

## **PROJECT NOTE**

### **INTRODUCTION:-**

Gujarat Gas Limited (Gujarat Gas), having the registered office of the company situated in the State of Gujarat at Block No. 15, 3rd Floor, Udyog Bhavan, Sector-11, Gandhinagar.

Gujarat Gas Limited (Gujarat Gas) is currently in the business to setup Piped Natural Gas network (PNG) to provide PNG for residential consumers as well as commercial units and CNG Station in various cities/town of Dadra and Nagar Haveli.

Gujarat Gas Limited has planned for the year 2017-18 to expand existing / ongoing network by laying pipeline to provide natural gas to various en-route villages in Dadra and Nagar Haveli.

It will be laid underground with a minimum clear cover of 1.2 meter.

One of the main objects to be pursued by the company on its incorporation is to lay, design, construct, fabricate, install and maintain gas process and gas manufacturing plants, gas installation including gas storage, machinery apparatus, pipes, valves fillings, meters and other allied accessories necessary and useful for the manufacturer, supply and destination of gas and energy.

### **Investigation: -**

The route has been carefully selected to minimize total length of the pipeline and forests based on desktop study and reconnaissance survey carried out by consultants M/s. Secon Pvt. Ltd.

The Right of Use (RoU) for forest area is proposed as a minimum of 0.5 mts. width (which is the minimum requirement).

The alignment is selected in such a way that while crossing the area under forest cutting of trees is minimized / avoided.

### **Design: -**

The entire pipeline will be designed to withstand a Maximum Allowable Operating Pressure (MAOP) of 99 Kg per Sq. Cm. The design code that generally will be followed would be ANSI B31.8. However, good engineering practices and other guidelines from other international standards like OISD (Oil Industries and Safety Directorate) will be followed as felt necessary to make the pipeline operation standard and safe. 20% excess flow capacity will be built in to pipe size to provide flexibility to the customer and to absorb hourly fluctuations of its consumption and spread its committed quantity over 24 hours.

### **Pipe material: -**

Pipe material would be American Petroleum Institute (API) grade steel, inspected at mills through third party inspection agency. All valves would be full-bore ball with gas/gas-oil actuators for operation. Entire pipeline would be piggable. All pipe fittings would be matching type and class.

**Corrosion protection: -**

The pipeline will be coated with 3 layers of Polyethylene (PE). All field joints will be coated with Raychem sleeve or equivalent followed by Holiday detection to ensure continuity of corrosion protective layer. A suitable, impressed current cathodic protection system will be provided as an additional protection to the pipeline.

A competent pipe laying contractor will be engaged for this work. The project will be monitored at site and office levels through latest project management software like MS.

The pipeline will be constructed as per the latest international standards like ANSI B31.8 and ASME. All good engineering practices will be followed during fabrication and laying of the pipe including usage of approved welding procedures, qualified welders and well identified consumable. Radiography of weld joints will be carried out as per applicable standard. Periodic pigging of the pipeline during construction will ensure expeditious completion and smooth commissioning. Entire execution will be supervised by a competent Third Party Inspection (TPI) agency that will in turn test and certify the pipeline trial commissioning will also be done under the supervision of this TPI.

**Investments:-**

The estimated total cost of the project is Rs. 17 lacs. (Approx.)

**Time Schedule:**

The completion schedule for this project is 2017-2018.

Place: Ahmedabad

Date:

**For Gujarat Gas Limited,**

  
**Vipul Patel**  
**Sr. Officer (ROU)**

