

## 1.1 GENERAL

### 1.1.1 Name of Work:

Lucknow Metro Rail Corporation (LMRC) invites Open Tenders from eligible applicants, who fulfil qualification criteria as stipulated in Clause 1.1.3 of NIT, for the work, %Contract KNPCC:01 - Construction of Boundary Walland Land Development of Depot at Polytechnic for IIT Kanpur-Naubasta for IIT Kanpur-Naubasta Corridor-1 of Proposed Kanpur Metro Project, Kanpur, Uttar Pradesh, India.+

The brief scope of the work and site information is provided in clause 2.0 to 2.11 of NIT.

### 1.1.2 Key details:

Approximate cost of work	INR 36.75Crores
Tender Security amount	INR 0.37Crore
Completion period of the Work	18months
Tender documents on sale	From 23.02.2016 to 04.03.2016 (between 09:00 Hrs to 17:30 Hrs) on working days
Cost of Tender documents	21000/- (Demand Draft in favour of %Lucknow Metro Rail Corporation Ltd.+payable at Lucknow.)
Date &time of Submission of Tender	21.03.2016 upto 15:00
Date & time of opening of Tender	21.03.2016 at 15:05
Authority and place for purchase of tender documents, seeking clarifications and submission of completed tender documents	<b>Director (Works and Infrastructure)</b> Lucknow Metro Rail Corporation, Administrative Building, Vipin Khand, Gomti Nagar, Near Dr. Bhimrao Ambedkar Samajik Parivartan Sthal, Lucknow-226010, Uttar Pradesh, India

### 1.1.3 QUALIFICATION CRITERIA:

#### 1.1.3.1 Eligible Applicants:

- i. The tenders for this contract will be considered only from those tenderers (proprietorship firms, partnerships firms, companies, corporations, consortia or joint ventures) who meet requisite eligibility criteria prescribed in the sub-clauses of clause 1.1.3 of NIT. In the case of a JV or consortium, all members of the group shall be jointly and severally liable for the performance of whole contract.
- ii. (a) A non-Indian firm is permitted to tender only in a joint venture or consortium agreement with any other Indian firm having minimum participation interest of 26% or

their wholly owned Indian subsidiary registered in India under Companies Act -1956 with minimum 26%participation.

(b) A tenderer shall submit only one bid in the same tendering process, either individually as a tenderer or as a partner of a JV. A tenderer who submits or participates in more than one bid will cause all of the proposals in which the tenderer has participated to be disqualified. No tenderer can be a subcontractor while submitting a bid individually or as a partner of a JV in the same bidding process. A tenderer, if acting in the capacity of subcontractor in any bid, may participate in more than one bid, but only in that capacity.

iii. Tenderers shall not have a conflict of interest. All tenderer found to have a conflict of interest shall be disqualified. A tenderer may be considered to have a conflict of interest with one or more parties in the bidding process,if:

(a) a tenderer has been engaged by the Employer to provide consulting services for the preparation related to procurement for or implementation of the project;

(b) a tenderer is any associates/affiliates (inclusive of parent firm) mentioned in subparagraph (a) above; or

(c) a tenderer lends, or temporarily seconds its personnel to firms or organisations which are engaged in consulting services for the preparation related to procurement for or implementation of the project, if the personnel would be involved in any capacity on the same project.

iv. A firm, who has purchased the tender document in their name, can submit the tender either as individual firm or in joint venture/Consortium. However, the lead partner in case of JV shall be one who has experience of RCC boundary wall/RCC structure/Pre-stressed concrete and mass compaction.

v. NON SUBSTANTIAL PARTNERS IN CASE OF JV/CONSORTIUM

1. Lead partner must have a minimum of 26% participation in the JV/Consortium.

2. Partners having less than 26% participation will be termed as non-substantial partner and will not be considered for evaluation which means that their financial soundness and work experience shall not be considered for evaluation of JV/Consortium.

