Meerut Development Authority, Meerut

Expression of Interest for Consultancy Services and Preparation of Detailed Project Report (DPR) For Rehabilitation and Improvement of Abu Drain in Meerut.

Meerut Development Authority invites capable consultants with an expression of interest for preparation of detailed project report for Rehabilitation and Improvement of Abu Drain Meerut. Interested consultants should provide the necessary details in format available on MDA website *www.mdameerut.in* based on which the consultants will be shortlisted. The submission of EOI document shall be accompanied with processing charge of Rs. 10000/- (Rupees ten thousand only) in the form of a demand draft payable in favour of Vice Chairman, MDA Meerut. Note, the processing charge is non refundable. MDA reserves the right to accept or reject any application without explanation or reason. If the EOI process is cancelled by MDA for administrative or any other reasons, the processing fees shall not be refunded.

The shortlisted consultants will be issued RPF documents and provided 30 days from the issue date of RPF documents to submit the bids. The RFP invitee will be based on QCBS (Quality and Cost Based Selection). Detailed scope of work and terms of reference shall be provided in the RFP. If required, a pre-proposal conference will be organized after issue of RPF to discuss and make changes to the RPF document. Any communication should be through Email/Fax/RPAD to the person and address i.e. *Superintending Engineer-II Meerut Development Authority Meerut Ph. 0121-2649198, 2641910, Fax No. 0121-2640911 Mob. 09412784155 Email:mdameerut@rediffmail.com.* EOI shall be submitted by RPAD/speed post only before 31st August, 2015 to the address mentioned above Any EOI

received after due date shall be returned unopened. MDA shall not responsible of late delivery of EOI.

Minimum Eligibility Criteria-

- The company should be registered with registrar of companies under the Company Act 1956. The company should possess ISO 9001 certificate.
- The company should be in consultancy business for last 10 years.
- The company should have an average annual turnover of Rs 10 cores in last 3 years.
- The company should be making net profit for last 3 year.
- The company should have completed minimum one detailed project report costing Rs 100 cores involving Sewerage/Storm Water Disposal/Solid Waste Disposal during last 7 years.
- The project should have been appraised and approved by a Central Govt. Agency under a Central Government Scheme or should be a project under multilateral funding search of ADB/ World Bank or similar.
- A copy of the DPR such as provided in soft copy (PDF format) for reference.

Brief Description of the Project

About Meerut City

The district was established under British rule in 1818 and on establishment constituted the then Tehsils of Meerut, Ghaziabad, Mawana, Baghpat, Sardhana and Hapur. Meerut district lies between 28°57ô to 29°02ô North latitude and 77°40ô to 77°45ô East longitude in the Indo-Gangetic plains of India. It is bound on the north by Muzaffarnagar district, in the south by Bulandshahar district while Ghaziabad and Baghpat districts form the southern and western limits. The river Ganges forms the eastern boundary and separates the district from Moradabad district and Bijnor district.

Due to its location & setting, nearness to the National capital and rich agricultural activity in the surrounding region, Meerut city presently acts as a major distribution centre for the diverse agriculture produce such as sugarcane, food-grains etc. It is the largest manufacturer of Musical Instruments in the country and is also one of the largest suppliers of sports goods. There are several large scale industries located in Meerut sugar mill, spinning mill, auto- tyre factory, fibre board industry etc. It is well known for its sweet shops, scissor and razor manufacturing, handloom printing and dying and is an emerging centre for jewellery designing. The city being the largest urban centre in the NCR, in terms of population after Delhi, holds a unique place and importance as the potential recipient of spill over activities from Delhi.

Meerut is a rich agricultural area with such pockets of land that do not fit in for crop purpose. Being in the proximity of Delhi, it is ideal for industry. It is home to 520 micro,

small and medium scale industries. As of August 2006, Meerut has about 23,471 industrial units, including 15,510 small-scale units and 7,922 cottage industries.

In spite of the various facts highlighting the importance of the city in the region it faces challenges of unplanned and organic growth. Infrastructural deficits in almost all the sectors coupled with an un-proportionately large poor class population limit the growth potential of the city. However the city holds potentials that are inherent in its character; such as a vibrant trade and commerce sector and cottage industry, the rich agricultural land and favourable geographical conditions around the city areas, numerous higher education institutes, availability of adequate skilled and semi skilled work force, proximity to Delhi etc. In addition to the stated strengths of the city, the proposed decentralization of NCT via the NCR formation and resultant spill over of activities should be a major factor in giving a boost to the cityôs future.

AS per 2001 census the city of Meerut has attained the status of a metropolitan city. Meerut is among one of the city selected under JNNURM scheme.

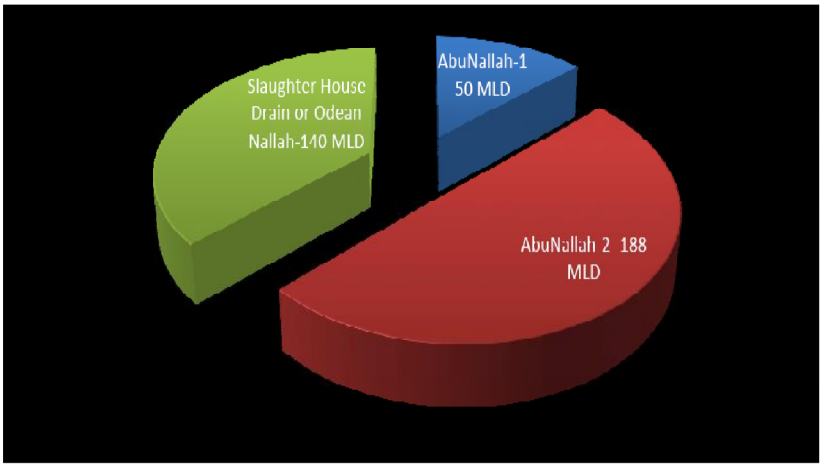
Existing Scenario

- **Major Drains in Meerut**

According to Central Pollution Board Report (2012) Meerut has following drain that ultimately discharge their wastewater in Kali Nadi.

1. Abu Nallah I has an average BOD of 113 mg/L with a BOD load of 5650 Kg/d.
2. Abu Nallah II mostly carries untreated sewage of Meerut city has a total BOD of 20304 Kg/d.
3. Slaughterhouse drain also known as Odean drain carries maximum BOD load of 72800 kg/d. Odean drain mostly contain the waste water of the slaughter houses located in Meerut.
4. Chhoyia drain has a BOD load of 62886 kg/d with an average BOD concentration of 731 mg/l. It carries mostly the wastewater of the industries located in Meerut. Following chart shows the distribution of pollution load of the drains.

Following gives the bar chart of the proportion of pollution load of the drains.



Following table gives the analysis report of the various drains in Meerut as studied by central pollution control board, New Delhi. It has been observed that the pollution level in almost all the drain was much above the alarming level. Measures should be undertaken to reduce the pollution level of the drains by segregating the wastewater from the storm water. Controlling the pollution level in the drains would result in the reduction of pollution level in kali nadi.

SL.No.	Point Source	Flow (MLD)	Parameters					BOD load kg/day
			pH	COD	BOD	TSS	TDS	
1.	AbuNallah-1	50	7.70	303	113	86	1540	5650
2.	AbuNallah-2	188	7.40	284	108	230	648	20304
3.	Slaughter House Drain or Odean Nallah	140	7.21	888	520	789	1132	72800
4.	Chhoyia Drain	86	8.27	3170	731	257	5076	62886
5.	Hapur Drain	56	7.46	145	31	128	-	1736
6.	Kadarabad Drain	49	7.96	97	21	35	-	1029
7.	Gulaothi Drain	4	7.26	385	183	290	-	732
8.	Bulandshar Drain-1	22	7.95	70	22	47	-	484
9.	Bulandshar Drain-2	-	7.34	105	40	143	-	-
Note : All units are measured in mg/l except pH								

Presently UP Jal Nigam has been involved in the execution of Meerut Sewerage scheme of JNNURM. The project coverage of the city with sewerage system is about 12% of total area and covers 25% of population. There are 6 intermediate pumping stations, one main pumping station and one 5 MLD treatment plant at Pallavpuram against requirement of 184 MLD. The project will lay 246.8 kms of sewers, 4 intermediate pumping stations, 2 main pumping stations, 3.32 kms of rising mains, 72 MLD of STP at Garh road.

