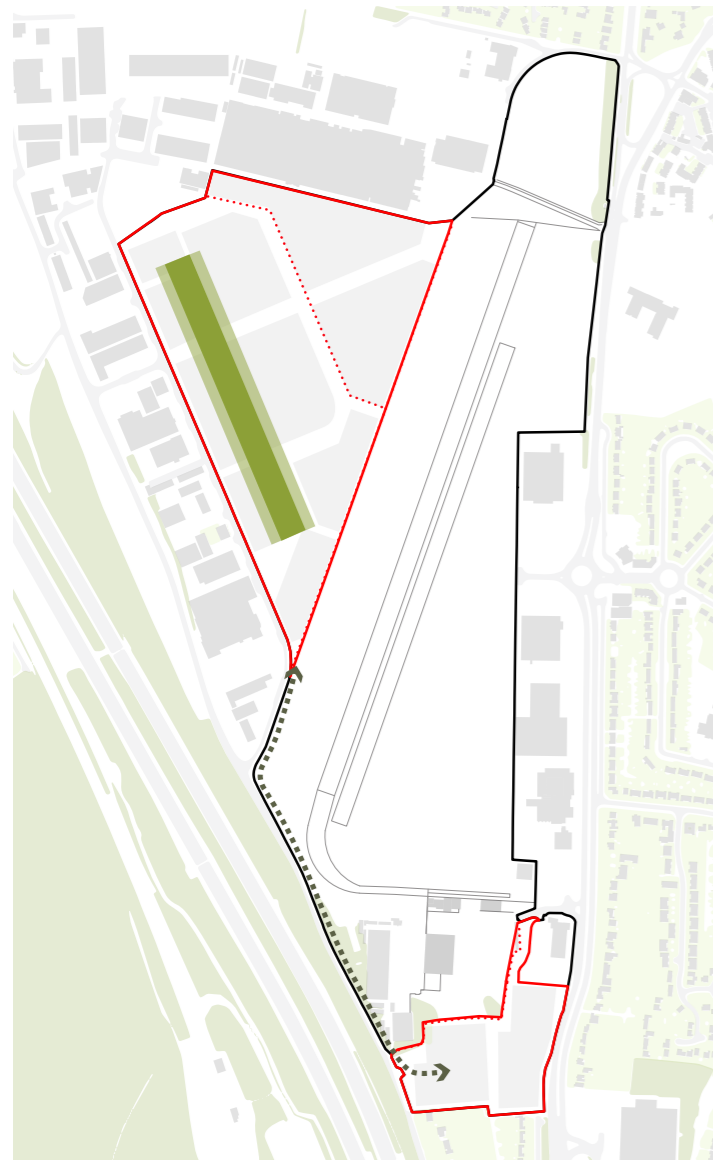


6.0

THE MASTERPLAN

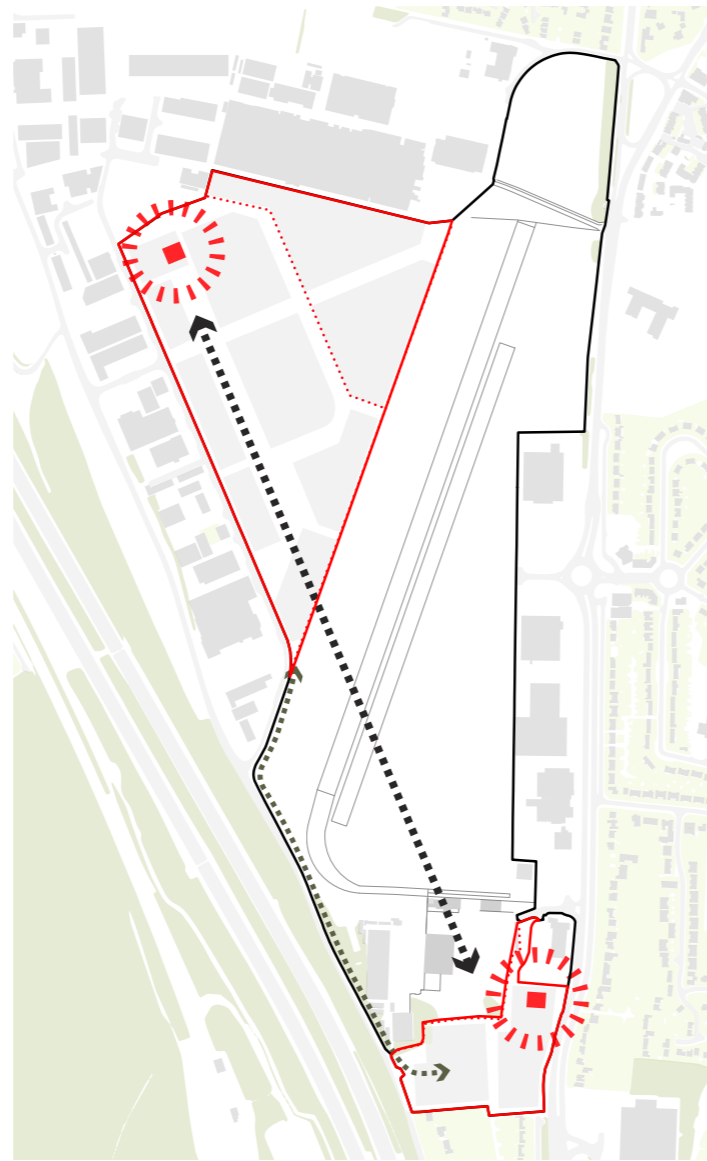
Key Design Moves



A RUNWAY PARK

The Runway Park is proposed as the fundamental structuring element of the masterplan. A simple, bold move which will create a clear identity and provide the high quality open space that investors demand of innovative employment sites AND is key to attract and retain skilled staff.

The Runway Park is a concept inspired by making a 'nod to the past' whilst setting out a confident new future for the site. The beauty of the concept is its ability to attract investors through the certainty that a quality feature will be committed to as the core element around which flexible plots will be built out over time.

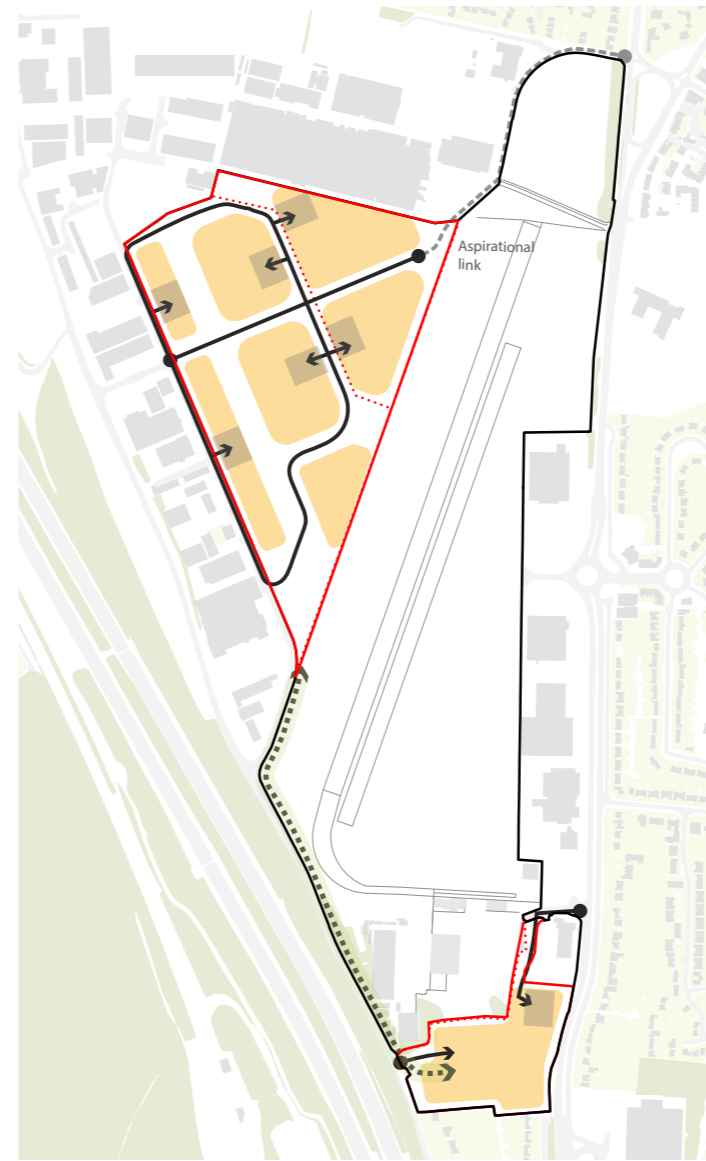


ICONIC BUILDINGS

In order to celebrate the heritage of the site, and make a perceptual link between the two development areas, the masterplan 'book ends' the linear park alignment with a plot that offers the opportunity for a land mark building to the north of the site. Frontages on Maidstone Road also have the potential to create a sense of arrival for the enterprise zone.

This sets up a 'conversation' with the control tower and perceptually links the two parts of the development area in spirit as one innovation park.

The two development areas also have the potential to be physically linked via a potential footpath that passes securely along the site boundary. This physical connection will promote interaction between the two sites and encourage shared use of facilities which, in turn, will assist objectives of reducing car trips.

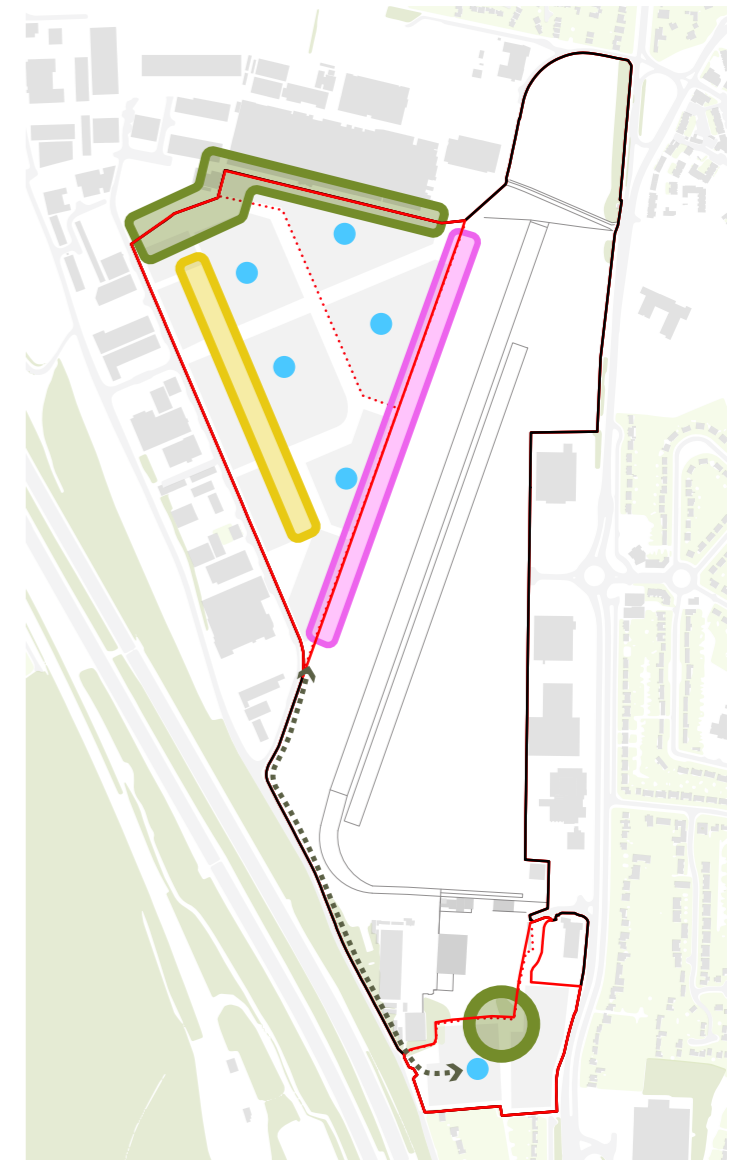


PEDESTRIAN FRIENDLY CLUSTERS

Successful interaction between organisations and individuals attracted to IPM can be amplified by a public realm that encourages innovation to be taken out of buildings into the public realm where collaboration and new ideas can be freely exchanged...this is the essence of innovation.

In order to achieve these qualities in the public realm, and deliver the environment that will attract and retain staff in a competitive market place, free flowing pedestrian movements must be prioritised.

The masterplan strategy seeks to capture vehicular movements with car parks located in strategic locations allowing pedestrian friendly clusters to surround the key open spaces such as the Runway Park.



LANDSCAPE CHARACTER AREAS

The fundamental framework put in place by the commitment to a Runway Park and primary access loop creates a framework within which plots can emerge over time. Development will come forward under the umbrella of one vision and the identity of one place but with the proposed landscape features influencing the identity of each zone of the IPM site. This includes:

- Park edge plots
- Outdoor collaboration 'rooms'
- Trees of character maintained to acceptable height
- Woodland clusters



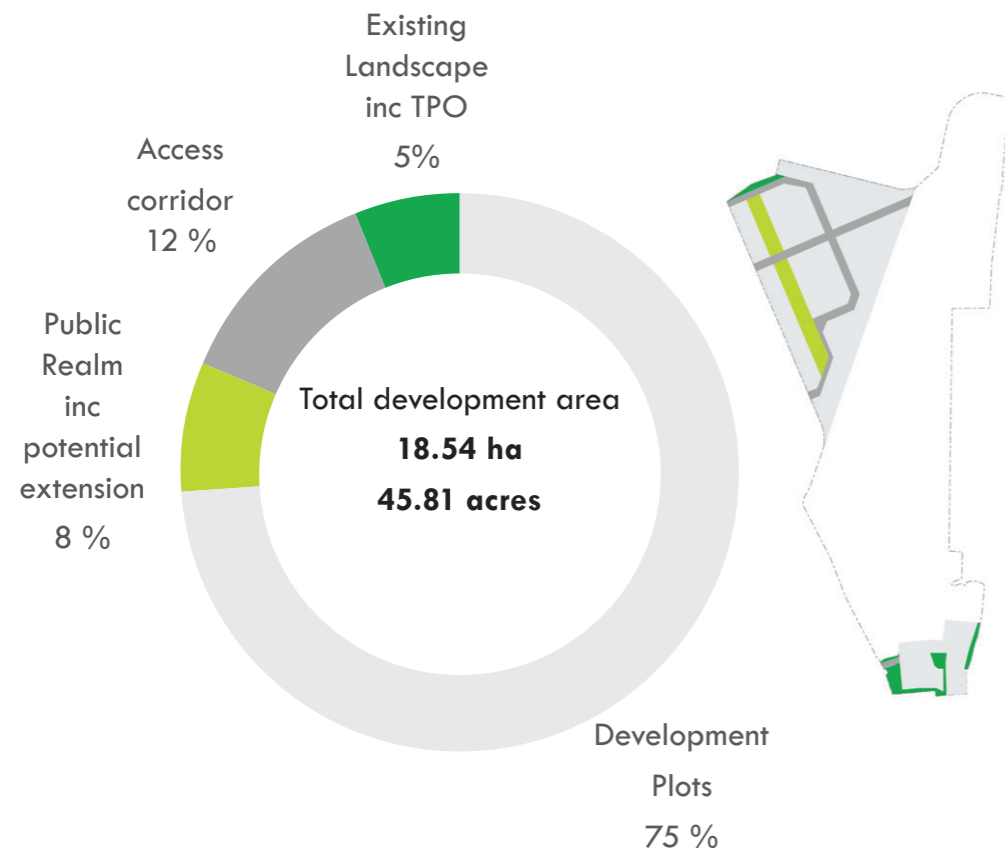
Illustrative Masterplan

The purpose of this section is to describe how the principles of the design rationale and vision could be manifested and delivered on site.

The IPM illustrative masterplan provides a spatial representation of the vision for IPM. The masterplan incorporates the key design moves which are underpinned by an understanding of the site opportunities and constraints whilst also exploring the creative opportunities to create a place of authenticity and a distinct investment proposition.

