



| Point Table | | | | |
|-------------|-----------|-----------|-----------|-------------|
| Point # | Elevation | Latitude | Longitude | Description |
| 1 | 1143 | N 3902759 | E 730589 | RESERVOIR |
| 2 | 1046 | N 3902794 | E 730274 | WELL |

LEGEND

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

| Point Table | | | | |
|-------------|-----------|-----------|-----------|-------------|
| Point # | Elevation | Latitude | Longitude | Description |
| 1 | 1143 | N 3902759 | E 730589 | RESERVOIR |
| 2 | 1046 | N 3902794 | E 730274 | WELL |

Note:

Type of soil :#3 to #5

Population : 1085

House Number: 56 Houses , 3 Mosque,

1 Madrasa and one Hub primary school

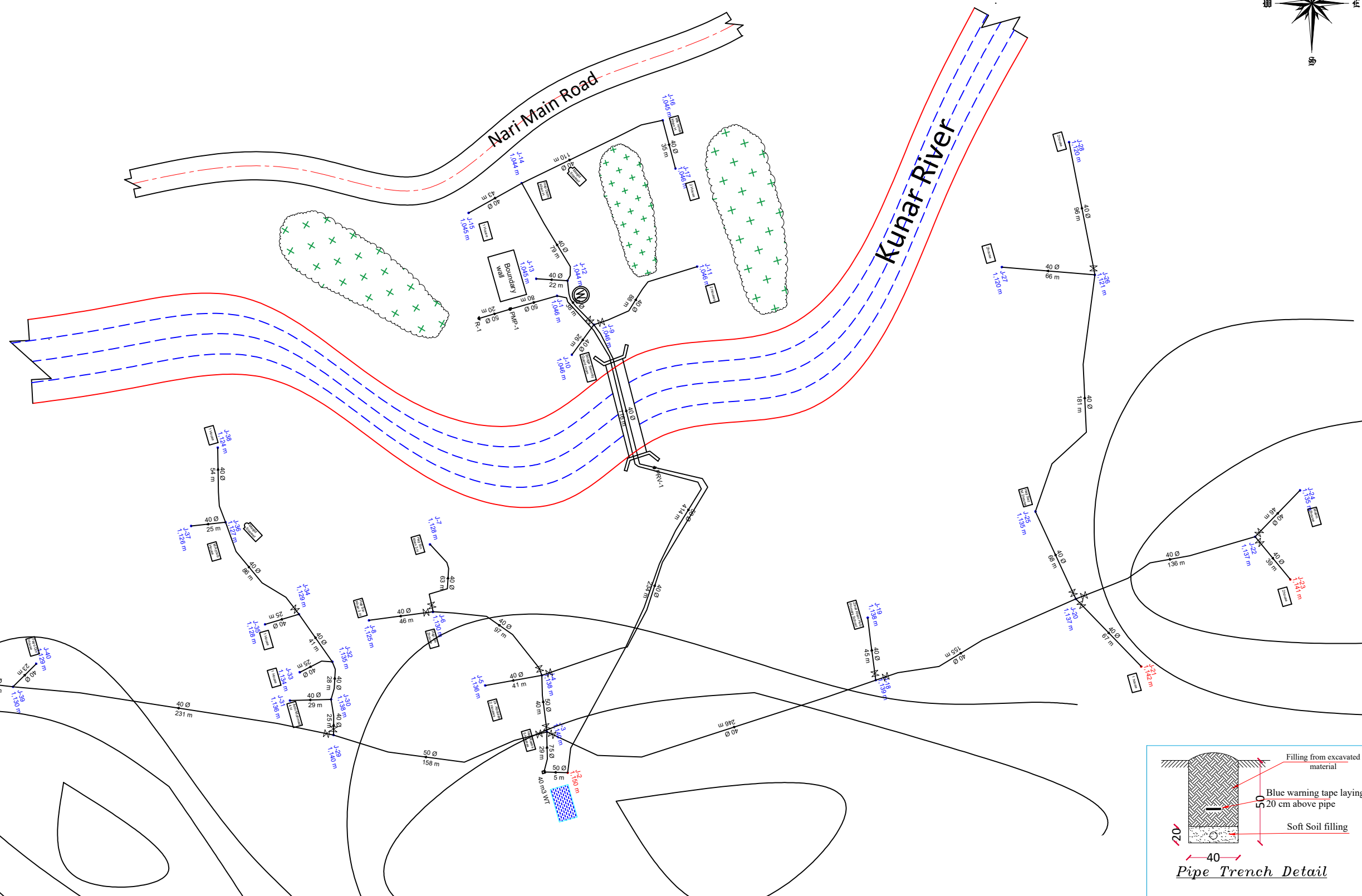
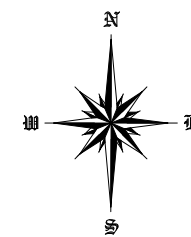
Static water level :35m

Dynamic water level:70 m

Total depth :100m

Drilling type : Rotary 12".

Nari - Shagi Village water Supply Project

**IRW**Islamic Relief Worldwide
WASH Initiative for Strengthening Health (WISH)

Department WASH

Drawing Title Final Site Plan

All dimension in (m) otherwise stated

Surveyed by

WASH team

Drawing & designed by

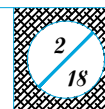
WASH Team

Review & check by

Eng. M. Tahir "Safi"

Approved by

Eng. Shah Faisal

SHEET
No.

09-May-2024

PROVINCE

Kunar

DISTRICT

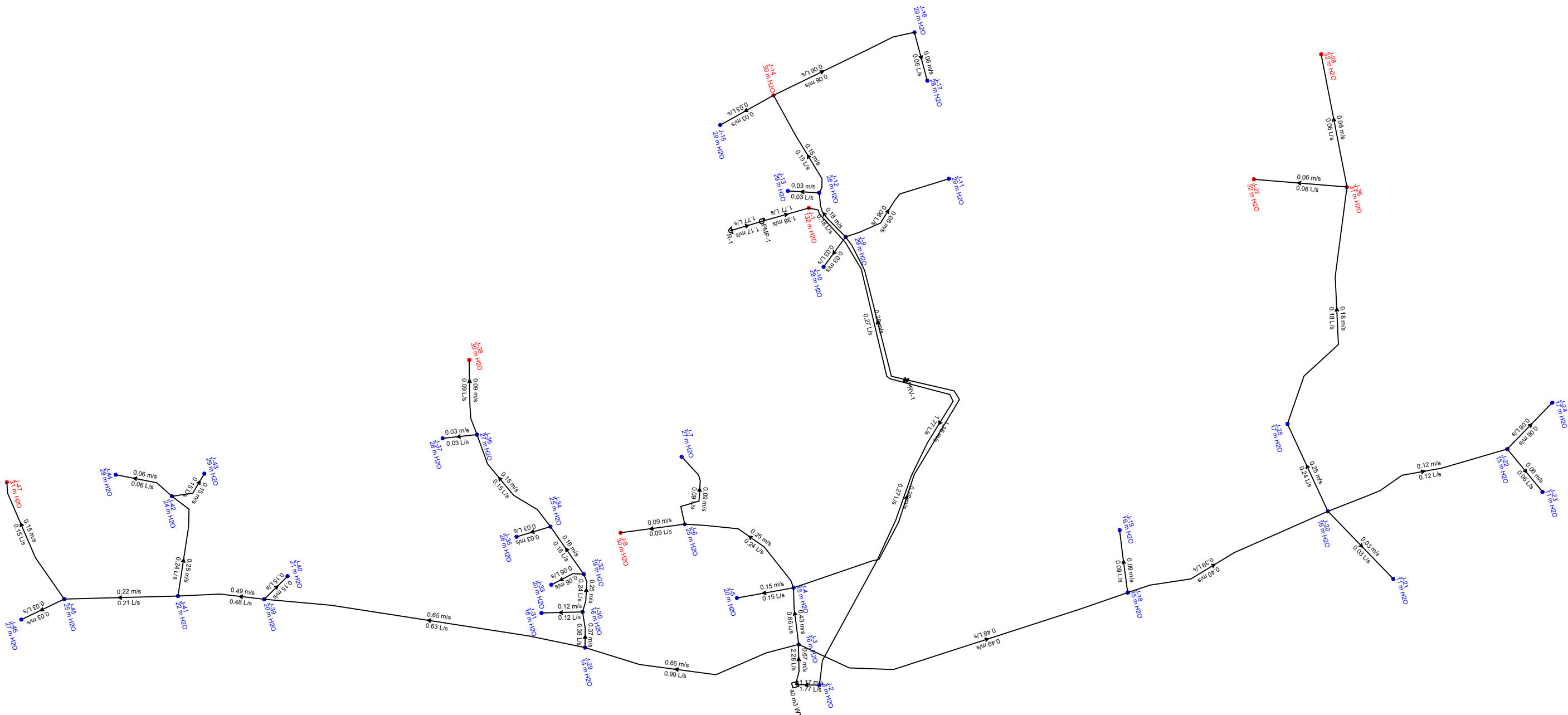
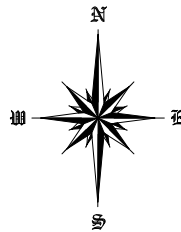
Nari

