

STANDARD INDUSTRI PEMBINAAN

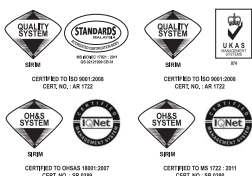
(CONSTRUCTION INDUSTRY STANDARD)

CIS 27:2019

**OCCUPATIONAL SAFETY AND HEALTH –
SPECIFICATION AND BILL OF QUANTITIES (BQ) FOR
CONSTRUCTION WORKS**

Description: Specification, bill of quantities, safety and health plan, OSH personnel, HIRARC, performance report, special working condition and traffic management.

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Construction Industry Development Board Malaysia



**Construction Industry
Development Board Malaysia**

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COMMITTEE REPRESENTATION

This Construction Industry Standard (CIS) was managed and developed by the Construction Industry Development Board Malaysia with the assistance of the Technical Committee of Safety and Health in Construction, which comprises representatives from the following organisations:

Association of Consulting Engineers Malaysia (ACEM)

Department of Occupational Safety & Health (DOSH)

Jabatan Kerja Raya (JKR)

Jabatan Pengairan dan Saliran (JPS)

Lembaga Lebuhraya Malaysia (LLM)

Malaysian Institute of Architects (PAM)

Master Builders Association Malaysia (MBAM)

Real Estate & Housing Development Association (REHDA)

Royal Institution of Surveyors Malaysia (RISM)

Toklan OSH Services

Universiti Teknologi MARA (UiTM)

PREFACE

This Construction Industry Standard (CIS) hereby referred as CIS 27: 2019 was developed as Occupational Safety and Health : Specification and Bill of Quantities (BQ) for Construction Works by the Construction Industry Development Board (CIDB) Malaysia which acted as a moderator and facilitator for the technical committee throughout the development process of this standard.

This CIS 27: 2019 Occupational Safety and Health : Specification and Bill of Quantities (BQ) for Construction Works adopt several components with reference to Occupational Safety and Health Act and Regulations (OSHA 1994), Factories and Machinery Act and Regulations (FMA 1967), Construction Industry Development Board Act 520, CIS 15: 2019 Guidelines of Prevention of Fall at Constructions Site, Guideline for Public Safety and Health at Construction Sites 2007 etc. The Specification and Bill Quantities (BQ) proposed in this CIS 27 : 2019 may be adopted in total or in part and addition/ omission may be effected to suit the project needs.

Compliance with this Construction Industry Standard does not of itself confer immunity from legal obligations.

OCCUPATIONAL SAFETY AND HEALTH - SPECIFICATION AND BILL OF QUANTITIES (BQ) FOR CONSTRUCTION WORKS

SECTION 1: GENERAL

1.1 Scope

The Conditions of Contract for the Works which is embodied in any Form of Contract shall be read in conjunction with this Specification. A copy of the Form of Contract is available for inspection on the Tender Table Document on any working day within the time stipulated for receiving tenders. If the tenderers consider that any of the clauses of the contract involves expenses, the tenderers shall allow for the money value of such clauses in the tender.

The Works covered in the contract comprise the provision by the Contractor at his own risk and cost of all materials, scaffolding, tools, plant, labour, transport, water, light and everything else necessary for the construction and completion of the project.

All to the entire approval of the Superintending Officer / Project Director hereinafter referred to as the S.O / P.D.

1.2 Normative references

The following normative reference is indispensable for the application of this construction industry standard. For dated reference, only the edition cited applies. For undated references, the latest editions of the normative references (including any amendments) apply.

- (i.) Construction Industry Development Board Act 520
- (ii.) Factory and Machinery Act (FMA), 1967 Rev 2006 and Regulations under the Act
- (iii.) Occupational Safety and Health Act (OSHA), 1994 and Regulations under the Act
- (iv.) Guidelines For Hazard Identification, Risk Assessment And Risk Control, 2008, DOSH
- (v.) Guidelines for Public Safety and Health at Construction Sites, 2007, DOSH
- (vi.) MS 2318: Code of Practice for Demolition of Buildings, 2010
- (vii.) CIS 15 : 2019 Guidelines of Prevention of Fall at Constructions Site
- (viii.) Industry Code of Practice for Safe Working in A Confined Space, 2010, DOSH

1.3 Terms and definitions

For the purpose of this standard, the following definitions shall apply.

