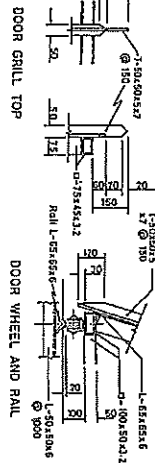
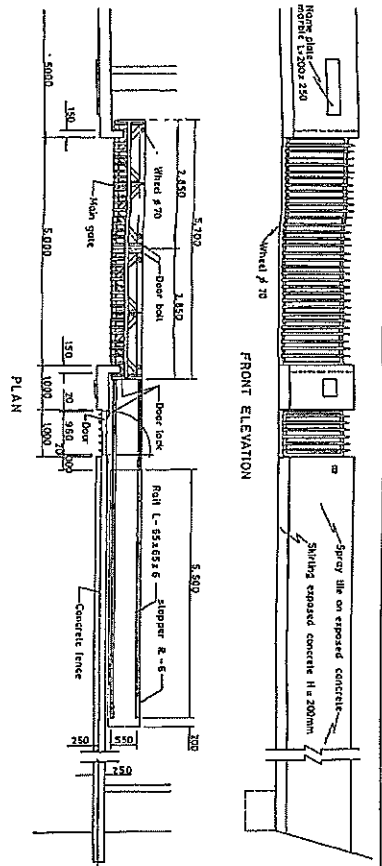
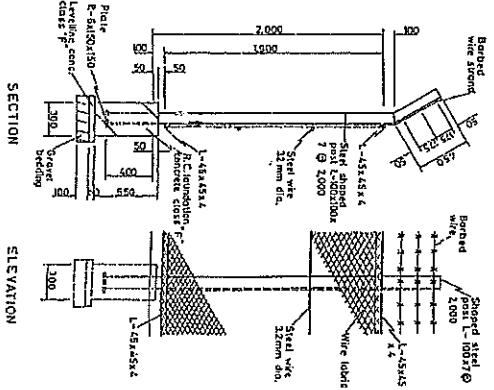


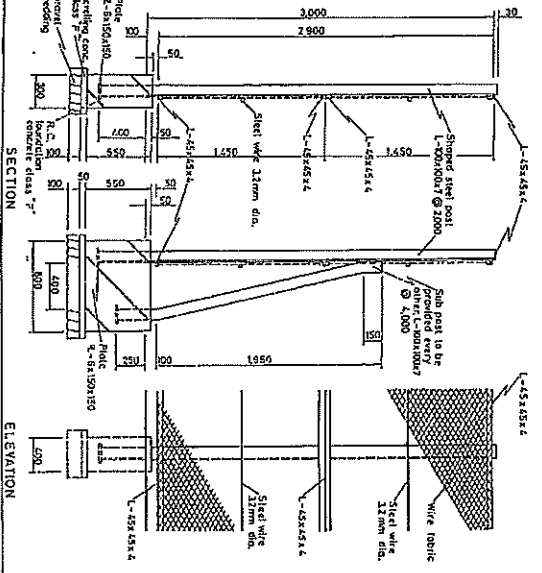
GATE (Type A)



FENCE WITH DOOR (Type A)

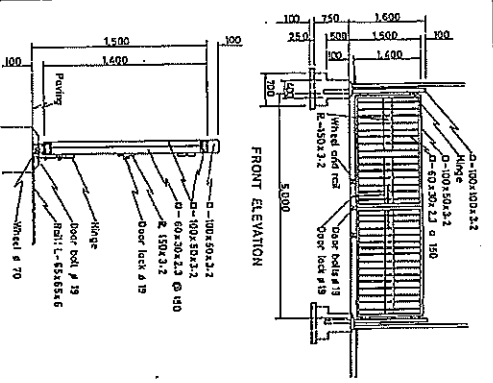


FENCE WITH DOOR (Type B)



TITLE STANDARD DESIGN (7)

GATE (Type B)



SECTIONAL DETAIL



REPUBLIC OF KENYA

KENYA POWER COMPANY LIMITED
 SANDUKARIKI HYDROPOWER PROJECT
 DESIGNED BY: HARPOET KOSI CO., LTD.
 DRAWN BY: C.V. 10027
 CHECKED BY: C.V. 10027
 SCALE: AS SHOWN

PLATE NO.

