Project Title:	**HOYLES LANE SUPPLY AND DEMAND (C&D PO 004)**
Project No:	**80061057-02**
Document Title:	**Hoyles Lane/Lea Gate Catchment Area**
	Arboricultural Impact Assessment

Document No:	**80061057-02-EMG-MISCE-99-RP-04-00008**	**Rev** **P03**
Suitability Description:	**For Information**	**Suitability code** **S02**

Date:	**December 2023**

Document Amendment record

Rev	Suitability code	Date	Amendment Details	Author ACS	Checker EGEMS	Reviewer EGEMS	Approver Bethell
P01	S02	Nov 2023	For Information	IRM	RS	RS	AO
P02	S02	Nov 2023	For Information	IRM	RS	RS	AO
P03	S02	Dec2023	For Information	IRM	RS	RS	AO

Hoyles Lane/Lea Gate Catchment Area

Arboricultural Impact Assessment

December 2023

Client:
Emerald Green Environmental Management Services Ltd on behalf of Bethell Construction Ltd.

Consultant:

ACS Consulting
Knutsford
WA16 8GS

Report Reference: 4909/DR.23

	Name	Signature	Date
Originator	IRM		November 2023
Checked By	P Feasby		December 2023
Approved By	R Sykes		December 2023

Document Revision Record

Issue No	Date	Details of Revisions
1	November 2023	Issue 1
2	December 2023	Interim Version - unverified

LIMITATION

ACS Consulting (ACS) has prepared this Report for the sole use of Emerald Green Environmental Management Services Ltd on behalf of Bethell Construction Ltd. in accordance with the Agreement under which our services were performed. No other warranty, expressed or implied, is made as to the professional advice included in this Report or any other services provided by us. This Report may not be relied upon by any other party without the prior and express written agreement of ACS. Unless otherwise stated in this Report, the assessments made assume that the sites and facilities will continue to be used for their current purpose without significant change. The conclusions and recommendations contained in this Report are based upon information provided by others and upon the assumption that all relevant information has been provided by those parties from whom it has been requested. Information obtained from third parties has not been independently verified by ACS, unless otherwise stated in the Report.

CONTENTS

1.0 INTRODUCTION

1.01

ACS Consulting is instructed by Emerald Green Environmental Management Services Ltd. on behalf of Bethell Construction Ltd. to report on trees and the implications for the proposed development at Lea Gate Catchment Area, Preston. The assessment and report was undertaken by Ian Murat, Registered Consultant of the Arboricultural Association.

1.02

In accordance with guidance on information requirements and validation for planning applications, this report fulfils the recommended national list criteria for tree survey/arboricultural information. More specifically, it contains the following:

- A full tree survey to the requirements of BS5837 (2012) Trees In Relation To Design, Demolition and Construction – Recommendations;
- A plan showing tree survey information, retention categorisation and root protection areas;
- An assessment of the arboricultural implications of development detailing trees to be retained/removed and appropriate protection measures;
- An Arboricultural Method Statement detailing a set of agreed principles for tree protection, implementation and phasing of works.

1.03

The site was visited during June and October 2023. A survey of the trees and hedgerows was completed, recording; *species type, age, height, crown spread, diameter-at-breast-height and condition*.

2.0 BACKGROUND

2.01 The Site

The site is located to the north west of Preston City centre. It encompasses Hoyles Lane, Cottam through to Lea Gate Waste Water Treatment Works (SD 47894 29987). The area is peri-urban in nature. The new A582 M55 link road is the site's dominating feature along with the Blackpool to Preston railway line, the Lancaster Canal and Savick Brook.

2.02 Statutory Protection

The pipeline transect does not pass through Conservation Areas. Trees directly along the transect are not the subject of a Tree Preservation Order (PCC web site). There are TPOs at a number of properties along Hoyles Lane notably 219; Orchard House and Laburnum House as illustrated in Fig 1 below.

