

**INITIAL LATERAL PILE LOAD TEST ON 600MM DIA PILE FOR THE  
CONSTRUCTION OF IMPROVEMENT OF SEWAGE MANAGEMENT  
SYSTEM IN NASIK CITY TO PREVENT POLLUTION IN RIVER  
GODAWARI BASED ON PPP/HAM MODEL  
(INITIAL TEST PILE PANCHAK STP 75 MLD- TP05)**



**CLIENT :- NMC.**  
**PMC:- CS TECH**  
**CONTRACTOR :- KUMBH WASTE WATER  
MANAGEMENT Pvt Ltd.**

**QCC**

**QCC LAB SOLUTIONS Pvt Ltd, Mumbai.**

**Tel:- 9452200078,8369458583**

**E-mail:-calibration@qcclabsolutions.com**

**Website:- [www.qcclabsolutions.com](http://www.qcclabsolutions.com)**

**INITIAL LATERAL PILE LOAD TEST ON 600MM DIA PILE FOR THE  
CONSTRUCTION OF IMPROVEMENT OF SEWAGE  
MANAGEMENT SYSTEM IN NASIK CITY TO PREVENT  
POLLUTION IN RIVER GODAWARI BASED ON PPP/HAM MODEL  
(INITIAL TEST PILE PANCHAK STP 75 MLD - TP05)**

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**INITIAL LATERAL PILE LOAD TEST ON 600MM DIA PILE FOR**  
**THE CONSTRUCTION OF IMPROVEMENT OF SEWAGE**  
**MANAGEMENT SYSTEM IN NASIK CITY TO PREVENT**  
**POLLUTION IN RIVER GODAWARI BASED ON PPP/HAM MODEL**  
**(INITIAL TEST PILE PANCHAK STP 75 MLD- TP05)**

**1.0 GENERAL**

- 1.1 Clients decided to carry out static pile testing work on 600mm diameter pile to estimate load carrying capacity in lateral direction and settlement. M/s ZedGeo Systems Private Limited, Mumbai was entrusted with work of static lateral pile load test.
- 1.2 This report covers data for one lateral pile load test. This report covers calculation of safe lateral load capacity for pile based on data collected during fieldwork.
- 1.3 The following codes of practices have been adopted.
  - IS 2911 (Part 4) –2013 “Load Tests on Piles”.

## 2.0 SCOPE OF WORK

Pile details are tabulated as below.

### 2.1 Pile details For Lateral Load Test (Routine)

The details of the pile are as given below:

Pile No = TP05

Location =Panchak STP 75 MLD

Safe Lateral Capacity of Pile = 3.5T

Test Load on Pile = 8.75T

Diameter of Pile = 600mm

Grade of Concrete = M25

Pile Depth = 10.31 m

### 2.2 Lateral test load for test pile

The design lateral load on the Initial pile is 3.5T. The pile is required to be tested to 8.75T, As per Clients requirement.

### **3.0 METHODOLOGY**

**3.1** The load testing on piles was conducted as per IS: 2911 (Part 4) – 2013.

#### **3.2 Test Load**

The lateral load test was carried out to a test load equal to design load as per Client's Instructions and Specifications. The maximum test load was 8.75T for test pile. Load was taken from the adjacent reaction pile.

#### **3.3 Routine Lateral Load Test on Piles**

The load testing on piles was conducted as per IS: 2911 (Part 4) – 2013. In a lateral load test conducted on a single pile, The load test conducted on a pile corresponds to a free head condition and the safe lateral load capacity obtained from the test corresponds to that of a free head pile. Lateral pile load test was conducted on free head condition to a test load equals to the design load.

The test was conducted by applying a series of loads on the test pile. The load was applied by means of a hydraulic jack reacting against the reaction pile. The hydraulic jack was of 50T capacity and had a pressure gauge and remote control pump. For the pile to be tested the surface on the sides was prepared smooth and flat to receive the load from the jack.

Calibration charts showing the correctness of the calibration of the pressure gauges and the jack before use was obtained and verified. Jack was fitted with locking devices.

Reading of displacement was recorded with the help of two dial gauges of 0.01mm sensitivity placed 300mm apart on test pile as well as the reaction pile. The dial gauges were placed diametrically opposite to the jack and were set to 0 mm at start of the test.

The tip of the dial gauges was rested on the central portion of the glass plate. Readings on the dial gauges were observed immediately before and after application of loads, and immediately before and after release of loads.

The loading was applied in increments close to 20 % of the estimated safe load.

Each stage of loading was maintained until the rate of displacement of the pile top is not more than 0.1 mm per 30 minutes. During the loading stages, the load on the pile was maintained for

a minimum of 30 minutes. The final load was maintained for 60 mins. and the corresponding displacement was observed. The pile test data was suitably presented by curves drawn between variables namely load and displacement and safe load shown on the graphs including field observations. The dial gauge readings shall be taken for the following time intervals in minutes of 1,10,20,30.

#### **Loading and Unloading Sequence for the Lateral pile Load Test**

One jack of 50MT. capacity having ram area of 71.20 cm<sup>2</sup>

Effective Ram area is = 71.20cm<sup>2</sup> , Design load =3.5 MT.. , Test load =8.75 MT.

