ECOLOGICAL MITIGATION

Arbtech Consulting Limited were instructed by Frank Shaw Associates Limited to undertake a Preliminary Ecological Appraisal and an Ecological Impact Assessment (EcIA) of the site. Key recommendations have been incorporated into the landscape scheme and the key findings of the EcIA follow :

Feature	***Foreseen impacts***	***Recommendations*** *Measures required to adhere to guidance, legislation and planning policies.*
Designated sites	No impacts to designated sites are anticipated due to the distance of the proposed development from such sites (where known) as well as the semi urban location of the site with surrounding physical barriers.	Best practice measures to minimise the possibility of pollution and tree damage must be implemented during construction.
Habitats and flora	As it stands no plans have been produced indicating the location of the development. No direct impacts to any notable habitats are anticipated as a result of the proposed development. However, due to the proximity of the site to deciduous and ancient woodland, indirect effects such as pollution or tree damage could occur during construction. The proposed development will result in the loss of areas of managed and unmanaged grassland in addition to areas of scrub. This is likely to have a minimal impact on biodiversity due to the relatively low ecological value of these habitats and their semi isolated nature on the site.	Best practice measures to minimise the possibility of pollution and tree damage must be implemented during construction. The Local Planning Authority (LPA) may request an Arboricultural Assessment to determine impacts on trees.
Amphibians	Areas of unmanaged grassland and scrub will likely be removed during construction. The loss of such habitats is likely to be inconsequential to local amphibian populations owing to their low value and the presence of more extensive habitat locally. However, site clearance could result in the death or injury of common amphibians, if present.	A precautionary working method will be implemented for common amphibians during construction.
Reptiles	Areas of unmanaged grassland will likely be removed during construction. The loss of such habitats is likely to be inconsequential to local reptile populations owing to their low value, semi isolated nature and the presence of more extensive habitat locally. However, site clearance could result in the death or injury of reptiles, if present.	Owing to the nature of the proposed development and the low potential for impacts to reptiles, further surveys are considered to be disproportionate. A precautionary working method will be implemented during construction.
Foraging and commuting bats	It is anticipated that the proposed development will not result in the removal of any habitats which could be used by foraging or commuting bats. The proposed development may include the use of lighting which could spill on to bat roosting, foraging or commuting habitat and deter bats from using these areas.	A low impact lighting strategy will be adopted for the site during and post-development.
Badger	It is anticipated that the woodland areas will not be impacted by any development. It is likely that areas of scrub and unmanaged grassland will be removed during construction. The loss of such habitats could result in a reduction in badger habitat and could result in the fragmentation of the local landscape. Furthermore, construction activities could result in the death or injury of badgers, if present.	Owing to the nature of the proposed development and the low potential for impacts to badgers, further badger surveys are considered to be disproportionate. A precautionary working method will be implemented during construction.
Hedgehog	Areas of grassland and scrub will likely be removed during construction. The loss of such habitats is likely to be inconsequential to local hedgehog populations owing to their low value and the presence of more extensive habitat locally. However, construction activities could result in the death or injury of hedgehogs, if present.	A precautionary working method will be implemented during construction.
Birds	Areas of scrub will likely be removed during construction. The loss of such habitats is likely to be inconsequential to local bird populations owing to their low value and the presence of more extensive habitat locally. However, the proposed development could result in the destruction or the disturbance and subsequent abandonment of active bird nests.	Works should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the tree/vegetation should be undertaken immediately, by qualified ecologist, prior to the commencement of work. All active nests will need to be retained until the young have fledged.

