
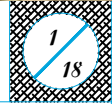












| Point Table | | | | |
|-------------|-----------|-----------|-----------|--------------------|
| Point # | Elevation | Latitude | Longitude | Description |
| 1 | 2375 | N 3817007 | E 702456 | RESERVOIR |
| 2 | 2335 | N 3816994 | E 702193 | Water point (well) |

| | | | | | | | | | | |
|--|------------|--|---------------------|--------------------------------------|------------------------|--|----------------------------|-----------|---------------------|-------------------|
|  | <i>IRW</i> | Islamic Relief Worldwide - SIDA | | Surveyed by | Eng. Neman "Sultani" | <div>SHEET NO.  30-Jul-2024</div> | PROVINCE | Ghor | <i>SIDA Project</i> | |
| | | Food Security, WASH, and Protection support to vulnerable families in Ghor - Afghanistan | | Drawing & designed by | Abdul Majeed "Khamosh" | | DISTRICT | Feroz koh | | |
| | | Department | WASH | All dimension in cm otherwise stated | Review & check by | | Eng. Hikmatullah "Arifzai" | VILLAGE | | Akhta Khana Sufla |
| | | Drawing Title | Being Map Site Plan | | Approved by | | Eng. Shah Faisal | | | |
| | | | | | | | | | | |

LEGEND

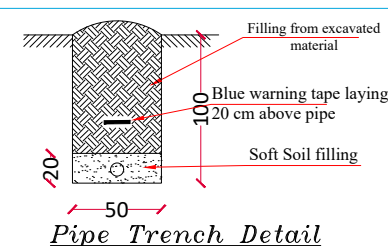
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|-------------------|---|
| Proposed Well |  |
| Main line |  |
| Distribution Line |  |
| Reservoir Area |  |
| Tertiary Road |  |
| Village houses |  |
| Agricultural Land |  |
| Mosque |  |
| Hill |  |
| Control Valve |  |

Point Table

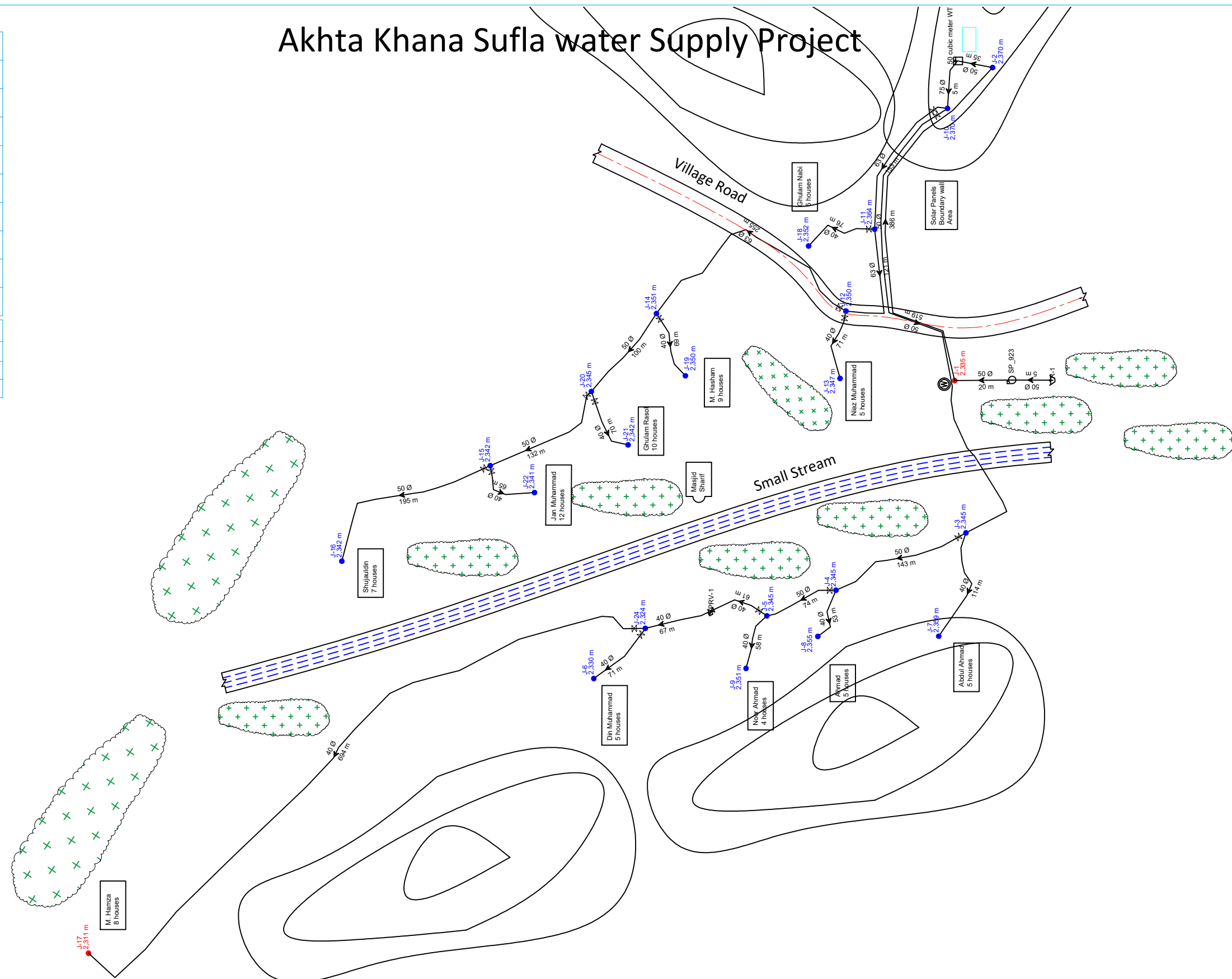
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|---------|-----------|-----------|-----------|-------------|
| 1 | 2384 | N 3817007 | E 702456 | RESERVOIR |
| 2 | 2335 | N 3816994 | E 702193 | WELL |

Note:

Type of soil :#2 to #4
Population : 1575
House Number: 75 Houses , 2 Mosque,
Static water level :8m
Dynamic water level:20 m
Total depth :25m
Drilling type :Percussion 18".



Akhta Khana Sufla water Supply Project



IRW

Islamic Relief Worldwide-SIDA
Food Security, WASH, and protection support to vulnerable families in Ghor- Afghanistan

Department WASH

Drawing Title Final Site Plan

All dimension in (m)
otherwise stated

Surveyed by

Eng. Neman "Sultani"

Drawing & designed by

Abdul Majeed "Khamosh"

Review & check by

Eng. Hikmatullah "Arifzai"

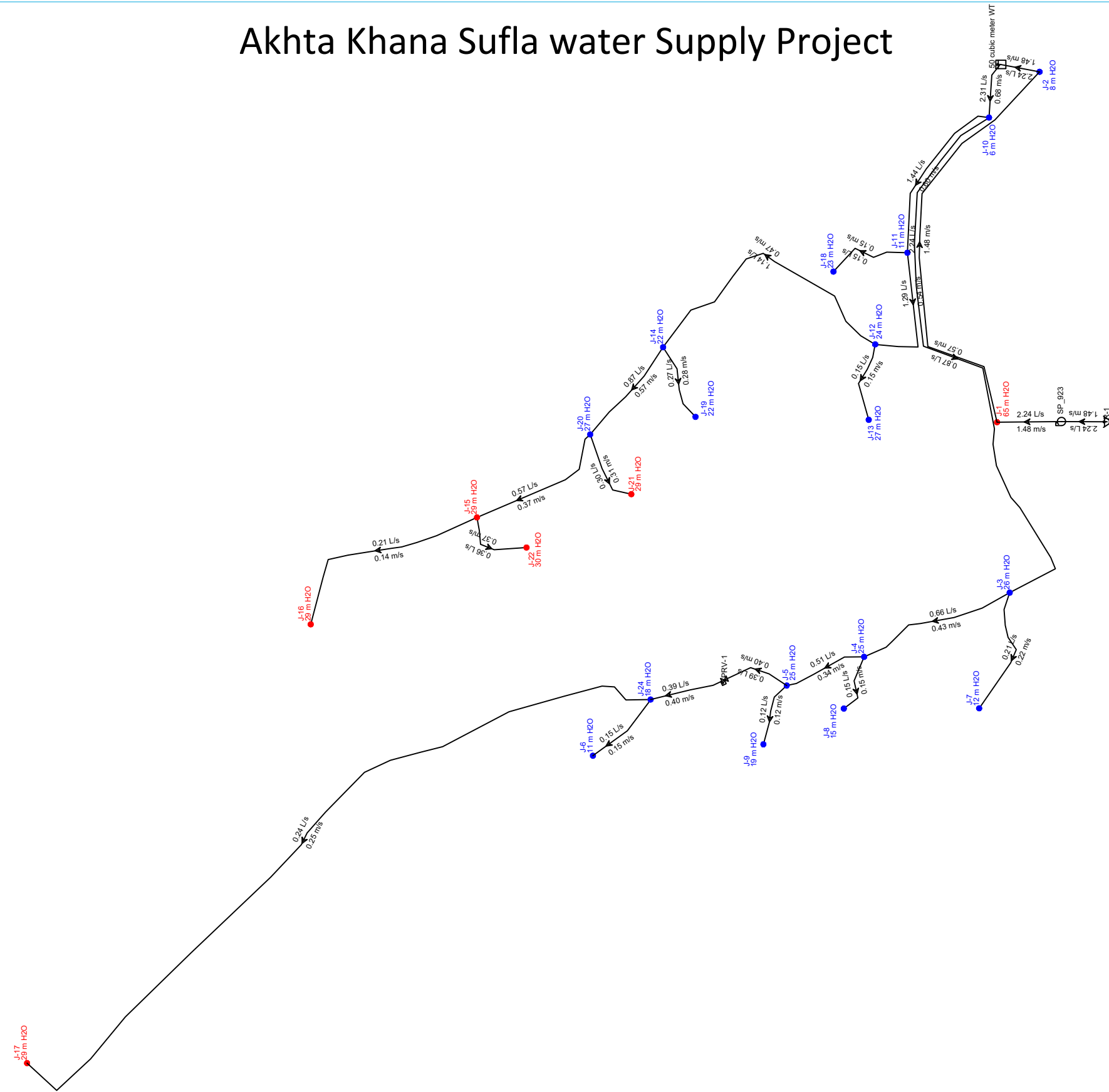
Approved by

Eng. Shah Faisal

SHEET No. 2/18
30-Jul-2024

| | |
|----------|-------------------|
| PROVINCE | Ghor |
| District | Feroz Koh |
| VILLAGE | Akhta Khana Sufla |

