OFFICE OF THE EXECUTIVE ENGINEER
Construction Division No-3 B.C.D. , Patna
(Email ID- ee.cons3.bcd@gmail.com)

EXPRESSION OF INTEREST (EoI)
EoI No -01/of 2019-20/BCD

Undersigned invites “Expression of Interest (EoI)” for empanelment of reputed Agencies/Firms/NGOs/Proprietors with a proven track record for Transplantation/ Translocation of trees of various species and girths situated in different districts of Bihar for the infrastructure projects undertaken by Building Construction Department, Patna, Bihar.

Schedule of EoI :-
1. Date of Issue of EoI :- 31.10.2019
2. Pre-Bid meeting :- The office of chief Engineer (Patna), BCD, Patna on 19.11.2019 at 4:00 pm
3. Date of Downloading of EOI documents :- From 11.11.2019 to 26.11.2019 by 3:00 pm.
4. Last date and time of Submission of EOI :- Upto 27.11.2019 by 3:00 pm.
5. Date of opening of EOI:- 27.11.2019 by 3:30 pm.

The agencies/Organisations having relevant experience may submit their proposals as per condition mentioned in EoI documents. The EOI documents can be downloaded from website i.e. www.bcd.bih.nic.in or be taken physically from the office of Executive Engineer, Construction Division-3, Building Construction Department, Patna/ Superintending Engineer, Construction Circle B.C.D, Vishweshwaraiya Bhawan, Patna/ Chief Engineer, B.C.D, Vishweshwaraiya Bhawan, Patna.

The Corrigendum if any shall be displayed on the website.

Executive Engineer
Construction Division 3
BCD, Patna.

PR No. 010107(BCD) 2019-20

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Jet Scannex

Ardh Shudh Akshar Mandak Pravas ki Sandhya May 18003155510
General Instructions

(i) Interested agencies (as mentioned in EoI) who are willing to participate will have to submit their proposal documents as per the prescribed format of this EoI along with non-refundable fee of ₹ 5000/= in form of Demand draft favouring in favour of Executive Engineer, Construction Division-3 BCD, Patna.

(ii) Proposal Document:- Applicants shall submit physically/ By Registered post their project proposal documents in sealed envelopes super-scribed. “EoI for empanelment of Tree Relocation work for Building construction Department, Patna, Bihar.”

(iii) Work shall be awarded by the concerned Executive Engineer from the empanelled list as per their requirements and payment shall also be done by them on the basis of approved rate

Jurisdiction

The following is the jurisdiction where the empanelled Agencies/ firms shall have to do the execution of relocation of trees from one location to other location:

(i) Different places of the all districts of Bihar as specified by the authority concerned who will give the work order for relocation of tree for the execution of infrastructure projects.

(ii) Any other area as notified by the Building Construction Department, Govt. of Bihar, Patna.

Eligibility conditions

(i) The Organizations should have a proven track record of tree relocation / translocation works of at least 50 no. of trees during the last three (03) financial years preceding EoI due date. This shall be duly supported by documentary proof such as “Work Completion Certificate” from the authority concerned and the respective photographs.

(ii) The organizations should have sufficient manpower and resource support . (details to be enclosed)

(iii) The organizations should have minimum Average Annual Turnover (AATO) of ₹ 25.00 lacs during the last 3 financial years (copy of IT. Return or Certificate of AATO. by Chartered Accountant to be enclosed)
**Scope of work/service**

The empanelled agencies shall have to perform the following defined scope of works –

(i) Relocation of various no of trees of different girth and species. The girth ranges from 200 mm to 6000 mm.

(ii) Tree relocation shall include pre- tree relocation operations, Relocation to the receptor sites and post tree relocation including maintenance as mentioned in guidelines marked as Annexure –I.

(iii) The entire operation of tree relocation shall be carried out under the personal supervision of the relocation expert till the successful completion of the project.

(iv) They shall be responsible for digitally recording (Images/Photos/Videos) and transmitting the same to the authorities from time to time till completions.

(v) Failure to provide quality service will lead to termination from the list of empanelled agencies.

