

# ***CONTENTS***

1. GIFT SOLID WASTE MANAGEMENT.....	8
1.1 SOLID WASTE MANAGEMENT PHILOSOPHY .....	8
1.2 AWCS NETWORK .....	10
1.3 SCOPE OF AWCS NETWORK FOR GIFTCL AND DEVELOPER .....	10
1.4 PLOT/BUILDING BLOCKS COMPONENTS .....	13
1.5 RESTRICTED WASTE CONTENTS .....	13
2. SOLID WASTE CONNECTION .....	15
2.1 SOLID WASTE CONNECTION.....	15
2.2 LIST OF DOCUMENTS / DRAWINGS SUBMITTED BY DEVELOPER .....	16
2.3 VALIDATION / SUBMISSION OF DOCUMENTS / DRAWINGS BY DEVELOPER .....	17
3. INSTALLATION REQUIREMENTS .....	18
3.1 DISCHARGE VALVE ROOMS / GARBAGE ROOM– INDOOR TOWERS.....	19
4. DEVELOPER'S INSTALLATIONS .....	21
4.1 ESTIMATION OF SOLID WASTE GENERATION .....	21
4.2 GENERAL SYSTEM SPECIFICATION .....	21
4.3 CHUTE.....	23
4.3.1 ACCESSORIES .....	25
4.3.2 EXECUTION.....	26
4.3.4 TESTS.....	27
4.3.5 MAINTENANCE SERVICE.....	28
4.3.6 DELIVERY, STORAGE AND HANDLING .....	29
4.4 MATERIALS .....	29
4.4.1 DIMENSIONS AND DESIGN.....	30
4.4.2 FRAME AND HOOD UNIT .....	31
4.4.3 DOOR AND RECEIVING UNIT .....	32
4.4.4 INSTALLATION .....	34

4.5 MANUFACTURER’S CERTIFICATION .....	34
5 GIFTCL’s INSTALLATION .....	34
5.1 PIPES .....	35
5.2 AIR INLET VALVES .....	36
5.3 DISCHARGE VALVE .....	37
5.4 AIR COMPRESSORS .....	38
6. OPERATION AND MAINTENANCE .....	39
6.1 LIST OF DOCUMENTS .....	39
6.2 O & M GUIDELINES .....	39
ANNEXURE I APPLICATION FORM FOR SOLID WASTE CONNECTION .....	42
ANNEXURE II GENERAL TERMS AND CONDITIONS .....	45
ANNEXURE – III TYPICAL CHUTE DRAWING .....	65
ANNEXURE – IV GARBAGE ROOM ARRANGEMENT AT GROUND LEVEL .....	66
ANNEXURE – V GARBAGE ROOM ARRANGEMENT AT BASEMENT -1 .....	67

## DEFINITIONS

- (i) **“Authority”** Designated employees are authorized to conduct inspections and takes steps to administer and enforce these requirements in line with the regulation. The details of any construction which are not specifically dealt within this regulation shall be performed to the satisfaction of a designated employee, which authority shall be reasonably exercised by the designated employee. Designated employees are hereby authorized to determine whether equipment, techniques, conditions, circumstances and all other matters meet the standards and requirements of this regulation or are otherwise acceptable.
- (ii) **“Act”** means The Environment (Protection) Act – 1986.
- (iii) **“Agreement”** means the an application form along with general terms and conditions and other incidental documents signed and submitted by the Applicant for the solid waste connection at a specified location within building envelope and duly accepted by the Service Provider.
- (iv) **“Applicant”** or **“Consumer”** means a Legal Entity (*a company, partnership firm, LLP, Housing Society or Trust*) or a proprietary concern or an individual, who has applied for solid waste Connection for commercial / residential / institutional purpose.
- (v) **“Application”** means request by an Applicant for Connection of solid waste in the prescribed format / application form of the Service Provider duly filled and signed by the Applicant.
- (vi) **“Authorized Representative”** Refers to all officers, staff & Representatives of the GIFTCL, GIFTCL discharging functions under the general or specific authority of the GIFTCL.

- (vii) **“Bill”** means monthly bill or for such period as determined by the Service Provider, for the solid waste connection, to be issued by the Service Provider, for Minimum Fixed Charges or charges based on Built Up Area for the solid waste connection and such other incidental charges, taxes, cess, duties and levies payable by the Consumer.
- (viii) **“Board”** means the Central Board or a State Board.
- (ix) **“Chute”** means a ventilated, 2 fraction dual vertical shaft of 500mm dia made of SS304 , 1.5mm thick vertical tube, pipe passing from floor to floor of a building with openings as required to connect with hoppers and normally terminating at its lower end at the roof of the refuse storage chamber.
- (x) **“Chute extension”** means straight or sometimes offset section added to the lower end of the chute to direct the fall of refuse into the AWCS Storage Section or valve.
- (xi) **“Code”** The National Building Code of India adopted by this regulation or a subsequent and similar Code adopted by this Regulation.
- (xii) **“Connection”** means installation of combination of one or more pipelines, related fittings, discharge valves, regulator, chutes, etc. in Applicant’s Site in order to be able to solid waste connection to the Applicant.
- (xiii) **“Consumer”** means the Applicant to whom the connection for solid waste for commercial / residential / institutional purpose has been installed.
- (xiv) **“Domestic Connection”** means the connection used for Residential purposes.

**“Non-Domestic connection”** means the connection used for commercial ,institutional, hospitals, public uses, horticulture and fire demand.

- (xv) **“Delayed Payment Charges”** means the charges as are payable by the Consumer as per rate given in the Tariff Card, for late payments of the Bill or such other demands raised by the Service Provider.
- (xvi) **“Designated Employee”** The Manager of Development and Inspections of the Planning, Property and Development Department of the Gift City and any GIFTCL employee whom he or she has delegated authority to administer or enforce all or part of this regulation.
- (xvii) **“Developer”** A persons or organization procuring plots from the GIFTCL making necessary development and finally lease or sale flat to end user.
- (xviii) **“Distribution”** means any of chute connection, primary storage section / discharge valve connection to Automated Waste Collection pipelines controlling and transporting of solid waste within building envelope.
- (xix) **“Hopper”** means the inlet door with access to the 500mm vertical gravity chute having a clear opening of 450mm x 450mm into which refuse bag is placed and when closed drops into the vertical chute shaft. The door will be manufactured in SS304 of min thickness 1.5mm consisting of a fixed frame and hood unit (the frame) and a hinged or pivoted combined door and receiving unit (the door).
- (xx) **“Hopper extension”** means apron or extension tray, additional to the receiving unit, which is provided to project refuse, at the correct angle from the hopper, direct into the chute.
- (xxi) **“Installation”** means the accessories and fittings of Automated Waste Collection Pipeline including discharge valve, air valve, control panels, storage section installed / erected within premises associated with a point of

connection of a consumer and connected to main AWCS pipeline network in the utility tunnel.

- (xxii) **“Mouth”** means smallest cross-sectional area of the clearway into the installed hopper when the door is fully opened. This should be of 450mm x 450mm clear opening.
- (xxiii) **“Owner”** A person / agent or employee of a person who owns, manages or is in possession of land or a building to which this regulation applies. Who is in receipt of the whole or a part of any rents or profits, there from whether the rents and profits are received on the person’s own account, or as agent or trustee for another person.
- (xxiv) **“Person”** shall include any Company or body corporate or association or body of individuals, whether incorporated or not, or artificial juridical person;
- (xxv) **“Premises”** includes any land, building or structure;
- (xxvi) **“Reconnection”** means, restart of the supply for the solid waste connection on fresh application submitted by the Applicant, after termination.
- (xxvii) **“Regulations”** means regulations prescribed or as may be prescribed by the Commission under the Act;
- (xxviii) **“Rules”** means the latest / updated Rules prescribed or as may be prescribed under the Act; Municipal Solid Wastes (Management and Handling) Rules, or Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules
- (xxix) **“Security Deposit”** means the amount of security (interest free) to be deposited by the Applicant, as per the Tariff Card, at the time of Application for Connection or Reconnection.

- (xxx) “**Service / Services**” means discharge of solid waste from automated waste collection system of Service Provider.
- (xxxi) “**Service Provider**” hereinafter referred to as GIFTCL or its designated agency handing the AWCS system.
- (xxxii) “**Site**” means the building, building envelope or property or establishment owned or occupied by the Applicant in the GIFT notified area.
- (xxxiii) “**Solid Waste**” means solid wastes generated from Commercial / Residential/ Institutional consumer in GIFT City notified area, limited to organic, inert, mixed residue and recyclable waste which includes paper, plastic, cardboard, glass, metal, except construction debris, E-waste and Hazardous waste.
- (xxxiv) “**Street**” includes any way, road, lane square, court, alley, passage or open space, whether a thoroughfare or not, over which the public have a right of way and also the roadway and footway over any Public Bridge or Causeway;
- (xxxv) “**Tariff Card**” means a schedule, issued by the Service Provider, from time to time, in respect of the Security Deposit, Charges for New Solid Waste Connection, Delayed Payment Charges and such other charges to be paid by the Applicant/ Consumer to the Service Provider.
- (xxxvi) “**Throat**” means smallest cross-sectional area of the clearway through the installed hopper when the door is fully closed.
- (xxxvii) “**Termination**” means as defined in clause 10.1 of Solid Waste Connection Agreement.
- (xxxviii) “**Ventilating Fan**” is a fan located at the top of the vertical garbage chute used to ventilate the chute and maintain a negative pressure in order to avoid smell and draft which is caused when opening the door to deposit waste. The fan will be in continuous operation sucking air to the roof of the building.

## 1. GIFT SOLID WASTE MANAGEMENT

### 1.1 SOLID WASTE MANAGEMENT PHILOSOPHY

- Solid Waste is being collected through Automated Waste Collection System connecting with two chutes (one for recyclable and another for non-recyclable waste) located in the buildings. The collection of the solid waste will be done by two fraction garbage chute system at building level. There will be access from every floor to convey the wastes to the ground floor.
- Construction & Demolition, household hazardous waste, E Waste, Bulky Waste and other special waste are collected manually from the



building levels time to time upon request.



- The Automated Waste Collection System (AWCS) begins where the building chute terminates at garbage room. AWC system will be provided to transfer waste from bottom of the building to the collection station through a network of pipes..
- The two chutes in the towers will accept the segregated waste and transport the same in different time cycles to the collection station plant
- The preferable location of the garbage waste room in towers as mentioned below.
  - Storage Section and Waste room shall be preferably located in Ground Floor and pipe net at upper basement high level.

- Storage Section and waste room shall be preferably located in Upper basement and pipe net in lower basement and rising through basement slab to high level of upper basement.