Methoded L.P.No	Coordinates	H (Elevations)	W (Width)	R (Radius)
B.P.	8492.17122	705281.128		50.000
CH-1	8492.32083	705183.594	4.272704	50.000
CH-2	8492.46800	705086.000	4.115232	50.000
CH-3	8492.61500	705000.000	16.292161	50.000
CH-4	8492.76200	704915.000	23.259191	50.000
CH-5	8492.90900	704830.000	14.333137	50.000
CH-6	8493.05600	704745.000	22.454231	50.000
CH-7	8493.20300	704660.000	2.561487	50.000
CH-8	8493.35000	704575.000	16.521241	50.000
CH-9	8493.49700	704490.000	7.542222	50.000
CH-10	8493.64400	704405.000	21.114400	50.000
CH-11	8493.79100	704320.000	6.250535	50.000
CH-12	8493.93800	704235.000	4.772118	50.000
CH-13	8494.08500	704150.000	18.151583	50.000
CH-14	8494.23200	704065.000	14.720252	50.000
CH-15	8494.37900	703980.000	8.075256	50.000
CH-16	8494.52600	703895.000	8.944528	50.000
CH-17	8494.67300	703810.000	20.541341	50.000
CH-18	8494.82000	703725.000	4.715125	50.000
CH-19	8494.96700	703640.000	31.081287	50.000
E.P.	8495.11400	703555.000		50.000

Project No	Coordinates	H (Elevations)	W (Width)	R (Radius)
CH-20	8495.26100	703470.000	10.600000	
CH-21	8495.40800	703385.000	25.126100	
CH-22	8495.55500	703300.000	5.217441	
CH-23	8495.70200	703215.000	2.391531	
CH-24	8495.84900	703130.000	9.241021	
CH-25	8495.99600	703045.000	11.181351	
E.P.	8496.14300	702960.000		

GENERAL NOTES:

- Excavation line and slope may be modified by the Engineer according to the actual topographic conditions encountered during construction.
- Dotted line along excavation line denotes design line of concrete. Back or cut shall not be permitted in trench within the line.
- Line of water including diversion during construction shall be designed by the Contractor and submitted for Engineer's approval.
- Construction joints and lift lines for concrete works are not indicated in the drawings in general. Location of joints and concrete placement schedule shall be the responsibility of Contractor and subject to approval by the Engineer.
- Reinforcement bars and fabric mesh are required but not shown in the drawings for structural details.
- Unless otherwise noted, all dimensions are given in millimetres except elevations which are indicated in meters.
- Unless otherwise noted, the Contractor shall design all temporary works and subject to approval by the Engineer.
- Load for temporary works shall be provided or fixed by the Contractor.
- Spacing of 1 stake in 1000m.
- Temporary access road along existing channel shall be designed and constructed by the Contractor. The Contractor shall submit detailed drawings of the temporary access road for the Engineer's approval.
- For details of the construction of the drainage outlet, see specification-031 to CH-04/02.

