



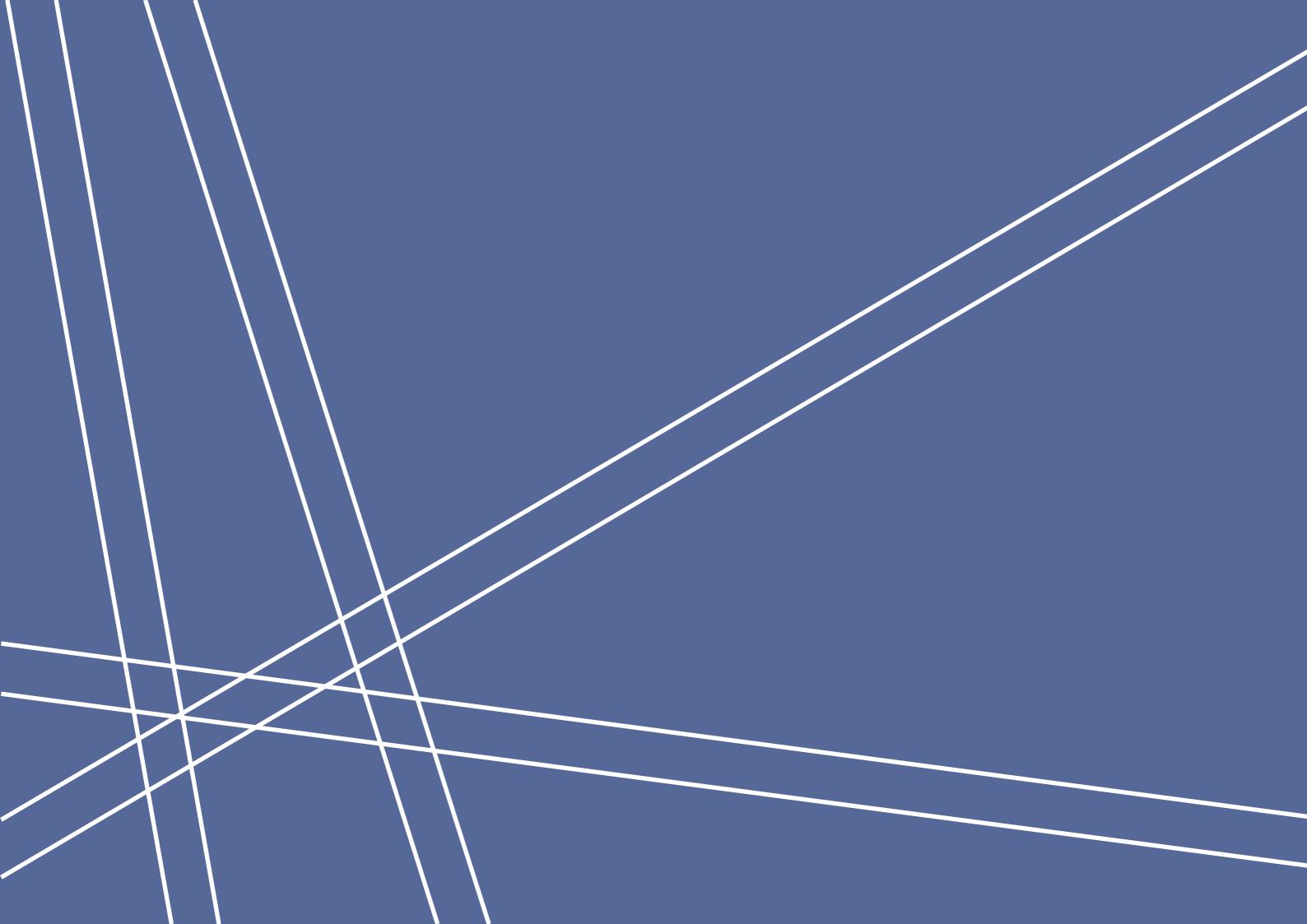


The Runway Edge provides a unique offer for start up organisations within a supportive network of like minded businesses embracing the ethos of enterprise.

Park, the development plots are nestled into a unique landscape backdrop, with pavilion typologies making a nod to the site heritage as 'hangars on the airport'.

At this key gateway, a generous plaza space provides the stage for lunchtime food trucks to draw employees in from the wider site and build lasting social networks.

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# 7.0 PHASING AND DELIVERY

## **Phasing**

A development of this scale will take time to construct; but delivering positive placemaking outcomes on the ground too slowly will not help build the identity and environment required to attract market interest and create a place of distinction.

Our approach to phasing focuses on delivery of key infrastructure for Phase 1 and this includes putting in place the northern gateway and first portion of the linear Runway Park. This will build momentum for the identity of the place and, from the outset, start to address the challenges of creating a flourishing place with a strong community.

## Potential phasing sequence

The masterplan proposes a very robust fundamental structure formed by the linear park and primary access corridor. The plots that hang off that remain very flexible and this also lends itself to a very agile phasing strategy that can naturally flow on from the first phase and be served off extensions to phase 1 infrastructure.

Each subsequent phase of development at IPM will not only continue to build a critical mass of accommodation and community but also focus on delivery of key pieces of public open space to complete the network envisaged to create a place of distinction that attracts and retains staff. A number of phases are subject to working in collaboration with third parties to bring these phases forward.