## 1.2 AWCS NETWORK

- AWCS network in GIFT city connects to the plot at high level of Upper Basement at a pre-determined location and cannot be changed.
- Utility tunnel is an underground passage developed by GIFTCL to house utility lines such as Water, electricity, AWCS pipe, ICT cables etc.

## 1.3 SCOPE OF AWCS NETWORK FOR GIFTCL AND DEVELOPER

The demarcation of boundary of GIFTCL and Developer is as follows:

### A) Developer's Scope:

- Developer will install two fraction chutes (as describe in Chapter - 5) with garbage room exactly below the garbage chutes as shown in Annexures enclosed in this document.
- It is envisaged that the Vertical Chutes terminate at the Garbage room located at the Ground floor and the pipe running at high level of upper basement so that it connects to the utility tunnel.
- Developer will provide 4m x 3 m of garbage room and chute shaft of 1500mm x 800mm. The chute shaft shall be vertically placed inside the garbage room which will be from terrace level to garbage room.
- Developer will provide 4m x 4m of storage area at any floor level which shall be accessible by transportation vehicle.

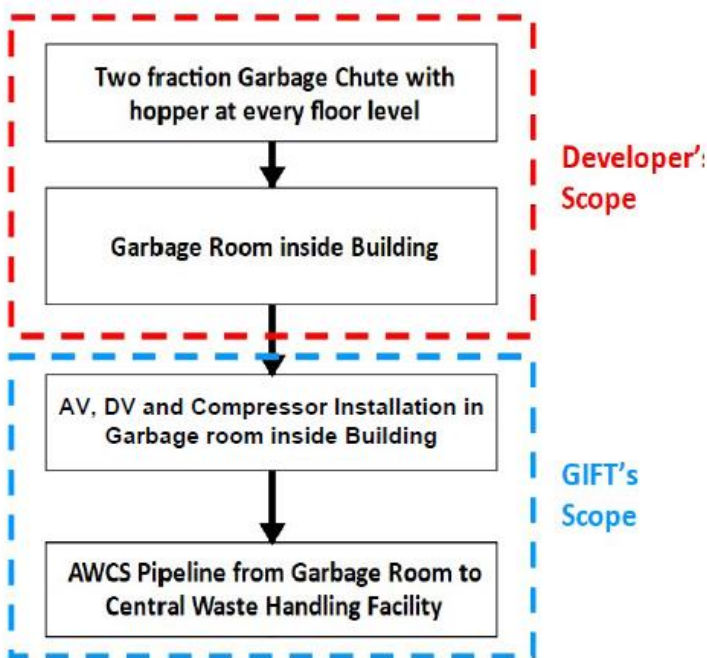
- A connection fee is chargeable by GIFTCL based on the built-up area as agreed in the sales contract when plots are leased to developers. There is a cost of providing the AWCS pipeline and DV and other components which starts from the Ground floor to the point of connection in the basement 1 to utility tunnel.
- Developer will design and install the two-fraction garbage chute considering above mentioned standards to integrate with AWCS for smooth and easy working operation under supervision of GIFTCL's representative. Refer specifications enclosed in document.
- Restricted waste which is not allowed to transfer into the AWCS will be separately handled and disposed by the GIFTCL/Developer in environment friendly manner as decided by GIFTCL during O &M stage. If GIFTCL will dispose such waste then developer has to store and segregate the waste as per GIFTCL requirement. Charges will be applied as per GIFTCL's terms and conditions. If developer is disposing such waste, he has to take the permission from GIFTCL and then it should be disposed as per latest Municipal Solid Wastes (Management and Handling) Rules, or Hazardous Waste (Management, Handling and Transboundary Movement) Rules.
- Developer has to submit the chute drawings, location of the chute and proposed alignment of AWCS pipeline within building to GIFTCL for approval. GIFTCL will check the feasibility of the pipeline route and has a right to suggest any modification required as per the system need. Developer has to incorporate the changes suggested by GIFTCL and resubmit the revised drawings for approval.

## **B) GIFTCL's Scope:**

- GIFTCL will supply, install, test and commission AWCS pipeline and required connections such as storage section from the termination of Chute along with analog level sensors, discharge valve, air inlet valves, sectioning valves, silencers, bends, Y-pipes, accessories such as pipe net, conduiting, compressed air tubing, and inspection door from chute end in the building up to the Utility Tunnel. The maintenance / O&M / repair works of these units will be done by GIFTCL at the cost of Developer.
- GIFTCL will lay AWCS pipeline in the utility tunnel to the Central Waste Handling Facility (CWHF).

GIFTCL will do maintenance / O&M / repair works of any assets inside the buildings or package but at the cost of Developer.

The schematic for scope is shown below –



## 1.4 PLOT/BUILDING BLOCKS COMPONENTS

Each Plot / Building blocks will comprise of the following elements and will be separate for the high-rise towers, retails, commercial, and entertainment areas:

- Storage Section with analog sensor, control panel interfacing the garbage chute to the control panel of the valve, discharge valve, air inlet valve, and mild steel pipe 6.3 mm thick epoxy painted if exposed with hanger brackets / Bitumen coated pipes if buried from bottom of chute to plot connection in utility tunnel / chamber.
- In certain cases, as per design for low rise building and land use like schools, club house etc where there is no garbage chutes in the towers, the plots will be connected with Outdoor inlet valves. These are located exterior to the building. Outdoor inlet discharge valve with casing, storage section inbuilt in valve, control panel, air inlet valve, and mild steel pipe 6.3 mm epoxy painted / PE coated Litter Bins are provided with 323mm dia pipes and specialized inlets in front of each building to cater to litter created from cigarette butts, paper and plastic cups and bottles not exceeding 200mm in length.

## 1.5 RESTRICTED WASTE CONTENTS

The AWCS is capable to collect and deliver two fractions of waste in an automatic, safe and effective way. The ordinary mixed waste includes newspapers, magazines, clothes, wood waste, plastics, cans, glass bottles etc. Nevertheless, the following exceptions should always be avoided in the systems and handled in a separate way:

- *Bulky waste:* Furniture, refrigerators etc should be collected separately
- *Combustible and inflammable substances likely to cause fire or explosions:* Burning Charcoals or cigarette butts, oil such as gasoline, kerosene, cooking oil etc.
- *Hard articles:* Stones, lumps of metal scraps such scrap iron.
- *Viscous articles:* Binders and adhesives such as paste and rapid binding adhesives.
- *Spongy articles:* Sponges, cushions that tend to expand and block the chute and/or transport pipe.
- *Articles emitting an offensive odour:* Animal faces and urine, bodies of house pets and rats.
- *Dangerous chemicals:* Corrosive and poisonous substances such as acidic and alkaline solutions.
- Besides, liquid such as soup, juice and drinks should be mixed with other type of waste and not to be disposed of in large quantities.

These items will be stored in a separate holding area and should be disposed by informing GIFTCL or the Service Provider who will come at preset times of the week or on call and collect these bulky waste items. If Disposal of waste will be carried out by GIFTCL then the separate charges will be levied as per GIFT policy.

Should the developer's FM team not manage the waste into the garbage chute in a systematic manner and cause blockage by throwing any of the restricted material which has been highlighted in section 2.5 of this document the costs associated with clearing the same will be charged by the service provider / GIFTCL as a penalty as per the GIFT Solid Waste Management Policy. Any additional cost



towards cutting of pipe to release blockages etc. will be charged as per GIFTCL



Solid Waste Management Policy

## 2. SOLID WASTE CONNECTION

### 2.1 SOLID WASTE CONNECTION

The GIFTCL shall be contacted for following application:

- To obtain a solid waste connection
- Reconnection
- Transfer of registered name

The application should be done in the prescribed application format along with terms and conditions form issued by GIFTCL. (Attached as Annexure I & II)

## 2.2 LIST OF DOCUMENTS / DRAWINGS SUBMITTED BY DEVELOPER

List of documents to be submitted at the subsequent stages for approval but not limited and may change on case-to-case basis which are as follows:

- Location of chute and chute details
- Structural Drawings showing beam depths and slab thickness - type of slab and direction of post tensioning if any.
- Architectural layout
- Latest MEP coordinated drawings
- Garbage Chute drawings and details of control panel wiring diagram from garbage chute contractor
- Specifications of garbage chute relating to size of inlet doors
- Complete layout drawings of system, including detail drawings of inlet hoppers stations
- Alignment Plan of AWCS pipeline within the building along with cross section starting from chute end up to Utility Tunnel with levels
- The checklist for all stages, but not limited to following, is as below –

Checklist for Various Stages for Developer	
DP	
Drawings for Space Arrangements	Assumptions
	Basis of Calculations
	Solid Waste Philosophy
	Location of garbage room



	Tentative Internal AWCS routing drawing with tunnel intersection details
<b>CC</b>	
Drawings	Signed Drawings of Garbage Room Layout
	Signed Drawings of Chutes
	Signed Drawings of AWCS Pipeline Routing
	Signed Drawings of Chutes Specification & details
Submission of DBR	Assumptions
	Solid Waste Philosophy
	Design Calculations for per capita solid waste generation
	Chute details
	Location of garbage room
	Internal AWCS routing drawing with tunnel intersection details with levels
<b>OC</b>	
Drawings	Final AWCS routing plan and section

### 2.3 VALIDATION / SUBMISSION OF DOCUMENTS / DRAWINGS BY DEVELOPER

- GIFTCL will validate all drawing / documents based upon feasibility or system requirement / specifications mentioned in Blue Book.
- Developer will submit soft and hard copy (3 copies of each), duly stamped and signed by authorized signatory of the Developer.
- GIFTCL will review and wherever required all necessary comments should be incorporated by Developer.
- Developer will only consider the approved documents / drawings by GIFTCL for further proceedings. Developer will consider the comment given by GIFTCL and shall resubmit the revised drawing / documents for

approval as mentioned in above point till acceptance of final approval from GIFTCL.

### 3. INSTALLATION REQUIREMENTS

The following system installation works/requirements are to be provided by the Developer:

- Bends are always of radius 1800 mm along the refuse pipe in the horizontal run from the chute to the plot connection.
- Bends connecting the discharge valve or the air valve are 750mm or 1250mm depending upon the location. The bends radius will be suggested by GIFTCL after studying the location, distance and other parameters related to the AWCS system.
- After a bend connecting the discharge valve there has to be a straight portion of 2500mm before the next bend is proposed
- Y pipe can only join the main pipe at an angle of 30 degrees, Y pipes can only join from the sides or top and never from the bottom.
- All pipes can only rise by a maximum of 20 degrees and fall by maximum 20 degrees to the plane. Before and after a rise there shall be a straight portion of 2500mm.
- For towers with basements the pipe will be run in the underside of ground level slab (high level basement 1).
- Floor and wall penetrations for the pipes if required should be done by Developer. Drawings should be provided for Cut-out coordinates at slab level and sleeve penetration in retaining wall at grade / basement level.
- Approximately 100 m<sup>2</sup> of working area should be provided by Developer for storage and welding of pipes adjacent to the working area.

