

Onshore Cable Route

Surface and Foul Water Drainage Management Plan

Requirement 18 (1) to (2) & 22 (1) to
(2(a))

Applicable to Work Numbers 5B to 20,
25 to 38, 41 to 49 and 52 to 61

Prepared by:	Checked by:	Approved by EATL:	Approved by NKT

Revision Summary					
Rev	Date	Prepared by	Checked by	Approved by EATL	Approved by NKT
1	07/09/21	Kay Griffin	Phil Williamson Rew-	Catherine Sibley	-
2	03/08/23	Kay Griffin	Terence Epo	Marta Menchi	-
3	30/11/23	Kay Griffin	John Dunlop	Marta Menchi	Suart Graham

Description of Revisions			
Rev	Page	Section	Description
1	ALL	ALL	New Document
2	ALL	ALL	Amendments made throughout document in response to consultee comments and cable route layout design
3	Throughout	Throughout	Amendments made throughout document in response to consultee comments and cable route layout design

FOR DISCHARGE

TABLE OF CONTENTS

1. INTRODUCTION AND SCOPE	5
1.1. Project Overview	5
1.2. Purpose and Scope	5
2. ABBREVIATIONS	7
3. CONSTRUCTION DETAILS	8
3.1. Construction Overview	8
3.2. Construction Consolidation Sites (CCS)	8
3.3. Accesses, Stone Haul Roads and Trackway	10
3.4. Jointing Bay Compounds	10
3.5. Duct Proving	11
3.6. Cable Pull-through	11
3.7. Reinstatement	11
3.8. Jointing Bay Compounds	12
3.9. Duct Proving	12
3.10. Cable Pull-through	12
3.11. Reinstatement	13
4. SITE DETAIL	13
4.1. Hydrological and Hydrogeological Context	13
4.2. Risk of Flooding	14
5. SURFACE AND FOUL WATER DRAINAGE MANAGEMENT PLAN GOVERNANCE	14
6. RELEVANT STANDARDS AND LEGISLATION	15
6.1. British Standards / Eurocodes	15
6.2. Legislation and Planning Policy	15
6.3. CIRIA Guidance	15
6.4. Local Guidance	16
6.5. Design Manual for Roads & Bridges	16
6.6. Environment Agency Guidance Notes	16
6.7. Regulatory Position Statements	16
7. WATER FRAMEWORK DIRECTIVE	16
8. SURFACE WATER DRAINAGE STRATEGY	17
8.1. Introduction	17
8.2. Existing Drainage	17
8.3. Drainage Design	18
8.4. Dewatering of Jointing Bay Excavations	19
8.5. Flood and Weather Alert	20
8.5.1. Flood Alert	20
9. MITIGATION MEASURES	21
9.1. Sediment	21

9.2.	Concrete and Cementitious Products.....	23
9.3.	Fuel Oils and Lubricants.....	24
9.4.	Contaminated Land.....	25
9.5.	Sewage and Organic Waste.....	25
10.	DISPOSAL OPTIONS AND TEMPORARY OUTFALLS.....	25
11.	ABSTRACTIONS AND PRIVATE WATER SUPPLIES	26
11.1.	Abstractions.....	26
11.2.	Protection of Private Water Supplies.....	27
12.	MONITORING AND REPORTING	28
12.1.	Monitoring.....	28
12.2.	Reporting.....	29
12.3.	Personnel	29
13.	REFERENCES	29
	APPENDIX 1 HYDROGEOLOGICAL RISK ASSESSMENT	31

FIGURE LIST

Figure1 Site Context Plan

Figure 2 Hydrological and Hydrogeological Features

Figure 3 EA Surface Water Flood Zone Map

FOR DISCHARGE

1. INTRODUCTION AND SCOPE

1.1. Project Overview

1. East Anglia Three Limited (EATL) was awarded a Development Consent Order (DCO) by the Secretary of State, Department of Business, Energy and Industrial Strategy (DBEIS) on 7 August 2017 for the East Anglia THREE Offshore Windfarm (EA THREE). The DCO granted consent for the development of a 1200MW offshore windfarm and associated infrastructure and is live until 28 August 2022.
2. The DCO has now been subject to three non-material variations:
 - In March 2019 EATL submitted a non-material change application to DBEIS to amend the consent to increase the maximum generating capacity from 1,200MW to 1,400MW and to limit the maximum number of gravity base foundations to 100. In June 2019 DBEIS authorised the proposed change application and issued an Amendments Order.
 - In July 2020 EATL submitted a second non-material change application to DBEIS to amend the parameters of its offshore substations (reducing the number of these to one) and wind turbines (a decrease in the number of turbines and an increase in their hub height and rotor radius). On 15 April 2021 DBEIS authorised this proposed change application and issued an Amendments Order.
 - In August 2021 EATL submitted a third non-material change application to DBEIS to amend the consent to remove the maximum generating capacity of 1,400MW and to amend the parameters of its wind turbines (a decrease in the number of turbines and an increase in their hub height and rotor radius). In September 2022 DBEIS authorised the proposed change application and issued an Amendments Order.
3. The onshore construction works associated with EA THREE will have a capacity of 1400MW and transmission connection of 1320MW. The construction works will be spread across a 37km corridor between the Suffolk coast at Bawdsey and the converter station at Bramford, passing the northern side of Ipswich. As a result of the strategic approach taken, the cables will be pulled through pre-installed ducts laid during the onshore works for East Anglia ONE Offshore Windfarm (EA ONE), thereby substantially reducing the impacts of connecting to the National Grid (NG) at the same location. The infrastructure to be installed for EA THREE, therefore, comprises:
 - The landfall site with one associated transition bay location with two transition bays containing the connection between the offshore and onshore cables;
 - Two onshore electrical cables (single core);
 - Up to 62 jointing bay locations each with up to two jointing bays;
 - One onshore converter station, adjacent to the EA ONE Substation;
 - Three cables to link the converter station to the National Grid Bramford Substation;
 - Up to three onshore fibre optic cables; and
 - Landscaping and tree planting around the onshore converter station location.
4. Since the granting of the DCO, the decision has been made that the electrical connection for EA THREE will comprise a high voltage direct current (HVDC) cable rather than a high voltage alternating current cable and, therefore, the type of substation that will be required is a HVDC converter station. The substation will, therefore, be referred to here as a 'converter station' and this amended terminology has been agreed with the relevant authorities on 15 October 2020. It has also been determined that only one converter station will be constructed rather than two and that the converter station will be installed in a single construction phase.
5. The EA THREE onshore works commenced development in July 2022, with works at the Converter Station, Paper Mill Lane, Playford Corner and Clappits.

1.2. Purpose and Scope

6. This Surface and Foul Water Drainage Management Plan (SFWDMP) focuses on the procedures for managing the drainage with respect to the EA THREE onshore cable works. This document has been produced to fulfil DCO Requirement 18 which states:

Surface and foul water drainage

18.-(1) No stage of the connection works may commence until for that stage written details of the surface and (if any) foul water drainage system (including means of pollution control) have, after consultation with the relevant drainage authorities, Suffolk County Council and the Environment Agency, been submitted to and approved by the relevant planning authority.

(2) The details agreed in paragraph (1) must accord with the proposals for a surface water and drainage management plan contained in the outline code of construction practice and include a surface water drainage scheme for Work No. 67, which is based on sustainable drainage principles and an assessment of the hydrological and hydrogeological context of the development.

(3) The surface and foul water drainage system for the relevant stage must be constructed in accordance with the approved details.

7. This document also fulfils part of DCO Requirement 22 which also requires a surface water and drainage management plan:

Code of construction practice

22.- (1) No stage of the connection works may commence until for that stage a code of construction practice (which must accord with the outline code of construction practice) has been submitted to and approved by the relevant local planning authority, in consultation with the relevant highway authority.

(2) The code of construction practice must include—

(a) a surface water and drainage management plan;

8. The scope of this document relates to the SFWDMP associated with the construction of the onshore cable works comprising Work running from the landfall location at Bawdsey to the Converter Station works located near Bramford, Suffolk (Figure 1 Site Context Plan), comprising Work No.s 5B to 61, as defined in the EA THREE DCO. The Requirement Discharge Documents (RDDs) relating to the construction and installation of cable route infrastructure within the Clappits Works Stage (Work No.s 21 to 24), Playford Corner Works Stage (Work No.s 39 and 40), Paper Mill Lane Works Stage (Work No.s 50 and 51) and Converter Station Stage (Work No.s 62 to 69) have previously been discharged. For the sake of completeness and to provide a suite of comprehensive RDDs for use by the Principal Contractor for the cable route (NKT), the infrastructure and activities that fall within these areas and the associated management measures for these will also be addressed in this document. Nevertheless, this document seeks only to discharge this Requirement with respect to Works No.s 5B to 20, 25-38, 41-49 and 52 -61.

9. With respect to the cable route, it is Mid Suffolk District Council (MSDC) and East Suffolk Council (ESC) who are the relevant planning authorities. However, EATL has acknowledged from an early stage that Suffolk County Council (SCC) (as the Lead Local Flood Authority), the East Suffolk Water Management Board, and the Environment Agency are important consultees in the process for the SFWDMP.

10. The purpose of the document is to describe the basis of the drainage scheme and management of water during installation of the cable, in order to meet the following objectives:

- To protect surface and groundwater by ensuring that appropriate measures are in place to prevent contaminants from entering the surrounding environment and in particular pathways that might lead to water receptors. The Project Environmental Management Plan (EA3-LDC-CNS-REP-IBR-000010) also deals with controls for hazardous materials;
- To comply with relevant legislation and good practice in terms of managing surface and foul water abstractions and discharges; and
- To maintain and protect private water supplies during construction.

11. The measures contained herein shall be adhered to by the Principal Contractor and the implementation and compliance will be monitored by the Construction Management Team. These measures will only be revised with the agreement of MSDC and ESC.

12. This plan should be read in conjunction with the Code of Construction Practice (CoCP) (EA3-LDC-CNS-REP-IBR-000084) and in particular the following:

- Project Environmental Management Plan (Appendix 10)
- Pollution Prevention and Emergency Incident Response Plan (Appendix 7)
- Flood Plan (Appendix 2)
- Watercourse Crossing Method Statement (Appendix 12)
- Section 14 Protection of Surface and Groundwater and also Section 14.5 Licences.

13. In addition, a Restoration Plan will be prepared to the approval of both MSDC and ESC in conjunction with SCC as Local Highway Authority, in accordance with Requirement 30 of the DCO. This Plan will set out how land that has been used temporarily for the EA THREE construction works will be reinstated within 12 months of the completion of that stage.

2. ABBREVIATIONS

BDC	Babergh District Council
CBS	Cement Bound Sand
CCS	Construction Consolidation Site
Chapter 8	Guidelines for (Public) Highways signing, lighting and guarding
CoCP	Code of Construction Practice
DBEIS	Department of Business, Energy and Industrial Strategy
DC	Direct Current
DCO	Development Consent Order
DMRB	Design Manual for Roads and Bridges
EA	Environment Agency
EA ONE	East Anglia ONE
EA THREE	East Anglia THREE
EATL	East Anglia THREE Limited
EnvCoW	Environmental Clerk of Works
ESC	East Suffolk Council
ES	Environmental Statement
GWD	Groundwater Directive (2006/118/EC, including amendments to Annex II detailed under Directive
HVDC	High voltage direct current
LLFA	Lead Local Flood Authorities
MSDC	Mid Suffolk District Council
MW	Megawatt
NG	National Grid Plc
NPPF	National Planning Policy Framework
PPG	Pollution Prevention Guideline
RPS	Regulatory Position Statement
SCC	Suffolk County Council
SPP	Suffolk SuDS Palette
SuDS	Sustainable Drainage System
WFD	Water Framework Directive (2000/60/EC)

3. CONSTRUCTION DETAILS

3.1. Construction Overview

14. The construction works will be undertaken across a 37km corridor between the Suffolk coast at Bawdsey and the Converter Station at Bramford, passing the northern side of Ipswich. The cables are to be installed through pre-installed ducts, laid during the onshore construction works for the EA ONE project. Construction has started on the cable route at three locations where Construction Consolidation Sites (CCS) will be located, at Playford, Paper Mill Lane and Clappits. This next phase of the construction works are expected to begin in Spring 2024 with an expected completion in December 2025. The construction activities within the onshore cable route will be as follows:

- Any minor temporary modifications to the public road network.
- Establish 3 additional CCS (approximate duration of 6 weeks for the establishment of each CCS).
- Establish 29 accesses from the public highway. These may require Section 278 Agreement with the Local Highways Authority (see Appendix 2 Transport Route Assessment of the Traffic Management Plan (EA3-LDC-CNS-REP-IBR-000080) for details).
- Establish up to circa 12.7km of stone haul road to access the jointing bay locations from the access points;
- Install 6.4km of proprietary trackway system to reach, *inter alia*, both ends of each Horizontal Directional Drill (HDD). HDDs will be accessed by proprietary trackway system from the jointing bay hardstandings or access points to allow each HDD to be proved.
- Establish 29 temporary jointing bay compounds (including 2 transition jointing bays) (approximate duration of 2 weeks for each compound).
- Excavation of jointing bay pits to locate the existing ducts at each jointing bay location (approximate duration of 3 weeks for each jointing bay location);
- Construct jointing bays (approximate duration of 3 weeks for each jointing bay).
- Transport of cables to site, from designated port to an off-site cable storage location and on to the jointing bay locations.
- Duct proving along the cable route.
- Pull cables through ducts and undertake jointing (approximate duration of 3 weeks per location).
- Backfill and reinstatement of jointing bays (approximate duration of 2 weeks).
- Remove temporary jointing bay hardstandings / compounds and CCS Compounds, haul roads, trackmatting and access points.
- Reinstatement all disturbed land, permanent fences, replacement hedges and vegetation with suitable hedgerow species, during the first appropriate planting season.

15. The layout of the above infrastructure is shown in Figure 1 Site Context Plan. The locations of the soil bunds are currently indicative and may be moved within the previously disturbed areas, following agreement with EATL, the Ecological Clerk of Works (EcoW) and the Archaeological Consultant. Similarly, the stone haul road/ trackway may also be moved laterally within a distance of +/-5m, following agreement with EATL, the EcoW and the Archaeological Consultant. Currently 12.7km of stone haul road and 6.4km of proprietary trackway are proposed, however it may be possible to reduce further the quantity of stone haul road required by using trackway where practicable. The use of trackway is less invasive (being placed directly on the topsoil) and requires fewer HGV movements. EATL commits to consulting MSDC, ESC and SCC (as applicable) with regards to any changes to the layout, should the design change significantly (e.g. changes to: highway access routes including access routes into and along the cable corridor; number of jointing bays; and anything that potentially requires archaeological assessment and mitigation).

16. Circa 8 teams of 5 workers will work in parallel across the cable route, installing the infrastructure at each location.

17. Temporary modification of the existing road networks may be required, such as localized widening, socketing of street signs and temporary moving of street furniture to allow the passage of larger HGVs, as set out in the Access Management Plan (EA3-LDC-CNS-REP-IBR-000079). This will be undertaken prior to construction commencing within relevant sections of the cable corridor route.

3.2. Construction Consolidation Sites (CCS)

18. The installation of the cable will require two 'Primary Construction Consolidation Sites' (PCCS) and four 'Secondary Construction Consolidation Sites' (SCCS), as set out in Table 3-1. All the proposed CCS will be within areas that were previously used for the EA ONE construction works.

Table 3-1 – Construction Consolidation Site Locations

CCS Type	Address	Dimensions (m ²)	Comments
Primary	Paper Mill Lane, Claydon, Ipswich, Suffolk IP6 0AP	3,577	Installed 2022 HGV turning area and parking 1,750m ²
Primary	Top Street, Martlesham, Suffolk IP12	3,572	HGV turning area and parking x 1,400m ²
Secondary	Bullen Lane, Bramford, Ipswich, Suffolk IP8	1,200	
Secondary	Playford Corner, Playford Mount, Ipswich, Suffolk IP6 9DS	581	Installed 2022
Secondary	Clappits, Woodbridge Road, Newbourne, Woodbridge, Suffolk IP12 4PA	1,185	Installed 2022/2023
Secondary	Landfall, Ferry Road, Woodbridge, Suffolk, IP12 3AS	1,200	Installation and use of CCS to be undertaken using Permitted Development Rights

19. As shown in Table 3-1, the dimensions of the CCS will be in accordance with Part 3, Requirement 12(9) of the DCO which limits the size of the PCCS to 3,600m² and the SCCS to 1,200m².
20. The PCCSs will:
- Provide areas for the storage of materials and equipment;
 - House site administration and welfare facilities for the labour resources;
 - Form an interchange hub for deliveries of material, equipment and resources; and
 - Allow HGVs to park prior to entering the local road network during peak hours.
21. The SCCSs will function as hubs for distribution along the cable route and will include welfare facilities with some limited storage of materials and equipment. SCCS may also include site offices.
22. The Paper Mill Lane PCCS will be the main administrative compound for the onshore works. Top Street PCCS and Landfall SCCS also include designated office space.
23. The CCS will be constructed as follows:
- Mark out the extent of CCS with use of Global Positioning Systems (GPS) Real Time Kinematic (RTK) setting out equipment;
 - Set out and install drainage features as required. Any encountered existing field drains will be located, capped or diverted to areas where any outfall can be managed in accordance with the Surface Water and Foul Drainage Management Plan (EA3-LDC-CNS-REP-IBR-000081);
 - Erect security fencing around the perimeter of CCS;
 - Excess vegetation to be removed from soil and from site prior to soil stripping. Strip topsoil under conditions where the topsoil is within its plastic limit with regards to moisture content to minimise damage to the soils structure and texture and store in designated areas within the same field boundary, all in accordance with BS3882, British Standard Topsoil and the Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (Defra, 2009). The removed vegetation will be either disposed of offsite or used on site for weed suppression in accordance with the correct licence/exemption;
 - Excavate to formation level and store any excess material. Topsoil and subsoil storage bunds will be placed in bunds locally separately, the topsoil bund being seeded, if they are to be stored for longer than 6 months. Subsoil bunds will be kept weed free;
 - Place imported stone in accordance with the CCS base structure design. Hardstandings will be installed in line with temporary works design assessments and may typically be circa 600mm thick;
 - Install prefabricated site offices, meeting room and welfare facilities, where required.

3.3. Accesses, Stone Haul Roads and Trackway

24. Existing accesses and farm tracks will be used where possible (with reinforcement where necessary) to access the jointing bay and HDD locations. Circa 12.7km of 5m wide stone haul road will be installed, in accordance with the permitted 18.05km (as set out in Part 3, paragraph 12(12) of the DCO). In addition, 6.4km of proprietary trackway system will be used to access, *inter alia*, the HDD proving locations. All tracks will, as far as reasonably possible, follow the track bed used for EA ONE.
25. There will be several HGV turning points and passing bays along the stone haul road and trackway. These are to provide HGVs with a safe location to turn round after driving onto the easement from the public highway and to reverse as short a distance as possible to the leading edge of the haul road/trackway construction. Over longer lengths of haul road/trackway further HGV turning points will be constructed allowing the HGV to drive along the haul road/trackway and reverse shorter distances.
26. The routing of the stone haul road/ trackway will be set out using GPS RTK equipment. For trackway, the proprietary trackway matting would be installed directly on the existing topsoil. For stone haul road the construction will be as follows:
- Set out the site tracks with the use of GPS RTK equipment;
 - Erect and maintain suitable signage and goal posts where the temporary road runs under overhead lines in accordance with HSE GS6 "Avoiding danger from overhead power lines";
 - Set out and install drainage features along the edges of the length of road to be constructed. Any impacted existing field drains will be located, capped or diverted to areas where any outfall can be managed in accordance with the Surface Water and Foul Drainage Management Plan (EA3-LDC-CNS-REP-IBR-000081);
 - Clear vegetation, strip topsoil and subsoil material for storage in separate designated stockpiles with suitable signage.
 - Topsoil storage bunds will be stored locally and seeded if they are to be stored for longer than 6 months. Subsoil bunds will be kept weed free.;
 - Excavate to formation level and store any excess material;
 - Test the existing ground conditions to ensure suitability of the temporary works design and bearing capacity for the haul road and hard standing areas;
 - Layers of stone and geotextiles/geogrid will then be placed on the cleared surface.
27. Based on the temporary works design and the soil bearing capacity, the 450mm thick stone haul road is likely to include one layer of non-woven geotextile and a layer of Geogrid 30/30 placed on the compacted sub-soil, with a second layer of geogrid 30/30 installed after 300mm of stone is place.
28. Where the stone haul road/trackway crosses over an existing watercourse, a flume will be installed temporarily to allow crossing of the watercourse and the continued flow of the watercourse beneath. When the watercourse is too wide to flume with a single board pipe, a proprietary bridge will be utilised. (See the Watercourse Crossing Method Statement (Appendix 12 of the Onshore Cable Route Code of Construction Practice (EA3-LDC-CNS-REP-IBR-000084).

3.4. Jointing Bay Compounds

29. 27 jointing bay compounds will be required, in addition to a compound for the 2 transition jointing bays at landfall. The jointing bay compounds will comprise hard standing to provide a working platform and to accommodate containers, drum trailer movement, parking, and welfare. The jointing bay compounds will have areas up to a maximum of 3,690m² (In accordance with Part 3 Requirement 12(11) which limits the area to 3,740m²). A typical layout is shown in Figure 2 of the Code of Construction Practice (EA3-LDC-CNS-REP-IBR-000084).
30. Once the location of the jointing bay compounds has been established (using GPS RTK equipment), the creation of the compound will commence with erection of security fencing, removal of topsoil layer and installation of hard standing areas. The jointing bays (25m x 5m) will then be excavated to a depth of up to 2.5m with adequate slope batter or shoring on all sides of the excavation to prevent the soil from collapse. The existing ducts will be exposed and concrete slabs constructed to provide a level working area. Drainage channels and a sump pit will be included to facilitate drainage and dewatering. Installation and jointing of the cables will then take place before the earth link boxes and fibre optic boxes are installed and the area back filled with subsoil and Cement Bound Sand, as required.
31. Earthing link boxes will be installed within the cable system on every fourth jointing bay. All link boxes will be installed into a link box chamber that will be buried to below plough depth at a minimum of 1.2m, within the jointing bay.

32. To enable the fibre optic cable pulling through the already installed ducts, a pulling chamber will be installed at every jointing bay location. All cable joints, link boxes and pulling chambers will be buried to below plough depth of 1.2m.

3.5. Duct Proving

33. The ducts to be used for EA THREE, which were installed during the EA ONE project construction works, will require cleaning and proving to ensure that they are intact, free of debris and ready for cable installation. Cleaning and proving will be undertaken by using a foam sponge pig, driven under air pressure from jointing bay to jointing bay followed by drawing a brush and mandrill through from jointing bay to jointing bay.
34. Each set of HDD ducts will also require proving. A larger diameter duct was installed at the HDD locations than is used along the rest of the cable route. Therefore, an excavation (2m x 3m x 1.5m) will be made at each end of each of the HDD locations at the duct diameter transition location. The transition coupler will be removed before cleaning and proving the HDD ducts as described above.
35. The construction of the two transition jointing bays within the transition bay compound is addressed in the Landfall Method Statement (EA3-LDC-CNS-REP-IBR 000078) (Reference to jointing bays in the remainder of this document also includes transition bays). These works will use the adjacent SCCS, located off Ferry Road, Bawdsey.

3.6. Cable Pull-through

36. The HVDC cable wound drums will be transported from the docks to the cable drum storage location located in Kesgrave close to Ipswich. Cable drums will then be transported directly to the jointing bay compounds. Cable lengths are dependent on the distance between the jointing bays and are typically between 750m and 1950m in length. Before cable installation commences the cable ducts and communications ducts will be given a final clean through and proved by pulling through a sponge, brush and mandrill.
37. Installation of the cables into the ducts will begin with a cable pulling system being installed into the jointing bay. A steel bond and winching system with free spinning rollers will be installed along the bottom of the jointing bay. The cable will then be drawn off the lorry mounted cable drum using HGV hydraulic assist and cable winch & winch wire.
38. Pulling calculations have confirmed that mechanical cable pushers will be required to assist the cable pull in operation on several of the longer pull locations, where cable pushers will be installed within the jointing bay. A dynamometer will ensure the maximum calculated pulling tension of the cables is not exceeded. Tension on the cable will be reduced using a biodegradable water-based lubricant, for example, "Lubtec-HD" (as used on EA ONE). Once both HVDC cables have been installed, the cable will then be jointed within the jointing bay and tested before moving onto the next pair of cables along the route. This process will be repeated for each of the twenty-eight sections.
39. The pre-installed DTS fibre optic ducting will be proven by blowing a gauging steel ball bearing through the ducting joint bay to joint bay. The Communication fibre ducts will be proven by blowing a sponge pig through prior to installing the fibre optic cable. Fibre optic cables will then be blown through the ducted system from jointing bay to jointing bay. The blowing of fibre optic cables requires a highspeed air flow combined with a mechanical pusher.
40. It is expected that pulling and jointing operations at each jointing bay would take approximately 2.5 weeks, typically spread over a three-to-four-week period, with a typically eight-person team installing the cables and a three-person jointing team.

3.7. Reinstatement

41. The jointing bay compounds, CCSs, accesses and stone haul roads will be reinstated and restored with the stored topsoil and subsoil in accordance with BS3882, British Standard Topsoil and the Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (Defra, 2009). Reinstatement will only take place under conditions where the topsoil is within its plastic limit with regards to moisture content to minimise damage to the soil's structure and texture. If necessary, the subsoil will be 'ripped' under friable conditions prior to placement if compaction had occurred. Topsoil may also require ripping if compacted following the removal of the trackway. Topsoil will be spread in such a way as to ensure that it does not become compacted. Pasture and arable land will be reseeded as required, fences reinstated, and suitable hedgerow species replanted during the first appropriate planting season in accordance with the Landscape Management Plan (EA3-LDC-CNS-REP-IBR-000077).

3.8. Jointing Bay Compounds

42. 27 jointing bay compounds will be required, in addition to a compound for the 2 transition jointing bays at landfall. The jointing bay compounds will comprise hard standing to provide a working platform and to accommodate containers, drum trailer movement, parking, and welfare. The jointing bay compounds will have areas up to a maximum of 3,690m² (In accordance with Part 3 Requirement 12(11) which limits the area to 3,740m²). A typical layout is shown in Figure 2 of the Code of Construction Practice (EA3-LDC-CNS-REP-IBR-000084).
43. Once the location of the jointing bay compounds has been established (using GPS RTK equipment), the creation of the compound will commence with erection of security fencing, removal of topsoil layer and installation of hard standing areas. The jointing bays (25m x 5m) will then be excavated to a depth of up to 2.5m with adequate slope batter or shoring on all sides of the excavation to prevent the soil from collapse. The existing ducts will be exposed and concrete slabs constructed to provide a level working area. Drainage channels and a sump pit will be included to facilitate drainage and dewatering. Installation and jointing of the cables will then take place before the earth link boxes and fibre optic boxes are installed and the area back filled with subsoil and Cement Bound Sand, as required.
44. Earthing link boxes will be installed within the cable system on every fourth jointing bay. All link boxes will be installed into a link box chamber that will be buried to below plough depth at a minimum of 1.2m, within the jointing bay.
45. To enable the fibre optic cable pulling through the already installed ducts, a pulling chamber will be installed at every jointing bay location. All cable joints, link boxes and pulling chambers will be buried to below plough depth of 1.2m.

3.9. Duct Proving

46. The ducts to be used for EA THREE, which were installed during the EA ONE project construction works, will require cleaning and proving to ensure that they are intact, free of debris and ready for cable installation. Cleaning and proving will be undertaken by using a foam sponge pig, driven under air pressure from jointing bay to jointing bay followed by drawing a brush and mandrill through from jointing bay to jointing bay.
47. Each set of HDD ducts will also require proving. A larger diameter duct was installed at the HDD locations than is used along the rest of the cable route. Therefore, an excavation (2m x 3m x 1.5m) will be made at each end of each of the HDD locations at the duct diameter transition location. The transition coupler will be removed before cleaning and proving the HDD ducts as described above.
48. The construction of the two transition jointing bays within the transition bay compound is addressed in the Landfall Method Statement (EA3-LDC-CNS-REP-IBR 000078) (Reference to jointing bays in the remainder of this document also includes transition bays). These works will use the adjacent SCCS, located off Ferry Road, Bawdsey.

3.10. Cable Pull-through

49. The HVDC cable wound drums will be transported from the docks to the cable drum storage location located in Kesgrave close to Ipswich. Cable drums will then be transported directly to the jointing bay compounds. Cable lengths are dependent on the distance between the jointing bays and are typically between 750m and 1950m in length. Before cable installation commences the cable ducts and communications ducts will be given a final clean through and proved by pulling through a sponge, brush and mandrill.
50. Installation of the cables into the ducts will begin with a cable pulling system being installed into the jointing bay. A steel bond and winching system with free spinning rollers will be installed along the bottom of the jointing bay. The cable will then be drawn off the lorry mounted cable drum using HGV hydraulic assist and cable winch & winch wire.
51. Pulling calculations have confirmed that mechanical cable pushers will be required to assist the cable pull in operation on several of the longer pull locations, where cable pushers will be installed within the jointing bay. A dynamometer will ensure the maximum calculated pulling tension of the cables is not exceeded. Tension on the cable will be reduced using a biodegradable water-based lubricant, for example, "Lubtec-HD" (as used on EA ONE). Once both HVDC cables have been installed, the cable will then be jointed within the jointing bay and tested before moving onto the next pair of cables along the route. This process will be repeated for each of the twenty-eight sections.

52. The pre-installed DTS fibre optic ducting will be proven by blowing a gauging steel ball bearing through the ducting joint bay to joint bay. The Communication fibre ducts will be proven by blowing a sponge pig through prior to installing the fibre optic cable. Fibre optic cables will then be blown through the ducted system from jointing bay to jointing bay. The blowing of fibre optic cables requires a highspeed air flow combined with a mechanical pusher.
53. It is expected that pulling and jointing operations at each jointing bay would take approximately 2.5 weeks, typically spread over a three-to-four-week period, with a typically eight-person team installing the cables and a three-person jointing team.

3.11. Reinstatement

54. The jointing bay compounds, CCSs, accesses and stone haul roads will be reinstated and restored with the stored topsoil and subsoil in accordance with BS3882, British Standard Topsoil and the Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (Defra, 2009). Reinstatement will only take place under conditions where the topsoil is within its plastic limit with regards to moisture content to minimise damage to the soil's structure and texture. If necessary, the subsoil will be 'ripped' under friable conditions prior to placement if compaction had occurred. Topsoil may also require ripping if compacted following the removal of the trackway. Topsoil will be spread in such a way as to ensure that it does not become compacted. Pasture and arable land will be reseeded as required, fences reinstated, and suitable hedgerow species replanted during the first appropriate planting season in accordance with the Landscape Management Plan (EA3-LDC-CNS-REP-IBR-000077).

4. SITE DETAIL

4.1. Hydrological and Hydrogeological Context

55. Figure 1 Site Context Plan provides an overview of the 37km onshore cable route. Local water features (based on 1:25,000 scale OS mapping) are shown on Figure 2. The majority of the onshore cable route is currently agricultural, undeveloped greenfield land.
56. The ground elevation along the cable corridor varies from approximately 56m to 0m AOD, with the gradient of the land generally sloping from higher ground the west down to the east, falling from the Bramford Substation towards the coast. There are local variations in the gradient but this represents a typical gradient over the whole of the onshore works.
57. The cable works drainage strategy takes into account the existing hydrological and hydrogeological conditions of the site, as confirmed through site ground investigations undertaken for the EA ONE works.
58. The EA THREE onshore cable will be installed across what is predominantly greenfield, agricultural land which drains through a series of open ditches to join other watercourses and eventually to main rivers along the route. The watercourses and ditches are influenced by local topography and land use, which will affect the runoff characteristics from a particular catchment. As the cable will be installed in the ducts laid during the onshore works for EA ONE, there will be no permanent watercourse crossings required for the cable. It is only, therefore, temporary construction vehicle access crossings that will be required.
59. The geology beneath the onshore cable route from landfall to Great Bealings predominantly comprises granular sand and gravel type material within the Kesgrave Catchment Subgroup, Alluvium or Red Crag. All these deposits are classed as Secondary A Aquifers. This area does not lie within a groundwater Source Protection Zones (SPZ) although there are three private abstraction licences from the ground water within the Great Bealings area, licensed for agricultural purposes.
60. From Great Bealings westwards towards the converter station the surface geology comprises mostly chalky till (clay) with Alluvium and locally exposed Chalk in the Gipping Valley. The till (Lowestoft Formation) is classed as an Unproductive Strata, whilst the Chalk is classed as a Principal Aquifer. The Onshore Cable Route passes through three Zone 1 SPZs in this section.
61. Temporary access across each watercourse will be achieved through the installation of either a flume pipe(s) or bridge and construction of a temporary haul road/track matting to enable plant and vehicles to cross the watercourse during construction. In all cases, construction plant and vehicles will be prohibited from driving through watercourses.
62. Once installation of the onshore cable route is completed, these temporary vehicle crossings will be removed and the watercourse / banks will be reinstated to their previous condition.

63. A Watercourse Crossing Method Statement is included as Appendix 12 of the Onshore Cable Code of Construction Practice (EA3-LDC-CNS-REP-IBR-000084).

4.2. Risk of Flooding

64. A Flood Risk Assessment was conducted in 2015 by Royal HaskoningDHV and the findings of this were included in the Environmental Statement (Vol 3 Chapter 21 as Appendix 21.2). Reference was made to the Environment Agency (EA) Flood Zone Map, which was used to identify the flood risk potential along the route of the cable works.

65. The EA Flood Map identifies three categories of Flood Zones, which reflect the risk of an area being affected by flooding from either rivers or the sea, where there are no flood defences. The zones are described as follows:

- Flood Zone 1: land defined as having less than a 1 in 1000 annual probability of flooding from rivers or the sea);
- Flood Zone 2: land having between a 1 in 1000 and a 1 in 100 annual probability of flooding from rivers or between a 1 in 1000 and a 1 in 200 annual probability of flooding from the sea; and
- Flood Zone 3: land having greater than a 1 in 100 annual probability of flooding from rivers or greater than 1 in 200 annual probability from the sea.

66. Based on the EA Flood Zone Map (Figure 21.5 of the ES), the report confirmed that the majority of the cable route is located within Flood Zone 1 (i.e. a less than 1 in 1000 annual probability of flooding from rivers or the sea) and therefore (according to EA criteria) is considered to have a 'Very Low' risk of flooding from these sources. Current UK flood mapping¹ indicates that this remains the case. There are however smaller sections in Flood Zone 2 and 3 where the cable route crosses the main rivers of the River Deben, Mill River, Martlesham Creek, River Lark, River Fynn, River Gipping and Somersham Watercourse. The onshore cable route also crosses numerous smaller ditches and watercourses and several marsh areas located between the landfall site and the River Deben.

67. Based on the EA Surface Water Flood Zone Map (Figure 3), the majority of the cable route is within an area at very low risk of flooding (i.e. a less than 1 in 1000 annual probability of flooding from surface water sources). There are six areas where a surface water flow pathway crosses through the cable route and in these areas the estimated probability of flooding varies between high (i.e. higher than 1 in 30 annual probability of flooding) and low (i.e. less than 1 in 100 annual probability of flooding but greater than or equal to 1 in 1,000 annual probability of flooding).

68. The areas where surface water flood risk is elevated are short in length and for most of the route, with the exception of a few areas, do not coincide with work areas. In the few places where work is required in areas of elevated surface water flood risk, areas of 'high' risk are avoided and the proposed placement of soil bunds would not block any significant flow pathways. Furthermore, the risks associated with rare and shallow flooding will be managed through the measures detailed in this surface water management plan, the proposed construction drainage systems and the operation of the flood plan which includes responding to Met Office severe weather warnings.

69. The proving location at the eastern side of HDD 6 sits across a narrow flow pathway that is designated as high risk on the EA Surface Water flood map. Review of LiDAR data indicates that there is no topographic feature associated with this flow pathway and this high risk zone is therefore considered to be erroneous with the actual risk of surface water flooding in this area likely to be low.

5. SURFACE AND FOUL WATER DRAINAGE MANAGEMENT PLAN GOVERNANCE

70. Prior to the commencement of construction, an Environmental Clerk of Works (EnvCoW) will be appointed by the Principal Contractor to manage *inter alia* the implementation of the SFWMDP. Contact details for the EnvCoW will be submitted to stakeholders for their records prior to commencement of construction.

71. The EnvCoW will be responsible for ensuring that effective surface water drainage management measures are in place for each relevant stage of construction and ensure that the relevant contractor also has in place a plan and appropriate means to respond to unforeseen events. This forward planning and implementation is critical to the effective management of surface water during construction and is a key lesson learnt from the construction of the East Anglia ONE project.

¹ <https://flood-map-for-planning.service.gov.uk/>

72. Prior to commencement of construction, the Principal Contractor will also submit details of their Accreditation (e.g. ISO) and Environmental Policies to the relevant stakeholders along with the following details for each key role relating to this plan:

- Role;
- Contact;
- Company Name and Address;
- Contact number and email; and
- Key responsibilities.

6. RELEVANT STANDARDS AND LEGISLATION

73. The cable route drainage strategy has been developed in accordance with the following relevant standards and guidance.

6.1. British Standards / Eurocodes

- BS EN 858-1:2002 Separator Systems for Light Liquids (e.g. Oil & Petrol)
- BS 8582:2013 Code of practice for surface water management for development sites

6.2. Legislation and Planning Policy

- The Water Framework Directive (2000/60/EC) (WFD)
- The Groundwater Directive (2006/118/EC, including amendments to Annex II detailed under Directive 2014/80/EU) (GWD)
- The Floods Directive (2007/60/EC)
- The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 which transposes the WFD and aspects of the GWD into UK legislation
- The Groundwater (England and Wales) Regulations 2009 which implements in England and Wales Article 6 of the GWD which details measures to prevent or limit inputs of pollutants into groundwater The Flood Risk Regulations 2009 transposes the EU Floods Directive into UK legislation and sets out requirements of the Environment Agency and local authorities in preparing assessments and mapping of flood risk for each river basin district in England and Wales
- Flood and Water Management Act 2010 includes provisions for the management of risk in connection with flooding and sets out requirements for Lead Local Flood Authorities (LLFA) in preparing strategies for local flood risk management
- The Land Drainage Act 1991 and 1994
- The Environment Act 1995
- The Environmental Permitting (England and Wales) Regulations 2016 consolidate and replace the Environmental Permitting (England and Wales) Regulations 2010, which have been amended 15 times to date. The 2010 Regulations are still in force and are the main implementing regulations for the environmental permitting regime.
- National Planning Policy Framework (NPPF), July 2021.
- Sustainable Drainage Systems – Non-statutory technical standards for sustainable drainage systems, March 2015, Department for Environment, Food and Rural Affairs.
- The Water Abstraction and Impounding (Exemptions) Regulations 2017.

6.3. CIRIA Guidance

- CIRIA C532 Control of Water Pollution from Construction Sites (2001)
- CIRIA C502 Environmental Good Practice on Site (2015)
- CIRIA C753 SuDS Manual (Dec 2015)
- CIRIA C762 Environmental Good Practice on Site (4th Edition 2016)
- CIRIA 648 Control of Water Pollution from Linear Construction Projects – Technical Guidance (2006)
- CIRIA 649 Control of Water Pollution from Linear Construction Projects – Site Guide (2006)
- CIRIA SP156 – Control of water pollution from construction sites – guide to good practice, (2002)

6.4. Local Guidance

- Suffolk Coastal and Waveney District Councils Level 1 Strategic Flood Risk Assessment 2018
- Mid Suffolk District Council Strategic Flood Risk Assessment, Mid Suffolk District Councils, March 2008
- Suffolk Coastal and Waveney District, Strategic Flood Risk Assessment, Main Report, February 2008, Scott Wilson on behalf of Suffolk Coastal District Council (now ESC)
- Suffolk Coastal and Waveney District Strategic Flood Risk Assessment, Appendix B – Suffolk Coastal District Council Report January 2009, Scott Wilson on behalf of Suffolk Coastal District Council
- Sustainable Drainage Systems (SuDS) a Local Design Guide, Appendix A to the Suffolk Flood Risk Management Strategy, Suffolk Flood Risk Management Partnership, 2023
- Suffolk SuDS Palette (SPP) – Guidance, Suffolk County Council

6.5. Design Manual for Roads & Bridges

- Design Manual for Roads & Bridges (DMRB): *CD 529 Design of outfall and culvert details*
- DMRB: CD 522 Drainage of runoff from natural catchments

6.6. Environment Agency Guidance Notes²

- Pollution Prevention Guidelines (PPG) General Guide to the Prevention of Water Pollution
- PPG3 Use and Design of Oil Separators in Surface Water Systems
- PPG4 Disposal of Sewage where no Mains Drainage is Available
- PPG5 Works in, or liable to affect Watercourses
- PPG6 Working at construction and demolition sites;
- PPG8 Storage and disposal of used oils;
- PPG20 Dewatering of underground ducts and chambers;
- PPG21 Pollution incident response planning;
- The Environment Agency's approach to groundwater protection (version 1.2 February 2018)
- Pollution Prevention for Business, (DEFRA and Environment Agency) May 2019.

6.7. Regulatory Position Statements

- Treating and using water that contains concrete and silt at construction sites: RPS 235, November 2020
- Temporary dewatering from excavations to surface water, Environment Agency, April 2021.

7. WATER FRAMEWORK DIRECTIVE

74. Consideration of the WFD is required for any development which clearly has the potential to cause deterioration in ecological, quantitative and/or chemical status of a water body or to compromise any improvements, which might otherwise lead to a waterbody meeting its WFD objectives. Typically, this will include projects involving engineering works or structures along a WFD water body, significant ground engineering works in close proximity to, or upstream of, a WFD water body or works that will involve a significant and long term change to the catchment of a WFD water body.

75. The cable route crosses numerous watercourses along the onshore cable route, from the converter station at Bramford to the landfall at Bawdsey, Suffolk. This includes seven main rivers, multiple smaller ordinary watercourses (drains/ditches) and two groundwater water bodies, before reaching coastal waters. As the ducts have already been installed no new engineering works to channels are required and the works that are needed are set away from the channels and will not constitute a significant long term change. On this basis, and bearing in mind mitigation measures outlined in this Surface Water and Drainage Management Plan and also the Code of Construction Practice (EA3-LDC-CNS-REP-IBR-000084, a Water Framework Directive (WFD) Assessment is not considered necessary for the Onshore Cable Works.

² The Environment Agency no longer provides 'good practice' guidance in the form of PPG and these documents were withdrawn in December 2015. The Environment Agency will be reviewing the validity of the archived documents as part of the government 'smarter guidance' project. While this process is concluded, the archived PPG documents are found at: <https://www.gov.uk/government/collections/pollution-prevention-guidance-ppg>

8. SURFACE WATER DRAINAGE STRATEGY

8.1. Introduction

76. The requirement for a SFWDMP is based on the duty to ensure that surface water quality and quantity is managed throughout the construction process to mitigate impacts off site. It will also play a role in protecting the quality of soils on site by preventing loss of composition and nutrients. Surface water runoff is a risk to the quality of all controlled water bodies and a nuisance to adjacent landowners. Surface water flooding can also delay works activities and become a risk to human health.
77. The impacts of the installation of the EA THREE onshore cables on surface water have been minimised by the strategic decision to install the ducts for the project as part of the EA ONE construction works. The EA THREE cables will, therefore, be pulled through these pre-installed ducts rather than requiring open trenching across the route. The existing ducts are located underground / below river bed to minimise potential impacts to flood risk receptors. Furthermore, the locations of the jointing bays are at least 10m from watercourses and at a maximum depth of 2.5m and have been designed to avoid the known area of contamination at Tuddenham St Martin (i.e. Work No. 41). There will, therefore, be no excavations or works within this area. The initial routing of the cable corridor was designed to also avoid mineral extraction areas.
78. A CoCP (EA3-LDC-CNS-REP-IBR-000084) has been prepared and agreed with MSDC, ESC and SCC and includes best practice measures for the protection of surface waters. A Pollution Prevention and Emergency Incident Response Plan (Appendix 8 to the CoCP) has been prepared and includes a description of the general requirements in place to identify and manage likely sources of pollution from the construction activities. Pollution prevention measures will be implemented in accordance with Environment Agency guidance (see Section 6). Procedures and contingency plans will be put in place at each work site to deal with the clean-up of small spillages and any emergency incidents. Staff will be suitably trained to deal with spillages, including the use of spill kits and other practical measures, to retain any pollution on site. The used spill kits or absorbents will be disposed of off-site at a suitably licenced facility.
79. Detailed evaluation of each section of the cable works will be undertaken prior to construction works commencing and selection of the most appropriate mitigation measures for each area will be applied. Such evaluation will consider, but not be limited to, extent of work areas, topography of the site, geology and soil conditions, hydrology and surrounding receptors.
80. The construction and environmental management team will call on specialist consultants (i.e. ecologists, hydrologists, ornithologists etc.), as and when necessary, to ensure that construction is being carried out in accordance with the requirements of the Environmental Statement, the Requirements of the DCO, environmental best practice and the approved Method Statements.
81. The workforce will receive “toolbox” talks outlining the aims of the water management strategy and its importance in maintaining a safe working environment and protecting water features along the route.
82. All necessary permits will be obtained by the Principal Contactor prior to commencement of these works. In accordance with the Land Drainage Act 1991 and local byelaws, where required written consent will be sought from the East Suffolk Water Management Board on the final methodology for any temporary or permanent works associated with, or any discharge to, Ordinary Watercourses within the East Suffolk Water Management Board District and/or Environment Agency, as relevant. Written consent from the SCC (the lead Local Flood Authority)) will be obtained for the final methodology for any temporary or permanent works associated with Ordinary Watercourse crossings outside of the East Suffolk Water Management Board District (pursuant the Land Drainage Act 1991).

8.2. Existing Drainage

83. Existing land drainage systems will be maintained during construction, where possible, and reinstated on completion. Consultation with landowners and occupiers will be undertaken to establish existing drainage arrangements, the location of drains and any other relevant information. Further mitigation will include the use of a specialist, local drainage contractor to undertake surveys to locate drains and create drawings both pre- and post-construction, if required, and ensure appropriate reinstatement. Where land drains are shallower than 1.5m, temporary culverting or diverting may be employed. Where possible, these will be cut off and capped inside the works area, to prevent silt leaving site and new field drains will be installed on the site boundary, as required. Following construction, field drainage systems and ditches will be fully reinstated where possible in consultation with landowners / occupiers.

84. Where construction operations may impact the wider drainage regime, the work will be undertaken in consultation and agreement with the East Suffolk Water Management Board and/or SCC as relevant. During the construction phase, local drainage will only be interrupted for the shortest possible period and will be reinstated as soon as practicable to minimise any effect on local drainage or soil moisture content.

8.3. Drainage Design

85. Once completed the cable will be a below ground structure and restoration will be undertaken to return the disturbed areas to their greenfield state with all original drainage connections restored. The drainage for the completed works will therefore ensure that flood risk is not increased (required as per paragraph 163 of the National Planning Policy Framework).

86. The surface water systems to be used during the construction of the onshore cable works will comprise Option 2 in the SCC Construction Surface Water Management Plan Template i.e. install, use and remove a temporary surface water drainage system. Where works are undertaken in proximity to sensitive receptors (watercourses and built development) this construction drainage will also be specified and implemented in line with the Non-Statutory Technical Standards for Sustainable Drainage Systems (SuDS) attenuating flows to the Greenfield Runoff Rates for all event up to the 1 in 100 annual probability storm. Elsewhere (i.e. crossing agricultural fields remote from surface watercourses) construction drainage arrangements will be designed to accommodate and control flows to Greenfield Runoff Rates for all storm up to the 1 in 10 annual probability event. This lower standard reflects both the temporary nature of the works and the minimal consequences of an exceedance event in these areas (i.e. localised ponding in fields).

87. Where appropriate, the principles of SuDS will be applied in order for the surface water discharge from across the cable route to mimic natural drainage as far as is practicable. The key principles that influence the planning and design process, therefore, comprise:

- Storing runoff and releasing it slowly (attenuation);
- Allowing water to soak into the ground (infiltration);
- Slowly transporting (conveying) water on the surface;
- Filtering out pollutants; and
- Allowing sediments to settle out by controlling the flow of the water.

88. Prior to undertaking the groundworks for any stage, a Preconstruction Water Management Plan will be developed and implemented to prepare the area of works and to prevent the contamination of both ground and surface water. The Preconstruction Water Management Plan will account for any existing land drainage, hydrological features, ground and surface water. Preconstruction drainage is an essential element in maintaining a suitable working area, reducing the potential for pooling water and preventing contaminated runoff into watercourses.

89. In addition, prior to commencing construction works, a Construction Water Management Plan will be prepared following the SCC Construction Surface Water Management Plan Template and this document will be agreed with MSDC, ESC and SCC. This Construction Water Management Plan will be implemented during the construction of the onshore cable route and will set out the practical steps required to manage drainage. The catchment area(s) for each jointing bay and access and the watercourse to which the treated water will thereafter be discharged will be identified.

90. The onshore cable route crosses many surface water drainage systems and, without appropriate controls, the excavation works could provide alternative routes for the surface water runoff to follow within the catchment. Drainage systems to be put in place will be designed to prevent any permanent alterations to existing drainage patterns and, at the same time, prevent contamination during temporary rerouting of natural runoff, during construction. These techniques will be designed to discourage any long-term changes to surface and groundwater movements. Existing drainage systems encountered during excavation, along with natural flow paths, will be fully reinstated, wherever practicable, as the route is progressed (see Section 8.2).

91. As part of the enabling works, shallow ditches will be installed in parallel to and downslope of any excavations and soil bunds to intercept surface water run-off from actively worked / disturbed ground or unconsolidated storage areas. Sumps will be used to collect the runoff from where it can be directed, either by pump or gravity (depending on the topography of the working site), to a settlement basin or water treatment facility (e.g. Siltbuster® unit or similar), where suspended solids will be contained and removed, before the runoff is discharged to ground or to a watercourse at Greenfield Runoff Rates (see Section 9.1).

92. The Construction Water Management Plan will identify the location of temporary attenuation ponds of sufficient size for sediment to settle out. This water can be retained for use in construction activities requiring a supply of water such as dust suppression, taking into consideration RPS 235 (Treating and using water that contains concrete and silt at construction sites) and the need to ensure capacity is provided within the surface water drainage system to accommodate future rainfall events. The Construction Water Management Plan will also outline the preferred surface water management strategy and identify the actions, timescales and responsibilities of individuals. The Construction Water Management Plan will identify sensitive receptors at risk from water runoff and the mitigation to be installed.

93. Wherever practical, jointing bays will be backfilled with arisings, in the order they were originally present to minimise alterations to the drainage pattern once construction and restoration have been completed. The reinstatement materials placed within the jointing bay's floor and sides will be at least as erosion-resistant as the original bed material but where appropriate may also be formed from a low- permeability material (e.g. a 'clay plug') to ensure that no preferential drainage pathways are created). Existing ditches and field drains in close proximity to the jointing bay site will be maintained and kept free from potential obstruction.

8.4. Dewatering of Jointing Bay Excavations

94. Jointing bays are reasonably large excavations which often go to a depth below that of the ground water level and therefore can require dewatering. Generally water will be removed from the excavation through the use of a standard surface water pump.

95. The Water Abstraction and Impounding (Exemptions) Regulations 2017 state that no more than 50m³/day is permitted to be dewatered if within 250m of a well used to supply water for lawful use or within 500m of a nature conservation site. If there is no (legal) well/spring/borehole or conservation site nearby then this can be increased to 100m³/day or higher if water is immediately discharged to a soakaway. Abstraction under the Exemption conditions is to last less than 6 consecutive months. In the large majority of cases jointing bay excavations will be completed within a period of six months and a discharge rate of 100 m³/d (or 50 m³/d if within 500m of a conservation site or within 250m of a spring, well or borehole used to supply water) will be more than sufficient to keep the excavation dry. In the event that the excavation needs to be kept open and dry for a longer period, or higher rates of dewatering are required, either a separate permit for the works would be sought or works would be rescheduled for the summer when ground conditions are drier.

96. Where needed, sheet piles may be used to minimise groundwater ingress and/or well points may be installed around the excavation to abstract the water from the ground before it could enter the excavation. The requirement for well points/sheet piles will be identified prior to commencing the works using filtration rate data.

97. Where the quality of the water allows, the extracted water will be pumped via settling tanks, sediment basins/lagoons, silt trap, filtration system or mobile treatment facilities (such as a Siltbuster®) to remove sediment, before being discharged, if required, into local ditches or drains via temporary interceptor (silt traps/fencing etc) in line with either an approved permit or exemption for discharge to surface waters. Subject to water volumes and the implementation of sufficient measures to remove any suspended solids for example, small volumes of water may be pumped straight to a grass swathe/soakaway within the works area. Water may also be pumped into a tanker for disposal at a licenced facility or for holding and later transfer for disposal via the above treatment methods. This process will be implemented in order to prevent increases in fine sediment supply to the watercourses. Treatment of high pH water (due to the presence of Cement Bound Sand) is considered in Section 9.2.

98. To reduce the likelihood of erosion channels being formed by the discharge from the lagoons/ settling tanks, water will be discharged at a slow rate, or spread evenly across a surface. For discharge onto rough vegetation to be effective, the discharge must be spread efficiently. For example, filtering the water through a series of lagoons with multiple discharge points will allow attenuation as well as diffuse dispersion, thus reducing the erosive potential of the runoff. To maximise the efficiency of the settlement lagoons/tanks, the sediment that collects at the base of the tank should be removed at periods dependent upon the intensity of the construction works.

99. Where space is limited to create lagoons or the volume of waters is lower, sediment bags/socks would be used. These would be fitted to the discharge point of pumps.

100. It is recognised that the generators required to power the pumps used to dewater excavation can be a source of noise disturbance to nearby residential properties. Construction noise will be controlled in accordance with Best Practicable Means as set out in the Construction Noise and Vibration Management Scheme (EA3-LDC-CNS-REP-IBR-000086). This requires the use of low impact type generators fitted with lined and sealed acoustic covers.

8.5. Flood and Weather Alert

8.5.1. Flood Alert

101. A Flood Plan has been prepared for the construction works and included as Appendix 2 of the CoCP (EA3-LDC-CNS-REP-IBR-000084). The Principal Contractor will sign up to the Environment Agency’s flood warning system as small sections of the cable corridor fall within Flood Zones 2 and 3 and also the Met Office severe weather warning system. The Flood Plan sets out the actions and responsibilities for the three flood trigger levels and the all clear as shown in Table 8-1. The contact details of the person(s) responsible for each of these actions (Flood Coordinator and Site Manager) will be submitted to stakeholders for their records prior to commencement of construction.

Table 8-1 Flood Response Procedures

Warning Triggers	General Procedures	Specific Actions
Trigger Level 1	General actions include: <ul style="list-style-type: none"> Communicate risk to all staff Make sure you know who is on site Take basic measures to prepare for flooding Stay in a safe place with a means of escape. Be ready should you need to evacuate. 	<ul style="list-style-type: none"> Place Staff on Green Alert Check access and availability to, and condition of equipment: closed road signs, torches (check battery life/spares), high visibility jackets for all staff Allow for handover should shift change occur before the warning is lowered Check staff registers are complete and available to ensure all staff are accounted for post- evacuation <p>Where trigger relates to rainfall, in addition to the actions above, the Principal Contractor will:</p> <ul style="list-style-type: none"> Speak to construction teams and request implementation of active measures to reduce the mobilisation of sediment and other pollutants in storm water runoff. This is likley to take the form of bringing forward basic house keeping measures such a road sweeping and clearance of intercept ditches. Reschedule (if reasonably possible and will not make situation worse) all engineering works which are liable to generate turbid runoff. This should include all earthworks. Review active work programme and associated temporary drainage arrangements and confirm that these are all in place and functional. Undertake survey of all active storm water drainage arrangements to check for damage, blockages or other problems which could impair their correct function and, in the event that deficiencies are identified, action urgent remedial works.
Trigger Level 2	<ul style="list-style-type: none"> Stay away from high risk areas Turn off gas, electricity and water supplies if safe to do so. Put flood protection equipment in place if safe to do so. Cooperate with the emergency services. Call 999 if you are in immediate danger. Evacuate site in an orderly and controlled way. 	<ul style="list-style-type: none"> Stop active work on the site and communicate change in flood status to all staff. If reasonably possible within a short timeframe (1hr) remove plant and equipment and relocate to elevated area that is away from potential flooding. Place staff on Red Alert and begin evacuation of jointing bay compound/CCS (Trigger Fire Alarm) Operate the emergency electrical shut off switches terminating the electricity supply and all power supplies to construction works sites/compounds, but only if safe to do so. Use allocated evacuation route to facilitate / direct the safe evacuation of all personnel to the agreed refuge location. Take register to ensure all staff are accounted for. Contact the Emergency Services and EA to confirm that the work sites are being closed due to the risk of flooding

Warning Triggers	General Procedures	Specific Actions
Trigger Level 3	<ul style="list-style-type: none"> Evacuate site as quickly as can be safely achieved. Account for all personnel Leave the area 	<ul style="list-style-type: none"> Immediately start evacuation of jointing bay compound and CCS if not actioned on receipt of the Flood Warning or Met Office Weather Warning (Trigger Fire Alarm at compounds) Use allocated evacuation route to facilitate / direct the safe evacuation of all personnel. Take register to ensure all staff are accounted for Contact the EATL to confirm that the jointing bay compound and/or CCS is being closed due to the risk of flooding.
All Clear	<ul style="list-style-type: none"> Be careful. Flood water may still be around for several days. If you've been flooded, ring your insurance company as soon as possible. 	<p>Where the preceding event related to rainfall or resulted in flood water entering or passing through the site storm water management systems, the Principal Contractor will:</p> <ul style="list-style-type: none"> Undertake a survey of all active storm water drainage arrangements to check for damage, blockages or other problems resulting from the storm / flood. Remedial works should be urgently undertaken on deficient drainage equipment. Significant pollution of any surface waterbody should be reported to the Environment Agency.