ECOLOGICAL MITIGATION STRATEGY

Existing Woodland Frame

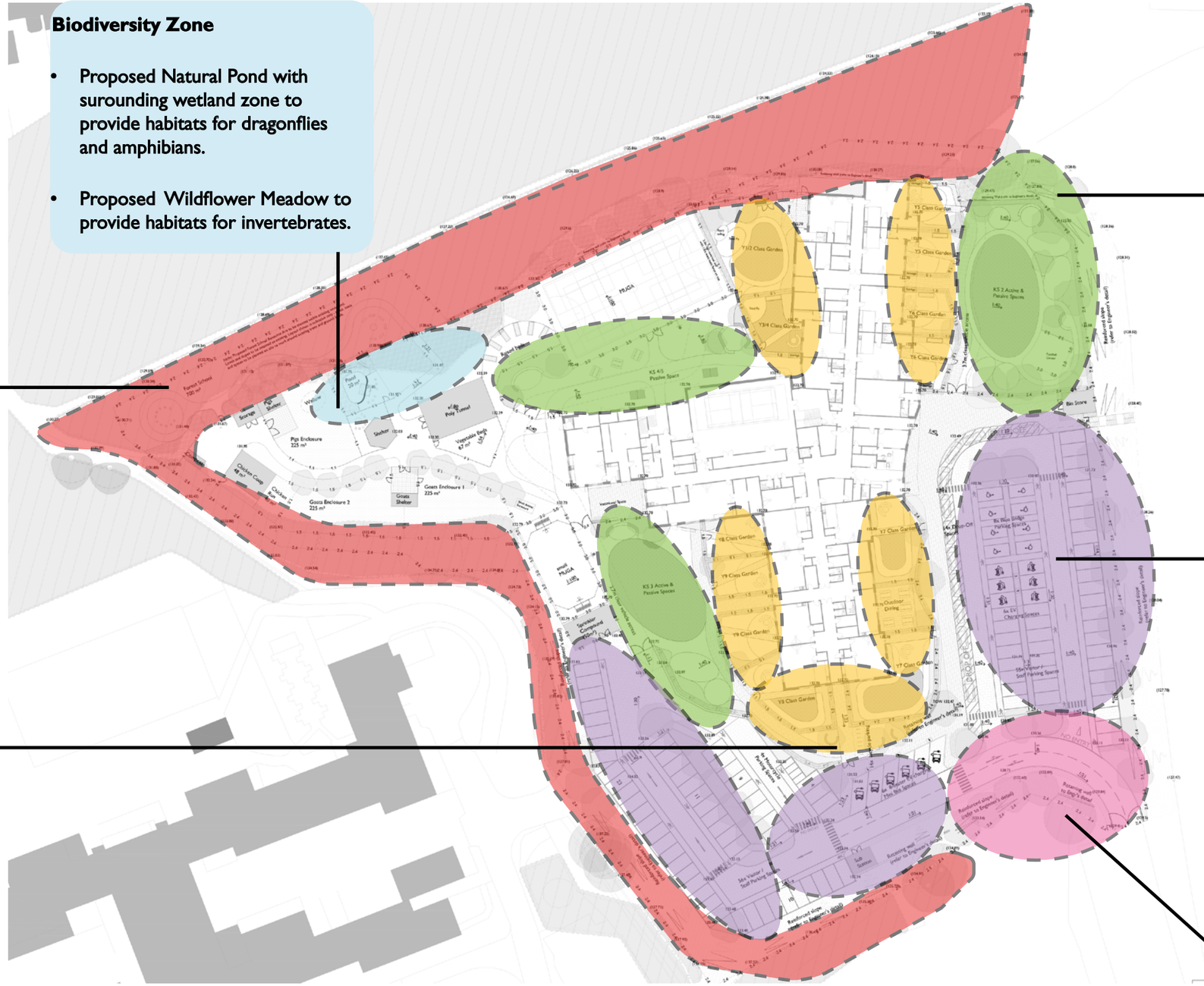
- To be retained.
- Improve existing moderate quality woodland with adequate understory planting and seeding.
- Proposed extension of the current woodland area by adding new native tree planting and undergrowth seeding to its fringe.
- Reduce construction impact to woodland and wildlife. Timing for vegetation removal works shall avoid the bird breed ing season from March till end of August. If this timeframe cannot be avoided, a qualified ecologist shall undertake a close inspection prior to the commencement of work. All active nests will be retained until fledging.
- Proposed Bird Nesting Boxes (8 no.) and Bat Boxes on existing trees.
- Proposed habitat creation/ enhancement for species like bats, badgers, hedgehogs & birds (e.g. log piles, rubble piles, dense coverts).