SIDA


$$JRW$$

| | |
|---------------|---|
| Department | WASH |
| Drawing Title | Node ID, Flow in (L/s), Velocity in (m/s), and Pressure in (mH2O) |

| | |
|-----------------------|----------------------------|
| Surveyed by | Eng. Neman "Sultani" |
| Drawing & designed by | Abdul Majeed "Khamosh" |
| Review & check by | Eng. Hikmatullah "Arifzai" |
| Approved by | Eng. Shah Faisal |

SHEET
NO.

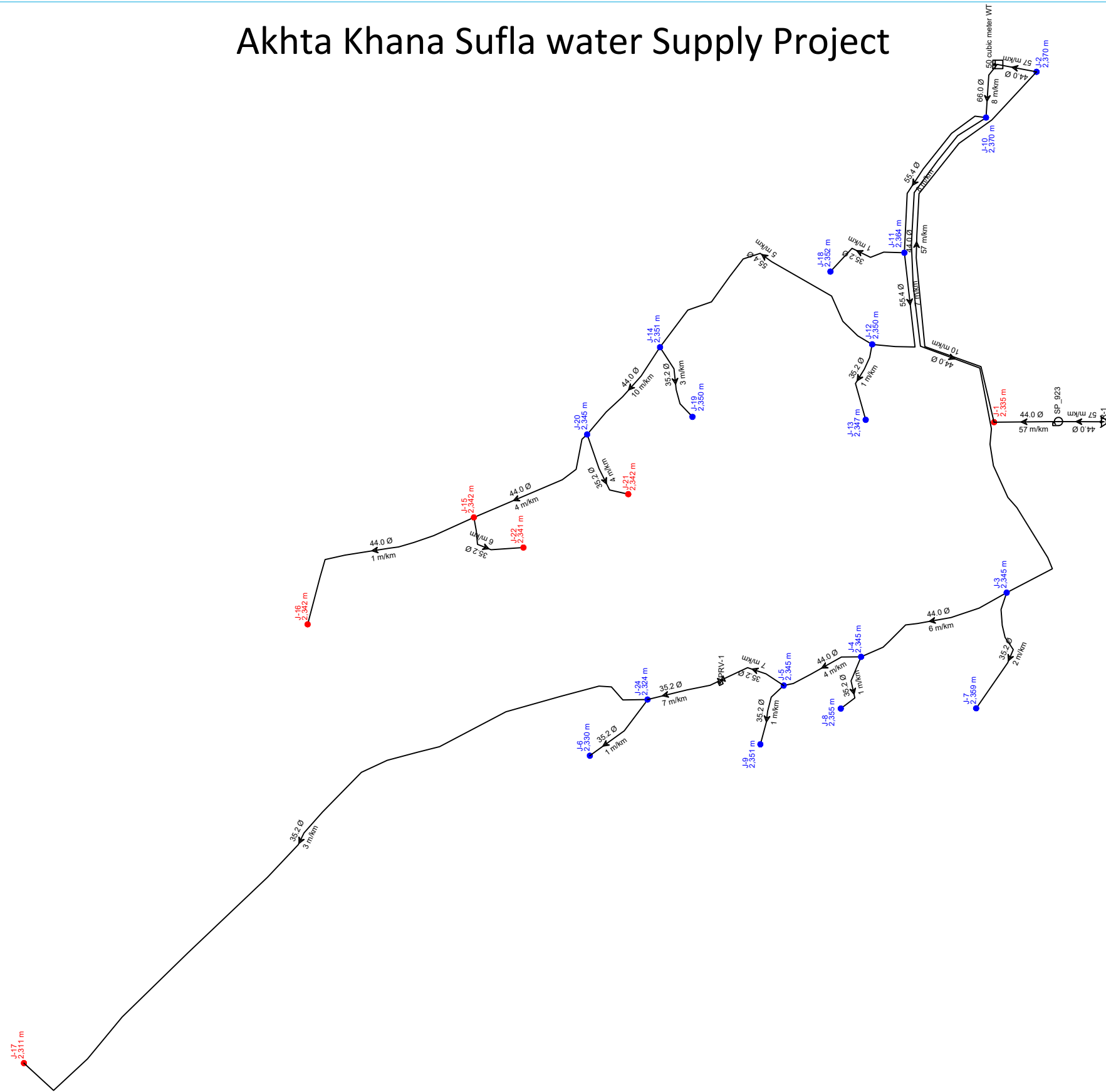
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18




30-Jul-2024

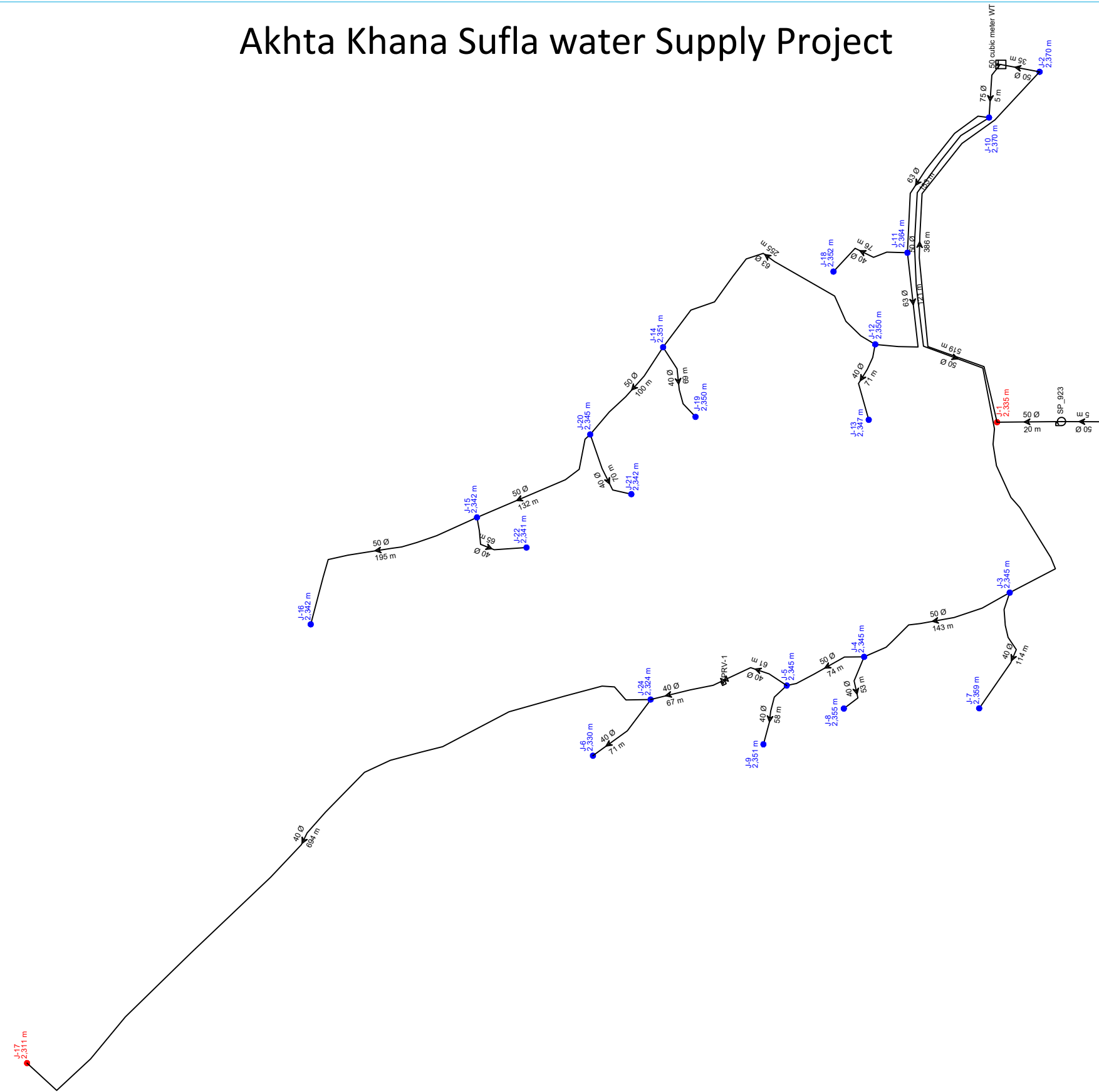
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| PROVINCE | Ghor |
| District | Feroz Koh |
| VILLAGE | Akhta Khana Sufla |