9. MITIGATION MEASURES

102. The most common pollutants present in water from a construction site are:

- Sediment (as suspended solids).
- Concrete and cementitious products.
- Hydrocarbons, such as fuel oils and lubricants.
- Pollutants arising from mobilisation of existing contaminated land or groundwater.
- Organic waste (sewage and effluent from welfare facilities).

9.1. Sediment

103. Contamination of surface water runoff is the highest potential risk of pollution during the cable route construction. The main source of contamination of the surface water runoff will be sediment. Sediment includes all suspended solids mobilised by the exposure of stored and stripped area of soils to rainfall and are picked up as the surface or groundwater on site flows through, or over, the soil. The impact of excessive amounts of suspended material in a receiving watercourse can have a significant negative impact on the ecology of the stream, smothering the natural fauna and flora.

104. The construction work will be designed to minimise the production of runoff containing elevated levels of suspended solids. The design for achieving this will be refined along the route, with much depending on the local requirements.

105. The measures used for minimising the generation of sediment laden runoff will include a combination of the following measures, with the precise solution varying along the route depending upon the nature and location of the works:-

- On-site retention of sediment will be maximised by routing all drainage through the site drainage systems. Additionally, where required, grips will be created along the downgradient edge of the working area to intercept any runoff from the working area and divert these into the site drainage system thereby preventing sediment from being washed outside the working area or being allowed to enter the wider land drainage network system of the land owner.
- Containment of heavily silt laden water as near as possible to the source (e.g. silt fencing along toe of soil storage piles or other affected points, addition of filter bags on pump outlets). Additional silt fences will be included in parts of the working area that are in proximity to surface drainage channels to manage water flow and encourage silt settlement.
- Diversion of clean water away from working areas to reduce volumes of dirty water generation. Where significant surface flows are considered possible this will involve the installation of drainage ditches (to divert flows around construction) upgradient of the soil storage areas, running parallel to the trenches and bunds to intercept water that otherwise may flow either into work areas from off-site.

- Appropriate silt traps would be proactively installed where their use is deemed effective to minimise sediment build up within basins or ditches.
- Temporary haul road constructed with suitable permeable crushed stone or aggregate surface laid on a geotextile membrane material preventing excessive ground damage from vehicles. Haul road/trackway to have drainage ditches on either side and also under-track drainage, where necessary and in accordance with the drainage requirements.
- Avoidance of excessive vehicle or plant tracking directly over topsoil stripped areas and the setting of vehicular speeds to minimise soil dispersal. Use of trackmat, or similar, where temporary off road access is required for excavator or other plant.
- Soil stored locally to excavation to minimise handling and exposure. Soil to be banded and sealed when stored for prolonged periods in order to shed rainfall and reduce silt laden runoff.
- Watercourse crossings carried out in accordance with proposed methods. Where necessary, watercourses requiring crossing will be temporarily flumed or bridged to allow uninterrupted flow of water within the watercourse. Depending on the specific location and if required, appropriate materials e.g. visqueen, geotextile, or silt fences will be used as splash barriers alongside crossing points, where needed.
- Covering or seeding of stored topsoil bunds at first opportunity, to reduce surface erosion.
- Strips of undisturbed vegetation will be retained on the edge of the working area where possible.
- Once the topsoil strip has occurred the construction material will be installed as soon as possible to reduce the area and duration of the exposure to rainfall scour and also ensure the existing drainage patterns are interrupted for the shortest duration possible.
- CCS will generally comprise a permeable crushed stone or aggregate surface laid on a geotextile membrane which will allow direct infiltration of rainfall run-off at the same time as trapping and filtering any sediment and contaminants. Where hard surfacing is considered for utilisation in potentially high risk areas of the construction compound, positive surface water collection systems for the management of rainfall-run-off to prevent the pollution of ground water will be considered where appropriate.
- Early consideration will be given to the types of activities undertaken and materials stored in the laydown area. Any high pollution risk areas will be considered at the outset of the strategy and activities and storage of material in these areas would be restricted.
- All excavated soils will be stored at least 10m from the top of the bank of any watercourse and any potentially contaminated soil will be stored on an impermeable surface and covered to reduce leachate generation and potential migration to surface waters. Procedures for dealing with unexpected contaminated materials are included in Section 11 of the CoCP.
- Traffic movement would be restricted to minimise the potential for surface disturbance.
- Where systems require a discharge, these will be subject to consultation and in accordance with Environment Agency requirements. Waste silts and sludges will be removed in accordance with Duty of Care requirements
- The minimisation of excavation volumes and disturbance to the surrounding areas, together with the replacement and reseeded, as required, of any soils inadvertently disturbed during excavations in general accordance with their original structure and location.
- Storage of construction materials and excavation arisings within Flood Zone 2 or Flood Zone 3 will be avoided where possible.
- The length of time excavations are kept open will be minimised to reduce the requirement for dewatering; any arisings from localised dewatering will either be disposed of off site at an appropriately licenced facility or will have appropriate treatment before being discharged.
- Each access, where there is the potential for depositing dust on the highway (that could then be washed into surface water drains and local watercourses), will have a wheel wash facility installed to prevent construction vehicles and plant carrying mud off site onto public roads. This will be a closed loop facility with self-contained water and silt collection systems. Collected silts/sludge will be regularly removed and the water topped up to retain function of the wheel wash. Its use, operation and maintenance will be monitored on site. Regular road-sweeping on the highway will also be undertaken to prevent sediment being washed into nearby watercourses.

106. Ideally the programming of the works will be timed to limit exposure of the subsoil to the most inclement weather, reducing excessive erosion and the generation of suspended solids in the runoff. It will not however be possible to prevent this impact at all times, so appropriate mitigation measures will be in place, as and where appropriate to manage any resultant runoff generated. After the completion of onshore cable construction and the commissioning phase all temporary flumes and bridges installed will be removed and the watercourse suitably reinstated.
107. When removing and working with topsoil or otherwise undertaking major earthworks some disturbance of sediment and generation of sediment laden runoff is inevitable even given the implementation of the control measures outlined above. The exposed subsoil is liable to both surface erosion and erosion via existing land drains, which can lead to silt contaminated water drainage/run-off entering local watercourses.
108. To manage this any potential for the generation of silt laden runoff will be identified and measures put in place to capture and hold these flows upstream of local discharge points. Suitable pollution control measures will then be put in place to ensure all captured flows are treated to a level that can be considered as uncontaminated prior to discharge. If necessary this will involve the use of a Siltbuster® or similar water treatment units. Areas for holding and controlling storm flows will be designed to both assist in the removal of sediment through settlement and in holding and attenuating any excess runoff from compacted ground or areas where vegetation has been removed. Discharge rates from these construction areas will therefore be limited to Greenfield Runoff Rates.
109. To establish the best method of treatment for any particular location, local characteristics including the topography, geology and drainage pathways through the area will be reviewed. Based on this one or a combination of the following options will be employed:
- Pumped to run across flat grassland (grass swathe), discharge to soakaway or an infiltration basin.
 - Pumped or drained to an adequately sized settlement lagoon or tank.
 - Pass through a silt trap or filtration system.
 - Installation of specialist treatment equipment, such as an interceptor or solids separator (e.g. Siltbuster® unit).
 - Pumped into a tanker for disposal at a licenced facility or by holding and transferring water to disposal via any of the treatment methods identified above.

9.2. Concrete and Cementitious Products

110. Cement, concrete and grouts are highly alkaline and corrosive and can cause serious pollution to the ground and watercourses. Concrete and cementitious products will, therefore, be prevented from entering the water at source. The cable works will require the delivery of ready mixed concrete to various locations for use, for example for use in the jointing bays. Cement polluted water will be generated from concrete washout, concreting operations and any cement grouting. The extent and location of the treatment facilities to be provided will depend on the frequency and volume of washout and the availability on site.
111. Concrete and cement mixing and washing areas will be situated at least 10m away from the nearest watercourse. These will incorporate settlement and recirculation systems to allow water to be re-used. All washing out of equipment will be undertaken in a contained area.
112. The treatment provided for any excess water contaminated with cement will remove suspended solids in the effluent, using lined settlement basins, enclosed skips or proprietary treatment equipment (Siltbuster® or similar) and will include pH adjustment to an acceptable range. Where a suitable sewer exists, and subject to an appropriate trade effluent consent from the sewerage undertaker, the treated water would then be discharged to sewer. If no suitable sewer exists, such excess water would be tankered from the site for treatment and disposal at an appropriately licenced facility. Alternatively, it may be possible that an Environmental Permit could be obtained from the Environment Agency for the treated water to be discharged to a watercourse or soakaway. In accordance with Regulatory Position Statement 235, water that contains concrete will not be discharged to a watercourse or soakaway, even after treatment without a permit from the Environment Agency. Any accumulated solid cement wastes would be removed, in accordance with the Contractor's waste Duty of Care and the requirements of the Site Waste Management Plan (included as Appendix 6 of the CoCP), if necessary, to an appropriately licenced facility for disposal.

113. Dry mix concrete will not be laid in saturated conditions to minimise the potential for leaching of alkaline water. If required in saturated areas the excavation will be dewatered for a sufficient time to lay and cure all concrete. Wet mix pouring will be subject to rigorous controls (shuttering, stand offs, bunding etc) to prevent discharge of cementitious material into drainage features and watercourses. Where practicable and design allows, the Principal Contractor may utilise a pre cast solution during construction to mitigate any of the concerns with pouring wet concrete.
114. Cement bound sand (CBS) was installed directly around the underground cable ducts during the EA ONE works. Groundwater may travel along the CBS, with potential ingress into the cable ducts. Water from the ducts/CBS may then discharge into the jointing bays during excavation and this is likely to continue throughout the period of time that the jointing bays remain open. When water comes in contact with CBS, the pH can rise to pH 12 or greater because of the release of alkaline hydroxide (OH-) ions and this water will therefore require treatment before discharge. All surface/groundwaters will be tested for PH level prior to all dewatering activities. This water will be treated (Siltbuster® or similar) on site before disposal or will be removed to an appropriately licenced offsite treatment facility.
115. Discharge of treated concrete wash water and also treated water from jointing bay excavations to surface waters will require an Environmental Permit from the Environment Agency.

9.3. Fuel Oils and Lubricants

116. Fuel oils, lubricants and other chemicals will be prevented from entering any drain or watercourse on site. There will always be the potential for a small amount of loss of fuel oils, and lubricants on a construction site from the use of plant and equipment and the storage and refuelling locations. However, with the proper management procedures in place, this risk will be minimised and effectively controlled, using best practice.
117. Each task undertaken on site will be subject to the approval of a detailed method statement and risk assessment, which will help to minimise any unacceptable risk of the loss of this type of material. An integral part of the risk assessment also requires the contractor to describe how they will prevent spillage or loss (e.g. refuelling procedures, storage and handling arrangements, and maintenance of plant) and how they will deal with an unexpected loss or spillage and confirm they have the knowledge and capability to do so. The prevention of loss or containment and removal of spilt or lost oil products will include one or more of the following;
- Oil, water and silt separators will be used where applicable on construction compound surface water management systems just prior to any outfall from site, to remove oils and fuels accidentally spilled/accumulated during construction. These will be maintained in accordance with the manufacturer's instructions to ensure they remain efficient. This level of capture and treatment will be applicable to main refuelling areas in the CCS where bulk storage will be contained e.g. site generators.
 - All fuels, oils, lubricants and other chemicals will be stored in an impermeable bund with at least 110% of the stored capacity. Any facilities installed shall be in accordance with the Control of Pollution (Oil Storage) (England) Regulations 2001. Facilities storing hazardous materials will be locked and made secure when not in use. Damaged containers will be removed from site. A register of fuel volumes stored on each site will be maintained.
 - All refuelling will take place over a dedicated impermeable area i.e.. drip tray or plant nappy, using a bunded bowser in accordance with refuelling procedure.
 - Fuel storage and refuelling will be a minimum of 30m from watercourses at a designated location agreed by EnvCOW.
 - Use of oil-absorbent materials to absorb and remove small quantities of oil and provide ready access to the same oil-absorbent materials for use in emergency spillage clean-up.
 - Use of drip trays or plant "nappy" pads under plant during refuelling, including of hand-held equipment and small plant (e.g. pumps and generators). Non-bunded static plant (i.e. portable generators) will use drip trays or plant "nappy" pads.
 - Safe storage and handling procedures.
 - Regular inspection and maintenance procedure for plant and equipment and storage facilities. All oil/fuel bunds should be monitored on a daily basis to ensure that any rainwater that has collected is removed.
 - Any contaminated rainwater in the bunds may need to be removed as hazardous waste.
 - Removal and suitable licenced disposal of ground accidentally contaminated.
 - Biodegradable oils will be used where possible.

9.4. Contaminated Land

118. Excavations through ground in locations that have been subject to previous contamination can result in pollutants, including total and soluble heavy metals, being transferred to the surface water and groundwater. This water can subsequently collect in open excavations during construction and, in some situations, this can present a problem for the discharge of this type of water offsite. Section 11 of the CoCP (EA3-LDC-CNS-REP-IBR-000084) summarises the approach to the encountering of unknown contaminated land.
119. No works will be undertaken within the area of Work No. 41 where there is known contamination. Discharge document Contaminated Land and Ground Water Report (EA3-GEN-CNS-PLN-IBR-000016) provides further information on the extent of the contamination and the layout of the EA THREE infrastructure in relation to this..

9.5. Sewage and Organic Waste

120. Whilst it is preferable for sewage generated by site welfare units to be disposed of to a foul sewer, for the key locations where temporary welfare facilities are required, there are currently no foul sewers available. Sewage and other foul water from welfare and accommodation units installed across the onshore cable route, including the main offices and accommodation at the Primary CCS, will therefore be discharged to sealed tanks. From these tanks it will be routinely collected by tanker, for disposal at a licenced facility by a suitably licensed and registered waste carrier in accordance with Duty of Care requirements, with details and records maintained in accordance with the Site Waste Management Plan (Appendix 6 of the CoCP (EA3-LDC-CNS-REP-IBR-000084)).

10. DISPOSAL OPTIONS AND TEMPORARY OUTFALLS

121. An Environmental Permit is usually required to discharge liquid or waste water (poisonous, noxious or polluting matter, waste matter, or trade or sewage effluent) into surface water, e.g. rivers, streams, estuaries. However, for the temporary discharge of uncontaminated water comprised of runoff from construction activities and excavations to surface water (e.g. pumping clean water out of excavations) a permit is not required, provided the discharge is made in full compliance with the Environment Agency's Regulatory Position Statement (RPS). Under the following circumstances, the Environment Agency considers such a discharge to be low risk and have therefore issued a RPS to provide the appropriate level of control.
122. The RPS guidance 'Temporary dewatering from excavations to surface water, April 2021' covers the discharge of uncontaminated water from excavations and is applicable; provided the discharge complies with all of the following conditions, the discharge must:
- Be temporary and last less than 3 consecutive months (applicable to any one location).
 - Be made to a surface water (river, stream or to the sea).
 - Not pollute surface water or adversely affect aquatic life, or designated sites or species.
 - Not result in the spread of non-native invasive species, parasites or disease.
 - Not cause flooding from surface water.
 - Not cause erosion of the banks or bed of surface water.
 - Not contain any chemical dosing agents or treated or untreated concrete / cementitious washout water.
 - Have a method statement that outlines the task and minimises the risk of pollution.
123. There are restrictions to this exemption that will be adhered to when deciding locations that are suitable for discharge from the onshore construction works.
124. No discharge must be located within, or less than 500m upstream of:
- Sites of Special Scientific Interest (SSSI);
 - Special Areas of Conservation (SAC);
 - Special Protection Areas (SPA);
 - Sites in process to become SACs or SPAs ('candidate SACs', 'possible SACs', 'potential SPAs' and 'sites of community importance (SCIs);
 - Internationally designated Ramsar sites;
 - Other nature conservation sites, (e.g. ancient woodlands, Local and National Nature Reserves); or
 - Local wildlife sites (i.e. sites with high local value for wildlife).

125. The RPS guidance 'Treating and using water that contains concrete and silt at construction sites: RPS 235' also includes criteria with respect to storing and treating water containing concrete or silt, including the following prohibitions:

- Storage of more than 30m³ of water containing concrete or silt at any time in any single location on the construction site
- Carrying out of activities associated with treating or using water that contains concrete or silt within 10m of any watercourse
- Carrying out of activities associated with treating or using water that contains concrete or silt within less than 50m of:
 - SSSIs
 - SACs
 - SPAs
 - candidate SACs, possible SACs, potential SPAs and sites of community importance
 - Ramsar sites
 - other nature conservation sites, such as ancient woodlands and local and national nature reserves
 - local wildlife sites
- Use of any water that contains concrete to suppress dust
- Use of more water than necessary to suppress dust
- Use of treated waste water to suppress dust within a groundwater source protection zone, or within 50m of a private drinking water supply
- Use of water from excavations at sites contaminated by oil, metals, hydrocarbons, solvents, pesticides or other polluting substances.

126. A review of the Natural England Magic Map webpage indicates that the only designated ecological sites within a 500m radius of the redline boundary are the Deben Estuary RAMSAR, Special Protection Area (SPA) and Site of Special Scientific Interest (SSSI) which the cable route crosses in two places and Newbourne Springs SSSI located to the west southwest of Jointing Bay JB 20/21. The Deben estuary is designated for "*its population of overwintering waders and its extensive and diverse saltmarsh communities*". Whilst it is possible that there will be an element of groundwater baseflow into the estuary, it is dominated by tidal flows which maintain the saltmarshes. It is therefore considered that the site is not considered a groundwater dependent ecological site.

127. The Newbourne Springs SSSI is located circa 250m to the west southwest of Jointing Bay JB 20/21. The SSSI comprises mixed habitats including lowland acid grassland; broadleaved, mixed and Yew woodland; and fen, marsh and swamp and is considered to be a potential water dependent ecological site.

128. Environmental briefings will be provided all contractors, as part of the site induction and training process. Any particularly important or sensitive sites will be highlighted in pre-construction briefings and tool box talks that will be delivered to those involved in the works.

11. ABSTRACTIONS AND PRIVATE WATER SUPPLIES

129. Figure 2 shows the locations of all current abstraction licences, domestic abstractions and protected rights within 250m of the onshore cable works.

11.1. Abstractions

130. Existing abstraction points may be used for dust suppression, where relevant agreements are already in place. If no such suitable agreement is in place, a temporary permit variation to the Schedule of Conditions may be sought to include use for dust suppression. Where additional consumptive abstraction is not permitted, any such change would be subject to offsetting against other existing permitted abstraction such that there is no net increase in consumptive water use. In addition, it is currently proposed that four new surface water abstractions will be required for dust suppression as follows:

- River Gipping (612499"E 248964"N) – for dust suppression for works between the Converter Station and Jointing Bay JB4/5;
- River Fynn (618976"E 249162"N) -for dust suppression for works between Jointing Bay JB5/6 and the river.
- River Lark (623431"E 248163"N) - for dust suppression for works between Jointing Bay JB10/11 and access point AP-17.
- Mill River (628312 "E 241342 "N) - for dust suppression between Clappits CCS and Jointing Bay JB24/25 at the western side of the River Deben.

131. The licensing of these proposed abstractions is currently being discussed with the Environment Agency.

132. In some situations, dewatering of excavations may require permitting however as noted above, even if no permit is required such abstraction would not have any intervening use prior to discharge. Where these abstractions are temporary (less than 6 months) a permit would be sought if the maximum daily abstraction volume is likely to exceed 100m³ (or 50m³ in locations less than 500m from a designated nature conservation site, or 250m or less from a spring, well or borehole used to supply water). Where these abstractions are not temporary (greater than 6 months) a permit would be sought if the maximum daily abstraction volume is likely to exceed 20m³. The Principal Contractor will be responsible for obtaining any permits from the Environment Agency, and for monitoring and recording associated abstraction rates or other license requirements to demonstrate compliance.

133. Where required however, surface water run-off will be retained for use. This will only occur where runoff from the land is stored isolated from inland waters (i.e. streams, ditches, lakes etc) and groundwater and which can therefore be classified as harvested rainwater under the definition within the Environment Agency's 'Rainwater harvesting: Regulatory Position Statement'. Such usage would not require an abstraction licence.

134. All existing abstractions will continue to be identified prior to construction, and the protection of any potentially affected water supplies will be maintained during construction works. Standard mitigation, where required, will include the development and application of risk management measures, pre and post-construction monitoring surveys of any particularly sensitive water supply (in liaison with the Local Authorities), and the preparation of alternative contingency supply arrangements.

11.2. Protection of Private Water Supplies

135. In the preparation of the Environmental Statement, a number of private water supplies were identified, close to the onshore cable works and further details on their precise location and use were collected from either the local authorities, or directly from the landowners. The excavation works required during the onshore cable installation works are relatively shallow and temporary and will be followed by relatively rapid reinstatement, to original ground levels. The subsequent assessment of impact on private supplies and abstractions in the area of the onshore cable route, conducted as a part of the original Environmental Statement (Volume 1 Chap 21: Water Resources and Flood Risk RHDV, 2015), concluded that any likely residual impact resulting from the works to any of the identified private water supplies or abstractors would be not significant.

136. A Hydrogeological Risk Assessment has been prepared and is included as Appendix 1. The assessment indicates that due to the relatively shallow depths and areas of excavation required, and the short duration of works the potential impact on the private water supplies and/or springs is considered to be low and even if localised dewatering is required the low volumes are unlikely to impact the receptors, nonetheless additional monitoring of these has been recommended in the event the dewatering is required to ensure that the works do not result an adverse impact on these features. The works will be undertaken in accordance with relevant mitigation which will have been agreed with the Environment Agency, SCC, ESC and MSDC and with appropriate best practice, which will ensure that there is no adverse impact on groundwater quality and in turn no impact on surface water quality.

137. Following consultation with MSDC and ESC it has been agreed that baseline water quality sampling of key watercourses and private water supplies will be undertaken over a period of six months covering both dry summer and wet winter condition prior to works commencing. This monitoring will be undertaken by the Principal Contractor and subject to landowner permission.

138. During construction further monitoring of key watercourses and private water supplies will be undertaken on at least a monthly basis to ensure that no negative impacts on water quality are occurring. Again, this monitoring will be subject to securing landowner permission and, subject to that permission being granted, the results of the monitoring will then be supplied to MSDC and ESC.

139. Landowners or users of private water supplies or abstractions will be provided with a suitable point of contact (i.e. the EATL Community Liaison Officer) through the establishment of a Communications Protocol, should they experience any problems with their Private Water Supply. All complaints will be investigated thoroughly, following the Project Community and Public Relations Procedure. Regular progress updates will be provided by the Community Liaison Officer to inform residents when works are likely to be undertaken in their Private Water Supply catchment area.

140. An Emergency Plan shall be put in place by the Principal Contractor to ensure prompt response to any complaint of perceived impact on private water supplies, including monitoring of the water supply in question and the immediate cessation of associated water-sensitive construction activities. In the unlikely event that construction works lead to the temporary deterioration of a Private Water Supply, an alternative temporary supply of water will be provided (e.g. water tankered to property and/or provision of temporary drinking water storage tanks). Damaged filters will be replaced in the unlikely event that a Private Water Supply becomes contaminated with sediments.

141. Mitigation and environmental controls will be put in place, as discussed in previous sections, to apply construction best practices and to follow the Environment Agency water pollution control guidelines to protect all aspects of water quality.
142. A Pollution Prevention and Emergency Incident Response Plan (Appendix 7 of the CoCP) will be in place to ensure there will be a prompt and effective response to any complaint that may have a perceived impact on any identified private water supplies, including the immediate cessation of associated water-sensitive construction activities.
143. During the construction phase, measures will be adopted by the Principal Contractor to prevent suspended silts from being carried into existing watercourses. These measures will be based on construction best practice and guidance provided by the Environment Agency and the Construction Industry Research and Information Association (CIRIA) (as set out in Section 9.1).

12. MONITORING AND REPORTING

12.1. Monitoring

144. The implementation and application of the appropriate mitigation measures for the protection of surface or ground water quality, described above, will be monitored by the EnvCoW, throughout the construction phase. If any non-conformity with any of the mitigation measures is identified, it will be recorded during inspection or a site audit and appropriate remedial actions will be implemented. A record of inspections of mitigation measures and any required maintenance will be maintained. Monitoring to include, but not be limited to, noting evidence of silt ingress, bank condition, and pH monitoring.
145. Site location and water sensitivity will be taken into account when determining the appropriate level and frequency of any sampling. Regular site inspections and in field water quality monitoring and assessment will however be undertaken throughout the construction period including any monitoring required by any discharge permit conditions. The contractor carrying out the construction activities will be responsible for the management and control of all surface water and any other water arising from the activity. Visual checks on water quality will be the most frequent to determine any localised impacts, or to highlight any potential for water quality risks. Inspection findings and site check analysis will be recorded and reported back through construction site management.
146. As set out in Section 6.4.1 of the Hydrogeological Risk Assessment (Appendix 1), it is recommended that if it is deemed necessary to dewater jointing bays JB 3/4 , JB 10/11, JB 17/18 or JB 21/22, that monitoring of the relevant nearby water supply or spring is undertaken throughout to ensure that there is no adverse impact on supply, if landowner permission is forthcoming. This would include monitoring of water levels of private water supplies and either visual monitoring or flow monitoring of springs (if feasible).
147. Given the short duration of dewatering and, therefore, monitoring, construction of structures for monitoring spring flow is considered unnecessary, however an initial walkover of spring locations should be undertaken (if landowner permission is forthcoming) and if possible measurements of flow undertaken, either through volumetric approach (i.e. measuring the rate of flow into a container of known volume) or through measurement of the stream flow (i.e. measuring the cross-sectional area of stream down-stream of spring and velocity of the flow).
148. Work should be undertaken by a qualified hydrologist and the most appropriate method for measuring flow undertaken based on the nature of the spring. Where flows are not sufficient to measure or it is not possible to measure in a quantitative manner, a qualitative visual assessment would be undertaken.
149. In the unlikely event that a notable drop in water levels or flows is recorded, the dewatering would be ceased until appropriate assessment of impact or suitable mitigation can be put into place.
150. Baseline monitoring of these water supplies and springs should also be undertaken, with landowner permission, prior to commencement of works to provide a baseline groundwater level or flow from which to observe any significant changes during works. This should consist of at least one round of monitoring, although additional rounds to identify any natural variations would be beneficial if feasible.

12.2. Reporting

151. A baseline water quality report was prepared for the ES, using the data collected in the baseline water quality monitoring programme. This provides details of any contamination concentrations recorded and will be used to describe the “background pollution levels” for the various locations. The results were compared to the most relevant Environmental Quality Standards appropriate and to assess the status according to the Water Framework Directive.
152. Any apparent environmental deterioration observed will be highlighted through ongoing checks and monitoring of water quality. In the event of a pollution incident or suspected deterioration, this would be reported to EATL’s construction team within 30 minutes. The incident will be immediately reported to the Environment Agency’s 24/7 incident hotline and also MSDC/ESC, where appropriate. Relevant monitoring points will be sampled to determine any impacts, in particular any relative to baseline data. A report detailing the findings will be prepared for any incident and recommendations provided for further monitoring and / or requisite mitigation measures.
153. All information recovered during the monitoring process will be collated and a routine assessment made regarding any impact to be reported on the surface and groundwater of the construction activities.

12.3. Personnel

154. All personnel taking samples or analysing and reporting water quality in the field will be suitably qualified. All laboratory analysis will be carried out using a suitably accredited laboratory, including written analysis.

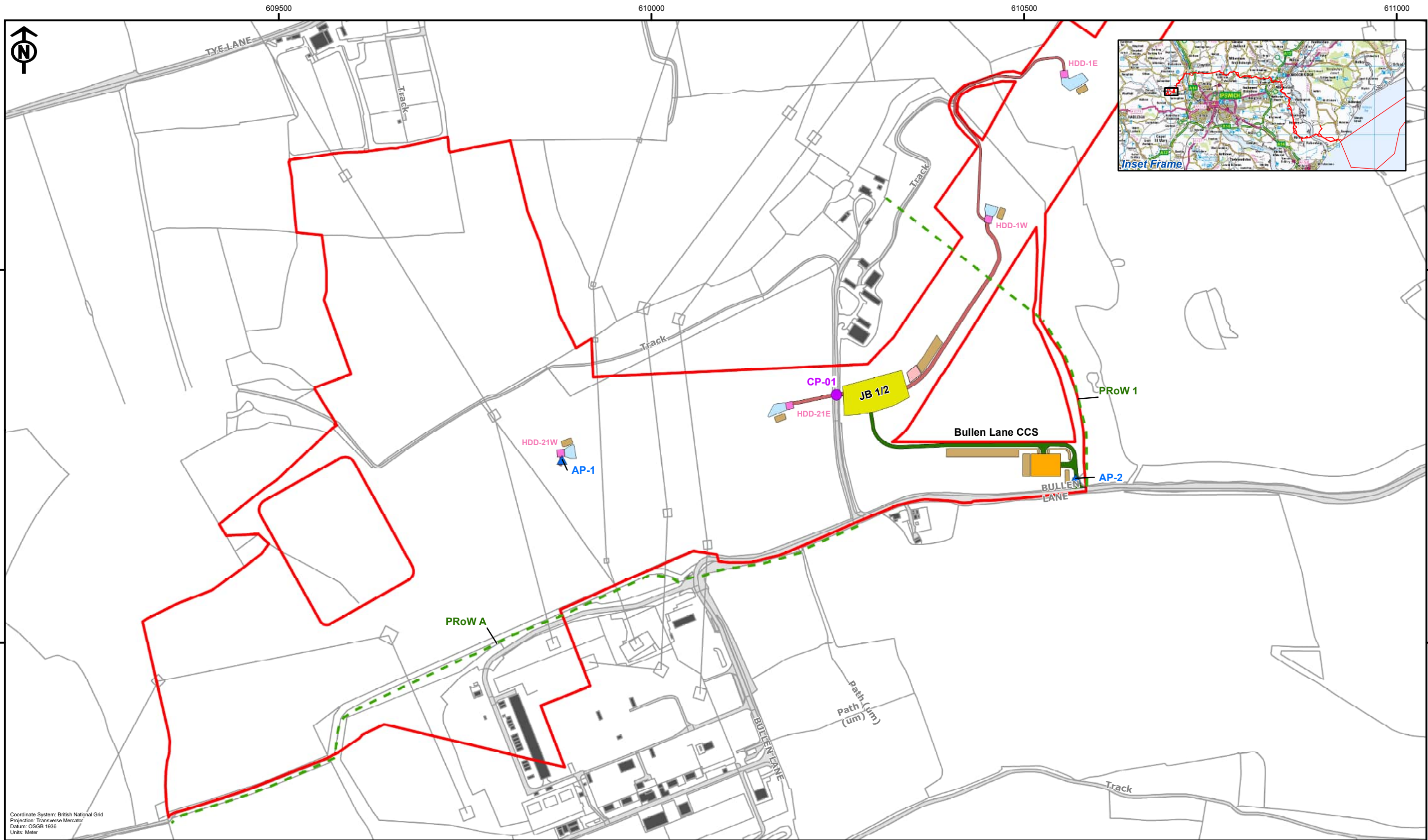
13. REFERENCES

- BGS Geology Viewer, accessed at: <https://mapapps.bgs.ac.uk/geologyofbritain/home.html> [accessed 01/07/2023]
- CIRIA, 2001, *C532 Control of Water Pollution from Construction Sites*, London: CIRIA
- CIRIA, 2002, *SP156 - Control of water pollution from construction sites - guide to good practice*
- CIRIA, 2006, *C648 Control of Water Pollution from Linear Construction Projects – Technical Guidance*
- CIRIA, 2006, *C649 Control of Water Pollution from Linear Construction Projects – Site Guide*
- CIRIA, 2015, *C741D Environmental Good Practice on Site (fourth edition)*, London: CIRIA
- CIRIA, 2015, *C753 SuDs Manual*, London: CIRIA
- CIRIA, 2016, *C762 Environmental Good Practice on Site pocket book (4th Edition)*, London: CIRIA
- Council of the European Union, 2000, *The Water Framework Directive 2000/60/EC*. Available at: <https://eur-lex.europa.eu/>
- Council of the European Union, 2006, *The Groundwater Directive 2006/118/EC*. Available at: <https://eur-lex.europa.eu/>
- Council of the European Union, 2007, *The Floods Directive (2007/60/EC)*, Available at: <https://eur-lex.europa.eu/> [accessed 17/12/2020]
- Department for Environment, Food and Rural Affairs (Defra), 2015, *Sustainable Drainage Systems - Non-statutory technical standards for sustainable drainage systems*
- Defra and Environment Agency, *Pollution Prevention for Business*, May 2019 <https://www.gov.uk/guidance/pollution-prevention-for-businesses>
- DEFRA Magic Mapping Application, accessed at: <https://magic.defra.gov.uk/MagicMap.aspx> [accessed 01/07/2023]
- Environment Agency, 2001, *Pollution Prevention Guidelines 1: General Guide to the Prevention of Water Pollution (withdrawn)*, Bristol, Environment Agency.
- Environment Agency, 2006a, *Pollution Prevention Guidelines 3: Use and Design of Oil Separators in Surface Water Systems (withdrawn)*, Available at: <https://www.gov.uk/government/publications/choosing-and-using-oil-separators-ppg3-prevent-pollution>
- Environment Agency, 2006b, *Pollution Prevention Guidelines 4: Treatment and disposal of sewage where no foul sewer is available (withdrawn)*, Available at: <https://www.gov.uk/government/publications/sewage-treatment-and-disposal-where-there-is-no-foul-sewer-ppg4>
- Environment Agency 2007, *Pollution Prevention Guidelines 5: Works in, or liable to affect Watercourses (withdrawn)*, Available at: <https://www.gov.uk/government/publications/works-in-near-or-over-watercourses-ppg5-prevent-pollution>

- Environment Agency, 2020, *Treating and using water that contains concrete and silt at construction sites RPS 235*, Available at: <https://www.gov.uk/government/publications/treating-and-using-water-that-contains-concrete-and-silt-at-construction-sites-rps-235> [accessed 01/07/2023]
- Environment Agency 2018a, updated 2020, *Temporary dewatering from excavations to surface water*, Available at: <https://www.gov.uk/government/publications/temporary-dewatering-from-excavations-to-surface-water> [accessed 01/07/2023]
- Environment Agency, 2018b, *The Environment Agency's approach to groundwater protection (Version 1.2)*, Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/692989/Environment-Agency-approach-to-groundwater-protection.pdf
- Flood Estimation Handbook Service. Accessed at: <https://fehweb.ceh.ac.uk/GB/map> [accessed 01/07/2023]
- Highways England, 2020, *Design Manual for Roads and Bridges, CD 529 Design of outfall and culvert details (formerly HA 107/04), Revision 1*, Available at: <https://www.standardsforhighways.co.uk/prod/attachments/a7bfb30c-d084-4b28-b8d7-39dc4d14f5c0?inline=true>
- Highways England, 2020, *Design Manual for Roads and Bridges, CD 522 Drainage of runoff from natural catchments (formerly HA 106/04), Revision 0*, Available at: <https://www.standardsforhighways.co.uk/prod/attachments/09c28187-371e-4180-8373-939f48607c01?inline=true>
- Mid Suffolk District Council, 2008, *Strategic Flood Risk Assessment*. Available at: <https://www.midsuffolk.gov.uk/assets/Strategic-Planning/Mid-Suffolk-SFRA/MidSuffolkSFRAFinal.pdf>
- Ministry of Housing, Communities and Local Government, *NPPF - National Planning Policy Framework*, 2021, Available at: <https://www.gov.uk/government/publications/national-planning-policy-framework--2>
- Suffolk Coastal and Waveney District Councils, 2018, *Level 1 Strategic Flood Risk Assessment*. Available at <https://www.eastsuffolk.gov.uk/assets/Planning/Waveney-Local-Plan/Strategic-Flood-Risk-Assessment-Level-1/01-Suffolk-Coastal-and-Waveney-District-Councils-Level-1-Strategic-Flood-Risk-Assessment.pdf> [accessed 10/03/22]
- Suffolk County Council, 2023, *Suffolk Flood Risk Management Strategy, Appendix A: Sustainable Drainage Systems (SuDS) a Local Design Guide*, Available at: <https://www.suffolk.gov.uk/asset-library/2023-sf3967-scc-suffolk-flood-risk-appendix-a2.pdf>
- Suffolk County Council, undated, *Suffolk SuDS Palette (SPP) – Guidance*, Available at: <https://www.suffolk.gov.uk/assets/Roads-and-transport/Flooding-and-drainage/Suffolk-Suds-Palette-002.pdf>
- Scott Wilson on behalf of Suffolk Coastal District Council (now ESC), 2008, *Suffolk Coastal and Waveney District, Strategic Flood Risk Assessment, Main Report*, February 2008
- Scott Wilson on behalf of Suffolk Coastal District Council (now ESC), 2009, *Suffolk Coastal and Waveney District Strategic Flood Risk Assessment, Appendix B – Suffolk Coastal District Council Report* January 2009
- Suffolk County Council, 2018, *Template for Construction Surface Water Management Plans*, August 2018 <https://www.suffolk.gov.uk/roads-and-transport/flooding-and-drainage/guidance-on-development-and-flood-risk/construction-surface-water-management-plan/>
- The British Standards Institution, 2017, amended 2019, *BS 752:2017 Design of Drainage and Sewer Systems outside Buildings*, London, BSI.
- The British Standards Institution, 2002, *BS EN 858-1:2002 Separator Systems for Light Liquids (e.g. Oil & Petrol)*, London, BSI.
- The British Standards Institution, 2000, *BS EN 12056-3:2000 Gravity Drainage Systems Inside Buildings*, London, BSI.
- The Environment Act 1995 c.25. Available at: <https://www.legislation.gov.uk/ukpga/1995/25/contents> [accessed 17/12/2020]
- The Environmental Permitting (England and Wales) Regulations 2016 (SI 2016/1154). Available at: <https://www.legislation.gov.uk/uksi/2016/1154/contents/made>
- The Flood and Water Management Act 2010. Available at: <https://www.legislation.gov.uk/ukpga/2010/29/contents>
- The Groundwater (England and Wales) Regulations 2009 (SI 2009/2902). Available at: <https://www.legislation.gov.uk/uksi/2009/2902/contents/made>
- The Land Drainage Act 1991 c.25. Available at: <https://www.legislation.gov.uk/ukpga/1991/59/contents>
- The Land Drainage Act 1994 c. 59. Available at: <https://www.legislation.gov.uk/ukpga/1994/25/contents>
- The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (SI 2017/407). Available at: <https://www.legislation.gov.uk/uksi/2017/407/contents/made>

APPENDIX 1 HYDROGEOLOGICAL RISK ASSESSMENT

FOR DISCHARGE



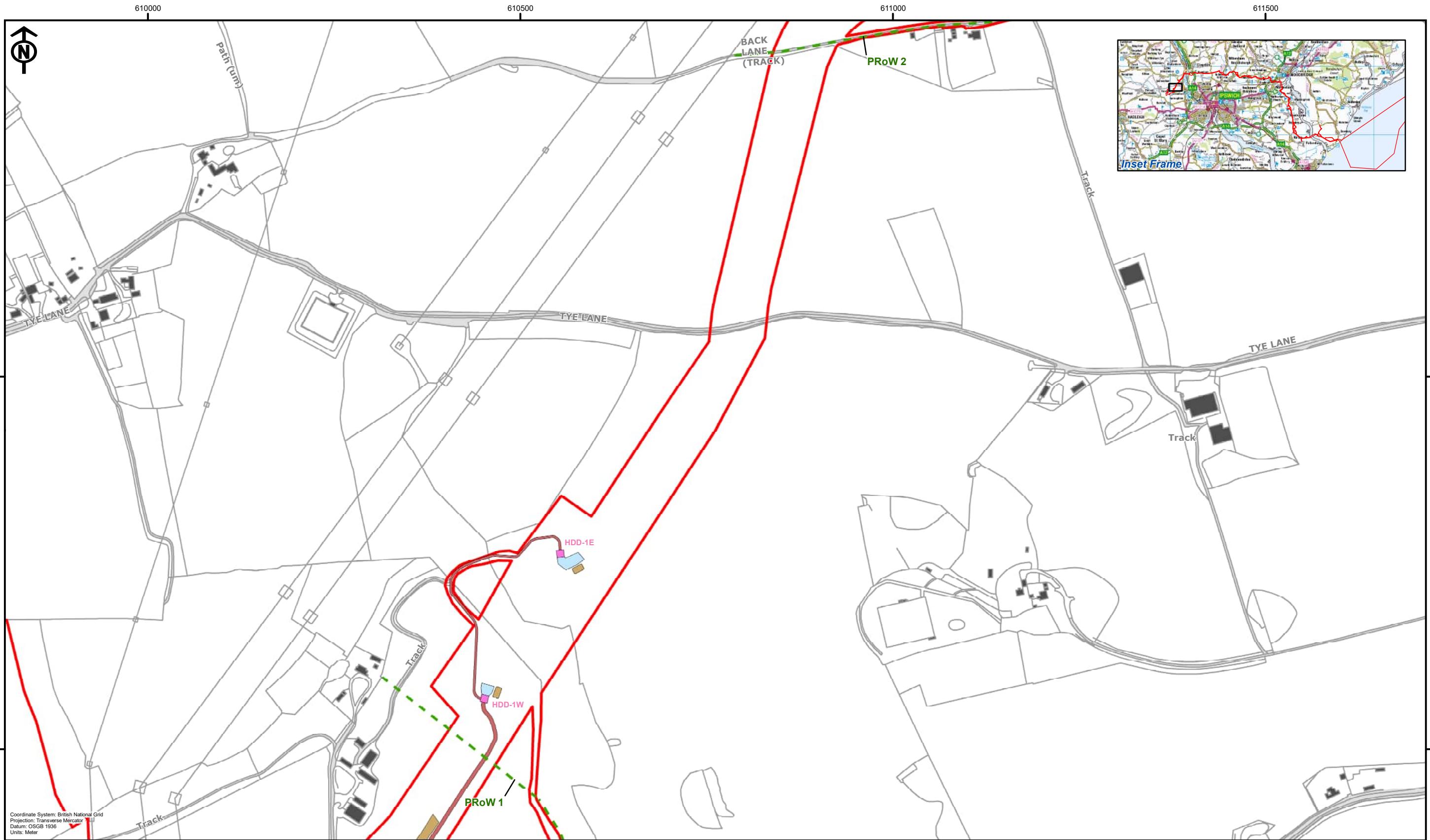
Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

EA THREE Development Order Limits	Jointing Bay Hardstanding	Top Soil Strip	Trackway
Crossing Point (Road Crossings Numbered)	Horizontal Direct Drilling Duct Proving Platform	Indicative Top Soil Bund	Indicative Subsoil Bund
Public Right of Way	Consolidated Construction Site Compound	Stone Haul Road	



Original A3 Plot Scale 1:5,000	0 100 200 Metres								
<table border="1"> <tr> <th>Rev</th> <th>Date</th> <th>By</th> <th>Comment</th> </tr> <tr> <td>A</td> <td>29/11/2023</td> <td>PW</td> <td>First Issue</td> </tr> </table>	Rev	Date	By	Comment	A	29/11/2023	PW	First Issue	<p>EA THREE Cable Route</p> <p>FIGURE 1.1 Site Context Plan</p> <p>© Crown copyright. All rights reserved. (2023) Licence number 0100031673.</p>
Rev	Date	By	Comment						
A	29/11/2023	PW	First Issue						

Drg No	404.5356.00006.0001.0
Rev	0
Date	29/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

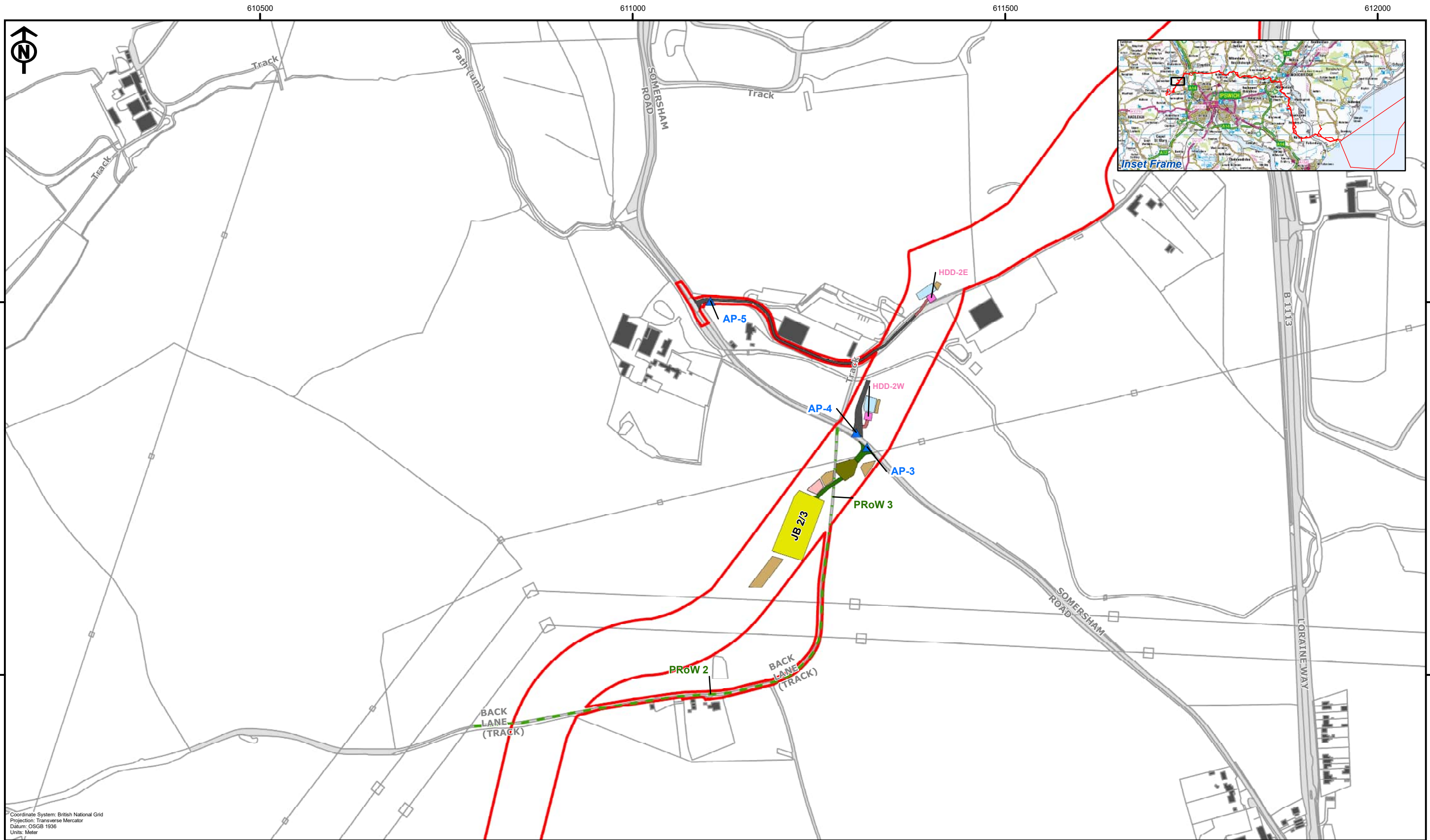
EA THREE Development Order Limits	Top Soil Strip
Public Right of Way	Indicative Top Soil Bund
Horizontal Direct Drilling Duct Proving Platform	Trackway



Original A3 Plot Scale	0	100	200 Metres
1:5,000			
Rev	Date	By	Comment
A	29/11/2023	PW	First Issue

EA THREE Cable Route
 FIGURE 1.2 Site Context Plan

Drg No	404.5356.00006.0001.0
Rev	0
Date	29/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

EA THREE Development Order Limits	Horizontal Direct Drilling Duct Proving Platform	Existing Track
Public Right of Way	Top Soil Strip	HGV Turning
Jointing Bay Hardstanding	Indicative Top Soil Bund	Stone Haul Road
Indicative Subsoil Bund	Trackway	



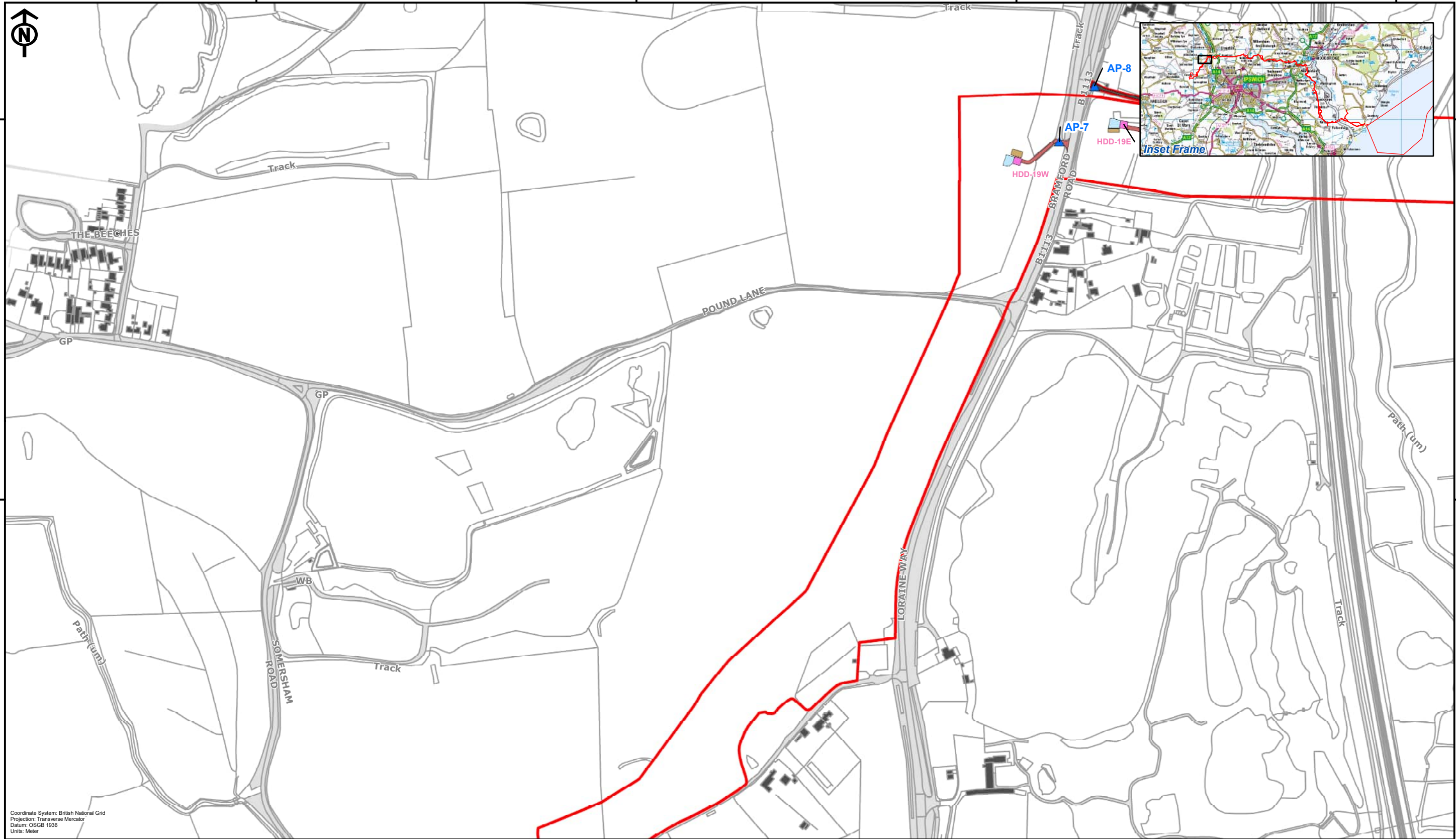
Rev	Date	By	Comment
A	29/11/2023	PW	First Issue

Original A3 Plot Scale 1:5,000

© Crown copyright. All rights reserved. (2023) Licence number 0100031673.

EA THREE Cable Route
 FIGURE 1.3 Site Context Plan

Drg No	404.5356.00006.0001.0
Rev	0
Date	29/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

- EA THREE Development Order Limits
- Jointing Bay Hardstanding
- Horizontal Direct Drilling Duct Proving Platform
- Top Soil Strip
- Indicative Top Soil Bund
- Indicative Subsoil Bund
- Stone Haul Road
- Trackway
- Existing Track



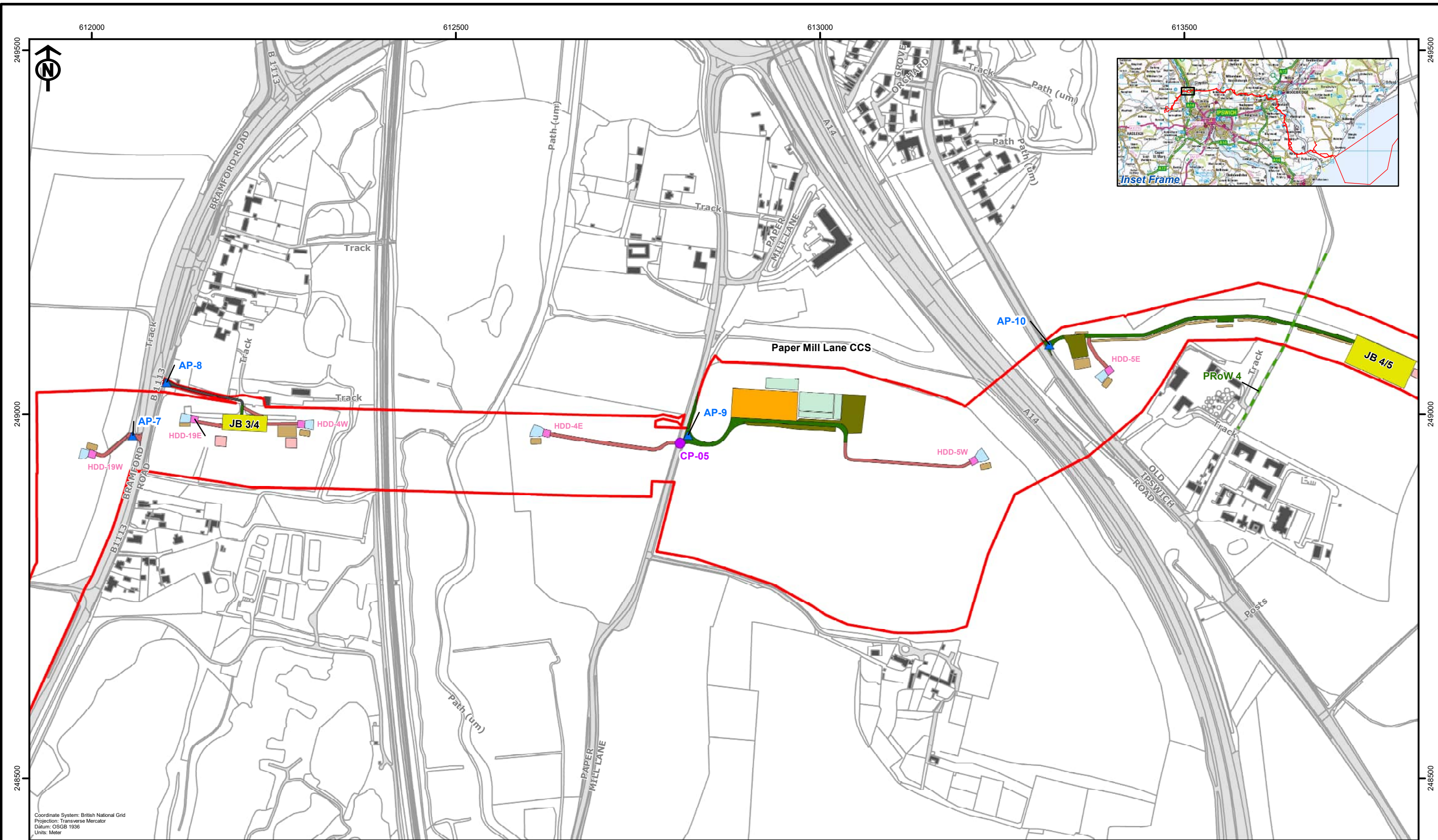
Rev	Date	By	Comment
A	29/11/2023	PW	First Issue

Original A3 Plot Scale 1:5,000

© Crown copyright. All rights reserved. (2023) Licence number 0100031673.

