Development Control
Gloucester City Council
PO Box 3252, Gloucester, GL1 9FW
01452 396396
development.control@gloucester.gov.uk
www.gloucester.gov.uk/planning

Application for Approval of Reserved Matters following Outline Approval

Town and Country Planning (Development Management Procedure) (England) Order 2015 (as amended)

Publication of applications on planning authority websites

Please note that the information provided on this application form and in supporting documents may be published on the Authority's website. If you require any further clarification, please contact the Authority's planning department.

Site Location

Disclaimer: We can only make recommendations based on the answers given in the questions.

If you cannot provide a postcode, the description of site location must be completed. Please provide the most accurate site description you can, to help locate the site - for example "field to the North of the Post Office".

Number

Suffix

Property Name

Address Line 1

Address Line 2

Address Line 3

Town/city

Postcode

Description of site location must be completed if postcode is not known:

Easting (x)

385609

Northing (y)

219857

Description PLAYING FIELD TO REAR OF 3-29 PAYGROVE LANE, GLOUCESTER

Applicant Details

Name/Company

Title

First name

Surname

Mr R Thompson

Company Name

Cotswold Oak Ltd

Address

Address line 1

c/o coombes everitt architects

Address line 2

105-107 Bath Road

Address line 3

Town/City

Cheltenham

Country

England

Postcode

GL53 7LE

Are you an agent acting on behalf of the applicant?

- [x] Yes
- [ ] No

Contact Details

Primary number

[redacted]

Secondary number

Email address

[redacted]

Agent Details

Name/Company

Title

First name

John

Surname

Everitt

Company Name

Coombes Everitt Architects Limited

Address

Address line 1

105-107

Address line 2

Bath Road

Address line 3

Town/City

Cheltenham

Country

England

Postcode

GL53 7LE

Contact Details

Primary number

[redacted]

Secondary number

Email address

[redacted]

Development Description

Please indicate all those reserved matters for which approval is being sought:

- [ ] Access
- [x] Appearance
- [x] Landscaping
- [x] Layout
- [x] Scale

Please provide a description of the approved development as shown on the decision letter

Outline application (with means of access offered for consideration) for residential redevelopment of up to 10 dwellings and public open space including associated landscaping, car parking and access.

Reference number

16/01558/OUT

Date of decision (date must be pre-application submission)

23/08/2018

Please provide a description of the reserved matters for which you are seeking consent. Please state if the outline planning application was an environment impact assessment application and, if so, confirm that an environmental statement was submitted to the planning authority at that time

Appearance, Landscaping, Layout, Scale

Has the work already started?

- ○ Yes
- ⊘ No

Supporting Information

Please provide the following information

Please list all relevant drawings, including reference numbers, that were approved as part of the original decision.

Site Location 7876-PL01, Site Layout 7876-PL02C, Access Detail GL158T, Topographical Site Survey 4900-07NOV16-01and02

Please list all drawing numbers submitted with this application for approval

PL001A site location. PL002 & PL003 topographical site survey. PL004A existing and proposed block plans. PL005A proposed site layout and street scene. PL006B materials distribution and landscaping. PL007 estate railings and gate detail. PL008close board timber fence detail. J701166 acoustic fence detail. Jacksons fencing technical details. PLH01 Lawence house type. PLH02 Latchford house type. PLH03 Langley house type. PLH04 Ranscombe house type. PLH05 Ruscombe house type. PLG01 single garage. PLG02 single garage. CIL form 1 additional information.

Site layout proposals and house types developed to client specification, fully designed access within development

Site Visit

Can the site be seen from a public road, public footpath, bridleway or other public land?

◯ Yes
⊘ No

If the planning authority needs to make an appointment to carry out a site visit, whom should they contact?

⊘ The agent
◯ The applicant
◯ Other person

Pre-application Advice

Has assistance or prior advice been sought from the local authority about this application?

◯ Yes
⊘ No

Authority Employee/Member

With respect to the Authority, is the applicant and/or agent one of the following:
(a) a member of staff
(b) an elected member
(c) related to a member of staff
(d) related to an elected member

It is an important principle of decision-making that the process is open and transparent.

For the purposes of this question, "related to" means related, by birth or otherwise, closely enough that a fair-minded and informed observer, having considered the facts, would conclude that there was bias on the part of the decision-maker in the Local Planning Authority.

Do any of the above statements apply?

◯ Yes
⊘ No

Declaration

I / We hereby apply for Approval of reserved matters as described in this form and accompanying plans/drawings and additional information. I / We confirm that, to the best of my/our knowledge, any facts stated are true and accurate and any opinions given are the genuine options of the persons giving them. I / We also accept that: Once submitted, this information will be transmitted to the Local Planning Authority and, once validated by them, be made available as part of a public register and on the authority's website; our system will automatically generate and send you emails in regard to the submission of this application.

☑ I / We agree to the outlined declaration

John Everitt

Date

11/02/2022

Scale bar 1:1250
0 20 40 60

NORTH

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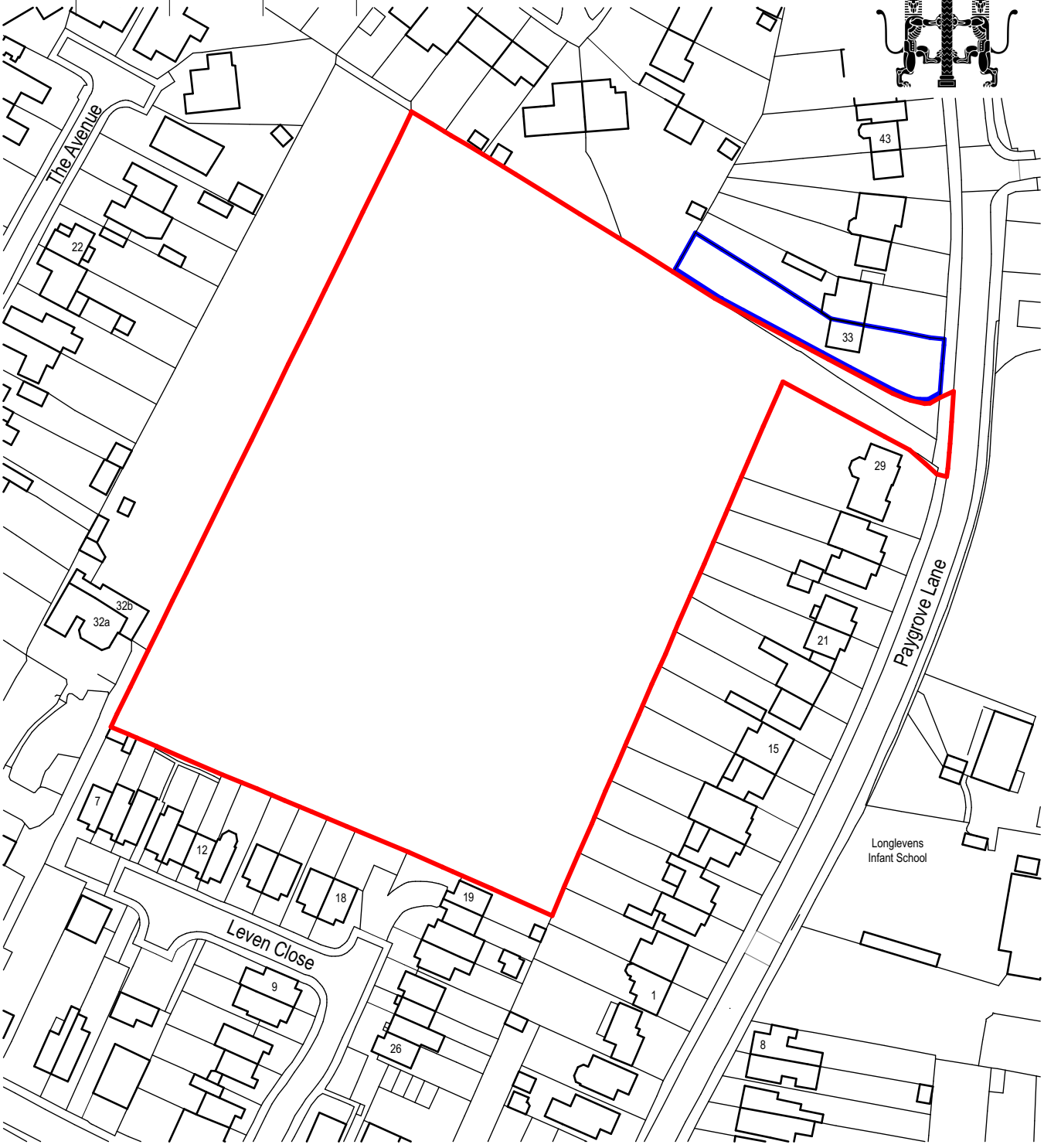
Chartered Practice



Revison A 03/2022 AH To accord with Outline approval

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Gloucestershire
GL53 7LE
[redacted]
www.ce-architects.co.uk

Drawing title:	Site Location Plan
Client:	Cotswold Oak Ltd
Drawn by:	AH Checked: JE
Project No:	21.20.020
Project:	Land at Paygrove Lane, Longlevens
Scale:	1:1250 @ A4
Date:	January 2022
Project / Drawing No:	21.20.020 PL001 A

Scale bar 1:250

0 5 10 15 20

N
Ordnance Survey Grid North

A D Horner Limited

Land and Measured Building Surveyors

coombes : everitt architects limited
105-107 Bath Road
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Gloucestershire
GL53 7LE
[redacted]

- [ ] Preliminary
- [ ] Feasibility
- [x] Planning
- [ ] Building Regulations
- [ ] Tender
- [ ] Construction issue
- [ ] As Built

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Chartered Practice

Drawing title:	Topographical Site Survey - Sheet 1 of 2
Client:	Cotswold Oak Ltd
Drawn by:	AH Checked: JE
Project No:	21.20.020
Project:	Land at Paygrove Lane, Longlevens
Scale:	1:250 @ A1
Date:	January 2022
Project / Drawing No:	21.20.020 PL002

coombes : everitt architects

Scale bar 1:250

0 5 10 15 20

Nos. 26 & 28
RICHMOND GARDENS
2 STOREY BRICK

No. 37
PAYGROVE LANE
2 STOREY BRICK

No. 33
PAYGROVE LANE
2 STOREY BRICK

NO. 29
PAYGROVE LANE
2 STOREY BRICK

Nos. 25 & 27
PAYGROVE LANE
2 STOREY BRICK

Nos. 21 & 23
PAYGROVE LANE
2 STOREY BRICK

Nos. 17 & 19
PAYGROVE LANE
2 STOREY BRICK

Nos. 13 & 14
PAYGROVE LANE
2 STOREY BRICK

Nos. 9 & 11
PAYGROVE LANE
2 STOREY BRICK

Nos. 5 & 7
PAYGROVE LANE
2 STOREY BRICK

PAYGROVE LANE

COLLEGE FIELDS

SCHOOL

GRASS

BRICK SETTS

TARMAC FOOTPATH

UNDERGROWTH

GARAGE

APPROXIMATE DEPTH MANHOLES FILLED WITH SOIL

N
Ordnance Survey Grid North

Notes

- Datum : Ordnance Survey Level datum via OS Active GPS Network
- Survey Grid : Pseudo-Ordnance Survey National Grid Co-ordinates derived via OS Active GPS Network. Scale Factor Unity.
- Survey contents correct as of date of survey and survey undertaken to agreed specification
- All critical dimensions to be checked prior to site works
- All kerb levels shown are channel levels
- Drainage and Service covers :
  Covers buried or obscured at the time of the survey are not shown. Manholes have not been entered for safety reasons and all pipe diameters are estimated from the surface. Drainage pipe diameters are in millimetres, eg. D100 means a 100mm diameter pipe. The flow type stated is based on visual evidence seen from the surface at the time of the survey. All internal manhole details should be confirmed by the contractor on site prior to site works.
- Trees :
  For concentric spread trees the spread plotted is an average value drawn to scale to the nearest metre. The minimum individual diameter surveyed is 0.15m at 1m up the trunk from the ground. Trunk diameters are not plotted to size. General species are only stated where noted. A qualified arboriculturalist should be consulted for species type and condition. Heights (when requested) are approximate to the nearest metre.

Tree Abbreviations

ALD	Alder
BCH	Beech
CED	Cedar
CHE	Cherry
CYP	Cypress
EUC	Eucalyptus
FAC	False Acacia
FRT	Fruit
HAW	Hawthorn
HOL	Holly
HOAK	Holm Oak
HORN	Hornbeam
HCH	Horse Chestnut
LAR	Larch
LAU	Laurel
MAP	Maple
PLN	London Plane
POP	Poplar
RHO	Rhododendron
ROW	Rowan
SAL	Sallow
SB	Silver Birch
SPR	Spruce
SCH	Sweet Chestnut
WBM	Whitebeam
WIL	Willow

Survey Stations

Station	Easting	Northing	Level
GPS1	385681.615	219890.823	19.079
S001	385726.638	219884.553	19.474
S002	385717.727	219874.906	19.492
S03A	385656.231	219897.779	19.118
S03B	385621.055	219851.695	19.271
S03C	385572.349	219822.509	19.453

A D Horner Limited
Land and Measured Building Surveyors

Legend of Abbreviations

AV	Air Valve	FLP	Floodlight Post	SCK	Stop Cock
BEDS	Flower Beds	FP	Footpath	SOF	Soffit Level
BK/W	Brick Wall	G	Gully	ST/W	Stone Wall
BLK/W	Block Wall	GV	Gas Valve	SV	Sluice Valve
BOL	Bollard	HW	Head Wall	SVP	Soil Vent Pipe
BS	Brick Setts	IC	Inspection Cover	TEL	Call Box (telephone)
BT	British Telecom	IL	Invert Level	TH	Threshold Level
BW	Barbed Wire Fence	IR	Iron Railing	TL	Traffic Light
CB	Close Board Fence	LL	Larch-lap Fence	TP	Telegraph Pole
CCTV	Closed Circuit Television Camera	LP	Lamp Post	TV	Cable Television
CELL	Cellar Cover	MB	Multibole Tree	UTL	Unable to Lift (Cover)
CGI	Corrugated Iron Fence	MH	Manhole	V	Valve (Unknown Type)
CL	Cover Level	MP	Marker Post	VP	Vent Pipe
C/L	Chain Link Fence	MP-E	Marker Post - Electric	W-HT	Top of Wall Level
CONC	Concrete Surface	MP-G	Marker Post - Gas	WL	Water Level
CONC/P	Concrete Panel Fence	MP-T	Marker Post - Telephone	WM	Water Meter
CP	Chestnut Paling Fence	MP-W	Marker Post - Water	W/M	Wire Mesh Fence
CRB	Crash Barrier	NAME	Road Nameplate	WO	Washout Valve
D	Diameter (trees in metres / drainage pipes in millimetres)	PAL	Palisade Fence	WV	Water Valve
DK	Drop Kerb	POK	Top of Kerb Level		
E	Electricity Cover	PR	Post and Rail Fence		
EP	Electricity Pole	PW	Post and Wire Fence		
ER	Earth Rod	RE	Rodding Eye		
FFL	Finished Floor Level	RET	Retaining		
FH	Fire Hydrant	RS	Road Sign		
FLAG	Flag Pole	RWP	Rainwater Pipe		

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- [ ] Construction issue
- [ ] As Built

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Drawing title: Topographical Site Survey - Sheet 2 of 2
Client: Cotswold Oak Ltd
Drawn by: AH Checked: JE
Project No: 21.20.020

Project: Land at Paygrove Lane, Longlevens
Scale: 1:250 @ A1
Date: January 2022
Project / Drawing No: 21.20.020 PL003

Existing Block Plan

Proposed Block Plan

Scale bar 1:500

0 10 20 30 40 50

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- ☐ Building Regulations
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- ☐ Construction issue
- ☐ As Built

RIBA Chartered Practice

Revisions
A 03/2022 AH Proposed block plan to accord with access indicated on Outline approval

Drawing title:	Existing and Proposed Block Plans
Client:	Cotswold Oak Ltd
Drawn by:	AH Checked: JE
Project No:	21.20.020
Project:	Land at Paygrove Lane, Longlevens
Scale:	1:500 @ A1
Date:	January 2022
Project / Drawing No:	21.20.020 PL004 A

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Accommodation schedule

Unit Mix

Ref	Bedrooms	Bedspaces	Number Off	GIFA sq/ft	Total sq/ft
Lawence	2 + study	3	1	935	935
Latchford	3	6	2	1389	2778
Langley	4	7	3	1389	4167
Ranscombe	4 + study	7	2	1615	3230
Ruscombe	5	8	2	1615	3230
					14340

Scale bar 1:500

0 10 20 30 40 50

Scale bar 1:200

0 5 10 15 20

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- [ ] Construction issue
- [ ] As Built

RIBA Chartered Practice

Revisions

A 03/2022 AH Proposed layout to accord with access indicated on Outline approval

Drawing title: Proposed Site Layout and Street Scene

Client: Cotswold Oak Ltd

Drawn by: AH Checked: JE

Project No: 21.20.020

Project: Land at Paygrove Lane, Longlevens

Scale: 1:500, 1:200 @ A1

Date: January 2022

Project / Drawing No: 21.20.020 PL005 A

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Existing chain-link and wire mesh fences retained to boundary

Replace existing close boarded timber fence with new acoustic timber fence to LPA approval

Brick boundary wall 2.0m high with brick-on-edge coping to match house finishes

Turning for cars

Tarmac finishes to un-adopted access to parking spaces

22 number demarked parking bays including 3 suitable for disabled use, finished in paviors, and 19 finished in grasscrete blocks

Lifting barrier with automatic timer to restrict over-night vehicular access. Timer to allow access from 0900 hrs - 1600hrs / 2000hrs winter / summer time Loop detector allows vehicles to exit at all times

Bollards adjacent lifting barrier

Pedestrian pass gate within estate railings to facilitate foot access to playing field

tactile paving at pedestrian crossing point

Replace existing close boarded timber fence with new acoustic timber fence to LPA approval

1.8cb indicates 1.8m high close board timber fence to rear plot boundaries and plot sub-divisions

Existing chain-link fence retained to boundary

Area for playing field with space for potential pitches as per Outline Approval to be cleared of existing planting and weeds, graded to a level finish, and harrowed to a fine tilth, prior to re-seeding with a grass mix suitable for amature playing pitches. Specification to be as agreed with Gloucester City Council

Storm water attenuation basin to design and specification by Cotswold Transport Planning

Access road to be offered for adoption to approval of Gloucestershire County Highways, refer to details by Cotswold Transport Planning

1.2m high, five rail metal estate railings with black painted finish to boundary of playing field

Existing tree planting to site boundaries to be retained as existing and indicated thus

Existing chain-link fence retained to boundary

New native species hedgerow

Turning head for service and emergency vehicles

Visitor parking finished in setts within highway

Existing hedgerow planting to boundary (shown hatched) to be cut back and reinforced as necessary to form boundary planting

Existing chain-link fence retained to boundary

1.8m high close boarded fence to boundary at end of access

Trees to be removed shown dotted

Landscape and Finishes Legend

FFL 19.350	Proposed floor level
T	Tarmac finishes to highway and drives
P	PCC block paviors, charcoal grey to GCH approval
G	Grasscrete block paving
	Paths and patios formed out of 600x600x40mm pcc buff riven paving slabs by Tobermore laided over 100mm concrete oversite and drained to adjacent soft landscaped areas.
	Russell Bute roof tile Anthracite
	Brick - Ibstock Forterra Chelsea Smoked Red
	Brick - Ibstock Forterra Atherstone Red Multi
Turf	Areas prepared and laid to turf
	Areas prepared and seeded to form playing field
pg	Pea gravel lain over weed supressing membrane
	Prepared and planted borders with individual specimen shrub planting
	Existing boundary planting retained and reinforced as necessary
	New native species hedgerow planting
	Existing trees to be retained
	New tree planting
	Trees to be removed
	16 Amp power supply to facilitate electric vehicle charge point.
	1.8m high close board timber fence with solid timber gates fitted with bolts top and bottom and lock operable from both sides
	Black painted, five bar estate railings to demark residential development + pedestrian pass gate as indicated
	2.0m high acoustic fence - 12k Envirofence Jacksons Fencing
B	Paved hardstanding for on plot bin storage. Collection from kerbside to LA regime

Trees

SU	Sorbus Aucuparia (Rowan)
SA	Sorbu Aria (Whitebeam)
FS	Fagus Sylvatica (Beech)

All trees and shrubs will conform to the specification for nursery stock as set out in British Standard 3936 Parts 1 (1992) and 4 (1984). Advanced Nursery stock trees shall conform to BS 5236.
Trees to be 'feathered' 2m high with 5-8cm girth and staked to a height of 750mm and planted in 1.0x1.0m prepared tree pits incorporating 80 litres of TPMC and slow release fertiliser. Roots to be dipped in mycorrhizal inoculant immediately prior to planting.

Native Species Hedgerow

Hedges to be planted in double staggered rows 400mm apart with a minimum of 7 plants per linear metre. hedging plants to be 0.6-0.8m high, 1+1 bareroot, healthy and vigorous transplants

Hawthorn	45%
Blackthorn	20%
Hazel	15%
Field Maple	15%
Holly, Dog-rose, Spindle, Wild Privet and Wych Elm	5%

Planting Notes

Ground preparation and planting works to include:
Excavate planting areas to a minimum depth of 600mm and remove all unsuitable material from site
Ensure / supply and spread 400mm depth of approved topsoil in areas to be planted. Light harrow to provide a fine tilth.
Collect and remove from areas to be planted or turfed all stones greater than 50mm in any dimension.
Supply and plant shrubs incorporating 20g / plant of slow release fertilizer into the backfill.
Provide and spread evenly over planting areas 75mm depth of coarse grade bark mulch.

Planted Borders

To be planted in groups of 3, 5, 7 per box in a random mix at a rate of 5 plants per sq/m

Type (i)	%
Cotoneaster Dameri	20
Berberis Candidula	25
Hedera Colchica Denata Veriegata	15
Mahonia Aquifolium	20
Spirea Japonica Bullata	20

Type (ii)	%
Cornus Canadensis	25
Euonymus Fortunei Radicans	25
Pachysandra Terminalis Veriegata	20
Vinca Major Variegata	20
Hedera Hibernica	10

Specimen Shrub Planting

Individual container grown specimen shrubs (minimum 3 litre) shown thus

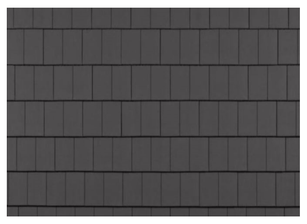
BD	Berberis Darwinii
CT	Choisya Ternata
FO	Forsythia Ovata
IQ	Ilex Aquifolium Golden Queen
IK	Ilex Altaclerensis Golden King
PV	Philadelphus Virginal
VA	Viburnum Aurora

2.0m high 12k Envirofence - acoustic fence

1.8m high close board fence

Ibstock Forterra Chelsea Smoked Red brick

1.2m high estate railings and gate



Russell Bute roof tile - anthracite

Ibstock Forterra Atherstone Red Multi

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- ☐ Construction issue
- ☐ As Built

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Revison

A	03/2022	AH	Hedgerow mix amended
B	03/2022	AH	Proposed layout plan to accord with access indicated on Outline approval

Drawing title:	Materials Distribution and Landscaping
Client:	Cotswold Oak Ltd
Drawn by:	AH
Checked:	JE
Project No:	21.20.020
Project:	Land at Paygrove Lane, Longlevens
Scale:	1:250 @ A1
Date:	January 2022
Project / Drawing No:	21.20.020 PL006 B

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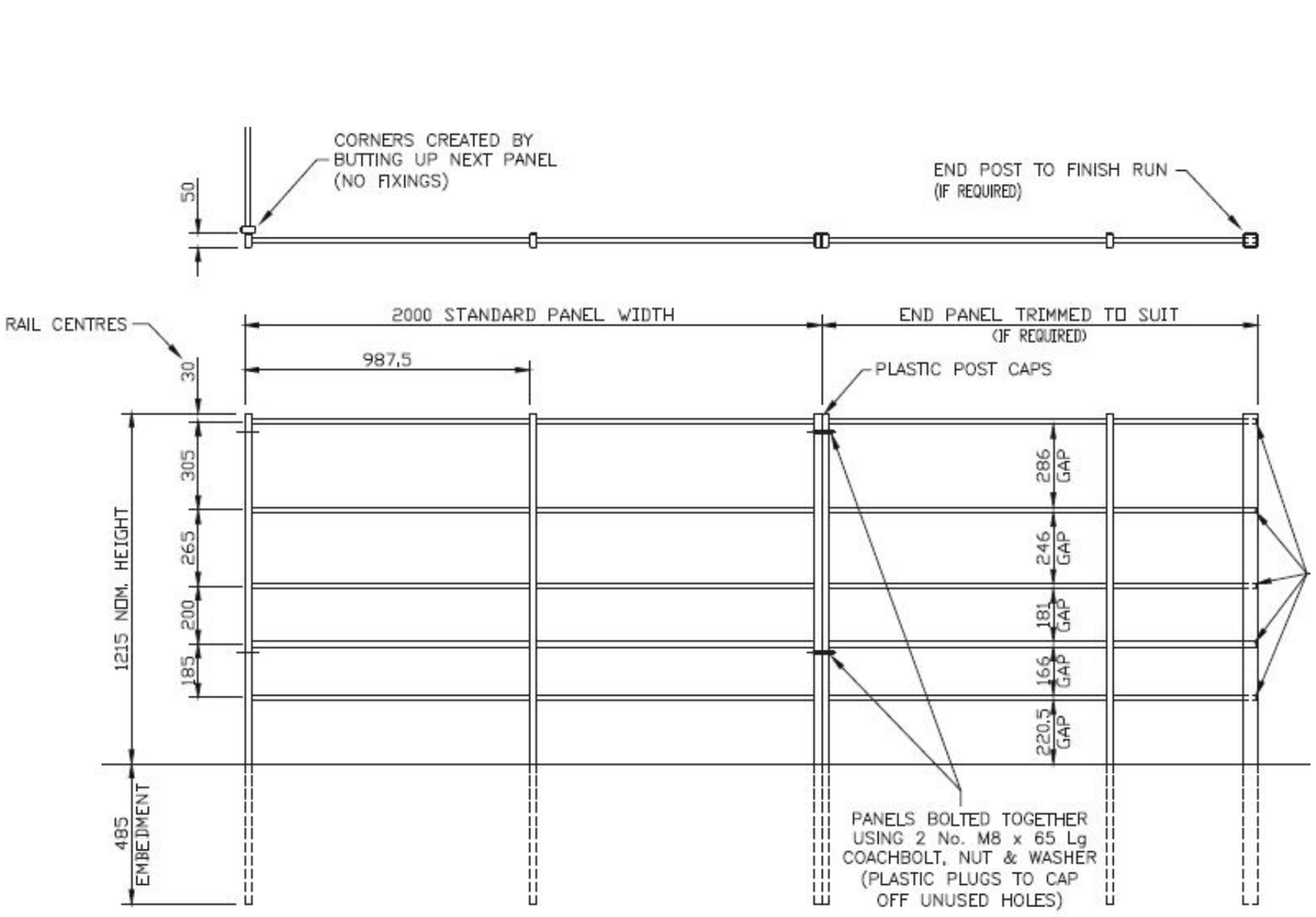
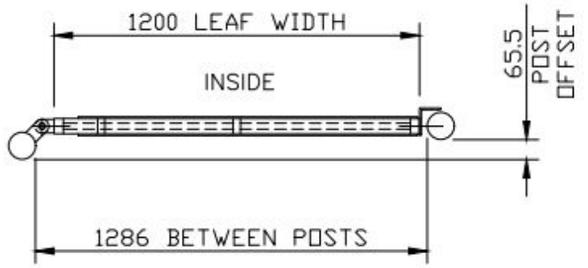
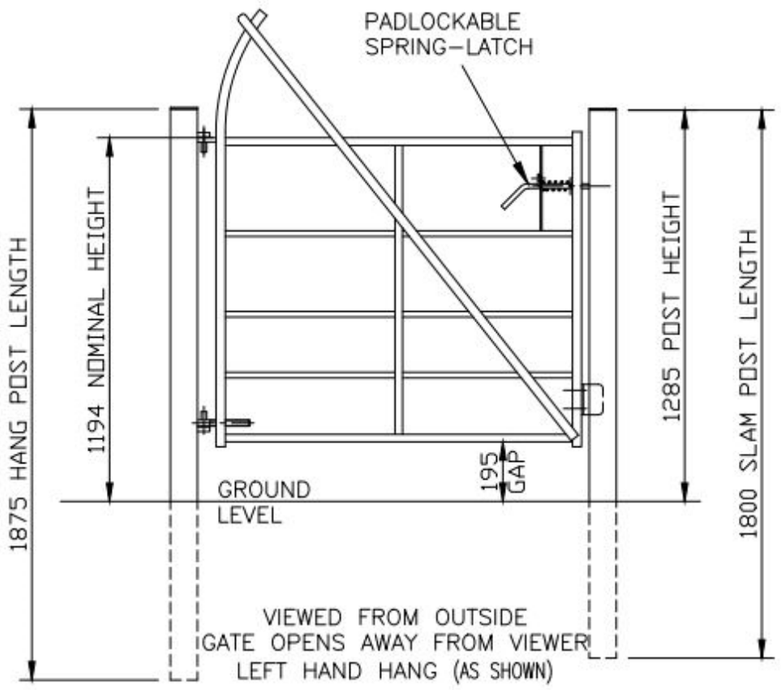






ESTATE GATE
1.2m WIDE

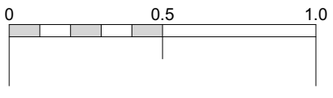
NOTES.

ALL DIMENSIONS ARE IN mm (UNO)
GAPS UNDER GATES & FENCING
ARE NOMINAL DUE TO GROUND LEVELS.

MATERIALS.

