Environmental Management Plan
Asda Barry

Document ref. ISG-WC-17-07-14-**HAD**-RTL0034-0001

Site name:	Asda Barry	**Project No:**	RTL0034
Cluster Address:	ISG Western Construction		
Project Names and Addresses	Asda Barry, Fford y Mileniwm, Barry, Vale of Glamorgan.		
Cluster Project Telephone No.:	TBC	**Project Fax No.:**	

Reviewed by	**Title**	**Signature**
Stan Parkinson	**ISG Project manager**	
Brian Amos	**ISG Construction Manager**	
Pete Creese	**ISG Environmental Manager**	Pete Creese.

Revision No: (A / B / C etc)	P01	P02	P03	P04						
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NB: This section should be updated manually and this page kept / inserted at the front of the plan during / further to any revisions that have been made										

Environmental Management Plan

Document Status

Revision	Amendment details	Details (name and date)	
		Env. Manager	Date
P01	Draft issue for comment	PC	17/07/14
P02	Updated after initial comments from LPA	PC	
P03	Construction issue	PC	
P04	Amendments made to Update EMP	PC	
P05	Amendments made, due to change in works	PC	

Distribution Record

Revision	Issued to	Date of Initial Issue	Date of Subsequent Issues
P01	Stan Parkinson – Lawrence Booth	17/07/14	

Scheduled Reviews

Monthly Review: This plan will be reviewed on a monthly basis.

Extraordinary Review: This plan will be reviewed when the works are deemed to have significantly altered, or where key changes to the plan are identified as requiring urgent incorporation into the plan.

Environmental Management Plan

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Environmental Management Plan

1.0 Introduction

This Environmental Management Plan is a project specific plan relating to the construction of the new Asda Superstore taking place at Fford y Mileniwm, Barry, Vale of Glamorgan.

This Environmental Management Plan has been compiled by the ISG Project Works management team to comply with the Asda Sustainability Guidance Pack for Suppliers.

The plan is a "live document" to be supplemented and/or revised as the project develops by the introduction of supporting documents such as Sub-Contractor Sustainability Management Plans, etc. The revising of this plan however, will not exceed three calendar months.

The plan details the arrangements which have been put into place for the management of environmental and sustainability matters during the project works.

All parties involved in these works must ensure that they are aware of their duties under relevant legislation. They must make themselves and their employees familiar with the content of this plan and work within the management system defined therein.

1.1 Location

Asda Barry is on the site of the former Woodham's Scrap Yard adjacent to Number 1 Dock at Barry Docks. The new entrance will be via Fford y Mileniwm although the site access will be from the Barry Island side of the site adjacent to the car park entrance. The site works are all contained within the overall venue boundary.

1.2 Project Details and Scope of Work

1.2.1 Generally

ISG have been appointed to provide Construction Management (CM) services to work as a lead contractor within the Asda Construction Framework for new build, re-model and refurbishment works.

The scope also includes CM direct trade packages which will be general building works fit out and general mechanical, plumbing and electrical services. These are works that fall outside the commodity packages and will also be required to deliver the store.

Specifically the works will include:

- Preparation of the existing site to required levels;
- Formation of a piling mat;
- Construction of tank farm in the south of the site for the construction of a new Petrol Filling Station (PFS);
- Erection of steel frame;
- Construction of store including cladding, roofing and floors;
- Installation of mechanical, electrical and refrigeration services;
- Construction of PFS;
- External works including car parks and landscaping.

1.3 Site Restrictions

The following existing restrictions have been identified from the Pre-Construction Information Pack and supporting information, such as Designers Risk Assessments and site visits. These will be taken into account throughout the works:

Existing Hazard / Consideration / Restriction	Notes / Controls
Hours of working	Monday to Friday 8am until 6pm Saturday 8am until 1pm Sunday – Closed No work will be permitted outside of these hours.
Boundaries & permanent / temporary access	Site boundaries are noted on the site plan and include all temporary access routes, walkways, crossovers and access points.
Delivery, Waste Collection or Storage Restrictions	Deliveries only during standard working hours Approved Contractor to be used for all waste collections Storage and segregation to be as identified on site logistics plan and at prestart meetings
Previous Use of Site	The site was formerly covered by an extensive network of railway sidings that were used between 1957 and 1990 by David Woodham as a scrap yard for railway locomotives (steam) and rolling stock. It would appear that during this period extensive amounts of asbestos containing materials were either dropped or dumped across the site. To the east of the site is the site of a former oil storage tanks farm that was previously owned by Regent and Shell.
Current Use of Site	The site has been undergoing significant remediation over a number of years by the Cuddy Group. ISG will inherit a remediated site.
Current or Anticipated Use of Adjacent Sites	The current adjacent sites are similarly undergoing remediation with the intention of developing further small retail units and residential accommodation during Phases 1 and 2 of the whole development.
Road and Traffic Systems Adjacent to the Site	Please refer to the ISG traffic management plan for details. The logistics plan for this site will take into account the ecological issues on site.
Existing Services (Utilities)	The site is served by water, electricity, telecoms and drainage services.
Ground Conditions	Following Cuddy's remediation, the first metre of the ground is imported clean material, the second metre is material that has been remediated to within the tolerance levels for 'Non-hazardous' material (WAC Test), the material below is un-tested.
Noise Restrictions	Noisy working is not permitted outside of the site working hours unless by prior agreement with ISG and only after a noise exposure risk assessment. Boundary noise analysis, should it be required, will be undertaken by ISG on behalf of Asda.
Existing Hazard / Consideration / Restriction	**Notes / Controls**

Access Restrictions	All permanent workers to the site shall attend an ISG 'Safety on Site' induction course. All visitors to site will also be given a 'Visitor's Site Safety Induction'. Safety critical workers are not permitted to work on a visitors pass. All permanent workers are to have relevant CSCS or equivalent training as a minimum.
Environmental Considerations such as watercourses	There are two docks and a marina to the east of the site. Both are fenced off. There are no works taking place near either bodies of water.
Existing Biodiversity	The site area has been remediated from the former Woodham's Scrap Yard by Cuddy's. The majority of the site is currently non-vegetated. From observations made during visits to site there appears little opportunity for the establishment of a wide bio-diversity as a result of the remediation that has been undertaken transforming the landscape, there is however evidence of visiting sea birds especially black headed and herring gulls. An ecological site map shall be completed and must be considered before work starts. An Environmental Manager from ISG has been appointed to oversee works taking place on the site.

1.4 Contact Directory

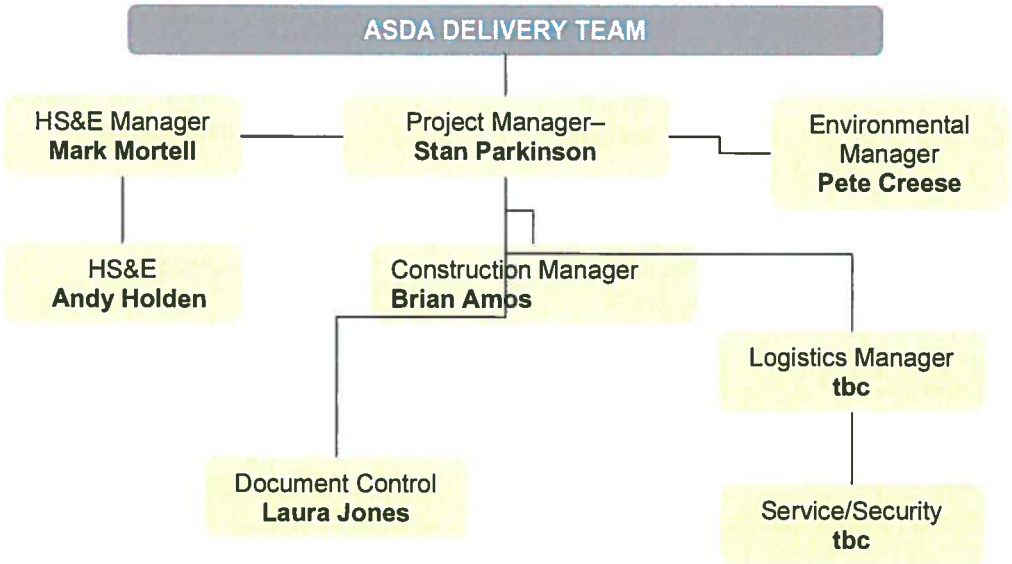
Name & Address	Contact Name	Phone No.(P) Fax No. (F) E-Mail (E)
Client: Asda Stores Limited Great Wilson Street Leeds	Jani Ishaq	P : 07779 700612
		F :
		E : jani.ishaq@asda.co.uk
CDM Co-ordinator: CDM Callidus Health & Safety Ltd Brooklands Court Tunstall Road Leeds LS11 5HL	David Lumb	P : 07881 092833
		F :
		E : David.lumb@wearecallidus.com
Architect: WCEC, Carrwood Court, Carrwood Road, Sheepbridge, Chesterfield S41 9QB	Richard Else	P : 07970 998329
		F :
		E : Richard.else@wcec.co.uk
M&E Services Designer DDA Ahed House Dewsbury Road Ossett WF5 9ND	Neil Phillips	P : 07515 579517
		F :
		E : nphillips@ddalyd.co.uk
CM/Principal Contractor ISG Western Construction Parklands Stoke Gifford BS34 8QU	Stan Parkinson (Project Manager)	P : 07580 977969

Details of the Sub Contractors working on this project will be maintained on a project directory, a copy can be found in the Health & Safety Plan for the works. This will be updated when new Sub Contractors or staff members join the team.