EA THREE Cable Route
 FIGURE 1.4 Site Context Plan

Drg No	404.5356.00006.0001.0
Rev	0
Date	29/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

- EA THREE Development Order Limits
- Jointing Bay Hardstanding
- Soil Storage
- Existing Track
- Crossing Point (Road Crossings Numbered)
- Horizontal Direct Drilling Duct Proving Platform
- Top Soil Strip
- HGV Turning
- Public Right of Way
- Consolidated Construction Site Compound
- Indicative Top Soil Bund
- Stone Haul Road
- Indicative Subsoil Bund
- Trackway



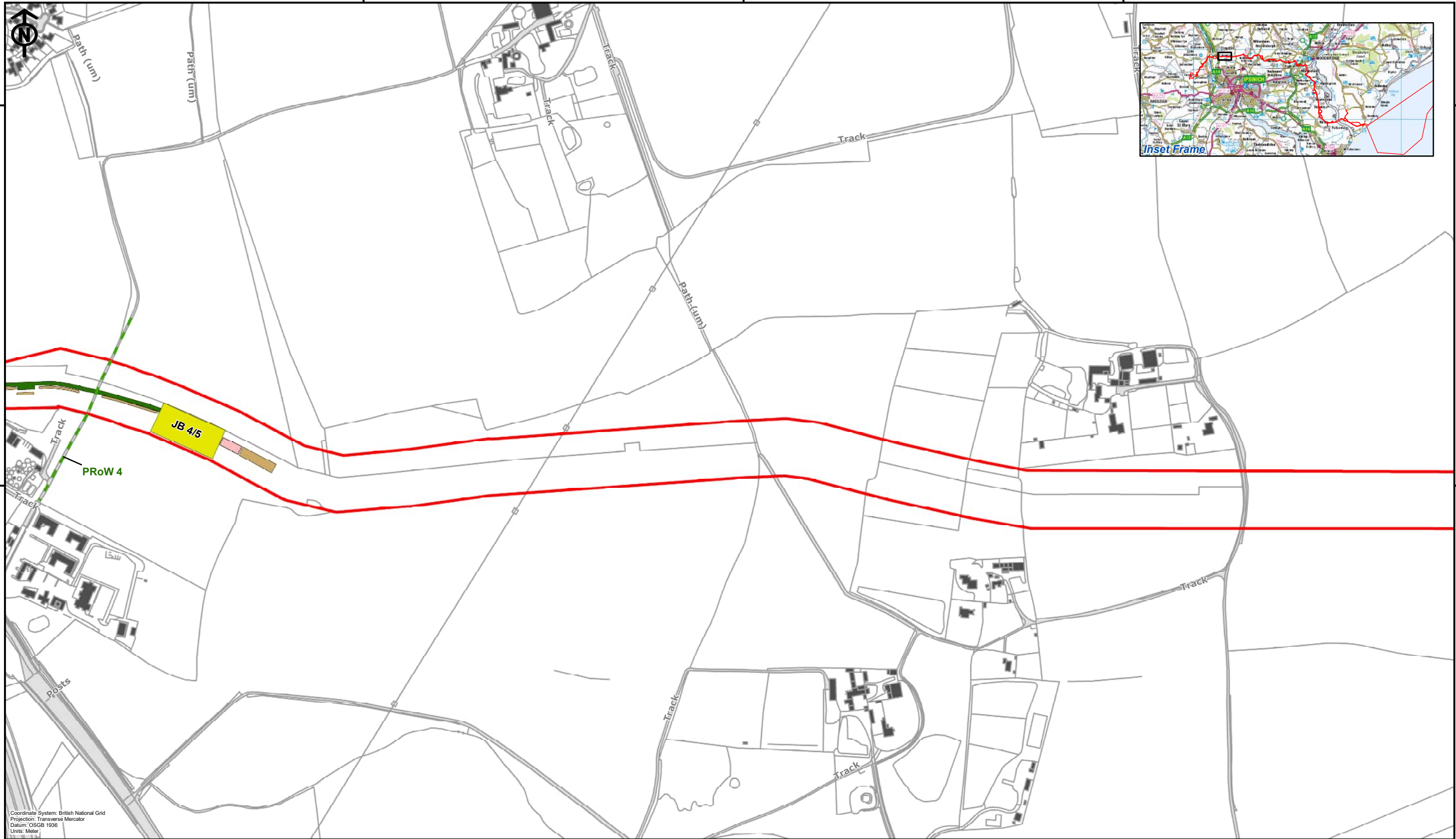
Rev	Date	By	Comment
A	29/11/2023	PW	First Issue

Original A3 Plot Scale 1:5,000
 0 100 200 Metres

© Crown copyright. All rights reserved. (2023) Licence number 0100031673.

EA THREE Cable Route
 FIGURE 1.5 Site Context Plan

Drg No	404.5356.00006.0001.0
Rev	0
Date	29/11/2023
Layout	N/A



EA THREE Development Order Limits	Indicative Subsoil Bund
Public Right of Way	Stone Haul Road
Jointing Bay Hardstanding	
Indicative Top Soil Bund	



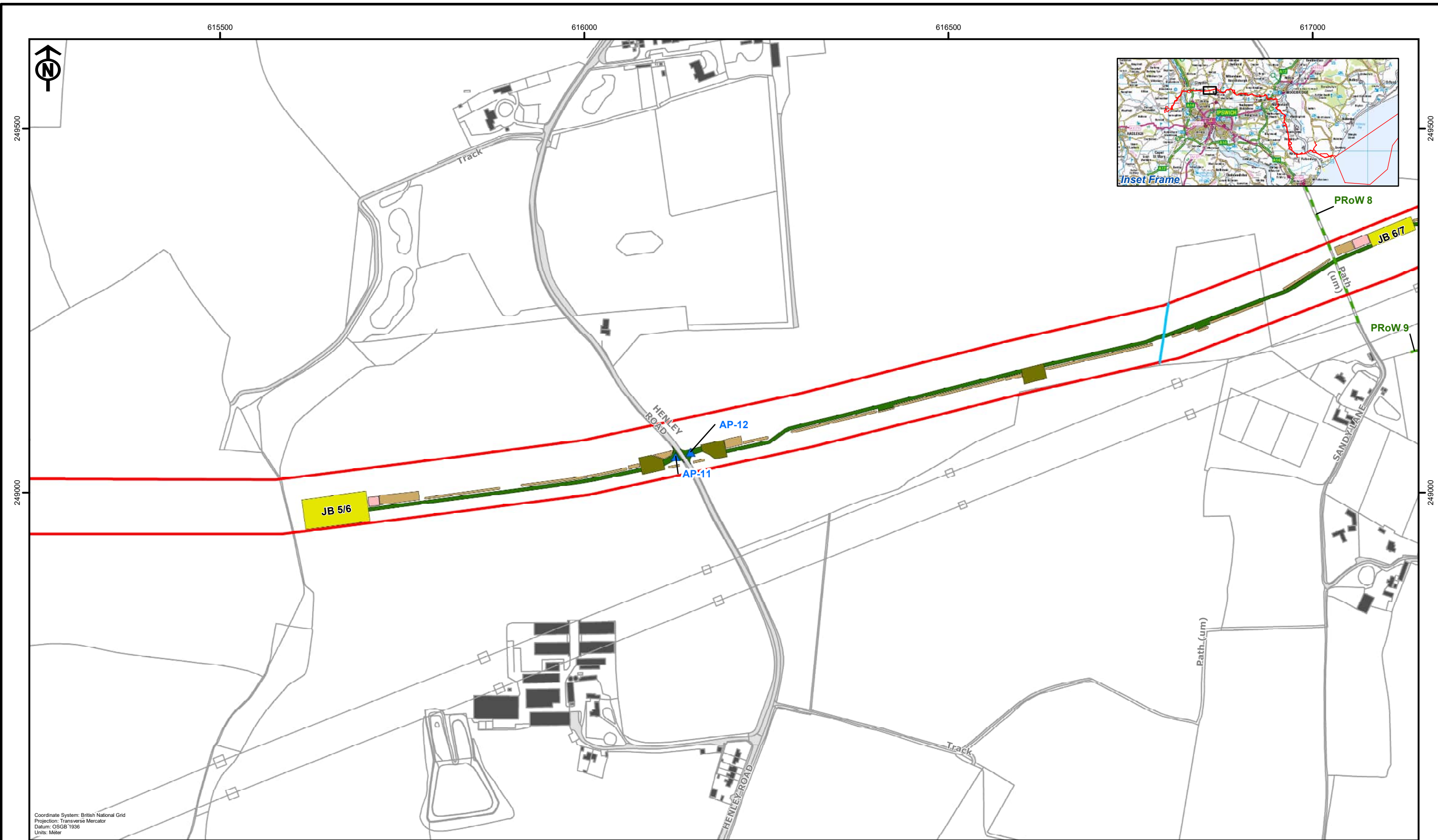
Rev	Date	By	Comment
A	29/11/2023	PW	First Issue

Original A3 Plot Scale 1:5,000

© Crown copyright. All rights reserved. (2023) Licence number 0100031673.

EA THREE Cable Route
 FIGURE 1.6 Site Context Plan

Drg No	404.5356.00006.0001.0
Rev	0
Date	29/11/2023
Layout	N/A



- EA THREE Development Order Limits
- Public Right of Way
- Watercourse within the DOL
- Jointing Bay Hardstanding
- Indicative Top Soil Bund
- Indicative Subsoil Bund
- HGV Turning
- Stone Haul Road



Rev	Date	By	Comment
A	29/11/2023	PW	First Issue

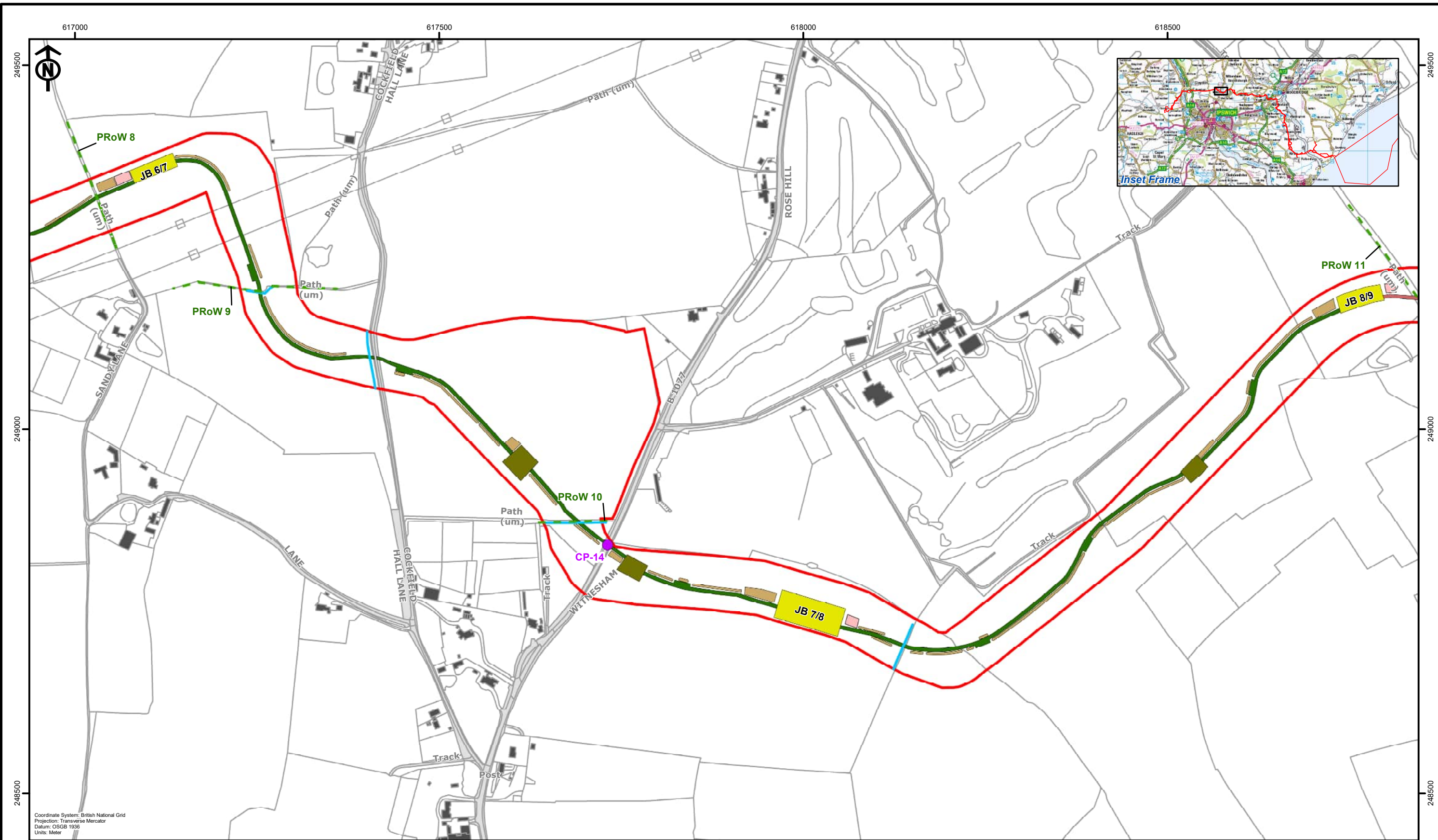
Original A3 Plot Scale 1:5,000

0 100 200 Metres

© Crown copyright. All rights reserved. (2023) Licence number 0100031673.

EA THREE Cable Route
 FIGURE 1.7 Site Context Plan

Drg No	404.5356.00006.0001.0
Rev	0
Date	29/11/2023
Layout	N/A



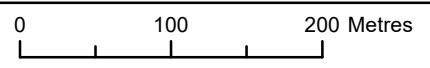
Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

- EA THREE Development Order Limits
- Watercourse within the DOL
- HGV Turning
- Jointing Bay Hardstanding
- Indicative Top Soil Bund
- Stone Haul Road
- Crossing Point (Road Crossings Numbered)
- Indicative Subsoil Bund
- Public Right of Way
- Trackway



Rev	Date	By	Comment
A	29/11/2023	PW	First Issue

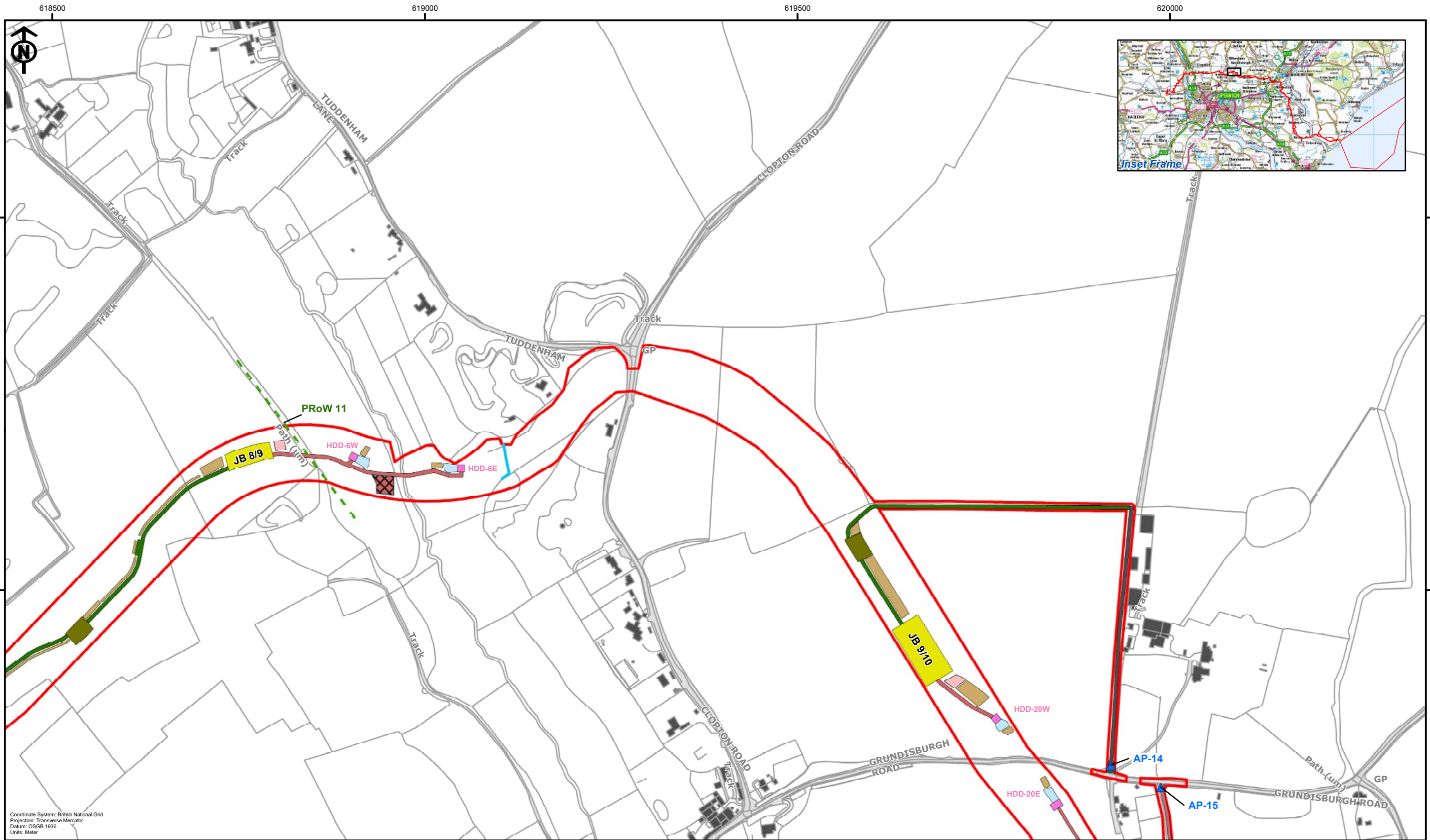
Original A3 Plot Scale
1:5,000



© Crown copyright. All rights reserved. (2023) Licence number 0100031673.

EA THREE Cable Route
 FIGURE 1.8 Site Context Plan

Drg No	404.5356.00006.0001.0
Rev	0
Date	29/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

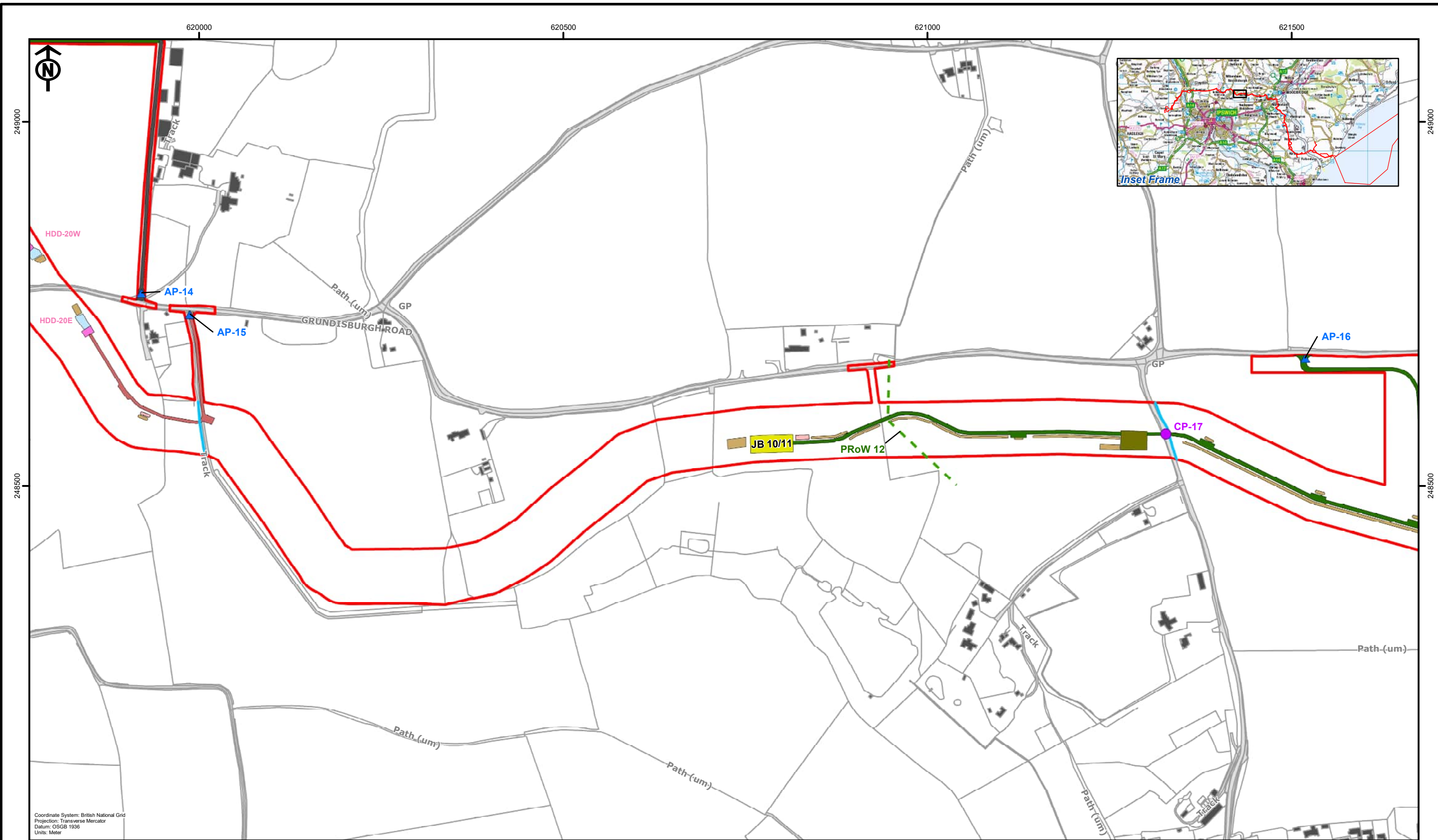
EA THREE Development Order Limits	Horizontal Direct Drilling Duct Proving Platform	Existing Track	Trackway Crane Pad
Public Right of Way	Top Soil Strip	HGV Turning	Stone Haul Road
Watercourse within the DOL	Indicative Top Soil Bund	Trackway	
Jointing Bay Hardstanding	Indicative Subsoil Bund		



Original A3 Plot Scale 1:5,000	0 100 200 Metres		
© Crown copyright. All rights reserved. (2023) Licence number 0100031673.			
Rev	Date	By	Comment
A	29/11/2023	PW	First Issue

EA THREE Cable Route
 FIGURE 1.9 Site Context Plan

Drg No	404.5356.00006.0001.0
Rev	0
Date	29/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

- EA THREE Development Order Limits
- Watercourse within the DOL
- Jointing Bay Hardstanding
- Horizontal Direct Drilling Duct Proving Platform
- Top Soil Strip
- Crossing Point (Road Crossings Numbered)
- Public Right of Way
- Indicative Top Soil Bund
- Indicative Subsoil Bund
- Existing Track
- HGV Turning
- Stone Haul Road
- Trackway



Rev	Date	By	Comment
A	29/11/2023	PW	First Issue

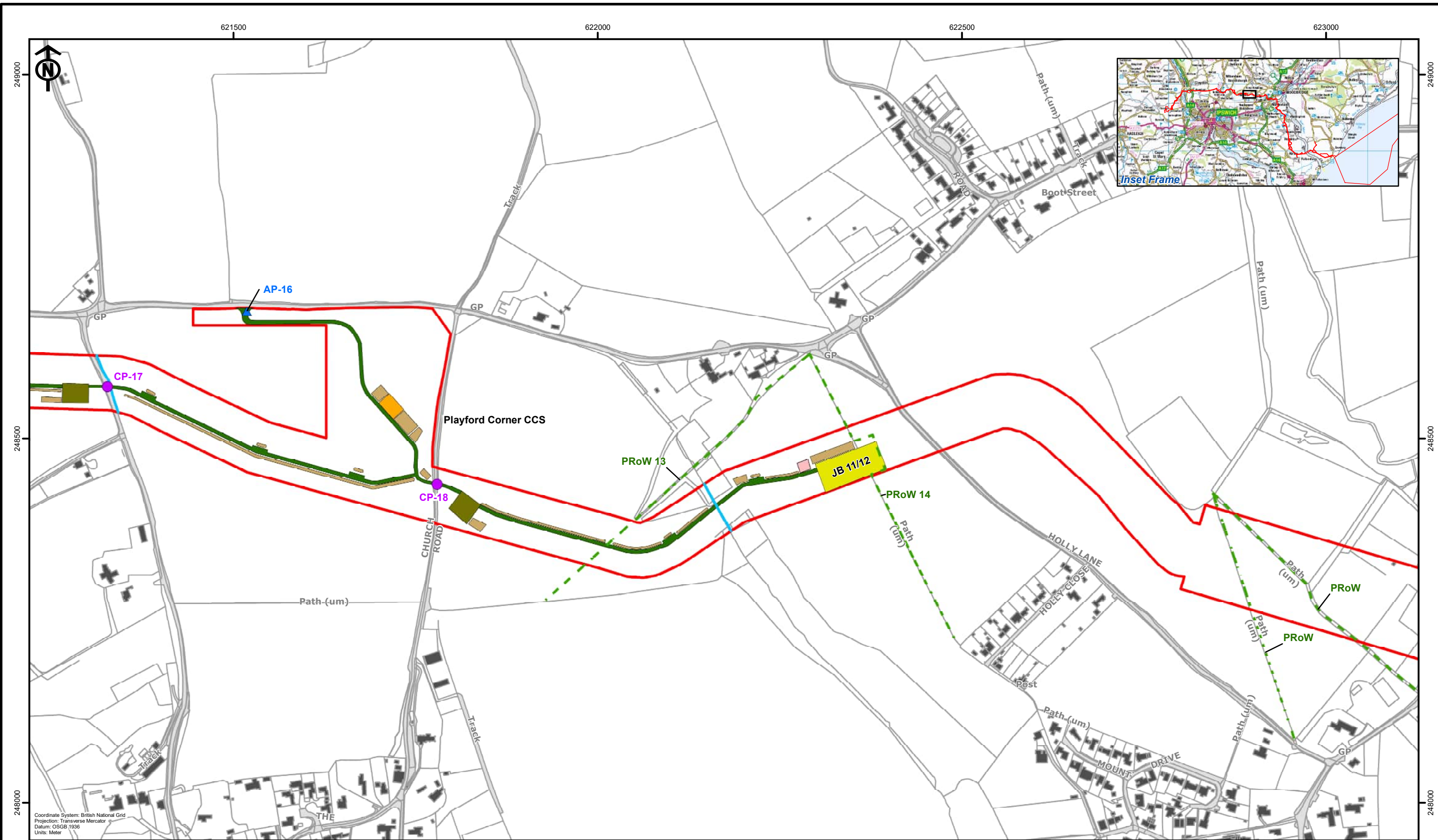
Original A3 Plot Scale 1:5,000

0 100 200 Metres

© Crown copyright. All rights reserved. (2023) Licence number 0100031673.

EA THREE Cable Route
 FIGURE 1.10 Site Context Plan

Drg No	404.5356.00006.0001.0
Rev	0
Date	29/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

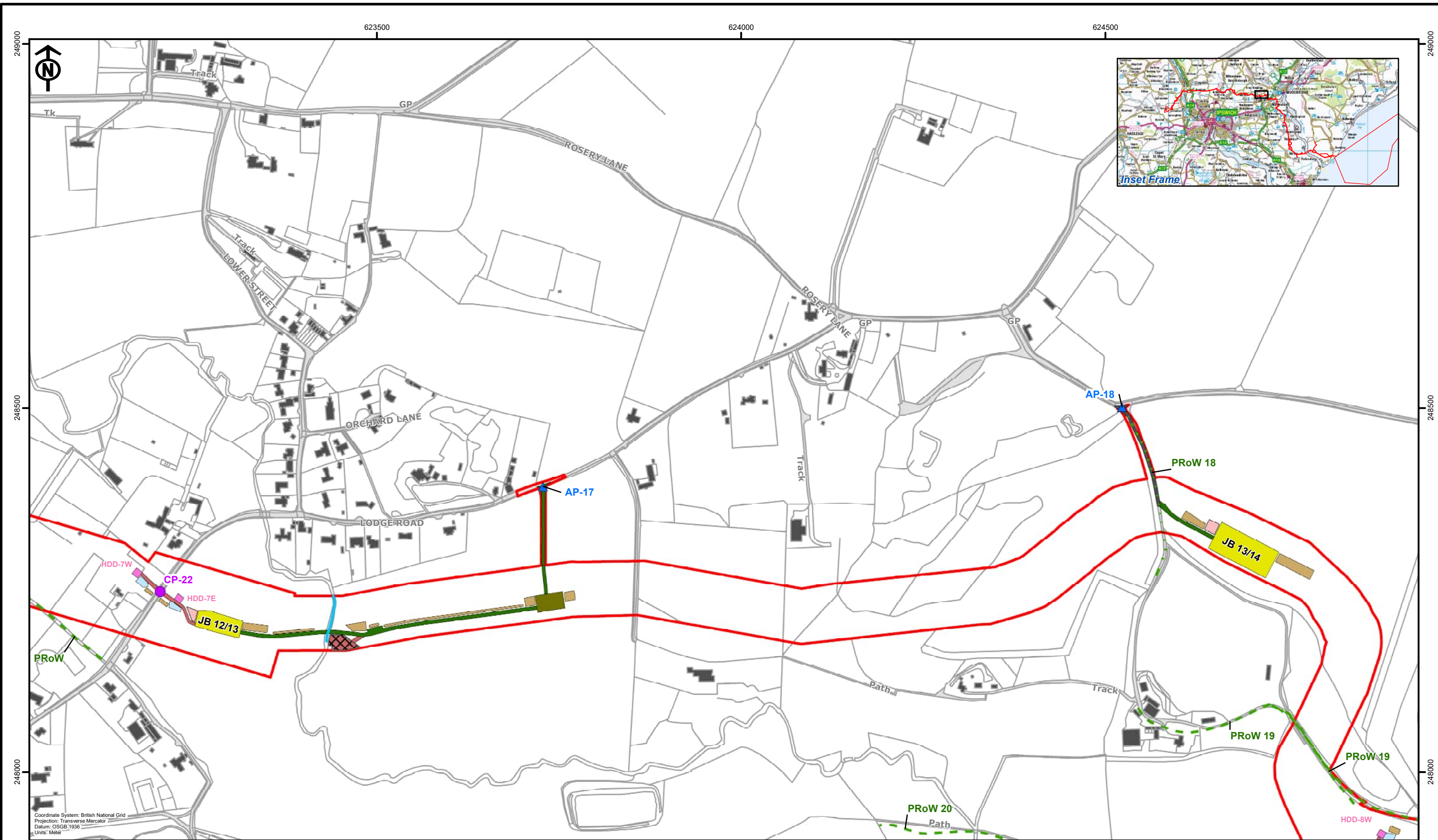
EA THREE Development Order Limits	Watercourse within the DOL	Indicative Subsoil Bund
Crossing Point (Road Crossings Numbered)	Jointing Bay Hardstanding	HGV Turning
Public Right of Way	Consolidated Construction Site Compound	Stone Haul Road
	Indicative Top Soil Bund	



Original A3 Plot Scale	0	100	200 Metres
1:5,000			
Rev	Date	By	Comment
A	29/11/2023	PW	First Issue

EA THREE Cable Route
 FIGURE 1.11 Site Context Plan

Drg No	404.5356.00006.0001.0
Rev	0
Date	29/11/2023
Layout	N/A



EA THREE Development Order Limits	Watercourse within the DOL	Indicative Top Soil Bund	Stone Haul Road
Crossing Point (Road Crossings Numbered)	Jointing Bay Hardstanding	Indicative Subsoil Bund	Trackway
Public Right of Way	Horizontal Direct Drilling Duct Proving Platform	Existing Track	Trackway Crane Pad
Top Soil Strip	Top Soil Strip	HGV Turning	



Rev	Date	By	Comment
A	29/11/2023	PW	First Issue

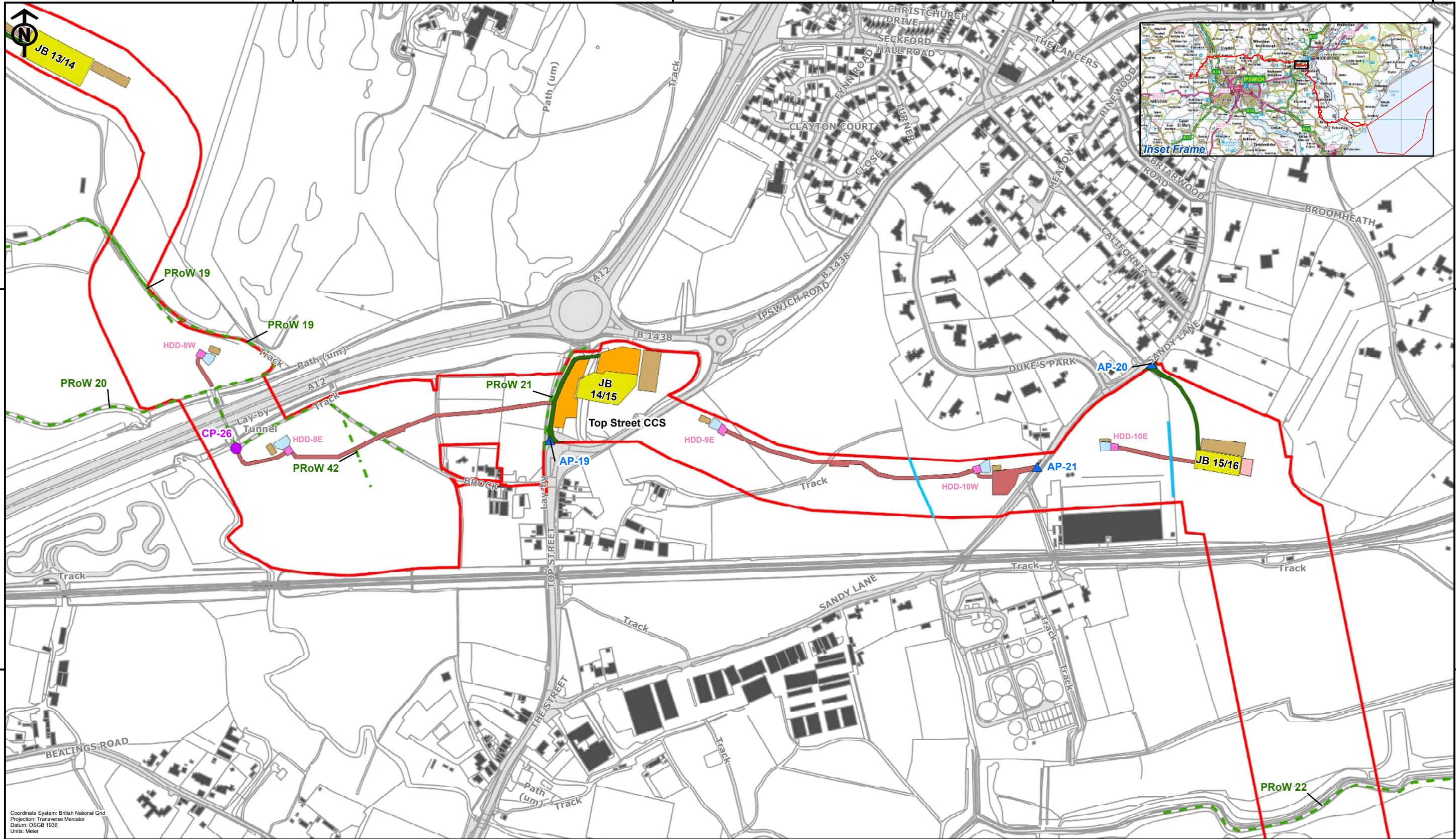
Original A3 Plot Scale 1:5,000

0 100 200 Metres

© Crown copyright. All rights reserved. (2023) Licence number 0100031673.

EA THREE Cable Route
 FIGURE 1.12 Site Context Plan

Drg No	404.5356.00006.0001.0
Rev	0
Date	29/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

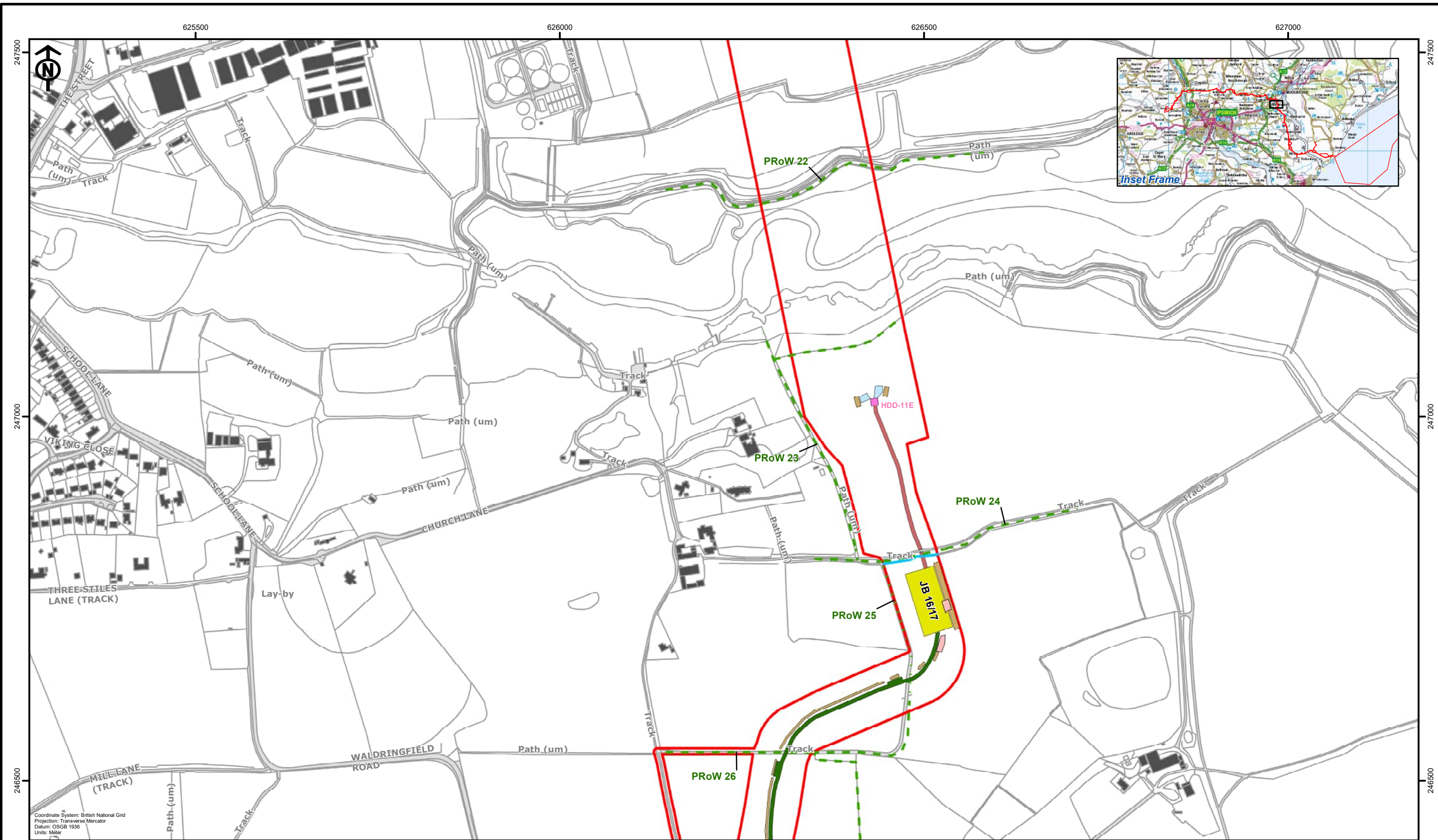
EA THREE Development Order Limits	Watercourse within the DOL	Consolidated Construction Site Compound	Stone Haul Road
Crossing Point (Road Crossings Numbered)	Jointing Bay Hardstanding	Top Soil Strip	Trackway
Public Right of Way	Horizontal Direct Drilling Duct Proving Platform	Indicative Top Soil Bund	
		Indicative Subsoil Bund	



				Original A3 Plot Scale 1:5,000	0 100 200 Metres
Rev	Date	By	Comment	© Crown copyright. All rights reserved. (2023) Licence number 0100031673.	
A	29/11/2023	PW	First Issue		

EA THREE Cable Route
 FIGURE 1.13 Site Context Plan

Drg No	404.5356.00006.0001.0
Rev	0
Date	29/11/2023
Layout	N/A



- EA THREE Development Order Limits
- Public Right of Way
- Watercourse within the DOL
- Jointing Bay Hardstanding
- Horizontal Direct Drilling Duct Proving Platform
- Top Soil Strip
- Indicative Top Soil Bund
- Indicative Subsoil Bund
- Stone Haul Road
- Trackway



Rev	Date	By	Comment
A	29/11/2023	PW	First Issue

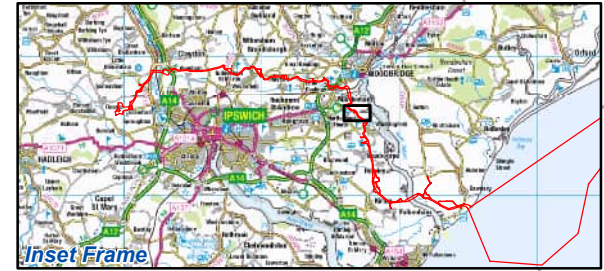
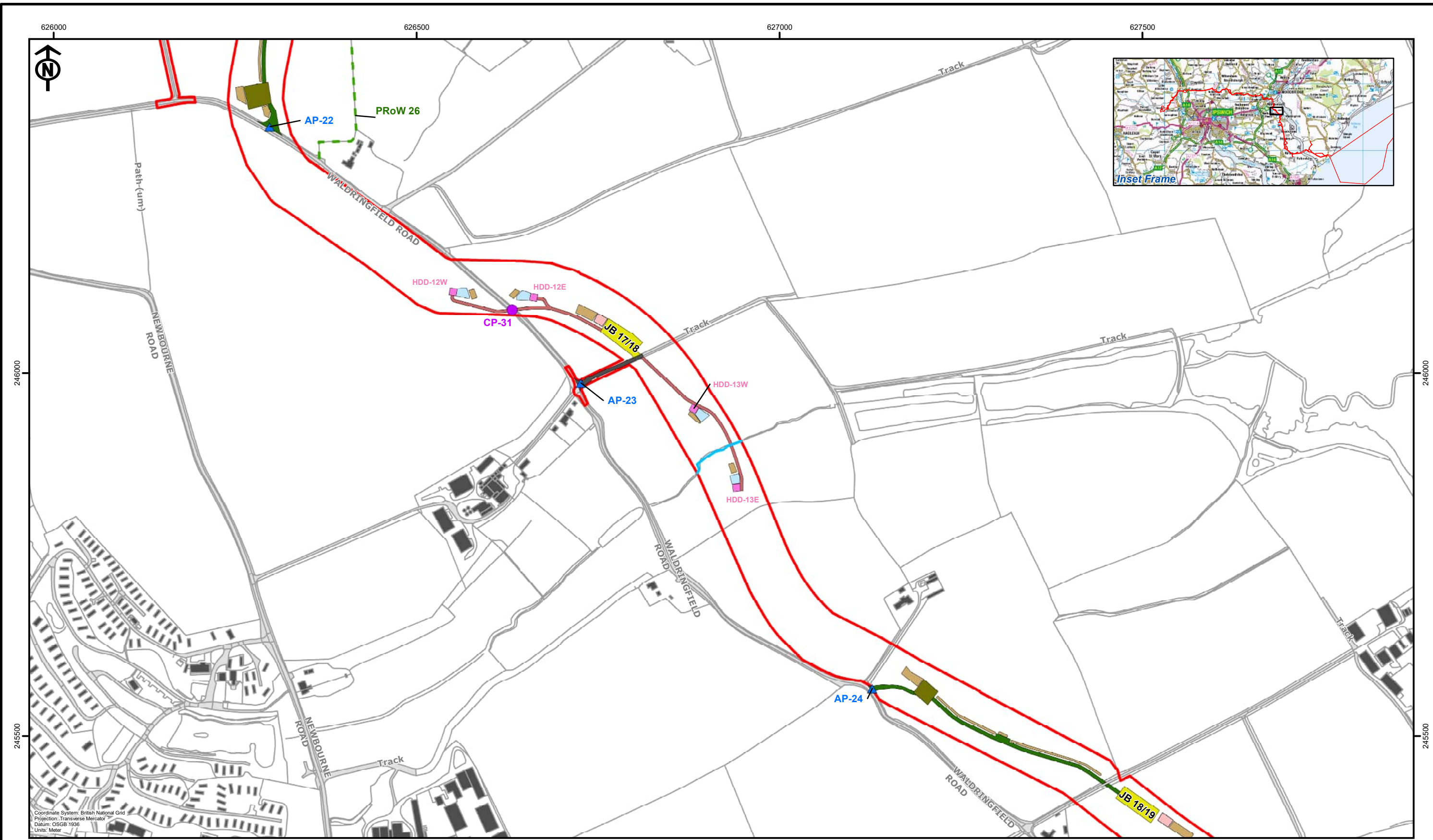
Original A3 Plot Scale 1:5,000

0 100 200 Metres

© Crown copyright. All rights reserved. (2023) Licence number 0100031673.

EA THREE Cable Route
 FIGURE 1.14 Site Context Plan

Drg No	404.5356.00006.0001.0
Rev	0
Date	29/11/2023
Layout	N/A



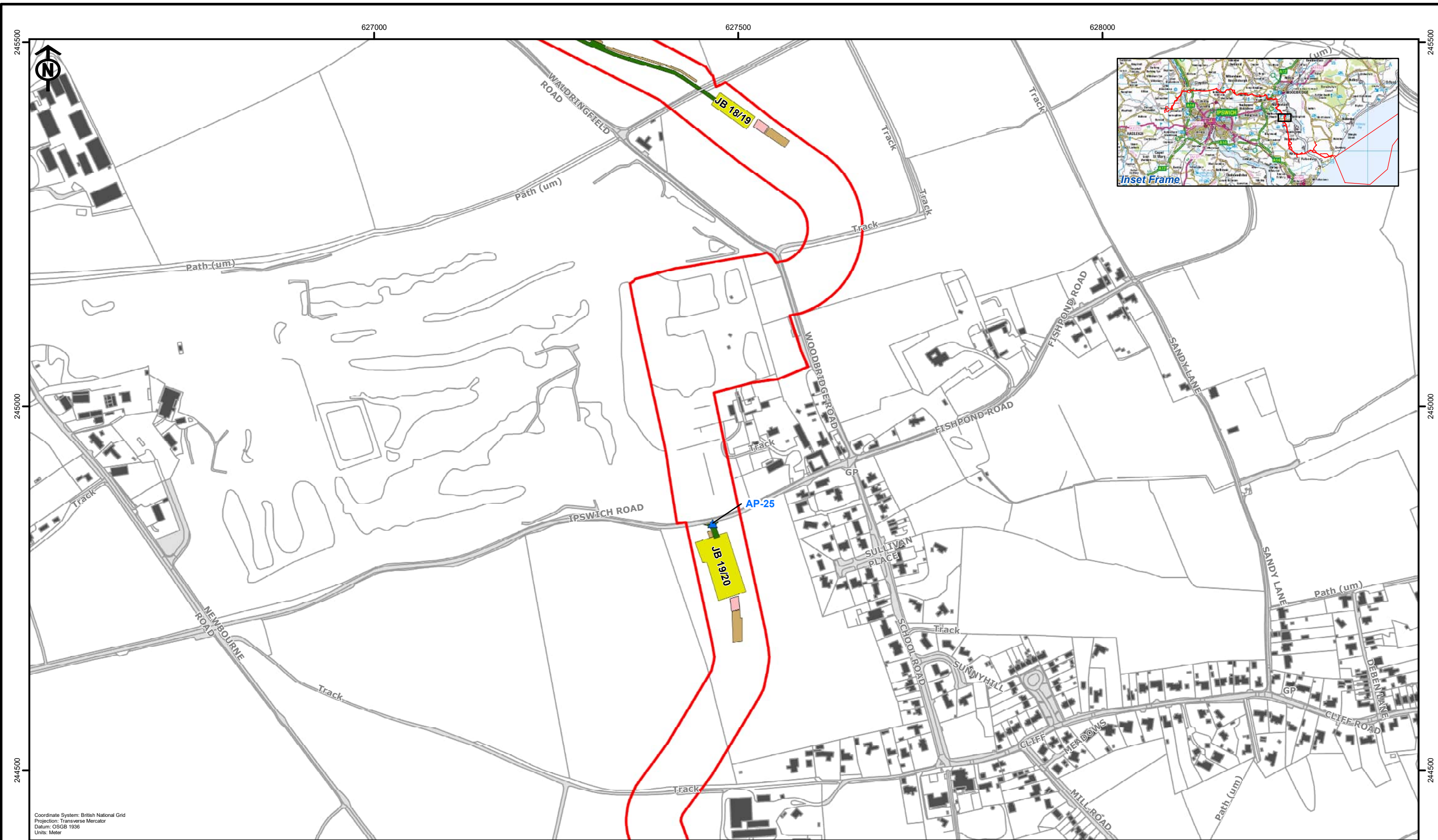
EA THREE Development Order Limits	Watercourse within the DOL	Indicative Top Soil Bund	Stone Haul Road
Crossing Point (Road Crossings Numbered)	Jointing Bay Hardstanding	Indicative Subsoil Bund	Trackway
Public Right of Way	Horizontal Direct Drilling Duct Proving Platform	Existing Track	
	Top Soil Strip	HGV Turning	



				Original A3 Plot Scale 1:5,000	0 100 200 Metres
Rev	Date	By	Comment	© Crown copyright. All rights reserved. (2023) Licence number 0100031673.	
A	29/11/2023	PW	First Issue		

EA THREE Cable Route
 FIGURE 1.15 Site Context Plan

Drg No	404.5356.00006.0001.0
Rev	0
Date	29/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

- EA THREE Development Order Limits
- Jointing Bay Hardstanding
- Indicative Top Soil Bund
- Indicative Subsoil Bund
- Stone Haul Road



Rev	Date	By	Comment
A	29/11/2023	PW	First Issue

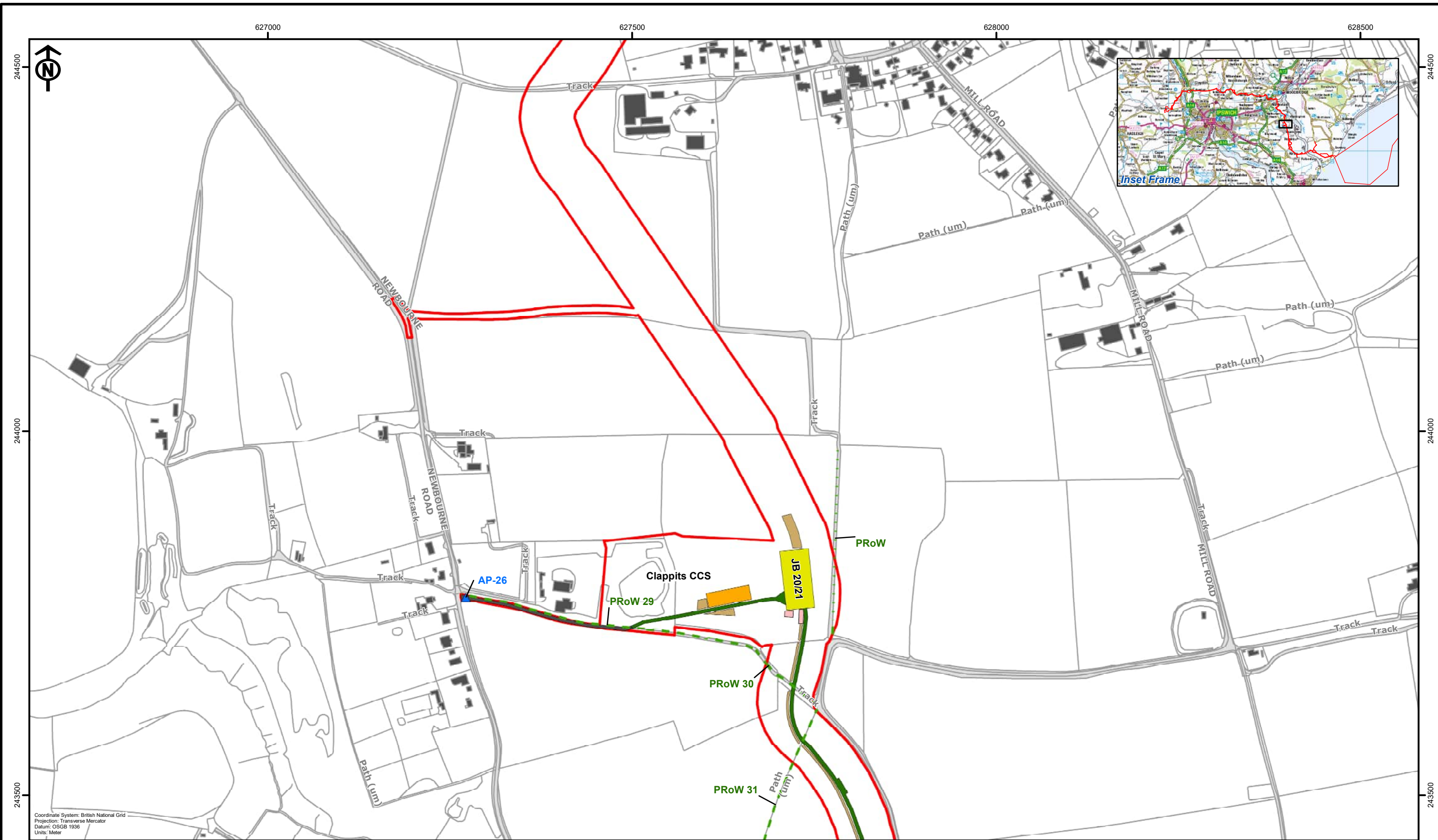
Original A3 Plot Scale 1:5,000

0 100 200 Metres

© Crown copyright. All rights reserved. (2023) Licence number 0100031673.

