# **Construction Environmental Management Plan**

# Document Reference: CEMP REV 00 01.03.2021

# Project Name: Mardon Park Unit A



# VIEW 1

| Approved by: | Date:                      | Signed : |
|--------------|----------------------------|----------|
|              | 1 <sup>st</sup> March 2021 |          |
| Prepared by  | Date:                      | Signed : |
| RJ Williams  | 1 <sup>st</sup> March 2021 | Antte.   |

| Revision No. | Date                       | Description of Change | Produced/Amended by |
|--------------|----------------------------|-----------------------|---------------------|
| 00           | 1 <sup>st</sup> March 2021 | CEMP Created & Issued | R Williams          |
|              |                            |                       |                     |
|              |                            |                       |                     |
|              |                            |                       |                     |
|              |                            |                       |                     |
|              |                            |                       |                     |
|              |                            |                       |                     |
|              |                            |                       |                     |
|              |                            |                       |                     |

# Issue & Amendment Record.

# **Table of Contents**

#### 1. Introduction.

- 1.1 Scope of Works.
- 1.2 Location.

#### 2. Environmental Management.

- 2.1 Impacts and Aspects Matrix.
- 2.2 Environmental Risk Assessment.
- 2.3 Nuisance.
- 2.4 Dust.
- 2.5 Nosie & Vibration.
- 2.5.1 Best Available Techniques BAT.
- 2.6 Light Disturbance.
- 2.7 Waste Management.
- 2.8 Segregation of Water.
- 2.9 Disposal of Non-Hazardous.
- 2.10 Disposal of Hazardous.
- 2.11 Waste Reporting & Records.
- 2.12 Water.

#### 3. Transportation & Traffic Management

- 4. Land Contamination.
- 5. Trees.
- 6. Resource Use.
- 7. Energy Consumption/Monitoring.
- 8. Community Liaison.
- 9. Pollution Prevention & Emergency response plan.
- **10.** Site Environmental Documentation.
- 11. Auditing & Monitoring.
- 12. Site Security
- **13.** Considerate Constructors
- 14. Neighbouring Developments

Appendix A: Location of Works. Appendix B: Aspects & Impacts. Appendix C: Preliminary Risk Assessment. Appendix D: Weekly Environmental Checks. Appendix E: Pollution Prevention Plan. Appendix F: Site Set Up & Traffic Management

#### 1. Introduction

GBV Properties Ltd has a sustainable vision for all its construction sites based on being both eco efficient and eco effective with its resources and labour. Fundamental to its vision are the continual improvements in environmental management it implements throughout its sites and an understanding of their social responsibility on the surrounding communities. The GBV Properties Ltd environmental management procedure sets out the objective to achieve environmental and social development simultaneously with a view to continuously improve the service, quality and commitment it provides.

This Construction Environmental Management Plan (CEMP) document has been produced in outline format. As a live and dynamic document, additions may be made to the plan as the project evolves.

#### 1.1 Scope of Works

The development comprises of new steel framed industrial unit (As per diagrams below) and is the next phase of a potential regeneration to the area creating further light industrial units for local business.



VIEW 2







NORTH EAST ELEVATION



SOUTH WEST ELEVATION

#### 1.2 Location

The site is located on the Mardon Park Development and to the rear of unit 19 20 Mardon park . Land to the rear of Unit 19/20 Mardon Park Central Avenue Baglan Port Talbot SA127AX.

The extent of the site is shown in the diagram below.



#### 2. Environmental Management

The EMS will be regularly monitored and audited by appropriate personnel, throughout the duration of the works. It is the responsibility of the Project Manager to ensure development, approval and effective implementation of the environmental management system. This should be undertaken with the support of environment manager, specialists and other suitably qualified personnel. It must also be made clear to all site personnel that everyone has a responsibility to ensure no environmental incidents occur.

The following outlines the processes and plans to be implemented on site to ensure all environmental aspects and impacts are identified and sufficient measures are put in place to reduce risks associated with the works.

#### 2.1 Impacts and Aspects Matrix

In line with procedures, an Impacts and Aspects Matrix has been completed which clearly identifies all applicable legislation in relation to the identified environmental aspects for this project, This document can be found in **Appendix B.** 

#### 2.2 Environmental Risk Assessment

Using the information obtained through the Impacts and Aspects Matrix, an environmental risk assessment has been undertaken. This assessment has been used to determine the mitigation methodology to be utilised on the project This draft document can be found in **Appendix C.** Where significant risks are identified, specific management plans are to be put into place and details of these will in due course be found within this CEMP. Each management plan will be thoroughly assessed by all project management and method statements will incorporate the mitigation for the assumed risk. Any changes to works packages must be reassessed prior to any commencement of work.

#### 2.3 Nuisance

Nuisance for the purposes of this document is broken into four sections, namely Dust, Noise, Vibration and Lighting. The following sections detail activities and control methods to be implemented on the project.

Sensitive receptors likely to be affected by construction nuisance include:

- Neighbouring Offices.
- Light Industrial Buildings.

