SAFETY STATEMENT

Issued To: **Fima Developments Ltd**

Date: **March 2016**

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SAFETY STATEMENT FOR FIMA DEVELOPMENTS LTD

COMPANY CONTACT DETAILS

SOLAS SAFE PASS & SOLAS C.S.C.S OR EQUIVALENT CARDS

INDEX **PAGE NO.**

REFERENCE LEGISLATION

- Safety, Health and Welfare at Work (General Application) Regulations 2007 (S.I. No. 299 of 2007)

- Safety, Health and Welfare at Work (Construction) Regulations 2013 (S.I. No. 291 of 2013)

- Safety, Health and Welfare at Work Act 2005 (Commencement) Order 2005 (S.I. No. 328 of 2005)

EMERGENCY CONTACT DETAILS	
Maurice Lyons	086 – 26 21 357
Fire Brigade	999 / 112
Garda	999 / 112
Emergency Services	999 / 112
ESB Networks	1850 372 999
Health and Safety Authority	1890 289 389
National Poison Centre	01- 8379963

SOLAS SAFE PASS & SOLAS C.S.C.S OR EQUIVALENT CARDS CONFIRMATION OF HOLDERS OF CARDS

Employees Name	**SOLAS Safe Pass or Equivalent No. on Ticket**	**SOLAS CSCS Card or Equivalent**	
		Name of Ticket	**No. on Ticket**

1.0 DOCUMENT CONTROL

1.1 The Documentation System

The Managing Director holds the master copy of the Safety Statement. Controlled copies of the Safety Statement shall be issued to personnel as specified on the circulation list. Each project site will also have a copy of the Safety Statement on hand along with the Site Specific Safety Plan.

It is company policy that all employees have access to those sections of the Safety Statement manual that are relevant to them.

Circulation List	**Manual No:**
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

1.2 Document Approval and Issue

The Safety Officer is responsible for the issue of new documentation and the retrieval and filing of obsolete documentation.

New documents must be issued and approved by the appropriate signatory, i.e. Maurice Lyons.

1.3 Revisions

The Safety Statement will be reviewed on an annual basis by the Safety Officer and will be changed as names of responsible persons change, as risk change, or as changes in legislation occur.

The Safety Officer will circulate a copy of revised sections to each holder of the Safety Statement. Amended sections should be removed and returned to the Safety Officer.

2.0 MANAGEMENT OF HEALTH & SAFETY POLICY

2.1 Statement of Health and Safety Policy

Under the Safety, Health and Welfare at Work Act 2005 every employer is required to prepare a Safety Statement.

This Safety Statement shall be brought to the attention of all employees, full time or temporary. This Safety Statement outlines safe systems of work, workplace / site hazards and is meant to be brought to the attention of all management and employees of Fima Developments Ltd to outline any duties / procedures to be followed so as to comply with any relevant legislation, in particular the Safety, Health & Welfare at Work Act 2005, the Safety, Health and Welfare at Work (Construction) Regulations 2013 and the Safety, Health and Welfare at Work (General Application) Regulations 2007.

It is the intention of Fima Developments Ltd to comply with all relevant legislation and provide employees with a safe working environment and also protect those who may be affected by our activities from harm. All employees will be expected to comply with policies and procedures as described in relevant sections of the Safety Statement.

This Statement will be amended as work procedures necessitate and as experience is gained.

_____

Maurice Lyons Date: _____

Fima Developments Ltd

3.0 ORGANISATION AND RESPONSIBILITIES

3.1 Managing Director – Maurice Lyons

Maurice Lyons has overall responsibility for Safety, Health and Welfare within Fima Developments Ltd.

This includes:

- Taking a direct interest in the Safety Statement and positively supporting any person whose function it is to carry it out.

- Allocating resources within the constraints of the company's budget to implement safety policies within the Safety Statement.

- Periodically reviewing his responsibilities and that of all other persons concerned with implementing policies and procedures outlined in the Safety Statement.

- Ensuring that all staff under his control is held accountable for their performance in relation to Occupational Safety and Health.

- Ensuring resources are available to provide training, as required, for management, supervisors and employees.

- Ensure all employees are in possession of SOLAS Safe Pass Card.

- Ensure employees that are required to hold SOLAS Construction Skills Cards (C.S.C.S) are in possession of them.

3.2 Site Supervisors

The Site Supervisors are responsible for managing and co-ordinating implementation of the Safety Statement, the Site Safety and Health Plan (where appropriate) and the activities of site employees.

These duties include:

- Monitoring site activities and assisting the Safety Officer in developing the site Safety and Health Plan.

- Ensuring that an analysis of the hazards and assessment of the risks associated with the execution of a project has been carried out and arrangements made to ensure that all work is carried out safely.

- Implementing the site Safety and Health Plan.

- Ensuring adequate welfare, first aid and fire fighting facilities and equipment are available on site.

- Conducting safety inspections on a weekly basis once the project begins and maintaining records of these inspections in a general site safety file.

- Ensuring all contractors obey established site safety rules and immediately corrects any violations of these rules.

- Verifying that all employees on site have received proper induction training to include a review of the site safety rules, the use of personal protective equipment, emergency procedures, first aid, accident reporting and any other relevant safety issues.

- Ensuring that safety standards laid down in the Safety Statement and site Safety and Health Plan are adhered to and obeyed.

- Being aware of all identified hazards in their area of responsibility and specific measures to reduce the risks associated with these hazards.

- Providing appropriate safety training to employees under their supervision.

- Ensuring that all staff under their immediate controls are aware of actions to be taken in case of emergency and that properly maintained fire fighting equipment is available.

- Ensuring that good housekeeping standards are maintained.

- Monitoring the activities of visitors and contractors on site to ensure their safety.

- Providing technical support to the Safety Officer, as appropriate, regarding implementation of the site Safety and Health Plan.

- Notifying the Safety Officer of any situations, which may present a safety hazard to contractors or the public.

- Providing information to operatives regarding any work on site, which may present unusual or significant risks to health and safety.

- Maintaining the general site safety file to include copies of all equipment certificates, site safety inspections, training records, MSD Sheets and other relevant health and safety information.

- Ensuring all pertinent safety information is communicated to contractors on site as appropriate.

- Obtaining and file accident investigation reports in the general site safety file and, when necessary, ensures accident reports have been filed with the Authority.

- Maintaining a complete and up to date copy of the Safety Statement and site Safety and Health Plan and ensure they are available to all contractors and inspectors of the Authority for review.

- Check that all employees including sub-contractors on site are in possession of appropriate site safety documentation i.e. SOLAS Safe Pass Card, C. S. C. S. tickets where appropriate with regard to driving vehicles on site, scaffolding etc.

3.3 Safety Officer

Designated Safety Officer:

In accordance with the requirements of the Safety, Health and Welfare at Work (Construction) Regulations 2013, a safety officer must be appointed where required:
The designated Safety Officer is responsible for co-ordinating the efforts of management and staff in working towards achieving the company's safety and health objectives by:

- Acting as Safety Co-ordinator for Fima Developments Ltd.
- Verifying that relevant safety rules and instructions have been issued to contractors and these have been accepted and signed by the contractor.
- Ensuring regular and effective communication between the client and Fima Developments Ltd site management regarding health and safety issues.
- Ensuring that an Accident Report form is completed thoroughly and promptly for all reported accidents.
- Ensuring where necessary, following accidents or dangerous occurrences, that statutory notifications are properly completed and submitted to the enforcing Authority.
- Monitoring accidents and incidents and preparing a summary report analysing incident trends.
- Conducting periodic site inspections with site Site-Supervisors, and documenting their findings.
- Ensuring that the Safety Statement is continually monitored and revised when necessary to comply with all relevant legislation and best safety practices.
- Liaising with the Health and Safety Authority and other bodies on matters pertinent to health and safety.
- Considering and, if necessary, acting on representations made by the designated Safety Representative on matters pertaining to the safety, health and welfare of persons at work.
- Reviewing and monitoring the activities of contractors and visitors on site in relation to safety.

3.4 Employees

In accordance with the requirements of the Safety, Health and Welfare at Work Act 2005, employees have the following responsibilities:

- All employees are required to co-operate fully with all provisions taken by the company for ensuring the safety, health and welfare of other employees, contractors and clients.

- All employees are required to immediately report all incidents, dangerous occurrences, unsafe conditions and unsafe acts to their immediate supervisor/foreman.

- All employees are required to adhere to all safe systems of work, use appropriate personal protective equipment and use all safety equipment provided.

- Employees are also responsible for reporting damage to equipment and the need for repair/replacement of items of personal protective equipment to their immediate superior.

- All employees are required to discharge their work in a safe manner so as to avoid injury to themselves/other staff and avoid damage to equipment and property.

- Any member of staff who does not adhere to company safety rules will be subject to appropriate disciplinary action. The disciplinary actions taken by Fima Developments Ltd will at all times aim to promote the health and safety rules of the company. Where there is a constant or repeated infraction by a member of staff on the health and safety policies of the company the employee's contract may be terminated. In the instance of lesser policy violations a verbal warning may be sufficient in order to deal appropriately with minor problems.

3.4.1 Substance Abuse Policy

The aim of this policy is to ensure acceptable standards of safety, health and welfare in the workplace.

The law imposes obligations on the company to ensure a safe system of work. In addition to the obligations on the company the law requires all employees, while at work, to take reasonable care of their own safety, health and welfare and for that of any other person who may be affected by their acts or omissions while at work. Furthermore, it is the duty of every employee to co-operate with the company in this regard.

The possession, use or supply of drugs or alcohol by any employee is strictly prohibited unless the drugs are prescribed by a duly qualified, registered medical practitioner. Possession or consumption of drugs or alcohol constitutes serious misconduct which may result in disciplinary action up to and including dismissal.

Possession or consumption of scheduled drugs and/or alcohol

Where the company suspects that you have consumed drugs and/or alcohol, Fima Developments Ltd reserves the right to request that you attend the company's medical practitioner for an examination, the results of which will be sent directly to the company [and copied to you]. You may in these circumstances be asked to leave the company premise/site for health and safety reasons pending receipt of the results of the examination.

Where the company suspects that you are in possession of/or consuming drugs and/or alcohol, an investigation will take place following the principles outlined in the Disciplinary Procedure.

3.5 Disciplinary Procedure

Introduction

Fima Developments Ltd requires acceptable standards of conduct from its employees and needs to ensure that employee's commitments to the company are met. From time to time difficulties may arise where an employees conduct, attendance or performance requires disciplinary action. The object of the company's disciplinary procedure is to ensure a fair and effective means of dealing with disciplinary issues as they arise, that any disciplinary action deemed necessary is imposed following proper and fair procedures and to ensure that the disciplinary action is appropriate in the circumstances.

Principles

- Disciplinary action will only be taken against your as an employee when the case has been fully investigated
- At every stage in the procedure you will be advised of the nature of the complaint against you and will always be given the opportunity to state your case before any decision is given
- At all stages you will be given the right to be accompanied by a person of your choice
- You will have the right to appeal against any disciplinary penalty imposed on you.

Management reserves the right to select the appropriate stage of the disciplinary procedure based on the particular circumstances of each case.

Stage I - Verbal Warning

- If your conduct or performance does not meet acceptable standards you will normally be given a formal Verbal Warning by your manager.
- Targets for improvement in both time and conduct/performance will be agreed between you and your manager and further disciplinary action will be taken against you if there is not satisfactory improvement.
- A letter confirming that a Verbal Warning has been given to you will be confirmed to you in writing and a copy will be kept on your personnel file for a period of six months.
- A verbal warning will be given for minor offences which include minor damage to company property, minor breach of company rules and regulations, unexplained absences from work, poor timekeeping and poor job performance. This list is not exclusive.

Stage 2 - First Written Warning

If you commit an offence of a serious nature or are already in receipt of a verbal warning to which you have not responded satisfactorily within the agreed time scale you will be issued with a FIRST WRITTEN WARNING. The written warning will be issued by the Managing Director. A copy of this warning will be kept on your personnel file for a period of twelve months.

Stage 3 - Final Written Warning

If there is still a failure to improve and conduct or performance is still unsatisfactory, or if the misconduct is sufficiently serious in itself, a FINAL WRITTEN WARNING will be given to you.

This will explain the nature of the offence and indicate that any recurrence may lead to dismissal.

The Final Written Warning will be issued by your Site Manager. A copy of this warning will be kept on your personnel file for a period of twelve months.

Exceptionally, there may be circumstances where the misconduct is so serious - verging on gross misconduct - that it cannot realistically be disregarded for future disciplinary purposes. In such circumstances it will be made very clear that the Final

Written Warning can never be removed from your personnel file and any recurrence will lead to dismissal.

Stage 4 – Dismissal

If conduct or performance is still unsatisfactory and you still fail to reach the prescribed standard, dismissal will normally result. ONLY A DIRECTOR can take the decision to DISMISS. You will be provided, as soon as reasonably practicable, with written reasons for dismissal. One copy to be retained by the company.

Serious Misconduct

The following types of behaviour during working hours, or in connection with Fima Developments Ltd's operations will normally be dealt with by the dismissal procedure.

- Physical violence, actual or threatened.
- Bullying, harassment and sexual harassment.
- Theft or unauthorised removal of materials or equipment.
- Malicious or wilful damage to property belonging to any employee of the company or belonging to the company.
- Falsification of records, including personal particulars and pay sheets, or falsely claiming expenses or other benefits.
- Professional misconduct such as, breaches of confidentiality, inappropriate sexual behaviour gross negligence or irresponsibility.
- Unauthorised absence from work

- Criminal offences outside working hours which may affect the employee's ability to perform his or her duties, particularly where there is an element of trust involved or it is felt there could be a risk to others.

This list is not exclusive nor does it imply that the Company will not take action in accordance with its rights or duties under criminal law, where appropriate.

Suspension from Duty

If you are accused of serious misconduct you may be suspended from work with or without pay or temporarily redeployed within the company, while the company investigates the alleged offence. Such action does not imply guilt. Immediate suspension from duty can only be authorised by the company principal. If, on completion of the investigation, where management is satisfied that serious misconduct has occurred, the result will normally be summary dismissal.

Appeals against Disciplinary Procedure

Employees shall have the right to appeal against the following disciplinary actions:

(a) Dismissal

(b) Verbal Warning, First Written Warning and Final Written Warning

An employee who wishes to appeal against a disciplinary decision must inform their manager in writing within five working days of the decision to be appealed. An employee will have the right to be accompanied by a person of their choice during the appeals procedure.

4.0 DIGNITY AND RESPECT AT WORK POLICY

Fima Developments Ltd is committed to implementing and promoting measures to protect the dignity of employees and to encourage respect for others at work. This is done by creating a work environment free from harassment, bullying and disrespectful behaviour and by dealing effectively with any complaints of such conduct as may arise. Harassment is unequal treatment and discrimination. Bullying is defined below. Lack of respect may be shown in words, conduct, acts or demeanour. The company values the contribution of all employees and this type of behaviour can demean and damage people.

Fima Developments Ltd recognises that the issue of whether harassment, bullying or disrespectful behaviour has occurred requires a factual determination based on all the evidence received. The company also recognises that false accusations can have serious effects on innocent men and women. We trust that all employees will continue to act in a responsible and professional manner to maintain a pleasant working environment free of harassment, bullying and disrespectful behaviour. To assist in achieving this goal, no record of a complaint shall be entered in an employee's file unless the matter is dealt with under the disciplinary procedure.

The company will not tolerate harassment, bullying or disrespectful behaviour by one employee of another for any reason.

In particular employees cannot and should not –

A. Comment to or about another employee
B. Harass or bully another employee
C. Discriminate against each other on any of the following grounds;

1) Gender
2) Marital Status
3) Family Status
4) Sexual Orientation
5) Religious Belief or Lack of Religious Belief
6) Age
7) Disability or the Nature of Disability
8) Race, Colour, Nationality or Ethnic or National Origins
9) Membership of the Traveller Community

4.1 Definitions

Harassment
Any act or conduct of an employee including spoken words, gestures or the production, display or circulation of written words, pictures or other material, is harassment of one person by another if the action or other conduct is unwelcome to the recipient and could reasonably be regarded, in relation to the relevant characteristics (1) to (9) above, as offensive, humiliating or intimidating to that person.

Sexual Harassment

Sexual or gender based harassment is unwanted conduct of a sexual nature, or other conduct based on sex affecting the dignity of women and men at work. It can include any act of physical intimacy, any request for sexual favours or any other act or conduct including spoken words, gestures, the production, display or circulation of written words, pictures or other material.

Conduct of this nature is sexual harassment if it is unwelcome to an employee and could reasonably be regarded as due to the employee's gender, or sexually offensive, humiliating or intimidating.

Conduct of this nature by an employee towards a fellow employee will constitute sexual harassment. Sexual harassment of any form will not be tolerated by the company.

Bullying

Bullying is behaviour directed at an individual which causes them or is calculated to cause them to feel, upset, threatened, humiliated or embarrassed, due to its persistent, offensive abusive, intimidating or malicious content.

