

Playford Corner Works

Code of Construction Practice Appendix 7 Pollution Prevention and Emergency Incident Response Plan

DCO Requirement 22 (2) (h)

(Applicable to Work Numbers 39 and 40)

Prepared by:	Checked by:	Approved by:
K Griffin, SLR		



	Revision Summary			
Rev	Date	Prepared by	Checked by	Approved by
1	06/08/21	Kay Griffin	Phil Rew- Williamson	Catherine Sibley
2	15/12/21	Kay Griffin	Phil Rew- Williamson	Gareth Mills
3	01/04/22	Kay Griffin	Phil Rew- Williamson	Gareth Mills
	·	·	·	

Description of Revisions			
Rev	Page	Section	Description
1	ALL	ALL	New document
2	ALL	ALL	Amended in accordance with minor project updates and consultee comments: ESC (23/09/21) and the Environment Agency (10/11/21)
3	ALL	ALL	Ammended in accordance with consultee comments (ESC 15/02/22 and Environment Agency 26/01/22)



TABLE OF CONTENTS

1.	INTRODUCTION AND SCOPE	5
1.1.	Project Overview	5
1.2.	Purpose and Scope	5
1.3.	Environmental Documents	6
1.3.	1. Environmental Policy	6
1.3.2	2. Project Environmental Management Plan	6
1.3.3	3. Project Emergency Response Plan	6
1.3.4		
2.	ABBREVIATIONS	
3.	POLLUTION PREVENTION MANAGEMENT	7
3.1.	Objectives	7
3.2.	Guidance and Good Practice	8
3.2.		
3.2.2	2. CIRIA Guidance	8
3.2.3	5 ,	
3.3.	Management and Compliance	8
4.		
4.1.	Storage of Materials	9
4.2.	Fuel and Oil Storage	14
4.3.	Vehicle Movements	17
4.4.	Hazardous Substances	19
4.5.		
4.6.	Watercourse Crossings	20
4.7.	Working On or Near Water	21
4.8.	Spill Response Plans	21
4.9.	Unexpected Contamination	22
5.	SITE LAYOUT	
6.	EMERGENCY INCIDENT RESPONSE PROCEDURE	
6.1.	Unconsented Discharge to Land or Water	25
6.2.	Release of Silt	25
6.3.	Emergency Pollution Event to Air	
6.4.	Flooding	
6.5.		
6.6.	Wildlife	
7.	KEY SITE AND EMERGENCY CONTACT LIST	28
8.	STAFF TRAINING	29
9.	TESTING AND REVIEW	29
10.	REFERENCES	29



FIGURES

- Figure 1 Site Context Plan
- Figure 2 'Stop, Contain, Notify' flowchart
- Figure 3 Secondary CCS Site Layout
- Figure 4 Jointing Bay Site Layout
- Figure 5 Wet Weather Decision Making Matrix



1. INTRODUCTION AND SCOPE

1.1. Project Overview

- 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. 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). The application is currently in the consultation phase.
- 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 East Anglia THREE 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.
- 3. 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.

1.2. Purpose and Scope

4. This Employer's Pollution Prevention and Emergency Incident Response Plan (PP&EIRP) sets outs the details of the pollution prevention controls which will be put in place during the Playford Corner Works Stage of the EA THREE construction works. The PP&EIRP also outlines the procedures to be used when responding to an environmental incident. This document forms an appendix to the Code of Construction Practice (CoCP), and fulfils DCO Requirement 22 (2) (h) which states:

22.—(2) The code of construction practice must include (...)

(h) a pollution prevention and emergency incident response plan

5. The scope of this document relates to the management of pollution prevention and environmental emergency incident response associated with the Playford Corner Works Stage (Work No.s 39 and 40), as part of the onshore cable route that runs from the landfall location at Bawdsey to the Converter Station located near Bramford, Suffolk (Figure 1 Site Context Plan). PP&EIRPs have been produced for each stage of the onshore works and are provided under separate cover. Health and safety incidents will be managed in accordance with the East Anglia Hub Emergency Response Plan (EAH-GEN-HSE-PLN-IBR-000027).



- ^{6.} The Playford Corner Works will be some of the first works to be undertaken along the cable route. These works have been designated as a stage in their own right to allow the works to commence at this location prior to works commencing along the cable route as a whole (i.e. the main cable works construction phase). The access and CCS will be constructed in Summer 2022 with the remaining works (comprising the jointing bay installation, cable pull through and reinstatement and also the access and trackways to the HDD duct proving excavations) will be undertaken as part of the main cable works construction phase.
- The information contained herein shall be adhered to by the Principal Contractor and implementation and compliance will be monitored by the Construction Management Team. The information will be used by the Principal Contractor to inform their own Emergency Incident Response Plan (EIRP) and pollution prevention procedures. These measures will only be revised with the agreement of East Suffolk Council (ESC).

1.3. Environmental Documents

- 8. The following documents will be in place to cover environmental management during the Playford Corner Works and include environmental documents that are related to pollution risk. These are described further in Sections 1.3.1 to 1.3.4 below:
 - Environmental Policy
 - Project Environmental Management Plan (Appendix 10 of the CoCP)
 - Construction Environment Management Plans (CEMPs)
 - Project Emergency Response Plan
 - CoCP.

1.3.1. Environmental Policy

- 9. EATL is a wholly owned subsidiary of ScottishPower Renewables and forms part of the IBERDROLA Group (hereon referred to as IBERDROLA). IBERDROLA has an Environmental Policy, which sets out key principles. These principles have been cascaded down into the renewables business of IBERDROLA, including SPR and are represented as follows:
 - Environmental Protection;
 - Regulation and Standards;
 - Environmental Objectives;
 - Environmental Performance;
 - Supply Chain;
 - Stakeholder Engagement;
 - Training, Awareness and Competence; and
 - Research and Innovation.
- 10. Within the policy, it states that IBERDROLA will 'consume responsibly, by making sustainable use of resources and increasing consumption of renewable resources' and will use 'ongoing efforts to identify, assess, and reduce the adverse environmental effects of the activities'.

1.3.2. Project Environmental Management Plan

- The Project Environmental Management Plan (PEMP) (Appendix 10 of the CoCP), produced by EATL, sets out how EA THREE intends to manage environmental risks associated with the development of the onshore works, including the Playford Corner Works and sets out specific control measures necessary to deliver the requirements and mitigation measures that have been committed to by EATL that relate specifically to the construction phase of EA THREE. The PEMP also includes the EATL minimum requirements, for inclusion within the CEMPs to be produced by the Principal Contractor and sets out guidance and best practice for their implementation at EA THREE construction sites.
- 12. This information will be communicated to the Principal Contractor in advance to allow method statements to be written and work activities planned in accordance with environmental constraints and conditions.

1.3.3. Project Emergency Response Plan

^{13.} EATL will have a documented Project Emergency Response Plan that will cover any potential Health Safety and Environmental incidents. This PP&ERIP will be used to inform the Project Emergency Response Plan which will detail the role and responsibilities of personnel required to respond to an incident and who needs to be informed following the incident. In addition, all appointed contractors will have their own emergency response plan relating to the activities they are undertaking.



1.3.4. Code of Construction Practice

- ^{14.} This plan forms part of the Playford Corner Works CoCP, which sets out the management and control measures which EATL will require the Principal Contractor to adopt and implement for its construction and related off-site activities. It includes a series of topic specific environmental plans and strategies for construction management, which include the following relating to pollution risk:
 - Surface and Foul Water and Drainage Management Plan (Appendix 1).
 - Flood Plan (Appendix 2).
 - Air Quality Monitoring Plan (Appendix 4).
- 15. The pollution preventions risk related to these topics are covered as part of this pollution risk assessment however for further details, please see specific appendices to the CoCP.

CBS	Cement Bound Sand	
СЕМР	Construction Environmental Management Plan	
CoCP	Code of Construction Practice	
СОЅНН	Control of Substances Hazardous of Health	
DBEIS	Business, Energy and Industrial Strategy	
DCO	Development Consent Order	
ECoW	Ecological Clerk of Works	
EA ONE	East Anglia ONE Offshore Windfarm	
EA THREE	East Anglia THREE Offshore Windfarm	
EATL	East Anglia Three Limited	
EIRP	Emergency Incident Response Plan	
EnvCoW	Environmental Clerk of Works	
ESC	East Suffolk Council	
HVDC	High voltage direct current	
NG	National Grid	
PEMP	Project Environmental Management Plan	
PP&EIRP	Pollution Prevention and Emergency Incident Response Plan	
PPE	Personal Protective Equipment	
PPG	Pollution Prevention Guidance	
SCC	Suffolk County Council	

2. ABBREVIATIONS

3. POLLUTION PREVENTION MANAGEMENT

3.1. Objectives

The key aim of this PP&EIRP is to ensure that pollution risks and control measures are identified, communicated to and accepted by the Principal Contractor within their own EIRP and managed accordingly on site to minimise pollution risks and protect the environment during the construction works. The Construction Manager shall oversee, in conjunction with the construction management team and the Environmental Clerk of Works (EnvCoW), all the construction activities to ensure that mitigation measures described in this PP&EIRP are put in place via the Principal Contractor's EIRP and all activities are carried out in such a manner so as to minimise or prevent effects on the surface water, groundwater and soils, and to prevent the accidental discharge of fuels, oils, lubricants, paint or solvents and other pollutants including sediment in surface water runoff high and pH water due to contact with Cement Bound Sand (CBS).



