
Nestle Water Pipelines

1. Introduction / background to the project

Nestle Waters UK Ltd bottle two brands of water in Buxton, Buxton Natural Mineral Water and Nestlé Pure Life. Due to the ongoing growth of the brands in particular and the bottled water market in general, Nestle Waters UK Ltd has reviewed its operations in Buxton and has identified opportunities to build on recent success and secure a sustainable long term future for the business. Bottling and warehousing are currently located at separate sites in the town centre and at the Harpur Hill Industrial Estate. These facilities do not have the potential to meet future business needs. They are not of sufficient size to accommodate expansion and the daily movement of goods between them is operationally inefficient, environmentally unsustainable and detrimental to the movement of traffic in the town centre. It is proposed to consolidate bottling and warehousing activities on a single site within an efficient, higher volume bottling facility which will be one of the most modern in Europe.

Nestle Waters UK Ltd proposes to consolidate its activities in Buxton, bringing together bottling and warehousing at a new facility on land to the east of Waterswallows Lane.

The bottling plant is the subject of a separate planning application. It will comprise of a building with a footprint of approximately 23,000m². In the main, the building is around 13.5m in height. There is likely to be one small element (water storage tanks) of the building which is greater than the general height – this will extend to approximately 18.0m in height. Car parking and servicing aprons will be tightly arranged around the margin of the building.

The location of the new facility has been influenced by the need for reasonable proximity to the source of mineral water. The pipelines from the two sources of mineral water will follow a route which is aligned along and beneath the public highway. There will be four pipe runs (in a cluster) to the factory, each pipe being around 80mm in diameter. The installation of pipes along the public highway is the subject of this planning application.

The proposed pipe route is identified on the application drawings, contained within Appendix A.

2. Scope of the construction works

The specification of the new pipelines is summarised as follows;

Installation of a combination of High Performance Polyethylene pipework, stainless steel pipework and Polyethylene ‘barrier’ pipework within approximately 3.5km length of trench.

Associated ancillaries such as valve chambers and cable ducts, located below ground.

The works which are the subject of this planning application will be within the public highway as indicated on the red-line drawings contained within Appendix A (an additional length of approximately 250m is located within the new factory boundary).

Installation works will generally consist of breaking into the highway surface and excavation to form a pipework trench.

New pipework will then be installed within the pipe trench and tested, prior to backfilling the trench with appropriate granular material.

The highway surface will be reinstated in accordance with the appropriate and approved specification.

3. Programme (restrictions & phasing of the work)

3.1 General Restrictions

Discussions held with Derbyshire County Council (DCC) highways team have indicated the following restrictions;

- DCC require a minimum of 3 months notice period prior to the works starting;
- A moratorium exists on working within Buxton from the 1st week in December to 1st week in January;
- DCC will allow highway works in lengths of 75m – 100m maximum within the town centre;
- DCC will allow highway works in lengths of up to 250m maximum within rural areas;
- DCC will allow works on Fairfield Road and Buxton town centre within the following working hours: 09.30hrs – 15.30hrs and 19.00hrs – 23.00hrs;
- DCC will allow over-night working (to 05.00hrs) on some sections subject to automatic traffic lights / traffic management control.

An outline programme is included within Appendix C.

Alternative Methods of Construction

Discussions are still ongoing with specialist suppliers to determine methods to minimise disruption (in particular Fairfield Road), including:

- Use of alternative materials of construction to minimise installation times;
- Use of directional drilling techniques to minimise pipework excavations.

These aspects will be determined during the detailed design of the scheme as noted in the programme in Appendix C.

3.2 Phasing of the Works

January to June 2011

Detailed design of the new pipe will be undertaken.

Consultation with all various 3rd parties such as DCC, High Peak Borough Council (HPBC), Environment Agency (EA) etc. will be progressed, building upon discussions and relationships already established. Initial applications will be made for all associated licences and permits.

