



**ACTION AGAINST HUNGER
DAIKUNDI OFFICE
WASH DEPARTMENT**

(TECHNICAL DRAWING PART)

PROJECT NAME:
WATER SUPPLY NETWORK PROJECT

JUN, 10, 2024

PREPARED BY: WASH DEPARTMENT

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DW.No:

G-101

Action Against Hunger

WASH Department

Project Name

Province

District

Water Supply

Daikundi

Shahrستان

Design&Drawing by

Chick by

Approved by

Mohamad Nekandesh

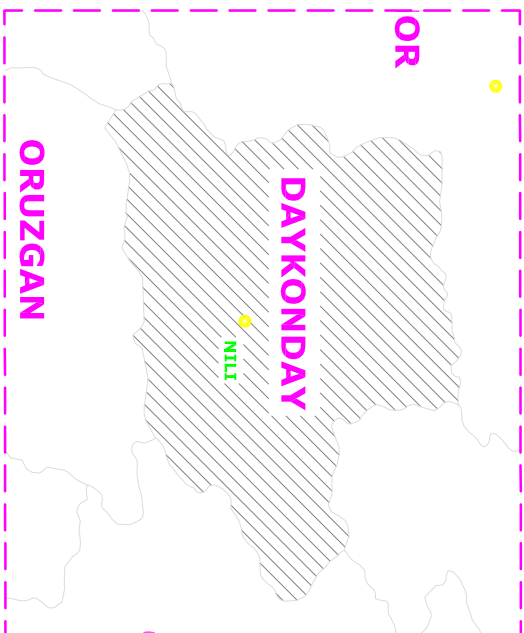
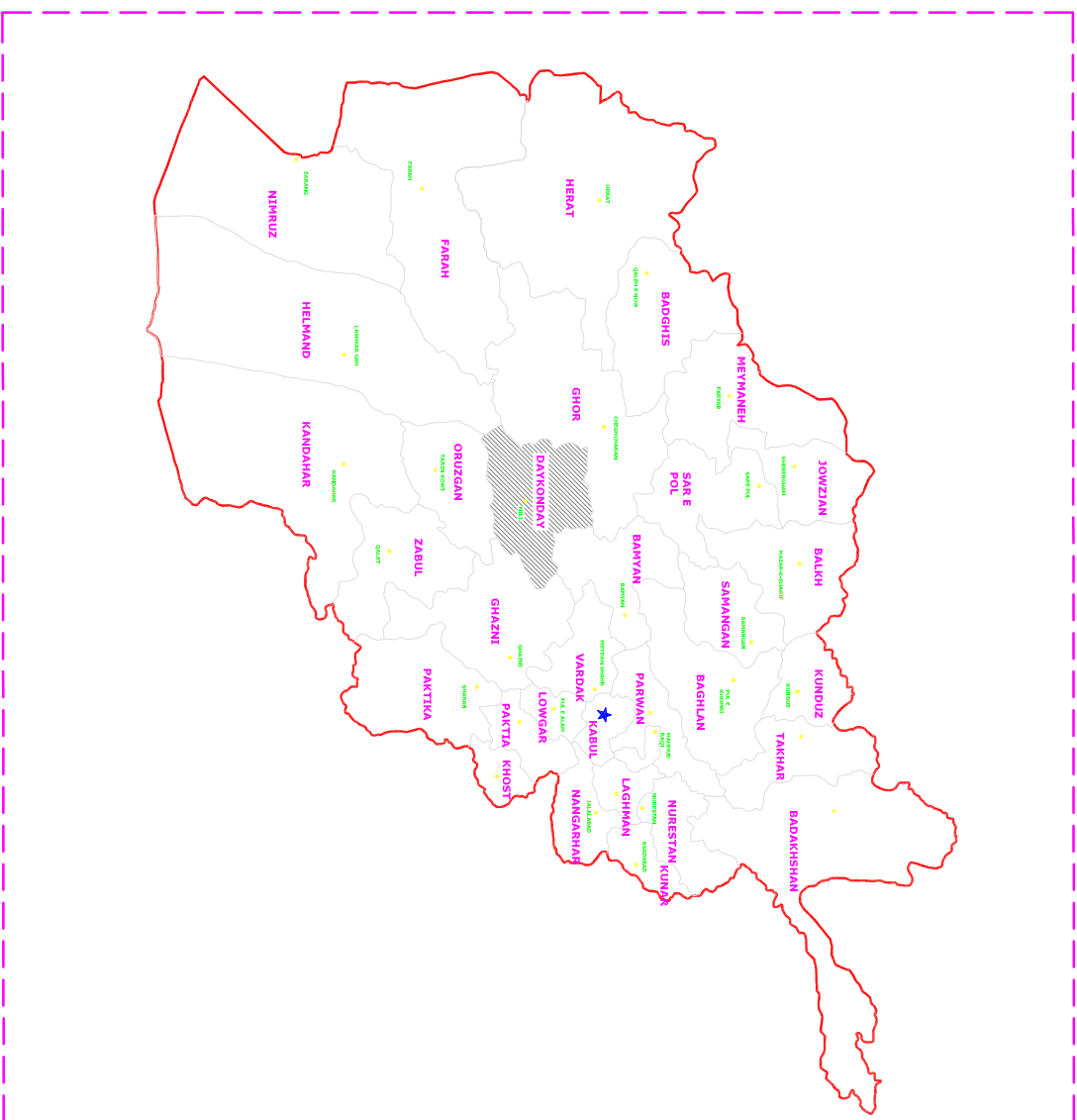
Mohamad Nekandesh

Yaddullah Jalali

Scale:

Note: All dimension are in millimeter

LOCATION OF PROJECT AT DAIKUNDI, AFGHANISTAN



DW.No:

G-102

Action Against Hunger

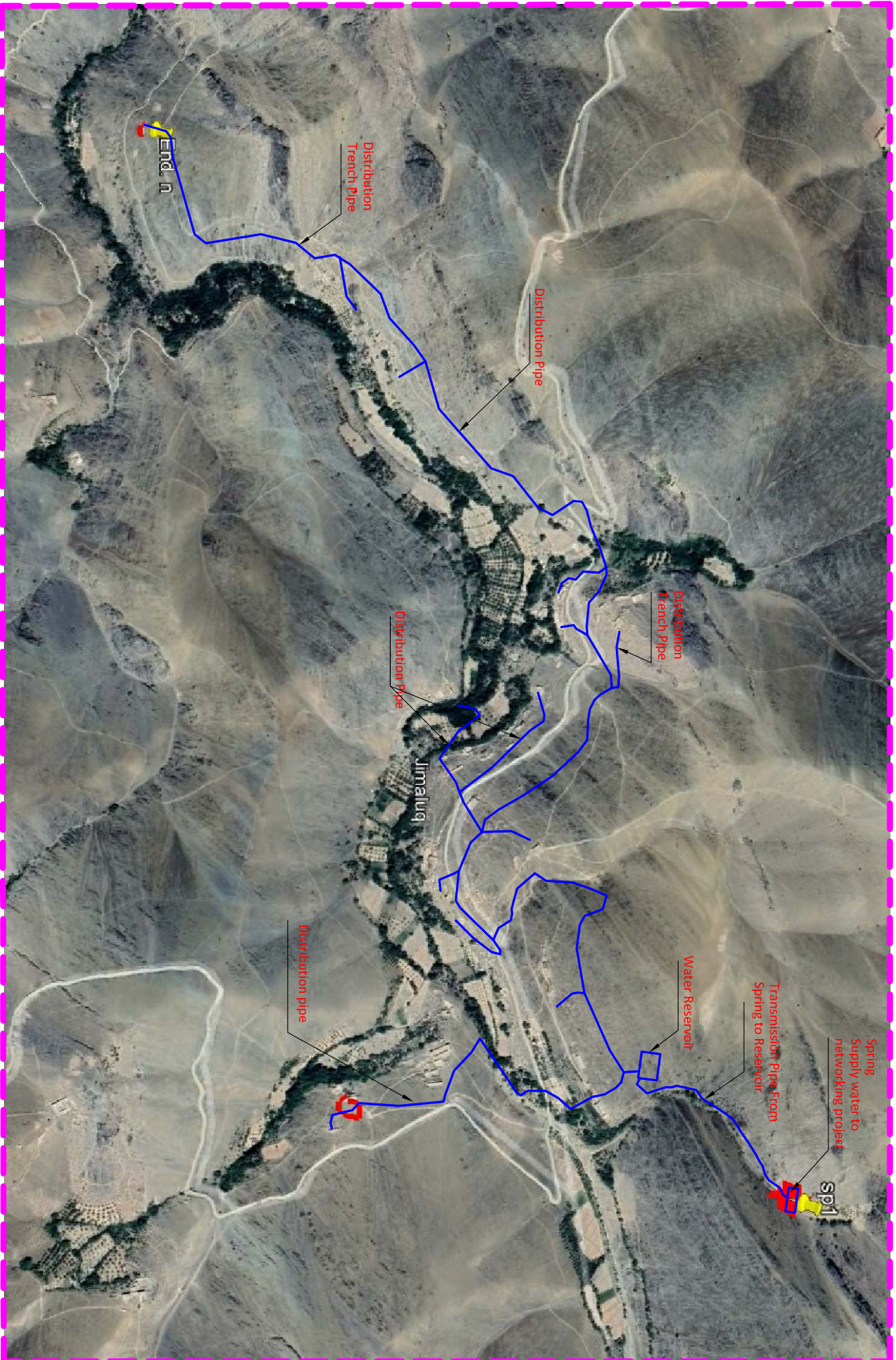
WASH Department

Project Name	Water Supply	Design&Drawing by	Mohamad Nekandesh
Province	Daikundi	Chick by	Mohamad Nekandesh
District	Shahrstan	Approved by	Yaddullah Jalali

Scale:

Note: All dimension are in millimeter

Site plan for Nawa Jamalqo Networking project



G-103 SITE PLAN

SCALE: N.T.S



DW.No:

G-103

Action Against Hunger

WASH Department

Project Name

Province

District

Water Supply

Daikundi

(.....)

Design&Drawing by

Chick by

Approved by

Mohamad Nekandesh

Mohamad Nekandesh

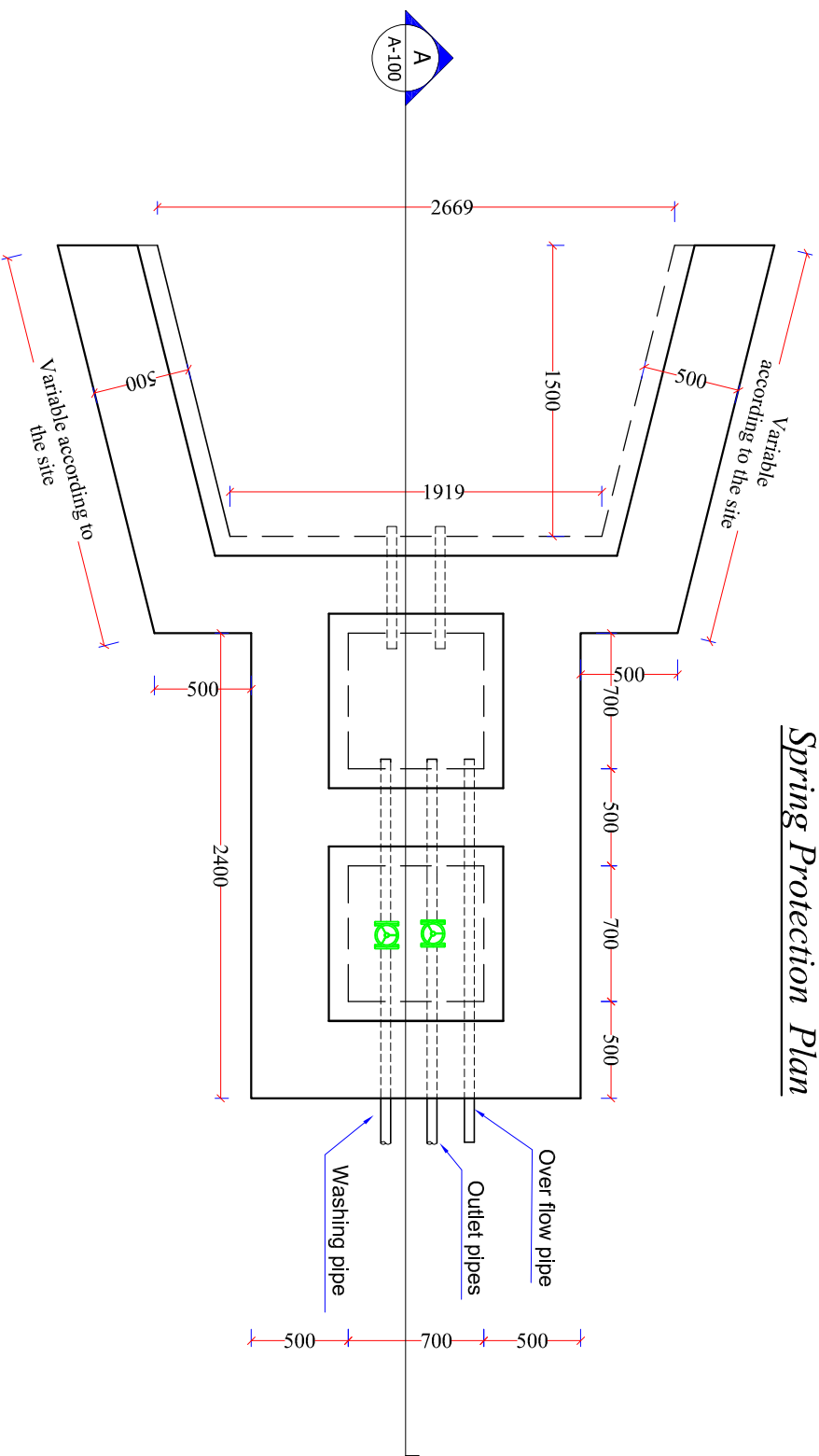
Yaddullah Jalali

Scale:

Note: All dimension are in millimeter

- Note:**
- 1- All dimensions are in mm unless otherwise stated.
 - 2- All PCC works should be with 1:2:4 mortar unless otherwise stated.
 - 3- All RCC works should be with 1:1.5:3 mortar unless otherwise stated.
 - 4- Stone masonry must be worked with 1:4 mortar unless otherwise stated.
 - 5- Curing must be continued upto 28 days.
 - 6- Clear and Clean water must be used every where.