GATE POSTS: ø88.9 CHS
T & B RAILS: 50 x 25 RHS
MID RAILS: ø19 CHS
STILES: 50 x 30 RHS
BRACES: 30 x 6 MS FLAT

Scale bar 1:20



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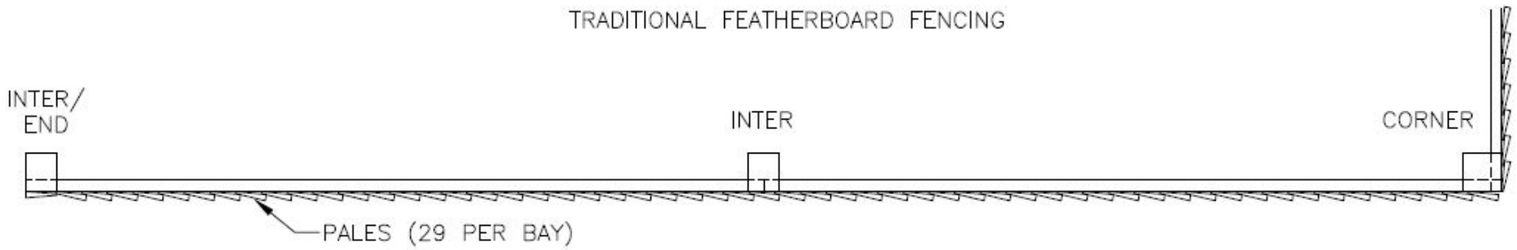
Drawing title:	Estate Railing and Gate Detail	Project:	Land at Paygrove Lane, Longlevens
Client:	Cotswold Oak Ltd	Scale:	1:20 @ A3
Drawn by:	AH Checked: JE	Date:	February 2022
Project No:	21.20.020	Project / Drawing No:	21.20.020 PL007

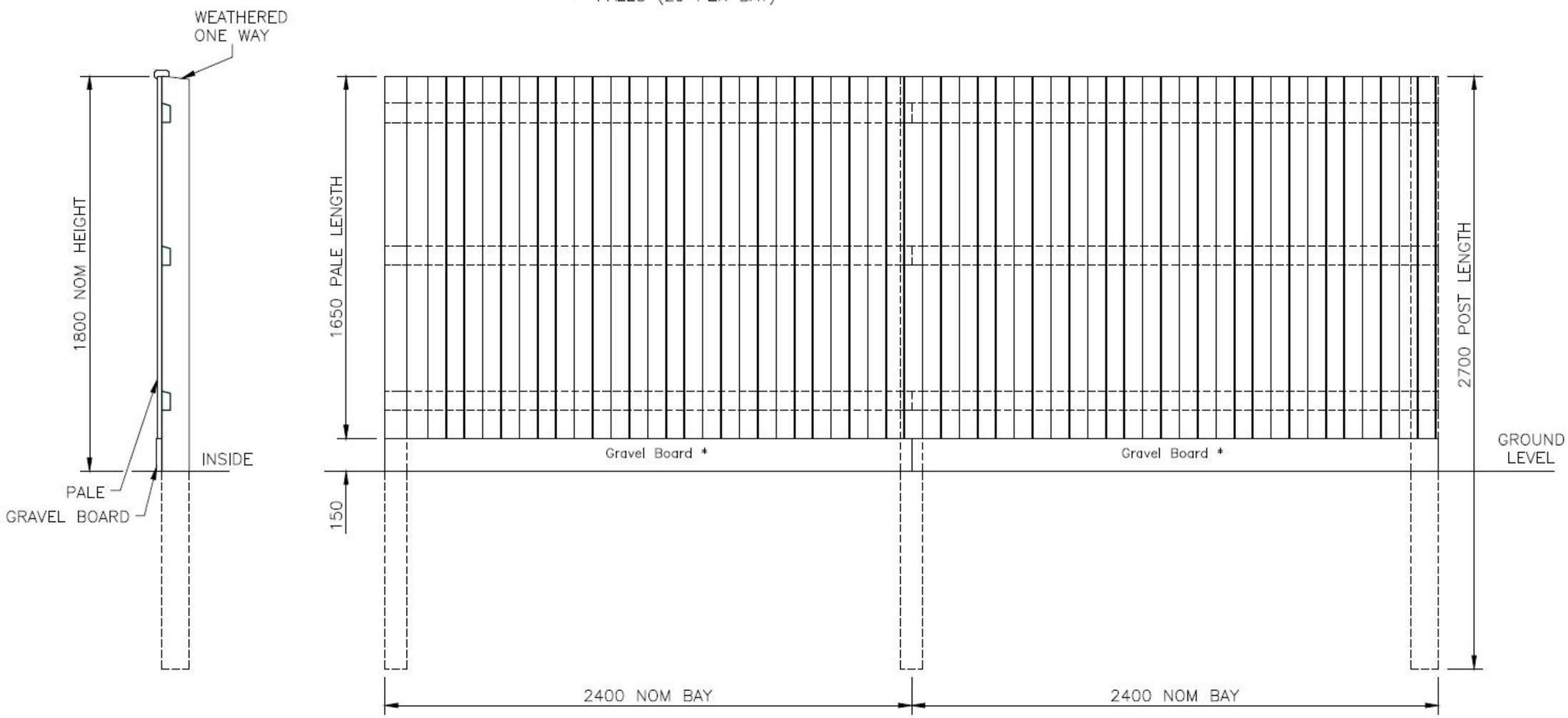
coombes : everitt architects

Scale bar 1:20

0 0.5 1.0

TRADITIONAL FEATHERBOARD FENCING





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- ☐ Preliminary
- ☐ Feasibility
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- ☐ As Built

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Drawing title:	Close Board Timber Fence Detail	Project:	Land at Paygrove Lane, Longlevens
Client:	Cotswold Oak Ltd	Scale:	1:20 @ A3
Drawn by:	AH	Checked: JE	Date: February 2022
Project No:	21.20.020	Project / Drawing No:	21.20.020 PL008

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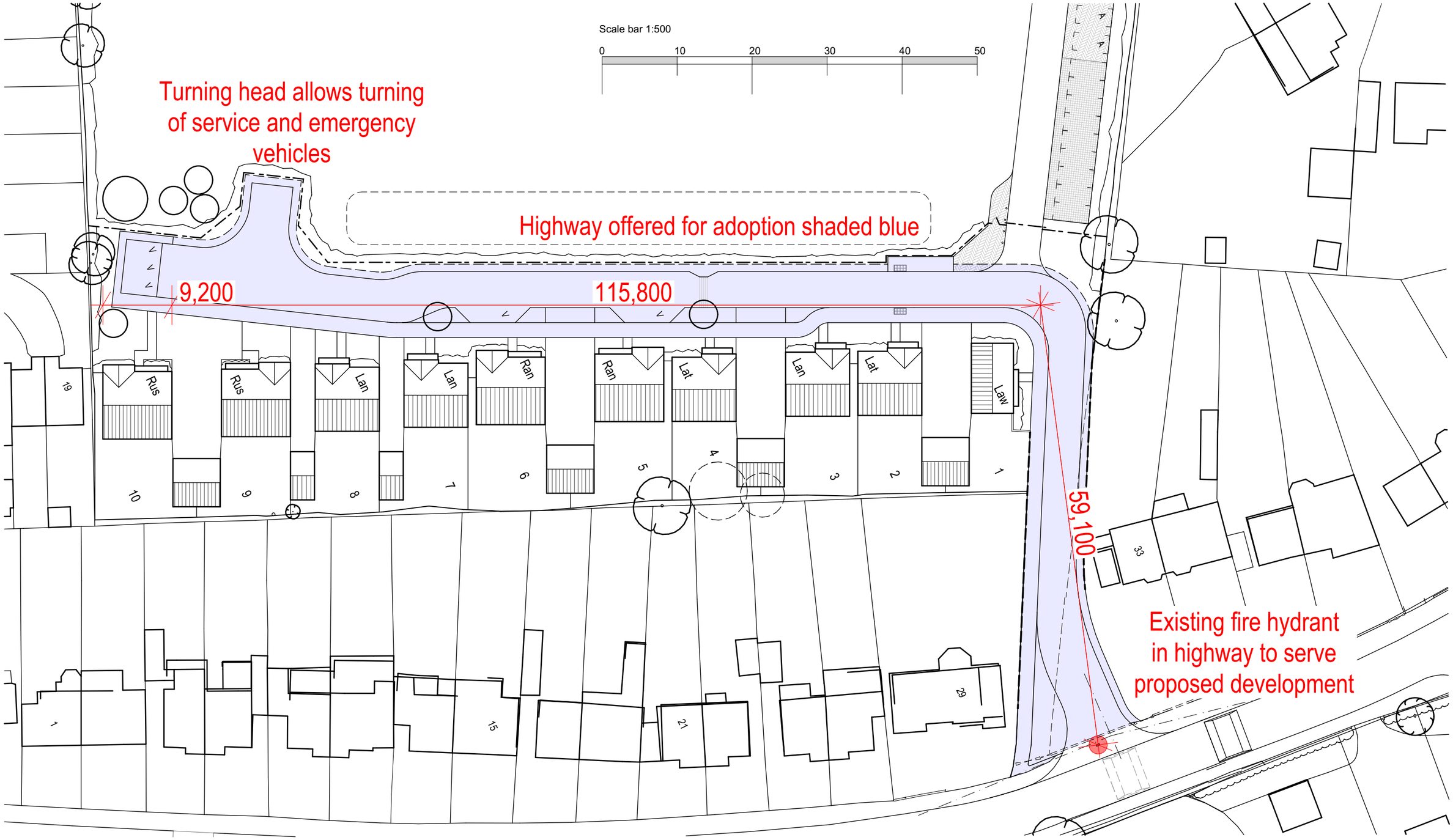

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- ☐ Preliminary
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- ■ Planning
- ☐ Building Regulations
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- ☐ Construction issue
- ☐ As Built

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Drawing title:	Fire Hydrant Strategy Plan
Client:	Cotswold Oak Ltd
Drawn by:	AH
Checked:	JE
Project No:	21.20.020
Project:	Land at Paygrove Lane, Longlevens
Scale:	1:500 @ A3
Date:	February 2022
Project / Drawing No:	21.20.020 PL009

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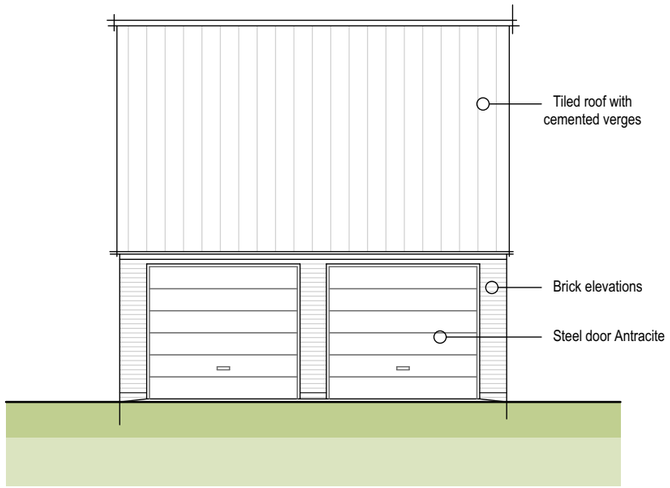
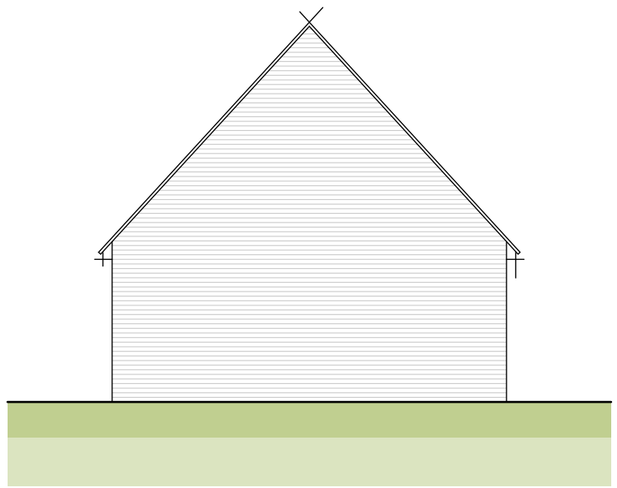
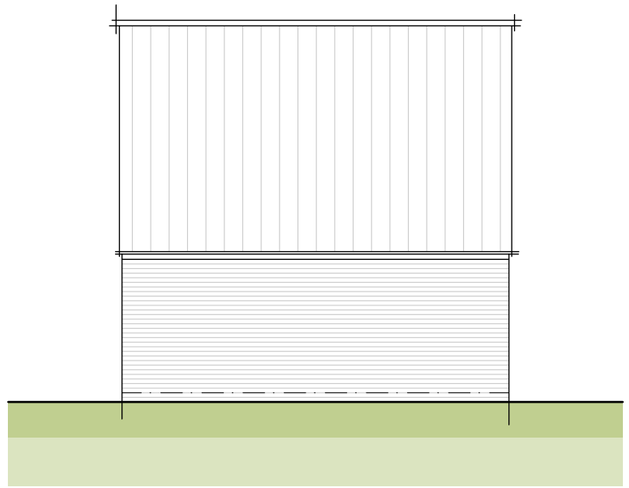


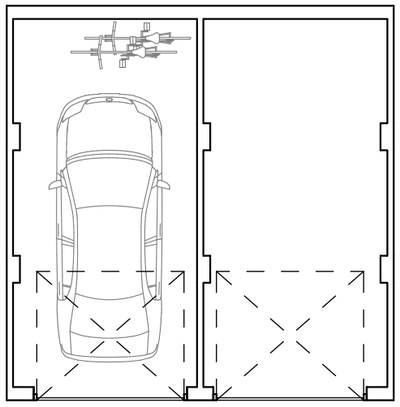
Front Elevation



Side Elevation



Rear Elevation



Pair Garages

Scale bar 1:100

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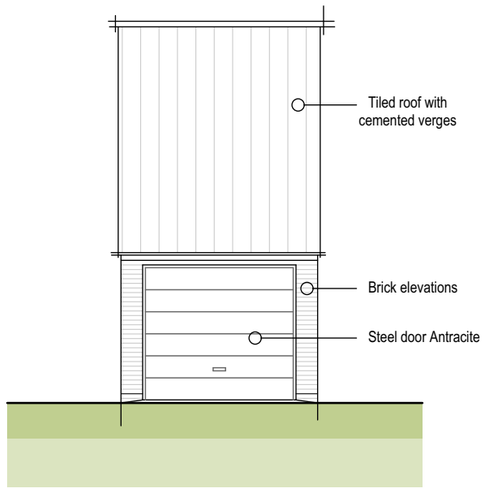
105-107 Bath Road
Cheltenham
Gloucestershire
GL53 7LE
[redacted]

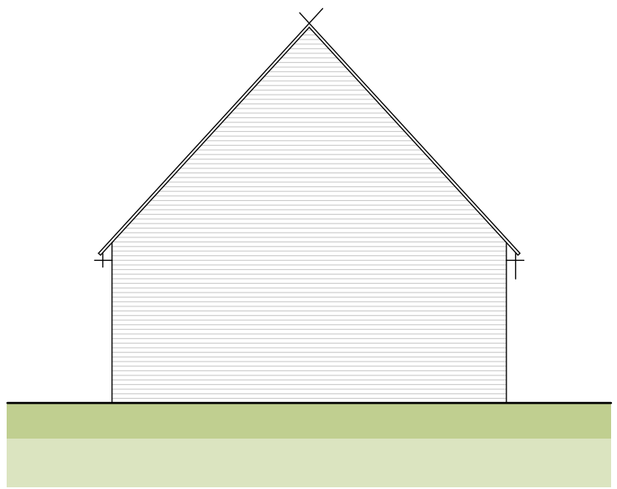
- ☐ Preliminary
- ☐ Feasibility
- ■ Planning
- ☐ Building Regulations
- ☐ Tender
- ☐ Construction issue
- ☐ As Built

RIBA
Chartered Practice

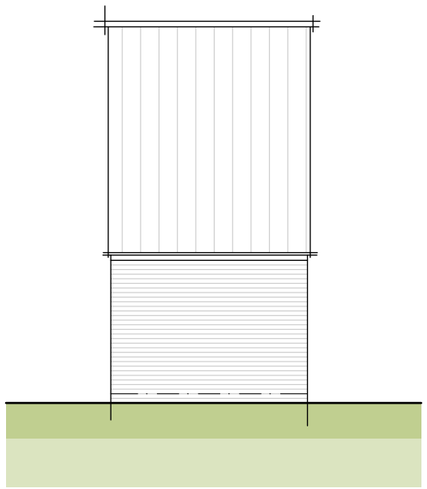
Drawing title:	Proposed Pair Garages
Client:	Cotswold Oak Ltd
Drawn by:	AH
Checked:	JE
Project No:	21.20.020
Project:	Land at Paygrove Lane, Longlevens
Scale:	1:100 @ A3
Date:	February 2022
Project / Drawing No:	21.20.020 PLG01



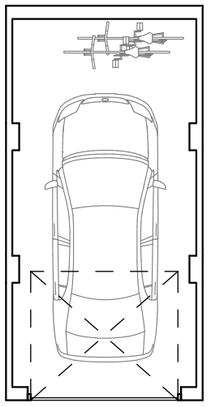
Front Elevation



Side Elevation

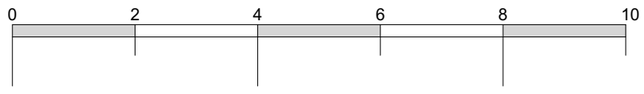


Rear Elevation



Single Garages

Scale bar 1:100



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Cheltenham
Gloucestershire
GL53 7LE
[redacted]

- ☐ Preliminary
- ☐ Feasibility
- ■ Planning
- ☐ Building Regulations
- ☐ Tender
- ☐ Construction issue
- ☐ As Built

RIBA
Chartered Practice

Drawing title:	Proposed Single Garage	Project:	Land at Paygrove Lane, Longlevens
Client:	Cotswold Oak Ltd	Scale:	1:100 @ A3
Drawn by:	AH Checked: JE	Date:	February 2022
Project No:	21.20.020	Project / Drawing No:	21.20.020 PLG02

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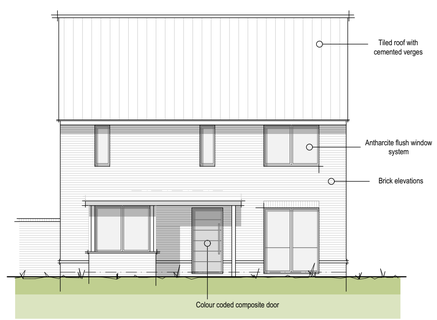
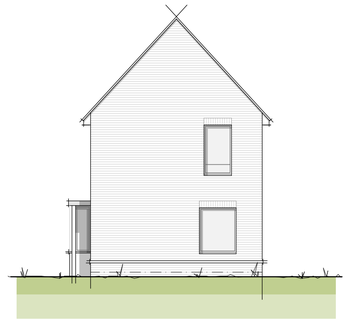
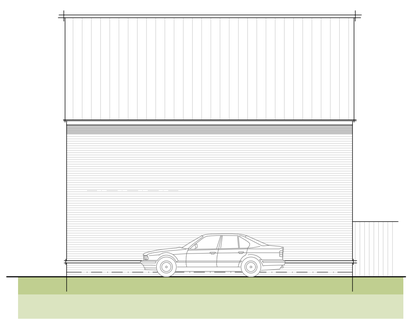


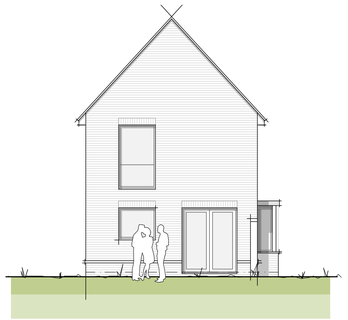
Front Elevation



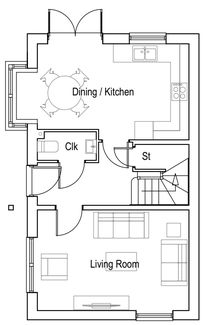
Side Elevation



Rear Elevation



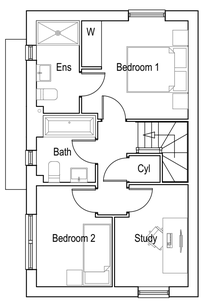
Side Elevation



Ground Floor Plan

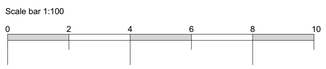
gifa 86.9sq/m (935sq/ft)

Plot 1



First Floor Plan

Scale bar 1:100



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Cheltenham
Gloucestershire
GL53 7LE
[redacted]

- ☐ Preliminary
- ☐ Feasibility
- ■ Planning
- ☐ Building Regulations
- ☐ Tender
- ☐ Construction issue
- ☐ As Built

RIBA
Chartered Practice

Drawing title:	Lawrence House Type, 2 Bedroom
Client:	Cotswold Oak Ltd
Drawn by:	AH Checked: JE
Project No:	21.20.020
Project:	Land at Paygrove Lane, Longlevens
Scale:	1:100 @ A1
Date:	November 2021
Project / Drawing No:	21.20.020 PLH01

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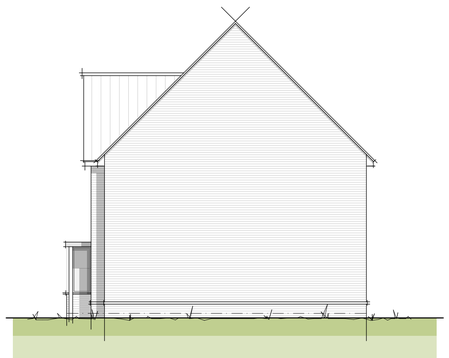
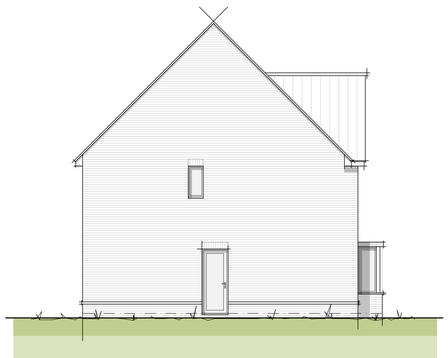
Front Elevation

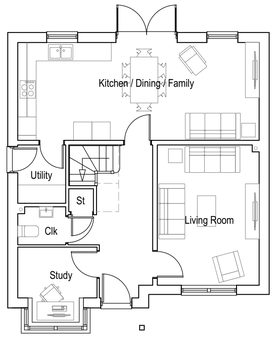


Side Elevation

Rear Elevation



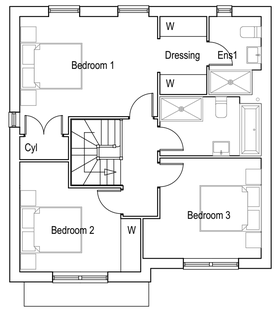
Side Elevation



Ground Floor Plan

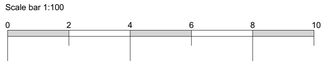
gifa 129.1sq/m (1389sq/ft)

Plots 2 & 4



First Floor Plan

Scale bar 1:100



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Gloucestershire
GL53 7LE

[redacted]

- ☐ Preliminary
- ☐ Feasibility
- ■ Planning
- ☐ Building Regulations
- ☐ Tender
- ☐ Construction issue
- ☐ As Built

RIBA
Chartered Practice

Drawing title:	Latchford House Type, 3 Bedroom
Client:	Cotswold Oak Ltd
Drawn by:	AH Checked: JE
Project No:	21.20.020
Project:	Land at Paygrove Lane, Longlevens
Scale:	1:100 @ A1
Date:	November 2021
Project / Drawing No:	21.20.020 PLH02

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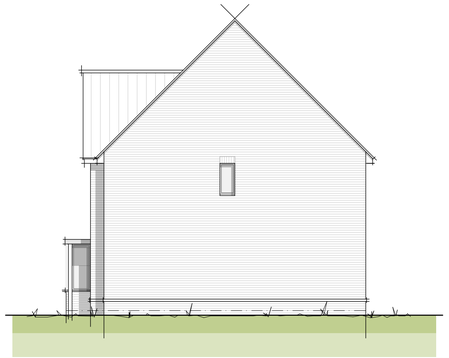
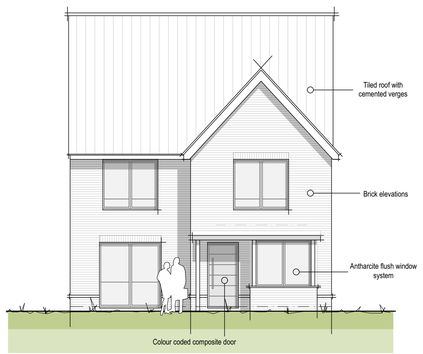
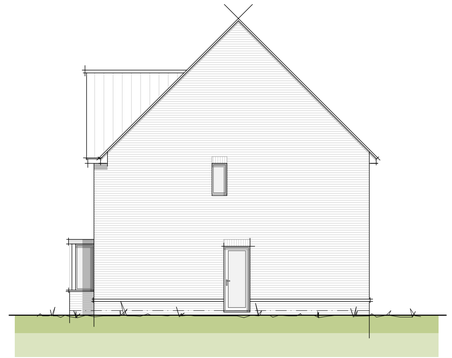
Front Elevation



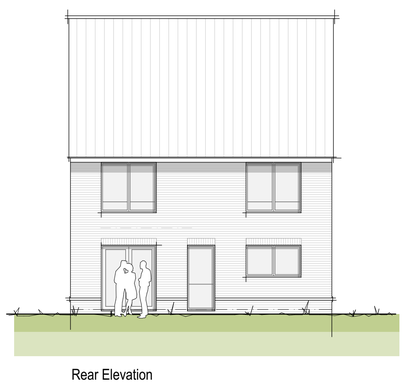
Side Elevation



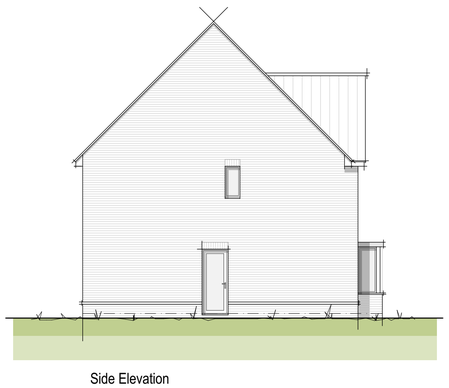
Front Elevation



Side Elevation

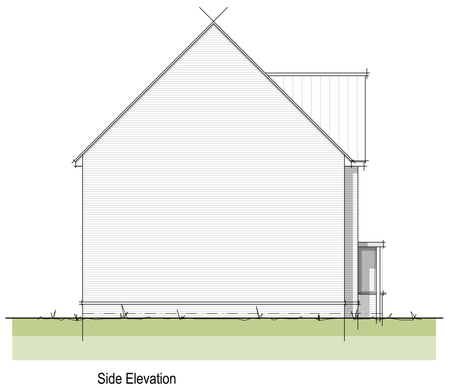


Rear Elevation

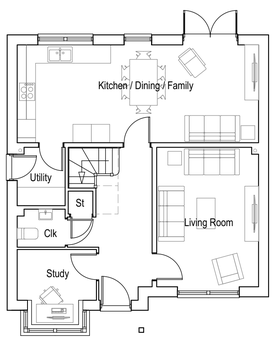


Side Elevation

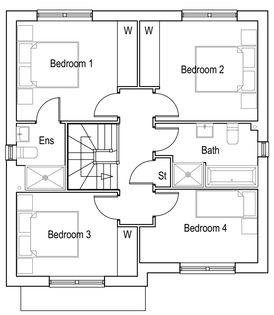
Rear Elevation



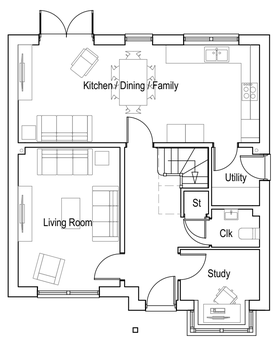
Side Elevation



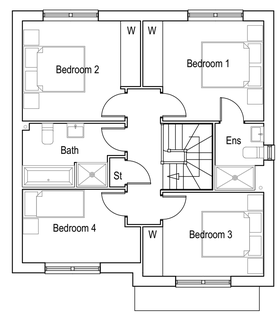
Ground Floor Plan
gifa 129.1sq/m (1389sq/ft)
Plot 3



First Floor Plan

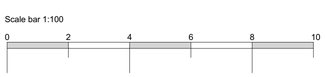


Ground Floor Plan
gifa 129.1sq/m (1389sq/ft)
Plots 7 & 8



First Floor Plan

Scale bar 1:100



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Cheltenham
Gloucestershire
GL53 7LE
[redacted]

- [ ] Preliminary
- [ ] Feasibility
- [x] Planning
- [ ] Building Regulations
- [ ] Tender
- [ ] Construction issue
- [ ] As Built

Drawing title:	Langley House Type, 4 Bedroom
Client:	Cotswold Oak Ltd
Drawn by:	AH Checked: JE
Project No:	21.20.020
Project:	Land at Paygrove Lane, Longlevens
Scale:	1:100 @ A1
Date:	November 2021
Project / Drawing No:	21.20.020 PLH03

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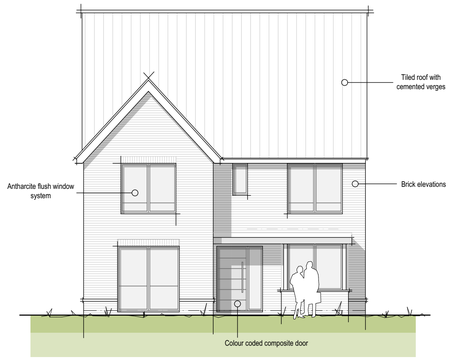
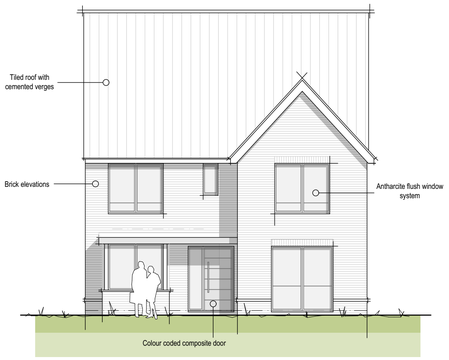
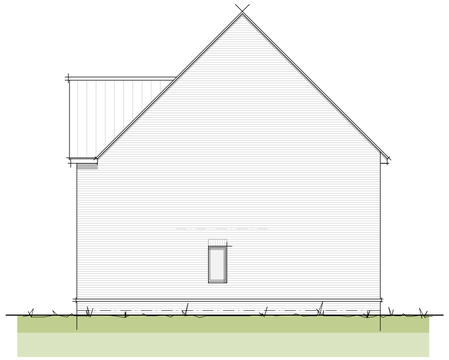


Front Elevation

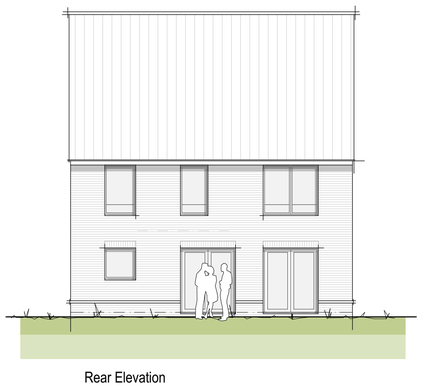
Side Elevation



Front Elevation



Side Elevation

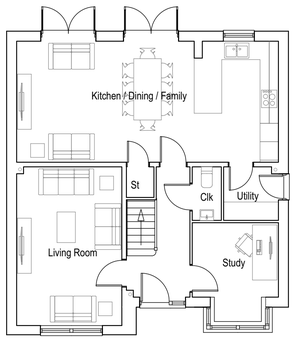


Rear Elevation

Side Elevation

Rear Elevation

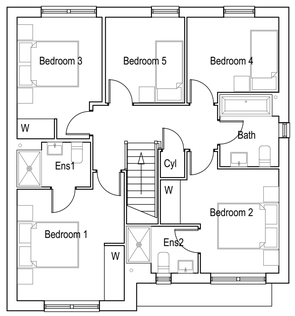
Side Elevation



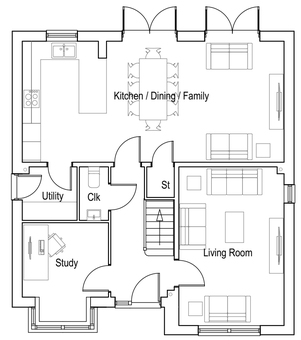
Ground Floor Plan

gifa 150.1sq/m (1615sq/ft)

Plot 9



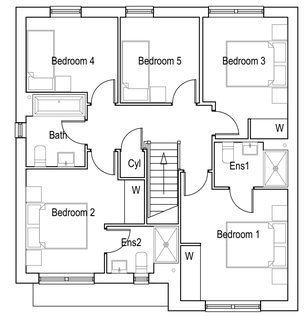
First Floor Plan



Ground Floor Plan

gifa 150.1sq/m (1615sq/ft)

Plot 10



First Floor Plan

Scale bar 1:100

0 2 4 6 8 10

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Cheltenham
Gloucestershire
GL53 7LE

- [ ] Preliminary
- [ ] Feasibility
- [x] Planning
- [ ] Building Regulations
- [ ] Tender
- [ ] Construction issue
- [ ] As Built

RIBA
Chartered Practice

Drawing title:	Ruscombe House Type, 5 bedroom
Client:	Cotswold Oak Ltd
Drawn by:	AH Checked: JE
Project No:	21.20.020
Project:	Land at Paygrove Lane, Longlevens
Scale:	1:100 @ A1
Date:	November 2021
Project / Drawing No:	21.20.020 PLH05

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11.02.2022

Gloucester City Council
Development Control
4th Floor Herbert Warehouse
The Docks
Gloucester
GL1 2EQ

Dear Sir / Madam

Re: Proposed development on land to the rear of 3-29 Paygrove Lane, Gloucester. PP11034314

This letter is to accompany a Reserved Matters planning application in respect of development at Paygrove Lane, Gloucester subject of Outline Approval 16/01558/OUT.

