



PROJECT DIRECTOR / COMMISSIONER KARACHI
GOVERNMENT OF SINDH

PC – I
(MODIFIED)

Re-Alignment/ Construction of Bund from
North Side of Malir River

NON – ADP 2013–14

COST RS. 2,527 Million

AUGUST, 2013

Prepared By: Works & Services Department
Government of Sindh

GOVERNMENT OF PAKISTAN
 PLANNING COMMISSION
 PC-1 Performa
(MODIFIED)

1. Name of the Project: Re-Alignment/Construction of Bund from North side of Malir River

2. Location:

Provide name of the District/ Province. District East Karachi; Taluka & Tapo, Korangi, Sindh

Attached a map of the area, indicating in the project location. Map of the area indicating Project Location Plan is attached.

3. Authorities responsible for

i) Sponsoring: Works & Services Department Government of Sindh

ii) Execution: Project Director / Commissioner Karachi through Works & Services Deptt., GOS.

iii) Operation and Maintenance Works & Services Department Government of Sindh

iv) Name of the concerned Federal Ministry be provided N.A.

4 a) Plan Provision:

• If the project is included in the medium terms/five years plan specify actual allocation. Not Included

• If not included in the current plan, what warrant its inclusion and how is it now proposed to be accommodated. It is part of regular important in the infrastructure of the city.

• If the project is proposed to be financed out of block provision, indicate: Yes as it is a Non-ADP Scheme

TOTAL BUDGET PROVISION	AMOUNT ALREADY COMMITTED	AMOUNT PROPOSED FOR THIS PROJECT	BALANCE AVAILABLE
2,527 Million	--	2,527 Million	-

b) Provision in the current year PSDP/ADP It is a Non-ADP Scheme

5. Project Objective

The objective of the sector/sub sector as indicate in the medium terms/five year plan be reproduced. Indicate objectives for the project and develop a linkage between the proposed project and the sectoral objectives.

Government of Sindh intends to reclaim about 220 acres which was non-finalized area (The area of 213 acres was finalized after considering mathematical study report and physical model study report by IR) of flood plain land for housing and commercial projects along right (Northern) flood protection bund of Malir River through its re-alignment between EBM causeways to elevated PARCO pipe line.

6. Description and justification of the Project

Described the project and indicate existing physical facilities in the area and justify the establishment of the project.

Malir River has two main tributaries; Mol and Khadeji which join about 44 Kms upstream of Korangi bridge, Karachi and ultimately falls in Arabian Sea. Malir river is carrying particularly storm / rain water and sewerage of Karachi city. Full flowing of the river is experienced only under heavy rainfall of a few days while under normal conditions throughout the year it is flowing with a very little depth and most of the sections remain dry.

The existing bund alignment and bed width is on historical patterns. Somewhere it is almost dry for the whole year and a significant part of it is un-utilized. In this situation there remains possibility to channelize the water way of Malir Bund by constructing internal Bund particularly at points opposite to Defence Phase-VII-A.

At this above mentioned location the width of Malir River is wider and there could be no impact on the flow of water even during heavy rain-fall. In this way about 126 acres (which was 123 acres) of land would be made available.

The Government of Sindh would be the beneficiary of Project by utilizing the land for multipurpose project. (Residential & Commercial Housing Unit)

The land is the property of Sindh Revenue Board and could be reclaimed to generate high revenue collection as the land is linked to DHA.

- Provide technical parameters i.e. input and out put of the project in quantifiable terms. Also discuss technology aspect of the project.

Jungle Clearance	= 2.2 million Sq.m
Earth Works	= 1.36 million Cu.m
Stone Pitching/Stone work	= 0.15 million Cu.m
Dumping of Stone	= 0.33 million Cu.m
Sand Grouting	= 0.23 million Sq.m

6 b) If the project is not included in the plan what warrants its inclusion in the plan N.A

6 c) Relation of the project with the object of the sector. Indicate the contribution of project in of other project (whether sanctioned or under preparation) which would from part integrated programme with the sector. N.A

7. **Capital Cost of Project** Rs. 2,527 Million

i) Foreign Exchange Cost No Foreign Exchange Component is involved.

- Provide faculty strength in relevant discipline in case of expansion of facilities. N.A

- Indicate the extent of Library and laboratory facilities available in case of Secondary, College and University educational N.A

- Provide details of technical staff required for operation holding O.P.D. Vaccination & maintenance of laboratories. N.A.

Indicate date of estimation of project cost. May 2013

i) Basis of determining the capital cost be provided. It including market survey, schedule rates, estimation on the basis of previous work done etc. The estimated cost has been based on Sindh composite schedule of Rate 2012, and non schedule items which are not available in the composite schedule of Rate 2012 are based on prevailing market rates.

S. NO	Component – Wise	Year – Wise	Physical activities
1.	Re-Alignment/Construction of Protection Bund from North side of Malir River		
	Year-wise Allocation of Funds	Year Fund	Total
		2013-14 (Rs.2000 million)	100%
		2014-15 (Rs. 527 million)	Nil
8.	Annual Operating Cost		
	- Item-wise annual operating cost for five year.	—	
	- Fixed and variable cost be Provided separately.	N.A	
9.	Demand Supply Analysis		
	- Existing capacity of services And its supply	N.A	
	- Projected Demand for ten Years	N.A	
	- Capacity of Projects being implemented In the Public & Private Sector.	N.A	
	- Supply Demand gap	N.A	
10.	Financial Plan		
	Sources of financing		Government of Sindh As Non-ADP Scheme
	a) Equity		
	Indicate the amount of equity to be Financed from each source.		
	- Sponsors Own Resources	N.A	
	- Federal Government	N.A	
	- Provincial Government	Rs. 2,527 Million	

- DFI's / Banks N.A
- General Public N.A
- Foreign equity indicate partner agency) N.A
- NGO's / Beneficiaries N.A
- Other N.A

b) Debt

Indicate the local & federal debt, Interest rate, Grace period and Repayment period for each loan Separately. The loan repayment Schedule be also annexed.

c) Grant Local & Foreign N.A

d) Weighted cost of Capital N.A

11 Project benefits and Analysis

i) Financial

It is a public service social development project and thus does not consider any financial returns from the beneficiaries.

ii) Economic

The project will be providing employment opportunities to skilled and unskilled labour Especially the people residing nearby will benefit from the project. The manpower involved would acquire considerable experience and technical skills which they will utilize on projects of similar nature.

The Operation of the project will provide employment opportunities to labour and supervisory staff and will directly benefit in housing expansion and economic growth of the country. The completion of this project will benefit thousands of workers directly who will be employed during construction.

iii) Social benefits with indicators

It is foreseen that due to the reclaim the above mentioned land the social setup of adjoining areas, especially the surrounding residential colonies will be changed and improved. It is also expected that commercial activities will be increased and positive impact on social aspect is expected.

iv) Environmental impact

The reclaim land will obviously effect the overall environment. As the land has been allocated for the construction activities, it is expected that construction activities can be performed in this area however due consideration will be given to minimize the adverse effects on the environment.

The potential noise sources during construction phase are related to noise from movement of heavy trucks and construction machinery. The noise levels generated by construction machinery will be in the limited area and will cause no harm to the human population.

Sox, Nox and particulates will be generated during the construction period and will be limited to project site. The impacts will be localized and restricted to few meters.

The project will not yield any negative impact on public health.

The project does not disturb any of the existing flora and fauna.

v) Impact of delay on project cost and viability

The delay will cause enhancement in the cost of project.

Project Analysis

(b)

i) Quantifiable output of the project

N.A

ii) Unit Cost Analysis

N.A

iii) Employment generation (direct and indirect)

Additionally employment opportunities to about 10,000 heads (direct) technical skilled and 15,000 (indirect) non skilled will be generated.

iv) Impact of delays on project cost and viability

The project should not be delayed because the material and labour cost of the project components will rise with the passage of time. However, the viability of the scheme will not be affected

2. Implementation of the Project.

- Indicate starting and completion date of project.

The project will be started after approval of PC-I and tendering process within one week time. The project will be completed in 9 months time subject to the availability of funds. It is envisaged that the execution of work shall be done in three to four work packages. A chart of Implementation schedule is enclosed at Annexure "A".

13. Management Structural & Manpower Requirements

- Administrative arrangement for Implementation of the project.

Works & Services Department, Government of Sindh under the Administrative Arrangement for the following Officials:-

- Project Director / Commissioner Karachi
- Chief Engineer – Highway Hyderabad
- Superintending Engineer
Provincial Highway Circle Hyderabad
- Executive Engineer – Provincial Coastal
Highway Division Hyderabad
- Assistant Engineer – Provincial Coastal
Highway Sub-Division-II Hyderabad

- Manpower requirement during execution and operation of the project be provided by skilled/professional.

14. Additional Projects / Decisions required to Maximize Socio Economical Benefits from the proposed project.

N.A

15. Certificate

It is certified that the Project proposal has been prepared on the basis of guidelines provided by the Planning Commission for preparation of PC-I (Modified) for infrastructure sector.

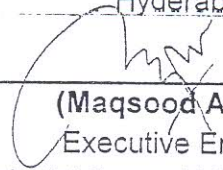
Prepared By : (Only Technical Portion)


M/s. NESPAK (Pvt.) Ltd.


(Muhammad Arif)

Assistant Engineer

Provincial Coastal Highway Sub-Division-II
Hyderabad


(Maqsood Ahmed)

Executive Engineer

Provincial Coastal Highway Division
Hyderabad

Checked By :


Superintending Engineer
Provincial Highway Circle, Hyderabad


(Shafeequ-e-Rehman Khambati)

Chief Engineer Highway, Hyderabad

Approved By :


(Shoaib Ahmed Siddiqui)

Project Director / Commissioner, Karachi


(Qazi Shahid Pervez)

Secretary

Works & Services Department
Government of Sindh

To,

✓
The Project Director,
Re-Alignment/Construction of Bund
from North Side of Malir River Project,
Hyderabad.

**SUBJECT:- STANDARD BIDDING/TENDER DOCUMENTS FOR THE ADP WORK
NAMELY "RE-ALIGNMENT/CONSTRUCTION OF BUND FROM NORTH
SIDE OF MALIR RIVER KARACHI".**

Ref nce:- Your office letter No.PD/RMBP/TC/G-55/Tender/M-I/101, dated 01-01-2015,
on the subject noted above.

On your recommendation in the letter referred above, Standard Bidding/Tender Documents in respect of subjected work in favour of **M/S: Sardar Mohammad Ashraf D.Balouch (Pvt) Ltd**, Government Contractor, being the lowest among others, is returned herewith duly sanctioned/approved, subject to availability of funds and observance of all Codal formalities. You are requested to please note that no any expenditure will be incurred beyond the amount of PC-I. Further you are requested to kindly affix the Stamp duty on Contract Agreements before issuing the work order under intimation to this office.

Sr.No.	Name of Firm/Agency.	Tender/Bid Amount.
01.	M/S: Sardar Mohammad Ashraf D.Balouch.	2,689,417,796/-
02.	M/S: Haji Muhkam Din Solangi.	3,038,859,575/-
03.	M/S: Hafiz Rab Nawaz & Co.	3,239,995,373/-

All the Standard Bidding/Tender documents received with your letter quoted above, are returned herewith (in original), for taking further necessary action, under SPPRA Rules 2010.

D.A./As above.

✓ (SALMAN MEMON)
CHIEF ENGINEER,
IRRIGATION KOTRI BARRAGE,
HYDERABAD.