The illustrative masterplan and accompanying indicative land use and building heights strategies in this section 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 illustrative masterplan, therefore, retains flexibility for detailed development proposals to come forward for individual plots, with application parameters and accompanying design codes becoming a mechanism to control development proposals so that they accord with the vision and illustrative masterplan intentions.



All building locations for illustrative purposes and capacity testing only - see parameter plans

All building locations for illustrative purposes and capacity testing only - see parameter plans



- Aspiration for long term link
- Retained and enhanced tree planting to create new woodland character area
- Potential iconic building with design code to be developed to secure specific treatment for this plot
- Outdoor room for collaboration
- Runway Park - social track
- Runway Park - flexible lawn space
- Runway Park - gateway plaza
- Runway Park - meadows
- Runway Edge - with potential landscape treatment featuring trees of character
- Aspiration for a secure pedestrian link within site boundary to connect north and south sites

All building locations for illustrative purposes and capacity testing only - see parameter plans



Secure pedestrian link within site boundary to connect north and south sites

Vehicular access

Tree retention

Potential location for multi-deck car park with design code to be developed to deliver a high quality facade and or green screening

Woodland cluster with car free outdoor space for collaboration

Plot Capacity Testing

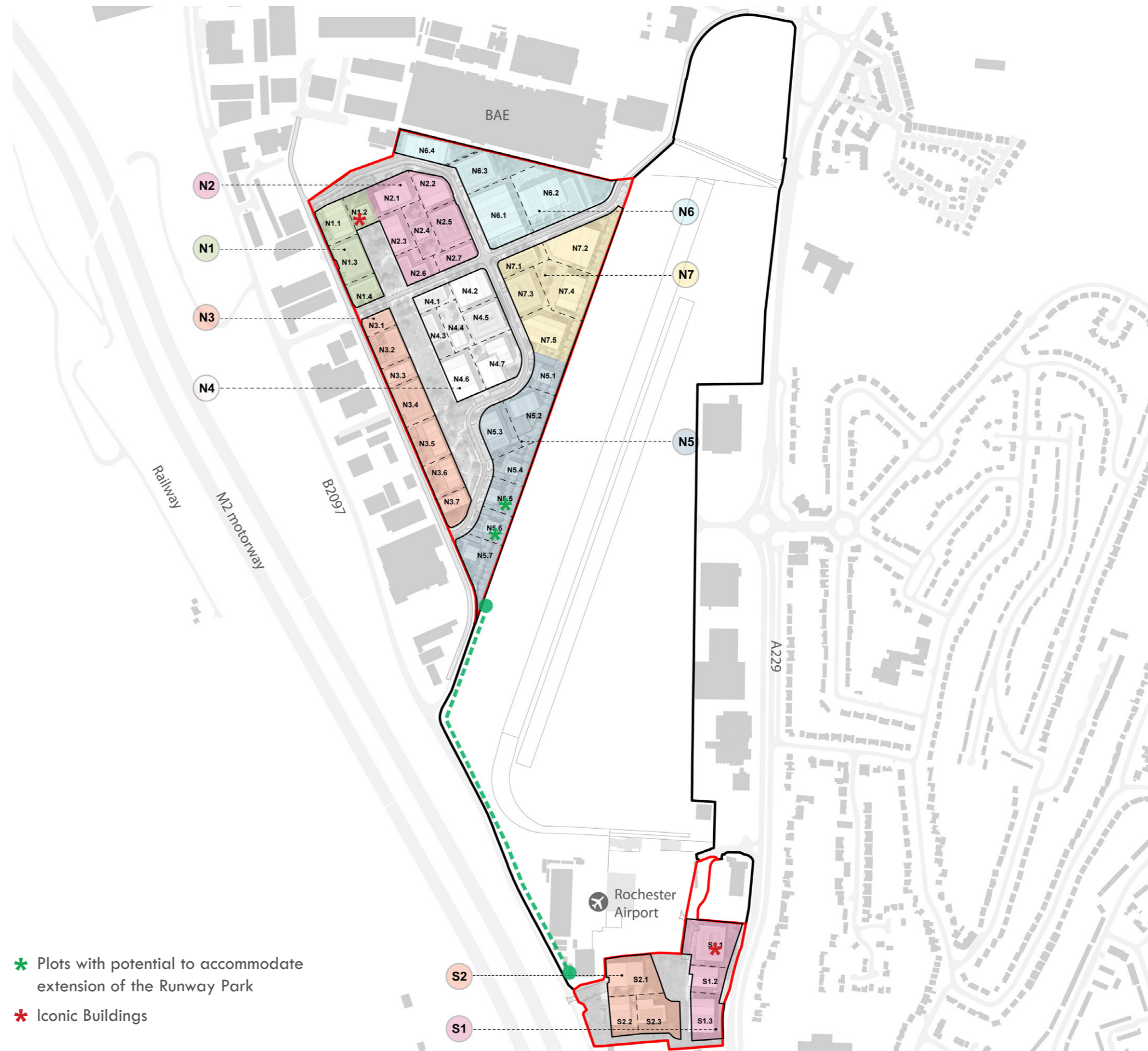
The IPM illustrative masterplan generates a number of plots which can come forward for development in a flexible manner. Indicative building heights and land use of each plot have been used to define the development capacity of the site.

The associated parameter plans set out in section 8 allow the flexibility for different stakeholders to come forward for feasibility testing of plots with decision makers able to test development proposals against the parameters and a set of design codes to control the design outcomes. Parameters contained in the LDO could become a critical tool for the marketing and branding of the Enterprise Zone as it will provide confidence that the site would be developed with a consistent approach.

The illustrative masterplan for IPM presents a robust plan for the key structuring elements that define the fundamental infrastructure corridors and spaces that will not only facilitate the marketing of serviced plots but also, crucially, provide a signpost of the quality of place that will emerge.

The framework is underpinned by a robust layout of the key structuring elements such as the linear 'Runway Park' and the points of access and movement corridors whilst allowing plots to be designed and developed in a flexible manner as interest from the market emerges during the lifetime of the LDO.

Future development proposals for plots will be set within this robust framework that ensures quality and continuity. This approach will allow development parcels to come forward in a phased manner, within a robust masterplan accompanied by design codes that will secure the intended placemaking objectives.





Key

B1	Business
B2	General Industrial
	Decked multi-storey car park

1 bay per

Parking Requirement	
B1	B2
30	50

m2 floorspace

Parcel	Plot	Plot Area	Building footprint m2	Height	GEA m2	Use Class and Size Category	Local Authority / ownership	Parking requirement (bays)	Total parking required (bays)	On plot deck parking provision (bays)	On street car park provision (bays)	Notes
N1	N1.1	2479	1,500	2	3,000	B2 1000-2000	MC	60	240	228	12	
	N1.2	1800	500	6	3,000	B1 500-1000	MC	100				
	N1.3	2705	2,000	3	6,000	Deck carpark	MC					
	N1.4	1581	800	3	2,400	B1 500-1000	MC	80				
N2	N2.1	2925	1,500	2	3,000	B2 2000+	MC	60	321	304	17	
	N2.2	2250	1,698	2	3,396	B2 2000+	MC	68				
	N2.3	2100	1,500	2	3,000	B2 1000-2000	MC	60				
	N2.4	2400	500	2	1,000	B2 1000-2000	MC	20				
	N2.5	2700	2,000	4	8,000	Deck carpark	MC					
	N2.6	1950	1,200	2	2,400	B1 500-1000	MC	80				
	N2.7	1500	1,000	1	1,000	B1 500-1000	MC	33				
N3	N3.1	1127	800	2	1,600	B1 500-1000	MC	53	243	228	15	
	N3.2	2249	800	2	1,600	B1 500-1000	MC	53				
	N3.3	1348	800	2	1,600	B2 1000-2000	TMBC	32				
	N3.4	2689	2,000	3	6,000	Deck carpark	TMBC					
	N3.5	2690	1,000	2	2,000	B2 1000-2000	TMBC	40				
	N3.6	2251	800	2	1,600	B2 1000-2000	TMBC	32				
	N3.7	1823	800	2	1,600	B2 1000-2000	TMBC	32				
N4	N4.1	1375	1,000	2	2,000	B1 500-1000	MC	67	404	380	24	
	N4.2	2475	2,000	2	4,000	B2 2000+	MC	80				
	N4.3	1750	800	2	1,600	B1 500-1000	MC	53				
	N4.4	2100	500	2	1,000	B2 1000-2000	TMBC	20				
	N4.5	2750	2,000	5	10,000	Deck carpark	MC-TMBC					
	N4.6	2925	2,400	2	4,800	B2 2000+	TMBC	96				
	N4.7	4081	600	2	1,200	B2 2000+	TMBC	24				
N5	N5.1	3550	400	1	400	B2 up to 1000	MC	8	132		132	*Potential for these two plots to be either development plots or extension of the runway park and reserved for a later phase.
	N5.2	3954	1,000	1	1,000	B2 1000-2000	MC	20				
	N5.3	2198	450	2	900	B1 500-1000	TMBC	30				
	N5.3		1,050	2	2,100	B2 1000-2000	TMBC	42				
	N5.4	2499	400	1	400	B2 up to 1000	MC	8				
	N5.5*	2243	400	1	400	B2 up to 1000	MC	8				
	N5.6*	2176	400	1	400	B2 up to 1000	MC	8				
N6	N6.1	5525	600	2	1,200	B1 500-1000	MC-BAE	40	318	304	14	
	N6.1		3,900	1	3,900	B2 2000+	MC-BAE	78				
	N6.2	8974	1,200	2	2,400	B1 500-1000	MC-BAE	80				
	N6.2		2,400	1	2,400	B2 2000+	MC-BAE	48				
	N6.3	4048	2,000	4	8,000	Deck carpark	MC-BAE					
N6.4	3548	1,800	2	3,600	B2 2000+	MC-BAE	72					
N7	N7.1	1750	800	2	1,600	B1 500-1000	MC-BAE	53	312	304	8	
	N7.2	5366	2,778	2	5,556	B2 2000+	MC-BAE	111				
	N7.3	2700	2,000	4	8,000	Deck carpark	MC-BAE					
	N7.4	4881	1,500	2	3,000	B2 2000+	MC-BAE	60				
	N7.5	4188	2,198	2	4,396	B2 2000+	MC-BAE	88				
S1	S1.1*	4558	2,000	4	8,000	Deck carpark	MC		359	304	55	*Flexibility in height for up to 6 storeys but would require reduction in floorspace on adjacent plots and would need to consider alternative parking arrangements (Can be outside of the LDO/masterplan area). *4 storey car park with the potential to explore employment space (B1/B2) of up to 6 storey subject to plot developer's requirements.
				Up to 6								
	S1.2*	1829	1,000	2	2,000	B2 1000-2000	MC	40				
S2	S1.3	2961	2,000	2	4,000	B2 2000+	MC	80				
	S2.1	4043	2,800	2	5,600	B2 2000+	MC-WWCP	112				
	S2.2	2163	1,500	2	3,000	B2 2000+	MC-WWCP	60				
	S2.3	3299	1,000	2	2,000	B1 500-1000	MC-WWCP	67				
TOTAL					154,648.00			2,329	2329	2052	277	

Plot Capacity Testing

BASED ON:

INDICATIVE LAND USE STRATEGY (Page 60)

INDICATIVE BUILDING HEIGHT STRATEGY (Page 61)

Use Class and Size summary	Footprint	GEA
B1 500-1000	10,950	23,700
B2 up to 1000	2,000	2,000
B2 1000-2000	10,450	19,900
B2 2000+	30,674	55,048
Total Floorspace	54,074	100,648

The quantum of parking to be provided ensures compliance with the current Medway parking standards. It is noted that these standards are a maximum, therefore reducing parking numbers will maintain compliancy. Minimum requirements will be met for accessible spaces, cycle parking and delivery space off the public highway. This can be managed on independent plots OR through the shared use of decked parking structures and servicing areas. Based on expected accumulation of parking bay demand by reference to similar science park developments there may be potential to decrease the number of parking spaces required in the future.

Indicative Land Use Strategy

USED TO DETERMINE CAPACITY






SEE SECTION 8 FOR PARAMETER PLANS

The IPM illustrative masterplan follows a strategy of delivering an over arching framework that is robust, with the runway park and primary access corridor underpinning the structure of the site. Around these fundamentals, plots can come forward in a flexible manner. The land use strategy is indicative and has been used to determine the development capacity of the site, but it is important to note that the specific land use of each plot remains flexible with all plots identified as 'Development Parcels' in the parameter plans set out in section 8.


Feedback from market testing has informed the mix of land uses proposed. In addition, the case studies used for the Innovation Environment 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 proposes a mix of B1 and B2 space to capture as much of the innovation value chain as possible. The indicative land use strategy seeks to propose a logical distribution of land uses in order to reinforce the intentions of the vision and deliver a place of quality. A range of B1 and B2 land uses are proposed but specific layouts for interested parties can emerge as interest is received. A key feature is the proposed distribution of B1 Business employment spaces along the primary gateway spine that accesses the northern site. The intention is to promote active frontages onto key routes in order to create natural surveillance of well used pedestrian routes to encourage a feeling of safety at all hours.

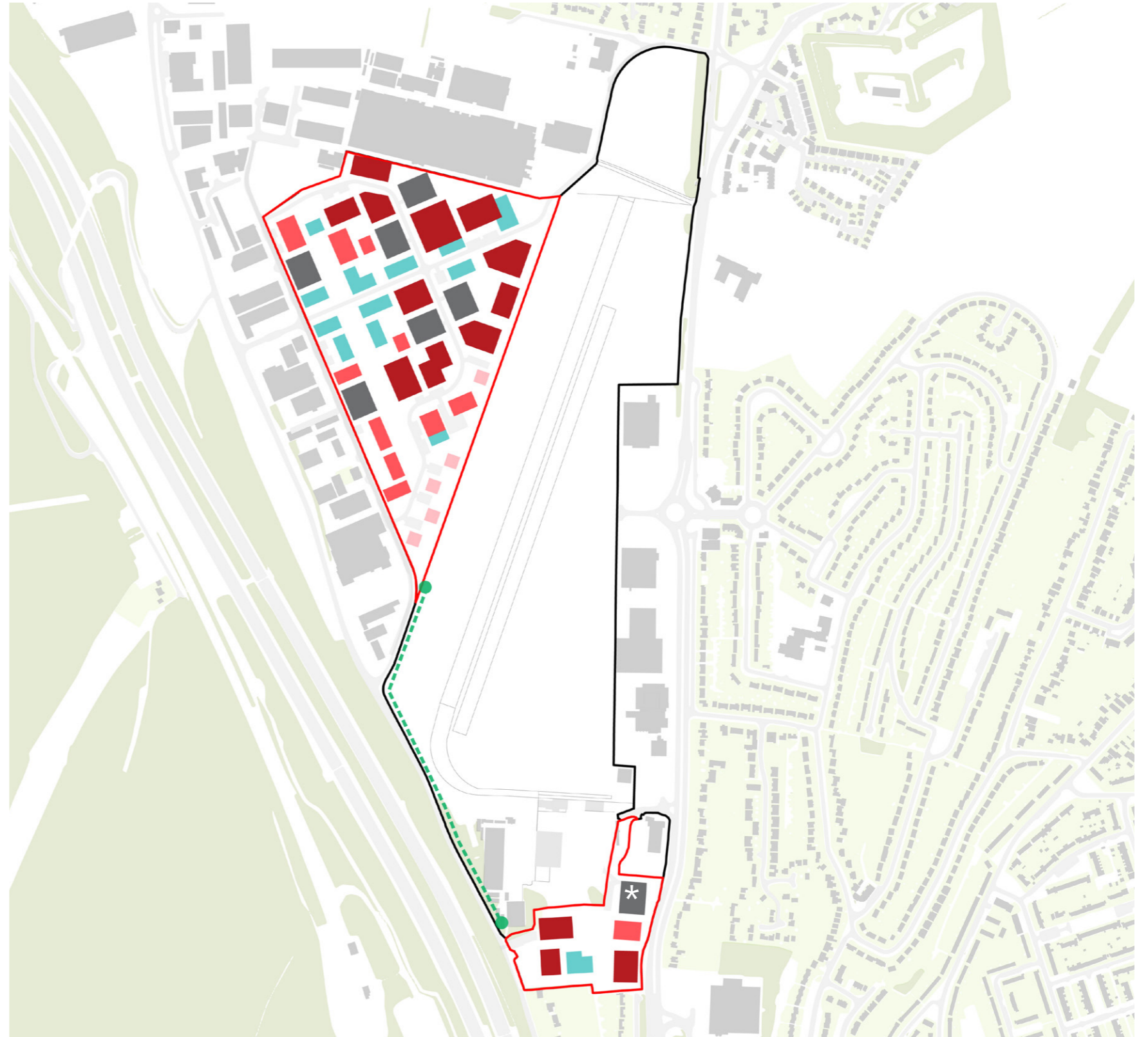
Summary of land use floorspaces proposed within the illustrative masterplan:

Land use	Building size range (m ²)	Total GEA (m ²)
B1 	500-1000	23,700
B2 	up to 1000	2,000
B2 	1000-2000	19,900
B2 	2000+	55,048
Multi-storey carpark 		54,000

*GEA split is purely indicative and an example of potential mix that has been used to test the masterplan

 4-storey car park with the potential to explore employment space (B1/B2) of up to 6 storeys subject to plot developer's requirements.