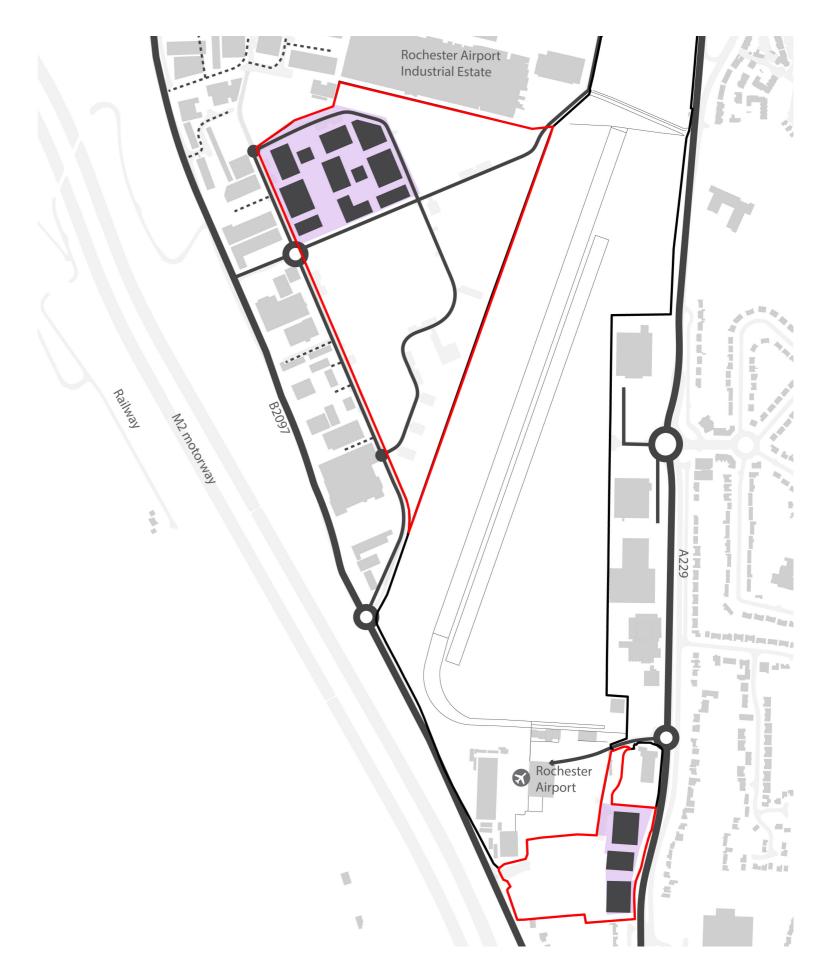
Phase 1:	B1 GEA (M2)	B2 GEA (M2)	Parking GEA (M2)	Total/Parcel GEA (M2)
NI	5,400	3,000	6,000	14,400
N2	3,400	10,396	8,000	21,796
S1	-	6,000	8,000	14,000
			Phase 1 total:	50,196

Phase 2:	B1 GEA (M2)	B2 GEA (M2)	Parking GEA (M2)	Total/Parcel GEA (M2)
N3.1 - N3.4	3,200	1,600	6,000	10,800
N4	3,600	14,200	10,000	27,800
			Phase 2 total:	38.600

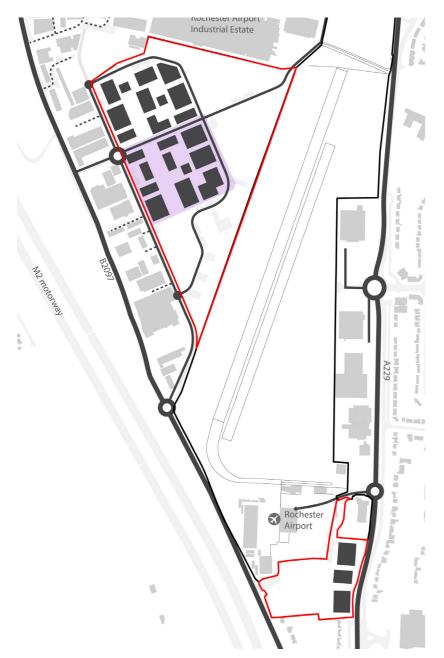
Phase 3:	B1 GEA (M2)	B2 GEA (M2)	Parking GEA (M2)	Total/Parcel GEA (M2)
S2	2,000	8,600	-	10,600
N3.5-3.7	-	5,200	-	5,200
N5	900	5,100	-	6,000
			Phase 3 total:	21,800

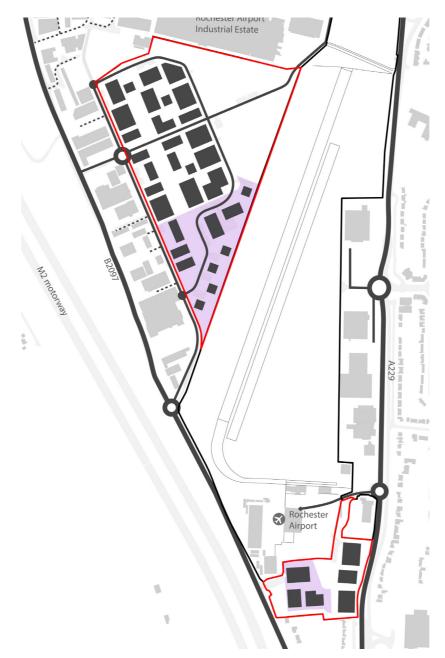
Phase 4:	B1 GEA (M2)	B2 GEA (M2)	Parking GEA (M2)	Total/Parcel GEA (M2)
N6	3,600	9,900	8,000	21,500
N7	1,600	12,952	8,000	22,552
			Phase 4 total:	44,052
			Total all:	154,648