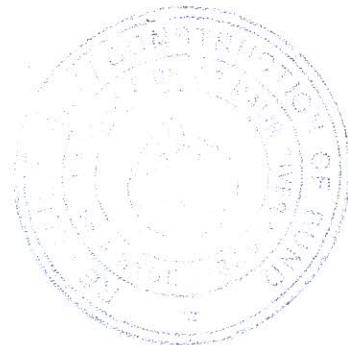


Photo copy attested

DAO

6/1

FINANCIAL REVIEW

NAME OF WORK: RE-ALIGNMENT / CONSTRUCTION OF BUND FROM NORTH SIDE OF MALIR RIVER

Technical sanctioned by the Chief Engineer, Kotri Barrage Region vide No: CDM/PD/Malir/1117, dated 05-12-2014 for Rs: 2,578,125,043-00

COST AS PER TECHNICAL SANCTION

Date of opening 17-12-2014

COST OF SCHEDULE ITEMS		COST OF NON-SCHEDULE ITEMS			TOTAL
Amount of Schedule Items	Amount of Carriage of Material	Amount of Non-Schedule Items	Amount of Provisional Cost	Total	
Rs.215,737,055	Rs.475,972,690	1,859,415,298	27,000,000	Rs.1,886,415,298	Rs. 2,578,125,043

COST AS PER TENDER

COST OF SCHEDULE ITEMS		COST OF NON-SCHEDULE ITEMS			TOTAL
Amount of Schedule Items	Amount of Premium (245.02% Above)	Amount of Non-Schedule Items	Amount of Provisional Cost	Total	
Rs.215,737,055	Rs.528,598,931	Rs.1,918,081,810	Rs. 27,000,000	Rs.1,945,081,810	Rs.2,689,417,796

Tender Amount (-) Cost of Technical Sanction = 2,689,417,796-00 (-) 2,578,125,043-00 = Rs.111,292,753 Over & above TECHNICAL SANCTION

Tender Cost worked out Rs.111,292,753 / 2,578,125,043 % = 4.32% Above the Technical Sanction i.e. within the permissible limit, hence recommended for necessary approval of Rs: 2,689,417,796-00 Quoted by M/s: Sardar Mohammad Ashraf D.Baluch (Pvt) Ltd, being lowest Bid amount.

Approved:
S.A.
Chief Engineer
Irrigation Kotri Barrage
HYDERABAD.

PROJECT ENGINEER/ EXECUTIVE ENGINEER
THATTA DRAINAGE DIVISION
THATTA

ZAHID HUSSAIN SHAIKH
PROJECT DIRECTOR
RE-ALIGNMENT/ CONSTRUCTION OF
MALIR PROJECT BUND
HYDERABAD

SMAH NAWAZ JATOI
DIVISIONAL ACCOUNTS OFFICER
RE-ALIGNMENT/ CONSTRUCTION OF
MALIR PROJECT BUND

DESIGN ENGINEER
Irrigation Kotri Barrage Hydr

Photo Copy attched

WORKS AND SERVICES DEPARTMENT
GOVERNMENT OF SINDH

RE-ALIGNMENT/ CONSTRUCTION OF BUND FROM NORTH SIDE OF MALIR RIVER

SUMMARY OF ESTIMATED COST
(MODIFIED)

CODE	DESCRIPTION	AMOUNT IN PAK. RUPEES	
		SCHEDULE ITEMS	NON SCHEDULE ITEMS
A.	Upstream of Jam Sadiq Bridge	571,227,437.68	-
B.	Downstream side of Jam Sadiq Bridge	845,962,577.89	799,498,161.00
C.	Rehabilitation of Left Bund	132,884,385.70	-
	<i>Add cost of non-schedule items</i>	799,498,161.00	

<i>Total Cost</i>	2,349,572,562
<i>Say</i>	2,349,572,562
<i>Cost in million</i>	2,350