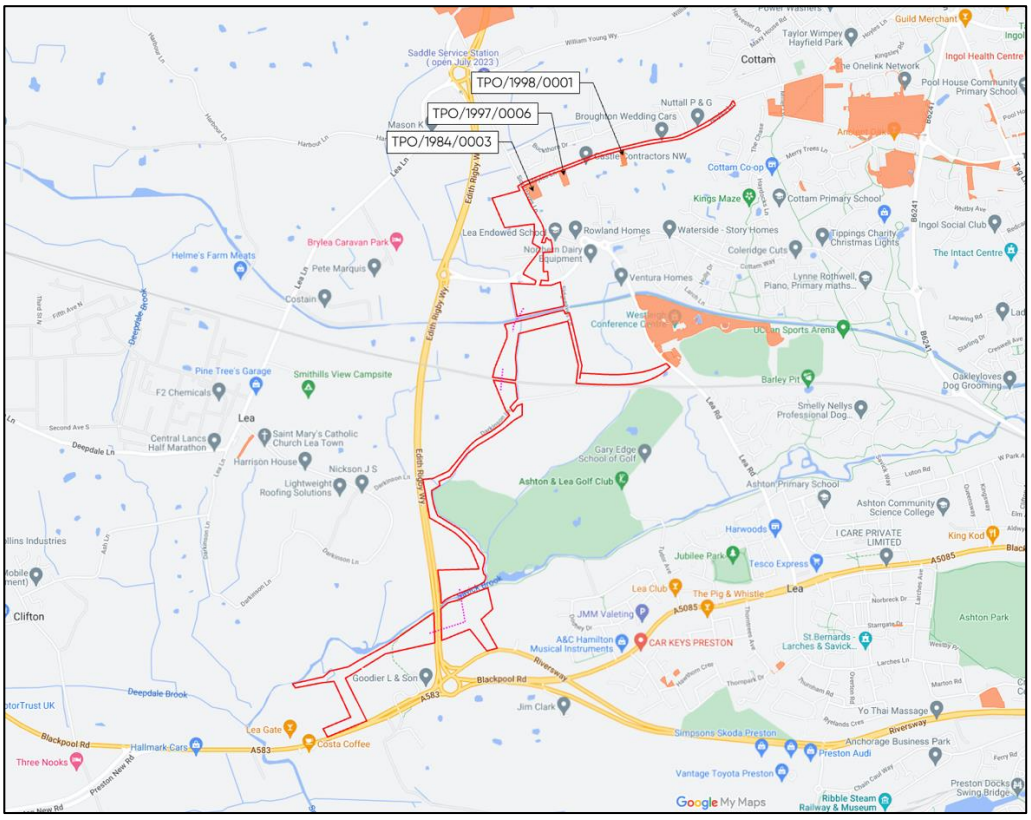


Fig 1: *Tree Preservation Orders highlighted in orange in relation to temporary working areas.*

There are no sections of Ancient Woodland[1] and there are no recorded ancient or veteran trees[2]. The transect includes a number of hedgerows that accord with the Hedgerow Regulations 1997.

[1] **Ancient Woodland (England) Natural England Open Data Publication**
[2] **Woodland Trust**

2.03 Soils

BS 5837 – 2012 requires a basic assessment of the soils on site. An examination of the British Geological Survey site notes the superficial deposits as: Till, Devensian - Diamicton. Sedimentary superficial deposit formed between 116 and 11.8 thousand years ago during the Quaternary period and: Head - Clay, silt, sand and gravel. Sedimentary superficial deposit formed between 2.588 million years ago and the present during the Quaternary period and; Tidal Flat Deposits, 1 - Silt, clay and sand. Sedimentary superficial deposit formed between 2.588 million years ago and the present during the Quaternary period.

The Cranfield Soil and Agrifood Institute Soilscapes viewer shows soils across the transect to be: Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils.

3.0 TREE SURVEY

3.01

I have identified trees as individuals or in groups/copse. The group/copse classification is intended to identify trees that form cohesive arboricultural features either aerodynamically, visually or culturally. Off-site trees and groups that could influence the development potential of the site, have been noted. Their attributes have been approximated.