#### 2.4 Dust

Mechanical disturbance of granular material exposed to air creates atmospheric dust, the potential sources of these fugitive dust emissions are outlined below:

- Site clearance
- On site earth moving operations, site levelling, cut and fill etc.
- Vehicle movements over haul roads
- Vehicle movements on site during dry periods
- Wind blowing across the site during dry periods
- Stockpiling of excavated materials
- Cutting and grinding
- Accidental spillage and loss of load from vehicles carrying loose material

Appropriate preventative measures to control dust emissions can significantly reduce the potential for dust generation. Implementation of the following methods will help to minimise risk.

| Risk                    | Mitigation   |
|-------------------------|--|
| Construction<br>Traffic | <ul> <li>All construction traffic will follow specifically designated routes</li> <li>Speed limits will be put into place on site for all vehicular movements</li> <li>All vehicles carrying loose material will be covered</li> <li>If deemed necessary Wheel wash facility to be used for vehicles leaving site</li> </ul> |
| Highways                | <ul> <li>Where appropriate, use of road sweepers will be incorporated to ensure highways remain clear of dust and mud</li> <li>Road edges and pathways will be swept by hand and damped down as necessary</li> </ul>   |
| Stockpiles              | <ul> <li>To be sealed or sprayed as required</li> <li>Location of stockpiles will be positioned away from any sensitive receptors</li> </ul>   |

| Dust<br>Suppression | <ul> <li>Mobile bowsers to be deployed on site at regular intervals when necessary</li> <li>Activity to be increased during significantly dry and windy periods</li> <li>Where necessary, use of hoardings to be considered to ensure reduction in dust migration</li> <li>Deliveries of significantly dusty materials to be sprayed to reduce dust potential</li> <li>All cutting and grinding operations to conducted in ways to reduce risk of dust migration (wet cutting techniques/dust suppression methodologies etc)</li> </ul> |
|---------------------|---|
| Monitoring          | <ul> <li>Ongoing monitoring to be undertaken by site personnel on regular basis, both on and off site to ensure no migration of dust</li> <li>Regular liaison with Client to be undertaken</li> <li>Regular reviews of mitigation methodology to be undertaken by Environmental Manager and Project Manager.</li> </ul>   |

#### 2.5 Noise & Vibration

Noise has the potential to cause disturbance, given the location of the adjacent office and commercial buildings and it is essential that the works comply with the conditions which have been laid out by the NPTCBC construction noise code of practice. The later, specifies that the Council's policy on hours of work is as follows:

- Monday to Friday 8am 6pm Saturday 8.30am 1pm
- No Sunday, Bank holiday or Public holiday working unless agreed in advance

Noise limitations to be set on site, drawing on BS 5228: Part 1 Noise Control on Construction) and any best practice on "Construction & Demolition work".

It is anticipated that the works should not pose any significant risks in relation to vibration other than when the piling is carried out but until such time as the contractor and method is chosen this can be updated further and the extent of the potential noise and vibration quantified.

#### 2.5.1 Best Available Techniques BAT

In addition, our team will embrace best practices with regards noise minimisation, this will include but not limited to;

- Where possible, 'silenced' plant and equipment would be used at all times;
- Acoustic enclosures would be fitted to suppress noisy equipment;
- Temporary screening or enclosures for static noisy plant to reduce noise emissions and plant should be certified to meet any relevant EC Directives/UK/BS5228 standards.
- All plant would be properly maintained (greased, blown silencers replaced etc);
- Where practicable, all plant should conform to the noise limits presented in the EC Noise Emission in the Environment by Equipment for use Outdoors Directive 2000/14/EC; and
- Vehicles and equipment should be fitted with effective exhaust silencers, maintained in good working order and operated to minimise noise emissions in accordance with BS 5228, and should vehicles be left standing for a significant period, engines would be switched off.

#### 2.6 Light Disturbance

The surrounding vicinity to the site currently creates a significant amount of light pollution to serve the security of the existing commercial buildings. Any further task lighting required on the project is not expected to cause a nuisance. All task lighting, however, will aim to minimise the impacts of light spillage on adjacent retained habitats as far as reasonably practicable.

#### 2.7 Waste Management System

A Site Waste Management Plan will be created for the project. Reviews of Site Waste Procedures and the Site Waste Management Plan will be undertaken at 6 monthly intervals, or less if required.

#### 2.8 Segregation of Waste

To ensure maximum potential for reducing waste to landfill, and encouraging reuse and recycling, waste will be segregated. Separate skips will be made available, when space is available, for all types of waste. Each skip will be clearly labelled, and site personnel will be informed of procedures within the induction. Regular monitoring will be undertaken to ensure correct procedures are followed at all times. The skips will be emptied at regular intervals to prevent overfilling. Toolbox Talks will be undertaken with all site personnel to ensure full understanding of waste procedures.

#### 2.9 Disposal of Non-Hazardous Waste

All non-hazardous waste will be removed from site within strict adherence to all waste legislation requirements, including Duty of Care Regulations. Prior to any agreed use of hauliers or waste disposal sites, the appropriate licences will be thoroughly checked to ensure that particular waste streams can be accepted, and carrier licences are valid. This can only be undertaken by authorised personnel and copies of all necessary licences must be retained on site at all time and reviewed for expiry. No waste will leave site without appropriate waste transfer notes. It is essential that all waste transfer notes are inspected for detail and must contain the correct description of waste as well as the correct waste code, in line with the List of Waste Codes Regulations.

#### 2.10 Disposal of Hazardous Waste

Hazardous waste is not anticipated given the site investigations and subsequent reports and it will therefore be under the threshold of 500kg a year set by the EA and hence the site will not have to be registered as a producer of Hazardous Waste. No hazardous waste must leave site without the correctly completed Consignment Note. The consignment notes must contain all necessary information including waste description and hazardous waste registration number. Any carriers removing hazardous waste must have appropriate licences and disposal sites must be verified to be able to accept waste being sent. These checks and signing of consignment notes can only be undertaken by authorised personnel. All hazardous waste must be stored on site in appropriate, covered or locked skips. No mixing of hazardous and non- hazardous waste is authorised.

In both instances above waste disposal options will look to ensure minimal transportation requirements where financially viable. If there is any suspected hazardous waste work will cease until it is tested and proved or we will otherwise determine how we need to mitigate this risk as a result of the testing outcome. This will be done in accordance with our strict waste management procedures.