- 17. The PP&EIRP outlines the general pollution prevention measures to be implemented to limit the potential for contamination of both the ground and surface waters, during the construction works. These measures are designed and implemented in line with current technical guidance and codes of practice as listed further into this plan.
- ^{18.} The objectives are, therefore:
 - To identify controls required for hazardous or contaminated materials.
 - To ensure the protection of watercourses during watercourse crossings;
 - To comply with relevant legislation and good practice in terms of managing surface and foul water abstractions and discharges.
 - To protect private water supplies during construction.
 - To protect surface and groundwater by ensuring that appropriate measures are in place to prevent contaminants from entering the surrounding environment and in particular from entering pathways that might lead to water receptors.

3.2. Guidance and Good Practice

^{19.} The general provisions placed on all EA THREE contractors are to minimise potential impacts from the onshore construction works on land, surface water or groundwater receptors. The Principal Contractor will follow relevant Environment Agency's Pollution Prevention Guidance (PPG) notes, as well as general good construction practices set out below.

3.2.1. Environment Agency Guidance Notes¹

- PPG01 General guide to the prevention of water pollution
- PPG05 Works near or liable to affect watercourses
- PPG06 Construction and demolition sites
- PPG08 Safe Storage and disposal of used oils
- PPG11 Preventing pollution at industrial sites
- 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

3.2.2. 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)

3.2.3. 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

3.3. Management and Compliance

^{20.} All works carried out by the Principal Contractor during the Playford Corner Works will be conducted in accordance with this PP&EIRP, the Principal Contractors EIRP and any accompanying method statements.

¹ The Environment Agency no longer provides 'good practice' guidance in the form of PPGs 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



- 21. The EnvCoW shall be entitled to cease works or instruct specific actions before works can proceed to ensure compliance with this PP&EIRP.
- 22. A series of method statements shall be prepared prior the construction phase to supplement the information provided in this PP&EIRP. Separate method statements will be prepared for each substantial construction task with potential to give rise to significant pollution. Each method statement shall:
 - Outline how the specific task will be carried out, including details of pollution mitigation measures.
 - Provide a description of its location.
 - Contain a detailed risk assessment of each task.
 - Contain a list of pollution prevention and control equipment to be provided.
 - Indicate the location at which this equipment will be stored.
 - Identify communications procedures.
- ^{23.} The Principal Contractor must demonstrate to the EnvCoW that by working in accordance with the agreed method statements, any discharges and run-off will be suitably controlled and treated.

4. POLLUTION PREVENTION RISKS AND CONTROLS

24. The following identifies the pollution risks and controls for the key polluting activities associated with the onshore construction works.

4.1. Storage of Materials

^{25.} Materials and waste will be stored in a manner that minimises risk to the water environment and reduces the potential for substances to enter any road side drains, natural drainage lines or water courses. The types of potentially polluting materials associated with these works and how and where they will be stored is given in the Table 4-1.

Table 4-1 Storage of Material Controls

TYPE OF MATERIAL & RELATED WORK ACTIVITY	CONTROLS	PREVENTION
TOPSOIL Soil stripping and excavations	To be stored beside the works to a height no greater than 2m.	Preventing migration of silty water to the local water environment.
1	Topsoil will not be compacted but profiled to maintain the soils natural properties and structure.	Preventing damage to surrounding vegetation.
	To be stored separately from subsoil.	Managing material to aid successful reinstatement
	Where likely to be stored for longer than 6 months or over the winter periods, topsoil will be seeded to minimise erosion.	Preventing generation of wind blown dust
	Topsoil must be stored at least 3m away from any trees and hedgerows to avoid root protection areas. Care must be taken not to disturb soil within 1.5m of any growing tree, or 4 x the tree's circumference, whichever is greatest in line with the National Joint Utilities Group Guidelines.	



TYPE OF MATERIAL & RELATED WORK ACTIVITY	CONTROLS	PREVENTION
	Nothing should be stored or left on the topsoil bund	
	No topsoil shall be stored within 10m of a watercourse. Storage on slopes that drain directly to a watercourse will also be avoided.	
	Storage should be avoided in any flood risk zones. If stored inside a flood risk zone, storage bunds should be perpendicular to the watercourse and may require a permit from the authority responsible.	
	Water to be used for dust suppression, as required.	
SUBSOIL Soil stripping and excavations	To be stored beside the works to a height of no more than 3m.	Preventing migration of silty water to the local water environment.
	Do not over compact but profiled to maintain the soils natural properties and structure.	Preventing damage to surrounding vegetation.
	To be stored separately from topsoil.	Managing material to aid successful reinstatement.
	Subsoil must be stored at least 3m away from any trees and hedgerows.	Preventing generation of wind blown dust
	Care must be taken not to disturb soil within 1.5m of any growing tree, or 4 x the tree's circumference,	
	whichever is greatest in line with the National Joint Utilities Group guidelines.	
	No subsoil shall be stored within 10m of a watercourse.	
	Storage should be avoided in any flood risk zones. If stored inside a flood risk zone, storage bunds should be perpendicular to the watercourse and may require a permit from the authority responsible.	
	Water to be used for dust suppression, as required.	



TYPE OF MATERIAL & RELATED WORK ACTIVITY	CONTROLS	PREVENTION
SAND/ STONE Sand and/or stone used in the installation of the construction access tracks, haul roads, CCS and jointing bays	To be stockpiled in the allocated lay down area in the site compound in a way to minimise dust and wastage. Stone (coarse clean stone, with low fines) will meet the standard requirements for use within the onshore cable works will arrive on site with a minimum percentage of	Preventing migration of fines and silty water into the local water environment
	fines. Water to be used for dust suppression, as required	Preventing generation of wind blown dust
CEMENT Construction of jointing bays	To be stored in the original packaging on pallets inside the Control of Substances Hazardous of Health (COSHH) stores. If cement is to be stored outside temporarily, it should be stored off the ground on pallets, away from waterbodies (at least 30m) or heavily trafficked areas and covered with tarpaulin.	Preventing migration of fines into the local water environment. Preventing the ingress of high alkaline discharge into local water bodies, changing the local pH and thereby altering the natural balance
CONCRETE Construction of jointing bays	An area of ground below the dispersing chute of the concrete wagon will be covered in visqueen to protect the underlying ground. Any amount that falls to unprotected ground will be removed immediately. If concrete wagons dispense directly into concrete bins, these bins will be placed on a layer of visqueen. A washout facility placed on visqueen will be provided for the wagon to wash into. The inside of this facility shall be fully water tight. Cement laden water that accumulates in the washout facility must under no circumstances be pumped into the surrounding environment. Instead the water must be collected in a container, clearly marked and left in the container for disposal or treatment.	Preventing migration of fines into the local water environment. Preventing the ingress of high alkaline discharge into local water bodies, changing the local pH and thereby altering the natural balance.
	Concrete laden water from excavations/work areas to be treated	



TYPE OF MATERIAL & RELATED WORK ACTIVITY	CONTROLS	PREVENTION
	in line with Surface and Foul Water Drainage Management Plan or disposed offsite to a licensed facility	
CEMENT BOUND SAND (CBS) Construction at jointing bays	CBS will be delivered to the jointing bay compounds in batches of the required amount and tipped onto a membrane to prevent ground contamination. This storage will be away from waterbodies (at least 30m) or heavily trafficked areas If there is excess this will be allowed to harden (within 24 hours) and will then be disposed away from site at an appropriate facility.	Preventing migration of fines into the local water environment. Preventing the ingress of high alkaline discharge into local water bodies, changing the local pH and thereby altering the natural balance
	Alternatively, cementous product to be stored in the original packaging on pallets inside the Control of Substances Hazardous of Health (COSHH) stores or within a covered hopper. Sand can be stored without any specific restrictions.	
	CBS contaminated water to be treated in line with Surface and Foul Water Drainage Management Plan or disposed offsite to a licensed facility	
CHEMICALS, BITUMEN, PAINTS, SOLVENTS, GREASE General onshore cable construction works	Substances dangerous to the environment ² to be stored in the original packaging inside a 110% capacity bund for the largest container or 25% of the total volume. All chemicals should be stored in	Preventing migration of hazardous toxic material into the natural environment, including groundwater and water bodies.
	COSHH data sheets will always be consulted and followed to the details of particular requirements. A COSHH Register will be maintained by the Principal Contractor.	
INERT WASTE (sand/ spoil/ stone) General onshore cable construction works, access /haul road, CCS and jointing bay compound removal	To be kept separate from non- hazardous and hazardous waste in a clearly designated area/ covered	To reduce the volume of hazardous and non- hazardous waste by segregation.