SIDA

Akhta Khana Sufla water Supply Project



| | | | | | | | | | |
|--|--|--|--|-----------------------|----------------------------|---|----------|-------------------|---|
|  | Islamic Relief Worldwide-SIDA Food Security, WASH, and protection support to vulnerable families in Ghor- Afghanistan | | | Surveyed by | Eng. Neman "Sultani" | Sheet No.  30-Jul-2024 | PROVINCE | Ghor |  |
| | Department | WASH | All dimension in (m) otherwise stated | Drawing & designed by | Abdul Majeed "Khamosh" | | District | Feroz Koh | |
| | Drawing Title | Node ID, In Dia in (mm), Head loss Gradient in (m/km) and Elevation in (m) | | Review & check by | Eng. Hikmatullah "Arifzai" | | VILLAGE | Akhta Khana Sufla | |
| | | | | Approved by | Eng. Shah Faisal | | | | |


$$JRW$$

All dimension in (m)

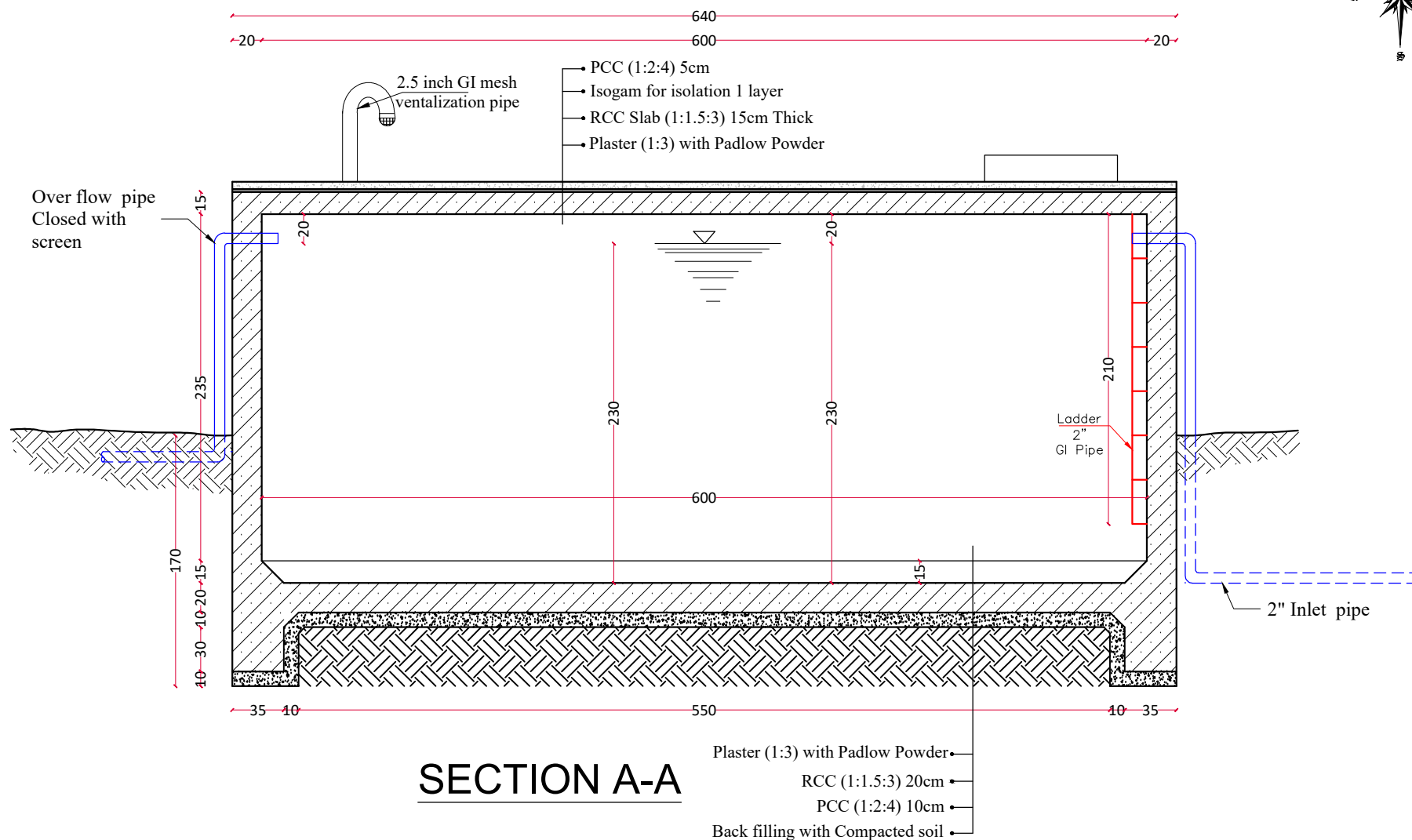
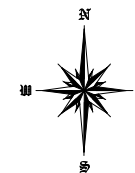
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|---------------|--|
| Drawing Title | Node ID, Out Dia in (mm), Length in (m) and Elevation in (m) |
|---------------|--|

Eng. Shah Faisal

5/18

Akhta Khana Sufla

SIDA



IRW

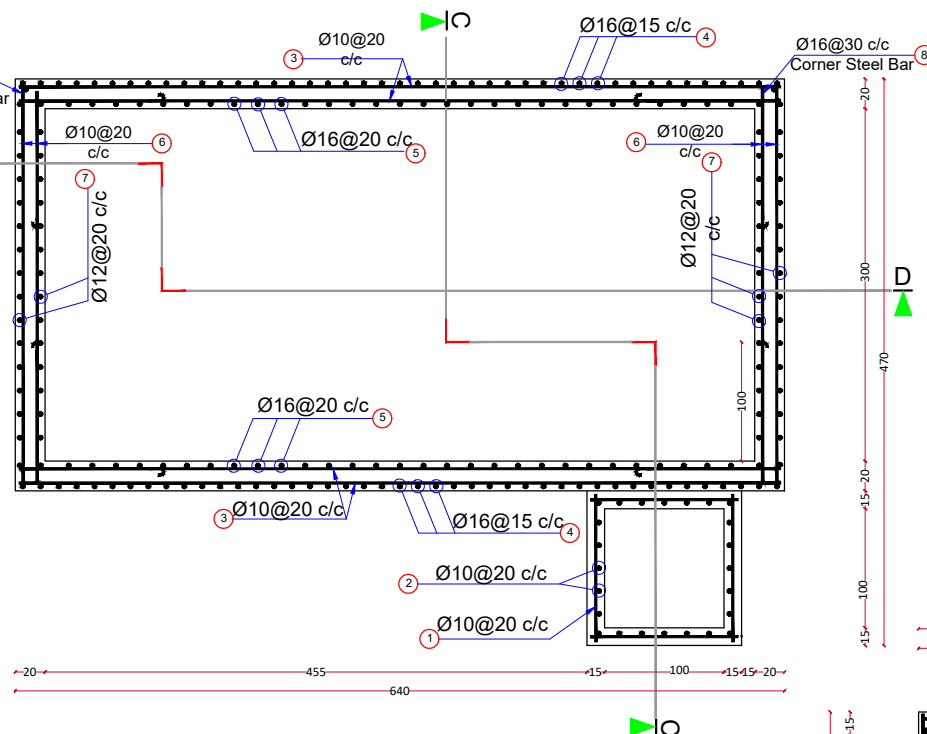
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| Islamic Relief Worldwide-SIDA Food Security, WASH, and protection support to vulnerable families in Ghor- Afghanistan | | |
| Department | WASH | All dimension in cm otherwise stated |
| Drawing Title | Section A-A | |

| | |
|-----------------------|----------------------------|
| Surveyed by | Eng. Neman "Sultani" |
| Drawing & designed by | Abdul Majeed Khamosh |
| Review & check by | Eng. Hikmatullah "Arifzai" |
| Approved by | Eng. Shah Faisal |

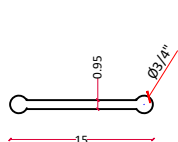
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|--------------|------|
| SHEET NO. | 7/18 |
| 30-July-2024 | |

| | |
|----------|-------------------|
| Province | Ghor |
| District | Feroz Koh |
| VILLAGE | Akhta Khana Sufia |

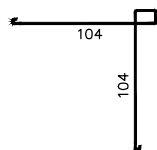
SIDA
Project



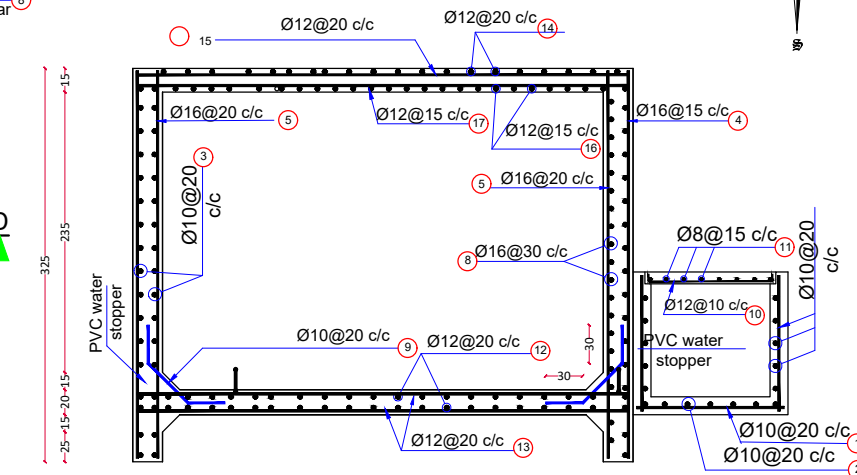
REINFORCEMENT PLAN



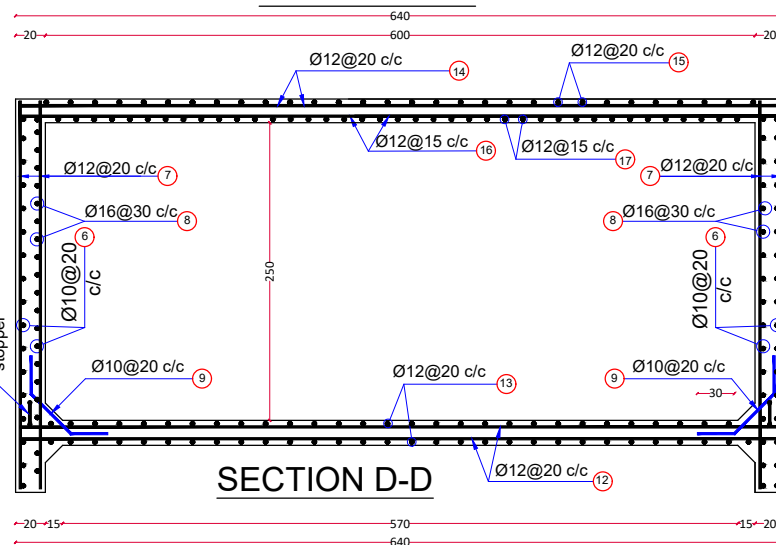
Detail of PVC water stopper



Corner Steel Bar Ø16 @30 c/c
L=250cm



SECTION C-C



SECTION D-D



IRW

| | | |
|--|--|---|
| Islamic Relief Worldwide-SIDA Food Security, WASH, and protection support to vulnerable families in Ghor- Afghanistan | | |
| Department | WASH | All dimension in cm otherwise stated |
| Drawing Title | Reservoir section and steel bar detail | |

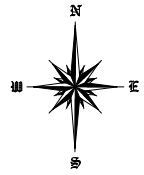
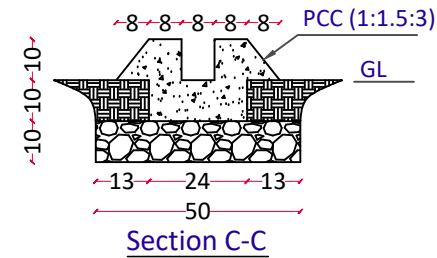
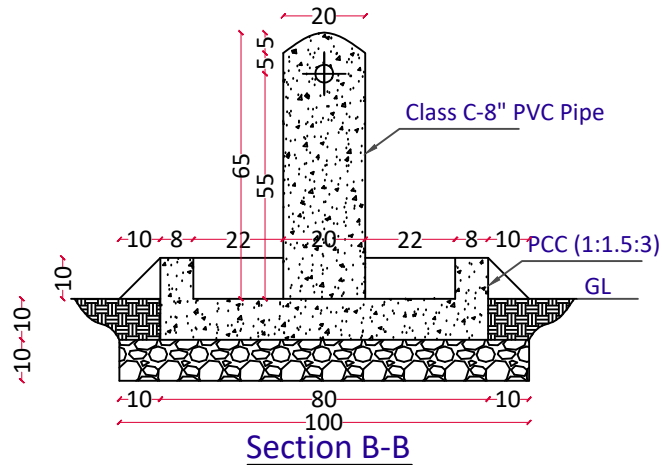
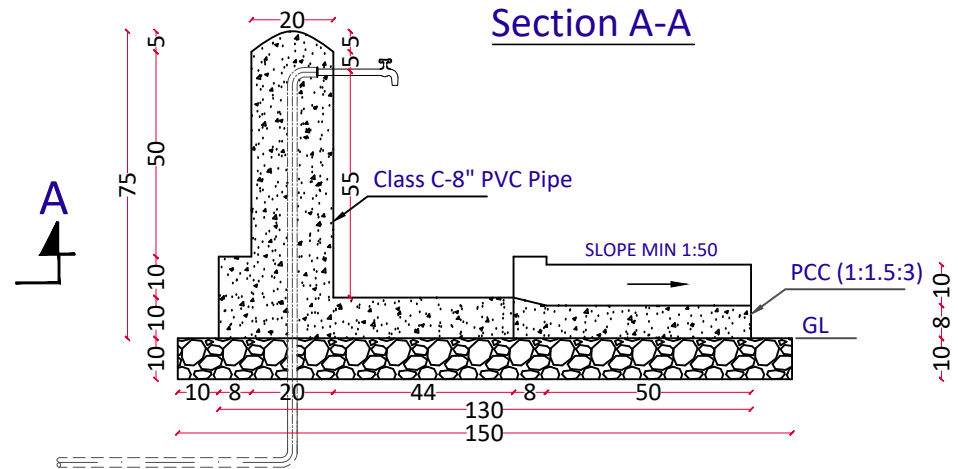
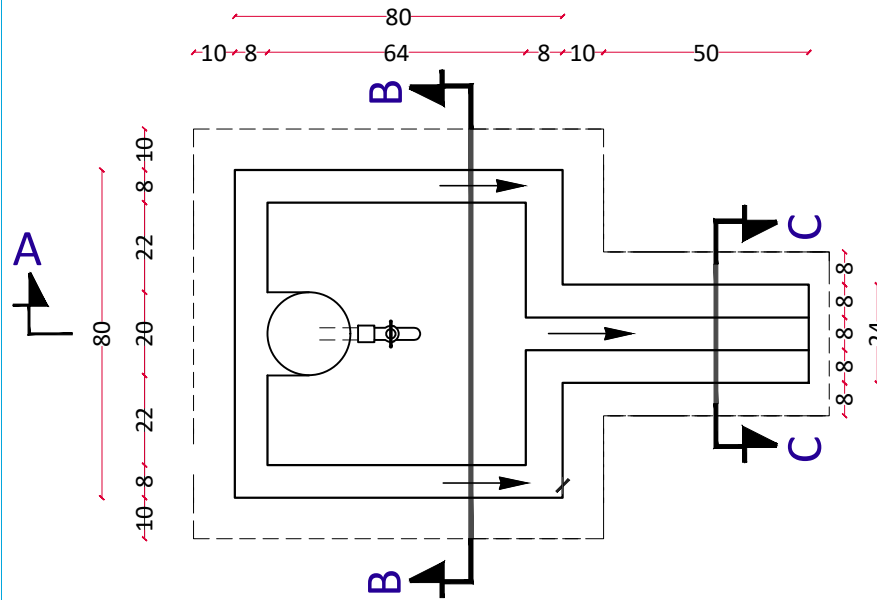
| | |
|-----------------------|----------------------------|
| Surveyed by | Eng. Neman "Sultani" |
| Drawing & designed by | Abdul Majeed Khamosh |
| Review & check by | Eng. Hikmatullah "Arifzai" |
| Approved by | Eng. Shah Faisal |

| | |
|--------------|---------|
| SHEET NO. | 9 18 |
| 30-July-2024 | |

| | |
|----------|-------------------|
| Province | Ghor |
| District | Feroz Koh |
| VILLAGE | Akhta Khana Sufia |

SIDA
Project

Stand Tap



IRW

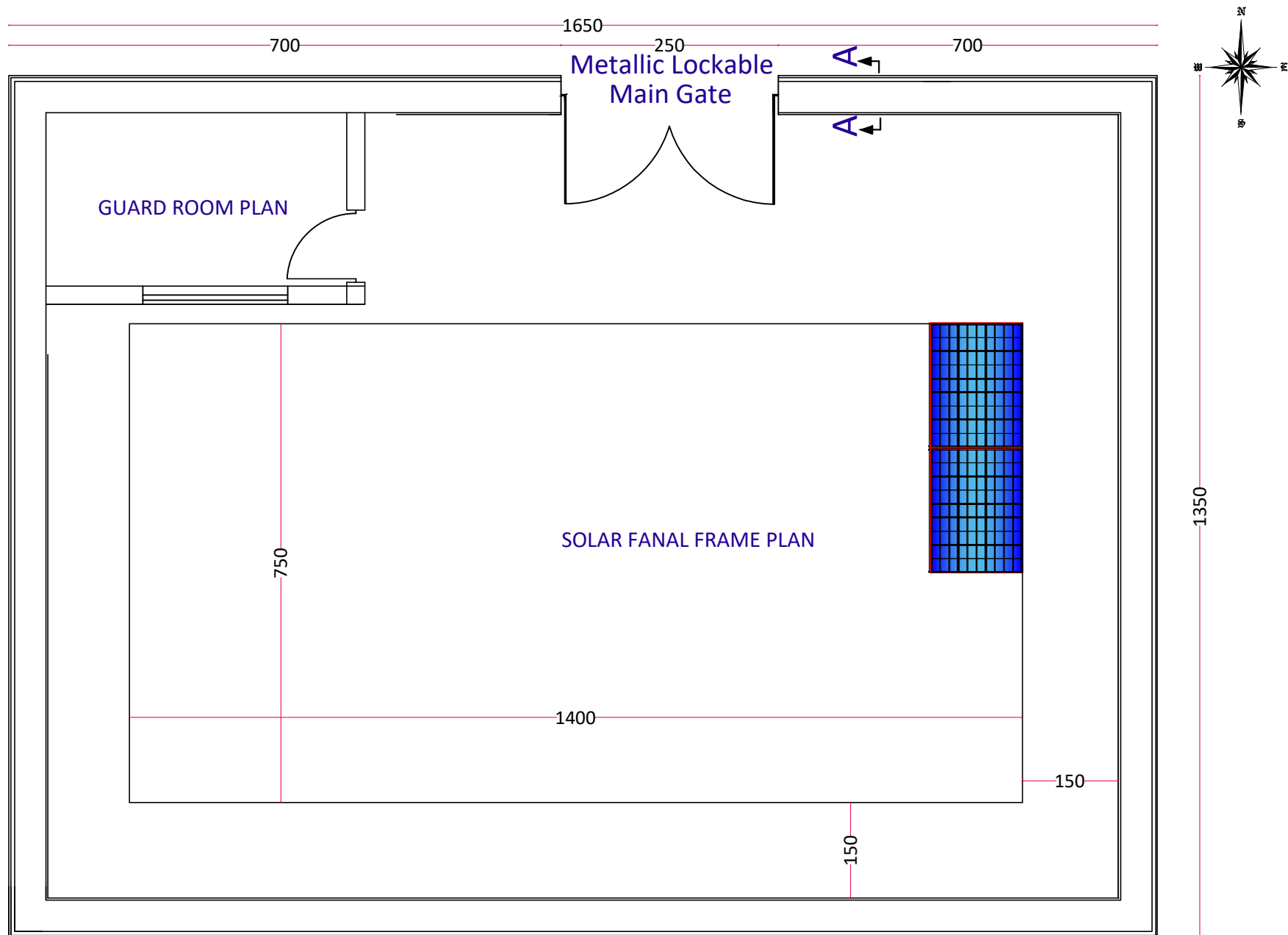
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|--|-----------------------------|---|
| Islamic Relief Worldwide-SIDA Food Security, WASH, and protection support to vulnerable families in Ghor- Afghanistan | | |
| Department | WASH | All dimension in cm otherwise stated |
| Drawing Title | House connection stand tape | |

