

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

ORIGINAL APPLICATION No. 614 OF 2018

IN THE MATTER OF:

Lubna Sarwath

....

Applicant

Versus

Govt of Telangana

....

Respondent

JOINT REPORT

RUNNING INDEX

| Sl. No. | Particulars | Page Nos. |
|----------------|--|------------------|
| 1. | Joint Report | 1 – 5 |
| 2. | Annexure – I – Municipal Administration & Urban Development Dept., Government of Telangana, GO Rt.No. 669, dated 22.09.2021 | 6 – 9 |
| 3. | Annexure – II – Analysis results of STPs located at Miralam Tank for the period from January 2021 to November 2021. | 10 |
| 4. | Annexure – III – Cadestral Map and Plan of Bum-Rukn-Ud-Dowla Lake. | 11 – 12 |

Place: Hyderabad

Date: 14-12-2021.

**JOINT REPORT DATED 14-12-2021 IN OA No. 614 OF 2018
BEFORE THE HON'BLE NGT, PRINCIPAL BENCH, NEW DELHI**

The Hon'ble NGT has taken Suo Motu of the mails sent by the SOUL represented by Dr.Lubna Sarwath, an NGO organization on "Bum-Rukn-Ud-Dowla", Rajendranagar, RR Dist on construction activities and discharge of waste water in the water spread area of the Lake. The case is numbered as Original Application No.614 of 2018.

The Hon'ble NGT during the hearing held on 14.12.2021 directed to submit a Joint report on the status of actions taken on encroachment in the FTL and diversion & treatment of sewage entering the Lake.

The details of action taken are as follows: -

1. Details of drains and diversion channel:

- Earlier, 3 drains were flowing into the lake before the diversion of the sewage. Two streams were flowing from Raghavendra Colony and one stream from Kings Colony and Rasheed Colony.
- To divert the stream from Kings Colony to Rasheed Colony, diversion box channel is laid with 340 mtrs length.
- To divert the other two streams from the Raghavendra Colony, a pipe line was laid connecting to the existing box channel which ultimately joins the STPs at Miralam Tank.
- The above diversion works were completed in November 2021.

Further, the following measures were taken:

- Construction & demolition waste which was earlier lying near the Lake has been removed and no further dumping was observed.
- The GHMC Officials have installed 4 no. of C.C.T.V Cameras to monitor the illegal dumping of C&D Waste.

2. Details of sewage generation & treatment:

- The quantity of sewage generated is about 0.5 MLD from the above mentioned colonies around the Lake. However, the diversion channel provided is to take up 1.0 MLD to meet the future demands.
- The sewage after diversion from Bum-Rukn-ud-Dowla Lake is connected to box type channel carrying the sewage to existing 10.0 MLD STP at Miralam Tank. As the existing STP is not sufficient to treat the total sewage coming from various surrounding areas of Miralam Tank, another STP of 11.5 MLD is sanctioned vide GO Rt.No. 669, dated 22.09.2021 (**Annexure-I**). The STP work will commence shortly.
- Another STP of 5 MLD capacity is existing at Miralam Tank to cater to the sewage from other areas viz., Shivrampally, Nine pahad, etc.
- TSPCB is carrying out regular monitoring of STPs located at Miralam Tank. The analysis reports indicate that the treated sewage is meeting the standards. The statement showing the analysis results for the period from January 2021 to November 2021 are enclosed (**Annexure-II**).
- The treated water from STPs at Miralam Tank are discharged into the Miralam Tank to maintain the Lake hydrology. Further, water from the Miralam Tank is also used for gardening & other purposes in the adjacent Nehru Zoological Park.

3. Details of FTL, Fencing & Encroachments:

- FTL is demarcated for the Tank and the copy of the same is enclosed (**Annexure-III**).
- The fencing work is partly provided for the Bum-Rukn-Ud-Dowla Lake. The North Tank Division (NTD), Irrigation & Command Area Development (I&CAD) Department has provided 150 mtrs fencing out

of total length of 1050 mtrs. Remaining 900 mtrs could not be taken up due to Stay Order from the Hon'ble High Court.

- The Greater Hyderabad Municipal Corporation (GHMC) authorities have taken up special drive for removal of (22) encroachments duly issuing the notices under the provision of HMC Act, 1955 vide Section 452(1) and 461(1) to the owners of the properties within the FTL of Bum Rukh Ud Dowla lake. During the demolition drive, the property owners have shown the Status Quo orders duly obtained from the Hon'ble High Court vide WP No. 26647/2020, 23645/2020, 23681/2020, 7279/2020, 28590/2018, 28151/2018, 23773/2021, 23778/2021, 23762/2021, 24011/2021, 25286/2021, 12983/2018, 28616/2018, 8507/2009, 22115/2021, 22092/2021, 22198/2021, 22103/2021, 22241/2021, 22187/2021, 20760/2021.

GHMC has filed counters in response to the above WPs and subject to the judgment of Hon'ble Court further action will be initiated.

