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ALAMEIN BARRACKS MASTERPLAN

Key - Site Location
- The site
- Built-up areas
- Driffield town centre
- Main roads
- Urban street network
- Railway and station
- Watercourses

Little Driffield

DRIFIELD

Kirkburn

ALAMEIN BARRACKS

Kelleythorpe

Show ground

1 km

2 km

3 km
**SECTION 1**

**Introduction**

Arup has been commissioned by East Riding of Yorkshire Council to prepare a masterplan to guide the development of housing allocation DRF-I (Alamein Barracks) in the adopted East Riding Local Plan Allocations Document (July 2016).

The site measures 31.66ha in area and is identified in Policy A3 of the Local Plan Strategy Document as a key area of growth. It is a large brownfield site, having previously been used by the Ministry of Defence (MoD).

The preparation and approval of a masterplan is a requirement of Policy DRF-I of the adopted East Riding Local Plan Allocations Document.

The Local Plan Allocations Document highlights further requirements that would need to be provided on specific allocations. For DRF-I Alamein Barracks, these include:
- Provision of a landscaped buffer and retention of trees;
- Pedestrian and cycle links to connect with the existing network;
- Direct bus link between the site and Driffield Town Centre;
- Avoid residential development in Flood Zone 3a; and
- Incorporate comprehensive Sustainable Drainage Systems.

This masterplan adds detail to those requirements set out above, as well as providing further guidance on the application of other relevant policies within the East Riding Local Plan (Section 2).

Section 5 provides the background to technical and design considerations which have informed the Placemaking Principles established in Section 6.

The Design and Placemaking Principles Sections in particular seek to secure the creation of buildings and places which integrate high quality design. This is to ensure that the development will create a visually attractive development which adds to the overall quality of the area and establishes a strong sense of place.

It is expected that, following consultation, the masterplan will form a Supplementary Planning Document. The content of the masterplan will therefore be an important material consideration in determining applications for the redevelopment of the site.
Figure 1: Allocation DRF-I (East Riding Allocations Document Extract)
Policy and Guidance

East Riding of Yorkshire Council is currently undergoing a Local Plan Review, which is the first stage of reviewing the Local Plan which was adopted in 2016.

Policy and guidance which has informed the masterplan

- Driffield Adopted Policies Map (2016)
- Affordable Housing SPD (2016)
- Sustainable Transport SPD (2016)
- Open Space SPD (2016)
- CIL Draft Charging Schedule and Regulation 123 list (2017)
- Infrastructure Delivery Plan (2015)
- SuDS Combined Planning Note and Standing Advice (2016)
### Consideration | Source | Description
--- | --- | ---
Parking Guidance | East Riding Sustainable Transport SPD (2016) | Car Parking Guidelines:

<table>
<thead>
<tr>
<th>Unit Size</th>
<th>Minimum Vehicle Parking</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 bedroom unit</td>
<td>1 space</td>
</tr>
<tr>
<td>2-3 bedroom unit</td>
<td>2 space</td>
</tr>
<tr>
<td>4-5 bedroom unit</td>
<td>2-3 spaces negotiated</td>
</tr>
</tbody>
</table>

1 visitor space per 4 houses should be provided.

Parking bays should be no smaller than 4.8m long and 2.4m wide. The width for disabled and parent & child parking bays should be 3.5m.

Density Requirements | East Riding Local Plan Strategy Document (2016) | Policy H4 within the Strategy Document states that developments will be encouraged to achieve a density of at least 30 dwellings per hectare (dph). However, sites in close proximity to Principal Towns should seek to provide a density above 30 dph. Paragraph 6.43 in the subtext to Policy H4 also identifies other instances where higher density schemes will be appropriate, which includes the redevelopment of brownfield sites.

The subtext to policy DRF-I provides an indicative capacity of 480 units for the site. This masterplan identifies a developable area for DRF-I of 10.3ha (excluding the MoD area), which would provide 360 units at a density of 35dph.

Affordable Housing | East Riding Affordable Housing SPD (2016) | Policy H2 of the East Riding Strategy Document sets out that affordable housing in Principal Towns will be required where a proposal comprises 10 housing units or more, or 0.33 hectares or more. Within the Driffield area 25% of housing should be affordable. Section 2 of the Affordable Housing SPD Addendum (February 2019) sets out how the Council will determine affordable housing provision, in light of paragraph 63 of the revised NPPF which can be given significant weight. The Affordable Housing SPD provides further detail on the mix and design of affordable housing that is required.
<table>
<thead>
<tr>
<th>CONSIDERATION</th>
<th>SOURCE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open Space Requirements</td>
<td>East Riding Open Space SPD (2016)</td>
<td>The Open Spaces SPD (2016) includes standards for the quantity, quality and accessibility of open spaces in new developments, as follows:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Parks (0.18ha per 1000 people, within 10 km)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Natural and semi-natural green space (2ha of natural green space per 1000 people and 1ha of local nature reserve per 1000 people, within 4km)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Playing Pitches (1.18ha per 1000 people, 20 minutes travel time)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Amenity green space (0.6ha per 1000 people, within 2km)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Provision for children and young people (No child should be living further than 100m from a small play area and all children should have access to three different types of space no further than 1,000m from home)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>New developments for more than 10 houses must make provision for new open space.</td>
</tr>
<tr>
<td>Education Requirements</td>
<td>East Riding Local Plan Strategy Document (2016)</td>
<td>Policy A3 (D2) outlines that plans, strategies and decisions should support the provision of additional infrastructure including</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Additional primary school pupil capacity for existing schools in Driffield; and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Additional secondary school pupil capacity at Driffield School.</td>
</tr>
<tr>
<td>Community Facilities</td>
<td>East Riding Local Plan Strategy Document (2016)</td>
<td>Policy C1 of the Strategy Document highlights that new developments will be supported where it is adequately serviced by infrastructure and facilities.</td>
</tr>
</tbody>
</table>

1 The Council is considering the need for Community Infrastructure Levy through a review of the Local Plan. At present, developer contributions will be secured through relevant S106 Agreements, supplemented where appropriate/required by funding from other sources.
### Table 1 - Policy and Guidance Considerations

<table>
<thead>
<tr>
<th>CONSIDERATION</th>
<th>SOURCE</th>
<th>DESCRIPTION</th>
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</thead>
<tbody>
<tr>
<td>SuDS</td>
<td>East Riding SuDS and Surface Water Drainage Requirements for New Development Combined Planning Note and Standing Advice (2016) East Riding Local Plan Strategy Document (2016)</td>
<td>There is a statutory requirement for the Local Planning Authority (LPA) to consult with the Lead Local Flood Authority (LLFA) regarding major developments with surface water drainage (10 or more dwellings). Policy ENV6 of the Strategy Document states that new developments on previously developed land should ensure they reduce existing run-off rates by a minimum of 30%</td>
</tr>
<tr>
<td>Housing Mix and Meeting Needs</td>
<td>East Riding Local Plan Strategy 2016</td>
<td>Policy H1 seeks that new housing development should contribute to the overall mix of housing in the locality, taking into account the current need, particularly for older and first-time buyers, current demand and existing housing stock. The provision of specialist accommodation, especially for older people, will be required as part of the housing mix unless it can be demonstrated that this would have an unacceptable impact on the economic viability of the proposed scheme.</td>
</tr>
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### Relevant Planning History

<table>
<thead>
<tr>
<th>SITE</th>
<th>REFERENCE</th>
<th>PROPOSAL</th>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Former Hangers Disused Airfield</td>
<td>07/07043/STPLF</td>
<td>Change of use from (B8) storage to (B2) general industry (Revised scheme of 07/03158/STPLF)</td>
<td>Approved</td>
</tr>
<tr>
<td>Phase 3 Development Kelleythorpe Industrial Estate</td>
<td>13/03743/STPLF</td>
<td>Erection of distribution centre including warehousing, ancillary offices, welfare office with associated access, service yards, parking and landscaping</td>
<td>Approved</td>
</tr>
<tr>
<td>Cadet Training Centre</td>
<td>18/01857/PLF</td>
<td>Erection of a storage building</td>
<td>Approved</td>
</tr>
</tbody>
</table>

Table 2 - Planning History
Vision and Objectives

VISION
Alamein Barracks will be an inclusive, sustainable and contemporary residential community which expands the amount, choice and quality of housing in Driffield and the surrounding area.