Spring Protection Plan



Note:
All GI and polyethylene pipes diameters must chose according to BoQ specification



DW.No:

A-101

Action Against Hunger

WASH Department

Project Name

Water Supply

Design&Drawing by

Mohamad Nekandesh

Province

Daikundi

Chick by

Mohamad Nekandesh

District

Shahristan

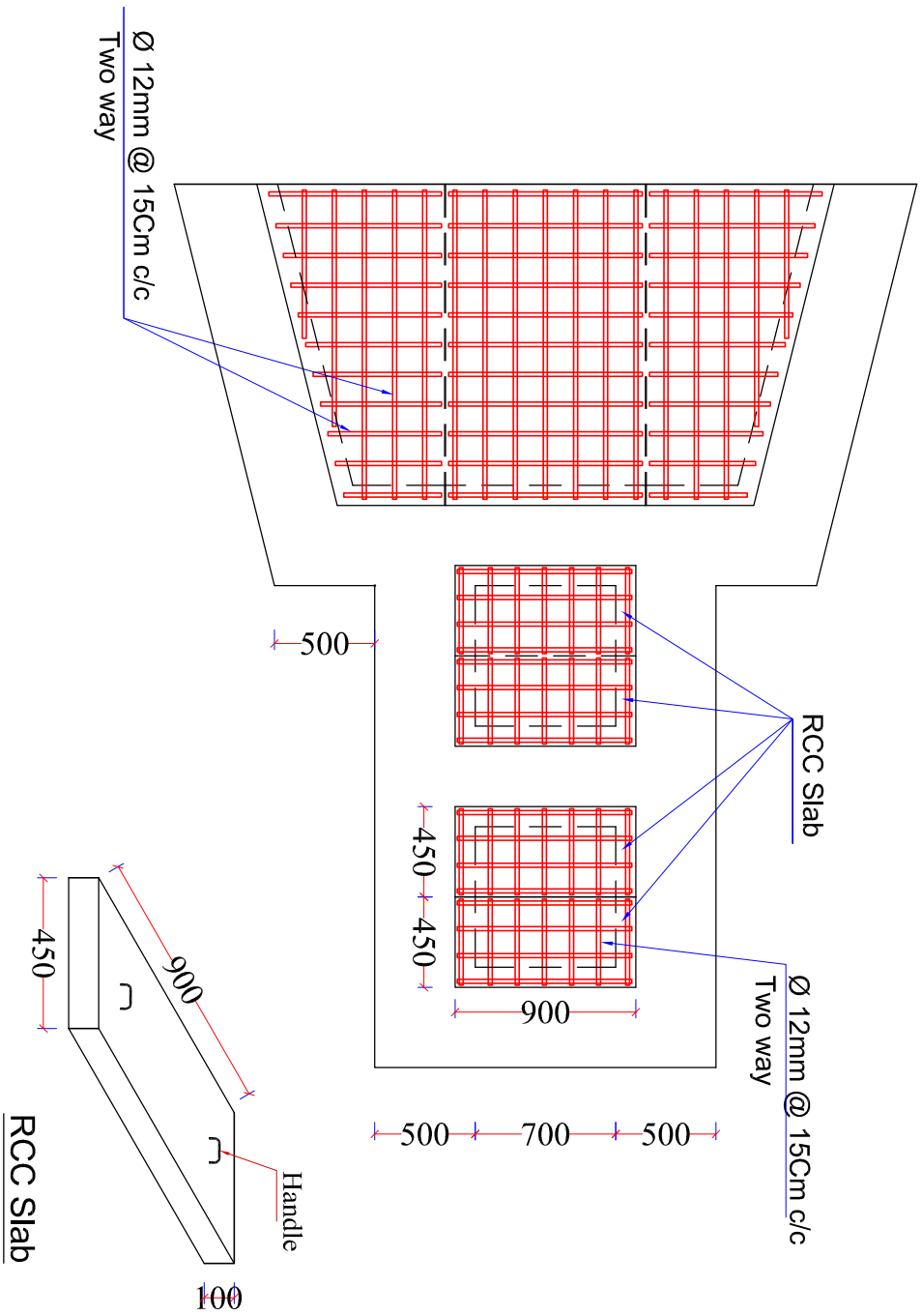
Approved by

Yaddullah Jalali

Scale:

Note: All dimension are in millimeter

Spring Protection Structure Reinforcement



DW.No:

A-102

Action Against Hunger

WASH Department

Project Name

Water Supply

Design&Drawing by

Mohamad Nekandesh

Province

Daikundi

Chick by

Mohamad Nekandesh

District

Shahristan

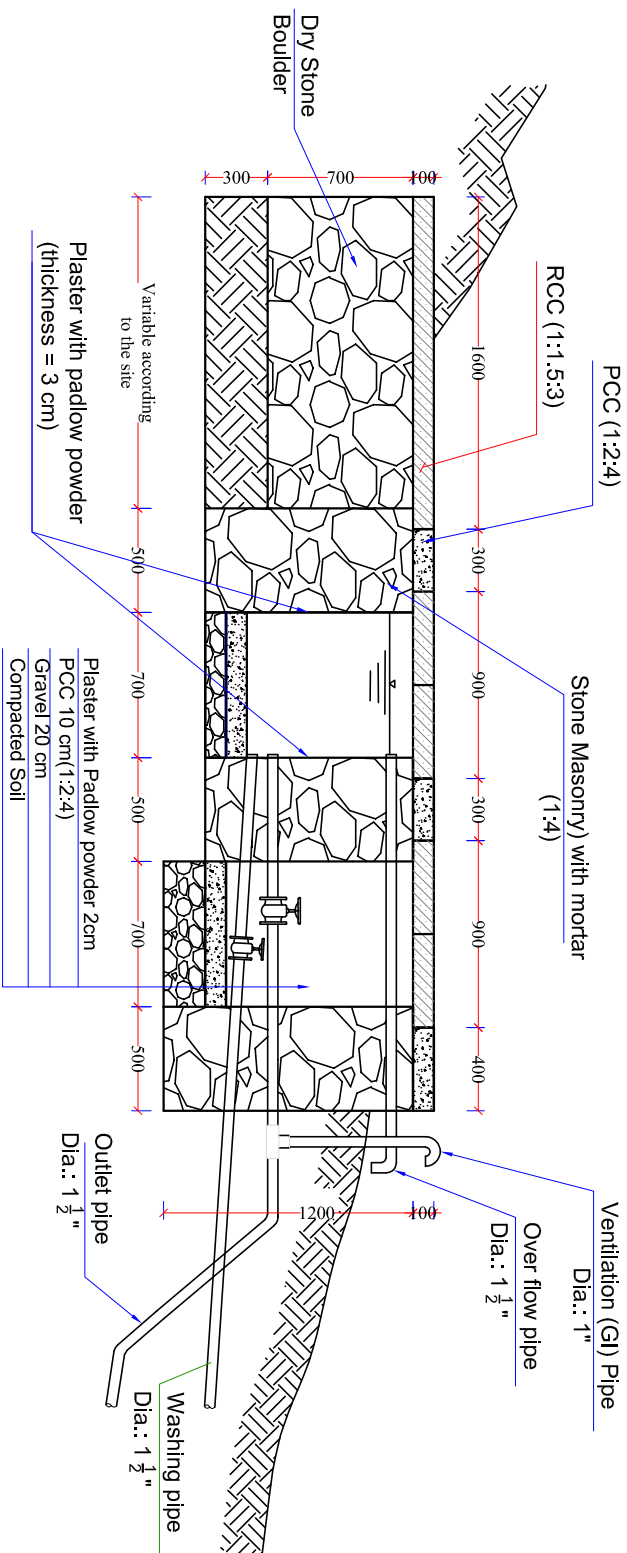
Approved by

Yaddullah Jalali

Scale:

Note: All dimension are in millimeter

Note:
The inside of sedimentation and gate valve box should be plastered with cement-sand mortar and padlow powder.



Section A - A

Note:
All GI and polyethylene pipes diameters must chose according to BoQ specification



DW.No:

A-103

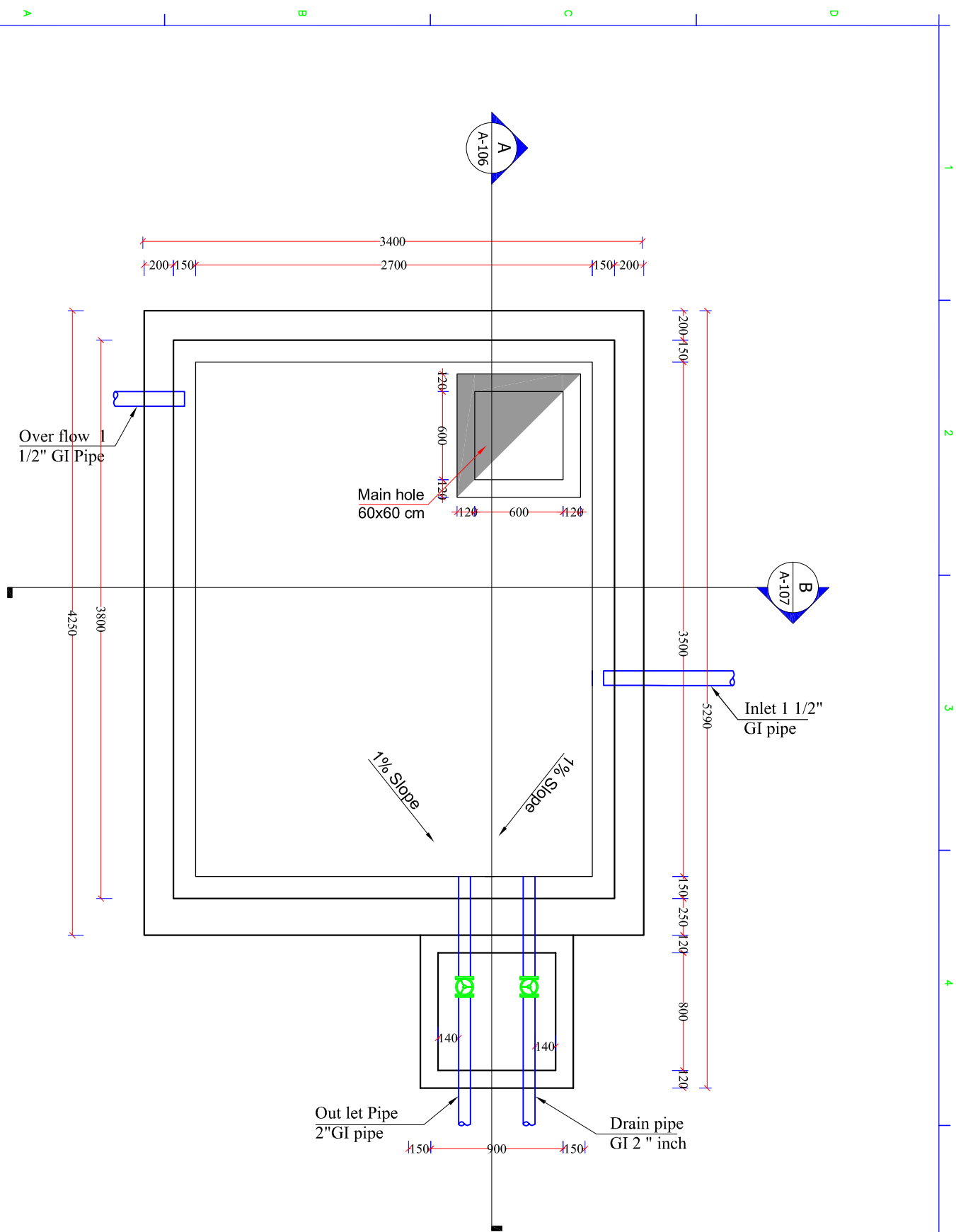
Action Against Hunger

WASH Department

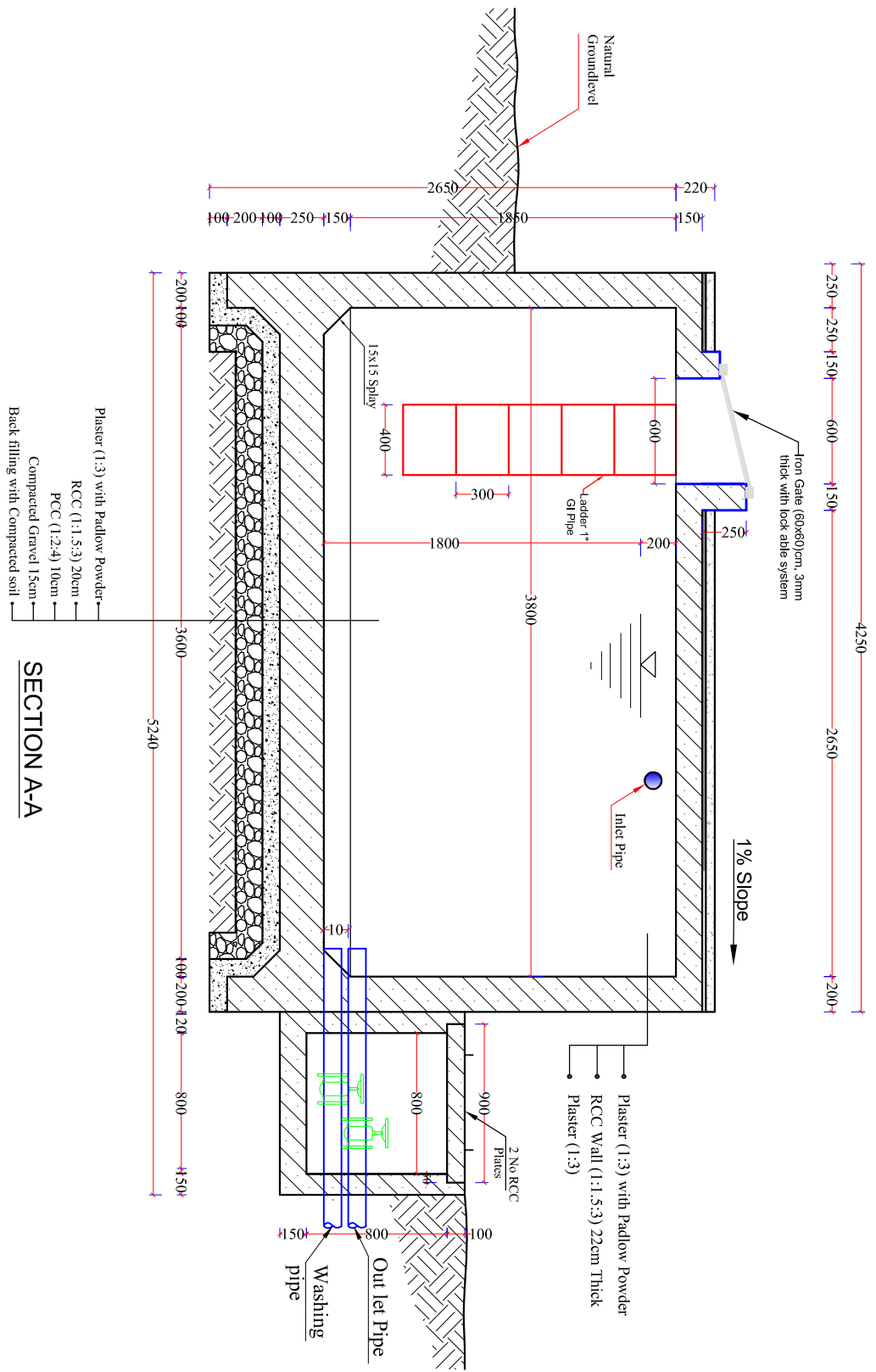
Project Name	Water Supply	Design&Drawing by	Mohamad Nekandesh
Province	Daikundi	Chick by	Mohamad Nekandesh
District	Shahristan	Approved by	Yaddullah Jalali

Scale:

Note: All dimension are in millimeter



DW.No:	Action Against Hunger				Scale:
	WASH Department				Note: All dimension are in millimeter
A-105	Project Name	Water Supply	Design&Drawing by	Mohamad Nekandesh	
	Province	Daikundi	Chick by	Mohamad Nekandesh	
	District	Shahristan	Approved by	Yadullah Jalali	

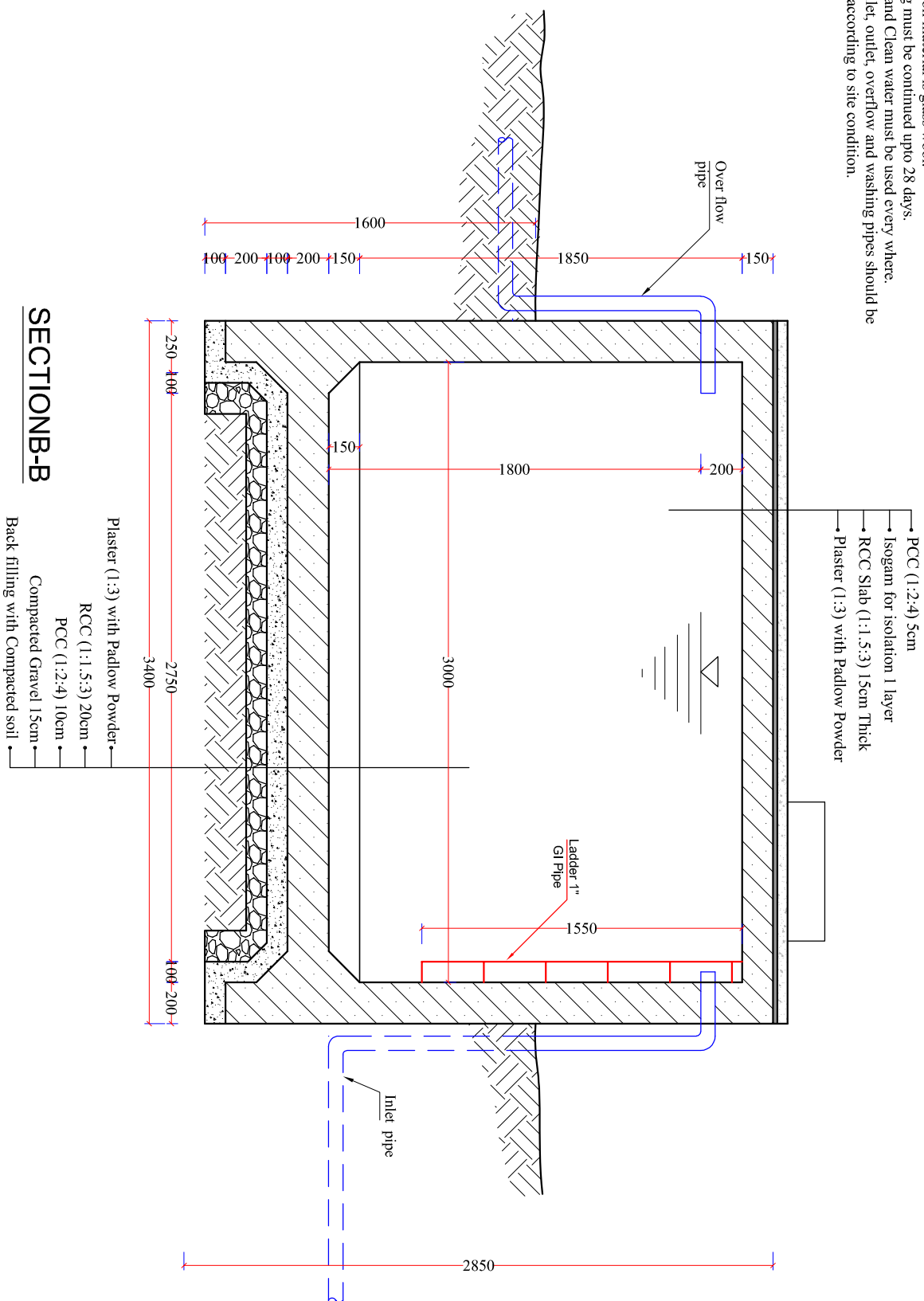


SECTION A-A



DW.No:	Action Against Hunger				Scale:
	WASH Department				Note: All dimension are in millimeter
A-106	Project Name	Water Supply	Design&Drawing by	Mohamad Nekandesh	
	Province	Daikundi	Chick by	Mohamad Nekandesh	
	District	Shahristan	Approved by	Yadullah Jalali	

- Note:**
- 1- All dimensions are in cm unless otherwise stated.
 - 2- During RCC work vibrator must be used to avoid water leakage from reservoir.
 - 3- All PCC works should be with 1:2:4 mortar unless otherwise stated.
 - 4- All RCC works should be with 1:1.5:3 mortar.
 - 5- Isolation material is glass wool.
 - 7- Curing must be continued upto 28 days.
 - 8- Clear and Clean water must be used every where.
 - 9- The inlet, outlet, overflow and washing pipes should be adjusted according to site condition.



SECTION B-B

- Plaster (1:3) with Padlow Powder
- RCC (1:1.5:3) 20cm
- PCC (1:2:4) 10cm
- Compacted Gravel 15cm
- Back filling with Compacted soil

Action Against Hunger

WASH Department

Scale:

Note: All dimension are in millimeter

DW.No:

A-107

Project Name

Water Supply

Design&Drawing by

Mohamad Nekandesh

Province

Daikundi

Chick by

Mohamad Nekandesh

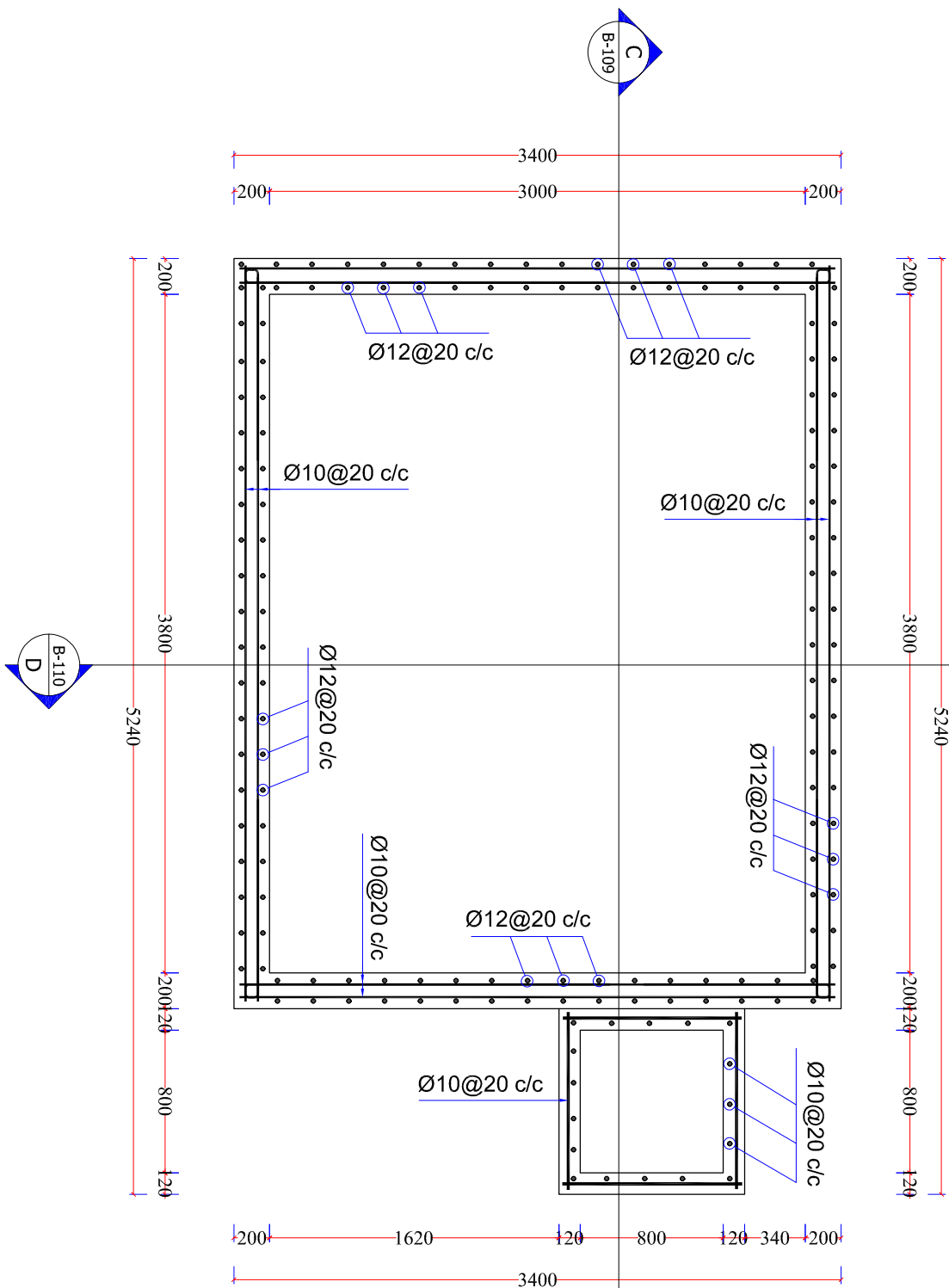
District

Shahrستان

Approved by

Yadullah Jalali

- Note:**
- 1- All dimensions are in cm unless otherwise stated.
 - 2- During RCC work vibrator must be used to avoid water leakage from reservoir.
 - 3- All PCC works should be with 1:2:4 mortar unless otherwise stated.
 - 4- All RCC works should be with 1:1.5:3 mortar.
 - 5- Isolation material is glass wool.
 - 7- Curing must be continued upto 28 days.
 - 8- Clear and Clean water must be used every where.
 - 9- The inlet, outlet, overflow and washing pipes should be adjusted according to site condition.



DW.No:

A-108

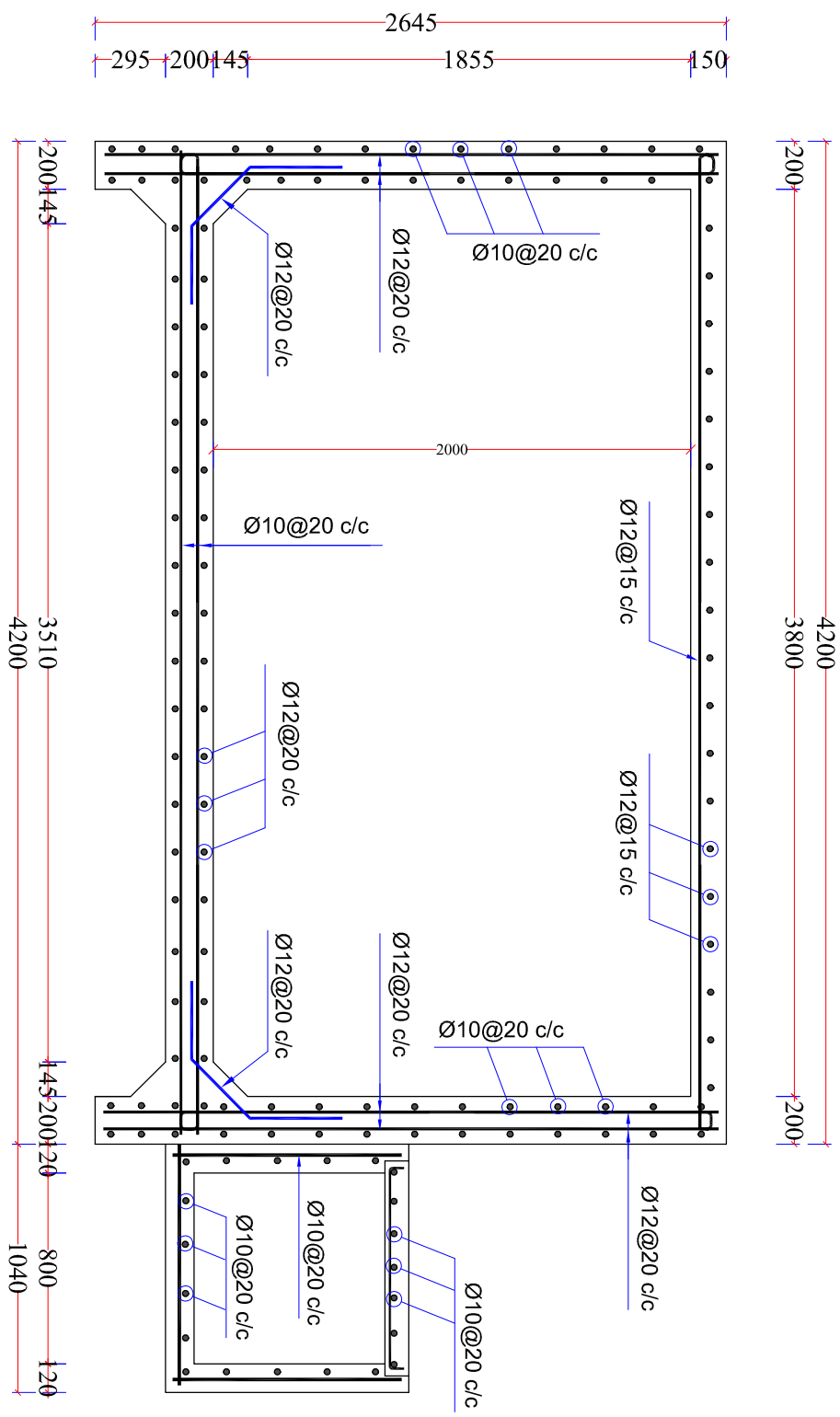
Action Against Hunger

WASH Department

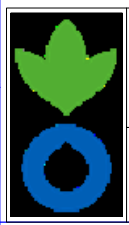
Project Name	Water Supply	Design&Drawing by	Mohamad Nekandesh
Province	Daikundi	Chick by	Mohamad Nekandesh
District	Shahristan	Approved by	Yadullah Jalali