3.02

The tree data can be found at Appendix A. There is no requirement in BS 5837 to repeat the details of the constraints information save for confirming that the trees were surveyed for species type, age, height, crown spread, diameter-at-breast-height, condition, and their suitability for retention from ground level. Each tree or group was assigned to one of the four retention categories [A,B,C,U] specified by BS5837. The individual descriptions and other relevant information are contained in the attached schedule and they are shown on the attached plans, based on the original topographical survey. Only trees with a stem diameter of 75 millimetres measured at 1.5 metres above the ground are required to be recorded.

3.03 New Planting

The survey noted new planting. The planting is part of the landscaping for the new A582. An assessment found that at least 98% of the new planting has failed to establish.

4.0 DEVELOPMENT IMPLICATIONS

4.01 Temporary Working Area

The total temporary working area of the entire scheme covers a transect of approximately 3.5 kilometres in length. The transect passes over existing highways, grazing and pasture land, water features and, infrastructure assets. The transect largely follows the existing sewer pipeline.

4.02 Requirement for Development

The works are required to resolve historical issues relating to local flooding and to resolve the impact of the North West Preston Strategic Development Site Plan on the Lea Gate Catchment area, up to and including foreseeable property development/built by 2040. The project will resolve the internal and external flooding, to a 1 in 30-year storm event, at properties on Hoyles Lane.

The contractor shall design and construct a new foul sewer rising main sewer to be laid adjacent to the existing foul sewer rising main, running from the junction of Westward Close with Hoyles Lane, to the Lea Gate pumping station.

4.03 Development Implications

The development design is driven by prescriptive site width and depths, which means that the proposed transect can only be accommodated on this site in the proposed alignment. The development will require the removal and reinstatement of a number of trees and small sections of hedgerows.

While the majority of the scheme is considered to be Permitted Development, 7 No. temporary accesses are required to safely access the temporary working areas. Establishment of 5 No. of these will require either the creation of new access points, or the modification (i.e. widening) of existing field accesses.

The associated removal of sections of hedgerow adjacent to highway and field boundaries require formal consent, either via Hedgerow Regulations or Planning Consent applications.

4.04 Loss to Development

The methodology for assessment is based on BS5837 – 2012 Trees in relation to design, demolition and construction – Recommendations. The guidance recommends that impacts on arboricultural assets should be assessed by considering:

1. Which arboreal assets are affected by the proposed development;
2. Understand what contribution the arboreal assets make to the significance of the site and location;
3. Identify what impact the loss of arboreal assets of the site might have on that significance;
4. Consider maximising enhancements and avoiding harm.

The principal implications will be the replacement of groups, individual trees and small sections of hedgerow as noted on the Arboricultural Layout Plan ARB/4909/Y/200. The impact for the replacement of the groups, individual trees and sections of hedgerow throughout the transect is considered to be slight. The small number of trees and hedgerows that are affected provide a limited contribution to the significance of the site and its setting. Their removal or pruning will result in low harm to the significance of the setting and its treed character. None of the trees proposed for replacement within the application footprint can be considered "major constraints" simply, their lower quality grading does not merit this description.

The alignment has been adjusted to retain T16 and G4. The transect avoids the major tree group along the boundary with the railway line. These are high quality arboreal features.

The transect avoids major tree groups along the golf course, passing through recently disturbed ground from the road construction. Trees T30 and T31 will require removing (under Permitted Development rights). The alignment limited, at this point, is working area by the new road and the water course passing to the west of the Ashton and Lea Golf Club.

The establishment of both the temporary accesses points and temporary working area transect will require the removal and reinstatement of sections of hedgerows, as noted.

The removal and replacement will be of sections no larger than is necessary to allow safe, adequate space for access and temporary working methods. Each small section will be replanted. The replacement has a low impact resulting in slight harm to the significance of the site and its wider peri urban setting. A section of hedgerow, recently planted as replacement hedging during the construction of the Preston Western Distributor Road will be removed. Much of this planting has not established.

As I have previously mentioned, the application is driven by the prescriptive site width and depths which means that the proposed development can only be accommodated on this site in the proposed alignment. The alignment follows, as is allowed, the current pipeline alignment layout.

The development cannot be accommodated in other part of the locale neither can it be accommodated in another configuration.