EA THREE Cable Route
 FIGURE 1.16 Site Context Plan

Drg No	404.5356.00006.0001.0
Rev	0
Date	29/11/2023
Layout	N/A



- EA THREE Development Order Limits
- Public Right of Way
- Jointing Bay Hardstanding
- Consolidated Construction Site Compound
- Indicative Top Soil Bund
- Indicative Subsoil Bund
- Existing Track
- Stone Haul Road



Rev	Date	By	Comment
A	29/11/2023	PW	First Issue

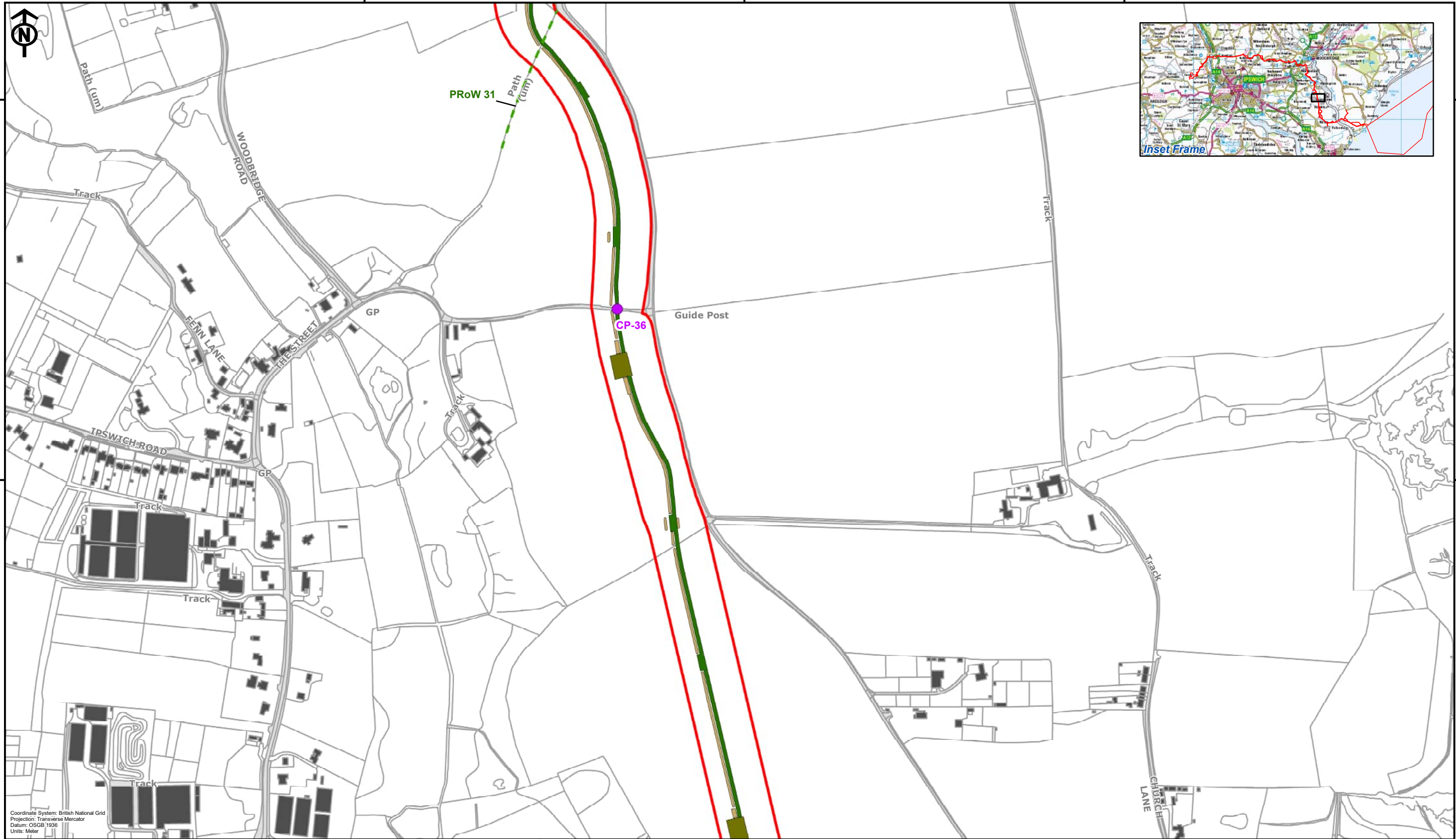
Original A3 Plot Scale 1:5,000

0 100 200 Metres

© Crown copyright. All rights reserved. (2023) Licence number 0100031673.

EA THREE Cable Route
 FIGURE 1.17 Site Context Plan

Drg No	404.5356.00006.0001.0
Rev	0
Date	29/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

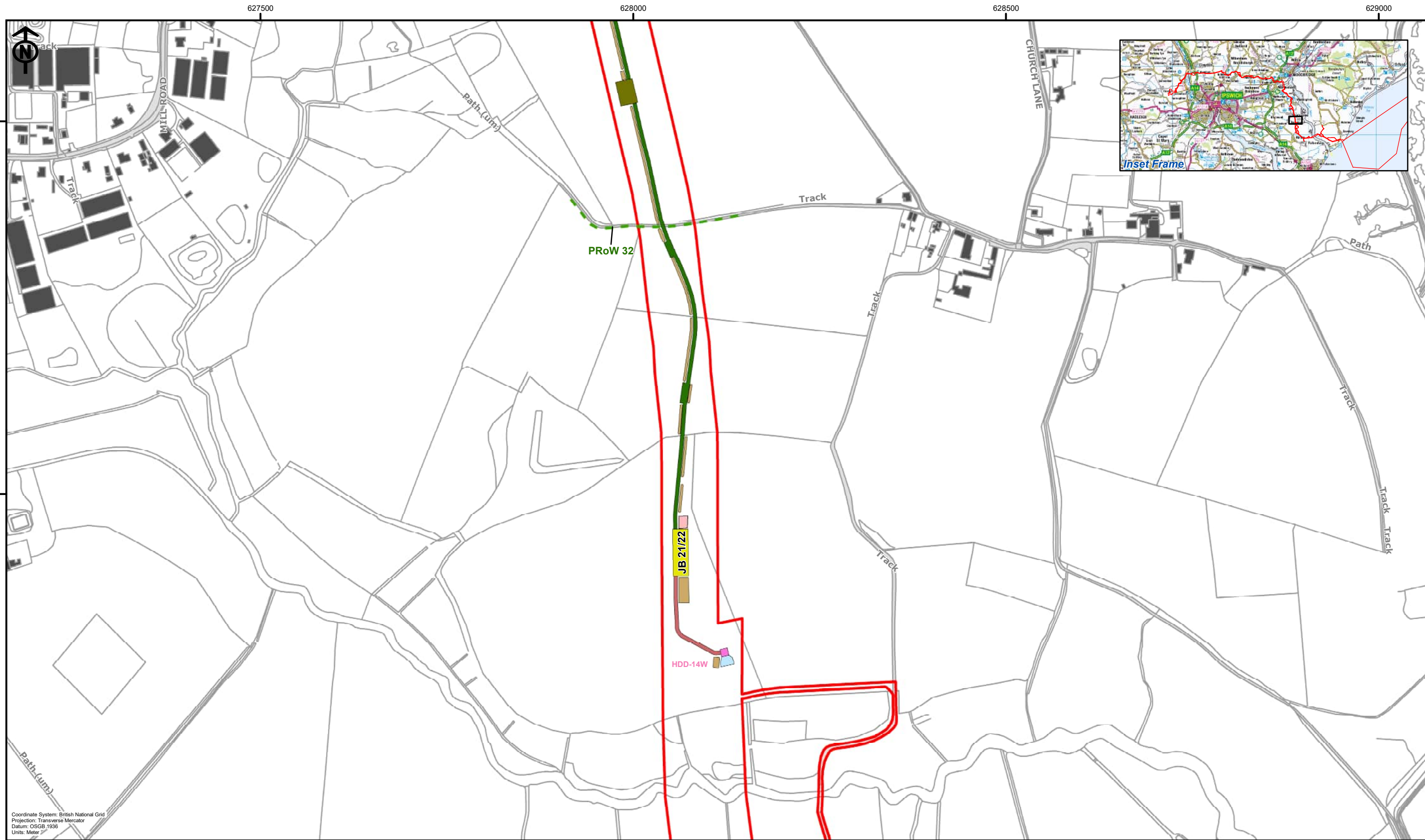
EA THREE Development Order Limits	Indicative Top Soil Bund
Crossing Point (Road Crossings Numbered)	HGV Turning
Public Right of Way	Stone Haul Road



				Original A3 Plot Scale 1:5,000	0 100 200 Metres
A	29/11/2023	PW	First Issue	© Crown copyright. All rights reserved. (2023) Licence number 0100031673.	
Rev	Date	By	Comment		

EA THREE Cable Route
 FIGURE 1.18 Site Context Plan

Drg No	404.5356.00006.0001.0
Rev	0
Date	29/11/2023
Layout	N/A



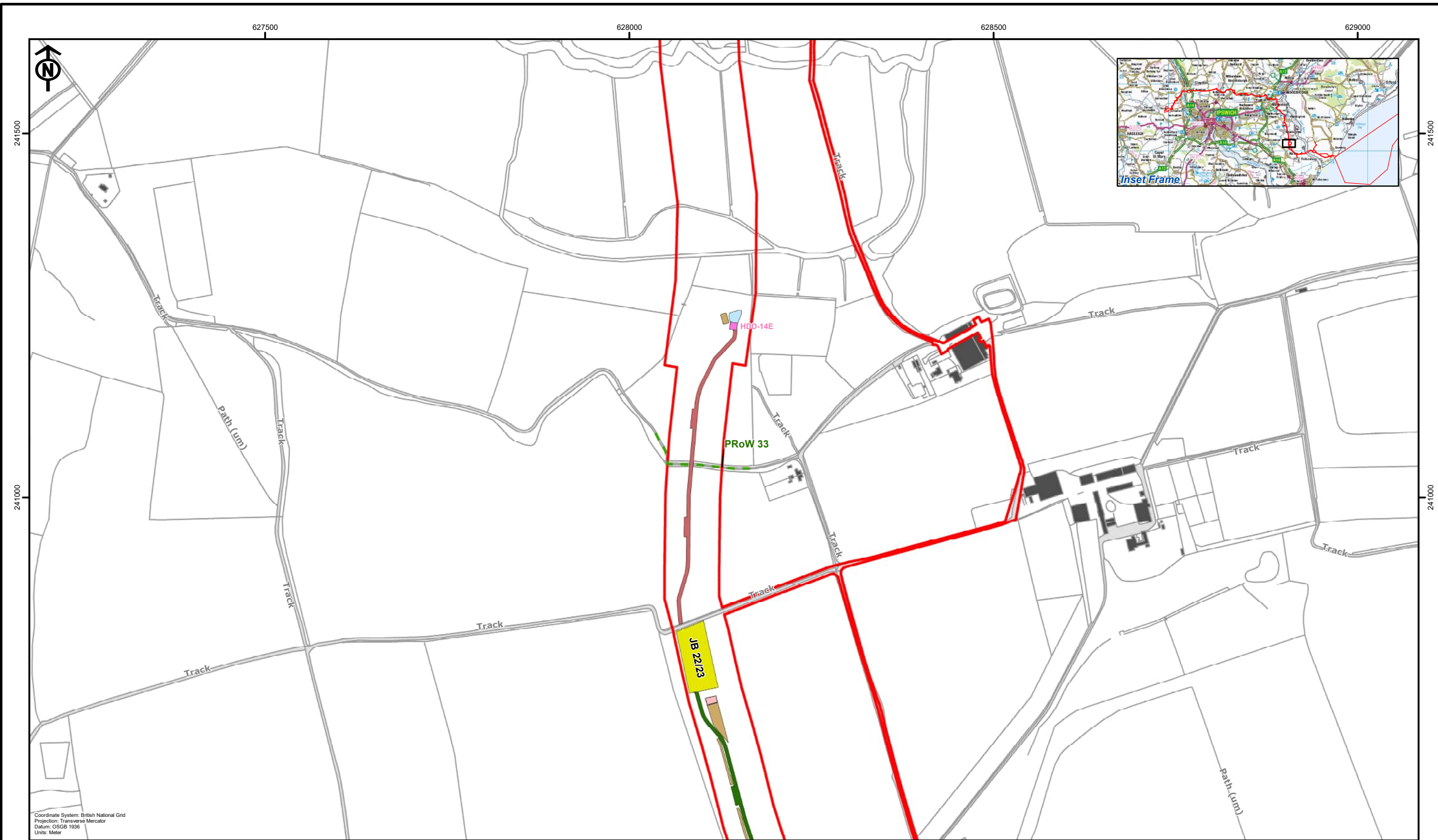
EA THREE Development Order Limits	Horizontal Direct Drilling Duct Proving Platform	HGV Turning
Public Right of Way	Top Soil Strip	Stone Haul Road
Jointing Bay Hardstanding	Indicative Top Soil Bund	Trackway
	Indicative Subsoil Bund	



Original A3 Plot Scale 1:5,000	0 100 200 Metres
A 29/11/2023 PW First Issue	© Crown copyright. All rights reserved. (2023) Licence number 0100031673.
Rev Date By Comment	

EA THREE Cable Route
 FIGURE 1.19 Site Context Plan

Drg No	404.5356.00006.0001.0
Rev	0
Date	29/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

- EA THREE Development Order Limits
- Public Right of Way
- Jointing Bay Hardstanding
- Horizontal Direct Drilling Duct Proving Platform
- Top Soil Strip
- Indicative Top Soil Bund
- Indicative Subsoil Bund
- Stone Haul Road
- Trackway



Rev	Date	By	Comment
A	29/11/2023	PW	First Issue

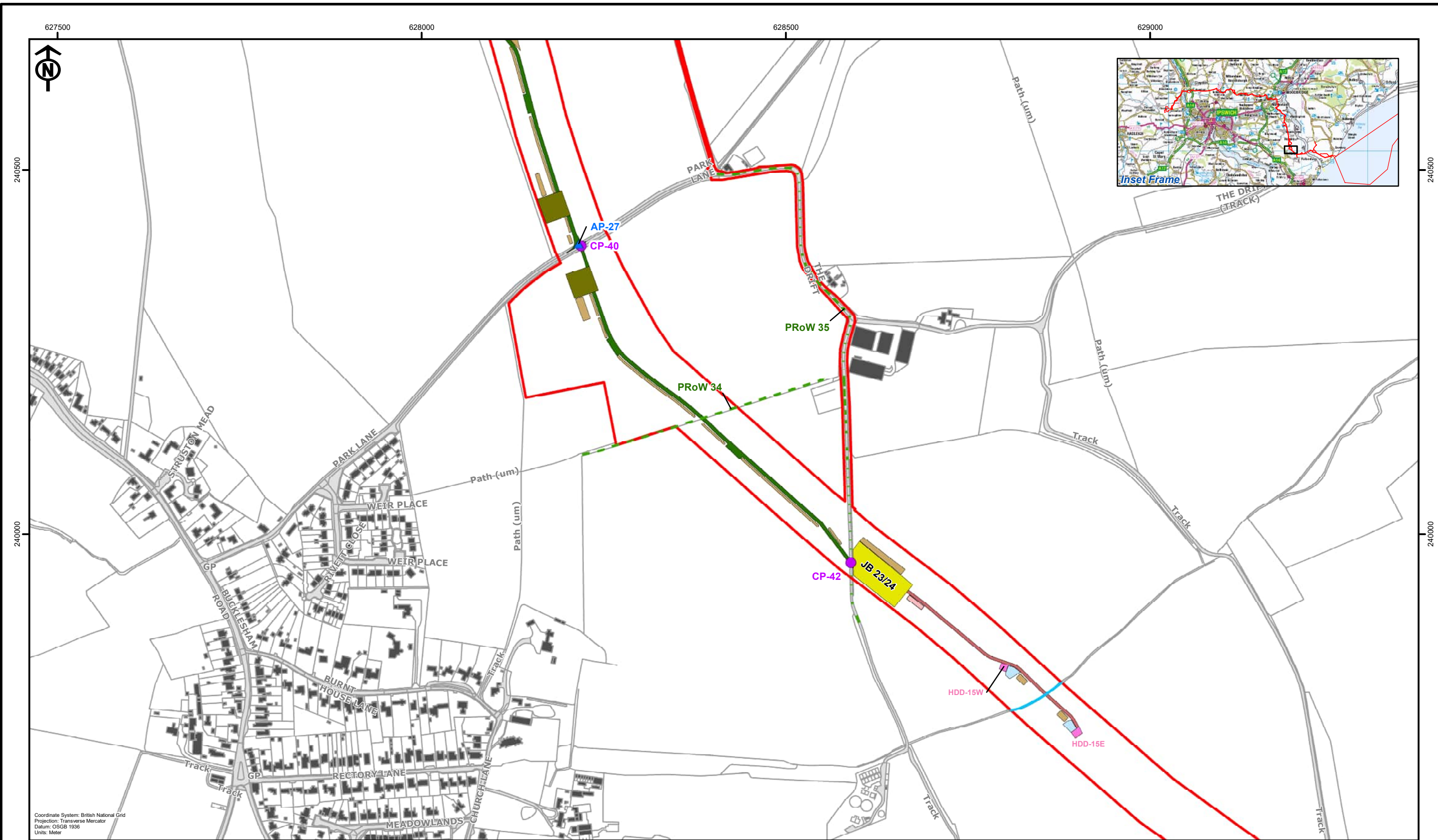
Original A3 Plot Scale 1:5,000

0 100 200 Metres

© Crown copyright. All rights reserved. (2023) Licence number 0100031673.

EA THREE Cable Route
 FIGURE 1.20 Site Context Plan

Drg No	404.5356.00006.0001.0
Rev	0
Date	29/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

- EA THREE Development Order Limits
- Watercourse within the DOL
- Indicative Top Soil Bund
- Trackway
- Jointing Bay Hardstanding
- Horizontal Direct Drilling Duct Proving Platform
- HGV Turning
- Stone Haul Road
- Crossing Point (Road Crossings Numbered)
- Public Right of Way
- Top Soil Strip



Rev	Date	By	Comment
A	29/11/2023	PW	First Issue

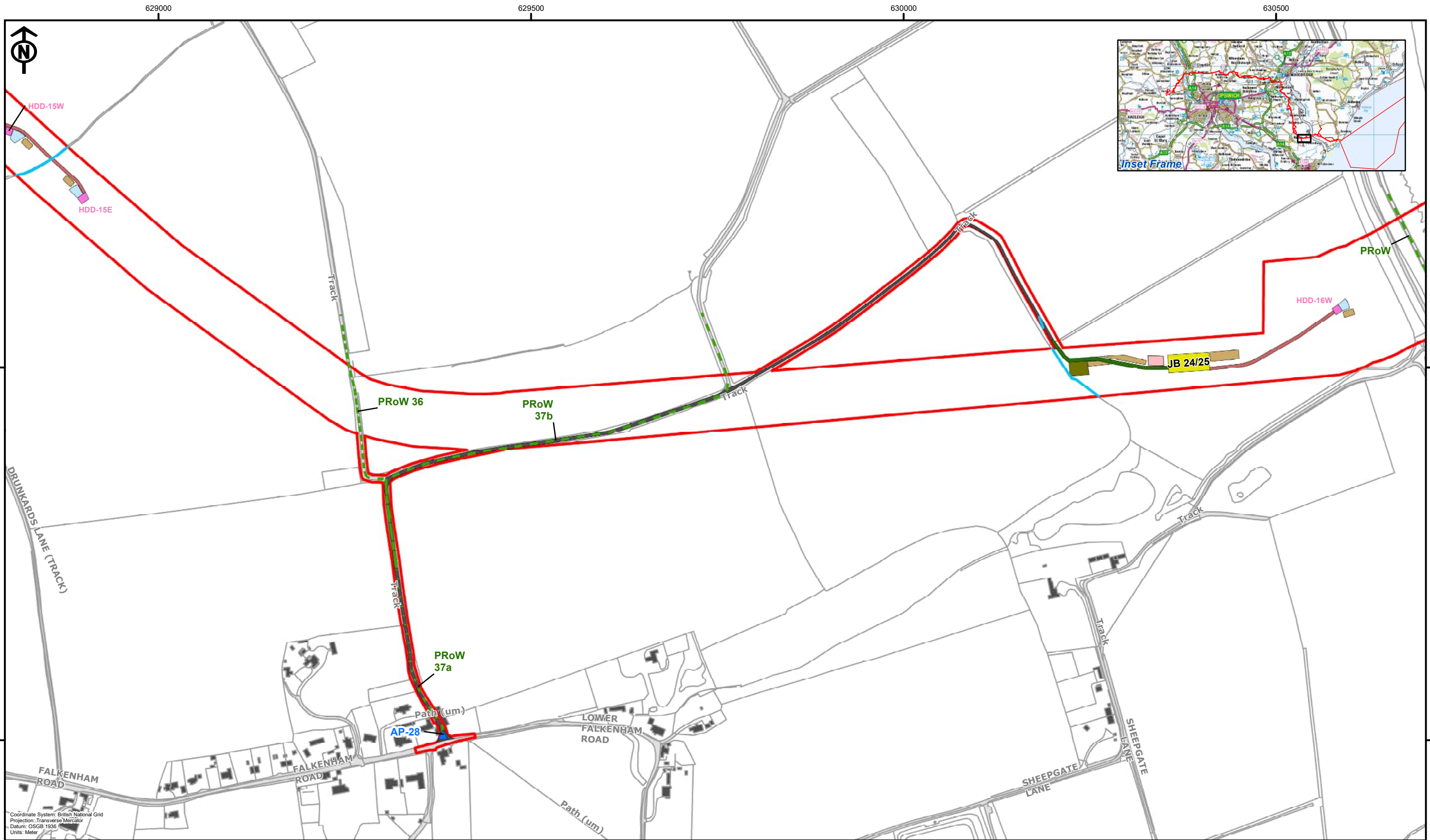
Original A3 Plot Scale 1:5,000

0 100 200 Metres

© Crown copyright. All rights reserved. (2023) Licence number 0100031673.

EA THREE Cable Route
 FIGURE 1.21 Site Context Plan

Drg No	404.5356.00006.0001.0
Rev	0
Date	29/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

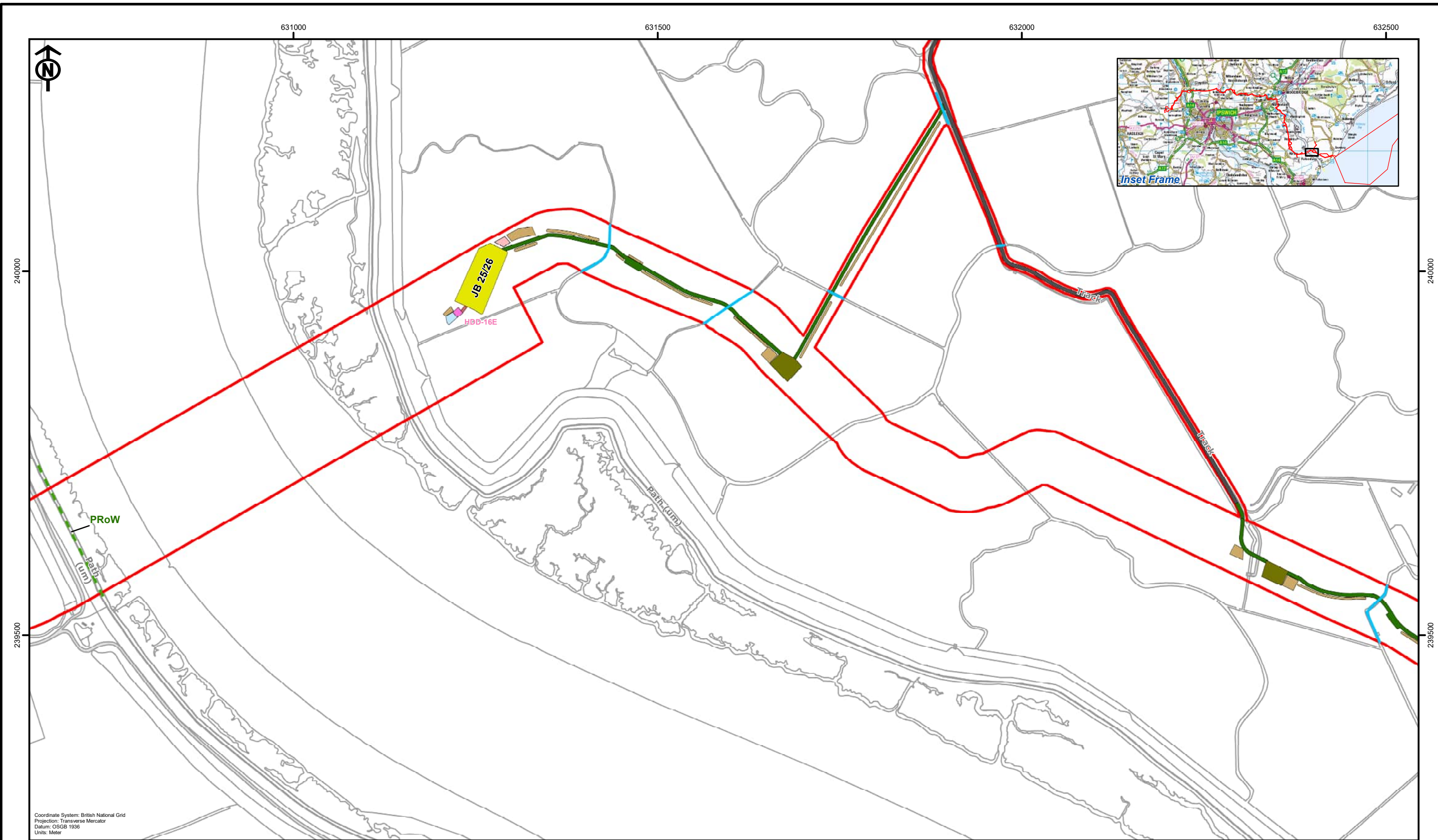
EA THREE Development Order Limits	Horizontal Direct Drilling Duct Proving Platform	Existing Track
Public Right of Way	Top Soil Strip	HGV Turning
Watercourse within the DOL	Indicative Top Soil Bund	Stone Haul Road
Jointing Bay Hardstanding	Indicative Subsoil Bund	Trackway



Original A3 Plot Scale	0	100	200 Metres
1:5,000			
Rev	Date	By	Comment
A	29/11/2023	PW	First Issue

EA THREE Cable Route
 FIGURE 1.22 Site Context Plan

Drg No	404.5356.00006.0001.0
Rev	0
Date	29/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

EA THREE Development Order Limits	Horizontal Direct Drilling Duct Proving Platform	Existing Track
Public Right of Way	Top Soil Strip	HGV Turning
Watercourse within the DOL	Indicative Top Soil Bund	Stone Haul Road
Jointing Bay Hardstanding	Indicative Subsoil Bund	Trackway



Rev	Date	By	Comment
A	29/11/2023	PW	First Issue

Original A3 Plot Scale 1:5,000

© Crown copyright. All rights reserved. (2023) Licence number 0100031673.

EA THREE Cable Route
 FIGURE 1.23 Site Context Plan

Drg No	404.5356.00006.0001.0
Rev	0
Date	29/11/2023
Layout	N/A



631500

632000

632500

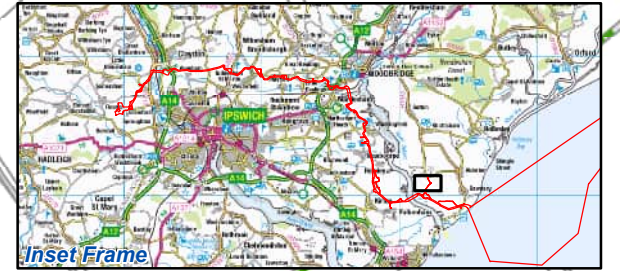
633000

241000

240500

241000

240500



PRoW 39

Path (unm)

AP-29

GP

Track

Track

Track

Track




Track

DUKE'S
LANE
(TRACKS)

Track

Track

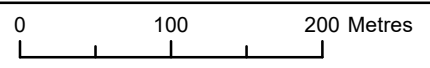
Coordinate System: British National Grid
Projection: Transverse Mercator
Datum: OSGB 1936
Units: Meter

-  EA THREE Development Order Limits
-  Public Right of Way
-  Existing Track



Rev	Date	By	Comment
A	29/11/2023	PW	First Issue

Original A3
Plot Scale
1:5,000

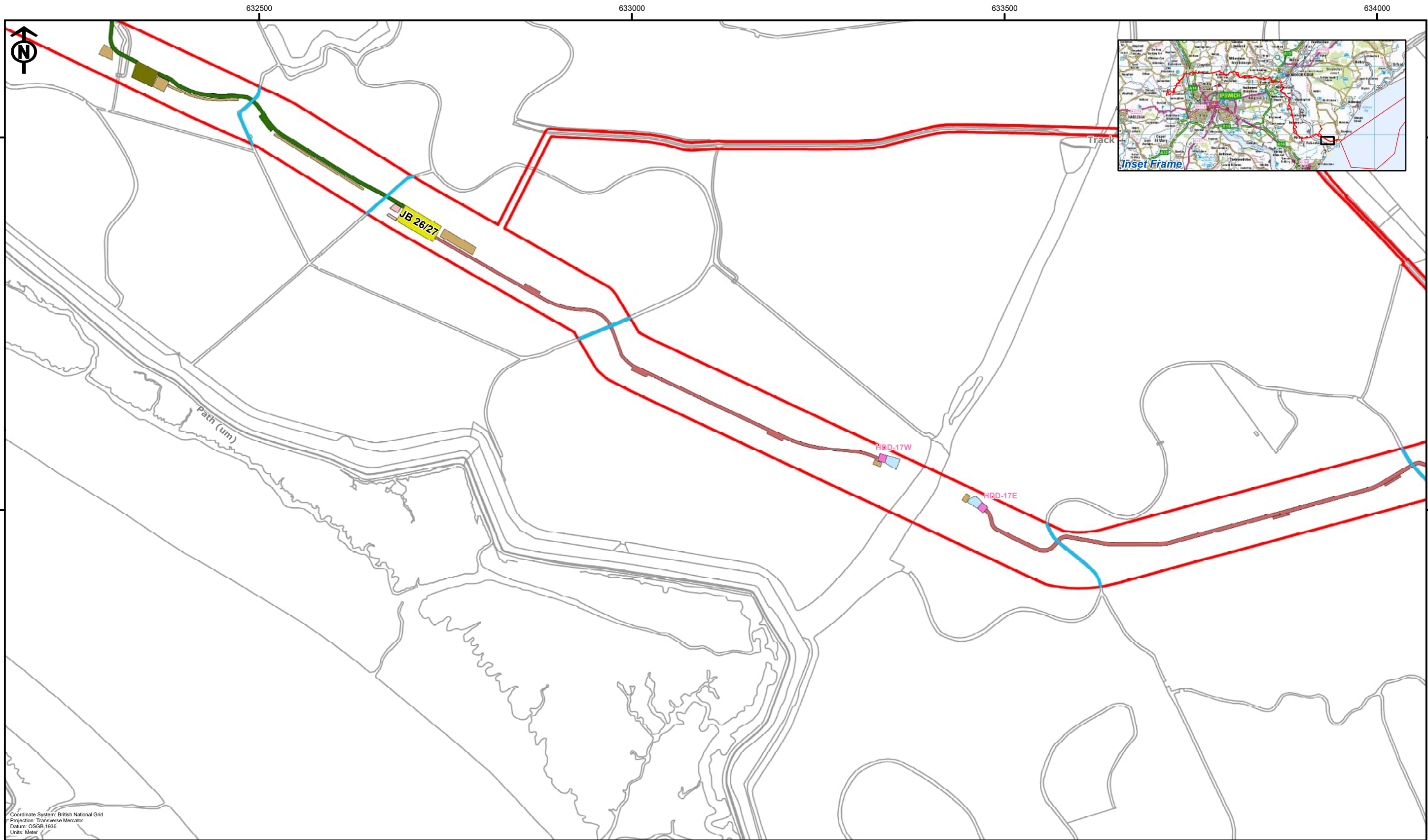


© Crown copyright. All rights reserved. (2023) Licence number 0100031673.

EA THREE Cable Route

FIGURE 1.24 Site Context Plan

Drg No	404.5356.00006.0001.0
Rev	0
Date	29/11/2023
Layout	N/A

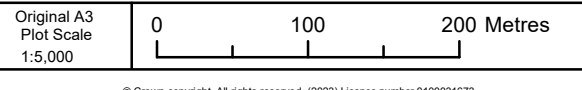


Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

EA THREE Development Order Limits	Horizontal Direct Drilling Duct Proving Platform	HGV Turning
Watercourse within the DOL	Top Soil Strip	Stone Haul Road
Jointing Bay Hardstanding	Indicative Top Soil Bund	Trackway
	Indicative Subsoil Bund	

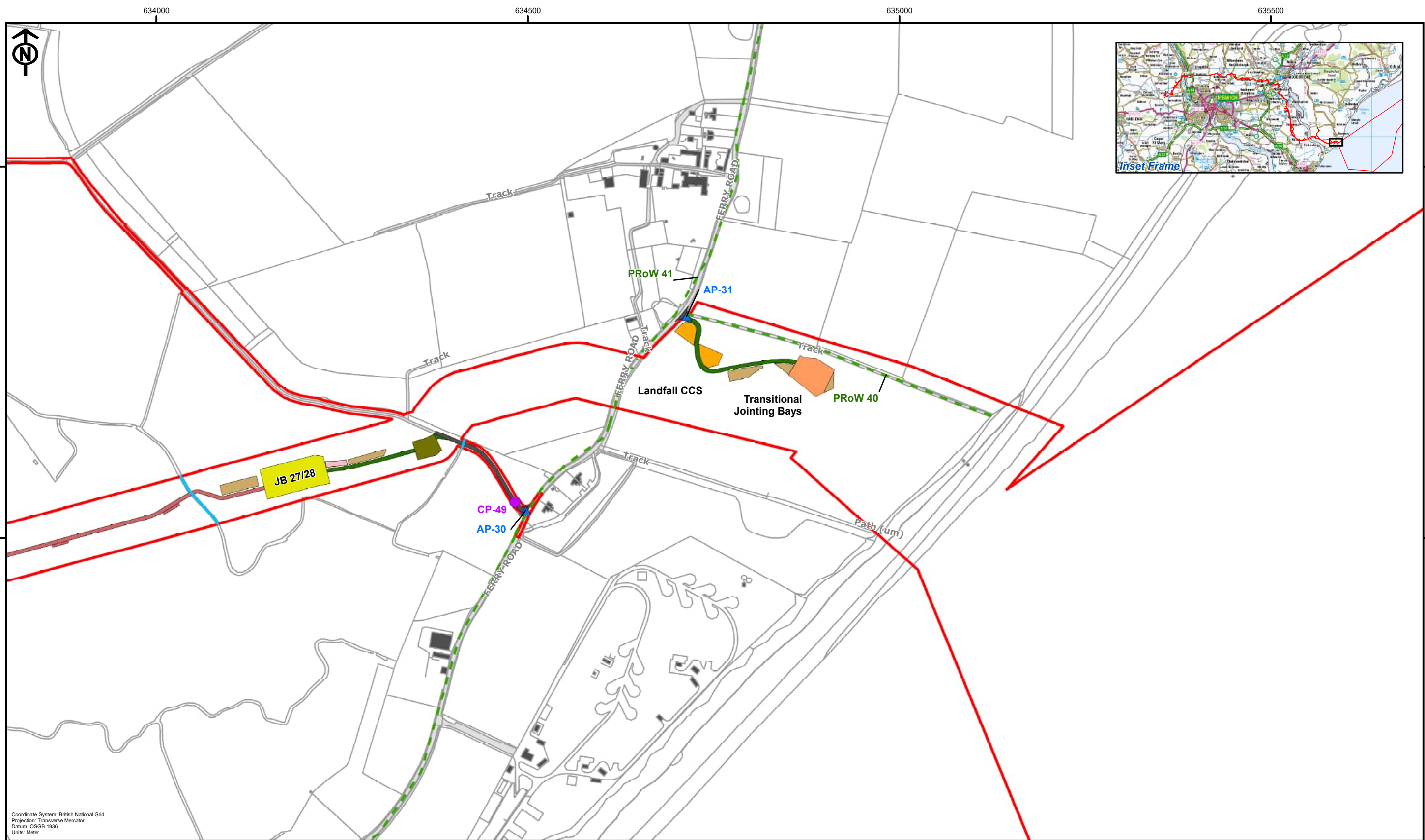


Rev	Date	By	Comment
A	29/11/2023	PW	First Issue



EA THREE Cable Route
 FIGURE 1.25 Site Context Plan

Drg No	404.5356.00006.0001.0
Rev	0
Date	29/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

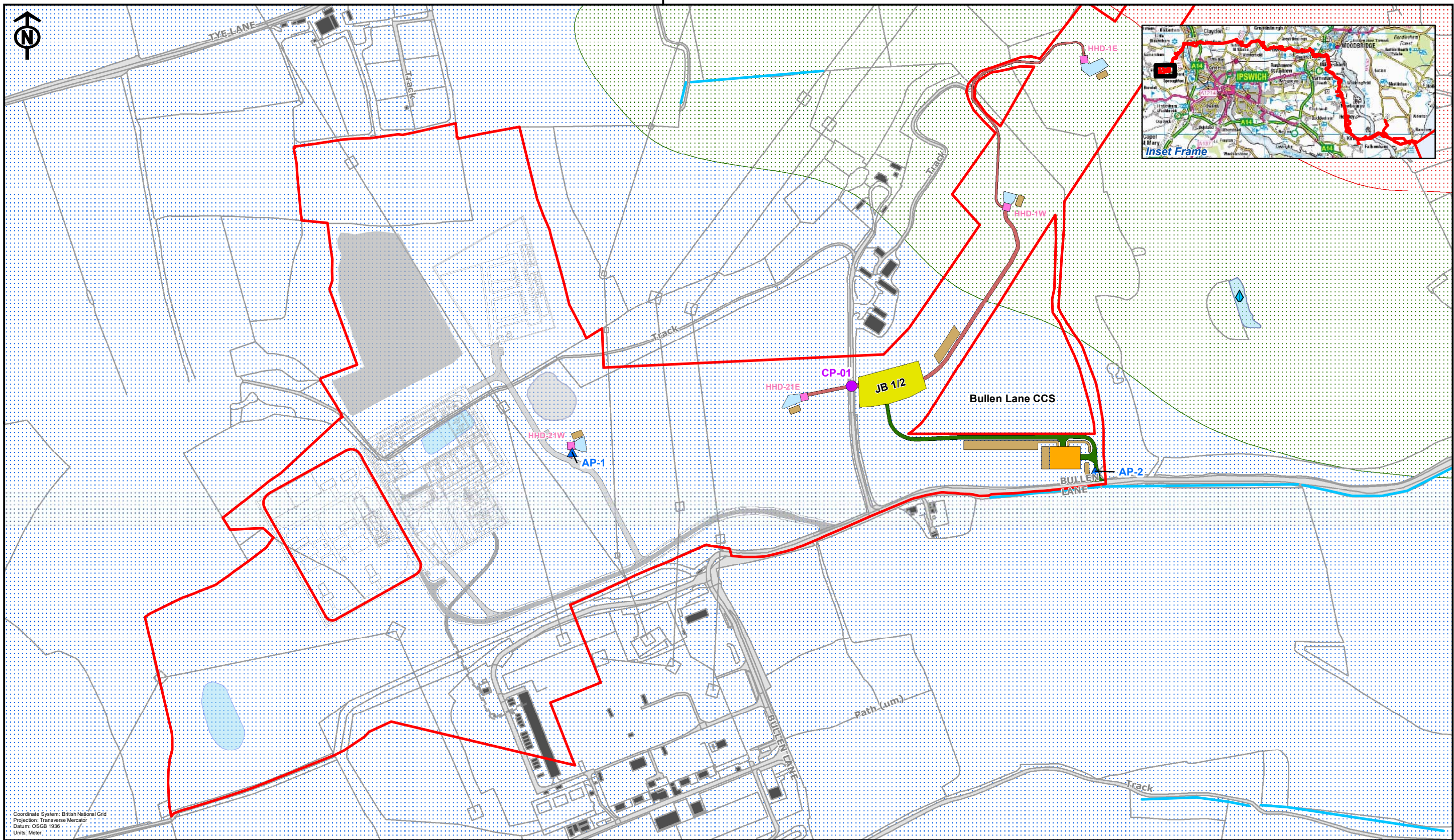
EA THREE Development Order Limits	Watercourse within the DOL	Indicative Top Soil Bund	Stone Haul Road
Crossing Point (Road Crossings Numbered)	Transition Jointing Bays	Indicative Subsoil Bund	Trackway
Public Right of Way	Jointing Bay Hardstanding	Existing Track	HGV Turning
	Consolidated Construction Site Compound		



Original A3 Plot Scale	0	100	200 Metres
1:5,000			
Rev	Date	By	Comment
A	29/11/2023	PW	First Issue

EA THREE Cable Route
 FIGURE 1.26 Site Context Plan

Drg No	404.5356.00006.0001.0
Rev	0
Date	29/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

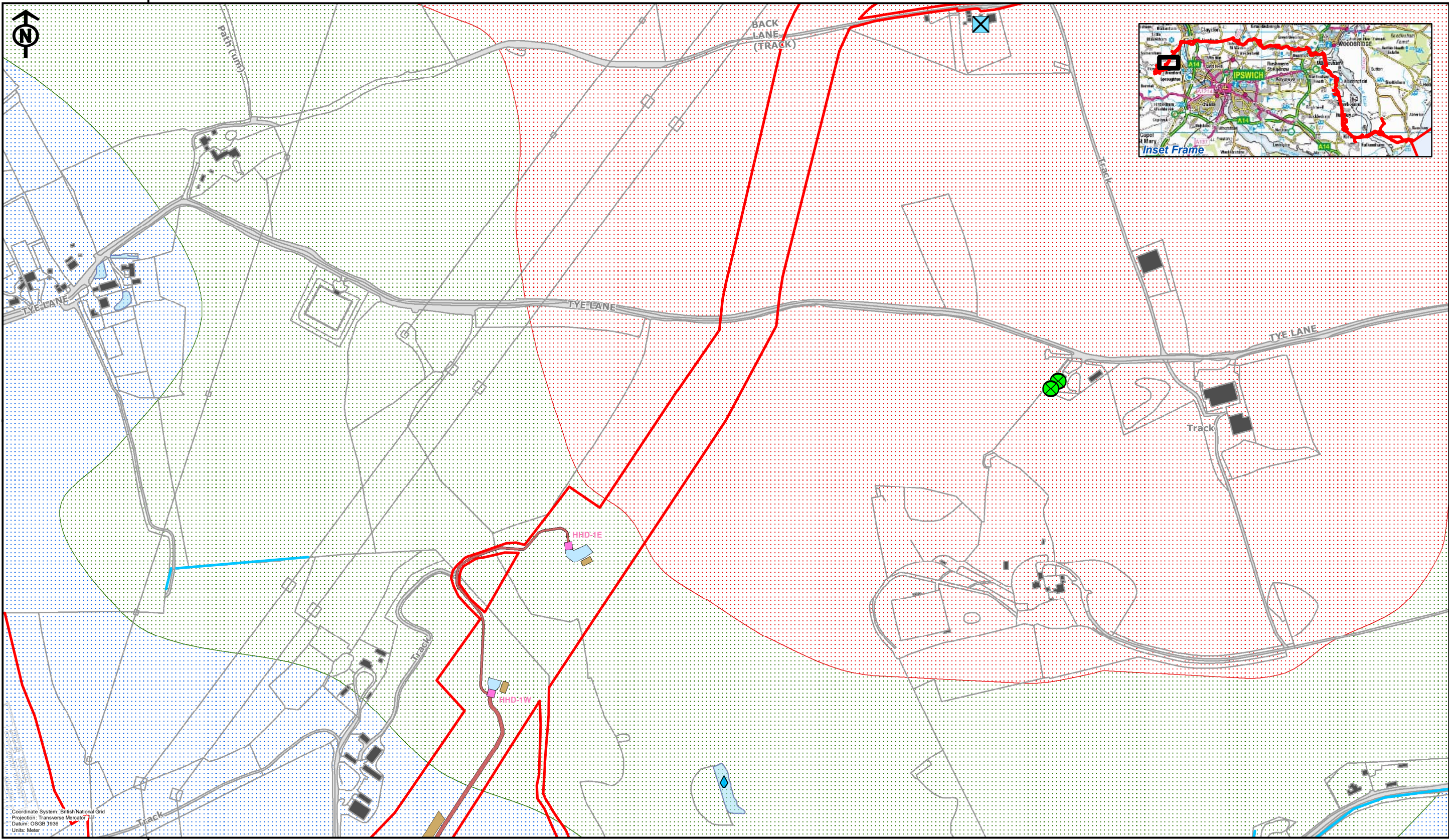
EA THREE Development Order Limit	Crossing Point (Road Crossings Numbered)	Top Soil Bund	Consolidated Construction Site Compound	Source Protection Zones Zone I - Inner Protection Zone Zone II - Outer Protection Zone Zone III - Total Catchment	Spring
EA THREE Onshore Substation Infrastructure	Stone Haul Road	Jointing Bay Hardstanding	Ordinary Watercourse		
Access Point	Trackway	Horizontal Direct Drill Work Platform	Surface Water Area		
	Top Soil Strip				



Original A3 Plot Scale 1:5,000	0 100 200 Metres								
<table border="1"> <tr> <td>Rev</td> <td>Date</td> <td>By</td> <td>Comment</td> </tr> <tr> <td>A</td> <td>10/11/2023</td> <td>PW</td> <td>First Issue</td> </tr> </table>	Rev	Date	By	Comment	A	10/11/2023	PW	First Issue	<p>© Crown copyright. All rights reserved. (2022) Licence number 0100031673. © Environment Agency copyright and/or database right (2023). All rights reserved.</p>
Rev	Date	By	Comment						
A	10/11/2023	PW	First Issue						

EA THREE Cable Route
 FIGURE 2.1 Hydrological and Hydrogeological Features

Drg No	404.5356.00006.0002.0
Rev	0
Date	10/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

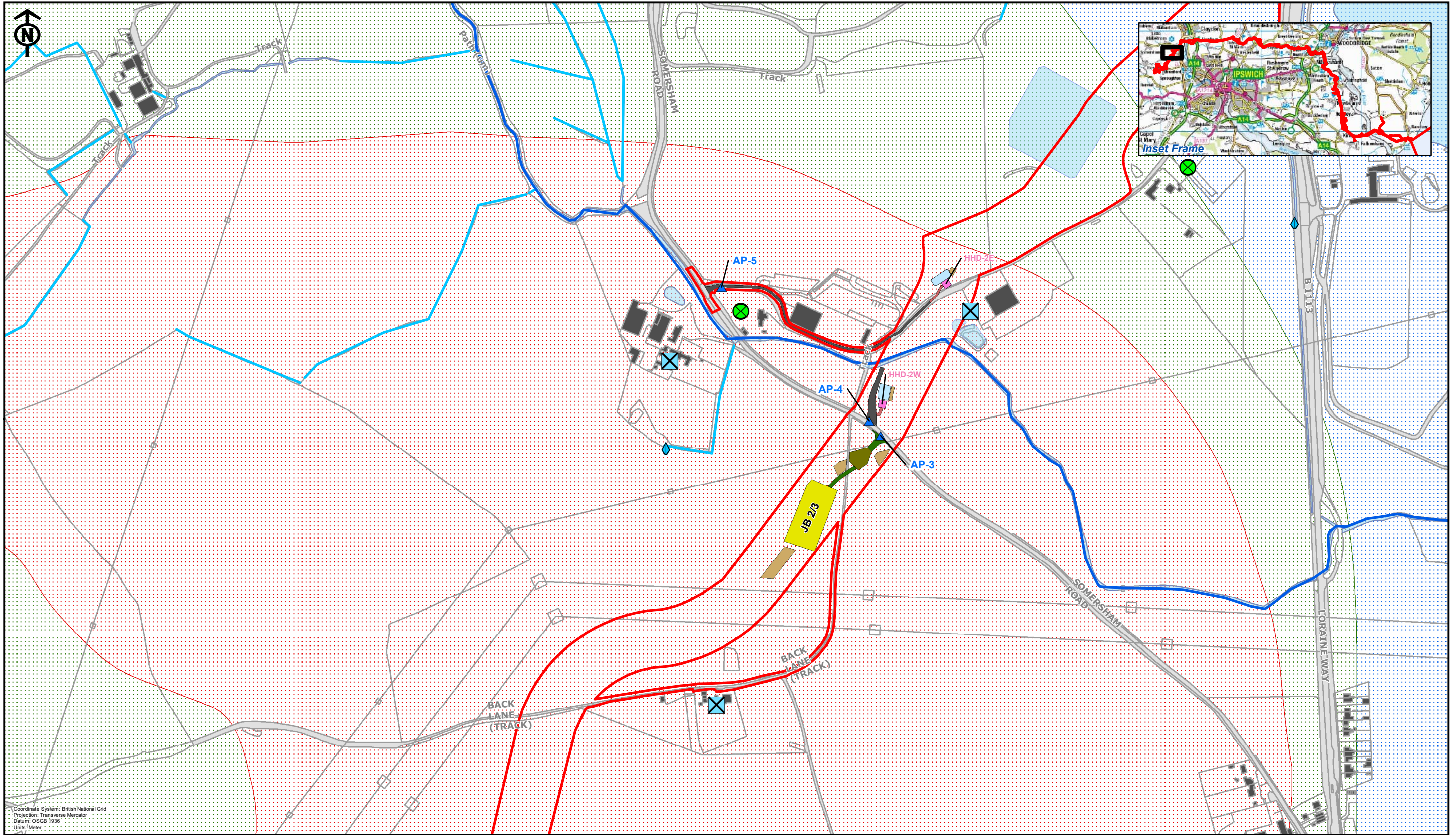
EA THREE Development Order Limit	Horizontal Direct Drill Work Platform	Source Protection Zones	Spring
Trackway	Ordinary Watercourse	Zone I - Inner Protection Zone	Licensed Surface Water Abstraction
Top Soil Strip	Surface Water Area	Zone II - Outer Protection Zone	Private Water Supply
Top Soil Bund		Zone III - Total Catchment	



				Original A3 Plot Scale 1:5,000	0 100 200 Metres
Rev	Date	By	Comment		
A	10/11/2023	PW	First Issue		

EA THREE Cable Route
 FIGURE 2.2 Hydrological and Hydrogeological Features

Drg No	404.5356.00006.0002.0
Rev	0
Date	10/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

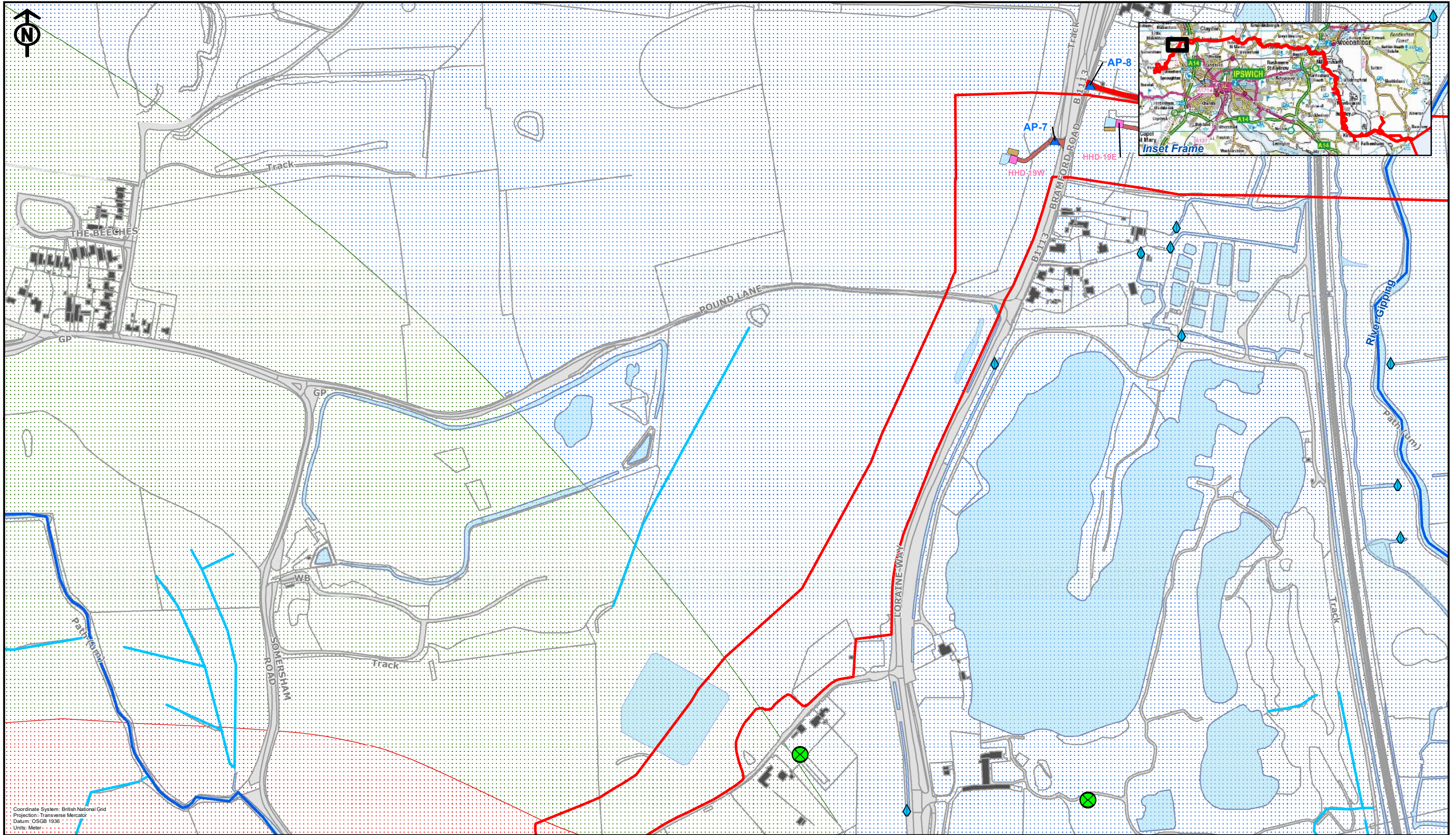
EA THREE Development Order Limit	Stone Haul Road	Jointing Bay Hardstanding	Surface Water Area	Zone III - Total Catchment	Private Water Supply
Access Point	Trackway	Horizontal Direct Drill Work Platform	Source Protection Zones	Spring	Licensed Surface Water Abstraction
Existing Track	Top Soil Strip	Statutory Main River	Zone I - Inner Protection Zone	Spring	
HGV Turning	Top Soil Bund	Ordinary Watercourse	Zone II - Outer Protection Zone		



Original A3 Plot Scale 1:5,000	0	100	200 Metres
Rev	Date	By	Comment
A	10/11/2023	PW	First Issue

EA THREE Cable Route
 FIGURE 2.3 Hydrological and Hydrogeological Features

Drg No	404.5356.00006.0002.0
Rev	0
Date	10/11/2023
Layout	N/A



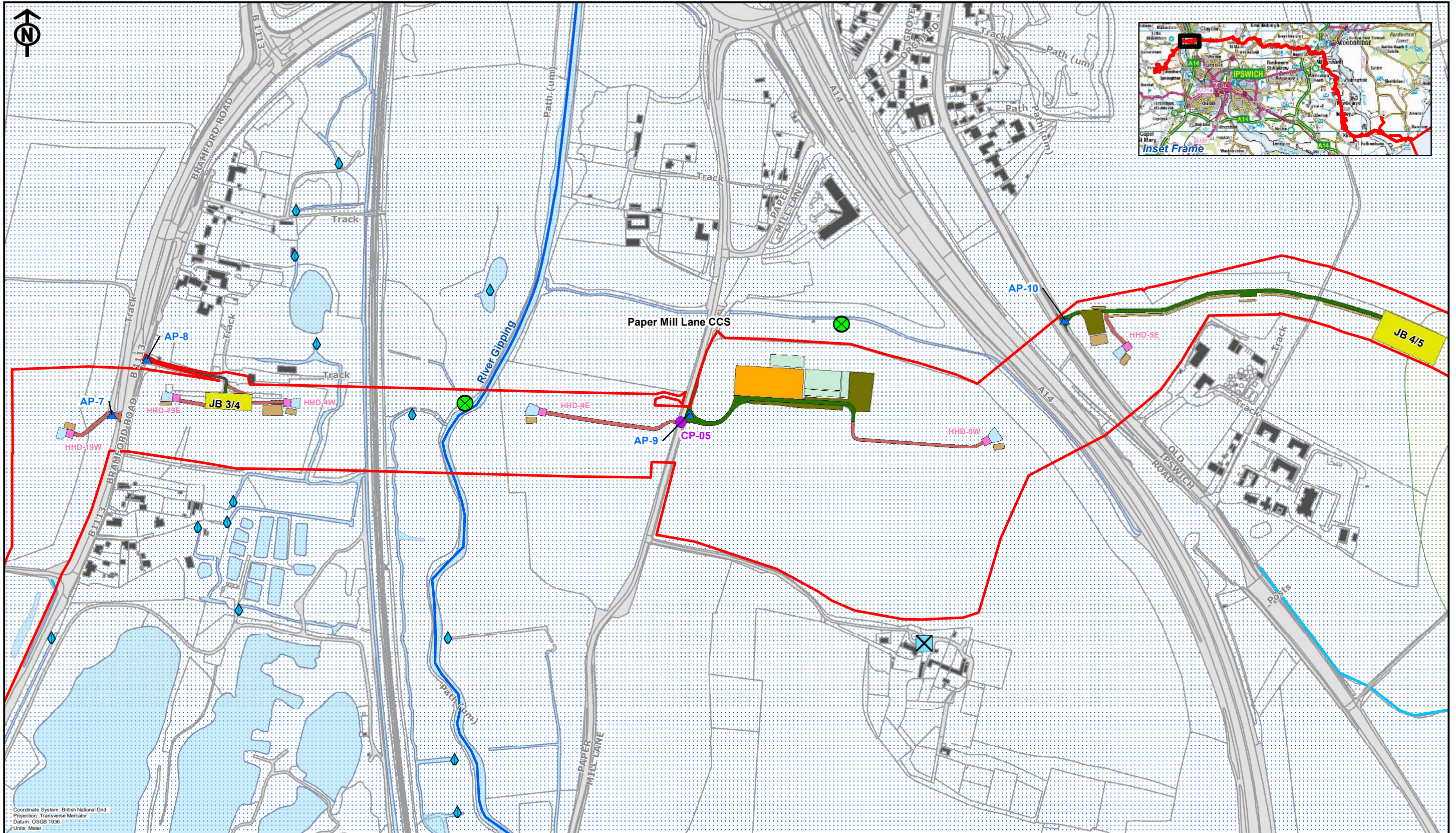
EA THREE Development Order Limit	Trackway	Horizontal Direct Drill Work Platform	Source Protection Zones	Spring
Access Point	Top Soil Strip	Statutory Main River	Zone I - Inner Protection Zone	Licensed Surface Water Abstraction
Existing Track	Top Soil Bund	Ordinary Watercourse	Zone II - Outer Protection Zone	
Stone Haul Road	Jointing Bay Hardstanding	Surface Water Area	Zone III - Total Catchment	



