

#### Tree Pit Detail

1. Clear spiral guard to be fitted to trunk to protect against animal browsing.

2. 50mm deep bark mulch layer to be spread evenly over a circular area 1000mm Ø around the tree to prevent weed growth and retain moisture.

3. Excavate tree pit to sufficient size to accommodate tree root ball. Loosen any compaction in base of excavated pit to aid drainage. The tree should be planted at a depth where the root flare is still visible, just breaching the soil surface following backfilling.

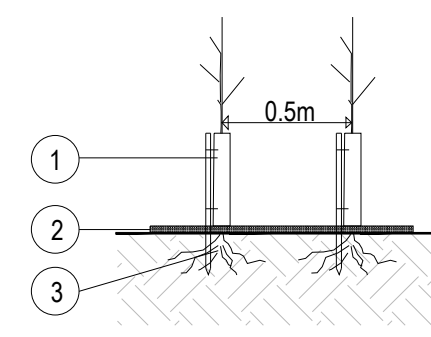
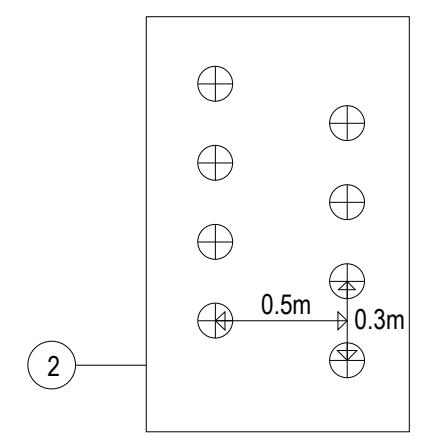
4. Backfill tree pit with subsoil and topsoil excavated from pit if this is regarded as of sufficient quality to promote the healthy establishment of the tree. If either the topsoil or subsoil excavated from the pit is of poor quality, then soil ameliorants may be used sparingly or imported topsoil compliant with BS3882 should be used.

Immediately after planting, water the tree, saturating the tree pit to field capacity.

The notes above are intended as a basic guide only. For further guidance on tree planting refer to BS8545:2014 Section 10.

Products suggested in italics above are available from Green Blue Urban (<http://greenblueurban.com/>).

#### Double Staggered Row



#### Native Hedgerow Planting Detail

1. Tubex shrub shelter with supporting cane or stake.

2. Tubex 1m wide biodegradable Jute/Hessian Fabric roll pegged down with supplied biodegradable plastic pegs along line of hedgerow to prevent weed growth and retain moisture.

3. Whip to be notch planted following clearance of any existing vegetation.

Immediately after planting, water the whip, saturating the ground around its base to field capacity.

The notes above are intended as a basic guide only. For further general guidance on planting refer to BS8545:2014 Section 10 and BS4428:1989 Section Section 9.

Products suggested in italics above are available from Tubex (<http://www.tubex.com/>).

#### Whip Maintenance and Management During 5 Year Establishment Period

Immediately following planting, the whip should be watered thoroughly. Following this, and with regard to prevailing weather conditions, newly planted whips should be watered regularly during periods of dry weather. When watering, the square meter of ground around the whip should be soaked to field capacity (refer to BS8545:2014 for further detail) by surface watering. Watering frequency is more important than quantity to prevent the roots of the newly planted whip from drying out.

All whips are fitted with protective guards to prevent animal damage. These should be checked regularly to ensure they remain in place and are providing adequate protection against the animals in the area. If damage to trees from browsing by animals still occurs, additional measures may be required.

A formal assessment of areas of whip planting should be carried out annually by a qualified arborist who will be able to advise on solutions should any problems be picked up. During this assessment, any guards and canes/stakes should be checked to ensure they are providing protection but not damaging the developing whip and that its roots are still firmly seated in the ground. If the whip has become loose in the ground, the soil around the base should be re-firmed and guards adjusted accordingly.

The space above the mulch mat around the whip should be kept clear of competing vegetation and weeds at all times.

