

CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN



Land at Summer Lane

Pagham

PO21 4NG

DATE	21.05.20
AUTHOR	LH
REVISION	B

Construction Environmental Management Plan Revision Sheet			
Issue Number	Date of Issue	Reason for Revision and Comments	
A	09-10-19		
B	21.05.20	Site set-up plan, and traffic route plan amended	
Author:	Lee Howard	Checked by:	Peter Drury
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Executive Summary

Drew Smith shall be responsible for safeguarding the environment and for mitigating the effects of the proposed construction works at Land at Summer Lane. To do this, Drew Smith and all its subcontractors and suppliers will comply with the environmental requirements outlined in the contract documentation and the specific content of this Construction Environmental Management Plan (CEMP).

This CEMP details the construction operation in accordance with relevant legislative requirements and construction industry best practice. This document will form part of Drew Smith's Construction Phase Plan which will be developed and agreed with the client, the specialist consultant team and the Local Authority prior to commencement of any construction activity.

Appended Documents:

- Existing Services Drawing
- Traffic Route plan
- Site Set Up Plan
- Construction Programme
- Emergency Contact Details

1 Project Background

1.1 Framework of this CEMP

This CEMP has been prepared to provide the details required by the Local Planning Authority relating to Condition 16 of the planning conditions for the construction of 90 units, in two parcels, in Summer Lane.

LPA Ref: P/58/15/OUT

1.2 Summary of the Requirements of Planning condition 16

The planning Condition is worded as follows:

No development commence until a Construction Management Plan has been submitted to and approved in writing by the Local Planning Authority. Thereafter the approved Plan shall be implemented and adhered to throughout the entire construction period. The Management Plan shall be adhered to throughout the construction period. The Plan shall provide details as appropriate but not necessarily be restricted to the following matters:-

- The anticipated number and frequency and types of vehicles used during construction;
- The method of access and routing of vehicles during construction;
- The parking of vehicles of site operatives and visitors.
- The Loading and unloading of plant, materials and waste;
- The storage of plant and materials used in construction of the development
- The erection and maintenance of security hoarding
- The provision of wheel washing facilities and other works required to mitigate the impact of construction upon the public highway Wheel washing facilities and other works required to mitigate the impact of construction upon the public highway (including the provision of temporary Traffic Regulation Orders);-
- Measures to control noise and vibration during construction
- Measure to control the emission of dust and dirt during construction: and
- Details of public engagement both prior to and during construction work

1.3 Summary of the remaining planning conditions.

1 Reserved Matters

"The permission hereby granted is an outline permission under S92 of the Town and Country Planning Act 1990 (as amended) and an application for the approval of the Local Planning Authority to the following matters must be made not later than the expiration of 3 years beginning with the date of this permission:-

- (a) Layout;
- (b) Scale;
- (c) Appearance; and
- (d) Landscaping"

2 Performance/Compliance

The development hereby permitted shall be begun either before the expiration of 3 years from the date of this permission, or before the expiration of 2 years from the date of approval of the last reserved matters to be approved, whichever is later.

3 Performance/Compliance "Approved Plans"

The development hereby permitted shall be carried out in accordance with the following approved plans:

DLA.1552.L003.01 Rev D;

120843/A/11 Rev C;

120843/A/05 Rev B;

120843/SK/13 Rev A;

120843/SK/14 Rev A;

120843/AT/A01 Rev A;

120843/AT/A02 Rev A;

20843/AK/15 Rev A;

and the Ecological Assessment (April 2015)"

1

4 Reserved Matters

The development hereby permitted shall be limited to no more than 90 dwellings and the reserved matters submitted pursuant to condition no1 shall generally accord with the principles shown on the drawing entitled 'Block Plan'.

5 Reserved Matters

The buildings hereby approved shall not exceed two-storeys in height.

6 Reserved Matters

Detailed plans and particulars of the Reserved Matters submitted to the Local Planning Authority pursuant to Condition no 1 shall include a phasing plan and schedule to show how the development of the site is to be carried out in numbered phases. The development shall be carried out in accordance with the approved schedule and phasing.

7 Pre-Commencement

Prior to the commencement of development, details of a foul water drainage system (including details of its siting, design and subsequent management/maintenance, if appropriate) shall be submitted to the Local Planning Authority for written approval. No dwelling shall be occupied until works for the disposal of sewage have been fully implemented in accordance with the approved details.

8 Pre-Commencement

Prior to the commencement of any site clearance or preparation works, a detailed ecological mitigation and enhancement scheme, including timing for implementation, shall be submitted to the Local Planning Authority for approval. The scheme shall be based on the mitigation and enhancement details set out in section 9 of the submitted Ecological Assessment dated April 2015. The scheme shall include provision for further badger survey work and sensitive hedgerow and vegetation removal. The development shall be carried out in accordance with the approved scheme and timetable.

9 Reserved Matters

Detailed plans and particulars of the Reserved Matters submitted to the Local Planning Authority for approval pursuant to Condition no1 shall include full details of a proposed surface water drainage scheme. The design should follow the hierarchy of preference for different types of surface water

drainage disposal systems as set out in Approved Document H of the Building Regulations, the recommendations of the SUDS Manual produced by CIRIA.

10 Pre-Commencement

The development shall not proceed until written consent has been approved in writing from the Lead Local Flood Authority (WSCC) or its agent (ADC) for the discharge of any flows to watercourses, or the culverting, diversion, infilling or obstruction of any watercourse on the site. Any discharge to a watercourse must be at a rate no greater than the pre-development run off values.

11 Pre-Occupation

Prior to the occupation of any dwelling hereby approved, full details of the maintenance and management of the SuDs system set out in a site-specific maintenance manual, shall be submitted to and approved in writing by the Local Planning Authority. The manual shall include details of financial management and arrangements for the replacement of major components at the end of the manufacturers recommended design life. Upon completed construction of the SuDs system, the owner or management company shall strictly adhere to and implement the recommendations contained within the manual.

12 Reserved Matters

Detailed plans and particulars of the Reserved Matters submitted to the Local Planning Authority for approval pursuant to Condition no1 shall include full details of vehicular access onto Summer Lane. The development shall be carried out in accordance with the approved details and shall be implemented prior to the occupation of any dwelling in each respective phase.

