

# New Thinking on Urban Infrastructure AT GIFT- A Smart City



Presented by:  
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**Gujarat International Finance Tec – City**  
**A Global Financial Hub**





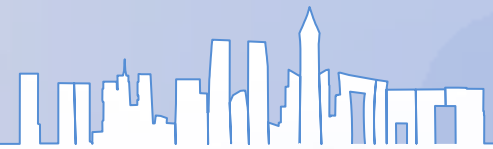
"The vision of Gujarat would be incomplete without capitalising on the in-house financial business acumen.

To tie-up with technology, to create a hub complete with infrastructure, to meet the needs of modern Gujarat, modern India and to create a space in the global financial world... that is my dream"

**Shri Narendra Modi**  
**Hon'ble Prime Minister of India**



# Demand For Financial Services In India

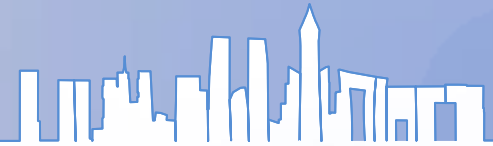


## Significant Potential:

- **Financial Services Sector transformed over the last decade**
- **Sector contributes significantly to the Indian economy**
- **Employs over 4 million people**
- **Represents around 5% of the GDP**
- **Estimated market capitalisation of over US\$ 200 billion**
- **Offers distinct kinds of opportunities across several product markets**



**“Given India's continued economic growth, the financial sector will grow increasingly larger, with a prospect of 10 to 11 million jobs by 2020.”**



“

“If India builds an International financial center, with suitable rules and regulations, the earnings out of financial sector exports will surpass that of IT”

”



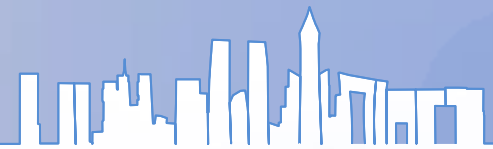
**Percy Mistry, (Fmr) World Bank (2007)**

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# Financial Services Centre's Contribution



## Financial Hubs



London



New York



Hong Kong



Singapore



Zurich



Franfurt



Sydney



Tokyo



Dubai



Channel Islands



Luxemburg

## Share Of GDP

9

10

13

12

10

5

8

20

11

60

30

## Jobs Share

5.2

5.4

5.5

5.2

4.0

5.0

4.0

10.0

N/A

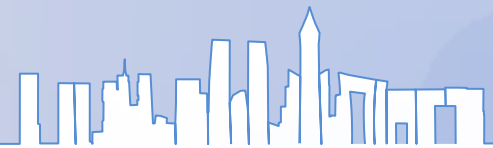
30.0

10.0

Source: IFSL; UK

% share

# Categories of Major Financial Services Centers



## Participants

Participation of both foreign and domestic financial institutions allowed

Participation only of foreign financial institutions allowed

### Niche/function-oriented international financial center

- Barcelona
- Montreal
- Edinburgh
- Chicago



### Full-scale international financial hub

- London
- New York
- Singapore



### Tax haven

- Bahamas
- Malaysia
- Bermuda
- Mauritius



### Out-regional financial center

- Hong Kong
- Dublin
- Dubai



Limited offering

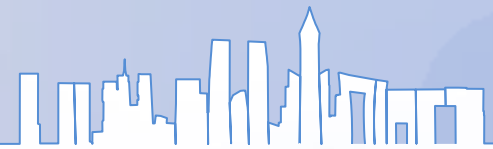
Full range

Range of sector/functions

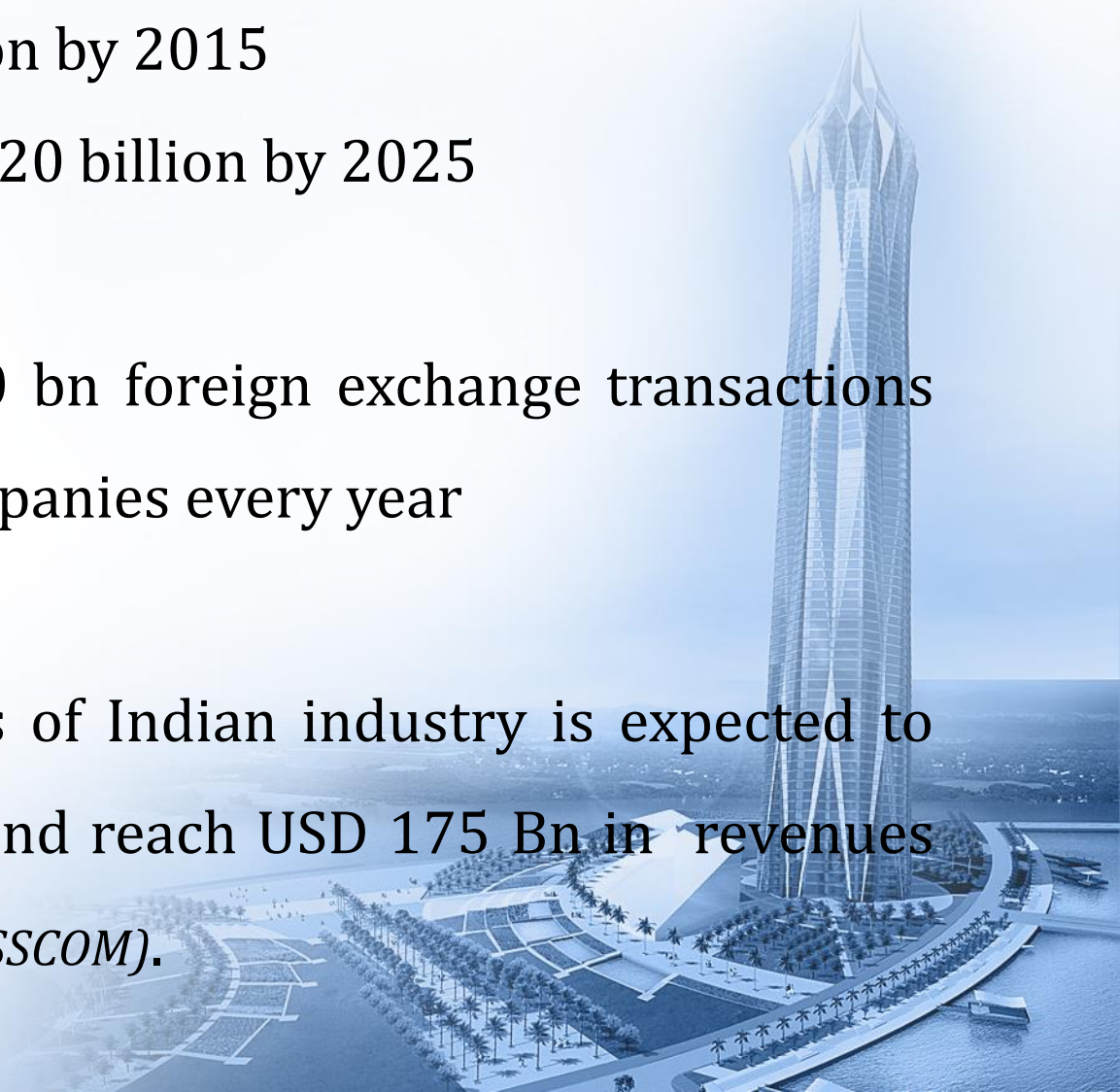




# Potential of International Financial Transactions from India



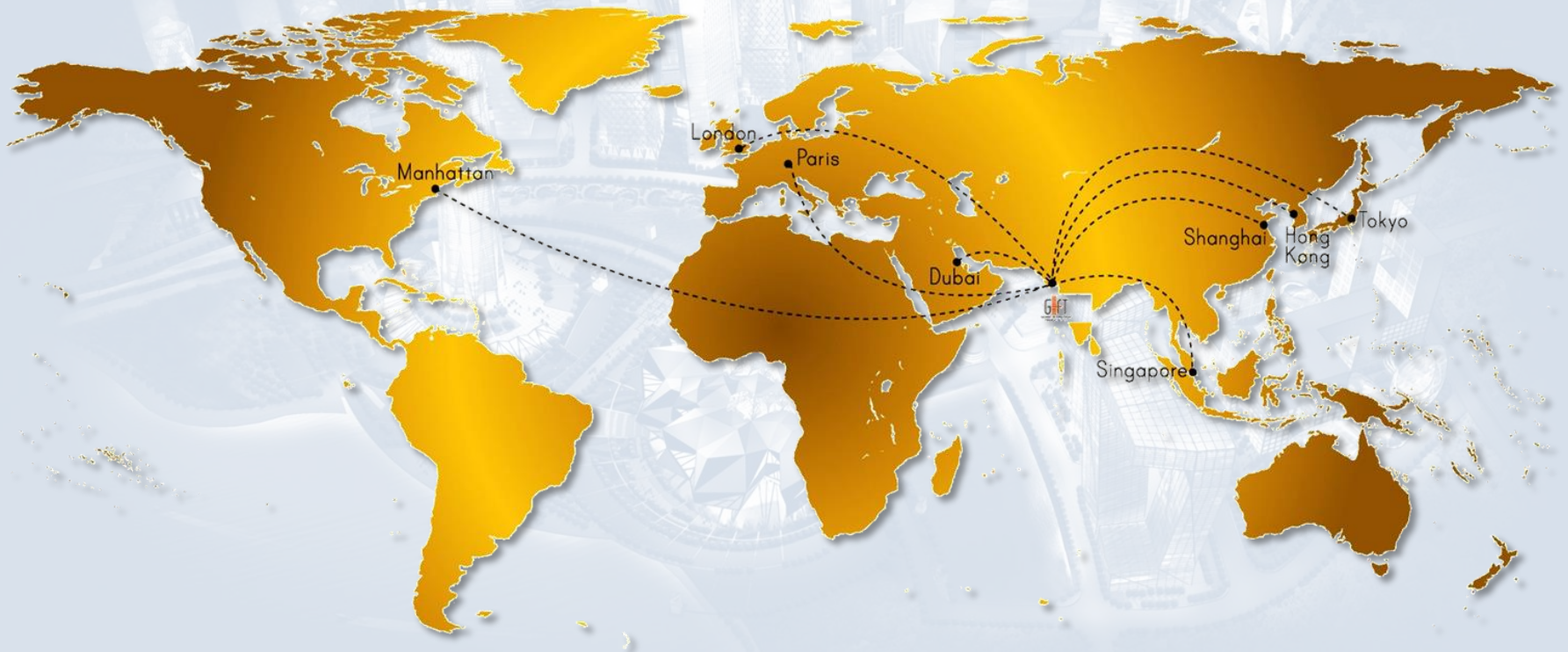
- Purchases by Indian households and firms of IFS will be
  - Nearly \$50 billion by 2015
  - Could exceed \$120 billion by 2025
- More than USD 80 bn foreign exchange transactions done by Indian companies every year
- Export components of Indian industry is expected to expand three fold and reach USD 175 Bn in revenues by 2020 (*Study by NASSCOM*).



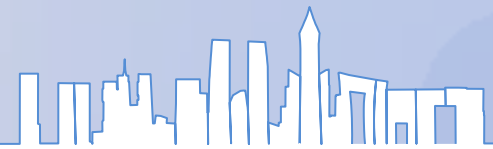
# IFSC in India

*Govt. of India has approved GIFT Multi Services SEZ as an International Finance Services Centre.*

*GIFT is the only approved IFSC in India.*







## 1: Offshore Banking

- Foreign Currency Lending
- Taking of Deposits
- Issue of Securities
- Over the Counter (OTC) Trading in Derivatives for Risk Management and speculative purposes
- Venture Capital

## 3: Fund Custody, Administration and Custody

- Custody of Corporate Funds
- Trust Companies
- Asset Management
- Hedge funds
- Investment Counsellors and Portfolio Managers

## 5: Insurance, Assurance and Reinsurance

- Life and Non-Life Insurance business
- Assurance Companies
- Captive Insurance
- Reinsurance and related operations

## 2: Corporate Treasury Management

- Managing Foreign Exchange Transactions
- Hedging Operations
- Raising and Investing of Cost

## 4: Securities Trading

- International financial exchange
- Securities Trading
- Futures and Options Trading
- Commodities Trading

## 6: Others

- International Business Companies
- Back office operations
- Ship Management & Maritime Operations
- Export Finance Companies
- Companies involved in Lending activities, Trade finance activities, International Leasing, Foreign Exchange dealers, International factoring
- Representative offices
- Money Changers and brokers



## DEFINING A SUCCESSFUL FINANCIAL SERVICES CENTRE

**A Successful Financial Services Centre Has Six Key Building Blocks:**

- Rational legal regulatory framework
- Attractive, sustainable local economy
- Stable political environment
- **Highly developed infrastructure**
- Strategic geographic location
- Good quality of life

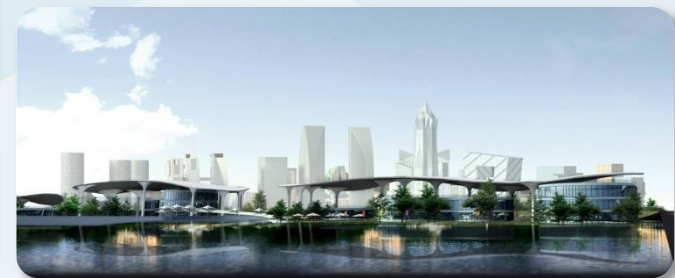




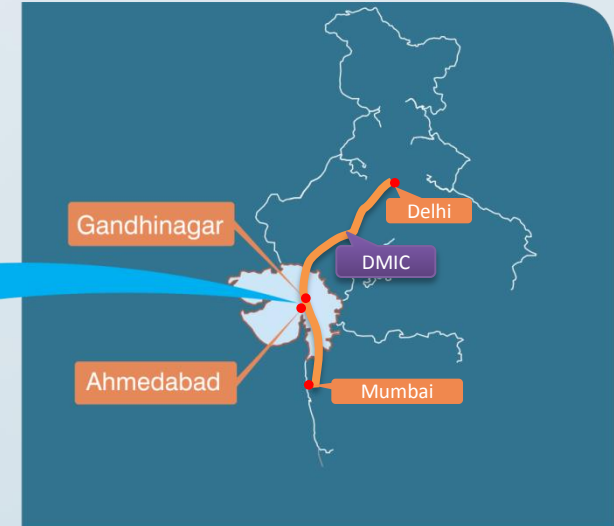
# GIFT- A new Thinking on Urban Infrastructure



- Globally benchmarked International Finance Centre
- Strategically located
- Central business hub  
0.5 Mn direct & 0.5 Mn indirect jobs
- Targeting Financial Services & IT/ITeS sectors
- First of it's kind development in scale, scope and quality
- State-of-the-art infrastructure



# Strategic Location - India / Gujarat



- Centrally located in the state of Gujarat in Gandhinagar
- 12km From Ahmedabad International Airport
- On the bank of River Sabarmati

# GIFT an Integrated Urban Development



## PROACTIVE URBAN GOVERNANCE

### Smart Business Environment:

- Benchmark office, high-rise district with landmark buildings



### Technology:

- Broadband FTTP
- WiFi / Wimax
- Shared IT Services
- Global Connectivity



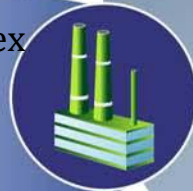
### Integrated Residential Development:

- Well-planned residential housing projects
- Walk-to-work



### Social Infrastructure:

- International Exhibition Complex
- Educational Institutes
- International and Domestic schools
- State of the Art Hospital
- Training School
- 5 star Hotels and Business Club



### Smart Infrastructure:

- Uninterrupted and highly reliable power supply (99.999%)
- Next generation water & waste management, district cooling



### Overall Connectivity/ Transport:

- External Connectivity includes MRTS / BRTS/ Roads
- Public-Private Modal Split 90:10

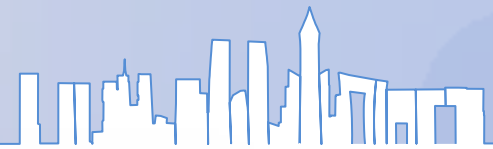


### Retail Cum Entertainment Hubs:

- High quality entertainment malls
- Large river front entertainment development
- Over 60% of the green Space