Lack of Respect

Lack of respect can be shown by direct comments, sarcasm, snide remarks, inappropriate jokes or banter directed towards a colleague. It can also arise where colleagues are ignored, overlooked, avoided or shunned without good reason and in a manner likely to be hurtful or disrespectful. Jokes or comments directed at or referring to a colleague could be thought amusing by others but unpleasant, uncomfortable or hurtful to that colleague. Respect should be shown to all colleagues. Respect is also earned. By showing respect to others and honouring their personal dignity, you will earn their respect.

Reporting of Harassment, Bullying and Disrespectful Behaviour

Harassment, Bullying and Disrespectful Behaviour of any form as set out above will not be tolerated by the company. Any person who encounters harassment, bullying or disrespectful behaviour themselves or of a colleague should inform the site supervisor immediately. You should also report any such behaviour directed at a colleague by any third party such as a supplier or customer. Allegations of harassment, bullying or disrespectful behaviour will be treated seriously and dealt with sensitively and confidentially. Where allegations are proven they will be dealt with under the company disciplinary procedure. The penalty imposed will be appropriate to the gravity of the conduct involved and could result in the dismissal of the employee against whom a complaint has been proven.

Any victimisation of an employee for reporting an incident, or assisting with an investigation of alleged harassment is a breach of equality legislation and will also be subject to disciplinary action.

Depending on the gravity of an allegation or allegations made, the company may opt to deal with the issue under the disciplinary procedure.

Progressing a Complaint
You must not ignore a problem or potential problem. Any issue of concern should be brought to the attention of your supervisor. If the complaint which you have made is serious you should be aware that your supervisor may consider it their duty to commence an investigation if you are not prepared to proceed with a formal complaint.

In making a complaint it is helpful to record any incidents – where, when, and what took place, any witnesses and copies of any written material.

4.2 Complaints Procedure

Informal Procedure
While in no way diminishing the issue or the effects on individuals, an informal approach can often resolve matters. The objective of this approach is to resolve the difficulty with the minimum of conflict and stress for the parties involved.

Any employee who believes they are being bullied or harassed should explain clearly to the alleged perpetrator(s) that the behaviour in question is unacceptable. In circumstances where you find it difficult to approach the alleged perpetrator(s) directly, you should seek help and advice, on a strictly confidential basis, from a contact person, such as:

- Maurice Lyons
- Any supervisor on-site

In this situation the contact person should listen patiently, be supportive and discuss the various options open to you.

a) Having consulted with the contact person, you may request the assistance of the contact person in raising the issue with the alleged perpetrator(s). In this situation the approach of the contact person should be by way of a confidential, non-confrontational discussion with a view to resolving the issue in an informal low-key manner.

b) You as the complainant may decide, for whatever reason, to bypass the informal procedure. Choosing not to use the informal procedure shall not reflect negatively on you in the formal procedure.

Formal Procedure
If an informal approach is inappropriate or if after the informal stage the bullying or harassment persists, the following procedures should be invoked: -

a) You should make a formal complaint in writing to your immediate supervisor/manager, or (if the complaint relates to that person), any member of management. The complaint should be confined to precise details of actual incidents of bullying or harassment.

b) The alleged perpetrator(s) will then be notified in writing that an allegation of bullying or harassment has been made against them. They will be given a copy of your statement and advised that they will have a fair opportunity to respond to the allegation(s).

c) The complaint will be subject to an initial assessment by a designated impartial member of management, with a view to determining an appropriate course of action. Such a course of action at this stage could be to explore a mediated solution or other means of resolving the issue informally. Should either of these approaches be deemed inappropriate or inconclusive, a formal investigation of the complaint will take place with a view to determining the facts and deciding on appropriate action including disciplinary action.

4.3 Investigation

a) The investigation will be conducted by either a designated member or members of management or, if deemed appropriate, an independent third party. The investigation will be conducted thoroughly, objectively, with sensitivity and with due respect for the rights of both you (the complainant) and the alleged perpetrator(s). Confidentiality will be maintained to the greatest extent consistent with the requirements of a fair investigation.

b) The alleged perpetrator will be given a copy of the complaint in writing setting out full details of the nature of the complaint and will be given an opportunity to respond.

c) The investigator(s) will meet with the complainant and alleged perpetrator(s) and any witnesses or relevant persons on an individual confidential basis with a view to establishing the facts surrounding the allegation(s). Both the complainant and alleged perpetrator(s) may be accompanied by a work colleague if so desired.

d) Every effort will be made to carry out and complete the investigation as quickly as possible and where possible within an agreed timeframe. On completion of the investigation, the investigator(s) will submit a written report to management containing the findings of the investigation. If the complaint is upheld, the report will recommend whether the company's disciplinary procedure should be invoked.

e) Both you (the complainant) and the alleged perpetrator(s) will be informed in writing of the findings of the investigation.

f) If the complaint is upheld, the alleged perpetrator(s) will be interviewed to determine an appropriate course of action. Such action could involve counselling and/or monitoring or progressing the issue through the disciplinary procedure.

A complaint, which is not upheld by the formal investigation, does not necessarily indicate that the complaint was malicious and an employee must not be victimised for having made a complaint.

5.0 TRAINING

5.1 Training for Safety

Fima Developments Ltd will provide such training as required by 2005 Safety, Health & Welfare at Work Act in order to safeguard the safety, health and welfare of employees.

Employees will be given the following safety training:

- All employees must be SOLAS Safe Pass trained will receive induction training to ensure that they fully understand the hazards to which they may be exposed within their specific area, and the safety precautions and emergency procedures required.

- Employees who are required to lift materials will be given training in correct manual handling techniques as appropriate for their position.

- The Safety Representative will receive the necessary training as recommended by the Health and Safety Authority to carry out his/her role effectively.

- Operators of company vehicles who are involved in serious or repeated accidents will receive appropriate remedial driver training.

- Training in various aspects of construction site safety as required.

- Only authorized, competent persons will operate machinery or drive vehicles on site. The training requirements for operating machinery or driving vehicles is for the operator to hold an adequate SOLAS Construction Skills Certification Scheme card for that machinery / vehicles, or equivalent programme approved by a body in another jurisdiction recognised by SOLAS as its equivalent.

5.2 Records of Training

Training Records will be maintained by Fima Developments Ltd and will contain the following information:

- Date of instruction or exercise

- Duration

- Name of instructor

- Name of person receiving instruction

- Nature and content of instruction.

6.0 CONSULTATION

6.1 Introduction

The Safety Officer will be responsible for co-ordinating consultation arrangements with employees. It is the policy of Fima Developments Ltd that all employees shall have the opportunity to bring all matters related to health and safety to the attention of management and consult as regards safety controls and precautions.

Employees are encouraged to consult with their superior in the first instance on issues of health and safety. Should an issue not be resolved in this way then the matter should be referred to the Safety Officer.

6.2 Safety Representative

Without prejudice to the provisions of the Safety, Health and Welfare at Work Act 2005 a safety representative must be elected in accordance the Safety, Health & Welfare at Work (Construction) Regulations 2013, following the procedure outlined.

Shall:

(a) Have completed the Safety Representative course & have a working knowledge and understanding of the company Safety Statement and statutory regulations.
(b) Be involved in consultation in maintaining safety standards in the workplace and make representation as required at safety meetings.
(c) Give time to periodic inspections of the workplace, report immediately any hazardous conditions to those responsible and keep records of all such inspections and hazards.
(d) Acquire the information, training and knowledge to fulfil the functions outlined and to prevent accidents by attending safety talks, seminars, etc. as and when requested by management.
(e) Investigate occurrences and complaints of potential hazards and co-operate with the safety, health and welfare officer, supervisors and governmental and insurance inspectors.
(f) Foster safety awareness in the work place, promote safe working practices and provide information and advise on safety and health to all personnel.
(g) Have knowledge of emergency procedures in case of accident or fire and ensure they are maintained and updated.
(h) Liaise with all on site to maintain clean & hygienic standards

The Safety Representative may:

(a) Consult with and make representations to his employer on issues of safety, health and welfare in the work place.
(b) Investigate accidents and dangerous occurrences to find out the causes and help identify preventive measures, but must not interfere with anything at the scene of obstruct any person with statutory obligations.
(c) Make oral or written representations to inspectors on matters off safety, health and welfare.
(d) Carry out inspections in the work place to identify hazards, investigate potential hazards and any complaints relating to safety subject to prior agreement with the employer.
(e) On request accompany the Health and Safety Authority Inspector on an inspection tour other than an investigation of an accident.

7.0 ACCIDENT INVESTIGATION AND REPORTING

7.1 Introduction

It is important that all accidents and incidents with potential for injury are reported to management and, where necessary, action is taken to prevent recurrence.

7.2 The Accident Report Form (IR1)

The Foreman / Supervisor responsible for the area in which the accident occurred must as soon as possible following the incident complete an Accident Report Form. The report is to be reviewed by the Foreman / Supervisor and the Safety Officer. Final reports are to be placed in a designated Accident Report file. A copy of the Accident Report form is included in the Appendix.

7.3 Accidents Reportable to the Health & Safety Authority (H.S.A.)

The Safety, Health and Welfare at Work (General Application) Regulation 2007 - Notification of Accidents and Dangerous Occurrences, requires the company to report to the Health and Safety Authority on prescribed forms (Appendix):

- Accidents at work resulting in a fatality or a person not being able to carry out their normal functions for more than 3 days.

- Dangerous occurrence.(IR3)

  Responsibility for ensuring that these reports are made when required rests with the Safety Officer. Records are to be maintained on file for 10 years.

7.4 Accident Analysis

An analysis of all accident reports is carried out annually by the Safety Officer. The findings will be circulated to all supervisors and site foreman.

8.0 VISITORS AND CONTRACTORS

8.1 Visitors

Fima Developments Ltd has a responsibility to ensure, as far as is reasonably possible, the safety of visitors and contractors while on our project sites. To that end the following policies will apply:

- All visitors are to check-in at the site office/site supervisor.
- An employee of Fima Developments Ltd will accompany visitors at all times while on our project sites.
- Visitors are to obey the site safety rules and emergency procedures at all times.
- Work areas will be adequately hoarded or fenced off as required and appropriate safety and warning signs posted while works are underway.

8.2 Contractors

Contractors on Fima Developments Ltd work sites are bound by the following:

- They should not work on the site unless covered by adequate employers and public liability insurance. Contractor's insurance policies must be submitted for examination prior to work commencing to ensure they confirm to Fima Developments Ltd operational requirements.
- They are obliged to observe the "Safety Rules for Contractors" as listed in the commencement of work at the discretion of the Safety Officer and designated Project Supervisors.
- Contractors will provide information on any addition, alteration or safety information to be taken into account during any subsequent construction work for retention in the Safety File.
- A Project Supervisor will be assigned to monitor the work of the contractor on site to ensure adherence to the safe practices outlined in the Safety Rules for Contractors, the Fima Developments Ltd Safety Statement and the Contractor's own Safety Statement.
- The Safety, Health and Welfare at Work (Construction) Regulations 2013 will be adhered to for all construction work completed on the premise or project sites.

9.0 FIRST AID

9.1 First Aid Supplies

First aid boxes will be made available at all on-site locations. Each first aid box, which will be stocked in accordance with guidelines, issued by the Health and Safety Authority (H.S.A.) and in compliance with the Safety, Health & Welfare at Work (General Application) Regulations 2007.

9.2 Nominated First Aiders

The following person(s) are the nominated First Aider(s) and has received appropriate training and certification:

1. _____
2. _____
3. _____

9.3 First Aid Training

- Training will be carried out by an organisation competent to do so.
- Refresher training will be provided at intervals not greater than 3 years.
- Each first aider will be responsible for the maintenance of appropriate first aid supplies.
- Wherever first aid is given a record of the injury and the First Aider must maintain details of treatment given.

10.0 Duties of Contractors

Fima Developments Ltd and all contractors engaged will comply with the following duties:

- Accept and adhere to established site safety rules and requirements of the Safety Plan and ensure this information is communicated to all persons under their control.

- Develop a safety Methods Statement, when appropriate/requested by the Project Supervisor or Fima Developments Ltd, which details work to be performed and safety, provisions to be taken. The Methods Statement is to be made available for inspection prior to work commencing.

- Co-operate with the Project Supervisor - Construction Stage (where applicable) to ensure safety is maintained on site and relevant statutory provisions are met.

- Provide the Project Supervisor - Construction Stage with information regarding any death, injury, condition or dangerous accidents, which the contractor is required to report to the Authority.

- Appoint a safety liaison person on site to consult with the Project Supervisor - Construction Stage on health and safety matters. Both training and experience will qualify the designated person.

- Complete all required inspections i.e. scaffolds, lifting equipment, excavations, etc. and correct any noted deficiencies immediately. Documentation of inspections shall be maintained on site for inspection.

- Report any broken or damaged equipment and unsafe conditions to the Project Supervisor - Construction Stage immediately.

- Maintain the work area in good order and in a satisfactory state of cleanliness.

- Provide training and education as necessary to ensure that employees under the contractors' control are competent to carry out work safely.

- Monitor the work site to ensure safety policy is being effectively implemented.

- Contractors must satisfy themselves that the scaffolding is safe for use by their employees prior to them using the scaffold.

10.1 Welfare Arrangements

- It is the responsibility of each contractor on site to provide the required facilities for their employees unless other arrangements have been agreed upon between the client and Fima Developments Ltd.

- The Fourth Schedule of the Safety, Health & Welfare at Work (Construction) Regulations lists specific requirements for the provision of welfare facilities and should be consulted when making arrangements.

10.2 Project Site First Aid

- The provision of first aid equipment and trained personnel will be considered during the Design Stage and arrangements finalised and implemented prior to the commencement of work. The Contracts Manager and the Project Manager - Construction Stage will determine the First Aid requirements of the project and ensure proper arrangements have been made.

- It is the responsibility of each contractor on site to provide appropriate first aid materials and trained personnel unless other arrangements have been agreed upon with Fima Developments Ltd.

- The 2007 Safety, Health & Welfare at Work (General Application) Regulations outline specific requirements for the provision of first aid resources and these should be consulted when finalising arrangements.

11.0 GENERAL SAFETY PRECAUTIONS AND CONTROLS

11.1 Housekeeping

- A high standard of housekeeping must be maintained at all times.
- Each contractor/employee will be responsible for his or her own area, ensuring that general clean up of the site takes place on a daily basis or upon the completion of work.
- All access/egress routes must be kept clear at all times.
- Combustible waste must be safely disposed of in appropriate containers and disposed of by a licensed contractor to a permitted location.
- Materials should never be stored in position, which would create hazards to workers; this includes storing materials on scaffolds, platforms, walkways, footpaths or roads.
- Site supervisors will monitor the work site to ensure housekeeping is maintained.
- All openings in floors, walkways, driveways etc. must be securely covered.
- Debris and materials must not be thrown or dropped from scaffolds or buildings unless a chute is provided or other suitable safe method used.
- Employees will be expected to maintain welfare facilities and leave them as close to the way they found them as possible.
- All contractors should understand site housekeeping requirements and tenders should take into account the labour required to comply with this standard.

11.2 Personal Protective Equipment

- All employees working on site during the construction stage unless otherwise specified require hard-hats, hi-vis vests and protective footwear.

- Additional personal protective equipment will be required based on the nature of the work being performed. The use of this equipment will be strictly enforced.

- Contractors are responsible for providing all necessary personal protective clothing and equipment to their employees.

- Personnel protective equipment should be properly stored when not in use to prevent damage.

- Signs for the wearing of helmets, eye protection, ear defenders etc. shall be placed inconspicuous areas throughout the site and site entrances.

- Where necessary training in the use of personal protective equipment (i.e. respirators) is to be provided.

11.3 Electricity

Equipment

- In the interest of safety all portable power equipment used on site shall operate on 110V.

- All electrical equipment brought onto the site must be of safe design and construction and properly maintained at all times.

- All equipment which may be exposed to mechanical damage, the effects of weather, wet conditions or flammable / explosive environments must be protected.

- The use of fuses or circuit breakers to protect electrical systems is required.

- Only authorised, competent, personnel should be using or working on live electrical equipment.

- Where temporary lighting is provided on site, it shall be of safe design and properly installed.

- Most power throughout the site will be provided through temporary ESB 110V supply. All equipment is to be properly maintained and grounded.

Overhead Power Lines

- Overhead power lines should be identified upon acquisition of the site and included in the development of the Safety Plan at the Design Stage.

- Contact with overhead power lines is one of the most severe hazards employees may face on a construction site. The practical steps that can be taken to prevent danger from live over-head cables include re-routing the cable, disconnecting it or placing suitable barriers around it.

- The local electrical authorities should be contacted for an on site consultation as to protection of the overhead line.

- One shall assume all overhead lines and cables are live unless specifically advised otherwise by the local authority.

