

SCALE 1:5000
 1" = 100' 0"
 1" = 30.48 M

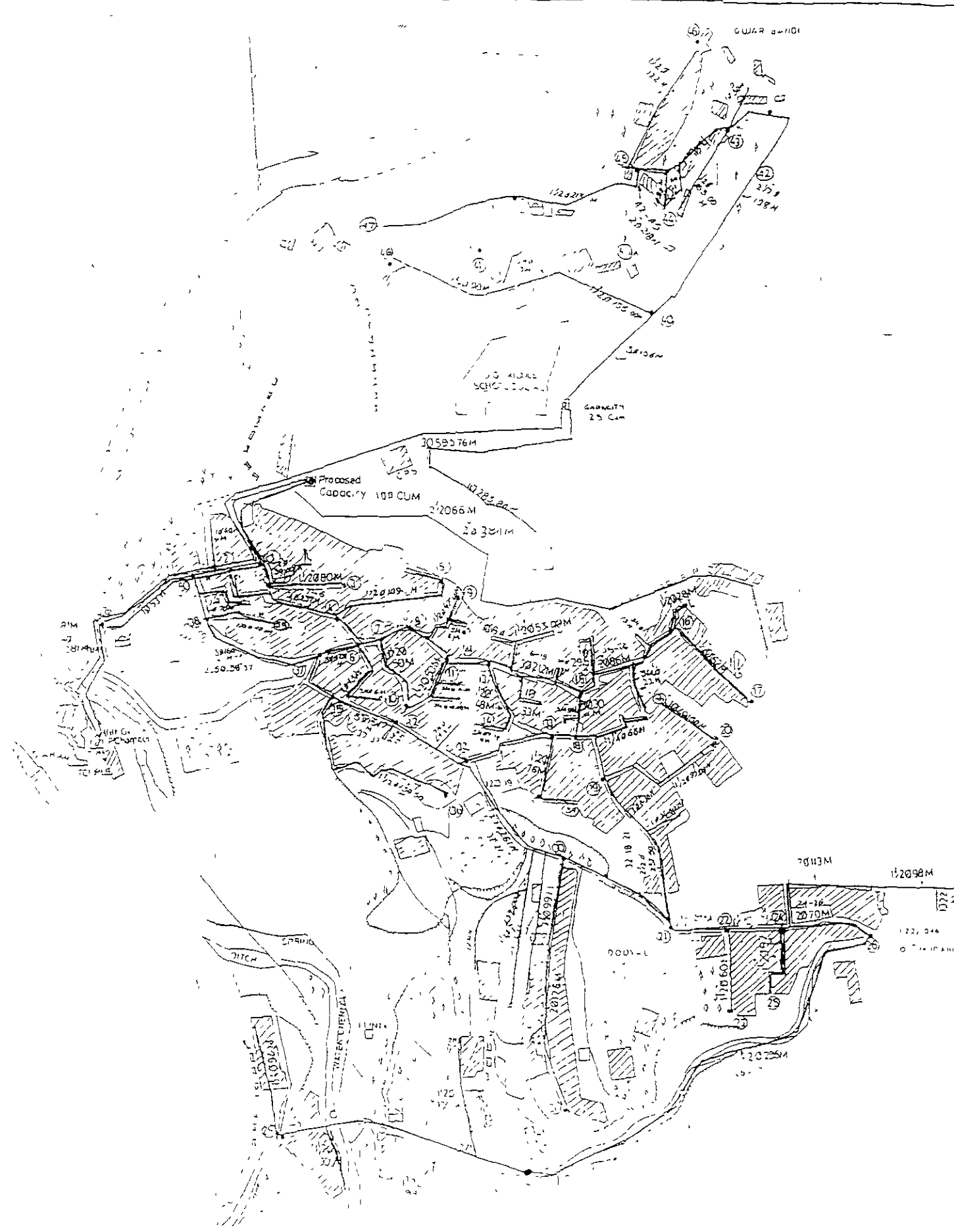


1. Scale Valve	
2. Fire Hydrant	
3. Check Valve	
4. Gate Valve	
5. Pressure Valve	
6. Air Valve	
7. Valve	
8. Valve	
9. Valve	
10. Valve	
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48. Valve	
49. Valve	
50. Valve	



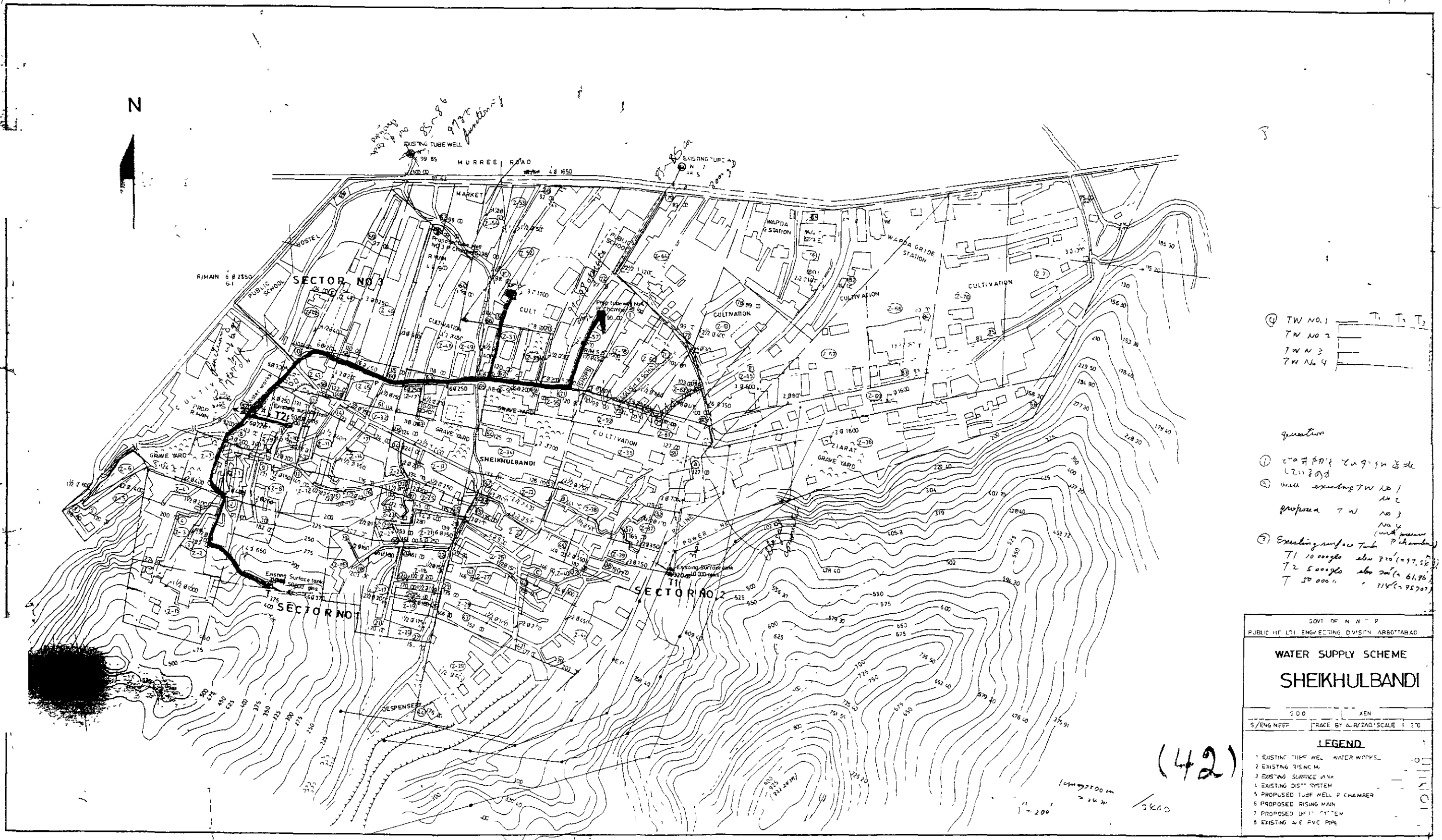
Nawansher 1/2

DIRECTOR OF
 GOVT OF N.W.F.P.
 WORKING DEPARTMENT
 BRIDGING WATER SUPPLY AND SANITATION
 MEASURES PHASE-III
 PROJECT LOCATION: NAWANSHER
 CONTRACT: PL 5
 PROJECT: INSTALLATION OF DISTRIBUTION NETWORK
 TRANSMISSION MAIN
 DRAWING NO: NAS-PL6-005
 DATE: 01.10.99



Nawansher 2/2
(Dhodial)

<small>GOVERNMENT OF PUNJAB PUBLIC WORKS DEPARTMENT</small>
WATER SUPPLY & SANITATION SCHEME
DHODIAL
<small>SCALE OF WORKS</small> <small>DATE</small>
LEGEND Main GI ——— Distribution GI ———



- ④ TW NO. 1
- TW NO. 2
- TW NO. 3
- TW NO. 4

quantity

- ① 2000000 ltr per day
- ② 1000000 ltr per day

proposed TW

- ③ Existing surface tube well chamber
- T1 1000000 ltr per day
- T2 500000 ltr per day
- T 500000 ltr per day

GOVT OF N.W.F.P.
PUBLIC HEALTH ENGINEERING DIVISION, ARBOTTABAD

WATER SUPPLY SCHEME SHEIKHULBANDI

S.D.O. XEN

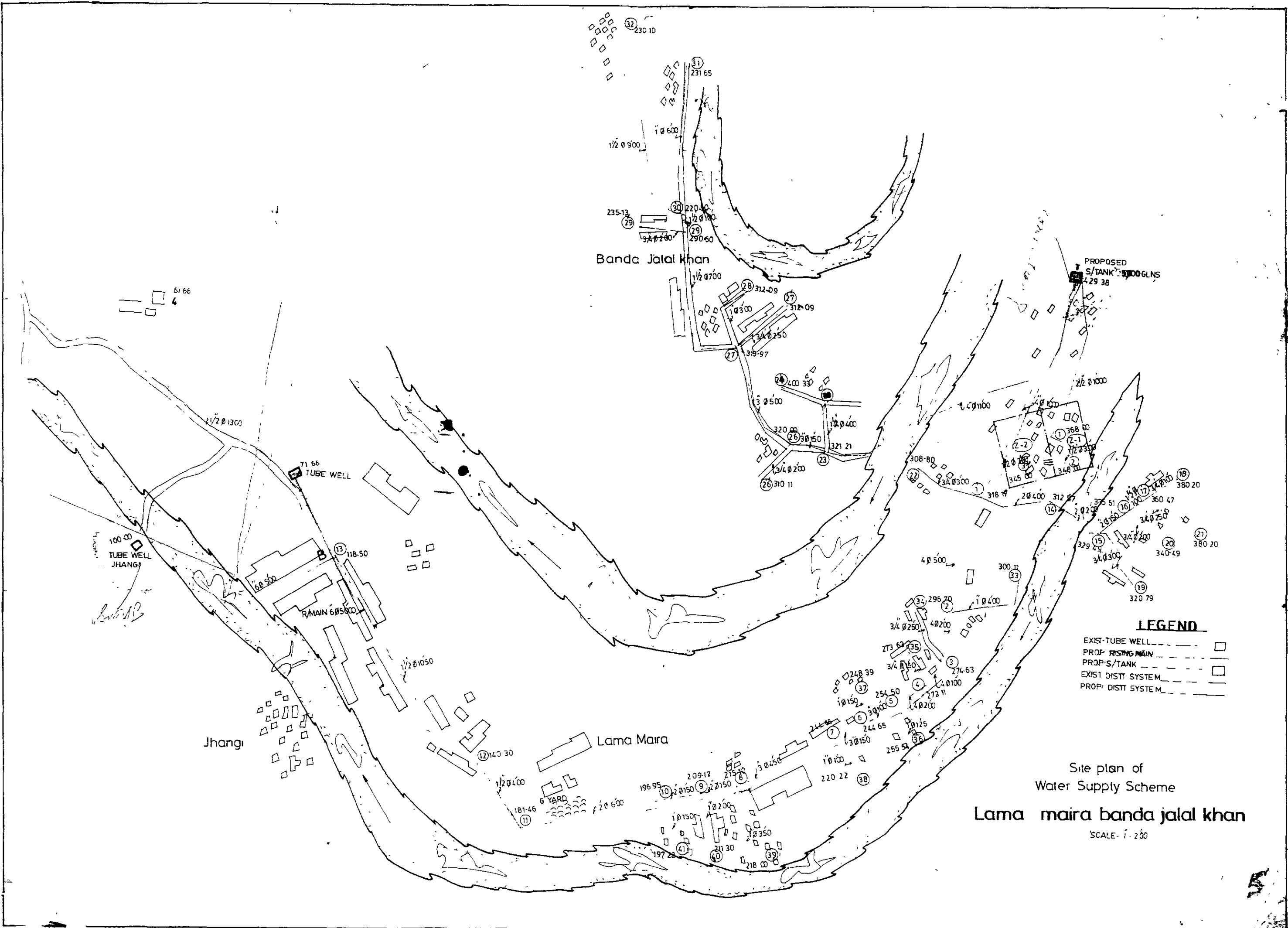
S/ENGINEER TRACE BY A. RIZQI SCALE 1:200

LEGEND

- 1 EXISTING TUBE WELL WATER WORKS
- 2 EXISTING PISQ.M.
- 3 EXISTING SURFACE W.M.
- 4 EXISTING DIST. SYSTEM
- 5 PROPOSED TUBE WELL P. CHAMBER
- 6 PROPOSED RISING MAIN
- 7 PROPOSED DIST. SYSTEM
- 8 EXISTING A.C. PVC PIPE

(42)

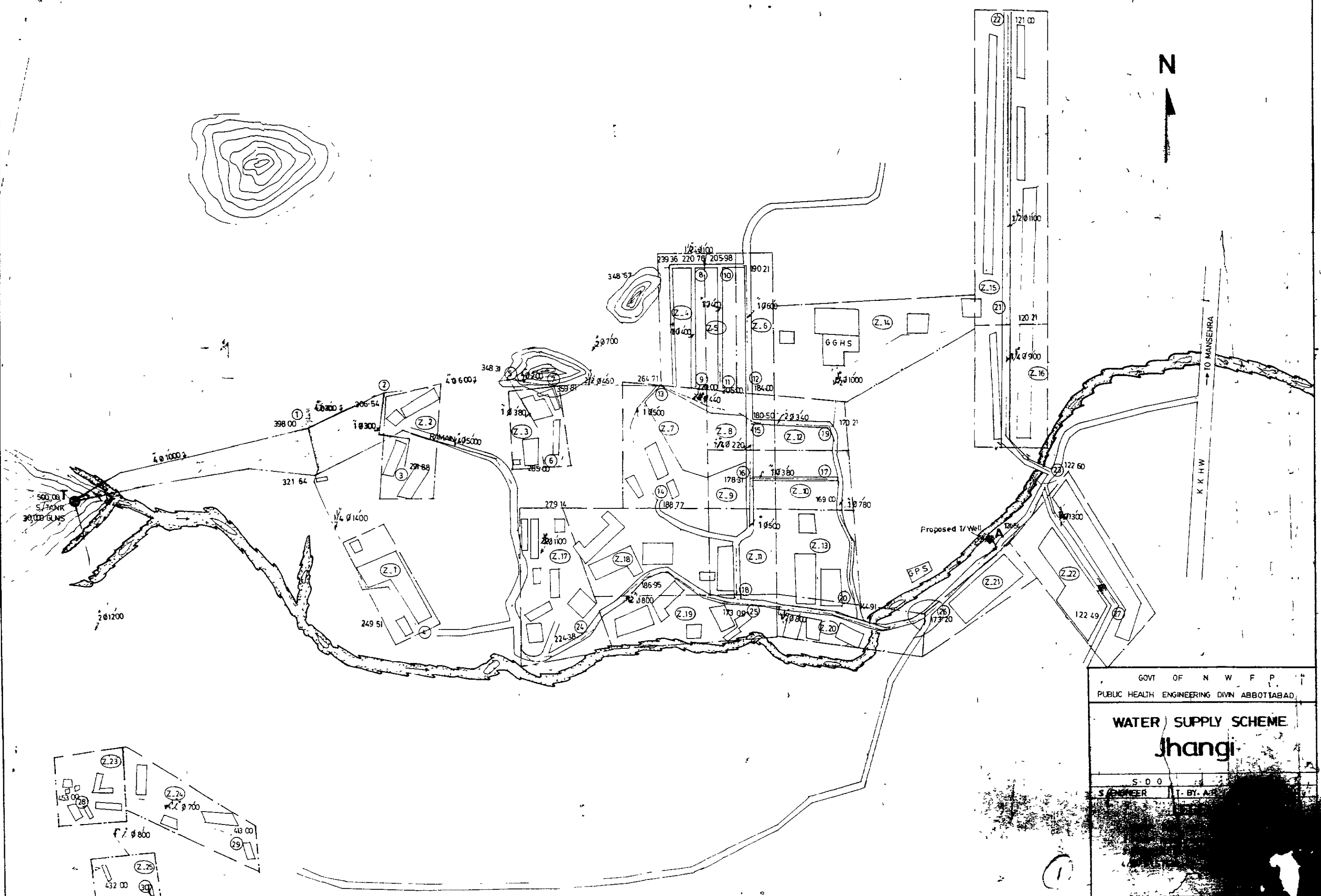
1000000 m
= 24 m
1" = 200'



LEGEND

- EXIST-TUBE WELL
- PROP. RISING MAIN
- PROP. S/TANK
- EXIST. DIST. SYSTEM
- PROP. DIST. SYSTEM

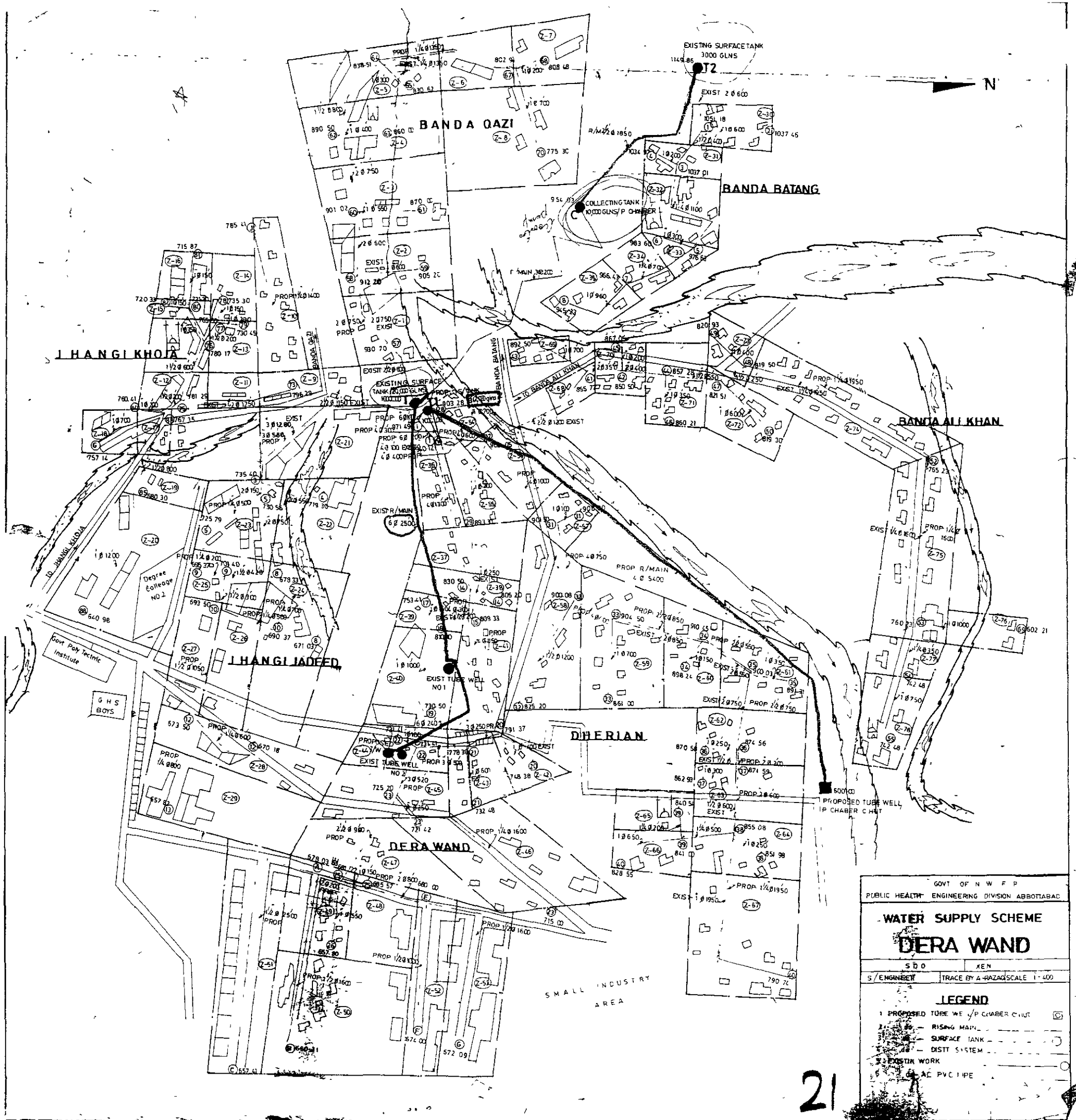
Site plan of
Water Supply Scheme
Lama maira banda jalal khan
SCALE: 1:200