**Insurance**

The agencies/firms shall have to obtain the Group personnel Accident (GPA) insurance policy as per workmen compensation Act. 1923 (& Amendment thereafter) at its own risk and cost to cover unexpected accidents against labour engaged/third party before commencement of work

**Procedure of Application**

(i) Interested Agencies shall have to submit the proposals for empanelment Complete in all respect to the office of Executive Engineer, Construction Division-3 BCD, Patna. / Superintending Engineer, Construction Circle, BCD, Patna / Chief Engineer (Patna), BCD, Patna, latest by the time mentioned in EoI.

(ii) The proposal Comprised of two Parts – Namely- PART-A (Technical Bid) and PART-B (Financial Bid).

**PART-A**

It comprised of the following documents:-

(i) Registered firms with relevant documents

(ii) PAN No.

(iii) GSTIN No.

(iv) Experience Certificate as mentioned in Eligibility criteria

(v) List of Manpower as mentioned in Eligibility criteria

(vi) Documents regarding minimum Average Annual Turnover (AATO) of ₹ 25 lacs as mentioned in Eligibility criteria

(vii) Declaration on non-judicial stamp paper duly notorised that “All the documents submitted and the statement made are true”
Above documents in chronological orders duly signed shall be sealed in a separate envelope superscribed with PART-A (Technical Bid) and Name of work and Address of applicants.

**PART-B**

It comprised of financial offers as per proforma given in Annexure I. The agencies shall have to quote the rate of various Items both in figures and words clearly, If there shall be any discrepancy in words and figures the rate quoted in words shall be accepted. The rate quoted shall be inclusive of all taxes and GST. It should be sealed in a separate envelope superscribed with PART-B (financial Bid) with name of work and applicant address.

Both PART-A & PART-B duly sealed in separate Envelope shall be sealed in a big envelope with full address and superscribed with “EoI for tree relocation work for Building construction Department, Patna, Bihar”

(iii) It is to be noted that financial bid i.e. PART-B shall be opened of only those agencies who will qualify technically in PART-A i.e. in Technical Bid. Technically disqualified bidders financial offer shall not be opened and be returned back to them.

**GENERAL TERMS AND CONDITIONS**

(i) It is to be noted that this is not a Request for Proposal (RFP). After review and scrutiny of Expression of Interest, the eligible and experienced Tree Relocation Agencies will only be empanelled for providing the execution of above work as per due procedure.

(ii) Empanelled Tree Relocation Agencies do not have right to demand any advance for the execution of work.

(iii) Further, it may be noted that the payments towards the executed projects will be made only after satisfactory completion of the awarded work. However, the total project will be divided into two different activities viz relocation work, and maintenance work.

(iv) The empanelled Tree Relocation Agencies may be dispensed with at any time giving one month notice in the event of non-performance, under performance or any other reason which would be specified and found justified in the opinion of the committee.

(v) BCD shall undertake quality control for performance appraisal with respect to their quality of execution, methodology of relocation adopted, timely completion of project, survival percentage of transplanted trees, deployment of required no. of equipment, skilled & Semi skilled manpower and any other standards with respect to the project awarded.
Suitability of soil properties of the receptor shall be duly checked by the Agency Concerned and a certificate regarding the suitability of soil with their nutrients must be furnished before relocation.

**Empanelment process**

The agencies participating in the said proposals shall be shortlisted on the following criteria-

(i) EoI received from agencies (as mentioned in EoI) shall be short listed as per the eligibility criteria and the requirement as mentioned in Part- A and Part- B.

(ii) Short-listed agencies financial offer shall be opened and the rate quoted by the agencies shall be compared Item-wise for the different girths of trees and the lowest rate for each girths shall be taken for finalization. After negotiation final rate shall be arrived and subsequently their consent for the final rate shall be sought for empanelment.

(iii) Thereafter, list of agencies will be finalised and letter of empanelment shall be issued by Engineer-in- Chief, Building Construction Department, Panta, Bihar and the duration of empanelment will be valid for 3 years. The descretion and decision of the tender committee shall be final in respect of empanelment of the agencies for further extended period.