A competitive tendering process will be undertaken to select of a suitable construction contractor.

Based on the known moratoriums on working within Buxton town centre (July and December), the works are noted below in relation to these key months.

May to July 2011

The construction contractor will undertake mobilisation activities and establish a site compound and welfare facilities within the new factory site at Waterswallows Lane.

Further investigation work will be undertaken by the contractor to identify and mark out the proposed pipeline route and also identify the location of all associated utilities.

Discussions would also take place with DCC and HPBC about the final construction programme and confirmation that all necessary highway and environmental permits required are in place.

Construction works would commence in Waterswallows Road and the new factory site as soon as an adequate quantity of pipe material has been procured. We have assumed that this work will not be affected by the limitations placed on construction works within Buxton during July 2011. Due to the length of this section, we propose to undertake construction works using the maximum highway possession that DCC will allow (up to a maximum of 250m).

Based on the likely durations of individual sections within Buxton, work within The Crescent and George Street is proposed to be completed before the July 2011 moratorium within Buxton. It should be noted that this area is fairly quiet, so construction activities could be undertaken here relatively discretely.

3.3 Works in July 2011

Bearing in mind the July moratorium on construction work within Buxton during this month, it is likely that the main piece of work during this period will be in Waterswallows Lane.

3.4 Works in August 2011

Works would continue in Waterswallows Road.

The works within Lightwood Road would also commence and should be completed within the month - ensuring critical works are complete before the start of the new school term (this section will require a short temporary closure of Lightwood Road which could be completed before the start of the new school term).

3.5 Works Between September 2011 and start of December 2011

This period would cover the majority of construction works within Buxton town centre.

It is proposed that the works on Fairfield Road would commence at the start of September 2011.

In coordination with the works on Lightwood Road, the works within Charles Street / Bridge Street would also be commenced simultaneously.

Once the works are completed within Fairfield Road, the works within Station Road will be commenced and should be completed prior to the end of November and the start of the December moratorium on works within Buxton.

It is anticipated that works within Waterswallows Road would continue and also be completed during this period.

It is intended that the pipework be sufficiently completed to allow Lightwood water to be supplied to the new factory by the end of November 2011 to facilitate process commissioning of the new water treatment plant.

Potential Delays to the Programme

It should be noted that the programme as presented represents the best estimate we have currently of the likely timescales involved with the construction works.

No allowance has been made for significant delays such as poor ground, hard material or un-chartered services.

4. Location of the contractors' site establishment / working areas / materials storage and handling

It is anticipated that the contractor's site establishment will be located on the new factory site at Waterswallows Lane – this will include all required welfare facilities plus an adequate area for the lay-down and storage of construction materials.

All working materials will be dispatched from this area as required to individual work faces as required and programmed / controlled by the construction contractor.

5. Traffic Management proposals (combined with item 3)

Detailed discussions are required with DCC on how the works are executed, but the following arrangements are initially proposed;

The Crescent / George Street – the existing road is narrow and will require a temporary road closure to facilitate the part of the works (alternative routes are possible and access to local properties will be maintained).

Station Road – construction works will require the use of traffic management.

Bridge Street / Charles Street – the route beneath the existing railway bridges will require a temporary road closure due to the restricted road width (alternative routes are possible and access to local properties will be maintained).

Lightwood Road - the works locally under the railway bridges on Lightwood Road will require a temporary road closure – it is proposed that this closure would take place outside of school term time. (alternative routes are possible and access to local properties will be maintained).

Fairfield Road – the works will require active traffic management to minimise disruption to traffic. Potentially this work could be subject to 24 hour working (as defined earlier).

Waterswallows Road – the works will require traffic management consisting of traffic lights (outside of construction hours). During construction activities, it is proposed that stop / go boards be used to enable real time control of traffic and provide the ability to react to short term fluctuations in traffic movements. Due to current programme restrictions, it is proposed to utilise long working areas (up to 250m) to facilitate efficient pipe installation (rather than employing 2 installation teams, which would be our alternative proposal).