#### 2.11 Waste Reporting and Records

All waste transfer / consignment notes will be held on site or at GBV Properties Ltd site office throughout the duration of the project. Each waste transfer will be fully documented, and the Site Waste Management Plan updated accordingly with waste carriers and disposal details.

#### 2.12 Water

There works proposed for the site will include excavations to be carried out, therefore, ground water is likely to be encountered.

NB there are no watercourses around or in the site but there are existing swales to manage.

However, all site activities will be monitored, and the following measures put in place to ensure site contamination does not reach any nearby watercourses.

Visual surveillance monitoring will then be undertaken during construction. All records of water monitoring inspections will be kept on site throughout the duration of the project and be readily available for inspection by the Client or any regulatory body. In periods of heavy rainfall or excessive vehicle movements within the vicinity, monitoring should be increased to reduce risks of pollution incidents.

Construction of concrete structures during the construction phase would be monitored to prevent associated contaminated material entering any watercourses. Pre-cast work or permanent formwork could reduce the amount of in-situ concreting required. Washing out of concrete wagons or other equipment used in concreting operations will be undertaken in designated contained washout areas. These will be located away from all watercourses and drains and will be impermeable to prevent infiltration to ground.

The positioning of fuel storage tanks and other potentially polluting materials and maintenance/refuelling facilities will be on bunded areas of hard standing with dedicated drainage systems. Stored materials on site will be checked regularly for containment integrity (both primary and secondary), quantity stored and security of storage.

Spill kits will be made available, and site operatives trained in their use, to deal with any spillages. All spill kits will be fully stocked and kept dry at all times.

#### **3** Transportation and Traffic Management

A traffic management / construction logistics plan can be found in the Construction Phase Health and Safety Plan. The plan outlines timings of deliveries; all required signage as well as designated routes to be taken by hauliers and workers ensuring minimal disruption to local residents and businesses. Further to this, GBV Properties adhere to a strict code of practice regarding plant and vehicle emissions, therefore, all mobile vehicles associated with the demolition / construction will comply with the standards for Low Emission. For HGVs, the standard is Euro IV for PM and for heavier vans and mini buses it is Euro 3. The site will be managed so

- The right machine will be used for the task avoid inefficiently oversized machines
- That any vehicles do not have to wait to park safely, where this is not practical no vehicles shall be left idling.
- Plant is serviced correctly and regularly
- Low carbon fuels are used where possible
- Plant is operated efficiently (e.g. minimising idling time and using appropriate power)

#### 4 Land contamination

A Groundsure desk top study of the Ground Conditions and Contamination assessment which indicated no contaminants within the footprint of the site and this will be confirmed by further site trial holes and chemical testing by Rhondda Geotechnical. However, previous land use would need for all operatives to be vigilant for any unusual form of contamination that may have been disposed of over the site. Therefore, during demolition and construction the following precautions would be taken to minimise the exposure of Site workers and the general public to potentially harmful substances:

- Adherence to the COSHH Regulations 2002 and the CDM Regulations 2015
- The requirement for all Site workers to wear and utilise appropriate and well-maintained PPE and, where necessary Respiratory Protective Equipment (RPE);
- The provision of adequate facilities and procedures to enable Site workers to wash and change;
- The use of dust suppression techniques;
- The regular cleaning of Site access roads; and
- The sealing of stockpiled material on the Site and covering of materials being transported to and from the Site.

If hazardous waste is discovered and is required to be removed from site, stockpiling of such material will be kept to a minimum and the storage area must be secure to ensure the risk of leaching into any water courses is negated. When disposing of any contaminated wastes, carriers and disposal sites must be verified for the type of waste stream prior to any waste removal. Prior to any soils being removed from site, a comprehensive test will be carried out to determine whether the soils are inert/hazardous or non-hazardous. The results of this testing will determine which disposal route is most appropriate. No WAC testing will occur until the first stage Full Characterisation Testing has been completed.

#### 5 Trees

A full site Arboriocultural Survey has been carried out indicated that no trees are under a tree protection order nor do they lie within a conservation area. Therefore, any tree within the site footprint will be removed by a trained operatives and mechanical means and others that lay outside will be pollarded to mitigate any further damage from the nearby construction work.

#### 6 Resource use

GBV Properties Ltd will ensure, where practicable, the use of recycled or sustainable materials sourced from a responsible source, where possible BES 6001 certified. Furthermore, In line with company protocol, all Concrete should be obtained from a certified sustainable source, wood must have chain of custody documentation and be FSC/PEFC certified and. Steel should have Cares or similar certification.

A dedicated area will be maintained for storage of all materials and due care and appropriate handling will be undertaken at all times to reduce any risk of damages and wastage. Packaging of items should not be removed until required, to ensure maximum potential for returning of unused goods.

#### 7 Energy consumption/Monitoring

"Switch it Off" schemes and other energy saving campaigns shall be implemented on site to encourage all personnel to consider their carbon footprint. Use of car sharing and buses shall be encouraged This shall also be covered within the site induction and regular toolbox talks held relating to the subject.

#### 8 Community liaisons

The Site manager or their agents will take charge of all day to day liaisons, with further support from the Environment manager who will be on site on a regular basis. Contact details and comments box will be displayed on the hoarding with a regular newsletter distributed to the local community informing them of the progression, forthcoming traffic movements and any potential disruption. GBV Properties Ltd and the contractor will convene regular open meetings with the residents for feedback and updates.

#### 9 Pollution prevention & Emergency response plan

THE UK Governments Pollution Prevention Guidance PPG1 will be used to guide all prevention measures. A full Pollution prevention plan can be found in Appendix E.

#### **10 Site Environmental Documentation**

All environmental documentation must be kept on site at all times and be available for inspection by internal and external auditors, as well as the client and management. Where any document is amended, previous versions will be superseded, and the environment Manager notified. Site personnel will be made aware immediately, if any significant changes in works procedures are implemented.

