

THE JANAKPUR ZONE AGRICULTURE DEVELOPMENT PROJECT  
IN  
THE KINGDOM OF NEPAL

THE DETAILED DESIGN  
FOR  
IRRIGATED MODEL FARM SCHEME,  
SHALLOW TUBE-WELL PROGRAMME

DESIGN DRAWINGS

DECEMBER 1980

JAPAN INTERNATIONAL COOPERATION AGENCY

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# IRRIGATED MODEL FARM SCHEME

## SHALLOW TUBE - WELL PROGRAMME

### LIST OF DRAWINGS

PLATE NO.	DRAWING NO.	TITLE
1	100-01	LOCATION MAP
		GENERAL LAYOUT
2	200-01	GENERAL LAYOUT OF ISWARPUR AREA
3	200-02	GENERAL LAYOUT OF GOSHALA AREA
4	200-03	GENERAL LAYOUT OF SAPHY AREA
5	200-04	GENERAL LAYOUT OF SAKHUWA AREA
6	200-05	GENERAL LAYOUT OF IAP (NO.5 BLOCK) AREA
		PUMP HOUSES & BAFFLE TANKS
7	300-01	LAYOUT OF PUMP HOUSE & BAFFLE TANK OF ISWARPUR AREA
8	300-02	LAYOUT OF PUMP HOUSE & BAFFLE TANK OF GOSHALA AREA
9	300-03	LAYOUT OF PUMP HOUSE & BAFFLE TANK OF SAPHY AREA
10	300-04	LAYOUT OF PUMP HOUSE & BAFFLE TANK OF SAKHUWA AREA
11	300-05	LAYOUT OF PUMP HOUSE & BAFFLE TANK OF IAP AREA
12	300-06	PUMP HOUSES
		IRRIGATION CANALS & FARM ROADS
13	400-01	PROFILES OF MAIN CANALS FOR ISWARPUR, GOSHALA, SAPHY AND SAKHUWA AREAS
14	400-02	PROFILES OF MAIN CANALS (5-1, 5-2) FOR IAP AREA
15	400-03	PROFILES OF MAIN CANAL (5-3) FOR IAP AREA & LIST OF BRANCH CANALS
16	400-04	TYPICAL CANAL SECTIONS
		RELATED STRUCTURES
17	500-01	ANGLE BOX STRUCTURES
18	500-02	DROP AND TURNOUT STRUCTURES
19	500-03	SYPHON STRUCTURE OF SAKHUWA AREA
20	500-04	CULVERT STRUCTURE OF IAP AREA
21	500-05	OUTLET STRUCTURES
22	500-06	DIMENSION TABLE OF OUTLET STRUCTURES
23	500-07	NO.7 AND NO.8 OUTLET STRUCTURES OF SAKHUWA AREA
		LAND IMPROVEMENT OF SAKHUWA AREA
24	600-01	EARTH WORK SCHEDULE FOR LAND IMPROVEMENT OF SAKHUWA AREA
25	600-02	PROFILES OF IMPROVED LAND AND FARM ROAD FOR SAKHUWA AREA
		PUMPS, ENGINES & OTHERS
26	700-01	PUMPS, ENGINES AND OTHERS FOR ISWARPUR, GOSHALA, SAPHY AND SAKHUWA AREAS (1/2)
27	700-02	PUMPS, ENGINES AND OTHERS FOR ISWARPUR, GOSHALA, SAPHY AND SAKHUWA AREAS (2/2)
28	700-03	PUMP, ENGINE AND OTHERS FOR IAP AREA (1/2)
29	700-04	PUMP, ENGINE AND OTHERS FOR IAP AREA (2/2)
30	800-01	CONSTRUCTION TIME SCHEDULE

#### Notes.

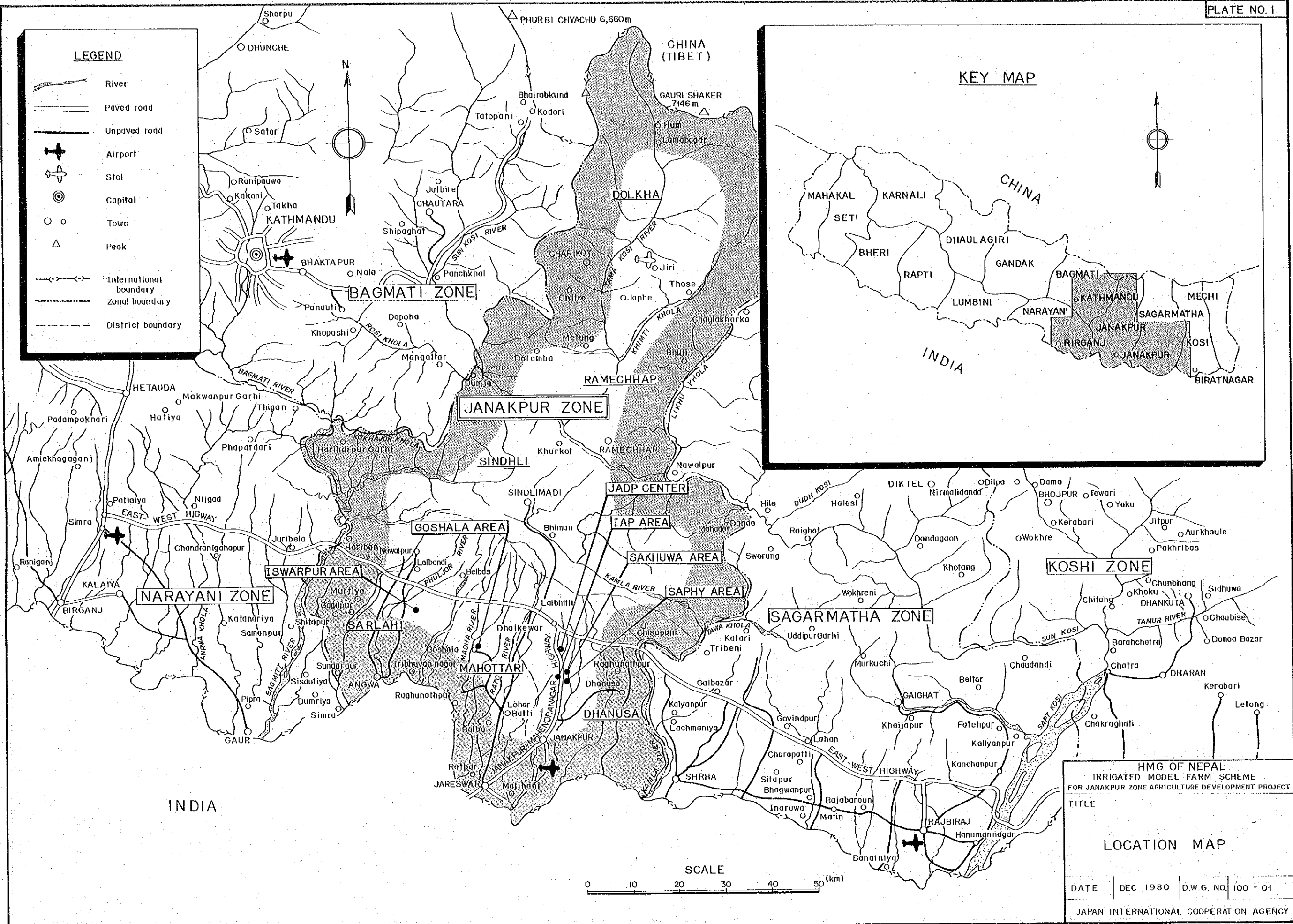
1. Land improvement work (except for construction of farm ridges) and installation of pumps, engines and pipes etc. are not included in this Contract.

2. Drawings for these works are attached only to show whole works of the Scheme.

**LEGEND**

- River
- Paved road
- Unpaved road
- Airport
- Stol
- Capital
- Town
- Peak
- International boundary
- Zonal boundary
- District boundary

**KEY MAP**



HMG OF NEPAL  
IRRIGATED MODEL FARM SCHEME  
FOR JANAKPUR ZONE AGRICULTURE DEVELOPMENT PROJECT

TITLE

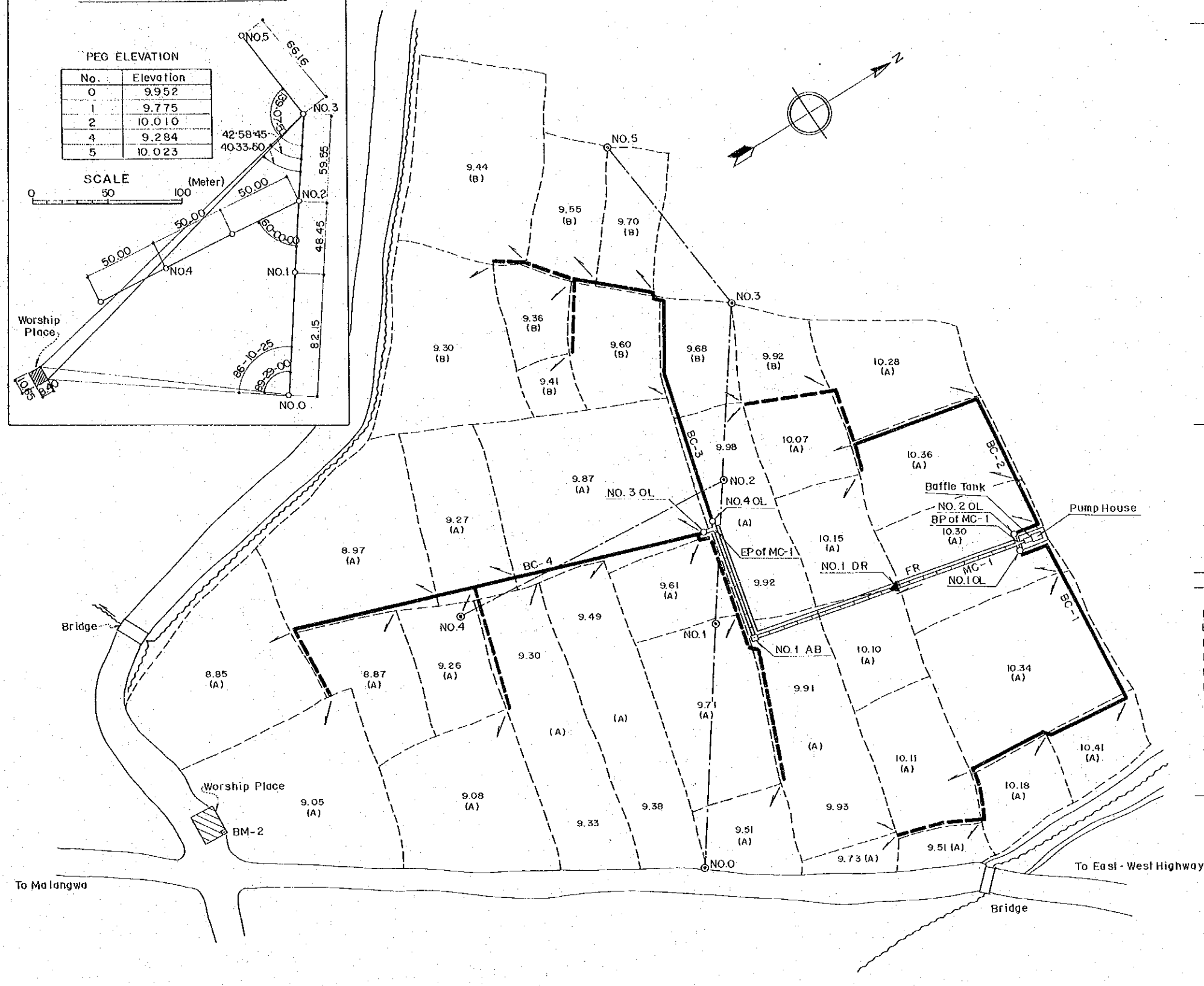
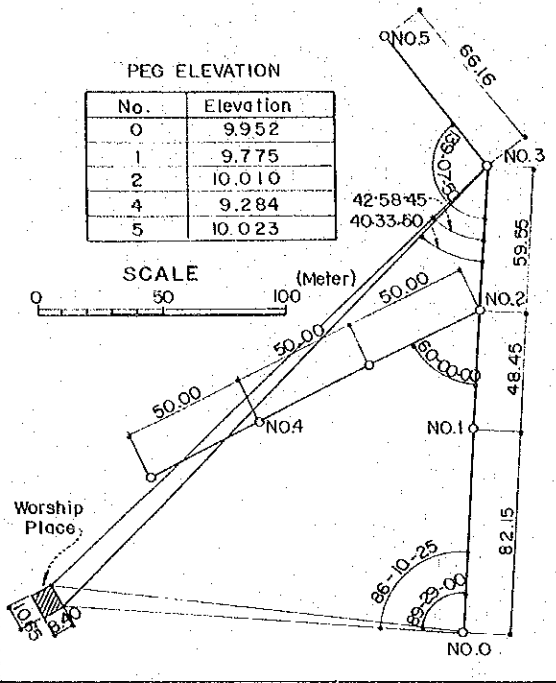
**LOCATION MAP**

DATE | DEC 1980 | D.W.G. NO. | 100 - 01

JAPAN INTERNATIONAL COOPERATION AGENCY

BASIC SURVEY SKELETON

No.	Elevation
0	9.952
1	9.775
2	10.010
4	9.284
5	10.023

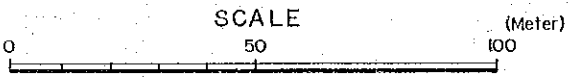


- I. Gross Area 5.6 ha.
- II. Landholders
  - (A) Jaineel Haque
  - (B) Mohammad Tauqir Mikrani
- III. Principal Features of the Work
  - 1. Canals & Farm Roads
    - (a) Main Canal MC-1 135 m
    - (b) Branch Canal
      - BC-1 120 m
      - BC-2 100 m
      - BC-3 110 m
      - BC-4 140 m
      - Total (BC) 470 m
  - 2. Related Structures
    - (a) Pump house 1 No.
    - (b) Baffle tank 1 No.
    - (c) Outlet Structure 4 Nos.
    - (d) Angle Box Structure 1 No.
    - (e) Drop Structure 1 No.

LEGEND

Item	Abbreviation	Mark
Bench Mark	BM	□
Beginning Point	BP	-
Ending Point	EP	-
Main Canal	MC	—
Branch Canal	BC	—
Form Channel to be constructed by farmers	-	—
Farm Road	FR	—
Drop Structure	DR	—
Outlet Structure	OL	—
Angle Box Structure	AB	—

NOTES 1. Elevation of BM-2 is arbitrarily employed as 10.000 meters.  
 2. The metric system is applied in both length and elevation.  
 3. Topographic map was prepared in September, 1980 by JICA.



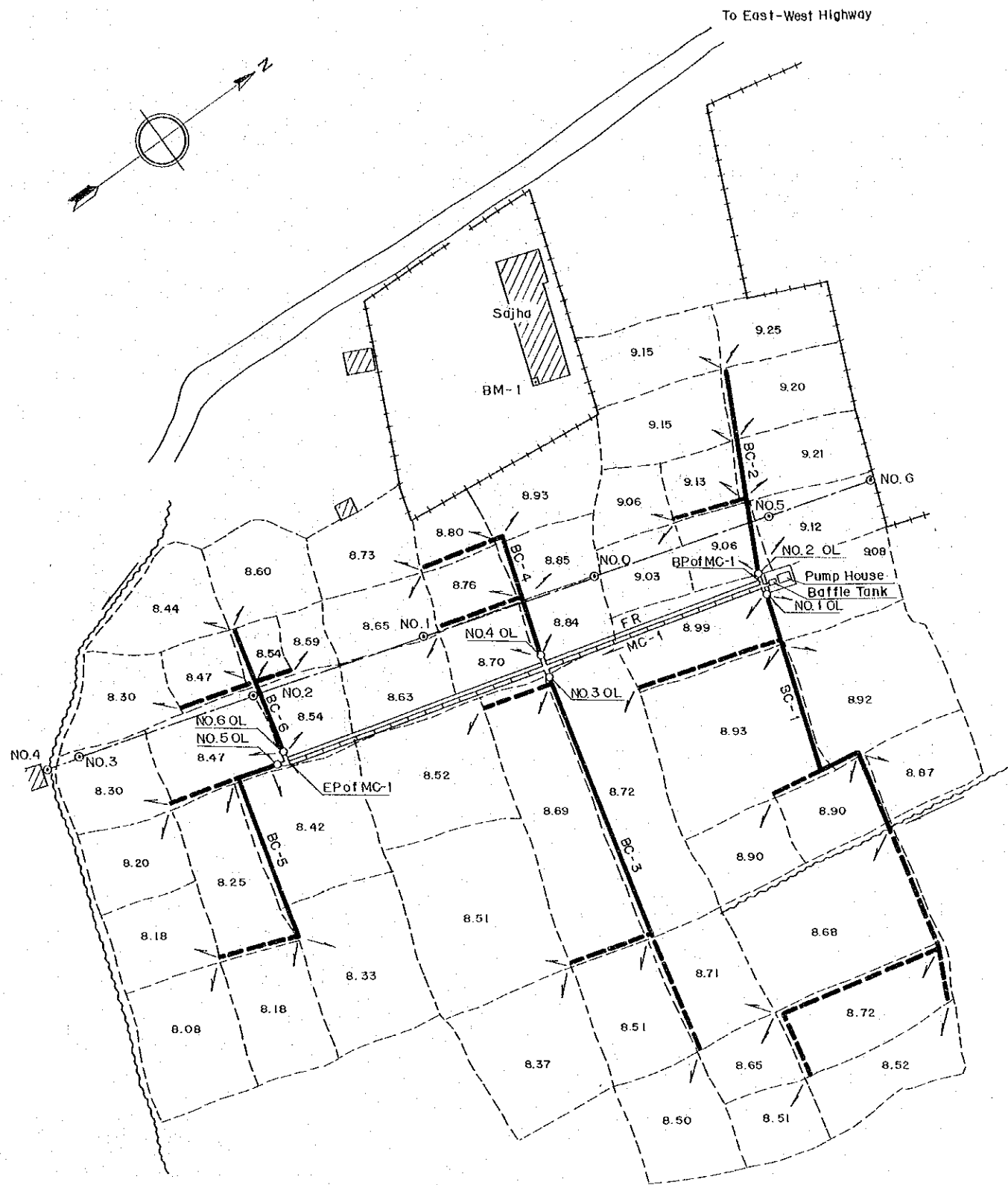
HMG OF NEPAL  
 IRRIGATED MODEL FARM SCHEME  
 FOR JANAKPUR ZONE AGRICULTURE DEVELOPMENT PROJECT

TITLE

**GENERAL LAYOUT OF ISWARPUR AREA**

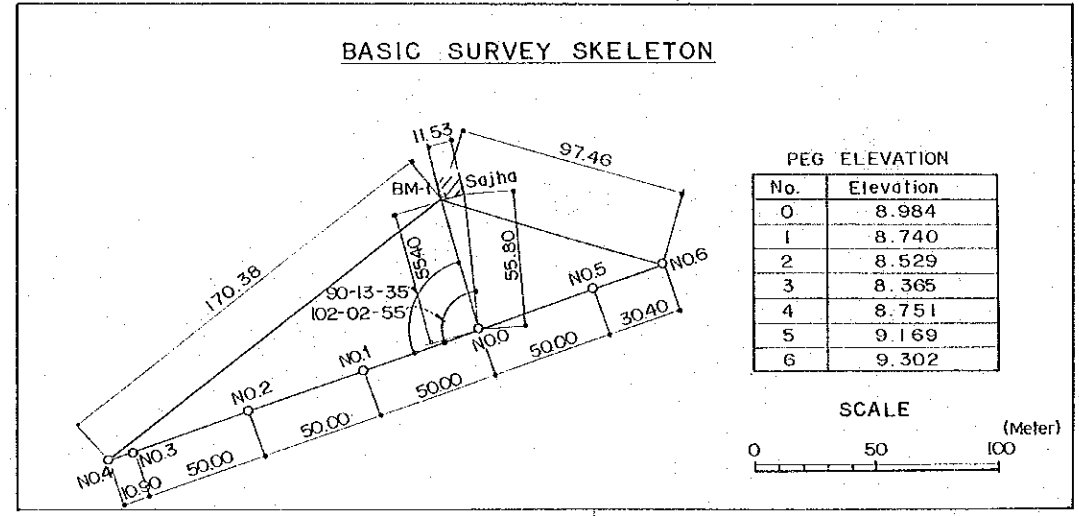
DATE	DEC. 1980	D.W.G. NO.	200-01
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JAPAN INTERNATIONAL COOPERATION AGENCY

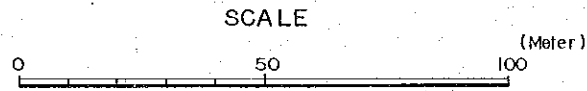


I. Gross Area	4.1 ha
II. Landholder	Mukund Prasad
III. Principal Features of the Work	
1. Canals & Farm Roads	
(a) Main Canal	142 m
MC - 1	
(b) Branch Canals	
BC - 1	90 m
BC - 2	60 m
BC - 3	80 m
BC - 4	40 m
BC - 5	60 m
BC - 6	40 m
Total (BC)	370 m
2. Related Structures	
(a) Pump house	1 No.
(b) Baffle tank	1 No.
(c) Outlet structure	6 Nos.

LEGEND		
Item	Abbreviation	Mark
Bench Mark	BM	⊕
Beginning Point	BP	—
Ending Point	EP	—
Main Canal	MC	———
Branch Canal	BC	———
Farm Channel to be constructed by farmers	—	———
Farm Road	FR	———
Outlet Structure	OL	⊕



NOTES. 1. Elevation of BM-1 is arbitrarily employed as 10.000 meters.  
2. The metric system is applied in both length and elevation.  
3. Topographic map was prepared in September, 1980 by JICA.



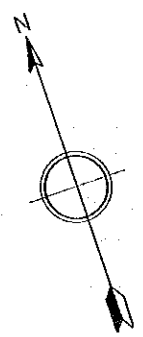
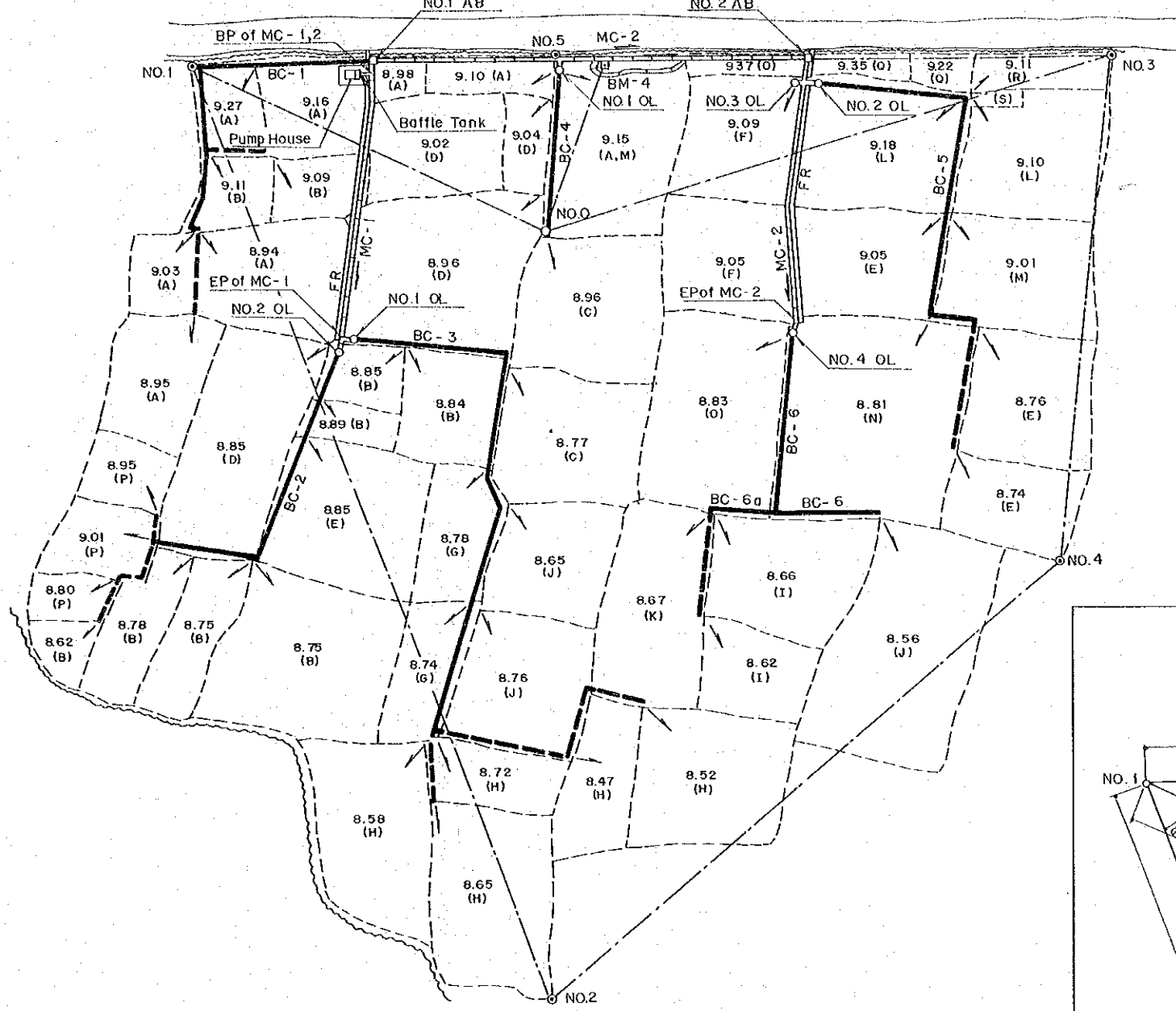
HMG OF NEPAL  
IRRIGATED MODEL FARM SCHEME  
FOR JANKPUR ZONE AGRICULTURE DEVELOPMENT PROJECT

TITLE  
**GENERAL LAYOUT OF GOSHALA AREA**

DATE	DEC. 1980	DWG. NO.	200-02
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JAPAN INTERNATIONAL COOPERATION AGENCY

To Janakpur - Mahendranagar Highway NO.1 AB NO.2 AB To Hardinath Agri. Farm

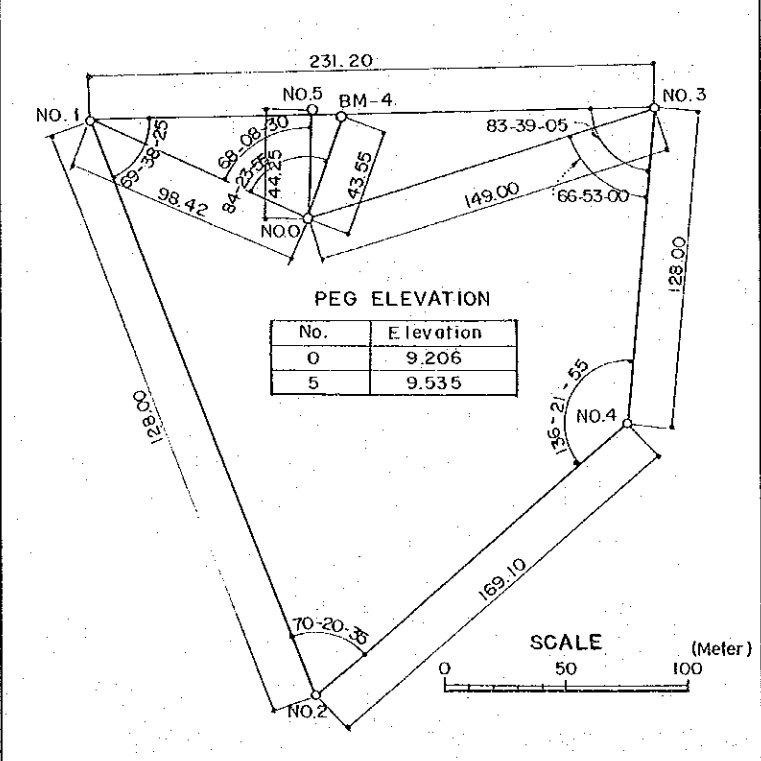


I. Gross Area	4.6 ha
II. Principal Features of the Work	
1. Canals & Farm Roads	
(a) Main Canal	
MC - 1	67m
MC - 2	182m
<b>Total (MC)</b>	<b>249m</b>
(b) Branch Canal	
BC - 1	80m
BC - 2	80m
BC - 3	140m
BC - 4	40m
BC - 5	110m
BC - 6	80m
BC - 6a	20m
<b>Total (BC)</b>	<b>550m</b>
2. Related Structures	
(a) Pump house	1 No.
(b) Baffle tank	1 No.
(c) Outlet structure	6 Nos.
(d) Angle Box structure	2 Nos.

NOTES: 1. Elevations of BM-4 is arbitrarily employed as 10.000 meters.  
 2. The metric system is applied in both length and elevation.  
 3. Topographic map was prepared in September, 1980 by JICA.

Item	Abbreviation	Mark
Bench Mark	BM	□
Beginning Point	BP	-
Ending Point	EP	-
Main Canal	MC	—————
Branch Canal	BC	—————
Farm Channel to be constructed by farmers	-	—————
Farm Road	FR	—————
Outlet Structure	OL	⊕
Angle Box Structure	AB	⊕

BASIC SURVEY SKELETON



III Landholders.

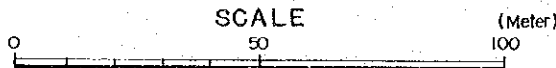
(A)	Bisheshar Sah
(B)	Budhan Yadav
(C)	Ram Pyari Devi Sah
(D)	Janak Yadav
(E)	Ram Bilash Sah
(F)	Kasim Dhobi
(G)	Raj Dev Yadav
(H)	Paro Devi Sah
(I)	Saryug Yadav
(J)	Lakhichan Sah
(K)	Sahbir Sah
(L)	Budhan Sah
(M)	Bechan Sah
(N)	School
(O)	Mokhtar Yadav
(P)	Lachmeshar Sah
(Q)	Ram Ratan Sah
(R)	Manki Yadav
(S)	Maheshwar Sah

HMG OF NEPAL  
 IRRIGATED MODEL FARM SCHEME  
 FOR JANAKPUR ZONE AGRICULTURE DEVELOPMENT PROJECT

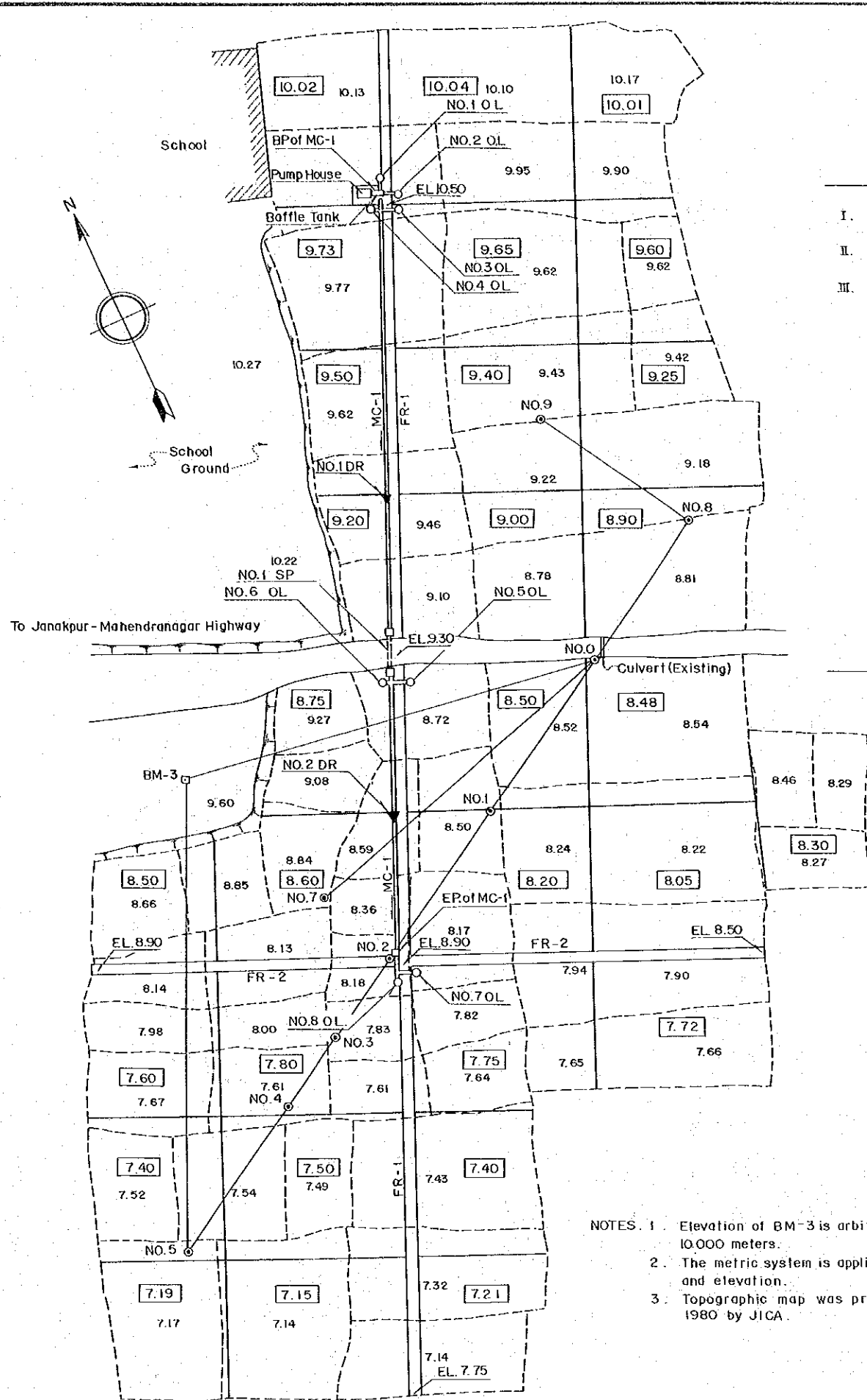
TITLE  
**GENERAL LAYOUT OF SAPHY AREA**

DATE	DEC. 1980	DW.G. NO.	200 - 03
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JAPAN INTERNATIONAL COOPERATION AGENCY





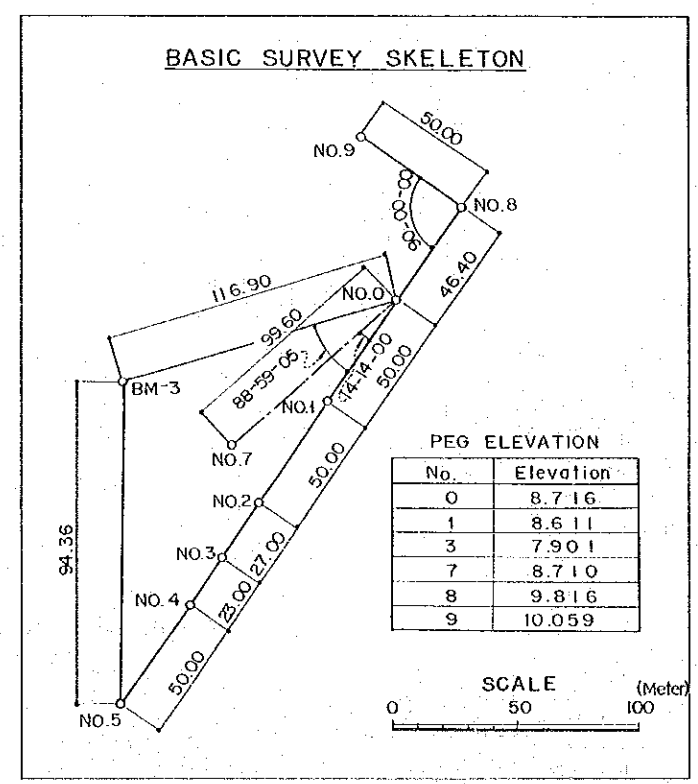


I. Gross Area	5.0 ha
II. Landholder	Hari Bahadur Baruwai
III. Principal Feature of the Work	
1. Canal	
(a) Main Canal	
MC - 1	198 m
2. Farm Roads (2.5 m wide)	
FR - 1	380 m
FR - 2	190 m
Total (FR)	570 m
3. Related Structures	
(a) Pump house	1 No.
(b) Baffle tank	1 No.
(c) Outlet structure	8 Nos.
(d) Drop structure	2 Nos.
(e) Syphon structure	1 No.
4. Land Improvement	
(a) Earth moving and levelling	5 ha
(b) Farm ridges	1,490 m

LEGEND

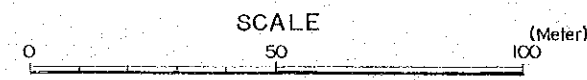
Item	Abbreviation	Mark
Bench Mark	BM	□
Beginning Point	BP	-
Ending Point	EP	-
Main Canal	MC	=====
Farm Road	FR	-----
Outlet Structure	OL	○
Drop Structure	DR	○
Syphon Structure	SP	○
Land Elevation after Land Improvement	-	8.92

NOTES: 1. Elevation of BM-3 is arbitrarily employed as 10.000 meters.  
 2. The metric system is applied in both length and elevation.  
 3. Topographic map was prepared in September, 1980 by JICA.



PEG ELEVATION

No.	Elevation
0	8.716
1	8.611
3	7.901
7	8.710
8	9.816
9	10.059



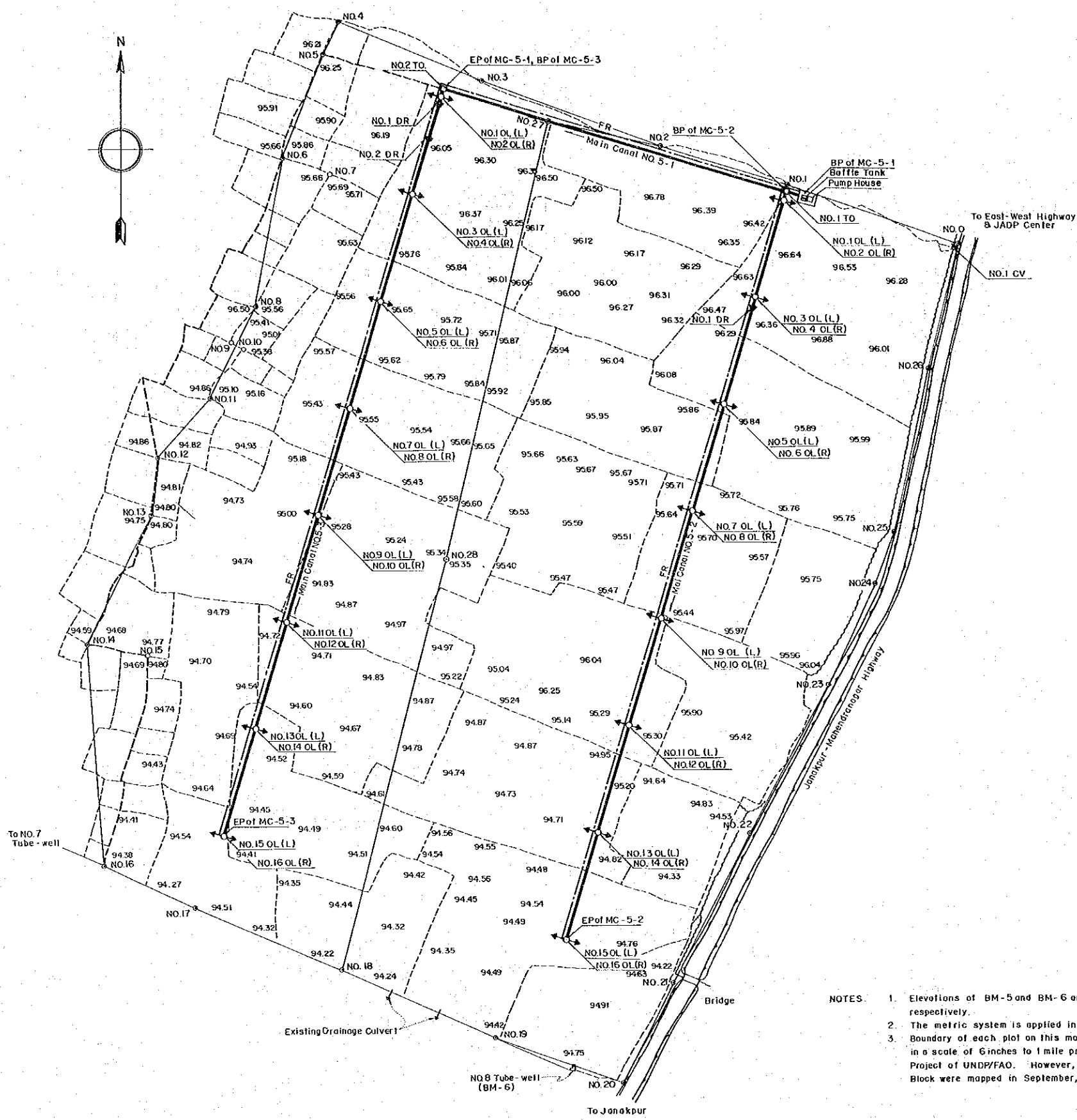
HMG OF NEPAL  
 IRRIGATED MODEL FARM SCHEME  
 FOR JANAKPUR ZONE AGRICULTURE DEVELOPMENT PROJECT

TITLE

**GENERAL LAYOUT OF SAKHUWA AREA**

DATE DEC. 1980 D.W.G. NO. 200-04

JAPAN INTERNATIONAL COOPERATION AGENCY



**I. Gross Area** 45.6 ha.

**II. Principal Features of the Work**

1. Canals & Farm Roads

(a) Main Canal MC-5-1	6m
to be newly constructed	328m
to be rehabilitated	334m
Sub-total (MC-5-1)	700m
MC-5-2	700m
MC-5-3	700m
Total (MC)	1,734m

2. Related Structures

(a) Pump house	1 No.
(b) Baffle tank	1 No.
(c) Turnout structure	2 Nos.
(d) Outlet structure	32 Nos.
(e) Drop structure	3 Nos.
(f) Culvert structure	1 No.

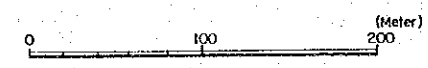
**LEGEND**

Item	Abbreviation	Mark
Bench Mark	BM	⊙
Beginning Point	BP	—
Ending Point	EP	—
Main Canal	MC	———
Farm Road	FR	— · — · —
Turnout Structure	TO	⊥
Drop Structure	DR	⊥
Outlet Structure on the Right Bank of MC	OL (R)	⊥
Outlet Structure on the Left Bank of MC	OL (L)	⊥
Culvert Structure	CV	—

**PEG ELEVATION**

No.	Elevation	No.	Elevation	No.	Elevation
0	96.961	10	95.962	20	94.945
1	97.199	11	95.731	21	94.524
2	97.389	12	95.526	22	94.680
3	97.670	13	95.492	23	95.915
4	97.388	14	95.612	24	95.506
5	96.532	15	95.707	25	95.767
6	96.359	16	94.492	26	96.189
7	96.235	17	94.886	27	96.916
8	96.031	18	94.910	28	95.674
9	96.016	19	95.042		

- NOTES:**
- Elevations of BM-5 and BM-6 are 97.734 and 96.005 meters (Mean Sea Level), respectively.
  - The metric system is applied in both length and elevation.
  - Boundary of each plot on this map is drawn by an enlargement of the topo-map in a scale of 6 inches to 1 mile prepared in December, 1968 under Sunkosi Terdi Project of UNDP/FAO. However, plot located around western boundary of No. 5 Block were mapped in September, 1980.



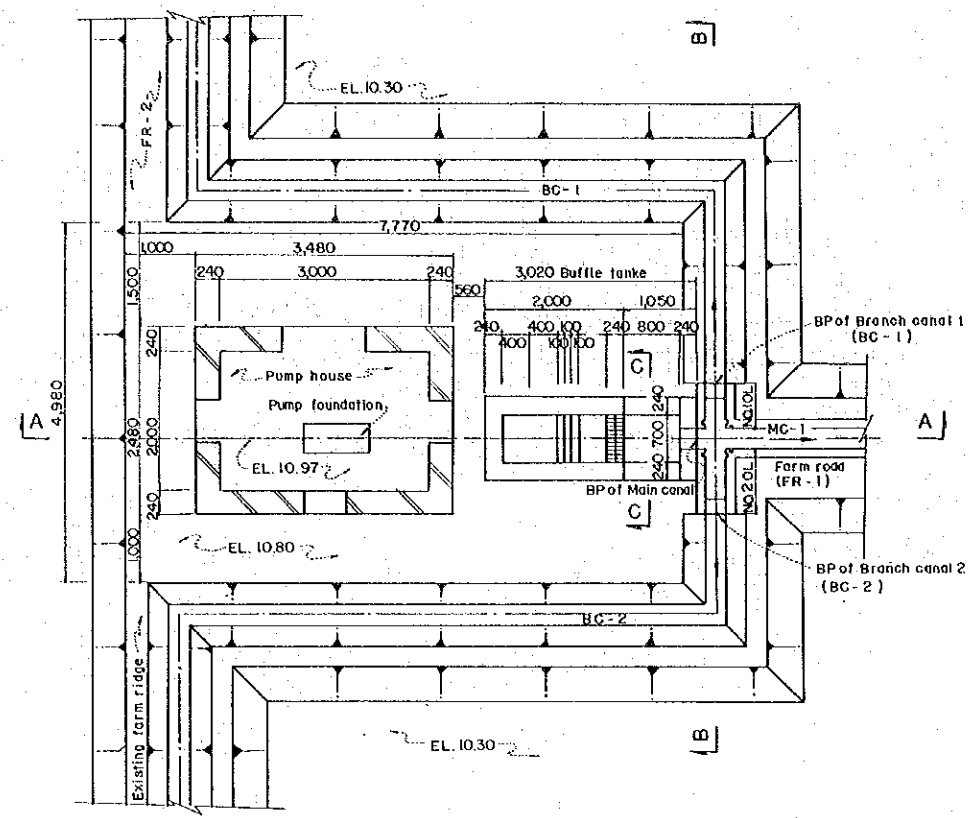
HMG OF NEPAL  
IRRIGATED MODEL FARM SCHEME  
FOR JANAKPUR ZONE AGRICULTURE DEVELOPMENT PROJECT

TITLE

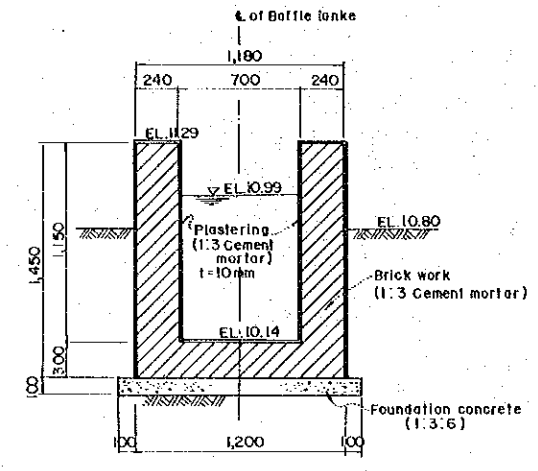
**GENERAL LAYOUT OF IAP (NO. 5 BLOCK) AREA**

DATE	DEC. 1980	DWG. NO.	200-05
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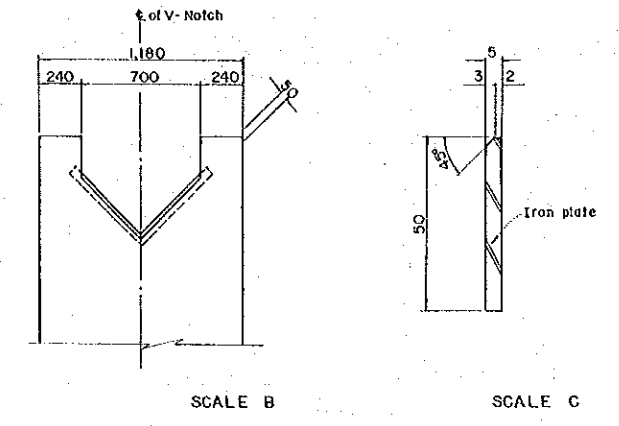
JAPAN INTERNATIONAL COOPERATION AGENCY



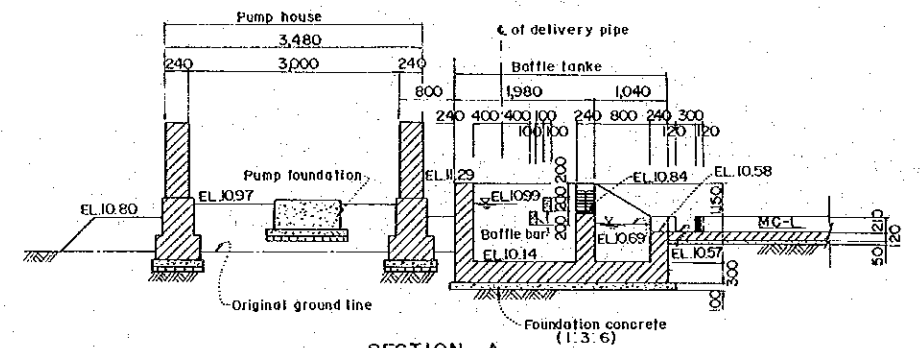
PLAN SCALE A



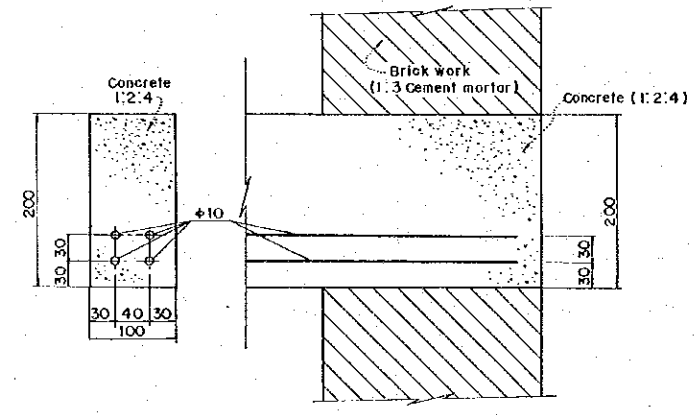
SECTION C SCALE B



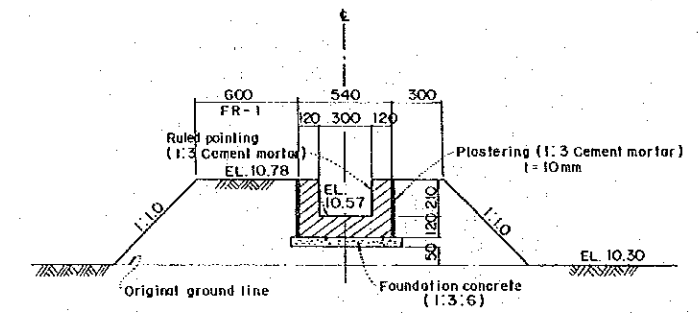
V-NOTCH



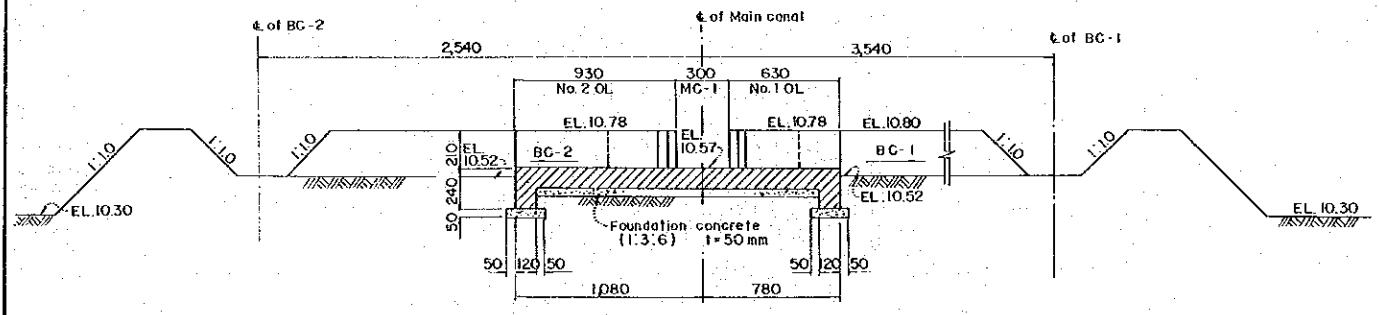
SECTION A SCALE A



BAFFLE BAR SCALE D

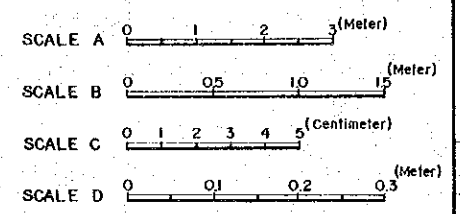


SECTION D SCALE B



SECTION B SCALE B

ABBREVIATIONS  
 BP: Beginning Point  
 OL: Outlet Structure  
 BC: Branch Canal  
 MC: Main Canal

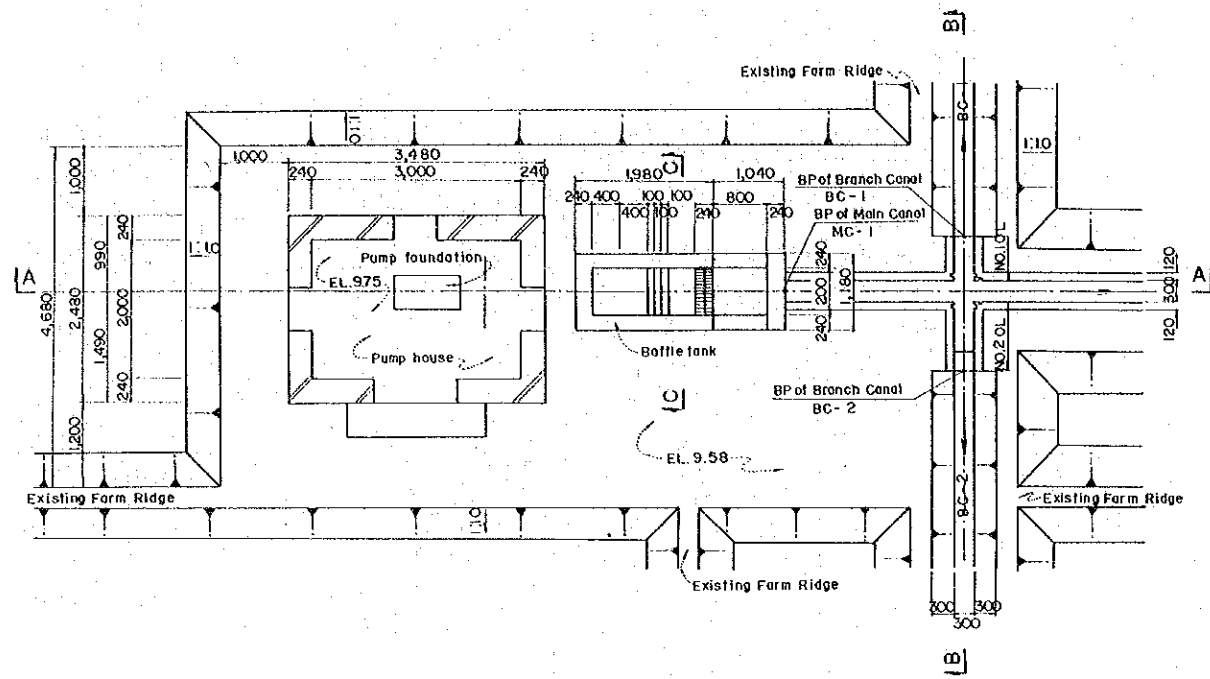


HMG OF NEPAL  
 IRRIGATED MODEL FARM SCHEME  
 FOR JANAKPUR ZONE AGRICULTURE DEVELOPMENT PROJECT

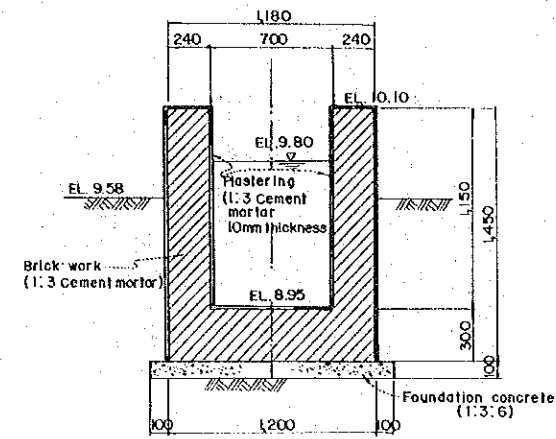
TITLE  
**LAYOUT OF PUMP HOUSE  
 & BAFFLE TANK  
 OF  
 ISWARPUR AREA**

DATE	DEC. 1980	DWG. NO.	300 - 01
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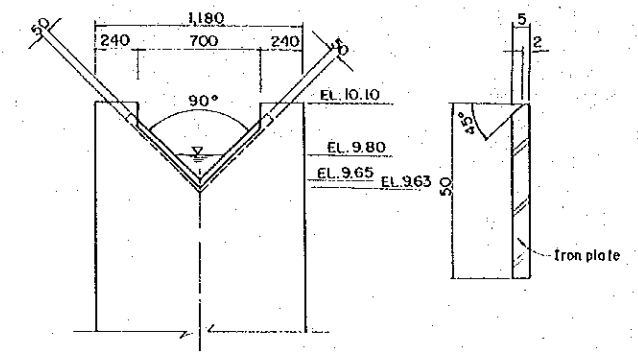
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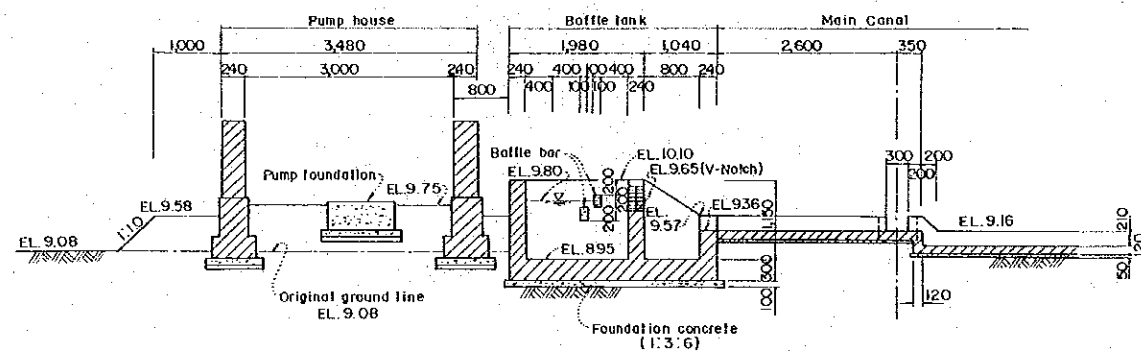
PLAN  
SCALE A



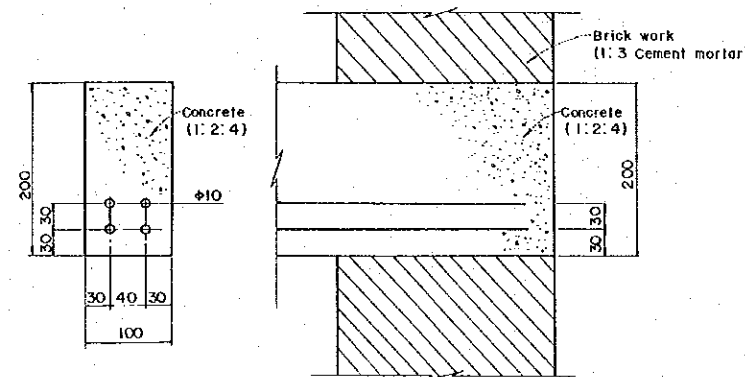
SECTION C  
SCALE B



V-NOTCH  
SCALE B SCALE C



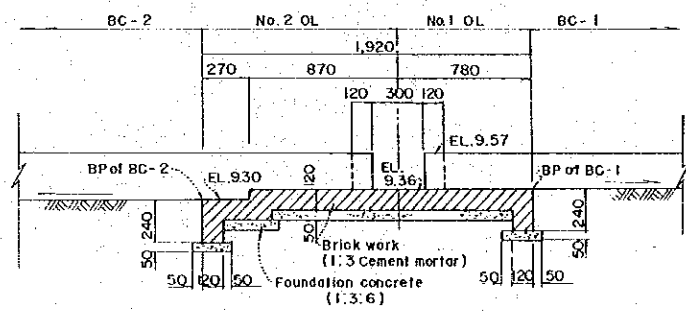
SECTION A  
SCALE A



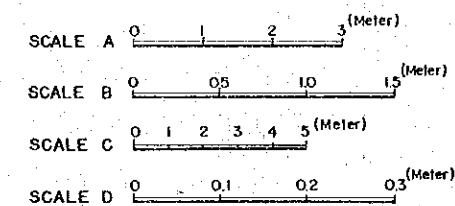
BAFFLE BAR  
SCALE D

ABBREVIATIONS

- BP : Beginning Point
- OL : Outlet Structure
- BC : Branch Canal



SECTION B  
SCALE B

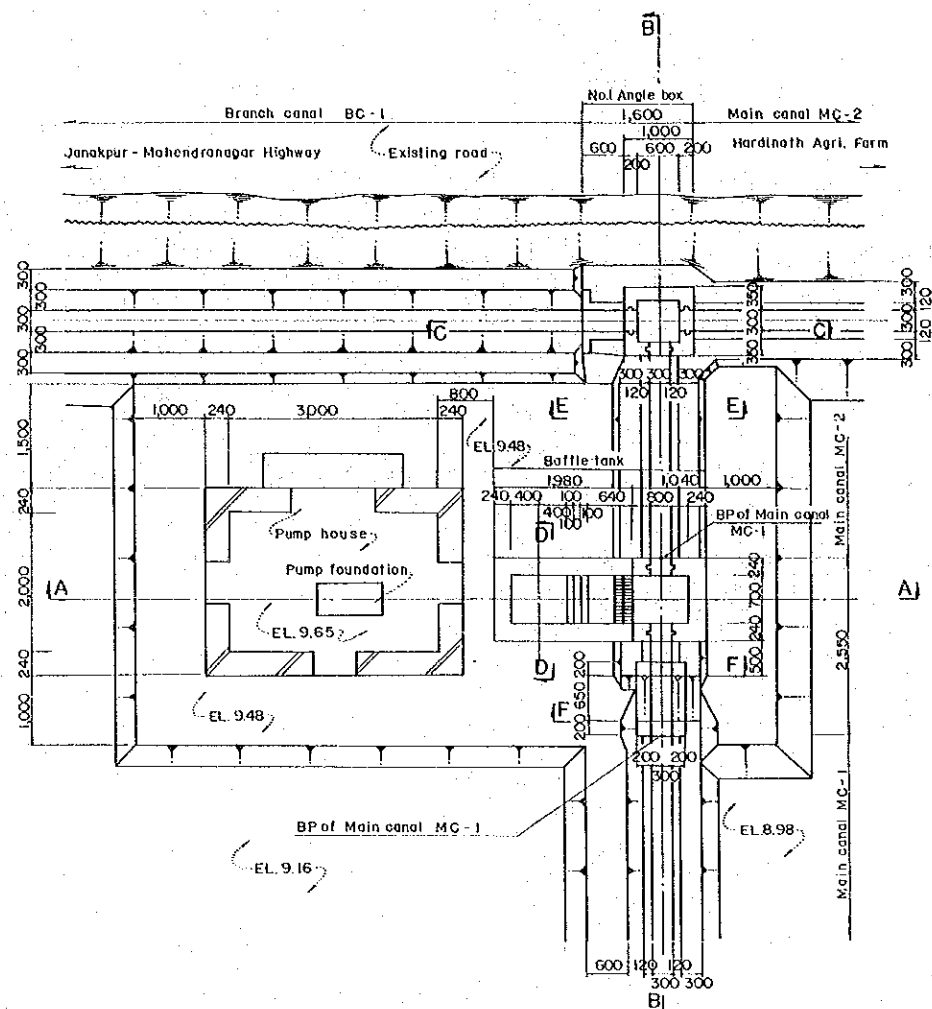


HMG OF NEPAL  
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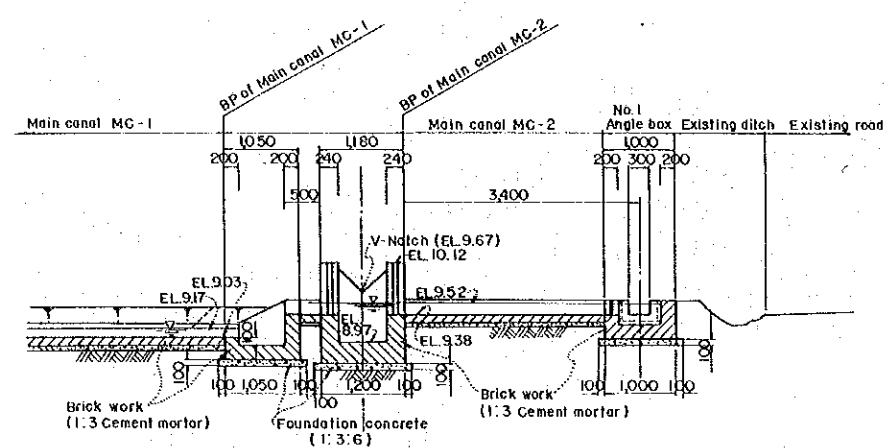
TITLE  
**LAYOUT OF PUMP HOUSE  
& BAFFLE TANK  
OF  
GOSHALA AREA**

DATE	DEC. 1980	D.WG. NO.	300-02
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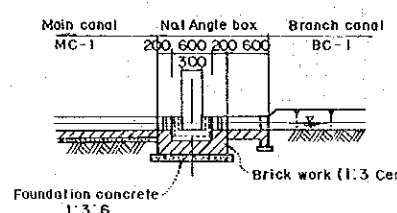
JAPAN INTERNATIONAL COOPERATION AGENCY



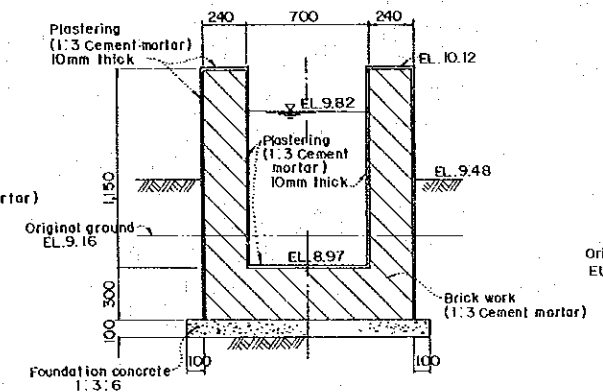
PLAN SCALE A



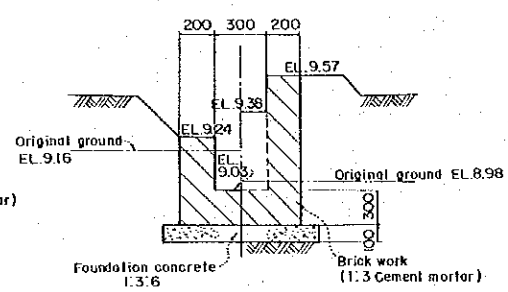
SECTION B SCALE A



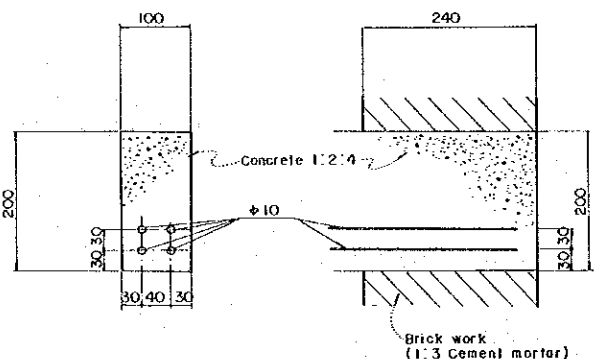
SECTION C SCALE A



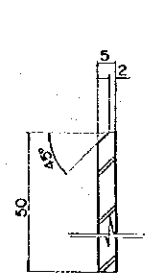
SECTION D SCALE B



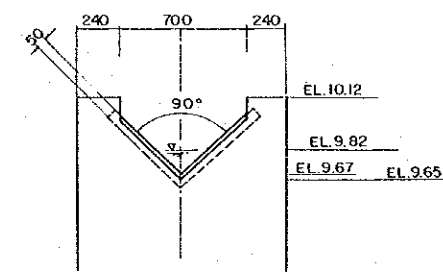
SECTION F SCALE B



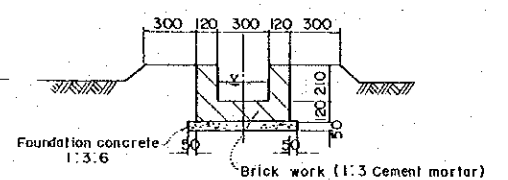
CONCRETE SLAB SCALE C



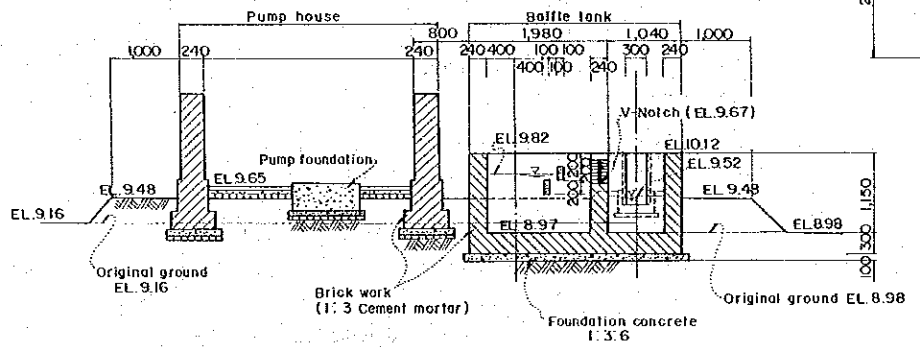
SCALE D



V - NOTCH SCALE B

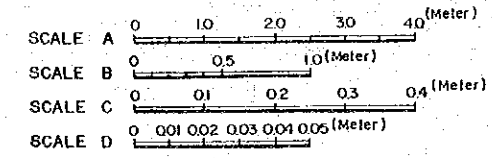


SECTION E SCALE B



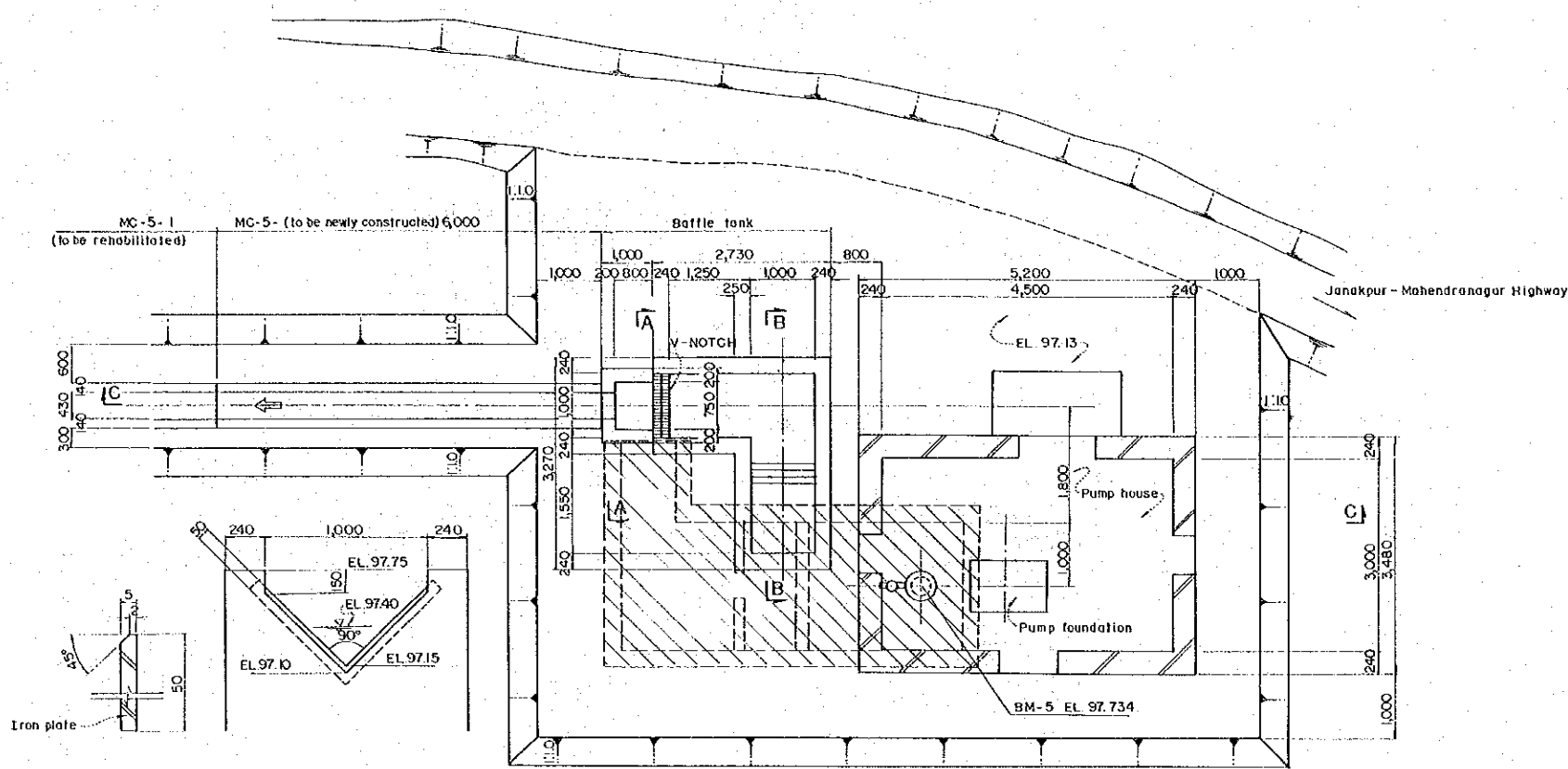
SECTION A SCALE A

ABBREVIATIONS  
 BP : Beginning Point  
 MC : Main Canal  
 BC : Branch Canal

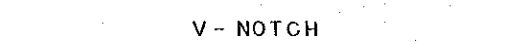


HMG OF NEPAL IRRIGATED MODEL FARM SCHEME FOR JANAKPUR ZONE AGRICULTURE DEVELOPMENT PROJECT			
TITLE			
LAYOUT OF PUMP HOUSE & BAFFLE TANK OF SAPHY AREA			
DATE	DEC. 1980	D.W.G. NO.	300-03
JAPAN INTERNATIONAL COOPERATION AGENCY			

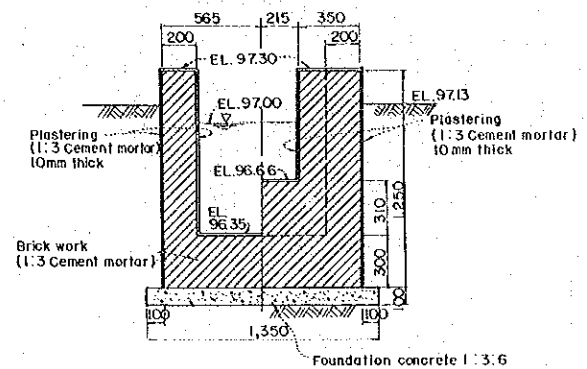




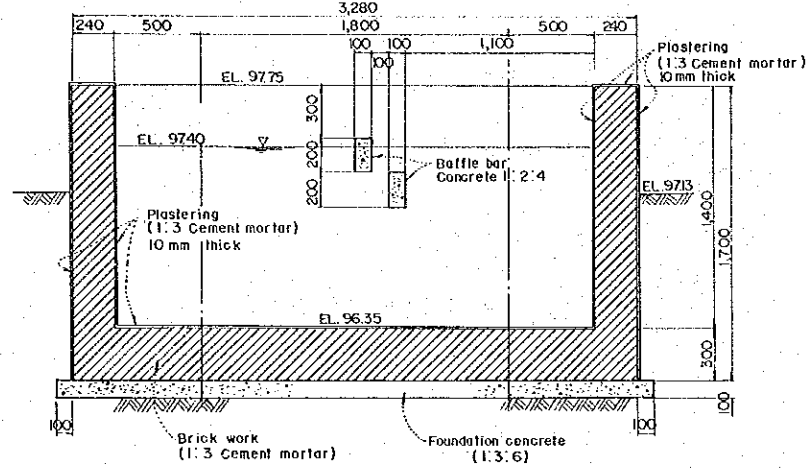
PLAN  
SCALE A



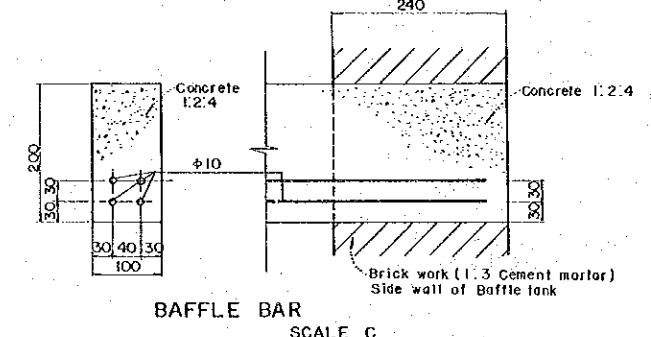
V - NOTCH  
SCALE B



SECTION A  
SCALE B

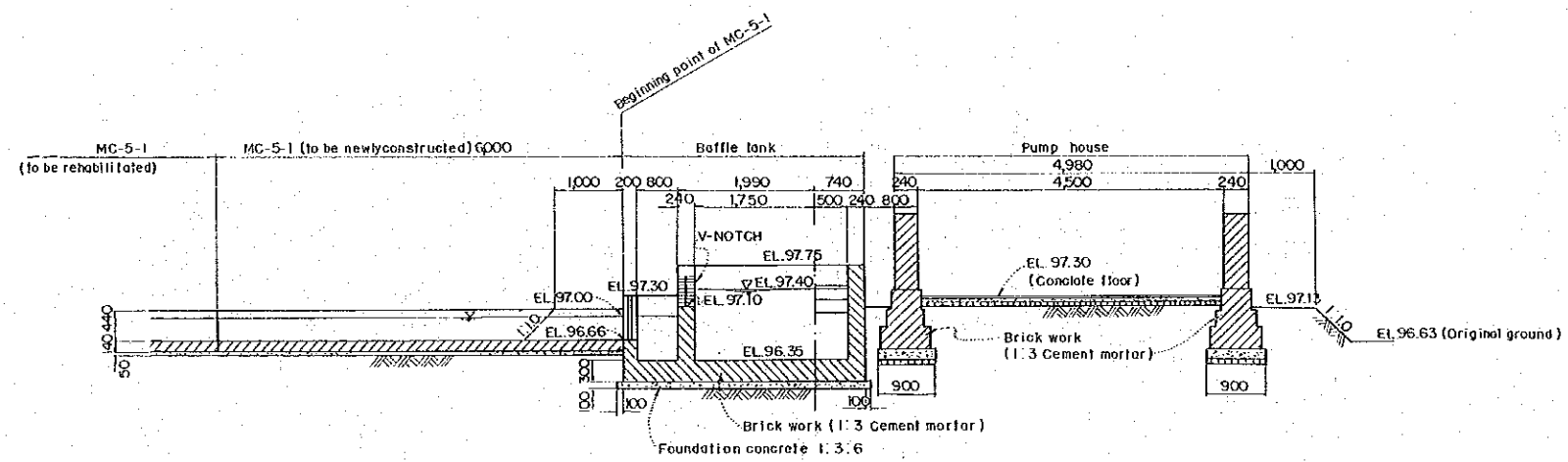


SECTION B  
SCALE B

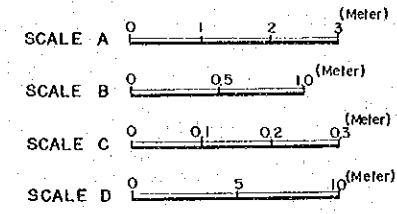


BAFFLE BAR  
SCALE C

Note. Hatched area is existing wall to be dismantled by the contractor under this contract.



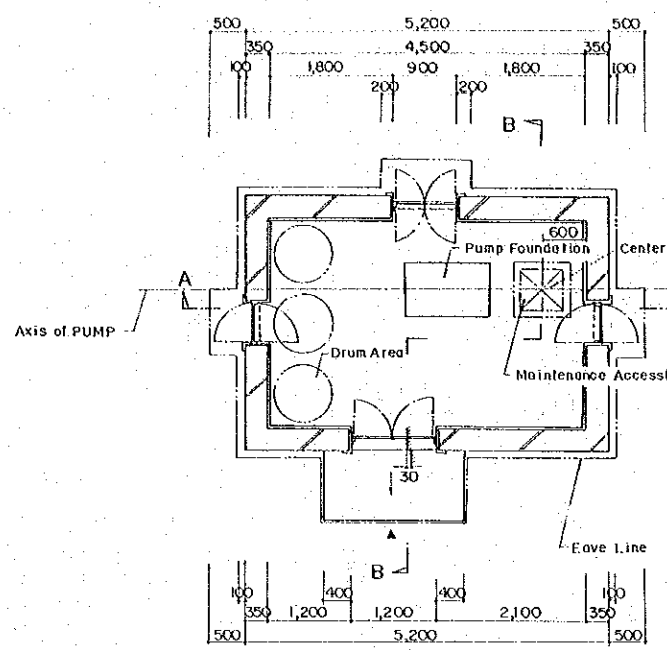
SECTION C  
SCALE A



HMG OF NEPAL  
IRRIGATED MODEL FARM SCHEME  
FOR JANAKPUR ZONE AGRICULTURE DEVELOPMENT PROJECT  
TITLE

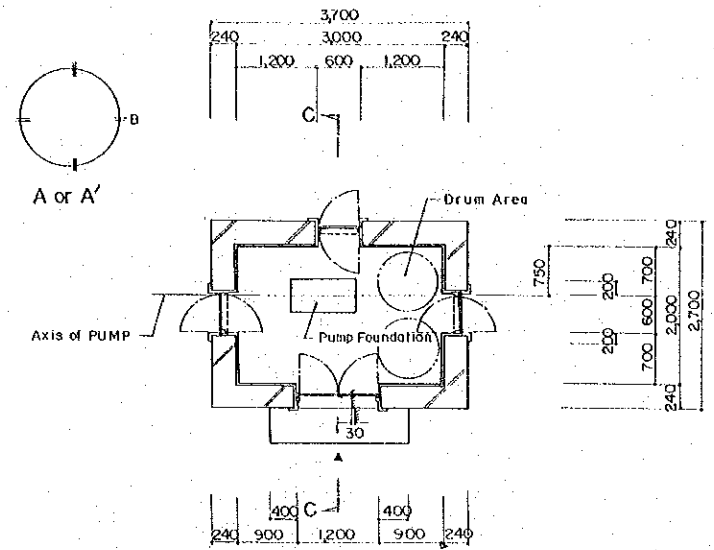
**LAYOUT OF PUMP HOUSE & BAFFLE TANK OF IAP AREA**

DATE	DEC. 1980	D.W.G. NO.	300 - 05
JAPAN INTERNATIONAL COOPERATION AGENCY			



PLAN (FOR "DEEP WELL")

SCALE A

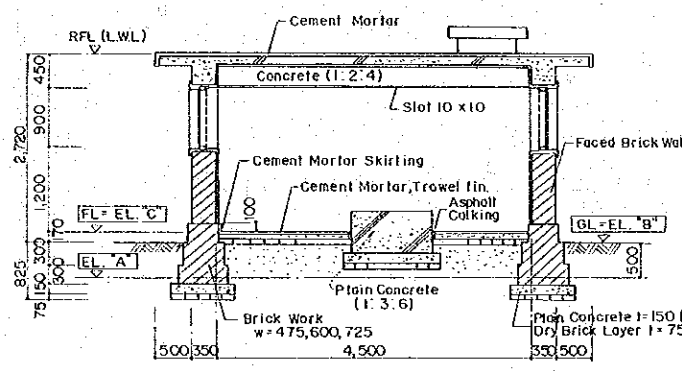


PLAN (FOR "SHALLOW WELL")

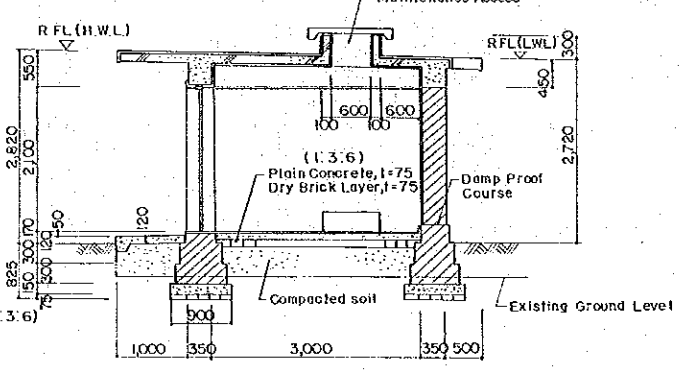
SCALE A

Area	Type of Well	EL. A	EL. B	EL. C	Locations of Doors
Iswarpur	Shallow	10.30	10.80	10.97	
Goshala	Shallow	9.08	9.58	9.75	
Sakhuwa	Shallow	10.00	10.50	10.67	
Saphy	Shallow	8.98	9.48	9.65	
I A P (No.5)	Deep	96.63	97.13	97.30	

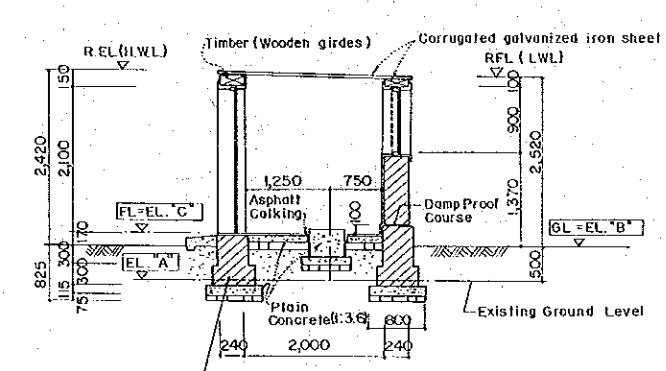
▼ : Door  
 : Delivery pipe



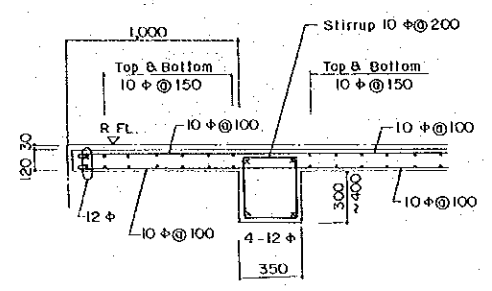
SECTION A  
SCALE A



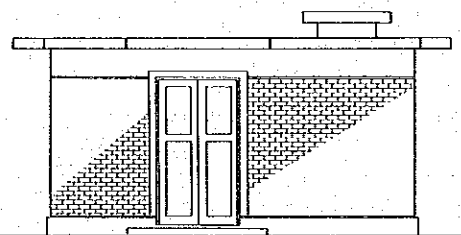
SECTION B  
SCALE A



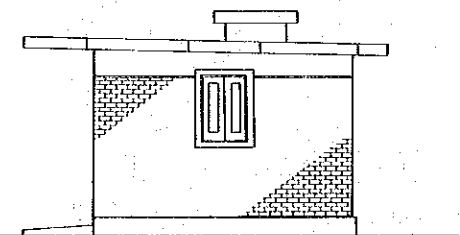
SECTION C  
SCALE A



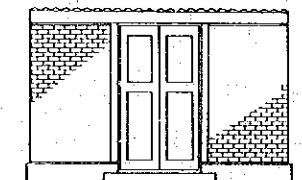
BAR ARRANGEMENT FOR ROOF SLAB  
SCALE B



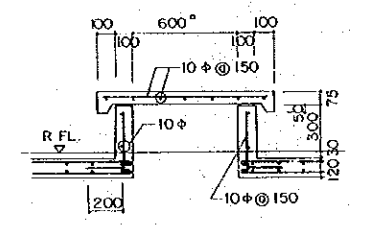
A SIDE ELEVATION  
SCALE A



B SIDE ELEVATION  
SCALE A



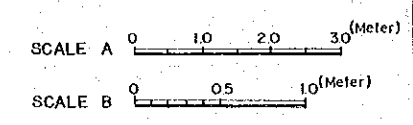
A' SIDE ELEVATION  
SCALE A



BAR ARRANGEMENT FOR MAINTENANCE ACCESS  
SCALE B

FINISHING SCHEDULES FOR "DEEP WELL"		FINISHING SCHEDULES FOR "SHALLOW WELL"	
INTERIOR	Floor : Cement Mortar, Trowel Finish	EXTERIOR	Roof : Cement Mortar
	Skirting : Cement Mortar h=100		Wall : Faced Brick Wall
	Wall : Cement Mortar		Step : Concrete Trowel Finish
	Ceiling : Cement Mortar		
	Door : Wooden Plank Door, Hinges, Knob		
	Lock Device, Architrave, Door Ball		
	Window : Wood made, Insect Screen Window		
	Handle, Lock Device		

Note: Cement mortar specified in this drawing shall be Portland cement and sand mixed in volumetric proportion of 1:3.



HMG OF NEPAL  
 IRRIGATED MODEL FARM SCHEME  
 FOR JANAKPUR ZONE AGRICULTURE DEVELOPMENT PROJECT

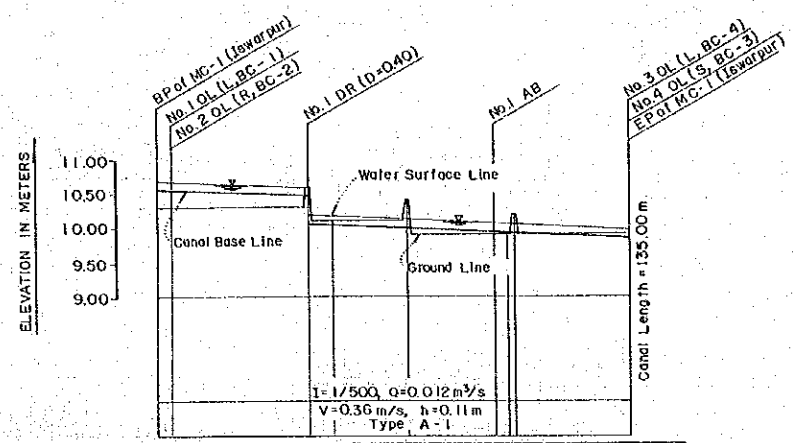
TITLE

**PUMP HOUSES**

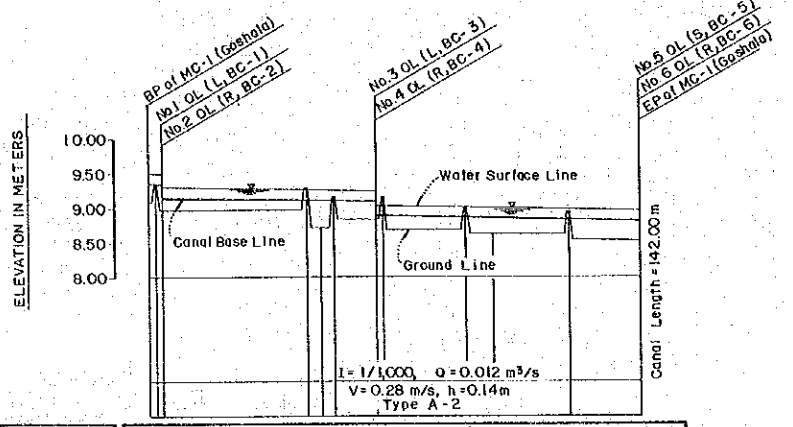
DATE	DEC. 1980	D.W.G. NO.	300-06
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JAPAN INTERNATIONAL COOPERATION AGENCY

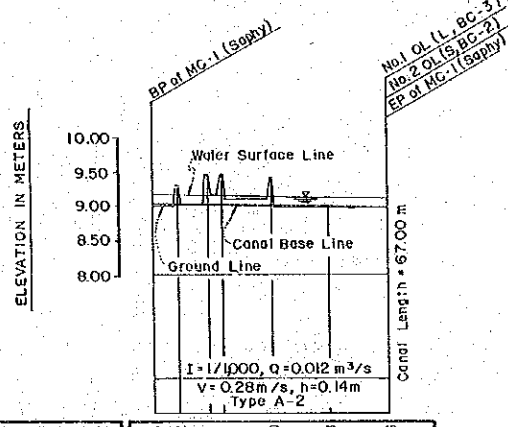




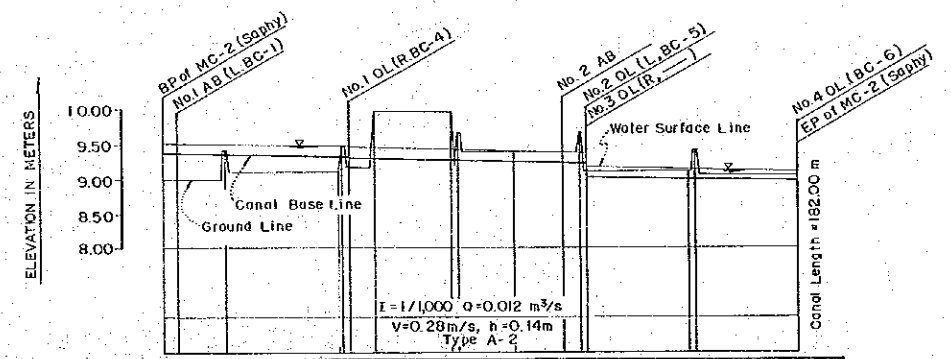
ISWARPUR AREA	CANAL BASE ELEVATION	WATER SURFACE ELEVATION	GROUND SURFACE ELEVATION	REDUCED DISTANCE	DISTANCE	STATION	CURVE
	9.98	9.98	10.30	0.00	0.00	No. 0 (BP)	→
	9.98	9.98	10.30	0.25	0.25	No. 1 (IP)	
	10.46	10.57	10.30	43.00	43.25	No. 1 (EP)	
	10.09	10.16	10.10	50.00	7.00	No. 2 (IP)	
	10.00	10.11	10.10	71.00	21.00	No. 2 (EP)	
	9.92	9.92	9.92	96.00	25.00	No. 3 (IP)	
	9.92	9.92	9.92	102.00	31.00	No. 4 (IP)	
	9.92	9.92	9.92	135.00	33.00	No. 4 (EP)	
	9.85	9.96	9.92				
	9.85	9.96	9.92				



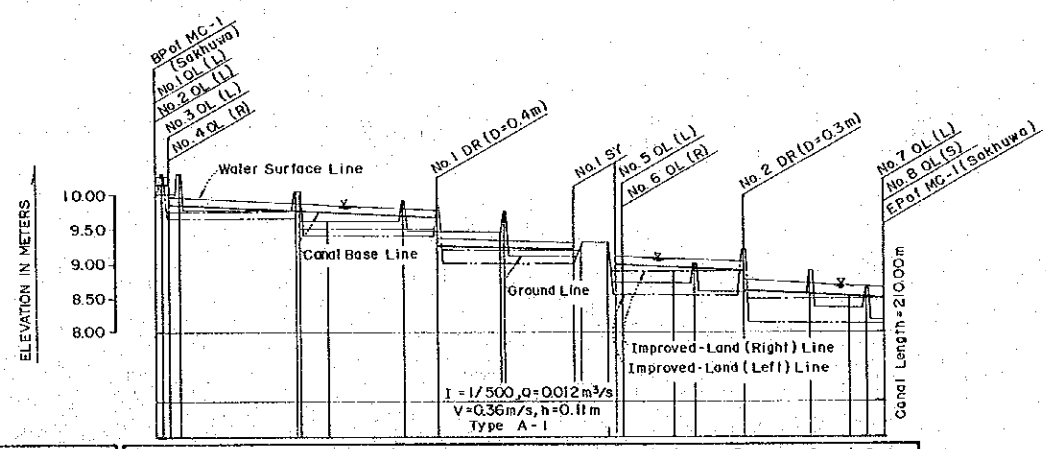
GOSHALA AREA	CANAL BASE ELEVATION	WATER SURFACE ELEVATION	GROUND SURFACE ELEVATION	REDUCED DISTANCE	DISTANCE	STATION	CURVE
	9.00	9.00	9.00	0.00	0.00	No. 0 (BP)	→
	9.12	9.25	9.25	46.00	46.00	No. 1 (IP)	
	9.11	9.25	9.25	50.00	50.00	No. 1 (EP)	
	9.00	9.04	9.04	66.00	66.00	No. 2 (IP)	
	9.00	9.04	9.04	88.00	88.00	No. 2 (EP)	
	8.88	9.02	8.70	92.00	92.00	No. 3 (IP)	
	8.87	9.01	8.63	100.00	100.00	No. 3 (EP)	
	8.85	8.99	8.54	122.00	122.00	No. 4 (IP)	
	8.85	8.99	8.54	142.00	142.00	No. 4 (EP)	
	8.92	8.96	8.54				



SAPHY AREA	CANAL BASE ELEVATION	WATER SURFACE ELEVATION	GROUND SURFACE ELEVATION	REDUCED DISTANCE	DISTANCE	STATION	CURVE
	9.03	9.17	8.98	0.00	0.00	No. 0 (BP)	→
	9.02	9.16	8.98	7.00	7.00	No. 1 (IP)	
	9.01	9.15	8.98	16.00	16.00	No. 1 (EP)	
	9.01	9.15	8.98	20.00	20.00	No. 2 (IP)	
	9.00	9.14	8.98	34.00	34.00	No. 2 (EP)	
	8.98	9.12	8.96	50.00	50.00	No. 3 (IP)	
	8.98	9.10	8.96	67.00	67.00	No. 3 (EP)	
	8.96	9.10	8.96				
	8.96	9.10	8.96				
	8.96	9.10	8.96				



SAPHY AREA	CANAL BASE ELEVATION	WATER SURFACE ELEVATION	GROUND SURFACE ELEVATION	REDUCED DISTANCE	DISTANCE	STATION	CURVE
	9.35	9.45	9.35	0.00	0.00	No. 0 (BP)	→
	9.35	9.45	9.35	3.40	3.40	No. 1 (IP)	
	9.26	9.45	9.26	16.00	14.60	No. 1 (EP)	
	9.26	9.45	9.26	50.00	56.00	No. 2 (IP)	
	9.26	9.45	9.26	53.00	7.00	No. 2 (EP)	
	9.24	9.38	9.24	60.00	10.00	No. 3 (IP)	
	9.24	9.38	9.24	82.00	22.00	No. 3 (EP)	
	9.24	9.38	9.24	84.00	2.00	No. 4 (IP)	
	9.24	9.38	9.24	100.00	16.00	No. 4 (EP)	
	9.11	9.11	9.11	114.00	14.00	No. 5 (IP)	



SAKHUWA AREA	CANAL BASE ELEVATION	WATER SURFACE ELEVATION	GROUND SURFACE ELEVATION	REDUCED DISTANCE	DISTANCE	STATION	CURVE
	9.74	9.85	9.74	0.00	0.00	No. 0 (BP)	→
	9.74	9.85	9.74	4.00	4.00	No. 1 (IP)	
	9.73	9.84	9.73	1.00	42.00	No. 1 (EP)	
	9.69	9.80	9.69	50.00	8.00	No. 2 (IP)	
	9.69	9.80	9.69	72.00	22.00	No. 2 (EP)	
	9.69	9.80	9.69	82.00	10.00	No. 3 (IP)	
	9.69	9.80	9.69	100.00	18.00	No. 3 (EP)	
	9.69	9.80	9.69	110.00	1.00	No. 4 (IP)	
	9.69	9.80	9.69	130.00	20.00	No. 4 (EP)	
	9.69	9.80	9.69	150.00	15.00	No. 5 (IP)	

SAKHUWA AREA	IMPROVED GROUND SURFACE ELEVATION	RIGHT SIDE	LEFT SIDE
	9.74	9.74	9.74
	9.74	9.74	9.74
	9.73	9.73	9.73
	9.69	9.69	9.69
	9.69	9.69	9.69
	9.69	9.69	9.69
	9.69	9.69	9.69
	9.69	9.69	9.69
	9.69	9.69	9.69

- ABBREVIATIONS
- BP : Beginning Point
  - EP : Ending Point
  - MC : Main Canal
  - BC : Branch Canal
  - OL : Outlet
  - DR : Drop
  - AB : Angle Box
  - SY : Syphon
  - R : To the Right
  - L : To the Left
  - S : Straight

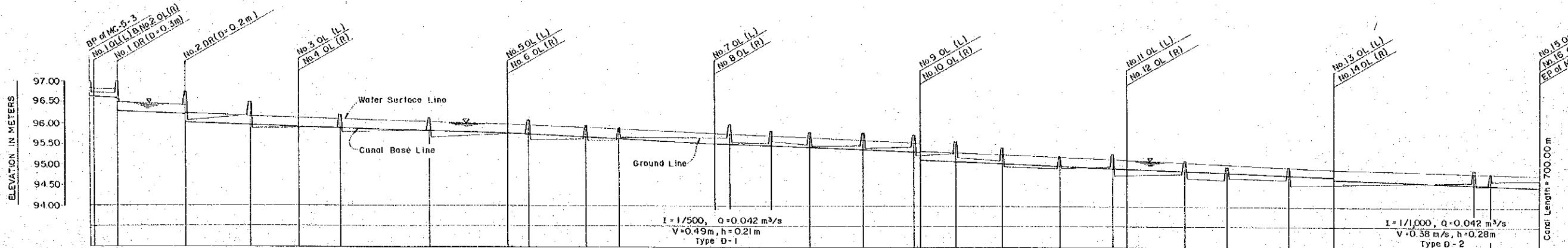
HMG OF NEPAL  
IRRIGATED MODEL FARM SCHEME  
FOR JANAKPUR ZONE AGRICULTURE DEVELOPMENT PROJECT

TITLE

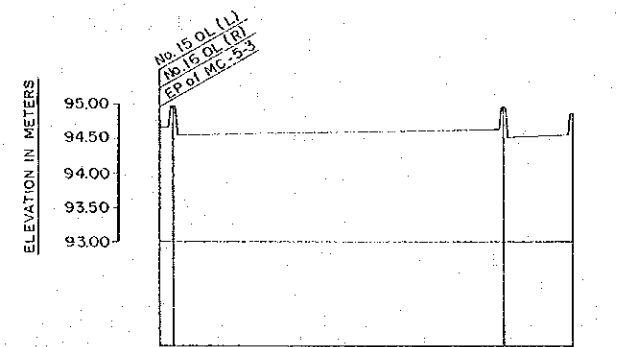
PROFILES OF MAIN CANALS FOR ISWARPUR, GOSHALA, SAPHY AND SAKHUWA AREAS

DATE	DEC. 1980	DWG. NO.	400-01
JAPAN INTERNATIONAL COOPERATION AGENCY			





STATION	DISTANCE	REDUCED DISTANCE	GROUND SURFACE ELEVATION	WATER SURFACE ELEVATION	CANAL BASE ELEVATION
1650	0.00	0.00	96.72	96.72	96.83
1651	2.00	2.00	96.72	96.72	96.83
1652	11.10	13.10	96.72	96.72	96.83
1653	33.10	46.20	96.42	96.43	96.20
1654	76.50	76.50	96.17	96.17	95.96
1655	100.00	100.00	95.88	95.88	95.81
1656	120.00	120.00	95.56	95.56	95.85
1657	163.00	163.00	95.24	95.24	95.76
1658	200.00	200.00	95.72	95.72	95.69
1659	210.10	210.10	95.74	95.74	95.65
1660	238.00	238.00	95.27	95.27	95.59
1661	254.00	254.00	95.56	95.56	95.56
1662	300.00	300.00	95.63	95.63	95.47
1663	307.00	307.00	95.53	95.53	95.44
1664	326.50	326.50	95.49	95.49	95.40
1665	346.30	346.30	95.46	95.46	95.36
1666	372.10	372.10	95.43	95.43	95.31
1667	397.00	397.00	95.41	95.41	95.26
1668	416.80	416.80	95.26	95.26	95.02
1669	439.30	439.30	95.09	95.09	94.97
1670	466.70	466.70	94.90	94.90	94.92
1671	493.20	493.20	94.75	94.75	94.86
1672	500.00	500.00	94.75	94.75	94.85
1673	528.00	528.00	94.73	94.73	94.77
1674	547.80	547.80	94.66	94.66	94.73
1675	577.90	577.90	94.65	94.65	94.67
1676	600.00	600.00	94.52	94.52	94.63
1677	668.00	668.00	94.51	94.51	94.47
1678	676.10	676.10	94.50	94.50	94.46
1679	700.00	700.00	94.66	94.66	94.44



STATION	DISTANCE	REDUCED DISTANCE	GROUND SURFACE ELEVATION	WATER SURFACE ELEVATION	CANAL BASE ELEVATION
1657	2390	7000	94.50	94.50	94.50
1658	360	70360	94.50	94.50	94.50
1659	9440	79800	94.50	94.50	94.50
1660	12040	81840	94.50	94.50	94.50

LIST OF BRANCH CANALS

Area	Main Canal	No. of Outlet	Name of B.C.	Length (m)	WEL (m)	BEL (m)	Depth (m)	Gradient
Isworpur	MC-1	No. 1	BC-1	120	1066	1052	0.14	1/1,000
"	"	No. 2	BC-2	100	1066	1052	0.14	1/1,000
"	"	No. 3	BC-4	140	994	983	0.11	1/500
"	"	No. 4	BC-3	110	994	980	0.14	1/1,000
Goshala	MC-1	No. 1	BC-1	90	928	914	0.14	1/1,000
"	"	No. 2	BC-2	60	948	932	0.16	1/2,000
"	"	No. 3	BC-3	80	869	878	0.11	1/500
"	"	No. 4	BC-4	40	920	906	0.14	1/1,000
"	"	No. 5	BC-5	60	863	852	0.11	1/500
"	"	No. 6	BC-6	40	894	880	0.14	1/1,000
Saphy	MC-1	No. 1	BC-3	140	908	894	0.14	1/1,000
"	"	No. 2	BC-2	80	908	894	0.14	1/1,000
"	MC-2	No. 1	BC-1	80	948	934	0.14	1/1,000
"	"	No. 1	BC-4	40	930	916	0.14	1/1,000
"	"	No. 2	BC-5	110	932	918	0.14	1/1,000
"	"	No. 4	BC-6	80	906	892	0.14	1/1,000
"	"	-	BC-6a	20	899	885	0.14	1/1,000

Note \* Branch Canal BC-1 branches out from Main Canal MC-1 with No. 1 Angle Box.

- ABBREVIATIONS
- BP : Beginning Point
  - EP : Ending Point
  - MC : Main Canal
  - DR : Drop
  - OL (L) : Outlet on the left bank
  - OL (R) : Outlet on the right bank
  - BC : Branch Canal
  - WEL : Water Surface Elevation at BP
  - BEL : Canal Base Elevation at BP

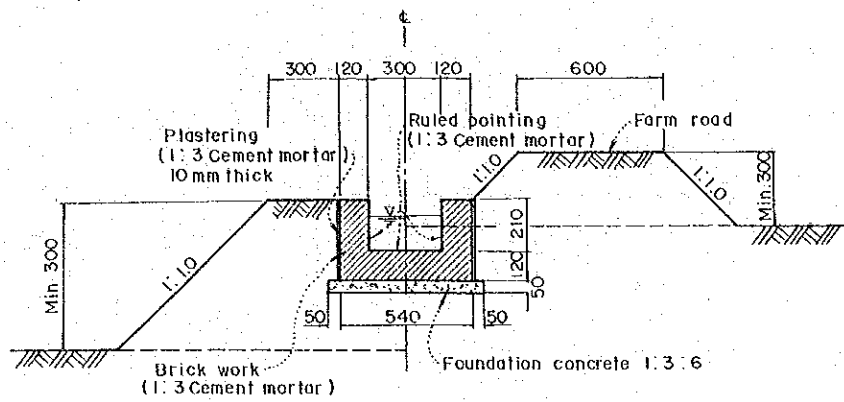
HMG OF NEPAL  
IRRIGATED MODEL FARM SCHEME  
FOR JANAKPUR ZONE AGRICULTURE DEVELOPMENT PROJECT  
TITLE

PROFILE OF MAIN CANAL (5-3)  
FOR IAP AREA AND LIST  
OF BRANCH CANALS

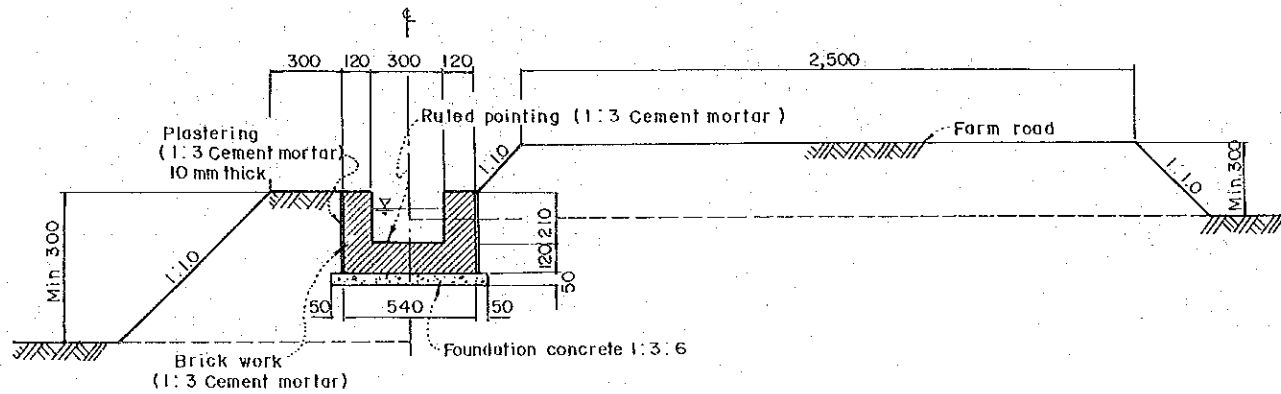
DATE DEC. 1980 D.W.G. NO. 400-03

JAPAN INTERNATIONAL COOPERATION AGENCY

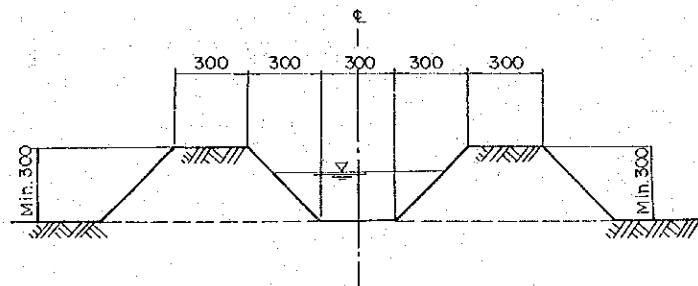
FOR S.T.W.P AREA



TYPE A-1,2 FOR GENERAL TYPE

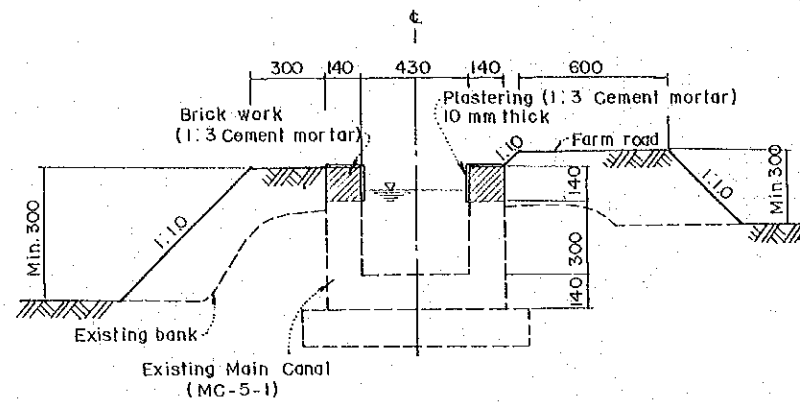


TYPE A-1,2 FOR INTENSIVE TYPE

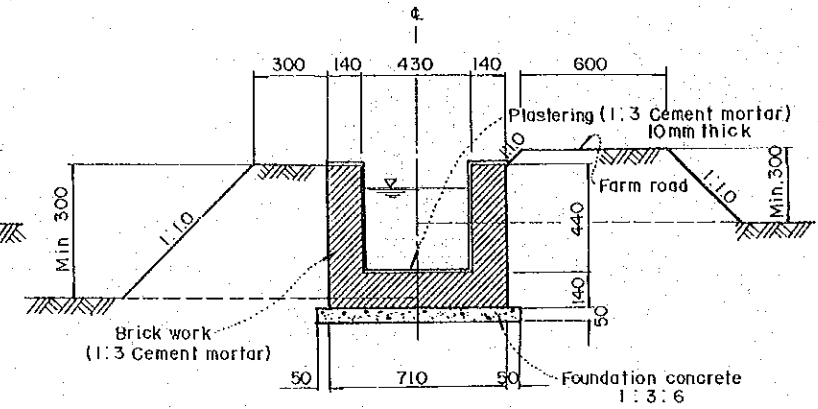


TYPE B

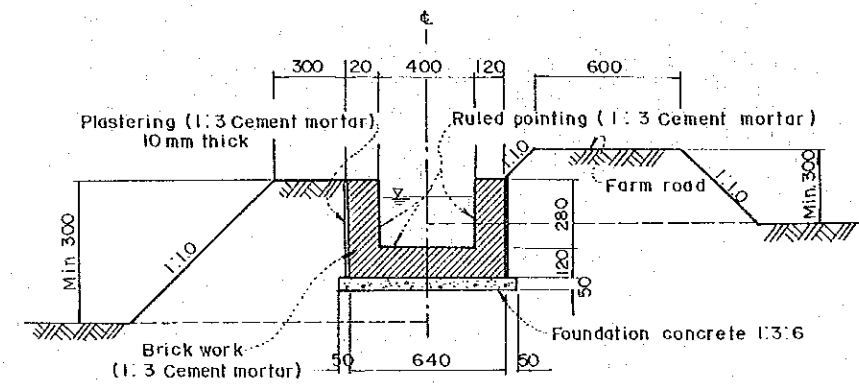
FOR IAP AREA



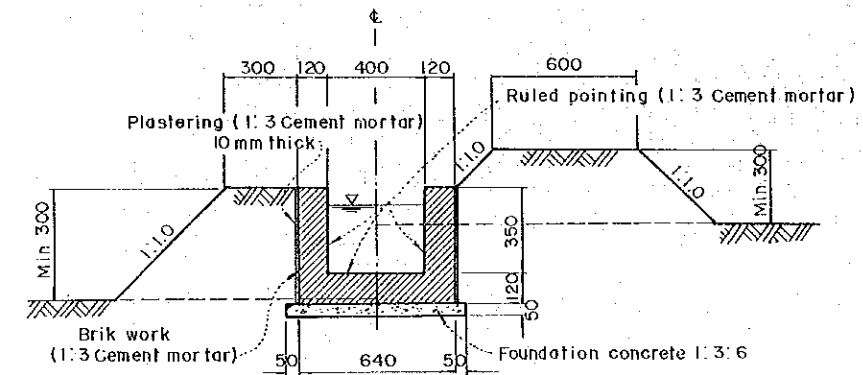
TYPE C FOR REHABILITATION (MC-5-1)



TYPE C



TYPE D-1



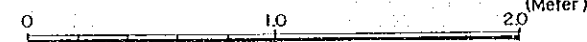
TYPE D-2

DIMENSION TABLE

(Unit: Meters)

TYPE	B	H	I	h	V	Q	REMARKS
A - 1	0.30	0.21	1/500	0.11	0.36	0.012	ST.W.P. Area, Main Canal
A - 2	0.30	0.21	1/1,000	0.14	0.28	0.012	ST.W.P. Area, Main Canal
B	0.30	0.30	-	-	-	0.012	ST.W.P. Area, Branch Canal
C	0.30	0.44	1/2,000	0.34	0.29	0.042	IAP Area, MC-5-1
D - 1	0.40	0.28	1/500	0.21	0.49	0.042	IAP Area, MC-5-2, MC-5-3
D - 2	0.40	0.35	1/1,000	0.28	0.38	0.042	IAP Area, MC-5-2, MC-5-3