- **List of Court Cases pending are as follows:**

| Sl. No. | High Court Case No. / WP No. | Brief Petition / Prayer | Order with date – Status. |
|----------------|-------------------------------------|--|---|
| 1. | 28151 / 2018 | Direct the respondents not to demolish or interfere with peaceful possession and enjoyment of the petitioners over the subject lands without following the procedure contemplated under law. | Order dated 28-08-2018 -- There shall be interim direction as prayed for. |
| 2. | 28590 / 2018 | Direct the respondents not to demolish or interfere with peaceful possession and enjoyment of the petitioners over the subject lands without following the procedure contemplated under law. | Order dated 16-08-2018- - There shall be interim direction as prayed for. |

| Sl. No. | High Court Case No. / WP No. | Brief Petition / Prayer | Order with date – Status. |
|---------|---|--|---|
| 3. | 23681 / 2020 | Direct the Respondents not to demolish or interfere with peaceful possession and enjoyment of the Petitioner over the subject property without following the procedure contemplated under law. | Order dated 21.01.2021 -- Interim order granted earlier stands extended till the next date of hearing. |
| 4. | 23645 / 2020 | Direct the Respondents not to demolish or interfere with peaceful possession and enjoyment of the Petitioner over the subject property without following the procedure contemplated under law. | Order dated 21.01.2021 -- Interim order granted earlier stands extended till the next date of hearing. |
| 5. | 23647 / 2020 | Direct the Respondents not to demolish or interfere with peaceful possession and enjoyment of the Petitioner over the subject property without following the procedure contemplated under law. | Order dated 21.01.2021 -- Interim order granted earlier stands extended till the next date of hearing. |
| 6. | 26635, 23762, 23773, 23776, 23778, 24011, 24322, 24324, 25130, 25141, 25154, 25168, 25286, 25508, 25518 25521 of 2021 | Direct the respondents to follow due process of law in the event of acquiring the land belonging to the petitioner bearing plot No A2 under Part of Sy No 50/4 50/5 and 50/6 admn 500 sq yards situated at Raghavendra Nagar Colony Opp National Police Academy Shivrampally Road RR District. | Order dated 9.11.2021 -- In the considered opinion of this Court, as the matter is still pending before the National Green Tribunal and in case the petitioners are aggrieved by the order passed by the National Green Tribunal, they do have a remedy to file appropriate application before the National Green Tribunal. This Court does not find any reason to interfere with the order passed by the |

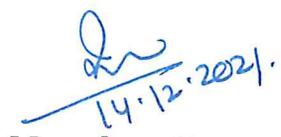
| Sl. No. | High Court Case No. / WP No. | Brief Petition / Prayer | Order with date – Status. |
|---------|------------------------------|--|---|
| | | | National Green Tribunal, which is only in respect of preservation of lakes. Writ Petitions are dismissed. Consequently, Interlocutory Applications, pending if any, stand dismissed. |
| 7. | 8020/2005 | Respondents authorities in trying to demolish petitioners houses situated in Sy No 42 of Bam Rukunddowla village Rajendernagar Mandal Ranga Reddy District bearing D No s 81399/1 81399 81399/5 81399/6 81399/9 81399/4 81399/3 81399/11 81399/15 81399/7 81399/10 81399/8 81399/14 81399/13and 81399/12 duly assessed by the municipality without issue of any notice | Order dated 24.10.2011 -- Having heard the learned counsel for the petitioners as well as the learned Government Pleader for Revenue and having regard to the interim order already passed, no further adjudication is necessary. |

Presently, all the three drains are diverted. The TSPCB Officials collected samples from Bum-Rukn-ud-Dowla Lake on 26.11.2021. The analysis indicates water quality as Class 'D'. The water quality of the Lake improved from earlier Class 'E' to Class 'D'.

Place: Hyderabad.

Date: 14.12.2021


**Director (Planning),
Municipal Administration &
Urban Development Dept.
Govt of Telangana.**


**Member Secretary,
Telangana State Pollution
Control Board.**

GOVERNMENT OF TELANGANA
ABSTRACT

MA&UD Dept., HMWSSB - Comprehensive Sewerage Master Plan for Hyderabad - Construction of (31) STPs in three Packages under Sewerage Improvement - Administration sanction for Package-I and Package -II (Musi River Catchment) and budget allocation - Orders -Issued.

MUNICIPAL ADMINISTRATION & URBAN DEVELOPMENT (ENGG.2) DEPARTMENT

G.O. Rt. No.669

Dated:22.09.2021

Read the following:-

1. G.O.Rt. No. 518, MA&UD(Engg) Dept., Dated 02.07.2018.
2. From the M.D., HMWSSB, Hyderabad Letter No. HMWSSB/MD/STPs-Projects/as/2020-21, Dated: 19.08.2020.
3. G.O.Rt.No. 374, MA&UD(Engg.2) Dept., Dated 11.09.2020.
4. From the MD., HMWSSB, Letter No. HMWSSB/MD/STPs-Projects/as/2020-21/34 and note Dated:04.02.2021.

ORDER:-

It was reported by the Managing Director, Hyderabad Metropolitan Water Supply & Sewerage Board, that the existing sewerage system is having the sewer network and sewage treatment plants. The present sewage generation in GHMC area is 1650 MLD.

2. It was reported that the present sewage treatment capacity is 772MLD through 25 STPs existing in GHMC area which accounts for 46.78% of treatment capacity.

3. It was reported that, in GHMC area, the gap of sewage treatment is 878 MLD which is mostly flowing through river Musi. Further it was reported that, the service area of HMWSSB was extended upto ORR by the Government. After detailed review of sewerage status, the Government has appointed M/s.Shah Technical Consultants, Mumbai for preparation of Comprehensive Sewerage Master Plan for Hyderabad Urban Agglomeration (HUA) vide reference 1st cited.

4. The Managing Director, Hyderabad Metropolitan Water Supply & Sewerage Board reported that, the consultant has conducted the detailed study of planning, survey, investigation, design, estimations and furnished the "Comprehensive Sewerage Master Plan (CSMP)" for HUA. As per the study of M/s.Shah Technical Consultants, Mumbai, it was reported that the total generation of sewage for the year 2021 is 1950 Mld i.e. 1650 MLD in GHMC and 300 MLD in ORR area. The estimated sewage flows for the year 2036 is 2814Mld and for the year 2051 is 3715 Mld. The consultants have recommended for construction of 62 STPs for the estimated sewage flows of year 2036.

5. Further the consultants have prioritized 31 STPs for GHMC in 3 packages for immediate phase as under:-

Package-1: 8 STPs of 402.5MLD capacity at a cost of Rs.1230.21 Crores including O&M for 15 years for North of Musi.

Package-2: 6 STPs of 480.5MLD at a cost of Rs.1355.13 Crores including O&M for 15 years for South of Musi.

Package-3: 17 STPs of 376.5 MLD capacity at a cost of Rs.1280.87 Crores including O&M for 15 years for Kukatpally-H.S.Lake Catchment.

6. The consultants have reported that, by implementation of 3 Packages as above, the 100% sewage treatment will takes place in GHMC area. In the reference 2nd read above, the M.D., HMWSSB, has submitted the proposals for 31 STPs in 3 packages to the Government for administrative sanction to take up under HAM mode of contracts i.e. 60% investment by agency and 40% cost by the Government, with project implementation period of 2 years and O & M

Period of 15 years as above. In the reference 3rd read above, Government have accorded administrative approval for construction of 17 STPs in the catchment Nalas of Hussain Sagar, under HAM Mode of contract, to meet the 40% of Government share coming to Rs.512.35 Crores which is to be provided in two years i.e. Rs. 256.175 Crores per year from Hyderabad Urban Agglomeration Budget. In the reference 4th read above, the MD., HMWSSB has requested the Government for Administrative sanction for the Package-I and Package-II STPs of Musi River Catchment with budget allocation of all three packages to the HMWSSB for implementation under HAM mode of contract. It was also reported that, the Hon'ble NGT is constantly issuing directions for establishment of STPs for all urban cities including Hyderabad City. Further MD, HMWSSB reported that, as there is trend of positive responses to the investments by the private agencies to the STPs projects under HAM mode of contracts, it is proposed to consider the implementation of these 2 STP projects under HAM (60:40) mode.

7. The budgetary requirement towards 40% share of the Government to be provided in 2 years during 1st year & 2nd year for all three STP packages is submitted as below:-

| STP Project Name & Package | Total Project Cost (Rs. inCr.) | Total Government shares towards 40% cost (Rs.in Cr.) | Government share during 1 st year (2021-22) (Rs. In Cr.) | Government share during 1 st year (2022-23) (rs. In Cr.) |
|--|--------------------------------|--|---|---|
| Package-3 - Hussainsagar Lake Catchment area STPs Project (already accorded administrative sanction vide GO Rt.No.374, dt: 11.9.2020) | 1280.87 | 512.35 | 256.175 | 256.175 |
| Package-1 - North of Musi STPs Project | 1230.21 | 492.084 | 246.042 | 246.042 |
| Package-2 - South of Musi STPs Project | 1355.13 | 542.052 | 271.026 | 271.026 |
| Total | 3866.21 | 1546.486 | 773.243 | 773.243 |

The Managing Director, Hyderabad Metropolitan Water Supply & Sewerage Board has requested the Government for Administrative Sanction to the two packages of Package-I and Package-II (Musi River Catchment) for implementation.

8. After careful examination of the entire matter, the Government hereby accord administrative sanction for the STPs of Package-I & Package-II under HAM mode of contract (60% investment by agency & 40% share through Government budget) for implementation of the projects in 2 years period:-

Package-1: Construction of 8 STPs of 402.5MLD capacity at a cost of Rs.1230.21 Crores including O&M for 15 years with budgetary support of Rs.246.042 Cr in 1st year & Rs.246.042 Cr for 2nd year.

