MOKANI KRUTI N.
(B.E.,M.Val(RE),M.Val(P.&M.)
** Real Estate valuer.*
** Plant and Machinery valuer.*
** Government Approved Valuer.*
** Chartered Engineer*
Regd. no. SRT/CCIT/DCIT(HQ,)/34AB/ KNM/2021-22, w.e.f. 26/10/2021
R&E-IBBI Reg. No. IBBI/RV/07/2019/11861
P&M-IBBI Reg. No. IBBI/RV/07/2022/14888

Office
111-112, Jaldarshan tower, opp. Nawadi owara, b/s Bahumali bhavan, Nanpura, Surat.- 395003.
Phone No : (O)0261-2463539
Mobile .No.93757-24106
Office / Fax No.: 0261-2453539
E-mail:-krutimokani@gmail.com

To,
Hardik Kothiya,
Director, Rayzon Energy Pvt. Ltd.,
Block 109, Nr Hariya Talav, B/h Aron Pipes Tal Mandvi, Karanj Olpad Surat, Gujarat, 394110 India.

Respected Sir / Madam,
In accordance with your appointment letter dated May 06, 2025, I enclose my report on the 'Cost analysis' of specified tangible assets such as Land, Building, Plant and machinery, equipment, and supportive assets ('the subject assets') that will be acquired by Rayzon Energy Pvt. Ltd on June 11, 2025.

Rayzon Energy Pvt. Ltd (herein referred the 'Company') mainly going to be in install production facility of Solar Cells using TOPCon technology with installed capacity of 3500 MW (MegaWatt) at RS No. 198, 197, 199/002, 196/002, Village: Kathvada, Taluka: Mangrol, Dist: Surat, Gujarat – 394120 India.

In the professional and unbiased opinion of the appointed chartered engineer, and based on the comprehensive analysis of all gathered data and information, it is concluded that the **total cost of subject proposed project** of the specified tangible assets, as of the report Date, is expressed as follows:

Particulars	Amount in INR Million
Total project Hard Cost including Land, Building, Plant and machinery, equipment, and supportive assets	16,177.54
Total Soft Cost including interest expenses, legal charges, and bank fees etc.	329.00
Total Project Cost	**16,506.54**

This conclusion reflects a fair assessment under the given circumstances, considering the assets condition, market dynamics, and a potential sale scenario. It is provided solely for the purpose stated in this report and should not be used for any other purpose.

We trust that this report meets your requirements and provides the necessary insights for its intended purpose. It is important to review this report in its entirety to fully understand the context and conclusions.

If you have any questions or require further information, please feel free to contact us. We would be delighted to provide any additional assistance you may need.

Yours sincerely,

KRUTI NAGINBHAI MOKANI
Digitally signed by KRUTI NAGINBHAI MOKANI
Date: 2025.06.25 20:15:08 +05'30'

Place: Surat.
Date : 25/06/2025

MOKANI KRUTI N.
Chartered Engineer
Reg. No. AM1978643
Registered Valuer (L&B , P&M)
Land Building: IBBI/RV/08/2019/11861
Plant Machinery: IBBI/RV/07/2022/14888

Mokani Kruti N.
Chartered Engineer
Reg. No.: AM1978643
Valuer of Plant & Machinery

TABLE OF CONTENTS

MOKANI KRUTI N.
(B.E.,M.Val(RE),M.Val(P.&M.)
** Real Estate valuer.*
** Plant and Machinery valuer.*
** Government Approved Valuer.*
** Chartered Engineer*
Regd. no. SRT/CCIT/DCIT(HQ,)/34AB/ KNM/2021-22, w.e.f. 26/10/2021
R&E-IBBI Reg. No. IBBI/RV/07/2019/11861
P&M-IBBI Reg. No. IBBI/RV/07/2022/14888

Office
111-112, Jaldarshan tower, opp. Nawadi owara, b/s Bahumali bhavan, Nanpura, Surat.- 395003.
Phone No : (O)0261-2463539
Mobile .No.93757-24106
Office / Fax No.: 0261-2453539
E-mail:-krutimokani@gmail.com

Executive Summary

In accordance with the appointment, I, as the Chartered Engineer, have assessed the cost of Land, Building, Plant and Machinery, equipment, and supportive assets that will be acquired by Rayzon Energy Pvt. Ltd. as of June, 11,2025 (the "Report Date"). This report has been conducted specifically for the purposes of the Cost analysis of entire upcoming project by Rayzon Energy Pvt. Ltd.

The findings of this assessment are presented in this summary report. It must be emphasized that this analysis is strictly intended for the stated purpose and should not be utilized for any other applications.
As of the Report Date, the cost of the specified Land, Building, Plant and Machinery, Equipment, and Supportive assets are detailed below in this report.

Particulars	INR million
Land Cost	172.73
Building & Civil Works	1,954.50
Plant and Machinery & Other Utilities without GST	12,703.15
Plant and Machinery & Other Utilities – Packing Forwarding Freight and Installation - without GST	6.74
GST on Plant and Machinery & Other Utilities including Packing Forwarding Freight and Installation	1026.61
Contingency	313.81
Hard Cost	**16,177.54**
Preliminary & Preoperative Expenses	159.50
Interest during construction	169.50
Soft Cost	**329.00**
Total Project Cost	**16,506.54**

While arriving at the Cost for the subject assets, we did not consider the costs associated with selling the assets, Environmental factors, including the presence of hazardous substances, have not been evaluated or incorporated into this report, as the engineer/appraiser is not qualified to detect or assess such issues, The Report does not involve any verification of ownership title or investigation into existing liabilities related to the subject assets.

Place: Surat.
Date : 25/06/2025

KRUTI NAGINBHAI MOKANI
Digitally signed by KRUTI NAGINBHAI MOKANI
Date: 2025.06.25 20:15:22 +05'30'

MOKANI KRUTI N.
Chartered Engineer
Reg. No. AM1978643
Registered Valuer (L&B , P&M)
Land Building: IBBI/RV/08/2019/11861
Plant Machinery: IBBI/RV/07/2022/14888

Mokani Kruti N.
Chartered Engineer
Reg. No.: AM1978643
Valuer of Plant & Machinery

MOKANI KRUTI N.
(B.E.,M.Val(RE),M.Val(P.&M.)
** Real Estate valuer.*
** Plant and Machinery valuer.*
** Government Approved Valuer.*
** Chartered Engineer*
Regd. no. SRT/CCIT/DCIT(HQ,)/34AB/ KNM/2021-22, w.e.f. 26/10/2021
R&E-IBBI Reg. No. IBBI/RV/07/2019/11861
P&M-IBBI Reg. No. IBBI/RV/07/2022/14888

Office
111-112, Jaldarshan tower, opp. Nawadi owara, b/s Bahumali bhavan, Nanpura, Surat.- 395003.
Phone No : (O)0261-2463539
Mobile .No.93757-24106
Office / Fax No.: 0261-2453539
E-mail:-krutimokani@gmail.com

Brief Summary of the Report

Appointed by	Hardik Kothiya ,Director of Rayzon Energy Pvt. Ltd.
Name of the company	Rayzon Energy Pvt. Ltd.
Report Issued to	Rayzon Solar Ltd. , Rayzon Energy Pvt. Ltd.
Intended User of this report	Rayzon Solar Ltd., Rayzon Energy Pvt. Ltd., SBI Capital Markets Limited Ambit Private Limited, IIFL Securities Limited, AZB & Partners, J. Sagar Associates, Hogan Lovells Lee & Lee, Security and Exchange Board of Inida. (SEBI),National Stock Exchange(NSE), Bombay Stock Exchange(BSE)
Purpose of this report	To estimate the total cost of setting up and installing a Solar Cells manufacturing unit using TOPCon technology with installed capacity of 3500 MW
Assets Class	Land, Building , Plant and Machinery , Equipment , and Supportive assets
Location of Assets	On sites facility will be installed at : Rayzon Energy Pvt. Ltd. RS No. 198, 197, 199/002, 196/002, Village: Kathvada, Taluka: Mangrol, Dist: Surat, Gujarat – 394120 India.
Date of Appointment	May 06, 2025
Date of Physical Visit	May 15, 2025
Date of Report	June 25, 2025
Estimated cost	INR 16,506.54 Million

KRUTI NAGINBHAI MOKANI
Digitally signed by KRUTI NAGINBHAI MOKANI
Date: 2025.06.25 20:15:34 +05'30'

Place: Surat.
Date : 25/06/2025

MOKANI KRUTI N.
Chartered Engineer
Reg. No. AM1978643
Registered Valuer (L&B , P&M)
Land Building: IBBI/RV/08/2019/11861
Plant Machinery: IBBI/RV/07/2022/14888

Mokani Kruti N.
Chartered Engineer
Reg. No.: AM1978643
Valuer of Plant & Machinery

MOKANI KRUTI N.
(B.E.,M.Val(RE),M.Val(P.&M.)
** Real Estate valuer.*
** Plant and Machinery valuer.*
** Government Approved Valuer.*
** Chartered Engineer*
Regd. no. SRT/CCIT/DCIT(HQ,)/34AB/ KNM/2021-22, w.e.f. 26/10/2021
R&E-IBBI Reg. No. IBBI/RV/07/2019/11861
P&M-IBBI Reg. No. IBBI/RV/07/2022/14888

Office
111-112, Jaldarshan tower, opp. Nawadi owara, b/s Bahumali bhavan, Nanpura, Surat.- 395003.
Phone No : (O)0261-2463539
Mobile .No.93757-24106
Office / Fax No.: 0261-2453539
E-mail:-krutimokani@gmail.com

1. Brief Background to the Assignment

Purpose of valuation	To estimate the total cost of setting up and installing a Solar Cells manufacturing unit using TOPCon technology with installed capacity of 3500 MW for Rayzon Energy Pvt. Ltd.
Date of Report	June 25, 2025.
Date of inspection	The specified tangible fixed assets (Land) of the subject unit were inspected on May 15, 2025
Name of the company	M/s Rayzon Energy Pvt. Ltd. is a subsidiary of Rayzon Solar Limited.
Location of the assets to be installed at	Revenue Survey No. 196/002, 197, 198, 199/002, Village: Kathvada, Taluka: Mangrol, Dist: Surat, Gujarat 394120 India.
Scope of work	I have been appointed by Director of Rayzon Energy Pvt. Ltd. to provide a report on To estimate the total cost of setting up and installing a Solar Cells manufacturing unit using TOPCon technology with installed capacity of 3500 MW including Land, Building, Plant and Machinery, Equipment, and Supportive assets including Real Estate located at Revenue Survey No. 196/002, 197, 198, 199/002, Village: Kathvada, Taluka: Mangrol, Dist: Surat, Gujarat 394120 India.

Inclusion	The scope of work as an Engineer/Appraiser of plant and machinery and Land Building includes, 1. Inspection of Land Available on site. 2. Estimate cost of construction of building and other infrastructure for production unit. 3. Estimation of cost of the subject assets including Plant and Machinery, Equipment, and Supportive assets to be installed on the site as, 4. Submission of cost vetting report on the subject assets to be installed on the site.
Exclusion	The following assets or items have been excluded from the scope of Cost vetting of Land, Building, Plant and Machinery, Equipment, and Supportive assets: 1. Cost of design book, and intangible assets, 2. Due diligences of documents provided. 3. Due diligences such as legal, environmental, financial or else, 4. Studies of stability or fitness and performance review of the subject assets under scope of work, 5. Any form of business valuation or intangibles such as goodwill, royalty, trademarks, patents, copyrights, R&D expenses & licenses, etc.
Particulars of assets under Cost Vetting	The specified assets under consideration are mainly covered under three heads: • Land and Building • Plant and Machinery. • Electrical Installations . • Other Infrastructural Facility to run production plant smoothly.
Confidentiality and Privacy	The information and/or data obtained during this exercise will maintain the conformity and privacy of client in compliance with Indian Accounting Standard.
Restrictions on Use and Publication	Possession of this report or any copy thereof does not carry with it the right to publication. No portion of this report shall be disseminated to third parties through prospectus, advertising,

public relations, news, or any other means of communication without the written consent and approval of Engineer.

2. Inspection of Site, Source of Information & Data Collection

Inspection of Assets

The physical inspection of the Land being valued has been conducted to the extent which is feasible and accessible. At the time of the site visit, the subject land was found to be a non-agricultural open land with no existing infrastructure or built-up facilities present on site. Visit has been conducted by Chartered Engineer/Appraiser Kruti Mokani as on May,15,2025

Source of Information

The following data, document or information has been studied as furnished by the Rayzon Energy Pvt. Ltd. to carrying out this Cost vetting exercise.

- All Sale deeds of land including index sheet with sign and stamp by Stamp Duty dept, Govt. of Gujrat.
- Soft copy and hard copy of all Performa invoices with and without taxes with company's representative's sign and stamp for building and other all plant machineries to be construct/installed.
- Other data, document and information regarding setting up and installing a Solar Cells manufacturing unit using TOPCon technology with installed capacity of 3500 MW.

3. Company Profile in Brief: About Rayzon Energy Pvt. Ltd. (REPL)

Rayzon Solar Limited (RSL)- The Parent company

M/s Rayzon Energy Private Limited is a subsidiary of Rayzon Solar Limited(RSL). RSL having an operational manufacturing unit of 3000 MW (MegaWatt) modules, consisting of 600 MW Mono PERC Line & 2400 MW Topcon Line at Block No. 105, B/H Aron Pipes, B/H Hariya Talav, Kim Mandvi Road, Karanj, Surast, Gujarat – 394110.

An operational manufacturing unit to produce N-Tunnel Oxide Passivated Contact ("TOPCon") modules, and bifacial modules with

TOPCon with an installed capacity of 3000 MW as well an upcoming manufacturing unit to produce Solar PV Modules using TOPCon cells with an installed capacity of 2000 MW at Village: Sava, Taluka: Mangrol, Surat, Gujarat India.

Accordingly, the Company will have a combined Module Manufacturing Facility of 8000 MW.

Initially, Company had installed 40 MW solar panel line in Nov 2017 and with multiple expansion, Company is having present operational capacity of 6000 MW and an upcoming additional capacity of 2000 MW which is projected to be operational from October 2025. All expansions done in past one year are based on latest technology of Topcon manufacturing line to provide better efficient PV modules.

Product Range:

1. TopCon (570W-595W, 144 Half-cut N-type Solar cell, 33kg, Split Junction Box)
2. Bifacial (535W-560W, 144 Half-cut Mono PERC Bifacial Solar Cell, 33kg, Split Junction Box)
3. Mono Facial (535W-560W, 144 Half-cut Mono PERC Solar Cell, 28.6kg, Split Junction Box)
4. Black Mono PERC (400W-410W, 108 Half-cut Mono PERC Solar Cell, 21.4kg, Split Junction Box)

The Company has global reach with servicing client across four countries, USA, Canada, Europe, the Middle East, and South Africa. RSPL product adhere to global standards such as ALMM, IEC, BIS, and MNRE, ensuring superior quality and reliability of products.

Rayzon Energy Private Limited (REPL)

M/s Rayzon Energy Private Limited is a subsidiary of Rayzon Solar Limited(RSL). Rayzon Energy Private Limited (REPL) has proposed to set up the manufacturing facility to produce Solar Cells using TOPCon technology which has installed capacity of 3500 MW (MegaWatt) at RS No. 198, 197, 199/002, 196/002, Village: Kathvada, Taluka: Mangrol, Dist: Surat, Gujarat – 394120 India.

Current Status / Site Visit Observations (REPL)

The Company has acquired the land for the project. Loaction of upcoming project is Revenue Survey No. 198, 197, 199/002, 196/002, Village: Kathvada, Taluka: Mangrol, Dist: Surat, Gujarat 394120 India.

The Company has received quotations for the proposed plant and machinery for the project.

As observed during the site visit, the Company has not initiated any work at the proposed site and the land is currently undeveloped open land.

Project Specifications 3500 MW Solar PV Crystalline Cell Manufacturing Plant

Following is the project specification for the proposed project.

Parameter	Cell Plant
Project Title	Solar photovoltaic Crystalline Silicon Cell manufacturing plant
Major components	N type Silicon Crystalline wafers, Gases like Silane, Ammonia, Phospine and Silver paste, Aluminium paste etc.,
Capacity of plant	3500 MWp per annum (Installed Capacity)
Manufacturing facility	TopCon Crystalline cells, half cut cells and bi-facial cell manufacturing facility using imported equipment.
Technology	Phosphorous doped N type TOPCon cells.

Proposed Manufacturing Capacity of the REPL

Following assumptions are made for assessing the plant capacity per annum.

1. Working hours per day - 23
2. Number of working days-335
3. Cell size 182X 210 sqmm
4. Cell wattage – 9.62 Wp

The summary of plant capacity considered for the proposed project.

Particular	Installed Capacity
Days Per Year	335
Hours per Day	23
Uptime (Hours/Year)	7705
Cell Size (in MM)	182*210
Cell Power (in Wp)	9.63
No of Cells Per Hour	46740
No of Cells Manufactured	360131700
Capacity in MW	**3468**

Source: Main Line Supplier Quotation & The Consultant Estimate

The installed plant capacity would be 3500 MW however the total plant capacity is 3.468 GW with the above assumptions of 9.62 Wp per cell but in practice, the output depends on the effective working hours in the year and the average wattage of the cells which in turn depends on the quality of the wafer and the process.

4. Project Cost Details

Cost of Land

The Company has acquired a land parcel measuring 107,149 square meters, located at Revenue Survey No. 198, 197, 199/002, and 196/002, Village: Kathvada, Taluka: Mangrol, District: Surat, Gujarat – 394120, India, as per the sale deed documents shared with Dun & Bradstreet (D&B) India. **The total land acquisition cost has been accounted at INR 172.73 million**, which has been included as part of the overall project cost.

Source: copies of Sale deed, Index Abstract and City survey records available online/offline

Details of all Land Acquired by REPL is mentioned in Annexure A

Building Approvals details

All Approved Building and Layout plans sanctioned by Town Planning Officer Surat (Nagar Niyojak Surat) wide letter No. B.P./Kathwada/Mangrol/Surat/2585 to 2589 dated 17/06/2025.

Plan is sanctioned by Govt Approved Authority, Dist: Surat.

Building & Civil Works Cost

The estimated total building and civil construction works cost is INR 1,954.50 million as per the quotation received from ECR Buildtech Pvt. Ltd. dated 13.5.2025 and Ritutech dated 31.5.2025

As per Local site assessment of similar projects in the past, the proposed civil and factory building cost for the project seems to be reasonable as the per cost of civil work for the proposed project.

Sr. No.	Particulars	Total Cost (INR Million)
1	Earth Work	170.13
2	Concrete & Form work	360.17
3	Structural Steel & Reinforcement	256.49
4	Water Proofing	33.00
5	Misc. Work -Structural	6.37
6	Road & Storm Water	159.66
7	Masonry, Plaster and Pointing	109.41
8	Flooring, Skirting and Dado	72.40
9	Doors, Windows and Ventilators	5.13
10	Painting	14.14
11	Plumbing	9.52
12	Sanitary Fixtures	6.22
13	Celings and Partitions	8.33
14	Misc. Works	2.30
15	Pile Works	167.55
16	Compound Walls	39.20
	Sub Total Construction Cost	**1420.00**
	Total Construction Cost incl. GST	1491.00
	Supply & Erection of Pre- Engineered Building Inclusive 0f GST	463.50
	Total Cost of Building Incl. Fire & Safety, HVAC, PCW & Wall partition, ceilings and Other Accessories	**1954.50**

Source: Cost estimation of each provided by REPL

Detail estimates of each item provided in Annexure :B

Plant and Machinery Cost

The Company has estimated a cost of INR 13,736.49 million for the plant and machinery which also includes utilities and other fixed assets for the project.
Detail estimates of each provided in Annexure :C

After assessment of similar projects in the, the proposed cost of Plant and Machinery (P&M), including Module Final Assembly (MFA), appears to be on the lower side. The estimated cost per GW for P&M in this project stands at approximately INR 3924.71 million, compared to the industry benchmark range of INR 4,750.00 million to INR 5,500.00 million per GW.

