



## **GUIDELINE 1.0**

This guideline is intended to assist implementing partners by providing clear and detailed requirements for the supply and installation of prefabricated steel structures, toilets, and associated civil works.

### **1.0 GENERAL REQUIREMENTS**

The Implementing partner shall provide the following works but not limited to:

- a) Supplying and installation of the prefabricated steel structures including providing all labour, supervision services, earth moving machinery, surveying instruments including facilities as required under statutory labour regulations, materials, equipment, tools and plants, transportation, etc. required for the work.
- b) Preparation and submission of work plan for the works as specified above and all other details that may be required by UN Habitat.
- c) Develop and implement a quality control strategy to ensure delivery of high-quality works.

### **2.0 GENERAL SCOPE OF WORK**

This will include the following:

- a) Site preparation including clearing and levelling civil works, roads, parking areas and drainage, and digging of foundations, footings and trenches for the required structures at each site.
- b) Supply and erection of a total of steel framed structures to house the various establishments.
- c) Construction of toilet facilities
- d) General civil works on site to ensure functionality of the sites.
- e) Secure fencing with vehicle access gate to two (2) project sites prior to the installations.
- f) Installation of signage and branding around the completed infrastructure, based on guidelines from UN-Habitat

The scope of work required for each of the above components is detailed below.

### **3.0 DETAILED SCOPE OF WORK**

#### **3.1 SITE PREPARATION, SITE WORKS AND FOUNDATIONS**

- a) The site preparation must be carried out in accordance with the site masterplan provided by UN-Habitat for each site and take into consideration the positioning of roads and access.
- b) Prior to commencing any installation, the implementing partner shall ensure and provide adequate water supply and electricity for their operations, and prepare the site by clearing, removing, and disposing of any unwanted materials on the site. The installation area shall be cleared of fences, bushes, vegetation, rubbish, slush etc. The waste/unwanted materials shall be disposed of in appropriate areas and according to the by-laws of Harare City.



- c) The implementing partner shall establish and record ground elevations for the entire site and determine and establish the levels in relation to the road and drainage for the site. The implementing partner shall establish markers for ease of periodic checking as the work proceeds.
- d) The implementing partner shall also dig out the trenches for water drainage of the site. The trenches shall be in line with the site layout plans to be provided.
- e) The implementing partner shall level the site and compact where needed to ensure a firm ground for project implementation and to ensure the levels identified are met.
- f) The site preparation works must be carried out in the most expeditious and efficient manner and the implementing partner shall ensure the stability and safety of the works excavation, adjacent structures, services and works etc. including the safety of the workmen.
- g) In addition, the implementing partner shall obtain any relevant permits and soil tests required before commencing the works.
- h) As part of the site preparation works and to prevent trespassing on the sites, the implementing partner shall supply and install palisade fencing and gate at each site as follows:
  - i. 1.8m height steel pales made of 30mm angle irons and single spike top finish; steel posts and railings at intervals; finished with paint (colour to be confirmed with Engineer/Architect)
  - ii. 5m (w) x 2.1m (h) manual sliding gate with a simple see-through design and secure lock is to be included, which allows for large vehicles to access the site

### **3.2 DIGGING AND ESTABLISHMENT OF FOUNDATIONS AND FOOTINGS**

Based on the designs and ground characteristics (as per soil tests), the implementing partner shall construct the reinforced concrete foundations and slab for the prefabricated steel structures and the shipping containers. Proven construction techniques should be adhered to in the foundation work. Of importance is for the implementing partner to ensure accurate foundation construction and setting based on the plan and ground levels, as well as determining soil types. This is to minimize the errors during erection of the structures. The foundations to be cured for a period of at least 7 days.