| | |
|-----------------------|----------------------------|
| Surveyed by | Eng. Neman "Sultani" |
| Drawing & designed by | Abdul Majeed Khamosh |
| Review & check by | Eng. Hikmatullah "Arifzai" |
| Approved by | Eng. Shah Faisal |

| | |
|--------------|-------|
| SHEET NO. | 11/18 |
| 30-July-2024 | |

| | |
|----------|-------------------|
| Province | Ghor |
| District | Feroz Koh |
| VILLAGE | Akhta Khana Sufia |

SIDA
Project



IRW

Islamic Relief Worldwide-SIDA
Food Security, WASH, and protection support to vulnerable families in Ghor- Afghanistan

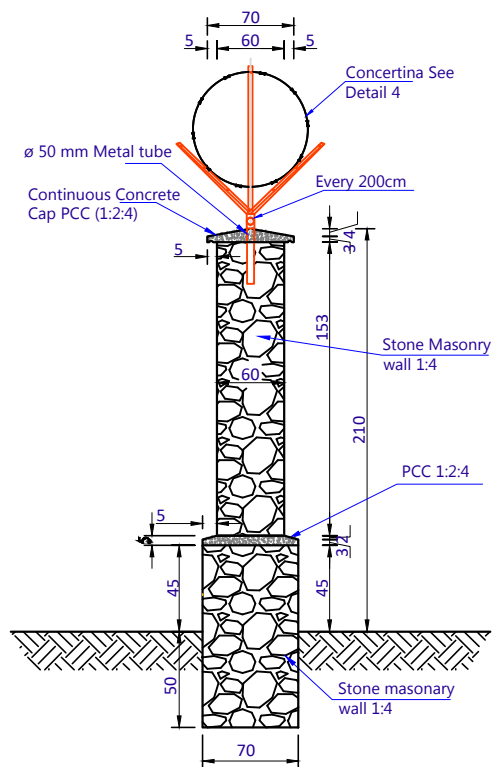
| | | |
|---------------|-----------------------------------|---|
| Department | WASH | All dimension in cm otherwise stated |
| Drawing Title | Boundary wall and Guard room plan | |

| | |
|-----------------------|----------------------------|
| Surveyed by | Eng. Neman "Sultani" |
| Drawing & designed by | Abdul Majeed Khamosh |
| Review & check by | Eng. Hikmatullah "Arifzai" |
| Approved by | Eng. Shah Faisal |

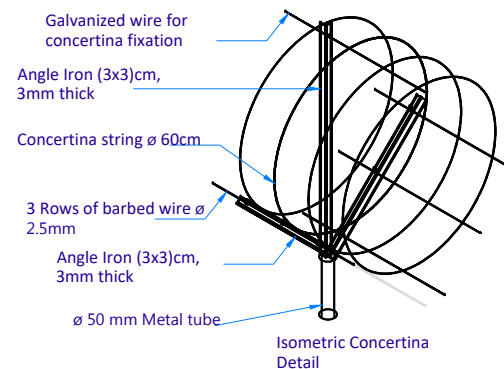
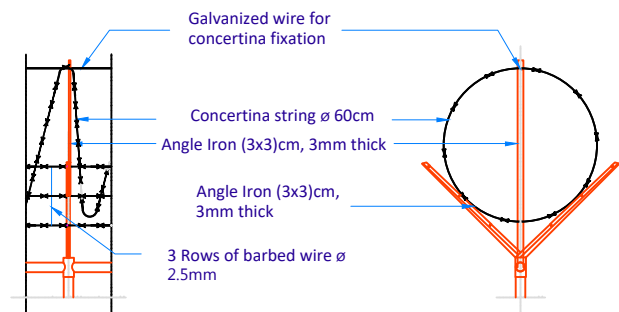
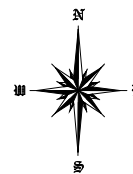
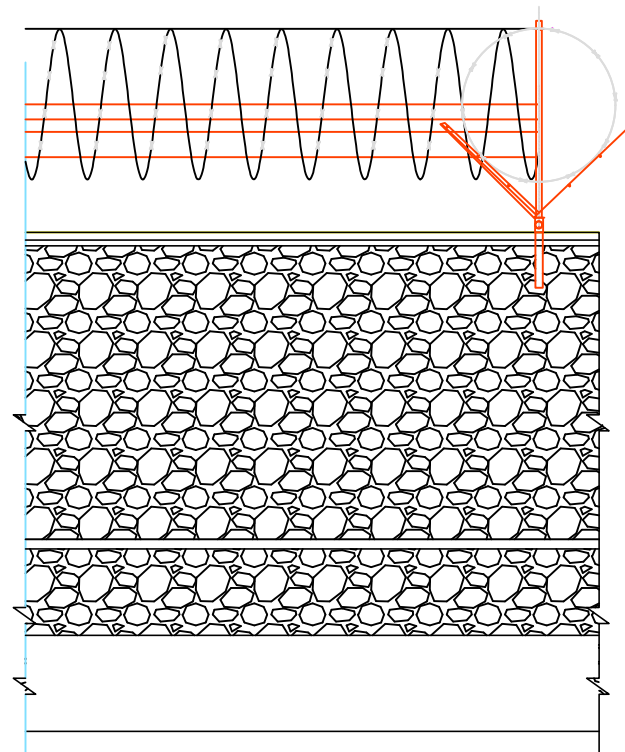
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|--------------|-------|
| SHEET NO. | 12/18 |
| 30-July-2024 | |

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| Province | Ghor |
| District | Feroz Koh |
| VILLAGE | Akhta Khana Sufla |

**SIDA
Project**



Section A-A



Isometric Concertina Detail



IRW

Islamic Relief Worldwide-SIDA
Food Security, WASH, and protection support to vulnerable families in Ghor- Afghanistan

Department WASH
Drawing Title boundary section and barbed wire plan

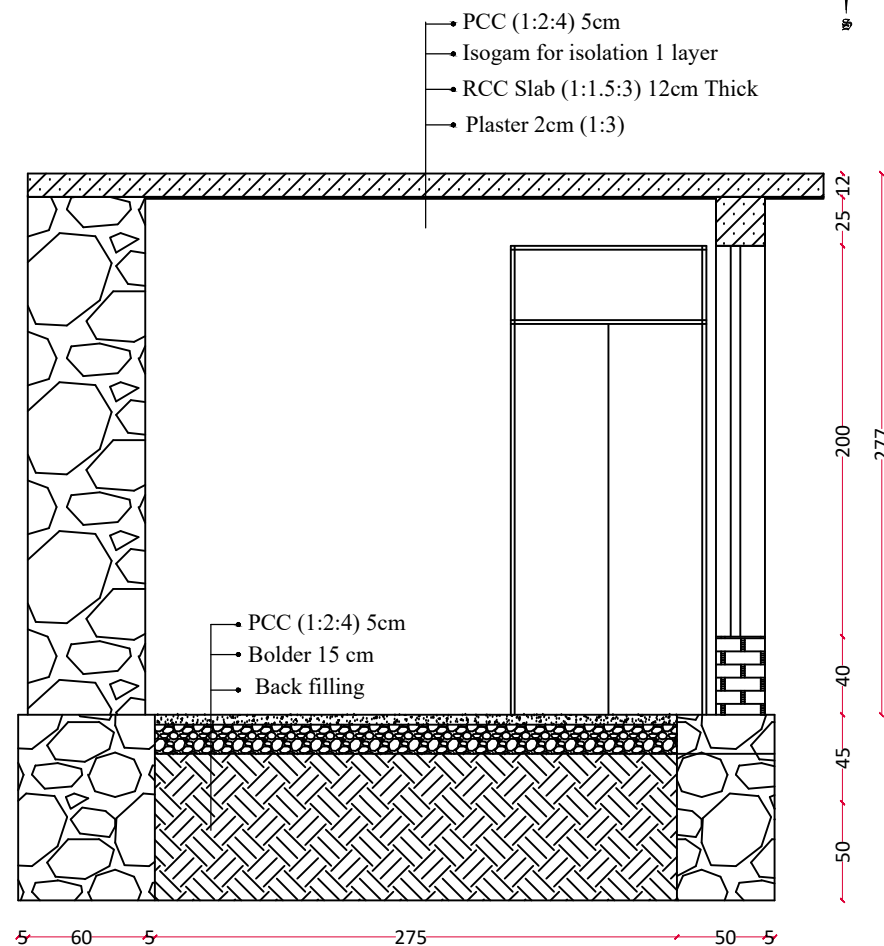
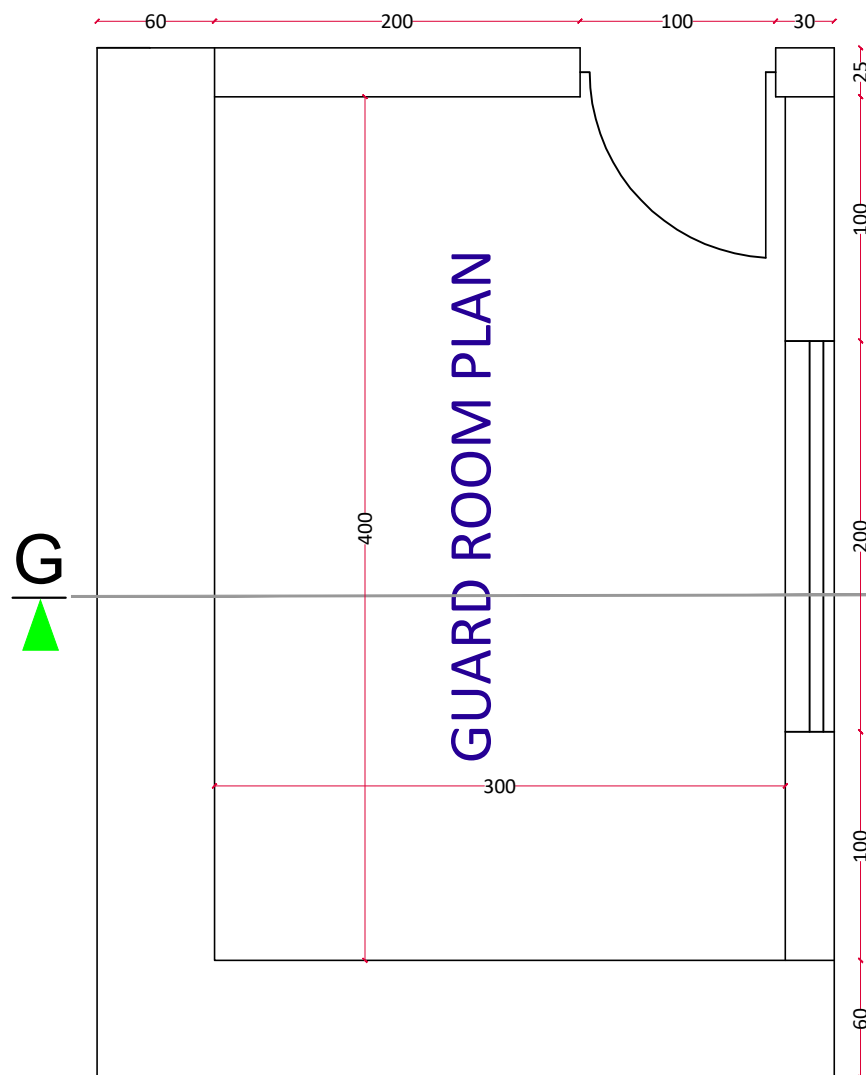
All dimension in cm
otherwise stated

Surveyed by Eng. Neman "Sultani"
Drawing & designed by Abdul Majeed Khamosh
Review & check by Eng. Hikmatullah "Arifzai"
Approved by Eng. Shah Faisal

SHEET NO. 13/18
30-July-2024

Province Ghor
District Feroz Koh
VILLAGE Akhta Khana Sufia

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Project



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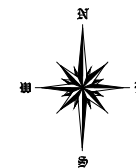
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| Islamic Relief Worldwide-SIDA Food Security, WASH, and protection support to vulnerable families in Ghor- Afghanistan | | |
| Department | WASH | All dimension in cm otherwise stated |
| Drawing Title | Guard Room Plan | |

| | |
|-----------------------|----------------------------|
| Surveyed by | Eng. Neman "Sultani" |
| Drawing & designed by | Abdul Majeed Khamosh |
| Review & check by | Eng. Hikmatullah "Arifzai" |
| Approved by | Eng. Shah Faisal |

| | |
|--------------|-------|
| SHEET NO. | 14/18 |
| 30-July-2024 | |

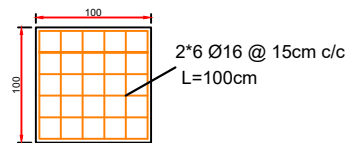
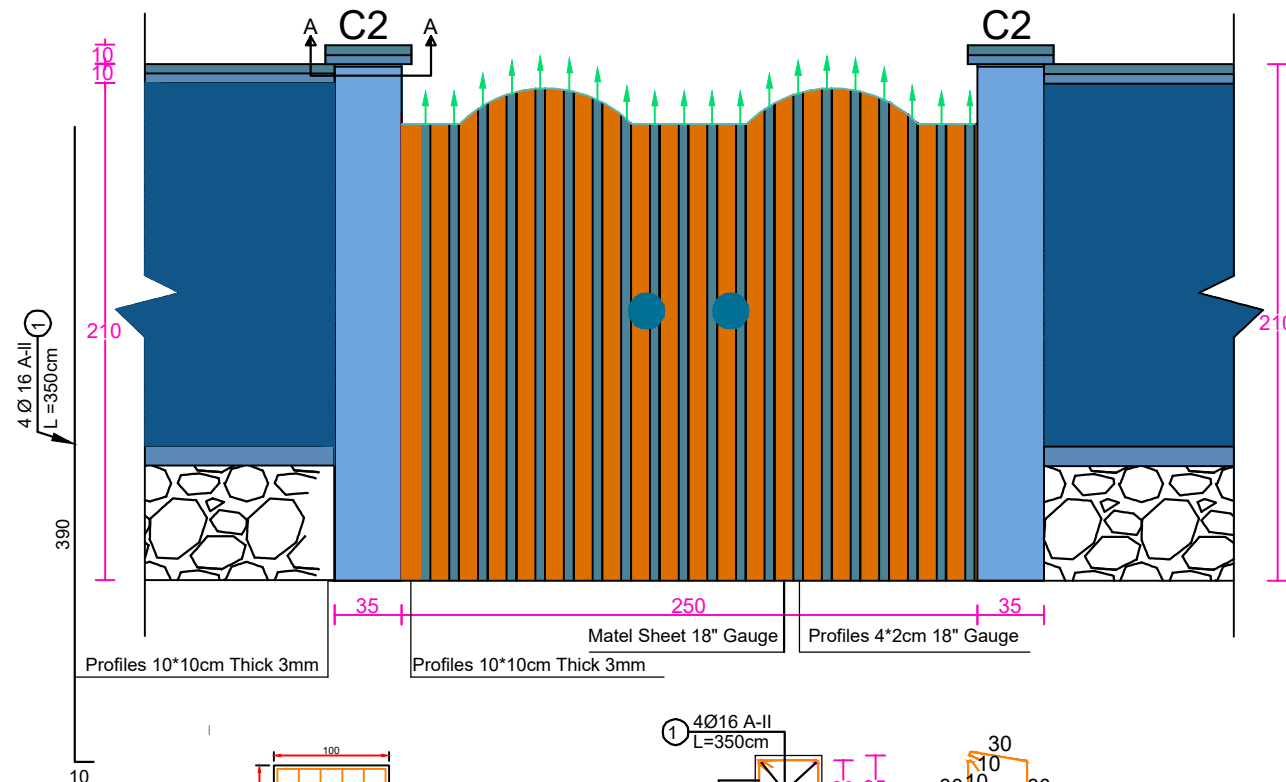
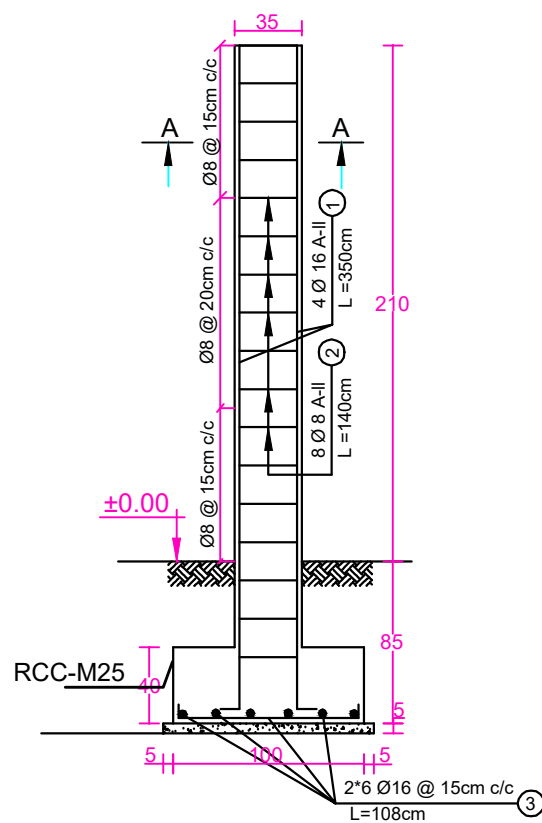
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|----------|-------------------|
| Province | Ghor |
| District | Feroz Koh |
| VILLAGE | Akhta Khana Sufia |