Class Gardens

- Proposed Bee/ Bug hotels and Bird feeding stations
- Proposed Bird Nesting and Bat Boxes to building
- Hedgehog gaps in the fences
- Low impact lighting strategy for the site during and post-development.

Biodiversity Zone

- Proposed Natural Pond with surounding wetland zone to provide habitats for dragonflies and amphibians.
- Proposed Wildflower Meadow to provide habitats for invertebrates.



Active/ Passive Outdoor Spaces

- Proposed Bee/ Bug hotel
- Proposed bird nesting and bat boxes on trees
- Trees & hedges to screen off/ mitigate human activity impact on adjacent wildlife habitats
- Proposed Native flowering & fruiting trees to attract pollinators and provide habitat and foraging opportunities for birds
- Hedgehog gaps in the fences

Car Park

- Proposed Bird boxes to existing and proposed trees
- Trees & hedges to screen/ mitigate human activity impact on wildlife habitats
- Proposed Native flowering trees to attract pollinators and provide habitat and foraging opportunities for birds

Entrance Orchard

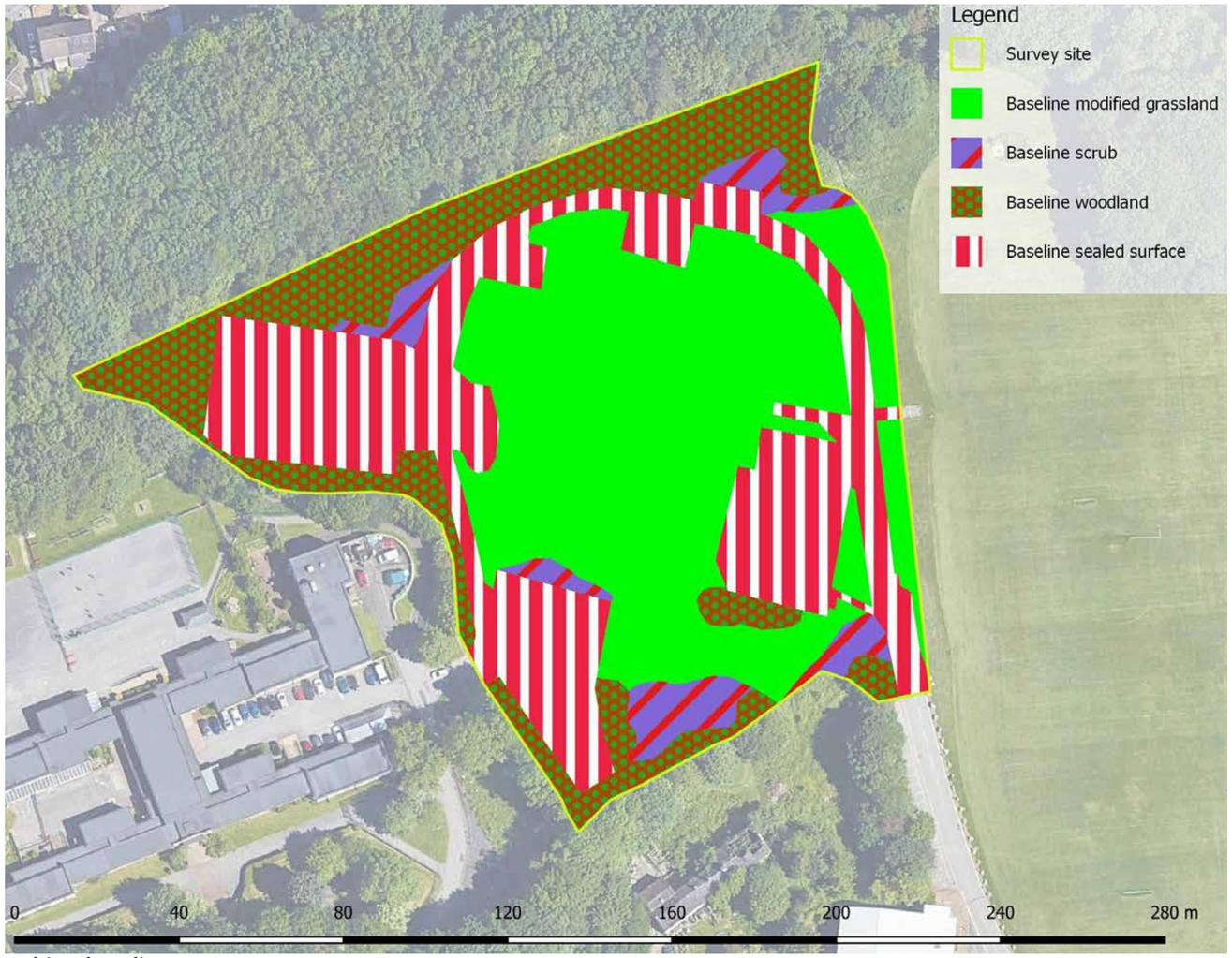
- Proposed fruit trees to attract pollinators and provide habitat and foraging opportunities for birds