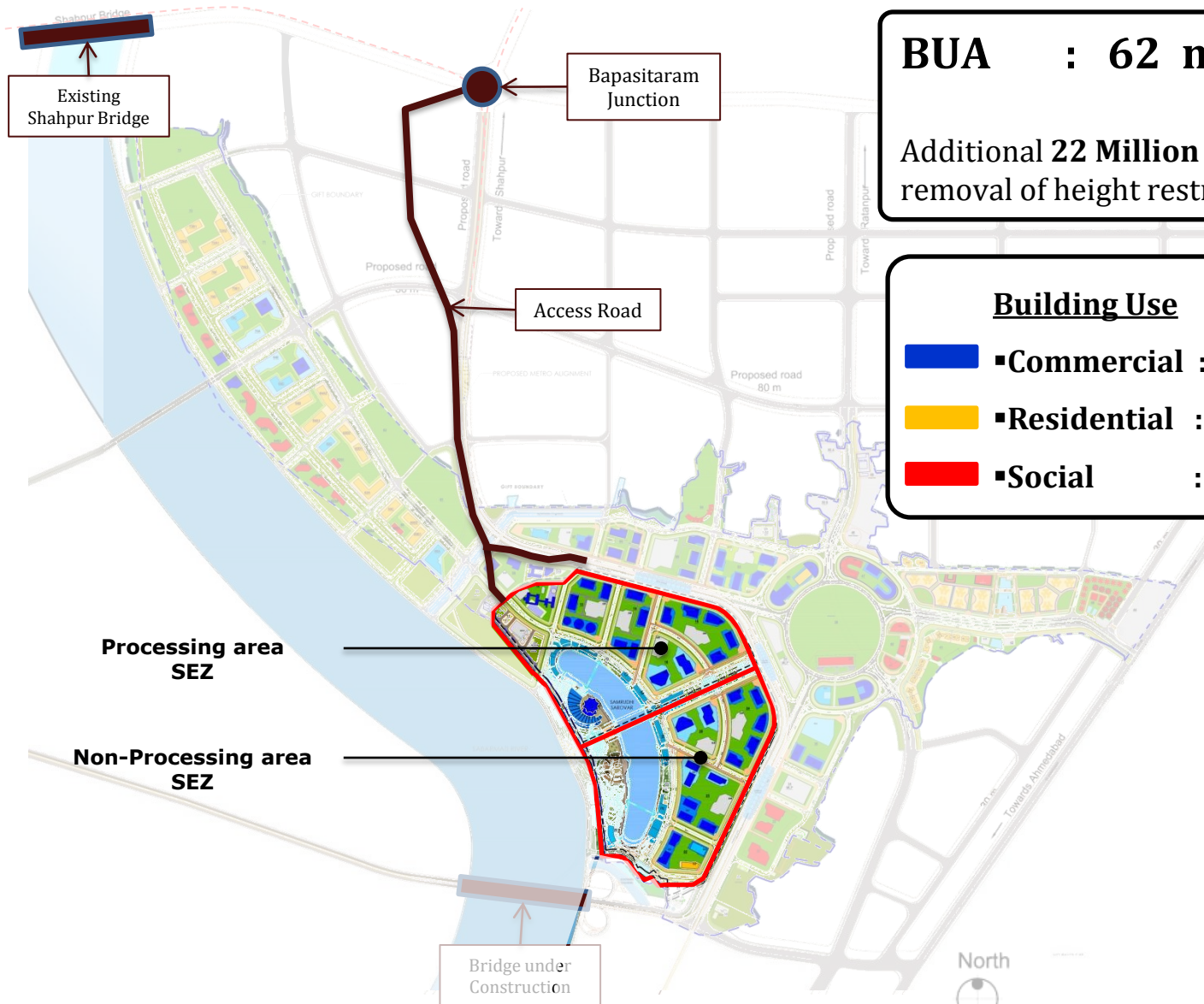
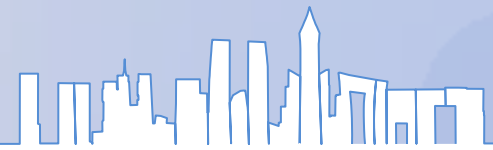




- **GIFT is the Master Developer of the City.**
- **GIFT Urban Development Authority (GIFTUDA) - constituted for well planned urban development of the area.**
- **GIFT Notified Committee - constituted for the better management at city level.**
- **GIFT has power distribution license for GIFT Area**



# GIFT: Master Plan



**BUA : 62 mn.sq.ft.**

Additional **22 Million** to be developed after removal of height restriction by AAI

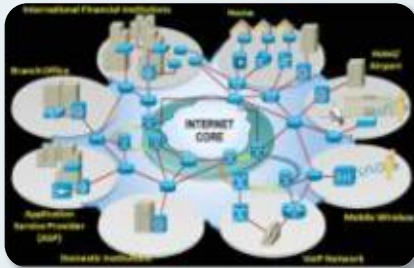
## Building Use

- **Commercial : 67% (42 Mn SqFt)**
- **Residential : 22% (14 Mn SqFt)**
- **Social : 11% (6 Mn SqFt)**

# GIFT Smart Infrastructure – Physical



- Integrated infrastructure for better diversity
- Smart Technology ensuring energy conservation
- All utilities /services to be coordinated through single agency



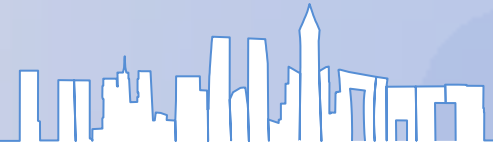
## INFRASTRUCTURE FACILITIES/ SERVICES

- Roads and Transportation
- Water Systems
- ICT
- Power Generation and Distribution
- District Cooling System
- Domestic Gas Distribution
- Waste Management Systems
- Utility Tunnel
- Landscaping

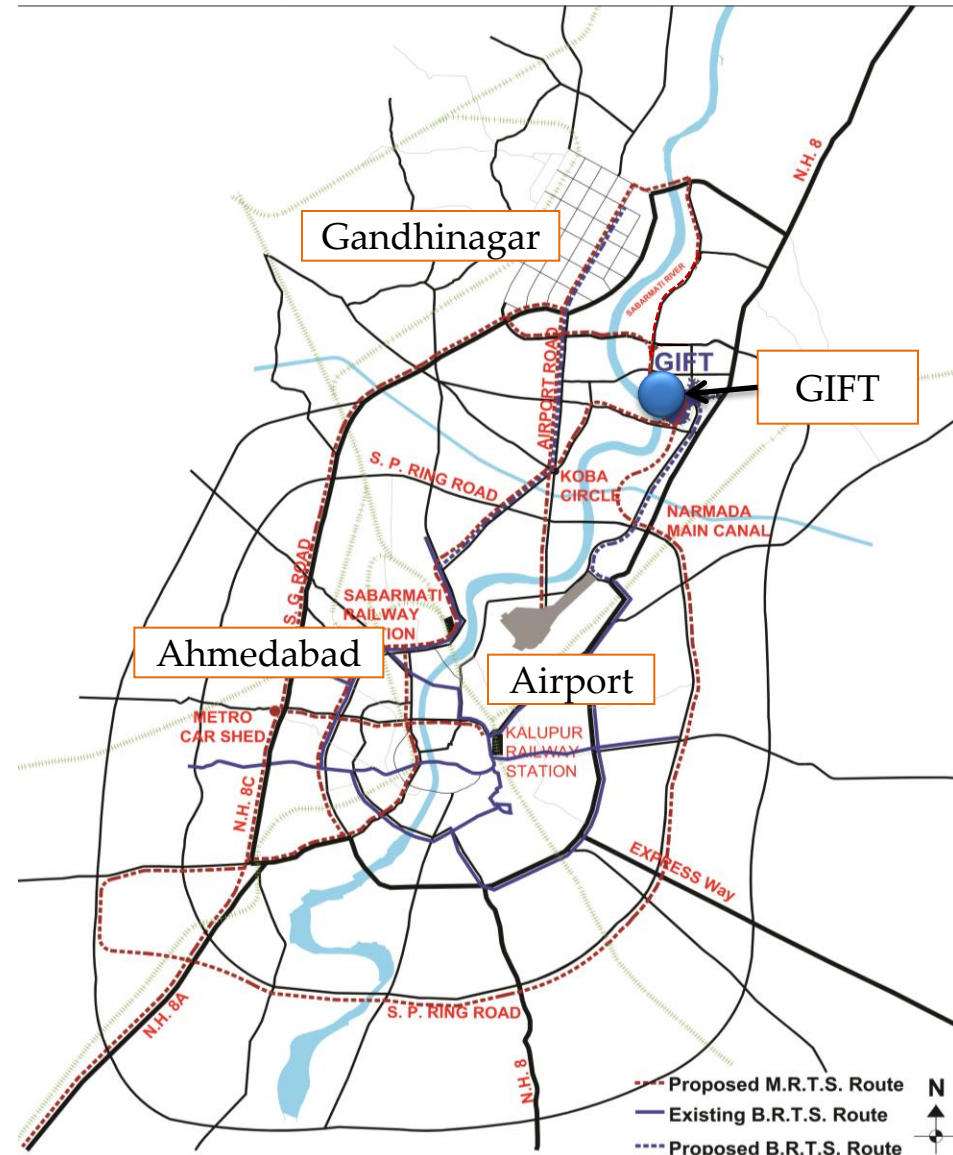
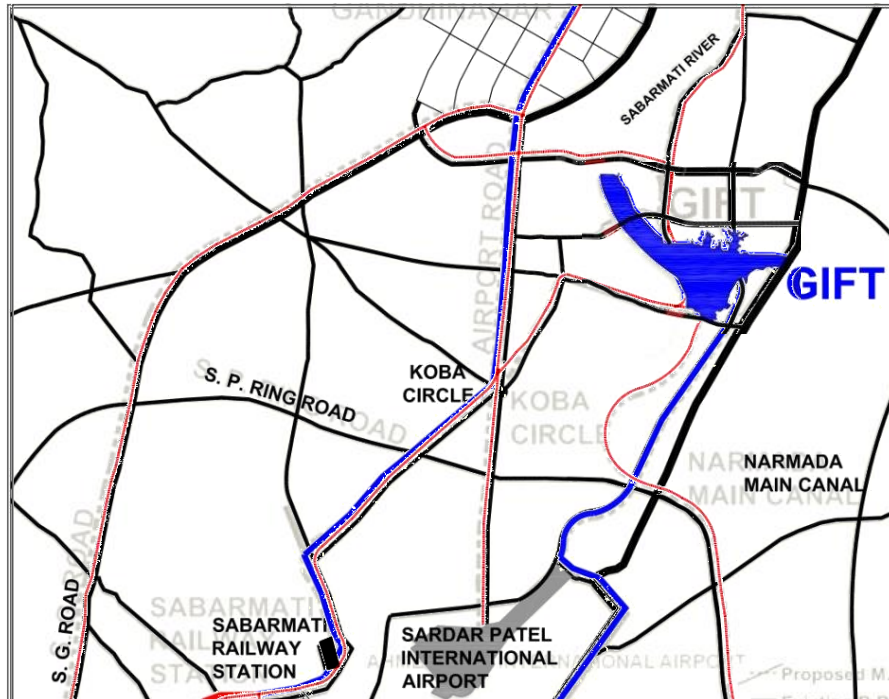




