

AMENDED PLAN	
Ref.	A1

Landscaping Management and Maintenance Specification

Solar Park 1

*Long Sutton Butterfly and Wildlife Park,
Long Sutton, Spalding, Lincolnshire*

[Planning Approval H11-0817-10]

SHDC PLANNING & DEVELOPMENT	
16 NOV 2011	
Ref.	0770-11

Revision Q_November 2011	Meadow seed mix spec. amended following LWT comments
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PLANTING SPECIFICATION

GENERALLY

All trees and plants shall be true to name and character and shall be supplied as barerooted or container grown. They shall be grown, handled and transported according to good horticultural practice.

PLANTING CONDITIONS

No planting shall be carried out when the ground is frozen, snow covered, waterlogged or excessively dry. In the event of the planting taking place during prolonged hot and dry conditions, the Landscape Maintenance Contractor is to ensure that the plants are well watered to ensure successful establishment.

SETTING OUT

Planting beds shall be pegged out in accordance with the planting plan.

COMPLETION OF PLANTING

- **PRUNING:** Immediately after planting, cut back carefully any damaged, dead or diseased branches. Remove any weak, thin or malformed growth and treat wounds greater than 25mm diameter with a fungicidal sealant.

TREE SCREEN

The boundary tree screening will be made up of retained trees with additional new English Heritage Malus types of fruit trees. The new West perimeter fruit tree planting will be made up of the following specific varieties in equal proportion:

Malus Cox's Orange Pippin
Malus Spartan
Malus Discovery
Malus James Grieve
Malus Laxtons Superb
Malus Egremont Russett
Malus Lord Lambourne

Each tree will be of 2 and a half year maturity in age and will be of 2-3 metres in height once planted. Trees will be planted around the perimeter at 3m centres and back filled with a 10mm recycled peat free compost. Each tree will be staked and tied with a 2.5m stake and 250mm rabbit guard.

HEDGE [ATOP EARTH BUNDUND]

The 2m high bunding will be planted with Rosa Canina 60/100cm in length with 2-3 breaks on each plant. These will be planted at a thickness of 5 per square meter. Each plant will be back filled with recycled peat free compost.

NATIVE HEDGE SCREEN [ENTRANCE GATE]

The entrance gates will be screened by a 21m length of fast growing native hedge consisting of:

Equal mix fast growing native species:

Crataegus Monogyna (Common Hawthorn), Fagus Sylatica (Beech) and Corylus Avellana (Hazel).

Planting: Two staggered rows 45cm apart. One row of bare rooted seedlings (60-90cm high) planted at 38cm centres, (56 plants). One row (staggered) of 50% transplanted tree stock (90 - 120cm high) and 50% bare rooted seedlings planted at 38cm centres (i.e. 28 tree stock and 28 seedlings). All with stakes / canes and rabbit guards to suite.

Prepare the ground prior to planting by removing existing vegetation.

MEADOW

Following installation of the Solar Park equipment and below ground National Grid infrastructure the grassed area will generally be allowed to self seed to encourage the development of local varieties of grasses and flora, but will be supplemented locally by seeding with a meadow **seed** mix as follows:.

N5 Long season Meadow Mixture (as supplied by Naturescape British Wild Flowers, Maple Farm, Coach Gap Lane, Ianger, Nottinghamshire, NG13 9HP Tel. 01949860592)

N5 is a diverse mix of 29 native wildflower species (N5Flowers) and 10 species of grass (NSGrass), 3 of which are native (indicated by an N following the species name). Essentially a combination of mixes N3 and N4, with species suitable for a range of soil

types, providing flowers through the entire season, from April to mid-September. As well as attracting bees and butterflies, birds should also be drawn by the inclusion of Common Catsear; Rough Hawkbit and particularly the Knapweeds and Scabious.

Mix is 80% Grasses to 20% Wildflowers by weight.

