

SECTION 5. TERMS OF REFERENCE & SCOPE OF WORK

POWER/ENERGY FEASIBILITY STUDY

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POWER/ENERGY FEASIBILITY STUDY

TERMS OF REFERENCE (TORS) OF POWER/ENERGY

INTRODUCTION:

Zulfikarabad Development Authority has prepared the detailed Land Use Plan of 55000 acres of land in Shah Bunder where a high end City having all the diverse land uses as per the aspiration of public. A consultant is required to conduct feasibility study in support of the detailed land use plan to explore a number of options after undertaking a complete & comprehensive review of the detailed land use plan which supposed to be based on local existing conditions. The feasibility study should encompass the five major components i.e. technical, economic, legal, operational and time schedule to facilitate proposed land use plan to include the latest available technology and knowledge in the field of power and energy sector.

TERMS OF REFERENCE:

Following is a detailed scope of work required to be undertaken by the consultant:

1. Prepare a base line study of Power/Energy demand and availability by collecting data from various departments/resources.
2. Suggest strategies for fulfilling the short falls and meet the further projections.
3. Prepare Financial & Technical Models for various energy/power productions.
4. Prepare and recommended distribution networks with option of using smart Grid system.
5. Study and recommend dispersion and placement of power/energy Infrastructure for 55,000 acres, as per proposed land use plan.
6. Identify potentials risks and challenges to implement power/energy Plan.
7. Develop grid integration and low flow studies
8. Technical Studies demonstrating that the chosen Technology, equipment and configuration is suitable for reliable, safe and trouble free power distribution for the City in terms of energy production.
9. Financial solution and tariff studies that demonstrates efficient and cost effective provision of power to the consumer.
10. Study for execution power energy on Public Private Partnership (PPP) basis.
11. Presentation of proposal and recommendation with financial models to Managing Director, ZDA after one months of Acceptance Letter.
12. Land use plan of Power/Energy for supporting conceptual master plan of the first node i.e. 55000 acres with emphasis on following but not limited to:
 - a) Sewerage System
 - b) Industrial zones/areas
 - c) Commercial zones/areas
 - d) Residential Zones/areas
 - e) High density Residential & Commercial zones/areas

- f) Institute & recreation zones/areas
- g) Miscellaneous zones/areas

13. Prepare Energy management protocol and recommend the integrated energy power production and distribution. The consultant will also study the latest technology in metering system and will recommend the optimum workable solution of handling various energy resources in an efficient and economic way.
14. Suggest an option among the available options to undertake power and energy production and distribution schemes for the City.
15. Prepare Policy legal and Institutional Framework; this shall include a detailed description of existing legislation, regulation and policy dealing with power and energy sector.
16. Prepare project phasing and development plans including time line to execute project along the phasing.
17. Develop recommendations, suggestions and conclusion/summaries for sustainable development of the proposed city.
18. Prepare detailed Description of the Proposed Project. The consultant is to concisely describe the proposed project, its geographic location, general layout of facilities including maps at appropriate scale where necessary. Any other details required to undertake the subject feasibility.
19. Prepare Legislative Regulatory the Framework: The consultant shall identify and describe that all pertinent regulations and standards governing the Power/Energy Supply.
20. Identify and analyze potential for Power/Energy Projects and study economical implications.
21. Occupation Safety and Health Concerns
22. Develop Flow Diagram/Network Diagram of Power/Energy Projects
23. Prepare detailed power/energy report.

