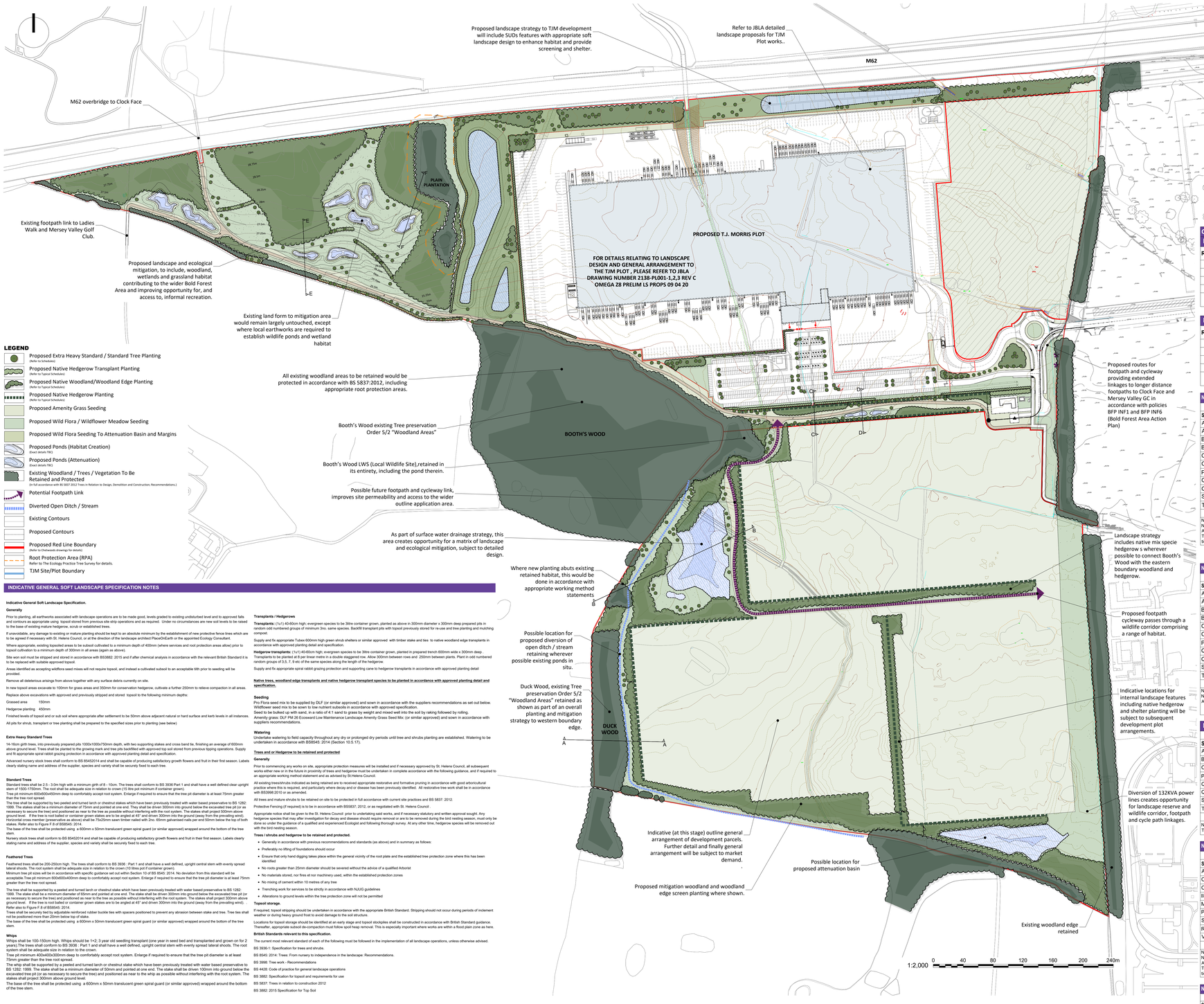

LEGEND

- Proposed Extra Heavy Standard / Standard Tree Planting (Refer to Schedules)
- Proposed Native Hedgerow Transplant Planting (Refer to Typical Schedules)
- Proposed Native Woodland/Woodland Edge Planting (Refer to Typical Schedules)
- Proposed Native Hedgerow Planting (Refer to Typical Schedules)
- Proposed Amenity Grass Seeding
- Proposed Wild Flora / Wildflower Meadow Seeding
- Proposed Wild Flora Seeding To Attenuation Basin and Margins
- Proposed Ponds (Habitat Creation) (Exact details TBC)
- Proposed Ponds (Attenuation) (Exact details TBC)
- Existing Woodland / Trees / Vegetation To Be Retained and Protected (In full accordance with BS 5837:2012 Trees in Relation to Design, Demolition and Construction; Recommendations.)
- Potential Footpath Link
- Diverted Open Ditch / Stream
- Existing Contours
- Proposed Contours
- Proposed Red Line Boundary (Refer to Chetwoods drawings for details)
- Root Protection Area (RPA) Refer to The Ecology Practice Tree Survey for details.
- TJM Site/Plot Boundary

INDICATIVE GENERAL SOFT LANDSCAPE SPECIFICATION NOTES

Indicative General Soft Landscape Specification.

Generally

Prior to planting, all earthworks associated with landscape operations are to be made good, levels graded to existing undisturbed level and to approved falls and contours as appropriate using topsoil stored from previous site strip operations and as required. Under no circumstances are new soil levels to be raised to the base of existing mature hedgerow, scrub or established trees.

If unavoidable, any damage to existing or mature planting should be kept to an absolute minimum by the establishment of new protective fence lines which are to be agreed if necessary with St. Helens Council, or at the direction of the landscape architect PlaceOnEarth or the appointed Ecology Consultant.

Where appropriate, existing topsoiled areas to be subsoil cultivated to a minimum depth of 400mm (where services and root protection areas allow) prior to topsoil cultivation to a minimum depth of 300mm in all areas (again as above).

Site won soil must be stripped and stored in accordance with BS3882: 2015 and if after chemical analysis in accordance with the relevant British Standard it is to be replaced with suitable approved topsoil.

Areas identified as accepting wildflora seed mixes will not require topsoil, and instead a cultivated subsoil to an acceptable tilth prior to seeding will be provided.

Remove all deleterious arisings from above together with any surface debris currently on site.

In new topsoil areas excavate to 100mm for grass areas and 350mm for conservation hedgerow, cultivate a further 250mm to relieve compaction in all areas.

Replace above excavations with approved and previously stripped and stored topsoil to the following minimum depths:

Grassed area 150mm

Hedgerow planting 450mm

Finished levels of topsoil and or sub soil where appropriate after settlement to be 50mm above adjacent natural or hard surface and kerb levels in all instances.

All pits for shrub, transplant or tree planting shall be prepared to the specified sizes prior to planting (see below)

Extra Heavy Standard Trees

14–16cm girth trees, into previously prepared pits 1000x1000x750mm depth, with two supporting stakes and cross band tie, finishing an average of 600mm above ground level. Trees shall be planted to the growing mark and tree pits backfilled with approved top soil stored from previous topping operations. Supply and fit appropriate spiral rabbit grazing protection in accordance with approved planting detail and specification.

Advanced nursery stock trees shall conform to BS 8545Z014 and shall be capable of producing satisfactory growth flowers and fruit in their first season. Labels clearly stating name and address of the supplier, species and variety shall be securely fixed to each tree.

Standard Trees

Standard trees shall be 2.5 - 3.0m high with a minimum girth of 8 - 10cm. The trees shall conform to BS 3936 Part 1 and shall have a well defined clear upright stem of 1500-1750mm. The root shall be adequate size in relation to crown (10 litre pot minimum if container grown).
Pits shall be 600mm x600mm deep to comfortably accept root system. Enlarge if required to ensure that the tree pit diameter is at least 75mm greater than the tree root spread.
The tree shall be supported by two peeled and turned larch or chestnut stakes which have been previously treated with water based preservative to BS 1282: 1999. The stakes shall be a minimum diameter of 75mm and pointed at one end. They shall be driven 300mm into ground below the excavated tree pit (or as necessary to secure the tree) and positioned as near to the tree as possible without interfering with the root system. The stakes shall project 500mm above ground level. If the tree is root balled or container grown stakes are to be angled at 45° and driven 300mm into the ground (away from the prevailing wind). Horizontal cross member (preservative as above) shall be 75x25mm sawn timber nailed with 2no. 65mm galvanised nails per end 50mm below the top of both stakes. Refer also to Figure F.8 of BS8545: 2014.
The base of the tree shall be protected using a 600mm x 50mm translucent green spiral guard (or similar approved) wrapped around the bottom of the tree stem.
Nursery stock trees shall conform to BS 8545Z014 and shall be capable of producing satisfactory growth flowers and fruit in their first season. Labels clearly stating name and address of the supplier, species and variety shall be securely fixed to each tree.