Scale:

Note: All dimension are in millimeter



A-109 STRUCTURAL LONGITUDINAL SECTION C-C
REF:
SCALE: 1:20



DW.No:

A-109

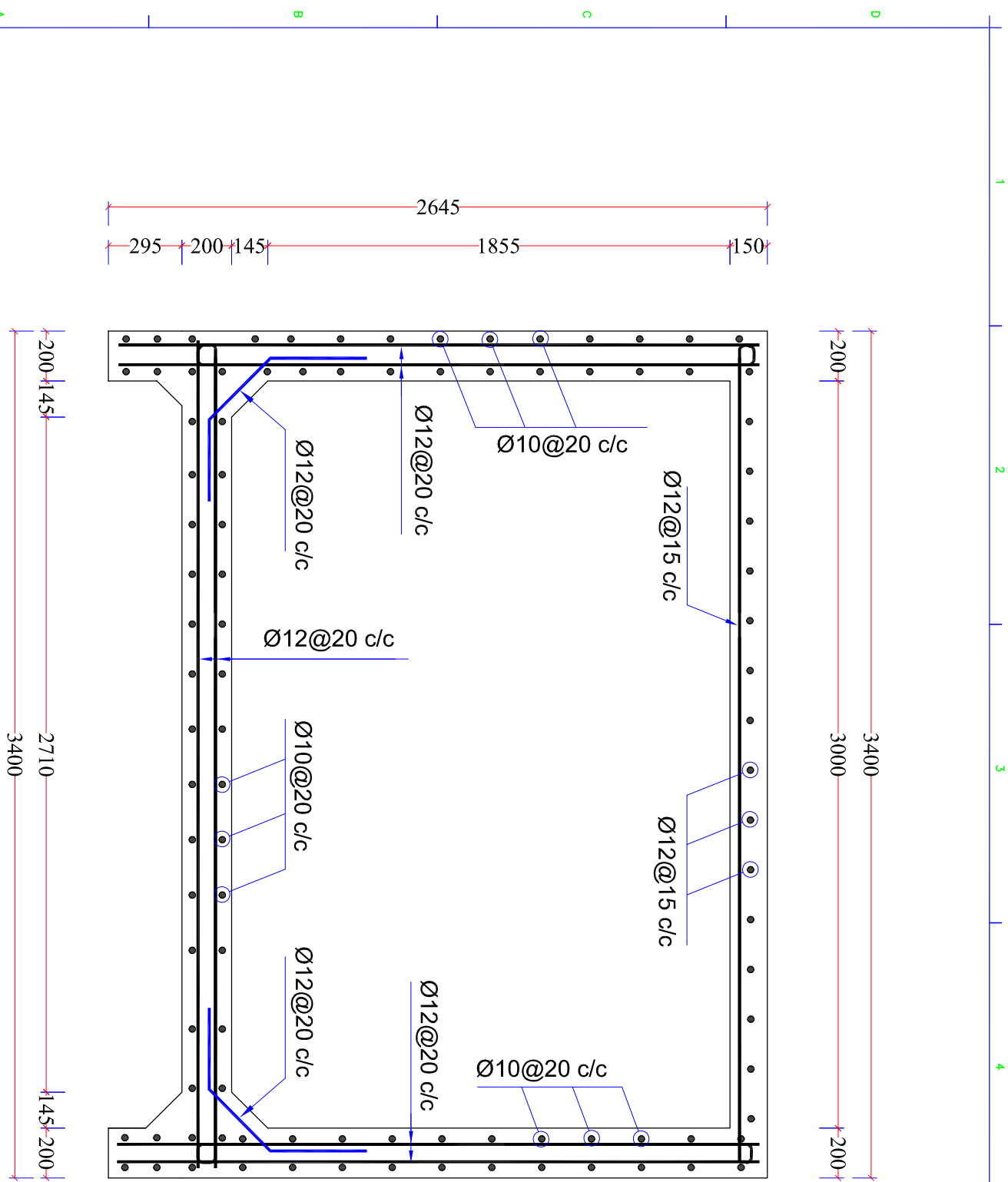
Action Against Hunger

WASH Department

Project Name	Water Supply	Design&Drawing by	Mohamad Nekandesh
Province	Daikundi	Chick by	Mohamad Nekandesh
District	Shahristan	Approved by	Yadullah Jalali

Scale:

Note: All dimension are in millimeter

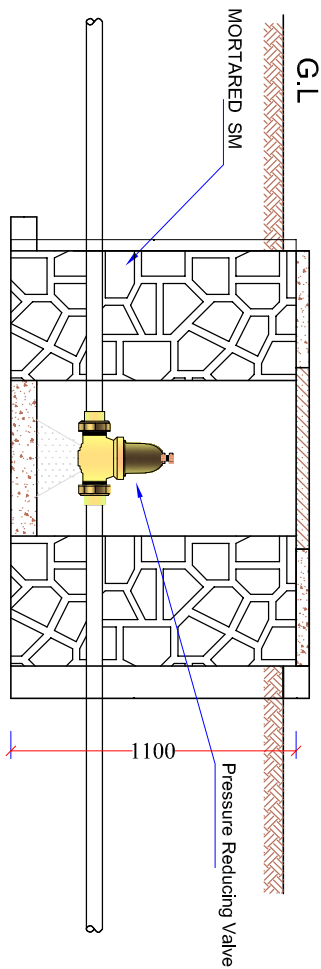
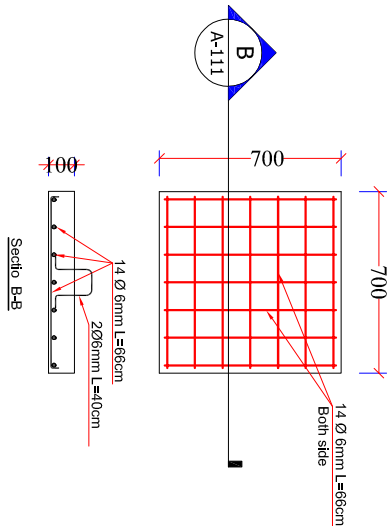
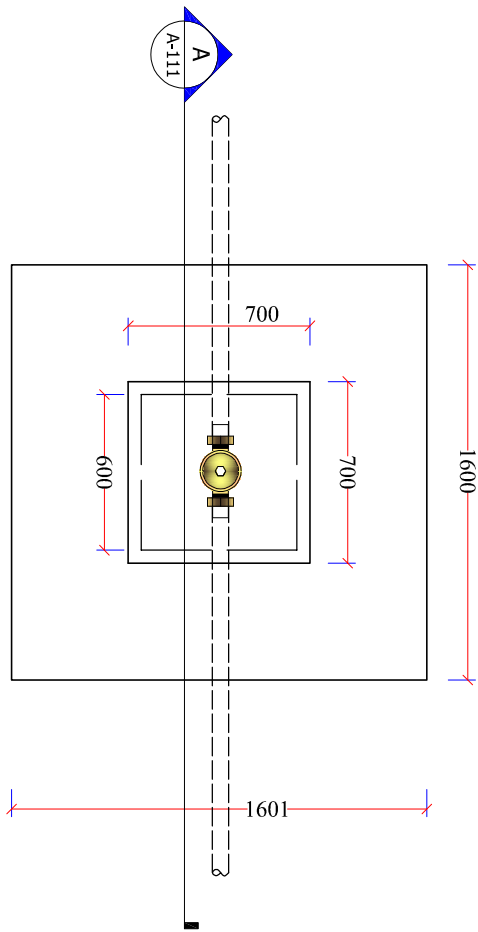


A-110 STRUCTURAL CROSS SECTION D-D
REF: SCALE: 1:5



DW.No:	Action Against Hunger				Scale:
	WASH Department				Note: All dimension are in millimeter
A-110	Project Name	Water Supply	Design&Drawing by	Mohamad Nekandesh	
	Province	Daikundi	Chick by	Mohamad Nekandesh	
	District	Shahristan	Approved by	Yadullah Jalali	

VALE BREAK PRESSURE



SECTION A-A

TYPICAL DIMENSIONS OF VALVE CHAMBER

S.NO.	DIAMETER OF VALVE (mm.)	DIMENSION (L x B) (mm.)
1.	50	600 X 600

Note:
All GI and polyethylene pipes diameters must chose according to BoQ specification

A.111 VALE BREAK PRESSURE

REF.

SCALE: 1:20



DW.No:

A-111

Action Against Hunger

WASH Department

Project Name
Province
District

Water Supply
Daikundi
Shahristan

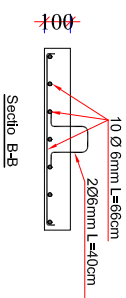
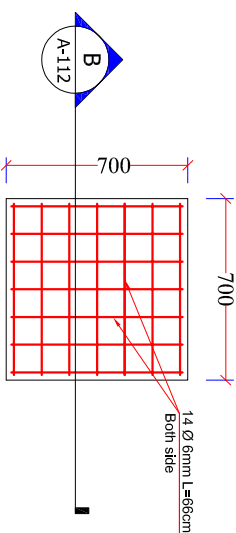
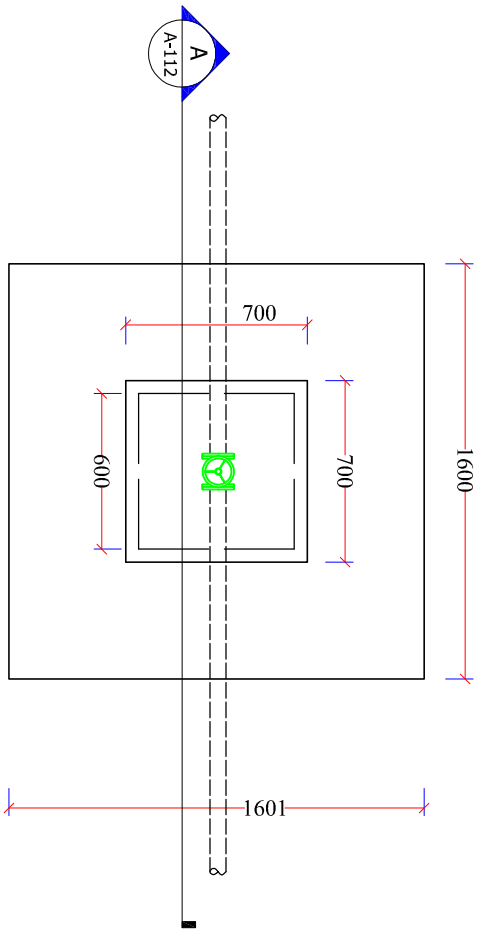
Design&Drawing by
Chick by
Approved by

Mohamad Nekandesh
Mohamad Nekandesh
Yaddullah Jalali

Scale:

Note: All dimension are in millimeter

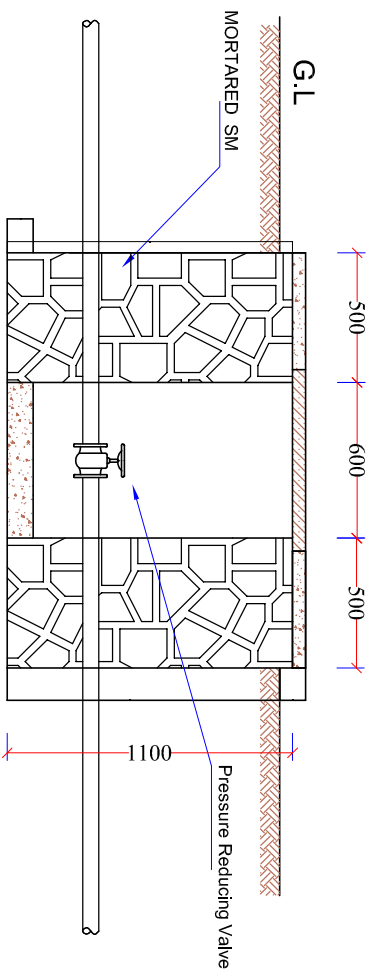
GATE VALE BOX FOR CONTROL



TYPICAL DIMENSIONS OF VALVE CHAMBER

S.NO.	DIAMETER OF VALVE (mm.)	DIMENSION (L x B)
1.	50	600 X600

SECTION A-A



Note:
All GI and polyethylene pipes diameters must chose according to BoQ specification

A-112 GATE VALE BOX

SCALE: 1:20



DW.No:

A-112

Action Against Hunger

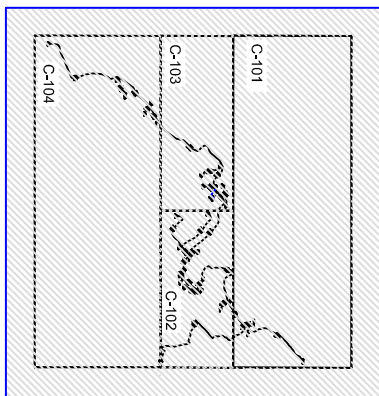
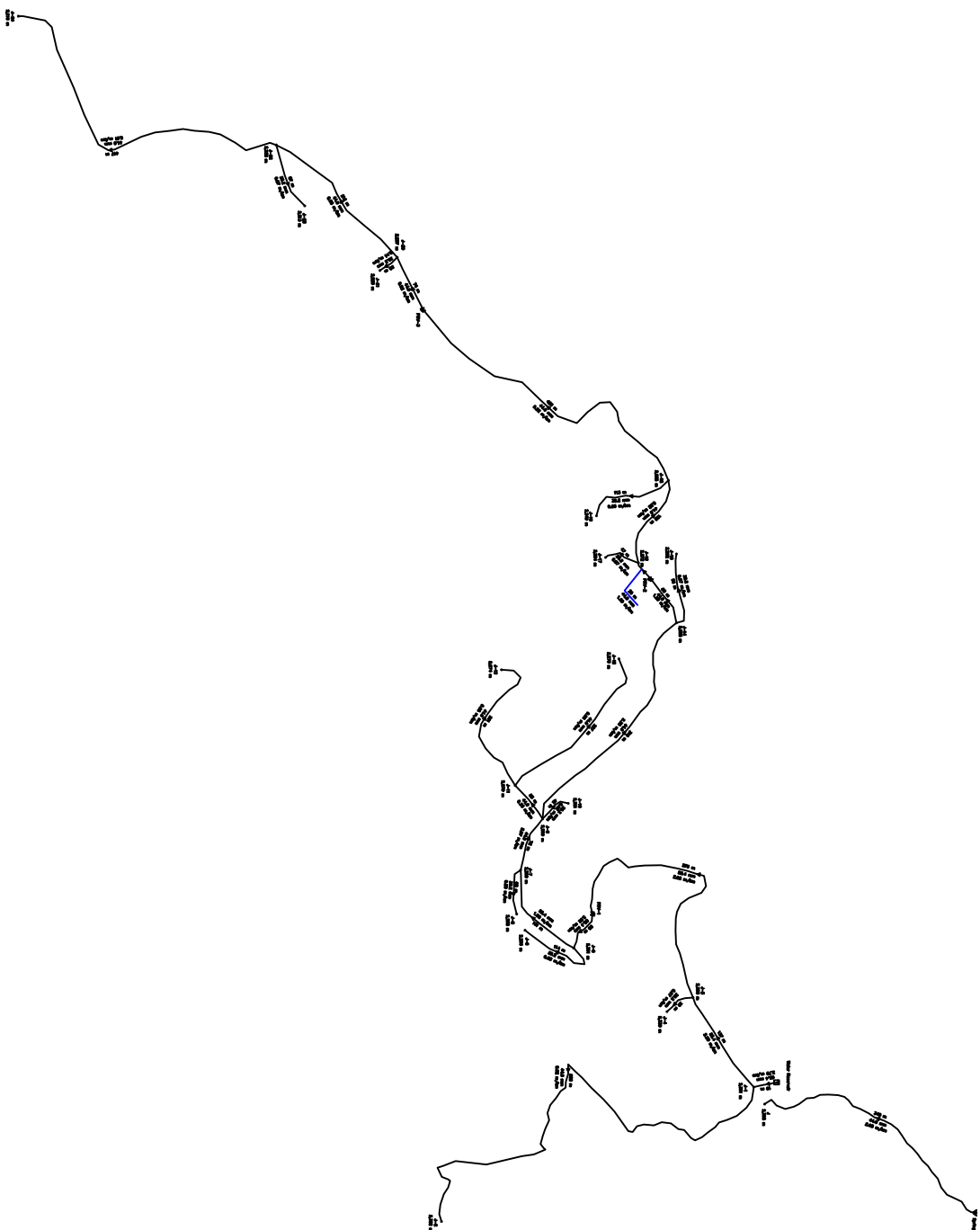
WASH Department

Project Name	Water Supply	Design&Drawing by	Mohamad Nekandesh
Province	Daikundi	Chick by	Mohamad Nekandesh
District	Shahristan	Approved by	Yaddullah Jalali

Scale:

Note: All dimension are in millimeter

1. Node ID:
2. Length in (m)
3. In Diameter in (mm)
4. Head loss Gradient in (m/km)
5. Elevation in (m)



KEY PLAN

LEGEND

SPRING PROTECTION	
BREAK PRESSURE TANK	
WATER RESERVOIR	
VALE BREAK PRESSURE	
GREEN AREA	
BENCH MARK	
GREEN AREAS	
POC	
RCC	

COORDINATES		
NAMES	EAST	NORTH
SPRING	287,281.89	3,718,748.32
RESERVOIR	286,734.72	3,719,032.14
B.P.1	286,872.21	3,718,818.09
V.B.P-1	286,884.53	3,719,018.66
V.B.P-2	286,386.62	3,719,415.00

Action Against Hunger

WASH Department

DW.No:

C-100

Project Name
Province
District

Water Supply
Daikundi
Shahristan

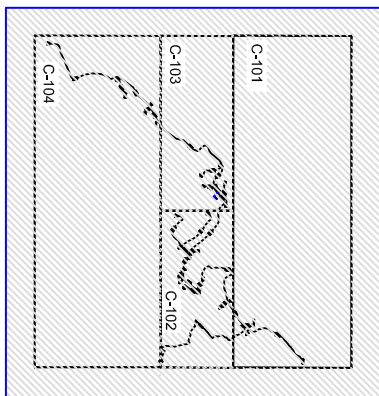
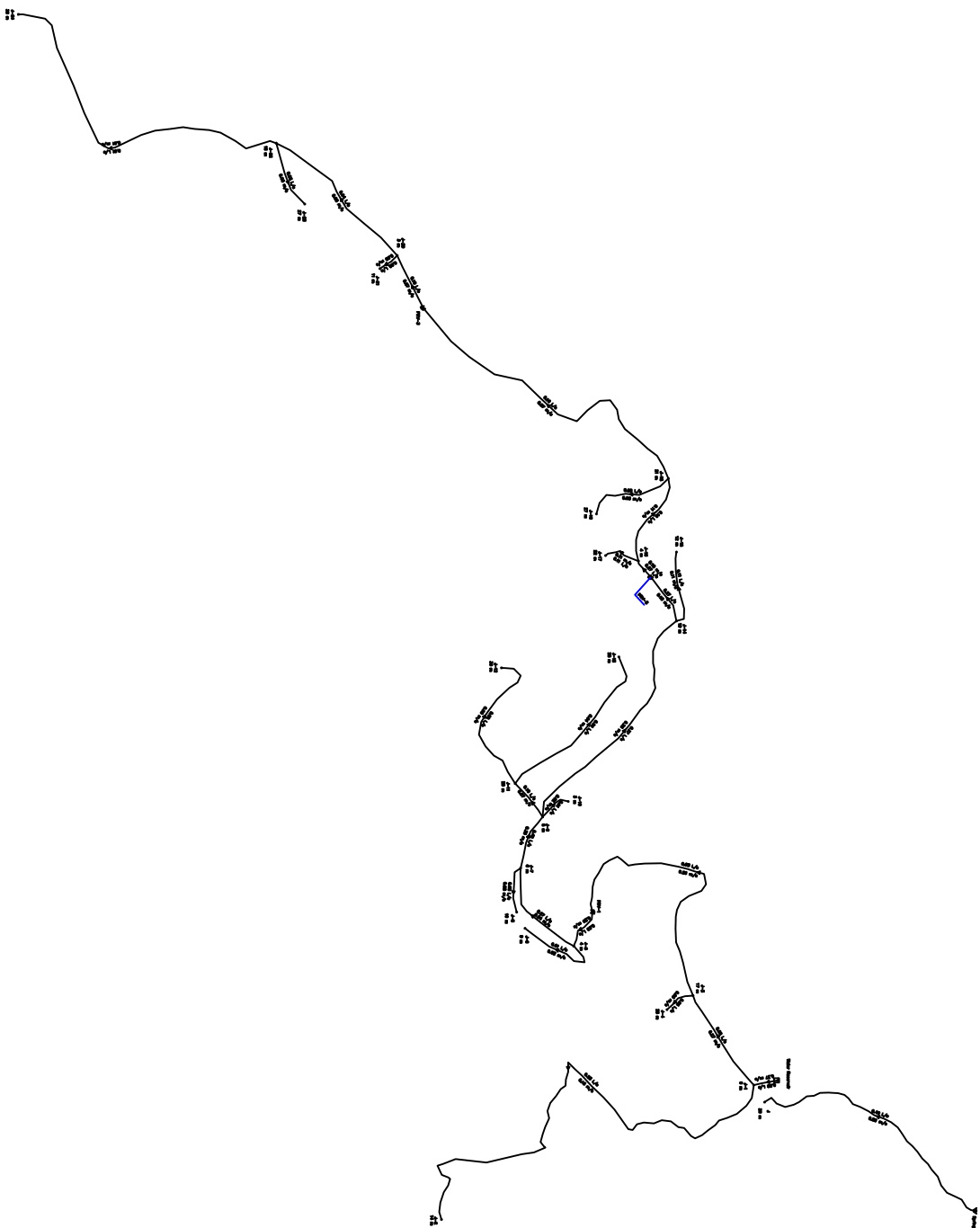
Design by
Drawing& Layout by
Approved by

Yaddullah Jalali
Mohamad Nekandesh
.....

Note: All dimension showed in sheet



1. Node ID:
2. Flow in (Liter/sec)
3. Velocity in (Meter/ sec)
4. Pressure Head in (Meter)



KEY PLAN

LEGEND

SPRING PROTECTION	
BREAK PRESSURE TANK	
WATER RESERVOIR	
VALE BREAK PRESSURE	
GREEN AREA	
BENCH MARK	
GREEN AREAS	
POC	
ROC	

COORDINATES		
NAMES	EAST	NORTH
SPRING	287,291.99	3,718,748.32
RESERVOIR	286,734.72	3,719,032.14
B.P.1	286,872.21	3,718,819.09
V.B.P-1	286,694.53	3,719,018.66
V.B.P-2	286,386.62	3,719,415.00

Action Against Hunger

WASH Department

DW.No:

C-100

Project Name
Province
District

Water Supply
Daikundi
Shahristan

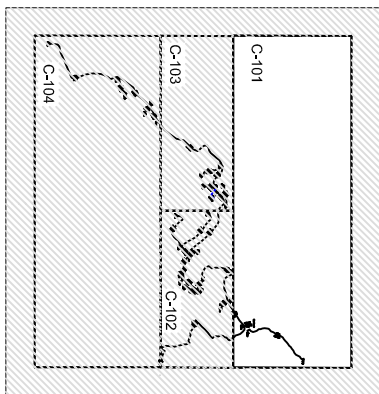
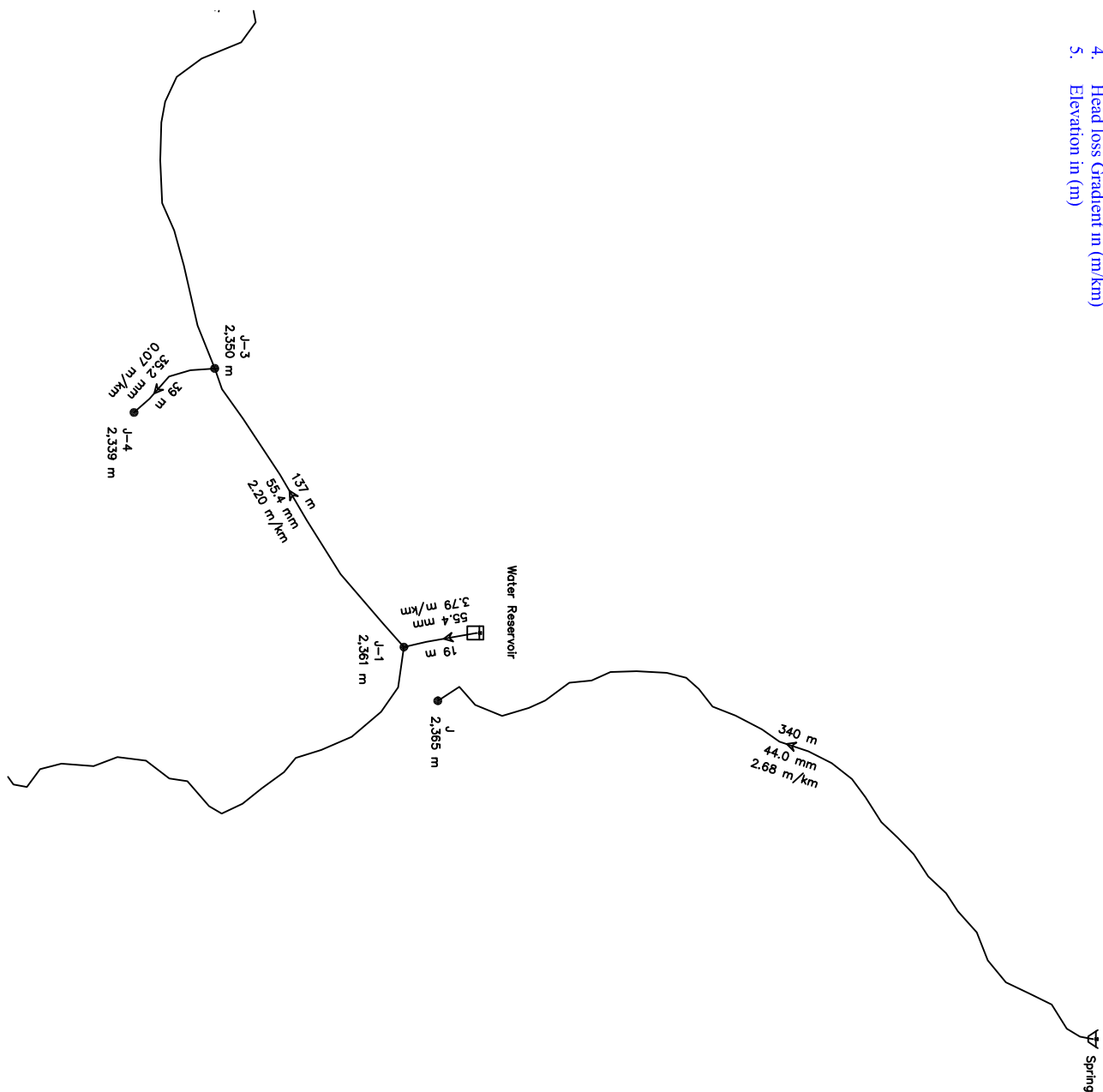
Design by
Drawing& Layout by
Approved by

Yaddullah Jalali
Mohamad Nekandesh
.....