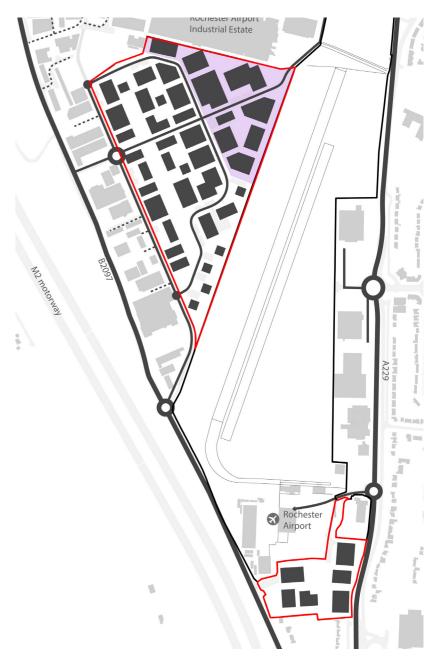
#### Phase 1







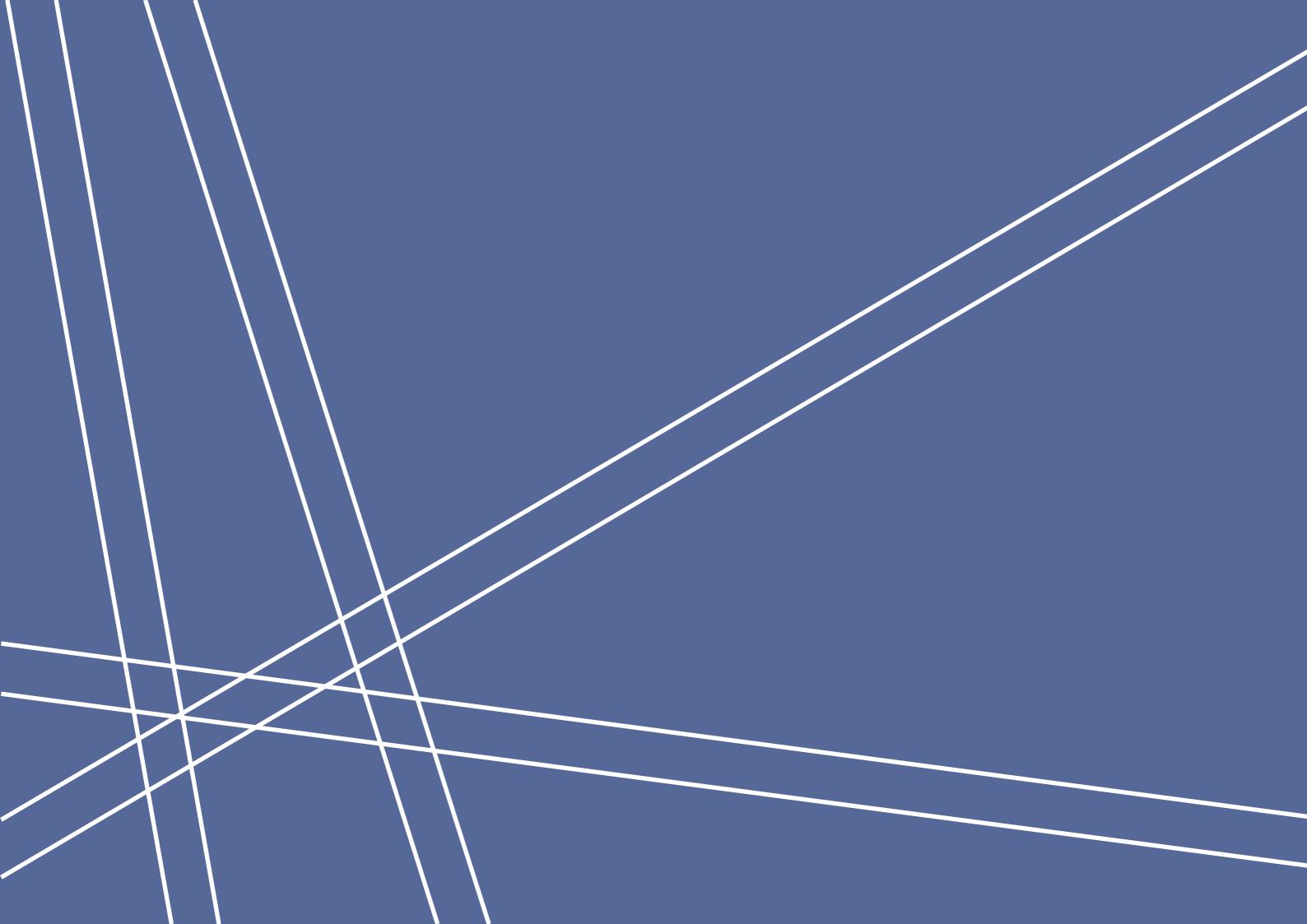




Potential Phase 2

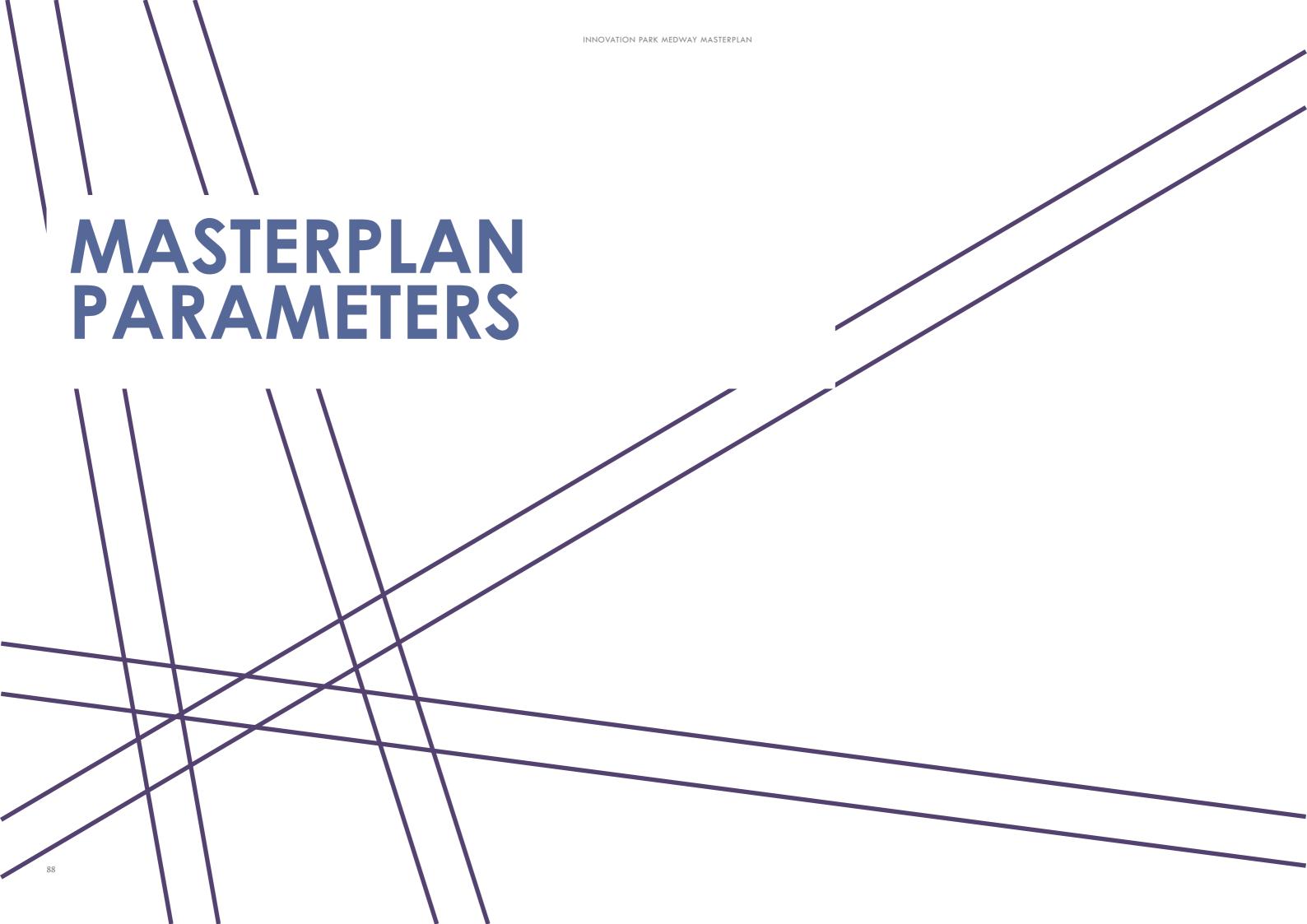
**Potential Phase 3** 

**Potential Phase 4** 





# 8.0 MASTERPLAN PARAMETERS





## **The Masterplan Parameters**

The illustrative masterplan explained in Section 6 sets out