



Dr B R AMBEDKAR NATIONAL INSTITUTE OF TECHNOLOGY
G T Road By Pass, Jalandhar-144011, Punjab (India)
Tel: 0181-2690301-2690453 website www.nitj.ac.in

The specifications regarding tender ref.no. NITJ/PUR/289/19/e-tender no. 18/2020 supply of Experimental Flume 5 mtr. have been revised as under:

Detailed Specifications of Experimental Flume

General description

1. Length of the experimental flume 10 Meters.
2. Minimum Test Section length of the flume is 5 meters
3. Measuring tank for discharge measurement.
4. Electromagnetic flow meter for discharge measurement.
5. Pressure chamber/Seepage chamber under the test section the flume with the length of 7 meters.
6. Discharge measurement of seepage water received from channel bed

Accessories for the experimental flume

- Uniform and non uniform discharge
- Flow formulae
- Flow transition (hydraulic jump)
- Energy dissipation (hydraulic jump, stilling basin)
- Flow over control structures: weirs (sharp-crested, broad-crested, ogee-crested)
- Flow over control structures: discharge under gates
- Flow-measuring flumes
- Local losses due to obstacles
- Transient flow: waves
- Vibrating piles

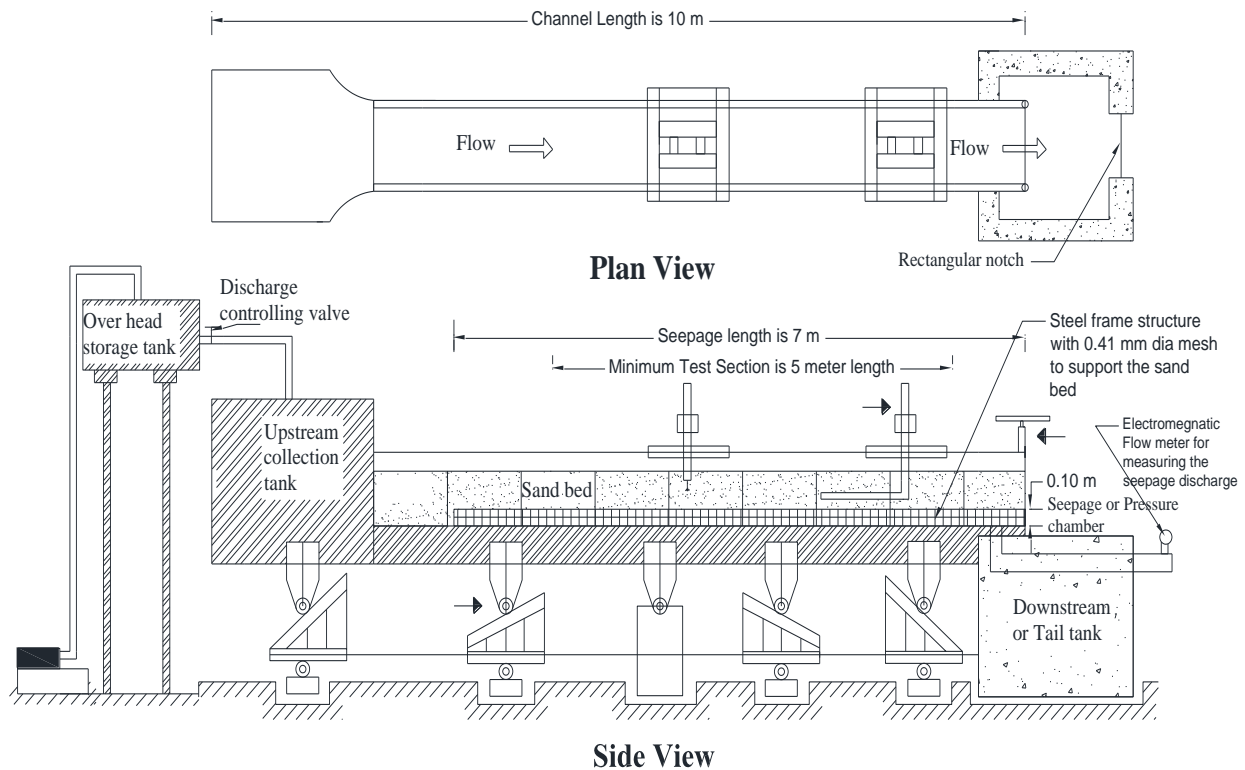


Technical details

Experimental section	Minimum Cross section : 309 X 450 mm Possible Length : 10 m Minimum Length of test Section = 5 meters Side walls : Transparent tempered glass Inclination : -0.5 to 2.5 %
Tanks	Material:- Stainless steel Capacity of downstream and upstream tanks: 800 litre appx. 2 Nos of tanks one at upstream and one at downstream
Discharge measurement at downstream (Main channel flow)	Through weirs, measuring tank or electromagnetic flow meters
Seepage Chamber (shown in figure)	(a) Beneath the channel with same length and width of the channel and depth can be taken as minimum 100 mm (b) Steel tube structure to be used to support sand material using 0.4 mm aperture mesh.
Discharge measurement for seepage chamber (passed through channel bed)	Electromagnetic flow meter with measuring range 0 to 50 m ³ /h
Pump (s)	Able to provide Flow rate 150 m ³ /h and acceptable up to 250 m ³ /h
Measuring devices of flow rate	upto 200 m ³ /h

Note:- The warranty of the equipment should be upto 2 years.

For understanding the seepage/Pressure Chamber, please use this drawing as a reference.



Description of seepage chamber can be referred from these articles

1. **Mahesh Patel** and Bimlesh Kumar. "Flow and bedform dynamics in an alluvial channel with downward seepage." *CATENA*, Elsevier, 158, 219-234, 2017.
2. **Mahesh Patel**, Shantanaba Majumder and Bimlesh Kumar. "Effect of seepage on flow and bedforms dynamics." *Earth Surface Processes and Landforms*, Wiley, 42 (12), 1807-1819, 2017.



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Further the last date for submission of e-bids has also been extended as per following schedule.

Last date of submission of online bids	End Date : 06.08.2020 upto 3:00 pm
Physical Submission of tender fee and EMD	End Date : 07.08.2020 upto 3:00 pm
Opening of Technical e-bid(Online)	07.08.2020 at 3:00 pm

However, there is no change in other terms and conditions of the e-tender.

Registrar