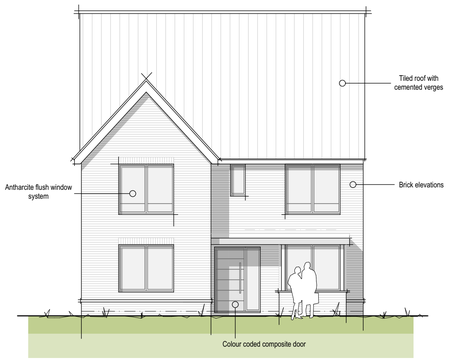
The application forms are provided together with a copy of our Design and Access Statement, a summary of conditions, and drawings in respect of the site layout, access, proposed house designs, scale and landscaping:
PL001 Site Location
PL002&3 Topographical Site Survey
PL004 Existing and Proposed Block Plans
PL005 Proposed Site Layout and Street Scene
PL006 Materials Distribution and Landscaping
PL007 Estate Railing and gate Detail
PL008 Close Board Timber Fence Detail
PL009 Fire Hydrant Strategy Plan
J7/01166 Acoustic Fence Detail and Technical Document
PLH01 Lawence House Type
PLH02 Latchford House Type
PLH04 Ranscombe House Type
PLH05 Ruscombe House Type
PLG01 Pair of Garages
PLG02 Single Garage

We trust that the above documents are satisfactory to you, should you require any additional information please do not hesitate to contact us directly.

Yours faithfully

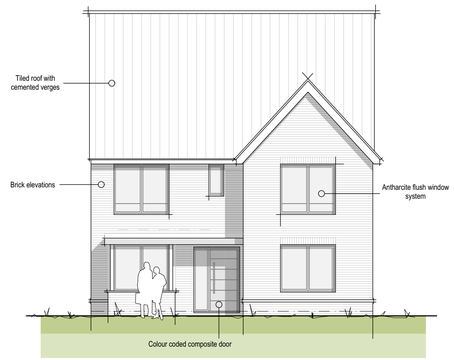
Andrew Hilton
Senior Architectural Technician

Office: Unit 1, The Old Dairy, Rushley Lane, Winchcombe. GL54 5JE
t: 01242 807727. www.ce-architects.co.uk. Registered Address: As Above.
coombes:everitt architects Ltd Company number: 08431956
Directors: Toby Coombes. RIBA. John Everitt. RIBA
coombes:everitt architects

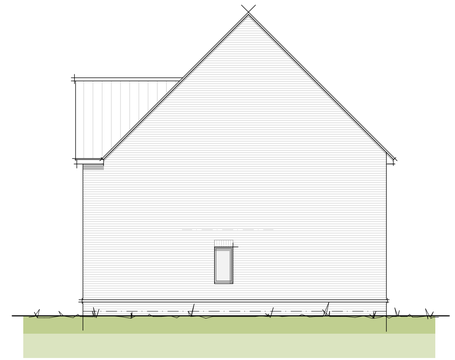


Front Elevation

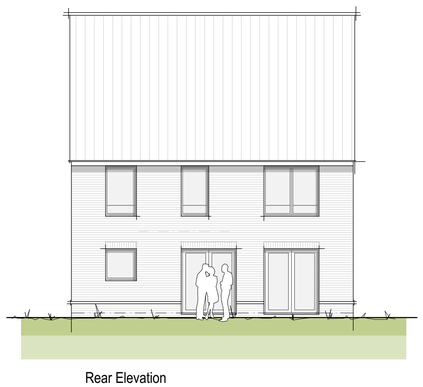
Side Elevation



Front Elevation

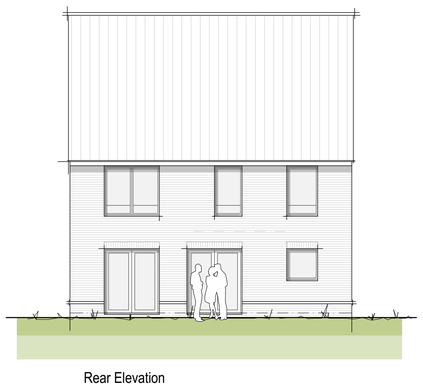


Side Elevation



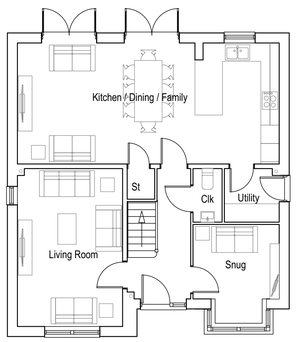
Rear Elevation

Side Elevation



Rear Elevation

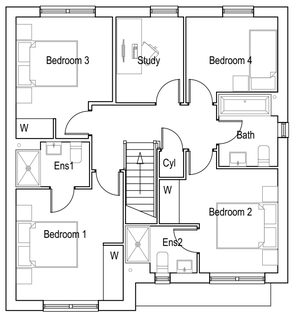
Side Elevation



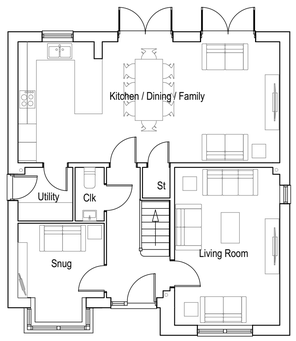
Ground Floor Plan

gifa 150.1sq/m (1615sq/ft)

Plot 5



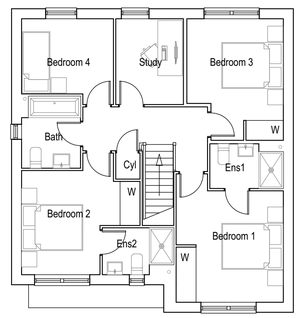
First Floor Plan



Ground Floor Plan

gifa 150.1sq/m (1615sq/ft)

Plot 6



First Floor Plan

Scale bar 1:100

0 2 4 6 8 10

coombes : everitt architects limited

105-107 Bath Road
Cheltenham
Gloucestershire
GL53 7LE

[redacted]

- [ ] Preliminary
- [ ] Feasibility
- [x] Planning
- [ ] Building Regulations
- [ ] Tender
- [ ] Construction issue
- [ ] As Built

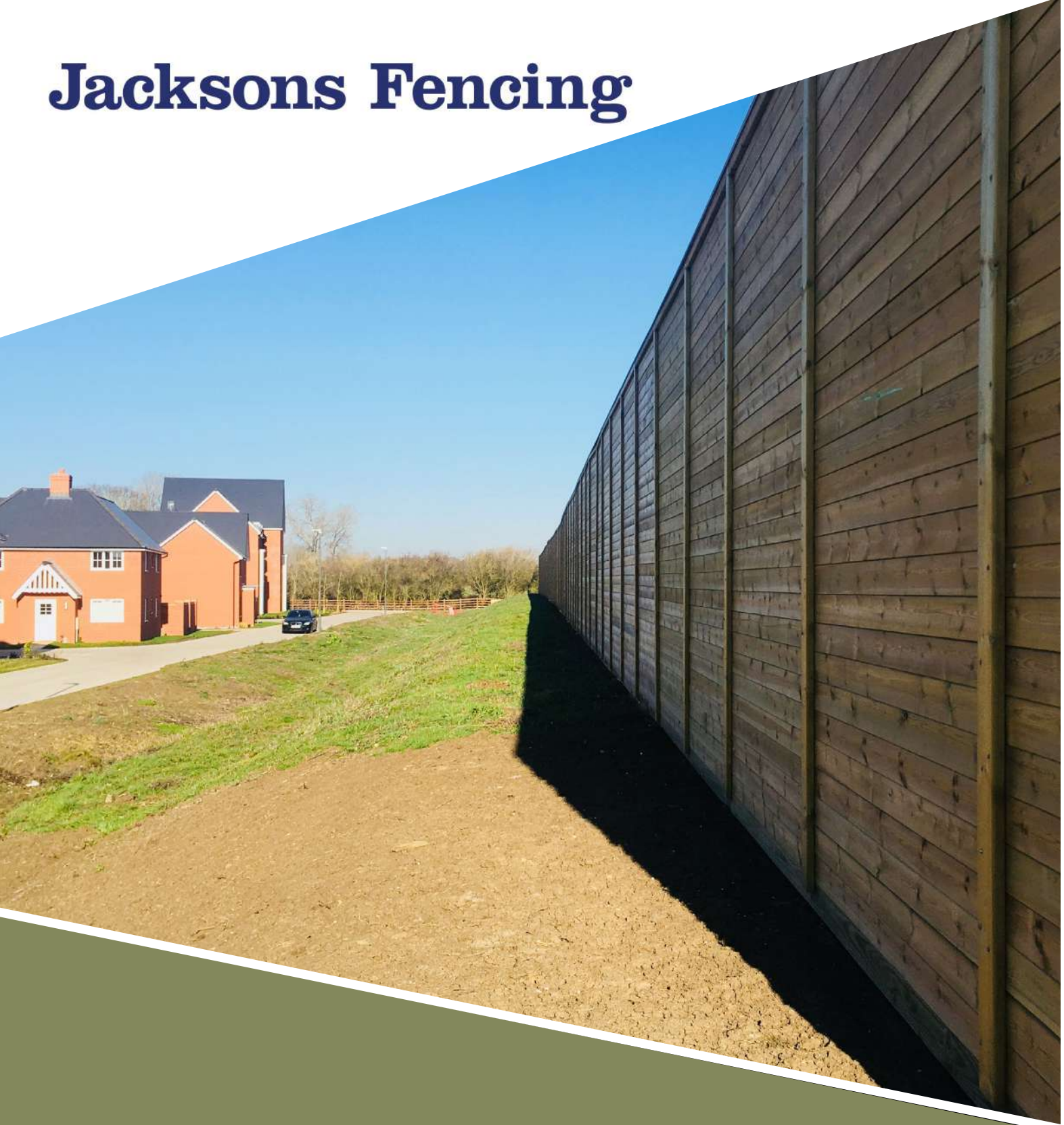
RIBA
Chartered Practice

Drawing title:	Ranscombe House Type, 4 Bedroom
Client:	Cotswold Oak Ltd
Drawn by:	AH Checked: JE
Project No:	21.20.020

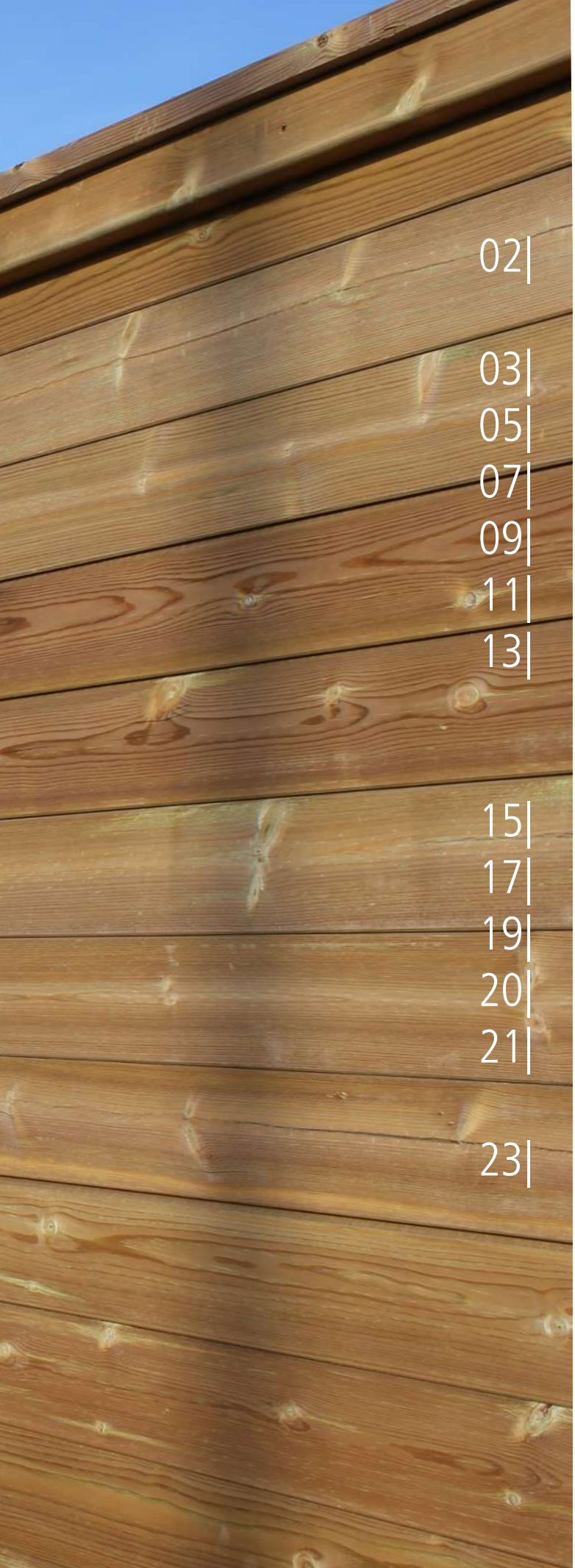
Project:	Land at Paygrove Lane, Longlevens
Scale:	1:100 @ A1
Date:	November 2021
Project / Drawing No:	21.20.020 PLH04

coombes : everitt architects

Jacksons Fencing



Reflective & Absorptive Acoustic Fencing | Acoustic Gates | Commercial & Highway Acoustic Barriers



Contents

6m high Jakoustic® Reflective with bespoke timber clad I-beams

JAKOUSTIC® BARRIER SYSTEM

KEEPING ENVIRONMENTAL NOISE IN CHECK SINCE 2004

When we developed and introduced the innovative Jakoustic® barrier system in 2004 it was in response to the need for an effective solution to the growing problem of noise pollution in the environment.

Since then, the increase in the UK population has fuelled house building and inevitably brought transport and infrastructure ever closer to residential property developments.

The Jakoustic® barrier system has been put to use in managing noise into and from sites across a wide variety of situations, from housing and schools, to transport, commercial, industrial and retail; while its performance, quality and natural timber façade has found favour with acoustics consultants, architects, developers, local authorities and homeowners alike.

THE GROWING CONCERN OF NOISE POLLUTION IN THE ENVIRONMENT

The World Health Organisation reports that noise is the second largest environmental cause of health problems, just behind the impact of air quality from particulate matter, and has set the European target limit of outdoor night noise levels at an annual average of 40 decibels (dB) in its new guidelines.

WHO findings revealed that people sleeping while exposed to night noise levels above 40dB on average throughout the year can suffer health effects like sleep disturbance and awakenings. Above 55dB long-term average exposure, noise can trigger elevated blood pressure and increase the risk of hypertension and premature deaths related to coronary heart disease and stroke.

Noise pollution in the environment is not just a matter for the bureaucrats to deal with through legislation. It affects all of us and it's our responsibility as good corporate citizens to ensure its effective management.

ENVIRONMENTAL NOISE AND LEGISLATION

The National Planning Policy Framework (NPPF) which supersedes the now withdrawn Planning Policy Guidance (PPG24), underlines and enforces key points in the Noise Policy Statement for England (NPSE), effectively meaning that it is now the responsibility of local authorities to implement acoustic guidance into local policy in context with government policy on sustainable development.

In practice, acoustic consultants are being brought in by architects, developers and construction companies at pre-planning stage on any project that could result in adverse impacts on the health and quality of life of local residents.

ACOUSTIC BARRIERS FOR ROAD NOISE APPLICATIONS

We are the first UK manufacturer of timber acoustic barriers who can CE mark both its Jakoustic® Commercial & Highways Reflective system and Jakoustic® Commercial & Highways Absorptive system as compliant with the requirements of BS EN 14388:2005, the harmonised standard relating to Road traffic noise reducing devices. This follows the successful type testing and validation of both systems, including posts, reflective and absorptive surfaces, fixings and installation method carried out by BSI.

ACOUSTIC NOISE BARRIER SYSTEMS

The proven and versatile Jakoustic® timber acoustic barrier system is available in any height up to three metres and in a number of versions that can reduce noise levels by up to 32 decibels to provide effective solutions to environmental noise pollution with low lifetime costs.

The basis of the Jakoustic® system features our unique timber 'tuning fork' design posts and boards with an interlocking 'v' and tongue and groove design. The special profile has been carefully developed to locate the boards in such a way that eliminates gaps that sound could travel through, even when boards shrink and expand with changes in the weather. The fence is finished with a capping and counter rail.

Our Commercial & Highways systems utilises the same basic structure, incorporating galvanised steel I-beams as opposed to timber tuning fork posts.

Jakoustic® Specification	12K Envirofence® Reflective (pg 5)	Jakoustic® Reflective (pg 7)	Jakoustic® Absorptive (pg 9)	Jakoustic® Commercial & Highway Reflective (pg 11)	Jakoustic® Commercial & Highway Absorptive (pg13)
Laboratory Tested/ Compliance	Not Tested	Category B3 BS EN 1793-2:1998	Category B3 BS EN 1793-2:1998 Category A3 BS EN 1793-1:1998	Category B3 BS EN 1793-2:1998 BS EN 1974-1 and 2 BS EN 14388:2005 (CE marking)*	Category B3 BS EN 1793-2:1998 Category A3 BS EN 1793-1:1998 BS EN 1794-1 and 2 BS EN 14388:2005 (CE marking)*
Timber Board Dimensions	20mm x 139mm Effective height 123mm	34mm x 143mm Effective height 123mm	34mm x 143mm plus additional absorptive layer covered with protective membrane Effective height 123mm	34mm x 143mm Effective height 123mm	34mm x 143mm Plus additional absorptive layer covered with a protective membrane Effective height 123mm
Noise Reduction	Meets minimum requirements for an acoustic barrier	Up to 28dB	Up to 32dB	Up to 28dB	Up to 32dB
Superficial Mass	10-12kg/m^2	25kg/m^2	28kg/m^2	25kg/m^2	28kg/m^2
Posts	For heights up to 2.0m use standard timber tuning fork posts For 2.1m - 3.0m height use standard tuning fork posts + steel spur post galvanised & powder coated black	For heights up to 2.0m use standard timber tuning fork posts For 2.1m - 3.0m height use standard tuning fork posts + steel spur post galvanised & powder coated black	For heights up to 2.0m use standard timber tuning fork posts For 2.1m - 3.0m height use standard tuning fork posts + steel spur post galvanised & powder coated black	Steel I-Beams Standard galvanised to BS EN ISO 1461	Steel I-Beams Standard galvanised to BS EN ISO 1461
CE Marked System for Road Noise	-	No	No	Yes	Yes
In-ground Posts	Yes	Yes	Yes	Yes	Yes
Base-plated Post Options	-	Optional	Optional	Optional	Optional
National Highway Sector Scheme 4	Timber can be treated and certified to National Highway Sector Scheme 4	Timber can be treated and certified to National Highway Sector Scheme 4	Timber can be treated and certified to National Highway Sector Scheme 4	Timber can be treated and certified to National Highway Sector Scheme 4	Timber can be treated and certified to National Highway Sector Scheme 4
National Highway Sector Scheme 2C	-	-	-	Yes	Yes
High Wind Loading	Optional	Optional	Optional	Optional	Optional
Up to 3.0m High	Yes	Yes	Yes	Yes	Yes
Above 3.0m High	-	-	-	Yes	Yes

*Please note: BS EN 14388:2015 is the latest standard but is not yet harmonised and hence cannot be used for CE marking

12K ENVIROFENCE®

12k Envirofence® is ideal for projects where there is a need for a barrier that meets with minimum superficial mass requirements. While it has not been subject to laboratory testing, 12k Envirofence® offers a cost-effective solution for situations where lower level of noise reduction is acceptable in applications subject to low to moderate wind loads. Its timber construction provides an attractive natural appearance that is appropriate for housing developments, retail and leisure facilities, schools, parks, and construction sites.

- 25 year guarantee using Jakcure® vacuum pressure treated timber
- Overlength timber tuning fork posts for setting in concrete as standard
- Barrier heights from 1.8m – 2.0m supplied with timber tuning fork posts (for general applications with low to moderate wind loads)
- Barrier heights of 2.1m - 3.0m include galvanised and/or powder coated steel spur posts
- Barrier heights from 2.1m – 5.0m may be specified with galvanised steel I-beam posts to suit ground and location conditions
- 20mm x 139mm x 4.8m (planed) boards with small chamfers which form a V-join between boards
- Complete with capping and counter rail
- Capping rail 34mm x 145mm x 4.8m (planed)
- Counter rail size 34mm x 70mm x 2.4m (planed)

Key Features	Benefits
Reflective barrier type	Lower cost
Timber construction	Timber façade offers low visual impact
10-12kg per sqm superficial mass	Meets minimum planning specification for 10-12kg per sqm superficial mass for an acoustic barrier
Lighter weight boards with same 125mm cover face as Jakoustic® barriers	Fast and easy to install
Jakcure® vacuum pressure treated	25 year guarantee
Planed timber finish	Suitable for installation on uneven and sloping ground
Flat face anti-climb design	Timber conforms fully to the EUTR (European Timber Regulations)

HEIGHT (MM)	POST CENTRES (MM)	SPUR POST (MM)	OVERALL POST LENGTH (MM)
2000	2410	N/A	2900
2500	2410	2000	3400
3000	2410	2500	3900

APPLICATIONS

- Residential
- Schools
- Parks
- Demarcation
- Low - medium risk security sites

POST OPTIONS

- Timber tuning fork posts for heights up to 3m

FINISHES

- Jakcure® treated timber as standard
- Spur posts hot dip galvanised to BS EN ISO 1461 and/or powder coated
- Planed timber finish

JAKOUSTIC® REFLECTIVE

The Jakoustic® Reflective barrier is particularly effective in reflecting noise away from its face by employing heavy section planed timber boards with deep interlocking 'v' tongue and groove joints, coupled to tuning fork posts that clamp the boards together to eliminate gaps that sound could easily travel through.

Offering up to 28dB* reduction in noise, it has been designed for construction on site and can accommodate changes in site levels or profile.

- Approximate superficial mass 25kg/m^2
- Heights from 1.8m - 3.0m available as standard
- 25 year guarantee using Jakcure® vacuum pressure treated timber
- Overlength timber tuning fork posts for setting in concrete as standard
- Heights to 2.0m supplied with timber tuning fork posts (for general applications with low to moderate wind loads)
- Heights of 2.1m - 3.0m include timber tuning fork posts and galvanised and/or powder coated steel spur posts
- 34mm x 143mm x 4.8m (planed) boards with unique deep interlocking 'v' tongue and groove joint
- Complete with capping and counter rail
- Capping rail 34mm x 145mm x 4.8m (planed)
- Counter rail size 34mm x 70mm x 2.4m (planed)
- For additional strength against higher wind loading see Jakoustic® Commercial & Highway Reflective (page 11)
- Rating according to BS EN 1793- 2:1998; Category = B3
- Laboratory sound reduction 28dB*

Key Features	Benefits
Reflective barrier type	Up to 28dB* reduction in noise
34mm thick 'V' boards	Timber conforms fully to the EUTR (European Timber Regulations) requirements
25kg/m² superficial mass	Easy to install
Planed timber finish	Attractive timber façade
Jakcure® vacuum pressure treated	25 year guarantee
Flat face anti-climb design	High privacy design offering good security
Matching pedestrian, swing and tracked sliding gates	Suitable for installation on uneven and sloping ground

**Jakoustic® barrier certified laboratory results: Rating according to BS EN 1793- 2:1998; category = B3; laboratory sound reduction 28dB.*

HEIGHT (MM)	POST CENTRES (MM)	SPUR POST (MM)	OVERALL POST LENGTH (MM)
2000	2410	N/A	2900
2500	2410	2000	3400
3000	2410	2500	3900

APPLICATIONS

- Housing
- Commercial / industrial properties
- Data centres
- Retail
- Logistics
- Low / medium wind conditions

POST OPTIONS

- Timber tuning fork posts for heights up to 3m

FINISHES

- Jakcure® treated timber as standard
- Spur posts hot dip galvanised to BS EN ISO 1461 and/or powder coated
- Planed timber finish

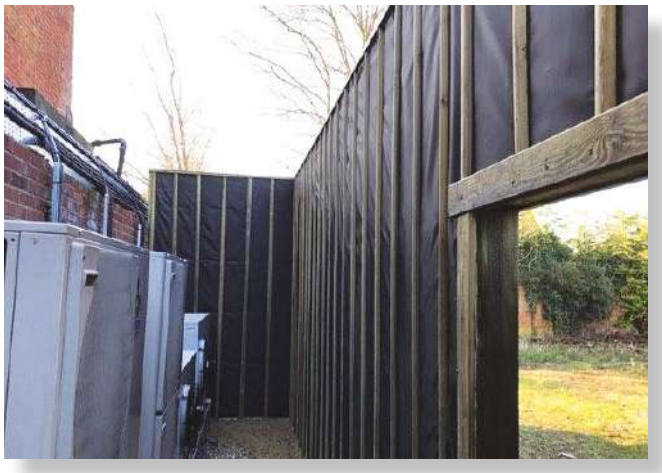
JAKOUSTIC® ABSORPTIVE

The Jakoustic® Absorptive barrier is designed specifically to keep noise within a contained space and is typically used around continuous power supply generators, air conditioner compressors, waste compactors and goods loading areas.

Jakoustic® Absorptive takes the proven Jakoustic® Reflective design of heavy section planed timber boards with deep interlocking 'v' tongue and groove joint, coupled to tuning fork posts, and adds an absorptive layer of a mineral Rockwool fibre and protective membrane to one side of the barrier.

Offering up to 32dB* reduction in noise, it has been designed for faster installation times on site and can accommodate changes in site levels or profile.

- Approximate Superficial Mass 28kg/m²
- Heights from 1.8m – 3.0m available as standard
- 25 year guarantee using Jakcure® vacuum pressure treated timber
- Absorptive layer of a mineral Rockwool fibre and protective membrane to one side
- Overlength timber tuning fork posts for setting in concrete as standard
- Heights to 2.0m supplied with timber tuning fork posts (for general applications with low to moderate wind loads)
- Heights of 2.1m - 3.0m include timber tuning fork posts and galvanised and/or powder coated steel spur posts
- 34mm x 143mm x 4.8m (planed) boards with unique deep interlocking 'v' tongue and groove joint
- Complete with capping and counter rail
- For additional strength against higher wind loading see Jakoustic® Commercial & Highway Absorptive (page 13)
- Rating according to BS EN 1793- 2:1998; Category = B3
- Rating according to BS EN 1793-1:1998; Category = A3
- Laboratory sound reduction 32dB



Key Features	Benefits
Absorptive barrier type	Up to 32dB* reduction in noise
Unique tuning fork design posts	Timber façade offers low visual impact
28kg/m² superficial mass	Fast and easy to install
Planed timber finish	Attractive timber construction
Absorptive layer of a mineral Rockwool fibre and protective membrane to one side	Timber conforms fully to the EUR (European Timber Regulations)
Jakcure® vacuum pressure treated	25 year guarantee
Flat face anti-climb design	High privacy design offering good security
Matching pedestrian, swing and tracked sliding gates	Suitable for installation on uneven and sloping ground

**Jakoustic® barrier certified laboratory results: Rating according to BS EN 1793- 2:1998; Category = B3. Rating according to BS EN 1793-1:1998; Category=A3. Laboratory sound reduction 32dB.*

HEIGHT (MM)	POST CENTRES (MM)	SPUR POST (MM)	OVERALL POST LENGTH (MM)
2000	2410	N/A	2900
2500	2410	2000	3400
3000	2410	2500	3900

APPLICATIONS

- Commercial properties
- Retail
- Logistics
- Industry
- Demarcation
- Low / medium wind conditions

POST OPTIONS

- Timber tuning fork posts for heights up to 3m

FINISHES

- Absorptive face clad in black membrane with vertical timber battens as standard
- Spur posts hot dip galvanised to BS EN ISO 1461 and powder coated black as standard
- Planed timber finish

JAKOUSTIC® COMMERCIAL & HIGHWAY REFLECTIVE

The Jakoustic® Commercial & Highway Reflective barrier system has been designed for commercial and highway applications, providing the same level of noise protection as the original Jakoustic® Reflective barrier, but it can be additionally CE marked as a whole system for road infrastructure.

Jakoustic® interlocking 'V' boards are affixed to galvanised steel I-beam posts for additional strength and rigidity, meeting not only stringent Highways Agency standards BS EN1794-1 and 2, but also ideally suited for application in exposed locations subject to high wind loading. The system is available with matching capping, counter rails and timber cladding to posts to further enhance its appearance. The complete acoustic barrier system can be CE marked as compliant with the requirements of EN 14388:2005 relating to road traffic noise reducing devices.

- Can be CE marked as compliant with the requirements of harmonised standard EN 14388:2005 relating to traffic noise reducing devices
- Timber can be treated to National Highway Sector Scheme 4 and the system can be installed in compliance with National Highway Sector Scheme 2C
- Approximate Superficial Mass 25kg/m^2
- Up to 28dB* noise reduction
- Overlength galvanised steel I-beam posts for setting in concrete as standard
- 34mm x 143mm x 4.8m (planed) boards with unique deep interlocking "V" tongue and groove joint
- Capping rail 34mm x 145mm x 4.8m (planed)
- Counter rail size 34mm x 70mm x 2.4m (planed)
- Can accommodate changes in level or profile
- Anti climb and scale design
- Matching pedestrian, swing and tracked sliding gates
- Heights from 1.8m available as standard
- 25 year guarantee using Jakcure® vacuum pressure treated timber

Key Features	Benefits
Reflective barrier type	Up to 28dB* reduction in noise
Attractive timber construction	Timber façade offers low visual impact
25kg/m² superficial mass	Fast and easy to install
Planed timber finish	Timber conforms fully to the EUR (European Timber Regulations)
Jakcure® vacuum pressure treated	Suitable for installation on uneven and sloping ground
Flat face anti-climb design	High privacy design offering good security
Matching pedestrian, swing and tracked sliding gates	Can be CE Marked as compliant with the requirements of current harmonised standard EN 14388:2005 relating to traffic noise reducing devices
Heights from 1.8m+	Meets Highways Agency standards BS EN 1794-1 and 2
Jakcure® 25-year guarantee	Suitable for exposed sites subject to high wind loading

**Jakoustic® Commercial and Highway barrier certified laboratory results:*
Rating according to BS EN 1794-1 Amex A, B, C, F, E

Jakoustic® Highway Laboratory sound reduction 28dB Superficial Mass 25kg/m²

Designed in accordance with BS EN 1794-2 (Detailed compliance statements available)

APPLICATIONS

- Highways
- Construction sites
- Commercial properties
- Logistics
- Railways
- Sites subject to high wind loading

POST OPTIONS

- Base plated galvanised steel I- beam posts to bolt down to concrete base foundations
- Overlength steel I-beam posts

GATES

- Matching gates available

FINISHES

- One face showing Jakcure® treated timber on posts as standard
- Steel I-beam posts hot dip galvanised to BS EN ISO 1461
- Planed timber finish

JAKOUSTIC® COMMERCIAL & HIGHWAY ABSORPTIVE

Shown: absorptive layer installed 'between posts'

The Jakoustic® Commercial & Highway Absorptive barrier system has been designed for commercial and highway applications, providing the same level of noise protection as the original Jakoustic® Absorptive barrier, but it can be additionally CE marked as a whole system for road infrastructure.

The barrier takes the proven Jakoustic® Commercial & Highway Reflective design of heavy section planed timber boards with deep interlocking 'v' tongue and groove joint and adds an absorptive layer of mineral Rockwool fibre and protective membrane to one side to achieve a noise reduction of up to 32dB*. The barrier is fixed to galvanised steel I-beam posts for additional strength and rigidity, meeting not only stringent Highways Agency standards BS EN1794-1 and 2, but also ideally suited for exposed locations subject to high wind loading. The Jakoustic® Commercial & Highway Absorptive system is available with matching timber capping and counter rails to further enhance its appearance. The complete acoustic barrier system can be CE marked as compliant with the requirements of EN 14388:2005 relating to road traffic noise reducing devices.

- Can be CE marked as compliant with the requirements of harmonised standard EN 14388:2005 relating to traffic noise reducing devices
- Timber can be treated to National Highway Sector Scheme 4 and the system can be installed in compliance with National Highway Sector Scheme 2C
- Approximate Superficial Mass 28kg/m²
- Heights from 1.8m available as standard
- 25 year guarantee using Jakcure® vacuum pressure treated timber
- Absorptive layer of a mineral Rockwool fibre and protective membrane to one side
- Overlength galvanised steel I-beam posts for setting in concrete as standard
- Complete with capping and counter rail (optional)
- Absorptive layer can be installed to the continuous 'clad' face or 'between posts'
- Rating according to BS EN 1793- 2:1998; Category = B3
- Rating according to BS EN 1793-1:1998; Category = A3
- Laboratory sound reduction 32dB*

Key Features	Benefits
Absorptive barrier type	Up to 32dB* reduction in noise
Attractive timber construction	Timber façade offers low visual impact
28kg/m² superficial mass	Fast and easy to install
Planed timber finish	Timber conforms fully to the EUR (European Timber Regulations)
Absorptive layer of mineral Rockwool fibre and protective membrane to one side	Can be CE Marked as compliant with the requirements of EN 14388:2005 relating to traffic noise reducing devices
Jakcure® vacuum pressure treated	Suitable for installation on uneven and sloping ground
Flat face anti-climb design	High privacy design offering good security
Matching pedestrian, swing and tracked sliding gates	Jakcure® 25-year guarantee

**Jakoustic® barrier certified laboratory results:*
Rating according to BS EN 1793- 2:1998; Category = B3.
Rating according to BS EN 1793-1:1998; Category=A3. Laboratory sound reduction 32dB.
Rating according to BS EN 1794-1 Amex A, B, C, F, E

APPLICATIONS

- Commercial properties
- Retail
- Logistics
- Industry
- Railways
- Sites subject to high wind loading

POST OPTIONS

- Base plated galvanised steel I- beam posts to bolt down to concrete base foundations
- Overlength steel I-beam posts

GATES

- Matching gates available

FINISHES

- One face showing Jakcure® treated timber on posts as standard
- Steel I-beam posts hot dip galvanised to BS EN ISO 1461
- Absorptive face clad in black membrane with vertical timber battens as standard
- Planed timber finish

JAKOUSTIC® GATES

For a totally integrated, acoustic barrier solution we offer matching Jakoustic® timber or galvanised steel framed gates for pedestrian and vehicular access.

Configured as singles or pairs to match the Jakoustic® Reflective or Absorptive barrier systems, gates are available in swing and tracked sliding designs for manual or automated operation.

Swing Gates

Available in a range of sizes*.

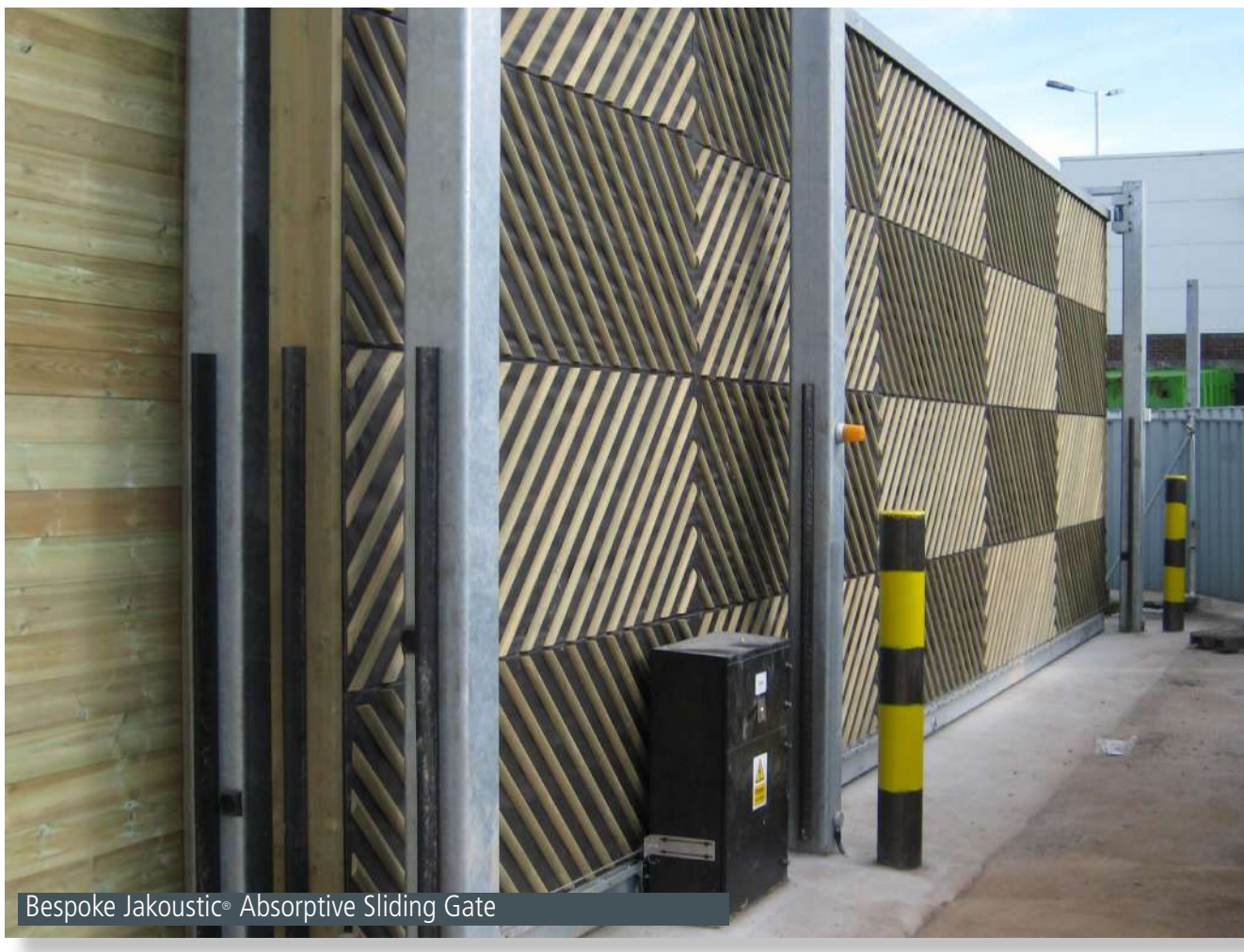
Swing gates can be hung on timber or galvanised, or galvanised and powder coated steel posts, dependent on size, with the addition of optional lintels if required.

Tracked Sliding Gates

Available in a range of sizes, please ask for more details.

The largest Jakoustic® tracked sliding gate that we have manufactured and installed to date is 3.5m high x 21m wide single leaf - but we can do larger.

*note: about the importance of automation on swing gates that generally exceed 6.5sqm per leaf



Bespoke Jakoustic® Absorptive Sliding Gate

APPLICATIONS

- Commercial properties
- Retail
- Logistics
- Industry
- Sites subject to high wind loading

FINISHES

- Jakcure® treated timber as standard
- Posts are hot dip galvanised to BS EN ISO1461 as standard

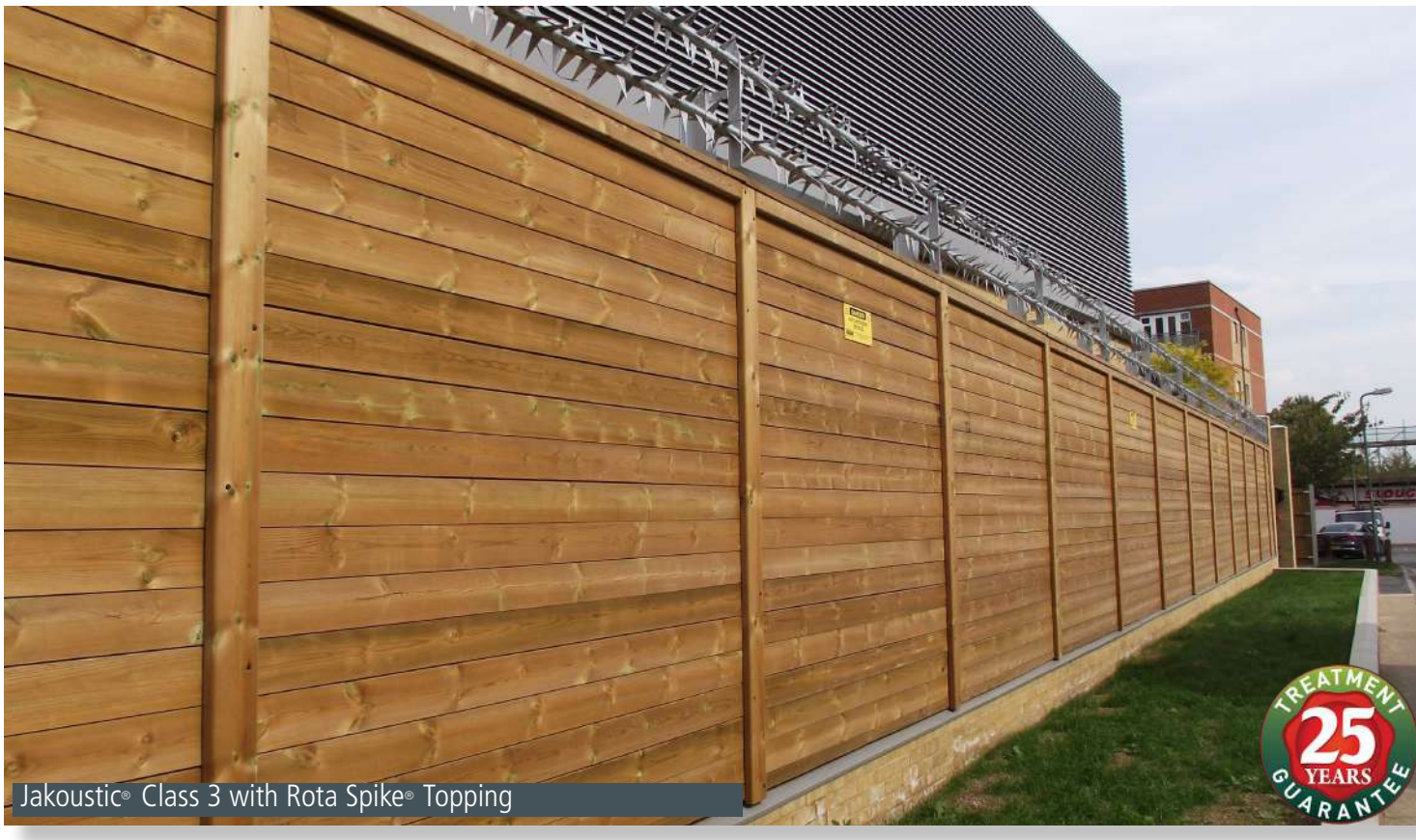
HIGH SECURITY JAKOUSTIC® CLASS 3 & TRIDENT BARRIERS

As the UK's leading manufacturer of certified security fencing systems, we are the only manufacturer able to offer a range of Jakoustic® timber barrier systems that have been successfully tested by Centre for the Protection of National Infrastructure (CPNI), Loss Prevention Certification Board (LPCB) and approved by Secured by Design as meeting with police preferred specification.

The beauty of the Jakoustic® Class 3 and Trident® systems is that they provide assured levels of security without projecting an intimidating presence or drawing attention to site activities; they also offer the added benefits of certified noise reduction capabilities and a high degree of privacy.

Due to the nature of high security products, detailed specifications may be subject to both secrecy and commercial confidentiality agreements and are not made available in the public domain. For more information on these products, please contact our High Security Specialist Team on 0800 408 4767 or email highsecurity@jacksons-security.co.uk

JAKOUSTIC® CLASS 3



Jakoustic® Class 3 with Rota Spike® Topping

Jakoustic® Class 3 is a variant of the Jakoustic® Reflective barrier that has been tested and certified by LPCB to LPS 1175 C5 (SR3) to provide moderate resistance to determined attempts of forced entry using a range of techniques employing hand and portable power tools.

- LPS 1175 C5 (SR3) / F1 Certified as standard.
- Can be upgraded to G1 Certification. Contact our sales team for more information.
- Double layer of 34mm thick timber boards provide a high level of resistance to cutting
- Approximate Superficial Mass 25kg/m²
- Anti-climb design with completely flat face allowing no foot or hand holds
- Zero visibility through barrier
- Can accommodate changes in ground level or profile
- Hot dip galvanised I-beam posts
- Range of security toppings available
- Up to 28dB* noise reduction
- Available at heights from 2.5 to 6m
- Secured by Design Preferred Specification
- 25 year guarantee using Jakcure® vacuum pressure treated timber

HEIGHT (MM)	POST CENTRES (MM)	GRADIENTS	ANGLES IN FENCE LINE
2500 - 6000	2410	0° TO 18.5°	90°, 180° OR 270°

**Jakoustic® barrier certified laboratory results: Rating according to BS EN 1793- 2:1998; category = B3; laboratory sound reduction 28dB.*

CERTIFICATION

- LPS 1175 C5 (SR3) / F1 Certified
- Can be upgraded to meet G1 Certification
- Secured by Design Preferred

FINISHES

- Jakcure® treated timber as standard
- Posts are hot dip galvanised to BS EN ISO1461 as standard
- Optional powder coated posts to BS EN 13438
- Additional marine coating for installations within 500m of salt water or estuary

CONTACT

- For detailed specifications, please contact our High Security Team on 0800 408 4767 or email high.security@jacksons-security.co.uk

TRIDENT® JAKOUSTIC® 2

Trident® Jakoustic® 2 system is of a dual layer construction comprising a single facing of interlocking 'V' timber boards, lined with a layer of steel mesh to 1.70m above ground. The interlocking 'V' coupled to a tongue and groove eliminates gaps even when boards shrink and expand with changes in the weather.

The totally flat attack face, steel mesh lining and combination of dissimilar construction materials makes the fence difficult to scale or penetrate.

Trident® Jakoustic® 2 hides its security capability as the mesh lining is fixed to the back of the barrier.

- Secured by Design Preferred Specification
- Up to 28dB* noise reduction
- Superficial Mass 25kg/m²
- Jakcure® vacuum pressure treated timber
- Flat face allowing no foot or hand holds
- Zero visibility through barrier
- Can accommodate changes in ground level or profile
- Post extensions as standard to carry 3 rows of barbed wire topping or may be specified to carry other toppings
- 25-year Jakcure® treatment guarantee

HEIGHT INCLUDING TOPPING (MM)	TOPPING HEIGHT (MM)	POST CENTRES (MM)	TOPPING
3000	600	2410	3 ROWS OF BARBED WIRE

**Jakoustic® barrier certified laboratory results: Rating according to BS EN 1793- 2:1998; category = B3; laboratory sound reduction 28dB.*

CERTIFICATION

- Secured by Design Preferred

FINISHES

- Jakcure® treated timber as standard
- Galvanised mesh as standard
- Posts are hot dip galvanised to BS EN ISO1461 as standard
- Optional hot dip galvanised and powder coated posts to BS EN 1343
- Optional hot dip galvanised and marine coating for installations within 500m of salt water or estuary

CONTACT

- For detailed specifications, please contact our High Security Team on 0800 408 47 67 or email high.security@jacksons-security.co.uk

TRIDENT® JAKOUSTIC® 3

Trident® Jakoustic® 3 represents the ultimate in timber security barrier systems.

It is of a sandwich construction comprising two facings of interlocking 'V' timber boards, lined internally with a layer of high security steel mesh to 2.28m above ground.

The interlocking 'V' coupled to a tongue and groove eliminates gaps even when boards shrink and expand with changes in the weather.

The totally flat faces, double layer of 34mm thick timber and high security steel mesh liner provide a combination of unlike construction materials that makes the fence extremely difficult to scale or penetrate through and is equally effective against attempts to gain entry into or exit from secure sites.

- Secured by Design Preferred Specification
- Dual layer of 34mm thick timber acoustic boards
- Reinforcing layer of galvanised high security mesh
- 28dB* or greater noise reduction potential from increased superficial mass
- Superficial Mass 25kg/m² (for each timber face)
- Jakcure® vacuum pressure treated timber
- Flat face allowing no foot or hand holds
- Zero visibility through barrier
- Can accommodate changes in ground level or profile
- Post extensions as standard to carry 3 rows of barbed wire topping or may be specified to carry other toppings
- 25-year Jakcure® treatment guarantee

HEIGHT (MM)	TOPPING HEIGHT (MM)	POST CENTRES (MM)	TOPPING
3900	600	2410	3 ROWS OF BARBED WIRE

**Jakoustic® barrier certified laboratory results: Rating according to BS EN 1793- 2:1998; category = B3; laboratory sound reduction 28dB.*

CERTIFICATION

- Secured by Design Preferred

FINISHES

- Jakcure® treated timber as standard
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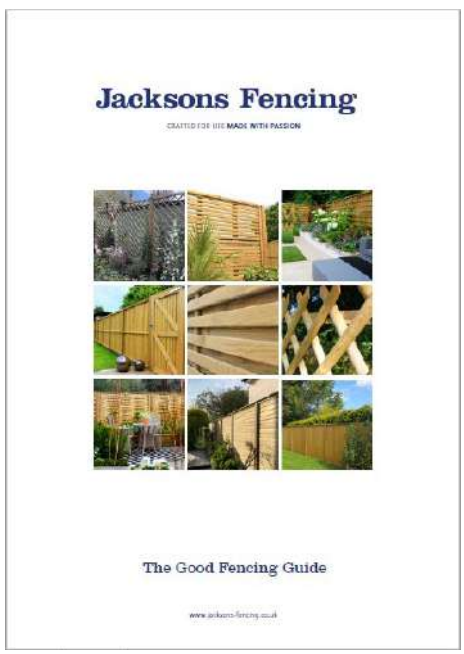

We offer a range of steel fencing, vehicle control barriers and hostile vehicle mitigation products suited to a range of applications including commercial premises, schools, high security sites, critical national infrastructure and sports pitches.

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CONTACT US

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Jakoustic® High-Security Barriers

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Jacksons Commercial Solutions

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Jacksons for Homeowners

In addition to our commercial and security products, Jacksons is one of the UK's leading manufacturers and suppliers of timber fencing, gates, decking, garden structures, landscaping timbers, household waste and recycling storage to homeowners, for more information, please contact our Retail Team on +44 (0) 1233 750 393 or email sales@jacksons-fencing.co.uk

Continuous Improvement

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Jacksons Fencing has a certified Quality Management System that complies with the requirements of LPCB: ISO 9001:2015

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Jacksons
Fencing

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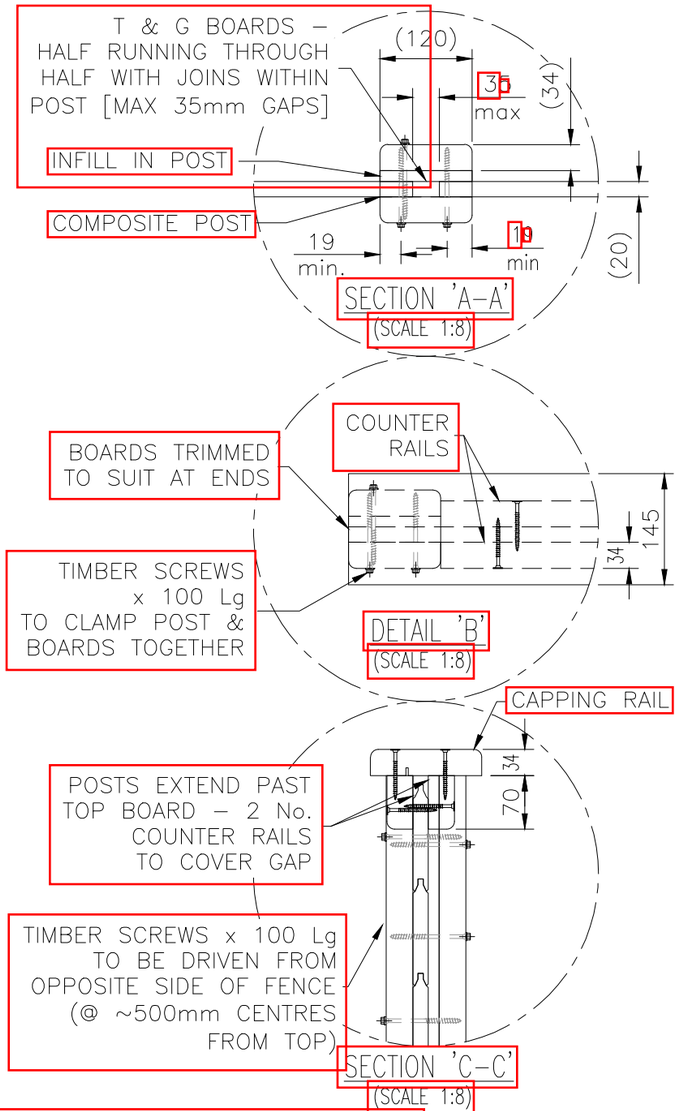
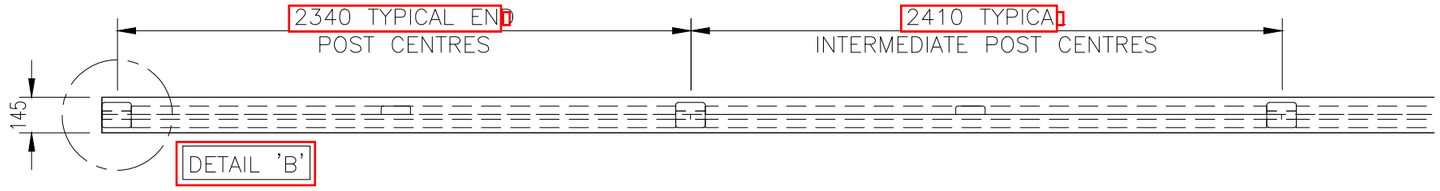
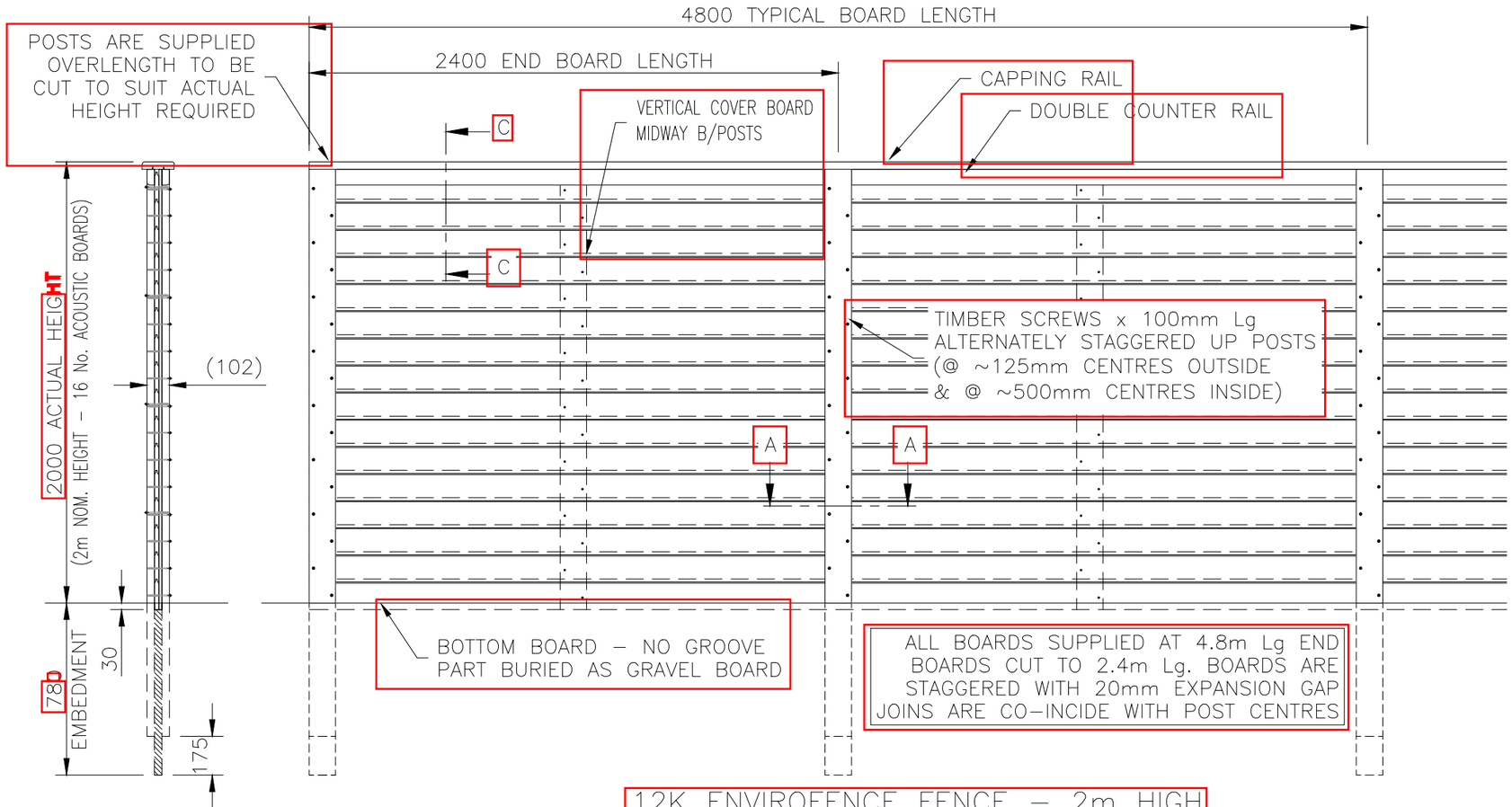
www.jacksons-security.co.uk



NOTE
COUNTER RAIL FIXINGS
65mm DECK SCREWS @ 600mm MAX CENTRES (5 PER COUNTER RAIL)
CAPPING RAIL FIXINGS
65mm DECK SCREWS 2 ROWS @ 600mm MAX CENTRES (20 PER CAPPING RAIL)

FENCING TO BE RAKED (NOT STEPPED) TO SUIT GROUND LEVELS AS STANDARD





12K ENVIROFENCE FENCE – 2m HIGH

NOTES.
ALL DIMENSIONS ARE IN mm (UNO)
GAPS UNDER FENCING ARE NOMINAL DUE TO GROUND LEVELS.