VILLAGE

Shagi

WISH

Nari - Shagi Village water Supply Project



IRW

Islamic Relief Worldwide
WASH Initiative for Strengthening Health (WISH)

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

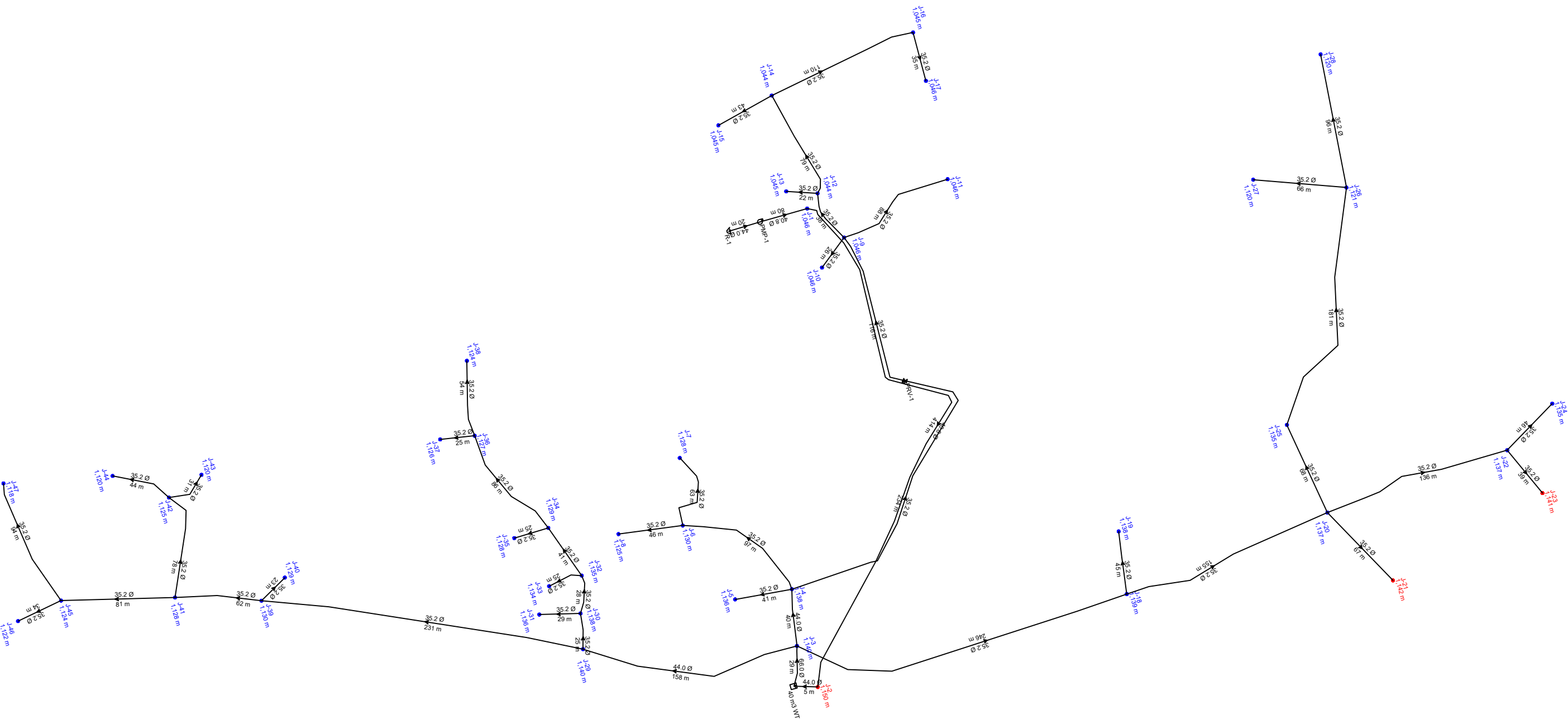
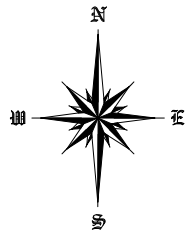
All dimension in (m)
otherwise stated

| | |
|-----------------------|----------------------|
| Surveyed by | WASH team |
| Drawing & designed by | WASH Team |
| Review & check by | Eng. M. Tahir "Safi" |
| Approved by | Eng. Shah Faisal |

| | | | |
|--------------|--|----------|-------|
| SHEET No. | | PROVINCE | Kunar |
| | | DISTRICT | Nari |
| | | VILLAGE | Shagi |

WISH

Nari - Shagi Village water Supply Project



IRW

Islamic Relief Worldwide
WASH Initiative for Strengthening Health (WISH)

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

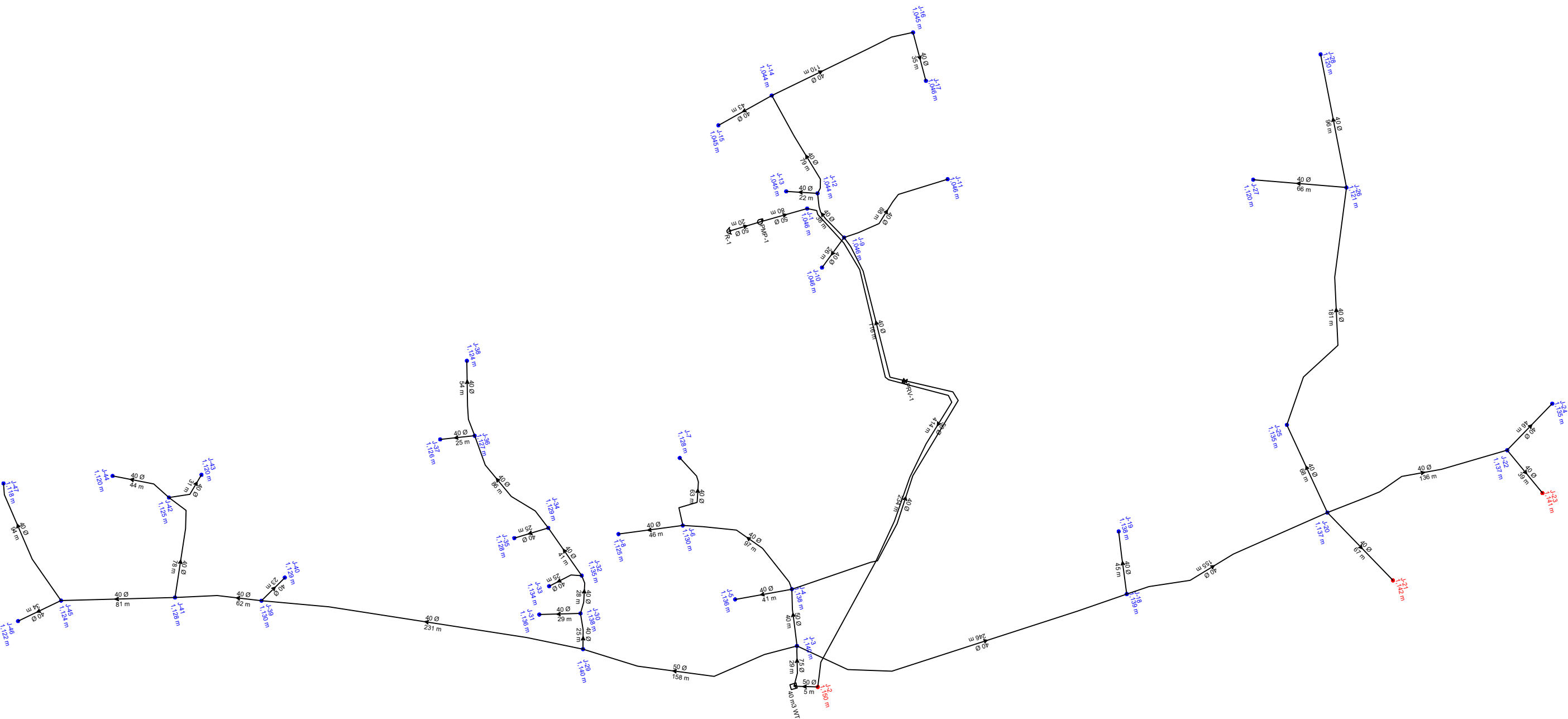
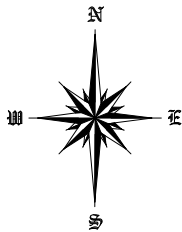
All dimension in (m)
otherwise stated

