



भारतीय विमानपत्तन प्राधिकरण
Airports Authority of India

PRESENTATION

**Consultation Paper 05/2024-25 for determination of MYTP
of
Lal Bahadur Shastri International Airport, Varanasi**

**भारतीय विमानपत्तन प्राधिकरण
लाल बहादुर शास्त्री अंतर्राष्ट्रीय एयरपोर्ट, वाराणसी**



Airports Authority of India extends heartfelt thanks to AERA for issuance of CP 05/2024-25 for determination of Aeronautical Tariff for Varanasi International Airport(VNS) for the 2nd control period (01.04.2024 – 31.03.2029).

Overview of Varanasi Airport

- Lal Bahadur Shastri International Airport, Varanasi (IATA:VNS,ICAO:VEBN) airport code ‘ 4C’ is the gateway to eastern UP. It connects the holy city of Varanasi to the various cities of India and abroad.
- The airport was initially built in 1924 and the commercial operations began in 1950.
- In addition of being the holy city, Varanasi is also an educational and medical hub of the eastern part of the state with premier educational institutes like IIT, BHU, Cancer institute etc.

Lal Bahadur Shastri International Airport, Varanasi

AIRPORT CHARACTERISTICS

1.	Code & Capacity	Aerodrome reference code : 4C	
2.	Details of facilities (Air Side)	No. of Runways : 01	
		No. of Parking stands : 11	
		No. of Stands	Stand Compatibility
		2	Code D - Upto B767
		8	Code C - Upto A321
		1	Code B - Upto B200
3.	ARFF Category of Airport	07	

Lal Bahadur Shastri International Airport, Varanasi

TERMINAL BUILDING CHARACTERISTICS

Peak Hour Traffic	
Domestic PAX	750
International PAX	300
Carpet Area	24000 SQ. MTR
Navigational Aids	<i>VOR/DME, ILS CAT I FOR RWY 27, MSSR, ADS-B</i>
ATC Watch Hours	H24
ILHBS	Operational
CCTV	169
FIDS (HD Display)	46 nos.

Lal Bahadur Shastri International Airport, Varanasi

TERMINAL BUILDING DATA

<u>S. No.</u>	<u>Particulars</u>	<u>Total</u>
1	TERMINAL BUILDING BUILT UP AREA (IN SQM)	24000
2	DESIGN TERMINAL CAPACITY (IN MPPA)	3.9
3	PEAK HOUR CAPACITY	1050
4	ENTRY / EXIT GATES (No.)	02/01
5	CONVEYOR BELTS (No.)	02
6	ESCALATORS (No.)	04
7	ELEVATORS (No.)	05
8	AEROBRIDGE (No.)	04
9	NO. OF TROLLEYS (No.)	500
10	CHECK- IN COUNTERS (No.)	21



1. Digi Yatra
2. 21 Check in counters with CUTE & 06 CUSS
3. In Line Baggage Screening system
4. Restrooms/ Tactile Flooring
5. Facilities for persons with reduced mobility-ramp
6. FIDS/ PA System/ Entertainment Screen
7. Immigration & Customs counters
8. Child care room
9. MI room
10. Napkin vending machines
11. Bottle crushing machine
12. Reading Lounge
13. Executive Lounge
14. Reserved Lounge
15. CCTV system
16. Adequate seating capacity
17. Paid Porter Service
18. Charging stations
19. Wheelchair assistance for PRM
20. May I Help You Counters



Existing Facilities

1. Master Concessionaire for Food & Beverages
2. Master Concessionaire Retail
3. Advertisement Rights
4. General Car Rental Facility
5. Car Parking
6. Executive Lounge
7. IBS (In Building Solution)
8. Application Based Cab Aggregator (Ola & Uber)
9. Tourism Counter
10. In-Flight Kitchen Service
11. EV Charging
12. ATM Counter
13. Reading Lounge
14. Pre-paid
15. Paid Porter service

Tenders in process

1. Baby Care room
2. Money Exchange

Major Ongoing Projects (Composite)



SL. NO	PROJECTS	CURRENT STATUS
1	Development of Lal Bahadur Shastri International Airport, Varanasi. Package-I - Construction of New Terminal Building and Allied works.	Stipulated date of commencement : 20.07.2024 Award Value Rs. 963.05 Cr (with GST) Stipulated date completion: 19.07.2027 Status : Work in Progress
2	Construction of Boundary wall for newly acquired land at LBSI Airport Varanasi.	Stipulated date of commencement : 16.08.2024 Award Value Rs. 17.31 Cr (with GST) Stipulated date of completion: 15.12.2025 Status : Work in Progress

PROPOSED MAJOR CAPEX-(Second Control Period)



S No.	Project	Amount (in Crs)	PDC/DOC
1.	Development of Lal Bahadur Shastri International Airport, Varanasi. (Ph-I) i/c C/o of New Terminal Building, Apron Extension, Runway Extension, Parallel Taxi Track and allied works	2869.65 Cr	PDC : 2027
2	Provision of Tensile Membrane (PVC/PVDF coated) shade for car parking and automatic sliding door at entrance gate of Technical Block, carpet tiles in New ATC Tower, storm water drain from new Technical Block to new Fire Station and construction of brick wall panel beneath profile sheet boundary wall near new Technical Block at LBSI Airport, Varanasi	1.04 Cr	PDC : 31.12.2024
3	Renovation of staff & public toilets and other miscellaneous works at LBSI Airport, Varanasi	1.50 Cr	30.06.2025

MAJOR CAPEX (First Control Period)



S.N	Description of Assets	Amount (in Crs)	Date of Completion
1	Construction of New Fire Station (CAT-IX) & Emergency Medical Centre at LBSI Airport, Varanasi.	8.180	30.11.2023
2	Construction of Turn Pad and fillets for Link taxi track for B777-300ER type of aircraft at LBSI airport, Varanasi.	10.660	17.07.2023
3	Development of parking area for Governance, political vehicle, staff vehicles and replacement of damaged footpath tiles in car parking at LBSI Airport Varanasi.	1.040	21.07.2023
4	Provision of both side shoulder and re-carpeting of approach road from VVIP gate of Airport to Cargo building gate, re-carpeting of damaged road in residential colony, construction of boundary wall along NH-56 side from Babatpur Police Chowki to CISF Barrack main gate and provision of view cutter with pathway for garbage bin at LBSI Airport, Varanasi.	2.270	30.06.2023
5	Construction of RCC Structure Boundary Wall in place of Old & Weak operational boundary brick work along NH56 at L.B.S.I Airport Varanasi.	1.020	15.04.2023
6	Extension of RESA (CBR 15 to 20 value) both side 240 x 90 m for runway 09 and 212 x 90 m for runway 27 with available RESA of 90 x 90 m at LBSI Airport, Varanasi.	3.800	21.01.2023
7	Construction of Localizer and Glide Path Building Hut and Antenna Platform at LBSI Airport, Varanasi	2.550	04.08.2022
8	Provision of Cement concrete pavement on Air Side Green area for Bus movement at LBSI Airport Varanasi (Construction of vehicular lane in operational area at LBSI Airport, Varanasi)	1.80	26.08.2022

MAJOR CAPEX (First Control Period)