- Barriers placed around live lines shall be inspected on a daily basis.

- Cranes and lifting equipment may be modified with suitable restraints to limit operations where applicable.

Underground Cables

- Prior to commencing any work on site all underground cables should be identified by contacting the local electricity authority and, if necessary, scanning the site to detect hot lines.
  As of July 2009 all persons using CAT/Jenny devices must hold a SOLAS C.S.C.S Detection of Underground Services ticket.

- Where a cable is identified the local electricity authority should be contacted for consultation.

- Proper work procedures should be established and documented.

- The route, depth and voltage of the cable should be identified and marked.

- Regard all buried cables as live.

- Excavators and power tools should not be used within one half meter of the line, the remainder should be hand dug.

- Once a cable is exposed it should be supported and protected against any damage.

11.4 Manual Handling

Reducing the Risk of Injury

Where it is not possible to avoid manual handling appropriate steps need to be taken to minimise the risk. The following aspects of the risk will be considered:

The Task

Is it possible to?

- Improve workplace layout to improve efficiency?
- Reduce the amount of twisting and stooping?
- Avoid lifting from floor level or above shoulder height?
- Avoid and / or minimise repetitive handling?
- Cut carrying distance or provide mobile lifting equipment?

The Load

Can the load be made?

- Lighter or less bulky?
- Easier to grasp?
- More stable?
- Less damaging to hold?
- Have you asked your suppliers to help?

The Working Environment

Is it possible to?

- Remove obstructions to free movement?
- Provide better footing?
- Avoid steps and steep ramps?
- Prevent extremes of hot and cold?
- Wear less restrictive clothing?
- Use suitable alternative personal protective equipment?

Manual Handling Training / Auditing

- Training will be provided as needed and appropriate for all personnel for whom manual handling represents a significant part of their work.

- Assessments and ongoing reviews will be conducted for each area where manual handling represents a significant part of the work performed.

11.5 Hazardous Substance

The handling of cement and other chemicals by builders can cause dermatitis.

- Employees will be informed of the risk and the importance of personal hygiene will be highlighted.

- Hand washing facilities will be provided for use on each site.

- Barrier creams and/or protective clothing will be readily available.

- Fima Developments Ltd will instruct all employees of the importance of wearing personal protective gloves in the course of their work.

11.6 Fire

- Depending upon the characteristics of the site, suitable fire fighting equipment will be made available.

- Extinguishers will be placed in accessible locations throughout the site/at the work area for use in the event of a fire.

- All fire fighting equipment should be properly maintained.

- Easily recognisable signs should indicate the location of equipment.

- Smoking should be restricted to specified areas throughout the site.

- Combustible debris should be properly disposed of away from potential ignition sources.

11.7 Work at Heights

- The contractor shall ensure that during the execution of work on site the surrounding area is maintained in an orderly and tidy condition and that loose material of any kind is not left in gangways or adjacent working areas.

- Safe access to all work must be provided in the form of proper scaffolding, ladders, steps, walkways, etc.

- The bottom support of any scaffold is to be placed on an adequate base plate and, where necessary, timber supports to prevent slipping or sinking.

- Scaffolding must be properly erected with toe-boards and guardrails and must be built on safe foundations.

- Working platforms must be a minimum of 600mm wide unless special circumstances prevail.

- They must be free of obstruction and non-slippery.

- Gangways for the passage of persons only must be at least 400mm wide.

- Scaffolding intended for access only, must not be loaded with plant or material.

- All scaffold boards must be in sound condition and at least 40mm thick.

- Scaffolding shall, wherever possible, be approached by ladders direct from the ground.

- Ladders must extend at least 1 meter above landing position, and be adequately secured by their stiles, not by their rungs.

- Platforms must be close-boarded with gaps not greater than 25mm.

- Openings in platforms must be properly fenced.

- All scaffolding is subject to inspection at any time by the Project Supervisor in charge and/or the company Safety Officer.

- Records of scaffold inspections (required prior to use, after bad weather and weekly) must be filled in on the proper register (GA3) and maintained on site.

- Good practice should always be followed when contractors are working at high levels.

- Warning notices should be prominently displayed to indicate to persons below that overhead work is being carried out.

- If there is a danger that tools or materials could fall, the area beneath the work must be adequately fenced off. Local company supervision must be informed so that they may request their staff to respect the barriers erected.

- When working close to the edges of roofs or girders, guardrails or safety harnesses must be used.

12.0 HAZARD IDENTIFICATION AND RISK ASSESSMENT

The following section is an assessment of the risks to Safety, Health and Welfare at Work encountered on site as required by the Safety, Health and Welfare at Work Act 2005 and the Safety, Health and Welfare at Work (General Application) Regulations 2007.

12.1 Hazard Identification

A hazard is anything with the potential to cause harm. Almost everything in the workplace can be a hazard. All hazards should be systematically identified.

12.2 Risk Assessment

This is the examination of anything at work that could cause harm to people and the precautions taken or need to be taken to prevent harm. The goal is to ensure that no one gets injured or becomes ill.

12.3 Control Measures

These are the rules; procedures and safe systems of work identified and agreed on to eliminate risk or reduce it to an acceptable level.

Where a risk cannot be eliminated or reduced to minimum levels, a process may have to be eliminated or transferred to third parties better equipped to handle high risks.

12.4 Classification of Risk

High Any hazard with the potential to cause fatal or irreversible injury or serious industrial disease.

Medium Any hazard with the potential to cause significant but reversible injury, high frequency of minor injury – permanent health effects.

Low Any hazard with the potential to cause minor injury or transient ill health – health recovers in time.

13.0 GENERAL RISK ASSESSMENTS

13.1 Hand Tools

Hazards

- Sharp edges
- Flying objects
- Defective tools
- Noise

Risk

- Electric shock
- Burns
- Tripping over cables
- Amputation due to entanglement

Risk Assessment Prior to Controls*: High *Risk Assessment After Controls: Medium

Safety Precautions and Controls

- All personnel using hand tools must be adequately trained in their safe use.
- When selecting the tool for the job in hand, the correct type, size and weight of the tool should be considered.
- The cutting edges of tools should be kept sharp and when not in use they should be protected by a suitable cover.
- All hand tools must be maintained in a safe condition and discarded and replaced when found to be unsafe for use.
- Tool handles should be of a smooth finish and free from patent defect.
- Tools should be kept clean and free from grease and dirt.
- When not in use tools should be stored in the appropriate toolbox or crib, so as not to present a tripping or falling hazard.
- All employees involved in the use of hand tools must have an understanding of the associated hazards and take necessary precautions to avoid risks.
- Hearing protectors must be worn when working with hand tools, which emit high levels of noise.
- Suitable and adequate personal protective equipment must be worn to protect from the hazards associated with each individual tool being used.

13.2 Excavations

Hazards

The main hazards associated with excavations are:

- Collapse of the sides.
- Persons falling into excavations.
- Striking underground services (see separate section).
- Persons in excavations being struck by falling materials.
- Building or structures collapsing due to excavations.
- Flooding.
- Asphyxiation or poisoning due to ground conditions or fumes from plant.
- Plant running into excavations.

Risk

- Personal injury. Death.

Risk Assessment Prior to Controls*: High *Risk Assessment After Controls: Medium

Control Measures

- No excavation work may begin until there has been consultation between the contractor and the Project Supervisor - Construction Stage.

  The location of electric cables, drains, gas and water mains etc. will be determined and marked prior to the commencement work. Local authorities and where necessary scanning must be used to determine service locations.

- It will be the liability of the contractor to make good any damage done to such services during excavation work, to render them safe and secure without undue delay.

- Only authorized, competent persons will operate machinery or drive vehicles on site. The training requirements for operating machinery or driving vehicles is for the operator to hold an adequate SOLAS Construction Skills Certification Scheme (C.S.C.S.) card for that machinery / vehicles, or equivalent approved by a body in another jurisdiction recognised by SOLAS as its equivalent.

- Excavations or openings will be properly sloped or shored at all times. A competent person must approve trench designs prior to entry. Warning lamps must be used during hours of darkness or low visibility.

- Excavations or openings in floors must be properly fenced at all times.

- During excavation work the surrounding areas must be maintained in an orderly and tidy condition.

- Safe means of access will be provided to excavations. Ladders will be in good condition, extend 1 metre above the excavation edge and be secured.

- Heavy vehicles are to be kept away from the edge of an excavation. At no time should materials be stored along the edge of an excavation.

- Flooded trenches should be "de-watered" as quickly as possible. Once emptied the trench is to be fully inspected prior to entry.

- Excavations are to be inspected on a daily basis, more often if weather or other conditions may have altered the stability of the excavation. Inspections are to be documented on the AF3 Form with a copy provided to the Project Supervisor Construction Stage.

13.3 Demolition / Refurbishment

Hazards

- Sudden collapse of structure due to support being removed, affects of valuation caused by machinery.
- Contact with Services such as electricity, gas, steam, sewers or dangerous substances.
- Encountering asbestos, lead paint excessive dust particles and fibres.
- Disposal of rubble or waste.

Risks

- Physical injury
- Death

Risk Assessment Prior to Controls*: High *Risk Assessment After Controls: Medium

Control Measures

- All work will be tendered for or negotiated in accordance with the approved standards.

- The Contracts Manager in conjunction with a specialist contractor if used, will draw up a Method Statement and a programme of work detailing the methods to be used, plant, safe systems of work, special requirements for dealing with health hazards, precautions and sequence of work, etc. This Method Statement and programme will be issued to the Supervisor responsible for the work on site.

- The Contracts Manager and Site Supervisor will ensure that protective measures of the safety of the public or visitors on site shall be provided and maintained. These measures must take into account the prevention or accidents, especially to children.

- All plant used on demolition sites will be suitable for demolition work and will be provided with any necessary safeguards to protect the operator.

- When carrying out preliminary procedures, the following must receive special attention:

    1. The location and disconnection of any services into the site. Confirmation of disconnection in writing must be requested from the appropriate service authority.

    2. The existence of any hazardous substances, e.g. asbestos, lead painted steelwork etc. on site must be determined from the documents provided and from a physical survey of the site, carrying out any sampling required.

- Where the building or structure to be demolished contains unusual or possible hazardous design features, or is in a dangerous structural condition, e.g. pre-stressed or post tensioned concrete, fire-damage building, cantilevered balcony, etc., then advice must be obtained from the qualified consultant structural engineer.

13.4 Drains / Confined Space Entry

For the purpose of this risk assessment 'Drain' shall mean drains, sewers, culverts, manholes, catch-pits, sumps, pits, sewage/effluent tanks, service tunnels and confined spaces below ground level

Hazards

- Flooding
- Hazardous atmospheres
- Oxygen deficiency
- Flammable/Explosive atmospheres
- Toxic gases/Vapours
- Infection (in particular 'Weil's Disease')

Risks

- Physical injury
- Death

Risk Assessment Prior to Controls*: High *Risk Assessment After Controls: Medium

Control Measures

- Ensure all cuts/abrasions/breaks in skin are adequately covered before entering drain/manhole and report any cuts sustained whist in the drain area immediately.
- The area is to have atmosphere tested before entry and during work. This involves the use of a gas-measuring instrument to detect the presence of e.g.: Oxygen Deficiency, Carbon Dioxide, Methane, Hydrogen Sulphide, Carbon Monoxide and Flammable vapours.
- Ventilate the confined space prior to entry.
- Where possible, wash and clean all drains prior to entry.
- Check access fittings e.g. fixed ladders, step irons, toe holds, before entry.
- Use of ropes, safety harness, winch and lifting tripod required.
- Use of explosion proof lighting or equipment where there is a potential for a flammable or explosive atmosphere.
- Erect barriers and fences around open manholes.
- Mandatory attendance of person on constant stand-by at surface, for the duration of the work. Provide an effective means of communication between personnel in the drain and the person on stand by duty on the surface.
- Personnel protective equipment will be issued and used as appropriate e.g. respiratory protection, head protection, waterproof clothing, gloves, protective footwear, and eye protection. **Note:** breathing apparatus must only be worn by fully trained personnel
- All employees entering drains or involved in confined space entry must be fully trained in hazards, drain entry procedures, use of equipment and emergency procedures.

13.5 Plant & Equipment

Hazards

- Noise.
- Operated by untrained individual
- Incorrect use.
- Speeding.
- Poor maintenance.
- Unsupervised reversing.
- Overloading or insecure loads

Risks

- Struck by site transport
- Falls from vehicles.
- Splashed by fuel during refuelling.
- Tipping or overturning of vehicles.
- Contact with moving parts of machinery.
- Struck by materials.

Risk Assessment Prior to Controls*: High *Risk Assessment After Controls: Medium

Control Measures

- The site foreman will ensure that all site transport when delivered to site is in good order and equipped with all safety devices, and guards. Mirrors (including convex at rear), motion sensors and flashing beacons must be fitted to all plant where required.

- Any defective vehicle or piece of equipment will be isolated and the hire company (where appropriate) contacted immediately. The machine will not be used until the defect is rectified and the equipment is re-inspected / certified.

- Only authorized, competent persons will operate machinery or drive vehicles on site. The training requirements for operating machinery or driving vehicles is for the operator to hold an adequate SOLAS Construction Skills Certification Scheme (C.S.C.S.) card for that machinery / vehicles, or equivalent approved by a body in another jurisdiction recognised by SOLAS as its equivalent.

- Site traffic will be restricted to fixed routes and access points.

- All plant and equipment will undergo regular documented inspections and any noted defects corrected.

- All required preparatory work shall be completed to ensure transport is used safely on site. This includes developing access roads, traffic control maintenance, etc.

- All transport on site including dump trucks, tippers, lorries, tractors, tankers etc. will be provided, maintained, operated and used in accordance with the current legislation and standard "best practice".

- All banks-men or supervisory staff required to enter earthmoving areas will be provided with high visibility waistcoats, belts etc.

- Children must not be permitted in work areas while plant is in use.

- All necessary measures required to avoid hazards to children on site outside working hours must be taken, particularly if it is not possible to fully fence the site.

- Persons may not ride on, or be carried in, an unsecured position on plant or equipment, but only in a seat or place provided for that purpose.

- Measures will be taken to prevent vehicles that are tipping into excavations etc. from over running the edge.

- All lifting gear and equipment must be marked with a means of identification and the safe working load and carry appropriate certificates.

- All wires, ropes, and chains must be fitted correctly, inspected and tested with results recorded as necessary.

- Electrical and mechanical plant, unless specifically designed must be switched off or stopped for adjustment and before items of equipment are connected or disconnected.

- Portable power equipment shall operate on 110 V supply, or less.

- If an excavator is used as a crane it must carry appropriate certification (GA1) and the safe working load should be clearly displayed on the bucket.

13.6 Abrasive Wheels

Any person working with or approaching the machine while in operation may be in danger of suffering serious injury through entanglement, coming in contact with the abrasive surface, Ejection of sparks or wheel burst due to incorrect mounting). Abrasive Wheels are therefore regarded as presenting a severe risk to operators and pedestrians if the prescribed precautions are not taken.

Hazards

- Entanglement
- Contact with abrasive surface
- Sparks
- Wheel burst

Risk

- Injury from flying particles
- Bursting of wheel or disc
- Cuts
- Respiratory damage due to inhalation of dust
- Amputation due to entanglement
- Hearing damage due to noise
- Electric shock
- Fire and/or explosion

Risk Assessment Prior to Controls*: High *Risk Assessment After Controls: Medium

Safety Precautions and Controls

- The operator must be trained to use the machine in a safe manner and only authorised persons may operate abrasive wheels. It is recommended that all persons using abrasive wheels have completed a course in abrasive wheels instruction.

- The operator must carry out the required pre-operational checks on the machine before use.

- It is the duty of the operator to advise his supervisor and maintenance person of any repairs necessary to the machine.

- No person, other than the operator, is permitted to approach the machine while it is operating.

- Adequate and suitable warning signs should be placed and clearly visible at the machine.

- The machine should always be stopped when not in use.

- The machine should under-go a planned maintenance programme. Following maintenance, the operator must ensure that all relevant machine guards have been replaced and secured.

- Dedicated sockets, protected by Earth Leakage Circuit Breakers (ELCB's) must be provided.

- A trained, competent person must only mount and dress wheels on grinding machines.

- Work rests must be kept adjusted as close as possible to the wheel.

- The operator must wear suitable P.P.E (Personal Protective Equipment) including ear defenders, steel toe boots, safety goggles or full-face visor as a minimum requirement.

13.7 Noise & Vibration

Hazards

- Noise
- Nuisance Noise

Risk

- Noise Induced hearing loss

Risk Assessment Prior to Controls*: High *Risk Assessment After Controls: Medium

Safety Precautions and Controls

- Fima Developments Ltd will ensure that every effort will be made to reduce workplace and environmental noise levels to a minimum, in so far as is reasonably practicable, so as to be safe and without risk to safety and health.

