

Construction Environmental Management Plan (CEMP)

CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN (CEMP)

Site	IFA2 HVCD Converter Station
Scheme No.	n/a
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IFA2 Daedalus Converter Station Development

Background

Interconnexion France Angleterre is a 1,000 MW high voltage direct current (HVDC) electrical interconnector between the British and French transmission systems. It will be the second link to France that National Grid has developed with Réseau de Transport d'Electricité (RTE) and will help to enhance the security, affordability and sustainability of energy supplies in both countries.

National Grid IFA2 Ltd (IFA2) is the company that National Grid has formed to develop and bring forward the IFA2 project and is legally separate from other companies within National Grid. In November 2014, National Grid IFA2 Ltd was granted an electricity interconnector licence by the energy regulator Ofgem.

For the remainder of this document the following terms shall apply;

Site "*Daedalus Converter Station Development*"

IFA2 "*The Employer*"

ABB "*Principal Contractor*"

Morgan Sindall "*Civils Contractor*"

ABB and those employed on the contract "*The Contractor*"

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Construction Environmental Management Plan (CEMP)

1. Introduction

1.1. Construction Environmental Management Plan

This Construction Environmental Management Plan (*CEMP*) outlines the environmental risks, constraints and proposed mitigation for the IFA2 HVDC Converter Station Development.

No development in relation to the Converter Station Development shall take place until the CEMP has been submitted to, and approved in writing by the local planning authority.

The CEMP shall set out the strategy and methodology in respect to the full range of environmental issues identified during the planning process, in line with the relevant condition, in order to minimise the impact of the development upon nearby residents and businesses, users of the highway and the water environment. Specifically;

- Site office/welfare facilities;
- The planned approach to avoid or mitigate the impacts upon designated sites and protected species;
- Management of materials, soil movement, methods of tracking soil movement and details for demonstrating soil will be suitable for use;
- Storage and dispensing of chemicals, fuels and oils;
- Storage and dispensing of hazardous materials (including any hazardous soils);
- Storage of materials and construction waste;
- Proposed method of working to prevent adverse impacts to surface water, groundwater and adverse impacts caused by noise, vibration, odours, dust and any airborne contaminants during development;
- Provision of road and wheel cleaning facilities.

Items which are outside the scope of the CEMP, as they are managed elsewhere are the;

- The proposed phasing of the development;
- The proposed maintenance and aftercare of the site;

The Converter Station Development shall take place strictly in accordance with the Construction Environmental Management Plan.

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1.2. Management System

The Principal and Civils Contractor are certified to the International Standards Organisation (ISO) 14001:2015 and this CEMP is part of their management system and structured to ensure that the obligations outlined within the standard are complied with during this project.

The CEMP has been developed in line with ABB, Morgan Sindall’s and IFA2’s environmental policies and relevant policies shall be communicated and displayed appropriately within site offices.

The CEMP identifies those aspects of site activities with potentially significant effects on the environment and the controls in place to mitigate those effects.

This CEMP is a live document that is to be reviewed at regular intervals (no longer than 6 months) by the project manager to reflect progress of the works and changes in environmental requirements.

Subcontractors shall be provided with a copy of the CEMP and works supervised by the Project Team are also subject to this CEMP.

ABB and Morgan Sindall has a series of standards and guidance that supplement this CEMP and shall be made available to all those working on the project.

1.3. Compliance Obligations

The division of responsibility for obtaining permits & consents is summarised below;

PRIMARY CONSENTS are those relating to assets that will be retained permanently as the Employer’s property. The Employer shall be responsible for obtaining all primary consents and licenses.

SECONDARY CONSENTS are those relating to the construction phase. The Principal Contractor shall be responsible for securing the following secondary consents and licenses relating to construction:

- a. Ordinary Watercourse Consent/Flood Risk Activity Permit (currently in discussion with Hampshire County Council).
- b. Installation of water fitting
- c. Licence to affect or translocation of protected species or habitats
- d. Tree & Hedgerow Protection Measures
- e. Considerate Construction Scheme (CCS)
- f. BREEAM Infrastructure Assessment.

A number of other secondary consents and licenses may be necessary if required, these shall also be the responsibility of the Principal Contractor, and may include, but not limited to the following :-

- a. Section 61 consent (noise / vibration).
- c. Environmental Permits (ie water, waste activities/exemptions)
- d. Control / removal of invasive species
- e. Notification of removal of water from excavations

The Pre-Notification & Consents Checklist (section 5) sets out the responsibilities for obtaining all relevant consents for the scheme.

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Each consent obtained may have conditions that must be implemented/complied with, these will be reviewed and if required, mitigation measures included in the Environmental Operational Controls section of the CEMP or task specific Risk Assessment & Method Statement (RAMS).

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2. Environmental Management

2.1. Environmental Risks

The project manager shall work with the environmental advisor is to ensure that the register of environmental effects (section 4), specific to the project is completed before works begin and updated as circumstances occur, such as a change in scope, or a change in ABB/Morgan Sindall/employer or other compliance obligation requirements.

The input of designers and others at pre-commencement meetings will also be considered in developing the register.

Significant environmental risks shall be included within the overall project risk register.

Compliance Obligations, Permits & Consents

The environmental advisor shall provide specific advice in relation to legal & other compliance obligations, which shall be review before and regularly during the project.

Additional checks can be made against the technical index, business environmental updates or in consultation with Head of Sustainability and Environment.

A record of the assessment shall be recorded and maintained within the Pre-Notification & Consents Checklist (section 5).

2.2. Objectives and targets

Project specific objectives and targets will be developed that take into account:

- ABB, Morgan Sindall sustainability and SHE functional strategies
- Customer Key Performance Indicators (KPIs) and other requirements.

The project manager is to ensure that monitoring against the objectives and targets takes place and that the contract's senior management team in consultation with the contract environmental adviser reviews them periodically, generally not less than annually.

Project specific objectives & targets are recorded in section 6.

2.3. Roles and responsibilities

Environmental Advisor

- Develop CEMP to ensure relevant planning conditions, legal, contractual and other environmental requirements are implemented during construction of the proposed development.
- Provide advice on environment risks, constraints associated with the project, mitigation and management throughout construction.
- Regularly review the CEMP through audit & inspection to ensure mitigation, controls and best practices have been implemented as required.
- Monitor environmental performance and provide advice in the event of any environmental incidents.

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Project Manager

- Ensure that the CEMP is implemented throughout the project.
- Regularly review the CEMP with the Environmental Advisor and others involved in the project to monitor environmental risks, constraints, mitigation and environmental performance.

Site Agents, Supervisors & Engineers

- Ensure all personnel involved in the project are familiar with the environmental risks of the proposed development through training, awareness, inductions and site/task specific briefings.
- The CEMP is regularly reviewed and the construction site is regularly inspected to ensure the requirements of the plan are implemented.

All Personnel

- Understand the environmental risks of the project and their work.
- Comply with this CEMP.

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2.4. Training

Training is to be given in accordance with relevant company's personnel development and training processes, operated at corporate level by HR.

However, as a minimum during this project,

- All project operatives and supervisory staff will receive a site specific induction that covers environmental issues associated with their roles and responsibilities including environment.
- More detailed training, such as that required for waste management plans, will be given to staff as identified in the training plan.
- Training on specific environmental topics will be given by suitably qualified personnel where required.