COST ESTIMATE

**WORKS AND SERVICES DEPARTMENT
GOVERNMENT OF SINDH**

RE-ALIGNMENT/ CONSTRUCTION OF BUND FROM NORTH SIDE OF MALIR RIVER

COST ESTIMATE

Based on Government of Sindh Schedule of Rates 2012

Item No.	Description	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
A. UPSTREAM SIDE OF JAM SADIQ BRIDGE (RIGHT BUND)					
<u>SCHEDULE ITEMS (PART-A)</u>					
A-1	Jungle clearance and removing. (a) Thin Jungle (Volume-III PART-VI, P/14 39/1)				
	a) Thin Jungle	%Sq.m.	267,500	74.82	200,143.50
	b) Thick Jungle	%Sq.m.	267,500	149.62	400,233.50
A-2	Stone pitching including sub-base with hammer dressed stone on surface laid in courses including sand grouting and cartage of material within 30.miles.				
	a) Pitching (CR Vol-III, Part-II, P/32, Chapter-6, item no. 23 Vol-II, Part-I, P/1, item no. 1)	Cu.m.	21,900	2,668.65	58,443,435.0
	b) Stone apron (CR Vol-III, Part-II, P/32, Chapter-6, item no. 23 Vol-II, Part-I, P/1, item no. 1)	Cu.m.	23,800	2,668.65	63,513,870.0
	c) Sub-Base (CR Vol-III, Part-II, P/32, Chapter-6, item no. 16 Vol-II, Part-I, P/1, item no. 1)	Cu.m.	11,500	1,704.19	19,598,185.0
A-3	Random rubble masonry (uncoursed) in 1:4 cement sand mortar. (Volume- III PART-II, P/27 chapter-6, item no.1)	Cu.m.	1,280	6,719.82	8,601,369.9
A-4	Earth work excavation in irrigation channels, drains etc. dressed to designed section grades and profiles excavated material disposed off and dressed within 50 ft. lead. (Volume- III PART-II, P/1 chapter-1, item no.5)	Cu.m.	32,900	85.48	2,812,187.4
A-5	Extra for slush or Daldal including dewatering. (Volume- III PART-ii, P/4 chapter-1, item no16)	Cu.m.	32,900	85.48	2,812,187.4

**WORKS AND SERVICES DEPARTMENT
GOVERNMENT OF SINDH**

RE-ALIGNMENT/ CONSTRUCTION OF BUND FROM NORTH SIDE OF MALIR RIVER

COST ESTIMATE

Based on Government of Sindh Schedule of Rates 2012

Item No.	Description	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
A-6	Earthwork for embankment earth obtained from approved borrow pits to conforming to AASHTO Class A-1, A-2 of A-4 soils as per specified in M-145 as per approval of Engineer including laying in 6" (150mm) thick layers (compacted), cold breaking, ramming, dressing and compaction by sheep foot/ power roller with optimum moisture content to a minimum modified AASHTO dry density as per specifications complete i/c all lead and lift. (actual compacted depth shall be considered for payment) within a radius of 50 KM. (CR Vol-III, Part-VI, P/1, Chapter-1, item no. 05 & 7(a) Vol-II, Part-I, P/1, item no. 1)	Cu.m.	517,800	801.17	414,845,826.0
A	Total of Schedule Items (Upstream side)				571,227,438
B. DOWNSTREAM SIDE OF JAM SADIQ BRIDGE					
<u>SCHEDULE ITEMS (PART-A)</u>					
B-1	Jungle clearance and removing. (Volume-III PART-VI, P/14 39/1)				
	a) Thin Jungle	%Sq.m..	837,000	74.82	626,243.40
	b) Thick Jungle	%Sq.m..	837,000	149.62	1,252,319.40
B-2	Stone pitching including sub-base with hammer dressed stone on surface laid in courses including sand grouting and cartage of material within 30 miles.				
	a) Pitching (CR Vol-III, Part-II, P/32, Chapter-6, item no. 23 Vol-II, Part-I, P/1, item no. 1)	Cu.m.	34,500	2,668.65	92,068,425.0
	b) Stone apron (CR Vol-III, Part-II, P/32, Chapter-6, item no. 23 Vol-II, Part-I, P/1, item no. 1)	Cu.m.	46,850	2,668.65	125,026,252.5
	c) Sub-Base (CR Vol-III, Part-II, P/32, Chapter-6, item no. 16 Vol-II, Part-I, P/1, item no. 1)	Cu.m.	17,250	1,704.19	29,397,277.5
B-3	Random rubble masonry (uncoursed) in 1:4 cement sand mortar. (Volume- III PART-II, P/27 chapter-6, item no.1)	Cu.m.	2,430	6,719.82	16,329,163.2
B-4	Earth work excavation in irrigation channels, drains etc. dressed to designed section grades and profiles excavated material disposed off and dressed within 50 ft. lead. (Volume- III PART-II, P/1 chapter-1, item no.5)	Cu.m.	38,980	85.48	3,331,886.4

**WORKS AND SERVICES DEPARTMENT
GOVERNMENT OF SINDH**

RE-ALIGNMENT/ CONSTRUCTION OF BUND FROM NORTH SIDE OF MALIR RIVER

COST ESTIMATE

Based on Government of Sindh Schedule of Rates 2012

Item No.	Description	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
B-5	Extra for slush or Daldal including dewatering. (Volume- III PART-II, P/4 chapter-1, item no16)	Cu.m.	38,980	85.48	3,331,886.4
B-6	Earthwork for embankment earth obtained from approved borrow pits to conforming to AASHTO Class A-1, A-2 of A-4 soils as per specified in M-145 as per approval of Engineer including laying in 6" (150mm) thick layers (compacted), cold breaking, ramming, dressing and compaction by sheep foot/ power roller with optimum moisture content to a minimum modified AASHTO dry density as per specifications complete i/c all lead and lift. (actual compacted depth shall be considered for payment) within a radius of 50 KM. (CR Vol-III, Part-VI, P/1, Chapter-1, item no. 05 & 7(a) Vol-II, Part-I, P/1, item no. 1)	Cu.m.	717,200	801.17	574,599,124.0
Total of Schedule Items (Downstream side)					845,962,578

NON-SCHEDULE ITEMS (PART-B)

B-7	Providing and laying/ dumping stones weighing 300 to 400 kg. complete in all respect as shown on the drawings or as directed by the Engineer.	Cu.m.	332,294	2,406.00	799,498,161.0
Total of Non-Schedule Items (Downstream side)					799,498,161

B	Total of Schedule & Non schedule Items (Downstream side)				1,645,460,739
----------	---	--	--	--	----------------------

C. REHABILITATION OF LEFT BUND

(Including upstream & Downstream side of Jam Sadiq Bridge)

SCHEDULE ITEMS (PART-A)

C-1	Stone pitching including sub-base with hammer dressed stone on surface laid in courses including sand grouting and cartage of material within 30 miles.				
a)	Pitching (CR Vol-III, Part-II, P/32, Chapter-6, item no. 23 Vol-II, Part-I, P/1, item no. 1)	Cu.m.	5,650	2,668.65	15,077,872.5
b)	Stone apron (CR Vol-III, Part-II, P/32, Chapter-6, item no. 23 Vol-II, Part-I, P/1, item no. 1)	Cu.m.	7,068	2,668.65	18,862,018.2

**WORKS AND SERVICES DEPARTMENT
GOVERNMENT OF SINDH**

RE-ALIGNMENT/ CONSTRUCTION OF BUND FROM NORTH SIDE OF MALIR RIVER

COST ESTIMATE

Based on Government of Sindh Schedule of Rates 2012

Item No.	Description	Unit	Quantity	Rate (Rs.)	Amount (Rs.)
C-2	Earthwork for embankment earth obtained from approved borrow pits to conforming to AASHTO Class A-1, A-2 of A-4 soils as per specified in M-145 as per approval of Engineer including laying in 6" (150mm) thick layers (compacted), cold breaking, ramming, dressing and compaction by sheep foot/ power roller with optimum moisture content to a minimum modified AASHTO dry density as per specifications complete i/c all lead and lift. (actual compacted depth shall be considered for payment) within a radius of 50 KM. (CR Vol-III, Part-VI, P/1, Chapter-1, item no. 05 & 7(a) Vol-II, Part-I, P/1, item no. 1)	Cu.m.	123,500	801.17	98,944,495.0
C	Total of Schedule Items				132,884,386
	TOTAL COST A+B+C				2,349,572,562