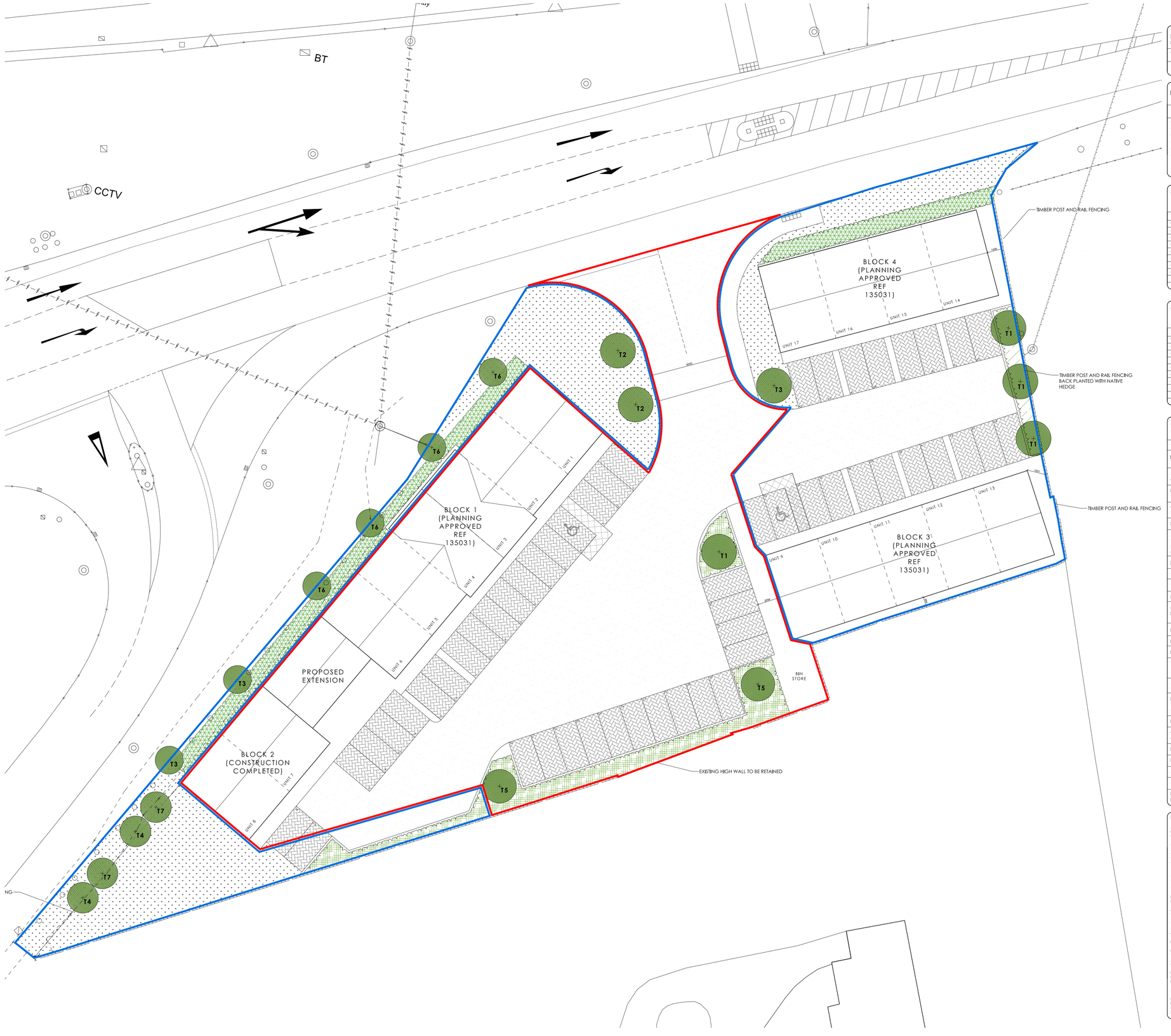
HILLCREST PARK RURAL ENTERPRISE DEVELOPMENT | CAISTOR

SITE PLAN



Proposed Site Plan

scale 1:200

HEDGE
Plant at 4/plants per linear metre in tdouble staggered row 300mm apart

%	Species	Type	Root	Size (mm)
100	*Fagus sylvatica*	n/a	B	450-600

INDIVIDUAL TREES

	Species	Type	Root	Girth (cm)
T1	*Acer campestre*	standard	B	8-10
T2	*Carpinus betulus*	Standard	B	8-10
T3	*Betula pendula*	Standard	B	8-10
T4	*Pinus sylvestris*	Standard	B	8-10
T5	*Prunus avium*	Standard	B	8-10
T6	*Pyrus calleryana chanticleer*	Standard	B	8-10
T7	*Quercus robur*	Standard	B	8-10

MIX A

Type	
Cornus alba	Size: all to be 3 Litre
Euonymus radicens	Plant in groups of 3/4 of same species in a irregular layout at 4 plants per sqm.
Hebe rakaiensis	
Hebe 'Autumn glory'	
Ilex aquifolium	Planted areas to receive 50mm bark chipping's after planting.
Lonicera pileata	
Ligustrum vulgare	Following establishment, plants should be trimmed to provide an overall formal shape.
Pinus mugho Mughus	

MIX B

Type	
Cotoneaster sal. 'Autumn fire'	Size: all to be 3 Litre
Escallonia 'Donard Seedling'	Plant in groups of 3/4 of same species in a irregular layout at 5 plants per sqm.
Hebe albicans	
Hebe 'Mrs Winder'	
Lonicera pileata	Planted areas to receive 50mm bark chipping's after planting.
Pyracantha coccinea	
Rosa glauca	Following establishment, plants should be trimmed to provide an overall formal shape.
Sarcococca confusa	
Viburnum tinus	

MAINTENANCE SCHEDULE

TREES

Task	Time of Year	Frequency
Inspection of mature trees	March-September	Annually
Selective felling of over mature/ declining species	October to February	As required
New planting to broaden/ supplement diversity of tree stock	October to March	Annually