**Load Increment shall be 20% of design load (3.5),So 0.70 MT.**

**As the least count of the pressure gauge is 05 kg/cm<sup>2</sup>, exact .70 MT. of increment cannot be attained. Hence the values close to the incremental load is considered.**

**Table 1 – Load Sequence.**

| Sr. No. | Pressure Gauge<br>(kg/cm <sup>2</sup> ) | Load (MT) | TIME (mins)        |
|---------|---|-----------|--------------------|
| 1.      | 0                                       | 0         | 0                  |
| 2.      | 20                                      | 1.42      | 1,10,20,30mins     |
| 3.      | 40                                      | 2.84      | 1,10,20,30mins     |
| 4.      | 60                                      | 4.27      | 1,10,20,30mins     |
| 5.      | 80                                      | 5.60      | 1,10,20,30mins     |
| 6.      | 100                                     | 7.12      | 1,10,20,30 mins    |
| 7.      | 125                                     | 8.90      | 1,10,20,30,60 mins |

**Unloading shall be done in same manner and reading shall be taken for 1,5,10minutes .**

## 4.0 RESULTS

### 4.1 Acceptance Criteria for Lateral Pile Load Test

The Safe Lateral Capacity of Piles is considered to be the least of the following as per IS: 2911, (Part 4) 2013

- Final load at which total displacement corresponds to 5mm.

From pile load test graph and field readings, it is seen that the average deflection of 5mm for test pile was not observed till last increment of 3.5T which is our safe load requirement.

And as per our field records the following observations were recorded.

- 1) The Maximum displacement of test pile observed at 8.90T = 1.80mm
- 2) Total Rebound = 1.35mm
- 3) Net Deflection = 0.55mm

So as per the test data and the graph we can say that the pile has shown more lateral load carrying capacity than design load of **3.5T** and the deflection was in permissible limits till test load .

Therefore **3.5T** can be adopted as the safe lateral load for the working piles..

18<sup>th</sup> Nov. 2025.

For Qcc lab solutions pvt. Ltd.



(Authorised Signatory)



## **READINGS AND GRAPH**



**M/s. Qcc lab solutions private limited, Mumbai.  
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Website:- www.qcclabsolutions.com**

**Qcc lab solutions private limited, Mumbai.**

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RECORD OF PILE LOAD TEST NO:-TP-5

L.C OF DIAL GAUGE:- 0.01mm

Ram Area :- 71.2cm<sup>2</sup>

PROJECT:- Improvement of Sewage Management System in Nash

Type of Test:- Lateral Load Test

Date of Casting :- 23/09/2025

LOCATION :- Panchak STP 75 MLD

Design Load on Pile:- 3.5 T

Pile Depth :- 10.31 Meter

CONSULTANT :- CS TECH.

Test Load :- 8.75T

CONTRACTOR:- KUMBH W. W.MANAGEMENT PVT.LTD.