| | |
|-----------------------|----------------------|
| Surveyed by | WASH team |
| Drawing & designed by | WASH Team |
| Review & check by | Eng. M. Tahir "Safi" |
| Approved by | Eng. Shah Faisal |

| | | | |
|--------------|--|----------|-------|
| SHEET No. | | PROVINCE | Kunar |
| | | DISTRICT | Nari |
| | | VILLAGE | Shagi |

WISH

Nari - Shagi Village water Supply Project



IRW

Islamic Relief Worldwide
WASH Initiative for Strengthening Health (WISH)

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

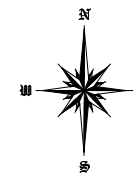
All dimension in (m)
otherwise stated

| | |
|-----------------------|----------------------|
| Surveyed by | WASH team |
| Drawing & designed by | WASH Team |
| Review & check by | Eng. M. Tahir "Safi" |
| Approved by | Eng. Shah Faisal |

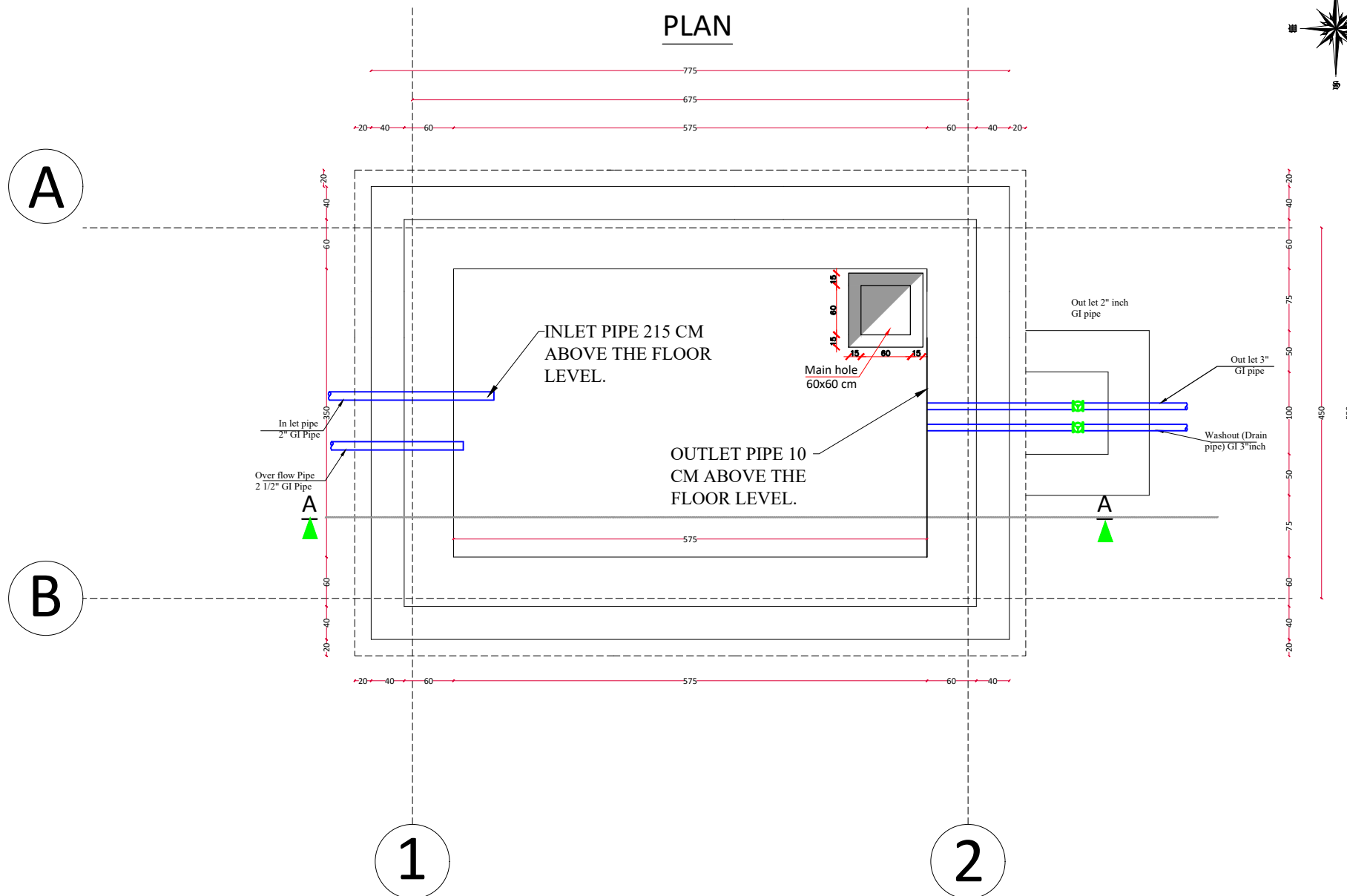
| | |
|-----------|-------------|
| SHEET No. | 5 / 18 |
| DATE | 09-May-2024 |

| | |
|----------|-------|
| PROVINCE | Kunar |
| DISTRICT | Nari |
| VILLAGE | Shagi |

WISH



PLAN



IRW

Islamic Relief Worldwide
WASH Initiative for Strengthening Health (WISH)

Department WASH

Drawing Title 40 Cubic Meter Stone Masonry Reservoir Plan

All dimension in cm
otherwise stated

Surveyed by

WASH team

Drawing & designed by

Eng. Mohammad Ayaz

Review & check by

Eng. M. Tahir "Safi"

Approved by

Eng. Shah Faisal

SHEET NO.