- (i) **Designated person**
Competent person appointed by an employer to carry out any supervision or inspection and to perform any tasks or duty prescribed by employer.
- (ii) **Contractor**
A person who undertakes to carry out or complete any construction works.
- (iii) **Construction works**
As defined in Act 520 CIDB.

(iv) **Superintendent Officer (S.O)**

As defined in the conditions of contract.

(v) **Professional Engineer with practising certificate**

A person registered under subsection 10D of the Registration of Engineers Act (Revised 2015).

1.4 Abbreviation

1.	BOWEC	–	Building Operations and Works of Engineering Construction
2.	CIDB	–	Construction Industry Development Board of Malaysia
3.	CIS	–	Construction Industry Standard
4.	CSS	–	Contractor Site Supervisor
5.	DOSH	–	Department of Occupational Safety and Health
6.	HIRARC	–	Hazard Identification, Risk Assessment and Risk Control
7.	MOH	–	Ministry of Health
8.	MS	–	Malaysia Standard
9.	OSH	–	Occupational Safety and Health
10.	PD	–	Project Director
11.	PEPC	–	Professional Engineer with Practising Certificate
12.	SHC	–	Safety and Health Committee
13.	SHO	–	Safety and Health Officer
14.	S&H	–	Safety and Health
15.	SSS	–	Site Safety Supervisor
16.	S.O	–	Superintendent Officer
17.	TNB	–	Tenaga Nasional Berhad

SECTION 2: OCCUPATIONAL SAFETY AND HEALTH SPECIFICATION FOR CONSTRUCTION WORKS

2.1 Duty of Contractor

The Contractor is responsible to register a building construction works with contract period of more than Six (6) weeks to the Department of Occupational Safety and Health. The registration must be completed within Seven (7) days after the commencement of Works in compliance with Section 35, Factory And Machinery Act 1967 (Revision 1974).

General duty of contractor shall include but not limited to the following:

- (i) To notify construction works with DOSH within seven (7) days of site possession for project with contract period of six (6) weeks and more.
- (ii) To provide and maintain a safe plant and system of work.
- (iii) To make arrangements for handling, usage, transporting, and storage of substances.
- (iv) To provide safety and health information, instruction, training and supervision.
- (v) To provide and maintain safe access and egress at work place.
- (vi) To provide and maintain a safe and healthy working environment including adequate welfare facilities.
- (vii) To establish a Safety and Health committee at the work place who is responsible to conduct a minimum of one (1) meeting for a every three (3) months. Such requirement is applicable for Works which employs more than 40 personnel on-site for the Works.

- (viii) To ensure all construction personnel at Construction work site holding a valid CIDB Green Card.
- (viii) To provide and maintain safety provision for their employees including the sub contractors and others.

2.2 Safety And Health Plan (S&H Plan)

The Contractor shall prepare the Safety and Health Plan as follows:

- (i) Fulfilment of all safety and health requirement during the construction works which includes planning, managing and monitoring plan that enables the Works to be practically commence without any potential risk to safety and health;
- (ii) Fulfilment all the requirement, pre-construction information and any other information provided by the Owner;
- (iii) Scheduled plan for project update, review, revise and refine of the Safety and Health Plan in consistent with the progress of the Works and minimizing the potential safety and health risk;
- (iv) Arrangement for S&H Plan to be practically implemented across all personnel carrying out the construction work and all persons who may be affected by the Works;
- (v) Reasonable measures to identify all potential safety and health risks arising from the construction work (including the risks specific to the particular type of construction work concerned);
- (vi) Suitable and sufficient measure for risk mitigation that includes provision of any site Safety and Health rules.

The Contractor shall submit five (5) copies of the prepared Safety and Health Plan to the S.O. or the client representative (each copy for S.O/P.D, Head of Project Team and Site Office) before the project commences and update it to the S.O. or the client representative throughout the construction works. A copy of the updated Safety and Health Plan shall be kept at site.

Safety and Health Plan shall include the following:

- (i) Project Introduction and Scope of Works (as in Works Programme or Critical Path Method) associated with Occupational Safety and Health (OSH).
- (ii) Contractor's Authorized and Updated OSH Policy, Drug and Alcohol Policy; OSH promotional activities and campaign that carried out to meet Client's Objective and Targets.
- (iii) Contractor's Organization Chart and Safety and Health Committee (SHC) Chart which shall describing the staff involved (example: Employer, Project Manager, Safety And Health Practitioner, Foremen, Designated Person / Person In Charge / Competence Person, Sub-Contractor, Supplier involved, Security Officer, Visitors, etc.)
- (iv) Arrangement of communication, consultation and involvement of each member of the Contractor's project team as shown in the Item 6.3 (iii), including their relationship, interfacings and cooperation of workmen for successful implementation of the project. The planning shall take into account control of any OSH Communications (Toolbox Talk and Safety Meeting), OSH related complaints, advice, OSH programmes and awareness, SHC meetings' schedule, and solving OSH related issues.
- (v) Contractor's Authorised Updated Compliance List on OSH Legislation and Other Related Requirements.

- (vi) List of Prohibited foods and drinks including drugs and medicine.
- (vii) List of Safety and Personal Protective Equipment at required at workplace.
- (viii) Schedule of OSH Trainings and Programmes to all workmen including sub-Contractor: Safety and Health Induction, CIDB Green Card, First Aid, Housekeeping, Working at Height, Manual Handling, Vector Control, Health & Hygiene Program Site Safety Inspection and Audit, Provision of Information (poster/ pamphlet/ notice board).
- (ix) Emergency Response Plan: Emergency routes and assembly point, emergency contact list, evacuation drill, emergency respond team, facilities and welfares, and emergency evacuation plan.
- (x) Safe Work System on Temporary Electricity Installation Works. The specification must include a designated person in charge, approved list of materials used, references and advised by TNB or other authorities as a case maybe (if necessary) on prohibition on danger or illegal installation.
- (xi) Safe Operational Procedures for method of statements for the following nature of works:
 - a. Stability of structures whilst carrying out construction work, including temporary structures and existing unstable structures,
 - b. Preventing falls,
 - c. Work with or near fragile materials,
 - d. Control of lifting operations,
 - e. The maintenance of plant and equipment (as interpret by OSHA 1994),
 - f. Work on excavations and work where there are poor ground conditions,
 - g. Work on wells, underground earthworks and tunnels,
 - h. Work involving explosives,
 - i. Masonry works,
 - j. Services works.
- (xii) Format of Incident investigation (near miss, dangerous occurrence, accident, fatality, occupational poisoning and occupational disease).
- (xiii) Format of Safety and Health Performance and Incident Statistics. Daily Reporting on Incident Statistic.
- (xiv) Chemical Safety Data Sheets or Material Safety Data Sheets.
- (xv) Health Precaution on workmen: Medical Report (Health Surveillance), noise monitoring.
- (xvi) Provision of Welfare Facilities (Sanitation for workmen).
- (xvii) Provision of Safety Signage and Traffic Control.
- (xviii) Provision of Project Hazard Identification, Risk Assessment and Risk Control (HIRARC).

S&H Plan shall be prepared and reviewed by Project Manager and approved by Project Director with the date and version on the cover page. It can be prepared in Bahasa Malaysia or English

2.3 OSH Personnel

The Contractor shall employ safety personnel such as SHO/SSS/CSS/DP (as the case maybe) as per requirement of the relevant Act/Regulations under the jurisdiction of DOSH.

a) **Safety and Health Officer**

- (i) For a project value of more than RM 20 million, the Contractor shall employ a full time competent person to act as a Safety and Health Officer at the place of work throughout the entire contract period.
- (ii) The Safety and Health officer shall be employed exclusively for the purpose of ensuring the due observance of the provisions of the Act at the place of work and any other regulation made therein including the promotion of a safe workplace conduct.
- (iii) The Contractor shall comply with Occupational Safety and Health (Safety and Health Officer) Order 1997, Order I and II on any contract value that exceeds RM20 million or with high risk. As stipulated in this Order, the Main Contractor(s) shall ensure their sub-Contractor(s) employ a Safety and Health Officer (SHO).

Notes : For High Risk definitions, kindly refer to CIS 25 : 2018

b) **Site Safety Supervisor**

Site Safety Supervisor (SSS) to be stationed minimum 15 hours a week throughout the entire period of the construction works.

c) **Contractor Safety Supervisor**

Every Subcontractor in charge of worksite who employs more than 20 persons shall appoint Contractor Safety Supervisor (CSS) to be stationed minimum 5 hours a week.

d) **Designated person**

Contractor shall appoint designated person in accordance to the requirement of Factories and Machinery (BOWEC) (S) 1986 Regulations.