Site supervisors and engineers will give tool box talks to operatives on key issues such as spill response, protected species and waste management, drawing upon the full suite of Toolbox Talk's (TBT's) as relevant to the project condition.

Details of task specific Environmental Operational Controls and detailed methodologies shall be included in RAMS.

2.5. Communication

Internal

Environmental information will be delivered to contract personnel in the following way:

- Including environmental / sustainability issues as an agenda item on project progress meetings
- Inductions, topic-specific training, tool box talks
- Posting information on notice boards
- Parent company communications, such as cascade briefings, magazine, intranet.

Additionally within the contract, information will be communicated through:

- SHEQ meetings
- Supply chain meetings
- Other meetings e.g. design team meeting

Where contact is made with any regulatory authorities, the SHEQ department will be informed and records maintained.

External Communications

The Site Agent shall be the responsible person for any communications with members of the public.

Details of any complaints or compliments shall be recorded and communicated to ABB and the employer; action taken where necessary to resolve immediate issues and details of all communications and subsequent actions shall be reported to the SHEQ Team, ABB and the employer.

2.6. Subcontractors

Subcontractors and suppliers are required to comply with the CEMP in its entirety.

Site inductions, toolbox talks, training and task briefings will be given to all site personnel with relevant information from the CEMP.

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This CEMP will be provided to subcontractors, along with the contract specific environmental details, where their works package can have a potential detrimental impact on the environment. Subcontractors will be required to develop their own environmental plans specific to work packages where appropriate and to comply with the content and direction of this and other applicable supporting documentation.

2.7. Auditing

Audits will be carried out to ensure compliance with the CEMP and to ensure that other applicable processes and requirements are operating as intended. They may include;

- The employer
- External – third party assessors to Morgan Sindall, ABB, British Standards Institute (BSI), Considerate Constructors Scheme (CCS).
- Internal.

An internal e-Audit shall be undertaken by the environmental adviser bi-annually or as required.

Other competent personnel from parent companies may conduct additional audit in line with any audit programme and plans, system compliance audits will be conducted or as directed by the Head of Internal Audit, the Head of Sustainability and Environment, and the SHEQ Assurance and Development Manager.

The project manager is responsible for ensuring that any non-conformances arising are closed out as soon as is practicable within the time frame specified. Close out will be confirmed by the auditor.

2.8. Monitoring

The project manager is responsible for ensuring environmental inspections at site level are carried out to ensure that the CEMP, permits, consents, mitigation and other applicable requirements are implemented and standards maintained as required.

Additional inspections may be carried out by the contract health and safety advisor.

A weekly environmental inspection, agreed with the environmental advisor, of all work areas shall be carried out and a record maintained.

Further informal monitoring shall be carried out as required and recorded as Positive Interventions, Hazards Removed and Gorilla Spotting, in line with parent company requirements.

In addition to site level Inspection, periodic Senior Leadership Tours shall be carried out by Senior Management Representatives.

2.9. Considerate Constructors Scheme (CCS)

The project will be registered with the Considerate Constructors Scheme (CCS).

2.10. BREEAM

The Converter Station Development shall be registered and certified in line with the Building Research Establishment Environmental Assessment Methodology (BREEAM) pilot Infrastructure 2016 scheme.

The aim of the project is to achieve a VERY GOOD rating.

Applicable criteria shall be included within this CEMP.

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2.11. Sustainable Construction

Environmental Performance Monitoring is both a legal requirement and a requirement of the Principal Contractor and the employer. The project manager shall ensure that an appropriate method of recording environmental performance monthly is implemented and meters are fitted and available where required;

- Water (Litre)
- Electric (Kwh)
- Gas (Kwh)
- Fuel – Power Generation (Litre)
- Fuel – Other (Litre)
- Aggregates (Concrete, Asphalt, Stone, Backfill, Other – Tonne)
- Aggregates (Primary, Secondary, Re-use – Tonne)
- Waste (Landfill, Incineration, Recycling, Reuse – Tonne)

Environmental Performance data shall be recorded monthly within the project National Grid Sustainable Construction Implementation Plan (SCIP) reporting spreadsheet and sent to the Environmental Advisor for inclusion in corporate and customer reporting.

2.12. Best Practices

Site mobilisation, plant and equipment shall be implemented in line with the Contractor's Standards for energy consumption, sustainability, minimisation of nuisance and visual impact to ensure that Best Practice and innovations are implemented wherever possible.

2.13. Environmental incident and emergency controls

Control measures to prevent and control environmental incidents and emergencies on sites are referenced in the register of environmental effects, and detailed in site emergency plans.

Generally, pollution prevention will be achieved by adequate training, by the provision of containment measures such as drip trays, absorbent mats or materials, drain covers for preventing impact on sewers or watercourses and by complying with safe working methods.

Adequate and appropriately placed spill kits will be provided for rapid incident response when and where prevention fails. Incidents and emergencies will be reported in accordance with the Principal Contractor and the customer's procedures.

Regular drills (either practical or desk top) shall be conducted and recorded to maintain competency levels of site personnel and adequacy of response plans.

An environmental emergency drill and record of same will be completed, within the first three months of the main works commencing and repeated at least annually thereafter.

2.14. Incidents and emergencies

Actions in response to environmental incidents and emergencies will be communicated at inductions and task briefings. Spill response posters will be displayed on office and welfare facility notice boards.

Site plans showing the locations of spill kits and waste facilities, in addition to the locations of health and safety facilities will be available on site office and welfare cabin notice boards.

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Plans will include the names of personnel with specific environmental responsibilities, and actions to be taken. Cross reference will be made to contingency planning requirements.

2.15. Incident reporting and investigation

Incidents are to be reported through the management hierarchy (including ABB) as soon as practically possible after they have been identified. Site management will assess the significance of the incident and determine the level of investigation.

All incidents must be reported to the Environmental Advisor and entered onto the appropriate reporting system.

2.16. Records

Environmental records will include;

Site Environment Folder;

- Permits, licences and consents
- Inspections
- Site visit records (by others)
- Internal and external audit reports
- Minutes of progress meetings
- Correspondence including complaints and regulatory units
- Environmental survey reports
- Environmental monitoring records
- Incident and investigation reports
- Environmental data e.g. recycled aggregates, sustainable timber, etc.

Site Waste Folder

- Waste Duty of Care Checks
- Material test results
- Material movement records
- Waste management records and plans

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3. Environmental Operational Controls

The following section provides generic environmental operational controls or details of any *site-specific* risk, constraints and mitigation associated with the project.

3.1. Site set up

Selection and establishment of site compounds shall be undertaken mindful of site sensitivity, security, neighbours, storage and handling of chemicals (spill prevention), materials storage needs, drainage, vehicle access including employee commuting needs and nuisance potential, planning constraints, etc.

Site compounds, storage and construction areas will be fenced or have barriers to delineate areas of operation and separate them from other occupied work sites.

A detailed Site Establishment Plan is currently being developed and will be available prior to site mobilisation, this will take into account the Site Environmental Hazard Plan (SK1), see section 7 for further details.

3.2. Bio-Security

Whilst some grazing of livestock and horses is taking place within the wider area, the converter station development is accessed directly from public highway and no agricultural land uses are on-site or immediately adjacent to the site or access, No site specific bio-security measures are currently required.