09-May-2024

PROVINCE

Kunar

DISTRICT

Nari

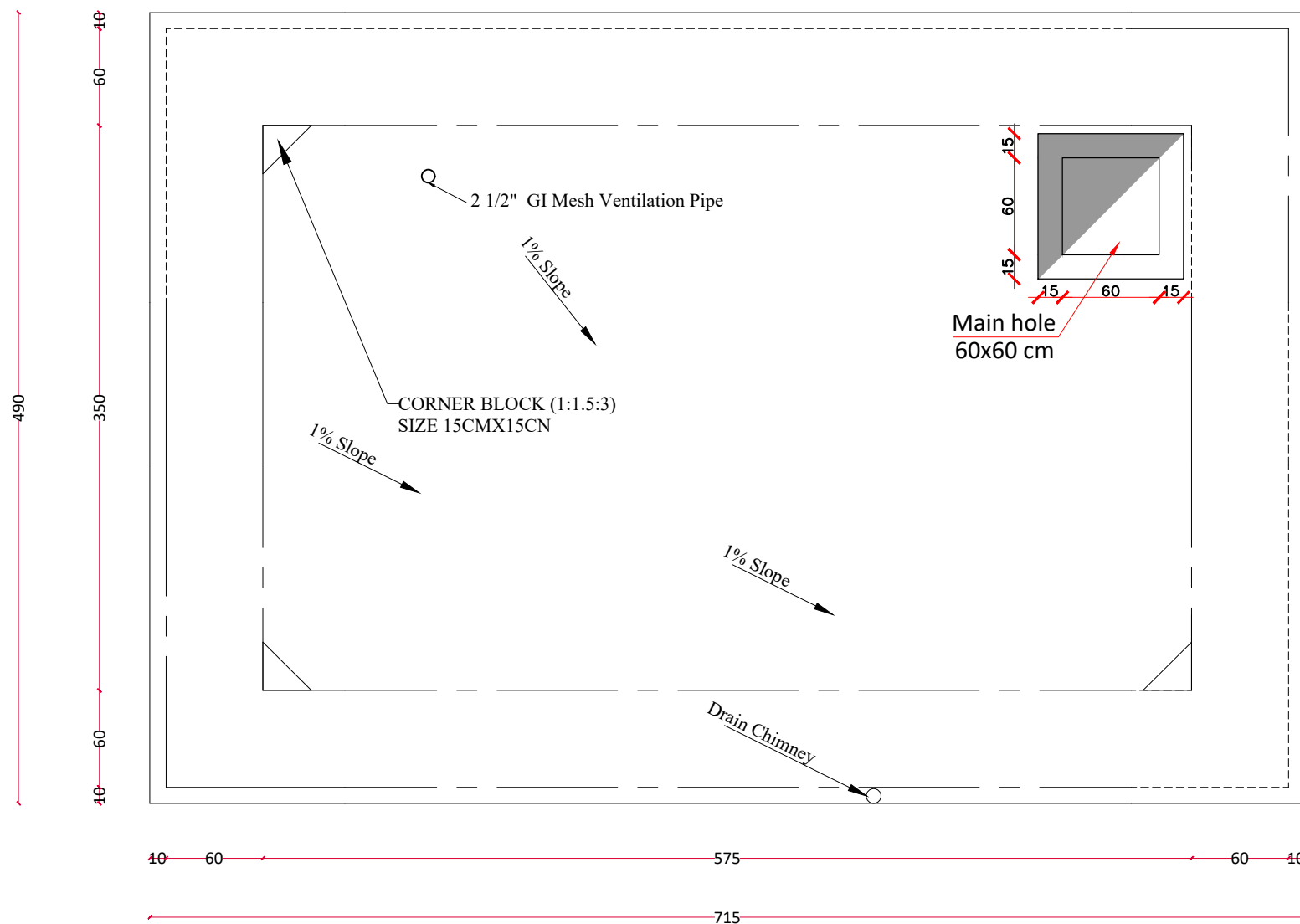
VILLAGE

Shagi

WISH Project



Roof Drain Plan



IRW

Islamic Relief Worldwide
WASH Initiative for Strengthening Health (WISH)

Department: WASH
Drawing Title: Reservoir Drain Plan

All dimension in cm
otherwise stated

Surveyed by: WASH team
Drawing & designed by: Eng. Mohammad Ayaz
Review & check by: Eng. M. Tahir "Safi"
Approved by: Eng. Shah Faisal

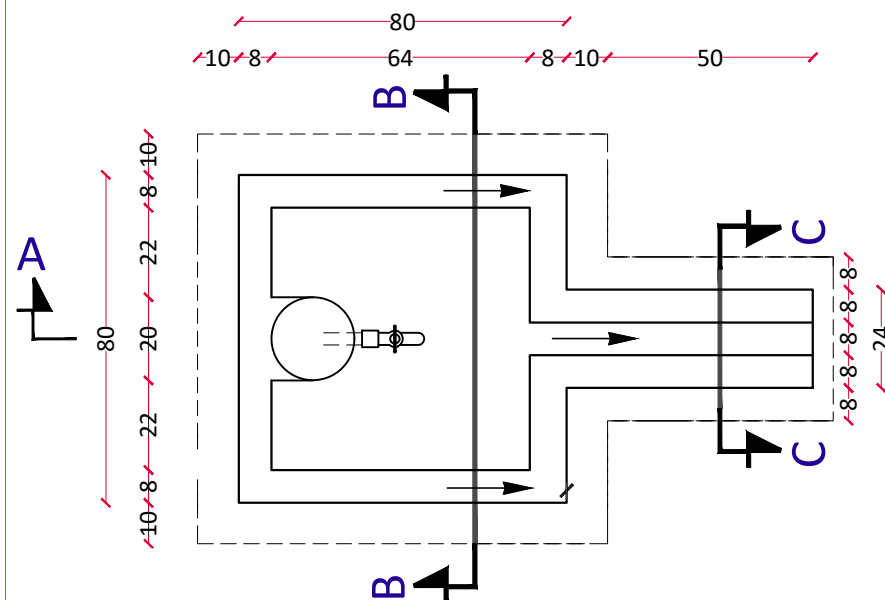
SHEET NO. 8/18
09-May-2024

PROVINCE: Kunar
DISTRICT: Nari
VILLAGE: Shagi

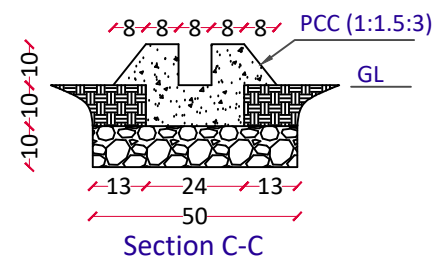
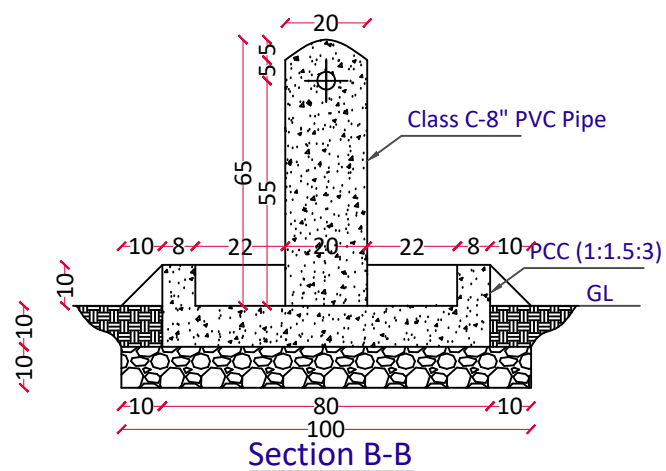
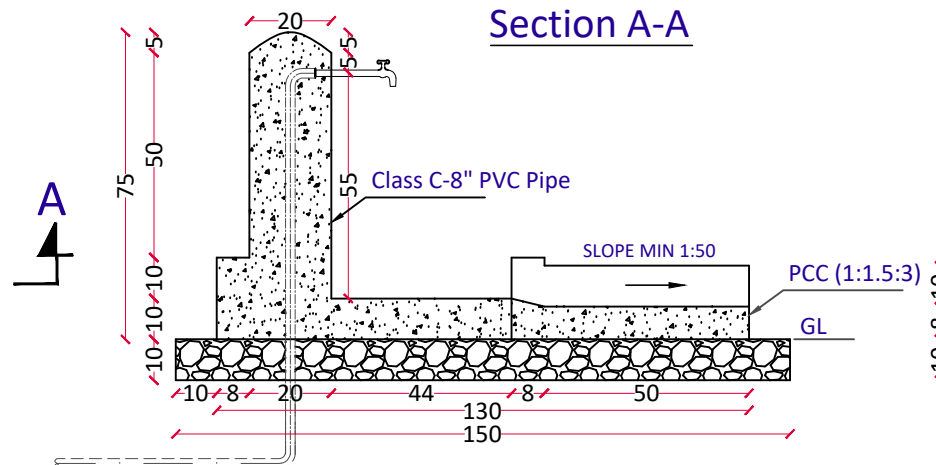
WISH
Project