The new neighbourhood will be set within the site’s existing mature landscape, creating an attractive environment which provides for the health and wellbeing of residents.
These precedent images include a range of developments which are considered to reflect the Vision and Placemaking Objectives for Alamein Barracks (Page 12)
Site Context and Characteristics

Site Description
The site measures 31.66ha and is located approximately 1.5km to the south west of Driffield Town Centre. Driffield is identified as a Principal Town in Policy S3 of the Local Plan Strategy. The strategy promotes Driffield as a centre of economic development and housing growth and catering for the service needs of significant parts of the East Riding. The site is located at Kelleythorpe within Kirkburn Parish, approximately 2.5km to the east of Kirkburn village and immediately to the west of Kelleythorpe Roundabout. The land was used as RAF Eastburn / RAF Driffield by the Royal Air Force between approximately 1918-1920 and again between 1936-1977. Whilst some buildings have since been demolished, a large number of buildings and structures still occupy the site. A significant number of mature trees are located within the site and along its boundaries.

Surrounding Context
The Gypsey Race stream runs along the north-eastern boundary of the site, with Kelleythorpe Industrial Estate and residential development beyond. To the north-west of the site are four hangars which were sold off by the MoD, prior to disposal of the main part of the allocated site. These buildings are now used for general industrial uses, including the manufacture of modular buildings. To the south side of the A614 are residential developments including Auchinleck Close and Ramsden Close, surrounded by agricultural land. To the south of Kelleythorpe Roundabout is a farmstead which was converted to a farm shop, which has since closed.

The map on Page 15 shows the relationship of the site to local facilities.

Land Ownership
The majority of the land within DRF-I was sold by the MoD to Omnivale Ltd in 2007. Adrian Sail of Strawsons Property (asail@strawsonsproperty.com) is the current land agent for the land on behalf of Omnivale Ltd. Part of the allocation has been retained by the MoD to provide the regional cadet headquarters. This area is identified on the uses plan on Page 5.

Policy DRF-I makes reference to provide for the potential relocation of the Army Reserve barracks. The supporting text states that ‘A more appropriate layout and design of development is likely to be achieved by relocating the Army Reserve to either an alternative location within the allocation, or to an alternative site that is equally, or more, suited to their needs.’

The four hangars to the west were sold off separately by the MoD and are now used for employment, including manufacturing modular buildings. Land beyond this area is used infrequently by the MoD for driver training. Two dwellings to the north eastern corner within the masterplan area are also in separate ownership.
Masterplan Considerations

TRANSPORT AND ACCESS
- Site Access
- Public Transport & Parking
- Pedestrian & Cycle Connectivity

WATER MANAGEMENT
- Flood Risk
- Sustainable Drainage Systems

LANDSCAPE
- Existing Trees
- Landscape Buffers
- Public Open Space

ECOLOGY
- Protected Species
- River Hull Headwaters SSSI
- Biodiversity Enhancements

HERITAGE
- Archaeology
- Historic Buildings
- RAF Heritage Opportunities

GROUND CONDITIONS
- Contamination
- Unexploded Ordnance (UXO)
- Asbestos

NOISE
- Road Noise
- Neighbouring Uses

AIR QUALITY
- Local Air Quality

COMMUNITY FACILITIES
- Access to Existing Services
- Provision of Community Facilities

MEETING HOUSING NEEDS
- Affordable Housing
- Housing Mix
- Modular Potential

DESIGN
- Density, Topography & Layout
- Architectural Styles & Detailing
- Contemporary Housetypes
Noise and connectivity issues relating to A614

Poor quality routes / disconnection from Kirkburn

Poor quality routes / disconnection from Driffield

Alamein Barracks, Driffield

Constraints Plan

Key
- Site Boundary
- MoD uses
- B2 uses
- Existing residential plots and access
- 50m noise offset from building envelope
- Watercourse
- Flood zone 2
- Flood zone 3
- Main road impacts
- Existing significant trees and vegetation
- Existing buildings
- Existing water mains
- Existing HV powerlines
- Existing sub-station

NB, flood risk and utilities outside site boundary not fully mapped. All mapping is approximate and subject to future site surveys.
Background
One of the key challenges to developing this site is linking the site to existing facilities and services in Driffield Town Centre. The A614 adjoins the southern boundary, providing access into the site. There is currently a 40mph speed restriction along the frontage of the site, with a 30mph restriction towards the eastern end on the approach to Kelleythorpe Roundabout. The A614 becomes a 60mph limit north of Kelleythorpe Roundabout, with a 40mph restriction on the A164 to the east.

An access is located towards the eastern end of the site, approximately 200m from Kelleythorpe Roundabout. A further access is located towards the western end providing access to the masterplan area currently retained by the MoD.

The A614 is a busy major road, consistently experiencing 12,000 Annual Average Daily Traffic (AADT) movements on the section to the north of Kelleythorpe Roundabout and 10,000 AADT movements along the section to the west of Kelleythorpe Roundabout which adjoins the southern boundary of the site.

Driffield Railway Station (approximately 2.5km to the north east) provides a moderate frequency of service to local and regional destinations including Hull, Beverley, Bridlington, Doncaster, Meadowhall and Sheffield.

Institution of Highways and Transportation (IHT) guidance states that for a bus to be a viable option for most people, a bus stop or station must be located within 400m of the site. The nearest bus stops are located on the A614 immediately to the south of the masterplan area, providing services east towards Bridlington and west towards York.

An existing footpath runs alongside the A614 adjoining the site from the entrance to the hangars to the west to Kelleythorpe Roundabout. To the south side of the A614 is a shared cycle/footpath from Ramsden Close. To the east of the roundabout is a shared pedestrian and cycle facility alongside the A164 and Beverley Road leading to Driffield Town Centre.

Masterplan Requirements

Site Access
The masterplan identifies potential access locations avoiding the area currently retained by the MoD. This includes a roundabout forming the main access at the junction of Auchinleck Close on the A614. Auchinleck Close is adopted highway and a roundabout should be provided to help to reduce traffic speeds and aid the pedestrian environment which is currently poor. Moving the junction further north into the site could assist in calming traffic, although this should be balanced against impacting on existing trees along the site boundary.

Appropriate pedestrian and cycle crossing points will help to connect the existing communities to the south with the masterplan site.

Development of the masterplan site is of a scale required to provide a secondary access. Should the MoD site be progressed alongside the wider masterplan site, this could be achieved through the reuse of the existing access serving the MoD site. However, if the MoD is not progressed concurrently with the wider site, a separate access would be required. It is considered that this could take the form of a priority controlled T-junction with ‘ghost island’ right turn lane. Whilst Ramsden Close to the south is not within the adopted highway, this could be achieved by widening the road northwards into the site.

The masterplan recognises that the MoD land may not come forward concurrently with the wider masterplan site. A coordinated approach should be taken to the site access which considers the access, development and phasing of any neighbouring development sites.

Transport Assessment and Travel Planning
A planning application will need to be accompanied by a Transport Assessment and Travel Plan so that the likely impacts of the development can be assessed. This assessment would need to take account of particularly high traffic flows at weekends and bank holidays, and the high proportion of HGV movements. The travel plan should be provided with an application setting out measures to reduce the need to travel by private car and promote public transport.
Existing pedestrian and cycle routes
Improved signage and potential traffic calming features within residential area to enhance existing link to the town centre.

Improve existing pedestrian/cycle connection directly onto roundabout from proposed site.