Access will be maintained for all premises on these highways at all times.

6. Environmental Considerations

Dust management

Dust generation is not considered to be a significant problem for the construction works, particularly as the works are predominantly within the public highway – dust is often generated by the following methods;

- Stripped topsoil not covered – this will only be appropriate to the site establishment and works within the new factory site.
- Inappropriate storage of construction materials/powders – this will be at the site establishment at the new factory site.
- Cutting of materials (eg concrete blocks by circular saw) – this could be a problem, particularly when opening up the carriageway.

The impact and affect caused by dust will be eradicated by removing the source of occurrence as follows;

- Ensuring that any stored topsoil or sub soil, set aside for re-use is covered to prevent wind erosion
- All construction materials will be stored in the appropriate manner, in accordance with the manufacturer's recommendations and in line with good practice.
- Generally, powders and fine material will be stored in drums or containers that can be stored and prevent migration due to wind affect. They will be kept in stores where practical and safe.
- Any materials that need to be stockpiled outside will be located in positions that do not encourage migration and should be covered as with topsoil when not in use.
- The local public highways (notably Waterswallows Road) will be kept free of debris caused by construction activities by use of road sweeper.
- Cutting activities – when cutting that generates dust cannot be avoided, wetting techniques will be adopted (eg use of water hose on circular saw).

Protection of water courses, ground water and soils.

All works carried out adjacent to or near any watercourse, will be in accordance with the "Guidelines for Water Pollution Prevention from Civil Contracts" and other relevant guidelines and standards as required by the Environment Agency:

PPG1 – General Guide for the prevention of water pollution

PPG5 – Works near or liable to affect watercourses

PPG6 – Work at construction and demolition sites

Formal EA approval will be sought by the contractor for the constructions works within close proximity to any watercourse, as required by UK legislation. This is applicable to the crossing of Hogshaw Brook (Lightwood Road). The exact nature of the crossing has yet to be detailed, although initial contact has been made with the EA to commence the process of consultation – the final detail will be developed and agreed with the EA, and any associated restrictions advised to the Principal Contractor accordingly.

Fuel and Chemical Storage

Fuel and chemical storage tanks will conform to the following conditions;

All fuel/oil storage tanks will be located on an impervious bund, with no surface water outlet, which will be at least 110% of the volume of the storage tank itself.

Fuel/oil storage tanks will be located within the contractor's compound.

Fuel bowsers will be kept within the contractor's locked compound at night to prevent unauthorised access and potential spillage

The transportation of fuel and oil across the site in drums or other containers will be avoided as far as practicable. Where this is unavoidable, extreme caution will be taken to avoid spillages or leaks.

An adequate stock of oil absorbent and containment materials (eg, sand or earth) and/or commercially available booms, oil absorbent pads and spill kits, will be kept on the site and in each vehicle undertaking work on the site. All relevant staff will be trained and be familiar with the use and location of these materials.

Personnel will be nominated as being responsible for the supervision of the filling of oil storage tanks, vehicles, etc.

Leaking or empty oil drums/storage vessels will be removed from site immediately and disposed of in an appropriate manner.

The contents of any tanks and/or drums will be clearly marked with a warning sign and the fuel store will have a posted emergency plan and fuel spillage kit available for immediate use.

Prior to removal from site any storage tank or drum will be emptied in a controlled manner by a competent person including the drain down of any hoses/pipes.

Sewage disposal.

All contractor welfare facilities will be located in the contractor's compound at the new factory site.

As there are no local foul sewers, all welfare facilities will be supplied with an integral septic tank (the contents emptied by tanker and suitably disposed off-site).

Disposal of surplus materials.

Surplus material will be used within the new factory site or, if unsuitable, be transferred for disposal at a registered landfill site.