design principles for the strategic frameworks which have been used to determine the site capacity.

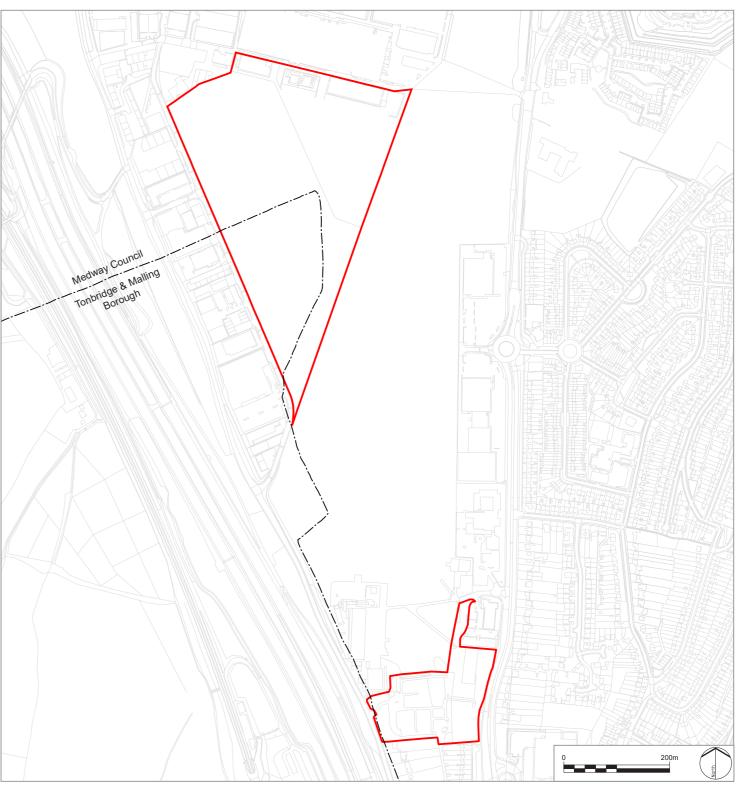
The LDO seeks to retain a degree of flexibility and therefore a set of flexible parameter plans are required to provide maximum allowances, against which the LDO is determined and the EIA is undertaken.