### **3.3 SUPPLY & INSTALLATION OF PREFABRICATED STEEL STRUCTURES (SEE DRAWINGS IN ANNEX 1 AND ANNEX 2)**

#### **a) Preparations Before Installation**

Before installation of the steel structures, the implementing partner is expected to:

1. Check the technical information of the materials as provided by the manufacturer and ensure the quantities match the specifications.
2. Develop an installation plan, which must be guided by the manufacturer's information
3. Ensure concrete bases and slab are adequate and in position for installation of the steel structure
4. Provide adequate security for the prefabricated components and any other building materials

#### **b) Installation of the prefabricated steel structures**

Upon completion of the reinforced concrete bases and slab, the implementing partner shall install and erect the steel structures with the guidance of the drawings to be supplied by UN Habitat. The implementing partner is



expected to supply all the components for the steel structures and install the structures as per the manufacturer's specifications. The quantities and specifications for each structure is presented below:

Project site	Steel structures with reinforced concrete slab and screed floor finish	
	Dimensions	Quantity
<b>Lot 1:</b>		
<b>Epworth MCEC</b> (layout drawing HSCI-105)	30m x 20m (Drawing HSCI-002B)	1
	20m x 20m (Drawing HSCI-002A)	1
<b>Lot 2:</b>		
<b>Epworth IRRC</b> (layout drawing HSCI-105) and <b>Highfield-IRRC</b> (layout drawing HSCI-106)	20m x 20m (Drawing HSCI-002A)	2

The implementing partner shall determine the best methods and procedure for the installation of steel structure ensuring safety of the workers on site.

### c) Site surfacing

Once the prefabricated steel structures are erected, the implementing partner must finish the areas around the structures and allow for proper drainage. All areas which will have roads and car parks must be surfaced with compacted gravel, and general circulation/loading areas must be surfaced with 80mm interlocking G-Block pavers. Refer to the site layout drawings.

### 3.4 CONSTRUCTION OF TOILET FACILITIES (SEE DRAWINGS IN ANNEX 1 AND ANNEX 3)

a) The scope of works required for the construction of toilets and shower facilities are based on the UN-Habitat designs as shown on the drawings.

b) Each Toilet block requires the following:

	Female	Male
<b>Highfield</b> Drawing HSCI-009	<ul style="list-style-type: none"> <li>- 2no cubicle toilets</li> <li>- 1no shower cubicle</li> <li>- 1no hand wash basin</li> </ul>	<ul style="list-style-type: none"> <li>- 1no cubicle toilet</li> <li>- 2no urinals</li> <li>- 1no shower cubicle</li> <li>- 1no hand wash basin</li> </ul>
<b>Epworth</b> Drawing HSCI-010	<ul style="list-style-type: none"> <li>- 4no cubicle toilets</li> <li>- 2no shower cubicles</li> <li>- 3no hand wash basins</li> </ul>	<ul style="list-style-type: none"> <li>- 2no cubicle toilets</li> <li>- 3no urinals</li> <li>- 2no shower cubicles</li> <li>- 3no hand wash basins</li> </ul>



- c) All works and processes shall be carried out using equipment, tools and methods that comply with applicable construction Health, Safety and Environmental regulations, standards, and policies. The use of PPE, safety caution tapes and symbols are mandatory.

## Reference Drawings

### ANNEX 1: Site layouts-Epworth & Highfield

- HSCI-105 Epworth IRRC, MCEC and Brick Centre -Site Layout
- HSCI-106 Highfield IRRC -Site Layout