Feathered Trees

Feathered trees shall be 200-250cm high. The trees shall conform to BS 3936 : Part 1 and shall have a well defined, upright central stem with evenly spread lateral shoots. The root system shall be adequate size in relation to the crown (10 litres pot if container grown).
Minimum tree pit sizes will be in accordance with specific guidance set out within Section 10 of BS 8545: 2014. No deviation from this standard will be acceptable.Tree pit minimum 600x600x400mm deep to comfortably accept root system. Enlarge if required to ensure that the tree pit diameter is at least 75mm greater than the tree root spread.
The tree shall be supported by a peeled and turned larch or chestnut stake which have been previously treated with water based preservative to BS 1282: 1999. The stake shall be a minimum diameter of 65mm and pointed at one end. The stake shall be driven 300mm into ground below the excavated tree pit (or as necessary to secure the tree) and positioned as near to the tree as possible without interfering with the root system. The stakes shall project 300mm above ground level. If the tree is root balled or container grown stakes are to be angled at 45° and driven 300mm into the ground (away from the prevailing wind). Refer also to Figure F.8 of BS8545: 2014.
Trees shall be securely tied by adjustable reinforced rubber buckle ties with spacers positioned to prevent any abrasion between stake and tree. Tree ties shall not be positioned more than 20mm below top of stake.
The base of the tree shall be protected using a 600mm x 50mm translucent green spiral guard (or similar approved) wrapped around the bottom of the tree stem.

Whips

Whips shall be 100-150cm high. Whips should be 1+2; 3 year old seedling transplant (one year in seed bed and transplanted and grown on for 2 years).The trees shall conform to BS 3936 : Part 1 and shall have a well defined, upright central stem with evenly spread lateral shoots. The root system shall be adequate size in relation to the crown.
Tree pit minimum 400x400x300mm deep to comfortably accept root system. Enlarge if required to ensure that the tree pit diameter is at least 75mm greater than the tree root spread.
The whip shall be supported by a peeled and turned larch or chestnut stake which have been previously treated with water based preservative to BS 1282: 1999. The stake shall be a minimum diameter of 50mm and pointed at one end. The stake shall be driven 100mm into ground below the excavated tree pit (or as necessary to secure the tree) and positioned as near to the whip as possible without interfering with the root system. The stakes shall project 300mm above ground level.
The base of the tree shall be protected using a 600mm x 50mm translucent green spiral guard (or similar approved) wrapped around the bottom of the tree stem.

Transplants / Hedgerows

Transplants: (1u1) 40-60cm high; evergreen species to be 3litre container grown, planted as above in 300mm diameter x 300mm deep prepared pits in random odd numbered groups of minimum 3no. same species. Backfill transplant pits with topsoil previously stored for re-use and tree planting and mulching compost.
Supply and fix appropriate Tubex 600mm high green shrub shelters or similar approved with timber stake and ties to native woodland edge transplants in accordance with approved planting detail and specification.

Hedgerow transplants: (1u1) 40-60cm high; evergreen species to be 3litre container grown, planted in prepared trench 600mm wide x 300mm deep . Transplants to be planted at 6 per linear metre in a double staggered row. Allow 300mm between rows and 250mm between plants. Plant in odd numbered random groups of 3,5..7 9 etc of the same species along the length of the hedgerow.
Supply and fix appropriate spiral rabbit grazing protection and supporting cane to hedgerow transplants in accordance with approved planting detail

Native trees, woodland edge transplants and native hedgerow transplant species to be planted in accordance with approved planting detail and specification.