Disposal of Waste and Contaminated Materials

Construction waste will be minimised by the reduction of the volume of waste generated at site by the following methods;

- Re-use of materials (eg topsoil, sub soil)
- Recycling of waste

The following waste from site operations is anticipated;

- Packaging from construction materials
- Unknown buried obstructions (stone, pipes, metalwork)
- Unused construction materials such as chemicals, retarders, grout, glue etc including cartridges/mixing systems and packaging
- General construction waste (paper, food wrappers, food, plastic, glass bottles)
- Existing waste/debris already on site
- Excavated material not suitable for re-use

Contaminated soil is not anticipated.

Protection of existing infrastructure and utilities

Utility information and record drawings will be provided to the Principal Contractor, who will be required to locate all services on site prior to construction, using a number of techniques including the use of a cable avoidance tool (CAT) and hand dug trial pits.

Utility services known to exist at the present time of construction have been shown on composite drawings and physically located on site by an extensive programme of trial pits undertaken in October and November 2010.

National Grid - a high pressure gas main within Waterswallows Road will be crossed twice. Discussions are on going with the utility company to agree methods of working within the vicinity and an agreed crossing detail and method of working.

Network Rail – excavation and installation of pipework will be required beneath rail bridges in Charles St and Lightwood Road – discussions have already been undertaken to allow trial pits to be excavated locally. It is envisaged that this dialogue will continue to gain approval of the final design before installation, along with a method for construction.

High Peak Borough Council (including English Heritage) – Conservation Area and Listed Buildings - discussions are ongoing with HPBC in relation to the current development of The Crescent. It is anticipated that any restrictions will be identified and advised to the Principal Contractor as required.

Derbyshire County Council – further discussions are required with the local highway authority to finalise proposals for working within the existing highway and the timing of the works.

Appendices

Appendix A – Propose Route

Appendix – Other Routes Considered

Appendix C – Outline Construction Programme

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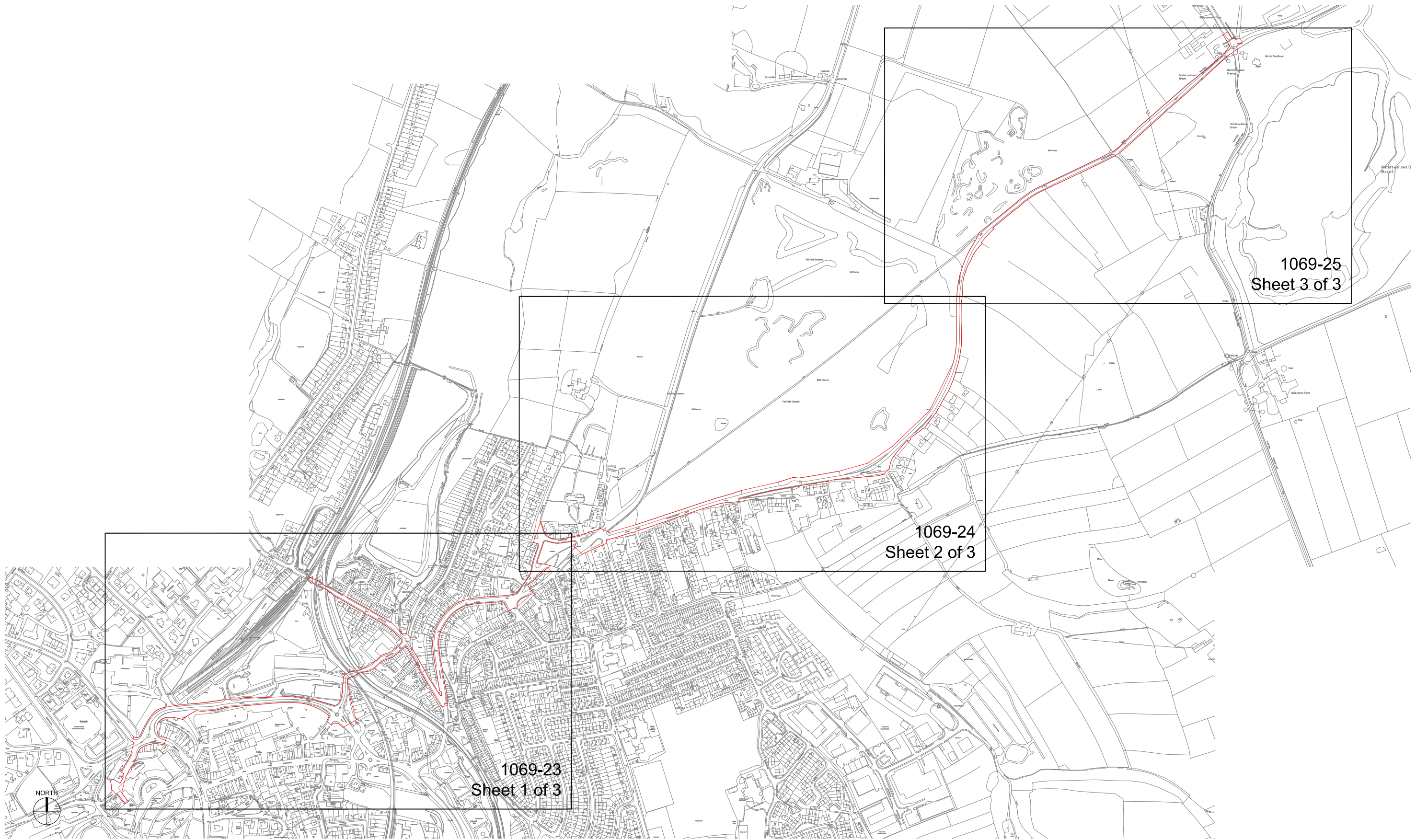
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Appendix A Drawings