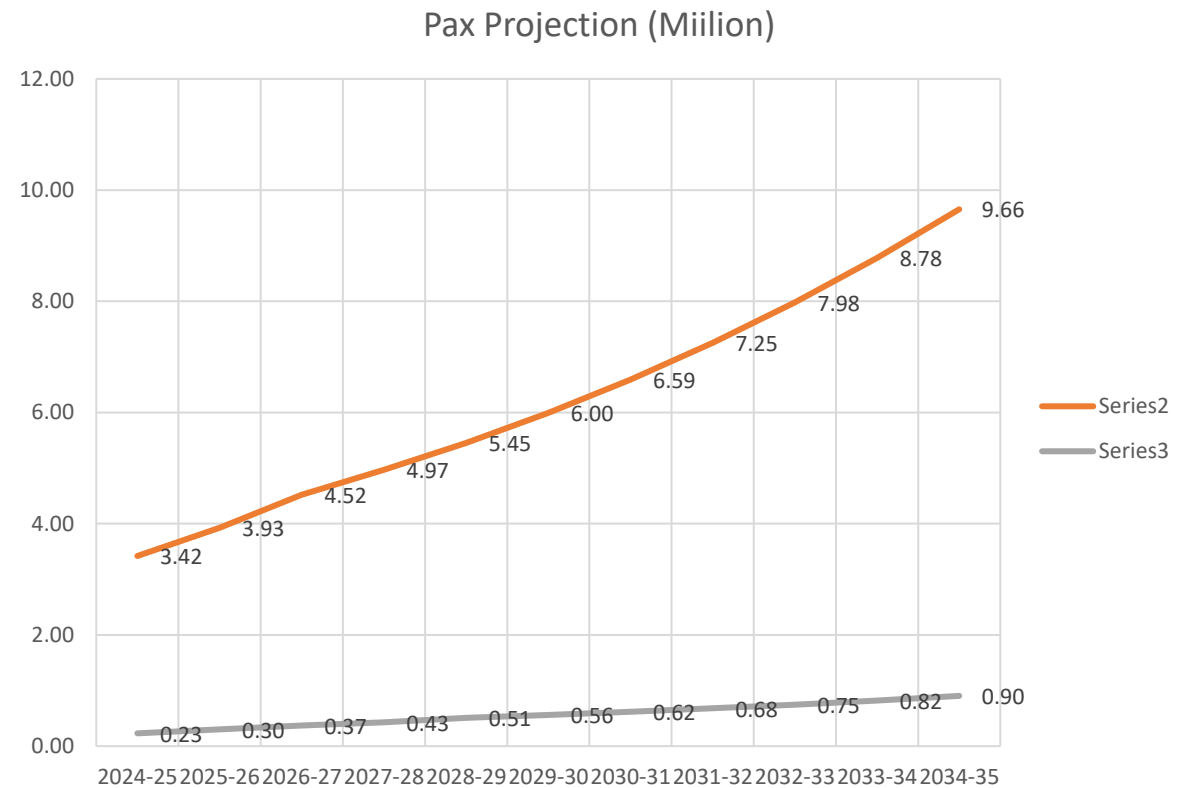
S.N	Description of Assets	Amount (in Crs)	Date of Completion
9	Widening of perimeter road from MT pool to Cargo gate & re-carpeting of perimeter road from Panel no. 1439 to apron in operational area at LBSI Airport, Varanasi	2.34	12.06.2022
10	Construction of 6 High Dependency Units (HDU) and 2 Intensive Care Units (ICU) Hospital near LBSI Airport Varanasi	2.48	2022
11	Expansion of Apron for 02 Nos. code 4C type of aircraft at LBSI Airport, Varanasi.	9.900	03.08.2020
12	Construction of 02 nos. PBB at LBSI Airport, Varanasi	3.120	30.06.2020
13	Vertical extension of CISF Barrack and KOTE at LBSI Airport, Varanasi	2.990	22.08.2020
14	Construction of 02 nos. PBB at LBSI Airport, Varanasi	2.19	24.10.19

LAL BAHADUR SHASTRI INTERNATIONAL AIRPORT VARANASI MINOR CAPEX (First Control Period)

S.N	Description of Assets	Amount (in Crs)	Date of Completion
1	Provision of way finding signage's system at LBSI Airport Varanasi	1.76	14.08.2019
2	Replacement of old package AC plant of MSSR and replacement of old Split & Window AC's of office and operational areas at LBSI Airport Varanasi.	0.65	30.10.2018
3	Provision of 750 KVA & 160 KVA DG sets for replacement of old DG sets, AMF & LT Panel etc. at LBSI Airport Varanasi.	1.71	04.01.2019
4	Provision of 1.2 Mw ground best grid connected solar power plant at LBSI Airport Varanasi.	6.36	18.02.2019
5	Replacement of existing fire fighting system at LBSI Airport Varanasi.	0.53	23.06.2020
6	Provision of UPS For GLF system at LBSI Airport Varanasi.	0.83	20.05.2022
7	Construction of Localizer and Glide Path Building Hut and Antenna Platform at LBSI Airport, Varanasi. S.H. Electrical Works.	0.50	21.06.2022
8	Expansion of Apron for 2 Nos. code 4C type of aircrafts at LBSI Airport Varanasi. S.H:-Provision of Apron Flood Light High Masts and GLF fixtures along with associated works.	0.20	25.12.2020
9	Construction of New ATC Tower and Technical Block at LBSI Airport Varanasi. (SH: Shifting of GLF cables, CCR's along with associated works)."	1.03	03.06.2022
10	Construction of New ATC Tower and Technical Block at LBSI Airport Varanasi. (SH: Provisioning of 33KV power supply cabling from New Power House (NPH), distribution panels etc.).	1.67	31.03.2022
11	Construction of New ATC Tower and Technical Block at Varanasi Airport. (SH: Provision of Elevators).	0.35	08.12.2021

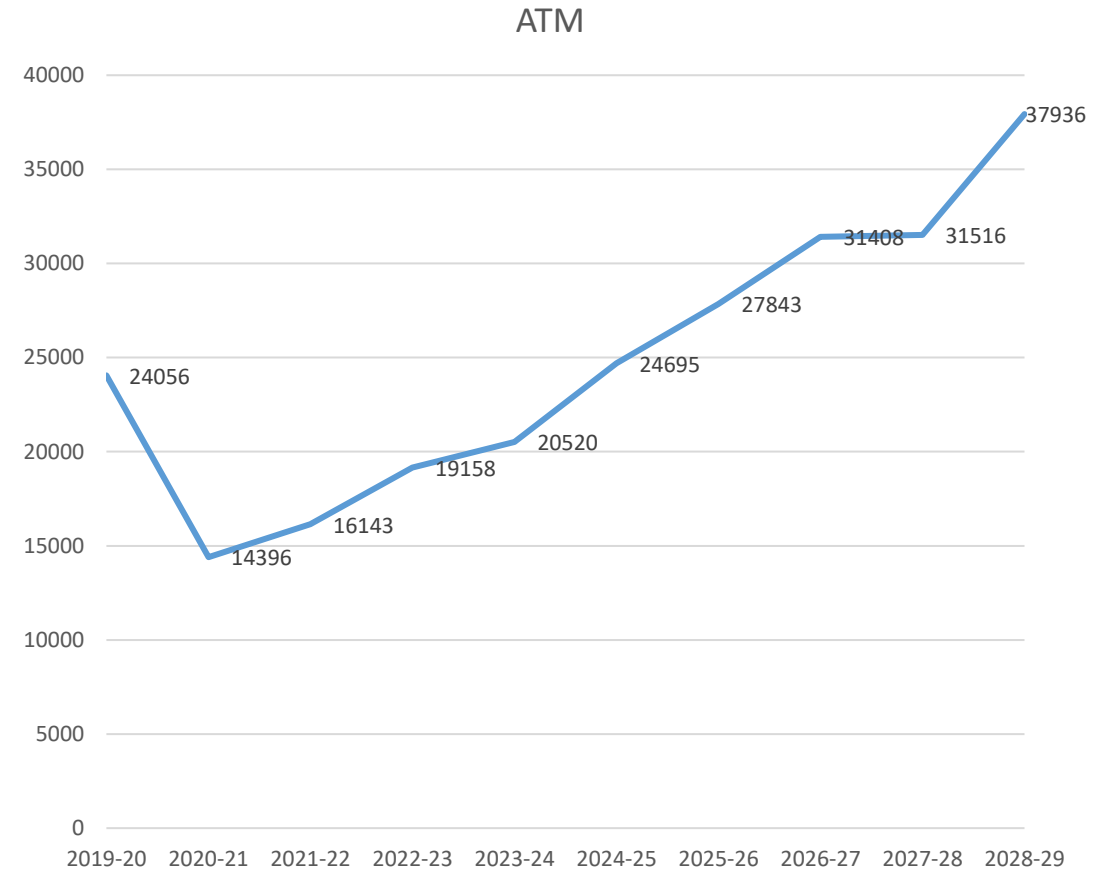
Varanasi Pax Traffic Projection(Million)

Year	Projection(Mn)
2024-25	3.65
2025-26	4.23
2026-27	4.89
2027-28	5.4
2028-29	5.96
2029-30	6.56
2030-31	7.21
2031-32	7.93
2032-33	8.73
2033-34	9.60
2034-35	10.56