The shrub shelter/guard should be removed once the whip has established a strong enough root system to support itself and has begun to grow strongly clear of the top of the shelter/guard, likely to be 1-2 years after planting. Biodegradable mulch mats can remain in place indefinitely.

Formative pruning should be carried out in accordance with BS3998 as required during the first 5 years to ensure the desired form is achieved.

For further guidance on whip and tree maintenance during establishment, refer to BS8545:2014 Section 11.

#### Wildflower Meadow - Seeding and Preparation

There are several methods to create a wildflower meadow. The method will depend on the size of the area to be seeded, the condition and diversity of flora on site and the availability of mechanised assistance.

#### Objectives

- Create a wildflower meadow that establishes to create a vibrant sward containing a variety of species
- Enhance biodiversity locally
- Provide vital habitat for insects, mammals and birds

#### Preparation/ Cultivation

- Area should be free of competing weeds, debris and rubbish
- Soil should be cultivated or rotavated to removed compaction
- Debris or stones larger than 50mm should ideally be removed from the surface before laying/sowing
- Ground should be sufficiently level, with the top 15cm cultivated to a fine tilth before sowing/turfing, allowing water to fully permeate the soil

#### Seeding

- Sowing to be undertaken mid-to-late April but can continue to the end of May
- Seed should be sown thinly to suppliers recommended sowing rate – therefore mix seed with a bulking agent such as sand
- Lightly rake seed into the soil
- If conditions are particularly dry, the seed will need to be watered to stimulate germination

#### Operations to Ensure Establishment

- Seeded area to be fenced off if required to protect germinating seeds from trampling;
- Newly seeded areas to be kept moist during periods of dry weather;
- First cut should only be undertaken once grass species within mix have established and grown to at least 150mm;
- First cut to take off 1 third only;
- A spring meadow should be cut in late June to early July to a height of 75-100mm;
- Summer meadows should be left uncut from June until mid-September or later; regular cutting for the first part of the year will prevent the establishment of coarse grasses;
- All arisings should be left for between 3-7 days before collection or bailing to allow seed pods to open and disperse seed;
- All arisings should be removed to prevent nutrient build up;
- Annual seed heads can be left standing over winter or can be cut back in late autumn with a brush cutter/trimmer
- Perennial meadows should be cut back in the same way, with a cut in winter before spring growth appears
- Annual meadows will need re-seeding the following spring

#### Ongoing Maintenance and Management

- Cut the wildflower meadow twice yearly to a height of 75-100mm, with the first cut taking place after flowering and seed drop – late July to mid-August
- The cut grass should be left to dry for 3-7 days dependent on weather conditions, and then collected and removed to a designated composting area on- or off-site
- The second cut is to take place at the end of the growing season (October/November), prior to winter die back
- All arisings are to be collected and removed, it is important to collect and remove mowings to retain low soil fertility and high floral diversity
- Remove all unwanted invasive, vigorous weeds (such as thistles and nettles, as well as all injurious weed species listed in the Weeds Act 1959 and Countryside Act 1981), including roots, by hand or by spot treatment with appropriate weed killer. Selective lawn killers should not be used.
- Wildflower meadows do not require any additional watering or feeding once established, this could alter the natural balance of plants in the area. Many native plants colonise poor land and the addition of extra nutrients and water will encourage excessive vigour in grasses, which will consequently out-compete the more desirable native plants
- Areas of grassland with bulbs should be left un-mown in early spring. Make the cut when the bulbs have died down (approximately six weeks after flowering). After this, the management should revert to that of the surrounding grassland

#### Tree Maintenance and Management During 5 Year Establishment Period

Immediately following planting, the tree should be watered thoroughly. Following this, and with regard to prevailing weather conditions, newly planted trees should be watered regularly during periods of dry weather. If the tree pit has been specified with an irrigation pipe, this should be used as the primary method of watering. If no irrigation pipe is specified, the square metre of ground around the tree should be soaked to field capacity (refer to BS8545:2014 for further detail) by surface watering. Watering frequency is more important than quantity to prevent the root ball of the newly planted tree from drying out.