1.5 Project Management Team (Site Level)

The sustainability duties on this project will be under the direction of the named management team with the chain of responsibilities shown in the Site Management Chart below:

POSITION	NAME	LOCATION	PHONE No.
Project Manager	Stan Parkinson	Barry	07580 977969
Construction Manager	Brian Amos	Barry	07500 111743
Environmental Manager	Pete Creese	Barry/Bristol	07738 062545
HS&E Manager	Andrew Holden	Barry/Bristol	07818 075265
Logistics Manager			
Document Controller	Laura Jones	Leeds	01132 186000



1.6 Project Management Team Responsibilities

Description	Responsibility	Delegated To	Frequency
1. Waste Management Arrangements	Environment & Sustainability Manager	Pete Creese	As required during development of project – monitored weekly.
2. Emergency Environmental Procedures – Spill Response	Environment & Sustainability Manager	Pete Creese	Prior to project commencement and reviewed throughout.
3. Pollution Controls	Environment & Sustainability Manager	Pete Creese	At project commencement and reviewed throughout.
4. Environmental Incident Reporting and Investigation	Environment & Sustainability Manager	Pete Creese	Initial reporting & investigation of any incident and compliance with Incident Action Matrix.
5. Induction	Site Manager/ HS&E Manager	Andy Holden	All personnel on initial start on site and re-inducted as work develops.
6. Environmental Inspections	Environment & Sustainability Manager	Pete Creese	Weekly with H&S Inspections
7. Excavation Permits to Proceed (PtP)	Site Manager		Daily review
8. Method statement acceptance and co-ordination	Site Manager		On receipt prior to work commencement.
9. Monitoring and reporting of Asda Sustainability Targets	Environment & Sustainability Manager	Pete Creese	As works proceed. Checking of materials used and compliance to Asda targets.

1.7 Roles and Responsibilities

Throughout the project the **Client** will be responsible for:

- Ensuring that designers, direct contractors and sub contractors are promptly supplied with sustainability information relevant to their purposes.
- Ensuring that direct contractors and sub contractors are informed of the minimum time to be allowed for planning and preparation before Project Works commences.

The Design Team will be responsible for:

- Ensuring the design meets the Asda Sustainability requirements.
- Ensuring the design is in accordance with the ISG policy Statements on the use of HFC's.
- Ensure that specifications include requirements for FSC sustainable timber only.
- Ensure the design follows the requirements of the ISG Sustainable Sourcing Code.
- Design to minimise waste and use materials that can be easily reused and recycled and have recycled content.

The Principal Contractor is responsible for:

- Managing BREEAM Construction Site Impacts.
- Ensuring sufficient environmental controls are being used during the works.
- Reporting environmental performance to the Client.
- Reviewing and approving direct contractors and sub contractor Method Statements prior to commencing works on site.
- Ensure suitable sustainability training is given staff and contractors
- Ensuring that all legal requirements are being met.
- Setting up the SWMP through BRE Smarter Waste
- Registering with Considerate Constructors and complying with the requirements of the scheme.

The Direct Contractors and Sub Contractors are responsible for:

- Production of Method Statements which detail the environmental controls and procedures which are to be used for specific Project Works activities and tasks.
- Minimising waste by reusing packaging and offcuts and using take back schemes etc.
- Segregating waste into appropriate waste streams to maximise recycling.
- Using approved waste contractors to remove waste and ensure zero waste to landfill.
- Store hazardous materials on bunds to prevent pollution from spillage and provide spill kits.
- Report wastage figures and recycling rates on a monthly basis.
- Report any environmental hazards or near misses.
- Carry out our environmental toolbox talks.

2.0 Operational Controls

2.1 Aspects & Impacts & Mitigation Measures

A copy of the Environmental Aspects and Impacts can be found in Appendix 1 of this plan.

The Environmental Aspects and Impacts assessment includes a risk rating to include likelihood of an event occurring and an indication of the potential severity. The assessment also indicates the control and mitigation measures that need to be used to ensure a low residual risk rating.

It also includes a reference to relevant control plans and other documentation which may give further detail on mitigation measures and best practice methods.

The following items have been defined as significant aspects and represent the key environmental risks on the project:

No.	Significant Aspect	Impact & Legislation	Control/Mitigation Measures	Control Plans
A1	Dust arising from construction activities	Nuisance to neighbours. Damage to local wildlife & habitats. Compliance to requirements of Considerate Constructors Scheme Clean Air Act 1993	• Fencing and sheeting at site boundary. • A water bowser will be on site for damping down. • Damp down drilling & dry excavation works • Cover stored materials, chutes & skips	• ISG ISO14001 BPM section 6.4.4 • BPG The Control of Dust & Emissions from Construction & Demolition • Considerate Constructors Scheme
B1	Retain protected species and habitats	Damage or loss to protected species or habitat Wildlife & Countryside Act 1981 Conservation (Natural Habitats) Regulation	• Identify locations of protected species & habitats using ecological maps. • Form physical protection to prevent worker access to sensitive areas • Define work areas clearly, no construction works or storage of materials allowed outside these areas • Include ecological constraints within the traffic management plan, specific access routes will be decided on to facilitate the movement of construction vehicles and operatives to sensitive areas • Communicate all environmentally sensitive areas to operatives via inductions • Implement the yellow/red card system for any operatives not complying with site rules	• Environmental Management Plan • ISG BPM section 6.4.5

No.	Significant Aspect	Impact & Legislation	Control/Mitigation Measures	Control Plans
	Retain protected species and habitats • **None have been identified in preliminary reports.**	Damage or loss to bats on site Wildlife & Countryside Act 1981 Conservation (Natural Habitats) Regulation	•	•
	Retain protected species and habitats • **None have been identified in preliminary reports.**	Damage or loss to protected species or habitat Wildlife & Countryside Act 1981 Conservation (Natural Habitats) Regulation	• Where work is taking place within areas of invertebrates, avoid unnecessary disturbance to nesting sites • Fencing and groundworks contractors must be made aware of work within this area and mitigate impacts through method statements. • Vehicles to be kept to a minimum through this area- see traffic management plan •	• Asda Barry Ecological Site Rules Map
	Retain protected species and habitats • Adjacent Grasslands	Damage or loss to protected species or habitat Wildlife & Countryside Act 1981 Conservation (Natural Habitats) Regulation	• Specific access routes will be decided on to facilitate the movement of construction vehicles and operatives to these areas. These routes will be limited in their extent as far as possible and exceed no more than 2m.	• Asda Barry Ecological Site Rules /Traffic Plan
	Retain protected species and habitats • **None previously identified on site**	Damage or loss to protected species or habitat Wildlife & Countryside Act 1981 Conservation (Natural Habitats) Regulation	• All site clearance works will be undertaken outside the birds nesting period of 1st March to 1st August – previously undertaken by Cuddy's	•
B2	Protection of trees, hedges and planted areas: **There are no trees or hedgerows within the boundaries of the site**	Damage to trees and/or hedgerows	•	•