The proposals are accompanied by a detailed landscape scheme that provides significant gains and enhancements to ensure the long-term impacts from tree replacement are mitigated.

The existing road network, in particular the bridge over the Lancaster Canal has a weight restriction of 18 tonnes, there is a requirement for an alternative access to the construction site around the Lancaster Canal. This necessitates the construction of a temporary haul route between Lea Road and the south end of Sidgreaves Lane (to be constructed under Permitted Development Rights, subject to approval of Planning Application 1 – discussed below).

The alignment of the temporary haul road has been adjusted to retain all the significant trees within the field, which are high quality arboreal features.

The principal implications will be the replacement of a section of H2 and H4 and T8. The impact for the replacement of the individual tree and sections of hedgerow throughout the transect is considered to be slight. The tree (T8) provides a limited contribution to the significance of the site and its setting. Its removal will result in low harm to the significance of the setting and its treed character. The tree proposed for replacement within the application

footprint cannot be considered a "major constraint", its lower quality grading does not merit this description.

The alignment has been adjusted to retain all the significant trees within the field. These are high quality arboreal features.

4.06 Retained trees that may be affected by disturbance from works

The proposal notes the location of construction activities in the simplistic RPA model for a number of trees and the hedgerows, as shown on the Arboricultural Plan.

The alignment is located outside the RPA however, there will be the requirement to locally access the RPA for working space. Where this occurs, significant ground protection measures will be employed to ensure the ground will not be damaged.

Where the roots of these trees extend into the working space, the ground, for the extent of that tree's individual RPA, will be protected using a no-dig construction such as TuffTrak. The use of this product and similar, if implemented in strict accordance with the manufacturer's method statement, has been demonstrated over a number of successive years to be a sound way of crossing roots, allowing them to continue functioning, maintaining tree health and stability. Where trees have been removed by stump grinding due to the close association with retained trees, the hollows left can be filled.

4.07 Pruning

There will be the requirement to prune trees that are both the subject of a TPO and free from protection along Hoyles Lane, Sidgreaves Lane opposite Laburnum House and Darkinson Lane. All of these pruning works are associated with works to be undertaken under Permitted Development.

The pruning will involve crown-lifting to give additional height over the works area and in the case of T9, crown reduction of the western canopy for working space.

Tree T23, along Darkinson Lane, will be crown-reduced on its south eastern canopy for access.

The trees will be pruned under an arboricultural watching brief. The works have no implications for tree physiology or visual amenity.

For the majority of the trees, there will be no pruning requirement for Access Facilitation.

4.08 Planning Policy

The majority of the proposed work is to be carried out under United Utilities' Permitted Development (PD) rights as statutory undertaker under The Town and Country Planning (General Permitted Development) (England) Order 2015 (GDPO).

Several temporary accesses are required which will be subject to Planning Applications, these are indicated on the Aboricultural Plans associated with this document and listed below;

- Planning App. 1 - Lea Road (Access 3) & Sidgreaves Lane South (Access 4);
- Planning App. 2 - Sidgreaves Lane North (Access 5);
- Planning App. 3 - Darkinson Lane (Accesses 6A & 6B);
- Planning App. 4 – Riversway (Access 1).

PA#1 – Lea Road & Sidgreaves Lane South

The issue of access to the site requires the construction of a haul route between Lea Road and Sidgreaves Lane. The accesses cannot be accommodated in other parts of the locale neither can they be accommodated in another configuration. The major restriction of the weight limit over Lancaster canal precludes the use of the lane from Avice Pimblett Way.

The existing road network, in particular the bridge over the Lancaster Canal, has a weight restriction of 18 tonnes, and there is therefore a requirement for an alternative access to the construction site, across/around the Lancaster Canal.

The principal implications will be the removal and reinstatement of a section of H20, a section of H21 and one tree (T8). In addition, pruning of section of H19 (to the north of H20) is required to provide safe egress sight-lines along Sidgreaves Lane. Tree (T8) provides a limited contribution to the significance of the site and its setting. Its removal will result in low harm to the

significance of the setting and its treed character. The tree proposed for replacement within the application footprint cannot be considered a "major constraint", its lower quality grading does not merit this description. The impact for the pruning, removal and replacement of the sections of hedgerow and single tree is therefore considered to be slight.