² In accordance with COSHH labelling



TYPE OF MATERIAL & RELATED WORK ACTIVITY	CONTROLS	PREVENTION
	skip (labelled) located on a hard standing where possible.	Preventing migration of fines into the local water environment.
	Storage area to be located away from sensitive receptors/pathways and watercourses.	
NON-HAZARDOUS WASTE General onshore cable construction works, access/ haul road, CCS and	To be kept separately from inert and hazardous waste.	To reduce the volume of hazardous and non-hazardous waste by segregation.
jointing bay compound removal	To be segregated into its component streams and kept in clearly labelled containers/ covered skips.	Preventing migration of fines and waste materials into the local water environment.
	Containers/ skips to be in good condition, enclosed if necessary (plastic/paper/cardboard/general) and located on hard standing.	
	Containers/ skips to be located away from sensitive receptors/pathways and watercourses.	
	Containers/ skips to be screened from external receptors if possible.	
HAZARDOUS WASTE General onshore cable construction works, access /haul road, CCS and	To be kept separately from inert and non-hazardous waste.	To reduce the volume of hazardous waste by segregation.
jointing bay compound removal	To be segregated into its component streams and kept in clearly labelled containers. Liquid hazardous waste containers to be bunded to contain 110% of the volume of the largest container or 25% of the total volume capacity.	Preventing toxic waste materials from entering the local water environment
	Containers/ skip to be in good condition, enclosed and located on impermeable hard standing.	
	Containers/ skips to be located away from sensitive receptors/pathways and watercourses.	
	Containers/ skips to be screened from external receptors if possible.	

^{26.} Sediment release or siltation can cause long term damage to river ecology and can accumulate to cause flooding events. Waters containing silt should never be pumped or allowed to flow directly into surface water features. Discharge of water into surface water



features must have Environment Agency permit or exemption in advance of construction. Suitable treatment will be required, such as the use of a lagoon, tank or chemical treatment.

- 27. Where possible prevent water from entering excavations. Use cut off ditches to prevent entry of surface water and well point dewatering or cut-off walls for groundwater. Suitable management of field drainage systems will be required where these may be present within works locations to further prevent water ingress. Create a sump in the corner of an excavation and avoid disturbing that corner. Do not allow personnel or plant to disturb water in the excavation. Pumping from excavations will be undertaken in accordance with the Water Abstraction and Impounding (Exemptions) Regulations 2017.
- 28. Fresh concrete and cement are very alkaline and corrosive and can cause serious pollution in watercourses. It is essential to ensure the use of wet concrete and cement in or close to any watercourse is carefully controlled so as to minimise the risk of any material entering the water, particularly from shuttered structures or the washing of equipment. Any water requiring removal from works involving concrete/cement is not to be discharged either to ground or surface waters without sufficient treatment to neutralise the pH level, and without appropriate permits as outlined above.
- Each area of works will be assessed individually to determine whether there is sufficient buffering capacity to settle solids and suspended silt via a soakaway prior to entry of run-off into the watercourse. Buffering capacity will generally depend on the topography and vegetation type, surface area and sensitivity. If sufficient buffering is not available, silt management measures will be enhanced to ensure that the sediment levels in the runoff does not exceed typical sediment concentration ranges in the receiving water body (see Surface Water and Foul Drainage Management Plan (EA3-LDC-CNS-REP-IBR-000034).
- The nature of the sediment control proposed would be determined by the contractor on a case-by-case basis. Typically, runoff will be directed to a settlement area and, in the event that this does not provide sufficient sediment removal, discharge from that area would be directed via a silt buster (or similar mechanical silt removal system) prior to discharge. In the event that this system is proving to be insufficient (likely in the event of storm events in excess of design capacity) the response will be to seek to increase the size (i.e. plan area) of the settlement area to enhance the settlement of solids prior to discharge. This will also provide additional storage capacity to hold back flows in excess of the permitted discharge rate on the site.
- 31. Site staff will use both visual observations and hand-held turbidity probes to assess for the presence of problematic sediment concentrations in real time while on site. This will supplement laboratory testing for suspended sediment concentrations.
- ^{32.} Prior to construction commencing, works will be undertaken, on a case by case and risk basis, to derive a relationship between turbidity and suspended sediment concentration for local subsoils and sediments along the route. From this the contractor will determine whether gravity or chemical treatment is required to drop out the sediment before discharge.
- Prior to and during works, basic monitoring in the watercourses / ditches that that will receive a permitted discharge of surface runoff from the works areas, and any other channel in close proximity to the works, will be undertaken. This monitoring will include basic in-situ testing (pH, Dissolved Oxygen, Conductivity and Turbidity) and also sampling and laboratory analysis for suspended solids concentration. These results will be used to both define typical baseline ranges in the receiving watercourses and confirm that adverse water quality impacts are not occurring.

4.2. Fuel and Oil Storage

- ^{34.} Fuel and oils will be stored in accordance with legislation to minimise the risk of pollution. In brief, secondary containment will be provided for all oil and diesel tanks:
 - For a single tank, the secondary containment will be at least 110% of the maximum storage capacity.
 - For two or more tanks in one secondary containment system, the secondary containment will be at least 110% of the biggest tank's maximum storage capacity or 25% of the total maximum storage capacity of all the tanks, whichever is the greatest.
- It is a requirement that storage of static generator(s) and associated fuel tank(s) are fully enclosed containerised systems (e.g. generator and fuel tank within the same bunded container unit) with a high level alarm fitted to the bund to indicate any issues with the containment system. Alternatively, static generator(s) and associated fuel tank(s)which are separate with inter-connecting hoses, may be located within a covered impermeable bund, where these will be located on-site for the "duration of the works". Bunds shall be constructed from concrete block work or similar (e.g. a walled containment facility). Rainwater shall be prevented from



accumulating in bunds as this will compromise the containment. Further controls with respect to fuel and oil storage are detailed in Table 4-2.

Table 4-2 Fuel and Oil Storage Controls

TYPE OF MATERIAL & RELATED WORK ACTIVITY	CONTROLS	PREVENTION
DIESEL Access tracks, haul roads, CCS and jointing bay construction	To be stored in bunded tanks or double walled bowsers.	Preventing a release of diesel from entering the natural environment
	Fuel tanks and mobile bowsers must be kept locked when not in use and overnight.	
	Use of portable bowsers with built-in bunds for any refuelling activities required in the active working area, with the return of bowsers to the temporary compound overnight.	80
	Where portable storage is required at active working areas these shall be sited at least 30m from watercourses, possible routes to watercourses and drains. Storage areas shall be located in areas free from vehicle movements to minimise the risk of collision damage.	
	Spill kit and granules will be stored near the bunded area. Jerry cans are to be used for hand carrying of fuel around the site. These must be clearly marked.	
	Where practicable, only restricted hand carrying of fuel should be allowed on the site. Any fuel containers must be stored in a bund or drip tray/plant nappy when not in use within a ventilated lockable COSHH store.	
	Ensure any fuel container is appropriately labelled.	
	Place plant nappies/drip trays under equipment containing fuel/oil in areas without permanent bunding and ensure their use when handling fuels or oils. This includes mobile generators when used out on site.	



TYPE OF MATERIAL & RELATED WORK ACTIVITY	CONTROLS	PREVENTION
OIL Access tracks, haul roads, CCS and jointing bay construction	To be stored in original container or in an appropriate container designed for the storage of oils.	Preventing a release of oil from entering the natural environment.
	Use of portable bowsers with built-in bunds for any refuelling activities required in the active working area, with the return of bowsers to the temporary compound overnight.	
	Where portable storage is required at active working areas these shall be sited at appropriate distances from watercourses, possible routes to watercourses and drains. Storage areas shall be located in areas free from vehicle movements to minimise the risk of collision damage.	S
	Metal jerry cans are to be used for hand carrying of oil around the site.	
	Where practicable, only restricted hand carrying of oil should be allowed on the site. Place plant nappies/drip trays under equipment when using oil.	
	Containers must be stored in a bund or drip tray/plant nappy when not in use within a ventilated lockable COSHH store.	
	Ensure the container is appropriately labelled.	
PETROL Access tracks, haul roads, CCS and jointing bay construction	To be stored in an appropriate container designed for the storage of petrol i.e. plastic jerry can.	Preventing a release of petrol from entering the natural environment.
	Plastic jerry cans are to be used for hand carrying of petrol around the site.	
	Where practicable, only restricted hand carrying of fuel should be allowed on the site.	
	Place plant nappies/drip trays under equipment containing fuel/oil in areas without permanent bunding and ensure their use when handling fuels or oils. This includes mobile	



TYPE OF MATERIAL & RELATED WORK ACTIVITY	CONTROLS	PREVENTION
	generators and metal jerry cans which are used out on site.	
	Ensure any petrol container is appropriately labelled.	
	Containers must be stored in a bund or drip tray/plant nappy when not in use within a ventilated lockable COSHH store.	
	Ensure the container is appropriately labelled.	S

4.3. Vehicle Movements

60.