As discussed with the Company, the primary reason for the comparatively lower Plant and Machinery (P&M) cost lies in its strategic and cost-efficient execution model. While many market participants typically engage turnkey contractors to manage the complete design, procurement, and construction processes often at a bundled premium the Company adopts a disaggregated, package-wise approach.

Instead of outsourcing the entire scope, the Company breaks down the project into specific work packages and engages directly with individual suppliers and vendors. This approach enables more granular control over each project component and facilitates significant cost optimization.

A key differentiating factor is the direct involvement of the promoters in procurement negotiations. Their hands-on engagement not only fosters stronger relationships with suppliers but also ensures that the Company is able to secure highly competitive pricing in line with current market conditions.

Supplier Credentials

Bangalore Vacuum Technology: Bangalore Vacuum Technology started in the year 2004, is known for manufacturing, supplying and trading Vacuum Furnaces & Vessels. The product range offered is inclusive of Vacuum Furnaces, Drying Ovens and Helium Gas Leak Detectors. Some of the sectors where the offered products find wide applications are biological and nuclear & atomic research. Few of the customers include BARC Mumbai, BARC Mysore, IIAP Bangalore and ISRO Bangalore,

They are in the field of manufacturing of below equipment from past 15 years.

- High-temperature Vacuum Furnaces

- RF/DC Sputtering system
- Vacuum Thin Film Coating Systems
- Vacuum Glove Boxes, Vacuum Chambers
- Industrial Vacuum furnaces
- Powder Coating units (using Flash Evaporation method for powder processing for thermal evaporation)
- Ultra-high vacuum accessories
- All kinds of Vacuum pump (Dry, Oil)
- Vacuum valves (Butterfly Valve, Air admittance Valves, Right angle valves, etc.,)
- Vacuum measuring Gauges (Digital High Pressure Pirani, Penning Gauge & Analog Pirani , Penning Gauges)
- Diffusion Pump & Liquid Nitrogen Trap
- Special purpose systems & fabrication (customer built)

Shenzhen S.C New Energy Technology Corporation: Shenzhen S.C New Energy Technology Corporation was founded in 2003, is a national high-tech equipment manufacturer with capabilities into R&D, manufacturing & sales of photovoltaic solar cell manufacturing equipment. S.C has manufacturing bases covering more than 200,000m2 in Shenzhen, Guangdong Province and Changzhou, Jiangsu Province; with a total of over 7,000 employees and an R&D team of over 1,200 personnel in 2023. With focus on solar photovoltaic industry, manufacturing and supply of solar cell manufacturing equipment, S.C provides equipment of many types mainly: wet chemical equipment series, horizontal furnaces series, plate-type/inline equipment series, laser equipment series, metallization equipment series and smart manufacturing equipment series. Today with ranking 1st in the industry in terms of production and sales volume for 7 consecutive years, S.C has grown into one of the largest solar cell manufacturing equipment suppliers in the world.

GNBS Eco Co Ltd: It was formerly GNBS Engineering Co Ltd, is a Korea-based company primarily engaged in the manufacture and sale of eco-friendly devices. The Company's products include scrubbers, traps and plasma plume removal devices. The scrubber is a harmful gas treatment device that combines plasma and wet cleaning methods. Traps are devices for increasing productivity and extending the lifespan

of vacuum pumps in manufacturing processes such as semiconductors and displays using physical and chemical properties. Plasma plume removal device is a device that uses low-temperature, low-power plasma to remove plume.

Atlas Copco India Ltd.: Atlas Copco was founded in 1873, in Stockholm, Sweden. The Atlas Copco Group is a world-leading provider of sustainable productivity solutions. The Group serves customers in more than 180 countries with products and services focused on productivity, energy efficiency, safety and ergonomics. Atlas Copco India, established in 1960, is the country's leading manufacturer of innovative solutions in air compressors and industrial gases, energy efficient vacuum pumps, portable compressors, light towers and generators, ergonomically designed industrial tools and assembly systems. They cater to the segments including general engineering, aerospace, automotive, manufacturing and process industries, oil and gas, construction, food and beverage, entertainment, among others

Luthra Pneumsys: It is based in Mumbai, Maharashtra has been manufacturing a range of pneumatic & hydraulic components to cater to the needs of automotive, pharmaceutical, food and plastic industries since 1974. The product range includes John Guest Advance Piping Solutions, Compressed Air Fittings, John Guest Plumbing Pipes and Fittings, "Push In" Plumbing Pipes & Fittings, John Guest India Plumbing Catalog, John Guest Pure Water Fitting and LLDPE Tubes and Food Grade Fitting and LLDPE Tubes Grade. These products find applications in several media, such as compressed air, gases, pure water, plumbing and many more

UHP Technologies Pvt Ltd.: It supports the new age industry like Photovoltaic, Semiconductor, BioPharma etc., in India apart from Oil & Gas, Nuclear, Petrochemical, Pharmaceutical and conventional segments. The business scope includes Engineering Facilities and Safety & Automation solutions for CORT- Corrosive, Oxidizing, Reactive & Toxic Gases & Chemicals. UHPTech provides custom built Gas Cabinets, Chemical Delivery Cabinets, Auto Changeover

Racks/Supply Panels, Valve Manifold Boxes and many other equipments. The company has full-fledged capability to take up Turnkey projects including design, supply, installation, integration and commissioning of all relevant equipments handling gases & chemicals.

Avant Garde Clean Room & Engg. Solutions Pvt. Ltd.: It is designing and building clean indoor climates for critical manufacturing industries like Pharmaceutical, Food, Automotive, Electronics, and others, ACES has been in the business for last 11 years.

Preliminary & Pre-operative Expenses

The preliminary and pre-operative expenses of the project have been estimated at INR 159.50 million which includes following items.

Sr. No.	Particulars	Amount INR million
1	Company Incorporation and Other Legal Charges	20.00
2	Bank Fees	18.00
3	Misc. Other	121.50
	Total	159.50

All above intangible costs, including interest expenses, legal charges, and bank fees, have been provided by the client, M/s Rayzon Energy Private Limited (REPL). The Chartered Engineer has relied entirely on the information furnished by the client for these components and has not undertaken any independent verification. Accordingly, the Chartered Engineer shall not be held responsible for the accuracy or validation of these cost elements.

5. Extent of Data Research

Extent of Data Research

The market survey of the subject assets (Building, Plant and machinery, equipment, and supportive assets) has been carried out for the estimation.

Data or information is gathered on the subject assets belong to the company from as many sources as practical, including but not limited to, the original equipment manufacturer (if possible), dealers and

brokers of like equipment, published catalogues and guides of similar equipment, as well as the public domain (internet). Upon gathering data regarding new and similar models with characteristics of company's assets, the analysis of comparable data is made to estimate.

To complete this valuation process, integration of information's drawn from the market research, analysis of the data and from the application of valuation techniques to form a conclusion. Effective integration depends on skill, knowledge, experience, and judgment.

6. Conclusion

Conclusion

The estimated total building and civil construction works cost is INR 1,954.50 million as per the quotation received from ECR Buildtech Pvt. Ltd. dated 13.5.2025 and Ritutech dated 31.5.2025. As per Chartered engineer/Appraiser assessment of similar projects in the past, the proposed civil and factory building cost for the project seems to be reasonable as the per GW cost of civil for the proposed project comes to INR 558.43 million at installed capacity however as per industry standards it comes in the range of INR 450.00 million to INR 600.00 million per GW of capacity.

The Company has estimated a cost of INR 13,736.49 million for the plant and machinery which also includes utilities and other fixed assets for the project. The Company has obtained quotations from reputed suppliers for proposed project. The suppliers are having adequate experience and expertise in providing after sales service for identified equipment's. As per Chartered engineer /Appraiser assessment of similar projects in the past, the proposed P&M cost for the project seems to be on a lower side as the per GW cost of P&M including MFA for the project comes to around INR 3,924.71 million against the industry average of INR 4,750.00 million to INR 5,500.00 million.

The proposed total hard cost (Building and Plant and Machinery cost) for the project comes to INR 4,483.14 million per GW of installed capacity of the project and as per assessment of similar projects in the proposed total hard cost (Building and Plant and Machinery cost) excluding land for the project seems to be on a lower side as the

industry average ranges from INR 5,200.00 million to INR 6,100.00 million.

As per Chartered Engineer's opinion, provided all cost including building and plant and machinery seems Fair and Reasonable.

7. Facts Assumptions and Limiting conditions

The following assumption & Limiting condition are considered to arrive at the opinion of cost estimates of the subject assets:

About Hard/Tangible cost	The cost estimates for the proposed project are given on the basis of estimates, and we have also relied upon the quotations being procured for the purposes of the funding, which is attached as an annexure to the report. The revenue and costs considered are based on the findings from primary survey and secondary research, as detailed in the methodology section. There may be changes in the revenue and cost estimates depending on the market conditions. The revenue and costs are comparable to the industry benchmarks. It has been assumed that available plant and machinery are complete and balanced along with utilities and auxiliaries.
About Soft/Intangible cost	Costs, including interest expenses, legal charges, and bank fees, have been provided by the client, M/s Rayzon Energy Private Limited (REPL). The Chartered Engineer has relied entirely on the information furnished by the client for these components and has not undertaken any independent verification. Accordingly, the Chartered Engineer shall not be held responsible for the accuracy or validation of these cost elements.
Statutory Permissions or Licenses	It is assumed that all required licenses, consents, or other legislative or administrative authority from any local, state, or national government, private entity, or organization have been or can be obtained or renewed for any use on which the cost estimate contained in this report is based.
Title of Asset (Legal Matters)	No responsibility is assumed for matters legal in nature. No investigation has been made into the title to or any liabilities against the assets appraised. Verbal and written communications with the client or firms are assumed to be true and correct. We have assumed that the owner's claim is valid, the property rights are good and marketable, and there

	are no encumbrances that cannot be cleared through normal processes, unless otherwise stated in the report. For the purpose of this exercise, we have assumed that the subject assets are free from all the litigation, encumbrances, etc. and all the taxes related to the subject assets have been paid in time.
Hidden or Unapparent Conditions	The Engineer/appraiser has, in the process of exercising due diligence, requested, reviewed, and considered information provided by the ownership of the assets and client, and the engineer has relied on such information being candid and complete, and assumes there are no hidden or unapparent conditions of the assets, subsoil or structures, which would render it more or less valuable. The engineer/appraiser assumes no responsibility for such conditions, for engineering that might be required to discover such factors, or the cost of discovery or correction.
Public and Private Record	• In an assignment where the engineer/appraiser was unable to inspect certain assets due to lack of client-approved assignment limitations, as detailed and documented in the report, the engineer/appraiser relied on information about the assets obtained through public and/or private record research. If errors are discovered in the public records later on, the responsibility for the impact of the error lies with the source of the information, not with the engineer/appraiser. • Information furnished by others or available on public domains is assumed to be true, correct and reliable. A reasonable effort has been made to verify such information; however, the engineer/appraiser assumes no responsibility for its accuracy. The estimation conclusions are subject to the correctness of said data.
Environmental Conditions:	• No environmental or impact studies, special market studies or analyses, special highest and best use studies, or feasibility studies have been requested or made by the engineer/appraiser unless otherwise specified in the valuation report.
Future Matters	• We have estimated the cost of the subject assets based the facts known to us, information provided to us, physical observation and the assumptions and limiting conditions mentioned herewith. Should there be any fact, reason, and information not

	known at the time of preparing this report which adversely affects the marketability/title of the asset under estimation, then this estimation report stands null and void. • The subject exercise is based on prevailing market dynamics as on the date of report and does not consider any unforeseeable developments or changes which could impact the same in the future. • We reserve our right to alter our conclusions at a later date, if it is found that the data provided to us by the client or firms was not - reliable, accurate or complete in any material respect.
Other	• A engineer/appraiser will not be required to give testimony or appear in court because of having made a valuation of the assets in question, unless specific arrangements to do so have been made in advance, or as otherwise required by law. • This report has been made only for the purpose stated in this report for the parties concerned, and it is neither intended nor valid for any other purpose and the parties.

Acceptance of this report by the client constitutes acceptance of all data, information, facts, assumptions and limiting conditions contained in the report.

KRUTI NAGINBHAI MOKANI

Digitally signed by KRUTI NAGINBHAI MOKANI
Date: 2025.06.25 20:16:03 +05'30'

Place: Surat.
Date : 25/06/2025

MOKANI KRUTI N.
Chartered Engineer
Reg. No. AM1978643
Registered Valuer (L&B , P&M)
Land Building: IBBI/RV/08/2019/11861
Plant Machinery: IBBI/RV/07/2022/14888

Mokani Kruti N.
Chartered Engineer
Reg. No.: AM1978643
Valuer of Plant & Machinery

Photographs of the Land






Place: Surat.
Date : 25/06/2025

KRUTI NAGINBHAI MOKANI
Digitally signed by KRUTI NAGINBHAI MOKANI
Date: 2025.06.25 20:16:54 +05'30'

MOKANI KRUTI N.
Chartered Engineer
Reg. No. AM1978643
Registered Valuer (L&B , P&M)
Land Building: IBBI/RV/08/2019/11861
Plant Machinery: IBBI/RV/07/2022/14888

Mokani Kruti N.
Chartered Engineer
Reg. No.: AM1978643
Valuer of Plant & Machinery

Annexure : A
Detail of Land acquired by REPL

Sr. no.	Description	land area (in sqmts)	Sale considaration Amount (Million) INR	Stamp duty & other charges (Million) INR	Total amount (Million) INR	Sale deed reg. details
1	Rev. survey no. 180/2, block no. 196/002, (old block no. 172), in the village limit of Kathwada, city survey no. NA196/002, sheet no. NA99, in city survey ward of Kathwada (NA), taluka Olpad, Dist. Surat.	22,032	42.96	2.54	45.50	Sale deed registration no. 759, of dated 30/01/2025, in S.R.O. of Surat (Mangrol)
2	Rev. survey no. 180/1, block no. 197, (old block no. 173), in the village limit of Kathwada, city survey no. NA197, sheet no. NA99, in city survey ward of Kathwada (NA), taluka Olpad, Dist. Surat.	28,003	54.61	3.22	57.83	Sale deed registration no. 761, of dated 30/01/2025, in S.R.O. of Surat (Mangrol)
3	Rev. survey no. 174, 175, block no. 198, (old block no. 174), in the village limit of Kathwada, city survey no. NA198, sheet no. NA99, in city survey ward of Kathwada (NA), taluka Olpad, Dist. Surat.	48,265	48.28	2.85	51.12	Sale deed registration no. 700, of dated 28/01/2025, in S.R.O. of Surat (Mangrol)
4	Rev. survey no. 180/2, block no. 199/002, (old block no. 175), in the village limit of Kathwada, city survey no. NA199/002, sheet no. NA99, in city survey ward of Kathwada (NA), taluka Olpad, Dist. Surat.	8,849	17.26	1.02	18.27	Sale deed registration no. 760, of dated 30/01/2025, in S.R.O. of Surat (Mangrol)
	Total	**1,07,149**	**163.10**	**9.63**	**172.73**	

Annexure : B - Cost of Building

(1) EARTH WORK

SR.NO	DESCRIPTION OF WORKS	UNIT	TOTAL QUANTITY	RATE INR	AMOUNT INR
A.1	Surface Excavation with Mechanical Digger / Excavator / Backhoe JCB on Ground for Cutting, filling & levelling portions of vegetation, small shrubs, grass & dressing the bottom surface to required slope, rolling the sub-surface with 10 tonne power roller to required ,up to a depth of 300 mm to 600 mm and making a level surface and carting away all the excavated earth material as directed by EIC	sq.m	79990	6	4,79,940.00
A.2	Earth work Excavation for foundations plinth beams,column footings, rafts,trenches, sumps, drains, equipment foundations and in plinths etc.in soft soils like all types of sandy soils, black cotton soils or Silty soil, clayey sands, with sand & gravel with Mechanical Digger/ Excavator/ Backhoe JCB including protection of slopes & preventing soil from falling inside pits by supporting soil sides, by proper shoring, strutting, removing / dismentling stone , boulders / pebbles , RCC / PCC , brick work in excavated pit and keeping pit dry by dewatering the subsoil water / rain water by pumping the same outside the premises away from the excavations till concreting is completed & stacking approved excavated earth for backfilling within site etc. as spcified & directed (Backfilling will be payable seperately as per relevent item below)				
a	Below NGL to 1.50 m lvl Below (NGL=Natural Ground Surface level at site)	CU.M	10995	140	15,39,300.00
b	Below 1.50 m up to 3.00 m lvl	CU.M	7060	170	12,00,200.00
c	Below 3.00m to 4.5 m lvl	CU.M	1600	205	3,28,000.00
A.3	Same as item A.2 but for excavation in Soft rock by Mechanical breaker, boulders by wedging, levelling, as directed at site, all complete.				

a	Below NGL to 1.50 m lvl Below (NGL=Natural Ground Surface level at site)	CU.M	QRO	350	-
b	Below 1.50 m up to 3.00 m lvl	CU.M	QRO	420	-
c	Below 3.00m to 4.5 m lvl	CU.M	QRO	510	-
A.4	Same as A.2 but excavation in Hard Rock by Control Blasting using a licensed blaster, approved by Engineer in charge , obtaining a licence from Statutory bodies to undertake blasting and storing the explosives as per prevalent rules of blasting confirm to IS 4081, IS:10081. It also includes shoring, strutting, dewatering the subsoil water and pumping the same outside the premises from the excavations until backfilling around foundations.				
a	From NGL to 1.50 m lvl Below (NGL=Natural Ground Surface level at site)	CU.M	QRO	1050	-
b	From 1.50 m up to 3.00 m lvl	CU.M	QRO	-	-
c	Depth below 3.00m lvl	CU.M	QRO	-	-
A.5	Carting away the surplus excavated materials outside the premises by mechanical means to approved Dumping ground, including all labour, transportation hire charges and royalty, etc. complete. Regarding the royalty or any other charges is not be the responsibility of the client outside the premises. Contractor to deal with such situations. (Only on Instruction of Site Engineer & Client as assumed)	CU.M	35300	175	61,77,500.00
A.6	Backfilling in foundation, within plinth up to formation level with approved excavated materials available within premises in layers not exceeding 300mm as directed, including watering and thorough consolidation by manual / mechnical means to 98% of modfifed Proctor density at optimum mositure content with field dry density 16-17 KN/m3 etc at optimum moisture content (OMC) including levelling & consolidation of the excavated surface prior to back filling, carrying out all necessary tests on soils including moisture content, compaction test or CBR test for every 100 m2 area or as directed by the Engineer etc.	CU.M	15600	100	15,60,000.00
A.7	Same as above item A6 but using approved material brought from outside by contractor including transportation hire charges and royalty, etc. complete				
a	Gravel Filling	CU.M		1150	-
b	Panna sand filling	CU.M	4050	1200	48,60,000.00

c	Good Natural Soil for under Plinth filling or Below Ground floor	CU.M	220000	440	9,68,00,000.00
d	Quarry dust	CU.M	1000	1223	12,23,000.00
e	Sand- gravel mix	CU.M	1000	1330	13,30,000.00
f	Providing and laying Granular Sub-Base (GSB) consisting of sand,moorum, crushed stone and gravel mixed in proportions as specified below:Sieve designation % by weight passing 75mm 100 53mm 80-100 26.5mm 55-90 9.5mm 35-65 4.75mm 25-55 2.36mm 20-40 0.425mm 10-25 0.075mm 3-10 for sub grade to a compacted thickness of 200mm laid in single layer using good quality graded materials from approved source and mixed in the specified proportion including cost and transportation of all materials, stacking and mixing in the specified proportion, spreading after mixing to required camber, leveling, watering with all leads to obtain moisture levels of mix between 1% above and 2% below the optimum moisture content at the time of compaction and compacting each layer with 8 - 10 ton vibratory power roller to obtain the required proctor density including all labour, charges for all tools and plants employed and all their incidental charges etc. all complete as directed	CU.M	10750	1725	1,85,43,750.00
A.8	Providing Hard stone metal filling OR Soling OR Stone Bed layer upto 230mm thick compacted thickness below GSB layer & Grade slab of approved quality from approved quarry, Spreading & laying of 75 mm to 100 mm size hard stone metal, all neatly hand packed so as to fill all voids with 40 mm metal & gravel and rolling with 10 ton power roller , to make up for settlements and roll again to given lines and levels etc., complete.	CU.M	13350	1800	2,40,30,000.00
A.9	Providing, spreading and levelling Hard stone metalling layer (12 mm and down) approx. to 25mm thickness in the DG & Transformer yard area to correct line and level etc. complete as specified and as directed etc., complete.	CU.M	5990	1560	93,44,400.00