Length: 1040m

Length: 230m

Proposed site access - Roundabout

Improvements to existing crossing points on northern side of roundabout (A164 and Montgomery Square), to include improved signage, surfacing etc.

Widen existing shared walking and cycling facility on the northern side of the A164. Improvements to include widening to provide a stepped facility separating walking, cycling and vehicle movements.

Proposed enhancements to pedestrian and cycle routes
Policy DRF-I of the Allocations Document seeks that the development provides a direct bus link between the site and Driffield Town Centre. The town centre bus service has been significantly reduced over recent years, making it difficult to integrate the Alamein Barracks with existing provision.

A public transport link between the site and Driffield is considered necessary due to the sites location and the scale of development. An individual site to town service running am and pm peak connections with trains at Driffield train station including an off peak shopping service for residents would promote sustainable travel and encourage modal shift from the use of the car.

A travel plan should be provided with an application setting out measures to reduce the need to travel by private car and promote public transport, walking and cycling. Examples of incentives include providing kick start bus services, discounted ticketing, travel vouchers, cycle to work and car share, as set out in the Council’s Sustainable Transport SPD.

The Council’s Transport Policy Team and Transportation Business Manager should be involved in the preparation of the site’s travel plan and transport assessment, which would need to be submitted alongside planning applications on the site in compliance with Local Plan Strategy Policy EC4.

**Parking**

Car parking provision will be expected to meet the requirements for residential development set out in the East Riding Local Plan Sustainable Transport SPD (2016).

The design of the development should include for storage of cycles for each dwelling and be able to demonstrate how any design solution accords with relevant national design guidance. This will help to encourage cycling from the development given its distance from services and facilities in Driffield Town Centre.

**Pedestrian and Cycle Connectivity**

The development should incorporate appropriate pedestrian and cycle links within and from the site to connect with the existing pedestrian and cycle network in accordance with Policy DRF-I of the Allocations Document.

It is considered the most desirable route to Driffield Town Centre would be through enhancements to Kelleythorpe Roundabout and the A164 leading to Beverley Road, with improved signage and traffic calming as shown on Page 20.

The Council will seek improvements to include widening of the existing footpath/cycle path to provide a stepped facility separating walking, cycling and vehicle movements. Improvements to the existing crossing at Kelleythorpe Roundabout could include surfacing and signage to indicate the presence of the crossing to motorists. Signage and traffic calming would improve the attractiveness of the existing route to the town centre via residential streets to the north of Beverley Road.

Policy DRF-J of the Allocation Document also seeks that a link is provided to the employment allocation DRF-J to the east of the site. The most appropriate location for this is likely to be onto Warfield Road, crossing the Gypsy Race.

Consideration should be given to the connectivity of the site to create links to existing communities. Measures to improve pedestrian and cycling facilities to connect Driffield and Kelleythorpe with other existing communities, including Kirkburn, would also be supported. However, such measures are not a requirement for the masterplan site and would need to be funded separately.
Background

The majority of the site is within the Environment Agency Flood Zone 1. However, a section across the north-eastern part of the site falls within Flood Zones 2 and 3a, an area at high risk of flooding. The sequential approach directs all forms of development to areas of lowest risk unless exceptional circumstances exist or there are wider sustainability benefits. The site has been demonstrated to be sequentially preferable through its allocation for housing in the East Riding Local Plan.

The Gypsey Race runs along the north-eastern boundary of the site. There is a history of flooding along this section, including to the rear of Montgomery Square/Gott Close and across Driffield Showground and Driffield Rugby Club in 2012. This resulted from exceptionally high flows in the Gypsey Race and backing up from culverted sections downstream to the east of the site. This was caused by exceptional rainfall leading to high groundwater levels, rising springs and high levels in the watercourses.

Flood risk map for the masterplan area
Masterplan Requirements

Sustainable Drainage Systems (SuDS)

Comprehensive SuDS should be incorporated in accordance with Policy DRF-I of the Allocations Document. The following drainage hierarchy should be followed:

1. Disposal on site to the ground, via soakaways or similar
2. Discharge to a nearby watercourse
3. Discharge to piped drainage system

The geology of the site is believed to be chalk bedrock overlain by sand and gravels. Disposal of surface water to the ground may be possible unless groundwater levels prevent it, and the viability of this should be considered in the first instance. Discharge to a local watercourse at a controlled rate would be the second preference.

The Gypsey Race provides the obvious discharge location due to its proximity to the site. The site is brownfield and it is likely to be a planning requirement that rate of surface water discharge off-site must not exceed existing – a reduction may be imposed. Evidence may be required that positive surface water drainage currently exists. If no evidence can be provided, the rate of discharge off site may be restricted to the greenfield rate.

A requirement for attenuation on site is likely due to the need to match or reduce the existing surface water discharge.

If shallow groundwater is present, soakaway features may be difficult to implement. Shallow SuDS conveyance features such as swales may be used but may not provide significant storage or infiltration potential. Groundwater levels should be investigated across the site, including seasonal fluctuation.

Large below ground structures, including surface water attenuation tanks, should be designed to resist floatation due to groundwater. Above ground attenuation basins should be located and designed to avoid filling with groundwater.

Flooding issues in the Gypsey Race suggest that there is limited capacity available to discharge upstream of the culvert beneath the A614. Surface water discharge must not increase flood risk elsewhere. The LLFA will consider the acceptability of discharging into West Beck where disposal on site to the ground via soakaways or discharge into the Gypsey Race are demonstrated to be unsuitable. It is likely to be more difficult to demonstrate that there is no increase in flood risk, particularly as the Driffield Trout Hatcheries are located in Flood Zone 3. Preference for such a solution would need to be via open ditches and the developer would need to provide details of future management and maintenance arrangements.

The River Hull Headwaters SSSI is located approximately 0.2km south of this site. Impacts on this site through off-site drainage must be avoided. Consultation will be required with Natural England where the hydrology of the SSSI may be affected.

Flood Risk Assessment (FRA)

Residential development should be avoided in Flood Zone 3a in accordance with Policy DRF-I of the Allocation Document. The site area exceeds 1ha in area and a flood risk assessment would therefore be required to support any future planning application on the site. Early discussions should take place with East Riding of Yorkshire Council as the Lead Local Flood Authority (LLFA). Surface water must not increase flood risk, either on site or elsewhere.

All buildings should have floor levels above the 1 in 100 year plus climate change allowance flood level, plus an appropriate freeboard. Climate change is not accounted for in the Flood Map.

Any development including access roads that increase ground levels or otherwise occupy space in Flood Zone 3 may trigger a requirement for compensatory storage to be provided elsewhere in the site. It can be challenging to demonstrate the effectiveness of compensatory storage and the preference would be to avoid development in Flood Zone 3 wherever possible. Access and egress routes should be designed to ensure users are not placed at unnecessary risk.

A site-specific FRA will identify areas at high risk of flooding from all sources including groundwater and surface water. Development should be guided away from these areas or measures be put in place to manage risk.
Background

The masterplan area is located within Natural England’s National Character Area (NCA) 40: Holderness and close to NCA 27: Yorkshire Wolds, which covers land beyond Kelleythorpe Industrial Estate to the north and incorporates land to the north of Kirkburn further to the west. The brownfield nature and extent of former MoD buildings within the site means that the site does not reflect the key characteristics of either the Holderness or Yorkshire Wolds NCAs.

The East Riding of Yorkshire Landscape Character Assessment (updated 2017) provides a local landscape assessment for the area. This considers the importance of the landscape and its capacity to accommodate development. The masterplan area lies within Landscape Character Type 16: Sloping Farmland within Landscape Character Area 16A: Southwest Driffield Parkland and Golf Course.

The assessment identifies that the Ministry of Defence properties adjacent to the airfield detract from the rural quality of the landscape. Whilst the site does contain a large number of structures which detract from the landscape character, significant areas of the site are covered by a combination of mature and self-seeded trees. Mature roadside hedgerow and trees generally alleviate the visual effects of development within the site.