Initial start-up documentation will include the following:

- Site Set Up checklist
- Impacts and Aspects Matrix (Appendix B)
- Environmental Risk Assessment (Appendix C)
- Construction Environmental Management Plan
- Site Waste Management Plan (In Construction Phase Plan)

#### **11** Auditing and Monitoring

A regular audit schedule will be set up at project start. This audit schedule will include both internal and external audits for the project. It is the responsibility of the site management to ensure all documentation and evidence required for audit purposes is kept up to date and freely available for inspection at all times. A weekly site inspection using the checklist found in appendix E will be carried out by a manager. The site environmental management system will be audited to the standards set out by ISO14001. Additional legal compliance audits will also be undertaken. Any system failures will be documented and appropriate corrective actions issued and implemented.

Weekly site inspections will be carried out to ensure environmental risks are being managed appropriately.SHE Inspection forms will be completed and signed off by site management. All documents will be filed and retained on site for auditing purposes. Any failure to undertake such monitoring will be deemed as a non-conformance with procedure and appropriate corrective action will be implemented.

#### **12 Site Security**

The site will be secured by a high heras type to form a physical barrier.

The vehicle entry point will be secured with a gate that will be kept shut and opened for vehicles by a vehicles banksman.

The site will have local camera and internet based site security. The perimeter of the fence will be well lit. CCTV will be deployed in a risk based manner to provide visual surveillance and recording of any incidents as required.

The local Police safer neighbourhood team will be consulted to ascertain if there are any specific risks relating to the site.

#### **13** Considerate Constructors

The site if necessary(TBC)will be registered with the Considerate Constructors scheme. The requirements of this will require us to sign up to the Considerate Code of Practice which will dictate how we manage many aspects of our site and detail how we should value our workforce, how we must consider everyone's safety, protect the environment, respect the community and care about the appearance of our site.

#### **14 Neighbouring Developments**

At present there are no neighbouring developments with planning consent that will have an impact on these works. Should this change in the future this section of the report will be updated.

#### Appendix A: Location of Works.

Appendix B: Aspects & Impacts.

Appendix C: Preliminary Risk Assessment.

Appendix D: Weekly Environmental Checks.

Appendix E: Pollution Prevention Plan.