Seeding

Pro Flora seed mix to be supplied by DLF (or similar approved) and sown in accordance with the suppliers recommendations as set out below.
Wildflower seed mix to be sown to low nutrient subsoils in accordance with approved specification.
Seed to be bulked up with sand, in a ratio of 4:1 sand to grass by weight and mixed well into the soil by raking followed by rolling.
Amenity grass: DLF PM 26 Ecoward Low Maintenance Landscape Amenity Grass Seed Mix; (or similar approved) and sown in accordance with suppliers recommendations.

Watering

Undertake watering to field capacity throughout any dry or prolonged dry periods until tree and shrubs planting are established. Watering to be undertaken in accordance with BS8545: 2014 (Section 10.5.17).

Trees and or Hedgerow to be retained and protected

Generally

Prior to commencing any works on site, appropriate protection measures will be installed and if necessary approved by St. Helens Council, all subsequent works either new or in the future in proximity of trees and hedgerow must be undertaken in complete accordance with the following guidance, and if required to an appropriate working method statement and as advised by St.Helens Council.

All existing trees/shrubs indicated as being retained are to received appropriate restorative and formative pruning in accordance with good arboricultural practice where this is required, and particularly where decay and or disease has been previously identified. All restorative tree work shall be in accordance with BS3998:2010 or as amended.

All trees and mature shrubs to be retained on site to be protected in full accordance with current site practices and BS 5837: 2012.

Protective Fencing (if required) is to be in accordance with BS5837: 2012, or as negotiated with St. Helens Council

Appropriate notice shall be given to the St. Helens Council prior to undertaking said works, and if necessary statutory and written approval sought. Any hedgerow species that may after investigation for decay and disease should require removal or are to be removed during the bird nesting season, must only be done so under the guidance of a qualified and experienced Ecologist and following thorough survey. At any other time, hedgerow species will be removed out with the bird nesting season.

Trees / shrubs and hedgerow to be retained and protected.

- Generally in accordance with previous recommendations and standards (as above) and in summary as follows:
- Preferably no lifting of foundations should occur
- Ensure that only hand digging takes place within the general vicinity of the root plate and the established tree protection zone where this has been identified
- No roots greater than 25mm diameter should be severed without the advice of a qualified Arborist
- No materials stored, not fires et our machinery used, within the established protection zones
- No mixing of cement within 10 metres of any tree
- Trenching work for services to be strictly in accordance with NJUG guidelines
- Alterations to ground levels within the tree protection zone will not be permitted

Topsoil storage

If required, topsoil stripping should be undertaken in accordance with the appropriate British Standard. Stripping should not occur during periods of inclement weather or during heavy ground frost to avoid damage to the soil structure.

Locations for topsoil storage should be identified at an early stage and topsoil stockpiles shall be constructed in accordance with British Standard guidance. Thereafter, appropriate subsoil de-compaction must follow spoil heap removal. This is especially important where works are within a flood plain zone as here.

British Standards relevant to this specification.

The current most relevant standard of each of the following must be followed in the implementation of all landscape operations, unless otherwise advised.

BS 3936-1: Specification for trees and shrubs.

BS 8545: 2014: Trees: From nursery to independence in the landscape: Recommendations.

BS 3998: Tree work – Recommendations

BS 4428: Code of practice for general landscape operations

BS 3882: Specification for topsoil and requirements for use

BS 5837: Trees in relation to construction 2012

BS 3882: 2015:Specification for Top Soil

TYPICAL IMAGES

TYPICAL PLANT SPECIES

OMEGA ZONE 8 PLANTING SCHEDULE

Individual Specimen Trees

Ref. No	SPECIES	HEIGHT (cm)	GIRTH (cm)	DENSITY	TYPE
1	Acer campestre	350-400	14-16	AS SHOWN	Extra Heavy Standard. Root Balled
2	Prunus avium	350-400	14-16	AS SHOWN	Extra Heavy Standard. Root Balled
3	Quercus robur	350-400	14-16	AS SHOWN	Extra Heavy Standard. Root Balled
4	Tilia cordata	350-400	14-16	AS SHOWN	Extra Heavy Standard. Root Balled

Notes:
Trees to be planted in accordance with an approved planting detail and specification.