- In situations where noise levels are likely to exceed 80dBa suitable and adequate hearing protectors will be made available to all employees likely to be affected.

- In situations where noise levels are likely to exceed 85dBa, suitable and adequate hearing protectors will be provided and all employees likely to be affected will use the hearing protection, in accordance with manufacturer's instructions.

- In situations, where it is not practicable to reduce noise levels, Fima Developments Ltd will ensure that a competent person carries out a noise assessment. A re-assessment will be carried out where noise levels are likely to have increased, either as a result of the introduction of new plant/machinery or work practices.

- Warning signs will be posted in all relevant work areas, indicating noise levels and the requirements regarding the use of hearing protectors.

- Every effort will be made, in so far as is reasonably practicable, to ensure that contractors/visitors adhere to the requirements of Fima Developments Ltd in relation to workplace and environmental noise levels.

- Fima Developments Ltd will exercise the right to reduce and/or eliminate noise levels, which are in excess of their workplace and/or environmental requirements.

- In compliance with the Safety, Health & Welfare at Work (General Application) Regulations 2007 audiometric testing will be made available to employees who are likely to be exposed to high levels of noise during their normal working day.

- Hearing protectors will be checked on a regular basis and replaced where necessary.

Vibration

Risk Assessment Prior to Controls*: High *Risk Assessment After Controls: Medium

Hazards

- Damages blood vessels, reducing blood supply, and also nerves in fingers causing a permanent loss of feeling. Worst case - gangrene requiring amputation.
- May also damage bones and muscles.
- You may lose flexibility and strength of grip.
- You may find it more difficult to work with hand held tools.
- Vibration white finger

Control Measures

- Keep warm at work, wear warm gloves.
- Do not smoke, or at least cut down, just before and while at work - Smoking affects blood flow.
- Exercise hands and fingers to improve blood flow.
- Use the right tool for the job, the equipment must be used as per the manufacturers instructions.
- Trigger time must be assessed and allowed usage must be enforced.
- Do not use more force than necessary when operating tools - gripping too tightly increases the problem.
- Avoid long periods of use - short bursts are better. Rotate jobs.
- Keep tools in good working order - if defective report it to your supervisor.
- Do not ignore symptoms - if you think vibration could be affecting your fingers, see your doctor.

13.8 Portable Electric Tools

The risks associated with this equipment are mainly electric shock and contact with the moving part of the tool. The risk is therefore assessed as ***High*** *due to the potential severity of an injury.*

Hazards

- Contact with moving parts
- Noise
- Electrical

Risk

- Electric shock
- Burns
- Tripping over cables
- Amputation due to entanglement
- Noise Induced hearing loss

Risk Assessment Prior to Controls**: High** ***Risk Assessment After Controls***: Medium

Safety Precautions and Controls

- All personnel must be trained in the safe use of portable electric tools.
- Portable electric tools must be serviced and maintained every 12 months by a competent person. (Portable Appliance Testing)
- All tools must be thoroughly inspected prior to use.
- Portable electric tools must only be used for the purpose for which it was designed.
- Cables, plugs and connectors must be in good condition and free from cracks, breaks and exposed wires.
- Always follow the manufacturer's instructions.
- Portable electric tools must operate only on 110v supply.
- A residual current circuit breaker (RCCB) must be used at the socket or mains, even if the power supply is 110v.
- Portable electric tools must never be used while the operator is standing in water.
- Electric cables and extension cables must be laid out in a neat and tidy fashion to avoid tripping hazards and becoming damaged by other vehicles and equipment.
- Never handle live electric cables.
- Long hair, jewellery, loose garments must not be worn when using portable electric tools.

- Portable electric tools must never be connected to lighting sockets.
- Eye and hearing protection should always be used while working with portable electric tools.

13.9 Mobile Equipment Maintenance

All mobile equipment used by Fima Developments Ltd must undergo planned service and maintenance as per an agreed maintenance/service schedule. The risks associated with the maintenance of this equipment are considered to be high, and the main risks identified are as follows:

Hazards

- Poor maintenance.
- Unsupervised reversing.
- Hydraulic hoses
- Machine runaway
- Unsupported raised bucket, forks etc.
- Pinch points
- Noise, dust and fumes
- Falling objects
- Fire
- Electrical

Risk

Death or serious injury could result from:

- Slips, trips and falls
- Operators falling from platform
- Overloading the platform causing it to overturn
- The platform tipping due to bad ground conditions or strong winds
- Incorrect use.
- Collision

Risk Assessment Prior to Controls*: High *Risk Assessment After Controls: Medium

Safety Precautions and Controls (in workshop)

- All equipment should be cleaned prior to service/maintenance.
- Only trained competent personnel may carry out service/maintenance.
- Local exhaust ventilation should be provided when carrying out engine checks.
- All engine covers must be provided with fixed retaining stays or opened in such a position that would prevent accidental release when personnel are exposed.
- No modifications can be made to equipment without manufacturer's approval.

- Water-cooled engine radiators must not be opened when engine is running. To open safely, the engine must be turned off and pressure released very slowly to avoid burns and scalds.
- Prior to working on any hydraulic system, the system must be bled down.
- Grating in pits must be kept free of all rubbish, oil spillage etc.
- Safe access must be provided to all machinery.
- Non-slip decking should be provided in strategic points on top of machinery where maintenance personnel may be required to stand.
- Long hair, jewellery, loose garments must not be worn when working near moving parts of machinery.
- All personnel should be trained in safe manual handling techniques.
- When checking for hydraulic leaks on hoses or airlines personnel are required to use suitably sized cardboard for inspection purposes, hoses must never be inspected by exposed hand.
- Equipment should only be operated at half revs in workshop area and enclosed spaces. Hearing protection e.g. ear muffs or plugs, must be worn in noisy areas.
- Dust and fumes should be controlled by means of adequate washing down and ventilation. Suitable dust masks must be provided and worn when necessary.
- Fire extinguishers should be installed on all equipment mobile equipment.
- P.T.O. and exposed drive shafts must be adequately guarded at all times.

Safety Precautions and Controls (in field)

- Personnel entering active working areas must report to the relevant person in charge.
- Where possible machinery should be parked in a safe area.
- All personnel must be trained in manual handling procedures.
- All open holes must be protected.
- Safe towing procedures must be in place and adhered to.
- In the event of a forklift, loading shovel or loader breaking down while transferring goods care must be taken to ensure the goods are secured and that personnel are not exposed under the load.

13.10 Exhaust Fumes

Exhaust gases contain harmful and poisonous components, particularly when working in confined spaces. High exposure levels or long term exposure may be harmful to health.

Hazards

- Toxic gases
- Oxygen deficiency

Risk

- Asphyxiation

Risk Assessment Prior to Controls*: High *Risk Assessment After Controls: Medium

Safety Precautions and Controls

- Adequate ventilation must be provided, especially in areas where exhaust fumes are likely to build up.

- All personnel working in areas, where exhaust fumes are likely to be present, must be informed of the associated risk.

- Suitable and adequate respiratory protection must be provided, worn and maintained.

- Smoking is strictly prohibited in areas where exhaust fumes are likely to be present.

13.11 Battery Charging

Due to the hazards associated with this process, e.g. the likely presence of hydrogen gas and battery acid, the risk is assessed as high.

Hazards
- Acid splash
- Electrics
- Manual handling

Risk
- Chemical burns & Eye injuries
- Back injury
- Electric shock
- Fire

Risk Assessment Prior to Controls*: High *Risk Assessment After Controls: Medium

Safety Precautions and Controls
- Only trained and authorised personnel are permitted to use battery-charging equipment.
- Use suitable and adequate personal protective equipment, e.g. full-face visor, apron and PVC gloves.
- Make sure that the charger is switched off before connecting or disconnecting to batteries.
- If more than one battery is being charged, battery bridge connectors should be used and bolted securely to the battery poles.
- After connecting, switch on charger and check that it is charging.
- Always check the cables prior to use to make sure they are in good condition.
- Smoking is strictly prohibited in battery charging areas.
- Safe manual handling procedures must be adhered to when handling batteries.
- Battery charging may only be carried out in a well-ventilated area.
- Adequate and suitable fire extinguishers should be readily available at all battery charging facilities.
- Emergency eyewash facilities must be readily available at all battery charging facilities.

13.12 Storage and Distribution of Materials

Hazards

- Blocking of access routes.
- Falling materials from height.
- People falling from height.

Risk Assessment Prior to Controls*: High *Risk Assessment After Controls: Medium

Control Measures

(Site Level)

- Materials will only be stored in designated areas on site and contractors will ensure that the delivery of materials is controlled so that excessive quantities are avoided (especially hazardous substances or flammables).

- Materials will not be stored in ways, which cause damage to the works, the materials, or endanger the safety of people or property.

- Particular care is required with hazardous chemicals, compressed gases and flammable liquids. A very high standard of housekeeping will be maintained in and around these storage areas. Each chemical should be considered on its own merit and the Material Safety Data Sheet consulted. Oxidising agents/ acids/ alkalis/etc must be stored separately in designated areas.

- Storage of flammable liquids and compressed gases will also be in designated areas. Gas cylinders stored externally 3m or more away from any combustible materials. Neither is to be kept in site huts or containers.

- Do not leave loose materials, or stack sheet materials, on platforms or working areas unless safely contained, or restrained. Pallets will be removed to single height before being unbanded. Lay sheet material flat if possible.

- Materials will not be stored on access routes within buildings or on the site.

(Materials delivered at Heights)

- Materials will be delivered to heights on each structure at designated places. These may be via loading platforms on the scaffolds or a designated landing area on the concrete structure.

- Materials will be raised to the elevated level by a tower or mobile crane or (at lower levels) by a telescopic handler. Loads will be secured against spillage

- Only competent drivers may operate telescopic handlers. They will be in constant contact with authorised banks men. Radio communication is preferred (unless short distance and good visibility facilitate hand signals).

- Guardrails will be maintained at all loading bays near edges. Note that at regularly used loading bays it is not practicable to maintain mid-rails and toe boards and these may be omitted. However guardrails must be reinstated as soon as possible after delivery of the load.

- Signs should be posted on scaffold loading bays confirming their capacity in simple terms.

- Potentially loose materials will be adequately secured. For example, blocks will remain wrapped / banded plus nets will be fitted around the load, steel rods will be effectively choked and skips will be sheeted.

13.13 Controls and Disposal of Waste

Hazards

- Slips & Trips
- Falls of Materials
- Fire
- Vermin

Risk Assessment Prior to Controls*: High *Risk Assessment After Controls: Medium

Control Measures

- Do not throw debris or waste from the edge of any structure.
- All waste must be disposed of by a licensed contractor to a permitted location.
- All rubbish / waste will be removed from the works as it accumulates and the works will be maintained in a clean and tidy condition for the duration of the contract. Contractors have responsibility for the waste in their areas.
- Nails shall be removed or knocked down from timber before disposal.
- Spillages shall be cleaned up immediately and the waste shall be disposed of correctly.
- Access routes and fire exits shall be kept clear of rubbish/waste at all times.
- Areas around plant and machinery shall be kept clear at all times.
- Welfare facilities shall be cleaned at least daily. A high standard of housekeeping is expected at all work areas on-site.

13.14 Work Adjacent to Overhead High Voltage Lines

Hazards

- Contact with or arcing from high voltage overhead power lines.

Risk Assessment Prior to Controls*: High *Risk Assessment After Controls: Medium

High For all vehicles with elevating boom arms, tipping trailers etc.
Low For rigid body vehicles or vehicles with restricted height reach.

Control Measures

- Before commencing work in the vicinity of overhead cables Site Management will consult with the ESB regarding the protection that must be provided on site.

- The protection provided shall be in accordance with HSE Guidance Note GS6 "Avoidance of Danger form Overhead Electric Power Lines" and the ESB leaflet derived from it.

- Fit and maintain ground level barrels and high-level bunting along the entire length of the danger zones of the overhead power lines.

- Erect and maintain "Goalpost" corridors across passageways beneath the overhead power lines.

- All verticals to bunting poles or goal posts to be made of timbers or other non-conducting material. They must be robust enough to provide stability in all weather. The design of the goalposts is to be approved by a section engineer.

- Bunting, barrels and goalposts will be placed at a distance of 6m minimum from the line of the overhead power lines.

- All vehicle drivers will be instructed on the safe practices. Particular emphasis will be placed on avoiding travel with raised booms etc. ESB notices will be placed on the windscreen of vehicles (-these are freely available from local ESB offices).

- Site Management for Fima Developments Ltd will supervise the erection of overhead warning barriers and then inspect all bunting and in particular the goal posts on a daily basis. After periods of severe weather or suspected vandalism, overhead line protection will be inspected by Site Management.

- All relevant operatives will be informed of the dangers of overhead power lines as part of site induction and the ongoing training programme.

- All goal posts will be highlighted with red and white colouring. Signs stating "Danger Overhead Power Lines" and the height restriction of the goal posts will be positioned at all goal post locations.

- The width of the goal posted crossing points will be 10m wide or less. .

- Bunting on goal posts shall be placed at a height of 3.6m approximately.

- No plant will be permitted to work below the overhead lines during erection.

- Barrels for bunting etc will be placed in line by use of a telescopic handler, approaching from the far side of the line.

- Erection of bunting and goal posts to be supervised by Fima Developments Ltd.'s site management.

13.15 Use of Electrical Equipment

Hazards

- Personal Injury
- Fire Hazards
- Electric Shock/Burns
- Explosion

Risk Assessment Prior to Controls*: High *Risk Assessment After Controls: Medium

Safety Precautions and Controls

1. Static Electricity

Ensure all metalwork is bonded and earthed, especially when using PHD Detector unit, flammable liquids etc.
Avoid using plastic materials, which become easily ionised
Wear Anti-Static footwear where required

2. Electric Shock

All live parts, which may cause danger, shall be suitably covered with insulating material and so protected as to prevent danger.
Have such precautions taken in respect of them (including, where appropriate, their being suitably placed) as will prevent danger.

3. Overhead Power Lines

Be aware of 'Arcing/flashover' from overhead power lines (in excess of 20 metres) especially when using ladders, mobile access equipment, etc.
A banks man will direct all access equipment and monitor its work activities.

4. Portable Apparatus

A circuit supplying portable equipment or a socket outlet intended to supply such portable equipment and in which the alternating current at a voltage exceeds 125 volts and not exceeding 1,000 volts is used, shall be protected by one or more residual current devices having a tripping current not exceeding 30 milliampres.

Portable equipment (other than portable transformers and portable generators) supplied at voltage exceeding 125 volts alternating current shall not be used in building operations, works of engineering construction or in a damp or confined locations unless its rating exceed 2 kilovolts amperes.

Portable hand lamps applied at a voltage exceeding 25 volts alternating current or 50 volts direct current shall not be used in building operations, works of engineering construction, damp or confined spaces.

Where a transformer is used to supply electricity to:

a. Portable equipment at voltage not exceeding 125 volts alternating current
b. A portable hand lamp at a voltage not exceeding 25 volts A/C

It shall be of a double wound type and the centre point of the lower voltage or secondary winding shall be connected to earth.

Electrical tools used outdoors, or where there is a lot of earthed metalwork are best worked from a safety isolating transformer, or connected through a residual current circuit breaker (RCB- MCBs - ELCBs).

5. Switches and Conduit

Power cables to machines (220v) will be armoured and covered in thick flexible rubber, PVC or installed in conduit. There must be a good earth connection.

6. Suitability Of Electrical Equipment And Installations, Adverse or Hazardous Environments/Identification And Marking.

Gen Application Regulations, 2007 Sec 76/77 /78/ refers

- All electrical equipment and installations shall at all times be so constructed, installed, maintained, protected and used so as to prevent danger.
- Electrical equipment, which may at any time be exposed to adverse or hazardous environments, including in particular mechanical damage.
- The effects the weather, natural hazards, temperature or pressure.
- The effects of wet, dirty, dusty or corrosive condition.

Hazards and Risks

Misuse of electricity can result in fire and explosion, personal injury and even death. It is essential therefore that a standard code of behaviour be observed with all electrical equipment, in order that it is treated with the considerable respect it deserves.

Arrangements and Controls

Only competent authorised personnel are permitted to work electrical systems or maintain electrical equipment. All employees must observe the following rules relating to electricity in the company.

- Report broken, ineffective, or damaged electrical equipment, such as loose connections and frayed cables, to your supervisor. Ensure that no one can come into contact with such equipment until it is repaired.
- Ensure that there is clear access to switchboards and other similar installations, in case isolation is required in an emergency.
- Assume all electrical circuits are live until you are certain they are not so.
- Switch off the socket before removing the plug.
- Learn what to do in case of electric shock. Before attempting rescue ensure that the source is isolated.
- Switch off when you have finished with the equipment.
- Only a competent person may carry out repair work on electrical apparatus.

13.16 Operation of Vehicles and Plant on Site

Hazard

- Death or injury due to:
- Incorrect use.
- Speeding.
- Poor maintenance.
- Unsupervised reversing.
- Overloading or insecure loads.