### ANNEX 2: Prefabricated steel structures

- HSCI-002A- 20x20m steel structure
- HSCI-002B- 30x20m steel structure

### ANNEX 3: Proposed Toilet facilities

- HSCI-009 – Highfield WC facilities
- HSCI-010- Epworth WC facilities



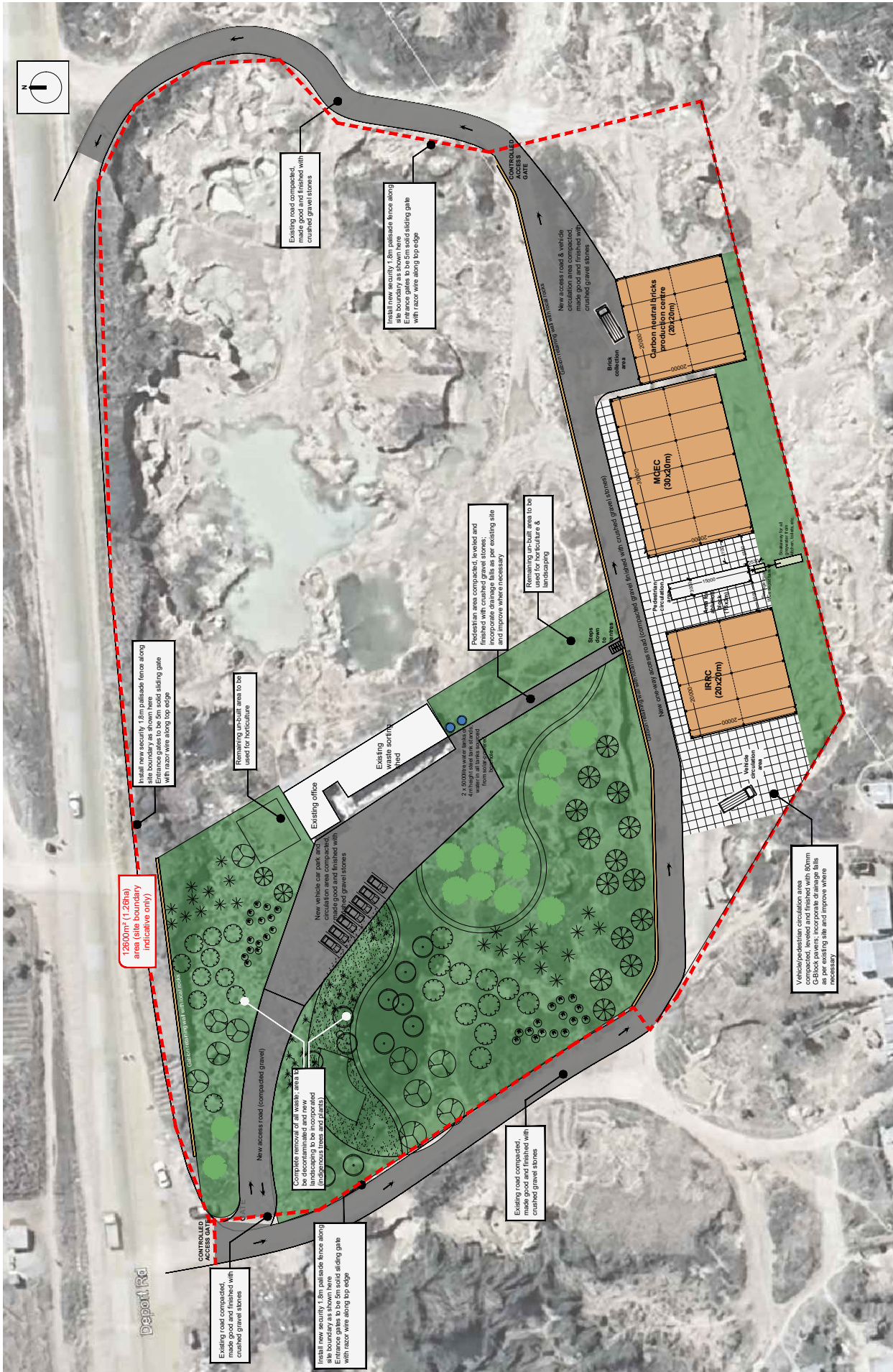
## **ANNEX 1: Site layouts-Epworth & Highfield**

**GENERAL NOTES ON SITE PREPARATION AND CIVIL WORKS:**

- Existing site conditions - contractor to perform necessary surveys, including field surveys and soil tests, prior to commencing any works.
- If any utility locations are shown, these are as marked by architect from field evidence. The size and location of underground utilities was not verified by excavation. The contractor is responsible for locating and protecting utilities during construction.
- All earthworks activities are to be performed in accordance to the site layouts as specified by the Architect. Earthworks to include establishing natural drainage according to existing levels and falls.
- Property boundaries, as shown, shall not be disturbed; setting out of all infrastructure to be undertaken under supervision of the Architect.
- Whenever and wherever encountered, existing utilities must be incorporated into the proposed new infrastructure, under supervision of an engineer.

