

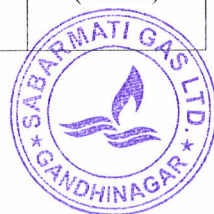
JUSTIFICATION

In continuation of the requirements of Environmental parameters, construction methodologies to be adopted for different terrain encountered enroute, design and engineering factors, availability of logistic support during construction, operation and maintenance of pipeline, various feasible routes were identified by the consultant **Multi Mantech International Pvt. Ltd.** based on desk study of relevant topographic maps of survey of India.

The study was subsequently supplemented with field reconnaissance and data collection along the feasible routes. Finally the optimum route was arrived at after analyzing the various data and conducting in depth study of topographic maps based on field data.

The route is finalized. **The route for laying For 8" Dia Steel Gas Pipeline Connectivity For Kishorpura SGL DRS To Rojad Swaminarayan CNG Station, Dist: Sabarkantha & Aravali (0.58352 Ha)**

Sr. No.	Description	Length (mt)	Width (mt)	Trench width (mt)	Area (Sq.m)	Area (Ha.)	Division
1	Crossing of SH-57 Kishorpura-Modasa Road Protected Forest @ch 0 to @ch 24	-	24	0.4	9.6	0.00096	Sabarkantha (North)
2	Crossing of SH-145 Ranasan-Radiyol Road Protected Forest @ch 26 to @ch 50	-	24	0.4	9.6	0.00096	Sabarkantha (North)
3	Parallel to SH-57 Kishorpura-Rojad Road Protected Forest @ch 50 to @ch 5530	5480	-	0.4	2192	0.2192	Sabarkantha (North)
4	Parallel to SH-57 Kishorpura-Rojad Road Protected Forest @ch 5530 to @ch 10087	4557	-	0.4	1822.8	0.18228	Sabarkantha (North)
5	Parallel to SH-57 Kishorpura-Rojad Road Protected Forest @ch 10087 to @ch 12719	2632	-	0.4	1052.8	0.10528	Sabarkantha (North)
6	Parallel to SH-57 Kishorpura-Rojad Road Protected Forest @ch 12719 to @ch 14460	1741	-	0.4	696.4	0.06964	Sabarkantha (North)
7	Parallel to SH-68 Talod-Harsol-Dhansura Road Protected Forest @ch 14460 to @ch 14560	100	-	0.4	40	0.004	Sabarkantha (North)



8	Crossing of SH-68 Talod-Harsol-Dhansura Protected Forest @ch 14560 to @ch 14590	Road	-	30	0.4	12	0.0012	Sabarkantha (North)
Diversion Area						5835.2	0.58352	

The pipeline will be laid at minimum 1.2m below ground level and as per the requirement of the authority.

The pipeline will be passing through protected forest land for about 5835.2 Sq.m.i.e. 0.58352 Hectares of land as per enclosed **Annexure-7**.

Factors considered :

While identifying the various alternatives for selection of the optimum route following factors were considered.

➤ **Pipeline route has been finalized in such a way that minimum forest land will be utilized as well as tree cutting will be minimum.**

- Demand and supply center.
- Compliance with environmental regulations.
- Safety of people and property.
- Shortest possible pipeline length.
- Minimum number of bends.
- Favorable ground profile for pipeline hydraulics.
- Accessibility to pipeline route during construction maintenance and other operation.
- Location of pipeline facilities and access there to
- Avoidance of mining protected and reserved forest archaeological and other sensitive areas.
- Avoidance of unstable ground features.
- Minimizing road, rail, rivers and flood prone areas.
- Avoidance of rocky stretches
- Avoidance of areas reserved for planned future development.
- Feasibility for future expansion.

Based on the above detailed route surveys have been carried out to finalize the exact corridor for laying the pipeline.

For, Sabarmati Gas Limited.,

(Mehul Surti)
Chief Manager (TS&P)