3.3. Nuisance

3.3.1.Noise control

Site works located in residential and other locations can create noise nuisance to neighbours and the general public, as well as posing an occupational risk. The presence of sensitive receptors will be identified and recorded on the register of environmental effects and the necessary control measures implemented.

During planning for the Converter Station Development Ambient Noise Monitoring was undertaken.

During the construction of the converter station, no machinery, processes or deliveries outside;

0800 to 1800 hours Monday to Friday;

0800 to 1300 hours on Saturday;

No work, processes or other activities shall take place at all on Sundays, bank or public holidays. (30)

A Control of Pollution Act Section 61 Notice is not required at this stage. However any work outside of the agreed times shall be discussed in advance with the Local Authority.

A number of noise monitoring conditions are associated with commissioning of the converter station, but these are currently outside the scope of this CEMP.(11/12/13)

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3.3.2. Traffic management plan

A traffic management plan has been developed for the project detailing deliveries, including abnormal loads, regular commuting, public transport options, parking, restrictions detailed in any local planning agreement with view to minimising local congestion and impact on local roads.

The TMP shall also consider how access to the site impacts users of Public Rights of Way (PROW). (conditions 20/21/22)

Further details of the Site TMP can be found within the Construction Phase Health & Safety Plan.

3.3.3. Mud and dust control

Wind-blown dust, generated from dry, exposed ground or soil and wastes stockpiles, will be controlled generally with the use of water sprays. Surfaces and stockpiles will be damped down to minimise dust as necessary. Such arrangements shall consider the adjacent airfield which is particularly sensitive to such materials.

In wetter conditions, deposits of mud on roads, pavements and areas of hard standing may need to be cleared. Installation of wheel washing devices may be required, preferably with water recycling equipment. Small occurrences will be cleared manually with a broom and shovel; elsewhere road sweepers will be called upon.

The need to control mud and dust is covered in site inductions and in relevant task risk assessments, method statements and briefings.

During the converter station development a vehicle wheel wash shall be used during times of significant material movements.

A road sweeper shall be scheduled to visit the site and on-call to remove any mud contaminating roads as required.

3.3.4. Housekeeping and Visual Standards

Adequate waste bins will be placed in work areas, storage areas and temporary site compounds for the depositing of work related waste and mixed welfare wastes.

Regular inspections will be carried out to monitor housekeeping and initiate action to clear litter and debris.

Personnel are encouraged to avoid littering and to clear litter where it occurs within site boundaries. Particular attention will be given to food waste which, if uncontrolled, could attract bird life creating additional hazards for the adjacent airfield.

The perimeter of the site shall be fenced and the access to the site shall be maintained to professional visual standards.

3.3.5. Plant emission control

Where feasible, electric or hybrid plant will be used in preference to diesel or petrol powered units.

No plant will be allowed to idle for long periods when not in use. Plant operators are encouraged to switch off as soon as practicable.

Evidence of poor plant maintenance, such as black exhaust fumes, will be monitored by supervisory staff on a continuing basis. Plant with unacceptable performance is prohibited from work until rectified

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or replaced. Plant will be routinely inspected in line with prescribed requirements including emissions as well as leaks and drops.

A number of planning conditions are associated with the converter station development related to electromagnetic emissions from the commissioned site. These conditions are not part of the scope of this CEMP, but have been addressed elsewhere.

3.3.6. Lighting

Where feasible, electric lighting will be used in preference to diesel or petrol powered units. Lighting shall be positioned to prevent nuisance to neighbours or sensitive receptors surrounding the site and where feasible shall be fitted with PIR movement sensors and/or timers, and shall only be used when required.

3.4. Water Management Plan

3.4.1. Site drainage

Drainage systems can act as rapid pathways for the spread of pollutants. Small quantities of pollutants such as oil can spread over large areas and cause significant harm.

A number of surface water drains are currently present along field boundaries and shall be avoided during site set up where possible.

Planning conditions associated with the converter station development require that surface water and the impact that site activities have on the other controlled waters are properly considered during construction.

Temporary and permanent surface water designs shall be submitted to the local authority before any construction shall commence on site. This will include consideration of existing watercourses and the likely impact of the development. (9)

Foul effluent from welfare facilities during construction shall be collected and removed from site by licensed waste contractors.

Permanent foul effluent connections are outside the scope of this CEMP.

3.4.2. Pumping from excavations

Greater or lesser quantities of surface and ground waters that occasionally require to be cleared from excavations and exposed surfaces will be discharged to sewer, to land or to controlled waters either directly or indirectly via minor drainage systems. The need for approvals or consents will be determined on a case-by-case basis. Priorities will be to prevent

i. Ingress of surface waters

ii. As far as is practical, disturbance to clean waters needing to be cleared from excavations and exposed surfaces.

Silty water will be passed through a settlement tank of appropriate capacity before discharge to the receiving medium.

Water known to be contaminated with hydrocarbons or other hazardous substances will be handled in accordance with specific risk assessments and method statements (RAMS).

Pumping operations and working in waters lead to the largest number of environmental incidents for the construction industry. Control measures must include detailed requirements being set out

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in risk assessments and method statements and the Permit to Pump (PTP) system shall be used for all de-watering activities.

PTP's must be task specific and include details of inspection, equipment, location of de-watering and discharge, and risks such as watercourses and monitoring to be carried out.

De-watering activities during the development are expected to be covered by the Environment Agencies Regulatory Position Statement (RPS). However any de-watering of significant volume or for an extended period of time must be reviewed by the environmental advisor to ensure it remains compliant.

No discharges to sewers are currently anticipated, however may require the consent of the relevant statutory undertaker if the need arises

3.4.3. Flood Risk

The Environment Agency flood map indicates that the site is not subject to flooding by river or surface water.

Previous visits have indicated a high groundwater levels and poor drainage, suggesting that during heavy rainfall the site is likely to become waterlogged.

Flooding can become a rapid pathway for the transportation of pollution, oils and silts and materials, chemical storage and access should be planned to avoid such areas during time of wet weather.

Manage stockpiles carefully to avoid silt runoff. Cover or reseed semi-permanent stockpiles, install control measures such as silt fencing and protect watercourse/drainages where required.

3.5. Storage of fuels, oils and COSHH materials

Fuels, oils, paints, solvents and other Control of Substances Hazardous to Health (COSHH) materials will be kept in lockable containers, with controlled access to keys, and in line with legal requirements e.g. oil storage regulations, 110% bunding, use of drip trays, etc.

Fuelling operations will be planned to minimise the risk of spillage and environmental risk. This may be the subject of a specific plan for high-risk operations and sensitive areas.

A site specific fuel delivery procedure shall be included within the site delivery RAMS. All those allocated the task of re-fuelling should be suitably briefed and maintain appropriate fuelling records where required.

Waste fuels, oils and COSHH items shall be stored and disposed in line with waste management process. See section 3.8 for further details.

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3.6. Contaminated land/

Initial Contaminated Land Site Investigations have been carried out by the employer, indicating a small number of locations with the potential for contaminated ground.

Further Intrusive Site Investigation will be carried out and it will allow for further assessment of the risks posed to human health & the environment. This will also include UXO clearance surveys. (16/38)

3.7. Resource/Materials Management

A CL:aire Protocol Materials Management Plan (MMP) shall be developed.

