

**REQUEST FOR PROPOSAL  
FOR  
SELECTION OF IMPLEMENTATION AGENCY FOR  
PAN CITY INFRASTRUCTURE – INTEGRATED COMMAND AND  
CONTROL CENTRE (ICCC), SMART COMPONENTS AND  
SMART GOVERNANCE  
FOR  
SILVASSA SMART CITY LIMITED (SSCL)**

**Tender Notification No: SSCL/IT DEPT/2020/01**

**Date: 08 October 2020**

**Last Date of Bid Submission: 25 November 2020**

**Volume 1: Instructions to Bidder**



**Invited By:**

**Silvassa Smart City Limited (SSCL)  
Silvassa, U.T of Dadra and Nagar Haveli**

## Table of Contents

<b>TABLE OF CONTENTS</b> .....	<b>2</b>
<b>1 DISCLAIMER</b> .....	<b>5</b>
<b>2 GLOSSARY</b> .....	<b>6</b>
<b>3 NOTICE INVITING BID</b> .....	<b>8</b>
<b>4 IMPORTANT DATES</b> .....	<b>9</b>
<b>5 INTRODUCTION AND BACKGROUND</b> .....	<b>10</b>
5.1 ABOUT SILVASSA .....	10
5.2 ABOUT SSCL .....	11
5.3 ABOUT THE PROJECT.....	11
5.4 PROJECT OBJECTIVES.....	11
5.5 PROJECT COVERAGE.....	12
<b>6 PRE-QUALIFICATION CRITERIA</b> .....	<b>13</b>
<b>7 INSTRUCTIONS TO BIDDER</b> .....	<b>17</b>
7.1 PURPOSE OF BID DOCUMENT.....	17
7.2 PROPOSAL PREPARATION COST.....	17
7.3 PRE-BID MEETING.....	17
7.4 AMENDMENT OF RFP DOCUMENT .....	18
7.5 CONFLICT OF INTEREST.....	18
7.6 CONSORTIUM CONDITION.....	19
7.7 RIGHT TO AMENDMENT OF PROJECT SCOPE.....	19
7.8 SSCL'S RIGHTS TO TERMINATE SELECTION PROCESS.....	19
7.9 RIGHT TO REJECT ANY PROPOSAL.....	19
7.10 TENDER FEE AND EARNEST MONEY DEPOSIT (EMD).....	20
7.11 SEALING, MARKING AND SUBMISSION OF BIDS .....	21
7.12 LANGUAGE OF BIDS.....	22
7.13 CONCESSIONS PERMISSIBLE UNDER STATUTES.....	23
7.14 BID VALIDITY.....	23
7.15 GST & TAXES.....	23
7.16 FIRM PRICES AND BID CURRENCY .....	23
7.17 RIGHT TO VARY THE SCOPE OF THE WORK AT THE TIME OF AWARD .....	23
7.18 MODIFICATION OR WITHDRAWAL OF BIDS.....	23
7.19 EVALUATION PROCESS.....	24
7.20 OPENING OF TECHNICAL BID.....	24
7.21 EVALUATION OF TECHNICAL BIDS.....	24
7.22 TECHNICAL EVALUATION CRITERIA .....	25
7.23 OPENING OF COMMERCIAL BID.....	30
7.24 EVALUATION OF COMMERCIAL BIDS AND SELECTION METHOD.....	30
7.25 OEM / IMPLEMENTATION PARTNER PARTICIPATION CRITERIA .....	31
7.26 RIGHTS TO ACCEPT/REJECT ANY OR ALL PROPOSALS .....	31

7.27	NOTIFICATIONS OF AWARD AND SIGNING OF CONTRACT .....	31
7.28	QUANTITY VARIATION.....	32
7.29	PERFORMANCE BANK GUARANTEE.....	32
7.30	VANDALISM/FORCE MAJEURE .....	33
7.31	FAILURE TO AGREE WITH THE TERMS & CONDITIONS OF THE BID DOCUMENT/ CONTRACT.....	33
7.32	TERMS AND CONDITIONS OF THE TENDER .....	33
<b>8</b>	<b>PROJECT MILESTONES AND PAYMENT SCHEDULE.....</b>	<b>34</b>
8.1	PROJECT MILESTONES AND PAYMENT SCHEDULES FOR IMPLEMENTATION PHASE.....	35
8.2	PROJECT MILESTONES AND PAYMENT SCHEDULES FOR OPERATIONS AND MAINTENANCE PHASE...	36
<b>9</b>	<b>FORMATS FOR PRE-QUALIFICATION BID .....</b>	<b>37</b>
9.1	PRE-QUALIFICATION DOCUMENTS CHECKLIST.....	37
9.2	PQ_1: FORMAT FOR BID COVER LETTER.....	39
9.3	PQ_2: FORMAT FOR EARNEST MONEY DEPOSIT (EMD).....	41
9.4	PQ_3: BIDDER INFORMATION FORMAT .....	43
9.5	PQ_4: AUDITOR'S CERTIFICATE FOR NET WORTH OF BIDDER.....	44
9.6	PQ_5: BIDDER'S OVERALL ANNUAL TURNOVER FROM ICT/ITES BUSINESS.....	45
9.7	PQ_6: EXPERIENCE OF IMPLEMENTING ICCC PROJECT.....	47
9.8	PQ_7: EXPERIENCE OF IMPLEMENTING SMART PROJECTS.....	49
9.9	PQ_8: SELF DECLARATION – NO BLACKLISTING.....	51
9.10	PQ_9: SELF DECLARATION FOR BIDDER NOT BEING INSOLVENT OR IN RECEIVERSHIP OR BANKRUPT 52	
9.11	PQ_10: SELF-CERTIFICATION FOR COMPLIANCE TO NON-IT SCOPE OF WORK.....	53
9.12	PQ_11: SELF-DECLARATION FOR COMPLIANCE TO PROCUREMENT GUIDELINES.....	55
<b>10</b>	<b>FORMATS FOR TECHNICAL BID.....</b>	<b>56</b>
10.1	GENERAL INSTRUCTIONS FOR PREPARATION OF THE TECHNICAL PROPOSAL .....	56
10.2	DOCUMENTS CHECKLIST FOR TECHNICAL BID.....	58
10.3	TQ_1: AUDITOR'S CERTIFICATE FOR NET WORTH OF BIDDER.....	59
10.4	TQ_2: BIDDER AVERAGE ANNUAL TURNOVER FROM ICT/ITES BUSINESS .....	60
10.5	TQ_3: UNDERTAKING FOR FULL-TIME PROFESSIONALS ON COMPANY'S PAYROLL (WORKING ON ICT PROJECTS).....	62
10.6	TQ_4: DETAILS OF EXPERIENCE OF EXECUTING LARGE ICT/ ITES PROJECTS.....	63
10.7	TQ_5: DETAILS OF EXPERIENCE OF EXECUTING SEMI-ACTUATED/ FULLY-ACTUATED TRAFFIC SIGNALS .....	65
10.8	TQ_6: DETAILS OF EXPERIENCE OF DATA CENTRE AND DISASTER RECOVERY PROJECTS.....	67
10.9	TQ_7: DETAILS OF EXPERIENCE OF EXECUTING VARIABLE MESSAGING DISPLAYS (VMD's)/ DIGITAL SIGN BOARDS .....	68
10.10	TQ_8: DETAILS OF EXPERIENCE OF EXECUTING IoT PROJECTS INCLUDING SMART STREET LIGHTS, SMART PARKING AND/OR ENVIRONMENTAL SENSOR.....	70
10.11	TQ_9: DETAILS OF EXPERIENCE OF EXECUTING SURVEILLANCE PROJECTS WITH REQUIRED NETWORK INFRASTRUCTURE.....	72
10.12	TQ_10: DETAILS OF EXPERIENCE OF INSTALLATION OF COMMAND AND CONTROL CENTRE .....	74

10.13	TQ_11: DETAILS OF EXPERIENCE OF EXECUTION OF ENTERPRISE RECOURSE PLANNING (ERP) PROJECTS	76
10.14	TQ_12: DETAILS OF EXPERIENCE OF EXECUTION OF GEOGRAPHIC INFORMATION SYSTEM (GIS) PROJECTS	78
10.15	TQ_13: UNDERTAKING FOR MANPOWER PROPOSED TO BE DEPLOYED ON PROJECT.....	80
10.16	TQ_14: CVs OF THE MANPOWER PROPOSED .....	82
10.17	TQ_15: FORMAT FOR AUTHORIZATION LETTERS FROM OEMS .....	83
10.18	TQ_16 FORMAT FOR SPECIFYING MAKE AND MODEL.....	84
<b>11</b>	<b>FORMAT FOR COMMERCIAL BID .....</b>	<b>87</b>
11.1	SUMMARY OF COST ESTIMATES.....	88
11.2	CAPEX.....	90
11.3	OPEX.....	200
<b>12</b>	<b>ANNEXURE A- MINIMUM QUALIFICATIONS FOR KEY PROJECT RESOURCES.....</b>	<b>212</b>
<b>13</b>	<b>ANNEXURE B FORMAT FOR PERFORMANCE BANK GUARANTEE.....</b>	<b>215</b>
<b>14</b>	<b>ANNEXURE C: LIST OF PRODUCTS/SOLUTIONS WHICH REQUIRES MAF FROM OEMS..</b>	<b>218</b>

## **1 Disclaimer**

The information contained in this Request for Proposal document (“RFP”) whether subsequently provided to the bidders, (“Bidder/s”) verbally or in documentary form by Silvassa Smart City Limited (henceforth referred to as “SSCL” in this document) or any of its employees or advisors, is provided to Bidders on the terms and conditions set out in this Tender document and any other terms and conditions subject to which such information is provided.

This RFP is not an agreement and is not an offer or invitation to any party. The purpose of this RFP is to provide the Bidders or any other person with information to assist the formulation of their financial offers (“Bid”). This RFP includes statements, which reflect various assumptions and assessments arrived at by SSCL in relation to this scope. This Tender document does not purport to contain all the information each Bidder may require. This Tender document may not be appropriate for all persons, and it is not possible for the Chief Executive Officer, SSCL and their employees or advisors to consider the objectives, technical expertise and needs of each Bidder. The assumptions, assessments, statements and information contained in the Bid documents, may not be complete, accurate, adequate or correct. Each Bidder must therefore conduct its own analysis of the information contained in this RFP and to seek its own professional advice from appropriate sources.

Information provided in this Tender document to the Bidder is on a wide range of matters, some of which may depend upon interpretation of law. The information given is not intended to be an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. SSCL accepts no responsibility for the accuracy or otherwise for any interpretation of opinion on law expressed herein.

SSCL and their employees and advisors make no representation or warranty and shall incur no liability to any person, including the Bidder under law, statute, rules or regulations or tort, the principles of restitution or unjust enrichment or otherwise for any loss, cost, expense or damage which may arise from or be incurred or suffered on account of anything contained in this RFP or otherwise, including the accuracy, reliability or completeness of the RFP, and any assessment, assumption, statement or information contained therein or deemed to form part of this RFP or arising in any way in this Selection Process.

SSCL also accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any Bidder upon the statements contained in this RFP. SSCL may in its absolute discretion, but without being under any obligation to do so, can amend or supplement the information in this RFP.

The issue of this Tender document does not imply that SSCL is bound to select a Bidder or to appoint the Selected Bidder (as defined hereinafter), for implementation and SSCL reserves the right to reject all or any of the Bidders or Bids without assigning any reason whatsoever.

The Bidder shall bear all its costs associated with or relating to the preparation and submission of its Bid including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by SSCL or any other costs incurred in connection with or relating to its Bid. All such costs and expenses will remain with the Bidder and SSCL shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a Bidder in preparation for submission of the Bid, regardless of the conduct or outcome of the Selection process.

## 2 Glossary

Term	Meaning
ANPR	Automatic Number Plate Recognition
AP	Access Point
API	Application Program Interface
ATCS	Adaptive Traffic Control System
BEC	Bid Evaluation Committee
BOM	Bill of Material
BP	Building Plan
BSF	Bid Security Form
CC	Capital Cost (CC1-Capital Cost 1, CC2 - Capital Cost 2)
CCC	Command and Control Centre
CCTV	Closed Circuit Television
CEO	Chief Executive Officer
CMMI	Capability Maturity Model Integration
CSP	Cloud Service Provider
DC	Data Center
DD	Demand Draft
DR	Disaster Recovery
ECB	Emergency Call Box
ERP	Enterprise Resource Planning
FRS	Functional Requirements Specifications
GIS	Geographical Information Systems
GoI	Government of India
GPS	Global Positioning System
HDD	Horizontal Directional Drilling
HDPE	High Density Polyethylene
HOD	Head of Department
HTTPS	Hypertext Transfer Protocol Secure
ICT	Information and Communication Technology
INR	Indian Rupee
ISO	International Organization for Standardization
IT	Information Technology
ITIL	Information Technology Infrastructure Library
KVM	Keyboard Video Mouse
LED	Light Emitting Diode
LoI	Letter of Intent
MAF	Manufacturer's Authorization Form
MFP	Multi-Functional Printer
NOC	Network Operation Center
NPV	Net Present Value
O&M	Operation & Maintenance
OEM	Original Equipment Manufacture

OFC	Optical Fiber Cable
PBG	Performance Bank Guarantee
PoA	Power of Attorney
PoC	Proof of Concept
POP	Point of Presence
PQ	Pre-Qualification
PSU	Public Sector Undertaking
PV	Present Value
PVC	Polyvinyl chloride
QoS	Quality of Service
RDBMS	Relational Database Management System
RFP	Request for Proposal
RV	Revenue (RV1-Revenue from 1, RV2-Revenue from 2)
SI	System Integrator
SLA	Service Level Agreement
SOR	Schedule of Rates
SPV	Special Purpose Vehicle
SRS	Software Requirement Specifications
SSCL	Silvassa Smart City Limited
TDS	Tax Deducted at Source
TQ	Technical Qualification
VM	Virtual Machine
VPN	Virtual Private Network

### 3 Notice Inviting Bid



#### Silvassa Smart City Limited (SSCL)

Notice Inviting RFP for “**Selection of Implementation Agency for PAN CITY INFRASTRUCTURE – INTEGRATED COMMAND AND CONTROL CENTRE, SMART COMPONENTS AND SMART GOVERNANCE in Silvassa City**”

Bid for Selection of Implementation Agency for Pan City Infrastructure – ICC, Smart Components And Smart Governance in Silvassa City is invited online on [www.dnhtenders.gov.in](http://www.dnhtenders.gov.in) from the bidder meeting the basic eligibility criteria as stated in the bid document.

<b>RFP Document Availability</b>	<a href="http://www.dnhtenders.gov.in">www.dnhtenders.gov.in</a> website
<b>Bid Fee (Non-refundable)</b>	Rs. 25,000/- (Rupees Twenty-Five Thousand only) by Demand Draft
<b>EMD</b>	EMD of Rs. 2,00,00,000/- (Two Crore Rupees) shall be either in form of Demand Draft or Bank Guarantee of any nationalized/scheduled bank with validity of 180 days from the date of bid submission
<b>Start date and time for downloading RFP</b>	<b>08 October 2020 at 1800 Hrs</b>
<b>Deadline for submission of pre-bid queries for clarifications</b>	<b>21 October 2020 at 1800 Hrs</b>
<b>Date, time and place of pre-bid meeting</b>	<b>28 October 2020 at 1600 Hrs</b> <b>Place:</b> Silvassa Municipal Council (New SMC) Building, 1 <sup>st</sup> Floor, Conference Room, Silvassa - 396230
<b>Deadline for submission of Proposal and EMD, online</b>	25 November 2020 at 1500 Hrs
<b>Deadline for physical submission of technical Proposal, Tender Fee and EMD</b>	30 November 2020 at 1500 Hrs
<b>Contact for queries</b>	Silvassa Smart City Limited, Silvassa Municipal Council (New SMC Bldg.), 1 <sup>st</sup> Floor, Silvassa – 396230 Email ID: <a href="mailto:ssclsilvassa@gmail.com">ssclsilvassa@gmail.com</a>

The right to accept/reject any or all bid(s) received is reserved without assigning any reason thereof.

Sd/-  
Chief Executive Officer  
Silvassa Smart City Limited (SSCL)



## 4 Important Dates

#	Information	Details
1.	Project Name/ Name of Work	“Selection of Implementation Agency for Pan City Infrastructure – Integrated Command and Control Centre, Smart Components and Smart Governance in Silvassa City”
2.	Publication of Request for Proposal	<b>08 October 2020 at 1800 Hrs Onward</b>
3.	Website to download RFP	<a href="http://www.dnhtenders.gov.in">www.dnhtenders.gov.in</a>
4.	RFP Fees	Rs. 25,000/- (Twenty Five Thousand only) by Demand Draft
5.	EMD Amount	EMD of Rs. 2,00,00,000 (Rupees Two Crores only) shall be either in form of Demand Draft or Bank Guarantee of any nationalized/scheduled bank with validity of 180 days from the date of bid submission.
6.	Deadline for submission of pre-bid queries for clarifications	<b>21 October 2020 at 1800 Hrs</b>
7.	Date, time and place of pre-bid meeting	<b>28 October 2020 at 1600 Hrs</b> <b>Place:</b> Silvassa Municipal Council (New SMC) Building, 1st Floor, Conference Room, Silvassa - 396230
8.	Deadline for submission of Proposal and EMD, online	25 November 2020 at 1500 Hrs
9.	Deadline for physical submission of Technical Proposal (1 Copy), Tender Fee and EMD	30 November 2020 at 1500 Hrs
10.	Addressee and address for the Tender Fee and EMD	<b>Addressee for the EMD:</b> Chief Executive Officer (CEO), Silvassa Smart City Limited (SSCL)  <b>Address:</b> Silvassa Municipal Council (New SMC) Building, Silvassa - 396230
11.	Date, time and place of online opening of Technical Proposals	<b>30 November 2020 at 17:00 Hrs</b> <b>Place:</b> O/o The CEO, Silvassa Smart City Limited, SMC Building, Silvassa, DNH
12.	Date, time and place of online opening of Financial Proposals	<b>To be informed later.</b> <b>Place:</b> O/o The CEO, Silvassa Smart City Limited, SMC Building, Silvassa, DNH
13.	Contact for queries	<b>Silvassa Smart City Limited, Silvassa Municipal Council (New SMC Bldg.), 1st Floor, Silvassa – 396230</b> Email ID: <a href="mailto:ssclsilvassa@gmail.com">ssclsilvassa@gmail.com</a>

## 5 Introduction and Background

### 5.1 About Silvassa

Silvassa is the capital of the Indian Union Territory of Dadra and Nagar Haveli. The city has many factories and industries providing significant government revenue, which allows the city to maintain a low level of taxation. The city was chosen as one of the hundred Indian cities in Government of India's Smart Cities Mission. Silvassa is one of the 9 cities to be taken up in round four of the smart cities Mission. Similar to the Round 1, Round 2 and Round 3 cities, the Round 4 cities have to now move towards converting their plan proposals.

By leveraging its strategically located industrial zone, dense city core, iconic riverfront and rich tribal legacy as key strengths, Silvassa aspires to be a thriving growth center in the region between Mumbai and Gujarat. The city seeks to achieve this by improving access to its industrial areas, improving mobility conditions in the city center, addressing all gaps in basic infrastructure, creating a clean and healthy urban environment, increasing avenues for art, culture and recreation, promoting skill development and using technology to provide smart governance.

The Smart City Mission is to promote cities that provide core infrastructure and give a better quality of life to its citizens, a clean and sustainable environment and application of 'Smart' Solutions. The focus is on sustainable and inclusive development and the idea is to look at compact areas, create a replicable model which put great emphasis on a vibrant public life and improve the Livability Index of cities. The Smart City Mission of Government is a bold, new initiative. It is meant to set examples that can be replicated both within and outside the Smart City, catalyzing creation of similar Smart Cities in various regions and parts of the country.

Accordingly, the purpose of Smart City Mission is to drive economic growth and improve quality of life of people by enabling local area development and harnessing technology especially that leads to Smart outcomes. Area-based development (retrofit and redevelop) will transform existing areas including slums into better planned ones thereby improving livability of the whole City. New areas (Greenfield) will be developed around cities to accommodate the expanding population in urban areas. Application of Smart Solutions will enable cities to use technology, information and data to improve infrastructure and services. Comprehensive development in this way will improve quality of life, create employment and enhance incomes for all, especially the poor and the disadvantaged, leading to creation of inclusive Cities.

Until the end of the 19th century, Silvassa was only a small village. The growing importance of Silvassa started in 1885 when the Portuguese Administration decided to transfer the seat of Nagar Haveli to the city. Gujarati and Hindi are the commonly spoken languages. Warli is the language spoken by the tribal population.

Silvassa is connected to Maharashtra and Gujarat via National Highway 848A. Silvassa has a well-maintained road network. The nearest railway stations are in Vapi, 16 kilometres away and Bhilad, 14 kilometres away. Daman is 30 km away via Bhilad on National Highway number 8. Mumbai is 160 km away from Silvassa, via Bhilad, on National Highway number 8, whereas Surat is 130 km away from Silvassa, via Bhilad, on National Highway number 8. Auto-rickshaw services ply between Vapi and Silvassa at a regular interval and easily available from Vapi railway station. Gujarat Road Transport Buses ply between Silvassa & Vapi at a regular interval.

Silvassa has developed into an industrial hub though it is a tribal region. Major industrial companies setting up manufacturing bases in the Silvassa. Its initial tax-free status granted by the Indian government to boost industrial investment in the Union Territory of Dadra and Nagar Haveli has contributed to the region's industrial growth. The According to the 2011 India census, Silvassa had a population of 98,265. Silvassa hosts more than 200,000 floating population, coming from all parts of the country, mostly the labourer's hail from Uttar Pradesh, Bihar & Orissa. Other floating community being from the states of Madhya Pradesh, Maharashtra, Gujarat, Kerala, Karnataka, Tamil Nadu, Andhra Pradesh, and Rajasthan.

Silvassa aspires to be thriving growth center in the region between Mumbai & Gujarat. The Government of India (GoI) has announced for development of Silvassa as a smart city in round four of the Smart Cities Mission.

The city of Silvassa seeks to improve access to its industrial areas, improve mobility conditions in the city centre, addressing all gaps in basic infrastructure, creating a clean and healthy urban environment, increasing avenues for art, culture and recreation, promoting skill development and using technology to provide smart governance.

As part of the SCP, the city of Silvassa has set its vision for smart city as follows. Silvassa- A vibrant growth center that offers an optimal balance between industrial prosperity and quality of life, while its rich tribal heritage.

## 5.2 About SSCL

As per the Smart Cities Mission (SCM) Statement & Guidelines released by the Government of India (GoI); it envisages implementation of the Mission at the city level by a **Special Purpose Vehicle (SPV)** created for the purpose. One of the primary reasons for the creation of an SPV for the Smart Cities Mission is to ensure operational independence and autonomy in decision-making and mission implementation. The SPV will plan, appraise, approve, release funds, implement, manage, operate, monitor and evaluate the Smart City development projects.

Further, The Company i.e. Silvassa Smart City Limited (SSCL) is expected to comply with all the applicable provision of the Companies Act, 2013 and the shareholders, the directors and the employees are expected to follow the provisions of the Act and its Rules so far as they apply to the Company. The Company is headed by a full time Chief Executive Officer (CEO) and has nominees of Central Government, UT Administration and ULB on its Board. The Guidelines provide that the Mission at the city level will be implemented by a SPV, created for the purpose. The SPV for the city of Silvassa will be a public limited company incorporated under the relevant provisions of the Companies Act, 2013 (Companies Act) and will be promoted jointly by the Administration of UT of DNH and SMC.

Under the Guidelines, the SPV has been given the autonomy and operational independence in decision-making and the implementation of the Mission. The Board of the SPV will have the complete freedom to decide whether the execution of the projects may be done through joint ventures, subsidiaries, public-private partnership (PPP), turnkey contracts etc. Therefore, in addition to the main SPV, there could be multiple project SPVs to execute the respective projects (pan city initiatives and local area development), envisaged by SMC for the city of Silvassa. The different sub-SPVs may include project specific SPVs, sectoral holding companies with a portfolio of project Specific SPVs, subsidiary companies or public private partnerships.

## 5.3 About the Project

One of the primary objectives of Silvassa under its smart city mission is to enhance the safety and security, improve efficiency of municipal services and promote a better quality of life for residents. In order to achieve these objectives, Silvassa desires to foster the development of a robust ICT infrastructure that supports digital applications and ensures seamless steady state operations, traffic management, surveillance, and real time tracking of services and vital city metrics throughout the city.

SSCL is considering the appointment of an agency to set up these priority initiatives identified under the Smart City mission which will include Integrated Command and Control Centre (CCC) and Smart Solutions.

## 5.4 Project Objectives

The key objective of this project is to establish a collaborative framework where input from different functional departments such as transport, water, police, meteorology, e-governance, etc. can be assimilated and analysed on a single platform; consequently, resulting in aggregated city level information. Further this aggregate city level information can be converted to actionable intelligence, which would be

propagated to relevant stakeholders and citizens. Following are the intangibles that should be addressed by this intervention:

- Better management of utilities and quantification of services
- Efficient traffic management
- Enhanced safety and security

## **5.5 Project Coverage**

Project coverage will include supply of Hardware, Networking, Installation, Commissioning and Operations & Maintenance of all the solutions in scope transport

The selected vendor will also be responsible for supply of IT solution for the management of hardware and application software, networking, installation, Training, Maintenance and operations of the solution for 5 year for Silvassa in an efficient and effective manner.

## 6 Pre-Qualification Criteria

The bidder must possess the requisite experience, strength and capabilities in providing services necessary to meet the requirements as described in the RFP document. Keeping in view the complexity and volume of the work involved, following criteria are prescribed as the eligibility criteria for the bidder interested in undertaking the project. The bidder must also possess technical know-how and financial ability that would be required to successfully provide System Integration, Operation and Maintenance services sought by SSCL for the entire contract duration. The bids must be complete in all respect and should cover entire scope of work as stipulated in the bid document. This invitation to bid is open to all bidders who qualify the eligibility criteria as given below:

#	Eligibility Criteria	Document Proof
1.	<p>The bidder must be:</p> <ul style="list-style-type: none"> <li>An Indian Firm</li> <li>A company registered under the Indian Companies Act 1956</li> <li>Operational at least for last 5 years as on date of publishing of RFP.</li> </ul>	<ul style="list-style-type: none"> <li>Certificate of incorporation / registration under Indian Companies Act 1956</li> </ul>
2.	<p>The bidder should have a <b>positive net worth</b> and should be a <b>profit making company</b>, as on:</p> <ul style="list-style-type: none"> <li>31st March 2020 <b>or</b></li> <li>31st March 2019 (in case audited statements for FY 2019-20 are Not available)</li> </ul>	<ul style="list-style-type: none"> <li>Certificate from the statutory auditor/CA clearly specifying the net worth of the firm</li> <li>Audited Profit &amp; Loss Statement</li> </ul>
3.	<p>The bidder should have an average annual turnover of <b>INR 300 Cr.</b> in ICT/ITES business for last 3 audited financial years*</p> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>ICT stands for Information, Communications Technology projects and include IT systems integration project.</li> <li>ITES is defined as outsourcing or offshoring of processes that can be enabled with information technology. Such outsourcing or offshoring which is technology enabled entails enterprise functions which are operations focused or customer centric or management of operations through technology enabled solutions.</li> </ul> <p><b>* Last 3 audited financial years mean:</b></p> <ul style="list-style-type: none"> <li>FY 2016-17, 2017-18 and 2018-19 (in case audited statements for FY 2019-20 are not available)</li> </ul> <p>or</p> <ul style="list-style-type: none"> <li>FY 2017-18, 2018-19 and 2019-20 (in case audited statements for FY 2019-20 are available)</li> </ul>	<ul style="list-style-type: none"> <li>Certificate from the statutory auditor/CA clearly specifying the annual turnover for the specified years (to be provided by Bidder ICT/ITES business for last 3 audited financial years*</li> <li>The turnover of only the legal entity bidding for the project will be considered for evaluation purpose.</li> </ul>
4.	<p>The bidder should have demonstrable experience of one project which involves SITC and O&amp;M of ICCC for cities/ townships/ railway/ airport/ government utilities/ public transport/ transit authority during</p>	<p>Documentary evidence (Citation, Copy of completion / Ongoing client certificate and work order / contract)</p>

	<p>last five years (as of bid publish date) of value not less than INR 5 crore.</p> <p>SITC: Supply, Installation, Testing and Commissioning O&amp;M: Operations and Maintenance ICCC: Integrated Command and Control Centre</p>	<p>Note:</p> <ul style="list-style-type: none"> <li>• In case project is on-going a certificate from the Chartered Accountant/Statutory Auditor must be provided mentioning that 50% of Capex complete</li> <li>• In case the experience shown is that of the bidder's parent / subsidiary then the following additional documents are required: <ul style="list-style-type: none"> <li>○ Certificate signed by the Company Secretary/statutory Auditor/2 Board of directors of the bidder certifying that the entity whose experience shown is parent/subsidiary of the bidding entity.</li> <li>○ Shareholding pattern of the bidding entity as per audit reports which establishes relationship between bidding entity and parent/subsidiary whose citation is shared</li> </ul> </li> </ul>
5.	<p>The Bidder should have minimum following experience of executing projects</p> <ul style="list-style-type: none"> <li>- One Project with minimum capex value of INR 80% capex value</li> <li style="text-align: center;">OR</li> <li>- Two Projects with minimum capex value of INR 60% capex value</li> <li style="text-align: center;">OR</li> <li>- Three or more Project with minimum capex value of INR 50% capex value</li> </ul> <p>Each such project citation must have at least four out of the following components during last five years (as of bid publish date)</p> <ul style="list-style-type: none"> <li>• Integrated Command Control Centre</li> <li>• Surveillance System including CCTV cameras</li> <li>• Data Centre or Disaster Recovery</li> </ul>	<p>Documentary evidence (Citation, Copy of completion / Ongoing client certificate and work order / contract)</p> <p>Note:</p> <ul style="list-style-type: none"> <li>• In case project is on-going a certificate from the Chartered Accountant/Statutory Auditor must be provided mentioning that 50% of Capex complete</li> <li>• In case the experience shown is that of the bidder's parent / subsidiary</li> </ul>

	<ul style="list-style-type: none"> <li>• Traffic Enforcement System</li> <li>• Adaptive Traffic Control System</li> <li>• ERP (Enterprise Resource Planning)</li> <li>• GIS (Geographical Information System)</li> </ul>	<p>then the following additional documents are required:</p> <ul style="list-style-type: none"> <li>○ Certificate signed by the Company Secretary/statutory Auditor/2 Board of directors of the bidder certifying that the entity whose experience shown is parent/subsidiary of the bidding entity.</li> <li>○ Shareholding pattern of the bidding entity as per audit reports which establishes relationship between bidding entity and parent/subsidiary whose citation is shared</li> </ul>
6.	Bidder should have/ establish project office (for entire project duration) and warehouse ( during the implementation phase) within 45 days of issuance of LoI in Silvassa City.	<p>Undertaking to open Office in Silvassa Or Copies of any two of the followings: Property Tax / Electricity / Telephone Bill / GST Registration / Lease agreement.</p>
7.	The bidder should not be blacklisted by Central / State Governments/PSU in India as on date of submission of the proposal	<ul style="list-style-type: none"> <li>• Undertaking by the authorized signatory as per format</li> </ul>
8.	<p>The bidder should:</p> <ul style="list-style-type: none"> <li>• not be insolvent, in receivership, bankrupt or being wound up, not have its affairs administered by a court or a judicial officer, not be declared defaulter by any financial institution not have its business activities suspended and must not be the subject of legal proceedings for any of the foregoing reasons</li> <li>• not have, and their directors and officers not have, been convicted of any criminal offence related to their professional conduct or the making of false statements or misrepresentations as to their qualifications to enter into a procurement contract within a period of three years preceding the commencement of the procurement process, or not have been otherwise disqualified pursuant to debarment proceedings</li> <li>• not have a conflict of interest in the procurement in question as specified in the bidding document</li> </ul>	<ul style="list-style-type: none"> <li>• Undertaking by the authorized signatory on stamp paper as per format</li> </ul>

9.	If the bidder are from a country which shares their border with India, then they must be registered with the competent authority.	<ul style="list-style-type: none"> <li>• Registration Proof with the competent authority. The registration should be valid at the time of submission of bids and at the time of acceptance of bids</li> <li>• Political and security clearance from the External and Home Ministries</li> <li>• For bidders who do not fall under the ambit of this criteria must submit a self-certification as per format</li> </ul>
----	---	--

**Note:**

- The bidder must attach valid documents and undertakings in support to their Technical and Financial capabilities/strength, as mentioned above. Without proper and complete supporting documents, the Bid proposals are liable to be rejected.
- The bidder should submit Manufacturers Authorization Certificate (MAF) from Original Equipment Manufacturers (OEMs) specific to the bid. The bidder should have a back-to-back support agreement/arrangement for services including supply of spare parts etc. with the OEMs that includes the post-sales support activities for the entire project period.
- The MAF is required for all hardware/software/equipment etc. as mentioned in Annexure C.
- Each of the proposed equipment should not be declared end-of-support by the OEMs for next 6 years from the date of bid submission.



## 7 Instructions to Bidder

1. Bidders are advised to study all instructions, forms, terms, requirements and other information in the Bid Documents carefully.
2. Submission of bid shall be deemed to have been done after careful study and examination of the Bid Document with full understanding of its implications.
3. The response to this Bid document should be full and complete in all respects. Failure to furnish all information required by the Bid documents or submission of a proposal not substantially responsive to the Bid documents in every respect will be at the bidder's risk and may result in rejection of its proposal.
4. Additionally, proposals of only those bidders who satisfy the Conditions of Eligibility, stated herein, will be considered for evaluation by SSCL.

### 7.1 Purpose of Bid Document

1. The purpose of this tender is to select an Implementation Agency for setting up Integrated Command and Control Centre and smart features as per scope across Silvassa City. This document provides information to enable the bidders to understand the broad requirements to submit their 'Bids'.
2. In case a bidding firm possesses the requisite experience and capabilities required for undertaking the work, it may participate in the selection process individually (the "Sole Firm") in response to this invitation. The term "bidder" means the sole firm.
3. The manner in which the proposal is required to be submitted, evaluated and accepted is explained in this RFP. The detailed scope of work is provided in this tender document.
4. The bidder shall be required to submit their bid in three parts –Pre-qualification, Technical Bid and Commercial Bid (in line with instructions given in this RFP).

### 7.2 Proposal Preparation Cost

1. The bidder is responsible for all costs incurred in connection with participation in this process, including, but not limited to, costs incurred in conduct of informative and other diligence activities, participation in meetings/discussions/presentations, preparation of proposal, in providing any additional information required by SSCL to facilitate the evaluation process, and in negotiating a definitive Contract or all such activities related to the bid process. The department will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.
2. This Bid document does not commit the SSCL to award a contract or to engage in negotiations. Further, no reimbursable cost may be incurred in anticipation of award. All materials submitted by the bidder shall become the property of SSCL and may be returned at its sole discretion.

### 7.3 Pre-Bid Meeting

A prospective bidder requiring any clarification on the RFP Document may submit his queries, via email, to [ssclsilvassa@gmail.com](mailto:ssclsilvassa@gmail.com) on or before **21 October at 1800 Hrs.**

1. SSCL will host a Pre-Bid meeting for Pre-bid queries (if any) by prospective bidders. The representatives of the bidders may attend the pre-bid meeting at their own cost. The purpose of the Pre-Bid meeting is to provide a forum to the bidders to clarify their doubts/seek clarification or additional information necessary for them to submit their bid. Details of the Pre-Bid meeting are:

Date and Time: **28 October at 1600 Hrs**

- **Venue:**  
Silvassa Municipal Council (New SMC) Building,

1st Floor, Conference Room,  
Silvassa – 396230

- The queries should necessarily be submitted in the following softcopy format and **should be in Microsoft Excel only** (.xls or .xlsx formats):

Request for Clarification		
Name and Address of the Organization Submitting Request	Name and Position of Person Submitting Request	Contact Details of the Organization / Authorized Representative
Name: Address:	Name: Designation:	Tel: Mobile: Fax: Email:

Pre-bid Queries for Tender No:							
Sr. No.	Category	RFP Section / Clause No	Clause Title	Page No	Content of RFP required Clarification	Clarification Sought	Clarification/ Response
1.							
2.							
3.							

(No PDF or Scanned images, Bidder should submit the queries in excel format only)

- Queries submitted post the above mentioned deadline or which do not adhere to the above mentioned format may not be responded to. All the responses to the queries (clarifications / corrigendum) shall be made available on the [www.dnhtenders.gov.in](http://www.dnhtenders.gov.in)

#### 7.4 Amendment of RFP Document

- At any time before the deadline for submission of bids, the SSCL, may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the RFP Document by an amendment.
- The bidders are advised to visit [www.dnhtenders.gov.in](http://www.dnhtenders.gov.in) on regular basis for checking necessary updates. SSCL also reserves the rights to amend the dates mentioned in this RFP for bid process.
- In order to afford prospective bidders reasonable time in which to take the amendment into account in preparing their bids, the SSCL may, at its discretion, extend the last date for the receipt of bids.

#### 7.5 Conflict of Interest

- A “Conflict of Interest” is any situation that might cause an impartial observer to reasonably question whether System Integrator actions are influenced by considerations of your firm’s interest at the cost of Government. The System Integrator agrees that it shall hold the SSCL’s interest paramount, without any consideration for future work, and strictly avoid any Conflict of Interest with other assignments of a similar nature. In the event the System Integrator foresees a Conflict of Interest, the System Integrator shall notify SSCL forthwith and seek its approval prior to entering into any arrangement with a third party which is likely to create a Conflict of Interest.
- Bidders shall not have a conflict of interest that may affect the Selection Process or the scope (the “Conflict of Interest”). Any bidder found to have a Conflict of Interest shall be disqualified.
- SSCL requires that the bidder provides professional, objective, and impartial advice and at all times hold the SSCL’s interests paramount, avoid conflicts with other assignments or its own interests, and act without any consideration for future work.

4. The System Integrator shall disclose to SSCL in writing, all actual and potential Conflicts of Interest that exist, arise or may arise (either for the System Integrator or its team) during the term of the Agreement as soon as it becomes aware of such a conflict.

## **7.6 Consortium Condition**

1. Consortium is not permitted for this bid.

## **7.7 Right to Amendment of Project Scope**

1. SSCL retains the right amend the scope of work or amend the program for service delivery at any time and without assigning any reason. SSCL makes no commitments, express or implied, that the full scope of work as described in this RFP will be commissioned.
2. The bidder's technical and commercial proposals received in this process may result in SSCL selecting to engage with the bidders' in further discussions and negotiations toward execution of a contract including finalization of the scope elements. The commencement of such negotiations does not, however, signify a commitment by the SSCL to execute a contract or to continue negotiations. SSCL may terminate negotiations at any time without assigning any reason.

## **7.8 SSCL's Rights to Terminate Selection Process**

1. SSCL may terminate the RFP process at any time and without assigning any reason. SSCL makes no commitments, express or implied, that this process will result in a business transaction with anyone.
2. This RFP does not constitute an offer by SSCL.
3. The bidder's participation in this process may result in SSCL selecting the bidder to engage in further discussions and negotiations toward execution of a contract. The commencement of such negotiations does not, however, signify a commitment by the SSCL to execute a contract or to continue negotiations. SSCL may terminate negotiations at any time without assigning any reason.

## **7.9 Right to Reject Any Proposal**

1. Notwithstanding anything contained in this RFP, SSCL reserves the right to accept or reject any Proposal and to annul the Selection Process and reject all proposals, at any time without any liability or any obligation for such acceptance, rejection or annulment, and without assigning any reasons therefore.
2. Besides other conditions and terms highlighted in the Tender document, bids may be rejected under following circumstances:

General rejection criteria:

- i. Conditional bids
- ii. If the information provided by the bidder is found to be incorrect/misleading/fraudulent at any stage/time during the tendering process
- iii. Any effort on the part of a bidder to influence the bid evaluation, bid comparison or contract award decisions
- iv. Bids received after the prescribed time and date for receipt of bids
- v. Bids without signature of person (s) duly authorized on required pages of the bid
- vi. Bids without power of attorney/board resolution or its certified true copy

Pre-qualification rejection criteria:

- i. Bidders not complying with the Eligibility Criteria given in this Tender
- ii. Revelation of prices in any form or by any reason before opening the Commercial Bid

- iii. Failure to furnish all information required by the Tender document or submission of a bid not substantially responsive to the Tender document in every respect

Technical rejection criteria:

- i. Technical Bid containing commercial details
- ii. Revelation of prices in any form or by any reason before opening the Commercial Bid
- iii. Failure to furnish all information required by the Tender document or submission of a bid not substantially responsive to the Tender document in every respect
- iv. Bidders not quoting for the complete scope of work as indicated in the Tender documents, addendum/corrigendum (if any) and any subsequent information given to the bidder
- v. Bidders not complying with the Technical and General Terms and conditions as stated in the Tender documents
- vi. Bidders not confirming unconditional acceptance of full responsibility of providing services in accordance with the Scope of Work and Service Level Agreements of this Tender

Commercial rejection criteria

- i. Incomplete Price Bid
  - ii. Price Bids that do not conform to the Tender's Price Bid format
  - iii. Total price quoted by the bidder does not include all statutory taxes and levies applicable
  - iv. If there is an arithmetic discrepancy in the Commercial Bid calculations the Technical Committee shall rectify the same. If the bidder does not accept the correction of the errors, its bid may be rejected.
3. Misrepresentation/improper response by the bidder may lead to the disqualification. If such disqualification/rejection occurs after the proposals have been opened and the highest ranking bidder gets disqualified/rejected, then SSCL reserves the right to consider the next best bidder, or take any other measure as may be deemed fit in the sole discretion of SSCL, including annulment of the selection process.

### 7.10 Tender Fee and Earnest Money Deposit (EMD)

1. The bidder should pay non-refundable Bid Fee of Rs. 25,000/- (Rupees Twenty Five Thousand only) by Demand Draft in favour of “**Silvassa Smart City Limited**” from nationalized or scheduled banks, payable at Silvassa. The Bid Fees shall be in the form of a Demand Draft.
2. The bidder should also pay EMD of Rs. 2,00,00,000 (Rupees Two Crores only) shall be either in form of Demand Draft or Bank Guarantee of any nationalized/scheduled bank with validity of 180 days from the date of bid submission.

