

# Guildford Mains Transfer - Resilience Project



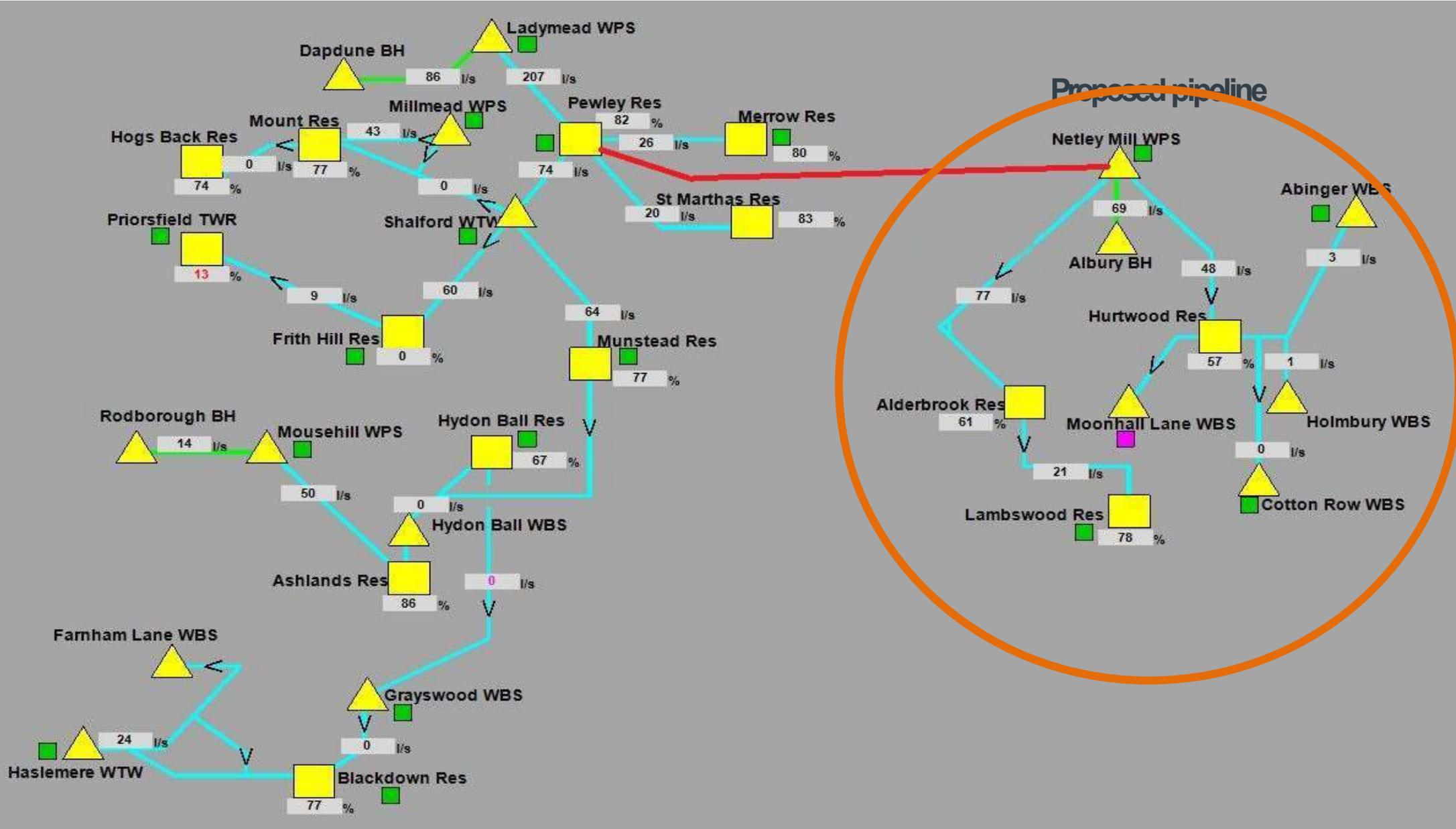
## Overview of Project

## Background and Needs

- Netley Mill water treatment works supplies 8,500 properties in Cranleigh and the surrounding villages via Hurtwood, Alderbrook and Lambswood reservoirs.
- A transfer main and associated works is proposed to be constructed between West Guildford (Pewley reservoir) and East Guildford supply areas (Netley Mill WTW).
- The aim of the project is to provide greater resilience for the East Guildford network, which is currently an 'island' zone unsupported by resources other than Netley Mill WTW.
- The length of the proposed pipeline is approximately 9km with a planned water supply transfer capacity up to 14 million litres/day and enable water to be moved from one area to another to ensure our customers can remain in supply.