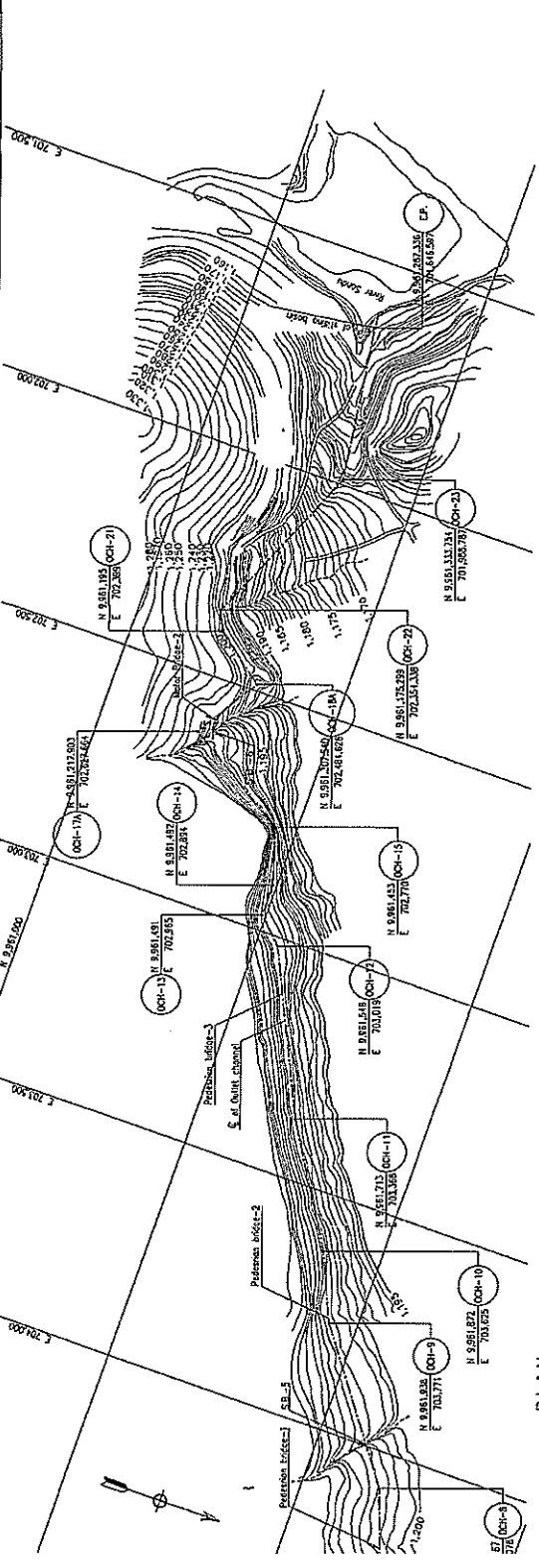
AS BUILT

Kenya Electricity Generating Company Ltd.
GHORURU HYDROPOWER PROJECT

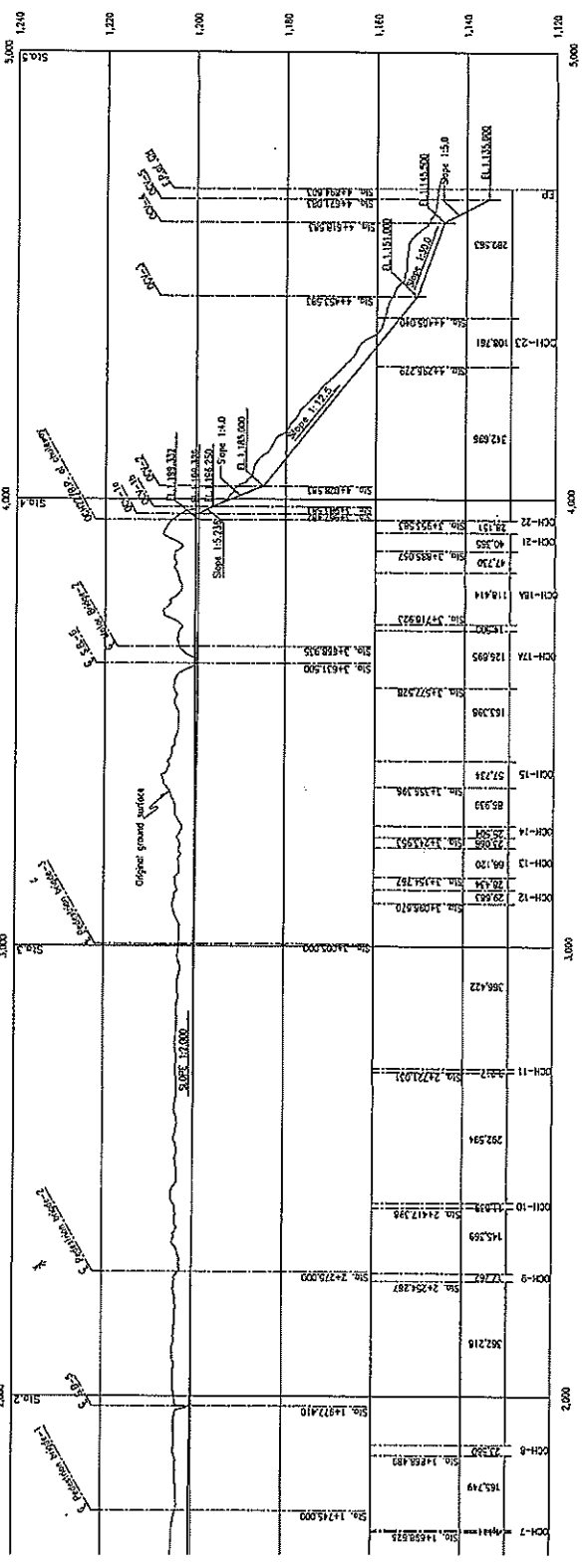
PROJECT NO. 1182/01
 SHEET NO. 01/01
 DATE: 11/08/01

