



**ACTION AGAINST HUNGER
DAIKUNDI OFFICE
WASH DEPARTMENT**


(TECHNICAL DRAWING PART)

PROJECT NAME:
WATER SUPPLY NETWORK PROJECT

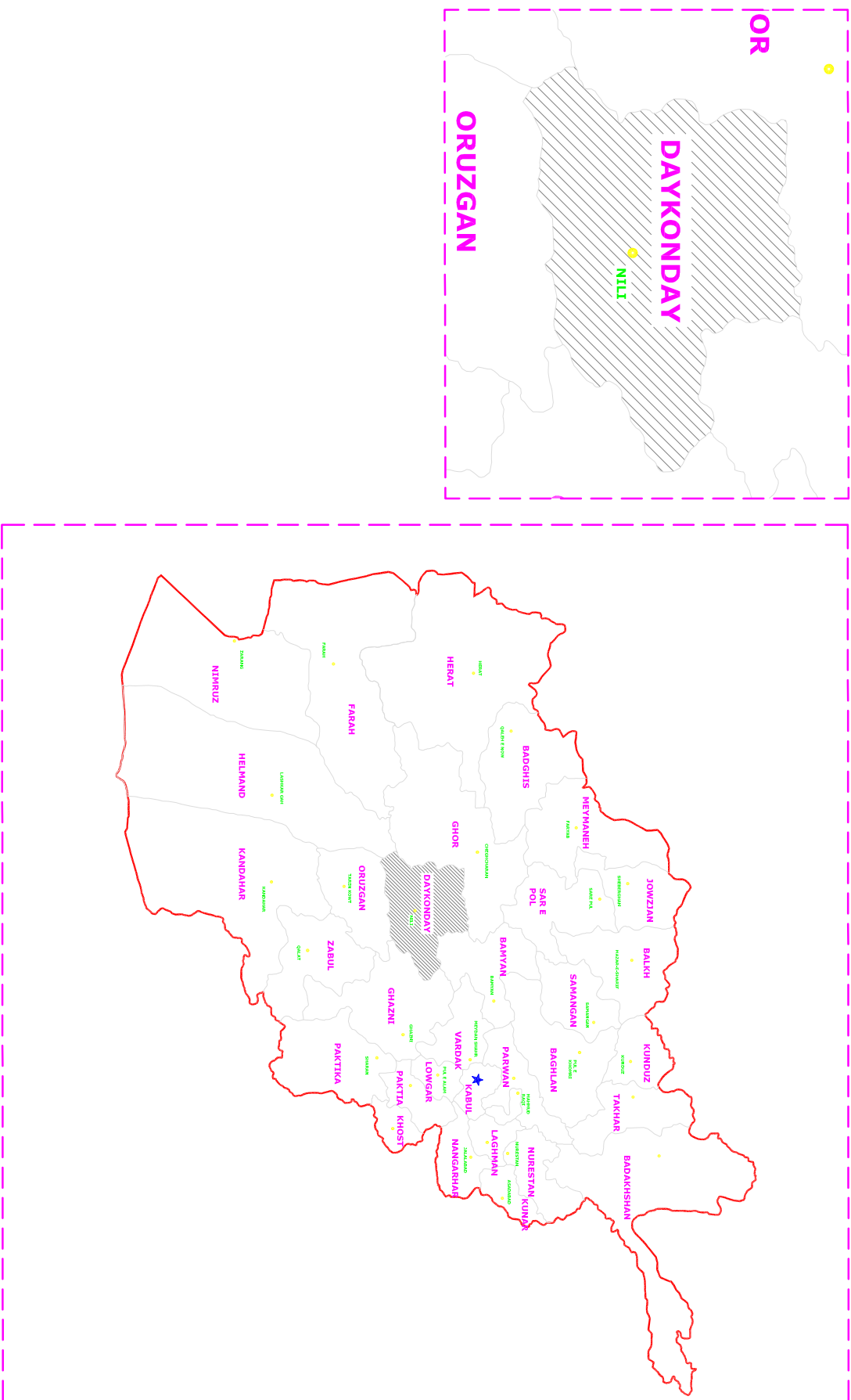
JUN, 10, 2024

PREPARED BY: WASH DEPARTMENT

INDEX SHEET			
NUMBE R	SHEET NUMBER	SHEET TITLES	
1	G-100	COVER SHEET	
2	G-101	INDEX SHEET	
3	G-102	LOCATION OF PROJECT	
4	G-103	SITE PLAN OF PROJECT	
5	A-101	SPRING PROTECTION PLAN	
6	A-102	SPRING PROTECTION REINFORCEMENT SLAB	
7	A-103	SPRING PROTECTION SECTION	
8	A-105	WATER RESERVOIR TANK PLAN	
9	A-106	WATER RESERVOIR TANK SECTION B-B	
10	A-107	WATER RESERVOIR TANK SECTION A-A	
11	A-108	REINFORCEMENT IN HORIZONTAL SECTION OF WATER RESERVOIR TANK	
12	A-109	REINFORCEMENT IN SECTION C-C OF WATER RESERVOIR TANK	
13	A-110	REINFORCEMENT IN SECTION D-D OF WATER RESERVOIR TANK	
14	A-111	VALE BREAK PRESSURE (VALE FOR REDUCING PRESSURE)	
15	A-112	GATE VALE BOX	
16	A-113	STAND TAP AND DIG SPECIFICATION OF LAYING PIPE	
17	C-100	KEY PLAN (Node ID, Length, Diameter, Headloss, Gradient, Elevation)	
18	C1-100	KEY PLAN (Node ID, Flow, Velocity, Pressure head)	
19	C-101	ENLARGE PLAN (Node ID, Length, Diameter, Headloss, Gradient, Elevation)	
20	C1-101	ENLARGE PLAN (Node ID, Flow, Velocity, Pressure head)	
21	C-102	ENLARGE PLAN (Node ID, Length, Diameter, Headloss, Gradient, Elevation)	
22	C1-102	ENLARGE PLAN (Node ID, Flow, Velocity, Pressure head)	

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

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	Pato	Approved by	Yaddullah Jalali

Scale:

Note: All dimension are in millimeter

Site plan for Dasht Malok pato Networking project



G-103 SITE PLAN

REF

SCALE: N.T.S



DW.No:

G-103

Action Against Hunger

WASH Department

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

Scale:

