

Bid invitation

Information

Description: YMN/CARRYOUT SOUNDNESS EVAL
AT MAH/22/EL
Bid invitation number: 6300037271

Bid invitation rules

Bid invitation currency: INR
Timezone: INDIA
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Bid invitation text:

Sub: Consultancy services for Carrying out Soundness evaluation and ascertaining structural stability of Major Assembly Hangar constructed with structural steel members at Equipment Division, BEML Ltd., Mysore

1 Soundness evaluation of Major Assy hangar

SM 9800

2 Providing design details for strengthening work

SM 9800

1) BRIEF SCOPE OF WORK:

To conduct soundness evaluation & structural stability of Major Assembly hangar of area 9800.00 SqM (approximately) covering all 3 bays constructed with structural steel members and provided with curved shaped roofing system both by theoretical & physical analysis including necessary testing wherever required and to confirm safety & stability of the building for production usage. The scope also, needs to provide detailed technical report along with the study conducted & recommending for corrective actions/suggestions wherever necessary with all relevant details. The study & recommendations needs to cover for load bearing members/structures including Stanchions, roof legs, secondary beams. Lattice girder, gantry girder, rain water gutters at roof level, roofing system, brick masonry wall embedded & covered all-round the hangar. Arch shaped glazing windows, foundations (if required) etc.,

2) DETAILS OF HANGAR:

The Major Assy Hangar: consists of 3 bays of each 22.50 M width c/c and 140.00 M in length constituting 9800.00

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Sq. M (approximately)

3) TESTS TO BE CARRIED OUT:

a) Conducting Physical Inspection & theoretical check with the available drawings provided by Beml & to submit report.

b) Conducting suitable Standard Tests required for ascertaining quality & strength of structures such as:

i) Ultrasonic Thickness gauge

ii) Hardness Test

iii) Liquid Penetrate Test

iv) Magnetic Particle Test

v) Piano Wire Leveling

vi) Lab Test: Chemical & Mechanical tests: Tensile strength, Yield strength, elongation, Bend

vii) Any other tests required for study to be conducted.

c) Reporting defects and suggesting strengthening measures and furnishing design details for strengthening / improvement works where ever required.

d) On site Testing: Conducting Non-destructive weld test on selected welded joints by strip coating with dyes (Liquid penetration method).

e) At least 3 no. Welded joints from each loading members are to be selected and to be tested by liquid penetration method.

Reporting defects and suggesting strengthening measures and furnishing design details for strengthening / improvement works where ever required only.

4) DETAILED SCOPE OF WORK:

a) Detailed physical verification of all structural members like stanchions, roof legs, gantry girders, top & bottom chords, lattice girders, roof level gutter supporting structures & gutters, cross bracings, arched window panes and any other supporting members covering all structural elements/members & study of structural system including roofing system.

b) Study of existing steel Structural layout drawings of building & crane capacity with details of existing loading.

c) Inspection and observations of existing distress features in the structures etc.,

d) Dimensional measurement of existing steel members and verification of layout drawings

e) Carrying out physical Test on typical structural steel members at random to assess the strength of structure.

f) Carrying out Theoretical analysis and design verification for assessment of structural soundness based on the data collected at site.

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- g) Working out appropriate restoration / strengthening measure for distressed or deficient regions of the structures (if required).
- h) Furnishing detailed report along with sketches, specifications, stages of strengthening, photographs along with outcome of structural soundness evaluation
- i) Providing details for strengthening of existing steel structures & civil works wherever required only.

5) TERMS & CONDITIONS:

- a) The Consultant may visit BEML Mysore to understand the requirement & to get themselves acquainted with the nature of work to be undertaken.
- b) The above tests shall be carried out covering minimum 20% of all existing load bearing members of Hangar considering all 3 bays viz., stanchions, beams, lattice girder, gantry, tie member, bracings, gutter support structure etc., to ascertain the strength.
- c) The payment will be made only after submission of all designs/details pertaining to subject work.
- d) The consultants/firm to quote for each activity defined under Technical service charges. However, for the purpose of payment only the clear Floor area of the building will be considered for measurement / payment.
- e) The Maximum period for conducting above test would be 60 days.
- f) All tests / verification to be carried out as per relevant Indian Standard and Standard Testing Procedure.
- g) The Consultant / Firm should make their own arrangement for required materials/ testing tools, labour & transportation.
- h) Except for arranging required ladders / crane which are available in-house by BEML, all other requirements involved to conduct field tests/verification shall be arranged by the consultant/firm.

6) TECHNICAL SERVICE CHARGES:

The technical service charges shall be quoted separately for each activity as follows:

- a) For carrying out soundness evaluation & structural stability of Major Assy Hangar & as illustrated under scope of work including conducting field tests & lab tests and furnishing the final report /fitness certificate for Hangar (except for furnishing design details for strengthening the steel structure wherever required).

Quantity: 9800.00 SqM

- b) Providing design details for strengthening/restoration of existing structural steel Structure wherever required by furnishing design details along with drawings, bill of quantities, cost estimation with specifications, strengthening measures & submission of Final reports.

Quantity: 9800.00 SqM

Note: The rate shall be quoted per unit (SqM) separately for item (a) & (b). The item (b) shall be operated only on requirement & need basis. However, the L1 position will be arrived by considering the total value of work consisting of both the items.

7) FACILITIES AT SITE:

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The following facilities shall be arranged by BEML at site free of cost during testing/ detailed study:

- a) Power & water supply (if required) from the nearest available points.
- b) Available ladder / crane for height working (the bidder may ascertain the facilities available with Beml by visiting before quoting for the same).
- c) Copy of existing layout drawings (both Architectural & Structural where ever available) for verification purpose will be provided.
- d) Excavation to see Foundation if necessary.

8) DELIVERABLES:

The deliverables should consist of following submissions:

- a) Introduction /Salient Features of study & analysis
- b) Physical Observations /Photographs
- c) Probing Tests & results of test
- d) Inferences/Extent of distress
- e) Theoretical Analysis & Design Verification
- f) Restoration /strengthening measures/specification/ sketches etc., (if involved)
- g) Concluding remarks.
- h) Fitness certificate in the standard format as per Factories act.

9) PAYMENT TERMS:

100% payment against completion of works & submission of Final reports along with all details & drawings etc., with the certification of Civil Maintenance dept.

Attachments:

TENDER DOCUMENT

TERMS & CONDITIONS TWO BID

Digital Signature

Bid invitation details

Item	Product Price Condition	Description	Vendor product number	Delivery date/ performance period	Quantity
1		Soundness evaluation of Major Assy hanga			9,800.000 M2
	IGST -Integrated GST		%		
	Basic Price		INR		
	CGST - Central GST		%		

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Item	Product	Description	Vendor product number	Delivery date/ performance period	Quantity
	Discount on Basic		%	_____	
	SGST - State GST		%	_____	
2		Providing design details for strengtheni		_____	9,800.000 M2
	IGST -Integrated GST		%	_____	
	Basic Price		INR	_____	
	CGST - Central GST		%	_____	
	Discount on Basic		%	_____	
	SGST - State GST		%	_____	