

Plan showing indicative areas of Bio-diverse roof - Areas subject to detail roof design

**BIODIVERSE**

Extensive biodiverse roof with substrates to support contrasting areas of grassland, to include:

1. Acid grassland.
2. Neutral grassland

The seed and substrates will be chosen to compliment each other to support the habitat. Other seeds will come in naturally and augment the mix in time.

**BIOSOLAR**

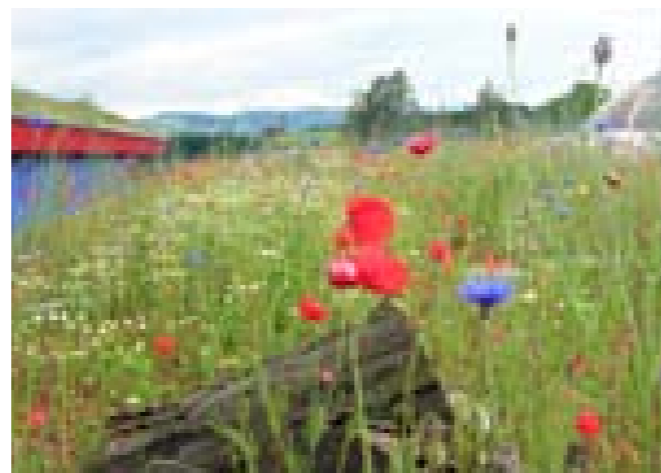
Where Photovoltaic panels are required a layer of low maintenance extensive vegetation will be planted. This enables a greater portion of the roof to become a biodiverse roof. Planting surrounding PV panels can have a cooling effect reducing the chance of overheating and extending the life of the panel. The shelter and shade created by the panels attracts a broader range of wildlife.

The boulders and variation in contour provide shelter and rooting space for small clumps of shrubs, to provide shelter. Small bowls, embedded in the roof will fill with rainwater to provide intermittent water supply. See typical section.