SCALE



HMG OF NEPAL  
IRRIGATED MODEL FARM SCHEME  
FOR JANAKPUR ZONE AGRICULTURE DEVELOPMENT PROJECT

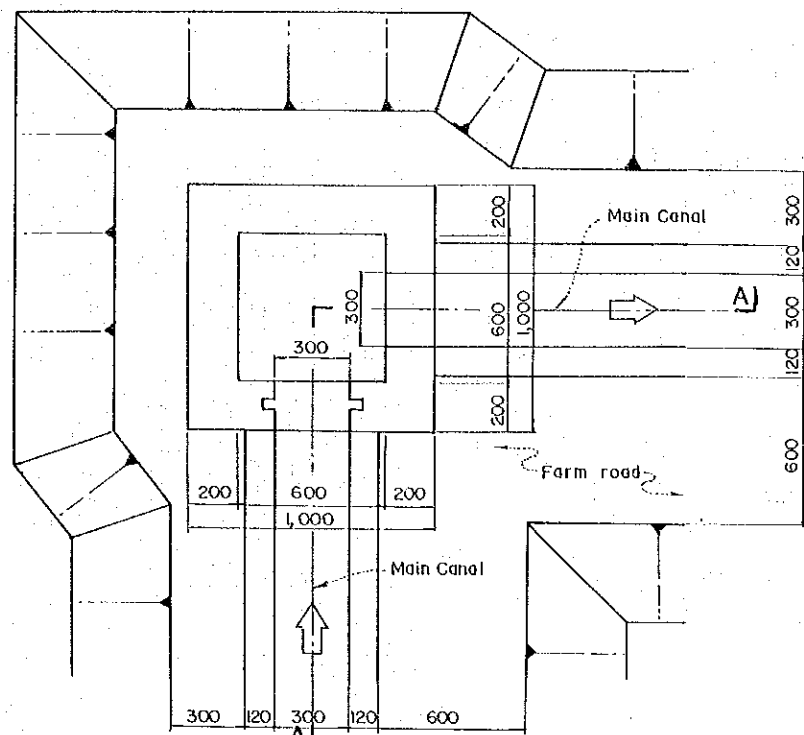
TITLE

TYPICAL CANAL SECTIONS

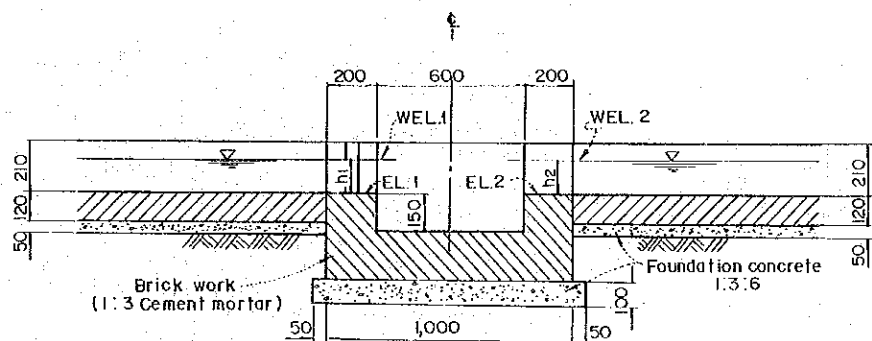
DATE DEC. 1980 D.W.G. NO. 400-04

JAPAN INTERNATIONAL COOPERATION AGENCY

TYPE A



PLAN



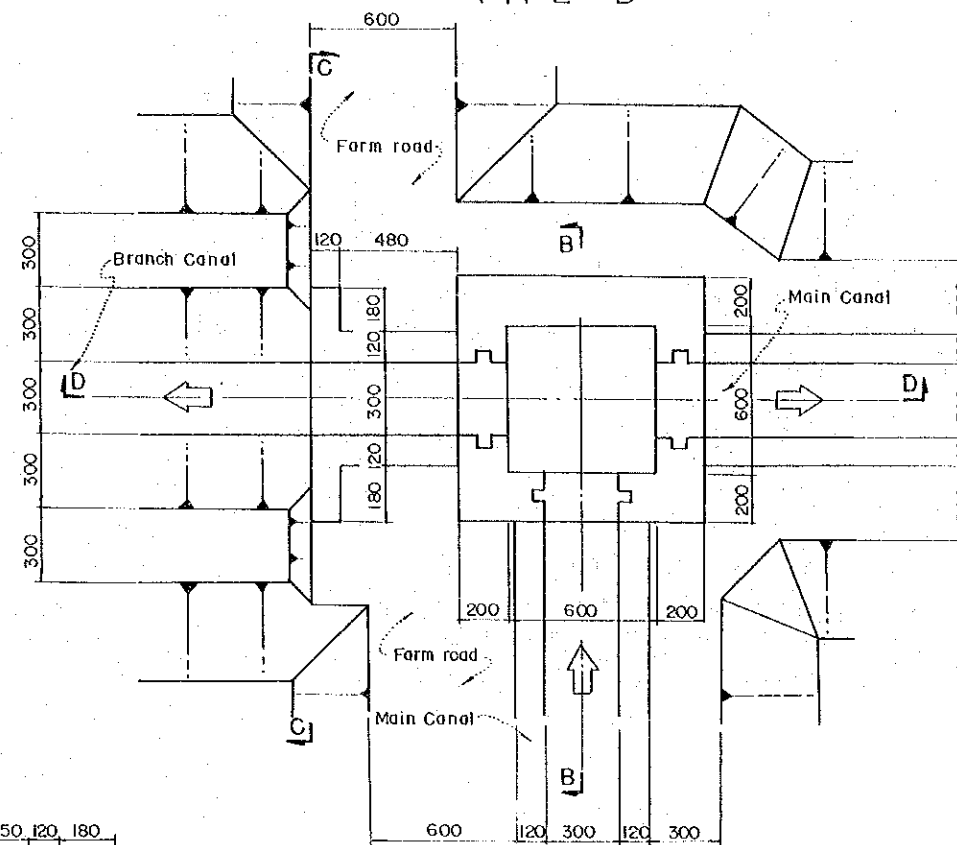
SECTION A

DIMENSION TABLE

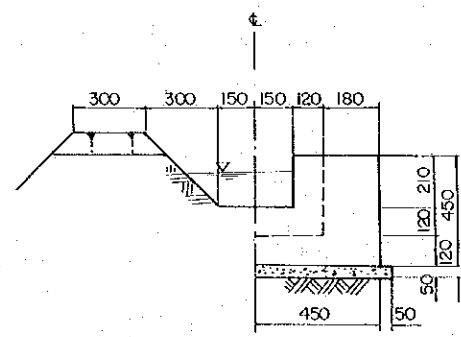
(Unit: Meters)

Area	Main Canal	No.	Type	Discharge	EL.1	EL.2	EL.3	EL.4	WEL.1	WEL.2	WEL.3	h1	h2	h3
Iswarpur	MC - 1	1	A	0.012 m <sup>3</sup> /s.	9.95	9.93	-	9.80	10.06	10.04	-	0.11	0.11	-
Saphy	MC - 2	1	B	0.012 m <sup>3</sup> /s.	9.38	9.36	9.36	9.23	9.52	9.50	9.50	0.14	0.14	0.14
Saphy	MC - 2	2	A	0.012 m <sup>3</sup> /s.	9.23	9.21	-	9.08	9.37	9.35	-	0.14	0.14	-

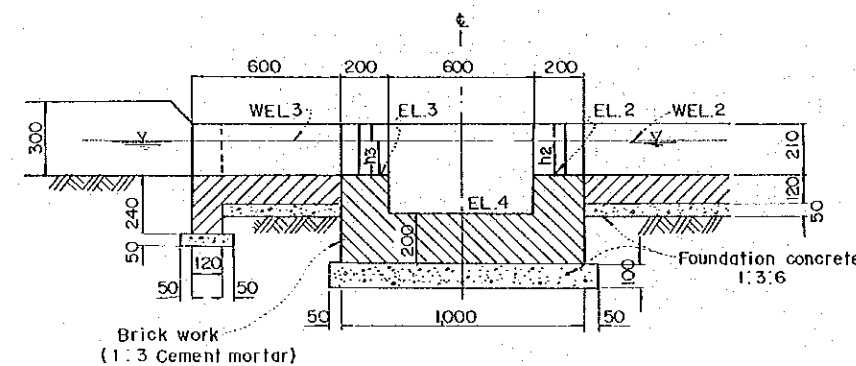
TYPE B



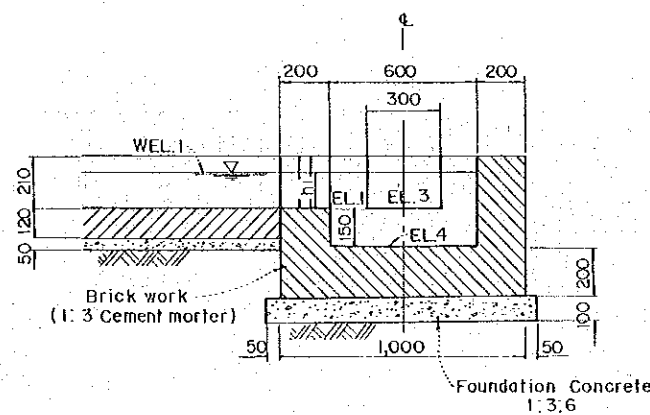
PLAN



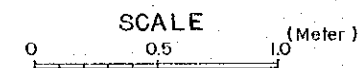
SECTION C



SECTION D



SECTION B

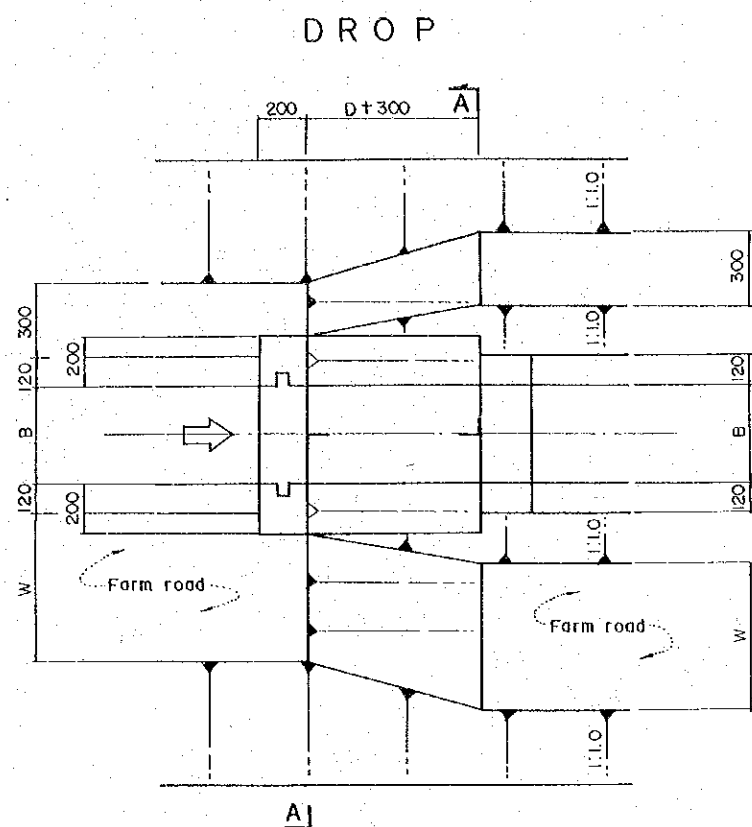


HMG OF NEPAL  
IRRIGATED MODEL FARM SCHEME  
FOR JANAKPUR ZONE AGRICULTURE DEVELOPMENT PROJECT

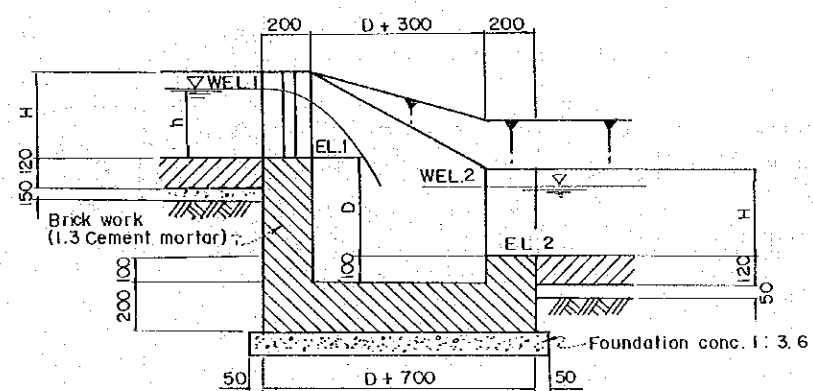
TITLE  
RELATED STRUCTURES  
ANGLE BOX STRUCTURES

DATE | DEC. 1980 | D.W.G. NO. | 500-01

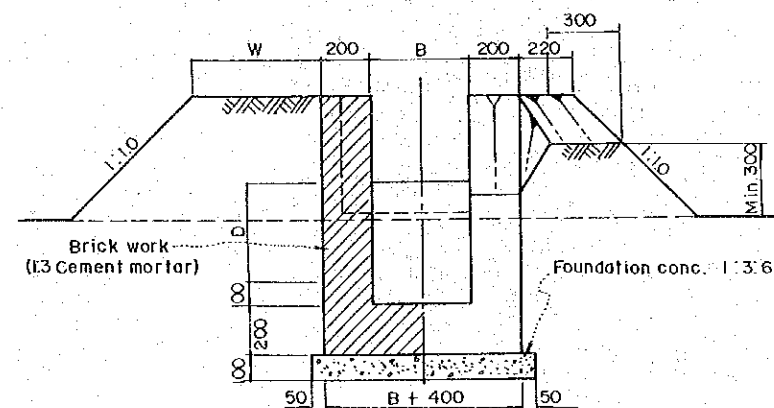
JAPAN INTERNATIONAL COOPERATION AGENCY



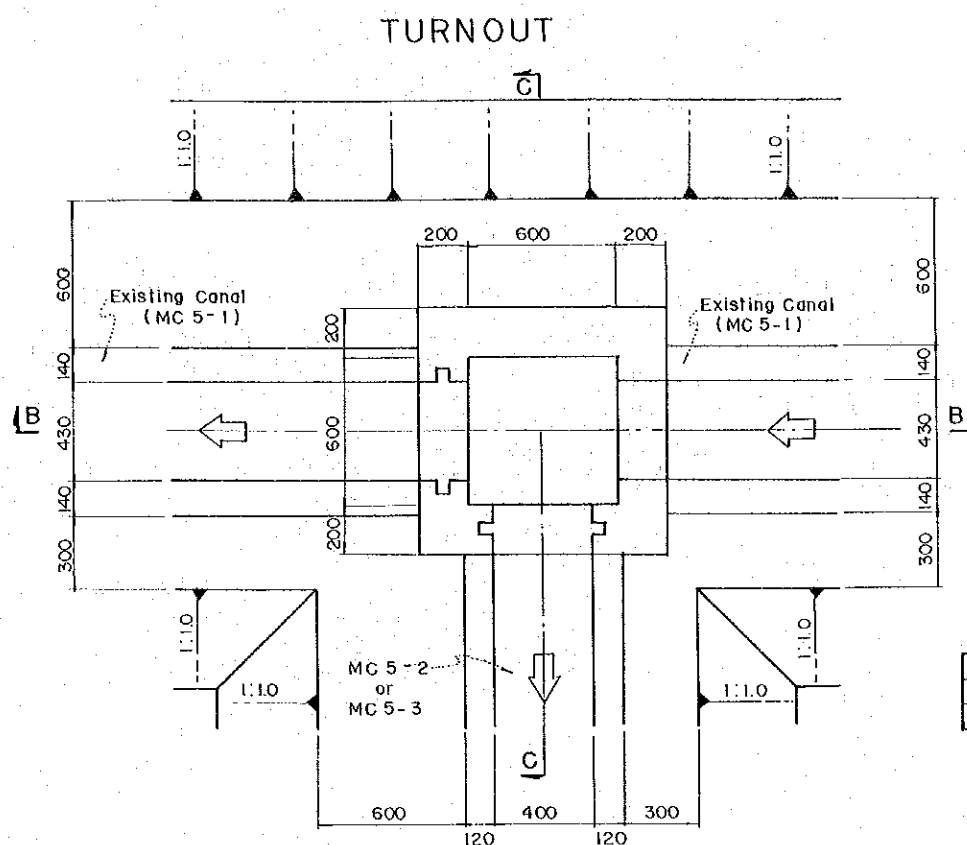
PLAN



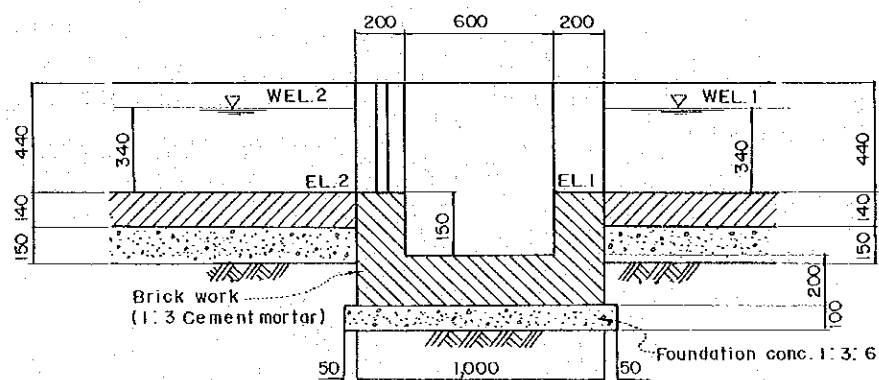
PROFILE



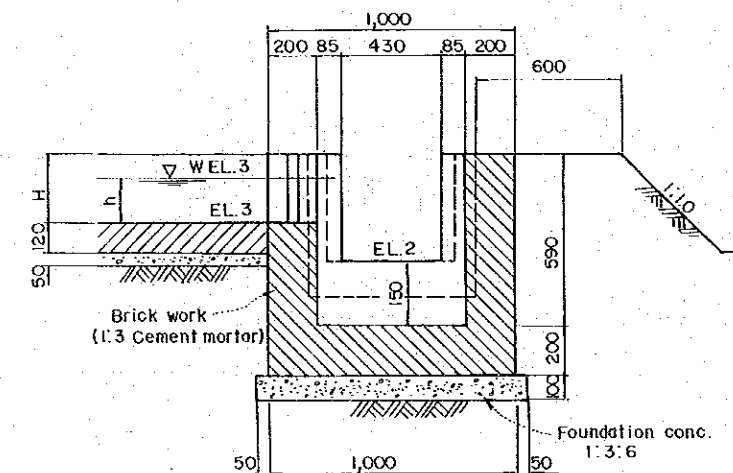
SECTION A



TURNOUT



SECTION B



SECTION C

DIMENSION TABLE OF TURNOUT STRUCTURE

(Unit : mm)

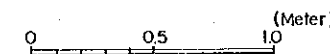
Area	Main Canal	No.	H	h	WEL.1	WEL.2	WEL.3	EL.1	EL.2	EL.3
IAP	MC-5-1	1	350	280	96.99	96.99	96.97	96.65	96.65	96.69
"	"	2	280	210	96.86	-	96.84	96.52	-	96.63

DIMENSION TABLE OF DROP STRUCTURE

(Unit : mm)

Area	Main Canal	No.	D	B	H	WEL.1	WEL.2	EL.1	EL.2	W
Iswarpur	MC-1	1	400	300	210	10.57	10.17	10.46	10.06	600
Sakhuwa	MC-1	1	400	300	210	9.77	9.37	9.66	9.26	2,500
"	"	2	300	300	210	9.01	8.71	8.90	8.60	2,500
IAP	MC-5-2	1	400	400	280	96.81	96.41	96.60	96.20	600
"	MC-5-3	1	300	400	280	96.80	96.50	96.59	96.29	600
"	"	2	200	400	280	96.43	96.23	96.22	96.02	600

Note: Elevations are shown in meters.



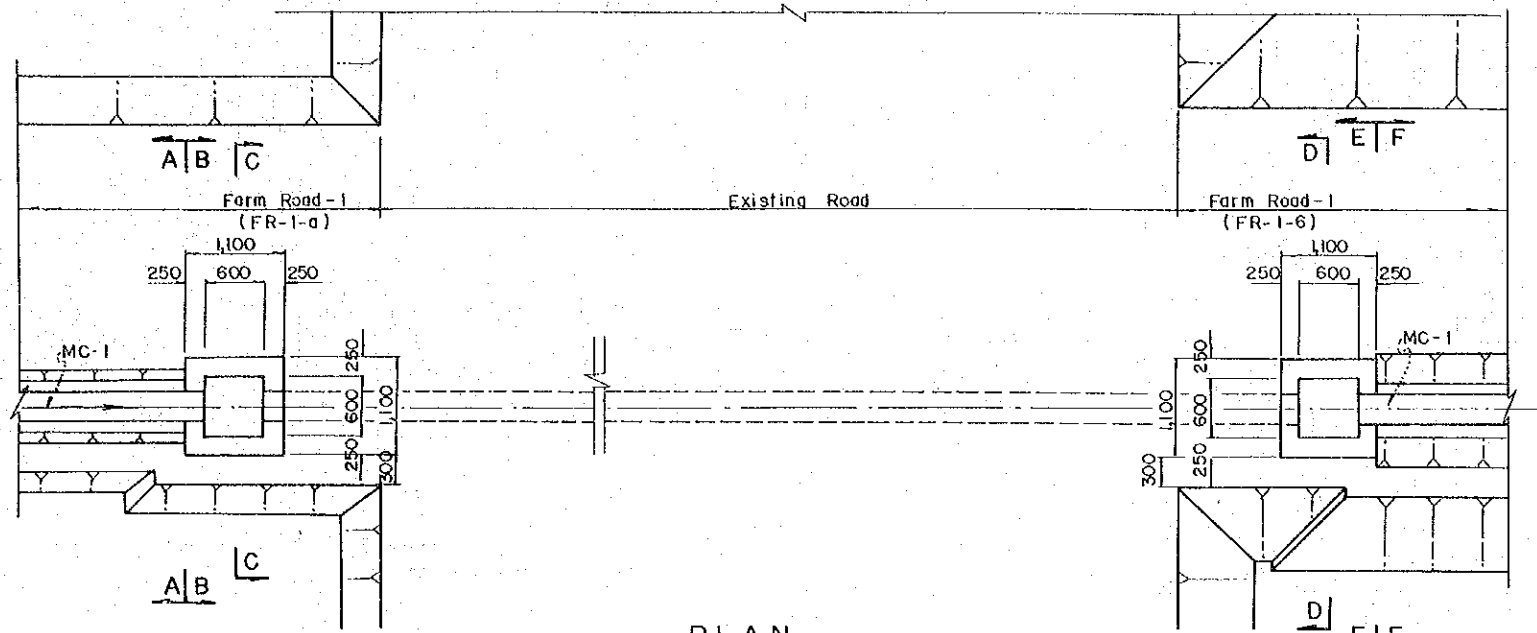
HMG OF NEPAL  
IRRIGATED MODEL FARM SCHEME  
FOR JANAKPUR ZONE AGRICULTURE DEVELOPMENT PROJECT