Other works- removal of debris trapped in branches etc.	As necessary	Annually
Removal of self set seedlings	January	Annually
Selective thinning and pruning to be undertaken to ensure there is sufficient light through the tree canopy	As necessary	As required

HEDGES

Task		
Trimming	April to October	5 times
Reshaping	Hard prune Oct-Feb	Annually
Chemical weed control along base	In winter and summer only when other methods have failed	Annually
Fertilising	Spring	Annually
New Planting	October-March	Annually
Litter/Debis	Throughout	Daily
Watering	As necessary, depending on weather	

AMENITY GRASS

Eroded areas: repair, rotovate to 150mm, 100mm topsoil if required, seed with BSH mix 19	May-September	As required
Litter/debris removal	Throughout	Daily
Grass cut, leave arisings, trim edges and collect trimmings	April-October	Every 2 weeks
Fertiliser-Spring	April	Annually
Fertiliser-Autumn	October	Annually
Scarification	March	Annually
Spiking	Autumn	Twice Annually
Reforming of edges to paths and planting	Autumn	Annually

PLANTING SPECIFICATION

All planting stock to shall comply with the requirements of the BS 3936, and shall be healthy with a strong root system. The native plants are to be of local providence and well labeled. Trees and shrubs should be in handled and transported in accordance with relevant codes of practice.

- Prevent drying of roots. Heel the trees in or, for short periods of storage put them in a plastic bag. Keep shaded and away from the wind.
- Keep as much fibrous root on the trees and possible.
- Avoid damaging the roots, breaking the stem tops or stripping back the bark from stems or roots.
- Prevent excessive heating.

Additional topsoil to be supplied where required, and to comply to BS 3882. To be 150mm deep for grassed areas and 300mm deep for hedges and shrubs.