MATERIALS.
ACOUSTIC BOTTOM BOARD: 139 x 20 thk (123 Nom. FACE)
ACOUSTIC T & G BOARD: 139 x 20 thk (123 Nom. FACE)
CAPPING RAIL: 145 x 34 thk PAR
POST COVER BOARD: 120 x 35 thk
COUNTER RAIL: 70 x 34 thk PAR
POST INFILL: 120 x 16 thk
OPTIONAL STEEL SPUR POSTS, ASSESSED TO SUIT SITE LOCATION.
ALL FIXINGS ARE GALVANISED OR STAINLESS STEEL.

FINISH.
TIMBER: JAKCURED TREATED.
STEEL: GALVANISED TO BS EN ISO 1461
STEEL: POWDER COATED: BLACK RAL 9005

Jacksons Fencing
Stowting Common, Near Ashford, Kent, TN25 6BN
[redacted]

DO NOT SCALE – IF IN DOUBT ASK

5	28/03/2020	NEW BORDER + NOTES
4	02/05/19	UPDATE
3	19/03/18	REDRAWN
2	27/11/13	Update
1	09/11/13	POST CENTRES 2410

Drawn JR
Date 21/06/2011
Checked AT
Size A3
Scale 1:25 U.O.S

TITLE SALES DRAWING
12K ENVIROFENCE FENCE – 2m HIGH
CUSTOMER
ACK No.
Drawing No. J7/01166
Sheet 1

21.20.020 B

New Residential Development
Paygrove Lane, Longlevens, Gloucester.

Reserved Matters – Summary of Conditons and Submitted Documentation

Summary of Planning Conditions REF: 16/01558/OUT
Validated: 21st December 2016.
Approval Dated 24th August 2018

Outline application (with means of access offered for consideration) for residential redevelopment of up to 10 dwellings and public open space including associated landscaping, car parking and access.

Nº.	Condition Type	Wording	Comment / Submitted information
1	Statement Prior to commencement	**Condition 1** Approval of the details of the appearance, landscaping, layout and scale of the development (hereinafter called "the reserved matters") shall be obtained in writing from the Local Planning Authority prior to the commencement of development except as provided for by other conditions. **Reason** To comply with the requirements of Section 91 of the Town and Country Planning Act 1990 as amended by Section 51 of the Planning and Compulsory Purchase Act 2004.	Full details of site layout PL005 and house types PLHT 01-05 and PLG01-02 submitted, including materials and finishes PL006.
2	Statement	**Condition 2** Plans and particulars of the reserved matters referred to in condition 1 above shall be submitted in writing to the Local Planning Authority and shall be carried out as approved. **Reason** Required to be imposed by Section 92 of the Town and Country Planning Act 1990.	
3	Statement	**Condition 3** Application for approval of the reserved matters shall be made to the Local Planning Authority before the expiration of 5 years from the date of this permission. **Reason** Required to be imposed by Section 92 of the Town and Country Planning Act 1990.	Approval dated 24.08.2018

4	Statement	**Condition 4** The development hereby permitted shall begin either before the expiration of 5 years from the date of this permission, or before the expiration of 2 years from the date of approval of the last of the reserved matters to be approved, whichever is the later. **Reason** Required to be imposed by Section 92 of the Town and Country Planning Act 1990.	Approval dated 24.08.2018
		Maximum Parameters	
5	Statement	**Condition 5** The development shall comprise no more than 10 no. residential units. **Reason** To define the terms of this permission.	10 dwellings proposed refer to site layout PL005
6	Statement Details provided	**Condition 6** The scale of development shall be no greater than two storeys. **Reason** To secure the maximum scale parameters in the application in the interests of preserving the character and appearance of the area and the amenities of neighbouring residents in accordance with Paragraphs 17 and 58 of the NPPF, Policies BE.1, BE.7, BE.17 and BE.21 of the 2002 City of Gloucester Second Deposit Local Plan, and Policies SD5 and SD15 of the Gloucester, Cheltenham and Tewkesbury Joint Core Strategy Main Modifications 2017.	All house types two storeys under pitched roofs, refer to house type plans and elevations PLHT 01-05
		Design	
7	Prior to works above ground	**Condition 7** No above ground construction of a building shall be commenced until details of all building facing materials and finishes for that building have been submitted to and approved in writing by the Local Planning Authority. Development shall be carried out in accordance with the approved details. **Reason** To ensure that the materials and exterior building components are appropriate to their context, in accordance with Policy SD5 of the Gloucester, Cheltenham and Tewkesbury Joint Core Strategy Main Modifications 2017, Paragraphs 17 and 58 of the National Planning Policy Framework	Proposed finishing materials to houses indicated on PL006

		and Policy BE.7 of the Second Deposit City of Gloucester Local Plan (2002).	
8	Details Provided	**Condition 8** Street and open space furniture, screen walls, fences/railings and other means of enclosure shall be implemented only in accordance with details (set out on scaled plans in elevation and layout) that have been submitted to and approved in writing by the Local Planning Authority. Boundary treatments shall be designed so as not to compartmentalise areas of the site, to allow for the passage of small mammals. **Reason** In the interests of privacy and security, to ensure that the design and materials are appropriate to their context, and to secure biodiversity mitigation and enhancement in accordance with Policies SD5, SD10, SD15 and INF4 of the Gloucester, Cheltenham and Tewkesbury Joint Core Strategy Main Modifications 2017, Paragraphs 17, 58, 109 and 118 of the National Planning Policy Framework and Policies BE.5, BE.7 and B.8 of the Second Deposit City of Gloucester Local Plan (2002).	Refer to plans PL005, PL006, PL007, PL008 Enviro Fence detail J7/01166
		Landscaping	
9	Details provided	**Condition 9** No development including demolition or site clearance shall be commenced on the site or machinery or material brought onto the site for the purpose of development until full details of adequate measures to protect trees and hedgerows have been submitted to and approved in writing by the local planning authority. These shall include: **A.** Fencing. Protective fencing must be installed around trees and hedgerows to be retained on site. The protective fencing design must be to specifications provided in BS5837:2005 or subsequent revisions, unless agreed in writing with the local planning authority. A scale plan must be submitted and approved in writing by the local planning authority accurately indicating the position of protective fencing. No development shall be commenced on site or machinery or material brought onto site until the	Refer to proposals by MHP Arboricultural

		approved protective fencing has been installed in the approved positions and this has been inspected on site and approved in writing by the local planning authority. Such fencing shall be maintained during the course of development, **B.** Tree Protection Zone (TPZ) The area around trees and hedgerows enclosed on site by protective fencing shall be deemed the TPZ. Excavations of any kind, alterations in soil levels, storage of any materials, soil, equipment, fuel, machinery or plant, citing of site compounds, latrines, vehicle parking and delivery areas, fires and any other activities liable to be harmful to trees and hedgerows are prohibited within the TPZ, unless agreed in writing with the local planning authority. The TPZ shall be maintained during the course of development	
10	Statement. Details provided	**Condition 10** The approved landscaping details shall be carried out in full concurrently with the development and shall be completed no later than the first planting season following the completion of the buildings. The planting shall be maintained for a period of 5 years following implementation. During this time any trees, shrubs or other plants which are removed, die, or are seriously damaged shall be replaced during the next planting season with others of similar size and species unless the local planning authority gives written consent to any variation. If any plants fail more than once they shall continue to be replaced on an annual basis until the end of the 5 year maintenance period. **Reason** To ensure a satisfactory and well planned development and to preserve and enhance the quality of the environment, in accordance with Policies BE.4 and BE.12 of the Second Deposit City of Gloucester Local Plan (2002), Policy SD5 of the Gloucester, Cheltenham and Tewkesbury Joint Core Strategy Main Modifications 2017 and Paragraphs 17 and 58 of the NPPF.	Refer to landscape plan PL006

		Archaeology	
11	Detail provided	**Condition 11** No development shall take place within the application site until the applicant, or their agents or successors in title, has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been submitted by the applicant and approved in writing by the Local Planning Authority. **Reason** To make provision for a programme of archaeological mitigation, so as to record and advance understanding of any heritage assets which will be lost, in accordance with paragraph 141 of the National Planning Policy Framework, Policy SD9 of the Gloucester, Cheltenham and Tewkesbury Joint Core Strategy Main Modifications 2017 and Policies BE.36, BE.37 & BE.38 of the Gloucester Local Plan (2002 Second Stage Deposit). This is necessary pre-commencement of development due to the potential harm to heritage assets from early phase works.	Written Scheme of Investigation Pre-construct Archaeology Ltd
		Ecology	
12	Detail Provided	**Condition 12** Bird and bat boxes (or facilities of a similar nature) shall be installed in accordance with details to be submitted to and approved in writing by the Local Planning Authority. They shall be installed in full in accordance with the approved details prior to occupation of the respective buildings or prior to the end of the first planting season following completion of the development in the event of tree-mounted fittings. **Reason** To secure biodiversity mitigation and enhancement in accordance with Policies SD10 and INF 4 of the Gloucester, Cheltenham and Tewkesbury Joint Core Strategy Main Modifications 2017, Paragraphs 17, 109 and 118 of the NPPF and Policy B.8 of the 2002 City of Gloucester Second Deposit Local Plan.	Refer to details by All Ecology
13	Detail provided	**Condition 13** No development shall commence until a site walkover survey has been undertaken	Refer to details by All Ecology

		by a qualified ecologist to investigate the presence of newts on the site and the results have been submitted to the Local Planning Authority. If their presence is confirmed no development shall commence until a mitigation strategy has been submitted to and approved in writing by the Local Planning Authority (including a timetable for its implementation) and the approved strategy shall thereafter be implemented in accordance with its terms. **Reason** To mitigation potential impact on biodiversity in accordance with Policies SD10 and INF 4 of the Gloucester, Cheltenham and Tewkesbury Joint Core Strategy Main Modifications 2017, Paragraphs 17, 109 and 118 of the NPPF and Policy B.8 of the 2002 City of Gloucester Second Deposit Local Plan.	
		Drainage	
14	Details provided	**Condition 14** No development shall commence on site until a detailed scheme for the disposal of surface water that employs a SuDS strategy has been submitted to and approved in writing by the Local Planning Authority. The submission must demonstrate the technical feasibility/viability of the drainage system through the use of SuDS to manage the flood risk to the site and elsewhere and the measures taken to manage the water quality for the life time of the development. The drainage scheme shall be carried out in accordance with the approved details and completed in full prior to occupation of the development. The drainage scheme shall include the following; ▯ The peak surface water discharge rate from the site for all events up to the critical duration 1 in 100 year (+ 40% climate change) event shall not exceed 3.9 l/s. ▯ The above rate includes runoff captured from all permeable and impermeable areas within the red line boundary. If the drained area is reduced in size, then the permissible discharge rate shall be re-calculated.	Refer to details by Cotswold Transport Planning

		▯ The SuDS design shall ensure that surface water runoff from the field across the whole of the north boundary is captured. ▯ The SuDS design shall accommodate as much of the required attenuation volume as possible in a swale. The swale shall not occupy a width of more than 7 metres and shall have side slopes as shallow as possible (not exceeding 1 in 5 on any side facing a playing pitch on the site). ▯ Any attenuation volume which cannot be accommodated within the swale shall be accommodated within a secondary attenuation feature at a location to be specified. **Reason** To ensure that the development is provided with a satisfactory means of drainage as well as to reduce the risk of creating or exacerbating a flooding problem and to minimise the risk of pollution, in accordance with Policies FRP.1a, FRP.6, FRP.11 of the City of Gloucester Second Deposit Local Plan 2002 Policy INF3 of the Gloucester, Cheltenham and Tewkesbury Joint Core Strategy Main Modifications 2017 and Paragraph 103 of the NPPF. Details are required pre-commencement given the potential impact on the possible drainage design of early phase works.	
15	Details provided	**Condition 15** No building shall be occupied until a SuDS management and maintenance plan for any SuDS/attenuation features and associated pipework has been submitted to and approved in writing by the Local Planning Authority. The approved SuDS maintenance plan shall be implemented in full in accordance with the agreed terms and conditions and shall operate for the lifetime of the development. **Reason** To ensure that the development is provided with a satisfactory means of drainage as well as to reduce the risk of creating or exacerbating a flooding problem and to minimise the risk of pollution, in accordance with Policies FRP.1a, FRP.6, FRP.11 of the City of Gloucester Second Deposit Local Plan 2002 Policy INF3 of the	Refer to details by Cotswold Transport Planning

		Gloucester, Cheltenham and Tewkesbury Joint Core Strategy Main Modifications 2017 and Paragraph 103 of the NPPF.	
16	Details provided	**Condition 16** No development shall commence until a comprehensive scheme for the provision of works for the disposal of foul sewage has been submitted to and approved in writing by the Local Planning Authority. The approved scheme shall thereafter be implemented to serve the development, and no buildings shall be occupied until satisfactory foul water drainage facilities for these buildings are in place and operational. **Reason** To ensure that the development is provided with a satisfactory means of drainage as well as to reduce the risk of creating or exacerbating a flooding problem and to minimise the risk of pollution, in accordance with Policies FRP.1a, FRP.6, FRP.11 of the City of Gloucester Second Deposit Local Plan 2002 Policy INF3 of the Joint Core Strategy Main Modifications 2017 and Paragraph 103 of the NPPF.	Refer to details by Cotswold Transport Planning
		Environmental Health	
17	Details provided	**Condition 17** Prior to commencement of the development hereby permitted, an Environmental Construction Management Plan shall be submitted to and approved in writing by the Local Planning Authority which specifies mitigation measures in respect of the following issues (including preparatory groundworks) in order to prevent nuisance. The development shall not be commenced until the approved plan has been made fully operational, and thereafter it shall be operated and maintained for the full duration of the construction phase. The scheme shall include details of how dust will be qualitatively monitored: **1** Dust from demolition **2** Dust from groundworks **3** Dust from haul roads **4** Dust from stockpiles and material handling/removal	Refer to report provided by RSK

		5 Light from security compounds **6** Storage of waste **7** Keeping highways clear of mud **8** Parking for contractors **Reason** To safeguard the amenities of the area and the waterway in accordance with Policies FRP.9, FRP.10, FRP.11 and BE.21 of the 2002 City of Gloucester Second Deposit Local Plan, Policy SD15 of the Gloucester, Cheltenham and Tewkesbury Joint Core Strategy Main Modifications 2017 and Paragraphs 17, 109, 120 and 123 of the NPPF. This is necessary pre-commencement of development due to the harm that could otherwise be caused by early-phase works.	
18	Statement	**Condition 18** Construction work and the delivery of materials shall be limited to the hours of 0800 hours to 1800 hours Monday to Friday, 0800hours to 1300hours on Saturdays and for the avoidance of doubt no construction work or deliveries shall take place on Sundays or Bank Holidays. **Reason** To safeguard the amenities of the area in accordance with Policies FRP.9, FRP.10, FRP.11 and BE.21 of the 2002 City of Gloucester Second Deposit Local Plan, Policy SD15 of the Gloucester, Cheltenham and Tewkesbury Joint Core Strategy Main Modifications 2017 and Paragraphs 17, 109, 120 and 123 of the NPPF.	
19	Statement. Details provided	**Condition 19** Prior to the occupation of any unit hereby permitted a noise fence or fences (as may be required) shall be installed in full at the site boundary with any rear garden of a residential property adjacent to the site where that garden would be situated next to the access road of the development, in accordance with a scheme to be submitted to and approved in writing by the Local Planning Authority, and shall be maintained as such thereafter. **Reason** To safeguard the amenities of the area in accordance with Policies FRP.10, FRP.11 and BE.21 of the 2002 City of Gloucester Second Deposit Local Plan, Policy SD15 of	Refer to details of 12k Enviro fence, PL006, drawing J7/01166

		the Joint Core Strategy Main Modification Document 2017 and Paragraphs 17, 109, 120 and 123 of the NPPF.	
		Highways	
20	Statement	**Condition 20** No building on the development shall be occupied until the carriageway(s) (including surface water drainage/disposal, vehicular turning head(s) and street lighting) providing access from the nearest public highway to that dwelling have been completed to at least binder course level and the footway(s) to surface course level. **Reason** To minimise hazards and inconvenience for users of the development by ensuring that there is a safe, suitable and secure means of access for all people that minimises the conflict between traffic and cyclists and pedestrians in accordance with the National Planning Policy Framework paragraph 35 and Policy INF1 of the Gloucester, Cheltenham and Tewkesbury Joint Core Strategy Main Modifications 2017.	
21	Statement	**Condition 21** No works shall commence on site (other than those required by this condition) on the development hereby permitted until the first 15 metres of the proposed access road, including the junction with the existing public road and associated visibility splays, has been completed to at least binder course level. **Reason** To minimise hazards and inconvenience for users of the development by ensuring that there is a safe, suitable and secure means of access for all people that minimises the conflict between traffic and cyclists and pedestrians in accordance with the National Planning Policy Framework paragraph 35 and Policy INF1 of the Gloucester, Cheltenham and Tewkesbury Joint Core Strategy Main Modifications 2017.	
22	Details provided	**Condition 22** No development shall take place, including any works of demolition, until a Construction Method Statement (for	Refer to report provided by RSK

		highways impacts) has been submitted to, and approved in writing by, the local planning authority. The approved Statement shall be adhered to throughout the construction period. The Statement shall: **I.** specify the type and number of vehicles; **II.** provide for the parking of vehicles of site operatives and visitors; **III.** provide for the loading and unloading of plant and materials; **IV.** provide for the storage of plant and materials used in constructing the development; **V.** provide for wheel washing facilities; **VI.** specify the intended hours of construction operations; **VII.** measures to control the emission of dust and dirt during construction 8 of 10 **Reason** To reduce the potential impact on the public highway and accommodate the efficient delivery of goods and supplies in accordance paragraph 35 of the National Planning Policy Framework and Policy INF1 of the Gloucester, Cheltenham and Tewkesbury Joint Core Strategy Main Modifications 2017. This is required pre-commencement of development due to the harm that could otherwise be caused by early-phase works.	
23	Detail provided	**Condition 23** No above-ground development shall commence on site until a scheme has been submitted to, and agreed in writing by the Council, for the provision of fire hydrants (served by mains water supply) and no dwelling shall be occupied until the hydrant serving that property has been provided to the satisfaction of the Council. **Reason** To ensure adequate water infrastructure provision is made on site for the local fire service to tackle any property fire.	Refer to PL009
24	Details provided	**Condition 24** No above-ground development shall commence until details of the proposed arrangements for future management and	Refer to details by Cotswold Transport Planning

		maintenance of the proposed streets within the development have been submitted to and approved in writing by the local planning authority. The streets shall thereafter be maintained in accordance with the approved management and maintenance details until such time as either a dedication agreement has been entered into or a private management and maintenance company has been established. **Reason** To ensure that safe, suitable and secure access is achieved and maintained for all people that minimises the conflict between traffic and cyclists and pedestrians in accordance with the NPPF and Policy INF1 of the Gloucester, Cheltenham and Tewkesbury Joint Core Strategy Main Modifications 2017.	
25	Detail provided	**Condition 25** The details to be submitted for the approval of reserved matters shall include vehicular parking and turning within the site, and the building(s) hereby permitted shall not be occupied until those facilities have been provided in accordance with the approved plans and shall be maintained available for those purposes for the duration of the development. **Reason** To ensure that a safe, suitable and secure means of access for all people that minimises the conflict between traffic and cyclists and pedestrians is provided in accordance with the National Planning Policy Framework paragraph 35 and Policy INF1 of the Gloucester, Cheltenham and Tewkesbury Joint Core Strategy Main Modifications 2017.	Refer to PL005 and details by Cotswold Transport Planning
26	Statement	**Condition 26** No works shall commence on site on the development hereby permitted until details of the relocated bus stop have been submitted to and approved in writing by the Local Planning Authority and the approved works have been completed and are open to the public. 9 of 10 **Reason**	The bus stop has been removed prior to the development of proposals for this application.

		To ensure that the development is designed to give priority to pedestrian movements and provide access to high quality public transport facilities in accordance with paragraph 35 of the National Planning Policy Framework and Policy INF1 of the Gloucester, Cheltenham and Tewkesbury Joint Core Strategy Main Modifications 2017. This is necessary pre-commencement of development due to the potential highway safety issues that could otherwise arise from early-phase works.	

21.20.020

Design and Access Statement for Land at Paygrove Lane, Longlevens, Gloucester

Office: Unit 1, The Old Dairy, Rushley Lane, Winchcombe. GL54 5JE
[redacted]. www.ce-architects.co.uk Registered Address : As Above
coombes:everitt architects limited company number: 8431956.
Directors; Toby Coombes RIBA John Everitt RIBA

coombes:everitt architects

1.0 Introduction

This Design and Access Statement has been prepared by coombes everitt architects on behalf of our client Cotswold Oak Ltd, to accompany a Reserved Matters planning application following Outline consent for up to ten dwellings on land off Paygrove Lane, Longlevens, Gloucester.

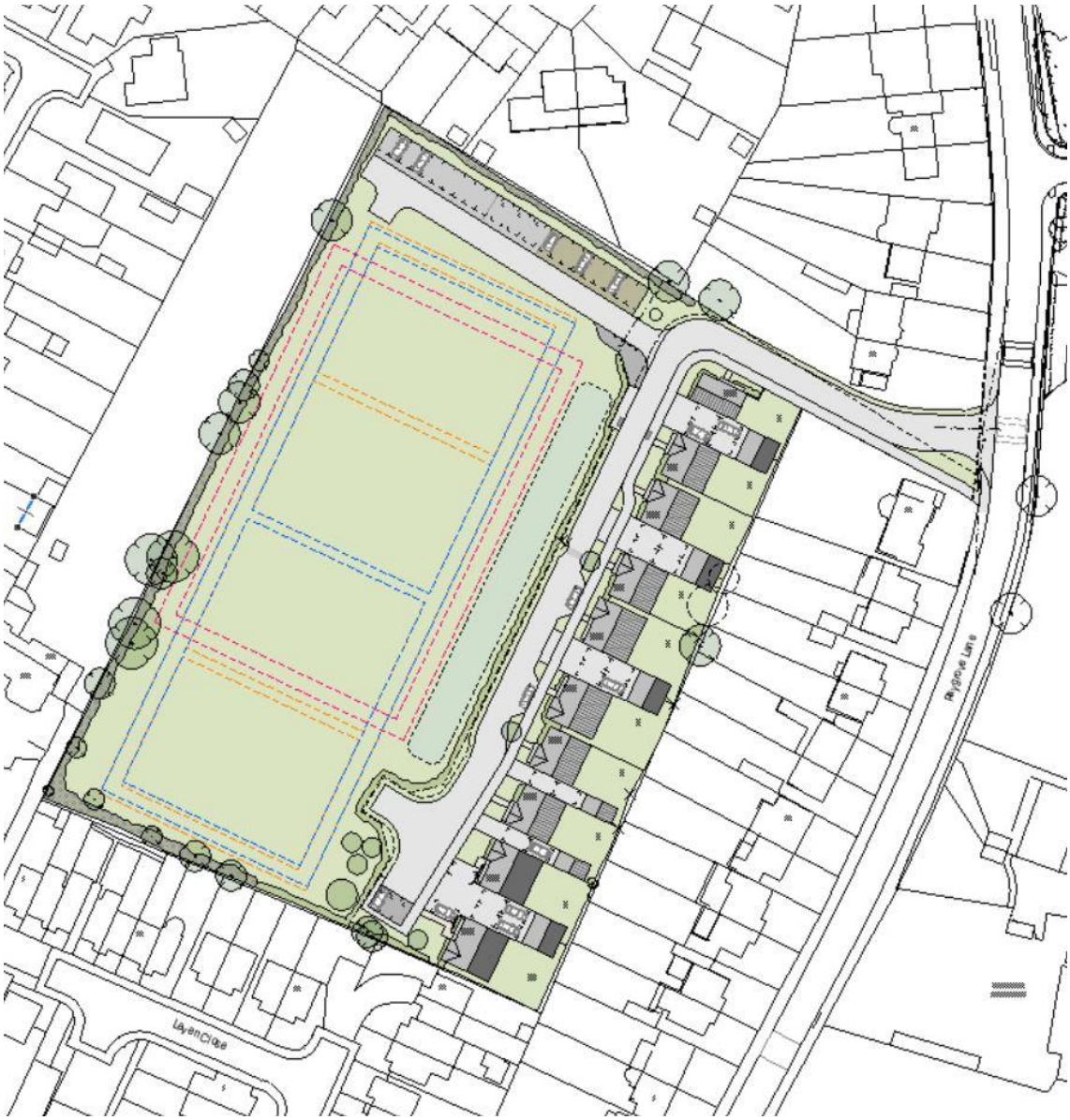
The Outline consent reference 16/01558/OUT was for residential redevelopment of up to ten dwellings (with means of access considered), and public open space including associated landscaping, car parking and access.

Layout approved at Outline

2.0 Development Overview

Outline approval in respect of application 16/01558/OUT was granted on 24th August 2018. The approval was for ten dwellings with access considered, all together with provision for potential playing pitches on the balance of the site retained as open space, and 22 car parking spaces for use in conjunction with the open space.

The current proposals have been developed to closely reflect the Outline approval in both terms of layout and provision. Great care has been taken to reflect the intent of the approval and provide open space for public benefit. The development will bring back into use a generous amount of public open space in this popular residential location as well as deliver a mix of housing of a type required in the locality.



Proposed layout

The proposed new houses are located to the eastern boundary of the site providing secure garden to garden development to the rear of existing housing on Paygrove Lane, there is generous separation between the existing and proposed homes.

Access is provided to the new homes via an adopted access road from Paygrove Lane, and this also provides access to the new car parking associated with the playing field retained to the larger western section of the site.

3.0 Design Objectives

- The proposals should provide high quality homes of a size and scale suitable for the location and site.
- Scale and massing should be in appropriate to the locality.
- The proposals should provide a mix of housing sizes to suit local need
- The development should enhance character of the site situated as it is between existing residential uses.
- The design will respect the privacy and residential amenity of neighbouring properties.
- The proposals should be of high quality providing modern, easily maintainable homes that are sustainable to run and which provide good living environments.
- The proposals will deliver the approved space for playing pitches together with associated parking as indicated on the Outline approval.

4.0 Scale of Development

The proposal has been carefully developed to ensure that the scale and mass is in keeping with the location, and that the amenity of existing neighbours is maintained, while making the best possible use of the site.

The proposed houses are a mix of modest two storey family homes under traditional pitched roofs, all to reflect the nature of existing housing in the vicinity. The proposals deliver a mix of new homes to suit a range of household sizes. Houses range from two to five bedroom.

5.0 Appearance

The site is located within an established residential neighbourhood comprising a range of housing types and styles that generally relate to the style of domestic architecture prevalent at the time of construction. In the immediate vicinity of the site the housing is generally a mix of family homes form the post WWII period onwards.

Existing entrance to site and adjacent housing

Existing housing on Paygrove Lane

Given the location and nature of the site which is enclosed and visually separate from existing adjacent development, it is considered appropriate that the proposed development be of a nature that respects the surrounding residential architecture, while creating a development with a self-referencing contemporary character.

It is proposed therefore to provide a series of new homes designed on a contemporary manner while reflecting the expected form of residential architecture. The houses will be constructed in a limited palette of high quality, durable materials, including brick elevations and tiled roofs. A high quality window system will complement the design and provide large format glazed areas to create light and comfortable homes.

Part proposed street scene

6.0 Sustainability & Access

The proposal has been designed to provide modern, high quality living environments, that are easily sustainable. The proposed development will:

- Be designed to meet current requirements of Building Regulations
- Be fitted with a modern efficient gas boiler
- Double glazing systems are proposed throughout
- Have a stepped approach with a level threshold entrance and entry level WC in accordance with AD Part M
- Have sufficient allocated parking space to allow for off street parking
- Have a garage for secure car, general and cycle storage
- The site is within walking and cycling distance of local facilities and has good access to Gloucester city centre

- The site is within convenient, sustainable distance of the employment opportunities and good local schools
- The site is close to a main bus route into the city centre and links to the extended public transport and road networks

7.0 Highways

The proposals have no adverse highway implications as a fully designed new junction to Paygrove Lane forms a part of the application together with a new road within the development that provides access and turning for residents and service vehicles, and access to the parking associated with the retained playing fields. The new access is specifically designed to create a low speed environment and a safe area for pedestrians.