The onshore cable works will require a significant volume of vehicle movements which have the potential to cause pollution. The procedures for control pollution risks associated with this activity are provided in the Table 4-3.

Table 4-3 Vehicle Movement Control Procedures

Activity	Control Procedure	Frequency /Timescale
Maintenance	All vehicles and plant to be inspected for signs of fuel/oil leaks or drips. Vehicles leaking fluids shall be denied entry to the site.	Prior to entry on site.
	All on-site vehicles and plant to be subject to visual inspection for signs of fuel/oil leaks or drips before being delivered to working area.	Daily
	Any vehicles leaking fluids shall be contained or removed from site for repair.	As required
	Maintenance of all mobile plant and vehicles to be carried out at a suitable location agreed with EnvCoW.	On-going during construction
	Wastes arising during vehicle maintenance to be collected in marked containers for disposal off site.	On-going during construction Waste to be removed from site as required
	A vehicle management system will be put in place wherever necessary to reduce the potential conflicts between	As required



Activity	Control Procedure	Frequency /Timescale
	vehicles and thereby reduce the risk of collision.	
	Speed limit on un-surfaced roads to minimise potential for dust generation and monitoring of haul road surface condition	On-going during construction
	Vehicles leaving site will be washed if necessary.	On-going during construction
	Water will be used as a dust suppressant as required.	On-going during construction
Parking	All mobile plant and vehicles to be parked in dedicated locations.	Every working day.
Plant	All static operational plant to be fitted with drip trays or plant nappies to prevent oil and fuel leaks causing pollution	On-going during construction
	All operational plant and vehicles to carry a suitable spill kit.	On-going during construction
Refuelling	Refuelling procedures and locations to be outlined within a method statement to be submitted to the EnvCoW for approval.	Prior to construction.
	A designated refuelling area will be used with an impermeable surface, at least 30m from watercourses and drainage ditches.	On-going during construction.
	Principal Contractor also needs to be aware of any prevailing weather conditions to ensure that any bunded area is not left in a condition that could result in an overflow. Any contaminated water within the bund must be treated or disposed of using a licensed waste contractor.	
	Suitable spill kits to be located at every refuelling point.	On-going during construction.
	Standing machinery will have drip trays placed underneath to prevent oil and fuel leaks causing pollution. Drip trays will be checked regularly and any accumulated oil removed for appropriate disposal.	On-going during construction.



4.4. Hazardous Substances

- 17. It is the responsibility of the Principal Contractor to have in place controls for the delivery, storage and use of the hazardous materials to be used during the construction works. COSHH assessments, environmental risk assessments and method statements will be used to determine the necessary controls required to protect human health and the environment.
- 78. It shall be a requirement for the Principal Contractor to hold and maintain an up to date inventory of any chemicals and wastes that are held on site including Material Safety Data Sheets (MSDS) and to maintain, manage and inspect the COSHH store.
- 79. Table 4-4 details the control measures which shall be employed for the management of hazardous substances.

Table 4-4 Hazardous Substances

MANAGEMENT OF HAZARDOUS SUBSTANCES

Selection of chemicals that have the lowest impact to the environment where practicable and volumes of hazardous substances stored to be limited to be fit for purpose and minimise risk;

The Principal Contractor and all sub-contractors shall detail within their CEMP specific controls necessary for the delivery, storage and handling of hazardous materials relevant to their works, and in particular oils and fuels, taking into account the requirements of the Control of Pollution (Oil Storage) (England) Regulations and best practice guidelines (such as Pollution Prevention for Business).

Ensure that fuels, oils and chemicals dangerous to the environment are only ordered in manageable quantities and stored responsibly i.e. in a bunded area able to contain 110% of the volume or in a suitable container/storage area within designated areas and in accordance with relevant legislation

Store fuel, oil and chemical in areas that are secure with suitable built in containment such as bund walls or drip tray. Containment must be structurally sound and strong enough to prevent leakage. They must be locked and secured when not in use.

Ensure that containers are labelled with details of contents and spillage kits or portable bund kits are available at or near the delivery point for emergencies.

Chemicals, oils and hazardous materials will be stored securely at least 30m from watercourses.

Place plant nappies/drip trays to be used when handling all chemicals, fuels or oils.

Activities involving the handling of large quantities of hazardous materials, such as deliveries and refuelling will be undertaken by designated and trained personnel.

Where external storage is required, these should be located in designated areas taking into account security, the location of sensitive receptors and pathways such as drains and watercourses, and safe access and egress for plant and manual handling. Spill response materials shall be provided nearby and be readily accessible, with local project personnel trained in spill response. Storage areas should be located in areas free from vehicle movements to minimise the risk of collision damage.

The storage of incompatible hazardous materials shall be appropriately segregated and stored a minimum of 30m from any watercourse or drain. If hazardous materials are stored in a confined space, the space must be properly ventilated

Oil, fuel and chemical storage areas shall be inspected, at least weekly for signs of spillage, leaks and damage. Rainwater, materials and general debris that collects in bunds and drip trays that compromise contingency storage shall be removed as part of the maintenance programme and in accordance with regulatory protocols. Spill kits of sufficient capacity to deal with volumes stored to be fully stocked and readily available.



4.5. Construction of Access Tracks and Haul Roads

^{80.} The Principal Contractor will be responsible for ensuring the mitigation measures in Table 4-5 are implemented as part of the access track and haul road construction process to limit the amount of silt migrating from the construction areas into surrounding watercourses. Drainage engineering along with environmental mitigation will be determined in consultation with the EnvCoW. The following are best practise mitigation methods that are best used in combination with one another to create a series of points to attenuate and manage runoff. A more detailed plan of where these methods will be installed will be required prior to construction and will be checked by the EnvCoW.

Table 4-5 Construction of Access Tracks and Haul Roads

MITIGATION TYPE	MITIGATION DESCRIPTION
Silt traps	Silt traps are a simple and effective method of controlling sediment laden run-off, but are limited by capacity of what the expected flows are likely to be. These can be installed either on the inlet or outlet side of culverts, but require to be robust enough to allow for frequent clearing out of collected sediments. Silt traps are also useful in reducing the amount of silt transported along longer drainage channels with a lower gradient.
Silt fencing	This system involves the installation of semi-permeable geotextile fabric, vertically held on simple timber posts, and is used primarily as an additional means of reducing sediment concentrations in run-off water. Silt fencing would not be used in watercourses. The fences can be installed alongside any sensitive areas e.g. large areas of stripped materials, or downstream from outlets. Silt fences are generally more suitable in a situation where sheet flow could result in the migration of silt from areas further up the slope or where the water in areas prone to sheet flow need to be interrupted to stop the formation of erosion gulleys. They should be used with caution in narrow channels prone to strong flow during wet periods where they can easily block the water and either cause flooding of the surrounding area or be destroyed in the process. Straw bales will not be used for filtering water as these are not an effective method and cause manual handling hazards when wet.
Settlement Lagoons	Any proposed site for large capacity settlement lagoons requires careful planning and a good awareness of the expected volumes of flows that they will be required to cope with. Lagoons are particularly effective where a large run-off volume is expected and suitable small scale dispersal to existing vegetation would not be successful. Care is required to ensure that the sidewalls are strong enough to withstand any potential loadings as an uncontrolled discharge could have serious environmental consequences.
Surface Cross- drains	On sections of tracks that have particularly long gradients, surface erosion can be prevalent following periods of persistent rainfall. Surface water tends to run down the roadline, accumulating as it nears the lower sections and eventually flowing into watercourses carrying with it all the silt scoured from the road surface along the way. To alleviate this issue, it is recommended to install a series of surface cross-drains to intercept these flows, and divert then into the side ditches, preventing the build-up of flow. These cross drains can be constructed with channels of various materials but should be strong enough to withstand the expected traffic loadings. It is noted that cross drains can quickly become filled with sediment, and, therefore, regular inspection and cleaning will be undertaken in order that they work as intended,
Flocculent and coagulant dosing	Where all other possibilities of sediment control have been considered, tried, or discounted, another method to increase the rate of settlement would be by the introduction of liquid flocculants. These work by pulling together finer suspended solids, into larger and therefore heavier particles that settle out quicker. The use of flocculent agents should be considered where there are limits on available space. Liquid flocculants are only to be used by trained operatives within a controlled dosing unit such as Siltbuster [®] to ensure any discharge is within required parameters in accordance with the necessary Environmental Permit.