Stand Tap



Section A-A



IRW

Islamic Relief Worldwide
WASH Initiative for Strengthening Health (WISH)

Department: WASH
Drawing Title: House connection stand tape

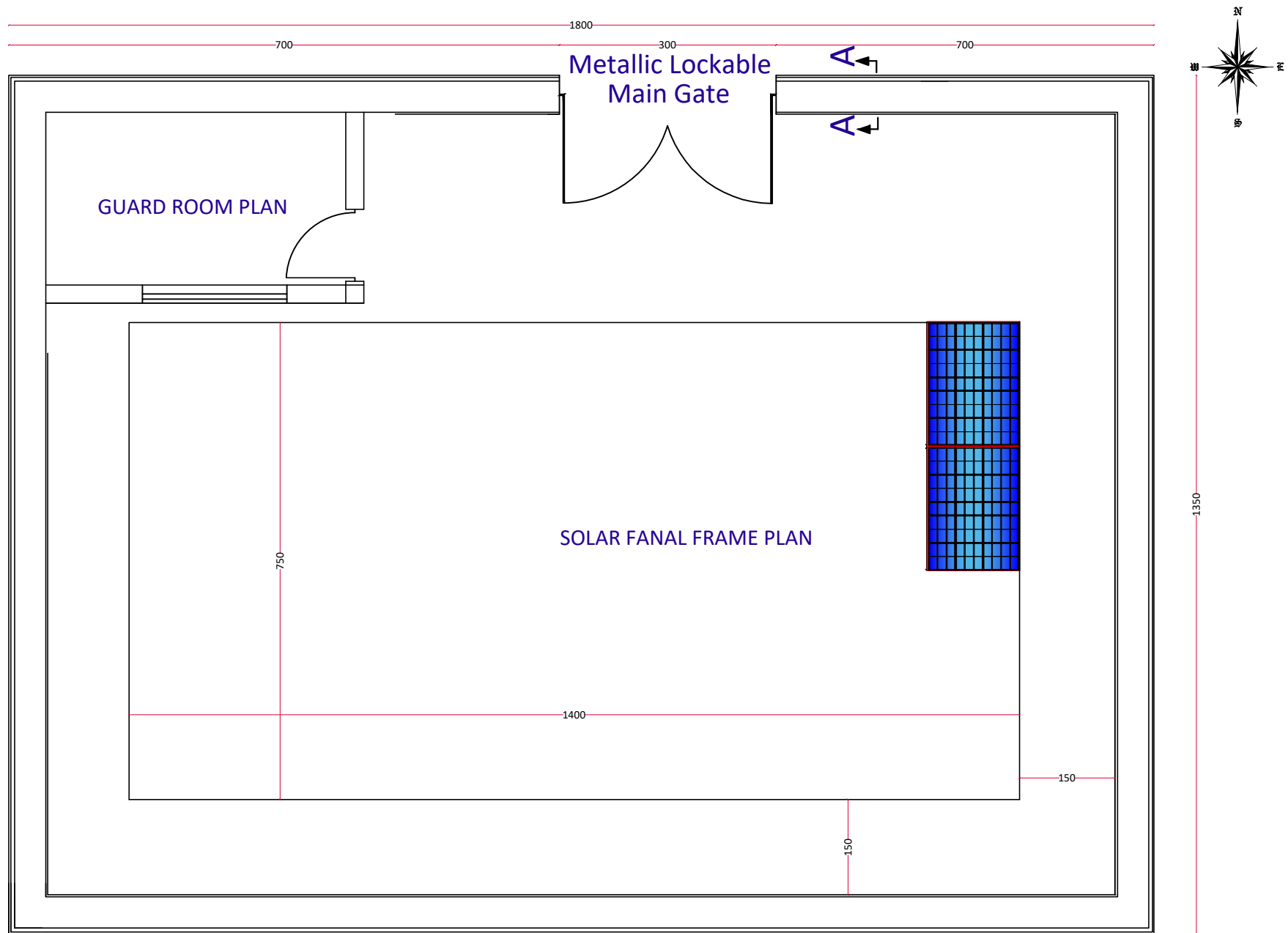
All dimension in cm
otherwise stated

Surveyed by: WASH team
Drawing & designed by: Eng. Mohammad Ayaz
Review & check by: Eng. M. Tahir "Safi"
Approved by: Eng. Shah Faisal


SHEET NO. 10/18
09-May-2024

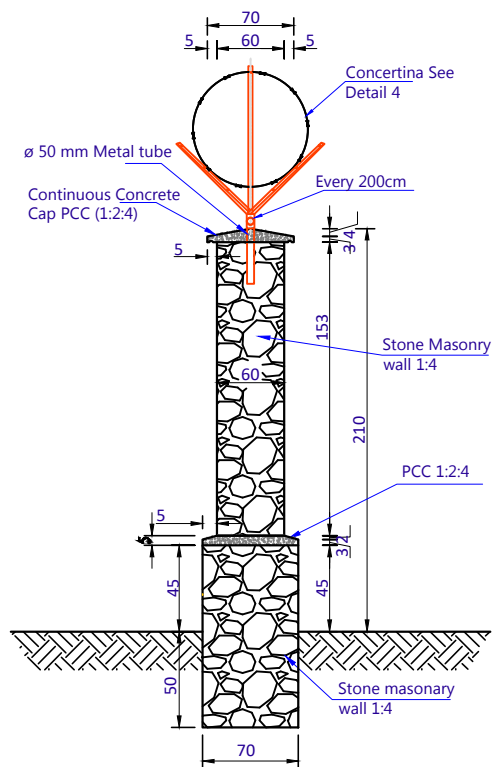
PROVINCE: Kunar
DISTRICT: Nari
VILLAGE: Shagi

WISH
Project

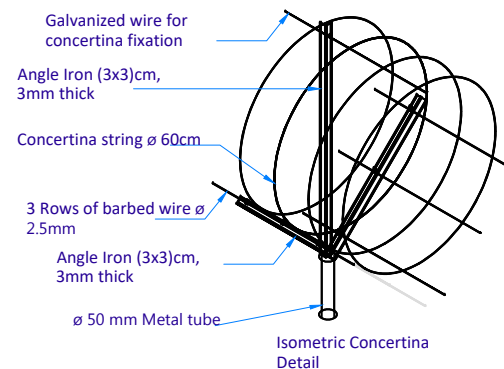
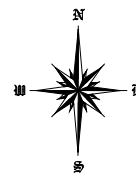
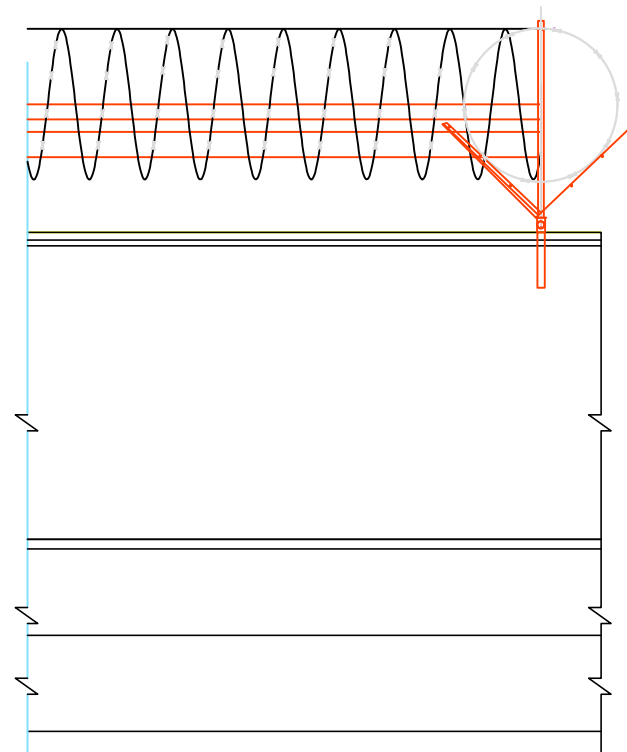
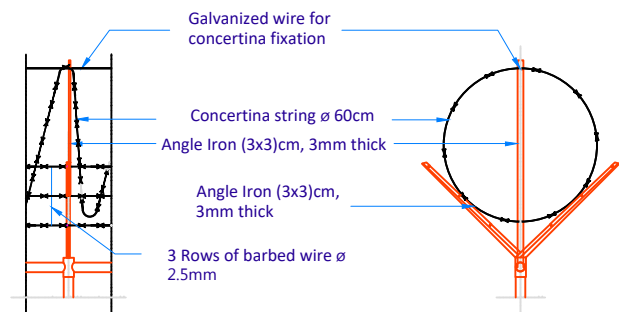


