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GOVERNMENT OF MANIPUR SECRETARIAT: MAHUD DEPARTMENT

NOTIFICATION

Imphal, the 19th October, 2022

F.No.AMS-105/1/2022 – MAHUD-MAHUD: WHEREAS, urbanization has led to horizontal growth of the cities thus creating problems of urban sprawl and this has resulted in increase of trip lengths and higher usage of private vehicles, problems of pollution and increased demand of infrastructure.

2. AND, WHEREAS, to address these issues, the urban areas of Manipur need to strengthen Public Transport System and to efficiently use the public transport system by integrating the land use with the transport infrastructure to make the cities liveable, healthy and smart.

3. AND, WHEREAS, with increase in urban spread, the travel lengths and time are also increasing which is leading to use of un-sustainable means of transport and the increased number of trips have made sustainable modes of transport such as public transport unviable and often falling short to meet the huge travel demands.

4. AND, WHEREAS, the State Government of Manipur intends to promote smart growth in the urban areas to deal with the problems related to urban development and transport faced by cities by way of developing these cities on Transit Oriented Development principles.

5. AND, WHEREAS, the Manipur Transit Oriented Development Policy will apply to whole of urban areas in Manipur as a guiding tool for preparation of Master Plans/Development Plans, formulation of Development Control Regulations etc.

6. AND, WHEREAS, for the purpose aforesaid and for other purposes connected therein and incidental thereto, it is felt necessary by the State government to frame the Manipur Transit Oriented Development Policy, 2022;

7. NOW, THEREFORE, the State Government makes the following Manipur Transit Oriented Development Policy, 2022 for implementation in the urban areas of Manipur:

1. Introduction

Urbanization has led to horizontal growth of the cities thus creating problems of urban sprawl. This has resulted in increase of trip lengths and higher usage of private vehicles, problems of pollution and increased demand of infrastructure. To address these issues, the urban areas of Manipur need to strengthen Public Transport System. It is however, important to efficiently use thepublic transport system by integrating the land use with the transport infrastructure to make the cities livable, healthy and smart.

Further with increase in urban spread, the travel lengths and time are also increasing which is leading to use of un-sustainable means of transport. This together with the increased number of trips have made sustainable modes of transport such as public transport unviable and often falling short to meet the huge travel demands. Government of Manipur intends to promote smart growth in the urban areas to deal with the problems related to urban development and transport faced by cities by way of developing these cities on Transit Oriented Development principles.

This Policy applies to whole of urban areas in Manipur as a guiding tool for preparation of Master Plans/Development Plans, formulation of Development Control Regulations etc.

2. Short title and commencement:

- 1) This may be called the Manipur Urban Area Transit Oriented Development (TOD), Policy, 2022.
- 2) It shall come into force from the date of its publication in the official Gazette.

3. Definition:

Transit Oriented Development (TOD): The integration of land use with transport systems is called "Transit Oriented Development", which is essentially "any development, macro or micro that is focused around a transit node, and facilitates complete ease of access to the transit facility thereby inducing people to prefer to walk and use public transportation over personal modes of transport". This entails planning for compact cities and reducing urban sprawl and dependency on the large-scale developments in the periphery which induce shift from non-motorized to motorized modes of travel. Approach to TOD highly depends on establishing mixed land-use zone as part of strategic densification.

TOD focuses on creation of high-density mixed land use development in the influence zone of transit stations, i.e. within the walking distance of 500mtransit station. TOD advocates pedestrian trips to access various facilities such as shopping, entertainment and work. Transit Oriented is to describe a type of community or district design to capitalize on transit.

TOD increases the accessibility of the transit stations by creating pedestrian and Non-Motorised Transport (NMT) friendly infrastructure that benefits large number of people, thereby increasing the ridership of the transit facility and improving the economic and financial viability of the system. Since the transit corridor has mixed land-use, where the transit stations are either origin (housing) or destination (work), the corridor experiencing peak hour traffic in both directions would optimize the use of the transit system.

4. Vision of TOD Policy

The vision of the TOD policy is threefold:

- 1) **Enable Transformation**: to assist in transformation of cities from private vehicle dependent city to public transport oriented development,
- Accessible Public Transport: to promote the usage of public transport by making it accessible, encourage green mobility by encouraging people to walk and cycle and at the same time curb pollution and other negative impacts of motorization.
- 3) **Compact Walkable Communities**: to create livable and affordable communities, which are compact and walkable.