				Original A3 Plot Scale 1:5,000	0 100 200 Metres
A	10/11/2023	PW	First Issue	© Crown copyright. All rights reserved. (2022) Licence number 0100031673. © Environment Agency copyright and/or database right (2023). All rights reserved.	
Rev	Date	By	Comment		

EA THREE Cable Route
FIGURE 2.4 Hydrological and Hydrogeological Features

Drg No	404.5356.00006.0002.0
Rev	0
Date	10/11/2023
Layout	N/A



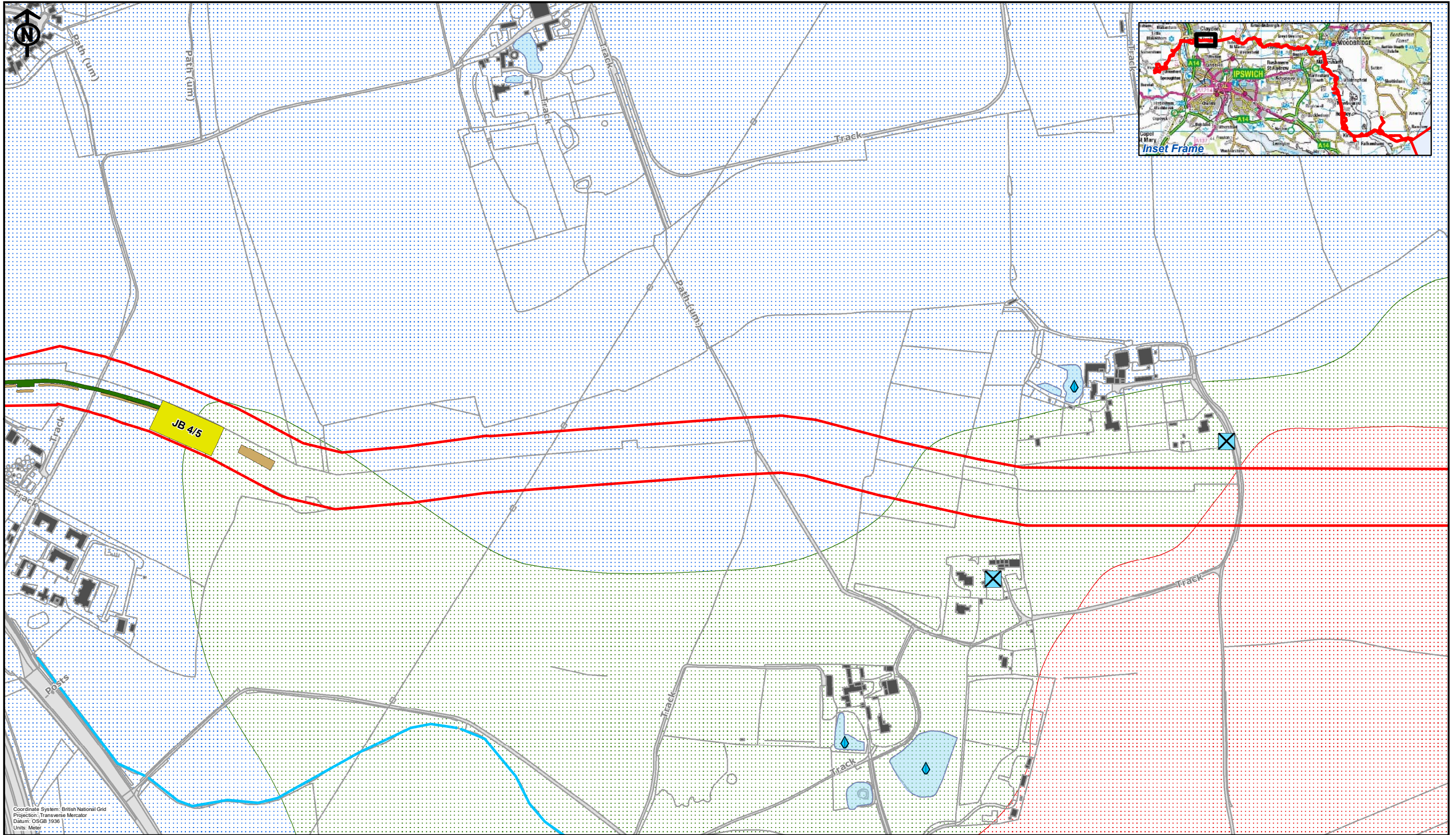
EA THREE Development Order Limit	Existing Track	Soil Storage	Horizontal Direct Drill Work Platform	Ordinary Watercourse	Zone III - Total Catchment	Private Water Supply
Access Point	HGV Turning	Top Soil Strip	Consolidated Construction Site Compound	Surface Water Area	Spring	
Crossing Point (Road Crossings Numbered)	Stone Haul Road	Top Soil Bund	Statutory Main River	Source Protection Zones	Licensed Surface Water Abstraction	
	Trackway	Jointing Bay Hardstanding		Zone II - Outer Protection Zone		



Original A3 Plot Scale 1:5,000	0	100	200 Metres
Rev	Date	By	Comment
A	10/11/2023	PW	First Issue

EA THREE Cable Route
 FIGURE 2.5 Hydrological and Hydrogeological Features

Drg No	404.5356.00006.0002.0
Rev	0
Date	10/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

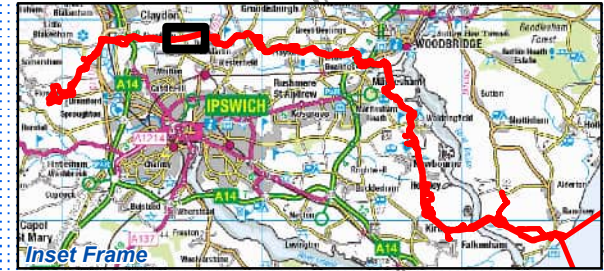
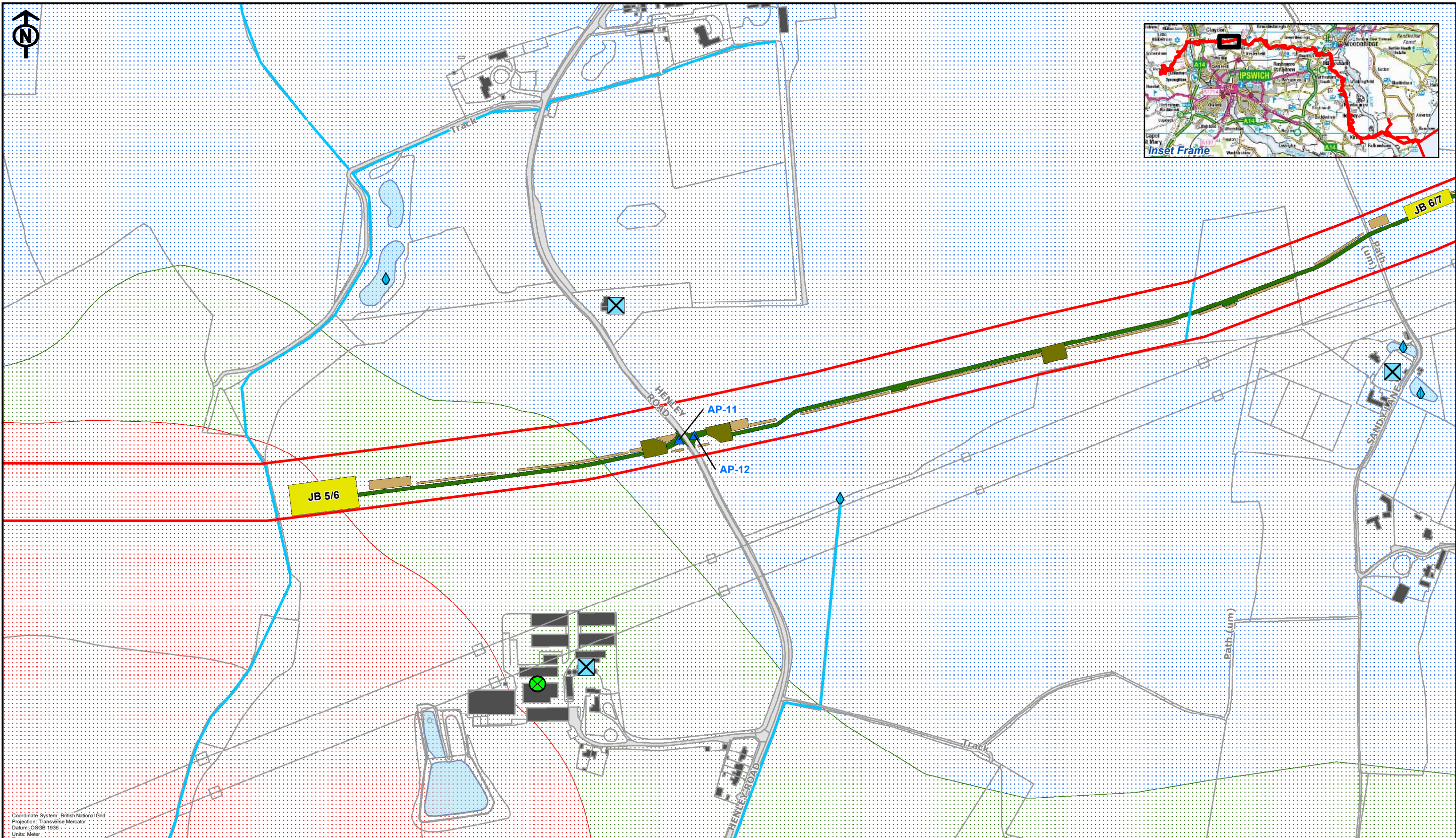
EA THREE Development Order Limit	Ordinary Watercourse	Zone II - Outer Protection Zone
Stone Haul Road	Surface Water Area	Zone III - Total Catchment
Top Soil Bund	Source Protection Zones	Spring
Jointing Bay Hardstanding	Zone I - Inner Protection Zone	Private Water Supply



Original A3 Plot Scale 1:5,000	0	100	200 Metres
Rev	Date	By	Comment
A	10/11/2023	PW	First Issue

EA THREE Cable Route
 FIGURE 2.6 Hydrological and Hydrogeological Features

Drg No	404.5356.00006.0002.0
Rev	0
Date	10/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

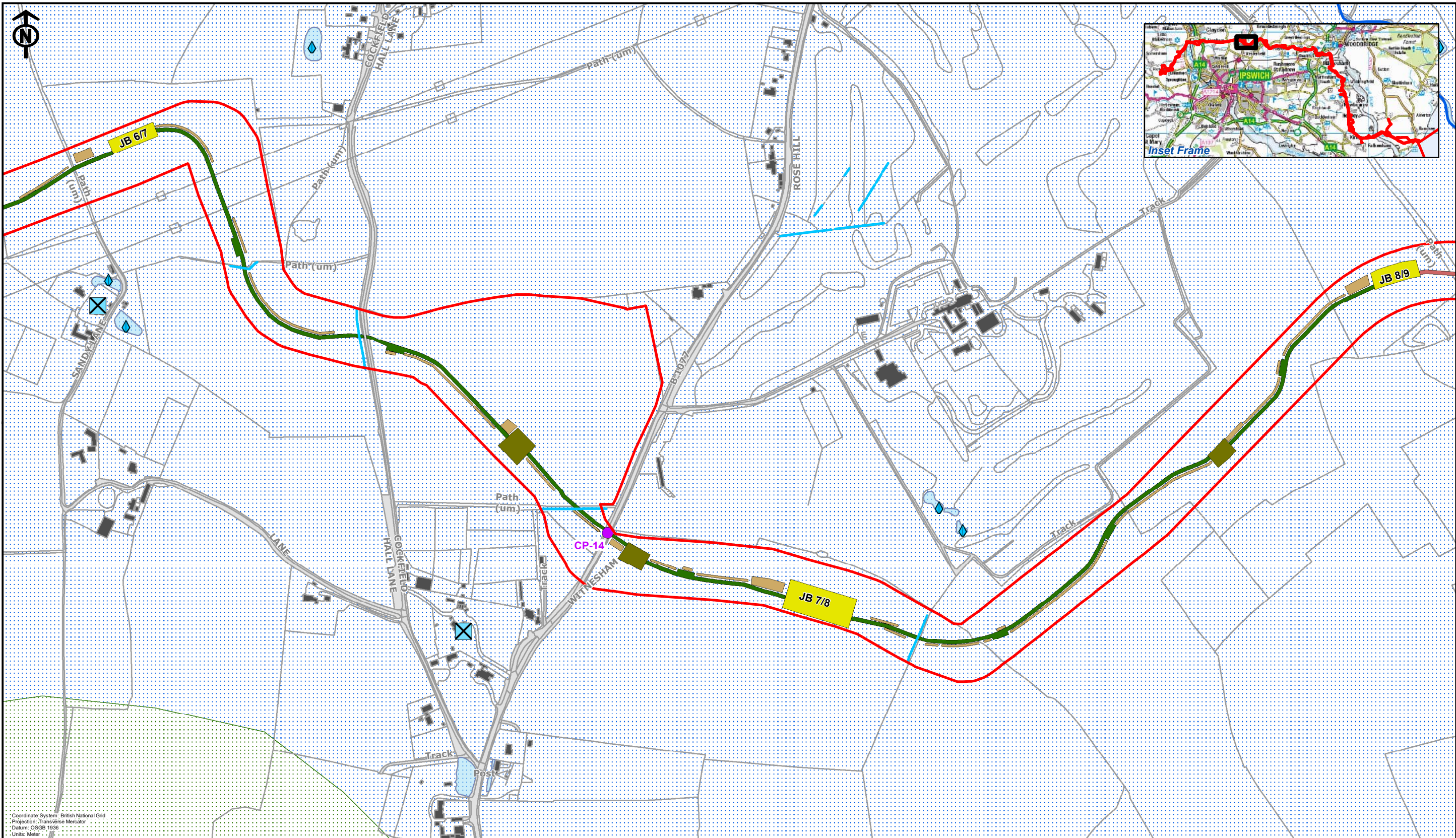
EA THREE Development Order Limit	Stone Haul Road	Surface Water Area	Zone III - Total Catchment	Private Water Supply
Access Point	Top Soil Bund	Source Protection Zones	Spring	Licensed Surface Water Abstraction
Watercourse within the DOL	Jointing Bay Hardstanding	Zone I - Inner Protection Zone	Licensed Surface Water Abstraction	
HGV Turning	Ordinary Watercourse	Zone II - Outer Protection Zone		



				Original A3 Plot Scale 1:5,000	0 100 200 Metres
A	10/11/2023	PW	First Issue	© Crown copyright. All rights reserved. (2022) Licence number 0100031673. © Environment Agency copyright and/or database right [2023]. All rights reserved.	
Rev	Date	By	Comment		

EA THREE Cable Route
 FIGURE 2.7 Hydrological and Hydrogeological Features

Drg No	404.5356.00006.0002.0
Rev	0
Date	10/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

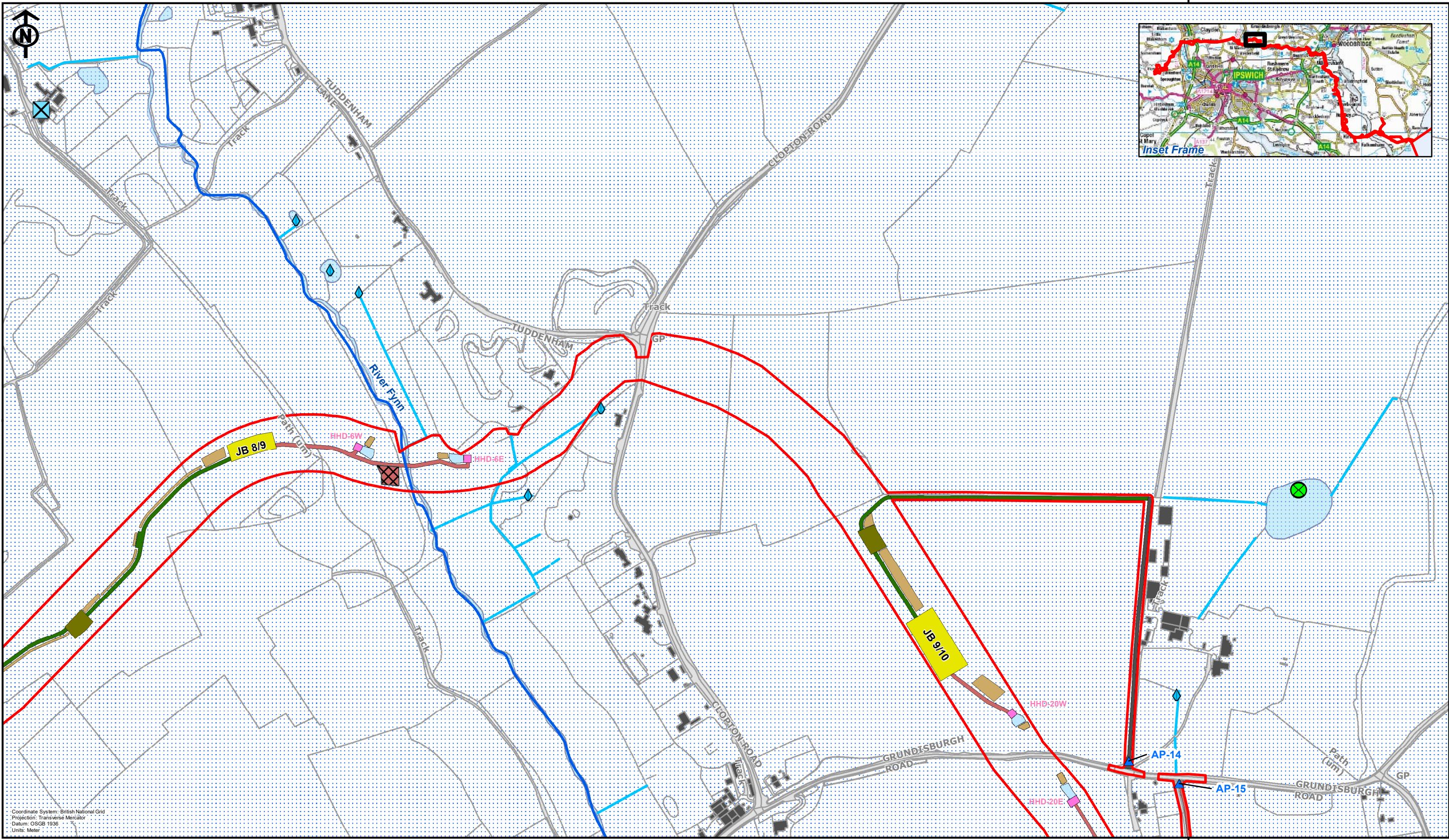
EA THREE Development Order Limit	HGV Turning	Jointing Bay Hardstanding	Source Protection Zones	Private Water Supply
Crossing Point (Road Crossings Numbered)	Stone Haul Road	Statutory Main River	Zone II - Outer Protection Zone	
Watercourse within the DOL	Trackway	Ordinary Watercourse	Zone III - Total Catchment	
	Top Soil Bund	Surface Water Area	Spring	



Original A3 Plot Scale 1:5,000	0	100	200 Metres
Rev	Date	By	Comment
A	10/11/2023	PW	First Issue

EA THREE Cable Route
 FIGURE 2.8 Hydrological and Hydrogeological Features

Drg No	404.5356.00006.0002.0
Rev	0
Date	10/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

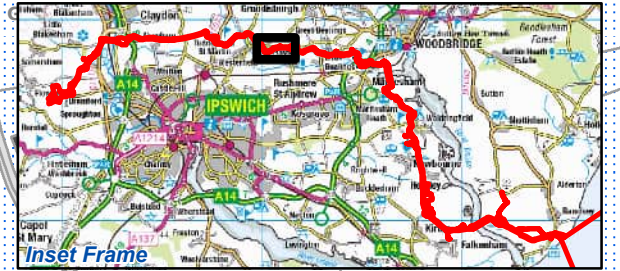
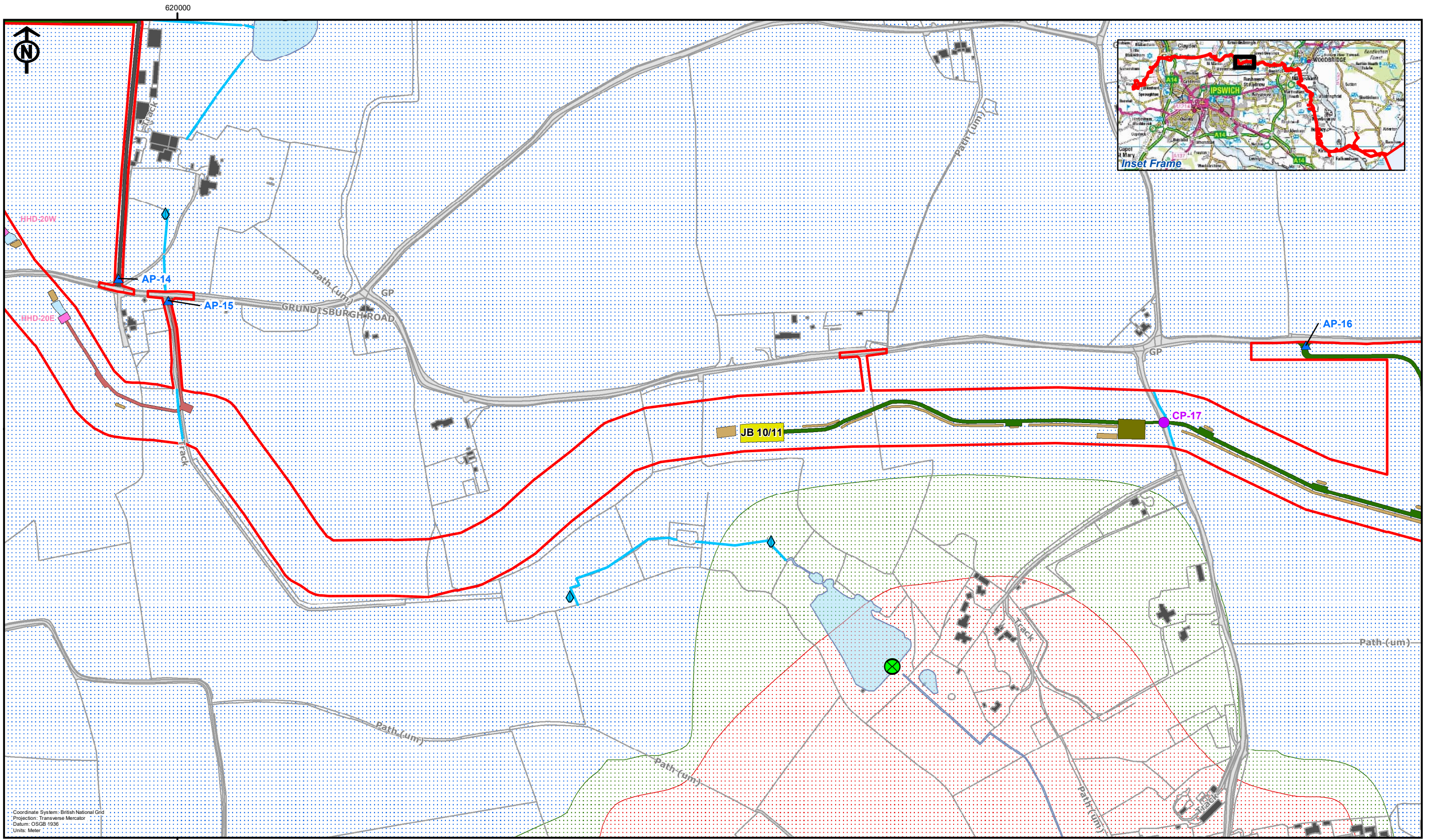
EA THREE Development Order Limit	HGV Turning	Top Soil Strip	Statutory Main River	Source Protection Zones	Private Water Supply
Access Point	Stone Haul Road	Top Soil Bund	Ordinary Watercourse	Zone III - Total Catchment	
Watercourse within the DOL	Trackway	Jointing Bay Hardstanding	Surface Water Area	Spring	
Existing Track	Trackway Crane Pad	Horizontal Direct Drill Work Platform		Licensed Surface Water Abstraction	



				Original A3 Plot Scale 1:5,000	0 100 200 Metres
Rev	Date	By	Comment		
A	10/11/2023	PW	First Issue		

EA THREE Cable Route
 FIGURE 2.9 Hydrological and Hydrogeological Features

Drg No	404.5356.00006.0002.0
Rev	0
Date	10/11/2023
Layout	N/A



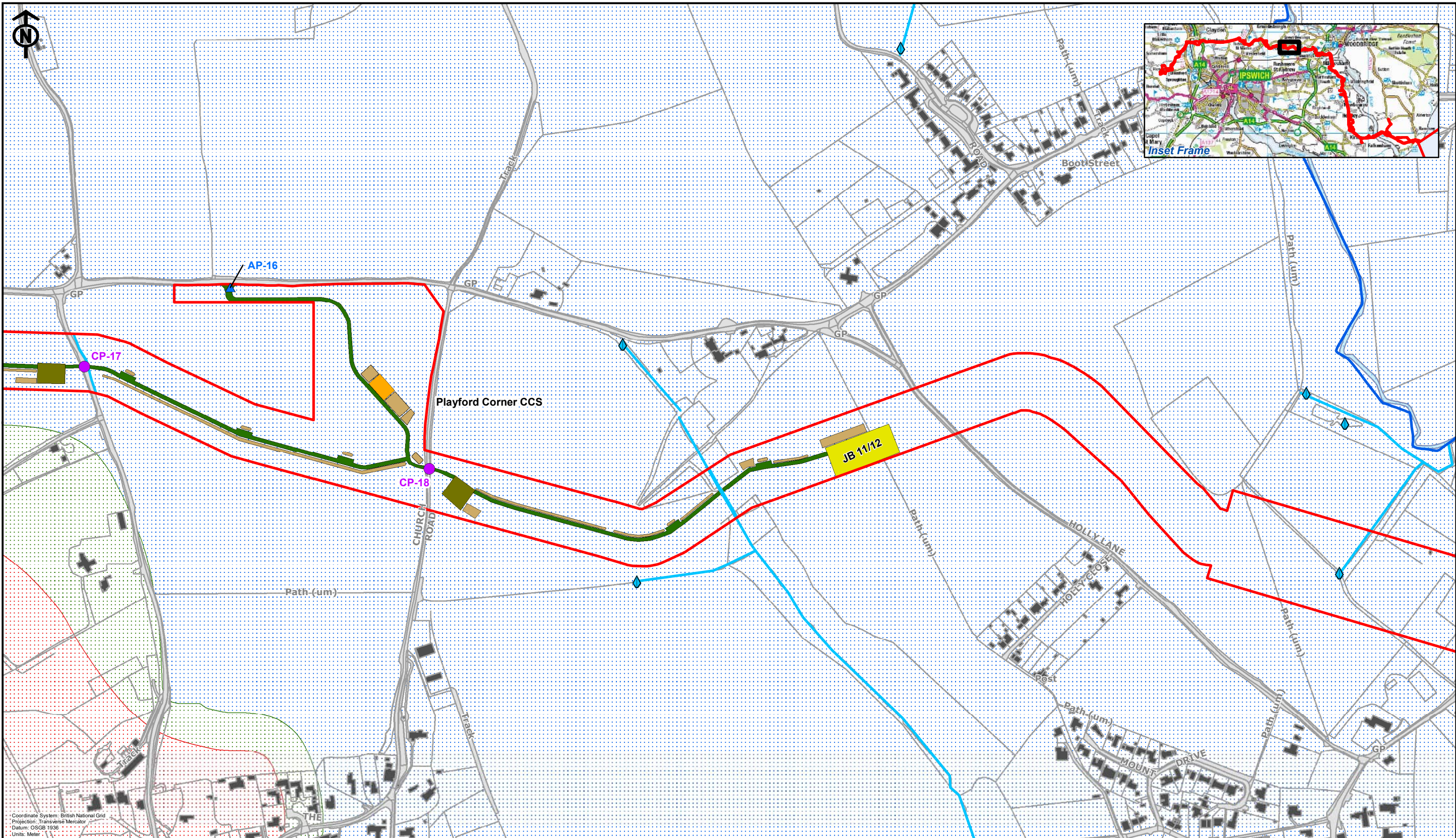
EA THREE Development Order Limit	Watercourse within the DOL	Trackway	Horizontal Direct Drill Work Platform	Source Protection Zones Zone I - Inner Protection Zone	Spring
Access Point	Existing Track	Top Soil Strip	Ordinary Watercourse	Source Protection Zones Zone II - Outer Protection Zone	Licensed Surface Water Abstraction
Crossing Point (Road Crossings Numbered)	HGV Turning	Top Soil Bund	Surface Water Area	Source Protection Zones Zone III - Total Catchment	
	Stone Haul Road	Jointing Bay Hardstanding			



				Original A3 Plot Scale 1:5,000	0 100 200 Metres	
Rev	Date	By	Comment	© Crown copyright. All rights reserved. (2022) Licence number 0100031673. © Environment Agency copyright and/or database right (2023). All rights reserved.		
A	10/11/2023	PW	First Issue			

EA THREE Cable Route
 FIGURE 2.10 Hydrological and Hydrogeological Features

Drg No	404.5356.00006.0002.0
Rev	0
Date	10/11/2023
Layout	N/A



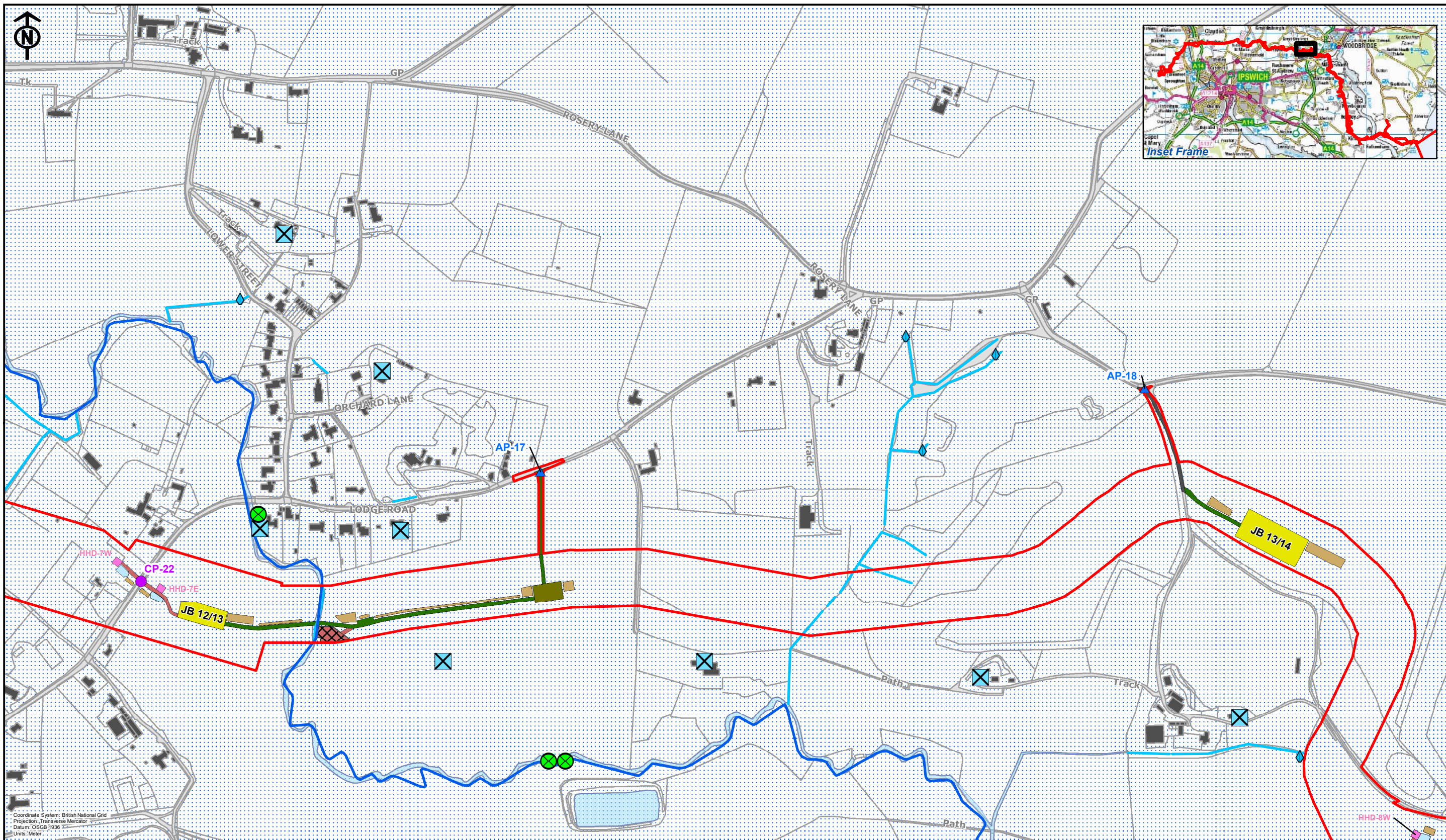
EA THREE Development Order Limit	Watercourse within the DOL	Jointing Bay Hardstanding	Surface Water Area	Zone III - Total Catchment
Access Point	HGV Turning	Consolidated Construction Site Compound	Source Protection Zones	Spring
Crossing Point (Road Crossings Numbered)	Stone Haul Road	Statutory Main River	Zone I - Inner Protection Zone	
	Top Soil Bund	Ordinary Watercourse	Zone II - Outer Protection Zone	



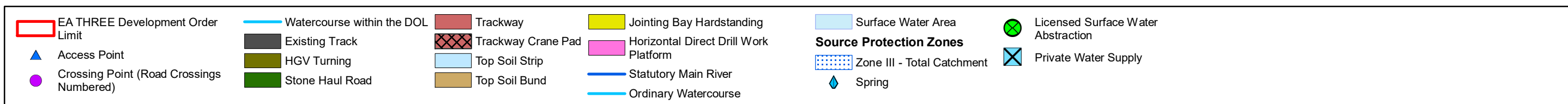
				Original A3 Plot Scale 1:5,000	0 100 200 Metres
Rev	Date	By	Comment		
A	10/11/2023	PW	First Issue		

EA THREE Cable Route
 FIGURE 2.11 Hydrological and Hydrogeological Features

Drg No	404.5356.00006.0002.0
Rev	0
Date	10/11/2023
Layout	N/A



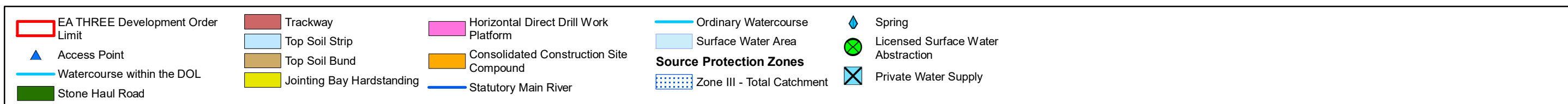
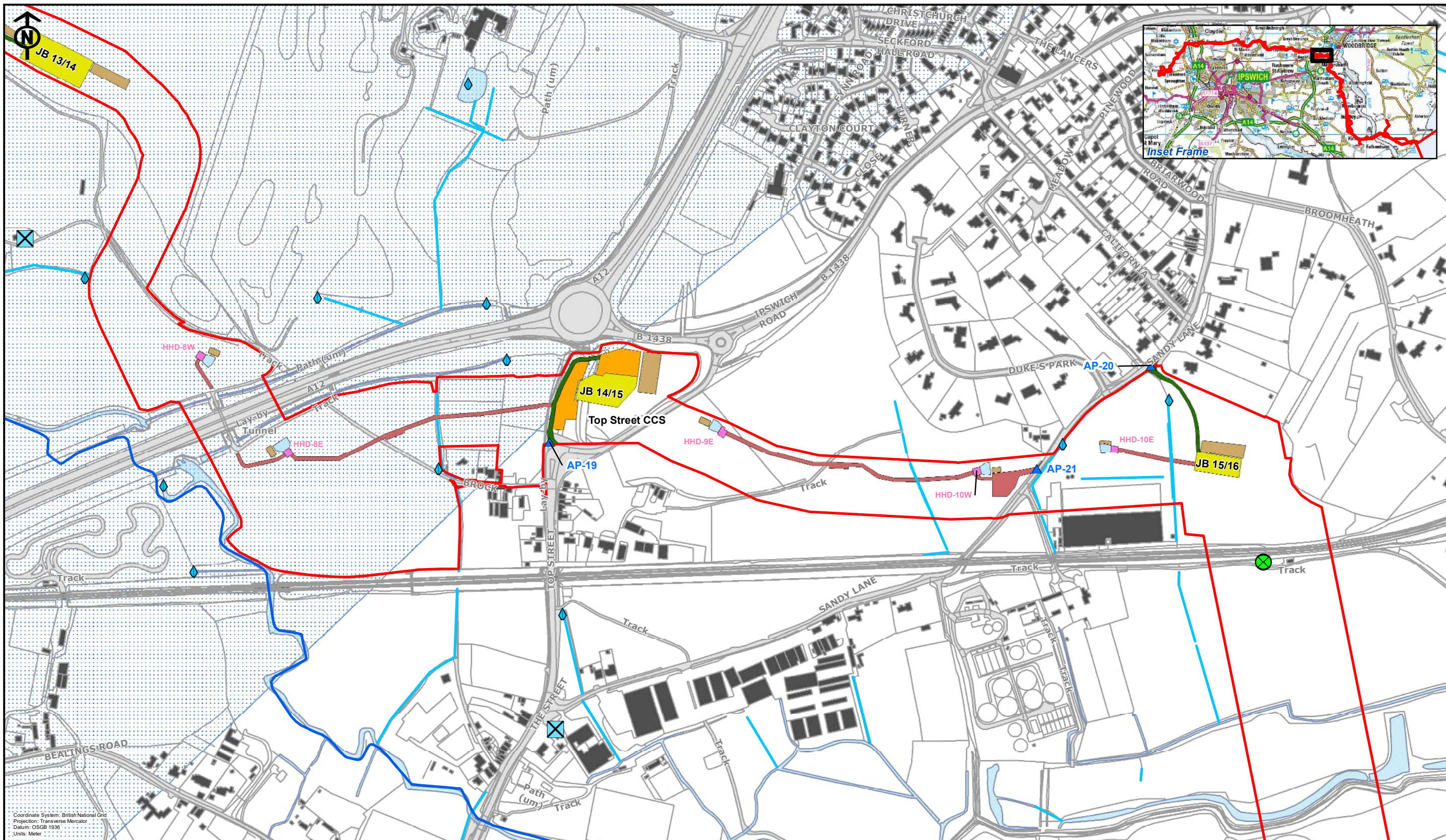
Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 3936
 Units: Meter



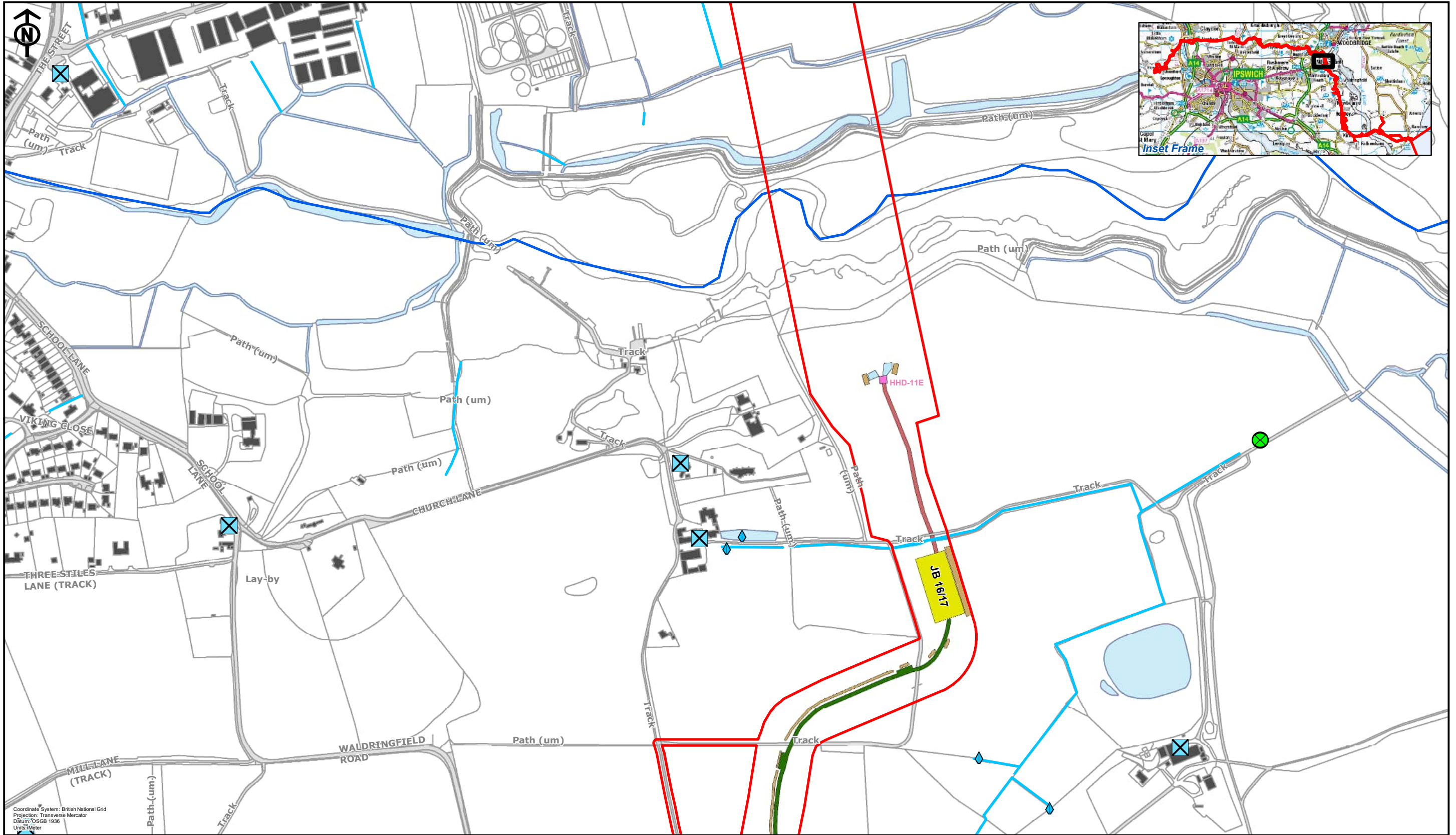
				Original A3 Plot Scale 1:5,000	0 100 200 Metres
Rev	Date	By	Comment		
A	10/11/2023	PW	First Issue		

EA THREE Cable Route
 FIGURE 2.12 Hydrological and Hydrogeological Features

Drg No	404.5356.00006.0002.0
Rev	0
Date	10/11/2023
Layout	N/A



	Original A3 Plot Scale 1:5,000	0 100 200 Metres	EA THREE Cable Route FIGURE 2.13 Hydrological and Hydrogeological Features	Drp No 404.5356.00006.0002.0
	A 10/11/2023 PW First Issue Rev Date By Comment	© Crown copyright. All rights reserved. (2022) Licence number 0100031673. © Environment Agency copyright and/or database right (2023). All rights reserved.		Date 10/11/2023 Layout N/A



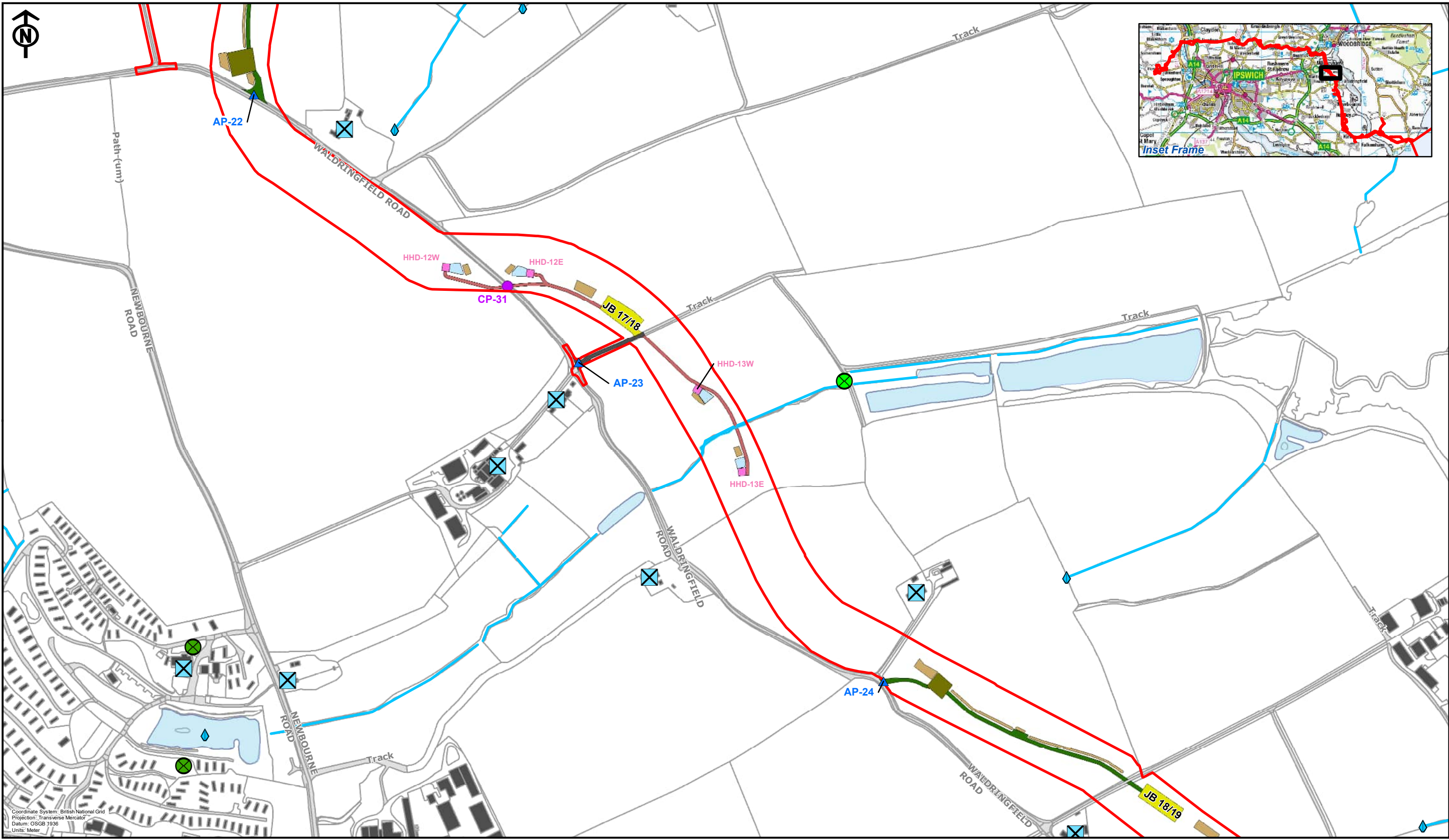
EA THREE Development Order Limit	Top Soil Strip	Statutory Main River	Licensed Surface Water Abstraction
Watercourse within the DOL	Top Soil Bund	Ordinary Watercourse	Private Water Supply
Stone Haul Road	Jointing Bay Hardstanding	Surface Water Area	Spring
Trackway	Horizontal Direct Drill Work Platform		



Original A3 Plot Scale 1:5,000	0 100 200 Metres								
<table border="1"> <thead> <tr> <th>Rev</th> <th>Date</th> <th>By</th> <th>Comment</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>10/11/2023</td> <td>PW</td> <td>First Issue</td> </tr> </tbody> </table>	Rev	Date	By	Comment	A	10/11/2023	PW	First Issue	<p>© Crown copyright. All rights reserved. (2022) Licence number 0100031673. © Environment Agency copyright and/or database right [2023]. All rights reserved.</p>
Rev	Date	By	Comment						
A	10/11/2023	PW	First Issue						

EA THREE Cable Route
 FIGURE 2.14 Hydrological and Hydrogeological Features

Drg No	404.5356.00006.0002.0
Rev	0
Date	10/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

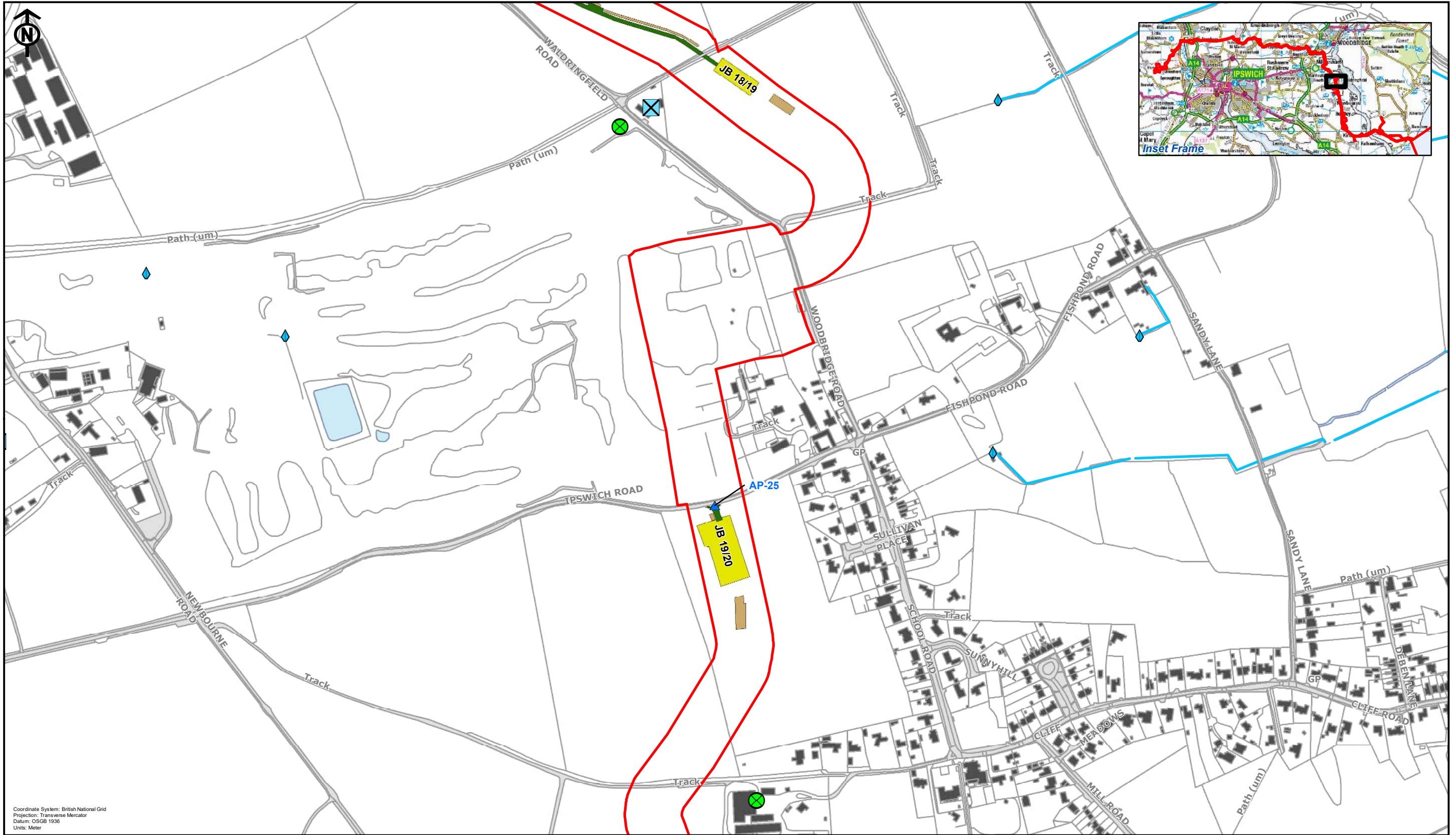
EA THREE Development Order Limit	Watercourse within the DOL	Trackway	Horizontal Direct Drill Work Platform	Licensed Surface Water Abstraction
Access Point	Existing Track	Top Soil Strip	Ordinary Watercourse	Licensed Ground Water Abstraction
Crossing Point (Road Crossings Numbered)	HGV Turning	Top Soil Bund	Surface Water Area	Private Water Supply
	Stone Haul Road	Jointing Bay Hardstanding	Spring	



				Original A3 Plot Scale 1:5,000	0 100 200 Metres
A	10/11/2023	PW	First Issue	© Crown copyright. All rights reserved. (2022) Licence number 0100031673. © Environment Agency copyright and/or database right [2023]. All rights reserved.	
Rev	Date	By	Comment		

EA THREE Cable Route
 FIGURE 2.15 Hydrological and Hydrogeological Features

Drg No	404.5356.00006.0002.0
Rev	0
Date	10/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

- EA THREE Development Order Limit
- Jointing Bay Hardstanding
- ⊗ Licensed Surface Water Abstraction
- ▲ Access Point
- Ordinary Watercourse
- ⊗ Private Water Supply
- Stone Haul Road
- Surface Water Area
- ◆ Spring
- Top Soil Bund



Rev	Date	By	Comment
A	10/11/2023	PW	First Issue

Original A3 Plot Scale 1:5,000

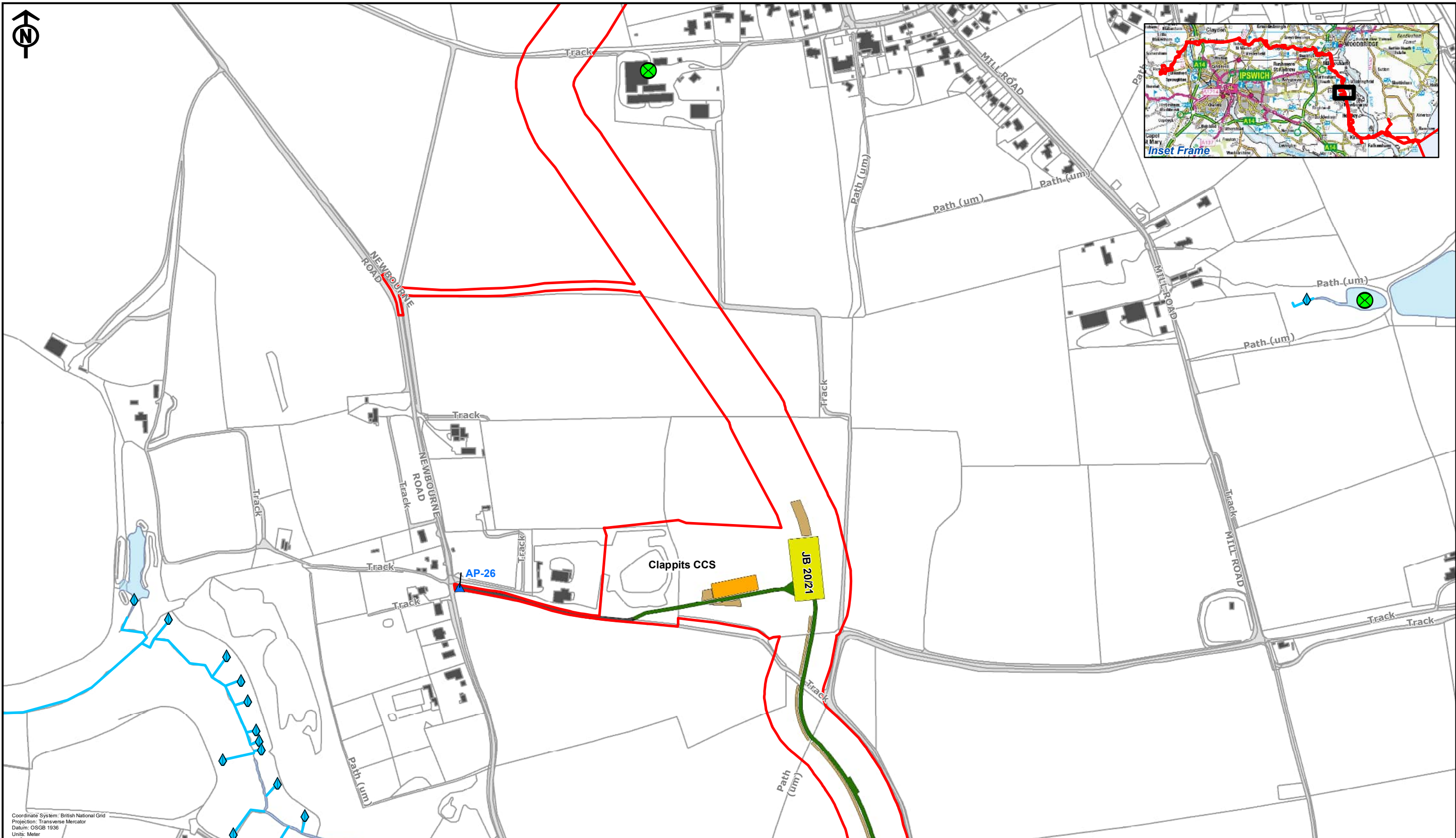
0 100 200 Metres

© Crown copyright. All rights reserved. (2022) Licence number 0100031673.
 © Environment Agency copyright and/or database right [2023]. All rights reserved.