IRW

| | | | | | | | | |
|---|-----------------------------------|--------------------------------------|-----------------------|----------------------|---|-------------|-------|--------------|
| Islamic Relief Worldwide | | | Surveyed by | WASH team | SHEET NO.  | PROVINCE | Kunar | WISH Project |
| WASH Initiative for Strengthening Health (WISH) | | | Drawing & designed by | Eng. Mohammad Ayaz | | DISTRICT | Nari | |
| Department | WASH | All dimension in cm otherwise stated | Review & check by | Eng. M. Tahir "Safi" | | VILLAGE | Shagi | |
| Drawing Title | Boundary wall and Guard room plan | | Approved by | Eng. Shah Faisal | | 09-May-2024 | | |



Section A-A



Isometric Concertina Detail



IRW

Islamic Relief Worldwide
WASH Initiative for Strengthening Health (WISH)

Department WASH
Drawing Title boundary section and barbed wire plan

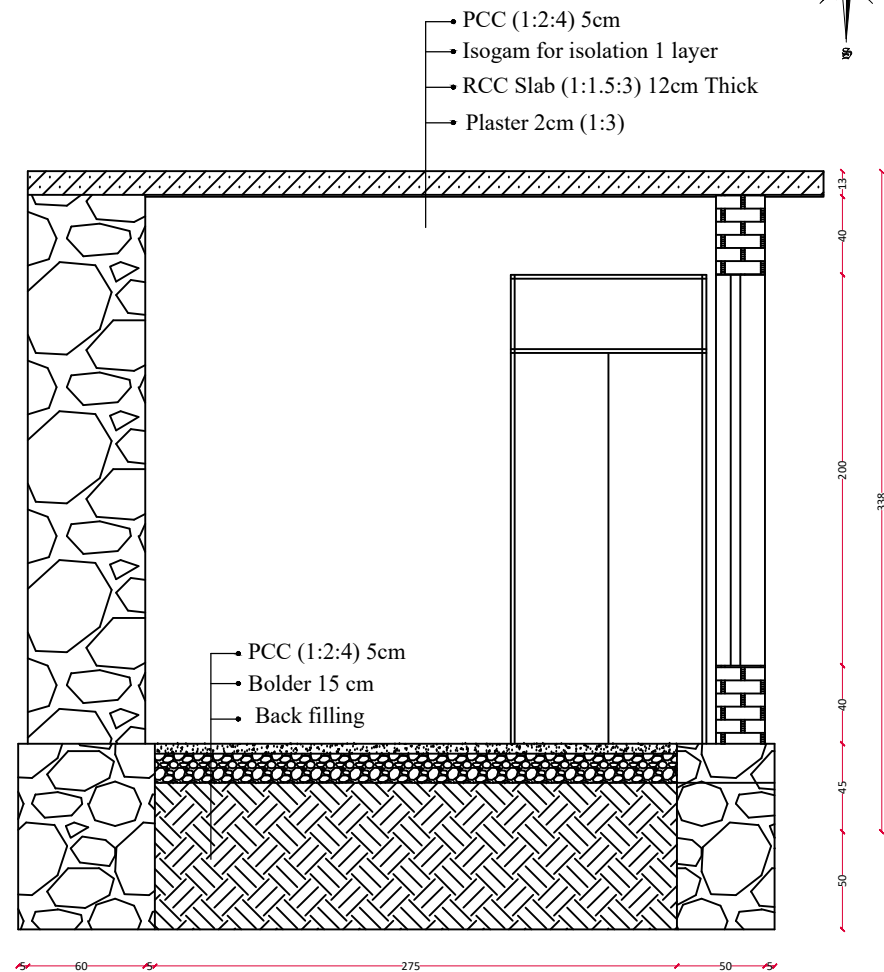
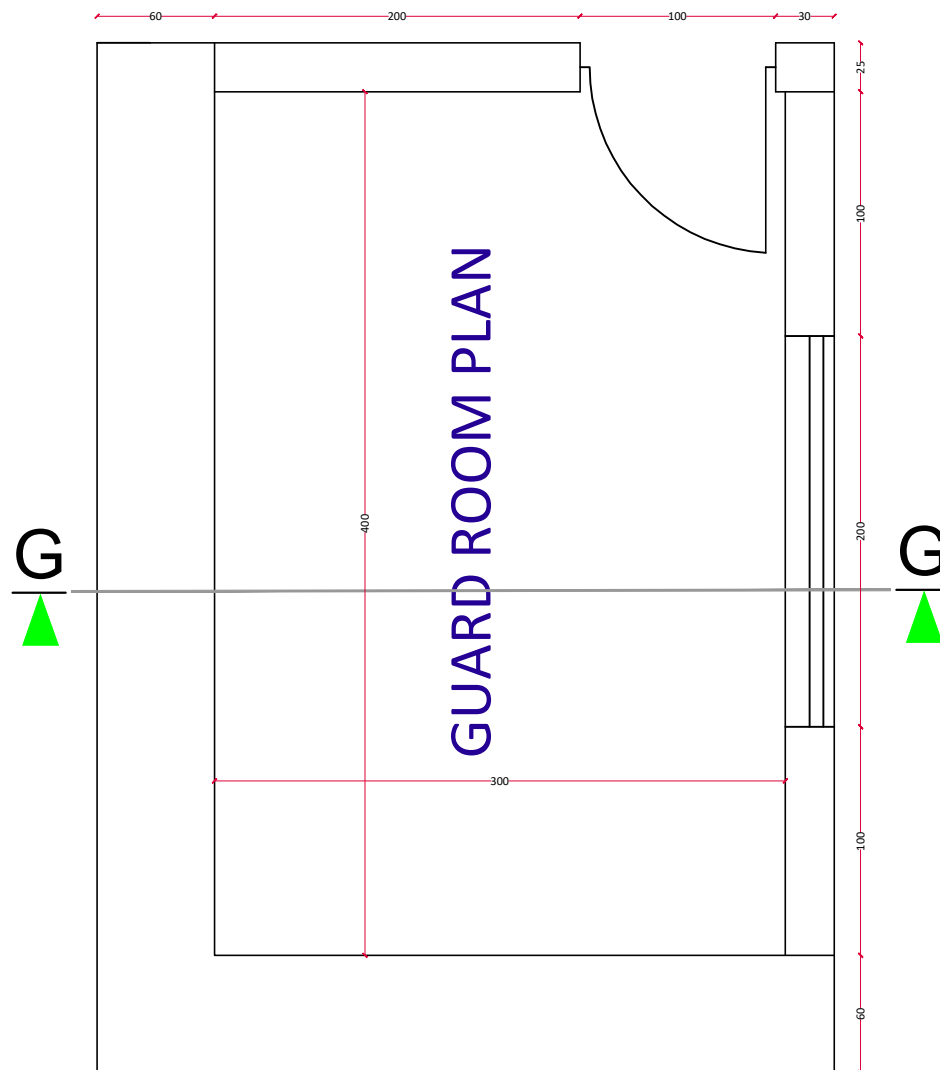
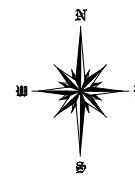
All dimension in cm
otherwise stated