Account Title	Silvassa Smart City Limited
Account No.	510101007142459
Customer ID	1001308684
Bank Name	Corporation Bank
Branch Name	Silvassa
IFSC Code	CORP0001239
MICR Code	396017111
Branch Code	001239
Bank Address	Ground floor, Nisarg apartment-a,

	Door no 2533(1) to (6), Kilvani road Silvassa, Dadra and Nagar Haveli 396230 India
--	--

3. No interest will be payable by the SSCL on the Earnest Money Deposit.
4. In case bid is submitted without EMD or Bid Fees as mentioned above then SSCL reserves the right to reject the bid without providing opportunity for any further correspondence to the bidder concerned.
5. The EMD of unsuccessful bidders will be returned by the Authority, without any interest, as promptly as possible on acceptance of the proposal of the Selected Bidder or when the Authority cancels the Bidding Process.
6. The Selected Bidder's EMD will be returned, without any interest, upon the Selected Bidder signing the Agreement and furnishing the Security Deposit/Performance Guarantee in accordance with the provision thereof.
7. The decision of SSCL regarding forfeiture of the EMD and rejection of bid shall be final and shall not be called upon question under any circumstances.
8. The EMD may be forfeited:
  - If a bidder withdraws their bid or increases their quoted prices during the period of bid validity or its extended period, if any; or
  - In the case of a successful bidder, if the bidder fails to sign the Contract or to furnish Performance Bank Guarantee within specified time.
  - During the bid process, if a bidder indulges in any such deliberate act as would jeopardize or unnecessarily delay the process of bid evaluation and finalization.
  - During the bid process, if any information found wrong/manipulated/hidden in the bid.

### 7.11 Sealing, Marking and Submission of Bids

Bidders are required to submit their bids in separate sealed envelopes as per instructions given below:

**Part 1:** Pre-Qualification Bid, Bid Fees, EMD and soft copy in **CD/DVD/Pen drive/USB stick** with complete details as mentioned in Section 10 in "**Envelop 1**" super scribed with Tender No, Due Date and RFP Name – "**Selection of Implementation Agency for Pan City Infrastructure – ICCC, Smart Components And Smart Governance in Silvassa City**". The proposal shall also consist with all supporting documents.

**Part 2:** Technical Bid and soft copy in **CD/DVD/Pen-drive/USB stick** with complete details as mentioned in Section 11 in "**Envelop 2**" super scribed with Tender No, Due Date and RFP Name – "**Selection of Implementation Agency for Pan City Infrastructure – ICCC, Smart Components And Smart Governance in Silvassa City**". The proposal shall also consist with all supporting documents, RFP copy, Addendum & Corrigendum, if any.

The large envelope/outer envelope containing above envelopes must be sealed and super-scribed and shall be sent as under:

Details to be mentioned exactly on sealed envelop	
<p><b><u>Tender Details</u></b></p> <ul style="list-style-type: none"> <li>• Notice No.: -----</li> <li>• Bid for "Selection of Implementation Agency for Pan City Infrastructure – ICCC, Smart Components And Smart Governance in Silvassa City".</li> </ul>	<p>To, The Chief Executive Officer (CEO), Silvassa Smart City Limited (SSCL),</p>

- Deadline for bid submission: <<25 Nov 2020>> at 1800 Hrs

Silvassa Municipal  
Council (New SMC)  
Building,  
Silvassa - 396230

1. The physical copy of Technical Bid, Tender Fee and EMD must be sent strictly through **Postal Speed Post/Registered Post AD/Courier/In-person** so as to reach on or before 30 **November 2020** at **1500 Hrs.** SSCL won't be responsible for any Postal/ Courier delays.
2. SSCL will not accept submission of a proposal in any manner other than that specified in the document. Proposals submitted in any other manner shall be treated as defective, invalid and rejected.
3. If the envelopes are not sealed and marked as instructed above, the SSCL assumes no responsibility for the misplacement or premature opening of the contents of the application and consequent losses, if any suffered by the bidder.
4. Each bidder shall submit only one proposal containing documents as below. A bidder who submits more than one proposal under this contract will be disqualified.
  - a. Original copy of the Tender Fee and EMD
  - b. Pre-qualification criteria related documents
  - c. Technical Proposal related documents
  - d. RFP Copy and Addenda & Corrigendum
  - e. The bidder shall prepare original set of the Application (together with originals /copies of documents required to be submitted along therewith pursuant to this document) and applicant shall also provide a soft copy on a Compact Disc (CD)/Pen-drive/USB stick. In the event of any discrepancy between the original and CD/Pen-drive/USB stick, the original shall prevail.
  - f. Each page of the above should bear the initials of the Applicant along with the seal of the Applicant in token of confirmation of having understood the contents.
5. Pre-qualification and Technical Proposal should be signed by an authorized person of the bidder. The Pre-qualification Proposal should be submitted along with a certified true copy of a board resolution/power of attorney empowering authorized signatory to sign/act/execute documents binding the bidder organization to the terms and conditions detailed in this proposal.
6. Proposals must be direct, concise, and complete. SSCL will evaluate bidder's proposal based on its clarity and completeness of its response to the requirements of the project as outlined in this RFP. The Board of Directors SSCL, reserves the right to accept or reject any or all the proposals without assigning any reason.

#### **PRICE BID**

1. The Price Bid must be submitted online on [www.dnhtenders.gov.in](http://www.dnhtenders.gov.in)
2. It should not be sent physically, if submitted physically the bid shall be rejected. Please refer format and instructions as given in the RFP.

#### **7.12 Language of Bids**

1. The bid prepared by the bidder and all correspondence and documents relating to the bids exchanged by the bidder and SSCL, shall be written in English language, provided that any printed literature furnished by the bidder in another language shall be accompanied by an English translation in which case, for purposes of interpretation of the bid, the English translation shall govern.

2. If any supporting documents submitted are in any language other than English, translation of the same in English language is to be duly attested by the bidder.

### **7.13 Concessions Permissible under Statutes**

Bidder, while quoting against this tender, must take cognizance of all concessions permissible, if any, under the statutes and ensure the same is passed on to SSCL, failing which it will have to bear extra cost. In case Bidder does not avail concessional rates of levies like customs duty, excise duty, sales tax, etc. SSCL will not take responsibility towards this. However, SSCL may provide necessary assistance, wherever possible, in this regard.

### **7.14 Bid Validity**

The proposal should be valid for acceptance for a minimum period of 180 days from the Bid Opening Date (the "Proposal Validity Period"). If required, SSCL may request the bidder to have it extended for a further period. The request and the responses thereto shall be made in writing. A Bidder agreeing to the request will not be required or permitted to modify his Proposal but will be required to extend the validity of EMD for the period of the extension, and in compliance with Tender Fee and EMD in all respects.

### **7.15 GST & Taxes**

The prices mentioned in the Price Bid should include all applicable GST & respective taxes. Any deviations due to change in the rate of taxes and duties or any introduction of new taxes and duties would be bear by the Bidder. SSCL shall not pay any additional amount for such tax rate deviation. The SSCL shall be entitled to deduct tax at source or any other taxes/cess as may be applicable.

### **7.16 Firm Prices and Bid Currency**

Prices quoted must be firm and final and shall not be subject to any upward modifications, on any account whatsoever. Prices shall be expressed in Indian Rupees (INR) only.

### **7.17 Right to Vary the Scope of the Work at the Time of Award**

SSCL reserves its right to make changes to the scope of the work at the time of execution of the resultant Agreement. If any such change causes an increase or decrease in the cost of, or the time required for the SI's performance of any part of the work under the Agreement, whether changed or not changed by the order, an equitable adjustment (if required) shall be made in the Contract Value or time schedule, or both, and the Agreement shall accordingly be amended. Any claims by the SI for adjustment under this Clause must be asserted within thirty (30) days from the date of the SI's receipt of the SSCL changed order.

### **7.18 Modification or Withdrawal of Bids**

1. A bidder wishing to withdraw its bid shall notify SSCL by e-mail prior to the deadline prescribed for bid submission. A withdrawal notice may also be sent by electronic means such as e-mail, but it must be followed by a signed confirmation copy, postmarked at least one day prior the deadline for submission of bids.
2. The notice of withdrawal shall:
  - Be addressed to SSCL at the address named in the bid Data Sheet,
  - Bear the Contract name, the <Title> and < bid No. >, and the words "Bid Withdrawal Notice."
3. Bid withdrawal notices received after the bid submission deadline shall be ignored, and the submitted bid shall be deemed to be a validly submitted bid.

4. No bid may be withdrawn in the interval between the bid submission deadline and the expiration of the specified bid validity period. Withdrawal of a bid during this interval may result in the forfeiture of the bidder's EMD.

### **7.19 Evaluation Process**

1. The bidder must possess the technical know-how and the financial wherewithal that would be required to successfully provide the services sought by SSCL, for the entire period of the contract. The bidder's bid must be complete in all respects, conform to all the requirements, terms and conditions and specifications as stipulated in the Bid document.
2. SSCL may appoint a Bid Evaluation Committee (BEC) to scrutinize and evaluate the Pre-qualification of bidders, Technical and Commercial Bids received. The BEC will examine the bids to determine whether they are complete, response and whether the bid format conforms to the Bid document requirements. SSCL may waive any informality or nonconformity in a bid which does not constitute a material deviation according to SSCL.
3. The technical bid of only those bidders shall be opened which meet all the conditions of the Pre-qualification Criteria mentioned in the RFP and as per format provided in the respective Sections of the RFP.
4. There should be no mention of bid prices in any part of the bid other than the Commercial Bids.

### **7.20 Opening of Technical Bid**

1. SSCL shall open the Technical Proposals, of bidders qualifying the Pre-qualification Criteria, in public, in the presence of bidders' designated representatives and anyone who chooses to attend, at the address, and at the date and time specified in the RFP.
2. Only bids that are opened and read out at the proposal opening and are accompanied with hard copy of Demand Drafts for EMD shall be considered further.

### **7.21 Evaluation of Technical Bids**

1. The Technical Bids of only those bidders, who qualify in the Pre-qualification stage, shall be considered and will be evaluated as per the evaluation criteria in this clause.
2. The evaluation committee may require written clarifications from the bidders to clarify ambiguities and uncertainties arising out of the evaluation of the bid documents (to be stated precisely as it should be in SSCL's interest).
3. **Only those bids which have a minimum score of 70% of total marks in Technical evaluation will be considered for opening of their Commercial Bid.** However, the bid evaluation committee, SSCL reserves the right to lower the minimum required marks if none of the Bidders achieves 70% of the total marks. Only the bids qualifying the Technical evaluation will be considered for Commercial evaluation.
4. SSCL (or the nominated party) reserves the right to check/validate the authenticity of the information provided in the Pre-qualification and Technical evaluation criteria.
5. For any project, the citations (submitted by the bidder) must be awarded under a single work order.
6. The bidders have to submit work order and client work-in-progress/completion certificate as a supporting documents for each project. Technical bid document without supporting document will liable for rejection.
7. Only projects for which the Work Order has been issued before 6 months of the release date of this RFP (supported by copy of Work Order), will be considered for evaluation.
8. In case of conditional bid or major deviations from the RFP requirements, SSCL may at its discretion reject the respective bid and will not be considered for further evaluation process.



9. Project citations of only up to one level of sub-contracting by the bidder to other party will be considered for evaluation.
10. Projects where the bidder is a sub-contractor will not be considered for evaluation purposes.

## 7.22 Technical Evaluation Criteria

The bidder's technical solution proposed in the Technical Evaluation bid shall be evaluated as per the evaluation criteria in the following table:

Section	Evaluation Criteria	Weightage
A	Bidders Financial Competence & Organizational Strength	35%
B	Project Experience of Bidder	60%
C	Proposed Resources for the Project	5%

The following sections explain how the bidders shall be evaluated on each of the evaluation criteria:

#	Technical Evaluation Criteria	Technical Evaluation Parameter	Weightage										
<b>A. Bidders Financial Competence &amp; Organizational Strength</b>													
A1	Bidder Competence – Net Worth	<p>The bidder having positive net worth as on:</p> <ul style="list-style-type: none"> <li>• 31st March 2019 (in case audited statements for FY 2019-20 are not available)</li> </ul> <p>or</p> <ul style="list-style-type: none"> <li>• 31st March 2020 (in case audited statements for FY 2019-20 are available)</li> </ul> <p>will get 70 of total allocated marks.</p> <ul style="list-style-type: none"> <li>• For every additional INR 15 Cr. of net worth, the bidder will get 10 marks subject to a maximum of 100 marks.</li> </ul> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Net Worth (in Crores)</th> <th>Marks</th> </tr> </thead> <tbody> <tr> <td>&gt;= INR 45 Cr.</td> <td>100</td> </tr> <tr> <td>&gt;= INR 30 Cr. and &lt; INR 45 Cr.</td> <td>90</td> </tr> <tr> <td>&gt;= INR 15 Cr. and &lt; INR 30 Cr.</td> <td>80</td> </tr> <tr> <td>&gt;= INR 0 Cr. and &lt; INR 15Cr.</td> <td>70</td> </tr> </tbody> </table> <p style="text-align: center;"><i>Maximum Marks: 100</i></p>	Net Worth (in Crores)	Marks	>= INR 45 Cr.	100	>= INR 30 Cr. and < INR 45 Cr.	90	>= INR 15 Cr. and < INR 30 Cr.	80	>= INR 0 Cr. and < INR 15Cr.	70	15%
Net Worth (in Crores)	Marks												
>= INR 45 Cr.	100												
>= INR 30 Cr. and < INR 45 Cr.	90												
>= INR 15 Cr. and < INR 30 Cr.	80												
>= INR 0 Cr. and < INR 15Cr.	70												
A2	Bidder Competence – Annual Turnover	The bidder having an average annual turnover of <b>INR 300 Cr.</b> in ICT/ITES business for last 3 audited financial years as on:	15%										

		<ul style="list-style-type: none"> <li>31st March 2019 (in case audited statements for FY 2019-20 are not available)</li> </ul> <p>or</p> <ul style="list-style-type: none"> <li>31st March 2020 (in case audited statements for FY 2019-20 are available)</li> </ul> <p>will get 70 of total allocated marks.</p> <ul style="list-style-type: none"> <li>For every additional INR 100 Cr. of average annual turnover, the bidder will get 10 marks subject to a maximum of 100 marks.</li> </ul> <table border="1"> <thead> <tr> <th>Annual Turnover (in Crores)</th> <th>Marks</th> </tr> </thead> <tbody> <tr> <td>&gt;= INR 600 Cr.</td> <td>100</td> </tr> <tr> <td>&gt;= INR 500 Cr. and &lt; INR 600 Cr.</td> <td>90</td> </tr> <tr> <td>&gt;= INR 400 Cr. and &lt; INR 500 Cr.</td> <td>80</td> </tr> <tr> <td>&gt;= INR 300 Cr. and &lt; INR 400 Cr.</td> <td>70</td> </tr> </tbody> </table> <p><i>Maximum Marks: 100</i></p> <ul style="list-style-type: none"> <li></li> </ul>	Annual Turnover (in Crores)	Marks	>= INR 600 Cr.	100	>= INR 500 Cr. and < INR 600 Cr.	90	>= INR 400 Cr. and < INR 500 Cr.	80	>= INR 300 Cr. and < INR 400 Cr.	70	
Annual Turnover (in Crores)	Marks												
>= INR 600 Cr.	100												
>= INR 500 Cr. and < INR 600 Cr.	90												
>= INR 400 Cr. and < INR 500 Cr.	80												
>= INR 300 Cr. and < INR 400 Cr.	70												
A3	People in Organization	<ul style="list-style-type: none"> <li>The bidder having at least 200 FTE (Full Time Employees) on the payroll of organization working on ICT projects will get 70 of the allocated marks.</li> <li>For every additional 100 FTEs, the bidder will get additional 10 marks subject to maximum of 100 marks.</li> </ul> <table border="1"> <thead> <tr> <th>Number of FTE</th> <th>Marks</th> </tr> </thead> <tbody> <tr> <td>&gt; 800 FTE</td> <td>100</td> </tr> <tr> <td>&gt; 500 FTE to =&lt; 800 FTE</td> <td>90</td> </tr> <tr> <td>&gt; 200 FTE to =&lt; 500 FTE</td> <td>80</td> </tr> <tr> <td>=&lt; 200 FTE</td> <td>70</td> </tr> </tbody> </table> <p><i>Maximum marks: 100</i></p>	Number of FTE	Marks	> 800 FTE	100	> 500 FTE to =< 800 FTE	90	> 200 FTE to =< 500 FTE	80	=< 200 FTE	70	5%
Number of FTE	Marks												
> 800 FTE	100												
> 500 FTE to =< 800 FTE	90												
> 200 FTE to =< 500 FTE	80												
=< 200 FTE	70												
<b>B. Project Experience of Bidder</b>													
B1	Bidder Experience – Executing ICCC Projects	<ul style="list-style-type: none"> <li><i>Criteria B1:</i> The bidder having demonstrable experience of one project which involves SITC of ICCC for cities/ townships/ railway/ airport/ government utilities/ public transport/ transit authority during last five years (as of bid publish date) of value not less than INR 5 crore</li> </ul>	15%										

		<p>will get 70 of total allocated marks.</p> <p>SITC: Supply, Installation, Testing and Commissioning O&amp;M: Operations and Maintenance ICCC: Integrated Command and Control Centre</p> <ul style="list-style-type: none"> <li>For every additional project fulfilling <i>Criteria B1</i>, the bidder will get 10 marks subject to a maximum of 100 marks.</li> </ul> <table border="1"> <thead> <tr> <th>Number of Projects</th> <th>Marks</th> </tr> </thead> <tbody> <tr> <td>= 4 or &gt; 4</td> <td>100</td> </tr> <tr> <td>= 3</td> <td>90</td> </tr> <tr> <td>= 2</td> <td>80</td> </tr> <tr> <td>= 1</td> <td>70</td> </tr> </tbody> </table> <p><i>Maximum Marks: 100</i></p>	Number of Projects	Marks	= 4 or > 4	100	= 3	90	= 2	80	= 1	70	
Number of Projects	Marks												
= 4 or > 4	100												
= 3	90												
= 2	80												
= 1	70												
B2	<p>Bidder Experience – Traffic Enforcement System/ Adaptive Traffic Control System</p>	<ul style="list-style-type: none"> <li><i>Criteria B2</i>: The bidder having experience of project that entails deployment spanning at least 20 traffic junctions with: <ul style="list-style-type: none"> <li>semi-actuated or fully-actuated traffic signals (semi-actuated or fully-actuated traffic signals with centralized software system or controlling traffic signals) OR</li> <li>traffic enforcement system which entails deployment of automatic number plate recognition system and red light violation detection system</li> </ul> </li> </ul> <p>will get 70 of total allocated marks.</p> <ul style="list-style-type: none"> <li>For every additional project fulfilling <i>Criteria B2</i>, the bidder will get 10 marks subject to a maximum of 100 marks.</li> </ul> <table border="1"> <thead> <tr> <th>Number of Projects</th> <th>Marks</th> </tr> </thead> <tbody> <tr> <td>= 4 or &gt; 4</td> <td>100</td> </tr> <tr> <td>= 3</td> <td>90</td> </tr> <tr> <td>= 2</td> <td>80</td> </tr> <tr> <td>= 1</td> <td>70</td> </tr> </tbody> </table> <p><i>Maximum marks: 100</i></p>	Number of Projects	Marks	= 4 or > 4	100	= 3	90	= 2	80	= 1	70	10%
Number of Projects	Marks												
= 4 or > 4	100												
= 3	90												
= 2	80												
= 1	70												
B3	<p>Bidder Experience – Data Centre or Disaster Recovery</p>	<ul style="list-style-type: none"> <li><i>Criteria B3</i>: The bidder having experience of project worth at least 5 Cr that entails SITC of data centre or disaster recovery centre</li> </ul> <p>will get 70 of total allocated marks.</p> <ul style="list-style-type: none"> <li>For every additional project fulfilling <i>Criteria B3</i>, the bidder will get 10 marks subject to a maximum of 100 marks.</li> </ul> <table border="1"> <thead> <tr> <th>Number of Projects</th> <th>Marks</th> </tr> </thead> <tbody> <tr> <td>= 4 or &gt; 4</td> <td>100</td> </tr> <tr> <td>= 3</td> <td>90</td> </tr> <tr> <td>= 2</td> <td>80</td> </tr> <tr> <td>= 1</td> <td>70</td> </tr> </tbody> </table>	Number of Projects	Marks	= 4 or > 4	100	= 3	90	= 2	80	= 1	70	10%
Number of Projects	Marks												
= 4 or > 4	100												
= 3	90												
= 2	80												
= 1	70												

		<table border="1"> <tr> <td>= 4 or &gt; 4</td> <td>100</td> </tr> <tr> <td>= 3</td> <td>90</td> </tr> <tr> <td>= 2</td> <td>80</td> </tr> <tr> <td>= 1</td> <td>70</td> </tr> </table> <p><i>Maximum marks: 100</i></p>	= 4 or > 4	100	= 3	90	= 2	80	= 1	70			
= 4 or > 4	100												
= 3	90												
= 2	80												
= 1	70												
B4	Bidder Experience – IoT Devices	<ul style="list-style-type: none"> <li><b>Criteria B4:</b> The bidder having experience of a project that entails deployment of Environment Sensors / Smart lighting/ Smart parking/ Variable Messaging Displays with an aggregate of at least 100 IoT devices</li> </ul> <p>will get 70 of total allocated marks.</p> <ul style="list-style-type: none"> <li>For every additional project fulfilling <b>Criteria B4</b>, the bidder will get 10 marks subject to a maximum of 100 marks.</li> </ul> <table border="1"> <thead> <tr> <th>Number of Projects</th> <th>Marks</th> </tr> </thead> <tbody> <tr> <td>= 4 or &gt; 4</td> <td>100</td> </tr> <tr> <td>= 3</td> <td>90</td> </tr> <tr> <td>= 2</td> <td>80</td> </tr> <tr> <td>= 1</td> <td>70</td> </tr> </tbody> </table> <p><i>Maximum marks: 100</i></p>	Number of Projects	Marks	= 4 or > 4	100	= 3	90	= 2	80	= 1	70	5%
Number of Projects	Marks												
= 4 or > 4	100												
= 3	90												
= 2	80												
= 1	70												
B5	Bidder Experience – Surveillance System including CCTV cameras	<ul style="list-style-type: none"> <li><b>Criteria B5:</b> The bidder having experience of a project that entails deployment of at least 100 surveillance cameras</li> </ul> <p>will get 70 of total allocated marks.</p> <ul style="list-style-type: none"> <li>For every additional project fulfilling <b>Criteria B5</b>, the bidder will get 10 marks subject to a maximum of 100 marks.</li> </ul> <table border="1"> <thead> <tr> <th>Number of Projects</th> <th>Marks</th> </tr> </thead> <tbody> <tr> <td>= 4 or &gt; 4</td> <td>100</td> </tr> <tr> <td>= 3</td> <td>90</td> </tr> <tr> <td>= 2</td> <td>80</td> </tr> <tr> <td>= 1</td> <td>70</td> </tr> </tbody> </table> <p><i>Maximum marks: 100</i></p>	Number of Projects	Marks	= 4 or > 4	100	= 3	90	= 2	80	= 1	70	5%
Number of Projects	Marks												
= 4 or > 4	100												
= 3	90												
= 2	80												
= 1	70												
B6	Bidder Experience – ERP	<ul style="list-style-type: none"> <li><b>Criteria B7:</b> The bidder having experience in executing one project that entails implementation of ERP for Municipal Corporations/ Councils/ Government organizations worth at least 3 Cr with modules such as finance management, human resource management, asset and material management will get 70 of total allocated marks.</li> </ul> <p>will get 70 of total allocated marks.</p>	10%										

		<ul style="list-style-type: none"> <li>For every additional project fulfilling <i>Criteria B7</i>, the bidder will get 10 marks subject to a maximum of 100 marks.</li> </ul> <table border="1"> <thead> <tr> <th>Number of Projects</th> <th>Marks</th> </tr> </thead> <tbody> <tr> <td>= 4 or &gt;4</td> <td>100</td> </tr> <tr> <td>= 3</td> <td>90</td> </tr> <tr> <td>= 2</td> <td>80</td> </tr> <tr> <td>= 1</td> <td>70</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li><i>Maximum marks: 100</i></li> </ul>	Number of Projects	Marks	= 4 or >4	100	= 3	90	= 2	80	= 1	70									
Number of Projects	Marks																				
= 4 or >4	100																				
= 3	90																				
= 2	80																				
= 1	70																				
B7	Bidder Experience – GIS	<ul style="list-style-type: none"> <li><i>Criteria B8</i>: The bidder having experience of project worth at least 5 Cr that entails implementation of Enterprise GIS and may include digitization, surveys.</li> </ul> <p>will get 70 of total allocated marks.</p> <ul style="list-style-type: none"> <li>For every additional project fulfilling <i>Criteria B8</i>, the bidder will get 10 marks subject to a maximum of 100 marks.</li> </ul> <table border="1"> <thead> <tr> <th>Number of Projects</th> <th>Marks</th> </tr> </thead> <tbody> <tr> <td>= 4 or &gt;4</td> <td>100</td> </tr> <tr> <td>= 3</td> <td>90</td> </tr> <tr> <td>= 2</td> <td>80</td> </tr> <tr> <td>= 1</td> <td>70</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li><i>Maximum marks: 100</i></li> </ul>	Number of Projects	Marks	= 4 or >4	100	= 3	90	= 2	80	= 1	70	5%								
Number of Projects	Marks																				
= 4 or >4	100																				
= 3	90																				
= 2	80																				
= 1	70																				
<b>C. Proposed Resources for the Project</b>																					
C1	People on Project	<ul style="list-style-type: none"> <li>Each of the following profiles suggested by the bidder will be evaluated:</li> </ul> <table border="1"> <thead> <tr> <th>Profile</th> <th>Marks</th> </tr> </thead> <tbody> <tr> <td>Project Manager</td> <td>30</td> </tr> <tr> <td>Command &amp; Control Centre Expert</td> <td>10</td> </tr> <tr> <td>VMS Expert</td> <td>10</td> </tr> <tr> <td>Surveillance Expert</td> <td>10</td> </tr> <tr> <td>Network &amp; Security Expert</td> <td>10</td> </tr> <tr> <td>Data Centre Expert</td> <td>10</td> </tr> <tr> <td>ERP Functional Expert</td> <td>10</td> </tr> <tr> <td>GIS Expert</td> <td>10</td> </tr> </tbody> </table> <p>Minimum qualifications and marking criteria of the above resources shall be as per Annexure A.</p> <p><i>Maximum marks: 100</i></p>	Profile	Marks	Project Manager	30	Command & Control Centre Expert	10	VMS Expert	10	Surveillance Expert	10	Network & Security Expert	10	Data Centre Expert	10	ERP Functional Expert	10	GIS Expert	10	5%
Profile	Marks																				
Project Manager	30																				
Command & Control Centre Expert	10																				
VMS Expert	10																				
Surveillance Expert	10																				
Network & Security Expert	10																				
Data Centre Expert	10																				
ERP Functional Expert	10																				
GIS Expert	10																				

## 7.23 Opening of Commercial Bid

1. The Commercial Bids shall not be opened by SSCL until the evaluation of the Technical Proposals has been completed.
2. SSCL will open the Commercial Bids of those bidders who have achieved **minimum score of 70% of total marks in technical evaluation.**
3. SSCL will open the Commercial Bids in the presence of the nodal officer/designated representatives of the bidder who choose to attend, at the time, date and place, as decided and communicated by SSCL.
4. Commercial Bids from bidders who have failed to qualify in evaluation of the technical proposal will not be opened. Only bids that are opened and read out at the proposal opening shall be considered further.

## 7.24 Evaluation of Commercial Bids and Selection Method

1. SSCL will award the Contract to the bidder based on Lowest Quoted Price (**L1**). No additional cost in any form will be entertained by SSCL during the contract period.
2. The Commercial evaluation will be done based on the parameters given below: Total Estimated Commercial Bid of a bidder would be calculated based on quantities given in Section 11. The quantities in this table has been derived/estimated, considering O&M period of 5 years. The extension can be decided in future depending on the satisfactory performance of the bidder by competent authority, future IT infrastructure expansion needs and sole discretion of SSCL.
3. The Commercial Bids of only the technically qualified bidders will be opened for evaluation.
4. Since the payments to the SI will be made over several years, the Discounted Cash Flow (DCF) method will be used to compare different payment terms, including advance payments and progressive stage payments to the SIs so as to bring them to a common denomination for determining lowest bidder. The DCF is defined in the Glossary of Management and Accounting Terms, published by the Institute of Cost and Works Accountants of India. DCF method would be used for evaluation of bids. Detailed modalities for applying DCF technique are as below:
  - a. Net Present Value (NPV) method will be used for evaluation of the Commercial Offer. The Net Present Value of a contract is equal to the sum of the present values of all the cash flows associated with it. The formula for calculating NPV of a Commercial Offer is illustrated below.
    - i. The SSCL will evaluate the offers received by adopting Discounted Cash Flow (NPV) method with a discounting rate of 9%.
    - ii. NPV will be calculated on the annual cash outflows.
    - iii. Standard software for example 'Excel', 'or any other spreadsheet will be used for NPV analysis.
    - iv. The NPV will be calculate during the formula below:

$$NPV (Cb) = C_0 + C_1/(1+r)^1 + C_2/(1+r)^2 + C_3/(1+r)^3 + C_4/(1+r)^4 + C_5/(1+r)^5 + \dots + C_n/(1+r)^n$$

Where,

- a)  $C_0$  is the sub-total for services provided during implementation phase
- b)  $C_1$  is defined as: Cost of O&M Services for the 1<sup>st</sup> year after "Go-Live" – (Higher value among "Committed revenue in absolute rupee terms for the 1<sup>st</sup> year after "Go-Live" and "Value derived from the percentage revenue share for the 1<sup>st</sup> year after "Go-Live")
- c)  $C_2$  is defined as: Cost of O&M services for the 2<sup>nd</sup> year after "Go-Live" – (Higher value among "Committed revenue in absolute rupee terms for the 2<sup>nd</sup> year after "Go-Live" and "Value derived from the percentage revenue share for the 2<sup>nd</sup> year after "Go-Live")
- d)  $C_n$  is defined as: Cost of O&M services for the n<sup>th</sup> year after "Go-Live" – (Higher value among "Committed revenue in absolute rupee terms for the n<sup>th</sup> year after "Go-Live" and "Value derived from the percentage revenue share for the N<sup>th</sup> year after "Go-Live")

e)  $r$  is the annual discounting rate as specified above

v. The method of selection is based on Lowest Quoted Price i.e. L1 Bidder arrived using above formula.

5. The bidder achieving the L1 price will be invited for negotiations for awarding the contract. In case of a tie where two or more bidders achieve the same price, the bidder with the higher technical score will be invited for negotiations and awarding the contract. In case of a tie on the technical scores and L1 price, the Cb will be calculated to the third place of decimal and the bidder with lesser Cb will be invited for negotiations and awarding of the contract.

**Arithmetical errors:** If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected. If the Bidder does not accept the correction of the errors, its bid will be rejected. If there is a discrepancy between words and figures, the amount in words will prevail

### **7.25 OEM / Implementation Partner Participation Criteria**

1. The bidder will be required to submit a manufacturer's authorization form of items listed in Annexure C, stating that the bidder in concern would be bidding for their products/solutions.
2. Bidders are required to specify only one make and model of each item and provide the details in the Technical bid.
3. Firms with common Proprietor/partner or connected with one another either financially or as principal and agent or as master and servant or with proprietor/partners closely related to each other such as husband, wife, father/mother and minor son/daughter and brother/sister and minor brother/sister, shall not bid separately under different names for the same contract. An independence form in the same regard must be submitted by the bidder.
4. If it is found that the same firm has submitted multiple bids under different names for the proposed contract, all such tender(s) shall stand rejected and bid deposit of each such firm/establishment shall be forfeited. In addition, such firms/establishments shall be liable, at the discretion of the Chief Operating Officer/ Municipal Commissioner, for further penal action.
5. If it is found that close relatives (as described above) have uploaded separate tenders/ quotations under different names of firms/establishments but with common address for such establishments/ firms and/or if such establishments/ firms, though they have different addresses, are managed or governed by the same person/persons jointly or severally, such tenders shall be liable for further penal action.
6. If after awarding the contract it is found that the accepted bid violated any of the directions pertaining to participation as stated above, the contract shall be liable for cancellation at any time during its validity in addition to penal action against the contractors as well as related firm/establishment.
7. OEM's must not have been Blacklisted globally.

### **7.26 Rights to Accept/Reject Any or All Proposals**

SSCL reserves the right to accept or reject any proposal, and to annul the bidding process and reject all Bids at any time prior to award of Contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected bidder or bidders of the grounds for SSCL's action.

### **7.27 Notifications of Award and Signing of Contract**

1. Prior to the expiration of the period of proposal validity, the bidder will be notified in writing or by fax or email that its proposal has been accepted.
2. SSCL shall facilitate signing of the contract within the period of 30 days of the notification of award. However, it is to be noted that the date of commencement of the project and all contractual obligations shall commence from the date of issuance of Purchase Order/Letter of Acceptance, whichever is earlier. All reference timelines as regards the execution of the project and the payments to the

Implementation Agency shall be considered as beginning from the date of issuance of the Purchase Order/Letter of Acceptance, whichever is earlier.

3. The notification of award (LoI/Purchase Order) will constitute the formation of the Contract. Upon the Bidder's executing the contract with SSCL, it will promptly notify each unsuccessful bidder and return their EMDs.
4. At the time SSCL notifies the successful Bidder that its bid has been accepted, SSCL will send the Bidders the Pro forma for Contract, incorporating all clauses/agreements between the parties. Within 15 days of receipt of the Contract, the successful Bidder shall sign and date the Contract and return it to SSCL. Draft Format of the contract is given in the respective sections of the RFP.

### **7.28 Quantity Variation**

1. At the time of award of contract, the quantity of goods, works or services originally specified in the bidding documents may be increased or decreased. The successful bidder shall not object to the upward or downward variation in quantities of any item within the variation limit of  $\pm 30\%$ .
2. Payment for additional quantities within the variation limit shall be made at tender rates and the tender rates shall be valid for entire duration of the contract.
3. No claim shall be entertained or become payable for price variation of additional quantities.
4. Repeat orders for extra items or additional quantities may be placed within 2 years of the original request order. The Unit Rate mentioned in the Commercial bid formats shall be used for the purpose of "Repeat Orders" for respective items. However, based on the market trends, SSCL retains the right to negotiate the Tender rate and/or request better specifications based on market and technological scenario. Delivery or completion period may be proportionally increased.

### **7.29 Performance Bank Guarantee**

1. The successful bidder shall at his own expense, deposit with department, within 30 days of the notification of award (done through issuance of the Purchase Order/Letter of Acceptance), an unconditional and irrevocable Performance Bank Guarantee (PBG) from a list of approved banks as per the format given in this Bid document, in favour of SSCL for the due performance and fulfilment of the contract by the bidder.
2. This Performance Bank Guarantee will be for an amount equivalent to 10% of contract value. All charges whatsoever such as premium, commission, etc. with respect to the Performance Bank Guarantee shall be borne by the bidder.
3. The successful bidder shall maintain a valid and binding Performance Guarantee for a period of three months after the expiry of the Contract Period ("Validity Period").
4. The Performance Bank Guarantee letter format can be found in the Annexure "Format for Performance Bank Guarantee" of this document.
5. The Performance Bank Guarantee may be discharged/ returned by department upon being satisfied that there has been due performance of the obligations of the bidder under the contract. However, no interest shall be payable on the Performance Bank Guarantee.
6. If the bidder, fails to furnish the Performance Guarantee, it shall be lawful for the Authority to forfeit the EMD and cancel the contract or any part thereof
7. In the event of the bidder being unable to service the contract for whatever reason, department would evoke the PBG. Notwithstanding and without prejudice to any rights whatsoever of department under the Contract in the matter, the proceeds of the PBG shall be payable to department as compensation for any loss resulting from the bidder's failure to complete its obligations under the Contract. Department shall notify the bidder in writing of the exercise of its right to receive such compensation within 14 days, indicating the contractual obligation(s) for which the bidder is in default.



8. Department shall also be entitled to make recoveries from the bidder's bills, performance bank guarantee, or from any other amount due to him, the equivalent value of any payment made to him due to inadvertence, error, collusion, misconstruction or misstatement.

### **7.30 Vandalism/Force Majeure**

The Bidding Process shall be governed by, and construed in accordance with, the laws of India and the Courts at Silvassa shall have exclusive jurisdiction over all disputes arising under, pursuant to and/or in connection with the Bidding Process.

### **7.31 Failure to Agree with the Terms & Conditions of the Bid Document/ Contract**

Failure of the bidder to agree with the Terms & Conditions of the Bid document/Contract shall constitute sufficient grounds for the annulment of the award of contract, in which event the contract may be awarded to the next most responsive bidder.

### **7.32 Terms and Conditions of the Tender**

1. Bidder is required to refer to the Contract Agreement, in this Bid document (Volume 3 of RFP), for all the terms and conditions to be adhered by the successful bidder during Project Implementation and Post implementation period.
2. Please note that one needs to read the Contract Agreement as a whole document; and the Annexure mentioned there-in may not correspond to the Bid document Annexure. Please refer to Contract Agreement in Volume 3 of RFP.

## 8 Project Milestones and Payment Schedule

The payment schedule and milestones are divided into two phases:

- i. Implementation Phase
- ii. Operations and Maintenance Phase

SSCL shall issue a “Request Order” in writing, indicating the number of units of Hardware and Software to be supplied along with the location (Project Site). The SSCL shall continue to issue such request until the full quantities of Hardware and Software specified in volume 2 within the variation limits of RFP is exhausted. Upon getting the Request Order, the SI shall promptly and as soon as possible within the lead time specified in the request order, supply, install and implement specified numbers of hardware and software at stated project site and commission the same. SSCL shall specify the Lead Time in Request Order. The Lead Time of Request Order shall be decided in discussion with the Service Provider before the Request Order is placed. SSCL’s decision in this regard shall be final but reasonable time shall be provided to the SI. Delay or non-performance will form the basis for application of Liquidated Damages. Tentative number of Request Orders and Lead Time as envisaged at this point of time is specified below.

Services	Approximate Time for Issuance of Request Order	Tentative Scope/ Approximate Sizing	Tentative Lead Time
Request Order 1	One-week post issuance of LoI	<ol style="list-style-type: none"> <li>1. Command and Control Centre (CCC) Non-IT Equipment</li> <li>2. Command and Control Centre (CCC) IT Hardware</li> <li>3. Command and Control Centre (CCC) – Software</li> <li>4. ATCS System - Lot #1</li> <li>5. ANPR Solution - Lot #1</li> <li>6. CCTV/Surveillance Cameras - Lot #1</li> <li>7. Smart Parking - Lot #1</li> <li>8. Smart Poles &amp; VMD - Lot #1</li> <li>9. Data Centre - Hardware - Lot #1</li> <li>10. Data Centre - Software - Lot #1</li> <li>11. Disaster Recovery - Hardware - Lot #1</li> <li>12. Disaster Recovery - Software - Lot #1</li> </ol>	Four months post issuance of request order
Request Order 2	On completion of survey / one month post issuance of LoI whichever is earlier	<ol style="list-style-type: none"> <li>1. Leased Line Connectivity</li> <li>2. Pelican Sign</li> <li>3. Smart Street Light</li> <li>4. E-Challan System</li> <li>5. GIS</li> <li>6. ATCS System - Lot #2</li> <li>7. ANPR Solution - Lot #2</li> <li>8. CCTV/Surveillance Cameras - Lot #2</li> <li>9. Smart Parking - Lot #2</li> <li>10. Smart Poles &amp; VMD - Lot #2</li> <li>11. Data Centre - Hardware - Lot #2</li> <li>12. Data Centre - Software - Lot #2</li> <li>13. Disaster Recovery - Hardware - Lot #2</li> </ol>	Seven months post issuance of request order

Services	Approximate Time for Issuance of Request Order	Tentative Scope/ Approximate Sizing	Tentative Lead Time
		14. Disaster Recovery - Software - Lot #2	
Request Order 3	On completion of survey / one month post issuance of LoI whichever is earlier	1. ERP and Mobile Application 2. Integration of all modules at ICCC	Eleven months post issuance of request order

### 8.1 Project Milestones and Payment Schedules for Implementation Phase

Based on findings of the Feasibility Study done by the SI, the SI may propose a change in the number of sites or individual units to be deployed in each phase as well as overall scope and a consequent change in phasing. SSCL also retains the right to suo-moto change the number of sites or individual units to be deployed for each scope item. The final decision on change in phasing and related change in payment schedules shall be at the discretion of SSCL.

**T = 15 days from LOI date**

Milestones	Payment Milestones for the Implementation % Payment of Time Schedule Phase	Payment Schedule	Time Schedule
<b>M1.1</b>	Request Order 1 – Delivery of Material / Licenses	50% of Request Order 1 Value (Capex Cost) post issuance of work order	T + 2 Month
<b>M1.2</b>	Request Order 1 – Installation, Testing and Commissioning of IT & Non-IT Equipment and Go-Live	40% of Request Order 1 Value (Capex Cost) on pro rata basis	T + 4 Months
<b>M1.3</b>	Request Order 1 – Three months of successful operation and Maintenance after Project Acceptance	10% of Request Order 1 Value (Capex Cost)	T + 7 Months
<b>M2.1</b>	Request Order 2 – Delivery of Material/ Licenses	50% of Request Order 2 Value (Capex Cost) post issuance of work order	T + 4 Months
<b>M2.2</b>	Request Order 2 – Installation, Testing and Commissioning of IT & Non-IT Equipment and Go-Live	40% of Request Order 2 Value (Capex Cost) on pro rata basis	T + 8 Months
<b>M2.3</b>	Request Order 2 – Three months of successful operation and Maintenance after Project Acceptance	10% of Request Order 2 Value (Capex Cost)	T + 11 Months
<b>M3.1</b>	Request Order 3 – Delivery of Material/ Licenses	50% of Request Order 3 Value (Capex Cost) post issuance of work order	T + 4 Months
<b>M3.2</b>	Request Order 3 – Installation, Testing and Commissioning of IT & Non-IT Equipment and Go-Live	30% of Request Order 3 Value (Capex Cost) on pro rata basis	T + 12 Months
<b>M3.3</b>	Request Order 3 – On submission and acceptance of SOP's	10% of Request Order 3 Value (Capex Cost)	T + 15 Months
<b>M3.4</b>	Request Order 3 – Three months of successful operation and Maintenance after Project Acceptance	10% of Request Order 3 Value (Capex Cost)	T + 15 Months

Note:

- All payments to the Implementation Vendor shall be made upon submission of invoices along with necessary approval certificates from concerned Authority like SSCL, SMC, Police Department etc.
- The above payments are subject to meeting of SLA's failing which the appropriate deductions as mentioned in the SLA document of this RFP.