Risk Assessment Prior to Controls*: High *Risk Assessment After Controls: Medium

Control Measures

- Only authorized, competent persons will operate machinery or drive vehicles on site. All persons driving machines will have the appropriate C.S.C.S ticket.

- Only vehicles necessary for the project will be permitted within the working area.

- Vehicles and plant must not obstruct exits, fire hydrants, or other exits.

- All vehicles will be maintained and serviced in accordance with the manufacturer's recommendations. All machines must have an in date certification i.e. C2 certificate for excavators and in compliance with the safety, Health and Welfare at Work (General Application) Regulations 2007 a Report of thorough Examination of Lifting Equipment GA2 .

- An inspection will be made of each machine prior to first use on site and at regular intervals after.

- Vehicles will not operate during the hours of darkness unless Site Management has specifically approved the operation and the standard of lighting provided is adequate.

- Site speed limits will be observed.

- All vehicles and plant will be fitted with a revolving amber beacon for use while being operated.

- All such equipment will be fitted with an audible warning device to warn when vehicle is reversing.

13.17 Refuelling and Fuel Storage

Hazards

- Flammable liquids.
- Hot engine surfaces.
- Other ignition sources i.e. smokers.
- Static Electricity.
- Flammable vapours and fumes.
- Leaking and faulty containers.

Risks

Risk of fire or explosion from:

- Build up of flammable fumes of vapours in enclosed area.
- Contact of fuel with hot engine surface.
- Build up of static electricity igniting fuel.
- Smoker's material igniting fuel..
- Risk of serious burns from contact with ignited fuel.
- Risk of dermatitis from handling fuel spirit.

Risk Assessment Prior to Controls*: High *Risk Assessment After Controls: Medium

Precautions

- All storage should be in good condition and free from leaks.
- Danger signs should be posted on tanks ie "danger Flammable liquids" and "No Smoking Switch off engine"
- All 2-stroke engine mixes should be stored in proper non-static fuel cans with a fully sealed cap to prevent any leaks o spillage's
- All cans and tanks should be clearly labelled.
- All portable cans should be stored in a separate lockable and ventilated store. Do not store in site storage containers or in enclosed spaces where fumes and spills could build up.
- Engine is switched off and allowed to cool before refuelling, never refuel a hot engine or while its running as any splash may ignite
- Gloves must be worn when handling fuel spirit.

13.18 Trench work

Risk

- Collapse of trench
- Falls into trench
- Plant Driving into trench
- Contact with underground services
- Entry & exit from trench
- Water lodging in trench
- Weakening of adjacent structures
- Contaminated ground

Risk Assessment Prior to Controls*: High *Risk Assessment After Controls: Medium

Control Measures

- Trenches upon assessment to be splayed or supports to be used. Support materials / trench box should be on site before work commences. If support system other than trench box used, temporary works design to be done
- Workers to be confined to supported section of trench.
- Trenches to be guarded off and warning signs erected.
- Timber baulks to be put in place to prevent plant falling into the trench
- Implement Excavation Permit, which ensures underground services to be located and identified prior to start of excavation. Contact local authority, use CAT device and hand dig to locate. Warn plant operator of all services located or likely to encountered
- Contaminants to be removed following a suitable Risk Assessment
- Plant and materials to be kept away from the side of excavations to prevent undue pressure or ingress of exhaust fumes
- Proper ladder access into and out of the trench must be provided
- Where excavations are dug next to structures, suitable preventative measures should be established in case of collapse, subsidence or damage
- Provide sump for draining access water or other methods of de-watering of trench.
- Backfill tight at the end of every shift
- Safe Work Plan done in advance
- Enter daily inspections into diary
- Enter weekly thorough examination into FORM AF3
- Precautions for working around mobile plant to be given out
- Train the Pipe layer and trenching team as follows.
  In the event of a trench collapse, resulting in entrapment of a worker, emergency services to be called immediately informing them of nature of accident. Site Manager/Foreman to oversee retrieval of casualty by hand dig only. Use of mechanical equipment for rescue is prohibited.
- Area to be sealed off from all those other than those directly engaged in the emergency rescue. Safe access for emergency services to be made to area where collapse occurred.
- First Aiders to be on stand by to give emergency aid. Emergency plan and drill to be done.

13.19 Working with Wet Concrete

Risk

- Skin contact resulting in such conditions as
- Dermatitis, burns and skin ulcers
- Eye contact resulting in severe irritation

Risk Assessment: Medium

Control Measures

- Wear waterproof gloves - replace if these get saturated or cement gets inside, wash hands and get new pair.
- Wear knee pads for finishing if cement gets through to the skin - wash and change clothes as soon as possible
- Wear safety glasses when pouring cement.
- Wear ear protection if using vibrating equipment.
- Wear knee length wellingtons.
- Cover all parts of the skin.
- Adequate washing facilities including hot water, soap and barrier creams must be provided on-site.

13.20 Working with Live Sewage

Risk

- Occupational diseases i.e. Tetanus, Leptospirosis, Gastro Enteritis, Hepatitis A ,B & C, Polio
- Being overcome by fumes
- Needle stick/Syringe injuries
- Bites and stings

Risk Assessment Prior to Controls*: High *Risk Assessment After Controls: Medium

Control Measures

- To avoid being overcome by fumes follow procedures for confined spaces.
- At induction employees are informed of good hygiene procedures i.e. hands and forearms to be scrubbed before eating and smoking.
- Welfare facilities are provided which include hot running water, soaps, barrier creams and anti-bacterial lotion.
- Showers should be provided if work of this nature is ongoing for the greater part of the job.
- Welfare facilities to be cleaned thoroughly and regularly.
- Employees to be offered inoculations against Tetanus, Hep A and B and polio drops
- Leptospirosis cards to be given to all at induction stage, read through and explained.
- Avoid smoking, touching nose or mouth with hands during work.
- Any scratches or grazes must be attended to by a first aider who will disinfect the wound and apply a waterproof plaster.
- Gloves will be provided and should be worn at all times.

13.21 Working Near Underground Services

Risk

- Injury, electrocution or evacuation of premises or dwelling caused by hitting services
- Fire by explosion
- Biological hazards

Risk Assessment Prior to Controls*: High *Risk Assessment After Controls: Medium

Control Measures

- Inform owners of services of intent to dig and obtain drawings of the area and mark up.
- Excavation permit to be obtained before digging.
- Locate electric services by using cat / genny detector and mark on the ground.
- Mark and **hand dig** trial holes using hand tools to confirm position.
- Issue permit to dig to machine operator. A copy to be kept in the cab.
- Safe System of Work Plan (SSWP) to be done.
- Excavators are not to be used within 1m of a gas pipeline, 5m of a transmission line and hand held power tools within 0.5m of any electric cable.
- Ban smoking in the vicinity of a gas main.
- Digging should be carried out alongside the service, rather than directly above it
- If heavy plant has to cross the line crossing points should be kept to a minimum
- Regular check and calibrate the CAT detector.
- Tool Box Talk for all persons working near services.
- Before starting work in the vicinity of underground cables, plant operatives are to be briefed on the dangers existing and the precautions to be observed.
- Treat all ducts as live when uncovered.
- If damage is done to cable keep people clear of the area and notify the relevant owner immediately.
- Gas leak: Evacuate the area, warn the occupants of nearby buildings and phone the gas board. Call the fire brigade.
- Hitting electrical cable: Stay clear of the cable. Contact the ESB. Call the Fire Brigade.
- Draw up an emergency plan and execute drill.

13.22 Use of excavators (Use of 360° &180° excavators for excavation)

Hazards

- Entrapment of people on slewing
- Large excavators travelling in a confined space
- Contact with buried services or overhead services
- Contact with pedestrians, other plant, fixed objects when tracking or slewing
- Overturning due to overloading, working on slopes
- Hazards associated when using as crane
- Mechanical failure (e.g. unintentional release of quick hitch buckets)
- Mechanical, fluid pressure, electrical hazards from power transmission
- Slips/falls when climbing in or out of a cab
- Noise and vibration

Risk Assessment Prior to Controls*: High *Risk Assessment After Controls: Medium

Safety Precautions and Controls

- Only trained operators who hold an adequate C.S.C.S. ticket (or Equivalent recognised by SOLAS) are allowed to operate this type of equipment.
- Flashing Beacon, motion sensors, and mirrors to be fitted.
- With backhoe loaders, with the front shovel is being employed, the backhoe attachment should be in its ”travel” position, with the safety locking device in place.
- Allow clearance distance of minimum 600m when slewing - barricade danger areas off if necessary.
- Do not slew bucket or load directly over personnel.
- Slow working cycle down when working on slopes to reduce bucket reach.
- Banksman to guide driver when large excavator is travelling.
- High visibility vest and helmet to be worn when outside vehicle. Also wear ear defenders in cab.
- Ensure statutory and company test, examination and inspection procedures are implemented. GA2 & GA1.
- Ensure that excavators are used only by certified trained persons.
- Ensure that the rules relating to authorised use of plant and equipment are made clear to all personnel at induction.

13.23 Mini-digger

Hazards

- Overloading the lifting equipment
- Operated be untrained individuals
- Signaller/banksman untrained

Risks

- Falling Objects
- Collisions
- Crushing

Risk Assessment Prior to Controls*: High *Risk Assessment After Controls: Medium

Safety Precautions and Controls

- Only trained operators who hold an adequate C.S.C.S. ticket (or Equivalent recognised by SOLAS) are allowed to operate this type of equipment.

- Each load must be inspected to ensure that it is adequately secured to the mini-digger hook and that the safety catch is in place.

- Each load must be assessed as to its weight and at no time can the Safe Working Load be passed.

- Operators must ensure that the direction of intended travel is clear prior to commencement of move.

- All lifting is inspected in a regular basis; however, operators must maintain critical checks on equipment on a daily basis.

- Only trained employees who hold an adequate C.S.C.S. ticket (or Equivalent recognised by SOLAS) shall act as signaller/banksman for operators.

13.24 Loading and Off Loading of Earthmoving Plant

Risks

- Machine striking obstructions or persons due to confined space
- Slippage of machine off while loading
- Uncontrolled movement of machine at point of balance
- Beaver tail Transporter units tipping at front under heavy load

Risk Assessment Prior to Controls*: High *Risk Assessment After Controls: Medium

Controls

- The machine driver is responsible for loading the machine safely onto the transporter under the direction of the transporter driver.
- Ensure loading/unloading area can accommodate movement of machine without striking obstructions or persons. Keep area clear of all unnecessary personnel.
- Buckets or rock breakers to be lashed to machine.
- Machine to be lined up with ramps.
- Ramp to be of adequate width, correct slope (ramp angle to be kept low) and constructed of the skids as provided by the manufacturer.
- Loading to be carried out at the slowest possible speed (idle speed), as per signals of transporter driver particularly at the point of balance to avoid sudden uncontrolled movement of machine.
- Avoid any unnecessary movement of the machine whilst it is on the transporter.
- Beaver tail loaders must be blocked under ramps to prevent tipping.
- High visibility vest, helmet and safety boots to be worn by transporter, driver and machine operator.
- Ensure transporter/trailer is on firm level ground
- Particular care to be taken in wet conditions or when machine tracks are dirty / wet.
- Machine and any loose items to be securely lashed, brakes to be engaged before transporter is moved.
- Tying chains and ratchet tightners to be regularly checked for wear and tear by transporter driver.

13.25 Transport & Delivery Vehicles

Hazard

- Uneven ground.
- Tipping.
- Reversing.
- Loading.
- Re-fuelling.
- Overhead lines.
- Discharge through chutes.
- Unsecured loads.

Risks

- Risk of collision and stationery plant and equipment.
- Risk of collision with moving plant.
- Risk of persons being struck by Transport Vehicles.
- Risk of persons getting crushed between delivery vehicles and plant.
- Risk of transport vehicles coming in contact with live overhead power lines.
- Risk to pedestrians from reversing vehicles.
- Risk of vehicles overturning.
- Fuel spillage.
- Risk of being struck by vehicles.

Risk Assessment Prior to Controls*: High *Risk Assessment After Controls: Medium

Controls

- All vehicles will be maintained in good working order, with lights, steering, handbrake, footbrake, indicators and wipers functioning efficiently.
- All vehicle delivering materials will be equipped with reversing bleepers and reversing lights, in good working order.
- Drivers of all delivery vehicles will be warned about any overhead lines in the vicinity.
- Drivers will be advised of the minimum clearance height under overhead lines.
- Drivers will not tip their vehicles under overhead lines where there is not sufficient clearance.
- Drivers will not reverse their vehicles in close proximity to workers or plant without the assistance of a banksman at the rear.
- Drivers will know the gradient both laden and unladen, on which their safety vehicles can be operated safely.
- Stop blocks or other suitable barrier will be used where tipping into excavation has to be carried out.
- All persons to wear hi-viz vests/jackets.

13.26 Compressors

Hazard

- Compressed air
- Towing
- Airlines and equipment

Risks

- Compressed Air is delivered at high pressure and if it enters the body it can rupture interior organs and cause death.
- Risk of serious injury from flailing hoses or connectors if they become disconnected.
- Connectors disengaging.
- Risk of eye injury from airborne particles when compressed air is used to blow out dust and the debris.
- Risk of noise induced hearing loss whilst working in close proximity to where compressed air tools are operating.
- Vibration white finger.

Risk Assessment Prior to Controls*: High *Risk Assessment After Controls: Medium

Controls

- Any form of horseplay is strictly forbidden where compressed air is concerned.
- Air compressor cylinders must be tested and certified every six months.
- Air hoses will be properly connected and have safety chains fixed in position.
- Air hoses will be kept clear of traffic, and will not be driven over.
- Air hoses will be kept clean to enable them to be inspected regularly.
- Eye protection will be worn where there is a risk from airborne particles.
- Ear protection will be worn when operating or working near compressed air tools.
- Rest periods for operators of pneumatic tools and equipment.

Operating Procedures for Compressor

Preparing to Tow

- Check the compressor draw bar and towing hitch carefully for damage and security.
- Only tow the compressor with a vehicle capable of safely towing the weight of the compressor, and that its towing hitch is in good condition and compatible with the compressor.
- Reverse the vehicle to the compressor: set the handbrake on the vehicle before getting out of the cab.
- Manoeuvre the compressor to connect the coupling. Use the jockey wheel/stand to avoid strain.
- If the coupling is of the pin and eye type, the pin must have a suitable R- Clip to prevent it jumping out.

- Fit security chains, the end fixed to the vehicles must be attached to a designated fixing eye of hook.
- Connect the electric cable and check that the warning lights and signals work on the compressor.
- The vehicle registration must be properly displayed at the rear of the compressor if travelling on a public road.
- Before moving make sure that the jockey wheel/stand are up and the compressor handbrake is released.

Using the Compressor

- Before standing check the compressor for fuel, oil and water.
- Check for any visible damage.
- Check with Foreman/Supervisor for any known information on buried cables and services. Proceed with caution.
- Only use air-lines that have been supplied with the compressor.
- Do not use damaged air-lines check connections are down correctly.
- If hoses become damaged during use, stop using them.
- Close all valves before starting and connecting air-lines.
- Blow out air-lines before connecting tools to reduce condensation carry over.
- Shut off pressure valve before changing tools.
- If operating a breaker or other tools for a long period, vibration can cause fingers to tingle painfully. Stop work occasionally and exercise fingers. Keep hands warm.

Unhitching and Parking

- Drive towing vehicles as close as possible to where compressor is required.
- Set hand brake on vehicle before leaving the cab.
- Lower jockey wheel/stand before unhitching.
- Move compressor into final position and apply hand brake.
- Always park the compressor on a hard level ground.
- Choke wheels.

P.P.E

- Hi –Viz vest.
- Safely boots.
- Gloves.
- Ear protection.
- Eye protection

13.27 Working at Height

Hazards

- Falls of persons from height.
- Falls of materials or articles from heights.

Risk Assessment Prior to Controls*: High *Risk Assessment After Controls: Medium

Control Measures

- Only persons who have received the site induction will be allowed to work on site.
- Sufficient materials and labour will be available on site to protect edges and openings.
- All edges, from which it is possible to fall, will be protected with guardrails and toe-boards. Middle rails will also be fitted where practicable.
- All guard-rails (and their uprights) will be of adequate strength and fitted so as to bear on the inside of the upright support where there is no proprietary support fitted.
- Guardrails will be between 950-1200mm high with toe-boards not less than 150mm. The space between any toe-board or barrier and the lowest guardrail above it shall not exceed 800mm.
- The persons fitting the protection will use harnesses attached to secure anchor points at all times*****. It shall be strictly prohibited to work within two metres of the edge without being clipped to an adequate anchor point.
- The site supervisor must supervise all work at height.
- Personnel required to wear/use harnesses will receive instruction on their proper use and maintenance. Specifically – all must have received the toolbox talk on Harnesses.
- Site management will ensure that work is planned so that safe access/egress and working places are provided for operatives to work at heights.
- External works and other exposed areas will not be permitted when high winds or gusting is experienced. Roof surfaces and access routes must be checked at the commencement of work after heavy rain, frost or snow.