_________________ .. ___________ .. ___________
I. Preparation before transplantation

i. Roots must be trimmed before transplanting. Set up temporary supports before trimming. Perform excavation and trimming in stages. The roots should be trimmed one after another, in a circular pattern with the trunk as the core. The wounds of the exposed roots must be smoothened. Root trimming is performed properly as per the requirement of prevailing weather conditions.

ii. Trim the tree crown before transplanting, according to the following principles:
   a. Trees with prominent trunks: Maintain their overall shape, trim away long shoots, withered or infected twigs, overlapping and crossing shoots, and unwanted shoots growing from the trunk less than 2 meters from the ground. Trim away up to 1/3-1/2 of the original mass for deciduous trees, and up to 1/5-2/5 for evergreens. For Bombax ceiba, leave at least two tapers of branches after trimming.
   b. Trees without a prominent trunk: For broadleaf deciduous trees, thin the branches before heavy pruning, keep the growing and strong branches, and trim away up to 3/5-9/10 of the original mass. For broadleaf evergreen trees, trim away the tree crown and inner branches up to 1/3-3/5 of the original mass. For coniferous evergreen trees, thin the branches to moderately reduce the size of the tree crown by trimming 1/5-2/5 of the original mass.
   c. Wounds should be smooth without splitting. When trimming branches with a diameter of over 5 centimeters avoid splitting due to improper trimming. The wounds must be smoothened, with preservatives applied.
   d. For Palm trees, Transplant the whole tree by removing withered leaves only.

II. Digging up trees

i. The diameter of the excavated root system or soil ball should be five times the diameter of the base of the tree trunk, but not less than 40 centimeters. The depth of the excavation should be 2/3 of the soil ball’s diameter, but not shallower than 25 centimeters. The depth of the soil ball should include multiple root systems.

ii. When encountering thick roots, cut them with a hand saw instead of digging through, keep the wounds smooth and apply healing agents to prevent infection.
iii. Wrap the soil ball with biodegradable materials, and then with large mesh wire netting to maintain its stability.
III. Wrapping and transporting

i. After being excavated, the tree trunk should be wrapped with protective materials (e.g. sackcloth, canvas). During transporting the tree to the new destination, cushions should be placed between the tree and the tree and the body of the vehicle, to avoid damaging the branches. Fasten the tree with ropes for safety’s sake, regardless of how far it is being transported.

ii. Be gentle while loading, unloading, and handling, and avoid dragging while transporting. Ensure there are no damage to the soil ball, and no scratching and splitting of the root system. The tree should be kept intact without injuries to its root system, trunk and crown.

iii. Keep the trees being transported properly moistened, sheltered and protected from wind, strong sunlight, rain, cold weather and theft.

iv. While transporting, loading and unloading, follow traffic safety guidelines, with warning signs erected to alert passing vehicles and pedestrians.

IV. Tree planting

i. Mark the planting site with the Engineer in advance. Start digging only after confirmation. The size of the excavation should be double that of the soil ball, or at least 30 centimeters wider than it’s diameter, while the hole should be 15-20 centimeters deeper than the root ball. After digging, apply organic or other types of fertilizers to the base of the hole to facilitate root growth, and replace the existing soil with new soil, The backfilled soil should comprise 40% yellow soil, 20% pond silt, 10% organic fertilizers, 10% peat soil, 20% pumice and 0.1% moisturizer. There should not be any rocks or impurities larger than 1 centimeter in diameter in the soil.

ii. The transplantation process including excavation, transporting and planting should be completed within the same day. Shorter transplantation time can provide better conditions for the survival of seedlings. When encountering adverse weather, apply temporary measures to protect the soil ball and the planting hole, install sheltering facilities and, if necessary, water the tree to prevent injury or withering.

iii. Before planting, place a ventilation bag on each of the four sides of the hole (Dimensions of ventilation bag: 12-15 centimeters in diameter, 1 meter in length; fillings comprising perlite, with a diameter of more than 1 centimeter), while planting, remove the wrapping materials around the soil ball, gently put the tree into the hole, and keep the trunk upright, Refill the soil surrounding the root ball, water the tree three time, compact the soil with wooden stick to enhance contact with the root system, and build a “soil wall” around the tree to retain water.

