

Below are **professional DPR-style descriptions** for each of the roads in your KML. Since the KML provides only the route alignment, the descriptions are written in a formal engineering style based on the road length and expected urban function. These can be directly incorporated into a DPR after verifying field conditions.

2.3.2 Model Road No. 6

Road Characteristic

This road corridor extends for an approximate length of **1.58 km**, connecting the western and eastern portions of the project area. The corridor serves as an important urban collector road by facilitating smooth movement between residential neighbourhoods and connecting local streets with the surrounding primary road network. The road primarily caters to intra-city traffic comprising two-wheelers, passenger cars, auto-rickshaws, light commercial vehicles, school transport vehicles, and emergency service vehicles.

The existing carriageway is expected to consist predominantly of flexible bituminous pavement with varying carriageway width along the alignment. The surrounding land use is primarily residential with scattered commercial developments at junctions and activity nodes. Basic urban utilities including electricity distribution lines, street lighting poles, water supply pipelines, and telecommunication cables are expected to be located within the available Right of Way (ROW). Existing roadside drainage infrastructure may be discontinuous, resulting in localized water stagnation during heavy rainfall. No grade-separated structures such as flyovers, railway overbridges, vehicular underpasses, or pedestrian subways are anticipated along the alignment; however, minor utility crossings and culverts may exist and should be verified during detailed engineering investigations.

The road exhibits significant potential for upgradation under the Smart Road programme through pavement strengthening, storm-water drainage improvement, utility corridor development, pedestrian infrastructure, landscaping, and installation of modern traffic management facilities.

Major Observations

The corridor functions as an important local connector carrying moderate traffic throughout the day. Localized pavement distress, inadequate roadside drainage, discontinuous pedestrian facilities, and utility encroachments may affect traffic operations and overall user safety. Proper asset mapping and utility coordination will be essential before commencement of civil works.

2.3.3 Model Road No. 32

Road Characteristic

Road No. 32 extends for approximately **2.15 km** and constitutes one of the longest corridors within the proposed project network. The road provides essential connectivity between multiple residential neighbourhoods, public institutions, and local commercial establishments while acting as a feeder corridor to higher-order roads within the urban transportation network.

The carriageway is expected to be surfaced with flexible bituminous pavement and accommodates mixed traffic under varying operational conditions. Due to its strategic location and longer stretch, the corridor supports continuous vehicular movement throughout the day. The adjoining land use is predominantly residential with intermittent institutional and commercial activities generating regular pedestrian and vehicular traffic.

The existing ROW is expected to accommodate underground utilities including water supply pipelines, sewerage lines, communication cables, and electrical distribution infrastructure. Distribution transformers and electric poles are likely to be located at intervals serving adjacent developments. Existing storm-water drains may be available only in selected stretches and require continuity improvement. No major flyovers or underpasses are expected; however, several road intersections and utility crossings are anticipated.

The corridor presents considerable scope for comprehensive Smart Road redevelopment incorporating pavement rehabilitation, complete street principles, integrated utility planning, drainage augmentation, and pedestrian-friendly infrastructure.

Major Observations

The road experiences moderate to high traffic demand due to its role as a collector corridor. Existing pavement condition may vary along different sections because of utility trenching and routine maintenance activities. Inadequate drainage, roadside parking, and limited pedestrian infrastructure are likely to affect operational efficiency, particularly during peak hours.

2.3.4 Model Road No. 33

Road Characteristic

Road No. 33 extends for approximately **0.74 km** and primarily functions as a local urban access road serving adjacent residential developments. The corridor facilitates efficient internal circulation by connecting residential layouts with the surrounding collector road network.

The existing roadway is expected to consist of flexible bituminous pavement with moderate carriageway width suitable for two-way urban traffic. Land use along the corridor is predominantly residential with localized neighbourhood commercial establishments generating limited vehicular and pedestrian movement.

Essential public utilities including electrical distribution lines, transformers, underground water supply pipelines, and communication networks are expected to be located within the utility corridor. Existing drainage infrastructure may be partially developed with discontinuities observed near property accesses. No grade-separated crossings are anticipated along the alignment.

The corridor is suitable for upgradation through pavement rehabilitation, improved drainage, pedestrian facilities, street lighting, and urban landscaping.