The following set of parameter plans set out the key layers that underpin the masterplan and the frameworks upon which the future Environmental Impact Assessment can be carried out.

The key parameters include:

- The site boundary
- Landscape parameters
- Access parameters
- Building height parameters

# Parameter Plan Site Boundary



LEGEND



Site Boundary



Medway Council and Tonbridge & Malling Borough Council Boundary



## Parameter Plan Landscape



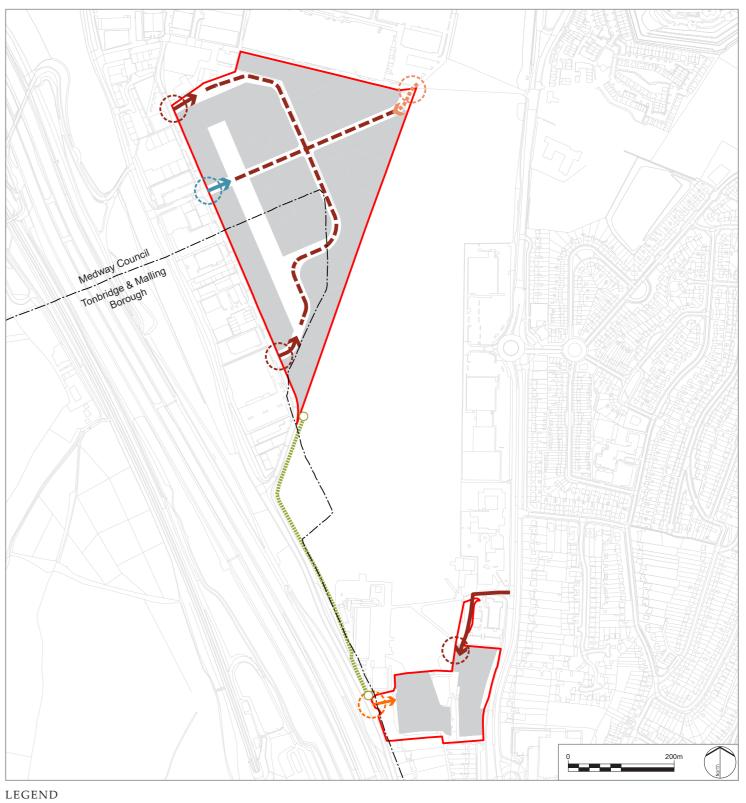
Medway Council and Tonbridge & Malling Borough Council Boundary

Development Parcels (Including on plot

landscape)

# Parameter Plan

# Access







Site Boundary



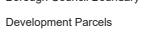
Primary Access Points



Bus priority access



Medway Council and Tonbridge & Malling Borough Council Boundary



Secondary Access Points



Potential Long Term Access Points



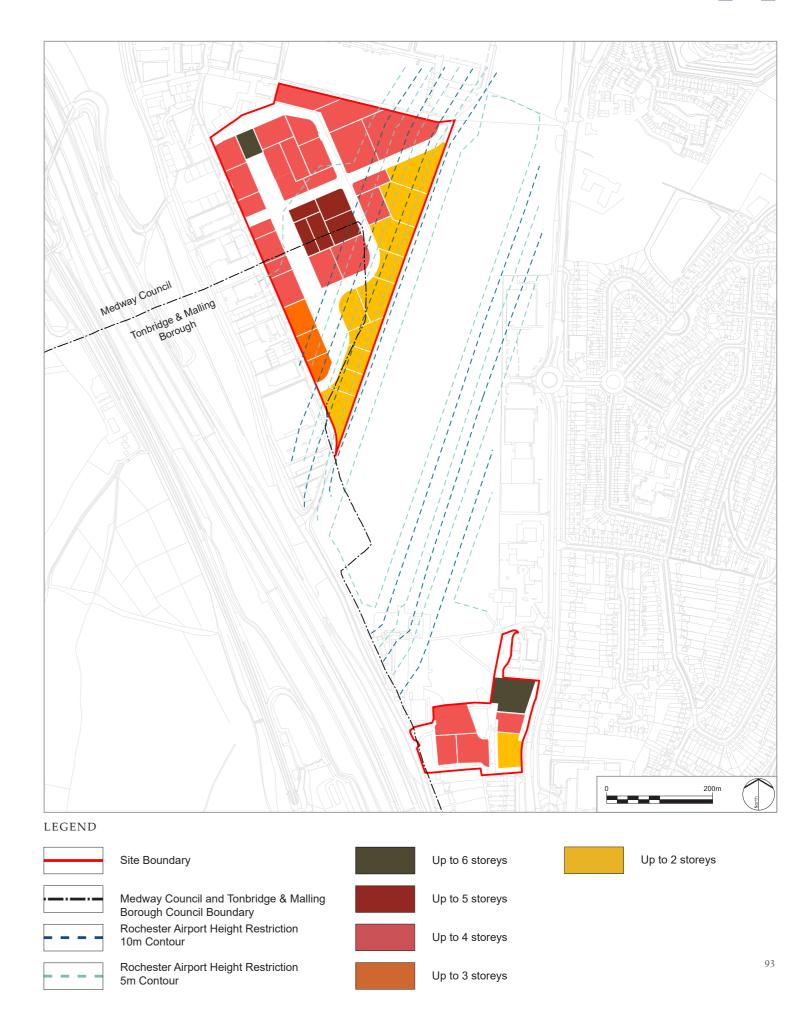
Potential pedestrian link between sites within secured site boundary



Indicative primary access route



# Parameter Plan Building Heights







# 9.0 TECHNICAL SUMMARIES

The following studies have informed the masterplan and provide an evidence base that underpins the development proposals put forward within this document.