PA#2 – Sidgreaves Lane North

It is necessary to temporarily widen an existing field entrance to/from Sidgreaves Lane, to the north of Lancaster Canal, to provide construction access to the southern end of the temporary working area, between Hoyles Lane and Lancaster Canal.

The principal implications will be the removal and reinstatement of a section of H17. No trees are affected by the requirements of this application. The impact for the removal and reinstatement of the section of hedgerow is considered to be slight.

PA#3 – Darkinson Lane

It is necessary to create 2 No. new temporary accesses along the transect on either side of Darkinson Lane, to accommodate the new sewer route and to provide temporary construction access along the working corridor.

The principal implications will be the removal and reinstatement of 2 No. sections of H24 and H26. In addition, pruning of sections of H23 and H25 (either side of H24) is required to provide safe egress sight-lines along Darkinson Lane. No trees are affected by the requirements of this application. The impact for the pruning, removal and reinstatement of these section of hedgerow is considered to be slight.

PA#4 – Riversway

It is necessary to temporarily widen one existing field access to/from Riverway, to provide temporary construction access to the southernmost section of the working area, south of Savick Brook.

No trees or hedgerows are affected by these proposals.

The over-arching policy guidance in respect of the site is that contained within the Preston Council Local Plan 2012 – 2026 and those of Central Government (131, 2021).

The impact of new developments on the natural environment has been kept to a minimum. The arboricultural impact assessment is provided to BS5837:2012 standard (or subsequent revisions). Areas of potential conflict in terms of site development are addressed by the method statement at Appendix B.

The site has no ancient woodland, veteran trees or ancient/species-rich hedgerows.

5.0 CONCLUSIONS

5.01

The majority of the proposed work is to be carried out under United Utilities' Permitted Development rights. 4 No. Planning Applications are to be submitted for some of the temporary accesses. These locations are indicated on the Arboricultural Plans associated with this document.

5.02

The works are required to resolve maintenance issues relating to local flooding and to resolve the impact of the North West Preston Strategic Development Site Plan on the Lea Gate Catchment area, up to and including foreseeable property development/built by 2040 and will resolve the internal and external flooding, to a 1 in 30-year storm event, at properties on Hoyles Lane.

5.03

The unintended consequence of the development will be the loss of the trees and hedgerows, as noted. The development design is driven by prescriptive site width, depths and fixed assets which means that the proposed alignment can only be accommodated in the proposed layout.

All significant existing woodlands, healthy mature trees and hedgerows have been integrated into the development scheme. The alignment has been adjusted to further retain significant high value arboricultural assets.