Results of the Contaminated Land Site Investigation shall be interpretively reported to ensure that any material intended for re-use onsite is suitable; where it is not suitable it is carefully tracked, further characterised, remediated where possible and if it remains unsuitable it is correctly disposed. (conditions 17/18/19/27)

Although not within the scope of the converter station development, material from that site, once it has been assessed to be suitable shall be transferred to the open space development to construct the visual screening mound, reducing vehicle movement and the need for disposal to landfill.

The MMP will demonstrate material is free from contamination and describe the necessary Material Tracking, Segregation, Inspection Test Plans and Verification activities to discharge planning conditions. Further details of the MMP can be found in Appendix B – Materials Management Plan.(23)

3.8. Waste management

Site Waste Management Plan

A Site Waste Management Plan (SWMP) shall be developed, implemented and maintained for the project.

Waste Characterisation

Anticipated waste streams and their EWC codes shall be estimated prior to construction, with important information coming from the MMP, particularly in the characterisation of excavated wastes.

Any waste streams likely to be sent directly to Landfill should be WAC Tested prior to excavation.

Waste Contractors

Waste Carrier License checks shall be carried out and the Environmental Permits/Exemptions of planned disposal sites shall be obtained prior to any waste movements.

Duty of care details must be correctly recorded within the SWMP and copies of all licenses/permits shall be kept onsite in the project waste file for the duration of the project.

Waste Storage & Segregation

The waste hierarchy ‘Prevention – reduce – reuse – recover – dispose’ must always be implemented (legal requirement).

Suitable skips, bins and storage areas shall be provided and closed or sheeted where required to prevent the escape of wind-blown debris. Waste storage must be suitably signed and display the correct EWC code.

Waste Disposal

Waste collections can only be carried out following the correct duty of care checks.

Any waste carriers whose details are not held on file must be turned away from site.

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Waste Movement Duty of Care

All waste movements must be covered by or accompanied by the correct duty of care documentation.

Waste movements without the correct document in place or not containing the correct information must be refused.

Non-Hazardous Waste Transfer Note

All Non-Hazardous Waste leaving the site will be accompanied with a Waste Transfer Note (WTN) or "Ticket".

Many waste carrier companies provide their own WTN. These will be checked to ensure that the following information is detailed:

- a written description of the waste
- any processes the waste has been through
- how the waste is contained or packaged
- the quantity of the waste
- the place, date and time of transfer
- the name and address of both the producer and carrier of the waste
- details of the permit, licence or exemption of the waste carrier
- the appropriate EWC code for your waste
- The 2007 SIC code for the activity producing the waste - 42.22/0
- A declaration that the waste hierarchy has been implemented.

Once complete, the WTN will be signed by a suitable person and a copy retained on site.

Non-Hazardous Season Ticket

There may be circumstances where waste produced on a site will be of a similar nature throughout the year and it may not be appropriate to issue WTN for every load if it is being transported by the same contractor and is going to the same location. A 'Seasonal Waste Transfer Note' may be used instead, for a period up to 12 months. The seasonal note must contain the same information as a WTN above and;

- the commencing and termination date

Once complete, the WTN will be signed by a suitable person and a copy retained on site.

Hazardous Waste Consignment Note

Each load of Hazardous Waste leaving the site will be accompanied by a Hazardous Waste Consignment Note. Many waste carrier companies provide their own Consignment Notes, These will be checked to ensure that they contain the correct information.

Once complete, the WTN will be signed by a person nominated by the Site Manager and a copy retained on site.

Consignment Notes follow the Hazardous Waste to the Transfer/Disposal location and must be completed by other parties that handle the waste. To ensure the waste has been correctly consigned, we must either obtain a Consignment Notes with Part E completed from the waste carrier, or if there are numerous transfers a quarterly statement summarising the wastes consigned between parties.

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Consignment Notes collected at site, completed part E's or quarterly statements shall be kept in the site waste file.

Waste Records

Key Waste Records include:

- . Site Waste Management Plan
- Evidence of Waste Characterisation/WAC Testing
- Waste Contractor Authorisation Checks; Licenses, Permits etc
- Duty of Care Records; WTN, Consignment Notes
- Waste Returns; Seasonal WTN, Hazardous Waste Part E or Quarterly Returns

The SWMP shall be updated with Waste Contractor authorisations/disposal sites regularly.

All waste movements must be recorded in the SWMP. The SWMP shall be stored electronically.

The SWMP shall be sent to the Environmental Advisor monthly for inclusion in corporate and customer reporting.

At the end of the project the project manager shall ensure the SWMP and all Waste records are obtained, updated and archived correctly.

3.9. Burning of wastes

The burning of waste is strictly prohibited and not allowed under any circumstances (31).

3.10. Ecology and biodiversity

During pre-construction surveys an Ecological Constraints survey will be carried out by a competent Ecologist to confirm the presence, necessary mitigation and additional controls required during the project.

Trees/Hedgerows (24/25)

Trees and Hedgerows may be protected by law and no work shall be carried out with their Root Protection Areas (RPA), until the correct level of tree protection has been determined.

Any Trees/Hedgerows to be removed shall be agreed via the planning process for the Converter Station development and where Trees/hedgerows are to be retained, Tree Protection (BS 5837) shall be installed prior to Mobilisation. Tree Protection shall be inspected regularly to ensure protection remains in place.

A Hedgerow Removal Notice has been submitted to the Local Authority on the 8th August 2017 to facilitate surveys and Badger Mitigation work, prior to final planning approval. In addition an Ecological Clerk of Works (ECoW) shall inspect any vegetation, give clearance and supervise all Vegetation Removal, to ensure protected species are identified and protected.

Details of the Arboricultural Constraints Plan and Tree Protection to be installed on the site can be found in Appendix A – Main Site Survey Extents and Tree Protection Details (SK2).

Vegetation Clearance can only be carried out with the approval of the ECoW.

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Birds

All birds, their nests and eggs are protected by law. The Bird Nesting Season typically runs from March to August each year.

The ECoW has undertaken nesting bird surveys to ensure that the proposed development is free from nesting birds, prior to any disturbance of the site. During early works, any identified birds nests have been avoided and monitored.

In addition, during construction any measures in the Airport Operation Manual designed to reduce the bird risk to the aerodrome, will be adopted in the CEMP. (32)

Some more detail about the clearance process which is planned? i.e. outside nesting season and clearance done to prevent birds returning next year?

No work can be undertaken within 50m of an active birds nest without the approval of the ECoW.

Badgers

Badgers and their setts are protected by law.

An active badger sett (c.7-10 sett entrances) is believed to be located along the fence/hedge/ditch line, through the centre and along the southern boundary.

A Sett Survey has been carried out by a Competent Ecologist to understand the activity of the sett and required mitigation/compensation.

Protected species licenses describing necessary mitigation has been applied for 8th August 2017 and is currently being determined by Natural England (Customer Number Ref:C134984).

No work/plant is permitted within 30m of an active badger sett without with the approval of the ECoW.

Reptiles (Lizards, Slow Worms, Snakes)

Initial surveys indicated the site was believed to contain a high population of Common Lizards, a medium population of Slow Worms and a low population of Grass Snakes.

Reptile Surveys have now been undertaken by a competent Ecologist. Only 1 Common Lizard was discovered during the survey.

Further Mitigation required is phased vegetation cut on-site, all work, vegetation and plant movements on the site must be with the approval of the ECoW until no longer deemed necessary.