Note: it is anticipated that a range of ancillary uses such as A3 land uses could be provided in strategic locations (such as along the Runway Park) to deliver shared facilities that would benefit the wider employment community. This could be included within buildings as detailed development proposals come forward and might include food and beverage, small scale retail, and community / leisure facilities.



Indicative Building Heights Strategy

USED TO DETERMINE CAPACITY

SEE SECTION 8 FOR BUILDING HEIGHT PARAMETER PLAN

The IPM illustrative masterplan generates a number of plots which can come forward for development in a flexible manner. Building heights proposed within these plots, as illustratively proposed on the indicative building heights plan, have been used to define the development capacity of the site.

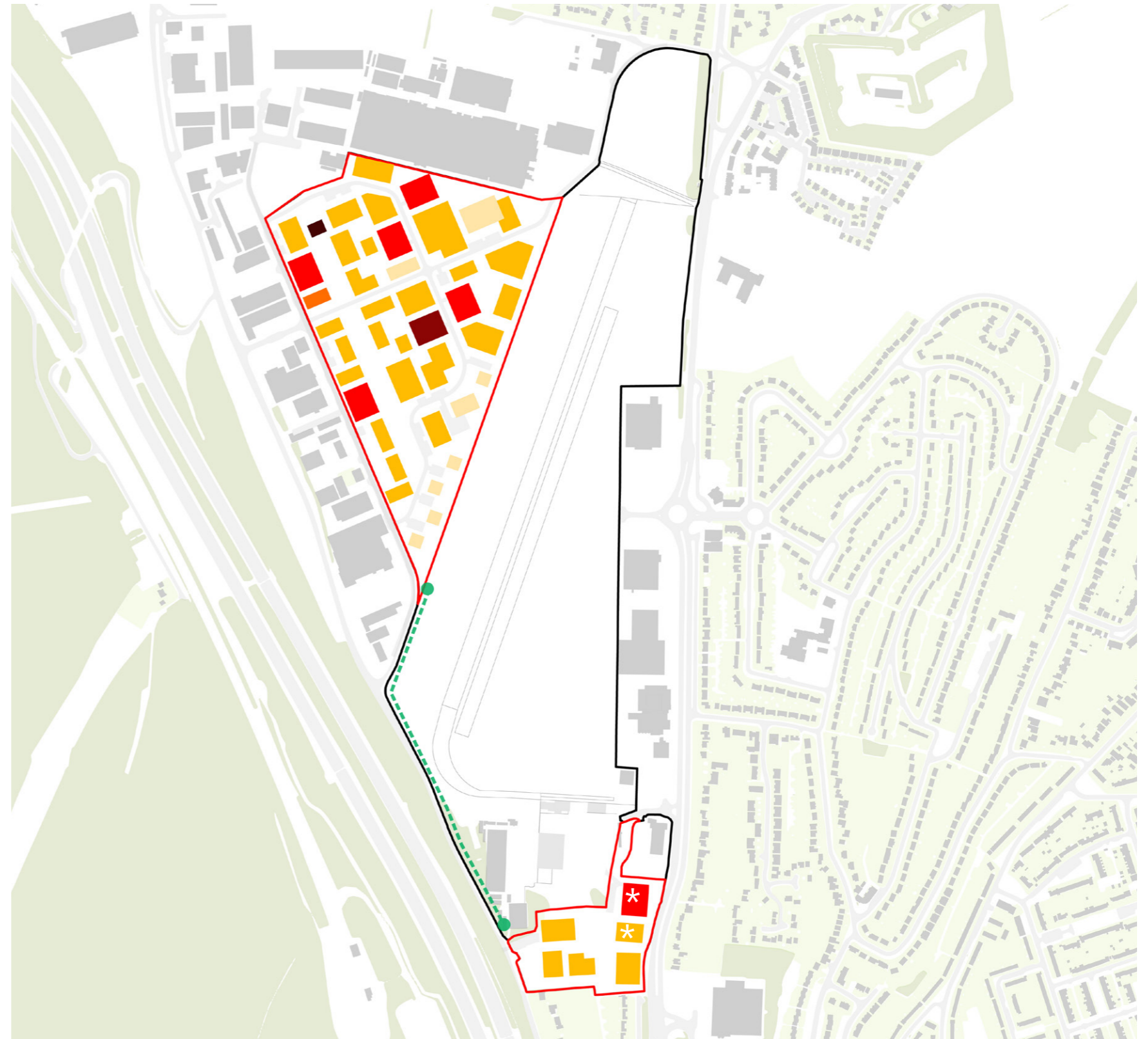
Whilst the illustrative masterplan is flexible, any future development proposals for plots will need to adhere to the maximum building heights set out in the Building Heights Parameter Plan (see section 8). The Building Heights Parameter Plan indicates maximum heights proposed, allowing the LDO to retain flexibility as the actual building heights are not yet known. It is likely that a small proportion of the development proposals will be built to the maximum height, and that the development proposals are more likely to reflect the indicative building heights strategy.

The building heights strategy and associated parameter plan work within the parameters set by the requirements of the adjacent continued use of the airport as an operational airport. Airport safeguarding restricts building heights and a height contour is applied with the acceptable height of development increasing with distance from the runway. In the areas immediately adjacent to the airport to single storey structures, with single storey hangar typologies located along the landscaped edge for example.

Elsewhere, the masterplan proposes predominantly 2 and 3 storey buildings, with one strategically located taller iconic building at the north end of the runway park at up to 6 storeys, with potential for iconic building to be located within the southern area along Maidstone Road. Decked car parks are proposed at 4 and 5 storeys.

Indicative building heights

-  6 storeys
-  5 storeys
-  4 storeys
(Up to 6 storeys)
-  4 storeys
-  3 storeys
-  2 storeys
(Up to 4 storeys)
-  2 storeys
-  1 storey



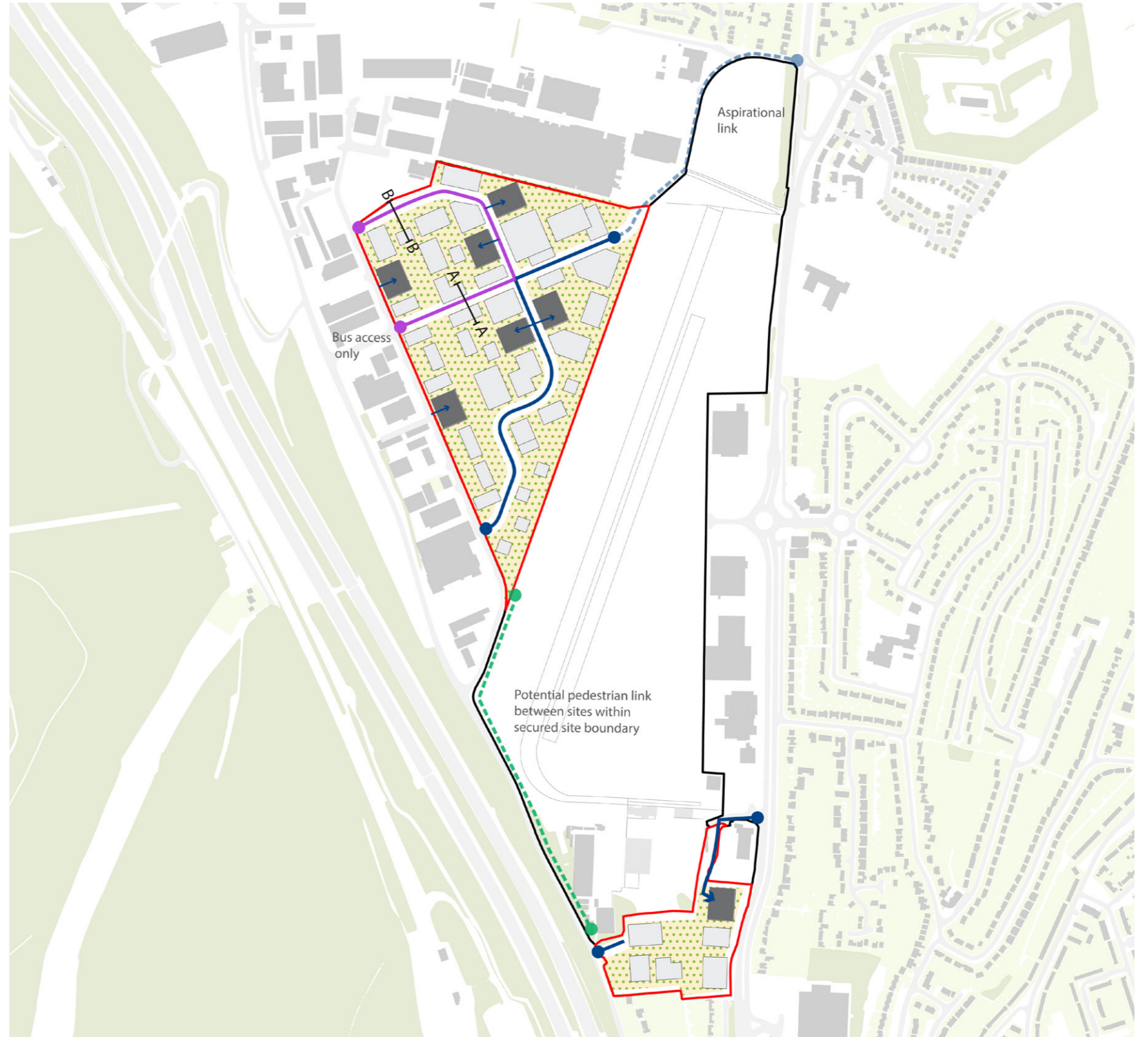
Indicative Access & Movement Strategy

SEE SECTION 8 FOR ACCESS PARAMETER PLAN

A number of points of access are proposed to connect the site to existing highways infrastructure. For the northern site, the central of the three points of access from Laker Road is proposed as a bus priority access point with cars using the northern/southern access points to penetrate the site. This reduces conflicting movements at the crossroads.

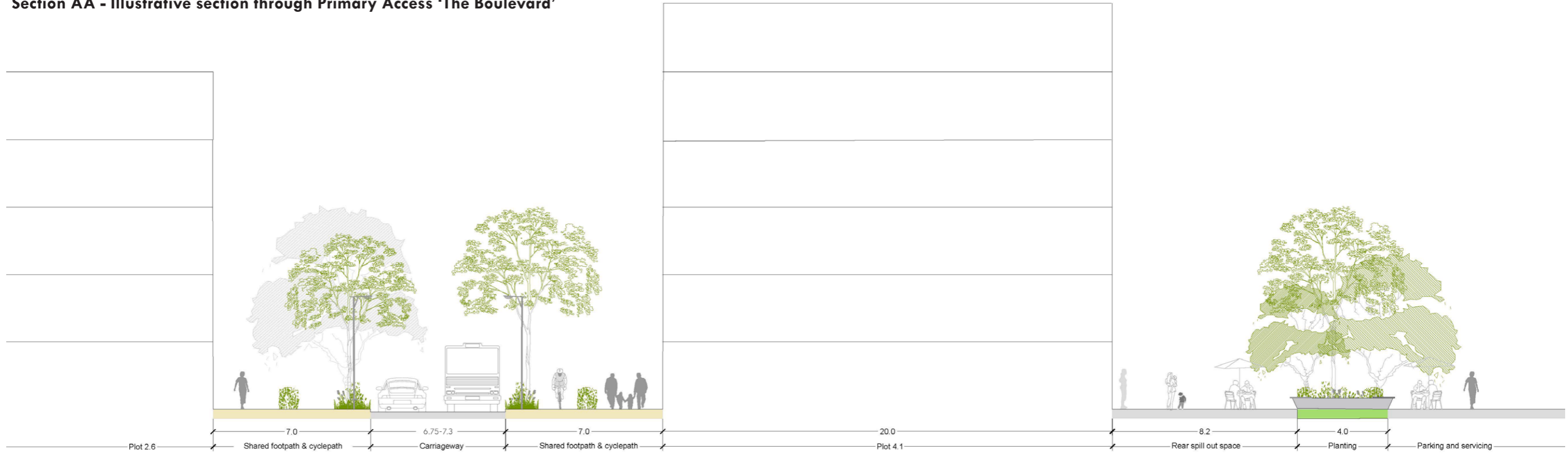
Within each cluster space is allocated for a multi-storey decked parking solution which will allow the clusters to capture vehicles from the primary circulation loop and retain the Runway Park as a pedestrian friendly environment. See sections AA and BB for illustrative cross sections through the primary access corridors.

The quantum of parking to be provided ensures compliance with the current Medway parking standards. It is noted that these standards are a maximum, therefore reducing parking numbers will maintain compliancy. Minimum requirements will be met for accessible spaces, cycle parking and delivery space off the public highway. This can be managed on independent plots OR through the shared use of decked parking structures and servicing areas. Based on expected accumulation of parking bay demand using Science Park trip rates there may be potential to decrease the number of parking spaces required in the future.