### Appendix A: Location of Works.





#### Appendix B: Aspects & Impacts.

|                            |  | L                             |                                 |   |
|----------------------------|--|-------------------------------|---------------------------------|---|
| Aspect                     | Legislation *  | Impact                        | Risk                            | Mitigation Measures   |
|                            | Environmental Protection Act 1990 Clean                    | Deposition of dust            | Complaints Legal action         | Monitoring  |
|                            | Air Act 1993   | Reduction in air quality      |                                 | Construction Environmental Management Plan                          |
| Nuisance – Dust            |  | Statutory nuisance            | Local Authority Action Clean-   | Damping down methods appropriate to site                            |
|                            |  | [                             | up costs                        | Caussing all laces materials  |
|                            |  |                               |                                 | Covering all loose materials  |
|                            | Ancient Monument & Archaeological Areas Act 1979 National  | Loss of heritage/artefacts    | Complaints Legal action         | Awareness training  |
|                            | Heritane Art 1983  | Loss of nor rago, anto lacts  | Companies Logai action          | Archaenhairal Assessments   |
| Haritage/Archaeology       | Heritage Act 1965  |                               | Delay and discuption            | Archaeological Assessments  |
| The that go / A Charlow Ny | Planning (Listed Buildings & Conservation Areas) Act 1990  |                               | Delay and diardphon             |   |
|                            | Planning (Listed buildings & Conservation Areas) Act 1950  |                               |                                 |   |
|                            | Fianning & Compensation Act 1991                           |                               |                                 |   |
|                            | Environmental Protection Act 1990                          | Disturbance to residents.     | Complaints Legal action. Delay  | Planning condition requiring adherence to Surrey Council's          |
|                            |  | Statutory Nuisance            | to works.                       |   |
| Nuisance - Noise           | Clean Neighbourhoods & Environment Act 2005                |                               |                                 | Code of Practice for Control of Pollution & Noise from              |
|                            | Control of Pollution Act 1974                              |                               | Risk to Reputation              | Demotivities & Construction Office                                  |
|                            |  |                               |                                 | Demolition & Construction Sites                                     |
|                            | Environmental Protection Act 1990                          | Disposal costs,               | Breach in Duty of Care          | Site Waste Management Plan – Use WRAP Net waste tool Plans          |
|                            | Control of Pollution Act 1974                              | Transportation, Resource      | Prosecution                     |   |
| Waste                      | Environment Act 1995                                       | use and landfill capacity     |                                 | Checks of Carrier licence and disposal facility consents / licences |
|                            | The Environmental Civil Sanctions Order 2010               |                               | Excess costs of disposal. Civil |   |
|                            |  |                               | Sanction                        | Minimise waste arising - Reuse and Recycle                          |
|                            | Hazardous Waste Regulations                                |                               |                                 |   |
|                            |  |                               |                                 | Segregation of wastes Training,                                     |
|                            | Clean Neighbourhoods & Environment Act 2005                |                               |                                 |   |
|                            |  |                               |                                 | Toolbox Talks   |
|                            | Duty of Care Regulations                                   |                               |                                 |   |
|                            |  |                               |                                 |   |
|                            | Environmental Permitting 2010                              |                               |                                 |   |
|                            | Water Industry Act 1991                                    | Water quality /groundwater    | Legal Action Clean-up mets      | Surface water and trade effluent consents                           |
|                            | Water Resources Act 1991                                   | quality reduction             | Legal Action Clean-up costs     | Site operational control procedures                                 |
| Water                      | Water Act 2003   | quality reduction.            | Failure to meet consent.        | Monitorios, compliance  |
|                            | Tatol AG 2000  | Pollution                     | Uneconomical us of water        | monitoring compilance   |
|                            | Groundwater Regulations 1995                               |                               | Need for Abstraction Licence    | Environmental Incident Procedure, Spill kite/training               |
|                            | Sioundwater Regulations 1855                               | Water Charges Resource        | Enforcement action              | Environmental incident Procedure, Spin kits/saming                  |
|                            | Environmental Remitting 2010                               | consumption Groundwater       | Enforcementacion                |   |
|                            | Environmental Permitting 2010                              | drawdown                      |                                 |   |
| Tonna a station            | Dead Ter Re Atable - Federal - Deadations                  | Teeffle diagraphics           | Constalate Domone Discustion    | Osealdarata Oseatuatara Osharra                                     |
| Transportation             | Road Traffic (Vehicle Emissions) Regulations               | I raffic disruption           | Complaints Damage Disruption    | Considerate Constructors Scheme                                     |
|                            |  |                               |                                 |   |
|                            |  | Dust and emissions to air.    |                                 | Traffic Management Plan   |
|                            |  |                               |                                 |   |
| Contaminated Land          | Contaminated Land Regulations 2006 Control                 | Contamination of Land         | Potential Spillage Prosecution  | Construction Environmental Management Plan                          |
|                            | of Pollution (Oil Storage) Regulations                     | Pollution of Waters           | Clean-up Costs                  | Compliance with Oil Storage Regulations                             |
|                            |  |                               |                                 |   |
|                            |  |                               |                                 | Spill kits & Training   |
| Ecology - Flora & Fauna    | Wildlife & Countryside Act 1981                            | Loss of habitat               | Legal action                    | Construction Environmental Management Plan Reptile                  |
| (Disturbance & Harm)       | Environment Act 1995                                       |                               |                                 | translocation   |
|                            |  | Loss of valuable species      | Loss of Reputation              |   |
|                            | Conservation (Natural Habitats Etc.) Regulations           | Spreading noxious/invasive    | Reinstatement costs Civil       | Japanese knotweed treatment / eradication                           |
|                            | Wild Mammals (Protection) Act 1996                         | species                       | Sanction                        | Species identification training                                     |
|                            |  |                               |                                 |   |
|                            | Protection of Badgers Act 1992                             |                               |                                 | Protective fencing and signage of sensitive areas                   |
|                            |  |                               |                                 |   |
|                            | Environmental Protection (Controls on Substances that      | Resource Use/Depletion Global | Cost                            | Supply chain management and material control                        |
|                            | Deplete the Ozone Layer) Regulations 1996.                 | Warming                       |                                 | Use of material from sustainable sources.                           |
| Resources                  |  |                               | Un-sustainability Risk to       |   |
| (ADS 09)                   | Control of Substances Hazardous to Health 1999.            |                               | Reputation                      | Use of FSC Timber   |
|                            | Environmental Protection Act 1990                          |                               |                                 |   |
| 1                          |  |                               |                                 |   |
|                            | Chemicals (Hazardous Information and packaging for Supply) |                               |                                 |   |
| Visual Amenity             | Town & Country Planning Act 1990                           | Loss of visual amenity        | Complaints Legal action         | Planning process Public   |
| (Detriment to)             |  |                               |                                 | consultation  |
|                            | Planning (Listed Buildings & Conservation Areas) Act 1990  |                               | Delay and disruption            |   |
| 17                         |  |                               |                                 | Considerate Constructors Scheme                                     |

# Mardon Park

| Environmental<br>Aspect | Potential Environmental<br>Impact  | Ris | (<br>+D | ×C | Tot | Control<br>Measures  |   | Resid<br>Risł | ual<br>( | Tota | Guidance   |
|-------------------------|--|-----|---------|----|-----|--|---|---------------|----------|------|--|
| DUST                    | Contamination of<br>water courses<br>Legal Action by Statutory<br>Authorities  | 4   | 2       | 8  | 48  | Pollution<br>Prevention Plan<br>Dust<br>sheets/damping<br>down via Bowser<br>Environmental<br>Monitoring   | 3 | 2             | 6        | 36   | CEMP   |
| NOISE                   | Complaints by residents<br>Legal Action by Statutory<br>Authorities<br>Disruption to wildlife  | 3   | 2       | 6  | 30  | Local council<br>Code of<br>Practice<br>Monitoring<br>Low noise<br>plant /ensure<br>no idling<br>engines   | 2 | 2             | 6        | 24   | Local council Code of<br>Practice  |
| WASTE                   | Pollution/contaminated<br>land<br>Legal Action by Statutory<br>Authorities   | 4   | 3       | 6  | 42  | Site Waste<br>Management<br>Plan<br>Environmental<br>Monitoring<br>Duty of<br>Care/Transfer<br>Notes Training<br>Segregation of<br>waste   | 2 | 2             | 8        | 32   | Site Waste Management<br>Plan  |
| WATER                   | Contamination of<br>groundwater/surfa<br>ce waters/rivers<br>Impacts on<br>wildlife<br>Potential harm to<br>humans Failure to<br>meet consents Legal<br>Action by Statutory<br>Authorities | 4   | 4       | 10 | 80  | Environmental<br>Monitoring<br>Obtain<br>appropriate<br>licences/consents<br>Spill kits complete<br>and readily<br>available<br>Consider flooding<br>when positioning<br>plant, fuel store<br>etc                      | 3 | 3             | 8        | 48   | Monitoring will be<br>undertaken on a weekly<br>basis, procedures are<br>set out in the Pollution<br>Prevention Plan. An up<br>to date log will be kept<br>in the Environmental file<br>and any findings will be<br>communicated to the<br>relevant persons. |
| TRAFFIC                 | Traffic congestion<br>Complaints from  | 4   | 3       | 6  | 48  | Traffic Management<br>Plan   | 3 | 2             | 4        | 20   | Traffic Management Plan  |
| ECOLOGY                 | Loss, destruction, harm<br>or disturbance of<br>wildlife or habitat<br>Reduction in<br>endangered species<br>Spreading of invasive<br>plants Legal Action by<br>Statutory Authorities      | 4   | 3       | 10 | 70  | Environmental<br>Monitoring<br>Training/Toolbox<br>Talks/Species<br>Identification<br>Information<br>Ecological<br>Assessment<br>Application for<br>appropriate<br>consents/licences<br>Fencing off sensitive<br>areas | 2 | 2             | 10       | 40   | Nature Conservation Plan   |