2.4 Safety And Health Committee

The Contractor shall establish a safety and health committee at the place of work if-

- (i) There are forty or more persons employed at the place of work; or
- (ii) The Director General of the Department of Occupational Safety and Health directs the establishment of such a committee at the place of work.

The composition of a safety and health committee established, the election or appointment of persons to the committee, the function of the committee, the powers of the members of the committee and any other matter relating to the establishment or procedure of the committee shall be as prescribed in PART II of the Occupational Safety and Health (Safety And Health Committee) Regulations 1996.

2.5 Safety And Health Training

Programs for the education and training of employees in the recognition, avoidance and prevention of unsafe conditions in employments covered by the Occupational Safety and Health Act 1994 (Act 514) and Factories and Machinery Act 1967 (Act 139) and other relevant regulations shall be established and implemented.

Every construction personnel working at site are required to obtain CIDB Green Card by attending the CIDB S&H Induction Course.

All construction personnel, Visitors, Vendors & Suppliers entering work site are:

- (i) Required to attend Site Safety Induction courses if required to enter an operational construction zone;
- (ii) Shall be accompanied by company appointed site personnel while on the site.

2.6 Hazards Identification Risk Assessment And Risk Control (HIRARC)

The Contractor shall identify potential hazards to employees or, assess their risk, or likelihood of happening and the effects they would have, and the taking of necessary control measures for such hazards.

Records of HIRARC shall be kept, maintained and submitted to the S.O/PD prior to commencement of the work. HIRARC may be reviewed during the course of work as required

The methodology proposed in the CIS 25 : 2018 Guidelines for Construction Activity Risk Assessment (CARA - HIRARC) published by CIDB Malaysia.

2.7 Safety And Health Performance Report

Five (5) copies monthly safety and health performance report shall be prepared and submitted to the S.O. The report shall also describe the followings:

- (i) Related OSH programme (toolbox meeting/ training/ drill/ inspection/ induction/ housekeeping/ audit/ legislation complied/ etc).
- (ii) Incident statistic from daily notification of any accidents, near misses, lost time injuries, death and ill-health with actions taken; in accordance with Occupational Safety And Health (Notification of Accident, Dangerous Occurrence, Occupational Poisoning and Occupational Disease) Regulations 2004.
- (iii) Related OSH issues on complaints / Non-compliance / damages and actions taken.
- (iv) Status on S & H Plan and HIRARC.
- (v) CIDB Green Card records/ Machineries register and maintainance records.
- (vi) Traffic and other related safety control.

Provision and maintenance of safety and health statistic scoreboard shall be provided to ensure that persons at site are at least informed about the safety and health activities. The boards shall be located at the entrance of site office/workplace or practicable locations.

2.8 Safety And Protective Equipment

Employees are required to wear appropriate personal protective equipment in all operations where there is risk of exposure to hazardous conditions as per approved HIRARC.

Provision and maintenance of Personal Protective Equipment to employees and site staff at site of adequate quantity and shall meet the requirements and specifications as approved by S.O/PD. The equipment shall include but not be limited to the following:

- (i) Foot Protection
- (ii) Safety helmets

- (iii) Harness, lanyards, and life lines (for workmen who work at heights more than 2m above ground level)
- (iv) Protective gloves
- (v) Safety goggles
- (vi) Safety jackets of reflective type
- (vii) Ear plugs and muffs
- (viii) Gas masks
- (ix) Dust masks
- (x) Head lamp
- (xi) Life jacket
- (xii) Laser protection
- (xiii) Protection against radiant energy

Provision and maintenance on the site during the entire contract period, of the adequate safety equipment shall meet the requirements and specifications in the as approved by S.O/PD:

- (i) Gas detectors (Apply for Works in confined spaces only)
- (ii) Breathing apparatus
- (iii) Air ventilation pumps
- (iv) Adequate lighting and warning lamps
- (v) Fire extinguishers
- (vi) Hazard tape
- (vii) Safety barriers
- (viii) Safety net

2.9 Health and Welfare Provision

To conduct Health Measurements (if necessary) by designated / competent person (example: Occupational Health Doctor / Medical Practitioner). Medical Report (Medical Surveillance) of workmen to be recorded by the Contractor (employer / self-employed person) for the Works exposed to chemicals and hazardous working area as listed in Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations 2000.