EA THREE Cable Route

FIGURE 2.16 Hydrological and Hydrogeological Features

Drg No	404.5356.00006.0002.0
Rev	0
Date	10/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

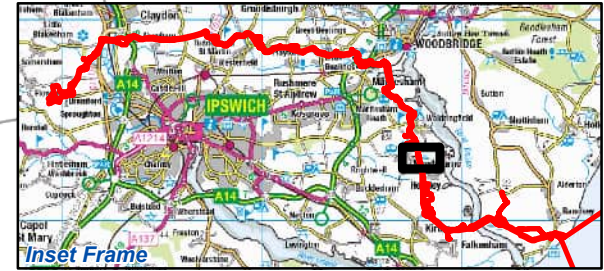
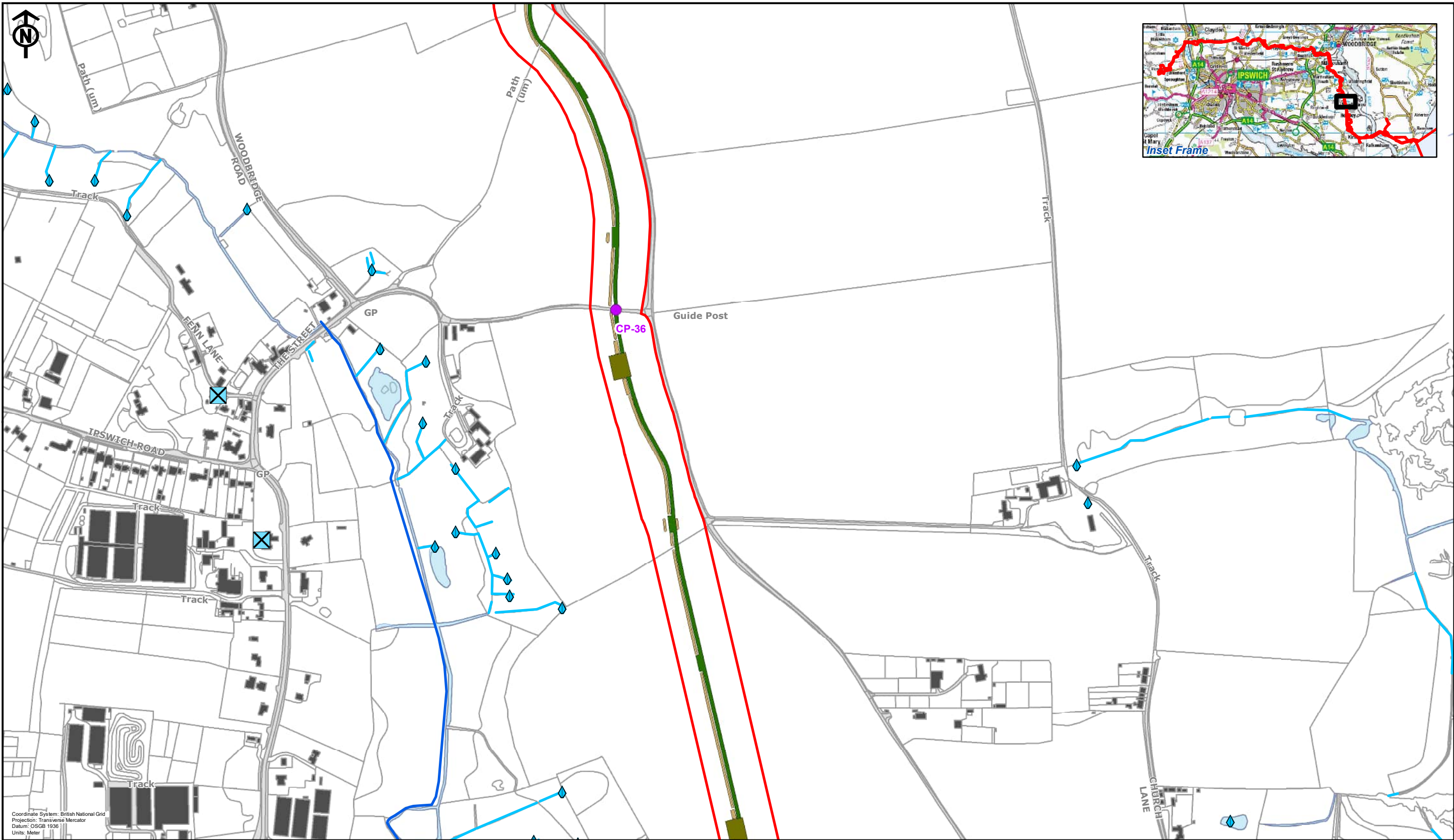
EA THREE Development Order Limit	Top Soil Bund	Surface Water Area
Access Point	Jointing Bay Hardstanding	Spring
Existing Track	Consolidated Construction Site Compound	Licensed Surface Water Abstraction
Stone Haul Road	Ordinary Watercourse	



				Original A3 Plot Scale 1:5,000	0 100 200 Metres
Rev	Date	By	Comment		
A	10/11/2023	PW	First Issue		

EA THREE Cable Route
 FIGURE 2.17 Hydrological and Hydrogeological Features

Drg No	404.5356.00006.0002.0
Rev	0
Date	10/11/2023
Layout	N/A



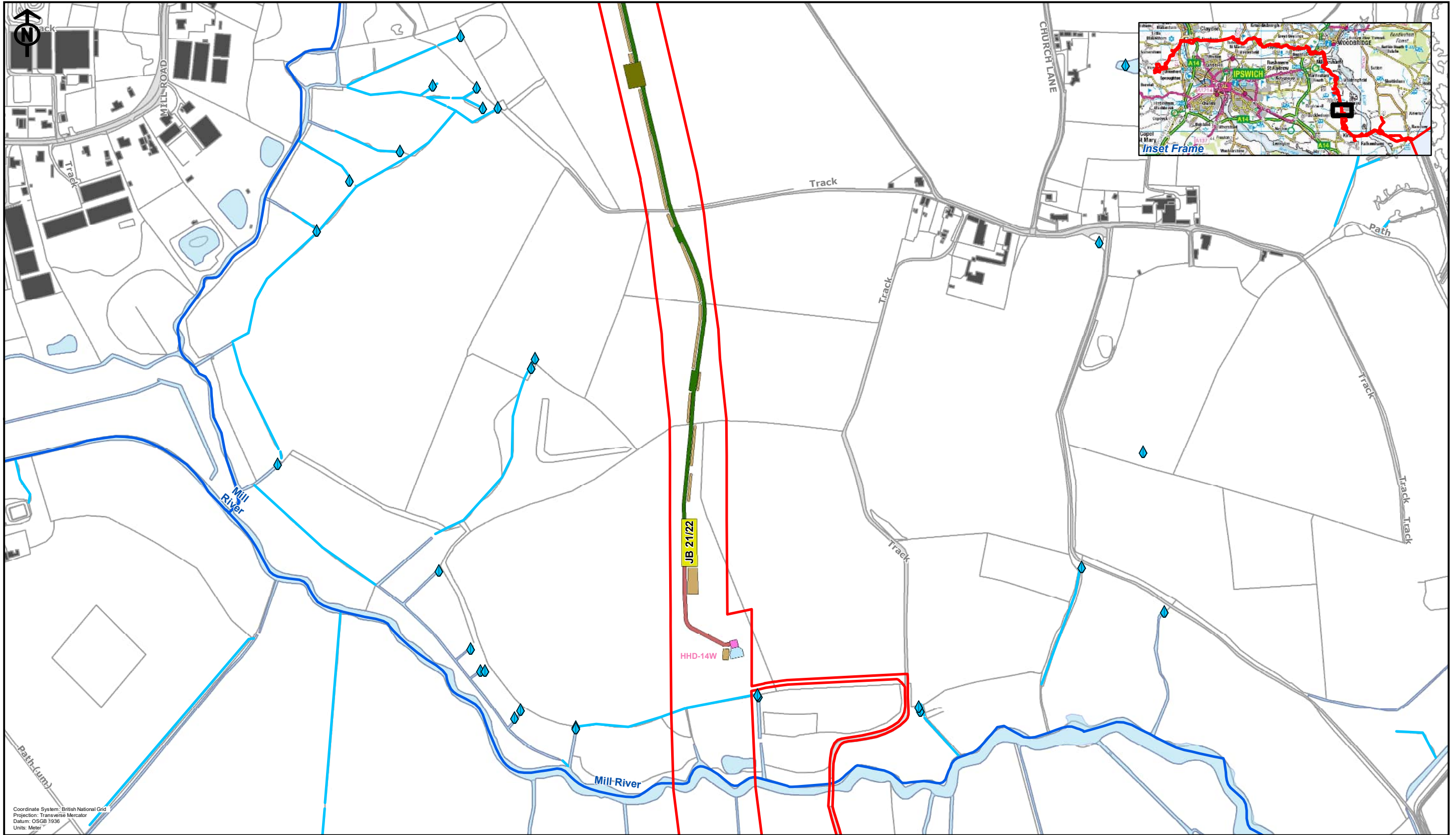
EA THREE Development Order Limit	Stone Haul Road	Surface Water Area
Crossing Point (Road Crossings Numbered)	Top Soil Bund	Spring
HGV Turning	Statutory Main River	Private Water Supply
	Ordinary Watercourse	



				Original A3 Plot Scale 1:5,000	0 100 200 Metres
Rev	Date	By	Comment	© Crown copyright. All rights reserved. (2022) Licence number 0100031673. © Environment Agency copyright and/or database right [2023]. All rights reserved.	
A	10/11/2023	PW	First Issue		

EA THREE Cable Route
 FIGURE 2.18 Hydrological and Hydrogeological Features

Drg No	404.5356.00006.0002.0
Rev	0
Date	10/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

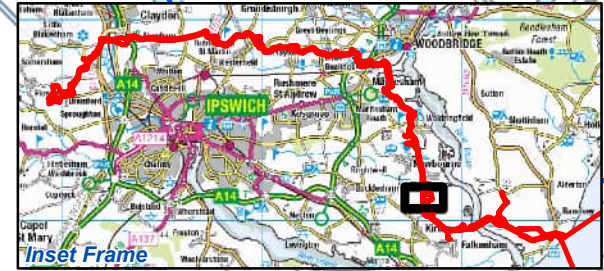
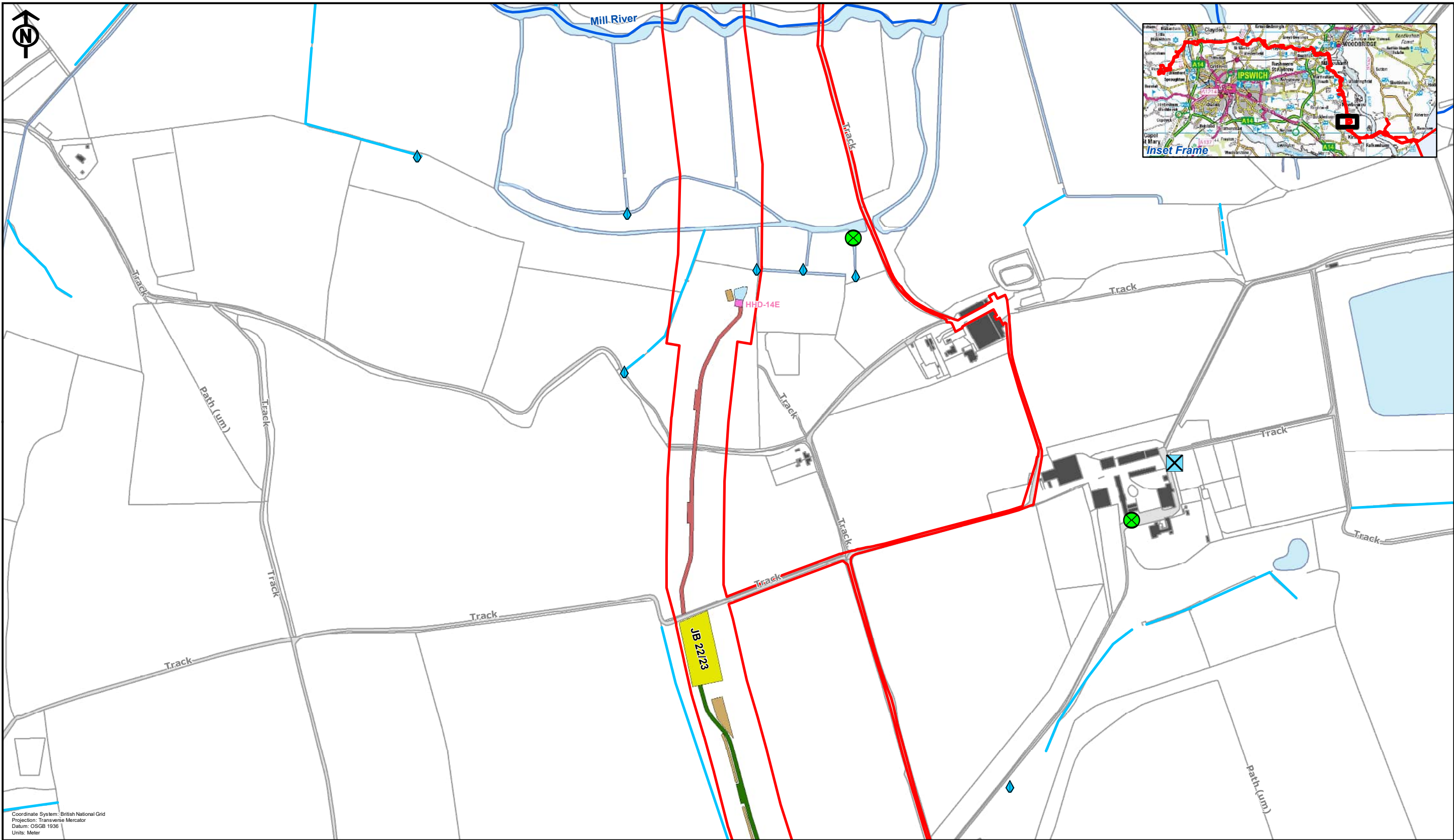
EA THREE Development Order Limit	Top Soil Strip	Statutory Main River
HGV Turning	Top Soil Bund	Ordinary Watercourse
Stone Haul Road	Jointing Bay Hardstanding	Surface Water Area
Trackway	Horizontal Direct Drill Work Platform	Spring



Original A3 Plot Scale 1:5,000	0 100 200 Metres								
<table border="1"> <tr> <td>Rev</td> <td>Date</td> <td>By</td> <td>Comment</td> </tr> <tr> <td>A</td> <td>10/11/2023</td> <td>PW</td> <td>First Issue</td> </tr> </table>	Rev	Date	By	Comment	A	10/11/2023	PW	First Issue	<p>© Crown copyright. All rights reserved. (2022) Licence number 0100031673. © Environment Agency copyright and/or database right [2023]. All rights reserved.</p>
Rev	Date	By	Comment						
A	10/11/2023	PW	First Issue						

EA THREE Cable Route
 FIGURE 2.19 Hydrological and Hydrogeological Features

Drg No	404.5356.00006.0002.0
Rev	0
Date	10/11/2023
Layout	N/A



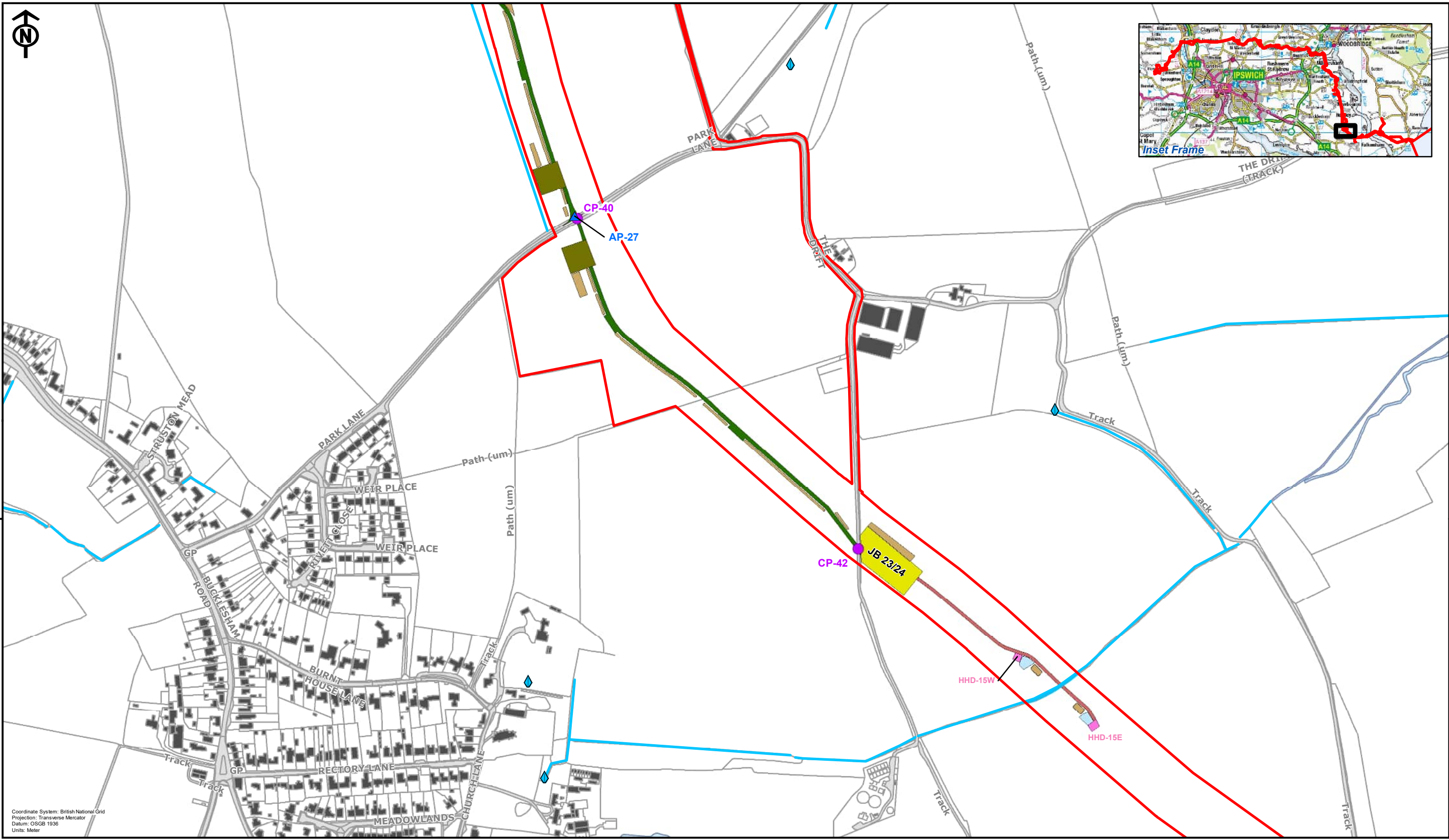
EA THREE Development Order Limit	Top Soil Bund	Ordinary Watercourse	Private Water Supply
Stone Haul Road	Jointing Bay Hardstanding	Surface Water Area	Spring
Trackway	Horizontal Direct Drill Work Platform	Licensed Surface Water Abstraction	
Top Soil Strip	Statutory Main River		



Original A3 Plot Scale 1:5,000	0 100 200 Metres								
<table border="1"> <tr> <th>Rev</th> <th>Date</th> <th>By</th> <th>Comment</th> </tr> <tr> <td>A</td> <td>10/11/2023</td> <td>PW</td> <td>First Issue</td> </tr> </table>	Rev	Date	By	Comment	A	10/11/2023	PW	First Issue	<p>© Crown copyright. All rights reserved. (2022) Licence number 0100031673. © Environment Agency copyright and/or database right (2023). All rights reserved.</p>
Rev	Date	By	Comment						
A	10/11/2023	PW	First Issue						

EA THREE Cable Route
 FIGURE 2.20 Hydrological and Hydrogeological Features

Drg No	404.5356.00006.0002.0
Rev	0
Date	10/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

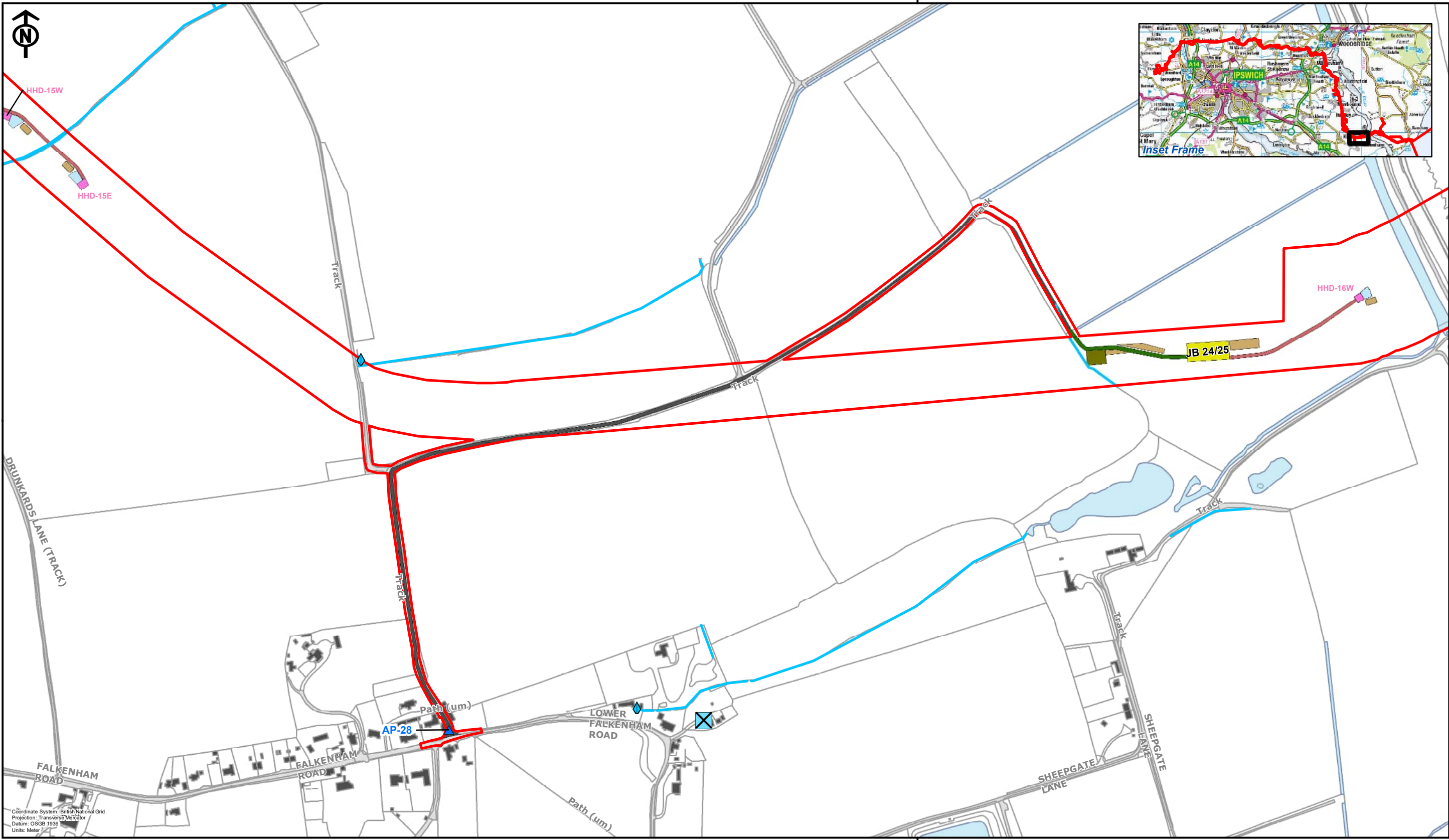
EA THREE Development Order Limit	Watercourse within the DOL	Top Soil Strip	Ordinary Watercourse
Access Point	HGV Turning	Top Soil Bund	Surface Water Area
Crossing Point (Road Crossings Numbered)	Stone Haul Road	Jointing Bay Hardstanding	Spring
	Trackway	Horizontal Direct Drill Work Platform	



				Original A3 Plot Scale 1:5,000	0 100 200 Metres
Rev	Date	By	Comment		
A	10/11/2023	PW	First Issue		

EA THREE Cable Route
 FIGURE 2.21 Hydrological and Hydrogeological Features

Drg No	404.5356.00006.0002.0
Rev	0
Date	10/11/2023
Layout	N/A



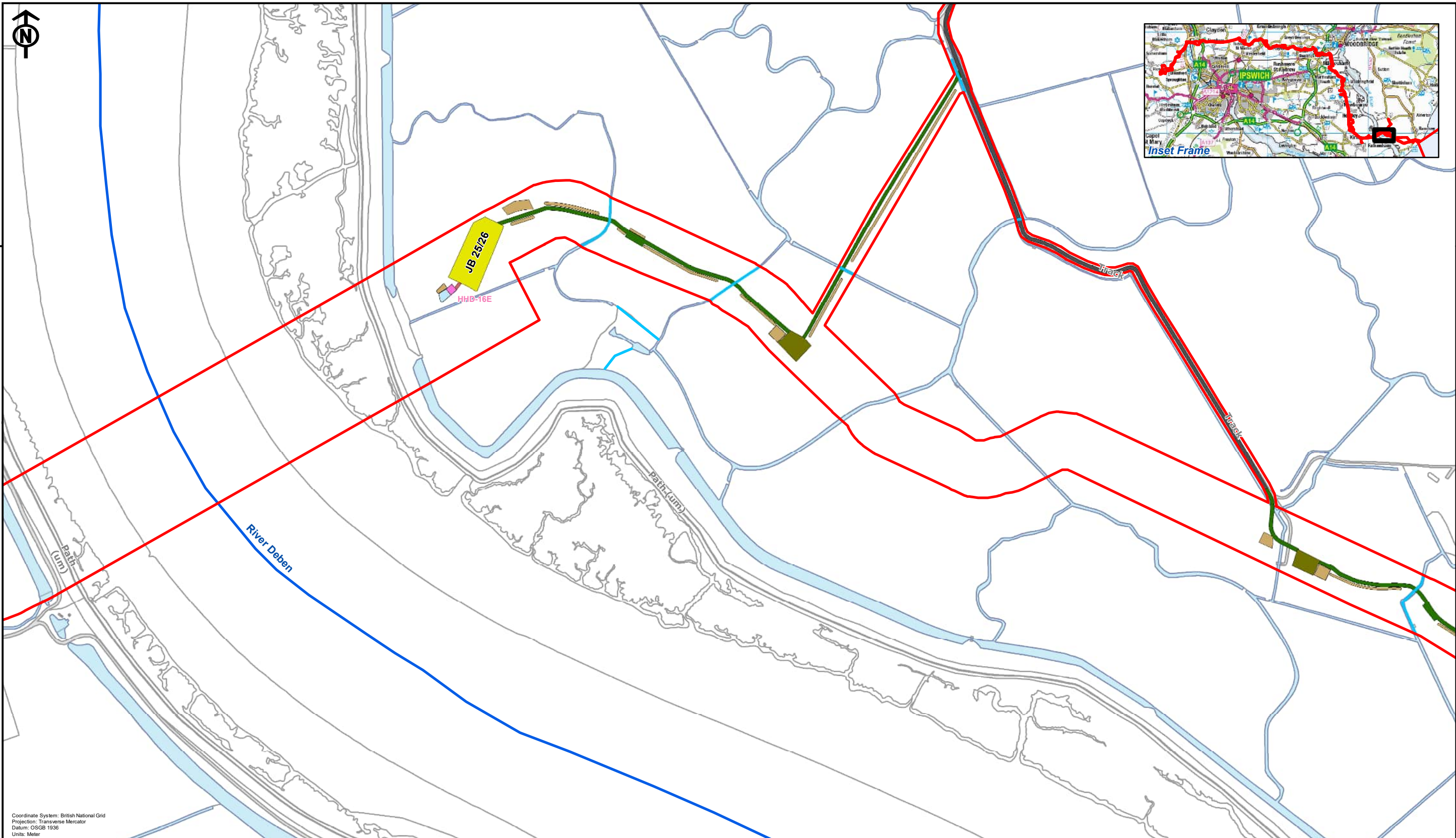
EA THREE Development Order Limit	HGV Turning	Top Soil Bund	Surface Water Area
Access Point	Stone Haul Road	Jointing Bay Hardstanding	Spring
Watercourse within the DOL	Trackway	Horizontal Direct Drill Work Platform	Private Water Supply
Existing Track	Top Soil Strip	Ordinary Watercourse	



Original A3 Plot Scale 1:5,000	0 100 200 Metres								
<table border="1"> <thead> <tr> <th>Rev</th> <th>Date</th> <th>By</th> <th>Comment</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>10/11/2023</td> <td>PW</td> <td>First Issue</td> </tr> </tbody> </table>	Rev	Date	By	Comment	A	10/11/2023	PW	First Issue	<p>© Crown copyright. All rights reserved. (2022) Licence number 0100031673. © Environment Agency copyright and/or database right [2023]. All rights reserved.</p>
Rev	Date	By	Comment						
A	10/11/2023	PW	First Issue						

EA THREE Cable Route
 FIGURE 2.22 Hydrological and Hydrogeological Features

Drg No	404.5356.00006.0002.0
Rev	0
Date	10/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

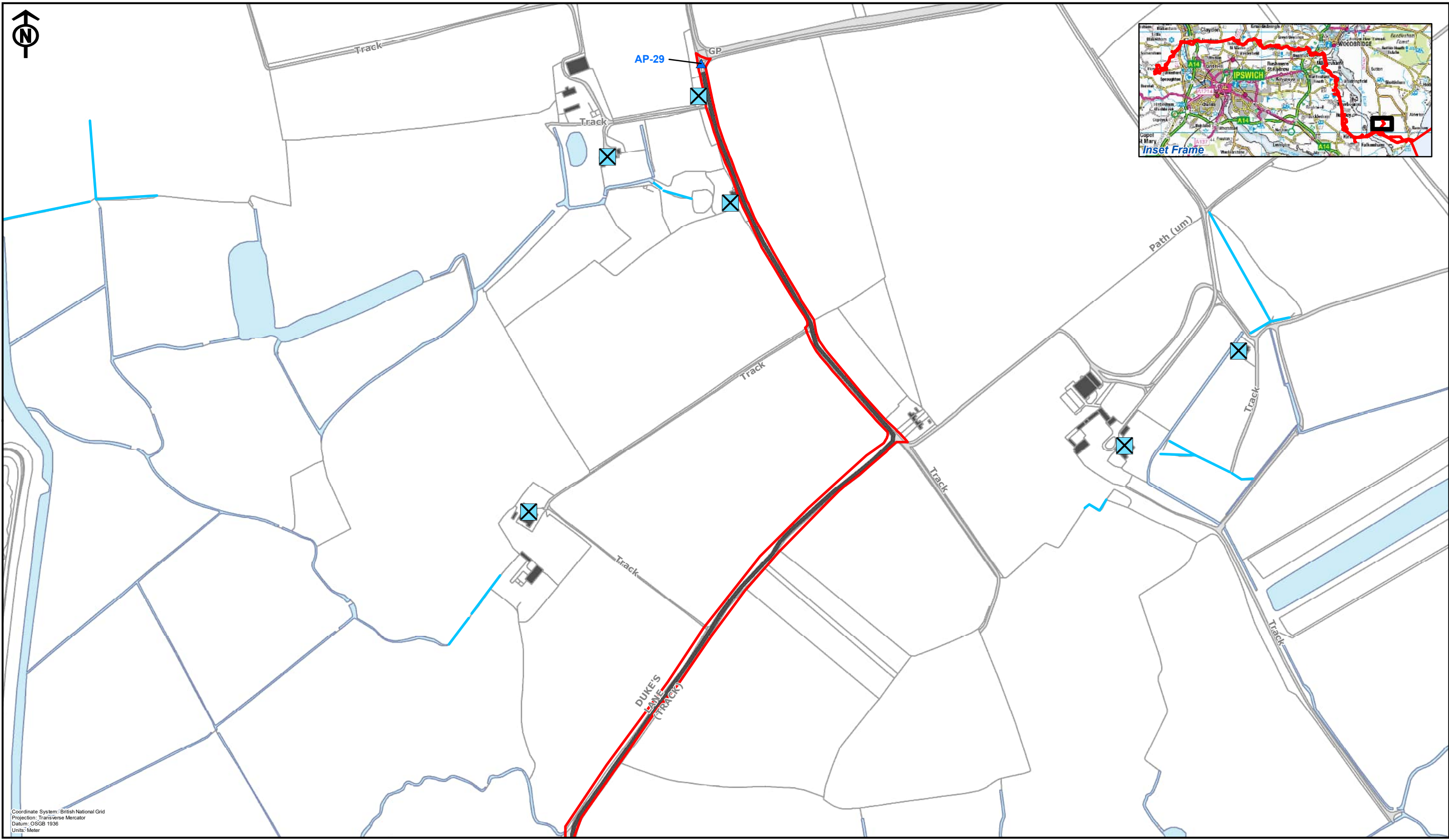
EA THREE Development Order Limit	Stone Haul Road	Jointing Bay Hardstanding	Surface Water Area
Watercourse within the DOL	Trackway	Horizontal Direct Drill Work Platform	
Existing Track	Top Soil Strip	Statutory Main River	
HGV Turning	Top Soil Bund	Ordinary Watercourse	



Original A3 Plot Scale 1:5,000	0	100	200 Metres
Rev	Date	By	Comment
A	10/11/2023	PW	First Issue

EA THREE Cable Route
 FIGURE 2.23 Hydrological and Hydrogeological Features

Drg No	404.5356.00006.0002.0
Rev	0
Date	10/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

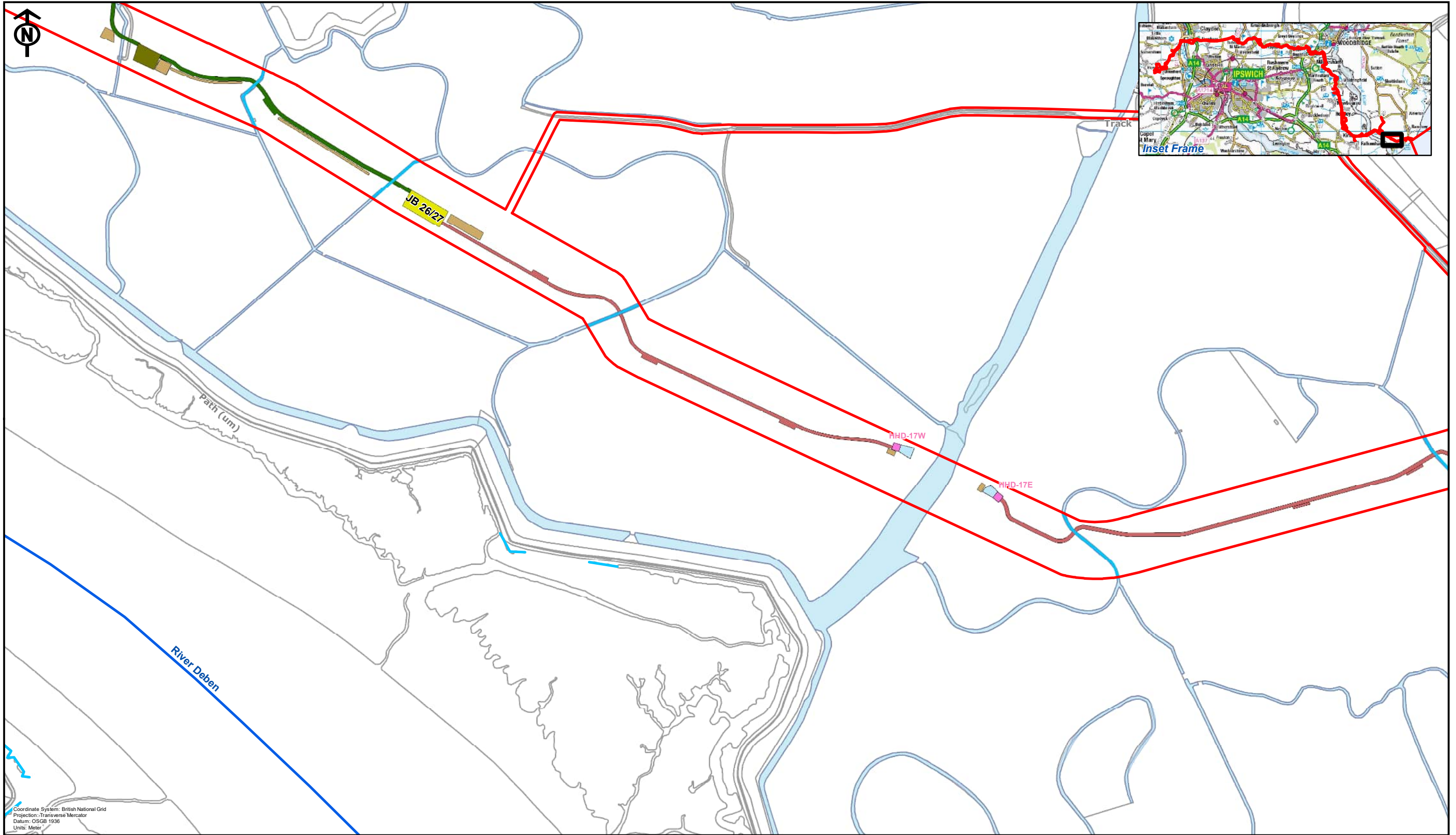
EA THREE Development Order Limit	Surface Water Area
Access Point	Private Water Supply
Existing Track	
Ordinary Watercourse	



				Original A3 Plot Scale 1:5,000	0 100 200 Metres
A	10/11/2023	PW	First Issue	© Crown copyright. All rights reserved. (2022) Licence number 0100031673. © Environment Agency copyright and/or database right (2023). All rights reserved.	
Rev	Date	By	Comment		

EA THREE Cable Route
 FIGURE 2.24 Hydrological and Hydrogeological Features

Drg No	404.5356.00006.0002.0
Rev	0
Date	10/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

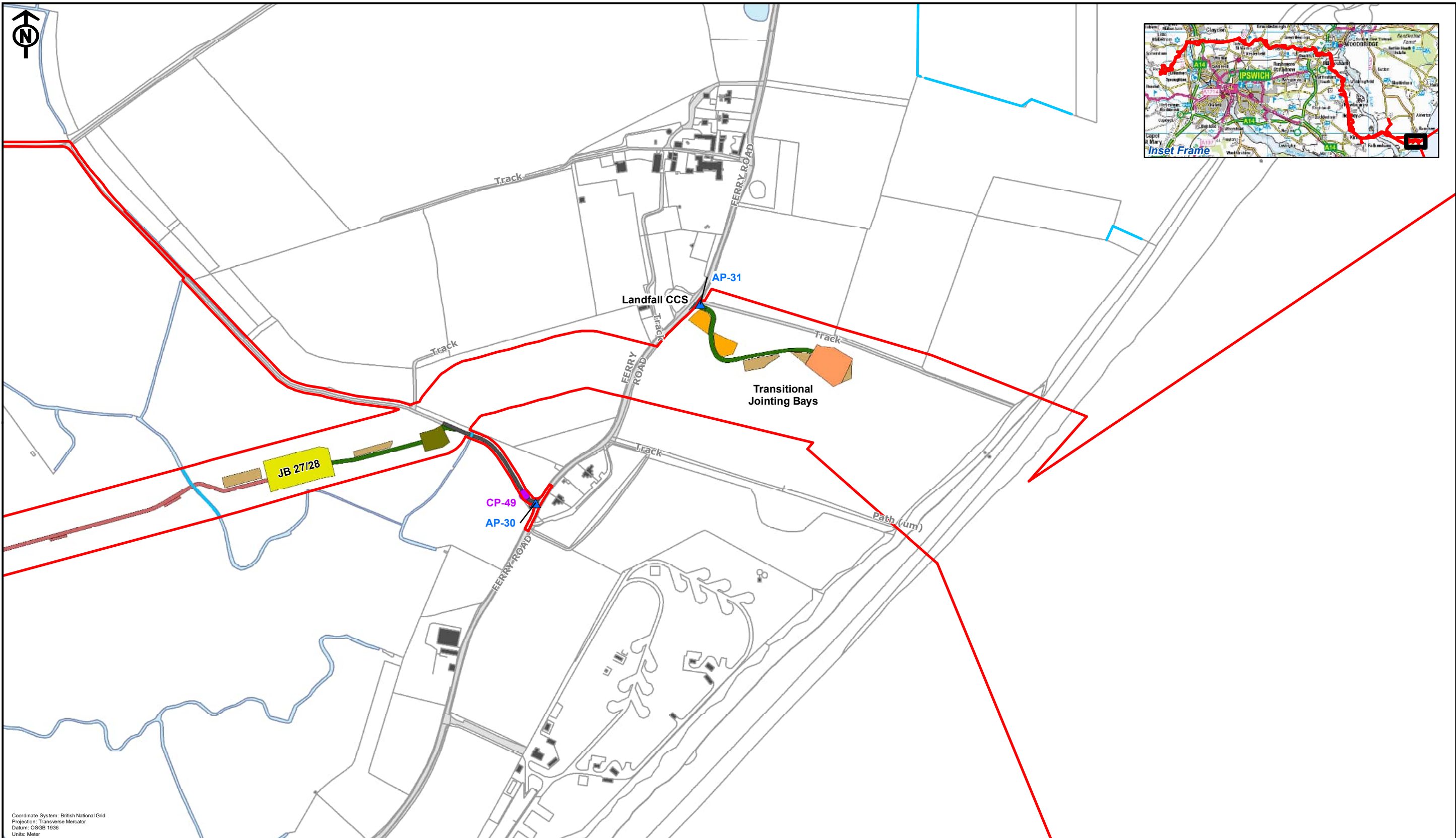
EA THREE Development Order Limit	Trackway	Horizontal Direct Drill Work Platform
Watercourse within the DOL	Top Soil Strip	Statutory Main River
HGV Turning	Jointing Bay Hardstanding	Ordinary Watercourse
Stone Haul Road		Surface Water Area



Original A3 Plot Scale 1:5,000	0 100 200 Metres								
<table border="1"> <thead> <tr> <th>Rev</th> <th>Date</th> <th>By</th> <th>Comment</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>10/11/2023</td> <td>PW</td> <td>First Issue</td> </tr> </tbody> </table>	Rev	Date	By	Comment	A	10/11/2023	PW	First Issue	<p>© Crown copyright. All rights reserved. (2022) Licence number 0100031673. © Environment Agency copyright and/or database right (2023). All rights reserved.</p>
Rev	Date	By	Comment						
A	10/11/2023	PW	First Issue						

EA THREE Cable Route
 FIGURE 2.25 Hydrological and Hydrogeological Features

Drg No	404.5356.00006.0002.0
Rev	0
Date	10/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

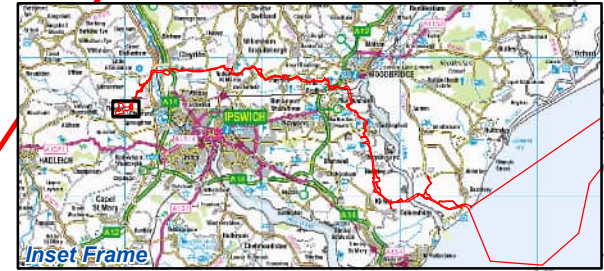
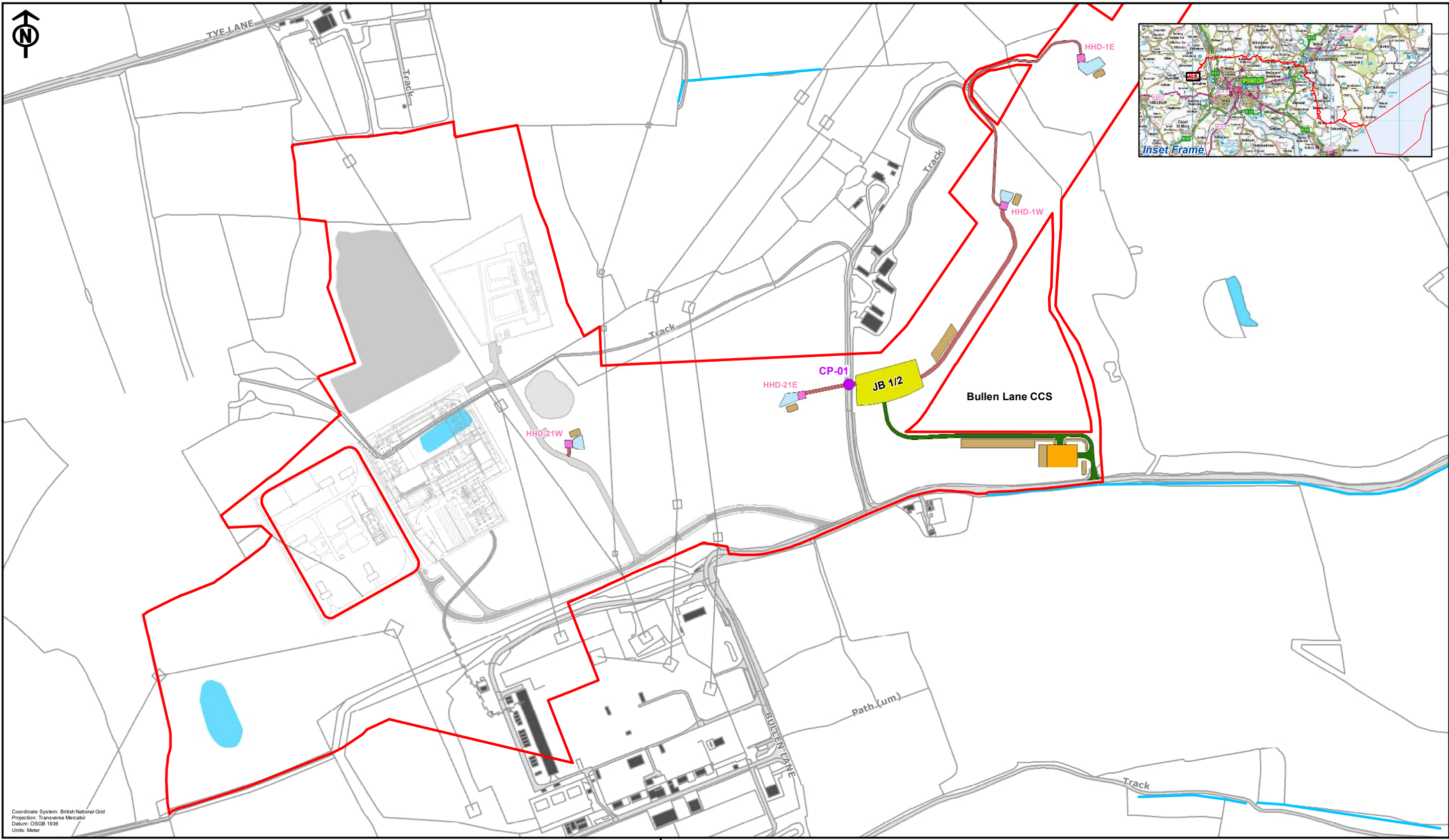
EA THREE Development Order Limit	Watercourse within the DOL	Trackway	Consolidated Construction Site Compound
Access Point	Existing Track	Transition Jointing Bays	Ordinary Watercourse
Crossing Point (Road Crossings Numbered)	HGV Turning	Top Soil Bund	Surface Water Area
	Stone Haul Road	Jointing Bay Hardstanding	



				Original A3 Plot Scale 1:5,000	0 100 200 Metres
Rev	Date	By	Comment		
A	10/11/2023	PW	First Issue		

EA THREE Cable Route
 FIGURE 2.26 Hydrological and Hydrogeological Features

Drg No	404.5356.00006.0002.0
Rev	0
Date	10/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

EA THREE Development Order Limits	Trackway	Horizontal Direct Drill Work Platform	EA THREE Onshore Substation Infrastructure
Crossing Point (Road Crossings Numbered)	Top Soil Strip	Consolidated Construction Site Compound	Watercourse (OS OpenMap Local)
Stone Haul Road	Jointing Bay Hardstanding	Top Soil Bund	Waterbody (OS OpenMap Local)



Rev	Date	By	Comment
A	10/11/2023	PW	First Issue

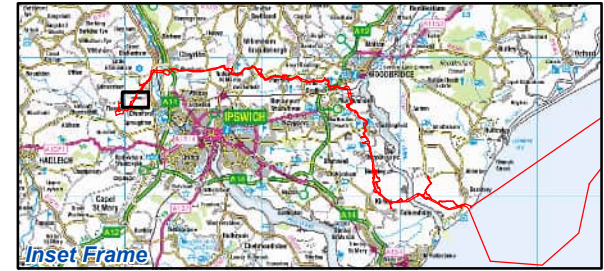
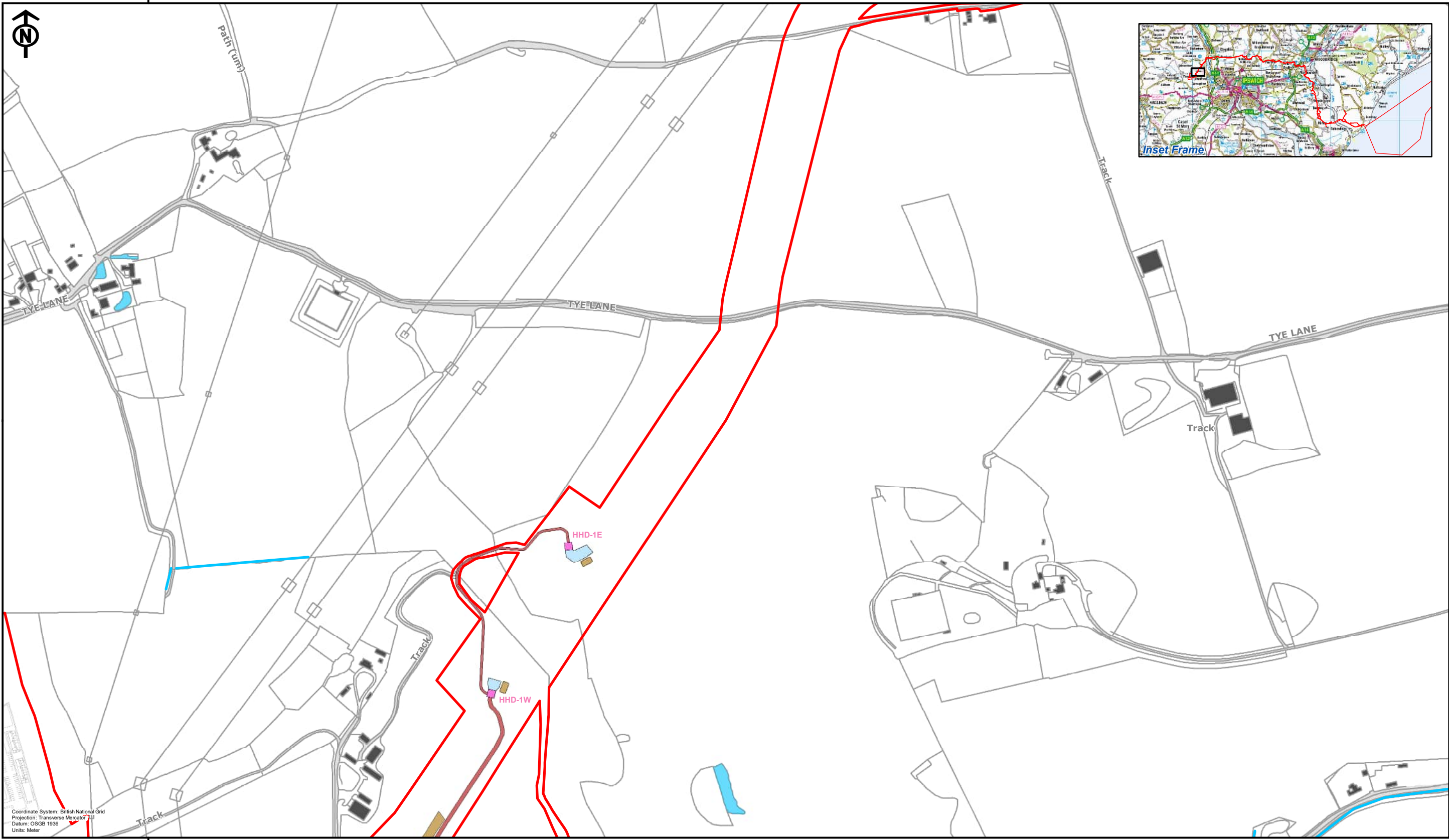
Original A3 Plot Scale 1:5,000

0 0.1 0.2 Kilometres

© Crown copyright. All rights reserved. (2022) Licence number 0100031673.
 © Environment Agency copyright and/or database right (2023). All rights reserved. Some features of this map are based

EA THREE Cable Route
 FIGURE 3.1 EA Flood Zones in Vicinity of Onshore Cable Works

Drg No	404.5356.00006.0045.0
Rev	0
Date	10/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

- EA THREE Development Order Limits
- Trackway
- Top Soil Strip
- Top Soil Bund
- Horizontal Direct Drill Work Platform
- Watercourse (OS OpenMap Local)
- Waterbody (OS OpenMap Local)