DESIGNED BY: NIPPON KOGI CO., LTD.
 DRAWN BY: CHW0001R

OUTLET CHANNEL
 PLAN AND PROFILE

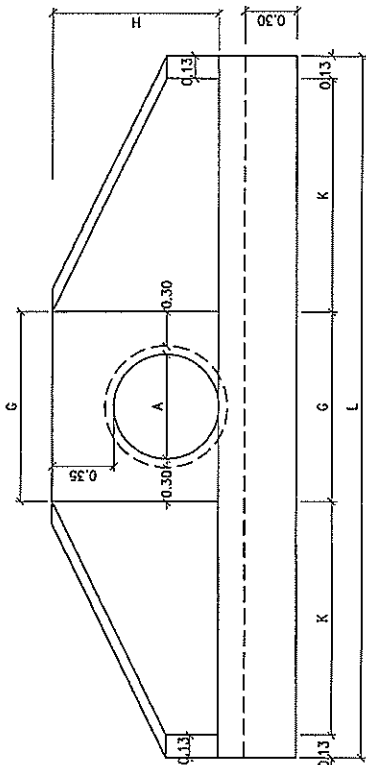


PLAN SCALE A

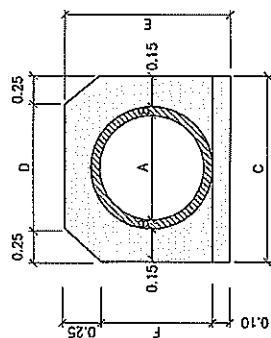


PROFILE: Hrs. SCALE A
 V.H.S. SCALE B

REVISION	REVISION	DATE
1.	Channel structure and bridge, foundations omitted	
2.	Horizontal and vertical coordinates omitted	



FRONT ELEVATION
N.T.S.



SECTION B-B
N.T.S.

SCHEDULE FOR INSTALLATION
OF ACCESS CULVERTS

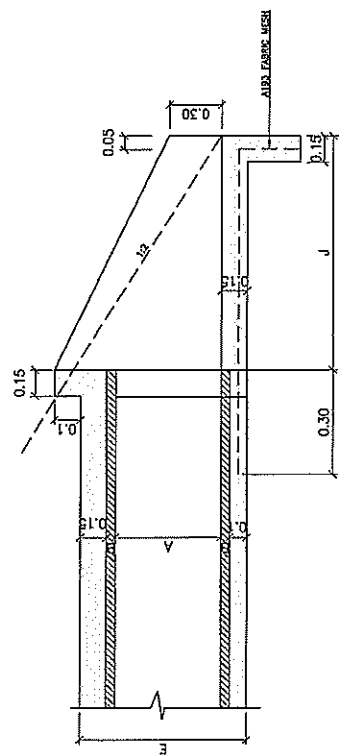
LOCATION (m)	CULVERT TYPE	CULVERT SIZE (mm)	CULVERT LENGTH (m)	INVERT LEVEL (E.L)
04-215	Private Access	600	3.6	1184.711

CULVERTS	A (m)	B (m)	C (m)	D (m)	E (m)	F (m)	G (m)	H (m)	J (m)	K (m)	L (m)	M (m)	N (m)	P (m)	CONCRETE CLASS B Inlet & Outlet	CONCRETE CLASS C Surround & Bed per running m.
DIA. 0.60m	0.60	0.05	1.00	0.50	0.50	0.95	1.2	0.95	1.25	0.72	2.90	1.44	1.43	1.46	1.97m ²	0.50m ²