## **8.2 Project Milestones and Payment Schedules for Operations and Maintenance Phase**

The Operations and Maintenance phase will start as soon as Go-Live for the final phase occurs. The SI will be required to adhere to the SLA and provide Post Implementation support for a period of 5 years after Go-Live which shall include 5 years of Onsite warranty with Comprehensive AMC (CAMC) support.

<b>Milestones</b>	<b>Payment Milestones for the Implementation % Payment of Time Schedule Phase</b>	<b>Payment Schedule</b>	<b>Time Schedule</b>
<b>M5</b>	Year 1 Payment for O&M after Go-Live	Equal Quarterly O&M Payments	Payment of Year 1
<b>M6</b>	Year 2 Payment for O&M after Go-Live	Equal Quarterly O&M Payments	Payment of Year 2
<b>M7</b>	Year 3 Payment for O&M after Go-Live	Equal Quarterly O&M Payments	Payment of Year 3
<b>M8</b>	Year 4 Payment for O&M after Go-Live	Equal Quarterly O&M Payments	Payment of Year 4
<b>M9</b>	Year 5 Payment for O&M after Go-Live	Equal Quarterly O&M Payments	Payment of Year 5

Payment of Operations and Maintenance phase will be made on quarterly basis (at completion of each quarter) based on the adherence to SLA, for the amount quoted for each respective year.

The payment shall be inclusive of GST, Income Tax, Duties/Fees, Levies, Charges and Commissions as applicable under the relevant Local Laws or Laws of India. Should there be a change in such applicable taxes/levies/charges, the actual taxes/levies/charges on the date of billing would prevail.

SSCL will release the payment within 30 days of submission of valid invoice subject to the condition that invoice and all supporting documents produced are in order and work is performed to the satisfaction of SSCL. SSCL shall be entitled to delay or withhold the payment of any invoice or part of it delivered by SI, where SSCL disputes such invoice or part of it provided that such a dispute is bonafide. The disputed amount shall be settled in resolution of dispute.

## 9 Formats for Pre-Qualification Bid

### 9.1 Pre-Qualification Documents Checklist

#	Documents to be submitted	Submitted (Y / N)	Documentary Proof (Page No.)
1.	DD of Rs. 25,000/- (Rupees Twenty Five Thousand only) as tender fee (in separate envelop)		
2.	Bid Cover Letter (Form PQ_1)		
3.	EMD of Rs. 2,00,00,000 (Rupees Two Crores only) (Form PQ_2)		
4.	Particulars of the Bidders (Form PQ_3)		
5.	Copy of certificate of incorporation / registration under Indian Companies Act 1956  For global companies, equivalent certificate in the country of incorporation		
6.	Certificate from the statutory auditor/CA clearly specifying the net worth of the bidder for last financial year (Form PQ_4)		
7.	Copy of the audited profit & loss statements for last three financial years		
8.	Certificate from the statutory auditor/CA clearly specifying the annual turnover from ICT/ITES business for last three financial years (Form PQ_5)		
9.	Details of the ICCC project executed (Form PQ_6) along with citation, work orders/ contract and successful completion certificate / Ongoing certificate from the client		
10.	Details of the implementing smart projects executed (Form PQ_7) along with citation, work orders/ contract and successful completion certificate / Ongoing certificate from the client		
11.	Declaration that the firm is not blacklisted by Central Government or any State Government organization/ department in India at the time of submission of the bid (Form PQ_8)		
12.	Declaration on stamp paper, for the bidder not being insolvent or in receivership or bankrupt (Form PQ_9)		
13.	Self-certification for compliance to Non-IT Scope of Work (PQ_10)		
14.	Self-Declaration for compliance to procurement guidelines (PQ_11)		
15.	Copies of any two of the followings: Property Tax / Electricity / Telephone Bill / GST Registration / Lease agreement. to be submitted for local office in Silvassa  OR  Undertaking from authorized signatory with Seal & Stamp of Organization, to open the local office with warehouse facility to be submitted within 45 days from issuance of LOI		

#	Documents to be submitted	Submitted (Y / N)	Documentary Proof (Page No.)
16.	Copy of work orders and client certificate for Bidder's Eligibility Criteria		

Note :

Last three financial years mean:

- FY 2016-17, 2017-18 and 2018-2019 (in case audited statements for FY 2019-20 are not available)

or

- FY 2017-18, 2018-19 and 2019-2020 (in case audited statements for FY 2019-20 are available)

## 9.2 PQ\_1: Format for Bid Cover Letter

<<To be printed on Bidder Company's Letterhead and signed by Authorized Signatory>>

Date: DD/MM/YYYY

To,  
The CEO,  
Silvassa Smart City Limited (SSCL),  
1<sup>st</sup> Floor, Silvassa Municipal Council (New SMC Building),  
Silvassa - 396230

**Subject:** "Selection of Implementation Agency for Pan City Infrastructure – ICCC, Smart Components And Smart Governance in Silvassa City".

**Reference:** Tender No: <No> dated <DD/MM/YYYY>

Dear Sir,

Having examined the Bid document (and the clarification / corrigendum issued thereafter, if any), the receipt of which is hereby duly acknowledged, we, the undersigned, offer to provide the professional services as required and outlined in the Bid document for the Selection of Implementation Agency for Pan City Infrastructure – ICCC, Smart Components And Smart Governance in **Silvassa City**. We attach hereto our responses to pre-qualification requirements and technical and commercial proposals as per Bid requirement. We confirm that the information contained in these responses or any part thereof, including the exhibits, and other documents and instruments delivered or to be delivered to SSCL, is true, accurate, verifiable and complete. This response includes all information necessary to ensure that the statements therein do not in whole or in part mislead SSCL in its shortlisting and Evaluation process.

We fully understand and agree to comply that on verification, if any of the information provided here is found to be misleading the selection process, we are liable to be dismissed/ disqualified from the selection process or termination of the contract during the project, if selected to do so.

We agree for unconditional acceptance of all the terms and conditions set out in the Bid document (and subsequent clarification/corrigendum, if any) and also agree to abide by this tender response for a period of 180 days from the Bid Opening Date. We hereby declare that in case the contract is awarded to us, we shall submit the contract performance guarantee bond in the form as prescribed in the Bid document.

We agree that you are not bound to accept any tender response you may receive. We also agree that you reserve the right in absolute sense to reject all or any of the products/ services specified in the tender response without specifying the reason for the same.

It is hereby confirmed that I/We are entitled to act on behalf of our company/corporation/firm/ organization "<Name of the Organization>" and empowered to sign this document as well as such other documents, which may be required in this connection.

Yours sincerely,

---

Authorized Signatory (with official seal)

Name :  
Designation :  
Address :  
Telephone & Fax :

E-mailAddress :



### 9.3 PQ\_2: Format for Earnest Money Deposit (EMD)

#### Format for EMD

(To be stamped in accordance with Stamp Act)

Ref:

Bank Guarantee No.

Date:

To,  
The CEO,  
Silvassa Smart City Limited (SSCL),  
1<sup>st</sup> Floor, Silvassa Municipal Council (New SMC Building),  
Silvassa – 396230

Dear Sir,

WHEREAS ..... (Name of Bidder) hereinafter called "the Bidder" has undertaken, in pursuance of Agreement dated <---->, (hereinafter referred to as "the Agreement for **Design, Supply, Installation & Commissioning and Maintenance of "Integrated Command and Control Centre (ICCC) with Smart Features" against Tender No. <----->** for the SSCL.

AND WHEREAS it has been stipulated in the said Agreement that the Bidder shall furnish a Bank Guarantee ("the Guarantee") from a scheduled bank for the sum specified therein as security for implementing PROJECT.

We <<name of Bank>> having our Registered office at <<address>> (hereinafter called "the Bank") are bound unto the << SSCL >> (hereinafter called "the Purchaser") in the sum of Rs. <<amount in figures>> (Rupees <<amount in words>> only) for which payment well and truly to be made to the said Purchaser, the Bank binds itself, its successors and assigns by these presents.

The conditions of this obligation are:

1. If the bidder having its bid withdrawn during the period of bid validity specified by the Bidder on the Bid Form; or
2. If the bidder, having been notified of the acceptance of its bid by the Purchaser during the period of validity of bid
  - a. Withdraws his participation from the bid during the period of validity of bid document; or
  - b. Fails or refuses to participate in the subsequent Tender process after having been short listed;

We undertake to pay to the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amount claimed is due to it owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to <<date>> and including <<extra time over and above mandated in the RFP>> from the last date of submission and any demand in respect thereof should reach the Bank not later than the above date.

NOTWITHSTANDING ANYTHING CONTAINED HEREIN:

- I. Our liability under this Bank Guarantee shall not exceed Rs. <<amount in figures>> (Rupees <<amount in words>> only)
- II. This Bank Guarantee shall be valid up to <<date>>

III. It is condition of our liability for payment of the guaranteed amount or any part thereof arising under this Bank Guarantee that we receive a valid written claim or demand for payment under this Bank Guarantee on or before <<date>> failing which our liability under the guarantee will automatically cease.

(Authorized Signatory of the Bank)

Seal:

Date:

## 9.4 PQ\_3: Bidder Information Format

<<To be printed on Bidder Company's Letterhead and signed by Authorized Signatory>>

To,  
The CEO,  
Silvassa Smart City Limited (SSCL),  
1<sup>st</sup> Floor, Silvassa Municipal Council (New SMC Building),  
Silvassa - 396230

**Subject:** "Selection of Implementation Agency for Pan City Infrastructure – ICC, Smart Components And Smart Governance in Silvassa City".

Dear Sir,

Please find below details of bidder for participation in "**Selection of Implementation Agency for Pan City Infrastructure – ICC, Smart Components And Smart Governance in Silvassa City**" tender <Tender Number> <dated>.

Bidder Information Sheet		
#	Particulars	Bidder
1.	Name of the Organization	
2.	Type of Organization (Pvt. Ltd./Public Limited/LLP)	
3.	Country of Registered Office	
4.	Address of Registered Office	
5.	Company Registration Details	
6.	Date of Registration	
7.	Details of any Global Certifications (ISO/ITIL/CMMi etc.)	
8.	PAN/Equivalent	
9.	GST/Equivalent	
10.	Address of Registered Office in India	
11.	No. of Years of Operation in India	
12.	Authorized Signatory Name	
13.	Authorized Signatory Designation	
14.	Authorized Signatory Contact Details	

Yours sincerely,

\_\_\_\_\_  
Signature of Authorized Signatory (with official seal)

Name :  
Designation :  
Address :  
Telephone & Fax :  
E-mail Address :

**Note:** To be submitted with any other supporting details specified as document proof in Pre-Qualification criteria.

## 9.5 PQ\_4: Auditor's Certificate for Net Worth of Bidder

Date: DD/MM/YYYY

To,  
The CEO,  
Silvassa Smart City Limited (SSCL),  
1<sup>st</sup> Floor, Silvassa Municipal Council (New SMC Building),  
Silvassa – 396230

Dear Sir,

This is to certify that the Net Worth as per books and records of \_\_\_\_\_  
for the following financial years are as under.

Sr.	Financial Year Ending	Net Worth (in INR Crores)
1.	31 March 2019 (to be filled only if audited statements are not available for FY 2019-20)	
2.	31 March 2020	

I further certify that I am competent officer in my company to make this declaration.

Yours sincerely,

\_\_\_\_\_  
Signature of Authorized Signatory (with official seal)

Name :  
Designation :  
Address :  
Telephone & Fax :  
E-mailAddress :

**Note:** To be submitted with any other supporting details specified/required as document proof

## 9.6 PQ\_5: Bidder's Overall Annual Turnover from ICT/ITES Business

<<To be printed on Bidder Company's Letterhead and signed by Authorized Signatory>>

Date: DD/MM/YYYY

To,  
The CEO,  
Silvassa Smart City Limited (SSCL),  
1<sup>st</sup> Floor, Silvassa Municipal Council (New SMC Building),  
Silvassa – 396230

**Subject:** "Selection of Implementation Agency for Pan City Infrastructure – ICC, Smart Components And Smart Governance in Silvassa City".

Dear Sir,

I have carefully gone through the Terms & Conditions contained in the RFP document for "**Selection of Implementation Agency for Pan City Infrastructure – ICC, Smart Components And Smart Governance in Silvassa City**". I hereby declare that below are the details regarding Overall Turnover for our organization for last 3 financial years.

#	Details	FY 2016-17 (in INR Crores) (i)	FY 2017-18 (in INR Crores) (ii)	FY 2018-19 (in INR Crores) (iii)	FY 2019-20 (in INR Crores) (iv)	Average Turnover [(i)+(ii)+ (iii)/3] Or [(ii)+(iii)+ (iv)/3]
1.	Overall Annual Turnover - Bidder					
Submit audited financial statements for: <ul style="list-style-type: none"> <li>FY 2016-17, 2017-18 and 2018-2019 (in case audited statements for FY 2019-20 are not available)</li> </ul> or <ul style="list-style-type: none"> <li>FY 2017-18, 2018-19 and 2019-2020 (in case audited statements for FY 2019-20 are available)</li> </ul> *** Average Turnover will be calculated as follows: <ul style="list-style-type: none"> <li>(i)+(ii)+(iii)/3 (in case details for FY 2019-20 are not available)</li> </ul> or <ul style="list-style-type: none"> <li>(ii)+(iii)+(iv)/3 (in case details for FY 2019-20 are available)</li> </ul>						

Contact details of officials for future correspondence regarding the bid process:

Details	Authorized Signatory (Primary Contact)	Secondary Contact
Name		
Title		
Company Address		

Mobile		
Fax		

I further certify that I am competent officer in my company to make this declaration.

Yours sincerely,

\_\_\_\_\_  
Signature of Authorized Signatory (with official seal)

Name :

Designation :

Address :

Telephone & Fax :

E-mailAddress :

**Note:** To be submitted with any other supporting details specified/required as document proof.

## 9.7 PQ\_6: Experience of Implementing ICCC Project

<<To be printed on Company's Letterhead and signed by Authorized Signatory>>

Date: DD/MM/YYYY

To,  
The CEO,  
Silvassa Smart City Limited (SSCL),  
1<sup>st</sup> Floor, Silvassa Municipal Council (New SMC Building),  
Silvassa – 396230

Dear Sir,

we <Name of the Company/ Organization>, have carefully gone through the Terms & Conditions contained in the RFP document for “**Selection of Implementation Agency for Pan City Infrastructure – ICCC, Smart Components And Smart Governance in Silvassa City**”. We hereby declare that below are the details regarding relevant work that has been taken up by <Name of the Company/ Organization>.

<NOTE: To be filled separately for each project undertaken by the bidder>

Name of the Project	Bidder				
	Project 1	Project 2	Project 3	-	Project n
<b>General Information</b>					
Client for which the project was executed					
Name of the client contact person(s)					
Designation of client contact person(s)					
Contact details of the client contact person(s)					
<b>Project Details</b>					
Description of the project					
Scope of work of the bidder					
Deliverables of the bidder					
Technologies used					
Outcomes of the project					
<b>Project Element</b>					
Integrated Command & Control Centre					
Data Centre					
DR					
CCTV Cameras					
ITMS/ ATCS					
VMD					
Environmental Sensors					
Smart Street Lights					
Smart Parking					

Name of the Project	Bidder				
	Project 1	Project 2	Project 3	-	Project n
Please specify others, if any					
<b>Other Details</b>					
Total cost of the project					
Total cost of the services provided by the bidder					
Duration of the project (number of months, start date, completion date, current status)					
Other relevant information <for each type of project>					
<b>Mandatory Supporting Documents</b>					
Work Order/Contract for the project					
Client certificate giving present status of the project and view of the quality of services by the bidder					

I further certify that I am competent officer in my company to make this declaration.

Yours sincerely,

\_\_\_\_\_  
Signature of Authorized Signatory (with official seal)

Name :

Designation :

Address :

Telephone & Fax :

E-mailAddress :

**Note:** To be submitted with any other supporting details specified/required as document proof.



## 9.8 PQ\_7: Experience of Implementing Smart Projects

<To be printed on Company's Letterhead and signed by Authorized Signatory>>

Date: DD/MM/YYYY

To,  
The CEO,  
Silvassa Smart City Limited (SSCL),  
1<sup>st</sup> Floor, Silvassa Municipal Council (New SMC Building),  
Silvassa – 396230

Dear Sir,

we <Name of the Company/ Organization>, have carefully gone through the Terms & Conditions contained in the RFP document for “**Selection of Implementation Agency for Pan City Infrastructure – ICCC, Smart Components And Smart Governance in Silvassa City**”. We hereby declare that below are the details regarding relevant work that has been taken up by <Name of the Company/ Organization>.

<NOTE: To be filled separately for each project undertaken by the bidder.>

Name of the Project	Bidder				
	Project 1	Project 2	Project 3	-	Project n
<b>General Information</b>					
Client for which the project was executed					
Name of the client contact person(s)					
Designation of client contact person(s)					
Contact details of the client contact person(s)					
<b>Project Details</b>					
Description of the project					
Scope of work of the bidder					
Deliverables of the bidder					
Technologies used					
Outcomes of the project					
<b>Project Element</b>					
Integrated Command & Control Centre					
Data Centre					
DR					
CCTV Cameras					
ITMS/ ATCS					
VMD					
Environmental Sensors					
Smart Street Lights					
Smart Parking					

Name of the Project	Bidder				
	Project 1	Project 2	Project 3	-	Project n
Please specify others, if any					
<b>Other Details</b>					
Total cost of the project					
Total cost of the services provided by the bidder					
Duration of the project (number of months, start date, completion date, current status)					
Other relevant information <for each type of project>					
<b>Mandatory Supporting Documents</b>					
Work Order/Contract for the project					
Client certificate giving present status of the project and view of the quality of services by the bidder					

I further certify that I am competent officer in my company to make this declaration.

Yours sincerely,

\_\_\_\_\_  
Signature of Authorized Signatory (with official seal)

Name :  
Designation :  
Address :  
Telephone & Fax :  
E-mailAddress :

**Note:** To be submitted with any other supporting details specified/required as document proof.

## 9.9 PQ\_8: Self Declaration – No Blacklisting

<<To be printed on Rs. 300/- Stamp Paper>>

Date: DD/MM/YYYY

To,  
The CEO,  
Silvassa Smart City Limited (SSCL),  
1<sup>st</sup> Floor, Silvassa Municipal Council (New SMC Building),  
Silvassa – 396230

Dear Sir,

In response to the Tender Ref. No. \_\_\_\_\_ dated \_\_\_\_\_ for  
“Selection of Implementation Agency for Pan City Infrastructure – ICC, Smart Components And Smart  
Governance in Silvassa City”, as an Owner/Partner/Director of \_\_\_\_\_, I/We  
hereby declare that presently our Company/Firm <Name of the company/ Organization> is having  
unblemished record and is not declared ineligible for corrupt and fraudulent practices either indefinitely  
or for a particular period of time by any State/ Central Government/PSU.

We further declare that presently our Company/Firm <Name of the company/ Organization> is not  
blacklisted and not declared ineligible for any reasons other than corrupt and fraudulent practices by any  
State/Central Government/PSU on the date of bid submission.

If this declaration is found to be incorrect then without prejudice to any other action that may be taken,  
my/ our security may be forfeited in full and the tender if any to the extent accepted can be cancelled .

Yours sincerely,

\_\_\_\_\_  
Signature of Authorized Signatory (with official seal)

Name :

Designation :

Address :

Date :

Place :

Seal of the Organization:

**9.10 PQ\_9: Self Declaration for Bidder Not Being Insolvent or In Receivership or Bankrupt**

<<To be printed on Rs. 300/-Stamp Paper>>

Date: DD/MM/YYYY

To,  
The CEO,  
Silvassa Smart City Limited (SSCL),  
1<sup>st</sup> Floor, Silvassa Municipal Council (New SMC Building),  
Silvassa – 396230

Dear Sir,

In response to the Tender Ref. No. \_\_\_\_\_ dated \_\_\_\_\_ for “Selection of Implementation Agency for Pan City Infrastructure – ICC, Smart Components And Smart Governance in Silvassa City”, as an Owner/Partner/Director of <Name of the Company/ Organization>, I/We hereby declare that presently our Company/Firm <Name of the Company/ Organization>:

- a) is not insolvent, in receivership, bankrupt or being wound up, not have its affairs administered by a court or a judicial officer, not be declared defaulter by any financial institution, not have its business activities suspended and must not be the subject of legal proceedings for any of the foregoing reasons.
- b) not has, and their directors and officers not have, been convicted of any criminal offence related to their professional conduct or the making of false statements or misrepresentations as to their qualifications to enter into a procurement contract within a period of three years preceding the commencement of the procurement process, or not have been otherwise disqualified pursuant to debarment proceedings.
- c) not have a conflict of interest in the procurement in question as specified in the bidding document

If this declaration is found to be incorrect then without prejudice to any other action that may be taken, my/ our security may be forfeited in full and the tender if any to the extent accepted can be cancelled.

Yours sincerely,

\_\_\_\_\_  
Signature of Authorized Signatory (with official seal)

Name :

Designation :

Address :

Date :

Place :

Seal of the Organization:

## 9.11 PQ\_10: Self-certification for compliance to Non-IT Scope of Work

<<To be printed on Rs. 300/-Stamp Paper>>

Date: DD/MM/YYYY

To,  
The CEO,  
Silvassa Smart City Limited (SSCL),  
1<sup>st</sup> Floor, Silvassa Municipal Council (New SMC Building),  
Silvassa – 396230

Dear Sir,

In response to the Tender Ref. No. \_\_\_\_\_ dated \_\_\_\_\_ for “Selection of Implementation Agency for Pan City Infrastructure – ICCO, Smart Components And Smart Governance in Silvassa City”, as an Owner/Partner/Director of \_\_\_\_\_, I/We hereby self-certify that our Company/Firm <Name of the company/ Organization> comply to the following points:

1. This Bid is for Construction of INTEGRATED COMMAND & CONTROL CENTRE (ICCC) and DATA CENTRE consisting of Architectural, Civil, Electrical, Fire Fighting, HVAC and Furniture infrastructural works and other miscellaneous works on EPC basis including 5-year defect liability period of all works.
2. The bidder shall quote his firm and fixed price for the entire work under this Contract, defined in more details in various sections of this bid document.
3. The rates and prices shall be submitted in the electronic formats given by Silvassa e-Procurement System “[www.dnhtenders.gov.in](http://www.dnhtenders.gov.in)”, rates and prices received in any other formats will be rejected and the Bids will be disqualified.
4. It will be entirely at the discretion of the Employer to accept or reject the bidder’s proposal, without giving any reasons whatsoever and the bidder shall not be permitted to withdraw his bid on this account.
5. No column in the Price Bid shall be left blank. In case the price is not quoted for any item, the bidder shall be deemed to have covered the cost of such items (according to the requirements of the bid document) elsewhere in the prices quoted for other items and no extra payment on this account will be made. For evaluation purpose the rate of item left blank by the Bidder will be considered zero (0) to sum up the price of that part. The wording in the item description is for subject matter guidance only; clause references are indicative only and all other relevant clauses shall also be referred to.
6. The prices shall allow for all the works covered under the bid and all liabilities and contractual obligations unless otherwise specified elsewhere in the RFP.
7. Items not specifically listed in his Price Schedules, but required to be executed for satisfactory working/safety of the system as specified, will not be separately paid for by the Employer when executed and shall be deemed to be already covered by other items and rates listed in the price sheets. No extra payment shall be given for any item which is required to complete and perform the project.
8. The bidder shall be deemed to have allowed in his price for provision, maintenance and final removal of all temporary works of whatsoever nature required for construction works for the proper execution of works. The rates shall also be deemed to include any works and setting out that may be required to be carried out for laying out of all the works involved.
9. The Price Schedules are to be read in conjunction with the conditions of Contract, the Specifications and other sections of these bid documents and these documents are to be taken as mutually explanatory of one another.
10. The bidder shall interpret the data furnished and carry out any additional survey work or investigation work required at his own cost. The prices quoted shall also include the cost of materials utilized for testing.

11. The bidder should acquaint himself with the site conditions including the access to work site. The successful bidder shall have to make suitable access to work sites at his own cost. These accesses will be used by the other contractors working for Silvassa Smart City Limited.
12. The item descriptions in price schedule are for subject matter guidance only and the prices shall include all the equipments / materials / accessories and services required as per the specifications.
13. If applicable, 1% of the value of work will be deducted from the Running bill against labour cess, which shall be non-refundable.
14. Third Party Inspection / CSC agency will be deployed and charges of the same will be borne by SSCL.
15. Any expenditure incurred by Third Party inspection / CSC agency for the Improper and defective work carried by the contractor shall be recovered from the contractor.
16. The prices shall be quoted inclusive of all taxes, royalties and duties prevailing at the time of submission of the bids. Statutory variation if any during the currency of contract shall have to borne by the agency which shall be not reimbursed by the SSCL.
17. The rates should be quoted inclusive of GST and all other applicable taxes.
18. Agency shall have to take Insurance policy and intimate to Silvassa Smart City Limited along with the evidence within time limit. In case of noncompliance entire responsibility shall be rest with the agency and required amount shall be recovered from any due amount of the agency.
19. Silvassa Smart City Limited can recover penalty amount from the agency for not taking the insurance. Though the penalty amount is recovered, responsibility of the agency for taking insurance shall be continued and will not be escaped from the responsibility.
20. Rate quoted by the bidder shall be firm for the entire period of Contract without any escalation in accordance with the Conditions of Contract.
21. The Rate shall also include the cost of materials utilized for testing.
22. The contractor after approval of his detailed designs and drawings shall furnish to the Employer's Representative an initial bill of quantities of all items as mentioned in Price Bid Schedule (to be reviewed and updated periodically). This bill of quantities will be used for assessment of percentage progress of any component at any stage.
23. Measurements jointly taken by the Employer's Representative and the Contractor will be entered in the measurement books and signed jointly by both the parties which shall form the basis for such interim payments.
24. **The contractor shall submit detailed construction programme for the approval of the Engineer-in-charge. The contractor shall submit his interim payment certificate for the works executed in accordance with the approved construction programme and described payment schedule. Payment for interim payment certificate will be done for executed quantities only after certification by Engineer-in-Charge.**

If this declaration is found to be incorrect then without prejudice to any other action that may be taken, my/ our security may be forfeited in full and the tender if any to the extent accepted can be cancelled.

Yours sincerely,

---

Signature of Authorized Signatory (with official seal)

Name:

Designation:

Address:

Date:

Place:

Seal of the Organization:

## 9.12 PQ\_11: Self-Declaration for compliance to procurement guidelines

<<To be printed on Rs. 300/- Stamp Paper>>

Date: DD/MM/YYYY

To,  
The CEO,  
Silvassa Smart City Limited (SSCL),  
1<sup>st</sup> Floor, Silvassa Municipal Council (New SMC Building),  
Silvassa – 396230

Dear Sir,

In response to the Tender Ref. No. \_\_\_\_\_ dated \_\_\_\_\_ for  
“Selection of Implementation Agency for Pan City Infrastructure – ICC, Smart Components And Smart  
Governance in Silvassa City”, as an Owner/Partner/Director of <Name of the Company/ Organization>,  
I/We hereby declare that I have read and agreed to the below clause

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and on sub-contracting to contractors from such countries; I certify that we are not from such a country or if from such a country, have been registered with the Competent Authority and will not sub contract any work to a contractor from such countries unless such contractor is registered with the Competent Authority. I hereby certify that this bidder fulfills all requirements in this regard and is eligible to be considered. Where applicable, evidence of valid registration by the Competent Authority shall be attached

Yours sincerely,

\_\_\_\_\_  
Signature of Authorized Signatory (with official seal)

Name :

Designation :

Address :

Date :

Place :

Seal of the Organization:

## 10 Formats for Technical Bid

### 10.1 General Instructions for Preparation of the Technical Proposal

- i. Bidders have to submit a very structured and organized technical bid, which will be analysed by the Technical Evaluation Committee for different compliances with regards to the requirements of the project. The document submitted must be searchable and well indexed without any handwritten material. Since the cut-off marks for Technical bid Score is 70, the quality and completeness of the information submitted by the bidder will matter a lot. All the documents must be submitted in one file only.
- ii. Bidder is expected to divide its bid in following sections/documents:

#### a. Bidder's Competence to Execute the Project

This document should bring about the capability of the firm to execute this project. Some of the required documents are as follows:

- Financial capability of the bidder in required formats and supporting documents
- Experience of executing similar projects

#### b. Technical Proposal

The technical proposal should specify the following:

- Understanding of the project
- Clear articulation and description of the design and technical solution and various components including (infrastructure architecture, application architecture, data architecture and physical street layer architecture)
- Details of the application software proposed
- Integration approach with existing infrastructure
- Reasoning for selection of the proposed technology over other options
- Use cases of how Command Centre will be used for integrated operations and emergency operations (at least 15 use cases)
- Business model for revenue generation across smart city components (without disclosure of any commercials)
- Strength of the bidder to provide services including examples or case-studies of similar solutions deployed for other clients
- Clearly articulate the Strategy and Approach & Methodology for Design, Installation, Configuration and Maintenance of hosted components, data recovery, hosting infrastructure of the project.
- Approach and Methodology for management of SLA requirements specified in the bid. Bidder is required to clearly articulate how the SLA requirements would be adhered.
- Detailed Project Plan with timelines, resource allocation, milestones etc. for supply, installation and commissioning of the various project components.
- The Operations and Risk Mitigation plan.

#### c. Other Details

- **Bill of Material & BoQ:** The bidder should give details of all the proposed IT and Non-IT components, without specifying the costs in the format given below. Please note that the bid shall get disqualified if Bidder gives price details in the technical document.



#	Name of Item	OEM/Make	Exact Model	Part No.	Quantity/ License Count Offered
1.	<Item 1>				
2.	<Item 2>				
3.	<Item 3>				
4.	<Item 4>				

- Make and Model (one & only one unique Make and Model per BOQ item is required) of all IT as well as Non-IT components along with datasheets highlighting Technical Specification (Ref: Volume 2) parameters in each datasheet for compliances.
- Compliance to Technical and Functional specifications as mentioned in Volume 2 against each specification feature.
- CVs of the Key Manpower proposed (Qualification of each resource is provided in Volume 1 & 2).

**d. OEM Details**

- OEMs of all proposed equipment/components should have existence in India for last three years as on 31<sup>st</sup> March 2020.
- For OEM selection criteria, please refer RFP Vol. 2, Section “OEM Selection Criteria”.
- During the demo at technical evaluation stage, the Technical Committee will give special attention to verify the quality, robustness and appropriateness of the proposed equipment/ components for city conditions. If any brand/product is found unsuitable, bidder may get dis-qualified or may be asked to replace the product with better brands meeting the tender requirements. Without any cost implication or changes in commercial bid.

**e. Proposed Team for the Project**

- As specified in Technical Bid Evaluation Framework, VMC would give importance to the right people proposed for the project. Bidder may propose different people for different skill-sets required and different responsibilities (during Project Implementation and Post-Implementation). Following documentation is expected in this section:
  - (a) Overall project team (for both Implementation and Post Implementation support phases)
  - (b) Escalation chart for the entire project duration
  - (c) Summary table providing qualification, experiences, certifications and other relevant details
  - (d) Detail CVs in the format attached
- All above mentioned documents shall have an index page with page numbers specified for all the key information/headers on company’s cover letter.
- For the application portfolio of all software equipment/components, standing of the Software equipment/components in the IMS/IDC/Gartner/Forrester Reports shall be considered. For Gartner, in the magic quadrant for components/products from OEM appearing in Leaders and Challengers segment must be proposed. During the demo at technical evaluation stage, the Technical Committee will give special attention to verify the quality, robustness and appropriateness of the proposed equipment/components for city

## 10.2 Documents Checklist for Technical Bid

#	Documentsto be submitted	Submitted (Y / N)	(Page No.)
1.	Auditor's Certificate for Net Worth of Bidder (TQ_1)		
2.	Certificate from the statutory auditor/CA clearly specifying the annual turnover from ICT/ITES business for last three financial years (Form TQ_2)		
3.	Undertaking for Technically Qualified Full-time Professionals on Company's Payroll (working on ICT Projects) (TQ_3)		
4.	Details of Experience of projects Executing Large ICT Projects (TQ_4)		
5.	Details of Experience of Projects Executing Semi-Actuated/ Fully-Actuated Traffic Signals (TQ_5)		
6.	Details of Experience of Data Centre and Disaster Recovery projects (TQ_6)		
7.	Details of Experience of Projects Executing Variable Messaging Displays/ Digital Signboards (TQ_7)		
8.	Details of Experience of Executing IoT Projects including Smart Street Lights, Smart Parking and /or Environmental sensor (TQ_8)		
9.	Details of Experience – Surveillance Projects with Required Network Infrastructure (TQ_9)		
10.	Details of Experience of Installation of Command and Control Centre (TQ_10)		
11.	Details of Experience of Execution of Enterprise Resource Planning (ERP) Projects (TQ_11)		
12.	Details of Experience of Execution of Geographic Information System (GIS) Projects (TQ_12)		
13.	Understanding of the Manpower/ Professionals to be deployed on the project (TQ_13)		
14.	CV of the proposed Manpower/ Professionals to be deployed on the project (TQ_14)		
15.	Format for Authorization Letters from OEMs (TQ_15)		
16.	Format for Specifying Make and Model (TQ_16)		
17.	Compliance to Technical and Functional Specifications from the Bidder as per Annexure 1,2 and 3 in Volume II of RFP		
18.	Compliance to Technical and Functional Specifications from the OEM for components mentioned Annexure 1, 2 and 3 in Volume II of RFP		
19.	Datasheets highlighting the Technical Specification parameters in each datasheet for compliances as mentioned in Volume II of RFP		
20.	Technical Proposal as mentioned in Section 10		

### 10.3 TQ\_1: Auditor's Certificate for Net Worth of Bidder

Date: DD/MM/YYYY

To,  
The CEO,  
Silvassa Smart City Limited (SSCL),  
1<sup>st</sup> Floor, Silvassa Municipal Council (New SMC Building),  
Silvassa – 396230

Dear Sir,

This is to certify that the Net Worth as per books and records of \_\_\_\_\_  
for the following financial years are as under.

NOTE: To be filled for the bidder.

Sr.	Financial Year Ending	Net Worth (in INR Crores)
1.	31 March 2019 ( Fill only if the value is not available for FY 2019-20)	
2.	31 March 2020	

I further certify that I am competent officer in my company to make this declaration.

Yours sincerely,

\_\_\_\_\_  
Signature of Authorized Signatory (with official seal)

Name :  
Designation :  
Address :  
Telephone & Fax :  
E-mail Address :

**Note:** To be submitted with any other supporting details specified/required as document proof.

## 10.4 TQ\_2: Bidder Average Annual Turnover from ICT/ITES Business

<<To be printed on Bidder Company's Letterhead and signed by Authorized Signatory>>

Date: DD/MM/YYYY

To,  
The CEO,  
Silvassa Smart City Limited (SSCL),  
1<sup>st</sup> Floor, Silvassa Municipal Council (New SMC Building),  
Silvassa – 396230

**Subject:** “Selection of Implementation Agency for Pan City Infrastructure – ICCS, Smart Components and Smart Governance in Silvassa City”.

Dear Sir,

I have carefully gone through the Terms & Conditions contained in the RFP document for “**Selection of Implementation Agency for Pan City Infrastructure – ICCS, Smart Components And Smart Governance in Silvassa City**”. I hereby declare that below are the details regarding Overall Turnover for our organization for last 3 financial years.

#	Details	FY 2016-17 (in INR Crores) (i)	FY 2017-18 (in INR Crores) (ii)	FY 2018-19 (in INR Crores) (iii)	FY 2019-20 (in INR Crores) (iv)	Average Turnover [(i)+(ii)+ (iii)/3] Or [(ii)+(iii)+ (iv)/3]
1.	Average Annual Turnover - Bidder					
Submit audited financial statements for: <ul style="list-style-type: none"> <li>FY 2016-17, 2017-18 and 2018-2019 (in case audited statements for FY 2019-20 are not available)</li> </ul> or <ul style="list-style-type: none"> <li>FY 2017-18, 2018-19 and 2019-2020 (in case audited statements for FY 2019-20 are available)</li> </ul> *** Average Turnover will be calculated as follows: <ul style="list-style-type: none"> <li>(i)+(ii)+(iii)/3 (in case details for FY 2019-20 are not available)</li> </ul> or <ul style="list-style-type: none"> <li>(ii)+(iii)+(iv)/3 (in case details for FY 2019-20 are available)</li> </ul>						

Contact details of officials for future correspondence regarding the bid process:

Details	Authorized Signatory (Primary Contact)	Secondary Contact
Name		
Title		
Company Address		

Mobile		
Fax		

I further certify that I am competent officer in my company to make this declaration.

Yours sincerely,

---

Signature of Authorized Signatory (with official seal)

Name :

Designation :

Address :

Telephone & Fax :

E-mailAddress :

Note: To be submitted with any other supporting details specified/ required as document proof.

**10.5 TQ\_3: Undertaking for Full-time Professionals on Company's Payroll (working on ICT Projects)**

<<To be printed on Company's Letterhead and signed by Authorized Signatory>>

Date: DD/MM/YYYY

To,  
The CEO,  
Silvassa Smart City Limited (SSCL),  
1<sup>st</sup> Floor, Silvassa Municipal Council (New SMC Building),  
Silvassa – 396230

Dear Sir,

I have carefully gone through the Terms & Conditions contained in the RFP document for “**Selection of Implementation Agency for Pan City Infrastructure – ICC, Smart Components And Smart Governance in Silvassa City**”. I hereby declare that my company <company's name> has <number > professionals as on 31<sup>st</sup> March 2020 working on ICT projects.

NOTE: To be filled for the bidder.

#	Name of the Resource	Employee Id
1.		
2.		
3.		

I further certify that I am competent officer in my company to make this declaration.

Yours sincerely,

\_\_\_\_\_  
Signature of Authorized Signatory (with official seal)

Name :  
Designation :  
Address :  
Telephone & Fax :  
E-mailAddress :

Note: To be submitted with any other supporting details specified/ required as document proof.

## 10.6 TQ\_4: Details of Experience of Executing Large ICT/ ITES Projects

<<To be printed on Company's Letterhead and signed by Authorized Signatory>>

Date: DD/MM/YYYY

To,  
The CEO,  
Silvassa Smart City Limited (SSCL),  
1<sup>st</sup> Floor, Silvassa Municipal Council (New SMC Building),  
Silvassa – 396230

Dear Sir,

I/ we have carefully gone through the Terms & Conditions contained in the RFP document for “**Selection of Implementation Agency for Pan City Infrastructure – ICCC, Smart Components And Smart Governance in Silvassa City**”. I/ we hereby declare that below are the details regarding relevant work that has been taken up by our company.

NOTE: To be filled separately for each project undertaken by the bidder.

Name of the Project	Bidder				
	Project 1	Project 2	Project 3	-	Project n
<b>General Information</b>					
Client for which the project was executed					
Name of the client contact person(s)					
Designation of client contact person(s)					
Contact details of the client contact person(s)					
<b>Project Details</b>					
Description of the project					
Scope of work of the bidder					
Deliverables of the bidder					
Technologies used					
<b>Other Details</b>					
Total cost of the project					
Total cost of the services provided by the bidder					
Duration of the project (number of months, start date, completion date, current status)					
Other relevant information <for each type of the project type>					
<b>Mandatory Supporting Documents</b>					
Work Order/Contract for the project					
Client certificate giving present status of the project and view of the quality of services by the bidder					

I/ we further certify that, I/ we am/ are competent officer in my company to make this declaration.

Yours sincerely,

---

Signature of Authorized Signatory (with official seal)

Name :

Designation :

Address :

Telephone & Fax :

E-mailAddress :

**Note:** To be submitted with any other supporting details specified/ required as document proof.



## 10.7 TQ\_5: Details of Experience of Executing Semi-Actuated/ Fully-Actuated Traffic Signals

<<To be printed on Company's Letterhead and signed by Authorized Signatory>>

Date: DD/MM/YYYY

To,  
The CEO,  
Silvassa Smart City Limited (SSCL),  
1<sup>st</sup> Floor, Silvassa Municipal Council (New SMC Building),  
Silvassa – 396230

Dear Sir,

I/ we have carefully gone through the Terms & Conditions contained in the RFP document for “**Selection of Implementation Agency for Pan City Infrastructure – ICCC, Smart Components And Smart Governance in Silvassa City**”. I/ we hereby declare that below are the details regarding relevant work that has been taken up by our company.

NOTE: To be filled separately for each project undertaken by the bidder.

Name of the Project	Bidder				
	Project 1	Project 2	Project 3	-	Project n
<b>General Information</b>					
Client for which the project was executed					
Name of the client contact person(s)					
Designation of client contact person(s)					
Contact details of the client contact person(s)					
<b>Project Details</b>					
Description of the project					
Scope of work of the bidder					
No. of Integrated Control Room/City-wide Control Room/Emergency Response Centre System implemented					
Deliverables of the bidder					
Technologies used					
Outcomes of the project					
<b>Other Details</b>					
Total cost of the services provided by the bidder					
Duration of the project (number of months, start date, completion date, current status)					
Other relevant information <for each type of the project type, like surveillance/traffic/ disaster management/city operation functions>					
<b>Mandatory Supporting Documents</b>					
Work Order/Contract for the project					

Name of the Project	Bidder				
	Project 1	Project 2	Project 3	-	Project n
Client certificate giving present status of the project and view of the quality of services by the bidder					

I further certify that I am competent officer in my company to make this declaration.

Yours sincerely,

\_\_\_\_\_  
Signature of Authorized Signatory (with official seal)

Name :

Designation :

Address :

Telephone & Fax :

E-mailAddress :

**Note:** To be submitted with any other supporting details specified/required as document proof.

## 10.8 TQ\_6: Details of Experience of Data Centre and Disaster Recovery projects

<<To be printed on Company's Letterhead and signed by Authorized Signatory>>

Date: DD/MM/YYYY

To,  
The CEO,  
Silvassa Smart City Limited (SSCL),  
1<sup>st</sup> Floor, Silvassa Municipal Council (New SMC Building),  
Silvassa – 396230

Dear Sir,

I/ we have carefully gone through the Terms & Conditions contained in the RFP document for “**Selection of Implementation Agency for Pan City Infrastructure – ICCC, Smart Components And Smart Governance in Silvassa City**”. I/ we hereby declare that below are the details regarding relevant work that has been taken up by our company.

NOTE: To be filled separately for each project undertaken by the bidder.

Name of the Project	Bidder				
	Project 1	Project 2	Project 3	-	Project n
<b>General Information</b>					
Client for which the project was executed					
Name of the client contact person(s)					
Designation of client contact person(s)					
Contact details of the client contact person(s)					
<b>Project Details</b>					
Description of the project					
Scope of work of the bidder					
No. of Data Centre and Disaster Recovery projects implemented					
Deliverables of the bidder					
Technologies used					
Outcomes of the project					
<b>Other Details</b>					
Total cost of the services provided by the bidder					
Duration of the project (number of months, start date, completion date, current status)					
Other relevant information <for each type of the project type, like on-premise/cloud DR etc>					
<b>Mandatory Supporting Documents</b>					
Work Order/Contract for the project					

Name of the Project	Bidder				
	Project 1	Project 2	Project 3	-	Project n
Client certificate giving present status of the project and view of the quality of services by the bidder					

I further certify that I am competent officer in my company to make this declaration.

Yours sincerely,

\_\_\_\_\_  
Signature of Authorized Signatory (with official seal)

Name :

Designation :

Address :

Telephone & Fax :

E-mailAddress :

**Note:** To be submitted with any other supporting details specified/required as document proof.

### **10.9 TQ\_7: Details of Experience of Executing Variable Messaging Displays (VMD's)/ Digital Sign Boards**

<<To be printed on Company's Letterhead and signed by Authorized Signatory>>

Date: DD/MM/YYYY

To,  
The CEO,  
Silvassa Smart City Limited (SSCL),  
1<sup>st</sup> Floor, Silvassa Municipal Council (New SMC Building),  
Silvassa – 396230

Dear Sir,

I/ we have carefully gone through the Terms & Conditions contained in the RFP document for “**Selection of Implementation Agency for Pan City Infrastructure – ICC, Smart Components And Smart Governance in Silvassa City**”. I/ we hereby declare that below are the details regarding relevant work that has been taken up by our company.

NOTE: To be filled separately for each project undertaken by the bidder.

Name of the Project	Bidder				
	Project 1	Project 2	Project 3	-	Project n
<b>General Information</b>					
Client for which the project was executed					
Name of the client contact person(s)					
Designation of client contact person(s)					

Name of the Project	Bidder				
	Project 1	Project 2	Project 3	-	Project n
Contact details of the client contact person(s)					
<b>Project Details</b>					
Description of the project					
Scope of work of the bidder					
No. of Integrated Control Room/City-wide Control Room/Emergency Response Centre System implemented					
Deliverables of the bidder					
Technologies used					
Outcomes of the project					
<b>Other Details</b>					
Total cost of the services provided by the bidder					
Duration of the project (number of months, start date, completion date, current status)					
Other relevant information <for each type of the project type, like surveillance/traffic/ disaster management/city operation functions>					
<b>Mandatory Supporting Documents</b>					
Work Order/Contract for the project					
Client certificate giving present status of the project and view of the quality of services by the bidder					

I further certify that I am competent officer in my company to make this declaration.

Yours sincerely,

\_\_\_\_\_  
Signature of Authorized Signatory (with official seal)

Name :  
Designation :  
Address :  
Telephone & Fax :  
E-mailAddress :

**Note:** To be submitted with any other supporting details specified/required as document proof.

**10.10 TQ\_8: Details of Experience of Executing IoT Projects including Smart Street Lights, Smart Parking and/or Environmental Sensor**

<<To be printed on Company’s Letterhead and signed by Authorized Signatory>>

Date: DD/MM/YYYY

To,  
The CEO,  
Silvassa Smart City Limited (SSCL),  
1<sup>st</sup> Floor, Silvassa Municipal Council (New SMC Building),  
Silvassa – 396230

Dear Sir,

I/ we have carefully gone through the Terms & Conditions contained in the RFP document for “**Selection of Implementation Agency for Pan City Infrastructure – ICCC, Smart Components And Smart Governance in Silvassa City**”. I/ we hereby declare that below are the details regarding relevant work that has been taken up by our company.

NOTE: To be filled separately for each project undertaken by the bidder.

Name of the Project	Bidder				
	Project 1	Project 2	Project 3	-	Project n
<b>General Information</b>					
Client for which the project was executed					
Name of the client contact person(s)					
Designation of client contact person(s)					
Contact details of the client contact person(s)					
<b>Project Details</b>					
Description of the project					
Scope of work of the bidder					
Deliverables of the bidder					
Technologies used					
<b>Other Details</b>					
Total cost of the project					
Total cost of the services provided by the bidder					
Duration of the project (number of months, start date, completion date, current status)					
Other relevant information <for each type of the project type>					
<b>Mandatory Supporting Documents</b>					
Work Order/Contract for the project					
Client certificate giving present status of the project and view of the quality of services by the bidder					

I further certify that I am competent officer in my company to make this declaration.

Yours sincerely,

---

Signature of Authorized Signatory (with official seal)

Name :

Designation :

Address :

Telephone & Fax :

E-mailAddress :

**Note:** To be submitted with any other supporting details specified/ required as document proof.

## 10.11 TQ\_9: Details of Experience of Executing Surveillance Projects with Required Network Infrastructure

<<To be printed on Company's Letterhead and signed by Authorized Signatory>>

Date: DD/MM/YYYY

To,  
The CEO,  
Silvassa Smart City Limited (SSCL),  
1<sup>st</sup> Floor, Silvassa Municipal Council (New SMC Building),  
Silvassa – 396230

Dear Sir,

I/ we have carefully gone through the Terms & Conditions contained in the RFP document for “**Selection of Implementation Agency for Pan City Infrastructure – ICCC, Smart Components And Smart Governance in Silvassa City**”. I/ we hereby declare that below are the details regarding relevant work that has been taken up by our company.

NOTE: To be filled separately for each project undertaken by the bidder.

Name of the Project	Bidder				
	Project 1	Project 2	Project 3	-	Project n
<b>General Information</b>					
Client for which the project was executed					
Name of the client contact person(s)					
Designation of client contact person(s)					
Contact details of the client contact person(s)					
<b>Project Details</b>					
Description of the project					
Scope of work of the bidder					
No. of Integrated Control Room/City-wide Control Room/Emergency Response Centre System implemented					
Deliverables of the bidder					
Technologies used					
Outcomes of the project					
<b>Other Details</b>					
Total cost of the services provided by the bidder					
Duration of the project (number of months, start date, completion date, current status)					
Other relevant information <for each type of the project type, like surveillance/traffic/ disaster management/city operation functions>					
<b>Mandatory Supporting Documents</b>					
Work Order/Contract for the project					



Name of the Project	Bidder				
	Project 1	Project 2	Project 3	-	Project n
Client certificate giving present status of the project and view of the quality of services by the bidder					

I further certify that I am competent officer in my company to make this declaration.

Yours sincerely,

\_\_\_\_\_  
Signature of Authorized Signatory (with official seal)

Name :

Designation :

Address :

Telephone & Fax :

E-mailAddress :

**Note:** To be submitted with any other supporting details specified / required as document proof.

## 10.12 TQ\_10: Details of Experience of Installation of Command and Control Centre

<<To be printed on Company's Letterhead and signed by Authorized Signatory>>

Date: DD/MM/YYYY

To,  
The CEO,  
Silvassa Smart City Limited (SSCL),  
1<sup>st</sup> Floor, Silvassa Municipal Council (New SMC Building),  
Silvassa – 396230

Dear Sir,

I/ we have carefully gone through the Terms & Conditions contained in the RFP document for “**Selection of Implementation Agency for Pan City Infrastructure – ICC, Smart Components And Smart Governance in Silvassa City**”. I/ we hereby declare that below are the details regarding relevant work that has been taken up by our company.

NOTE: To be filled separately for each project undertaken by the bidder.

Name of the Project	Bidder				
	Project 1	Project 2	Project 3	-	Project n
<b>General Information</b>					
Client for which the project was executed					
Name of the client contact person(s)					
Designation of client contact person(s)					
Contact details of the client contact person(s)					
<b>Project Details</b>					
Description of the project					
Scope of work of the bidder					
Deliverables of the bidder					
Technologies used					
<b>Other Details</b>					
Total cost of the project					
Total cost of the services provided by the bidder					
Duration of the project (number of months, start date, completion date, current status)					
Other relevant information <for each type of the project type>					
<b>Mandatory Supporting Documents</b>					
Work Order/Contract for the project					
Client certificate giving present status of the project and view of the quality of services by the bidder					

I further certify that I am competent officer in my company to make this declaration.

Yours sincerely,

---

Signature of Authorized Signatory (with official seal)

Name :

Designation :

Address :

Telephone & Fax :

E-mailAddress :

Note: To be submitted with any other supporting details specified/ required as document proof.

### 10.13 TQ\_11: Details of Experience of Execution of Enterprise Recourse Planning (ERP) Projects

<<To be printed on Company's Letterhead and signed by Authorized Signatory>>

Date: DD/MM/YYYY

To,  
The CEO,  
Silvassa Smart City Limited (SSCL),  
1<sup>st</sup> Floor, Silvassa Municipal Council (New SMC Building),  
Silvassa – 396230

Dear Sir,

I/ we have carefully gone through the Terms & Conditions contained in the RFP document for “**Selection of Implementation Agency for Pan City Infrastructure – ICCC, Smart Components And Smart Governance in Silvassa City**”. I/ we hereby declare that below are the details regarding relevant work that has been taken up by our company.

NOTE: To be filled separately for each project undertaken by the bidder.

Name of the Project	Bidder				
	Project 1	Project 2	Project 3	-	Project n
<b>General Information</b>					
Client for which the project was executed					
Name of the client contact person(s)					
Designation of client contact person(s)					
Contact details of the client contact person(s)					
<b>Project Details</b>					
Description of the project					
Scope of work of the bidder					
Modules under scope of work					
Deliverables of the bidder					
Technologies used					
<b>Other Details</b>					
Total cost of the project					
Total cost of the services provided by the bidder					
Duration of the project (number of months, start date, completion date, current status)					
Other relevant information <for each type of the project type>					
<b>Mandatory Supporting Documents</b>					
Work Order/Contract for the project					
Client certificate giving present status of the project and view of the quality of services by the bidder					

I further certify that I am competent officer in my company to make this declaration.

Yours sincerely,

---

Signature of Authorized Signatory (with official seal)

Name :  
Designation :  
Address :  
Telephone & Fax :  
E-mailAddress :

Note: To be submitted with any other supporting details specified/ required as document proof.

## 10.14 TQ\_12: Details of Experience of Execution of Geographic Information System (GIS) Projects

<<To be printed on Company's Letterhead and signed by Authorized Signatory>>

Date: DD/MM/YYYY

To,  
The CEO,  
Silvassa Smart City Limited (SSCL),  
1<sup>st</sup> Floor, Silvassa Municipal Council (New SMC Building),  
Silvassa – 396230

Dear Sir,

I/ we have carefully gone through the Terms & Conditions contained in the RFP document for “**Selection of Implementation Agency for Pan City Infrastructure – ICCC, Smart Components And Smart Governance in Silvassa City**”. I/ we hereby declare that below are the details regarding relevant work that has been taken up by our company.

NOTE: To be filled separately for each project undertaken by the bidder.

Name of the Project	Bidder				
	Project 1	Project 2	Project 3	-	Project n
<b>General Information</b>					
Client for which the project was executed					
Name of the client contact person(s)					
Designation of client contact person(s)					
Contact details of the client contact person(s)					
<b>Project Details</b>					
Description of the project					
Scope of work of the bidder					
Deliverables of the bidder					
Technologies used					
<b>Other Details</b>					
Total cost of the project					
Total cost of the services provided by the bidder					
Duration of the project (number of months, start date, completion date, current status)					
Other relevant information <for each type of the project type>					
<b>Mandatory Supporting Documents</b>					
Work Order/Contract for the project					
Client certificate giving present status of the project and view of the quality of services by the bidder					

I further certify that I am competent officer in my company to make this declaration.

Yours sincerely,

---

Signature of Authorized Signatory (with official seal)

Name :

Designation :

Address :

Telephone & Fax :

E-mailAddress :

Note: To be submitted with any other supporting details specified/ required as document proof.

### 10.15 TQ\_13: Undertaking for Manpower proposed to be Deployed on Project

<<To be printed on Company's Letterhead and signed by Authorized Signatory>>

Date: DD/MM/YYYY

To,  
The CEO,  
Silvassa Smart City Limited (SSCL),  
1<sup>st</sup> Floor, Silvassa Municipal Council (New SMC Building),  
Silvassa – 396230

Dear Sir,

I/ we have carefully gone through the Terms & Conditions contained in the RFP document for “**Selection of Implementation Agency for Pan City Infrastructure – ICCC, Smart Components And Smart Governance in Silvassa City**”. I/ we hereby declare that following resources are being proposed for the project.

#	Proposed Position	Resource Name	Proposed CV Compliance
1.	Project Manager		
2.	Command & Control Centre Expert		
3.	VMS Expert		
4.	Surveillance Expert		
5.	Network & Security Expert		
6.	Data Centre Expert		
7.	ERP Functional Expert		
8.	GIS Expert		
9.	Any other resources		

This is Certify that, the above information/ details are correct and authenticated, if it found to be incorrect, then without prejudice to any other action that may be taken, my/ our security may be forfeited in full and the tender if any to the extent accepted can be cancelled.

Yours sincerely,

\_\_\_\_\_  
Signature of Authorized Signatory (with official seal)

Name :  
Designation :  
Address :  
Telephone & Fax :  
E-mailAddress :

**Note:** To be submitted with any other supporting details specified/ required as document proof.





### 10.16 TQ\_14: CVs of the Manpower Proposed

<<CV of the proposed Manpower to be submitted in the following format>>

**Reference:** Tender No: <No> dated <DD/MM/YYYY>

1.	Name of the Staff																	
2.	Current Designation in the Organization																	
3.	Proposed Role in the Project																	
4.	Proposed Responsibilities in the Project																	
5.	Date of Birth																	
6.	Education	▪ <Degree>/<Diploma>, <College/University>, <Year of Passing>																
7.	Key Training and Certifications																	
8.	Language Proficiency	<table border="1"> <thead> <tr> <th>Language</th> <th>Reading</th> <th>Writing</th> <th>Speaking</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Language	Reading	Writing	Speaking												
Language	Reading	Writing	Speaking															
9.	Employment Record (For the Total Relevant Experience)	<table border="1"> <thead> <tr> <th>From / To:</th> <th>Employer</th> <th>Position Held</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table>	From / To:	Employer	Position Held													
From / To:	Employer	Position Held																
10.	Total No. of Years of Work Experience																	
11.	Total No. of Years of Experience for the Role Proposed																	
12.	Highlights of relevant assignments handled and significant accomplishments	<p>Use following format for each project</p> <table border="1"> <tr> <td>Name of Assignment/Project:</td> <td></td> </tr> <tr> <td>Year:</td> <td></td> </tr> <tr> <td>Location:</td> <td></td> </tr> <tr> <td>Client:</td> <td></td> </tr> <tr> <td>Main Project Features:</td> <td></td> </tr> <tr> <td>Positions Held:</td> <td></td> </tr> <tr> <td>Activities Performed:</td> <td></td> </tr> </table>	Name of Assignment/Project:		Year:		Location:		Client:		Main Project Features:		Positions Held:		Activities Performed:			
Name of Assignment/Project:																		
Year:																		
Location:																		
Client:																		
Main Project Features:																		
Positions Held:																		
Activities Performed:																		

**10.17 TQ\_15: Format for Authorization Letters from OEMs**

<<To be printed on OEM's Letterhead and signed by Authorized Signatory of OEM>>

Date: DD/MM/YYYY

To,  
The CEO,  
Silvassa Smart City Limited (SSCL),  
1<sup>st</sup> Floor, Silvassa Municipal Council (New SMC Building),  
Silvassa – 396230

**Subject:** "Selection of Implementation Agency for Pan City Infrastructure – ICCS, Smart Components And Smart Governance in Silvassa City" – Authorization Letter from OEMs.

**Reference:** Tender No: <No> dated <DD/MM/YYYY>

Dear Sir,

We \_\_\_\_\_, (name and address of the manufacturer) who are established and reputed manufacturers of \_\_\_\_\_ having factories at \_\_\_\_\_ (addresses of manufacturing/development locations) do hereby authorize M/s \_\_\_\_\_ (name and address of the bidder) to bid, negotiate and conclude the contract with you against the above mentioned tender for the above equipment/software manufactured/developed by us.

We herewith certify that the supplied and installed equipment / software products are not end of the life and we hereby undertake to provide onsite support & provide free update and upgrade the equipment / software for the duration of 5 years from the date Go-Live and completion of warranty period (5 year).

Yours faithfully,

(Signature of the Authorized Signatory of OEM)  
Name:  
Designation:  
Seal:  
Date:  
Place:  
Business Address:

(Signature of the Authorized Signatory of Bidder)  
Name:  
Designation:  
Seal:  
Date:  
Place:  
Business Address:

## 10.18 TQ\_16 Format for specifying Make and Model

Definitions:

- Bidder Compliance is defined as the compliance to the Functional, Technical specifications and Datasheet mentioned in the Volume II of the tender document on Bidder Letter Head
- OEM Compliance is defined as the compliance to the Functional and Technical specifications mentioned in the Volume II of the tender document and TQ\_15 in the Volume 1 of the tender document on OEM Letter Head

<<To be printed on OEM's Letterhead and signed by Authorized Signatory of OEM>>

#	Description	Warra nty Period	Propos ed Make	Proposed Model/Ver sion	Bidder Complia nce	OEM Complia nce
<b>CCC Components</b>						
1	Video Wall Solution- 55" LED					
2	Video wall controller with wall management software					
3	Operator Workstation (CCC and NOC) with 2 monitors (22")					
4	Operator Workstation (Helpdesk) with 1 monitor (22")					
5	Laptop					
6	Office Productivity Suite					
7	Network Colour Laser Printer					
8	Network B/w Laser Printers					
9	Network B/w Heavy Duty Laser Printers					
10	Multi-Function Printer (MFP)					
11	IP Phone					
12	Indoor Fixed Dome Cameras for internal surveillance					
13	Wifi Access for CCC					
14	Fire Safety System with alarms					
15	Access Control System					
16	IP PABX for CCC					
17	Digital Set top box					
<b>War Room &amp; Meeting Room components</b>						
18	Video Conferencing Unit					
19	55" LED display to present critical information Display (War Room and Conference Room)					
20	Microphone with respective accessories					
<b>Helpdesk/Contact Centre components</b>						
21	Headphones					

22	SMS Gateway modem					
<b>Networking Components</b>						
23	Core Router					
24	Core Switch					
25	L3 Switch					
26	L2 Switch					
27	Server load balancer					
28	Internet Router					
29	KVM Switch/Module					
<b>Non-IT components</b>						
30	42 U Racks for Networking					
31	42 U Racks for servers and storage					
32	Online UPS with battery backup					
<b>Storage &amp; Servers</b>						
33	Primary Storage with 2 no. of SAN Switches & Complete mounting accessories					
34	Secondary Storage - Tape Drive & Library					
35	Blade Servers					
36	Chassis for Blade Server					
<b>Cyber Security Components</b>						
37	Firewall (External) {1+1 in HA Mode}					
38	Firewall (Internal) {1+1 in HA Mode}					
39	Data Loss Protection (DLP)					
40	Anti - Advanced Persistent Threat (Anti-APT)					
41	Anti - Distributed Denial of Service (DDoS)					
42	Security Information and Event Management (SIEM)					
43	Network Access Control (NAC) including Patch Management					
44	IDAM Solution (1+1 in HA mode)					
45	Host Intrusion Prevention System (HIPS)					
46	Web Application Firewall (WAF)					
<b>Active components and Junction box</b>						
47	Access Switch L2 Industrial Grade					
48	Electricity Metres					
49	Field Junction Box/Cabinets for all components					
50	Online field UPS with Battery Bank for 2 hours					
<b>Active and Passive components for Buildings</b>						
51	Indoor Fixed Dome Cameras for internal surveillance					

52	2 Megapixel Full HD IR IP Vandal proof Bullet Camera with Varifocal Lens					
53	8 channel Network Video Recorder (NVR)					
54	32" LED display					
55	8 Port Managed PoE/PoE+ Network switch					
56	UPS with 1 hour backup					
56	9U Rack					
<b>Surveillance and Traffic Enforcement components</b>						
57	Fixed box/Overview Camera					
58	PTZ Camera					
59	ANPR camera					
60	IR Illuminator					
61	E-challan handheld devices					
<b>ATCS Components</b>						
62	ATCS Traffic Controller with all mounting accessories					
63	Countdown timer (CDT) with all mounting accessories					
64	Vehicle Detector Camera with all mounting accessories					
65	Cantilever poles					
66	Standard poles for Traffic Signals					
67	Traffic Light Aspects - Red					
68	Traffic Light Aspects - Green (Green Straight, Green Right, Green Left)					
69	Traffic Light Aspects - Amber					
70	Pedestrian lamp heads - Stop & Walk Man					
<b>Variable Messaging Display and Environmental Sensor</b>						
71	VMD (8m*3m)					
72	VMD (3m*1.5m)					
73	Environmental Sensor					
<b>Smart Street lights</b>						
74	Streetlight controller & dimming driver					
<b>Street bay parking</b>						
75	Surface mount magnetic sensors					
76	Handheld device with scanner and printer					
77	Other, if any					

## **11 Format for Commercial Bid**

### **General Instructions**

1. Bidder should provide all prices as per the prescribed format under this Annexure.
2. All the prices are to be entered in Indian Rupees (INR) only.
3. Prices indicated in the schedules shall be inclusive of all taxes, duties and levies etc. The prices should also specify five year support cost as per provided formats.
4. It is mandatory to provide breakup of all taxes, duties and levies wherever asked for.
5. SSCL reserves the right to ask the SI to submit proof of payment against any of the taxes, duties and levies indicated.
6. SSCL shall take into account all taxes, duties and levies for the purpose of evaluation.
7. The Bidder/ SI needs to account for all Out of Pocket expenses due to lodging, boarding and other related items.
8. Variation in quantities of individual items shall be permitted. The successful bidder shall not object to the upward or downward variation in quantities of any item without compromising the features & functional requirement as per RFP.
9. Bidder shall be bound to give same or more % discount on the list price of the OEMs on the future purchases (additional purchases within the contract period) by SSCL/SMC/Traffic Police Dept. Bidder shall ensure that the future products supplied are of latest specifications as per the OEM roadmap.
10. For the purpose of evaluation of Commercial Bids, SSCL shall make appropriate assumptions to arrive at a common Bid Price for all the bidders. This however shall have no co-relation with the Contract value or actual payment to be made to the bidder.
11. SSCL also intends to utilize various rates obtained through this tender for requirements across various departments. Bidders are requested to factor this larger demand and give the best possible rate to SSCL.
12. No escalations of prices will be considered under any circumstances.
13. The software licenses provided should be perpetual and at enterprise level such that SSCL or SMC (or any entity as determined by SSCL) can use the software products irrespective of number of users and number of field devices (sensors, cameras, etc.) or number of cores of computer. Additions to users or field devices or number of cores will have to be done at no additional cost.

Format for Commercial Bid are as follows,

Format for Commercial Bid are as follows, bidder should submit the commercial bid in this format only. Any other format for Commercial Bid will not be considered for the evaluation.

### 11.1 Summary of Cost Estimates

<b>Integrated CCC and Smart Solutions in Silvassa City</b>				
<b>Summary of Cost Estimates</b>				
<b>Sr. No.</b>	<b>Project Area</b>	<b>Schedule</b>	<b>Estimated Cost in INR</b>	<b>In INR Crore</b>
<b>CAPITAL COST (CAPEX) - (I)</b>				
1	Command and Control Centre (CCC)	A		
2	Integration with CCC	B		
3	Data Centre (DC) Hardware	C		
4	Data Centre Application and Software	D		
5	Training, Certification and Audit	E		
6	Enterprise Resource Planning (ERP), Mobile Applications and Web Portal	F		
7	Geospatial Information System (GIS)	G		
8	Active Components and Junction Box including Earthing	H		
9	Traffic Enforcement System and Surveillance	I		
10	Adaptive Traffic Control System (ATCS)	J		
11	Video Messaging Display (VMD) and Environmental Sensors	K		
12	Smart Street Lights	L		
13	Smart Bay Parking Management System- Street Bay Parking	M		
14	Architecture Works	A1		
15	Civil Works	A2		
16	Electrical Works	A3		
17	Fire Fighting Works	A4		
18	HVAC System	A5		
19	Furniture	A6		
<b>Total CAPEX (I)</b>				



<b>OPERATIONAL EXPENSE (OPEX)- (II)</b>							
<b>Sr. No</b>	<b>Item Description</b>	<b>Reference Schedule</b>	<b>Total 1st Year Rate (INR)</b>	<b>Total 2nd Year Rate (INR)</b>	<b>Total 3rd Year Rate (INR)</b>	<b>Total 4th Year Rate (INR)</b>	<b>Total 5th Year Rate (INR)</b>
1	Bandwidth Charges	N					
2	Services for Disaster Recovery Infrastructure	O					
3	Manpower during O&M period	P					
4	Comprehensive Annual Maintenance Support	Q					
5	Other Services	R					
6	Operation & Maintenance of all types of Electrical, Mechanical, Internal Plumbing, Freighting, Electro-mechanical instruments & power, water cost.	A7					
<b>OPEX for 5 Years (II)</b>							
<b>Estimated Cost: Grand Total (I + II)</b>							
<b>Total for 5 Years (in Words)</b>							

## 11.2 CAPEX

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
<b>Schedule A - SITC of CCC Setup</b>								
A1	Video Wall Solution- 55" LED (Matrix of 4*3)	Number	12					
A2	Video wall controller with cabling and other fixture and wall management software	Lot	1					
A3	Operator Workstation (CCC and NOC) with 2 monitors (22") with office productivity suite licenses	Number	28					
A4	Operator Workstation (Helpdesk) with 1 monitor (22") with office productivity suite licenses	Number	10					
A5	Laptop for higher management with office productivity suite licenses	Number	2					
A6	Network Colour Laser Printer (A3)	Number	1					
A7	Network B/w Laser Printers (A4)	Number	2					
A8	Network B/w Heavy Duty Laser Printers	Number	1					
A9	Multi-Function Printer (MFP)	Number	2					
A10	IP Phone	Number	51					
A11	Indoor Fixed Dome Cameras for internal surveillance	Number	25					
A12	Wi-Fi Access for CCC	Lot	1					
A13	Networking Cost (Passive Components such as LAN/CAT 6 Cabling)	Lumpsum	1					
A14	Electrical Cabling & Necessary Illumination Devices for CCC, War Room, Helpdesk room, NOC room, Manager(s) room etc.	Lumpsum	1					
A15	IP PABX for CCC including all accessories	Lot	1					
A16	Digital Set top box	Number	2					
A17	Video Conferencing Unit	Number	1					
A18	55" LED display to present critical information Display (War Room)	Number	1					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
A19	Microphone with respective accessories	Number	15					
A20	Headphones	Number	10					
A21	PRI Line (Pair) with all necessary accessories	Number	1					
A22	SMS Gateway modem	Number	1					
A23	Any Other Items	Lumpsum	1					
<b>Schedule B - Integrations with CCC</b>								
B1	Integration of ICCC with Smart street lighting	Lumpsum	1					
B2	Integration of ICCC with Smart Meters	Lumpsum	1					
B3	Integration of ICCC with Smart Parking	Lumpsum	1					
B4	Integration of ICCC with Intelligent Traffic Enforcement	Lumpsum	1					
B5	Integration of ICCC with City Surveillance System	Lumpsum	1					
B6	Integration of ICCC with Adaptive Traffic Control System (ATCS)	Lumpsum	1					
B7	Integration of ICCC with Environment Sensors	Lumpsum	1					
B8	Integration of ICCC and ERP with GIS	Lumpsum	1					
B9	Integration of ICCC with Variable Messaging Display (VMD)	Lumpsum	1					
B10	Integration of ICCC with Bus Terminal/Stops	Lumpsum	1					
B11	Integration of ICCC with SWM	Lumpsum	1					
B12	Integration of ICCC with SCADA (Water and Sewerage)	Lumpsum	1					
B13	Integration of ICCC with Electric Buses	Lumpsum	1					
B14	Integration of ICCC with additional platform for each additional use case	Number	1					
<b>Schedule C - SITC of DC Hardware</b>								
C1	Core Router	Number	2					
C2	Core Switch	Number	2					
C3	L3 Switch	Lot	1					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
C4	L2 Switch	Lot	1					
C5	Server load balancer	Number	2					
C6	Networking Cost (Passive Components)	Lumpsum	1					
C7	Internet Router	Number	2					
C8	KVM Switch/Module	Number	1					
C9	42 U Racks for Networking	Number	2					
C10	42 U Racks for servers and storage	Number	8					
C11	Online UPS with battery backup	Number	1					
C12	Storage with 2 no. of SAN Switches & Complete mounting accessories	Lot	1					
C13	Storage - Tape Drive & Library	Lot	1					
C14	Blade Servers & Chassis	Lot	1					
<b>SITC of Cyber Security Solution</b>								
C15	Firewall (External) {1+1 in HA Mode}	Number	2					
C16	Firewall (Internal){1+1 in HA Mode}	Number	2					
C17	Data Loss Protection (DLP)	Lot	1					
C18	Anti - Advanced Persistent Threat (Anti-APT)	Lot	1					
C19	Anti - Distributed Denial of Service (DDoS)	Lot	1					
C20	Security Information and Event Management (SIEM)	Lot	1					
C21	Network Access Control (NAC) including Patch Management	Lot	1					
C22	IDAM Solution (1+1 in HA mode)	Lot	1					
C23	Host Intrusion Prevention System (HIPS)	Lot	1					
C24	Web Application Firewall (WAF)	Lot	1					
C25	Any Other Cost (Please specify in Technical Bid)	Lumpsum	1					
<b>Schedule D - DC Applications and Software</b>								

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
D1	Enterprise Management System (including SLA Mgmt., Helpdesk Mgmt., Network Mgmt., BMS) + Licenses as required	Lot	1					
D2	Backup software	Lot	1					
D3	Virtualization Software	Lot	1					
D4	DRM (DC-DR Sync) Software	Lot	1					
D5	Anti-virus (Software + License) for workstations	Number	40					
D6	Anti-Virus for Server	Lot	1					
D7	ICCC Software with Perpetual License and unlimited sensors	LS	1					
D8	Call Centre Management (Software + 20 user License)	LS	1					
D9	Video Management Software	Number	1					
D10	Supply & configuration of video management software channel license	Number	124					
D11	Central Management Software for detecting RLVD, No Helmet and Triple Riding	Lot	1					
D12	Central Management Software for detecting Wrong way	Lot	1					
D13	Central Management Software for detecting Speed violation	Lot	1					
D14	Enterprise violations management system for fines and connectivity with Vahan and Sarathi for auto vehicle identification and fines registry	Lot	1					
D15	Variable Messaging Display (Software + License)	Lot	1					
D16	Centralized Software for Smart Street Lights (Including Mobile Apps)	Lot	1					
D17	Smart Parking Software including Dash boarding, reporting & Analytic tools	Lot	1					
D18	Smart Parking POS software	Lot	1					
D19	GIS Software Licenses for Servers	Number	2					
D20	GIS Web Server License	Number	1					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
D21	GIS Software Licenses for Database Servers	Number	1					
D22	GIS Platform License (server based)	Number	1					
D23	GIS Platform - Desktop (Editing license)	Number	3					
D24	ATCS Software Solution	Lot	1					
D25	Software license for Database server	Lot	1					
D26	Software license per servers	Lot	1					
D27	Software license for web server	Lot	1					
D28	Any Other items	Lumpsum	1					
<b>Schedule E - Training , Certifications and Audit</b>								
E1	Functional Training	Batches	14					
E2	Administrative Training	Batches	7					
E3	Sr. Management Training	Batches	7					
E4	ISO 27K certification	Lot	1					
E5	Security Audit (ISO 27k Audit)	Lot	1					
<b>Schedule F - Enterprise Resource Planning , Mobile Application and Web-portal</b>								
F1	Supply and Activation of ERP Licenses	Lot	90					
F2	Implementation Cost for ERP Modules	Lumpsum	1					
F3	Integration Cost for E-Gov Solution	Lumpsum	1					
F4	Integration with GIS	Lumpsum	1					
F5	Integration with Biometric Attendance System	Lumpsum	1					
F6	Development/ Implementation Cost for Web Portal & Mobile App	Lot	1					
F7	Scanning of documents	Lumpsum	1					
F8	Any other items	Lumpsum	1					
<b>Schedule G - GIS</b>								
G1	Satellite Image	Sq. Kilometer	18					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
G2	Processing of Satellite Imagery and Digitization	Sq. Kilometer	18					
G3	Customized GIS Application Development For Water Supply, Storm Water, Sewer, OFC, Gas and Electricity Departments	Lumpsum	1					
G4	Underground utilities survey	Kilometer	122					
G5	Any other items	Lumpsum	1					
<b>Schedule H - SITC of Active components &amp; Junction box including Earthing</b>								
H1	Access Switch L2 Industrial Grade with SFP and Patch Cord	Nos	72					
H2	Fibre Patch cords 20 metres	Units	55					
H3	SITC of Electricity Metres at Junction Boxes	Units	55					
H4	SITC of Field Junction Box/Cabinets for all field components of project	Nos	55					
H5	SITC of Online field UPS with Battery Bank for 2 hours	Nos	55					
<b>SLTC of Passive Component</b>								
H6	SLTC of HDPE Pipe - 50 mm	Mtr.	5500					
H7	SLTC of HDPE Pipe - 90 mm	Mtr.	5500					
H8	SLTC of DWC Pipe - 90 mm	Mtr.	5500					
H9	SLTC of DWC Pipe - 120 mm	Mtr.	5500					
H10	SLTC of Electrical Cable - 3 Core, 2.5 Sqmm Unarmoured Cable	Mtr.	100					
H11	SLTC of Electrical Cable - 3 Core, 2.5 Sqmm armoured Cable	Mtr.	250					
H12	SLTC of Electrical Cable - 7 Core, 1.5 Sqmm Armoured Cable	Mtr.	5000					
H13	SLTC of Electrical Cable - 14 Core, 1.5 Sqmm Armoured Cable	Mtr.	2500					
H14	Removing of existing poles, pole Foundations, Aspects, Damaged Cables, Existing Controller & Shifting to the location as per guideline of Authority.	Mtr.	50					
H15	Trenching - Hard Murrum/Asphalt Road	Mtr.	2750					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
H16	Trenching - HDD	Mtr.	2750					
<b>Leased Line Connectivity</b>								
H17	One Time Charge for Leased Line bandwidth of 2 Mbps Link Between ICCC and end remote locations	Number	16					
H18	One Time Charge for Leased Line bandwidth of 5 Mbps Link Between ICCC and end remote locations	Number	3					
H19	One Time Charge for Leased Line bandwidth of 10 Mbps Link Between ICCC and end remote locations	Number	1					
H20	One Time Charge for Leased Line bandwidth of 20 Mbps Link Between ICCC and end remote locations	Number	24					
H21	One Time Charge for Leased Line bandwidth of 30 Mbps Link Between ICCC and end remote locations	Number	82					
H22	One Time Charge for Leased Line bandwidth of 40 Mbps Link Between ICCC and end remote locations	Number	1					
H23	One Time Charge for Leased Line bandwidth of 50 Mbps Link Between ICCC and end remote locations	Number	4					
H24	One Time Charge for Internet Leased Line for ICCC of 100 Mbps	Number	2					
H25	One Time Charge for Point to Point Leased Line connectivity between DC and DR of 100 Mbps	Number	2					
H26	One Time Charge for Leased Line bandwidth of 20 Mbps Link between DC and check post locations	Number	6					
H27	Any other Items	Lumpsum	1					
<b>Schedule I - Traffic Enforcement and Surveillance</b>								



#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
I1	SITC of Red Light Violation Detection (RLVD) System including <b>No Helmet Detection &amp; Triple Riding detection</b> for covering <b>4 arms &amp; 8 lanes (2 Lanes in each arm)</b> at each junction with complete hardware including ANPR cameras, Overview Cameras, IR Illuminator, Local Processing Unit, with cabling, accessories & mounting infrastructure as required	Traffic Junction	12					
I2	SITC of Red Light Violation Detection (RLVD) System including <b>No Helmet Detection &amp; Triple Riding detection</b> for covering <b>3 arms &amp; 6 lanes (2 lanes in each Arm)</b> at each junction with complete hardware including ANPR cameras, Overview Cameras, IR Illuminator, Local Processing Unit, with cabling, accessories & mounting infrastructure as required	Traffic Junction	4					
I3	SITC of Red Light Violation Detection (RLVD) System including <b>No Helmet Detection &amp; Triple Riding detection</b> for covering <b>4 arms &amp; 6 lanes (2 Lanes in 2 Arms each and 1 lane in remaining 2 Arms each)</b> at each junction with complete hardware including ANPR cameras, Overview Cameras, IR Illuminator, Local Processing Unit, with cabling, accessories & mounting infrastructure as required	Traffic Junction	1					
I4	SITC of Speed Detection System for covering <b>2 lanes</b> in one direction with complete subcomponents including ANPR camera, wide angle evidence camera, IR illuminator, non-intrusive speed sensor with cabling & mounting infrastructure as required	Location	20					
I5	SITC of ANPR System for capturing number plates at <b>2 arms and 4 lanes</b> at each Location with complete hardware including ANPR cameras, Local Processing Unit, with cabling, accessories & mounting infrastructure as required	Location	5					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
I6	SITC of ANPR System for capturing number plates at <b>2 arms and 6</b> lanes at each Location with complete hardware including ANPR cameras, Local Processing Unit, with cabling, accessories & mounting infrastructure as required	Location	6					
I7	SITC of "Wrong way detection" System covering <b>1 arm and 1 lane</b> at each Location with complete hardware including ANPR camera, cabling, accessories and mounting infrastructure as required	Location	8					
I8	SITC of Traffic Surveillance PTZ Cameras System with Complete mounting accessories as required	Number	6					
I9	SITC of Traffic Surveillance Overview/Fixed box Cameras System with required Hardware and Software including Local Processing Unit, cabling, accessories & mounting infrastructure as required	Number	122					
I10	SETC of Poles for Cameras and Equipment	Number	42					
I11	E-Challan Handheld Device including Software	Number	15					
I12	Any Other Items	Lumpsum	1					
<b>SITC of Active and Passive Components for surveillance in Buildings</b>								
I13	Indoor Fixed Dome Cameras for internal surveillance	Number	420					
I14	2 Megapixel Full HD IR IP Vandal proof Bullet Camera with Varifocal Lens	Number	140					
I15	8 channel Network Video Recorder (NVR)	Number	70					
I16	32" LED display	Number	70					
I17	Video Channel License	Number	560					
I18	8 Port Managed PoE/PoE+ Network switch	Nos	70					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
I19	SFP (1G) Short haul	Nos	140					
I20	Fibre Patch cords 2 metres	Units	140					
I21	Networking (CAT6) cable	Mtr.	28,000					
I22	Flexible Power cables 3 core, 1.5 sq. mm copper cable	Mtr.	28,000					
I23	PVC Pipe 22 mm diameter	Mtr.	21,000					
I24	UPS with 1 hour backup	Nos	70					
I25	9U Rack	Nos	70					
I26	Any Other Items	lumpsum	1					
<b>Schedule J - SITC of Adaptive Traffic Control System</b>								
J1	SITC of ATCS Traffic Controller with all mounting accessories	Number	17					
J2	SITC of Countdown timer (CDT) with all mounting accessories	Number	126					
J3	SITC of Vehicle Detector Camera with all mounting accessories	Number	63					
J4	SETC of Cantilever poles	Number	63					
J5	SETC of Standard poles for Traffic Signals	Number	97					
	<b>SITC of 300 mm dia polycarbonate signal heads including aspect with LED based capsule, visor bracket frame works, Supports, flexible wires, Wires glands and pipes etc</b>							
J6	SITC of Traffic Light Aspects - Red	Number	189					
J7	SITC of Traffic Light Aspects - Green (Green Straight, Green Right, Green Left)	Number	531					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
J8	SITC of Traffic Light Aspects - Amber	Number	189					
J9	SITC of Pedestrian lamp heads - Stop & Walk Man	Number	126					
<b>SITC of Electrical Cable</b>								
J10	SITC of 3 Core, 2.5 Sqmm Unarmoured Cable	Meter	100					
J11	SITC of 3 Core, 2.5 Sqmm Armoured Cable	Meter	250					
J12	SITC of 7 Core, 1.5 Sqmm Armoured Cable	Meter	5000					
J13	SITC of 14 Core, 1.5 Sqmm Armoured Cable	Meter	2500					
J14	Removing of existing poles, pole Foundations, Aspects, Damaged Cables, Existing Controller & Shifting to the location as per guideline of Authority.	Number	50					
J15	Any Other items	lumpsum	1					
<b>Schedule K - Variable Messaging Display and Environment Sensors</b>								
K1	SITC of VMD (3 x 1.5m) with Audio enabled and VMD Controller	Number	4					
K2	Installation, Testing, Commissioning of Poles for VMD (3 x 1.5m) (including its mounting structure, pole inclusive of all civil, electrical, erection, earthing work with necessary foundation for Variable Messaging Display	Number	4					
K3	SITC of VMD (8 x 3m) with Audio enabled and VMD Controller	Number	7					
K4	Installation, Testing, Commissioning of Poles for VMD (8 x 3m) (including its mounting structure, pole inclusive of all civil, electrical, erection, earthing work with necessary foundation for Variable Messaging Display	Number	7					
K5	SITC of Environmental sensors	Number	2					
K6	Any Other items	Lumpsum	1					
<b>Schedule L - Smart Street lights</b>								

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
L1	SITC of street light Controller & dimming driver for existing functional LED Street Lights 1500-3000W on High Mast poles with 6 LED Fixtures to be made smart & communicable to City's Command and Control Centre (CCC), as per tender specifications.	Number	17					
L2	SITC of street light Controller & dimming driver for existing functional LED Street Lights <b>1500-3000W</b> on <b>High Mast poles with 8 LED Fixtures</b> to be made smart & communicable to City's Command and Control Centre (CCC), as per tender specifications	Number	11					
L3	SITC of street light Controller & dimming driver for existing functional LED Street Lights <b>1500-3000W</b> on <b>High Mast poles with 12 LED Fixtures</b> to be made smart & communicable to City's Command and Control Centre (CCC), as per tender specifications.	Number	6					
L4	SITC of street light Controller & dimming driver for existing functional LED Street Lights <b>100W to 300W each</b> on <b>Single/ Double/ Triple poles</b> with capability to handle/control the <b>min 10 Nos to Max 100 Nos of LED Street Light Poles per feeder panel</b> , to be made smart & communicable to City's Command and Control Centre (CCC), as per tender specifications.	Number	104					
L5	Any Other items	Lumpsum	1					
<b>Schedule M - SITC of Street Bay Parking Management System - Street Bay Parking</b>								
M1	Magnetic sensor surface mount	Number	325					
M2	SITC of Networking/Communication for magnetic sensors including all necessary cabling and accessories	Lot	7					
M3	Handheld device with scanner and printer with 8 hrs battery backup at full load with networking capability to command centre or Mobile POS device	Number	15					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
M4	Any other items	lumpsum	1					
<b>Schedule A1 - Architecture works</b>								
1	Providing and laying autoclaved aerated cement blocks masonry with 150mm/230mm/300 mm thick AAC blocks in super structure above plinth level up to floor V level with RCC band at sill level and lintel level with approved block laying polymer modified adhesive mortar all complete as per direction of Engineer-in-Charge. (The payment of RCC band and reinforcement shall be made for separately).	Cum	34.53					
2	Providing and laying autoclaved aerated cement blocks masonry with 100mm thick AAC blocks in super structure above plinth level up to floor V level in cement mortar 1:4 (1 cement : 4 coarse sand). The rate includes providing and placing in position 2 Nos 6 mm dia M.S. bars at every third course of masonry work.	Cum	3.49					
3	Providing 10mm thick cement plaster in single coat on brick/concrete walls for interior plastering up to floor two level and finished even and smooth in (ii) Cement mortar 1:4 (1-cement :4-sand)	Sqm	322.32					
4	Applying two coats of Birla (white cement based) or Asian (acrylic lapy- putty) or equivalent & two coats of primer of approved brand and manufacture on new wall surface to give an even shade including thoroughly brushing the surface free from mortar dropping and other foreign matter and sand papered smooth.	Sqm	322.32					
5	Wall painting (two coats) with plastic emulsion paint of approved brand and manufacture on undecorated wall surface to give an even shade including thoroughly brushing the surface free from mortar droppings and other foreign matter and sand papered smooth.	Sqm	746.05					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
6	Distemping (Two coats) with oil bound distemper of approved brand and manufacture and of required shade on wall surfaces to give an even shade, over and including a priming coat with distemper primer of approved brand and manufacture after thoroughly brushing the surface free from mortar dropping and other foreign matter and also including preparing the surface even and sand papered smooth.	Sqm	606.87					
7	P & L 24" x 24" vitrified 8 mm thick tile flooring over 20 mm (average) base of cement mortar 1:6 (1 cement: 6 coarse sand) on new surface or fixing on existing flooring by adhesive material including dismantling of existing flooring and jointed with color cement slurry including finished with flush pointing & cleaning the surface etc. complete for light shade (upto 10 ton)	Sqm	151.14					
8	<b>Laminated Wooden Flooring or Carpet</b> Providing and laying in position 8mm thick laminated wooden flooring AC4 semi commercial use at desired locations including steps, Riser with edge protector and skirting as per the patterns/ designs of the consultants of Pergo, Tarkett, Eurofloor, Quickstep, Armstrong, Beautex, Egger. The samples shall be approved by the consultants prior to laying. The wooden floor shall be laid over a company made underlay felt and underlay foam leveller. The sides of the wooden flooring shall be firmly secured against uplift with the use of company made skirting and edge profiles. The profile sections shall be approved by the engineer-in-charge prior to use. in complete.	sqm	235.2					

9	<p>Providing and Fixing 15 mm thick densified tegular edged eco friendly light weight calcium silicate false ceiling tiles of approved texture of size 595 x 595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanised steel sections (galvanising @ 120 grams per sqm including both side) consisting of main "T" runner suitably spaced at joints to get required length and of size 24x38 mm made from 0.33 mm thick (minimum) sheet, spaced 1200 mm centre to centre, and cross "T" of size 24x28 mm made out of 0.33 mm (Minimum) sheet, 1200 mm long spaced between main "T" at 600 mm centre to centre to form a grid of 1200x600 mm and secondary cross "T" of length 600 mm and size 24 x28 mm made of 0.33 mm thick (Minimum) sheet to be inter locked at middle of the 1200x600 mm panel to form grid of size 600x600 mm, resting on periphery walls /partitions on a Perimeter wall angle pre-coated steel of size(24x24X3000 mm made of 0.40 mm thick (minimum) sheet with the help of rawl plugs at 450 mm centre to centre with 25 mm long dry wall screws @ 230 mm interval and laying 15 mm thick densified edges calicum silicate ceiling tiles of approved texture in the grid, including, cutting/ making opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc., wherever required. Main "T" runners to be suspended from ceiling using G.I. slotted cleats of size 25x35x1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm G.I. adjustable rods with galvanised steel level clips of size 85 x 30 x 0.8 mm, spaced at 1200 mm centre to centre along main "T", bottom exposed with 24 mm of all Tsections shall be pre-painted with polyster baked paint, for all heights, as per specifications, drawings and as directed by Engineer-in-Charge.</p>	sqm	700.01					
---	---	-----	--------	--	--	--	--	--



#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
10	<p><b>12.54</b> -Providing and fixing GI Clip in Metal Ceiling System of 600x600 mm module which includes providing and fixing 'C' wall angle of size 20x30x20 mm made of 0.5 mm thick pre painted steel along the perimeter of the room with help of nylon sleeves and wooden screws at 300 mm center to centre, suspending the main C carrier of size 10x38x10 mm made of G.I steel 0.7 mm thick from the soffit with help of soffit cleat 37x27x25x1.6 mm, rawl plugs of size 38x12 mm and C carrier suspension clip and main carrier bracket at 1000 mm c/c. Inverted triangle shaped Spring Tee having height of 24 mm and width of 34 mm made of GI steel 0.45 mm thick is then fixed to the main C carrier and in direction perpendicular to it at 600 mm centers with help of suspension brackets. Wherever the main C carrier and spring T have to join, C carrier and spring T connectors have to be used. All sections to be galvanized @ 120 gms/sqm (both side inclusive), fixing with clip in tiles into spring T with</p> <p><b>12.54.2</b> -GI Metal Ceiling Clip in plain Beveled edge global white color tiles of size 600x600 and 0.5 mm thick with 25 mm height, made of GI sheet having galvanizing of 100 gms/sqm (both sides inclusive) and 20% perforation area with 1.8 mm dia holes and having NRC of 0.5, electro statically polyester powder coated of thickness 60 microns (minimum), including factory painted after bending and perforation.</p>	Sqm	60.2					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
11	Providing & fixing glazing panels & doors using 12mm thk toughened, float, clear glass of Asahi or approved equivalent make with crystal edge polish (conforming to ASTM Standards C-1048) supported by S.S. patch fittings (Sevax Olivier or approved equivalent) at the bottom, top & side edge and inter-connecting patch fittings between glass panels, stainless steel articulated countersunk bolts threaded bolts, chemical fasteners, etc. glass panel size as per design and drawing including applying colourless sealant of joint incl. required edge polish, making glazing water tight, etc. Destructive node joint test reports to be submitted for establishing the safety factor. Including operating hardware, SS patch fittings, fabricated long length satin finish SS 316 door handles, patch lock, floor springs etc. complete as directed by the architect for frameless patch doors, single or twin leaf shutters with fixed panel on top. (All hardware: as specified) Item to include making & fixing necessary 37.5x 50mm BTC rigid framework above the false ceiling for fixing the angle part of the internal glass partitions and glass doors at the top as per architectural detail drawing including all hardware complete.	Sqm	64.14					
12	<b>9.20-</b> Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters.  <b>9.20.1-</b> 35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	Sqm	17.64					
13	<b>9.105</b> -Providing and fixing partition upto ceiling height consisting of G.I. frame and required board, including providing and fixing of frame work made of special	Sqm	132.75					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
	<p>section power pressed/ roll form G.I. sheet with zinc coating of 120 gms/ sqm(both side inclusive), consisting of floor and ceiling channel 50mm wide having equal flanges of 32 mm and 0.50 mm thick, fixed to the floor and ceiling at the spacing of 610 mm centre to centre with dash fastener of 12.5 mm diameter 50 mm length or suitable anchor fastener or metal screws with nylon plugs and the studs 48 mm wide having one flange of 34 mm and other flange 36 mm and 0.50 mm thick fixed vertically within flanges of floor and ceiling channel and placed at a spacing of 610 mm centre to centre by 6 mm dia bolts and nuts, including fixing of studs along both ends of partition fixed flush to wall with suitable anchor fastener or metal screws with nylon plugs at spacing of 450 mm centre to centre, and fixing of boards to both side of frame work by 25 mm long dry wall screws on studs, floor and ceiling channels at the spacing of 300 mm centre to centre. The boards are to be fixed to the frame work with joints staggered to avoid through cracks, Galvanised M.S. fixing channel of 99 mm width (0.9 mm thick having two flanges of 9.5 mm each with zinc coating of 120 gms/sqm(both side inclusive)) to be provided at the horizontal joints of two boards, fixed to the studs using metal to metal flat head screws, including jointing and finishing to a flush finish with recommended jointing compound, jointing tape, angle beads at corners (25 mm x 25 mm x 0.5 mm), joint finisher and two coats of primer suitable for board as per manufacture's specification and direction of engineer in charge all complete.</p>							

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
	<b>9.105.1</b> -75 mm overall thickness partition with 12.5 mm thick double skin fire rated Glass Reinforced Gypsum (GRG) plaster board conforming to IS: 2095: (part 3) : 1996 (Board with BIS certification marks)							
14	Providing and fixing thermal insulation with Resin Bonded Fibre glass wool conforming to IS: 8183 having density 24 kg/m <sup>3</sup> , 50 mm thick, wrapped in 200G Virgin Polythene Bags fixed to wall with screw, rawel plug & washers and held in position by criss crossing GI wire etc. complete as per directions of Engineer-in-Charge.	Sqm	132.75					
15	Providing and fixing fire resistant door frame of section 50 x 60 mm on horizontal side & 35 x 60 mm on vertical sides having built in rebate made out of 1.6 mm thick GI sheet ( Zinc coating not less than 120gm/ m <sup>2</sup> ) suitable for mounting 120 min Fire Rated Glazed Door Shutters. The frame shall be filled with Mineral wool Insulation having density min 96Kg/m <sup>3</sup> . The frame will have a provision of G.I. Anchor fastners 14 nos ( 5 each on vertical style & 4 on horizontal style of size M10 x 80 ) suitable for fixing in the opening along with Factory made Template for SS Ball Bearing Hinges of Size 100x89x3mm for fixing of fire rated glazed shutter . The frame shall be finished with a approved fire resistant primer or Powder coating of not less than 30 micron in desired shade as per the directions of Engineer - in- charge . (Cost of SS ball bearing hinges is excluded).	Mtr	12					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
16	Providing and fixing 60 mm thick glazed fire resistant door shutters of 120 min Fire Rating confirming to IS:3614 (Part II) or EN1634-1:1999, tested and certified as per laboratory approved by Engineer-in-charge, with suitable mounting on door frame, consisting of vertical styles, top rail & side rail 60 mm x 60 mm wide and bottom rail of 110 mm x 60 mm made out of 1.6mm thick G.I. sheet (zinc coating not less than 120gm/m <sup>2</sup> ) duly filled mineral wool insulation having density min 96 kg/ m <sup>3</sup> and fixing with necessary stainless steel ball bearing hinges of size 100x89x3mm of approved make, including applying a coat of approved fire resistant primer or powder coating not less than 30 micron etc all complete as per direction of Engineer-in-charge (panelling to be paid for seperately).	Sqm	6.3					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
17	<p><b>26.24</b> Providing and fixing in position wall panelling at all heights with integral densified calcium silicate panels/tiles of size 595 x 595mm, having NRC (Noise Reduction coefficient) of 0.50 (minimum) as per IS 8225:1987, Light reflectance of 85% (minimum). Non combustible as per BS:476 (part-4), fire performance as per BS:476 (part 6&amp;7), humidity resistance of 100%, thermal conductivity &lt;0.043 W/m K as per ASTM 518:1991, comprising of a frame made from especially fabricated galvanised mild steel sheet 0.50 mm thick pressed section (galvanizing @120 grams per sqm including both sides) i.e. vertical studs of size 48 x 34 x 36 mm are placed at 600mm center to center in a floor and ceiling channel section of size 50 x 32mm fixed to the floor and soffit at 600mm centers using 12mm dia,50mm long wedge type expanded zinc alloy dash fastner with 10mm bolt. This same channel is then to be fixed in horizontal direction at 600mm center to center so as to form a grid of 600mm x 600mm. Glasswool of 50mm thickness is then to be inserted in the slots and finally calcium silicate non combustible panels/tiles are to be screw fixed with self tapping pan head nickel coated mild steels screws of size 13 x 3.2mm on to this grid leaving an even groove of 1 mm between the panels. The joints between the panels are to be duly jointed and finished using recommended jointing calcium silicate based compound and fiber joint tape roll 50mm wide (90 metre )roll and two coats of primer suitable for panelling as per manufacturer's specification as per direction of Engineer-in-Charge all complete.</p> <p><b>26.24.1</b> With 15 mm thick fully perforated square/butt edge light weight calcium silicate panels/ tiles</p>	Sqm	188.97					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
18	<p><b>11.56</b> Providing and laying Polished Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge.</p> <p><b>11.56.1</b> Polished Granite stone slab jet Black, Cherry Red, Elite Brown, Cat Eye or equivalent.</p>	Sqm	5					

19	<p>Designing, fabricating, testing, installing and fixing in position Curtain Wall with Aluminium Composite Panel Cladding, with open grooves for linear as well as curvilinear portions of the building, for all heights and all levels etc. including: (a) Structural analysis &amp; design and preparation of shop drawings for pressure equalisation or rain screen principle as required, proper drainage of water to make it watertight including checking of all the structural and functional design. (b) Providing, fabricating and supplying and fixing panels of aluminium composite panel cladding in pan shape in metallic colour of approved shades made out of 4mm thick aluminium composite panel material consisting of 3mm thick FR grade mineral core sandwiched between two Aluminium sheets (each 0.5mm thick). The aluminium composite panel cladding sheet shall be coil coated, with Kynar 500 based PVDF / Lumiflon based fluoropolymer resin coating of approved colour and shade on face # 1 and polymer (Service) coating on face # 2 as specified using stainless steel screws, nuts, bolts, washers, cleats, weather silicone sealant, backer rods etc. (c) The fastening brackets of Aluminium alloy 6005 T5 / MS with Hot Dip Galvanised with serrations and serrated washers to arrest the wind load movement, fasteners, SS 316 Pins and anchor bolts of approved make in SS 316, Nylon separators to prevent bi-metallic contacts all complete required to perform as per specification and drawing The item includes cost of all material &amp; labour component, the cost of all mock ups at site, cost of all samples of the individual components for testing in an approved laboratory, field tests on the assembled working curtain wall with aluminium composite panel cladding, cleaning and protection of the curtain wall with aluminium composite panel cladding till the handing over of the building for occupation. Base frame work for ACP cladding is payable under the relevant aluminium item.s The Contractor shall provide curtain wall with aluminium composite panel cladding, having all the performance characteristics all complete, as per the Architectural drawings, as per item description, as specified, as per the approved shop drawings and as directed by the Engineer-in-Charge. However, for the purpose of payment, only the actual area on the external face of the curtain wall with Aluminum Composite Panel Cladding</p>	Sqm	166					
----	---	-----	-----	--	--	--	--	--



#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
	(including width of groove) shall be measured in sqm. up to two decimal places.							
20	Providing and fixing roller blinds with drive unit end plug support brackets roller tube bottom rail ball chains all described as below but with fabric of approved shade colour and sample. Drive unit to be of moulded plastic with straight rectangle support pin and inserted into the tube end. It shall be driven by a ball chain pulley and can be positioned at right or left side of the shade. The shade when lowering or raising shall automatically be lockable from release of the ball chain by means of friction lock. End plug shall be moulded to plastic locking pin. The plug shall be inserted into the tube end. Support brackets shall be of zinc plated steel and provided with moulded plastic covers and used in right of left hand positions differentiated by acceptance of the rectangular drive unit support or the ground idler plug pin. Roller tube shall be made out of roll formed steel of thickness suitably protected against corrosion and keyway integrated with the tube to accommodate the spline, outside diameter of the roller tube shall be 25mm. Bottom rail shall be stiffening element inserted into the bottom rod pocket. Tube to be of the material as approved out of timber, PVC, Steel of VB Bottom rail. Ball chain shall be of 2mm dia cord with actual balls moulded coaxially to it on 6mm pitch to form ball chain. Make - Vista / Hunter douglas	Sqm	114.76					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
21	<p><b>Wall Paper</b>-Providing and fixing anti bacterial / anti microbial, ISO 22196 (JIS Z2801) rated, durable water resistant, fire retardant, PVC wall paper (Bio Hygienic) of approved shade with recommended adhesive of approved make and sample as per manufacturer's specifications. Cost to include preparation on the panned surface for receiving the Poster as per the manufacturer specification.</p> <p>Basic cost of wall paper at Rs. 1400 /Sqm</p> <p><b>Item to include base finish preparation in line &amp; level.</b></p>	Sqm	238.43					
22	<p><b>Providing and fixing 3M make Scotchal 7725 Series Frosted film</b> on Glass Partition and glass door with MCS warranty as per the manufacturer specification.</p>	Sqm	50					
23	<p><b>Signage's</b>-Providing and fixing 1.5mm Anti- Corrosive Brushed SS Plate Engraved Room Name &amp; Number, size <b>300mmx100mm</b>.As per samples approved by E-in -Charge.</p>	Nos	30					
24	<p><b>DEMOLITION &amp; DISMANTLING</b>_ Dismantling tiled of stone floors laid in mortar including stacking of serviceable materilas and disposal of unserviceable materials with all lead and lift.</p>	Sqm	151.14					
25	<p><b>DEMOLITION &amp; DISMANTLING</b>_ Demolition of Brick work and stone masonry including stacking of serviceable materilas and disposal of unserviceable materials with all lead and lift.(ii) In Cement Mortar.</p>	Cum	20					
26	<p><b>DEMOLITION &amp; DISMANTLING</b>_ Demolition including stacking of serviceable materilas and disposal of unserviceable materials with all lead and lift. (i) R.C.C. work</p>	Cum	10					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
27	<p><b>INDOOR PLANTERS</b>_Supply of Palms and indoor plant - well developed, polybag, disease free. Acceptable tolerances to variations in stem height shall be +100mm or -100mm from the height specified in the Bills of Quantities. The heads of palms and plants shall be well balanced and a healthy growing apical shoot all free from pest and disease. Supply shall include labour &amp; equipment cost of loading, unloading, transport to site, storage &amp; stacking within site in area protected from dust.</p> <p><b>All Season indoor Areca Palm (1.2m Height)</b></p>	Nos	10					
28	<p><b>INDOOR PLANTERS</b>_Supply of Palms and indoor plant - well developed, polybag, disease free. Acceptable tolerances to variations in stem height shall be +100mm or -100mm from the height specified in the Bills of Quantities. The heads of palms and plants shall be well balanced and a healthy growing apical shoot all free from pest and disease. Supply shall include labour &amp; equipment cost of loading, unloading, transport to site, storage &amp; stacking within site in area protected from dust.</p> <p><b>Nature Cycas Revoluta Sago Palm (0.6m Height)</b></p>	Nos	3					
29	<p><b>INDOOR PLANTERS</b>_Supply of Palms and indoor plant - well developed, polybag, disease free. Acceptable tolerances to variations in stem height shall be +100mm or -100mm from the height specified in the Bills of Quantities. The heads of palms and plants shall be well balanced and a healthy growing apical shoot all free from pest and disease. Supply shall include labour &amp; equipment cost of loading, unloading, transport to site, storage &amp; stacking within site in area protected from dust.</p> <p><b>Dieffenbachia 'Camilla' - Plant (0.9 m Height)</b></p>	Nos	5					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
30	<b>INDOOR PLANTERS</b> Supply of Palms and indoor plant - well developed, polybag, disease free. Acceptable tolerances to variations in stem height shall be +100mm or -100mm from the height specified in the Bills of Quantities. The heads of palms and plants shall be well balanced and a healthy growing apical shoot all free from pest and disease. Supply shall include labour & equipment cost of loading, unloading, transport to site, storage & stacking within site in area protected from dust.  <b>Dieffenbachia 'Tropic Snow' - Plant (1.2 m Height)</b>	Nos	5					
31	supply and installation of Round Decoration Fancy Plastic Flower Pots(0.3 to .45 Height and size Suitable for indoor plants)	Nos	23					
32	<b>DUSTBIN</b> Supply of Stainless Steel Plain Pedal Dustbin, Garbage Bin with Removable Bucket Round Shape 8"x12" - 5 liters, Silver Color Slim and Fingerprint-Proof Finish.	Nos	5					
33	<b>DUSTBIN</b> Supply of Stainless Steel Dustbin Round Semi Perforated ( 9" x 14")	Nos	10					
<b>Schedule A2 - Civil works</b>								
1	Providing and laying autoclaved aerated cement blocks masonry with 100 mm thick AAC blocks in super structure above plinth level up to floor V level in cement mortar 1:4 (1 cement : 4 coarse sand ). The rate includes providing and placing in position 2 Nos 6 mm dia M.S. bars at every third course of masonry work.	Cum	18.98					
2	<b>Raised False Floor with 600x600mm tiles-</b>	sqm	180.67					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
	<p>Providing and fixing removable raised/false access flooring with system and its components of approved make for different plenum height with possible height adjustment upto 50 mm, comprising of modular load bearing floor panels supported on G.I. rectangular stinger frame work and G.I. Pedestal etc. all complete, as per the architectural drawings, as specified and as directed by Engineer-in-charge consisting of:</p> <p>(a) Providing at required spacing to form modular framework, pedestals made out of GI tube of thickness minimum 2 mm and 25 mm outer diameter, fully welded on to the G.I. Base plate of size 100mm x 100mm x 3mm at the bottom of the pedestal tube, G.I. pedestal head of size 75mm x 75mm x 3.5 mm welded with GI fully threaded stud 16mm outer diameter with two GI Check nuts screwed on the stud for level adjustment upto 50mm, locking and stabilizing the pedestal head in position at the required level. The pedestals shall be fixed to the subfloor (base) through base plate using epoxy based adhesive of approved make or the machine screw with rawl plug.</p> <p>(b) Stringers system in all steel construction hot dipped galvanized of rectangular size 570x20x30x0.80mm thick having holes at both ends for securing the stringers on to the pedestal head using fully threaded screws ensuring maximum lateral stability in all directions, the grid formed by the pedestal and stringer assembly shall receive the floor</p>							

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
	<p>panel, this system shall provide adequate solid, rigid support for access floor panel, the system shall provide a minimum clear uninterrupted clearance between the bottom of the floor for electrical conduits and wiring etc. all complete as per the architectural drawings, as specified and as directed by the Engineer-in-charge.</p> <p>(c) Providing and fixing Access Floor panel of 600x600x32 mm medium grade Filled Steel anti static high pressure Lamination of 800H grade (FS800H). Access Floor panel shall be steel welded construction with an enclosed bottom pan with uniform pattern of 64 hemispherical cones. The top and bottom plates of Steel Gauges: top 0.6 mm and bottom 0.7 mm fused spot welded together (minimum 64 welds in each dome and 20 welds along each flange). The panel should be Corroresist epoxy coated for lifetime rust protection and cavity formed by the top and bottom plate is filled with Pyrogrip noncombustible Portland cementitious core mixed with lightweight foaming compound. The access floor shall be factory finished with Anti-static High Pressure laminate with Non Warp technology upto 1mm thickness for superior adhesion and Surface flatness within 0.75mm. The panel is to withstand a Concentrated Load of 363 kgs applied on area 25mm x 25mm without collapse in the centre of the panel which is placed on four steel blocks. The panel will withstand and Uniformly Distributed Load (UDL) minimum 1250 kg/sqm and an impact load of 50kg all complete as per the approved manufacturers specification and as per the direction of Engineer-in-charge. All specification must be printed on the side of the panel to ensure the quality of the product.</p>							

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
	450 mm Finished Floor Height (FFH).							
3	<b>Strengthening of Ground floor Slab with Steels joist/Beam-</b> Providing, erecting, fabricating the M.S. structure as per requirement on site incorporating proper size of M.S. angles, flats, bars, channels, sections complete with cutting, welding, grinding & finishing duly painted with one coat of red oxide with erection on site as per direction of engineer in charge with necessary grouting, cementing, plastering & finishing complete.	kg	870.98					
4	Extra for Supply of Hiti Bolts M16-4500 Lng -HIT-V(5.8) with Hiti adhesive -RE 500 V3	No	32					
5	<b>RCC-Tie Beam -</b> Providing and laying controlled cement concrete M.200 and curing complete excluding the cost of formwork and reinforcement for reinforced concrete work in (A) Foundations, footings, Base of columns and Mass concrete (upto 10 ton)	Cum	1.478					
6	<b>Formwork -Tie Beam -</b> Providing formwork of ordinary timber planking so as to give a rough finish including centering shuttering strutting and propping etc. height of propping and centering below supporting floor to ceiling not exceeding 4 M. and removal of the same for in situ reinforced concrete and plain concrete work in. (H) (1) Sides and soffits of Beams Beam Haunchings  cantilevers Girders Bressumers and Lintels not exceeding 1 M. in Depth. (upto 10 ton)	Sqm	16.61					
7	<b>Reinforcement-</b>	Kg	73.9					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
	Providing TMT Bar FE 500/500D reinforcement for R.C.C. work including bending, binding and placing in position complete upto floor two level (upto 10 ton)							
8	<b>Excavation-Manual Labour-</b> Excavation for foundation upto 1.5 m depth including sorting out and stacking of useful materials and disposing off the excavated stuff upto 50 Meter lead. (B) Dense or Hard soil	Cum	46.2					
9	<b>100mm Thk. PCC-</b> Providing and laying cement concrete 1:2:4 (1- Cement : 2- Coarse sand : 4- graded stone aggregates 20 mm nominal size) and curing complete excluding cost of formwork in (A) Foundation and Plinth (upto 10 ton)	Cum	1.68					
10	<b>CONCRETE BLOCK MASONRY (250mm Thk)-</b> Precast concrete block masonry (including quoin blocks jamb blocks closer etc.) with solid concrete blocks of approved size made of cement concrete 1:3:6 mix (1- Cement : 3 coarse sand : 6- graded stone aggregates of 20 mm and down grade) in foundation and plinth cement mortar 1:6 (upto 10 ton)	Cum	10.8					
11	<b>Filling in CSS Pedestal-</b> Filling in foundation and plinth with murrum or selected soil in layers of 20cm. thickness including watering, ramming and consolidating etc. complete. (upto 10 ton)	Cum	33.75					
12	<b>RCC-Slab For Top-</b> Providing and laying controlled cement concrete M.200 and curing complete excluding the cost of formwork and reinforcement for reinforced concrete work in (A) Foundations, footings, Base of columns and Mass concrete (upto 10 ton)	Cum	6.75					



#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
13	<b>Slab Edges</b> -Providing formwork of ordinary timber planking so as to give a rough finish including centering shuttering strutting and propping etc. height of propping and centering below supporting floor to ceiling not exceeding 4 M. and removal of the same for in situ reinforced concrete and plain concrete work in. (I) Edges of slabs and Breaks in floors and walls. (upto 10 ton)	Sqm	14.4					
14	<b>CM Plaster</b> - 20mm thick sand faced cement plaster on walls upto height 10 metres above ground level consisting of 12mm thick backing coat of C.M. 1:3 (1-cement : 3-sand) and 8mm thick finishing coat of C.M. 1:1 (1-cement : 1-sand) etc. complete.	Sqm	14.4					
15	<b>Reinforcement</b> - Providing TMT Bar FE 500/500D reinforcement for R.C.C. work including bending, binding and placing in position complete upto floor two level (upto 10 ton)  70kg/Cum of concrete	Kg	472.5					
<b>Schedule A3 - Electrical works</b>								
1	<b>11 kV Outdoor Cable Terminations</b>  Supply, Installation, Testing & Commissioning of heat shrink outdoor type cable termination for 11 kV (E) grade XLPE insulated cable including necessary earth connectivity connection, material & consummables making the termination/ joint complete ensuring the joint resistance is within the permissible limit as per IS, of following types & sizes. <b>The makes of cable jointing kit shall be like 3M, RPG, Denson or as per the approved make list of PWD or as approved by Chief Technical Officer (CTO).</b>	Nos.	4					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
	<b>11KV (E), 3C x 120 sq.mm A2XFY</b>							
2	<p><b><u>11 kV (Earthed) Grade HT Cable- Aluminium Conductor</u></b></p> <p>Supply, Installation, Testing and Commissioning of XLPE insulated, Aluminum conductor, 11kV Earth (E) grade, cross-linked polyethylene (XLPE) insulated, Aluminium conductor, screened by extruded semi-conducting compound for the conductor, , screened by extruded semi-conducting compound for the insulation followed with copper tape and inner and outer extruded PVC sheath compound Type-ST2 sheathed, heavy duty cable, galvanised steel round wire armouring of following sizes to be buried in ground/ laid in ducts / laid in trays in ready made trenches, Civil work such as excavation, backfilling, sand, brick/tile/semi-circle hume pipe protection (if require) etc confirming to IS 7098 (Part-2) &amp; IEC 60502 Part-2. Removal of empty drums, cartoons &amp; making the site normal as instructed by Client is included in the scope. Work should be done as per DNHPDCL guidelines and norms. <b>The makes of cable shall be like Polycab, RPG, Universal, Finolex or as per the approved make list of PWD or as approved by Chief Technical Officer (CTO).</b></p> <p><b>11KV (E), 3C X 120 sq.mm A2XWY CABLE</b></p>	Rmt	100					
3	<b><u>11kV Ring Main Unit (RMU)</u></b>	No.	1					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
	Supply, Installation, testing & commissioning Indoor type 11 KV, 630 Amp., 21kA for 3 sec. SF6 type extensible and motorized 4 way smart Ring Main Unit (RMU) complete with (2 VCB + 2 LBS) with FRTU and FPI with IP Protection, as per IS. <b>The makes of RMU shall be like ABB, Siemens, Schneider or as per the approved make list of PWD or as approved by Chief Technical Officer (CTO).</b>							
4	<b><u>COMPACT SUBSTATION :-</u></b>	Nos.	2					

Supply, Installation, Testing & Commissioning of approved make Compact Substation with 250 kVA, 3 phase, 50 c/s ONAN Type UNIPACK 21KA for 3 Sec. SF6 insulated Non-Extensible Compact switchgear (Type DV-NE) consisting of one No. Direct Cable module and One No. Fixed Manual Vacuum Circuit Breaker in SF6 insulated stainless steel enclosure, with series trip, self powered microprocessor based numerical over current relay (IDMTL + Inst.) protection. Interconnection between HT switchgear and transformer shall be using 1Cx3x150 sq.mm Al. unarmoured XLPE Cable. Copper wound transformer **250 KVA, 11KV/433V**, Dyn11 Oil filled, INDOOR TYPE TRANSFORMER BUSHINGS, hermetically sealed transformer with corrugated wall, without conservator type of design & Top Normal Porcelain Bushings for HT & LT with Off load tap switch of rating +5% to -10% @ 2.5%. Temp Rise - Oil/Winding 40/45 Deg cel. Losses (Subject to IS 1180 Energy Efficiency level 2 - Max @ 50% Loading : As per IS 1180 and Max @ 100% Loading : As per IS 1180 and Impedance As per IS 1180 with LV PANEL-500 AMPS ALUMINUM BUSBAR (100% for Phase and 50% for Neutral, Current Density - 1amp/sqmm) with Outgoings 500 Amps 433V 4P 50Hz 35KA ICOG Fixed Manual Type Moulded case Circuit Breaker (MCCB) with Microprocessor based release for Overload, short circuit & earth Fault protection., Multifunctional Meter with Class 1.0 Accuracy with RS 485 Port, RYB, ON/OFF Trip Indications, OUTDOOR ENCLOSURE having IP54 degree of protection for HT & LT switchgear compartment & IP23 degree of protection for Transformer compartment, Powder /Colour Coated Enclosure, with Interconnection Between HT switchgear & Transformer using 1Cx3x150 Sq.mm XLPE Aluminium Single core cable. Interconnection between Transformer & LT switchgear using Al. Busbars. Internal earthing connections by using 50x6 mm GI Strips including Transformer Neutral, Complete as per specification and standard of DNHPDCL. **The makes of RMU shall be like ABB, Siemens, Schneider or as per the approved make list of PWD or as approved by Chief Technical Officer (CTO).**

5	<p><b>D.G. Set:</b> Supplying and erecting, commissioning and testing of diesel generating set having continuous rating, 3 phase, 415 volts, 50 cycles A.C. supply comprising of a totally enclosed air/water cooled diesel engine with multi-cylinders developing suitable BHP not less than following capacity at 1500 RPM with 10% overload for one hour in 24 hours with standard accessories like fly wheel, lubricating oil cooler, "A" class governor, heavy duty fuel wheel and lubricating oil filter, oil bath air filler, lubricating oil pressure gauge, end exhaust manifold, standard set of tools with adjustable spanners, screw drivers, feeder gauge, cylinder head to cover, joint cylinder head to exhaust, element lube oil filter, 12/24 volts electric starting equipment complete with standard battery, dynamo, cut-outs, ammeter, necessary wiring, pressure gauge, starter etc and heavy duty Residential type exhaust silencer and vertical hot air duct both logged with asbestos rope, save oil trays, exhaust piping of required length, standard wall/floor mounted fuel with level indicator and piping and drip proof alternator, self excited, self regulated, screen protected, with excitation system, capable of delivering the rated system output at 415 volts, 3 phase, 0.8 PF, 50 Hz, 4 wire, running at 1500 RPM, conforming to IS-4722-1968 with voltage regulation +/- 5% of rated voltage from no load to full load. Both the engine and alternator fitted on a common fabricated steel base plate with antivibration mounting engine and alternator both connected to each other by flexible flange coupling and with floor/wall mounted control panel box comprising of voltmeter ammeter, selector switches, ACB / MCCB / MCB of adequate capacity, indicator lamps duly wired with HRC fuses. The alternator &amp; control panel shall be connected with provided suitable capacity armoured cable and complete with Acoustic enclosure (canopy) made out of 18 SWG CRCA Sheet, sound absorbing material Rockwool of 64 density &amp; 100 mm thick conforming to IS:8183 The resin bonded rockwool covered from inside the canopy by perforated sheet with 3/4 mm holes, sound level not more than 75 dB at a distance of 1 mtr, as per PVCT norms. Erection, commissioning and satisfactory testing as per requirement with first filling of fuel, oil, etc. with guarantee of complete system for One year. &amp; with obtaining all necessary</p>	No.	1					
---	--	-----	---	--	--	--	--	--

certificate from Electrical Inspector. The Capacity and Ratings of DG sets are as below. **The makes of DG shall be like Kirloskar, Cummins, Caterpillar or as per the approved make list of PWD or as approved by Chief Technical Officer (CTO).**

**-Continuous rating of 250 KVA ,BHP not less than 313 BHP**

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
6	<p>Supplying and erecting, commissioning and testing of approved make AMF control panels suitable for following size of 3 phase, 415 V., 50 cycles, A.C. diesel generating set complete of scope as detailed below:</p> <p>1) Power module: A pair of electromechanically interlocked contactors (for mains &amp; generator) Overload relay for generator contactor Neutral contactor for mains and generator Power socket for connections.</p> <p>2) Control and metering module: Line voltage monitor. Generator voltage monitor Ammeter 3 items at tempt start facility. Air circuit breakers/MCB/MCCB of suitable rating for auto/manual operation. Auto/manual switch. Emergency stop push buttons. Manual start push button. frequency meter. Engine hour meter. Two earthing studs.</p> <p>3) Protection module: The engine shutdown in the unlikely event of Low lube oil pressure High cylinder head temperature. V belt failure.</p> <p>4) Indicators with alarm Load on generator.</p> <p>5) Indicators Load on mains Engine fails to start. Emergency stop battery charger.</p> <p>The AMF Panel of following capacity-</p> <p><b>AMF Control Panel for 250 KVA 3 phase DG Set</b></p> <p><b>The makes of AMF Panel shall be like Kirloskar, Cummins, Caterpillar or as per the approved make list of PWD or as approved by Chief Technical Officer (CTO).</b></p>	No.	1					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
7	<p>Supplying and erecting, commissioning and testing Acoustic enclosure (canopy) made out of 18 SWG, CRCA Sheet, sound absorbing material Rockwool of 64 density &amp; 100 mm thick conforming to IS:8183 The resin bonded Rockwool covered from inside level not more than 75 dB at a distance of 1 mtr, as PVCT norms , on provided foundation suitable for following size of DG Set. The enclosures for following capacity of DG sets. <b>The makes of AMF Panel shall be like Kirloskar, Cummins, Caterpillar or as per the approved make list of PWD or as approved by Chief Technical Officer (CTO).</b></p> <p><b>-For for 250 KVADG Set</b></p>	No.	1					



#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
8	<p><b>LT POWER CONTROL CENTER (LT PCC)- S.I.T.C. of LT PCC (Indoor) totally enclosed type as per IS: 2147, Operation on 3-Phase, 415V, 50Hz, Neutral effectively grounded, IP-55, with power &amp; control contactors as per IS: 13947, CT of accuracy class- I as per IS: 2705, Relays &amp; control fuses, air insulated electrolyte grade Aluminum/copper busbar for three phase &amp; neutral system with thermal magnetic based/ air break fixed type MCCB with trip free mechanism, current limiting type, MCB as per IS/IEC 60898-2:2003, suitable rating outgoing feeders as per design &amp; SLD drawings, digital type metering instruments, equipment fittings, bus bars, cable alleys, cable gland, incoming &amp; outgoing cable connection chamber suitable for 1100V grade, Al./ Cu. conductor PVC insulated &amp; PVC sheathed armoured cable, 10% spare terminals, power wiring use of 650/ 1100V grade, FRLS insulated copper conductor wires conforming to IS: 694 &amp; 8130, cable compartments of minimum 350 mm size. LT PCC shall be comprising of:</b></p>	No.	1					

**a) 2 nos. of Incomers from CSS & 1 No. Incomer from DG & 1 No. bus coupler of 500A, 4 Pole, Air Break Fixed MCCB** conforms to IS / IEC 60947-2 with trip free mechanism, current limiting type with Microprocessor release (O / C, S / C & E / F) with adjustable settings & having minimum 2NO+2NC potential free auxiliary contacts with all necessary Electro-Mechanical protections & interlocks etc. MCCB with Breaking Capacity of Icu=36 KA at 415V (Ics =100% of Icu), Microprocessor release with approved make. energy meter 3 phase 4 wire unbalanced load 500 V.50A / 100A complete erected as directed with necessary earth wire. (Cat. II) **(4Nos) b)** Outgoing of above 80A, upto & including 250A, 4 Pole, Air Break Fixed MCCB with Breaking Capacity of Icu=25 KA at 415V (Ics =100% of Icu) conforms to IS/ IEC 60947-2 with trip free mechanism, current limiting type with Thermal Magnetic/ Microprocessor release (O / C, S / C & E / F) with adjustable settings & having minimum 2NO+2NC potential free auxiliary contacts with all necessary Electro-Mechanical protections & interlocks etc. **(5Nos.) c)** Outgoing of above 16A, upto & including 80A, 4 Pole, Air Break Fixed MCCB with Breaking Capacity of Icu=25 KA at 415V (Ics =100% of Icu) conforms to IS/ IEC 60947-2 with trip free mechanism, current limiting type with Thermal Magnetic/ Microprocessor release (O / C, S / C & E / F) with adjustable settings & having minimum 2NO+2NC potential free auxiliary contacts with all necessary Electro-Mechanical protections & interlocks etc. **(16Nos.) d)** Outgoing of above 16A, upto & including 80A, 3 Pole, Air Break Fixed MCCB with Breaking Capacity of Icu=25 KA at 415V (Ics =100% of Icu) conforms to IS/ IEC 60947-2 with trip free mechanism, current limiting type with Thermal Magnetic/ Microprocessor release (O / C, S / C & E / F) with adjustable settings & having minimum 2NO+2NC potential free auxiliary contacts with all necessary Electro-Mechanical protections & interlocks etc. **(1No.) e)** Supplying and erecting of 630 A triple pole & neutral 440V / 500V panel mounting Aluminium Busbars with four equal Nos. of bus having current density not more than 0.8 Amp. / sq.mm (Rated current / cross section area) duly wrapped with colour insulating tape for phase sequence of following current carrying capacity, erected with necessary bus bar supports

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
	/insulators, main cable socket to each busbar, erected in existing cubical panel with necessary connections. <b>f) Refer SLD TCE.11364A-EL-4000-AU-40003 for more details. The makes of Switchgear shall be like Siemens, ABB, Schneider Electric, L&amp;T or as per the approved make list of PWD or as approved by Chief Technical Officer (CTO).</b> NB: The standard companies switch gear shall be used and only manufacturers at CPRI approved factory and shall be certified by that company whose switch gears are used after fabrication for beneficial use.							
9	<b><u>WORK STATION UPS MAIN DISTRIBUTION BOARD (WS UPS MDB)-</u></b>	No.	1					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
	<p>S.I.T.C. of totally enclosed type as per IS: 2147, Operation on 3-Phase, 415V, 50Hz, Neutral effectively grounded, IP-55, with power &amp; control contactors as per IS: 13947, CT of accuracy class- I as per IS: 2705, Relays &amp; control fuses, air insulated electrolyte grade Aluminum/copper busbar for three phase &amp; neutral system with thermal magnetic based/ air break fixed type MCCB with trip free mechanism, current limiting type, MCB as per IS/IEC 60898-2:2003, suitable rating outgoing feeders as per design &amp; SLD drawings, digital type metering instruments, equipment fittings, bus bars, cable alleys, cable gland, incoming &amp; outgoing cable connection chamber suitable for 1100V grade, Al./ Cu. conductor PVC insulated &amp; PVC sheathed armoured cable, 10% spare terminals, power wiring use of 650/ 1100V grade, FRLS insulated copper conductor wires conforming to IS: 694 &amp; 8130, cable compartments of minimum 350 mm size, Aluminium earth bus bar for entire length as per SLD, detail specifications &amp; data sheet including required testing @ factory as per applicable IS/ IEC standards. WS UPSDB shall be comprising of:</p>							