No.	Significant Aspect	Impact & Legislation	Control/Mitigation Measures	Control Plans
D1	Prevent pollution of clean land during construction activities	Pollution of soils and associated groundwater systems during construction activities Control of Pollution (Oil Storage) Regs: 2001	• Correct storage of hazardous materials • Use of double skinned storage containers for oils and chemicals • Use of bunds around fuel and oil storage areas to contain leaks and spills • Spill kits adjacent to all fuel storage areas • Drip trays/Plant Nappies to be used under all oil using plant and equipment • Segregation of contaminated and non-contaminated soils • All paperwork on waste removal from portable toilet's obtained- method statements and incident procedure included • Permit to dig for all excavation works	• Environmental Management Plan • Emergency procedures • ISG BPM Section 6.4.4
G3	Use of materials not responsibly sourced	Depletion of natural resources & deforestation.	• Only FSC certified sustainable timber products to be used. • Auditing of supply chain deliveries and paperwork • Completion of ISG Sustainability Returns	• Asda Sustainability Guidance Pack for Suppliers • Contractor Sustainability Management Plans •
G2	Reuse of contaminated excavated materials	Hazards to health of humans and wildlife.	• Check the groundwork's survey before using soil piles to fill in other areas of the site • Based on available data, no contaminated ground was identified during the geo-environmental investigations.	• Environmental Management Plan
G5	Use of HFC's and PVC's	Global warming potential. Use of hazardous materials and environmentally damaging manufacturing methods Ozone Depleting Substances (Qualifications) Regulations 2009 Environmental Protection (Controls on Ozone Depleting Substances) Regs 2002 As Amended	• Monitoring of contractor and supplier Sustainable Commodities datasheet • HFC Policies • Use of HFC Justification Reports	• Asda Sustainable Sourcing Code • Contractor Sustainability Management Plans • ISG Sustainability Returns • HFC & PVC Justification Reports
H1	Noise pollution to local communities from construction activities	Nuisance & disturbance to local communities due to noise caused by construction activities and deliveries. Environmental protection Act 1990 Part III: Statutory Nuisance Noise & Statutory Nuisance Act 1993 Control of Noise (CoP for Construction & Open Sites) Order 2002	• Low noise methods of construction to be employed • Low noise plant and equipment specified and used on site • Regular monitoring of noise levels at perimeter of site	• Section 61 Agreement • ISG Environmental Management Plan
J1	Waste production from construction activities	Unnecessary waste of materials and resources. Waste to landfill or incineration. Opportunities for	• Reduce waste generated via workshops, reusable packaging and maximisation of offsite fabrication	• ISG Site Waste Management Plan • Supplier contractual order documentation

		recycling. • Landfill: Waste Acceptance Criteria • Environmental Permitting Regs: 2007 • Hazardous Waste Regs: 2005 • Controlled Waste Regs: 1992 • Environmental Protection Act 1990 Part II: The Duty of Care • Site Waste Management Plan Regs: 2008 • Waste Electrical and Electronic Equipment (WEEE) Regs 2006	• Good standards of housekeeping & storage arrangements • Reuse of off cuts and materials wherever possible • Segregation of waste streams in accordance with waste management contractors requirements for recycling • Use of approved contractor by all suppliers and contractors	
K1	Use of water during construction activities (mixing cement)	Water wastage or unnecessary use. Water Resources Act 1991 Water Act 2003	• Control of water supply • Leak prevention • Onsite monitoring and control	• ISG Environmental Management Plan
K2	Use of water from welfare facilities	Water wastage or unnecessary use.	• Low usage equipment to be used in welfare facilities (spray taps etc) • Water management equipment for toilets	• ISG Environmental Management Plan
L3	Leaks and spills of hazardous materials	Pollution to surface water drains and watercourses via the 3 outlets Control of Pollution Regulations 2001	• Correct storage of hazardous materials • Pollution prevention controls in place i.e. bunding, spill kits, drip trays etc. • Double skinned oil tanks • Spill kits available for all locations of hazardous materials.	• ISG Environmental Management Plan • 'As Built' record drawings of existing drainage systems • ISG BPM Section 6.4.4 • Contractor Method Statements
L5	Discharge of waters to foul drains or controlled waters	Pollution of controlled waters. Breach of discharge consent to foul drainage systems.	• Water from wheel washing on site is to be captured using a trough, water will then be recycled using a filter- no discharge consent required • Must ensure waste transfer note is obtained for disposing of waste arising's	• ISG Environmental Management Plan • TW Discharge Consents

2.2 Record Drawings

The 'As Built' drainage systems are recorded on DDA drawings

A copy of these drawings will be held in the project offices.

2.3 Permits and Consents

The following permits and licences are expected for the Project Works at the site:

2.4 Legal & Other Requirements

ISG subscribe to an on line legal register supplied by Waterman Greenspace. This register is updated monthly and provides access and evaluation of all environmental legislation which is applicable to the activities of ISG.

The register provides access to the full legislative documentation and includes a summary of its content. It also includes details on its applicability to ISG's operations and a summary of our methods of compliance.

The ISG Health, Safety, Quality and Environmental (HSQ&E) Director reviews all applicable legislation and ensures that our operational procedures as defined in our Integrated Best Practice Manual are in compliance.

Access to the register is via the Waterman Greenspace web portal and will be available to all ISG staff working on the project.

Legal requirements and compliance will be checked during the regular ISG HSQ&E visits and site audits.

A copy of the applicable Environmental Legislation can be found in Appendix 2 of this Plan.

Environmental Management Plan

Objectives and Targets

The agreed specific Project Works stage environmental objectives and targets for the training academy are listed below:

Design Sustainability Targets		
Target	Requirement	Notes
Minimise carbon emissions	Use energy efficient lighting systems and meet requirements of ISG an Asda's Policy Statement on HFC's.	
Maximise water reduction opportunities	Design to minimise water consumption.	**e.g. spray taps, flow restrictors etc.**
Source and use environmentally and socially responsible materials	Follow ISG and Asda's Sustainable Sourcing Code. Use inert or low emission finishes and materials. Design with reused or recycled products in mind. Minimise requirement for plasterboard. Specify FSC timber products only.	
Minimise waste generation	**Design to minimise waste, using modular sizes etc.** **Design to minimise need for wrap, painting etc.** **Use materials that can be reused and recycled.**	

Project Works Sustainability Targets		
Target	Requirement	Notes
Sustainable Sourcing	Follow ISG and Asda Sustainable Sourcing Code. Use FSC timber products only. Avoid restricted substances and materials such as PVC and HFC's. Avoid coatings or use low emission materials. Avoid products difficult to reuse or recycle. Use materials with high recycled content. Avoid hazardous materials.	**Complete FSC/EUTR datasheet on Smarter Waste.**
Incident Management-	Zero Notifiable Sustainability Incidents	Report all sustainable incidents or near misses. Follow the Incident Management Plan.
Waste	Minimise waste produced. Reuse packaging & offcuts Zero waste to landfill by using Atlantic Recycling approved waste contractors. Reuse or recycle at least 95% of waste (by weight) in project works.	**Report monthly**
Air Quality	**Control dust.** **Use low emission vehicles & maintain.**	

	Minimise smoke or fumes.	
Biodiversity	Protect existing trees, vegetation & wildlife. Protect watercourses. Report invasive species.	
Energy & Carbon	Use low sulphur fuels. Turn off plant and equipment when not in use. Use low energy lighting and turn off when not required. Use hybrid or other low carbon vehicles. Comply with Low Emissions Policy	
Land & Groundwater Contamination	Use plant nappies or trip trays under all oil using equipment. Use bunds for storage of all hazardous materials. Have spill kits next to all hazardous materials. Store hazardous materials away from water courses and drains.	
Noise & Vibration	Work only within permitted times. Use quiet equipment and tools. Monitor noise levels. Position plant and equipment away from residents. Use sound screens around noisy plant	**Section 61 defines workable hours.** **Define noise reduction methods in Method Statements.**
Surface Water Protection & Flood	Use plant nappies or drip trays under all oil using equipment. Use bunds for storage of all hazardous materials. Have spill kits next to all hazardous materials. Store hazardous materials away from water courses and drains.	
Sustainable Transport	**Use low carbon forms of transport.** **Record mode of transport.** **Maximise sustainable transport where possible.** **Follow ISG Traffic Management Plan**	

2.5 Procurement Process

All potential contractors have to pass the ISG Pre-Qualification process. This includes the completion of a questionnaire and the issue of associated documentation to determine health, safety and environmental competence as required by the CDM regulations. A full credit check is also carried out as part of the Pre-Qualification process.