4.6. Watercourse Crossings

81. No watercourse crossings will be required for the Playford Corner Works.



4.7. Working On or Near Water

- 82. Construction activities in or near water have the potential to cause serious pollution or impact on the bed and banks of a watercourse and on the quality and quantity of the water. Most pollution incidents are avoidable. With careful planning the risk of site work causing pollution can be reduced. Many measures needed to prevent pollution cost very little, especially if they are included at the planning stage of any activity. Major causes of environmental harm associated with working in or near watercourses include:
 - Silt disturbance of river bed or bank, dewatering and pumping of excavations, runoff from exposed ground, plant washing, roads and river crossings.
 - Cement and concrete which is very alkaline and corrosive and can cause serious pollution
 - Chemicals and solvents oil storage, refuelling, vehicle and plant washing, trade materials etc.
 - Waste materials (including hazardous waste) e.g. oily wastes, spent acids and solvents.
- 83. Most activities with the potential for affecting watercourses or groundwater will require an authorisation from the EA. The general provisions as listed in Table 4-6 should be referred and adhered to when working in or near watercourses.

Table 4.6 Contractor Check List For Working In Or Near Water

Contractor Check List for Working In Or Near Water

Identify all activities that will be undertaken in or near watercourses.

Risk Assessment Method Statements to detail all relevant controls

Communicate risks associated with working in or near watercourses to all personnel.

Identify all activities that will require a consent, are obtained. Comply with all conditions.

Undertake necessary risk assessments in advance of activities.

Communicate method statements to all relevant personnel through activity plans.

Monitor the success of all measures and re-design if necessary.

Give staff regular toolbox talks about the risks of working near water and the potential to cause pollution.

Undertake regular checks on site to ensure that pollution prevention measures are in place and are successful.

Be vigilant about any works with cement/ concrete near water.

Store cement and other pollutants in a secure location over 30m from a watercourse.

Ensure plant and vehicles are not washed or refuelled within 30m of a watercourse or waterbody.

Ensure that oil and fuels are used and stored in accordance with best practice.

4.8. Spill Response Plans

- As listed in the above sections there are numerous materials that will be present on site and various activities that could cause an incident if not managed appropriately, the Principal Contractor is therefore required to produce an Emergency Response Plan so that in the event of any spill on site the appropriate actions can be quickly undertaken.
- 85. Incidents will be categorised as follows:
- 86. Near miss:
 - Any event or situation that, whilst not immediately causing harm, has the potential to adversely impact on the environment;
- 87. Minor:
 - Pollution to controlled waters as a result of oil/chemical spills or silt that is not considered to be significant and is contained locally;



- Pollution or contamination of land as a result of oil/chemical spills that is not considered to be significant due to the nature and extent of contamination and sensitivity of receptors;
- Pollution of air such as refrigerants (e.g. R410A) leak due to global warming potential;
- Management of waste with insufficient regard to 'duty of care' but is unlikely to give rise to notices from stakeholders;
- Protected species fatality or habitat damage not covered under 'Major';
- Any other matter deemed to be a minor incident by the Environmental Management & Compliance Manager;

88. Major:

- An incident which gives rise to a prosecution, regulatory notice, caution or warning letter, or other form of enforcement action/notification from a stakeholder such as a regulatory body or authority (including a utility where appropriate).
- Activity undertaken in breach of legal requirements, without appropriate permission, licence or consent, or in breach of consent conditions, including 'duty of care'.
- Significant pollution to controlled waters as a result of oil/chemical spills or significant quantities of silt;
- Significant pollution or contamination of land as a result of oil/chemical spills which is considered to be significant due to the nature and extent of contamination and sensitivity of receptors;
- Significant pollution of air such as refrigerants (e.g. SF6/R22) leak due to high global warming potential;
- Injury or death to any animal which has legal protection; and
- Any other matter deemed to be a major incident by the Environmental Management & Compliance Manager.
- ^{89.} The following aspects will form part of the Principal Contractor's Emergency Response Plans:
 - Use of an assigned Emergency Spill Response Contractor;
 - Assessment of safety of site operatives/ employees.
 - Location, access to and content of spill kits / response materials, including Emergency Lockers with a unique reference to make it simple to identify the location of an incident.
 - EATL has the following minimum requirements in regards to spill response. Spill kits to be provided in/with the following:
 - In all heavy plant, 4x4 and commercial vehicles.
 - With all refuelling bowsers.
 - During all refuelling operations, associated transportation and storage.
 - With all static fuel tanks.
 - Provisions for stopping and containing the spillage/leakage/hazard, please see Figure 2 'Stop, Contain, Notify' flowchart.
 - Notification procedures (including reporting to the relevant external stakeholders, environmental regulatory bodies and EATL where the severity of the incident deems such notifications appropriate.
 - Clean up and waste management including method for handling the waste, bagging and handing over to the relevant waste contractors whose contact details will be listed.
 - Spill response materials replenishment, the Emergency Locker will be replenished each time the kits are used.
 - Spill response competency, Toolbox talks will be issued by the EnvCoW to demonstrate the deployed of spill kits in the event of an incident. A spill drill will be conducted, documented and signed by all in attendance on six monthly basis.

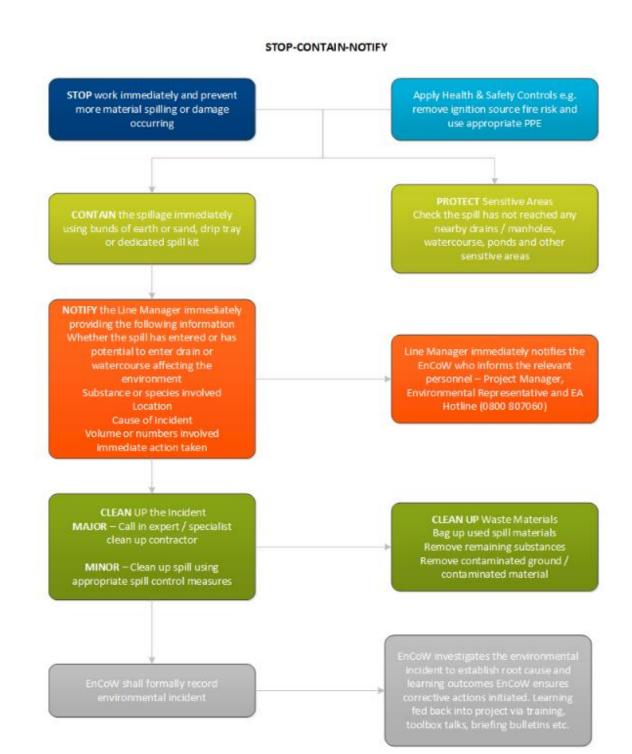
4.9. Unexpected Contamination

90.

In the event that unexpected gross contamination is encountered (i.e. visual and olfactory evidence of hydrocarbons, spent oxide, tars or other unusual discolorations or odours), work in the affected area will cease on instruction by the Site Manager or delegate. The affected area will be contained and made as safe as reasonably practical pending assessment by a suitably qualified environmental specialist. Consultation with the relevant planning authority and the Environment Agency will be undertaken, and agreement reached on plans for further investigation and remediation measures (where necessary) prior to any remedial action being undertaken. Appropriate measures are further set out in Section 11 (Contaminated Land) of the CoCP.



Figure 2 – Stop Contain Notify Matrix



Page 23 of 30



5. SITE LAYOUT

91.

- The Playford Corner CCS will be utilised for welfare, site staff accommodation with dedicated office space, parking, as well as providing secure storage for materials, plant and equipment. The CCS and jointing bay compounds are shown on Figure 3 and 4 respectively and will have a permeable crushed stone or aggregate surface laid on a geotextile membrane, which will allow some direct infiltration of rainfall run-off, at the same time as trapping and filtering sediment and contaminates. Where hard surfacing is considered for utilisation in potentially high risk areas of the CCS or jointing bay 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. The following measures will be in place, however further detail is provided in the Playford Corner Works Surface and Foul Water Drainage Management Plan:
 - The main access road into the CCS will have a portable wheel wash facility to prevent construction vehicles and plant carrying mud off site onto public roads and will include self-contained water and silt collection systems. Waste silts and sludges will be regularly removed in accordance with Duty of Care requirements.
 - Oil, water and silt separators will be used where applicable in the CCS and jointing bay surface water management systems 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.
 - The length of time excavations are kept open will be minimised to reduce the potential for dewatering.
 - The filtration of all run-off using mitigation measures such as check dams, filter strips, silt fences or settling tanks/ponds
 prior to release, or the discharge of clean surface water run-off to land to allow natural percolation wherever possible (no
 discharge of water will take place directly into a watercourse without applicable consent being in place and being in
 accordance with the Surface and Foul Water Drainage Management Plan).
 - The separate storage of topsoil and excavated materials, to prevent mixing of sub-soil and topsoil, thus improving reinstatement.
 - The minimisation of excavation volumes and disturbance to the surrounding areas, together with the replacement and reseeding, as required, of any soils inadvertently disturbed during excavations in general accordance with their original structure and location.
 - The setting of vehicular speeds along the construction access tracks to minimise soil trafficking.
 - The use of pollution control measures to reduce sediment run-off entering any watercourses or surface water drainage systems during construction activities, with reference to the relevant guidance and good practice (See Section 3.2).
 - Regular cleaning and maintenance of plant to ensure potential pollutants are not released e.g. from fuel spills and leaks.
 - The maintenance of a register of fuel volumes stored on site, and the location of fuel storage and refuelling points in designated areas, a minimum of 30m from watercourses.
- 92. Regular inspection of facilities storing hazardous materials, which will be locked and made secure when not in use (see Section 3 above).
 - Best environmental practices will be followed, reducing the potential for release of contaminants to ground to a minimal level. Appropriate spill and leak containment systems will be incorporated into the construction procedures to ensure no uncontrolled releases of contaminants occur.
 - Any materials to be removed from site will be subject to the appropriate waste management licensing regulations. Care will be taken to manage any stockpiles of materials in order to reduce runoff from exposed surfaces.
- ^{93.} It will be the Principal Contractor's responsibility to provide a site layout plan, including surface, foul and combined drains. This shall be risk assessed with appropriate exclusion areas, mitigation, and identification of any features of environmental importance within the immediate surroundings.