Sowing Rate: 5g per square meter, 20Kg per acre, 50kg per hectare

N5 Long Season Meadow Mixture

N5Flowers species

Achillea millefolium - Yarrow 3%
Centaurea nigra - Common Knapweed 5%
Centaurea scabiosa - Greater Knapweed 3%
Daucus carota - Wild Carrot 5%
Echium vulgare - Viper's Bugloss 2%
Galium verum - Lady's Bedstraw 6%
Geranium pratense - Meadow Cranesbill 2%
Hypochaeris radicata - Common Catsear 2%
Knautia arvensis - Field Scabious 3.5%
Lathyrus pratensis - Meadow Vetchling 2%
Leontodon hispidus - Rough Hawkbit 2%
Leucanthemum vulgare - Oxeye Daisy 5%
Linaria vulgaris - Common Toadflax 1%
Lotus corniculatus - Birdsfoot Trefoil 4%
Malva moschata - Musk Mallow 3%
Plantago media - Hoary Plantain 2.5%
Primula veris - Cowslip 3%
Prunella vulgaris - Self Heal 7%
Ranunculus acris - Meadow Buttercup 5%
Ranunculus bulbosus - Bulbous Buttercup 5%
Rhinanthus minor - Yellow Rattle 6%
Rumex acetosa - Common Sorrel 5%
Scabiosa columbaria - Small Scabious 3%
Silene dioica - Red Campion 4%
Stachys officinalis - Betony 3%
Succisa pratensis - Devilsbit Scabious 2%
Trifolium pratense - Wild Red Clover 2.5%
Verbascum nigrum - Dark Mullein 1.5%
Vicia cracca - Tufted Vetch 2%

29 Wildflower species

NSGrass species

Agrostis capillaris - Common Bent 3%
Anthoxanthum odoratum (N) - Sweet Vernal Grass 3%
Briza media (N) - Quaking Grass 2%
Cynosurus cristatus - Crested Dogstail 22%
Festuca ovina - Sheep's Fescue 22%
Festuca rubra ssp. commutata - Chewing's Fescue 22%

Festuca rubra ssp. litoralis - Slender Creeping Red Fescue 13%
Hordeum secalinum (N) - Meadow Barley 1%
Poa pratensis - Smooth Stalked Meadow Grass 10%
Trisetum flavescens - Yellow Oatgrass 2%

10 Grass species

The seed mix will be sown at **5g per m²** from mid-March to September in drifts equally distributed around the site totally 200m². The seeding will be prepared and finished with by a light raking and rolling **or treading in**.



Indicative Image: Long Season Meadow Grass

PLANTING SCHEDULE

Malus Domestica 2yrs, 2-3 m in height, complete with tree stakes, tree ties and rabbit guards **[72 nos]**.

Rosa Canina planted 5 per square meter, 60/100cm minimum of 2 breaks per plant **[9,075 plants total]**

Native Hedge: Equal mix of Crataegus Monogyna (Common Hawthorn), Fagus Silyatica (Beech) and Corylus Avellana (Hazel) **[112 plants total]**

Meadow seed mix **[1 kg – sufficient for 200m²]**

MANAGEMENT OBJECTIVES

The purpose of maintaining and managing the site is in the first instance to encourage the satisfactory establishment of the landscape proposals and to ensure the integrity in the long term.

It is intended that the implementation of this management plan will help fulfill the design objectives over the first 5 years after project completion.

PLANTING MAINTENANCE

Carry out maintenance of the planted areas as follows:

Make visits at approximately fortnightly during first six months then monthly intervals during the growing season and as necessary to fulfill the requirements of this specification.

Keep bunding clear of weeds by cultivating and use of MAFF approved herbicides.

Hand weed as required to control weed growth. Apply suitable mulch to native hedge planted area if required to control pernicious weed growth during establishment.

Remove litter as part of routine maintenance so as to keep the site clear.

Once during the first year, in March or April, evenly spread slow release Ficote 140TE or equal and approved fertilizer at the rates of application recommended by the manufacturer to trees and planting.