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Project**

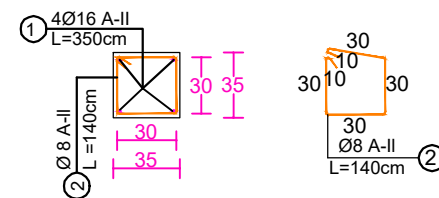


Main Gate Front View

Column - C2 No=3



Footing for Main gate columns



Sec. A-A



IRW

Islamic Relief Worldwide-SIDA
Food Security, WASH, and protection support to vulnerable families in Ghor- Afghanistan

Department WASH
Drawing Title Metallic Gate front view , Section and detail

All dimension in cm
otherwise stated

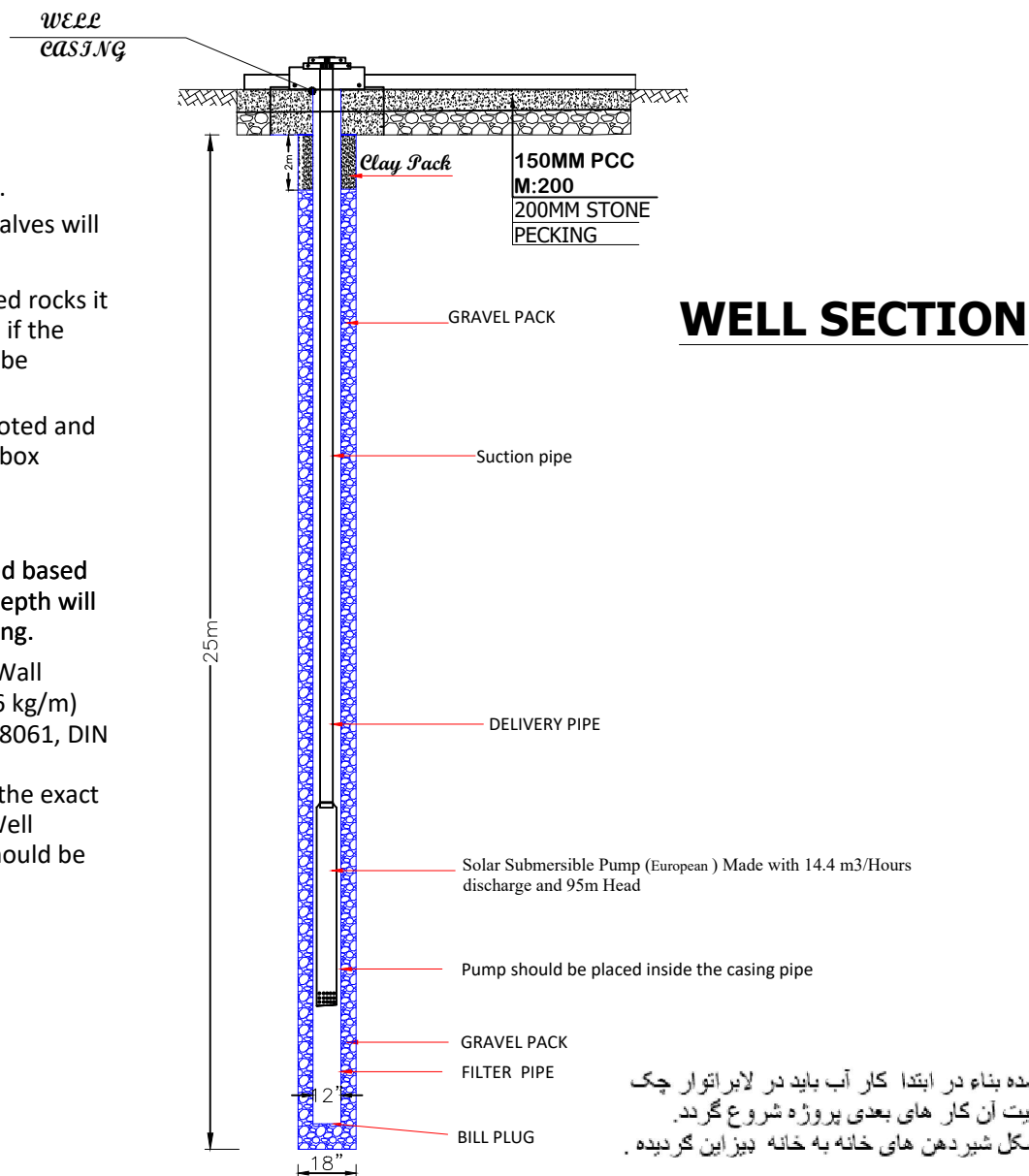
Surveyed by Eng. Neman "Sultani"
Drawing & designed by Abdul Majeed Khamosh
Review & check by Eng. Hikmatullah "Arifzai"
Approved by Eng. Shah Faisal

SHEET NO. 15/18
30-July-2024

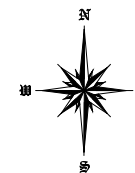
Province Ghor
District Feroz Koh
VILLAGE Akhta Khana Sufla

SIDA
Project

- 1-Well designed by WASH department.
- 2-The working pressure for pipes and valves will be 16 or 20 bar (290 PSI)
- 3- If the ground stratum are made of bed rocks it no need for installation of casing pipes. if the stratum are made of Loss soil it should be stablized by installation casing pipes.
- 4-Each drilled strata depth should be noted and soil sample should be kept in a sample box separately .
- 5-Pump test for 8 hours.
- 6-the depth of filter pipe has considered based on the previous experience . the true depth will be determined after well practical drilling.
- 7-Diameter=(12") inches, Class C, Min Wall Thickness (12.1) mm, Min weight (16.6 kg/m)
According to ASTM D1785 Sch.80, DIN 8061, DIN 8062, ASTM F480 Standards
- 8-the Size of Gravel Packing (3-6) mm, the exact size will be declared after boring and Well Hydrological calculations, the Gravel should be clean and technical acceptable

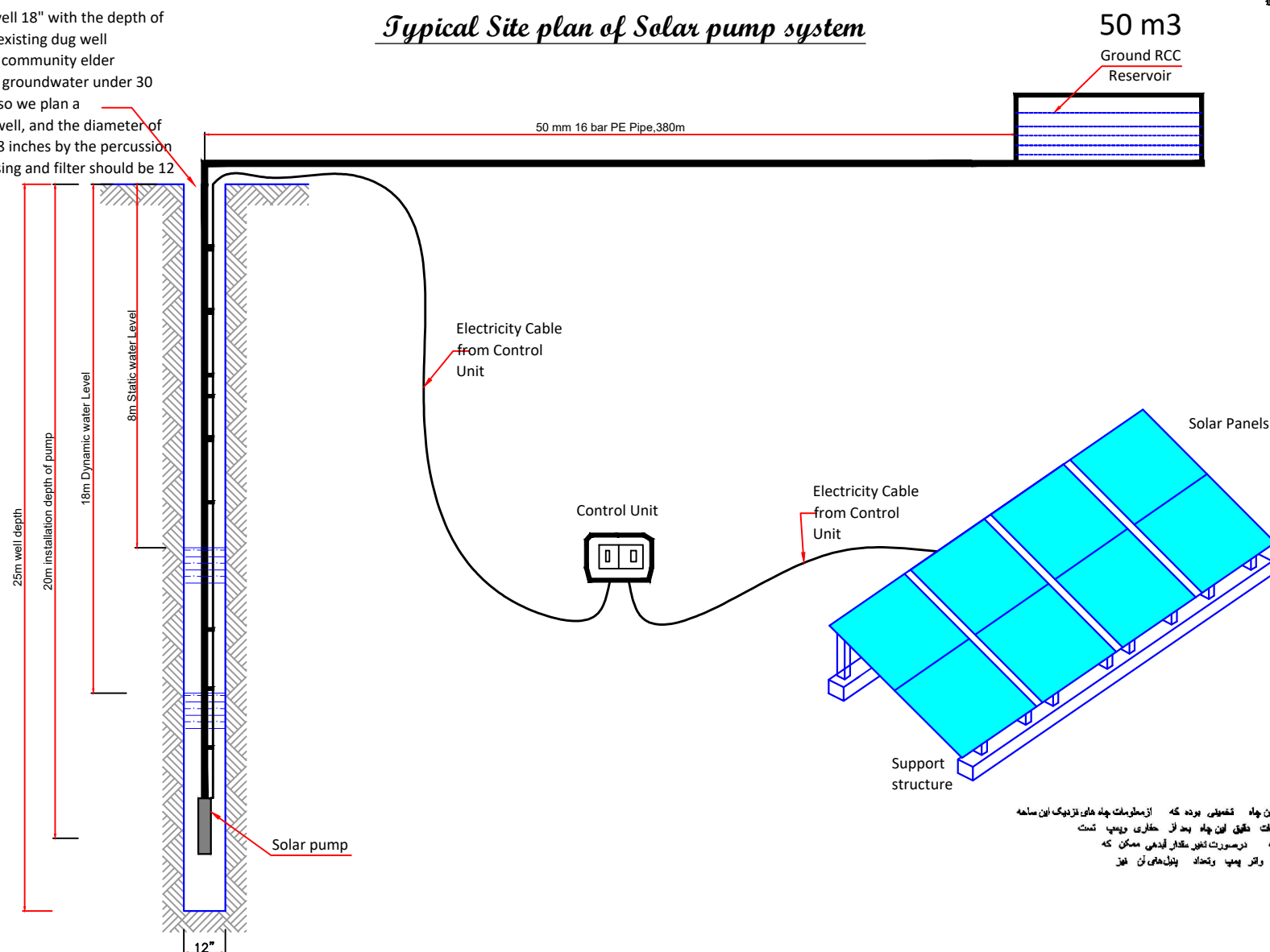


نوت:
از اینکه آب چاه در لایر اتوار تست نشده بناء در ابتدا کار آب باید در لایر اتوار چک شود و بعد از حصول اطمینان از کیفیت آن کار های بعدی پروژه شروع گردد.
همچنان نظر به مشخصات شبکه به شکل شیر دهن های خانه به خانه دیز این گردیده .