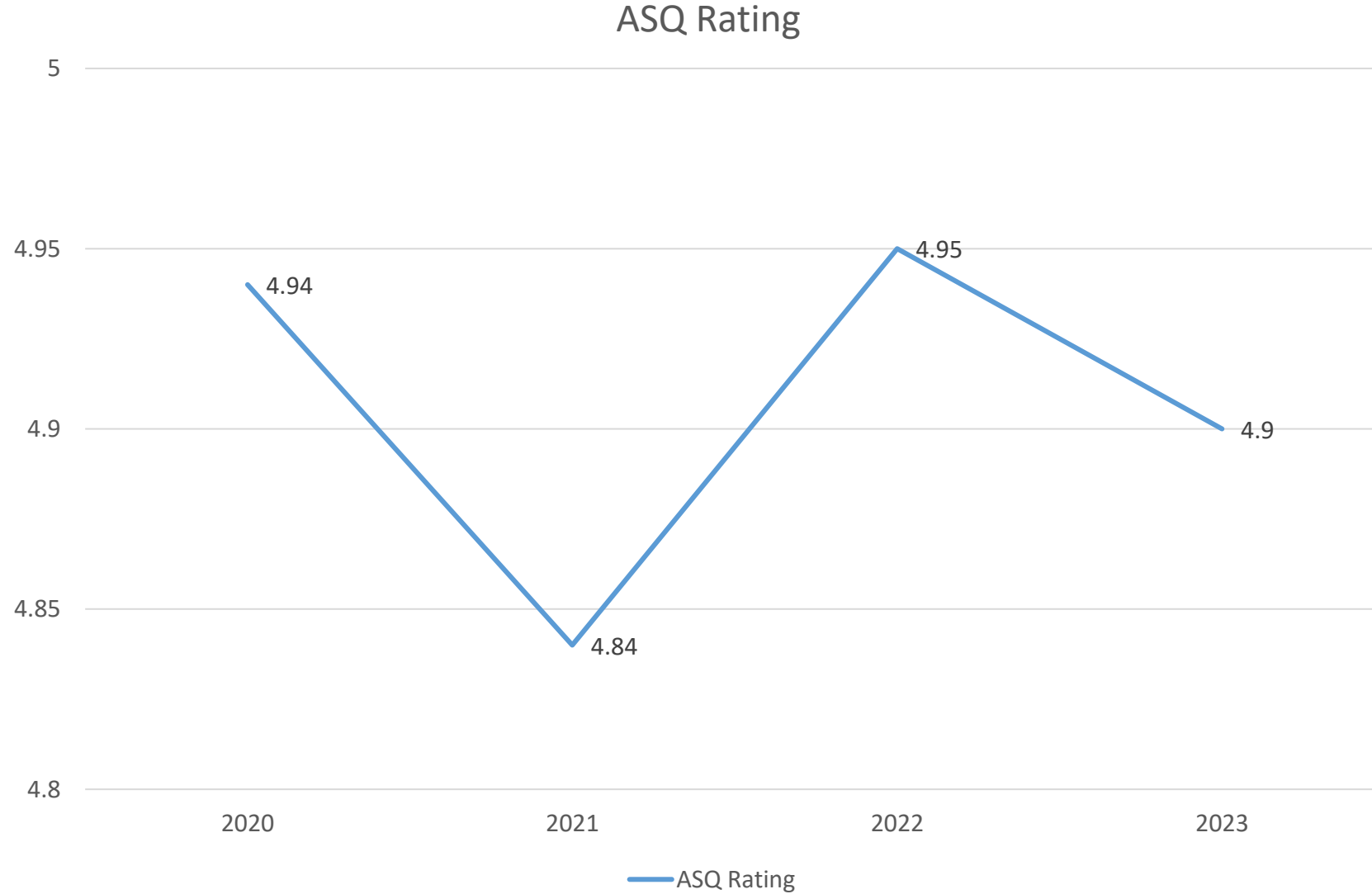
ATM Projection for Varanasi

Year	ATM Projection
2019-20	24056
2020-21	14396
2021-22	16143
2022-23	19158
2023-24	20520
2024-25	24695
2025-26	27843
2026-27	31408
2027-28	31516
2028-29	37936