13 Pre-Occupation

Visibility splays of 2.4 metres by 25 metres shall be provided at the proposed site vehicular accesses onto Summer Lane in accordance with the approved planning drawings. Once provided the splays shall thereafter be maintained and kept free of all obstructions over a height of 0.6 metre above adjoining carriageway level or as otherwise agreed. The approved details shall be implemented prior to the occupation of any dwelling in each respective phase.

14 Pre-Occupation

No part of the development in any phase shall be first occupied until a footway has been constructed along the north side of Summer Lane, the Summer Lane/Pagham Road junction has been realigned, and the other works as indicatively shown on drawing number 120843/A11 Revision C have been provided in accordance with plans and details submitted to and approved in writing by the Local Planning Authority, in consultation with the Local Highway Authority.

15 Reserved Matters

Detailed plans and particulars of the Reserved Matters submitted to the Local Planning Authority for approval pursuant to Condition no1 shall include full details of the proposed parking bay and crossing point on Summer Lane, as detailed on the submitted plan entitled 'Block Plan'. The development shall thereafter be carried out in full accordance with the approved details and implemented in full before the first dwelling is occupied.

17 Pre-Commencement

No development shall take place within each respective phase of development until the applicant 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 by the Planning Authority. The development shall be carried out in accordance with the approved details.

18 Reserved Matters

Detailed plans and particulars of the Reserved Matters submitted to the Local Planning Authority for approval pursuant to Condition no1 shall include the full details, measures, monitoring and subsequent reporting, as set out in the approved Travel Plan which is included in the submitted Transport Statement. The approved measures shall be implemented in full prior to the occupation of any dwelling hereby approved.

19 Pre-Commencement

Development shall not commence in each respective phase of development (including site clearance), until mitigation measures detailed in the submitted Tree Survey and Arboricultural Impact Assessment have been implemented in full. The mitigation measures shall be retained in full during the construction phase of each respective phase of development.

20 Reserved Matters

"Detailed plans and particulars of the Reserved Matters submitted to the Local Planning Authority for approval pursuant to Condition no1 shall include a landscape management plan, including long-term design objectives, management responsibilities and maintenance schedules for all landscape areas other than privately owned domestic gardens. The landscape management plan shall be implemented in accordance with the approved details.

"

21 Pre-Commencement

No development shall take place until details of laying out, timetable for provision and maintenance of the area shown on the approved plans for Public Open Space have been submitted to and approved in writing by the Local Planning Authority. The layout details submitted under planning condition 1 (layout) shall define the boundaries of the Public Open Space areas, their intended use, any items of equipment, means of enclosure and all other structures to be installed. The scheme shall also include details of dedicated dog walking routes and 'off lead' dog walking areas. The development shall be carried out in accordance with the approved details.

22 Pre-Occupation

Prior to the occupation of any of the dwellings hereby approved, a strategy for the provision of the highest available headline speed of broadband provision for future occupants of the site shall be submitted to and approved in writing by the Local Planning Authority. The strategy shall take into account the timetable for delivery of 'superfast broadband' (defined as having a headline access speed in excess of 24Mb or more). The strategy shall seek to ensure that upon occupation of a dwelling, the provision of the highest available headline speed of broadband service to that dwelling from a site-wide network is in place and provided as part of the initial highway works and in the construction of frontage thresholds to dwellings that abut the highway. Unless evidence is put forward and agreed in writing by the Local Planning Authority that technological advances for the provision of a new broadband service for the majority of potential customers will no longer necessitate below ground infrastructure, the development of the site shall be carried out in accordance with the approved strategy.

23 Pre-Commencement

Prior to the commencement of any phase of the approved development, a scheme detailing the physical works and a timetable to provide a minimum of at least 10% of the total energy demand from the development comprising renewable or low carbon energy generation on site, shall be submitted to and approved in writing by the Local Planning Authority. Thereafter the development shall be carried out in complete accordance with the approved scheme prior to first occupation of each respective phase, and retained so in perpetuity.

24 Reserved Matters

Detailed plans and particulars of the Reserved Matters submitted to the Local Planning Authority for approval pursuant to Condition no1 shall include a scheme of mitigation in order to restrict the potential for vehicle parking in the vicinity of the proposed eastern access onto Summer Lane. Such approved measures shall be implemented in accordance with the approved details and retained thereafter.

25 Reserved Matters

Detailed plans and particulars of the Reserved Matters submitted to the Local Planning Authority for approval pursuant to Condition no1 shall include full details of the proposed car parking spaces associated with each dwelling. Such approved spaces shall thereafter be retained at all times for their designated use.

26 Reserved Matters

Detailed plans and particulars of the Reserved Matters submitted to the Local Planning Authority for approval pursuant to Condition no1 shall include a schedule of materials and finishes to be used in the external walls and roofs of the buildings. A 'statement of detail' shall be submitted setting out details of the proposed windows and doors, details of depths of recess/reveal from the brickwork, sills and lintels, brick bonding, brick detailing, eaves detailing and rainwater goods. The materials and 'statement of detail' as approved shall be used in the construction of the buildings.

2 Site Information and Consented Development

2.1 Site and Surrounding Area

2.1.1 DESCRIPTION:

The site is three parcels of land located off Summer Lane, Pagham. The sites are currently open space / fields behind and beside the residential properties in Summer Lane.



Please refer to Appendix B for Traffic Route Management Plan for location details.

2.2 Scheme Description / Scope of works

2.2.1 The project consists of a 90 timber framed residential properties of single and two storeys.

The key construction stages are as follows:

- S278 works including service diversions
- Road widening
- Roads to estate including services and streetlights
- Groundworks to oversite
- Erection of timber frames
- Roof, windows and brickwork to timber frames
- First fix all trades
- Plasterboard and plaster

- Second fix all trades, service connections
- Paint
- Finals all trades and carpets
- External finishing's

2.3 Sensitive Receptors

2.3.1 Table 2.1 below lists a number of receptors which have been identified as being potentially sensitive to the works to be undertaken during the construction of the Development due to their proximity to the Site and nearby access road.

Table 2.1 Receptor in the Vicinity of the Proposed Development that are Potentially Sensitive to Construction Works

Receptor	Location and / or impact
Neighbours	Noise Dust Fumes Litter Vibration Vehicle movements
Air quality	Dust Fumes
Ground and groundwater	Site clearance On site earth moving operations Pollution spills Vibration Dust
Watercourses	Pollution spills Litter Dust / silt
Protected Species	Translocation of the following:- Common Lizards Slow Worms Grass Snakes Refer to Ecology Mitigation Strategy prepared by Aluco Ecology Ltd July 19 Rev A
Existing utilities	Water- Is located in Summer Lane Electric- Substation is located in Summer Lane BT Is located in Summer Lane Please refer to Appendix.