Package-2: Construction of 6 STPs of 480.5 MLD capacity at a cost of Rs.1355.13 Crores including O&M for 15 years with budgetary support of Rs.271.026 Cr in 1st year & Rs.271.026 Cr for 2nd year.

9. The Hyderabad Metropolitan Water Supply & Sewerage Board shall ensure that on implementation of the STP projects of Package-I, II & III by construction of 31 STPs, the 100% sewage generated in GHMC area shall be processed, treated and disposed.

10. The Managing Director, Hyderabad Metropolitan Water Supply & Sewerage Board shall take further action accordingly.

11. This order issued with the concurrence of Finance (DCM) Department vide their U.O. No. 2248/227/A2/DCM/2020, Dated :07.01.2021.

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF TELANGANA)

**ARVIND KUMAR
SPECIAL CHIEF SECRETARY TO GOVERNMENT**

To
The M.D., HMWS&SB, Hyderabad.

3 8

Copy to:

The P.S. to Prl. Secretary to C.M.
OSD to Minister (MAUD)

The Finance (DCM) Department,
The G.A.(Cabinet) Department.

P.S. Spl. C.S. to Government, MA&UD Dept.

P.A. to Secretary to Government, MA&UD Dept.

//FORWARDED:: BY ORDER//

J. J. J.
SECTION OFFICER

9

Annexure -III

Proposed STP in priority I & II in Telangana in GHMC

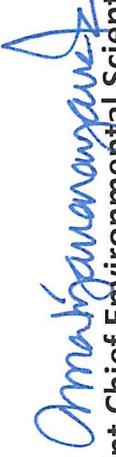
| No. | Location | Capacity of the STP proposed in MLD | Status of Project (at DPR Stage/ Under Tendering/ Work to be Awarded) | Likely Date of Completion |
|--------------------|-----------------------------------|-------------------------------------|--|---------------------------|
| Package-III | | | | |
| 1 | Ambar Cheruvu (Pragathi Nagar) | 37.00 | Tenders successfully completed. Agency is placed and works will commence in 1 st week of April. | 2022 |
| 2 | Chinna Maisamma | 14.50 | | |
| 3 | Nalla Cheruvu (Kukatpally) | 15.00 | | |
| 4 | Khajakunta | 22.00 | | |
| 5 | Yellammakunta Lake (Jaya Nagar) | 13.50 | | |
| 6 | Fathe Nagar | 100.00 | | |
| 7 | Vennelagadda | 5.00 | | |
| 8 | Gayatri Nagar (Chintal) | 5.00 | | |
| 9 | Fox Sagar Lake | 14.00 | | |
| 10 | Shivalaya Nagar Cheruvu | 14.00 | | |
| 11 | Pariki Cheruvu (Kandri Gutta) | 28.00 | | |
| 12 | Durgam Cheruvu | 7.00 | | |
| 13 | Khajaguda | 21.00 | | |
| 14 | Miyapur Patel Cheruvu | 7.00 | | |
| 15 | Gangaram Cheruvu | 20.00 | | |
| 16 | Mullakathuva Cheruvu | 33.50 | | |
| 17 | Kamuni Cheruvu | 20.00 | | |
| Total | | 376.5 | | |
| Package-I | | | | |
| 18 | New Alwal Lake | 15.50 | Proposals are under sanction stage at Government level. | |
| 19 | R K Puram Lake (Mukkiddi cheruvu) | 5.50 | | |
| 20 | Banda Cheruvu | 15.00 | | |
| 21 | Kapra Lake | 20.00 | | |
| 22 | Rama Cheruvu | 30.00 | | |
| 23 | Pedda Cheruvu | 17.50 | | |
| 24 | Nalla Cheruvu | 86.50 | | |
| 25 | Amberpet | 212.50 | | |
| Total | | 402.50 | | |
| Package-II | | | | |
| 26 | Miralam Site 1 | 30.00 | Proposal are under sanction stage at Government level. | |
| 27 | Miralam Site | 11.50 | | |
| 28 | Bapughat STP at Attapur Site | 48.00 | | |
| 29 | Kokapat Lake | 15.00 | | |
| 30 | Ibrahim Cheruvu | 56.00 | | |
| 31 | Nagole | 320.00 | | |
| Total | | 480.50 | | |