BIODIVERSITY NET GAIN

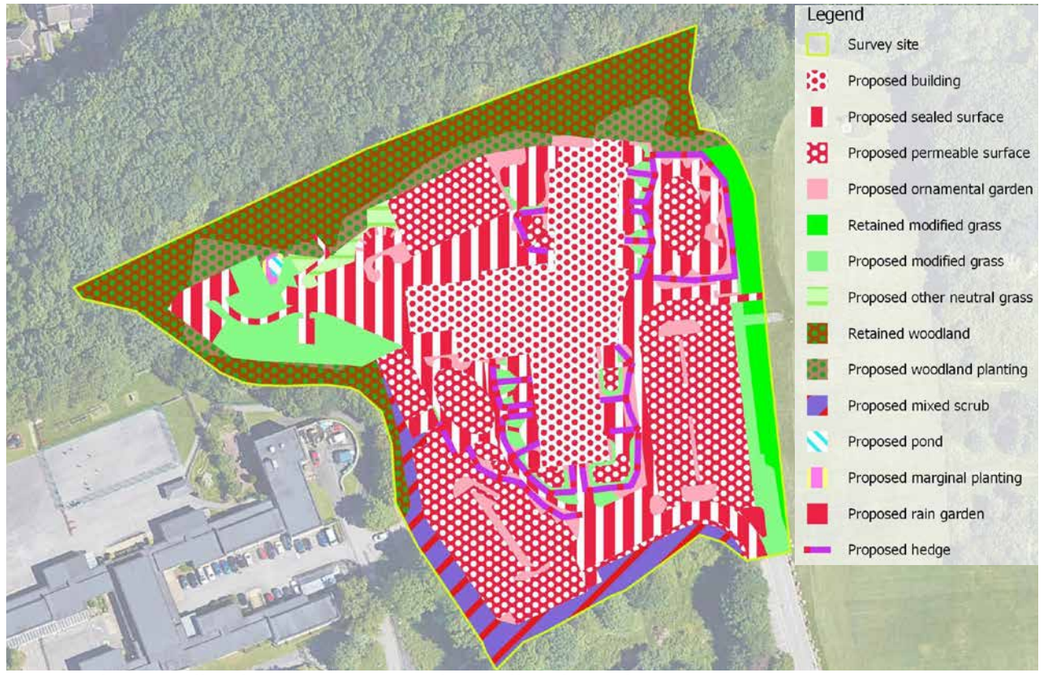
Biodiversity Net Gain (refer to BNG Report by Arbtech Consulting Ltd for details)

Arbtech Consulting Limited were instructed by Frank Shaw Associates Limited to undertake a Biodiversity Net Gain (BNG) evaluation of the site. The results indicate a net gain in habitat area units (0.40) and a net gain in linear units (0.36).
This is mainly contributed to replacement of part of the baseline grassland and some woodland and scrub areas with the proposed school site of buildings sealed and permeable surfaces, ornamental planting and grass areas, but compensated for with enhanced retained woodland condition both in on site and offsite areas, native scrub planting. and the proposed planting of new hedgerows.
Relevant enhanced/created habitat condition requirements are outlined below:

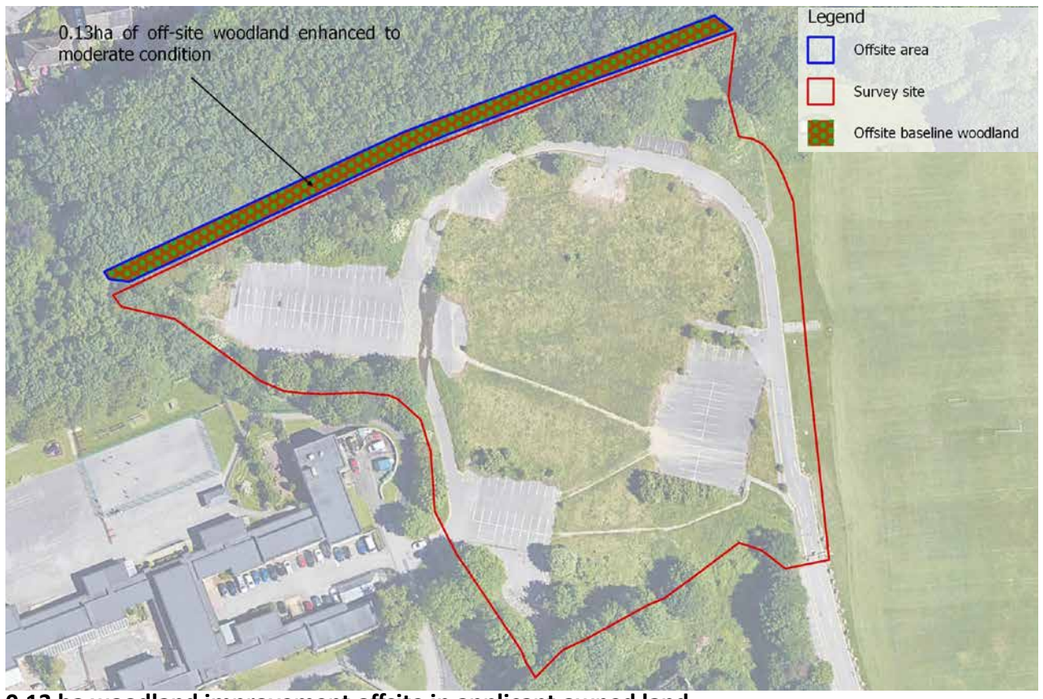
- **Enhanced broadleaved woodland (poor to moderate condition)**
  0.31907ha on site (within redline) and 0.13ha offsite in applicant owned land.



Habitat baseline map



0.31907 ha woodland improvement within redline boundary



0.13 ha woodland improvement offsite in applicant owned land

LANDSCAPE LAYOUT

Joseph Norton Academy
Deighton //
Landscape Statement

LANDSCAPE LAYOUT

Proposed Trees
Hedgerow Planting
Ornamental Shrub Planting
Native Shrub Planting
Woodland Improvement Planting to existing woodland within site
Woodland Improvement Planting to existing woodland offsite
Wildflower Meadow Seeding
Wetland / Pond Margin Seeding
Woodland Undergrowth Seeding
Grazing Pasture Seeding
Amenity Grass Seeding
Reinforced Grass Turf