#### Preliminary Environmental Aspect & Impact Risk Assessment

# Construction Environmental Management Plan

# Mardon Park

| RESOURCE | Generation of        | 4 | 2 | 6 | 36 | Re-use of   | 2 | 1 | 4 | 12 | All waste streams  |
|----------|----------------------|---|---|---|----|---|---|---|---|----|--|
| USE      | additional waste     |   |   |   |    | materials   |   |   |   |    | have been identified,  |
|          | streams Reduction of |   |   |   |    | Prevention of   |   |   |   |    | any additional waste   |
|          | fossil fuels         |   |   |   |    | over-ordering   |   |   |   |    | streams will be added  |
|          | Destruction of non-  |   |   |   |    | Appropriate   |   |   |   |    | to the Site Waste  |
|          | sustainable forests  |   |   |   |    | storage of  |   |   |   |    | Management Plan  |
|          |                      |   |   |   |    | materials FSC<br>Timber Usage<br>Switch It Off<br>Schemes |   |   |   |    | Further procedures can<br>be found in the Pollution<br>Prevention Plan |
|          |                      |   |   |   |    |   |   |   |   |    |  |

| Likelihood of Occurrence (O) |      | + Likelihood of Det | ection (D) | X Severity of Consequence (C) |      |  |
|------------------------------|------|---------------------|------------|-------------------------------|------|--|
| Criteria                     | Rank | Criteria            | Rank       | Criteria                      | Rank |  |
| V High                       | 5    | V High              | 1          | V High                        | 10   |  |
| High                         | 4    | High                | 2          | High                          | 8    |  |
| Moderate                     | 3    | Moderate            | 3          | Moderate                      | 6    |  |
| Low                          | 2    | Low                 | 4          | Low                           | 4    |  |
| V Low                        | 1    | V Low               | 5          | V Low                         | 2    |  |

Author:

Date:

### Appendix D: Weekly Environmental Checks.

| Reporting period:                        |                 | Main Sub Contractors | s on site: |  |
|--|-----------------|----------------------|------------|--|
| ricporting ported.                       |                 |                      |            |  |
|  | 1               |                      |            |  |
| Mark haringing                           |                 |                      |            |  |
| vveek beginning:                         |                 |                      |            |  |
|  |                 |                      |            |  |
|  |                 |                      |            |  |
| Short description of work carried out w  | ithin reporting | period:              |            |  |
|  |                 |                      |            |  |
|  |                 |                      |            |  |
|  |                 |                      |            |  |
| Weather conditions                       |                 |                      |            |  |
| weather conduoris                        |                 |                      |            |  |
|  |                 |                      |            |  |
|  |                 |                      |            |  |
| Environmental incidents in the reporting | g period:       |                      |            |  |
|  |                 |                      |            |  |
|  |                 |                      |            |  |
|  |                 |                      |            |  |
| Weekly Activities: (to be completed      | by Environme    | ental Manager).      |            |  |
|  | Name            | Date                 | Note       |  |
| Watercourse/discharge                    |                 |                      |            |  |
| monitoring                               |                 |                      |            |  |
| -  |                 |                      |            |  |
| Spill kits checked                       |                 |                      |            |  |
| Completeness of inventory                |                 |                      |            |  |
| Reptile barrier                          |                 |                      |            |  |
|  |                 |                      |            |  |
| Noise monitoring                         |                 |                      |            |  |
|  |                 |                      |            |  |
| Tree protection                          |                 |                      |            |  |
|  |                 |                      |            |  |
| Site boundary                            |                 |                      |            |  |
| one boundary                             |                 |                      |            |  |
| Fuel storage                             |                 |                      |            |  |
| -  |                 |                      |            |  |
| checked (containment integrity, storage  |                 |                      |            |  |
| Dust situation                           |                 |                      |            |  |
| Vahislas                                 |                 |                      |            |  |
| venicies                                 |                 |                      |            |  |
| (Is everybody aware of vehicle coverage  |                 |                      |            |  |
| Environmental toolbox talks              |                 |                      |            |  |
|  |                 |                      |            |  |
| Lighting                                 |                 |                      |            |  |
|  |                 |                      |            |  |
| Environmental training                   |                 |                      |            |  |
|  |                 |                      |            |  |
| requirements                             |                 |                      |            |  |

Appendix E: Pollution Prevention Plan.