First aid facilities

- (i) The Contractor shall require to provide and properly maintained a complete First aid facilities and provisions for medical care available for every employee performing work at the site which include provision of first aid kit and first aider throughout the contract period.
- (i) Regulations prescribing specific requirements for first aid in Factories and Machinery (Safety, Health and Welfare) Regulations 1970 shall be followed.

The Contractor must refrain from dumping or/and depositing (that capable of collecting water) which afford breeding places for mosquitoes (including houseflies, rats, insects and other dangerous animals). All excavation and any portion of the site where water stagnates or accumulates shall be kept dry by pumping, bailing or other operations (vector control). The contractor shall pay all charges as may be required by the MOH / Local Authority and employ whatever destructive measures as are necessary entirely at his own cost and expense

All Work shall be carried out without unreasonable noise and dust suppression. The Contractor shall taking measures to ensure that all equipment, machinery and place of Works are in proper working condition so as to minimize the amount of noise generated and dust suppression. Whenever hazardous substances such as dusts, fumes, mists, vapours, or gases exist or are produced in the course of construction work, their concentrations shall not exceed the limits specified in the Act. The S.O/ P.D may require the Contractor to replace any machinery and equipment as well as method of statements that to his discretion, is emitting excessive noise and dust.

To conduct Health Measurements (if necessary) by designated / competent person (example: Occupational Health Doctor / Medical Practitioner). Medical Report (Medical Surveillance) of workmen to be recorded by the Contractor (employer / self-employed person) for the Works exposed to chemicals and hazardous working area as listed in Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations 2000.

Construction areas shall be lighted to not less than the minimum illumination intensities as per regulation 29 Factories and Machinery Act 1967. Emphasis shall be given to stairways, accesses and emergency escape routes.

The Contractor shall provide and maintain temporary accommodation in accordance to MS2593:2015 - Temporary construction site workers' amenities and accommodation – Code of practice.

The Contractor shall provide and maintained designated rest area/areas for workers and site staff. The areas provided shall be safe, ventilated and lighted.

The Contractor shall provide adequate temporary toilet and bathing place with necessary water, septic tank and drainage in accordance to Regulation 37 SH Welfare Regulations under FMA 1967, Department of Environment (DOE) or/and Local Authority requirements. It shall be maintained in a clean and sanitary condition at all times to the satisfaction of the S.O/ P.D/ MOH/ Local Authority. All waste water must be treated such that its effluent meets the requirements.

2.10 Safe Working Area

Allow for compliance with Guidelines for Public Safety in Construction published by DOSH. The Contractor shall store or stack at all times, all materials, tools, etc as listed below in a safe and orderly manner so as not obstruct any passageway or place of work.

- (i) Shed for storage of cement with the floor raised 300 mm above the ground.
- (ii) Shed for bar-bending and similar Works
- (iii) Store for chemical / hazardous substance
- (iv) Store for other building materials

The Contractor shall supply, erect, maintain the perimeter hoarding to ensure public safety.

Erection, dismantling, alteration and maintenance of scaffolding shall comply to BS1139 MS1462 , working platform and safety nettings shall be under the supervision of the competent person.

Catch platform shall be designed by professional engineer with practising certificate (PEPC) where it involved demolition of structure or other related exterior works at more than 12m height.

Contractor shall erect and maintain overhead protection / fencing / guard rails / safety screen / wire netting / toe board / safety barricades to ensure safe working environment.

Contractor shall provide personal fall arrest systems as per required under the Guidelines for the Prevention of Falls at workplaces 2007 issued by DOSH. Provision, maintenance and removal of guardrails or board fences and temporary foot walks with adequate overhead protection for public walkways and thoroughfares (please delete where not applicable) during the works.

Cordoning off working area and provision of public control and safety measures where lifting operations, moving, shifting, transferring works are carried out outside the hoarded up area of the worksite.

2.11 Traffic Management

Provision of traffic management plan, traffic management safety report and adequate safety traffic warning signages, warning lights, flagmen shall comply to Nota Teknik Jalan JKR No. 23/2003, Arahan Teknik Jalan 2C/85 to be provided and maintained by designated person at suitable locations for work place in close proximity of public throughout the entire period of construction works.