DELIVERABLES

S. NO.	Document	Time Required
1	Inception Report (Refined detailed scope)	3 weeks
2	Interim Report based on finalized Table of Contents which should include Technical, economic, legal, operational and scheduling aspects of the study.	3 weeks
3	Presentation and approval of the Interim Report	2 weeks
4	Draft final Report	4 weeks
5	Final Presentation	1 week
6	Final Report 3 copies + one electronic copy	3 weeks
	Total	16 Weeks

PAYMENT SCHEDULE

S. NO.	Item	Payment percent	Condition
1	Mobilization advance	5%	At the time of Contract Agreement
2	Inception Report Approval	10%	After it is approved from ZDA
3	Interim Report	15%	After it is approved from ZDA
4	Draft Final Report	20%	After it is approved from Zulfikarabad Development Authority
5	Final Presentation	10%	After presentation delivered and approved by ZDA
6	Final Report	40%	After approval has been given by ZDA.
Total		100%	

ESTIMATED COST

S. NO.	Expert/Specialist	Quoted Rate	No. Required	Man Month	Amount
1					
2					
3					
4					
5					
6					
7					
8					
9	Supporting Staff				
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

9	Supporting Staff				
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					



ZULFIKARABAD DEVELOPMENT AUTHORITY



D-8, Block-2, Kahkashan, Clifton, Karachi.
Tel# 0092-21-99251576, Fax # 0092-21-99251581

I.O.N

Subject: SELECTION OF CONSULTANCY FIRMS FOR PREPARATION OF FEASIBILITY STUDIES FOR POWER/ENERGY, EIA STUDY, WATER SUPPLY FOR ZULFIKARABAD CITY NODE-I

Reference is made Discussion held in Conference room on 29th July, 2015

As discussed TORs for the following studies are to be provided by Planning Department.

- Power/Energy Supply
- Water Supply
- EIA Study

2. Previous TORs prepared by Operations and Procurement Wing are enclosed for your review and amendment if required necessary.

3. It is requested that fresh TORs incorporating your entire requirement are forwarded and the time frame for the various studies be forwarded to this Wing for our further action please.

4. We may held a meeting if desired by Planning Wing.

(ENGR. ISLAMUDDIN SHAIKH)
Consultant Procurement, ZDA

To,

✓ Deputy Director Planning,
Zulfikarabad Development Authority,
Karachi.

No. ZDA/Cons/Proc/30

Copy to:

- ✓ President Procurement/Consultant Committee, ZDA
- ✓ Director (Finance), ZDA
- ✓ Project Director, ZDA
- ✓ Deputy Director (Operations), ZDA
- ✓ Master File

(2 copies)
30/7/15

30/7/15



ZULFIKARABAD DEVELOPMENT AUTHORITY



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Tel# 0092-21-99251576, Fax # 0092-21-99251581

I.O.N

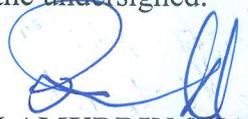
Subject: SELECTION OF CONSULTANCY FIRMS FOR PREPARATION OF POWER/ENERGY, EIA STUDY, WATER SUPPLY, FINANCIAL & LEGAL CONSULTANCY

As the Planning Department wanted to give fresh views/inputs regarding various studies required to be undertaken. It would be appreciated if the under mentioned studies considered for their need & scope for which suggested Terms of Reference are also forwarded:

- Power/Energy Supply
- Water Supply and Disposal of Waste Water Sewerage
- EIA Study
- Financial & Legal Consultancy Services

In case the said studies are required to be undertaken, it is requested that the under mentioned documents be provided for each study:

- Detailed Terms of Reference with deliverables required.
 - Details of experts and efforts required to conduct the study.
 - Detailed estimated cost for feasibility study based on time based method of execution.
 - Time line to complete the feasibility study.
 - If the feasibility is not required at this stage, then indentify the expected time to undertake the procurement.
- The procurement process will start after receipt of the requested information. Please include a soft copy with the documents.
 - If you have any questions, please feel free to contact the undersigned.


(ENGR. ISLAMUDDIN SHAIKH)
Consultant Procurement, ZDA

05/5/2015

To,

Deputy Director Planning,
Zulfikarabad Development Authority,
Karachi.

ZDA/Cons/Proc/6904

Copy to:

Director (Operations), ZDA
Director (Finance), ZDA
Director (Administration), ZDA
Project Director (Expressway), ZDA
Master File

CC: Managing Director, ZDA

Planning Department has not notified to you that subject studies to be undertaken again. Thereby, it is

(P.T.O)

suggested to you that process has to be continued which was initiated by consultant Procurement and operations department.