All trees are fitted with protective guards to prevent animal damage. These should be checked regularly to ensure they remain in place and are providing adequate protection against the animals in the area. If damage to trees from browsing by animals still occurs, additional measures may be required.

A formal assessment of young tree health and development should be carried out annually by a qualified arborist who will be able to advise on solutions should any problems be picked up. During this assessment, any stakes and ties should be checked to ensure they are providing support but not damaging the tree and that the tree is still firmly seated in the ground. If the tree has become loose in the ground, the soil around the base should be re-firmed and stakes and ties adjusted accordingly.

The mulched area around the base of the tree should be kept clear of competing vegetation and weeds at all times.

Tree stakes and ties should be removed once the tree has established a strong enough root system to support itself, likely to be 1-2 years after planting. Strimmer guards should remain in place until the end of the 5 year establishment, with adjustments or segments added as necessary to facilitate tree growth. Tree guards should only be removed if they are beginning to restrict tree growth or if it is felt the risk of damage has significantly reduced due to strong tree growth and development or changes in the surrounding environment.

Formative pruning should be carried out in accordance with BS3998 as required throughout the 5 year establishment period.

For further guidance on tree maintenance during establishment refer to BS8545:2014 Section 11.

#### Planting Schedule

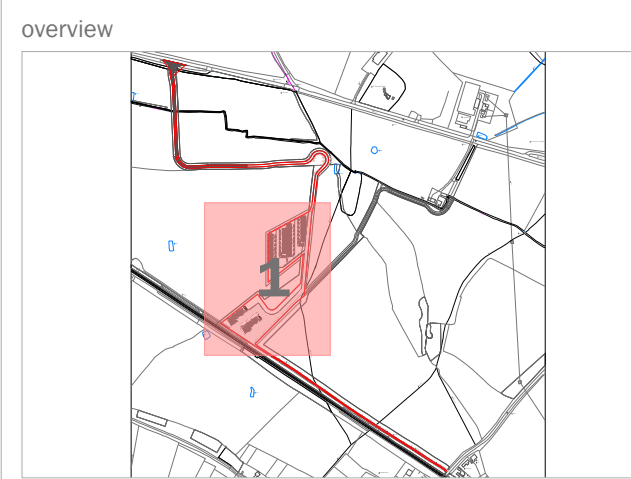
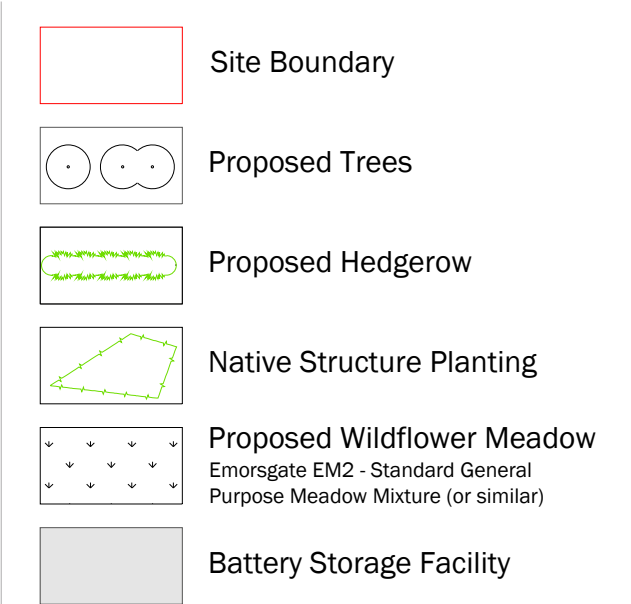
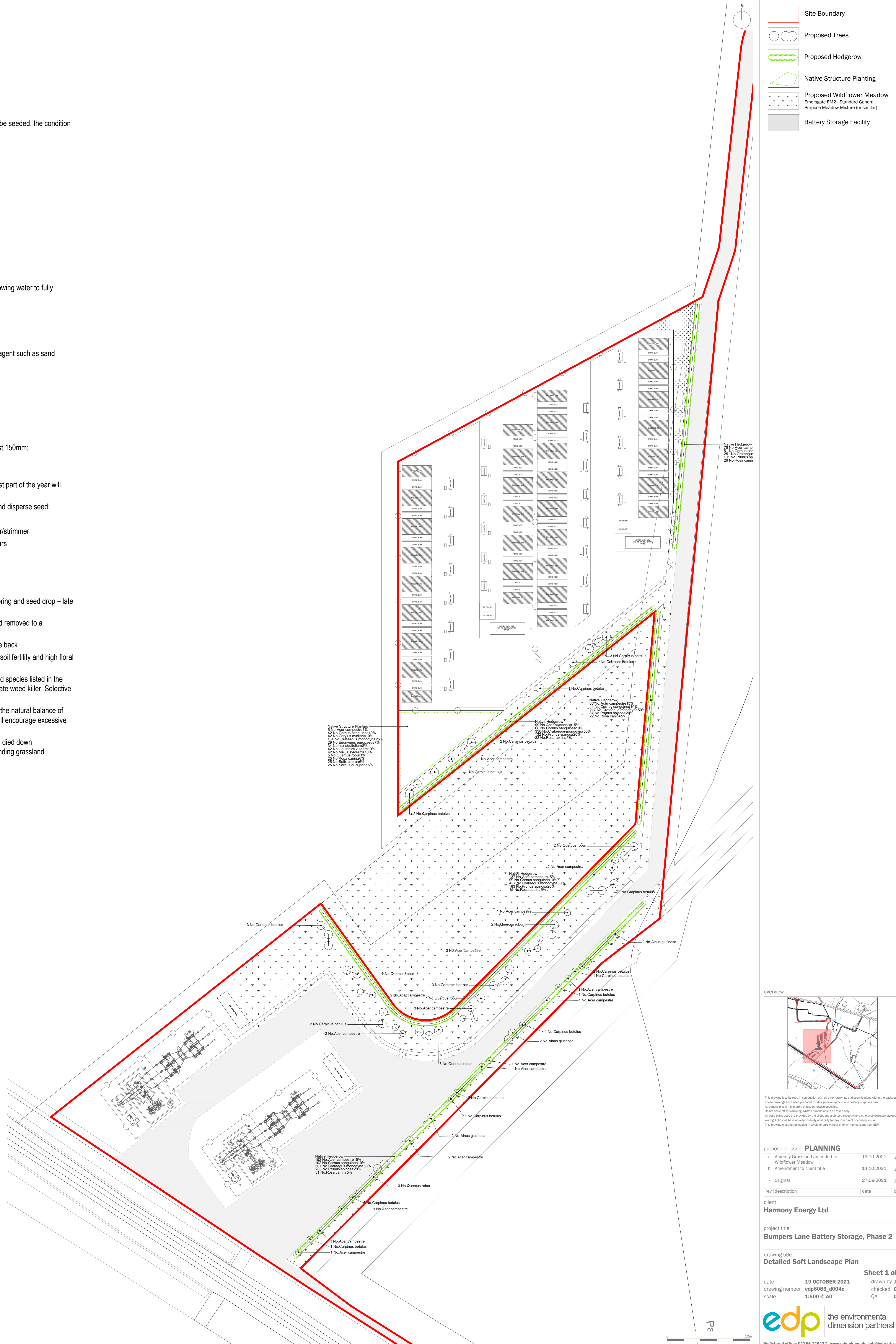
Trees						
Number	Common Name	Species	Girth	Height	Specification	Density
2-	Common Maple	Acer campestre	14-16cm	450-500cm	RB: 3x; Extra Heavy Standard; clear stem minimum 200cm; 5 breaks	Counted
5-	Common Maple	Acer campestre	12-14cm	150-175cm	1+2; Transplant - seed raised: B	1/m <sup>2</sup>
21-	Common Maple	Acer campestre	14-16cm	450-500cm	RB: 3x; Extra Heavy Standard; clear stem minimum 200cm; 5 breaks	Counted
6-	Common alder	Alnus glutinosa	12-14cm	400-450cm	B: 3x; Large Feathered; 7 breaks	Counted
11-	Common Hornbeam	Carpinus betulus	14-16cm	400-450cm	RB: 3x; Extra Heavy Standard; Clear Stem 175-200 ;5 brks	Counted
21-	Common Hornbeam	Carpinus betulus	14-16cm	400-450cm	RB: 3x; Large Feathered; 7 breaks	Counted
104-	Common Hawthorn	Crataegus monogyna	125-150cm		1+2; Transplant - seed raised: B	1/m <sup>2</sup>
42-	Common Crab Apple	Malus sylvestris	14-16cm	150-175cm	1+2; Transplant - seed raised: B	1/m <sup>2</sup>
13-	Common Oak	Quercus robur	14-16cm	400-450cm	RB: 3x; Extra Heavy Standard; clear stem 175-200cm; 5 breaks	Counted
5-	Common Oak	Quercus robur	175-200cm		BR:2x; Feather :5 brks	1/m <sup>2</sup>
25-	Goat Willow	Salix caprea	12-14cm	150-175cm	0/2; Cutting; Branched: 2 brks: B	1/m <sup>2</sup>
25-	Rowan	Sorbus aucuparia	14-16cm	125-150cm	1+1; Transplant - seed raised: B	1/m <sup>2</sup>
<b>Total :280 -</b>						