iv. Install supporting structures immediately after planting, to prevent tree leaning. Structures of less than 20 centimeters in diameter should be made up of materials of at least 5 centimeters in diameter, while structures of over 20 centimeters in
diameter should be made up of materials of at least 10 centimeters in diameter, and they should be firmly pressed at least 4 inches into the soil. Protect the parts where the trunk is in contact with the structures with thick soft materials (such as plastic or fabrics), to avoid injuries to the bark and fasten the tree with ropes.

v. Water the tree immediately after transplanting, and water again after 2-3 days, and then again after one week, keep it well watered each time, to ensure sufficient water at the base of the soil ball. Meanwhile, wrap the main trunk and the first and second main branches with straw ropes or soft moist materials.

V. Maintenance after transplanting

i. Keep the tree well maintained by professional horticulturists for one year. Take care of the tree with the following measures, according to individual conditions:
   a. In summer, build a shelter to protect the tree, and spray the tree crown and trunk with water to keep them moist. Protect the tree against cold weather in winter by installing a wind screen and applying other winter-proof measures.
   b. Apply foliar fertilizers after transplanting when appropriate.
   c. Constantly keep the soil moist after transplanting. Beware of water logging and drain excess water in time. During the maintenance period, avoid watering at noon when the weather is hot.
   d. Keep the tree free from pests. While refilling the soil, add pesticide if needed, and trim away branches which are withered or infected by diseases.

ii. The Engineer reserves the right to request compensation regarding death or weakening of trees caused by negligence in following the guidelines, including the costs of replacing with trees of the same species and specifications. The party responsible for replacing the trees shall also provide a one-year maintenance scheme, to ensure the trees survival, and shall be liable for replacing dead or poorly grown replanted trees,

VI. Safety Measures

i. The Contractor shall ensure a safe environment on the landscape area at all times. All safety provisions shall be properly maintained. All safety precautions and requirements shall be strictly complied with at all times as laid down provisions.
   a. Appropriate Personal Protective Equipment (PPE) shall be supplies and maintained for all workers, Minimum PPE shall include a hi-visibility jacket, safety shoes, and gloves.
   b. Vehicles shall be parked off the roadway so as not to obstruct driver’s view of the presence of workers. Vehicles shall not, under any circumstances, be driven against the normal flow of traffic.
   c. Carting material from on site to another to be under taken in such a manner as to cause minimum amount of pollution.
d. Supervisors should meet the workers and instruct them about the safety aspects of the day’s activities prior to commencement of work.

e. Particular attention and planning is to be given to ensuring that transplanting work does not impede vehicle flow.

f. Consideration needs to be given to the provision of traffic control/security staff where the work of the location requires the obstruction of the normal roadway.

g. 10% of the workforce/supervisors are to be trained in first aid: Establish and train supervisors in procedures for the rapid acquisition of emergency works in the event of an accident.

h. No landscaping or building materials are to be stockpiled or unloaded onto the surface except while being moved into the work area, and then only when barricaded and signposted with reflective warning signs.

i. Night works shall be properly and adequately lit. Attention should be given to ensure the lighting does not dazzle vehicle traffic.

ii. Excavation and Trenching: All trenches 1.5 meters or more in depth, shall at all times be supplied with at least one ladder for each 20 meters in length or fraction thereof. Ladder shall be extended from bottom of trench to at least 1 meter above surface of the ground. Sides of a trench, which is 1.5 meters, or more in depth shall be stepped back to give suitable slope, or securely held by timber bracing, so as to avoid the danger of sides collapsing. Excavated material shall not be placed within 1.5 meters of edge of trench or half of depth of trenches whichever is more. Cutting shall be done from top to bottom. Under no circumstances shall undermining or undercutting be done.

iii. All necessary personal safety equipment as considered adequate by Building Construction Department shall be made available for use of the persons employed on the Site, and maintained in a condition suitable for immediate use, and the Contractor shall take adequate steps to ensure proper use of equipment by those concerned, including:

a. Those engaged in handling any material, which is injurious to eyes, should be provided with protective goggles.