# External Transportation

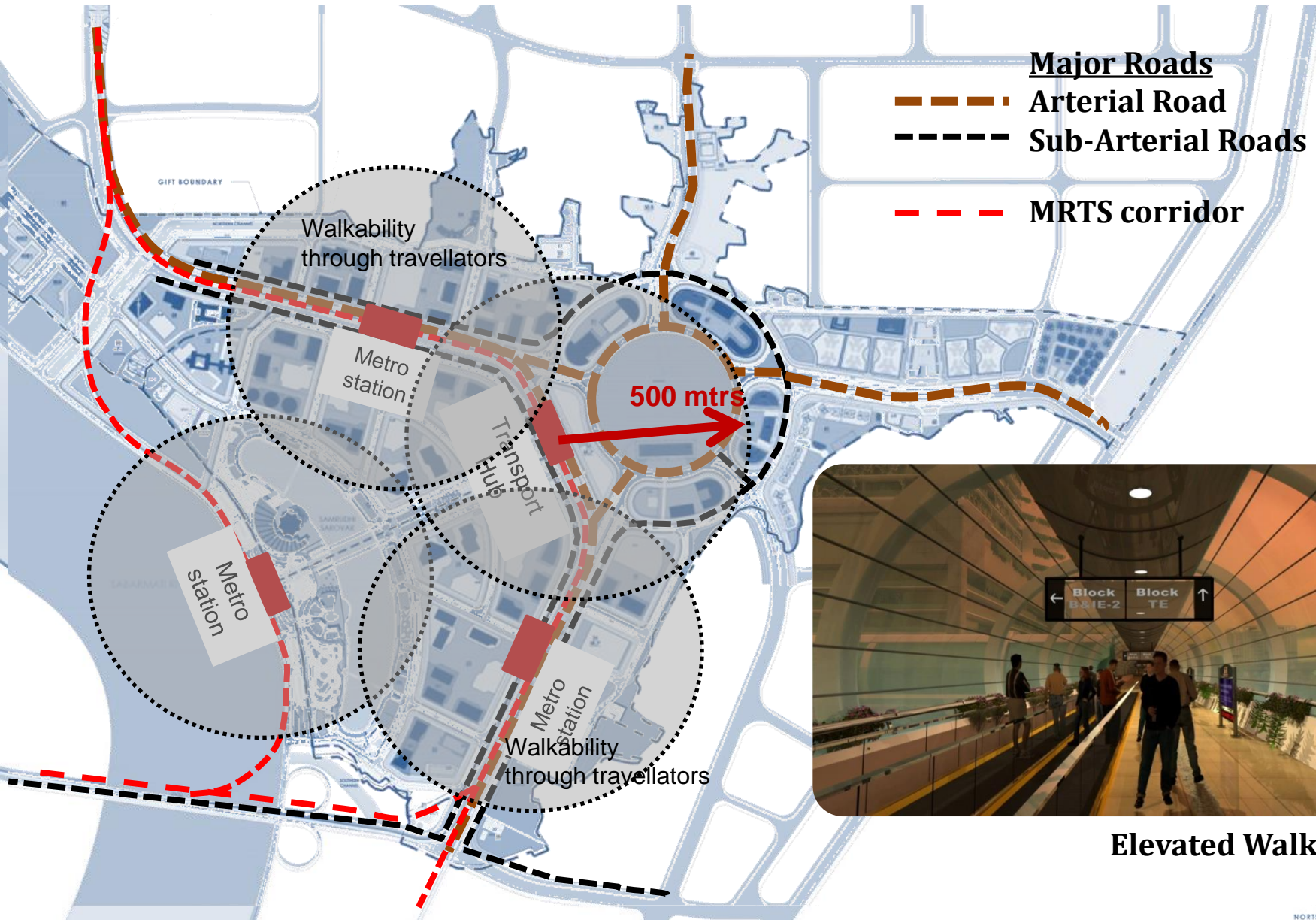
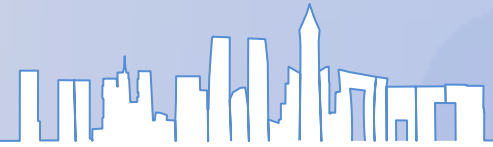


- Grid of six Arterial Roads  
(Connecting to various areas of Ahmedabad and Gandhinagar)
- Metro Rail Transport System (MRTS) to GIFT
- Bus Rapid Transit System (BRTS) to GIFT



# GIFT- A Transit Oriented Development

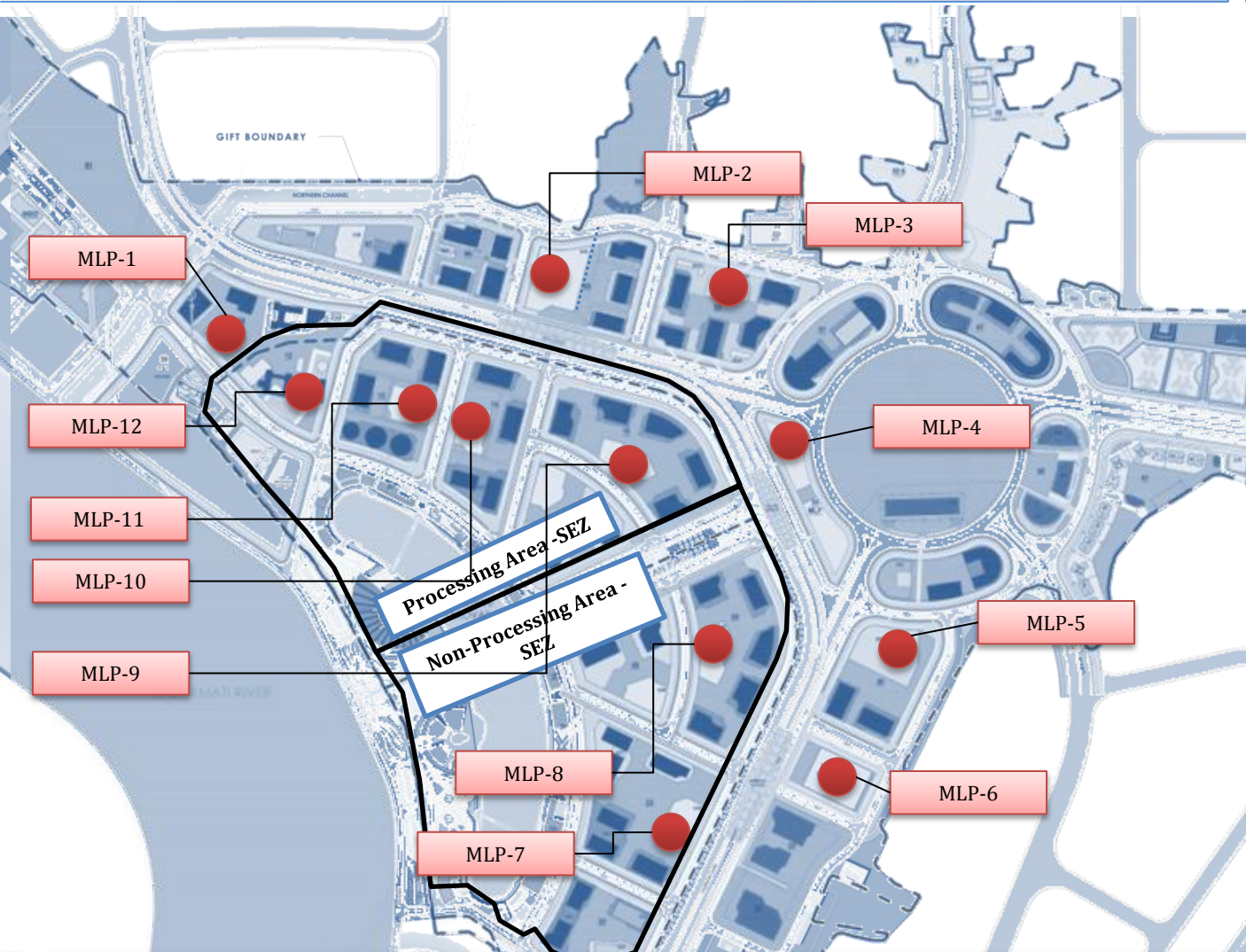
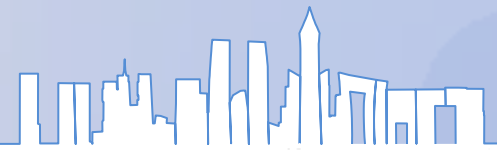
## Major Internal Transport Corridor