Surveyed by WASH team
Drawing & designed by Eng. Mohammad Ayaz
Review & check by Eng. M. Tahir "Safi"
Approved by Eng. Shah Faisal

SHEET NO. 12/18
09-May-2024

PROVINCE Kunar
DISTRICT Nari
VILLAGE Shagi

WISH
Project



IRW

Islamic Relief Worldwide
WASH Initiative for Strengthening Health (WISH)

Department WASH
Drawing Title Guard Room Plan

All dimension in cm
otherwise stated

Surveyed by WASH team
Drawing & designed by Eng. Mohammad Ayaz
Review & check by Eng. M. Tahir "Safi"
Approved by Eng. Shah Faisal

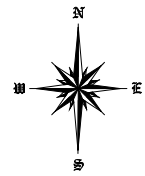
SHEET NO. 13/18
09-May-2024

PROVINCE Kunar
DISTRICT Nari
VILLAGE Shagi

WISH
Project

Ratagal(Shigi) Village water Supply Project

Typical Site plan of Solar pump system

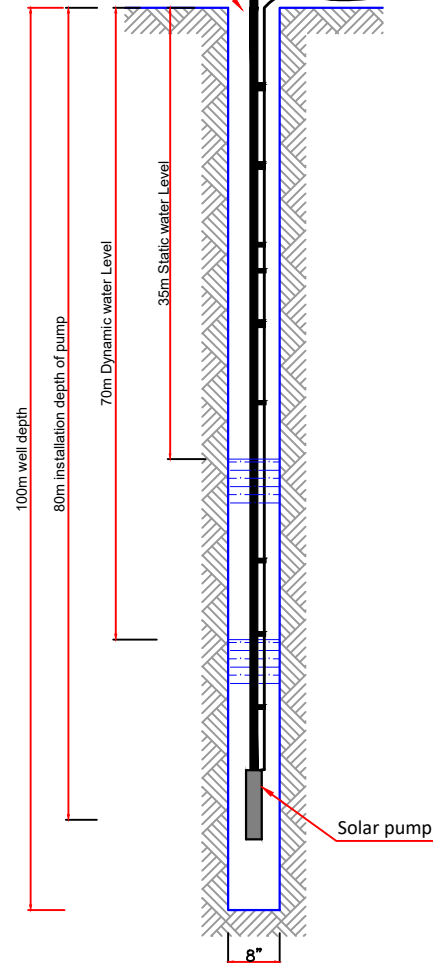


40 m³

Ground RCC
Reservoir

50 mm 16 bar PE Pipe, 414m

New proposed well with the depth of 100m and diameter of drilling will be 12 inch by Rotary machine, the casing and filter should be 8 inch Class D



Electricity Cable
from Control
Unit

Control Unit

Electricity Cable
from Control
Unit

Solar Panels

Support
structure

تو
تمام فرام برای این چاه تحقیقی بوده که از معلومات چاه های نزدیک این ساحه
انخذ گرفته و معلومات دقیق این چاه بعد از حفاری و پمپ تست
آن بدست خواهد آمد، در صورت نیاز مقدار آذنی ممکن که
در مشخصات سوار و اثر پمپ و تعداد پمپ های آن نیز
تغییر خواهد کرد.



IRW

Islamic Relief Worldwide
WASH Initiative for Strengthening Health (WISH)

Department WASH
Drawing Title TDH

All dimension in cm
otherwise stated

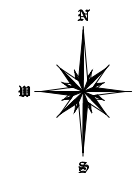
| | |
|-----------------------|----------------------|
| Surveyed by | WASH team |
| Drawing & designed by | Eng. Mohammad Ayaz |
| Review & check by | Eng. M. Tahir "Safi" |
| Approved by | Eng. Shah Faisal |

SCALE
16/18
09-May-2024

PROVINCE Kunar
DISTRICT Navi
VILLAGE Shigi

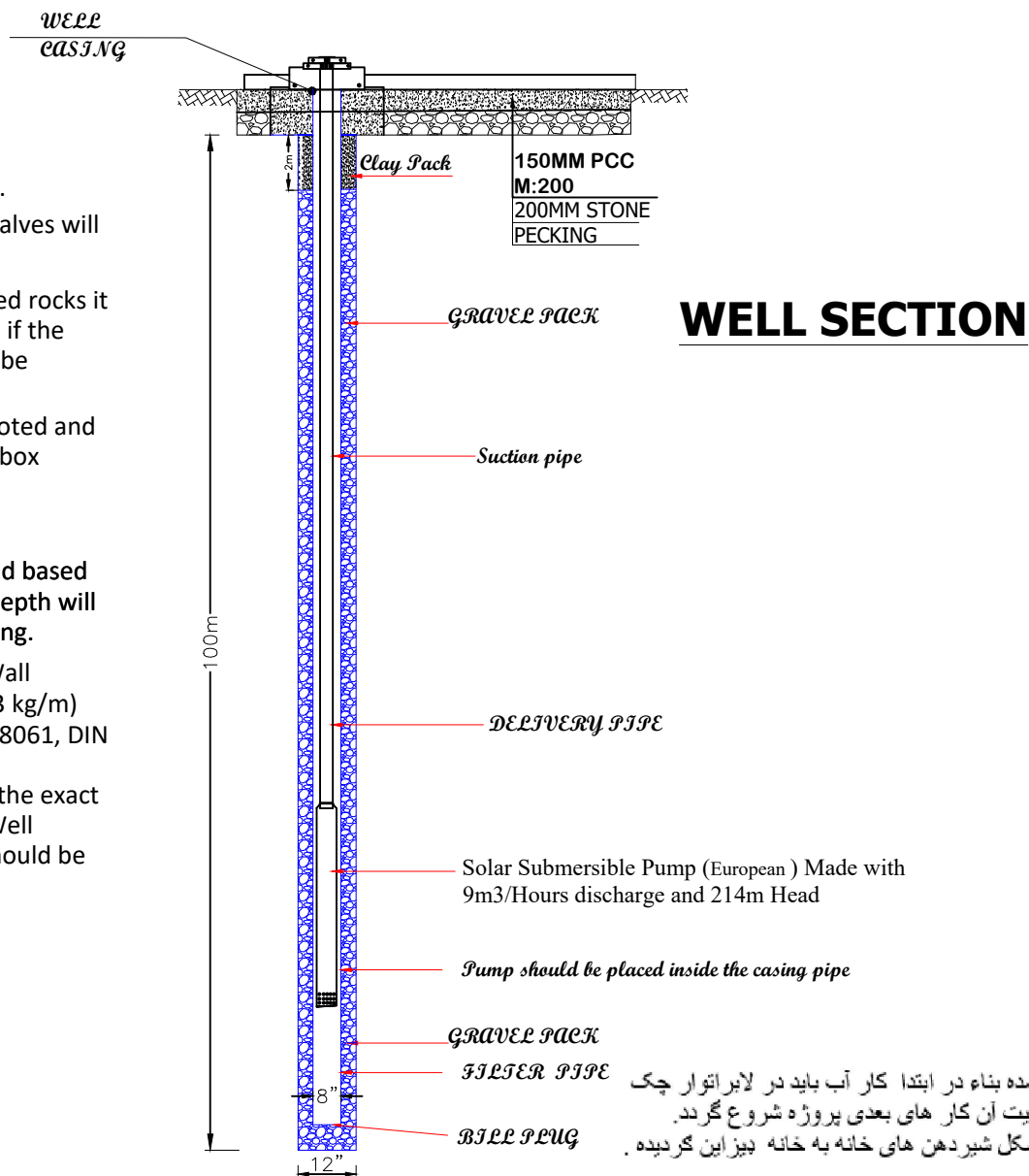
**WISH
Project**

Ratagal(Shigi) Village water Supply Project



Notes

- 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=(8") inches, Class D, Min Wall Thickness (10.3) mm, Min weight (10.3 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