A.10	Providing and laying LDPE sheet layer of 300 microns thick over soil or PCC with necessary minimum over lap of 4" wide.	SQ.M	56590	48	27,16,320.00
	TOTAL OF SECTION-A: EARTHWORK				₹ 17,01,32,410.00

(2) SECTION-B CONCRETE & FORMWORK

SR. NO	DESCRIPTION OF WORKS	UNIT	TOTAL QUANTITY	RATE INR	AMOUNT INR
B.1	Providing, machine mixing and laying **Plain cement concrete** (PCC) below foundations for columns footing, bases of walls, plinths, rafts, plinth beams, grade slabs, plinth protection to make up level etc; compacting, curing required shuttering and its removal, dewatering, cleaning, preparing surfaces, junctions etc: complete at all heights, and depths as per the drawing and to the satisfaction of the EIC. Size of aggregate to be 20 mm and down graded or as directed by the EIC.				
a	PCC M10	**CU.M**	**7235**	4520	**3,27,02,200.00**
b	PCC M15	**CU.M**	**QRO**	5204	**-**
B.2	Same as above item but for Plum concrete of 65% PCC and 35% Plum, Mix PCC 1:3:6 (1 cement : 3 sand : 6 stone aggregate) Size of the plum shall be maximum 300 mm in one direction.	**CU.M**	**560**	3450	**19,32,000.00**
B.3	Providing, concrete by **machine Mix at site** using 20 mm & down-size graded machine crushed stone aggregate & Laying **RCC** for all type of works **up to plinth level (FFL)** for footings, foundations, pile caps, rafts, column pedestals, plinth beams, wall, staircase foundatitons, trenches, manhole, pit, culverts, drains, sump pits, equipment foundations, ramps, grade slabs with desired finish, encasing of pipes, dowels etc. including compacting, machine vibrating, tamping, leveling, curing, use of appropriate additives & admixtures of approved make as per manufacturers specifications etc. all complete.				
a	M25	**CU.M**	**QRO**	6326	**-**
b	M30	**CU.M**	**QRO**	6600	**-**
B.4	Providing, concrete by **machine Mix at site** using 20 mm & down-size graded machine crushed stone aggregate & Laying RCC for all type of works at all levels, heights and locations **above plinth level-FFL** for all structures, equipment				

	foundations, columns, floor beams, slabs, roof slabs, sunshades, lintels, staircases, fins, chajjas, pardis, sills, copings, cornices, projections, column/beam encasing, RCC Transoms & Mullions (Stiffeners), parapet with desired finish, encasing of pipes, dowelsc, etc. including compacting, machine vibrating, tamping, leveling, curing, use of appropriate additives, admixtures & waterproofing compound as specified of approved make as per manufacturers specifications etc. all complete.				
a	M25	**CU.M**	**QRO**	6526	**-**
b	M30	**CU.M**	**QRO**	6905	**-**
B.5	Same as above item B.3 providing, laying **site mix concrete** for **Under Ground Water Retaining Structures like** water storage tank, scale pit, basins, sumps/sump pits, effluent treatment plant, including thinner tank, pH tank, Neut. tank, Neut. sump, Equalisation tank etc. including addition of waterproofing compound of Fosroc/Pidilite/equivalent approved make & dosage as per manufacture's specifications, providing necessary fittings & arrangement for pressure grouting of cement mix 1:1 under pressure of about 30mtr. head of water at construction joints, weak pot/ honeycombs and **testing the same for water tightness** as per requirement of IS 3370 and **making good defects / leakages** as directed by Owner/Owner's representative at no extra cost to owner. *** There will be no plaster & concrete shall be dense and leak proof**				
a	M30	**CU.M**	**QRO**	7050	**-**
B.6	**Same as item B.3** Providing and Laying in position **Ready Mix Concrete (RMC) Up to plinth level- FFL** as per instruction and mentioned including the use of appropriate additives & admixtures etc. of approved make & dosage as per manufacture's specifications at all locations, height and levels all types of works including receiving from RMC batching plant and transporting to site, pumping arrangement, placing, compacting, machine vibrating, tamping, leveling, curing etc. all complete				
a	M25	**CU.M**	**10250**	5650	**5,79,12,500.00**
b	M30	**CU.M**	**1050**	5900	**61,95,000.00**
B.7	**Same as item B.4** Providing and Laying in position **Ready Mix Concrete (RMC) above plinth level- FFL** as per instruction and mentioned including the use of appropriate additives & admixtures etc. of approved make & dosage as per manufacture's specifications at all locations, height and levels all types of works including receiving from RMC batching plant and transporting to site, pumping arrangement, placing, compacting, machine vibrating, tamping, leveling, curing, use				

	of appropriate additives, admixtures & waterproofing compound as specified of approved make as per manufacturers specifications etc. all complete.				
a	M25	**CU.M**	**10100**	5800	**5,85,80,000.00**
b	M30	**CU.M**	**1050**	6050	**63,52,500.00**
B.8	Same as above item B.5 providing, laying **Ready Mix Concrete (RMC)** for **Under Ground Water Retaining Structures** as per instruction and mentioned including the use of appropriate additives & admixtures etc. of approved make & dosage as per manufacture's specifications at all locations, height and levels all types of works including pumping arrangement, compacting, machine vibrating, tamping, leveling, curing etc. all complete *** There will be no plaster & concrete shall be leak proof**				
a	M30	**CU.M**	**3200**	6150	**1,96,80,000.00**
B.9	Providing & Laying **Non Shrink Grout** of approved make under base plates, in pockets, equipment base etc. including hacking of old concrete if required, formwork etc. all complete as per manufacturer's specification and as directed and instructed by Owner/Owner's representative.				
a	Conbextra GP2 of Fosroc	**CU.M**	**27.0**	64500	**17,41,500.00**
b	Same as item B9 but Providing and Laying **Plain Cement Grout M40** in C.M. 1:2:2 (2 parts grit) including curing, preparation of surface etc.	**CU.M**	**5.0**	12000	**60,000.00**
B.10	**Concrete Flooring / Floor Toping / IPS Flooring:** Providing, mixing, laying plain Cement concrete or Reinf. Concrete Grade Slab flooring over compacted grade or floor toping (IPS) over suspended slab of **specified concrete grade & Thickness 75 mm to 200 mm** using 20 mm down size stone aggregate **with water-proofing admixture** of Dr.fixit / Sunanda chemicals / Fosroc or equivalent and laid in alternate panels with power trowelled finish, making coving of 50mm along the perimeter with sealants & fillers, finishing the surface smooth to given levels including saw cut groove of size 5mm X 15mm or as specified at 3m X 4m panels control joint & sealing the joints with sealants as specified, curing all complete. **Note: Reinforcement shall be paid under separate item.**				
a	M 25 Grade	**CU.M**	**2670**	7170	**1,91,43,900.00**
B.11	**VDF Flooring on compacted Grade** Providing, Mixing, Laying, Dewatering & Finishing concrete floor by **"Vacuum Dewatered Floor"** by "TRIMIX" system through approved agency using 20mm down size stone aggregate, the floor thickness of 75 mm to 200 mm laid in panels in line and level finishing the top surface smooth by Dewatered vacuum flooring (TRIMEX) by Fixing of channels at an specific interval, vibrated with screed vibrator, lay dewatering matt and remove the excess				

	water from concrete by using specified devise and finish the floor by laying rough, medium and smooth power trowels, saw cut grooves cutting of size 5mm X 15mm minimum or as specified at 3m X 4m panels or as spcified for control joint, sealing the joints with sealants as specified, curing etc. complete. (Floor hardener, shall be paid separately in respective item) **Note: Reinforcement shall be paid under separate item.**				
	M25 Grade	**CU.M**	**2270**	7150	**1,62,30,500.00**
B.12	Providing and laying **"Laser screed floor" including cost of providing and laying concrete of specified grade** (OPC only without fly ash), necessary laser equipment's, supply, placing, laying of concrete, compacting, using water reducing admixtures, surface levelling by laser m/c, floating, surface finishing, checking the levels using optical level tools and laser guided level tools, to manage the datum level prefixed. Thereafter, carrying out tooling using bump cutter and removing excess / high spots from the surface, tolerance up to +/-5mm, broadcasting floor hardener and setting it using power trowels and finally finishing. Groove cutting for control joint by both conventional wet-cut and early-entry dry-cut saws may be used to saw cut joints in floors. The saw-cut using the early-entry saw should be depth minimum of 25mm, saw-cutting should be performed, before the concrete starts to cool or as soon as the concrete surface is firm enough not to the torn or damaged by the blade, and before random-drying-shrinkage cracks can form in the concrete slab. Shrinkage stresses start building upon the concrete as it sets and cools. If sawing is unduly delayed, the concrete can crack randomly before it is sawed. in suitable panel of 4.0 M x 4.0 M etc. complete as directed. Armer construction joints & expansion joints with all accessaries, floor hardener, shall be paid separately in respective item) - "Laser Skid" method without dewatering, panel span up to 15m, Surface Tolerance ± 5mm, and concrete thickness up to 200mm thickness.	**CU.M**			-
	M25 Grade	**CU.M**	**7870**	7500	**5,90,25,000.00**
B.12 .a	Supplying Providing and fixing **Armer Joint** in flooring at construction Joint, Expansion Joint for **150 mm thick grade slab.**	**Rm**	**3535**	2750	**97,21,250.00**
B.13	Supplying Providing and spreading non-metallic hardener of 4kg/sq mt consumption – of sika -chapdur or equivalent	**Sq.m**	**60000**	70	**42,00,000.00**
B.14	Providing & fixing 25 mm thick 200 mm (max) wide Shalitex board or approved equivalent make in Isolation / expansion joints as specified including Polysulphide sealant filler material of Nitoseal 21(I) of Fosroc or BASF or approved equivalent make plysulphide / polyurethane sealant for top 25mm deep for entire length of joint etc. complete.	**Rm**	**4500**	325	**14,62,500.00**

B.15	Providing & embedding in concrete P.V.C. Water-stopper (CALICO 102 make or local available equivalent), 5mm thick, 150-250 mm & 250-300 mm wide including jointing, etc. complete as specified and as directed, at all levels. (for water tanks etc.) - Contractor to submit Data Sheet for approval.				
a	150--250 mm	**RM**	**600**	450	**2,70,000.00**
b	250-300 mm	**RM**	**1080**	650	**7,02,000.00**
B.16	Providing and fixing MS. holding down / anchor bolts in concrete or masonry of various diameters including nuts, washers, sleeves, etc. complete as per drawings & as directed at all heights and depths including supplying and fixing all necessary templates, supports and setting out. (Templates and supports will not be measured and paid for)	**KG**	**QRO**	150	-
B.16 .a	Same as above item B15 of **anchor bolt but installation only**, as per drawing, detail (MS anchor bolt shall be supplied by Client)	**MT**	**98**	32000	**31,36,000.00**
B.17	Providing cut outs / opening in RCC members of any grade of any size in deck slab, in canopies, vertical parapetes as required.				
a	Of size 200 x 200, 300 x 300 , 400 x 400 etc. upto area 0.25 sq.m. max	**NOS.**	**5**	625	**3,125.00**
b	Of size 600 x 600, 750 x 750, 1000 x 1000 area more than 0.25 sq.m upto 1.0 sq.m. max	**NOS.**	**5**	910	**4,550.00**
B.18	Same as item B.4 above but concreting to close the existing cutouts in slab upto 200 mm thick at any location, any height.				
a	For opening of size 450 x 600, 600 x 600 area upto 0.36 sq.m. max	**NOS.**	**5**	910	**4,550.00**
b	For opening above 600x600 to 1000x1000 area more than 0.36 sq.m. up to 1.0 sq.m. max	**NOS.**	**5**	1250	**6,250.00**
	Form Work				
	Notes				
1	Contractor should submit for the Consultant's approval design and drawing for all formwork showing sizes of member including props and its foundation considering RMC by pumping.				
2	A mockup of formwork for columns, typical column-beam junction, beams should be made and only after obtaining approval of the mockup, the contractor will be allowed to proceed with the work.				
3	All concrete surfaces shall have smooth and even finish originally by themselves without any finishing or rendering. In case the Engineer is not satisfied with the finish obtained, remedial measures for improving them shall be carried out by the Contractor at his cost.				

4	Rate shall include for straight formwork at all levels and use of adhesive tape, compressible gasket materials, and approved mould release agent/shuttering oil, mechanical buffing of shuttering plates,etc				
5	Manual/mechanical cleaning of shutter plates after every use is a must.				
6	The rate shall include hacking of concrete surface required to be plastered immediately after removal of formwork.				
7	Only good quality steel and plywood shuttering shall be permited for its use at site.				
8	Size of the panels used for exposed concrete finish areas shall be approved by the Engineer-in-charge.				
9	The supporting system for platform shall be having self alignment devices to ensure perfect line and level, and verticality of the shuttering, staging to achieve required degree of perfection.				
10	Only new plywood and steel shuttering either new or approved condition shall be permitted for first use at site, and for form finish shutter where exposed concrete finish is specified approved new shuttering material shall be used that can permit forming of grooves or pattern as per drawings.				
11	Providing cutouts, holes and recess for fixtures shall be included in the rates				
B.19	Providing & erecting rigid form work for all type of RCC members with requisite supports, bracings, stays, staging, scaffolding, removal of laitance, etc. complete as directed & as specified in underground work, at all upper floor levels having floor ht. up to 5.0 m including removal of the same, shifting it at proper location, etc. all inclusive.	**SQ.M**	**90670**	630	**5,71,22,100.00**
a	**Extra over for item B.19** for staging for every 1.0m above 5.0 m. **Note:** Only floor area will be payble.	**SQ.M**	**13390**	280	**37,49,200.00**
B.20	Breaking, Demolishing existing concrete element below ground, above ground at any level any height for expansion work with breaker without disturbing existing reinforcement with scfolding, tools and tackles complete as directed as specified and debris need to removed from place and disposed of as dircted by site engineer	**Cu.m**	**10**	3520	**35,200.00**
B.21	Breaking, Demolishing existing structural steel elements above ground without disturbing existing facility with due care retaining the existing members for further usage with all scafolding tools tackles complete as directed.	**MT**	**10**	20000	**2,00,000.00**
	TOTAL OF SECTION-B: CONCRETE AND FORMWORK				**36,01,71,825.00**

(3) SECTION-C: STRUCTURAL STEEL & REINFORCEMENT

SR. NO	DESCRIPTION OF WORKS	UNIT	TOTAL QUANTITY	RATE INR	AMOUNT INR
C.1	Supplying, Providing, Straightening, cutting, hooking, bending & placing in position as per drawings and details, including cost of annealed GI binding wire of 18 swag, high strength ribbed TMT reinforcement bar conforming to IS 1786 for all RCC components such as raft, foundations of building columns and equipment, retaining walls, columns & pedestals, slabs and beams, trenches, sumps, grade slabs, staircase, paraperts, chajjas, etc. including transport loading, unloading, shifting as and when required, all complete as specified and as directed for sub structures & superstructures at any height and at all levels.				
a	High yield strength ribbed TMT Reinforcement bars, conforming to IS: 1786. (Grade Fe 500 D)	**MT**	**3190**	77,500.00	**24,72,25,000.00**
b.	Hot rolled mild steel bars / reinforcement, conforming to IS: 432. (Grade Fe 250)	**MT**	**10**	77,500.00	**7,75,000.00**
C.2	Supplying, providing, Fabrication, fixing and embedding in position, inserts consisting of **MS** angles, plates, structural members, pipe sleeves, puddle flanges, fan clamps, inclusive of anchor bars & fasteners in conc. or masonry as per drg and spec at all levels. (Rates shall be inclusive of cost of material for hold fast & fasteners as required)	**MT**	**10**	1,10,700.00	**11,07,000.00**
C.2.a	Same as above item C.2 but with hot-dip galvanising 275 GSM thickness as per IS standard for Insert angles, holdfast, pipe sleeve, puddle flanges etc.	**MT**	**10**	1,35,700.00	**13,57,000.00**
C.2.b	Same as above item C.2 but SS 316 for pipe sleeve, puddle flange etc.	**MT**	**10**	3,50,000.00	**35,00,000.00**
C.3	Supplying, Providing, fabricating and erecting in position Structural steel work as per the design, for columns, bracing, floor beams, pipe racks, conveyor gantry, girders, monorails, ladders, stairs (without treads), cleats, protection angles, insert plates, frames, hangers, pipe-rack support, cross overs, roof trusses, purlins, bracings, tie runners, MS Plates, Sag Rod etc, complete as per Drawings provided by client / consultant using steel structural members such as: a. Plates, beams, channels, angles, tees rods, etc of specified grade conforming to IS 2062, b. Hollow Box Sections such as RHS/SHS/CHS of specified grade of TATA or equivalent conforming to IS4923 (RHS & SHS) & IS1161 (for CHS), of all sizes and shapes and as per detail design, drawings and specifications for various spans **including preparing shop drawings for each structure and getting approved prior to fabrication,** fillet welding, butt welding, splicing, necessary edge preparation for butt welding, etc., all as per specifications and drawings. **including connection / erection bolts and nuts.**	**MT**	**10**	1,15,000.00	**11,50,000.00**

C.4	Supplying, Providing and applying two coats of Zinc Chromate Red Oxide Primer(25 microns/coat DFT) and two coats of **Synthetic Enamel Paint** (25 microns/coat DFT) of approved make and quality **(Asian Paints / Berger / Nerolac)** to the structural steel members of any shape and at all elevation as per manufacturer's specifications & standards including surface preparation, staging, scaffolding etc. complete as specified and directed. (**Cost shall be inclusive of surface abrasive blast cleaned to Sa 2.5 (ISO8501-1:1988) or SSPC- SP6, using a blend of shot and grit, removal of rusting by wire Brush**)	**MT**	**QRO**	9,300.00	**-**
	OR				
C.5	Supplying, Providing and applying two coat of Epoxy Zinc Chromate Primer (25 microns/coat DFT) and Two coat of **Epoxy High Build (100 microns/coat)** of approved make and quality **(Asian Paints / Berger / Nerolac)** to the structural steel members of any shape and at all elevation as per manufacturer's specifications & standards including surface preparation, staging, scaffolding etc. complete as specified and directed. **(Cost shall be inclusive of surface abrasive blast cleaned to Sa 2.5 (ISO8501-1:1988) or SSPC- SP6, using a blend of shot and grit, removal of rusting by wire Brush)**	**MT**	**10**	11,500.00	**1,15,000.00**
C.6	Fabricating and fixing in position chequered plates of size 6/7, 8/9, 10/11 etc. welded or bolted, in floors, platforms, trench covers, stair steps, landings, including cutting of openings etc., as specified and directed.	**MT**	**10**	33,500.00	**3,35,000.00**
C.7	Providing & fixing in position G.I. grating treads for stairs of 25 x 6 mm thick minimum 35 kg/sq.m or as specified and as per Engineering Standards fabrication by approved specialist manufacturer).	**SQ.M**	**100**	5,000.00	**5,00,000.00**
C.8	Providing and fixing post installed reinforcement dowel bars (rebaring) in existing reinforced concrete member of grade M30 using chemical (resin) anchor Systems HILTI -RE500 V3 epoxy injectable mortar of HILTI make or equivalent, including drilling holes of required diameter and depth, injecting the chemical by dispenser, complete as per manufacturer's specifications, scaffolding, all tools and tackles, etc. The quantity of rebars will be payable as per item C1.				
a	for Y8 bar - Hole 10 mm dia x 100 deep max.	**NOS.**	**12**	350.00	**4,200.00**
b	for Y10 bar - Hole 12 mm dia x 150 deep max.	**NOS.**	**12**	650.00	**7,800.00**
c	for Y12 bar - Hole 16mm dia x 200 deep max.	**NOS.**	**12**	1,365.00	**16,380.00**
d	for Y16 bar - Hole 22mm dia x 240 deep max.	**NOS.**	**12**	2,310.00	**27,720.00**
e	for Y20 bar - Hole 28 mm dia x 300 deep max.	**NOS.**	**12**	4,097.00	**49,164.00**
f	for Y25 bar - Hole 32 mm dia x 450 deep max.	**NOS.**	**12**	8,330.00	**99,960.00**

C.9	Providing and installing chemical resin anchors in reinforced concrete of grade M30, using HIT-RE500V3 epoxy injectable mortar, including drilling holes of required diameter and depth, injecting epoxy mortar and anchor as per manufacturer's specifications, scaffolding all tools and tackles, etc.				
i)	HAS-E Anchor M16 (Threaded rod with nuts & washers) of apprporiate length	**NOS.**	**24**	1,800.00	**43,200.00**
ii)	HAS-E Anchor M20 (Threaded rod with nuts & washers) of apprporiate length	**NOS.**	**24**	2,900.00	**69,600.00**
iii)	HAS-E Anchor M24 (Threaded rod with nuts & washers) of apprporiate length	**NOS.**	**24**	4,400.00	**1,05,600.00**
	TOTAL OF SECTION-C: STRUCTURAL STEEL & REINFORCEMENT				**25,64,87,624.00**

(4) SECTION-D: WATERPROOFING

SR. NO	DESCRIPTION OF WORKS	UNIT	TOTAL QUANTITY	RATE INR	AMOUNT INR
D.1	**Providing & laying Box Type Cement Based water proofing** for underground structures and / or wherever specified as per standards laid down by "M/s. India Waterproofing Co." or approved equivalent, but shall not be less than the following -				
	For Raft : The lower P.C.C. bed shall be thoroughly cleaned of all dirt, loose particles, dust etc. and a layer of C.M. 1:4 screed mixed with approved waterproofing compound will be laid to required levels and/or grade to an evenly compacted thickness of 25 mm (min.) or as specified. On initial setting but while the surface is green, rough Shahabad stone slab 20 mm thick and approx. 600 mm x 600 mm in size shall be laid, close jointed and the joints/gaps will be filled by cement slurry C.M. 1:1 with waterproofing additive. The entire surface of Shahabad stone then will be covered with a coat of C.M. 1:4 plaster 25 mm thick mixed with waterproofing compound. The overlap of this 3 layer treatment shall be approx. 600 mm on all sides beyond the vertical walls of the structure. The base is ready to receive the raft and walls of the foundation.				
	For Walls : As soon as the curing period of the vertical external walls of the structure is completed, the vertical layer of the "Box type waterproofing" should be started, so as to complete the "Box" of the waterproofing as follows: A layer of 15 mm thick plaster in C.M. 1:4 mixed with approved waterproofing compound be given to the walls of the structure after properly preparing the surface, a maximum height of 1200 mm on which 20 mm thick rough Shahabad stone slabs masonry approx. 600 mm x 600 mm be fixed vertically and jointed properly externally. The joint of vertical and				

	horizontal layer of the waterproofing shall be executed with utmost care, so as to fill up all voids/cavities. A grout of C.M. 1:2 slurry with waterproofing additive is then slowly poured in the cracks/voids behind the vertical Shahabad stones from top. The grout shall be allowed to flow freely and not by force, as to damage the verticality of the stone slabs. Once this layer is complete similar operation follows vertically for further 1200 mm height until the desired level is attained. Over this rough stone a layer of 12 mm thick C.M. 1:4 plaster with waterproofing compound is given to complete the "Box type" treatment. The entire surface be cured for a period of a week before backfilling is undertaken.				
a	Waterproofing below raft	**SQ.M**	**3200**	1550	**49,60,000.00**
b	Waterproofing on external surface of retaining wall including grouting of all tie rod holes with approved non shrinkage admixture	**SQ.M**	**1080**	700	**7,56,000.00**
D.2	Providing & laying cement based **waterproofing plaster,** 15 mm thk in CM 1:3 including approved waterproofing compound as per manufacturer specification for inside of water tanks by approved agency including wattas, slopes etc. complete as directed and instructed by Engineer In Charge.	**SQ.M**	**8190**	450	**36,85,500.00**
D.3	For toilet sunks : Providing cement based waterproofing treatment or equivalent to toilets/ sunken slabs with brick bat of average thickness 115 mm laid in required slope to drain the water for any span and consisting of following operations:	**SQ.M**	**1060**	1250	**13,25,000.00**
	a) Applying and grouting a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with proprietary waterproofing compound conforming to IS: 2645 over the RCC slab including cleaning the surface before treatment.				
	b) Laying cement concrete using broken bricks/brick bats 25 mm to 100 mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with proprietary waterproofing compound conforming to IS: 2645 over 20 mm thick layer of cement mortar of mix 1:5 (1 cement : 5 coarse sand) admixed with proprietary waterproofing compound conforming to IS: 2645 to required slope and rounding at the junction of floor and wall.				
	c) After two days of proper curing applying a second coat of cement slurry admixed with proprietary waterproofing compound conforming to IS: 2645.				
	d) Finishing the surface with 20 mm thick jointless of cement mortar of mix 1:4 (1 cement : 4 coarse sand) admixed with proprietary waterproofing compound conforming to IS: 2645 and finally finishing the surface with trowel with neat cement slurry and making of 300 X 300 mm square.				

	e) Finishing the surface with 20 mm thick jointless waterproof plaster upto a height of 600 mm above the floor of cement mortar of mix 1:4 (1 cement : 4 coarse sand) admixed with proprietary waterproofing compound conforming to IS: 2645.				
	f) The contractor to submit 10 year unconditional guarantee for the waterproofing work on Rs. 100 stamp paper in an approved Performa.				
D.4	**Terrace slab Water Proofing (Option-1)** Providing & laying cement based approved surface water proofing by experienced agency for terrace slab with **brick bat** (25 mm to 115mm thick), filling the joints and laying top layer with joint less plaster 35mm thick in CM 1:4 mixed with approved water proofing compound, finished smooth with trowel with cement finish **laid to slope 1: 150** & mark false squares of 300 mm size as directed. The treatment shall be carried up to inner side of parapet wall and up to 300 mm height with a round watta and a drip mould all complete as directed.	**SQ.M**	**17050**	1250	**2,13,12,500.00**
D.5	**Terrace Slab Water Proofing (Option-2**) Providing & laying waterproofing treatment to terrace flat / sloping using **liquid applied membrane** such as elastic & resilient acrylic (Dr. Fixit Newcoat) / polyurethane resin (KEMPEROL-1K) / elostomeric cementitious coating (FOSROC Brushbond RFX) over the finished screed surface, either spray / hand applied as per the manufacturer's specifications. Surface preparation should be carrired out prior to application of screed. A ten year guarantee for satisfactory performance shall be executed on bond paper by the contractor or specialist agency.	**SQ.M**	**QRO**	1450	**-**
	a. Providing & laying cement screed 20-25mm thick over waterproofing membrane for flat roofs including integral waterproofing admixture finished of approved shade / pattern as directed.				**-**
	b. Providing & laying levelling cement screed 20-25mm thick on prepared surface under waterproofing membrane including integral waterproofing admixture on flat /sloping roofs, with smooth finish, to provide substrate for waterproofing membrane.				**-**
D.6	Providing and fixing PVC pipe of approved make & quality for rain water down take with necessary, shoes, bends, offset pieces, fixures, etc. including necessary all civil works like scaffolding dismantling, etc. Complete.				
a	100mm dia - 4kgf / sqcm.	**RM**	**300**	600	**1,80,000.00**
b	150mm dia - 6 kgf /sqcm.	**RM**	**300**	850	**2,55,000.00**
c	200mm dia - 6 Kgf /sqcm.	**RM**	**500**	1050	**5,25,000.00**
	TOTAL OF SECTION-D: WATERPROOFING				**3,29,99,000.00**

(5) : SECTION-E: MISCELLANEOUS (CIVIL WORKS)

SR. NO	DESCRIPTION OF WORKS	UNIT	TOTAL QUANTITY	RATE INR	AMOUNT INR
E.1	Giving Anti-termite treatment by specialist agency approved by client with 10 years guarantee as specified and as directed. (singular measurement of plinth area will be considered)	**SQ.M**	**57990**	65	**37,69,350.00**
	FIRST STAGE :				
	The treatment shall start at a depth of 500 mm below the ground level except when such ground level is raised or lowered by filling and cutting after the foundation have been cast. In such cases, the depth of 500 mm shall be determined from the new soil.				
	SECOND STAGE:				
	The top surface of the consolidated earth within plinth walls shall be treated with chemicals emulsion at the rates of 5 litres power Sqmt of the surface before the sand bed or subgrade is laid. In the filled earth has been well rammed and the surface does.				
	THIRD STAGE :				
	After the building is complete, the earth along the external perimeter of the building should be rodded at intervals of 150 mm and to a depth of 300 mm. The rod should be moved back forward and forward parallel to the wall to break up the earth and check.				
E.2	Providing and fixing **SS rungs of 316 Grade** 20mm dia as per the drg and or as directed by Engineer in charge, fixing in position in line and levels etc complete	**KG**	**450**	350	**1,57,500.00**
E.3	Providing and applying NITOBOND over the existing concrete surface as specified and directed to receive the new concrete including labour for roughening and cleaning the existing surface etc complete	**SQ.M**	**256**	500	**1,28,000.00**
E.4	Supplying, fabricating and fixing **weld mesh gate** of size 3.0 m x 1.50 m using 65 mm x 65 mm x 6 mm angles for frame work of two shutters with necessary intermediate stiffeners, cross bracing of the same member, hinges for fixing, locking arrangement etc. all complete.	**No.**		14500	**-**
E.5	**FENCING:**Supplying and fixing barbed wire fencing using 12 gauge GI **twisted** wire (7 no.s)tied to the steel post(ISA 75 X 75 x6) using 16 gauge binding wire @ 200mm c/c interval and two cross diagonals Steel post (ISA 75 x 75 x 6) of 2450mm long, of which bottom 450mm was (ISA 75 x 75 x 6) of 2450mm long, of which	**RM**	**790**	2847	**22,49,130.00**

	bottom 450mm was grouted in to PCC 1:3:6, using 20mm down graded metal including excavation with the strut post with neat finishing etc complete. Height of barbed wire fencing - 1.80 mt				
	OR				
E.6	Supplying, providing and fixing of 3.0 mm dia, 50 mm x 50mm GI mesh fencing installed to the **RCC post** using 16 gauge binding wire, RCC post of 2450 mm long, of which bottom 450 mm grouted into PCC 1:3:6 block of size 450 x 450 x 600 mm deep using 20 mm down graded metal including excavation with the strut post at the end of each 6th post and also at every change of direction etc complete. (RCC precast post 1.8 mtr above ground level and 450 mm below ground level, 150 x 150 mm size at bottom, 125 mm x 125 mm at top with 4 Nos, 8 mm bars and 6 mm @ 150 mm c/c stirrups of M20 grade including, casting, curing fixing etc complete	**RM**	**QRO**	3500	**-**
E.7	Supply & laying of PPH pipe, in the reqd.position in line & lvl as per the drg, joining the pipes using Hydraulic Butt fusion Welding Machine, necessary excavation in all soil for laying & backfilling of soil.				
a	75mm dia at 6KGF/Sq.CM	**RM**	**QRO**	650	**-**
b	110mm dia at 6KGF/Sq.CM	**RM**	**QRO**	900	**-**
c	200mm dia at 6KGF/Sq.CM	**RM**	**QRO**	1950	**-**
E.8	Providing and fixing moulded PPH fittings like (puddle flange ,collar , etc..), to the suitable pipe diameter, in reqd line & lvl , grouting the same as per the drg , including all materials & labour etc. complete.				
a	110mm dia	**NOS.**	**QRO**	1500	**-**
b	200mm dia	**NOS.**	**QRO**	3500	**-**
E.9	Core cutting in the existing RCC slab up to 250 mm thk making the hole at required position, level as specified and as directed including all material , labour hire charges for tools /tackles etc complete by the suitable method not endangering the structural stability				
a	75mm	**NOS.**	**10**	1500	**15,000.00**
b	100mm	**NOS.**	**10**	1900	**19,000.00**
E.10	Electrical Conduit for light cables: Contractor must prepare conduit routing layout as per site condition with taking shortest route.				
	Supply, providing Installation, testing & commissioning of following type of Heavy duty MS conduits with all installation accessories providing of all hardware such as screws, cleats & clamps, junction boxes etc. The cost of fabrication and installation of MS supports required for installing conduits same shall be included.				

	The concealed conduit work shall be carried out along with construction of walls prior to plaster. The work covers chasing walls with wall cutters only if necessary fixing the conduits, boxes, and accessories, redoing the damaged surface using chicken mesh. All horizontal conduit runs shall be straight at wall point Socket/light level to necessary junction/pull boxes and then straight vertical drop to switch box if necessary. The conduits shall be laid such that they are little below the brick level to avoid cracks. Elbow shall not be used and bends shall be avoided as far as possible using offsets. Pull boxes shall be provided at suitable locations. The pull and junction boxes shall not be clustered at one place and shall be so arranged that they should not be easily seen from heavy movement areas. All cases shall be taken to secure joints and boxes in place. All vertical runs shall be sealed at top, while masonry civil works going on. Conduit with 32mm dia. minimum shall be used be used for all concealed work.Flexible conduits shall not be used in concealed work.				
	While laying the conduits for concealed wiring in the ceiling or in the beams and columns and before casting, the contractor shall ensure that both ends of the conduit are plugged by means of dead-end socket or otherwise so that any foreign matter can not enter the conduit and choke them. Each conduit shall be provided with protruding length of not less than 300mm on free end of the conduits. There shall be no intermediate joints in one straight run of conduit.				
a	25 mm Dia Heavy duty MS powder coated conduit(Black colour) with 22 SWG GI wire for pulling the cable. Conduit must be provided with all accessories like bends, couplers, elbows, Tees, Junction box, clamps, screws etc.	**RMT**	**90.00**	145	**13,050.00**
b	32 mm Dia Heavy duty MS powder coated conduit(Black colour) with 22 SWG GI wire for pulling the cable. Conduit must be provided with all accessories like bends, couplers, elbows, Tees, Junction box, clamps, screws etc.	**RMT**	**90.00**	185	**16,650.00**
E.11	Supplying providing & erecting temporary barricading 3.0 m high around the proposed development as instructed by EIC & dismantling & take away the same after completion of the said work. Contractor shall be responsible for stability & safety of barricading till the project completion & submit design / drawings before starting the work. The barricading shall comprise of GI profiled sheets clamped/fixed with 'J' type bolt or self-tapping screw to columns of standard section angles/ channels/ hollow section at required C/C distance adequately embedded in earth with necessary pit & PCC encasement, providing man, material entry/ exit gates at instructed locations etc. complete wherever specified by Engineer in Charge.	**Rm**	**QRO**	4500	**-**
	TOTAL OF SECTION-E: MISCELLANEOUS				**63,67,680.00**

(6) SECTION-F: ROAD & STORM WATER DRAINAGE

SR. NO	DESCRIPTION OF WORKS	UNIT	TOTAL QUANTITY	RATE INR	AMOUNT INR
F.1	**Surface Excavation for Road,** parking, foothpath, storm water drain in soft soils like sandy soils, black cotton, silty clay, sand & gravel for road upto required depth, dressing the bottom surface to required slope, rolling the sub-surface with 10 tonne power roller to required slope as per drawings as directed and carting away the surplus earth upto a lead and providing, spreading & levelling by mechanical & manual means	**SQ.M**	**27000.00**	20	**5,40,000.00**
F.2	Filling in Road and parking areas using approved material brought from outside laid in layers not exceeding 200 mm consolidating the filled surface up to required final formation level including watering, ramming, levelling and consolidating the filling to 98% Modified Proctor Density by compacting with 10 MT vibratory rollers and power roller complete				
a	Gravel Filling	**CUM**	**1000.00**	1150	**11,50,000.00**
b	Panna sand filling	**CUM**	**QRO**	1200	**-**
c	Good Natural Soil for under Plinth filling or Below Ground floor	**CUM**	**100000.00**	440	**4,40,00,000.00**
d	Quarry dust	**CUM**	**QRO**	1220	**-**
e	Sand- gravel mix	**CUM**	**QRO**	1330	**-**
f	Providing and laying **Granular Sub-Base** (GSB) consisting of sand,moorum, crushed stone and gravel mixed in proportions as specified below: Sieve designation % by weight passing 75mm 100 53mm 80-100 26.5mm 55-90 9.5mm 35-65 4.75mm 25-55 2.36mm 20-40 0.425mm 10-25 0.075mm 3-10	**CUM**	**2950.00**	1730	**51,03,500.00**

	for sub grade to a compacted thickness of 200mm laid in single layer using good quality graded materials from approved source and mixed in the specified proportion including cost and conveyance of all materials, stacking and mixing in the specified proportion, spreading after mixing to required camber, leveling, watering with all leads to obtain moisture levels of mix between 1% above and 2% below the optimum moisture content at the time of compaction and compacting each layer with 8 - 10 ton vibratory power roller to obtain the required proctor density including all labour, charges for all tools and plants employed and all their incidental charges etc. all complete as directed				
F3	Providing and laying Hard stone metal of approved quality from approved quarry to a consolidated thickness of 100mm-150mm thick metal properly hand packed interstices filled with spalls and chips, and gravel surface formed well compacted with vibro roller to required slope and camber as specified and directed.	**CUM**	**4150.00**	1900	**78,85,000.00**
F4	Providing and laying **wet mix water bound macadam** (WMM) 0-25MM crushed graded metal and murum binder, murrum having plastic index not more than 6, for base course having compacted thickness 150mm done in two layer of 75mm thick layer with all contractor's materials labour, plant & machinery including all leads and lift loading, unloading, transporting to site, laying WMM and compacting by paver to grade and camber, watering etc complete with vibratory roller of 8-10 tones capacity to attain 98% of maximum modified dry proctor density and CBR 80 under soaked condition, submitting test reports all complete as per drawing, specifications and direction of the Engineer-in-charge.	**CUM**	**2700.00**	1780	**48,06,000.00**
F5	Providing, machine mixing and laying Plain cement concrete **(PCC)** using 20 mm maximum size & downgraded aggregate below road, foundations, drain etc; compacting, curing required shuttering and its removal, dewatering, cleaning, preparing surfaces, junctions etc: complete at all any location and depths as per the drawing. Size of aggregate to be 20 mm and down graded or as directed by the EIC.				
a	PCC M10	**CUM**	**2130.00**	4520	**96,27,600.00**
F.6	Providing and laying LDPE sheet layer of 300 microns thick over **soil or PCC** with necessary minimum over lap of 4" wide.	**SQ.m**	**18000.00**	42	**7,56,000.00**
F.7	Providing laying site machine mix / ready mix concrete RCC for road of specified grade in alternate panels by **"Vacuum Dewatered Floor" method by "TRIMIX" system** through approved agency using 20mm downsize stone aggregate, the concrete road thickness of 100 mm to 200 mm as specified in drawing, detail in proper line, level, camber & slope, the top surface smooth by Dewatered vacuum				

	flooring (TRIMEX) by Fixing of channels at an specific interval, vibrated with screed vibrator, lay dewatering matt and remove the excess water from concrete by using specified devise and finish the floor by laying rough, medium and smooth power trowels, saw cut grooves cutting of size 6 mm X 30 mm minimum shall be cut within 24 hrs. of laying the concrete at 3 m X 3 m panels for control joint, sealing the control joints with polysulphide sealants as specified, curing etc. complete. Note: Reinforcement shall be paid under separate item.				
	M25	**CUM**	**2700.00**	7150	**1,93,05,000.00**
F.8	**Storm Water Drain** :Providing Concreting by machine mixing at site using Site Mix and laying reinforcement cement concrete (RCC) of specified grade using 20mm and down-size graded machine crushed stone aggregate in rafts, Walls concrete for storm drains, trenches, chambers & sumps etc. upto finished floor level including providing pockets & cut-outs, vibrating, tamping, curing and rendering the concrete surface if required etc. complete (cost of shuttering and reinforcement will be measured separately)				
	M25	**CUM**	**2190.00**	5650	**1,23,73,500.00**
F.9	**Providing & erecting rigid form work** for drains, culverts with necessary supports, bracings, stays, etc. keeping in position during concreting as directed & as specified including removal of the same, & shifting it at proper location, etc. all inclusive.	**SQ.M**	**14690.00**	600	**88,14,000.00**
F.10	Supplying, Providing, laying and fixing in position at all levels **ribbed TMT reinforcement** for all RCC works including cutting, bending & binding with l6 gauge M.S. annealed binding wire or by welding if required, with necessary laps, chairs, supports, concrete cover blocks, laps etc. complete including the cost of binding wire.				
a	High yield strength ribbed TMT Reinforcement bars, conforming to IS: 1786. (Grade Fe 500)	**MT**	**334.00**	77500	**2,58,85,000.00**
b	Hot rolled mild steel bars / reinforcement, conforming to IS: 432. (Grade Fe 250)	**MT**	**10.00**	77500	**7,75,000.00**
F.11	Providing and laying, **Grade M-25 precast** reinf. cement concrete covers / slabs of required length and width (on storm water drains gutters) , with or without slots including shuttering, lifting, transporting to site, placing in position and sealing of joints, but excluding cost of reinf. and corner angle. 75mm to 150mm Thk	**CU.M**	**540.00**	14500	**78,30,000.00**
F.12	Supplying, Providing and fixing precast kerbstone of M30 grade concrete in following sizes including making, mould, casting, finishing, stacking, shifting				

	erection, alignment, 300mm gap, curing etc, finishing with 1 coat of enamel paint with primer of approved shade etc complete.				
a	450 x 500 x 150 mm	**NOS.**	**7500.00**	380	**28,50,000.00**
F.13	Providing and fixing concrete interlocking, machine manufactured, heavy duty type paver blocks of 60 mm thickness and M30 grade concrete, including bedding of sand / fine metal of 75 mm thickness, with edge confinements in cement mortar, laying in perfect line and grade etc. complete. The shade and colour of the block shall be approved by the Owner. The Top Finish of the paver blocks shall be melamine finish.	**SQM**	**7200.00**	850	**61,20,000.00**
F.14	Providing and fixing RC Concrete Hume Pipes of class NP3 of approved make as directed, erection of Hume pipes in line and levels including necessary excavation (Upto 1.50M) grouting the collar joints with cm 1:3, benching, refilling the same with excavated earth, water compaction etc				
a	150 mm dia	**RM**	**360**	1100	**3,96,000.00**
b	300 mm dia	**RM**	**360**	1390	**5,00,400.00**
c	450 mm dia	**RM**	**240**	2350	**5,64,000.00**
d	600 mm dia	**RM**	**120**	3150	**3,78,000.00**
F.15	Providing & laying 40mm thickness of premix bituminous surface including laying premix bituminous carpet, preparing the surface, applying tack coat, laying the carpet, to required line, level & gradient, compacting the same with 10T roller immediately after laying etc. complete all as per the specification, drawing & as directed by engineer. (2% of Wet Mix)	**SQ.M**	**QRO**	850	**-**
F.17	Providing & laying 12mm consolidated thickness of **(Road Top Coat)** premix bituminous seal coat including cleaning the surface to required line, level & gradient, compacting the same with 10T roller, all as per the specification, drawing & as directed by the engineer.	**SQ.M**	**QRO**	250	**-**
	TOTAL OF SECTION-F: ROAD & STORM WATER DRAIN				**15,96,59,000.00**

(7) SECTION -G : MASONRY, PLASTER AND POINTING

SR. NO	DESCRIPTION OF WORKS	UNIT	TOTAL QTY.	RATE INR	AMOUNT INR
	DISMANTLING WORKS				
G.1a	Removing/Breaking/**Dismantling existing brick walls**, carefully and without collateral damage, of any thickness including plaster, including dismantling any	**SQ.M**	**2500.00**	270	**6,75,000.00**

	doors/windows within them or individual doors/windows, stacking the same for disposal and clearing the site of the debris. Area will not be deducted for Door & Window.				
G.1b	Removing/Breaking/**Dismantling existing loose plaster** in walls and ceiling, likely to come off, after ensuring Client's approval of any thickness, carefully and without collateral damage and clearing the site of the debris.	**SQ.M**	**QRO**	100	**-**
G.1c	**Removing wall & columns tiles**/ stones & existing Skirting of any type by using stone cutting machine, to ensure minimum noise and disturbance, including removing bed mortar and disposing it off with all leads and lifts for laying of new brick wall or concealing the wires/trays etc. complete as directed. Item to include cement bedding, PCC or Brick Bat Coba that needs to be dismantled. In wall tiles, back plaster to be removed too.	**SQ.M**	**QRO**	250	**-**
G.1d	Core cutting in slabs, beams as per requirement and finishing the same. size upto150 mm dia and thickness is 350mm with minimum disturbance in noise and no structural damage to RCC Members. Upto 150mm in dia. For sizes above, the rate shall be a derived pro-rata basis rate. This will be carried out under supervision and by a specialized contractor at site.	**NO.S**	**QRO**	3000	**-**
	CONSTRUCTION WORK				
G.2	Providing and laying first class **brick masonry 230 mm thk** conforming to IS:2222 in CM 1:5 with bricks having crushing strength of 50kg/cm^2 using locally available good quality approved table moulded chamber burnt stock bricks of approved quality for all levels including raking the joings, curing, scaffolding etc complete. Patli beam should be cast at 1.0 m interval or as indicated in drawing for respective heights.				
a	In substructure (in Foundation, upto Plinth)	**CU.M**	**770.00**	6166	**47,47,820.00**
b	In superstructure at all floors at all levels.	**CU.M**	**11500.00**	6266	**7,20,59,000.00**
c	Same as G2, but for **350mm** thick brick masonry	**CU.M**	**795.00**	6225	**49,48,875.00**
G.3	Providing and laying half clay brick **(115 mm)** thick partition walls or less in cm 1:4 at all levels using table moulded chamber burnt stock bricks having crushing strength of 50kg/cm2 of approved quality. Cost to include R.C.C. stiffeners/ patli beams both horizontal & vertical in the superstructure at every 1.2m c/c or as per detail dwg. Rate should be including scaffolding, curing, complete. (Reinforcement steel will be measured separately).	**SQ.M**	**750.00**	950	**7,12,500.00**
G.4	Same as G.2 but using 300mm thk Flyash Bricks having crushing strength not less than 75kg/cm3. These bricks to conform to manifacturing and testing IS codes for first class Red Bricks.	**CU.M**	**QRO**	6200	**-**

G.5	Same as G.2, but using **150/200mm thk** Autoclaved Aerated Concrete (AAC) Blockwork	**CU.M**	**QRO**	7000	
G.6	Do as G.5 but for 300mm thk (200mm + 100mm) concrete block (For Staircase areas)	**CU.M**	**QRO**	7000	**-**
G.6a	Do as G.5 but for 100mm thk concrete block	**CU.M**	**QRO**	7000	**-**
C.7	Providing and laying of concrete **Solid Block of 200 mm** thickness in cm 1:4 in superstructure using good quality approved concrete blocks, including raking the joints curing, scaffolding etc complete. Note: 1. The Compressive Strength of block should not be less than 75 Kg /cum. 2. Blocks to be Manufactured by hydraulic compressive machine and water absorption not exceeding 8% by weight				
a	In substructure (in Foundation, upto Plinth & compound wall)	**CU.M**	**QRO**	5500	**-**
b	In superstructure at all floors at all levels.	**CU.M**	**QRO**	5700	**-**
G.8	Providing & rendering **Sand Faced Cement Plaster** in cement mortar 1:4 for under coat & cement mortar 1:2 for top coat with water proofing compound of reputed brand as specified, surface preparation, sponge finish in line, level and plumb including staging & scaffolding as required, racking out joints, roughening concrete surface, cleaning, watering, curing etc. complete.150mm Rate to include all watas, bands, grooves, drip moulds etc. as required. all complete to the satisfaction of the EIC.				
a	20 mm thick plaster in 2 coats	**SQ.M**	**23300.00**	450	**1,04,85,000.00**
G.9	Providing & rendering **12mm thick Cement Plaster** to the ceiling/internal walls in cement mortar 1:4 with smooth finish in line, level & plumb including scaffolding racking out joints, round corners, coving at wall side & slab junction roughening concrete surfaces cleaning watering, curing etc. Complete. with all watas, bands, grooves, drip moulds etc. as required. All complete to the satisfaction of the EIC.				
a	12/15 mm thick	**SQ.M**	**29000.00**	390	**1,13,10,000.00**
G.10	**Wall Punning**: Providing & applying POP punning up to thickness of 8mm to 12 mm on walls - as per requirement to bring the Wall or Ceiling to proper level & plumb as required.	**SQ.M**	**1500.00**	450	**6,75,000.00**
G.11	Providing a 20mm x 50mm plastering band at roof level areas as per the architectural drawings, finishing the same with cm 1:3 in line and level including all labours, scaffolding, curing etc complete.	**RM**	**QRO**	300	**-**

G.12	Providing & fixing of galvanized low carbon wire, annealed wire **chicken mesh** of, 24 Gauge thk & 15mm-20mm mesh size, at junctions of brickwork with RCC / PCC member and all corners & joints, held in position firmly by nailing to the masonry surface, including necessary scaffolding , staging etc. complete.	**SQ.M**	**6750.00**	100	**6,75,000.00**
G.13	Providing **cut out in internal brick masonry** wall including finishing the sides. in cm 1:4.				
a	Up to 1.5 Sq.m	**NOS.**	**QRO**	1650	**-**
b	Above 1.50 Sq.m up to 3 mts.	**NOS.**	**QRO**	5500	**-**
G.14	Providing or cutting a **chase in wall** of appropriate width with a chase cutter for embedding pipes/conduits and fittings & making good the same by using 1:1 cement mortar over the wire mesh with the tint of groove (Chases will be measured along the centre line of the installed pipe)	**RM**	**1800.00**	150	**2,70,000.00**
G.15	All corners in masonry shall be provided with **MS corner guard** 50 mm X50 mm. The corner guard to be as per detail drawing and specifications, to be fixed as per manufacturer's recommendations.	**RM**	**QRO**	300	**-**
G.16	Providing and laying 40 mm thick PCC 1:2:4, with 6 mm aggregate **Damp Proof Course** below brick work at plinth level with an approved water proofing compound added at the rate of 3% of the weight of cement or as specified by manufacturer or as directed.	**SQ.M**	**6330.00**	450	**28,48,500.00**
G.17	Providing and laying rubble of max size 230 mm for UCR masonry in cm 1:4 in substructure around building periphery using good quality approved rubbles, including pointing the joints curing, scaffolding etc complete.	**CU.M**	**QRO**	5475	**-**
	TOTAL OF SECTION-G: MASONRY ,PLASTER & POINTING				**10,94,06,695.00**

(8) SECTION -H : FLOORING, SKIRTING & DADO

SL. NO	DESCRIPTION OF WORKS	UNIT	TOTAL QUANTITY	RATE INR	AMOUNT INR
.1	**Kota or Equivalent tough stone with Cement Joints** : Providing & laying Semi - Polished Kota Stone Tiles 18mm to 25 mm thk. machine cut, semi-polished stone of best quality and uniform colour, of req. sizes in flooring laid on cement mortar bedding of required thickness to achieve FFL in line level & plumb, curing grouting the joints of size 4mm x 5mm with cement approved make & shade, inclusive of applying and removing the mask tape after grouting, and including the	**SQ.M**	**QRO**	1550	**0.00**

	cutting and sizing of each kota stone at right angles, including all materials, labour, complete. as approved by Site Engineer.				
H.1 a	Same as H.1 but for **Kota stone with Epoxy joints.**	**SQ.M**	**QRO**	1550	**0.00**
H.1b	Additional for **mirror polishing** of Kota Flooring to be done on site including all materials, labour, machine polishing for Kota stone etc., complete. as approved by Site Engineer.	**SQ.M**	**QRO**	200	**0.00**
H.1c	Same as H.1 but for **Unpolished Rough Finish Kota stone.**	**SQ.M**	**QRO**	1350	**0.00**
H.2	**Kota or Equivalent tough stone Skirting:** Cutting the wall by chasing and laying Kota Stone skirting upto a height of 100 mm with recess from wall such that the skirting is flush with the wall over a base mortar, upto 16 mm thk in CM 1:4 including laying in given line and level, including curing, etc, complete. The skirting tile joints to match the flooring tile joints. It should be joined by using adhesive in cement paste as per the manufacturers specifications.	**RM**	**100.00**	850.00	**85000.00**
H.3	**Staircase in Kota/Porcelain Tiles:** Supply and installation of heavy duty porcelain/Kota tiles in staircase areas, of suitable size of approved quality and colour, fixed with straight joints both ways in coloured grout to match and including adhesive fixing, on 25mm thick cement and sand 1:3 screed backing.	**SQ.M**	**130.00**	1,800.00	**234000.00**
H.3a	Providing half round Edge nosing of Kota/ Porcelain Tiles in the Treads as specified and as directed including polishing , curing etc complete.	**RM**	**100.00**	950.00	**95000.00**
H.4	**Granite Flooring:** Providing & laying Granite stone of approved quality Mirror Polished Granite Flooring over a base mortar of required thickness to achieve FFL to give a jointless finish in floor on necessary cement mortar of bedding, including laying to given lines and levels, polishing, curing, all materials, labour etc. (Basic Price of Rs 200/sqft) . (Colour to be finalized by client**)**	**SQ.M**	**350.00**	3,850.00	**1347500.00**
H.4a	**Granite Skirting:** Cutting the walls by chasing and laying Polished Granite stone skirting of 100mm height, after chasing the wall so that the skirting is flush with the wall, including curing, polishing etc, complete. The skirting tile joints to match the flooring tile joints. It should be joined by using adhesive in cement paste as per the manufacturers specifications.	**RM**	**250.00**	1,050.00	**262500.00**
H.4b	**Staircase in Granite:** Prepare the surface of RC / BW steps and laying the **Flamed Granite Slab** as Tread/ Riser as per the drawing over a cm 1:5 bed mortar to given lines and levels, including groove cutting, polishing, curing etc. complete as per dwgs at all heights.(Basic Price of Rs160/sq.ft landed price at site)	**SQ.M**	**475.00**	3,850.00	**1828750.00**

H.4c	Providing half round Edge nosing of Granite in the Treads as specified and as directed including polishing , curing etc complete.	**RM**	**655.00**	250.00	**163750.00**
H.5	**GRANITE WALL CLADDING:** Providing and fixing Approved Granite slab dado/cladding of uniform colour with 18-20mm thick (-/+ 2mm tolerance) machine cut, machine polished in nominal sizes, as per drawing & pattern including backing plastered surface and thereafter fixing marble by using adhesive in cement paste as per the manufacturers specifications. (Including back up blushes). The dado substrate should be smooth, in plumb and line level. All as per manufacturer's specifications & instructions of Engineer In - Charge. (Only plan / elevational area will be measured. Wastage due to dimensional difference, pattern, and cutting sizes available will be to the contractors account). Rate to include all holes & openings required for fixtures and fittings. Necessary provision shall be made in the lift lobby cladding for providing the frosted glass and electrical points. (Basic rate Rs 200 per Sq.Ft.) Backing plaster/ adhesive to be included in the rate.	**SQ.M**	**100.00**	4,050.00	**405000.00**
H.6	**Granite Threshold:** Providing & Fixing in position up to 150mm wide and 19mm thick machine cut Jet Black Granite as per the approved sample for thresholds as per the drawing. It is to be laid to the required level & line including cutting of stone to the required size & shape, edge polishing / chamfered edges along the length of the upper surface, surface preparation including cement backing with 1:1 cement grout, filling & finishing the joints with cement & approved colour pigments, exposed edges, curing, cleaning etc complete as per the instructions of the EIC.	**RM**	**85.00**	1,250.00	**106250.00**
H.7	Prepare the surface of RCC slab/ masonry and laying of Polished Jet Black granite, 20 mm thick , as specified, over a base mortar of 20 mm thick in CM 1:3 including joints finishing with neat line and levels etc complete.(For Pantry slab, window sills & jams). The rate to include edge grinding/finishing/lipping etc complete as per drawing detail provided.				
a	For Door Jambs	**SQ.M**	**240.00**	3,850.00	**924000.00**
b	For Window Jambs	**SQ.M**	**150.00**	3,850.00	**577500.00**
c	**Kitchen/ Pantry Countertop:** Providing and erecting 600mm deep Granite counter in shape and design as directed. With approved 20mm thk granite top of approved shade, including 18MM cement mortar and LOCAL marble base, with LOCAL marble verticals and shelves as indicated, making cut-outs for sink, plumbing fixtures, gas cylinder pipes, etc, cost to include for all granite vertical patties, facias, splash - back patties, granite skirting etc. Polishing including edge	**SQ.M**	**QRO**	4900	**0.00**

	polishing, washing, cleaning, and finishing the wall surface below the counter with 200mm x 200mm ceramic white colour tile including necessary cement mortar backing complete details as directed. running length of counters to be measured along their centre lines and paid for. (Basic cost of granite Rs. 2000/- Sq.mt.)				
H.8	**Vitrified Tile Flooring:** Supplying and laying of vitrified tile flooring of homogenous quality, preferably of non-slip variety of approved shade and make, 600 x 600 mm over a base mortar of required thickness in cm 1:3 in given line and levels giving jointless finish etc complete.	**SQ.M**	**1550.00**	1,450.00	**2247500.00**
a	Same as H.8 but for 800x800 mm tiles	**SQ.M**	**QRO**	1650	**0.00**
b	Same as H.8 but for 1200x1200 mm tiles	**SQ.M**	**QRO**	2000	**0.00**
c	Same as H.8 but using 600x600 **anti-skid vitrified tiles**	**SQ.M**	**470.00**	1,550.00	**728500.00**
H.9	**Vitrified Skirting:** Supplying, cutting the wall by chasing and laying vitrified tile skirting flush with finihsed wall surface with a 4 mm groove above of approved make and shade over a base mortar of required thickness in CM 1:3 including laying in given line and levels. The skirting tile joints to match the flooring tile joints. It should be joined by using adhesive in cement paste as per the manufacturers specifications.	**RM**	**530.00**	650.00	**344500.00**
H.10	**Vitrified Tile Dado:** Providing and fixing Approved Vitrified tile dado of uniform colour, 12 mm thick (-/+ 2mm tolerance) as per drawing & pattern including backing plastered surface and thereafter fixing tile by using adhesive in cement paste as per the manufacturers specifications. (Including back up blushes). The dado substrate should be smooth in plumb and line level. All as per manufacturer's specifications & instructions of Engineer - In - Charge. (Only plan / elevational area will be measured. Wastage due to dimensional difference, pattern, and cutting sizes available will be to the contractors account). Rate to include all holes & openings required for fixtures and fittings. Necessary provision shall be made in the lift lobby cladding for providing the frosted glass and electrical points.	**SQ.M**	**1215.00**	1,350.00	**1640250.00**
H.11a	Providing, laying of Plaster of Paris (POP) of 20mm thk over the newly laid floor (Kota stone / Vitrified tile / Ceramic tile) as specified and as directed, to enable other agencies like HVAC ,ELECTRICAL, to carry out their works if necessary, including all materials, labour, etc, complete.	**SQ.M**	**QRO**	450	**0.00**
	OR				
H.11b	Providing, laying of PVC **Floor Protection Sheet** of 5mm thk over the newly laid floor (Kota stone / Vitrified tile / Ceramic tile/ Granite/ Marble Flooring etc.) as	**SQ.M**	**3000.00**	65.00	**195000.00**

