

A SITE VISIT REPORT
AT
“ANAND-NADIAD BULLET TRAIN STATION” @ GUTAL
ON 25TH MARCH 2023.

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INTRODUCTION OF SITE

The Anand-Nadiad Station comes under C6 package of MAHSR OF 88 kms. The station is 16 kms away from Anand city, 9.5 kms away from Nadiad bus station and 9 kms away from Nadiad Railway Station which makes it easy for travellers from both the cities to connect easily.

The station has 2 Villa parking for cars, auto's, buses, etc. It has provisions upto 2053 year. HSR acts as a gateway to the city.

The façade of this station is designed in a milky white appearance keeping in mind the jewel of anand i.e, AMUL. Similarly façade of surat is designed of a diamond shape.

The overall height of station is 25.66 m and a length of 42 m. There are three different levels in the station area that are ground level, Concourse level and Rail+Slab level.

The Rail+slab level has 4 tracks among which the 2 tracks in the middle will be for direct trains to the next station.

The facilities according to different levels are:

Ground level – Unpaid concourse, service rooms

Concourse level- Ticket Section, AFC gates, BOH area

Platform- Operator rooms, control rooms, SER rooms

Number of lifts - 3

Number of escalators-3

Staircase - 6 (3 for emergency)

The Platform type is Side platform.

There are 2 side platforms with 4 tracks.

Other facilities provided inside the station area are:

Lounge, Rest room, AFC gates, waiting area, First Aid Room, Nursery, etc.

TECHNICAL DETAILS OF SITE:

The whole station plan is divided in 9 zones. The construction is been started from the 3rd zone for easy operation and transportation of materials on the both sides.

40 Automatic machines were used for soil penetration testing

50 m expansion joint is provided for reduction of heat of hydration of RCC.

The type of foundation is pile foundation. The plinth beam is upto the pile cap. The level of columns are from ground level to concourse level and from concourse level to rail level.

They inserted 35 m of pile in 2 segments to prevent soil stabilization and to ensure minimum joints. A settlement of 11 mm was observed while the pile load testing. A single pile can withstand upto 3000 tonnes of weight.

The rafter is placed in a single lane truss. Red paint is applied upto 6 m for fire proofing and white paint is for non-fire proof area.

6 sigma technique was used for lean implementation for reduction in time line and reduction in constraints. The slab thickness is 200 mm.

A shear key was provided for bonding of columns. Haunce beam is used which is cost effective. The reinforcement in column was of 20mm dia Fe 500.

M40 grade of concrete was used in concourse level. 1000 m³ concrete was used in one day for one zone. This is a type of monolithic construction.