2.4 Environmental Impact and Mitigation / Control Measures

2.4.1 The table below lists Environmental Impacts and Mitigations which have been identified as being potentially sensitive to the works to be undertaken during the construction of the Development.

Ecology	Reptiles to be relocated as stipulated in Ecology report.
Transport	The Traffic Management Plan can be found within Appendix 2 and details the following: - Vehicle routes - Parking - Vehicular/pedestrian access/egress from site - Segregation of vehicles/plant and pedestrians/operatives - Material unloading areas - Crane hard standings Signage will be displayed at junctions on the routes to the site from the main road to help drivers navigate and reduce the likelihood of large vehicles having to attempt to turn around causing obstructions and hazards associated with reversing vehicles on carriageways.
Noise and Vibration	No construction operations and deliveries are permitted to take place outside 8am – 6pm All contractors will be required to control and limit noise and vibration levels so that current legislative standards are not exceeded, i.e. the noise limits referenced in Table E.1 Annex E of BS5228:2009 and A1:2014 Part 1
Air quality	Areas of hardstanding and permanent road surfaces will be constructed as soon as possible on site. Until this time and in areas of unsurfaced roads and where significant dust creation is identified, ground conditions will be compacted using static sprinklers, bowzers, where necessary. All processing plant and vehicles carrying loose aggregate and workings will be covered or shielded to reduce/avoid dust emissions.
Ground Conditions	The report compiled by Ashdown Site Investigations Ltd Report No R16-11602 produced in September 2016 identified a

	bearing pressure of 100kn/m2 in the London Clay formation. No elevated levels of contaminants were identified within this report.
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3 Control of the Construction Process

3.1 Roles and Responsibilities

- 3.1.1 The anticipated roles and responsibilities of the key parties involved in the construction works are set out below. However, it should be noted that all members of staff are responsible for ensuring the requirements of the CEMP are followed.

Main Contractor

- 3.1.2 Drew Smith will appoint contractors to develop specific phases on their behalf. They will appoint a Site Manager, full details of which will be included within the CMS.

Architect

- 3.1.2 Architect is:-

Contact: Kenn Scadden Associates

Address: Concept House
North End
Portsmouth
Hampshire
PO2 8AA

Telephone: 02392 679819

- 3.1.3 Engineers is:-

Contact: Rogers Cory Partnership

Architectural and Civils Partnership

Address: The old school
Old School Road
Hook
Hampshire
RG27 9NJ

Telephone: 01256 769269

Site Manager

- 3.1.4 The Site Manager will be allocated to this project prior to commencement and will be responsible for the day to day management of Health and Safety, Environmental and Quality Performance during the construction of the Proposed Development. The Site Manager will also be responsible for implementing the CEMP, including the development of a detailed Environmental Action Plan for delivering the CEMP, monitoring the performance of sub-contractors and maintaining records to demonstrate compliance with and implementation of CMS.
- 3.1.5 In addition, the Site Manager will be responsible for ensuring that all staff and operatives receive a site specific health, safety and environmental induction prior to starting work on-site and are provided with relevant information concerning environmental sensitivities and protection measures.
- 3.1.6 The Site Manager will be responsible for reviewing all risk assessment method statements and ensuring an appropriate programme of tool box talks are developed and effectively communicated.
- 3.1.7 All queries and complaints from the public and local community will be directed to the Site Manager who will be responsible for responding to these and maintaining a register of complaints.

Internal Team

3.1.8

Description	Person(s) Responsible
Contracts Manager	Lee Howard
Site Manager	TBC
Health and Safety Advisor	Adrian Shipley
Contracts Surveyor	Ben Alford / Fleur Giles
Technical Manager	Peter Drury
Produce CEMP	Lee Howard
Site Inspections	Regular site inspections to be carried out to check all site operations, identify environmental risks and implement controls

All Staff and Subcontractors

- 3.1.9 All staff and subcontractors have the responsibility to:
- Work to agreed plans, methods and procedures to eliminate and minimise environmental impacts (including the CEMP);

- Understand the importance of avoiding pollution on-site, including noise and dust, and how to respond in the event of an incident to avoid or limit environmental impact;
- Report all incidents immediately to their line manager;
- Monitor the work place for potential environmental risks and alert the immediate line manager if any are observed; and
- Co-operate as required, with site inspections and audits.

Table 3.1 Key Contacts**Operations Director**

Adrian Cator
Galliford Try Partnerships
01489 861400

Site Manager

TBC
Drew Smith
01489 861400

Ecologist

Aluco Ecology Ltd
Pencairn
Penmener
The Lizard
Cornwall
TR12 7NR
01962 886633

Arboriculturalist

Arbor-Call
01962 840003

3.2 Training and Raising Awareness

- 3.2.1 The raising of environmental and health and safety awareness is viewed as a crucial element in the appreciation and implementation of the CEMP. This CEMP will be distributed to members of the project team, including suppliers and subcontractors as necessary to ensure that environmental and health and safety requirements are adequately communicated.
- 3.2.2 The Site Manager is responsible for ensuring that all people on-site are provided with relevant information concerning environmental protection. A system should be operated on-site whereby all staff and operatives receive a site specific safety and environmental induction prior to commencing any work on-site.
- 3.2.3 All information is relayed to personnel by the nominated person during Site Induction and continued through by Toolbox Talks. The Site Manager is the nominated person.

3.3 Reporting

- 3.3.1 Any problems are reported to the Site Manager, and the Operations Director, Adrian Cator for his comments.

3.4 Complaints and Incidents

- 3.4.1 The Site Manager will develop and implement an appropriate queries / complaints procedure and details of whom to contact in the event of a complaint will be displayed on signage on the perimeter hoarding.

3.4.2 Logging a complaint / incident will be done by Site Manager.

Table 3.2 Incident and Complaints Log

Date	Recorded by	Concerning	Incident

3.4.3 The formal procedure for handling project complaints/concerns will be developed and agreed by the principal contractor / site manager but may include a procedure similar to that detailed below:

- Stakeholders (i.e. the general public, local authority etc.) will be able to report any concerns complaints or other comments to site manager in writing, by email or in person at the site offices. Site contact details should be provided at site entrances, on perimeter hoardings and possibly at appropriate community locations;
- The site manager will take full details of the concerns expressed and ensure that a formal assessment is commenced of the reported concern. They will also issue an initial response to the person who has submitted the complaint / concern. They will also issue an initial response to the person who has submitted the complaint / concern confirming its receipt;
- The site manager will undertake an investigation to assess what corrective and preventative action, or further investigation is necessary;
- Any corrective measures / actions will be implemented with associated implementation dates being recorded;
- Following implementation of the corrective action and agreement with the relevant stakeholder that the complaint has been adequately addressed the case will be closed and date recorded.

3.5 Public Relations and Community Relations

Meeting the locals

3.5.1 General information regarding the development will be provided to neighbours affected by the work and the form and format for regular communication will be organised in liaison with established community groups to ensure effective and regular communication is maintained throughout the development period regarding programming and construction activities.

4 Construction Management

4.1 Description of Construction Works

4.1.1 The main elements of construction works associated with the different components of the proposed development are summarised in Table 4.1 below

Table 4.1 Overview of Construction Works

Works	Description
Phase 1 Enabling works	Ecology and S278 Works
Phase 1	Eastern Site
Phase 2	Western Site

4.2 Description of Construction Works

4.2.1 Commencement date to be confirmed

4.2.2 The above timescales are estimates based upon current market conditions and likely build rates.

4.3 Construction Equipment

4.3.1 Plant typically to be used for this site are listed below:-

- Excavators
- Dumpers
- Forklift
- Mobile Crane
- Silo
- Skips
- Disk cutters
- Drills
- Hiab lorries

4.3.2 The impacts associated with the use of this equipment/activities on noise and air quality and the environmental control measures which are recommended are discussed in Section 5.

4.4 Hours of Working (Hours of Operation)

4.4.1 The standard working hours for all construction activities will be from:

- 8am to 5pm Monday to Friday

4.5 Construction Traffic Management Plan

Vehicles:

4.5.1 Traffic and Traffic operatives will follow the information set out below:

- All vehicles to switch off engines – no idling vehicles (noise and emission prevention)
- All loads of loose material entering and leaving site to be covered
- No site runoff of water or mud onto the adjacent public highway will be permitted
- The site manager will be responsible for ensuring that suitable measures are in place to ensure roads are kept clean
- Consolidate / hard surfacing and effective cleaning of haul routes and appropriate speed limit around site
- Ensure plant is regularly maintained, any plant showing signs of black smoke should be taken out of use. Well maintained modern plant helps reduce noise levels
- Use low Sulphur diesel
- Delivery times and routes will be issued to our subcontractors and suppliers
- Suppliers / subcontractors will be sent away by site management should they ignore these requirements at their cost

Pedestrians/Personnel:

4.5.2 The pedestrian route will be clearly defined to ensure that there is no crossing of pedestrians through the vehicular route.

4.5.3 The general public will be excluded from the works area using appropriate fencing and signage.

4.5.4 Health and Safety signage will be displayed at appropriate locations throughout the works.

4.5.5 All visitors will be required to sign in and out of the site on a daily basis

4.6 Storage of Plant and Materials

4.6.1 The Site Manager will inspect daily the site area for spillage, an incident form will be completed should any be found, and forwarded to HQ so we can avoid reoccurrences

4.6.2 The Site Manager will inspect bunds and drip trays, more frequently during periods of bad weather

4.6.3 Rainwater should be kept from entering bunds and drip trays. The Site Manager will be responsible for overseeing the emptying of drip trays bunds adhering to control procedures

4.6.4 Information will be displayed on spill kits and within the site office covering emergency actions and contact details. The EA and Southern Water contacts will be prominently displayed and used should any incident occur which could impact upon ground water

4.6.5 Hazardous chemicals, which may harm staff and the environment, should be stored in an appropriate container within a ventilated store

4.6.6 COSHH assessments covering all substances on site will be kept within the site office and operatives will be appropriately trained in emergency procedures

4.6.7 The Site Manager will be responsible for updating the register

4.6.8 Plant should be regularly maintained, and removed from site immediately if found to be leaking

Dealing with Spillages

- 4.6.9 Use bunded areas for refuelling as indicated on the Compound Plan
- 4.6.10 Drip trays will be used when refuelling and care should be taken with hoses running between mobile plant and tank to avoid spillages and contain any leakage
- 4.6.11 Spill kits will be provided adjacent to refilling sites
- 4.6.12 Operators will be spill kit trained and kits will be inspected at regular intervals by the Site Manager to ensure supplies are maintained
- 4.6.13 Refuelling procedures will be covered in the site induction, though only trained operatives will be permitted to carry out the procedure
- 4.6.14 Small plant should be refilled within the designated area
- 4.6.15 Small/mobile/static plant such as generators, compressors, pumps etc. will have drip trays
- 4.6.16 Clean spillages using agreed wet handling methods

4.7 Handling of Plant and Materials

- 4.6.17 The handling of plant materials will be managed by the appointed Contractor.

4.8 Health and Safety Management

- 4.8.1 Drew Smith are committed to promoting a positive safety culture. The enforcing authority for health and safety on construction sites is the Health and Safety Executive (HSE) who will be notified of all construction works prior to their commencement on site.
- 4.8.2 The Site Manager will maintain a register of accidents, incidents, near misses and complaints. Contractors failing to maintain the required safety standards may be excluded from the approved tender list of future work.
- 4.8.3 All works will be carried out in accordance with all legal compliance and all other acts, regulations and Codes of Practice and site rules relating to the works will be observed.
- 4.8.4 No bonfires are to be permitted in any case
- 4.8.5 When laying and using Bitumen, do not overheat bitumen and cover pots
- 4.8.6 Use great care in all processes to prevent spillages and extinguish any accidental fires immediately

4.9 Security On-Site

- 4.9.1 Only authorised persons will be allowed on Site. A Site Risk Assessment will be produced which will detail how security will be managed on the Site. Any person identifying unauthorised personnel on-site should contact the Site Manager who will take appropriate action and ensure the unauthorised person leaves the Site safely.