# Netley Mill Water Network



Netley Mill Water Treatment Works feeds the area to the east of Guildford. If Netley Mill fails, the circled area is cut off from the supply as it is an “island zone”. Other areas of Guildford shown above are linked to other supplies.



# Outline Customer Programme

(subject to change)

# Guildford Resilience Program

## Current Stakeholder Plan

Spring 2024	Summer / Autumn 2024	Winter 2024 / 2025	Spring / Summer 2025	Winter 2025 / 2026
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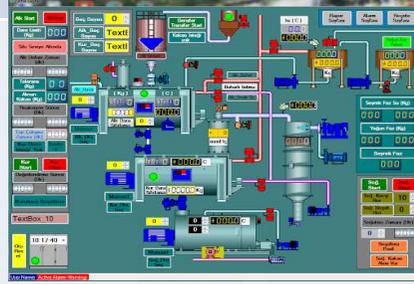
Start on site. Mobilisation equipment.  
Fence Wayleave  
Strip topsoil  
Form Compounds  
Pipe Deliveries

Fusing Pipe  
Pipe Laying in fields  
Horizontal Direction Drill at:  
Tillingbourne, BOAT & Sandpit  
Pumping Station At Pewley Reservoir

Pipelaying at: Pewley Hill and Pewley Downs  
Pipelaying at: A25 between Silent Pool & Shere  
Construct Receiving tank Netley  
Fit out Pumping Station Pewley

Complete Remaining pipelaying & Connections  
Testing & Commissioning  
Reinstate Fields

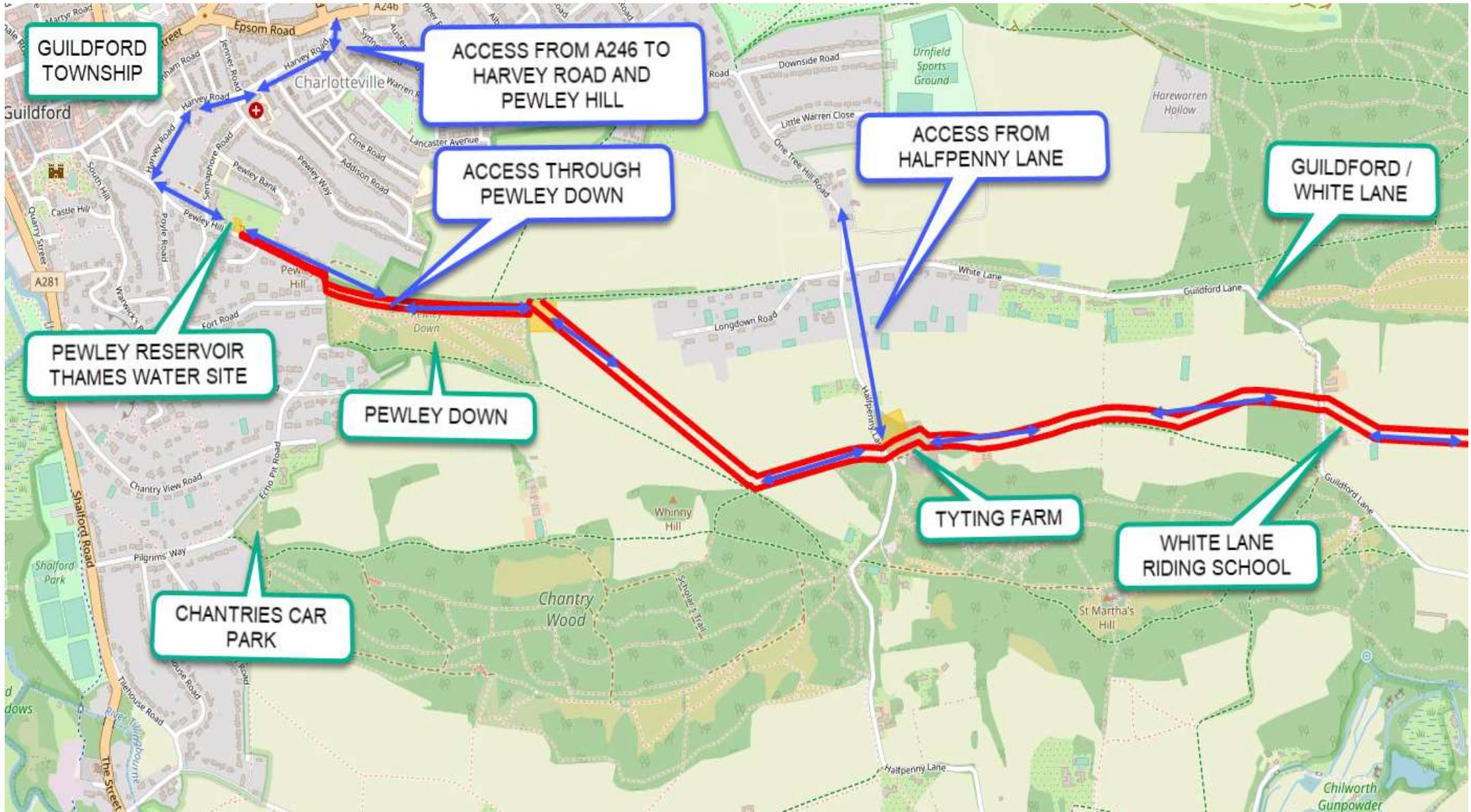
Testing and Commissioning Controls System goes into Service  
Handover  
Completion