6. EMERGENCY INCIDENT RESPONSE PROCEDURE

- 94. The information below sets out the procedures to be put in place to respond to different potential emergency environmental incidents. The Principal Contractor will be responsible for producing their own Emergency Incident Response Plan (EIRP). The Principal Contractor's EIRP will provide more detail relating to types of incidents, hazards, response procedures and emergency contact telephone numbers. The following environmental emergency response procedures will be used as a basis for the development of the Principal Contractor's EIRP which shall also include:
 - Identification of responsibility and authority.
 - Location plan.



- Identification of hazards.
- Emergency contact details.
- Emergency response arrangements.
- Emergency reporting arrangements.
- Emergency evacuation arrangements.
- Details of emergency response team.
- ^{95.} The Principal Contractor will declare the specialist sub-contractor they would use in the event of an environmental emergency event, this contractor must be available 24/7 and their response time to site should also be declared in Principal Contractor's documents and site briefings.
- 96. The EATL Construction Team or SPR's Whitelee Control Centre must be contacted within 30 minutes of any incident, followed up by an initial written report within 24 hours. A full report must be issued to EATL no later than 7 days from the incident. All Environmental Incidents shall be reported in the SPR HSE tool as soon as possible after an incident has occurred or upon delivery of the initial incident report notification (24 hours) by completing the appropriate Environmental Incident Forms and submitting them to the Construction Team. The EATL Environmental Team shall then record the details onto the relevant system.
- 97. Measures to remedy and prevent a recurrence shall be identified by the incident owner, with target dates and responsibilities also recorded. The actions should be tracked to completion. It is the responsibility of the action owner to close out their actions.
- 98. The appropriate Regulator shall be notified, as required, of any legal breaches connected to site activities.

6.1. Unconsented Discharge to Land or Water

- ^{99.} No discharges can be made to land or water without an Environmental Permit being in place. In the event of a fuel or chemical spillage the following procedure must be employed:
 - ASSESS the situation. Determine the source, composition and approximate quantity of the spill and determine whether you have the appropriate equipment, Personal Protective Equipment (PPE) and training to tackle the spill.
 - Get the HELP you require to deal with the spill safely. Inform the Works Manager/ site engineer of the spill. They will contact a spill contractor if required.
 - If the spill is located adjacent to the site on one of the roads/pathways used by members of the public, PREVENT pedestrians and traffic passing through the spill. Contact police headquarters if the spill prevents a risk to traffic.
 - STOP the source of the spill.
 - CONTAIN the spillage using either a spill kit or a suitable inert material e.g. sand. DO NOT allow the spill to enter the local drainage system or watercourses. Cover any drains, and use spill socks to prevent run off to watercourses.
 - REMOVE the spillage. Small spills can be removed using spill mats and/or granules; larger spills may require a pump from a specialist contractor.
 - DISPOSE of the waste material. Used spill kit should be placed in a designated bin separate from all other types of waste. Do not put used spill kit material in any of the skips. Material which has been pumped may be stored in empty oil drums or other suitable container prior to removal by a registered hazardous waste contractor.
 - REPORT the incident immediately to the Site Supervisor and to the Environmental Advisor. The Environment Agency must be informed in the event of pollution to groundwater or surface water; Anglian Water and the relevant local planning authority must be contacted should pollution from site enter the surface water drain or foul drainage system. The EATL team shall be informed as soon as is reasonably practicable if a regulatory body has been informed of an incident.
 - REVIEW event to determine any actions required to prevent the incident from recurring. Review the effectiveness of the response plan and make any changes necessary.
- ^{100.} See Figure 2 which shows the 'Stop, Contain, Notify' procedure.

6.2. Release of Silt

- ^{101.} In the event of a release of silt the following procedure must be employed:
 - CHECK watercourses during periods of high rainfall or construction activities with potential for significant run-off.
 - Get the HELP you require to deal with the situation safely and inform Site Manager of the silting.



- Implement mitigation measures immediately. TRACE back to the source where possible. Consider whether the site activity should be halted.
- PREVENT further spread of sediment downstream by implementing silt screens/booms etc. to help control sediment immediately. If already in place check for signs of damage.
- MONITOR the effectiveness of protection measures daily and re-plan as necessary.
- MAINTAIN silt bales/screens etc. regularly so they do not make problems worse.
- REPORT the incident immediately to the Site Supervisor and to the EnvCoW. The Environment Agency must be informed in the event of pollution to a surface water; Anglian Water and the relevant local planning authority must be contacted should pollution from site enter the surface water drain or foul drainage system. EATL team must be informed as soon as is reasonably practicable if a regulatory body has been informed of an incident.
- REVIEW event to determine any actions required to prevent the incident from recurring. Review the effectiveness of the response plan and make any changes necessary.

6.3. Emergency Pollution Event to Air

- ^{102.} In the event of a pollution release to air the following procedure must be employed:
 - LOCATE the source of the air pollution.
 - If safe to do so, STOP the source of the pollution for example by turning off faulty equipment. Do not expose yourself to any dust or vapours without the appropriate PPE.
 - STOP any works which are in the vicinity of the pollution event, make sure all site staff and members of public are diverted away from the pollution event.
 - SUPPRESS particulate air pollution with water but only if you can control the runoff such that the water will not enter any drains or watercourses.
 - REPORT the incident to the works manager and site engineer who will in turn report the incident to ESC. Report the incident to the EnvCoW.
 - REVIEW the cause of the pollution event to determine any actions required to prevent the incident from recurring.
 - Review the effectiveness of the response plan and make any changes necessary.

6.4. Flooding

^{103.} A separate Flood Plan has been prepared as in presented as Appendix 2 to the CoCP, this sets out the procedure to be followed in the event of a flood emergency.

6.5. Extreme Weather

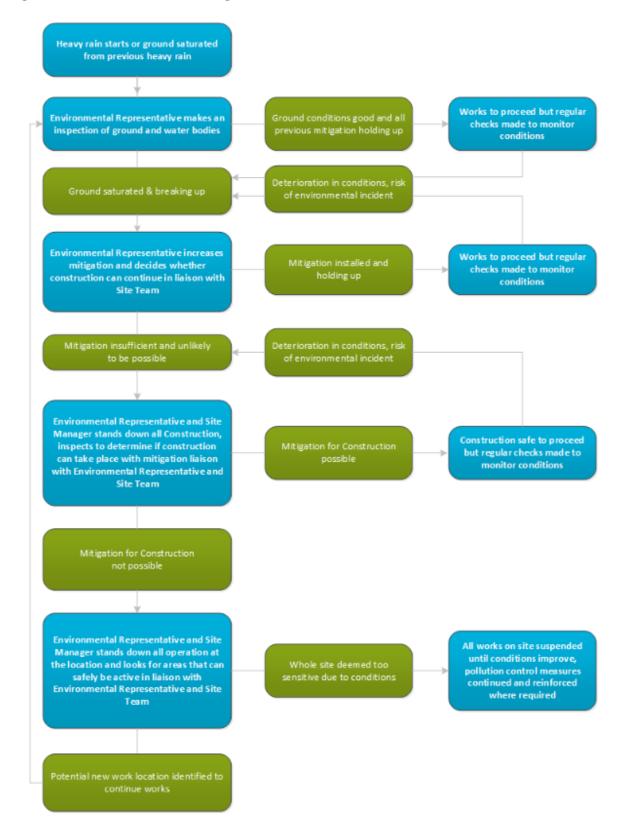
- In the event of an extreme weather event the following procedure must be employed, see Figure 5 for wet weather decision making matrix.
 - Ensure the current and forecast weather conditions are reviewed daily as part of the daily site risk assessment.
 - Sign up to receive Environment Agency Flood Alerts;
 - When extreme weather closes in stop work, make safe and secure and ensure all loose items are recovered and correctly stored.
 - If safe to do so, use site vehicles to leave site along approved routes.
 - In the event egress is denied, all site personnel are to remain together as a group and make their way to the nearest welfare unit / safe location.
 - Site Supervisor to ensure all personnel are accounted for at all times.
 - Site Supervisor to report the incident to Site Manager / Construction Manager who will decide the appropriate action to be carried out.
 - Remain in the welfare unit / safe location until rescue arrives or weather conditions improve.
 - Remain in telephone contact with the Site Manager and report in every 30 minutes to ensure real time updates can be provided both on the weather and any rescue attempt.