LAL BAHADUR SHASTRI INTERNATIONAL AIRPORT VARANASI

AIRPORT SERVICE QUALITY



Varanasi Airport Connectivity

Connectivity From Varanasi Airport



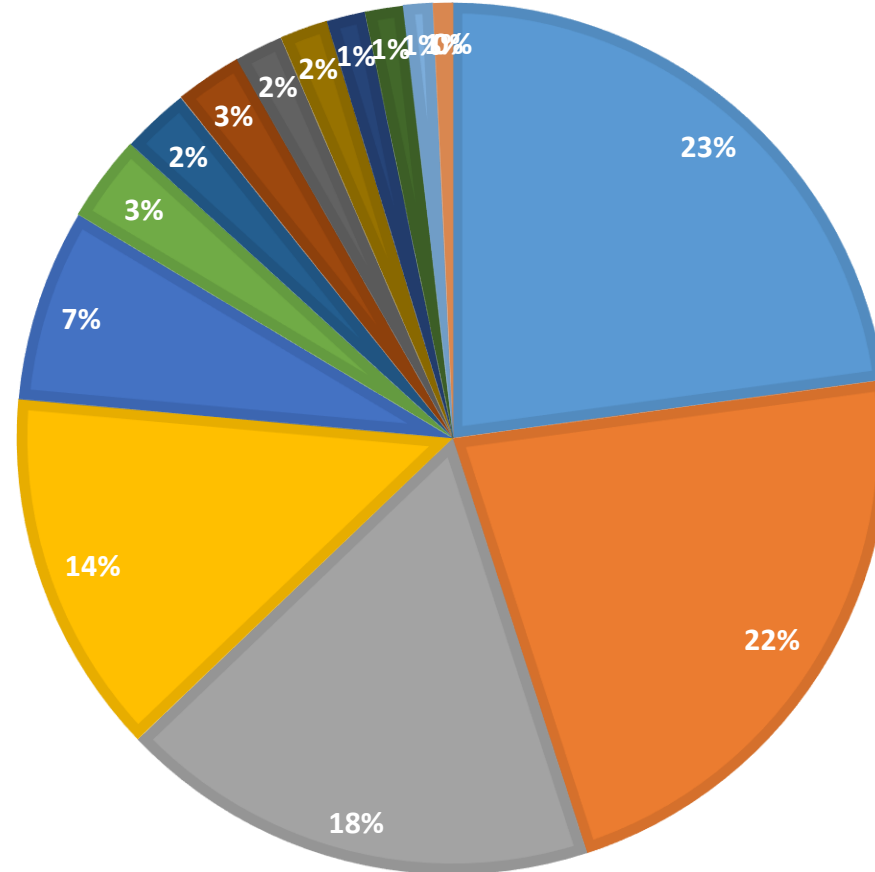
LAL BHADUR SHASTRI INTERNATIONAL AIRPORT VARANASI

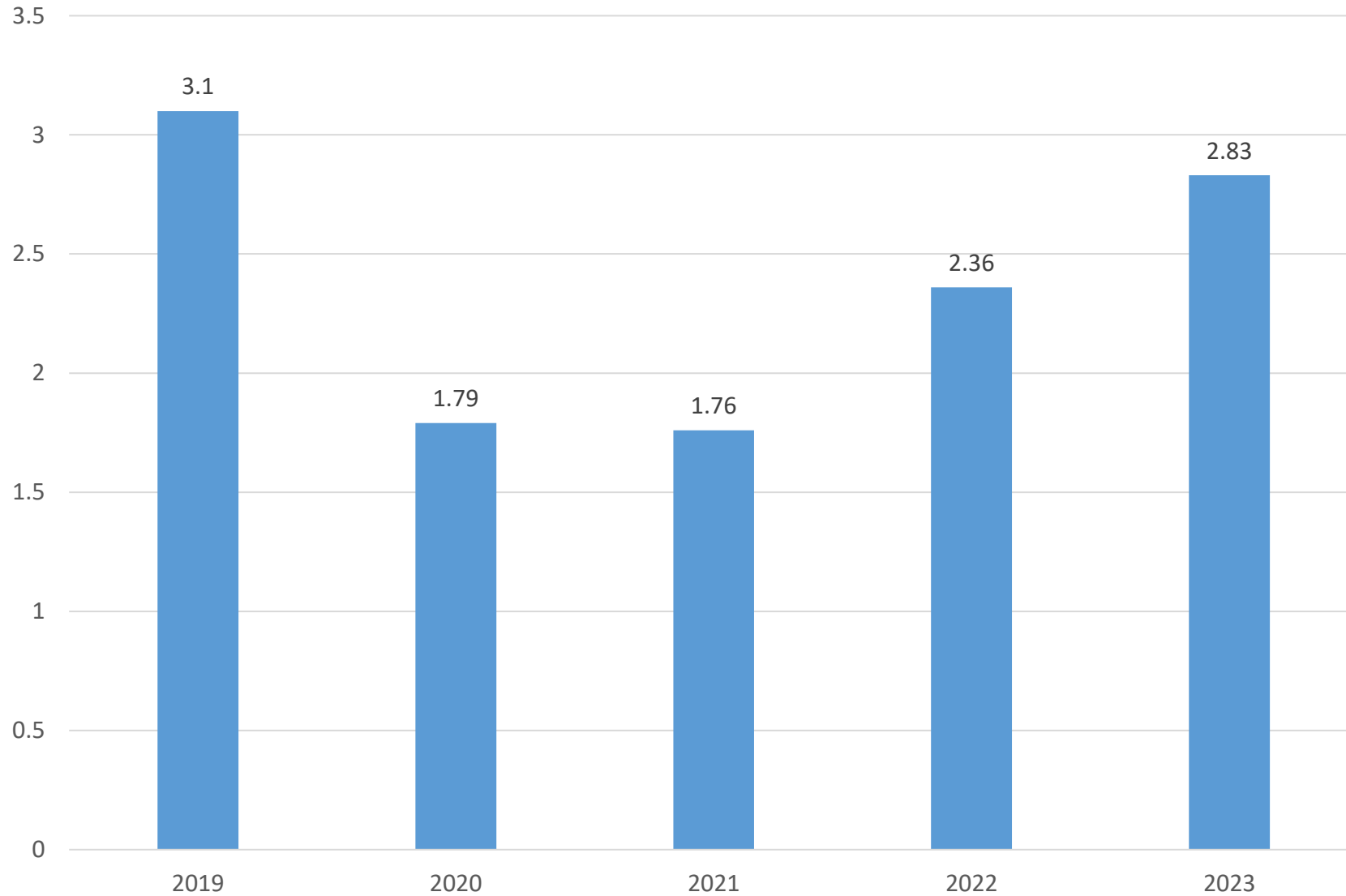
Frequency of destinations connected



WEEKLY FREQUENCY

- Bengaluru
- Delhi
- Mumbai
- Hyderabad
- Kolkata
- Chennai
- Pune
- Sharjah
- Ahmedabad
- Khajuraho
- Lucknow
- Bhuwaneshwar
- Kathmadnu
- Indore
- Pantangar

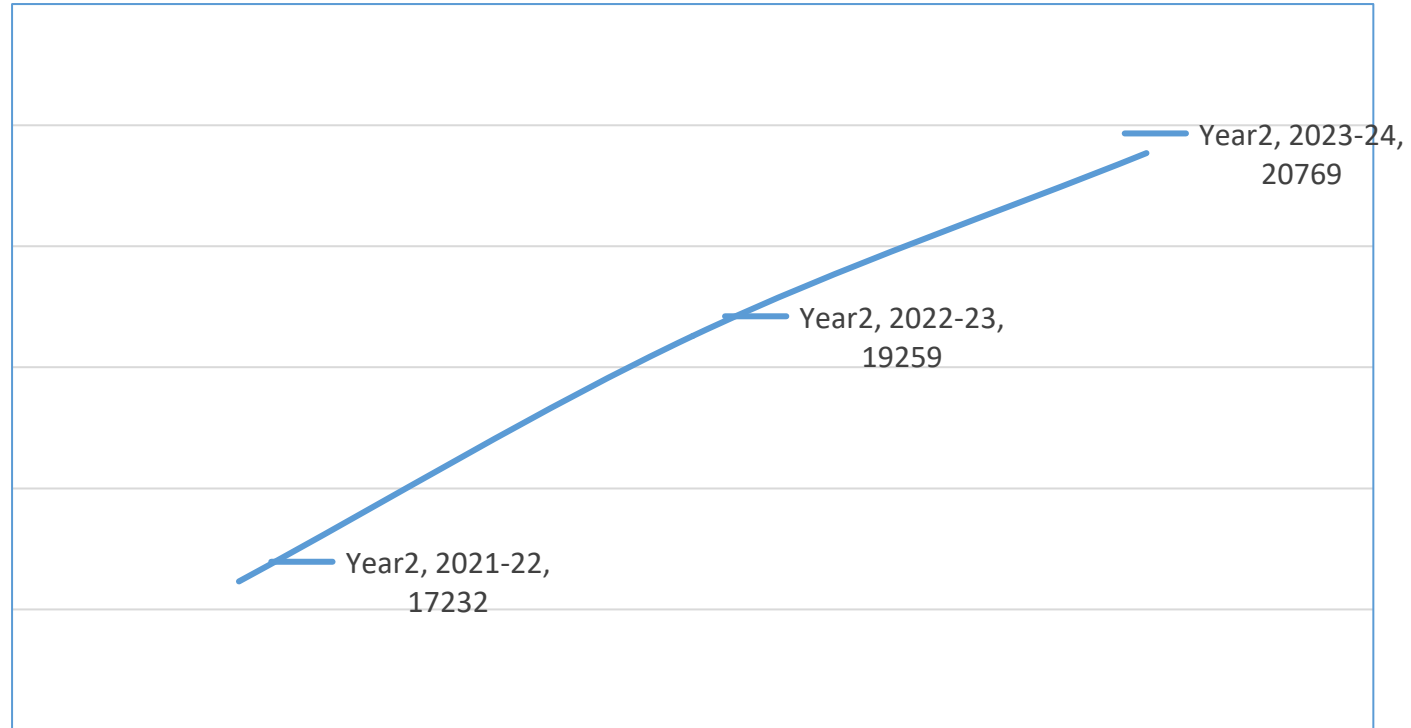




Comparative Data of Aircraft Movement



Aircraft Movement Per Year



<i>S. No.</i>	<i>Year</i>	<i>No. of Aircraft Movement</i>	<i>% Change</i>
1	2021-22	17232	14.98
2	2022-23	19259	11.76
3	2023-24	20769	7.85