GOVT OF N W F P
PUBLIC HEALTH ENGINEERING DIVN ABBOTTABAD

WATER SUPPLY SCHEME
Jhangi

S-D-O
S. ENGINEER T. BY. A



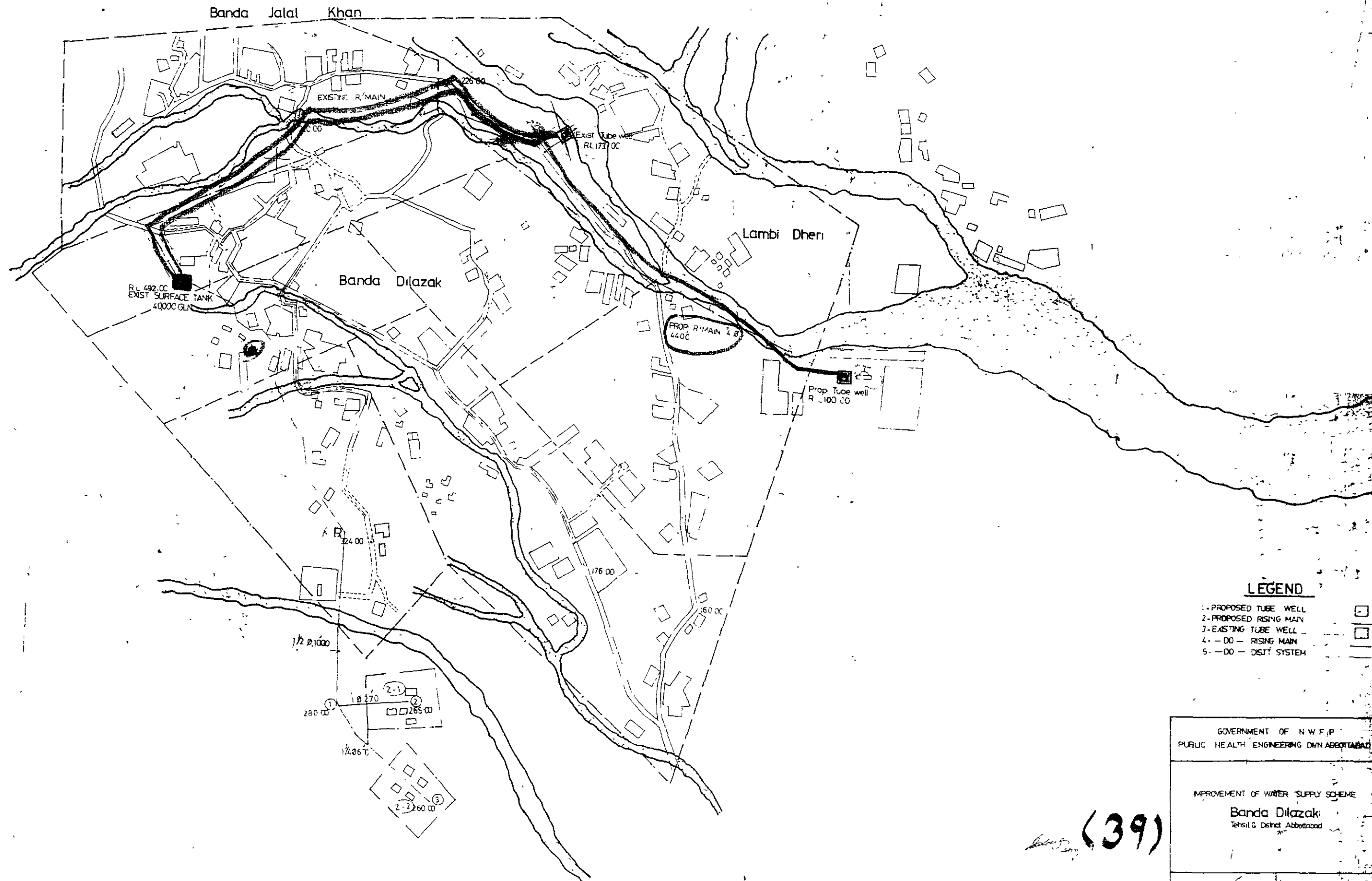
GOVT OF N W F P
PUBLIC HEALTH ENGINEERING DIVISION ABBOTTABAD

WATER SUPPLY SCHEME DERA WAND

S B O XEN
S/ENGINEER TRACE BY A-RAZQA SCALE 1"=400'

LEGEND

- 1 PROPOSED TUBE WELL / P CHAMBER CHIT
- 2 RISING MAIN
- 3 SURFACE TANK
- 4 DIST SYSTEM
- 5 EXIST WORK
- 6 AC PVC PIPE

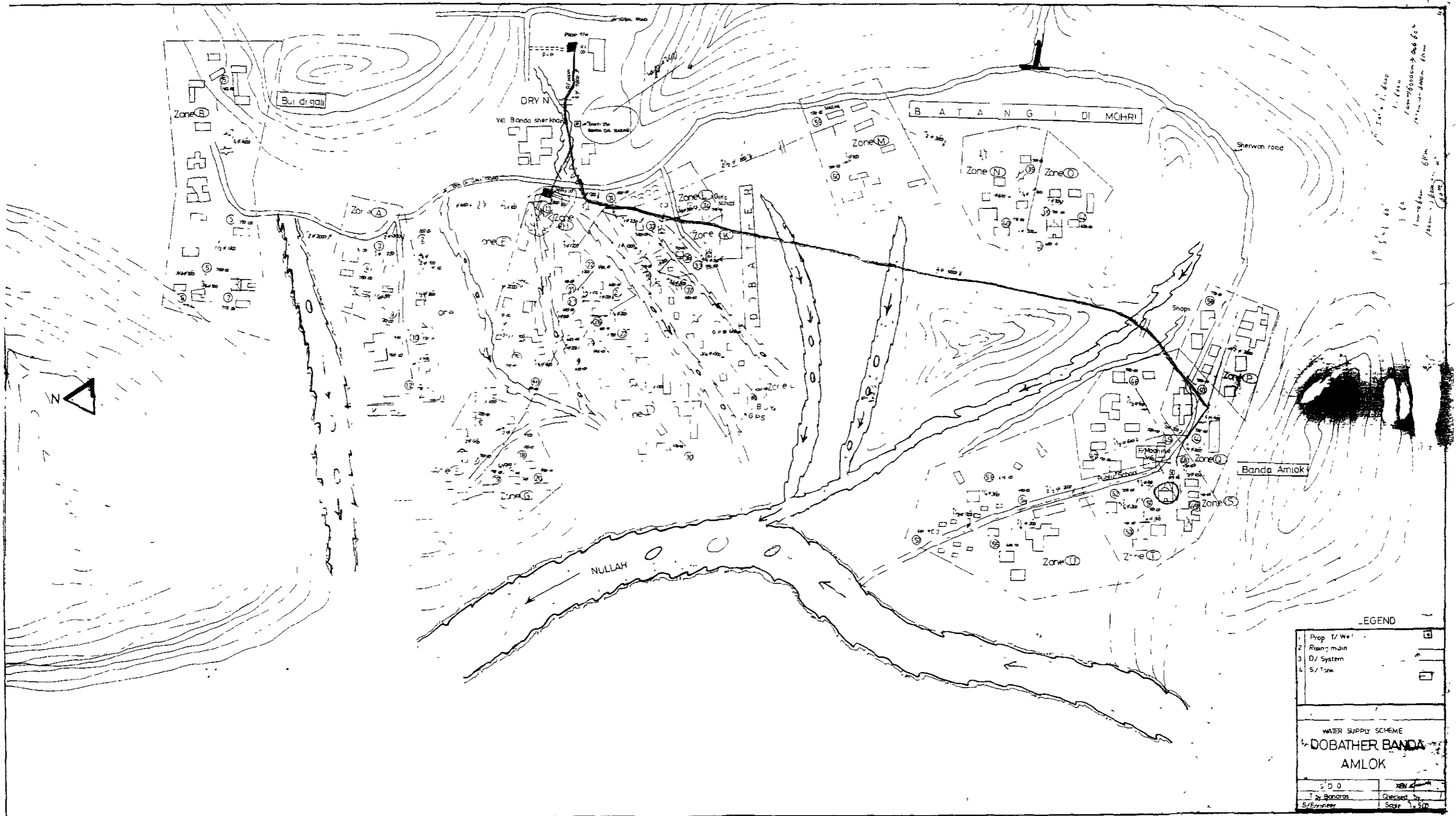


LEGEND

- 1- PROPOSED TUBE WELL □
- 2- PROPOSED RISING MAIN —
- 3- EXISTING TUBE WELL □
- 4- — DO — RISING MAIN —
- 5- — DO — DIST. SYSTEM —

GOVERNMENT OF N.W.F.P. PUBLIC HEALTH ENGINEERING DIV. ABBOTTABAD		
IMPROVEMENT OF WATER SUPPLY SCHEME Banda Dilazak Tehsil & District Abbottabad		
S.D.O. <i>[Signature]</i>	XEN	
TRACE BY	CHECKED BY	SCALE

[Handwritten Signature] (39)

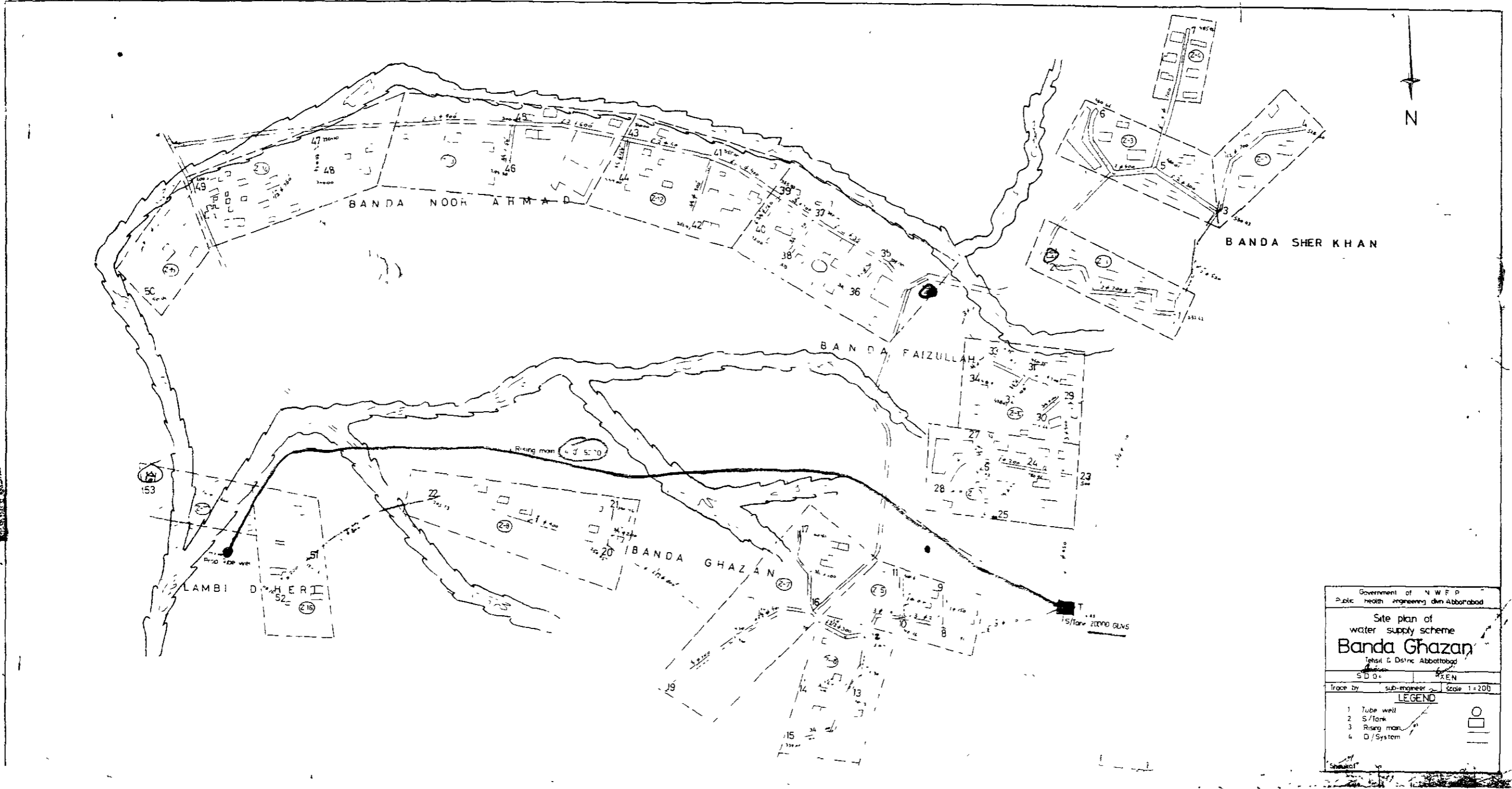


LEGEND

1. Prop. T/ Well	
2. Rising main	
3. D/ System	
4. S/ Tank	

WATER SUPPLY SCHEME
DOBATHER BANDA
AMLOK

S. D. O.	
T. Banaras	Checked by
S/Engineer	Scale 1:500



Government of N.W.F.P.
Public health engineering div Abbottabad

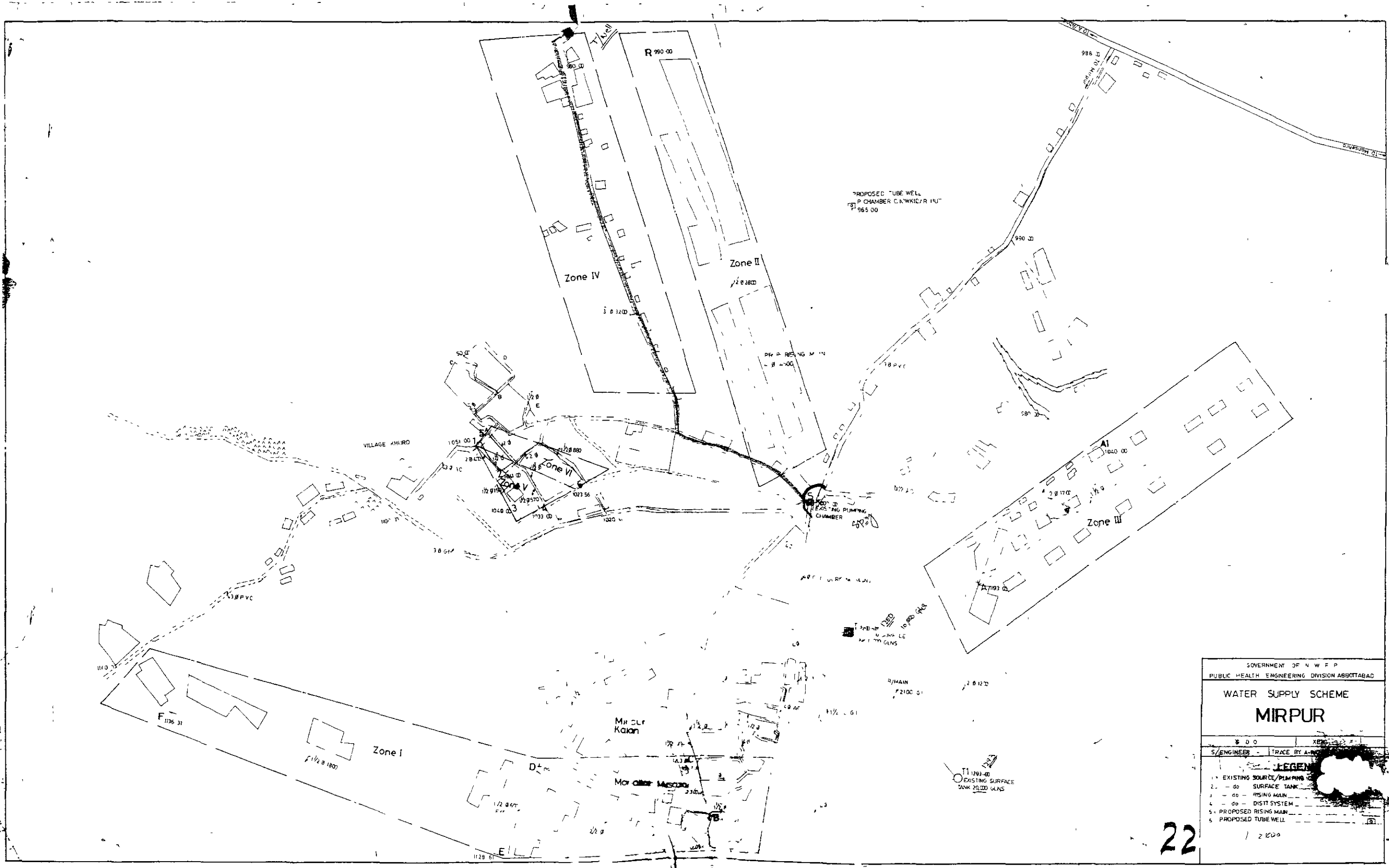
Site plan of
water supply scheme
Banda Ghazan
Tehsil & Distric Abbottabad

S.D.O. A.XEN

Trace by sub-engineer Scale 1:200

LEGEND

1 Tube well	
2 S/Tank	
3 Rising man	
4 D/System	



GOVERNMENT OF N.W.F.P.
PUBLIC HEALTH ENGINEERING DIVISION ABSOTABAD

WATER SUPPLY SCHEME
MIRPUR

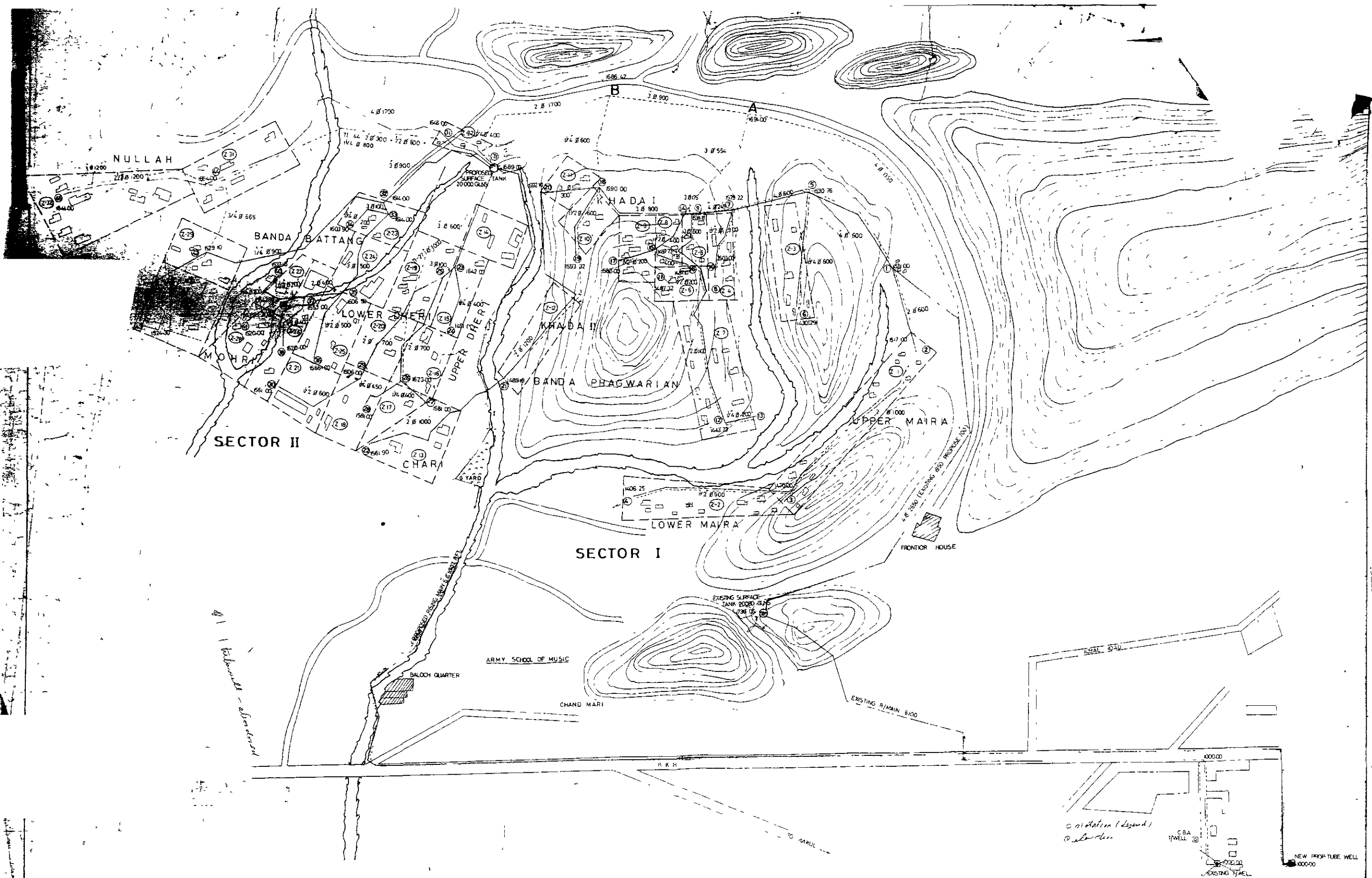
S/ENGINEER - TRACE BY A...

LEGEND

- 1 - - - - EXISTING SOURCE/PUMPING
- 2 - - - - SURFACE TANK
- 3 - - - - RISING MAIN
- 4 - - - - DIST. SYSTEM
- 5 - - - - PROPOSED RISING MAIN
- 6 - - - - PROPOSED TUBE WELL

1/2000

22



GOVERNMENT OF N.W.F.P.
PUBLIC HEALTH ENGINEERING DIVISION ABBOTTABAD

Banda Phagwarian
DISTRICT ABBOTTABAD

CHECKED BY: [Signature] SCALE: 1:2000

LEGEND	
1	EXISTING TUBE WELL (E)
2	PROPOSED TUBE WELL (E)
3	EXISTING RISING MAIN (E)
4	PROPOSED RISING MAIN (E)
5	EXISTING TANK (E)
6	PROPOSED TANK (E)
7	EXISTING DISTRIBUTION MAIN (E)
8	PROPOSED DISTRIBUTION MAIN (E)
9	JUNCTIONED PIPE (E)

10



TW2
PROPOSED TUBE WELL NO 2
P. CHAMBER/C HUT

TW1
PROPOSED TUBE WELL NO 1
P. CHAMBER/C HUT

81 borders per plot capitals on water infrastructure

(46)

PUBLIC HEALTH ENG.	
WATER SUPPLY	
Salhad	
S.D.O.	XEN
ENGINEER	TRACE BY A.R.M. SCALE 1:1000
LEGEND	
1	EXISTING COLLECTING WELL
2	EXISTING RISING MAIN
3	EXISTING SURFACE TANK
4	EXISTING DIST. SYSTEM
5	PROPOSED TUBE WELL
6	PROPOSED RISING MAIN
7	PROPOSED SURFACE TANK
8	PROPOSED DIST. SYSTEM
9	EXISTING PL.
10	EXISTING W.P.
11	EXISTING N.W.P.
12	EXISTING C.W.P.

參考資料 3. 既存井戸台帳

Well Inventory Sheet

General

<p>Unit <input type="text" value="TMA"/></p> <p>Area Name <input type="text" value="Stoney Jheel (Jheel means lake)"/></p> <p>Altitude of Top of Well (AMSL, m) <input type="text"/></p> <p>Well Completion Date <input type="text" value="1984"/></p> <p>Total Depth (ft) <input type="text" value="No Data"/></p> <p>Min. Dia. of the Casing (inch) <input type="text" value="8"/></p> <p>Well Owner's Name <input type="text" value="TMA"/></p> <p>Static Water Level (hearing) <input style="width: 50%;" type="text" value="2'-3"/> <input style="width: 50%;" type="text" value="7"/></p> <p>Draw-down (hearing) <input type="text" value="No Data"/> <input type="text" value="20"/></p> <p>Specific Yield (l/sec/m) <input type="text" value="No Data"/></p>	<p>Well Number <input type="text" value="No.1"/></p> <p>Coordinate (UTM) <input type="text"/></p> <p>Altitude of Ground Surface (AMSL, m) <input type="text"/></p> <p>Well Status <input type="text" value="Working"/></p> <p>Diameter of the Top Casing (inch) <input type="text" value="12"/></p> <p>Well Ownership <input type="text" value="TMA"/></p> <p>Drilled by <input type="text" value="PHED"/></p> <p>Dynamic Water Level (hearing) <input type="text" value="No Data"/> <input type="text" value="90"/></p> <p>Automatic Stopper Depth <input type="text" value="Not Installed"/></p> <p>Transmissivity (if available) <input type="text" value="No Data"/></p>
--	--

Aquifer

Name	from (m)	to (m)	Artesian	Litho. Code	Aquifer Age	Hydraulic Media	Aquifer Type	Thickness (m)

Well Completion Date Well Close Date (if abandoned)

Remarks

Casing/Screen Condition

Casing Type Screen Type

Screen Perforation Rate (%)

Screen Set Depth

Remarks

Pump Condition

Pump Type <input type="text" value="Turbine (Vertical)"/>	Installation Depth <input type="text" value="160"/>
Manufacturer <input type="text" value="KSB"/>	Year of Made <input type="text" value="1971"/>
Pump Diameter <input type="text" value="6"/>	Riser Pipe Diameter <input type="text" value="6"/>
Lift Height in Spec (ft) <input type="text" value="130"/>	Lift Height in Working (ft) <input type="text" value="90 (dynamic water L. from the hearing)"/>
Discharge in Spec (lit/sec) <input type="text" value="32"/>	Discharge in Working (lit/sec) <input type="text" value="13 (hearing)"/>
RPM <input type="text" value="1450"/>	Lift Height to the elevated Tank <input type="text" value="Water Tank in the City Center 8km apart Jinnah Tank Height: 150"/>
Working Hours per Day <input type="text" value="14"/>	Working Days per Year <input type="text" value="11 months to 11.5 months"/>
Total Daily Discharge (m3/day) <input type="text" value="No Data"/> <input type="text" value="855"/>	Total Annual Discharge (m3/year) <input type="text" value="No Data"/> <input type="text" value="220,000"/>

Remarks

Motor Condition

Manufacturer <input type="text" value="SIEMENS"/>	Year of Made <input type="text" value="1994"/>
Motor Capacity <input type="text" value="380V, 70A"/>	Electricity Consump. Per m3 <input type="text"/>
RPM <input type="text" value="1470"/>	Horse Power <input type="text" value="50"/>

Remarks

Well Inventory Sheet

General

Unit	TMA	Well Number	No.2								
Area Name	Stoney Jheel (Jheel means lake)	Coordinate (UTM)	<table border="1" style="width: 100%;"><tr><td style="width: 50%;">Longitude</td><td style="width: 50%;">Latitude</td></tr></table>	Longitude	Latitude						
Longitude	Latitude										
Altitude of Top of Well (AMSL, m)		Altitude of Ground Surface (AMSL, m)									
Well Completion Date	1997	Well Status	Abandoned								
Total Depth	290'	Diameter of the Top Casing	10'								
Min. Dia. of the Casing	10'	Well Ownership	TMA								
Well Owner's Name	TMA	Drilled by	ADB								
Static Water Level (hearing)	<table border="1" style="width: 100%;"><tr><th>Starting</th><th>when abandoned</th></tr><tr><td>Artesian</td><td>No Data</td></tr></table>	Starting	when abandoned	Artesian	No Data	Dynamic Water Level (hearing)	<table border="1" style="width: 100%;"><tr><th>Starting</th><th>when abandoned</th></tr><tr><td><58'</td><td>>100' (hearing)</td></tr></table>	Starting	when abandoned	<58'	>100' (hearing)
Starting	when abandoned										
Artesian	No Data										
Starting	when abandoned										
<58'	>100' (hearing)										
Draw-down (hearing)	<table border="1" style="width: 100%;"><tr><th>Starting</th><th>when abandoned</th></tr><tr><td>58'</td><td>No Data</td></tr></table>	Starting	when abandoned	58'	No Data	Automatic Stopper Depth	Not Installed				
Starting	when abandoned										
58'	No Data										
Specific Yield (l/sec/m)	No Data	Transmissivity (if available)	No Data								

Aquifer

No Data

Log Available

Name	from (m)	to (m)	Artesian	Litho. Code	Aquifer Age	Hydraulic Media	Aquifer Type	Thickness (m)

Well Completion Date	1997	Well Close Date (if abandoned)	2001
Remarks	Abandoned because of the groundwater level declination. But no concrete confidence. This well must be used for groundwater monitoring. Only 35m apart from Well No.1		

Casing/Screen Condition

Casing Type	Steel	Screen Type	Brass, Slotted																				
Screen Perforation Rate (%)	No Data																						
Screen Set Depth Log Available	<table border="1" style="width: 100%;"><tr><td>From</td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr><tr><td>to</td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr></table>			From										to									
From																							
to																							
Remarks	The pump and motor must be removed for the groundwater observation.																						

Pump Condition

Pump Type	Turbine (Vertical)	Installation Depth	100'								
Manufacturer	KSB	Year of Made	1997								
Pump Diameter	4"	Riser Pipe Diameter	4"								
Lift Height in Spec.	308'	Lift Height in Working	>100' (dynamic water L. from the hearing)								
Discharge in Spec (lit/sec)	22 (0.75cusec)	Discharge in Working (lit/sec)	0.4~0.5 (hearing)								
RPM	1450	Lift Height to the elevated Tank	Water Tank in the City Center 8km apart Jinnah Tank Height: 150'								
Working Hours per Day	10	Working Days per Year	11 months to 115 months								
Total Daily Discharge (m3/day)	<table border="1" style="width: 100%;"><tr><th>Starting</th><th>at Abandoned</th></tr><tr><td>No Data</td><td>14~18</td></tr></table>	Starting	at Abandoned	No Data	14~18	Total Annual Discharge (m3/year)	<table border="1" style="width: 100%;"><tr><th>Starting</th><th>at Abandoned</th></tr><tr><td>No Data</td><td>4,700~6,000</td></tr></table>	Starting	at Abandoned	No Data	4,700~6,000
Starting	at Abandoned										
No Data	14~18										
Starting	at Abandoned										
No Data	4,700~6,000										
Remarks											

Motor Condition

Manufacturer	SIEMENS	Year of Made	1984
Motor Capacity	380V, 70A	Electricity Consump. Per m3	
RPM	1470	Horse Power	50
Remarks			

Well Inventory Sheet

General

Unit	TMA	Well Number	No.3
Area Name	Stoney Jheel (Jheel means lake)	Coordinate (UTM)	Longitude Latitude
Altitude of Top of Well (AMSL, m)		Altitude of Ground Surface (AMSL, m)	
Well Completion Date	1997	Well Status	Working
Total Depth	333'	Diameter of the Top Casing	10"
Min. Dia. of the Casing	10"	Well Ownership	TMA
Well Owner's Name	TMA	Drilled by	ADB
Static Water Level (hearing)	10' (hearing)	Dynamic Water Level (hearing)	No Data
Draw-down (hearing)	No Data	Automatic Stopper Depth	Not installed
Specific Yield (l/sec/m)	No Data	Transmissivity (if available)	No Data

Aquifer	Name	from (m)	to (m)	Artesian	Litho. Code	Aquifer Age	Hydraulic Media	Aquifer Type	Thickness (m)
No Data									
No Data									

Well Completion Date	1997	Well Close Date (if abandoned)	Working
Remarks	According to the well watchman, the discharge has been reduced because of the groundwater level declination. But no concrete confidence. Only 15m apart from Well No.5		

Casing/Screen Condition	
Casing Type	Steel
Screen Type	Brass, Slotted
Screen Perforation Rate (%)	No Data
Screen Set Depth	From to
Remarks	

Pump Condition	
Pump Type	Turbine (Vertical)
Installation Depth	120'
Manufacturer	KSB
Year of Made	1997
Pump Diameter	4"
Riser Pipe Diameter	4"
Lift Height in Spec.	308'
Lift Height in Working	100' (dynamic water L. from the hearing)
Discharge in Spec. (lit/sec)	22 (0.75cusec)
Discharge in Working (lit/sec)	0.5 (400gallon/hour, hearing)
RPM	1450
Lift Height to the elevated Tank	Water Tank in the City Center 8km apart Jinnah Tank, Height: 150'
Working Hours per Day	10
Working Days per Year	11months to 11.5 months
Total Daily Discharge (m3/day)	No Data
Total Annual Discharge (m3/year)	No Data
Remarks	Present discharge and draw-down are too small compared with the specification of the pump

Motor Condition	
Manufacturer	SIEMENS
Year of Made	1988
Motor Capacity	380V, 70A
Electroty Comsump. Per m3	
RPM	1470
Horse Power	150
Remarks	

General

Unit	TMA	Well Number	No.4								
Area Name	Stoney Jheel (Jheel means lake)	Coordinate (UTM)	Longitude Latitude								
Altitude of Top of Well (AMSL, m)		Altitude of Ground Surface (AMSL, m)									
Well Completion Date	1997	Well Status	Working								
Total Depth	330'	Diameter of the Top Casing	10"								
Min. Dia. of the Casing	10"	Well Ownership	TMA								
Well Owner's Name	TMA	Drilled by	ADB								
Static Water Level (hearing)	Artesian <table border="1"><tr><td>Station</td><td>Present</td></tr><tr><td>80' (hearing)</td><td></td></tr></table>	Station	Present	80' (hearing)		Dynamic Water Level (hearing)	<table border="1"><tr><td>Station</td><td>Present</td></tr><tr><td>No Data</td><td>80' (hearing)</td></tr></table>	Station	Present	No Data	80' (hearing)
Station	Present										
80' (hearing)											
Station	Present										
No Data	80' (hearing)										
Draw-down (hearing)	No Data <table border="1"><tr><td>Station</td><td>Present</td></tr><tr><td>20' (hearing)</td><td></td></tr></table>	Station	Present	20' (hearing)		Automatic Stopper Depth	Not installed				
Station	Present										
20' (hearing)											
Specific Yield (l/sec/m)	No Data	Transmissivity (if available)	No Data								

Aquifer	Name	from (ft)	to (ft)	Artesian	Litho. Code	Aquifer Age	Hydraulic Media	Aquifer Type	Thickness (ft)
Gravel		41	48	Artesian	Gr	Q	Porous	Semi-	5
		58	96					Confined	18
		101	106						5
		124	138						14
		142	184						22
		206	273						67
		315	321						6

Well Completion Date	1997	Well Close Date (if abandoned)	Working
Remarks	According to the well watchman, the discharge has been reduced because of the groundwater level declination. But no concrete confidence. It is reported that the discharged groundwater contains much clay and silt particles (high turbidity) and this phenomena shows the caving of the well. Only 15m apart from Well No.5		

Casing/Screen Condition

Casing Type	Steel	Screen Type	Brass, Slotted
Screen Perforation Rate (%)	No Data		
Screen Set Depth (ft)	From 80 125 143 267 316		
No Data	to 96 137 183 275 320		
Remarks	It is supposed that the reason of the clay and silt containing in the groundwater is that the screen type and packing materials are not suitable for this well.		

Pump Condition

Pump Type	Turbine (Vertical)	Installation Depth	150'								
Manufacturer	ERGG	Year of Made	1984								
Pump Diameter	4"	Riser Pipe Diameter	4"								
Lift Height in Spec	230'	Lift Height in Working	>100' (dynamic water L. from the hearing)								
Discharge in Spec (lit/sec)	30	Discharge in Working (lit/sec)	10 (8,000 gallon/hour, hearing)								
RPM	1450	Lift Height to the elevated Tank	Water Tank in the City Center 8km apart Jinnah Tank, Height: 150'								
Working Hours per Day	14	Working Days per Year	11 months to 11.5 months								
Total Daily Discharge (m3/day)	<table border="1"><tr><td>Starting</td><td>Present</td></tr><tr><td>1,363</td><td>504</td></tr></table>	Starting	Present	1,363	504	Total Annual Discharge (m3/year)	<table border="1"><tr><td>Starting</td><td>Present</td></tr><tr><td>490,000</td><td>170,000</td></tr></table>	Starting	Present	490,000	170,000
Starting	Present										
1,363	504										
Starting	Present										
490,000	170,000										
Remarks	The pump was replaced in 2002. The repairs were done for 5 times because of the silt and clay particle in the groundwater.										

Motor Condition

Manufacturer	SIEMENS	Year of Made	1996
Motor Capacity	380V, 89A	Electricity Consump Per m3	
RPM	1470	Horse Power	50
Remarks	The motor was also replaced in 2002.		

Well Inventory Sheet

Unit: TMA Well Number: No.5

Area Name: Stonay Jheel (Jheel means lake) Coordinate (UTM):

Altitude of Top of Well (AMSL, m): Well Status: Abandoned

Well Completion Date: 1984 Well Status: Abandoned

Total Depth: 280' Diameter of the Top Casing: 12"

Min. Dia. of the Casing: 12" Well Ownership: TMA

Well Owner's Name: TMA Drilled by: PHED

Static Water Level (hearing): No Data Dynamic Water Level (hearing): No Data

Draw-down (hearing): No Data Automatic Stopper Depth: Not Installed

Specific Yield (l/sec/m): No Data Transmissivity (if available): No Data

Aquifer (ft): No Data

Name	from (m)	to (m)	Artesian	Litho. Code	Aquifer Age	Hydraulic Media	Aquifer Type	Thickness (m)

Well Completion Date: 1984 Well Close Date (if abandoned): 1997

Remarks: Only 20m apart from Well No.2. This well must be used for monitoring well.

Casing/Screen Condition

Casing Type: Steel Screen Type: Brass, Slotted

Screen Perforation Rate (%): No Data

Screen Set Depth (ft): From to

Remarks: Abandoned because of the clogging of the screen.

Pump Condition

Pump Type: Turbine (Vertical) Installation Depth: 160'

Manufacturer: KSB Year of Made: 1984

Pump Diameter: 8" Riser Pipe Diameter: 8"

Lift Height in Spec: 130' Lift Height in Working: No Data

Discharge in Spec (lit/sec): 32 (25,000 gallon/h) Discharge in Working (lit/sec): No Data

RPM: 1450 Lift Height to the elevated Tank: Water Tank in the City Center 8km from the Jinnah Tank, Height: 150'

Working Hours per Day: 14 Working Days per Year: 11 months to 11.5 months

Total Daily Discharge (m3/day): No Data Total Annual Discharge (m3/year): No Data

Remarks: Pump has been already removed

Motor Condition

Manufacturer: SIEMENS Year of Made: 1984

Motor Capacity: 380V, 70A Electricity Consump Per m3:

RPM: 1470 Horse Power: 150

Remarks: Motor has been already removed.