Native Hedgerow Trees

Ref. No	SPECIES	HEIGHT (cm)	GIRTH (cm)	DENSITY	TYPE
A	Acer campestre	250-300	8-10	AS SHOWN	Standard. Root Balled
B	Prunus avium	250-300	8-10	AS SHOWN	Standard. Root Balled
C	Quercus robur	250-300	8-10	AS SHOWN	Standard. Root Balled
D	Quercus petraea	250-300	8-10	AS SHOWN	Standard. Root Balled

Notes:
Trees to be planted in accordance with an approved planting detail and specification.

Native Woodland Transplant Planting (W)

SPECIES	SIZE (cm)	TYPE	DENSITY	% IN MIX
Acer campestre	40-60	1u1 BR	1.5m Centres	10
Alnus glutinosa	40-60	1u1 BR	1.5m Centres	5
Betula pendula	40-60	1u1 BR	1.5m Centres	10
Betula pubescens	40-60	1u1 BR	1.5m Centres	5
Crataegus monogyna	40-60	1u1 BR	1.5m Centres	10
Corylus avellana	40-60	1u1 BR	1.5m Centres	10
Prunus avium	40-60	1u1 BR	1.5m Centres	8
Quercus petraea	40-60	1u1 BR	1.5m Centres	7
Quercus robur	40-60	1u1 BR	1.5m Centres	20
Sorbus aucuparia	40-60	1u1 BR	1.5m Centres	10
Tilia cordata	40-60	1u1 BR	1.5m Centres	5

Notes:
Native woodland species to be planted in random single specie odd numbered groups of 3,5,7 etc.
All native woodland edge transplants to be planted in accordance with an approved planting detail and specification.
Transplants to be planted within 600mm high green Tubex Shrub shelters or similar approved with timber stake and 2No. ties in accordance with approved planting detail.

Native Woodland Whip Planting (WHP)

SPECIES	SIZE (cm)	TYPE	DENSITY	% IN MIX
Acer campestre	125-150	1+2 BR	1.5m Centres	10
Alnus glutinosa	125-150	1+2 BR	1.5m Centres	5
Betula pendula	125-150	1+2 BR	1.5m Centres	10
Betula pubescens	125-150	1+2 BR	1.5m Centres	5
Crataegus monogyna	125-150	1+2 BR	1.5m Centres	10
Corylus avellana	125-150	1+2 BR	1.5m Centres	10
Prunus avium	125-150	1+2 BR	1.5m Centres	8
Quercus petraea	125-150	1+2 BR	1.5m Centres	7
Quercus robur	125-150	1+2 BR	1.5m Centres	20
Sorbus aucuparia	125-150	1+2 BR	1.5m Centres	10
Tilia cordata	125-150	1+2 BR	1.5m Centres	5

Notes:
Native woodland whip species to be planted in random single specie odd numbered groups of 3,5,7 etc.
All native woodland edge transplants to be planted in accordance with an approved planting detail and specification.

Native Feathered Trees (within Woodland (W) and Whip (WHP) areas: 10 % of area)

SPECIES	Height (cm)	TYPE	% IN MIX
Acer campestre	200-250	Feathered Root Balled	15
Betula pendula	200-250	Feathered Root Balled	15
Crataegus monogyna	200-250	Feathered Root Balled	10
Prunus avium	200-250	Feathered Root Balled	10
Quercus robur	200-250	Feathered Root Balled	25
Quercus petraea	200-250	Feathered Root Balled	5
Sorbus aucuparia	200-250	Feathered Root Balled	12.5
Tilia cordata	200-250	Feathered Root Balled	7.5

Notes:
Trees to be planted in accordance with an approved planting detail and specification.