#### The studies are as follows:

Air Quality Assessment
Noise Survey

Archaeological & Heritage Impact Assessment
Contamination Survey
Ecological Impact Assessment
Flood Risk and Drainage Assessment
Landscape and Visual Impact Assessment
Innovation Environment Study
Transport Assessment
Travel Plan
Utilities Assessment



# **Air Quality Assessment**

# **Noise Survey**

#### **Summary:**

A detailed Air Quality Assessment has been completed, using the Breeze Roads software and meteorological data, verifying the model results using local monitoring data, following the approach detailed below:

- Review of Air Quality Action Plans/Strategies for the area and review the local Air Quality Review and Assessment reports;
- Determination of existing background air pollutant concentrations for NO2 and PM10 for the area;
- Computation of air pollutant concentration predictions for NO2 and PM10 using the Breeze Roads software and the NOx to NO2 calculator at relevant receptor locations representative of the residential elements of the site and existing residential properties near the site;
- Verification of the air quality modelling against local measurement data,
   e.g. diffusion tubes and/or continuous monitors, in order to ensure accurate modelled results;
- Assessment of the results of the air quality modelling to establish the air quality constraints on and impacts of the proposed development;
- Comparison of the outcomes against the agreed assessment criteria against the relevant National Air Quality Objectives and the requirements of the Council's Air Quality Action Plan;
- Construction Dust Assessment
- Air Quality Damage mitigation assessment
- Determination of mitigation.

The results show that dust during construction can be adequately controlled using best practice techniques and as such dust impact will be negligible. There will be negligible to small increases in nitrogen dioxide and particulate levels at nearby receptors, but these will remain below air quality objective levels. The contribution for the scheme to traffic levels affecting the local Air Quality Management Area has been calculated as £1,544,660. This will be secured by conditions imposed on developers.

#### **Summary:**

The site is surrounded by commercial premises which are not considered to be noise sensitive. The nearest dwellings to the proposed development have been identified, with the nearest dwelling approximately 15m to the south of the southern site.

Vibration levels are not anticipated to be significant at the site and there are currently no vibration-emitting sources proposed as part of the development, therefore we do not anticipate an operational or construction vibration assessment to be required.

A Noise Assessment has been completed in accordance with BS 5228 to inform the masterplan and the submission of the LDO. Noise levels during construction, occupation and operation of the scheme are not predicted to be significant. It is therefore not considered that any significant mitigation will be required that would adversely affect the current masterplan proposals.

# Archaeological & Heritage Impact Assessment

#### **Summary:**

An Archaeological and Heritage Impact Assessment has been undertaken to inform the masterplanning process. It identifies all known heritage assets potentially affected by the proposed development, whilst also identifying the potential for currently unknown heritage assets.

Designated and non-designated heritage assets within 2km of the study area have been identified.

An overview of the historic environment covering prehistoric activity through to post-war development, an historic map regression exercise and an aerial photograph analysis have been undertaken. Previous desk-based and intrusive archaeological investigations undertaken within the site and study area have also been reviewed.

This baseline review has found that there is a low probability of archaeological remains pre-dating the airfield to survive within the site, although this is slightly higher in some parts of the site due to the proximity of a Roman road.

The review also found that below ground remains of WWII structures, some floor surfaces and foundations of a 1940's building and the airfield identifier circle and name from at least 1953 may be present within the site. If present, these would be impacted by the proposed development.

The heritage assessment has also found that development within the masterplanning site will result in visual changes to the setting of five designated heritage assets, including Fort Horsted Scheduled Monument. However these visual changes are not considered to result in any reduction in the contribution that the setting makes to the significance of these assets.

# **Contamination Survey**

#### **Summary:**

A Geoenvironmental and Geotechnical Desk Study has been undertaken for the site in line with current best practice guidance.

The study has found that the site is underlain by superficial deposits of the Clay and Flints Formation, and bedrock geology of the Seaford Chalk Formation. The environmental sensitivity of the site is considered to be high with the underlying chalk formations designated as Principal Aquifers and the site located within a Source Protection Zones 2.

Based on the history of the area there is considered to be significant potential for contamination and other ground based risks to be present beneath some of the study area. Potential for contamination to be present beneath the site derived from historic industrial use places a high to very high risk to groundwater and surface water issues. Zetica bomb risk mapping indicates that the majority of the site is situated within a high risk area and available records state that the airport experienced a heavy bombing raid during World War Two.

#### Potential mitigation likely to be required / next steps:

Further physical investigations will be required at the appropriate stage to inform ground conditions, geotechnical hazards, contamination and potential pollutant linkages, including a detailed assessment of the potential risk associated with UXOs.