	specified and as directed, to enable other agencies like HVAC ,ELECTRICAL, to carry out their works if necessary, including all materials, labour, etc, complete.				
H.12	**Epoxy Flooring:**(3MM SCREED + 2MM SELF LEVELING EPOXY TOP COAT) Providing and laying of Epoxy Flooring over VDF/Trimix Flooring as per manufacturers instructions. The rate to include all steps of laying the flooring including, surface preparation, surface priming, laying of monolithic bed and Top Coat of Epoxy Treatment. Methodology to be followed exactly as per Manufacturers data sheet or Technical Specifications.	**SQ.M**	**36500.00**	1,250.00	**45625000.00**
	Methodology in brief: The surface is to be prepared thoroughly by cleaning, wire brushing, stone grinding, sandering etc to ensure that no loose particles remain on the top of concrete surface. The surface shall be checked moisture content prior to application of top epoxy with an electronic moisture meter and shall not exceed 4% during application of top epoxy. Grinding and cleaning of the existing floor surface to be followed by providing and application of two coat epoxy primer and laying of 3mm thick epoxy screed. Apply one coat epoxy putty over the screeded surface followed by self-levelling epoxy flooring of 2mm thickness.				
	Make: Fosroc/ BASF/ Sika				
	NOTE: a. All the joints shall be filled up with manufacturer recommended putty prior to application of epoxy system. b. For all expansion joints, polyurethane sealant shall be applied as per manufacturer's specification and expansion joint shall not be covered/over this with epoxy treatment at top to allow necessary amount at the joint. c. Before application on site, manufacturers methodology and application technique to be shared with EIC/ Client for approval.				
H.12a	Do as above but with 50/100 Micron Epoxy Paint	**SQ.M**	**QRO**	850	**0.00**
H.12b	Do as above but for 4mm thick Antistatic Epoxy Self Levelling flooring	**SQ.M**	**QRO**	2250	**0.00**
H.12c	Same as H.12 but for chemical resistant Epoxy flooring	**SQ.M**	**8200.00**	1,350.00	**11070000.00**
	The methodology will be remain same as H.13 however, this would include sticking of Adhesive Copper Tapes above screed level, before epoxy top-coat, complete as per manufacturers specification.				
H.13	**Epoxy Coving:** Epoxy coving between floor & walls, wall and wall, and wall to ceiling. Steps to include: surface preparation, application of primer coat,				

	application of coving (Prepare epoxy mortar and make the appropriate coving of 50 mm x 50 mm at all junctions), followed by application of top coat in desired colour shade.				
	a. Wall to floor - 75 x 100	**RM**	**3520.00**	**360.00**	**1267200.00**
	b. Wall to Wall - 50 x 50	**RM**	**QRO**	600	**0.00**
	c. Wall to Ceiling - 45 x 45	**RM**	**QRO**	600	**0.00**
H.13a	Same as H13 but for food grade				
	a. Wall to floor - 75 x 100	**RM**	**115.00**	**360.00**	**41400.00**
	b. Wall to Wall - 50 x 50	**RM**	**16.00**	**350.00**	**5600.00**
	c. Wall to Ceiling - 45 x 45	**RM**	**115.00**	**350.00**	**40250.00**
H.13b	Same as above but for **Pencil Coving** of 15mmx15mm along pass-boxes, civil door/ window frames etc. as specified in dwg or as per EIC confirmation.	**RM**	**50.00**	**800.00**	**40000.00**
H.14	**Polyurethane Resin Flooring:** 6mm thick polyurethane flooring (Make: Flowcrete, BASF, SIKA) including necessary preparation of surface, checking of moisture content, applying primer, putty and top-coat). complete all as specified and directed as per manufacturer's instructions.	**SQ.M**	**QRO**	4500	**0.00**
H.14a	Same as H.14, but using Cementitious Polyurethane Flooring.	**SQ.M**	**QRO**	3500	**0.00**
H.15	**Polyurethane Skirting/ Coving:** Providing & fixing 100mm high polyurethane skirting (matching to polyurethane flooring) including corners with cove filet/wall based transition strip.	**SQ.M**	**QRO**	950	**0.00**
H.16	**Carpet Flooring:** Providing and laying 100% synthetic carpet of density 1500 g/sqm and of approved shade as per manufacturer's specifications including matching and finishing joints etc., complete in all respects as per the drawing and the directions of the Engineer-in- Charge. The item include providing and laying 12 mm thk coir underlay below the synthetic carpet (Basic rate Rs 180 /- Per Sq.Ft). Covering to be consider into rate calculation.	**SQM**	**QRO**	2500	**0.00**
H.17	Providing and fixing **Powder Coated SS skirting** (upto a height of 100mm)/ transition profiles on wall as approved.	**RM**	**QRO**	3500	**0.00**
H.18	**Laminated wooden flooring:** Providing & laying 8mm thk laminate floor of approved make as per approved sample and shade having high wear resistance with high pressure laminate surface treated with aluminium oxide, having good scuff resistance, laid on top of a high density fibre board with a density with planks having tongue and groove joint. (Basic rate Rs 150/- per sft)	**SQM**	**QRO**	3500	**0.00**

H.19	Laminated wooden skirting: Providing & fixing 8mm thk, 50mm high laminated skirting (matching to laminated wooden flooring) including corners. (Basic rate Rs 85/- per rft)	**RM**	**QRO**	1250	**0.00**
H.20	**Vinyl Flooring:** Heavy duty vinyl flooring high strength, resilient, non chip, non crack, high wear & tear applications and conforms to IS 3462 standards with various other international standards laminated homogeneous flooring. (Basic rate Rs 100/- per sft)	**SQM**	**QRO**	1550	**0.00**
H.21	**Laminated False flooring with 300mm height:** Providing & laying raised floor system to be installed shall provide a minimum finished floor height of 300mm from the existing floor level. The system shall provide for suitable pedestal and under structure design to withstand various static loads and rolling loads subjected to it in an office/DCS/server/panel etc. The panel should be laminated on the exposed side with anti static laminate and PVC beading on all sides of the panel. The overall system shall be able to withstand a UDL of 1080kgs per sq.mts and a point load of 360 kgs. The under structure will withstand axial load of 2200 kgs. Make: Unifloor or equivalent	**SQM**	**QRO**	1950	**0.00**
H.22	**Acid Alkali Resistant Tiles**: P/F Endura Johnson Acid Alkali Resistant Tiles 10mm to 12mm specifications as per IS4457, with Epoxy joints and chemically resistant mortar bedding as per IS 4832 are used for laying these tiles.	**SQM**	**1250.00**	2,500.00	**3125000.00**
	TOTAL OF SECTION -H : FLOORING , SKIRTING & DADO				**7,23,99,450.00**

(9) SECTION -I : DOORS, WINDOWS & VENTILATORS

SR. NO	DESCRIPTION OF WORKS	UNIT	TOTAL QUANTITY	RATE INR	AMOUNT INR
I.1	Providing & fixing of single glazed window systems with, galvanised steel , profile of single rebate of size 100x 50 mm, of 1.20 mm profile thick assembled by Butt Joint with roofing bolts & clear toughened glass of thk 8mm mounting on profiles with high performance double side adhesive tape with silicon pointing	**SQ.M**	**QRO**	6750	**0.00**
I.2	Providing & fixing of Double glazed window systems with, galvanised steel, profile of double rebate of size 150x 50 mm, of 1.20 mm profile thick assembled by Butt Joint with roofing bolts & clear toughened glass of thk 8mm mounting on profiles with high performance double side adhesive tape with silicon pointing .	**SQ.M**	**QRO**	7850	**0.00**
I.3	**VIEW PANEL (SMD make Or Equivalent make)**				

	Providing & fixing of **Double Glazed Fixed View Panel systems** with galvanised steel of Double rebate profile of required size & 1.20 mm profile thick assembled by Butt Joint with roofing bolts & clear float glass of thk 8mm mounting on profiles with high performance double side adhesive tape with silicon pointing .				
i	Frame thk 340 X 50 mm	**SQ.M**	**QRO**	6500	**0.00**
ii	Frame thk 265 X 50 mm	**SQ.M**	**QRO**	6450	**0.00**
I.4	**Sliding window - Two Track**				
	Supplying, fabricating and fixing anodised (15 microns) two track sliding windows made out of Indal sections or equivalent 9141 (1.2 18 kg/RM) for bottom gutter and 4096 (0.778 kg/ RM) for side frame and 9777 (0.493 kg/RM) 9778 (0.632 kg/RM) for shutter side frames and 3994 (0.38 kg/RM) for shutter bottom and top frame with all necessary fittings like wheels, Rubber gasket, locks and top guide with 6 mm thick clear toughened glass.	**SQ.M**	**QRO**	5800	**0.00**
I.5	Do as above but with Pure Polyester(Jotun make or equivalent) Powder coated sections. The thickness of Powder coating should be of 50 to 60 microns.	**SQ.M**	**QRO**	6150	**0.00**
I.6	**Three track sliding windows:**				
	Supplying, fabricating and fixing anodised (15microns) three track sliding windows made out of Indal sections 9140(1.637 kg/RM) for bottom gutter, 4098 (1.066kg/m) for side frames and 9777(0.493 kg/m) 9778(0.632kg/m) for shutter side frames and 3994(0.38 kg/m) for shutter bottom frame and top frame with all necessary fittings, like wheels, rubber gasket, locks and top guide with 6 mm thick clear toughened glass etc complete.	**SQ.M**	**450.00**	6000	**2700000.00**
I.7	Do as above but with Pure Polyester(Jotun make or equivalent) Powder coated sections . The thickness of Powder coating should be of 50 to 60 microns .	**SQ.M**	**QRO**	6450	**0.00**
I.8	**Fixed windows :**				
	Supplying and installing Semi-unitized type Aluminium Structural Glazing system and fixed windows having 115 mm x 57 mm Mullion, 77 mm x 57 mm Mullion Transom, 6 mm 'low e' (with Advanced Solar Control and Thermal Insulation properties) Toughened Glass +12 mm Air Gap + 5 mm Clear Heat Strengthened Glass of Saint Gobain Blue Toughened Glass as specified by Architect fixed on shutter section using 6 mm Spacer Tape, Dow Corning / GE make Structural Sealant, 12 mm Backer Rod, DOW Corning / GE make weather sealant, brackets etc. complete with all joinery such as MS brackets and anchor fasteners. Aluminium sections will be 15 microns black colour anodized.				
	Glass Properties: Light Transmission 24%, Internal Reflection – 11%, u value 1.9				

	WINDOWS TO BE EXTERNALLY FLUSHED				
i	1000 X 1200 mm	**SQ.M**	**QRO**	6000	**0.00**
ii	1200 X 1200 mm	**SQ.M**	**QRO**	6000	**0.00**
I.9	Do as above but with Pure Polyester(Jotun make or equivalent) Powder coated sections . The thickness of Powder coating should be of 50 to 60 microns .	**SQ.M**	**QRO**	6150	**0.00**
I.10	**Openable Windows (Top Hung)**				
	Supply, fabricating and fixing of anodised (15 microns) aluminium top hung windows made out of Indal section 9222(1.174 kg/RM) as intermediate frames and 9223 (1.127 kg/RM) for outer frame section with all necessary fittings like snap on glazing clips (4611 - 0.172 kg/RM) rubber gaskets with 5 mm thick float glass etc, complete				
i	1000 X 500 mm	**SQ.M**	**QRO**	6450	**0.00**
I.11	Do as above but with Pure Polyester(Jotun make or equivalent) Powder coated sections . The thickness of Powder coating should be of 50 to 60 microns .	**SQ.M**	**QRO**	6550	**0.00**
I.12	**Openable Windows (Side Opening)**				
	Supply, fabricating and fixing of anodised (15 microns) aluminium side opening windows made out of Indal section 9222(1.174 kg/RM) as intermediate frames and 9223 (1.127 kg/RM) for outer frame section with all necessary fittings like snap on glazing clips (4611 - 0.172 kg/RM) rubber gaskets with 5 mm thick float glass etc, complete				
i	1200 X 1200 mm	**SQ.M**	**QRO**	6450	**0.00**
I.13	Do as above but with Pure Polyester(Jotun make or equivalent) Powder coated sections . The thickness of Powder coating should be of 50 to 60 microns .	**SQ.M**	**QRO**	6550	**0.00**
I.14	**N-Type ventilators:**				
	Supply, fabricating and fixing aluminium anodised (15 micros natural) "N" type ventilator made out of Indal section NOS. 2082 (0.554 kg/RM) 9139(0.81kg/RM) 4125(0.184 kg /RM) Snap-On glazing clips with all necessary fittings like joining clips, rubber gaskets with 4 mm float glass etc., complete.	**SQ.M**	**QRO**	6750	**0.00**
I.15	Do as above but with Pure Polyester(Jotun make or equivalent) Powder coated sections . The thickness of Powder coating should be of 50 to 60 microns .	**SQ.M**	**QRO**	6800	**0.00**
I.16	**Grills for "N" Type ventilators**				
	Supply, fabricating and fixing anodised 15 microns natural) grills made out of 25 mm square tubes and 3/8 channels with all necessary fittings etc, complete	**SQ.M**	**QRO**	6750	**0.00**
I.17	Do as above but with Pure Polyester(Jotun or equivalent make) Powder coated sections .The thickness of Powder coating should be of 50 to 60 microns.	**SQ.M**	**QRO**	6850	**0.00**

I.18	-Do- as above but with netlon mesh (Bird Mesh) instead of 3/8 U channels	**SQ.M**	**QRO**	7050	**0.00**
I.19	Supply, fabricating and fixing aluminium anodised (15 microns, natural) fixed ventilators made out of Indal section NOS. 2082 (0.554 kg/RM) 9139(0.81kg/RM) 4125(0.184 kg /RM) Snap-On glazing clips with all necessary fittings like joining clips, rubber gaskets with 4 mm float glass etc., complete	**SQ.M**	**QRO**	6850	**0.00**
I.20	Do as above but with Pure Polyester(Jotun or Equivalent make) Powder coated sections. The thickness of Powder coating should be of 50 to 60 microns.	**SQ.M**	**QRO**	6950	**0.00**
I.21	**DOORS :**				
	Supply, fabricating and fixing aluminium 15microns anodised natural colour single Leaf/Double leaf door made out of section No.1 9221 (1.975 kg/RM) as door outer frame and 9241 (1.418 kg /rm) 9239(1.365kg/RM) as door vertical 9200 ((1.974 kg / RM) as door bottom top and bottom 9240 (1.594 kg /RM) as door middle 80 mm x 44.5 mm x 2 mm section for door top with all necessary fittings of Godrej make like heavy duty Door Closers, hinges, locks, latches, top and bottom 9240 (1.594 kg /RM) as door middle 80mm x 44.45 mm x 2 mm section for door top with all necessary fittings like heavy duty hinges, locks, tower bolts, handles, rubber gaskets with 5 mm thick toughened glass at top of door shutter and 12 mm prelaminated Novopan board at shutter bottom etc complete.	**SQ.M**	**QRO**	7250	**0.00**
I.22	Do as above but with Pure Polyester (Jotun or equivalent make) Powder coated sections. The thickness of Powder coating should be of 50 to 60 microns.	**SQ.M**	**QRO**	7350	**0.00**
I.23	**Doors with recessed section outer frame :**				
	Supplying, fabricating and fixing aluminium anodised (15 microns) natural colour single leaf/ Double Leaf door with recessed section outer frame of size 85 x 45 mm the door shutters are made out of 85 x 45 x 2 mm and 100 mm x 45 x 2 mm for the verticals and 100 x 45 x 2mm for the verticals and 100 x 45 x 2 mm for the top and middle and 100 x 45 x 2.5 mm for the bottom sections with all necessary fittings of Godrej make like heavy duty Door Closers, hinges, locks, latches, tower bolts, handles, rubber gaskets with 5mm float glass and 12 mm Prelaminated board etc. complete.	**SQ.M**	**QRO**	8500	**0.00**
I.24	Do as above but with Pure Polyester(Jotun or equivalent make) Powder coated sections. The thickness of powder coating should be of 50 to 60 microns	**SQ.M**	**QRO**	8550	**0.00**
I.25	Providing and fixing **rolling shutter** using 18 gauge m.s.sheets, with accessories like side guides, side brackets top suspension guides, side brackets top suspension shafts, ball bearings, locking arrangements from both sides, m.s. hood cover etc. including a coat of anti-corrosive zinc chromate primer and two coats of synthetic enamel paint of approved make and shade etc. complete				

	Sizes as mentioned below				
a	3500 x 3000 (W x H)	**NOS.**	**QRO**	79625	**0.00**
b	2500 x 5000 (W x H)	**NOS.**	**QRO**	81250	**0.00**
c	5400 x 4000 (W x H)	**NOS.**	**QRO**	189540	**0.00**
I.26	Same as I25, but with Gear Operation.				
a	3000 x 3000 (W x H)	**NOS.**	**10.00**	75000	**750000.00**
b	3000 x 4000 (W x H)	**NOS.**	**5.00**	96000	**480000.00**
c	5400 x 5000 (W x H)	**NOS.**	**5.00**	216000	**1080000.00**
I.27	Providing and embedding of natural anodised aluminium subframe of section 62mm X 15 mm (wt. ~ 0.765 kg /m) in masonry wall at all levels wherever required during the construction of masonry wall as per the drg and as directed including all materials, labour, etc, complete.	**RM**	**QRO**	750	**0.00**
I.28	Providing and fixing in position PVC door "sintex" or approved make or equivalent consisting of black granite door frame properly finished and adjusted with all gaps to fit in door frames with all necessary fittings of Godrej Make like heavy duty Door Closers, hinges, locks, latches, tower bolts, handles, rubber gaskets with 5mm float glass and 12 mm Prelaminated board etc. Complete.	**SQ.M**	**QRO**	9000	**0.00**
I.29	**Fixed Louvered Ventilators.** Supplying and fixing of aluminium anodised (15 microns) outer frame made out of 63 x 38 box sections and fixed with Fixed Louver of required size with all necessary fittings and with 5 mm pinhead glass.	**SQ.M**	**QRO**	6250	
	Size 450 x 600mm	**NOS**	**QRO**	1850	**0.00**
	Size 600 x 600mm	**NOS**	**QRO**	2250	**0.00**
I.30	Do as above but with Pure Polyester(Jotun or equivalent make) Powder coated sections. The thickness of Powder coating should be of 50 to 60 microns.	**SQ.M**	**QRO**	6350	**0.00**
I.31	Providing and fixing **sensor controlled sliding doo**r with all track, rail, control unit, sliding door leaves, top light or solid panel , safety light barrier, activator or radar motion detectors all fixtures and glass complete of Dorma or equivalent make.				
i	1500x2200	**SQ.M**	**QRO**	45000	**0.00**
ii	2400x2200	**SQ.M**	**3.00**	40500	**121500.00**
I.32	**FLUSH DOOR (BOTH SIDE VENEER)**				
	Providing & fixing 40mm thk Flush Solid Door finished with veneer on both sides with melamine polish as per design pattern shown in drawing. All edges should finish with matching wood lipping with melamine polish. Rate including cost of necessary hardware, approved adhesive. All complete as per detail drawing, as	**SQ.M**	**QRO**	14500	**0.00**