Each new home is provided with on plot parking that is in accordance with GCH parking standards at two spaces to all homes (2-4 bedrooms) and three spaces to five bedroom homes. In addition five dedicated visitor spaces are provided within the highway.

In addition to the on plot allocated parking each house benefits from a garage (minimum internal dimensions of 6.0x3.0m) for additional secure parking and cycle storage. Garages do not count towards the parking provision on site.

In accordance with the Outline approval, twenty two spaces are provided in association with the playing field.

Full details of the highway design are provided by Cotswold Transport Planning

8.0 Drainage

Full designs for foul and storm drainage are provided by Cotswold Transport Planning. Storm drainage allows for the storage of attenuated storm water on site thus limiting discharge from site.

9.0 Ecology and Tree Protection

In accordance with conditions attached to the Outline approval, the relevant required ecological reports and details of protection to existing trees and hedgerows to the site boundaries are provided by All Ecology and MHP Arboricultural respectively.

10.0 Archaeology

In accordance with the Outline approval, a Written Scheme of Investigation is submitted as a part of this application outlining the proposed provision for a programme of archaeological mitigation to areas affected by the proposed development.

11.0 Conclusions

We believe the proposal represents an appropriate form of development which is fully in accordance with that approved at Outline. The proposal is of an appropriate scale and mass, provides a mix on new family homes , is in keeping with the local aesthetic, and respects the residential amenity of existing neighbours.

We trust that Local Planning Authority is able to support this application.

LAND OFF PAYGROVE LANE, LONGLEVENS, GLOUCESTERSHIRE

WRITTEN SCHEME OF INVESTIGATION FOR A PROGRAMME OF ARCHAEOLOGICAL INVESTIGATIONS

SITE CODE: PLLG 22

PROJECT REFERENCE: K7635

FEBRUARY 2022

PRE-CONSTRUCT ARCHAEOLOGY

Written Scheme of Investigation for a programme of archaeological investigations on land off Paygrove Lane, Longlevens, Gloucester

Local Planning Authority:	**Gloucestershire County Council**
Central National Grid Reference:	**SO 8561 1985**
Site Code:	**PLLG 22**
Written and researched by:	**Jonathan Webster**
Project Manager:	**Jonathan Webster**
Commissioning Client:	**Cotswold Oak Ltd.**
Contractor:	**Pre-Construct Archaeology Ltd** **PCA Warwick** **2 Plestowes Barn,** **Hareway Lane,** **Barford,** **Warwick** **CV35 8DD**
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February 2022

CONTENTS

1 INTRODUCTION

1.1 General Background

1.1.1 Pre-Construct Archaeology Ltd (PCA) has been commissioned by Cotswold Oak Limited to undertake a programme of archaeological investigations on land of Paygrove Lane, Longlevens, Gloucester (Site centred: SO 8561 1985; Figure 1). The work is being undertaken ahead of the redevelopment of the site area with the construction of up to ten dwellings with associated access, parking, landscaping and infrastructure for which an outline application has been approved by Gloucester City Council (Planning Reference: **16/01558/OUT**).

1.1.2 Previous studies of the proposed development area (GCCAS 2000) demonstrated the presence of medieval and later ridge and furrow as well as a single possibly earlier linear and a general scattering of residual artefactual pottery including of Romano-British date. As such, the presence of currently unknown features or deposits could not be ruled out and so it was requested that a programme of archaeological investigations be undertaken.

1.1.3 The definition of an archaeological programme of investigations is *'a programme of controlled, intrusive fieldwork with defined research objectives which examines, records and interprets archaeological deposits, features and structures and, as appropriate, retrieves artefacts, ecofacts and other remains within a specified area. The records made and objects gathered during the fieldwork are studied and the results of that study published in detail appropriate to the project design'* (CIFA 2020a).

1.1.4 This document comprises a Written Scheme of Investigation (WSI) and has been prepared in consultation with the guidelines and standards laid down in the following documents:

- *Standard and Guidance for an Archaeological Excavation,* Chartered Institute for Archaeologists: Reading (CIFA 2020a);

- *Code of Approved Conduct for the Regulation of Arrangements in Field Archaeology*, Chartered Institute for Archaeologists: Reading (CIFA 2020b);

- *Standard and Guidance for the collection, documentation, conservation and research of archaeological materials*, Chartered Institute for Archaeologists: Reading (CIFA 2020c);

- *Management of Archaeological Research Projects in the Historic Environment (Morphe)*, Historic England: London (HE 2015);

- *Gloucestershire Archaeological Archive Standards,* South West Museum Development Programme (SWM 2018);

- *Fieldwork Induction Manual: Operations Manual 1*, Pre-Construct Archaeology Limited: London (Taylor and Brown 2018);

- *Fieldwork Operations Manual, Regional Variation Addendum; Warwick Office,* Pre-Construct Archaeology Limited: Warwick (Webster 2018).

1.1.5 The general aims of these investigations are to:

- determine the presence or absence of buried archaeological remains within the proposed development area;
- determine the character, date, extent and distribution of any archaeological deposits revealed as well as their potential significance;
- determine levels of disturbance to any archaeological deposits from plough damage or from any other agricultural/industrial practices or later building activities;
- gain as full an understanding as practicable of all potential archaeological features and deposits within the development area;
- disseminate the results of the fieldwork through an appropriate level of recording.

1.1.6 The specific aims of these investigations are to:

- further the understanding of the potential features and residual artefacts recorded in the previous phase of evaluation.

2 GEOLOGY AND TOPOGRAPHY

2.1 Geology

2.1.1 The underlying geology for the site is mapped as mudstone of the Charmouth Mudstone formation deposited between 183 and 199 million years ago in the Jurassic Period in an environment dominated by warm shallow seas. This is mapped as being overlain by a combination of sands and gravels of the Cheltenham Sand and Gravel Formation deposited by subaerial slopes to the south of the glacial extent up to three million years ago and comprised of detrital coarse to fine individual clasts forming downslope fans of material (BGS 2022).

2.1.2 This is mapped as being sealed across the majority of the site by freely draining lime rich loamy soils that are aligned broadly northwest to southeast. The current mapping suggests that to the northeast the soils become more clay rich and with gradually greater impeded drainage, this being most likely present in the northeast corner of the site (Landis 2022).

2.2 Topography

2.2.1 The area of investigation is approximately 1.36ha is size and is situated to the immediate west of Paygrove Lane in the Longlevens suburb of Gloucester, roughly 3km to the northeast of the city centre. It is surrounded on all sides by domestic housing and at the time of writing comprises a large playing field. The site is flat at a height of broadly *c*.19m AOD (above Ordnance Datum) and is situated on a plateau that runs north to south before dropping towards the River Severn estuary to the west and rising towards the Cotswold Plateau to the east. Horsbere Brook, a south to north flowing watercourse, lies 200m to the east of the site and joins the River Severn north of Gloucester.

3 ARCHAEOLOGICAL BACKGROUND

3.1 Introduction

3.1.1 The site has been subject to a previous archaeological evaluation by trial trenching (GCCAS 2000) and a search of the Gloucestershire Historic Environment Records office (GHER search reference: **HER1866721**) was undertaken and this provided a dataset of the currently known historic and archaeological background of the site and surrounding area within a 1km radius. This section is an overview of the records office search to provide context for the archaeological potential of the development site, which falls within this topographical area. For more detailed information please refer to the original HER search document.

3.2 Prehistoric and Romano-British Periods

3.2.1 There is no known Prehistoric or Romano-British activity within the boundary of the site with little beyond unstratified finds being recorded further afield within 900m of the site boundary. A palaeolithic Acheulian flint hand axe is recorded to have been found some 300m to the east of the site in 1948 (HER Reference: **GHER4823**). A Mesolithic or Neolithic worked flint scraper was discovered *c*.900m to the south of the site and was residual within the fill of a Romano-British ditch. A desk-based assessment of the gravel terraces between the site and the River Severn concluded that prehistoric activity has low potential (Oxford Archaeology 2015; HER Reference: **GHER959**). A denarius of Vespasian (AD69-79) and a Roman brooch were found unstratified *c*.450-500m to the west and southwest (HER Reference: **GHER1352**).

3.2.2 Despite the proximity of the major Roman town of *Glevum* (Gloucester) 2.8km to the southwest, Roman archaeology at two sites around Oxstalls College Campus, between the development site and the town, has been described as ‘surprisingly slight’ (HER Reference: **GHER1058**). However, evidence to the south appears more concentrated, adjacent to the west bank of Horsbere Brook *c*.900-1200m from the site (HER References: **GHER750** & **GHER736**).

Fieldwork at the Centre Severn, for example, uncovered an extensive Roman field system of predominantly northwest by southeast orientation, with a hearth and two inhumation burials dated to the 2nd to 4th century (HER Reference: **GHER750**). A possible trackway on the same alignment was recorded just outside the 1km search area *c.*300m to the east of Centre Severn. (HER Reference: **GHER736**).

3.2.3 Closer to the development site, the evidence for activity is sparce: 500m to the south, a trench in Sir Thomas Rich's school grounds uncovered no significant archaeology and *c*.130m to the east fieldwork at the former Gloscat Annexe (HER Reference: **GHER698**), now College Fields, likewise saw no archaeological features. The development site itself featured an undated north-south ditch which was postulated as 'earlier than the furrows' (GCCAS 2000). At 1m wide by 0.90m deep with a "V"-shaped profile it had potential to be of Romano-British date based on its morphology, it being similar to the Roman examples to the south. Two pieces of Romano-British greyware were noted during the same fieldwork although they were residual finds from a furrow rather than insitu (*Ibid*.).

3.3 Medieval to Post-medieval Periods

3.3.1 The Anglo-Saxon chronicle famously records Gloucester as one of the three 'cities of the Britons' that were taken from local kings in 577AD by the brothers *Cuthwine* and *Ceawlin*. At the time, Gloucester probably continued to function as an administrative centre with an entirely rural economy; it attracted a 'Saxon' minster in around AD679 but no significant intermural developments were undertaken until the 10th century. However, the town itself falls outside the study area and there is no known Early Medieval activity within 1km of the site.

3.3.2 Medieval to post-medieval, north-south oriented, furrows were a prominent feature of the evaluation of the proposed development site and furrows were frequent and regularly space at 3-4m apart (*Ibid*.). A small selection of very abraded medieval pottery sherds was also recovered from the site. A medieval moat was known *c*.600m to the east

of the site on the Horsbere Brook (HER Reference: **GHER4826**) until being subsumed by a housing estate in 1960. It was described in 1998 as *'90 yards each way the platform is slightly raised ... some remarkable earthworks are to be seen in an adjoining field, but what their object was is not clear'*. The site probably represented a moated manor house, with the earthworks relating to the housing platforms of an associate small settlement. Medieval to post-medieval furrows are well attested on sites to the immediate west of the brook, on two sites around 900m to the south of the current study area (HER Reference: **GHER750**), where quarrying was also seen (HER Reference: **GHER761**); 950m to the west at Oxstalls College (HER Reference: **GHER1058**) and, 970m to the northwest at Brionne Way (HER Reference: **GHER1275**).

3.3.3 The current area boundary can be identified on the 1799 enclosure map as within Longlevens Common Fields and is shown on the First and Third Edition County Ordnance Survey maps (1888 & 1925) as divided into long parallel strips running northeast by southwest, before becoming opened up for the current playing fields following the Second World War.

3.4 Conclusions

3.4.1 The area of investigation is thought to currently have a moderate to low potential for Prehistoric or Romano-British activity which, if present is most likely to represent agricultural land management. The known Romano-British field systems and possible trackway to the south, parallel to Horsbere Brook extends northwards and could potentially, if continuing, extend into the site however no evidence to suggest they do is currently known.

3.4.2 The distribution patterns of medieval and post-medieval archaeology support the general assessment that land use to the northwest of Gloucester focussed on agricultural and quarrying activity on the free draining gravel terraces (Ie. HER References: **GHER959** & **GHER1058**) and it is thought likely that the proposed development area avoided this fate. The site appears to have been common land by the post-medieval

period and little additional activity is known before the removal of former field boundaries in the later 20th century.

3.4.3 When evaluated, the site showed evidence of frequent furrows, 20th century drainage features and other modern land management activity (gravel land drains, pits, fence posts and landscaping). This agricultural impact may have truncated potentially earlier features/deposits further reducing the potential of the site still further.

4 METHODOLOGY

4.1 Excavation and Sampling

4.1.1 The archaeological investigations will comprise the controlled site strip of the area of the proposed housing down to the top of the natural substrate or a depth of 400mm BPGL (below present ground level), the limit of the proposed development strip, whichever is higher. In areas of potentially deeper impact such as house footings, the site strip will go deeper should the natural substrate and/or horizon where potential archaeological deposits/features are visible has not been reached.

4.1.2 PCA has been informed by Cotswold Oak that no excavation is required as part of the proposed development within the areas of the proposed back gardens and for the area of the car park, which will be laid to grass crete. These areas will be monitored by the PCA team to ensure that archaeological levels are not impacted. Should for any reason ground conditions dictate that archaeological levels are encountered within these areas, they will be archaeologically excavated in accordance with the methodologies set out below.

4.1.3 In advance of the fieldwork PCA will request that the client has demonstrated that all reasonable measures have been taken to secure the site area, identify any constraints and have provided all reasonable information regarding the presence of services, any ecological constraints, the presence of Public Rights of Way, any areas of potentially contaminated land and/or any other known risks to health and safety.

4.1.4 The excavation areas will be stripped by a ‘team’, comprising a tracked mechanical excavator assisted by two dumpers and monitored by a suitably experienced archaeologist. The strip will start at the southern end of the site moving north (See Figure 2). The dumpers will vary their route to avoid rutting and will traverse the unstripped parts of the site to spoil locally before being transported offsite at a later date. Spoil will be separated into two separate bunds, one for topsoil and the second for

subsoil, each of which will be sealed at the end of each working day to ensure no run off occurs. The routes of the dumpers will be periodically monitored to ensure that no rutting ensues to the point where it could impact potentially underlying archaeological assets.

4.1.5 The tracked excavator will be fitted with a toothless ditching bucket and under suitable archaeological supervision will remove overburden to the top of the natural substrate, first significant archaeological horizon, or limit of the proposed development impact, whichever is encountered first.

4.1.6 Where appropriate, PCA will request that the LPA sign off blank areas once he is happy to allow for this to take place. No construction related access to areas will be permitted until after the Planning Archaeologist is satisfied that the archaeological aims and objectives for that specific area have been completed.

4.1.7 The excavation areas will be subjected to a pre-excavation survey plan once sufficient weathering has taken place with all possible features and deposits being recorded. This survey will then be used to formulise an appropriate excavation strategy that best fulfils the requirements below. Features/deposits will be excavated to retrieve artefactual and ecofactual material, as well as determine their character, significance and date.

4.1.8 All areas of the excavation will be inspected periodically throughout the course of the investigations under different lighting conditions and from different angles to ensure that no potential features or deposits are missed. Artefactual material will be recovered from as many contexts as possible regardless of date to help fully characterise the site. Where large finds assemblages are present an appropriate sample subsection will be taken and the methodologies, percentages and any other appropriate information recorded on the appropriate context sheet.

4.1.9 All possible archaeological features and deposits will be sampled as follows:

- All structural features (eg. Postholes and hearths), burials, industrial features (eg. Ovens and kilns) etc will be 100% excavated;
- Other discrete features (eg. Pits) shall be excavated to a minimum of 50% based on the potential for the recovery of important material or ecofactual assemblages. Should features be characterised and 'common' to the point that further excavation is unlikely to yield significant new information then discussions on reducing this strategy will be held;
- Features of possible natural origin (eg. Variations in the geology) will be excavated until a full characterisation of the feature type, profile, fill are adequately demonstrated;
- Linear features (eg, ditches and gullies) are to be excavated to a minimum of 10% or until a full understanding of the feature is ascertained. All intersections will be sampled to establish relationships and a higher percentage of excavation shall be undertaken in areas of potential domestic activity;
- Occupational layers are to be excavated to a minimum 10% with higher percentage for prehistoric layers as required to gain full understanding of the various functions and any spatial variations.

4.1.10 Field excavation techniques and recording methods are detailed in the *PCA Fieldwork Induction Manual* (Operations Manual I; Taylor & Brown 2018) and *PCA Fieldwork Operations Manual Regional Variation Addendum; Warwick* (Webster 2018).

4.2 Recording Methodology

4.2.1 Deposits or the removal of deposits judged by the excavating archaeologist to constitute individual events will each be assigned a unique record number (often referred to within British archaeology as 'context numbers') and recorded on individual pre-printed forms (Taylor and Brown 2018; Webster 2018). Context sheets are to be primarily filled in by the archaeologist who excavated the feature/deposit.

4.2.2 The limits of excavations, heights above Ordnance Datum (m AOD) and all features in plan will be recorded by a Geomax Mesa^2 rover unit,

utilising X-PAD Survey 3 software with RTK differential correction, giving three-dimensional accuracy of 20mm or better. Each point will be recorded in relation to the OSGB36 geod model and coded to an internal PCA database to provide a dataset which records feature type, context number, associated drawing numbers and any other information that may be relevant. This survey will provide a three-dimensional geo-referenced visual representation of the archaeology present.

4.2.3 Hand drawn sections will be drawn at an appropriate scale, primarily 1:10. Likewise where appropriate, plans of archaeological features will be drawn at a suitable scale to record them in detail. These plans will be accurately related to the National Grid and drawn in relation to a specific geo-referenced baselines provided by the Geomax Mesa^2 rover unit. All plans and sections will be levelled in respect to AOD and are to be drawn on polyester based drafting film and clearly labelled.

4.2.4 All deposits will be recorded with sufficient data to allow for a full characterisation of the context and its relationships to be made and allow for future studies to query and compare the dataset with confidence.

4.2.5 The primary photographic record of the site will be undertaken using a Canon EOS 1300D digital SLR camera with an 18.0-megapixel resolution. Photographs will be taken of all deposits and all images will be labelled appropriately and cross-referenced in relation to a site specific photography register. All photographic images and associated registers will be regarded as part of the primary archive.

4.3 Human Remains

4.3.1 In the unlikely event that human remains, either inhumations and/or cremations, are exposed during the course of the archaeological investigations then all works will cease immediately and the local police and coroner informed. The area will be screened from view and after informing the client and Planning Archaeologist any remains will be

lifted in accordance with professional standards and guidelines once the antiquity of the remains has been suitably proven and Ministry of Justice Licence applied for as appropriate (in accordance with Section 25 of the Burial Act 1857). The need for a Ministry of Justice Licence applies to both inhumation and cremated remains. Application for a Licence would be made by PCA.

4.4 Finds recovery and processing

4.4.1 All artefacts recovered during the course of the archaeological investigations are the property of the landowner. They will be suitably bagged, boxed and marked in accordance with the *Standards and Guidance for the Collection, Conservation and Research of Archaeological Materials* (CIFA 2020c), and the *Standard and Guide to Best Practice for Archaeological Archiving in Europe* (Perrin et al. 2014).

4.4.2 All finds encountered will be retained on site before returning to the office where they will be identified, quantified and dated to period. A *terminus post quem* will be produced for each stratified context and the dates used to help determine the broad date phasing for the site. On completion of the fieldwork, the finds will be cleaned and packaged according to standard national guidelines (CIFA 2020c). Please note, after quantification and assessment the following categories of materials will be discarded after a period of six months following the submission of the archaeological fieldwork report, unless there is a specific request to retain them (and subject to the collection policy of the relevant depository):

- where unstratified;
- modern pottery;
- Material that has been assessed and has no clear reason for retention.

4.4.3 The primary archive records will clearly state how all artefact

assemblages have been recovered, sub-sampled and processed.

4.5 Treatment of treasure

4.5.1 Finds falling under the statutory definition of treasure (as defined by the Treasure Act of 1996 and later revisions) would be reported immediately to the relevant Coroner's Office, the landowner/client and the Planning Archaeologist. A treasure receipt (obtainable from either the FLO or the DCMS website) would be completed and a report submitted to the Coroner's Office and the FLO within 14 days of understanding that the find is treasure. Failure to report within 14 days of discovery is a criminal offence.

4.5.2 The treasure receipt and report would include the date and circumstances of the discovery in addition to the identity of the finder (put as PCA/site contractor) and the location of the find in relation to Ordnance Survey.

4.6 Palaeoenvironmental Sampling

4.6.1 A structured programme of palaeoenvironmental sampling appropriate to the specific aims of the project will be implemented. The strategy and methodology for the sampling of deposits will be in accordance with English Heritage (now Historic England) Centre for Archaeology Guidelines "*Environmental Archaeology – A guide to the theory and practice of methods, from sampling and recovery to post-excavation*" (2011).

4.6.2 Where deposits are dry, bulk samples for the recovery of charred plant remains, small bones and finds, will be taken from sealed and datable features such as pits, ditches, hearths and floors. Each context will be sampled in isolation. The size of the sample is expected to be in the range of 40 litres per context or 100% of smaller contexts. Samples will not be taken from the intersection of features or where context horizons are not fully defined.

4.6.3 Where deposits are wet, waterlogged or peaty, monoliths will be taken along cleaned vertical surfaces for the retrieval of pollen, diatoms,

ostracods and foraminifera. The numbers to be taken will be agreed with the client and the Planning Archaeologist. Where bulk samples are to be taken a minimum of 20 litres will be taken from visible layers or spits for the retrieval of plant macro-remains and insects.

4.6.4 Environmental samples from dry deposits will normally by processed by floatation following the fieldwork and the residues will be sorted to retrieve small bones, small finds and charcoal that has not floated. Environmental samples from wet deposits will normally be sent to specialists for processing in laboratory conditions.

4.6.5 Where guidance is relevant the appropriate English Heritage (now Historic England) papers will be followed (EH 2005; 2006; 2007 & 2011).

5 ACCESS AND SAFETY

5.1.1 Access to the site will be arranged in coordination and agreement with the client and suitable welfare provision will be made available.

5.1.2 All relevant health and safety legislation, regulations and codes of practice will be respected. The Health and Safety policies will be those of Pre-Construct Archaeology Ltd. and in accordance with all statutory regulations. A Health & Safety Risk Assessment for the site will be produced and made available to all staff.

5.1.3 There is a duty of care for the client to provide all information reasonably obtainable on contamination and the location of live services before site works commence.

6 STAFFING

6.1 Staffing and Support

6.1.1 The project will be managed and led by Jonathan Webster, Project Manager at PCA Warwick who will ensure all staff are familiarised with the site, the archaeological background of the area and the ground conditions to maximise the effectiveness of the archaeological investigations.

6.1.2 The following staff will form the project team as appropriate:

- 1x Project Manager
- 1x Archaeological Supervisor
- 1x Archaeological Surveyor
- 2x Archaeological Technicians
- 1x Finds Supervisor
- 1x Palaeo-environmental Supervisor
- 1x Illustrator for post-excavation work.

7 REPORTING

7.1.1 Upon completion of the archaeological fieldwork an appropriate assessment report will be undertaken to go through the results of the investigations, a draft of which be supplied to the client for comment in the first instance. Once approved by the client a copy of the report will be forwarded to Toby Catchpole for comment before formal submission to the Local Planning Authority.

7.1.2 Should little or no archaeology be revealed during the archaeological investigations then it is expected that the production and submission of a suitable report will be completed within three weeks of the completion of fieldwork. If significant and/or substantial archaeological deposits are revealed, then the submission may take longer to allow for the necessary specialist input. In this event, if deemed appropriate, an interim report will be prepared to aid in the preparation of an appropriate mitigation strategy.

7.1.3 The following specialists will be utilised during the post-excavation assessment as required.

- Animal Bone – Karen Deighton or Kevin Reilly
- Human Bone - James Langthorne
- Prehistoric Pottery – Sarah Percival
- Roman Pottery – Eniko Hudak or Alex Beeby
- Post Roman Pottery – Berni Seddon or Chris Jarrett
- Ceramic Building Material, Stone and Structural Daub - Kevin Hayward
- Fired Clay Objects - Berni Seddon
- Slag and Industrial Waste - Gary Taylor
- Clay Tobacco Pipe and Glass - Gary Taylor or Chris Jarrett
- Coins – Murray Andrews
- Small/Metal Finds – Marit Gaimster
- Lithics – Barry Bishop
- Environmental Archaeology – Kate Turner

7.1.4 All post-excavation investigations will be undertaken in accordance with the guidelines contained in Historic England's *Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide* (Historic England 2015).

7.1.5 Once an appropriate report has been submitted and accepted, PCA will supply one digital and one physical copy of the report for inclusion in the Gloucestershire Historic Environment Record (GHER). Contingency will be made for the publication of results. In addition to this, a summary account of the work will be submitted to the editors of any relevant period journals as agreed by the Planning Archaeologist.

8 OWNERSHIP OF FINDS, STORAGE AND CURATION OF ARCHIVE

8.1.1 Prior to the start of the investigations, PCA will seek the transfer title of ownership of the complete project archive to a suitable local depository as approved with the local planning authority. This will be undertaken by issuing a "Deeds of Transfer Agreement" form and requesting an accession number. The site archive will then be deposited with the depository as required by the planning authority.

8.1.2 During post-excavation assessment all artefactual material recovered will be held in storage by PCA Warwick. Transfer of title and the transfer of the ownership of the archive to the County Archive Facility or any other local registered depository will be arranged at once a full understanding of the archive size is known, and the arrangements will be indicated in the archaeological investigations fieldwork report.

8.1.3 PCA will recommend that ownership of all such archaeological finds will be given over to the relevant authority to facilitate future study and ensure proper preservation of all artefacts. In the unlikely event that artefacts of significant monetary value are discovered, and if they are not subject to Treasure Act legislation separate ownership arrangements may be negotiated.

8.1.4 The project archive shall be compiled in accordance with the guidelines contained in *Guidelines for the Preparation of Excavation Archives for Long term Storage* (Brown 2011), the *Standard Guide to Best Practice for Archaeological Archiving in Europe* (Perrin et al 2014) and the *Gloucestershire Archaeological Archive Standards* (SWM 2018).

8.1.5 A copy of the report will accompany the archive when it is deposited.

8.1.6 The Gloucestershire Historic Environment Record is registered with the Online Access to Index of Archaeological Investigations (OASIS) project. PCA will provide appropriate details relating to this project by completing the OASIS form at http://ads.ahds.ac.uk/project/oasis, in accordance with the guidelines provided by Historic England and the Archaeology Data Service.

9 MONITORING AND LIAISON

9.1.1 PCA will allow the site and all records to be inspected and examined at any reasonable time during or after the archaeological fieldwork by the client or any designated representative of the Local Planning Authority.

9.1.2 PCA will liaise closely with the client and the Planning Archaeologist throughout the course of the project and will arrange for onsite meetings at key decision points, if necessary.

10 FURTHER CONSIDERATIONS

10.1 Insurance

10.1.1 Pre-Construct Archaeology Ltd is covered by Public and Employer's Liability Insurance. Professional Indemnity £5,000,000 RSA (Saturn) P8531NAECE/1026, Public & Products Liability £10,000,000 Aviva & Towergate Underwriting, 24765101CHC/000133, EOL001198/0104, Employers Liability £10,000,000 Aviva 24765101CHC/000133.

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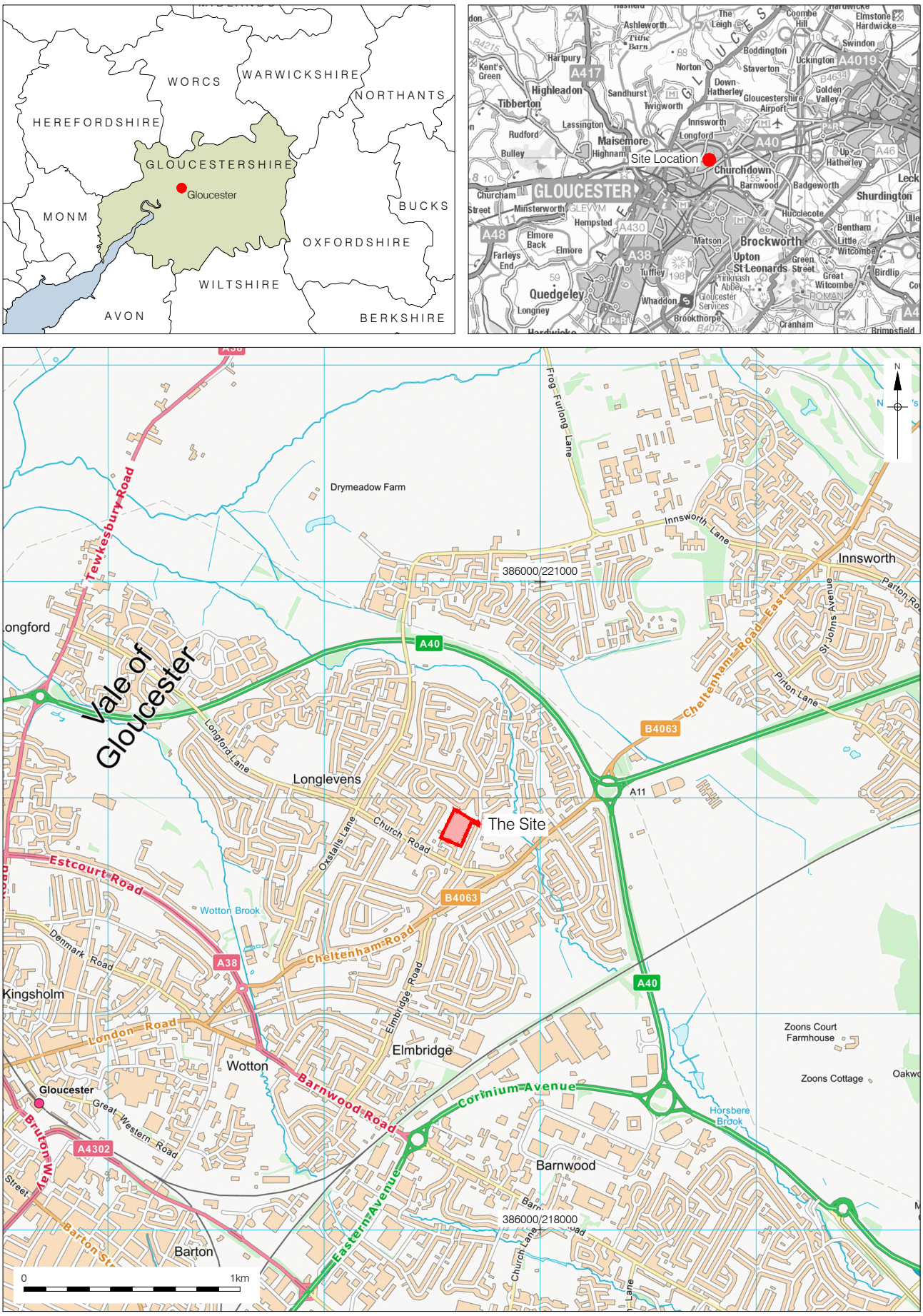
http://www.british-history.ac.uk (accessed 13/01/2022).