Consultant Procurement

Sudh
6/5/15

5. Comments are solicited please.

Sudh
6/5/15

Director ops.

6. These studies were part of PC-I and were ordered by Planning wing as this will become part of the master plan which was being developed by own resources using planning experts of ZDA. During long sessions of planning, the AD Planning wing was called into the process of just giving input during these sessions. As it is planning task and has no relationship with operations therefore can not comment on the assessment of need for these feasibility studies. It is upto planning wing to decide the requirement conducting studies.

7. It is therefore required to conduct on page 3.

Thorough review of the feasibility and if these required, the planning department should develop all the procurement packages as per the contents of the ION.

- 8. Please clarify if the need of these studies exist. Also develop the TOR etc as per the ION if necessity of requirement is approved. The previous procurement efforts were not initiated by operations wing rather it come from ^{EX} MD ZDA in consultation with planning wing.
- 9. Put up for your information please

\$ 6/5/2015

Consultant Procurement

10. Procurement Department processes the procurement requirements of various departments. Respective Departments after studying the need and scope are required to forward the details of the Procurement for further action. As the Planning Department had indicated the need for various studies at the initial stage, these already stand incorporated in the approved PC-I.

11. As the Planning Department was of the view that their inputs had not been obtained/incorporated in the various studies required to be undertaken, they were requested vide our ION No. ZDA/Cons/Proc/6904 dated 05-05-2015 (F/A) to study the need and scope of the studies referred at para 1 of ION at F/A, and forward their inputs about each study as highlighted at para 2 of ION at F/A.

12. in response to ION, Deputy Director Planning vide his noting on the original ION at para 4 ante has closed the subject by intimating that their Department has not asked the Procurement Department for undertaking the studies again and have suggested that the process initiated by Procurement and Operations Department be continued.

13. Comments of the Director Operations have been obtained which are at para 6, 7, 8 and 9 ante. The Director Operations has also highlighted that he was incorporated in the presentation being given by the Planning Department to Ex Managing Director. The main aspects highlighted by Director Operations are as indicated below and are supported:

- a. Various studies have been ordered by Planning Department and have been included in approved PC-I.
- b. As these studies pertain to the Planning Department for fulfilling their planning tasks, therefore Operations Department cannot comment on the assessment of need for these feasibility studies.
- c. Planning Department should conduct a thorough review of the various feasibility studies proposed by them regarding their respective scope and need.
- d. Planning Department should develop all the procurement packages as per the content of the ION.
- e. Planning Department should clarify if the need for these studies exists.

14. Procurement process of various studies was initiated as required by the Planning Department. As the Deputy Director Planning had highlighted serious reservation on the scope, Terms of Reference etc of the said studies to the undersigned, therefore they were requested to review the said studies and give their inputs. Now for reasons best known to them, they have changed their stance and do not want to own the need for procurement of the feasibility studies. As the various feasibility studies included in the PC-I (F/B) are required by Planning Department, these need to be reviewed by them and their recommendation be given so that Procurement Department can plan accordingly.

15. In view of preceding paragraph, it is recommended that the Planning Department be asked to review the need and scope of the requirement and forward the same to Procurement Department intimating the time line as to when the NITs for the said feasibility studies are required to be initiated please.


Consultant Procurement, ZDA 12/5

16. Managing Director, ZDA
Through DD (Coord)

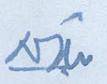
Para - 15/above, may kindly be approved -

17. Managing Director, Z.D.A.


12/5/2015

As proposed. Need and scope to reviewed with regard to requirements be done in a formal manner so that - NIT so - published should carry away -
specific details in the large intd - of zda.

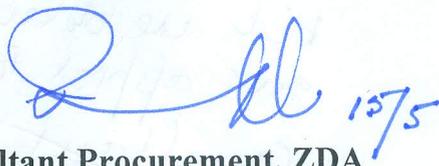
18 DD  12/5
19 Consultant (P-50)



20. Subject case was processed through ION # ZDA/Cons/Proc/6904 dated 05-05-2015 for reviewing the needs and requirement regarding studies mentioned under para 1 of above mentioned ION.