Once a contractor has passed the Pre-Qualification process they are entered onto the ISG Supply Chain Database and are available for our project teams to use.

The tender lists for the various works packages on the Project works will be drawn up from contractors selected from the ISG Supply Chain Database dependant upon their experience and capability to undertake the works required.

Upon the return of the tender documents Post Tender Interviews may be held to determine the content of the returned bids and to resolve any issues to ensure a compliant bid.

The ISG Financial team prepare a Tender Report and Recommendation for appointment.

The Tender Report examines the tenderer's ability to comply with the contractual requirements of the project as detailed in the tender documentation.

The Tender Report will formally recommend the appointment of a Trade Contractor which best satisfies the requirements of the works across a range of criteria.

Once approved the Trade Contractor can be appointed and the formal contractual documentation issued for signature.

Environmental and sustainability requirements are further reviewed as part of the pre commencement process before works start on site.

2.6 Competence, Training & Awareness

ISG determines the needs for competence, training and awareness of staff via its training pathways. The training pathways are developed with the senior divisional and line managers to ensure that all staff has the appropriate skills, abilities and competence for their current role. These are reviewed during the annual performance feedback for all individuals.

Environmental training for the training Academy will include a range of training mediums. These include:

2.6.1 ISG Company Induction

All new ISG staff receives a 1 day company induction within 1 month of joining. This includes 'Sustainability', 'Environmental' and 'ISG Construction Management System' training'.

2.6.2 Site Induction

All ISG staff, consultants, visitors and operatives will receive a specific site induction for the project. This will include the environmental aspects and impacts and sustainability objectives and targets for the project.

2.6.3 Risk Assessment Briefings

All persons working on the project will receive detailed briefings on applicable approved Method Statements to ensure that they are fully understood before works commence. These will include a briefing of any environmental aspects to the works and mitigation measures which must be employed.

2.6.4 Tool Box Talks

Regular toolbox talks will be given on a range of applicable environmental subjects. These will ensure that all onsite personnel are ware of key environmental issues and have a practical understanding of key issues.

2.6.5 Project Environmental Awareness

A specific training workshop will be held covering all the project environmental & sustainability issues to raise awareness of the objectives and targets that must be achieved.

2.6.6 Waste Management Workshops

Specific waste management workshops will be held with Sub Contractors to identify reduction methods, opportunities for reuse of materials and the segregation of waste for recycling.

2.6.7 Biodiversity Toolbox Talks

Toolbox Talks will be held with all ISG staff and Trade Contractor supervision to raise awareness of biodiversity and wildlife issues on the site.

2.6.8 Spill Kit & Emergency Procedures Training

Key individuals and supervisors will be given spill kit and environmental emergency procedure training.

Training will be provided when required by the contract programme and upon the availability of staff and the appointment of the Trade Contractors. A record of all training given will be kept and maintained in the ISG site offices.

2.7 Operational Control

The ISG Company Management System (CMS) is used by all ISG staff.

The CMS covers all aspects of operations in our offices and on our projects and acts as a guide and a procedures manual for ISG staff. It covers all aspects of health & safety, quality and environmental management as well as including advice and guidance on our sustainability initiatives.

To ensure that our procedures are in accordance with the highest standards possible we have certified the CMS in accordance with the latest versions of the 3 main international standards for management systems.

These are:

- ISO14001 Environmental Management Systems
- ISO9001 Quality Management Systems
- OHSAS18001 Occupational Health & Safety Management Systems

Our certification body BSI carry out routine inspections and audits of our offices and sites to ensure that we are compliant with these standards.

Trade Contractors will produce Method Statements which detail the environmental controls and procedures which are to be used for specific Project Works activities and tasks. These will be reviewed and approved by ISG before the contractors commence works on site.

The ensure compliance to the ISG company standards and to the requirements of this EMP, regular site inspections and audits will be undertaken by ISG site staff and visiting support staff.

Upon appointment the Works Contractors will be required to issue a Sustainability Management Plan for the works and complete the ISG Responsible Sourcing Datasheet and the Commodities datasheet for approval by ISG.

2.8 Pollution Prevention

A range of mitigation measure will be used during the Project Works at all ISG sites to prevent pollution:

2.8.1 Mitigation of Water & Land/Soil Pollution

- Drainage Plans - A comprehensive drainage plan of the site will be available showing all foul and surface water drainage and the location of other watercourses
- Controls for rainwater runoff from contaminated soil storage areas
- Consent to discharge to be used for water disposal via foul water systems once agreed with Thames Water
- Storage of fuels, oils and chemicals will be kept away from drains and watercourses in secure bunded areas which are safe from accidental damage
- All storage containers, drums and tanks will be clearly marked up with the contents
- COSHH data sheets for all substances in will be kept in the ISG site offices
- A Spill Kit will be located close to refuelling and storage areas and project staff trained in their use
- Plant and equipment will be serviced regularly and hydraulic systems and hoses checked weekly
- Drip trays or plant nappies to be used under oil using plant such as generators, pipe cutters etc. and empty them regularly

- Pumping of silt water from excavations, wheel washing, road cleaning will not be allowed to enter Surface Water drainage systems or into rivers, streams or ditches etc. Methods disposal must be agreed with ISG and Welsh Water/Dwr Cymru / EA and included within Method Statements
- Rainwater contaminated with silt, oils or chemicals will not be allowed to enter the Surface Water drainage. Silt traps and fences to be used where necessary.
- Concrete spillage or wash out to be controlled and not allowed to enter water systems
- Skips and waste containers will be located on impervious ground to prevent leaks contaminating ground and watercourses
- Skips and waste containers will not be overfilled and covered to prevent litter being blown out and rain penetration

2.8.2 Mitigation of Air & Noise Pollution

- Damping down dusty operations such as excavations, drilling and cutting operations as well as site access roads and adjacent highways.
- Filters and dust extraction systems to be used for dusty and fume causing operations
- Spraying operations to be controlled with adequate containment or screens and ventilation
- Ensure materials are used as defined by their COSHH assessments
- Ensure material deliveries have adequate covering and sheeting
- Ensure that all vehicles and plant are well maintained, and switch off engines when not in use
- All vehicles comply to EU regulations and hold current MOT (if applicable)
- Encourage the use of low emission transportation i.e. LPG, electric, hybrid, biofuels, low sulphur petrol etc. in accordance with the Asda/ISG Low Emissions Policy
- No fires will be permitted on site at any time
- Office and kitchen waste to be stored in bins with lids and regularly collected
- Implement operational restrictions for noisy operations
- Ensure plant is fitted with noise reduction devices or mufflers etc
- Use of electric hoists
- Use quiet methods of working or specialist plant etc
- Regularly check, measure and monitor dust/noise levels within the site

2.8.3 Mitigation of Light Pollution

- Planned location of lighting to reduce risks of pollution to receptors
- Light baffles & projector luminaries used to control spread of light
- Timers & daylight sensors used to control non essential lighting

2.9 Environmental Incidents

An environmental incident is any event which has or could have caused damage to any form of biodiversity. Incidents could include encountering unexpected contamination, flooding, spills and leakages, damage to wildlife and fires.

Incidents often lead to a non compliance with legal and other requirements such as planning consents and ISG sustainability policies. All types of environmental incident or near miss must be reported, recorded and investigated.

During the Project works the following incident categories will be used:

2.9.1 Category 1 Major Incident - leading to prosecution
A major environmental Incident will result in likely prosecution or a restriction of works. It will generally be non routine and large scale. It could also be due to persistent and significant breach of permit / licence or consent conditions.

2.9.2 Category 2 Significant Incident – potential of prosecution
A significant environmental incident could result in prosecution or a restriction of works. It could also be due to a persistent non-significant breach or significant non-persistent breach of consent conditions, or significant or persistent breach of monitoring threshold.

2.9.3 Category 3 Moderate to Minor Incident
A moderate to minor environmental incident, including receipt of a substantiated complaint associated with specific site activity. It could also be due to non-significant and non persistent exceedance of monitoring threshold.

2.9.4 Category 4 Very Minor Incident
A very minor incident which can be easily remedied and cleared.

2.9.5 Near-Miss
A near miss is considered to have occurred where an activity has taken place which could have resulted in an environmental incident, but the occurrence has had no effect on a receptor, either due to luck, or as a result of appropriate management systems in place.