Mixed Design :- M25

CLIENT:- NMC

Pile Diameter: - 600 mm

**RLPLT**

| DATE       | TIME  | PRESSURE<br>GAUGE<br>(mins) | LOAD IN MT | Dial Gauge    |              |              |              | DEFLECTION<br>OF TEST PILE | DEFLECTION<br>OF REACTION PILE<br>IN MM |  |  |  |
|------------|-------|-----------------------------|------------|---------------|--------------|--------------|--------------|----------------------------|---|--|--|--|
|            |       |                             |            | Reading<br>1  | Reading<br>2 | Reading<br>3 | Reading<br>4 |                            |   |  |  |  |
| LOADING    |       |                             |            |               |              |              |              |                            |   |  |  |  |
| TEST PILE  |       |                             |            | REACTION PILE |              |              |              | Avg. Test Pile             | Avg. Reaction Pile                      |  |  |  |
| 25-10-2025 | 0     | 0                           | 0          | 0             | 0            | 0            | 0            | 0                          | 0                                       |  |  |  |
|            | 15.00 | 20.00                       | 1.42       | 0.07          | 0.07         | 0.16         | 0.16         | 0.07                       | 0.16                                    |  |  |  |
|            | 15.10 |                             |            | 0.07          | 0.07         | 0.23         | 0.25         | 0.07                       | 0.24                                    |  |  |  |
|            | 15.20 |                             |            | 0.10          | 0.11         | 0.23         | 0.25         | 0.11                       | 0.24                                    |  |  |  |
|            | 15.30 |                             |            | 0.10          | 0.11         | 0.23         | 0.25         | 0.11                       | 0.24                                    |  |  |  |
|            | 15.31 | 40.00                       | 3.09       | 0.35          | 0.30         | 0.25         | 0.27         | 0.33                       | 0.26                                    |  |  |  |
|            | 15.40 |                             |            | 0.36          | 0.31         | 0.25         | 0.27         | 0.34                       | 0.26                                    |  |  |  |
|            | 15.50 |                             |            | 0.38          | 0.32         | 0.26         | 0.28         | 0.35                       | 0.27                                    |  |  |  |
|            | 16.00 |                             |            | 0.38          | 0.32         | 0.26         | 0.28         | 0.35                       | 0.27                                    |  |  |  |
|            | 16.01 | 60.00                       | 4.63       | 0.40          | 0.36         | 0.29         | 0.30         | 0.38                       | 0.30                                    |  |  |  |
|            | 16.10 |                             |            | 0.40          | 0.36         | 0.29         | 0.30         | 0.38                       | 0.30                                    |  |  |  |
|            | 16.20 |                             |            | 0.40          | 0.36         | 0.29         | 0.30         | 0.38                       | 0.30                                    |  |  |  |
|            | 16.30 |                             |            | 0.40          | 0.36         | 0.29         | 0.30         | 0.38                       | 0.30                                    |  |  |  |
|            | 16.31 | 80.00                       | 6.18       | 0.63          | 0.58         | 0.35         | 0.41         | 0.61                       | 0.38                                    |  |  |  |
|            | 16.40 |                             |            | 0.65          | 0.60         | 0.35         | 0.45         | 0.63                       | 0.40                                    |  |  |  |
|            | 16.50 |                             |            | 0.65          | 0.61         | 0.36         | 0.47         | 0.63                       | 0.42                                    |  |  |  |
|            | 17.00 |                             |            | 0.65          | 0.61         | 0.36         | 0.47         | 0.63                       | 0.42                                    |  |  |  |
|            | 17.01 | 100.00                      | 7.73       | 0.95          | 0.88         | 0.53         | 0.76         | 0.92                       | 0.65                                    |  |  |  |
|            | 17.10 |                             |            | 0.99          | 0.92         | 0.54         | 0.77         | 0.96                       | 0.66                                    |  |  |  |
|            | 17.20 |                             |            | 1.01          | 0.92         | 0.55         | 0.77         | 0.97                       | 0.66                                    |  |  |  |
|            | 17.30 |                             |            | 1.01          | 0.92         | 0.55         | 0.77         | 0.97                       | 0.66                                    |  |  |  |
|            | 17.31 | 125.00                      | 8.90       | 1.56          | 1.43         | 0.81         | 1.02         | 1.50                       | 0.92                                    |  |  |  |
|            | 17.40 |                             |            | 1.85          | 1.74         | 0.85         | 1.06         | 1.80                       | 0.96                                    |  |  |  |
|            | 17.50 |                             |            | 1.85          | 1.74         | 0.90         | 1.11         | 1.80                       | 1.01                                    |  |  |  |
|            | 18.00 |                             |            | 1.85          | 1.74         | 0.93         | 1.12         | 1.80                       | 1.03                                    |  |  |  |
|            | 18.30 | 125.00                      | 8.90       | 1.85          | 1.74         | 0.95         | 1.15         | 1.80                       | 1.05                                    |  |  |  |

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RECORD OF PILE LOAD TEST NO:-TP-5

L.C OF DIAL GAUGE:- 0.01mm

Page:- 2

PROJECT:- Improvement of Sewage Management System in Nash Type of Test:- Lateral Load Test

Ram Area :- 71.2cm<sup>2</sup>

LOCATION :- Panchak STP 75 MLD

Date of Casting :- 23/09/2025

CONSULTANT :- CS TECH.

Design Load on Pile:- 3.5 T

Pile Depth :- 10.31 Meter

CONTRACTOR:- KUMBH W. W.MANAGEMENT PVT.LTD.

