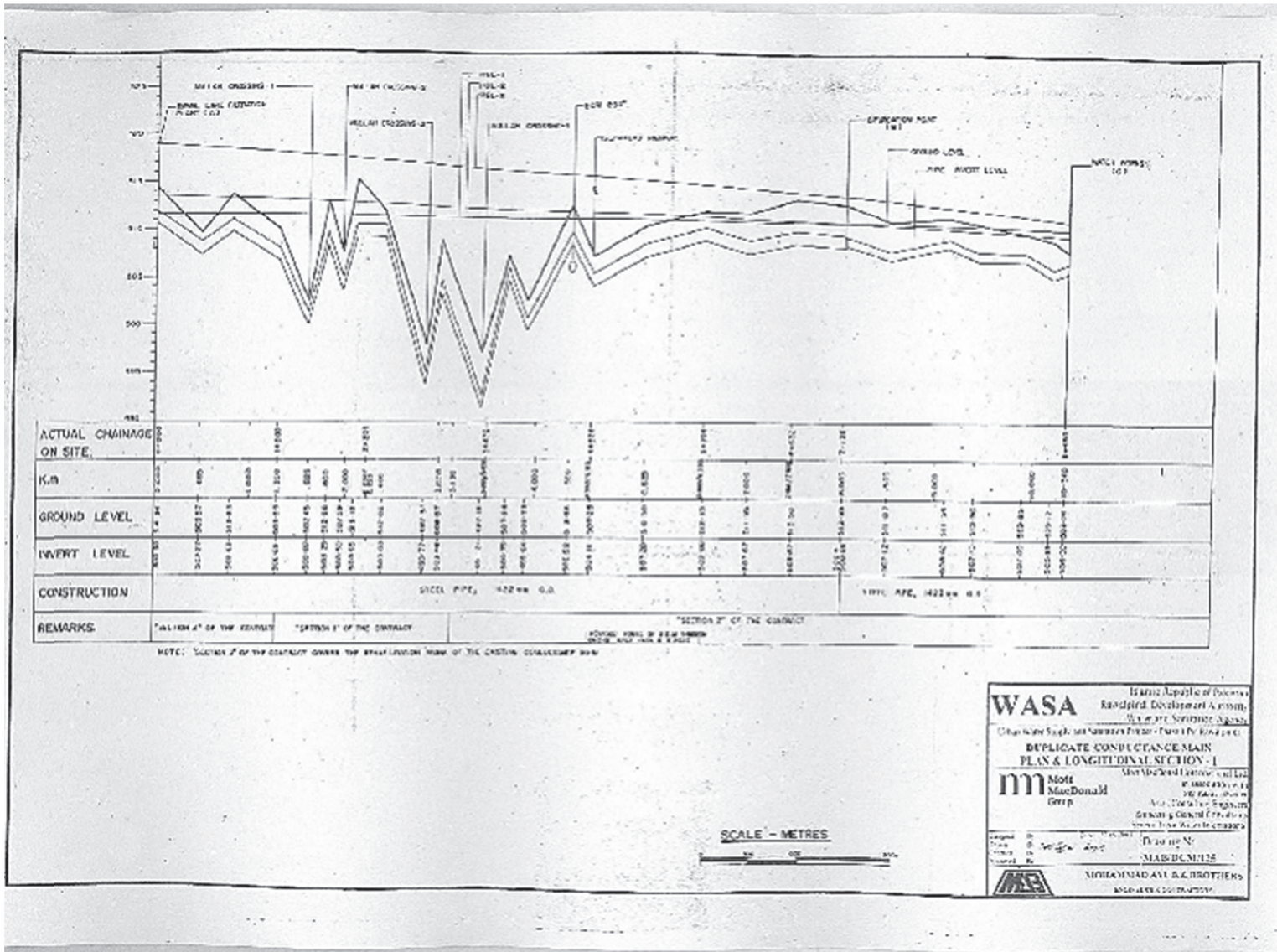