4.10 Considerate Constructors

- 4.10.1 In order to maintain a high standard of good practise at this development, all staff and contractors will be advised of the below values:
 - **Consideration:** All work to be carried out with positive consideration to the needs of all potentially affected parties and the environment in general;
 - **Environment:** Minimising noise and dust from construction, attention of waste management and avoidance of pollution;

- **Cleanliness:** The working site is to be kept clean in good order at all times;
- **Good Neighbours:** Full and regular consultation with neighbours regarding programming and site activities;
- **Respectful:** Respectful and safe standards of dress shall be maintained. Lewd or derogatory behaviour will not be tolerated;
- **Safe:** Construction operatives and site vehicle movements are to be carried out with great care and consideration for the safety and security of the general public and site personnel;
- **Responsible:** Considerate Constructors will ensure that all site personnel and any other persons working on the site understand and implement these values;
- **Accountable:** Posters relating to the scheme will be displayed around the site giving names and telephone numbers of staff who can be contacted in response to issues raised by the general public or other persons affected by the site operation.

5 Environmental Control Measures

5.1 Public Access and Traffic Management

- 5.1.1 Construction traffic associated with the proposed development will access the site from the direction of Pagham Road. Please refer to traffic route plan enclosed for full details.
- 5.1.2 Where possible, measures will be adopted to ensure that construction traffic travels minimal distances along sensitive routes (residential or congested roads) and those vehicles are kept clean and sheeted when on public highways.
- 5.1.3 Action will be taken to minimise and control any nuisance arising from construction traffic by using measures such as controlling vehicle speed, use of sweepers, wheel washing and keeping all site entrances clean.

5.2 Waste and Materials Management and Storage

- 5.2.1 Waste and materials management will be the responsibility of the Site Manager. Please refer to enclosed Site Set Up plan for full storage details.

5.3 Noise and Vibration

- 5.3.1 The construction works are likely to follow the generic mitigation measures as listed below:
 - Plant and equipment will be regularly maintained to ensure optimum performance of any fitted sound reducing devices, e.g. exhausts.
 - Toolbox talks will be held with site operatives to promote being a “Good neighbour”.
 - A site induction will take place and will cover appropriate use of radios and being considerate to neighbours.
 - Equipment and vehicles to be shut down when not in use
 - Where necessary, any permanent noise barriers would be constructed as early as possible in the construction programme.
 - Hours of operation will be restricted as indicated in Section 4.4

5.4 Dust & Air Quality

- 5.4.1 During the construction phase, there will be various site clearance works and activities undertaken, which all have the potential to generate particle emissions arising from dust and smoke. Outlined below are typical generic measures that will be implemented to minimise the effect of air pollution:
- Minimise dust generating activities. Machinery and dust causing activities are to be located away from sensitive receptors;
 - Use water as dust suppressant where applicable, dust suppression should consist of “mist spraying” only;
 - Whenever possible keep stockpiles or mounds away from the site boundary, sensitive receptors, water courses and surface drains;
 - Whenever possible securely cover skips with polythene or tarpaulin;
 - Use mechanical road sweepers on all adjacent roads during periods of dry weather. Site Manager to arrange regular inspections of site and local network.
- 5.4.2 The table below demonstrates the main sources of particle emissions during construction activities and the controls required to minimise pollution.

Table 5.1

Activity	Remedy
Dust blown up from Roadways	Dampen down with water from a fine water spray
Materials / dust being blown from skips	Cover skips with tarpaulins or similar
Dust blown from areas around site	Erect Fencing (permanent) where possible or hoardings to cut down on airborne dust
Smoke, ash	No burning on site
Exhaust from mechanical plant	Ensure plant is regularly maintained, any plant showing signs of black smoke should be taken out of use. Use low sulphur diesel.
Dust arising from materials / storage	Cover materials with polythene or tarpaulin

5.5 Ecology & Biodiversity

- 5.5.1 Prior to any works commencing (and at any time during construction for advice) please contact our Ecologist.
- 5.5.2 To minimise the risk of killing and, or injuring reptiles, any ecology fencing must be kept clear and intact during construction.
- 5.5.3 The ecologist must be in supervision for vegetation clearance and tree felling

- 5.5.4 No tree felling or lopping works to be undertaken during bird nesting season (March – August inclusive) to reduce the risk of disturbing, damaging, and destroying active nests and their occupants.
- 5.5.5 Erect Ecology and Tree protection fencing in accordance with the Ecology and Arboricultural reports
- 5.5.6 Ecology related constraints on this site are as follows:

Table 1: Summary of Anticipated Protected Species & Habitats Mitigation

	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A
Vegetation																								
Protect retained vegetation with fencing																								
Creation of new habitats in SANG/open space																								
Nesting Birds																								
Principal Cutting of woody vegetation period																								
Bats																								
Safe Tree Felling (any trees with bat roost features)																								
Badger																								
Update Survey																								
Sett Closure under Licence																								
Water Vole																								
Survey for Water Vole signs (main survey period)																								
Creation of new wetland habitat (early in process)																								
Mitigation destructive search (if required) (or)	?	?																						
Works under Licence (if required)																								
(nb Water Vole strategy will need to be updated following results of re-survey, timings above are based on guidelines, but a detailed strategy will refer to local situation/results)																								
Reptiles																								
Mitigation and translocation																								
Destructive Search																								

5.6 Tree Protection

- 5.6.1 Some trees and hedgerows will need to be either wholly removed or partially removed to enable the proposed development to take place. This will need to be agreed with the existing neighbour before work commences. Tree protection will be erected in accordance with the attached drawings.
- 5.6.2 Prior to any works commencing please contact our Arboriculturalist to arrange a pre-start meeting. A further meeting to inspect installed tree / ground protection measures will also be required.
- 5.6.3 Outlined below are typical measures that will be implemented to minimise the effect on protected trees:
- Tree protection fencing to be erected prior to any on site activities in accordance with the Arboricultural Impact Assessment
 - No materials to be stored within the tree protection area
 - No plant or site personnel to enter tree protection area
 - No reduction or raising of soil levels within tree protection area

- No tree felling or lopping works to be undertaken during bird nesting season (March – August).
- Works within tree root zones to be undertaken under supervision of appointed Arboriculturalist
- Penalties for contravention of a TPO can result in a fine at Magistrates or Crown Court depending upon extent of damage

5.7 Contaminated Land Procedures

- 5.7.1 Should any areas of contamination be encountered; the LPA will be notified immediately and these will be dealt with in an appropriate manner.
- 5.7.2 All workers on-site will be made aware of potential contamination issues on the Site and will use best practice techniques during the construction phase.