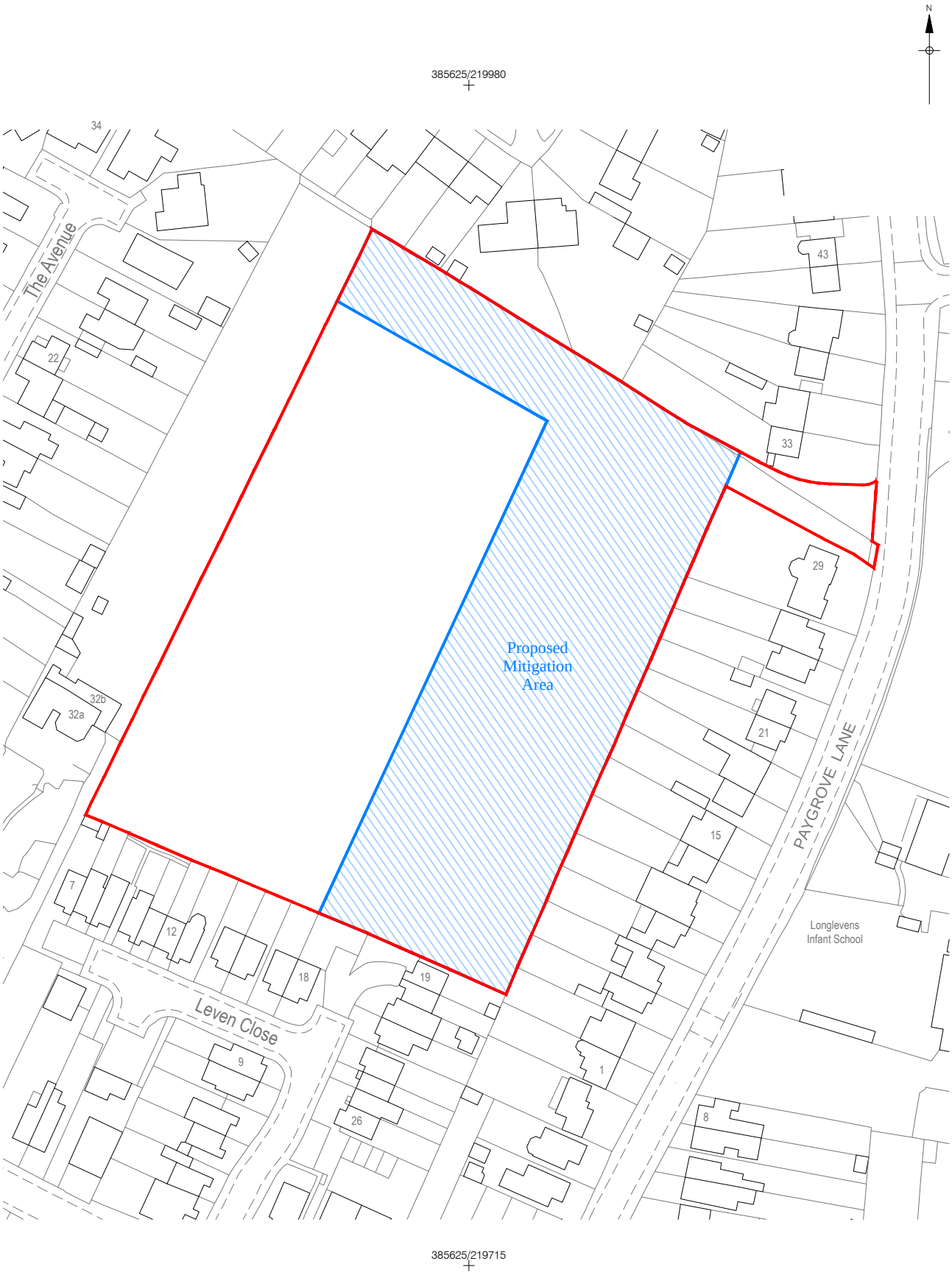


P:\PROJECT DATA\Out of London\Gloucestershire\Land off Paygrove Lane_Longlevens\CAD\WSI\Fig 01_Site Location.dwg

10/01/22 MR

Figure 1
Site Location
1:2,000,000, 1:250,000, 1:25,000 at A4

P:\PROJECT DATA\Out of London\Gloucestershire\Land off Paygrove Lane, Longlevens\CAD\WSI\Fig 02_Proposed Mitigation Area.dwg



0 50m

10/01/22 MR

Figure 2
Detailed Site Plan showing the Proposed Mitigation Area
1:1,250 at A4

P C A

PCA CAMBRIDGE
THE GRANARY, RECTORY FARM
BREWERY ROAD, PAMPISFORD
CAMBRIDGESHIRE CB22 3EN
[redacted]

PCA DURHAM
THE ROPE WORKS
BROADWOOD VIEW
CHESTER-LE-STREET
DURHAM DH3 3AF
[redacted]

PCA LONDON
UNIT 54, BROCKLEY CROSS BUSINESS CENTRE
96 ENDWELL ROAD, BROCKLEY
LONDON SE4 2PD
[redacted]

PCA NEWARK
OFFICE 8, ROEWOOD COURTYARD
WINKBURN, NEWARK
NOTTINGHAMSHIRE NG22 8PG
[redacted]

PCA NORWICH
QUARRY WORKS, DEREHAM ROAD
HONINGHAM
NORWICH NR9 5AP
[redacted]

PCA WARWICK
2 PLESTOWES BARN, HAREWAY LANE
BARFORD, WARWICK
WARWICKSHIRE CV35 8DD
[redacted]

PCA WINCHESTER
5 RED DEER COURT, ELM ROAD
WINCHESTER
HAMPSHIRE SO22 5LX
[redacted]

Land to Rear of Paygrove Lane, Gloucester

Technical Note – Engineering

21-0760_TN002

March 2022

1. Introduction

1.1 Cotswold Transport Planning Ltd (CTP) have been appointed by Cotswold Oak Ltd to provide an Engineering Technical Note (TN) in support of a reserved matters planning application for the residential development and associated open space on land to the rear of Paygrove Lane, Gloucester.

1.2 The application site benefits from outline planning permission, granted in December 2016 by GCC under LPA Ref: 16/01558/OUT, for the construction of up to 10 no. dwellings with associated parking and landscaping and public open space.

2. Site Location

2.1 The site consists of a 1.4ha playing field to the rear of 3 - 29 Paygrove Lane, Gloucestershire, which is located approximately 2.5km north-east of Gloucester City Centre.

2.2 A site location plan is contained in **Appendix A**.

3. Development Proposals

3.1 As mentioned above, outline planning permission for the erection of up to 10 dwellings, public open space and associated works was granted in 2016 (LPA ref: 16/01558/OUT).

3.2 The proposed site layout plan is included at **Appendix B**.

4. Existing Site Conditions

Topography

4.1 Refer to **Appendix C** for site topographical survey.

4.2 The site is predominantly flat with a gentle fall from the southwest boundary at 19.30m AOD to the northeast boundary at 18.80m AOD, with an average ground gradient of 1:300.

Ground Conditions

4.3 Infiltration testing was undertaken on site on 15-16th November 2018 and ground conditions found to be not suitable for soakaways as half drain times could not be achieved and high ground water present. Therefore, discharge to ground at source not possible.

Existing Drainage

4.4 There are no public sewer (Severn Trent) assets within the site boundary. A public foul rising main passes along Paygrove Lane. Existing public assets can be found in Leven Close to the south and College Fields to the north. Refer to Appendix D for ST records.

4.5 An existing Highways drain runs within the footpath of Paygrove Lane.

4.6 The nearest watercourse is the Horsbere Brook located approximately 200m to the east on third party land.

5. Proposed Drainage

Foul Drainage

5.1 Refer to **Appendix D** for Engineering Layout.

5.2 A gravity connection from the development to the public foul asset within College Fields is feasible with localised raising of ground levels and floor levels in the site.

5.3 Severn Trent Water have confirmed capacity within Leven Close and College Fields system. Refer to Appendix C for Severn Trent correspondence.

Surface Drainage

5.4 Refer to **Appendix D** for Engineering Layout.

5.5 In accordance with the SuDS hierarchy of surface water management the following should be considered, in order, for discharge of development surface water run off:

- Discharge to ground at source – soakaways
- Discharge to water body
- Discharge to a surface water sewer, highway drain, or another drainage system
- Discharge to existing combined drainage

5.6 Infiltration testing was undertaken confirms discharge to ground at source not possible.

5.7 The nearest watercourse is 200m to the east and a level analysis has shown a gravity connection is not feasible. The connection would also require third party land agreement. Therefore, discharge to watercourse not possible.

5.8 A storm connection to the existing Highways drain within the footpath of Paygrove Lane was explored but following a CCTV of the system the condition and capacity was found to be inadequate. Gloucestershire County Council Highways confirmed a connection to highways assets for this development will not be permitted.

5.9 A pumped connection from the development to the public storm asset within College Fields is feasible with attenuation required via a SuDS swale, which shall be designed to cater for the 1 in 100 year event with a 40% allowance for climate change.

5.10 Severn Trent Water have confirmed capacity within Leven Close and College Fields system. An allowable storm discharge rate of 2 l/s has been confirmed.

5.11 Refer to **Appendix E** for Calculations.

6. External Works

Access

6.1 Refer to **Appendix D** for Engineering Layout.

6.2 Access to plots to be in accordance with Building Regulations Part M – Category M4(1): Visitable dwellings.

6.3 Surface water from the highway will be collected by standard road gullies which connect to the proposed drainage system.

6.4 Highways to be of flexible construction comprising of asphalt surface finish..

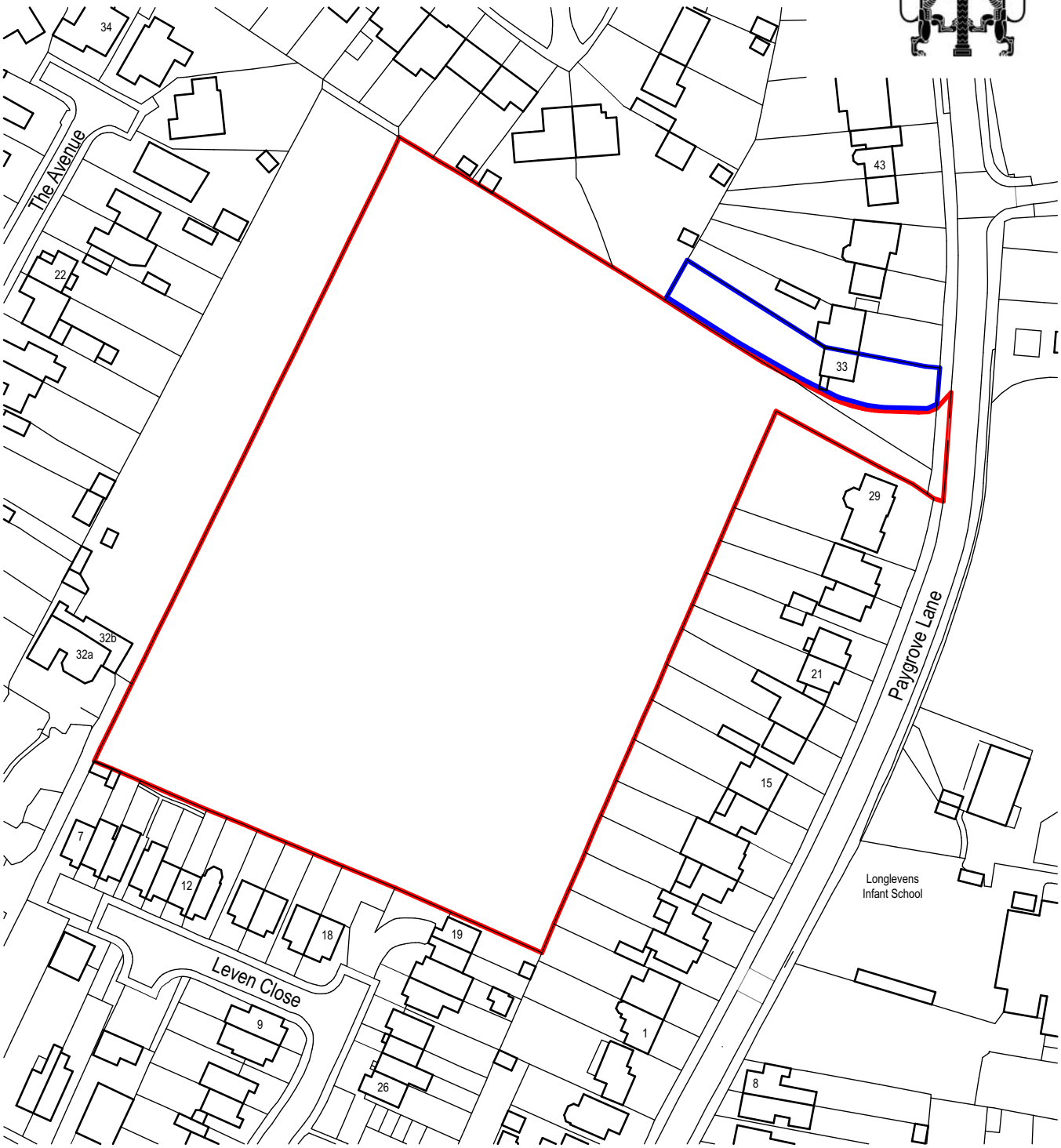
6.5 Finished floor levels to be set a minimum 150mm above external ground level.

APPENDIX A

Scale bar 1:1250
0 20 40 60

NORTH

RIBA
Chartered Practice



coombes : everitt architects limited
105-107 Bath Road
Cheltenham
Gloucestershire
GL53 7LE

[redacted]
www.ce-architects.co.uk

Drawing title:	Site Location Plan
Client:	Cotswold Oak Ltd
Drawn by:	AH Checked: JE
Project No:	21.20.020
Project:	Land at Paygrove Lane, Longlevens
Scale:	1:1250 @ A4
Date:	November 2021
Project / Drawing No:	21.20.020 SK1000A

APPENDIX B

Accommodation schedule

Unit Mix

Ref	Bedrooms	Bedspaces	Number Off	GIFA sq/ft	Total sq/ft
Lawence	2 + study	3	1	935	935
Latchford	3	6	2	1389	2778
Langley	4	7	3	1389	4167
Ranscombe	4 + study	7	2	1615	3230
Ruscombe	5	8	2	1615	3230
					14340

Scale bar 1:500

0 10 20 30 40 50

Preliminary

coombes : everitt architects limited
105-107 Bath Road
Cheltenham
Gloucestershire
GL53 7LE

[redacted]
www.ce-architects.co.uk

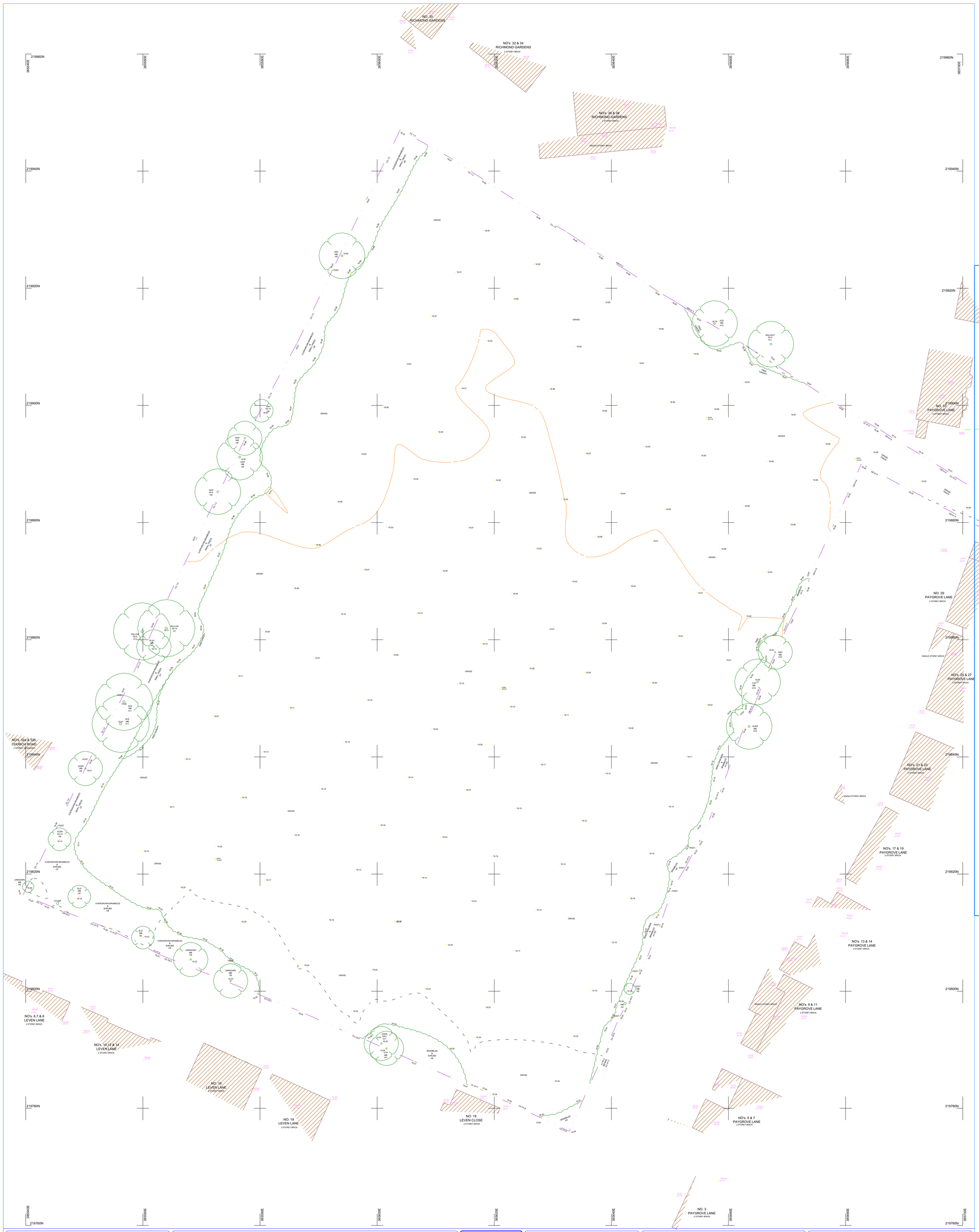
- [ ] Preliminary
- [ ] Feasibility
- [x] Planning
- [ ] Building Regulations
- [ ] Tender
- [ ] Construction issue
- [ ] As Built

RIBA
Chartered Practice

Drawing title:	Proposed Site Layout
Client:	Cotswold Oak Ltd
Drawn by:	AH Checked: JE
Project No:	21.20.020
Project:	Land at Paygrove Lane, Longlevens
Scale:	1:500 @ A1
Date:	January 2022
Project / Drawing No:	21.20.020 PL005

coombes : everitt architects

APPENDIX C



Notes

- Datum : Ordnance Survey Level datum via OS Active GPS Network
- Survey Grid : Pseudo Ordnance Survey National Grid Co-ordinates derived via OS Active GPS Network. Scale Factor Unity.
- Survey contents correct as of date of survey and survey undertaken to agreed specification
- All critical dimensions to be checked prior to site works
- All kerb levels shown are channel levels
- Drainage and Service covers :
  Covers buried or obscured at the time of the survey are not shown. Manholes have not been entered for safety reasons and all pipe diameters are estimated from the surface. Drainage pipe diameters are in millimetres, eg. D100 means a 100mm diameter pipe. The flow type stated is based on visual evidence seen from the surface at the time of the survey. All internal manhole details should be confirmed by the contractor on site prior to site works.
- Trees :
  For concentric spread trees the spread plotted is an average value drawn to scale to the nearest metre. The minimum individual diameter surveyed is 0.15m at 1m up the trunk from the ground. Trunk diameters are not plotted to size. General species are only stated where noted. A qualified arboriculturalist should be consulted for species type and condition. Heights (when requested) are approximate to the nearest metre.

Legend of Abbreviations

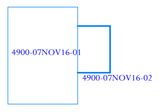
AV	Air Valve	FLP	Floodlight Post	SCK	Stop Cock
BEDS	Flower Beds	FP	Footpath	SOF	Soffit Level
BK/W	Brick Wall	G	Gully	ST/W	Stone Wall
BLK/W	Block Wall	GV	Gas Valve	SV	Sluice Valve
BOL	Bollard	HW	Head Wall	SVP	Soil Vent Pipe
BS	Brick Setts	IC	Inspection Cover	TEL	Call Box (telephone)
BT	British Telecom	IL	Invert Level	TH	Threshold Level
BW	Barbed Wire Fence	IR	Iron Railing	TL	Traffic Light
CB	Close Board Fence	LL	Larch-lap Fence	TP	Telegraph Pole
CCTV	Closed Circuit Television Camera	LP	Lamp Post	TV	Cable Television
CELL	Cellar Cover	MB	Multibole Tree	UTL	Unable to Lift (Cover)
CGI	Corrugated Iron Fence	MH	Manhole	V	Valve (Unknown Type)
CL	Cover Level	MP	Marker Post	VP	Vent Pipe
C/L	Chain Link Fence	MP-E	Marker Post - Electric	W-HT	Top of Wall Level
CONC	Concrete Surface	MP-G	Marker Post - Gas	WL	Water Level
CONC/P	Concrete Panel Fence	MP-T	Marker Post - Telephone	WM	Water Meter
CP	Chestnut Paling Fence	MP-W	Marker Post - Water	W/M	Wire Mesh Fence
CRB	Crash Barrier	NAME	Road Nameplate	WO	Washout Valve
D	Diameter (trees in metres / drainage pipes in millimetres)	PAL	Palisade Fence	WV	Water Valve
DK	Drop Kerb	POK	Top of Kerb Level		
E	Electricity Cover	PR	Post and Rail Fence		
EP	Electricity Pole	PW	Post and Wire Fence		
ER	Earth Rod	RE	Rodding Eye		
FFL	Finished Floor Level	RET	Retaining		
FH	Fire Hydrant	RS	Road Sign		
FLAG	Flag Pole	RWP	Rainwater Pipe		

Tree Abbreviations

ALD	Alder
BCH	Beech
CED	Cedar
CHE	Cherry
CYP	Cypress
EUC	Eucalyptus
FAC	False Acacia
FRT	Fruit
HAW	Hawthorn
HOL	Holly
HOAK	Holm Oak
HORN	Hornbeam
HCH	Horse Chestnut
LAR	Larch
LAU	Laurel
MAP	Maple
PLN	London Plane
POP	Poplar
RHO	Rhododendron
ROW	Rowan
SAL	Sallow
SB	Silver Birch
SPR	Spruce
SCH	Sweet Chestnut
WBM	Whitebeam
WIL	Willow

Survey Stations

Station	Easting	Northing	Level
GPS1	385681.615	219890.823	19.079
S001	385726.638	219884.553	19.474
S002	385717.727	219874.906	19.492
S03A	385656.231	219897.779	19.118
S01B	385621.055	219851.695	19.271
S04C	385572.349	219822.509	19.453



A D Horner Limited

Land and Measured Building Surveyors

51 Bridge Street
Pershore
Worcestershire
WR10 1AL

1 Folly House
Venton
Plymouth, Devon
PL7 5DS

Website: www.adhorner.co.uk

Title	Land r/o No.'s 3-29 Paygrove Lane, Longlevens, Gloucester GL2 0AP
Client	Gloucestershire County Council
Date	November 2016
Drawing No	4900-07NOV16-01
Plot scale	1 : 250 @ A0
Digital scale	1 CAD unit : 1 metre
Surveyed	LM
Checked	
Revision	

0 metres 10

N
Ordnance Survey Grid North

PRELIMINARY

APPENDIX D

PROPOSED PRIVATE PACKAGE PUMPING STATION.
PACKAGE PUMPING STATION TO BE TT PUMPS SATURN DUAL PUMP OR SIMILAR APPROVED PRODUCT.
DISCHARGE TO STW SURFACE WATER NETWORK AT 2l/s.
DISCHARGE RATE TO BE CONFIRMED BY STW.

Final S278 Design Area to be confirmed, indicatively road shown as simple bellmouth with 1% gradient to the site to ensure suitable tie in

SW01
CL 18.80
IL 17.95

SW01
CL 18.93
IL 17.61

SW02
CL 19.08
IL 18.45

FW01
CL 19.35
IL 18.07

FW02
CL 19.10
IL 18.32

FW03
CL 18.72
IL 18.72

FW04
CL 19.48
IL 17.66

FW05
CL 19.37
IL 17.59

FW06
CL 19.33
IL 17.24

FW07
CL 19.05
IL 17.07

EX FWMH
CL 18.93
IL 17.02

EX SWMH
17.49 SL

19.500
19.200
19.350
19.425
19.275
19.500
19.650
19.800
19.950

Lat
Lan
Ran

1:200

Nos. 36 & 38 RICHMOND GARDENS 2 STOREY BRICK
No. 37 PAYGROVE LANE 2 STOREY BRICK
NO. 29 PAYGROVE LANE 2 STOREY BRICK
Nos. 25 & 27 PAYGROVE LANE 2 STOREY BRICK
Nos. 21 & 23 PAYGROVE LANE 2 STOREY BRICK
Nos. 17 & 19 PAYGROVE LANE 2 STOREY BRICK

PAYGROVE LANE

INDICATIVE

Notes:

1. Do not scale from this drawing. All dimensions are in metres, unless stated otherwise.
2. Ordnance Survey, (c) Crown Copyright 2020. All rights reserved. Licence number 100022432.
3. Drawing to be read in conjunction with all other drawings. Any discrepancies are to be reported to the engineer 5 working days in advance of undertaking any work.
4. All pipework to be 100Ø PVC UNO
5. All chambers to be 450Ø Type D Chambers UNO. Chambers marked with diameter to be Type B Chambers (except chamber at pump).

KEY

- SURFACE WATER MANHOLE AND SEWER
- FOUL WATER MANHOLE AND SEWER
- HIGHWAY GULLY AND CONNECTION
- 18.450 — FINISHED FLOOR LEVELS
- SWALE
- +19.15 — PROPOSED LEVEL
- RISING MAIN
- HEADWALL
- 1/30 — GRADIENT
- UNDERBUILD (WITH HEIGHT)

Rev	Date	Details	Drawn by	Checked by
A	16.02.22	ROAD AND LAYOUT AMENDED	PG	KT

COTSWOLD TRANSPORT PLANNING

CLIENT: Cotswold Oak Ltd

PROJECT: Paygrove Lane, Longlevens

TITLE: Engineering Layout Sheet 1

STATUS: INFORMATION

SCALE @ A1:	DATE:	DRAWN:	CHECKED:	APPROVED:
1:250	26/01/2022	PG	KT	KT

JOB NO:	DRAWING NO:	REVISION:
CTP-0760	C002	A

INDICATIVE

Notes:

1. Do not scale from this drawing. All dimensions are in metres, unless stated otherwise.
2. Ordnance Survey, (c) Crown Copyright 2020. All rights reserved. Licence number 100022432.
3. Drawing to be read in conjunction with all other drawings. Any discrepancies are to be reported to the engineer 5 working days in advance of undertaking any work.
4. All pipework to be 100Ø PVC UNO
5. All chambers to be 450Ø Type D Chambers UNO. Chambers marked with diameter to be Type B Chambers (except chamber at pump).