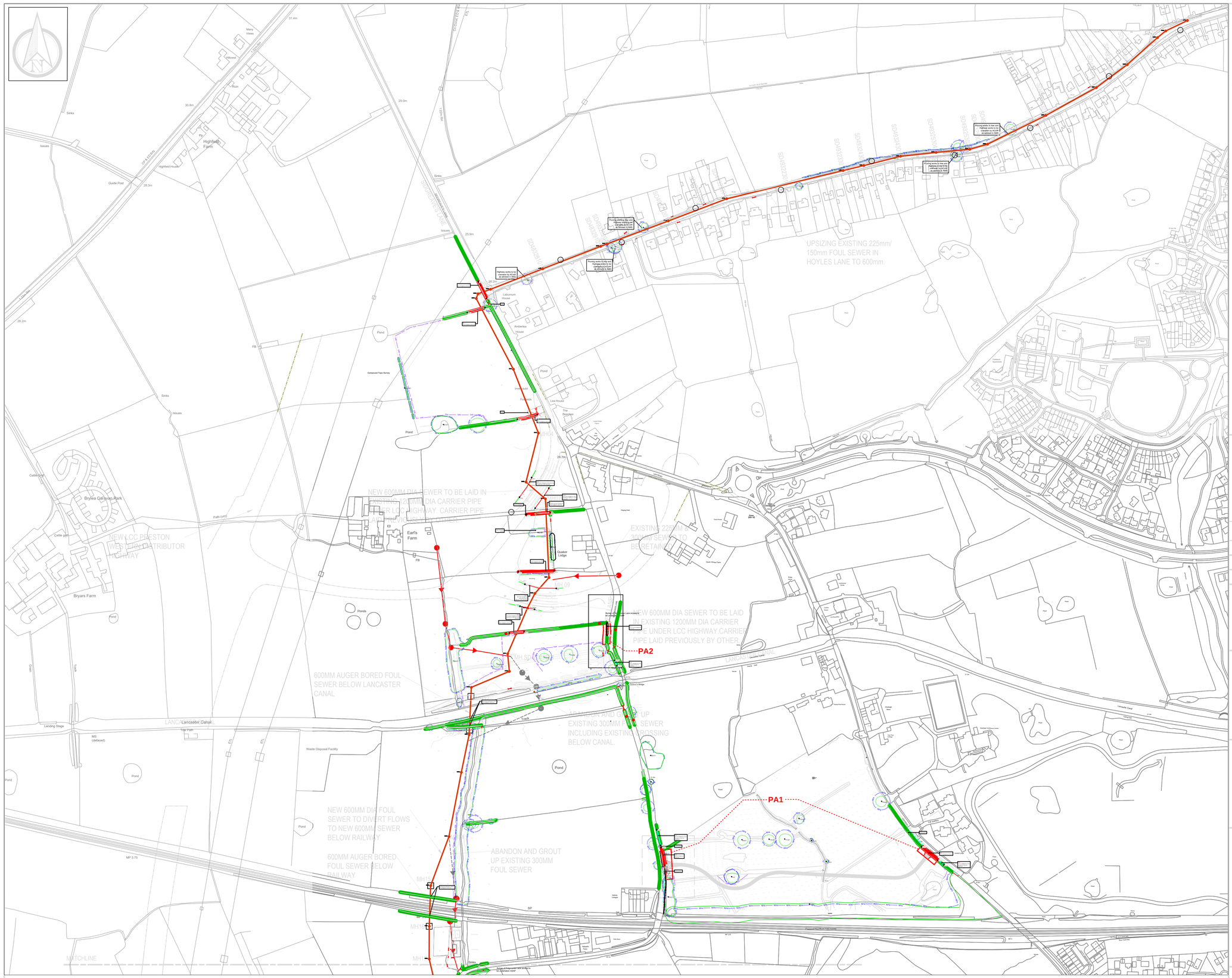
Areas of potential conflict in terms of site development are addressed by the method statement at Appendix B. The site has no ancient woodland, veteran trees or ancient/species-rich hedgerows.

Where pruning is required for access facilitation, the degree of cutting is not damaging to tree physiology or visual amenity.

Replacement provision is considered significant taking into account the trees that are being replaced and the location.

5.04

A Method Statement is appended to demonstrate the scheme is feasible. Certain matters listed therein may alternatively be addressed satisfactorily by means of a condition(s). This requires detailed discussions with the LPA on the principle that conditions should always be used in the first instance as per government guidance and that contained in BS 5837 – 2012 Table B.1 Delivery of tree-related information into the planning system; the method statement fulfils the recommended criteria for arboricultural information.



SITE PLAN
SCALE 1 : 2500

0 25 50 75 100 125m
SCALE 1:2500 AT ORIGINAL SIZE

NOTES

GENERAL

1. DO NOT SCALE FROM THIS DRAWING.
2. ALL DIMENSIONS ARE IN MILLIMETRES (mm) & ALL LEVELS ARE IN METRES (m) AOD, UNLESS STATED OTHERWISE.
3. ALL DIMENSIONS & LEVELS CHECKED ON SITE AND ANY DISCREPANCIES SHOULD BE REPORTED TO GHD.
4. ALL LEVELS SHOWN ARE RELATIVE TO ORDNANCE DATUM.
5. THIS DOCUMENT IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT PROJECT STANDARDS AND SPECIFICATIONS.

