Justification for location of the project in forest area

The Telangana Drinking water project (TDWSP) is intended to provide safe drinking water to every habitation at a service level with 100 lpcd at household level from a sustainable surface water source. As a part of the project, it is proposed to provide safe drinking water to 4 Mandals in Sathupalli Constituency from Wyra reservoir as raw water source.

The work **"Laying of Pipe Line and Construction of Structures to Provide safe Drinking Water in Sathupalli Constituency – Segment 26/1"** All possible alternate routes for laying of pipelines have been examined and when it is inevitable and no other alternative route except through forest and Water Treatment Plant Structure in the Forest Area is essential to treat the raw water then supply clear water through gravity mains to habitations in the Sathupalli Constituency in Khammam District. As per the Hydraulic Designs and Topography of the Area the proposed locations are very much essential for laying of pumping main, gravity mains and construction of water treatment plant and there are no other possible alternative alignment.

Cost of the Project: Administrative sanctioned for Rs.155.00 Crores vide GO.MS. No.82, Dt.07-02-2015 of PR&RD. The copy of GO enclosed herewith.

Superintending Engineer
TDWSP Circle, Khammam

"Counter Signed"

Chief Engineer
TDWSP ,Hyderabad

Location wise Justification Report for the project proposed in forest area

Proposed Reach: Pipeline (Pumping Main) from Wyra Intake well to WTP at Kannegiri RF

Merits/Demerits : The pipeline is proposed to pump the raw water to proposed Water Treatment plant (WTP) then treated water will distribute to 4 Mandals from this point only. The pumping main is route shortened by this identified area thereby pumping of raw water can saves power and thereby reduces the operational costs thereby leads to economy. The WTP proposed in Forest area so the pumping pipeline has to cross the forest boundary.

Alternative alignment: Alternative alignment is not possible because this is the only shortest route to reduce the pumping main length. The pumping main just enters the forest area from the non forest area there by pipeline length in forest area is reduced.

Merits/Demerits : Proposed alignment path is economical and shortest one.

Justification: The proposed reach is economical as per the Hydraulic designs and Topography of the Area the proposed location is very much essential.

Proposed Reach: **Water Treatment Plant (WTP)**

Merits/Demerits: The scheme is designed mainly on gravity principle as such the treated water will be pumped to a nearby higher elevation from there the water will be distributed by gravity to all habitations. It is technically and economically ideal to provide Water Treatment Plant at the foot hill to treat the raw water and to pump treated water to GLBRs over the hills. This is the only location available in the vicinity with no tree growth and plain land available to lay the pipeline and construction of structure.

Alternative alignment: Possible alternatives examined. Alternate alignment is not possible because natural plain land near foot of the hills is available is present at this location only. It is technically and economically ideal to provide WTP in this location such that the pumping mains and gravity mains are easily passes to and fro from this location without any damage to forest area. The pumping main is route shortened by this identified area thereby pumping of raw water can saves power and thereby reduces the operational costs thereby leads to economy.

Merits/Demerits : Construction of WTP away from forest area leads to increase in pumping length which in turn will increase power and operational costs.

Justification: As per the Hydraulic designs, existing natural conditions and Topography of the Area the proposed location/alignment is very much essential for construction of WTP. The water will flow by gravity to village OHSRs from these OHBRs without any hindrances like re-pumping stations and power requirements at different locations.

Proposed Reach: **Pipeline (Distribution) from Water Treatment Plant (WTP) at Kannegiri RF to outside forest area**

Merits/Demerits : The distribution pipelines are proposed to distribute the treated water to 4 Mandals from this point only. These pipelines will be laid adjacent to pumping main to cross the forest boundary and to reduce the forest stretch.

Alternative alignment: Alternative alignment means pipeline has to lay away from the pumping main route in forest area there by the pipeline coverage in forest area is increased to reduce the forest coverage these distribution pipelines proposed adjacent to the pumping main to easy maintenance. To cross from WTP the laying of pipeline is not possible because of there is no path.

Merits/Demerits : Proposed alignment path is economical, easy maintainable and shortest one.

Justification: The proposed reach is economical as per the Hydraulic designs and Topography of the Area the proposed location is very much essential.

Superintending Engineer
TDWSP Circle, Khammam

"Counter Signed"

Chief Engineer
TDWSP, Hyderabad