Test Load :- 8.75T

CLIENT:- NMC

Mixed Design :- M25

Pile Diameter: - 600 mm

**RLPLT**

| DATE                                  | TIME  | PRESSURE | LOAD IN MT | Dial Gauge                             |              |              |              | DEFLECTION<br>OF TEST PILE<br>IN MM | DEFLECTION<br>OF REACTION PILE<br>IN MM |  |  |  |  |  |
|---------------------------------------|-------|----------|------------|--|--------------|--------------|--------------|-------------------------------------|---|--|--|--|--|--|
|                                       |       |          |            | GAUGE<br>READING<br>kg/cm <sup>2</sup> | Reading<br>1 | Reading<br>2 | Reading<br>3 |                                     |   |  |  |  |  |  |
| <b>UNLOADING</b>                      |       |          |            |  |              |              |              |                                     |   |  |  |  |  |  |
| <b>TEST PILE</b> <b>REACTION PILE</b> |       |          |            |  |              |              |              |                                     |   |  |  |  |  |  |
| 25-10-2025                            | 18.31 | 100.00   | 7.73       | 1.49                                   | 1.55         | 0.85         | 1.06         | 1.52                                | 0.96                                    |  |  |  |  |  |
|                                       | 18.35 |          |            | 1.49                                   | 1.55         | 0.85         | 1.06         | 1.52                                | 0.96                                    |  |  |  |  |  |
|                                       | 18.40 |          |            | 1.49                                   | 1.55         | 0.85         | 1.06         | 1.52                                | 0.96                                    |  |  |  |  |  |
|                                       | 18.41 | 80.00    | 6.18       | 1.49                                   | 1.55         | 0.85         | 1.06         | 1.52                                | 0.96                                    |  |  |  |  |  |
|                                       | 18.45 |          |            | 1.49                                   | 1.55         | 0.85         | 1.06         | 1.52                                | 0.96                                    |  |  |  |  |  |
|                                       | 18.50 |          |            | 1.49                                   | 1.55         | 0.85         | 1.06         | 1.52                                | 0.96                                    |  |  |  |  |  |
|                                       | 18.51 | 60.00    | 4.63       | 1.41                                   | 1.48         | 0.83         | 1.03         | 1.45                                | 0.93                                    |  |  |  |  |  |
|                                       | 18.55 |          |            | 1.41                                   | 1.48         | 0.83         | 1.03         | 1.45                                | 0.93                                    |  |  |  |  |  |
|                                       | 19.00 |          |            | 1.41                                   | 1.48         | 0.83         | 1.03         | 1.45                                | 0.93                                    |  |  |  |  |  |
|                                       | 19.01 | 40.00    | 3.09       | 1.15                                   | 1.24         | 0.63         | 0.88         | 1.20                                | 0.76                                    |  |  |  |  |  |
|                                       | 19.05 |          |            | 1.14                                   | 1.22         | 0.62         | 0.87         | 1.18                                | 0.75                                    |  |  |  |  |  |
|                                       | 19.10 |          |            | 1.14                                   | 1.22         | 0.62         | 0.87         | 1.18                                | 0.75                                    |  |  |  |  |  |
|                                       | 19.11 | 20.00    | 1.42       | 0.85                                   | 0.90         | 0.45         | 0.76         | 0.88                                | 0.61                                    |  |  |  |  |  |
|                                       | 19.15 |          |            | 0.82                                   | 0.88         | 0.43         | 0.71         | 0.85                                | 0.57                                    |  |  |  |  |  |
|                                       | 19.20 |          |            | 0.82                                   | 0.88         | 0.43         | 0.71         | 0.85                                | 0.57                                    |  |  |  |  |  |



**Qcc lab solutions private limited, Mumbai.**

## **RECORD OF PILE LOAD TEST NO:-TP-5**

**PROJECT:** Improvement of Sewage Management System in Nash **Type of Test:-** Lateral Load Test

**LOCATION :-** Panchak STP 75 MLD

**CONSULTANT :- CS TECH.**

**CONTRACTOR:- KUMBH W. W. MANAGEMENT PVT.LTD.**

CONTRACT  
CLIENT:- NMC

**L.C OF DIAL GAUGE:-** 0.01mm

**Type of Test:- Lateral Load Test**

**Design Load on Pile:- 3.5 T**

**Test Load :- 8.75T**

Mixed Design :- M25

**Mixed Design :- M25  
Pile Diameter:- 600 mm**

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**Ram Area :- 71.2cm<sup>2</sup>**

**Date of Casting :- 23/09/2025**

Pile Depth :- 10.31 Meter

RLPLT

**Qcc lab solutions private limited, Mumbai.**

QCC

## **RECORD OF PILE LOAD TEST NO:-TP05**

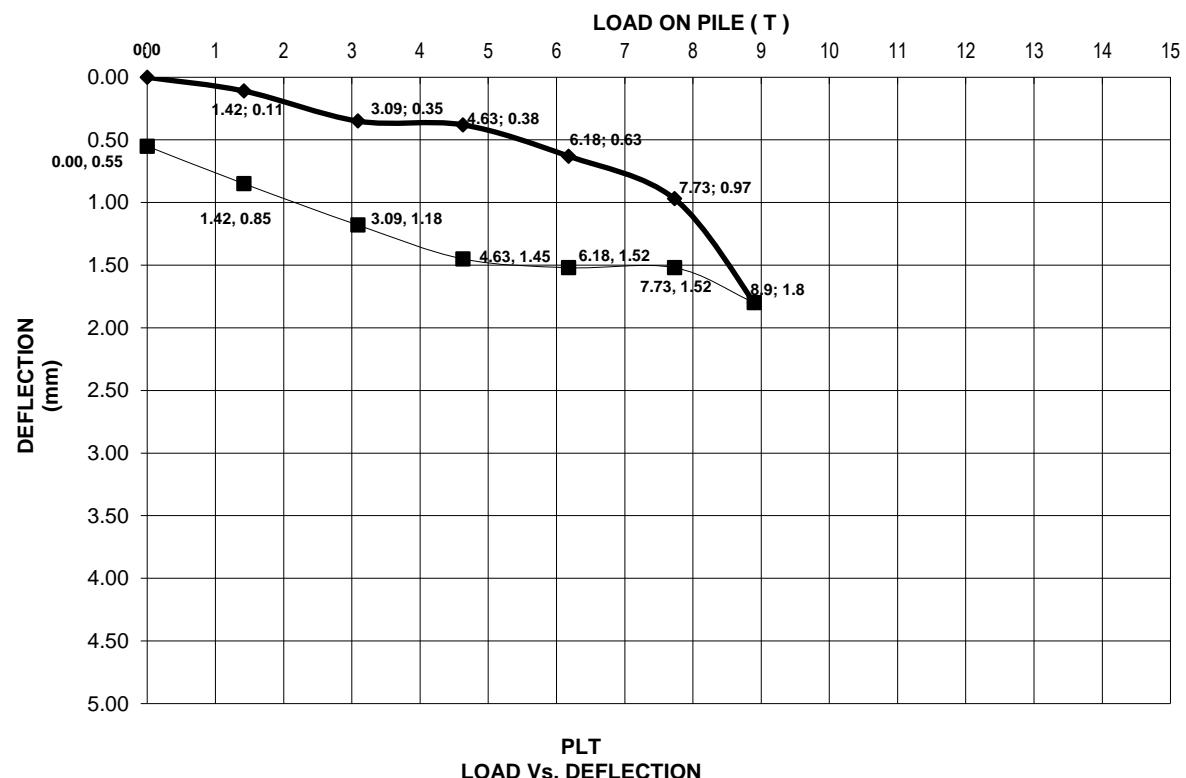
## **PROJECT:- . - Improvement of Sewage Management System in Nashik City**