Section AA - Illustrative section through Primary Access 'The Boulevard'



Section BB - Illustrative section through Primary Access 'Woodland Gateway'



Indicative Landscape Strategy

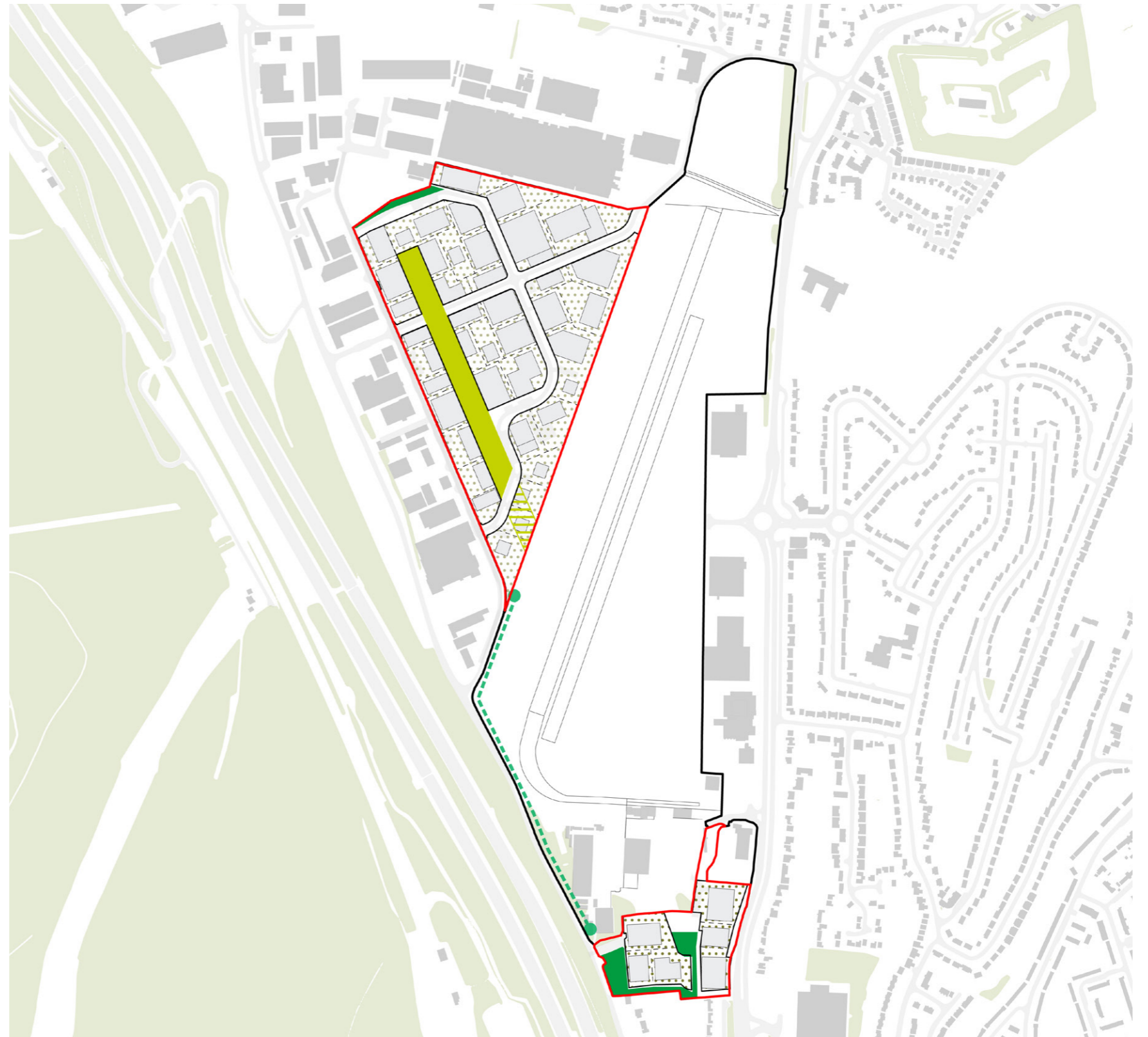
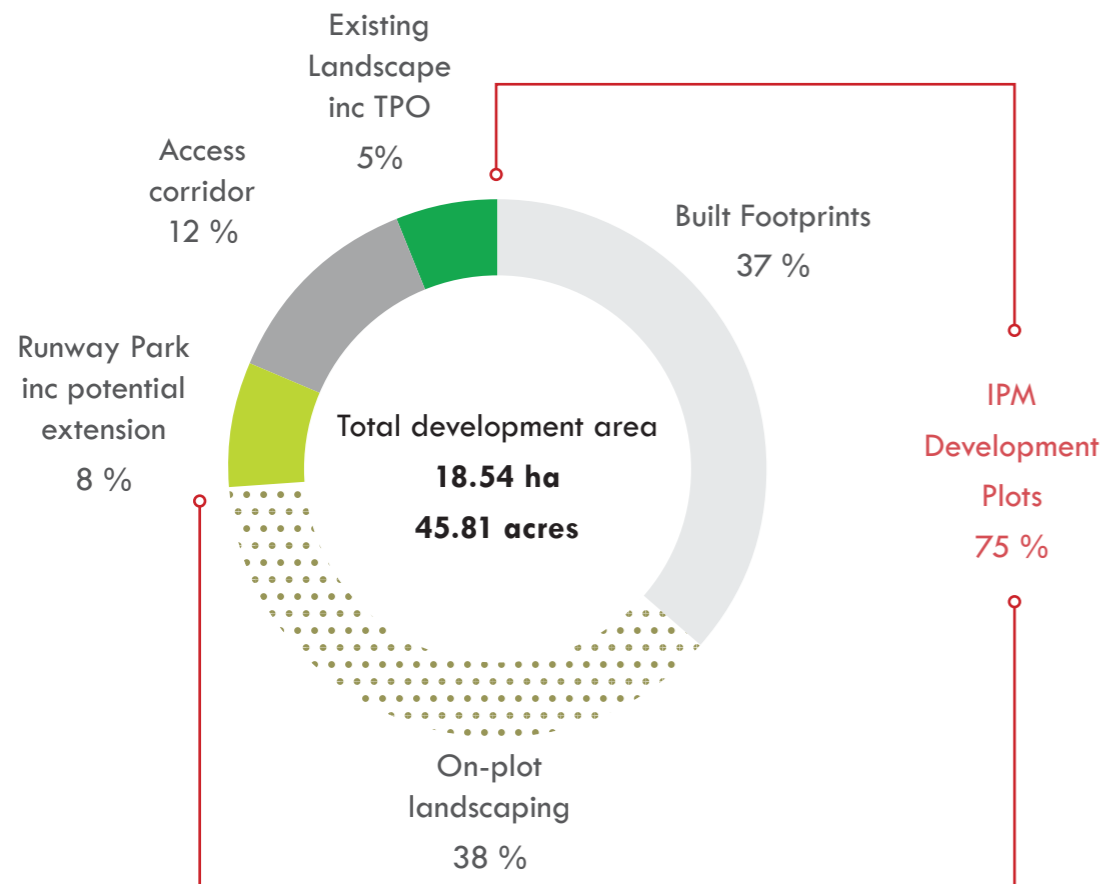
SEE SECTION 8 FOR LANDSCAPE PARAMETER PLAN

The key concept behind the masterplan for IPM is to put in place a 'legacy landscape'. This idea goes beyond a design aspiration for achieving great placemaking.

The legacy landscape, with 'The Runway Park' green spine at its core is inspired by the idea that a place can emerge around this fundamental framework over many years and many phases of development ... a place built around and underpinned by a strong landscape and infrastructure strategy.

The vision for IPM features a 'legacy landscape', a landscape framework that sets out a very robust mechanism which will assist the phased delivery of plots over many years. The landscape framework, thus, will act as a long term generator of place, value and a tool that guides phased delivery of plots.

The landscape framework becomes THE key piece of infrastructure, allowing efficient sequencing of delivery that ensures each subsequent phase 'plugs into' an over arching landscape framework to effectively bring together each parcel and each phase as a cohesive place. This approach delivers maximum flexibility as a framework that guides phasing, assists the delivery of key infrastructure and utilities and delivers a high quality place.



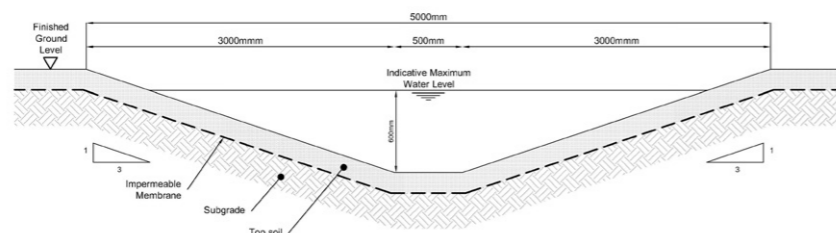


Indicative Drainage Strategy

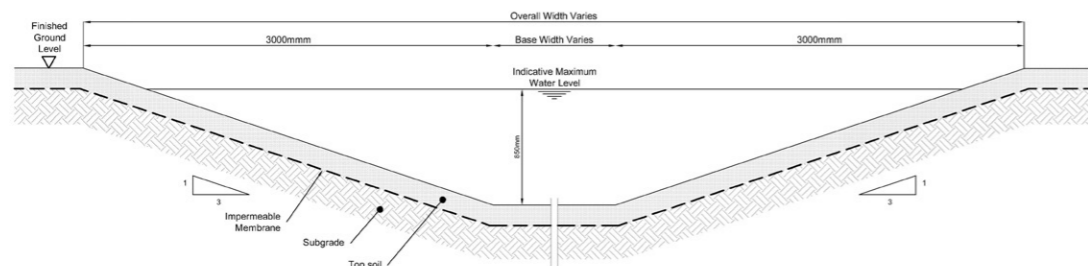
A strategic surface water drainage solution has been prepared for the proposed development based upon a range of infiltration techniques that can be employed across the development. Surface water flood routing for the proposed development will also route flood water in the extreme events away from building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

- KEY:**
- Permeable paving
 - Cellular storage
 - Tree pits
 - Dry basin
 - Swale

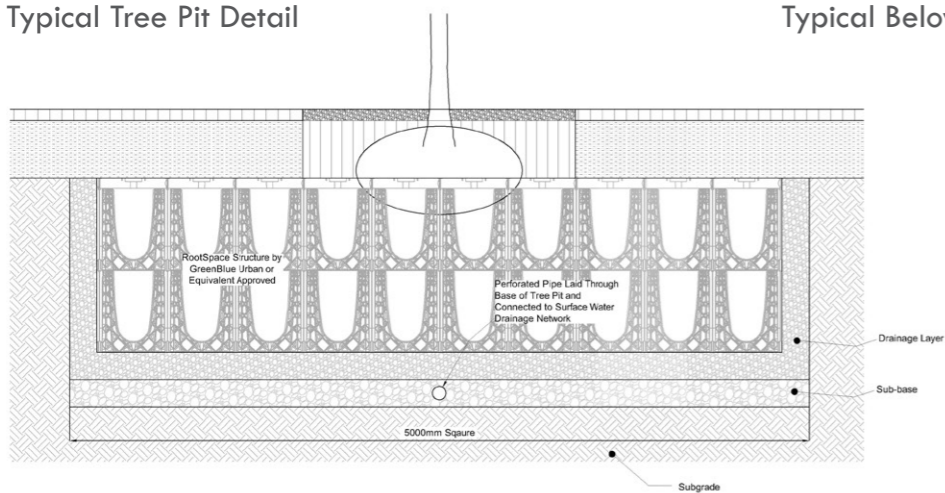
Typical Swale Detail



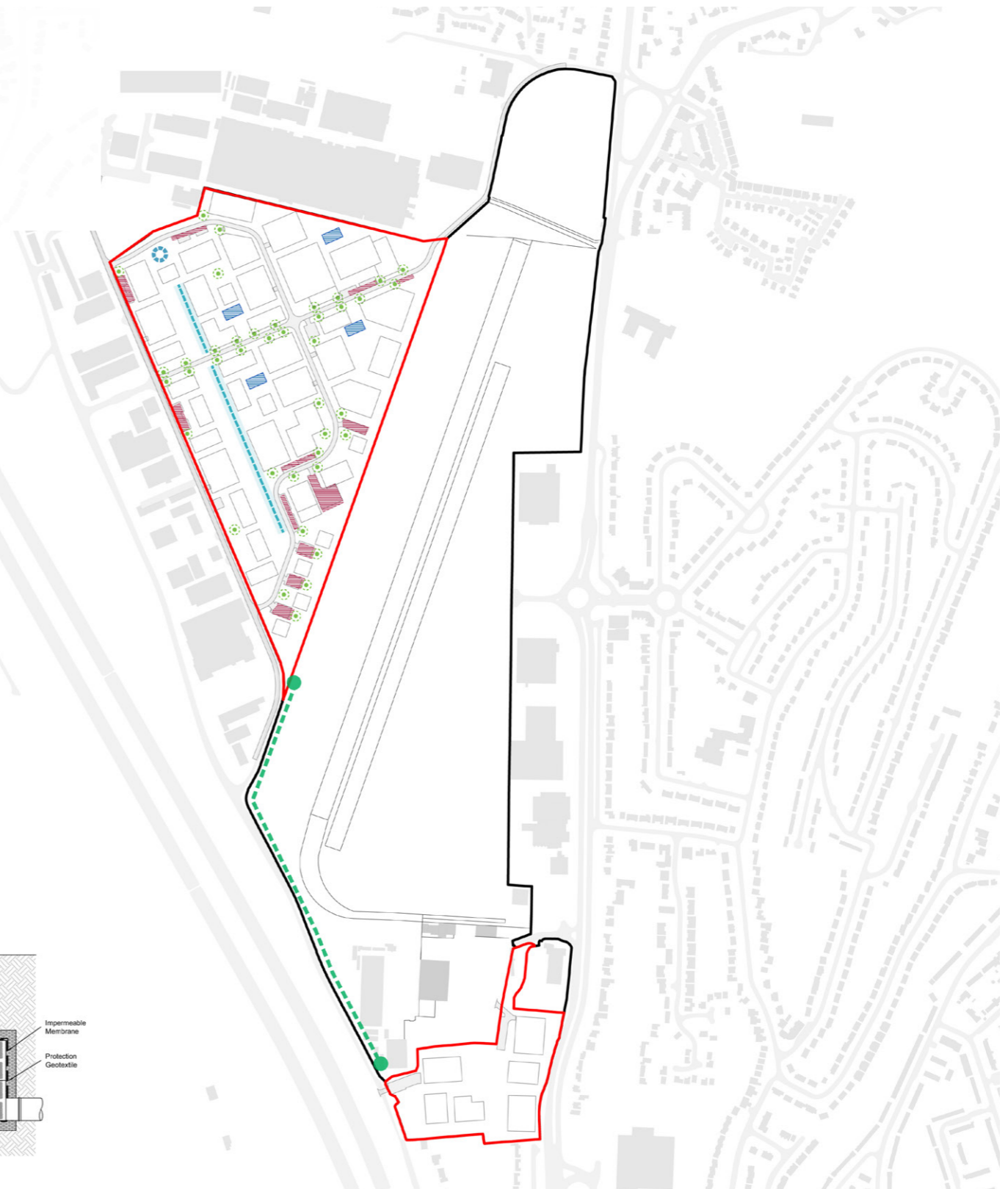
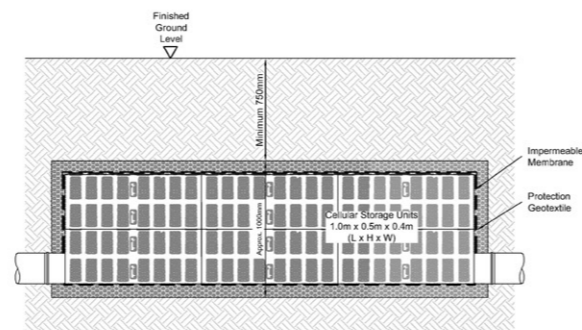
Typical Dry Basin Detail



Typical Tree Pit Detail



Typical Below Ground Cellular Storage



Landscape Character

The landscape strategy for IPM seeks to deliver places of a range of scales for a variety of activities. The intention is to deliver a series of spaces that can be curated by future users of the site and accommodate a varied programme of activities which will help attract and retain the best staff.