Masterplan Requirements

Existing Trees

Whilst Policy DRF-I seeks the retention of trees within the site, an appropriate assessment should be carried out on the suitability and desirability of retaining those existing trees. A planning application should be accompanied by an arboricultural assessment which assesses the condition of trees and demonstrates their suitability for removal. There are a significant number of mature trees on the site and the loss of existing trees would need to be balanced against the need to provide housing on the site.

Landscape Buffers

Policy DRF-I identifies the requirement to provide a substantial landscaped buffer to the northern and western boundaries. This will help to screen views of the development and views of the neighbouring employment units from within the site. In accordance with Policy ENV2 of the Local Plan Strategy development proposals should be sensitively integrating into the existing landscape. The existing landscaping along the southern boundary should also be retained wherever possible to provide a suitable buffer from the neighbouring A614.

Public Open Space

The areas of flood risk present an opportunity to provide high quality Public Open Space on site. The development would need to provide equipped areas of Public Open Space and outdoor sports facilities in accordance with the Council’s Open Space SPD.

Amenity green space should be delivered on site which is sufficient to meet both the open space standard in Policy C3 of the Local Plan Strategy and satisfy the design requirements of Policy ENV1.
Background
A data search was carried out and a high-level field survey was undertaken in February 2019. As part of the survey, the potential for the site to support any legally protected faunal species and/or species of nature conservation importance, e.g. Section 41 Priority Species, was assessed. A cursory assessment of habitats within the site was undertaken.  

The site is located within the 2km SSSI Impact Risk Zone for the River Hull Headwaters SSSI (0.2km south) and the Council will therefore be required to consult Natural England (NE) on an application. There are three non-statutory designated sites within 2km of the masterplan area – Island Plantation (0.8km south east), Eastburn Beck Grassland (0.8km south) and Bell Mills (1.8km east).

A range of species of nature conservation interest have been recorded in the desk study area. If the habitats within the site are also suitable, there is the potential for these species to occur on site. Habitats on the site of the highest ecological value are broadleaved trees, scrub and semi-improved grassland.

<table>
<thead>
<tr>
<th>SPECIES</th>
<th>HABITAT SUITABILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bats</td>
<td>Some of the buildings and trees on site were recorded to have features suitable for roosting bats. The trees, scrub and grassland have potential to support foraging/commuting bats.</td>
</tr>
<tr>
<td>Water Vole</td>
<td>Water vole were identified in the data search and the Gypsey Race adjacent to the northern boundary has potential to support water vole.</td>
</tr>
<tr>
<td>Great Crested Newts (GCN)</td>
<td>Five waterbodies were identified within 250m of the site and there is suitable terrestrial habitat for this species on site (grassland, scrub).</td>
</tr>
<tr>
<td>Badger</td>
<td>The site has potential to support foraging badger. In addition, the embankment of the Gypsey Race in the north of the site and the area of dense scrub in the south have suitability for sett construction.</td>
</tr>
<tr>
<td>Breeding Birds</td>
<td>The site offers suitability for common breeding birds in addition to Schedule 1 species such as barn owl and black redstart. Potential barn owl nesting site was identified, two barn owls were observed and splash and pellets were recorded at the location</td>
</tr>
</tbody>
</table>

Table 3 - Habitat Suitability

---

2 Not all areas of the masterplan area were accessed, and the survey did not constitute a Phase 1 Habitat Survey or Preliminary Ecological Appraisal.
**Masterplan Requirements**

**Protected Species Surveys**

<table>
<thead>
<tr>
<th>SURVEY</th>
<th>REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preliminary Ecological Appraisal (PEA)</td>
<td>A PEA is required to accompany a planning application. This must incorporate a field survey to thoroughly assess the habitats and their potential to support any legal protected or notable faunal species. The PEA is likely to trigger the requirement for further protected species surveys. The PEA can be undertaken at any time of year; however, the optimal survey period is late-April to mid-October in northern England.</td>
</tr>
<tr>
<td>Bats</td>
<td>A Bat Roost Suitability Assessment should be undertaken as part of the PEA which will inform the requirement for further presence/absence surveys (dusk emergence/dawn re-entry surveys). Due to the potential for commuting/foraging bats, further surveys will be required. If bats are found to be utilising the site, mitigation will be required if habitats are to be modified/lost.</td>
</tr>
<tr>
<td>Water Vole</td>
<td>Water vole surveys will be required if works are required within 10m of the Gypsey Race.</td>
</tr>
<tr>
<td>Great Crested Newts (GCN)</td>
<td>Habitat Suitability Index (HSI) is required on each of the waterbodies within 250m of the site, to identify their suitability for GCN. If the waterbodies are suitable, further surveys will be required in order to determine the presence/likely absence of GCN.</td>
</tr>
<tr>
<td>Badger</td>
<td>A badger survey will be required due to the potential to support foraging badger.</td>
</tr>
<tr>
<td>Breeding Birds</td>
<td>Breeding bird surveys are required and the buildings on site should be surveyed by a qualified ecologist who holds a barn owl licence.</td>
</tr>
</tbody>
</table>

**Table 4 - Survey Requirements**

**River Hull Headwaters SSSI**

Discharge of surface water must avoid impacting on the River Hull Headwaters SSSI located to the south of the site. Early engagement with Natural England will be required where the development and any associated off-site drainage works has potential to impact on the hydrology of the SSSI.

**Biodiversity Enhancements**

In accordance with Policy ENV4 of the Local Plan Strategy, proposals should further the aims of the East Riding of Yorkshire Biodiversity Action Plan (ERYBAP) and should seek to achieve a net gain in biodiversity where possible. Planning conditions will be imposed to secure additional protection, replacement and/or enhancement measures such as swift and bat boxes.
Background
There are no designated heritage assets within the site and surrounding study area (500m from the masterplan boundary). There will be no physical or setting impacts to existing designated heritage assets. However, the site includes the historic military development and also lies within an archaeologically rich surrounding landscape.

First edition OS mapping indicates several ‘tumuli’ (generally bronze age round barrows) located within and directly adjacent to the site, although they do not appear to survive in the present day. Archaeological remains are also known from the surrounding study area. Open air trenches to the west of the site revealed two Bronze Age Barrows containing pottery, human and animal remains. Construction works to the west of the site revealed an Iron Age cemetery and a Romano British agricultural settlement. An Iron Age Roundhouse and Roman earthworks is located 300m north of the site.

Alamein Barracks was first constructed in 1918 and was a key Royal Air Force training location during World War II. Many of the buildings on the site date back to the initial construction of the base.

Masterplan Requirements

Archaeology
There is potential for encountering archaeological deposits within the site and further archaeological investigation is required to assess potential survival and significance of any archaeological remains. As set out in Policy ENV3(D) the Council will seek to ensure mitigation of damage through preservation of the remains in situ as a preferred solution.

When in situ preservation is not justified, the developer will be required to make adequate provision for excavation and recording before or during development.

Historic Buildings
Due to the nature of the site, a level three building recording survey should be undertaken and submitted in writing to the Historic Environment Record Office, prior to the submission of any application on the site. This should include a full drawn and photographic record of the site and any buildings; both internally and externally, it should also include a written analytical statement with an introductory description and a systematic account of the buildings origins, construction, development and use, consulting any documentary evidence necessary. Such documentation should include the mural of the English Electric Lightning aircraft located in one of the existing MoD buildings. The information gained from this survey can be considered as preliminary archaeological investigation with added public benefits as it would record the site and its significances to archival standard. Furthermore the information gathered from this survey can aid in guiding design and compiling a heritage statement.

Further archaeological investigation would be required to fully understand the site and its special interests, this investigation could help inform design and recognise ways to incorporate heritage. Should significant non-designated heritage assets be recognised within the study area as a result of further archaeological investigation and historic building survey, an assessment is to be made of setting impact caused by the development on these heritage assets.