Invasive Species

Japanese Knotweed is not located within the Converter Station or Open Space Development, but has been identified growing elsewhere on the aerodrome. A vegetation survey has been carried out and no plants have been identified on the proposed development.

No work/plant is permitted within 10m of any know Japanese Knotweed or other invasive species.

Other Protected Species

Other protected species have not previously been identified on the site, however if additional protected species of plants or animals are suspected, work should be stopped and advice sought from the Environmental Advisor.

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3.11. Historic Environment

Wessex Archaeology (WA) have been appointed by IFA2 to undertake the Archaeological Clerk of Works role for the project. WA intend to liaise with Hampshire County Councils County Archaeologist and agree a Written Scheme of Investigation (WSI) for the project.

ABB shall coordinate with the ACoW to ensure the WSI is built into site activities.

There are no known historic assets or features within the Converter Station Development, it is anticipated at this stage that an Archaeological Watching Brief will be provided for during any soil stripping activities, at key points during the project, when required (15/37).

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4. Register of environmental effects

Site	IFA2 converter station	Prepared by	Richard Cooper	Date	18/08/2017
Assisted by					
		Reviewed by	Richard Cooper	Date	18/08/2017
NOTES					
Pre-construction risks have been reviewed; these shall be reviewed again following detailed surveys/reports.					

In the table below, under Environmental Impacts, assess levels of impact significance for each Development Activity and Aspect, as L, M or H, in accordance with following risk matrix. Mitigation measures are required where significance of impact is assessed as M or H.

Likelihood of Activity resulting in impact.	Severity of Subsequent Impact		
	Low (1)	Moderate (2)	High (3)
Negligible (1)	L (2)	L (2)	L (3)
Unlikely (2)	L (2)	M (4)	M (6)
Likely (3)	L (3)	M (6)	H (9)
Certain (4)	M (4)	H (8)	H (12)

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			Likelihood	Severity	Resulting Significance		
			1 - Negligible 2 - Unlikely 3 - Likely 4 - Certain	1 - Low 2 - Moderate 3 - High	L (<3) M (4-6) H (8>)		
Works associated with office operations	Operation of air-conditioning and refrigerant units containing ozone depleting substances	Escape of gases and impact associated with ozone layer and climate change.	2	1	LOW	-	-
Works affecting Water resources	Abstraction of surface or groundwater	Deterioration in water resource quantity and quality	2	1	LOW	-	-
	Dewatering of surface or groundwater	Deterioration in water resource quantity and quality	4	2	MEDIUM	Implement appropriate controls and PTP during any de-watering.	LOW
	Impoundment of watercourses	Deterioration in water resource quantity and quality	2	1	LOW	-	-
	Discharge of effluent	Deterioration in water resource quality	2	1	LOW	-	-
	Discharge of site drainage	Deterioration in water resource quality	3	2	MEDIUM	Site drainage plan to be approved before operation.	LOW
	Discharge of foul drainage	Deterioration in water resource quality	2	1	LOW	-	-

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			Likelihood	Severity	Resulting Significance		
			1 - Negligible 2 - Unlikely 3 - Likely 4 - Certain	1 - Low 2 - Moderate 3 - High	L (<3) M (4-6) H (8>)		
Physical (temp and perm) works to watercourses and Rivers	Deterioration in water resource quality	2	2	MEDIUM	Prior approval for any works within 16m of watercourses shall be sought an specific RAMS shall be prepared to minimise any impacts.	LOW	
	Change in flow regime	2	2	MEDIUM		LOW	
	Loss of Biodiversity	2	2	MEDIUM		LOW	
	Deterioration in water resource quantity and quality	1	1	LOW	-	-	
	Deterioration in water resource quantity and quality	2	1	LOW	-	-	
	Deterioration in water resource quantity and quality	2	2	MEDIUM	Storage shall be correctly located away from sensitive areas and appropriate spill kits shall be available.	LOW	

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Activity	Aspect	Impact	Impact Significance			Control and Mitigation	Residual Impact Significance
			Likelihood	Severity	Resulting Significance		
			1 - Negligible 2 - Unlikely 3 - Likely 4 - Certain	1 - Low 2 - Moderate 3 - High	L (<3) M (4-6) H (8>)		
	Use and Storage of Construction Hazardous substances including Oils/ Diesels and Petroleum	Deterioration in water resource quality	2	2	MEDIUM	Storage shall be correctly located away from sensitive areas and only suitable containers/equipment is permitted.	LOW
	Use and Storage of Process Commissioning Hazardous substances	Deterioration in water resource quality	2	2	MEDIUM	Storage shall be correctly located away from sensitive areas and only suitable containers/equipment is permitted.	LOW
	Concrete Washout	Deterioration in water resource quality	2	2	MEDIUM	Concrete washout shall be located away from sensitive areas and use dedicated, covered, concrete washout skip.	LOW
	Use of potable water	Deterioration in water resource quality	3	1	MEDIUM	Water use shall be monitored.	LOW

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Activity	Aspect	Impact	Impact Significance			Control and Mitigation	Residual Impact Significance
			Likelihood	Severity	Resulting Significance		
			1 - Negligible 2 - Unlikely 3 - Likely 4 - Certain	1 - Low 2 - Moderate 3 - High	L (<3) M (4-6) H (8>)		
Works affecting Ecological Habitat and Species <i>(Note: completing this risk assessment and including mitigation measures and controls within the project environmental plan (PEP) will address the Planet target on biodiversity.</i>	Works affecting Ecological Important Habitat	Loss of biodiversity	3	3	HIGH	Ecological Surveys shall be conducted to determine appropriate mitigation. All further works shall be supervised by the ECoW.	TBC
	Works removing Ecological Important Habitat	Loss of biodiversity	3	3			TBC
	Works affecting ecological protected species	Loss of biodiversity	3	3			TBC
	Works removing ecological protected species	Loss of biodiversity	3	3			TBC
	Works affecting invasive plants	Land contamination by non-native species	TBC	TBC	TBC	-	-
	Works removing invasive plants	Land contamination by non-native species	TBC	TBC	TBC	-	-
	Direct impact	Loss of historic/archaeological value	TBC	TBC	TBC	-	-

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Activity	Aspect	Impact	Impact Significance			Control and Mitigation	Residual Impact Significance
			Likelihood	Severity	Resulting Significance		
			1 - Negligible 2 - Unlikely 3 - Likely 4 - Certain	1 - Low 2 - Moderate 3 - High	L (<3) M (4-6) H (8>)		
Works affecting historic (e.g. listed) or archaeological important sites and structures	Near area	Loss of historic/archaeological value Subsidence vibration	2	1	LOW	-	-
	Adjacent to area	Encroachment	2	1	LOW	-	-
Working on and disturbance of contaminated land	Physical disturbance	Potential spread of contaminated land and pollution	TBC	TBC	TBC	Further Site Investigation planned, Risk Assessment will be carried out. Materials Management Plan will be developed, tracking system used and material reuse verified.	-
	Disposal	Potential spread of contaminated land and pollution	TBC	TBC	TBC		-
General construction activities that may lead to Nuisance	Mud on road	Nuisance to local population	2	2	MEDIUM	Wheel washes and road sweepers shall be used as required.	LOW
	Atmospheric emissions	Nuisance to local population	2	1	MEDIUM	Only appropriate plant & equipment shall be used.	LOW