### **Mardon Park Development**

## **Pollution Prevention Plan.**

| Approved by: | Date:                      | Signed : |
|--------------|----------------------------|----------|
|              |                            |          |
| Prepared by  | Date:                      | Signed : |
| RJ Williams  | 1 <sup>st</sup> March 2021 | -Guille_ |

### Issue & Amendment Record.

| Revision No. | Date                       | Description of Change | Produced/Amended by |
|--------------|----------------------------|-----------------------|---------------------|
| 00           | 1 <sup>st</sup> March 2021 | First Issue           | RJ Williams         |
|              |                            |                       |                     |
|              |                            |                       |                     |
|              |                            |                       |                     |
|              |                            |                       |                     |
|              |                            |                       |                     |
|              |                            |                       |                     |
|              |                            |                       |                     |
|              |                            |                       |                     |

# Contents.

|     | Part                 | Section |                                    | Title               | Page |  |
|-----|----------------------|---------|------------------------------------|---------------------|------|--|
| 1   | Introduction         | 1.1     |                                    | Scope               |      |  |
|     |                      | 1.2     | Definition and Example             |                     |      |  |
| 2   | Pollution Control    | 2.1     | Spill kits, plant & eq             | uipment, Wheel      | wash |  |
|     | Measures             |         |                                    |                     |      |  |
|     |                      | 2.1.1   | Ident                              | ified Risks         |      |  |
|     |                      | 2.2     | Mitigation and                     | Clean Lin Trainir   |      |  |
|     |                      | 2.2     | Operating Pr                       | ocedure Training    | 19   |  |
|     |                      | 2.3     | Effective                          | ness Testing        | 3    |  |
|     |                      | 2.1     | Encourt                            | ness resting        |      |  |
| -   | Managing Figure to a | 2.1     | Consitive recent                   | r identification o  | nd   |  |
| 3   | Managing Firewater   | 3.1     | Sensitive recepto                  | or identification a | na   |  |
|     | Spillages            |         | 1                                  | Management          |      |  |
|     |                      |         |                                    | -                   |      |  |
| 4   | Dust Control Methods | 4.1     | Identification and suppression     |                     |      |  |
|     |                      |         | Methods                            |                     |      |  |
| 5   | Noise Pollution      | 5.1     | Section 60/61 Consent Requirements |                     |      |  |
|     |                      |         |                                    |                     |      |  |
| 6   | Contaminated Land    | 6.1     | Storage                            | and removal         |      |  |
|     |                      |         |                                    |                     |      |  |
| 7   | Chemical and Product | 7.1     | Potenti                            | al Pollutants       |      |  |
| ·   | Inventory            |         |                                    |                     |      |  |
|     | -                    |         |                                    |                     |      |  |
| 8   | Incident Reporting   | 8.1     | Reporti                            | na Procedure        |      |  |
| ľ   | incluent reporting   |         |                                    | .g                  |      |  |
|     |                      |         |                                    |                     |      |  |
| 9   | Responsibilities     | 9.1     | Responsibility Matrix              |                     |      |  |
| 1   |                      |         |                                    |                     |      |  |
| 10  | Emergency Contacts   | 10.1    | TRC                                |                     |      |  |
| 1.0 | Emergency Contacts   | 10.1    | Ibc                                |                     |      |  |
|     |                      |         |                                    |                     |      |  |
|     |                      |         |                                    |                     |      |  |

#### 1. Introduction

#### 1.1 Scope

This pollution control and incident response plan forms part of the environmental management plan for the contract. It describes the pollution control and reporting process to be followed by GBV Properties Ltd and their subcontractors.

- 1.2 Definition and Example
- 1.2.1 An environmental incident will typically be, but not be limited to, the examples listed below:
  - Minor oil spills away from watercourses
  - Not working in accordance with the environmental requirements of a Works Procedure
  - An event or series of events causing environmental harm i.e. silting up of a river, an oil spill
  - A breach of consent conditions i.e. generating noise in excess of the Local Authority Section 60/61 limits
  - Issue of a statutory enforcement notice by the Local Authority or Environment Agency.

#### 2. Pollution Control Measures

2.1 Sufficient numbers of spill kits will be strategically placed around the site, especially in areas identified as potential spillage locations. The locations of these spill kits should be checked periodically and especially if access to the area changes throughout the programme of the works. A map should be clearly displayed to identify the location of all spill kits, if positions change; the map must be updated to reflect the changes. The site Foreman and/or other nominated person [by PM] are responsible for checking and maintaining the spill kit materials. No litter is to be placed in the spill kits, and they must be clearly labelled, and materials enclosed listed and kept up to date. Also, a copy of the Spill Procedure Incident Response Plan must be included within the spill kit container. The SPIRP will be published at the beginning of the project. Used materials from the kits must be disposed of appropriately, and replaced as a matter of urgency. Appropriate waste facilities must be provided for contaminated materials. These waste facilities must be kept separated from any other non-contaminated wastes.

All sites should where possible use double bunded plant or equipment, where double bunded plant or equipment is not available, there must be an additional method of containment to ensure no pollution or spillages occur. This could be in the form of plant nappies and/or drip trays. Where drip trays are used, suitable methods for emptying must be employed, such as with hand held pump and the contaminated water disposed of correctly. The trays must be checked daily (more during wet weather) to ensure no build-up of contaminated water overspill from the tray.

All bulk fuel tanks will be adequately protected (including concrete bund) to prevent major spillage in the event of hose failure or other equipment malfunction. The protection must include use of sandbags and booms to create a protective barrier around the equipment.

Initial plant set-up is to be checked and signed—off. The amount of fuel in the tanks on arrival must be recorded, (99% of the time they are usually empty).

Wheel wash facility will be provided to prevent any spreading of contamination onto local roads. All vehicles carrying waste away from site must use covers to prevent any loss of load and additional dust.

Weekly combined Health, Safety and Environmental Inspection will be carried out to ensure procedures are followed.