**LOCATION :-** Panchak STP 75 MLD

CONSULTANT :- CS TECH.

**CONTRACTOR:- KUMBH W. W. MANAGEMENT PVT.LTD.**

**CLIENT:- NMC**



Maximum Deflection : 1.80mm

Total Rebound : 1.25mm

Final Deflection : 0.55mm

**NMC/CS TECH/KWWM/QCC**  
**Qcc solutions pvt ltd.**

**Qcc lab solutions pvt ltd.**

**KWWM/CS TECH/NMC/QCC.**

# **FIELD READINGS**



**M/s. Qcc lab solutions private limited,Mumbai  
Tel:- 9452200078,8369458583  
E-mail:-calibration@qcclabsolutions.com  
Website:- [www.qcclabsolutions.com](http://www.qcclabsolutions.com)**

**Zed Core N Bore**

RECORD OF PILE LOAD TEST NO:-

Improvement of Sewage Management  
PROJECT:- System in Nachik City

LOCATION :- Panchak STP 75MLD

CONTRACTOR:-

CLIENTS NAME:- NMC

L.C OF DIAL GAUGE:- 0.01 mm  
 Type of Test:- Latency Load Test  
 Design load on pile:- 3.5T  
 Test Load :- 0.75T  
 Mixed Design :- M25  
 Pile Diameter :- 600

Page:- 1

Ram Area :- 71.2  
 Date of Casting :- 03.09.2025  
 Pile Depth :- 10.31 Meter

| DATE<br>(Hrs) | TIME  | PRESSURE<br>kg/cm <sup>2</sup> | LOAD IN MT | LATERAL PILE LOAD TEST |              |              |              |              |               |                      |     | REMARK    |    |  |
|---------------|-------|--------------------------------|------------|------------------------|--------------|--------------|--------------|--------------|---------------|----------------------|-----|-----------|----|--|
|               |       |                                |            | DIAL GUAGES            |              | TEST PILE    |              |              |               | REACTION PILE        |     | SIGNATURE |    |  |
|               |       |                                |            | Gauge<br>READING       | Reading<br>1 | Reading<br>2 | Reading<br>3 | Reading<br>4 | Avg Test Pile | Avg Reaction<br>Pile | ZED | VEL       | MR |  |
| 25/10/25      |       |                                |            |                        | 0            | 0            | 0            | 0            | 0             | 0                    |     |           |    |  |
|               | 15:00 | 20                             | 1.42       | 0.07                   | 0.07         | 0.16         | 0.16         | 0.07         | 0.07          | 0.16                 | AT  |           |    |  |
|               | 15:10 |                                |            | 0.07                   | 0.07         | 0.23         | 0.25         | 0.07         | 0.07          | 0.24                 | AT  |           |    |  |
|               | 15:20 |                                |            | 0.10                   | 0.11         | 0.23         | 0.25         | 0.10         | 0.10          | 0.24                 | AT  |           |    |  |
|               | 15:30 |                                |            | 0.10                   | 0.11         | 0.23         | 0.25         | 0.10         | 0.10          | 0.24                 | AT  |           |    |  |
|               | 15:30 | 40                             | 3.09       | 0.35                   | 0.30         | 0.25         | 0.27         | 0.32         | 0.26          | AT                   |     |           |    |  |
|               | 15:40 |                                |            | 0.36                   | 0.31         | 0.25         | 0.27         | 0.33         | 0.26          | AT                   |     |           |    |  |
|               | 15:50 |                                |            | 0.38                   | 0.32         | 0.26         | 0.28         | 0.35         | 0.27          | AT                   |     |           |    |  |
|               | 16:00 |                                |            | 0.38                   | 0.32         | 0.26         | 0.28         | 0.35         | 0.27          | AT                   |     |           |    |  |
|               | 16:00 | 60                             | 4.63       | 0.40                   | 0.36         | 0.29         | 0.30         | 0.38         | 0.29          | AT                   |     |           |    |  |
|               | 16:10 |                                |            | 0.40                   | 0.36         | 0.29         | 0.30         | 0.38         | 0.29          | AT                   |     |           |    |  |
|               | 16:20 |                                |            | 0.40                   | 0.36         | 0.29         | 0.30         | 0.38         | 0.29          | AT                   |     |           |    |  |
|               | 16:30 |                                |            | 0.40                   | 0.36         | 0.29         | 0.30         | 0.38         | 0.29          | AT                   |     |           |    |  |
|               | 16:31 | 80                             | 6.18       | 0.63                   | 0.58         | 0.35         | 0.41         | 0.60         | 0.38          | AT                   |     |           |    |  |
|               | 16:40 |                                |            | 0.65                   | 0.60         | 0.35         | 0.45         | 0.62         | 0.57          | AT                   |     |           |    |  |
|               | 16:50 |                                |            | 0.65                   | 0.61         | 0.36         | 0.47         | 0.63         | 0.41          | AT                   |     |           |    |  |
|               | 17:00 |                                |            | 0.65                   | 0.61         | 0.36         | 0.47         | 0.63         | 0.41          | AT                   |     |           |    |  |
|               | 17:01 | 100                            | 7.73       | 0.95                   | 0.88         | 0.53         | 0.76         | 0.91         | 0.64          | AT                   |     |           |    |  |
|               | 17:10 |                                |            | 0.99                   | 0.92         | 0.54         | 0.77         | 0.95         | 0.65          | AT                   |     |           |    |  |
|               | 17:20 |                                |            | 1.01                   | 0.92         | 0.55         | 0.77         | 0.96         | 0.66          | AT                   |     |           |    |  |
|               | 17:30 |                                |            | 1.01                   | 0.92         | 0.55         | 0.77         | 0.96         | 0.66          | AT                   |     |           |    |  |
|               | 17:31 | 125                            | 8.90       | 1.56                   | 1.43         | 0.81         | 1.02         | 1.49         | 0.91          | AT                   |     |           |    |  |
|               | 17:40 |                                |            | 1.85                   | 1.94         | 0.85         | 1.06         | 1.79         | 0.95          | AT                   |     |           |    |  |
|               | 17:50 |                                |            | 1.85                   | 1.74         | 0.90         | 1.11         | 1.79         | 1.00          | AT                   |     |           |    |  |
|               | 18:00 |                                |            | 1.85                   | 1.74         | 0.93         | 1.12         | 1.79         | 1.02          | AT                   |     |           |    |  |
|               | 18:30 | 125                            | 8.90       | 1.85                   | 1.74         | 0.95         | 1.15         | 1.79         | 1.05          | AT                   |     |           |    |  |