KEY
Site Boundary

SOFTSCAPE
Existing Trees (RPZ dashed)
Existing Trees to be removed

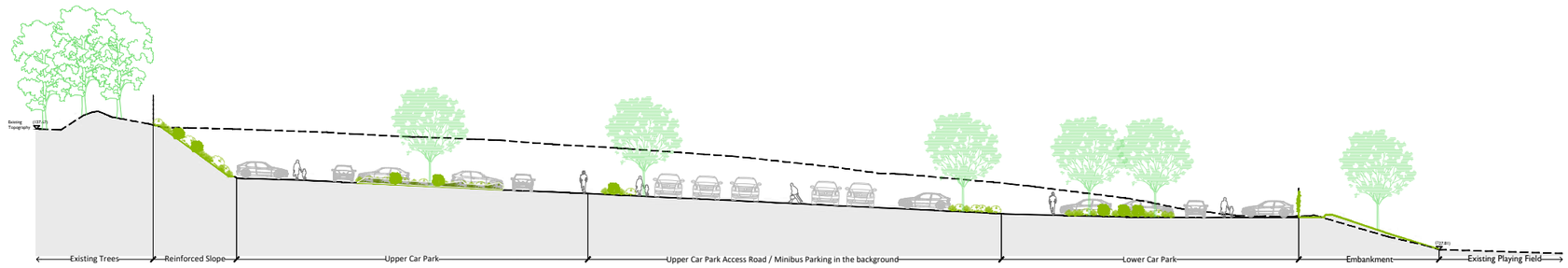
HARDSCAPE
RC Retaining Wall (to Engineer's detail)
Soil Retaining System (to Engineer's detail)
2.0m high Freestanding Wall to MUGA (to Engineer's detail)
Slab Paving
Blacktop Tarmac
Coloured Tarmac
Wet Pour Safety Surface
Timber Decking
MUGA Sports Surface
Permeable Paving
Reinforced Gravel

FENCING
3.0m Closeboard Fencing Vertical Featheredge
3.0m Rebound Weld Mesh Fencing to MUGA
2.4m Anti-climb Weld Mesh Fencing to outdoor play spaces & site perimeter
1.8m Anti-climb Weld Mesh Fencing to Upper Years Class Gardens
1.5m Anti-climb Weld Mesh Fencing to Lower Years Class Gardens
1.5m Galvanised Wire Mesh Fencing to Goats Enclosure (75-150mm mesh)
1.5m Galvanised Wire Mesh Fencing to Chicken Run (25mm mesh)
1.1m Galvanised Wire Mesh Fencing to Pigs Enclosure (75-150mm mesh) with electric pasture tape to bottom
1.1m Timber Picket Fencing to Veg. Beds with 600mm high rabbit-proof wire netting
1.1m Cleft Chestnut Fencing to Forest School
1.1m Stainless Steel Balustrade with Handrail

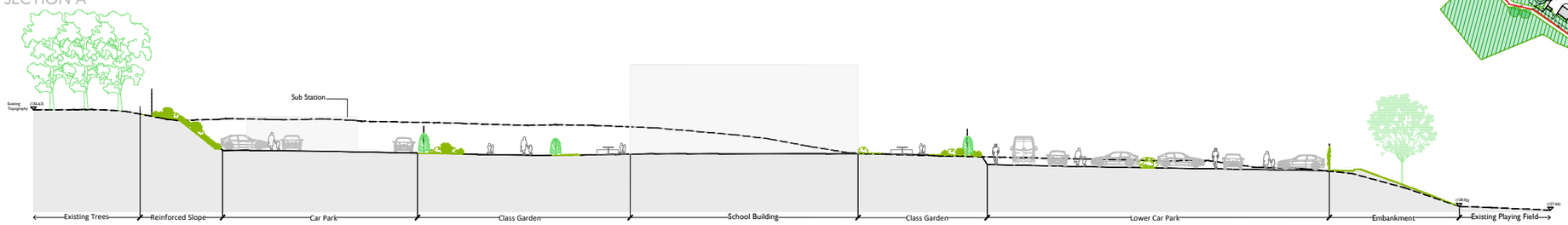
landscape proposals.