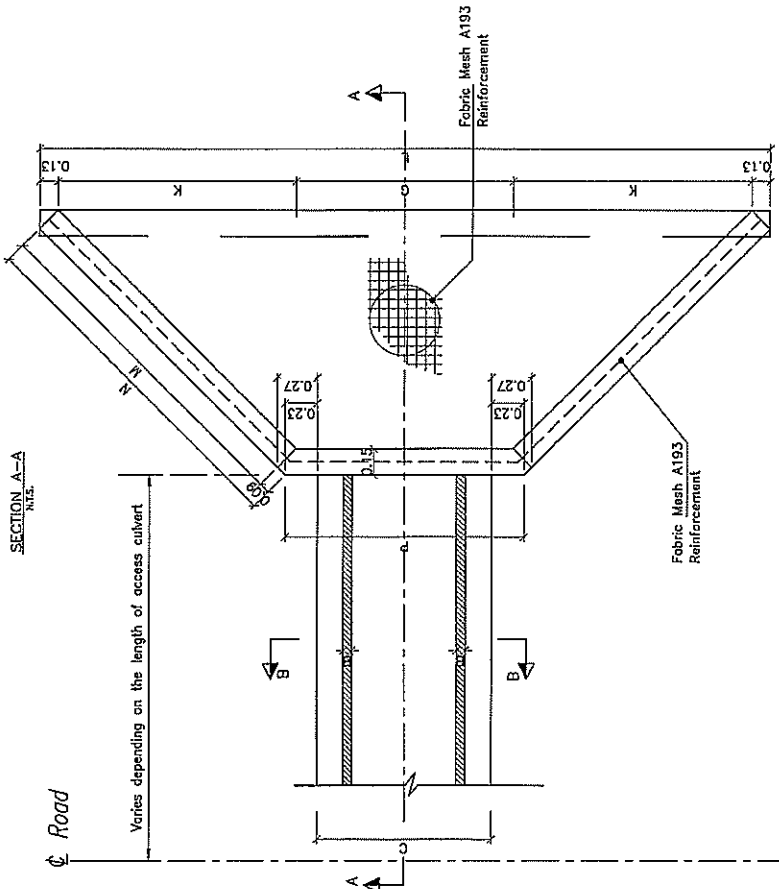
NOTES

1. A193 FABRIC MESH REINFORCEMENT TO BE PLACED AS SHOWN
2. THE SLOPE OF THE PIPE SHALL BE AS DIRECTED BY THE ENGINEER
3. ALL DIMENSIONS ARE IN METRES UNLESS STATED OTHERWISE.

AS BUILT



SECTION A-A
N.T.S.

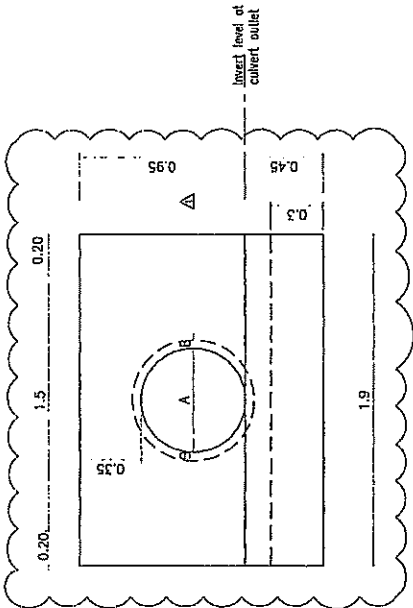


LAYOUT PLAN
N.T.S.