RAF Heritage Opportunities
Policy ENV3(A) outlines that heritage assets should be used to reinforce local distinctiveness, create a sense of place, and assist in the delivery of the economic well-being of the area. Alamein barracks form part of the early RAF and aviation history of Yorkshire and lie within a landscape which shows evidence of human occupation from prehistory to the present day. This provides an opportunity to enhance public understanding of heritage through the development, including:

- Retention where possible of historic structures within the site;
- Enhanced understanding of the military history of the site through archival and documentary research, as well as potential for exploring local experiences of WWII through oral history;
- The provision of signage and information board / displays throughout the site relating the military and prior history and archaeological past of the site;
- Public outreach during any archaeological investigation on the site through involvement of local and military societies, such as Operation Nightingale, a military initiative developed to use archaeology as a means of aiding the recovery of service personnel injured in recent conflict; and
- The creation of public art which relates to previous human occupation of the site from prehistory to the present day, such as the wider Bronze Age funerary landscape surrounding the Driffield area, or the aircraft mural referred to earlier.
Background

Site History and Potential Sources

The site has potential for contamination associated with former uses and potential sources include:
- Demolition and construction of buildings on the site;
- Buildings containing asbestos;
- Use as an army barracks, heavy vehicle traffic;
- Electrical substation within the east of the site;
- Possible infilled pond within the south east corner of the site; and
- Historic sheep wash within the east of the site, adjacent to the Gypsey Race.

Geology, Hydrology and Hydrogeology

The site is predominantly underlain by sands and gravels which is underlain by the Flamborough Chalk Formation. A number of springs are located approximately 500m to the south of the site, which flow east into a ponded area. The Gypsey Race drain which looks to have been culverted approx. 350m northwest of the site, reappearing at the northern point of the site. The superficial deposits are classified as a Secondary Aquifer and the Flamborough Chalk Formation is classified as a Principal Aquifer.

Unexploded Ordnance (UXO) Risks

The site has been classified as having a Medium probability of UXO encounter³. The risk is associated with activities undertaken within the close proximity to the site, the most significant being the Driffield Airfield. Historical records indicate a medium level of bombing density across the borough in which the site was situated during WWII. The assessment has also identified a medium risk from German UXO. The site’s history as a military airfield also presents a risk from live and expended munitions and other related military materials, which may not have been disposed of correctly.

Masterplan Requirements

A ground investigation is required to assess potential sources of contamination in made ground associated with infilled pond, substation and the demolition and construction of buildings within the site (including hydrocarbons, metals, asbestos).

This should also confirm the founding conditions. Standard shallow strip foundations may be suitable for low level housing; however, some piled foundations may be required.

³ Due to the site’s military history a Preliminary Unexploded Ordnance Risk Assessment was obtained from Dynasafe BACTEC Ltd.
Background

Industrial Processes

Industrial air pollution sources are regulated through a system of operating permits requiring stringent emission limits to be met and ensuring that any releases to the environment are minimised or rendered harmless. There are three Part A processes within 2km of the site that have relevant emissions to air – GWE Biogas Ltd (1.6km west), M J Girking Ltd (1.6km east), JSR Farms Ltd (1.8km east). The A614 is a major road and an area of potentially poor air quality. No significant sources of unpleasant odours or other significant sources of air pollution have been identified within 500m of the site.

Local Air Quality Management

The Environment Act 1995 requires local authorities to review and assess air quality with respect to the objectives for seven pollutants specified in the National Air Quality Strategy. Local authorities have been required to carry out an Updating and Screening Assessment of their area every three years. If this assessment identifies areas likely to exceed air quality objectives, then a further Detailed Assessment is required. Where objectives are not predicted to be met, local authorities must declare the area as an Air Quality Management Area (AQMA) and produce an Air Quality Management Plan.

There are no AQMAs declared by East Riding Yorkshire Council. The Council has some concerns regarding Air Quality in Driffield Town Centre and is carrying out passive monitoring, although there are no significant issues identified in the area immediately surrounding the site.

Masterplan Requirements

Air Quality Assessment

Given the proximity of the major road A614, there is a risk that mitigation will be required to reduce the risk of adding new receptors in an area of potentially poor air quality. An assessment of construction dust impacts following IAQM guidance, and air quality screening or detailed assessment of both the construction and operational phases of the development will be required to accompany a planning application. This assessment will quantify the impact of the development and, once the detailed design is finalised, a damage costs assessment will inform the level of mitigation required for any increase in emissions.

The development should make provisions that allow electric vehicle charging points to be installed at each dwelling, with additional provision for visitors and alternative uses to be considered on a case by case basis. This will help to reduce carbon emissions in accordance with Policy ENV1 and encourage sustainable travel options including electric vehicles in accordance with Policy EC4.
Background

Road, Rail and Air Traffic

The nearest road to the site is the A614, which is a moderately busy, single carriage road that borders the south of the masterplan boundary. Standard mitigation measures can be adopted through boundary treatments and building envelope sound insulation to provide a suitable level of amenity to future residents.

No significant sources of rail or air traffic have been identified around the proposed site, therefore, mitigation for these noise sources is not required.

Commercial / Industrial Noise

Four hangars are located along the masterplan boundary to the west which are now in B2 employment use, including for the construction of modular buildings. Therefore, these spaces need to be considered as significantly noisy sources, in close proximity to the housing allocation.

Commercial buildings within Kelleythorpe Industrial Estate are located to the north east of the site, separated from the site by landscaping along the Gypsy Race. A relatively new B8 distribution building has been constructed on allocation DRF-J and noise is emitted from plant associated with the building.

Masterplan Requirements

Neighbouring Uses

The masterplan map has assumed a separation distance for dwellings from commercial uses, to include landscaping and tree screening. The exact stand-off distance and noise mitigation will need to be informed by a noise survey which may result in a greater or lesser buffer and the requirement for a perimeter barrier (bund or acoustic fence).

A noise assessment will need to be prepared to accompany a planning application to demonstrate that an acceptable level of amenity can be achieved and to ensure that the development complies with Policy ENV1 of the Local Plan Strategy. The assessment would need to take into account impacts from construction noise, including on existing residential properties close to the masterplan site.
Masterplan Requirements

Education
Planning Policy A3(D2) of the Local Plan Strategy identifies that plans, strategies and development decisions in the Driffield & Wolds sub area should support the provision of additional infrastructure, including:
- Additional primary school pupil capacity for existing schools; and
- Additional secondary school pupil capacity at Driffield School.

At the time of preparing the masterplan (May 2019), the site falls within the catchment area for Driffield Church of England Infants School which will see a deficit in pupil capacity within the plan period.

Whilst the scale of development proposed and level of need identified does not justify a new school on-site, a contribution would be required to meet the additional needs generated by the development of the DRF-I site, calculated based on demand and capacity within local schools at the time of the planning application.

Community Uses / Local Shop
Whilst there is no requirement under Policy DRF-I for a community use on the site, it is likely that the size of the development combined with the existing Kelleythorpe community could support a local community facility. The most appropriate location for this is considered to be towards the southern boundary where it benefits from visibility from the A614, as well as being well integrated in the site, linking existing and future Kelleythorpe residents and businesses in accordance with Policy C2 of the Local Plan Strategy. This location is identified on the masterplan map.

In accordance with Policy EC3 D/J of the Local Plan Strategy, the Council would ensure that any retail use serves purely a local convenience need and does not divert trade from Driffield Town Centre.

Nursery
There is currently a shortage of nursery places locally (July 2019) and the Council would support the provision of a nursery on the site. This may also present an opportunity to provide a local facility for the wider community.
Masterplan Requirements

Affordable Housing

The location of the site is within an area which Policy H2 of the strategy seeks the provision of 25% affordable housing, which should be provided on site. Policy H2 also seeks that affordable housing should be integrated into the development in terms of its design and layout, being pepper-potted and dispersed amongst market housing. Developers will be encouraged to consider whether or not there is a local appetite for a community led housing scheme as part of the mix of affordable housing.