TREE PLANTING-

Plant from late October to early March
If planted in late spring or early summer, plants should be watered during dry spells for the first growing season.
Avoid planting in frosty, cold or windy, hot, sunny or drying conditions.
Choose cloudy drizzly weather when possible.
Tree pit- Used for trees over 900mm tall. Planted in pits at least 150mm greater than the diameter of the root ball. The soil should be broken below the pit by at least 250mm. The pit should bacrilled and heeled in.
The trees should be protected by plastic tree protection tubes and supported by soft wood (75-100mm in diameter) timber stakes not more than ⅔ of the trees height. The stake should be located on the windward side of the tree and attached via expandable rubber ties.

HEDGE PLANTING-

Plant from late October to late March.
Topsoil to be supplied to all areas of hedging to a depth of 300mm and to comply to BS 3882.
All planting operations shall be carried out with British Standard 4482. Planting pits are to be dug in excess of the roots to allow the roots to spread out in the pit. All plants to planted at there natural depth as they existed in the nursery.

Evacuate 300mm deep, and break up the base of the planting bed. Provide and lay 300mm of topsoil in accordance with BS 3882. Cultivate to this depth and incorporate 100mm of well rotted farmyard manure or approved compost. Planting beds to be mulched with 30mm of bark chippings after planting.

SHRUB PLANTING

Planted late October to early March. All pernicious weeds are to be eradicated. Excavate 300mm deep, and break up base of planting beds. Provide 300mm deep topsoil and approved compost to BS 3882. Planting pits are to be dug in excess of the roots to allow the roots to spread out in the pit. All plants to be planted at there natural depth as they existed in the nursery. Planting beds to be mulched with 50mm of bark mulch after planting.

EXISTING TREES

REMOVAL

Any trees to be removed shall be removed in a safe and appropriate manner , adhering to relevant British Standards.
The contractor shall:

1) Locate the selected trees to be removed and verify by marking each tree
2) No tree shall be removed in a manner that compromises safety. When work is being performed, all safety precautions shall be in place to protect the operators and the general public.
3) The Contractor shall plan and prepare for the use and positioning of equipment so as to accomplish the safe, effective and efficient removal of trees. Whenever any tree, or large tree sections of a tree, being removed may endanger people or property, the Contractor shall ensure that an adequate area is cordoned off with tape or rope and clearly marked to prohibit the public or other unauthorised persons from entering.
4) The trees will be removed via the most safe and appropriate methods:
   - Clear and unrestricted fell - Clear felling shall consist of removal of the complete tree to ground level in one operation leaving the tree structure intact. The Contractor shall be responsible for all felling debris which arise as a result of the wrong tree being felled or as a result of clear felling work.
   - Sectional felling/restricted fell - Where needed, the Contractor shall fell the tree indicated in sections, ensuring the limbs and trunk are removed in a controlled fashion, either by the use of ropes involving sections which are no larger than can be controlled without causing damage, or by tree fall in situations which are acceptable.
5) The trees will be removed via the most safe and appropriate methods:
   - Stump removal via root grubbing- Grubbing shall consist of the complete removal of tree stumps and roots by hand, machine excavation or other means. All arising's shall be removed from site for disposal.
   - Stump removal via root grinding- After felling, the stump shall be cut down flush with ground level. The Contractor shall grind the whole stump and root plate out to a depth of no less than 500mm below ground level. . All arising's shall be removed from site or disposed of as directed by the Supervising Officer.
6) The contractor shall backfill the resultant hole to the level of the surrounding ground surface, with imported top soil which complies with the appropriate British Standards. The contractor shall remove arising's from site in a appropriate and safe manner, and all debris shall be clean up and removed.

PROTECTION

Trees greatly complement the built environment, but can be easily injured during the development process. BS 5837: 2012 Trees in Relation to Design, Demolition and Construction offers detailed guidance on the protection of trees during development and construction and includes minimum dimensions of zones of protection, and the avoidance of damage through storage of harmful substances or the lighting of fires near trees.

Trees are vulnerable in many ways during construction, and including:
- Physical damage (from vehicles, tools or equipment).
- Physical damage by the lowering of levels or trenching for services.
- Disruption of root systems by the passage of vehicles or equipment or storage of materials.
- Toxic effects from spillage of fuels, lubricants or other chemicals.
- Fire damage.