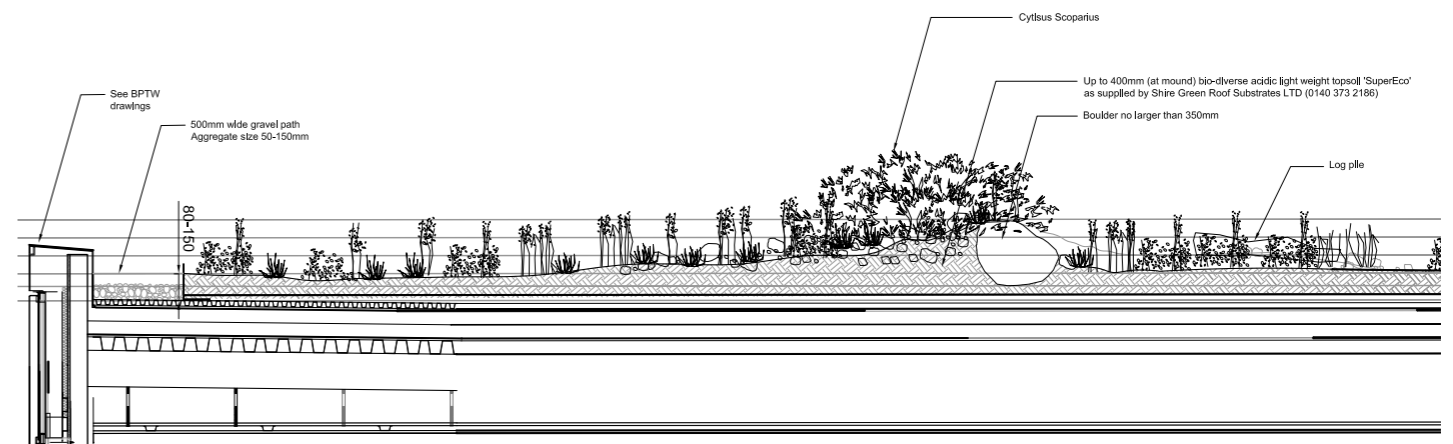
**MAINTENANCE:**

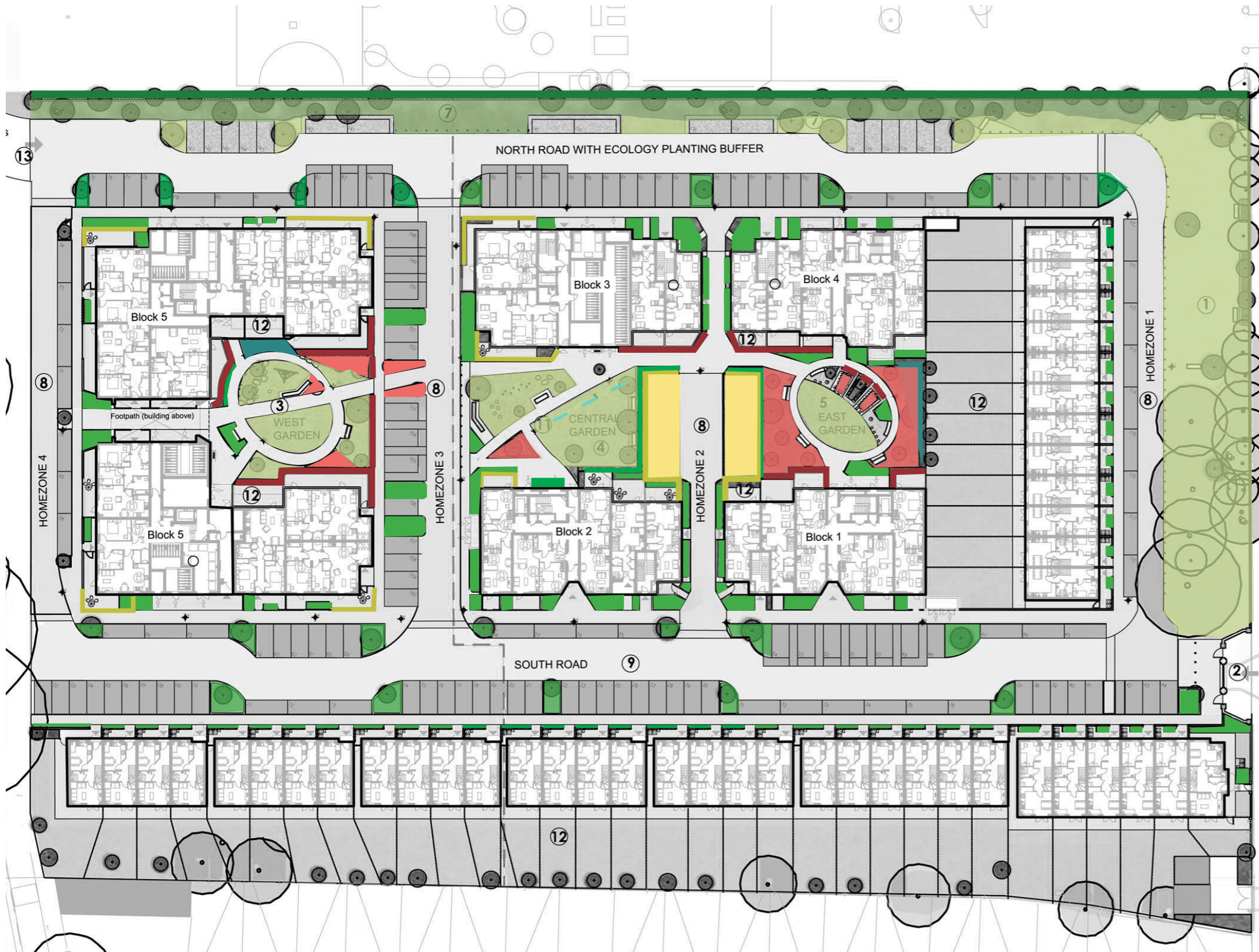
It is anticipated that there will be two maintenance visits per year by trained operatives, mainly to weed unwanted arrivals. It's not proposed to provide an irrigation system as this would be inconsistent with a low impact ecological approach. Access to the roof is for maintenance only.

**Precedant image of a Biosolar roof**



**Example Section Through Biodiverse Roof**





**PLANTING TYPES:**

- Shrub and groundcover planting
- Large shrubs and self-clinging climbers for screening
- Grasses and herbaceous planting
- Swale
- Grass
- Wildflower Meadow
- Hedge - Clipped evergreen hedge to private gardens
- Hedge - Native Thicket Hedge
- Planted vertical screens
- Bio-diverse roof to car podiums

**PLANTING:**

A strong theme of native and naturalised planting or ecological value is at the centre of the landscape proposals. East garden could become a more private, residents managed garden in the future if there was interest from residents.