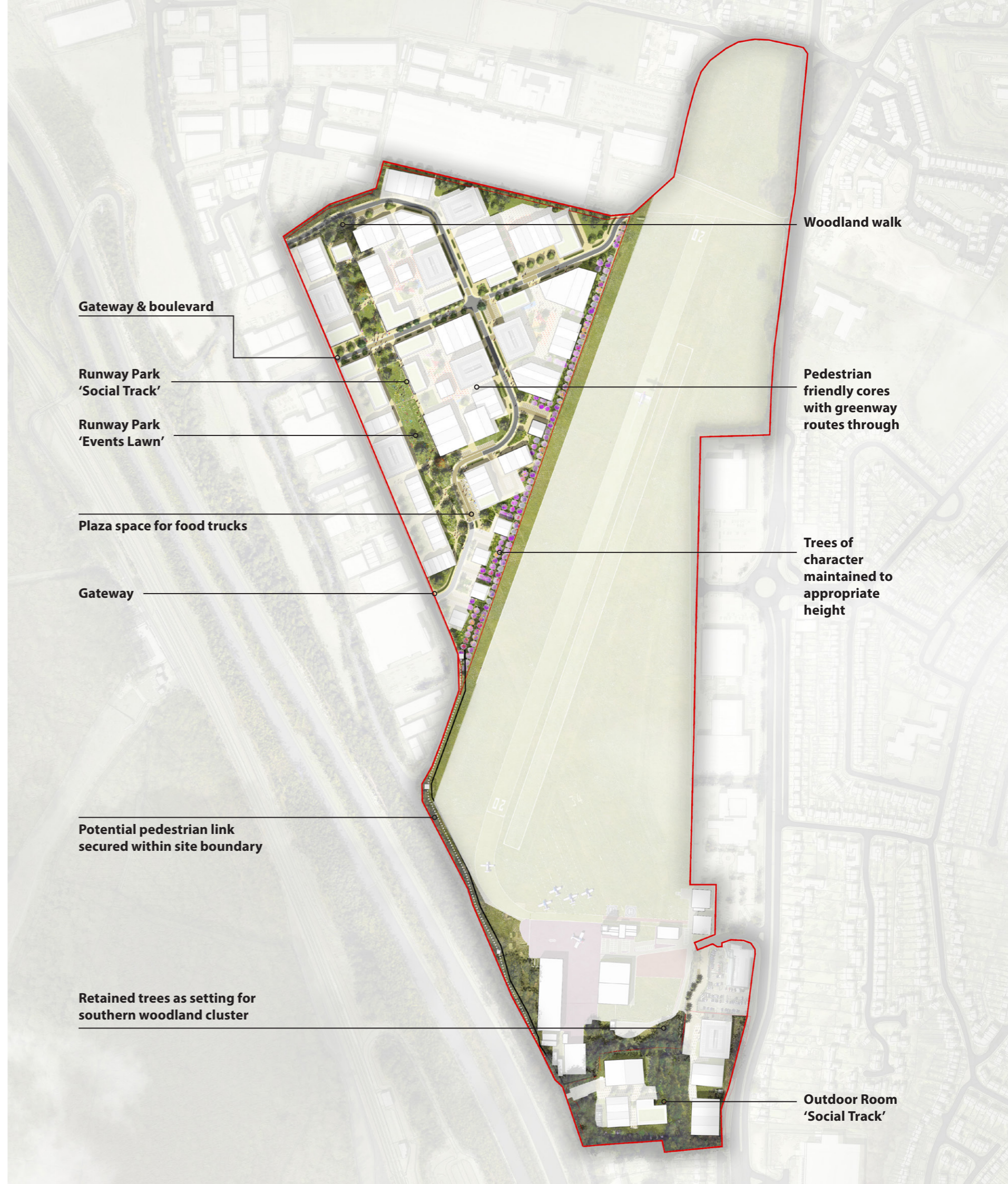
Each component of the landscape framework takes its inspiration from existing landscape conditions and creates a backdrop for development parcels to come forward as distinct parcels with their own identity, under the umbrella of the IPM branding which will be projected by the public realm.

The landscape framework delivers places with distinctive character, creating specific kinds of value. It will create an extraordinary environment within which moments of inspiration will occur and ideas can be exchanged. The distinct character of each landscape element will also elevate architecture to new standards that contribute to IPM becoming a place of distinction - a unique investment opportunity.

Within the framework there are welcoming, civic spaces that work celebrate the sense of arrival. Quieter spaces heightens the senses, whether by unearthing the layers of a site's history or through sound, sight, smell and touch.

The strategy also seeks to deliver open space for each phase of development to create place and build an enterprising, entrepreneurial and innovative community spirit in an environment that is authentic and attractive to its users.

Selection of species in the planting scheme should avoid small berried and nut bearing species in order to minimise attraction of large birds and/or flocks which could contribute to risk of bird strike on the airfield.



The Power of 10 - Landscape Strategy

Runway Park - social track



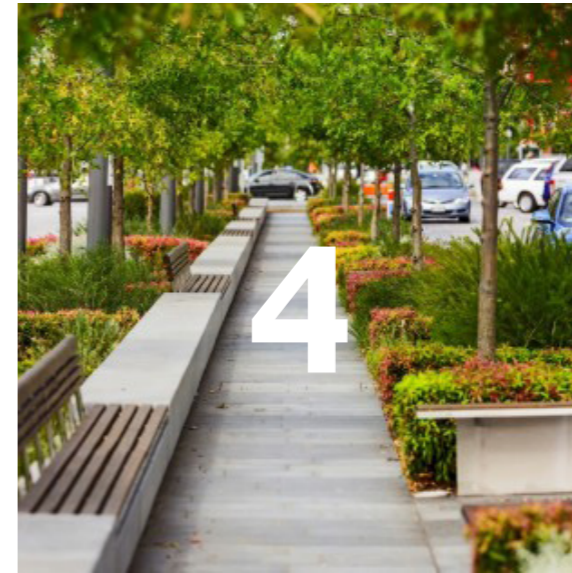
Runway Park - events lawn



Outdoor rooms



Greenways



Gateways



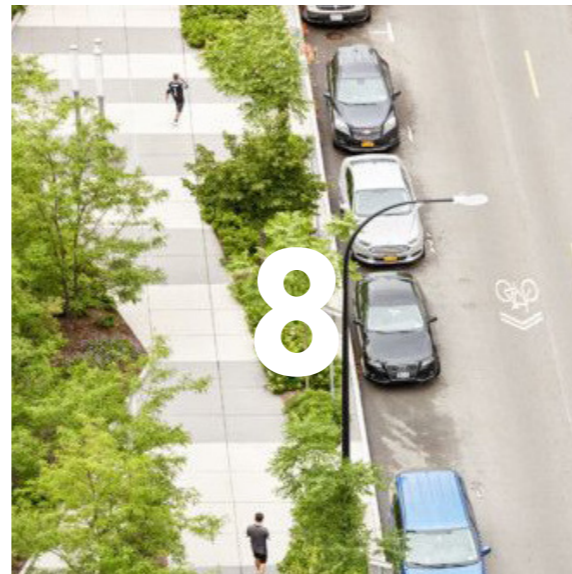
Woodland walk



Trees of character



Boulevard



Decked parking



Innovative street structures



*Precedent images for illustrative purposes only

Potential Landscape Features

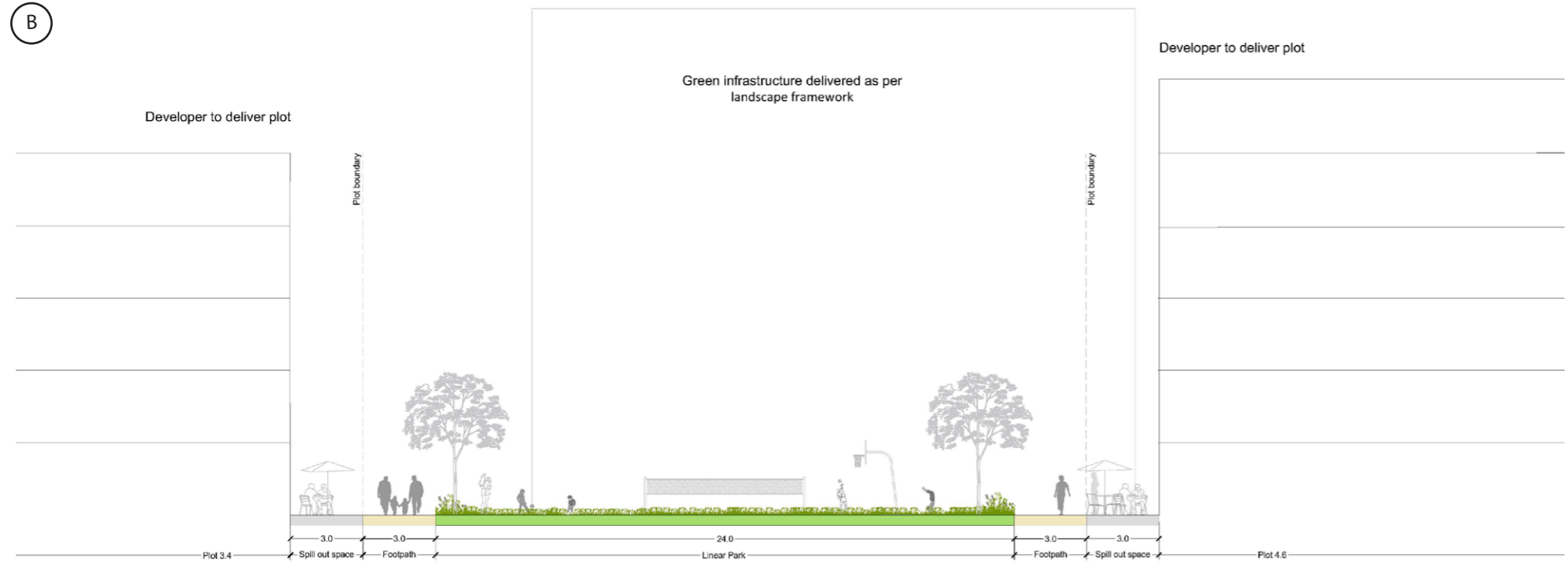
1. The Runway Park Social Track *Getting innovation on track*



2. The Runway Park Events Lawn *A flexible events space*



*Precedent images for illustrative purposes only



3. Outdoor rooms
Collaborative spaces



4. Greenways
Pedestrian innovation stitches



5. Gateways
Arrival points & identity markers



6. The Woodland Walk
A peaceful retreat





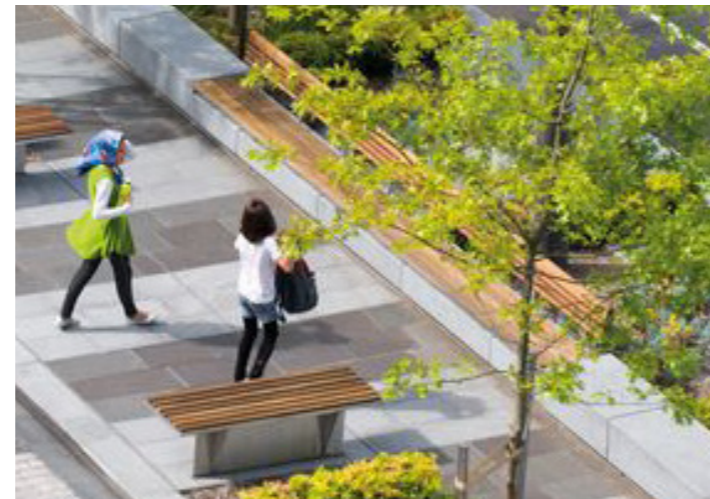
7. The Landscaped Edge

A seasonal set piece that puts people in touch with nature



8. The Boulevard

Much more than an access route



9. Car Decks

Meanwhile solutions OR permanent positive features



10. Innovative Technology

Leading edge technology that embraces innovation



*Precedent images for illustrative purposes only

POTENTIAL
CHARACTER...
**BRINGING THE
PLACE TO LIFE**

Proposed Character

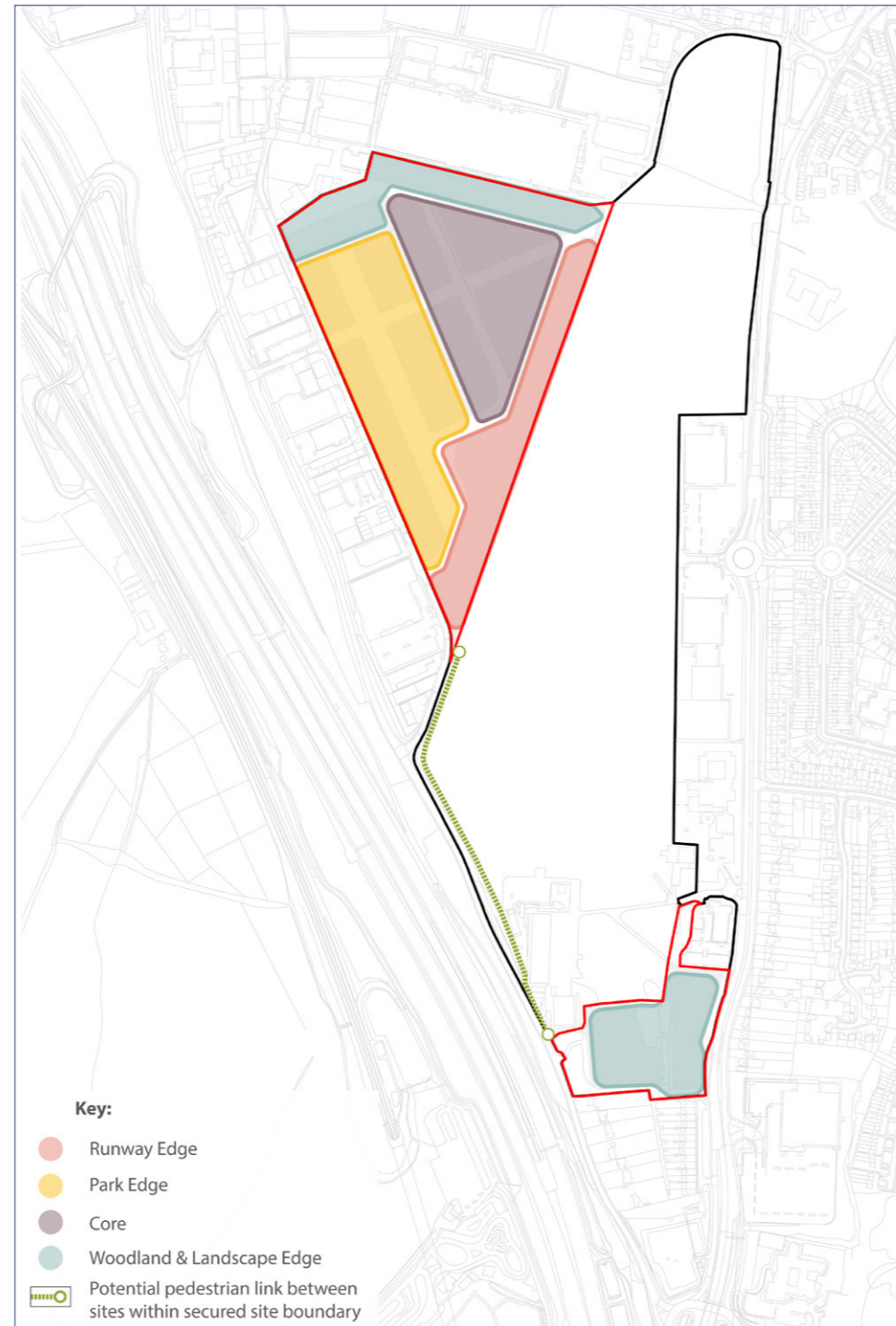
This section takes key areas of the masterplan, and based on the principles described in the previous sections, describes how these might evolve in terms of their built form, composition, quality, and character.

The purpose of this section is to describe how the principles of the design rationale and vision could be manifested and delivered on site. It is envisaged that Design Coding at the next stage of the planning process will guide development proposals further and fix tighter parameters that detailed development proposals must adhere to.