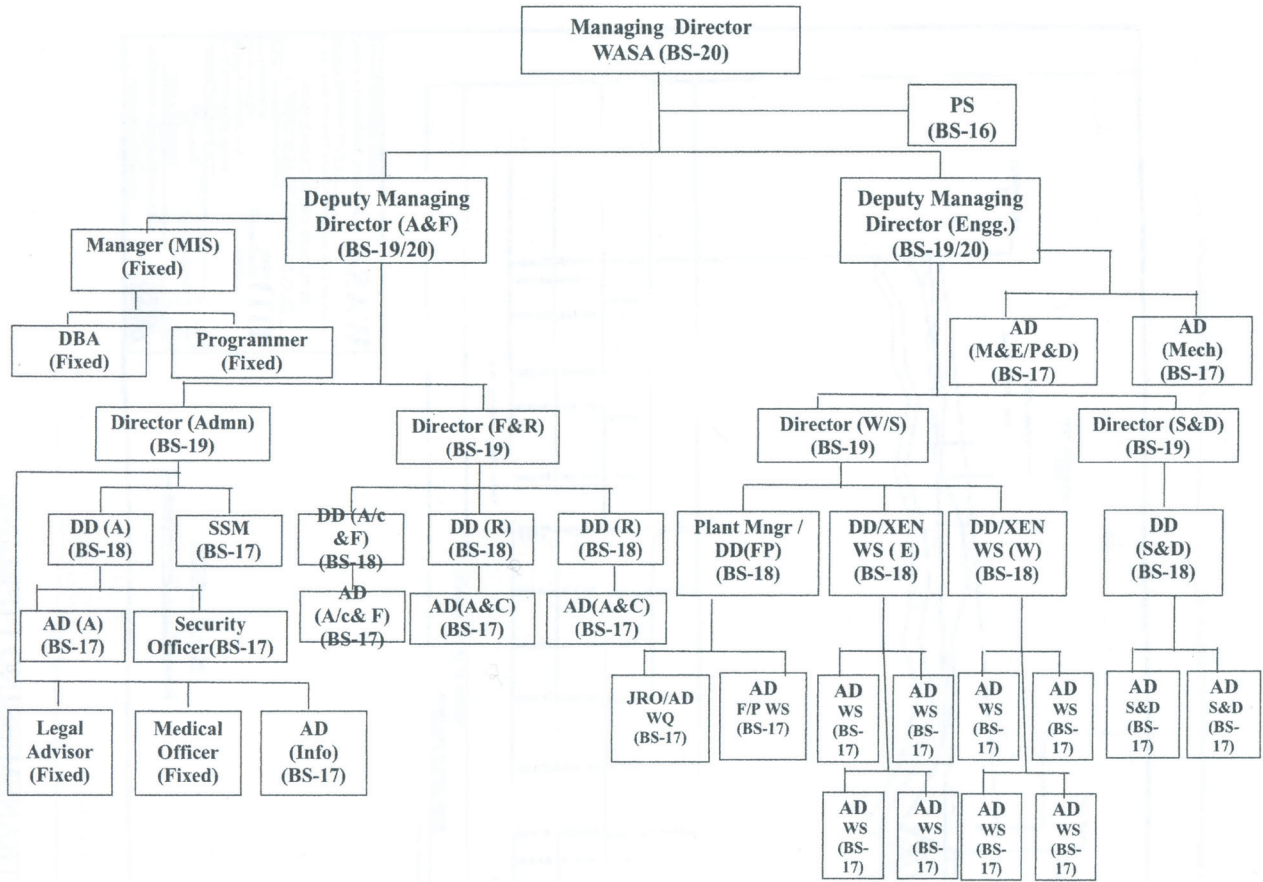