	specified and as directed by Consultant / Project - In - Charge. (Actual executed area will be measured).Basic Rate of Veneer Rs 750 /- per SQ.M				
I.33	**FLUSH DOOR (ONE SIDE VENEER AND ONE SIDE LAMINATE)**				
	Providing & fixing 40mm thk Flush door finish with veneer & melamine polish on one sides and 1.0 mm thk laminate on other side as per design pattern shown in drawing. All edges should finish with matching wood lipping with melamine polish. Rate including cost of necessary hardware, approved adhesive. All complete as per detail drawing, as specified and as directed by Consultant / Project - In - Charge. (Actual executed area will be measured) Basic Rate of Veneer Rs 750 /- per SQ.M. Basic Rate of Laminate Rs 375 /- per SQ.M				
i	1500 x 2200 mm (Double Leaf)	**SQ.M**	**QRO**	14500	**0.00**
ii	1000 X 2200 mm (Single Leaf)	**SQ.M**	**QRO**	14500	**0.00**
iii	900 X 2200 mm (Single Leaf)	**SQ.M**	**QRO**	14500	**0.00**
	a. same as above but with view panel (750 (W) x 1200 (H))	**SQ.M**	**QRO**	14500	**0.00**
	b. same as above but with view panel (900 (W) x 1200 (H))	**SQ.M**	**QRO**	14500	**0.00**
I.34	**PARTLY GLAZED PARTLY SOLID DOOR WITH SANDWICHED GLASS (BOTH SIDE VENEER)**				
	Providing & fixing 40mm thk Partly glazed Partly Solid Door with Sandwiched glass. Door Shutters veneer on both sides with melamine polish as per design pattern shown in drawing. All edges should finish with matching wood lipping with melamine polish. (Rate including 6mm +12 mm air gap + 5 mm thk clear glass/ etched glass sandwiched partition designed opening with wooden beadings finished with melamine polish wherever instructed) Rate including cost of necessary hardware, approved adhesive. All complete as per detail drawing, as specified and as directed by Consultant / Project - In - Charge. (Actual executed area will be measured) Basic Rate of Veneer Rs 750 /- per SQ.M				
i	1000 X 2200 mm (Single Leaf)	**SQ.M**	**QRO**	12000	**0.00**
I.35	**FLUSH DOOR (BOTH SIDE LAMINATE)**				
	Providing & fixing 40mm thk Flush door finish with 1.0 mm thk laminate on both sides as per design pattern shown in drawing. All edges should finish with matching wood lipping with melamine polish. Rate including cost of necessary hardware, approved adhesive. All complete as per detail drawing, as specified and as directed by Consultant / Project - In - Charge. (Actual executed area will be measured) Basic Rate of Laminate Rs 375 /- per SQ.M				

i	750 X 2200 mm (Single Leaf)	**SQ.M**	**QRO**	13500	**0.00**
ii	900 X 2200 mm (Single Leaf)	**SQ.M**	**QRO**	13500	**0.00**
	GLASS DOORS.				
I.36	**SINGLE GLASS DOORS OF SIZE** Supplying and fixing of single leaf frameless glass doors of 12mm thk Toughened glass with all required patch fittings, heavy-duty floor springs, as per the drg, including, locking systems and SS handle of 18" long, etc, complete.				
i	900 x 2200 mm (Single Leaf)	**SQ.M**	**QRO**	9750	**0.00**
ii	1000 x 2200 mm (Single Leaf)	**SQ.M**	**QRO**	9750	**0.00**
ii	1200 x 2200 mm (Single Leaf)	**SQ.M**	**QRO**	9750	**0.00**
I.37	**DOUBLE GLASS DOOR OF SIZE** Supplying and fixing of double leaf frameless glass doors of 12mm thk Toughened glass with all required patch fittings, heavy-duty floor springs, as per the drg, including, locking systems and SS handle of 18" long, etc, complete.				
i	1500 x 2200 mm (Double Door)	**NOS.**	**QRO**	47850	**0.00**
I.38	**FOR MODULAR TOILET DOORS** 1) Shutter : Fabricating & fixing single leaf single swing flush door 38mm thk of approved make, finished with 1mm thick laminate of approved make & colour on both sides. The shutter edges shall be lipped in 8mm thick approved timber beading melamine polished. 2) Hardware : one no SS mortise lock of Dorma / Geze or equivalent, with 4nos ss bearing hinges of Dorma/ Geze make , door closure of approved make, one no floor mounted SS door stopper. 3) Frame : Frame should be formed out of 50mm X 100mm approved timber melamine polished with 38mm wide x 12mm deep rebate. Fixing of Frame : Frame should be fixed to masonry wall using M.S holdfast / for partitions using wooden screws with clear anti-termite treatment for the concealed portion frame.				
i	750 x 2200 mm (Single Leaf)	**NOS.**	**QRO**	15000	**0.00**
I.39	**TRAP DOOR IN LAMINATE FINISH**				
	Providing trap door in 19 mm ply wood finished with 1 mm thk laminate on both sides. The item to include ss hinges, handles if any as per design. The item also include providing necessary support structure from the ceiling for fixing the trap door shutters. (BASIC COST OF LAMINATE RS 375 /- PER SQM)	**SQ.M**	**QRO**	14500	**0.00**
I.40	**Fire Exit Door :**				

	Providing and fixing Metal Fire Doors of "Shakti Hormann/Promat" make with a vision panel 310mmx310mm & without panic bar (For Fire Exit) of 120 minutes Rated Insulated Fire Door Tested in accordance to BS: 476 Part – 20 and IS: 3809: 1979, CNP – 2150				
	Door Frame: Providing of Door Frame of section 120mmx70mm with fire intumescent seal strip of size 10mmx4mm for fire and smoke sealing mounted in the grooves of the frame and coated with fire retardant intumescent Primer coating.				
	Shutter: Providing of 42mm thick asbestos-free Fire / Smoke check shutter of 60 min fire rating comprising of one 15mm Promatect -H Calcium Silicate Board with 19mm thick Non–combustible Fire Retardant compound coated with silicon sealant and Smoke Seal Strips of size 10mm x 4mm mounted in the grooves in the shutter on all sides except bottom. Promaseal Intumescent sealant is used to seal the gaps between Promatect-H Board and shutter beading. Hinges: Providing of 3nos of SS304 grade Dorma Make SS ball bearing hinges of size 100mmx75mmx2.5mm with S.S. Screws. Door Closer: Door Closer to be of fire rated from Dorma. Handle: Fire rated Dorma Make 450 mm long handles in SS finish to be included in cost.				
i	Double Leaf Door - size: 1500 mm X 2400 mm	**SQ.M**	**QRO**	16200	**0.00**
ii	Double Leaf Door - size: 1500 mm X 2200 mm	**SQ.M**	**QRO**	16200	**0.00**
	TOTAL OF SECTION - I : DOORS , WINDOWS & VENTILATORS.				**51,31,500.00**

(10) SECTION -J: PAINTING

SR.NO	DESCRIPTION OF WORKS	UNIT	TOTAL QUANTITY	RATE INR	AMOUNT INR
J.1	Providing and applying 3 coats of approved white wash or colour wash with copper sulphate and anti-fungal additives to internal surface of walls, slab bottom, roofs, beam column etc. to give good given shade including surface preparation, staging, scaffolding etc., complete.	**SQ.M**	**5613.00**	80.00	**4,49,040.00**
J.2	Do as above but with only one coat of approved white wash or colour wash .	**SQ.M**	**QRO**	70.00	**0.00**
J.3	**Emulsion Painting for Internal Walls .**	**SQ.M**	**29000.00**	190.00	**55,10,000.00**
	Providing and applying 3 coats of Interior Emulsion Paint of approved colour to internal surface of brick walls, columns and dry wall surfaces like Gypsum or Calcium Silicate. The rate to include surface preparation, application or primer and putty, staging, scaffolding etc., complete. Methodology to be followed as per Manufacturers instructions.				
	Surface Preparation :				
	Remove all the foreign matters such as cement plaster splash, oil stains, grease stains, mosaic / marble polishing, white cement etc thoroughly by using scrapping blade, emery stone or emery sheets. Use mild solvents in case grease or oil stains are hard. Fill up the services cutouts/ holes/ chases with cement or POP. Make sure that the corners are properly plastering in line and levels are correct.				
	Base Putty:				
	Putty will be prepared as per manufacturers instructions. It should be smooth and free from any coarse ingredient, etc. Application of putty should be started only after approval of surface area by the Engineer. It should be applied on the whole surface to make the surface smooth. No lumps should be allowed to dry completely. After drying, the surface should be scraped with sand/emery paper till smooth surface is obtained. After application of first coat of putty, the surface shall be allowed to dry for 24 hours. sand papering shall then be done to give smooth surface. Subsequent applications of putty and sand papering shall be done till the Engineer is satisfied about final surface, which should be absolutely even, levelled and smooth.				
	Finishing Primer :				

	Primer should be a cement primer, or as per manufacturer's specification (manufacturer to be same as that of paint). These tins should be opened in presence of the Engineer. Primer should be applied with smooth brushes on surface to cover entire surface properly. There should be no brush marks, stripes, etc. when applied on the surface. This surface should be allowed to dry atleast for 24 hours before next application.				
	Finishing coats:				
	First coat of emulsion paint of approved make and colour is applied by brush to cover the entire surface.				
	Final two coats are applied after all other agencies work is completed, just before occupation the premium emulsion of approved make. This coat is applied by Roller as required to get an even finish.				
J.4	**Emulsion Painting for External Walls.**				
	Removing the loose particles over the exterior plastering, levelling the undulated surfaces etc using mosaic stone and supply and apply one coat of white primer of exterior grade, against sanding and levelling the undulations, finally two coats of approved make and colour paint of weather shield exterior grade emulsion paint is applied complete as per the satisfaction of EIC. Colour-Dusty Grey	**SQ.M**	**23300.00**	190.00	**44,27,000.00**
J.5	**Stucco Paint for External Walls**				
	Same as above except two coats of Stucco to be applied after application of Primer.	**SQ.M**	**QRO**	350.00	**0.00**
J.6	**OIL BOUND DISTEMPER FOR WALLS.**	**SQ.M**	**QRO**	190.00	**0.00**
	Providing and applying 2 coats of Oil Bound Distemper of approved make to internal surface of brick walls, columns The rate to include surface preparation, application or primer and putty, staging, scaffolding etc., complete. Methodology to be followed as per Manufacturers instructions.				
J.7	**Synthetic Enamel Paint:** Prepare the surfaces and apply 2 coats of synthetic enamel paint of ICI DULUX of Equivalent brand of approved shade over a Enamel primer coat for wall surfaces as directed and as specified, for metal surfaces, ceiling surfaces etc. including preparation of surfaces, scaffolding etc., complete.	**SQ.M**	**QRO**	300.00	
J.8	Providing and applying **Antifungal Acrylic Emulsion** external paint to walls, ceilings, beams, columns etc. Including surface preparation, scaffolding etc. complete.	**SQ.M**	**QRO**	250.00	**0.00**
J.9	**Epoxy Paint**				

	Providing and applying Epoxy paint to internal floor pathways surfaces as per manufacturer's specification and standard including surface preparation, staging, scaffolding etc. complete as specified	**SQ.M**	**QRO**	650.00	**0.00**
J9a	Same as J9, but shall be food grade for inside of watertank	**SQ.M**	**7500.00**	500.00	**37,50,000.00**
J.10	**PU Paint**				
	Providing and applying 2 coat of (Total 100 micron thick) antifungal water based Polyurethane paint to uniform shade over a coat of approved primer & the surface preparation done using approved levelling material on all internal walls, ceilings etc. complete as per manufacturer specification including stagging,scaffolding, etc.	**SQ.M**	**QRO**	650.00	**0.00**
	TOTAL OF SECTION - J: PAINTING				**1,41,36,040.00**

(11) SECTION -K (PART 1): PLUMBING

SL. NO	DESCRIPTION OF WORKS	UNIT	TOTAL QUANTITY	RATE INR	AMOUNT INR
A	**INTERNAL WATER SUPPLY**				
K.1.1	Providing and fixing in position Heavy duty Flat Bottom HDPE Tank of Sintex or equivalent make .Tank shall be of 100% UV stabilised, Virgin plastic, tripple layer body, including all .The tank should be provided with a heavy duty high pressure copper float ball valves with brass body conforming to IS 1703-1977 at inlet. Two nozzles for level indicator to be provided with the tank. Additional nozzles for venting and drain to be provided. Round Manhole (600 mm diameter) at top to be provided for cleaning. water inlet and outlet nozzles to be provided. Isolation ball valves **of 50 mm dia** and outlet of nozzles and drain to be provided with the tank. Level indicator / gauge also to be included along the tank. The GAD of tank and all accessories have to be approved by the consultant before procurement, Tank is placed on the terrace of each block				
a	500 liters (For flushing and domestic water)	**NOS.**	**QRO**	6,000.00	**0.00**
b	1000 liters	**NOS.**	**QRO**	12,000.00	**0.00**
c	2000 liters	**NOS.**	**QRO**	24,000.00	**0.00**
K.1.2 (a)	Providing and fixing in position tested UPVC plastic pipe (Unplasticized Polyvinyl Chloride) SCH 40 as per ASTM D 1785 with all fittings like bends, tees, reducers, elbows, unions etc. with Socket joints including supporting on walls with heavy duty clamps or M.S.brackets etc. complete including				

	scaffolding and all testing after laying of pipes as specified and including making holes in the walls or floors as required and redoing the same (For work on terrace, within plumbing shafts and inside false ceiling)				
	Domestic water				
a	40 mm dia	**RM**	**QRO**	210.00	**0.00**
b	32 mm dia	**RM**	**QRO**	175.00	**0.00**
c	25 mm dia	**RM**	**2000**	145.00	**290000.00**
d	20 mm dia	**RM**	**500**	105.00	**52500.00**
e	15 mm dia	**RM**	**QRO**	95.00	**0.00**
	Flushing water				
a	40 mm dia	**RM**	**QRO**	210.00	**0.00**
b	32 mm dia	**RM**	**QRO**	175.00	**0.00**
c	25 mm dia	**RM**	**2000**	145.00	**290000.00**
d	20 mm dia	**RM**	**500**	105.00	**52500.00**
e	15 mm dia	**RM**	**QRO**	95.00	**0.00**
K.1.3	Supply, installation , testing & commissioning forged brass ball valve with forged brass ball, suitable for working pressure of 16kg/sq.cm (Cost shall be inclusive of providing necessary union / flange connection, etc).				
a	32 dia	**NOS.**	**QRO**	2,150.00	**0.00**
b	25 dia	**NOS.**	**200**	1,850.00	**370000.00**
c	20 dia	**NOS.**	**QRO**	1,700.00	**0.00**
d	15 dia	**NOS.**	**QRO**	1,650.00	**0.00**
K.1.4	Providing & fixing Auto Air vent on water supply risers, suitable for pressure of 10 Kg/Sq.cm.				
a	15 mm	**NOS.**	**QRO**	1,825.00	**0.00**
B	**INTERNAL DRAINAGE**				
K.1.5	Providing, laying and joining in position heavy quality PVC, spigot and socket pipes for soil, waste vent (6 kg/cm2) including all fittings, bends, vent cowls, single or double junctions of different degrees, with or without access doors, etc. including all joinery with rubber ring and solvent compound, fixing them on floors or vertically against walls on M.S brackets clamped with PVC Aluminium coated 'U' clamps including Jasthi Nail or Anchor fastener, so as to keep the pipe minimum 3" away from the wall as shown on drawing so that all connection joints are exposed including testing after laying the pipes as specified and painting etc. complete. Jasthi Nail or Anchor fastener shall be				

	included in scope of work. MS bracket to be Hot Dip GI C or Z type readymade channel with clamp.				
a	150 dia	**RM**	**QRO**	1,450.00	**0.00**
b	110 dia	**RM**	**QRO**	1,100.00	**0.00**
c	75 dia	**RM**	**1000**	650.00	**650000.00**
K.1.6	Providing and fixing in UPVC waste pipes for wash basin & urinals including all fittings like elbows, bends, tees, plugs, etc. including making chases in the wall, wrapping the pipes with hessian cloth soaked with bitumen including cutting & chasing in walls & floor for 32 mm dia to 50 mm dia waste pipes & fittings. And making good the same by using 1:1 Cement mortar.				
a	50 dia	**RM**	**200**	295.00	**59000.00**
b	40 dia	**RM**	**200**	210.00	**42000.00**
c	32 dia	**RM**	**500**	175.00	**87500.00**
K.1.7	Providing and fixing P.V.C. WC connector (straight or bend type) with rubber lip ring. Including 110 mm dia PVC pipe of required length and proper connection complete as required.	**NOS.**	**300**	1,200.00	**360000.00**
K.1.8	Providing and fixing in position heavy uPVC urinal trap (P- trap) with 100 mm dia outlet complete with M-150 cement concrete all around and below the trap, including supplying and fixing brass / C.P square grating of 150 x 150 size with brass C.P cover plate etc. complete.	**NOS.**	**300**	175.00	**52500.00**
K.1.9	Providing and fixing in position heavy uPVC floor trap (Nahani trap) with 75 mm dia outlet complete with M-150 cement concrete all around and below the trap, including supplying and fixing brass / C.P square grating of 150 x 150 size with brass C.P cover plate etc. complete.	**NOS.**	**300**	1,550.00	**465000.00**
	100 x 75 mm outlet for Urinal with 125mm grating				
	INTERNAL PROCESS DRAIN			1	
NOTE	The quantities mentioned in this document are estimated on the basis of drawings prepared & submitted to client. The successful bidder has to physically measure, prepare BOQ, shop floor drawings & get written approval from client's site engineer before procurement of material.			1	
	Pipe Work			1	
K.1.10	**Process drain (PD)**			1	
	Stainless steel seamless pipes, material to ASTM A 312 TP 304 TP 304, Sch-10S dimensions to ANSI B 36.19 BE to ANSI 16.25			1	
	80NB	**RM**	**QRO**	1	**0.00**

	100NB	**RM**	**QRO**	1	**0.00**
	150 NB	**RM**	**QRO**	1	**0.00**
	200 NB	**RM**	**QRO**	1	**0.00**
K.1.11	**Elbow 90deg**			1	
	SS304, seamless Elbow, R=1.5D, ASTM A403 WP304, Wall thickness to respective pipe wall thickness. Dimensions as per ANSI B 16.9.			1	
	80NB	**NOS.**	**QRO**	1	**0.00**
	100NB	**NOS.**	**QRO**	1	**0.00**
	150NB	**NOS.**	**QRO**	1	**0.00**
	200 NB	**NOS.**	**QRO**	1	**0.00**
K.1.12	**Elbow 45deg**			1	
	SS304, seamless Elbow, R=1.5D, ASTM A403 WP304, Wall thickness to respective pipe wall thickness. Dimensions as per ANSI B 16.9.			1	
	80NB	**NOS.**	**QRO**	1	**0.00**
	100NB	**NOS.**	**QRO**	1	**0.00**
	150 NB	**NOS.**	**QRO**	1	**0.00**
	200 NB	**NOS.**	**QRO**	1	**0.00**
K.1.13	**Eccentric Reducer**			1	
	SS304, seamless Elbow, R=1.5D, ASTM A403 WP304, Wall thickness to respective pipe wall thickness. Dimensions as per ANSI B 16.9. All welding shall be Argon Arc.			1	
	100X 80NB	**NOS.**	**QRO**	1	**0.00**
	150X 100NB	**NOS.**	**QRO**	1	**0.00**
K.1.14	**Equal Lateral Tee**			1	
	SS304, seamless Elbow, R=1.5D, ASTM A403 WP304, Wall thickness to respective pipe wall thickness. Dimensions as per ANSI B 16.9. All welding shall be Argon Arc.			1	
	80 X 80	**NOS.**	**QRO**	1	**0.00**
	100 X 100	**NOS.**	**QRO**	1	**0.00**
	200 X 200	**NOS.**	**QRO**	1	**0.00**
K.1.15	**Unequal Lateral Tee**			1	
	SS304, seamless Elbow, R=1.5D, ASTM A403 WP304, Wall thickness to respective pipe wall thickness. Dimensions as per ANSI B 16.9. All welding shall be Argon Arc.			1	
	200 X 150	**NOS.**	**QRO**	1	**0.00**

