Right Side Mosul
Low Cost House Units

2019-09-07
Site Infrastructure Drawing packages
## Detailed Drawing packages

### LIST OF DRAWING

<table>
<thead>
<tr>
<th>NUM.</th>
<th>TITLE</th>
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<td>WS-PL-01</td>
<td>Water Supply Site Plan</td>
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Notes:
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This drawing is to be read in conjunction with all other relevant drawings.

Legend:
- **NEW PHASE**
- **OLD PHASE**

Project:
Right Side Mosul Buildings

Drawing:
SITE PLANE NEW PHASE

Location:
Mosul

Scale: 1/1000

SN: AR-PL-01

Format: A3

Arch: Shahyan Lutfi

Approved by: R. Almasri

Client: UN-HABITAT

Rev. Description Date
A Concept Design 23-07-2019
B Tendering 07-09-2019
C Tendering 21-08-2019
D Concept Design 07-09-2019

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## Design Brief for Low Cost Houses

### Right Side Mosul Building

<table>
<thead>
<tr>
<th>Building Schedule</th>
<th>Item</th>
<th>Type -A-</th>
<th>Type -B-</th>
<th>Type -C-</th>
<th>Type -D-</th>
<th>Total</th>
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<tbody>
<tr>
<td>1</td>
<td>Number of buildings.</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>9</td>
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<tr>
<td>2</td>
<td>Number of apartments for one block.</td>
<td>30</td>
<td>24</td>
<td>48</td>
<td>36</td>
<td>----</td>
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<tr>
<td>3</td>
<td>Number of stories per block</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>3</td>
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<tr>
<td>4</td>
<td>Number of apartments for all blocks.</td>
<td>120</td>
<td>24</td>
<td>144</td>
<td>36</td>
<td>324</td>
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<table>
<thead>
<tr>
<th>Project Brief Schedule</th>
<th>Item</th>
<th>Qty</th>
<th>Unit</th>
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<tbody>
<tr>
<td>1</td>
<td>Plot Area.</td>
<td>39,569</td>
<td>M²</td>
</tr>
<tr>
<td>2</td>
<td>Build up Area.</td>
<td>8,137</td>
<td>M²</td>
</tr>
<tr>
<td>3</td>
<td>Apartment gross Area.</td>
<td>62.4</td>
<td>M²</td>
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<tr>
<td>4</td>
<td>No. of Apartment.</td>
<td>324</td>
<td>No.</td>
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<tr>
<td>5</td>
<td>Apartment Capacity.</td>
<td>7</td>
<td>Family Member</td>
</tr>
<tr>
<td>6</td>
<td>Total Capacity.</td>
<td>2,268</td>
<td>Family Member</td>
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<tr>
<td>7</td>
<td>Pathway, Roads, and parking.</td>
<td>15,833</td>
<td>M²</td>
</tr>
<tr>
<td>8</td>
<td>Green Area.</td>
<td>15,599</td>
<td>M²</td>
</tr>
</tbody>
</table>

### Design Description:

#### Unit Functions:
- A. Living room (can be used as an extra bedroom).
- B. Bed room.
- C. Kitchen
- D. Bathroom.

#### Building materials:
- A. Block for walls.
- B. Concrete for roof and floor.

These building materials are used for permanent housing that offer excellent thermal, water and acoustic insulation.

#### Concept Design Description:

#### Site Plan Design:
- A. Roads and Parking are serving all buildings
- B. Play Ground
- C. Green Area
- D. Extension Area

#### Building Design:
- A. Internal courtyard serves social integration and creates a safe environment for kids gathering

#### Apartment Design:
- A. All rooms have exterior windows for natural day light and ventilation

### Aria’s social impact

The project location is relatively stable with ongoing recovery and reconstruction efforts increasing in momentum.