**HABITAT ENHANCEMENT:**

Habitat enhancement will include:

Bat & sparrow boxes to be allowed for on block buildings

6no. bird boxes to create nesting opportunities for a range of species mitigating for the loss of potential nesting opportunities with in existing buildings or removed vegetation. Boxes with open fronts, 32mm & 28mm diameter holes will be installed on existing mature trees & Boundary fencing to ecology corridor

Stag beetle loggeries: pyramid shaped arrangement of logs set 500mm in ground Logs from native felled site trees

Small mammal hole in garden boundary fencing, min one hole per garden to ensure a continuous route though all rear gardens

EGERTON ROAD

**HEDGE PLANTING**



Elaeagnus ebbingei



Photinia 'Red Robin'



Carpinus betulus



Ligustrum ovalifolium



Low small hedge:  
Buxus sempervirens

**Mixed Native Hedge**



Native hedgerow: 50% Crataegus Monogyna, 10% of each of the following; Corylus avellana, Rosa Canina, Rosa rubiginosa, Euonymus europaeus Viburnum Opulus .

**NATIVE SWALE MIX**



Iris pseudacorus



Carex pendula



Juncus patens



Juncus effusus



Lythrum salicaria



Stipa tenuissima



Stipa gigantea



Echinacea purpurea  
'Magnus'



Verbena bonariensis



Salvia nemorosa  
'Cardonna'

**SHRUB AND GROUND COVER PLANTING**



Cornus alba  
'Elegantissima'



Hebe rakaiensis



Hebe 'Midsummer  
Beauty'



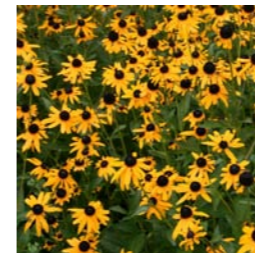
Rosa 'Kent'



Viburnum davidii



Festuca



Rudbeckia



Achillea 'Terracotta'



Stachys officinalis



Eryngium

**VERTICAL PLANTED SCREENS WITH PLANTING TO THE FRONT**



Liriope muscari



Dryopteris filix-mas



Rosmarinus spp



Hedera helix 'Glacier'



Geranium 'Rozanne'



Rosa pimpinellifolia



Galanthus nivalis



Vinca minor



Geranium 'Rozanne'



Narcissus 'Jack  
Snipe'



### **MANAGEMENT:**

Clarion Housing Group will be the long-term stewards of the development and will undertake or procure the management, maintenance and repair of the development to an agreed standard.