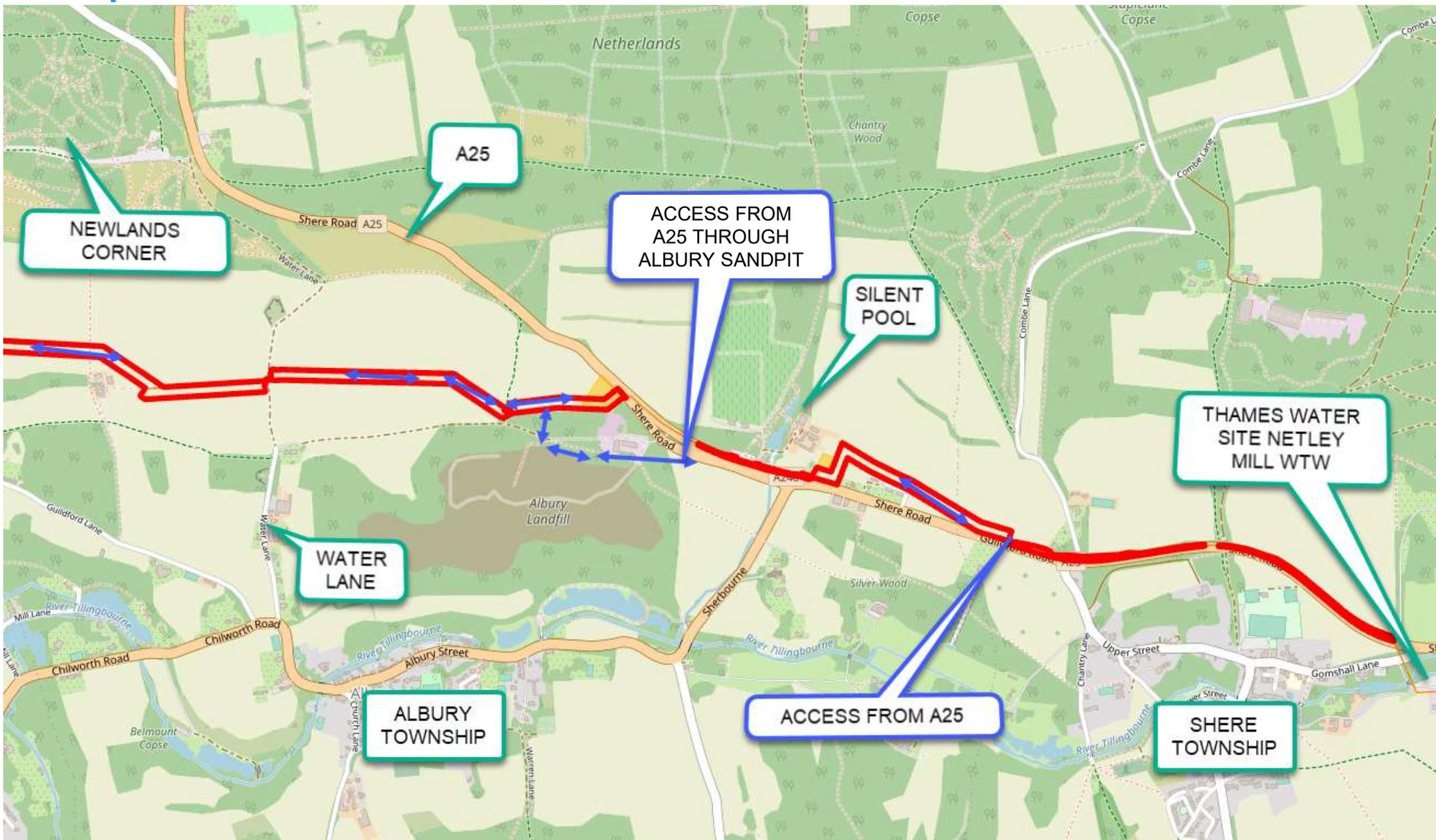
# Proposed Access Routes

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Thames Water are consulting with Guildford Borough Council to have an access to the working corridor via Halfpenny Lane. This will allow construction simultaneously from both ends of the pipeline. If we cannot use Halfpenny lane, there will be one access from west to east along the whole working corridor for the duration of the project. We are pressing for the first option.

# Proposed Access Routes



If we cannot utilise Halfpenny Lane as one access route, the working corridor will be accessed from Albury Sandpit off the A25 across to Pewley Downs



# Pewley Reservoir Resident Impacts

# Pewley Reservoir Resident Impact



Pewley Hill road will have one lane closed for the pipeline to be installed in the trench. We will work with residents to maintain access to their properties during this work and will notify them in advance of the possible impacts.