5.8 Hydrology & Water Quality

- 5.8.1 The following generic mitigation measures are proposed to protect the water environment:
- All site works will be undertaken with suitable temporary drainage measures in place.
 - Strict control of the site boundaries will be enforced by the Site Manager, including minimal land clearance and restrictions on the use of machinery near water bodies.
 - The design of the SUDS and the use of pollution prevention control measures will ensure that the development does not affect groundwater,
 - Cleared land should be replanted or vegetated as soon as practicable to minimise the extent of exposed land and the volume of surface water run-off.

5.9 Visual Impacts

- 5.9.1. Existing boundaries to be maintained. The proposed new site entrance will be sympathetically reinstated at the end of the project.

5.10 Artificial Lighting

- 5.10.1 Light spill and glare during construction will be minimised by the controlled and sympathetic use of lighting taking into account the location of sensitive receptors both on and surrounding the site.
- 5.10.2 The following best practice measures will be implemented during the construction works:
- Lighting to be switched off when not required for construction activities or for security / health and safety.
 - Light spill will be minimised by avoiding poorly sited lights on the Site boundary.
 - The programme of works will take into account the location of sensitive receptors, in particular the residential properties, ecological species sensitive to changes in ambient lighting levels, pedestrians and road users, through the careful selection of the compound locations, restricting hours of operation and through control and careful direction of lighting used.

5.11 Emergency Procedures

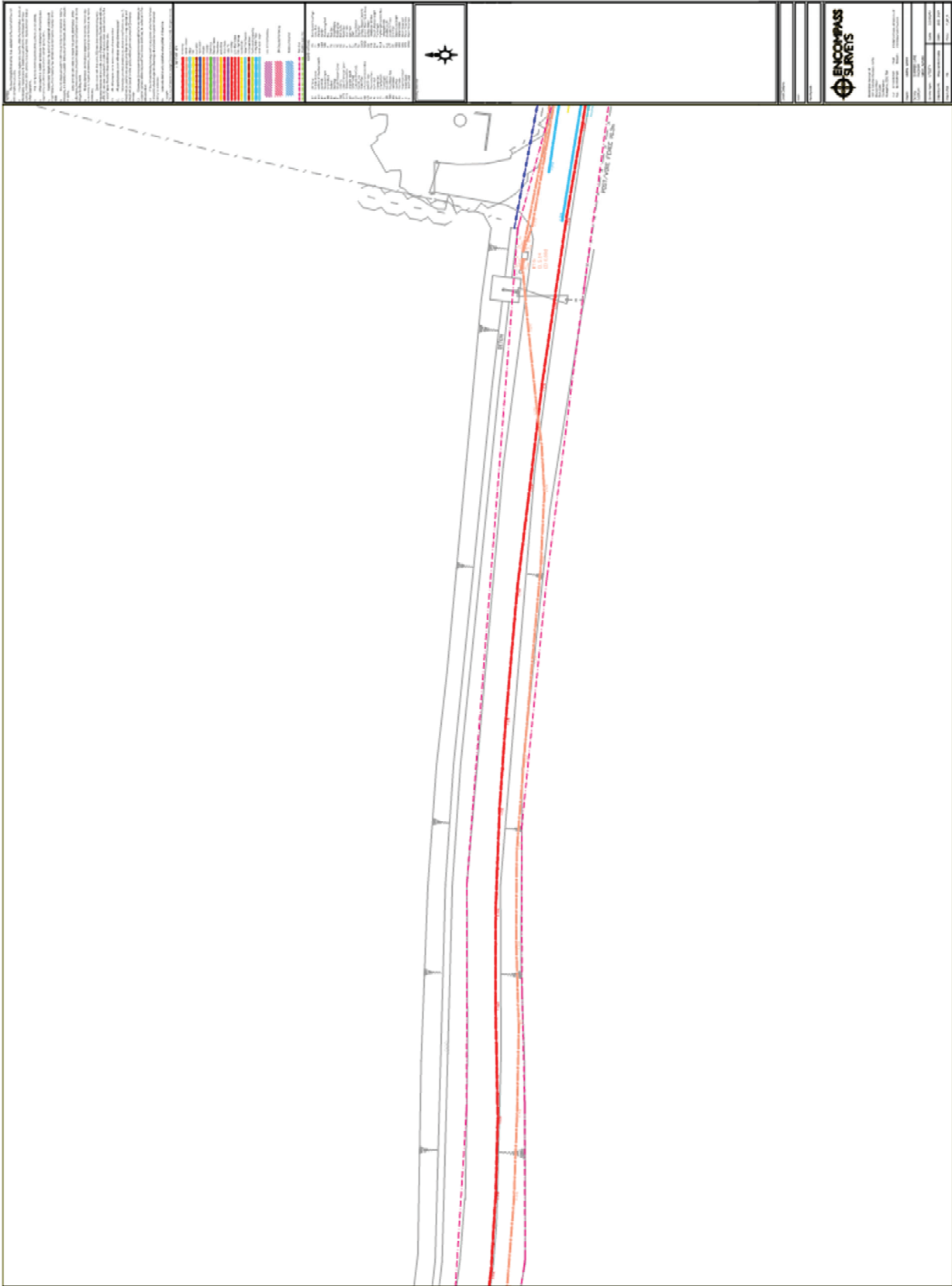
- 5.11.1 Pathways for pollution to escape should be removed and/or easily intercepted. This can be achieved through isolating polluting materials from drainage infrastructure and ensuring that there are appropriate methods for intervention and containment. More information on dealing with spillages and storage of chemicals, fuels etc. is found within Section 4.6.
- 5.11.2 A set of standardised emergency response procedures will govern the management of environmental incidents. Construction contractors will be required to adhere to and implement these procedures and ensure that site operatives are familiar with the emergency arrangements.