IRW

Islamic Relief Worldwide
WASH Initiative for Strengthening Health (WISH)

| | |
|---------------|--------------|
| Department | WASH |
| Drawing Title | Well Section |

All dimension in cm
otherwise stated

| | |
|-----------------------|----------------------|
| Surveyed by | WASH team |
| Drawing & designed by | Eng. Mohammad Ayaz |
| Review & check by | Eng. M. Tahir "Safi" |
| Approved by | Eng. Shah Faisal |

SCALE: 1/18
09-May-2024

| | |
|----------|-------|
| PROVINCE | Kunar |
| DISTRICT | Nari |
| VILLAGE | Shigi |

WISH Project

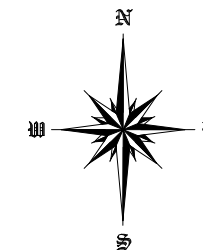
Ratagal(Shigi) Village water Supply Project

between two solar panel vertical array frame should have 10 cm space for air vent to protect the solar frame from sliding and overturning.

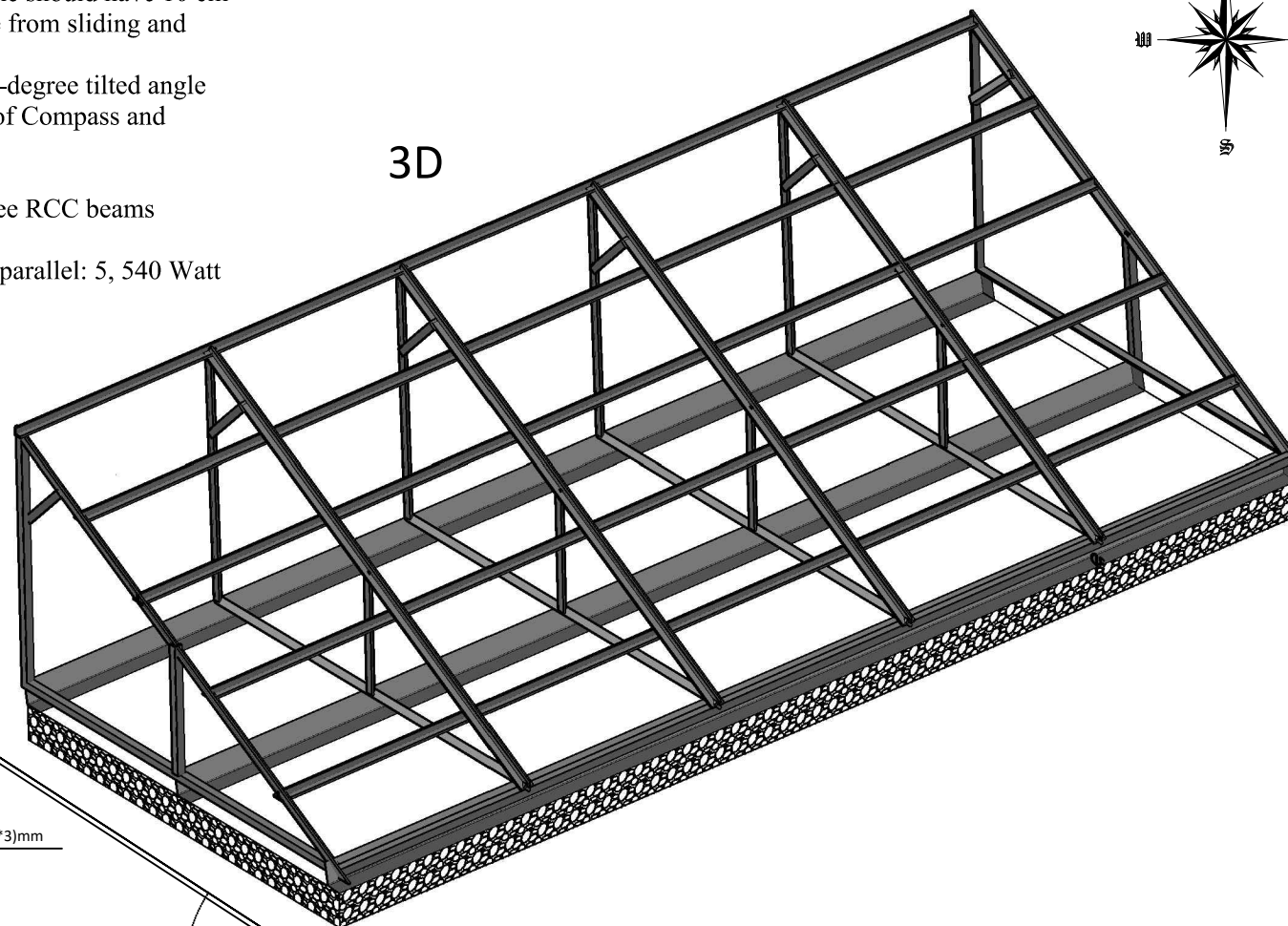
4- the solar panel's frame should have a 35-degree tilted angle with the surface of the yard as instruction of Compass and Groundfos software's and product.

5- under the frame we have (30*30)cm three RCC beams according to the drawing

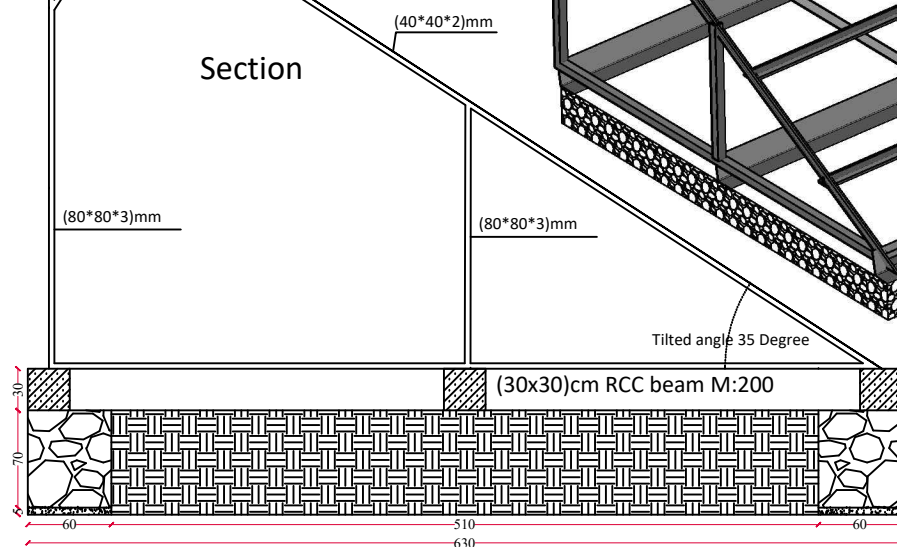
6- Number of solar modules in series: 5 in parallel: 5, 540 Watt or 10 in Parallel: 5, 270Watt



3D



Section



IRW

Islamic Relief Worldwide
WASH Initiative for Strengthening Health (WISH)
Department WASH
Drawing Title Solar Panel Plan Details

All dimension in cm
otherwise stated

| | |
|-----------------------|----------------------|
| Surveyed by | WASH team |
| Drawing & designed by | Eng. Mohammad Ayaz |
| Review & check by | Eng. M. Tahir "Safi" |
| Approved by | Eng. Shah Faisal |

SHEET NO. 18/18
09-May-2024

| | |
|----------|-------|
| PROVINCE | Kunar |
| DISTRICT | Nari |
| VILLAGE | Shagi |

WISH
Project