# Typical examples of pipe laying in an urban environment

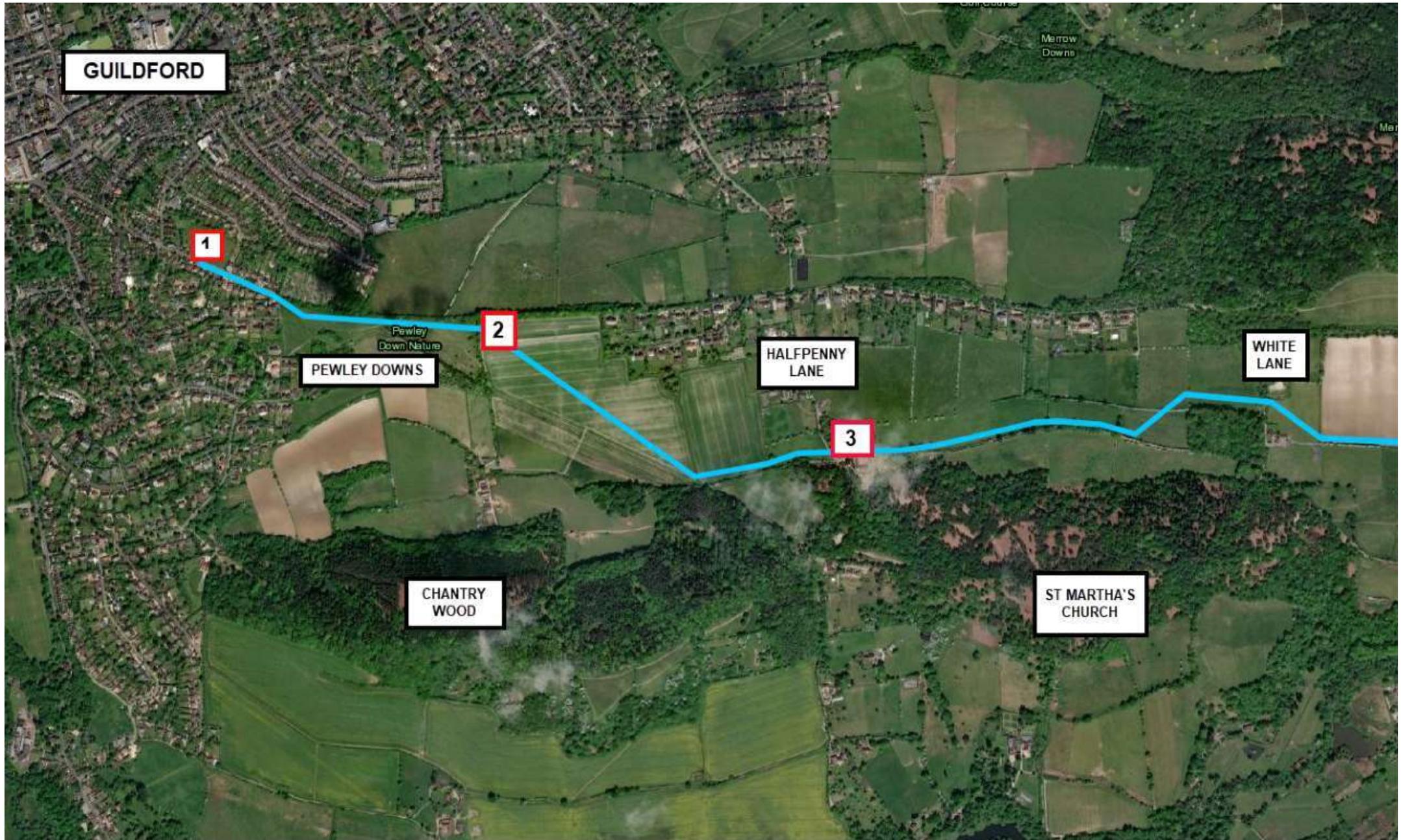




# Proposed Construction Site Compounds

# Project Overview

## Proposed Site compounds



These are the proposed locations for the site compound areas – see slide 15 for details

# Proposed Site compounds



Proposed locations for site set ups – see slide 15 for details

# Proposed Site compounds

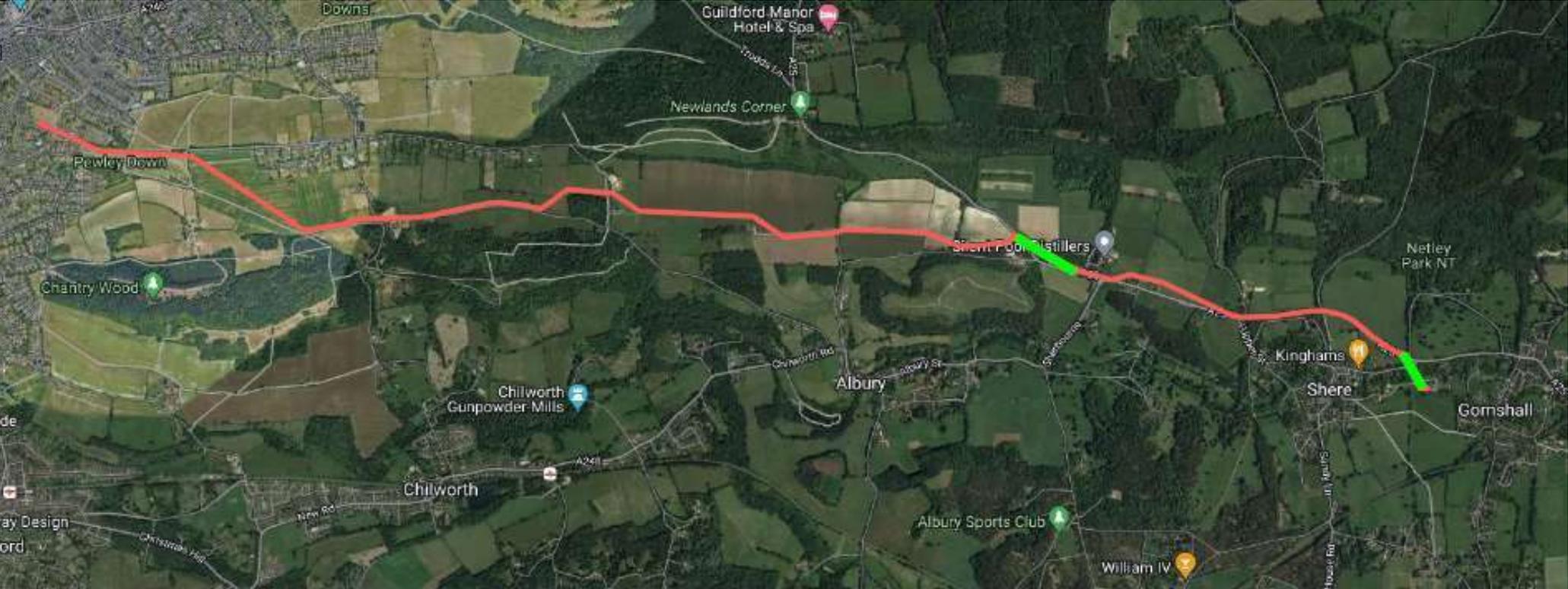
COMPOUND	LOCATION	ACCESS	SIZE	DURATION
1	TW Pewley Reservoir Site	From Pewley Hill	TW site=650m <sup>2</sup>	24 Months
2	Private land - paddock	Through Pewley Downs	75m x 75m=5625m <sup>2</sup>	12 Months
3	Private land – Tyting Farm Owned by Guildford Borough Council	From Halfpenny Lane	75m x 75m=6000m <sup>2</sup>	24 Months
4	Private land - paddock	Direct from A25	75m x 75m=5625m <sup>2</sup>	6 Months
5	Private land - paddock	Direct from A25	16000m <sup>2</sup> - Primary Compound	24 Months
6	Netley Mill WTW TW Site	From Gomshall Lane	TW site-2000m <sup>2</sup>	24 Months





