

Note.
This design has been issued in advance of the full ground investigation results. It is possible that, following review of the ground investigation, changes may be required to the earthworks design with associated impacts on the design or layout of other elements of the project. This drawing is therefore subject to possible change following review of the ground investigation when this has been made available to WSP.

The design information shown on this drawing and any associated setting out information is based on British National grid.

NOTE - CONSTRUCTION ISSUE C03

- Amendments to the design at Church Hill (minor amendments to the boundary treatments to allow for the road reconfiguration, and gates altered at church car park);
- Amendments to the design at Hall Lane (minor amendments to the boundary treatments to allow for the road reconfiguration);
- Diversion of Hall Beck (alteration to watercourse alignment and design);
- Soft landscaping around drainage areas including Attenuation Ponds (refer to Point 6);
- Siting of interceptor channels and filter drains (soft landscaping around changes in Point 3);
- Variation in slope angle on certain sections (change in type of planting in certain areas due to underlying geotechnical feature placement associated with soil stability);
- Inclusion of reinstatement works for areas used as temporary construction compounds;
- Areas of woodland and scrub planting are to be reconfigured, following recent tree clearances; and
- No. 8 additional tree guards will be provided within livestock fields near Blubberhouses Hall to protect growing trees.

REV	DATE	BY	DESCRIPTION	CHK	APP
C03	21/08/2023	MM	FOR CONSTRUCTION	SF	AW
C02	24/03/2023	MM	CONTRACTORS STORAGE AREAS REVISED	SF	AW
C01	01/02/2023	MM	CONSTRUCTION ISSUE BASED ON HIGHWAY DESIGN VERSION JUNE 2021	SF	AW
T02	18/06/2020	CM	TENDER CONSULTATION EDITS	SF	AW
T01	28/11/2019	LA	FIRST ISSUE	SF	AW

DRAWING STATUS: **S3 - FOR REVIEW**

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CLIENT: **North Yorkshire County Council**

ARCHITECT: **wsp**

SITE/PROJECT: **A59 KEX GILL DIVERSION**

TITLE: **Soft Landscape: Planting Plan
PLANTING SCHEDULE
(1 of 15)**

SCALE @ A1:	CHECKED:	APPROVED:
NOT TO SCALE	SF	AW

PROJECT NO:	DESIGNED:	DRAWN:	DATE:
70049554	SF	MM	21/08/2023

DRAWING NO: **NYKGDD-WSP-ELS-SG-DR-LE-00011** REV: **C03**

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GENERAL NOTES

- All works within the NYCC Highway boundary to be the responsibility of the NYCC Highways Department from the end of the 5-Year Establishment Period.
- Areas of land outwith the NYCC Highways boundary will revert to the Landowner for ongoing maintenance.
- All 1 in 2 and 1 in 3 embankments and cuttings to be hydroseeded in August/ September.
- The Bridleway to have 1m wide verge on either side of wildflower grass seed mix, using G2, G3 or G5 according to location For details of Ecology Features, refer to LEMMMP Drawings, DRG Ref No NYKGDD-WSP-ELS-SG-DR-LE-00027 to 00036.
- All wet grassland areas to be allowed to colonise naturally, shown as Mix G4. Areas around Attenuation Pond and Hall Beck diversion.
- All woodland areas are sown with Wildflower Grass Shade tolerant seed mix.
- Plant feathered trees randomly within woodland mixes against areas of existing (retained) woodland to assist in alleviation of potential windblow due to site clearance of existing woodland plantations.
- Grassland Seed mix for areas of restored pasture, we have specified wildflower grass seed mix however this may alter during consultation with Landowner.