**Elevated Walkways**



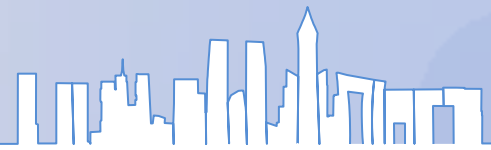
# Multi Level Parking (MLP)



- Total Parking Requirement of GIFT City- 1.2 lakhs ECS
- No. of Car Parking in MLP – 60,000 car parks



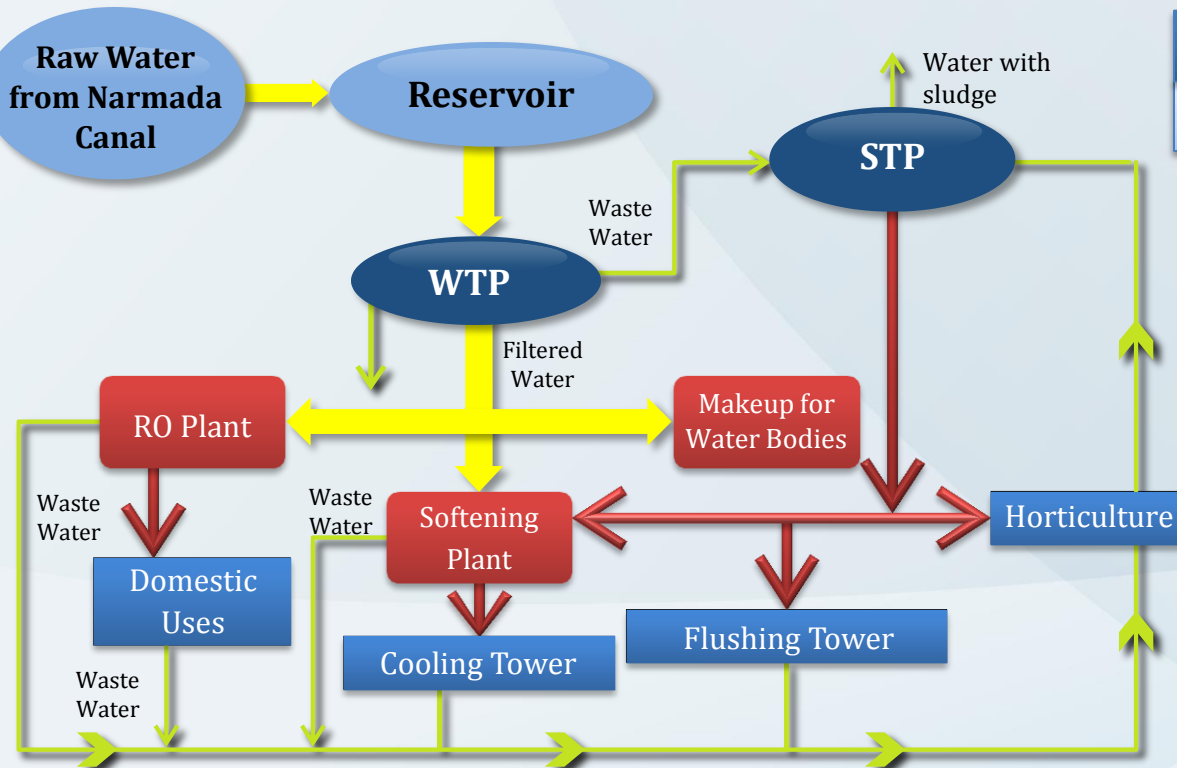
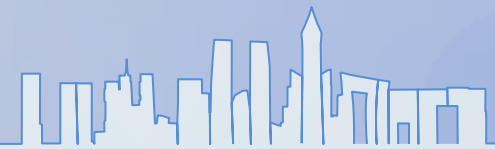
*MLP-2*







# Water Infrastructure



Drink from Any Tap

- Quality Water- can be drunk from any tap
- Storage of surface run-off & rain water
- Approach towards making the project water neutral

## SMART Water Infrastructure

### Utility Monitoring



### Metering



### Leak Detection



### Controllers



# District Cooling System

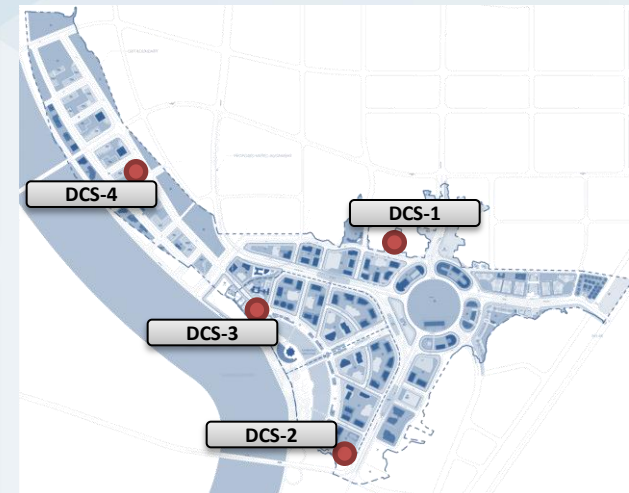
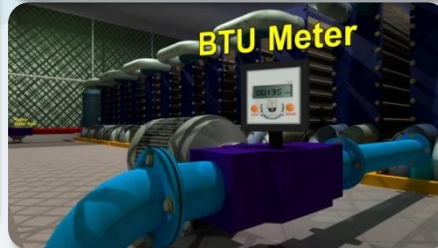


## Total Cooling Load - 2,40,000 TR

- Efficiency through economies of scale
- Reduces energy costs
- Reduces maintenance costs
- Improves air quality and temperature control
- Reduces noise and vibration
- Conventional AC System not required

## DCS Control Centre- Smart Infrastructure

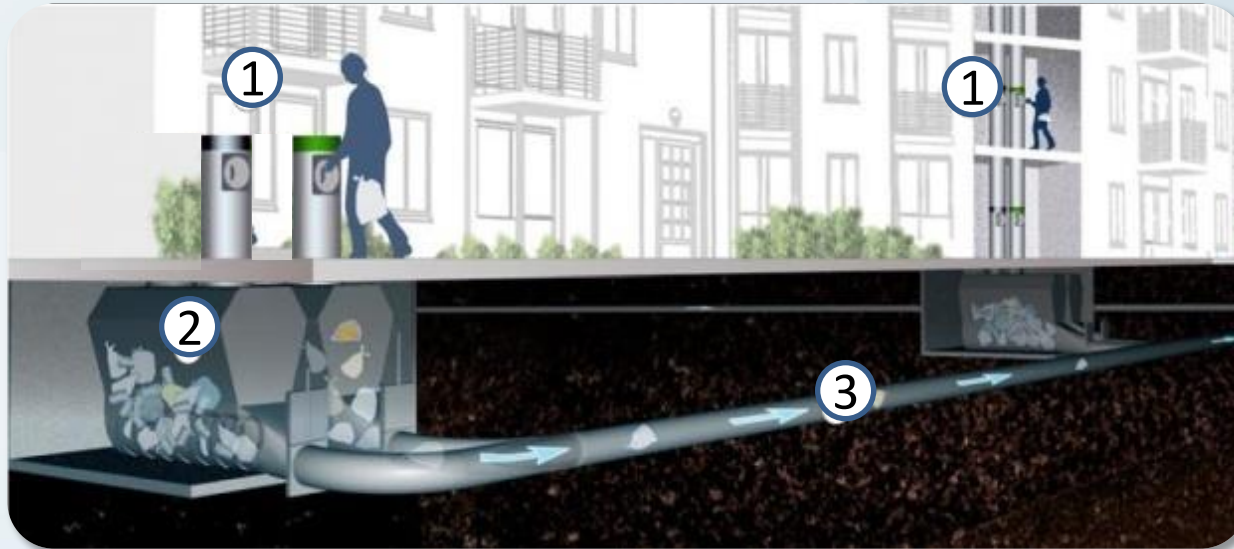
- Monitoring District Cooling Plant System
- Simulation of cooling/energy requirements
- Analyze interface with distribution/usage for both the supply and return elements
- Evaluation of extensive economic scenarios
- Safety Management, Emergency response