3 Drawings



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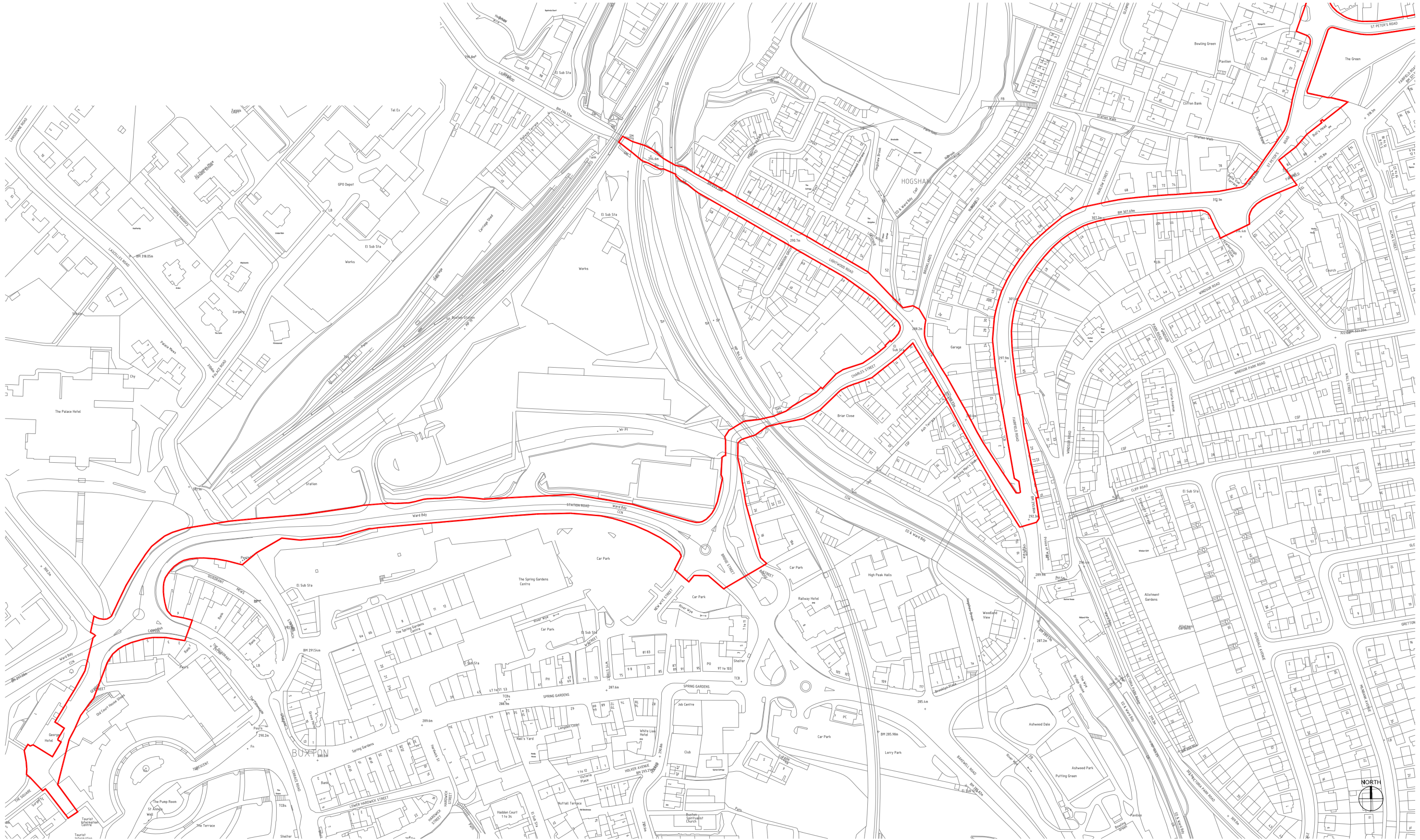
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drawing title
**Planning Application Boundary
Sheets Location Plan**