Housing Mix

The development should contribute to the overall mix of housing in accordance with Policy H1 of the strategy. This should include specialist accommodation, including adaptable housing and bungalows for older people, unless it can be demonstrated that this would have an unacceptable impact on the economic viability of the proposed scheme.

Modular Construction Potential

It is considered that the site could in part support a modular type construction, subject to detailed design. The hangars to the west of the site are now occupied by employment uses including a company designing and constructing modular buildings.
Background

Design

Design needs to be considered as an overarching principle that incorporates all of the individual Local Plan requirements. This will ensure that development creates a sustainable residential development that recognises and respects the local character.

The site presents an opportunity to improve the character and quality of the area and create a community with its own identity, but which integrates well with surrounding development and improves the way the area functions.

Policy

Local Plan Policy ENVI sets out the approach that should be taken in integrating high quality design into new development. This involves safeguarding and respecting the diverse character and appearance of the area, reducing carbon emissions and making efficient use of resources.

Design Guidelines

A framework of design guidelines to create a high quality development with a strong sense of place is set out below. It is important that the design of the site:

- has regard to its wider context and specific characteristics;
- has an appropriate scale, density, massing, height and material;
- has regard to the amenity of existing or proposed properties;
- incorporates landscaping, alongside boundary treatment, of an appropriate scale and size that enhances the setting of buildings, public space and views;
- promotes equality of safe access, movement and use;
- has regard to features that minimise crime and the perception of crime;
- considers the use of public art, where the sense of place and public access or view would justify it;
- ensures infrastructure including open space and roads, are well integrated into the development; and
- pays attention to the use of local materials, architectural styles and features.

Masterplan Requirements

Density, Topography & Layout

The topography of the site is flat and the masterplan considers an average net density of between 30 - 35dph would be appropriate across the site. Proposed development should take account of the linear layout of the existing internal roads and built form of the barracks. This will help to minimise the loss of trees on the site, whilst providing a design linked to its former use.

The layout and landscaping of the development should create a safe environment and minimise crime through the Secured by Design methods. This will ensure that pedestrian and cycle routes are overlooked, well lit and maintained. The layout should promote connected growth and avoid the segregation of old and new development. This includes linking to existing communities to the south of the A614 and consideration of the potential future development of the area currently retained by the MoD.

Street Design

Development should be served by a permeable and legible network of streets, which allow a range of direct routes through the site for pedestrian and cyclists. Provision of swales adjacent to roads within the development would create an attractive environment, whilst providing sustainable drainage.

Footways should be provided either side of the carriageway, measuring 2m in width to enable two pushchairs/wheelchairs to pass. The footways could be separated from the main road by a combination of double sided on-street parking spaces and planted swales.

Local Architectural Styles & Detailing

New buildings, streets and spaces should take design cues and influences from positive urban form and unique townscape characteristics that give Driffield and the surrounding area its identity. Materials specific to Driffield’s identity are found in the town’s historic core, as its individual character results from what would have been available locally at the time.

Vernacular house design could include a mixture of designs, sizes and styles, including asymmetrical roofs and replicated elements of rounded corners and arches found on agricultural buildings in the area.
A variety of chimney pot size and shapes are evident across the local area. Modern developments which are devoid of chimneys have far less interesting and characterful skylines.

The Driffield (North) Conservation Area makes use of materials that are distinctive to the area which include:
- Brown / red hue to the majority of its historic brickwork from the 18th and 19th centuries.
- Traditional (non-interlocking) clay pantiles

The Council will resist the use of generic materials and architectural detailing / standard, traditional house types which do not reflect the local vernacular.

Contemporary Housetypes

More creative and innovative developments will be supported and the Council will encourage applicants to take advantage of the latest technologies to improve building quality. The inconspicuous nature of the site means that it may be suitable for a range of contemporary house styles, incorporating Modern Methods of Construction (MMC) or ‘modular’. This can provide a range of planning benefits to the masterplan site, including faster construction than traditional methods.

It is recognised that homes constructed through MMC may not look like traditional housing and the Council will take a flexible approach to design in order to maximise the value of MMC through economies of scale and efficiencies. However, the materials, massing, layout and detailed design should still be tailored to reflect Driffield and the surrounding area.

MMC also allows houses to be adapted to respond to specialist needs for the elderly or those with disabilities, as well as responding to changes in technology.

Pre-application & Design Review

Early engagement in the consideration of design is encouraged through the Council’s pre-application process. Integreat Plus provide local design review assessment and support the Council on major projects within the East Riding.

Further detail in particular relating to the streetscape and landscaping design have been developed in the Placemaking Principles within Section 6.
SECTION 6

Placemaking Principles

RESPONSIVE TO LANDSCAPE

EASY TO GET AROUND

HIGH QUALITY TOWNSCAPE
RESPONSIVE TO LANDSCAPE
1. Gypsey Race Corridor / Open Space
2. Integrating Sustainable Drainage
3. Play and Recreation
4. Tree Belts and Boundaries
5. Barracks Landscape and Trees
6. Green Links and Other Open Space

EASY TO GET AROUND
7. A Hierarchy of Streets
8. Walking and Cycling

HIGH QUALITY TOWNSCAPE
9. Density, Scale and Massing
10. Key Frontages
1. Gypsey Race Corridor / Open Space

The site has a substantial mature landscape which should form the basis of the future character of the development. Landscape features should be retained, incorporated and celebrated within the layout wherever possible.

*Gypsey Race corridor*

- The Gypsey Race is a small watercourse which flows along the northern edge of the site. The watercourse, and the flood risk area identified alongside it, offer the opportunity to create a generous green corridor through the site with a width of between 50-100m.

- The edge of this corridor should be guided by flood risk assessment, including the possibility of reconfiguring the existing flood zones 2 and 3 to create a rationalised edge to the development and minimise loss of developable area. Subject to a full risk assessment, it may be acceptable to develop houses, streets and SuDS within flood zone 2.

- This area should provide an attractive amenity landscape area for residents including new planting to complement the existing, an informal network of footpaths and new wetland landscapes and new habitat areas.

- The type of planting provided should consider the desirability of screening views of large industrial units located outside the site to the north.

- Sustainable drainage features could be incorporated into the corridor, subject to flood risk assessment.

- Informal or equipped play facilities could be incorporated into the corridor, subject to flood risk.

- The north western end of the corridor, which is currently ploughed land, could incorporate new sports pitches, subject to flood risk.

**Proposals:**

- 2km circular footpath with seating.
- Sustainable urban drainage including attenuation basins.
- Links to neighbouring industrial and residential areas.
- Enhancement to Gypsey Race watercourse with riparian planting, footpath and seating pockets.
- Open lawn for flexible use.
- Existing tree planting to be retained where possible.
- Allocation for 2 playing pitches.
Sketch Plan Showing Indicative Design
2. Integrating Sustainable Drainage
- The development should incorporate Sustainable Urban Drainage as a key structuring element, in order to mitigate risk of surface flooding, enhance water quality and contribute to biodiversity. Water should be attenuated, conveyed and filtered in surface features where possible, before being returned to surrounding watercourses at a greenfield rate.
- The SuDS strategy for the site must take account of the site conditions, notably existing flood risk associated with the Gypsy Race, high water table, and the flat topography of both the site and its surrounds. Additional assessment is required to determine whether ground conditions are appropriate to allow for soakaways.
- The masterplan indicates a connected network of SuDS features forming a defining feature within the developments green corridors.
- The proposed SuDS strategy must take account of the conflict between the desire to retain existing trees and the need to utilise open space for SuDS.
3. Play and recreation

- The site should provide a range of open spaces which meet the needs of residents to enjoy active and healthy lifestyles and have access to natural outdoor environments.

- A development of approximately 360 dwellings will require provision to serve a population of approximately 1,000 people.

- Consideration should be given to the Council’s Open Spaces SPD. Based on current provision, this would require two playing pitches and a large play area to be located within the site. Any areas for parking, changing and storage facilities are assumed to be accounted for within the areas of public open space shown on the masterplan. Play areas should be located to maximise the number of houses which are located within a 400m walk of play facilities.