Well Inventory Sheet

General

Unit: TMA Well Number: No.1

Longitude: Latitude:

Area Name **Nawan Shahr** Coordinate (UTM)

Altitude of Top of Well (AMSL, m) Altitude of Ground Surface (AMSL, m)

Well Completion Date **1997** Well Status **Working**

Total Depth **345** Diameter of the Top Casing **10"**

Min Dia. of the Casing **10"** Well Ownership **TMA**

Well Owner's Name **TMA** Drilled by **ADB**

Static Water Level (hearing)

Starting	Present
Artesian	No Data

 Dynamic Water Level (hearing)

Starting	Present
<58" (hearing)	No Data

Draw-down (hearing)

Starting	Present
58" at 2Dlit/sec	No Data

 Automatic Stopper Depth **Not Installed**

Specific Yield (l/sec/m) **No Data** Transmissivity (if available) **No Data**

Aquifer (ft)

Name	from (ft)	to (ft)	Artesian	Litho Code	Aquifer Age	Hydraulic Media	Aquifer Type	Thickness (ft)
Gravel	42	51	Artesian	Gr	Q	Porous	Semi-	9
	70	114					Confined	44
	155	177						17
	188	198						12
	298	329						31
	336	348						12

Well Completion Date **1997** Well Close Date (if abandoned) **Working**

Remarks **According to the well watchmen, the discharge has been reduced because of the groundwater level declination. But no concrete confidence Only 120m apart from Well No.2**

Casing/Screen Condition

Casing Type **Steel** Screen Type **Brass, Slotted**

Screen Perforation Rate (%) **No Data**

Screen Set Depth (ft)

From	101	156	188	289	337				
to	113	176	196	327	345				

Remarks

Pump Condition

Pump Type **Turbine (Vertical)** Installation Depth **140'**

Manufacturer **ERGG** Year of Made **1994**

Pump Diameter **4"** Riser Pipe Diameter **4"**

Lift Height in Spec **250'** Lift Height in Working **No Data**

Discharge in Spec. (lit/sec) **14 (190galon/min)** Discharge in Working (lit/sec) **8 (6,000galon/hour, hearing)**

RPM **1450** Lift Height to the elevated Tank **Water Tank in the City Center 5km from here (Kunji Ground)**

Working Hours per Day **14** Working Days per Year **11 months to 11.5 months**

Total Daily Discharge (m3/day)

Starting	Present
1,000	400

 Total Annual Discharge (m3/year)

Starting	Present
335,000	134,000

Remarks

Motor Condition

Manufacturer **SIEMENS** Year of Made **1993**

Motor Capacity **380V, 37.5A** Electricity Consump Per m3

RPM **1480** Horse Power **25**

Remarks

Well Inventory Sheet

General

Unit **TMA** Well Number **No.2**

Area Name **Nawan Shahr** Coordinate (UTM)

Longitude	Latitude

Altitude of Top of Well (AMSL, m) Altitude of Ground Surface (AMSL, m)

Well Completion Date: 1997 Well Status: Abandoned

Total Depth: 354' Diameter of the Top Casing: 10"

Min. Dia. of the Casing: 10" Well Ownership: TMA

Well Owner's Name: TMA Drilled by: ADB

Static Water Level (hearing): Starting 8' when abandoned No Data Dynamic Water Level (hearing): Starting 84' when abandoned No Data

Draw-down (hearing): Starting 58' at 22lit/sec when abandoned No Data Automatic Stopper Depth: Not installed

Specific Yield (l/sec/m): No Data Transmissivity (if available): No Data

Aquifer

Name	from (ft)	to (ft)	Artesian	Litho. Code	Aquifer Age	Hydraulic Media	Aquifer Type	Thickness (ft)
Gravel	35	50	Artesian	Gr	Q	Porous	Semi-Confined	15
	88	73					Confined	15
	90	108						18
	118	132						14
	155	182						7
	218	236						18
	315	320						5
	345	358						11

Well Completion Date: 1997 Well Close Date (if abandoned): 2001

Remarks: Well itself dropped down by 16' and 15m3 of gravels were thrown into the well. But, the dropping was not stopped. Therefore, it was abandoned. The dropping down of the well might be caused by the caving of the silt/clay layers. It is supposed that such caving might be avoided if the Johnson type screen and sand packing were applied for this well. This well should be used for the groundwater monitoring.

Casing/Screen Condition

Casing Type: Steel Screen Type: Brass, Slotted

Screen Perforation Rate (%): No Data

Screen Set Depth (ft):

From	95	119	152	219	315	346				
to	108	131	160	235	319	354				

Remarks:

Pump Condition

Pump Type: Turbine (Vertical) Installation Depth: No Data

Manufacturer: KSB Year of Made: 1997

Pump Diameter: 4" Riser Pipe Diameter: 4"

Lift Height in Spec: 250' Lift Height in Working: NO Data

Discharge in Spec (lit/sec): 14.5 (0.5cusec) Discharge in Working (lit/sec): 8 (8,000gallon/hour, hearing)

RPM: 1450 Lift Height to the elevated Tank: Water Tank in the City Center 5km from here (Kunj Ground)

Working Hours per Day: 14 Working Days per Year: 11 months to 11.5 months

Total Daily Discharge (m3/day): Starting 1,100 when abandoned 400 Total Annual Discharge (m3/year): Starting 370,000 when abandoned 134,600

Remarks: Pump is still equipped.

Motor Condition

Manufacturer: No Data Year of Made: No Data

Motor Capacity: No Data Electricity Consumption Per m3: No Data

RPM: No Data Horse Power: No Data

Remarks: Motor has been removed.

Well Inventory Sheet

General

Unit: TMA Well Number: No.3

Area Name: Newan Shahr Coordinate (UTM):

Altitude of Top of Well (AMSL, m): Altitude of Ground Surface (AMSL, m):

Well Completion Date: 1997 Well Status: Abandoned

Total Depth	<input type="text" value="NO Data"/>	Diameter of the Top Casing	<input type="text" value="10"/>								
Min. Dia. of the Casing	<input type="text" value="10"/>	Well Ownership	<input type="text" value="TMA"/>								
Well Owner's Name	<input type="text" value="TMA"/>	Drilled by	<input type="text" value="ADB"/>								
Static Water Level (hearing)	<table border="1"> <tr> <td>Starting</td> <td>when abandoned</td> </tr> <tr> <td>Artesian</td> <td>No Data</td> </tr> </table>	Starting	when abandoned	Artesian	No Data	Dynamic Water Level (hearing)	<table border="1"> <tr> <td>Starting</td> <td>when abandoned</td> </tr> <tr> <td>No Data</td> <td>No Data</td> </tr> </table>	Starting	when abandoned	No Data	No Data
Starting	when abandoned										
Artesian	No Data										
Starting	when abandoned										
No Data	No Data										
Draw-down (hearing)	<table border="1"> <tr> <td>Starting</td> <td>when abandoned</td> </tr> <tr> <td>No Data</td> <td>No Data</td> </tr> </table>	Starting	when abandoned	No Data	No Data	Automatic Stopper Depth	<input type="text" value="Not installed"/>				
Starting	when abandoned										
No Data	No Data										
Specific Yield (l/sec/m)	<input type="text" value="No Data"/>	Transmissivity (if available)	<input type="text" value="No Data"/>								

Name	from (ft)	to (ft)	Artesian	Litho. Code	Aquifer Age	Hydraulic Media	Aquifer Type	Thickness (ft)

Well Completion Date	<input type="text" value="1997"/>	Well Close Date (if abandoned)	<input type="text" value="2000"/>
Remarks	<input type="text" value="This well was abandoned only 6 months after the completion. It is reported by the field engineer that this well was abandoned because of the severe decline of the groundwater level (might be more than 100 feet) But there is no concrete evidence of the severe groundwater level decline. This well should be utilized as an observation well."/>		

Casing/Screen Condition																									
Casing Type	<input type="text" value="Steel"/>	Screen Type	<input type="text" value="Brass, Slotted"/>																						
Screen Perforation Rate (%)	<input type="text" value="No Data"/>																								
Screen Set Depth (ft)	<table border="1"> <tr> <td>From</td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>to</td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>			From											to										
From																									
to																									
Remarks	<input type="text" value=""/>																								

Pump Condition											
Pump Type	<input type="text"/>	Installation Depth	<input type="text"/>								
Manufacturer	<input type="text"/>	Year of Made	<input type="text"/>								
Pump Diameter	<input type="text"/>	Riser Pipe Diameter	<input type="text"/>								
Lift Height in Spec.	<input type="text"/>	Lift Height in Working	<input type="text"/>								
Discharge in Spec (lit/sec)	<input type="text"/>	Discharge in Working (lit/sec)	<input type="text"/>								
RPM	<input type="text"/>	Lift Height to the elevated Tank	<input type="text" value="Water Tank in the City Center 5km from here (Kury Ground)"/>								
Working Hours per Day	<input type="text"/>	Working Days per Year	<input type="text"/>								
Total Daily Discharge (m3/day)	<table border="1"> <tr> <td>Starting</td> <td>when abandoned</td> </tr> <tr> <td> </td> <td> </td> </tr> </table>	Starting	when abandoned			Total Annual Discharge (m3/year)	<table border="1"> <tr> <td>Starting</td> <td>when abandoned</td> </tr> <tr> <td> </td> <td> </td> </tr> </table>	Starting	when abandoned		
Starting	when abandoned										
Starting	when abandoned										
Remarks	<input type="text" value="There is no data because the pump has been removed."/>										

Motor Condition			
Manufacturer	<input type="text"/>	Year of Made	<input type="text"/>
Motor Capacity	<input type="text"/>	Electricity Consump. Per m3	<input type="text"/>
RPM	<input type="text"/>	Horse Power	<input type="text"/>
Remarks	<input type="text" value="There is no data because the motor has been removed."/>		

Well Inventory Sheet

General							
Unit	<input type="text" value="TMA"/>	Well Number	<input type="text" value="No.4"/>				
Area Name	<input type="text" value="Nawan Shahr"/>	Coordinates (UTM)	<table border="1"> <tr> <td>Longitude</td> <td>Latitude</td> </tr> <tr> <td> </td> <td> </td> </tr> </table>	Longitude	Latitude		
Longitude	Latitude						
Altitude of Top of Well (AMSL, m)	<input type="text"/>	Altitude of Ground Surface (AMSL, m)	<input type="text"/>				
Well Completion Date	<input type="text" value="1997"/>	Well Status	<input type="text" value="Working"/>				
Total Depth	<input type="text" value="NO Data"/>	Diameter of the Top Casing	<input type="text" value="10"/>				

Min. Dia. of the Casing	10"	Well Ownership	TMA								
Well Owner's Name	TMA	Drilled by	AOB								
Static Water Level (hearing)	<table border="1"> <tr> <td>Starting</td> <td>Present</td> </tr> <tr> <td>No Data</td> <td>No Data</td> </tr> </table>	Starting	Present	No Data	No Data	Dynamic Water Level (hearing)	<table border="1"> <tr> <td>Starting</td> <td>Present</td> </tr> <tr> <td>No Data</td> <td>No Data</td> </tr> </table>	Starting	Present	No Data	No Data
Starting	Present										
No Data	No Data										
Starting	Present										
No Data	No Data										
Draw-down (hearing)	<table border="1"> <tr> <td>Starting</td> <td>Present</td> </tr> <tr> <td>No Data</td> <td>No Data</td> </tr> </table>	Starting	Present	No Data	No Data	Automatic Stopper Depth	Not installed				
Starting	Present										
No Data	No Data										
Specific Yield (l/sec/m)	No Data	Transmissivity (if available)	No Data								

Name	from (ft)	to (ft)	Artesian	Litho. Code	Aquifer Age	Hydraulic Media	Aquifer Type	Thickness (ft)
No Data								

Well Completion Date	1997	Well Close Date (if abandoned)	Working
Remarks	According to the well watchman, the discharge has been reduced because of the groundwater level declination. But no concrete confidence.		

Casing/Screen Condition			
Casing Type	Steel	Screen Type	Brass, Slotted
Screen Perforation Rate (%)	No Data		
Screen Set Depth (ft)	From		
No Data	No Data		
Remarks			

Pump Condition											
Pump Type	Turbine (Vertical)	Installation Depth	150'								
Manufacturer	KSB	Year of Made	1997								
Pump Diameter	4"	Riser Pipe Diameter	4"								
Lift Height in Spec	280'	Lift Height in Working	NO Data								
Discharge in Spec. (lit/sec)	22 (0.75cusec)	Discharge in Working (lit/sec)	25 (Actual measurement, 30-12-02) (by flow meter equipped)								
RPM	1450	Lift Height to the elevated Tank	Water Tank in the City Center 5km from here (Kurj Ground)								
Working Hours per Day	14	Working Days per Year	11 months to 11.5 months								
Total Daily Discharge (m3/day)	<table border="1"> <tr> <td>Starting</td> <td>Present</td> </tr> <tr> <td>No Data</td> <td>1,280</td> </tr> </table> (based on direct measurement)	Starting	Present	No Data	1,280	Total Annual Discharge (m3/year)	<table border="1"> <tr> <td>Starting</td> <td>Present</td> </tr> <tr> <td>No Data</td> <td>420,000</td> </tr> </table> (same with daily disch.)	Starting	Present	No Data	420,000
Starting	Present										
No Data	1,280										
Starting	Present										
No Data	420,000										

Remarks	According to the field engineer the discharge in working is about 8lit/sec but actual measurement by the flow meter shows 25lit/sec. The interview survey is very doubtful and such data should be taken from the direct measurement not from the hearing if the measurement is possible
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Motor Condition			
Manufacturer	SIEMENS	Year of Made	1996
Motor Capacity	380V, 58A	Electrcity Consump Per m3	
RPM	1470	Horse Power	40
Remarks			

Well Inventory Sheet

General							
Unit	TMA	Well Number	No.5				
Area Name	Nawan Shahr	Coordinate (UTM)	<table border="1"> <tr> <td>Longitude</td> <td>Latitude</td> </tr> <tr> <td></td> <td></td> </tr> </table>	Longitude	Latitude		
Longitude	Latitude						
Altitude of Top of Well (AMSL, m)		Altitude of Ground Surface (AMSL, m)					
Well Completion Date	1997	Well Status	Working				
Total Depth	353'	Diameter of the Top Casing	10"				
Min Dia. of the Casing	10"	Well Ownership	TMA				

Well Owner's Name: TMA Drilled by: ADB

Static Water Level (hearing): Starting Present, Flowing 52' (hearing)

Dynamic Water Level (hearing): Starting Present, <52' No Data

Draw-down (hearing): Starting Present, 52' at 29lit/sec No Data

Automatic Stopper Depth: Not installed

Specific Yield (l/sec/m): No Data Transmissivity (if available): No Data

Aquifer

Name	from (ft)	to (ft)	Artesian	Litho. Code	Aquifer Age	Hydraulic Media	Aquifer Type	Thickness (ft)
Gravel	40	73	Artesian	Gr	Q	Porous	Semi-confined	33
	82	87						5
	228	255						26
	273	318						43
	320	364						34

Well Completion Date: 1997 Well Close Date (if abandoned): Working

Remarks: According to the well watchman, the discharge has been reduced because of the groundwater level declination. But no concrete confidence.

Casing/Screen Condition

Casing Type: Steel Screen Type: Brass, Slotted

Screen Perforation Rate (%): No Data

Screen Set Depth (ft): From 230 274 321 to 254 314 353

Remarks:

Pump Condition

Pump Type: Turbine (Vertical) Installation Depth: 140'

Manufacturer: ENGG Year of Made: 1994

Pump Diameter: 4" Riser Pipe Diameter: 4"

Lift Height in Spec: 240' Lift Height in Working: NO Data

Discharge in Spec. (lit/sec): 23 (300gal/min) Discharge in Working (lit/sec): 10 (8,000gal/h, hearing)

RPM: 1450 Lift Height to the elevated Tank: Water Tank in the City Center 5km from the (Kunj Ground)

Working Hours per Day: 14 Working Days per Year: 11 months to 11.5 months

Total Daily Discharge (m3/day): Starting 1,150 Present 500 Total Annual Discharge (m3/year): Starting 390,000 Present 170,000

Remarks: Motor and pump were replaced 7 times after the well completion. Last replacement was done in October, 2002.

Motor Condition

Manufacturer: SIEMENS Year of Made: 1993

Motor Capacity (kwh): 380V, 58A Electricity Consumption, Per m3:

RPM: 1470 Horse Power: 40

Remarks: Motor and pump were replaced 7 times after the well completion. Last replacement was done in October, 2002.

Well Inventory Sheet

General

Unit: TMA Well Number: No.5

Area Name: Newen Shahr Coordinate (UTM): Longitude Latitude

Altitude of Top of Well (AMSL, m): Altitude of Ground Surface (AMSL, m):

Well Completion Date: 1997 Well Status: Working

Total Depth: 405' Diameter of the Top Casing: 10"

Min. Dia. of the Casing: 10" Well Ownership: TMA

Well Owner's Name: TMA Drilled by: ADB

Starting Present Starting Present

Static Water Level (hearing) Dynamic Water Level (hearing)
 Draw-down (hearing)

Starting	Present
NO Data	50' (hearing)

 Automatic Stopper Depth
 Specific Yield (l/sec/m) Transmissivity (if available)

Aquifer

Name	from (ft)	to (ft)	Artesian	Litho. Code	Aquifer Age	Hydraulic Media	Aquifer Type	Thickness (ft)
Gravel	282	296	Artesian	Gr	Q	Porous	Semi-confined	6
	313	317						4
	323	328						5
	336	341						5
	361	370						19
	373	377						4
	390	405						15

Well Completion Date Well Close Date (if abandoned)

Remarks

Casing/Screen Condition

Casing Type Screen Type
 Screen Perforation Rate (%)
 Screen Set Depth (ft)

From	293	324	336	352	391				
to	297	328	340	370	405				

Remarks

Pump Condition

Pump Type Installation Depth
 Manufacturer Year of Made
 Pump Diameter Riser Pipe Diameter
 Lift Height in Spec Lift Height in Working
 Discharge in Spec. (lit/sec) Discharge in Working (lit/sec)
 RPM Lift Height to the elevated Tank
 Working Hours per Day Working Days per Year
 Total Daily Discharge (m3/day)

Starting	Present
No Data	450

 Total Annual Discharge (m3/year)

Starting	Present
No Data	150,000

Remarks

Motor Condition

Manufacturer Year of Made
 Motor Capacity Electricity Comeump. Per m3
 RPM Horse Power

Remarks

Well Inventory Sheet

General

Unit Well Number
 Area Name Coordinate (UTM)

Longitude	Latitude

 Altitude of Top of Well (AMSL, m) Altitude of Ground Surface (AMSL, m)
 Well Completion Date Well Status
 Total Depth Diameter of the Top Casing
 Min Dia. of the Casing Well Ownership
 Well Owner's Name Drilled by
 Static Water Level (hearing)

Starting	Present
Flowing	52' (hearing)

 Dynamic Water Level (hearing)

Starting	Present
No Data	100' (hearing)

 Draw-down (hearing)

Starting	Present
NO Data	48' (hearing)

 Automatic Stopper Depth

Specific Yield (l/sec/m) Transmissivity (if available)

Aquifer	Name	from (ft)	to (ft)	Artesian	Litho. Code	Aquifer Age	Hydraulic Media	Aquifer Type	Thickness (ft)
Gravel		25	31	Artesian	Gr	Q	Porous	Semi-confined	8
		230	234						4
		254	298						44
		316	320						4
		328	352						24
		374	380						16

Well Completion Date Well Close Date (if abandoned)

Remarks

Casing/Screen Condition

Casing Type Screen Type

Screen Perforation Rate (%)