- Garbage room or where chutes and container chambers are installed, a separate enclosed accommodation at ground level in an accessible position should be provided for the storage of large and bulky articles or salvageable materials or both, so that disposal arrangement can be made. A minimum space of 10m<sup>2</sup> is recommended.

### 3.1 DISCHARGE VALVE ROOMS / GARBAGE ROOM– INDOOR TOWERS

The following works and requirements are to be provided by the Developer. Refer drawings in Annexure V which show the options of location of discharge room and minimum dimension required for the waste room.

Size: minimum area required for garbage room shall be 4m x 3m.

Location: Developer shall provide garbage room at ground floor of every building/block.

- All building and architectural appurtenances, including openings, make good openings, finishes etc.
- Two Gravity chutes with hopper inlet loading doors confirming to BS 1703. (Scope of Waste Chute Supplier). Minimum opening of door should be 450 (w) x 450 (H), having diameter of chute 500mm.
- Room lighting, electricity supply 15A socket, fire protection system, water supply (bib tap) and drainage point to drain away the water accumulated in chute due to maintenance. This drainage point can be at basement level also.
- Connection of water outlet to the floor drains.

- All necessary penetrations in upper slab (refer AV / DV room drawings)
- Openings in vertical walls to provide for air intake at 5cum / sec. Clear opening of 0.5 sqm for Discharge valve and 1.0 sqm for air valve.
- Slab penetration may be covered by steel grating, supported by steel framework, in case the primary air intake needs to be fed from lower floor.
- AV / DV needs 5cum/sec air intake prior to operation to create air path in pipe net. This air is to be drawn from lower floor from the car park or open area. Existing penetration in shear wall in garbage room can be used to provide air in most cases, certain case may need ducting to be provided from open area.
- Fire Cell Compartmentalisation as per local fire norms to segregate AV / DV room in Upper and Lower level garbage room.
- All acoustic treatment and lining to walls, doors and ceiling where required. This is to reduce the noise levels likely to be generated during operation of the Discharge Valve. Noise level is likely to be in the range of 60 dB – 80dB during operation for a period of approximately 3 minutes depending upon the load of accumulated garbage in the chute.
- Sealing of holes between equipment and structure except the filling of non-inflammable materials to the slots, holes or space framed by sleeves for the cable, trunkings, water pipe and the like.
- The room where the Discharge valve and / or Air inlet valve is housed needs to be designed to withstand a negative pressure of 2 KN/m<sup>2</sup> (min).

- All civil requirements like inspection chambers, pits for valves inside the plot will be provided by Developer as per AWCS installation requirement.

#### 4. DEVELOPER'S INSTALLATIONS

Developer shall consider following guidelines for installation within the building.

##### 4.1 ESTIMATION OF SOLID WASTE GENERATION

- Developer will estimate the total solid waste to be generated as per CPHEEO – solid waste management manual. Also provide the details of waste hazardous / e-waste if any.
- Developer will provide the waste composition to be generated such as percentage of paper, plastic, metal, cardboard, metals, glass, organic waste, inert or any other hazardous waste which is to be disposed.

##### 4.2 GENERAL SYSTEM SPECIFICATION

The general system specification is a guideline for Developer to offer their systems to be based on similar working and operation and acts as a guideline for the deliverables as desired by the GIFTCL.

- Two SS 304 Vertical chutes of 500mm dia, with minimum 1.5mm thick will be installed confirming to BS 1703.
- The waste drops down by gravity through a 500mm vertical chute to a waste storage section located at Ground Floor where it can be temporarily stored prior to emptying cycle. Considering that the waste disposal to the chute shall be performed at the same time intervals in between floors.

- Developer should describe in its proposal the security measures and system to be taken to avoid unwarranted accidents, including the measures to be taken when the discharge valve at the bottom of the chute is activated.
- Developer should also take into consideration self-cleaning methods in the chutes and pipes including the inlet doors/loading station/garbage room to avoid blockages and unpleasant odours.
- Waste can be disposed into loading doors any time. An interlock control for the loading doors is to be provided. With this control, loading doors of the same waste chute are locked by electro-mechanical device when the discharge valve at the bottom is opened. Upon completion of waste discharge after a few seconds, electro-mechanical locks of all the concerned loading doors will be released for normal operation.
- Installer, or supplier of a service, should have technical qualifications, experience, and trained personnel and facilities to perform the specified work.
- When 2 or more units of the same type or class of materials or equipment are required, these units are products of 1 manufacturer.
- Manufacturers of equipment assemblies, which use components made by others, assume complete responsibility for the final assembled product.
- All components of an assembled unit need not be products of the same manufacturer, but component parts which are alike are the products of a single manufacturer.
- Components are compatible with each other and with the total assembly for the intended service.
- Developer shall check and review dimensions and details of the space of the space allocated for garbage chutes in early phases of construction.

- Provide a qualified representative possessing complete knowledge of system and equipment to train the employees in operation and maintenance of system.
- Refuse should be transported in the plastic/waste bags.
- System should be automatically operated, and the brush should clean the entire vertical surface and go back at a speed of 1-2 min per floor or so and can be done at a specified time every week through a PLC.

### 4.3 CHUTE

- Risers: Two garbage chutes of 500 mm diameter, 1.5mm thick constructed of stainless-steel grade 304
- Provide slip type expansion joints in chute risers between floors, upper section telescoping into section below.
- Support chutes by frames and fasteners at each floor to prevent sound transmission to the floor slab as recommended by the manufacturer. Weld and dress smooth connection joints between vertical shafts and horizontal intakes with no projections that may catch or tear waste.
- Chute shall meet the BS 1703 requirements.

#### Chute Vent

- The safety vent shall be designed to normally exhaust the chute riser of odor, keep inclement elements out and (in the event of rapid combustion or sudden explosion) provide complete relief within the chute riser, so the intake doors below will not be blown open.

#### Chute Disinfecting Apparatus

- Provide chute disinfecting and sanitizing device. Equip chute at top with copper flushing rings containing 1.5 mm diameter spray holes, 65 mm on centers with extra holes which shall completely drain ring when water is shut off. In lieu of flushing rings, chute may be equipped with spray heads designed to flush inside of chute.
- Developer shall provide all necessary fittings to water supply piping to connect the disinfecting and sanitizing device to the plumbing system.

### **Chute Loading Stations / Doors**

- Inlets station on all floors shall consist of the intake door mounted in a single face plate. The intake door shall have pivot type side/bottom hinges and be located as indicated on the drawings.
- Intake hopper doors shall be made of SS304 grade, 1.5mm thick, and carry the UL (1½ hour 121 deg. C (250 deg. F)) "B" label, covering size, design and construction of the door, frame, latching, and closing mechanism. Fabricate door of steel sheet and provide self-closing and self-latching devices.
- Door size shall be a clear opening 450 mm x 450mm side/bottom hinged. Doors will be airtight in construction.
- Provide a 450 mm x 450 mm access panel with an UL (1½ hour 121 deg. C (250 deg. F)) "B" label, covering size, design and construction of the door, frame latching and closing mechanism. Locate at highest floor level to allow access to maintain the fan and sanitizing pumps.
- Surfaces of door and frames to be unmarred by lapped joints, bolted frame, screws or rivets. Door and frame are mounted into intake throat with sheet metal screws into anchor plate and straps welded to intake throat making



door and frame readily removable without marring the finished wall.

- Door to be equipped with single-motion handle.
- Provide intake doors, shroud door(s) and connector door, with electric interlocking mechanism.
- Each intake door shall have a pilot light showing when the door is locked.
- Provide switch at the bottom of the chute to lock out all the doors during a cleaning period or maintenance.
- Clearly write on the intake door in letters approximately one inch high, the word "DRY" and "WET" Waste". Raise or incise letters in door face in permanent manner. Raised lettering shall be metal or plastic with metal attachment.
- **Maintenance** of vertical garbage chutes will be under the scope of the developer.

#### **4.3.1 ACCESSORIES**

- Provide 19mm IPS flushing spray head and 13 mm sprinkler head above highest intake. Provide additional 13mm sprinkler heads at every intake counting from the top.
- Provide Disinfecting & Sanitizing unit for installation in line to the flushing spray head complete with back flow prevention valve and electric control switch.
- The disinfecting and sanitizing systems stated shall be provided for both chutes and waste fraction.
- Offsets (bends) in the chute can be provided if required for buildings above 40 floors which have intermediate mechanical levels, shall be made the same diameter as the chute and have an additional layer of steel reinforcing

the impact area. Offsets are not to deviate more than 15 degree off the vertical axis of the chute.

- Sprinkler System: Chute shall be protected internally by automatic sprinklers. This requires a sprinkler at or above the top intake door of the chute, and in addition, a sprinkler shall be installed within the chute at alternate floor levels in building over two stories in height with mandatory sprinkler located at the lowest service level.
- Developer has to make arrangement in Garbage room as per the requirement listed in this document such as but not limited to Compressor, flushing arrangement, dryer, odor control device, etc.

### 4.3.2 EXECUTION

#### **Fabrication**

- Factory assembly chute minimum 1.5mm thick with all joints welded and expansion joints at each floor. Lock-seamed spiral pipe is acceptable.
- Bolt intake doors in place on throats formed into chute tubes.
- Flash chute sections inside the sections below with no bolts, clips or other projections inside chute to snag the flow of material.
- Preposition support frames to ensure proper intake levels and plumbness. Reinforce and support separately discharge doors and offsets at impact area.

#### **Installation**

- Chute Loading Stations:

- 1) Set station flush with adjacent surface.
  - 2) Attach face plate to supports with stainless steel screws.
- Hangers: - Conveyance lines and air intake and exhaust ducts: When proper hanger spacing does not correspond with joist or rib spacing, structural steel channels may be attached to joists or ribs and tubing suspended there from. Vertical Runs: Support at each floor line and at the roof line.

### **Protection**

- Protect all finish parts of equipment, such as shafts and bearing where accessible, from rust prior to operation by means of protective grease coating and wrapping. Close pipe openings with caps or plugs during installation. Cover and protect equipment against dirt, water, and chemical or mechanical injury. Clean the exposed materials and equipment after completion of all work.
- Assemble the chute and chute accessories in place; align and anchor in accordance with the manufacturer's instructions.
- Run water supplies to the flushing and sprinkler heads.
- Erect walls around chute after all other work are completed (by Civil Contractor). Chute intake door frames shall be set square and flush with the finish wall line before the walls are erected.

### **4.3.4 TESTS**

- Demonstrate entire system will operate as specified. Test all lines in sequence by the passage of five test runs of material from each station.
- Demonstrate operation of station controls by a minimum of five test runs

when dispatch buttons are operated simultaneously at 2 or more separate stations.

- Test chute components after installation. Operate doors, locks and interlock systems to demonstrate that hardware is adjusted, and electrical wiring is connected correctly.
- Test fire sprinklers and heat-and smoke-sensing devices for proper operation.
- Operate sanitizing unit through one each complete cycle of chute use and cleanup and replenish chemicals or cleaning fluids in unit containers.
- Complete test operations before installing enclosure.
- GIFTCL's representative shall witness test before acceptance.
- After acceptance of testing by GIFTCL and installation of enclosure, the GIFTCL's representative shall perform final inspection.

#### 4.3.5 MAINTENANCE SERVICE

Furnish inspection and maintenance service on all equipment for a period of 2 years after Date of Substantial Completion that the system is to be put into daily operation. This service shall consist of examination by competent and qualified mechanics; cleaning, oiling, greasing, adjustments and replacement of any parts required to place equipment in proper working order, (except parts made necessary by improper use, accident or negligence). Maintenance to be performed twice in a month.

The developer and his facilities management personnel are responsible for the future maintenance of the vertical garbage chutes.

GIFTCL is only responsible for the Operations and Maintenance of the AWCS system connecting the bottom the garbage chute to the utility tunnel.

#### 4.3.6 DELIVERY, STORAGE AND HANDLING

Protect chutes and accessories to prevent physical damage and deterioration from other construction and from weather.

### 4.4 MATERIALS

#### **General**

Materials used in the construction of the inlet hopper unit shall be, as far as practicable, non-combustible, when tested in accordance with the requirements of BS 476-4, and resistant to hardware and abuse. The materials shall be SS304 grade 1.5mm thick confirming to BS1703 and other relevant BS standards relevant to SS304 fabrication.

#### **Welding**

The welding of stainless steel shall be carried out in accordance with the requirements of BS EN 1011-2.

#### **Finishing**

#### **General**

All materials that are not inherently non-corrodible shall be protected from corrosion in accordance with the requirements of a), b) or c).

**a) Galvanizing**

All support brackets of the vertical garbage chute embedded in the shaft will be installed with hot dip galvanizing and in accordance with the requirements of BS EN ISO 1461.

**b) Painting**

Where no other finish is specified, iron and steel components shall at least be supplied with a coat of priming paint and epoxy coated, conforming to the requirements of BS 2523.

**c) Other finishes**

Any finish other than those in a) and b) shall be by agreement between the purchaser and the supplier. Any such finish shall, if a relevant British Standard exists, conform to the requirements of that standard.

#### 4.4.1 DIMENSIONS AND DESIGN

**General**

The vertical garbage chute and inlet hopper shall be designed and constructed such that there can be no emission of dust or fumes, and excessive noise is prevented when the hopper is in the closed or open position; no part of the hopper or frame shall obstruct the free passage of waste.

**Hopper clearway**

The hopper shall be designed and constructed so that there is no obstruction to the discharge of refuse into the chute and there is no entry to the chute whilst the

hopper is partially open.

The dimensions of the throat of the hopper shall be not less than the dimensions of the mouth.

The largest dimension of the mouth opening, i.e. the diagonal of a rectangular opening, shall not exceed the diameter of the chute with which the hopper is to be connected. In no case shall this diagonal be lesser than 430 mm.

#### 4.4.2 FRAME AND HOOD UNIT

##### **General**

The unit shall consist of a frame for fixing into an orifice in the wall of the chute and a hood as shown in Figure 3.

##### **Thickness of material**

The minimum thicknesses of material used in the construction of the frame and hood shall be as follows:

- Stainless steel SS304                      1.5mm

##### **Luting flange**

All frames, as distinct from hoods, shall be so constructed as to provide a continuous luting flange for the purpose of dressing in the surrounding wall surfacing material.

##### **Lugs**

When lugs are used, they shall be securely fixed to the frame unit and shall be

so constructed as to provide an adequate fixing for the frame unit to the surrounding structure.

#### 4.4.3 DOOR AND RECEIVING UNIT

##### General

The unit shall comprise a door, a receiving plate and two retaining side cheeks formed or continuously fixed so as to prevent any seepage. To prevent spillage from the sides, the cheeks shall be carried up as high as is practicable, without impeding the operation of the hopper, with a minimum height of 125 mm, measured radially from the intersection between the door and the receiving plate. The base of the receiving unit shall project downwards at an angle of not less than 45° to the horizontal when the door is closed.

##### Thickness of material

The minimum thicknesses of material used in the construction of the door and receiving unit shall be as follows:

Stainless steel SS304	door, unless reinforced to a comparable strength	1.2mm
	receiving unit	1.5 mm

##### Gaskets

A gasket shall be securely fixed to the door or frame to minimize noise and prevent the emission of dust or foul air when the door is closed. It shall be constructed



of rubber or other suitable material and shall form a continuous effective seal. For the same reason a continuous strip of rubber or other similar material shall be provided to act as a buffer and seal between the back of the receiving unit and the hood and fixed so as to render malicious damage or removal difficult. The gaskets shall be readily replaceable.

### **Counterbalance of door**

The unloaded door, when released from the fully opened position, shall automatically resume the closed position.

Consideration should be taken, at the design stage, of any danger of trapping fingers, hands or arms.

### **Hinge**

The hinge shall be so constructed that it is protected from clogging by stray refuse and permits the door to conform to the requirements of BS1703. It shall be securely fixed and shall present no sharp or otherwise dangerous feature to the user or passer-by. The construction of the hinge shall be such that the hopper door can be removed from the frame for maintenance purposes. To prevent vandalism and misuse, the method of removal shall be designed to deter tampering by unauthorized persons.

### **Handle and fastener**

A handle or other means of opening shall be securely fixed to or formed as an integral part of the door. If a fastener is used, it shall be of robust construction and shall be securely fixed. Neither the handle nor the fastener shall present any sharp or dangerous feature to the user or passer-by.

#### 4.4.4 INSTALLATION

To accommodate a hopper in the wall of the chute, a precast block of impervious material, with a recess or other suitable means of bedding the frame squarely shall be used. Jointing of the blocks with the surrounding brickwork shall be secure.

#### 4.5 MANUFACTURER'S CERTIFICATION

##### **Chute**

The manufacturer shall be satisfied that the components of the chute conform to the requirements of this British Standard at the time of dispatch and shall provide a certificate to this effect, at the request of the purchaser.

##### **Hopper**

Every hopper shall be legibly and indelibly marked with the following:

- a) the manufacturer's name or identification mark;
- b) the model number or name;
- c) the number of this British Standard, i.e. BS 1703.

#### 5 GIFTCL'S INSTALLATION

GIFTCL will install, test and commission AWCS pipeline and required connections such as storage section from the termination of Vertical garbage chute along with analog level sensors, discharge valve and air inlet valves, sectioning valves, silencers, bends, Y-pipes, accessories such as conduiting, compressed air tubing,

and inspection door with acoustic insulation at the cost of Developer from chute end in the building up to the Utility Tunnel.

## 5.1 PIPES

- All straight solid waste conveyance pipes shall be of spiral or longitudinal welded carbon steel for ordinary duty.
- Pipe work, Fittings & Joints material shall be as per: IS 3589 FE 330, 508mm OD. The thickness varies from 6mm – 8mm depending upon the erosion due to waste generation from the plot. The transport pipe shall nominally vary in thickness. This is due to the abrasion experienced through wear and tear at intermediate joints or bends and from varying waste loads. Each fitting shall be designed to stand erosion and abrasion produced by the waste.
- Method of examination and testing of pipe installation shall be as per standards prescribed by the Service Provider.
- Whenever the pipe shall cross a road where heavy traffic load is expected an adequate concrete sleeve shall be provided.
- Special bends of abrasion resistant steel as required based on the pipe profile as per the design calculation confirmation submittal will be installed in desired locations as per the requirement.
- Pipe shall be supplied in lengths no shorter than 5.8 meters.
- Pipe branches shall be located in a manner ensuring the smooth flow of solid waste from one branch to another. The maximum branch angle shall not exceed more than 30 degrees.
- Air Pipe shall be laid as per standards prescribed by the Service Provider.
- All piping shall be free of burrs, beads, or protrusions into the air stream.

- The air pipe system shall be provided with all necessary sectioning valves, non-return valves, silencer and sleeves.
- Buried pipes shall be corrosion protected with Bitumen layer coating. All pipe joints and pipe to fitting joints shall be fully welded. The maximum internal protrusion of all weld joints shall not exceed 3mm. Pipe supports shall be provided as and when required for stable and sufficient support of the solid waste conveyance pipe. The average distance between supports shall not exceed 6m. Exposed supports shall be painted only. Suitable vibration isolation pads shall be provided to isolate the pipe from building structure where necessary.
- All pipe joints will be welded to achieve air tightness.

## 5.2 AIR INLET VALVES

- The air inlet valves (AV) shall be provided to create an air flow in the pipe system and Discharge valves (DV) shall be provided for controlling the input of waste into the pipe system
- The air inlet valve shall be pneumatically operated (open/close) actuation. The signal to actuate the valve is received from the PLC situated in the centralized solid waste collection station. This signal shall be relayed to the air inlet valve via the Remote Terminal Unit (RTU).
- The valve housing/frame and valve plate shall be of mild steel construction. The valve plate shall be provided with suitable sealing gasket to ensure that the valve remains airtight when closed. The air inlet throttle disc shall be sized to provide the required vacuum depression in the solid waste transport pipe.

- Each air inlet valve shall be provided with an integrated silencer to reduce the air suction noise level to an acceptable level. The silencer shall be constructed of mild steel with suitable acoustic treatment material and its design shall not impede the smooth intake of air into the solid waste transport pipe. The silencer design and construction shall allow for easy and quick maintenance of the air inlet valve.
- The air inlet valve shall be normally installed at ground floor along with the Discharge valves in the garbage waste room, in close proximity to the discharge valve. The valve shall remain open less than 1 minute per individual collection time.

### 5.3 DISCHARGE VALVE

- The discharge valve shall be pneumatically operated (open/close actuation). The signal to actuate the valve shall be received from the PLC situated in the centralized solid waste collection station.
- The valve housing and secondary components shall be of mild steel construction. The main valve plate shall be 12mm thick mild steel and provided with suitable sealing gasket to ensure that the valve remains airtight when closed. The discharge valve construction and its components shall be of sufficient design and strength to withstand the high impact load of solid waste falling from high levels at all times.
- The discharge valve shall provide for the smooth, efficient and complete discharge of solid waste into the solid waste transport pipe.
- For ease of maintenance and part replacement the discharge valve shall be made in 2 main separable sections, each section having a flange end connection held together by bolts and nuts. For ease of maintenance, the

discharge valve must be capable of being dismantled to allow for valve plate replacement on site.

- All valves are heavy duty to remain airtight during the lifetime of the installation. Discharge valves (DV) shall be dimensioned to withstand the impact from falling waste in high rise buildings.

#### 5.4 AIR COMPRESSORS

- Compressor to be installed at garbage room to cater compressed air for operation of pneumatic valves for AWCS system.
- Compressor with its accessories like drier, air manifold, limit switch etc. are part of air compressor unit.
- Developer needs to provide electrical point of 20Amp each 5nos of plug point with switch, socket and MCB for air compressor and other equipments.
- Air compressor has drain valve to drain moisture accumulated in air receiver which needs to be drain in garbage room drain point.
- Developer needs to arrange drain arrangement for the same in garbage room by installing suitable piping or by giving additional drain point in garbage room.
- Air compressor makes minor noise during operation, developer needs to take care during design of garbage room with at list 5m<sup>3</sup> /sec air flow ventilation of fresh air.
- During operation and maintenance work compressor may needs to remove/ repair or replace. Developer needs to design adequate door size of garbage room in view of movement of AWCS equipment's and do not disturb building operations.

## **6. OPERATION AND MAINTENANCE**

### **6.1 LIST OF DOCUMENTS**

The Developer has to provide but not limited to following documents for inspection as and when required by GIFTCL / GPCB / CPCB / MoEF's representative.

- Availability of Detailed plan / Drawings
- Operation and Maintenance Manual
- Schedule of Daily Operation
- Schedule of Inspection of Machinery
- Records of Key Activity of O & M
- Staff position / Organogram / Hierarchy
- Inventory of Stores

### **6.2 O & M GUIDELINES**

- The Developer is responsible for providing O&M services related to the Vertical Garbage Chute and Hopper Doors and is responsible for the safe and efficient operation of the same at all times and as per the sub clause listed below.
- Operation and routine maintenance work shall include the day to day operation, inspection, performance logging, maintenance, servicing, periodic testing and calibration of the equipments.
- Any tools, equipment, testing instruments, consumable items and sundry materials required for the operation and routine maintenance work shall be

provided by the Developer. Safety and protective equipment such as safety helmet, shoe, eye protectors, ear shields, etc. shall also be included.

- Uniform shall be provided for wearing by workers at all time while on duty and shall bear the Developer's company name. The cost of such provision shall be borne by the Developer.
- Remote Operation- Operation shall be carried out remotely using the designated remote-control software.
- Operation, Routine Maintenance, Preventive Maintenance & Break down maintenance shall be carried out.
- All necessary maintenance and operation staff experienced on both mechanical and electrical work such as engineers, foremen, operators, mechanics, helpers, etc., for effective maintenance and operation of all systems should be engaged.
- Provide sufficient personnel to operate a 24 hours per day, 7 days per week. Sufficient personnel shall remain on duty on the Premises at all times to immediately respond to emergency maintenance and repair work.
- Keep all records, logbooks, log sheets, maintenance job cards, etc., in neat order to the satisfaction of the GIFTCL's Representative. All records, logbooks and log sheets, charts, maintenance job cards, etc., shall become the property of the GIFTCL.
- Operate, control, maintain, replace and repair any part of equipment or material within the systems which may prove defective due to Developer's design, erection, operation, performance, or workmanship, or prove defective from any act or omission that may develop from use in the works or any section thereof. Defective is hereby defined to include, but not limited to operation or control system failures, Performance below required



minimum, excessive wear, unusual deterioration or aging of materials or finishes, unsafe conditions, the need of excessive maintenance, abnormal noise or vibration and similar unusual, unexpected and unsatisfactory conditions.

- Provide all spare parts for replacements made necessary due to wear and tear of equipment. Provide all consumable such as: refrigerants, oils, grease, filters, chemicals, etc., and all tools and maintenance equipment required for proper operation and complete maintenance of the Works.
- Provide all routine operational maintenance and full prevention maintenance as recommended by the equipment manufacturers to keep equipment and systems in proper operation condition.
- Allow for maintaining adequate stocks of all manufacturer's recommended spare parts and consumables as necessary to guarantee that all equipment and systems can be immediately repaired and properly maintained in satisfactory operation condition at all times.
- The Developer shall provide un-restricted access at all times 24x7x 365 to the AWCS team to carry out O&M and call outs related to the AWCS equipment installed in the Developers plot. This will be carried out by the designated service provider or GIFTCL.

## ANNEXURE I APPLICATION FORM FOR SOLID WASTE CONNECTION



## Application Form

## Gujarat International Finance Tec-City Company Limited

Applied for Utility:		<input type="checkbox"/> District Cooling System ડિસ્ટ્રિક્ટ કુલિંગ સિસ્ટમ	<input type="checkbox"/> Water પાણી	<input type="checkbox"/> Sewage સુએજ	<input type="checkbox"/> Solid Waste (AWCS) ઝોડબલ્યુ સી એસ	
APPLICATION FOR:		<input type="checkbox"/> Permanent Connection કાયમી જોડાણ	<input type="checkbox"/> Temporary Connection અંતર્યામી જોડાણ	<input type="checkbox"/> Name Change નામ બદલી	<input type="checkbox"/> Demand Extension માંગનો વધારો	
		<input type="checkbox"/> Demand Reduction માંગનો ઘટાડો	<input type="checkbox"/> Removal of Services સેવા બંદ કરવી			
Type of Premises/ જમ્યાનો વર્ગ (પ્રકાર) :		For Office Use / ઓફિસ કામ માટે :		તાજેતરનો પાસપોર્ટ સાઈઝ ફોટો Latest Passport size Photo		
<input type="checkbox"/> Domestic ઘરેલું		<input type="checkbox"/> Non-Domestic બિન ઘરેલું				Date તારીખ
<input type="checkbox"/> Others – Please Specify અન્ય – વિગત સ્પષ્ટ જણાવો		Application No. અરજી નંબર				Consumer No. ગ્રાહક નંબર
For Temporary Supply / અંતર્યામી જોડાણ હોય તો : Date of connection _____ to _____ સંલગ્નતાની તારીખ થી સુધી		SAP No. એસ એ પી નંબર				Applicable Tariff લાગુ પડતું
In Case of Name change: Name of existing consumer નામ બદલી માટે : હાલના ગ્રાહકનું નામ						
<input type="checkbox"/> E-Bill confirmation / ઈ-બિલ પુષ્ટિ				Sign Here / સહી		

Details of Applicant supported by necessary evidences are furnished hereunder / અરજદારની વિગતો જરૂરી દસ્તાવેજ પુરાવા સહિત આ સાથે સામેલ છે:

Full Name of Applicant  
અરજદારનું નામ \_\_\_\_\_

Applicant Type / અરજદારનો પ્રકાર						
<input type="checkbox"/> Public Ltd. પબ્લિક લી.	<input type="checkbox"/> Pvt. Ltd. પ્રાઇવેટ લી.	<input type="checkbox"/> Partnership ભાગીદારી	<input type="checkbox"/> Proprietary માલિકી	<input type="checkbox"/> Govt. Dept. સરકારી વિભાગ	<input type="checkbox"/> Reg. Trust રજીસ્ટર્ડ ટ્રસ્ટ	<input type="checkbox"/> Co-operative Society કો.ઓ. સોસાયટી
PAN No. :			GST No. :			
Occupancy Type: કમળાનો પ્રકાર		<input type="checkbox"/> Owner સહ માલિક	<input type="checkbox"/> Joint Owner સહ માલિક	<input type="checkbox"/> Tenant ભાડુઆત	<input type="checkbox"/> Lease લીઝ	<input type="checkbox"/> Others અન્ય
Connection Address details / સંલગ્નતાની જગ્યા અને વિગતો :						
Unit / Flat No.: એકમ / ફ્લેટ નં. :		Floor No.: ફ્લોર નં. :		Building Name: બિલ્ડિંગ નું નામ :		
Block No.: બ્લોક નં. :		Road No.: રોડ નં. :		Zone: ઝોન :	<input type="checkbox"/> DTA ડીટીએ	<input type="checkbox"/> SEZ એસઝીઝી
E-mail: ઈ-મેલ :		GIFT City, Gandhinagar - 382355 ગિફ્ટ સિટી, ગાંધીનગર - ૩૮૨૩૫૫				
Mobile No.: મોબાઇલ નં. :		Landline Tel. No.: લેન્ડલાઇન ટે. નં. :				
Name and Designation of Authorized Person: અધિકૃત અધિકારીનું નામ અને પદ :						
Total Build up Area / કુલ વિસ્તાર બનાવો : _____ sq m / ચો.મી.				Total number of Occupants / કમળાકરનારની કુલ સંખ્યા :		

DCS Demand details / ડિસ્ટ્રિક્ટ કુલિંગ સિસ્ટમ માંગની વિગતો :

Contract Demand / કરાર માંગ : _____ TR / ટી આર	Ultimate Demand / અંતિમ માંગ : _____ TR / ટી આર
--	---

Water / Sewage / AWCS Demand details / પાણી / સુએજ / ઝોડબલ્યુ સી એસ માંગની વિગતો :

Total Water Demand / કુલ પાણીની માંગ : _____ Liters/day / લિટર દિવસ દિવસ		
Flushing / ફ્લશિંગ : _____ Liters/day	Domestic / સ્થાનિક : _____ Liters/day	Gardening / બાગકામ : _____ Liters/day

## Gujarat International Finance Tec-City Company Limited

EPS - Building no. 49A, Block 49, Zone 04, Gyan Marg, GIFT City, Gandhinagar – 382355

## A) List of latest documents to be attached with new application

## i) Identity Proof (self-attested) (anyone)

- ☐ Electoral Identity Card
 ☐ Passport
 ☐ Ration Card  
☐ Driving License
 ☐ PAN Card
 ☐ Aadhar Card

## ii) Proof of ownership or occupancy for which utility connection is required (anyone)

- ☐ Copy of registered sale deed or lease deed  
☐ Letter of Allotment  
☐ Ownership Certificate issued by GIFTUDA  
☐ NOC from Developer (For Temporary connection only)  
☐ Copy of Index (For Name Change)

iii) If the applicant is a company, trust, educational institute, government department etc. The application form shall be signed by a competent authority (e.g., Branch Manager, Principal, Executive Engineer, etc.) along with a relevant resolution authority letter of the institution concerned.

iv) In case of Public and/or Private Limited Company – The applicant shall furnish the Memorandum and Articles of Association and Certificate of Incorporation along with an authorization in the name of the applicant for signing the requisition form and agreement.

v) In case of a partnership firm – The applicant shall furnish the partnership deed and an authorization in the name of applicant for signing the requisition form and agreement.

vi) Clearly marked area of utilization on approved plan of GIFTUDA, jointly signed by building developer's authorized representative and Leaseholder's authorized representative.

vii) List of Directors with address & contact details on company's letter head (exempted for Government Institutions, PSU Banks).

viii) Copy of PAN and GST details of the applicant.

ix) Duly filled and signed installation test certificate is to be submitted before the release of connection. The installation test certificate is to be signed and sealed by the developer.

x) Buildup area certificate from GIFT UDA.