LAYOUT PLAN OF TRANSMISSINO PIPELINE



PROFILE OF TRANSMISSINO PIPELINE

# ORGANOGRAM - WASA



## Cost Breakdown

Name of Work Specification		Qty.	Unit	Rate (Rs)	Cost (Rs)
<b>Transmission Pipe Line (Rawal Dam W.T.P -- Reservoir Tank)</b>					
<b>A: Excavation &amp; Backfilling</b>					
1	Roadside or Field	1600	m	10,000	16,000,000
	Excavation of Trenches (Wide1.7m*Depth2.7m), Shoring, Sand bedding t=300mm, Backfilling Sand, Crashed-stone(or soil) t=200mm, Transporting waste dumps up to 5km from site				
2	Asphalt Road	7700	m	17,000	130,900,000
	Cutting asphalt, Removing road metalling, Excavation of Trenches (Wide1.7m*Depth2.7m), Shoring, Sand bedding t=300mm, Backfilling sand, Crashed-stone 200-250mm, Asphalt concrete 50-100mm, Transporting waste dumps up to 5km from site				
3	Highway Road Crossing	100	m	440,000	44,000,000
	Lead-pipe jacking method, Excavation of vertical shafts, Shoring, Jacking Lead-pipe (Dia 1400mm) Prepacked concrete around pipe (t=100mm), Transporting waste dumps up to 5km from site				
	Excavation of Trenches (Wide 1.7m*Depth 2.7m), Shoring, Lining Concrete for protecting pipe (1.7m*1.8m), Backfilling soil, Transporting waste dumps up to 5km from site				
4	Stream(Valley) Crossing	250	m	10,000	2,500,000
	Excavation of Trenches (Wide1.7m*Depth2.7m), Shoring, Lining Concrete for protecting pipe (1.7m*1.8m) , Backfilling crashed-stone t=900mm, Transporting waste dumps up to 5km from site				
<b>B: Pipe-laying</b>					
1	Pipe-laying (HDPE 48")	9700	m	180,000	1,746,000,000
	Providing laying, testing and disinfecting the HDPE(PN 12.5) PE-100 including the cost of all types of PE specials i.g Tees, Bends, Stub End, End cap, Couplers, Reducers etc, including the cost of butt Fusion joints with HDPE, testing and disinfecting complete in all respect.				

<b>C: Annexed Equipment</b>					
1	Installation of Wash Out Valve & Chamber	16	no	600,000	9,600,000
	Dia 300mm Gate Valve & Chamber & Piping(L=approx 10m), Concrete Channel (L=1m)				
2	Installation of Air Valve & Chamber	18	no	600,000	10,800,000
	Dia 100mm Air Valve with Gate valve & Chamber				
3	Installation of Maintenance Valve & Chamber	11	no	7,900,000	86,900,000
	Dia 1200mm Gate Valve & Chamber Starting and ending points plus 9 points at approx 1km interval				
4	Installation of Non-return Valve	2	no	8,100,000	16,200,000
	Dia 1200mm Gate Valve, Chamber				
5	Connection of Existing Pipes	7	no	2,000,000	14,000,000
	Dia 300-900mm Gate Valve, Chamber & Piping (L=approx 10m)				
<b>D: Miscellanea Works</b>					
1	Removal of waste concrete pipe Dia 1400mm & mass concrete (plinth etc)	1	unit	20,000,000	20,000,000
	Transporting waste dumps up to 5km from site				
				<b>Total</b>	<b>2,097,350,000</b>