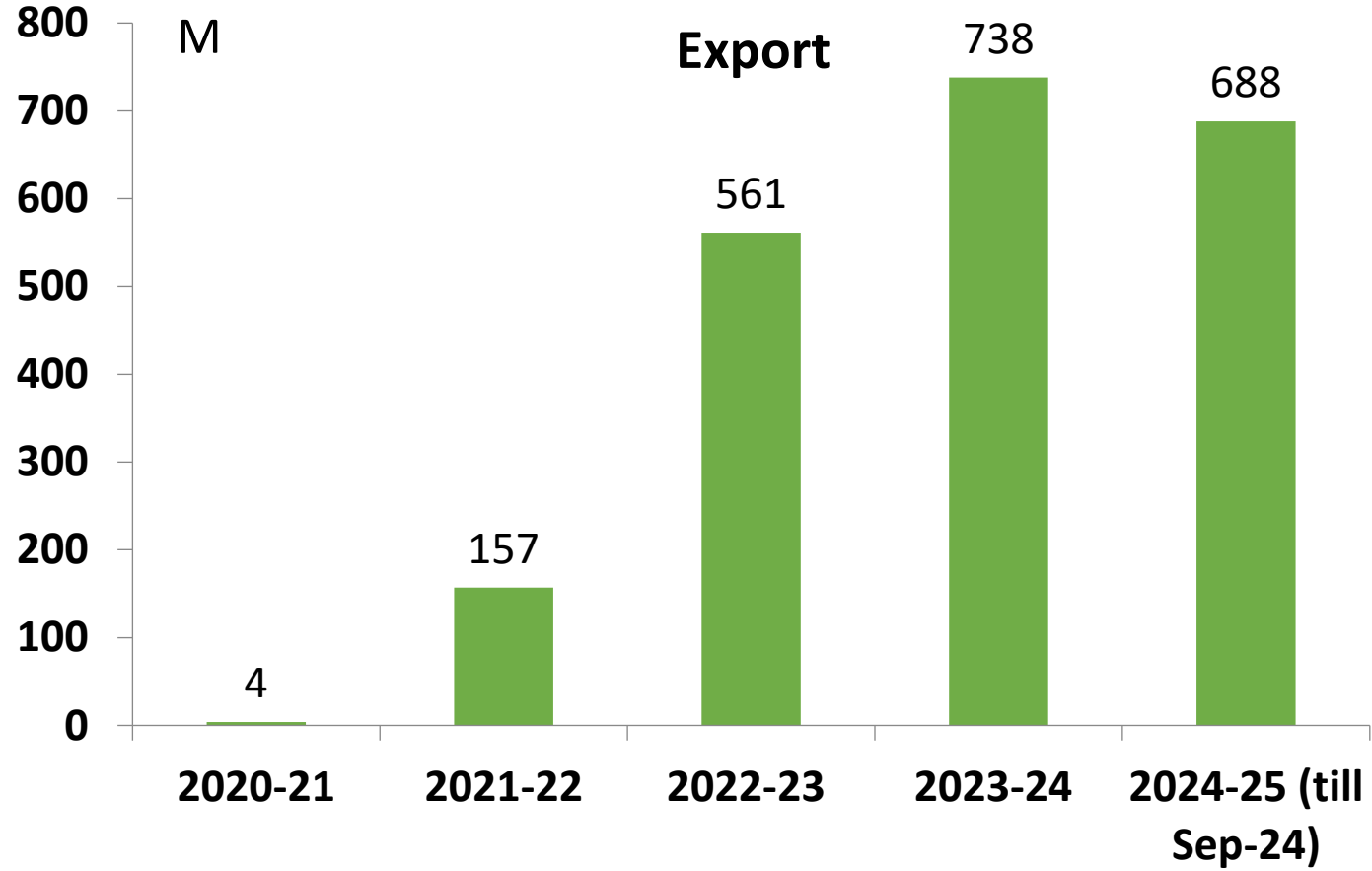
Brief History Of Cargo Terminal

- Integrated Cargo Terminal was **established in 2019** at LBS International Airport, Varanasi having an area of 8800 SQM.
- Integrated Cargo Terminal have built up area **of 4102 SQM.** and open surface area of 4698 SQM.
- Before functioning of Integrated Cargo Terminal, Cargo Operation at Varanasi Airport was being managed from Old Passenger Building.
- Considering the need of Dedicated Cargo Terminal to enhance International as well as Domestic Cargo Volume, AAI took over Cargo Building from U.P Export Corporation Ltd, a State Govt undertaking on 02.01.2018.
- AAI fully renovated Old Cargo Building and installed modern security Equipment. Cargo Operation (International & Domestic) from Integrated Cargo Terminal started from 15.01.2019.
- To facilitate perishable cargo from Varanasi Airport, cold storage having **capacity of 5 MT established at Integrated Cargo Terminal, Amritsar Airport. Temperature range can be maintained from +2.0 Degree Celsius to +8.0 Degree Celsius.**

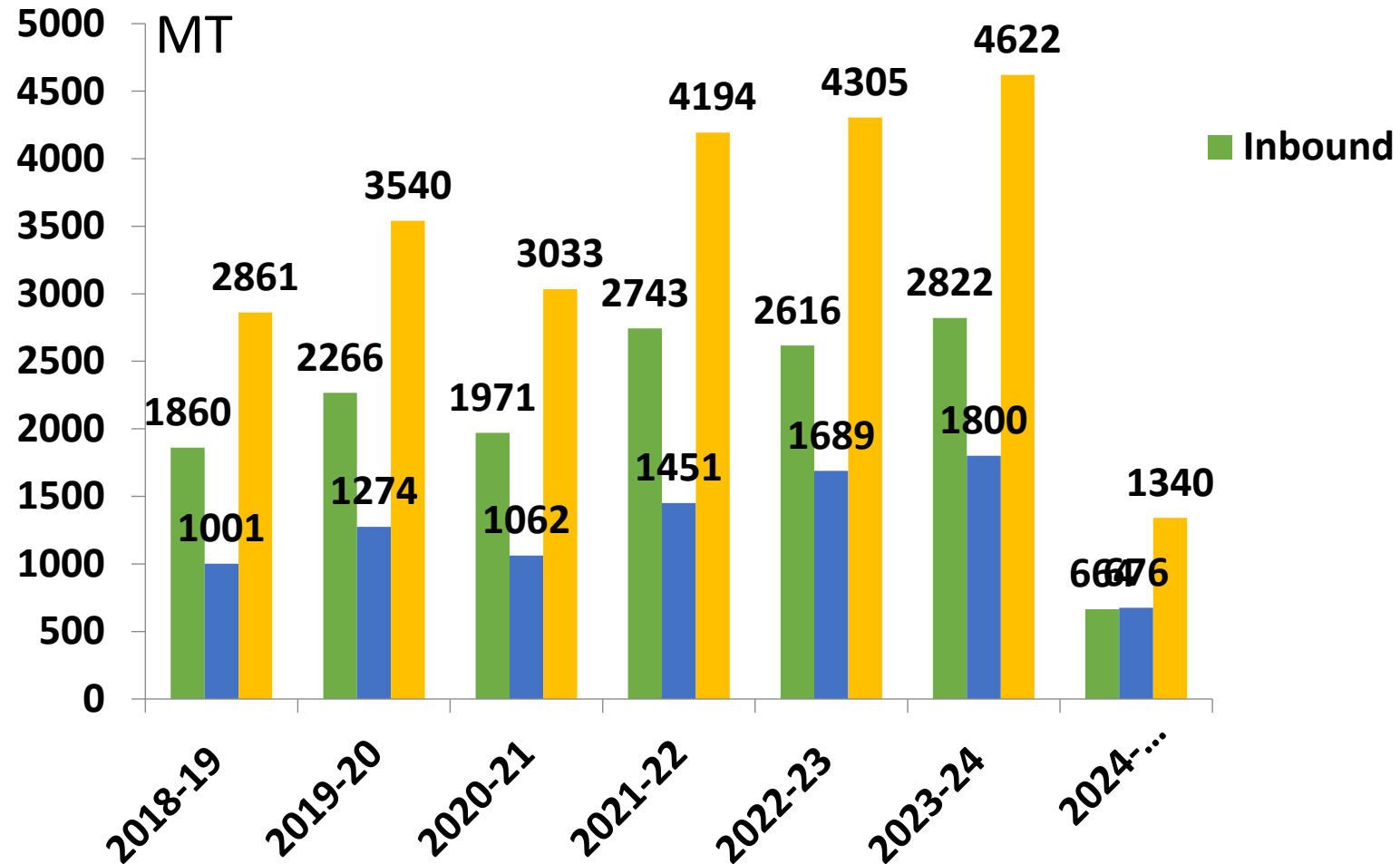
Cargo Infrastructure Details

Total Area	8800 SQ. MTRS.
One time holding capacity	16 MT (International) 32 MT (Domestic)
DGR (Sensitive Cargo) Room	02
No. of Scales	02 (1Ton)
No of X-BIS (Dual View)	02
No. of DFMD	02
No. of ETD	01
Type of Operation Management	AAICLAS Managed

International Cargo Export



Domestic Cargo Handled





- IOCL Aviation Fuel Station
- HPCL Aviation Fuel Station
- BPCL Aviation Fuel Station
- Jio-BP Aviation Fuel Station

Existing facilities :

Varanasi Airport has an area of 774 acres and single runway with orientation 09/27, and dimension of 2745m x 45m. The existing terminal building with an area of 24000sqm is serving 1050PHP to cater 3.9MPPA. The apron have a capacity of 11bays presently, serving both international and domestic passenger.

Proposal :

To meet the ever increasing passenger traffic and demand in this region, it is proposed to construct a new terminal building, apron and runway extension, link taxi to cater to the passenger's convenience in the future growth of Varanasi Airport.