LEGEND

- PROPOSED MANHOLE
- EXISTING MANHOLE
- ABANDONED MANHOLE
- TREES, GROUPS OR HEDGES TO BE RETAINED
- TREES, GROUPS OR HEDGES TO BE REMOVED
- ROOT PROTECTION AREAS (RPA)
- TREE PROTECTION FENCING (TPF)
- TREE PROTECTION FENCING ADJUSTED (TPF)
- TIMBER BOX PROTECTION
- TEMPORARY GROUND PROTECTION
- PLANNING APPLICATION BOUNDARY
- PROPOSED GRAVITY SEWER
- EXISTING SEWER/ SURVEYED EXISTING COMBINED SEWER
- ABANDONMENT
- EXISTING HIGH PRESSURE GAS MAIN
- LCC PRESTON WESTERN DISTRIBUTOR HIGHWAY

THIS DRAWING SHOULD BE REPRODUCED IN COLOUR

CURRENT ISSUE INFORMATION

VERSION	AUTH	CHKD	REVD	REASON FOR ISSUE	DATE
P01	LD	PB	RW	Arboricultural Information	14/09/23

SUITABILITY CODE	SUITABILITY DESCRIPTION

ACS Consulting
tree consultants

bethell
Civils • Utilities

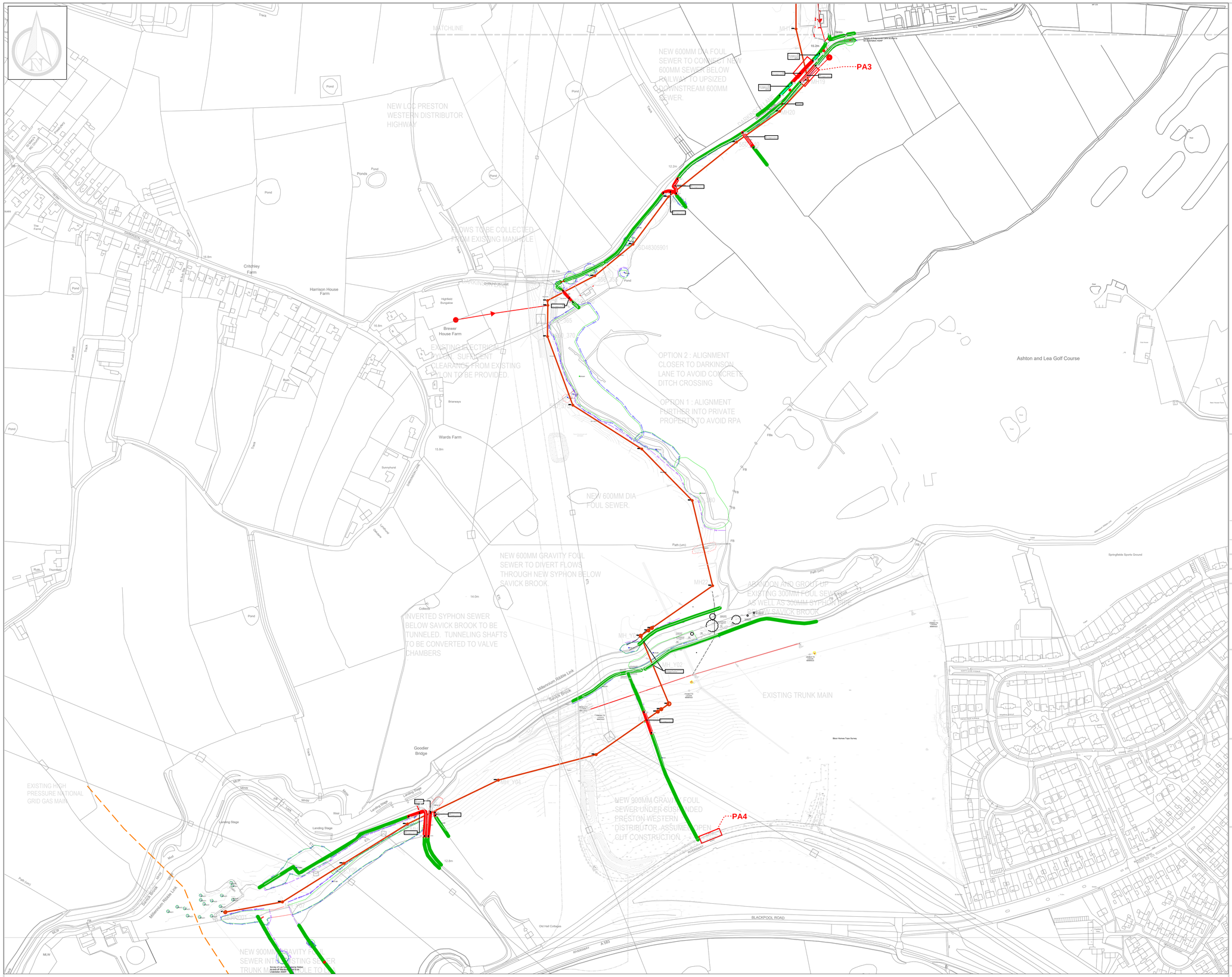
United Utilities
Water for the North West