**KEY**

- Existing indicative site boundary (to be confirmed by relevant Local Authority)
- Proposed prefabricated steel warehouse structure



1  
1:250

**EPWORTH IRRC, MCEC & BRICKS PRODUCTION**

PROJECT	EPWORTH INTEGRATED RESOURCE RECOVERY CENTRE, MULTIFUNCTIONAL CLEAN ENERGY CENTRE & CARBON NEUTRAL BRICKS PRODUCTION		
DRAWINGS	PROPOSED SITE LAYOUT		
SCALE	1:250	PAPER	A0
DATE	FEB 2025		
KEY	05		
CONSTRUCTION			
HSC1-105			

**Harare Sustainable City Initiatives**

**UN-HABITAT**

DO NOT SCALE FROM THIS DRAWING ALL DIMENSIONS TO BE CONFIRMED ON SITE BY THE CONTRACTOR PRIOR TO CONSTRUCTION

REV / DATE    CHG / AMENDMENTS    NOTES



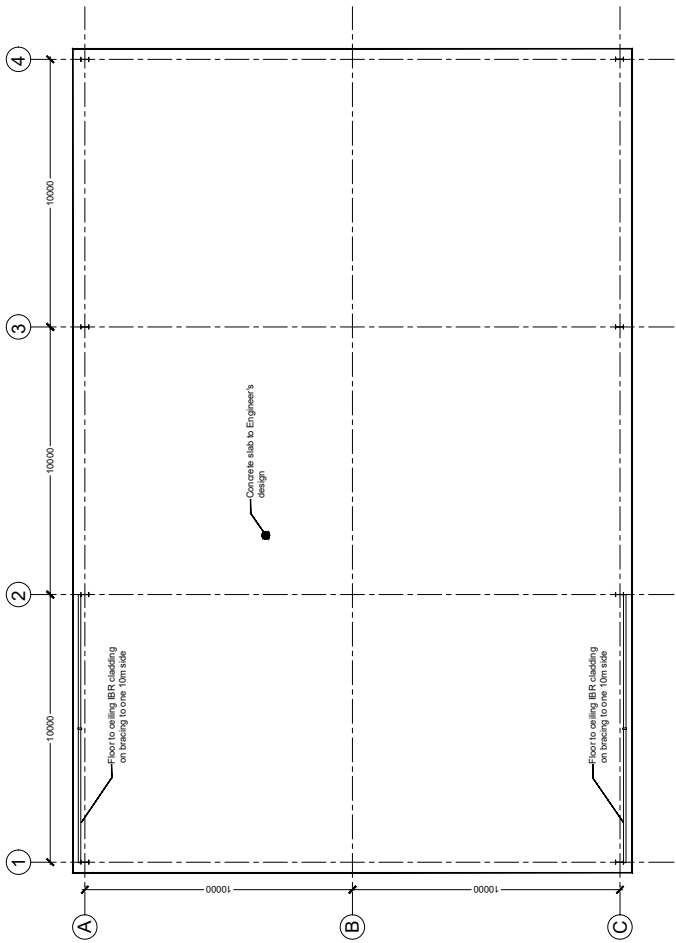


## **ANNEX 2: Prefabricated steel structures**

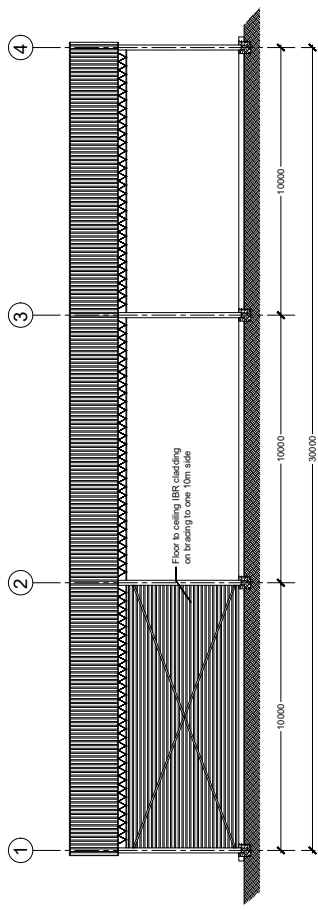
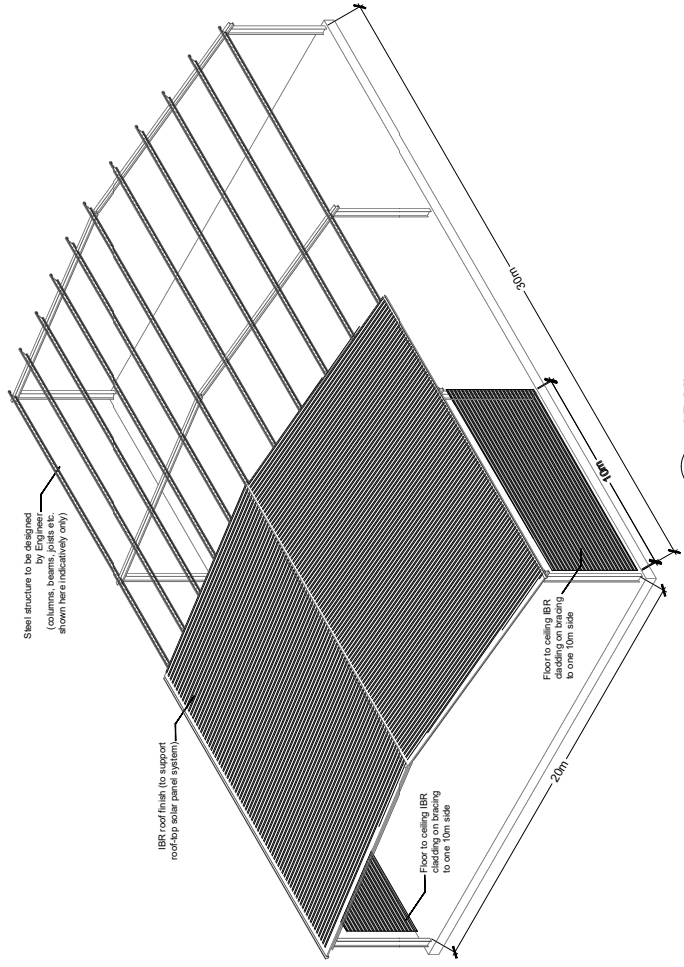




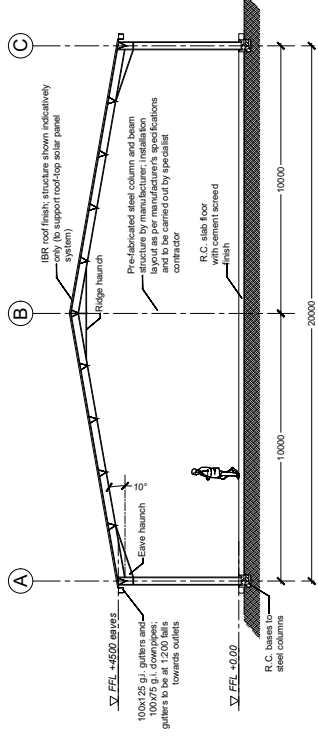
**30m x 20m STEEL STRUCTURE**  
(Drawings indicative only - specifications for foundations and steel structures to be by Engineer)



**1 Proposed Floor Plan**  
1:100



**3 Long Section**  
1:100



**4 Short Section**  
1:100

- NOTES:**
1. Column bases and slab to be designed, constructed and checked under supervision of a Structural Engineer and based on soil tests to be carried out by the Contractor at each site, prior to installation of the steel structure.
  2. Soil conditions may vary with each site and require an alternative solution. Soil conditions and levels must be determined and documented.
  3. All components and members of the steel frame will be provided by the manufacturer, and must be installed as per the manufacturer's instructions and specifications, and supervised by a Structural Engineer.
  4. All connections must be bolted or welded to resist moments and carried out by a certified professional.

REV	DATE	CHK	AMENDMENTS
01	08/05/24		Construction details and notes

NOTES



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PROJECT		PRE-FABRICATED 30m x 20m STEEL STRUCTURE	
DRAWING		PROPOSED PLANS AND ELEVATIONS	
SCALE	1:100	PAPER	A1
DATE	MAR 2025	CONSTRUCTION	
DWG	HSCI-002B	REV	00



### **ANNEX 3: Proposed Toilet facilities**