FENCING

- For information on Fencing, please refer to NYKGDD-WSP-HFE-SG-DR-CH-03001 to 03015.
- Protective fencing for new plantations and grazing pastures during the Construction and Establishment Period is shown on this set of Planting Plans, Fencing and LEMMMP Plans.
- Tree Protective fencing for existing vegetation to be retained is shown on the Tree Survey and Arboricultural Impact Assessment Figures 1 to 12. Ancient and veteran trees to be protected during construction phase in accordance with BS5837:2012. This fencing is to protect all existing trees during construction and for the future against grazing by livestock.
- All individual trees located within existing fields at Blubberhouses, to be protected by Timber Post and 4 Rail Fence as per Technical Detail NYKGDD-WSP-HFE-SG-DR-CH-03016.

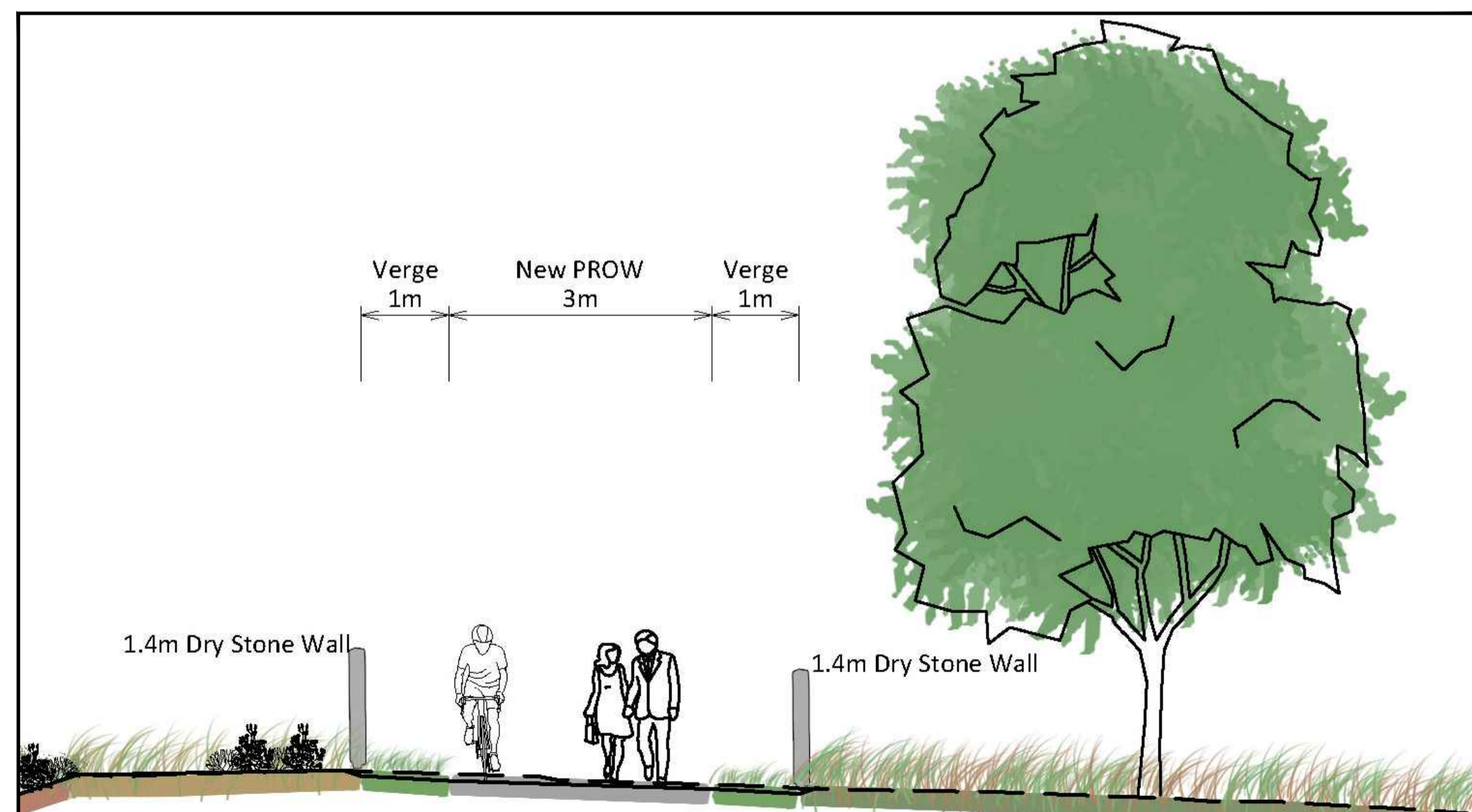
EXISTING VEGETATION

- The existing trees in the Blubberhouses and Eastern underpass area (Ancient and Veteran Trees) have been surveyed and plotted within a 5m parameter due to method of surveying used. (Handheld GPS). Generally, the existing trees are drawn with a 13m spread, except the actual canopy to vary in size. Refer to Tree Survey and Arboricultural Impact Assessment Figures 1 to 12.
- New tree planting to be added beyond the protected Root Protection Area to act as buffer to protect the trees for the future.

SETTING OUT

- All setting out points for planting positions, using National Grid/OS Grid.
- For all areas where woodland/scrub lies adjacent to an existing or proposed wall or fence, planting of shrubs and trees to be offset from the boundary by 2m on either side of the boundary.
- All tree and shrub planting to be planted at 5m distance from all culverts, retaining structures and supporting earthworks.
- At Hall Beck, all tree and shrub planting to be sited at 2.5m distance from top of bank.
- All woodland and scrub planting at 2.5m centres. For woodland, scrub planting and hedgerow mix, plant in species groups of 5 to 10No plants.
- Highway verge to be a minimum of 2.5m width. In accordance with Highways England Design Manual for Roads and Bridges, all shrubs to be 4.5m from edge of carriageway, medium size trees, 7m and large trees not within 9m.