1. New Terminal building = 75000sqm (basement, Ground Floor and First Floor)
2. Multi level carparking = 1000 cars
3. Runway extension = 1704m
4. Peak Hour Passenger capacity : 5000
5. Passengers to cater = 6MPA
6. New Apron for aircraft parking capacity = 20nos.(A-321)

Land Acquisition Status

- Land under acquisition (350 Acres)
 - For Terminal Building: 90 Acres (Acquisition completed >99%)
 - For Extension of Runway : 270 Acres (~117 Hectares)
 - 114 Hectares(Acquisition complete for > 88%)
 - 3 Hectares Govt Land
 - For Tunnel Work, Acquisition under progress under NH Act, **Work Completion**
- State Govt has authorized AAI to commence work on the land which has been acquired till date.(Email dated 14 Feb 2024)
- Work Awarded:
 - Terminal Building work: (Progress: Digging work for MLCP 80% Complete)
 - New Boundary Wall : (Work Awarded : Jun 2024)

Highlights

- PMC Appointed by AAI on 19 Feb 2024
- Pollution Control Board Approval Granted 01/03/2024
- Cabinet Approval granted 04 Jul 2024
- Work for Terminal Building Awarded 10 Jul 2024
- Foundation Laying on 20th Oct 2024 by Hon'ble PM

Planned Development

Salient Features		
Land	Acquisition of Additional 350 Acres Land. Swapping of 135 Acres of AAI Land.	
Runway Extension	1704 m x 45m (Total Length of 4075m x 45m)	
Apron	20 Code 4C Aircrafts or 04 Code E + 12 Code 4C	
Terminal Building	Area (Sq. m)	75,000 (New Terminal Building) + 24000 (Existing Terminal Building) = 99000
	Peak Hour Passenger (PAX) in numbers	5,000 (New Terminal Building) + 1500 (Existing Terminal Building) = 6500
	Annual Capacity in million passengers (MPPA)	6 (New Terminal Building) + 3.9 (Existing Terminal Building) = 9.9 MPPA
ANS Infrastructure	CAT-III Lighting at RWY 27	
Aerobridges	18 Nos	
Multi Level Car Parking	1,000 Cars	
Underpass	To be developed by NHAI (Deposit Work)	

PROPOSED MASTER PLAN



S.NO	ITEM	S.NO	ITEM
1	APPROACH ROAD	8	TERMINAL PHASE-II
2	AIRPORT ENTRY	9	FUTURE TERMINAL
3	EXISTING CAR PARKING	10	PROPOSED APRON PHASE-II
4	EXISTING TERMINAL PHASE-I	11	PROPOSED CAR PARKING
5	EXISTING APRON PHASE-I	12	PROPOSED MLCP BLOCK
6	EXISTING RUNWAY	13	PROPOSED UTILITY BLOCK
7	RUNWAY EXTENSION	14	FUTURE CAR PARKING



EXISTING SCENARIO



- LEGEND**
- 1. EXISTING TERMINAL
 - 2. EXISTING CAR PARKING
 - 3. EXISTING APRON
 - 4. INDIAN OIL AVIATION
 - 5. RELIANCE AVIATION
 - 6. CONTROL OFFICE
 - 7. EXISTING RUNWAY
 - 8. PROPOSED AREA FOR TERMINAL BUILDING, MLCP, UTILITY BLOCK, OFFICE BUILDING & GSE

TOTAL SITE AREA-
271310 SQM (67 Ha)

7 2745m X 45m (7.5 M WIDE SHOULDERS) RUNWAY

8
PROPOSED SITE AREA-
240053 SQM (2.4 Ha)

VARANASI - LUCKNOW ROAD

BABATPUR RAILWAY STATION

RAILWAY TRACK

DESIGN PHT
5000 PAX

240053
SQM
SITE AREA
(BATTERY
LIMIT)

8
NO. OF
DOMESTIC
AIRLINES

13
APRON
CAPACITY

RUNWAY
ORIENTATION
09/27
2745m X 45m

45
NO. OF
HAULTING
FLIGHTS

41
NO. OF
ORIGINATING
FLIGHTS



TERMINAL BUILDING VIEW



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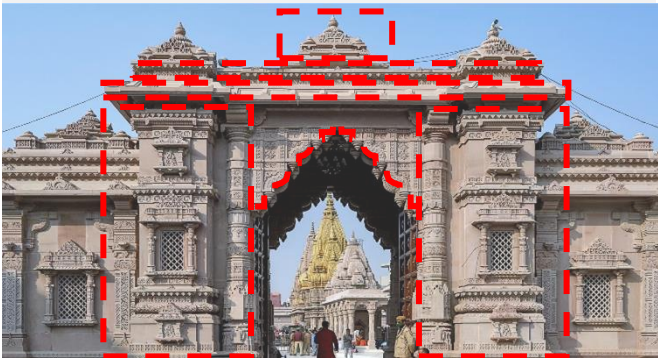


TERMINAL FRONT VIEW



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Form derivation from the entrance gate of Shri Kashi Vishwanath Temple



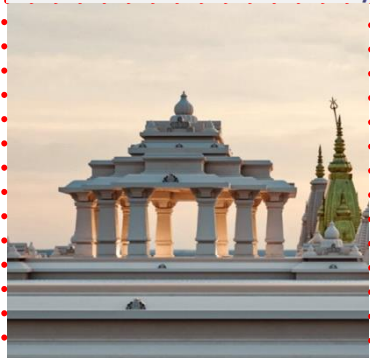
Arches Style influenced from the entrance gate of Shri Kashi Vishwanath Temple



Form derivation from the entrance gate of Shri Kashi Vishwanath Temple



Vestibule design inspired from the Shikharas



“Expression of Temple Architecture through Nagara Style”