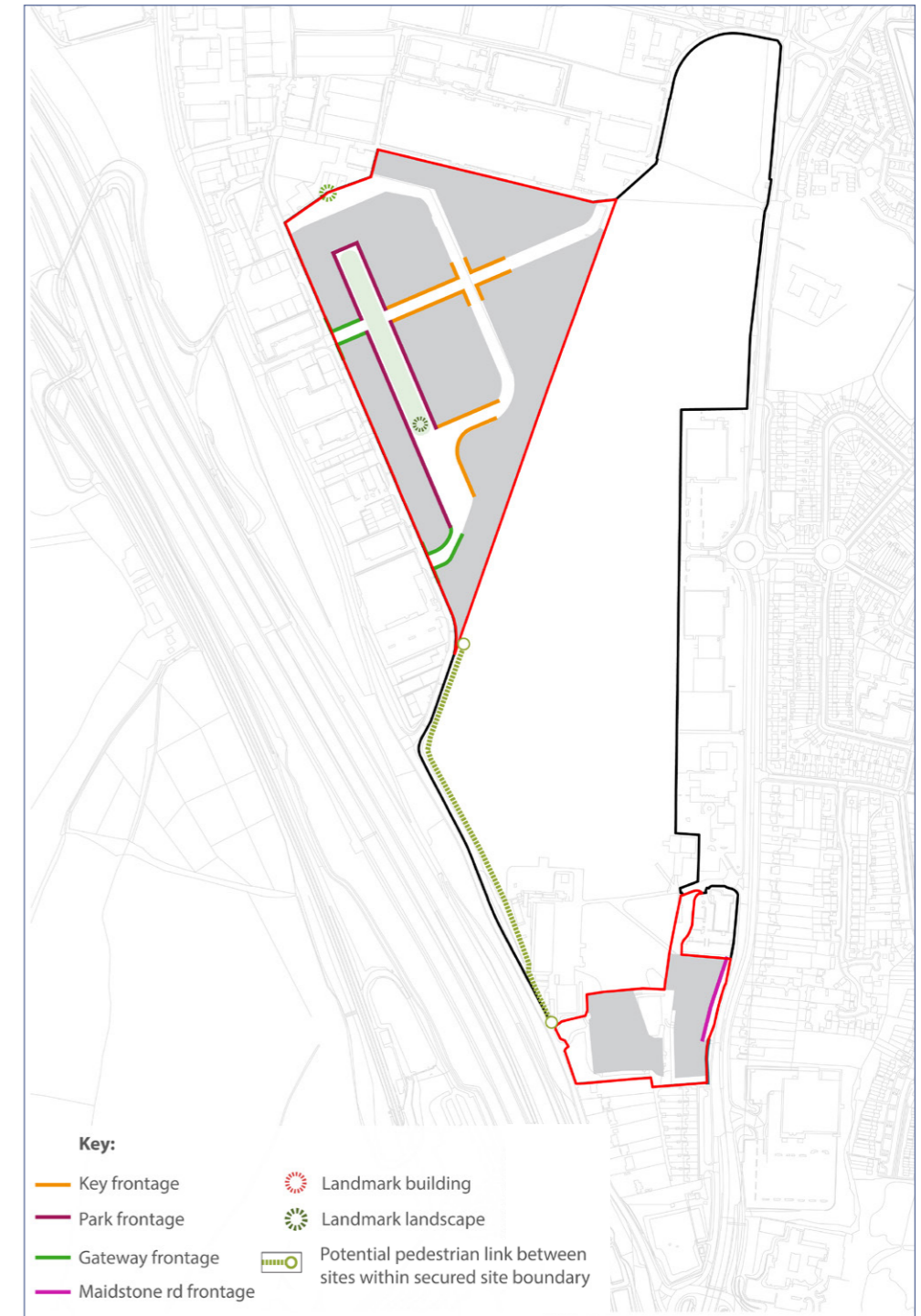
The studies do not represent the only solution but illustrate how an integrated design approach would deliver a scheme with a strong sense of place.

The studies do however represent the layout, form, scale and massing that will result from the design approach. The material is intended to give a clearer picture of how the design principles will translate into the fabric of the scheme.

Character Areas

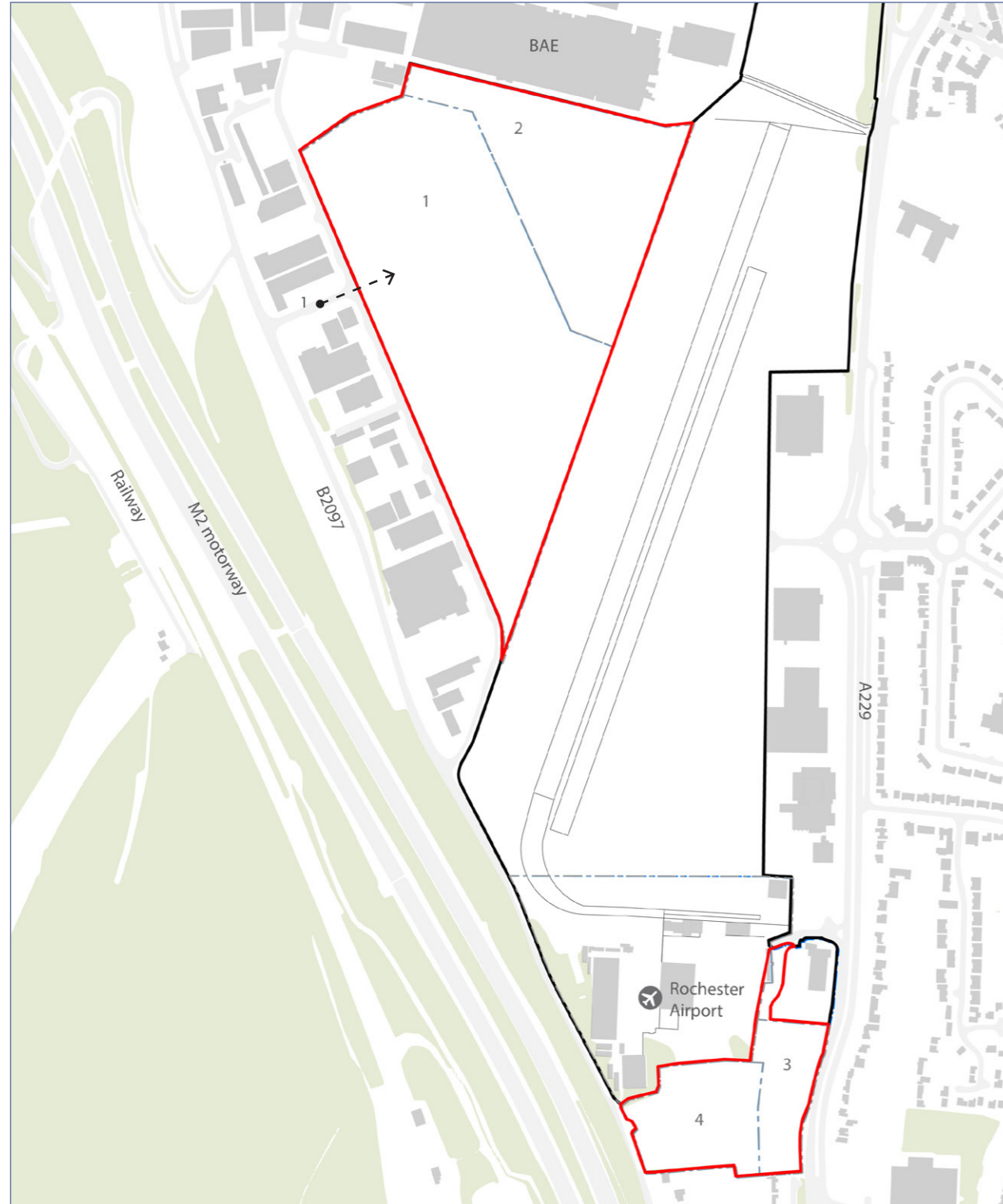


Key facades, spaces and buildings



The 1st Phase Northern Gateway Early impact

1st Phase Location Plan



1. Existing view into Phase 1 gateway



*Artists impression of potential character subject to detailed design with funding of works to be explored in the future

1st Phase Northern Gateway



INNOVATION
PARK
MEDWAY

INNOVATION



//

The first phase of development at Innovation Park Medway provides a home for pioneer, early occupiers. This gateway opens up access and transforms perceptions, placing IPM on the map for investors.

The gateway presents a high quality public realm and sense of enclosure that celebrates a sense of arrival and sets the tone for a place of distinction.

//

The Runway Park





The *Runway Park* will become the signature open space that becomes a mark of distinction for IPM. Acting as a ‘social track’, this bold landscape element will provide a flexible space and a home for the range of activities that will attract and retain talent.

The *Runway Park* will quickly establish itself as the forum for collaboration, bring businesses and individuals together in the public realm to foster a innovative spirit.

The Runway Edge



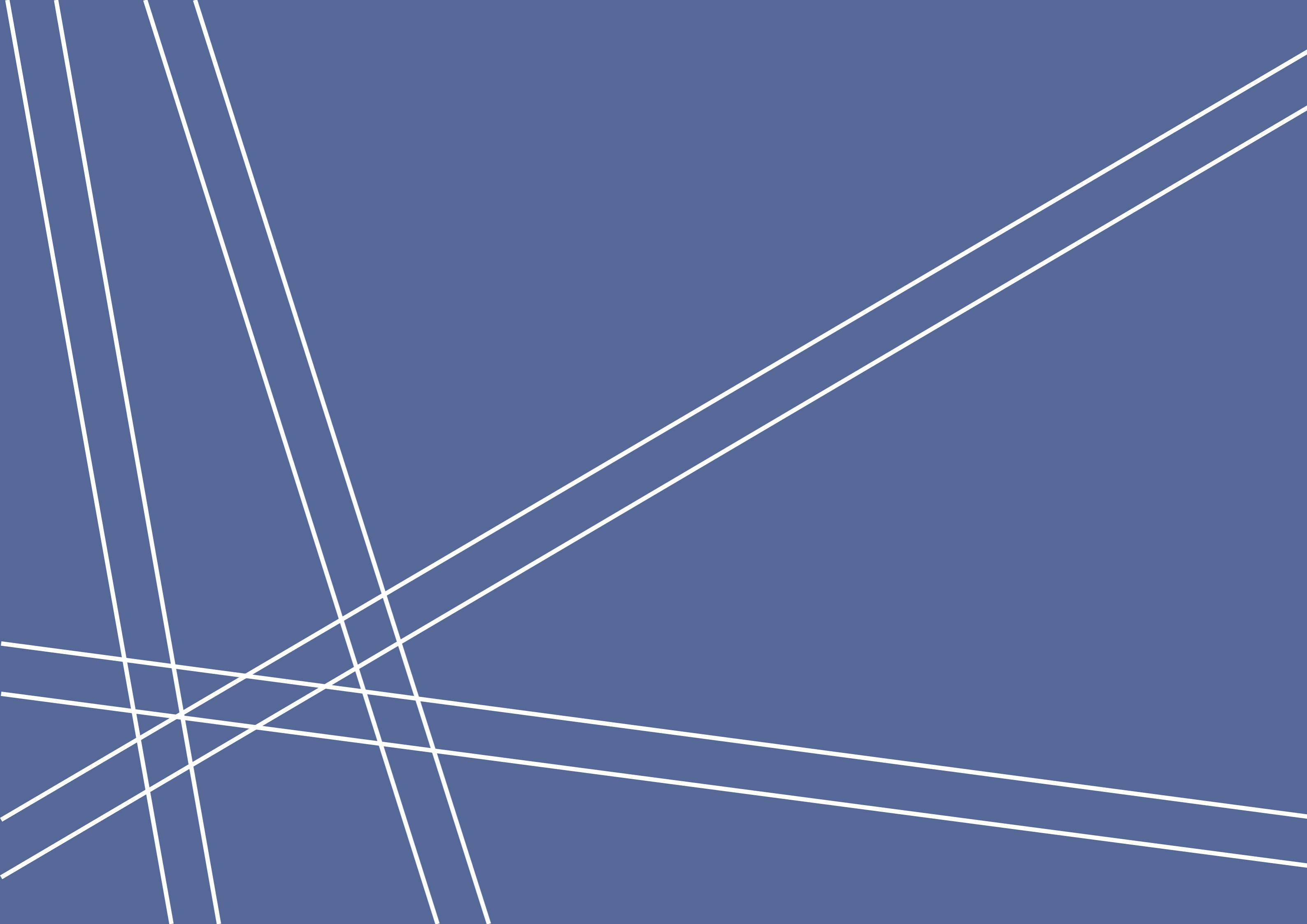
Artists impression of potential character subject to detailed design with funding of works to be explored in the future



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

Located at the southern end of the *Runway 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.



7.0

PHASING AND DELIVERY

Phasing

A development of this scale will take time to construct; but delivering positive place-making 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.

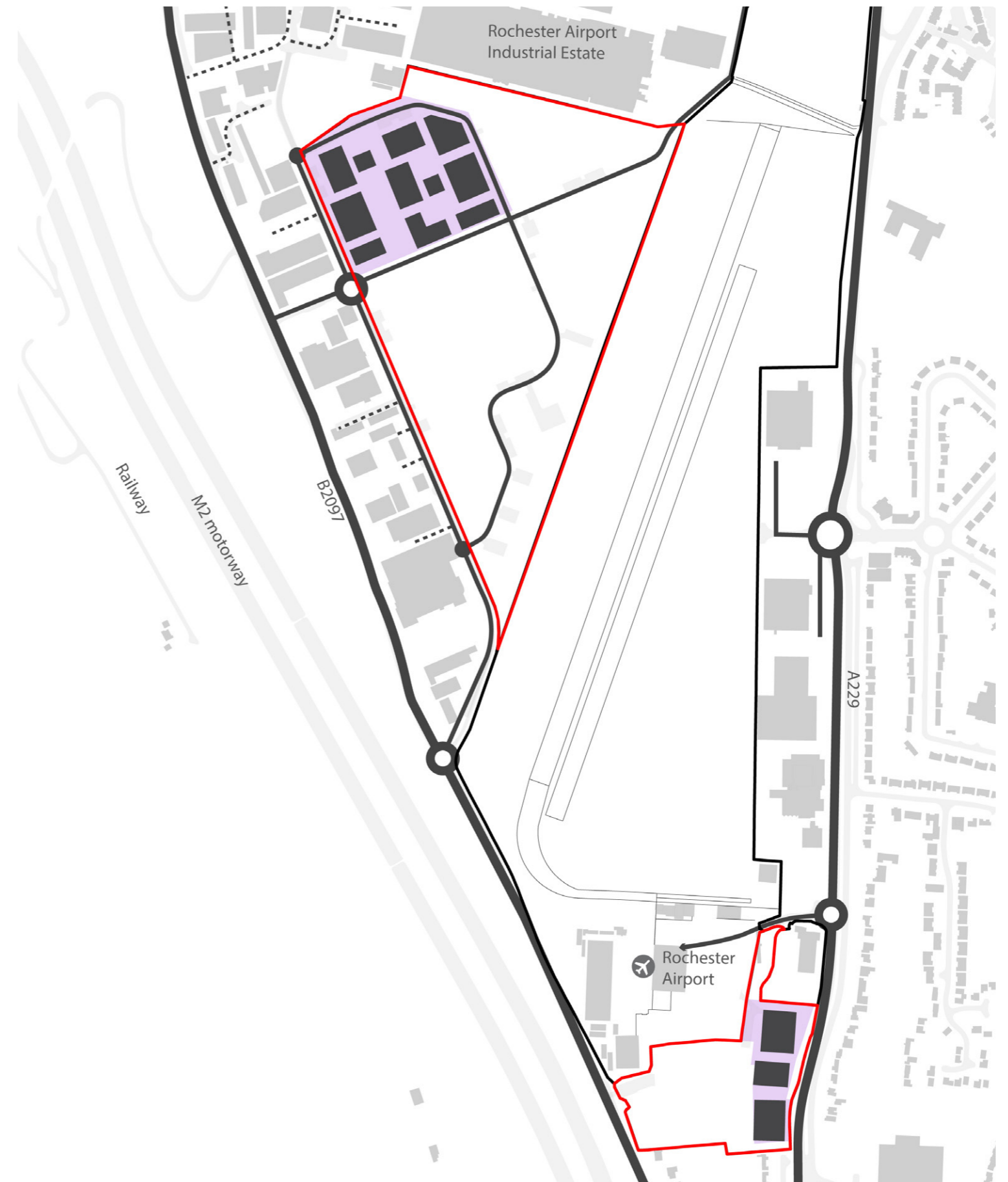
Our approach to phasing focuses on delivery of key infrastructure for Phase 1 and this includes putting in place the northern gateway and first portion of the linear Runway Park. This will build momentum for the identity of the place and, from the outset, start to address the challenges of creating a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