Typical Site plan of Solar pump system

New proposed well 18" with the depth of 25 m as per the existing dug well observation and community elder information, the groundwater under 30 meters has salt, so we plan a 25-meter-deep well, and the diameter of digging will be 18 inches by the percussion machine; the casing and filter should be 12 inches. Class C



IRW

Islamic Relief Worldwide-SIDA
Food Security, WASH, and protection support to vulnerable families in Ghor- Afghanistan
Department WASH
Drawing Title TDH
All dimension in cm
otherwise stated

Surveyed by Eng. Neman "Sultani"
Drawing & designed by Abdul Majeed Khamosh
Review & check by Eng. Hikmatullah "Arifzai"
Approved by Eng. Shah Faisal

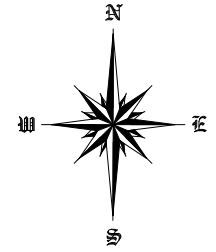
SHEET
NO. 17/18
30-July-2024

Province Ghor
District Feroz Koh
VILLAGE Akhta Khana Sufia

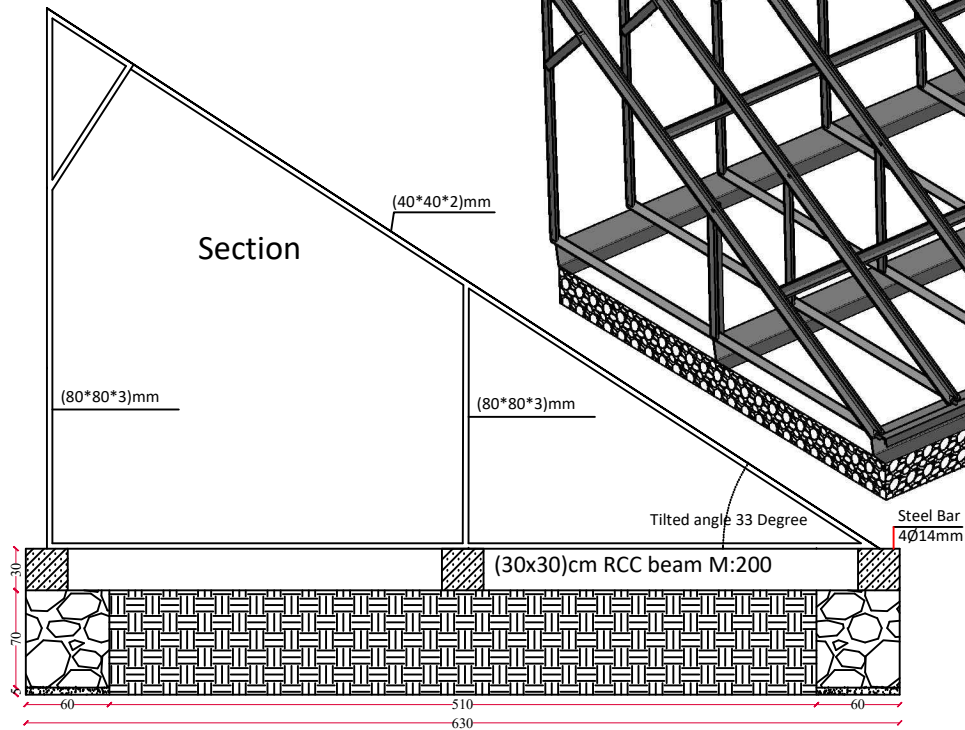
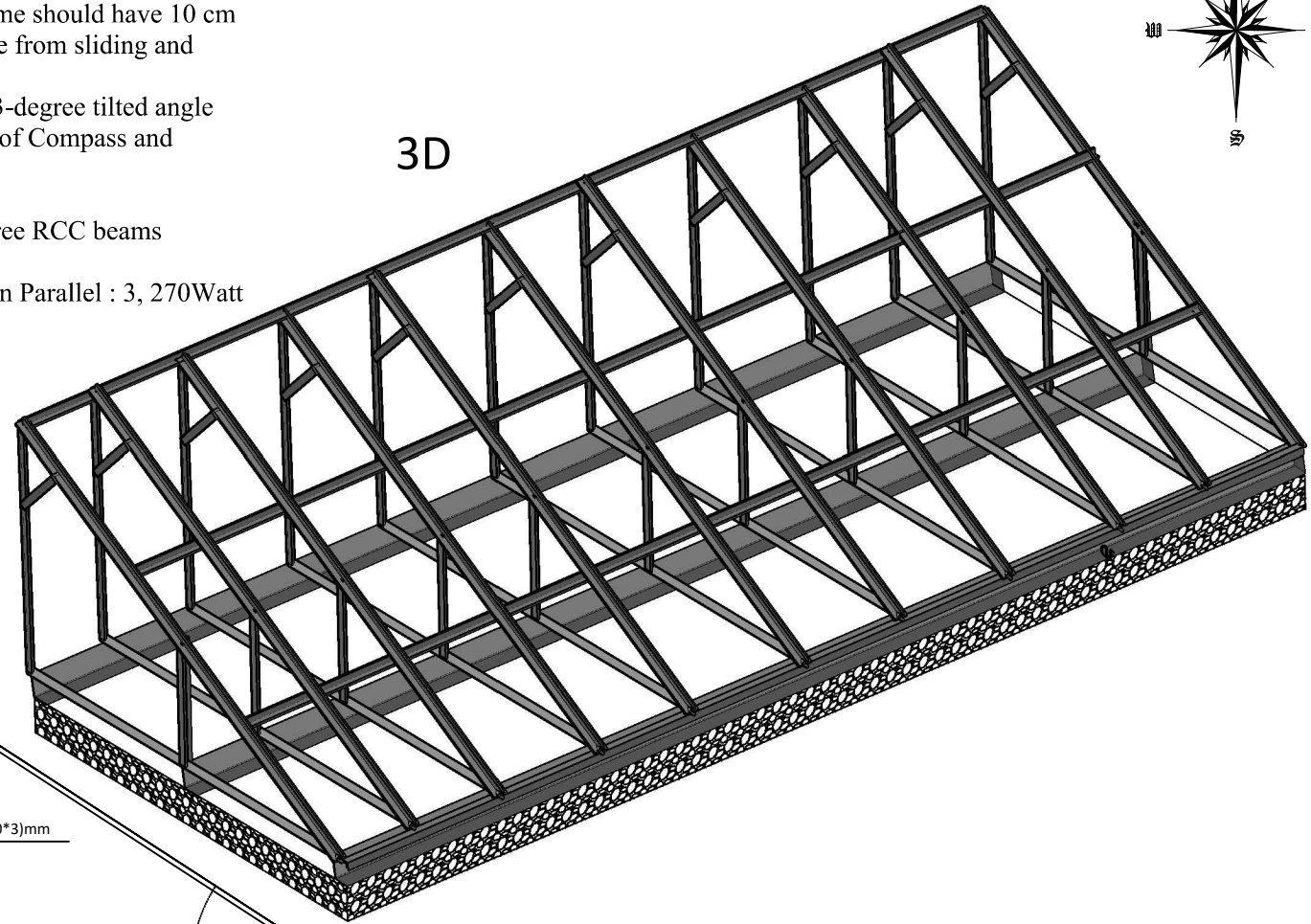
SIDA
Project

Akhta Khana Sufla Village water Supply Project

- 3- All solar panels should have 10 Number Nut&bold and between two solar panel vertical array frame should have 10 cm space for air vent to protect the solar frame from sliding and overturning.
- 4- the solar panel's frame should have a 33-degree tilted angle with the surface of the yard as instruction of Compass and Groundfos software's and product.
- 5- under the frame we have (30*30)cm three RCC beams according to the drawing
- 6- Number of solar modules in series: 10 in Parallel : 3, 270Watt



3D



IRW

Islamic Relief Worldwide-SIDA
Food Security, WASH, and protection support to vulnerable families in Ghor- Afghanistan

Department WASH
Drawing Title Solar Frame Plan and Section

All dimension in cm
otherwise stated

Surveyed by Eng. Neman "Sultani"
Drawing & designed by Abdul Majeed Khamosh
Review & check by Eng. Hikmatullah "Arifzai"
Approved by Eng. Shah Faisal

SHEET NO. 18/18
30-July-2024

Province Ghor
District Feroz Koh
VILLAGE Akhta Khana Sufla

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Project