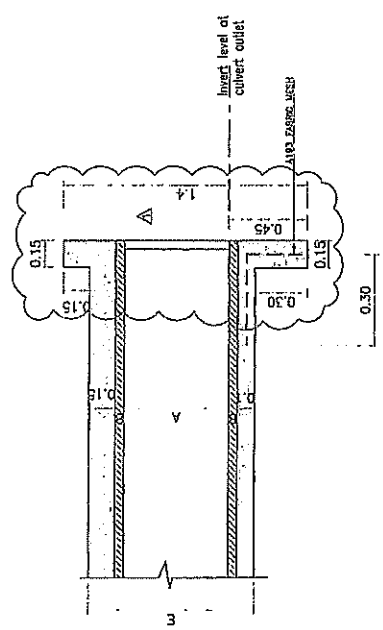
SONDUMIRU HYDROPOWER PROJECT			
NO.	DATE	BY	APPROVED
1	18 OCT 05	AS	AS

NO.	DATE	BY	APPROVED
1	18 OCT 05	AS	AS

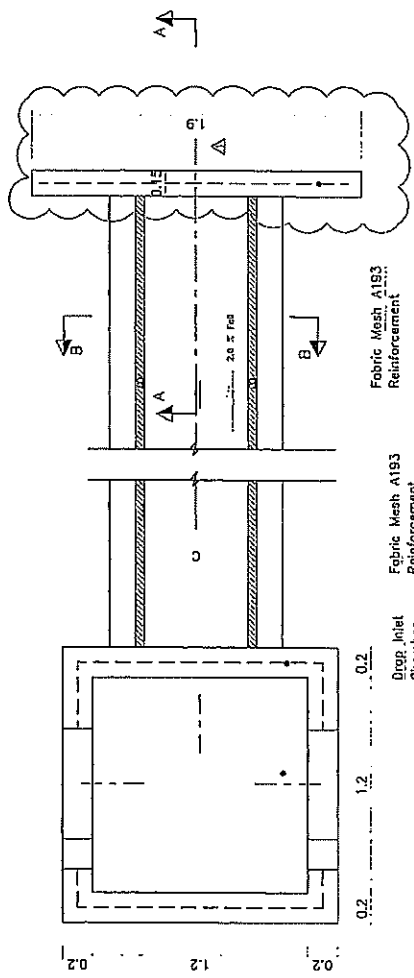
POWER HOUSE BY-PASS
DETAILS & SCHEDULE OF 600mm DIA. ACCESS CULVERT



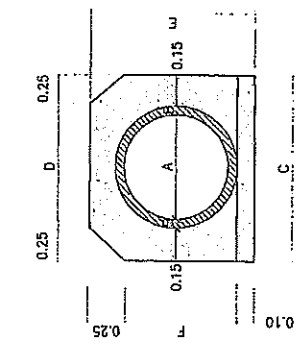
END DETAIL AT OUTFALL
(N/24)



SECTION A-A
(N/24)



LAYOUT PLAN
(N/24)



SECTION B-B
(N/24)

DIMENSIONS FOR INSTALLATION
OF CROSS CULVERTS

CULVERT	A (m)	B (m)	C (m)	D (m)	E (m)	F (m)	CONCRETE CLASS B (m³)	CONCRETE CLASS B (m³)	CONCRETE CLASS B (m³)	CONCRETE SURFACE & BED PER RUNNING M
DIAMETER 0.60m	0.60	0.60	0.05	1.00	0.50	0.35	0.60	1.42m³	0.34m³	0.50m³

- NOTES
1. ALL FABRIC MESH REINFORCEMENT TO BE PLACED AS SHOWN
 2. THE SLOPE OF THE PIPE SHALL BE AS SHOWN OR OTHERWISE AS DIRECTED BY THE DESIGNER
 3. ALL UNFINISHED ARE TO FINISH UNLESS STATED OTHERWISE.

NO.	REVISION	DATE	BY	CHKD.	APP'D.	SCALE
1	FOR WALL REVISION AND DIMENSION CHANGED	18 OCT 06	ME	GA		

REFERENCE DRAWINGS
CH-19-07

SONCHUJIRU HYDROPOWER PROJECT			
NO.	DATE	REVISION	BY
1	22.08.05		ME
2	22.08.05		ME
3	22.08.05		ME
4	22.08.05		ME
5	22.08.05		ME
6	22.08.05		ME
7	22.08.05		ME
8	22.08.05		ME
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98	22.08.05		ME
99	22.08.05		ME
100	22.08.05		ME

POWER HOUSE BY-PASS
TYPICAL PLAN AND OUTFALL FOR CROSS CULVERTS