21. Planning Department had certain reservations with Procurement and Operation Department. The Director Operation was requested for solicitation of his comments and finally Consultant Procurement forwarded the case to MD vide para 15 of Note Sheet.

22. Necessary action as decided by MD vide para 17 ante may please be initiated in a professional manner at your end so that further action of procuring of various studies required by Planning Departments as indicated in said ION may be processed by this department accordingly please.

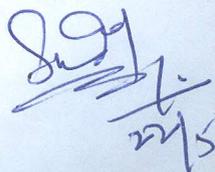


Consultant Procurement, ZDA

Deputy Director (Planning), ZDA

23. It is notified to you, Master Plan is prerequisite for the subject studies. Meanwhile, Planning wing is preparing detailed land use plan. After its completion, Planning wing will inform you about the required studies and will provide relevant as mentioned in para 1 by end of July 2015.

24 Consultant Procurement



PTO

For information of D Admin (Chairman
Procurement Committee) please.

D

25/5/2015

26. D/Admin

Noted please. suggest discuss the approximate time frame required to award the study to any consultant and the time likely to be taken by the consultant to conduct the study.

In case they want to cut short the time, it is only possible that the study be initiated well before the the completion of land use plan so that by the time NIT is floated, bids are obtained their Land Use Plan is ready (this would save approx four weeks or so).

D
25/05/15

27. consultant Procurement

Noted please. your attention to Para 26^{is} invited and it is requested the suggestion offered by D/Admin (President Procurement Committee) regarding cutting short time in preparation of Land use plan / Master plan for issuance of NIT.

We both may also discuss the case with D/Admin for further refinement of the schedule.

D D/Plan

D
2/6/15

28. As per decision of MD, we are proceeding in professional manner, It is already notified to you vide Para 23 that planning wing will inform you 4 weeks (end of July 2015) before the completion of Master Plan is End of August 2015. Time for the completion of Master Plan and feasibility studies will be worked out on technical basis and will be notified to you accordingly.
29. It is requested to you please provide detail schedule of procurement which will help in saving additional 4 weeks or so, as mentioned in Para 26.
30. It is observed that basic principles of public procurement are not followed appropriately, which are the Right Time and Responsiveness. The previous NITs were failed to attract reputable consultants due to short completion time. No feedback reports of failed NITs were shared with the relevant departments in order to overcome the shortcomings.
31. Planning Wing is a major stakeholder in conducting studies and has no representation in Procurement Process for identifying the right source for the above mentioned tasks.


Deputy Director Planning, ZDA

31 Consultant Procurement, ZDA

31/6/15

Level in Procurement Wing on 4-6-15

32. It is highlighted that the time for responsiveness against NITs and completion time of various studies used to be discussed in daily agenda meetings. Competent Authority in consultation with Planning representative used to decide completion time which was upto maximum of 2.5 months and accordingly the RFP documents were prepared and targets were met as given by the Ex MD. DD Planning Wing is requested to check from his officers who used to be present in all daily agenda meeting.
33. Aspects highlighted at para 30 are simply allegations made by Planning Wing, who are requested to please prove their contentions however the allegations are not agreed to. Detail of previous studies, NITs vis-à-vis responsiveness and other information is tabulated below; there had been no failure of NITs and therefore no feedback reports of such failures were required. Please get updates from your staff and reconcile.

Previous NITs showing Responsiveness and Completion Time of various Feasibility Reports/Studies

S.No	Name of Study	NIT published in Newspaper on	Submission date	Response Time as worked out	Proposed Contract Agreement Time period for completion of feasibility reports
01	EIA Study	19-02-2015	10-03-2015	20 days	02 months
02	Water Supply & Sewerage Disposal	16-01-2015	04-02-2015	20 days	2.5 months
03	Financial & Legal	17-11-2014	04-12-2014	18 days	01 ear
04	Power Energy	14-01-2015	04-02-2015	22 days	02 months
05	Communication & Security	20-02-2015	10-03-2015	19 days	02 months

34. Please be informed that SPPRA rules are being followed. Minimum response time is 15 days, keeping in view the urgency at that time it was kept near to the minimum.