### Zed Core N Bore

**RECORD OF PILE LOAD TEST NO:-**

RECORD OF PILE LOAD TEST NO:-  
PROJECT:- Improvement of Sewage Management  
System in Nashik City  
LOCATION:- Panchak STP 75 MLD  
CONTRACTOR:-  
CLIENTS NAME:- NMC

L.C OF DIAL GAUGE:- 0.01 mm  
 Type of Test:- Lateral load test  
 Design load on pile:- 3.5 T  
 Test Load :- 0.75 T  
 Mixed Design :- 125  
 Pile Diameter :- 600

Ram Area :-  $71.2 \text{ cm}^2$   
Date of Casting :-  
Pile Depth :-

LATERAL PILE LOAD TEST

# **CALIBRATION CERTIFICATES**



**M/s. Qcc lab solutions private limited, Mumbai.  
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E-mail:-calibration@qcclabsolutions.com  
Website:- www.qcclabsolutions.com**




# QCC LAB

SOLUTIONS PVT. LTD.

Equipment Sales & Calibration Services

Format No: QCC/DG/01

Rev. No.- 00

## CALIBRATION CERTIFICATE

|   |                                      |
|---|--------------------------------------|
| Calibration Certificate No.                         | : QCC-2303-16030                     |
| Calibration Report Date                             | : 01/12/2025                         |
| Customer Name                                       | : M/s. ZEDZEO SYSTEMS PRIVET LIMITED |
| Site Address  | : Navi Mumbai                        |
| Date of Calibration                                 | : 01/04/2025                         |
| Calibration Due Date ( as per customer requirement) | : 01/04/2026                         |
| <b>DETAILS OF UNIT UNDER CALIBRATION</b>            |                                      |
| Equipement Description                              | : Analog Dial Gauge                  |
| Id of UUC   | : ZSPL/DG/02                         |
| Make.   | : BAKER                              |
| Model No.   | : FJA452                             |
| Range (mm)  | : 0-25 mm                            |
| Resolution (mm)                                     | : 0.01                               |