Rev	Date	By	Comment
A	10/11/2023	PW	First Issue

Original A3 Plot Scale 1:5,000

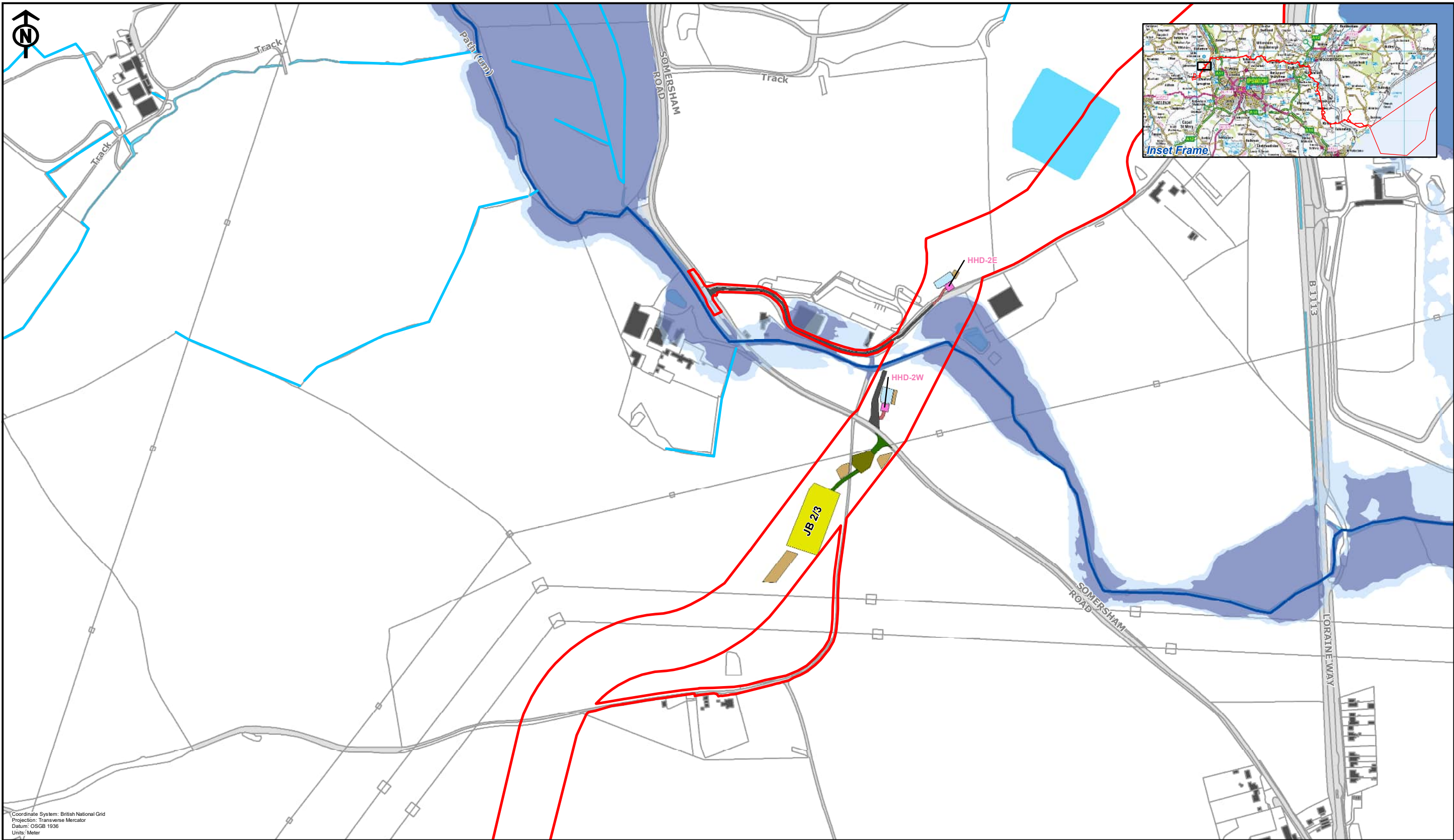
0 0.1 0.2 Kilometres

© Crown copyright. All rights reserved. (2022) Licence number 0100031673.
 © Environment Agency copyright and/or database right (2023). All rights reserved. Some features of this map are based

EA THREE Cable Route

FIGURE 3.2 EA Flood Zones in Vicinity of Onshore Cable Works

Drg No	404.5356.00006.0045.0
Rev	0
Date	10/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

EA THREE Development Order Limits	Trackway	Horizontal Direct Drill Work Platform	Environment Agency Flood Zone 3
Existing Track	Top Soil Strip	Statutory Main River	Environment Agency Flood Zone 2
HGV Turning	Top Soil Bund	Watercourse (OS OpenMap Local)	Waterbody (OS OpenMap Local)
Stone Haul Road	Jointing Bay Hardstanding		



Rev	Date	By	Comment
A	10/11/2023	PW	First Issue

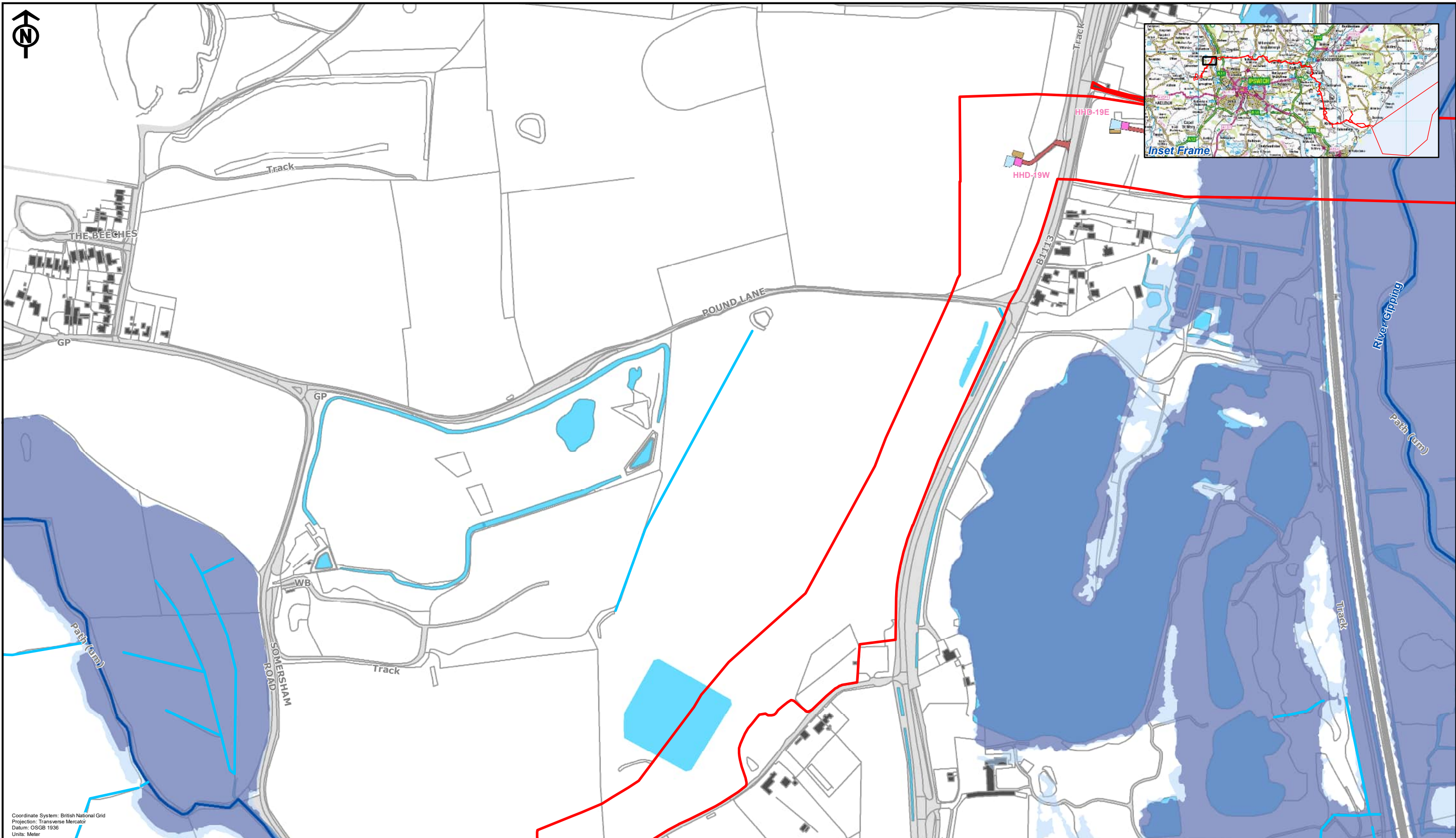
Original A3 Plot Scale 1:5,000

0 0.1 0.2 Kilometres

© Crown copyright. All rights reserved. (2022) Licence number 0100031673.
 © Environment Agency copyright and/or database right (2023). All rights reserved. Some features of this map are based

EA THREE Cable Route
 FIGURE 3.3 EA Flood Zones in Vicinity of Onshore Cable Works

Drg No	404.5356.00006.0045.0
Rev	0
Date	10/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

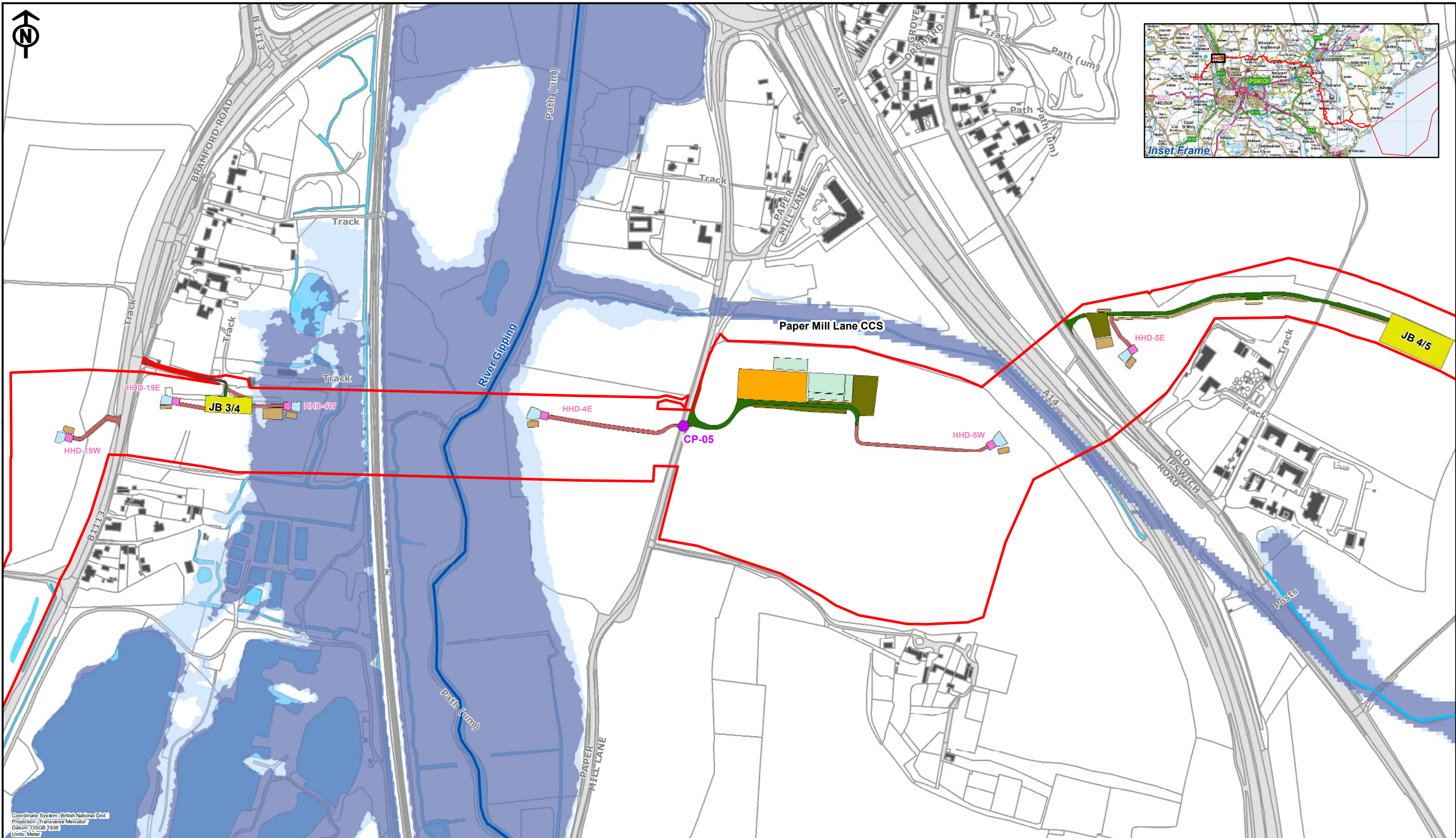
EA THREE Development Order Limits	Top Soil Strip	Statutory Main River	Environment Agency Flood Zone 2
Existing Track	Top Soil Bund	Watercourse (OS OpenMap Local)	Environment Agency Flood Zone 3
Stone Haul Road	Jointing Bay Hardstanding	Waterbody (OS OpenMap Local)	
Trackway	Horizontal Direct Drill Work Platform		



Original A3 Plot Scale 1:5,000	0	0.1	0.2 Kilometres
© Crown copyright. All rights reserved. (2022) Licence number 0100031673. © Environment Agency copyright and/or database right (2023). All rights reserved. Some features of this map are based			
Rev	Date	By	Comment
A	10/11/2023	PW	First Issue

EA THREE Cable Route
 FIGURE 3.4 EA Flood Zones in Vicinity of Onshore Cable Works

Drg No	404.5356.00006.0045.0
Rev	0
Date	10/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

EA THREE Development Order Limits	HGV Turning	Top Soil Strip	Consolidated Construction Site Compound	Environment Agency Flood Zone 3
Crossing Point (Road Crossings Numbered)	Stone Haul Road	Top Soil Bund	Statutory Main River	Environment Agency Flood Zone 2
Existing Track	Trackway	Jointing Bay Hardstanding	Watercourse (OS OpenMap Local)	Waterbody (OS OpenMap Local)
	Soil Storage	Horizontal Direct Drill Work Platform		



Rev	Date	By	Comment
A	10/11/2023	PW	First Issue

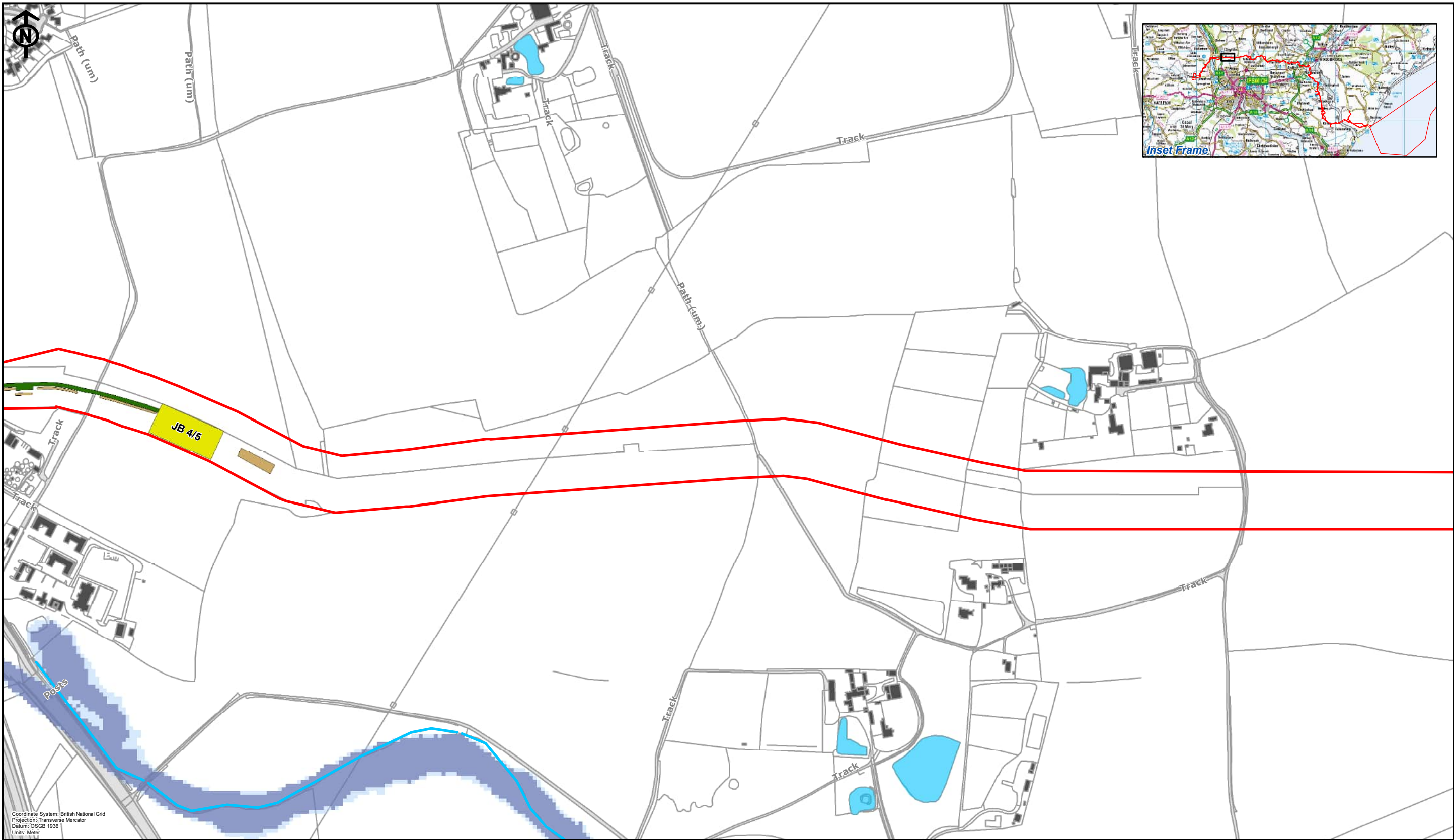
Original A3 Plot Scale 1:5,000

0 0.1 0.2 Kilometres

© Crown copyright. All rights reserved. (2022) Licence number 0100031673.
 © Environment Agency copyright and/or database right (2023). All rights reserved. Some features of this map are based

EA THREE Cable Route
 FIGURE 3.5 EA Flood Zones in Vicinity of Onshore Cable Works

Drg No	404.5356.00006.0045.0
Rev	0
Date	10/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

- EA THREE Development Order Limits
- Stone Haul Road
- Top Soil Bund
- Jointing Bay Hardstanding
- Watercourse (OS OpenMap Local)
- Waterbody (OS OpenMap Local)
- Environment Agency Flood Zone 3
- Environment Agency Flood Zone 2



Rev	Date	By	Comment
A	10/11/2023	PW	First Issue

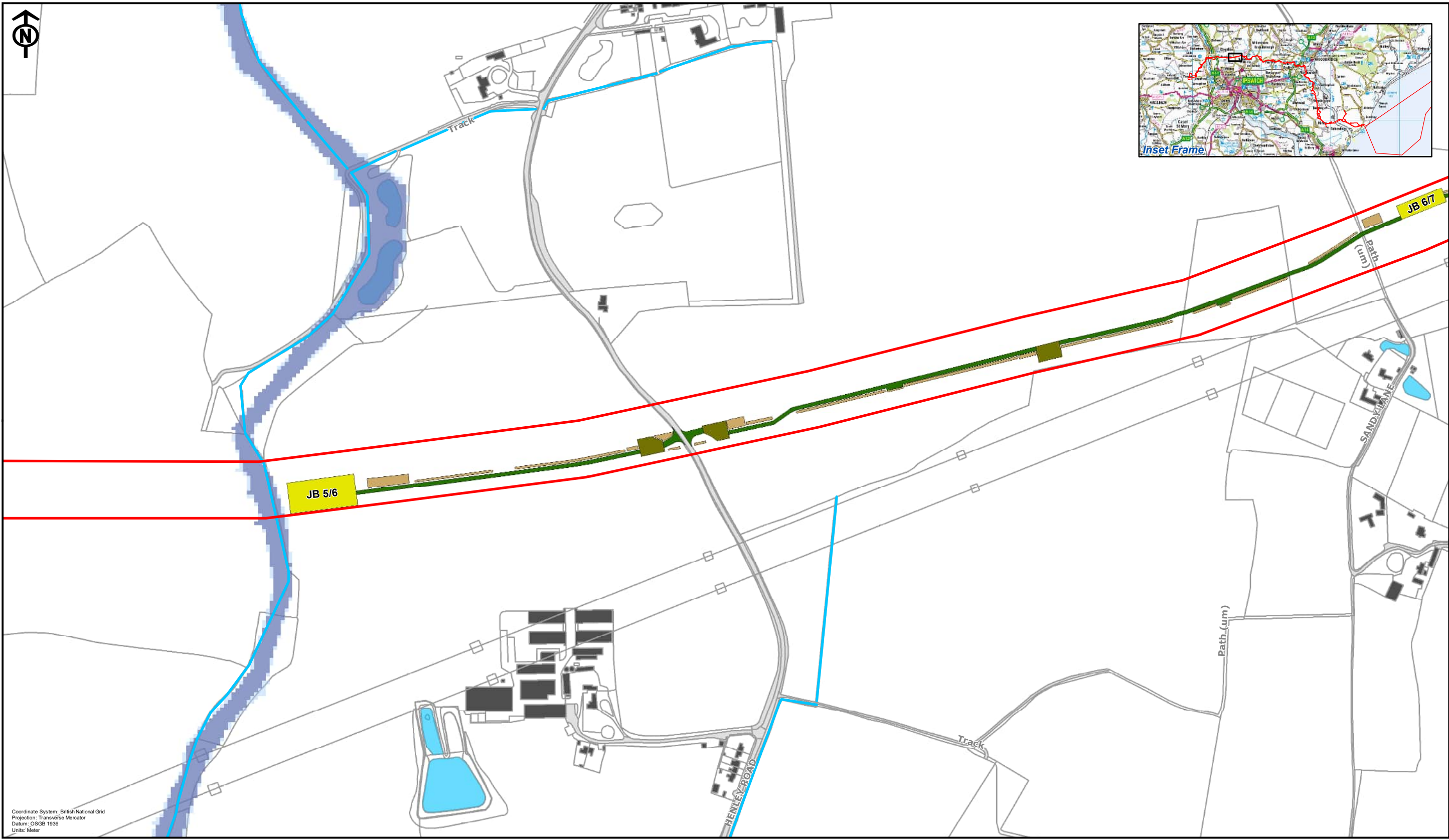
Original A3 Plot Scale 1:5,000

0 0.1 0.2 Kilometres

© Crown copyright. All rights reserved. (2022) Licence number 0100031673.
 © Environment Agency copyright and/or database right (2023). All rights reserved. Some features of this map are based

EA THREE Cable Route
 FIGURE 3.6 EA Flood Zones in Vicinity of Onshore Cable Works

Drg No	404.5356.00006.0045.0
Rev	0
Date	10/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

- EA THREE Development Order Limits
- Jointing Bay Hardstanding
- Environment Agency Flood Zone 2
- HGV Turning
- Watercourse (OS OpenMap Local)
- Waterbody (OS OpenMap Local)
- Environment Agency Flood Zone 3
- Stone Haul Road
- Top Soil Bund



Rev	Date	By	Comment
A	10/11/2023	PW	First Issue

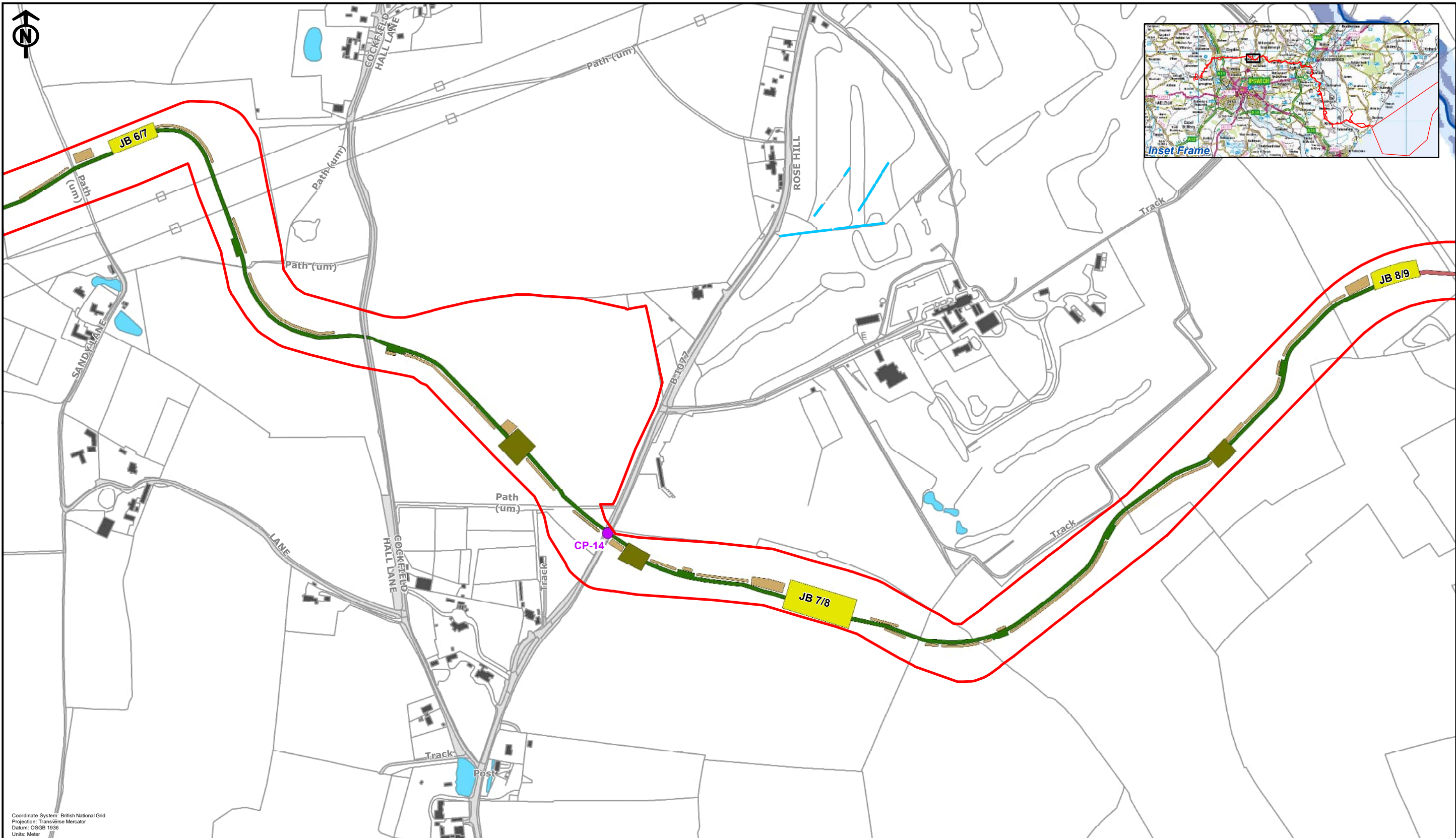
Original A3 Plot Scale 1:5,000

0 0.1 0.2 Kilometres

© Crown copyright. All rights reserved. (2022) Licence number 0100031673.
 © Environment Agency copyright and/or database right (2023). All rights reserved. Some features of this map are based

EA THREE Cable Route
 FIGURE 3.7 EA Flood Zones in Vicinity of Onshore Cable Works

Drg No	404.5356.00006.0045.0
Rev	0
Date	10/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

EA THREE Development Order Limits	Stone Haul Road	Statutory Main River	Environment Agency Flood Zone 2
Crossing Point (Road Crossings Numbered)	Trackway	Watercourse (OS OpenMap Local)	Waterbody (OS OpenMap Local)
HGV Turning	Jointing Bay Hardstanding	Environment Agency Flood Zone 3	

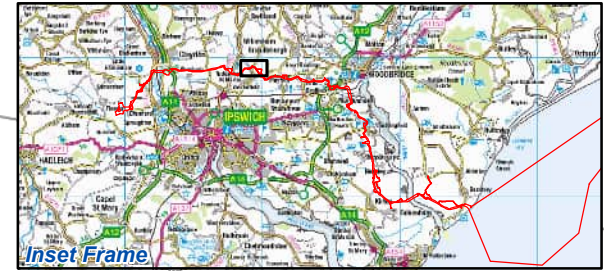
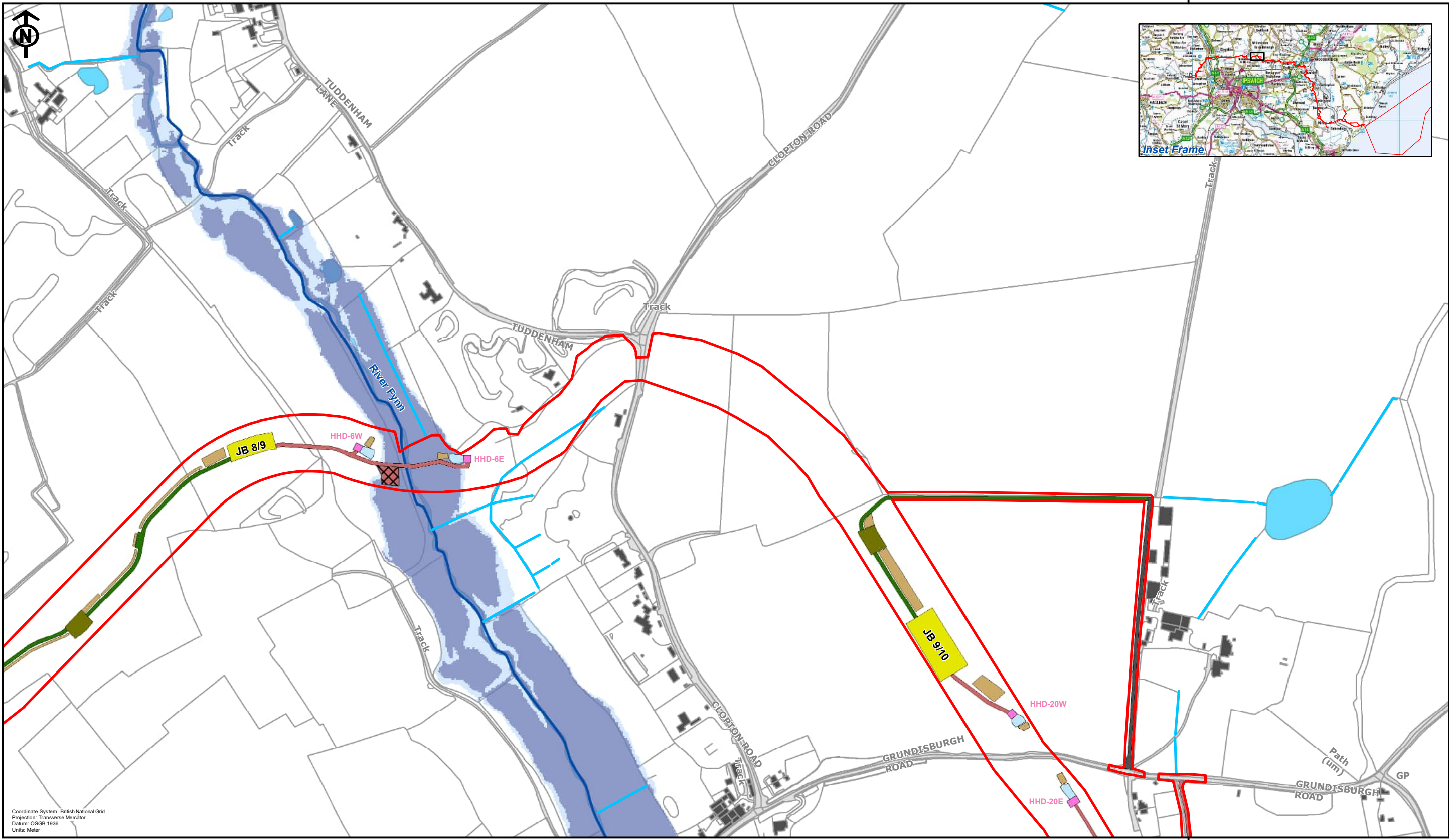


Original A3 Plot Scale 1:5,000	0 0.1 0.2 Kilometres								
<table border="1"> <thead> <tr> <th>Rev</th> <th>Date</th> <th>By</th> <th>Comment</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>10/11/2023</td> <td>PW</td> <td>First Issue</td> </tr> </tbody> </table>	Rev	Date	By	Comment	A	10/11/2023	PW	First Issue	<p>© Crown copyright. All rights reserved. (2022) Licence number 0100031673. © Environment Agency copyright and/or database right (2023). All rights reserved. Some features of this map are based</p>
Rev	Date	By	Comment						
A	10/11/2023	PW	First Issue						

EA THREE Cable Route
 FIGURE 3.8 EA Flood Zones in Vicinity of Onshore Cable Works

Drg No	404.5356.00006.0045.0
Rev	0
Date	10/11/2023
Layout	N/A

620000



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

620000

EA THREE Development Order Limits	Trackway	Jointing Bay Hardstanding	Waterbody (OS OpenMap Local)
Existing Track	Trackway Crane Pad	Horizontal Direct Drill Work Platform	Environment Agency Flood Zone 3
HGV Turning	Top Soil Strip	Statutory Main River	Environment Agency Flood Zone 2
Stone Haul Road	Top Soil Bund	Watercourse (OS OpenMap Local)	



Rev	Date	By	Comment
A	10/11/2023	PW	First Issue

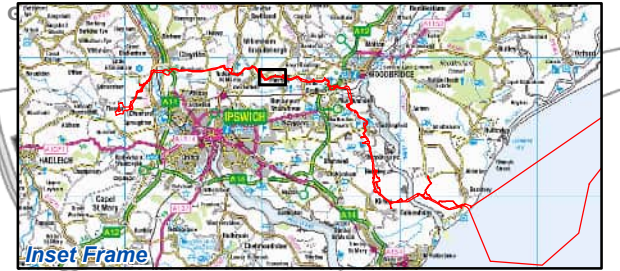
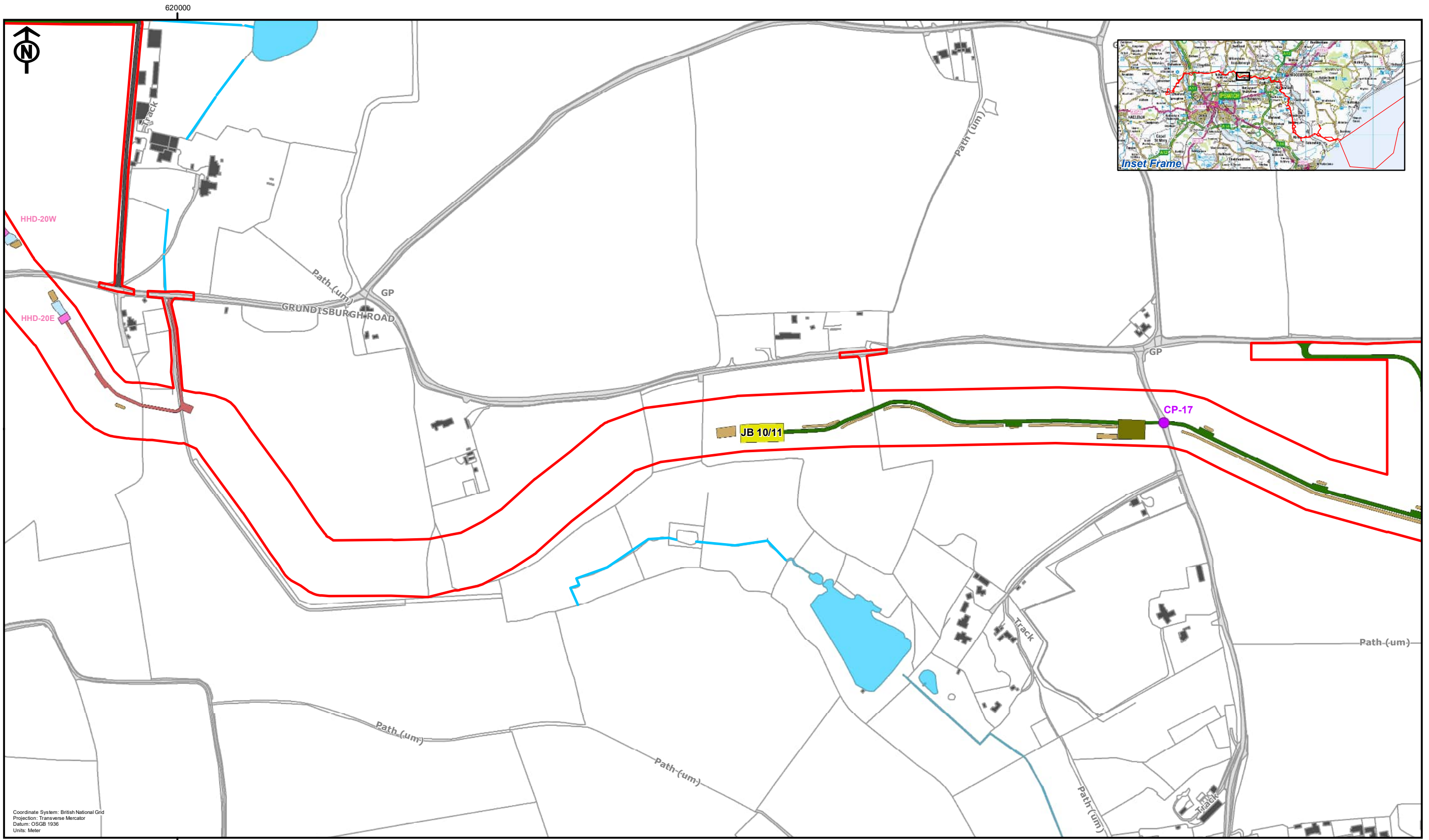
Original A3 Plot Scale 1:5,000

0 0.1 0.2 Kilometres

© Crown copyright. All rights reserved. (2022) Licence number 0100031673.
 © Environment Agency copyright and/or database right (2023). All rights reserved. Some features of this map are based

EA THREE Cable Route
 FIGURE 3.9 EA Flood Zones in Vicinity of Onshore Cable Works

Drg No	404.5356.00006.0045.0
Rev	0
Date	10/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

EA THREE Development Order Limits	HGV Turning	Top Soil Bund	Waterbody (OS OpenMap Local)
Crossing Point (Road Crossings Numbered)	Stone Haul Road	Jointing Bay Hardstanding	
Existing Track	Trackway	Horizontal Direct Drill Work Platform	
	Top Soil Strip	Watercourse (OS OpenMap Local)	



Rev	Date	By	Comment
A	10/11/2023	PW	First Issue

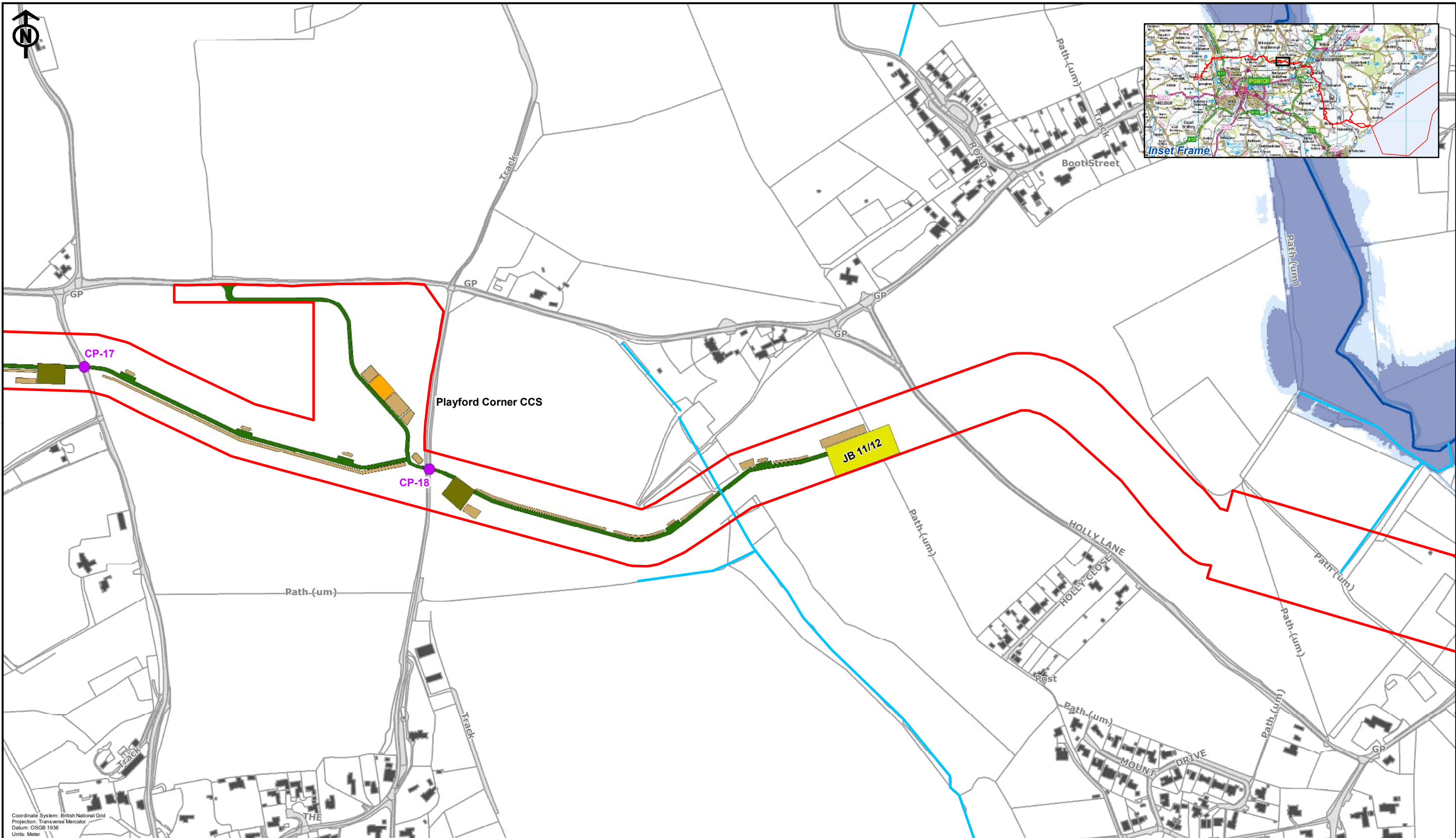
Original A3 Plot Scale 1:5,000

0 0.1 0.2 Kilometres

© Crown copyright. All rights reserved. (2022) Licence number 0100031673.
 © Environment Agency copyright and/or database right (2023). All rights reserved. Some features of this map are based

EA THREE Cable Route
 FIGURE 3.10 EA Flood Zones in Vicinity of Onshore Cable Works

Drg No	404.5356.00006.0045.0
Rev	0
Date	10/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

EA THREE Development Order Limits	Stone Haul Road	Statutory Main River	Environment Agency Flood Zone 2
Crossing Point (Road Crossings Numbered)	Top Soil Bund	Watercourse (OS OpenMap Local)	Environment Agency Flood Zone 3
HGV Turning	Jointing Bay Hardstanding	Waterbody (OS OpenMap Local)	
	Consolidated Construction Site Compound		



Rev	Date	By	Comment
A	10/11/2023	PW	First Issue

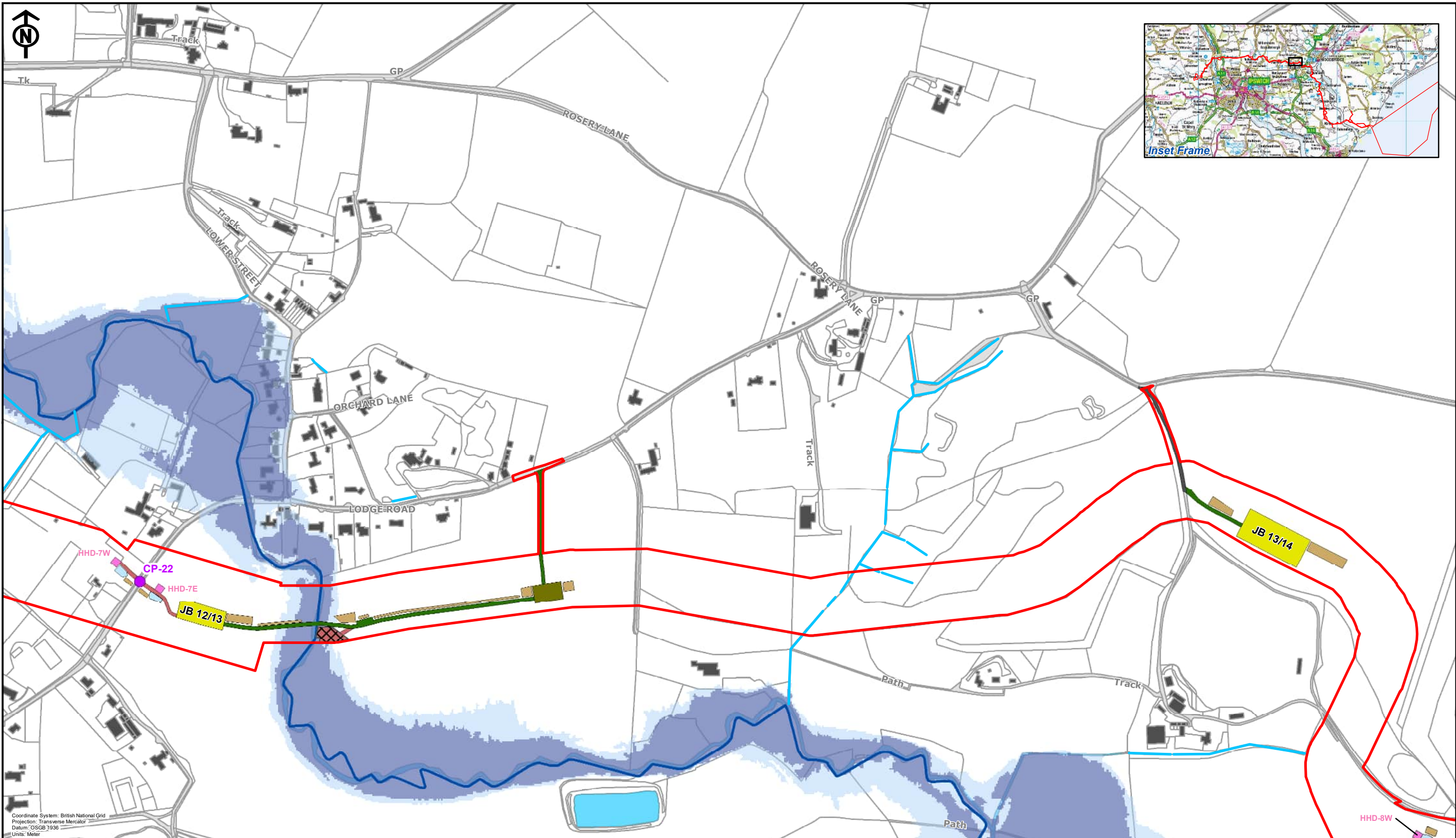
Original A3 Plot Scale 1:5,000

0 0.1 0.2 Kilometres

© Crown copyright. All rights reserved. (2022) Licence number 0100031673.
 © Environment Agency copyright and/or database right (2023). All rights reserved. Some features of this map are based

EA THREE Cable Route
 FIGURE 3.11 EA Flood Zones in Vicinity of Onshore Cable Works

Drg No	404.5356.00006.0045.0
Rev	0
Date	10/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

EA THREE Development Order Limits	HGV Turning	Top Soil Strip	Statutory Main River	Environment Agency Flood Zone 2
Crossing Point (Road Crossings Numbered)	Stone Haul Road	Top Soil Bund	Watercourse (OS OpenMap Local)	Environment Agency Flood Zone 3
Existing Track	Trackway	Jointing Bay Hardstanding	Waterbody (OS OpenMap Local)	
	Trackway Crane Pad	Horizontal Direct Drill Work Platform		



Rev	Date	By	Comment
A	10/11/2023	PW	First Issue

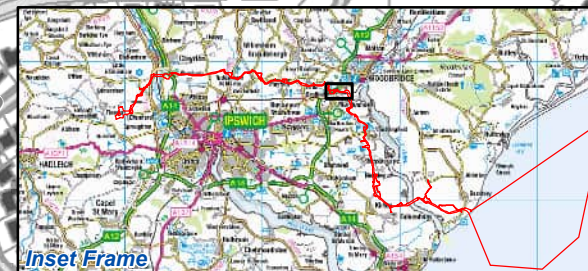
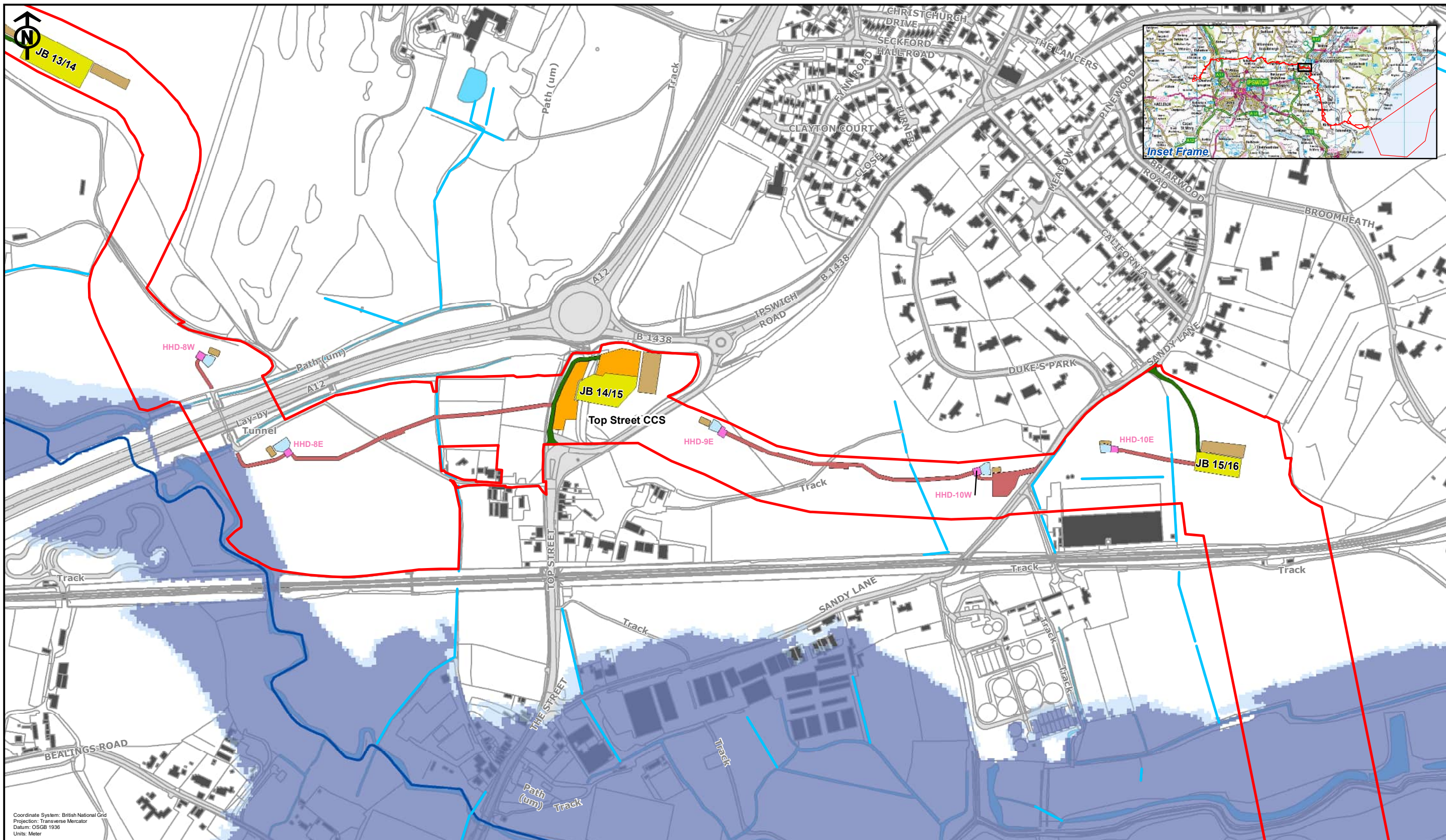
Original A3 Plot Scale 1:5,000

0 0.1 0.2 Kilometres

© Crown copyright. All rights reserved. (2022) Licence number 0100031673.
 © Environment Agency copyright and/or database right (2023). All rights reserved. Some features of this map are based

EA THREE Cable Route
 FIGURE 3.12 EA Flood Zones in Vicinity of Onshore Cable Works

Drg No	404.5356.00006.0045.0
Rev	0
Date	10/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

EA THREE Development Order Limits	Top Soil Bund	Consolidated Construction Site Compound	Environment Agency Flood Zone 3
Stone Haul Road	Jointing Bay Hardstanding	Statutory Main River	Environment Agency Flood Zone 2
Trackway	Horizontal Direct Drill Work Platform	Watercourse (OS OpenMap Local)	
Top Soil Strip		Waterbody (OS OpenMap Local)	



Rev	Date	By	Comment
A	10/11/2023	PW	First Issue

Original A3 Plot Scale 1:5,000

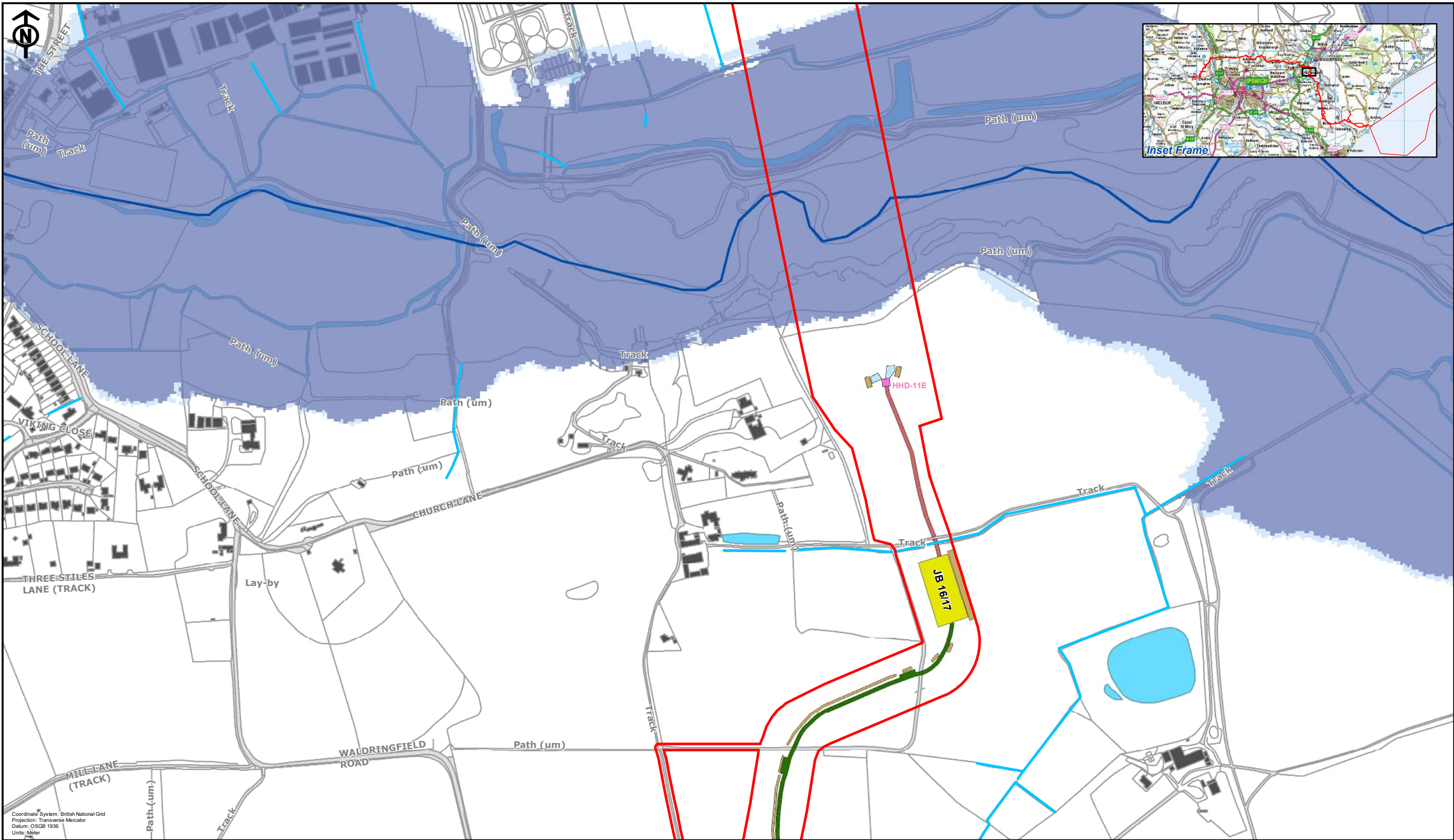
0 0.1 0.2 Kilometres

© Crown copyright. All rights reserved. (2022) Licence number 0100031673.
 © Environment Agency copyright and/or database right (2023). All rights reserved. Some features of this map are based

EA THREE Cable Route

FIGURE 3.13 EA Flood Zones in Vicinity of Onshore Cable Works

Drg No	404.5356.00006.0045.0
Rev	0
Date	10/11/2023
Layout	N/A



EA THREE Development Order Limits	Top Soil Bund	Watercourse (OS OpenMap Local)
Stone Haul Road	Jointing Bay Hardstanding	Waterbody (OS OpenMap Local)
Trackway	Horizontal Direct Drill Work Platform	Environment Agency Flood Zone 3
Top Soil Strip	Statutory Main River	Environment Agency Flood Zone 2