Screen Set Depth (ft)	From	to	256	330	378					
	296	350	386							

Remarks

Pump Condition

Pump Type Installation Depth

Manufacturer Year of Made

Pump Diameter Riser Pipe Diameter

Lift Height in Spec Lift Height in Working

Discharge in Spec (lit/sec) Discharge in Working (lit/sec)

RPM H P Lift Height to the elevated Tank

Working Hours per Day Working Days per Year

Total Daily Discharge (m3/day)	Starting	Present	Total Annual Discharge (m3/year)	Starting	Present
	No Data	400		No Data	130,000

Remarks

Motor Condition

Manufacturer Year of Made

Motor Capacity Electricity Consump Per m3

RPM Horse Power

Remarks

Well Inventory Sheet

General

Unit Well Number

Area Name Coordinate (UTM)

Altitude of Top of Well (AMSL, m) Altitude of Ground Surface (AMSL, m)

Well Completion Date Well Status

Total Depth Diameter of the Top Casing

Min. Dia. of the Casing Well Ownership

Well Owner's Name Drilled by

Static Water Level (hearing)	Starting	when abandoned	Dynamic Water Level (hearing)	Starting	when abandoned
	100'	150'		No Data	No Data

Draw-down (hearing) Automatic Stopper Depth

Specific Yield (l/sec/m) Transmissivity (if available)

Aquifer
No Data

Name	from (ft)	to (ft)	Artesian	Litho. Code	Aquifer Age	Hydraulic Media	Aquifer Type	Thickness (ft)

Well Completion Date

1988-1989

Well Close Date (if abandoned)

1999

Remarks

Pump installed but measurement possible. According to the field engineer the reason for abandoned is that the dynamic water level was severely down by more than 180' from GL. This well located on the foot slope of the hill

Casing/Screen Condition

Casing Type

PVC

Screen Type

PVC, Slotted

Screen Perforation Rate (%)

No Data

Screen Set Depth (ft)

From												
to												

Remarks

Pump Condition

Pump Type

Submersible Pump

Installation Depth

180'

Manufacturer

KSB

Year of Made

Not noted

Pump Diameter

3"

Riser Pipe Diameter

3"

Lift Height in Spec

No Data

Lift Height in Working

No Data

Discharge in Spec (lit/sec)

No Data

Discharge in Working (lit/sec)

2.5 (2,000gal/h when abandoned, hearing)

RPM

No Data H.P. No Data

Lift Height to the elevated Tank

Jail Tank apart 2.5km, 400' above from here

Working Hours per Day

5 when abandoned

Working Days per Year

11 months to 11.5 months

Total Daily Discharge (m3/day)

Starting	when abandoned
No Data	45

Total Annual Discharge (m3/year)

Starting	when abandoned
No Data	15,000

Remarks

Motor Condition

Manufacturer

Year of Made

Motor Capacity

Electricity Consump. Per m3

RPM

Horse Power

Remarks

Not applicable

Well Inventory Sheet

General

Unit

TMA

Well Number

No.2

Area Name

Jinnah Garden

Coordinate (UTM)

Longitude	Latitude

Altitude of Top of Well (AMSL, m)

Altitude of Ground Surface (AMSL, m)

Well Completion Date

1988-1989

Well Status

Abandoned

Total Depth

No Data

Diameter of the Top Casing

8"

Min. Dia. of the Casing

8"

Well Ownership

TMA

Well Owner's Name

TMA

Drilled by

PHED

Static Water Level (hearing)

Starting	when abandoned
No Data	No Data

Dynamic Water Level (hearing)

Starting	when abandoned
No Data	No Data

Draw-down (hearing)

Starting	when abandoned
No Data	No Data

Automatic Stopper Depth

Not installed

Specific Yield (l/sec/m)

No Data

Transmissivity (if available)

No Data

Aquifer
No Data

Name	from (ft)	to (ft)	Artesian	Litho Code	Aquifer Age	Hydraulic Media	Aquifer Type	Thickness (ft)

Well Completion Date 1988-1988 Well Close Date (if abandoned) 1995

Remarks Pump installed but measurement possible According to the field engineer the reason for abandoned is that the PVC casing was damaged The reason of the damage is unknown. And the groundwater level was also highly declined by about 160' from GL according to the field engineer The well is located on the foot slope of the hill. This well is possible to be equipped with the level recorder but inside of the house must be cleaned up

Casing/Screen Condition

Casing Type PVC Screen Type PVC, Slotted

Screen Perforation Rate (%) No Data

Screen Set Depth (ft)
No Data From to

Remarks

Pump Condition

Pump Type Submersible Pump Installation Depth 180'

Manufacturer KSB Year of Made Not noted

Pump Diameter 3" Riser Pipe Diameter 3"

Lift Height in Spec No Data Lift Height in Working No Data (180'?)

Discharge in Spec. (lit/sec) No Data Discharge in Working (lit/sec) 0.5 (400gal/h when abandoned, hearing)

RPM No Data H.P. No Data Lift Height to the elevated Tank Jail Tank apart 2.5km, 400' above from here

Working Hours per Day 5 when abandoned Working Days per Year 11 months to 11.5 months

Total Daily Discharge (m3/day) No Data 9 Total Annual Discharge (m3/year) No Data 3,000

Remarks

Motor Condition

Manufacturer Year of Made

Motor Capacity Electricity Consume Per m3

RPM Horse Power

Remarks Not applicable

Well Inventory Sheet

General

Unit TMA Well Number No.1

Area Name Narrian Coordinate (UTM) Longitude Latitude

Altitude of Top of Well (AMSL, m) Altitude of Ground Surface (AMSL, m)

Well Completion Date 1972-1973 Well Status Abandoned

Total Depth No Data Diameter of the Top Casing 12"

Min. Dia. of the Casing 8" Well Ownership TMA

Well Owner's Name TMA Drilled by PHED

Static Water Level (hearing) Flowing No Data Dynamic Water Level (hearing) No Data No Data

Draw-down (hearing) No Data No Data Automatic Stopper Depth Not installed

Specific Yield (l/sec/m) No Data Transmissivity (if available) No Data

Aquifer	Name	from (R)	to (R)	Artesian	Litho Code	Aquifer Age	Hydraulic Media	Aquifer Type	Thickness (R)
No Data									

Well Completion Date 1972-1973 Well Close Date (if abandoned) 1983

Remarks No reason for well abandon has been made clear but it is inferred the bending of casing and rod caused by the drop down of the well might be the main reason as same as other wells in this area. It can be used for monitoring.

Casing/Screen Condition

Casing Type Steel Screen Type Brass, Slotted

Screen Perforation Rate (%) No Data

Screen Set Depth (ft) No Data
From to

Remarks

Pump Condition

Pump Type No Data Installation Depth No Data

Manufacturer No Data Year of Made No Data

Pump Diameter No Data Riser Pipe Diameter No Data

Lift Height in Spec. No Data Lift Height in Working No Data

Discharge in Spec (lit/sec) No Data Discharge in Working (lit/sec) No Data

RPM No Data Lift Height to the elevated Tank Water Tank in the City Center 2km from the

Working Hours per Day 14 Working Days per Year 11 months to 11.5 months

Total Daily Discharge (m3/day)

Starting	when abandoned
No Data	No Data

 Total Annual Discharge (m3/year)

Starting	when abandoned
No Data	No Data

Remarks Pump has been removed. Suction pump is installed for the domestic use of the inhabitants.

Motor Condition

Manufacturer No Data Year of Made No Data

Motor Capacity No Data Electricity Consump. Per m3

RPM No Data Horse Power No Data

Remarks Motor has been removed

Well Inventory Sheet

General

Unit TMA Well Number No.1A

Area Name Narrian Coordinate (UTM)

Longitude	Latitude

Altitude of Top of Well (AMSL, m) Altitude of Ground Surface (AMSL, m)

Well Completion Date 1985 Well Status Abandoned

Total Depth No Data Diameter of the Top Casing 8"

Min. Dia. of the Casing 8" Well Ownership TMA

Well Owner's Name TMA Drilled by PRD

Static Water Level (hearing)

Starting	when abandoned
Flowing	No Data

 Dynamic Water Level (hearing)

Starting	when abandoned
No Data	No Data

Draw-down (hearing)

Starting	when abandoned
No Data	No Data

 Automatic Stopper Depth Not Installed

Specific Yield (l/sec/m) No Data Transmissivity (if available) No Data

Aquifer	Name	from (ft)	to (ft)	Artesian	Litho. Code	Aquifer Age	Hydraulic Media	Aquifer Type	Thickness (ft)
No Data									

Well Completion Date	1985	Well Close Date (if abandoned)	1996
Remarks	No reason for well abandon has been made clear but it is reported by the well watchman that the reason of abandon was severe groundwater level decline. It can be used for monitoring after the removal of the pump. It is located just behind of Well No 1		

Casing/Screen Condition

Casing Type	Steel	Screen Type	Brass, Slotted
Screen Perforation Rate (%)	No Data		
Screen Set Depth (ft)	From _____ to _____		
Remarks			

Pump Condition

Pump Type	Submersible Pump	Installation Depth	160'
Manufacturer	KSB	Year of Made	No Data
Pump Diameter	3"	Riser Pipe Diameter	3"
Lift Height in Spec	244'	Lift Height in Working	No Data (more than 100')
Discharge in Spec. (lit/sec)	13 (10,000gal/h)	Discharge in Working (lit/sec)	1.3 (1,000gal/h, hearing)
RPM	2,000 HP 15	Lift Height to the elevated Tank	Water Tank in the City Center 2km from here (Kun) Ground
Working Hours per Day	14	Working Days per Year	11 months to 11.5 months
Total Daily Discharge (m3/day)	Starting _____ when abandoned 66	Total Annual Discharge (m3/year)	Starting _____ when abandoned 22,000
Remarks			

Motor Condition

Manufacturer		Year of Made	
Motor Capacity		Electricity Consumption Per m3	
RPM		Horse Power	
Remarks	Not applicable		

Well Inventory Sheet

General

Unit	TMA	Well Number	No.2
Area Name	Narrian	Coordinate (UTM)	Longitude _____ Latitude _____
Altitude of Top of Well (AMSL, m)		Altitude of Ground Surface (AMSL, m)	
Well Completion Date	1974-1975	Well Status	Abandoned
Total Depth	No Data	Diameter of the Top Casing	12"
Min Dia. of the Casing	10"	Well Ownership	TMA
Well Owner's Name	TMA	Drilled by	PHED
Static Water Level (hearing)	Starting _____ when abandoned No Data	Dynamic Water Level (hearing)	Starting _____ when abandoned No Data
Draw-down (hearing)	No Data	Automatic Stopper Depth	Not installed
Specific Yield (l/sec/m)	No Data	Transmissivity (if available)	No Data

Aquifer

Name	from (ft)	to (ft)	Artesian	Litho. Code	Aquifer Age	Hydraulic Media	Aquifer Type	Thickness (ft)
No Data								

Well Completion Date	1974-1975	Well Close Date (if abandoned)	1997
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Remarks: The reason why it was abandoned is reported by the field engineer that the casing and rod was bent by the drop down of the well. The drop down of the well was caused by the caving of the clay layers. Caving would be avoided using the Johnson type screen of the fine spacing with the packing material of medium grained sand. Not suitable for monitoring.

Casing/Screen Condition

Casing Type: Steel Screen Type: Brass, Slotted

Screen Perforation Rate (%): No Data

Screen Set Depth (ft): No Data

Remarks:

Pump Condition

Pump Type: Turbine (Vertical) Installation Depth: 150'

Manufacturer: KSB Year of Made: 1978

Pump Diameter: 8" Riser Pipe Diameter: 8"

Lift Height in Spec.: 198' Lift Height in Working: No Data

Discharge in Spec. (lit/sec): 38 (30,000gal/h) Discharge in Working (lit/sec): 15 (12,000gal/h, hearing)

RPM: 1,470 Lift Height to the elevated Tank: Water Tank in the City Center 2km from here (Kun) Ground

Working Hours per Day: 14 Working Days per Year: 11 months to 11.5 months

Total Daily Discharge (m3/day): Starting No Data when abandoned 756 Total Annual Discharge (m3/year): Starting No Data when abandoned 254,000

Remarks: It is impossible to remove the pump because the rod is bent.

Motor Condition

Manufacturer: No Data Year of Made: No Data

Motor Capacity: No Data Electricity Consump Per m3:

RPM: No Data Horse Power: No Data

Remarks: Motor has been removed.

Well Inventory Sheet

General

Unit: TMA Well Number: No.3

Area Name: Narian Coordinate (UTM):

Altitude of Top of Well (AMSL, m): Altitude of Ground Surface (AMSL, m):

Well Completion Date: 1974-1975 Well Status: Abandoned

Total Depth: No Data Diameter of the Top Casing: 12"

Min. Dia. of the Casing: 10" Well Ownership: TMA

Well Owner's Name: TMA Drilled by: PHED

Static Water Level (hearing): Starting Flowing when abandoned No Data Dynamic Water Level (hearing): Starting No Data when abandoned No Data

Draw-down (hearing): Starting NO Data when abandoned NO Data Automatic Stopper Depth: Not installed

Specific Yield (l/sec/m): No Data Transmissivity (if available): No Data

Aquifer	Name	from (ft)	to (ft)	Artesian	Litho Code	Aquifer Age	Hydraulic Media	Aquifer Type	Thickness (ft)
No Data									

Well Completion Date: 1974-1975 Well Close Date (if abandoned): 1986

Remarks: The reason why it was abandoned is that the well and well chamber were dropped down together by 6' by the caving. The chamber is filled with garbage. Not suitable for monitoring. Inhabitants of the Narian are mainly from Afghanistan. The sewage is being discharge directly to the ground. The sewage may contaminate the groundwater.

Casing/Screen Condition

Casing Type Screen Type
 Screen Perforation Rate (%)
 Screen Set Depth (ft)
 No Data
 Remarks

Pump Condition

Pump Type Installation Depth
 Manufacturer Year of Made
 Pump Diameter Riser Pipe Diameter
 Lift Height in Spec Lift Height in Working
 Discharge in Spec (lit/sec) Discharge in Working (lit/sec)
 RPM Lift Height to the elevated Tank
 Working Hours per Day Working Days per Year
 Total Daily Discharge (m3/day)

Starting	when abandoned
No Data	756

 Total Annual Discharge (m3/year)

Starting	when abandoned
No Data	254,000

 Remarks

Motor Condition

Manufacturer Year of Made
 Motor Capacity Electricity Consump. Per m3
 RPM Horse Power
 Remarks

Well Inventory Sheet

General

Unit Well Number
 Area Name Coordinate (UTM)

Longitude	Latitude

 Altitude of Top of Well (AMSL, m) Altitude of Ground Surface (AMSL, m)
 Well Completion Date Well Status
 Total Depth Diameter of the Top Casing
 Min. Dia. of the Casing Well Ownership
 Well Owner's Name Driled by
 Static Water Level (hearing)

Starting	when abandoned
Flowing	No Data

 Dynamic Water Level (hearing)

Starting	when abandoned
No Data	No Data

 Draw-down (hearing)

Starting	when abandoned
No Data	No Data

 Automatic Stopper Depth
 Specific Yield (l/sec/m) Transmissivity (if available)

Aquifer
No Data

Name	from (ft)	to (ft)	Artesian	Litho. Code	Aquifer Age	Hydraulic Media	Aquifer Type	Thickness (ft)

Well Completion Date Well Close Date (if abandoned)
 Remarks

Casing/Screen Condition

Casing Type Screen Type

Screen Perforation Rate (%)

Screen Set Depth (ft)
No Data

From																			
to																			

Remarks

Pump Condition

Pump Type Installation Depth

Manufacturer Year of Made

Pump Diameter Riser Pipe Diameter

Lift Height in Spec Lift Height in Working

Discharge in Spec (lit/sec) Discharge in Working (lit/sec)

RPM Lift Height to the elevated Tank

Working Hours per Day Working Days per Year

Total Daily Discharge (m3/day)

Starting	when abandoned

 Total Annual Discharge (m3/year)

Starting	when abandoned

Remarks

Motor Condition

Manufacturer Year of Made

Motor Capacity Electricity Consump. Per m3

RPM Horse Power

Remarks

Well Inventory Sheet

General

Unit TMA Well Number No.4

Area Name Narian Coordinate (UTM)

Latitude	Longitude

Altitude of Top of Well (AMSL, m) Altitude of Ground Surface (AMSL, m)

Well Completion Date 1988-1989 Well Status Abandoned

Total Depth No Data Diameter of the Top Casing 10"

Min. Dia. of the Casing 10" Well Ownership TMA

Well Owner's Name TMA Drilled by PHED

Static Water Level (hearing)

Starting	when abandoned
Flowing	No Data

 Dynamic Water Level (hearing)

Starting	when abandoned
No Data	No Data

Draw-down (hearing)

Starting	when abandoned
No Data	No Data

 Automatic Stopper Depth Not installed

Specific Yield (l/sec/m) No Data Transmissivity (if available) No Data

Aquifer

No Data

Name	from (ft)	to (ft)	Artesian	Litho. Code	Aquifer Age	Hydraulic Media	Aquifer Type	Thickness (ft)

Well Completion Date 1974-1975 Well Close Date (if abandoned) 1986

Remarks The reason why it was abandoned is that the well and well chamber were dropped down together by 2' by the casing. The chamber has been demolished. Fifteen (15) pipes are installed in the well for the domestic illegal use of the groundwater by the inhabitants. Not suitable for monitoring. Inhabitants of the Narian are mainly from Afghanistan. The sewage is being discharged directly to the ground. The sewage may contaminate the groundwater.

Casing/Screen Condition

Casing Type PVC Screen Type PVC, Slotted

Screen Perforation Rate (%)

Screen Set Depth (ft)
No Data

From												
to												

Remarks

Pump Condition

Pump Type	<input type="text" value="Turbine (Vertical)"/>	Installation Depth	<input type="text" value="No Data"/>								
Manufacturer	<input type="text" value="No Data"/>	Year of Made	<input type="text" value="No Data"/>								
Pump Diameter	<input type="text" value="No Data"/>	Riser Pipe Diameter	<input type="text" value="No Data"/>								
Lift Height in Spec	<input type="text" value="No Data"/>	Lift Height in Working	<input type="text" value="No Data"/>								
Discharge in Spec. (lit/sec)	<input type="text" value="No Data"/>	Discharge in Working (lit/sec)	<input type="text" value="10 (8,000gal/h. hearing)"/>								
RPM	<input type="text" value="No Data"/>	Lift Height to the elevated Tank	<input type="text" value="Water Tank in the City Center 2km from the (Kun) Ground"/>								
Working Hours per Day	<input type="text" value="14"/>	Working Days per Year	<input type="text" value="11 months to 11.5 months"/>								
Total Daily Discharge (m3/day)	<table border="1"> <tr> <th>Starting</th> <th>when abandoned</th> </tr> <tr> <td><input type="text" value="No Data"/></td> <td><input type="text" value="500"/></td> </tr> </table>	Starting	when abandoned	<input type="text" value="No Data"/>	<input type="text" value="500"/>	Total Annual Discharge (m3/year)	<table border="1"> <tr> <th>Starting</th> <th>when abandoned</th> </tr> <tr> <td><input type="text" value="No Data"/></td> <td><input type="text" value="170,000"/></td> </tr> </table>	Starting	when abandoned	<input type="text" value="No Data"/>	<input type="text" value="170,000"/>
Starting	when abandoned										
<input type="text" value="No Data"/>	<input type="text" value="500"/>										
Starting	when abandoned										
<input type="text" value="No Data"/>	<input type="text" value="170,000"/>										

Remarks

Pump has been removed.

Motor Condition

Manufacturer	<input type="text" value="No Data"/>	Year of Made	<input type="text" value="No Data"/>
Motor Capacity	<input type="text" value="No Data"/>	Electricity Consump Per m3	<input type="text" value=""/>
RPM	<input type="text" value="No Data"/>	Horse Power	<input type="text" value="No Data"/>

Remarks

Motor has been removed

Well Inventory Sheet

General

Unit	<input type="text" value="TMA"/>	Well Number	<input type="text" value="No.5"/>								
Area Name	<input type="text" value="Narrian"/>	Coordinate (UTM)	<table border="1"> <tr> <th>Longitude</th> <th>Latitude</th> </tr> <tr> <td></td> <td></td> </tr> </table>	Longitude	Latitude						
Longitude	Latitude										
Altitude of Top of Well (AMSL, m)	<input type="text" value=""/>	Altitude of Ground Surface (AMSL, m)	<input type="text" value=""/>								
Well Completion Date	<input type="text" value="1995"/>	Well Status	<input type="text" value="Abandoned"/>								
Total Depth	<input type="text" value="280'"/>	Diameter of the Top Casing	<input type="text" value="10'"/>								
Min. Dia. of the Casing	<input type="text" value="10'"/>	Well Ownership	<input type="text" value="TMA"/>								
Well Owner's Name	<input type="text" value="TMA"/>	Driled by	<input type="text" value="ADB"/>								
Static Water Level (hearing)	<table border="1"> <tr> <th>Starting</th> <th>when abandoned</th> </tr> <tr> <td><input type="text" value="Flowing"/></td> <td><input type="text" value="Almost GL (31-12-'02)"/></td> </tr> </table>	Starting	when abandoned	<input type="text" value="Flowing"/>	<input type="text" value="Almost GL (31-12-'02)"/>	Dynamic Water Level (hearing)	<table border="1"> <tr> <th>Starting</th> <th>when abandoned</th> </tr> <tr> <td><input type="text" value="No Data"/></td> <td><input type="text" value="No Data"/></td> </tr> </table>	Starting	when abandoned	<input type="text" value="No Data"/>	<input type="text" value="No Data"/>
Starting	when abandoned										
<input type="text" value="Flowing"/>	<input type="text" value="Almost GL (31-12-'02)"/>										
Starting	when abandoned										
<input type="text" value="No Data"/>	<input type="text" value="No Data"/>										
Draw-down (hearing)	<table border="1"> <tr> <th>Starting</th> <th>when abandoned</th> </tr> <tr> <td><input type="text" value="No Data"/></td> <td><input type="text" value="No Data"/></td> </tr> </table>	Starting	when abandoned	<input type="text" value="No Data"/>	<input type="text" value="No Data"/>	Automatic Stopper Depth	<input type="text" value="Not Installed"/>				
Starting	when abandoned										
<input type="text" value="No Data"/>	<input type="text" value="No Data"/>										
Specific Yield (l/sec/m)	<input type="text" value="No Data"/>	Transmissivity (if available)	<input type="text" value="No Data"/>								

Aquifer

No Data

Name	from (ft)	to (ft)	Artesian	Litho. Code	Aquifer Age	Hydraulic Media	Aquifer Type	Thickness (ft)

Well Completion Date Well Close Date (if abandoned)

Remarks

The reason why it was abandoned is that the well was dropped down by the casing Suitable for monitoring. The sewage is being discharged directly to the ground. The sewage may contaminate the groundwater Therefore, the irreal use of groundwater from this well should be prohibited immediately.

Casing/Screen Condition

Casing Type	<input type="text" value="PVC"/>	Screen Type	<input type="text" value="PVC, Slotted"/>
Screen Perforation Rate (%)	<input type="text" value="No Data"/>		

Screen Set Depth (ft)
No Data

From																			
to																			

Remarks

Pump Condition

Pump Type: No Data Installation Depth: No Data

Manufacturer: No Data Year of Made: No Data

Pump Diameter: No Data Riser Pipe Diameter: No Data

Lift Height in Spec: No Data Lift Height in Working: No Data

Discharge in Spec (lit/sec): No Data Discharge in Working (lit/sec): No Data

RPM: No Data Lift Height to the elevated Tank: Water Tank in the City Center 2km from the (Xunj) Ground

Working Hours per Day: 14 Working Days per Year: 11 months to 11.5 months

Total Daily Discharge (m3/day): No Data (Starting/when abandoned) Total Annual Discharge (m3/year): No Data (Starting/when abandoned)

Remarks: Pump has been removed.

Motor Condition

Manufacturer: No Data Year of Made: No Data

Motor Capacity: No Data Electricity Consump. Per m3: No Data

RPM: No Data Horse Power: No Data

Remarks: Motor has been removed.

Well Inventory Sheet

General

Unit: TMA Well Number: No.8

Area Name: Narrian Coordinate (UTM): Longitude / Latitude

Altitude of Top of Well (AMSL, m): No Data Altitude of Ground Surface (AMSL, m): No Data

Well Completion Date: 1997 Well Status: Working

Total Depth: 288' Diameter of the Top Casing: 10"

Min. Dia. of the Casing: 10" Well Ownership: TMA

Well Owner's Name: TMA Drilled by: ADB

Static Water Level: Flowing (Starting/when abandoned) Dynamic Water Level (hearing): 48' (Starting/when abandoned) / 100' (hearing)

Draw-down (hearing): 48' at 35lit/sec (2800gph) (Starting/when abandoned) Automatic Stopper Depth: Not installed

Specific Yield (lit/sec/m): No Data Transmissivity (if available): No Data

Aquifer

Name	from (ft)	to (ft)	Artesian	Litho. Code	Aquifer Age	Hydraulic Media	Aquifer Type	Thickness (ft)
Gravel	161	164	Artesian	Gr	Q	Porous	Semi-	3
	243	266						23
	286	288						2
		288	Bedrock					

Well Completion Date: 1997 Well Close Date (if abandoned): Working

Remarks: The well is dropping down because of the caving. It is also reported by the field engineer that the groundwater level is still declining, but there is no concrete confidence. This well is also supplying water to the inhabitants (level 2) There is no water supply system in this area (Narrian)

Casing/Screen Condition

Casing Type: Steel Screen Type: Brass, Slotted

Screen Perforation Rate (%): No Data

Screen Set Depth (ft): From 243 to 285 / to 285 to 288

Remarks

Pump Condition

Pump Type	Turbine (Vertical)	Installation Depth	150'								
Manufacturer	ENGG	Year of Made	1993								
Pump Diameter	4"	Riser Pipe Diameter	4"								
Lift Height in Spec	170'	Lift Height in Working	100' (hearing)								
Discharge in Spec (lit/sec)	23 (300gal/min)	Discharge in Working (lit/sec)	8 (3,000gal/h, hearing)								
RPM	1,450	Lift Height to the elevated Tank	Water Tank in the City Center 2km from here (Kunj Ground)								
Working Hours per Day	14	Working Days per Year	11 months to 11.5 months								
Total Daily Discharge (m3/day)	<table border="1"> <tr> <th>Starting</th> <th>Present</th> </tr> <tr> <td>No Data</td> <td>400</td> </tr> </table>	Starting	Present	No Data	400	Total Annual Discharge (m3/year)	<table border="1"> <tr> <th>Starting</th> <th>Present</th> </tr> <tr> <td>No Data</td> <td>134,000</td> </tr> </table>	Starting	Present	No Data	134,000
Starting	Present										
No Data	400										
Starting	Present										
No Data	134,000										

Remarks

Motor Condition

Manufacturer	SIEMENS	Year of Made	1994
Motor Capacity	380V, 43.5A	Electricity Consumption Per m3	
RPM	1,465	Horse Power	30

Remarks

Well Inventory Sheet

General

Unit	Mirpur	Well Number	No.1								
Area Name	Sar Spring	Coordinate (UTM)	<table border="1"> <tr> <th>Longitude</th> <th>Latitude</th> </tr> <tr> <td></td> <td></td> </tr> </table>	Longitude	Latitude						
Longitude	Latitude										
Altitude of Top of Well (AMSL, m)		Altitude of Ground Surface (AMSL, m)									
Well Completion Date	2002	Well Status	Working								
Total Depth	358'	Diameter of the Top Casing	10"								
Min. Dia. of the Casing	10"	Well Ownership	Unit Mirpur								
Well Owner's Name	Unit Mirpur	Drilled by	PHED								
Static Water Level	<table border="1"> <tr> <th>Starting</th> <th>Present</th> </tr> <tr> <td>75'</td> <td>No Data</td> </tr> </table>	Starting	Present	75'	No Data	Dynamic Water Level (hearing)	<table border="1"> <tr> <th>Starting</th> <th>Present</th> </tr> <tr> <td>85'</td> <td>No Data</td> </tr> </table>	Starting	Present	85'	No Data
Starting	Present										
75'	No Data										
Starting	Present										
85'	No Data										
Draw-down (hearing)	<table border="1"> <tr> <th>Starting</th> <th>Present</th> </tr> <tr> <td>10' at 7 lit/sec (3,000gph)</td> <td>No Data</td> </tr> </table>	Starting	Present	10' at 7 lit/sec (3,000gph)	No Data	Automatic Stopper Depth	Not installed				
Starting	Present										
10' at 7 lit/sec (3,000gph)	No Data										
Specific Yield (l/sec/m)	No Data	Transmissivity (if available)	No Data								

Aquifer

Name	from (ft)	to (ft)	Artesian	Litho. Code	Aquifer Age	Hydraulic Media	Aquifer Type	Thickness (ft)
Gravel	80	90	No	Gr	Q	Porous	Unconfined	30
	120	132						12
	154	159						5
	175	185						10
	187	195						8
	200	208						8
	222	230						8
	306	311						5
	317	330						13
	350	358						6

Well Completion Date	2002	Well Close Date (if abandoned)	Working
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Remarks

Casing/Screen Condition

Casing Type	Steel	Screen Type	Brass, Slotted															
Screen Perforation width	1.5mm																	
Screen Set Depth (ft)	<table border="1"> <tr> <th>From</th> <th>122</th> <th>176</th> <th>189</th> <th>201</th> <th>225</th> <th>318</th> <th>351</th> </tr> <tr> <th>to</th> <td>130</td> <td>184</td> <td>193</td> <td>205</td> <td>229</td> <td>326</td> <td>355</td> </tr> </table>	From	122	176	189	201	225	318	351	to	130	184	193	205	229	326	355	
From	122	176	189	201	225	318	351											
to	130	184	193	205	229	326	355											

Remarks

Pump Condition

Pump Type	Submersible	Installation Depth	140'
Manufacturer	MAK Engineering International	Year of Made	2002
Pump Diameter	3"	Riser Pipe Diameter	3"
Lift Height in Spec	580'	LIFT Height in Working	85' (no change, hearing)
Discharge in Spec (lit/sec)	7.8 (8,000galon/h)	Discharge in Working (lit/sec)	7.8 (8,000galon/h)
RPM	No Data HP 30	Lift Height to the elevated Tank	Tank 1.5km apart, height from the well 500'
Working Hours per Day	14	Working Days per Year	11 months to 11.5 months
Total Daily Discharge (m3/day)	Starting 383 Present 383	Total Annual Discharge (m3/year)	Starting 128,000 Present 128,000

Remarks: No Level

Motor Condition

Manufacturer		Year of Made	
Motor Capacity		Electricity Consume Per m3	
RPM		Horse Power	

Remarks: Not applicable

Well Inventory Sheet

General

Unit	Derawanda	Well Number	No.1
Area Name	Derawanda	Coordinate (UTM)	Longitude Latitude
Altitude of Top of Well (AMSL, m)		Altitude of Ground Surface (AMSL)	
Well Completion Date	1984-1985	Well Status	Working
Total Depth	118'	Diameter of the Top Casing	8"
Min. Dia. of the Casing	8"	Well Ownership	Unit Derawanda
Well Owner's Name	Unit Derawanda	Driled by	PHED
Static Water Level	28' <small>Static</small> No Data <small>Present</small>	Dynamic Water Level (hearing)	58' <small>Static</small> No Data <small>Present</small>
Draw-down (hearing)	30' at 4lit/sec (3,000gph) No Data	Automatic Stopper Depth	Not installed
Specific Yield (l/sec/m)	No Data	Transmissivity (if available)	No Data

Aquifer

Name	from (ft)	to (ft)	Artesian	Litho. Code	Aquifer Age	Hydraulic Media	Aquifer Type	Thickness (ft)
Sand	80	85	Under	Gr	Q	Porous	Unconfined	5
Gravel	85	111	Water Table					26
		111	Bedrock					

Well Completion Date: 1984-1985 Well Close Date (if abandoned): Working

Remarks: The serious problems of this well are, "Decrease of the discharge by the groundwater level decline". "The well is sinking by the caving and the well might be abandoned in near future". The distance between wells in this area is too narrow (30m to 50m)

Casing/Screen Condition

Casing Type	PVC	Screen Type	PVC, Slotted
Screen Perforation Size	1mm		
Screen Set Depth (ft)	From 82 to 114		

Remarks:

Pump Condition

Pump Type	Turbine (Vertical)		Installation Depth	90'	
Manufacturer	KSB		Year of Made	1984	
Pump Diameter	4"		Riser Pipe Diameter	4"	
Lift Height in Spec	400'		Lift Height in Working	100' (hearing)	
Discharge in Spec (lit/sec)	6 (5,000galon/h)		Discharge in Working (lit/sec)	2 (1,500gal/h, hearing)	
RPM	2,900		Lift Height to the elevated Tank	Tank apart 1km, lift height is 250' (Dheri Qasian)	
Working Hours per Day	14		Working Days per Year	11 months to 11 5 months	
Total Daily Discharge (m3/day)	Starting	Present	Total Annual Discharge (m3/year)	Starting	Present
	190	100		84,000	34,000
Remarks					

Motor Condition

Manufacturer	SIEMENS	Year of Made	1984
Motor Capacity	380V, 30A	Electricity Comaump Per m3	
RPM	2,940	Horse Power	20
Remarks			

Well Inventory Sheet

General

Unit	Derawanda	Well Number	Rehabilitation		
Area Name	Derawanda	Coordinate (UTM)	Longitude Latitude		
Altitude of Top of Well (AMSL, m)		Altitude of Ground Surface (AMSL)			
Well Completion Date	1995	Well Status	Working		
Total Depth	194'	Diameter of the Top Casing	10"		
Min Dia. of the Casing	10"	Well Ownership	Unit Derawanda		
Well Owner's Name	Unit Derawanda	Drilled by	PHED		
Static Water Level	Starting	Present	Dynamic Water Level (hearing)	Starting	Present
	36'	120' (hearing)		75'	140' (hearing)
Draw-down (hearing)	36' at 8lit/sec (8,000gph) 20' (hearing)		Automatic Stopper Depth	Not Installed	
Specific Yield (l/sec/m)	No Data		Transmissivity (if available)	No Data	

Aquifer

Name	from (ft)	to (ft)	Artesian	Litho. Code	Aquifer Age	Hydraulic Media	Aquifer Type	Thickness (ft)
Gravel	48	58	Under	Gr	Q	Porous	Unconfined	10
Sand	88	88	Water					2
Gravel/Sand	130	140	Table					10
Gravel	140	187						47
		187	Bedrock					

Well Completion Date	1995	Well Close Date (if abandoned)	Working
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Remarks: Decrease of the discharge by the groundwater level decline is the main problem. The well sinking by the caving has not take place so far. The distance between wells in this area is too narrow (30m to 50m).

Casing/Screen Condition

Casing Type	Steel	Screen Type	Brass, Slotted
Screen Perforation Size	No Data		
Screen Set Depth (ft)	From	52	150
	to	58	190
Remarks			

Pump Condition

Pump Type	Turbine (Vertical)	Installation Depth	150'
Manufacturer	KSB	Year of Made	1984

Pump Diameter	4"	Riser Pipe Diameter	4"
Lift Height in Spec	400'	Lift Height in Working	140' (hearing)
Discharge in Spec (lit/sec)	9 (7,000gal/h)	Discharge in Working (lit/sec)	1.3 (1,000gal/h, hearing)
RPM	2,900	Lift Height to the elevated Tank	Tank apart 1km, lift height is 250' (Dheri Qasian)
Working Hours per Day	14	Working Days per Year	11 months to 11.5 months
Total Daily Discharge (m3/day)	Starting 380, Present 84	Total Annual Discharge (m3/year)	Starting 127,000, Present 21,000

Remarks: Pump is old.

Motor Condition

Manufacturer	SIEMENS	Year of Made	1985
Motor Capacity	380V, 42A	Electricity Consump. Per m3	
RPM	2,950	Horse Power	30

Remarks: Motor is also old.

Well Inventory Sheet

General

Unit	Derawanda	Well Number	No.2
Area Name	Derawanda	Coordinate (UTM)	Longitude, Latitude
Altitude of Top of Well (AMSL, m)		Altitude of Ground Surface (AMSL, m)	
Well Completion Date	1985 - 1988	Well Status	Abandoned
Total Depth	162'	Diameter of the Top Casing	8"
Min Dia. of the Casing	8"	Well Ownership	Unit Derawanda
Well Owner's Name	Unit Derawanda	Drilled by	PHED
Static Water Level	23' (Starting), 90? (when abandoned)	Dynamic Water Level (hearing)	43' (Starting), No Data (when abandoned)
Draw-down (hearing)	20' at 5.7lit/sec (4,500gph) (measured by string), No Data	Automatic Stopper Depth	Not Installed
Specific Yield (l/sec/m)	No Data	Transmissivity (if available)	No Data

Aquifer

Name	from (ft)	to (ft)	Artesian	Litho. Code	Aquifer Age	Hydraulic Media	Aquifer Type	Thickness (ft)
Sand	86	166	Under	S	Q	Porous	Unconfined	5
Gravel	180	184	Water Table	Gr				4
		184	Bedrock					

Well Completion Date	1985 - 1988	Well Close Date (if abandoned)	1984
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Remarks: The reason of the abandon is that the PVC pipe was damaged due to the drop-down of the well. The well has been collapsed and not suitable for monitoring.

Casing/Screen Condition

Casing Type	PVC	Screen Type	PVC, Slotted
Screen Perforation Size	1mm		
Screen Set Depth (ft)	From 86 to 78		

Remarks:

Pump Condition

Pump Type	No Data	Installation Depth	No Data
Manufacturer	No Data	Year of Made	No Data
Pump Diameter	No Data	Riser Pipe Diameter	No Data

Lift Height in Spec	No Data	Lift Height in Working	No Data	
Discharge in Spec (lit/sec)	No Data	Discharge in Working (lit/sec)	4.4 (3,500gal/h, hearing)	
RPM	No Data	Lift Height to the elevated Tank	Tank apart 1km, lift height is 250' (Dhen Classen)	
Working Hours per Day	14	Working Days per Year	11 months to 11.5 months	
Total Daily Discharge (m3/day)	Starting	when abandoned	Starting	when abandoned
	No Data	223		No Data

Remarks: Pump has been removed

Motor Condition

Manufacturer	No Data	Year of Made	No Data
Motor Capacity	No Data	Electricity Consume Per m3	
RPM	No Data	Horse Power	No Data

Remarks: Motor has also been removed

Well Inventory Sheet

General

Unit	Derawanda	Well Number	No.3	
Area Name	Usman Abed	Coordinate (UTM)	Longitude Latitude	
Altitude of Top of Well (AMSL, m)		Altitude of Ground Surface (AMSL, m)		
Well Completion Date	1996 - 1997	Well Status	Working	
Total Depth	No Data	Diameter of the Top Casing	8"	
Min. Dia. of the Casing	8"	Well Ownership	Unit Derawanda	
Well Owner's Name	Unit Derawanda	Drilled by	PHED	
Static Water Level	Starting	Present	Starting	Present
	No Data	No Data		No Data
Draw-down (hearing)	Starting	Present	Automatic Stopper Depth	Not installed
	No Data	No Data		
Specific Yield (l/sec/m)	No Data	Transmissivity (if available)	No Data	

Aquifer

No Data

Name	from (ft)	to (ft)	Artesian	Litho Code	Aquifer Age	Hydraulic Media	Aquifer Type	Thickness (ft)

Well Completion Date	1996 - 1997	Well Close Date (if abandoned)	Working
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Remarks: According to the watchman of the well, there is no problem so far. But, the chief of the district complained that the water comes one day per five days and its supplying time is only 2 hours. In the vicinity of the well, there was five wells drilled by Medical college but four wells have been abandoned. In addition to the poor aquifer, the wells are congested in small area and such configuration of the well points further accelerates the decline of the groundwater level.