Compliance Status of Miralam Tank STP -10 MLD for the year 2021

| Month/ Parameter | pH | EC | TSS | TDS | DO | COD | BOD | T.Coli | F.Coli | Compliance status |
|----------------------------|----------------|------|------------|------|-----|------------|-----------|--------|--------|---------------------------------|
| discharge Standards | 5.5-9.0 | - | 100 | - | - | 250 | 30 | - | - | Within the stipulated standards |
| January | 7.77 | 1894 | 20 | 1042 | 7.5 | 28 | 9 | 120 | 1.8 | |
| February | 8.09 | 1555 | 8 | 992 | 5.6 | 40 | 9 | 1.8 | 1.8 | |
| March | 7.74 | 1750 | 10 | 962 | 5.3 | 60 | 20 | 49 | 13 | |
| April | 7.76 | 1571 | 6 | 958 | 4.8 | 20 | 7 | 46 | 11 | |
| May | 7.87 | 1420 | 5 | 786 | 4.4 | 24 | 8 | 220 | 33 | |
| June | 7.99 | 1229 | 18 | 655 | 3 | 89 | 23 | 70 | 22 | |
| July | 7.15 | 1190 | 18 | 677 | 3.9 | 96 | 26 | 94 | 15 | |
| August | 8.56 | 1781 | 28 | 1063 | 5 | 28 | 7 | 210 | 31 | |
| September | 7.81 | 1209 | <5 | 684 | 4.2 | 28 | 10 | 140 | 33 | |
| October | 7.26 | 1286 | 6 | 710 | 4.1 | 36 | 12 | 94 | 33 | |
| November | 7.54 | 1496 | 16 | 855 | 4.0 | 52 | 19 | 170 | 70 | |

Compliance Status of Miralam Tank STP -5 MLD for the year 2021

| Month/ Parameter | pH | EC | TSS | TDS | DO | COD | BOD | T.Coli | F.Coli | Compliance status |
|----------------------------|----------------|------|------------|------|-----|------------|-----------|--------|--------|---------------------------------|
| discharge Standards | 5.5-9.0 | - | 100 | - | - | 250 | 30 | - | - | Within the stipulated standards |
| January | 7.57 | 2175 | 18 | 1175 | 4.5 | 53 | 14 | 79 | 13 | |
| February | 8.00 | 1440 | 8 | 807 | 4.9 | 16 | 8 | 130 | 49 | |
| March | 7.76 | 1376 | 8 | 722 | 4.9 | 33 | 16 | 31 | 13 | |
| April | 8.49 | 1506 | <5 | 840 | 4.4 | 28 | 9 | 23 | 8 | |
| May | 7.90 | 1413 | <5 | 794 | 4.5 | 36 | 12 | 58 | 13 | |
| June | 8.03 | 1418 | 12 | 808 | 2.8 | 41 | 15 | 130 | 17 | |
| July | 8.31 | 1304 | 7 | 732 | 4.8 | 24 | 8 | 350 | 32 | |
| August | 8.66 | 1585 | 14 | 846 | 3.8 | 24 | 9 | 240 | 27 | |
| September | 8.17 | 1531 | 16 | 958 | 4.2 | 56 | 18 | 540 | 110 | |
| October | 8.55 | 1926 | 28 | 1076 | 3.8 | 40 | 14 | 130 | 33 | |
| November | 7.47 | 1868 | 24 | 1031 | 3.3 | 126 | 28 | 350 | 17 | |


 Joint Chief Environmental Scientist

NOTES:
 1. ALL LEVELS ARE IN METRES.
 2. DO NOT SCALE THE DRAWING.

LEGEND:

- FULL TANK LEVEL (FTL)
- △ EXISTING FTL PILLAR
- TOE LINE
- GPS CONTROL POINTS
- BUND TOP
- BT ROAD
- CART TRACK
- ROCK/BOULDERS
- CHURCH/TEMPLE/MOSQUE
- TOMB/DHATRI/GRAVES
- SORE WELL POINT
- POWER LINE WITH POLE
- TRANSFORMER
- HT-TOWER
- WATER SPREAD
- WELL
- BUILDINGS
- COMPOUND WALL
- INLET / OUTLET
- TREE
- CULVERT
- DRAIN / STREAM
- FENCING
- RAILWAY TRACK
- VILLAGE BOUNDARY
- BUFFER ZONE 9m FROM FTL LINE

LAKE DETAILS:

- 1. WATER SPREAD AREA : 8.915 Acres
- 2. AREA OF THE TANK UPTO FTL : 18.575 Acres
- 3. WATER LEVEL : +100.032
- 4. FULL TANK LEVEL (FTL) : +101.850
- 5. FULL TANK LEVEL PERIMETER : 1597.783m
- 6. BUND LENGTH : 503.000m
- 7. DATE OF SURVEY : 28-02-2014

Client: GREATER HYDERABAD MUNICIPAL CORPORATION

Project: SURVEY OF LAKES IN GHMC AREA

Title: PLAN OF BOMRUKUD-DOWLA LAKE (HUDA PARK) (ID-2935)