Rev	Date	By	Comment
A	10/11/2023	PW	First Issue

Original A3 Plot Scale 1:5,000

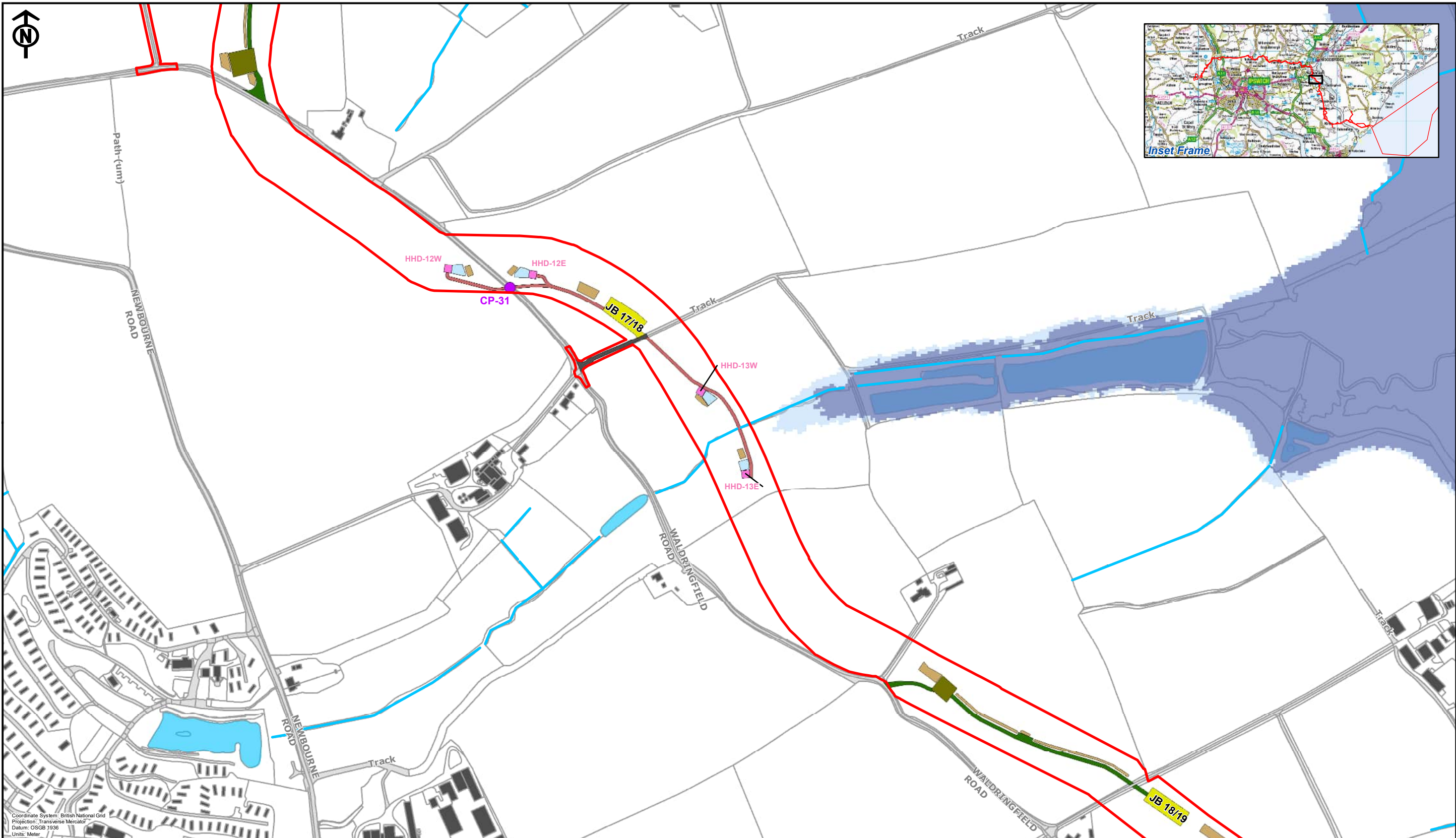
0 0.1 0.2 Kilometres

© Crown copyright. All rights reserved. (2022) Licence number 0100031673.
 © Environment Agency copyright and/or database right (2023). All rights reserved. Some features of this map are based

EA THREE Cable Route

FIGURE 3.14 EA Flood Zones in Vicinity of Onshore Cable Works

Drg No	404.5356.00006.0045.0
Rev	0
Date	10/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

EA THREE Development Order Limits	HGV Turning	Top Soil Bund	Waterbody (OS OpenMap Local)
Crossing Point (Road Crossings Numbered)	Stone Haul Road	Jointing Bay Hardstanding	Environment Agency Flood Zone 3
Existing Track	Top Soil Strip	Horizontal Direct Drill Work Platform	Environment Agency Flood Zone 2
	Trackway	Watercourse (OS OpenMap Local)	



Rev	Date	By	Comment
A	10/11/2023	PW	First Issue

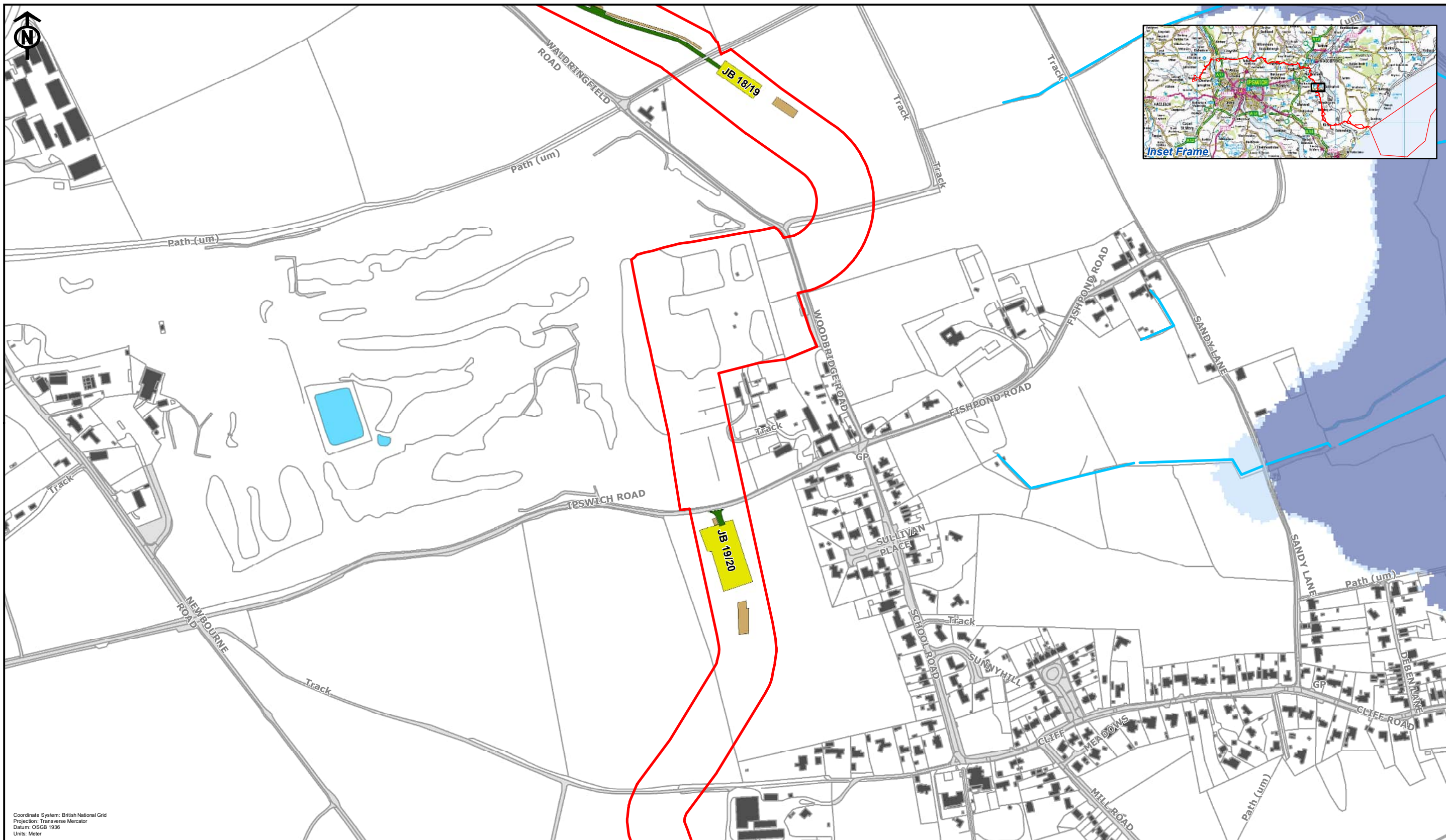
Original A3 Plot Scale 1:5,000

0 0.1 0.2 Kilometres

© Crown copyright. All rights reserved. (2022) Licence number 0100031673.
 © Environment Agency copyright and/or database right (2023). All rights reserved. Some features of this map are based

EA THREE Cable Route
 FIGURE 3.15 EA Flood Zones in Vicinity of Onshore Cable Works

Drg No	404.5356.00006.0045.0
Rev	0
Date	10/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

- EA THREE Development Order Limits
- Stone Haul Road
- Top Soil Bund
- Jointing Bay Hardstanding
- Watercourse (OS OpenMap Local)
- Waterbody (OS OpenMap Local)
- Environment Agency Flood Zone 3
- Environment Agency Flood Zone 2



Rev	Date	By	Comment
A	10/11/2023	PW	First Issue

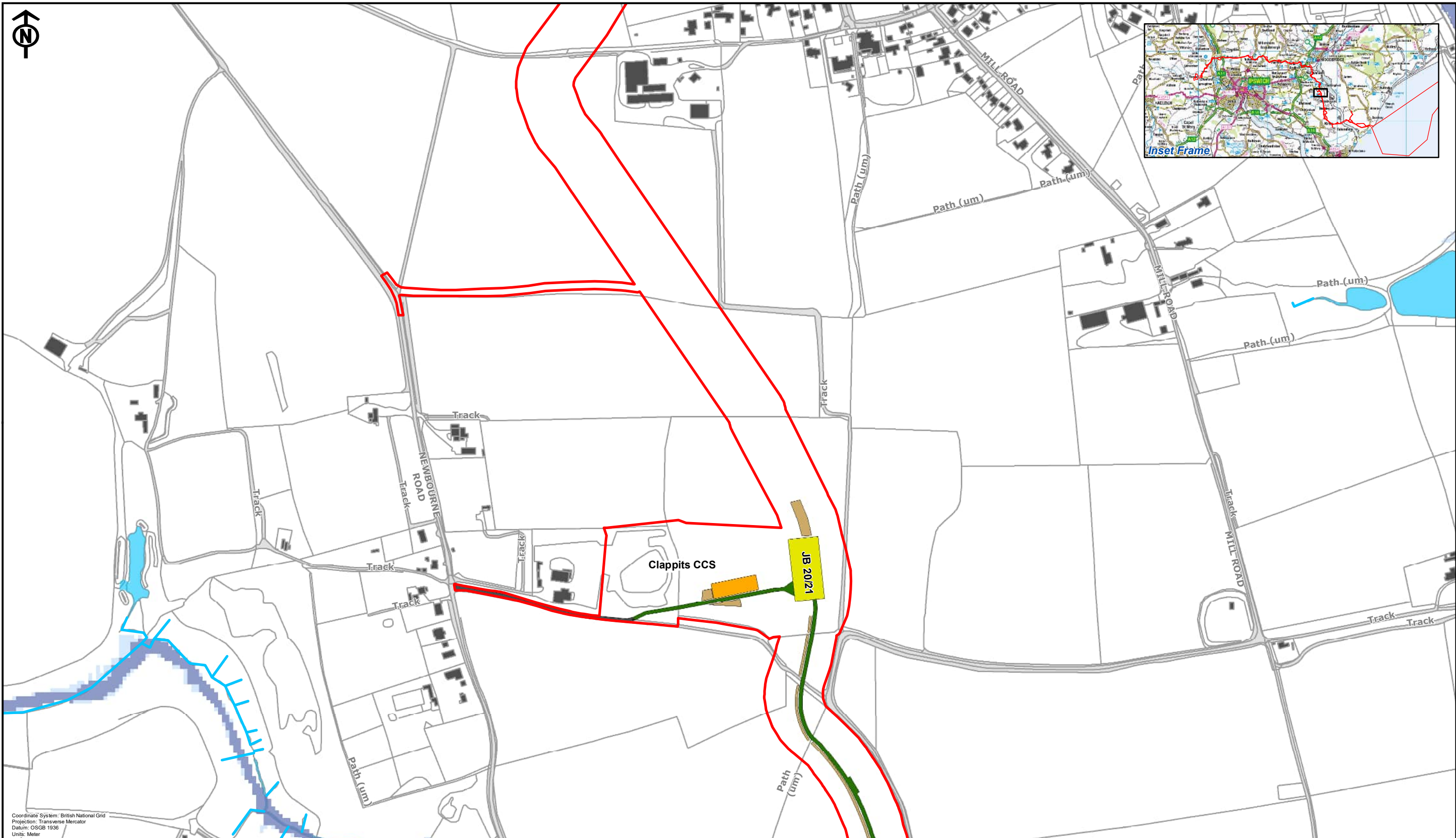
Original A3 Plot Scale 1:5,000

0 0.1 0.2 Kilometres

© Crown copyright. All rights reserved. (2022) Licence number 0100031673.
 © Environment Agency copyright and/or database right (2023). All rights reserved. Some features of this map are based

EA THREE Cable Route
 FIGURE 3.16 EA Flood Zones in Vicinity of Onshore Cable Works

Drg No	404.5356.00006.0045.0
Rev	0
Date	10/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

EA THREE Development Order Limits	Jointing Bay Hardstanding	Environment Agency Flood Zone 3
Existing Track	Consolidated Construction Site Compound	Environment Agency Flood Zone 2
Stone Haul Road	Watercourse (OS OpenMap Local)	
Top Soil Bund	Waterbody (OS OpenMap Local)	



Rev	Date	By	Comment
A	10/11/2023	PW	First Issue

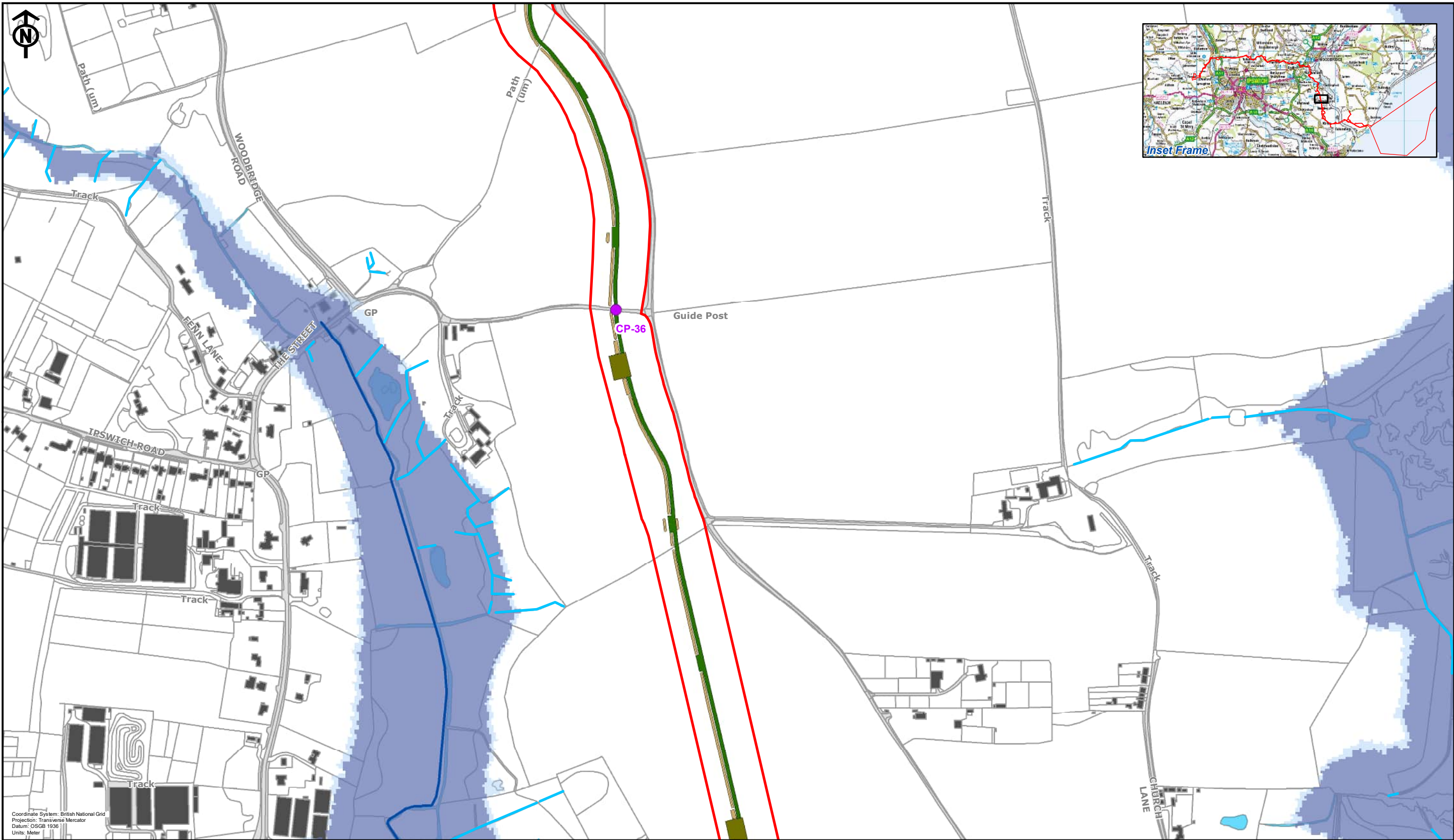
Original A3 Plot Scale 1:5,000

0 0.1 0.2 Kilometres

© Crown copyright. All rights reserved. (2022) Licence number 0100031673.
 © Environment Agency copyright and/or database right (2023). All rights reserved. Some features of this map are based

EA THREE Cable Route
 FIGURE 3.17 EA Flood Zones in Vicinity of Onshore Cable Works

Drg No	404.5356.00006.0045.0
Rev	0
Date	10/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

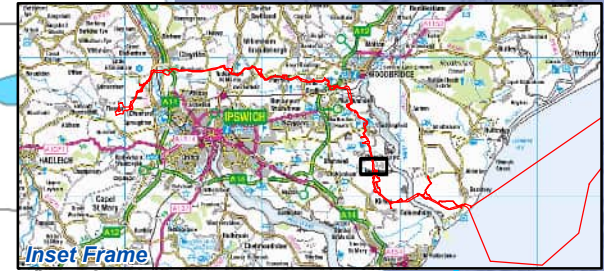
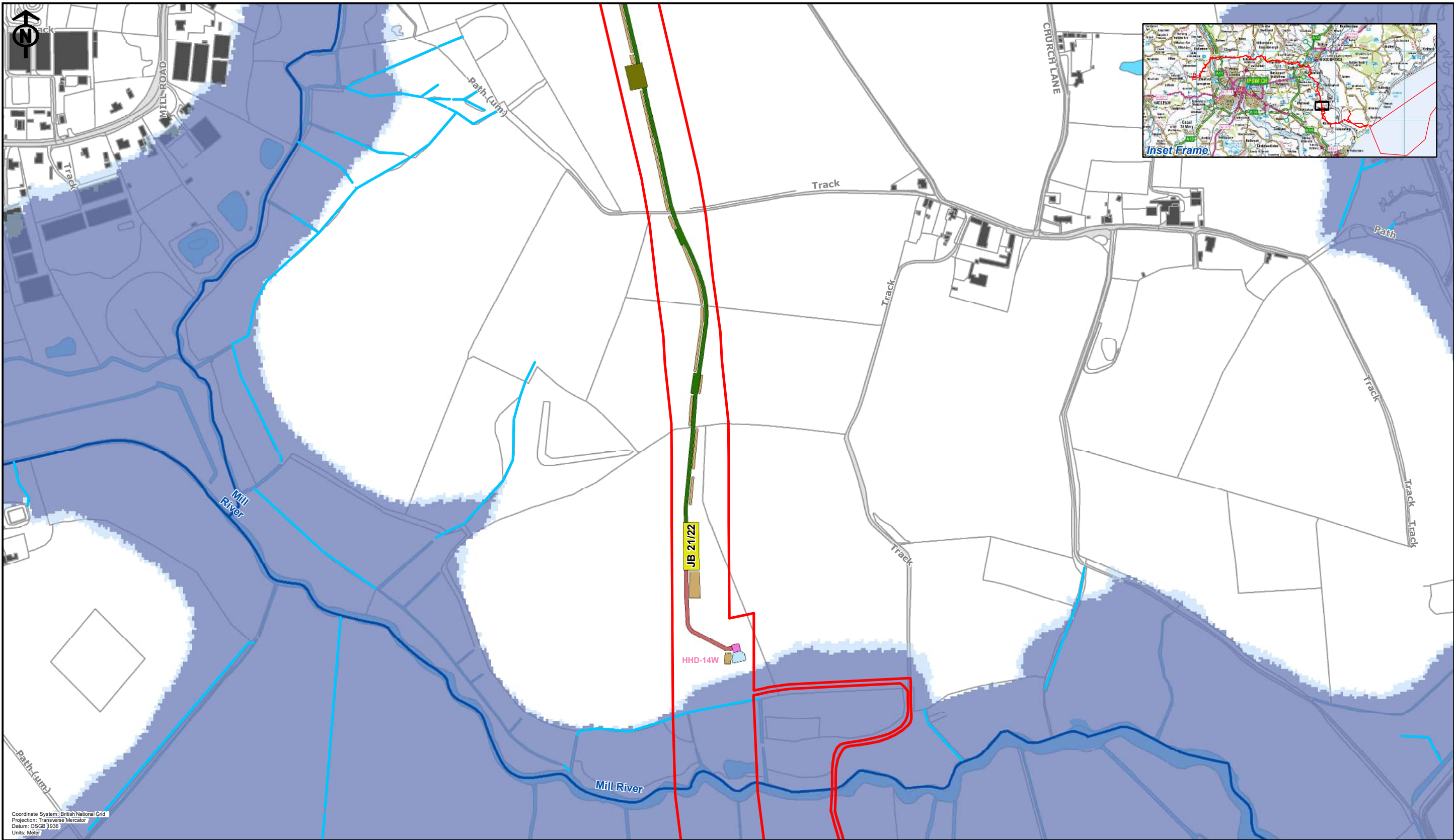
EA THREE Development Order Limits	Stone Haul Road	Waterbody (OS OpenMap Local)
Crossing Point (Road Crossings Numbered)	Top Soil Bund	Environment Agency Flood Zone 3
HGV Turning	Statutory Main River	Environment Agency Flood Zone 2
	Watercourse (OS OpenMap Local)	



				Original A3 Plot Scale 1:5,000	0 0.1 0.2 Kilometres
Rev	Date	By	Comment	© Crown copyright. All rights reserved. (2022) Licence number 0100031673. © Environment Agency copyright and/or database right (2023). All rights reserved. Some features of this map are based	
A	10/11/2023	PW	First Issue		

EA THREE Cable Route
 FIGURE 3.18 EA Flood Zones in Vicinity of Onshore Cable Works

Drg No	404.5356.00006.0045.0
Rev	0
Date	10/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

EA THREE Development Order Limits	Top Soil Strip	Statutory Main River	Environment Agency Flood Zone 2
HGV Turning	Top Soil Bund	Watercourse (OS OpenMap Local)	Environment Agency Flood Zone 3
Stone Haul Road	Jointing Bay Hardstanding	Waterbody (OS OpenMap Local)	
Trackway	Horizontal Direct Drill Work Platform		



Rev	Date	By	Comment
A	10/11/2023	PW	First Issue

Original A3 Plot Scale 1:5,000

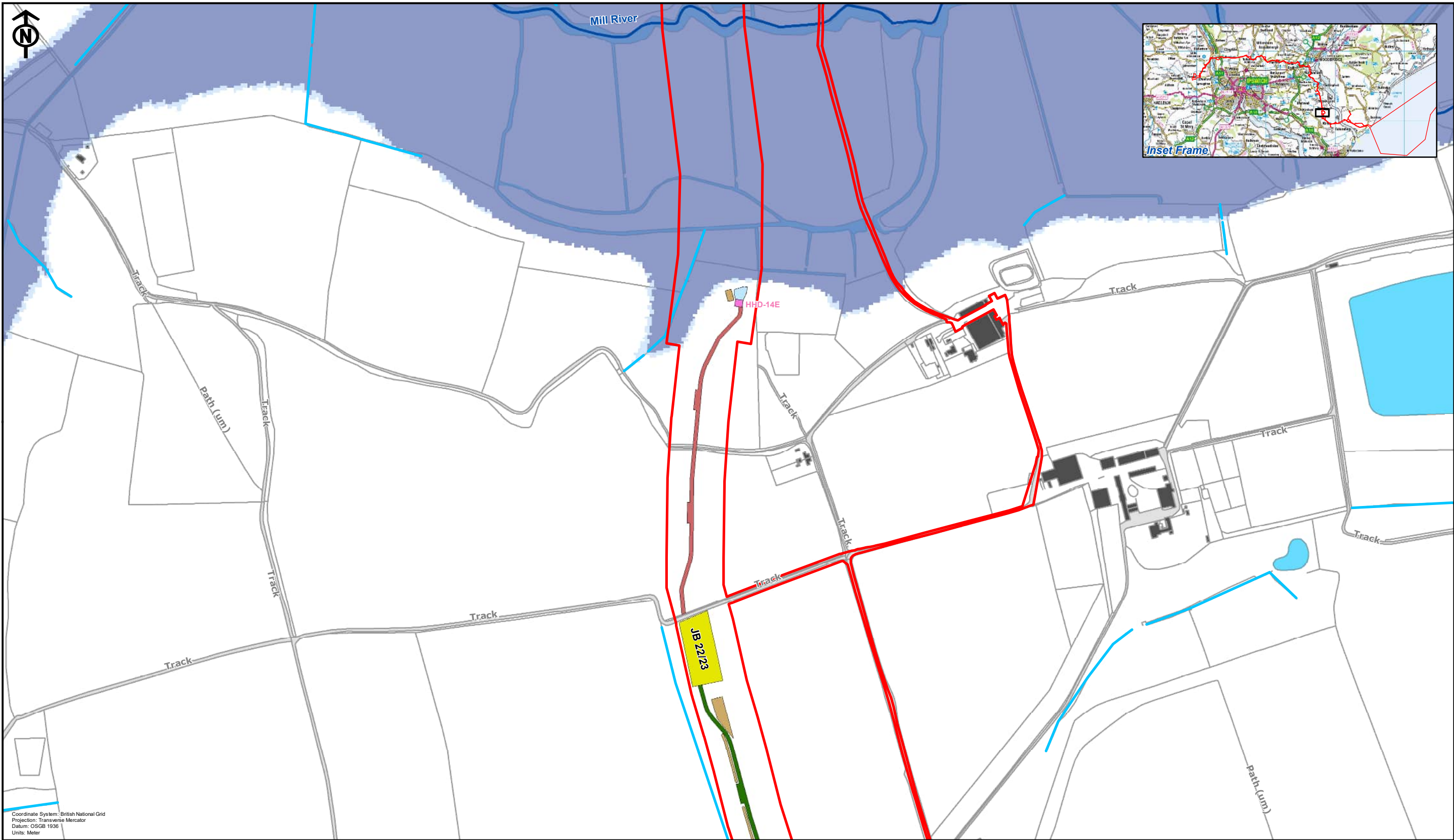
0 0.1 0.2 Kilometres

© Crown copyright. All rights reserved. (2022) Licence number 0100031673.
 © Environment Agency copyright and/or database right (2023). All rights reserved. Some features of this map are based

EA THREE Cable Route

FIGURE 3.19 EA Flood Zones in Vicinity of Onshore Cable Works

Drg No	404.5356.00006.0045.0
Rev	0
Date	10/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

EA THREE Development Order Limits	Top Soil Bund	Watercourse (OS OpenMap Local)
Stone Haul Road	Jointing Bay Hardstanding	Waterbody (OS OpenMap Local)
Trackway	Horizontal Direct Drill Work Platform	Environment Agency Flood Zone 3
Top Soil Strip	Statutory Main River	Environment Agency Flood Zone 2



Rev	Date	By	Comment
A	10/11/2023	PW	First Issue

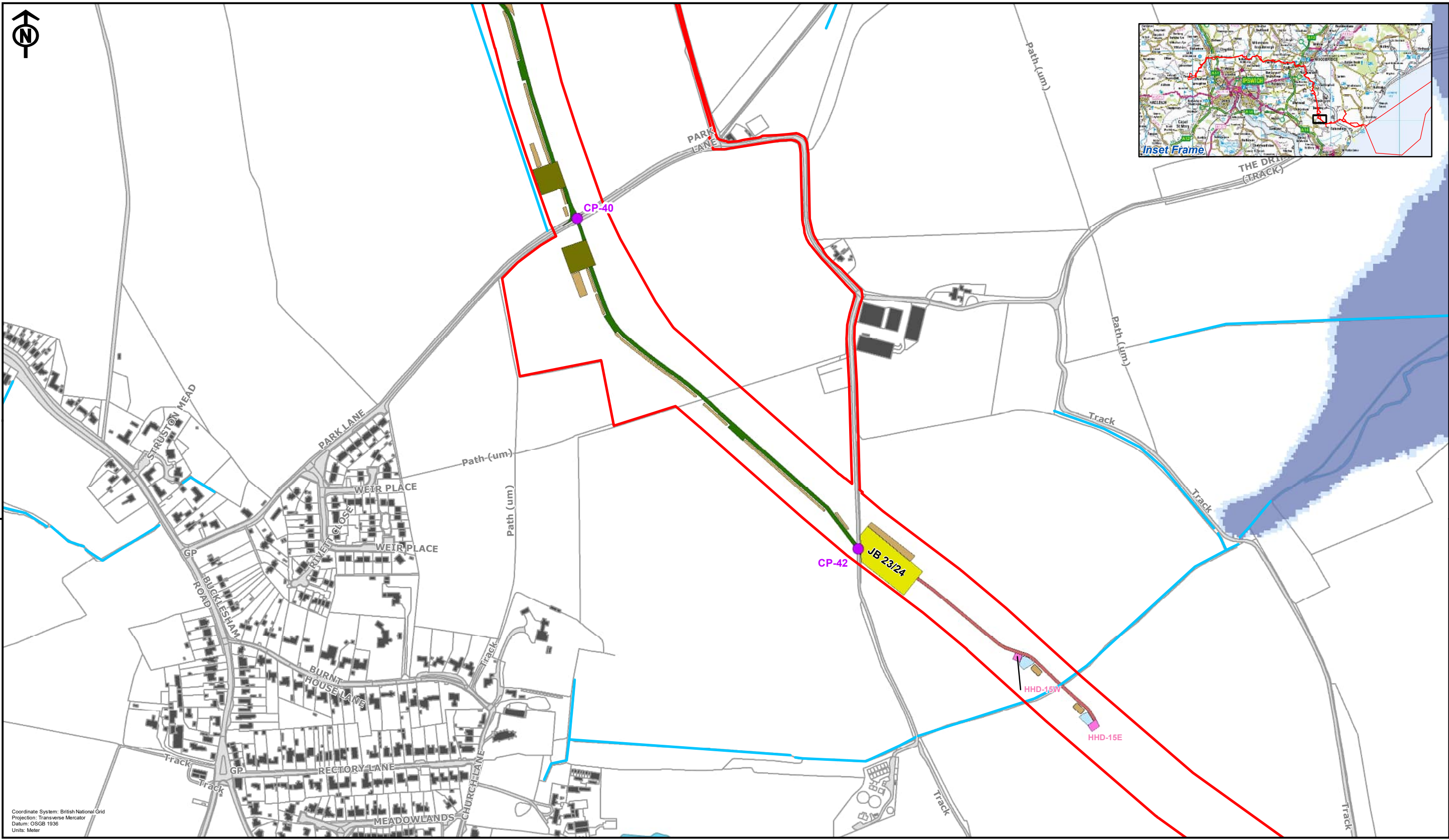
Original A3 Plot Scale 1:5,000

0 0.1 0.2 Kilometres

© Crown copyright. All rights reserved. (2022) Licence number 0100031673.
 © Environment Agency copyright and/or database right (2023). All rights reserved. Some features of this map are based

EA THREE Cable Route
 FIGURE 3.20 EA Flood Zones in Vicinity of Onshore Cable Works

Drg No	404.5356.00006.0045.0
Rev	0
Date	10/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

EA THREE Development Order Limits	Stone Haul Road	Jointing Bay Hardstanding	Environment Agency Flood Zone 3
Crossing Point (Road Crossings Numbered)	Trackway	Horizontal Direct Drill Work Platform	Environment Agency Flood Zone 2
HGV Turning	Top Soil Strip	Watercourse (OS OpenMap Local)	
	Top Soil Bund	Waterbody (OS OpenMap Local)	

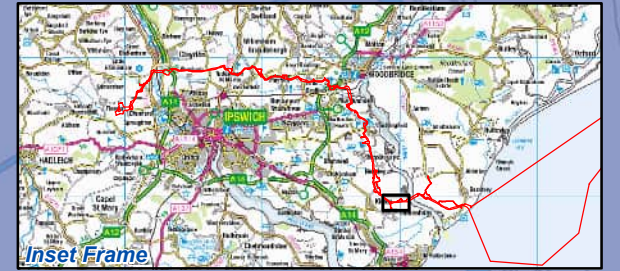
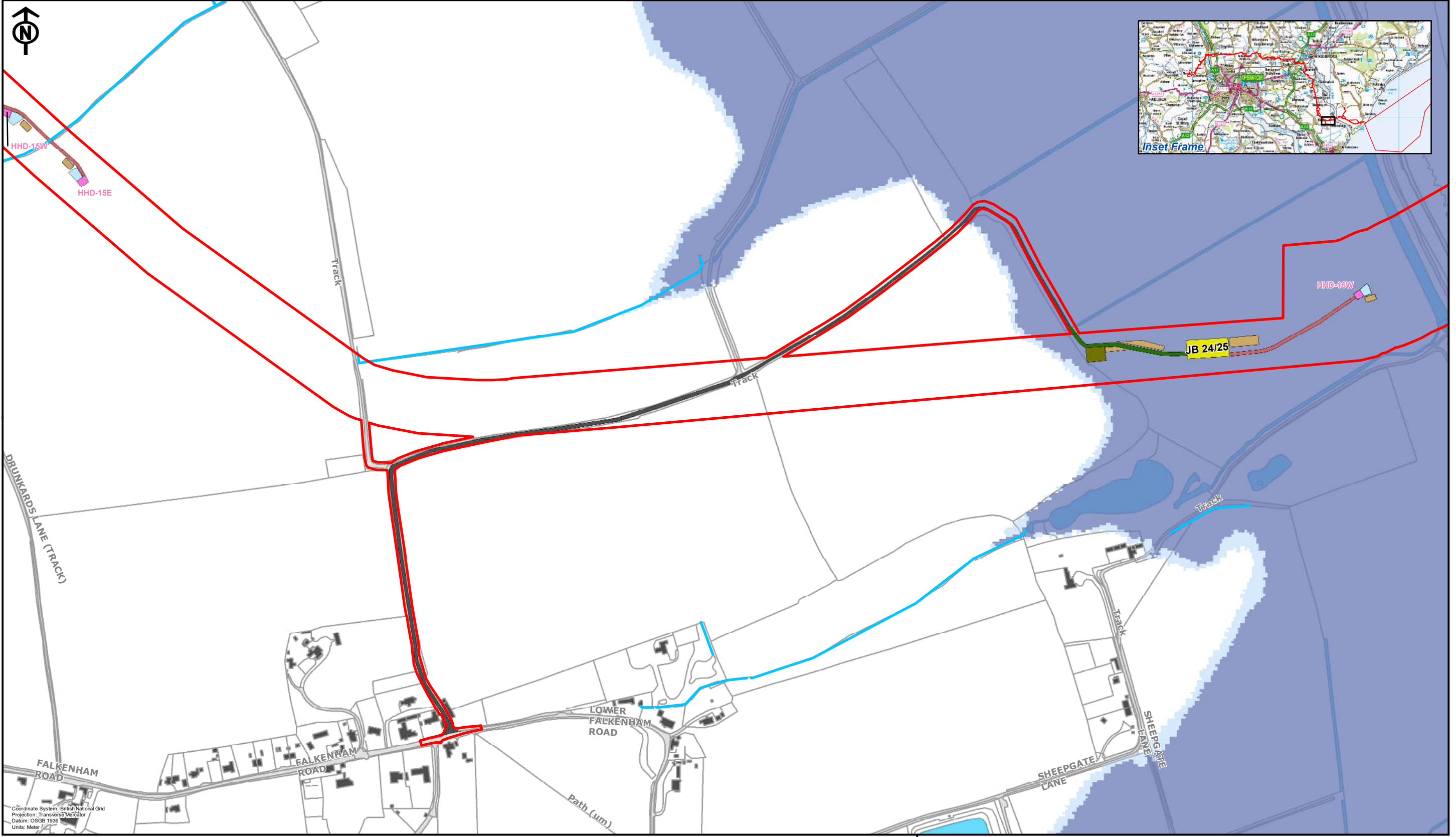


Original A3 Plot Scale 1:5,000	0	0.1	0.2 Kilometres
© Crown copyright. All rights reserved. (2022) Licence number 0100031673. © Environment Agency copyright and/or database right (2023). All rights reserved. Some features of this map are based			
Rev	Date	By	Comment
A	10/11/2023	PW	First Issue

EA THREE Cable Route
 FIGURE 3.21 EA Flood Zones in Vicinity of Onshore Cable Works

Drg No	404.5356.00006.0045.0
Rev	0
Date	10/11/2023
Layout	N/A

630000



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

630000

EA THREE Development Order Limits	Trackway	Horizontal Direct Drill Work Platform	Environment Agency Flood Zone 2
Existing Track	Top Soil Strip	Watercourse (OS OpenMap Local)	Environment Agency Flood Zone 3
HGV Turning	Top Soil Bund	Waterbody (OS OpenMap Local)	
Stone Haul Road	Jointing Bay Hardstanding		



Rev	Date	By	Comment
A	10/11/2023	PW	First Issue

Original A3 Plot Scale 1:5,000

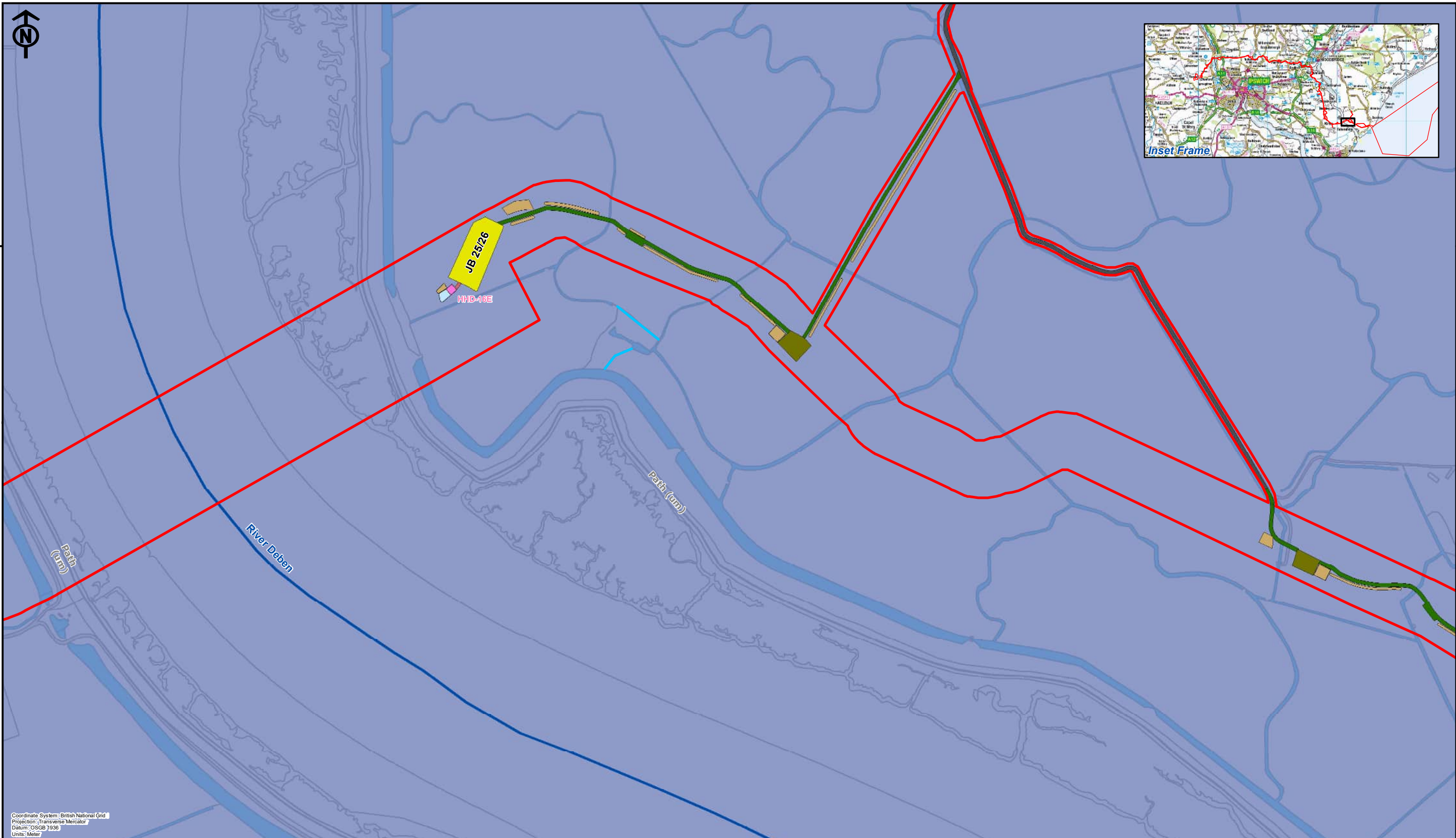
0 0.1 0.2 Kilometres

© Crown copyright. All rights reserved. (2022) Licence number 0100031673.
 © Environment Agency copyright and/or database right (2023). All rights reserved. Some features of this map are based

EA THREE Cable Route

FIGURE 3.22 EA Flood Zones in Vicinity of Onshore Cable Works

Drg No	404.5356.00006.0045.0
Rev	0
Date	10/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

EA THREE Development Order Limits	Trackway	Horizontal Direct Drill Work Platform	Environment Agency Flood Zone 3
Existing Track	Top Soil Strip	Statutory Main River	Environment Agency Flood Zone 2
HGV Turning	Top Soil Bund	Watercourse (OS OpenMap Local)	
Stone Haul Road	Jointing Bay Hardstanding	Waterbody (OS OpenMap Local)	



Rev	Date	By	Comment
A	10/11/2023	PW	First Issue

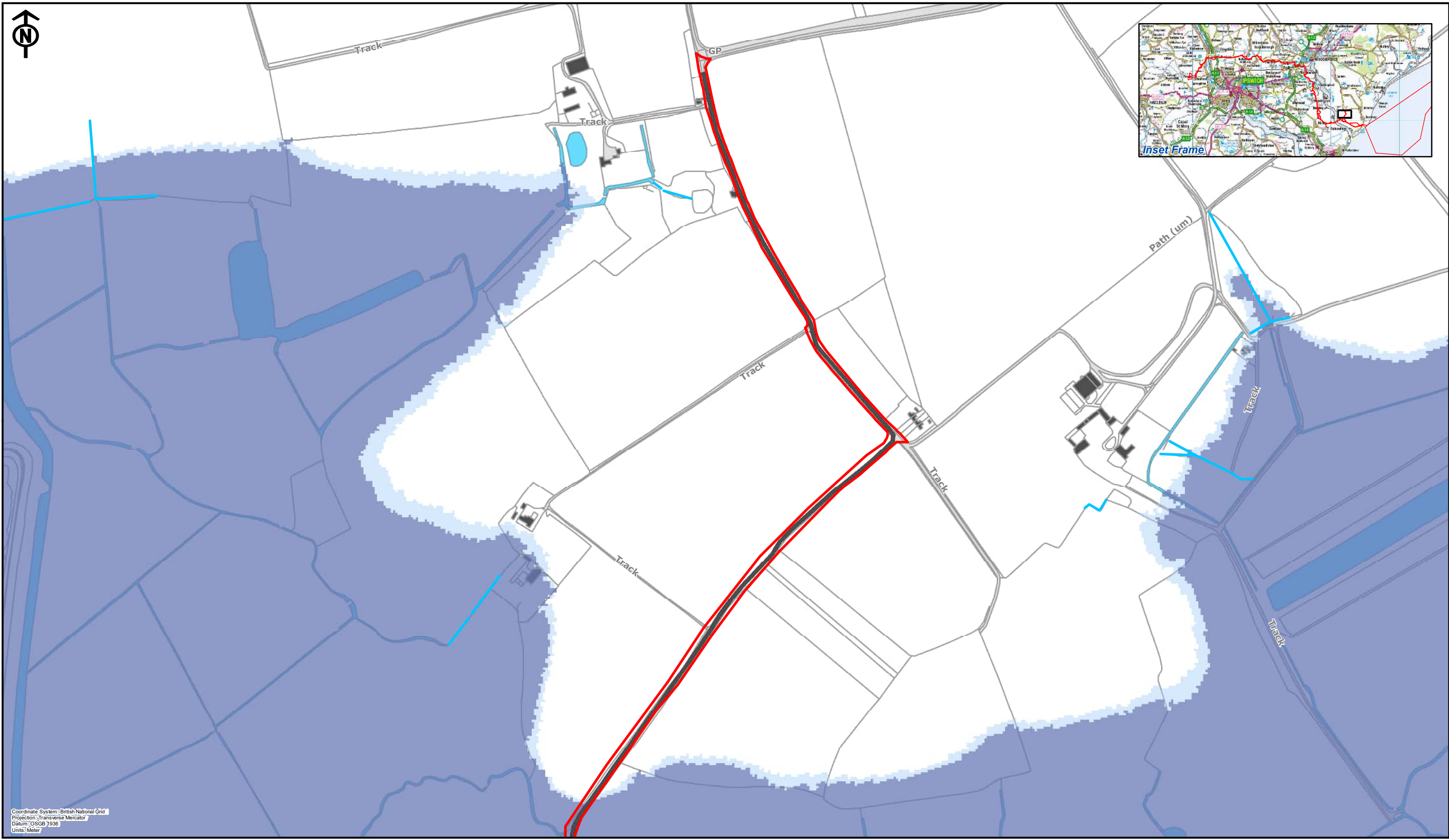
Original A3 Plot Scale 1:5,000

0 0.1 0.2 Kilometres

© Crown copyright. All rights reserved. (2022) Licence number 0100031673.
 © Environment Agency copyright and/or database right (2023). All rights reserved. Some features of this map are based

EA THREE Cable Route
 FIGURE 3.23 EA Flood Zones in Vicinity of Onshore Cable Works

Drg No	404.5356.00006.0045.0
Rev	0
Date	10/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

- EA THREE Development Order Limits
- Existing Track
- Watercourse (OS OpenMap Local)
- Waterbody (OS OpenMap Local)
- Environment Agency Flood Zone 3
- Environment Agency Flood Zone 2



Rev	Date	By	Comment
A	10/11/2023	PW	First Issue

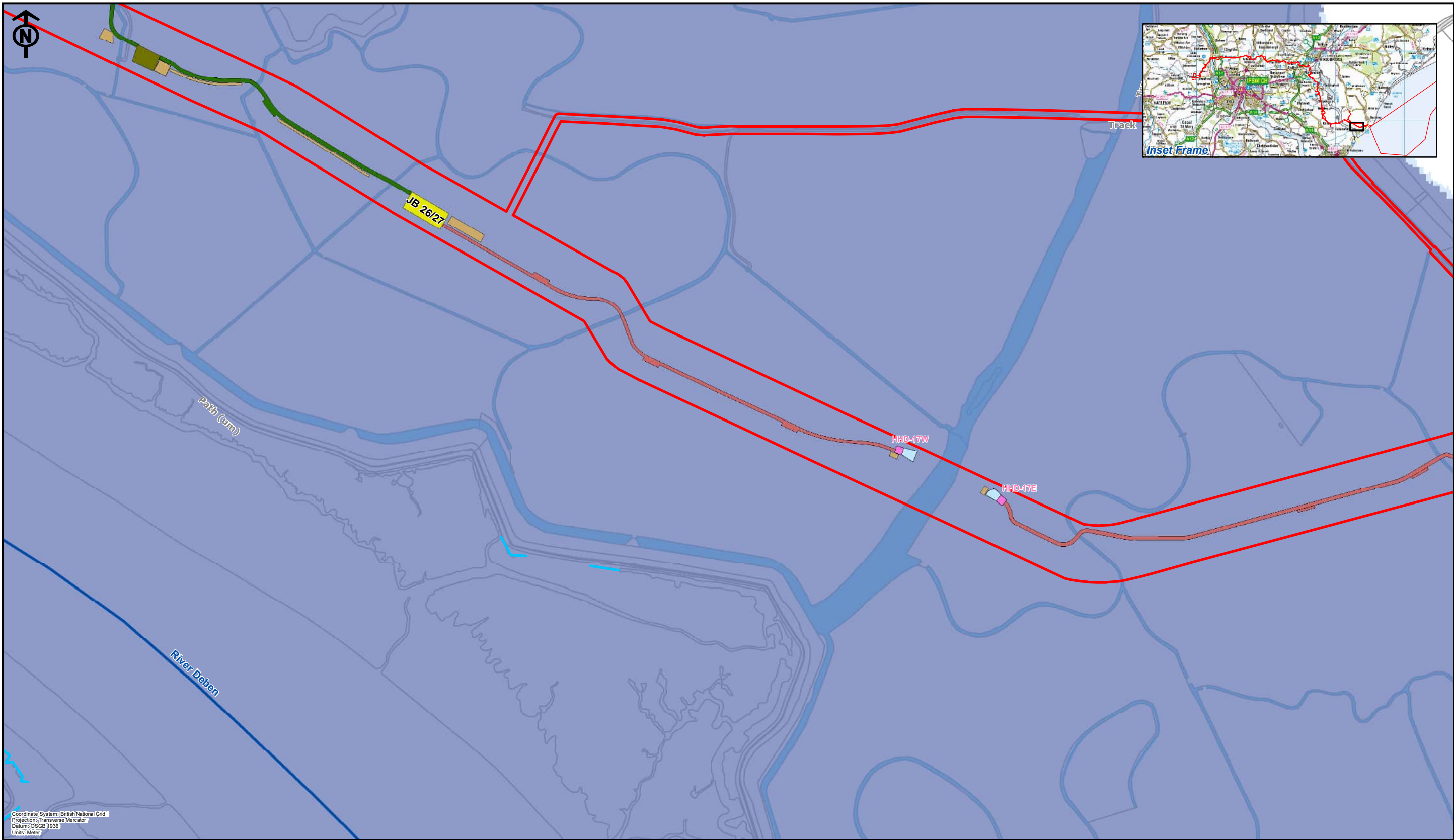
Original A3 Plot Scale 1:5,000

0 0.1 0.2 Kilometres

© Crown copyright. All rights reserved. (2022) Licence number 0100031673.
 © Environment Agency copyright and/or database right (2023). All rights reserved. Some features of this map are based

EA THREE Cable Route
 FIGURE 3.24 EA Flood Zones in Vicinity of Onshore Cable Works

Drg No	404.5356.00006.0045.0
Rev	0
Date	10/11/2023
Layout	N/A



Coordinate System: British National Grid
 Projection: Transverse Mercator
 Datum: OSGB 1936
 Units: Meter

EA THREE Development Order Limits	Top Soil Strip	Statutory Main River	Environment Agency Flood Zone 2
HGV Turning	Top Soil Bund	Watercourse (OS OpenMap Local)	Environment Agency Flood Zone 3
Stone Haul Road	Jointing Bay Hardstanding	Waterbody (OS OpenMap Local)	
Trackway	Horizontal Direct Drill Work Platform		



Rev	Date	By	Comment
A	10/11/2023	PW	First Issue

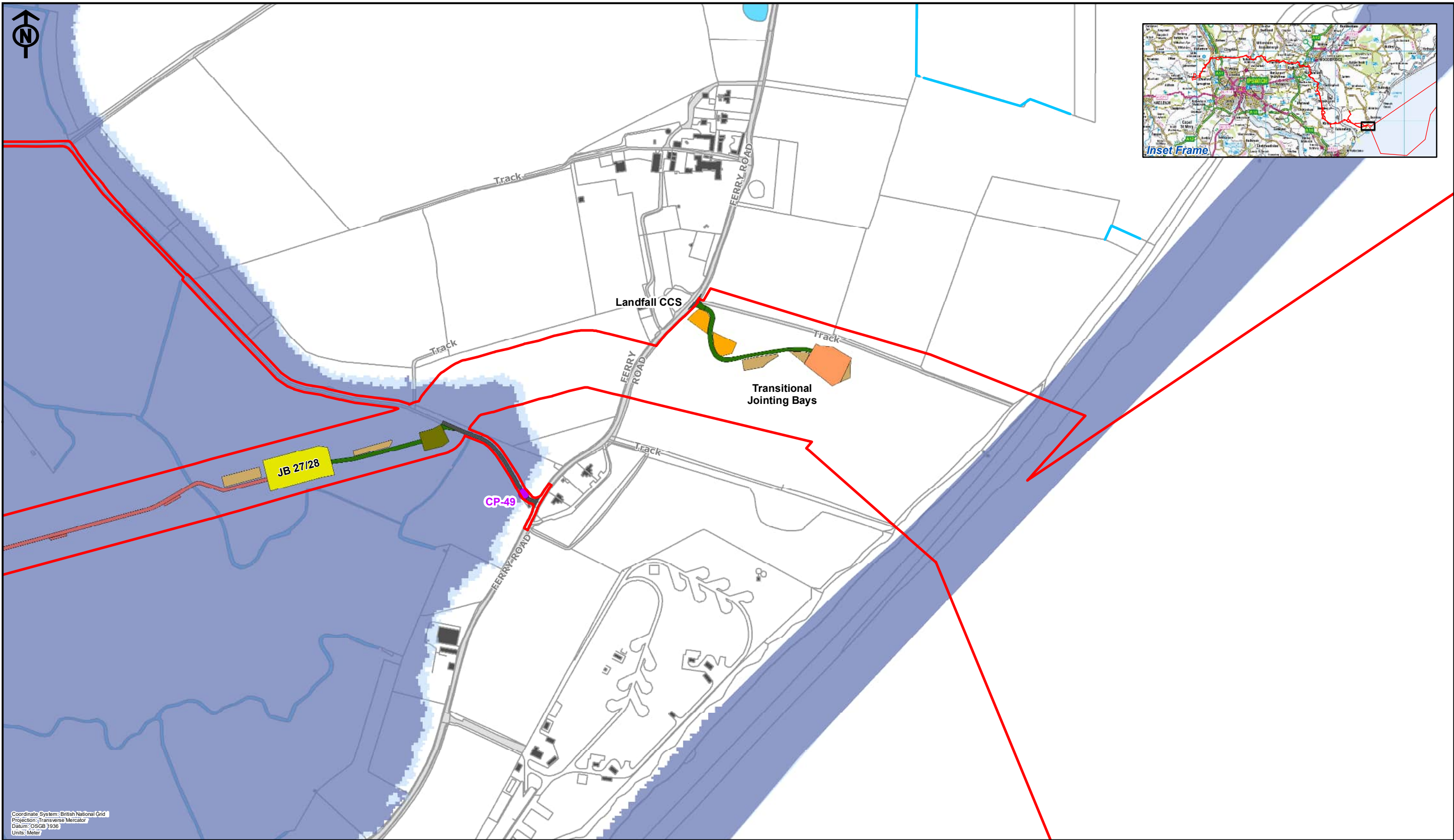
Original A3 Plot Scale 1:5,000

0 0.1 0.2 Kilometres

© Crown copyright. All rights reserved. (2022) Licence number 0100031673.
 © Environment Agency copyright and/or database right (2023). All rights reserved. Some features of this map are based

EA THREE Cable Route
 FIGURE 3.25 EA Flood Zones in Vicinity of Onshore Cable Works

Drg No	404.5356.00006.0045.0
Rev	0
Date	10/11/2023
Layout	N/A



EA THREE Development Order Limits	HGV Turning	Top Soil Bund	Waterbody (OS OpenMap Local)
Crossing Point (Road Crossings Numbered)	Stone Haul Road	Jointing Bay Hardstanding	Environment Agency Flood Zone 3
Existing Track	Trackway	Consolidated Construction Site Compound	Environment Agency Flood Zone 2
	Transition Jointing Bays	Watercourse (OS OpenMap Local)	



Original A3 Plot Scale 1:5,000	0	0.1	0.2 Kilometres
© Crown copyright. All rights reserved. (2022) Licence number 0100031673. © Environment Agency copyright and/or database right (2023). All rights reserved. Some features of this map are based			
Rev	Date	By	Comment
A	10/11/2023	PW	First Issue

EA THREE Cable Route
 FIGURE 3.26 EA Flood Zones in Vicinity of Onshore Cable Works

Drg No	404.5356.00006.0045.0
Rev	0
Date	10/11/2023
Layout	N/A