client
Nestle Waters, Buxton
project
Land to at Waterswallows Lane

scale **@ A3 1:7500**
date **08/12/10**
dm **SW** chkd **GT**

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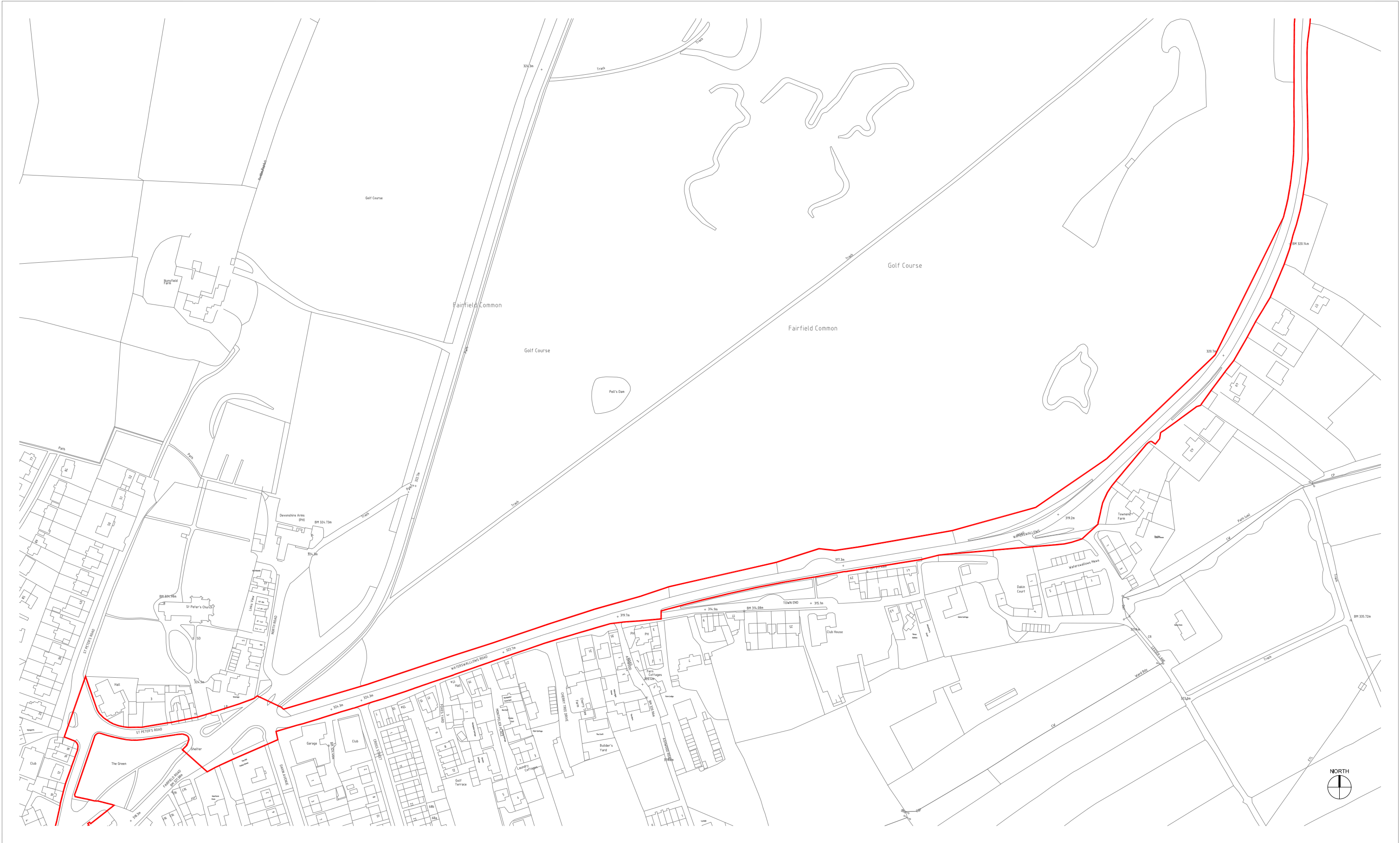
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drawing title
Planning Application Boundary
Sheet 1 of 3

client
Nestle Waters, Buxton
project
Land to at Waterswallows Lane

scale @ A3 1:2500
date 08/12/10
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drawing title
Planning Application Boundary
Sheet 2 of 3

client
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project
Land to at Waterswallows Lane

scale @ A3 1:2500
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	client Nestle Waters, Buxton		scale @ A3 1:2500	1069-25
	project Land to at Waterswallows Lane		date 08/12/10	
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Appendix B

Routes Considered

3 Pages Main Options Considered

Option 1 - As proposed (George St / Station Road / Charles St / Lightwood Road / Fairfield Road / Waterswallows Road)

The George St and Station Road route was chosen due to the proximity to the Buxton Source.

Lightwood Road was chosen due to it's proximity to the Lightwood Source.

Charles St was chosen to reduce the impact on Bridge St (Bridge St would probably have been cheaper to work in bearing in mind the wider working area, with approximately same length of pipework, additional trenching cost - but discounted due to adverse effect on traffic in the centre of Buxton).

Waterswallows Road – was chosen in preference to wholly along the A6 or across the golf course for the reasons noted later.

Fairfield Road - utilities appear to be fairly well defined along this road and there is enough room within the carriageway to install pipework and maintain traffic flow via traffic management.

In order to keep the length of work within Fairfield Road to a minimum, it is proposed to use St Peters Road. This will have the significant effect of reducing the period of working along Fairfield Road.

Option 2 - Nunsfield Road (as above but instead of A6 - the route picks up from Charles St / Lightwood Road and crosses the A6 at St Peters Road - onward to the factory via Waterswallows Road)

Nunsfield Road is a quiet suburban road and provides the only means of vehicular access to the properties on Nunsfield Road and Glenmoor Road.