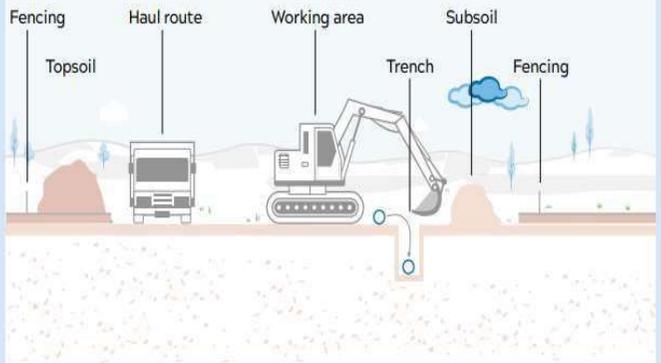
# Construction Methods

# Areas of open cut and trenchless excavation



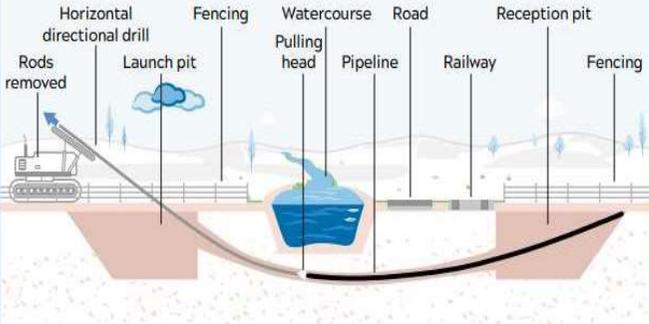
### Open cut trenching

Open cut trenching will be used for most of the pipeline route which goes through open ground. Open cut is when a trench is dug out by a digger, the pipe is laid and then covered over (see picture below).



### Trenchless techniques

This technique will be used to lay pipes underneath main rivers, railway lines and main roads (some A roads, with some B roads). We will use methods such as directional drilling or auger boring, when a machine will drill or 'bore' a hole through the ground from one side of an obstruction, to the other. The pipe is then pushed through the hole produced (see picture below).



Red line = open cut trenching  
 Green line = Trenchless technique – under A25 and River Tillingbourne at Netley Mill



S.A.N.G

Suitable Alternative Natural Greenspace

## Provisional dates for work at the S.A.N.G. location

We will be working in the SANG area at Tyting Farm from Spring to Autumn 2024

We will align with Guildford Borough Council's plans once their design has been shared





# Summary

# Mitigations to date

- The proposed pipeline will transfer drinking water from West Guildford (Pewley Reservoir) to East Guildford (Netley Mill WTW) to provide greater resilience and the means to meet increases in future demand in the area.
- Project is a key example of Thames Water's plan to address Surrey CC and Guildford BC concerns regarding future water resilience in the area.
- Through route selection and optimisation, a number of potential impacts to the Environment and cultural heritage have already been avoided.
- Mitigation will be employed through implementation of a Construction, Environmental Management plan (CEMP), and if required mitigation licences will be obtained from Natural England in accordance with legislative requirements.
- Assessment of potential ecological and cultural heritage impacts suggests that impacts will largely only be realised during the construction phase, and therefore only short-term, temporary, and insignificant.
- A scheme of biodiversity enhancements will be implemented to ensure biodiversity net gain across the project area, this will include cooperation with Guildford BC on the SANG.

# Next steps and programme

- Guildford Borough Council confirmed no need for a full Environment Impact Assessment
- Further vegetation clearance end October 2023
- Meeting with local Councils 13 November 2023
- Press release invitation to attend residents drop in's November 2023
- Face to face meeting with affected landowners and tenants 16 November 2023
- Drop-in session for Pewley Down and Guildford residents 23 November 2023
- Drop in session for Albury and other residents 25 November 2023
- Further drop in sessions early 2024
- Construction starts Quarter 1 2024
- Commissioning September to winter 2025
- Completion winter 2025