2.9.6 Incident Reporting
All environmental incidents or near-misses will be reported to ISG. The ISG HS&E Advisor will investigate all incidents.

Incidents that involve pollution, fish kills or release of hazardous substances will be immediately reported to the Environment Agency on their incident hotline:

0800 807 060

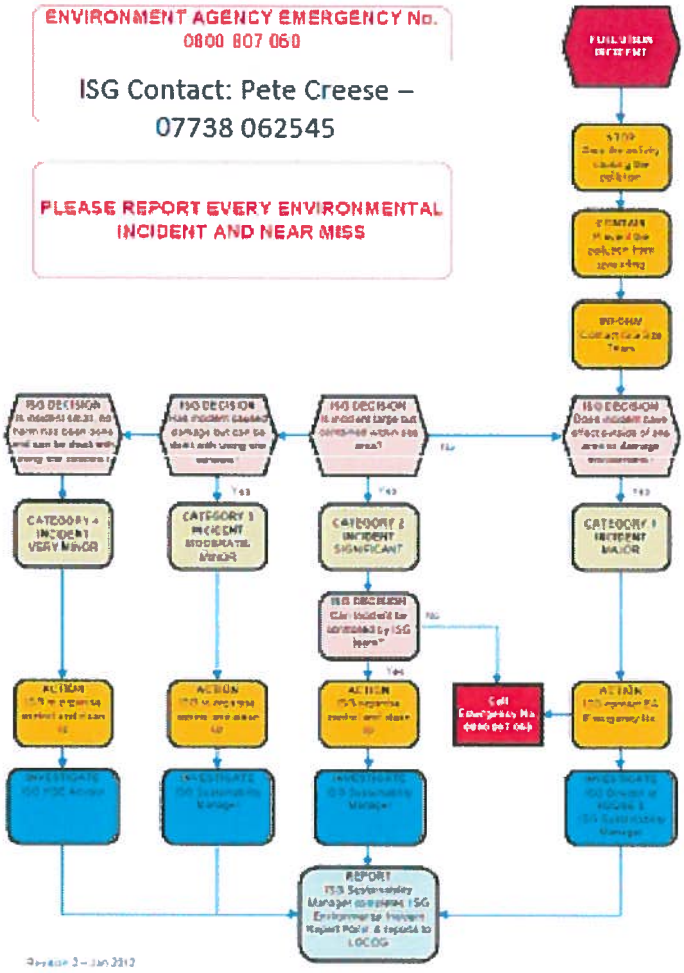
The following flow chart will be followed to determine the incident type and shows the actions to be taken. It will be displayed in all welfare areas and in the site offices.

Pollution Incident Procedure

ENVIRONMENT AGENCY EMERGENCY No.
0800 807 060

ISG Contact: Pete Creese –
07738 062545

PLEASE REPORT EVERY ENVIRONMENTAL INCIDENT AND NEAR MISS



2.10 Environmental Monitoring & Reporting

ISG will carry out site inspections and monitoring for environmental compliance and for pollution controls.

The table below shows the planned monitoring frequencies:

Activity	Frequency	Responsibility	Record
HSQ&E Inspection	Weekly	HSE Advisor	**ISG HSE Inspection Form**
Dust	Daily Visual	Construction Managers, Sustainability Manager	**Record of bowser operation**
Sustainability Inspection	Monthly	Sustainability Manager	**Cluster inspection against requirements of this plan**

Appendix 1 – Environmental Aspects & Impacts

A: AIR QUALITY

No.	Aspect	Impact & Legislation	Likelihood			Potential Severity			Control/Mitigation Measures	Ref to Control Plans	Residual Risk Rating		
			High	Med	Low	High	Med	Low			High	Med	Low
A1	Dust arising from construction activities	Nuisance to neighbours. Damage to local wildlife & habitats. Compliance to requirements of Considerate Constructors Scheme Clean Air Act 1993		●			●		• Temporary fencing and sheeting at site boundary. • Hardpaving haulage roads and storage areas. • Water used as dust suppressant for dusty works. • Damp down drilling & dry excavation works • Cover stored materials, chutes & skips • Park wide dust monitoring	• ISG BPM Section 6.4.4.4 • GLA BPG The Control of Dust & Emissions from Construction & Demolition • Considerate Constructors Scheme		●	
A2	Release of ozone depleting substances	Release of ozone depleting substances to the atmosphere. Damage to the atmospheric ozone layer Ozone Depleting Substances (Qualifications) Regulations 2009 Environmental Protection (Controls on Ozone Depleting Substances) Regs 2002 As Amended		●			●		• Ban on the use of any ozone depleting substances or materials on the project	• Design Specifications • Contractor documentation			●
A3	Vehicle & plant emissions	Local air pollution. Nuisance to wildlife & habitats. Clean Air Act 1993	●				●		• Compliance with ISG Low Emissions Policy • Use of electric hoists and cranes • Engines of vehicles & plant turned off when not in use • Encourage the use of low emission transportation i.e. LPG, electric, hybrid, biofuels, low sulphur petrol etc. • Vehicles & plant to be regularly maintained • All vehicles comply to EU regulations and hold current MOT certification	• ISG BPM Section 6.4.4.4 •			●

Appendix 1 – Environmental Aspects & Impacts

A: AIR QUALITY (RELEASE TO AIR) CONTINUED

No.	Aspect	Impact & Legislation	Likelihood			Potential Severity			Control/Mitigation Measures	Ref to Control Plans	Residual Risk Rating		
			High	Med	Low	High	Med	Low			High	Med	Low
A4	Carbon Dioxide emissions (CO_2)	Release of greenhouse gas to atmosphere contributing to global warming.		●			●		• Encourage the use of low CO2 vehicles for transportation i.e. LPG, electric, hybrid, biofuels etc. • Low energy usage plant, lighting & equipment to be used where possible • ISG Energy Policy to be implemented	• ISG BPM Section 6.4.4.4 • ISG Energy Policy			●

B: BIODIVERSTY & ECOLOGY

No.	Aspect	Impact & Legislation	Likelihood			Potential Severity			Control/Mitigation Measures	Ref to Control Plans	Residual Risk Rating		
			High	Med	Low	High	Med	Low			High	Med	Low
B1	Retain protected species & habitats	Damage or loss to protected species or habitat. Wildlife & Countryside Act 1981 Conservation (Natural Habitats) Regulations 1994		●			●		• Identify locations of protected species & habitats and form physical protection to prevent worker access • Monitor habitat on regular basis • Communicate to operatives via inductions	• Environmental Management Plan • ISG BPM Section 6.4.5			●
B2	Protection of trees and planted areas	Damage to trees & associated wildlife		●			●		• Identify locations of protected species & habitats and form physical protection to prevent worker access • Monitor habitat on regular basis • Communicate to operatives via inductions • Record and identify any damaged habitat for reinstatement	• Environmental Management Plan • ISG BPM Section 6.4.5			●
B3	Noise & vibration nuisance to wildlife	Nuisance and damage to wildlife caused by noise and vibration from construction activities Wildlife & Countryside Act 1981 Conservation (Natural Habitats) Regulations 1994	●				●		• Limitations to hours of working as defined in Section 61 agreement • Use of low noise procedures and equipment • Temporary noise baffles to be used for noisy operations. • Noise barriers at site boundary • Best practice procedures to keep noise & vibration ALARP	• Section 61 Agreement			●

Appendix 1 – Environmental Aspects & Impacts

B: BIODIVERSTY & ECOLOGY (CONTINUED)

No.	Aspect	Impact & Legislation	Likelihood			Potential Severity			Control/Mitigation Measures	Ref to Control Plans	Residual Risk Rating		
			High	Med	Low	High	Med	Low			High	Med	Low
B4	Light nuisance to wildlife	Nuisance and damage to wildlife caused by artificial lighting from construction activities Wildlife & Countryside Act 1981 Conservation (Natural Habitats) Regulations 1994		●				●	• Diffusers used on permanent lighting to prevent light spread • Timers / movement sensors used to limited hours of artificial lighting • Light assessments made for temporary / task lighting. To be included in Risk Assessments& Method Statements	• Contractor Method Statements			●