# Solid Waste Management

- Maximise resource recovery / minimal emissions
- Minimise impact on environment, human intervention, space requirement, impact on health hazard
- No waste visibility
- Power neutral

## Automatic Collection, Transportation and Segregation System



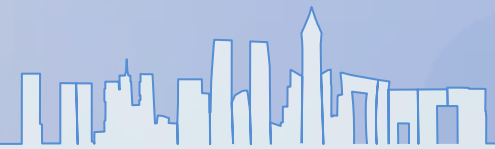
1. The waste is thrown into a disposal chute
2. Computer controlled access
3. Waste sucked through pipes at a speed of 90 km/hr
4. Treatment through plasma gasification



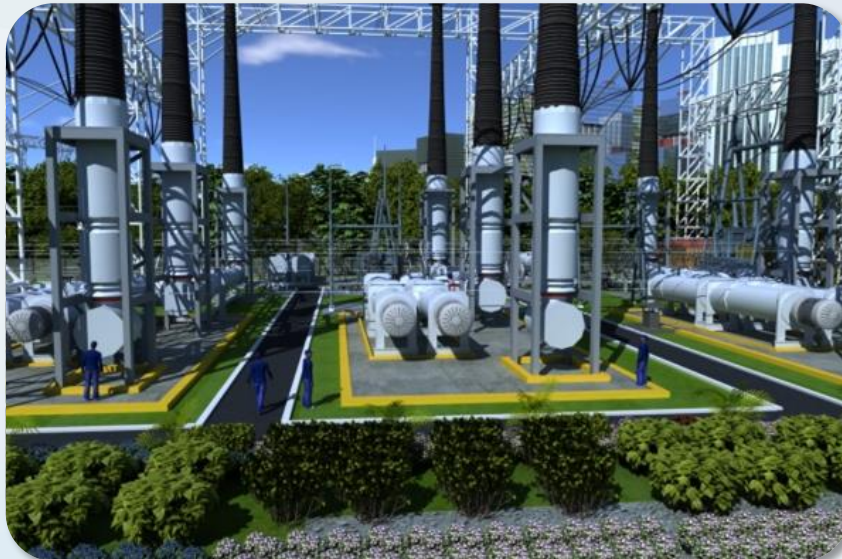
- Monitoring E-Waste; Bio-medical, Hazardous Waste handling system
- Monitoring Central Waste Handling Facility
- Monitoring Residual Waste handling, rejects
- Safety Management, Emergency response



# Power Infrastructure



- **Underground cabling for power distribution within GIFT**
- **Substation and Distribution Automation**
- **Indoor Substation**
  1. Gas Insulated Switchgears(GIS) substation for sub-transmission and distribution within GIFT
  2. Compact substation (CSS) in building
- **Total Power Requirement- 750 MVA (from dual source)**
- **Emergency Power generation (Gas Based) - 150 MW**
- **Green Power**

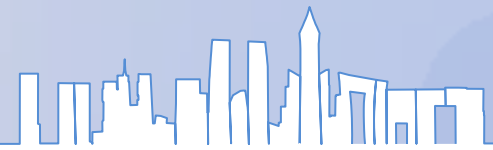


## Power Control Centre

- Power supply monitoring
- Power loss minimization
- Grievance redressal system
- Power consumption and efficiency monitoring
- Emergency Power supply monitoring

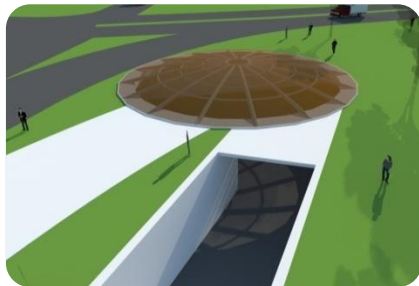
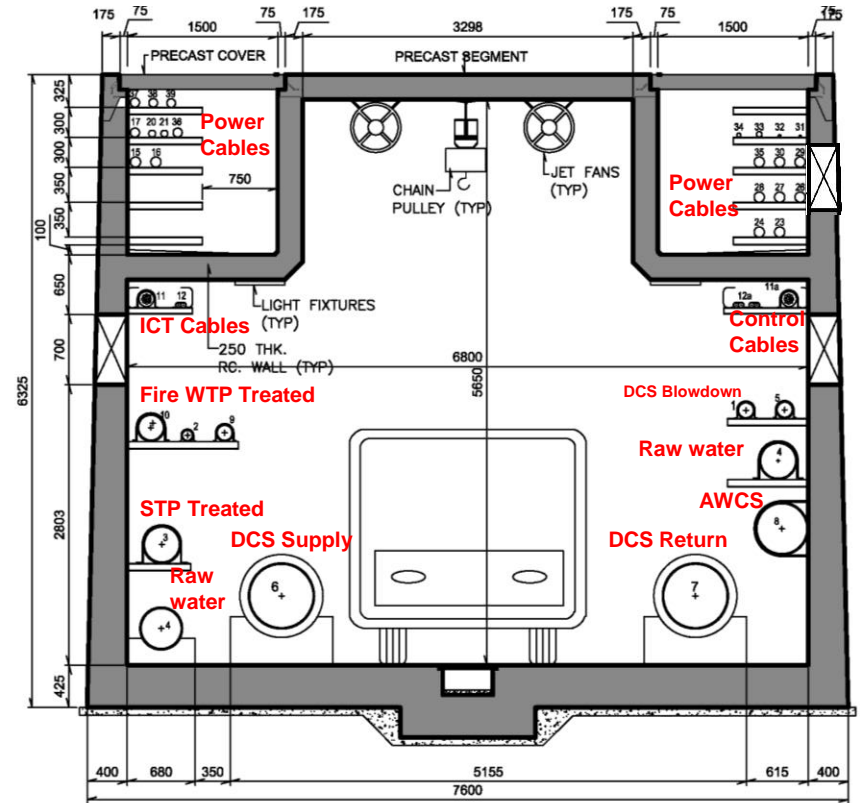
Reliability – **99.999%** which means outage of only 5.3 minutes/annum

# Utility Tunnel Alignment





# Utility Tunnel Details



Access to Tunnel



Lighting & Ventilation





## GIFT Vision

Create a ***world class financial city*** by offering an unrivalled business environment to global and local financial services enterprises.



## GIFT ICT Vision

Create ***leading-edge*** infrastructure, services and platforms and offer financial services enterprises a ***significant competitive advantage to operate regionally and globally***

“Best in Class”  
Customer Experience

Gateway to Financial  
Markets

Cost-effective ICT

Secure & Resilient  
ICT Environment

Pre-enabled on demand Infrastructure







## GIFT Occupants would have access to following ICT Services

### INFRASTRUCTURE

- High Speed Fibre
- Network
- Diverse Local and International Connectivity
- Pervasive Wireless and Mobile Network
- Data Centres

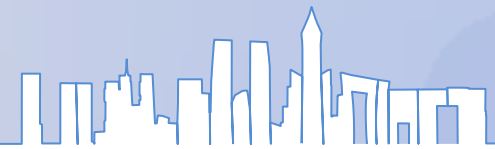
### PLATFORMS

- Financial Extranets
- CUG to Exchanges
- Voice
- Industry Specific Platforms
- City e-Portal
- Sensor Networks
- IPTV Internet Gateway

### SERVICES

- Data
- Voice
- Wi-Fi
- Tier-4 Data Centres
- Business Continuity
- Security
- High Speed Internet Access
- Monitoring

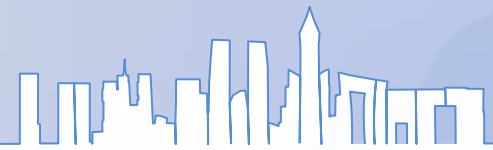
# Samruddhi Sarovar- An Entertainment Zone