However still a large portion of sewage would remain untapped and would be discharged in Kali Nadi thereby increasing its pollution level.

Proposed Nallah Reclamation Plan

The objective of the proposed project is to restore the environmental status of the drain and to make it pollution free so that it can support aquatic environment. The drain ultimately meets Kali Nadi thus preventing the pollution of Kali Nadi which ultimately meets Ganga river near Kannauj.

The goals of the proposed Abu drain reclamation are to improve the environmental conditions along the surroundings of the drain so that solid waste disposal, open defection, sewage disposal does not occur in the drain. Moreover, efforts shall be made to make the site aesthetically pleasant by providing landscaping along either side of the drain. To achieve above goals following activities shall be included in the proposed project.

- **Isolation of Sewage from the drain**. This can be achieved by providing underground sewers on either side of the drain with main sewer on one side and sub main on other side with provision of joining of sub main and main sewers at regular intervals. Compact Sewage treatment plants shall be constructed to treat the sewage before the same may be discharged. Moreover, in areas where land is available, the drain would be channelled through wetland for the treatment of pollutants.

- **Lining of the Drain:** As a part of drain reclamation the entire drain shall be lined with brickwork with cement concrete floor. M.S. fencing shall be done on either side up to the height of 3.0m so as to prevent the disposal of solid waste and other materials in the drain. Foot path on either side shall be provided with attractive landscaping and wherever available parks shall be made for attractions of peoples.

- **Provision of Catch Basins for Disposal of Storm water**: Provision of catch basin shall be made on either side of the drain for the disposal of storm water. Sediments would settle out in catch basins and storm water shall be discharged in the drain. As the sewage has been diverted from the drain, storm water would provide the necessary discharge in the drain.

- **Provision of Screens at Regular Interval:** Bar screen would be provided at regular intervals for checking the entry of solid waste in the drain.

- **Provision of landfill Sites along the Drain:** During the visit of experts in Meerut, it was observed that heaps of solid wastes were found at a number of places indicating improper disposal of Solid waste. It is proposed in the project to include a number of small landfill sites along the sides of the drain. This would help in the disposal of solid waste considerably. The landfills shall be covered with a beautiful grass cover for aesthetics view point. Landfill leach ate generated from the sites shall be discharged in the sewers and gases formed shall be collected and can be used as a fuel for running generators.

- **Provision of Multilevel Parking at few sites:** The population of Meerut city has been increasing at a very faster rate and many commercial places facing parking problems. Multilevel parking shall be constructed over the drain at important commercial centres, namely, Abu Lane and at other places. This would solve the parking problem and would generate sufficient revenue for the maintenance of the same.

- **Community Participation:** Community participation shall be ensured for the long term maintenance of the drain.

- **Reduction of Odour**: To reduce the odour problems along the drain by controlling the discharge of wastewater and solid waste.

- **Provision of Community Parks:** Community parks shall be developed **along** the site of the drain. This would ensure attraction of tourists and would result in revenue generation to be utilised for the maintenance of the parks.

Tentative SCOPE OF WORK for the Reclamation of the Drain (form Sardhana Road to Kali Nadi, 18.7 Km)