TITLE

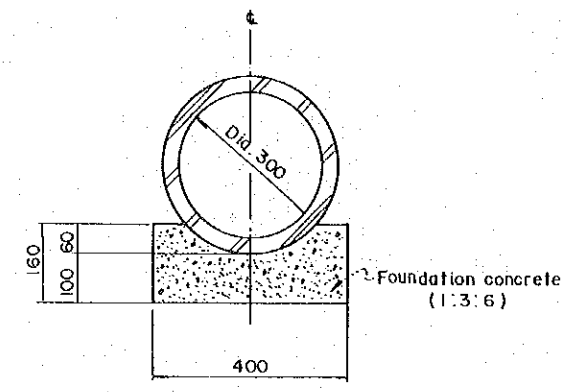
RELATED STRUCTURES  
DROP AND TURNOUT STRUCTURES

DATE DEC. 1980 D.W.G. NO. 500-02

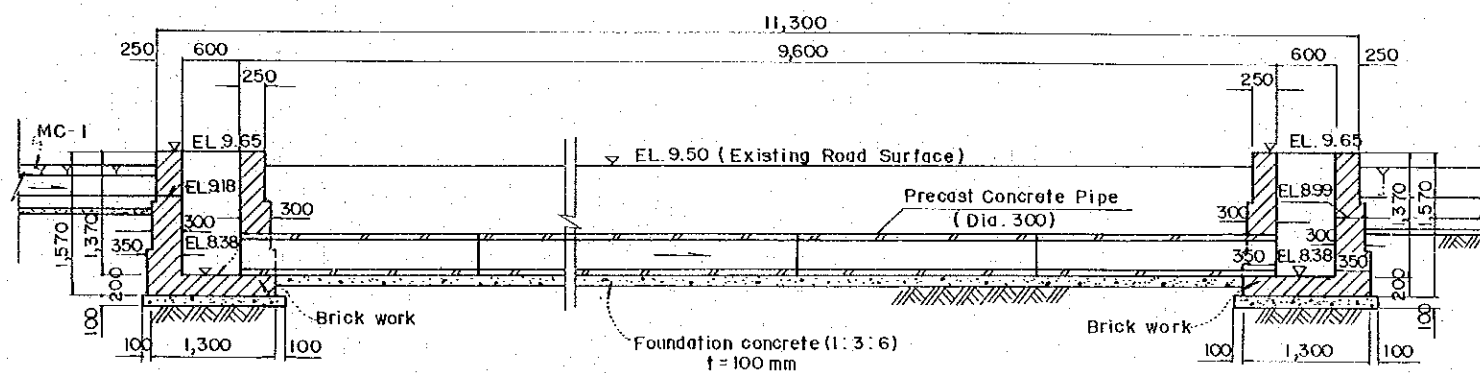
JAPAN INTERNATIONAL COOPERATION AGENCY



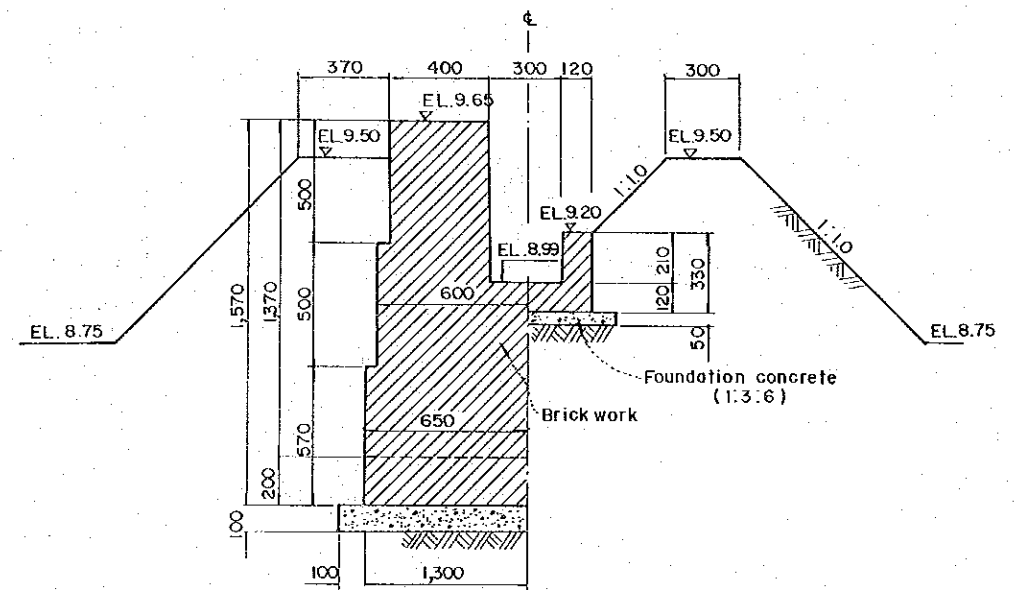
PLAN  
SCALE A



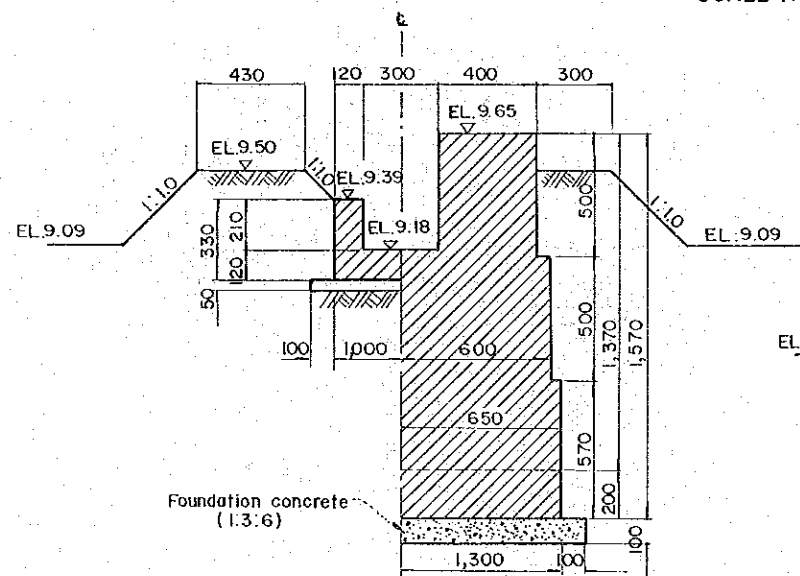
PIPE SECTION  
SCALE C



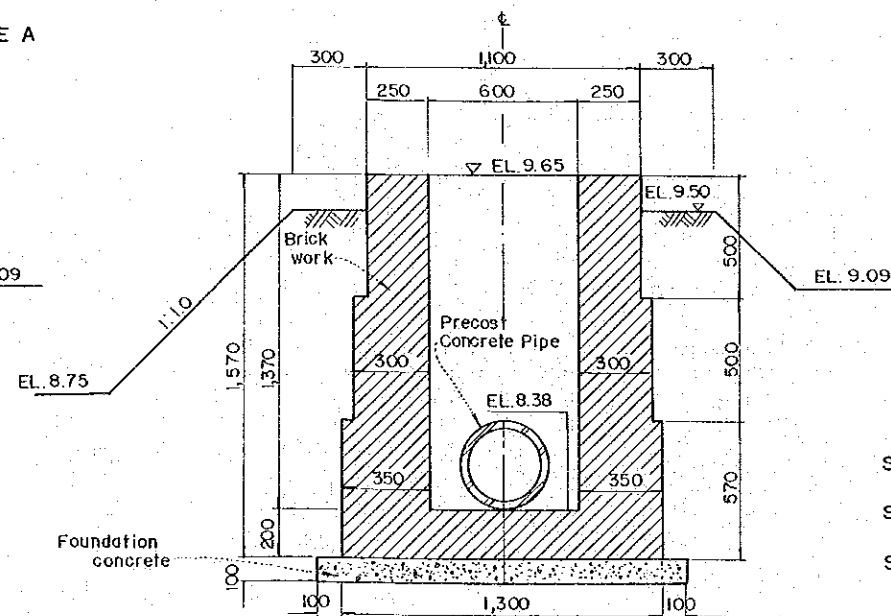
PROFILE  
SCALE A



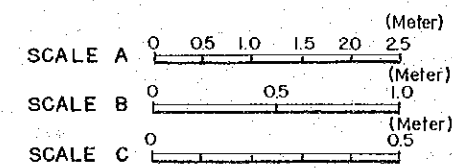
SECTION E SECTION F  
SCALE B



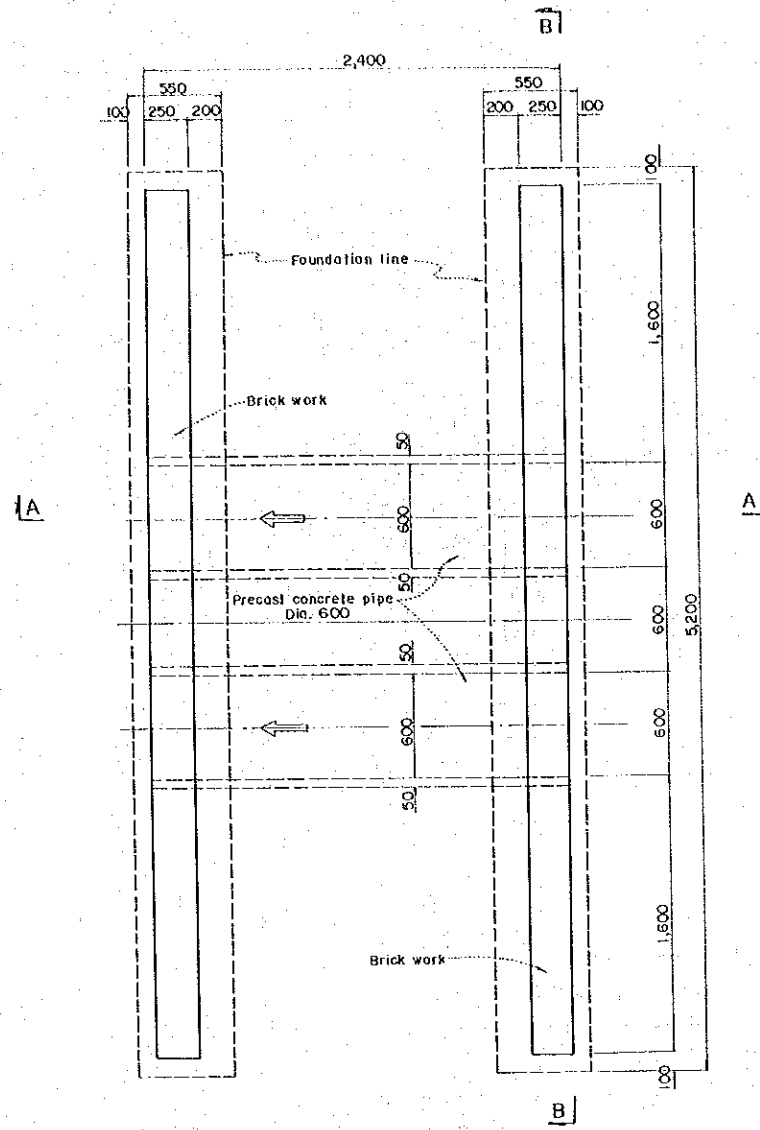
SECTION A SECTION B  
SCALE B



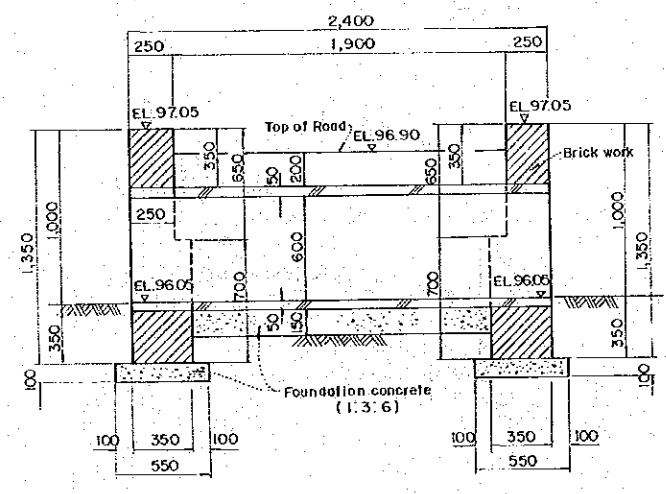
SECTION D SECTION C  
SCALE B



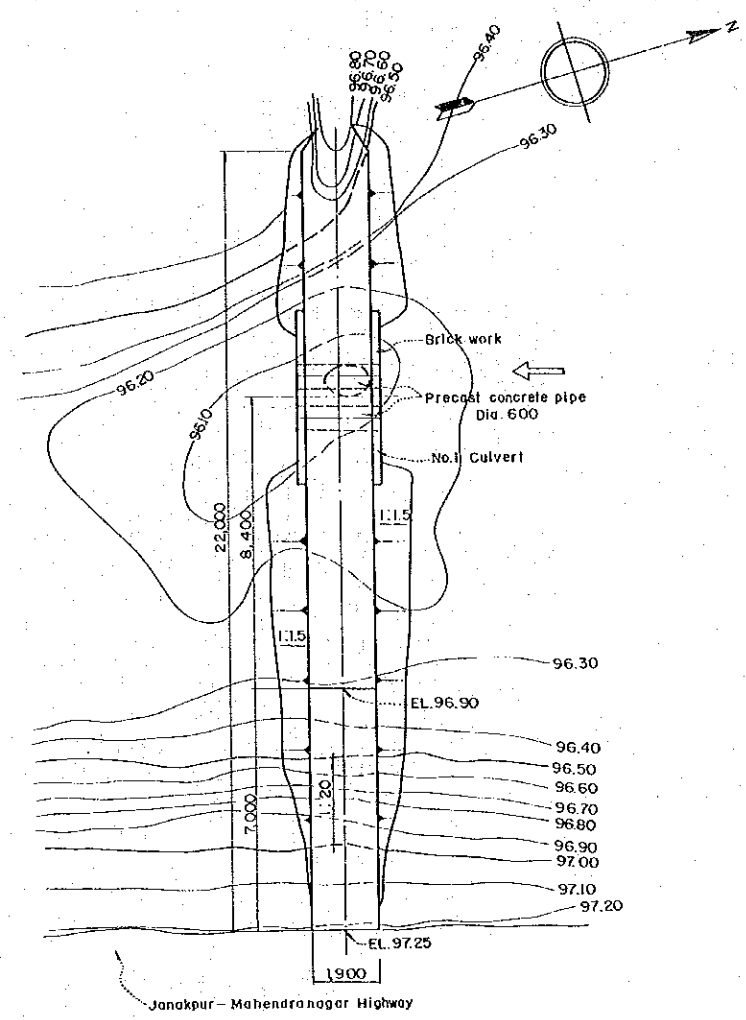
HMG OF NEPAL IRRIGATED MODEL FARM SCHEME FOR JANAKPUR ZONE AGRICULTURE DEVELOPMENT PROJECT		
TITLE <b>RELATED STRUCTURES SYPHON STRUCTURE OF SAKHUWA AREA</b>		
DATE	DEC. 1980	D.W.G. NO. 500 - 03
JAPAN INTERNATIONAL COOPERATION AGENCY		



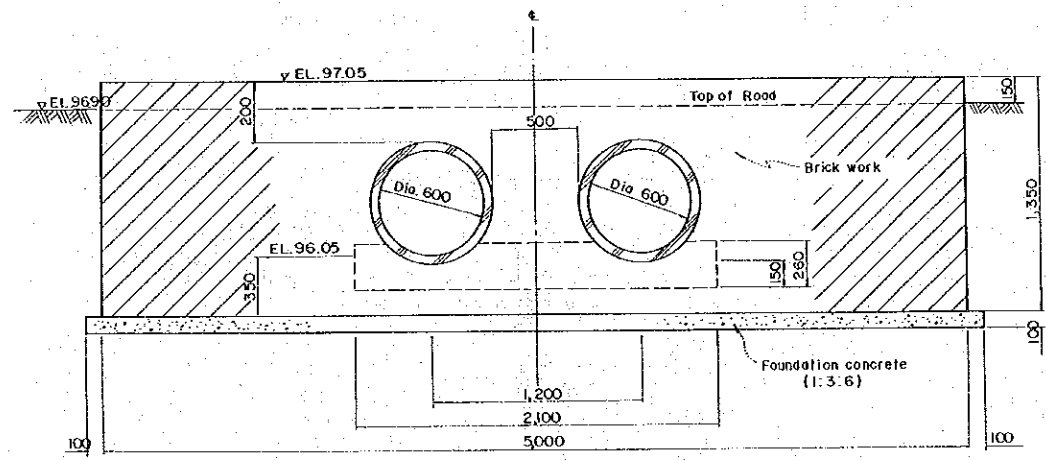
PLAN SCALE A



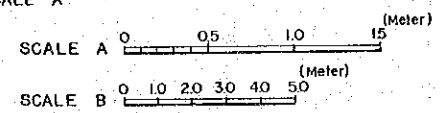
SECTION A SCALE A



GENERAL PLAN SCALE B



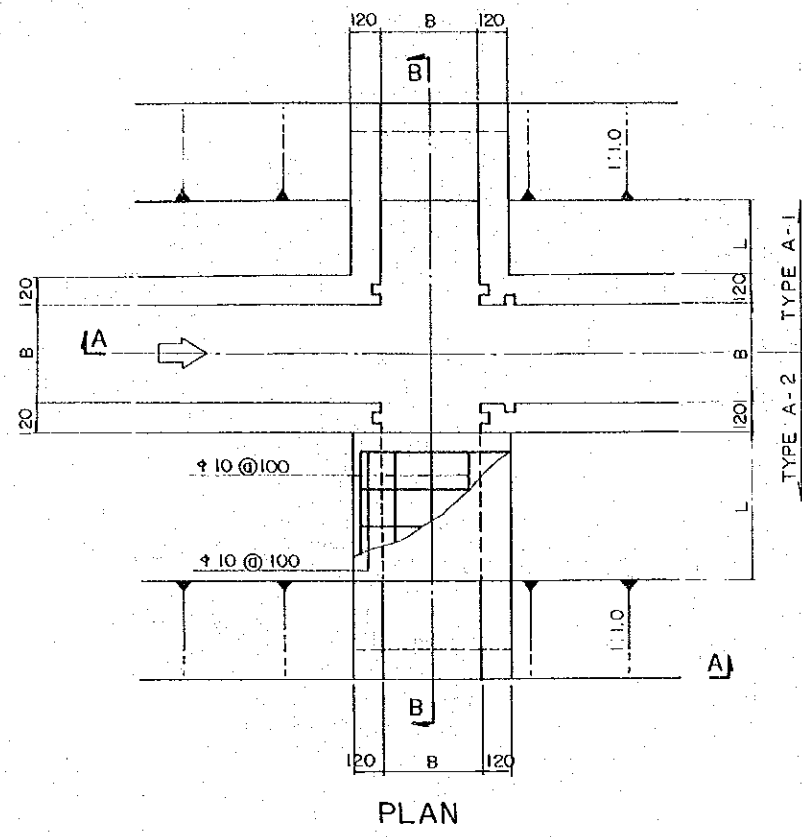
SECTION B SCALE A



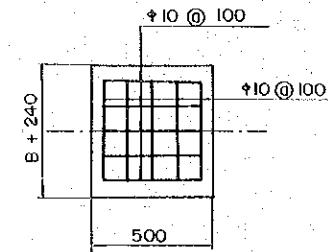
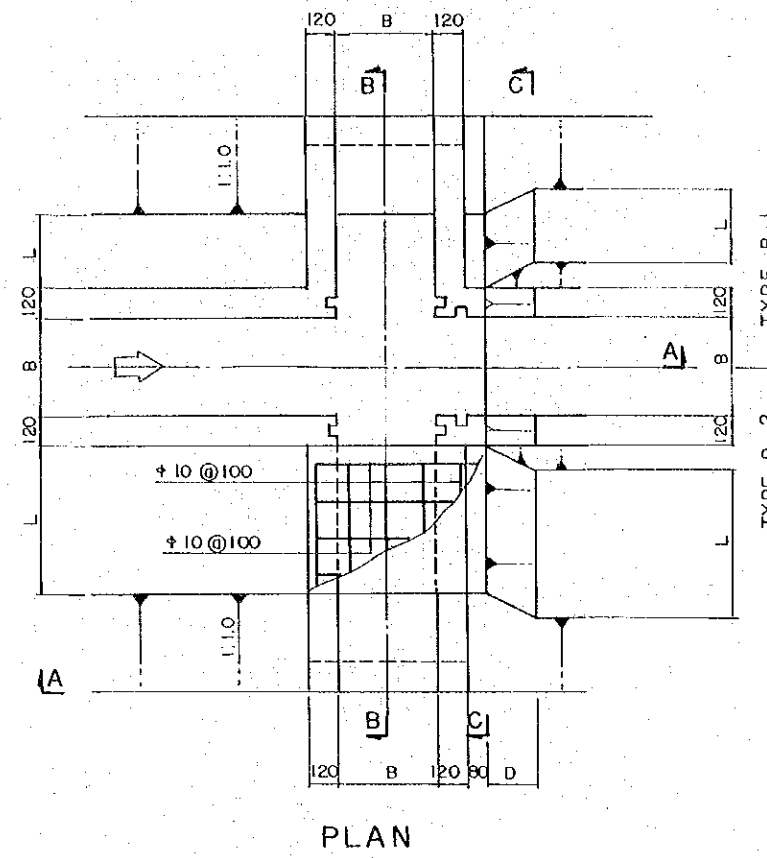
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TITLE RELATED STRUCTURES CULVERT STRUCTURES OF IAP AREA			
DATE	DEC. 1980	D.W.G. NO.	500 - 04
JAPAN INTERNATIONAL COOPERATION AGENCY			



TYPE A



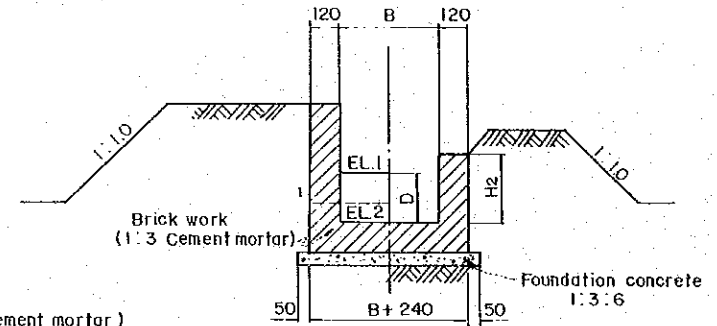
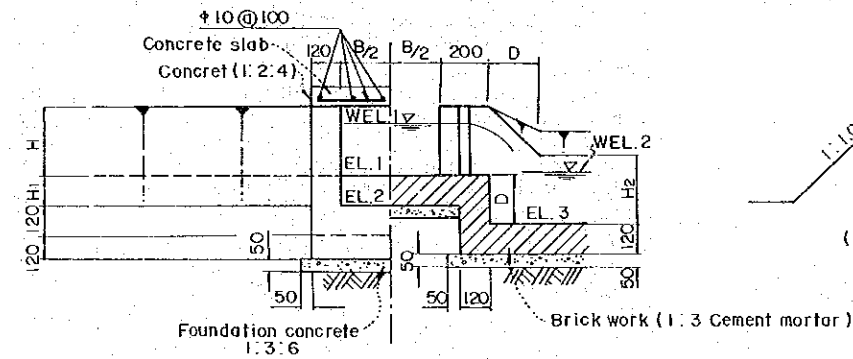
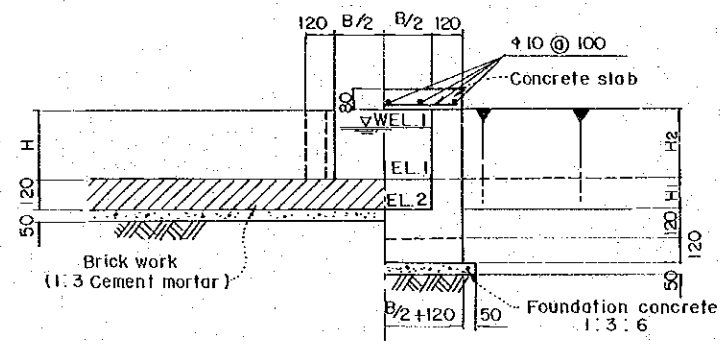
TYPE B



CONCRETE SLAB

PLAN

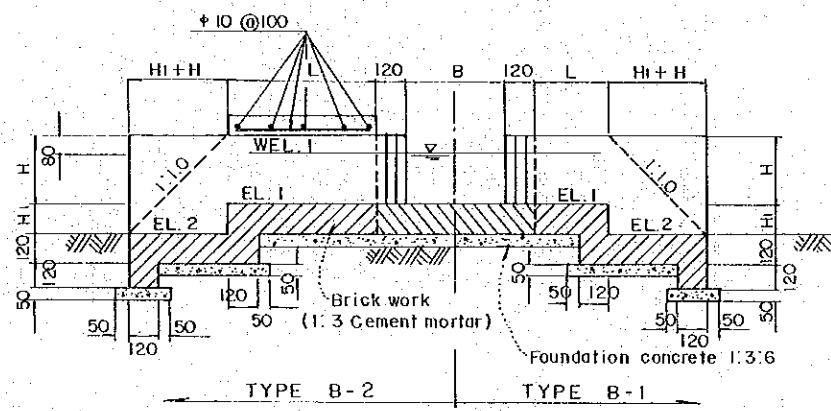
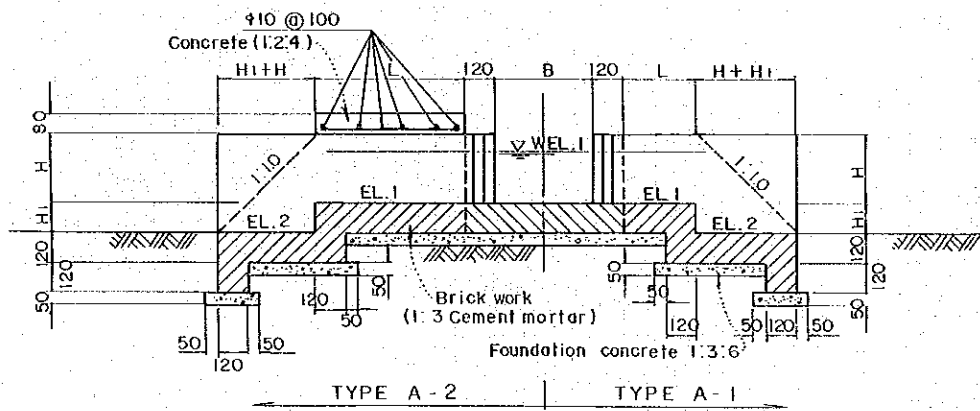
PLAN



SECTION A

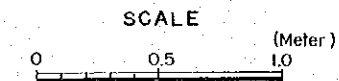
SECTION A

SECTION C



SECTION B

SECTION B



HMG OF NEPAL			
IRRIGATED MODEL FARM SCHEME			
FOR JANAKPUR ZONE AGRICULTURE DEVELOPMENT PROJECT			
TITLE			
RELATED STRUCTURES OUTLET STRUCTURES			
DATE	DEC. 1980	D.W.G. NO.	500 - 05
JAPAN INTERNATIONAL COOPERATION AGENCY			

DIMENSION TABLE OF OUTLET STRUCTURE

(Unit : Meters)

Area	Main Canal	No.	Type	B	L	H	H1	D	EL. 1	EL. 2	EL. 3	WEL. 1	WEL. 2	H2
Iswarpur	MC - 1	1	A-1	0.300	0.300	0.210	0.050	—	10.57	10.52	—	10.68	—	0.210
		2	A-1	0.300	0.600	0.210	0.050	—	10.57	10.52	—	10.68	—	0.210
		3	A-1	0.300	0.300	0.210	0.020	—	9.85	9.83	—	9.96	—	—
		4	A-1	0.300	0.300	0.210	0.050	—	9.85	9.80	—	9.96	—	—
Goshala	MC - 1	1	B-1	0.300	0.300	0.210	0.220	0.200	9.36	9.14	9.16	9.50	9.30	0.210
		2	B-1	0.300	0.600	0.210	0.040	0.200	9.36	9.32	9.16	9.50	9.30	0.210
		3	B-1	0.300	0.300	0.210	0.030	0.200	9.08	8.78	8.90	9.22	9.04	0.210
		4	B-1	0.300	0.600	0.210	0.020	0.200	9.08	9.06	8.90	9.22	9.04	0.210
		5	A-1	0.300	0.300	0.210	0.300	—	8.82	8.52	—	8.96	—	—
		6	A-1	0.300	0.600	0.210	0.020	—	8.82	8.80	—	8.96	—	—
Saphy	MC - 1	1	A-1	0.300	0.300	0.210	0.020	—	8.96	8.94	—	9.10	—	—
		2	A-1	0.300	0.300	0.210	0.020	—	8.96	8.94	—	9.10	—	—
	MC - 2	1	A-1	0.300	0.300	0.210	0.150	—	9.31	9.16	—	9.45	—	0.210
		2	B-1	0.300	0.600	0.210	0.020	0.200	9.20	9.18	9.00	9.34	9.14	0.210
Sakhuwa	MC - 1	3	B-1	0.300	0.300	0.210	0.110	0.200	9.20	9.09	9.00	9.34	9.14	0.210
		4	A-1	0.300	0.300	0.210	0.020	—	8.94	8.92	—	9.08	—	—
		1												
		2												
IAP	MC - 5-2	3												
		4												
		5	A-2	0.300	2.500	0.210	0.490	—	8.99	8.50	—	9.10	—	0.210
		6	A-1	0.300	0.300	0.210	0.240	—	8.99	8.75	—	9.10	—	0.210
		7												
		8												
		1	A-1	0.400	0.300	0.350	—	—	96.69	96.66	—	96.97	—	0.350
		2	A-1	0.400	0.600	0.350	—	—	96.69	96.69	—	96.97	—	0.350
3	A-1	0.400	0.300	0.350	—	—	96.57	96.57	—	96.85	—	0.280		
4	A-1	0.400	0.600	0.350	—	—	96.57	96.57	—	96.85	—	0.280		
5	A-1	0.400	0.300	0.280	—	—	96.02	96.02	—	96.23	—	0.280		
6	A-1	0.400	0.600	0.280	—	—	96.02	96.02	—	96.23	—	0.280		
7	A-1	0.400	0.300	0.280	—	—	95.80	95.80	—	96.01	—	0.280		
8	A-1	0.400	0.600	0.280	—	—	95.80	95.80	—	96.01	—	0.280		
9	B-1	0.400	0.300	0.280	—	0.200	95.57	95.44	95.31	95.79	95.59	0.350		
10	B-1	0.400	0.600	0.280	—	0.200	95.57	95.44	95.31	95.79	95.59	0.350		
11	A-1	0.400	0.300	0.350	—	—	95.21	95.21	—	95.49	—	0.350		
12	A-1	0.400	0.600	0.350	—	—	95.21	95.21	—	95.49	—	0.350		
13	B-1	0.400	0.300	0.350	—	0.200	95.09	95.09	94.89	95.37	95.17	0.350		
14	B-1	0.400	0.600	0.350	—	0.200	95.09	95.09	94.89	95.37	95.17	0.350		
15	A-1	0.400	0.300	0.350	—	—	94.79	94.79	—	95.07	—	—		
16	A-1	0.400	0.600	0.350	—	—	94.79	94.79	—	95.07	—	—		
MC - 5-3	1	A-1	0.400	0.300	0.280	—	—	96.65	96.65	—	96.84	—	0.280	
	2	A-1	0.400	0.600	0.280	—	—	96.65	96.65	—	96.84	—	0.280	
	3	A-1	0.400	0.300	0.280	—	—	95.91	95.91	—	96.12	—	0.280	
	4	A-1	0.400	0.600	0.280	—	—	95.91	95.91	—	96.12	—	0.280	
	5	A-1	0.400	0.300	0.280	—	—	95.69	95.69	—	95.90	—	0.280	
	6	A-1	0.400	0.600	0.280	—	—	95.69	95.69	—	95.90	—	0.280	
	7	A-1	0.400	0.300	0.280	—	—	95.47	95.47	—	95.68	—	0.280	
	8	A-1	0.400	0.600	0.280	—	—	95.47	95.47	—	95.68	—	0.280	
	9	B-1	0.400	0.300	0.280	—	0.200	95.25	95.25	95.05	95.46	95.26	0.280	
	10	B-1	0.400	0.600	0.280	—	0.200	95.25	95.25	95.05	95.46	95.26	0.280	
	11	A-1	0.400	0.300	0.280	—	—	94.85	94.85	—	95.06	—	0.280	
	12	A-1	0.400	0.600	0.280	—	—	94.85	94.85	—	95.06	—	0.280	
	13	A-1	0.400	0.300	0.280	—	—	94.63	94.63	—	94.84	—	0.350	
	14	A-1	0.400	0.600	0.280	—	—	94.63	94.63	—	94.84	—	0.350	
	15	A-1	0.400	0.300	0.350	—	—	94.44	94.44	—	94.72	—	—	
	16	A-1	0.400	0.600	0.350	—	—	94.44	94.44	—	94.72	—	—	

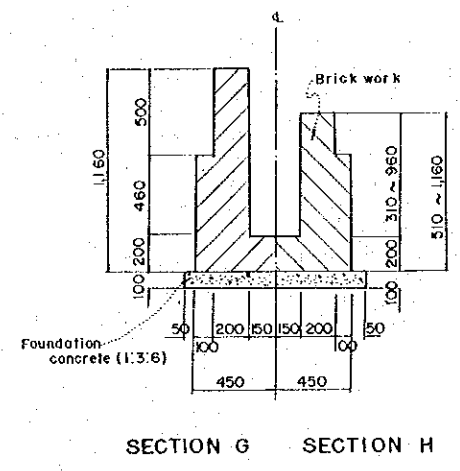
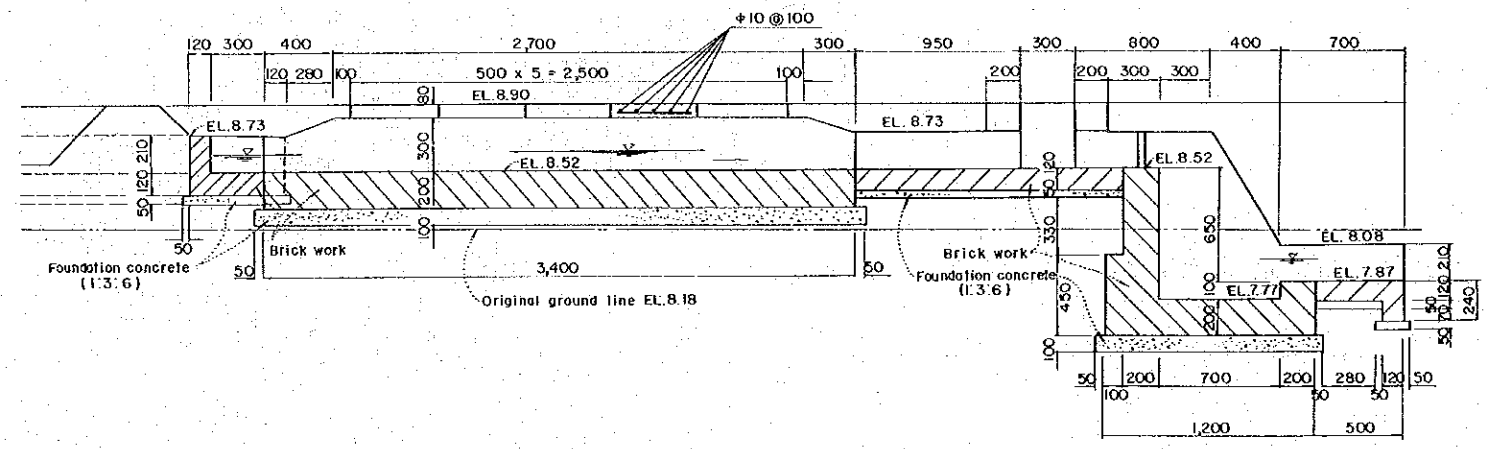
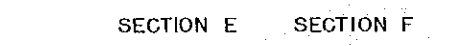
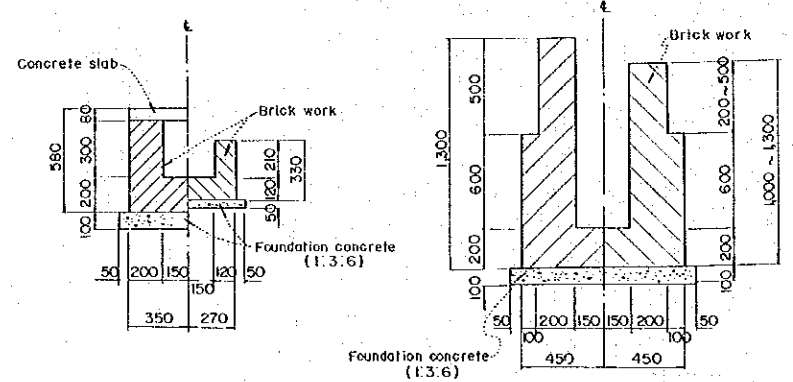
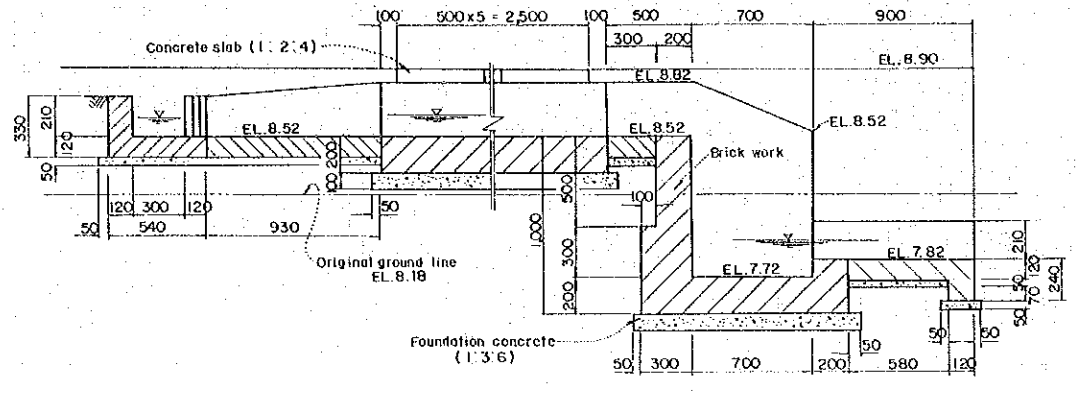
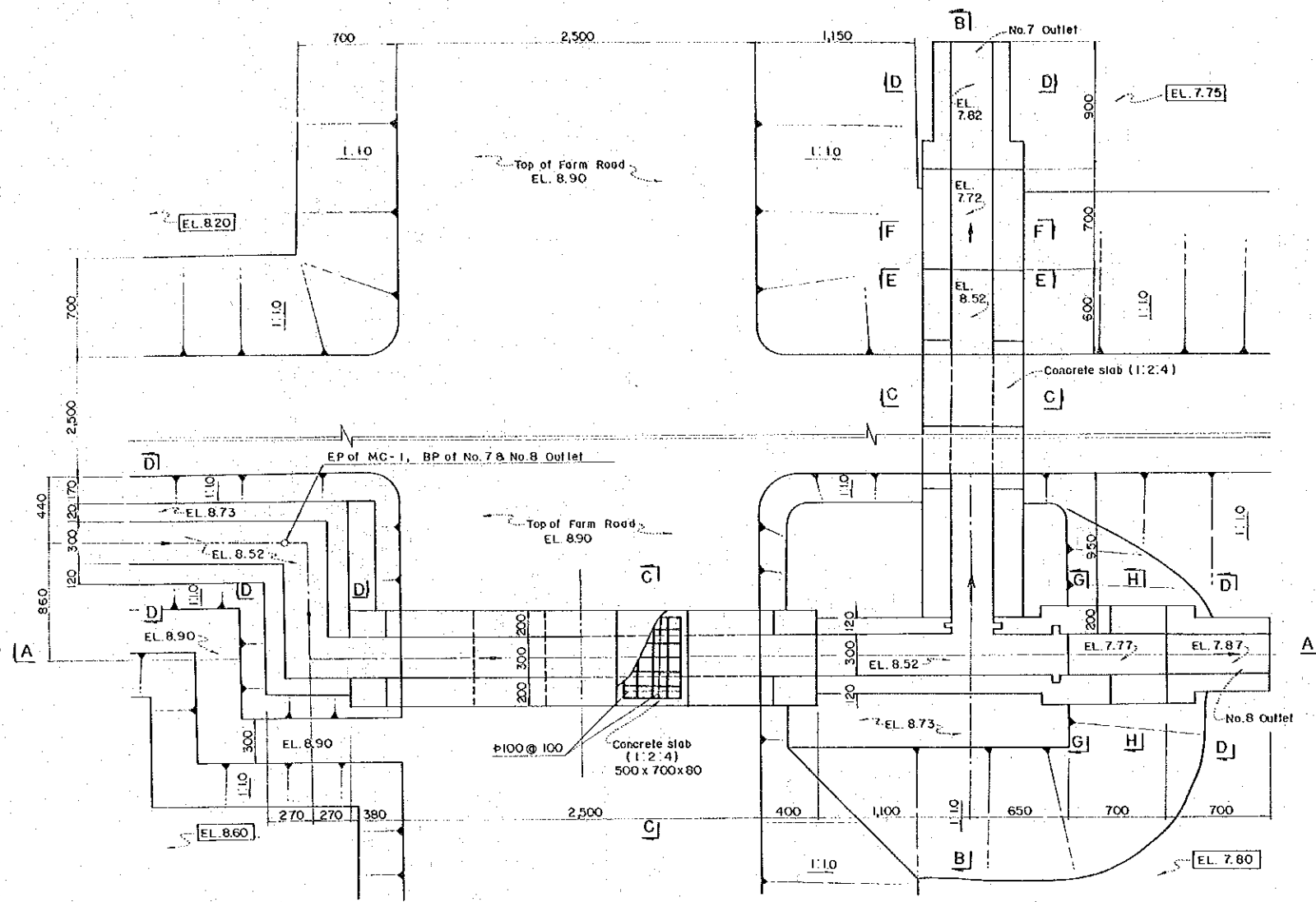
Notes. 1. Dimensions and elevations of No.1 to No.4 outlets in Sakhuwa Area are shown on D.W.G No. 300-04.  
 2. Dimensions and elevations of No. 7 and No. 8 outlets in Sakhuwa Area are shown on D.W.G. No. 500-07.