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Activity	Aspect	Impact	Impact Significance			Control and Mitigation	Residual Impact Significance
			Likelihood	Severity	Resulting Significance		
			1 - Negligible 2 - Unlikely 3 - Likely 4 - Certain	1 - Low 2 - Moderate 3 - High	L (<3) M (4-6) H (8>)		
	Construction dust	Nuisance to local population	2	2	MEDIUM	Site speed limits, road sweepers, damping down and correct stockpiling of materials.	LOW
	Batching dust and silo emissions	Nuisance to local population	1	1	LOW	-	-
	Process atmospheric emissions	Nuisance to local population	1	1	LOW	-	-
	Noise emissions	Nuisance to local population	2	2	MEDIUM	Best practice plant and equipment will be used. Working Hours will be adhered to.	LOW
	Light emissions	Nuisance to local population	2	2	MEDIUM	Site lighting will be carefully established to avoid nuisance.	LOW
	Vibration	Nuisance to local population	1	2	MEDIUM	Best practice plant and equipment will be used. Working Hours will be adhered to.	LOW
	Odour emissions	Nuisance to local population	1	2	MEDIUM	Appropriate waste storage and regular site inspections.	LOW

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Activity	Aspect	Impact	Impact Significance			Control and Mitigation	Residual Impact Significance
			Likelihood	Severity	Resulting Significance		
			1 - Negligible 2 - Unlikely 3 - Likely 4 - Certain	1 - Low 2 - Moderate 3 - High	L (<3) M (4-6) H (8>)		
	Road congestion	Nuisance to local population	2	2	MEDIUM	Traffic Management Plan	LOW
	Other public rights of way	Loss of amenity value Disruption	1	2	MEDIUM	Traffic Management Plan	LOW
	Visual amenity	Loss of amenity value	2	2	MEDIUM	Open space development includes visual screening to reduce impact.	LOW
	Unsociable working hours	Nuisance to local population	2	2	MEDIUM	Comply with standard working hours outlined in planning conditions.	LOW
Works requiring the consumption of Energy and/or fossil fuels	Energy consumption/carbon management - Construction works	Direct: cost Indirect: atmospheric emissions Resource depletion	N/A			Environmental Performance reported in line with Environmental Policies and customer requirements.	LOW
	Energy consumption/carbon management - Site accommodation	Direct: cost Indirect: atmospheric emissions					

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Activity	Aspect	Impact	Impact Significance			Control and Mitigation	Residual Impact Significance
			Likelihood	Severity	Resulting Significance		
			1 - Negligible 2 - Unlikely 3 - Likely 4 - Certain	1 - Low 2 - Moderate 3 - High	L (<3) M (4-6) H (8>)		
		Resource depletion					
	Energy consumption/carbon management - Transport and logistics	Direct: cost Indirect: atmospheric emissions Resource depletion					
	Energy consumption/carbon management - Material selection (embodied energy)	Direct: cost Indirect: atmospheric emissions Resource depletion					
	Energy consumption / carbon management – generation of on-site power	Direct: cost Indirect: atmospheric emissions Resource depletion					
	Delivery and handling (transfer) of fuels (liquid or gas)	Direct pollution through spills, etc.					

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Activity	Aspect	Impact	Impact Significance			Control and Mitigation	Residual Impact Significance
			Likelihood	Severity	Resulting Significance		
			1 - Negligible 2 - Unlikely 3 - Likely 4 - Certain	1 - Low 2 - Moderate 3 - High	L (<3) M (4-6) H (8>)		
		Waste of resource and cost					
	Delivery and handling (transfer) of fuels (liquid or gas)	Direct pollution through spills, etc. Waste of resource and cost	2	2	MEDIUM	Site specific fuel delivery RAMS. Appropriate spill kit.	LOW
Works leading to the generation of Waste	Material storage and damage	Direct: cost Indirect: reduced sustainability	2	1	MEDIUM	Materials Management will be carefully planned (see contaminated land). Site Waste Management Plan.	LOW
	Creation of litter	Nuisance	2	1	MEDIUM		LOW
	Waste disposal (duty of care) Construction waste Sewage M&E decommissioning waste, etc.	Contamination Nuisance Pollution Legal compliance	3	2	MEDIUM		LOW
	Surplus excavation/aggregate disposal	Increased cost Reduced sustainability	3	1	MEDIUM		LOW
	Packaging waste	Increased cost of disposal	1	1	MEDIUM		LOW

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			Likelihood	Severity	Resulting Significance		
			1 - Negligible 2 - Unlikely 3 - Likely 4 - Certain	1 - Low 2 - Moderate 3 - High	L (<3) M (4-6) H (8>)		
		Depletion of resources					
Works in sensitive location or where abnormal operating conditions arise e.g. Emergency response	Abnormal operating conditions e.g. pumping, filtration, water treatment, etc.	Pollution of environment Legal sanction	-	-	N/A	-	-
	Unplanned event (Incidents e.g. spill, fire, etc.)	Pollution of environment Legal sanction	2	2	MEDIUM	Construction Environmental Management Plan (CEMP)	LOW

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5. Consents & Pre-Notification Checklist

Contract no:	###	Contract name:	ABB IFA2 Converter Station	Completed by:	Richard Cooper	Date:	18/08/2017
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Consent name	Description of the works requiring approval	Approx. timescale to obtain consent	Enforcement agency			Consent / notification req'd Yes/No	Responsible party for application	Date applied	Consent received/comments
			England	Wales	Scotland				
Water resources									
Permit to discharge water to a watercourse	Effluent discharges of 5 to 20 cubic meters per day to a point source, i.e. pipe, outfall or soak-away, that enters directly or indirectly controlled waters. Any discharges exceeding 20 cubic meters per day will need to apply for a bespoke permit.	EA – approx. 4 months SEPA: Registration – 1 month License – approx. 4 months	EA	NRW	SEPA	N/A	-	-	-
Consent to discharge waste water to a Sewer	Consent or approval for discharge of effluent to sewer.	2 months	Water Company	Water Company	Water Company	N/A	-	-	-
S165 consent for temporary discharge	Temporary consent to discharge to surface water from a pipe less than 229mm	EA – 7 working days	EA	NRW	SEPA	N/A	-	-	-

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Consent name	Description of the works requiring approval	Approx. timescale to obtain consent	Enforcement agency			Consent / notification req'd Yes/No	Responsible party for application	Date applied	Consent received/comments
			England	Wales	Scotland				
from a pipe less than 229mm.	(9") or when the EA request a formal application.	SEPA – 7 working days							
S166 consent for temporary discharge from a pipe larger than 229mm.	Temporary consent to discharge to surface water from a pipe greater than 229mm (9") or when the EA request a formal application.	EA 7 - working days SEPA – 7 working days	EA	NRW	SEPA	N/A	-	-	-
Abstraction licence	Abstraction of water from a controlled water resource.	EA: 4 - 6 months SEPA: Registration - 1 month License – approx. 4 months	EA	NRW	SEPA	N/A	-	-	-
Notification of removal of water from excavations	Removal of water from the ground or surface water to assist construction or the extraction of aggregates and minerals.	N/A	EA	NRW	SEPA	N/A	-	-	-