- 35. It was with this background knowledge that you were requested vide ION dated 05-05-2015 to please furnish the TORs and other information on priority so that procurement process may be started well in time giving all concerned sufficient time to respond to the respective RFP. More than a month has been lapsed with no response.
- 36. If it is not too much trouble please consider various RFP and provide your inputs regarding TORs etc for various studies at your earliest please.


 Consultant Procurement
 03/06/2015

Deputy Director (Planning), ZDA

Through Chairman (Procurement Committee)

37. Let us not get involved in a blame game. We all are the team of ZDA. The Consultant Procurement and the Procurement Committee is providing a service and the above suggestions are only to save time. As Master planning is your domain please proceed as considered appropriate as long as URGENCY is the key word for success of our projects.

09/06/15

38. By Dir (Planning)
Through Consultant Procurement


 10/06/15

Please explain para 32


 11/06/15

39. Assistant Director Planning.

39. With reference to Para 32, Planning wing suggested some studies, but did not participate in the preparation of RFPs and decision of completion time. The same may be confirmed from Ex. MD in writing or verbally.


 12/06/15
Assistant Director Planning, ZDA

Deputy Director Planning, ZDA

40. Our observations regarding Right time and Responsiveness are valid and legitimate as per the schedule provided by you in **Para.33**. The expected completion time of all studies except Financial and Legal is over in June 2015 and you are asking planning wing to provide new RFPs on 05.05.2015 while nobody notified you for undertaking these studies again. And you were suggested to by planning wing as per **Para.4** to continue already initiated studies. Your statements are **ambiguous**; therefore it is requested to provide the **current status** of the studies if you are not **FAILED** to complete them on due dates.

S. No.	Name of Study	NIT published in Newspaper on	Submission date	Response Time as worked out	Proposed Contract Agreement Time Period for Completion of Feasibility reports	Expected completion Date
1	EIA Study	19-02-2015	10-03-2015	20 days	02 months	29-05-2015
2	Water Supply & Sewerage Disposal	16-01-2015	04-02-2015	20 days	2.5 months	10-05-2015
3	Financial & Legal	17-11-2014	04-12-2014	18 days	01 year	22-12-2015
4	Power Energy	04-01-2015	04-02-2015	22 days	02 months	27-04-2015
5	Communication & Security	20-02-2015	10-03-2015	19 days	02 months	28-05-2015

41. As per **Para.33** the **NIT/Bids** have already been floated and Bid documents are submitted. It is requested to inform whether **induction of new RFPs in the Bid document is Legal or illegal (as per SPPRA or prevailing)**. Planning wing is scared; proceeding with existing NITs, consequently, may add one more case in unending legal battles of ZDA.

42. It is requested to you again to provide comprehensive procurement plan, which will help in saving so called **Additional Four Weeks or So On**, as proposed in Para 26.

43. It is also notified to you again that Planning Wing is a major stakeholder in conducting studies and has no representation in Procurement Process for **identifying the right source** for the above mentioned tasks. **Non-induction of relevant professionals is also a violation of basic principle/codes of public procurement.**

44. Planning wing has limited capacity and at present planning team is busy in preparation of the Master Plan, which is the most Urgent Task at the moment. It is informed you several times that Planning wing will initiate relevant studies as per needs accordingly.

45. Planning wing always appreciates teamwork and ready to cooperate. Successful completion of topographical survey, Conceptual Plan and Detailed Land use is evidence of its devotion to meet the vision of ZDA and teamwork. It is requested to you please unnecessary communication and resolve all the issues in pre-arranged meetings involving all stakeholders.


Deputy Director (Planning), ZDA.
17/6/15.