## B) List of latest documents to be attached with application for Name Change

## i) Submit the document mentioned at A i) &amp; ii)

ii) No Objection Certificate from the registered consumer or authorized person of the premises shall be required for cases involving transfer of security deposit in the name of applicant.

iii) No Objection Certificate by Co-Owner, in case of joint Ownership.

iv) Copy of latest bill duly paid.

v) In case the existing consumer is deceased, death certificate is required.

vi) In case of change of name to legal heir, any of the following document shall be considered as acceptable proof of legal heir:

- ☐ Registered Will/deed
 ☐ Succession or legal heir certificate.  
☐ Mutation in municipal/land records

vii) NOC from other legal heir(s) in case the connection is to be changed in the name of one of the legal heirs.

viii) If the applicant is company, submit the documents mentioned at A iii), iv), v), vi) & viii).

C) In case of application for contract demand alteration/conversion of service/change of consumer category, submit work completion certificate and installation test certificate from developer (A ix)).

## D) Any Utility dues outstanding in GIFT City area of operation in consumer's name: Yes / No.

If 'Yes', provide Consumer No. \_\_\_\_\_

ચિફ્ટ સિટી ક્ષેત્રમાં અરજદારના નામે અન્ય સ્થળે કોઈપણ બીજા ચુકવવાનું બાકી છે : હા / ના જો 'હા' હોય તો ગ્રાહક નંબર આપો : \_\_\_\_\_

## E) Any Utility dues outstanding for the premises for which connection applied for: Yes/No.

If 'Yes', provide Consumer No. \_\_\_\_\_

જે પરિસરમાં કનેક્શન માટે અરજ કરી છે તે પરિસર માટે કોઈપણ બિલ ચુકવવાનું બાકી છે : હા / ના જો 'હા' હોય તો ગ્રાહક નંબર આપો : \_\_\_\_\_

## F) Declaration / જાહેરનામું

I / We hereby declare that.

a) The information provided in this application is true to my knowledge.

b) I/We desire and agree with the utility supplier to avail connection for the above-mentioned purpose and of the demand provided in this application form for the period not less than 2 yrs. From the first day of the month next to date of commencement of connection by the supplier.

c) I/We have read the Supply Code issued by GIFT and agree to abide by the conditions mentioned therein.

d) I/We will deposit utility dues regularly as per the applicable tariff and any other charges.

e) I/We will own the responsibility of security and safety of the meter, its accessories, and the Installation thereafter.

હું / અમે આથી જાહેર કરીએ છીએ કે

એ) આ અરજમાં આપેલી માહિતી મારી જાણકારી મુજબ સાચી છે.

બી) હું/અમે ચિફ્ટ સિટી સાથે ઉપજા અને સંપત્તિ ધરાવીએ છીએ કે ઉપરોક્ત નિર્દિષ્ટ હેતુ માટે જ જોડાણ શરૂ કરવામાં આવે એ તારીખ પછીના મહિનાના પ્રથમ દિવસથી બે વર્ષથી ઓછા નહીં એવા સમયગાળા માટે આ અરજ હોયમાં દર્શાવેલ માંગ પ્રમાણે હોય.

સી) હું / અમે ચિફ્ટ સિટીનો સપ્લાઈ કોડ વાંચેલ છે અને તેમાં ઉલ્લેખિત શરતો સાથે બાબત ધરાવ સંપત્તિ હું/છીએ.

ડી) હું / અમે બિલના બાકી નાણાં નિયમિત રીતે લાગુ દર અને અન્ય ચાર્જિસ પ્રમાણે જમા કરાવીશું / કરાવીશું.

ઈ) હું / અમે મીટર, એના એસેસરીઝ અને ઈન્સ્ટોલેશન પછીની સુરક્ષા અને તકેદારીની જવાબદારી લઈશ / લઈશું.

(Signature of the consumer or Authorized Signatory with Company Seal)

(ગ્રાહક અથવા અધિકૃત અધિકારીની સહી અને સીકરો)

Witness Name / સાક્ષીનું નામ

(Building Developer Authorized Person / બિલ્ડિંગના વિકાસકર્તા અધિકૃત અધિકારી)

Witness Signature / સાક્ષીની સહી

(Building Developer Authorized Person / બિલ્ડિંગના વિકાસકર્તા અધિકૃત અધિકારી)

\*In case of thumb impression, name & signature of witness is necessary. In case the applicant is a Firm / Partnership / Ltd. Company, Power of attorney holder's signature must be supported by official seal.

Gujarat International Finance Tec-City Company Limited

EPS - Building no. 49A, Block 49, Zone 04, Gyan Marg, GIFT City, Gandhinagar – 382355

## ANNEXURE II GENERAL TERMS AND CONDITIONS

The following terms and conditions will apply and govern the solid waste connection to Commercial / residential/ Institutional Applicant of GIFTCL hereinafter referred to as the “Service Provider”).

1. **DEFINITIONS:**
  - (i) **“Agreement”** means the an application form along with general terms and conditions and other incidental documents signed and submitted by the Applicant for the solid waste connection at a specified location within building envelope and duly accepted by the Service Provider.
  - (ii) **“Applicant”** or **“Consumer”** means a Legal Entity (*a company, partnership firm, LLP, Housing Society or Trust*) or a proprietary concern or an individual, who has applied for solid waste Connection for commercial / residential / institutional purpose.
  - (iii) **“Application”** means the request by an Applicant for Connection of solid waste in the prescribed format / application form of the Service Provider duly filled and signed by the Applicant.
  - (iv) **“Automated Waste Collection System”** means transfer of waste through the underground pipeline or utility trench.
  - (v) **“Bill”** means monthly bill or for such period as determined by the Service Provider, for the solid waste connection, to be issued by the Service Provider, for Minimum Fixed Charges or charges for the solid waste connection and such other incidental charges, taxes, cess, duties and levies payable by the Consumer.

- (vi) “**Consumer**” means the Applicant to whom the connection for solid waste for commercial / residential / institutional purpose has been installed.
- (vii) “**Connection**” means installation of combination of one or more pipelines, related fittings, discharge valves, regulator, chutes, etc. in Applicant’s Site in order to be able to solid waste connection to the Applicant.
- (xxxix)
- (xl) “**Domestic Connection**” means the connection used for Residential purposes.
- (xli) “**Non-Domestic connection**” means the connection used for commercial, institutional, hospitals, public uses, horticulture and fire demand.
- (viii) “**Delayed Payment Charges**” means the charges as are payable by the Consumer as per rate given in the Tariff Card, for late payments of the Bill or such other demands raised by the Service Provider.
- (ix) “**Reconnection**” means, restart of the supply for the solid waste connection on fresh application submitted by the Applicant, after termination.
- (x) “**Security Deposit**” means the amount of security (*interest free*) to be deposited by the Applicant, as per the Tariff Card, at the time of Application for Connection or Reconnection.
- (xi) “**Service / Services**” means discharge of solid waste from automated waste collection system of Service Provider.

- (xii) “**Site**” means the building or property or establishment owned or occupied by the Applicant in the GIFT notified area from where the applicant would connect the solid waste to the main pipeline of the service provider.
- (xiii) “**Solid Waste**” means solid wastes generated from Commercial / Residential/ Institutional consumer in GIFT City notified area, limited to organic, inert, mixed residue and recyclable waste which includes paper, plastic, cardboard, glass, metal, except construction debris, E-waste and Hazardous waste.
- (xiv) “**Tariff Card**” means a schedule, issued by the Service Provider, from time to time, in respect of the Security Deposit, Charges for New Solid Waste Connection, Delayed Payment Charges and such other charges to be paid by the Applicant/ Consumer to the Service Provider.
- (xv) “**Termination**” means as defined in clause 10.1 of this Agreement.

## **2. DISCHARGE OF SOLID WASTE:**

- 2.1 The discharge of solid waste would be allowed, at the discretion of the Service Provider and the Service Provider shall at any time, be entitled to withdraw the Services.
- 2.2 By submission of this Application duly filled by the Applicant, shall be deemed to have unconditionally agreed to and accepted discharge of solid waste on the terms and conditions herein contained, and these terms and conditions shall constitute a binding Agreement between the Service Provider and the Applicant.

## **3. USE OF CONNECTION OF SOLID WASTE:**



- 3.1 Solid waste connection shall be used only for the purpose of discharging solid waste from the building as per the type of Connection requested for in the Application form at the Site and shall not be permitted/allowed to be used for any other purpose.
- 3.2 Applicant shall have to obtain the specific prior written permission of the Service Provider for change in installing any pipe line and / or modification / alteration/ transfer of the Connection.
- 3.3 The Applicant shall not discharge the solid waste from any other Site or permit any other person or party to use the solid waste connection.

#### **4. CONNECTION OF SOLID WASTE:**

- 4.1 On submission of the Application and payment of the security deposit charges as per the tariff card, the Service Provider or its representative will carry out a technical survey of the Site.
- 4.2 On completion of the technical survey, the Service Provider shall determine the location and manner of laying discharge valves & temporary storage for discharge of solid waste as per the prevailing engineering norms. The applicant shall make necessary arrangement for discharge of solid waste into main Automated Waste Collection System pipeline (outside the building but in / out of the utility trench) of the service provider. The applicant shall be required to comply with the standard engineering norms and practices for the connection and shall also follow the instruction as may be given by the Service Provider. If at the time of connection or subsequently any damage caused to the property / pipeline/ system of the service provider it shall



be repaired by the applicant at his own cost as per the satisfaction of the service provider.

- 4.3 The solid waste connection will be provided subject to necessary approval and permission being received along with the payments of the applicable charges, received from the Applicant as charges towards the cost of providing the connection as well as payment of security deposit.