- It may be appropriate to locate play facilities within the Gypsey Race corridor, subject to flood risk consideration. In this instance, a number of small informal open spaces should be provided at key locations within the development to provide doorstep access.

- The Gypsey Race corridor is likely to provide sufficient informal green space to serve the development. Care should be taken to design this area to create a range of informal recreational opportunities.
4. Tree belts and boundaries

- The southern edge of the site includes dense tree belts which form the boundary of the site. These should be retained and enhanced, with sufficient distance provided between the edge of canopies and new buildings.

- Intermittent tree planting exists along the western boundary, partially screening views of the existing hangers to the west. Planting on this edge of the site should be retained and enhanced to reduce the visual impact of the hangers, utilising the 50m buffer between the existing hangers and new buildings to create an enhanced landscape buffer.

- Noise mitigation, potentially including fencing and bunding, should be incorporated along the western edge, with consideration to the impact on existing trees.
5. Barracks landscape and trees
- The barracks includes a well-developed, mature ornamental landscape including large trees, avenues and rows of blossom trees.
- The site layout should take account of the desirability of retaining these features wherever possible, including aligning streets to incorporate existing avenues of trees, and locating public open spaces to provide space around distinctive larger trees.
- It is recognised that a significant number of trees may need to be removed in order to facilitate development. In addition, some trees may be in poor condition. Future proposals should be demonstrably based on a detailed tree survey which takes account of desirability of retaining trees.
- The desirability of retaining existing trees may be a factor in site capacity and density.

6. Green links and other open spaces
- The site layout should incorporate additional green links of between 20-30m wide to provide landscaped connections between the A614 and Gypsey Race corridor, and to link the eastern and western areas of the site.
- Provision of green corridors would be an appropriate method of retaining existing tree avenues. The location of green corridors should be refined to provide the best response to existing trees. This will provide the development with a mature and connected landscape structure from that beginning.
- Subject to requirement, additional small open spaces should be provided within the development to allow the retention of stand-alone trees. These spaces should also incorporate informal and equipped play areas, ensuring facilities are walkable from all areas of the site and are in locations which are well overlooked by surrounding houses.
RESPONSIVE TO LANDSCAPE

EASY TO GET AROUND

HIGH QUALITY TOWNSCAPE
7. **A hierarchy of streets**

A main street should create a legible route around the site which connects a minimum of two vehicle access points. The main street should:

- Be distinctive from other streets in terms of its design and character
- Be designed to facilitate a potential bus-route through the site.
- Include on street parking as a means of passive traffic calming
- Include street trees
- Include distinctive design, landscape, hardscape and potential shared surface areas at key nodal points in the network, to aid legibility

Residential streets should make up the rest of the street network. Residential streets should:

- Include informal landscape, including street tree planting, which complements but is distinct from the main street.
- Consider the desirability of including homezone design principles and create places which are safe and attractive for residents to play and socialise.
- Incorporate on-street car parking.
- Be laid out to discourage large numbers of vehicles taking short-cuts through residential streets, and ensuring a high degree of pedestrian and cycle permeability.

All streets should have a design speed of 20mph or lower.

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**Main Access Road**

Main route through development linking to the entrance areas.

Proposals (see plan and sections on Page 44):

- Two way road of 6.5m width to accommodate the new bus route
- Planting strip where possible to separate the footpath and highway
- Existing trees to be retained where possible and incorporated within the design. These will help to create a strong character and permanence to the scheme. The road layout may need to be adjusted and gently meandered to enable trees to be retained. Design will need to be informed by an arboricultural assessment.
- Potential for SuDS planting
- Double sided on street carparking set between planting strips (see sketch plan)
- Footpath on either side of road - width to enable two pushchairs/ wheelchair to pass
- Boundary treatment to residential properties
Hangars on the adjacent land

Existing trees to be retained where possible with enhancement plants

Informal Footpath

Varying width dependant on retained trees to arboricultural assessment’s detail

Footpath

Front garden

Proposed housing

Proposed housing

Parking spaces

Planted suds with street trees

Footpath

Typical Plan Of Access Road

Typical Section Through Access Road Alongside Retained MoD Buildings

Typical Section Through Access Road With Housing Each Side
8. Walking and cycling

- Pedestrian and cycle movement will primarily be provided for within the street network. A permeable and legible network of streets will ensure a choice of direct routes through the site and linking the existing streets in the surrounding area.

- The existing lane and bridge which provide access to the site from the eastern corner should be retained as pedestrian and cycle access points and integrated into the footpath network.

- Traffic free walking and cycling routes should be incorporated into the Gypsey Race green corridor, the landscaped western edge of the site, and the series of new green corridors which will be included in the site layout.

- A new pedestrian / cycle bridge will be provided over the Gypsey Race linking to Warfield Road. The alignment of other footpaths, streets and green corridors within the site should be considerate to the desire to create a direct and legible route from the site entrance to the new bridge.

- The main vehicle access points should include enhanced pedestrian and cycle facilities and new crossings over the A614.
RESPONSIVE TO LANDSCAPE

EASY TO GET AROUND

HIGH QUALITY TOWNSCAPE
9. Density, Scale and massing
- The masterplan identifies a net developable area of 10.3ha (excluding the MoD site. An average net density of between 30 and 35dpha would be appropriate.
- A density gradient should be considered as a means of facilitating varied character in different parts of the site, including:
  - A higher density close to the eastern access point, in order to create a focal point within the site, potentially including provision of a local community hub and small-scale retail.
  - A higher density along the edge of the Gypsey Race corridor and other green corridors, to aid creating a sense of urban enclosure of these spaces.
  - A lower density on the western edge of the site and north western corner.
- Buildings on the site should generally be two or three storeys in height.
- Bungalows may be appropriate in lower density areas, and where there is no requirement for creating urban enclosure of public realm.
- Buildings in key locations such as key edges, closing vistas or at key nodes should be of a scale which helps them to stand out from the surrounding townscape environment.
- Buildings up to four storeys in key locations may be considered on their own merit.
Smaller scale residential streets

Proposals:
- Narrower road widths
- Chicanes to slow traffic and provide space for street planting on alternating sides of road
- Existing trees to be retained where possible and incorporated within the design.
- Potential for SuDS planting
- Single side on-street car parking set between planted chicanes
- Footpath on either side of road - width to enable two pushchairs/ wheelchair to pass
- Boundary treatment to residential properties
10. Key frontages

- Development should provide frontage along the full length of the Gypsey Race corridor.

- Development should front onto the western edge of the site in order to facilitate the main street to be located within the ‘noise buffer’, except the northern part of this boundary where this does not apply.

- Development should front onto key site access points along the A614 in order to create a sense of ‘gateway’ to the site, particularly close to the local community hub.

- The local community hub should include active ground floor uses creating an active edge to the public realm, and be visible from the A614

- It may be appropriate for development to back onto the southern edge of the site, due to the character of the A614 and existing dense vegetation along the boundary.

- Development should front onto all other streets and open spaces created within the site.
**Entrances to the site on the southern boundary**

Proposals:
- Create a sense of arrival and demarcation of entrance.
- Landscape space with wildflower planting/trees.
- Possible location for signage/art or a memorial

**Precedent images**

- Multi-stem trees create a welcoming entrance feature
- Attractive understorey planting
- Demarcation of entrance through signage/art or memorial
- Wildflower planting to provide seasonal cover
Delivering the Masterplan

PHASING CONSIDERATIONS

The masterplan as drafted identifies a capacity for the site of approximately 360 dwellings, but this could increase to approximately 480 dwellings if the MoD land comes forward.

It is anticipated that development will be progressed in various phases by different developers. This masterplan seeks to ensure that development comes forward in a coordinated manner. Proposals will therefore be required to demonstrate how they have ensured that the form of development proposed is in compliance with the guidance set out in this masterplan. Where proposed development deviates from the masterplan layout, the applicant would need to satisfy the Council that there is a good reason for the variation and that the overall principles can still be satisfied. The position of buildings, streets, open spaces and other features within the site should be subject to detailed design.