46 consultant Procurement

As discussed file is put up

please:


8/7/2015

Sp. Director

47, Para wise comments are offered as under:

Para 40:

46. On the recommendation of CSC bidding process of studies has been cancelled due to non preparation of Master Plan of ZDA. The TORs, deliverables; schedule of payments with regard men months and re imbursable etc shall be prepared by Planning Wing for the studies which are considered essential. As soon as Master Plan is approved, the required RFP will be prepared by Procurement Wing and will be processed for selection of Consultants. It is suggested to avoid such correspondence showing FAILED it means that Procurement Wing, Consultant Selection Committee and Procurement Committee have failed which is not understandable. Please do not worry about the bidding process as Planning Wing has nothing to do with procurement jurisdiction. Planning Wing have calculated the expected time in the last column of table in para 40 the basis of calculation may please be forwarded for our guidance.

Para 41:

47. There is no induction of new RFP in the bid documents and as such it is not question of legal and illegal as blamed by Planning Wing. Planning Wing should not be scared for the things not related to their department. Please note that there are no legal battles. Please intimate detail of legal battles if they exist.

Para 42:

48. You may request all directorates to prepare Annual Procurement Plan as soon as possible. Procurement Wing will compile and consolidate for further issuing to the concerned agency like SPPRA.

Para 43:

49. Previous reports submitted by Planning Wing from time to time states that Master Plan has been prepared. Weekly agenda reports show that Master Plan was prepared during month of March 2015 copy of agenda report enclosed. On the other hand Master Plan is under preparations as briefed by the DD Plan, why this contradiction? Please identify the right source as has been pointed out by you and also quote SPPRA rule for violation of basic principles/codes of Public Procurement as alleged by you.

Para 44:

50. Please initiate relevant studies, TORs, deliverables; schedule of payments etc as per needs by 31st August 2015 so that time of bidding process and adequate time for contractual completion is given.

Para 45:

51. Self appraisal of Planning Wing has been shown by the DD Plan. We as a lay man do not understand as to why Master Plan could not be prepared even after lapse of four years. There was no unnecessary communication from Procurement Wing. You were requested to have a meeting with Chairman of Procurement & Consultant Selection Committee but you did not respond. You are now suggesting having meeting of all stakeholders to resolve the issue.

52. It is requested to please intimate whether the Master Plan shall be prepared FIRST and got approved from Competent Authority OR Consultancy Services of different studies will be hired independent of approval of Master Plan.

 08/07/2015
Consultant Procurement, ZDA

DD (Planning)

Through

Director (Admin) [President Procurement Committee]

53. Let us ^{at para 39} not ^{is not} press the matter any further. Even AD (Planning) ^{left out} ~~had~~ ^{had} stated that he does not have the expertise to prepare the RFP's. ^{AD (Planning) has advised} because the other portion is that AD (Planning) ^{is not} complete.

54. In light of the aspects highlighted by the MO during discussion on master plan on 03 July 15, there is no need to follow up on this please file. We will initiate studies once the details asked by us are forwarded to procurement by the Planning Dept.

Consultant Procurement

55

Please file and wait till the details asked by us are forwarded by Planning Wing.

14/7



ZULFIKARABAD DEVELOPMENT AUTHORITY

WEEKLY DIRECTORS COORDINATION MEETING



PLANNING

Dated: 24-03-2015

S. No	Activity	Status in Last meeting	Progress during the week	Discussions and decisions	Remarks
1	Master Plan	<ul style="list-style-type: none">Master plan of ZulfiKarabab City (Node-I) completed and printed in large size sheet.Land status of the Node-I has been printed and discussed with Director EstateAmendments and improvements in sector planning have been completedPreparation of presentation to CM, Sindh has been startedTable of content of the development plan is in progress	<ul style="list-style-type: none">Preliminary conceptual planning of remaining sectors of ZulfiKarabab City has been completed.Auto Cad Training for technical ZDA staff has been organized and it will start from 24th March till 31 March 2015.Land statement of 3km road has prepared and forwarded to the Director of Estate for further process.Preparation of presentation to CM, Sindh is still in progress.		
3	Topographical Survey of Phase - I of ZulfiKarabab	<ul style="list-style-type: none">Work has been done.		<ul style="list-style-type: none">The file of Retention Money of Topographical Survey has been forwarded to the XEN for further process.	