## DETAIL OF MASTER EQUIPMENT USED FOR CALIBRATION

| Master Equipment Description     | Range                       | Calibration Certificate No. | Make              | Calibration Date          | Calibration Date |
|----------------------------------|-----------------------------|-----------------------------|-------------------|---------------------------|------------------|
| Dial calibration Tester          | 0-25 mm                     | M-210209-25-1               | Reddy Instruments | 05/09/2024                | 05/09/2025       |
| Calibration Method               | : IS 2092 -1983, QCC/SOP/15 |                             |                   |                           |                  |
| Calibration Done on Location     | : AT LAB                    |                             |                   |                           |                  |
| Room Temp. (°C) & Humadity (%RH) | : 20.1 & 56                 |                             |                   |                           |                  |
|                                  |                             | Unit of Measurement : mm    |                   |                           |                  |
| Sr.No.                           | Set point on DUC            | Reading on master (Avg.)    | Deviation/Error   | Expanded Uncertainty in ± |                  |
| 1                                | 0.0                         | 0.0000                      | 0.0000            |                           |                  |
| 2                                | 2.5                         | 2.5003                      | 0.0003            |                           |                  |
| 3                                | 5.0                         | 5.0009                      | 0.0009            |                           |                  |
| 4                                | 7.5                         | 7.5085                      | 0.0085            |                           |                  |
| 5                                | 10.0                        | 10.0013                     | 0.0013            |                           |                  |
| 6                                | 12.5                        | 12.5019                     | 0.0019            |                           |                  |
| 7                                | 15.0                        | 15.0064                     | 0.0064            |                           |                  |
| 8                                | 17.5                        | 17.5068                     | 0.0068            |                           |                  |
| 9                                | 20.0                        | 20.0084                     | 0.0084            |                           |                  |
| 10                               | 22.5                        | 22.5093                     | 0.0093            |                           |                  |
| 11                               | 25.0                        | 25.0092                     | 0.0092            |                           |                  |

Remarks:

1. DUC stands for device under calibration.
2. The certificate shall refers only to the particuler item submitted for calibration .
3. The certificate shall not be reproduced except in full unless written permission for the publication of an approved abstract has been obtained from the technical manager of QCC lab solution Pvt. Ltd. Navi Mumbai.
4. As found ;As left
5. The calibration results reported in the certificate are valid at the time of and under the stated conditions of measurement.
6. Calibration point don as per customer request

(Calibrated By)



(Authorised Signatory)




# QCC LAB SOLUTIONS PVT. LTD.

Equipment Sales & Calibration Services

Format No: QCC/DG/01

Rev. No.- 00

## CALIBRATION CERTIFICATE

|  |                                      |
|--|--------------------------------------|
| Calibration Certificate No.                        | : QCC-2303-16031                     |
| Calibration Report Date                            | : 01/04/2025                         |
| Customer Name                                      | : M/s. ZEDZEO SYSTEMS PRIVET LIMITED |
| Site Address                                       | : Navi Mumbai                        |
| Date of Calibration                                | : 01/04/2025                         |
| Calibration Due Date ( as per customer requirment) | : 01/04/2026                         |
| <b>DETAILS OF UNIT UNDER CALIBRATION</b>           |                                      |
| Equipement Description                             | : Analog Dial Gauge                  |
| Id of UUC  | : ZSPL/DG/01                         |
| Make.  | : BAKER                              |
| Model No.  | : FIB564                             |
| Range (mm)   | : 0-25 mm                            |
| Resolution (mm)                                    | : 0.01                               |

## DETAIL OF MASTER EQUIPMENT USED FOR CALIBRATION

| Master Equipement Description    | Range                       | Calibration Certificate No. | Make              | Calibration Date          | Calibration Date |
|----------------------------------|-----------------------------|-----------------------------|-------------------|---------------------------|------------------|
| Dial calibration Tester          | 0-25 mm                     | M-210209-25-1               | Reddy Instruments | 05/09/2024                | 05/09/2025       |
| Calibration Method               | : IS 2092 -1983, QCC/SOP/15 |                             |                   |                           |                  |
| Calibration Done on Location     | : AT LAB                    |                             |                   |                           |                  |
| Room Temp. (°C) & Humadity (%RH) | : 20.4 & 53                 |                             |                   |                           |                  |
| Unit of Measurement : mm         |                             |                             |                   |                           |                  |
| Sr.No.                           | Set point on DUC            | Reading on master (Avg.)    | Deviation/Error   | Expanded Uncertainty in ± |                  |
| 1                                | 0.0                         | 0.0000                      | 0.0000            |                           |                  |
| 2                                | 2.5                         | 2.4984                      | -0.0016           |                           |                  |
| 3                                | 5.0                         | 4.9992                      | -0.0008           |                           |                  |
| 4                                | 7.5                         | 7.4968                      | -0.0032           |                           |                  |
| 5                                | 10.0                        | 9.9983                      | -0.0017           |                           |                  |
| 6                                | 12.5                        | 12.4846                     | -0.0154           |                           |                  |
| 7                                | 15.0                        | 14.9854                     | -0.0146           |                           |                  |
| 8                                | 17.5                        | 17.4837                     | -0.0163           |                           |                  |
| 9                                | 20.0                        | 19.9914                     | -0.0086           |                           |                  |
| 10                               | 22.5                        | 22.4911                     | -0.0089           |                           |                  |
| 11                               | 25.0                        | 24.9930                     | -0.0070           | 0.007                     |                  |

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4. As found ;As left
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6. Calibration point don as per customer request

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## CALIBRATION CERTIFICATE

|   |                                      |
|---|--------------------------------------|
| Calibration Certificate No.                         | : QCC-2303-16032                     |
| Calibration Report Date                             | : 01/04/2025                         |
| Customer Name                                       | : M/s. ZEDZEO SYSTEMS PRIVET LIMITED |
| Site Address  | : Navi Mumbai                        |
| Date of Calibration                                 | : 01/4/2025                          |
| Calibration Due Date ( as per customer requirement) | : 01/04/2026                         |
| <b>DETAILS OF UNIT UNDER CALIBRATION</b>            |                                      |
| Equipement Description                              | : Analog Dial Gauge                  |
| Id of UUC   | : ZSPL/DG/02                         |
| Make.   | : BAKER                              |
| Model No.   | : 215357                             |
| Range (mm)  | : 0-25 mm                            |
| Resolution (mm)                                     | : 0.01                               |