3. In case of JV/Consortium, change in constitution or percentage participation shall not be permitted at any stage after their submission of application otherwise the applicant shall be treated as non-responsive

#### 1.1.3.2 Minimum Eligibility Criteria:

A. Work Experience:The tenderers will be qualified only if they have completed work(s) during last Fiveyears ending31.01.2016as given below:

A.1

(i) At least one similar work (i.e. (a) **Construction of RCC boundary wall / RCC structure/Pre-stressed concrete and (b) land development work with mass compacted earth filling**) of value of **Rs. 29.40 crores** or more,

If the above work of **Rs. 29.40crores** has been done by the foreign partner of JV and the work was done in the country of the foreign partner then in addition to this, the foreign partner must have done works equal to **Rs. 14.70crores** outside

the country of the foreign partner.

OR

- (ii) At least two similar works(i.e. **(a) Construction of RCC boundary wall / RCC structure/Pre-stressed concrete and (b) land development work with mass compacted earth filling**), as defined in para (i) above, each of value of **Rs. 18.375Crores** or more,

If both the above works of **Rs. 18.375crores** have been done by the foreign partner of JV and the work was done in the country of the foreign partner then in addition to this, the foreign partner must have done works equal to **Rs. 14.70crores** outside the country of the foreign partner.

OR

- (iii) At least three similar works(i.e. **(a) Construction of RCC boundary wall / RCC structure/Pre-stressed concrete and (b) land development work with mass compacted earth filling**), as defined in para (i) above, each of value of **Rs. 14.70crores** or more,

If all the above works of **Rs. 14.70crores** have been done by the foreign partner of JV and the work was done in the country of the foreign partner then in addition to this, the foreign partner must have done works equal to **Rs. 14.70crores** outside the country of the foreign partner.

**AND**

- A.2 The above qualifying work done must have at least 87,500 cum of compacted mass earth work and 1775 cum of RCC boundary wall / RCC structure/Pre-stressed concrete work in a single contract.

Notes :

- The tenderer shall submit details of work executed by them in the Performa of **Appendix-17 of FOT** for the works to be considered for qualification of work experience criteria. Documentary proof such as completion certificates from client clearly indicating the nature/scope of work, actual completion cost and actual date of completion for such work should be submitted. ***The offers submitted without this documentary proof shall not be evaluated.*** In case the work is executed for private client, copy of work order, bill of quantities, bill wise details of payment received certified by C.A., T.D.S certificates for all payments received and copy of final/last bill paid by client shall be submitted.
- Value of successfully completed portion of any ongoing work up to **31.01.2016** will also be considered for qualification of work experience criteria.
- For completed works, value of work done shall be updated to **31.01.2016** price level assuming 5% inflation for Indian Rupees every year and 2% for foreign currency portions per year. **The exchange rate of foreign currency shall be applicable 28 days before the submission date of tender.**
- In case of joint venture / Consortium, full value of the work, if done by the same joint venture shall be considered. However, if the qualifying work(s) were done by them in JV/Consortium having different constituents, then the value of work as per their percentage participation in such JV/Consortium shall be considered.

## B. Financial Standing

The tenderers will be qualified only if they have minimum financial capabilities as below:

### (i) T1 – Liquidity:

It is necessary that the firm can withstand cash flow that the contract will require until payments received from the Employer. Liquidity therefore becomes an important consideration.

This shall be seen from the balance sheets and/or from the banking reference. Net current assets and/or documents including banking reference, should show that the applicant has access to or has available liquid assets, lines of credit and other financial means to meet cash flow of Rs.3.50 Crores for this contract, net of applicant's commitments for other Contracts. Banking reference should contain in clear terms the amount that bank will be in a position to lend for this work to the applicant/member of the Joint Venture/Consortium. In case the Net Current Assets (as seen from the Balance Sheets) are negative, only the Banking references will be considered. Otherwise the aggregate of the Net Current Assets and submitted Banking references will be considered for working out the Liquidity.

The banking reference should be from a Scheduled Bank in India or (in case of foreign parties) from an international bank of repute acceptable to LMRC and it should not be more than 3 months old as on date of submission of bids.