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
	<p><b>a) 2 Nos.</b> of Incomers from UPS of 4 Pole, 32A MCCB with Breaking Capacity of Icu=25 KA at 415V (Ics=100% of Icu), Microprocessor release (O / C, S / C &amp; E / F) conforms to IS/IEC 60947-2 with trip free mechanism, current limiting with adjustable settings &amp; having minimum 2NO+2NC potential free auxiliary contacts with all necessary Electro-Mechanical protections &amp; interlocks etc. with power contactor of 4 pole 440V 40 Amp complete erected as per direction. <b>(2 Nos.)</b></p> <p><b>b) Outgoing of 415 V, 6 to 32 Amp. MCB Four Pole for Motor &amp; Inductive Load (C Curve) having 10KA breaking capacity &amp; confirms to IS :8828 in existing box having following capacity. <b>(4 Nos.)</b></b></p> <p><b>c) Supplying and erecting of 100 Amp. Capacity triple pole &amp; neutral 440V / 500V panel mounting Copper Busbars with four equal Nos. of electrolyte bus having current density not more than 1.6 Amp. / sq.mm (Rated current / cross section area) duly wrapped with colour insulating tape for phase sequence of following current carrying capacity, erected with necessary bus bar supports /insulators, main cable socket to each bar, erected in existing cubical panel with necessary connections.</b></p>							

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
	<p><b>d) Refer SLD TCE.11364A-EL-4000-AU-4004 for more details. The makes of Switchgear shall be like Siemens, ABB, Schneider Electric, L&amp;T or as per the approved make list of PWD or as approved by Chief Technical Officer (CTO). NB: The standard companies switch gear shall be used and only manufacturers at CPRI approved factory and shall be certified by that company whose switch gears are used after fabrication for beneficial use. Price of Panel comprises of pedestal of minimum 350 mm height made of MS angle/ channel/ flats of favourable shapes.</b></p>							
10	<b><u>WORK STATION UPS SUB DISTRIBUTION BOARD-</u></b>	No.	2					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
	<p>S.I.T.C. of totally enclosed type as per IS: 2147, Operation on 3-Phase, 415V, 50Hz, Neutral effectively grounded, IP-55, with power &amp; control contactors as per IS: 13947, CT of accuracy class- I as per IS: 2705, Relays &amp; control fuses, air insulated electrolyte grade Aluminum/ Copper busbar for three phase &amp; neutral system with thermal magnetic based/ air break fixed type MCCB with trip free mechanism, current limiting type, MCB as per IS/IEC 60898-2:2003, suitable rating outgoing feeders as per design &amp; SLD drawings, digital type metering instruments, equipment fittings, bus bars, cable alleys, cable gland, incoming &amp; outgoing cable connection chamber suitable for 1100V grade, Al./ Cu. conductor PVC insulated &amp; PVC sheathed armoured cable, 10% spare terminals, power wiring use of 650/ 1100V grade, FRLS insulated copper conductor wires conforming to IS: 694 &amp; 8130, cable compartments of minimum 350 mm size. Panel shall be comprising of:</p> <p><b>a) Incomer from WS UPSMDB of Above 16A, upto &amp; including 80A, 4 Pole, MCCB with Breaking Capacity of Icu=25 KA at 415V (Ics =100% of Icu), Air Break Fixed MCCB conforms to IS/ IEC 60947-2 with trip free mechanism, current limiting type with Microprocessor release (O / C, S / C &amp; E / F) with adjustable settings &amp; having minimum 2NO+2NC potential free auxiliary contacts with all necessary Electro-Mechanical protections &amp; interlocks etc. (1No.)</b></p>							

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
	<p><b>b)</b> Outgoing of 240 V, 6 to 32 Amp. MCB double pole switch for motor &amp; inductive load (C Curve) having 10 KA breaking capacity &amp; conforms to IS : 8828 in existing box having following capacity . (9 Nos.)</p> <p><b>c)</b> Supplying and erecting of 100 Amp. Capacity triple pole &amp; neutral 440V / 500V panel mounting Copper Busbars with four equal Nos. of electrolyte bus having current density not more than 1.6 Amp. / sq. mm (Rated current / cross section area) duly wrapped with colour insulating tape for phase sequence of following current carrying capacity, erected with necessary bus bar supports / insulators, main cable socket to each bar, erected in existing cubical panel with necessary connections.</p> <p><b>d) Refer SLD TCE.11364A-EL-4000-AU-4004 for more details. The makes of Switchgear shall be like Siemens, ABB, Schneider Electric, L&amp;T or as per the approved make list of PWD or as approved by Chief Technical Officer (CTO).</b> NB: The standard companies switch gear shall be used and only manufacturers at CPRI approved factory and shall be certified by that company whose switch gears are used after fabrication for beneficial use. Price of Panel comprises of pedestal of minimum 350 mm height made of MS angle/ channel/ flats of favourable shapes.</p>							



#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
11	<p><b><u>LIGHTING DISTRIBUTION BOARD</u></b>- S.I.T.C. of totally enclosed type as per IS: 2147, Operation on 3-Phase, 415V, 50Hz, Neutral effectively grounded, IP-55, with power &amp; control contactors as per IS: 13947, CT of accuracy class- I as per IS: 2705, Relays &amp; control fuses, air insulated electrolyte grade Aluminum busbar for three phase &amp; neutral system with thermal magnetic based/ air break fixed type MCCB with trip free mechanism, current limiting type, MCB as per IS/IEC 60898-2:2003, suitable rating outgoing feeders as per design &amp; SLD drawings, digital type metering instruments, equipment fittings, bus bars, cable alleys, cable gland, incoming &amp; outgoing cable connection chamber suitable for 1100V grade, Al./ Cu. conductor PVC insulated &amp; PVC sheathed armoured cable, 10% spare terminals, power wiring use of 650/ 1100V grade, FRLS insulated copper conductor wires conforming to IS: 694 &amp; 8130, cable compartments of minimum 350 mm size. Panel shall be comprising of:</p> <p><b>a) 2 nos. of Incomers from LT PCC of 4 Pole, 32A MCCB with Breaking Capacity of Icu=25 KA at 415V (Ics=100% of Icu), Air Break Fixed MCCB conforms to IS/ IEC 60947-2 with trip free mechanism, current limiting type with Microprocessor release (O / C, S / C &amp; E / F) with adjustable settings &amp; having minimum 2NO+2NC potential free auxiliary contacts with all necessary Electro-Mechanical protections &amp; interlocks etc. with 4 pole 440V 40 Amp. power contactor complete erected as per direction. (2 Nos.)</b></p>	Nos.	2					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
	<p><b>b)</b> Outgoing of 25A 2 pole single phase R&amp;B approved make RCBO (Electro magnetic type only) working on residual current device having 6 KA short circuit breaking capacity and 30 mA sensitivity &amp; 30 milli sec. tripping time conforming to IS 12640 test knob facility trip free mechanism operating for rated leakage at nominal ten volt, complete erected including all materials lugs screws etc. completed. <b>(3 Nos.)</b></p> <p><b>c)</b> Outgoing of 6A to 32A Miniature circuit breaker single pole suitable to operate on 240 V A.C. system and having breaking capacity 10 KA to be erected in existing box. confirming to IS 8828/1996 with ISI Mark. <b>(9 Nos.)</b></p> <p><b>d)</b> Supplying and erecting of 100 Amp. Capacity triple pole &amp; neutral 440V / 500V panel mounting Copper Busbars with four equal Nos. of electrolyte bus having current density not more than 1.6 Amp. / sq.mm (Rated current / cross section area) duly wrapped with colour insulating tape for phase sequence of following current carrying capacity, erected with necessary bus bar supports / insulators, main cable socket to each bar, erected in existing cubical panel with necessary connections.</p>							

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
	<p><b>d) Refer SLD TCE.11364A-EL-4000-AU-4007 for more details. The makes of Switchgear shall be like Siemens, ABB, Schneider Electric, L&amp;T or as per the approved make list of PWD or as approved by Chief Technical Officer (CTO). NB: The standard companies switch gear shall be used and only manufacturers at CPRI approved factory and shall be certified by that company whose switch gears are used after fabrication for beneficial use. Price of Panel comprises of pedestal of minimum 350 mm height made of MS angle/ channel/ flats of favourable shapes.</b></p>							

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
12	<p><b><u>RAW POWER DISTRIBUTION BOARD-1-</u></b> S.I.T.C. of totally enclosed type as per IS: 2147, Operation on 3-Phase, 415V, 50Hz, Neutral effectively grounded, IP-55, with power &amp; control contactors as per IS: 13947, CT of accuracy class- I as per IS: 2705, Relays &amp; control fuses, air insulated electrolyte grade Aluminum busbar for three phase &amp; neutral system with thermal magnetic based/ air break fixed type MCCB with trip free mechanism, current limiting type, MCB as per IS/IEC 60898-2:2003, suitable rating outgoing feeders as per design &amp; SLD drawings, digital type metering instruments, equipment fittings, bus bars, cable alleys, cable gland, incoming &amp; outgoing cable connection chamber suitable for 1100V grade, Al./ Cu. conductor PVC insulated &amp; PVC sheathed armoured cable, 10% spare terminals, power wiring use of 650/ 1100V grade, FRLS insulated copper conductor wires conforming to IS: 694 &amp; 8130, cable compartments of minimum 350 mm size. Panel shall be comprising of:</p> <p><b>a) 2 nos. of Incomers from LT PCC of 4 Pole, 32A MCCB with Breaking Capacity of Icu=25 KA at 415V (Ics =100% of Icu), Air Break Fixed MCCB conforms to IS/ IEC 60947-2 with trip free mechanism, current limiting type with Microprocessor release (O / C, S / C &amp; E / F) with adjustable settings &amp; having minimum 2NO+2NC potential free auxiliary contacts with all necessary Electro-Mechanical protections &amp; interlocks etc. with 4 pole 440V 40 Amp. power contactor complete erected as per direction. (2 Nos.)</b></p>	No.	1					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
	<p><b>b)</b> Outgoing of 6 A to 25 A, 4 Pole Three Phase R&amp;B approved make RCBO (Electro magnetic type only) working on residual current device having 6 KA short circuit breaking capacity and 30 mAmp. Sensitivity &amp; 30 mili sec. tripping time conforming to IS 12640 test knob facility trip free mechanism operating for rated leakage at nominal ten volt, complete erected including all materials lugs screws etc. completed. <b>(3 Nos.)</b></p> <p><b>c)</b> Outgoing of 6A / 10A / 16A / 20A / 25A 2 pole single phase R&amp;B approved make RCBO (Electro magnetic type only) working on residual current device having 6 KA short circuit breaking capacity and 30 mAmp. Sensitivity &amp; 30 mili sec. tripping time conforming to IS 12640 test knob facility trip free mechanism operating for rated leakage at nominal ten volt, complete erected including all materials lugs screws etc. completed. <b>(6 Nos.)</b></p> <p><b>d)</b> Supplying and erecting of 100 Amp. Capacity triple pole &amp; neutral 440V / 500V panel mounting Copper Busbars with four equal Nos. of electrolyte bus having current density not more than 1.6 Amp. / sq.mm (Rated current / cross section area) duly wrapped with colour insulating tape for phase sequence of following current carrying capacity, erected with necessary bus bar supports / insulators, main cable socket to each bar, erected in existing cubical panel with necessary connections.</p>							

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
	<p><b>e) Refer SLD TCE.11364A-EL-4000-AU-4008 for more details. The makes of Switchgear shall be like Siemens, ABB, Schneider Electric, L&amp;T or as per the approved make list of PWD or as approved by Chief Technical Officer (CTO).</b> NB: The standard companies switch gear shall be used and only manufacturers at CPRI approved factory and shall be certified by that company whose switch gears are used after fabrication for beneficial use. Price of Panel comprises of pedestal of minimum 350 mm height made of MS angle/ channel/ flats of favourable shapes.</p>							

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
13	<p><b>RAW POWER DISTRIBUTION BOARD-2-</b> S.I.T.C. of totally enclosed type as per IS: 2147, Operation on 3-Phase, 415V, 50Hz, Neutral effectively grounded, IP-55, with power &amp; control contactors as per IS: 13947, CT of accuracy class- I as per IS: 2705, Relays &amp; control fuses, air insulated electrolyte grade Aluminum busbar for three phase &amp; neutral system with thermal magnetic based/ air break fixed type MCCB with trip free mechanism, current limiting type, MCB as per IS/IEC 60898-2:2003, suitable rating outgoing feeders as per design &amp; SLD drawings, digital type metering instruments, equipment fittings, bus bars, cable alleys, cable gland, incoming &amp; outgoing cable connection chamber suitable for 1100V grade, Al./ Cu. conductor PVC insulated &amp; PVC sheathed armoured cable, 10% spare terminals, power wiring use of 650/ 1100V grade, FRLS insulated copper conductor wires conforming to IS: 694 &amp; 8130, cable compartments of minimum 350 mm size. Panel shall be comprising of:</p> <p><b>a) 2 nos. of Incomers from LT PCC of 4 Pole, 63 A MCCB with Breaking Capacity of Icu=25 KA at 415V (Ics =100% of Icu), Air Break Fixed MCCB conforms to IS/ IEC 60947-2 with trip free mechanism, current limiting type with Microprocessor release (O / C, S / C &amp; E / F) with adjustable settings &amp; having minimum 2NO+2NC potential free auxiliary contacts with all necessary Electro-Mechanical protections &amp; interlocks etc. with 4 pole 440V 40 Amp. power contactor complete erected as per direction. (2 Nos.)</b></p>	No.	1					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
	<p><b>b)</b> Outgoing of 6 A to 25 A, 4 Pole Three Phase R&amp;B approved make RCBO (Electro magnetic type only) working on residual current device having 6 KA short circuit breaking capacity and 30 mAmp. Sensitivity &amp; 30 mili sec. tripping time conforming to IS 12640 test knob facility trip free mechanism operating for rated leakage at nominal ten volt, complete erected including all materials lugs screws etc. completed. (3 Nos.)</p> <p><b>c)</b> Outgoing of 6A / 10A / 16A / 20A / 25A 2 pole single phase R&amp;B approved make RCBO (Electro magnetic type only) working on residual current device having 6 KA short circuit breaking capacity and 30 mAmp. Sensitivity &amp; 30 mili sec. tripping time conforming to IS 12640 test knob facility trip free mechanism operating for rated leakage at nominal ten volt, complete erected including all materials lugs screws etc. completed.(9 Nos.)</p> <p><b>d)</b> Supplying and erecting of 100 Amp. Capacity triple pole &amp; neutral 440V / 500V panel mounting Copper Busbars with four equal Nos. of electrolyte bus having current density not more than 1.6 Amp. / sq.mm (Rated current / cross section area) duly wrapped with colour insulating tape for phase sequence of following current carrying capacity, erected with necessary bus bar supports /insulators, main cable socket to each bar, erected in existing cubical panel with necessary connections.</p>							



#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
	<b>e) Refer SLD TCE.11364A-EL-4000-AU-4008 for more details. The makes of Switchgear shall be like Siemens, ABB, Schneider Electric, L&amp;T or as per the approved make list of PWD or as approved by Chief Technical Officer (CTO).</b> NB: The standard companies switch gear shall be used and only manufacturers at CPRI approved factory and shall be certified by that company whose switch gears are used after fabrication for beneficial use. Price of Panel comprises of pedestal of minimum 350 mm height made of MS angle/channel/ flats of favourable shapes.							
14	<b><u>EMERGENCY LIGHTING DISTRIBUTION BOARD-</u></b>	Nos.	2					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
	<p>S.I.T.C. of totally enclosed type as per IS: 2147, Operation on 3-Phase, 415V, 50Hz, Neutral effectively grounded, IP-55, with power &amp; control contactors as per IS: 13947, CT of accuracy class- I as per IS: 2705, Relays &amp; control fuses, air insulated electrolyte grade Aluminum busbar for three phase &amp; neutral system with thermal magnetic based/ air break fixed type MCCB with trip free mechanism, current limiting type, MCB as per IS/IEC 60898-2:2003, suitable rating outgoing feeders as per design &amp; SLD drawings, digital type metering instruments, equipment fittings, bus bars, cable alleys, cable gland, incoming &amp; outgoing cable connection chamber suitable for 1100V grade, Al./ Cu. conductor PVC insulated &amp; PVC sheathed armoured cable, 10% spare terminals, power wiring use of 650/ 1100V grade, FRLS insulated copper conductor wires conforming to IS: 694 &amp; 8130, cable compartments of minimum 350 mm size, Aluminium earth bus bar for entire length as per SLD, detail specifications &amp; data sheet including required testing @ factory as per applicable IS/ IEC standards. Panel shall be comprising of:</p> <p><b>a) Incomer from LT PCC of 240 V MCB double pole switch for motor &amp; inductive load (C Curve) having 10 KA breaking capacity &amp; conforms to IS : 8828 in existing box having following capacity (A) 6 to 32 Amp. (Cat. III) (1 Nos.)</b></p>							

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
	<p><b>b)</b> Outgoing of 25A 2 pole single phase R&amp;B approved make RCBO (Electro magnetic type only) working on residual current device having 6 KA short circuit breaking capacity and 30 mAmp. Sensitivity &amp; 30 milisecond tripping time conforming to IS 12640 test knob facility trip free mechanism operating for rated leakage at nominal ten volt, complete erected including all materials lugs screws etc. completed. (1 Nos.)</p> <p><b>c)</b> Outgoing of 6A to 32A Miniature circuit breaker single pole suitable to operate on 240 V A.C. system and having breaking capacity 10 KA to be erected in existing box. conforming to IS 8828/1996 with ISI Mark. (6 Nos.)</p> <p><b>d)</b> Supplying and erecting of 100 Amp. Capacity triple pole &amp; neutral 440V / 500V panel mounting Copper Busbars with four equal Nos. of electrolyte bus having current density not more than 1.6 Amp. / sq.mm (Rated current / cross section area) duly wrapped with colour insulating tape for phase sequence of following current carrying capacity, erected with necessary bus bar supports / insulators, main cable socket to each bar, erected in existing cubical panel with necessary connections.</p> <p><b>e)</b> Refer SLD TCE.11364A-EL-4000-AU-4007 for more details. The makes of Switchgear shall be like Siemens, ABB, Schneider Electric, L&amp;T or as per the approved make list of PWD or as approved by Chief Technical Officer (CTO).</p>							

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
	NB: -The standard companies switch gear shall be used and only manufacturers at CPRI approved factory and shall be certified by that company whose switch gears are used after fabrication for beneficial use. Price of Panel comprises of pedestal of minimum 350 mm height made of MS angle/channel/ flats of favourable shapes.							
15	<p><b><u>APFC PANEL-</u></b></p> <p>Supply, installaton, testing &amp; commissioning LV APFC panel consisting of required capacitor banks for continuous duty to improve P.F. 0.85 to 0.99 in required steps enclosed in dust &amp; vermin proof compartment, indoor type, fabricated from CRCA sheet steel with minimum thickness of 3 mm for base frame / channel / gland plates, 2.0 mm for load bearing members / doors &amp; 1.6 mm for internal partitions, minimum degree of protection - IP 42, busbar chamber, required size of Al bus bar/ terminals, minimum 10 stage APFC relay, metering, indicating lamps, push buttons, with detuned reactor complete as per IS: 16636-2017 with latest ammendment &amp; detailed technical specification and data sheet as under.</p> <p><b>50 KVAR capacity: APFC panel consisting following items.</b></p> <p>a) 125 A, 50 kA for 1sec. TP, TM based MCCB with spreader terminals &amp; rotary handle</p> <p>b) 0-125 A range analogue ammeter of 96 x 96 mm size with selector switch</p>	Nos	2					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
	<p>c) 3nos. 125 / 5A, 10 VA CL-1.0 cast resin type current transformer</p> <p>d) Suitable rating MCCB / MCB &amp; Contactors for each capacitor bank</p> <p>e) Suitable rating APP type capacitor banks (vacuum impregnated with non-PCB / non toxic oil, internally delta connected with built in internal fuses complete with discharge resistances &amp; terminal cover) of approved make in required steps with well suited detuned reactor is placed in series with each capacitor step. (e.g., 50 KVAR capacity will be provided in steps of 2 nos x 5 KVAR, 2 nos x 7.5 KVAR &amp; 2 nos x 12.5 KVAR).</p> <p>f) Enclosure dimensions- 1600(H) x 1150(W) x 600 (D)</p> <p><b>The makes of Switchgear shall be like Siemens, ABB, Schneider Electric, L&amp;T or as per the approved make list of PWD or as approved by Chief Technical Officer (CTO).</b></p>							
16	<p><b><u>UPS for Work Station-</u></b></p> <p>Supplying, installation, testing and commissioning of online <b>3 phase 20 kVA UPS System with 30 minutes backup</b> including batteries, interconnecting cables, battery racks etc. <b>The makes of UPS shall be like Delta, Eaton, ABB or as per the approved make list of PWD or as approved by Chief Technical Officer (CTO).</b></p>	Nos.	2					
17	<p><b><u>UPS for Emergency Lighting Distribution Board-</u></b></p>	Nos.	2					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
	Supplying, installation, testing and commissioning of online <b>3 phase 500 VA UPS System with 30 minutes backup</b> including batteries, interconnecting cables, battery racks etc. <b>The makes of UPS shall be like Delta, Eaton, ABB or as per the approved make list of PWD or as approved by Chief Technical Officer (CTO).</b>							
18	Supply, laying, testing & commissioning 1.1 kV grade, XLPE insulated, stranded Aluminium conductor, galvanised steel flat strip / round wire armoured, extruded PVC type ST2 sheathed, heavy duty cable (to be laid on wall surface with necessary clamps / in existing cable trench / cable trays / conduit / pipe sleeves at road crossing or floor as per site requirement) conforming to IS:7098 (Part-1) & IEC:60502 (Part-1) of following sizes. <b>The makes of cable shall be like RR Cable, Polycab, RPG, Universal, Finolex or as per the approved make list of PWD or as approved by Chief Technical Officer (CTO)</b>  <b>3.5 Core x 240 Sq. mm</b>	Rmt	2					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
19	Supply, laying, testing & commissioning 1.1 kV grade, XLPE insulated, stranded Aluminium conductor, galvanised steel flat strip / round wire armoured, extruded PVC type ST2 sheathed, heavy duty cable (to be laid on wall surface with necessary clamps / in existing cable trench / cable trays / conduit / pipe sleeves at road crossing or floor as per site requirement) conforming to IS:7098 (Part-1) & IEC:60502 (Part-1) of following sizes. <b>The makes of cable shall be like RR Cable, Polycab, RPG, Universal, Finolex or as per the approved make list of PWD or as approved by Chief Technical Officer (CTO)</b>  <b>3.5 Core x 120 Sq. mm</b>	Rmt	2					
20	Supply, laying, testing & commissioning of 1.1 kV grade, XLPE insulated, stranded Aluminium conductor, galvanised steel flat strip / round wire armoured, extruded PVC type ST2 sheathed, heavy duty cable (to be laid on wall surface with necessary clamps / in existing cable trench / cable trays / conduit / pipe sleeves at road crossing or floor as per site requirement) conforming to IS:7098 (Part-1) & IEC:60502 (Part-1) of following sizes. <b>The makes of cable shall be like RR Cable, Polycab, RPG, Universal, Finolex or as per the approved make list of PWD or as approved by Chief Technical Officer (CTO)</b>  <b>4 Core x 35 Sq. mm</b>	Rmt	1306					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
21	Supply, laying, testing & commissioning of XLPE(IS:7098)(I)-88 ISI armoured cable multistrand Copper conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe at road crossing or floor of following size of cables. <b>The makes of cable shall be like RR Cable, Polycab, RPG, Universal, Finolex or as per the approved make list of PWD or as approved by Chief Technical Officer (CTO)</b>  <b>4 Core x 6 Sq. mm</b>	Rmt	42					
22	Supply, laying, testing & commissioning of XLPE(IS:7098)(I)-88 ISI armoured cable multistrand Copper conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe at road crossing or floor of following size of cables. <b>The makes of cable shall be like RR Cable, Polycab, RPG, Universal, Finolex or as per the approved make list of PWD or as approved by Chief Technical Officer (CTO)</b>  <b>4 Core x 2.5 Sq. mm</b>	Rmt	50					
23	Supply, laying, testing & commissioning of XLPE(IS:7098)(I)-88 ISI armoured cable multistrand Copper conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe at road crossing or floor of following size of cable. <b>The makes of cable shall be like RR Cable, Polycab, RPG, Universal, Finolex or as per the approved make list of PWD or as approved by Chief Technical Officer (CTO)</b>	Rmt	400					



#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
	<b>3 Core x 2.5 Sq. mm</b>							
24	Supply, installation, testing, commissioning of double compression heavy duty brass cable glands (nickel-plated) with washers & rubber ring conforming to IS, suitable for 3, 3½ & 4 core cables of following type & sizes (Double Compression). <b>The makes of cable gland shall be like Comet, Dowells, Beaco or as per the approved make list of PWD or as approved by Chief Technical Officer (CTO).</b> <b>3.5 Core x 240 Sq. mm</b>	Nos.	100					
25	Supply, installation, testing, commissioning of double compression heavy duty brass cable glands (nickel-plated) with washers & rubber ring conforming to IS, suitable for 3, 3½ & 4 core cables of following type & sizes (Double Compression). <b>The makes of cable gland shall be like Comet, Dowells, Beaco or as per the approved make list of PWD or as approved by Chief Technical Officer (CTO).</b> <b>3.5 Core x 120 Sq. mm</b>	Nos.	6					
26	Supply, installation, testing, commissioning of double compression heavy duty brass cable glands (nickel-plated) with washers & rubber ring conforming to IS, suitable for 3, 3½ & 4 core cables of following type & sizes (Double Compression). <b>The makes of cable gland shall be like Comet, Dowells, Beaco or as per the approved make list of PWD or as approved by Chief Technical Officer (CTO).</b> <b>4 Core x 35 Sq. mm</b>	Nos.	4					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
27	Supply, installation, testing, commissioning of double compression heavy duty brass cable glands (nickel-plated) with washers & rubber ring conforming to IS, suitable for 3, 3½ & 4 core cables of following type & sizes (Double Compression). <b>The makes of cable gland shall be like Comet, Dowells, Beaco or as per the approved make list of PWD or as approved by Chief Technical Officer (CTO).</b> <b>4 Core x 6 Sq. mm</b>	Nos.	4					
28	Supply, installation, testing, commissioning of double compression heavy duty brass cable glands (nickel-plated) with washers & rubber ring conforming to IS, suitable for 3, 3½ & 4 core cables of following type & sizes (Double Compression). <b>The makes of cable gland shall be like Comet, Dowells, Beaco or as per the approved make list of PWD or as approved by Chief Technical Officer (CTO).</b> <b>4 Core x 2.5 Sq. mm</b>	Nos.	8					
29	Supply, installation, testing, commissioning of double compression heavy duty brass cable glands (nickel-plated) with washers & rubber ring conforming to IS, suitable for 3, 3½ & 4 core cables of following type & sizes (Double Compression). <b>The makes of cable gland shall be like Comet, Dowells, Beaco or as per the approved make list of PWD or as approved by Chief Technical Officer (CTO).</b> <b>3 Core x 2.5 Sq. mm</b>	Nos.	24					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
30	Providing & fitting crimping type Cable Terminals (Lugs) conforming to IS of following types and sizes. Aluminium Tubular Terminals(Long Barrel) (in Sq.mm.) <b>The makes of cable lugs shall be like Comet, Dowells, Beaco or as per the approved make list of PWD or as approved by Chief Technical Officer (CTO).</b>  <b>240 Sq. mm</b>	Nos.	24					
31	Providing & fitting crimping type Cable Terminals (Lugs) conforming to IS of following types and sizes. Aluminium Tubular Terminals(Long Barrel) (in Sq.mm.) <b>The makes of cable lugs shall be like Comet, Dowells, Beaco or as per the approved make list of PWD or as approved by Chief Technical Officer (CTO).</b>  <b>120 Sq. mm</b>	Nos.	16					
32	Providing & fitting crimping type Cable Terminals (Lugs) conforming to IS of following types and sizes. Aluminium Tubular Terminals(Long Barrel) (in Sq.mm.) <b>The makes of cable lugs shall be like Comet, Dowells, Beaco or as per the approved make list of PWD or as approved by Chief Technical Officer (CTO).</b>  <b>35 Sq. mm</b>	Nos.	16					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
33	Providing & fitting crimping type Cable Terminals (Lugs) conforming to IS of following types and sizes. Copper Tubular Terminals(Long Barrel) (in Sq.mm.) <b>The makes of cable lugs shall be like Comet, Dowells, Beaco or as per the approved make list of PWD or as approved by Chief Technical Officer (CTO).</b>  <b>6 Sq. mm</b>	Nos.	102					
34	Providing & fitting crimping type Cable Terminals (Lugs) conforming to IS of following types and sizes. Copper Tubular Terminals(Long Barrel) (in Sq.mm.) <b>The makes of cable lugs shall be like Comet, Dowells, Beaco or as per the approved make list of PWD or as approved by Chief Technical Officer (CTO).</b>  <b>2.5 Sq. mm</b>	Nos.	38					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
35	<p>Supply, Installation, testing &amp; commissioning of Recess office compliant UGR&lt;19 LED 600x600mm fitting Maximum Luminaire Height 75 mm made of white CRCA having unique angular optics with bold origami illuminated bands made of Molded PC Diffuser and perforated middle section, makes the illumination easy on eyes, LED Used shall be SMD type and fixture should have minimum efficacy at System level <math>\geq 100</math> lumens/watt, Life of fixture : 50K Hrs. @ L70B50 Lumen maintenance, CCT 6500 (SDCM 5), CRI &gt;80, PF &gt;0.95 &amp; THD&lt;10%, an operating Voltage Range of 140 - 270 V. Minimum Internal Surge Protection 4KV The fixture design should comply with IS:10322 &amp; Must be EMC / EMI compliance maintaining driver leakage current as per IEC 60598, Minimum system Lumens 2500 and total power consumption not more than <b>25W</b>. Operating voltage of 140-270V with Over Voltage protection @320V cut-off with auto-restart and less than 125VAC. LM79 and LM80 reports need to be submitted from a NABL/UL accredited lab to verify above parameters along with IEC/EC 62471 compliance</p> <p><b>Similar to Philips make RC480B LED25S/865 W60L60 PSU WH or equivalent of Havells, Wipro or as per approved make list of PWD or as approved by Chief Technical Officer (CTO).</b></p>	Nos.	38					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
36	<p>Supply, Installation, testing &amp; commissioning of Recess office compliant UGR&lt;19 LED 600x600mm fitting Maximum Luminaire Height 75 mm made of white CRCA having unique angular optics with bold origami illuminated bands made of Molded PC Diffuser and perforated middle section, makes the illumination easy on eyes, LED Used shall be SMD type and fixture should have minimum efficacy at System level <math>\geq 100</math> lumens/watt , Life of fixture : 50K Hrs. @ L70B50 Lumen maintenance, CCT 6500 (SDCM 5), CRI &gt;80, PF &gt;0.95 &amp; THD&lt;10%, an operating Voltage Range of 140 - 270 V. Minimum Internal Surge Protection 4KV The fixture design should comply with IS:10322 &amp; Must be EMC / EMI compliance maintaining driver leakage current as per as per IEC 60598, Minimum system Lumens 3000 and total power consumption not more than <b>30W</b> . Operating voltage of 140-270V with Over Voltage protection @320V cut-off with auto-restart and less than 125VAC .LM79 and LM80 reports need to be submitted from a NABL/UL accredited lab to verify above parameters along with IEC/EC 62471 compliance.</p> <p><b>Similar to Philips RC480B LED30S/865 W60L60 PSU WH or equivalent of Havells, Wipro or as per approved make list of PWD or as approved by Chief Technical Officer (CTO).</b></p>	Nos.	76					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
37	Supply, Installation, testing & commissioning of 6" LED Recessed Downlighter with a nominal system lumen output of 1200 lumens and a minimum system efficacy of 110 lm/W. The luminaire shall have a rated system lifetime of 50,000 burning hours at L70B50. The luminaire should have a color temperature of 6500K and CRI>80. The luminaire shall meet IP20 rating with THD<10% and PF > 0.95 and 2.5KV surge protection. The luminaire housing should be made of pressure die cast aluminium and the luminaire optics shall have a high efficiency diffuser with more than 85% transmittance. The total power consumption should not exceed <b>11 W</b> (including driver). The fixture should comply with the parameters as per IS10322. The LED driver should comply to IEC61000-3-2 ed.3.2, 2009 for Harmonics, IEC61347-2-13, 2006 in conjunction with IEC61347-1 ed.2.0, 2007. LM 79 and LM80 reports need to be submitted from a NABL/UL accredited lab to verify above parameters along with IEC/EC 62471 compliance. <b>Similar to Philips DN296B LED12S PSU WH or equivalent of Havells, Wipro or as per approved make list of PWD or as approved by Chief Technical Officer (CTO).</b>	Nos.	18					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
38	Supply, Installation, testing & commissioning of 6" LED Recessed Downlighter with a nominal system lumen output of 1500 lumens and a minimum system efficacy of 110 lm/W. The luminaire shall have a rated system lifetime of 50,000 burning hours at L70B50. The luminaire should have a color temperature of 6500K and CRI>80. The luminaire shall meet IP20 rating with THD<10% and PF > 0.95 and 2.5KV surge protection. The luminaire housing should be made of pressure die cast aluminium and the luminaire optics shall have a high efficiency diffuser with more than 85% transmittance. The total power consumption should not exceed <b>13.5 W</b> (including driver). The fixture should comply with the parameters as per IS10322. The LED driver should comply to IEC61000-3-2 ed.3.2, 2009 for Harmonics, IEC61347-2-13, 2006 in conjunction with IEC61347-1 ed.2.0, 2007. LM 79 and LM80 reports need to be submitted from a NABL/UL accredited lab to verify above parameters along with IEC/EC 62471 compliance. <b>Similar to Philips DN296B LED15S PSU WH or equivalent of Havells, Wipro or as per approved make list of PWD or as approved by Chief Technical Officer (CTO).</b>	Nos.	30					



#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
39	Point wiring for Light / Bell with 2-1.5 sq.mm & earthwire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multistrand copper wires, in following type of pipe to be erected concealed in/ on surface on wall/ceiling complete with 6A Modular type switch / bell push & accessories and earth continuity of following type, erected on PVC / Metallic box, single mounting base frame covered with textured/metallic front plate modules erected on / in wall / ceiling as per pipe erected, with necessary Lamp holder/ceiling rose / H.D.Connector as directed. (a) with medium class Rigid PVC pipe and accessories Cat III. <b>The makes of Modular switches shall be like Legrand, Crabtree, Clipsal, Anchor, MK or as per the approved make list of PWD or as approved by Chief Technical Officer (CTO).</b>	Nos.	162					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
40	<p><b>POINT WIRING IN COPPER (MODULAR)</b>- Providing following type of Modular Type Accessories mounted with pvc / metallic box, single mounting base frame covered with textured / metallic front plate, modules erected with necessary connection. As desired by Engineer In charge. <b>The makes of Modular switches shall be like Legrand, Crabtree, Clipsal, Anchor, MK or as per the approved make list of PWD or as approved by Chief Technical Officer (CTO).</b></p> <p><b>(A) One No. SP 6 Amp. - Cat.III</b></p>	Nos.	38					
41	<p><b>POINT WIRING IN COPPER (MODULAR)</b>- Providing following type of Modular type accessories mounted with PVC/ metallic box, single mounting base frame covered with textured/ metallic front plate, modules erected with necessary connection as desired by Engineer In charge. <b>The makes of Modular switches shall be Legrand, Crabtree, Clipsal, Anchor, MK or as per the approved make list of PWD or as approved by Chief Technical Officer (CTO).</b></p> <p><b>(I) 16 Amp. SP one way switch- Cat.III</b></p>	Nos.	25					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
42	<p><b>POINT WIRING IN COPPER (MODULAR)</b>- Providing following type of Modular type accessories mounted with PVC/ metallic box, single mounting base frame covered with textured/ metallic front plate, modules erected with necessary connection as desired by Engineer In charge. <b>The makes of Modular switches shall be like Legrand, Crabtree, Clipsal, Anchor, MK or as per the approved make list of PWD or as approved by Chief Technical Officer (CTO).</b></p> <p><b>(J) 6/16Amp. Universal socket - Cat.III</b></p>	Nos.	25					
43	<p><b>POINT WIRING IN COPPER (MODULAR)</b>- Providing following type of Modular type accessories mounted with PVC/ metallic box, single mounting base frame covered with textured/ metallic front plate, modules erected with necessary connection as desired by Engineer In charge. <b>The makes of Modular switches shall be like Legrand, Crabtree, Clipsal, Anchor, MK or as per the approved make list of PWD or as approved by Chief Technical Officer (CTO).</b></p> <p><b>(J) 20 Amp. Universal socket - Cat.III</b></p>	Nos.	2					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
44	<p>Providing &amp; erecting Switch board for Computer or electric apparatus consisting of following items in single board erected on PVC / Metalboard with 3 mm thick PC (Polycarbonate) / Acrylic sheet erected as directed 1 no. 6A/16A universal plug-switch combined., 4 nos. 6A Switch, 4 nos. 6A 5 pin Plug.</p> <p><b>[B] For Modular Type Accessories Cat-III</b></p>	Nos.	54					
45	<p>Supply, Installation, fabrication, testing &amp; commissioning of G.I ladder type cable tray with channels of size 75 x 15 x 15 mm / 100 x 15 x 15 mm and rungs of size 35 x 15 x 15 mm spaced at 250 mm apart. fabricated from 2 mm thick sheet steel in standard length of 2.5 meter, duly hot dipped galvanized after fabrication as per IS-2629 1989/ IS 4759-1984 including accessories such as coupler plates/ fish plates, bends, tees, reducers, elbo, covers and electro galvanized hardware etc, erected on existing support as per specification and instructions of Engineer in charge. <b>The makes of the cable tray and accessories shall be as per the approved make list of PWD or DNHPDCL.</b></p> <p><b>Size- 450 (W) X 75 (H) X 2.0 mm Thick</b></p>	Rmt	282					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
46	Supplying & laying under floor pre-galvanised corrosion proof rectangular sheet steel cable trunking of 1.6 mm thick having with stand point load up to 1.33 Ton & free from seepage of concrete of screed water having following size of dimensions and No of compartments (W x D x T). <b>The makes of the trunking chamber and accessories shall be as per the approved make list of PWD or DNHPDCL.</b>  <b>Size- 150mm x 38mm x 1.6mm with Three Compartments</b>	Rmt	114					
47	<b>CONDUIT AND ACCESSORIES-</b> Providing & erecting PVC Corrugated Flexible Conduit with required nos. of coupling, PVC bushes, Check-nuts etc. complete of following sizes. <b>The makes of Conduits shall be like Precision, Polycab or as per the approved make list of PWD or as approved by Chief Technical Officer (CTO).</b>  <b>(a) 20 mm</b>	Rmt	621					
48	<b><u>EARTHING:-</u></b>	Nos.	18					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
	<p>Supplying &amp; erecting earth pit of minimum bore dia.150mm size approved make Earthing Electrode consisting Pipe-in-Pipe Technology as per IS 3043-1987 made of corrosion free G.I.Pipes having Outer pipe dia of 50mm having 80-200 Micron galvanising, Inner pipe dia of 25 mm having 200-250 Micron galvanising, connection terminal dia of 12mm with constant ohmic value surrounded by highly conductive compound with high charge dissipation suitable for following type of applications. <b>The makes of the earthing pipe and accessories shall be as per the approved make list of PWD or DNHPDCL.</b></p> <p>(c) For Electrical Installation covering Transformer Neutrals, Lightning arrester Earthing, A. C. Plant &amp; Sensitive Computer System(like Automation, SCADA) i.e independent Earthing in normal soil.</p> <p>Length of Pipe : 3.00 mtrs Back filling Compound : 2 nos Bags of 25 Kg.</p>							
49	<p>Supply, installation, testing and commissioning of Earth Test Link Kit. <b>The makes of the earth link test kit and accessories shall be as per the approved make list of PWD or DNHPDCL.</b></p>	Nos.	18					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
50	Supplying and laying 25 mm X 6 mm G.I strip at 0.50 metre below ground as strip earth electrode, including connection/terminating with G.I. nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of G.I. nut bolt & spring washer spaced at 50mm). <b>The makes of the earthing strip shall be as per the approved make list of PWD or DNHPDCL.</b>	Kg	360.5					
51	Providing and Erecting required size of <b>25X6 mm Copper strip</b> for earthing of electrical equipment i.e. Motor & Transformer Neutral earthing at a depth of 0.5m below ground as strip earth electrode, including termination/ interconnecting with GI Nut/Bolts, washer, Spring washer etc. as required. Jointing shall be done by overlapping & with two sets of Nut/bolts and spring washer. <b>The makes of the earthing strip shall be as per the approved make list of PWD or DNHPDCL.</b>	Kg	68.46					
52	Supplying & laying of <b>8 SWG G.I. earth</b> from Earth Electrode (below G.L.) to electrical switch gears or electrical machineries including making necessary connection as approved, specified and directed by the deptt.	Kg	16.58					
53	Supplying and laying of Flexible PVC insulated multistrand multicore 1.1 kv grade ISI marked copper wires of following size to be erected as directed. <b>The makes of cable shall be like RR Cable, Polycab, RPG, Universal, Finolex or as per the approved make list of PWD or as approved by Chief Technical Officer (CTO).</b>	Rmt	1863					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
	<b>3 x 1.5 sq. mm</b>							
<b>Schedule M4 - Fire Fighting works</b>								
1	Supply & installation of following type of portable fire extinguisher system as per IS 2190 & 15683. <b>Dry Chemical Powder Fire Extinguisher 6 Kg capacity</b>	Nos	8					
2	Supply & installation of following type of portable fire extinguisher system as per IS 2190 & 15683. <b>Carbon dioxide (CO<sub>2</sub>) Fire Extinguisher 4.5 Kgs capacity</b>	Nos	22					
3	Supply and installation of Gas Suppression System Components (Novec-1230) for Data center and command and control center. (1 lot for Data center and 1 lot for control center)	Lot.	1					
<b>Schedule M5 - HVAC System</b>								
1	Design, manufacture, supply, installation, testing and commissioning of Microprocessor based single /double skinned Precision Air conditioning unit (For Data Centre) with R410a/R407c Refrigerant having Top/ Bottom suction indoor unit, air-cooled outdoor condensing unit with fan. Indoor unit consists of filter section, P-I-D Controller, multi rows deep copper cooling coil with aluminium fins, dehumidification cycle, modular panel cabinet construction, cabinet insulation, fan section with dynamically balanced centrifugal fans with motor and drive, high technology scroll compressor, accessible refrigeration control, interconnected refrigerant piping, drain piping, electricals etc.  6 TR (4,500 CMH)	Nos	2					



#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
2	Design, manufacture, supply, installation, testing and commissioning of ceiling suspended rectangular in-line fan with motor of following capacity with ductwork complete with starter panel, wire mesh etc. with all other accessories. (For Toilets at Gr & 3rd Floors)  Capacity: 1,000 CMH, 15 mm WC	Nos	2					
3	Design, manufacture, supply, installation, testing and commissioning of wall mounted propeller exhaust air fan with motor of following capacity complete with starter panel, wire mesh etc. with all other accessories. (For Small Toilets at Gr & 3rd Floors)  Capacity: 250 CMH, Free air delivery	Nos	2					
4	GI site fabricated rectangular ducts, complete with MS frame structure and necessary supports using thread roads (as per IS:655) and anchor bolts, exhaust air collars, vanes, splitters dampers for Air-conditioning & Toilet Exhaust Ventilation System. 22 G GI Ducting	SqM	15					
5	GI site fabricated rectangular ducts, complete with MS frame structure and necessary supports using thread roads (as per IS:655) and anchor bolts, exhaust air collars, vanes, splitters dampers for Air-conditioning & Toilet Exhaust Ventilation System. 24 G GI Ducting	SqM	40					
6	Design, manufacture, supply, installation, testing and commissioning of extruded aluminium powder coated fixed blade type diffusers without VCD, as required. (For Toilet Exhaust Ventilation System + AC Return air grilles)	SqM	2					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
7	Design, manufacture, supply, installation, testing and commissioning of extruded aluminium powder coated fixed blade type intake air louvres, as required. (For Ventilation System)	SqM	1					
8	Design, manufacture, supply, installation, testing and commissioning of extruded aluminium powder coated diffusers & grilles with VCD, as required. (For Air-conditioning System)	SqM	1					
9	Design, manufacture, supply, installation, testing and commissioning of GI volume control duct dampers, as required.	SqM	1					
10	Supply & fixing of <b>Thermal insulation</b> on the Sheet Metal Duct with Factory Pasted Al. Foil Faced Fire retardant 13 mm thick Closed Cell Nitrile Rubber Insulation with necessary Adhesive as recommended by the Manufacturer.	SqM	45					
11	Supply and fixing of <b>Acoustic insulation</b> with 25mm thick Open Cell Nitrile Rubber with necessary Adhesive as recommended by the Manufacturer.	SqM	10					
12	Necessary modification work of the existing ductwork at Ground & 3rd floors along with relocation of Indoor units, as required based on latest internal layout drawings.	Lot	1					

**Note:**

1. Capacities & quantities of equipment mentioned above are tentative. The same shall be finalised based on detail heat load calculations to be submitted by Vendor during engineering stage, as per actual requirement.
2. Above cost estimation is indicative only. The same shall vary depending upon selected equipment based on detailed heat load calculations & available/selected models by respective vendor.
3. It is assumed that the existing AC units with ductwork of Gr & 3rd floors, already installed at site, shall be adequate & to be reused for these floors. Hence AC system of Data Centre at Ground Floor has been considered in this BoQ.