Prune plants at appropriate time to remove dead or dying and diseased wood and suckers, to promote healthy growth and natural shape. Dress cut ends exceeding 25 mm diameter with fungicidal sealant.

Regularly check condition of stakes, ties, guys and guards. Replace broken or missing items. Adjust ties if necessary to prevent rubbing of bark. Cut back any damaged bark and treat wound with fungicidal sealant.

Spray crown of trees when in leaf during periods of extended warm weather during the first growing season. Carry out in the evening [i.e. not in full sun].

Water new hedging during periods of drought / excessively warm weather during first growing season.

Cut the meadow areas once in spring (March/ April) and once in Autumn (September / October) (unless otherwise controlled by sheep grazing) and remove cuttings.

The above Maintenance works should also be undertaken [during appropriate months / seasons] annually to ensure the site is maintained to a good standard.

Any trees or plants that die within the first five years following project completion shall be replaced in accordance with the original specification unless otherwise approved in writing by the Planning Authority [due to planting being well enough established and providing sufficient growth / cover to obviate the need to replace the failed plant or tree].



Landscaping Management and Maintenance Specification

The Solar Park Extension (Solar Park 2)

*Long Sutton Butterfly and Wildlife Park,
Long Sutton, Spalding, Lincolnshire*

[Planning Approval H11-0206-11]



Revision Q_November 2011	Meadow seed mix spec. amended following LWT comments
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PLANTING SPECIFICATION

GENERALLY

All plants shall be true to name and character and shall be supplied as barerooted or container grown. They shall be grown, handled and transported according to good horticultural practice.

PLANTING CONDITIONS

No planting shall be carried out when the ground is frozen, snow covered, waterlogged or excessively dry. In the event of the planting taking place during prolonged hot and dry conditions, the Landscape Maintenance Contractor is to ensure that the plants are well watered to ensure successful establishment.

SETTING OUT

Planting beds shall be pegged out in accordance with the planting plan.

COMPLETION OF PLANTING

- **PRUNING:** Immediately after planting, cut back carefully any damaged, dead or diseased branches. Remove any weak, thin or malformed growth and treat wounds greater than 25mm diameter with a fungicidal sealant.

NATIVE HEDGE SCREEN [TO EAST BOUNDARY]

The East boundary will be screened by a fast growing native hedge consisting of:

Equal mix fast growing native species:

Crataegus Monogyna (Common Hawthorn), *Fagus Silyatica* (Beech) and *Corylus Avellana* (Hazel).

Planting: Two staggered rows 45cm apart. One row of bare rooted seedlings (60-90cm high) planted at 38cm centres. One row (staggered) of 50% transplanted tree stock (90 - 120cm high) and 50% bare rooted seedlings planted at 38cm centres

All with stakes / canes and rabbit guards to suite.

MEADOW

Following installation of the Solar Park equipment and below ground National Grid infrastructure the grassed area will generally be allowed to self seed to encourage the development of local varieties of grasses and flora, but will be supplemented locally by seeding with a meadow seed mix as follows:

N5 Long Season Meadow Mixture (as supplied by Naturescape British Wild Flowers, Maple Farm, Coach Gap Lane, Inger, Nottinghamshire, NG13 9HP Tel. 01949860592)

N5 is a diverse mix of 29 native wildflower species (N5Flowers) and 10 species of grass (NSGrass), 3 of which are native (indicated by an N following the species name). Essentially a combination of mixes N3 and N4, with species suitable for a range of soil types, providing flowers through the entire season, from April to mid-September. As well as attracting bees and butterflies, birds should also be drawn by the inclusion of Common Catsear; Rough Hawkbit and particularly the Knapweeds and Scabious.

Mix is 80% Grasses to 20% Wildflowers by weight.

Sowing Rate: 5g per square meter, 20Kg per acre, 50kg per hectare

N5 Long Season Meadow Mixture

N5Flowers species

Achillea millefolium - Yarrow 3%
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Lathyrus pratensis - Meadow Vetchling 2%
Leontodon hispidus - Rough Hawkbit 2%

Leucanthemum vulgare - Oxeye Daisy 5%
 Linaria vulgaris - Common Toadflax 1%
 Lotus corniculatus - Birdsfoot Trefoil 4%
 Malva moschata - Musk Mallow 3%
 Plantago media - Hoary Plantain 2.5%
 Primula veris - Cowslip 3%
 Prunella vulgaris - Self Heal 7%
 Ranunculus acris - Meadow Buttercup 5%
 Ranunculus bulbosus - Bulbous Buttercup 5%
 Rhinanthus minor - Yellow Rattle 6%
 Rumex acetosa - Common Sorrel 5%
 Scabiosa columbaria - Small Scabious 3%
 Silene dioica - Red Campion 4%
 Stachys officinalis - Betony 3%
 Succisa pratensis - Devilsbit Scabious 2%
 Trifolium pratense - Wild Red Clover 2.5%
 Verbascum nigrum - Dark Mullein 1.5%
 Vicia cracca - Tufted Vetch 2%

29 Wildflower species

NSGrass species

Agrostis capillaris - Common Bent 3%
 Anthoxanthum odoratum (N) - Sweet Vernal Grass 3%
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 Cynosurus cristatus - Crested Dogstail 22%
 Festuca ovina - Sheep's Fescue 22%
 Festuca rubra ssp. commutata - Chewing's Fescue 22%
 Festuca rubra ssp. litoralis - Slender Creeping Red Fescue 13%
 Hordeum secalinum (N) - Meadow Barley 1%
 Poa pratensis - Smooth Stalked Meadow Grass 10%
 Trisetum flavescens - Yellow Oatgrass 2%

10 Grass species

The seed mix will be sown at 5g per m² from mid-March to September in drifts equally distributed around the site totally 200m². The seeding will be prepared and finished with by a light raking and rolling or treading in.



Indicative Image: Long Season Meadow Grass (Naturescape)

PLANTING SCHEDULE

Native Hedge Mix [879 seedlings and 293 tree stock – 1,172 plants TOTAL].

Meadow seed mix [1 kg – sufficient for 200m²]

MANAGEMENT OBJECTIVES

The purpose of maintaining and managing the site is in the first instance to encourage the satisfactory establishment of the landscape proposals and to ensure the integrity in the long term.

It is intended that the implementation of this management plan will help fulfill the design objectives over the first 5 years after project completion.

PLANTING MAINTENANCE

Carry out maintenance of the planted areas as follows:

Make visits at approximately fortnightly during first six months then monthly intervals during the growing season and as necessary to fulfill the requirements of this specification.

Hand weed as required to control weed growth. Apply suitable mulch to native hedge planted area if required to control pernicious weed growth during establishment.

Remove litter as part of routine maintenance so as to keep the site clear.

Once during the first year, in March or April, evenly spread slow release Ficote 140TE or equal and approved fertilizer at the rates of application recommended by the manufacturer to planting.

Prune plants at appropriate time to remove dead or dying and diseased wood and suckers, to promote healthy growth and natural shape. Dress cut ends exceeding 25 mm diameter with fungicidal sealant.

Regularly check condition of stakes, canes, ties, guys and guards. Replace broken or missing items. Adjust ties if necessary to prevent rubbing of bark. Cut back any damaged bark and treat wound with fungicidal sealant.

Water new hedging during periods of drought / excessively warm weather during first growing season.

Cut the meadow once in spring (March/ April) and once in Autumn (September / October) (unless otherwise controlled by sheep grazing) and remove cuttings.

continued

The above Maintenance works should also be undertaken [during appropriate months / seasons] annually to ensure the site is maintained to a good standard.

Any plants that die within the first five years following project completion shall be replaced in accordance with the original specification unless otherwise approved in writing by the Planning Authority [due to planting being well enough established and providing sufficient growth / cover to obviate the need to replace the failed plant or tree].