## **5. CHARGES/CONTRIBUTION:**

- 5.1 The solid waste connection shall be valid only after receipt of security deposit and completion of all formalities by the Applicant.
- 5.2 The solid waste connection charges in various segments like Commercial, residential, institutional will be determined by the Service Provider. These charges may be subject to revisions from time to time, without prior notice to the Applicant.
- 5.3 All cess, taxes, duties, assessments and any other levies imposed or to be imposed in future by any State or Central Government or any Statutory Authority in relation to the discharge of solid waste shall be passed on and be payable by the Applicant.
- 5.4 For any extension / modification, rectification / alteration of the pipeline / meter / regulator or any part of the Connection, the Applicant shall request the Service Provider in the format prescribed by the Service Provider or by a written request. The request shall be considered by the Service Provider and subject to the technical feasibility and receipts of advance payment for the said charges are undertaken by the Service Provider. The charges for

the same may be decided by the Service Provider. In no case, the Applicant shall have the right to modify / alter the Connection without prior consent of the Service Provider. In the event if it is found that the Connection has been modified / altered / tampered in part or whole, the Service Provider at its sole discretion may discontinue the services and shall forfeit the registration fees. The decision of the Service Provider shall be final and binding upon the Applicant.

## **6. BILLING AND PAYMENT:**

- 6.1 The solid waste disposal charges shall be billed on the basis of the total built up area and /. The decision of the Service Provider as for the charges to the Applicant shall be final.
- 6.2 A Bill shall be sent for charges on a monthly basis i.e. once in a month or as determined by the Service Provider at the prevailing rate of charges for solid waste disposal in the particular period. (The Bill will include all other taxes, cess, duties and levies) payable for the relevant period by the Applicant.
- 6.3 The Service Provider reserves its right to vary the period / frequency and manner of billing from time to time without prior notice to the Applicant. Every Bill issued by the Service Provider shall be paid in full or before its due date by the Applicant or else Service Provider has the right to stop the services without any prior notice to the Applicant.
- 6.4 In case of payment after due date, the Applicant shall have to pay delayed payment charge at rates, as decided by the Service Provider from time to time.

- 6.5 In case of dishonor of any cheque for any charges payable to the Service Provider, the Applicant shall without prejudice to the other rights of Service Provider hereunder or in law, be liable to pay to Service Provider such charges.
- 6.6 Applicant shall bound to make payment of bill in full or before the due date even in the cases where the Applicant has lodged complaint or raised any dispute with respect to the solid waste charges or otherwise In case of any dispute or any discrepancy with respect to amount of bill, the Applicant shall be required to lodge his complaint within 7 (seven) days after the payment is made. Service Provider reserves the right to stop services without any prior notice in case of non-compliance with the above by the Applicant.
- 6.7 If the due date for making payment of any charges is falling either on Sunday or holiday then the same shall be considered to be due on the previous day of the holiday.
- 6.8 The Applicant shall at all times from the date of connection of solid waste till the expiry or termination of this Agreement will pay and maintain payment of security deposit to the Service Provider. The Service Provider would not pay any interest on the security deposit to the Applicant.
- 6.9 The security deposit shall be as per Tariff Card.
- 6.10 The Service Provider would adjust any unpaid amount from security deposit, if the Applicant fails to pay any sum due and payable by the Applicant under this Agreement. The decision of the Service Provider shall be final and binding upon the Applicant.

- 6.11 Subject to no unpaid amount from the Applicant, the security deposit will be refunded to the Applicant after on termination of the Agreement, or any such matter without any interest on this amount.

**7. OBLIGATION OF THE APPLICANT:**

- 7.1 Prior to the commencement of solid waste connection, the Applicant shall at its own cost obtain all necessary consents, approvals and permissions from all relevant authorities as may be required to obtain the Solid Waste Connection. It will be the sole responsibility of the Applicant to obtain all such “No Objection Certificates” (NOCs).
- 7.2 The applicant has to make necessary provision for internal chute, discharge valve, temporary storage etc. for discharge of solid waste into the main pipeline of automated waste collection system (outside the building in/out of the trench) at its own cost & shall comply with the standards provided by the service provider.
- 7.3 The Applicant shall permit the Service Provider’s authorized representative to access the Site for the purpose of laying pipelines and undertaking installation and also to alter or replace any pipeline, undertaken any inspection, installation of equipment if the Service Provider in its discretion determines the same to be necessary or expedient.
- 7.4 The Service Provider reserves the right to discontinue the Services in the event of any dispute between the Applicant and the Service Provider.
- 7.5 The Applicant shall take all adequate precautions and adopt all safety measures to safeguard pipeline, valves and other equipments installed by

the Service Provider for solid waste connection. In case the Applicant carries out any unauthorized repair, alteration, modification, directly or indirectly, in the pipeline, valves, equipments installed for the purpose of solid waste connection, the same shall be deemed to be breach of the contractual terms contained therein and in case of any accident, the Applicant shall be solely responsible for the same. Service Provider shall not take any responsibility on account of the same. Service Provider has the right to stop the services immediately in such cases.

## **8 PROPERTY/OWNERSHIP:**

- 8.1 Pipe fittings and other installations used for the purpose of discharge of solid waste up to the main pipeline of automated solid waste collection system (outside the building in/out of the trench) shall be done by the Applicant and the Applicant shall maintain the pipelines up to automated solid waste collection system, in working condition.
- 8.2 The manner and mode of discharge of solid waste is at the absolute discretion of the Service Provider.
- 8.3 The Applicant shall permit the authorized representative of the Service Provider to enter upon the property/Site for the purpose of inspection and maintenance checkups. The Applicant shall verify the identification of such authorized representative prior to permitting such persons access upon the property/Site. The Service Provider shall not be liable/responsible for the entry by any unidentified person or any imposter or person claiming to represent our act on behalf of the Service Provider.

8.4 The Applicant shall not tamper or interfere, nor permit any tampering or interference with the pipes, equipment and other installations for the purpose of solid waste collection. Service Provider shall, without prejudice to its other rights, be entitled to disconnect the Services without giving any prior notice and shall be entitled to recover suitable compensation for any damages caused by the Applicant.

8.5 The Applicant shall not adjust, clean, repair, replace or otherwise handle any of the pipes, equipment and other installation. Any damage or breakdown in the pipes, installations and equipment shall be immediately intimated by the Applicant to the Service Provider.

## **9. SOLID WASTE DISPOSAL BY THE SERVICE PROVIDER:**

9.1 The Service Provider will endeavor to provide the Applicant with consistent and regular Services for solid waste disposal.

9.2 The Service Provider reserves the right to revise solid waste collection charges from time to time without any prior notice.

9.3 The Service Provider will collect the solid waste from the main pipeline of automated waste collection system outside the building in/out of the utility trench.

9.4 There shall be no rebate provided to the Applicant in case of any loss due to breakage in the upstream of the main pipeline. The Service Provider upon intimation by the Applicant shall rectify the problem in the main pipeline however shall not be liable for any compensation.

## **10. TERMINATION:**

10.1 Without prejudice to the other rights of the Service Provider in law otherwise, the Service Provider may at any time, immediately and without notice disconnect the Services and terminate the Agreement with the Applicant, if;

- (i) The Applicant fails to pay the Service Provider any sum due to the Service Provider under the terms and conditions and/or otherwise within 30 days from the due date of payment thereof.
- (ii) The Applicant fails to comply with any of its obligations and/or commits any breach of the covenant or conditions on his part to be observed, performed or fulfilled.
- (iii) The particulars as furnished by the Applicant in the Application are found to be false or incorrect.
- (iv) The solid waste connection is used by the Applicant for any other purpose.
- (v) The Applicant tampers/modifies/alters the Connection without the consent of the Service Provider.

10.2 The Applicant may, by written notice of one month to the Service Provider requests Termination of solid waste connection.

- (i) In such case, no charges/contributions paid by the Applicant to the Service Provider shall be refunded except the Security Deposit, without any interest, subject to settlement of all pending bills and dues by the Applicant.

10.3 In the event of Termination of the solid waste Connection, without prejudice to the other rights of the Service Provider:

- (i) The Service Provider shall suspend the Services.
- (ii) The Applicant shall be liable to pay the Service Provider all amounts due till that date of Termination of this Agreement.

## **11. RECONNECTION:**

11.1 If after termination the Applicant applies for the restart of the solid waste connection, all (“Reconnection”) charges like Connection / commissioning (as determined by the Service Provider) shall be borne and paid by the Applicant and Applicant has to complete all formalities related to new Connection.

11.2 Reconnection of solid waste will be at the sole discretion of the Service Provider and the Service Provider may refuse the same, without assigning any reasons whatsoever.

## **12. TRANSFER OF THE CONNECTION:**

12.1 The Service Provider permits transfer of the solid waste connection from one name to another name in the event of transfer or assignment of the leasehold rights of the Building, The transfer will be permitted subject to the payment of such charges as may be decided by the Service Provider, from time to time. The transfer of solid waste connection from one name to another name is subject to submission of fresh application and necessary documents, as may be required by the Service Provider and will be affected only upon full satisfaction by the Service Provider.



### **13. LIABILITY / INDEMNITY:**

- 13.1 The Applicant shall not use the solid waste connection for any illegal or unlawful activity or purpose. In case of any offense under or violation of any law, statute or regulation by the Applicant, the Applicant alone shall be responsible and liable for the said offense or violation and the Applicant agrees to indemnify and keep indemnified the Service Provider from and against any loss, claim, action or proceeding that may be suffered or incurred by the Service Provider as a result of any such offense or violation by the Applicant.
- 13.2 The Applicant shall be liable for any loss or damage caused to pipes equipment or installations whether caused on account of negligence by the Applicant or its associates or agents or due to theft, sabotage or otherwise however.
- 13.3 The Applicant shall be deemed to be in exclusive possession and control of the solid waste up to the main pipeline of Automated Waste Collection System outside the building in / out of the utility trench and the Applicant shall be liable for any damage caused to any person or property as a result thereof. Accordingly, the Applicant shall protect, indemnify and hold the Service Provider harmless against all claims, demands, actions, suits, proceedings, judgments and all liabilities, costs, expenses, damages or losses arising out of resulting from or incidental or in connection with the discharge of solid waste.
- 13.4 The indemnity provisions will be enforceable notwithstanding termination of Services for solid waste disposal.

- 13.5 The Service Provider will put in his best endeavor to cause minimum damage to garden, lawn, plants, decorations, tiles and any other decorative surface within the premises of the Applicant both on the ground and on the walls. Accordingly, the Applicant shall protect, indemnify, and hold the Service Provider harmless against all claims, demands, action, suits, proceedings, judgments and all liabilities costs, expenses, damages or losses arising out of resulting from or incidental to or connection with the disposal of solid waste.

