Delhi Mumbai Industrial Corridor Development Corporation

Development of Greenfield International Airport at Bhiwadi, Rajasthan

Green Belt Plan
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1 GREEN BELT PLAN

1.1. INTRODCUTION

The proposed Greenfield airport, bordering on the proposed Bhiwadi – Tapookra - Khushkhera (BTK) Industrial Complex has been proposed by DMICDC in relation to the Kushkhera –Bhiwadi – Neemrana Investment Region. An area of 2058 hectare has been earmarked for the Bhiwadi International Airport. The land proposed for the airport is predominantly agricultural. The land has been identified for the airport based on the pre-feasibility study conducted by Airports Authority of India in consideration of the operational requirements.

The airport is proposed to be developed in Phases to handle an ultimate capacity of approx. 80 million passengers in future, with two parallel runways. The runway is planned to accommodate Airbus 380 type aircraft. Besides the runway, the airport will be provided with other facilities such as connecting taxiway, apron, air traffic control tower, fire stations, electrical sub-stations, refueling facilities, hangar and maintenance facilities, flight catering, terminal buildings to handle international and domestic passengers and cargo and other infrastructure facilities. The airport will be equipped with Navigational Aids for all weather operations.

1.2. GREEN BELT PLAN

1.2.1 Green Belt Development:

Apart from compensatory plantation, additional plantation has been proposed in the form of greenbelt development. The Greenbelt/landscaping at the Airport area will result in harmonising and amalgamating the physical structures of proposed buildings with surrounding environment but also acts as pollution sink/noise barrier. The plants not only serve various direct environmental facilities, but also have indirect positive environmental impacts such as reduction in overall energy use in the buildings.

Greenbelt will check soil erosion, make the ecosystem more diversified and functionally more stable, make the climate more conducive and restore balance. The entire land sites subject to use of construction related activities should be restored to the original setting by restoration and landscaping of the sites. Landscaping of the areas within the premises of Airport shall be taken up during construction period. Overall project area shall be restored to the natural setting in an environmentally sound manner.

The area reserved for green belt development for the proposed BIA is 1165.10 ha for all phases which are 56.61% of total project area. Out of which, 237.98 ha green belt will be developed in

Phase I which is 11.56% of total area. The remaining green area will be developed in other phases. In Phase I, Airside green area development will be 95.57 ha and city side green area development will be 142.41 ha. It is proposed to plant trees at commercial area development at BIA. An area of 15 ha is considered for tree plantation in the phase I development. In this area 16500 plants will be planted and total funds allotted for plantation is Rs. 247.50 Lakh including 5 years maintenance. The suggested species for Green belt at airport are given in Table 1.1.

TABLE 1.1: SUGGESTED SPECIES FOR LANDSCAPE AT AIRPORT

S. NO	COMMON NAME	BOTANICAL NAME
GREEN BELT TREES		
1	Devils tree	*Alstonia scholaris*
2	Suru	*Casuarinas equsetifolia*
ORNAMENTAL TREES		
3	Kaniar	*Bauhinia purpurea*
4	Golenchi/Golachin	*Plumeria alba*
5	Cheel	*Callistemon lanceolatus*
6	king Sago Palm	*Cycas revoluata*
7	Date sugar palm	*Phonix sylvestris*
8	Asoka	*Polyalthia longifolia*
SHRUBS		
9	Kuppi	*Acalypha hispida*
10	jhinti	*Barleria cristata*
11	Yellow orchid plant	*Bauhinia tomentosa,*
12	chhoti-ari, sankuppi	*Clerodendron inerme*
13	Nilkanta	*Duranta plumieri*
14	Thalkamal	*Hamelia patens*
15	Gurhal	*Hibiscus rosasinensis*
16	bedina	*Mussaenda erthyrophylla*
17	Kaner	*Nerium oleander*
18	Lalpata	*Poinsettia pulcherrima*
19	Piliya	*Tecoma stans*
20	Peeli kaner	*Thevetia nereifolia*
21	garden croton	*Codioeum sp*
22	Lettuce plant	*Pisonia alba*
CLIMBERS		
23	Pilaghanti	*Allamanda cathartica*
24	Shtawar	*Asparagus densiflorus*
25	Baganvilas	*Bougainvillea sp*
26	Koyala	*Clitorea ternatea*

S. NO	COMMON NAME	BOTANICAL NAME
27	Kamlata	*Ipomoea palmate*
28	Madhu Malati	*Quisqualis indica*
FOWERING PLANTS		
29	Gul-mehndi	*Impatiens balsamina*
30	Lalmurga	*Celosia sp*
31	Chandramallika	*Chrysanthemum sp*
32	Cosmos	*Cosmos bipinnatus*
33	Gul-e-makhmal	*Gomphrena globosa*
34	Jhenduphool	*Tagetus erecta*
35	Petunia	*Petunia hybrida*
36	Khursa	*Portulaca grandiflora*
37	Sefakuss	*Salvia splendens*
38	Pinja phool	*Solidago Canadensis*
39	Sadabahar	*Vinca rosea*
40	Jhinia	*Zinnia elegans*

The species recommended for turfing are given in Table 1.2. The site for grass turf to be selected as follows:

1. Open sunny places and preferably with little quantity of shade.
2. Free from hazards like grazing and use of pathways
3. Site should not be under the tree canopy as the litter affects the quality of turf grass

TABLE 1.2: SPECIES FOR LAWN (TURF) GRASSES

S. NO	COMMON NAME	BOTANICAL NAME	TEXTURE	SITUTATION
1.	Cynodon dactylon	*Hariyali (or) Arugu (or) Doob grass*	Medium	Suitable for open sunny location; drought tolerant
2.	Stenotaphrum secundatum	*St. Augustine grass*	Coarse	Suitable for shady situation with frequent irrigations
3.	Zoysia japonica	*Japan grass*	Coarse	Can grow well in poor sandy soil and suited for open sunny situation
4.	Paspalum vaginatum	*Paspalum grass*	Medium	Suitable for open sunny situation, highly drought tolerant