Native Woodland Edge Transplant Planting (WE)

SPECIES	SIZE (cm)	TYPE	DENSITY	% IN MIX
Acer campestre	40-60	1u1 BR	1m Centres	15
Corylus avellana	40-60	1u1 BR	1m Centres	15
Crataegus monogyna	40-60	1u1 BR	1m Centres	25
Ilex aquifolium	40-60	2Lb' CG	1m Centres	10
Malus sylvestris	40-60	1u1 BR	1m Centres	7.5
Prunus spinosa	40-60	1u1 BR	1m Centres	15
Sambucus nigra	40-60	1u1 BR	1m Centres	2.5
Rosa canina	40-60	1u1 BR	1m Centres	5
Viburnum opulus	40-60	1u1 BR	1m Centres	5

Notes:
Native woodland edge species to be planted in random single specie odd numbered groups of 3,5,7 etc.
All native woodland edge transplants to be planted in accordance with an approved planting detail and specification.
Transplants to be planted within 600mm high green Tubex Shrub shelters or similar approved with timber stake and 2No. ties in accordance with approved planting detail.

Native Hedgerow Transplant Planting Mix (NH)

SPECIES	SIZE (cm)	TYPE	DENSITY	% IN MIX
Corylus avellana	40-60	1u1 BR	8 per linear metre. Double Staggered Row	5
Crataegus monogyna	40-60	1u1 BR	8 per linear metre. Double Staggered Row	80
Ilex aquifolium	40-60	3Ltr CG	8 per linear metre. Double Staggered Row	5
Rosa canina	40-60	1u1 BR	8 per linear metre. Double Staggered Row	5
Viburnum opulus	40-60	1u1 BR	8 per linear metre. Double Staggered Row	5

Notes:
Crataegus to be the dominant species within the hedgerow and planted along full length of run. Other species to be planted in random scattered groups of 1, 3, 5no within hedgerow.
All native transplants to be planted in accordance with an approved planting detail and specification.
Hedgerow transplants to be planted with 600mm high clear spiral rabbit guard and supporting cane in accordance with an approved planting detail.

Native Under Storey Transplant Planting to Plain Plantation (PROVISIONAL)

SPECIES	SIZE (cm)	TYPE	DENSITY	% IN MIX
Acer campestre	40-60	1u1 BR	1m Centres	15
Corylus avellana	40-60	1u1 BR	1m Centres	15
Crataegus monogyna	40-60	1u1 BR	1m Centres	25
Ilex aquifolium	40-60	2Lb' CG	1m Centres	15
Malus sylvestris	40-60	1u1 BR	1m Centres	7.5
Sambucus nigra	40-60	1u1 BR	1m Centres	2.5
Rosa canina	40-60	1u1 BR	1m Centres	10
Viburnum opulus	40-60	1u1 BR	1m Centres	10

Notes:

Allow 15% of area. To be planted in full accordance with BS5837 2012 and approved method statement to prevent damage to tree roots within the existing plantation.
Native woodland edge species to be planted in random single specie odd numbered groups of 3,5,7 etc.
All native woodland edge transplants to be planted in accordance with an approved planting detail and specification.
Transplants to be planted within 600mm high green Tubex Shrub shelters or similar approved with timber stake and 2No. ties in accordance with approved planting detail.

©This drawing is protected by copyright. It may not be reproduced, amended or circulated for wider distribution without the express permission of PlaceOnEarth Ltd.

SAFETY - HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards / risks normally associated with the types of work detailed on this drawing, note the following:

Construction

1. No abnormal risk.

Maintenance / Cleaning

1. The Contractor and Facilities Manager are reminded that the perimeter of the site is maintained as fully accessible to the public. In this, all footpaths and roadways, including those upon which soft landscape impacts, are to be maintained in a clean and tidy condition and free from over hanging vegetation.
2. Particular care is to be taken when maintaining shrub planted areas to avoid accidental contact with dangerous waste materials, which may have been discarded in such areas.
3. The use of chemical based herbicides in landscape maintenance is to be discouraged in favour of organically based herbicides.
4. Pruning of trees and shrubs during the bird nesting season must be undertaken following a thorough inspection for the presence or otherwise of active nests.

Decommissioning / Demolition

1. In the event of existing tree removal, all soft landscape areas and trees must first be inspected for the presence of nesting birds and all protected species generally. Ideally, tree and shrub removal should be undertaken outwith of the recognised bird nesting season which is March to September.
2. Prior to the removal of shrub planting, a thorough site cleanse must be undertaken to establish the absence of any potential dangerous waste material, which could cause accidental harm.