5. Objectives of TOD Policy

TOD integrates land use and transport planning to develop compact growth centers within the influence zone of 500m on either side of the transit stations i.e., areas within walking distance, to achieve the following objectives:

- To promote the use of public transport by developing high density zones in the influence area, which would increase the share of transit and walk trips made by the residents/ workers to meet the daily needs and also result in reduction in pollution and congestion in the influence area.
- 2) To provide all the basic needs of work/ job, shopping, public amenities, entertainment in the influence zone with mixed land-use development which would reduce the need for travel.
- To establish a dense road network within the development area for safe and easy movement and connectivity of NMT and pedestrians between various uses as well as to transit stations.
- 4) To achieve reduction in the private vehicle ownership, traffic and associated parking demand.
- 5) To develop inclusive habitat in the influence area so that the people dependent onpublic transport can live in the livable communities within the walkable distance of transit stations.
- 6) To prevent urban sprawl by accommodating the growing population in a compact area with access to the transit corridor, which would also consolidate investments and bring down the infrastructure cost for development.

6. Benefits of TOD Policy

TOD shall provide the following benefits to Cities:

- 1) Mobility Options for all Change the paradigm of mobility by enabling a shift from use of private vehicles towards the use of public transport and alternative modes.
- 2) Better Quality of Life for All Provide a variety of high-density, mixed-use, mixedincome housing, employment and recreation options within walking/cycling distance of each other and Mass Transit Station- in order to induce a lifestyle change towards healthier living and better quality of life. Integrate communities rather than segregating them and reduce social stigma and dissent.
- 3) Reduce Environmental Degradation Set a clear vision for the growth and redevelopment of the city in a compact manner, by minimizing sprawl (low density spread out development). Help save environmentally sensitive lands and virgin lands through high-density compact development.
- 4) Increased ridership due to larger population living/working within walking distance.

Chapter 2

7. Approach for TOD Implementation

1) Influence Zone

- a) The area in the immediate vicinity of the transit station, i.e. within a walking distance, having high density compact development with mixed land use to support all basic needs of the residents is called the influence zone of a transit station/ corridor.
- b) Influence zone is either established at a transit stations or along the transit corridors. It is up to a radius of nearly 500m of the transit station.
- c) The area of influence, where the TOD is planned for implementation, should be demarcated and notified through master plan and local area plans before implementation. If in any case the TOD is to be implemented in a phased manner, the influence area of the TOD can also be notified in phases. The principles for delineating the influence area should be clearly indicated so that there is no speculation or confusion regarding the influence zone.

2) High Density Compact Development

- a) TOD promotes densification in the influence area by providing higher Floor Area Ratio (FAR)/ Floor Space Index (FSI) and higher population & job density as compared to the area around and beyond the influence areas. To ensure sustainable development, the minimum FAR should be upto 250 and can be higher. This will promote higher concentration of people within the walking distances of transit station, thereby increasing the ridership of the public transport and resulting in increased fare revenue, pollution and congestion reduction.¹
- b) It is not necessary to keep the density and FAR norms consistent for the influence areas across the city. It can vary depending on the infrastructure available, land use zoning, transit capacity etc
- c) Cities should follow green building norms, adopt renewal sources of energy such as solar and waste to energy options, adopt rain water harvesting and ground water recharge techniques, which would encourage water conservation, utilization of clean energy and promote sustainable waste management so as to make them self-sustaining through efficient use of resources and infrastructure.

3) Mixed Use Development

a) Mixed land use should be stipulated for development/ redevelopment in the TOD zone as it would reduce the need for travel by providing most of the activities such as shopping, entertainment and public amenities such as schools, parks, playgrounds, hospitals etc. within the walking distance of the residents. It would also improve the accessibility of the transit facilities and at the same time link origins and destinations, i.e. residences with work places or activity nodes. This would ensure better utilization of transit fleet by distributing loads in both directions, rather than creating unidirectional peak hour flows.

- b) A blend of land-uses helps in the optimization of physical infrastructure and resources, as all components like roads, parking, water, sewerage etc., remain functional at all times of the day.
- c) The TOD benefits cannot be realized with the kind of developments that encourage the use of personalized vehicles. It is therefore imperative to restrict developments such as low-density housing, low-rise development, warehouses, petrol pumps/CNG stations, cremation ground and surface/Multilevel parking etc. in the influence area.
- d) Mix of uses within the TOD can be achieved either by horizontal mixing i.e. separate activities in separate plots/ buildings or vertical mixing i.e. combining different activities within the same building.
- e) The mix of uses to be proposed shall be decided as per the local conditions and the trends in real estate market, however, the minimum percentage of built up area for housing, commercial and other amenities should be fixed. The use of balance built up area may depend on the prevailing market conditions and demand of the city.