Casing/Screen Condition

Casing Type	No Data	Screen Type	No Data
Screen Perforation Size	No Data		
Screen Set Depth (ft)	From		
No Data	to		

Remarks:

Pump Condition

Pump Type	Submergible	Installation Depth	150'
Manufacturer	KSB	Year of Made	1996
Pump Diameter	4"	Riser Pipe Diameter	4"
Lift Height in Spec	630'	Lift Height in Working	(Pressure gauge shows 8kg/cm2)
Discharge in Spec (lit/sec)	7.6 (6,000gal/h)	Discharge in Working (lit/sec)	3.8 (3,000gal/h, hearing)

RPM HP Lift Height to the elevated Tank Working Hours per Day Working Days per Year

Total Daily Discharge (m3/day)

Starting	when abandoned
No Data	192

 Total Annual Discharge (m3/year)

Starting	when abandoned
No Data	84,000

Remarks

Motor Condition

Manufacturer Year of Made

Motor Capacity Electricity Consume. Per m3

RPM Horse Power

Remarks

Well Inventory Sheet

General

Unit Well Number

Area Name Coordinate (UTM)

Longitude	Latitude

Altitude of Top of Well (AMSL, m) Altitude of Ground Surface (AMSL, m)

Well Completion Date Well Status

Total Depth Diameter of the Top Casing

Min. Dia. of the Casing Well Ownership

Well Owner's Name Driled by

Static Water Level

Starting	when abandoned
5'	No Data

 (measured by string) Dynamic Water Level

Starting	when abandoned
25'	50' (hearing)

Draw-down (hearing)

Starting	when abandoned
20' at 7.6lit/sec (8,000gph)	No Data

 Automatic Stopper Depth

Specific Yield (l/sec/m) Transmissivity (if available)

Aquifer

Name	from (ft)	to (ft)	Artesian	Litho. Code	Aquifer Age	Hydraulic Media	Aquifer Type	Thickness (ft)
Gravel	125	181	Under	Gr	Q	Porous	Unconfined	6
	186	182	Water					58
	218	245	Table					27
	280	290						30

Well Completion Date Well Close Date (if abandoned)

Remarks

Casing/Screen Condition

Casing Type Screen Type

Screen Perforation Size

Screen Set Depth (ft)

From	142	220	284						
to	182	244	288						

Remarks

Pump Condition

Pump Type Installation Depth

Manufacturer Year of Made

Pump Diameter Riser Pipe Diameter

Lift Height in Spec Lift Height in Working

Discharge in Spec (lit/sec) Discharge in Working (lit/sec)

RPM Lift Height to the elevated Tank

Working Hours per Day Working Days per Year

Total Daily Discharge (m3/day)	Starting	when abandoned	Total Annual Discharge (m3/year)	Starting	when abandoned
	No Data	223 (hearing)		No Data	75000 (hearing)
Remarks	Pump has been removed				

Motor Condition

Manufacturer	No Data	Year of Made	No Data
Motor Capacity	No Data	Electricity Consume. Per m3	
RPM	No Data	Horse Power	No Data
Remarks	Motor has also been removed		

Well Inventory Sheet

General

Unit	Banda Phugwarian	Well Number	No.2
Area Name	Sikandar Abad	Coordinate (UTM)	LONGITUDE Latitude
Altitude of Top of Well (AMSL m)		Altitude of Ground Surface (AMSL)	
Well Completion Date	1983 - 1984	Well Status	Abandoned
Total Depth	279'	Diameter of the Top Casing	10"
Min Dia. of the Casing	8"	Well Ownership	Unit Banda Phugwarian
Well Owner's Name	Unit Banda Phugwarian	Drilled by	PHED
Static Water Level	Starting: Flowing, when abandoned: No Data	Dynamic Water Level (hearing)	Starting: <80', when abandoned: No Data
Draw-down (hearing)	Starting: 60' at 10lit/sec (8,000gph), when abandoned: No Data	Automatic Stopper Depth	Not Installed
Specific Yield (l/sec/m)	No Data	Transmissivity (if available)	No Data

Aquifer

Name	from (ft)	to (ft)	Artesian	Litho Code	Aquifer Age	Hydraulic Media	Aquifer Type	Thickness (ft)
sand	102	120	Artesian	S	Q	Porous	Semi-	18
	136	150					Confined	14
	152	178						26
	217	234						17
	242	255						13
	258	275						17

Well Completion Date	1983 - 1984	Well Close Date (if abandoned)	1989
Remarks	The well was abandoned because of sinking of well Not suitable for monitoring as it has been filled.		

Casing/Screen Condition

Casing Type	Steel	Screen Type	Steel, Slotted
Screen Perforation Size	1mm		
Screen Set Depth (ft)	From 138 to 148	154 to 174	219 to 229
		242 to 252	262 to 272
Remarks			

Pump Condition

Pump Type	Submersible	Installation Depth	100' (hearing)
Manufacturer	No Data	Year of Made	No Data
Pump Diameter	No Data	Riser Pipe Diameter	No Data
Lift Height in Spec.	No Data	Lift Height in Working	No Data
Discharge in Spec (lit/sec)	No Data	Discharge in Working (lit/sec)	10 (8,000gal/h, hearing)
RPM	No Data	Lift Height to the elevated Tank	Tank apart 2km, lift height is 900' (Top of the Hill)
Working Hours per Day	14	Working Days per Year	11 months to 11 5 months
Total Daily Discharge (m3/day)	Starting: No Data, when abandoned: 509 (hearing)	Total Annual Discharge (m3/year)	Starting: No Data, when abandoned: 170,000 (hearing)

Remarks Pump has been removed and reused in well No.2A located just beside of this well

Motor Condition

Manufacturer Year of Made

Motor Capacity Electricity Consump Per m3

RPM Horse Power

Remarks Not applicable

Well Inventory Sheet

General

Unit Banda Phugwarian Well Number No.2A

Area Name Skandar Abad Coordinate (UTM) Longitude Latitude

Altitude of Top of Well (AMSL, m) Altitude of Ground Surface (AMSL, m)

Well Completion Date 1998 Well Status Working

Total Depth 300' Diameter of the Top Casing 10"

Min. Dia. of the Casing 10" Well Ownership Unit Banda Phugwarian

Well Owner's Name Unit Banda Phugwarian Drilled by PHED

Static Water Level Starting Present Dynamic Water Level (hearing) 30' 50'

Draw-down (hearing) 10' at 7.8lt/sec (6,000gph) 10' at 6.3 lt/sec Automatic Stopper Depth Not installed

Specific Yield (l/sec/m) No Data Transmissivity (if available) No Data

Aquifer Same with Well No.2

Name	from (ft)	to (ft)	Artesian	Litho. Code	Aquifer Age	Hydraulic Modn	Aquifer Type	Thickness (ft)

Well Completion Date 1998 Well Close Date (if abandoned) Working

Remarks Problems have not been found so far

Casing/Screen Condition

Casing Type Steel Screen Type Steel, Slotted

Screen Perforation Size 1mm

Screen Set Depth (ft) Same with well No.2 From to

Remarks

Pump Condition

Pump Type Submergible Installation Depth 100' (hearing)

Manufacturer KSB Year of Made 1992

Pump Diameter 4" Riser Pipe Diameter 4"

Lift Height in Spec 900' Lift Height in Working 50' (hearing)

Discharge in Spec (lt/sec) 7.8 (6,000gal/h) Discharge in Working (lt/sec) 6.3 (5,000gal/h, hearing)

RPM 2,900 HP 50 Lift Height to the elevated Tank Tank apart 2km, lift height is 900' (Top of the Hill)

Working Hours per Day 14 Working Days per Year 11 months to 11.5 months

Total Daily Discharge (m3/day) Starting when abandoned Total Annual Discharge (m3/year) Starting when abandoned

362 318 (hearing) 128,000 107,000 (hearing)

Remarks

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Motor Condition

Manufacturer		Year of Made	
Motor Capacity		Electricity Comsump Per m3	
RPM		Horse Power	
Remarks	Not applicable		

Well Inventory Sheet

General

Unit	Salhad	Well Number	No.1
Area Name	Kund	Coordinate (UTM)	Longitude Latitude
Altitude of Top of Well (AMSL, m)		Altitude of Ground Surface (AMSL, m)	
Well Completion Date	1994 - 1995	Well Status	Working
Total Depth	310'	Diameter of the Top Casing	10"
Min Dia. of the Casing	8"	Well Ownership	Unit Salhad
Well Owner's Name	Unit Salhad	Drilled by	PHED
Static Water Level	Starting Present 32' No Data	Dynamic Water Level (hearing)	Starting Present 42' 100' (hearing)
Draw-down (hearing)	Starting Present 10' at 10lit/sec (0.000gph) 10' at 6.3 lit/sec	Automatic Stopper Depth	Not Installed
Specific Yield (l/sec/m)	No Data	Transmissivity (if available)	No Data

Aquifer

Name	from (ft)	to (ft)	Artesian	Litho. Code	Aquifer Age	Hydraulic Media	Aquifer Type	Thickness (ft)
Gravel	18	36	No	Gr	Q	Porous	Unconfined	18
	48	58						10
	148	163						20
	172	178						4
	188	218						28
	245	255						10
	267	278						11
Bedrock	278							

Well Completion Date	1994 - 1995	Well Close Date (if abandoned)	Working
Remarks	Problems have not been found so far. Groundwater level is lower than surface water level in Nulla Qatha by about 6m. Located on the lowest terrace of the valley.		

Casing/Screen Condition

Casing Type	Steel	Screen Type	Steel, Slotted
Screen Perforation Size	1mm		
Screen Set Depth (ft)	From 145 190 246 270		
	to 181 214 254 286		
Remarks			

Pump Condition

Pump Type	Submergible	Installation Depth	120' (hearing)
Manufacturer	KSB	Year of Made	No Data
Pump Diameter	4"	Riser Pipe Diameter	4"
Lift Height in Spec	630'	Lift Height in Working	100' (hearing)
Discharge in Spec. (lit/sec)	6.3 (5,000gal/h)	Discharge in Working (lit/sec)	5 (4,000gal/h, hearing)
RPM	2,900 HP 22	Lift Height to the elevated Tank	Tank apart 1.5km, lift height is 600'
Working Hours per Day	14	Working Days per Year	11 months to 11.5 months
Total Daily Discharge (m3/day)	Starting Present 318 255 (hearing)	Total Annual Discharge (m3/year)	Starting Present 107,000 86,000 (hearing)

Remarks	
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Motor Condition

Manufacturer Year of Made
 Motor Capacity Electricity Consump Per m3
 RPM Horse Power
 Remarks

Well Inventory Sheet

General

Unit Well Number
 Area Name Coordinate (UTM)

Longitude	Latitude

 Altitude of Top of Well (AMSL, m) Altitude of Ground Surface (AMSL, m)
 Well Completion Date Well Status
 Total Depth Diameter of the Top Casing
 Min. Dia. of the Casing Well Ownership
 Well Owner's Name Drilled by
 Static Water Level

Starting	Present
38'	No Data

 Dynamic Water Level (hearing)

Starting	Present
70'	80' (hearing)

 Draw-down (hearing)

Starting	Present
32' at 6.3lit/sec (5,000gph)	No Data

 Automatic Stopper Depth
 Specific Yield (l/sec/m) Transmissivity (if available)

Aquifer

Name	from (ft)	to (ft)	Artesian	Litho. Code	Aquifer Age	Hydraulic Media	Aquifer Type	Thickness (ft)
Gravel	66	67	No	Gr	Q	Porous	Unconfined	1
	78	97						21
	101	120						19
	137	139						2
	142	146						4
	149	157						8
	181	172						11
	174	178						4
	184	193						9
	207	236						29
	241	257						16

Well Completion Date Well Close Date (if abandoned)

Remarks

Casing/Screen Condition

Casing Type Screen Type
 Screen Perforation Size
 Screen Set Depth (ft)

From	87	103	150	166	173	200	240			
to	95	119	155	169	177	235	256			

Remarks

Pump Condition

Pump Type Installation Depth
 Manufacturer Year of Made
 Pump Diameter Riser Pipe Diameter
 Lift Height in Spec. Lift Height in Working
 Discharge in Spec. (lit/sec) Discharge in Working (lit/sec)
 RPM HP Lift Height to the elevated Tank
 Working Hours per Day Working Days per Year
 Total Daily Discharge (m3/day)

Starting	Present
509	318 (hearing)

 Total Annual Discharge (m3/year)

Starting	Present
171,000	107,000 (hearing)

Remarks

Motor Condition

Manufacturer Year of Made
 Motor Capacity Electricity Consump Per m3
 RPM Horse Power
 Remarks

Well Inventory Sheet

General

Unit/Town Well Number
 Area Name Coordinate (UTM)

--	--

 Altitude of Top of Well (AMSL, m) Altitude of Ground Surface (AMSL)
 Well Completion Date Well Status
 Total Depth Diameter of the Top Casing
 Min Dia. of the Casing Well Ownership
 Well Owner's Name Drilled by
 Static Water Level

Starting	Present
27.1m	No Data

 Dynamic Water Level (hearing)

Starting	Present
40.1m	No Data

 Draw-down (hearing)

Starting	Present
13.0m	No Data

 Automatic Stopper Depth
 Specific Yield (l/sec/m) Transmissivity (if available)

Aquifer

Name	from (m)	to (m)	Artesian	Litho Code	Aquifer Age	Hydraulic Media	Aquifer Type	Thickness (m)
Gravel/Boulder	5.5	8.5	No	Gr/Bi	Q	Porous	Unconfined	3
	9.8	29						18.2
	30.5	37.5						7
	64	67						3
	69	75						6
	87	90						3

Well Completion Date Well Close Date (if abandoned)

Remarks

Casing/Screen Condition

Casing Type Screen Type
 Screen Perforation Size
 Screen Set Depth (m)

From	31	64	69	87						
to	37	66.4	74.4	90						

Remarks

Pump Condition

Pump Type Installation Depth
 Manufacturer Year of Made
 Pump Diameter Riser Pipe Diameter
 Lift Height in Spec Lift Height in Working
 Discharge in Spec (lit/sec) Discharge in Working (lit/sec)
 RPM HP Lift Height to the elevated Tank
 Working Hours per Day Working Days per Year
 Total Daily Discharge (m3/day)

Starting	Present
806	655

 Total Annual Discharge (m3/year)

Starting	Present
270,000	220,000

Remarks

Motor Condition

Manufacturer Year of Made
 Motor Capacity Electricity Consump Per m3

Remarks

Well Inventory Sheet

General

Unit/Town <input type="text" value="Town Nawan Shahr"/>	Well Number <input type="text" value="No.3"/>								
Area Name <input type="text" value="Nawan Shahr"/>	Coordinate (UTM) <table border="1" style="width: 100%;"><tr><td style="width: 50%;">Longitude</td><td style="width: 50%;">Latitude</td></tr></table>	Longitude	Latitude						
Longitude	Latitude								
Altitude of Top of Well (AMSL, m) <input type="text"/>	Altitude of Ground Surface (AMSL, m) <input type="text"/>								
Well Completion Date <input type="text" value="1997, August"/>	Well Status <input type="text" value="Working"/>								
Total Depth <input type="text" value="113.5m"/>	Diameter of the Top Casing <input type="text" value="10"/>								
Min. Dia. of the Casing <input type="text" value="10"/>	Well Ownership <input type="text" value="Town Nawan Shahr"/>								
Well Owner's Name <input type="text" value="Town Nawan Shahr"/>	Drilled by <input type="text" value="Kfw"/>								
Static Water Level <table border="1" style="width: 100%;"><tr><td style="width: 50%;">Starting</td><td style="width: 50%;">Present</td></tr><tr><td>No Data</td><td>No Data</td></tr></table>	Starting	Present	No Data	No Data	Dynamic Water Level <table border="1" style="width: 100%;"><tr><td style="width: 50%;">Starting</td><td style="width: 50%;">Present</td></tr><tr><td>No Data</td><td>No Data</td></tr></table>	Starting	Present	No Data	No Data
Starting	Present								
No Data	No Data								
Starting	Present								
No Data	No Data								
Draw-down (hearing) <table border="1" style="width: 100%;"><tr><td style="width: 50%;">Starting</td><td style="width: 50%;">Present</td></tr><tr><td>No Data</td><td>No Data</td></tr></table>	Starting	Present	No Data	No Data	Automatic Stopper Depth <input type="text" value="Not installed"/>				
Starting	Present								
No Data	No Data								
Specific Yield (l/sec/m) <input type="text" value="No Data"/>	Transmissivity (if available) <input type="text" value="No Data"/>								

Aquifer	Name	from (m)	to (m)	Artesian	Litho. Code	Aquifer Age	Hydraulic Media	Aquifer Type	Thickness (m)
No Data									

Well Completion Date Well Close Date (if abandoned)

Remarks

Casing/Screen Condition

Casing Type <input type="text" value="GRP (FRP)"/>	Screen Type <input type="text" value="GRP, Slotted"/>				
Screen Perforation Size <input type="text" value="No Data"/>					
Screen Set Depth (m) <table border="1" style="width: 100%;"><tr><td style="width: 50%;">From</td><td style="width: 50%;">to</td></tr><tr><td>No Data</td><td></td></tr></table>	From	to	No Data		
From	to				
No Data					

Remarks

Pump Condition

Pump Type <input type="text" value="Submergible"/>	Installation Depth <input type="text" value="150' (hearing)"/>								
Manufacturer <input type="text" value="Pakistan Engineering Company (PECC)"/>	Year of Made <input type="text" value="1998"/>								
Pump Diameter <input type="text" value="4"/>	Riser Pipe Diameter <input type="text" value="4"/>								
Lift Height in Spec. <input type="text" value="45.5m"/>	Lift Height in Working <input type="text" value="NO Data"/>								
Discharge in Spec (lit/sec) <input type="text" value="19.5lit/sec"/>	Discharge in Working (lit/sec) <input type="text" value="14.7lit/sec (0.88m3/min) measured by flow meter, 4-1-'03"/>								
RPM <input type="text" value="2,900"/> HP <input type="text" value="16.5"/>	Lift Height to the elevated Tank <input type="text" value="Distance to the tank: 300m, H to Tabic: 20m"/>								
Working Hours per Day <input type="text" value="14"/>	Working Days per Year <input type="text" value="11 months to 11.5 months"/>								
Total Daily Discharge (m3/day) <table border="1" style="width: 100%;"><tr><td style="width: 50%;">Starting</td><td style="width: 50%;">Present</td></tr><tr><td>983</td><td>740</td></tr></table>	Starting	Present	983	740	Total Annual Discharge (m3/year) <table border="1" style="width: 100%;"><tr><td style="width: 50%;">Starting</td><td style="width: 50%;">Present</td></tr><tr><td>330,000</td><td>248,000</td></tr></table>	Starting	Present	330,000	248,000
Starting	Present								
983	740								
Starting	Present								
330,000	248,000								

Remarks

Motor Condition

Manufacturer <input type="text"/>	Year of Made <input type="text"/>
Motor Capacity <input type="text"/>	Electricity Consump Per m3 <input type="text"/>
RPM <input type="text"/>	Horse Power <input type="text"/>

Remarks

Well Inventory Sheet

General

Unit	Jhangl	Well Number	No 1
Area Name	Jhangl	Coordinate (UTM)	Longitude Latitude
Altitude of Top of Well (AMSL, m)		Altitude of Ground Surface (AMSL)	
Well Completion Date	1979	Well Status	Working
Total Depth	No Data	Diameter of the Top Casing	10"
Min. Dia. of the Casing	10"	Well Ownership	Unit Jhangl
Well Owner's Name	Unit Jhangl	Drilled by	PHED
Static Water Level	Starting No Data Present 20' (hearing)	Dynamic Water Level	Starting No Data Present 30' (hearing)
Draw-down	Starting No Data Present 10' at 12.8 lit/sec (hearing)	Automatic Stopper Depth	Not installed
Specific Yield (l/sec/m)	No Data	Transmissivity (if available)	No Data

Aquifer
No Data

Name	from (ft)	to (ft)	Artesian	Litho. Code	Aquifer Age	Hydraulic Media	Aquifer Type	Thickness (ft)

Well Completion Date: 1979 Well Close Date (if abandoned): Working

Remarks: Old well, but well functioning because of the good aquifer. Water level of both of static and dynamic can be measured.

Casing/Screen Condition

Casing Type: PVC Screen Type: PVC, Slotted

Screen Perforation Size: No Data

Screen Set Depth (ft):
No Data

From														
to														

Remarks:

Pump Condition

Pump Type	Submersible	Installation Depth	120' (hearing)
Manufacturer	No Data, Donated by UNICEF	Year of Made	1974
Pump Diameter	4"	Riser Pipe Diameter	4"
Lift Height in Spec	500'	Lift Height in Working	30' (hearing)
Discharge in Spec. (lit/sec)	12.8 (10,000gal/h)	Discharge in Working (lit/sec)	12.8 (10,000gal/h, hearing)
RPM	2,900 HP 50	Lift Height to the elevated Tank	Tank apart 1.2km, lift height is 400' Pressure gauge shows 330 psi
Working Hours per Day	14	Working Days per Year	11 months to 11 5 months
Total Daily Discharge (m3/day)	Starting 838 Present 838 (hearing)	Total Annual Discharge (m3/year)	Starting 213,000 Present 213,000 (hearing)

Remarks: No plate, donated by UNICEF

Motor Condition

Manufacturer		Year of Made	
Motor Capacity		Electricity Consump Per m3	
RPM		Horse Power	

Remarks: Not applicable

Well Inventory Sheet

General

Unit	Jhangt	Well Number	No.2
Area Name	Jhangt	Coordinate (UTM)	Longitude Latitude
Altitude of Top of Well (AMSL, m)		Altitude of Ground Surface (AMSL, m)	
Well Completion Date	1991 - 1992	Well Status	Working
Total Depth	No Data	Diameter of the Top Casing	10"
Min Dia. of the Casing	10"	Well Ownership	Unit Jhangt
Well Owner's Name	Unit Jhangt	Drilled by	PHED
Static Water Level	Starting: 20' Present: No Data	Dynamic Water Level	Starting: 55' Present: No Data
Draw-down	Starting: 35' at 7.2lit/sec Present: No Data	Automatic Stopper Depth	Not installed
Specific Yield (l/sec/m)	No Data	Transmissivity (if available)	No Data

Aquifer	Name	from (ft)	to (ft)	Artesian	Litho Code	Aquifer Age	Hydraulic Media	Aquifer Type	Thickness (ft)
	Gravel with Cla	0	42	No	Gr	Q	Porous	Unconfined	42
	Fine Gravel	42	67						25
	Gravel with Clay	67	90						23
	Fine Gravel	90	100						10
	Fine Gravel	155	156						1

Well Completion Date	1992	Well Close Date (if abandoned)	Working
Remarks	Well is functioning very well because of the good aquifer		

Casing/Screen Condition

Casing Type	Steel	Screen Type	Brass, Slotted
Screen Perforation Size	No Data		
Screen Set Depth (ft)	From: 50 to: 66	91 to: 99	155 to: 165
Remarks			

Pump Condition

Pump Type	Turbine (Vertical)	Installation Depth	85' (hearing)
Manufacturer	KSB	Year of Made	1983
Pump Diameter	4"	Riser Pipe Diameter	4"
Lift Height in Spec.	950'	Lift Height in Working	No Data
Discharge in Spec (lit/sec)	7.8 (5,000gal/h)	Discharge in Working (lit/sec)	6.3 (5,000gal/h, hearing)
RPM	2,900 HP 40	Lift Height to the elevated Tank	Tank apart 1.6km, lift height is 850'
Working Hours per Day	14	Working Days per Year	11 months to 11.5 months
Total Daily Discharge (m3/day)	Starting: 362 Present: 318 (hearing)	Total Annual Discharge (m3/year)	Starting: 128,000 Present: 107,000 (hearing)
Remarks	No data plate		

Motor Condition

Manufacturer	Siemens	Year of Made	1989
Motor Capacity	380V, 57A	Electricity Consump Per m3	
RPM	2950	Horse Power	40
Remarks			

Unit	Banda Dilazak	Well Number	No 1 (only one well)
Area Name	Banda Dilazak	Coordinate (UTM)	Longitude Latitude
Altitude of Top of Well (AMSL, m)		Altitude of Ground Surface (AMSL, m)	
Well Completion Date	1987 - 1988	Well Status	Working
Total Depth	No Data	Diameter of the Top Casing	10"
Min. Dia. of the Casing	8"	Well Ownership	Unit Banda Dilazak
Well Owner's Name	Unit Banda Dilazak	Drilled by	PHED
Static Water Level	Starting 50' Present 60' (hearing)	Dynamic Water Level	Starting 57' Present 80' (hearing)
Draw-down	Starting 7' at 5.7lit/sec (4500gph) Present 20' (hearing)	Automatic Stopper Depth	Not Installed
Specific Yield (l/sec/m)	No Data	Transmissivity (if available)	No Data

Aquifer	Name	from (ft)	to (ft)	Artesian	Litho. Code	Aquifer Age	Hydraulic Media	Aquifer Type	Thickness (ft)
	Gravel with Cla	0	28	No	Gr, S	Q	Porous	Unconfined	28
	Sand & Gravel	66	70						4
	Sand & Gravel	78	92						14
	Gravel with Cla	92	102						10
	Sand & Gravel	102	113						11
	Sand & Gravel	151	182						11
	Sand & Gravel	227	256						29
	Bedrock	258							

Well Completion Date	1988	Well Close Date (if abandoned)	Working
Remarks	The problem of this well is severe groundwater level decline which causes decrease of the discharge But no concrete confidence No sinking of well		

Casing/Screen Condition	
Casing Type	Steel
Screen Perforation Size	2mm
Screen Set Depth (ft)	From 82 to 90, 104 to 112, 149 to 161, 230 to 254
Screen Type	Brass, Slotted
Remarks	

Pump Condition	
Pump Type	Submersible
Manufacturer	KSB
Pump Diameter	3"
Lift Height in Spec	620'
Discharge in Spec (lit/sec)	7.8 (6,000gal/h)
RPM	2,900 HP 27.22
Working Hours per Day	14
Total Daily Discharge (m3/day)	Starting 382 Present 191 (hearing)
Remarks	Pump is old
Installation Depth	128' (hearing)
Year of Made	1988
Riser Pipe Diameter	3"
Lift Height in Working	80' (hearing)
Discharge in Working (lit/sec)	3.8 (3,000gal/h, hearing)
Lift Height to the elevated Tank	Tank apart 2km, lift height is 500'
Working Days per Year	Pressure gauge shows 330 psi. 11 months to 11.5 months
Total Annual Discharge (m3/year)	Starting 128,000 Present 64,000 (hearing)

Motor Condition	
Manufacturer	
Motor Capacity	
RPM	
Remarks	Not applicable
Year of Made	
Electricty Consump Par m3	
Horse Power	

Well Inventory Sheet

General

Unit	Banda Ghazan	Well Number	No.1 (only one well)
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Area Name: **Dobather Banda Amlok** Coordinate (UTM):

Altitude of Top of Well (AMSL, m): Altitude of Ground Surface (AMSL, m):

Well Completion Date: **1985 - 1986** Well Status: **Working**

Total Depth: **348'** Diameter of the Top Casing: **10"**

Min. Dia. of the Casing: **8"** Well Ownership: **Unit Dobather Banda Amlok**

Well Owner's Name: **Unit Dobather Banda Amlok** Drilled by: **PHED**

Static Water Level:

Starting	Present
19'	80' (hearing)

 Dynamic Water Level:

Starting	Present
28'	80' (hearing)

Draw-down:

Starting	Present
10' at 7 lit/sec (6,000gph)	20' (hearing)

 Automatic Stopper Depth: **Not installed**

Specific Yield (l/sec/m): **No Data** Transmissivity (if available): **No Data**

Aquifer

Name	from (ft)	to (ft)	Artesian	Litho. Code	Aquifer Age	Hydraulic Media	Aquifer Type	Thickness (ft)
Sand	35	45	No	S, Gr	Q	Porous	Unconfined	10
Sand	55	66						11
Sand	88	96						8
Gravel	208	220						12
Sand	228	238						10
Gravel	282	294						12
Sand	302	319						17
Sand	327	338						11

Well Completion Date: **1988** Well Close Date (if abandoned): **Working**

Remarks: **The problem of this well is severe groundwater level decline which causes decrease of the discharge. But no concrete confidence. No sinking of well.**

Casing/Screen Condition

Casing Type: **Steel** Screen Type: **Brass, Slotted**

Screen Perforation Size: **3/32"**

Screen Set Depth (ft):

From	89	209	228	282	302	329				
to	95	217	236	292	319	337				

Remarks: **Groundwater level of both of static and dynamic can be observed**

Pump Condition

Pump Type: **Submergible** Installation Depth: **110' (hearing)**

Manufacturer: **KSB** Year of Made: **1986**

Pump Diameter: **4"** Riser Pipe Diameter: **4"**

Lift Height in Spec: **1,000'** Lift Height in Working: **80' (hearing)**

Discharge in Spec (lit/sec): **9.5 (7,500gal/h)** Discharge in Working (lit/sec): **6.3 (5,000gal/h, hearing)**

RPM: **2,900** HP: **60** Lift Height to the elevated Tank: **Tank apart 2.3km, lift height is 900' (Top of Hill)**

Working Hours per Day: **14** Working Days per Year: **11 months to 11.5 months**

Total Daily Discharge (m3/day):

Starting	Present
477	318 (hearing)

 Total Annual Discharge (m3/year):

Starting	Present
160,000	107,000 (hearing)

Remarks: **Pump is old**

Motor Condition

Manufacturer: Year of Made:

Motor Capacity: Electricity Consump Per m3:

RPM: Horse Power:

Remarks: **Not applicable**

Well Inventory Sheet

General

Unit: **Sheikhul Bandi** Well Number: **No 1**

Area Name: **Narian** Coordinate (UTM):

Longitude	Latitude
<input type="text"/>	<input type="text"/>

Well Completion Date	1985 - 1988	Well Status	Working								
Total Depth	300'	Diameter of the Top Casing	10"								
Min Dia. of the Casing	8"	Well Ownership	Unit Sheikhu Bandi								
Well Owner's Name	Unit Sheikhu Bandi	Drilled by	PHED								
Static Water Level	<table border="1"> <tr> <td>Starting</td> <td>Present</td> </tr> <tr> <td>Flowing</td> <td>10' (hearing)</td> </tr> </table>	Starting	Present	Flowing	10' (hearing)	Dynamic Water Level	<table border="1"> <tr> <td>Starting</td> <td>Present</td> </tr> <tr> <td><3'</td> <td>60' (hearing)</td> </tr> </table>	Starting	Present	<3'	60' (hearing)
Starting	Present										
Flowing	10' (hearing)										
Starting	Present										
<3'	60' (hearing)										
Draw-down	<table border="1"> <tr> <td>Starting</td> <td>Present</td> </tr> <tr> <td>3' at 7.6lit/sec (8,000gph)</td> <td>50' at 3.8lit/sec (3,000gph, hearing)</td> </tr> </table>	Starting	Present	3' at 7.6lit/sec (8,000gph)	50' at 3.8lit/sec (3,000gph, hearing)	Automatic Stopper Depth	Not Installed				
Starting	Present										
3' at 7.6lit/sec (8,000gph)	50' at 3.8lit/sec (3,000gph, hearing)										
Specific Yield (l/sec/m)	No Data	Transmissivity (if available)	No Data								

Aquifer	Name	from (ft)	to (ft)	Artesian	Litho Code	Aquifer Age	Hydraulic Media	Aquifer Type	Thickness (ft)
No Data									

Well Completion Date	1985	Well Close Date (if abandoned)	Working
Remarks	The well itself has no big problem, but many illegal connections are found in the rising man. Therefore, the working days per year has been reduced. The water level of both of static and dynamic can be measured.		

Casing/Screen Condition	
Casing Type	PVC
Screen Type	PVC, Slotted
Screen Perforation Size	No Data
Screen Set Depth (ft)	From
No Data	to
Remarks	

Pump Condition					
Pump Type	Submersible				
Installation Depth	No Data				
Manufacturer	KSB				
Year of Made	1988 (changed)				
Pump Diameter	4"				
Riser Pipe Diameter	4"				
Lift Height in Spec	540'				
Lift Height in Working	60' (hearing)				
Discharge in Spec (lit/sec)	14 (11,000gph)				
Discharge in Working (lit/sec)	3.8 (3,000gph, hearing)				
RPM	2,900 HP 40				
Lift Height to the elevated Tank	Tank apart 2km, lift height is 450'				
Working Hours per Day	14				
Working Days per Year	9months				
Total Daily Discharge (m3/day)	<table border="1"> <tr> <td>Starting</td> <td>Present</td> </tr> <tr> <td>509 (8,000gph)</td> <td>181 (hearing)</td> </tr> </table>	Starting	Present	509 (8,000gph)	181 (hearing)
Starting	Present				
509 (8,000gph)	181 (hearing)				
Total Annual Discharge (m3/year)	<table border="1"> <tr> <td>Starting</td> <td>Present</td> </tr> <tr> <td>140,000</td> <td>52,000 (hearing)</td> </tr> </table>	Starting	Present	140,000	52,000 (hearing)
Starting	Present				
140,000	52,000 (hearing)				
Remarks	Pump is old				

Motor Condition	
Manufacturer	
Year of Made	
Motor Capacity	
Electricity Gomsup Per m3	
RPM	
Horse Power	
Remarks	Not applicable

Well Inventory Sheet

General

Unit	Sheikhu Bandi	Well Number	No.3
Area Name	Sheikhu Bandi	Coordinate (UTM)	Longitude Latitude
Altitude of Top of Well (AMSL, m)		Altitude of Ground Surface (AMSL, m)	
Well Completion Date	1985, May	Well Status	Working

Total Depth Diameter of the Top Casing

Min. Dia. of the Casing Well Ownership

Well Owner's Name Drilled by

Static Water Level

Starting	Present
8'	No Data

 Dynamic Water Level

Starting	Present
40'	No Data

Draw-down

Starting	Present
32' at 10RT/sec (8,000gph)	No Data

 Automatic Stopper Depth

Specific Yield (l/sec/m) Transmissivity (if available)

Aquifer

Name	from (ft)	to (ft)	Artesian	Litho Code	Aquifer Age	Hydraulic Media	Aquifer Type	Thickness (ft)
Gravel	29	39	No	Gr, s	Q	Porous	unconfined	10
Gravel	41	52						11
Sand/Gravel	65	88						3
Gravel	105	118						13
Gravel	159	175						16
Gravel	228	237						11
Fine Gravel	303	311						8
Fine Gravel	333	342						7

Well Completion Date Well Close Date (if abandoned)

Remarks

Casing/Screen Condition

Casing Type Screen Type

Screen Perforation Size

Screen Set Depth (ft)

From	47	108	181	203	227	305	333.5			
to	51	117	173	204	235	309	431.5			

Remarks

Pump Condition

Pump Type Installation Depth

Manufacturer Year of Made

Pump Diameter Riser Pipe Diameter

Lift Height in Spec Lift Height in Working

Discharge in Spec. (lit/sec) Discharge in Working (lit/sec)

RPM BHP Lift Height to the elevated Tank

Working Hours per Day Working Days per Year

Total Daily Discharge (m³/day)

Starting	Present
509 (8,000gph)	509 (hearing) (8,000gph)

 Total Annual Discharge (m³/year)

Starting	Present
140,000	140,000 (hearing)

Remarks

Motor Condition

Manufacturer Year of Made

Motor Capacity Electricity Consump Per m³

RPM Horse Power

Remarks

Well Inventory Sheet

General

Unit Well Number

Area Name Coordinate (UTM)

Longitude	Latitude

Altitude of Top of Well (AMSL, m) Altitude of Ground Surface (AMSL, m)

Well Completion Date Well Status

Total Depth Diameter of the Top Casing

Min. Dia. of the Casing	10"	Well Ownership	Unit Sheikhu Bandi								
Well Owner's Name	Unit Sheikhu Bandi	Drilled by	PHED								
Static Water Level	<table border="1"> <tr><td>Starting</td><td>Present</td></tr> <tr><td>10"</td><td>35" (hearing)</td></tr> </table>	Starting	Present	10"	35" (hearing)	Dynamic Water Level	<table border="1"> <tr><td>Starting</td><td>Present</td></tr> <tr><td>40"</td><td>65" (hearing)</td></tr> </table>	Starting	Present	40"	65" (hearing)
Starting	Present										
10"	35" (hearing)										
Starting	Present										
40"	65" (hearing)										
Draw-down	<table border="1"> <tr><td>Starting</td><td>Present</td></tr> <tr><td>30" at 10lit/sec</td><td>30" (hearing)</td></tr> </table>	Starting	Present	30" at 10lit/sec	30" (hearing)	Automatic Stopper Depth	Not Installed				
Starting	Present										
30" at 10lit/sec	30" (hearing)										
Specific Yield (l/sec/m)	8,000gph No Data	Transmissivity (if available)	No Data								

Name	from (ft)	to (ft)	Artesian	Litho Code	Aquifer Age	Hydraulic Media	Aquifer Type	Thickness (ft)
Gravel	27	42	No	Gr	Q	Porous	unconfined	15
Gravel	102	118						14
Gravel	122	127						5
Gravel with Cla	190	197						7
Gravel	197	221						24
Bedrock	221							

Well Completion Date	1995	Well Close Date (if abandoned)	Working
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Remarks: No problem so far Under the good condition.

Casing/Screen Condition

Casing Type	Steel	Screen Type	Brass, Slotted										
Screen Perforation Size	1mm												
Screen Set Depth (ft)	<table border="1"> <tr><td>From</td><td>37</td><td>103</td><td>122.5</td><td>198</td></tr> <tr><td>to</td><td>41</td><td>115</td><td>126.5</td><td>218</td></tr> </table>	From	37	103	122.5	198	to	41	115	126.5	218		
From	37	103	122.5	198									
to	41	115	126.5	218									

Remarks:

Pump Condition

Pump Type	Submergible	Installation Depth	110" (hearing)								
Manufacturer	KSB	Year of Made	No Data								
Pump Diameter	3"	Riser Pipe Diameter	3"								
Lift Height in Spec	300'	Lift Height in Working	65" (hearing)								
Discharge in Spec. (lit/sec)	10 (8,000gph)	Discharge in Working (lit/sec)	9 (7,000gph, hearing)								
RPM	2,900 BHP 18.04	Lift Height to the elevated Tank	Tank apart 2km, lift height is 250' (Pressure gauge shows 4.2kg/cm2)								
Working Hours per Day	14	Working Days per Year	11 months - 11.5 months								
Total Daily Discharge (m3/day)	<table border="1"> <tr><td>Starting</td><td>Present</td></tr> <tr><td>509 (8,000gph)</td><td>446 (hearing) (7,000gph)</td></tr> </table>	Starting	Present	509 (8,000gph)	446 (hearing) (7,000gph)	Total Annual Discharge (m3/year)	<table border="1"> <tr><td>Starting</td><td>Present</td></tr> <tr><td>170,000</td><td>150,000 (hearing)</td></tr> </table>	Starting	Present	170,000	150,000 (hearing)
Starting	Present										
509 (8,000gph)	446 (hearing) (7,000gph)										
Starting	Present										
170,000	150,000 (hearing)										

Remarks: Discharge has not been reduced too much

Motor Condition

Manufacturer		Year of Made	
Motor Capacity		Electricity Consump Per m3	
RPM		Horse Power	

Remarks: Not applicable

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