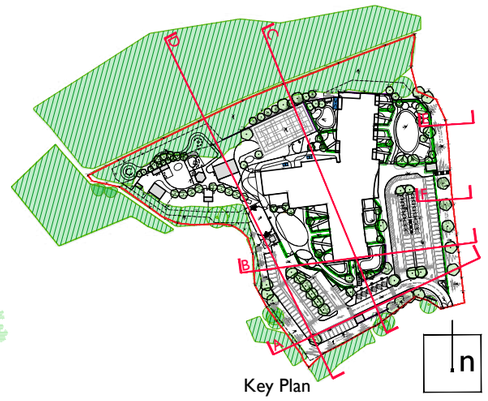
Joseph Norton Academy
Deighton //
Landscape Statement

SITE SECTIONS

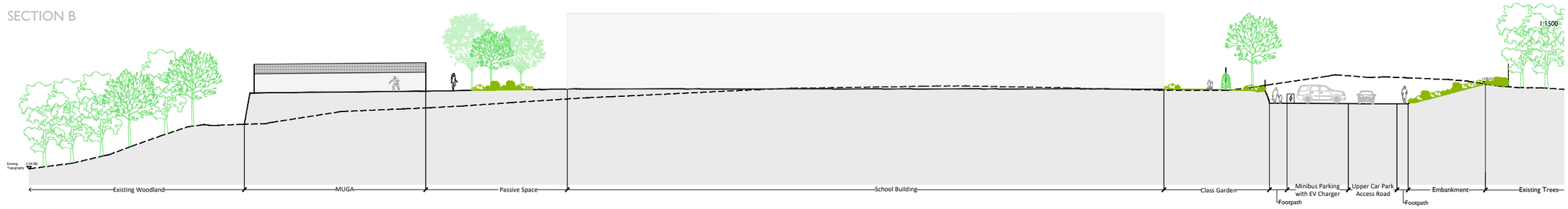


SECTION A

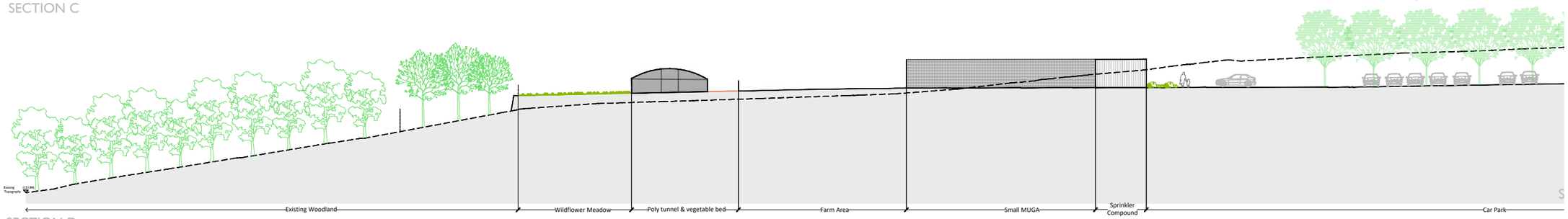




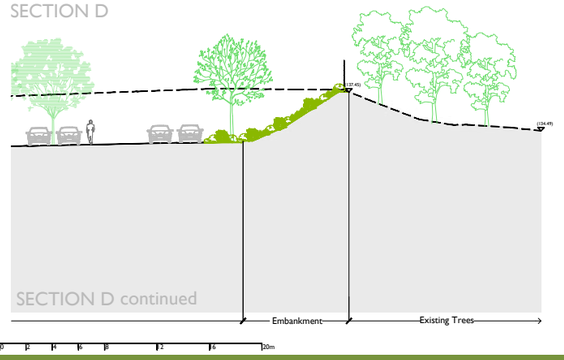
SECTION B

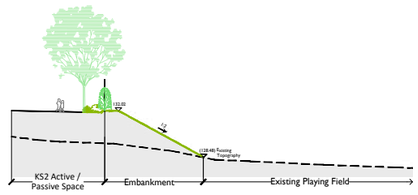


SECTION C

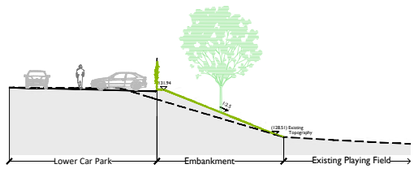


SECTION D





SECTION E



SECTION F