C: ENERGY EFFICIENCY

No.	Aspect	Impact & Legislation	Likelihood			Potential Severity			Control/Mitigation Measures	Ref to Control Plans	Residual Risk Rating		
			High	Med	Low	High	Med	Low			High	Med	Low
C1	Reduction of energy usage	Reduction in localised pollution and greenhouse gas emissions.		●			●		• Low energy usage plant, lighting & equipment to be used where possible • PIRs for office and welfare lighting • ISG Energy Policy to be implemented • Measurement of energy usage (where possible) & reporting to ISG	• ISG Energy Policy			●

Appendix 1 – Environmental Aspects & Impacts

D: LAND (CONTAMINATED LAND & RELEASES TO LAND)												
No.	Aspect	Impact & Legislation	Likelihood			Potential Severity			Control/Mitigation Measures	Ref to Control Plans	Residual Risk Rating		
			High	Med	Low	High	Med	Low			High	Med	Low
D1	Prevent pollution of clean land during construction activities	Pollution of soils and associated groundwater systems during construction activities Control of Pollution (Oil Storage) Regs: 2001	●				●		• Correct storage of hazardous materials • Use of double skinned storage containers for oils and chemicals • Use of bunds around fuel and oil storage areas to contain leaks and spills • Spill kits adjacent to all fuel storage areas • Drip trays/Plant Nappies to be used under all oil using plant and equipment • Segregation of contaminated and non contaminated soils • Hard surfaced roads and storage areas • Permit to Proceed for excavation works	• Environmental Management Plan • Emergency procedures • ISG BPM Section 6.4.4		●	
D2	Pollution of clean soils from dewatering process	Pollution of soils and associated groundwater systems during dewatering Control of Pollution (Oil Storage) Regs: 2001		●			●		• Pumping of surface water to foul water drainage with Thames Water Consent • Consent to Discharge	• ISG Environmental Management Plan • ISG BPM Section 6.4.4 • WW/DC Consent to Discharge			●
D3	Pollution to watercourses from contaminated soils	Pollution to watercourses Control of Pollution (Oil Storage) Regs: 2001 Groundwater Regulations 2006	●				●		• Controls for rainwater runoff from contaminated soil storage areas • Contaminated soils to stored on hard standing areas away from surface water drains	• Pollution Prevention and Incident Contingency Plan • ISG BPM Section 6.4.4			●

Appendix 1 – Environmental Aspects & Impacts

E: ARCHAEOLOGY & HERITAGE

No.	Aspect	Impact & Legislation	Likelihood			Potential Severity			Control/Mitigation Measures	Ref to Control Plans	Residual Risk Rating		
			High	Med	Low	High	Med	Low			High	Med	Low
E1	Damage to archaeology & heritage during construction activities	Damage or loss of items of archaeological or historical interest Ancient Monuments Regs: 1981 Treasure Act 1996			●			●	• Investigation of ground conditions carried out before excavation works commenced	• ISG BPM Section 6.4.2			●

F: LIGHT

No.	Aspect	Impact & Legislation	Likelihood			Potential Severity			Control/Mitigation Measures	Ref to Control Plans	Residual Risk Rating		
			High	Med	Low	High	Med	Low			High	Med	Low
F1	Light pollution to local communities & ecosystems from temporary safety and task lighting	Nuisance & disturbance to local communities & ecosystems from artificial lighting from construction zones		●				●	• Planned location of lighting to reduce risk of pollution • Light baffles & projector luminaries used to control spread of light • Timers and daylight sensors used to control non essential lighting	• ILE Guidance Notes for the Reduction of Light Pollution • CIE Guide on Limitation of the Effects of Obtrusive Light			●

G: MATERIALS (USE OF RAW MATERIALS & NATURAL RESOURCES)

No.	Aspect	Impact & Legislation	Likelihood			Potential Severity			Control/Mitigation Measures	Ref to Control Plans	Residual Risk Rating		
			High	Med	Low	High	Med	Low			High	Med	Low
G1	Appropriate life cycle of materials and components	Minimisation of materials & resources by prevention of maintenance or replacement during whole life span of facility		●			●		• Review of contractors materials evaluate appropriate materials & components to suit planned lifespan of facility	• ISG Sustainability Guidance Pack for Suppliers • Contractor Sustainability Management Plans • ISG Sustainability Returns			●

Appendix 1 – Environmental Aspects & Impacts

G: MATERIALS (USE OF RAW MATERIALS & NATURAL RESOURCES) CONTINUED											
No.	Aspect	Impact & Legislation	Likelihood			Potential Severity			Control/Mitigation Measures	Ref to Control Plans	Residual Risk Rating		
			High	Med	Low	High	Med	Low			High	Med	Low
G2	Reuse of contaminated excavated materials	Hazards to health of human and wildlife. Contaminated leachants polluting water courses.		●		●			• Correct storage of excavated materials • Testing of excavated materials • Remediation & disposal measures in accordance with the DTS Raeburn PtP process and validation requirements.	• Contractor Method Statements • Permit to Proceed system			●
G3	Use of materials not responsibly sourced	Depletion of natural resources & deforestation.		●			●		• Only FSC certified sustainable timber products to be used. • Auditing of supply chain deliveries and paperwork • Completion of ISG Sustainability Returns	• ISG Sustainability Guidance Pack for Suppliers • Contractor Sustainability Management Plans • ISG Sustainability Returns		●	
G4	Use of toxic materials	Pollution to air & water. Hazard to health of humans & wildlife Planning hazardous Substances Act 1990			●		●		• Specification and purchase of low toxic alternatives • No use of banned substances in ISG Sustainable Sourcing Code • Correct storage, handling & application & disposal of any toxic materials	• ISG Sustainable Sourcing Code • ISG Environmental Management Plan • Contractors Sustainability Management Plan			●

Appendix 1 – Environmental Aspects & Impacts

G: MATERIALS (USE OF RAW MATERIALS & NATURAL RESOURCES) CONTINUED

No.	Aspect	Impact & Legislation	Likelihood			Potential Severity			Control/Mitigation Measures	Ref to Control Plans	Residual Risk Rating		
			High	Med	Low	High	Med	Low			High	Med	Low
G5	Use of HFC's and PVC's	Global warming potential. Use of hazardous materials and environmentally damaging manufacturing methods Ozone Depleting Substances (Qualifications) Regulations 2009 Environmental Protection (Controls on Ozone Depleting Substances) Regs 2002 As Amended	●				●		• Monitoring of contractor and supplier Sustainable Commodities datasheet • Compliance with the HFC Policy. • Use of HFC Justification Reports	• ISG Sustainable Sourcing Code • ISG PVC & HFC Policies • ISG Sustainability Returns • HFC & PVC Justification Reports		●	

H: NOISE & VIBRATION (IMPACTS ON LOCAL COMMUNITIES)

No.	Aspect	Impact & Legislation	Likelihood			Potential Severity			Control/Mitigation Measures	Ref to Control Plans	Residual Risk Rating		
			High	Med	Low	High	Med	Low			High	Med	Low
H1	Noise pollution to local communities from construction activities	Nuisance & disturbance to local communities due to noise caused by construction activities and deliveries. Environmental protection Act 1990 Part III: Statutory Nuisance Noise & Statutory Nuisance Act 1993 Control of Noise (CoP for Construction & Open Sites) Order 2002	●				●		• Identification of sensitive receptors • Hours of noisy operations in accordance with planning approval. Any extension to this will not be carried out without a Section 61 agreement in place. • Low noise methods of construction to be employed • Low noise plant and equipment specified and used on site • Regular monitoring of noise levels at perimeter of site	• Section 61 Agreement • ISG Environmental Management Plan		●	
H2	Vibration nuisance to local communities and damage to buildings from construction activities	Nuisance & damage to local communities due to vibration caused by construction activities and deliveries.			●		●		• Use of low vibration plant and equipment • Regular monitoring of activities likely to cause vibration	• ISG Environmental Management Plan			●