- Where edge protection is not available safety harnesses must be used and a Method Statement prepared for the works and a detailed rescue plan put in place outlining the rescue at heights procedures to be implemented in the event of a fall and subsequent suspension. All operatives required to use safety harnesses must be trained in the use of safety harnesses and supplied with certified gear fit for the intended use.

- Materials must not be tipped, dropped or thrown down from a height other than by means of a chute or other suitable safe methods.

- Effective cordons must be fitted at lower levels to deter non-essential personnel in some areas e.g. steel erection, scaffolding, etc. In a few exceptional cases where this is not practicable (e.g. steeple-jack style operations on stacks) operatives may be required to attach tools or small articles to chords so that they cannot fall.

- Portable access equipment, such as trestles, stepladders and tower scaffolds, will not be positioned at locations where operatives are at risk of falls.

13.28 Road / Concrete Saw

Hazards

- Dust.
- Noise.
- Rotating blade.
- Vibration.
- Fire.

Risks

- Ill health from dust.
- Injury from coming in contact with Saw Blade.
- Injury due to incorrect fitting of Blade.
- Injury due to machine striking against persons.
- Vibration white finger.

Risk Assessment Prior to Controls*: High *Risk Assessment After Controls: Medium

Controls

- All dusty situations will be adequately watered.
- All guards will be in position before machine is started
- Manufacturer instructions will be rigidly followed when fitting blade.
- All adjacent personnel will be alerted to keep clear of saw.
- All operators adequately trained and competent to mount blades and operate saw.
- It is advisable to use water as a means of dust suppression.

13.29 Plant Maintenance

Hazards

- Entrapment
- Unprotected bodies
- Fire/explosion
- Vehicle movement
- Substances
- Tyre replacement
- Battery acid
- Unserviceable tools
- Electrical power tools and equipment
- Oil/diesel.

Risks

- Poor access or egress to machinery.
- Machinery being started up whilst under repair.
- Electric shock or burns.
- Hydraulic drums or body of vehicles are not securely propped during maintenance.
- Injury from inflating or changing tyres.
- No smoking rules – not followed.
- Use of worn or damaged tools.
- Caught in moving parts.
- Exposure to hazardous substances (skin/ ingestion).
- Run over by machinery or vehicle.
- Burns from battery acid.

Risk Assessment Prior to Controls*: High *Risk Assessment After Controls: Medium

Controls

- Only authorised personnel are allowed carry out maintenance work.
- Keys will always be removed from ignition during maintenance work.
- All hydraulic arms must be securely propped during maintenance.
- Body of machines will be securely propped to avoid entrapment.
- Mechanical lifting aids will be provided where practicable.
- All machines will be allowed to cool down where a risk of burns exists.
- Maintenance records are to be maintained.
- PPE to be worn while working on batteries.
- Vehicle parked on level ground.
- All guards in position secure and maintained.
- Barrier creams/gloves.
- Battery charging area ventilated.

13.30 Hazardous Chemicals / Substances

A number of hazardous chemicals, such as fuels, lubricants, cements etc are used in construction projects and these constitute a serious hazard if not controlled.

Risks

- Risks of injury or damage to Health if hazardous substances or chemicals are inhaled, ingested or absorbed through the skin during storage, transportation or usage.
- Risk of injury if precautions set out in Material Safety Data Sheets are not followed.

Risk Assessment Prior to Controls*: High *Risk Assessment After Controls: Medium

Controls

- Safe alternative substances will be used where possible.
- All hazardous substances or chemicals will have Material Safety Data Sheets provided by the supplier.
- Every employee likely to be exposed to any hazardous substance will be familiarised with the risks attached to each one and the precautions required.
- The necessary personal protective equipment and clothing will be provided and used.
- All chemicals and hazardous substances will be stored in the appropriate manner and containers clearly marked with contents.
- Good hygiene practices are essential following handling of chemicals.
- Health surveillance where required.

Guidelines for the Safe Use of Chemicals

- Use the safest chemical possible for the job & read the label and safety sheet before opening the package/drum.
- Take special measures prescribed before using the chemical.
- Know emergency procedures to be taken in the event of an accident.
- Avoid inhalation of all vapours and dusts be ventilation or extraction equipment or by working outdoors. This is especially important for toxic, harmful or irritant chemicals. Vapours of flammable chemicals must be contained.
- Prevent contact with eyes. Where there is a risk of contact with eyes, wear

protective goggles. This is especially important for corrosive and irritant chemicals.

- Prevent contact with skin, as far as possible, if necessary, use suitable protective gloves. This is important for corrosive, toxic, harmful or irritant chemicals. It must be noted that solvents may penetrate protective gloves to reach the skin following prolonged contact.
- Do not eat, drink or smoke when working with chemicals, or let chemicals contact food. This is important for explosive, oxidising, flammable, toxic or harmful chemicals.
- Avoid contact with chemicals. Clean yourself and your working clothes. Goods hygiene is always recommended. This is especially important with toxic or harmful chemicals.
- Do not dump chemicals on the soil or into a sewer. Dispose of used chemicals as recommended by the manufacturer.
- Store all chemicals in a closed, labelled container in a cool, ventilated space or as prescribed by the manufacturer. Segregate all incompatible chemicals to avoid undesirable consequences in case of accidental spillage.

13.31 Lifting Operations

Hazards

- Overloading the lifting equipment
- Operated be untrained individuals
- Signaller / banksman untrained

Risks

- Collapse of lifting device
- Overturning of lifting device
- Failure of rigging equipment
- Falling objects
- Raised materials hitting structures/objects/persons/overhead cables.

Risk Assessment Prior to Controls*: High *Risk Assessment After Controls: Medium

Control Measures

- A method statement for lifting operations will be supplied to the site management on request.
- Only authorized, competent persons will operate a crane or lifting device on site. The training requirements for operating a crane or lifting device is for the operator to hold an adequate SOLAS Construction Skills Certification Scheme card for a crane or that lifting device, or equivalent programme approved by a body in another jurisdiction recognised by SOLAS as its equivalent.
- Level, compact ground will be supplied for set up of lifting equipment, however the operator must satisfy himself that the set up area is adequate and will support the lifting equipment during operations.
- Relevant certificates of testing and examination will be provided with all lifting equipment (both lifting device and rigging equipment i.e. slings/wire ropes etc.
- A trained and experienced person will supervise the lifting operations.
- A trained banks-man (who holds a relevant C.S.C.S. ticker or its equivalent recognised by SOLAS) will guide the lifting operations, two way radios will be used where visibility is obstructed.
- A trained slinger /rigger (who holds a relevant C.S.C.S. ticker or its equivalent recognised by SOLAS) will rig/secure lifts prior to directing the crane to lift.
- The operator, prior to setting up the lifting equipment, will inspect the work area.
- To ascertain the location of any overhead cables, services or structures (including scaffolds) in the lift area.
- Under no circumstances must lifts be temporarily placed on scaffolds or other structures unless they are erected / constructed to support the lift.
- Loading towers must be constructed by experienced and trained persons and erected in accordance with the manufacturer's instructions.
- Operators of lifting devices must be aware of impact loads applied during operations.

13.32 Welding & Brazing

Hazards

- Fire
- Explosion
- Exposure to fumes
- Burns
- Eye injury

Risk Assessment Prior to Controls*: High *Risk Assessment After Controls: Medium

Control Measures

- The Project Supervisor for Construction will issue a Permit to Work for most hot work

- The purpose of a Permit to Work is to ensure that adequate fire precautions have been taken prior to work commencing, e.g. fire extinguishers and fire blanket present, and all combustibles removed and heat shields positioned where appropriate.

- Flashback arrestors will be fitted to all oxygen and fuel gas lines.

- The immediate area will be cordoned off to prevent access to unauthorised persons.

- Gloves, safety boots, overalls, safety helmet or visor, and eye protection will be worn at all times during welding operations.

- Gas cylinders will be on trolleys or secured in an upright position during use, and securely stored away externally after use. Cylinders must be kept 3m or more from any combustible material.

- The operator will ensure that there is adequate ventilation during standard operations. Detailed risk assessments/method statements will be required to determine the necessary precautions during non-routine work e.g. in confined areas or any work on stainless or galvanised material.

13.33 Portable Generator

Hazards

- Fire
- Exposure to noise
- Manual handling injuries

Risk Assessment Prior to Controls*: High *Risk Assessment After Controls: Medium

Control Measures

- The generator must never be sited in an enclosed space where carbon monoxide fumes can build up. The generator must always be located in a well ventilated area.

- All personnel using the generator must be adequately trained in its safe use.

- Personal protective equipment must be worn e.g. ear protection and gloves when handling diesel, or petrol.

- Where it is not possible to avoid manual handling, appropriate steps need to be taken to minimise the risk.

- The generator will undergo regular documented inspections and any noted defects corrected. All cables will be checked for faults and defects corrected.

- Fuelling of the generator must be preformed in a well-ventilated area. A spill tray must be provided to facilitate the refuelling of the generator.

- While the generator is in operation, the operator must observe for any fuel leaks. Fire equipment must be located near operation at all times.

13.34 Temporary Electrics

Hazard:

- Live electrical current
- Trailing cables across access routes.
- Damaged equipment and cables.
- Surface water on site.
- Overloading sockets and cables

Risk:

- Risk of serious injury or death from electric shock.
- Risk of injury from tripping over training leads.
- Risk of mechanical damage to cables trailing across site access ways and roads.
- Risk of burns from contact with live electrical equipment.
- Risk of fire from overloaded equipment or cables.

Risk Assessment Prior to Controls*: High *Risk Assessment After Controls: Medium

Control Measures

- All temporary electrical distribution cables and equipment must be 110V and wired into and earth leakage circuit breaker. (ELCB)

- All sockets are yellow waterproof sockets and are in good condition without any exposed wires and wired by a competent electrician.

- All transformers and distribution boards are in good condition with all trip switches working properly.

- A competent person does a weekly check on all equipment.

- Damaged cables are replaced immediately and no temporary joints used.

- Cables do not trail across access walkways, doorways, and stairs etc. causing trip hazards.

- Cables crossing site roadways are buried in cable ducting.

- Electrical system is wired through miniature circuit breaker (MCB) to prevent current overload.

- All power is isolated at finishing time.

13.35 Temporary Lighting

- Poor lighting to work areas.
- Poor site lighting.

Hazard

- Risk of injury from trips or falls.
- Risk of injury from walking into unseen hazards.

Risk Assessment: *Low*

Control Measures

- All work areas must be well lighted.
- All access walkways are well lighted.
- Adequate lighting is provided where necessary for safe access around site.
- All temporary lighting is 110 voltages.
- All lights and cables are in good condition and prevented from coming in contact with surface water.
- All lighting are wired through an E.L.C.B. and M.C.B. (see temporary electrics)

13.36 Flammable Liquids and Flammable Gases.

Hazards

- Fire.

Risk Assessment Prior to Controls*: High *Risk Assessment After Controls: Medium

Control Measures

- Flammable liquids will be stored and used in accordance with current legislation and good practice.
- Only the amount required for that day will be brought to the workplace.
- Fire points will be set up at the workplace and at storage area.
- Adequate escape routes, clearly sign posted and lit will be maintained.
- Workers will be instructed in the safe use of these materials.
- Flammable liquids will insofar as is reasonably practicable be protected form sources if ignition.
- Smoking is prohibited while working with flammable liquids.
- Gas cylinders will not be stores within site buildings such as offices, canteens, drying rooms etc.
- Cylinder valves will be fully closed when not in use.
- Cylinders used for gas welding will be stored and moved on trolleys.
- Gas cylinders should not be left unattended when there is a risk of damage by vehicles or machinery.
- Workers will be instructed on emergency procedures.

13.37 Hand and Power Tools

Hazards

- Sharp edges.
- Electric power.
- Flying materials, dust etc.
- Hot surfaces.
- Trailing cables.
- Rotating chucks or blades.
- Noise.

Risk

- Risk of injury to hands and other body parts from sharp tools or edges.
- Risk of muscular strain to wrists and hands.
- Risk of injury to eyes from flying materials such as sparks, filings or dust.
- Risk of minor burns from hot surfaces.
- Risk of electric shock from unearthed or un-insulated tools.
- Risk of tripping over trailing cables.
- Risk of noise induced hearing loss from over exposure to noisy

Risk Assessment Prior to Controls*: High *Risk Assessment After Controls: Medium

Control Measures

- Sharp or pointed tools and equipment are stored and carried safely in toolboxes or tool belts.
- Any defective tools or equipment are replaced immediately.
- All electrical equipment with metal casing must be properly earthed and all other tools are double insulated.
- All cables are kept tidy and away from access routes and walkways.
- All personal protective equipment such as safety goggles, earmuffs and gloves are worn appropriate to the equipment used.
- All rotating blades or discs are guarded and guards maintained in good condition.
- Power supply is disconnected before making any adjustment, changing any disc or blade.
- Power tools are all 110 volts
- Manufacturer’s instructions are read and fully understood before operating.
- All tools and equipment are immobilized or kept out of reach of children.

13.38 Angle Grinders and Consaws

Hazards

- Rotating disc or blade
- Abrasive disc.
- Flying sparks, dust or materials.
- Noise.
- Disc or blade not correctly fitted.
- Incorrect disc use
- Trailing cables
- Electrical power.

Risk

- Risk of injury to hands or other body parts due to contact with rotating blade disc.
- Risk of disc shattering due to incorrect mounting, over speeding or incorrect use of disc (using a cutting disc to grind or visa versa)
- Risk of disc or blade being thrown off due to incorrect mounting.
- Risk of eye injury from sparks, dust or flying materials.
- Risk of injury to hands and other body parts from hot sparks.
- Risk of noise induced hearing loss form over exposure to high noise levels.
- Risk of injury to other persons working in the area close to noise, sparks, dust or other materials.
- Risk of fire from hot sparks.
- Risk of tripping over training cables.
- Risk of electrical shock from exposed wires.

Risk Assessment Prior to Controls*: High *Risk Assessment After Controls: Medium

Control Measures – Ensure that:

- All persons operating angle grinders are fully instructed in safe mounting of blades and discs and safe operating of machine.

- Equipment is in good repair and defects are repaired and faulty equipment replaced.

- All guards are fitted and maintained in good condition.

- All personal protective equipment such as goggles, face shields, boots, gloves and overalls are worn when necessary.

- The correct disc is used for whatever type of material is being cut or worked on.

- The discs or blades are mounted correctly, follow all manufacturers' instructions.

- The mounting nuts are not damaged and in good condition, replace if necessary.

- The correct mounting tool or spanner is used and never over tighten as the wheel will tighten itself as it spins.

- The spindle wheel on the machine and disc are clearly marked and match up with each other.

- A grinding disc is never used for cutting or visa versa.

- The grinder is used at the correct angle and doesn't get chocked causing excessive stress to the blade.

- Care is taken to where hot sparks or flying material will go. Move any combustible material away and warn other workers in the area.

- Hearing protection will be used where excessive noise is experienced.

- Any trailing cables are kept tidy and away from access routes or walkways.

13.39 Kango Hammers – Use of

Risk

- Electric shock
- Burns
- Tripping over cables
- Amputation due to entanglement
- Noise induced hearing loss
- Vibration Induced white finger

Risk Assessment: Medium

Control Measures

- All portable tools on site will be 110V or less
- Ensure only a trained competent person operates Kango Hammer. It must be maintained on a regular basis by a competent person. Maintenance Certificates must be completed and readily available.
- Step down transformers will be used where the supply exceeds this.
- Transformers, plugs, sockets, leads must be to the latest standards and in good condition.
- All cable connections will be properly made.
- All flammable materials will be kept a safe distance from electrical equipment is use.
- Defects in electrical equipment will be reported to the foreman who will remove the defective item from the location for repair.
- Only competent people will attempt to repair or alter any electrical equipment.
- Cables will be positioned so as not to cause trip hazards.
- Built in safety devices must not be interfered with and where any of these devices are missing or defective, the machine should be taken out of service until repairs are carries out by a trained competent person.
- Portable electrical tools should be used and maintained in accordance with manufacturers specifications.
- Operators will not wear loose clothing.

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13.40 Works Adjacent To Live Traffic

Hazards

- Pedestrians in contact with site plant or vehicle on public road
- Site Worker in contact with site plant or vehicle on public road
- Motor Traffic Accident-between and site plant on public road
- Dust problems
- Loose chippings on public road

Risk Assessment Prior to Controls*: High *Risk Assessment After Controls: Medium

Safety Precautions and Controls

- Ensure that construction plant does not cross the public road without temporary traffic lights or flagmen present.

- For works on or near a roadway ensure a Traffic Management Plan is drawn up and all advance warning signage is positioned in accordance with Chapter 8 of the Department of Transports Temporary Signs Manual.