Note: All dimension showed in sheet



1. Node ID:
2. Length in (m)
3. In Diameter in (mm)
4. Head loss Gradient in (m/km)
5. Elevation in (m)



KEY PLAN

LEGEND

SPRING PROTECTION	
BREAK PRESSURE TANK	
WATER RESERVOIR	
VALE BREAK PRESSURE	
GREEN AREA	
BENCH MARK	
GREEN AREAS	
POC	
ROC	

COORDINATES		
NAMES	EAST	NORTH
SPRING	287,281.99	3,718,748.32
RESERVOIR	286,724.72	3,719,032.14
B.P.1	286,872.21	3,718,818.09
V.B.P-1	286,884.53	3,719,018.66
V.B.P-2	286,386.62	3,719,415.00

Action Against Hunger

WASH Department

DW.No:

C-101

Project Name
Province
District

Water Supply
Daikundi
Shahristan

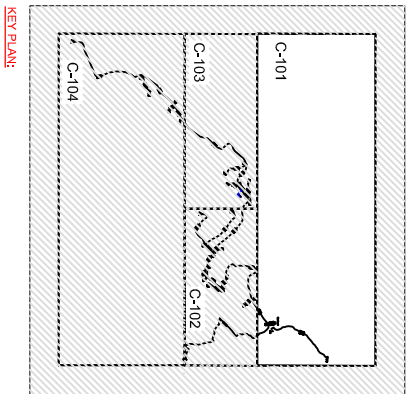
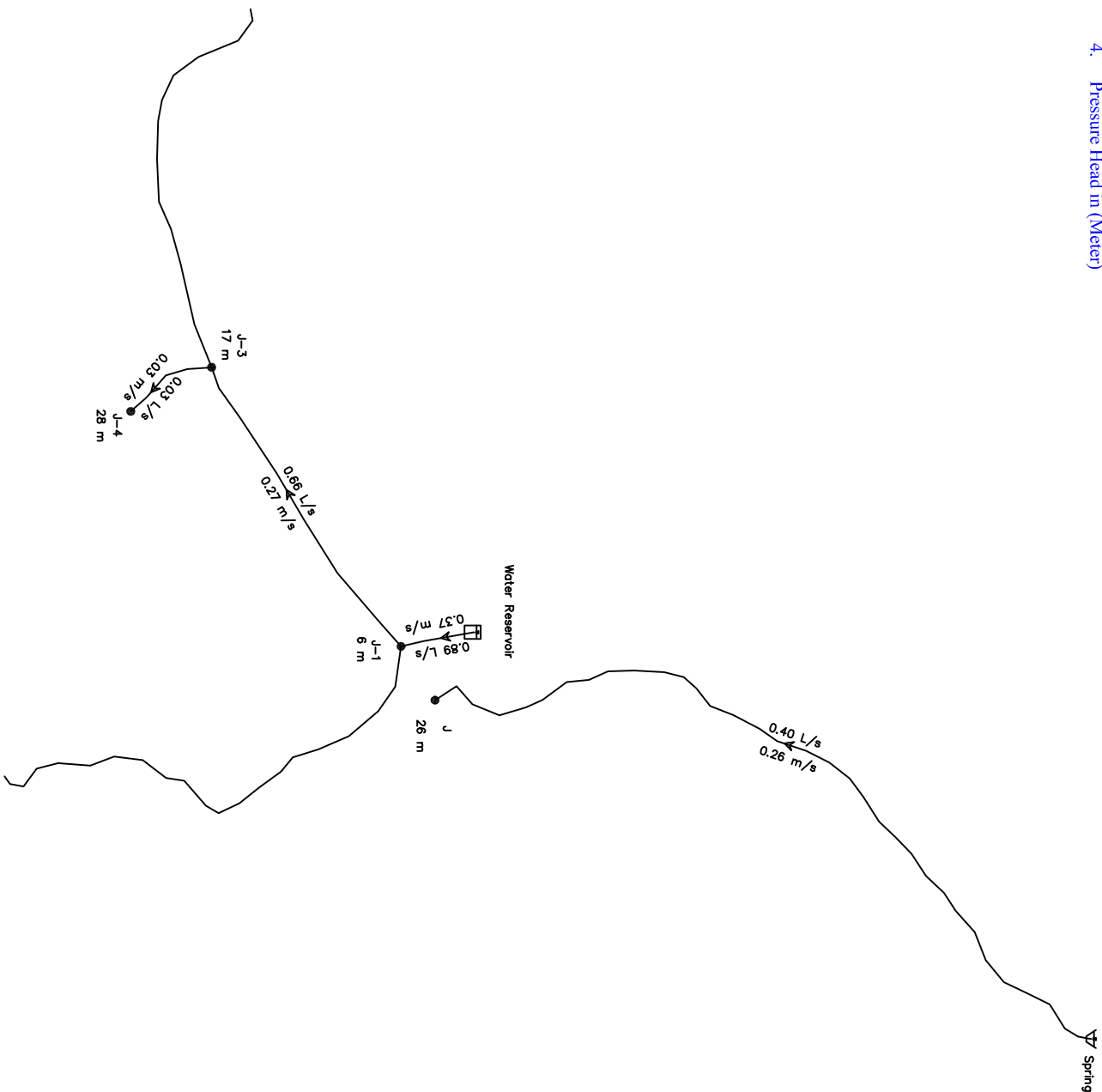
Design by
Drawing& Lyout by
Approved by

Yaddullah Jalali
Mohamad Nekandesh
.....

Note: All dimension showed in sheet



1. Node ID:
2. Flow in (Liter/sec)
3. Velocity in (Meter/sec)
4. Pressure Head in (Meter)



LEGEND:

SPRING PROTECTION	
BREAK PRESSURE TANK	
WATER RESERVOIR	
VALE BREAK PRESSURE	
GREEN AREA	
BENCH MARK	
GREEN AREAS	
POC	
ROC	

COORDINATES		
NAMES	EAST	NORTH
SPRING	287,291.99	3,718,748.32
WATER RESERVOIR	286,734.72	3,719,032.14
B.P.1	286,872.21	3,718,819.09
V.B.P-1	286,894.53	3,719,018.66
V.B.P-2	286,385.62	3,719,415.00

Action Against Hunger

WASH Department

DW.No:

C-101

Project Name
Province
District

Water Supply
Daikundi
Shahristan

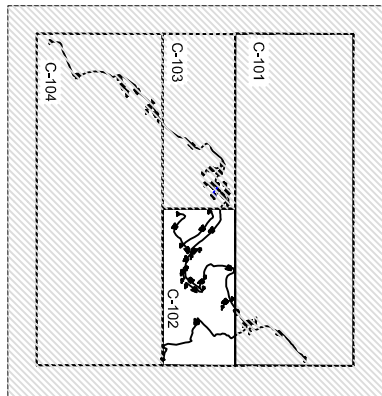
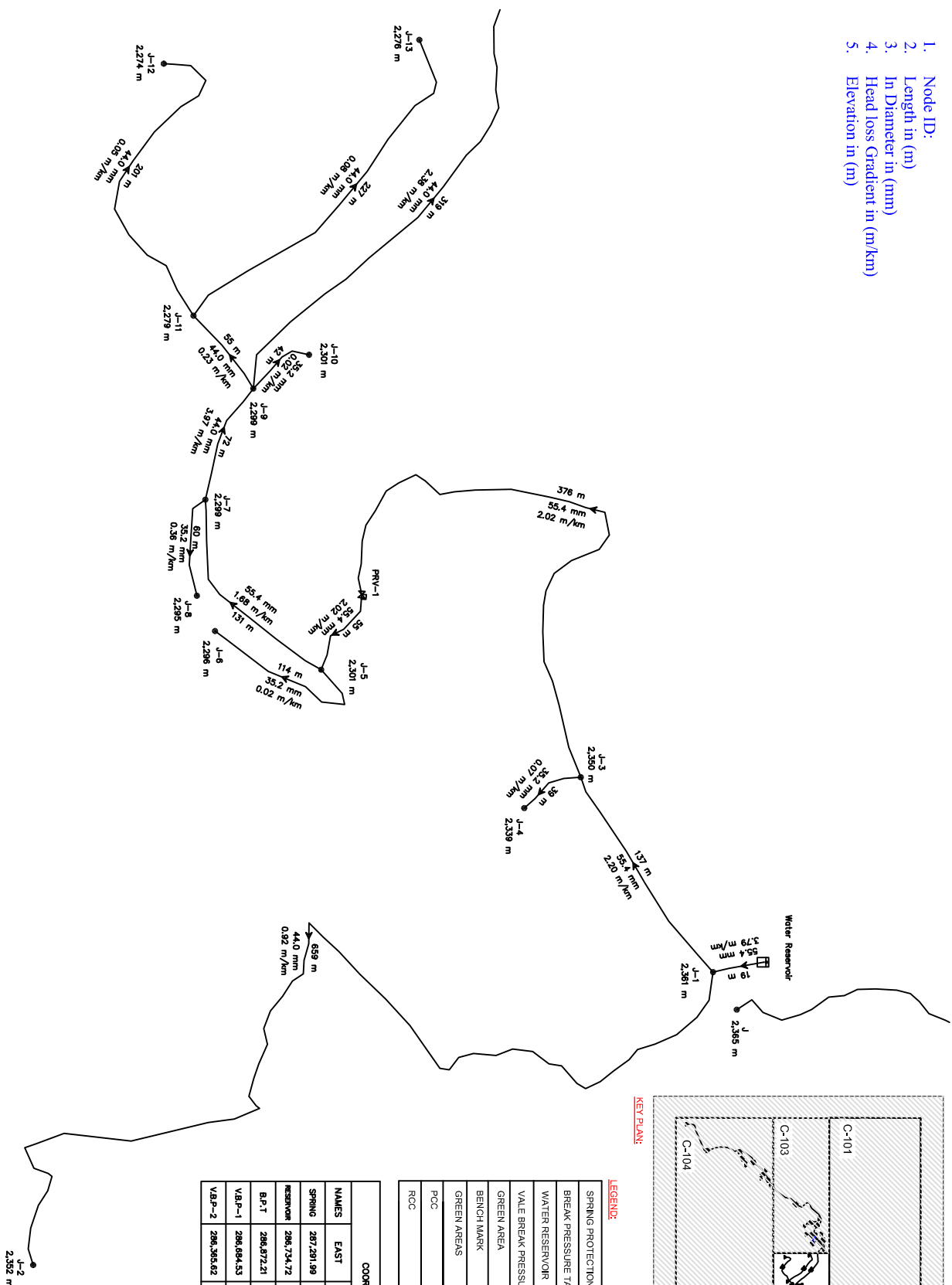
Design by
Drawing & Layout by
Approved by

Yaddullah Jalali
Mohamad Nekandesh
.....

Note: All dimension showed in sheet



1. Node ID:
2. Length in (m)
3. In Diameter in (mm)
4. Head loss Gradient in (m/km)
5. Elevation in (m)



KEY PLAN

LEGEND

SPRING PROTECTION	
BREAK PRESSURE TANK	
WATER RESERVOIR	
VALE BREAK PRESSURE	
GREEN AREA	
BENCH MARK	
GREEN AREAS	
POC	
ROC	

COORDINATES		
NAMES	EAST	NORTH
SPRING	287,281.99	3,718,748.32
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B.P.1	286,872.21	3,718,819.09
V.B.P-1	286,884.53	3,719,018.66
V.B.P-2	286,386.62	3,719,415.00
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Action Against Hunger

WASH Department

DW.No:

C-102

Project Name
Province
District

Water Supply
Daikundi
Shahristan

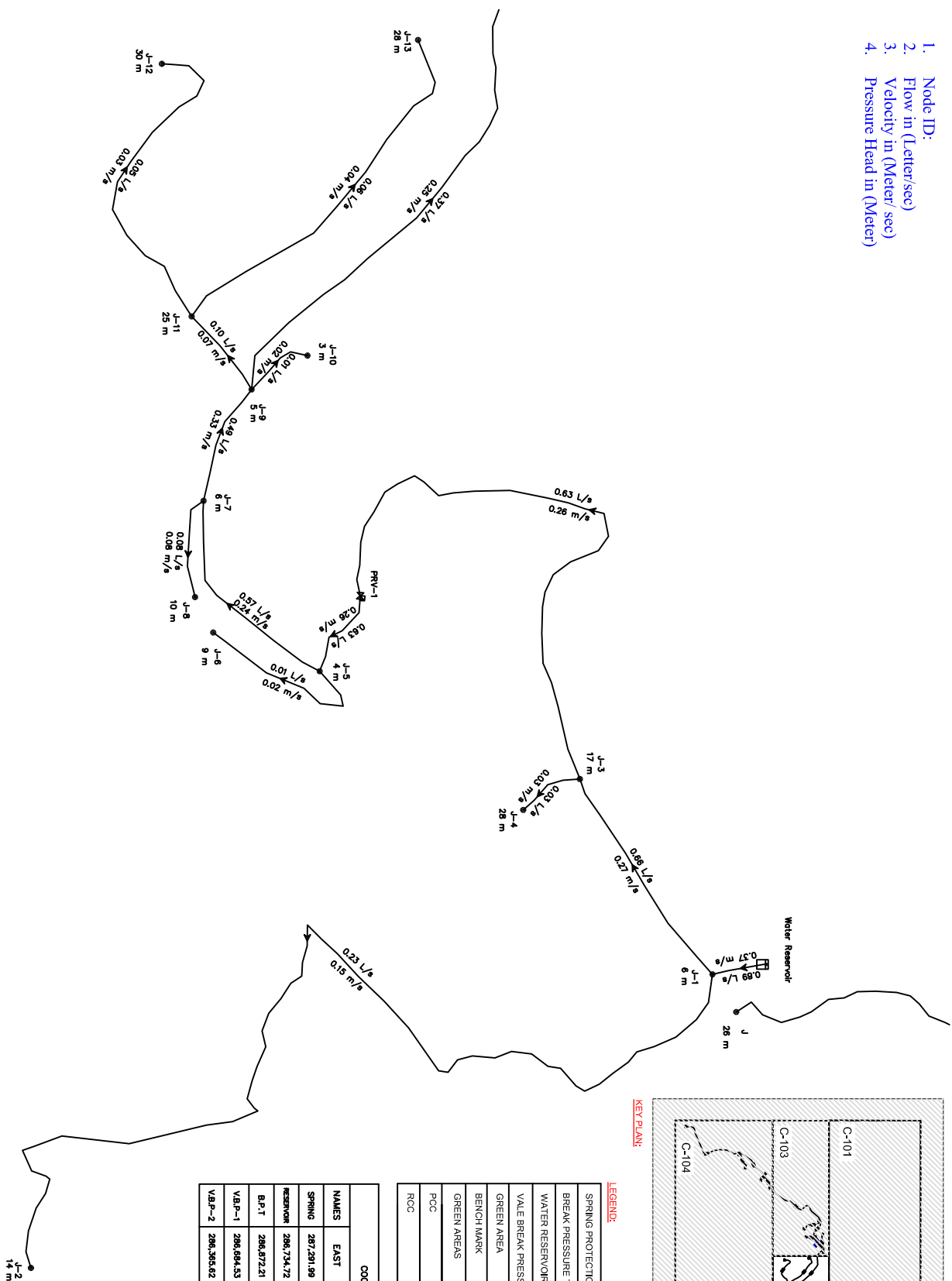
Design by
Drawing & Layout by
Approved by

Yaddullah Jalali
Mohamad Nekandesh
.....

Note: All dimension showed in sheet



1. Node ID:
2. Flow in (Liter/sec)
3. Velocity in (Meter/ sec)
4. Pressure Head in (Meter)



KEY PLAN:

LEGEND:

SPRING PROTECTION	
BREAK PRESSURE TANK	
WATER RESERVOIR	
VALE BREAK PRESSURE	
GREEN AREA	
BENCH MARK	
GREEN AREAS	
POC	
ROC	

COORDINATES		
NAMES	EAST	NORTH
SPRING	287,291.99	3,718,748.32
RESERVOIR	286,734.72	3,719,032.14
B.P.1	286,872.21	3,718,819.09
V.B.P-1	286,884.53	3,719,018.66
V.B.P-2	286,385.62	3,719,415.00

Action Against Hunger

WASH Department

DW.No:

C-102

Project Name

Water Supply

Design by

Yaddullah Jalali

Province

Daikundi

Drawing& Lyout by

Mohamad Nekandesh

District

Shahristan

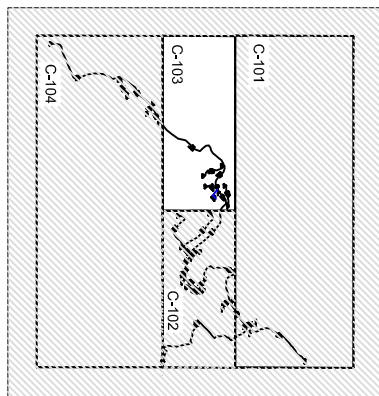
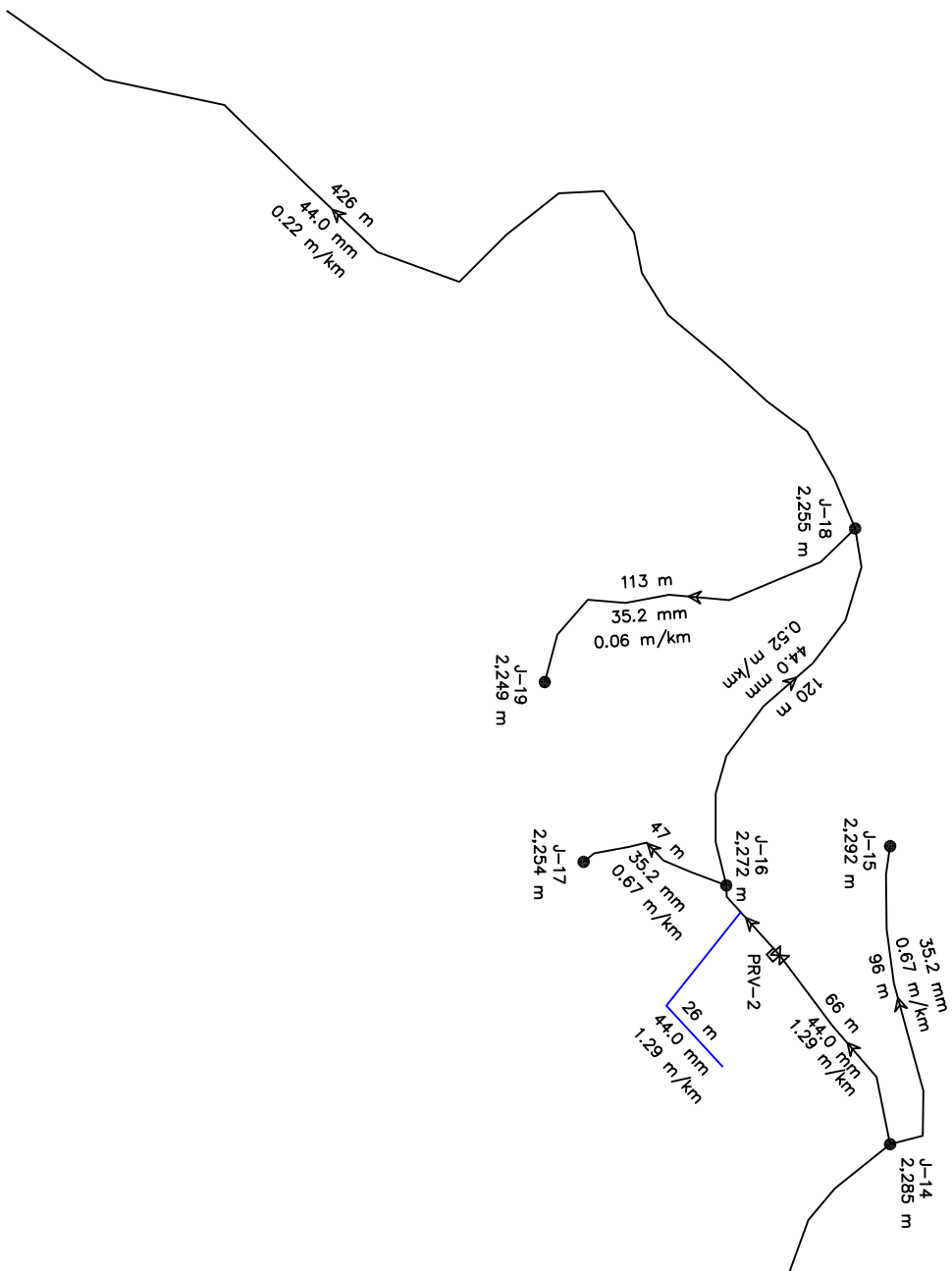
Approved by

.....

Note: All dimension showed in sheet



1. Node ID:
2. Length in (m)
3. In Diameter in (mm)
4. Head loss Gradient in (m/km)
5. Elevation in (m)



KEY PLAN

LEGEND

SPRING PROTECTION	
BREAK PRESSURE TANK	
WATER RESERVOIR	
VALE BREAK PRESSURE	
GREEN AREA	
BENCH MARK	
GREEN AREAS	
POC	
ROC	

COORDINATES		
NAMES	EAST	NORTH
SPRING	287,281.99	3,718,748.32
RESERVOIR	286,724.72	3,719,032.14
B.P.T	286,872.21	3,718,818.09
V.B.P-1	286,684.53	3,719,018.66
V.B.P-2	286,386.62	3,719,415.00

Action Against Hunger

WASH Department

DW.No:

C-103

Project Name
Province
District

Water Supply
Daikundi
Shahristan

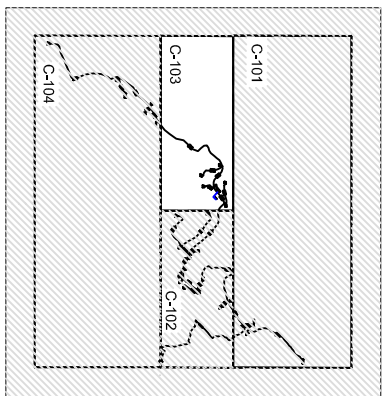
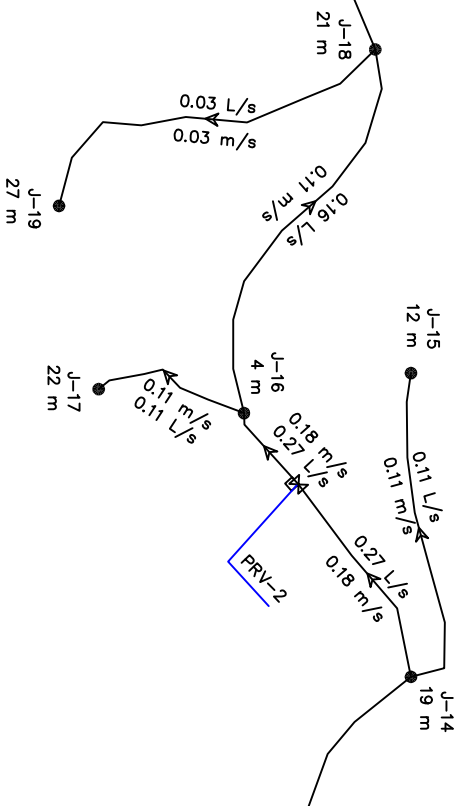
Design by
Drawing& Lyout by
Approved by

Yaddullah Jalali
Mohamad Nekandesh
.....

Note: All dimension showed in sheet



1. Node ID:
2. Flow in (Liter/sec)
3. Velocity in (Meter/ sec)
4. Pressure Head in (Meter)



KEY PLAN

LEGEND

SPRING PROTECTION	
BREAK PRESSURE TANK	
WATER RESERVOIR	
VALE BREAK PRESSURE	
GREEN AREA	
BENCH MARK	
GREEN AREAS	
POC	
ROC	

COORDINATES		
NAMES	EAST	NORTH
SPRING	287,291.99	3,718,748.32
RESERVOIR	286,734.72	3,719,032.14
B.P.1	286,872.21	3,718,818.09
V.B.P-1	286,884.53	3,719,018.66
V.B.P-2	286,385.62	3,719,415.00

Action Against Hunger

WASH Department

DW.No:

C-103

Project Name
Province
District

Water Supply
Daikundi
Shahristan

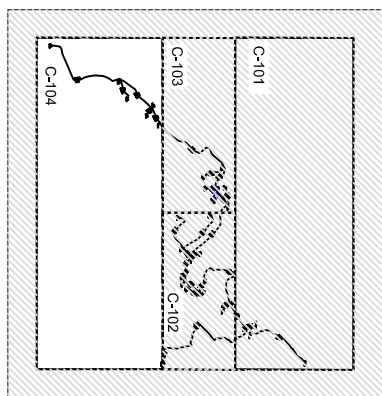
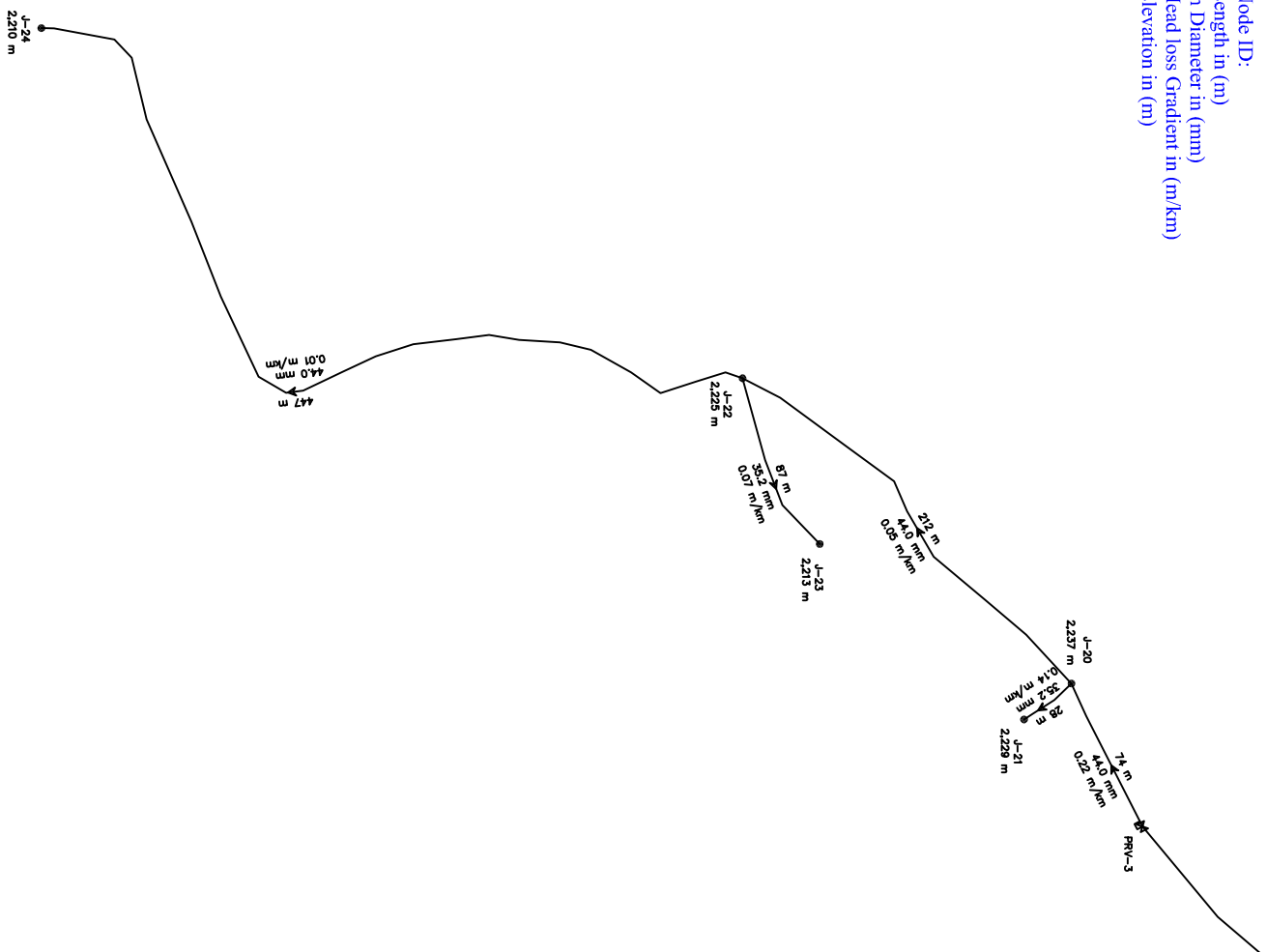
Design by
Drawing& Lyout by
Approved by

Yaddullah Jalali
Mohamad Nekandesh
.....