HMG OF NEPAL  
 IRRIGATED MODEL FARM SCHEME  
 FOR JANAKPUR ZONE AGRICULTURE DEVELOPMENT PROJECT

TITLE  
 RELATED STRUCTURES  
 DIMENSION TABLE OF OUTLET  
 STRUCTURES

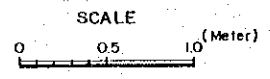
DATE DEC. 1980 DWG. NO. 500-06

JAPAN INTERNATIONAL COOPERATION AGENCY



Notes  
 B.P. : Beginning Point.  
 E.P. : Ending Point.  
 EL. 8.60 : Ground Elevation after Land Improvement.

HMG OF NEPAL  
 IRRIGATED MODEL FARM SCHEME  
 FOR JANAKPUR ZONE AGRICULTURE DEVELOPMENT PROJECT  
 TITLE  
**RELATED STRUCTURES  
 NO. 7 AND NO. 8 OUTLET STRUCTURES  
 OF SAKHUWA AREA**

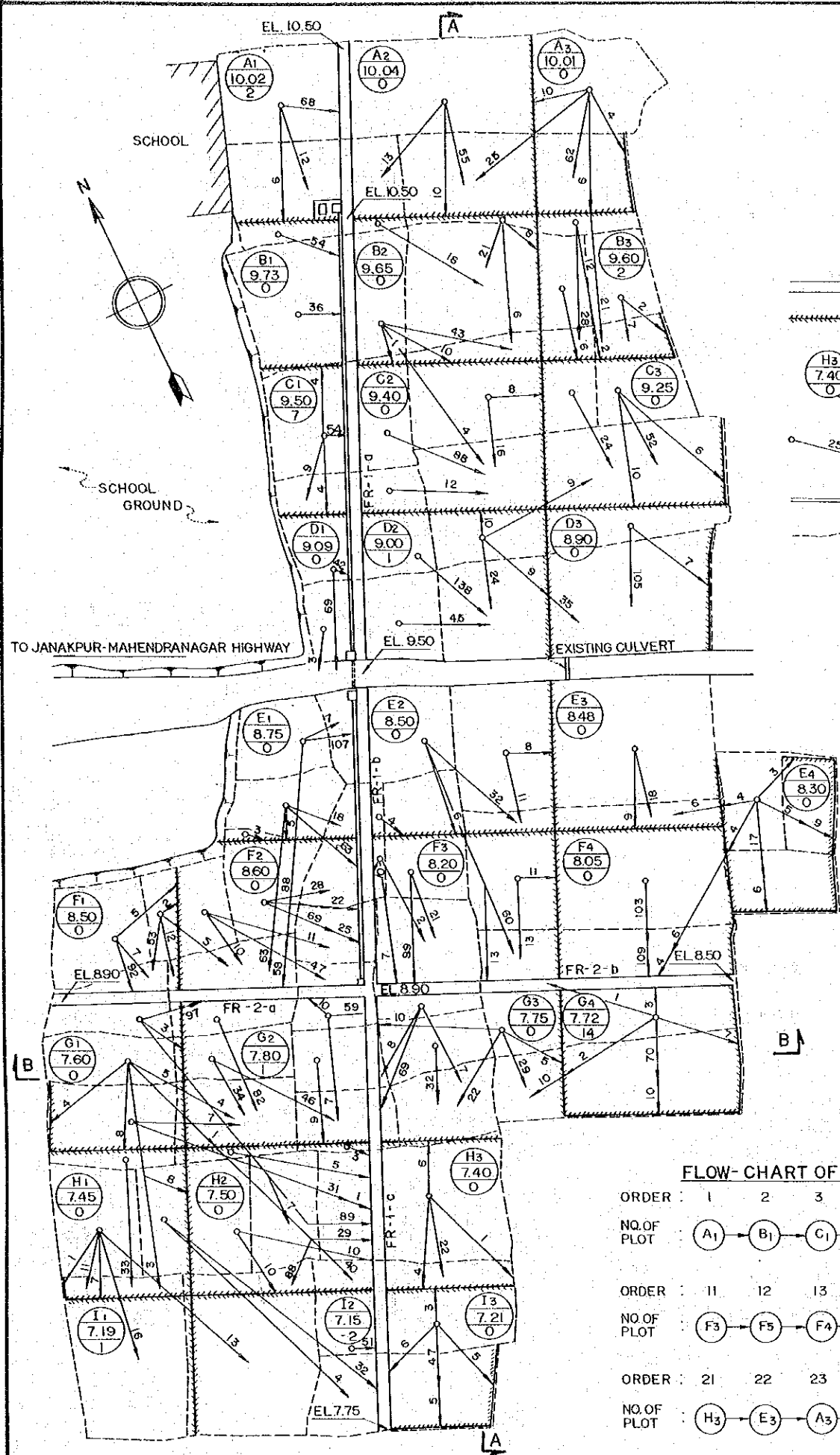


DATE DEC. 1980 D.W.G. NO. 500 - 07

JAPAN INTERNATIONAL COOPERATION AGENCY

EARTH WORK FOR LAND IMPROVEMENT

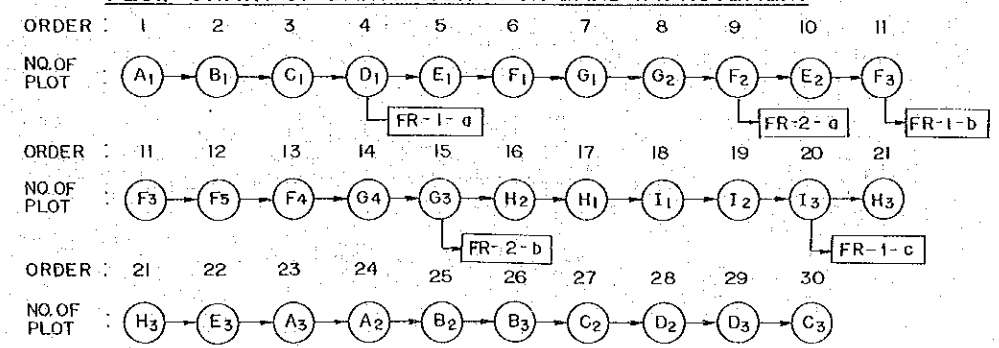
PLOT NO.	AREA (m <sup>2</sup> )	GROUND EL (m)	CUT		FILL			REVISED (m <sup>3</sup> )	BALANCE		TO OR FROM (+) (-)	DISPOSAL (m <sup>3</sup> )	
			FIELD (m <sup>3</sup> )	ROAD (m <sup>3</sup> )	FIELD (m <sup>3</sup> )	ROAD (m <sup>3</sup> )	RISE (m <sup>3</sup> )		TOTAL (m <sup>3</sup> )	+			-
A 1	1,300	10.02	88	10	61	6	77	0.9	86	2		2	
A 2	2,400	10.04	78	84	0	9	93	0.9	103		+25(A3)	0	
A 3	1,300	10.01	128	55	0	19	74	0.9	82	46	-25(A2) -21(B3)	0	
B 1	1,100	9.73	90	0	81	0	81	0.9	90	0	0	0	
B 2	2,000	9.65	111	79	0	17	96	0.9	107	4	-4(C2)	0	
B 3	1,250	9.60	60	62	0	9	71	0.9	79		+21(A3)	2	
C 1	800	9.50	72	2	48	8	58	0.9	65	7		7	
C 2	2,000	9.40	124	108	0	7	115	0.9	128		+4(B2)	0	
C 3	1,800	9.25	92	77	0	14	91	0.9	101		+9(D2)	0	
D 1	550	9.09	114	0	102	0	102	0.9	114	0	0	0	
D 2	2,000	9.00	271	187	0	16	203	0.9	226	45	-9(C3) -35(D3)	1	
D 3	1,800	8.90	112	126	0	6	132	0.9	147		+35(D2)	0	
E 1	1,300	8.75	412	23	96	7	126	0.9	140	272		-272(F2)	0
E 2	2,000	8.50	134	39	0	16	55	0.9	61	73		-73(F3)	0
E 3	1,800	8.48	90	78	0	8	86	0.9	96		+6(E4)	0	
E 4	1,300	8.30	64	19	0	24	43	0.9	48	16		-6(E3) -10(F4)	0
F 1	1,050	8.50	181	65	87	6	158	0.9	176	5		-5(F2)	0
F 2	1,850	8.60	212	294	242	0	536	0.9	596		384	+272(E1)+97(G1) +5(F1)+10(G2)	0
F 3	2,000	8.20	164	86	118	10	214	0.9	238		74	+1(G4) +73(E2)	0
F 4	1,900	8.05	213	98	105	0	203	0.9	226		13	+10(E4)+3(G4)	0
G 1	1,500	7.60	425	0	0	18	18	0.9	20	405		-12(G2) -289(H2)-97(F2)	0
G 2	2,000	7.80	248	162	124	9	295	0.9	328		80	+12(G1)+79(G3)	1
G 3	1,900	7.75	182	97	0	5	102	0.9	113	69		+79(G2) -10(G4)	0
G 4	1,700	7.72	117	63	0	17	80	0.9	89	28		-1(F3)-10(G3) -3(F4)	+14
H 1	1,400	7.40	118	42	0	16	58	0.9	64	54		+11(G1)-16(I1)	0
H 2	2,000	7.50	29	150	123	9	282	0.9	314		285	+285(G1)	0
H 3	1,350	7.40	33	20	0	10	30	0.9	33	0	0		0
I 1	1,250	7.18	0	13	0	0	13	0.9	15		15	+16(H1)	1
I 2	1,900	7.15	51	16	80	0	96	0.9	107		56	+5(I3) +49(H1)	-2
I 3	1,200	7.21	66	42	0	13	55	0.9	61	5	0	-5(I2)	0
Total	47,700		4,079	2,097	1,267	279	3,643		4,053	1,031	1,005		26



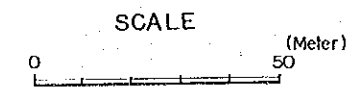
**LEGEND**

- : FARM ROAD (FR)
- ==== : FARM RIDGE
- : NO. OF PLOT
- : ELEVATION (m)
- : REMAINDER (m<sup>3</sup>)
- ↔ : DIRECTION AND VOLUME OF EARTH MOVEMENT (m<sup>3</sup>)
- : MAIN CANAL
- - - : EXISTING FARM RIDGE

FLOW-CHART OF EARTH WORK FOR LAND IMPROVEMENT



- NOTES
1. Elevation of BM-3 is tentatively assumed at 10,000 meters.
  2. Units of elevations and lengths are shown in meters.
  3. Land improvement except construction of farm ridges will be carried out on force account basis.
  4. Construction of farm ridges will be carried out under this contract.



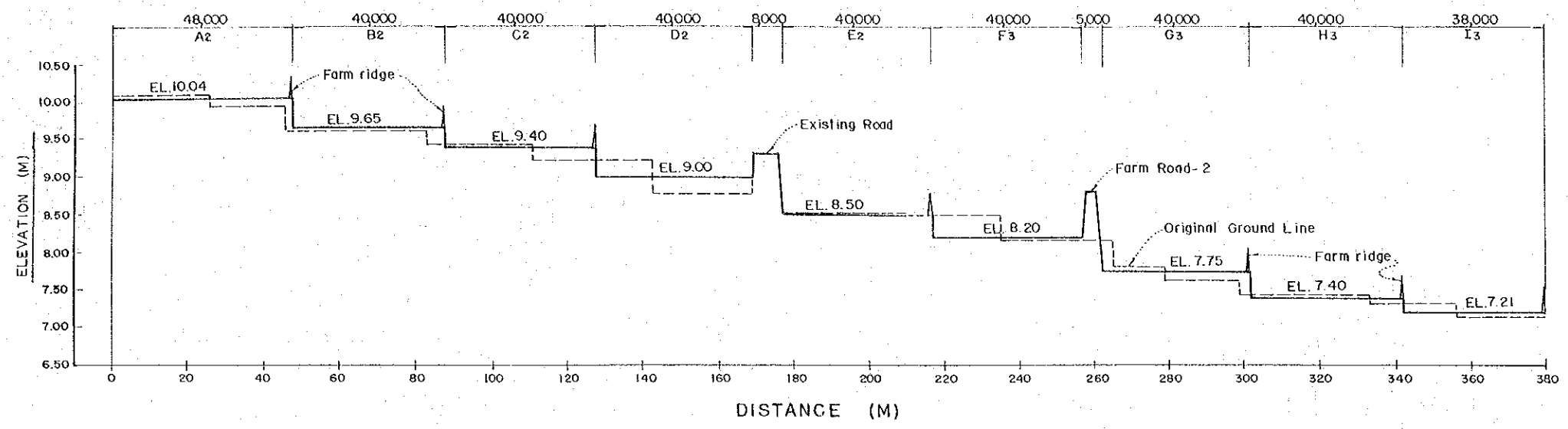
HMG OF NEPAL  
IRRIGATED MODEL FARM SCHEME  
FOR JANAKPUR ZONE AGRICULTURE DEVELOPMENT PROJECT

TITLE  
**EARTH WORK SCHEDULE  
FOR LAND IMPROVEMENT  
OF SAKHUWA AREA**

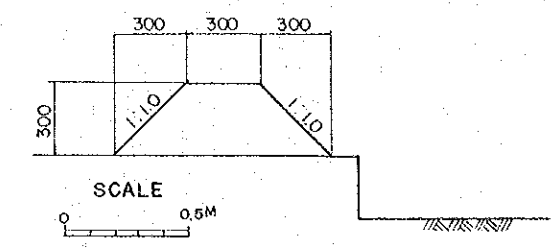
DATE : DEC. 1980    D.W.G. NO. : 600-01

JAPAN INTERNATIONAL COOPERATION AGENCY

SECTION A - A

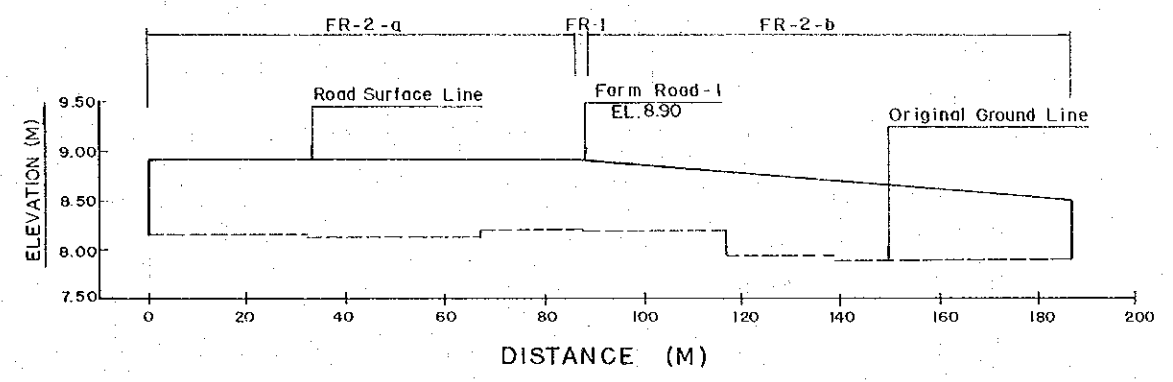


TYPICAL SECTION OF FARM RIDGE

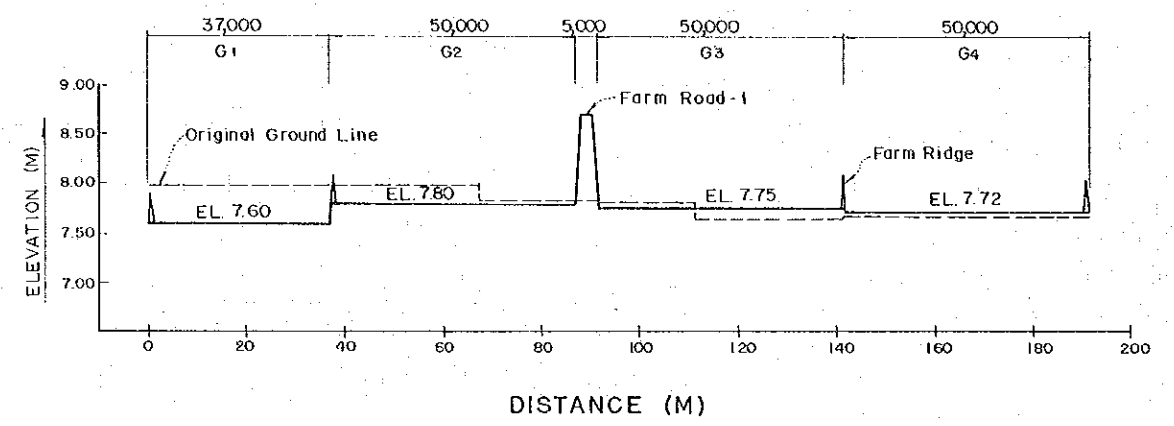


- Notes
1. Land improvement except construction of farm ridges will be carried out on force account basis.
  2. Construction of farm ridges will be carried out under this contract.

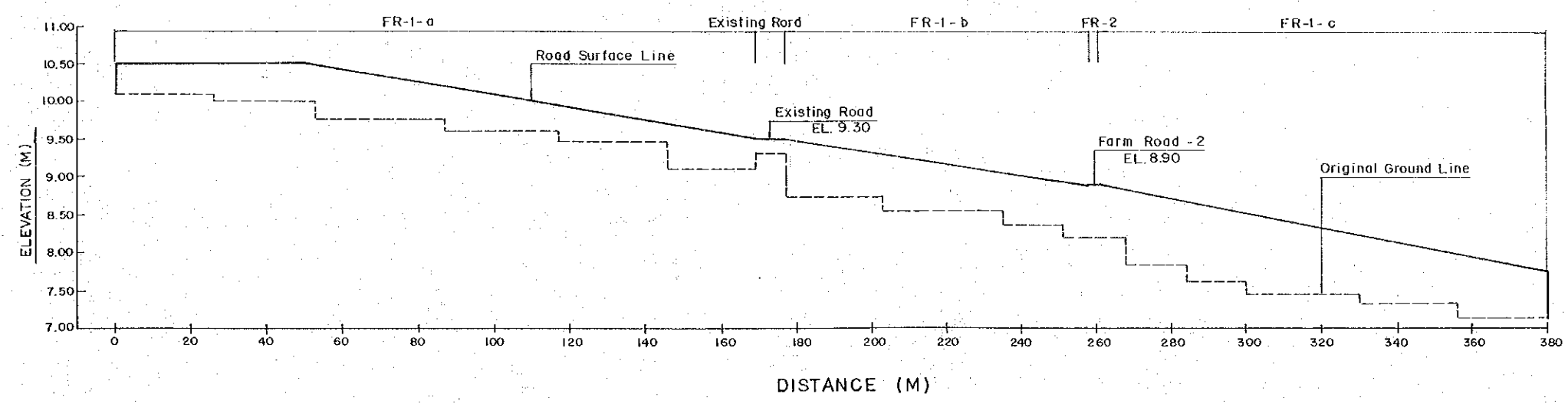
FARM ROAD - 2



SECTION B - B



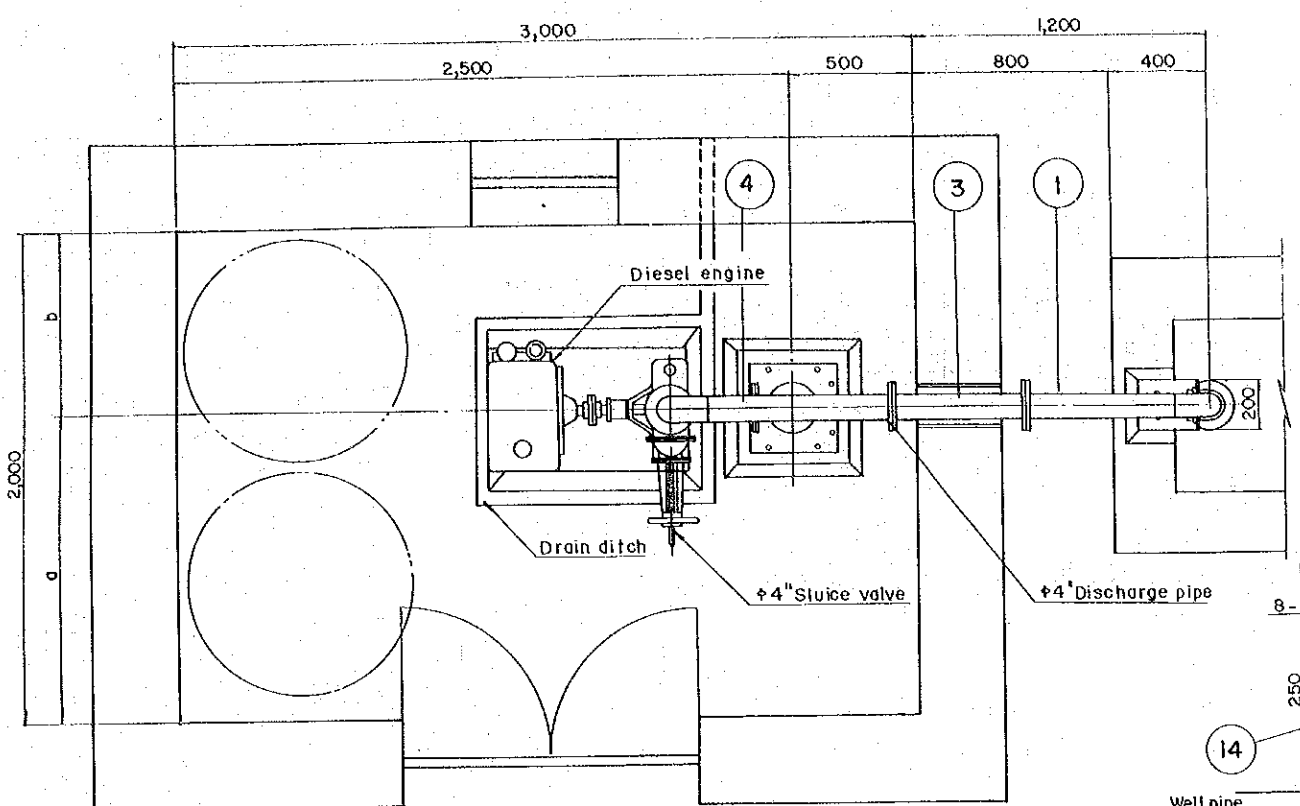
FARM ROAD - 1



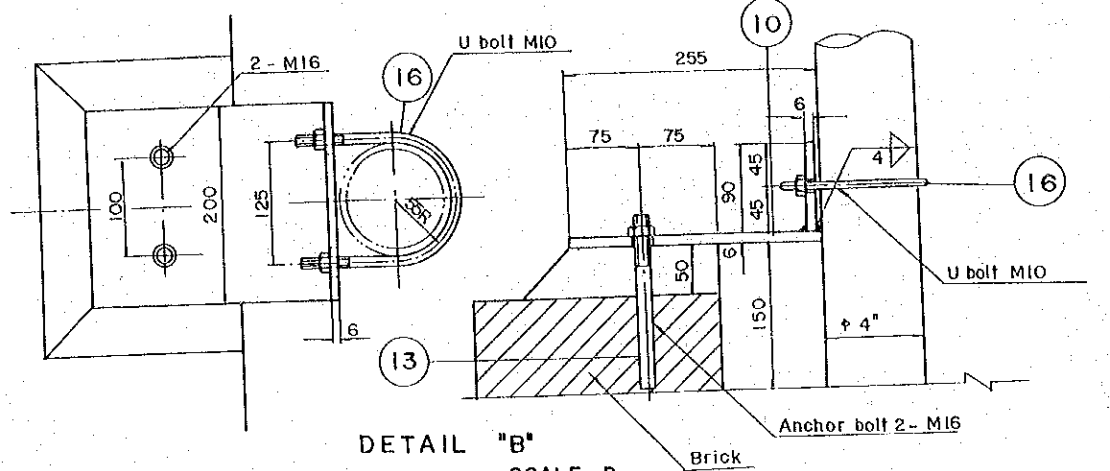
Abbreviations

- FR : Farm Road
- M : Meters

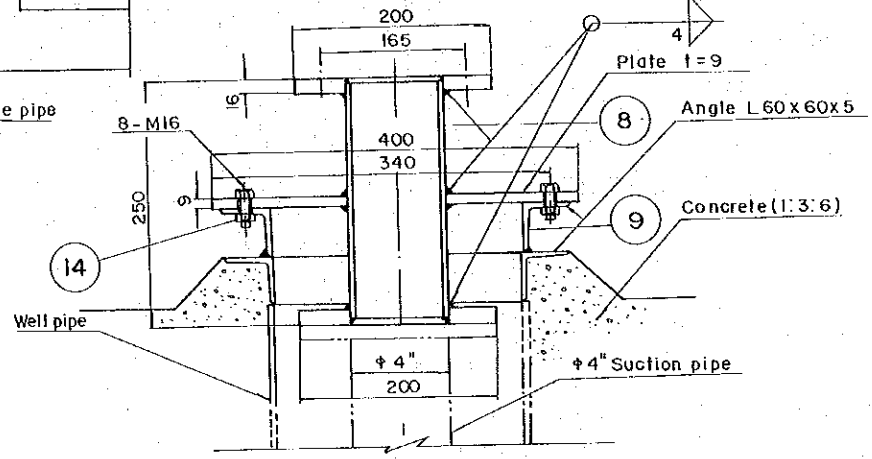
HMG OF NEPAL			
IRRIGATED MODEL FARM SCHEME			
FOR JANAKPUR ZONE AGRICULTURE DEVELOPMENT PROJECT			
TITLE			
PROFILES OF IMPROVED LAND AND FARM ROAD FOR SAKHUWA AREA			
DATE	DEC. 1980	D.W.G. NO.	600-02
JAPAN INTERNATIONAL COOPERATION AGENCY			



