

GOVERNMENT OF ANDHRA PRADESH
Office of the Engineer-in-Chief, Rural Water Supply & Sanitation, Hyderabad.

Memo No.AEE/DEE-II (Designs)Type designs-OHSRs/2012 .dt : 31 .12 .2012

Sub: RWS&S (P) –Revised –Type Drawings – for OHSRs with normal staging around 13 mts column –brace structure –with ring raft foundations for S.B.C 7.5 t/M2 and 10 t/M2 – Column staging with Flat bottoms- M30 grade Concrete –for basic wind speed 44 m/s and 50 m/s– Copy- communicated - Reg.

Ref: 1. Lr.Rc.No.T2/State Plan /Nadupuru /Designs/2012, dt: 16.11.2012 of the SE,RWS&S, Krishna District.
2. Cir.Memo.No AEE1/DEE (Designs) /Type designs –OHSRs /2011 Dated: 25.03.2011.

The attention of the Superintending Engineers in the State, are invited to the reference 2nd cited, where in the approved drawings are communicated for OHSRs with domed bottoms. There has been a request from the Field Engineers, to provide the bottom slabs for small capacities up to 60KL, as they are facing difficulties in construction of domed bottoms.

Hence the approved revised drawings and deigns for OHSRs with M30 grade Concrete are communicated here with along the assumptions slip for 20KL, 40KL, 60KL, with normal staging around 13.0 mts for the S.B.C of 7.5 T/M2 to 10T/M2 for wind speed with 50m/sec (May be used for 44m/sec) using IS 456(2000) , IS875(1987), and IS 3370(2009).

The old Type Designs for M20 with flat bottoms with over hanging sections are unsafe based on the revised codal provisions of IS 3370(2009) and IS 456(2000) and also all the water retaining structures have to be designed with M30 grade concrete.

The receipt of this memo along with enclosures has to be acknowledged in the first .

Encl:

1. Revised Drawings of OHSRs in soft copy.
2. Assumption slip.

SD/-(R.Chakrapani)
Engineer-in-Chief (RWS & S)
Hyderabad.

To

All the Superintending Engineer, RWS & S, Dept.

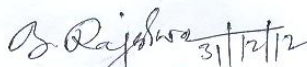
Copy to all Chief Engineers/ Project Director, RWS&S, Dept for adoption.

Copy to all Superintending Engineers, O/O ENC, RWS&S, Dept Hyd for information and adoption .

Copy to all Executive Engineers/ Project Directors, RWS&S, Dept for adoption.

Copy to all Deputy Executive Engineers/ Project Director, RWS&S, Dept for information and adoption.

// Authenticated //


Deputy Executive Engineer



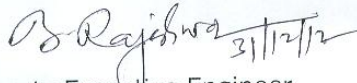
ASSUMPTIONS FOR DESIGNS OF OHSR

1. Ring raft foundations has been proposed for the moderate staging around 13 m.
2. The structure been designed based on IS 456-2000 and IS 3370(2009)
3. The entire structure designed for " severe" environmental classification category as per IS 3370(2009).
4. The S.B.C of soils has been assumed from 7.5 T/m², 10 T/m² ,and 15 T/m² .For lesser S.B.C Soils , the soils have to be stabilized to 7.5 T/M².as designs are limited for 7.5 T/m² SBC .
5. Basic Wind speed assumed based on IS 875 (1987)
 - (a) 50m/sec wind speed for coastal area, which are having not greater than 60 kms radial distance from sea coast.
 - (b) 44m/sec wind speed for coastal area, in the state beyond 60km from the radial distance from sea coast.
6. The seismic load factor for IInd Zone area has been considered for design of braces and columns special design is required for more than II nd Zone areas .
7. M30 Concrete and Fe415 steel have been considered .
8. Water cement Ratio has to be Maintained by 0.45 as per IS 3370(2009)
9. The super plasticizers for workability of concrete and CONCARE liquids for rust proof shall be used for all members of structure .
10. 50 mm Cover for the reinforcement for foundation slabs and 45 mm for all other members as per IS 3370(2009).
11. The reinforcement detailing SP34 has to be followed.

SD/-(R.Chakrapani)
Engineer-in-Chief (RWS & S)
Hyderabad.

To
All the Superintending Engineer, RWS & S, Dept.

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Deputy Executive Engineer
