

No.OR/MSO/18/79-OR

Dated the 10th April, 1980

To

The Secy. to the Govt. of Andhra Pradesh Assam, Bihar, Gujarat, Haryana, Himachal Pradesh, Kerala, Madhya Pradesh, Maharashtra, Karnataka, Orissa, Punjab, Rajasthan, Tamilnadu, Uttar Pradesh and West Bengal.

Subject : Augmentation of laboratory facilities in States for material testing/Research — Additional equipment to State labs. which had already reached the level of the CRRI model

I am directed to say that with a view to augment the existing laboratory facilities in States for material testing/Research, the Govt. of India have decided to offer a grant-in-aid equal to Rs 4 lacs, on matching basis, from the Central Road Fund (Ordinary) Reserve for acquiring additional equipment at a cost of Rs 8 lacs for State laboratories which have already reached the level of the Central Road Reserach Institute model. Since this proposal is likely to cost Rs 8 lacs and the grant-in-aid from the Central Road Fund (Ordinary) Reserve would be restricted to 50% of the total cost, the balance 50% will have to be met by the State Government from their own plan resources but excluding their free balance in the Central Road Fund (Allocations) account. The State Govt's confirmation of the acceptance of this position may please be communicated urgently.

2. A copy of the list indicating the additional equipment required for augmentation of laboratory facilities is enclosed (Annexure I). The total cost of this global list of equipment works out to Rs 15 lacs. While some of the equipment (Marked by asterisk in Annexure I) may not be required by all the States, some other equipment might be already available with many other State Govts. Taking into account this factor, it is estimated that on the average the cost of additional equipment would be about Rs 5.2 lacs. In addition, a provision has been made for buildings to accommodate the additional equipment at the cost of Rs 2.80 lacs. The total cost of the proposal is accordingly estimated at Rs 8 lacs. I am therefore, to request that the State Govt. may kindly consider the proposal of augmentation of laboratory facilities referred to above and forward a detailed estimate for the approval of this Ministry. While forwarding this estimate, formal concurrence of the State Govt. to meet the balance 50% cost from their own plan resources may also be forwarded to this Ministry.

CONSOLIDATED LIST OF ADDITIONAL EQUIPMENT TO BE PROVIDED IN THE STATE LABORATORIES

Sl.No.	Equipment	No. Reqd.	Approx. Rate	Amount
1	2	3	4	5
1. A	General Equipment.			
(i)	High sensitivity proving ring 100 kg - Capacity	2	1900	3800
(ii)	200 kg - Capacity	2	1900	3800
(iii)	500 kg - Capacity	2	1900	3800
(iv)	1000 kg - Capacity	1	1900	1900
(v)	2000 kg - Capacity	1	2600	2600
2	Dial Gauges			
(i)	12 mm Travel	6	500	3000
(ii)	25 mm Travel	6	500	3000
	Sub-Total : A			21900
1. B	Sub-Surface Investigations			
	Truck	1	1,30,000	1,30,000
	Drilling Rig, upto 60 m depth	1	1,00,000	1,00,000
	Soil & rock drilling kit	1	52,000	52,000
	Vane Shear kit	3	17,000	51,000
	Portable equipment for seismic survey (TERRASOOUT)	1	23,000	23,000
	Stratometer for electrical resistivity survey	1	13,000	13,000
	Borehole Camera	1	20,000	20,000
	Binosular type micro scope	1	10,000	10,000
	Borehole deformation meter	1	30,000	30,000
	Static penetrometer equipment (10 tonnes)	1	50,000	50,000
	Hydraulic Jacks. (30, 50, 100 and 200 tonnes).	1	27,000	27,000
	Undisturbed soil samplers (Denson & Piston Sampler)	1	18,000	18,000
	Plate load test equipment	1	10,000	10,000
	Thin wall sampling tubes (100 & 50 mm. Dia. and 0.75 m long)	100 each type.	—	20,000
	SPT Test equipment and static cone penetrometers.	3	5,000	15,000
	Sub-Total : B			5,69,000
	* Optional items depending on the requirements.			
C.	Soils			
1.	Sample extractor frame with hydraulic jack hand operated	1	1,100	1,100
2.	Motorised unconfined compression testing machine	1	1,800	1,800
3.	Motorised direct shear operators with 12 rate of strain	1	10,000	10,000
4.	Triaxial testing equipment (Motorised) with 8 rates of feed and Assembly for lateral-pressure and pore pressure	1	35,000	35,000
5.	Tor Vans Apparatus	3	900	2,700
6.	Universal Automatic Compactor	1	5,000	5,000
7.	Core cutter	6	700	42,000
8.	Soil Lathe	1	5,000	5,000
9.	Vacuum pump	1	7,500	7,500
10.	Proctor needle, spring type	6	500	3,000
*11.	Consolidation test equipment	3	9,000	27,000
	Sub-Total : C.			1,02,800
D.	Rock Testing Equipment			
1.	Rock Sample height Gauge	1	600	600
2.	Rock Classification Hammer	1	1,250	1,250
3.	Portable rock tester	1	12,000	12,000
*4.	Field direct shear kit	1	35,000	35,000
	Sub-Total : D			48,850

E.	Concrete :			
*1.	Concrete laboratory set up.	1	38,000	38,000
2.	In-situ concrete strength testing equipment, test hammer & Pachometer	1	22,000	22,000
*3.	UTM for tension, compression and other tests	1	40,000	40,000
*4.	Strain measuring equipment set	1	20,000	20,000
			Sub-Total : E	1,20,000
F	Equipment for Hydraulic Studies			
1.	Current meter	1	5,000	5,000
2.	Echo sounding equipment	1	10,000	10,000
			Sub-Total : F	15,000
G.	Road Testing Equipment			
1.	Benkelmen Beam.	2	2,000	4,000
2.	Profile meter (hand towed)	2	5,000	10,000
*3.	British portable skid tester	4	15,000	60,000
*4.	Accelerated polishing machine	1	20,000	20,000
			Sub-Total : G	94,000
H.	Traffic Engineering			
*1.	Radar Speed meter	1	20,000	20,000
2.	Enoscope	1	1,000	1,000
*3.	Electronic Traffic counter	1	15,000	15,000
4.	Multi-bank hand tallies	6	200	1,200
*5.	Multi-pen event recorder	1	5,000	5,000
*6.	Time lapse photography camera and projector unit	1	20,000	20,000
			Sub-Total : H	62,200
J	Terrain Evaluation and Photogrametry			
*1.	Pocket stereoscope	2	2,000	4,000
*2.	Stereometer with Parallax Bar	1	20,000	20,000
			Sub-Total : J	24,000
K.	Mobile Laboratory			
*1.	Laboratory Truck		1,80,000	1,80,000
*2.	Equipment		50,000	50,000
			Sub-Total : K	2,30,000
L.	Special Research Equipment			
*1.	Equipment. (individual items should be identified depending on actual needs)	1	1,00,000	1,00,000
			Sub-Total : L	1,00,000
M.	Quality Control Equipment in Field.			
*1.	Equipment (individual items to be identified depending on actual needs)	1	50,000	50,000
			Sub-Total : M	50,000
N.	Miscellaneous			
1.	Electronic Desk Calculator	1	5,000	5,000
*2.	Slide Projector	1	5,000	5,000
*3.	Camera	1	4,000	4,000
*4.	Photostat Machine	1	5,000	5,000
			Sub-Total : N	19,000