- Samruddhi Sarovar (Master Balancing Reservoir)
- Food courts: Restaurants, Eateries, Dining
- Gathering spaces for concerts and events, Promenades
- Water sport activities
- Retail Facilities
- Walkers paradise: jogging track, viewing points
- Light and Sound show, Fountains, Water Shows

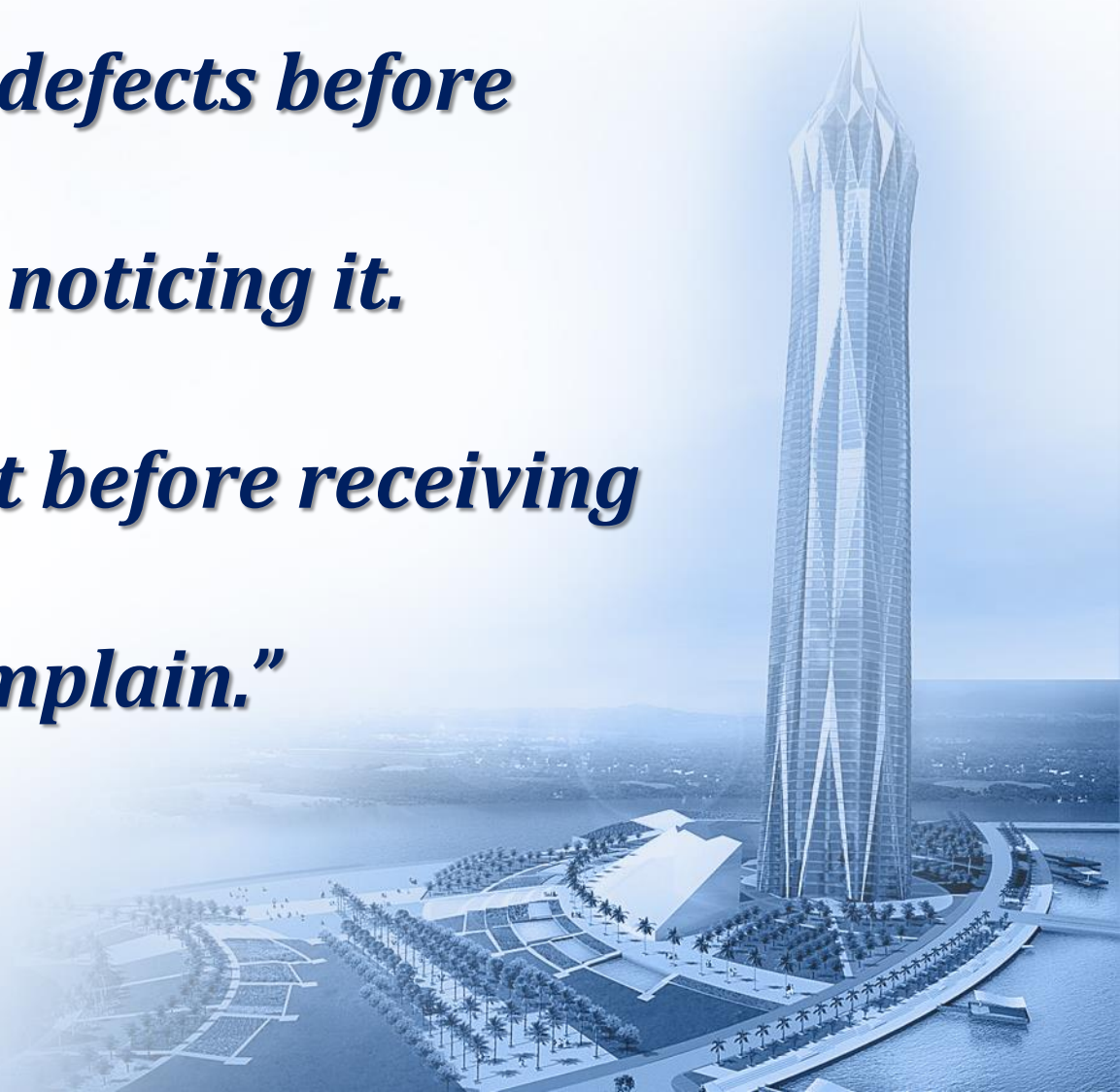




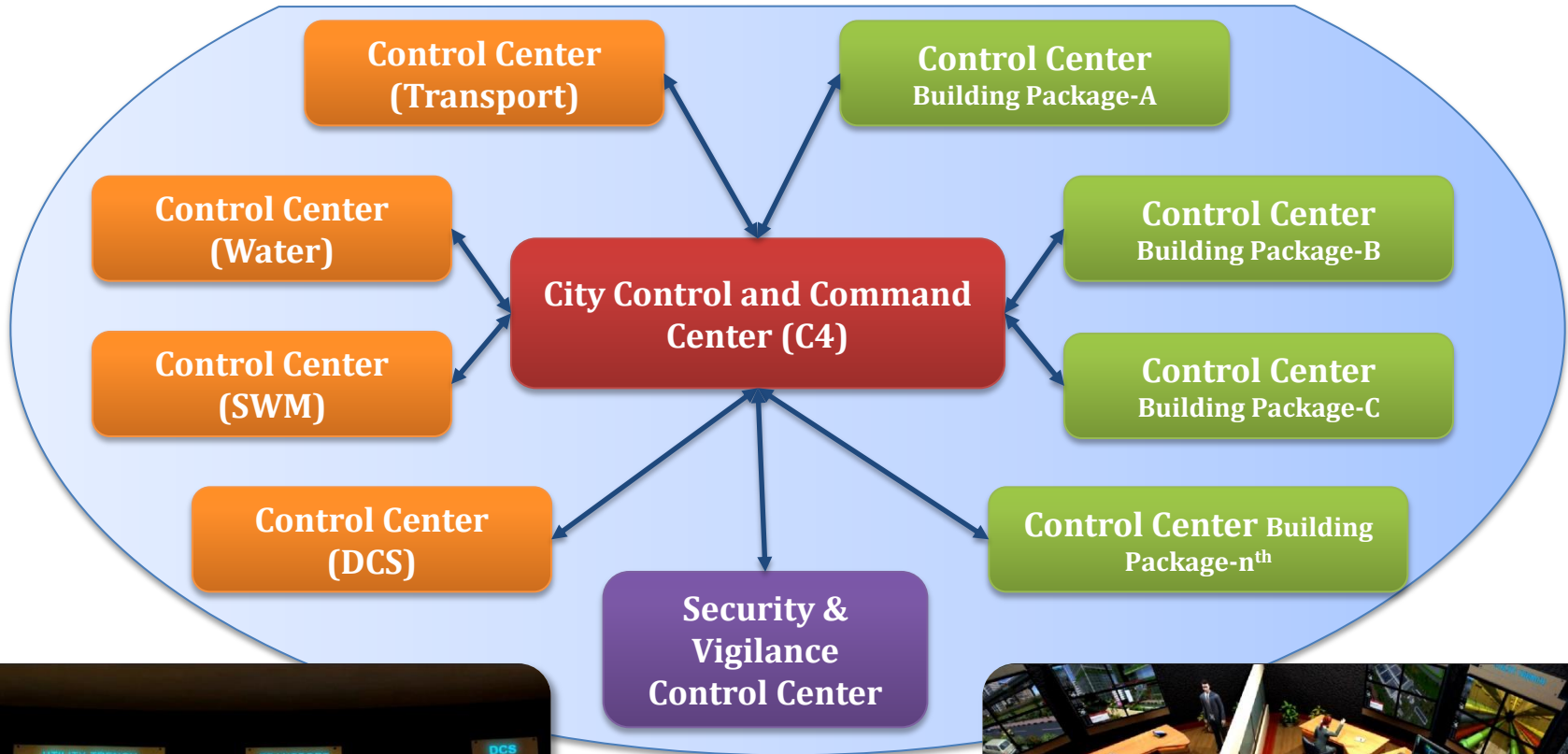
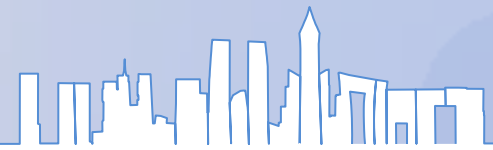


***“Identify the defects before  
consumer noticing it.***

***Rectify the defect before receiving  
the complain.”***



# Central Command & Control



- C4 will take critical live feeds from all Control Centers
- C4 will take remedial actions in case of emergency