- All persons setting up a traffic management plan must be in possession of a SOLAS C.S.C.S Signing, Lighting & Guarding course.

- Ensure road surface at crossing is clean and free from loose material and mud

- If temporary traffic lights are used check that they are timed correctly keeping in mind traffic flow on the road and site in addition to the length of public road being crossed

- If flagmen are employed ensure that they receive instruction regarding their duties and receive safety induction particular to their task before they start work.

- All operatives based on a public road must wear high visibility garments, helmets and safety boots as a minimum requirement.

- Nets to be used to prevent objects falling from trucks.

13.41 Use of Tractor

Hazard:

- Brake failure leading to collision or overturning
- Overturning due to excessive speed bad ground, sudden braking & operating on slopes, environmental factors
- Slips/ falls when climbing into or out of a cab
- Heat, noise, vibration, high pressure fluid, electrical hazards from power transmission
- Poor visibility from operating position
- Contact with overhead cables when tipping
- Unauthorised use
- Exhaust fumes when used in confined areas
- Falling from a height

Risk Entanglement, falls resulting in cuts, fractures and abrasion possible fatality

Risk Assessment Prior to Controls*: High *Risk Assessment After Controls: Medium

Controls

- Ensure that only a trained competent person operates tractor using a safe system of work. All controls should be in working order and clearly marked. A tidy cab allows safer and easy use of the controls. Always ensure that the tractor can be started off the key and the fuel stop is in place. The brakes should be in sound working order, balanced and interlocked, except when being used for fieldwork. A properly functioning handbrake is a must. The PTO should be turned on and off correctly and the hydraulics should be functioning correctly. The trailer hitch points of both tractor and trailer must be free of wear. All mirrors, indicators, lights and wipers should be in good working order as required by the Road Traffic Act. Remove the key, set the brakes and lock the transmission and lower implements before leaving the tractor. NEVER allow another passenger or child into the cab while the tractor is operating. Install a compact fire extinguisher and first aid kit in the tractor. Never start or work a tractor or other piece of machinery in a closed shed or garage. One of the exhaust by products is carbon monoxide which can be deadly.

- Ensure that only a trained competent person operates machinery. All work equipment must be maintained on a regular basis. Maintenance records must be completed and readily available. Ensure that all guards and safety devices are in place and in good working order. Follow all manufacturers' instructions when refilling with fuel. Ensure that the engine has cooled down sufficiently (to reduce the risk of fire) and also refilling should be done in a well-ventilated area to allow vapours to disperse in the air. Never smoke when refilling.

- In accordance with the Safety, Health & Welfare at Work (General Application) Regulations, 2007 as of 2007 all work equipment must meet the requirements of Regulation 30:

- 'An employer shall ensure that (b) in the case of work equipment which is exposed to conditions causing deterioration liable to result in a danger to safety and health-
- Periodic inspection and, where appropriate, testing is carried out,
- Special inspections are carried out when exceptional circumstances arise which are liable to make the equipment unsafe, including modification work, accidents, natural phenomena, or prolonged activity, and
- Deterioration is detected and remedied in good time.
- In addition, the results of inspection and all maintenance records must be recorded and kept on file for five years and access to those records must be provided on request to an inspector.

13.42 Trailer Attached to Tractor

Hazard

- Brake failure leading to collision or overturning- tractor not able to slow the load in the event of the braking system malfunction on a gradient.
- Overturning due to excessive speed bad ground, sudden braking & operating on slopes, environmental factors
- Slippage of load due to load been unstable
- Machine load too high, contact with obstructions
- Load being carried exceeding the Safe Working Load of the dump trailer.
- Poor visibility from operating position
- Contact with overhead cables when tipping
- Unauthorised use

Risk Jack-knifing of trailer and tractor resulting in serious injury, commercial damage possible fatality.

Risk Assessment Prior to Controls*: High *Risk Assessment After Controls: Medium

Control

- Only a trained competent person should operate trailer behind tractor.
- Heavy trailed implements and loads can cause serious accidents if not fitted with an adequate braking system. Never exceed the maximum weight permitted on the drawbar. Never exceed the maximum on the drawbar by the manufacturer.
- Always ensure that the load is balanced. Add weight to the front, rear or side of tractor to counteract the loss of stability.
- Reduce speed especially with heavy loads and when cornering with laden trailers. Always ensure regular maintenance, making sure that heavy trailed implements and trailers are fitted with good brakes and brakes checked on a regular basis and all maintenance records recorded.

13.43 Weil's Disease

Hazards

- Exposure may be fatal if adequate precautions are not adhered to.

Risk Assessments: Medium

Control Measures

- Weil's disease is caused by contact with rats' urine or water contaminated by rats. The infection may enter the body via damaged skin or by accidental ingestion through the nose or mouth. The disease may be fatal and the symptoms are similar to influenza.

- Areas, which may pose a risk, are drains or any other areas where rats may be found. Particularly near watercourses.

- Persons working in likely contaminated areas should ensure that any cuts or scratches are carefully cleaned and covered.

- After contact with raw water, the hands and forearms should be thoroughly washed especially before eating; drinking or smoking and persons should avoid rubbing their nose, eyes or mouth during work.

- Wherever possible, protective clothing such as gloves should be worn to avoid contact with infected areas.

- Operatives are reminded to inform their G.P. of any influenza-like symptoms and the nature of their job.

- Adequate washing facilities will be provided on site.

13.44 Site Dumper

Hazards:

- Defective machine
- Unsafe systems of work
- Driver error

Risks:

- Serious injury, commercial damage & possible fatality

Risk Assessment Prior to Controls*: High *Risk Assessment After Controls: Medium

Controls:

If you are doing a risk assessment you need to consider the following:

- The work activity/task;
- The equipment to be used;
- The duration of the work;
- The location of the work activity, i.e. Presence of hazards such as excavations, underground services, overhead power lines, other plant and equipment;
- The working environment, e.g. Weather conditions, lighting, location of the public;
- Condition and stability of existing work surfaces; physical capabilities of the workers.

SAFE DRIVER

The following needs to be taken account by management and drivers when operating site dumpers:

- Security – The dumper should only be operated by trained, competent and authorised persons. The key shouldn't be left in the machine when the operator is away from it.
- Training – You must be competent to operate a dumper in the construction industry and hold a current CSCS card in relation to operating a site dumper. The operator should also be given induction training on each site to inform him/her of any site specific hazards, traffic routes, other ongoing works at the particular place of work.
- The skip of the dumper should never be overfilled or overloaded. This could result in materials falling out and injuring somebody, or in the driver's view being obstructed, or in the machine becoming less stable.
- Seat belts must be worn when operating site dumpers and suitable Roll Over Protection
- (ROPs) must be in place. Fatalities have occurred in the past which directly related to not wearing a seat belt.

- Only transport suitable loads. Dumpers are designed to transport loose fill materials such as earth and small rocks. Objects such as pipes etc. should not be laid across the dumper skip and transported.
- Ensure machines are operated at an appropriate speed. Site dumpers being operated at too high a speed have led to serious accidents.
- Stability – where possible ensure the ground is reasonably level prior to operating dumper.
- Avoid working on sloped ground where possible. When this is not possible then consult the manufacturer's manual to ensure you are working within the safe capacity/limitations of the machine.
- Operators should be seated when operating machine with their seat belt on. Operators should put the dumper in neutral gear, engage the handbrake and dismount the machine when the skip is being loaded. Never operate the dumper from a standing position.
- Nobody should operate plant machinery if under the influence of alcohol or drugs.
- Never allow anybody ride on the step of the dumper as there is a high risk they could fall and be seriously injured.
- Always be aware of other machine operators and pedestrians in the vicinity of your works.
- Report any defect with the machine as soon as it is noticed.
- Mobile phones should not be used when driving site dumpers.

SAFE SYSTEMS OF WORK

- Safe systems of work must be in place. Risk assessments must be completed for tasks and appropriate controls highlighted to relevant personnel.
- Ensure adequate measures are taken to prevent driving too close to an excavation edge causing the ground to subside.
- The weather conditions need to be taken into account. Snow and ice will greatly effect the stability and control of machines. Wet weather can lead to ruts being formed in soft ground which can later make a dumper unstable.
- Ensure pedestrians and vehicles are segregated where possible and any interfaces are controlled.
- Ground should be levelled where possible.
- Stop blocks, chocks or other such devices should always be used when tipping materials over embankments, excavations or into water to prevent the dumper overrunning the edge or overturning.
- Adequate supervision and monitoring of safety rules must be in place.

SAFE MACHINE

The first safety critical decision regarding operation of a site dumper is in the selection of the machine for the task. Always ensure that it is suitable for then

task being undertaken as dumpers can vary greatly in size, capacity and stability. Always follow manufacturer's instructions when selecting and operating dumpers.

Once the machine selection is made then it is essential to ensure that the plant machinery being used is in safe working order. Many accidents are caused due to defects with safety critical components of plant machinery. Common defects which occur on site dumpers include:

- Drivers seat becoming detached from body of machine.
- Seat belts not working or missing.
- Handbrakes and brakes becoming ineffective.
- Flashing beacons and warning devices becoming defective.
- Tipping controls becoming defective.
- Inadequate ROPs fitted.

The Safety, Health and Welfare at Work (Construction) Regulations 2013 requires the following devices to be fitted to site dumpers:

In order to ensure safe machinery, systems must be in place to check for defects and to maintain the machine. A daily prestart check on the basic controls should be completed by the operator as well as a periodic thorough check by a competent person. The dumper must be serviced as required (see manufacturers manual). All dumpers should be fitted with ROPs conforming to the relevant standard (EN474-6:2006, BS EN1351 0:2000 & BS EN 3471:1994). Tyres must be checked for defects regularly and should be kept at the appropriate tyre pressure.

13.45 Use of Work Ladders – Access into Excavations)

Hazards

- Risk Of Injury From Falls
- Contact with electrical sources
- Collapse

Risk Assessment Prior to Controls*: High *Risk Assessment After Controls: Medium

Safety Precautions and Controls

- Ladders to be used for short duration work only.
- Ladders should be angled at the ration of 4 vertical to one horizontal, or never greater than 75 degrees (4:1)
- They will be secured at the upper point, and correctly 'footed' with stability at the bottom end.
- At all times persons using ladders will maintain 3 point contact while working off or using ladders for access/egress.
- If been used as access, the ladder must extend at least one metre above a stepping off point.
- Ladders must be in good condition, unbroken, rungs intact, timber ladders never painted so as to conceal possible defects
- When working with ladders they should be moved occasionally so as to prevent overreaching.
- Always face the ladder when ascending/descending.
- Beware of wet grassy rungs.
- Always takes care when carrying ladders not to touch or make contact with overhead cables, take care when carrying so as not to obstruct path of vision, keep ladders (particularly aluminium) away from overhead electrical cables as arcing make take place.
- When using ladders ensure ‘vertical indicator’ is angled correctly
- Store ladders away properly after use.

14.0 COMPANY VEHICLES - HAZARD AND SAFETY INFORMATION

All of Fima Developments Ltd vehicles must be provided with a fully stocked first aid kit and a 2kg fire extinguisher as a minimum. All maintenance records and statutory certificates must be maintained and updated when required.

14.1 General

Hazard: Unauthorised access
Risk: Unauthorised use resulting in physical injury/property damage
Class: **High**
Control: Ensure all transport vehicles are secured to prevent unauthorised access while not in use, particularly during night hours.

Hazard: Collision with pedestrians and other vehicles.
Risk: Serious personal injury and property damage
Class: **High**
Control:

1. All drivers must be fully licensed and provided with adequate insurance for the vehicle they are driving for Fima Developments Ltd.
2. Loss of license for staff in job specifications that require a full license may result in dismissal.
3. Make regular inspections of your vehicle for obvious defects and ensure any defects are rectified without delay.
4. Drive in a safe manner at all times and be particularly careful when driving on sites to consider the condition of temporary access roads or roads that are under construction and being used for access purposes.
5. Ensure before reversing that there are no obstructions or people behind the vehicle.
6. Report all accidents or damage, however minor to the company secretary.
7. Ensure any traffic violations you are involved in which result in yourself being prosecuted are reported to the company secretary.
8. Ensure your vehicle is serviced in accordance with the manufacturer's requirements.
9. Check lights, tyres, oil, water, windscreen wiper and washer reservoir etc. at least once a week.
10. Any special safety items such as, reversing audible alarms, shall also be checked to ensure proper operation. Note all defects and report at once to your supervisor so repairs can be made immediately.
11. Do not drink alcohol or take medication that could affect driving ability before driving a vehicle.
12. Ensure that the vehicle is only driven by those authorised to do so.
13. Ensure you always drive in a safe and courteous manner.
14. Personal belongings or any company property must be locked in the boot when parking and never left in the car overnight unless in a locked op garage.
15. Ensure that the appearance of the vehicle is maintained at an acceptable standard and kept clean both inside and outside.
16. The glove compartment of each vehicle shall contain applicable accident reports and a copy of the insurance company accident

investigation kit. All drivers shall be instructed in the proper method of reporting accidents.

17. All company vehicles should be provided with a travel first aid kit and necessary equipment for breakdowns, i.e.: hazard triangle, torch, puncture repair kit, etc. or have immediate access to roadside service.
18. An annual audit should be undertaken to ensure company vehicles are adequate for the work to be carried out, have adequate tyres, clear windscreens, are kept clean, and all paperwork (Licenses, etc.) is updated annually.

Hazard: Jacking up vehicles –trolley jacks
Risk: Fall from height resulting in serious injury and possible fatality, entrapment under car.
Class: **High**
Control:

- Vehicle jacks are standard items of lifting equipment. While many possess built in safeguards, their simplicity and mobility may induce carelessness in those operators using them. Certain conditions must be met to ensure jacks are used safely when lifting vehicles.
- Under no circumstances should any person work beneath a vehicle supported only by a jack or jacks.
- The correct jack for the job should be used. It should be capable of taking the load of the vehicle to be lifted and be applied to the correct part of its underside.
- The jack should only be used to raise the vehicle prior to inserting the appropriate stands, chocks. It should not be relied upon as the sole support for work underneath or close beside a vehicle.
- Jacks should only be used on firm, level ground.
- Wheels of the vehicle still in contact with the ground should be chocked.
- Routine checks and maintenance should be carried out to ensure the jack is in good working order
- Personnel must be trained in their correct use.

Hazard: Stress and Fatigue
Risk: Minor accident to major collision
Class: **High**
Controls:

- An employer shall not require an employee to work for a period of more than 4.5 hrs without allowing a break of at least 15 minutes.
- An employer shall not require an employee to work for a period of more than 6 hours without a break of at least 30 minutes.
- Provisions must be made for drivers to take sufficient breaks to alleviate stress and fatigue.
- An employee shall be entitled to a rest period of not less than 11 consecutive hours in each period of 24 hours during which s/he works for his/her employer.
- An employee may not work more than an average of 48 hours in each period of 7 days.

- See Organisation of Working Time Act, 1997 for detailed requirements.

Hazard: Roadside Breakdowns
Risk: Personal Injury, Vehicle/Pedestrian Collision
Class: **High**
Control:

Basic safety precautions and rules of the road must be adhered to. Wherever possible, the vehicle should be taken to the garage or moved to a place of relative safety.

Vehicles should be clearly visible and easily distinguishable by both day and night. The use of reflective markings is of great benefit.

Each Vehicle Should Be Equipped With:

- Protective clothing including high visibility reflective coats/vests.
- A fully stocked First Aid Kit in accordance with the Safety, Health & Welfare at Work (General Application) Regulations, 2007.
- Traffic Cones
- Lighting for illuminating the work area
- A correct vehicle jack
- Axle stands

Any roadside breakdown must be reported to the employer as soon as possible.

Only staff who have been given specific training on how to undertake roadside breakdowns should carry out any repairs. Such staff should wear clean reflective clothing throughout the operation and particular care should be taken when working on the offside of the vehicle.

The service vehicle should be placed between the operative and the oncoming traffic at least 20 to 25 ft away. It should if possible, be parked at an angle with its nose into the nearside of the road with the steering wheel turned to the left on full lock. Where possible, advance warning signs and cones should be used.

On motorways and trunk roads, where the vehicle is in a dangerous position, or when a dangerous load is being carried, the police should be informed as well as the employer.

14.2 Deliveries

Hazard Vehicle movement
Risk Bodily injury, damage to property and machinery, fatality
Class **High**
Control Implement a safe system of vehicle movement to include methods of arrival loading unloading and departure. Ensure the provision of signage to warn staff and visitors of the hazard. There must at no time be any accessibility to any machinery by visitors or unauthorised personnel. Drivers are expected to remove keys from vehicles every time they leave the cab. This is to prevent unauthorised use and also to avoid accidental movement when unloading at the job site.