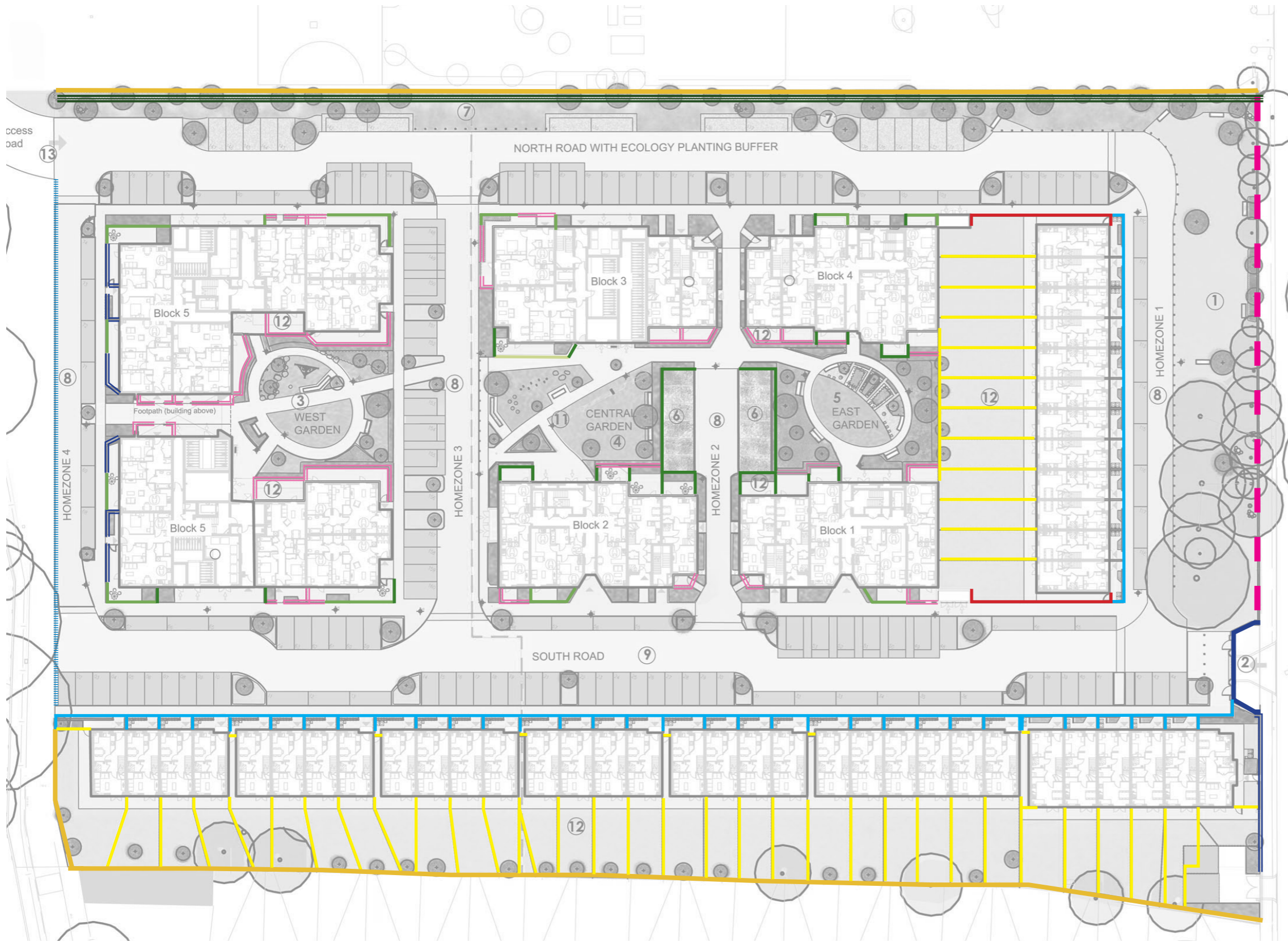
### **MAINTENANCE:**

The following overall objectives will be considered in the development of a management and maintenance plan, to be developed following planning approval:

#### **Objectives:**

- To ensure that the trees, planting and grass area are managed appropriately to aid establishment, and that any planting that dies or fails to thrive is replaced.
- Put in place long-term objectives for tree management along the new established ecological corridor to ensure areas of varied grassland, hedgerow and shrub understory habitat are now over-shadowed by developing tree canopies.
- Thereafter; to maintain the external areas to a high visual standard and to enhance the ecological value of the site.
- Shared Amenity Areas: Provide a valuable recreational asset for the residential community.
- Public Realm Areas: Provide a valuable recreational asset for the residential & local community.
- To protect and manage new and existing tree, planting, and grass areas.
- Maintain the external areas to a standard approved by Secured By Design, to allow clear sight lines and natural surveillance.
- To monitor and safeguard against invasive weeds.
- Maintain areas to a high standard ensuring the space is free from litter & any damage to planting, furniture & surfaces to be reported and rectified as soon as possible to avoid any negative impressions of the space.
- All Paving / Surfacing to be regularly weeded and inspected for damage.
- Ensure that the lighting is maintained to the level set out in the approved scheme, and that any failed bulbs are promptly replaced.
- Biodiverse Roofs: It is anticipated that there will be two maintenance visits per year by trained operatives, mainly to weed unwanted arrivals. It's not proposed to provide an irrigation system as this would be inconsistent with a low impact ecological approach. Access to the roof is for maintenance only.

# BOUNDARY STRATEGY PLAN - RICHMOND COLLEGE



## BOUNDARY TYPES:

- North & South Boundary: 2.1m high timber close boarded fence, capping rails & concrete posts & gravel boards.
- Side house boundary: 1.8m high brick wall with brick piers min. every 6m. Brick to match adjacent houses.
- Rear garden fence: 1800mm high close board timber fence with 300 high timber trellis panel, timber capping rails & concrete posts & gravel boards.
- House front boundary wall: low 600 brick wall to street with 1200mm high wall to screen bin storage. Brick to match house.
- Railings to Blocks front terraces: 1200mm high railing. Gates to private access
- Low wall with railing. 450mm high brick wall with 750mm high railing above. 1.2m total height
- Planted screen 1200mm high
- Planted screen 1400-1800mm high
- Native hedge and planting to ecological corridor.
- - - Existing boundary wall retained with new railings above
- Existing College entrance retained
- - - - - East site boundary: raised kerb to edge of homezone