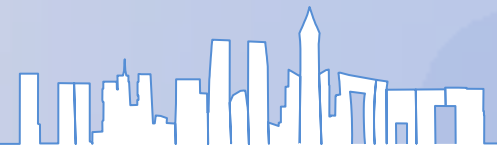


**Infrastructure is being developed  
in phases.**

**Phase-I is in advance stage of  
implementation.**

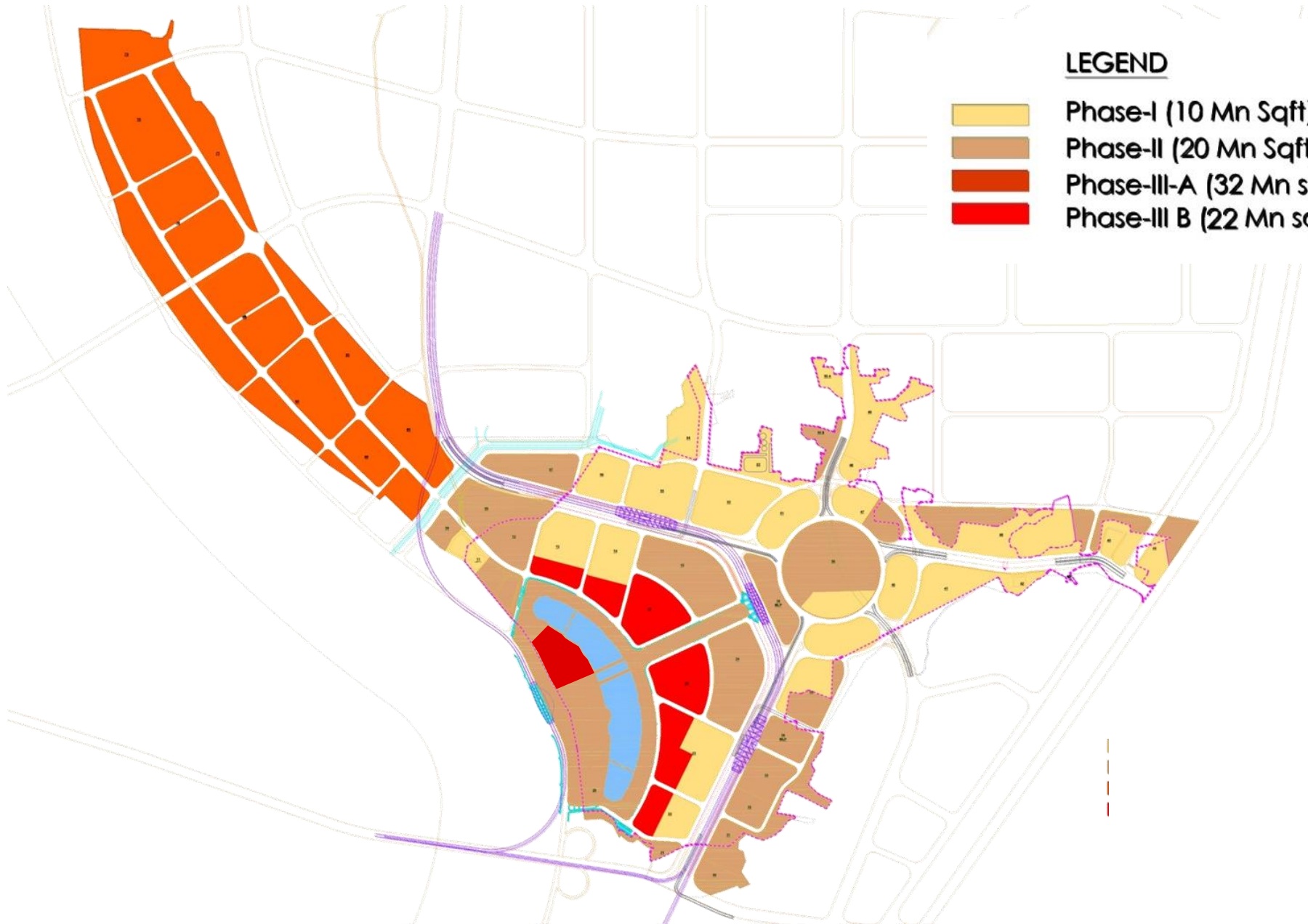


# GIFT: Implementation Plan (Phase wise)



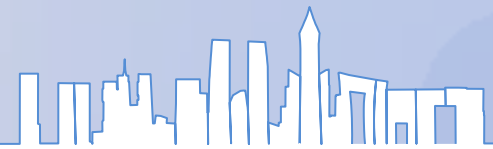
## LEGEND

- Phase-I (10 Mn Sqft)
- Phase-II (20 Mn Sqft)
- Phase-III-A (32 Mn sqft)
- Phase-III B (22 Mn sqft)





# Development at GIFT.....(1/2)



**Roads & Street Lights**



**66 kV Power Receiving Station**



**Water Treatment Plant**

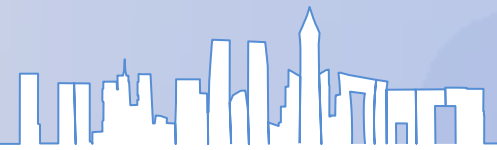


**District Cooling System**





# Development at GIFT.....(2/2)



## Automated Waste Collection System



## Utility Tunnel





# Allotment & Investment In GIFT



# Allotments at GIFT City

Phase I – Allotment of around 12 mn. sq. ft. of BUA completed



7.77 Mn Sqft

Commercial, Residential & Social



World Trade Centers  
Association

World Trade Centre  
1.0 Mn Sq Ft



200 Beds Hospital  
0.25 Mn Sq Ft



Residential Tower  
0.15 Mn Sq Ft



State Bank of India

Local Head Quarter  
0.2 Mn Sq Ft



Residential Tower  
0.4 Mn Sq Ft



# Allotments at GIFT City – Contd...

Phase I – Allotment of around 12 mn. sq. ft. of BUA completed



ICSE School  
0.1 Mn Sq Ft



Global Insurance Training Centre  
0.2 Mn Sq Ft



BSE Tower  
0.5 Mn Sq Ft

**TATA COMMUNICATIONS**

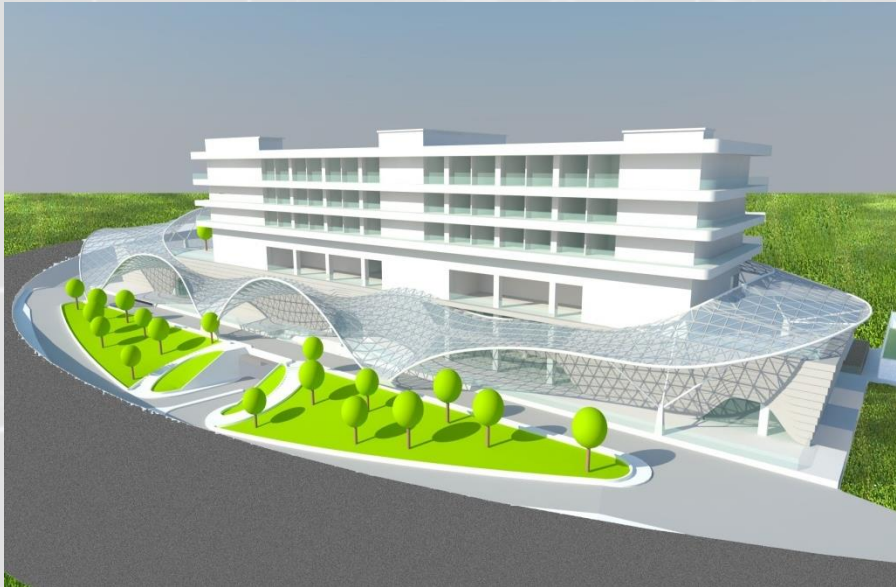
Tier IV Data Centre  
0.1 Mn Sq Ft



Commercial, Residential, Hotel  
& Shopping Mall  
1.1 Mn Sq Ft

# Allotments at GIFT City – Contd...

Phase I – Allotment of around 12 mn. sq. ft. of BUA completed



**Business Club**  
0.16 Mn Sq Ft



**Hiranandani**  
creating better communities

**Commercial Building**  
0.25 Mn Sq Ft





## **GIFT – Phase-I Development Investment & Employment**

<b>Use Type</b>	<b>BUA (Mn. Sq.Ft.)</b>	<b>Investment (INR in Mn.)</b>
Commercial	7.2	55,000
Social	1.6	8,000
Residential	3.2	22,500
<b>Total</b>	<b>12</b>	<b>85,500</b>

**Employment Generation in  
GIFT City by 2016- 30,000**

**Current Employment- 700**



Developing A **modern urban infrastructure for Financial services** is very **CHALLENGING** when the project is unconventional and state of the art infrastructure is to be implemented but,  
by **Systematic Method, Innovative Strategies, Dedicated Team** and **Strong Management** vision can be achieved.  
***GIFT City is an example to follow.....***





Gift



City in Making



**Thank you.....**