**Temporary works, Site management and General management**

**Total \* 32%**

**671,150,000 PR**

**Total Cost of Construction**

**2,768,500,000 PR**

**Consultancy Charges (Detail design & Construction management)**

**Total of Construction \* 5%**

**138,420,000 PR**

**Total Cost of Project**

**2,906,920,000 PR**

**SUMMARY OF ANNUAL BUDGET**

**ESTIMATE OF INCOME**

*Rs. In Million*

**2012-2013**

Sr. #	Head of Account / Detail	Budget Estimates
<b>A.</b>	<b>OWN SOURCE RECEIPTS</b>	
	<b>a) Water Supply</b>	
	i. Consumer Water & Sewerage Charges & consumer arrears recovery	215.000
	<b>2 Bulk Water Sales</b>	
	i) MES	95.000
	ii) Others NIH,NARC,Pakistan Railway,ISI	5.000
	<b>Sub-Total (a)</b>	<b>315.000</b>
<b>b)</b>	<b>1 New Connection Fee etc.</b>	3.000
	<b>2 Supply of water through Water Bouzers</b>	6.000
	<b>Sub-Total (b)</b>	<b>9.000</b>
<b>c)</b>	<b>Other Sources</b>	
	1 Contractor Enlistment / Renewal Fee	0.250
	2 50% Share of UIP Tax	180.000
	3 Misc. / Other Income	25.000
	<b>Sub-Total (c)</b>	<b>205.250</b>
	<b>Sub-Total (b+c)</b>	<b>214.250</b>
	4 <b>Expected subsidy / Loan as per business plan</b>	<b>100.000</b>
	<b>SUB-TOTAL-A (a+b+c)</b>	<b>629.250</b>
<b>B.</b>	<b>FUNDS RELEASED BY GOVT. OF THE PUNJAB</b>	
	1 Funds Released for Development by Punjab Government.	90.000
	<b>Sub-Total (B)</b>	<b>90.000</b>
	<b>TOTAL RECEIPTS</b>	<b>719.250</b>

## SUMMARY OF EXPENDITURE

*Rs. In Million*  
**2012-2013**

Sr. #	Head of Account / Detail	Budget Estimates
<b>A.</b>	<b>FROM OWN SOURCES</b>	
<b>1</b>	<b>Original Work and O&amp;M Expenditure</b>	
a	Filtration Plant including Soan Tubewells	56.100
b	Water Supply	314.800
c	Sewerage	29.200
d	Cost of treated Water Supply based on Khanpur Dam source to be paid to CDA. Khanpur Dam source	57.000
	<b>Sub-Total A (1)</b>	<b>457.100</b>
<b>2</b>	<b>Establishment Expenditure</b>	
a	Pay & Allowances (Existing Staff)	307.412
b	Contingent Expenditure etc.	44.125
	<b>Sub-Total A (2)</b>	<b>351.537</b>
	<b>Sub-Total A</b>	<b>808.637</b>
<b>B.</b>	<b>FUNDS RELEASED BY GOVT. OF THE PUNJAB</b>	
i	Expenditure out of Development Funds	90.000
	<b>Sub-Total B</b>	<b>90.000</b>
	<b>G. TOTAL (A+B)</b>	<b>898.637</b>

Summary of staffing

ON/S	DESIGNATION	BPS	Sanctioned	Filled	Vacant
1	Managing Director	20	1	1	0
2	Dy. Managing Director (Engg)	19/20	1	1	0
3	Dy. Managing Director (A&F)	19/20	1	1	0
4	Director (Administration) & (Finance & Revenue)	19	2	2	0
5	Director (Engineering)	19	2	2	0
6	Dy. Director (Admn & Finance)	18	2	1	1
7	Dy. Director (Revenue)	18	2	2	0
8	Dy. Director (Engg.)	18	4	2	2
9	Asst Director (Admn & Accounts)	17	2	2	0
10	Asst Director (A&C)	17	2	2	0
11	Asst Director (Engg.)	17	13	5	8
12	Asst Director (Information)	17	1	1	0
13	Asst Director (Security)	17	1	0	1
14	Sr. Sp.Magistrate	17	1	1	0
15	JRO / AD (WQ)/AP Manager	17	1	1	0
16	Manager MIS	18 / FIXED	1	1	0
17	Database Administrator	17 / FIXED	1	0	1
18	Programmer	16 / FIXED	1	0	1
19	Asst. Programmer	14 / FIXED	1	0	1