4) Mandatory and Inclusive Housing

- a) The cities should fix a minimum percentage (20% or higher) of allowed FAR for affordable housing in all development/redevelopment in the influence zones.
- b) Housing in the influence zone should have a mix of all economic groups/ sections. The development control regulation should stipulate housing for Economically Weaker Sections (EWS) as well as LIG/MIG, or other types based on Census definition, in the influence area to give an opportunity to the people who depend on public transport for daily commuting to live in walkable neighbourhoods.
- c) The upper limit to the area of individual dwelling unit should be fixed as a regulatory component in the influence zones to ensure housing for LIG/MIG.

5) Multimodal Integration

- a) The influence area should have high quality integrated multi-modal transport system for the optimum use of the facilities by the residents/ users. The system should have seamless physical connectivity, information integration and fare integration across modes so that the first and last mile connectivity does not become a bottleneck in the use of public transport system by the citizens.
- b) The mass transit system, including its stations, should be designed to provide high quality services that assure user satisfaction in terms of safety and comfort. The citizens should have barrier free access to all the required amenities in the transit system as well as around the transit centers.
- c) The hierarchy of the facilities at the transit system should prioritize pedestrians followed by bicycle, feeder buses, drop-off facilities and park and ride facility in the given order.
- d) The transit stations should have ample bicycle parking spaces with scope for future expansion if need arises.

- e) Intermediate Public Transport (IPT), Non-Motorized Transport (NMT) and feeder buses perform a significant role in providing first and last mile connectivity to the populace beyond the influence zone. To ensure that the area around the transit station remain congestion free and to facilitate easy transfers, it is important to provide adequate parking and pickup/ drop-off facilities for the above modes at suitable locations at the stations and in the influence zone.
- f) To support TOD, park and ride facilities may be provided, if needed. The facilities, with suitable pricing that deters private vehicle use, may be planned primarily at the end stations and can variably decrease according to the requirement on the intermediate nodes. On-street parking should be prohibited in the influence area and if necessary, it should be priced higher than off street parking.

6) Focus on pedestrians, cyclists and NMT users

- a) The streets should be designed for users of all age groups and for all types of commuters including pedestrians, bicyclists, motorists and transit riders. They should be safe and accessible by all.
- b) The influence zone should have development in smaller blocks with a finer street network having provision for pedestrians, bicyclists and NMT users. This will create a grid of small, traversable blocks which has sidewalks and amenities like lighting and information signage etc. and ensure accessibility of the transit stations by pedestrians and cyclist.
- c) Right of Way (ROW) should not dictate the pedestrian circulation network; it should rather be designed based on the pedestrian volume and adjoining landuse. Smaller ROWs should be made 'pedestrian and NMT only' or one-way streets so that pedestrian circulation is not compromised.
- d) Continuous and unobstructed footpaths of suitable width should be provided on either side of the streets. To protect the footpaths from encroachment and parking, buffers or bollards etc. may be provided.
- e) Traffic Calming: To promote a safe and secure environment for pedestrian and NMT users, necessary measures should be taken to reduce speed as well as volume of motorized traffic in the influence zone. On streets which are primarily designed for movement of pedestrian and NMT as well as those having ROW less or equal to 12m, the maximum speed limit should be restricted to 20 kmph by design by use of table top crossings, carriage way surfaces etc. For all other streets, in and around the influence zone, the speed should not exceed 40 kmph.

7) Street Oriented Buildings and Vibrant Public Spaces

- a) Retail and other 'active uses' should be supported on the ground floor along the main streets, key intersections, stations and parking garages to ensure high quality pedestrian environments.
- b) To promote natural surveillance of public spaces, all boundary walls and setbacks should be removed and buildings should be permitted up to the edge of the street. Also, the orientation of the buildings should be such so as to face the pedestrian facilities.
- c) The streets should have a natural surveillance system by providing mixed-use active frontage, vending zones and avoiding opaque wall, which would ensure a safe environment for pedestrians, especially women, children and elderly.