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D-8, Block-2, Kahkashan, Clifton, Karachi.
Tel# 0092-21-99251576, Fax # 0092-21-99251581

I.O.N

Subject: SELECTION OF CONSULTANCY FIRMS FOR PREPARATION OF POWER/ENERGY, EIA STUDY, WATER SUPPLY, FINANCIAL & LEGAL CONSULTANCY

As the Planning Department wanted to give fresh views/inputs regarding various studies required to be undertaken. It would be appreciated if the under mentioned studies considered for their need & scope for which suggested Terms of Reference are also forwarded:

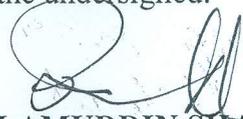
- Power/Energy Supply
- Water Supply and Disposal of Waste Water Sewerage
- EIA Study
- Financial & Legal Consultancy Services

In case the said studies are required to be undertaken, it is requested that the under mentioned documents be provided for each study:

- Detailed Terms of Reference with deliverables required.
- Details of experts and efforts required to conduct the study.
- Detailed estimated cost for feasibility study based on time based method of execution.
- Time line to complete the feasibility study.
- If the feasibility is not required at this stage, then indentify the expected time to undertake the procurement.

2. The procurement process will start after receipt of the requested information.
Please include a soft copy with the documents.

3. If you have any questions, please feel free to contact the undersigned.


(ENGR. ISLAMUDDIN SHAIKH)
Consultant Procurement, ZDA

05/5/2015

To,

Deputy Director Planning,
Zulfikarabad Development Authority,
Karachi.

No. ZDA/Cons/Proc/6904
Copy to:

- ✓ Director (Operations), ZDA
- ✓ Director (Finance), ZDA
- ✓ Director (Administration), ZDA
- ✓ Project Director (Expressway), ZDA
- ✓ Master File

CC: Managing Director, ZDA

4. Planning Department has not notified to you that subject studies to be undertaken again. Thereby, it is
(P.T.C)

ITEMIZED FINANCIAL REQUIREMENT FOR PREPARATORY WORK

S. NO.	ITEM OF WORK	EXISTING PHASING RS. IN MILLION				COST RS. IN MILLION	ITEM OF WORK	REVISED ANNUAL PHASING RS. IN MILLION					REVISED COST RS. IN MILLION		
		2011-2012	2012-2013	2013-2014	2014-2015			EXPENDITURE TILL DATE		REQUIREMENT					
								2012-2013	2013-2014	2013-2014	2014-2015	2015-2016		2016-2017	
A	CONCEPTUAL MASTER PLANNING FOR ENTIRE AREA	37.50	212.50	0.00	0.00	250.00	Conceptual Master Planning and Detailed Master Planning on 55000 acres (Node-1) including Financial, management, legal and transactional consultancy services, and Consultancy services for detailed supervision and design for Pre-Development Works and carrying out following feasibility studies: a. Environmental survey b. Water Feasibility c. Sea Port Feasibility d. Air Port e. Power feasibility f. Communication g. Security h. Gas and heating i. Solid Waste / Sewerage Feasibility	0.99	1.90	30.00	87.00	70.84	59.27	250.00	
								0.00	0.00	0.00	6.00	3.00	0.00	0.00	9.00
								0.00	0.00	0.00	15.00	5.00	0.00	0.00	20.00
								0.00	0.00	0.00	18.00	12.00	0.00	0.00	35.00
								0.00	0.00	0.00	12.00	5.00	0.00	0.00	20.00
								0.00	0.00	0.00	15.00	0.00	0.00	0.00	15.00
								0.00	0.00	0.00	3.00	0.00	0.00	0.00	3.00
								0.00	0.00	0.00	4.00	0.00	0.00	0.00	4.00
								0.00	0.00	0.00	3.00	1.00	0.00	0.00	4.00
								0.00	0.00	0.00	7.00	3.00	0.00	0.00	10.00
								B	PPP Seed Money						0.00
C	Marketing						0.00	0.00	0.00	10.00	7.00	0.00	17.00		
D	Topographical survey of 55000 acres land (Node-1, Taluka Shah Bunder)						0.00	0.00	13.75	41.25	0.00	0.00	55.00		