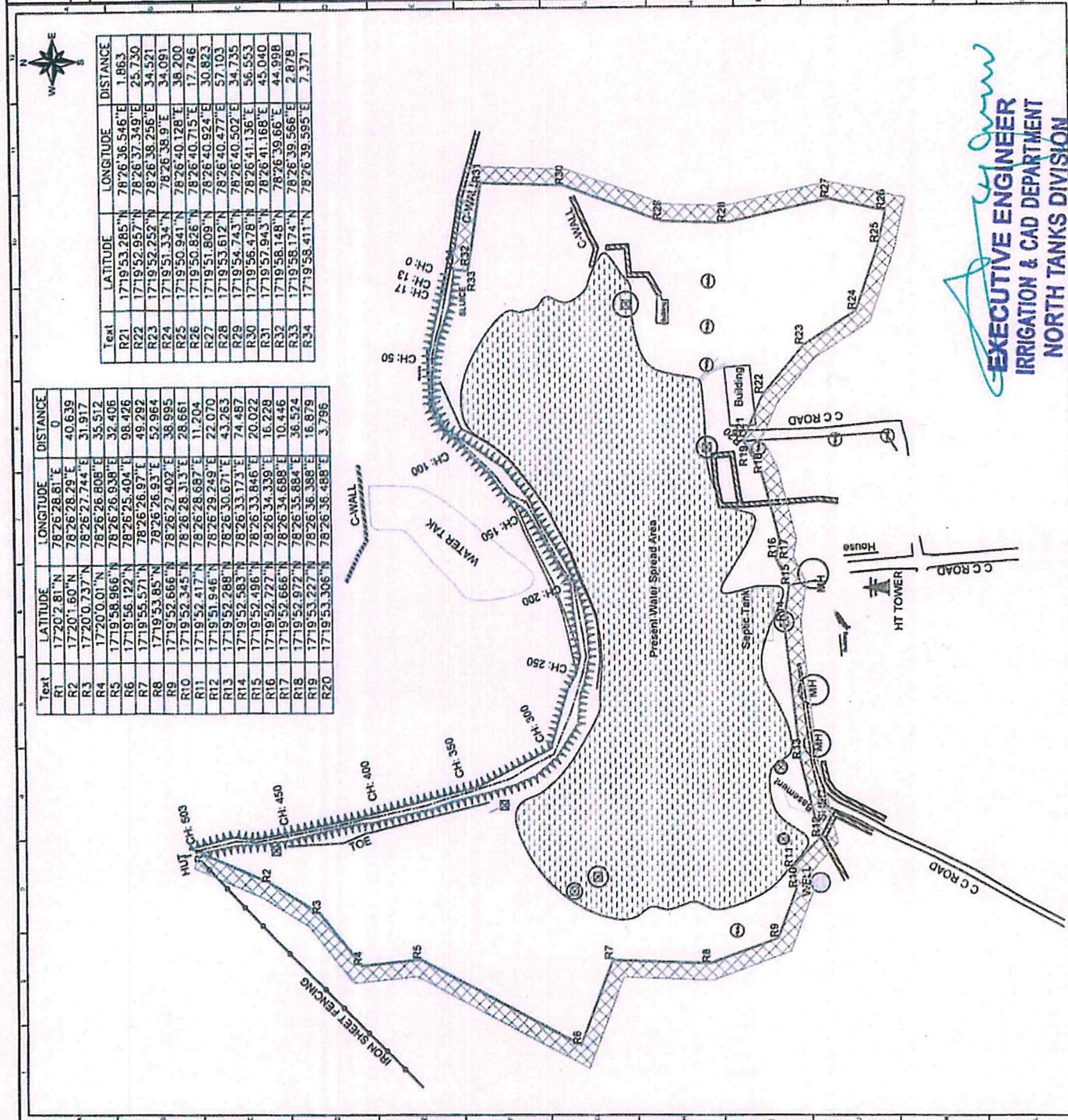
Consultants: BOMRUKUD-DOWLA VILLAGE, GANDIPET MANDAL

Scale: 1:1500

Prepared: N. Yesuvaraj
Drawn: E. Reddihala
Checked: M. Jagadeesh
Approved: Ch. Lingalah

Sheet No.: 1
Date:

Dwg. No.: AA/R/R/144010D - 2835



| Text | LATITUDE | LONGITUDE | DISTANCE |
|------|---------------|---------------|----------|
| R1 | 17°20'28.1"N | 78°26'28.61"E | 0 |
| R2 | 17°20'1.60"N | 78°26'28.29"E | 40.639 |
| R3 | 17°20'0.73"N | 78°26'27.74"E | 31.917 |
| R4 | 17°20'0.01"N | 78°26'26.80"E | 35.512 |
| R5 | 17°19'58.96"N | 78°26'26.93"E | 32.406 |
| R6 | 17°19'58.12"N | 78°26'25.40"E | 98.426 |
| R7 | 17°19'55.57"N | 78°26'26.97"E | 49.292 |
| R8 | 17°19'53.85"N | 78°26'26.93"E | 52.964 |
| R9 | 17°19'52.66"N | 78°26'27.40"E | 38.985 |
| R10 | 17°19'52.34"N | 78°26'28.31"E | 28.661 |
| R11 | 17°19'52.41"N | 78°26'28.68"E | 11.204 |
| R12 | 17°19'51.94"N | 78°26'29.24"E | 22.070 |
| R13 | 17°19'52.28"N | 78°26'30.67"E | 43.263 |
| R14 | 17°19'52.58"N | 78°26'33.17"E | 74.487 |
| R15 | 17°19'52.49"N | 78°26'33.84"E | 20.022 |
| R16 | 17°19'52.72"N | 78°26'34.33"E | 16.228 |
| R17 | 17°19'52.66"N | 78°26'34.68"E | 10.446 |
| R18 | 17°19'52.97"N | 78°26'35.88"E | 36.524 |
| R19 | 17°19'53.22"N | 78°26'36.38"E | 16.879 |
| R20 | 17°19'53.30"N | 78°26'36.48"E | 3.796 |
| R21 | 17°19'53.28"N | 78°26'36.54"E | 1.863 |
| R22 | 17°19'52.95"N | 78°26'37.34"E | 25.730 |
| R23 | 17°19'52.25"N | 78°26'38.25"E | 34.521 |
| R24 | 17°19'51.33"N | 78°26'38.97"E | 34.091 |
| R25 | 17°19'50.94"N | 78°26'40.12"E | 38.200 |
| R26 | 17°19'50.83"N | 78°26'40.71"E | 17.746 |
| R27 | 17°19'50.83"N | 78°26'40.92"E | 30.823 |
| R28 | 17°19'53.61"N | 78°26'40.87"E | 57.103 |
| R29 | 17°19'54.74"N | 78°26'40.50"E | 34.735 |
| R30 | 17°19'56.47"N | 78°26'41.13"E | 56.553 |
| R31 | 17°19'57.94"N | 78°26'41.16"E | 45.040 |
| R32 | 17°19'58.14"N | 78°26'39.66"E | 44.998 |
| R33 | 17°19'58.12"N | 78°26'39.56"E | 2.878 |
| R34 | 17°19'58.41"N | 78°26'39.59"E | 7.371 |

| Text | LATITUDE | LONGITUDE | DISTANCE |
|------|---------------|---------------|----------|
| R1 | 17°20'28.1"N | 78°26'28.61"E | 0 |
| R2 | 17°20'1.60"N | 78°26'28.29"E | 40.639 |
| R3 | 17°20'0.73"N | 78°26'27.74"E | 31.917 |
| R4 | 17°20'0.01"N | 78°26'26.80"E | 35.512 |
| R5 | 17°19'58.96"N | 78°26'26.93"E | 32.406 |
| R6 | 17°19'58.12"N | 78°26'25.40"E | 98.426 |
| R7 | 17°19'55.57"N | 78°26'26.97"E | 49.292 |
| R8 | 17°19'53.85"N | 78°26'26.93"E | 52.964 |
| R9 | 17°19'52.66"N | 78°26'27.40"E | 38.985 |
| R10 | 17°19'52.34"N | 78°26'28.31"E | 28.661 |
| R11 | 17°19'52.41"N | 78°26'28.68"E | 11.204 |
| R12 | 17°19'51.94"N | 78°26'29.24"E | 22.070 |
| R13 | 17°19'52.28"N | 78°26'30.67"E | 43.263 |
| R14 | 17°19'52.58"N | 78°26'33.17"E | 74.487 |
| R15 | 17°19'52.49"N | 78°26'33.84"E | 20.022 |
| R16 | 17°19'52.72"N | 78°26'34.33"E | 16.228 |
| R17 | 17°19'52.66"N | 78°26'34.68"E | 10.446 |
| R18 | 17°19'52.97"N | 78°26'35.88"E | 36.524 |
| R19 | 17°19'53.22"N | 78°26'36.38"E | 16.879 |
| R20 | 17°19'53.30"N | 78°26'36.48"E | 3.796 |