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# **Ecological Impact Assessment**

#### **Summary:**

An Ecological Impact Assessment has been undertaken to inform the masterplanning process. This includes a desktop review, in addition to a phase 1 habitat survey and a number of protected species surveys undertaken during 2018.

A number of statutory and non-statutory designated sites within 10km of the site boundary have been identified. These include a Site of Special Scientific Interest (SSSI), three Special Areas of Conservation and two Special Protection Areas. In addition, there are two Local Wildlife Sites within 2km of the site. A range of habitats are also present within the site, including semi-improved grassland and lowland broadleaved woodland.

Protected or notable species found during historical or current onsite surveys include bats, dormouse, breeding birds and common lizard. Further protected species surveys are programmed for Autumn 2018.

Overall, based on the nature and location of the proposed development, no adverse effects on statutory or non-statutory designated sites are anticipated. The proposed development would achieve a net gain in biodiversity, in line with guidelines set out in the National Planning Policy Framework. Although some semi-improved neutral grassland will be lost, this loss will be compensated through reprovision off-site.

# Potential ecological mitigation/compensation measures likely to be required:

- Grassland The grassland in Parcel 1 is cut once a year and supports a semi-improved community. Its loss will be compensated through either creation of new grassland off-site or contribution towards long-term management/enhancement of a local wildlife site.
- Woodland The woodland is a Habitat of Principle Importance (HPI); Lowland Mixed Deciduous Woodland. The loss of a small number of trees will require compensation through new tree planting on site.
- Bats Bats are present foraging in Parcel 4. Mitigation to avoid impacts to foraging bats will involve the implementation of an appropriate low level lighting scheme on site.
- Dormice Dormice are present within woodland around Parcel 4. A Natural England licence will be required for vegetation clearance here, and mitigation will involve implementation of a low level lighting scheme (as above).
- Birds Breeding farmland birds (skylark) are present in the grassland of Parcel 1 and nesting birds present within scrub and woodland. Mitigation will involve clearance of these habitats to be carried out outside of the bird nesting season (March to August).
- Reptiles Common lizard are present in Parcel 1 grassland and scrub. Mitigation will involve the translocation of common lizard from the Site to a suitable area elsewhere within the airport site.
- An Ecological Management and Enhancement Plan (EMEP) will be produced to provide prescriptions for the above mitigation measures, particularly in regard to dormice, birds and reptiles.

# Flood Risk and Drainage Assessment

#### **Summary:**

A Level 1 Flood Risk Screening Study has been undertaken for the site and has concluded that the site is located with Flood Zone 1.

The site is at low risk of flooding from fluvial (river) sources and mostly at low risk of surface water flooding. However, there is a medium risk of flooding from surface water along the northernmost boundary of the site. Site levels currently force the overland routing west to Laker Road and this overland route will be preserved, where possible, through the scheme design. There is also a high risk of surface water flooding in the centre of the existing airport site – however this is outside of the proposed development area.

Strategic Flood Risk Assessments (SFRA) do not identify any significant risks of groundwater flooding within the district. Therefore no measures will be necessary to mitigate this.

There are no existing watercourses present on site. The River Medway runs west-east approximately 2.5km to the north of the site. Currently, all surface water on the developed site drains via infiltration, while overland flow discharges to the west onto Laker Road. Other than the private airport network there are no surface water sewers on the existing site.

The site geology comprises primarily of superficial deposits of clay with flint, underlain by highly permeable Seaford Chalk strata. Any infiltration drainage would need to be located within this productive strata.

#### **Drainage Strategy:**

A historic drainage strategy, compiled in 2014, derived an infiltration rate of 19.8 m/hr ( $5.5 \times 10-3 \text{m/sec}$ ) from a back-analysis of the existing drainage. The exact infiltration rate would need to be determined on site via site specific soakaway testing, however, this indicative rate would suggest soakaways are an extremely viable option.

A strategic surface water drainage solution has been prepared for the proposed development based upon a range of infiltration techniques that can be employed across the development. Surface water flood routing for the proposed development will also route flood water in the extreme events away from building footprints into areas of containment, such as swales and open storage structures along the landscaped green corridor.



# Landscape and Visual Impact Assessment

#### **Summary:**

A full Landscape and Visual Impact Assessment (LVIA) has been prepared to inform the masterplan.

The LVIA includes a review of relevant landscape policies and designations, published landscape character assessments, and fieldwork to assess the existing landscape and visual characteristics of the site and its context.

The site lies within an "Urban and Industrial" area and is located approximately 100m from The Kent Downs Area of Outstanding Natural Beauty (AONB).

The study was informed by a zone of theoretical visibility (ZTV) study which identified the maximum theoretical visibility (allowing for topography, major areas of woodland and settlements) of the proposed development and enabled targeted fieldwork to identify the actual visibility of the development proposals.

The assessment identified that there were no significant effects on the surrounding landscape and townscape arising from the proposed development. Intervening woodland and terrain reduces visibility of the development proposals, and where the development proposals can be seen, they would be viewed in the context of existing buildings in the industrial and employment areas surrounding the site, including the BAE Systems buildings (the highest of which is 23m above ground level) and which exert a strong influence on the surrounding environment.

# **Market Testing**

#### **Summary:**

The 'Innovation Park Medway Development options study' (Final Report by Lichfields for Medway Council, 30 July 2018) suggests that there is a clear demand across sectors.