#### **14. FORCE MAJURE**

The Service Provider shall not be liable for any loss / damage, costs, charges or expenses whatsoever that may be caused to or occasioned by the Applicant or another person on account of failure to perform or for the delay in performing any provisions of this Agreement if the same is caused or results due to acts of God, War, Revolt, Fire, Tempest, Flood, Earthquake, Lighting, direct or indirect consequences of God (declared/undeclared) Sabotage, Hostilities, National emergencies, civil disturbances, commotion, embargo or any other law promulgation, regulation or ordinance whether Central or State or Municipal, breakage bursting or freezing of pipeline or occurrence of any event beyond the control of the Service Provider provided further that the Service Provider shall not be responsible and/or liable for any losses direct or consequential caused to the Applicant if the same is caused due to the reasons stated hereinabove.

#### **15. AMENDMENT:**

The Service Provider may at any time amend, add to or delete any or all these terms and conditions with immediate effect and in such case, the amended terms and conditions shall be informed to the Applicant and shall be binding on the Applicant.

**16. TERMS BINDING ON SUCCESSORS:**

These terms and conditions shall be binding on the heirs, administrator, successor and assigns of the Applicant.

**17. NOTICE:**

Any notice to the Applicant will be sent to the address of the Applicant stated in its Application.

**18. ARBITRATION:**

All disputes arising out of this Agreement shall be referred to the sole arbitrator appointed by the M.D/CEO of the Service Provider and the provisions of The Arbitration and Conciliation Act 1996 shall be applicable. The award of the Sole Arbitrator shall be final and binding on both the Service Provider and the Applicant. The seat of arbitration shall be at Gandhinagar. However, in case of any application or appeal to be preferred. The courts at Gandhinagar would only have the exclusive jurisdiction.

**DECLARATION:**

I confirm that I am authorized to make this Agreement with GIFTCL for supply of Water. I do hereby declare that I have read and understood the above terms and conditions including the charges as applicable from time to time. I hereby accept

the above stated terms and conditions in its entirety, irrevocably and unconditionally and accordingly put and subscribe my hand to these terms and conditions.

---

Name of the Applicant/Developer

---

Sign and seal of the Representative  
of Applicant/Developer

Place:

Date:

## **Tariff Structure**

### **I. Permanent New Connection Charges:**

#### **1. Charges**

##### **I. New connection charges:**

This one-time charge is in the form of connection charges which is fixed, non-refundable.

#### **2. Cost Recovery**

##### **I. Recovery of connection charges includes cost of followings:**

- 1) Inside Garbage room: Air Valve, Discharge Valve, Storage Section, Control cables, Level Sensors, Control panel.
- 2) Up to 50 meters of AWCS pipeline from bottom of the DV.

##### **II. Cost recovered through DR charges includes followings infrastructure developments:**

- 1) After 50 meters of AWCS pipeline from garbage room to Central Waste Handling Facility (CWHF) through utility tunnel
- 2) Development of CWHF
- 3) Treatment plant and disposal

**Security Deposit (interest free)**

Sr. No.	Consumer Category	Solid Waste (INR)
1	Domestic	3 months X Collection Charges as applicable for total BUA
2	Non - Domestic	4 months X Collection Charges as applicable for total BUA

**Collection Tariff**

Charges for FY 2023-24 i.e. from 1<sup>st</sup> April 2023 to 31<sup>st</sup> March 2024.

Sr. No.	Consumer Category	Solid Waste Charges (INR/ Sq. Ft. of BUA)
1	Domestic	0.25
2	Non - Domestic	0.27

\* Solid waste charges will increase of Rs 0.05 per Sq. ft of BUA every year starting from FY 2023-24 i.e. from 1<sup>st</sup> April 2023.

Charges for FY 2024-25 i.e. from 1<sup>st</sup> April 2024 to 31<sup>st</sup> March 2025.

<b>Sr. No.</b>	<b>Consumer Category</b>	<b>Solid Waste Charges (INR/ Sq. Ft. of BUA)</b>
1	Domestic	0.30
2	Non - Domestic	0.32

\* Solid waste charges will increase of Rs 0.05 per Sq. ft of BUA every year starting from FY 2023-24 i.e. from 1<sup>st</sup> April 2023.

### Phasing of Collection Tariff

<b>Sr. No.</b>	<b>Timeline after issuing Occupancy Certificate (OC) to building</b>	<b>Charges as per BUA</b>
1	0 months to 12 months	10% of BUA or actual occupancy whichever is higher
2	12 months to 24 months	30% of BUA or as per actual BUA occupied whichever is higher
3	24 months to 36 months	60% of BUA or as per actual BUA occupied whichever is higher
4	> 36 months	100% of BUA

**Delay Payment Charges**

Sr. No.	Consumer Category	Penalty
1	Domestic	18% interest per annum of the bill amount payment after due date
2	Non – Domestic	

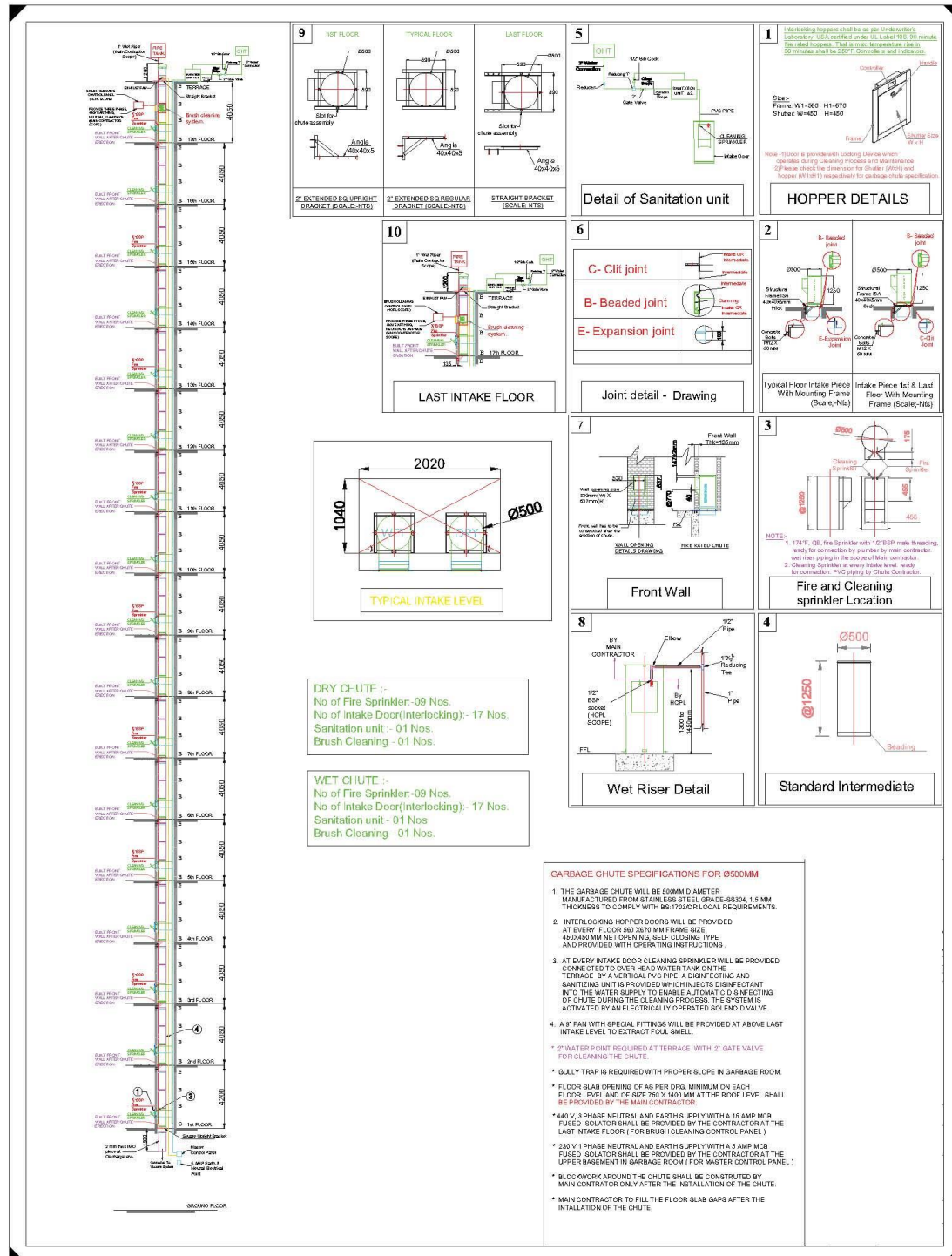
The manually collection of solid waste will be treated as per non-domestic charges/tariff.

**Note**

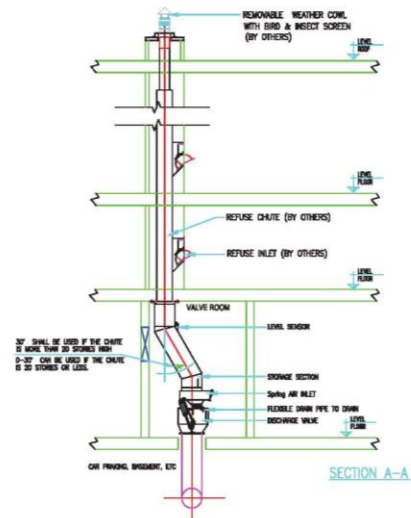
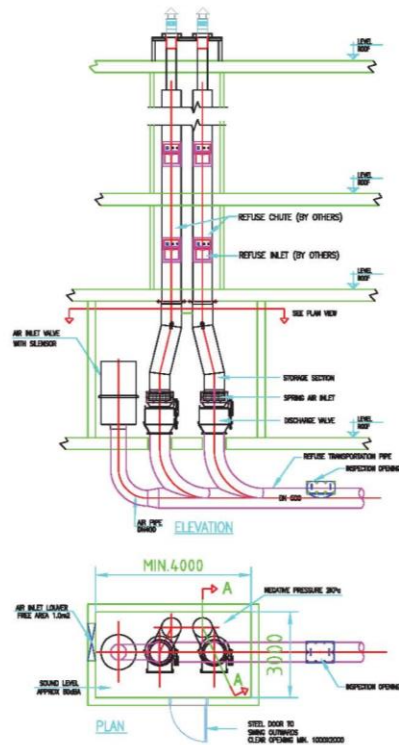
- All the above rates/ charges/ tariff mentioned are exclusive of all taxes
- The billing will commence from the date of connection.
- The above charges are subject to change from time to time by the Service Provider.
- Penalty/ Cost recovery from developers for violation/ misuse of system



# ANNEXURE – III TYPICAL CHUTE DRAWING



## ANNEXURE – IV GARBAGE ROOM ARRANGEMENT AT GROUND LEVEL



-1