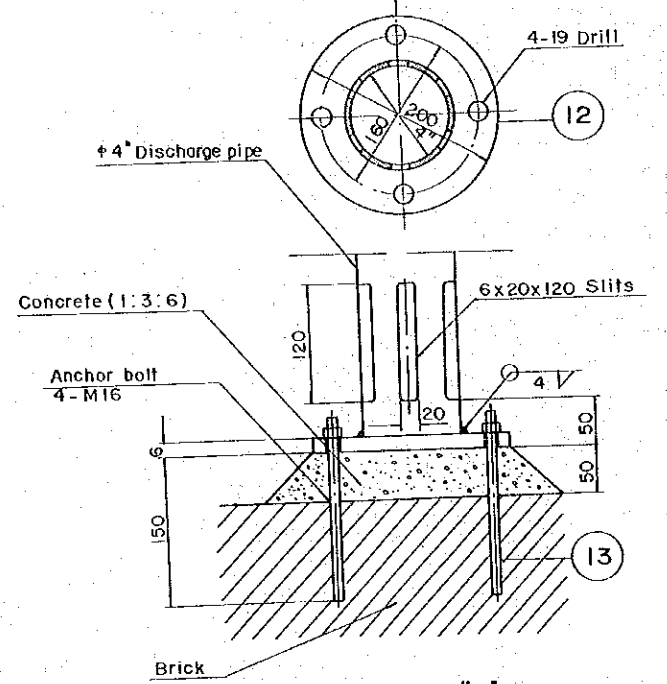
PLAN SCALE A



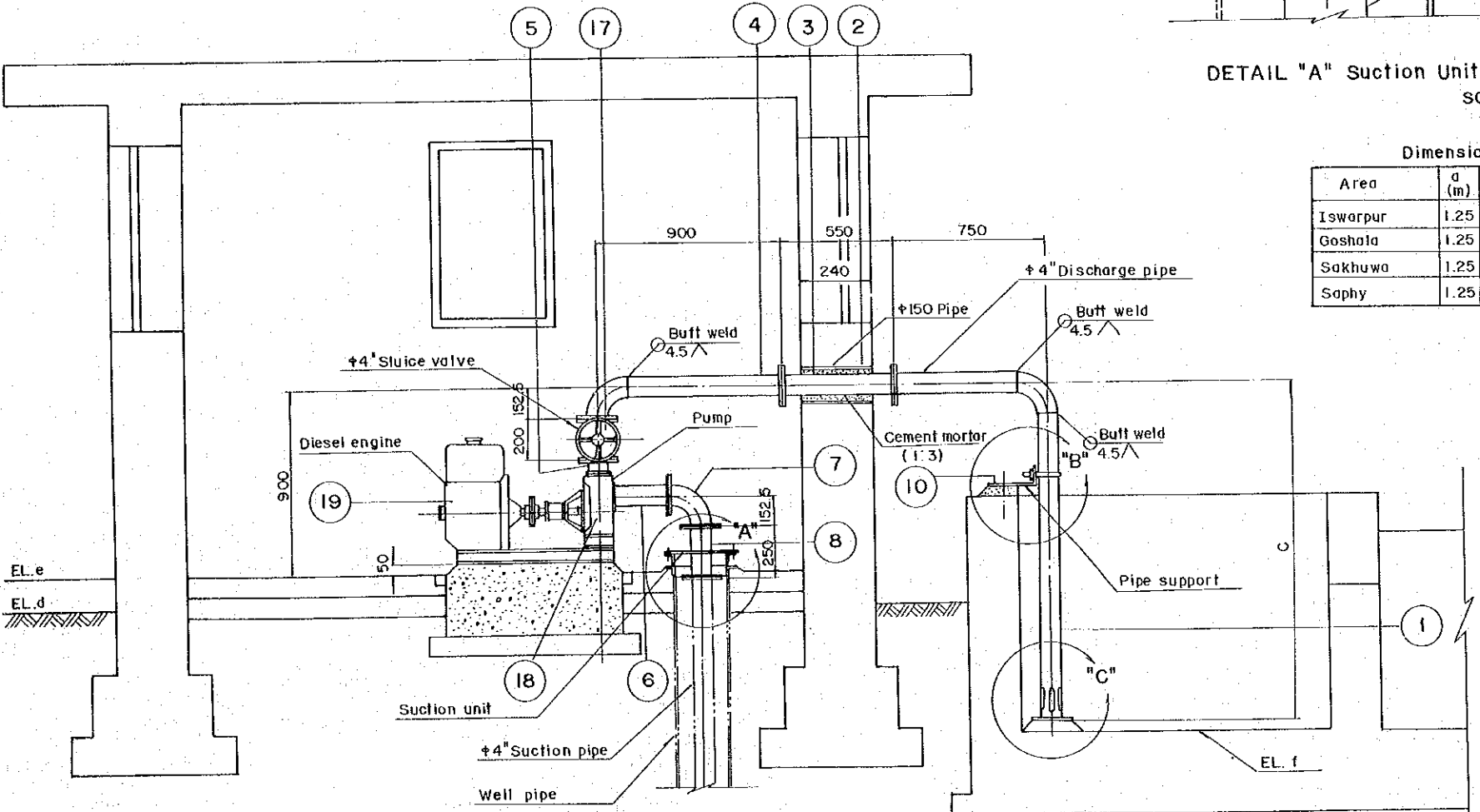
DETAIL "B" SCALE B



DETAIL "A" Suction Unit SCALE B



DETAIL "C" SCALE B

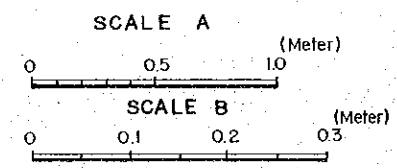


PROFILE SCALE A

Dimension Table

Area	a (m)	b (m)	c (m)	EL. d	EL. e	EL. f
Iswarpur	1.25	0.75	1.68	10.80	10.97	10.14
Goshala	1.25	0.75	1.65	9.58	9.75	8.95
Sakhuwa	1.25	0.75	1.82	10.50	10.67	9.70
Saphy	1.25	0.75	1.53	9.48	9.65	8.97

- Notes:
1. Procurement and installation of pumping equipment will be carried out on force account basis.
  2. The contractor shall make necessary arrangement for the installation.

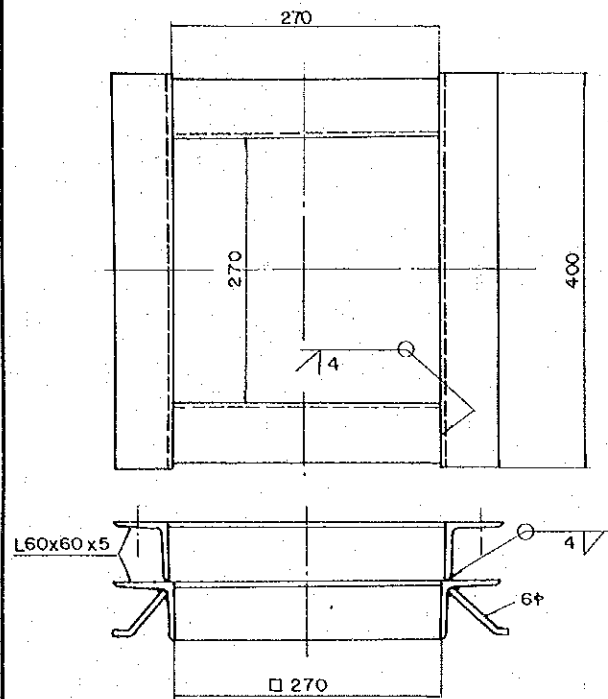


HMG OF NEPAL  
IRRIGATED MODEL FARM SCHEME  
FOR JANAKPUR ZONE AGRICULTURE DEVELOPMENT PROJECT

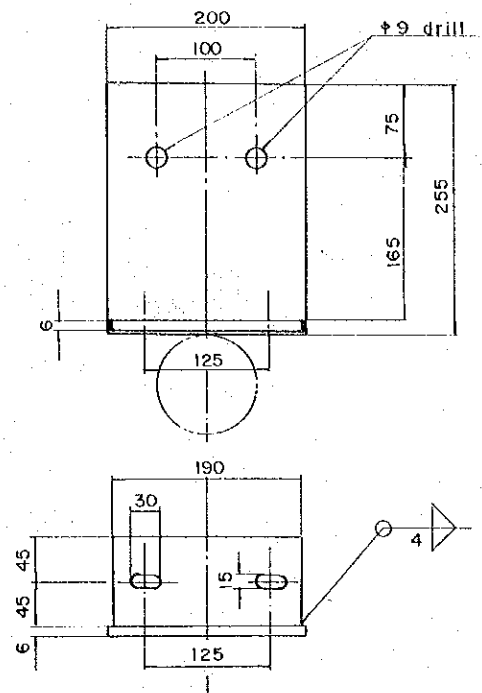
TITLE  
**PUMPS, ENGINES AND OTHERS  
FOR ISWARPUR, GOSHALA, SAPHY  
AND SAKHUWA AREAS (1/2)**

DATE	DEC. 1980	DWG. NO.	700 - 01
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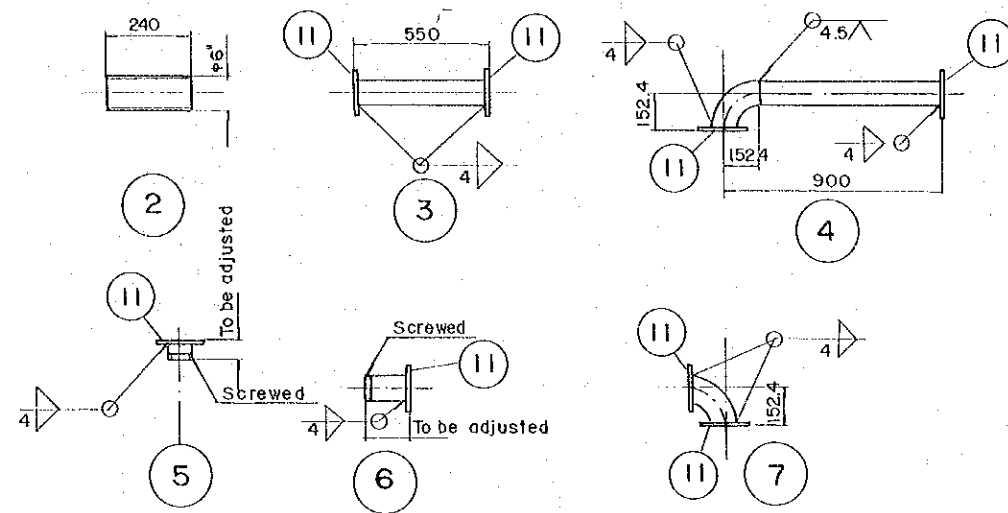
JAPAN INTERNATIONAL COOPERATION AGENCY



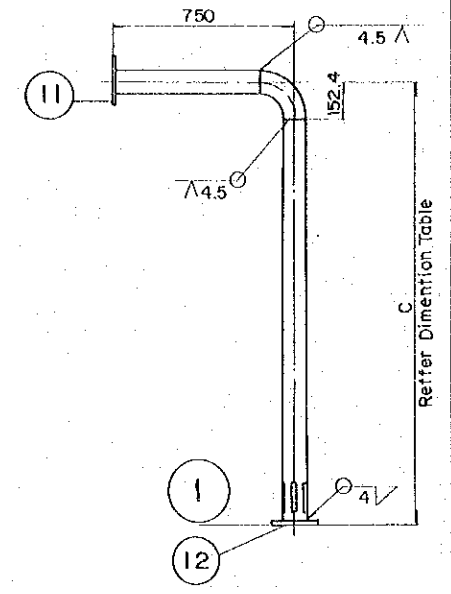
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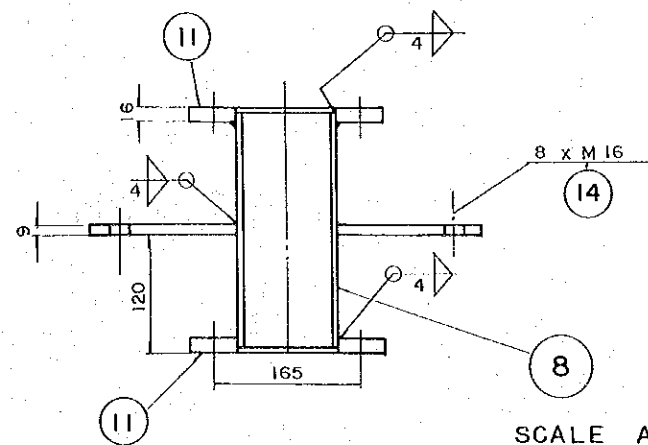
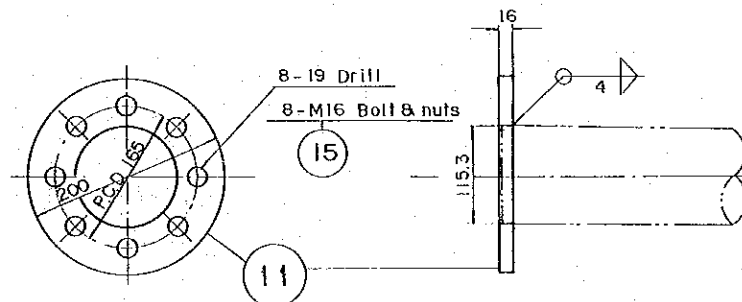
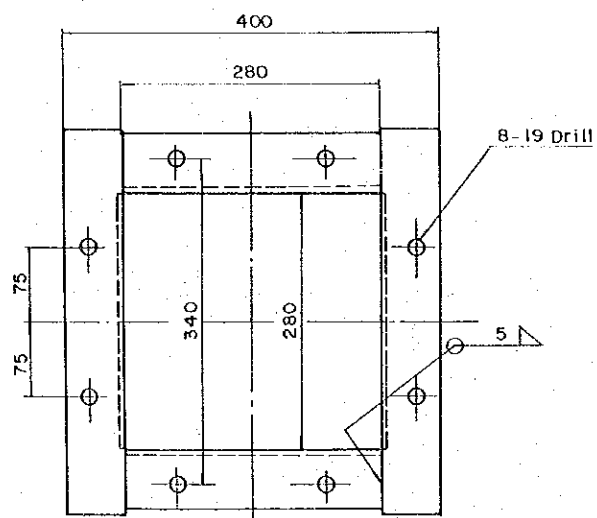
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SCALE B



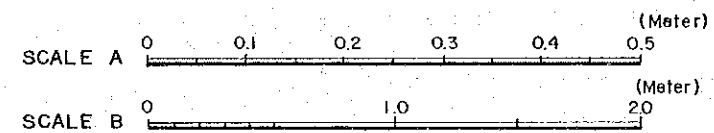
REFER DETAIL "C"



SCALE A

ONE SET OF PUMPING EQUIPMENT

Part No	Name of Parts	Material	Remarks	Q'ty
19	DiSel engine			1 set
18	Pump			1 set
17	Sluice valve	5 kg/cm <sup>2</sup> cast iron flanged gate valve	Outside screw type	1 set
16	U bolts & nuts		M10 x165L	1 set
15	Bolts & nuts		M16 x 55L	56sets
14	Bolts & nuts		M16 x 30L	8 sets
13	Anchor bolts & nuts		M16 x200L	6 sets
12	End Plate	Steel plate	t = 6 Steel R	1 pc
11	Flange	5 kg/cm <sup>2</sup> steel pipe flange	for 4" pipe	1 pcs
10	Pipe support	Steel plate	t = 6 Steel R	1 set
9	Suction unit	Steel section	L 60x 60x 5	1 set
8	Suction unit pipe	"	W /400x400x9 <sup>1</sup> steel R	1 pc
7	" (6)	"	90° elbow pipe	1 pc
6	" (5)	"	"	1 pc
5	" (4)	"	Flanged and screwed adjusting pipe	1 pc
4	" (3)	"	90° elbow and Straight pipe	1 pc
3	Piping (2)	"	4" pipe	1 pc
2	Sleeve pipe	"	6" pipe	1 pc
1	Piping (1)	Carbon steel pipe 5 kg/cm <sup>2</sup>	4" pipe	1 pc

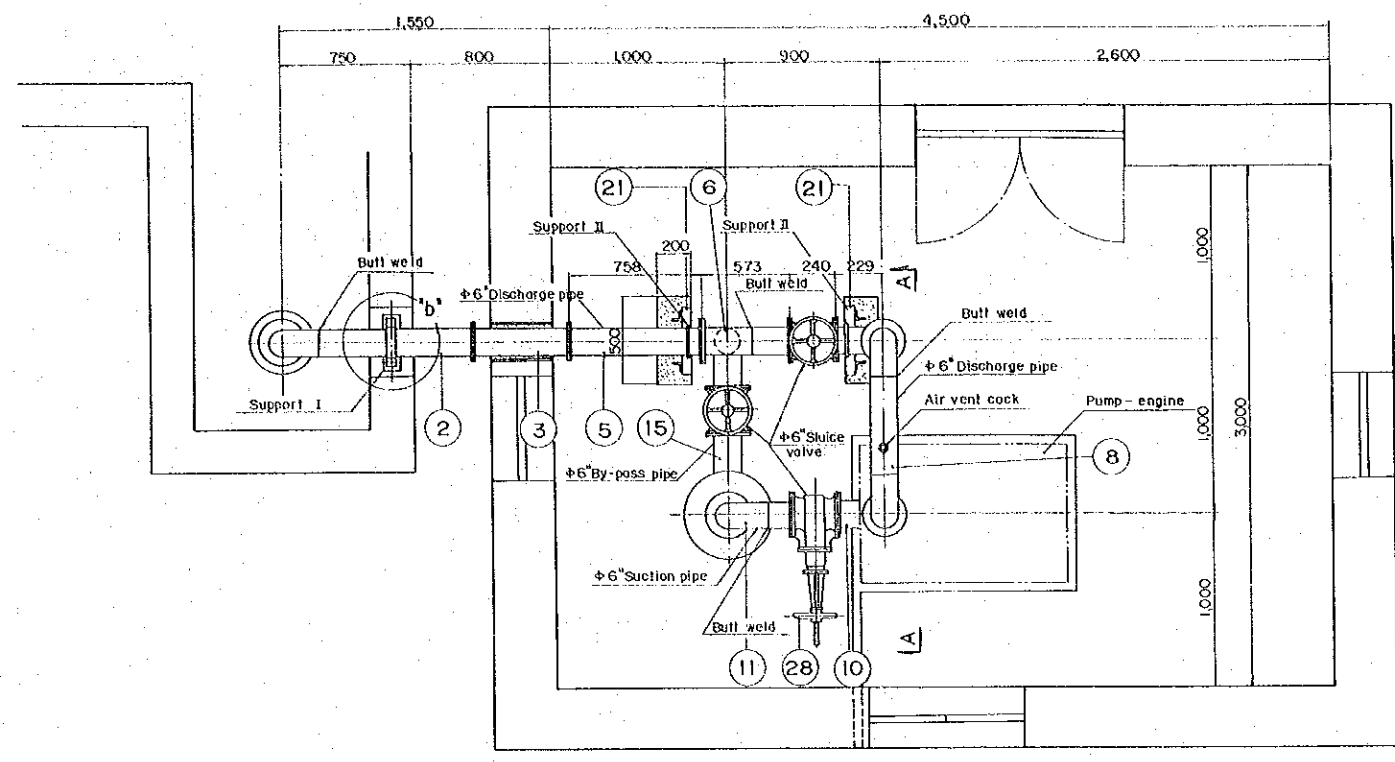


HMG OF NEPAL  
IRRIGATED MODEL FARM SCHEME  
FOR JANAKPUR ZONE AGRICULTURE DEVELOPMENT PROJECT

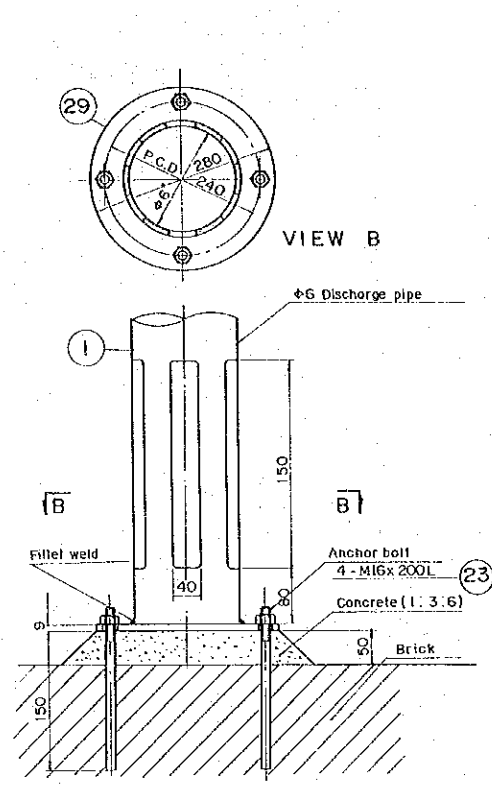
TITLE  
PUMPS, ENGINES AND OTHERS  
FOR ISWARPUR, GOSHALA, SAPHY  
AND SAKHUWA AREAS (2/2)

DATE	DEC. 1980	D.W.G. NO	700 - 02
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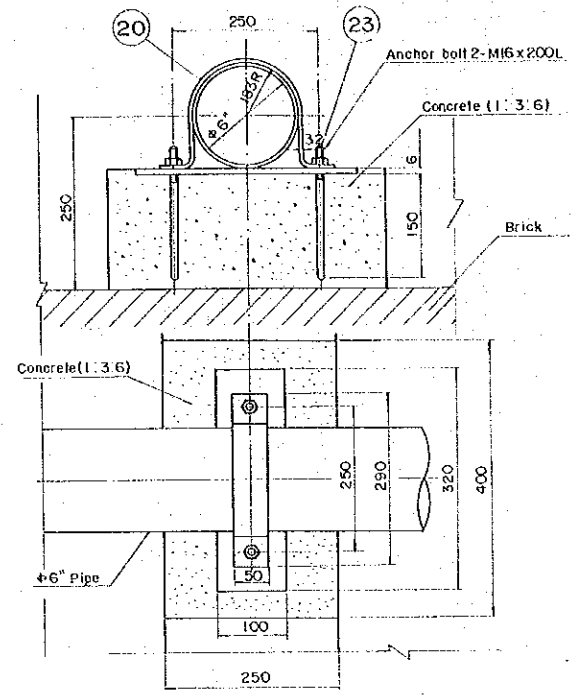
JAPAN INTERNATIONAL COOPERATION AGENCY



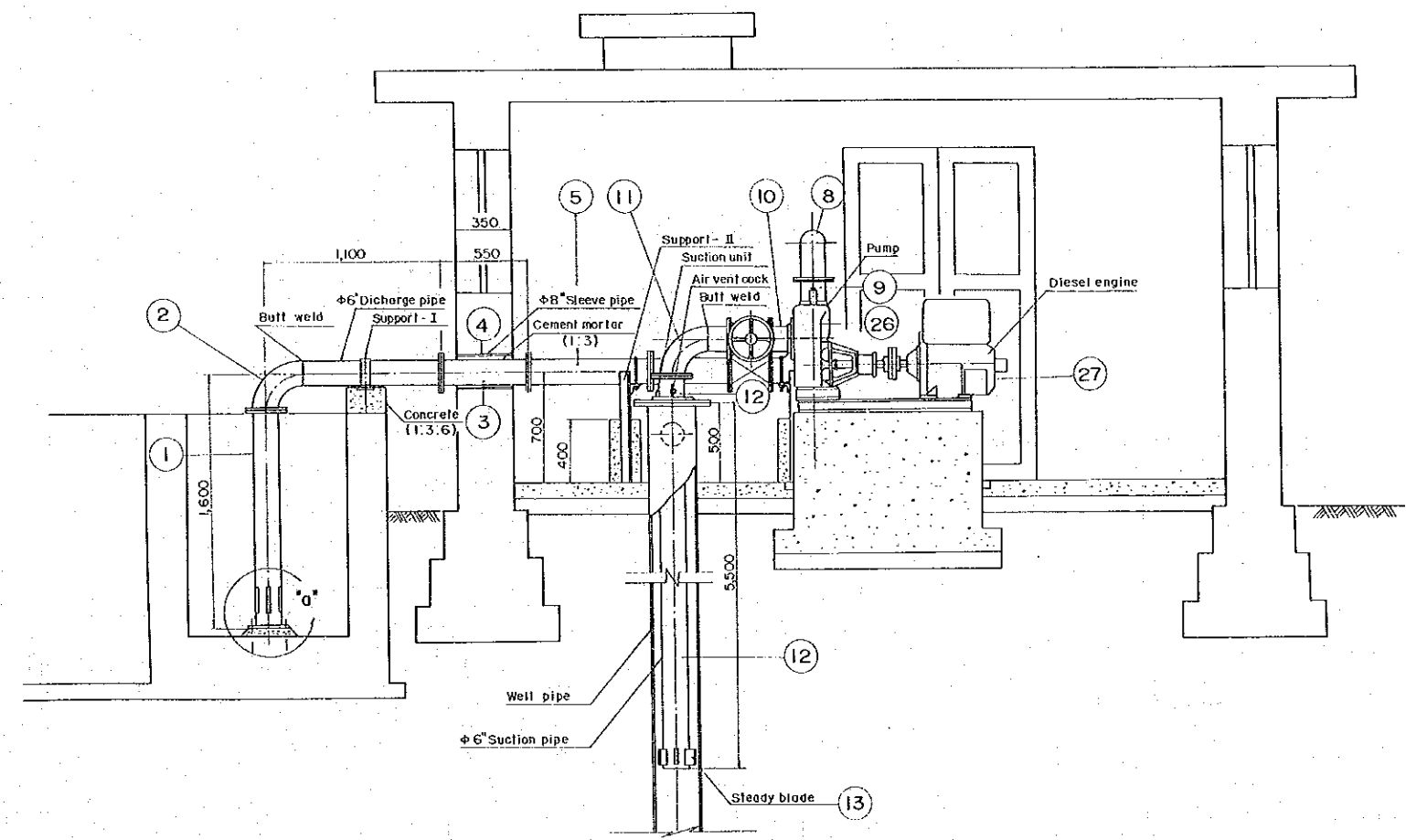
PLAN  
SCALE A



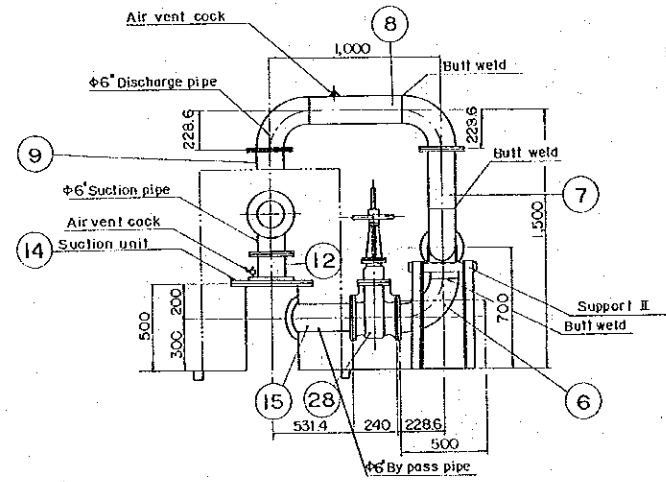
DETAIL "a"  
SCALE B



DETAIL "b" Support I (20)  
SCALE C

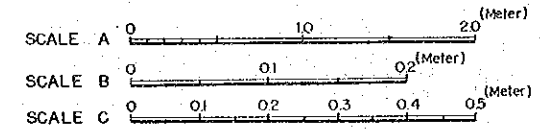


PROFILE  
SCALE A



VIEW A  
SCALE A

- Notes 1. Procurement and installation of pumping equipment will be carried out on force account basis.  
2. The Contractor shall make necessary arrangement for the installation.



HMG OF NEPAL  
IRRIGATED MODEL FARM SCHEME  
FOR JANAKPUR ZONE AGRICULTURE DEVELOPMENT PROJECT

TITLE  
**PUMP, ENGINE AND OTHERS  
FOR IAP AREA (1/2)**

DATE	DEC. 1980	DWG. NO.	700 - 03
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JAPAN INTERNATIONAL COOPERATION AGENCY





CONSTRUCTION TIME SCHEDULE FOR IRRIGATED MODEL FARM SCHEME FOR JADP

WORK ITEMS	1980	1981			
	DEC	JAN	FEB	MAR	APR
A. Tendering, Evaluation & Contract Agreement	██████████				
B. Commencement & Completion of works		● Commencement			● Completion
I. I. A. P. Area (NO.5 Tube - well)					
1. Preparatory Works & Clearance of sites	██████████				██████████
2. Installation of Pump & Engine					
3. Pump House			██████████		
4. Main Canals		██████████	██████████		
5. Related Structures		██████████			
II. Shallow Tube - well Areas (General Type ; Goshala, Iswarpur, Saphy Areas)					
1. Preparatory Works & Clearance of sites	██████████				██████████
2. Drilling ( Two Units of Drilling Rigs )			①       ②       ③		
3. Pump Houses			① ██████████ ② ██████████ ③ ██████████		
4. Installation of Pumps & Engines				①       ②       ③	
5. Main Canals		██████████			
6. Branch Canals			██████████		
7. Related Structures			██████████		
III. Shallow Tube - well Areas ( Intensive type ; Sakhuwa Area )					
1. Preparatory Works & Clearance of Sites	██████████				██████████
2. Drilling					
3. Pump House			██████████		
4. Installation of Pump House & Engine, etc.					
5. Land Improvement (1) Land Levelling, etc.					
6. Land Improvement (2) Farm Ridges		██████████	██████████		
7. Main Canal & Farm Roads		██████████			
8. Related Structures			██████████		

Note ; Drilling rigs for the Scheme are scheduled to arrive in Janakpur at the end of January, 1981.

LEGEND

- ██████████ Works on Contract Basis
- ||||| Works on Force Account Basis
- ① Goshala Area
- ② Iswarpur Area
- ③ Saphy Area

HMG OF NEPAL IRRIGATED MODEL FARM SCHEME FOR JANAKPUR ZONE AGRICULTURE DEVELOPMENT PROJECT			
TITLE  CONSTRUCTION TIME SCHEDULE			
DATE	DEC. 1980	DWG. NO.	800 - 01
JAPAN INTERNATIONAL COOPERATION AGENCY			



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