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Consent name	Description of the works requiring approval	Approx. timescale to obtain consent	Enforcement agency			Consent / notification req'd Yes/No	Responsible party for application	Date applied	Consent received/comments
			England	Wales	Scotland				
Works in proximity of a watercourse/land drainage/flood defence consent	Any temporary or permanent physical works in, adjacent (within 9m), under, or over a watercourse.	LA (for ordinary watercourses): 2 months EA (for main rivers): 2 months IDB (where applicable): 2 months SEPA: registration – 1 month Licence approx. 4 months	LA/EA	LA/NRW	SEPA	YES	MS	TBC	Flood Risk Consent maybe required. Drainage Design to be submitted to FBC. Hampshire CC Land Drainage to be consulted.
Consent to use pesticide in close proximity to a watercourse	Any application of a pesticide(including herbicides, fungicides, insecticides, molluscicides, rodenticides, growth regulators and masonry and	2 months	EA	NRW	SEPA	N/A	-	-	-

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Consent name	Description of the works requiring approval	Approx. timescale to obtain consent	Enforcement agency			Consent / notification req'd Yes/No	Responsible party for application	Date applied	Consent received/comments
			England	Wales	Scotland				
	timber preservatives) within 10m of a watercourse, including canal, ditch, river or estuary.								
Consent to affect bed of an estuary or sea (FEPA consent, in Wales you will also require a Coastal Protection Act consent (CPA))	Any works that may deposit material onto the bed of an estuary or the sea, including cofferdams, erection of jetties, outfall structures	4- 12 months	MMO	Marine Consents Unit: (MCU) – Welsh Assembly	Marine Scotland Licensing Operations Team – Scottish Executive	N/A	-	-	-
River works licence (within River Thames)	Under Section 66 of the Port of London Act, a river works licence is required for any works in the River Thames, riverward of the mean high water mark and regardless of ownership of the river bed, including any works under the river or overhanging the river.	3 months	Port of London Authority	-	-	N/A	-	-	-

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Consent name	Description of the works requiring approval	Approx. timescale to obtain consent	Enforcement agency			Consent / notification req'd Yes/No	Responsible party for application	Date applied	Consent received/comments
			England	Wales	Scotland				
Dredging licence (within River Thames)	Before any dredging work is undertaken on the tidal Thames it is a statutory requirement that a licence for such works is granted under Section 73 of the Port of London Act 1968 (as amended).	3 months	Port of London Authority	-	-	N/A	-	-	-
River works licence (within the Medway Port)	Any works which are to be carried out within the port limit must have a river works licence to ensure that all relevant consultations have been carried out and that there are no adverse effects on the safety of navigation within the port	3 months	Peel Ports Medway	-	-	N/A	-	-	-
Dredging licence	Before any dredging work is undertaken within the port of Medway and dredging licence must be approved.	3 months	Peel Ports Medway	-	-	N/A	-	-	-

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Consent name	Description of the works requiring approval	Approx. timescale to obtain consent	Enforcement agency			Consent / notification req'd Yes/No	Responsible party for application	Date applied	Consent received/comments
			England	Wales	Scotland				
Installation of water fitting	Installation of new water supply i.e. (Batcher) to be consented by water company	1 month	Water Company	Water Company	Water Company	ABB	-	-	New water supply will be part of site welfare establishment.
Discharge of hazardous substances and non-hazardous pollutants dangerous substance / groundwater regulations	Disposal/discharge of effluent containing hazardous substances or non-hazardous pollutants to ground or to surface water which is not covered by a Consent to Discharge	3 months	EA	NRW	SEPA	N/A	-	-	-
Groundwater Source Protection Zone (SPZ).	When working within a Groundwater Source Protection Zone (SPZ), you should contact your local regulator to discuss the work being undertaken. The SPZ is an area designated around a groundwater source, the maximum extent of which is the catchments area for the source and	-	EA	NRW	SEPA	N/A	-	-	-

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Consent name	Description of the works requiring approval	Approx. timescale to obtain consent	Enforcement agency			Consent / notification req'd Yes/No	Responsible party for application	Date applied	Consent received/comments
			England	Wales	Scotland				
	within which the Regulator seeks to limit the processes and activities that can occur within that area								
Water Protection Zones (WPZ) Consent	<p>General construction works are exempt but any fixed premises e.g. depots in a WPZ where chemicals are stored will require a consent</p> <p>You must get consent if you store or use:</p> <p>200 litres of more of any controlled substance</p> <p>50 litres or more of any controlled substance if stored in a single container</p> <p>Controlled substances include fuel and oil, artificial fertilizer, and toxic, harmful or corrosive substances</p>	4 Months	EA	NRW	NA	N/A	-	-	-

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Consent name	Description of the works requiring approval	Approx. timescale to obtain consent	Enforcement agency			Consent / notification req'd Yes/No	Responsible party for application	Date applied	Consent received/comments
			England	Wales	Scotland				
Piling work within a GWPZ approval	Any piling or penetrative foundation works that are scheduled to take place within a groundwater source protection zone must first be approved by the Environment Agency. A piling risk assessment must be undertaken including contaminated land tests – these can take 4 weeks to complete.	25 days	EA	NRW	SEPA	N/A	-	-	-
Dust									
Prescribed processes	Use of mobile concrete crushers and screens-operator should have a licence from the planning authority local to its head quarters. Where Morgan Sindall own and operate concrete batching plant away from site the batching process	3 months	Planning Authority	Planning Authority	SEPA/ Planning Authority	N/A	-	-	-

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			England	Wales	Scotland				
	may be a prescribed process requiring consent								
Noise									
S61 consent (noise & vibration)	S61 consent is only necessary if a planning or development order or the client requires the contractor to enter into the s61 process.	2 months to develop 28 days determination	Planning Authority	Planning Authority	Planning Authority	N/A	-	-	Not currently required, but any planned work outside standard working hour will require consultation with FBC.
Ozone depleting gases.									
F-Gas and ODS regulations qualified person	A qualified person needs to; carry out leakage checking, recovery of fluorinated greenhouse gases, install, maintain and service any refrigeration equipment, air conditioning unit, equipment containing fluorinated greenhouse gas based	5 Day CITB/City and Guilds	EA	NRW	SEPA	YES	ABB/MS	TBC	F-Gas Contractors must be F-Gas compliant/competent.

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			England	Wales	Scotland				
	solvents, fire protection system, fire extinguisher or H.V switch gear containing more that 3 kg of fluorinated greenhouse gas. A individual must be qualified for the relevant activity e.g. H.V switch gear will require a individual holding the H.V switch gear qualification.								
Waste Management									
Environmental Permitting Regulations 2009 (England and Wales) Waste Management Licence 1994 (Scotland)	An environmental permit must be gained for a location where waste material requires disposal, storage or treatment on site or where the off site location does not have permitted licences. Any waste management licences in place before 6th April 2008 automatically became Environmental Permits.	4 months	EA	NRW	SEPA (WML)	NO	-	-	Do not believe Environmental Permits for Waste Management are currently required. Shall be reviewed as part of the MMP.

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			England	Wales	Scotland				
	The Environmental Permitting Regulations do not apply in Scotland and a Waste Management Licence must still be obtained.								
Waste Exemptions	Environment Permitting Regulations (England and Wales) 2010	35 days (England and Wales) 21 days (Scotland)	EA	NRW	SEPA	TBD	-	-	-
Hazardous Waste Registration	No longer a legal requirement in England.								
Ecology									
Control/Removal of Invasive Species	Submission of Invasive Species management plan to EA/SEPA		EA	NRW	SEPA	YES	MS	TBC	Responsibility of the ECoW.
Licence to effect or translocation of	Where protected species has been identified, a licence may be necessary to	25 days	DEFRA English Nature	Welsh Assembly NRW	Scottish Executive SNH	YES	MS	TBC	Responsibility of the ECoW.