Policy DRF-I seeks that proposals provide for the potential relocation of the Army Reserve barracks to another suitable location within the site, or alternative location, if agreed with the Army Reserve as a long term operational requirement. At the time of producing this masterplan, there is no indication that the MoD are intending to relocate from this site.

The existing MoD cadets area could be delivered as the final phase of the development. The masterplan has been produced to futureproof the inclusion of this site if it becomes available, but can be delivered without this land. The layout of earlier phases must ensure that development of this area can be incorporated as a final phase in the future in a cohesive and seamless manner. This should include integration with the street network, built form and structural landscape elements as indicated on the illustrative site masterplan, whilst also functioning appropriately with this area remaining outside of the development.

In order to ensure that the first houses are located closer to facilities in Driffield, there would be benefits in the development being phased from east to west. The western access junction, parts of the Gypsey Race landscape corridor, pedestrian links over the watercourse, and improved pedestrian / cycle links to the Kelleythorpe roundabout should be delivered in early phases. The local community hub should also be developed in early phases, within the first 250 dwellings. Ground floor units could be utilised as community spaces or meanwhile business spaces if retail is not viable in early phases. A second or emergency site access should be provided prior to the occupation of 250 dwellings.
**Buffer Planting if MoD site retained**

Planting to screen retained MoD site. Existing planting to be retained where possible with enhancements proposed.

Proposals:
- Trees to be retained where possible.
- Tree planting to be enhanced with buffer planting to provide additional visual screening.
- To be designed in accordance with Arboricultural Assessment.

**Precedent images**

Hedge provides full screening

**Existing images**

Views into the MoD site

Views into the MoD site
**Infrastructure Delivery & Planning Obligations**

The infrastructure required to deliver the allocation has been identified as part of the masterplan requirements. This table provides a broad summary of estimated costs for key infrastructure associated with the redevelopment of the site. These provide best estimates at the time of the masterplan’s preparation. Planning Obligations will continue to be the main mechanism through which developer contributions for additional new infrastructure are sought, calculated at the time of determining the outline or full planning application.

<table>
<thead>
<tr>
<th>ITEM OF INFRASTRUCTURE</th>
<th>ESTIMATED 2019 COST</th>
<th>BASIS OF COSTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Roundabout</td>
<td>£775,000</td>
<td>Assumed 1nr. roundabout. Costed using SPON’S AB and uplifted to 3Q 2019.</td>
</tr>
<tr>
<td>New Filter Lane Junction</td>
<td>£125,000</td>
<td>Arup cost data of similar junction. Rate updated to 3Q 2019</td>
</tr>
<tr>
<td>Main Internal Access Road</td>
<td>£1,350,000</td>
<td>SPON’S Civil 2019. 1,000m length spine road.</td>
</tr>
<tr>
<td>Footway and Cycle Path upgrades</td>
<td>£430,000</td>
<td>SPON’S Civil 2019 1040m length footpath/cycleway</td>
</tr>
<tr>
<td>Surface Water Drainage</td>
<td>£500,000</td>
<td>CIRIA 2007 Env. Agency document, rate adjusted to 3Q 2019. Assumed 3.3ha SuDS area, 50% swales and 50% basins</td>
</tr>
<tr>
<td>Foul Water Drainage</td>
<td>£310,000</td>
<td>2nr large pumping stations and pipelines. Arup in house cost data, adjusted to 3Q 2019</td>
</tr>
<tr>
<td>Cold Water pipelines</td>
<td>£160,000</td>
<td>SPON’S M&amp;E 2019 1.7km long 150mm diameter HDPE pipe.</td>
</tr>
<tr>
<td>Electricity Substation</td>
<td>£30,000</td>
<td>1nr substation 3.5m x 3.5m. SPON’S Civil 2019</td>
</tr>
<tr>
<td>Kelleythorpe Roundabout improvements</td>
<td>£20,000</td>
<td>Allowance for surfacing / signage at existing crossing points</td>
</tr>
<tr>
<td>Traffic Calming for safe cycle route</td>
<td>£30,000</td>
<td>Allowance for 2nr locations of speed control table/cushion etc alongside improved signage for cycle route</td>
</tr>
<tr>
<td>Education contribution / Public Transport</td>
<td>£232,000</td>
<td>Primary school places £82,000 / Public Bus Service Start-up (£50,000 p/a)</td>
</tr>
<tr>
<td>Sub-Total Construction Works Estimate</td>
<td>£4,044,000</td>
<td></td>
</tr>
<tr>
<td>Main Contractors Preliminaries</td>
<td>£404,400</td>
<td>Assumed 10%</td>
</tr>
<tr>
<td>Main Contractors Overheads &amp; Profits</td>
<td>£323,520</td>
<td>Assumed 8%</td>
</tr>
<tr>
<td>Total Construction Work Estimate</td>
<td>£4,771,564</td>
<td></td>
</tr>
<tr>
<td>Management of works</td>
<td>£477,192</td>
<td>Allowance for management of the works including administrative costs, consultants, engineers, other professional fees, contract fees or other costs and expenses. Estimated 10%.</td>
</tr>
<tr>
<td><strong>BASE COST ESTIMATE</strong></td>
<td><strong>£5,248,756</strong></td>
<td></td>
</tr>
<tr>
<td>Project Contingency of 25%</td>
<td>£1,312,189</td>
<td>Project contingency of 25%</td>
</tr>
<tr>
<td>Allowance for unknown utilities</td>
<td>£100,000</td>
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<tr>
<td><strong>Allowance for unknown utilities</strong></td>
<td><strong>£100,000</strong></td>
<td></td>
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<tr>
<td><strong>Total Construction Work Estimate</strong></td>
<td><strong>£5,660,945</strong></td>
<td>Table 5 -Estimated Infrastructure Costs</td>
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</table>
## Planning Application Validation Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Outline</th>
<th>Full</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Form</td>
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</tr>
<tr>
<td>Fee</td>
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</tr>
<tr>
<td>Ownership/Agricultural Holdings Certificates</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Location Plan</td>
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<td>✓</td>
</tr>
<tr>
<td>Design and Access Statement</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Environmental Impact Assessment*</td>
<td>To be confirmed through EIA screening</td>
<td>To be confirmed through EIA screening</td>
</tr>
<tr>
<td>Site Plan</td>
<td>✓ Indicative</td>
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</tr>
<tr>
<td>Existing and Proposed Floor Plans</td>
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<td>✓</td>
</tr>
<tr>
<td>Existing and Proposed Elevations</td>
<td>✓</td>
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<tr>
<td>Existing and Proposed Site Sections</td>
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<td>✓</td>
</tr>
<tr>
<td>Roof Plans</td>
<td>✓</td>
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<tr>
<td>Affordable Housing Statement</td>
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<tr>
<td>Biodiversity Report</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Flood Risk Assessment and Drainage Strategy</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Heritage Statement</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Land Contamination Assessment</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Noise Impact Assessment</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Open Space Assessment</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Transport Assessment</td>
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<td>✓</td>
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<tr>
<td>Travel Plan (Draft)</td>
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<td>✓</td>
</tr>
<tr>
<td>Tree Survey</td>
<td>✓</td>
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</tr>
</tbody>
</table>

*The scale of development would exceed the thresholds for Schedule 2 development of the Environmental Impact Assessment (EIA) regulations - the development includes more than 150 dwellings or the overall area of the development exceeds 5 hectares. Therefore, a screening request should be sought from East Riding of Yorkshire Council to determine whether an EIA is required to accompany an application.

Additional documents and assessments may be required depending on the scheme proposals. East Riding of Yorkshire Council encourages pre-application discussions which provides the opportunity to discuss and agree the nature and scope of any validation requirements.

Table 6 - Validation Requirements