In Case of JV- Requirement of liquidity is to be distributed between members as per their percentage participation and every member should satisfy the minimum requirement.

Example: Let member-1 has percentage participation= $M$  and member-2 haspercentage participation= $N$ . If minimumliquidity requiredis  $\frac{W}{100}$  then liquidity of member-1 =  $(W M)/100$  and liquidity of member-2 =  $(W N)/100$ .

### (ii) T2 - Profitability:

Profit before Tax should be Positive in at least 2(two) year, out of the lastfive audited financial years.

In Case of JV: - The profitability of only lead member shall be evaluated.

### (iii) T3 - Net Worth:

Net Worth of tenderer during last audited financial year should be >Rs 4.90 Crores

In Case of JV- Net worth will be based on the percentage participation of each Member.

Example: Let Member-1 has percentage participation =  $M$  and Member-2 has = $N$ . Let the Net worth of Member-1 is  $A$  and that of Member-2 is  $B$ , then the Net worth of JV will be =  $(AM+BN)/100$

### (iv) T4 - Annual Turnover:

The average annual turnover from construction of last five financial years should be >Rs.19.60 Crores.

The average annual turn over of JV will be based on percentage participation of each member.

Example: Let Member-1 has percentage participation =  $M$  and Member - 2 has = $N$ . Let the average annual turn over of Member-1 is  $A$  and that of Member-2 is  $B$  then the average annual turn over of JV will be= $(AM+BN)/100$

### **Notes:**

- Financial data for latest last five audited financial years has to be submitted by the tenderer in Appendix-18 of FOT along with audited balance sheets. The financial data in the prescribed format shall be certified by Chartered Accountant with his stamp and signature. In case audited balance sheet of the last financial year is not made available by the bidder, he has to submit an affidavit certifying that ~~the~~

balance sheet has actually not been audited so farq In such a case the financial data of previous ~~4q~~ audited financial years will be taken into consideration for evaluation. If audited balance sheet of any year other than the last year is not submitted, the tender may be considered as non-responsive.

- Where a work is undertaken by a group, only that portion of the contract which is undertaken by the concerned applicant/member should be indicated and the remaining done by the other members of the group be excluded. This is to be substantiated with documentary evidence.

#### 1.1.3.3 Bid Capacity Criteria:

##### Bid Capacity:

The tenderers will be qualified only if their available bid capacity is more than the approximate cost of work as per NIT. Available bid capacity will be calculated based on the following formula:

$$\text{Available Bid Capacity} = 2 * A * N . B$$

Where,

A = Maximum of the value of construction works executed in any one year during the last five financial years (updated to 31/01/2016 price level assuming 5% inflation for Indian Rupees every year and 2% for foreign currency portions per year).

N = No. of years prescribed for completion of the work.

B = Value of existing commitments (as on 01/03/2016) for on-going construction works during period of 18months w.e.f. 1/3/2016.

##### **Notes:**

- Financial data for latest last five financial years has to be submitted by the tenderer in Appendix-15 of FOT along with audited financial statements. The financial data in the prescribed format shall be certified by the Chartred Accountant with his stamp and signature in original.
- Value of existing commitments for on-going construction works during period of 18months w.e.f. 1/3/2016 has to be submitted by the tenderer in Appendix-16 of FOT. These data shall be certified by the Chartered Accountant with his stamp and signature.
- In the case of a group, the above formula will be applied to each member to the extent of his proposed participation in the execution of the work. If the proposed % participation is not mentioned then equal participation will be assumed.
- Example for calculation of bid capacity in case of JV / Group
- Suppose there are ~~Pq~~ and ~~Qm~~ members of the JV / group with their participation in the JV / group as 70% and 30% respectively and available bid capacity of these members as per above formula individually works out ~~Xq~~ and ~~Yq~~ respectively, then Bid Capacity of JV / group shall be as under:
- Bid Capacity of the JV / group = 0.7X + 0.3Y