#### Shrubs

Number	Common Name	Species	Height	Pot Size	Specification	Density
42-	Common Dogwood	Cornus sanguinea	125-150cm	5L	1+1; Transplant - seed raised: Branched: 3 brks: B	1/m <sup>2</sup>
42-	Common Hazel	Corylus avellana	150-175cm	5L	1+2; Transplant - seed raised: Branched: 3 brks: B	1/m <sup>2</sup>
29-	Common Spindle Tree	Euonymus europaeus	125-150cm	4L	1+2; Transplant - seed raised: Branched: 5 brks: B	1/m <sup>2</sup>
34-	Common Holly	Ilex aquifolium	125-150cm	5L	Leader With Laterals: 3L	1/m <sup>2</sup>
42-	Common Privet	Ligustrum vulgare	150-175cm	5L	0/2; Cutting; Branched: 3 brks: B	1/m <sup>2</sup>
25-	Dog Rose	Rosa canina	125-150cm	5L	1+1; Transplant - seed raised: Branched: 3 brks: B	1/m <sup>2</sup>
<b>Total :214 -</b>						

#### Hedges

Number	Common Name	Species	Height	Specification	Density
529-	Common Maple	Acer campestre	125-150cm	1+1; BR; Branched: 2 brks	0.3Cr Double Staggered at 0.5m offset
355-	Common Dogwood	Cornus sanguinea	100-125cm	1+1; Branched: 2 brks :BR	0.3Cr Double Staggered at 0.5m offset
1762-	Common Hawthorn	Crataegus monogyna	125-150cm	1+1; BR; Branched: 2 brks	0.3Cr Double Staggered at 0.5m offset
706-	Blackthorn	Prunus spinosa	125-150cm	1+1; Branched: 2 brks :BR	0.3Cr Double Staggered at 0.5m offset
178-	Dog Rose	Rosa canina	125-150cm	1+1; Branched: 2 brks :BR	0.3Cr Double Staggered at 0.5m offset
<b>Total :3530 -</b>					



purpose of issue **PLANNING**

Approved/Drawings submitted to: 19-10-2021 JH  
 Wildflower Meadow  
 Amendment to client title: 14-10-2021 JH  
 Original: 27-09-2021 JH

rev / description / date / by

client  
**Harmony Energy Ltd**

project title  
**Bumpers Lane Battery Storage, Phase 2**

drawing title  
**Detailled Soft Landscape Plan**

date 19 OCTOBER 2021 drawn by JH  
 drawing number edj6085\_0004c checked OK  
 scale 1:500 @ A0 QA DL

Sheet 1 of 1

edp the environmental dimension partnership

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