Note: All dimension showed in sheet



1. Node ID:
2. Length in (m)
3. In Diameter in (mm)
4. Head loss Gradient in (m/km)
5. Elevation in (m)



KEY PLAN

LEGEND

SPRING PROTECTION	
BREAK PRESSURE TANK	
WATER RESERVOIR	
VALE BREAK PRESSURE	
GREEN AREA	
BENCH MARK	
GREEN AREAS	
POC	
ROC	

COORDINATES		
NAMES	EAST	NORTH
SPRING	287,281.99	3,718,748.32
RESERVOIR	286,734.72	3,719,032.14
B.P.T	286,872.21	3,718,819.09
V.B.P-1	286,684.53	3,719,018.66
V.B.P-2	286,385.62	3,719,415.00

Action Against Hunger

WASH Department

DW.No:

C-104

Project Name
Province
District

Water Supply
Daikundi
Shahristan

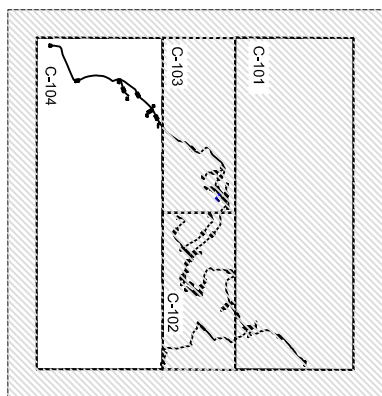
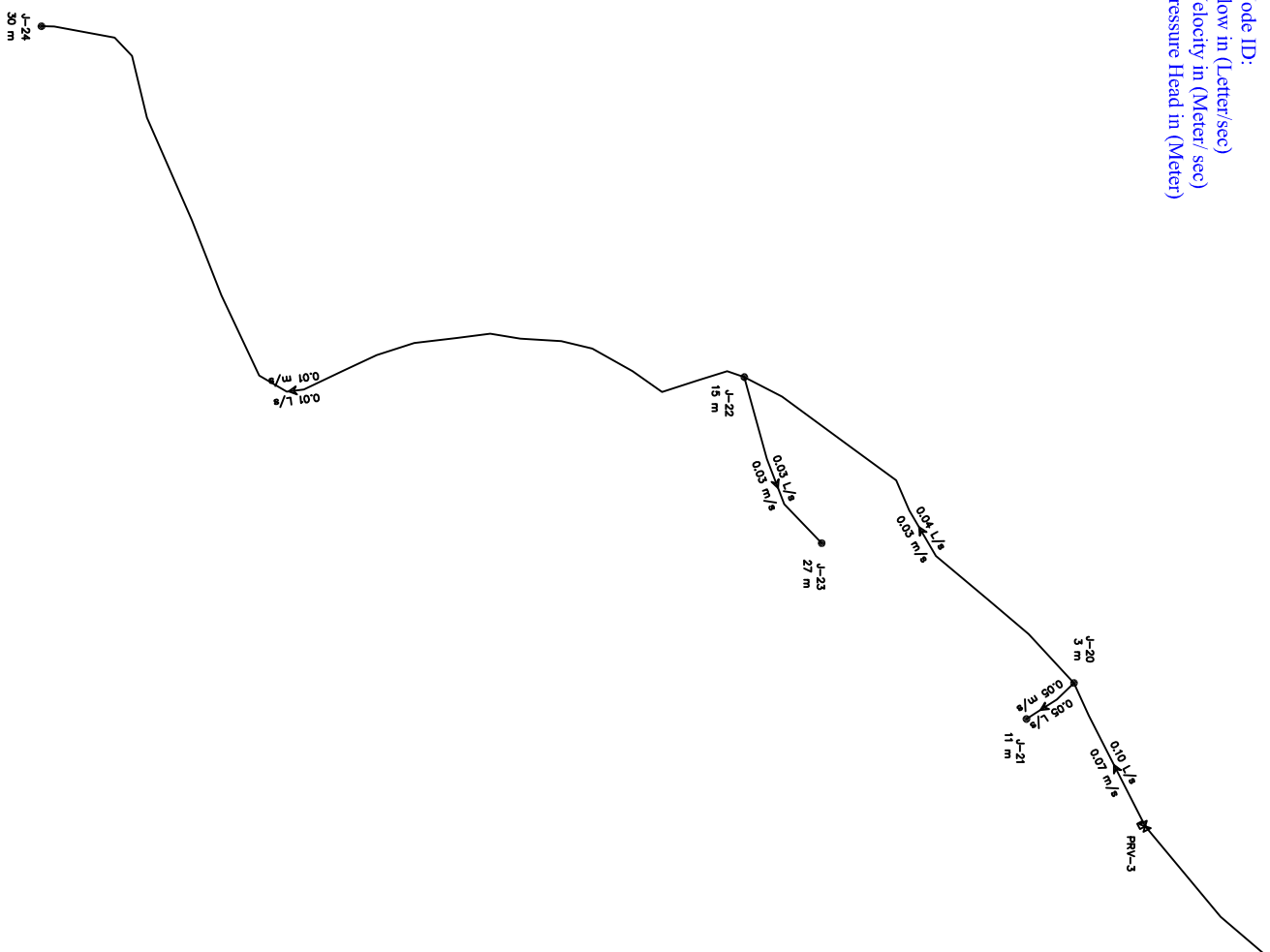
Design by
Drawing& Layout by
Approved by

Yaddullah Jalali
Mohamad Nekandesh
.....

Note: All dimension showed in sheet



1. Node ID:
2. Flow in (Liter/sec)
3. Velocity in (Meter/ sec)
4. Pressure Head in (Meter)



KEY PLAN

LEGEND

SPRING PROTECTION	
BREAK PRESSURE TANK	
WATER RESERVOIR	
VALE BREAK PRESSURE	
GREEN AREA	
BENCH MARK	
GREEN AREAS	
POC	
ROC	

COORDINATES		
NAMES	EAST	NORTH
SPRING	287,291.99	3,718,748.32
RESERVOIR	286,734.72	3,719,032.14
B.P.T	286,872.21	3,718,819.09
V.B.P-1	286,884.53	3,719,018.66
V.B.P-2	286,385.62	3,719,415.00

Action Against Hunger

WASH Department

DW.No:

C1-104

Project Name

Water Supply

Design by

Yaddullah Jalali

Province

Daikundi

Drawing& Lyout by

Mohamad Nekandesh

District

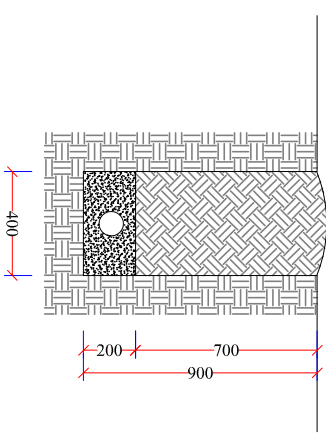
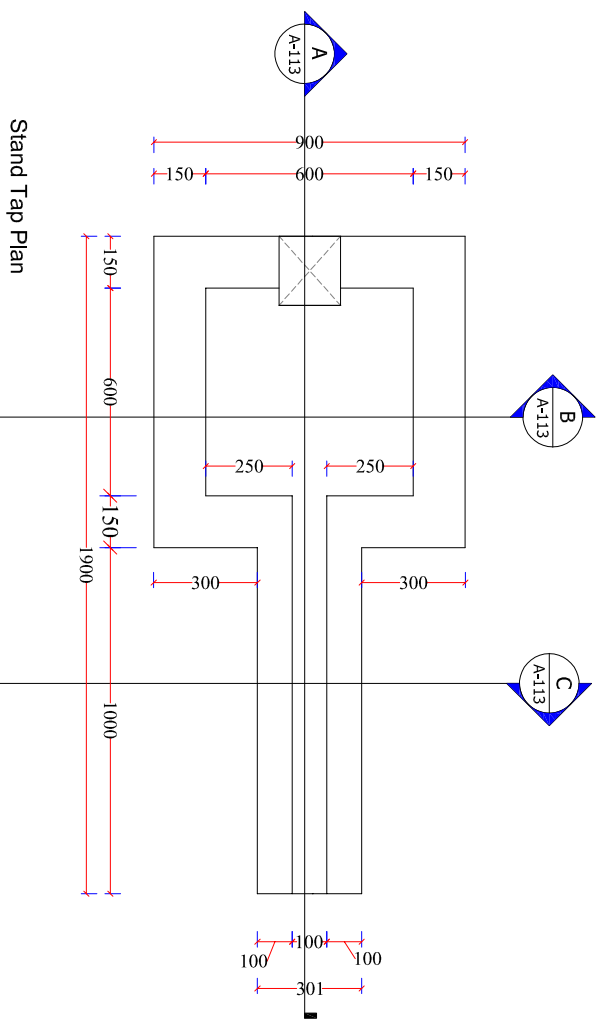
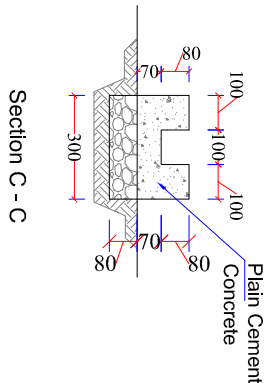
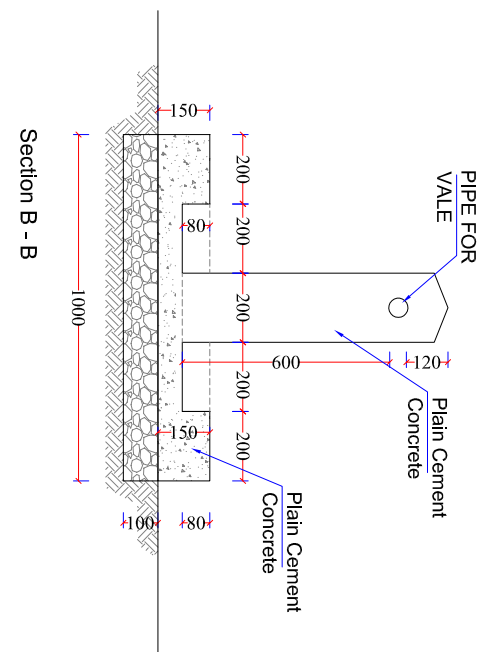
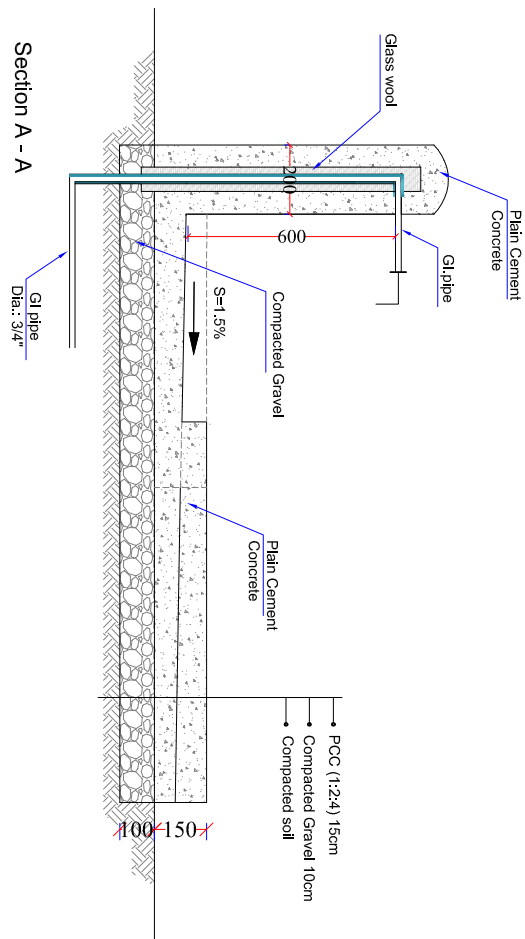
Shahristan


Approved by

.....

Note: All dimension showed in sheet





	DW.No:	Action Against Hunger				Scale:
		WASH Department				Note: All dimension are in millimeter
	A-113	Project Name	Water Supply	Design&Drawing by	Mohamad Nekandesh	
		Province	Daikundi	Chick by	Mohamad Nekandesh	
District		Shahristan	Approved by	Yaddullah Jalali		