Potential phasing sequence

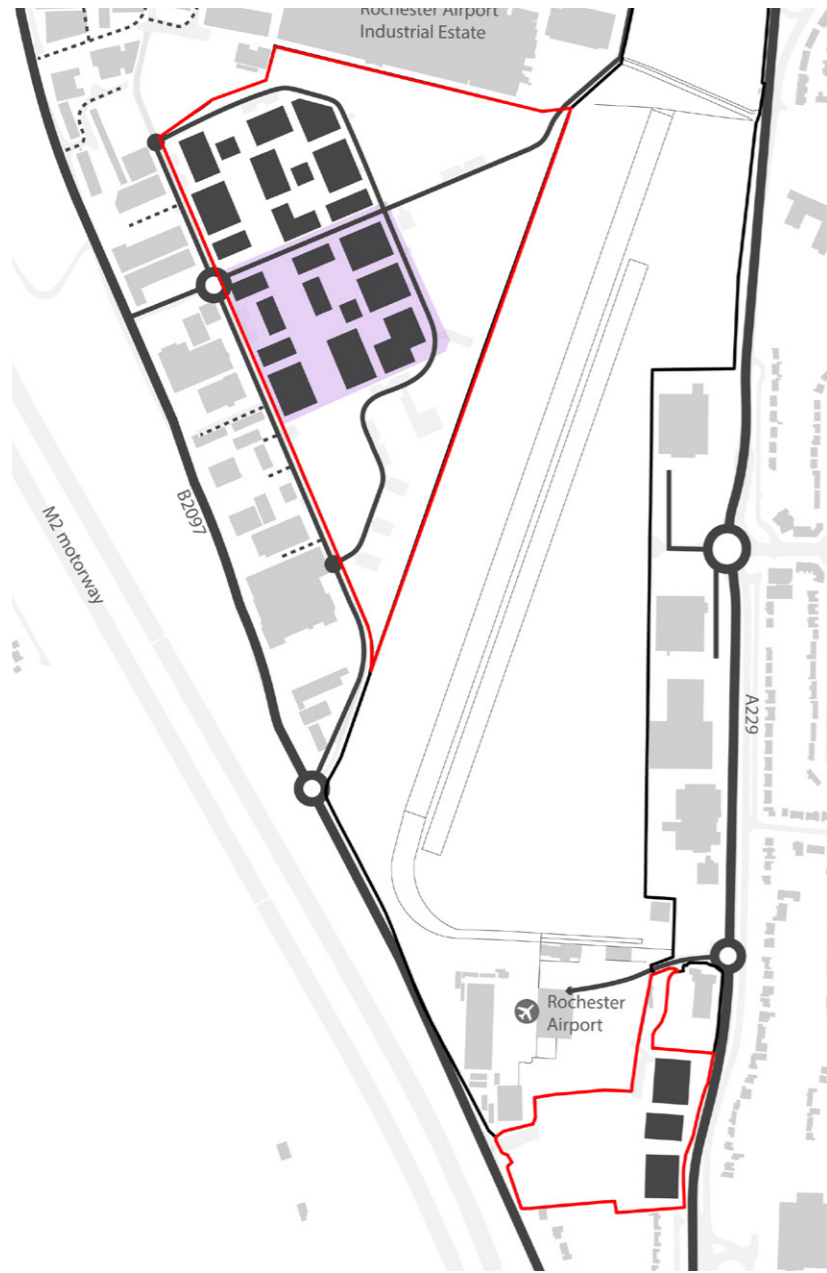
The masterplan proposes a very robust fundamental structure formed by the linear park and primary access corridor. The plots that hang off that remain very flexible and this also lends itself to a very agile phasing strategy that can naturally flow on from the first phase and be served off extensions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

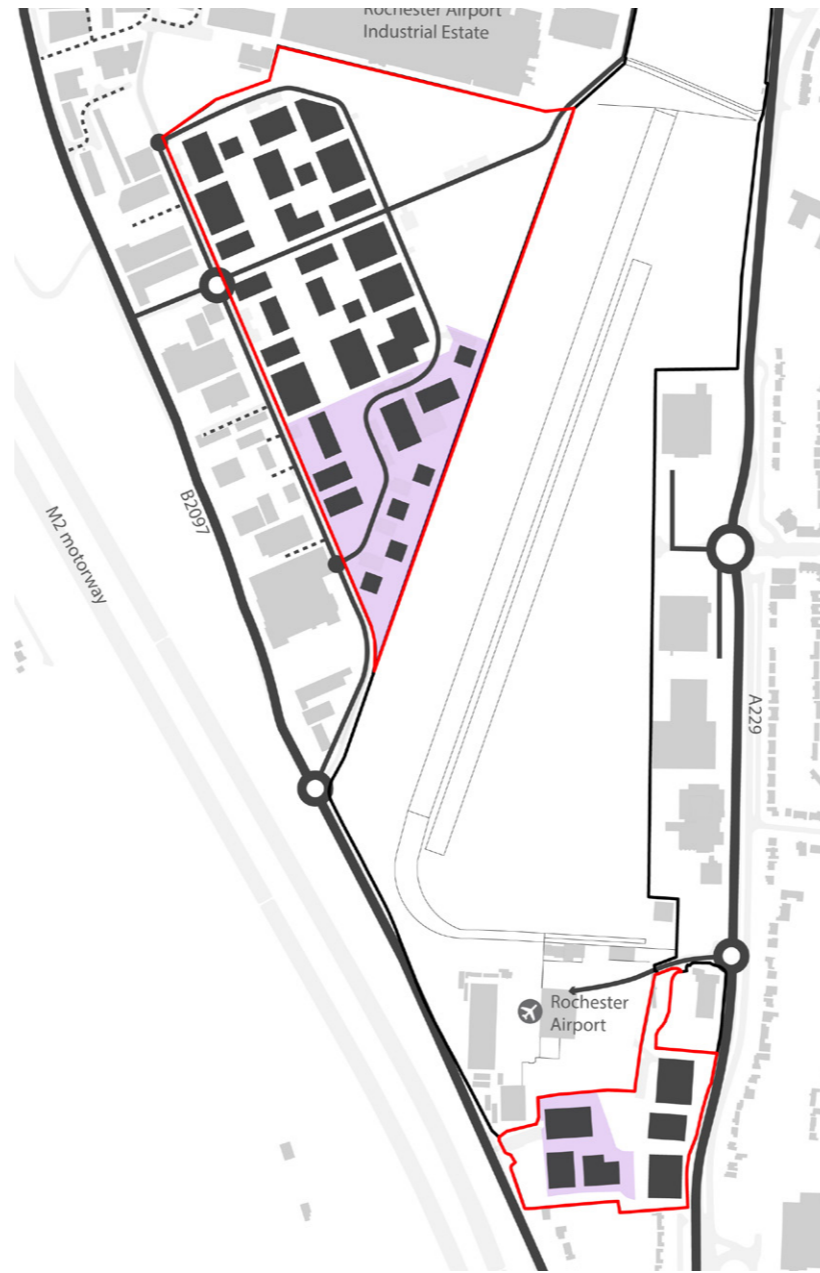
Phase 1



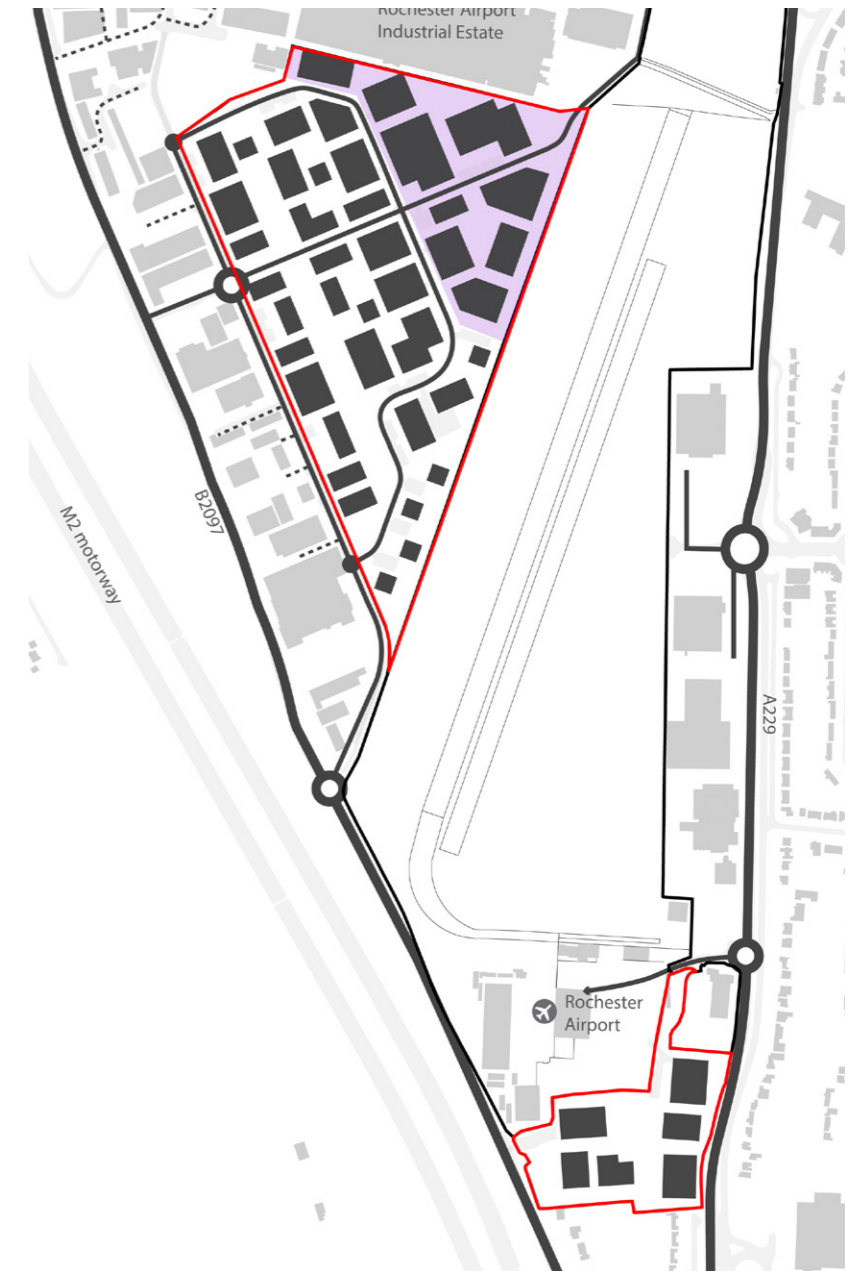
Phase 1:	B1 GEA (M2)	B2 GEA (M2)	Parking GEA (M2)	Total/Parcel GEA (M2)
N1	5,400	3,000	6,000	14,400
N2	3,400	10,396	8,000	21,796
S1	-	6,000	8,000	14,000
			Phase 1 total:	50,196
Phase 2:	B1 GEA (M2)	B2 GEA (M2)	Parking GEA (M2)	Total/Parcel GEA (M2)
N3.1 - N3.4	3,200	1,600	6,000	10,800
N4	3,600	14,200	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



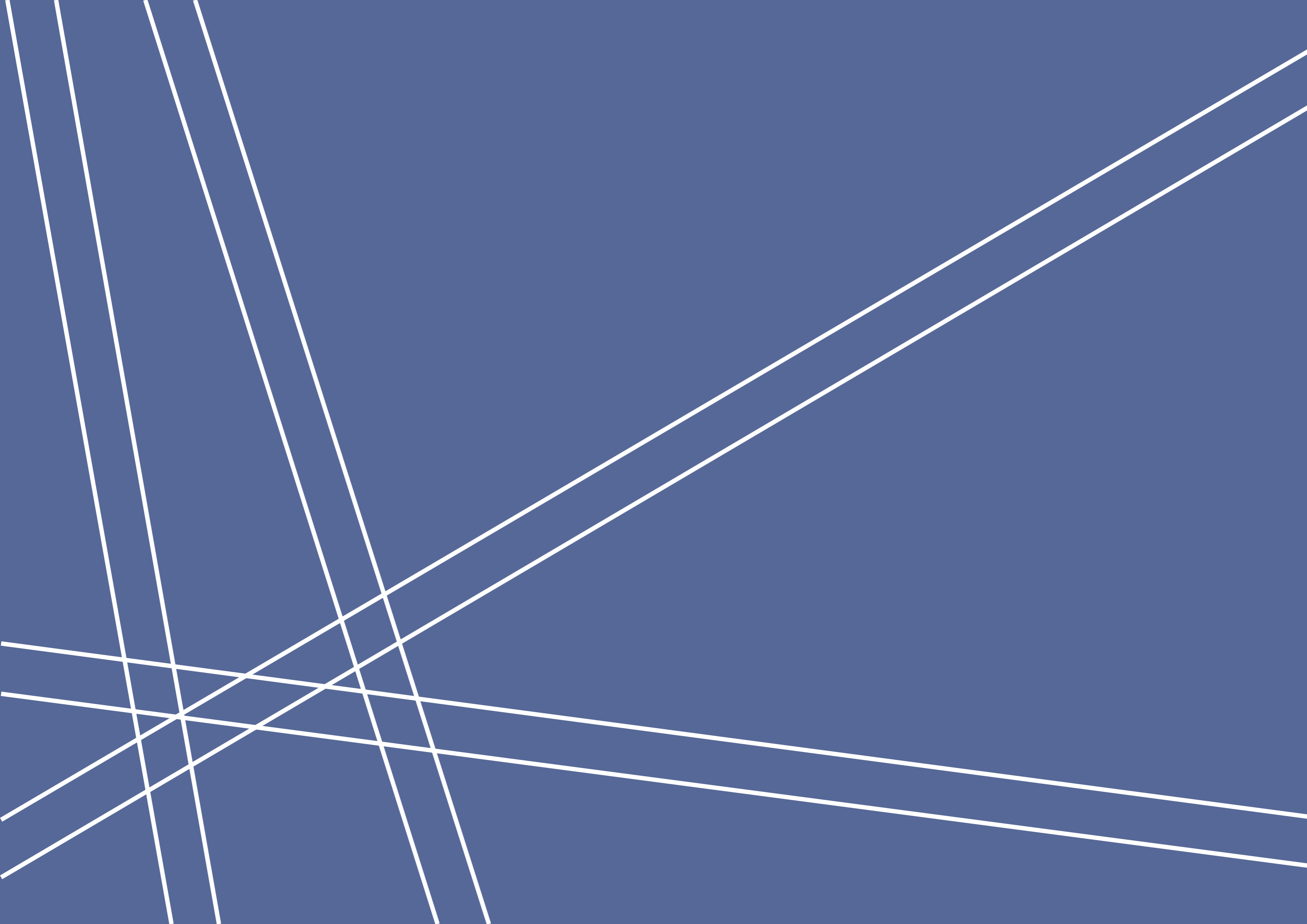
Potential Phase 2



Potential Phase 3



Potential Phase 4



8.0

MASTERPLAN PARAMETERS

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.