Appendix 1 – Environmental Aspects & Impacts

J: WASTE (MANAGEMENT, INCLUDING REUSE, RECYCLING AND DISPOSAL)												
No.	Aspect	Impact & Legislation	Likelihood			Potential Severity			Control/Mitigation Measures	Ref to Control Plans	Residual Risk Rating		
			High	Med	Low	High	Med	Low			High	Med	Low
J1	Waste production from construction activities	Unnecessary waste of materials and resources. Waste to landfill or incineration. Opportunities for recycling. ISG Zero Waste to Landfill target Landfill: Waste Acceptance Criteria Environmental Permitting Regs: 2007 Hazardous Waste Regs: 2005 Controlled Waste Regs: 1992 Environmental Protection Act 1990 Part II: The Duty of Care Site Waste Management Plan Regs: 2008 Waste Electrical and Electronic Equipment (WEEE) Regs 2006	●				●		• Reduce waste generated via workshops, reusable packaging and maximisation of offsite fabrication • Good standards of housekeeping & storage arrangements • Reuse of off cuts and materials wherever possible • Segregation of waste streams in accordance with waste management contractors requirements for recycling • Use of approved waste management contractor by all suppliers and contractors	• ISG Environmental Management Plan • Supplier contractual order documentation • ISG Site Waste Management Plan		●	
J2	Waste production from site offices and welfare facilities	Waste to landfill or incineration. Opportunities for recycling are missed. Controlled Waste Regs: 1992 Environmental Protection Act 1990 Part II: The Duty of Care Site Waste Management Plan Regs: 2008		●				●	• Segregation of organic waste from canteen • Recycling facilities for office waste.	• ISG Site Waste Management Plan			●

Appendix 1 – Environmental Aspects & Impacts

K: WATER (USAGE)

No.	Aspect	Impact & Legislation	Likelihood			Potential Severity			Control/Mitigation Measures	Ref to Control Plans	Residual Risk Rating		
			High	Med	Low	High	Med	Low			High	Med	Low
K1	Use of water during construction activities	Water wastage or unnecessary use. Water Resources Act 1991 Water Act 2003	●				●		• Control of water supply • Leak prevention • On site monitoring & control • Targets set for water consumption & records kept	• ISG Environmental Management Plan			●
K2	Use of water from welfare facilities	Water wastage or unnecessary use.		●				●	• Low usage equipment to be used in welfare facilities (spray taps etc.) • Water management equipment for toilets • Targets set for water consumption & records kept	• ISG Environmental Management Plan			●

L: WATER QUALITY (RELEASES TO WATER AND FLOODING)

No.	Aspect	Impact & Legislation	Likelihood			Potential Severity			Control/Mitigation Measures	Ref to Control Plans	Residual Risk Rating		
			High	Med	Low	High	Med	Low			High	Med	Low
L1	Soil erosion	Sediment and silt residues contaminating existing soil and water courses. Groundwater Regulations 2009		●			●		• Plan for water runoff from storage areas • Prevention of runoff into controlled waters and surface water drainage • Regular monitoring of soil erosion	• ISG Environmental Management Plan			●
L2	Surface water runoff from contaminated soils	Pollution to clean soil areas, surface water drains and watercourses. Water Act 2003		●			●		• Plan for water runoff from contaminated soils areas • Prevention of runoff foul water drainage • Proper storage areas for contaminated soils. • Regular inspections & monitoring	• ISG Environmental Management Plan			●

Appendix 1 – Environmental Aspects & Impacts

L: WATER QUALITY (RELEASES TO WATER AND FLOODING) (CONTINUED)												
No.	Aspect	Impact & Legislation	Likelihood			Potential Severity			Control/Mitigation Measures	Ref to Control Plans	Residual Risk Rating		
			High	Med	Low	High	Med	Low			High	Med	Low
L3	Leaks and spills of hazardous materials	Pollution to surface water drains and watercourses. Control of Pollution Regulations 2001	●			●			• Correct storage of hazardous materials • Pollution prevention controls in place i.e. bunding, spill kits, drip trays etc. • Double skinned oil tanks • Spill kits available for all locations of hazardous materials.	• ISG Environmental Management Plan • As Built' record drawings of existing drainage systems • ISG BPM Section 6.4.4 • Contractor Method Statements			●
L4	Flooding from storm water	Pollution to clean soil areas, surface water drains and watercourses.			●	●			• Planned storage for hazardous materials • Flood plan & emergency procedures (see EMP) • Storm controls to temporary drains	• ISG Environmental Management Plan			●
L5	Discharge of waters to foul drains or controlled waters	Pollution of controlled waters. Breach of discharge consent to foul drainage systems.		●		●			• Thames Water Consents required for discharge to foul drainage systems • Treatment on site of water for discharge to controlled waters • Regular monitoring & inspections	• ISG Environmental Management Plan • WW/DC Discharge Consents			●
L6	Damage to boreholes causing pathway for contaminants to the aquifer	Pollution of aquifer. Groundwater Regs: 2009		●		●			• Adequate protection of boreholes and working exclusion zone • No storage of materials adjacent to boreholes • Keeping boreholes free from rubbish • Regular inspection of boreholes •	• ISG Environmental Management Plan			●

Appendix 2 Legal Register & Site Plan

The following legislation has been identified as **directly** applicable to the activities on the Asda Barry Project:

3.1.1 Waste

3.1.1.1 CLEAN NEIGHBOURHOODS AND ENVIRONMENT ACT 2005

3.1.1.2 LANDFILL: WASTE ACCEPTANCE CRITERIA

3.1.1.3 ENVIRONMENTAL PERMITTING REGULATIONS 2007

3.1.1.4 HAZARDOUS WASTE (ENGLAND AND WALES) REGULATIONS 2005 AS AMENDED

3.1.1.5 WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE) REGULATIONS 2006, AS AMENDED

3.1.1.6 CONTROLLED WASTE (REGISTRATION OF CARRIERS AND SEIZURE OF VEHICLES) REGULATIONS 1991, AS AMENDED

3.1.1.7 CONTROLLED WASTE REGULATIONS 1992, AS AMENDED

3.1.1.8 ENVIRONMENTAL PROTECTION ACT 1990 PART II: THE DUTY OF CARE, AS AMENDED

3.1.1.9 LIST OF WASTES (ENGLAND) REGULATIONS 2005

3.1.1.10 SITE WASTE MANAGEMENT PLANS REGULATIONS 2008

3.1.1.11 WASTE BATTERIES AND ACCUMULATORS REGULATIONS 2009

3.1.2 Air Pollution

3.1.2.1 CLEAN AIR ACT 1993

3.1.2.2 CLEAN AIR (EMISSION OF DARK SMOKE) (EXEMPTION) REGULATIONS 1969

3.1.2.3 FLUORINATED GREENHOUSE GASES REGULATIONS 2009

3.1.2.4 ENVIRONMENTAL PROTECTION (CONTROLS ON OZONE DEPLETING SUBSTANCES) REGULATIONS 2002, AS AMENDED

3.1.2.5 OZONE DEPLETING SUBSTANCES (QUALIFICATIONS) REGULATIONS 2009

3.1.2.6 VOLATILE ORGANIC COMPOUNDS IN PAINTS, VARNISHES AND VEHICLE REFINISHING PRODUCTS REGULATIONS 2005

Appendix 2 Legal Register & Site Plan

3.1.3 Water

3.1.3.1 WATER RESOURCES ACT 1991 (AS AMENDED)

3.1.3.2 WATER ACT 2003

3.1.3.3 WATER INDUSTRY ACT 1991, AS AMENDED

3.1.3.4 WATER RESOURCES (ABSTRACTION AND IMPOUNDING) REGULATIONS 2006, AS AMENDED

3.1.3.5 GROUNDWATER (ENGLAND & WALES) REGULATIONS 2009

3.1.3.6 TRADE EFFLUENTS (PRESCRIBED PROCESSES AND SUBSTANCES) REGULATIONS 1989, AS AMENDED

3.1.4 Contaminated Land

3.1.4.1 ENVIRONMENTAL PROTECTION ACT 1990: PART IIA - CONTAMINATED LAND

3.1.5 Nuisance

3.1.5.1 ENVIRONMENTAL PROTECTION ACT 1990 PART III: STATUTORY NUISANCE

3.1.5.2 NOISE AND STATUTORY NUISANCE ACT 1993

3.1.5.3 CONTROL OF NOISE (CODES OF PRACTICE FOR CONSTRUCTION AND OPEN SITES) (ENGLAND) ORDER 2002

3.1.5.4 NOISE EMISSIONS IN THE ENVIRONMENT BY EQUIPMENT FOR USE OUTDOORS REGULATIONS 2001

3.1.6 Producer Responsibility

3.1.6.1 PRODUCER RESPONSIBILITY OBLIGATIONS (PACKAGING WASTE) REGULATIONS 2007

3.1.7 Hazardous Substances/Chemicals

3.1.7.1 CONTROL OF POLLUTION (OIL STORAGE) (ENGLAND) REGULATIONS 2001

3.1.7.2 ENVIRONMENTAL PROTECTION (DISPOSAL OF PCBs AND OTHER DANGEROUS SUBSTANCES) (ENGLAND AND WALES) REGULATIONS 2000, AS AMENDED

