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CORRIGENDUM

In reference to the tender for the purchase of DYNAMIC TESTING SYSTEM (SERVO HYDRAULIC) with reference number IIT (BHU)/CE/ 2020-21/586 published on 10-11-2020, the following change in the technical specification is made. Accordingly, the last date of submission of bid has been extended to 08/12/2020.

1. Serial No.1 of Technical Specification: The machine shall comply with the following tests: AASHTO TP 107, AASHTO T322 and ASTM D7369.
2. Serial No. 8 of Technical Specification:

Temperature Control Chamber:

i. The set up shall have an integral temperature control chamber such that the tests can be carried out under controlled operating temperature.
ii. The integral temperature control chamber shall have a temperature range of at least -20^{o}C to 70^{o}C. The chamber shall have a real time temperature display.
iii. The integral temperature control chamber shall have a easily accessible control unit to set the chamber temperature.
iv. The dimension of the integral temperature control chamber shall be such that sufficient space is available to comfortably conduct the following tests: AASHTO TP 107, AASHTO T322, and ASTM D7369.
The integral temperature control chamber shall be capable of reaching and maintaining test temperatures as per the requirements in the following test standards: AASHTO TP 107, AASHTO T322, and ASTM D7369
v. The integrated temperature control shall have a dummy specimen temperature monitoring and real time temperature display.

3. Serial No. 9 of Technical Specification:

Mandatory Testing Accessories to be supplied:

i. Should be supplied with setup for fabrication (using compacted mixture)/ testing of cylindrical asphalt mixes specimens for SVECD, as per AASHTO TP 107-14.
ii. Should be supplied with setup for fabrication (using compacted mixture)/ testing of cylindrical asphalt mix specimens for (a) creep compliance and strength using indirect tensile test device according to AASHTO T322, (b) resilient modulus under indirect tension according to ASTM D7369.

4. Serial No. 10 of Technical Specification:

Future Expansion:

i. Whole setup should have capability to expand/supply setup (including software, accessories) for testing of cylindrical asphalt mixes specimens for dynamic modulus, as per AASHTO T342.
ii. Whole setup should have capability to expand/supply setup (including software, accessories) for testing (using compacted mixture) prismatic specimens of asphalt concrete for fatigue life under flexure (4 point bending) as per AASHTOT321specifications,
iii. Whole setup should have capability to expand/supply setup for testing cylindrical specimens of asphalt concrete under cyclic triaxial compression test as per BS EN 12697-25.
iv. Whole setup should have capability to expand/supply setup (including software, accessories) for testing soil/aggregate system for resilient modulus under triaxial mode as per AASHTOT307 specifications.
v. Whole setup should have capability to expand/supply setup (including software, accessories) for testing cylindrical asphalt mix specimens for Dynamic Modulus and Flow Number for Asphalt Mixtures Using the Asphalt Mixture Performance Tester (AMPT) as per AASHTO T378 2017.

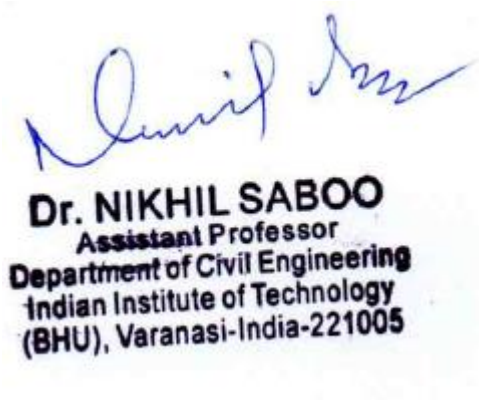
5. Annexure 2

Annexure- 2

TECHNICAL COMPLIANCE STATEMENT
(To be submitted by bidder duly filled)

SL No.	Technical Requirement	YES/NO
1	DYNAMIC TESTING SYSTEM (SERVO HYDRAULIC) FOR ASPHALT/GRANULAR/CONCRETE MIXTURES	
2	Load frame, Actuator, Load cell, Temperature control chamber, Control and data acquisition system, Transducers, Hydraulic power supply, Mandatory accessories and Components as described in this specification. The machine complies with the following tests: AASHTO TP 107, AASHTO T322 and ASTM D7369	
3	Two column load frame	
4	-20^{o}C to 70^{o}C operating temperature	
5	30 kN static and at least 25 kN dynamic, double acting, servo hydraulic actuator	
6	Actuator has a minimum stroke of ±50 mm (one side)	
7	Actuator has an internal LVDT transducer	
8	Actuator has a Labyrinth bearing, long life and high performance, capable of producing at least 70Hz wave shapes.	
9	Low profile precision transducers load cell, +/-30 kN, 0.1 %.	
10	HPS has Minimum working pressure of at least up to 160 bar.	
11	HPS has Built in Emergency Stop button	
12	CDAS has at least 3 feedback control modes (a) force, (b) position (actuator) and (c) on-specimen strain (LVDT). Transfer between the control modes is bump less.	

13	CDAS has Computer programmable digital loading wave shapes shall be produced up to at least 70Hz.	
14	The communication and acquisition of data is USB or Ethernet	
15	Sampling rate is at least up to 192,000/sec	
16	Has pre-programed test templates (method files) for operators. The test templates are as per international standards ASTM/AASHTO/BSEN	
17	The dimension of the integral temperature control chamber provides sufficient space to conduct the following tests: AASHTO TP 107, AASHTO T322 and ASTM D7369	
18	Mandatory Testing Accessories are supplied	
19	Is capable of future expansion	



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