ESTABLISHMENT AND MAINTENANCE OF PROTECTION ZONES

TIMING
- Erect barriers to establish zones before materials or machinery are brought on site or building work begins, including erection of site huts.
- Barriers are not to be removed or altered without prior consultation with an arborist.
- Barriers should remain in place until construction works are completed in full

LIMITS
- Erect stout barriers at the limits of the zone of protection.

TREE PROTECTION BARRIER SPECIFICATION
- Barriers shall be fit for the purpose of excluding construction activity.
- In most cases, barriers shall comprise weldmesh panels affixed using wire or scaffold clamps to a well braced framework of vertical and horizontal scaffold poles.
- In some cases it may be appropriate to use temporary site office buildings as components of the tree protection barriers.
- Notices should be erected on the barriers with words such as "Construction exclusion zone – keep out".

SCAFFOLDING WITHIN PROTECTED AREAS
- If it is essential for scaffolding to be erected in protected areas, barriers as per section above will be erected to provide just enough space for the scaffolding. The ground in between the barriers and the building should be protected by boarding such as scaffold boards for pedestrian use, or more substantial boarding for heavier traffic.
- Ground beneath the boards will be left undisturbed and protected by geotextile fabric, if necessary. Padding will be used on the fabric to level the ground.
- Boarding will be left in place until building works are completed.

STORAGE OF OILS, FUELS, MATERIALS & MACHINERY
- No storage or discharge of any materials or liquids, including mixing of cement will be permitted within 10 metres of the stem of any tree or within the protected zone (whichever is the furthest), also taking account of any slope to avoid the harmful effects of runoff.

FIRES
- No fires to be lit in a position where flames could extend to within 5m of foliage or trunk taking into account wind direction and strength.

SERVICES
- If services must be routed within the protection zone, consider the use of thrust boring techniques, or digging a small trench by hand.
- If adopting either of the above, works will be a minimum of 1 metre from the tree and at a minimum depth of 750 mm.
- Sleeving of services will help to protect them and ease essential repairs.
- The National Joint Utilities Group in publication NJUG 10 gives detailed guidance on the installation of services near to trees. Methods are to be agreed in advance of commencing any works.

TREE STUMP REMOVAL
- To prevent damage to remaining root systems stumps of trees to be removed shall not be winched or dug out but chipped to an appropriate level by stump grinder.

MACHINERY AND EQUIPMENT
- Care shall be taken at all times to avoid any equipment striking the tree trunk, branches or foliage. Particular care is needed with delivery vehicles, overhead cranes and excavators.
- Protected trees should not be used as anchorages for winches or other equipment. recommendations in BS 3998.

BRIEFING
- All staff and contractors shall be briefed prior to commencing works on the importance of observing the above requirements, and the vulnerability of trees to damage during construction

REFER TO:

BS 4428: 1989	Code of practice for general landscape operations
BS 3998: 2010	Tree Work Recommendations
BS 5837: 2012	Trees in Relation to Design, Demolition and Construction

PROPOSED TREES
MIX A
MIX B
PROPOSED HEDGE

PERMEABLE PAVING
TARMAC
GRASS
GRAVEL

BUILDING
FENCE
HEDGE
CHANNEL
WALL
BANK EDGE
STORM DRAINAGE
FOUL DRAINAGE
CHANGE OF SURFACE
OVERHEAD ELECTRIC
OVERHEAD TELEPHONE
TREE
BOREHOLE
MANHOLE
CONTROL STATION

REV B 26.02.2019
REDLINE AMENDED
REV A 21.01.2019
REDLINE AMENDED
DRAWING ISSUES AND REVISIONS

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PROJECT | **Hillcrest Park**
Rural Enterprise Development
Caistor Top

DATE | March 2016
TITLE | PROPOSED SITE PLAN
SCALE | 1:200
ORIGINAL SIZE | A1
DRAWING NUMBER | LDC2450-01B