2.12 Special Working Conditions

Special attention shall be given to the following working condition by the contractor:

- (i) Working in confined space shall comply with the requirements of Industry Code of Practices for Safe Working in a Confined Space, 2010, Occupational Safety and Health requirements stated in laws, regulations including any revisions to the current regulations.
- (ii) For working at height Contractor shall comply the requirement of CIS 15: 2019 Guidelines of Prevention of Fall at Constructions Site.
- (iii) All excavation works shall comply with the provision of PART XII of the Factories and Machinery (Building Operation and Works of Engineering Construction) (Safety) Regulations, 1986.
- (iv) All demolition works shall comply with the provision of PART XI of the Factories and Machinery (Building Operation and Works of Engineering Construction)(Safety) Regulations, 1986 and the MS 2318: 2010 Demolition of Buildings - Code of practice.
- (v) All blasting works shall comply with the provision of PART XV of the Factories and Machinery (Building Operation and Works of Engineering Construction)(Safety) Regulations, 1986, Act 207 Explosive Act 1957 and other regulatory requirements
- (vi) Working Over or Near Water
 - a) Employees working over or near water, where the danger of drowning exists, shall be provided with approved life jacket or buoyant work vests.
 - b) Prior to and after each use, the buoyant work vests or life preservers shall be inspected for defects which would alter their strength or buoyancy. Defective units shall not be used
 - c) Ring buoys with at least 27.5 metre of line shall be provided and readily available for emergency rescue operations. Distance between ring buoys shall not exceed 61 metre.
 - d) At least one life boat shall be made available at locations where employees are working over or adjacent to water.

2.13 Access and Egress

The Contractor shall provide all necessary personnel and lighting for the security of the site at all times until completion of the whole Works.

In every building or structure entrance and exits shall be so arranged and maintained as to provide free and unobstructed access and egress from all parts of the building or structure at all times when it is occupied. No lock or fastening to prevent free escape from the inside of any building shall be

installed except in mental, penal, or corrective institutions where supervisory personnel is continually on duty and effective provisions are made to remove occupants in case of fire or other emergency.

Exits shall be marked by a readily visible sign. Access and egress to entrances and exits shall be marked by readily visible signs in all cases where the entrance or exit or way to reach it is not immediately visible to the occupants.

Means of access and egress shall be continually maintained free of all obstructions or impediments to full instant use in the case of fire or other emergency.

2.14 Plant and Machinery

The Contractor shall ensure the following plants obtain a valid certification which are deemed to be in compliance with the requirements by the Department of Occupational Safety and Health Malaysia before they are being put into operation:

- (i) Compressor
- (ii) Tower Crane
- (iii) Derrick
- (iv) Mobile Crane
- (v) Material Hoist
- (vi) Passenger Hoist
- (vii) Gondola

2.15 Temporary Works by Designer

The following temporary works shall be designed and endorse by Professional Engineer with practising certificate appointed by the contractor to ensure these temporary structures are safe and without risk and as per the requirement of Factories and Machinery (BOWEC) (S) 1986 Regulations.

- (i) Formwork and reshores
- (ii) Scaffolding
- (iii) Catch platform
- (iv) Construction rubbish/debris disposal chute exceeding 12 metres in height
- (v) Runways and ramps used by vehicles
- (vi) Support for stability of structure where adjoining area to be excavated or piled
- (vii) Loading platform
- (viii) Material and Passenger hoist
- (ix) Gondola
- (x) Tower crane foundation

OCCUPATIONAL SAFETY AND HEALTH BILL OF QUANTITY

ITEM	DESCRIPTION	UNIT	QTY	RATE (RM)	AMOUNT (RM)
	<u>OCCUPATIONAL SAFETY & HEALTH</u>				
A	Preparation of 5 copies site safety and health plan (S & H Plan) as per item 2.2 of the specification for OSH Construction Works in CIS 27 : 2019	Nos	5		
B	Employment of safety personnel as per item 2.3 of the specification for OSH Construction Works in CIS 27 : 2019				
	i) Safety and Health Officer	Man/month			
	ii) Site Safety Supervisor	Man/month			
	iii) Contractor Safety Supervisor	Man/month			
	iv) Designated Person	Man/month			
C	Establishment of a Safety and Health Committee at place work as per item 2.4 of the specification for OSH Construction Works in CIS 27 : 2019	Month			
D	Provision of safety and health training as per item 2.5 of the specification for OSH Construction Works in CIS 27 : 2019	Nos			
E	Preparation of Hazard Identification Risk Assessment and Risk Control (HIRARC) for the activities carried out at site as per item 2.6 of the specification for OSH Construction Works in CIS 27 : 2019	Item			
F	Preparation of 5 copies Safety & Health Performance Report as per item 2.7 of the specification for OSH Construction Works in CIS 27 : 2019	Monthly	5		
G	Provision for safety and protective equipment as per item 2.8 of the specification for OSH Construction Works in CIS 27 : 2019 and as approved by S.O				
	▪ Safety footwear	Pairs			
	▪ Safety helmets	Pcs			
	▪ Full Body Harness c/w Hook and Lanyard for workmen who work at heights more than 2m above ground level	Pcs			
	▪ Safety / life lines for workmen who work at heights more than 2m above ground level	Meter			
	▪ Protective gloves	Pairs			
	▪ Safety goggles	Pairs			
	TO COLLECTION (RM)				