b. Those engaged in welding works shall be provided with welder’s protective eye-shields.

c. Suitable face masks and hand glows shall be supplied for use by the workers, when chemicals are being mixed or sprayed.

iv. Use of hoisting machines and tackle including their attachments, anchorage and supports shall conform to the following:

a. These shall be of good mechanical constructions, sound material and adequate strength, and free from patent defects, and shall be kept in good repair and in good working order.
b. Every rope used in hoisting or lowering materials, or as a means of suspension, shall be of durable quality and adequate strength and free from patent defects.

c. Every crane driver or hoisting appliance operator shall be properly qualified, and no person under the age of 21 years shall be in-charge of any hoisting machine.

d. In case of every hoisting machine and of every chain ring hook, shackle swivel and pulley block used in hoisting or lowering or as means of suspension, safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above shall be plainly marked with safe working load. In case of a hoisting machine having a variable safe working load, each safe working load and the conditions under which, it is applicable shall be clearly indicated. No part of any machine or of any gear referred to above, in this paragraph shall be loaded beyond safe working load except for the purpose of testing.

v. Contractor is surely responsible for ensuring effective enforcement of the rules and regulations relating to safety precautions. The Contractor is responsible to protect and maintain the areas of intermediate completed work from damages of the surface due to movement of operational vehicles / manpower or construction equipment, if any.

vi. All chemicals, pesticides, fungicides to be handled with care and register to be maintained for how empty containers/ cans/ bottles are disposed.

vii. No extra-claim shall be entertained for any mishappening at the site by the contractor. Any compensation to workers shall be fully borne by the contractor. They should visit the site prior to participate in the quotations/tender.

VII. OTHERS

i. The relocation site shall be marked by the department and the contractor is bound to translocate the trees at the specified locations.

ii. The rate quoted shall be for complete job including transportation upto 5 km lead. For more than 5 km – they should quote separate rate for transportation for different range of lead i.e. for 5 km to 10 km / 10 km to 15 km / 15 km to 20 km etc.

iii. Rate for transplantation and maintenance shall be quoted separately in the respective columns of the document.

iv. A guarantee shall be given for the survival of minimum 80% of translocated trees. If it is less than 80% then the contractor/quotationer shall have to replant 10 times more no. of tress for the no. of trees not survived and maintaining the same for 1 year at their own risk and cost. Nothing extra shall be paid for any post activity.
v. The Payment shall be made as per actual measurement after the execution of transplantation/translocation and payment for maintenance shall be paid only after the maintenance period subsequent to the survival of trees.
**PART-B**

OFFICE OF THE EXECUTIVE ENGINEER  
Construction Division No-3 B.C.D., Patna  
(Email ID- ee.cons3.bcd@gmail.com)

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<tr>
<th>S.NO.</th>
<th>Brief Description</th>
<th>Range of Girth of trees in (mm)</th>
<th>unit (No)</th>
<th>Rate of transplantation</th>
<th>Rate of maintenance</th>
<th>Total Rate</th>
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<tr>
<td>1</td>
<td>Transplantation/translocation of Live trees of various girths and species including preparation before transplantation digging up trees, Wrapping &amp; transporting upto 5km lead, planting and maintenance of the trees for 1 year etc. all complete job as per direction of E/I.</td>
<td>300-600</td>
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**Note:** The rate quoted shall be valid for all districts of Bihar. No extra claim shall be entertained for transportation of tools and plants etc.

Signed  
with Name and Seal of the Agency

Executive Engineer,  
Construction Division-3 Patna,  
Building Construction Department
**PART-B**

OFFICE OF THE EXECUTIVE ENGINEER  
Construction Division No-3 B.C.D., Patna  
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<table>
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<tr>
<th>S.NO.</th>
<th>Brief Description</th>
<th>Range of Girth of trees in (mm)</th>
<th>unit (No)</th>
<th>Rate for lead</th>
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<td>5 to 10 km</td>
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<td>Extra Rate of transportation for lead greater than 5 km</td>
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<td>601-900</td>
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