KERB AREA VIEW



CHECK-IN HALL VIEW



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CHECKIN 02

CHECKIN 01

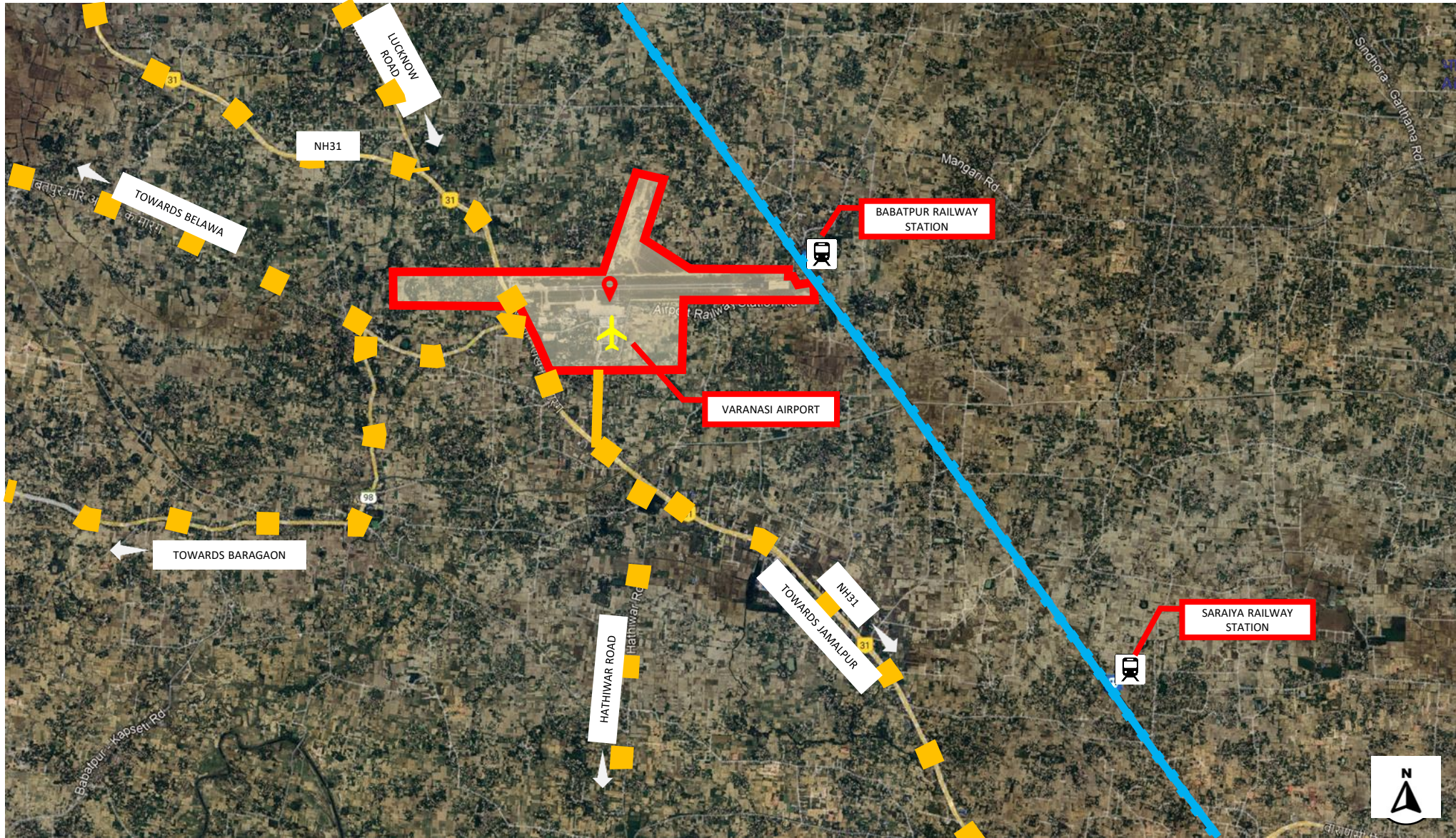
SECURITY HOLD AREA



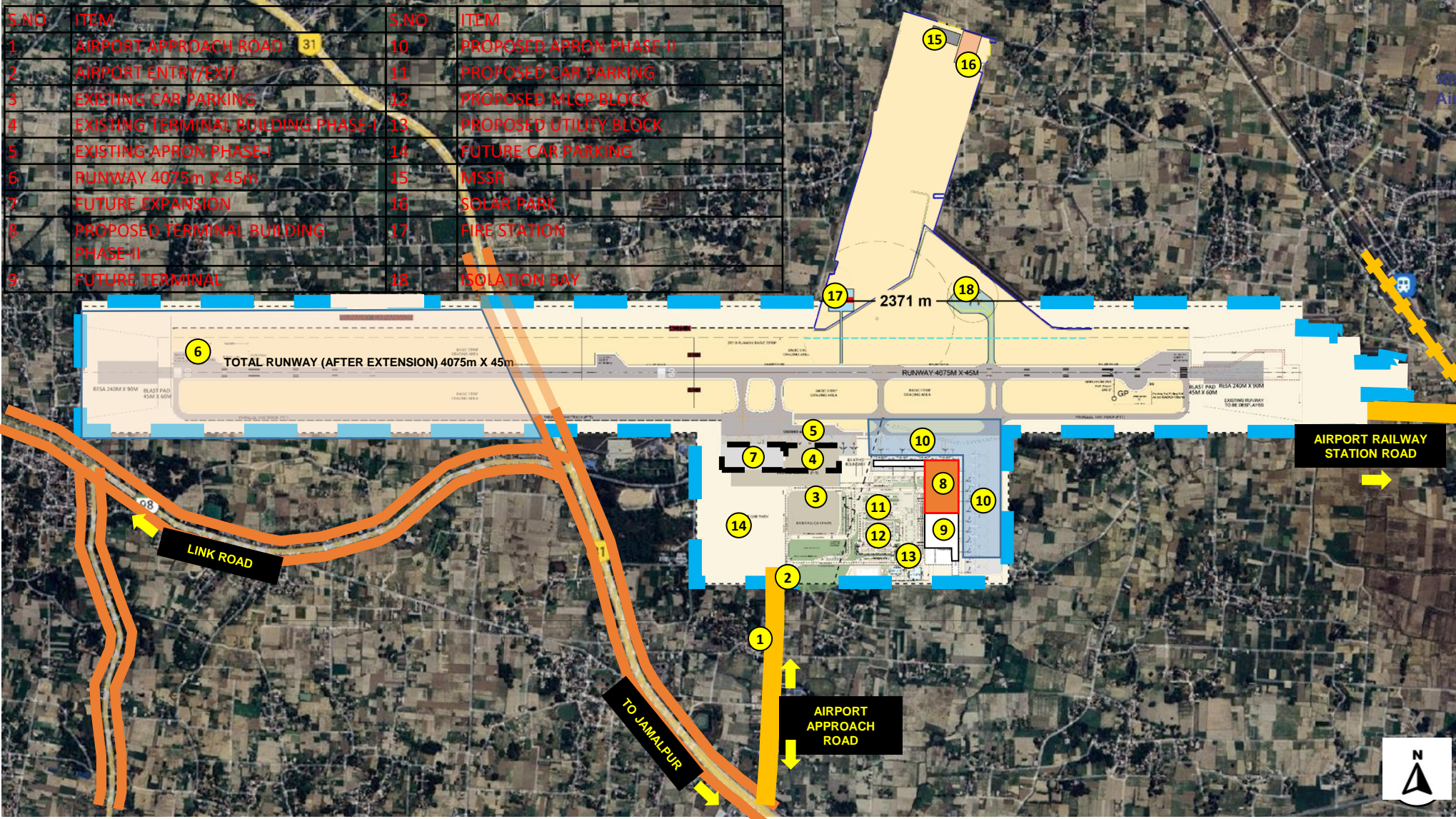
CONNECTIVITY



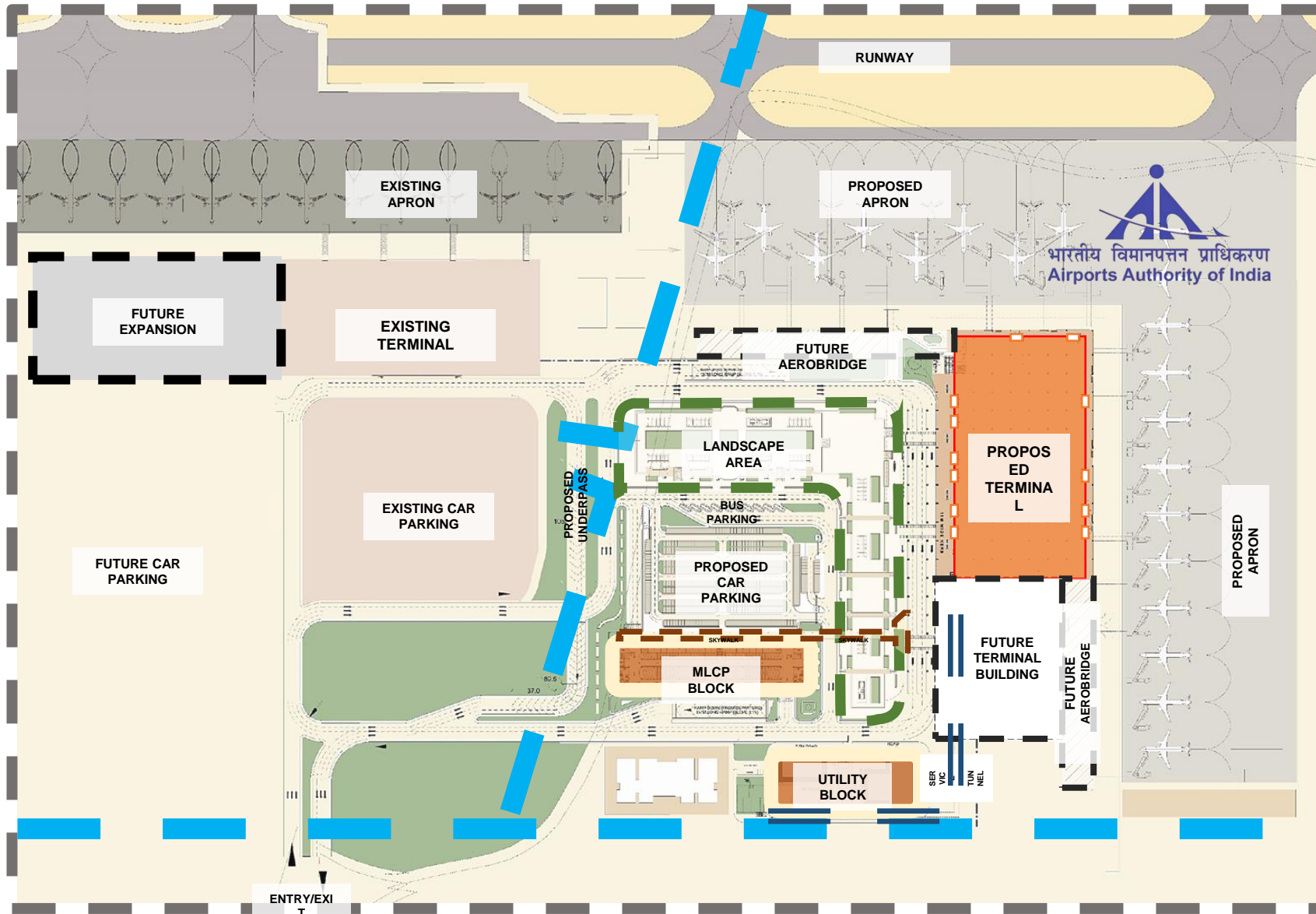
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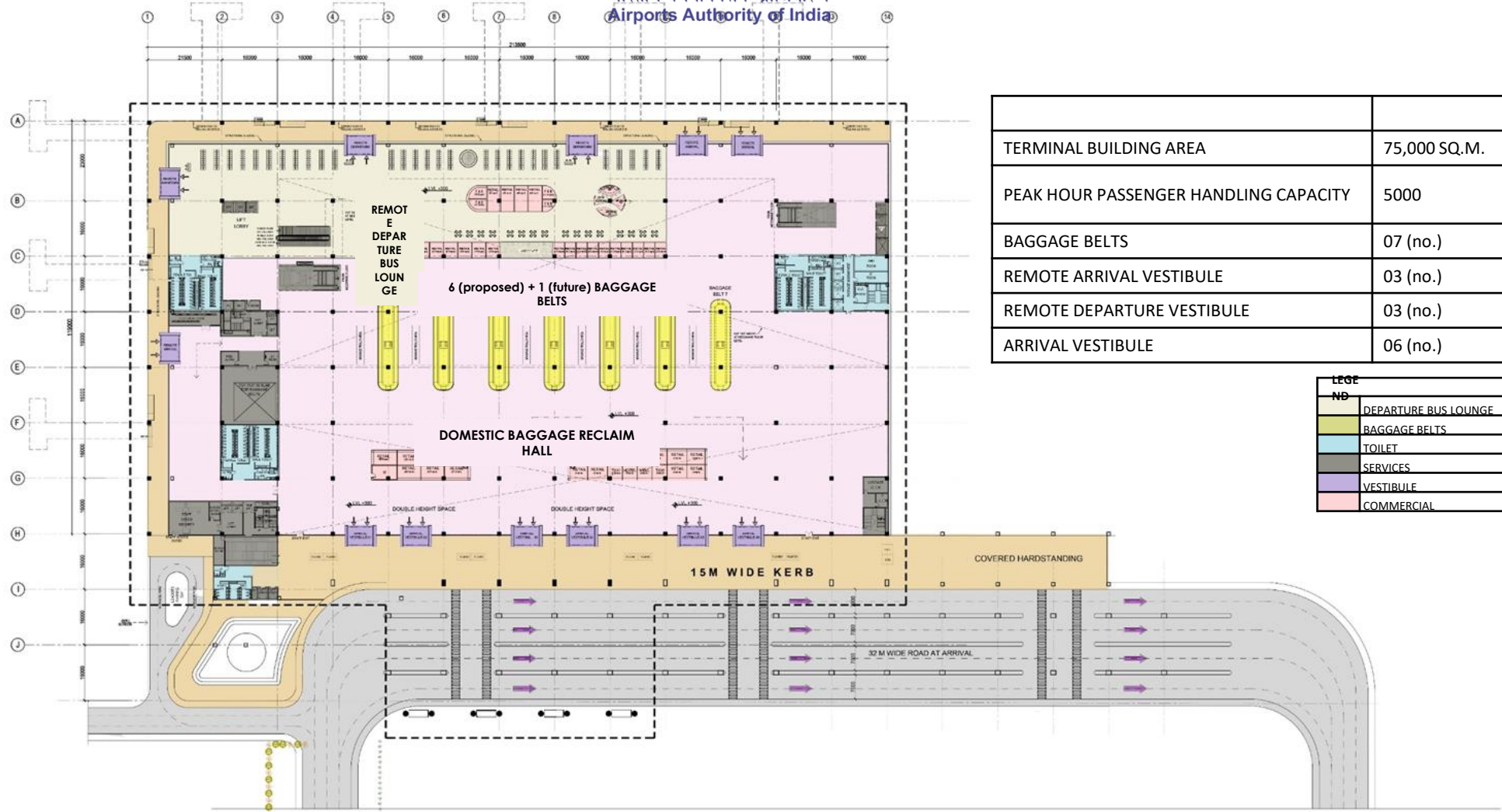
MASTER PLAN