- For all areas where woodland/scrub lies adjacent to an existing or proposed wall or fence, planting of shrubs and trees to be offset from the boundary by 2m on either side of the boundary.
- Plant feathered trees randomly within woodland mixes against areas of existing (retained) woodland to assist in alleviation of potential windblow due to site clearance of existing woodland plantations.

Typical section across bridleway



PLANING MIXES

W1 Broadleaved Deciduous Woodland Mix

Number	Species	Common Name	Specification	Height	Mix	Area
1343	Betula pendula	Common Silver Birch	1+1: Transplant - seed raised: B	40-60cm	15%	8322.42m²
903	Corylus avellana	Common Hazel	1+1: Transplant - seed raised: Branched: 2 brks: B	40-60cm	10%	5548.29m²
1343	Crataegus monogyna	Common Hawthorn	1+1: Transplant - seed raised: B	40-60cm	15%	8322.42m²
457	Ilex aquifolium	Common Holly	Leader with Laterals: C	40-60cm	5%	2774.13m²
457	Prunus avium	Wild Cherry	1+1: Transplants - seed raised: B	40-60cm	5%	2774.13m²
3120	Quercus robur	Common Oak	1+1: Transplant - seed raised: B	40-60cm	35%	19418.99m²
457	Rosa canina	Dog Rose	Branched: 3 brks: C	40-60cm	5%	2774.13m²
903	Sorbus aucuparia	Rowan	1+1: Transplant - seed raised: B	40-60cm	10%	5548.29m²
Total :8983				Total :100%		Total :55482.8m²

W2 Wet Woodland Planting

Number	Species	Common Name	Specification	Height	Mix	Area
480	Alnus glutinosa	Common Alder	1+1: Transplant - seed raised: B	40-60cm	30%	2982.52m²
401	Betula pubescens	Downy Birch	1+1: Transplant - seed raised: B	40-60cm	25%	2485.43m²
163	Corylus avellana	Common Hazel	1+1: Transplant - seed raised: Branched: 2 brks: B	40-60cm	10%	994.18m²
163	Crataegus monogyna	Common Hawthorn	1+1: Transplant - seed raised: B	40-60cm	10%	994.18m²
84	Prunus padus	Bird Cherry	1+1: Transplant - seed raised: B	40-60cm	5%	497.07m²
243	Salix cinerea	Grey Willow	Branched: 2 brks: C	40-60cm	15%	1491.27m²
84	Viburnum opulus	Guelder Rose	1+1: Transplant - seed raised: Branched: 2 brks: B	40-60cm	5%	497.07m²
Total :1618				Total :100%		Total :9941.72m²

W3 Woodland Edge Mix

Number	Species	Common Name	Specification	Height	Mix	Area
199	Betula pendula	Common Silver Birch	1+1: Transplant - seed raised: B	40-60cm	15%	1171.91m²
135	Corylus avellana	Common Hazel	1+1: Transplant - seed raised: Branched: 2 brks: B	40-60cm	10%	781.26m²
259	Crataegus monogyna	Common Hawthorn	1+1: Transplant - seed raised: B	40-60cm	20%	1562.52m²
74	Ilex aquifolium	Common Holly	Leader with Laterals: C	40-60cm	5%	390.64m²
74	Malus sylvestris	Common Crab Apple	1+1: Transplant - seed raised: B	40-60cm	5%	390.64m²
135	Prunus avium	Wild Cherry	1+1: Transplant - seed raised: B	40-60cm	10%	781.26m²
199	Prunus spinosa	Blackthorn	1+1: Transplant - seed raised: Branched: 2 brks: B	40-60cm	15%	1171.91m²
74	Rosa canina	Dog Rose	Branched: 3 brks: C	40-60cm	5%	390.64m²
199	Sorbus aucuparia	Rowan	1+1: Transplant - seed raised: B	40-60cm	15%	1171.91m²
Total :1348				Total :100%		Total :7812.69m²

W6 Scrub

Number	Species	Common Name	Specification	Height	Mix	Area
185	Betula pendula	Common Silver Birch	1+1: Transplant :B	40-60cm	20%	1093.16m²
359	Crataegus monogyna	Common Hawthorn	1+1: Transplant :B	40-60cm	40%	2186.33m²
139	Salix caprea	Goat willow	0/1 :Cutting :2 brks :B	60-80cm	15%	819.91m²
229	Sorbus aucuparia	European mountain ash	1+1 :Transplant :B	40-60cm	25%	1366.46m²
Total :912				Total :100%		Total :5465.86m²

Note:
All species are planted at 2.5ctr spacing.

Grass Areas (Bespoke mix to be sourced via Northern Seed Supplier approved by Project Manager)

Seed Mix Name	Sowing Rate	Area	Weight
G1 - Highway verge and Visibility Splays	5g/m²	33647m²	168267 g
G2 - Wildflower and Grass Meadow for Acid Soils	6g/m²	2241m²	13447 g
G3 - Upland Heathland/Acid Grassland Mix with added Heather	6g/m²	73632m²	441819 g
G4 - Wet Grassland	0g/m²	4541m²	0g
G5 - Wildflower and Grass Meadow Mix for Neutral Soils	6g/m²	121480m²	728905 g
G6 - Woodland Wildflower and Grass Mix	6g/m²	68216m²	409318 g

INDIVIDUAL TREES

W4 Specimen Trees Heavy and Selected Standard

Number	Species	Common Name	Girth	Height	Specification
6	Alnus glutinosa	Common Alder	12-14cm	350-425cm	3x :Heavy Standard :Clear Stem min. 200 :5 brks :RB
13	Quercus robur	Common Oak	10-12cm	300-350cm	2x :Selected Standard :Clear Stem 175-200 :4 brks :RB
4	Sorbus aucuparia	Rowan	12-14cm	350-425cm	3x :Heavy Standard :Clear Stem 175-200 :5 brks :RB
Total :23					

W5 Feathered Trees

Number	Species	Common Name	Girth	Height	Specification
28	Betula pendula	Common Silver Birch		200-250cm	2x :Feather :5 brks :B
12	Crataegus monogyna	Common Hawthorn	6-8cm	250-300cm	2x :Feather :5 brks :B
2	Quercus robur	Common Oak	80-100cm		1+2 :Transplant :B
7	Sorbus aucuparia	Rowan		250-300cm	2x :Feather :5 brks :B
Total :49					