6 Conclusion

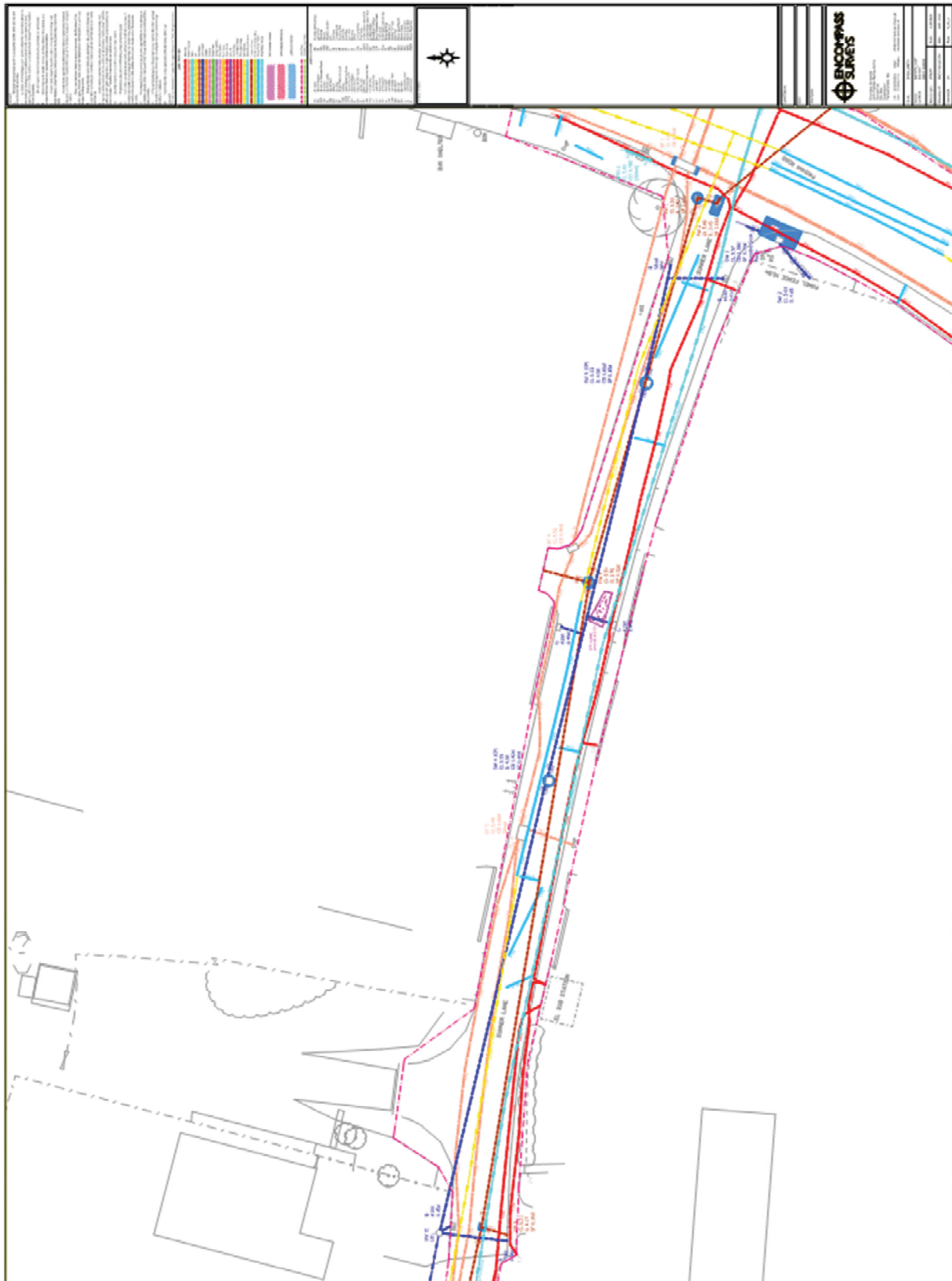
- 6.6.1 All this information is relayed to personnel by the nominated person during Site Induction and continued through by Toolbox Talks. The Site Manager is the nominated person.
- 6.6.2 Any problems are also reported to the Site Manager for his comments.
- 6.6.3 The following information sheet will be discussed at each person's site induction and continued through tool box talk by the Site Manager.
- 6.6.4 Each sub-contractor will be informed how and when he can help to cut down on air pollution at the pre-start meeting.
- 6.6.5 Any breaches will be notified to the site contractor in writing.