Despite this, there is a need for continued vigilance in terms of operational security and implementation. It is advisable to possess a good knowledge of the area to reduce risks.
Right Side Mosul
Low Cost House Units
2019-09-07
Schematic Drawing For Electrical
TOTAL CONNECTED LOAD: 597.4 KW
TOTAL DEMAND LOAD: 287.5 KW
TOTAL LOAD KVA = 348 KVA
TOTAL CONNECTED LOAD: 643.8 KW
TOTAL DEMAND LOAD: 286 KW
TOTAL LOAD KVA = 357.5 KVA

DB2-2
SDB10
SDB9
SDB8
SDB7
SDB6
SDB5
SDB4
SDB3
SDB2
SDB1
SDB12
SDB11

DB2-1
SDB10
SDB9
SDB8
SDB7
SDB6
SDB5
SDB4
SDB3
SDB2
SDB1
SDB12
SDB11

DB1-2
SDB10
SDB9
SDB8
SDB7
SDB6
SDB5
SDB4
SDB3
SDB2
SDB1
SDB12
SDB11

DB1-1
SDB10
SDB9
SDB8
SDB7
SDB6
SDB5
SDB4
SDB3
SDB2
SDB1
SDB12
SDB11
SDB13
SDB14
SDB15

DB6-1
SDB10
SDB9
SDB8
SDB7
SDB6
SDB5
SDB4
SDB3
SDB2
SDB1
SDB12
SDB11
SDB13
SDB14
SDB15
SDB16
SDB17
SDB18
SDB19
SDB20
SDB21
SDB22
SDB23
SDB24

DB6-2
SDB10
SDB9
SDB8
SDB7
SDB6
SDB5
SDB4
SDB3
SDB2
SDB1
SDB12
SDB11
SDB13
SDB14
SDB15
SDB16
SDB17
SDB18
SDB19
SDB20
SDB21
SDB22
SDB23
SDB24
TOTAL CONNECTED LOAD: 699 KW
TOTAL DEMAND LOAD: 300.5 KW
TOTAL LOAD KVA = 375.6 KVA

TR 3
Right Side Mosul
Low Cost House Units
2019-09-07
Sanitation Drawing for Site
Notes:
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Legend:
- Water Supply pipes
- Water tank 36,000 L
- Mechanical VALVE

Project:
Right Side Mosul Buildings

Drawing:
Water pump station

Location:
Mosul

Scale:
N/V

Format:
A3

SN: WS-DPL-01

Arch: TAIF ALKAABI
Approved by: R.Almasri

Client: UN-HABITAT
\textbf{Galvanized Water Tank} \\
\textbf{compacted sub base layer} \\
\textbf{thick} = 30 \text{ cm} \\
\textbf{1200*300} \\
\textbf{36,000 L} \\
\textbf{205}

\textbf{Notes:} \\
\textit{All dimensions are in centimeters unless noted.} \\
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\textbf{Legend:} \\
Note: The location of installation for the pipes is under tiles.
CONCRETE MANHOLE

HEAVY DUTY CAST IRON COVER AND FRAME
125X125mm. OVER ALL DIMENSION

FINISHED GRADE LEVEL

ALUMINUM STEP

(SEE DETAIL)

GRP LINER

BITUMEN EXPLOSION

CLASS A CONCRETE

BLINDING

CONCRETE MANHOLE

ARCH: TAIF ALKAABI

Approved by: R. Almasri

Client: UN-HABITAT

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SEPTIC TANK
**Legend:**

<table>
<thead>
<tr>
<th>Red</th>
<th>Description</th>
<th>Date</th>
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<td>01-11-2019</td>
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<tr>
<td>B</td>
<td>Tendering</td>
<td>20-08-2019</td>
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<tr>
<td>C</td>
<td>Tendering</td>
<td>14-04-2019</td>
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<td>D</td>
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<td>E</td>
<td>Tendering</td>
<td>14-12-2018</td>
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**Project:**
Right Side Mosul Buildings

**Location:**
Mosul

**Scale:**
N/A

**Format:**
A3

**Client:**
UN-HABITAT

**Approved by:**
R. Almasri

**Eng.:**
M. Al-najar

<table>
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<tr>
<th>M³</th>
<th>KG</th>
<th>BXLXH</th>
<th>KW</th>
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<tr>
<td>180</td>
<td>54</td>
<td>6<em>11.9</em>3</td>
<td>14</td>
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COMPACTE SEWEG TREATMENT UNIT