1.1.3.4 *The tender submission of tenderers, who do not qualify the minimum eligibility criteria & bid capacity criteria stipulated in the clauses 1.1.3.2 to 1.1.3.3 above, shall not be considered for further evaluation and therefore rejected. The mere fact that the tenderer is qualified as mentioned in sub clause 1.1.3.2 to 1.1.3.3 shall not imply that his bid shall automatically be accepted. The same should contain all technical data as required for consideration of tender prescribed in the ITT.*

#### 1.1.4 Tender Documents

The Tender documents consist of:

##### Volume 1

- Notice Inviting Tender (NIT)
- Instructions to Tenderers (ITT)
- Form of Tender
- General Conditions of Contract (SCC)
- Special Conditions of Contract (SCC)

##### Volume 2

- General and Technical Specifications

##### Volume 3

- Bill of Quantities (BOQ)

##### Volume 4

- Tender Drawings

##### Volume 5

- Condition of Contract on Safety, Health & Environment (SHE) Ver 1.2

1.1.5 The contract shall be governed by the documents listed in Para 1.1.4 above along with latest edition of CPWD Specification, IRS Specifications & MORTH Specifications. These may be purchased from the market.

1.1.6 The tenderers may obtain further information/ clarification, if any, in respect of these tender documents from the office of Director (Works and Infrastructure) Lucknow Metro Rail Corporation Ltd, Administrative Building, Vipin Khand, Gomti Nagar, Near Dr. Bhimrao Ambedkar Samajik Parivartan Sthal, Lucknow-226010, Uttar Pradesh, India Telephone no. 0522-2304014,15 (Ext. 182).

1.1.7 All tenderers are hereby cautioned that tenders containing any material deviation or reservations as described in Clause E 4.0 of Instructions to Tenderers+ and/or minor

deviation without quoting the cost of withdrawal shall be considered as non-responsive and is liable to be rejected.

- 1.1.8 Late tenders (received after date and time of submission of bid) shall not be accepted under any circumstances.
- 1.1.9 Tenders shall be valid for a period of 180 days (both days inclusive i.e. the date of submission of tenders and the last date of period of validity of the tender) from the date of submission of Tenders and shall be accompanied with a tender security of the requisite amount as per Annexure-6 of ITT in the form of a Bank Guarantee from Scheduled Commercial Bank in India, which shall be valid for a further period of 56 days beyond the validity period for the tender.
- 1.1.10 LMRC reserves the right to accept or reject any or all proposals without assigning any reasons. No tenderer shall have any cause of action or claim against the LMRC for rejection of his proposal.

**Director (Works & Infrastructure)**

Lucknow Metro Rail Corporation,  
Administrative Building,  
Vipin Khand, Gomti Nagar,  
Near Dr. Bhimrao Ambedkar Samajik Parivartan Sthal,  
Lucknow-226010,  
Uttar Pradesh, India.

## SCOPE OF WORK

### 2.0 GENERAL

The scope of work consists of construction of RCC boundary wall along the periphery of Polytechnic Depotand fillingwith good quality earthusing at 95% of maximum dry density as per Modified Proctor Density.