3.1.7.3 CONTROL OF ASBESTOS REGULATIONS 2006

3.1.7.4 PLANNING HAZARDOUS SUBSTANCES ACT 1990

3.1.8 Radioactive Substances

3.1.8.1 RADIOACTIVE SUBSTANCES ACT 1993

3.1.9 Major Incidents/COMAH

3.1.9.1 CONTROL OF MAJOR ACCIDENT HAZARDS (COMAH) REGULATIONS 1999, AS AMENDED

3.1.10 Planning

3.1.10.1 TOWN AND COUNTRY PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) (ENGLAND AND WALES) REGULATIONS 1999, AS AMENDED

3.1.10.2 BUILDING REGULATIONS 2000, AS AMENDED

3.1.10.3 PLANNING (LISTED BUILDINGS AND CONSERVATION AREAS) REGULATIONS 1990, AS AMENDED

3.1.10.4 HEDGEROWS REGULATIONS 1997

3.1.10.5 TOWN AND COUNTRY PLANNING (TREES) REGULATIONS 1999

3.1.10.6 TOWN AND COUNTRY PLANNING ACT 1990

3.1.10.7 TREASURE ACT 1996

3.1.10.8 ANCIENT MONUMENTS (APPLICATIONS FOR SCHEDULED MONUMENT CONSENT) REGULATIONS 1981, AS AMENDED

3.1.10.9 WEEDS ACT 1959

Appendix 2 Legal Register & Site Plan

3.1.11 Wildlife/Biodiversity

3.1.11.1 WILDLIFE AND COUNTRYSIDE ACT 1981, AS AMENDED

3.1.11.2 CO NSERVATION (NATURAL HABITATS, & C.) REGULATIONS 1994, AS AMENDED

3.1.11.3 PROTECTION OF BADGERS ACT 1992

3.1.11.4 ENVIRONMENTAL DAMAGE (PREVENTION & REMEDIATION) REGULATIONS 2009

3.1.12 Miscellaneous

3.1.12.1 ENVIRONMENTAL INFORMATION REGULATIONS 2004

3.1.12.2 PLANT HEALTH DIRECTIVE AND INTERNATIONAL STANDARD FOR PHYTOPSANITARY MEASURES NO. 15 (ISPM 15)

The following legislation has been identified as **indirectly** applicable to the activities for the Asda Barry project:

3.1.13 Indirect Legislation

3.1.13.1 CLIMATE CHANGE LEVY (REGISTRATION AND MISCELLANEOUS PROVISIONS) REGULATIONS 2001, AS AMENDED

3.1.13.2 ENERGY PERFORMANCE OF BUILDINGS (CERTIFICATES AND INSPECTIONS) (ENGLAND AND WALES) REGULATIONS 2007, AS AMENDED

3.1.13.3 REGISTRATION, EVALUATION AND AUTHORISATION OF CHEMICALS (REACH)

3.1.13.4 LANDFILL TAX REGULATIONS 1996, AS AMENDED

3.1.13.5 ENVIRONMENTAL NOISE (ENGLAND) REGULATIONS 2006

3.1.13.6 WATER ENVIRONMENT (WATER FRAMEWORK DIRECTIVE) (ENGLAND AND WALES) REGULATIONS 2003

The following legislation has been identified as **forthcoming** and may impact upon activities for the Asda Barry project in the future. Entries in this section will be monitored for further developments to ensure ongoing compliance.

3.1.14 Forthcoming Legislation

3.1.14.1 WATER FRAMEWORK DIRECTIVE: DAUGHTER DIRECTIVE ON PRIORITY SUBSTANCES

3.1.14.2 WATER FRAMEWORK DIRECTIVE: DAUGHTER DIRECTIVE ON GROUNDWATER (DUE TO BE AMENDED)

3.1.14.3 ENVIRONMENTAL CRIME DIRECTIVE

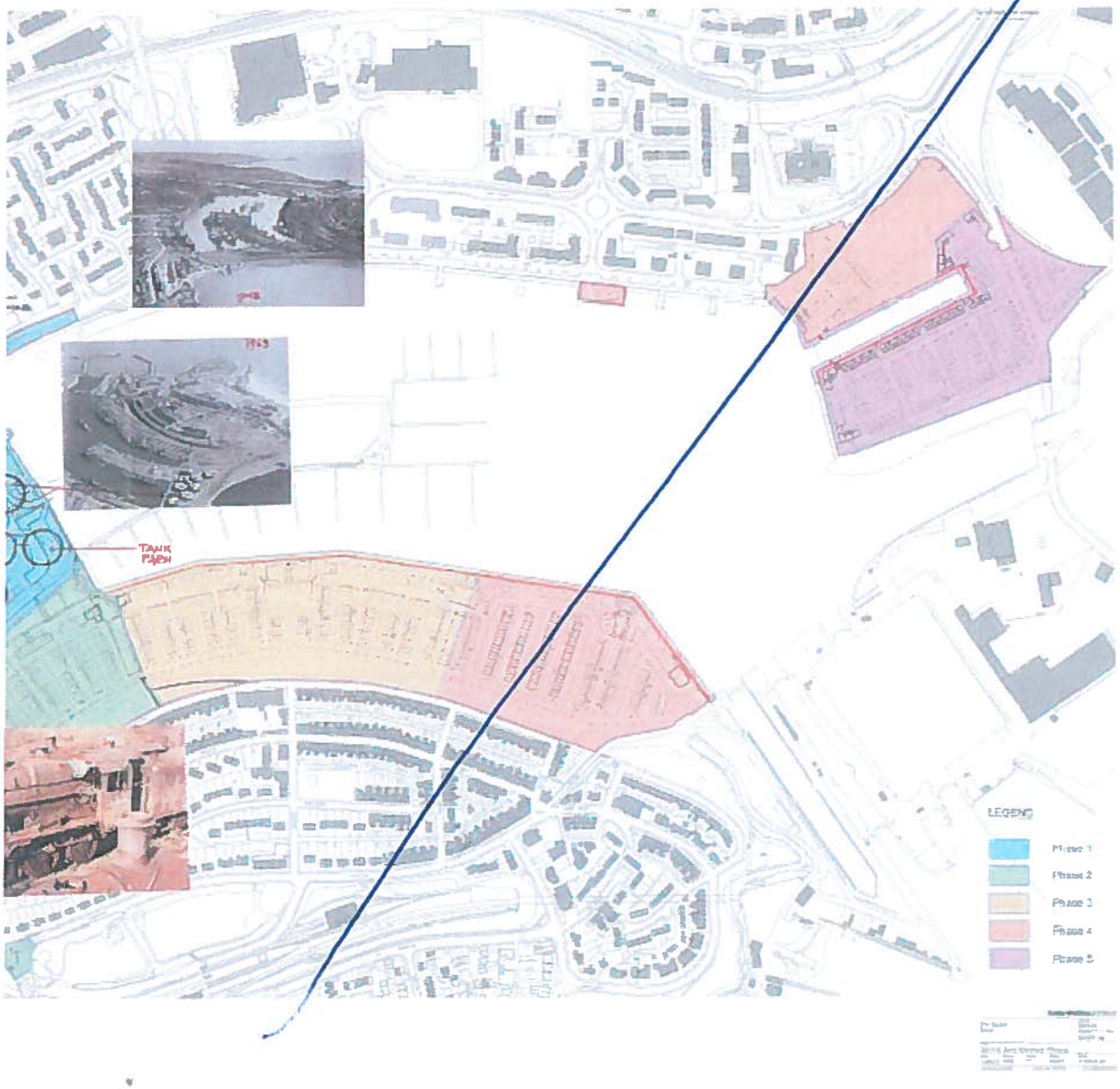
The following **other requirements** have been identified as directly applicable to ISG and the works at the Urban Sustainability Centre project:

3.1.15 Other Requirements

3.1.15.1 CONTROL OF DUST AND EMISSIONS FROM CONSTRUCTION AND DEMOLITION: BEST PRACTICE GUIDANCE

NOTE: The above stated legislation is current at the date of issue of this document. ISG subscribe to the Waterman online Environmental register

ter & Site Plan



Appendix 2 Legal Register & Site Plan