HOYLES LANE

ARBORICULTURAL LAYOUT

SHEET 1

SCALE	SHEET SIZE
1:2500	A1
DRAWING NUMBER	REVISION
ARB/4909/Y/200	


NEW LCC PRESTON WESTERN DISTRIBUTOR HIGHWAY
NEW 600MM DIA FOUL SEWER TO CONNECT NEW 600MM SEWER BELOW RAILWAY TO UPSIZED DOWNSTREAM 600MM SEWER.
FLOWS TO BE COLLECTED FROM EXISTING MANHOLE
EXISTING ELECTRICITY CABLE - SUFFICIENT CLEARANCE FROM EXISTING PYLON TO BE PROVIDED.
OPTION 2 : ALIGNMENT CLOSER TO DARKINSON LANE TO AVOID CONCRETE DITCH CROSSING
OPTION 1 : ALIGNMENT FURTHER INTO PRIVATE PROPERTY TO AVOID RPA
NEW 600MM DIA FOUL SEWER.
NEW 600MM GRAVITY FOUL SEWER TO DIVERT FLOWS THROUGH NEW SYPHON BELOW SAVICK BROOK.
INVERTED SYPHON SEWER BELOW SAVICK BROOK TO BE TUNNELED. TUNNELING SHAFTS TO BE CONVERTED TO VALVE CHAMBERS
ABANDON AND GROUT UP EXISTING 300MM FOUL SEWER AS WELL AS 300MM SYPHON BELOW SAVICK BROOK
EXISTING TRUNK MAIN
NEW 900MM GRAVITY FOUL SEWER UNDER SUSPENDED PRESTON WESTERN DISTRIBUTOR ASSURE OPEN CUT CONSTRUCTION
EXISTING HIGH PRESSURE NATIONAL GRID GAS MAIN
PA3
PA4
Ashton and Lea Golf Course
Springfields Sports Ground
Critchley Farm
Harrison House Farm
Brewer House Farm
Wards Farm
Goodier Bridge
Savick Brook
Millennium Pebble Link
Darkinson Lane
Whitehills Road
Blackpool Road
A583
Old Hall Cottages
Thornfield
Sunnyhurst
Highfield Bungalow
Briarways
The Farms
Ponds
Pond
Track
Path (um)
Path (sm)
Ditch
Fence
Wall
Hedge
Trees
Collects
Landing Stage
Survey 3D model showing flashing flashes of Pebble Brook by the Undertaker ADAP
MATCHLINE
MH19
MH20
MH V01
MH V02
MH V03
MH V04
SD48305901
SD48305902
SD48305903
SD48305904
SD48305905
SD48305906
SD48305907
SD48305908
SD48305909
SD48305910
SD48305911
SD48305912
SD48305913
SD48305914
SD48305915
SD48305916
SD48305917
SD48305918
SD48305919
SD48305920
SD48305921
SD48305922
SD48305923
SD48305924
SD48305925
SD48305926
SD48305927
SD48305928
SD48305929
SD48305930
SD48305931
SD48305932
SD48305933
SD48305934
SD48305935
SD48305936
SD48305937
SD48305938
SD48305939
SD48305940