PART SITE PLAN



GROUND FLOOR PLAN

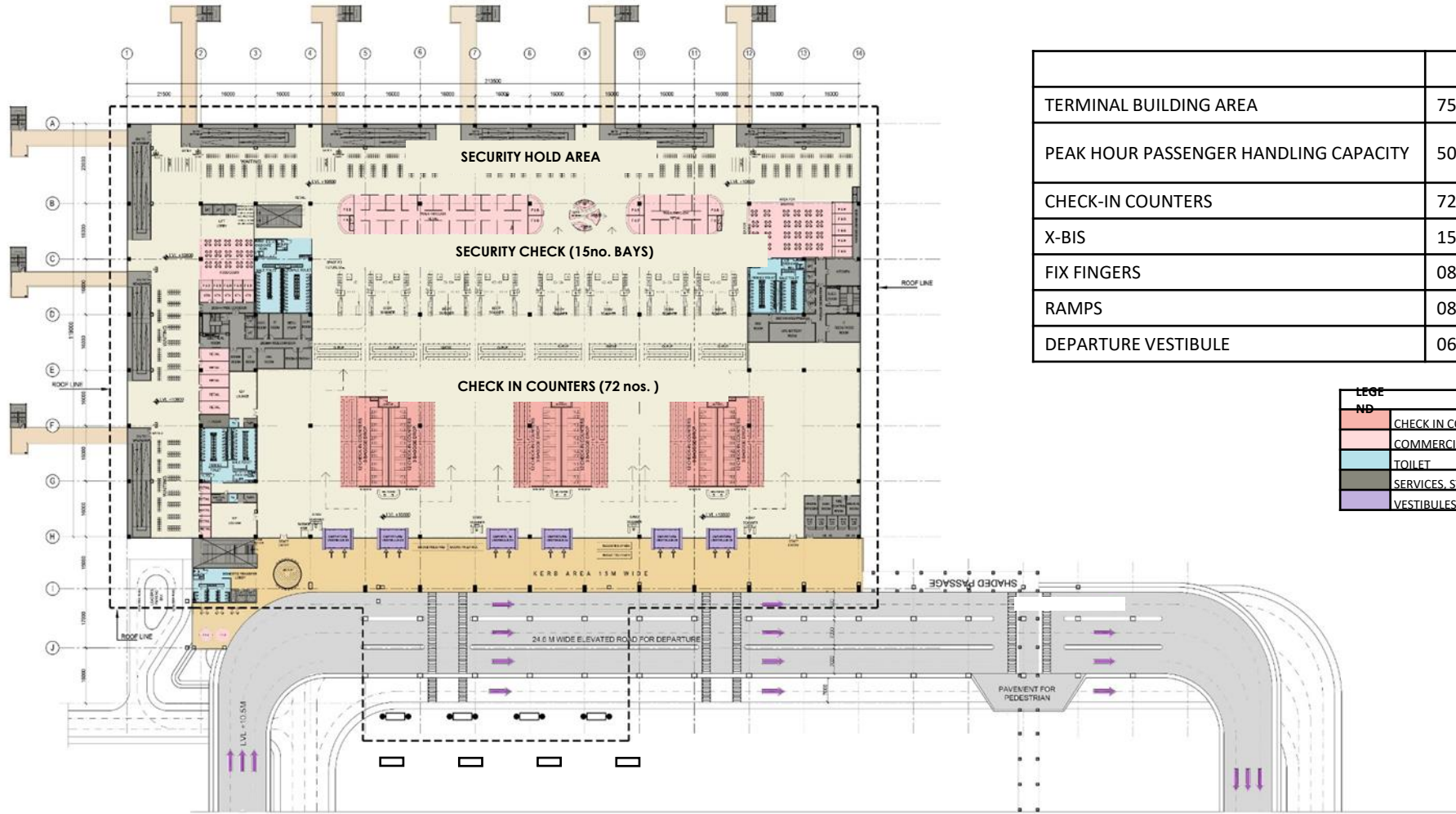


TERMINAL BUILDING AREA	75,000 SQ.M.
PEAK HOUR PASSENGER HANDLING CAPACITY	5000
BAGGAGE BELTS	07 (no.)
REMOTE ARRIVAL VESTIBULE	03 (no.)
REMOTE DEPARTURE VESTIBULE	03 (no.)
ARRIVAL VESTIBULE	06 (no.)

LEGEND	
NO	DESCRIPTION
1	DEPARTURE BUS LOUNGE
2	BAGGAGE BELTS
3	TOILET
4	SERVICES
5	VESTIBULE
6	COMMERCIAL



FIRST FLOOR PLAN



TERMINAL BUILDING AREA	75,000 SQ.M.
PEAK HOUR PASSENGER HANDLING CAPACITY	5000
CHECK-IN COUNTERS	72 (no.)
X-BIS	15 (no.)
FIX FINGERS	08 (no.)
RAMPS	08 (no.)
DEPARTURE VESTIBULE	06 (no.)

LEGEND	
ND	CHECK IN COUNTERS
	COMMERCIAL
	TOILET
	SERVICES, STAIRS AND RAMPS
	VESTIBULES





धन्यवादा

Thank You