

भारत सरकार GOVERNMENT OF INDIA
रेल मंत्रालय MINISTRY OF RAILWAYS
(रेलवे बोर्ड RAILWAY BOARD)

No. 2022/Stn. Dev.-I/08/70

New Delhi, dated: 29.04.2023

The General Managers,
All Zonal Railways.

Vice Chairman,
Rail Land Development Authority

Sub: Presentations for Master Plans of station development works

Ref.: Railway Board letter No. 2021/Stn. Dev.-I/08/18 dated 03.10.2022

Presentations for station development Master Plans are being made by the Zonal Railways and Rail Land Development Authority (RLDA) at Railway Board and a lot of variations in the presentations are being observed. In order to standardise the process, the guidelines for components of presentation are attached as Annexure-1 and the guidelines for the planning process are attached as Annexure-2. These annexures are for guidance only and Zonal Railways and RLDA are requested to carry out due diligence at their end following the extant instructions and keep the supporting material ready during the presentations.

DA/- as above.

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29.4.23
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Copy to :

1. EDPG to MR, EDPG to MOS(D), EDPG to MOS (J)
2. PSO/Sr PPS CRB & CEO, Member (Finance), Member (Infra), Member (T&RS), Member (O&BD), Secy, DG(RHS), DG(RPF)
3. PCEs, CCMs, CEEs, CAO/Cs, CSTEs and DRMs, all Zonal Railways.

Elements of presentation

- 1. Explain the History and local context of the Railway Station and how the project intends to serve its stakeholders (5-6 slides). Important data to be included:**
 - i) Category of the station and importance of railway station in local context. Pattern of growth of the city. Type of industries, places of tourist and pilgrimage importance, educational institutes, places of historical importance etc. being served by the station.
 - ii) Number of trains being handled, the number of passengers being handled, passenger profile, and anticipated growth in the horizon year (daily and peak hour numbers).
 - iii) Unique features of the station.
 - iv) Approaches of the station (Station access); Types of roads and their level of service; Location map (preferably superimposed on satellite image); Second Entry to the station. Modes of transport being connected; Station usage and accessibility by the city.
 - v) Challenges faced by passengers at the station – current and future.
- 2. Explain the chosen plan including solutions to the challenges (4-5 slides)**
 - i) The best option that optimises land use, passenger facilities and railway operations along with brief rationale.
 - ii) Planned traffic flow highlighting interventions to improve the same; any remaining conflicts to be highlighted. Simple schemes have higher probability of succeeding in real life and shall be preferred over complicated schemes. Connection between Drop-off and parking, and between parking to arrivals shall be seen carefully.
 - iii) Planned passenger movements – various use cases shall be tackled; Drop-off to entry to concourse to platform; Platform to FOB to Arrivals; Inter-change within the station etc.
 - iv) Integration of commercial functions with station functions. The parking/arrivals shall be integrated with commercial areas; the railway station entry and commercial entry shall be distinct so that conflicts in station entry are removed; MLCP can easily be integrated with commercial development.
 - v) Planned multi-modal Integration and interchange of passengers, pedestrian passage through station for connecting main entry to second entry side and commercial exploitation of the potential due to such pedestrian movements within the station premises.
 - vi) Provision of Goods/Parcel handling facilities, if required. Parcel lifts may be avoided.
- 3. Present proposed theme for redeveloped station (15-20 slides).**
 - i) Three options shall be presented.
 - ii) Main Entry View-Front & Side Elevation, Second Entry-Front/Side Elevation, Bird's Eye View, Concourse Inside and Top Views etc shall be included.
 - iii) A schematic section view should also be included to indicate the change in levels.
 - iv) The rendering of options should be in sufficient details. (Comparison may be made with good rendered works at other stations and efforts should be made to raise the benchmarks.)
- 4. Feasibility and Cost (2-3 slides):**
 - i) The structures to be demolished, those to be retained and those to be freshly built shall be distinctly shown.
 - ii) Phase working shall be broadly decided along with its impact on operations.
 - iii) Indicative cost including the cost of relocation.
 - iv) Air space of the station complex, excluding track portion, should be explored for commercial development and the areas should be clearly mentioned in the presentation. Areas for commercial development of nearby land should also be mentioned along with floor area to be developed.
 - v) The extent of commercial development in the station complex including the Roof Plaza should be detailed and shown in the presentation.
 - vi) The Master Plan should also clearly show the commercial development planned in Railway area surrounding the station complex, the permitted FAR and its phasing.

Guidelines for the planning process

- 1. Guidelines for overall plan:**
 - i) Development of 2nd Entry/Exit Station Building with respect to future prospects.
 - ii) Integration of both sides of the city.
 - iii) Non conflicting entry/exit to the station premises for various modes (Segregated and safe traffic movement).
 - iv) Availability of access roads to 2nd Entry/Exit to Station Building.
 - v) Well Designed Circulation Plan with respect to Pedestrian Traffic, Divyangjan, Vehicular Traffic (all Modes), Parking and Waiting etc with the sizes being decided based on expected future traffic and codal norms for such facilities.
 - vi) Multimodal Connectivity: Integration of other modes of transport-ISBT, Metros etc.
 - vii) Seamless connectivity to be planned. Just showing a provision in the Master Plan is not adequate.
 - viii) Commercial development should be planned in harmony with overall development. Appropriate facilities requirement for commercial development should be incorporated in planning.
 - ix) Utilities should be well planned for the scale of development proposed.
 - x) Evacuation in case of fire and fire safety provisions have to be given very high priority.
- 2. Guidelines for roof plaza size:**
 - i) The roof plaza shall as far as possible provide all facilities required by waiting passengers including seating, kiosks, retail, drinking water, information etc.
 - ii) Judicious Selection of Roof plaza Size as per Passenger Handling Capacity considering Peak Hour Passenger Traffic & Commercial Exploitation:
 - 12 m minimum
 - 36 m for Small station
 - 72 m for Medium to Large Station
 - 108 m or more for Very Large & Busy Station