2.1.1. Risk assessments will be undertaken and the following processes to be put in place:-

#### **Sensitive Receptors**

- Any areas which pose risk of pollution to groundwater, surface water or drainage must be determined through risk assessment.
- Where groundwater has been identified, additional due care must be taken to ensure no contamination may occur. Maps should be marked up to clearly identify all groundwater aquifers known below a site.
- Bulk tanks will not be located within 10 meters of any watercourse or 50 meters of a borehole or well, any breach of this would be a breach in legislation.
- All Pumped water should be discharged via appropriately sized silt separation tanks to prevent any introduction of solids into the existing water courses.
- Discharge should be monitored, sampled and results recorded.
- Use of Materials Hazardous to aquatic environments should be chosen carefully and control measures enforced to prevent any leaching of substances into ground/surface water.
- Monitor water levels in and around areas of substantial dewatering processes. Areas to be recharged with extracted groundwater to same quality and temperature.

#### Working near Water

- Check that permissions have been obtained for any temporary works
- Ensure that surface run off from the site is contained and discharge controlled by appropriate methods (silt fences, settling tanks, and balancing ponds.)
- Floating booms should be used in the above to contain any chemical/petrol chemicals resulting from surface runoff these are last resort measures to catch unexpected substances.
- Appropriate land drainage consents must be complied with

#### **Site Transportation**

- No out of working hours deliveries will be accepted.
- Site haul routes should be regularly inspected, and dust suppressed to ensure that air quality does not deteriorate in the immediate vicinity of the construction site.

#### **Concrete Washout Area**

- Is located sufficiently away from any water courses or drainage outlets.
- Will be regularly monitored to ensure no overflowing of unit
- Set concrete be disposed of appropriately.
- 2.2 Training will be given to ensure that all staff are aware of the necessary operating procedures.
- 2.3 Periodic exercises will take place to test the effectiveness of this procedure and records of these exercises held on site. It is recommended that these tests are undertaken on a basis of no less than 3 monthly intervals to ensure procedures are kept up to date.

#### 3. Managing Firewater Spillages

3.1 Emergency containment systems appropriate to the site layout must be considered in the event of firewater having to be used. Firewater cannot be allowed to contaminate any watercourses. There are many ways in which pollutants can enter watercourses such as: - direct entry through site drainage system, run off into nearby watercourses or through the ground. Site drainage will be examined to ensure in event of emergency at the site, potential sensitive receptors will be safe from for and a suitable method of containment to be used. Suitable methods would include bunds, trenches, shut-off valves and lagoons. Emergency materials and equipment located will be in the sensitive areas.

#### 4. Dust Control Methods

4.1 Dust suppression methods must be considered especially during dry periods. The methods must ensure dust cannot contaminate surrounding property, cause pollution of watercourses or damage to any wildlife and ecology. Risk assessment will define areas as at risk of dust contamination. Suitable methods available would include use of bowsers and/or micro spray systems. For control of dust on roads, all Lorries will be covered, and use of road sweepers will be implemented where appropriate. Where any lorries are noted to be leaving sites

#### 5. Noise Pollution

5.1 Suitable methods should be undertaken to ensure reduction of disturbance potential. Noise monitoring will be undertaken at specific points around the site area. Where it is deemed the noise impact to pose significant risk, alternative methods should be incorporated to mitigate this risk. Use of low noise plant and good plant maintenance should be incorporated on site. A noise compliant protocol will be introduced with published contact numbers must be made available to all residents, EHO and other authorities in the event of emergency/nuisance during work periods and for periods outside of normal working hours.

#### 6. Contaminated Land

6.1 Where there is potential for contaminated materials to be removed from site, stockpiling of such material is required, the storage area must be secure to ensure it does not pose risk of leaching into any water courses or groundwater. When disposing of any contaminated wastes, carriers and disposal sites must be verified for the type of waste stream prior to any removal being undertaken. Prior to any soils being removed from site, a comprehensive test will be carried out to determine whether the soils are inert/hazardous or non-hazardous. The results of this testing will determine which disposal route is most appropriate. No WAC testing will occur until the first stage Full Characterisation Testing has been completed.

#### 7. Chemical and Product Inventory

7.1 A full inventory of all chemicals and COSHH sheets which have a potential to cause pollution will be populated at the start of the project and kept in on file. This list is to be completed and kept up to date as necessary. Any chemicals or products will be appropriately stored.

#### 8. Incident Reporting

8.1 The Environmental Manager will investigate into the cause of any major incidents, which will be recorded and notified to the relevant Project Manager using the GBV Properties Ltd incident report form. Incidents will be escalated to both the environment manager and contracts via phone & email. Where any complaints are made against the site about noise and or vibration, this must be recorded and acted upon immediately.

#### 9. Responsibilities

| 9. Responsibilities  |                |    |    |    |     |    |
|--|----------------|----|----|----|-----|----|
| Action   | Responsibility |    |    |    |     |    |
|  |                | SO | SM | EM | H&S | PM |
| Identify the pollution/potential pollution incident.                           |                | •  | +  | •  | +   | •  |
| Conduct regular exercises to test procedures.                                  |                | •  | •  | •  | •   | •  |
| Implement immediate pollution control measures.                                |                |    | •  |    |     |    |
| Notify emergency services.   |                | •  | •  | •  | •   |    |
| Notify _ Project Manager.  |                |    | +  |    |     |    |
| Plan control/clean-up measures.  |                |    | •  | •  | •   |    |
| Carry out control/clean-up measures.   |                | •  | •  |    | •   |    |
| Investigate cause of incident and produce EIR                                  |                |    |    | •  |     |    |
| Recommend preventative action.   |                |    |    | •  | •   |    |
| Implement prevention action.   |                |    |    |    | •   | •  |
| Notify EA in extreme emergency.  |                |    |    |    |     | •  |
| SO – Site Operation; SM – Site Manager; EM Environment Manager; H & S – Health |                |    |    |    |     |    |
| and Safety Advisor; PM – Project Manager.                                      |                |    |    |    |     |    |



Appendix F: Site Set Up & Traffic Management