Major Observations

The road primarily caters to local traffic and exhibits relatively lower traffic intensity. Existing infrastructure may require modernization to improve mobility, drainage efficiency, pedestrian safety, and overall streetscape quality.

2.3.5 Model Road No. 34

Road Characteristic

Road No. 34 has an approximate length of **1.52 km** and serves as an important urban connector between residential neighbourhoods and adjoining collector roads. The corridor plays a significant role in distributing local traffic while supporting access to residential, institutional, and commercial properties situated along the alignment.

The roadway is expected to comprise a flexible bituminous pavement with adequate horizontal alignment suitable for uninterrupted urban traffic movement. Utility infrastructure including electricity distribution networks, transformers, underground water supply pipelines, sewerage systems, and telecommunication services is anticipated along developed sections of the corridor.

Existing roadside drainage may be discontinuous or partially obstructed, requiring rehabilitation to improve storm-water management. No major flyovers or underpasses are expected; however, local culverts and utility crossings may be present.

Major Observations

The corridor experiences regular local traffic and functions as an important neighbourhood connector. Pavement condition, drainage continuity, utility coordination, and pedestrian facilities require detailed assessment before implementation of improvement works.

2.3.6 Model Road No. 37

Road Characteristic

Road No. 37 extends approximately **0.74 km** and serves as a secondary urban access corridor connecting residential developments with the surrounding municipal road network. The road supports local traffic movement while providing direct access to residential properties and community facilities.

The existing pavement is expected to be bituminous with moderate carriageway width. Basic municipal infrastructure including electrical distribution lines, transformers, water supply pipelines, and communication utilities is likely to exist within the available ROW. Side drains may be absent or available only in isolated stretches.

The corridor possesses adequate potential for complete street development including pavement strengthening, drainage improvement, pedestrian walkways, street lighting, and landscape enhancement.

Major Observations

The corridor carries low to moderate traffic volumes and primarily functions as a residential access road. Improvement of drainage infrastructure and pedestrian safety facilities would substantially enhance serviceability and road user comfort.

2.3.7 Model Road No. 39

Road Characteristic

Road No. 39 extends approximately **0.82 km** and provides connectivity between local residential areas and adjoining collector roads. The corridor plays an important role in facilitating neighbourhood-level traffic circulation and access to essential urban services.

The roadway is expected to consist of a flexible bituminous pavement with utility infrastructure including electric poles, transformers, water supply lines, and communication networks located within the available ROW. Existing storm-water drainage infrastructure may require augmentation to ensure efficient surface runoff disposal during monsoon conditions.

No grade-separated structures such as overpasses or underpasses are anticipated; however, local cross-drainage structures should be verified during field investigation.

Major Observations

The road serves predominantly residential traffic with occasional service vehicles. Pavement maintenance, drainage improvement, and enhanced pedestrian infrastructure are recommended to improve operational efficiency and user safety.

2.3.8 Model Road No. 40

Road Characteristic

Road No. 40 is the shortest corridor within the project network, extending approximately **0.35 km**. The road functions as a local access street providing connectivity between residential properties and the adjoining municipal road system. Despite its limited length, the corridor contributes significantly to neighbourhood accessibility and last-mile connectivity.

The existing pavement is expected to be flexible bituminous construction with moderate carriageway width suitable for two-way local traffic. Utility infrastructure including electrical distribution lines, transformers, water supply pipelines, street lighting, and communication services is likely to be present along the alignment. Side drains may be available only in isolated sections and require continuity improvement.

The corridor offers considerable scope for enhancement through pavement rehabilitation, integrated utility management, improved drainage, pedestrian infrastructure, and streetscape development under the Smart Road initiative.

Major Observations

The corridor primarily accommodates local residential traffic with relatively low traffic intensity. Existing infrastructure is expected to require routine maintenance and modernization to improve pavement performance, drainage efficiency, safety, and accessibility.

These descriptions are written in a **formal DPR style** suitable for Smart City, Municipal Corporation, or R&B reports. They should still be validated against field observations before being treated as engineering fact, since the KML itself does not contain asset-level information such as pavement material, utilities, or drainage.