### 2.1 BRIEF SCOPE

- Civil works to be undertaken in this contract consist of construction of RCC boundary wall consisting of isolated footing, strip footing, rafts, retaining walls, columns and RCC pre cast panels and M.S. railing, land development works with mass earth filling usinggood quality earth, carriage of earth, spreading in layersand compaction at OMC to obtain 95% of maximum dry density as per Modified Proctor Density, cutting & transplantation of trees as per specifications and drawings, etc.
- Scope of work includes cost of all machineries, manpower, equipment and other necessary arrangement required for construction of all permanent and temporary works as per BOQ,General and Technical Specifications, drawings and or as directed by Engineer.
- The scope of work shall inter alia include the following:
  - a) Site Clearance, dismantling of obstructions etc., before commencement of works, all as required or as directed.
  - b) True and proper demarcation, layout of work, provision of all instruments and appliances in connection with all above mentioned work as specified or as directed by Engineer-in-Charge or the representative of LMRC.
  - c) The scope of work also includes provision of casting yard for boundary wall panels with minimum20 casting beds and 20 nos.pre-casting moulds including 5 nos. logo panel moulds of approved design, casting of panels, transporting of panels to site of work using adequate mechanical device for transportation without causing damage to them & their proper erection with safety measures at site of work using erection equipment, such as cranes etc. and false work as required as per erection scheme approved by the engineer.
  - d) Filling of earth on prepared beds in layers and compaction on OMC to obtain 95% of maximum dry density as per Modified Proctor Density with available earth in true line and level as directed by Engineer- in - charge.
  - e) Day to day cleaning of worksite throughout the execution period.
  - f) Laying of RCC hume pipes and construction of pull-pits/ manholes as per drawing and design.
  - g) All the drawings including detailed architectural and structural drawings will be supplied by LMRC.
  - h) All aspects of quality assurance, including testing of various components of the work, as specified or as directed.
  - i) Clearing site after construction and handing over of all the works, as specified and directed.



- j) Period of completion is **Eighteen months** from date of issue of ~~%~~Letter of Acceptance+
- k) Defect Liability period is **Eighteen Months** from the date of completion of work.
- l) Survey work such as demarcation of boundary line and setting out of work at site is included scope of work. The coordinates of the critical points of the boundary wall shall be intimated to the contractor who shall make his own arrangements to transfer these coordinates to the ground with the help of total station and get it checked by the Engineer.
- m) Any other item of work as may be required to be carried out for completing the job in all respects in accordance with the provisions of the contract and /or to ensure the structural stability and safety of the work during and after construction.
- n) Construction of Boundary/retaining wall including footings and columns, excavation, backfilling, dewatering, removing sludge, etc.

#### **2.1.1 RAILING WORK.**

- a) The steel tube shall be confirming to IS 1161 and IS 226, welding shall be done as per IS 816.
- b) Tubes shall be clean finished and free from scale. They shall be free from cracks, surface flaws, laminations and other defects. The ends shall be cut clean and square with axis of tube, unless otherwise specified.
- c) The ends of all the tubes should be provided with a cap or base unless specified.
- d) Fabrication work is to be done in an approved workshop.
- e) Clearing of site and handing over of all the works, as specified or as directed.
- f) Maintenance of the completed work during the maintenance period as directed.

#### **2.1.2 COMPONENTS OF WORK**

The work content in the said contract consists of the following components.

##### **Preliminary Works**

This includes the following:

- a) Stripping of entire surface and grading the area to be filled up including filling the pockets, removal of slush, bad soil and any obstruction including pumping/baling out water, loading, carriage and disposal of stripped unsuitable material from sites as directed by the Engineer. The original ground surface after stripping shall be compacted by mechanical equipments.
- b) Setting out of alignment by establishing masonry pillars, reference points etc. as per drawings and/or as directed by Engineer.
- c) Construction of reference pillars from Ground level to proposed finished formation level at locations as directed by the Engineer including establishment of Bench Marks.
- d) Dismantling existing permanent and temporary structures and proper stacking of the serviceable materials and unserviceable materials.

- e) Establishing of material testing laboratory at site as per requirement or as specified by the Engineer.

#### **2.1.4 Material**

##### **2.1.4.1 Quality**

All materials used in the works shall be of the best quality of their respective kinds as specified herein, obtained from sources and suppliers approved by the Engineer and shall comply strictly with the tests prescribed in the Technical Specifications/Codes of Practice.

##### **2.1.4.2 Sampling and Testing**

In addition to test certificates, samples of all materials proposed to be employed in permanent works shall be submitted to the Engineer when called for. In such cases, materials will not be brought to the site without prior approval of the Engineer.

Samples provided to the Engineer are to be labeled in boxes suitable for storage. Materials or workmanship, not corresponding in character and quality with approved samples, will be rejected by the Engineer.

Samples required for approval and testing must be supplied at least 45 days in advance to allow for testing & approval. Delay to the works arising from the late submission of samples will not be acceptable as a reason for delay in completion of the works.

The contractor will bear all expenses for sampling and testing, whether at the manufacturer's premises at source, at site or at any testing laboratory or institution as directed by the Engineer. In case of field tests, 10% of the samples shall be tested in approved outside laboratory as directed by the engineer. No payment shall be made on this account.

##### **2.1.4.3 Rejection**

Any materials that have been found not to conform to the specifications will be rejected forthwith and shall be removed from the site by the contractor at his own cost.

##### **2.1.4.4 Workmanship**

All works shall be true to level, plumb and square and the corner, edges and arises in all cases shall be unbroken and neat and shall be as per provisions in the relevant Technical Specifications / Standard Codes of Practices. Contractor shall also submit Quality Assurance Programme and Methods Statements within 30 days of acceptance of tender for approval of the Engineer. The approved Quality Assurance Plan and Method Statements will form the basis for quality control and checklist for strict adherence during the work.

Any work not as per satisfaction of the Engineer or his representative will be rejected and the same shall be rectified, or removed and replaced with work of required standard of workmanship at no extra cost.

#### **2.2 Interface Works**

In addition the Contractor shall be required to carry out all the works as per interfacing requirements of Depot contractor. The contractor shall carry out necessary co-ordinations with various contractors especially to Building, Road, Utility, E &M, track, Telecom, Signaling & Traction contractor for keeping provisions pertaining to cut outs/ openings etc. for completion of work.

## **2.3 Structures**

The construction of structures will have to be planned in such a manner that they do not obstruct or interfere with the existing roads/railways and other utilities. Where work is required to be carried out at locations adjacent to such roads/railways, utilities, structures, monuments etc. suitable safety and protection arrangements will have to be ensured for which nothing extra will be payable. It should be ensured that no damage is caused to any such element and Engineer/ Employer shall be indemnified against such damage at nothing extra will be payable on this account.

### **2.4.1 REFERENCE TO THE STANDARD CODES OF PRACTICE**

2.4.1.1 All Standards, Technical Specifications and Codes of practice referred to shall be latest editions including all applicable official amendments and revisions. The Contractor shall make available at site all relevant Indian Standard Codes of practice, IRSC, MORTH & IRC Codes and CPWD specifications as applicable.

2.4.1.2 Wherever Indian Standards do not cover some particular aspects of design/ construction; relevant British German Standards will be referred to. The Contractor shall make available at site such standard codes of practice.

2.4.1.3 In case of discrepancy among Standard codes of practice, Technical Specifications and provisions in sub clauses in this NIT, the order of precedence will be as below:

- i) Provision in NIT
- ii) Technical Specifications,
- iii) CPWD specifications
- iv) Standard Codes of Practice.
- v) MORTH Specifications

### **2.4.2 DIMENSIONS**

2.4.2.1 As regards errors, omissions and discrepancies in Specifications and Drawings, relevant clause of Special Conditions of Contract will apply.

2.4.2.2 The levels, measurements and other information concerning the existing site as shown on the conceptual / layout drawings are believed to be correct, but the Contractor should verify them for himself and also examine the nature of the ground as no claim or allowance whatsoever will be entertained on account of any errors or omissions in the levels or strata turning out different from what is shown on the drawings.

## **2.5 ASSOCIATED WORKS**

Works to be performed shall also include all general works preparatory to the construction and works of any kind necessary for the due and satisfactory construction, completion and maintenance of the works to the intent and meaning of the drawings adopted and technical specifications, to best Engineering standards and orders that may be issued by the Engineer from time to time, compliance by the agency with all Conditions of Contract, supply of all materials, apparatus, plants, equipment, tools, fuel, water, strutting, timbering, transport, offices, stores, workshop, staff, labour and the provision of proper and sufficient protective works, diversion, temporary fencing, lighting and security required for the safety of the public and protection of works on adjoining land; first aid equipment, sanitary accommodation for the staff and workmen, effecting and maintenance of all insurances,

the payment of all wages, salaries, fees, royalties, duties or the other charges arising out of the erection of works and the regular clearance of rubbish, clearing up, leaving the site perfect and tidy on completion.