At the junction with Charles St / Lightwood Road, Nunsfield Road is narrow and would potentially need to be closed to facilitate the works.

The road and footpaths are narrow. There is public parking along the entire length of Nunsfield Road which is fully occupied most of the day due to the properties being mainly terraced houses with no front garden off road parking. Traffic management would be very restrictive to the area and works would be very slow due to the density of vehicles and properties.

To get to St Peters Road there are 2 options:

Option 2a - Via Nunsfield Road Middle Path - a narrow pedestrian footpath which is known to contain buried services - this would be shorter than Option 1.

- Considerable pedestrian traffic use this pathway as a main link to A6 Fairfield Road.
- The footpath already contains gas, electric, foul sewer, surface water, potable water, street lighting and telecommunication cabling – there appears to be little room for new

water infrastructure. In order to get the proposed water mains in this footpath, a number of significant service diversions would be required;

- The footpath would require closure to facilitate the works;
- There are mature trees along the footpath, for which restrictive covenants may be an issue. In addition this would complicate the excavation works.
- The existing dry stone wall that bounds the footpath would need to be removed for health and safety reasons.

On the basis that the route along the middle path is impractical without significant other work, this option has been discounted.

Option 2b – Nunsfield Road End Path

This option consists of installing pipework to the end of Nunsfield Road, where use would then be made of a 'path' at the end of Nunsfield Road.

- On the positive side, there are minimal services, although the overall length is greater than Option 1.
- However, the works would require access to private land. In addition, the stretch of St Peter's Road is known to be an un-adopted and private in this area.

On the basis that the route would require legal agreements with 3rd parties, with associated undefined time and cost risk, this option has been discounted.

Option 3 - Windsor Road / Park Road / Queens Road / Cross Street / Waterswallows Road

This option is similar to Option 1, although Fairfield Road would be largely avoided by using the public highway within the housing estate to the east of the A6.

However, it should be noted that this option would still require around 20m of excavation works within Fairfield Road.

Access to Windsor Road is not straightforward as the area is exclusively residential – presently we are unaware of any additional restrictions that might be placed on the construction works as a consequence of this.

The topography of Windsor is noted to be extremely steep and challenging to construction works.

There is an existing and substantial masonry retaining wall along Windsor Road (at the back of the houses on Fairfield Road). Maintaining the integrity of this structure during construction works represents a significant risk.

The route is significantly longer than Option 1 using Fairfield Road.

The route also includes Queens Road which serves the Tongue Land Industrial Estate. Consequently, a significant volume of traffic uses this road daily to access and egress from the estate.

On the basis of the above – notably the difficulties associated with installing significant infrastructure within a residential area, the volume of traffic using Queens Road, additional length and the risks identified with the existing retaining wall - this option has been discounted.

Other Routes Considered

The A6 from the Waterswallows Road junction to the 'Tom Thorn' junction was initially considered but discounted on grounds of cost and excessive disruption to traffic.

Use of the a public footpath / track across the golf course was also considered but discounted on grounds of local amenity and legal impediments relating to common / private land.

The potential to retain an easement through existing factory site on Station Road was considered but discounted on practical terms, as a legal agreement between Nestle and the purchaser of the existing site was not possible (plus there appeared to be limited value in this route bearing in mind the relatively short length of pipe involved)

The opportunity to install pipework within Network Rail land was considered but discounted on practical grounds. A legal agreement between Nestle and Network Rail was not pursued on the grounds of potential risk to both parties. The alignment of the existing local railway system, in any event, is of limited benefit.

The potential to use 'common land' and 'private land' was given serious consideration. However, due to the associated legal difficulties with installing private equipment in such land, this was not pursued further.

Appendix C

Outline Construction Programme

1 Page