- d) Ground floor should support commercial activity, with at least 50% untinted transparent frontage.
- e) The height of compound wall, if present, should be transparent above 100 cm, with exception of high security government buildings.
- f) The frontage of all parking structure/podiums or stilts on the ground floor should support active frontage on all primary streets.
- g) **Preserve Open Spaces**: All open areas such as amenity spaces, green spaces, playgrounds, parks and natural areas should be preserved as part of TOD. The open space provision within TOD should meet the Urban and Regional Development Plans Formulation and Implementation (URDPFI) guideline of 10-12 sq.mt. per person.
- h) Safety and Security: To ensure a safe and secure environment for pedestrian and NMT users, especially women and children, the influence zone should be designed to maximize natural surveillance. For this purpose, street lighting should be provided; active frontage and vendors zone etc. should be created. Further, facilities such as CCTV cameras and panic buttons etc. should also be installed for round the clock surveillance.

8) Building Design Details

Buildings higher than 2-3 storeys shall step back higher floors in order to maintain a human scale along the sidewalk and reduce shadow impacts on the public street.

9) Managed Parking

- a) To discourage the use of private vehicles and to manage parking in TOD, it is essential that the supply of the parking is reduced and made expensive within the influence zone.
- b) On-street parking should be prohibited within 100 m of the transit station, except for freight delivery and pickup or drop-off of the differently abled.
- c) The use of parking spaces within the influence zone can be maximized by sharing of spaces between uses that have demand during different times of the day. For example, parking requirements for office/work can be shared with the parking spaces for residences as their hours for demands do not coincide with each other.
- d) TOD aims to promote NMT which includes use of bicycle. Therefore, bicycle parking facilities should be provided at regular intervals and suitable locations within the influence zone. Public bicycle sharing systems may also be planned to promote the use of bicycles.
- e) Parking should not be allowed in a manner wherein the aesthetics of the city is lost. The neighbourhood is generally adversely affected by parking of vehicles in front of the buildings on the primary streets; therefore, on-street parking should be avoided. In case, if on-street parking is needed, it should be provided in a manner, wherein it acts as a buffer for the pedestrians and cyclists from motorized traffic.
- f) To restrict unauthorized parking and to avoid congestion caused due to on-street parking, it is important to have an enforcement mechanism in place. Cities should have a parking policy with heavy penalty for unregulated parking in the influence zone and ensure that the same is implemented. Also, the parking should have price variations according to time of day and duration of parking.

CHAPTER 3

8. Role & Responsibilities of various Agencies

1) Town Planning Department, Government of Manipur

- a) Formulation of TOD Policy
- b) Prepare/revise various Development Plans incorporating separate chapter for TOD, enabling provisions and amendments for implementation of TOD, zoning regulations, development controls and subdivision/amalgamation regulations for various uses/activities, building byelaws for various uses/activities and design guidelines for TOD Areas.

2) Planning and Development Authority, Manipur.

- a) Implementation of TOD Area Zonal Plans, TOD Layout Plan/TD Schemes/TP Schemes/Redevelopment Schemes etc. in TOD Areas in sole capacity or in partnership with land owners/developers as applicable.
- b) Preparation and implementation of proposals for strengthening of trunk infrastructure and integrated infrastructure and services systems plan for infrastructure components in TOD.

3) Municipal Corporation/ Municipal Councils

- a) Implementation of TOD Area Zonal Plans for TOD Areas.
- b) Promote, control and regulate the developments in the TOD areas.
- c) Promote, Control and Regulate the building construction activities in the TOD Areas.
- d) Preparation and implementation of integrated Multi-modal Public Transport operations service plan.

Chapter 4

9. Statutory Framework:

- TOD policy should be notified as part of the Master Plan/Development plan of the city. The policy document should clearly outline the importance of the high capacity transit networks in the city's development.
- 2) The vision of the Master Plan/ Development Plan should be resonated by all the stakeholders, especially those involved in infrastructure development and preparation of development plans. The building bye-laws and development control regulations need to incorporate the changes required for implementing TOD.
- 3) The influence zone of the TOD should be clearly notified by the concerned Authority.
- 4) To ensure that the infrastructure created in the influence zone is provided in a planned manner, the ULBs and the Development Authority should prepare a comprehensive plan integrating all the utilities, physical infrastructure and essential facilities such as roads, sewers, drainage, electric lines, green spaces, police post, fire post, electric sub-stations, etc. The plan would be useful to assess the carrying capacity of the existing infrastructure and the upgradation needed to meet the increased demand once TOD is implemented.

10. Communications and Outreach

ULBs may launch awareness program about the components of TOD, its benefits, incentives to be reaped by the land owners, developers, infrastructure agencies and other bodies, reduced per unit cost for creating and maintaining infrastructure etc. and provide improved guality of life.

M. JOY SINGH, Commissioner (MAHUD), Government of Manipur.