It is assumed that all works will be carried out by a competent contractor, working where appropriate, to an approved method statement.This is not an exhaustive list and reference should be made to the Health and Safety Plan. Where no items are indicated no residual risks are thought to be present.

ALL DIMENSIONS TO BE CHECKED ON SITE PRIOR TO COMMENCEMENT OF ANY WORK. PLACEONEARTH ARE TO BE NOTIFIED OF ANY OMISSIONS OR ERRORS PRIOR TO COMMENCMENT OF ANY SETTING OUT, WORKS OR ORDERING OF MATERIALS.

DO NOT SCALE FROM THIS DRAWING.
FIGURED DIMENSIONS ONLY ARE TO BE USED.

PLACEONEARTH LTD CAN NOT BE HELD RESPONSIBLE FOR THE ACCURACY OF INFORMATION PRODUCED BY OTHERS FOR THE PURPOSES OF PRODUCING OUR DRAWINGS I.E. TOPOGRAPHICAL SURVEYS, ARCHITECTS LAYOUTS. AREA MEASUREMENTS ARE PROVIDED FOR INFORMATION ONLY. ANY VERIFICATION OF MEASUREMENTS SHOULD BE SOUGHT FROM A SUITABLY QUALIFIED SURVEYOR.

PLACEONEARTH LTD CAN NOT BE HELD RESPONSIBLE FOR THE ACCURACY OF COMPUTER SOFTWARE USED TO DETERMINE MEASUREMENTS.

EXACT SERVICES LOCATIONS ARE NOT KNOWN AND ARE TO BE CONFIRMED BY THE ENGINEER.
IT IS THE RESPONSIBILITY OF THE CONTRACTOR PRIOR TO UNDERTAKING ANY WORK OR BREAKING GROUND TO SCAN/CHECK FOR THE LOCATION OF ALL SERVICES AND MARK OUT ON SITE. ANY CONFLICT WITH PROPOSED LANDSCAPE/PLANTING AREAS SHOULD BE REPORTED TO PLACEONEARTH PRIOR TO UNDERTAKING ANY WORKS.

TREE LOCATIONS ARE DEPENDANT ON LOCATION OF ADJACENT/PROPOSED SERVICES AND REQUIRED STANDOFF AND TO BE CONFIRMED BY THE ENGINEER (SEE ABOVE).

ROOT BARRIERS ARE TO BE INSTALLED (WHERE REQUIRED) TO TREES ADJACENT TO SERVICES , BUILDINGS, ROADS AND PATHWAYS AND INSTALLED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS AND SPECIFICATIONS.

ALL DIMENSIONS ARE IN MILLIMETRES (UNLESS STATED).

THIS DRAWING IS FOR PLANNING PURPOSES ONLY AND NOT FOR CONSTRUCTION.

Rev	Date	Description	Designed
F	16 04 20	Note added to TJM plot.	NRW
E	01 04 20	TJM Plot layout revised in line with architects layout. Cycleway alignment revised in line with amended TJM plot.	NRW
D	20.03.20	Schedules revised	NRW
C	11.03.20	Landscape layout revised in line with St Helen's Council Tree and Woodlands Officer Comments. TJM layout update. Access road updated. Cycleway alignment revised. Schedules revised.	NRW
B	18.12.19	Drawing reference number amended	NRW
A	17.12.19	Planning boundary amended. Key amended.	NRW

Client
OMEGA ST. HELENS LTD / T.J.MORRIS LIMITED

Project
OMEGA ZONE 8

Title
LANDSCAPE STRATEGY:OMEGA ZONE 8 (OPP DWG 5)

Drawn	Checked	Scale@A1	Issue
NRW/PT	NRW	1:2000@A0	PLANNING

Drawing No.	Date	Revision
POE_199_001	12/19	F

PlaceOnEarth landscape design
68 St. Mary's Avenue, Whitley Bay, Tyne and Wear, NE26 1TA
Tel: +44 (0) 7966 002 082
E mail: contact@placeoneearth.co.uk