Note: All dimension are in millimeter

5

Spring Protection Plan



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

SCALE: 1:20



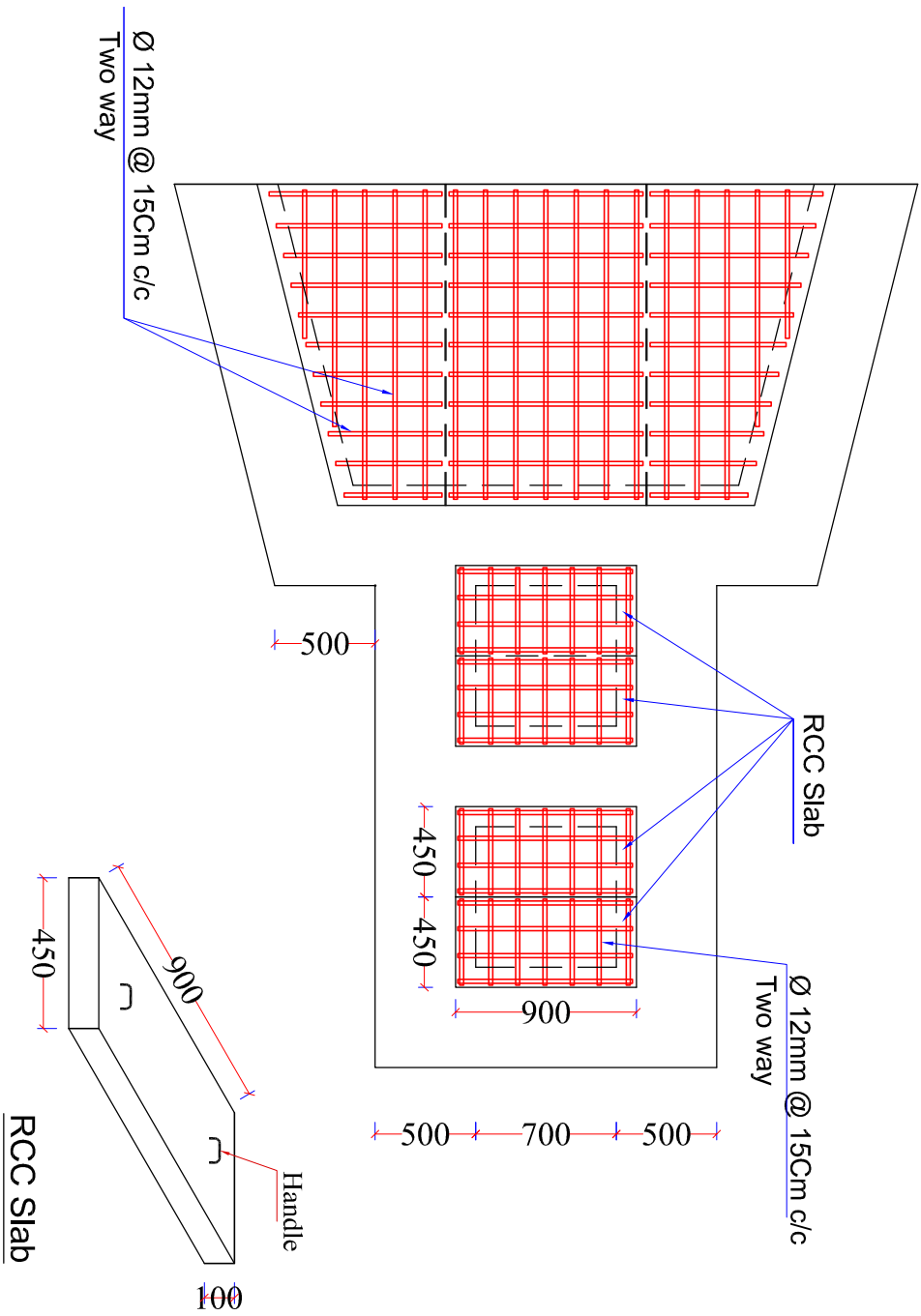
A-101

WASH Department

Mohamad Nekandesh
Mohamad Nekandesh
Yaddullah Jalali

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

Pato

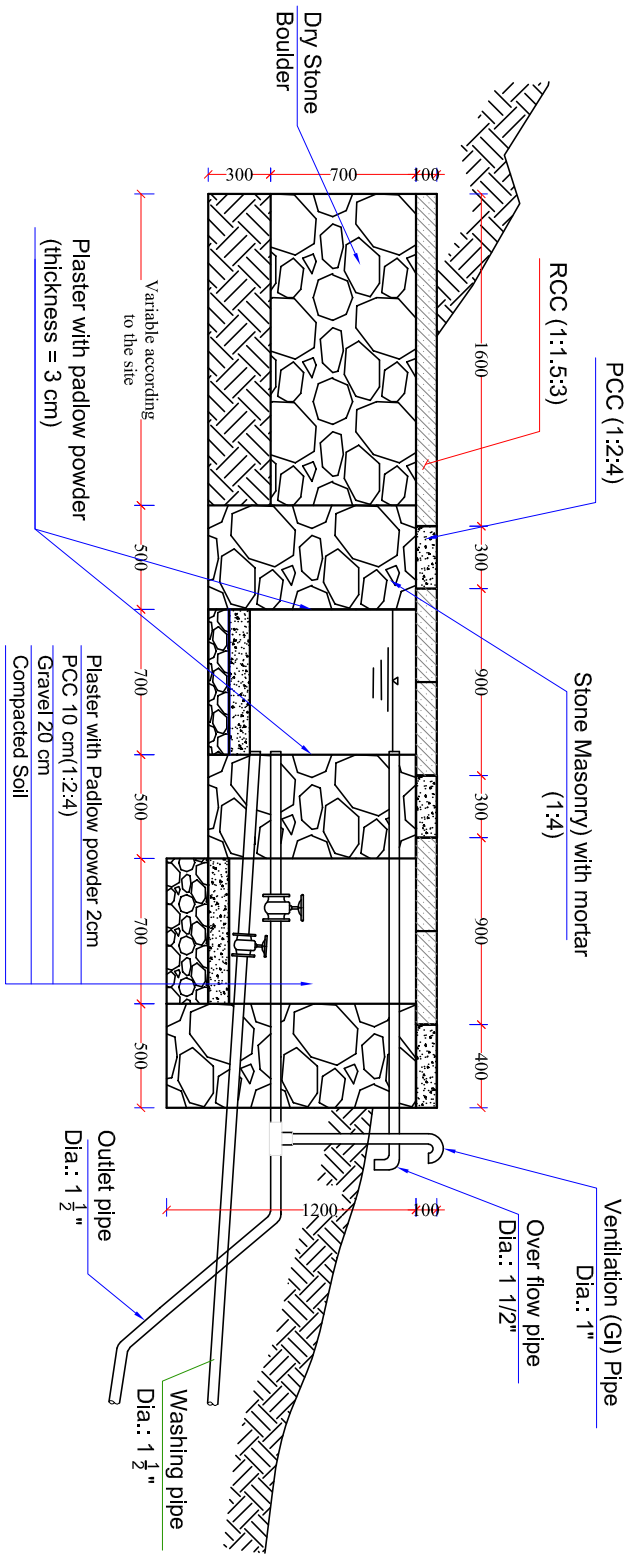
Approved by

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	Pato	Approved by	Yaddullah Jalali

Scale:

Note: All dimension are in millimeter

- 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.

Over flow 1
1/2" GI Pipe

Main hole
60x60 cm

Inlet 1 1/2"
GI pipe

Out let Pipe
2"GI pipe

Drain pipe
GI 2 " inch



DW.No:

A-105

Action Against Hunger

WASH Department

Project Name

Water Supply

Design&Drawing by

Mohamad Nekandesh

Province

Daikundi

Chick by

Mohamad Nekandesh

District

Pato

Approved by

Yaddullah Jalali

Scale:

Note: All
dimension are
in millimeter

5

adjusted according to site condition.



SCALE: 1:20

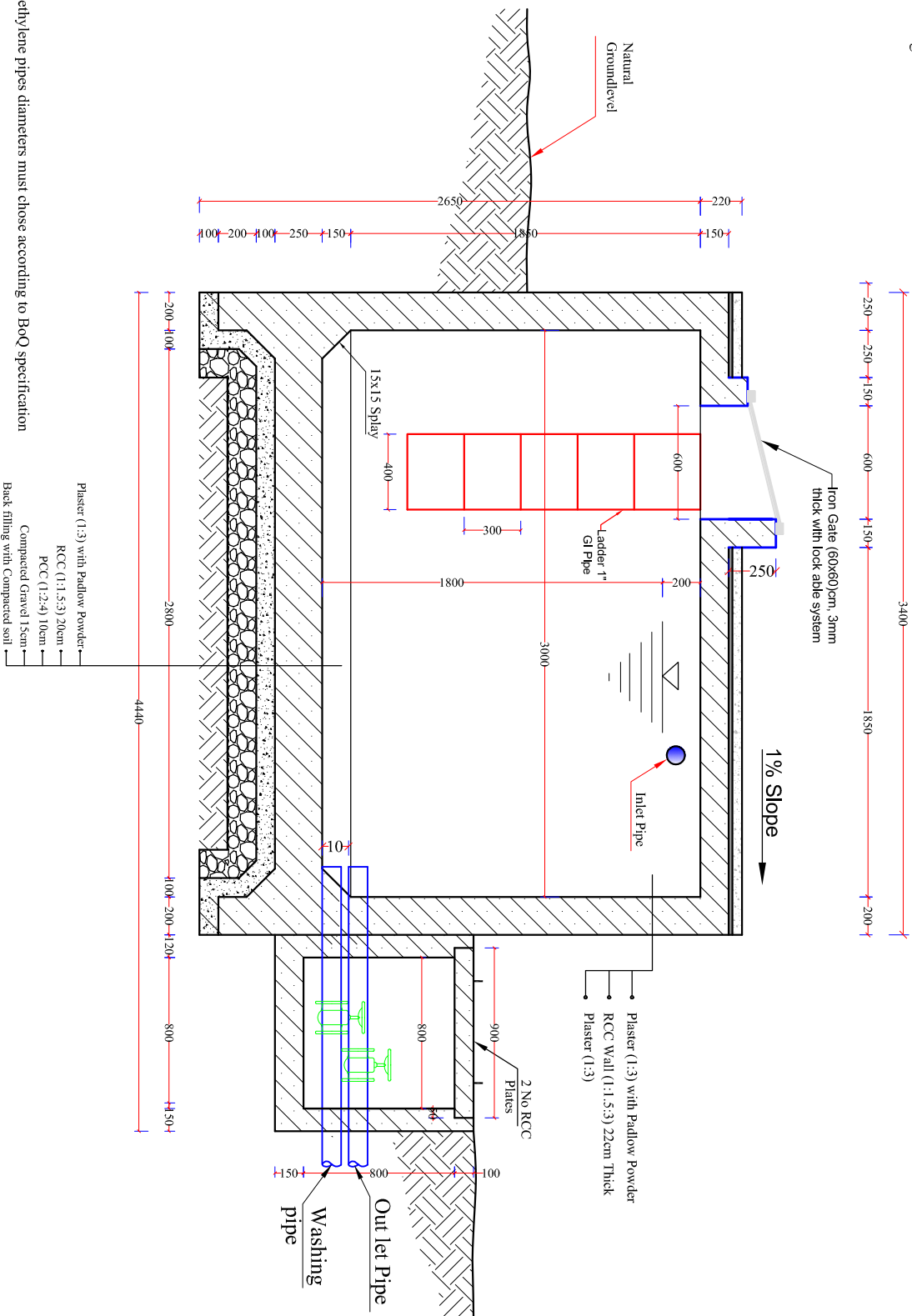


A-106

Mohamad Nekandesh
Mohamad Nekandesh
Yaddullah Jalali

Note: All dimension are in millimeter

- 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.



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

A-107 SECTION A-A

SCALE 1:20

Action Against Hunger

WASH Department

Scale:

Note: All dimension are in millimeter

DW.No:

A-107

Project Name
Province
District

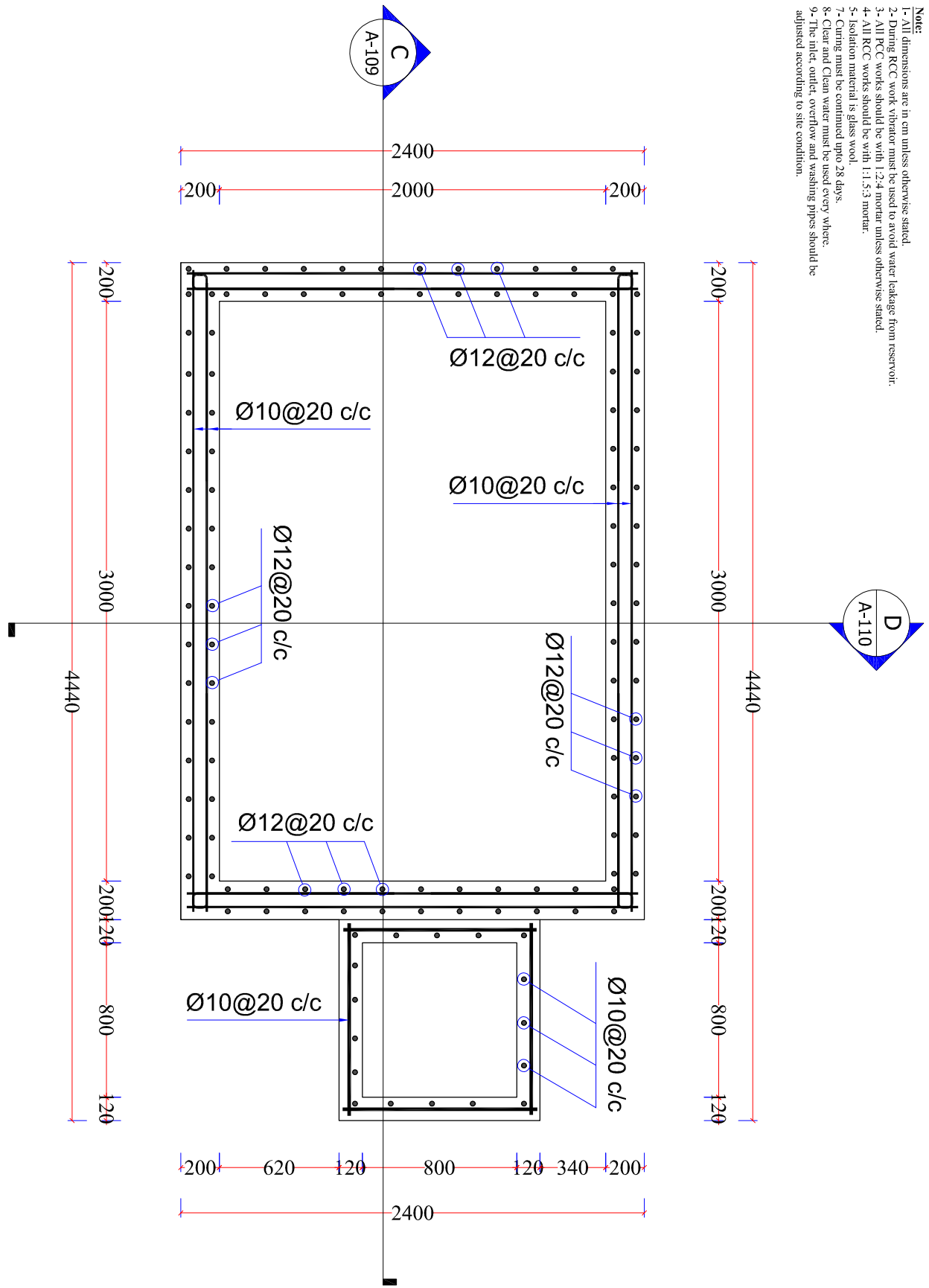
Water Supply
Daikundi
Pato

Design&Drawing by
Chick by
Approved by

Mohamad Nekandesh
Mohamad Nekandesh
Yaddullah 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 RCC 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.



A-108 HORIZONTAL REINFORCEMENT PLAN
SCALE: 1:20



DW.No:

A-108

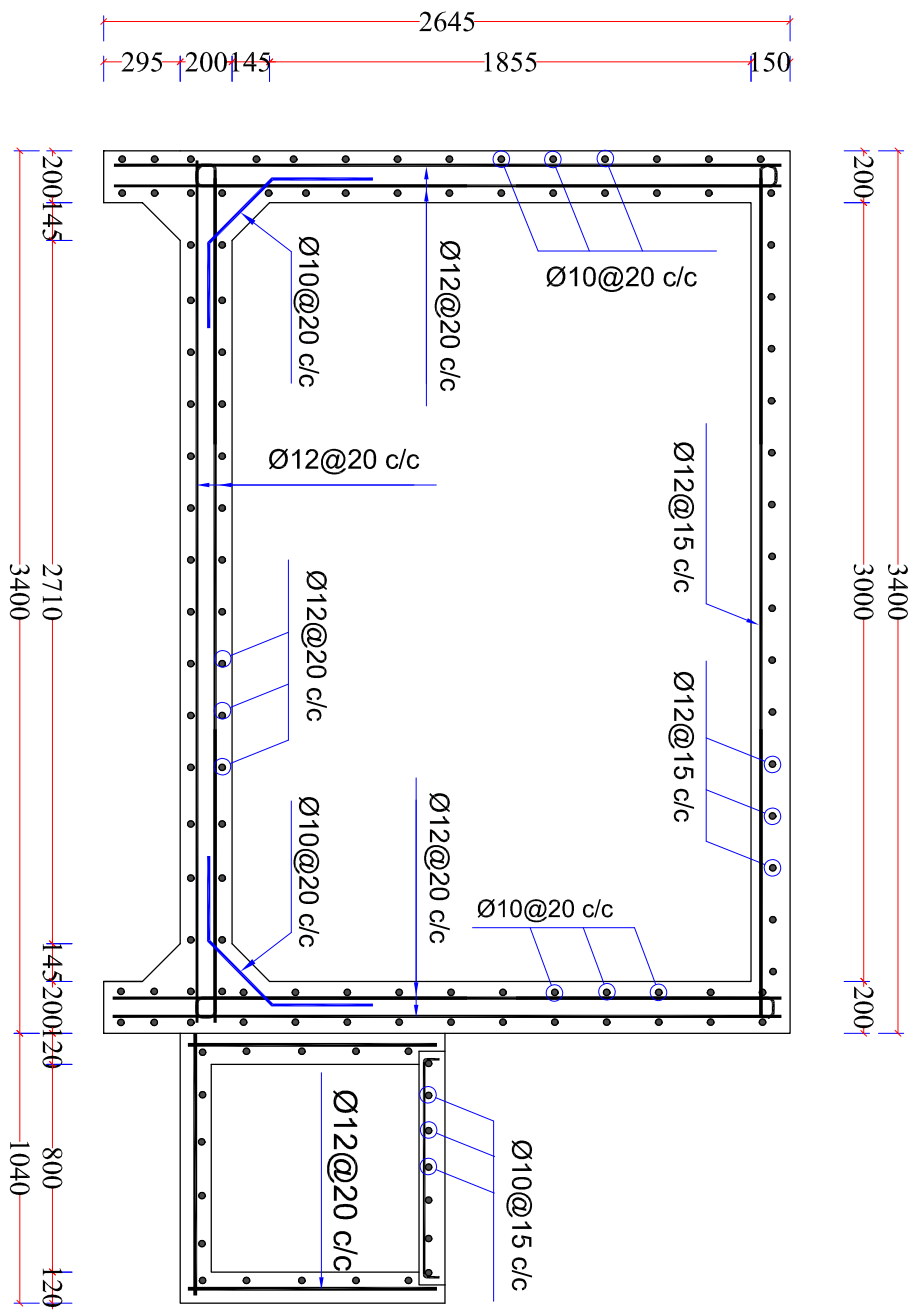
Action Against Hunger

WASH Department

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

Scale:

Note: All dimension are in millimeter



A.109 SECTION C-C

SCALE: 1:20



DW.No:

A-109

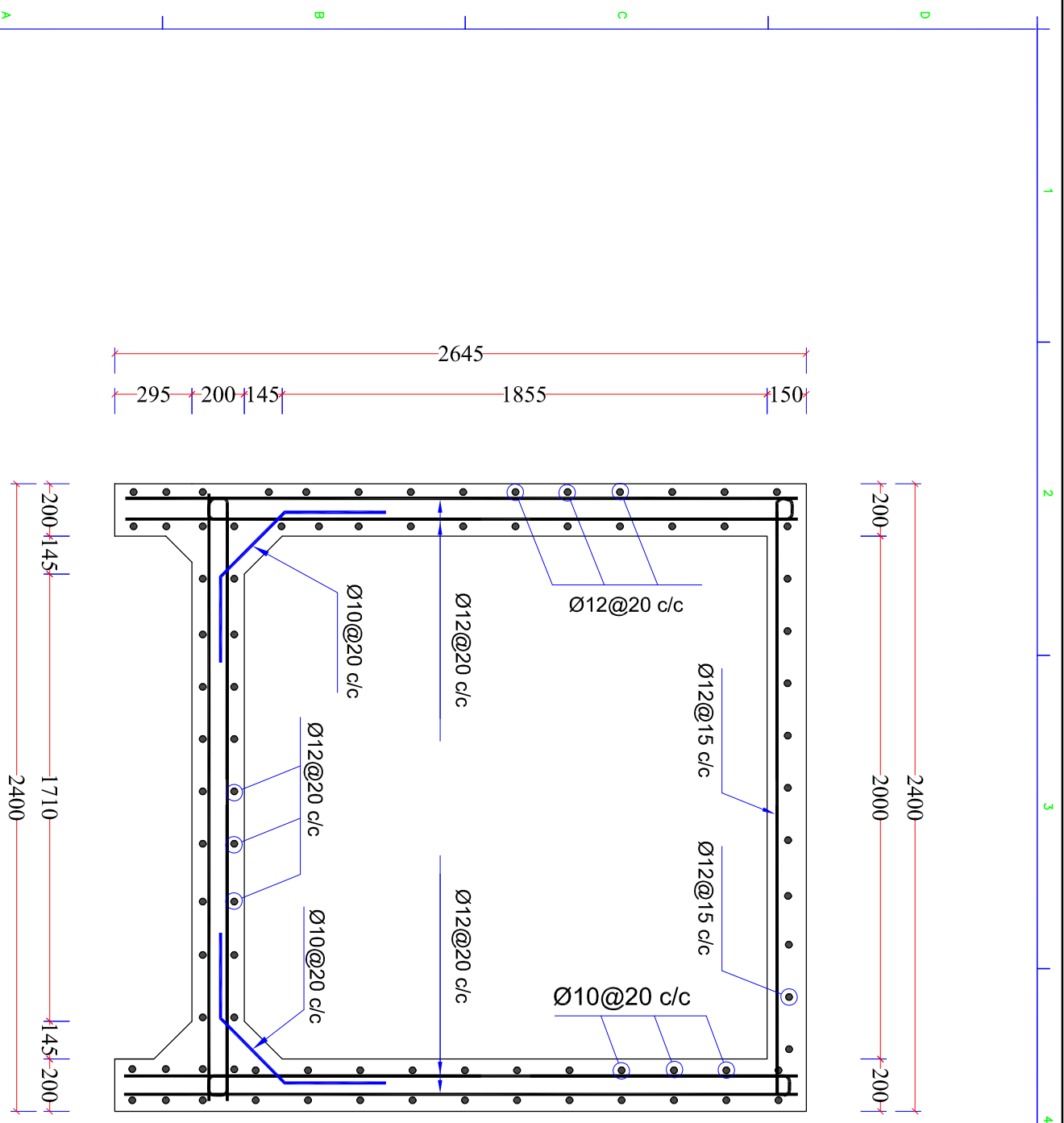
Action Against Hunger

WASH Department

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

Scale:

Note: All dimension are in millimeter



DW.No:

A-110

Action Against Hunger

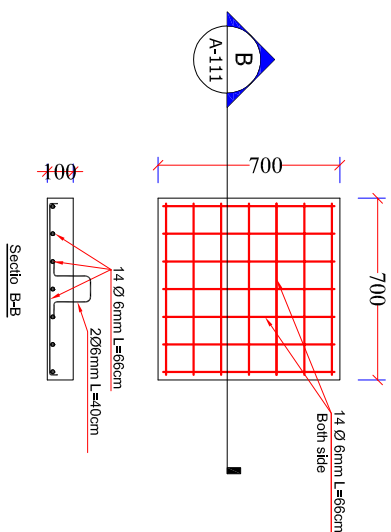
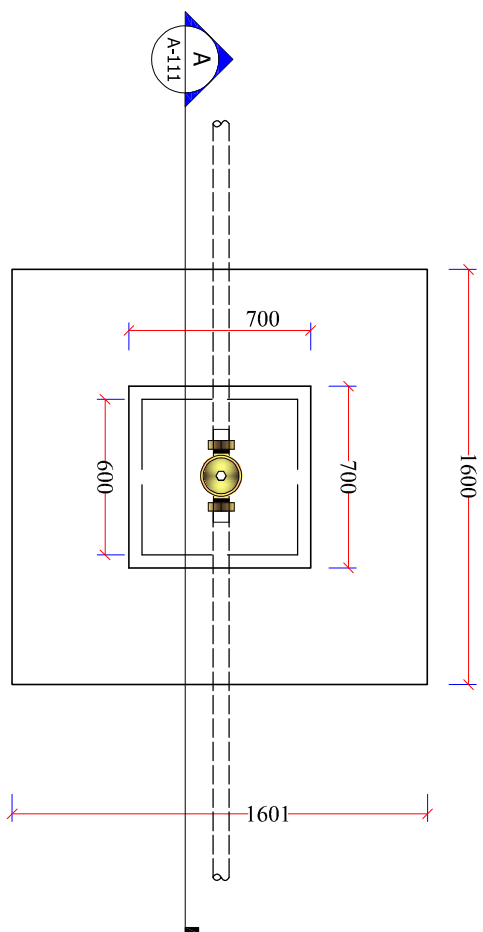
WASH Department

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

Scale:

Note: All dimension are in millimeter

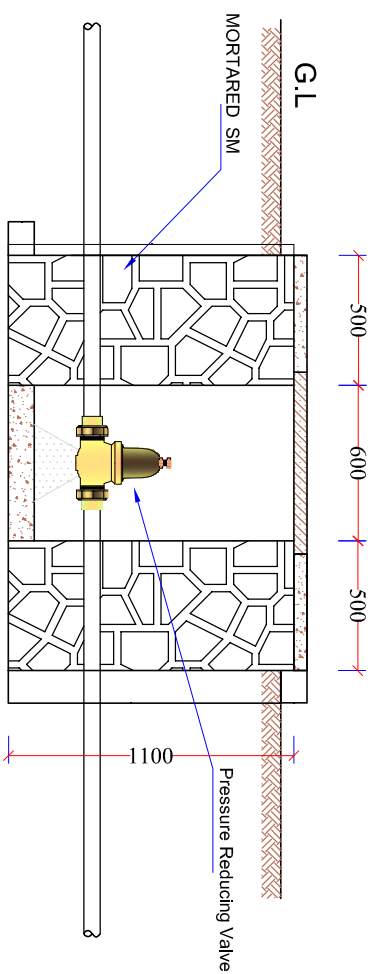
VALE BREAK PRESSURE



TYPICAL DIMENSIONS OF VALVE CHAMBER

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

SECTION A-A



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

Action Against Hunger

WASH Department

DW.No:

A-111

Scale:

Note: All dimension are in millimeter

Project Name
Province
District

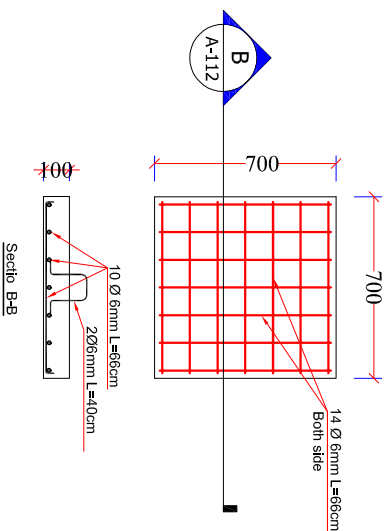
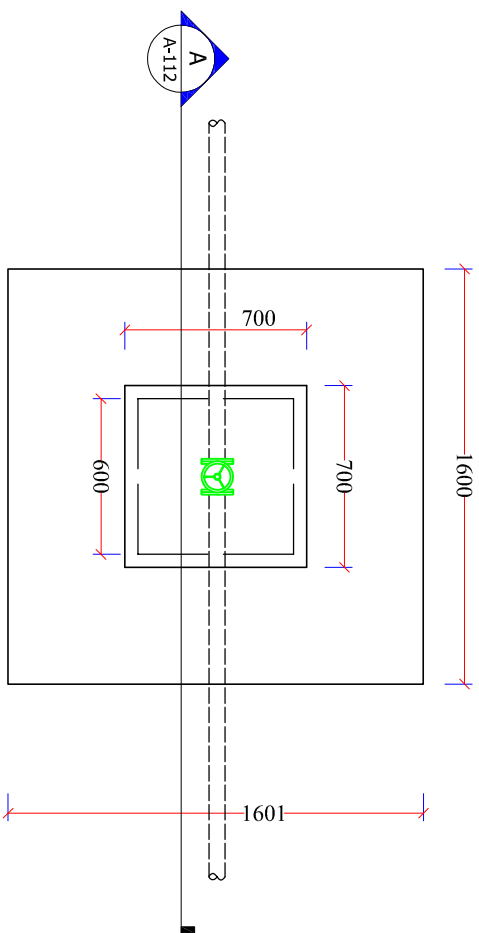
Water Supply
Daikundi
Pato

Design&Drawing by
Chick by
Approved by

Mohamad Nekandesh
Mohamad Nekandesh
Yaddullah Jalali



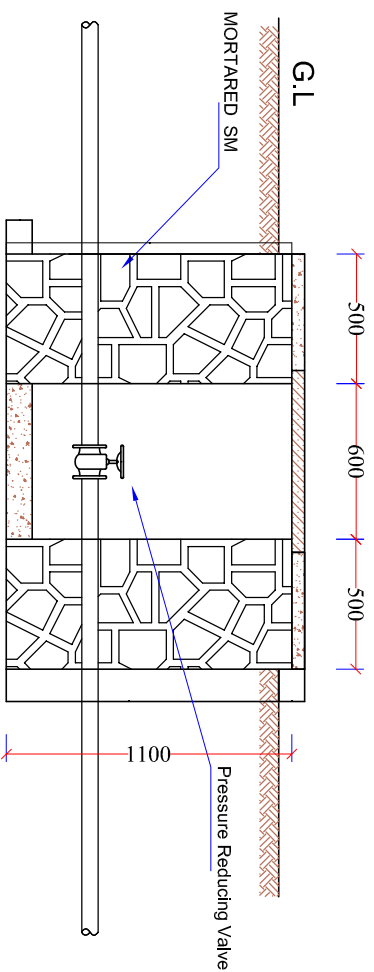
GATE VALE BOX FOR CONTROL



Typical Dimensions of Valve Chamber

S.No.	Diameter of Valve (mm.)	Dimension (mm.) (L x B)
1.	50	600 X 600

SECTION A-A



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



DW.No:

A-112

Action Against Hunger

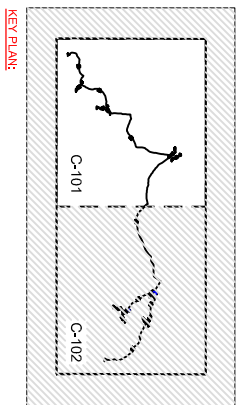
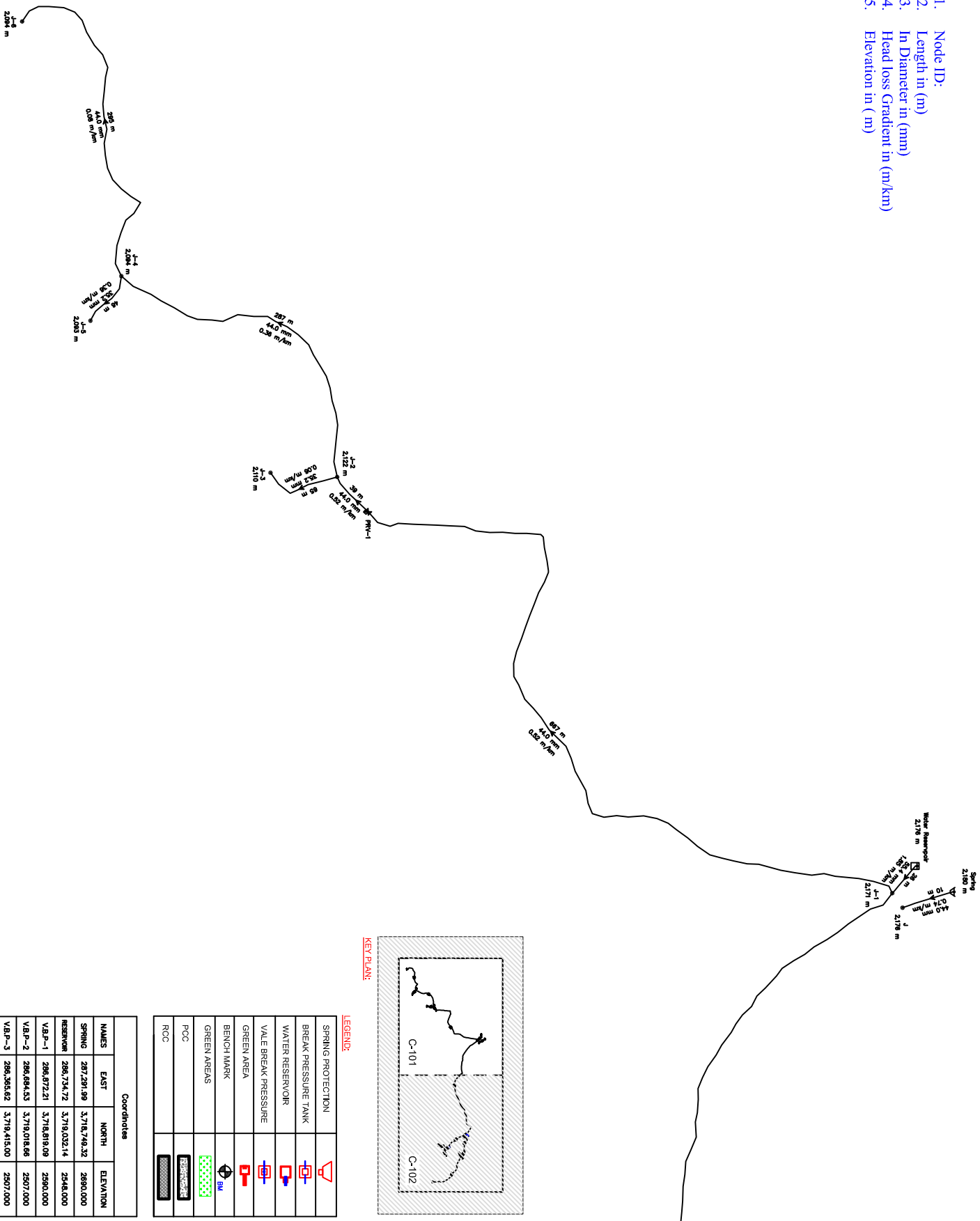
WASH Department

Project Name	Water Supply	Design&Drawing by	Mohamad Nekandesh
Province	Daikundi	Chick by	Mohamad Nekandesh
District	Pato	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	
PCC	
RCC	

Coordinates		
NAMES	EAST	NORTH
SPRING	287,291.99	3,778,748.32
RESERVOIR	286,734.72	3,778,032.14
V.B.P-1	286,872.21	3,778,818.09
V.B.P-2	286,884.53	3,778,018.66
V.B.P-3	286,385.62	3,778,415.00

Action Against Hunger

WASH Department

DW.No:

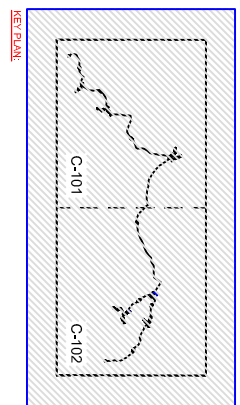
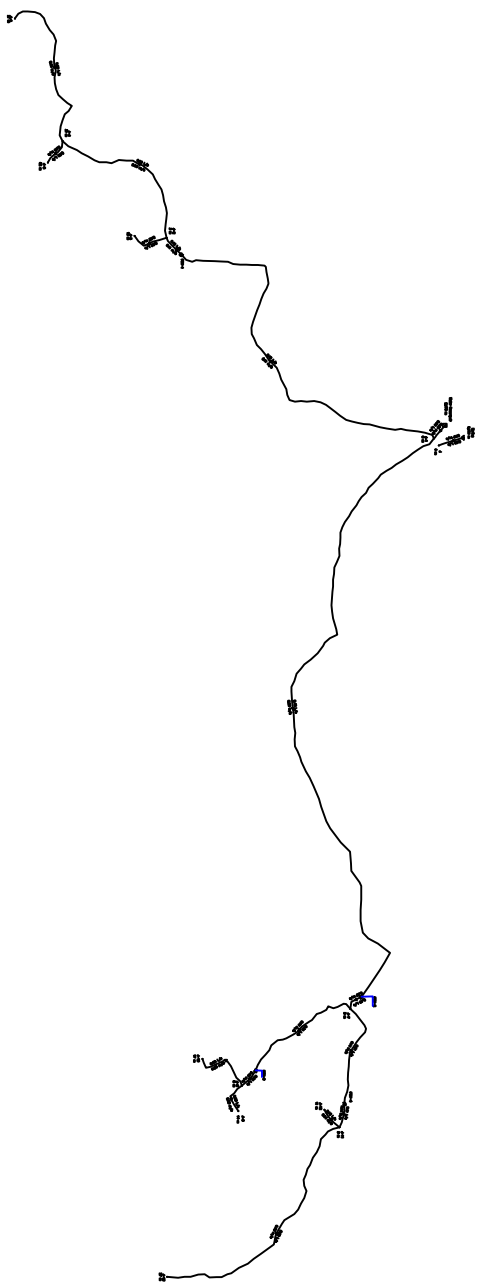
C-101

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

Note: All dimension showed in sheet



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



INSET 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	287,291.99	3,718,748.32
RESERVOIR	286,734.72	3,719,032.14
V.B.P-1	286,872.21	3,718,619.09
V.B.P-2	286,684.53	3,719,018.66
V.B.P-3	286,365.62	3,719,415.00

Action Against Hunger

WASH Department

DW.No:

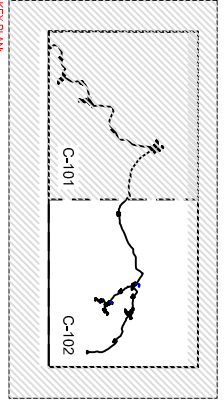
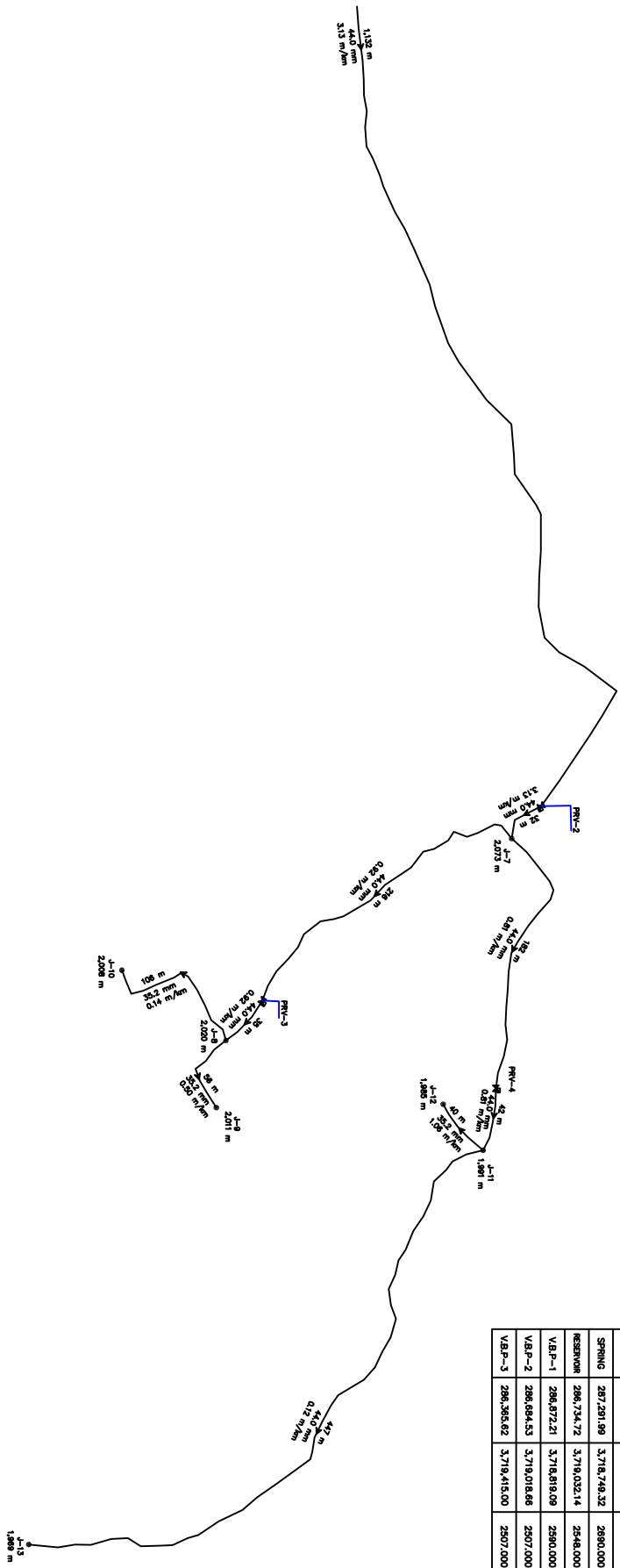
C1-100

Note: All dimension showed in sheet

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



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	ELEVATION
SPRING	287,291.99	3,718,748.32	2680.000
RESERVOIR	286,734.72	3,719,032.14	2646.000
V.B-P-1	286,872.21	3,718,818.09	2590.000
V.B-P-2	286,694.53	3,719,018.66	2507.000
V.B-P-3	286,365.62	3,719,415.00	2507.000

Action Against Hunger

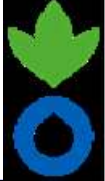
WASH Department

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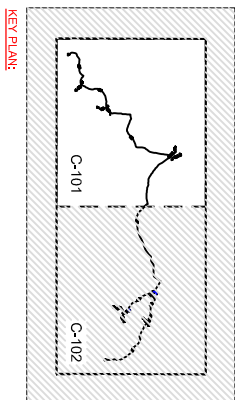
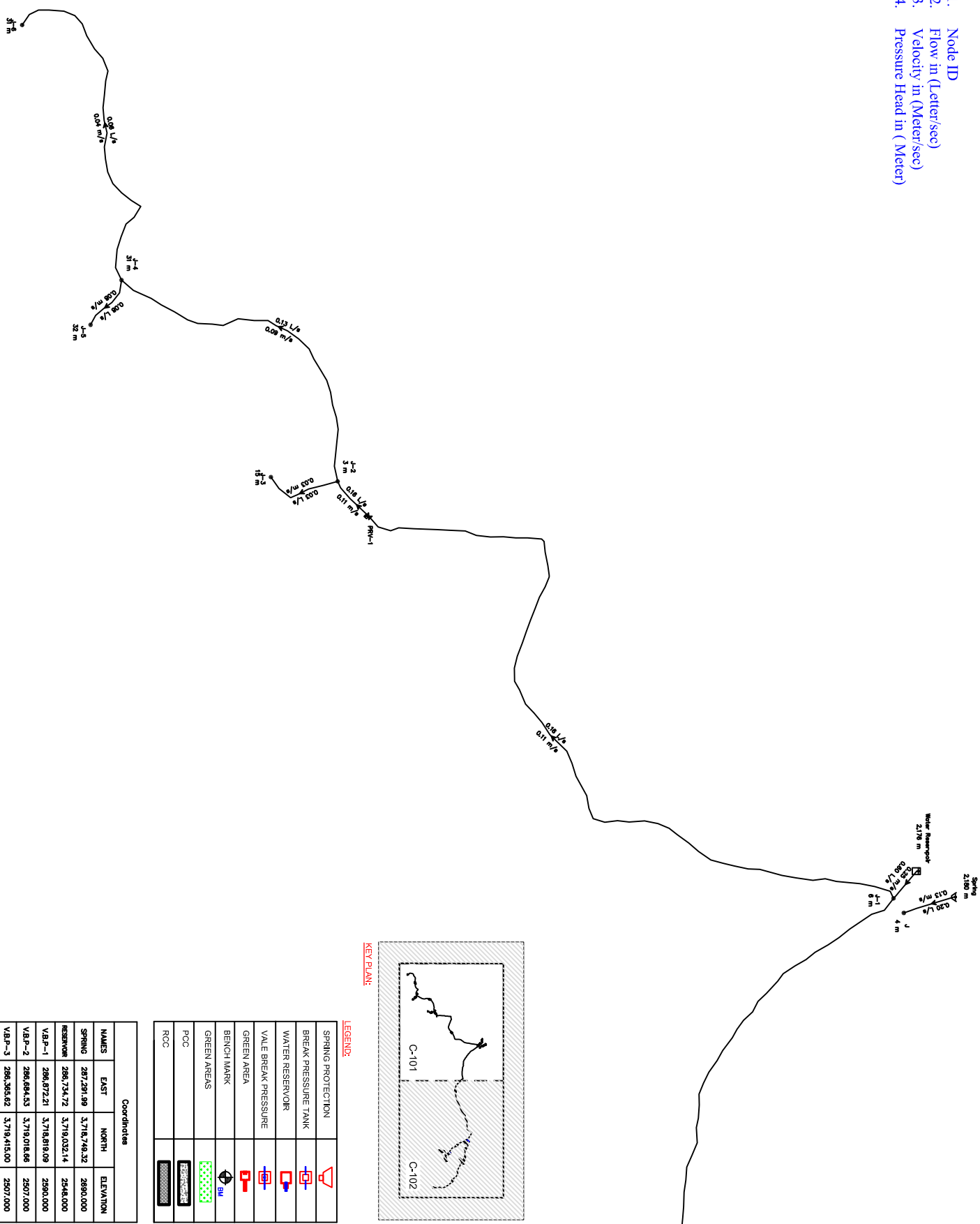
C-102

Note: All dimension showed in sheet

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



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	
PCC	
RCC	

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

Action Against Hunger

WASH Department

DW.No:

C1-101

Project Name
Province
District

Water Supply
Daikundi
Pato

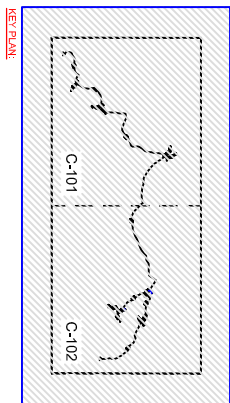
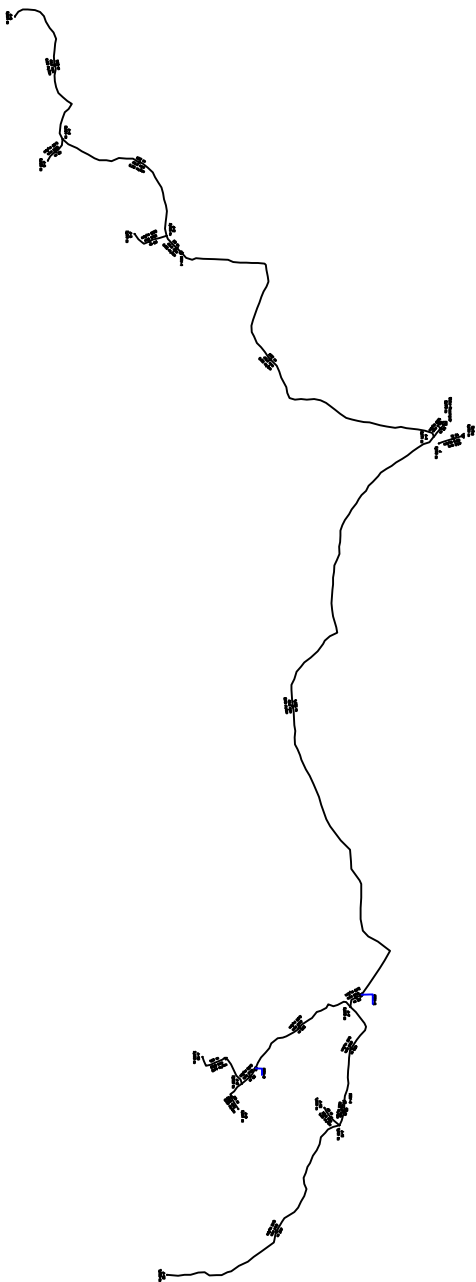
Design by
Drawing& Layout by
Approved by

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)



NET PLAN

LEGEND

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

Coordinates			
NAMES	EAST	NORTH	ELEVATION
SPRING	287,291.99	3,718,748.32	2690.000
RESERVOIR	286,734.72	3,719,032.14	2548.000
V.B.P-1	286,872.21	3,718,819.09	2590.000
V.B.P-2	286,884.53	3,719,018.66	2597.000
V.B.P-3	286,365.62	3,719,415.00	2597.000

Action Against Hunger

WASH Department

DW.No:

C-100

Project Name
Province
District

Water Supply
Daikundi
Pato

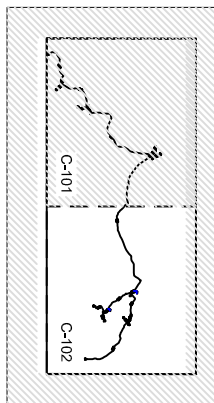
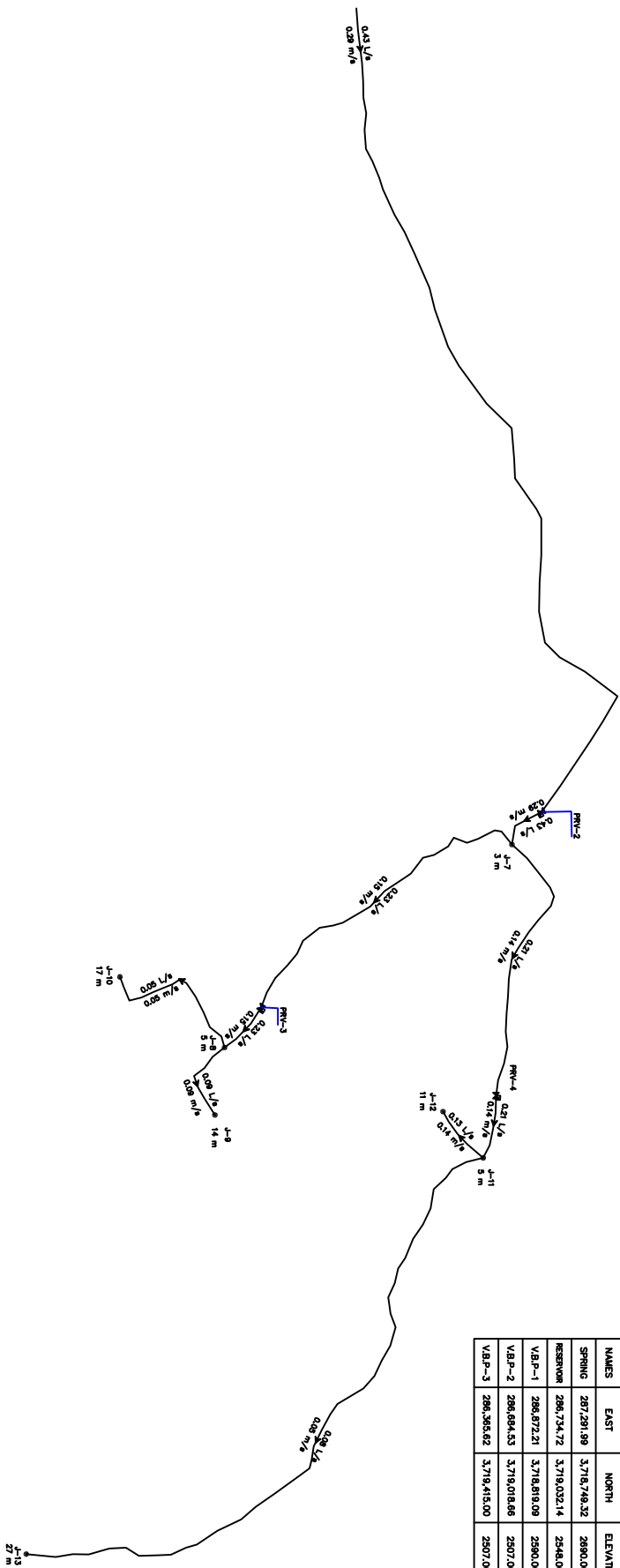
Design by
Drawing& Layout by
Approved by

Yaddullah Jalali
Mohamad Nekandesh
.....

Note: All dimension showed in sheet



1. Node ID
2. Flow in (Letter/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	
PCC	
ROC	

Coordinates		
NAMES	EAST	NORTH
SPRING	287,291.99	3,718,748.32
RESERVOIR	286,734.72	3,718,032.14
V.B-P-1	286,672.21	3,718,619.09
V.B-P-2	286,684.53	3,718,018.66
V.B-P-3	286,365.62	3,718,415.00

Action Against Hunger

WASH Department

DW.No:

C1-102

Note: All dimension showed in sheet

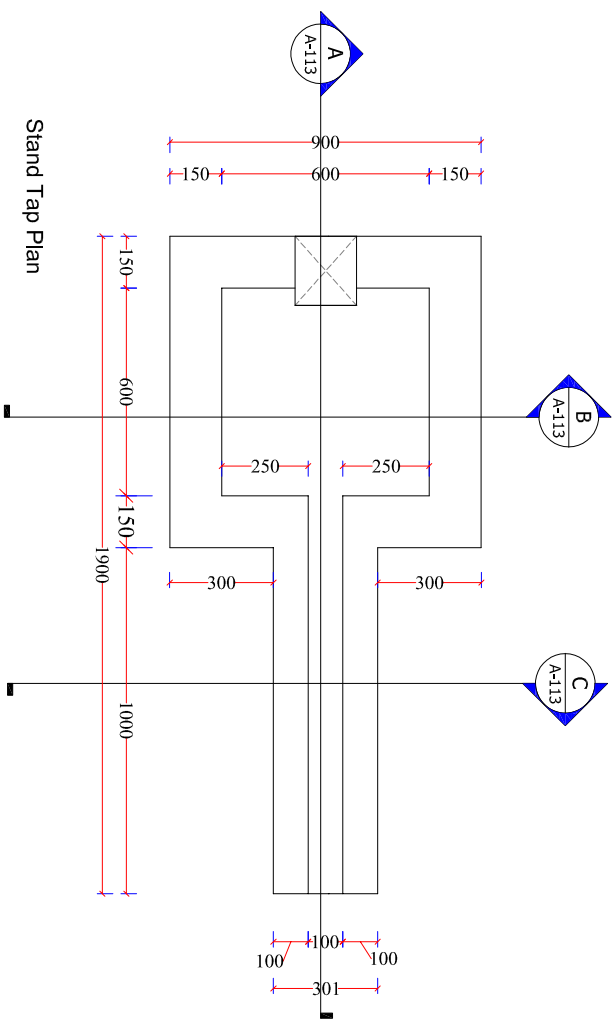
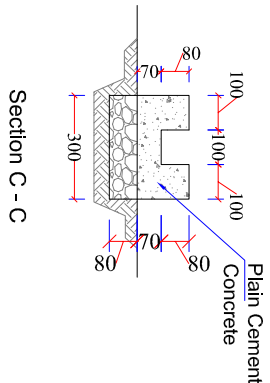
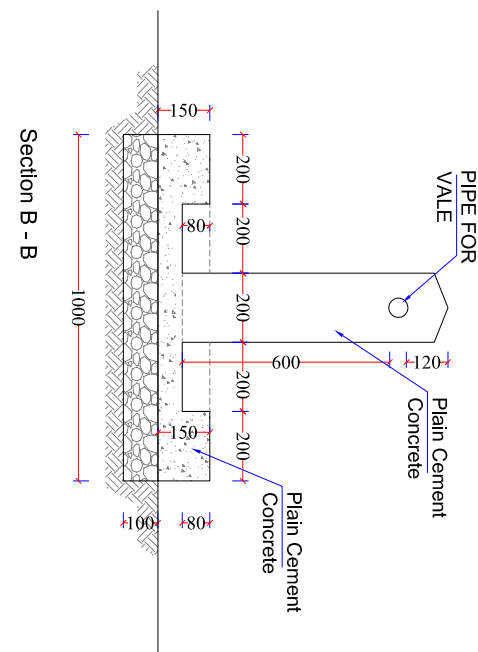
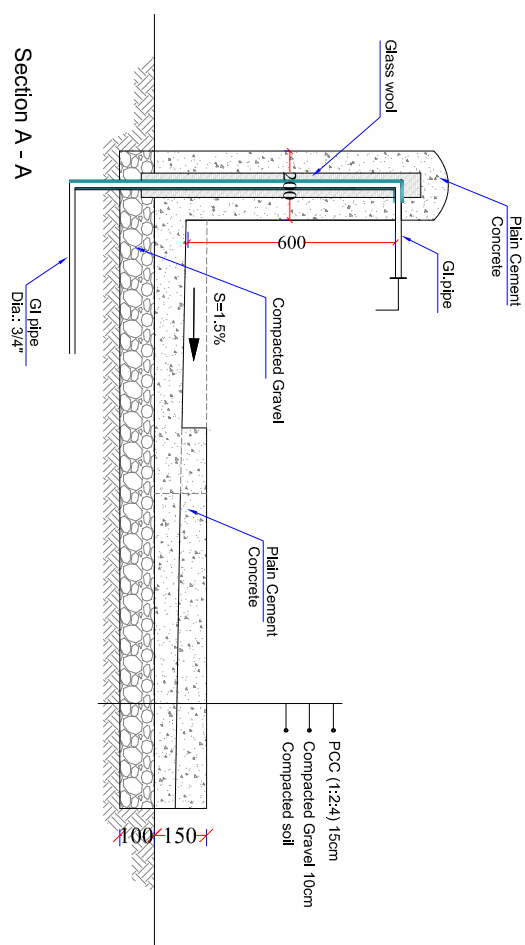


Project Name
Province
District

Water Supply
Daikundi
Pato

Design by
Drawing& Layout by
Approved by

Yaddullah Jalali
Mohamad Nekandesh
.....



Stand Tap Plan



DW.No:

A-113

Action Against Hunger

WASH Department

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

Scale:

Note: All dimension are in millimeter