6.6. Wildlife

Should any other wildlife be encountered within work areas, whether trapped, in distress or at risk of harm, works will cease, and the site supervisor will seek further guidance from the Ecological Clerk of Works (ECoW). All contractor management plans are to include emergency contacts and/or rescue facility details. Further details regarding species-specific emergency procedures are included in the Ecological Management Plan (EA3-LDC-CNS-REP-BOW-000001).



Figure 5 Wet Weather Decision Making Matrix





7. KEY SITE AND EMERGENCY CONTACT LIST

^{106.} Emergency contacts shall be communicated to all site personnel via a briefing in relation to emergency response. The following key site emergency contacts will be completed prior to construction and made available to all site personnel.

EMERGENCY CON	TACTS				
Project Name:	East Anglia THREE		Project No.		
Address			Tel No.		
	RS TO BE USED II RE OR ENVIRONMEN		A SERIOUS ACCID	ENT, DANGEROUS	
EMERGENCY SERVICES	Ambulance	999 or	Tel No.		
SERVICES	Fire		Tel No.		
	Police		Tel No.		
HOSPITAL	Address Accident and Emergency Ipswich Hospital, Heath Road, Ipswich, Suffolk, IP4 5PD				
	Tel. No.	01473 712233			
	Gas	ТВС	Tel No.	твс	
COMPANY CONTACT	Electric	ТВС	Tel No.	твс	
	Water	ТВС	Tel No.	твс	
	Telecoms	ТВС	Tel No.	ТВС	
CONSTRUCTION TEAM CONTACT NUMBERS	Construction / Site Manager	твс	Tel No.	твс	
	Alternative Contact	ТВС	Tel No.	ТВС	
ENVIRONMENTAL INCIDENT	Regulatory Body	Environment Agency	Tel No.	0800 80 70 60	
CONTACT INFORMATION	Waste Disposal Company	ТВС	Tel No.		
Third party environmental emergency response company 24/7 response					



8. STAFF TRAINING

- ^{107.} Every person working within the scope of the project must have a minimum level of training required for their role. This will ensure a competent pollution prevention and an effective response to any emergency situations such that the extent of damage following an incident is mitigated.
- The Principal Contractor must ensure they are aware of the requirements of this PP&EIRP and that the requirements are communicated to all their staff on site. As part of the site induction, any sub-contractor working on site will be briefed on the applicable emergency response procedures so that they are prepared and able to respond to an incident promptly and effectively. Each member of the Emergency Response Team shall be appropriately trained in the areas to which they are appointed. Confirmation of contractor staff training shall be supplied by the Principal Contractor and maintained as part of training records.
- ^{109.} An six-monthly drill shall be carried out by the Principal Contractor for each potential emergency situation that can have a major impact on the environment. The details of the drill shall be documented with signatures of attendees. Where appropriate, the environmental emergency response plans will be tested on-site in consultation with ESC, and the Environment Agency.
- 110. Weekly environmental toolbox talks will be briefed to site personnel by the Principal Contractor's environmental advisor/ EnvCoW on various topics that are appropriate to the work activities. In relation to pollution prevention the following toolbox talks are advised however this list is not exhaustive:
 - Storage of materials
 - Chemicals
 - Hazardous substances
 - Pollution Prevention
 - Pollution Incident Response
 - Pollution Incident Reporting
 - Spill kit Use physical display of how to use the kit
 - Fuels and Oils (Pollution Prevention)
 - Cement/ Concrete Water Pollution Prevention

9. TESTING AND REVIEW

- ^{111.} The Principal Contractor's EIRP will be reviewed on the following basis:
 - Monthly, in line with review of identified Aspects / Hazards for the Location.
 - In line with any consultation with local emergency services.
 - When any requirement of this EIRP is changed.
 - When any corrective and preventive actions are identified following completion of the Emergency Report.

10. REFERENCES

CIRIA 2001, C532 Control of water pollution from construction sites: guidance for consultants and contractors, 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 2005, C651 Environmental Good Practice on Site Checklist, London: CIRIA

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

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 <u>https://www.gov.uk/guidance/pollution-prevention-for-businesses</u>



Environment Agency, 2001, Pollution Prevention Guidelines 1: General Guide to the Prevention of Water Pollution (withdrawn), Bristol, Environment Agency.

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 [accessed 17/12/2020]

Environment Agency, 2020, Treating and using water that contains concrete and silt at construction sites RPS 235, Available at: <u>https://www.gov.uk/government/publications/treating-and-using-water-that-contains-concrete-and-silt-at-construction-sites-rps-</u>235 [accessed 17/12/2020]

Environment Agency, 2020, *Temporary dewatering from excavations to surface water, Available at:* <u>https://www.gov.uk/government/publications/temporary-dewatering-from-excavations-to-surface-water</u> [accessed 17/12/2020]

Environment Agency, 2014, *Pollution Prevention Guidelines 06 – Construction and demolition sites.* Available at <u>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/485215/pmho0412bwfe-e-e.pdf</u>

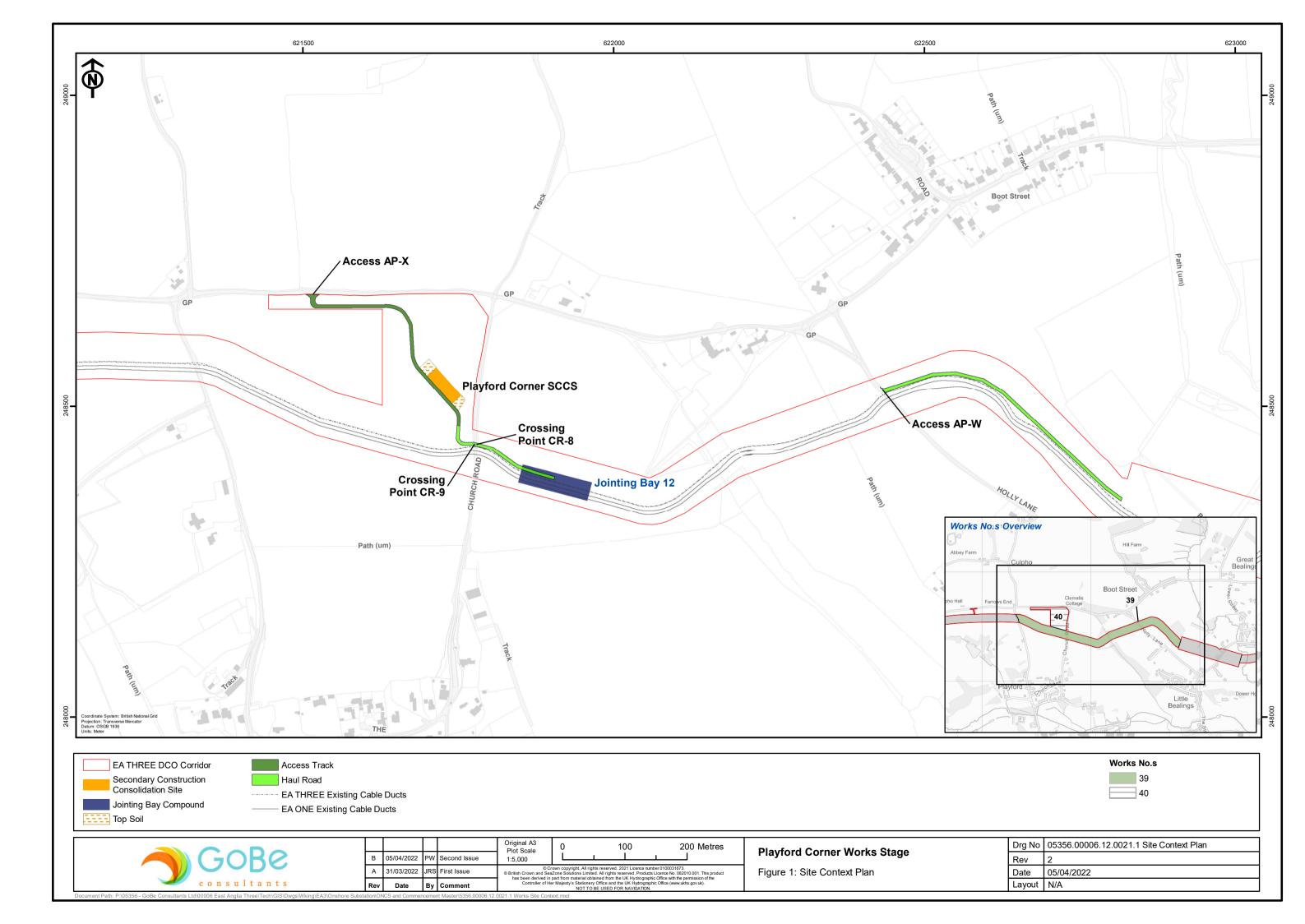
Environment Agency, *Pollution Prevention Guidelines 08 – Safe Storage and disposal of used oils*. Available at http://adlib.everysite.co.uk/resources/000/119/331/ppg08feb04_127052.pdf