## DETAIL OF MASTER EQUIPMENT USED FOR CALIBRATION

| Master Equipment Description     | Range                       | Calibration Certificate No. | Make              | Calibration Date          | Calibration Date |
|----------------------------------|-----------------------------|-----------------------------|-------------------|---------------------------|------------------|
| Dial calibration Tester          | 0-25 mm                     | M-210209-25-1               | Reddy Instruments | 05/09/2024                | 05/09/2025       |
| Calibration Method               | : IS 2092 -1983, QCC/SOP/15 |                             |                   |                           |                  |
| Calibration Done on Location     | : AT LAB                    |                             |                   |                           |                  |
| Room Temp. (°C) & Humadity (%RH) | : 20.1 & 56                 |                             |                   |                           |                  |
| Unit of Measurement : mm         |                             |                             |                   |                           |                  |
| Sr.No.                           | Set point on DUC            | Reading on master (Avg.)    | Deviation/Error   | Expanded Uncertainty in ± |                  |
| 1                                | 0.0                         | 0.0000                      | 0.0000            |                           |                  |
| 2                                | 2.5                         | 2.5003                      | 0.0003            |                           |                  |
| 3                                | 5.0                         | 5.0009                      | 0.0009            |                           |                  |
| 4                                | 7.5                         | 7.5085                      | 0.0085            |                           |                  |
| 5                                | 10.0                        | 10.0013                     | 0.0013            |                           |                  |
| 6                                | 12.5                        | 12.5019                     | 0.0019            |                           |                  |
| 7                                | 15.0                        | 15.0064                     | 0.0064            |                           |                  |
| 8                                | 17.5                        | 17.5068                     | 0.0068            |                           |                  |
| 9                                | 20.0                        | 20.0084                     | 0.0084            |                           |                  |
| 10                               | 22.5                        | 22.5093                     | 0.0093            |                           |                  |
| 11                               | 25.0                        | 25.0092                     | 0.0092            |                           |                  |

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6. Calibration point don as per customer request

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## CALIBRATION CERTIFICATE

|   |                                      |
|---|--------------------------------------|
| Calibration Certificate No.                         | : QCC-2303-16034                     |
| Calibration Report Date                             | : 01/04/2025                         |
| Customer Name                                       | : M/s. ZEDZEO SYSTEMS PRIVET LIMITED |
| Site Address  | : Navi Mumbai                        |
| Date of Calibration                                 | : 01/04/2025                         |
| Calibration Due Date ( as per customer requirement) | : 01/04/2026                         |
| DETAILS OF UNIT UNDER CALIBRATION                   |                                      |
| Equipement Description                              | : Analog Dial Gauge                  |
| Id of UUC   | : ZSPL/DG/04                         |
| Make.   | : BAKER                              |
| Model No.   | : 214954                             |
| Range (mm)  | : 0-25 mm                            |
| Resolution (mm)                                     | : 0.01                               |

## DETAIL OF MASTER EQUIPMENT USED FOR CALIBRATION

| Master Equipment Description     | Range                       | Calibration Certificate No. | Make              | Calibration Date          | Calibration Date |
|----------------------------------|-----------------------------|-----------------------------|-------------------|---------------------------|------------------|
| Dial calibration Tester          | 0-25 mm                     | M-210209-25-1               | Reddy Instruments | 05/09/2024                | 05/09/2025       |
| Calibration Method               | : IS 2092 -1983, QCC/SOP/15 |                             |                   |                           |                  |
| Calibration Done on Location     | : AT LAB                    |                             |                   |                           |                  |
| Room Temp. (°C) & Humadity (%RH) | : 20.3 & 56                 |                             |                   |                           |                  |
| Unit of Measurement : mm         |                             |                             |                   |                           |                  |
| Sr.No.                           | Set point on DUC            | Reading on master (Avg.)    | Deviation/Error   | Expanded Uncertainty in ± |                  |
| 1                                | 0.0                         | 0.0000                      | 0.0000            | 0.007                     |                  |
| 2                                | 2.5                         | 2.4991                      | -0.0011           |                           |                  |
| 3                                | 5.0                         | 4.9995                      | -0.0005           |                           |                  |
| 4                                | 7.5                         | 7.4976                      | -0.0024           |                           |                  |
| 5                                | 10.0                        | 9.9997                      | -0.0003           |                           |                  |
| 6                                | 12.5                        | 12.4967                     | -0.0033           |                           |                  |
| 7                                | 15.0                        | 14.9941                     | -0.0059           |                           |                  |
| 8                                | 17.5                        | 17.4936                     | -0.0064           |                           |                  |
| 9                                | 20.0                        | 19.9985                     | -0.0015           |                           |                  |
| 10                               | 22.5                        | 22.4969                     | -0.0031           |                           |                  |
| 11                               | 25.0                        | 24.9990                     | -0.0010           |                           |                  |

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