ITEM	DESCRIPTION	UNIT	QTY	RATE (RM)	AMOUNT (RM)
H	<ul style="list-style-type: none"> ▪ Safety jackets of reflective type ▪ Ear plugs and muffs ▪ Gas masks ▪ Dust masks ▪ Head lamp ▪ Life jacket ▪ Laser protection ▪ Protection against radiant energy ▪ (any additional and delete where not applicable... etc.) <p>Provision for health and welfare as per item 2.9 of the specification for OSH Construction Works in CIS 27 : 2019</p> <ul style="list-style-type: none"> ▪ Workers Accomodation ▪ First Aid Facilities ▪ Rest Area ▪ Toilet ▪ other health and welfare facilities to be specified <p>.....</p> <p>.....</p> <p>.....</p>	<ul style="list-style-type: none"> Pcs Pairs Set Pcs Pcs Pcs Pcs Pcs Pcs Item Item Item Item Item 			
I	<p>Allow for compliance to safe working area as per item 2.10 of the specification for OSH Construction Works in CIS 27 : 2019</p> <ul style="list-style-type: none"> i) Supply erection, maintenance and removal on completion of the works, protective and security hoarding as stipulated in Specification For Occupational Safety And Health For Building Construction Works. ii) Supply, erection and dismantling of scaffolding, working platform with safety nettings by competent person(s) under the direct supervision of a designated person as stipulated in Specification For Occupational Safety And Health For Building Construction Works. iii) Submission of scaffolding design and working platform for works above 15m height certified by a Professional Engineer for the approval of the S.O. / P.D. as stipulated in Specification For Occupational Safety And Health For Building Construction Works. iv) Supply, erection, maintains and dismantling of catch platform during demolition of structure or other related exterior works at more than 12m height. Such platform shall be designed by a Professional Engineer and certified for safety prior to erection as stipulated in Specification For Occupational Safety And Health For Building Construction Works. 	<ul style="list-style-type: none"> Item Item Item Item 			
TO COLLECTION (RM)					

ITEM	DESCRIPTION	UNIT	QTY	RATE (RM)	AMOUNT (RM)
	v) Supply erection, maintenance and removal of safety barricades / fencing / railing / screen / wire netting / toe board for maintaining safe working environment (please delete where not applicable) during the works.	Item			
	vi) Provision, maintenance and removal of guardrails or board fences and temporary foot walks with adequate temporary overhead protection for public walkways and thoroughfares (please delete where not applicable) during the works.	Item			
	vii) Cordoning off working area and provision of public control and safety measures where lifting operations, moving, shifting, transferring works are carried out outside the hoarded up area of the worksite as stipulated in Specification For Occupational Safety And Health For Building Construction Works.	Item			
J	Provision of traffic management plan/scheme as per item 2.11 of the specification for OSH Construction Works in CIS 27 : 2019	Item			
K	Allow for compliance to special working condition as per item 2.12 of the specification for OSH Construction Works in CIS 27 : 2019	Item			
L	Provision for access and egress as per item 2.13 of the specification for OSH Construction Works in CIS 27 : 2019	Item			
M	Provision for plant and machinery as per item 2.14 of the specification for OSH Construction Works in CIS 27 : 2019	Item			
N	Provision for temporary works by designer as per item 2.15 of the specification for OSH Construction Works in CIS 27 : 2019	Item			
TOTAL CARRIED TO SUMMARY TENDER (RM)					

Acknowledgement

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