**Schedule M6 - Furniture**

**Command Center Workstation Furniture and Fixtures:**

Providing & Supplying BIFMA certified godrej wipro and equivalent Wish Penta workstation of size 1500W1x 750D. Panel thickness-52.4mm. Uprights and horizontals shall be made of aluminum extrusion having material AL96063-T6 & have average wall thickness of 1.2 mm & powder coated with epoxy-polyester powder. Fabricated bottom frame for 52.4mm shall comprise of L- Channels made of 2mm thick CRCA steel (IS:513), formed plates of 3mm thick HR steel (IS:2062) & ERW steel tube of size 35x15x1.6mm in oval cross section (IS:7138) welded together. This shall be coated with average 50 to 60 micron thickness of epoxy powder coating. This shall be bolted to the uprights with M6 screws. A block for 52.4mm panel's thickness shall comprise of 38mm thick paper honeycomb with 3mm MDF on each sides and 0.6mm decorative laminate or fabric on both sides. Particle board framing shall be used on outer boundary of these blocks as well as intermediately at certain locations forming conduit for passing cables. These blocks (2nos.) will be located in the middle bands of the panels. The panel legs used for supporting panels. The height of a panel leg shall be 126mm. Panel legs shall be fabricated by CO2 welding MS Tube of section 38 mm x 25 mm (IS: 7138 ERW Tube) with the base plate of the MS plate of 35x22x5mm (IS: 2062, 5 mm HR) over which an M8 Leveler shall be fitted, which allows for adjustment of the height by 50mm. It will be coated with min. 45 micron thickness of epoxy powder coating. The single side legs shall be used for supporting panels & work surface on one side only. Single side legs shall be fabricated by CO2 welding MS Tube of section 38 mm x 25 mm (IS: 7138 ERW Tube) with the base plate of the MS plate of 35x22x5mm (IS: 2062, 5 mm HR) over which an M8 Leveler shall be fitted, which shall allow for adjustment of the height by 50mm. this shall be coated with min. 45 micron thickness of epoxy powder coating. Gable end panel shall be made of 18mm thick both side Pre laminated particle board of interior grade of approved shade conforming to IS: 12823. All the edges of panel shall be provided with machine pressed 2 mm thick PVC lipping glued with hot melt EVA glue. Cable duct shall be made from 0.8 mm thick M.S.

1

Number

28

CRCA Grade D as per IS: 513 - 1994. It is constructed with two parts, one is body & another is cover. It holds the cables & gives aesthetic appearance by covering all cables entry, which are moving upward to the panels. Size of Cable duct is 107mm W X 154 mm H X 21 mm D. TOP TILES: These tiles shall be slid in to the panels from top before fixing the top horizontal. These tiles shall be supported from top & bottom side with clips made from PP co polymer fitted in horizontal extrusion. Fabric magnetic tiles shall be fabric upholstered metal tiles in 0.6 mm thick G.I. Grade O as per IS: 277. The fabrics shall be upholstered with adhesives. Fabric tackable tiles shall be upholstered metal tiles in 0.6mm thick G.I. grade O as per IS: 277, with P.E. foam in the tile for tackability. The fabric shall be upholstered with adhesives. White board tiles shall be made of 8.0 mm thick particle board conforming to IS: 12823 laminated with 0.6mm thick white glossy high pressure laminate on outer side & 0.6mm backing laminate on inner surface and will be having all its edges with minimum 0.5 mm thick PVC edging. BOTTOM TILES: All bottom tiles shall be press fitted on to the assembly frame of the panel with the help of snap on clips made of nylon-66 and support clips made from PP polymer. Plain Metal tiles shall be powder coated metal tiles in 0.8 mm thick M.S. CRCA Grade D as per IS: 513. ALUMINUM EXTRUSIONS: The top trims and end trims for 52.4 mm & 22.8 mm shall be made from aluminum extrusion having material AL96063-T6. All kinds of extrusions for 52.4 mm and 22.8 mm shall have average wall thickness of 1.2 mm & having finish of powder coating. Top trim in 52.4mm thick panel shall be press fitted on the horizontal extrusion & in 22.8mm thick panel it shall be slide fitted with the help of top trim connector made from PP copolymer 3530 grade. End trim for 52.4mm thick panel shall be slide fitted with the help of end trim connector made from 2.0mm thick M.S. CRCA Grade D as per IS: 513. End trim for 22.8 mm thick panel shall slide with the help of end trim connector made from nylon-66. STABILITY POST: End stability post shall be fitted at the end of the free panel, to avoid movement of freestanding panels. The post shall be made in two parts. 1. The MS post which shall be grouted to the floor with Hilti make anchor bolts. 2. A cover extrusion of aluminium alloy shall cover the grouted MS

stability bracket. The top end of the extrusion shall be covered with a powder coated aluminum cap. PANEL JOINERY POST: The panels shall be joined to each other directly with 1800 joinery or with the help of post to form different layouts. The types available are 90° 2 way, 3 way & 4 way, 120° 2 way, 3 way & fin post 2 way, 3 way & 4 way. The panel joinery post shall be made up of aluminium extrusion having material AL-96063-T6. It shall have average wall thickness of 1.2mm. It shall be coated with 50 to 60 micron thickness of epoxy powder coating. These joineries will be covered with die cast caps of powder coated aluminium alloy ADC 12. All the caps shall be press fitted on the respective extrusions. WORKTOP: Work top shall be made of 25mm thick prelaminated particle board interior grade (As per IS: 12823). Bottom shall have a backing laminate of minimum 0.6mm thickness. All the edges of work surface shall be provided with machine pressed 2 mm thick PVC Edge band glued with hotmelt EVA glue. Work top shall be mounted onto the partition panels for work stations by means of cantilever brackets made from 2.0 mm thick CRCA grade D steel as per IS: 513-1994 duly pretreated and powder coated. The work surface shall be provided with circular (grommet) cut out of Dia. 65mm as per the requirement, for passing of wires. These cut outs shall be provided with ABS covers. The Penta Return work surface shall be supported by the stiffener. The stiffener shall be fabricated from 2mm thick CRCA steel (IS: 513), plates of 5 mm & 3 mm thick HR steel (IS: 2062) & ERW steel tube of size 50X30X1.5 mm welded together. This stiffener shall connect to panel on one side and to Double Sided penta return leg on the other side. Work surface bracket shall be mounted on to the Horizontal extrusion. Work surface bracket shall be made from 2.0 mm thick CRCA grade D steel as per IS: 513-19. Ribs shall be provided in the bracket for strengthening purpose. All the work surface are mounted on the work surface brackets. Holder bracket shall be made from 2.0 mm thick CRCA grade D steel as per IS: 513-19. It shall slid in between end trim & vertical extrusion, & mounted on work surface with the help of pop rivet. Seating arrangement includes metal key board tray, CPU trolley and Nova free standing pedestal with central

locking and flat metal front of size 390W x 435D x 646HT,  
3dr=2box+1file. Approved Make: godrej wipro and equivalent

**Office Desk (Workstation) Furniture and Fixtures:**

Providing & Supplying BIFMA certified godrej wipro and equivalent Wish Penta workstation of size 1200W1 x 600D with spine fin combination. Panel thickness-52.4mm on one side AND 22.4mm. Panel thickness-52.4mm. Uprights and horizontals shall be made of aluminum extrusion having material AL96063-T6 & have average wall thickness of 1.2 mm & powder coated with epoxy-polyester powder. Fabricated bottom frame for 52.4mm shall comprise of L- Channels made of 2mm thick CRCA steel (IS:513), formed plates of 3mm thick HR steel (IS:2062) & ERW steel tube of size 35x15x1.6mm in oval cross section (IS:7138) welded together. This shall be coated with average 50 to 60 micron thickness of epoxy powder coating. This shall be bolted to the uprights with M6 screws. A block for 52.4mm panel's thickness shall comprise of 38mm thick paper honeycomb with 3mm MDF on each sides and 0.6mm decorative laminate or fabric on both sides. Particle board framing shall be used on outer boundary of these blocks as well as intermediately at certain locations forming conduit for passing cables. These blocks (2nos.) will be located in the middle bands of the panels. The panel legs used for supporting panels. The height of a panel leg shall be 126mm. Panel legs shall be fabricated by CO2 welding MS Tube of section 38 mm x 25 mm (IS: 7138 ERW Tube) with the base plate of the MS plate of 35x22x5mm (IS: 2062, 5 mm HR) over which an M8 Leveler shall be fitted, which allows for adjustment of the height by 50mm. It will be coated with min. 45 micron thickness of epoxy powder coating. The single side legs shall be used for supporting panels & work surface on one side only. Single side legs shall be fabricated by CO2 welding MS Tube of section 38 mm x 25 mm (IS: 7138 ERW Tube) with the base plate of the MS plate of 35x22x5mm (IS: 2062, 5 mm HR) over which an M8 Leveler shall be fitted, which shall allow for adjustment of the height by 50mm. this shall be coated with min. 45 micron thickness of epoxy powder coating. Gable end panel shall be made of 18mm thick both side Pre laminated particle board of interior grade of approved shade conforming to IS: 12823. All the edges of panel shall be provided with machine pressed 2 mm thick PVC clipping glued with hot melt EVA glue. Cable duct shall be made from 0.8

2

Number

22

mm thick M.S. CRCA Grade D as per IS: 513 - 1994. It is constructed with two parts, one is body & another is cover. It holds the cables & gives aesthetic appearance by covering all cables entry, which are moving upward to the panels. Size of Cable duct is 107mm W X 154 mm H X 21 mm D. TOP TILES: These tiles shall be slid in to the panels from top before fixing the top horizontal. These tiles shall be supported from top & bottom side with clips made from PP co polymer fitted in horizontal extrusion. Fabric magnetic tiles shall be fabric upholstered metal tiles in 0.6 mm thick G.I. Grade O as per IS: 277. The fabrics shall be upholstered with adhesives. Fabric tackable tiles shall be upholstered metal tiles in 0.6mm thick G.I. grade O as per IS: 277, with P.E. foam in the tile for tackability. The fabric shall be upholstered with adhesives. White board tiles shall be made of 8.0 mm thick particle board conforming to IS: 12823 laminated with 0.6mm thick white glossy high pressure laminate on outer side & 0.6mm backing laminate on inner surface and will be having all its edges with minimum 0.5 mm thick PVC edging. BOTTOM TILES: All bottom tiles shall be press fitted on to the assembly frame of the panel with the help of snap on clips made of nylon -66 and support clips made from PP polymer. Plain Metal tiles shall be powder coated metal tiles in 0.8 mm thick M.S. CRCA Grade D as per IS: 513. ALUMINUM EXTRUSIONS: The top trims and end trims for 52.4 mm & 22.8 mm shall be made from aluminum extrusion having material AL96063-T6. All kinds of extrusions for 52.4 mm and 22.8 mm shall have average wall thickness of 1.2 mm & having finish of powder coating. Top trim in 52.4mm thick panel shall be press fitted on the horizontal extrusion & in 22.8mm thick panel it shall be slide fitted with the help of top trim connector made from PP copolymer 3530 grade. End trim for 52.4mm thick panel shall be slide fitted with the help of end trim connector made from 2.0mm thick M.S. CRCA Grade D as per IS: 513. End trim for 22.8 mm thick panel shall slide with the help of end trim connector made from nylon-66. STABILITY POST: End stability post shall be fitted at the end of the free panel, to avoid movement of freestanding panels. The post shall be made in two parts. 1. The MS post which shall be grouted to the floor with Hilti make anchor bolts. 2. A



cover extrusion of aluminium alloy shall cover the grouted MS stability bracket. The top end of the extrusion shall be covered with a powder coated aluminum cap. PANEL JOINERY POST: The panels shall be joined to each other directly with 1800 joinery or with the help of post to form different layouts. The types available are 90° 2 way, 3 way & 4 way, 120° 2 way, 3 way & fin post 2 way, 3 way & 4 way. The panel joinery post shall be made up of aluminium extrusion having material AL-96063-T6. It shall have average wall thickness of 1.2mm. It shall be coated with 50 to 60 micron thickness of epoxy powder coating. These joineries will be covered with die cast caps of powder coated aluminium alloy ADC 12. All the caps shall be press fitted on the respective extrusions. WORKTOP: Work top shall be made of 25mm thick prelaminated particle board interior grade (As per IS: 12823). Bottom shall have a backing laminate of minimum 0.6mm thickness. All the edges of work surface shall be provided with machine pressed 2 mm thick PVC Edge band glued with hotmelt EVA glue. Work top shall be mounted onto the partition panels for work stations by means of cantilever brackets made from 2.0 mm thick CRCA grade D steel as per IS: 513-1994 duly pretreated and powder coated. The work surface shall be provided with circular (grommet) cut out of Dia. 65mm as per the requirement, for passing of wires. These cut outs shall be provided with ABS covers. The Penta Return work surface shall be supported by the stiffener. The stiffener shall be fabricated from 2mm thick CRCA steel (IS: 513), plates of 5 mm & 3 mm thick HR steel (IS: 2062) & ERW steel tube of size 50X30X1.5mm welded together. This stiffener shall connect to panel on one side and to Double Sided penta return leg on the other side. Work surface bracket shall be mounted on to the Horizontal extrusion. Work surface bracket shall be made from 2.0 mm thick CRCA grade D steel as per IS: 513-19. Ribs shall be provided in the bracket for strengthening purpose. All the work surface are mounted on the work surface brackets. Holder bracket shall be made from 2.0 mm thick CRCA grade D steel as per IS: 513-19. It shall slid in between end trim & vertical extrusion, & mounted on work surface with the help of pop rivet. . Approved Make: godrej wipro and equivalent

**Ergonomic chairs for C&C:**

OXBO MB-seat assembly: the seat assembly should be made up of  $1.2 \pm 0.1$  cm. thick hot-pressed plywood , upholstered with fabric upholstery covers and moulded polyurethane foam. seat size: 47.0 cm. (w) x 48.0 cm. (d) back assembly: the back assembly. should be made of powder coated (oft 40-60 microns) tubular frame of  $2.54 \pm 0.03$  cm. x  $0.2 \pm 0.016$  cm. thk. ms erw tube designed with contoured lumbar support for extra comfort. the back should be upholstered using double layer spacer mesh fabric with high tenacity yarn. back size : 46.5 cm (w) x 60.5 cm (h) high resilience (hr) polyurethane foam: the hr polyurethane foam should be moulded with density =  $45 \pm 2$  kg/m<sup>3</sup> and hardness load  $16 \pm 2$  kgf for 25% compression. armrests: the one-piece armrests should be injection moulded from black co-polymer polypropylene. Centre-tilt mechanism: the mech should be m should be designed with the following features:

- 360° revolving type.
- 17°  $\pm$  2° maximum tilt on pivot at centre
- upright position locking.

tilt tension adjustment. . pneumatic height adjustment: the pneumatic height adjustment has an adjustment stroke of  $11.0 \pm 0.3$  cm. telescopic bellow assy: the bellow should be 3 piece telescopic type and injection moulded in black polypropylene. pedestal assembly: the pedestal should be injection moulded in black 33% glass-filled nylon 66 and fitted with 5 nos. twin wheel castors. the pedestal should be  $66.3 \pm 0.5$  cm. pitch-center dia. ( $76.3 \pm 1.0$  cm with castors.) twin wheel castors: the twin wheel castors should be injection moulded in black nylon. Overall Dimensions of Chair  
Seat Height - min 43.3 to max 54.3 cm. Height - min 89.5 to max 100.5 cm. Width & Depth of Chair as measured from pedestal - Width-76.3 cm and Depth-76.3 cm

3

Number

50

**Chairs for Managers:**

OXBO HB-seat assembly: the seat assembly should be made up of 1.2 ± 0.1 cm. thick hot-pressed plywood, upholstered with fabric upholstery covers and moulded polyurethane foam. seat size: 47.0 cm. (w) x 48.0 cm. (d) back assembly: the back assembly should be made of powder coated (oft 40-60 microns) tubular frame of 2.54 ± 0.03 cm. x 0.2 ± 0.016 cm. thk. ms erw tube designed with contoured lumbar support for extra comfort. the back should be upholstered using double layer spacer mesh fabric with high tenacity yarn. back size: 46.5 cm (w) x 70.5 cm (h) high resilience (hr) polyurethane foam: the hr polyurethane foam should be moulded with density = 45 +/- 2 kg/m<sup>3</sup> and hardness load 16 ± 2 kgf for 25% compression. armrests: the one-piece armrests should be injection moulded from black co-polymer polypropylene. centre-tilt mechanism: the mechanism should be designed with the following features:

- 360° revolving type.
- 17° ± 2° maximum tilt on pivot at centre
- upright position locking.
- tilt tension adjustment.

pneumatic height adjustment: the pneumatic height adjustment has an adjustment stroke of 11.0 ± 0.3 cm. telescopic bellows: the bellows should be 3 piece telescopic type and injection moulded in black polypropylene. pedestal assembly: the pedestal should be injection moulded in black 33% glass-filled nylon 66 and fitted with 5 nos. twin wheel castors. the pedestal should be 66.3 ± 0.5 cm. pitch-center dia. (76.3 ± 1.0 cm with castors.) twin wheel castors: the twin wheel castors should be injection moulded in black nylon. Overall Dimensions of Chair - Seat Height - min 43.3 to max 54.3 cm. Height - min 99.5 to max 110.5 cm. Width & Depth of Chair as measured from pedestal - Width- 76.3 cm and Depth- 76.3 cm.

4

Number

2

**Chairs for conference rooms, misc.:**

**BEAT HB FABRIC W/O SEAT SLIDE-"SEAT/BACK ASSEMBLY:** The seat & back is made up of  $1.2 \pm 0.1$  cm thk. hot pressed plywood measured as per QA method described in OCP-QLTA-PL14-18 upholstered with knitted fabric, over moulded High Resilience Polyurethane foam.

\*HIGH BACK SIZE: 51.8 cm. (W) x 75.2 cm. (H)

\* SEAT SIZE : 49.0 cm. (W) x 51.4 cm. (D)

**HIGH RESILIENCE (HR) POLYURETHANE FOAM:** The HR polyurethane foam is moulded with density =  $55 \pm 2$  kg/m<sup>3</sup> and hardness  $16 \pm 2$  kgf as per IS:7888 for 25% compression.

**ARMRESTS:** The adjustable armrest is designed with the following features: • Up-Down adjustment – 8 steps (8.0±0.5 cm range) • Height adjustable armrest structure which is powder coated & fitted with an armrest top.

**(A) FRONT PIVOT SYNCHRO MECHANISM:** The adjustable tilting mechanism is designed with the following features.

- 360° revolving type.
- Single point control.
- Front-pivot for tilt with feet resting on ground ensuring more comfort.
- Tilt tension adjustment.
- 4-position locking with anti-shock feature.
- Seat/back tilting ratio of 1:2.

**BACK HEIGHT ADJUSTABILITY:** Back can be adjusted in 5 positions by manually. Stroke of height adjustable spine is 7 cm. Back height adjustability is applicable for High back and Mid back chair.

**PNEUMATIC HEIGHT ADJUSTMENT:** The pneumatic height adjustment has an adjustment stroke of  $10.0 \pm 0.3$  cm.

**PEDESTAL ASSEMBLY WITH CASTORS:** The pedestal is injection moulded in black 30% glass-filled Nylon and fitted with 5 nos. twin wheel castors. The pedestal pitch-centre dia is  $\varnothing 66.1 \pm 0.5$  cm. ( $76.1 \pm 1.0$  cm. with castors).

**TWIN WHEEL CASTORS:** The twin wheel castors are injection moulded in black Nylon.

**OPTION OF SLIDING SEAT MECHANISM:** Seat can be slide horizontally as per user convenience. Stroke of seat slide is 5 cm. This option is available for revolving pedestal type of chair."

5

Number

28

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
6	<p><b>War Room Conference Table (15 personnel):</b>  ENCARTA-Encarta Conference Table size shall be seats (1) 675 Width mm x 600 Depth mm x 750 Height mm, seats (2) 1350 Width mm x 600 Depth mm x 750 Height mm. Top shall be 25 mm PLB thick With PVC beading all over. In Understructure legs shall be made from 18 mm thick PLT having curved profile plus Modesty shall be made from PLT (pre - laminated twin) boards 18 mm thick in twoshades. Wire manager shall be running along the width of desk fitted on the modesty panel from inside.</p>	Number	1					
7	<p><b>Small Conference Table (10 personnel):</b>  ENCARTA-Encarta Conference Table size shall be seats (1) 675 Width mm x 600 Depth mm x 750 Height mm, seats (2) 1350 Width mm x 600 Depth mm x 750 Height mm. Top shall be 25 mm PLB thick With PVC beading all over. In Understructure legs shall be made from 18 mm thick PLT having curved profile plus Modesty shall be made from PLT (pre - laminated twin) boards 18 mm thick in twoshades. Wire manager shall be running along the width of desk fitted on the modesty panel from inside.</p>	Number	1					

**Sofa (1 seater):**

PREMIUM LOUNGE 1 SEATER-)side frame assembly: the side frame assembly should be fitted to the two ends of the connecting beam assembly to form the leg-cum-armrest assembly. it should be made of  $03.81 \pm 0.03\text{cm.} \times 0.2 \pm 0.016\text{cm.}$  Thick  $0.16\text{cm}$  and black powder coated ( dft 40-60 microns ). the ends should be fitted with abs moulded end caps. ) tie member: it should be the connecting beam assy. which holds the two side frames to each other. 2 nos. tie members should be used to connect the side frames. the tie-member should be of  $03.81 \pm 0.03\text{cm.} \times 0.2 \pm 0.016\text{cm.}$  thick  $0.16\text{cm}$  and black powder coated ( dft 40-60 microns ). the seat/back assemblies should be mounted on one of the tie-member which has  $5.0 \pm 0.1\text{cm} \times 5.0 \pm 0.1\text{cm} \times 0.5 \pm 0.1\text{cm.}$  thk --  $5.5 \pm 0.1\text{cm}$  long ms. std. angles welded to mount the seat and back. seatrest assembly: the seat rest assembly cons should be ts of a fabricated inner-frame assembly insitu-moulded high resilience (hr) polyurethane foam having density =  $45 \pm 1 - 2\text{ kg/m}^3$  with hardness load  $25 \pm 2\text{ kgf}$  for 25% compression of the foam. the complete moulded seat rest assembly should be covered with a replaceable fabric upholstery cover \*seat size:  $52.0\text{cm. (w)} \times 50.0\text{cm. (d)} \times 6.0\text{cm. (t)}$  )backrest assembly: the backrest assembly should be flexing type and cons should be ts of a fabricated inner-frame assembly insitu-moulded with high resilience (hr) polyurethane foam having density =  $45 \pm 1 - 2\text{ kg/m}^3$  with hardness load  $14 \pm 2\text{ kgf}$  for 25% compression of the foam. the complete moulded backrest assembly should be covered with a replaceable fabric upholstery cover. \*backsize:  $52.0\text{cm. (w)} \times 59.0\text{cm. (h)} \times 6.0\text{cm. (t)}$  )adj. glides: the adj. glide should be injection moulded in black nylon & fitted to the front end of side frame assembly along with abs moulded adj. glide base to take c should be or unlevelled floor surface. Overall Dimensions of Chair Seat Height -  $43.5\text{ cm.}$  Height -  $78.5\text{cm.}$  Width & Depth of Chair as - Width- $60.5\text{cm}$  and Depth- $70.0\text{ cm.}$

8

Number

2

**Sofa (2 seater):**

PREMIUM LOUNGE 2 SEATER-)side frame assembly: the side frame assembly should be fitted to the two ends of the connecting beam assembly to form the leg-cum-armrest assembly. It should be made of 0 3.81 ±0.03cm. x 0.2 ±0.016cm. Thick cmx0.16cm and black powder coated (dft 40-60 microns). The ends should be fitted with abs moulded end caps. ) tie member: it should be the connecting beam assy. which holds the two side frames to each other. 2 nos. tie members should be used to connect the side frames. The tie-member should be of 0 3.81 ±0.03cm. x 0.2 ±0.016cm. thick cm x 0.16cm and black powder coated ( dft 40-60 microns ). The seat/back assemblies should be mounted on one of the tie-member which has 5.0 ±0.1cm x 5.0 ±0.1 cm x 0.5 ±0.1cm. thk -- 5.5 ±0.1cm long ms. std. angles welded to mount the seat and back. seatrest assembly: the seat rest assembly cons should be ts of a fabricated inner-frame assembly insitu-moulded high resilience (hr) polyurethane foam having density = 45 +1- 2 kg/m<sup>3</sup> with hardness load 25 ± 2 kgf for 25% compression of the foam. The complete moulded seat rest assembly should be covered with a replaceable fabric upholstery cover \*seat size: 52.0cm. (w)x 50.0cm. (d) x 6.0cm. (t) )backrest assembly: the backrest assembly should be flexing type and cons should be ts of a fabricated inner-frame assembly insitu-moulded with high resilience (hr) polyurethane foam having density = 45 +1- 2 kg/m<sup>3</sup> with hardness load 14 ± 2 kgf for 25% compression of the foam. the complete moulded backrest assembly should be covered with a replaceable fabric upholstery cover. \*backsize: 52.0cm. (w)x 59.0cm. (h) x 6.0cm. (t) )adj. glides: the adj. glide should be injection moulded in black nylon & fitted to the front end of side frame assembly along with abs moulded adj. glide base to take should be or unlevelled floor surface. Overall Dimensions of Chair Seat Height - 43.5 cm. Height - 78.5cm. Width & Depth of Chair as - Width-113.0cm and Depth-70.0 cm.

9

Number

2

**Sofa (3 seater):**

PREMIUM LOUNGE 3 SEATER-)side frame assembly: the side frame assembly should be fitted to the two ends of the connecting beam assembly to form the leg-cum-armrest assembly. It should be made of  $03.81 \pm 0.03\text{cm.} \times 0.2 \pm 0.016\text{cm.}$  Thick  $\text{cm} \times 0.16\text{cm}$  and black powder coated ( dft 40-60 microns ). The ends should be fitted with abs moulded end caps. ) tie member: it should be the connecting beam assy. which holds the two side frames to each other. 2 nos. tie members should be used to connect the side frames. The tie-member should be of  $03.81 \pm 0.03\text{cm.} \times 0.2 \pm 0.016\text{cm.}$  Thick  $\text{cm} \times 0.16\text{cm}$  and black powder coated ( dft 40-60 microns ). The seat/back assemblies should be mounted on one of the tie-member which has  $5.0 \pm 0.1\text{cm} \times 5.0 \pm 0.1 \text{cm} \times 0.5 \pm 0.1\text{cm.}$  thk --  $5.5 \pm 0.1\text{cm}$  long ms. std. angles welded to mount the seat and back. seatrest assembly: the seat rest assembly consists of a fabricated inner-frame assembly in situ-moulded high resilience (hr) polyurethane foam having density =  $45 \pm 1 - 2 \text{ kg/m}^3$  with hardness load  $25 \pm 2 \text{ kgf}$  for 25% compression of the foam. the complete moulded seat rest assembly should be covered with a replaceable fabric upholstery cover \*seat size:  $52.0\text{cm. (w)} \times 50.0\text{cm. (d)} \times 6.0\text{cm. (t)}$  )backrest assembly: the backrest assembly should be flexing type and consists of a fabricated inner-frame assembly in situ-moulded with high resilience (hr) polyurethane foam having density =  $45 \pm 1 - 2 \text{ kg/m}^3$  with hardness load  $14 \pm 2 \text{ kgf}$  for 25% compression of the foam. the complete moulded backrest assembly should be covered with a replaceable fabric upholstery cover. \*backsize:  $52.0\text{cm. (w)} \times 59.0\text{cm. (h)} \times 6.0\text{cm. (t)}$  )adj. glides: the adj. glide should be injection moulded in black nylon & fitted to the front end of side frame assembly along with abs moulded adj. glide base to take care should be on unlevelled floor surface. Overall Dimensions of Chair Seat Height -  $43.5 \text{cm.}$  Height -  $78.5\text{cm.}$  Width & Depth of Chair as - Width- $164.0\text{cm}$  and Depth- $70.0 \text{cm.}$

10

Number

4



**Cupboards (5 feet high):**

SLIMLINE MINOR 2S-Model 4S & 2SH Locker Model 'H' 900mm(W)x507mm(D)x1950mm(H) (Height without leveler). Construction & Material-§ Aesthetically appealing Slimline, completely knock down construction. § Removable Skirting to cover integral legs. § Legs fitted with screw type leveler § Made from combination of CRCA 0.8 mm & 0.6 mm Thickness. Main Door § Steel Hinged Door. Main Door Locking / handle: § Handle & Base Aesthetically appealing, Ergonomic, flush with door made from Zinc alloy. § 3 way 90 Degree Removable key type Cam lock & locking mechanism. Locker Door & it's locking / handle for Model 'H'. § Fixed Half locker on RH side § Hinged Door § 2 way Cam lock with Knob type handle Shelving: • Model 4S • Height wise Adjustable Shelf Mounting • 4 Nos. Of Full Adj. Shelves • Model 2SH • Height wise Adjustable Shelf Mounting • 2 Nos. Of Full Adj. Shelves • Locker Model 'H' – • Top fixed full shelf • Adjustable Half Shelves – 1 no. on RH & 2 nos. on LH side of Vertical Partition. Hanging Rod § Model 2SH § 1 no. Full length Hanging rod below top shelf mounted on Snap-on type plastic brackets. Locker Model 'H' § 2 nos. half length Hanging rods – one on Left half of partition below top shelf & another on Right half below locker – both mounted on Snap-on type plastic brackets 9. Finish: § Epoxy Powder coated to the thickness of 50 microns (+-10).

11

Number

2

**Cupboards (6.5 feet high):**

SLIMLINE 4S-Model 4S & 2SH Locker Model 'H'  
900mm(W)x507mm(D)x1950mm(H) (Height without  
leveler). Construction & Material-§ Aesthetically appealing  
Slim line, completely knock down construction. § Removable  
Skirting to cover integral legs. § Legs fitted with screw type  
leveler § Made from combination of CRCA 0.8 mm & 0.6 mm  
Thickness. Main Door § Steel Hinged Door. Main Door  
Locking / handle: § Handle & Base Aesthetically appealing,  
Ergonomic, flush with door made from Zinc alloy. § 3 way 90  
Degree Removable key type Cam lock & locking mechanism.  
Locker Door & it's locking / handle for Model 'H'. § Fixed Half  
locker on RH side § Hinged Door § 2 way Cam lock with Knob  
type handle Shelving: • Model 4S • Height wise Adjustable  
Shelf Mounting • 4 Nos. Of Full Adj. Shelves • Model 2SH •  
Height wise Adjustable Shelf Mounting • 2 Nos. Of Full Adj.  
Shelves • Locker Model 'H' – • Top fixed full shelf • Adjustable  
Half Shelves – 1 no. on RH & 2 nos. on LH side of Vertical  
Partition. Hanging Rod § Model 2SH § 1 no. Full length  
Hanging rod below top shelf mounted on Snap-on type plastic  
brackets. Locker Model 'H' § 2 nos. half-length Hanging rods –  
one on Left half of partition below top shelf & another on  
Right half below locker – both mounted on Snap-on type  
plastic brackets 9. Finish: § Epoxy Powder coated to the  
thickness of 50 microns (+-10).

12

Number

2

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
13	<p><b>Center table:</b>  Providing and supplying godrej wipro and equivalent Pisa CENTER Table. Width of table= 112.0 cm, Depth=60.0 cm, height=35.1 cm. It should be 12 ±0.3 mm thick black tinted Toughened glass UV glued with bushes made in SS 202 grade for fixing with understructure. It should be a welded Assembly made in SS202 grade having Dia. 12±0.04 as per should be :1762. OEM should be Green Guard and BIFMA Certified</p>	Number	1					
14	<p><b>Side Table:</b>  Providing and supplying godrej wipro and equivalent Pisa Side Table. Width of table= 60.0 cm, Depth=60.0 cm, height=35.1 cm. It should be 12 ±0.3 mm thick black tinted Toughened glass UV glued with bushes made in SS 202 grade for fixing with understructure. It should be a welded Assembly made in SS202 grade having Dia. 12±0.04 as per should be :1762. OEM should be Green Guard and BIFMA Certified</p>	Number	6					

**Cupboard (Side):**

SLIMLINE 4S-Model 4S & 2SH Locker Model 'H'  
900mm(W)x507mm(D)x1950mm(H) (Height without  
leveler). Construction & Material-§ Aesthetically appealing  
Slimline, completely knock down construction. § Removable  
Skirting to cover integral legs. § Legs fitted with screw type  
leveler § Made from combination of CRCA 0.8 mm & 0.6 mm  
Thickness. Main Door § Steel Hinged Door. Main Door  
Locking / handle: § Handle & Base Aesthetically appealing,  
Ergonomic, flush with door made from Zinc alloy. § 3 way 90  
Degree Removable key type Cam lock & locking mechanism.  
Locker Door & it's locking / handle for Model 'H'. § Fixed Half  
locker on RH side § Hinged Door § 2 way Cam lock with Knob  
type handle Shelving: • Model 4S • Height wise Adjustable  
Shelf Mounting • 4 Nos. Of Full Adj. Shelves • Model 2SH •  
Height wise Adjustable Shelf Mounting • 2 Nos. Of Full  
Adj. Shelves • Locker Model 'H' – • Top fixed full shelf •  
Adjustable Half Shelves – 1 no. on RH & 2 nos. on LH side of  
Vertical Partition. Hanging Rod § Model 2SH § 1 no. Full  
length Hanging rod below top shelf mounted on Snap-on type  
plastic brackets. Locker Model 'H' § 2 nos. half length Hanging  
rods – one on Left half of partition below top shelf & another  
on Right half below locker – both mounted on Snap-on type  
plastic brackets 9. Finish: § Epoxy Powder coated to the  
thickness of 50 microns (+-10).

15

Number

10

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
16	<p><b>Reception Desk:</b>  Providing and supplying godrej wipro and equivalent First Impression Clean matt PU finish 18mm thick  Inside radius 700.0 mm  Outside radius – 1350.0 mm  Depth – 650 mm Rubberized cork – 18mm thick  Glass Frosted Glass 10mm thick Diamond cut finishing on edges  Inside Radius – 1202.5mm  Outside radius – 1402.5mm  Depth – 200mm  *Note: Angle sustained within arc surface is 60 deg.  Understructure  Modesty Panel MS Perforated sheet  Below Worksurface : 0.8 mm (thick) x 665.0 mm (height) x 1345.0 mm (flat length)  Above Worksurface : 0.8mm (Thick) x 260 mm (height) x 1345.0 mm (flat length)  Legs MS tube 1.6 mm thick  Diameter 50.8 mm Height 604 mm</p>	Number	1					

17	<p><b>CEO table 2350X2350X750:</b>  CIGNUS 2350X2350X750-Primary Work -Surface Made of 25mm Thick Pre-laminated twin board of E1-P2 grade and approved shade confirming to IS-12823:1990, Edge banded with matching 2 mm thick PVC lipping. Secondary Work Surface- Made of 25mm thickMDF one side pre-laminate board confirming to IS-14587:1998 with 0.4mm PVC membrane pressed on to top. Softclosing access flap with in-build power box are provided on work surface for wire management. Modesty Panel- Made of 25mm thick MDF one side pre-laminate board confirming to IS-14587:1998 with 0.4mm PVC membrane pressed on to top Under- structure-Made of 25mm Thick Pre-laminated twin board of E1-P2 grade and approved shade confirming to IS-12823:1990, Edge banded with matching 2 mm thick PVC lipping. Integrated Pedestal Made of 25mm Thick Pre-laminated twin board of E1-P2 grade and approved shade confirming to IS-12823:1990, Edge banded with matching 2 mm thick PVC lipping. Drawer fronts made of 25mm thick MDF one side pre-laminate board confirming to IS-14587:1998 with 0.4mm PVC membrane pressed on to top Pedestal construction is BOX-BOX-FILE type which Uses powder coated 400 MM long metal Panel Drawer Slides. Drawer extension is 325 MM. Drawers have a soft closing &amp; anti slam mechanism. Handles are provided for ease of opening. Pedestal is provided with lock for security.</p>	Number	1					
----	---	--------	---	--	--	--	--	--

**CEO CHAIR:**

**MARVEL HB-SEAT ASSEMBLY :** The Cushioned seat should be made of Injection molded Plastic outer & inner. Plastic Inner should be upholstered with leatherette and moulded High Resilience (HR) Polyurethane foam of Density  $45 \pm 2$  kg/m<sup>3</sup>, and hardness load  $16 \pm 2$  kgf as per IS:7888 for 25% compression. \*Seat SIZE : 47.0 cm. (W) x 48.0 cm. (D) **BACK ASSEMBLY:** The Cushioned back should be made of PU Foam with insitu molded MSE.R.W Round Tube of size  $1.9 \pm 0.03$  cm x  $0.16 \pm 0.0128$  cm. It upholstered with Leatherette. **HIGH BACK SIZE:** 47.7 cm. (W) x 76.4 cm **ARMRESTS :** The armrest top should be moulded from polyurethane(PU) and mounted on to a drop lift adjustable type tubular armrest support made of  $03.81 \pm 0.03$  cm x  $0.2 \pm 0.01$  cm thk M.S. E.R.W tube having chrome plated finish. The armrest height adjustable up to  $6.5 \pm 0.5$  cm in 5 steps. **ACTIVE BIO-SYNCHRO MECHANISM:** The adjustable tilting mechanism should be designed with the following features: • 360° revolving type. • Front-pivot for tilt with feet resting on ground and continuous lumbar support ensuring more comfort. • Tilt tension adjustment can be operated in seating position. • 5-position Tilt limiter giving option of variable tilt angle to the chair. • Seat/back tilting ratio of 1: 2 • The mechanism housing should be made up of HPDC Aluminum black powder coated. **SEAT DEPTH ADJUSTMENT :** Seat depth adjustment should be integrated in the seat through a sliding mechanism. Seat depth adjustment range should be of  $6.0 \pm 0.5$  cm. **ADJUSTABLE BACK SUPPORT:** Back Frame should be connected to the Up/Dn mechanism housed in Plastic T spine. It can be adjusted in the range of  $7.42 \pm 0.5$  cm for the comfortable back support to suit individual need. **PNEUMATIC HT. ADJUSTMENT:** The pneumatic adjustment has an adjustment stroke of  $10.0 \pm 0.3$  cm. **PEDESTAL ASSEMBLY:** The pedestal should be High Pressure Die cast polished Aluminum and fitted with 5 nos. twin wheel castors. The pedestal should be  $65.0 \pm 0.5$  cm. pitch-center dia. ( $75.0 \pm 1.0$  cm. With castors.) **TWIN WHEEL CASTORS:** The twin wheel castors should be injection moulded in black PP having  $6.0 \pm 0.1$  cm wheel Diameter.