20	Medical Officer (Part Time)	FIXED	1	1	0
21	Legal Advisor (Part Time)	FIXED	1	1	0
22	PS	16	1	1	0
23	Social Organizer	16	1	1	0
24	Admin Officer	16	1	0	1
25	Senior Accountant	16	2	1	1
26	Sub. Engineer	16	3	3	0
27	Legal Assistant	14	1	1	0
28	Assistant	14	7	7	0
29	Accountant / PRS	14	4	4	0
30	Steno	12	2	2	0
31	Supervisor Billing	11	2	2	0
32	Cashier	11	1	1	0
33	Computer Operator	11	11	11	0
34	Sub. Engineer	11	10	7	3
35	Quantity Surveyor	11	1	0	1
36	Supervisor	11/9	16	16	0
37	Draftsman	10	2	2	0
38	Inspector Revenue	9	15	15	0
39	Telephone Exc. Tech.	9	1	1	0
40	Imam Masjid	9	2	2	0
41	Senior Clerk	9	6	6	0
42	Junior Clerk	7	19	19	0
43	Store Keeper	6	4	4	0
44	Complaint Receiver	6	14	14	0
45	Lab Assistant	6	1	1	0

46	Care Taker	6	1	1	0
47	Operator F/P	6	10	10	0
48	Compressor/Gen. Opr.	6	1	1	0
49	Electrician	6	4	4	0
50	Bill Distributor	5	26	26	0
51	Fitter/ TW Mechanic	5	5	4	1
52	Pipe Fitter / Plumber	5	26	26	0
53	Secruity Sargent	5	1	0	1
54	Head TWO	5	5	5	0
55	Dewatering Set Operator	5	2	2	0
56	Jetting Machine Driver/Opr.	5	2	0	2
57	Sucker Machine Driver/Opr.	5	2	1	1
58	Hvy / Sp Duty Driver	9	15	15	0
59	Tube Well Operator	4	437	437	0
60	Driver	4	34	34	0
61	Chlorine Attendant	4	2	2	0
62	Assitt. TW Mechanic	4	4	4	0
63	Auto Mechanic	4	1	1	0
64	Auto Electrician	4	1	1	0
65	Pump Operator (WW-1)	4	4	4	0
66	Motor winder	4	2	2	0
67	Lift Operator	4	1	1	0
68	Mason	3	2	2	0
69	Mate	3	12	12	0
70	Head Mali	2	1	1	0
71	Naib Qasid	2/1	26	26	0

72	Chowkidar	1	27	27	0
73	Sewerman	1	92	92	0
74	Sweeper	1	14	14	0
75	Helper	1	95	95	0
76	Valveman / Cleaner	1	72	72	0
77	Mali	1	5	5	0
	Grand Total		1101	1075	26

## Screening Format

### Question 1 Outline of the project

1-1 Does the project come under following sectors?

Yes       No

If yes, please mark corresponding items.

- Mining development
- Industrial development
- Thermal power (including geothermal power)
- Hydropower, dams and reservoirs
- River/erosion control
- Power transmission and distribution lines
- Roads, railways and bridges
- Airports
- Ports and harbors
- Water supply, sewage and waste treatment
- Waste management and disposal
- Agriculture involving large-scale land-clearing or irrigation
- Forestry
- Fishery
- Tourism

1-2 Does the project include the following items?

Yes       No

If yes, please mark following items.

- Involuntary resettlement (scale: households persons)
- Groundwater pumping (scale: m<sup>3</sup>/year)
- Land reclamation, land development and land-clearing (scale: hectors)
- Logging (scale: hectors)

1-3 Did the proponent consider alternatives before request?

- Yes: Please describe outline of the alternatives  
( )
- No

1-4 Did the proponent have meetings with the related stakeholders before request?

Yes       No

If yes, please mark the corresponding stakeholders.

Administrative body

Local residents

NGO

Others ( )

Question 2

Is the project a new one or an on-going one? In the case of an on-going one, have you received strong complaints etc. from local residents?

New     On-going (there are complaints)     On-going (there are no complaints)

Others ( )

Question 3 Name of the law or guidelines:

Is Environmental Impact Assessment (EIA) including Initial Environmental Examination (IEE) required for the project according to a law or guidelines in the host country?

Yes     No

If yes, please mark the corresponding items.

Required only IEE      (  Implemented,  on going,  planning)

Required both IEE and EIA      (  Implemented,  on going,  planning)

Required only EIA      (  Implemented,     on    going,  planning)

Others: ( Since it is a rehabilitation project, IEE will be conducted first and based on its recommendations, carrying out of EIA will be decided. )

Question 4

In case of that EIA was taken steps, was EIA approved by relevant laws in the host country?

If yes, please mark date of approval and the competent authority.

<input type="checkbox"/> Approved: without a supplementary condition	<input type="checkbox"/> Approved: with a supplementary condition	<input type="checkbox"/> Under appraisal
--	---	--

(Date of approval:      Competent authority:      )

Not yet started an appraisal process

Others:( )

Question 5

If a certificate regarding the environment and society other than EIA is required, please indicate the title of certificate.

Already certified Required a certificate but not yet done

Title of the certificate :( )

Not required

Others ( )

Question 6

Are following areas located inside or around the project site?

Yes No Not identified

If yes, please mark corresponding items.

- National parks, protected areas designated by the government (coast line, wetlands, reserved area for ethnic or indigenous people, cultural heritage) and areas being considered for national parks or protected areas
- Virgin forests, tropical forests
- Ecological important habitat areas (coral reef, mangrove wetland, tidal flats)
- Habitat of valuable species protected by domestic laws or international treaties
- Likely salt accumulation or soil erosion areas on a massive scale
- Remarkable desertification trend areas
- Archaeological, historical or cultural valuable areas
- Living areas of ethnic, indigenous people or nomads who have a traditional lifestyle, or special socially valuable area

Question 7

Does the project have adverse impacts on the environment and local communities?

Yes No Not identified

Reason: ( )

Question 8

Please mark related environmental and social impacts, and describe their outlines.

- |   |   |
|---|---|
| <input type="checkbox"/> Air pollution  | <input type="checkbox"/> Social institutions such as social infrastructure and local decision-making institutions |
| <input type="checkbox"/> Water pollution                                      | <input type="checkbox"/> Existing social infrastructures and services   |
| <input type="checkbox"/> Soil pollution                                       | <input type="checkbox"/> The poor, indigenous or ethnic people  |
| <input type="checkbox"/> Waste  | <input type="checkbox"/> Maldistribution of benefit and damage  |
| <input type="checkbox"/> Noise and vibration                                  | <input type="checkbox"/> Local conflict of interests  |
| <input type="checkbox"/> Ground subsidence                                    | <input type="checkbox"/> Gender   |
| <input type="checkbox"/> Offensive odors                                      | <input type="checkbox"/> Children's rights  |
| <input type="checkbox"/> Geographical features                                | <input type="checkbox"/> Cultural heritage  |
| <input type="checkbox"/> Bottom sediment                                      | <input type="checkbox"/> Infectious diseases such as HIV/AIDS etc.  |
| <input type="checkbox"/> Biota and ecosystem                                  | <input type="checkbox"/> Others ( )   |
| <input checked="" type="checkbox"/> Water usage                               |   |
| <input type="checkbox"/> Accidents  |   |
| <input type="checkbox"/> Global warming                                       |   |
| <input type="checkbox"/> Involuntary resettlement                             |   |
| <input type="checkbox"/> Local economy such as employment and livelihood etc. |   |
| <input type="checkbox"/> Land use and utilization of local resources          |   |

Outline of related impacts:

Increase of safe and stable drinking water supply gives an effect of positive environmental impact to residents

Question 9

Information disclosure and meetings with stakeholders

9-1 If the environmental and social considerations are required, does the proponent agree on information disclosure and meetings with stakeholders in accordance with JICA Guidelines for Environmental and Social Considerations?

Yes       No

9-2 If no, please describe reasons below.

[ ]