15.0 GENERAL SAFETY GUIDELINES

(A) MOBILE EQUIPMENT

- All surface vehicles must be operated in accordance with the rules of the Highway Code, by authorised, qualified drivers.
- The speed limit of 15 KMPH. must be adhered to at all times on site.
- Before any vehicle is operated the driver/operator must carry out a complete pre start-up check of the equipment. Operators are not permitted to drive vehicles that are not in a safe mechanical condition.
- Tipping units, high boom or mast machines must never move within 10ft (ten feet) of high- tension power lines.
- Vehicles must be brought to a complete stop before anyone is permitted to get on or off.
- No person is permitted to stand on the running board of a moving vehicle.
- Operators may not transport people in the box or bucket of their vehicle unless in cases of emergency.
- A signaller must guide vehicles, being backed into congested areas.
- When material is being transported on vehicles, the operator is responsible for the safe loading, securing and unloading of the material.
- Drivers of dump trucks should dismount and stand clear of the machine while the vehicle is being loaded.
- Any material, which projects beyond the front, rear or sides of the vehicle, must be properly" flagged".
- Walk around the machine before starting to make certain there are no people in the area.
- Sound horn at all exit and entry points.
- Always look in the direction of travel.
- Never travel with the bucket, forks or boom in the raised position.
- Beware of overhead obstructions and power lines, etc.
- When machinery is driven on public roads, it is essential that dirt be cleaned off the tyres.
- Never leave a machine unattended with engine running.
- In the case of excavators, loading shovels, fork trucks etc. always leave in neutral gear with bucket/forks lowered and parking brake on before dismounting from cab.
- Adhere to correct mounting and dismounting procedures.
- Never exceed rated safe working load (S.W.L.) of any machine.
- Always ensure that protective guards are secure and in place.
- Do not lubricate or repair the machine while it is running.
- Keep machine clean.

(B) LIFTING EQUIPMENT

- Make sure that all lifting equipment is tested, examined and certified every six months, by a competent person.
- The Safe Working Load must be clearly visible on all lifting equipment.
- All lifting equipment must be examined before use.

(C) LIFTING GEAR

- Always know the weight being lifted and also allow for the weight of the lifting gear.
- Always select lifting gear of adequate strength and ensure that it is properly marked.
- Ensure that end links, rings and shackles are riding freely on any hook on which they hang.
- Care should be taken when using collar slings to ensure that the lifting hook does not bear on the small end of the egg link.
- Use wood or other packing to protect the sling from any sharp edges on a load.
- Avoid shocks due to the load slipping or snatching in starting to lift. The stress on all lifting gear is much greater if the load is applied suddenly.
- Never exceed the Safe Working Load (SWL) of any piece of lifting tackle/gear.
- Never use excessively pitted, corroded or worn chains or slings. See to it that such equipment is cut up and discarded.
- Never use chain in which the links are locked, stretched or do not move freely.
- Never join chain by bolting or wiring links together.
- Never shorten a chain by tying knots - use an adjuster or keep an adequate supply of chains and slings of suitable lengths.
- Do not drag a chain from under a load or drop it from a height.
- Do not use the load chain of a block as a sling, by hooking round the load.
- Do not carry idle slings on the crane hook at the same time as the loaded sling.

(D) EQUIPMENT / TOOLS

- Do not use any equipment or tools unless you are authorised and qualified to do so.

- Before starting any machine makes sure that all personnel in the area are in the clear and that guards and safety devices are in place and properly adjusted.

- Never lubricate machinery while it is in motion unless moving parts are adequately guarded, or lubrication points are extended to remove all danger of contact with moving parts.

- Guards must be kept in place and must not be adjusted when machinery is in motion.

- When carrying out repairs under a cover plate always make sure that it is secure to prevent it from falling.

- Before working under or near equipment that has been hoisted or raised with jacks, block the equipment securely with wooden blocks.

- Equipment/machinery should only be operated by personnel who are fully trained and authorised to do so.

- Only authorised personnel may use a portable power operated tool or power-actuated tool.

- Gloves should not be worn when operating rotating equipment, e.g. lathes, drills, etc.

- Do not use defective tools and always use the correct tool for the job.

- Store tools properly when not in use.

- Edged or pointed tools must be stored in such a manner so that they do no cause a hazard to the safety of personnel.

- Always carry tools in a bag, on a belt or in your hands. Never carry tools in your pockets.

- It shall be the duty of every employer, to ensure that the necessary measures are taken so that equipment and tools are suitable for the work being carried or that they are properly adapted for that purpose and may be used by employees without risk to their safety and health.

(E) WELDING - CUTTING AND BURNING

Prior to carrying out any welding, cutting or burning operations, the following guidelines should be fully understood and implemented by those concerned in the operation.

- Welding, cutting or burning operations must only be carried out by a competent person.
- Before welding or burning may commence, the area must be inspected for fire hazards and if such hazards should prevail they must be rendered safe before work commences.
- The area must be equipped with a suitable fire extinguisher or water hose under pressure.
- Where applicable, in case of fire, the area must be inspected at regular intervals after the work has been completed.
- Welding cables should be put down in such a fashion, or supported overhead, so as to prevent walkways being obstructed and tripping hazards being caused.
- Suitable goggles or face shields must be worn during welding, cutting or burning operations.
- Welding jackets, spats and gloves must be worn in addition to normal protective equipment. Capes or shoulder covers must be worn when work is being carried out overhead.
- Safety footwear must be securely laced and tied.
- Welding, cutting and burning shall not be carried out in confined spaces, unless properly ventilated.
- If areas underneath where work is being carried are likely to be affected then these areas must be guarded or roped off.
- Others adjacent to arc welding areas shall be protected from welding flash by screens or shall wear welding goggles.
- When oxy-acetylene cylinders are not visible to the person carrying out the welding, cutting or burning, a stand-by person must be on guard at the cylinders.
- Clean down the equipment on which work is to be carried out.
- Fuel tanks that welding is to be carried out must emptied, cleaned and ventilated.
- Identify air intake and position yourself so that your back is facing this current of air and therefore blowing any fumes, which may be created, away from you. If this is not possible an exhaust system should be provided.

(F) ELECTRIC WELDING

NEVER USE A FLAME FOR TESTING LEAKS

- Electric welding units are to be used only in designated, dry locations.
- Never use pipe or electrical conduits for earthing purposes.
- Do not attempt to change the polarity switch when the equipment is under load.
- Never strike an arc on any type of gas cylinder.
- The disconnect switch must be open before plugging or un-plugging any arc welding equipment.
- Check cables for damage and have repairs carried out on any defective cables before work commences.
- When welding operations are being carried out above an area used by others the lower area must be barricaded off or physically guarded.
- Before leaving an area where welding has taken place the area must be inspected to make sure that there is no danger of fire.
- When the job is completed, roll up cables and hoses, pick up electrode stubs, pieces of plate, scrap, etc. and remove or suitably store them.

(G) WELDING, CUTTING & BURNING EQUIPMENT

Pressure Regulators

Always treat a regulator as a precision instrument. Do not expose it to knocks, jarring or sudden pressure surges caused by rapid opening of cylinder valves.

- Never use faulty regulators.

Hoses

- Only standard welding hoses should be used.

Blue for oxygen Red for acetylene
Do not expose hoses to heat, traffic, sparks, oil or grease.
Check Valves

It is essential that equipment is protected by such valves which are an automatic safeguard incorporating a non-return spring loaded valve. The purpose, being to prevent oxygen and fuel gases rising in the hoses.

- Close gas cylinder valves, remove regulators and replace protective cover when provided.

- When work is complete, or cylinders are empty, they should be so marked and returned to storage.

- Always stand to one side of the pressure regulator gauge when operating the valve on the cylinder and always open valves slowly.

- Check condition of cylinder, valves, regulators, couplings and hoses before use.

- Never allow grease or oil to come into contact with oxygen or gas fittings.

- Lighted cutting torches must never be left unattended.

- Leaking cylinders must be reported immediately.

- Jets of gas from a torch must never be used for cleaning or de-dusting.

- Isolate cylinders and purge all hoses on completion of use.

(H) COMPRESSED GAS CYLINDERS

- When gas cylinders are moved by hand they should be tilted and rolled along their bottom edge. Dragging or rolling on their side is prohibited.

- A bottle rack must be used when raising cylinders from one elevation to another, when being transported on vehicles or when moving during the normal course of operations. All gauges must be disconnected during transportation.

- All gauges must be disconnected during transportation.

- Cylinders must be secured in the upright position. They should not be dropped, struck, or be allowed to strike violently against other cylinders or objects.

- All cylinders must be stored in an upright position.

- Oxygen cylinders should be stored separately from acetylene cylinders, or other full gas cylinders, or be separated from each other by means of a fire resistant partition.

- Leakage around a valve or spindle will be apparent by hissing or in some cases by the smell of gas. Tightening the gland nut on the cylinder valve with a spanner can rectify this. If the leak persists then return the defective cylinder to the supplier.

COLOUR CODING FOR CYLINDERS

Oxygen (Oxy) – BLACK *Acetylene (Acy) – MAROON*

SAFETY STATEMENT FOR FIMA DEVELOPMENTS LTD

(I) HAZARDOUS SUBSTANCES

Prior to purchasing any chemical or other hazardous substance it is the responsibility of the buyer to ensure that:

- All relevant information on the product is available and that it is accompanied by a "Materials Safety Data Sheet" (M.S.D.S.)
- Personnel receive instructions on all chemicals and dangerous substances prior to use
- The product is approved for use

Substances can enter the body by:

- Inhalation
- Absorption
- Ingestion
- Injection

THE EFFECTS ON THE BODY MAY BE ACUTE OR CHRONIC

The substances may act as:

- Asphyxiates
- Irritants
- Blood poisons
- Narcotics (affecting the nervous system)

All employees who use chemical substances of any nature should always treat each chemical as a potential health hazard.

(J) CHEMICAL CONTAINERS

All chemical containers should be clearly labelled. Those labels should contain information relating to the following:

- Product name
- Composition of chemical
- Associated hazards, if any
- First aid procedures in the event of an accident
- Method of disposal in the event of a spillage or leakage occurring

(K) MATERIAL SAFETY DATA SHEETS

Additional information relevant to individual chemicals is outlined in material safety data sheets and anyone using any of these products must be fully conversant with all the potential hazards. This entails reading the accompanying instructions thoroughly on the Material Safety Data Sheet prior to starting any work.

(L) CHEMICAL PRECAUTIONS

- Familiarise yourself with the chemical you are required to work with by carefully noting the information outlined on labels and material safety data sheets, prior to commencement of work.
- Ensure that recommended protective clothing is available and worn.
- If you are in doubt about any safety aspect relating to any chemical, ask your supervisor or contact the manufacturer.

(M) GENERAL FIRST AID PROCEDURES RE. CHEMICALS

Detailed First Aid Procedures to be implemented in the event of exposure to specific chemicals are outlined on each container label and the relevant Material Safety Data Sheet.

The following are **general** rules:

- Flush skin or eye contact immediately, with copious amounts of water. (at least 15 minutes) Remove contaminated clothing.
- In the event of ingestion of a substance occurring do not induce vomiting (especially where oils or fuels have been ingested) seek medical attention. Never give mouth-to-mouth respiration if a casualty has ingested a poisonous substance.
- If fumes are inhaled, remove from exposure immediately, if safe to do so.

(N) FIRE PREVENTION

- Good housekeeping is the best protection against fire.

- All trash, e.g. oily rags, rubbish, etc. must be placed in the proper containers provided.

- Obey "NO SMOKING" signs. Never smoke or bring an open flame into any area where flammable materials are being stored or used. Flammable liquids such as petrol, diesel oil, etc. must be carried and stored in properly coloured and labelled containers.

- Clean up spills of oil, grease or other flammable materials at once, using the proper chemical absorbent, (as indicated on relevant Materials Safety Data Sheet)

- When welding, cutting or burning is taking place ensure that an adequate supply of suitable fire extinguishers are immediately available.

- Do not tamper with or block any access to fire fighting equipment.

- Notify a Supervisor as soon as possible after use of any fire fighting equipment, so that it can be checked and replaced.

- Familiarise yourself with the location of fire fighting equipment in your work area.

- Familiarise yourself with all means of exit from your work area, which may be used in the event of fire or other emergency.

- Never block or restrict access to any emergency exit.

- All personnel must be trained in the safe procedures to follow on the discovery of a fire.

- All personnel should be trained in the use of fire fighting equipment and have full knowledge of the procedures to follow in the case of emergency evacuation.

- If you encounter a small fire, put it out taking care for personal safety and the safety others who may be affected by the fire.

- If you encounter a large fire, which cannot be extinguished safely, raise the alarm and evacuate the building. Close all windows and doors on your way out if it is safe to do so.

- Make sure that all personnel are accounted for after the building has been evacuated.

- Never re-enter a blazing building for any reason –

LEAVE THAT TO THE EMERGENCY SERVICES

(O) FIRST AID PROCEDURES

All injuries, no matter how minor, must be treated as soon as possible after they occur.

Immediate First Aid treatment is required for the following injuries:-

- Any eye injury.
- Puncture wounds.
- Any wound which bleeds profusely.
- Any deep cut, especially one at a joint.
- Minor concussion.
- If you are present when a person is seriously injured, carry out the following:
- Do not remove the person unless their safety is further threatened by

  (1) Electric shock
  (2) Hazardous circumstances.

- Give First Aid treatment. (Try to reassure the patient by talking to them calmly)
- Considerable bleeding should be stopped if possible. Contact with patients blood should be avoided **(wear suitable hand protection)**
- Make the injured person as comfortable as possible and get help.
- If the injured person is not breathing commence artificial respiration at once.
- Arrange for Emergency Services to be contacted if required.
- Notify your Supervisor if not already notified and give the following information:
- The nature of the persons injuries and if known, how the injuries occurred.
- The location of the accident.
- The injured person's name.

(P) EMERGENCY SERVICES

- If at any time you have to contact the Emergency Services remember the following:
- Speak clearly and slowly.
- Give your name and the location of the accident.
- Do not hang up the phone until instructed to do so by the operator.
- Try to stay calm.

(Q) PERSONAL PROTECTIVE EQUIPMENT

Personal protective equipment must be worn, as and when required.

- Always ensure that personal clothing is in good condition and well fitting, and is laundered regularly.
- Safety footwear must be worn in designated areas and be maintained in good safe condition.
- Gloves must be worn whenever there is a possibility of injury to hands or fingers. For example; when welding, cutting and burning, handling material, which is rough, hot, or sharp etc.
- Eye protection must be worn where and when specified.
- Respiratory equipment must be worn as and when directed by your Supervisor.
- Fall arrest equipment or safety lines must be worn where there is a possibility of falling from a height of more than 2 metres or when working in tanks or vessels.
- Ear defender will be provided where required and must be worn in designated areas.
- Hard hats must be worn where there is a risk of being struck by falling objects.

NOTE:-

It shall be the duty of every employee while at work, to use in such a manner so as to provide the protection intended, any suitable appliance, protective clothing, convenience, equipment or other means or thing provided (whether for his/her use alone or for use by him/her in common with others) for securing his/her safety, health and welfare while at work

(R) SOLAS SAFE PASS

All employees of Fima Developments Ltd must have completed the SOLAS Safe Pass Course and make their cards available for inspection before starting on a new site.

Fima Developments Ltd site management will verify that all workers on our sites including sub-contractors have completed the SOLAS Safe Pass Course.

16.0 SITE SPECIFIC WORK / INFORMATION SHEET

1	**Nature of the Project:**	
2	**Name of Client:**	
3	**Main Contractor:**	
4	**Project Supervisor for the Construction Stage:**	
5	**Project Supervisor for the Design Stage:**	
6	**Location of the Development:**	
7	**Existing Traffic Systems, Relevant adjoining land uses and Restrictions:**	
8	**The Existing Environment:**	

9	**Existing Services:**	
10	**Other contracts which may affect work:**	
11	**Working Hours:**	
12	**Duration of Works:**	
13	**Site Specific Risks**	

16.1 SAFETY DELEGATION

OVERALL RESPONSIBILITY

Name: _____ **Title: _____**

Safety Systems
Name**:** _____
Title: _____

Fire & Other Emergencies
Name: _____
Title: _____

Protective Equipment
Name: _____
Title: _____

Fire Warden
Name: _____
Title: _____

Safety Training
Name: _____
Title _____

First Aid
Name _____
Title: _____

Induction Training
Name: _____
Title: _____

Stocking of First Aid Box
Title: _____
Title: _____

Equipment Hazards
Name: _____
Title: _____

Consultation Arrangement
Name: _____
Title: _____

Engagement of Contractors
Name: _____
Title: _____

Purchase of Safety Equipment
Name: _____
Title: _____

16.2 Safety Representative

Name: _____ **Title: _____**

16.3 First Aid Arrangements

FIRST AID BOX CONTENTS

_____

_____

_____

_____

_____

_____

Location(s) of First aid boxes

_____

Person(s) Responsible for First Aid .....
.....
_____