18

Number

1

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
19	<p><b>CEO VISITOR CHAIR:</b>  MARVEL VISITOR-) SEATASSEMBLY : The Cushioned seat should be made of Injection molded Plastic outer &amp; inner. Plastic Inner should be upholstered with leatherette and moulded High Resilience (HR) Polyurethane foam of Density 45±2 kg/m3, and hardness load 16 ± 2 kgf as per IS:7888 for 25% compression. *Seat SIZE : 47.0 cm. (W) x 48.0 cm. (D)  BACKASSEMBLY: The Cushioned back should be made of PU Foam with insitu molded MSE. R. W Round Tube of size 1.9±0.03cm x 0.16 ±0.0128cm. It upholstered with Leatherette. BACKSIZE: 47.7 cm. (W) x 60.1 cm. (D)  Visitor TUBULAR FRAME: The tubular frame should be cantilever type and made of Ø2.54± 0.03 cm X 0.02 ± 0.016cm thick SS 202 tube. The back should be connected to frame through chrome plated high pressure die case connector piece</p>	Number	7					
20	<p><b>ROUND TABLE:</b>  Providing and supplying godrej wipro and equivalent Orion Round table 1050 dia. Worktop is made of 25mm THK PLT. Knocked down understructure made from 8mm HR plate with Levellers &amp; a vertical support tube of dia 90 &amp; 2mm Thickness.</p>	Number	1					



**MANAGER TABLE 1800X2100X750:**

FINNESSE 6030 + ERU 5216 + PEDESTAL-Finesse Table - 6030 size shall be 1800 Width mm x 900 Depth mm x 740 Height mm. Table top shall be 25 mm thick plain particle board (PPB) Clad with 0.6 mm thick post formed laminate and 1 mm thick backing laminate (bdl) .Flat edge Duly sealed with 2 mm thick PVC beading. The modesty shall be 18 mm thick plain particle board ( ) PPB Clad with 1.0 mm thick decorative laminate (DL) on both sides. Edge Sealed with 2 mm thick PVC beading. Finesse ERU -5216 LHS size shall be 1550 Width x 450 Depth x 705 Height. The top of Finesse ERU -5216 LHS shall be 25 mm thick plain particle board (PPB) Clad with 0.6 mm thick post formed laminate and 1 mm thick Backing Laminate ( BDL).Flat Edge duly sealed with 2 mm thick PVC beading. The Modesty shall be 18 mm thick plain particle board (PPB) Clad with 1.0 mm thick Decorative Laminate (DL) on both sides. Edge sealed with 2 mm thick PVC Beading. Overall Dimensions of Free Standing Ped With Castors For Finesse Table shall be 390mm (W)x440mm(D)x646mm(H). The construction & Material used shall be welded assembled, 0.8 mm thick CRCA for body shell, drawer front & tray , front side stiffener , rear aide stiffener and 1.2 mm thick CRCA Top stiffener & Bottom stoffener . The drawer fronts shall be metal front straight edge. Locking shall be 10 lever cam lock & Central RH locking with actuator & lock channel mechanism for box-box-file Pedestal. The top panel shall be metal straight edge top. Castor should be swiveling non - lockable castors mounted below the body shell for free standing full height mobile pedestal and M8 Leveling stud for free standing pedestal . The anti-tipping mechanism shall have fifth roller arrangement mounted below file drawer to avoid toppling of unit when file drawer is pulled out. Partition in drawer shall be 1 no. Partition in box drawers with lock mounted. Plastic pencil tray shall be optional accessory. Finish shall be epoxy polyester powder coated to the thickness of 50 microns. Application shall be suitable for pushing below worksurface which has got a clear height of 725 mm from below. For drawer pulling side wise tapered recess provided in shell behind drawer fronts.

21

Number

1

**ASST MANAGER TABLE 1650X1950X750:**

FINNESSE 5630 + ERU 5216 + PEDESTAL-Finesse Table - 5630 size shall be 1650 Width mm x 900 Depth mm x 740 Height mm. Table top shall be 25 mm thick plain particle board (PPB) Clad with 0.6 mm thick post formed laminate and 1 mm thick backing laminate (bdl) .Flat edge Duly sealed with 2 mm thick PVC beading. The modesty shall be 18 mm thick plain particle board ( ) PPB Clad with 1.0 mm thick decorative laminate (DL) on both sides. Edge Sealed with 2 mm thick PVC beading. Finesse ERU -5216 LHS size shall be 1550 Width x 450 Depth x 705 Height. The top of Finesse ERU -5216 LHS shall be 25 mm thick plain particle board (PPB) Clad with 0.6 mm thick post formed laminate and 1 mm thick Backing Laminate ( BDL).Flat Edge duly sealed with 2 mm thick PVC beading. The Modesty shall be 18 mm thick plain particle board (PPB) Clad with 1.0 mm thick Decorative Laminate (DL) on both sides. Edge sealed with 2 mm thick PVC Beading. Overall Dimensions of Free Standing Ped With Castors For Finesse Table shall be 390mm (W)x440mm(D)x646mm(H). The construction & Material used shall be welded assembled, 0.8 mm thick CRCA for body shell, drawer front & tray , front side stiffener ,rear aide stiffener and 1.2 mm thick CRCA Top stiffener & Bottom stoffener . The drawer fronts shall be metal front straight edge. Locking shall be 10 lever cam lock & Central RH locking with actuator & lock channel mechanism for box-box-file Pedestal. The top panel shall be metal straight edge top. Castor should be swiveling non - lockable castors mounted below the body shell for free standing full height mobile pedestal and M8 Leveling stud for free standing pedestal . The anti-tipping mechanism shall have fifth roller arrangement mounted below file drawer to avoid toppling of unit when file drawer is pulled out. Partition in drawer shall be 1 no. Partition in box drawers with lock mounted. Plastic pencil tray shall be optional accessory. Finish shall be epoxy polyester powder coated to the thickness of 50 microns. Application shall be suitable for pushing below worksurface which has got a clear height of 725 mm from below. For drawer pulling side wise tapered recess provided in shell behind drawer fronts.

22

Number

1

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
23	<p><b>PERSONAL LOCKER UNIT 4 DOOR:</b>  providing and supplying godrej wipro and equivalent PLU 4 door 380mm(W) x 450mm(D) x 1830mm(H) DMX Drg.- PL13-A4-33797, R1 – 4 Sheets (Cam Lock) DMX Drg.-PL13-A4-36467, R1 – 4 Sheets (Hasp)The add-on units can be stacked width wise to form bank of lockers having common side panel.10 Lever cam lock with lock lever § Option of hasp arrangement 5. Material: CRCA 0.6mm Thickness 6. Construction: Rigid knockdown construction. 7. Shelf Uniformly Distributed Load Capacity per each shelf level is 35 Kg maximum. 8. Hat Shelf Only for 1 Door Model at the top 9. Hanging Rod · For 1 Door – Below Hat Shelf · For 2 Door – 1 Hanging rod in both compartment 10. Finish: Epoxy Polyester Powder coated to the thickness of 50 microns (+/-10). 11. Handle / Label holder · Aesthetically appealing Snap fit ABS plastic handle. · Plastic label holder for identification 12. Ventilation Attractive punched pattern for ventilation 13. Accessories (Optional) Stand for 1 wide, 2 wide and 3 wide – 125 mm High (add to unit height) inclusive of Leveler</p>	Number	10					

**OPTIMIZER:**

SD 2 BAY - 1NOS LD 2 BAY - 1NOSTD 2 BAY - 4 CHANNELS  
- 9 FT 2NOS Providing and supplying godrej wipro and equivalent Compactors: Supplying, fabricating and installing in position compactors of godrej wipro and equivalent make metal optimizers comprising of 3 types of units (3 bay) set on channels as follows: The Construction of each unit shall be rigid knock down made out of 0.8 thick CRCA steel conforming to IS : 513 . Each body shall have a main unit plus add on units (1,2,3,4,5) . Finish shall be Epoxy polyester powder coated thickness of 40 microns. Shelf construction shall be made from CRCA steel 0.8 mm thick IS :513 . Uniformly distributed load capacity of 80 Kg. Undercarriage shall have construction in welded frame made of HR sheet 3.15 mm thick conforming to IS : 10748 . Finish shall be epoxy polyester powder coat of approved color & shade with a dry film thickness of minimum 40 microns. The Movements shall be Drive Type configuration: D2 & D3 unit movement to be mechanical through a PU Drive Wheel and Sprocket -Chain-Tensioner arrangement mounted rigidly onto body size. In D3 each undercarriage to be movable with 2 rollers on the shaft for driving, 2 antifriction ball bearing for rolling and 4 antifriction ball bearing for guiding between rail. Centralized locking arrangement to be provided with approved Fittings, locking stiffener to be mounted onto back of single last unit so that it gets locked on channels when all the units are brought together. Recess handle lock arrangement not occupying more than 90.0mm space to be provided, lock to be of approved make & placed at suitable height. If the last unit is twin movable, hinged doors to be provided to the end bodies, in this case locking stiffener is mounted onto drive unit cover; and with tile fascia option, mounted in the recess of vertical trim. Each Drive Type units shall have Locking Knob which will rotate to unlock for movement and placed near the drive wheel for manual locking of individual units when a person is using those units. End stoppers to be provided to prevent derailment. Door locking to be with hinged doors of recessed die cast handle cum lock giving 3 way locking through a lever & shooting bolts. Guide channels shall consist of 'J' section 2 mm thick & 25 mm square bright bar - both connected by

24

Number

1

screws. Prior to the embedding of the guide channels with the help of raul plug & screw, the ground has to be in proper leveled condition. Easteners shall be galvanized/ blackodized/Zn plated. The label holder shall be made from 2 mm thick clear transparent acrylic sheet . Also total no. of loading levels per understructure shall be 15 for LD3, 15 for SD3 and 30 forTD3. Fascia(tiling) 3 tile pattern fascia option on drive side panel plus 3 tile pattern fascia on non-drive side panel plus 3 tile pattern fascia option on back panel of single last plus 3 tile pattern fascia option on backpanel of single static . The tiles to be held together by stiffeners & fasteners in 2 vertical metal trims., all complete. (Shop drawings to be submitted for Approval).

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
25	<p><b>REST ROOM BED:</b>  Providing and supplying godrej wipro and equivalent EQ bed with ply arrangement with headboard. Overall Size: Width - 2050.0 mm. Depth - 973.0 mm. Height - 720.0 mm Material :Headboard panels are made of 18 mm thick Pre-laminated Particle Board. All the exposed edges are edge banded with 2 mm thick PVC edge banding. Bed leg frame structure consist of metal frames made of M.S. 50 x25 mm box section in 1.2 thickness Internal Pipes made of 19 x 19 mm box section in 0.9 mm thickness. Headboard pipes are made of 25 x 25 mm box section in 0.9 mm thickness. Mattress holding bkt is made of 0.6 mm CRCA SHEET. Note that Ply has to be arranged by contractor/end user.</p>	Number	2					
26	<p><b>REST ROOM MATTRESS:</b>  Providing and supplying godrej wipro and equivalent Anand Milan Mat 78364 Thickness: 10 cm With a breathable coir base, PU foam and a correct combination of foam &amp; coir, it has everything one needs for a good sleep</p>	Number	2					
27	<p><b>Storage (Under workstation):</b>  NOVA PEDETAL 390X435X646</p>	Number	58					
28	<p><b>Soft Board:</b>  Providing and fixing Fabric wrapped soft board panels 12mm thick of size and profile as per detail with 6mm grooves made at the junction of soft board and partition and finished with Aluminium Hat sections. Soft board to be fixed on a backing of 12mm exterior grade MDF with PVC grippers at the edges. The rate should include cladding the panels in approved fabric (basic price Rs. 300/Rmt), 4mm thick foam infill as per approved specification. Note the fabric shall be stretched uniformly along the direction of weave and shall be wrinkle free. Size of 1500x1200mm</p>	EACH	2					

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Unit Rate without tax(b)	Amount without tax(c) (c=a*b)	Applicable Taxes (d)	Total Amount with Tax (e) (e=c+d)
29	<b>White Board:</b> Providing and fixing 1mm thick White writing laminate on 12mm thick exterior grade MDF with grooves at the junction of writing laminate and partition as shown in the drawings. Cost to be inclusive of Aluminum beading at all edges of the MDF on which the laminate is stuck. The cost to include supplying and installing approved pen & duster holder with necessary supports, hardware, etc. complete. Approved makes: White Mark or Alko Sign or Fixograph Size of 1500x1200mm	EACH	2					
30	<b>Kitchen / Pantry equipment:</b> Samsung, LG, and similar 253 L Frost Free Double Door 4 Star Refrigerator- This 253 L refrigerator offers Stabilizer-free Operation to ensure optimal operation within a range of 100 - 300 volts. It also ensures that you don't need an external stabilizer and protects the appliance from voltage fluctuations. It comes with a Door Alarm that alerts you when the door hasn't been properly closed. This helps prevent the loss of cool air and wastage of electricity.	Nos	1					
31	<b>Kitchen / Pantry equipment:</b> Samsung, LG and Similar 28 L Convection Microwave Oven- Indian cooking has a style of its own. This 28 L microwave oven from Samsung, LG and similar understands that and is designed to mix spices, make tadka seasoning, and papads with ease.	Nos	1					
32	<b>Kitchen / Pantry equipment:</b> Commercial Type Tea Coffee and Soup Vending Machine-	Nos	1					
33	<b>Kitchen / Pantry equipment:</b> commercial type Hot N Ambient N Cold is the all-season water purifier simple push of a button type machine.	Nos	1					
<b>TOTAL CAPEX in INR</b>								

### 11.3 OPEX

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Year 1 cost without Tax	Year 2 cost without Tax	Year 3 cost without Tax	Year 4 cost without Tax	Year 5 cost without Tax	Total cost without Tax	Total cost with Tax
<b>Schedule N - Bandwidth Charges</b>											
N1	Internet Leased Line for ICCC of 100 Mbps	Number	2								
N2	Leased Line connectivity between DC and DR of 100 Mbps	Number	2								
<b>Leased Line</b>											
N3	Leased Line bandwidth of 2 Mbps Link Between ICCC and end remote locations	Number	16								
N4	Leased Line bandwidth of 5 Mbps Link Between ICCC and end remote locations	Number	3								
N5	Leased Line bandwidth of 10 Mbps Link Between ICCC and end remote locations	Number	1								
N6	Leased Line bandwidth of 20 Mbps Link Between ICCC and end remote locations	Number	24								
N7	Leased Line bandwidth of 30 Mbps Link Between ICCC and end remote locations	Number	82								
N8	Leased Line bandwidth of 40 Mbps Link Between ICCC and end remote locations	Number	1								
N9	Leased Line bandwidth of 50 Mbps Link Between ICCC and end remote locations	Number	4								
<b>Leased Line for CCTV at check post</b>											
N10	Leased line to connect DC with check post locations 20 Mbps	Number	6								
<b>Schedule O - Services for DR Infrastructure</b>											
O1	DR Infra on cloud - Server and Storage	Number	1								
<b>Schedule P - Manpower during O&amp;M period</b>											
P1	Project Manager - Onsite	Number	1								



#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Year 1 cost without Tax	Year 2 cost without Tax	Year 3 cost without Tax	Year 4 cost without Tax	Year 5 cost without Tax	Total cost without Tax	Total cost with Tax
P2	Technical Expert- Command & Control Center - Onsite	Number	1								
P3	Technical Expert – Server and storage - Onsite	Number	1								
P4	Technical Expert – Video Surveillance and IoT devices - Onsite	Number	1								
P5	Technical Expert – Networking, EMS/NMS & Software Application - Onsite	Number	1								
P6	Database Administrator(1st Year - Onsite, 2nd, 3rd, 4th and 5th Year - Offsite)	Number	1								
P7	Cybersecurity Expert ( 1st, 2nd Year - Onsite, 3rd, 4th and 5th Year - Offsite)	Number	1								
P8	GIS Expert - Onsite	Number	1								
P9	ERP Developer - Onsite	Number	1								
P10	Data entry Operator - Onsite	Number	1								
P11	CCC Supervisors (one per shift) - Onsite	Number	2								
P12	Helpdesk Staff (2 per shift) - Onsite	Number	4								
P13	Field Staff (2 per shift) - Onsite	Number	4								
<b>Training Costs (during O&amp;M Period)</b>											
P14	Refresher Training	Batches	6								
<b>Third Party Audit (during O&amp;M Period)</b>											
P15	IT Audit	Lot	1								
<b>Schedule Q - Comprehensive Annual Maintenance Support</b>											
<b>Command and Control Centre - CAMC</b>											
Q1	Video Wall Solution- 55" LED(Matrix of 4*3)	Number	12								
Q2	Video wall controller with cabling and other fixture and wall management software	Lot	1								
Q3	Operator Workstation (CCC and NOC) with 2 monitors (22") with office productivity suite licenses	Number	28								

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Year 1 cost without Tax	Year 2 cost without Tax	Year 3 cost without Tax	Year 4 cost without Tax	Year 5 cost without Tax	Total cost without Tax	Total cost with Tax
Q4	Operator Workstation (Helpdesk) with 1 monitor (22") with office productivity suite licenses	Number	10								
Q5	Laptop for higher management with office productivity suite licenses	Number	2								
Q6	Network Colour Laser Printer (A3)	Number	1								
Q7	Network B/w Laser Printers (A4)	Number	2								
Q8	Network B/w Heavy Duty Laser Printers	Number	1								
Q9	Multi-Function Printer (MFP)	Number	2								
Q10	IP Phone	Number	51								
Q11	Indoor Fixed Dome Cameras for internal surveillance	Number	25								
Q12	Wifi Access for CCC	Lot	1								
Q13	Networking Cost (Passive Components such as LAN/CAT 6 Cabling)	Lumpsum	1								
Q14	Electrical Cabling & Necessary Illumination Devices for CCC, War Room, Helpdesk room, NOC room, Manager(s) room etc.	Lumpsum	1								
Q15	IP PABX for CCC including all accessories	Lot	1								
Q16	Digital Set top box	Number	2								
Q17	Video Conferencing Unit	Number	1								
Q18	55" LED display to present critical information Display (War Room)	Number	1								
Q19	Microphone with respective accessories	Number	15								
Q20	Headphones	Number	10								
Q21	PRI Line (Pair) with all necessary accessories	Number	1								
Q22	SMS Gateway modem	Number	1								
Q23	Any Other Items	Lumpsum	1								
	<b>DC Hardware - CAMC</b>										

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Year 1 cost without Tax	Year 2 cost without Tax	Year 3 cost without Tax	Year 4 cost without Tax	Year 5 cost without Tax	Total cost without Tax	Total cost with Tax
Q24	Core Router	Number	2								
Q25	Core Switch	Number	2								
Q26	L3 Switch	Lot	1								
Q27	L2 Switch	Lot	1								
Q28	Server load balancer	Number	2								
Q29	Networking Cost (Passive Components)	Lumpsum	1								
Q30	Internet Router	Number	2								
Q31	KVM Switch/Module	Number	1								
Q32	42 U Racks for Networking	Number	2								
Q33	42 U Racks for servers and storage	Number	8								
Q34	Online UPS with battery backup	Number	1								
Q35	Storage with 2 no. of SAN Switches & Complete mounting accessories	Lot	1								
Q36	Storage - Tape Drive & Library	Lot	1								
Q37	Blade Servers & Chassis	Lot	1								
Q38	Firewall (External) {1+1 in HAMode}	Number	2								
Q39	Firewall (Internal) {1+1 in HAMode}	Number	2								
Q40	Data Loss Protection (DLP)	Lot	1								
Q41	Anti - Advanced Persistent Threat (Anti-APT)	Lot	1								
Q42	Anti - Distributed Denial of Service (DDoS)	Lot	1								
Q43	Security Information and Event Management (SIEM)	Lot	1								
Q44	Network Access Control (NAC) including Patch Management	Lot	1								
Q45	IDAM Solution (1+1 in HA mode)	Lot	1								
Q46	Host Intrusion Prevention System (HIPS)	Lot	1								
Q47	Web Application Firewall (WAF)	Lot	1								

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Year 1 cost without Tax	Year 2 cost without Tax	Year 3 cost without Tax	Year 4 cost without Tax	Year 5 cost without Tax	Total cost without Tax	Total cost with Tax
Q48	Any Other Item	Lumpsum	1								
<b>DC Applications and Software - CAMC</b>											
Q49	Enterprise Management System(including SLA Mgmt, HelpdeskMgmt, Network Mgmt, BMS)	Lot	1								
Q50	Backup software	Lot	1								
Q51	Virtualization Software	Lot	1								
Q52	DRM (DC-DR Sync) Software	Lot	1								
Q53	Anti-virus (Software) for workstations	Number	40								
Q54	Anti-Virus for Server	Lot	1								
Q55	ICCC Software with Perpetual License and unlimited sensors	LS	1								
Q56	Call Centre Management (Software)	LS	1								
Q57	Video Management Software	Number	1								
Q58	Central Management Software for detecting RLVD, No Helmet and Triple Riding	Lot	1								
Q59	Central Management Software for detecting Wrong way	Lot	1								
Q60	Central Management Software for detecting Speed violation	Lot	1								
Q61	Enterprise violations management system for fines and connectivity with vahan and sarathi for auto vehicle identification and fines registry	Lot	1								
Q62	Variable Messaging Display Software	Lot	1								
Q63	Centralized Software for Smart Street Lights (Including Mobile Apps)	Lot	1								
Q64	Smart Parking Software including Dash boarding, reporting & Analytic tools	Lot	1								
Q65	Smart Parking POS software	Lot	1								

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Year 1 cost without Tax	Year 2 cost without Tax	Year 3 cost without Tax	Year 4 cost without Tax	Year 5 cost without Tax	Total cost without Tax	Total cost with Tax
Q66	GIS Platform License (server based)	Number	1								
Q67	GIS Platform - Desktop (Editing license)	Number	3								
Q68	ATCS Software Solution	Lot	1								
Q69	Software license for Database server	Lot	1								
Q70	Software license per servers	Lot	1								
Q71	Software license for web server	Lot	1								
<b>ERP, Mobile Application and Web-portal - CAMC</b>											
Q72	Software support cost for ERP application and licenses	Lot	1								
Q73	Software support cost for Web Portal & Mobile Application	Lot	1								
Q74	Any Other Items	Lumpsum	1								
<b>GIS - CAMC</b>											
Q75	GIS Application suite	Lot	1								
Q76	Any Other Items	Lumpsum	1								
<b>OFC - CAMC</b>											
Q77	Access Switch L2 Industrial Grade with SFP and Patch Cord	Nos	72								
Q78	Fibre Patch cords 20 metres	Units	55								
Q79	Electricity Metres at Junction Boxes	Units	55								
Q80	Field Junction Box/Cabinets for all field components of project	Nos	55								
Q81	Online field UPS with Battery Bank for 2 hours	Nos	55								
Q82	HDPE Pipe - 50 mm	Lot	1								
Q83	HDPE Pipe - 90 mm	Lot	1								
Q84	DWC Pipe - 90 mm	Lot	1								
Q85	DWC Pipe - 120 mm	Lot	1								

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Year 1 cost without Tax	Year 2 cost without Tax	Year 3 cost without Tax	Year 4 cost without Tax	Year 5 cost without Tax	Total cost without Tax	Total cost with Tax
Q86	Electrical Cable - 3 Core,2.5 Sqmm Unarmoured Cable	Lot	1								
Q87	Electrical Cable - 3 Core,2.5 Sqmm armoured Cable	Lot	1								
Q88	Electrical Cable - 7 Core,1.5 Sqmm Armoured Cable	Lot	1								
Q89	Electrical Cable - 14 Core,1.5 Sqmm Armoured Cable	Lot	1								
<b>Traffic Enforcement and Surveillance - CAMC</b>											
Q90	Red Light Violation Detection (RLVD) System including <b>No Helmet Detection &amp; Triple Riding detection</b> for covering <b>4 arms &amp; 8 lanes (2 Lanes in each arm)</b> at each junction with complete hardware including ANPR cameras, Overview Cameras, IR Illuminator, Local Processing Unit, with cabling, accessories & mounting infrastructure as required	Traffic Junction	12								
Q91	Red Light Violation Detection (RLVD) System including <b>No Helmet Detection &amp; Triple Riding detection</b> for covering <b>3 arms &amp; 6 lanes (2 lanes in each Arm)</b> at each junction with complete hardware including ANPR cameras, Overview Cameras, IR Illuminator, Local Processing Unit, with cabling, accessories & mounting infrastructure as required	Traffic Junction	4								
Q92	Red Light Violation Detection (RLVD) System including <b>No Helmet Detection &amp; Triple Riding detection</b> for covering <b>4 arms &amp; 6 lanes (2 Lanes in 2 Arms each and 1 lane in remaing 2 Arms each)</b> at each junction with complete hardware including ANPR cameras, Overview Cameras, IR Illuminator, Local Processing Unit, with cabling, accessories & mounting infrastructure as required	Traffic Junction	1								

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Year 1 cost without Tax	Year 2 cost without Tax	Year 3 cost without Tax	Year 4 cost without Tax	Year 5 cost without Tax	Total cost without Tax	Total cost with Tax
Q93	Speed Detection System for covering <b>2 lanes</b> in one direction with complete subcomponents including ANPR camera, wide angle evidence camera, IR illuminator, non-intrusive speed sensor with cabling & mounting infrastructure as required	Location	20								
Q94	ANPR System for capturing number plates at <b>2 arms and 4 lanes</b> at each Location with complete hardware including ANPR cameras, Local Processing Unit, with cabling, accessories & mounting infrastructure as required	Location	5								
Q95	ANPR System for capturing number plates at <b>2 arms and 6 lanes</b> at each Location with complete hardware including ANPR cameras, Local Processing Unit, with cabling, accessories & mounting infrastructure as required	Location	6								
Q96	Wrong way detection System covering <b>1 arm and 1 lane</b> at each Location with complete hardware including ANPR camera, cabling, accessories and mounting infrastructure as required	Location	8								
Q97	Traffic Surveillance PTZ Cameras System with Complete mounting accessories as required	Number	6								
Q98	Traffic Surveillance Overview/Fixed box Cameras System with required Hardware and Software including Local Processing Unit, cabling, accessories & mounting infrastructure as required	Number	122								
Q99	Poles for Cameras and Equipment	Number	42								
Q100	E-Challan Handheld Device including Software	Number	15								
Q101	Indoor Fixed Dome Cameras for internal surveillance	Number	420								
Q102	2 Megapixel Full HD IR IP Vandal proof Bullet Camera with Varifocal Lens	Number	140								

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Year 1 cost without Tax	Year 2 cost without Tax	Year 3 cost without Tax	Year 4 cost without Tax	Year 5 cost without Tax	Total cost without Tax	Total cost with Tax
Q103	8 channel Network Video Recorder (NVR)	Number	70								
Q104	32" LED display	Number	70								
Q105	Video Channel License	Number	560								
Q106	8 Port Managed PoE/PoE+ Network switch	Nos	70								
Q107	SFP (1G) Short haul	Nos	140								
Q108	Fibre Patch cords 2 metres	Units	140								
Q109	Networking (CAT6) cable	Lot	1								
Q110	Flexible Power cables 3 core, 1.5 sq. mm copper cable	Lot	1								
Q111	PVC Pipe 22 mm diameter	Lot	1								
Q112	UPS with 1 hour backup	Nos	70								
Q113	9U Rack	Nos	70								
Q114	Any other item	Lumpsum	1								
<b>Adaptive Traffic Control System- CAMC</b>											
Q115	ATCS Traffic Controller with all mounting accessories	Number	17								
Q116	Countdown timer (CDT) with all mounting accessories	Number	126								
Q117	Vehicle Detector Camera with all mounting accessories	Number	63								
Q118	Cantilever poles	Number	63								
Q119	Standard poles for Traffic Signals	Number	97								
Q120	Traffic Light Aspects - Red	Number	189								
Q121	Traffic Light Aspects - Green (Green Straight, Green Right, Green Left)	Number	531								
Q122	Traffic Light Aspects - Amber	Number	189								
Q123	Pedestrian lamp heads - Stop & Walk Man	Number	126								
Q124	3 Core, 2.5 Sqmm Unarmoured Cable	Lot	1								
Q125	3 Core, 2.5 Sqmm Armoured Cable	Lot	1								



#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Year 1 cost without Tax	Year 2 cost without Tax	Year 3 cost without Tax	Year 4 cost without Tax	Year 5 cost without Tax	Total cost without Tax	Total cost with Tax
Q126	7 Core, 1.5 Sqmm Armoured Cable	Lot	1								
Q127	14 Core, 1.5 Sqmm Armoured Cable	Lot	1								
Q128	Any other item	Lumpsum	1								
<b>Variable Messaging Displays and Environment Senesors - CAMC</b>											
Q129	VMD (3 x 1.5m) with Audio enabled and VMD Controller (including its mounting structure, pole inclusive of all civil, electrical, erection, earthing work with necessary foundation for Variable Messaging Display)	Number	4								
Q130	VMD (8 x 3m) with Audio enabled and VMD Controller (including its mounting structure, pole inclusive of all civil, electrical, erection, earthing work with necessary foundation for Variable Messaging Display)	Number	7								
Q131	Environmental sensors including all cabling and mounting accessories	Number	2								
Q132	Any other item	Lumpsum	1								
<b>Smart Street Lights - CAMC</b>											
Q133	Street light Controller & dimming driver for existing functional LED Street Lights 1500-3000W on High Mast poles with 6 LED Fixtures with necessary communication/ Connectivity to CCC, Software with updates and upgrades, gateway infrastructure	Number	17								
Q134	Street light Controller & dimming driver for existing functional LED Street Lights 1500-3000W on High Mast poles with 8 LED Fixtures with communication/ Connectivity to CCC, Software with updates and upgrades, gateway infrastructure etc.	Number	11								

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Year 1 cost without Tax	Year 2 cost without Tax	Year 3 cost without Tax	Year 4 cost without Tax	Year 5 cost without Tax	Total cost without Tax	Total cost with Tax
Q135	Street light Controller & dimming driver for existing functional LED Street Lights 1500-3000W on High Mast poles with 12 LED Fixtures with communication/ Connectivity to CCC, Software with updates and upgrades, gateway infrastructure etc.	Number	6								
Q136	Street light Controller & dimming driver for existing functional LED Street Lights 100W to 300W each on Single/ Double/ Triple poles with capability to handle/ control the min 10 Nos to Max 100 Nos of LED Street Light Poles per feeder panel communication/ Connectivity to CCC, Software with updates and upgrades, gateway infrastructure etc.	Number	104								
Q137	Any other item	Lumpsum	1								
<b>Street Bay Parking - CAMC</b>											
Q138	Magnetic sensor - surface mount	Number	325								
Q139	Networking/Communication for magnetic sensors including all necessary cabling and accessories	Lot	7								
Q140	Handheld device with scanner and printer with 8 hrs battery backup at full load with networking capability to command centre or Mobile POS device	Number	15								
Q141	Any other item	Lumpsum	1								
<b>Schedule R - Other Services</b>											
R1	SMS Services (10000 sms pack) per Year	Number	1								
<b>Schedule A7- O &amp; M of building services and furniture</b>											
1	Operation and Maintenance of <b>Electrical Including Diesel Cost for running of DG Set.</b> The scope of Work includes Quarterly inspection of all System, Preventive Maintenance of all kinds of equipment installed under the Project Part B (Establishment of	Lumpsum	1								

#	Description	Unit of Measurement	Qty.	Proposed Qty. (a)	Year 1 cost without Tax	Year 2 cost without Tax	Year 3 cost without Tax	Year 4 cost without Tax	Year 5 cost without Tax	Total cost without Tax	Total cost with Tax
	physical infrastructure) and Training to designated staff twice a year complete work										
2	Operation and Maintenance of <b>HVAC</b> . The scope of Work includes Quarterly inspection of all System, Preventive Maintenance of all kinds of equipment installed under the Project Part B (Establishment of physical infrastructure) and Training to designated staff twice a year complete work	Lumpsum	1								
3	Operation and Maintenance of <b>Fire Fighting</b> . The scope of Work includes Quarterly inspection of all System, Preventive Maintenance of all kinds of equipment installed under the Project Part B (Establishment of physical infrastructure) and Training to designated staff twice a year complete work	Lumpsum	1								
4	Operation and Maintenance of <b>Furniture</b> . The scope of Work includes Quarterly inspection of all System, Preventive Maintenance of all kinds of equipment installed under the Project Part B (Establishment of physical infrastructure) and Training to designated staff twice a year complete work	Lumpsum	1								
<b>TOTAL COST OF OPEX</b>											

## 12 Annexure A- Minimum Qualifications for Key Project resources

### Project Manager= 30 Marks

#### a) Educational Qualification: 10 Mark

- MCA/MBA (IT)/M. Tech = 10 Marks
- BE / B. Tech = 5 Marks
- Else 0 Mark

#### b) Project/Program management Experience in Large ICT/ Command and Control Centre implementation Project of value > 100 crores: 10 Marks

- >= 3 Projects= 10 Marks
- Less than 3 projects but >=1 Project(s) = 5 marks
- Else 0 Mark

#### c) Project/Program management Experience: 10 Marks

- >= 10 years= 10 Marks
- Less than 10 years but >= 5 years = 5 Marks
- Else 0 Mark

### Command & Control Centre Expert= 10 Marks

#### a) Educational Qualification: 3 Marks

- BE/B.Tech = 3 Marks
- Else 0 Mark

#### b) Relevant Work experience as CCC expert with the proposed software/OEM solution implementation: 4 Marks

- >=2 years = 4 marks
- Else 0

#### c) International work experience in Designing & implementation of CCC: 3 Marks

- >=3 Projects= 3 Marks
- 2 Projects = 1 Mark
- Else 0 Mark

### VMS Expert= 10 Marks

#### a) Educational Qualification: 3 Marks

- BE/B.Tech or Graduation / Post Graduation in Transportation = 3 Marks
- Else 0 Marks

#### b) Relevant Work experience as VMS expert with the proposed Software/OEM: 4 Marks

- >=2 years = 4 marks
- Else 0

#### c) International work experience in Designing & implementation of Intelligent (preferably Adaptive) Traffic Management System: 3 Marks

- >=3 Projects= 3 Marks
- 2 Projects = 1 Mark
- Else 0 Mark

### Surveillance Expert= 10 Marks

#### a) Educational Qualification: 3 Marks

- BE/B.Tech = 3 Marks
- Else 0 Marks

#### b) Relevant Work experience as Surveillance expert: 4 Marks

- $\geq 5$  years = 4 marks
- $\geq 3$  and  $< 5$  year = 2 Marks
- Else 0

**c) Work experience as Surveillance expert: 3 Mark**

- $\geq 3$  Projects = 3 Marks
- 2 Projects = 1 Mark
- Else 0 Mark

**Network & Security Expert= 10 Marks**

**a) Educational Qualification: 3 Marks**

- Bachelor's Degree in Engineering/MCA = 3 Marks
- Else 0 Marks

**b) Relevant Work experience in Implementation of Network and Security Infrastructure Projects: 4 Marks**

- $\geq 5$  years = 4 marks
- $\geq 3$  and  $< 5$  year = 2 Marks
- Else 0

**c) Work experience as Network and Security Expert: 3 Mark**

- $\geq 3$  Projects = 3 Marks
- 2 Projects = 1 Mark
- Else 0 Mark

**Data Centre Expert= 10 Marks**

**a) Educational Qualification: 3 Marks**

- Bachelor's Degree in Engineering/MCA = 3 Marks
- Else 0 Marks

**b) Relevant Work experience in designing of Data Centre Implementation Projects: 4 Marks**

- $\geq 5$  years = 4 marks
- $\geq 3$  and  $< 5$  year = 2 Marks
- Else 0 Marks

**c) Work experience as Data Centre Expert: 3 Marks**

- $\geq 3$  Projects = 3 Marks
- 2 Projects = 1 Mark
- Else 0 Mark

**ERP Functional Expert= 10 Marks**

**a) Educational Qualification: 3 Marks**

- Bachelor's Degree in Engineering/MCA = 3 Marks
- Else 0 Marks

**b) Relevant Work experience in ERP Implementation Projects: 4 Marks**

- $\geq 5$  years = 4 marks
- $\geq 2$  and  $< 5$  year = 2 Marks
- Else 0 Marks

**c) Work experience as ERP Expert: 3 Marks**

- $\geq 2$  Projects = 3 Marks
- 1 Project = 1 Mark
- Else 0 Mark

**GIS Expert= 10 Marks**

**a) Educational Qualification: 3 Marks**

- Bachelor's Degree in Engineering/MCA = 3 Marks
- Else 0 Marks

**b) Work experience as GIS expert: 4 Marks**

- $\geq 5$  years = 4 Marks
- $\geq 2$  and  $< 5$  year = 2 Marks
- Else 0 Mark

**c) Work experience in Designing & implementation of GIS Systems: 3 Marks**

- $\geq 2$  Projects = 3 Marks
- 1 Project = 1 Mark
- Else 0 Mark

## 13 Annexure B Format for Performance Bank Guarantee

<<To be printed on Rs. 300/-Stamp Paper>>

IN CONSIDERATION OF \_\_\_\_\_ through \_\_\_\_\_

Silvassa Smart City Limited (SSCL) for “**Selection of Implementation Agency for Pan City Infrastructure – ICC, Smart Components And Smart Governance in Silvassa City**” (hereinafter referred to as the “said work”) on the terms and conditions of the AGREEMENT dated the \_\_\_\_\_ day of \_\_\_\_\_ 2020 executed between SSCL on the one part and the Company (\_\_\_\_\_) on the other part (hereinafter referred to as “the said AGREEMENT”) and on the terms and conditions specified in the Contract, Form of Offer and Form of Acceptance of Offer, true and complete copies of the offer submitted by the Company, the said Acceptance of Offer and the said AGREEMENT are annexed hereto.

The Company has agreed to furnish SSCL in Guarantee of the Nationalized Bank for the sum of Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_ only) only which shall be the Security Deposit for the due performance of the term’s covenants and conditions of the said AGREEMENT. We \_\_\_\_\_ Bank registered in India under Act and having one of our local Head Office at \_\_\_\_\_ do hereby guarantee to SSCL in \_\_\_\_\_ Department.

- i. Due performance and observances by the Company of the term’s covenants and conditions on the part of the Company contained in the said AGREEMENT, AND
- ii. Due and punctual payment by the Company to SSCL of all sum of money, losses, damages, costs, charges, penalties and expenses that may become due or payable to SSCL by or from the Company by reason of or in consequence of any breach, non-performance or default on the part of the Company of the term’s covenants and conditions under or in respect of the said AGREEMENT.

AND FOR THE consideration aforesaid, we do hereby undertake to pay to SSCL on demand without delay demur the said sum of Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_ only) together with interest thereon at the rate prescribed under \_\_\_\_\_ from the date of demand till payment or such lesser sum, as may be demanded by SSCL from us as and by way of indemnity on account of any loss or damage caused to or suffered by SSCL by reason of any breach, non-performance or default by the Company of the terms, covenants and conditions contained in the said AGREEMENT or in the due and punctual payment of the moneys payable by the Company to SSCL thereunder and notwithstanding any dispute or disputes raised by the Company in any suit or proceeding filed before the Court relating thereto our liability hereunder being absolute and unequivocal and irrevocable AND WE do hereby agree that:

- a) The guarantee herein contained shall remain in full force and effect during the subsistence of the said AGREEMENT and that the same will continue to be enforceable till all the claims of SSCL are fully paid under or by virtue of the said AGREEMENT and its claims satisfied or discharged and till SSCL certifies that the terms and conditions of the said AGREEMENT have fully and properly carried out by the Company.
- b) We shall not be discharged or released from liability under this Guarantee by reason of
  - a. any change in the Constitution of the Bank or
  - b. any arrangement entered into between SSCL and the Company with or without our consent;
  - c. any forbearance or indulgence shown to the Company,

- d. any variation in the terms, covenants or conditions contained in the said AGREEMENT;
  - e. any time given to the Company, OR
  - f. Any other conditions or circumstances under which in a law a surety would be discharged.
- c) Our liability hereunder shall be joint and several with that of the Company as if we were the principal debtors in respect of the said sum Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_ only).
- d) We shall not revoke this guarantee during its currency except with the previous consent of SSCL in \_\_\_\_\_ Department in writing;
- e) Provided always that notwithstanding anything herein contained our liabilities under this guarantee shall be limited to the sum of Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_ only) and shall remain in force until SSCL certifies that the terms and conditions of the said AGREEMENT have been fully and properly carried out by the Company.
- f) Bank hereby agrees and covenants that if at any stage default is made in payment of any instalment or any portion thereof due to SSCL under the said AGREEMENT or if the Company fails to perform the said AGREEMENT or default shall be made in fulfilling any of the terms and conditions contained in the said AGREEMENT by the Company, the Bank shall pay to SSCL demand without any demur, such sum as may be demanded, not exceeding Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_ only) and that the Bank will indemnify and keep SSCL indemnified against all the losses pursuant to the said AGREEMENT and default on the part of the Company. The decision of SSCL that the default has been committed by the Company shall be conclusive and final and shall be binding on the Bank/Guarantor. Similarly, the decision of SSCL as regards the Agreement due and payable by the Company shall be final and conclusive and binding on the Bank /Guarantor.
- g) SSCL shall have the fullest liberty and the Bank hereby gives its consent without any way affecting this guarantee and discharging the Bank/Guarantor from its liability hereunder, to vary or modify the said AGREEMENT or any terms thereof or grant any extension of time or any facility or indulgence to the Company and Guarantee shall not be released by reason of any time facility or indulgence being given to the Company or any forbearance act or omission on the part of SSCL or by any other matter or think whatsoever which under the law, relating to sureties so releasing the guarantor and the Guarantor hereby waives all suretyship and other rights which it might otherwise be entitled to enforce.
- h) That the absence of powers on the part of the Company or SSCL to enter into or execute the said AGREEMENT or any irregularity in the exercise of such power or invalidity of the said AGREEMENT for any reason whatsoever shall not affect the liability of the Guarantor/Bank and binding on the bank notwithstanding any abnormality or irregularity,
- i) The Guarantor agrees and declares that for enforcing this Guarantee by \_\_\_\_\_ against it, the Courts at Silvassa only shall have exclusive jurisdiction and the Guarantor hereby submits to the same.

1. \_\_\_\_\_

2. \_\_\_\_\_



Being respectively the Director of the Company, who in token thereof, has hereto set his respective hands in the presence of:

1. \_\_\_\_\_

2. \_\_\_\_\_

## **14 Annexure C: List of Products/Solutions Which Requires MAF from OEMs**

The bidder shall submit Manufacturers Authorization Certificate (MAF) from Original Equipment Manufacturers (OEMs) of the following products/ solutions:

Sr.	Product	Submitted (Yes/No)
1.	Video Wall Screen	
2.	Video Wall Controller	
3.	Video Wall Management Software	
4.	LED TV (Professional Displays)	
5.	CCC Software	
6.	CCC Monitoring Workstations	
7.	Desktop PC	
8.	Laptop	
9.	Tablet	
10.	IP Phones and IP EPABX	
11.	Enterprise Management Systems (EMS)	
12.	Centralized Anti-virus Solution	
13.	Call Centre Solution	
14.	RDBMS Licenses (If Any)	
15.	All Routers and Switches	
16.	Firewall	
17.	Intrusion Prevention System	
18.	Server Load Balancer	
19.	All Servers/Blades/Chassis	
20.	Storage (Primary and Secondary)	
21.	Tape Drive and Backup Solution	
22.	Precision Air Conditioner (PAC)	
23.	Online UPS	
24.	Video Management System	
25.	All CCTV and ANPR Cameras	
26.	ATCS System	
27.	Environmental Sensors	
28.	Variable Message Sign Boards	
29.	Cloud Service Provider (CSP)	