A soft market testing exercise is underway which will be gathering feedback via telemarketing from high value technology, engineering, manufacturing and knowledge-intensive businesses as to their interest in the proposed development at IPM, the quantum of space they would be interested in occupying and the type of space they are interested in.

Feedback will also be collected in terms of why companies aren't interested in occupying space at IPM to inform the masterplan and the B1/B2 split. Findings are expected to provide greater clarity into the proposed split of the masterplan and this involves speaking to as many potentially interested occupiers matching the aforementioned description and compiling all of this evidence.

# **Innovation Environment Study**

#### **Summary:**

The success of IPM will be dependent on the development of the right ecosystem for investment. The case study analysis and innovation literature suggests that it will be important for the design solution to offer affordable, flexible work spaces that allow businesses to grow and scale up over time.

Opportunities for collaboration, both within buildings and with external partners such as universities, are essential. When attracting higher value innovation and service based activities, social spaces and the quality of both workplace and public spaces is critical to developing a strong site brand and positioning in a highly competitive national and regional investment landscape.

The case studies used for the benchmarking exercise suggest that one of the key success factors is the mix of commercial office and R&D (B1) uses alongside B2 industrial activities. This mix, alongside a flexible mix of plot sizes, is critical to creating an ecosystem for innovation where:

- \* Firms can grow and develop; and
- \* Innovations (the ideas that actually create value) can transfer from the R&D and theoretical space (B1) to the operational space (B2).

IPM has the opportunity to propose a mix of B1 and B2 space to capture as much of the innovation value chain as possible. This approach is quite innovative in itself, as the traditional model would be to focus on just one part of the value chain (e.g. lab-based R&D, or professional services, or industrial assembly activities). By adopting this approach it makes it more likely that IPM can help the region improve on it's complexity scored for example.

The 'Innovation Park Medway Development options study' (Final Report by Lichfields for Medway Council, 30 July 2018) suggests that there is a clear demand across sectors, so the mix of use is also more likely to be able to achieve both short-term return on investment requirements and longer-term economic ambitions for the region.

The success of IPM also requires clear positioning, dynamic workplaces and links to local universities. To provide the right ecosystem for investment, the benchmarking exercise found that some or all of the following should be in place.

- \* A clear site brand and positioning within national and regional offering defines a clear business focus to investors and businesses;
- \* Affordable, flexible work spaces (typically co-working) are important for early stage companies; scale-up spaces then provide the ability for these start-ups to grow; proximity to technology-focused universities promotes research and innovation;
- \* Access to informal meeting places (coffee shop, drop-in space) and city centres encourage the exchange of ideas and solving problems across disciplines; and
- \* Easy access to trains to major cities and international airports attracts businesses and skilled people.

To create an enabling environment for innovation, we recommend to focus on encouraging collaboration, fostering face to face communication and accommodating technology.

## **Transport Assessment**

#### **Summary:**

The Transport Assessment has analysed traffic data to assess the existing conditions of the site and surrounding area including a review of the local road network, local public transport services, walking and cycling accessibility and analysis of the collision data.

The anticipated trip generation of the proposed development has been predicted, which confirms that the development will fall within that previously assessed and accounted for within the wider area network models.

The Assessment has also considered outputs from the Strategic Transport Model produced by Fore Consulting. This confirms that the network is already operating close to capacity, and that whilst the IPM will contribute to this, the contribution will be negligible in the wider context, and can be ameliorated by the provision of junction improvements in the area as part of strategic measures coming forward in consultation with Medway, Kent County Council, and Highways England.

## **Travel Plan**

#### **Summary:**

The Travel Plan is a framework document promoting a range of potential measures with the overall objective of reducing the number of single occupancy vehicle journeys to and from the site.

The main reason for implementing the Travel Plan are:

- Reduce the impact of travel to and from the site;
- Social responsibility;
- Reducing the carbon footprint of the development;
- Improving the health and well-being of people using the site;
   and
- To promote and encourage the use of sustainable modes of travel.

The document provides an overview of the existing transport infrastructure and sets out measures that will be introduced in order to meet the Travel plan objectives. The Travel Plan will be secured through agreement.

### **Utilities Assessment**

#### **Summary:**

Based upon the anticipated end use for the development, enquiries have been made of all the principal utility providers for the area.

Southern Water have confirmed that they have no strategic infrastructure requiring diversion. They have confirmed that potable water supply and foul water disposal can be facilitated from their current infrastructure. Network reinforcement, should this be identified, will be undertaken by Southern Water under their new infrastructure pricing mechanism.

Southern Gas Networks have confirmed that they have a strategic main that will require diversion prior to the development. They have confirmed that new gas mains services can be provided from their existing infrastructure. There is a low-medium risk that some off site reinforcement will be required to service the development loads.

UKPN have confirmed that they have existing strategic mains electrical services that will require diversion prior to development. They have confirmed that new electric mains services can be provided from their existing 33/11Kv switching station (Chatham West), located approximately 3km from the site.

British Telecom have confirmed that they have no strategic infrastructure requiring diversion. They have confirmed that new mains services can be provided from their Bluebell Hill exchange and that the exchange and the local cabinet (No 43) is Fibre enabled with FTTC (Fibre To The Curb) and thus high speed broadband is available.

### Potential mitigation likely to be required / next steps:

Budget estimates for infrastructure costs for the proposed development currently stand at circa £2,500,000, including all diversions and new supplies. A 10% contingency should also be added for potential reinforcement of the gas network.



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