EXECUTIVE ENGINEER
 IRRIGATION & CAD DEPARTMENT
 NORTH TANKS DIVISION
 HYDERABAD

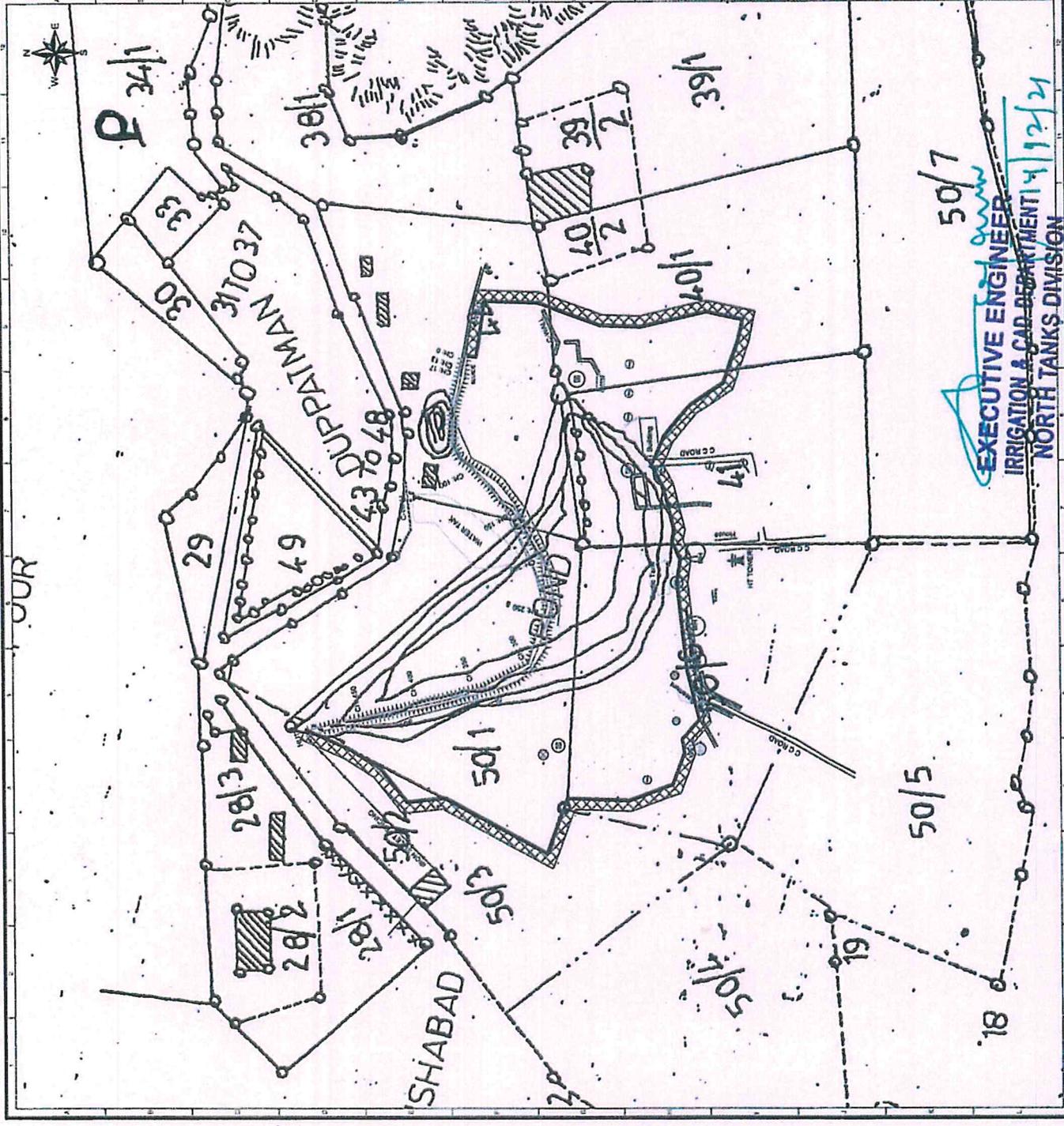
R.0

NOTES:
1. ALL LEVELS ARE IN METRES.

LEGEND:

| | |
|--|------------------------------|
| | FULL TANK LEVEL (FTL) |
| | EXISTING FTL PILLAR |
| | TOE LINE |
| | GPS CONTROL POINTS |
| | BLIND TOP |
| | BT ROAD |
| | CART TRACK |
| | ROCK / BOULDERS |
| | CHURCH / TEMPLE / MOSQUE |
| | TOMB / CHHATRA / GRAVES |
| | BORE WELL POINT |
| | POWER LINE WITH POLE |
| | TRANSFORMER |
| | HT TOWER |
| | WATER SPREAD |
| | WELL |
| | BUILDINGS |
| | COMPOUND WALL |
| | INLET / OUTLET |
| | TREE |
| | CULVERT |
| | DRAIN / STREAM |
| | FENCING |
| | RAILWAY TRACK |
| | VILLAGE BOUNDARY |
| | BUFFER ZONE 8m FROM FTL LINE |

| | | | |
|--------------|---|-----------|-----------------|
| Rev. | Draft Copy | Date | Signature |
| Client: | GREATER HYDERABAD MUNICIPAL CORPORATION | | |
| Project: | SURVEY OF LAKES IN GHMC AREA | | |
| Title: | CADASTRAL MAP OF BUM RUKH UDDIN DOWLA LAKE (HUDA PARK) (ID-2935) BUM RUKH UDDIN DOWLA VILLAGE, GANDIPET MANDAL | | |
| Consultants: | aarvee associates architects, engineers, consultants, pvt. ltd. 10th Floor, The Hyderabad Towers, 100, Hyderabad Road, Hyderabad - 500004, India. | | |
| Dig. No. | AAURR14401D - 2013 | Sheet No. | 2 of 5 |
| Scale: | 1:1000 | Prepared: | A. Srinivasa |
| | | Drawn: | E. Ramesh |
| | | Checked: | V. Appanna |
| | | Approved: | R. Venkateswulu |



50/7
 EXECUTIVE ENGINEER
 IRRIGATION & CAD DEPARTMENT 19/12/24
 NORTH TANKS DIVISION
 HYDERABAD