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			England	Wales	Scotland				
protected species or habitats	undertake mitigation or works in the area.								
Consent to work in a Site of Special Scientific Interest Special Areas of Conservation, Special Protection Areas, RAMSAR (wetland areas)	Where works will be undertaken in a protected habitat.	4-6 months	Natural England	NRW	SNH or regulatory Authority	N/A	-	-	-
Consent to work in a Site of Special Scientific Interest that is also a Special Area of Conservation, Special Protection Areas or RAMSAR (wetlands)	Where works would take place in or could affect the integrity of the protected site/or its species then an appropriate assessment may be required.	4-6 months	LPA/DEFRA Natural England	LPA/DEFRA NRW	LPA/DEFRA SNH	N/A	-	-	-
Felling licenses	Where more than 5m3 of timber is to be felled per quarter and no detailed	10 weeks	Forestry Commission	Forestry Commission	Forestry Commission	N/A	-	-	-

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			England	Wales	Scotland				
	planning permission is in place.								
Protected Trees	-	6 weeks	LA	LA	LA	NO	MS	TBC	Protected Tree consent not required, but Tree Protection shall be established where required.
Protected Hedgerows	All non-residential hedgerows over 20m in length are protected and a removal notice must be submitted to the LA.	6 weeks	LA	LA	LA	YES	MS	TBC	Hedgerow removal notice is required before any hedgerows can be removed.
Archaeology and Built Heritage									
Listed Building Consent / Conservation Area Consent	Works affecting a listed building/conservation areas including installation of noise insulation and remedial works on structure(s).	1-2 months	Planning Authority English Heritage	Planning Authority Welsh Assembly/NRW	Planning Authority Scottish Executive	N/A	-	-	-

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			England	Wales	Scotland				
Scheduled Ancient Monuments	Works potentially affecting a scheduled ancient monument must be consented by English Heritage	3 months	English Heritage	Welsh Assembly/NRW	Historic Scotland	N/A	-	-	-
Works affecting an area of archaeological importance	Where works affect an area where there is evidence and or potential for archaeological remains.	6 weeks	Planning Authority	Planning Authority/NRW	Planning Authority	N/A	-	-	-
Licence for removing human remains	Where human remains need removing.	1 week	Home Office	Home Office	Home Office	N/A	-	-	-
Licence which will affect a burial ground	Where works will affect a burial ground.	3 months	Home Office	Home Office	Home Office	N/A	-	-	-
Planning Permission/Development Order/Act conditions									
Planning Permission for permanent and temporary access onto a classified road		12-16 weeks	Planning Authority	Planning Authority/NRW	Planning Authority	IFA2 Ltd	IFA2 Ltd	-	-

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			England	Wales	Scotland				
Planning conditions	Conditions may require certain controls and agreements to be in place and implemented prior to and during the works including demolition/dismantling.	6 weeks	Planning Authority	Planning Authority/NRW	Planning Authority	IFA2 Ltd	IFA2 Ltd	-	-
IPC Consent for Overhead lines (OHL)		4-12 months	DEFRA	DEFRA/NRW	DEFRA	N/A	-	-	-
EIA Screening/Scoping for S37/Planning application	Overhead line (OHL) EIA Regs & TCPA EIA Regs	6 weeks (screen) 6 weeks (scope)	Planning Authority/ DEFRA	Planning Authority/ DEFRA/NRW	Planning Authority/ DEFRA	IFA2 Ltd	-	-	-
EIA & Environmental Statement	If screening requires then prepared to accompany S37 application/planning application	6-12 months	Planning Authority/ DEFRA	Planning Authority/ DEFRA/NRW	Planning Authority/ DEFRA	IFA2 Ltd	-	-	-
Wayleaves/Easements	Where new overhead lines (OHL) ,cables and pipelines will cross third party land	2-6 months	Landowner	Landowner	Landowner	N/A	-	-	-

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			England	Wales	Scotland				
Land Purchase	Where additional land is required permanently or temporarily for the works	6-12 months	Landowner	Landowner	Landowner	N/A	-	-	-
Lease conditions	Conditions may require certain controls and agreements to be in place and implemented prior to and during the works.	4 weeks	Landlord	Landlord	Landlord	IFA2 Ltd	-	-	-
Port Authority consultation	Port Authorities may impose certain controls and require certain agreements to be in place and implemented prior to and during the works.	4 weeks	Port Authority	Port Authority	Port Authority	N/A	-	-	-
Public Rights of Way (PROWS)									
Closure and Diversion of Public Rights of Way and Roads	Temporary/permanent closures or diversions of public rights of way and roads require consent and notification of alterations prior to works commencing.	1- 2 months	Planning Authority	Planning Authority	Planning Authority	NO	-	-	Existing PROW runs across the site access, but will need to be managed with signage.

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			England	Wales	Scotland				
Closure and Diversion of Trunk Roads of Motorways	Temporary or permanent closures or diversions of trunk roads and motorways require consent and notification of alterations prior to works commencing.	1-2 months	Highways Agency	Welsh Assembly/NRW	Scottish Executive	N/A	-	-	-
Radioactive Substances									
Licence for the use and storage of radioactive sources	Where on site laboratories or other areas use radioactive sources for measurement etc.	4-5 months	EA	NRW	SEPA	N/A	-	-	-
Other									
Considerate Constructors Scheme	Where the project is a non-JV project longer than 6 weeks duration and in an urban environment it is to be entered into the Considerate Constructors Scheme.	2 weeks	CCS	CCS	CCS	YES	ABB	TBC	-
BREEAM	http://www.breeam.org/		BRE	BRE	BRE	YES	MS	TBC	BREEAM Infrastructure

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			England	Wales	Scotland				
									Scheme to be applied to project.

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6. Objectives & Targets

IFA2 Converter Station objectives and targets			
Element	Objective	Target and/or measure	Site Action & Status
Climate Positive Positive about Resources	Energy Usage	Record energy usage on 95% of sites.	- Monitor and Record Energy, Fuel, Water and Waste Performance. Aggregate and cement usages. - Maintain the SWMP. - Maintain IFA2 SCIP and provide to the IFA2 CIE and MS EA Monthly.
	Waste diverted from landfill	96% of waste is diverted from landfill	
	Secondary aggregate usage	90% of aggregates used on site is from secondary sources.	
	Cement usage	A measure of the amount of cement used on all schemes in the delivery phase.	
Enhancing Eco-Systems	Natural capital	N/A	- Identify opportunities to improve the bio-diversity of the project.
General Requirements	Environmental Awareness Training		- Ensure appropriate Environmental Awareness Training is delivered.
	ISO 14001		- Implement and regularly review the EMP. - Bi-Annual RIVO e-Audit.
Environmental Incidents	Environmental Incidents	To measure Cat 1 and Cat 2 environmental incidents	- Report all Environmental Incidents - Regularly review Environmental Incident Performance. - Following any environmental incidents implement any necessary corrective action.

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Appendix A – Main Site Survey Extents and Tree Protection Details (SK2)

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Appendix B – Materials Management Plan

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PLACEHOLDER –
DRAFT WILL BE AVAILABLE PRE-CONSTRUCTION

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