KEY

- SURFACE WATER MANHOLE AND SEWER
- FOUL WATER MANHOLE AND SEWER
- HIGHWAY GULLY AND CONNECTION
- 18.450 — FINISHED FLOOR LEVELS
- SWALE
- +19.15 — PROPOSED LEVEL
- RISING MAIN
- HEADWALL
- 1/36 — GRADIENT
- UNDERBUILD (WITH HEIGHT)

Rev	Date	Details	Drawn by	Checked by
A	16/02/22	RAOD AND LAYOUT AMENDED	PG	KT

COTSWOLD TRANSPORT PLANNING

CLIENT: Cotswold Oak Ltd

PROJECT: Paygrove Lane, Longlevens

TITLE: Engineering Layout Sheet 2

STATUS: INFORMATION

SCALE @ A1:	DATE:	DRAWN:	CHECKED:	APPROVED:
1:250	26/01/2022	PG	KT	KT

JOB NO:	DRAWING NO:	REVISION:
CTP-0760	C003	A

APPENDIX E

Summary of Results for 100 year Return Period (+40%)

Half Drain Time : 964 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Control (l/s)	Max Σ Outflow (l/s)	Max Volume (m³)	Status
15 min Summer	18.510	0.680	0.0	2.0	2.0	79.5	O K
30 min Summer	18.602	0.772	0.0	2.0	2.0	105.9	O K
60 min Summer	18.688	0.858	0.0	2.0	2.0	133.8	Flood Risk
120 min Summer	18.763	0.933	0.0	2.0	2.0	161.1	Flood Risk
180 min Summer	18.799	0.969	0.0	2.0	2.0	175.4	Flood Risk
240 min Summer	18.820	0.990	0.0	2.0	2.0	183.6	Flood Risk
360 min Summer	18.838	1.008	0.0	2.0	2.0	191.0	Flood Risk
480 min Summer	18.844	1.014	0.0	2.0	2.0	193.5	Flood Risk
600 min Summer	18.842	1.012	0.0	2.0	2.0	192.9	Flood Risk
720 min Summer	18.836	1.006	0.0	2.0	2.0	190.1	Flood Risk
960 min Summer	18.819	0.989	0.0	2.0	2.0	183.3	Flood Risk
1440 min Summer	18.794	0.964	0.0	2.0	2.0	173.1	Flood Risk
2160 min Summer	18.759	0.929	0.0	2.0	2.0	159.9	Flood Risk
2880 min Summer	18.724	0.894	0.0	2.0	2.0	146.8	Flood Risk
4320 min Summer	18.651	0.821	0.0	2.0	2.0	121.3	Flood Risk
5760 min Summer	18.575	0.745	0.0	2.0	2.0	97.5	O K
7200 min Summer	18.497	0.667	0.0	2.0	2.0	75.8	O K
8640 min Summer	18.420	0.590	0.0	2.0	2.0	57.2	O K
10080 min Summer	18.344	0.514	0.0	2.0	2.0	41.4	O K
15 min Winter	18.546	0.716	0.0	2.0	2.0	89.3	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
15 min Summer	117.448	0.0	81.7	19
30 min Summer	79.010	0.0	109.9	34
60 min Summer	50.812	0.0	141.4	64
120 min Summer	31.621	0.0	175.9	122
180 min Summer	23.637	0.0	197.3	182
240 min Summer	19.105	0.0	212.6	242
360 min Summer	14.037	0.0	234.4	362
480 min Summer	11.286	0.0	251.2	482
600 min Summer	9.522	0.0	264.9	600
720 min Summer	8.282	0.0	276.6	720
960 min Summer	6.640	0.0	295.6	834
1440 min Summer	4.854	0.0	324.1	1082
2160 min Summer	3.541	0.0	354.7	1472
2880 min Summer	2.828	0.0	377.5	1876
4320 min Summer	2.055	0.0	411.6	2684
5760 min Summer	1.637	0.0	437.4	3464
7200 min Summer	1.371	0.0	457.5	4184
8640 min Summer	1.186	0.0	475.0	4928
10080 min Summer	1.049	0.0	490.4	5640
15 min Winter	117.448	0.0	91.6	19

Summary of Results for 100 year Return Period (+40%)

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Control (l/s)	Max Σ Outflow (l/s)	Max Volume (m³)	Status
30 min Winter	18.644	0.814	0.0	2.0	2.0	119.1	Flood Risk
60 min Winter	18.735	0.905	0.0	2.0	2.0	150.8	Flood Risk
120 min Winter	18.817	0.987	0.0	2.0	2.0	182.6	Flood Risk
180 min Winter	18.858	1.028	0.0	2.0	2.0	199.5	Flood Risk
240 min Winter	18.882	1.052	0.0	2.0	2.0	209.7	Flood Risk
360 min Winter	18.906	1.076	0.0	2.0	2.0	220.1	Flood Risk
480 min Winter	18.917	1.087	0.0	2.0	2.0	225.2	Flood Risk
600 min Winter	18.921	1.091	0.0	2.0	2.0	226.8	Flood Risk
720 min Winter	18.919	1.089	0.0	2.0	2.0	226.3	Flood Risk
960 min Winter	18.908	1.078	0.0	2.0	2.0	221.0	Flood Risk
1440 min Winter	18.871	1.041	0.0	2.0	2.0	204.9	Flood Risk
2160 min Winter	18.827	0.997	0.0	2.0	2.0	186.6	Flood Risk
2880 min Winter	18.778	0.948	0.0	2.0	2.0	166.8	Flood Risk
4320 min Winter	18.668	0.838	0.0	2.0	2.0	127.2	Flood Risk
5760 min Winter	18.551	0.721	0.0	2.0	2.0	90.7	O K
7200 min Winter	18.427	0.597	0.0	2.0	2.0	58.9	O K
8640 min Winter	18.297	0.467	0.0	2.0	2.0	32.8	O K
10080 min Winter	18.155	0.325	0.0	2.0	2.0	13.2	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
30 min Winter	79.010	0.0	123.1	33
60 min Winter	50.812	0.0	158.4	62
120 min Winter	31.621	0.0	197.2	122
180 min Winter	23.637	0.0	221.1	180
240 min Winter	19.105	0.0	238.0	238
360 min Winter	14.037	0.0	262.5	354
480 min Winter	11.286	0.0	281.4	470
600 min Winter	9.522	0.0	296.7	584
720 min Winter	8.282	0.0	309.7	696
960 min Winter	6.640	0.0	331.2	914
1440 min Winter	4.854	0.0	338.2	1154
2160 min Winter	3.541	0.0	397.2	1604
2880 min Winter	2.828	0.0	422.8	2052
4320 min Winter	2.055	0.0	461.2	2900
5760 min Winter	1.637	0.0	490.0	3696
7200 min Winter	1.371	0.0	512.4	4400
8640 min Winter	1.186	0.0	532.0	5096
10080 min Winter	1.049	0.0	549.3	5648

Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	100	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	18.000	Shortest Storm (mins)	15
Ratio R	0.350	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+40

Time Area Diagram

Total Area (ha) 0.371

Time (mins) From:	To:	Area (ha)
0	4	0.371

Model Details

Storage is Online Cover Level (m) 18.930

Swale Structure

Infiltration Coefficient Base (m/hr)	0.00000	Length (m)	75.0
Infiltration Coefficient Side (m/hr)	0.00000	Side Slope (1:X)	3.0
Safety Factor	2.0	Slope (1:X)	200.0
Porosity	1.00	Cap Volume Depth (m)	0.000
Invert Level (m)	17.830	Cap Infiltration Depth (m)	0.000
Base Width (m)	0.6		

Pump Outflow Control

Invert Level (m) 17.730

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	2.0000	0.900	2.0000	1.700	2.0000	2.500	2.0000
0.200	2.0000	1.000	2.0000	1.800	2.0000	2.600	2.0000
0.300	2.0000	1.100	2.0000	1.900	2.0000	2.700	2.0000
0.400	2.0000	1.200	2.0000	2.000	2.0000	2.800	2.0000
0.500	2.0000	1.300	2.0000	2.100	2.0000	2.900	2.0000
0.600	2.0000	1.400	2.0000	2.200	2.0000	3.000	2.0000
0.700	2.0000	1.500	2.0000	2.300	2.0000		
0.800	2.0000	1.600	2.0000	2.400	2.0000		

ARBORICULTURAL CONSULTANTS

Justin Hobbs BSc(Hons) Tech Cert(AA) PTI
Arboriculturist

TREE SURVEY REPORT AND TREE PROTECTION PLAN

For:

NEW RESIDENTIAL DEVELOPMENT AND ASSOCIATED INFRASTRUCTURE

At:

LAND AT PAYGROVE LANE, GLOUCESTER

MHP ref: 21341 LAND AT PAYGROVE LANE, GLOUCESTER_TS_TPP _V2

CONTENTS:

Issue record

Date	Version	Notes	Checked by
11.02.2022	V1	Initial issue	MR
16.02.2022	V2	Plan update – T5 canopy	MR

1 INTRODUCTION

1.1 Introduction

1.1.1 Outline planning permission has been granted by Gloucester City Council (GCC) for *residential redevelopment of up to 10 dwellings and public open space including associated landscaping, car parking and access* (GCC ref 16/01558/OUT) at Playing Field Rear 3 – 29 Paygrove Lane; hereafter referred to as 'the site'.

1.1.2 Condition 9 of 16/01558/OUT states:

No development including demolition or site clearance shall be commenced on the site or machinery or material brought onto the site for the purpose of development until full details of adequate measures to protect trees and hedgerows have been submitted to and approved in writing by the local planning authority. These shall include:

A. Fencing. Protective fencing must be installed around trees and hedgerows to be retained on site. The protective fencing design must be to specifications provided in BS5837:2005 or subsequent revisions, unless agreed in writing with the local planning authority. A scale plan must be submitted and approved in writing by the local planning authority accurately indicating the position of protective fencing. No development shall be commenced on site or machinery or material brought onto site until the approved protective fencing has been installed in the approved positions and this has been inspected on site and approved in writing by the local planning authority. Such fencing shall be maintained during the course of development,

B. Tree Protection Zone (TPZ) The area around trees and hedgerows enclosed on site by protective fencing shall be deemed the TPZ. Excavations of any kind, alterations in soil levels, storage of any materials, soil, equipment, fuel, machinery or plant, citing of site compounds, latrines, vehicle parking and delivery areas, fires and any other activities liable to be harmful to trees and hedgerows are prohibited within the TPZ, unless agreed in writing with the local planning authority. The TPZ shall be maintained during the course of development Reason To ensure adequate protection to existing trees which are to be retained and to retain habitat, in the interests of the character and amenities of

the area and protecting biodiversity in accordance with Policies SD10 and INF 4 of the Gloucester, Cheltenham and Tewkesbury Joint Core Strategy Main Modifications 2017, Paragraphs 17, 109 and 118 of the National Planning Policy Framework and Policies B.8, B.10 and BE.4 of the Second Deposit City of Gloucester Local Plan (2002). Receipt of details pre-commencement is necessary to fully protect retained trees.

1.3.1 A proposed site layout (Drawing no 7876-PL0C) was submitted with the outline application.

1.3.2 I have been supplied with the latest proposed site layout plans (21.20.020 SK003 B).

1.2 Site details

1.2.1 For location purposes, the site can be located using the following grid reference: SO 85619 19860

1.3 Instruction and scope

1.3.1 I am instructed by Cotswold Oak to visit the site and to carry out an assessment of arboricultural features in accordance with British Standards (BS) 5837:2012 'Trees in Relation to Design Demolition and Construction – Recommendations'.

1.3.2 I am to prepare the following information in relation to the planning application:

- Tree survey and schedule of findings.
- An arboricultural impact assessment & tree protection plan in relation to the latest proposals.

2 GENERAL

2.1 Statutory tree protection and other designations

2.1.1 I have carried out the following desk-based tree-related constraints checks in relation to the site.

	General summary information	Relevant to site?
Conservation Area[1]	• All trees with a trunk diameter greater than 75mm at 1.5m height are protected in the same way as for TPO (see below). • Six weeks' notice must be given to the Local Planning Authority (LPA) prior to carrying out any tree works so that possible requirement for TPO can be assessed.	No
Tree Preservation Order (TPO)[2]	• It is an offence to cut down, uproot, top or lop, wilfully damage or wilfully destroy relevant trees or woodlands. • Formal permission must be applied for (and granted) by the LPA before carrying out tree works. • Penalties of up to £20K (Magistrates Court) or unlimited fine (Crown Court).	No

2.2 Limitations

2.2.1 In some instances, I have been unable to access or clearly observe the trunks of trees as they are offsite. Where this is the case, I have made my best endeavours to accurately estimate dimensions and tree condition.

2.2.2 Trees are living organisms and self-supporting dynamic structures. Their physiological and structural condition can change rapidly in response to a wide range of biotic/abiotic factors. As such, the findings and recommendations of my tree survey are limited to 24 months from the date of my site visit.

[1] https://www.gloucester.gov.uk/environment-waste-recycling/nature-and-conservation/trees-and-high-hedges/
[2] https://www.gloucester.gov.uk/environment-waste-recycling/nature-and-conservation/trees-and-high-hedges/

2.3 Wildlife informative

2.3.1 Tree works should not be carried out until a reasonably detailed inspection of relevant trees has been carried out to determine if bat roosts and/or bird nests are present.

2.3.2 It is a criminal offence to intentionally damage/destroy the nest of any wild bird while it is in use or being built. Similarly it is an offence to intentionally/recklessly disturb roosting bats or to damage or destroy a bat roost.

2.3.3 The Arboricultural Association publishes useful advice in relation to trees and nesting birds[3].

Helpful advice with regards to bats and tree work is published by the UK Government[4], the Arboricultural Association[5] and The Bat Conservation Trust[6].

[3] https://www.trees.org.uk/Help-Advice/Public/When-is-the-bird-nest-season
[4] https://www.gov.uk/guidance/bats-protection-surveys-and-licences
[5] https://www.trees.org.uk/Help-Advice/Public/Bats-and-trees-Who-does-what-where
[6] https://www.bats.org.uk/about-bats/where-do-bats-live/bat-roosts/roosts-in-trees

3 ARBORICULTURAL SURVEY

3.1 Site visit

3.1.1 I visited the site on 25.11.2021.

3.2 Findings

3.2.1 My findings are set out within the Tree Survey Schedule with explanatory key at **Appendix 1**.

3.3 General site characteristics

3.3.1 General site characteristics can be summarised as:

- A flat, disused playing field surrounded on all sides by residential gardens of varying sizes. Access is via a single track off Paygrove Lane.

3.4 Key arboricultural features

3.4.1 The key arboricultural features associated with the site can be summarised as:

- An overgrown and encroaching hedgerow along the western boundary with trees present within in.
- A small number of trees located in surrounding gardens that are close to the site boundary and/or with canopies overhanging into the site.

4 ARBORICULTURAL IMPACT ASSESSMENT(AIA) AND TREE PROTECTION PLAN (TPP)

4.1 Arboricultural Impact Assessment.

4.1.1 A combined AIA & TPP is included at **Appendix 2.**

Tree removals

4.1.2 The plan shows the tree survey and constraints information in relation to the current proposed layout and confirms one small tree and one small tree group shall be removed. These are a single ash tree (T9) and a group of Leyland cypress, both of quality and amenity value.

4.1.3 New tree planting is proposed that will mitigate for the loss of these trees, and enhance tree cover on site.

4.2 Tree Protection Plan

4.2.1 The Tree Protection element of the plan demonstrates how retained trees can be effectively protected and retained as part of the construction of the proposals.

4.2.2 Locations and specifications of tree protection barriers are provided.

4.2.3 Tree protection barriers must be put in place before any other work is carried out on site, including demolition and remain in place for the duration of construction works.

5 CONCLUSION & RECOMMENDATION

5.1 Conclusion

5.1.1 The current development proposals are feasible from an arboricultural perspective and at the details provided within this report should be adequate to fulfil the requirements of condition 9 of 16/01558/OUT. For the following key reasons:

- No trees of significant value shall be removed to enable the construction of the proposals.
- Tree protection measures can be put in place to ensure that construction works do not result in damage to the retained trees.
- New tree planting will establish and mature to enhance the character of the site.

APPENDIX 1 – TREE SURVEY SCHEDULE

TREES

Ref	Common name	Height (m)	Est	Stem dia (mm)	Est	N	Est	E	Est	S	Est	W	Est	Estimated first branch height (m)	1st branch direction	Estimated canopy height (m)	Life stage	Special status	General observations & management recommendations	Struct. cond.	Phys. cond.	ULE	Quality grading	RPA radius (m)	RPA area (m2)	TPO
T1	Walnut	12	#	400	#	7	#	7	#	7	#	7	-	1.5	SE	0.5	EM	None	Off site in adjoining garden. Twin leaders from 0.5m. Wide spreading.	Fair	Good	20+	B1	5	72	None
T2	Sycamore	17	#	600	#	4	#	4	#	4	#	4	-	3	N	4	EM	None	Off site in adjoining garden. Multiple leaders, dense, upright form.	Fair	Good	20+	B1	7	163	None
T3	Ash	14	#	500	#	4	#	4	#	4	-	4	#	3	W	3	EM	None	Growing in hedgerow, dense bramble around base, early onset of ash die back evident.	Fair	Fair	10+	C1	6	113	None
T4	Willow	4	#	1200	#	1.5	#	1.5	#	1.5	#	1.5	#	3	SW	2	OM	None	Old tree, pollarded regularly at 3m. Just off site in adjoining garden.	Fair	Good	20+	B1	14	651	None
T5	Willow	7	-	290	-	1	-	9	-	8	-	0	-	1	SE	0.5	EM	None	Leans significantly to S & E.	Poor	Good	10+	C1	3	38	None
T6	Willow	4	#	1200	#	0	-	0	-	0	-	0	-	3	SE	3	Dead	None	Old pollard, just off site. Dead.	Dead	Dead	<10	U	14	651	None
T7	Sycamore	11	-	300	#	3	#	3	#	3	#	3	#	2	E	2	EM	None	Growing on edge of site in area of dense bramble.	Fair	Fair	10+	C1	4	41	None
T8	Cypress	14	-	500	#	4	-	4	#	3	#	3	#	1	N	2	M	None	Noticeable tree, just off site in adjoining garden.	Fair	Good	20+	B1	6	113	None
T9	Ash	11	-	350	#	5	-	2	#	1	-	4	-	2	W	1	M	None	Multi-stemmed tree, just located within site.	Fair	Fair	10+	C1	4	55	None

GROUPS

Ref	Common names of woody species present	Estimated average trunk diameter at 1.5m (mm)	Estimated minimum & maximum heights (m)	Estimated average height (m)	Estimated average canopy height (m)	Life stage	Special status	General observations & management recommendations	Struct. cond.	Phys. cond.	ULE	Quality grading	RPA radius from canopy edge (m)	Protected status
G1	2 x Ash	300	12 & 12	12	4	EM	None	Growing in hedgerow surrounded by dense ivy, early onset of ash die back evident.	Fair	Fair	10+	C2	As shown on plan	None
G2	15 + Sycamore	180	12 & 12	12	2	EM	None	Group of slim formed trees grown in close proximity, close to boundary.	Fair	Good	10+	C2	As shown on plan	None
G3	3 x Field maple	300	11 & 11	11	2	M	None	Group growing in adjoining garden and overhanging into site.	Fair	Good	20+	B2	As shown on plan	None
G4	Leyland cypress	150	8 & 6	7	0	EM	None	Planted as boundary hedge in adjoining garden, canopy overhangs into site.	Fair	Fair	10+	C2	As shown on plan	None

HEDGEROWS

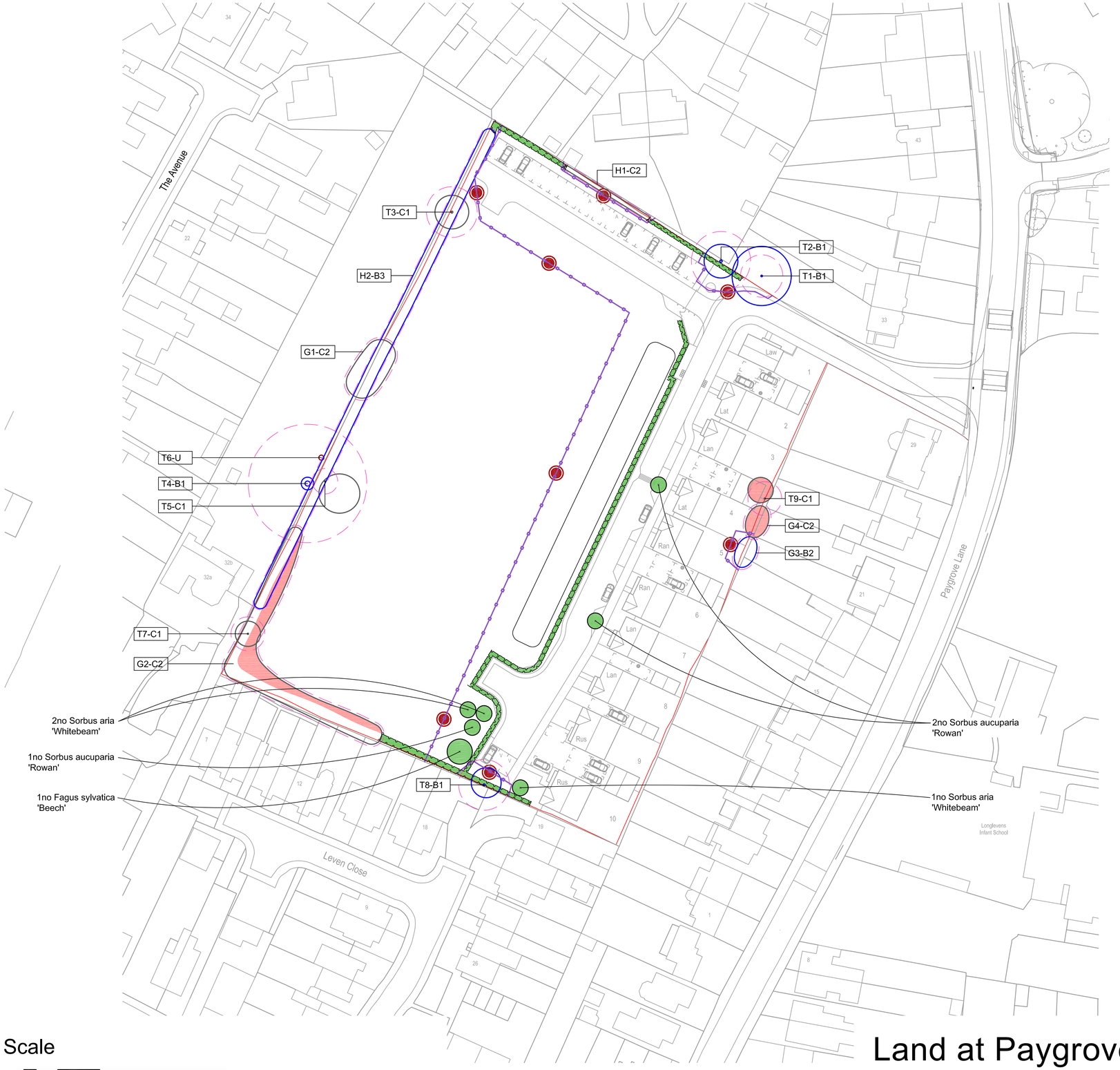
Ref	Common names of woody species present	Estimated minimum & maximum heights (m)	Estimated average height (m)	Estimated average trunk diameter (mm)	Estimated average lateral spread (m)	Estimated average canopy height (m)	Life stage	Special status	General observations & management recommendations	Struct. cond.	Phys. cond.	ULE	Quality grading	RPA radius from canopy edge (m)
H1	Privet, elder	4 & 4	4	75	1	0	M	None	Rooted in adjoining garden, spreading into site.	Fair	Good	20+	C2	As shown on plan
H2	Hawthorn, elder, ash, cherry, bramble	7 & 2	5	100	3	0	M	None	Haphazard, overgrown with bramble, spreading into site.no recent management.	Fair	Good	20+	B3	As shown on plan

KEY

Assessment criteria	Description
Reference number on plan	T: Tree, G: Group, W: Woodland, H: Hedgerow. This reference is recorded on the Tree Survey and Constraints Plan against the relevant survey item.
Common name (Scientific name)	Common names: normal type. Scientific names where required: italic type in brackets
Heights	Unit: metres (m). Recorded to the nearest half metre for heights upto 10m and to the nearest whole metre for heights above 10m.
Stem diameter	Unit: millimetres (mm). Rounded to the nearest 10mm. Single and multi-stemmed trees are measured at 1.5m above highest ground level or otherwise as in accordance with Annex C, BS5837:2012.
Estimates	Measured tree dimensions are identified by an '-' in the adjacent 'Estimate' column. Where dimensions have been estimated (offsite, or otherwise inaccessible survey items) this is clearly identified by a '#' in the adjacent 'Estimate' column.
Crown spread	Unit: metres (m). Directions refer to the four compass points (north, east, south, west). Dimensions are rounded-up to the nearest half metre for heights up to 10m and to the nearest whole metre for heights above 10m.
Estimated average lateral spread	Unit: metres (m). For hedgerows only. An estimate of the average width between branch tips.
Crown clearance height	Unit: metres (m). The existing height above ground level of: • First significant branch and the compass direction of its growth: North (N), North-east (NE), East (E) , South-east (SE) etc. • Canopy (height between branch tips and ground level).
Life stage	Y – young (stake dependent), SM - Semi-Mature (still capable of being transplanted without preparation, up to 30cm girth and not yet sexually mature), EM – Early Mature (not yet having reached 75% of expected mature size), M – Mature (anything else up to normal life expectancy for the species), OM – Over Mature (anything beyond mature and in natural decline), V – Veteran, A - Ancient (any tree displaying characteristics described by the Ancient Tree Forum and referenced by Natural England).
Special status	• None • Veteran: any tree judged to meet criteria as defined by the Ancient Tree Forum • Ancient: any tree judged to meet criteria as defined by the Ancient Tree Forum[1]
General observations and preliminary management recommendations	General observations are recorded in relation to a survey item's structural and/or physiological condition (eg the presence of any decay and physical defect) and /or any preliminary management recommendations that may be appropriate.
Structural condition	• Good: without any observable significant biomechnical structural weaknesses • Fair: with minor biomechanical structural flaws. Some remedial action may be required • Poor:with significant biomechanical weaknesses requiring intervention particularly where risk management is required.
Physiological condition	• Good: no indications of impaired physiological function and in optimum condition for age and species • Fair: with indicators of reduced vitality. Some intervention may be required • Poor: with significantly impaired physiological function for age and species
Remaining contribution	Useful life expectancy, or the length of time a tree's is estimated to be able to make a useful contribution, is expressed in years as: <10, 10+, 20+, 40+.
Quality grading	Assessed in accordance with Table 1, BS5837:2012. Colours relate to depiction on the Tree Constraints Plan. • Category A (Green) Trees of high quality with an estimated remaining life expectancy of 40 years • Category B (Blue) Trees of moderate quality with an estimated remaining life expectancy of at least 20 years. • Category C (Grey) Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm. • Category U (Red) Unsuitable for retention. Trees in such a poor condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years. Note - A, B and C trees are also given a sub-category of 1, 2 or 3 which reflects their arboricultural, landscape or cultural and conservation values respectively. Each subcategory has an equal weight, for example an A1 tree has the same retention priority as an A3 tree. More than one sub-category may be applied to a survey item as appropriate.
RPA radius	Root Protection Area (RPA): a layout design tool. Unit: metres (m). Radial distance from tree centre to define a circle that indicates on the Tree Survey Plan the minimum rooting area required to maintain tree's viability. Calculated in accordance with Annex D, BS5837:2012
RPA area	Unit: square metres (m^2). The area of the RPA radius circle described above. Applies only to individual trees.

[1] LONSDALE, D. (Ed). Ancient and other veteran trees: further guidance on management. The Tree Council. London. 2013.

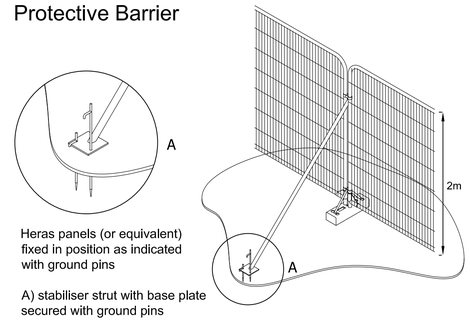
APPENDIX 2 – ARBORICULTURAL IMPACT ASSESSMENT AND TREE PROTECTION PLAN



Key

- Vegetation to be removed / area pruned
- Proposed tree planting (see 21.20.020 PL006 Materials Distribution and Landscaping for details)
- Proposed hedge planting (see 21.20.020 PL006 Materials Distribution and Landscaping for details)
- Tree protection fencing
- Signage 'Construction exclusion zone - No Access'

Protective Barrier



Heras panels (or equivalent) fixed in position as indicated with ground pins

A) stabiliser strut with base plate secured with ground pins

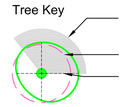
Quality and Suitability For Retention

- Category A - High quality and value (Highly desirable for retention)
- Category B - Moderate quality and value (Desirable for retention)
- Category C - Low quality and value (Optional for retention)
- Category U - Poor quality and value (Unsuitable for retention)

Root Protection Areas (RPA)

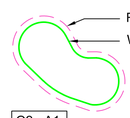
Root Protections Areas (RPA) indetified are in accordance with BS5837:2012. RPA's are shown as a pink dashed polyline

Tree Key



- Existing shade segment (where applicable)
- Root Protection Area (RPA)
- Tree / Group canopy extent (calculated using N,E,S,W cardinal points - not shown)
- Tree / Group Number ID and Quality

Group / Area / Woodland / Hedgerow Key



- Root Protection Area (RPA)
- Woodland, group or hedge
- Tree / Group Number ID

Tree number on plan	Common name	Quality grading	RPA radius (m)	Protected Status
T1	Walnut	B1	5	None
T2	Sycamore	B1	7	None
T3	Ash	C1	6	None
T4	Willow	B1	14	None
T5	Willow	C1	3	None
T6	Willow	U	0	None
T7	Sycamore	C1	4	None
T8	Cypress	B1	6	None
T9	Ash	C1	4	None

Group number on plan	Common names of woody species present	Quality grading	RPA radius (m)	Protected status
G1	2 x Ash	C2	As shown on plan	None
G2	15 + Sycamore	C2	As shown on plan	None
G3	3 x Field maple	B2	As shown on plan	None
G4	Leyland cypress	C2	As shown on plan	None

Hedge number on plan	Common names of woody species present	Quality grading	RPA radius (m)
H1	Privet, elder	C2	As shown on plan
H2	Hawthorn, elder, ash, cherry, bramble	B3	As shown on plan

Notes

1) This drawing has been produced to be printed in colour. If you have been given this drawing in monochrome please request a colour version.

2) Do not scale directly from this drawing.

3) This drawing is to be read in conjunction with all other relevant MHP drawings and information supplied by other consultants.

Rev.		Date:	Drawn:	Checked:
A	Updated layout with arb work adjusted accordingly	10-02-22	GW	MR

Revisions:

Project: Land at Paygrove Lane, Gloucester

Client: Coombes Everitt

Title: Arboricultural Impact Assessment and Tree Protection Plan

Drawing number: 21341.502 Rev: A

Status: FOR INFORMATION

Drawn By:	Checked By:	Date:	Scale @ A1:
GW	JH	09-12-21	1:500

Scale

0 2 5 10 20 50

Land at Paygrove Lane, Gloucester

Arb Impact Assessment & Tree Protection Plan

N

ARBORICUTURAL CONSULTANTS mhp