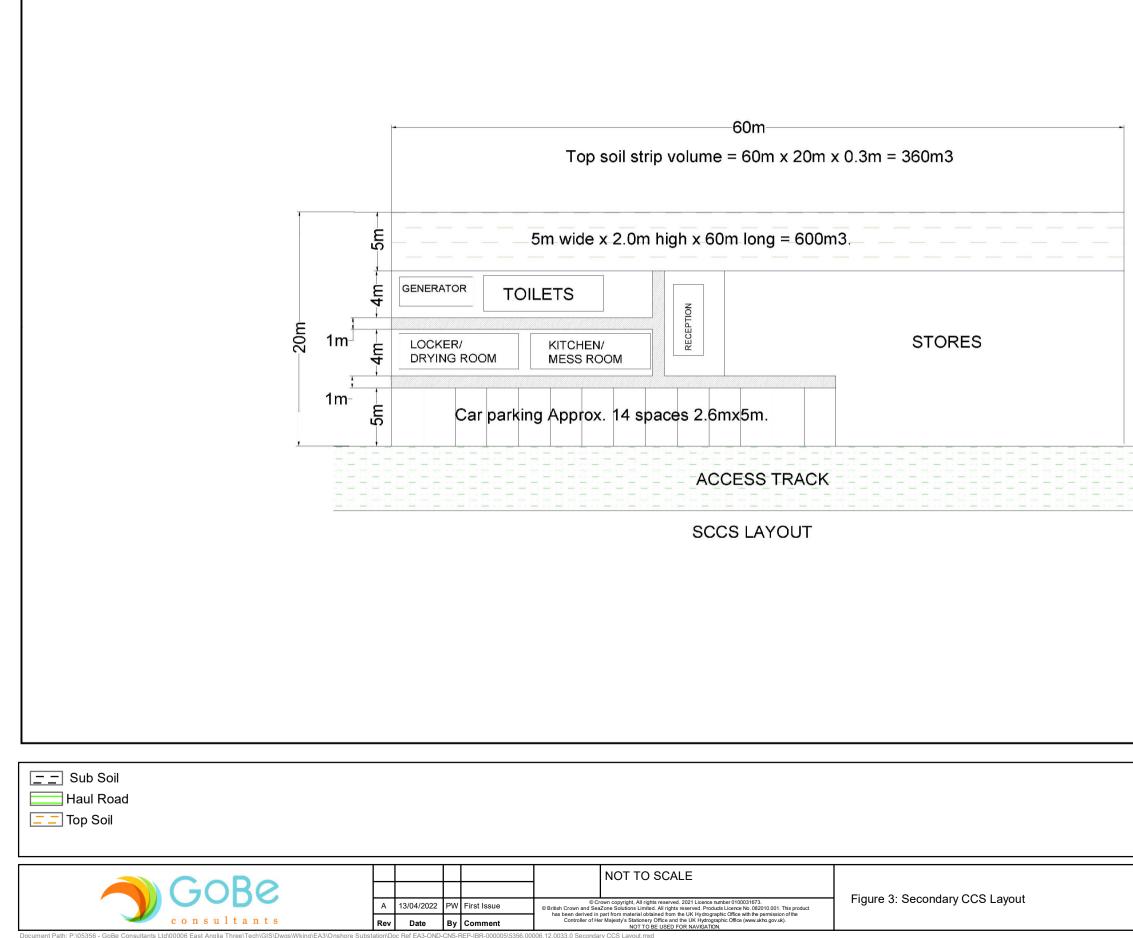
Environment Agency, 2004, Pollution Prevention Guidelines 11 – Preventing pollution at industrial sites

Environment Agency, 2004, Pollution Prevention Guidelines 20 – Dewatering of underground ducts and chambers

Environment Agency, 2004, Pollution Prevention Guidelines 21: Pollution incident response planning

SEPA, 2009, Engineering in the Water Environment Good Practice Guide Temporary Construction Methods, March 2009

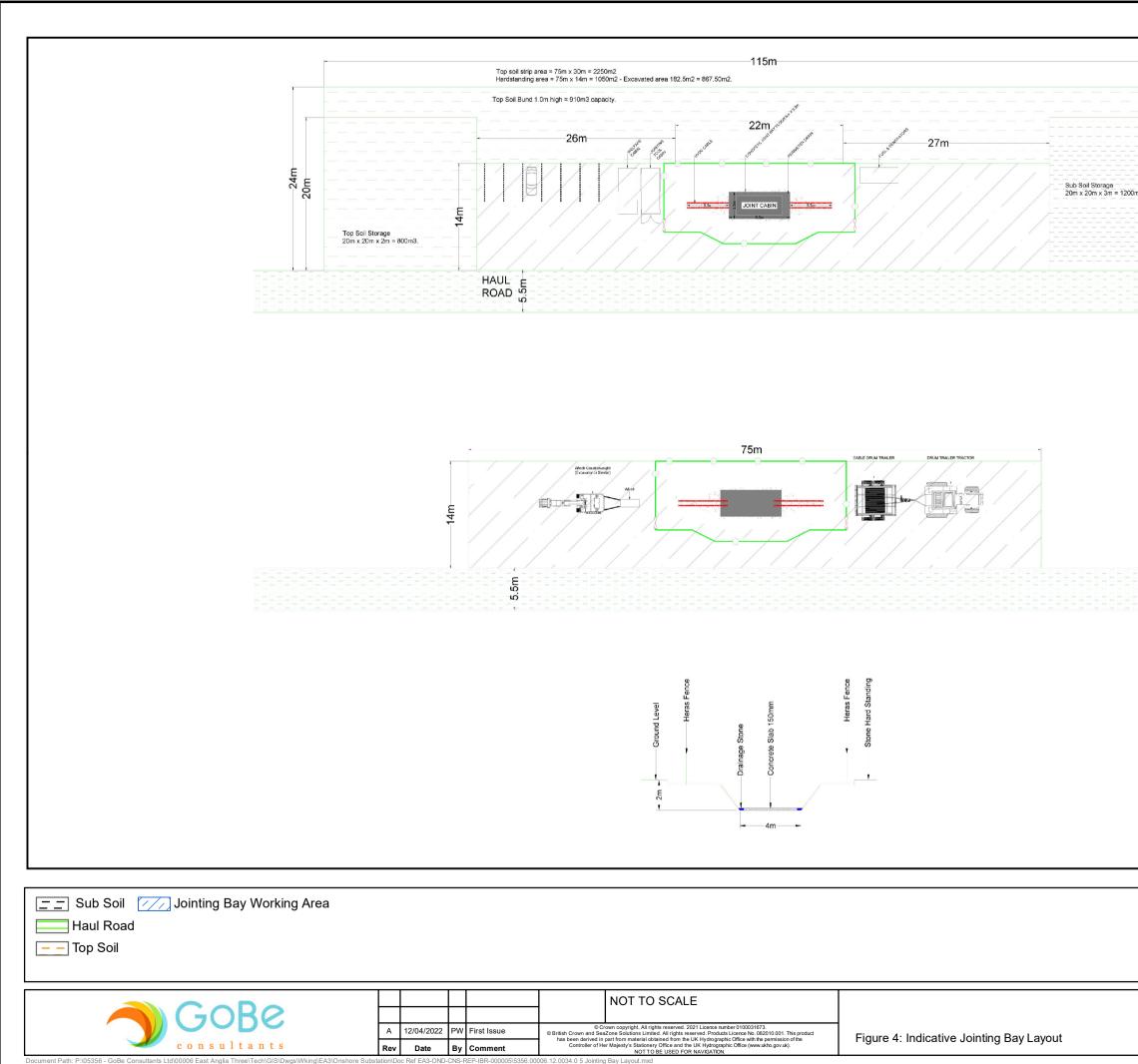




		-	-			-	-				-		_
-	-			-	-			-	-			-	-
		-	-			-	-			-	-		
-	-			-	_			-	-			-	-
-	-			-	-			-	-			-	-
		-	-			-	-			-	-		
-	-			-	-			-	-			-	-
		-	-			-	-			-	-		
		-	-			-	-			-	-		

NOT TO SCALE

	Drg No	05356.00006.12.0033.0 Secondary CCS Layout
	Rev	1
	Date	13/04/2022
[Layout	N/A



-	
0m3.	

NOT TO SCALE

Drg No	05356.00006.12.0034.0 5 Jointing Bay Layout
Rev	1
Date	12/04/2022
Layout	N/A