Sr. No.	Item
1	Desilting of drain by mechanical means (Hydraulic excavator) and disposal beyond the municipal limit
2	Construction of Embankment for achieving the desired side slopes in the proposed drain section
3	Provision of M.S. fencing on either side of the drain
4	Provision of foot path along the drain
5	CC Lining along the sides of the drain for the entire length of the drain and construction of CC bed
6	Provision of 1800 mm main sewer (NP4)on one side of the drain with provision of manholes at every 100 m for disposing the sewage to the treatment plants including the provision of catch basins at regular intervals for admitting storm water to the drain
7	Provision of 1000 mm sub main sewer (NP3) on another side of the drain with provision of manholes at every 70 m with connections to main sewer at regular intervals including the provision of catch basins at regular intervals for admitting storm water to the drain
8	Strengthening of Side Roads on each sides
9	Provision of three numbers of 20 MLD sequencing Batch Reactor based including cost of land Sewage Treatment Plants including pumping stations
10	Provision of six numbers of landfills for disposal of solid wastes
11	Provision for Solar Street Lighting Systems including all accessories
12	Provision for construction of Multi Level Car Parking at three places
13	Provision of shopping complex near Begum Bridge and other suitable places
14	Shifting of Transmission lines including Poles etc.
15	Public Conveniences at different places and recreational activities
16	Strengthening existing bridges and culverts and construction of new bridges
17	Plantation and maintenance of green belt
	Total

- The budgetary estimate for the above scope is about 425 Crores

Expression of Interest (EOI) Consulting Firms

Interested firm may submit EOI information as per format indicated below

I. Consulting Firm Information

Consultant Name:	
EOI Submission by : Name of Authorized person	Position

Consultant	**Country of Incorporation**	**Joint Venture (JV) or Sub-consultant**	**EOI Submission By Authorized Person**	**Position**

Associations (Joint Venture or Sub-consultancy)

Present the rationale for and benefits of working in association (JV or Sub-consultant) with others rather than undertaking the assignment independently (as appropriate). Describe the proposed management and coordination approach of the association and the role of each firm.

I confirm that:

Documentation regarding our corporate structure including beneficial ownership has been attached.

Documentation regarding our Board of Directors has been attached.

A written agreement to associate for the purpose of this Expression of Interest has been signed between the consortium partners and has been attached.

Once your team is shortlisted and invited for submission of the Proposal, it is not permissible to transfer the invitation to any other firm, such as Consultantôs parent companies, subsidiaries and affiliates. The Client will reject a Proposal if the Consultant drops a JV member without the Clientôs prior consent, which is given only in exceptional circumstances, such as debarment of the JV partner or occurrence of Force Majeure.

II. Assignment Specific Qualifications and Experience

Your EOI shall demonstrate technical competence based on project references :

A. Technical Competence

Cross-referencing from your profile projects in Section C. Project References, highlight the technical qualifications of your entity/consortium in undertaking similar assignments. Provide details of past experiences working with similar project authorities.

B. Management Competence (Please answer each question in one paragraph of 3-5 sentences)

1. Describe standard policies, procedures, and practices that your entity has to assure quality interaction with clients and outputs. Please state if your company is ISO certified.

2. How will your firm/consortium handle complaints concerning the performance of experts or quality of the reports submitted for this assignment? What internal controls are in place to address and resolve complaints?

3. How will you ensure the quality of your firmôs/consortiumôs performance over the life of this assignment?

4. Describe standard policies, procedures and practices that your firm has put in place to avoid changes/replacements of personnel and to ensure the continuity of professional services once contracted.

5. Describe what social protection practices you have in place to safeguard the well-being of your proposed experts? Specifically describe arrangements you have in place for medical, accident, and life insurance coverage during the assignment.

C. Project References

Please select most relevant projects to demonstrate the firmôs technical qualifications (maximum 10 projects).

SN	Project	Period	Client	Country	Firm
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					

Project Summary

SN 1	
Project Title	
Country / Region	
Start Date	
Completion Date	
Continuous / Intermittent	
Client	
Funding Source	
Description	(indicate your role and input in person-months)

SN 2	
Project Title	
Country / Region	
Start Date	
Completion Date	
Continuous / Intermittent	
Client	
Funding Source	
Description	(indicate your role and input in person-months)

(Please insert more table as necessary)

III. EOI Attachments

SN	Description
1.	Certificate of Incorporation of the lead member
2.	Certificate of Incorporation of the JV member (for each member)
3.	Certificate of Incorporation of the Sub-Consultant (for each sub-consultant)
4.	Letter of Association
5.	Certificates from clients for the Project references given.
6.	Soft copy of atleast one DPR of eligible project in pdf format
7.	Audited Balance sheets and Turnover certificate for the last three years.
8.	ISO 9001 Certificate