

Inspection Report

Road Information:

- **Road Name:** T13-Balluana to Jhumba up to block boundary via Chughe Kalan
- **Monitor Name:** Sidhu Baltej Singh
- **Inspection Date:** 30 Nov 2023
- **Package:** PB02030
- **Status:** In Progress
- **Road Length:** 7.490 km

Observations:

During the inspection on 30 Nov 2023, two critical aspects of the road, namely Carriage Way Width and Camber, were found to be unsatisfactory as reported by Monitor Sidhu Baltej Singh.

Inspector's Comment:

Upon traversing through the datasheet, Monitor Sidhu Baltej Singh expressed significant concerns regarding the quality of the Carriage Way Width and Camber. The inspector noted that these parameters fall below the expected standards for an Indian suburban road.

Comment:

"The Carriage Way Width and Camber on the inspected road segment do not meet the prescribed standards for an Indian suburban road. The deficiencies identified pose potential risks to road safety and overall functionality. Urgent corrective measures are warranted to address these issues and bring the road up to the required specifications."

Corrective Measures Application:

Carriage Way Width Adjustment:

- Conduct a comprehensive engineering assessment to determine the optimal Carriage Way Width based on traffic volume and road usage.
- Implement resurfacing or widening measures as necessary to achieve the recommended width.
- Ensure compliance with local and national road width standards.

Camber Correction:

- Undertake a detailed analysis of the road profile to identify areas with inadequate Camber.
- Implement corrective measures, including leveling, grading, or resurfacing, to achieve the appropriate Camber for safe and efficient water drainage.
- Ensure compliance with Camber specifications outlined in Indian road design guidelines.

Quality Assurance Protocols:

- Strengthen quality control protocols during construction and maintenance activities to ensure adherence to specified standards.
- Regularly monitor and inspect ongoing and completed work to identify and address potential deviations promptly.
- Conduct periodic quality audits to verify the implementation of quality assurance measures.

Community Awareness:

- Engage with the local community to raise awareness about the ongoing corrective measures and the importance of adhering to road safety guidelines during construction phases.
- Establish communication channels to address concerns and feedback from the community.
- Provide regular updates to the community on the progress of the corrective measures.

Tests that needs to be rechecked or reperformed:

- **Sieve Analysis of Aggregates:**
 - **Purpose:** Determines the particle size distribution of aggregates.
 - **Why:** Proper gradation ensures the stability and performance of the road structure.
 - **Duration:** Typically a few hours.
- **Compressive Strength Test (Cement Concrete/Cement Mortar Cubes):**
 - **Purpose:** Measures the ability of concrete or mortar to withstand compressive loads.
 - **Why:** Ensures that the concrete meets strength requirements for structural integrity.
 - **Duration:** 7 to 28 days, depending on the curing period.
- **FIELD DENSITY FOR GSB/WMM/SOIL/DBM/BC:**
 - **Purpose:** Determines the in-place density of compacted materials.
 - **Why:** Ensures proper compaction and structural stability of the road layers.
 - **Duration:** Field test, quick results.

Images Uploaded by the SQM:







Comparison of unsatisfactory attributes with QCR Registrar:

Horizontal alignment shall be reckoned with respect to the centerline of the carriageway as shown on the drawings. The permitted tolerances for the edges of the carriageway and the roadway and lower layers of pavement in plain and rolling terrain and in hilly terrain are given below.

Permitted tolerances In Plain and In Hilly Rolling Terrain
Edges of carriageway + 20 mm + 30 mm
Edges of roadway and lower layers of pavement + 30 mm + 50 mm

Layer	Upper Tolerance	Lower Tolerance	Note
Subgrade	+20mm	-25mm	None
Subbase	+10mm	-20mm	(Flexible pavement)
Subbase	+6mm	-10mm	(Concrete pavement)
Base course	+6mm	-6mm	(Bituminous)
Base course	+10mm	-10mm	(Machine laid)
Base course	+15mm	-15mm	(Manually laid)
Wearing course	+6mm	-6mm	(Machine laid)
Wearing course	+10mm	-10mm	(Manually laid)
Cement concrete paver	+5mm	-6mm	None

Special Note for the Next SQM to come: