TENDER DOCUMENT

TENDER No.: BHI/PI(S)/675/1015

FOR

Tender for Providing and Installing Cast-in-Situ Vertical Bored Piles in Coke Sorting Plant area of “Augmentation of Fuel and Flux Crushing Facilities (Package-064)”, of Bhilai Steel Plant, Chhattisgarh.

VOLUME – IV

(TECHNICAL SPECIFICATIONS AND TENDER DRAWINGS)

ENGINEERING PROJECTS (INDIA) LIMITED
(A GOVT. OF INDIA ENTERPRISE)

B- 252, Street No.-5,
Smriti Nagar, Bhilai,
Chhattisgarh- 490020
1.0 Following shall be adhered to in respect of pile foundations:


ii. Pile boring shall be done by conventional trypoid piling rig through all types of Fill/Soil as per approved construction methodology by setting out piles with temporary casing of appropriate length. The construction methodology shall be submitted by contractor for Engineer’s approval.

iii. The minimum diameter of pile shall be 600 mm and minimum cast length of pile above cut-off level shall be 1.0 meter.

iv. Piles are to be installed as per provisions of relevant IS codes under proper supervision and quality control.

v. Piles shall be terminated in weathered shale rock layer recognizable by its geographical texture as well as SPT ‘N’ > 100 with a socket length , not less than 3 D within such stratum, where ‘D’ is the diameter of pile. Termination depth shall be ensured by conducting Standard Penetration Test in every tenth piles.

vi. The work shall be carried out as per approved drawings and design of piles in terms of rated capacity, length, diameter, termination criteria to locate the founding level of pile w.r.t. measureable parameter, reinforcement etc. for the job and test piles.

vii. Reinforcement of Grade Fe 500 of ‘SAIL’ make shall be used in work.

viii. Routine load test to be performed for the following as per provision of IS: 2911(part4)-1985 and IS: 14893:1998.

   a) Integrity test on each pile
   b) Static compressive load test
   c) Lateral load test
   d) vertical Pull-out load test
ix. The pile load test shall be conducted on the pile by Maintained load Method. The test shall be carried out at pile cut-off level (COL) wherever practicable. If the water table is above the COL, the test pit shall be kept dry throughout the test period by suitable de-watering methods.

x. The routine load test shall be carried for a test load of minimum one and half times the working load. The number of test shall be minimum one half percent of the total number of piles. The client (BSP) shall approve piles for routine load tests.

xi. In case routine pile load test shows that the pile has not achieved the desired capacity and stands rejected then the Tenderer shall install additional pile(s) as required at no extra cost.

xii. Testing of piles and interpretation of pile load test results shall be carried out as per IS: 2911 (part-4) and IS: 14893:1998. Tenderer shall ensure that all the measuring equipment/instruments are properly calibrated from a reputed laboratory/institute prior to their use.

2.0 Following drawings are to be referred for tender purpose.

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DRAWING SHALL BE READ IN CONJUNCTION WITH THE FOLLOWING DRAWINGS:
1. BSP-EPI-02-064-02-002-35-DE-06457 (SHEET-1)
2. BSP-EPI-02-064-02-002-35-DE-06457 (SHEET-2)
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