Appendix A – Existing Services











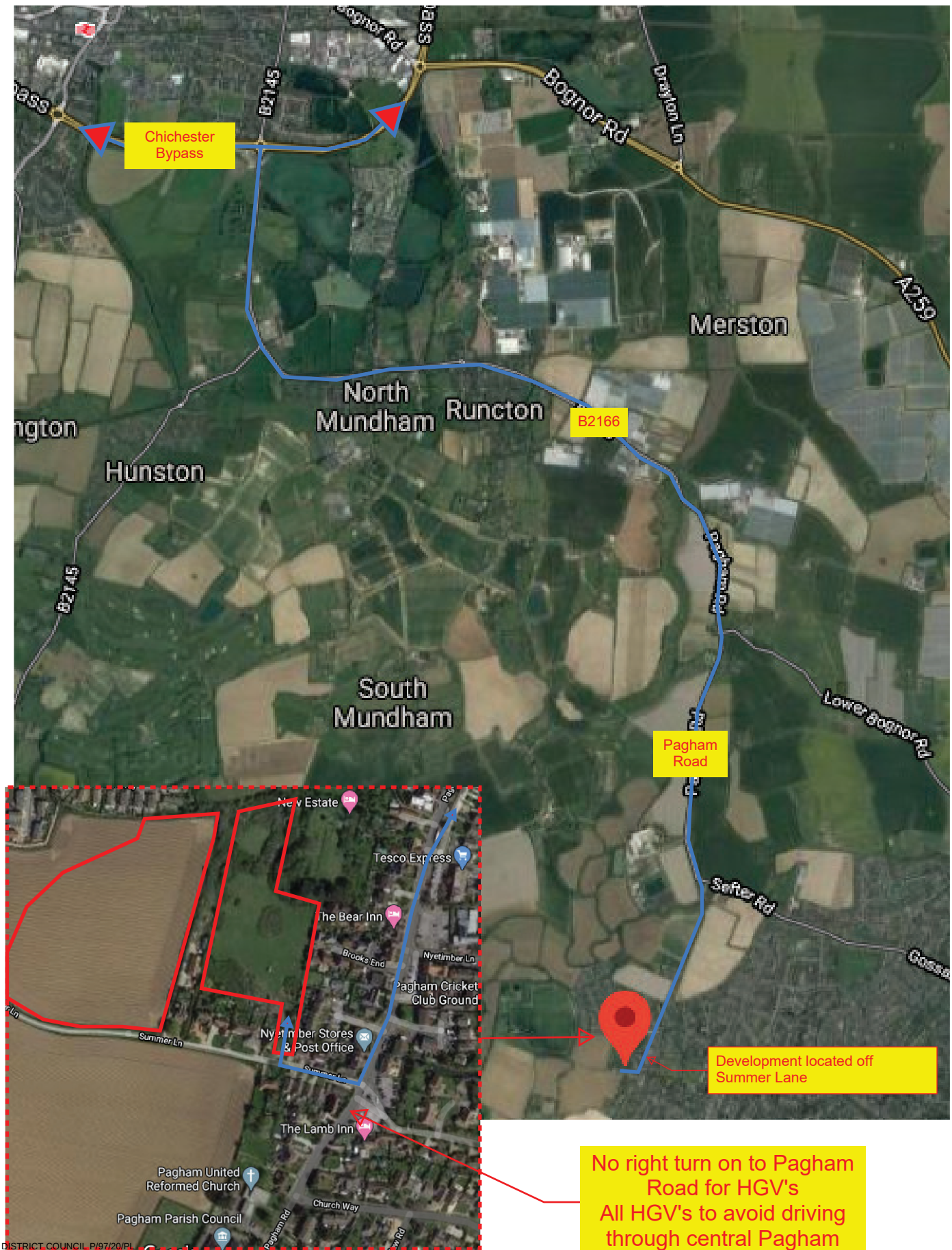
Appendix B – Traffic Route Plan

SITE: Summer Lane

ADDRESS: Land Off Summer Lane, Pagham, West Sussex, PO21 4NG

Traffic Route Plan

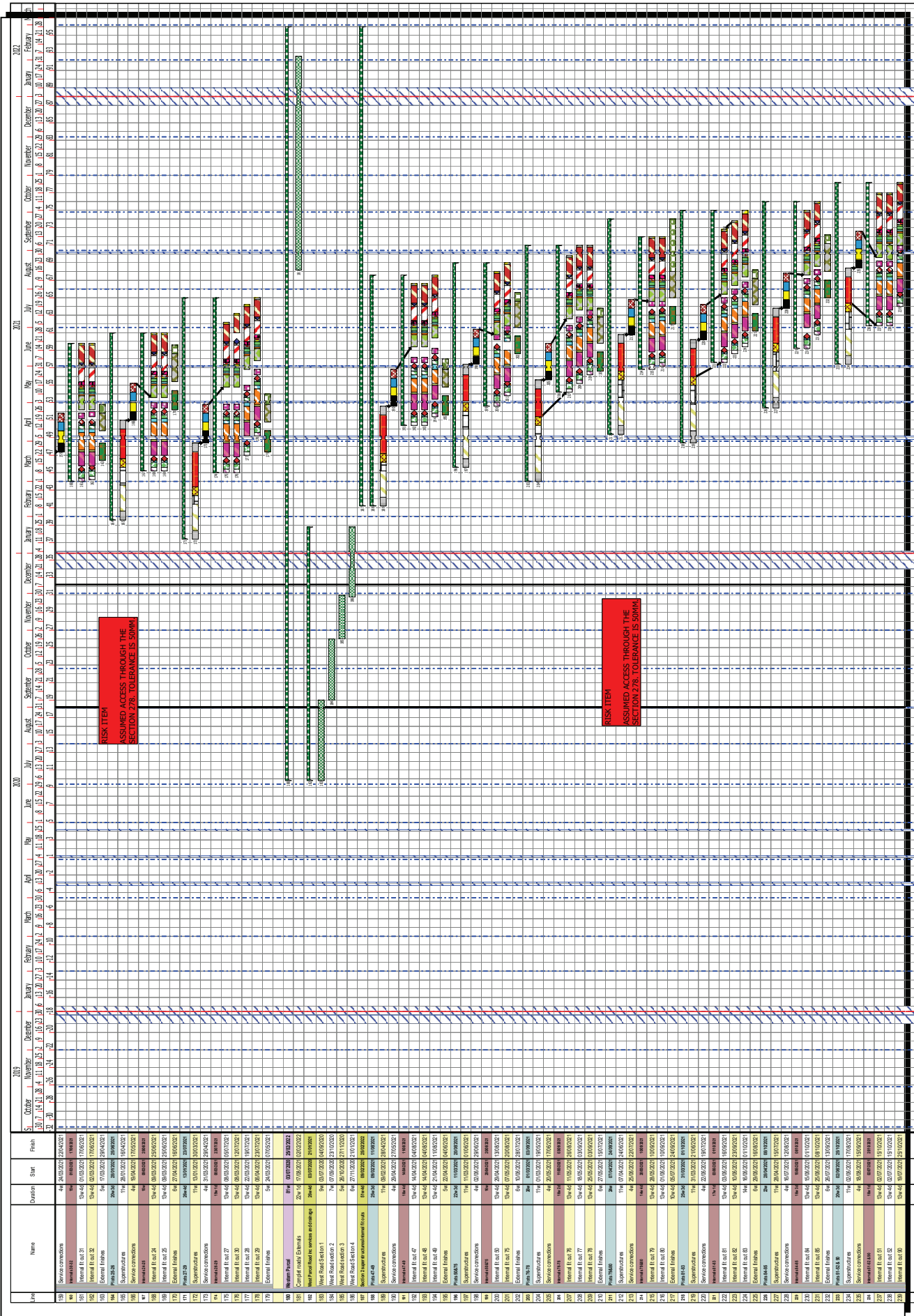
Please read in conjunction with the Construction and Environmental Management Plan



Appendix C – Site Set Up Plan



Appendix D- Construction programme



Pagham Target Programme Revised 278		DSH0201	Revision no: A
		13/12/19	
		Lee Howard	

Appendix E – Emergency Contact Details

Name	Company	Contact Name	Contact Number	Contact Address
Contractor	Drew Smith Homes	Lee Howard	01489 861400	Drew Smith House, Mill Court, The Sawmills, Durley, Southampton, SO32 2EJ
Site Manager	Drew Smith Homes	TBC		
Environment Manager	Galliford Try	Amit Patel		Cowley Business Park, Cowley, Uxbridge, Middlesex, UB8 2AL
Environment Agency	Environment Agency		03708 506506	National Customer Contact Centre, PO Box 544, Rotherham, S60 1BY
Ecologist	Aluco Ecology Ltd	Gareth	01962 886633	
Waste Management Contractor				