## **2.6 CONSTRUCTION DEPOT**

For casting yard, batching plant and other activities land of suitable size of **4000 sq. m** within the land acquired by the LMRC at depot at Kanpur. The land shall be made good for such offsite activities as needed by the Contractor at no extra cost to the employer. The land shall be cleared from debris all structure made by contractor including, RCC footing and raft etc. before handing over the back to the Employer. Final bill will be released to the contractor after all structures from the construction depot are removed. The contractor shall barricade this area as per the instructions of the Engineer and nothing extra shall be paid.

## **2.7 UTILITIES**

Utility identification at foundation locations will be done by the contractor and in case utility(s) is encountered or obligatory requirement is to be met out; the contractor shall modify the span configuration/foundation design accordingly in consultation with engineer as provided in the tender drawing to save the utility(ies) or to meet obligatory requirements within the accepted price. Shifting of utility(ies) would be done only in exceptional cases where in the opinion of the Engineer no other option is available. Contractor shall be paid for diverting the utilities under relevant Schedule items. No payment shall however be made for supporting the utilities during course of work.

The utilities are to be diverted with proper liaison and approval of the utility owning agencies. The utilities which are not be diverted but require supporting, proper supporting is be done so that they are not damaged along their branches. Precautions to be taken while handling the utilities are mentioned as under;

- (i) Utilities must not be damaged at any cost. If due to some or the other reason, mishappening occurs, it should be rectified immediately by the Contractor at his own cost under intimation to LMRC.
- (ii) Till rectification of the damaged trunk sewers, the Contractor shall arrange substitute arrangement for sewer pumping and its disposal as per directions of Engineer /concerned civic agencies. The similar arrangement is done for other utilities.
- (iii) The manholes of Trunk/Sewers should not be covered under the foundation as these may create hindrances to the annual de-silting/cleaning of sewer lines.
- (iv) Sufficient distance of foundation from outer edge of Trunk / Sewers is kept in view of further maintenance/Safety of Trunk /Sewers.
- (v) The covers of manholes be saved from heavy machinery movement to avoid any accident/Slippage of malba in manholes etc into the Trunk /Sewers which may cause blockage of lines. In case of damage of manhole cover & frame the same shall be replaced immediately by the Contractor at his own cost.
- (vi) Manholes of the trunk sewer should be kept freely accessible for cleaning and removal of blockages and malba should not be dumped over these manholes.

- (vii) Branch sewer connections which are connected with the trunk sewers should also be taken care of. If the same are damaged, the same should be restored immediately on priority.
- (viii) NOC & Approval of schemes of Diversion of Utilities from the concerned regulatory / statutory / Local Authority is the responsibility of the Contractor and nothing extra is payable on this account.

These are only indicative for one of the utility. Similarly, necessary precautions which are specified from time to time by the utility owning agencies shall also be followed. The Central verge/footpath furnishings which are to be dismantled be handed over to the concerned department in their stores at his own cost.

Contractor should make his own survey for identification of underground/above ground utilities.

## **2.8 INSPECTION**

LMRC may appoint an independent agency to ensure the quality checking of design, supply, fabrication, erection and construction of all works under scope of work. The Contractor shall ensure the complete co-operation with the agency to perform their work satisfactorily. In addition LMRC also reserves right to undertake quality check and inspection directly by itself.

## **2.9 TIME SCHEDULE**

The agency shall submit with the tender %time Schedule+for completion of various portions of works. This schedule is to be within the overall completion period of **18months**.

## **2.10 TENDER PRICE**

The tender price as mentioned in Clause C 10.0 of ITT shall include all the above listed items in the scope of the work (Clause 2.1 to 2.9).

## **2.11 SITE INFORMATION**

The project site is located in the Kanpur area of Uttar Pradesh. The proposed depot is to be constructed in existing Government polytechnic campus near Gurudev Chauraha. The plan of the proposed depot is enclosed in Volume-4.