(Note: Above sizes (along the track) are for guidance only. Based on planning requirements, appropriate size Roof Plaza should be planned.)
 - iii) As far as possible, roof Plazas may be made accessible to general public (unticketed) from both sides of the station. Provision for flexible partitions and access control system to be kept for suitable segregation of ticketed and unticketed areas. This system should be flexible enough to cater for changes in station usage and changes in footfalls over the years. Ticket checking and security checks should be planned independent of each other.
 - iv) 1 in 8 ramps with lifts may be planned wherever escalators are not justified.
- 3. Guidelines for station element design:**
 - i) Size of entry/ exit blocks, escalators/ lifts, passages, queue lengths for security checks/ ticketing etc as per desired Level of Service (Refer Manual of Standards and Specifications for Railway Stations (MSSRS) for the same).
 - ii) Mandatory facilities like lounges, ticket checking, RPF, ticketing, access control, etc shall be planned.
 - iii) Fire safety and evacuation plan shall be designed as per MSSRS.
 - iv) The complete station shall be divyangjan friendly.
- 4. Guidelines for choosing facade/ elements**
 - i) The facade/ architectural elements shall be rooted in local context of the station. Historical and tourist attractions nearby may be adapted in facade and its elements or station interiors. Wherever strong historical/ tourist attraction is not dominant in local context, modern architectural elements to be encouraged.
 - ii) Suitable integration of Heritage Structure in the planning. Heritage value should be carefully checked.
 - iii) Aesthetically pleasing entrance Porches of adequate size shall be planned taking care that the porch does not overpower the entire facade.
 - iv) Architectural design and aesthetics should bring an element of distinction to the station.
 - v) Ease of Construction: Method of construction should be easy to adopt considering usage of station by the passengers and stakeholders, train safety, 25 kv OHE etc.
 - vi) Ease of Maintenance: Avoid Jali like structures which are difficult to clean, avoid wavy forms which are difficult to maintain and may result in water stagnation and seepage, use of local materials is desirable, amenability of the surfaces for cleaning etc. Choice of materials for different items must be indicated in one slide.
- 5. Guidelines for Commercial development**
 - i) May be explored as per viability on both end station buildings and Roof Plazas.
 - ii) Provision of Budget Hotel considering its future usage/religious/tourist importance etc.

- iii) Commercial development areas should be easily accessible (road approach), should have good connection with the various modes of transportation available at the station and adequate parking should be available for the commercial areas.
- iv) Commercial development should aim for utilizing the highest FAR and permitted height in the location.
- v) Future Commercial development areas should be well marked in the Master Plan. These areas should be planned for maximum permissible height at the location.
- vi) Officer in charge of land management and commercial Development in the Zonal Railway should associate in planning of commercial development portion of the Master Plan.
- vii) The planning for commercial development should broadly bring out the following:
 - Floor area by commercial development of nearby land including details of plot size.
 - Floor area by commercial development above station buildings on both sides (excluding the portion over tracks).
 - Internal commercial retail area.
 - The phasing of commercial development.

6. Guidelines for Showcasing the Plan:

- i) High resolution images shall be prepared for the chosen facade/ architectural theme showing external as well as internal views and facilities.
- ii) Physical model shall highlight the development. Efforts shall be made to zoom in on the facilities for the passengers. Covering the entire yard or relocated services is not necessary.
- iii) The 3-D views of the Master Plan and physical models must show commercial areas to their full expected heights.
- iv) The external context shall be adequately captured in the 3D views/ models. While the outside structures need not be detailed, giving wrong impression through too much greenery in built city environment is not desirable.

7. Guidelines for Judicial Assessment of Parking requirement in Horizon Year on both sides of the station duly accounting for proposed commercial development:

- i) To be expressed in Equivalent Car Space (ECS) and shall take into consideration changing modal preferences and intervention in metros, BRT etc by local authorities.
- ii) Location and size of Parking should be designed by Traffic Planning experts.
- iii) Surface Parking is desirable.
- iv) Multi-Level Car Parking (MLCP) may be planned based on space constraints and Parking needs of the station and commercial development planned at the station.
- v) Basement parking in cases of space constraint. May generally be avoided in high water table areas.

8. Guidelines on planning Segregation of Arrival & Departure of Passengers

- i) Grade separated roads may be avoided except in areas with heavy space constraints.
- ii) Passenger shall not have to travel too much just to achieve segregation of arrival-departures.
- iii) The facilities for arriving passengers such as taxis/ tourist information, gift shops etc shall be planned along with some waiting before accessing other trains/modes of transport.
- iv) FOB should be the preferable mode of crossing the tracks. Subways may be adopted on case to case considerations of seepage, security, ease of construction etc.

9. Stakeholder Consultations and assessment of statutory clearances required and prior liaison:

- i) Road Infrastructure Improvement plan connecting Railway Station to be planned with Urban Local Bodies-Planning for Holistic Development.
- ii) The plan may be discussed with wide range of stakeholders for taking their feedback and suggestions.

10. Cost consideration:

- i) Assessment of Abstract Cost of Station Development with element wise break up.
- ii) Reasonability of Cost of Investment based on Importance, Usage & Size of Station.
- iii) Approximate assessment of commercial potential of the project should also be made. Possibility of harnessing of commercial potential to maximum extent should be ensured.
- iv) Spaces earmarked for commercial development in the Master Plan must not be put to other uses without approval of competent authority.

11. Planning for sustainability and smart requirements as per extant instructions.