E RCC BRIDGE													
E-1	Construction of RCC Bridge over Dhandhari 6000 m span complete in all respects including feasibility, geotechnical exploration, design, piling, abutments, foundation and superstructure.	376.50	500.00	871.00	772.50	2520.00	Design and Construction of RCC Bridge over Dhandhari 1000 meter span (subject to design and final approval by IRI after hydraulic studies) complete in all respects including feasibility, permit acquisition from concerned departments/agencies, Geotechnical Exploration, design, piling, abutments, foundation, approach roads, J-Spurs upstream of River and superstructure etc.	0.00	0.00	360.00	1440.00	1440.00	4680.00
E-2	Land Acquisition	0.00	0.00	0.00	0.00	0.00	Land Acquisition For Bridge	0.00	0.00	10.00	50.00	0.00	60.00
	Sub Total E:-	376.50	500.00	871.00	772.50	2520.00	Sub Total E:-	0.00	0.00	370.00	1490.00	1440.00	4740.00
F	Total A to E:-	414.00	712.50	871.00	772.50	2770.00	Total A to E:-	0.99	1.90	413.75	1731.25	1571.84	5242.00
G	Add 10% Contingencies	41.40	71.25	87.10	77.25	277.00	Add 2% Contingencies (excluding E-2)	-	-	8.08	33.63	31.44	103.58
H	Add 20% Premium	82.80	142.50	174.20	154.50	554.00		-	-	-	-	-	-
I	Vehicles and Equipment (0.6%)	2.48	4.28	5.23	4.64	16.62	Vehicles and Equipment 0.6% (excluding E-2)	-	-	2.42	10.09	9.43	31.07
J	Total F to I:-	540.68	930.53	1137.53	1008.39	3617.62	Total F to I:-	0.99	1.90	424.25	1774.96	1612.71	5376.65
K	Price Escalation 6%	0.00	55.83	68.25	60.53	184.62	Price Escalation 6.5% to 13.0%	-	-	0.00	0.00	104.83	307.87
L							Consultancy for top supervision 1.5% of Rs. 5140.58M	-	-	5.60	22.38	23.84	77.11
M	Total J to L:-	540.68	986.36	1205.78	1069.42	3802.24	Total J to L:-	0.99	1.90	429.84	1797.35	1741.57	5761.63

N	Yearly Demand/Grand Total:-	538.20	982.08	1200.55	1064.78	3785.61	Yearly Demand/Grand Total:-	1790.18	5761.63	
O	Capital:-			1200.55	1064.78	3785.61	Capital:-	1797.35	5761.63	
P	Revenue Cost:-	13.30	24.00	29.34	26.02	97.66	Revenue Cost (1%):-	17.97	57.97	
Q	Total Required:-	551.50	1006.08	1229.89	1090.80	3878.27	Total Required:-	1815.32	5819.60	
R	% increase in the PC - I Cost									50.06%

COST OF THE BRIDGE Rs in Million, WITH ITS RELATED FACTORS

Bridge Cost:	360.00	1440.00	1440.00	1440.00	4680.00
Contingencies 2%	7.20	28.80	28.80	28.80	93.60
Vehicles and Equipment 0.6%	2.16	8.64	8.64	8.64	28.08
Total:	369.36	1477.44	1477.44	1477.44	4801.68
Escalation 6.5 to 13%	0.00	0.00	96.03	192.07	288.10
Total:	369.36	1477.44	1573.47	1669.51	5089.78
Revenue Cost 1%	3.69	14.77	15.73	16.70	50.90
Total:	373.05	1492.21	1589.21	1686.20	5140.68
Consultancy top supervision 1.5%	5.60	22.38	23.84	25.29	77.11
Grand Total Bridge only:	378.65	1514.60	1613.05	1711.50	5217.79