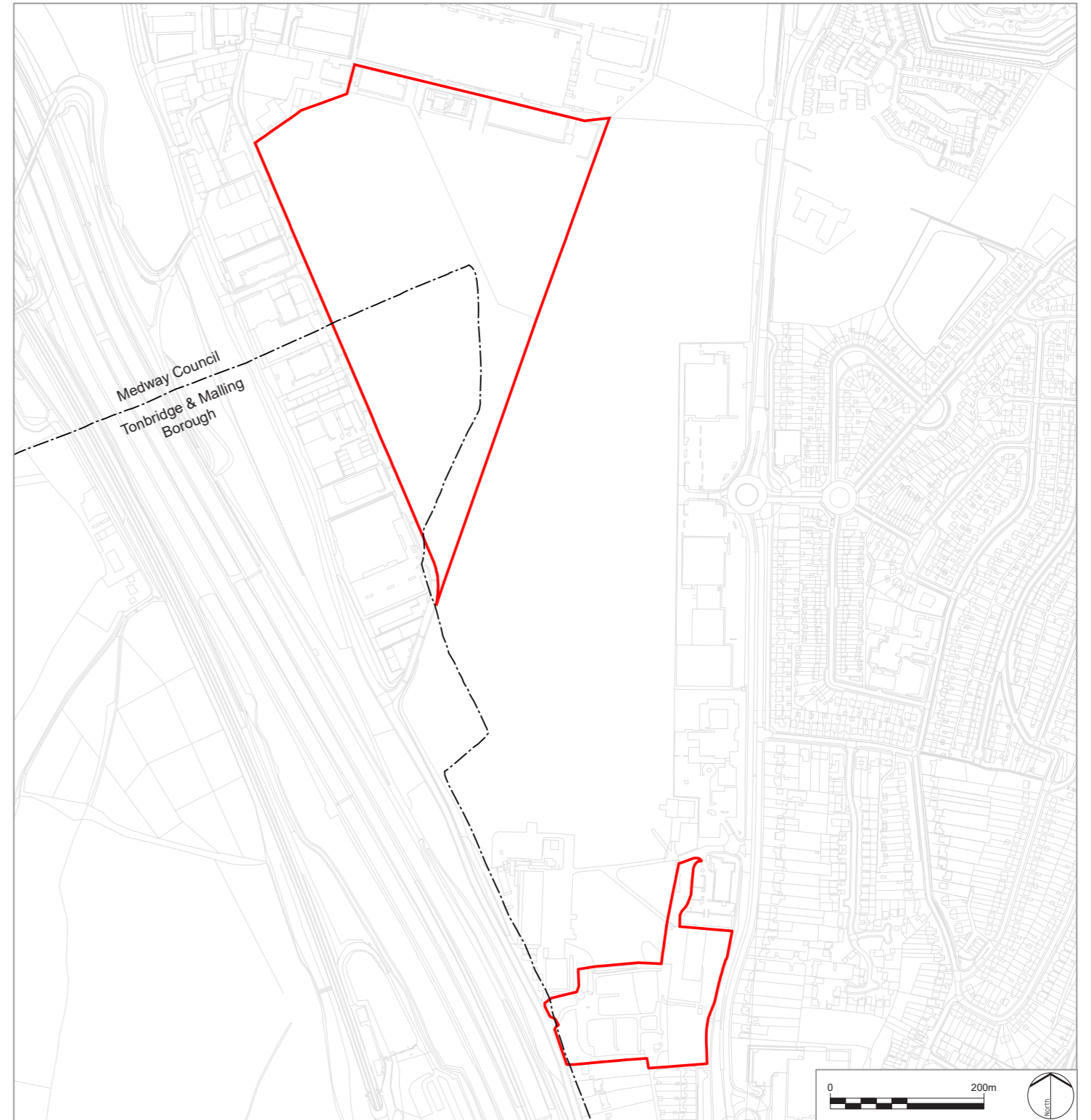
The following set of parameter plans set out the key layers that underpin the masterplan and the frameworks upon which the future Environmental Impact Assessment can be carried out.

The key parameters include:



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

Parameter Plan

Site Boundary

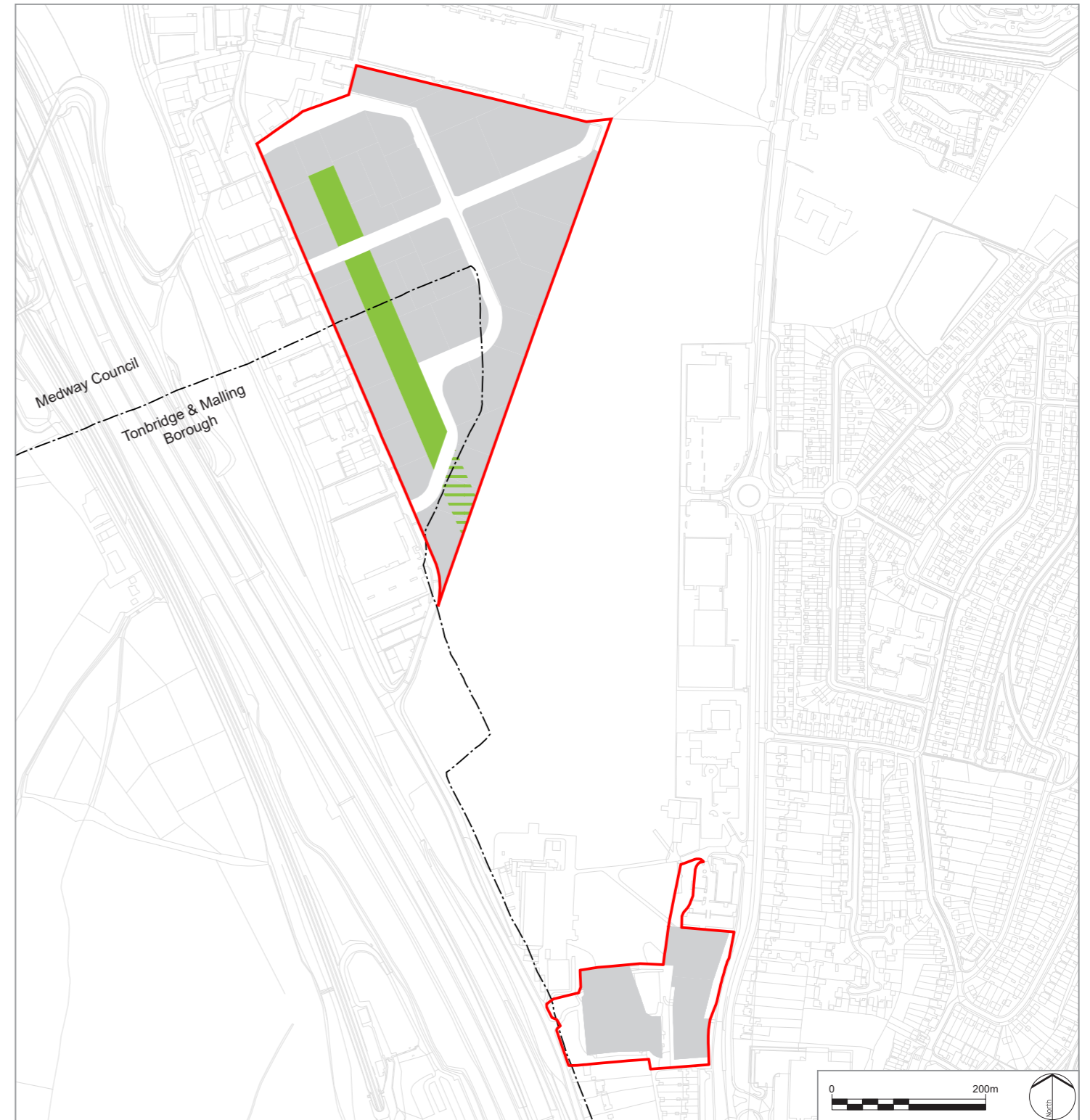


LEGEND

-  Site Boundary
-  Medway Council and Tonbridge & Malling Borough Council Boundary

Parameter Plan

Landscape

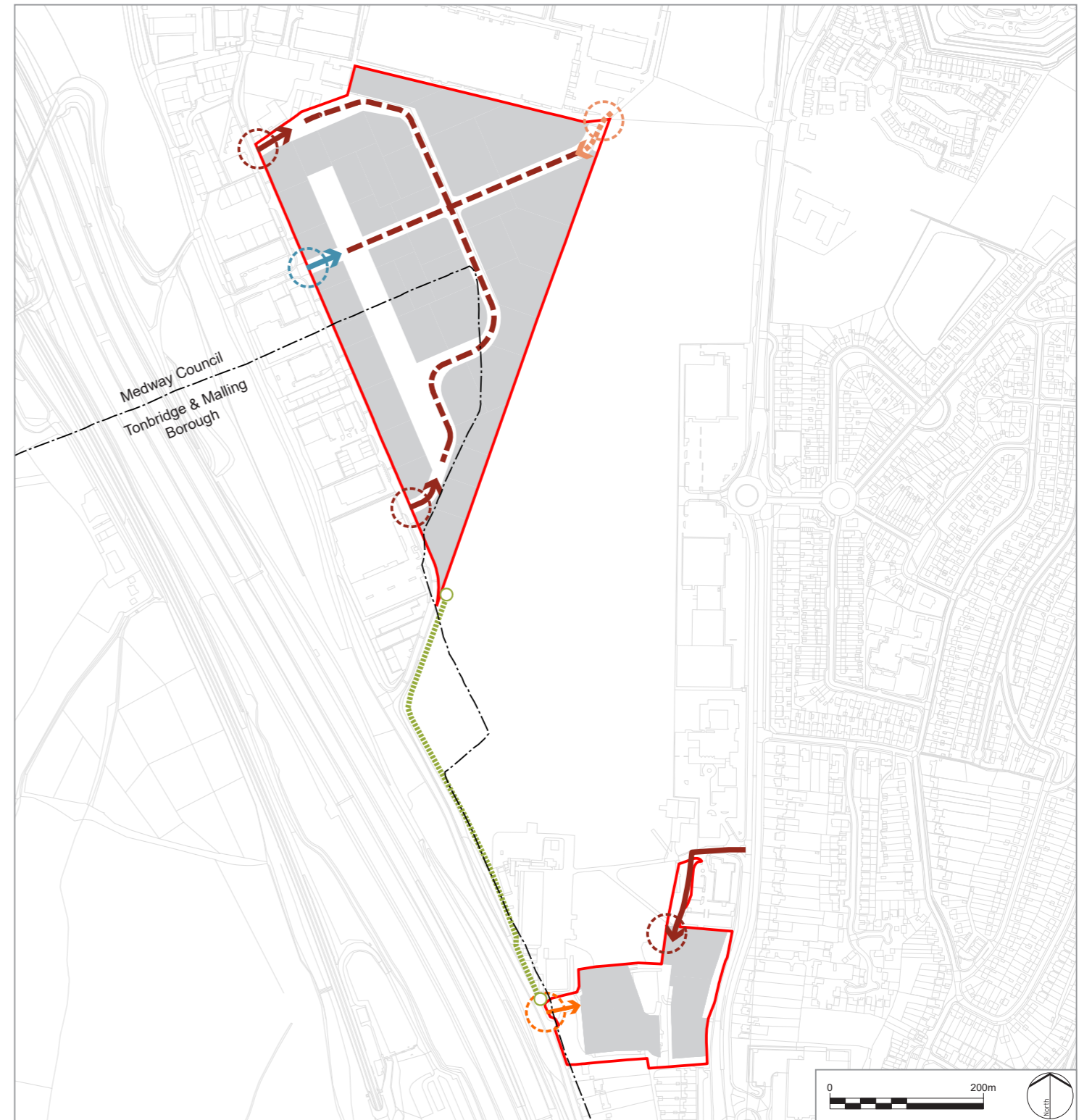


LEGEND

- | | | | |
|---|---|---|-------------------------------|
|  | Site Boundary |  | Proposed Landscape |
|  | Medway Council and Tonbridge & Malling Borough Council Boundary |  | Potential Landscape Extension |
|  | Development Parcels (Including on plot landscape) | | |

Parameter Plan

Access

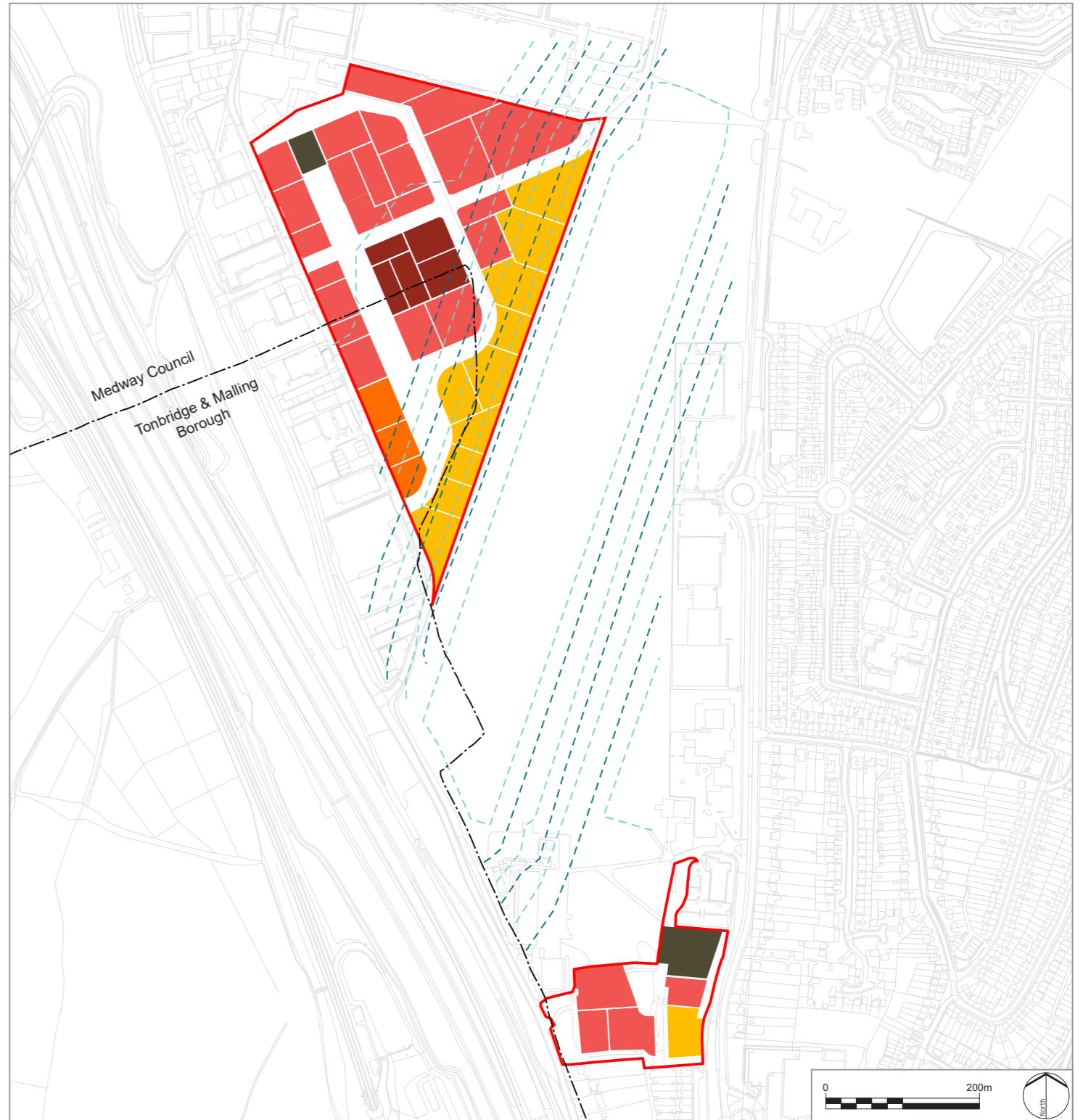


LEGEND

- | | | | | | |
|--|--|--|-----------------------------------|--|---------------------|
| | Site Boundary | | Primary Access Points | | Bus priority access |
| | Medway Council and Tonbridge & Malling Borough Council Boundary | | Secondary Access Points | | |
| | Development Parcels | | Potential Long Term Access Points | | |
| | Potential pedestrian link between sites within secured site boundary | | Indicative primary access route | | |

Parameter Plan

Building Heights



LEGEND

	Site Boundary		Up to 6 storeys		Up to 2 storeys
	Medway Council and Tonbridge & Malling Borough Council Boundary		Up to 5 storeys		
	Rochester Airport Height Restriction 10m Contour		Up to 4 storeys		
	Rochester Airport Height Restriction 5m Contour		Up to 3 storeys		

The background is a solid grey color. It features several white lines of varying lengths and orientations. Some lines are vertical or near-vertical, while others are diagonal or horizontal. The lines are scattered across the page, with a higher density in the lower-left quadrant. The word 'APPENDIX' is centered in the upper-left area.

APPENDIX



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

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 NO_x 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.

Noise Survey

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.

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 re-provision 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 19.8m/hr (5.5×10^{-3} 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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