	100X 80	**NOS.**	**QRO**	1	**0.00**
	150X 100	**NOS.**	**QRO**	1	**0.00**
	150X 80	**NOS.**	**QRO**	1	**0.00**
K.1.16	**Unequal Tee**			1	
	SS304 Unequal Tee ,A 312 TP304 Dimensions as per ANSI B 16.9. All welding shall be Argon Arc.			1	
	100X 80NB	**NOS.**	**QRO**	1	**0.00**
	150x100NB	**NOS.**	**QRO**	1	**0.00**
	150x80NB	**NOS.**	**QRO**	1	**0.00**
K.1.17	**Flange**			1	
	SORF ASTM A182 Gr.F304, 150#, dimensions as per ANSI B16.5			1	
	150NB	**NOS.**	**QRO**	1	**0.00**
	100NB	**NOS.**	**QRO**	1	**0.00**
	80NB	**NOS.**	**QRO**	1	**0.00**
K.1.18	**Blind Flange**			1	
	BFRF ,ASTM A182 Gr.F316, 150#, dimensions as per ANSI B16.5			1	
	150NB	**NOS.**	**QRO**	1	**0.00**
	100NB	**NOS.**	**QRO**	1	**0.00**
	200NB	**NOS.**	**QRO**	1	**0.00**
K.1.19	**Ring Gasket**			1	
	CNAF suitable for Hot condensate, Dimensions as per ANSI B16.20			1	
	150NB	**NOS.**	**QRO**	1	**0.00**
	100NB	**NOS.**	**QRO**	1	**0.00**
	80NB	**NOS.**	**QRO**	1	**0.00**
K.1.20	**Bolts & Nuts**			1	
	A193, for Nut A194,Bolt dimension as per ANSI B 18.2.1. Nuts dimensions as per ASME B 18.2.2.			1	
	20x96	**NOS.**	**QRO**	1	**0.00**
	16x90	**NOS.**	**QRO**	1	**0.00**
	16x90	**NOS.**	**QRO**	1	**0.00**
K.1.21	Excavating and backfilling for process drain routing as per drawings as directed and carting away the surplus earth upto a lead and providing, spreading & levelling by mechanical & manual means			1	
	Total Pipe Work	**JOB**	**QRO**	1	**0.00**

K.1.22	Supply & fixing of Double Seal GMP Drain Traps of SS with SS cover. Making proper connection, cutting chase / hole / core cut in floors / slabs and bringing the same in proper condition and shape after placing the trap in right position complete as required	**NOS.**	**QRO**	1	**0.00**
K.1.23	Supply & fixing of Single Seal GMP Drain Traps of SS with SS cover. Making proper connection, cutting chase / hole / core cut in floors / slabs and bringing the same in proper condition and shape after placing the trap in right position complete as required	**NOS.**	**QRO**	1	**0.00**
K.1.24	**Testing and Commissioning**	**JOB**	**QRO**	1	**0.00**
	EXTERNAL DRAINAGE				
K.1.28	Providing, laying and jointing **heavy quality UPVC,** spigot and socket pipes for **soil, waste and vent** (6 kg/cm2) including all fittings, bends laying to proper alignment and gradient, including jointing with solvent compound testing as specified including all excavation in murrum / hard soil / back filled area where loose boulders may be encountered upto a depth of 3m refilling the trenches, consolidation and removal of surplus excavated stuff within site, dewatering all as directed etc. complete				
	160 dia	**RM**	**500**	1,250.00	**625000.00**
	200 dia	**RM**	**300**	1,950.00	**585000.00**
	250 dia	**RM**	**200**	2,150.00	**430000.00**
	300 dia	**RM**	**100**	2,750.00	**275000.00**
K.1.29	Providing, laying and jointing high density Polythelene pipes **(HDPE)** of pressure rating, PN4 including welded joints using hot plate including all excavation in any type of soil upto a depth of 3m refilling the trenches, consolidation and removal of surplus excavated stuff within site, dewatering all as directed etc. complete				
	100 dia	**RM**	**500**	325.00	**162500.00**
	160 dia	**RM**	**500**	730.00	**365000.00**
	200 dia	**RM**	**300**	1,050.00	**315000.00**
	250 dia	**RM**	**200**	1,650.00	**330000.00**
	300 dia	**RM**	**100**	3,250.00	**325000.00**
K.1.30	**Constructing inspection Chambers (Brick Masnory)** including excavation , laying 150mm thick cement concrete in mix 1:4:8 using 40mm size stone jelly, 230mm thick brick masonry in C.M. 1:5 Using stock bricks, plastering to inner surfaces with C.M. 1:3 for 20mm thick to a neat finish , plastering outer surface				

	with C.M.1:4, 15mm thick , forming benching in C.C with 1:2:4 mix , channelling to smooth with C.M.1:3, 20mm thick, providing and fixing 263 x165 mm size PP rungs grouting in cement concrete of 1:2:4 mix into masonry, including stone soling below etc. complete as per standard sizes mentioned below. However, chamber sizes may vary suit to site & detailed drawing shall be followed. **The below chamber rates will be verified based on respective individual item rate prior to execution. Any rate variation more than 10% will not be acceptable.**				
a	600x600mm Internal size and upto 600mm depth from FGL / Road lvl.	**NOS.**	**30**	6,789.00	**203670.00**
b	600x900mm Internal size and upto 1000mm depth from FGL / Road lvl.	**NOS.**	**20**	12,500.00	**250000.00**
c	600x1200mm Internal size and upto 1500mm depth from FGL / Road lvl.	**NOS.**	**10**	20,500.00	**205000.00**
d	600x1200mm Internal size and upto 2000mm depth from FGL / Road lvl.	**NOS.**	**5**	26,000.00	**130000.00**
K.1.31	**Constructing RCC inspection chambe**r including excavation, laying M10 Grade 100 mm thk PCC below raft, Min 150 mm thk raft (as per Drawing) & side walls with TMT Reinforcement (**max 75 kg / cu.m as per drawin**g) necessary rigid formwork in position while concreting, fixing rungs, 12 mm plaster on internal, external faces etc. complete However, chamber sizes may vary suit to site & detailed drawing shall be followed. **The below chamber rates will be verified based on respective individual item rate prior to execution. Any rate variation more than 10% will not be acceptable.**				
a	600x600mm Internal size and upto 600mm depth from FGL / Road lvl.	**NOS.**	**30**	17,000.00	**510000.00**
b	600x900mm Internal size and upto 1000mm depth from FGL / Road lvl.	**NOS.**	**20**	32,850.00	**657000.00**
c	600x1200mm Internal size and upto 1500mm depth from FGL / Road lvl.	**NOS.**	**10**	52,400.00	**524000.00**
d	600x1200mm Internal size and upto 2000mm depth from FGL / Road lvl.	**NOS.**	**5**	66,000.00	**330000.00**
K.1.32	Providing and fixing in position heavy duty cast iron manhole cover HD 20 confirming to IS 1726 of size 600 x 600 or 600 mm dia at any levels etc, complete	**NOS.**	**QRO**	3,050.00	**0.00**
K.1.33	Supplying, Providing and fixing heavy duty FRP manhole cover of approved make of size 600 x 600 or 600 mm dia at any levels etc, complete	**NOS.**	**QRO**	550.00	**0.00**
K.1.34	Providing and constructing drop connection externally for drop of more than 60 cms between inverts of branch and main sewer. The rate includes providing and fixing C.I. pipes and fitting class LA required for drop, inspection and cleaning eye with chain and lid, drop pipe, bends, tees etc. Jointing with lead joints, encasing the same in cement concrete 1:2:4 making holes in the masonary or RCC circular walls of the manhole and making good the same after inserting the pipes etc. complete	**NOS.**	**4**	6,500.00	**26000.00**

K.1.35	Providing and installing 150 / 200 dia Glazed stoneware sewer trap in position in inspection chamber or manhole	**NOS.**	**2**	1,500.00	**3000.00**
K.1.36	Construction of conical sewer chambers for depth 2000 mm and above having dia at the top 530mm and 1350mm at the bottom with brick masonary 350 mm thick at the bottom and 230 mm thick at top in C.M. (1:5) 230m thick 1:3:6 cement concrete foundation, haunches and benching in 1:2:4 cement concrete waterproof cement plaster 1:3, 12mm thick both internal and external surfaces finished with floating coat of neat cement providing and fixing heavy duty PVC rungs as required at 30mm centre to centre, SFRC circular double seal type cover and frame of internal dia 525mm medium duty type fixed over 100 mm thick R.C.C. slab in 1:2:4 cement concrete provided with M.S. reinforcement of 12mm dia, rods at 100mm center both ways including all excavation, refilling, dewatering if required.	**NOS.**	**2**	34,500.00	**69000.00**
K.1.36.a	Extra over above for depth below 2000 mm	**RM**	**1**	17,001.00	**17001.00**
K.1.37	Constructing 1200 mm x 900 mm x 900 mm deep grease trap as shown on drawings, 1:3 plaster smooth inside and rough outside with water proofing compound including supply of all the materials for the chamber with 6mm (1/4") thick M.S. manhole cover and frame bracings, (as per drawing) including all excavation, backfilling, of surplus earth etc. complete. Item shall also include for providing stainless steel basket for grease removal.	**NOS.**	**12**	34,500.00	**414000.00**
	TOTAL OF SECTION -K (PART 1) : PLUMBING.				**95,22,171.00**

(12) SECTION -K (PART 2): SANITARY FIXTURES

SR.NO	DESCRIPTION OF WORKS	UNIT	TOTAL QUANTITY	RATE INR	AMOUNT INR
	SANITARY AND WATER SUPPLY FIXTURES				
K.2.1	**Under Counter wash basin:** Providing and fixing wash basin of approved make commercial size of approved make & design including - i) Heavy CI brackets as required. ii) 32 mm CP brass waste coupling with 32 mm CP brass heavy bottle trap (detachable type) with. CP brass extension piece & wall flange. CP brass chain with rubber ring. iii) UPVC drain pipe & specials, from bottle trap to floor trap including 32 to 50 mm pipe, reducers (75/50 or 40 mm), elbows, cleanouts, tees etc including making holes in RCC/Civil works, connecting to sleeves (where left) in floor etc complete. Pipes to be of 6 bar variety with solvent joint & will be measured (running length) & paid under separate item. iv)15 mm CP brass heavy fancy angle cock with CP connector of required length connecting to. v) Angle Valve with wall flange including jointing using teflon tape etc. complete. vi) counter mounted WHB (for circular /oval basin) above or below the counters as required including brackets as required. The counter duly cut will be provided by others, but sealing of edges to be included in the item. Make - JAQUAR_FLS WHT 0401_Under Counter Ceramic Wash Basin Dimensions(WxDxH)mm: 190x550x430	**NOS**	**30.00**	16246	**487380.00**
a	Providing & fixing 15 mm **pillar tap** of approved make & design for wash basin with necessary accessories etc. complete.	**NOS**	**30.00**	2462	**73860.00**
K.2.2	**Hand dryer:**Wall Mounted High Speed Hand Drier (Make: Euronics / Russell / Kimberly Clark) SS 304 Body Non Magnetic, Matt Finish, Touch - Free Hand Dry Time: Less than 20 seconds Auto Cut-off: 60 seconds Motor: Brush Type, Dual Ball Bearings Motor Speed: 25000 RPM Rated Power: 550w (No Heating Elements) Current: 15A Water Splash: IPx1 Blowing Volume: > 270m3/H Circuit Operation Infrared Automatic, self adjusting Sensor Range 12 cm - 15 cm Warm Air Speed Output 95 m/s Drip Proof IPx1 Isolation CLASS 1	**NOS**	**20.00**	20185	**403700.00**

K.2.3	**Soap dispenser**: Providing and Fixing SS Soap Dispenser of approved make and design of 1 litre liquid soap capacity Including all necessary fittings. Make: Kohler, Euronics, Jaquar.Basic cost-Rs.2,000/- per piece	**NOS**	**30.00**	3446	**103380.00**
K.2.4	**Tissue paper holder:** Providing and Fixing of SS Wall mounted Tissue paper holder of approved make and design ,including all necessary fittings. Make: Euronics or Equivalent. Basic cost-Rs1000/- per piece	**NOS**	**20.00**	2463	**49260.00**
K.2.5	**Mirror:** Providing and Fixing of 5 mm thick bevelled edge mirror of approved make and quality, frame-less mixed with SS studs etc complete in all respects as directed by the Architect. Make-Modi guard/Saint-Gobain or Equivalent				
	1.5mts x 1.0mts	**NOS**	**15.00**	2117	**31755.00**
	3.0mts x 1.0mts	**NOS**	**15.00**	3988	**59820.00**
K.2.6	**Wall Hung WC- Providing and fixing in position JAQUAR wall hung (chair type) white colour consisting of the following including making water and drain connections providing and fixing brackets and making good the walls and floors where required and flush valve and Concealed Cistern**	**NOS**	**80.00**	21169	**1693520.00**
	1) White colour JAQUAR W.C. pan wash down pattern with P or S trap.				
	2. Dual type PVC Cistern with flexible pipe, stop cock, plastic flush pipe, brass ball cock.				
	3) Commander white plastic, solid seat and cover with C.P. brass hinges rubber buffers etc.				
	4) 100 dia connector pipe from P or S trap to be junction of the soil stack or drain.				
	Make- JAQUAR _ VGS-WHT-81953UF_Rimless Wall Hung WC with UF soft close seat cover, Hinges, Accessories set Size:400x580x370 mm				
	Make- JAQUAR _ CIB-WHT-31801011XD_Slim Concealed Cistern Body with drain pipe connection set for Wall Hung WC				
	Make- JAQUAR _ FLV-CHR-1075K_Automatic Flush Valve OR 'Make-JAQUAR _ FLV-1085_Metropole Flush Valve Dual Flow				
K.2.7	**Toilet paper holder:** Supplying and stacking of Toilet Paper holder includes transportation, loading/unloading and storage at site as direction by Engineer in-charge. All fixture and fitting shall be made conforming to relevant standards. It shall be type 304 stainless steel alloy 18-8. Wall flange shall be 12 gauge and tubing shall be 16 gauge. Tubing shall be welded to flat flange with concealed continuous bead. All exposed surfaces shall have satin finish. Flat flange shall	**NOS**	**80.00**	4431	**354480.00**

	have three (3) countersunk mounting holes to accommodate № 10 flat head screws or 1/4" diameter (Ø 6) pan head or button head screws (all by others).				
K.2.8	**2 way bib cock:** Providing and Fixing of 2 way bib cock with wall Melange. complete as directed by the Architect. Basic cost of the 2 way bib cock should be Rs.2,000/- Make- JAQUAR_CHR 583_Health Faucet ABS with 2 Way Bib Cock Brass	**NOS**	**80.00**	2806	**224480.00**
K.2.9	**Health Faucet:** Providing and Fixing of health Faucet with tube, Hook with 1 meter pipe. complete as directed by the Make- JAQUAR_ALD-CHR-565_Hand Shower (Health Faucet) with 1 Meter Long Easy Flex Tube in Chrome Finish & Wall Hook Architect. Basic cost of the Health Faucet should be Rs.1,100/-	**NOS**	**80.00**	2462	**196960.00**
K.2.10	Supply, install, testing and commissioning of 4"chrome plated threaded 15X15 cm cast brass cover, multi inlet adjustable with trap Floor Drain Including, Floor clean out plug, PVC siphon or equivalent and necessary accessories, connections with Mixtures and main drain pipes. As per specifications	**NOS**	**120.00**	6400	**768000.00**
K.2.11	**Sensotronic Urinal** - Supplying and fixing in position White Colour vitreous, flat back urinals size consisting of the following inclusive of making water and drain connections and making good the walls and floor where required including of JAQUAR Make.	**NOS**	**45.00**	16246	**731070.00**
	1) C.P. Brass waste coupling.				
	2) C.P. brass bottle trap with extension piece and wall flange.				
	3) C.P flush pipe with C.P distribution arms and C.P. spreaders for each urinals.				
	4) Hand press operated flush valve				
	Make - JAQUAR_URS-WHT-0704_ Urinal without Sensor Size (mm) 710 x 485 x 300				
K.2.12	**Concealed Urinal sensor:** Supply and installation of sensotronic concealed type flushing valve for urinal complete set with installation box with control cock including all consumable, tools, tackles, labour etc all complete as directed by the Bank. Basic cost-Rs.12,000/- per NOS. 'Make - JAQUAR_SNR-CHR-51097_Sensotronic Sens Flushing Valve for UrinalSensotronic Sensor Flushing Valve for Urinal with Complete Kit (Suitable For Urinal URS-WHT-0704)	**NOS**	**45.00**	16246	**731070.00**
K.2.13	**Shower accessories:**Supplying and Fixing in position chrome Plated shower with all accessories including the Followings :-	**NOS**	**10.00**	9354	**93540.00**
	1) Shower head and shower arm				
	2) Spout				

	3) Concealed stop cock				
K.2.14	**Sink:** Supplying and Fixing single bowl stainless steel sink 18" x 21" –grace big Nirali or equivalent with bottle trap, west coupling, 10 mm dia C.P. connector pipe 450mm long etc. complete.	**NOS**	**5.00**	6886	**34430.00**
K.2.15	**Sink:** Supplying and Fixing stainless steel kitchen sink single bowl Nirali Make with bottle trap, coach screws and brackets (Size 24" x 20" - Grace - Super)	**NOS**	**QRO**	8369	**0.00**
K.2.16	**Sink:** Supplying and Fixing stainless steel kitchen sink single bowl and drain board with bottle trap, coach screws and brackets (Size 391/2" x 20" - Elegance - Medium)	**NOS**	**QRO**	12308	**0.00**
K.2.17	**Double Bowl Sink:** Supplying and Fixing stainless steel kitchen sink double bowl and drain board with bottle trap (2 NOS.), coach screws and brackets (Size 61" x 20" - Graceful Elegance - Big)	**NOS**	**QRO**	16246	**0.00**
K.2.18	Supplying and Fixing Swan Neck Sink tap with swinging spout (table/counter mounted) including connector pipes etc, complete.	**NOS**	**10.00**	3446	**34460.00**
K.2.19	Supplying and Fixing C.P brass sink tap with swinging spout including all accessories etc, complete.	**NOS**	**QRO**	2511	**0.00**
K.2.20	Supplying and Fixing Sink Mixer, 1 Hole with swinging spout (table/counter mounted model) with 450 mm long copper pipes including all accessories etc, complete.	**NOS**	**QRO**	4431	**0.00**
K.2.21	Supplying and Fixing in position, hot water storage heater Racold / Sphere hot make including making all inlet and outlet connections, Fixing brackets, coach screws, angle valves, connector pipes (hot and cold) etc. complete	**NOS**			**0.00**
i	25 litres (2Kw)		**10.00**	14769	**147690.00**
ii	100 litres (3 Kw)		**QRO**	34500	**0.00**
	TOTAL OF SECTION -K (PART 2) : SANITARY FIXTURES				**62,18,855.00**

(13) SECTION -L: CEILINGS & PARTITIONS

SR. NO	DESCRIPTION OF WORKS	UNIT	TOTAL QUANTITY	RATE INR	AMOUNT INR
L.1	**Specification for Suspended Calcium silicate ceiling - heavy duty** Providing and fixing suspended calcium silicate false ceiling which includes fixing of G.I. perimeter channel of size 0.55 mm thick (having one flange of 20 mm and another flange of 30 mm and a web of 27mm) along with perimeter of ceiling, screw fixed to brick wall / partition with the help of nylon sleeves and screws at 610 mm centre to centre. Then suspending GI Intermediate channels of size 45 mm (0.9 mm thick with two flange of 15mm each) from the soffit at 1220mm centres with ceiling angle of width 25mm x 10 mm x 0.55mm thick fixed to soffit with G.I. cleat and steel expansion fasteners. Ceiling section of 0.55mm thickness having knurled wed of 51.5mm and two flanges of 26mm each with lips of 10.5 mm are then fixed to the intermediate channel with the help of connecting clips and in direction perpendicular to the intermediate channel at 610 mm centres. 12.5mm tapered edge calcium silicate board (conforming to IS - 2095-1982) is then fixed using tongue & groove joint. Screw fixing to done mechanically with drilling machine with suitable attachment. The tapered edges of the Calcium Silicate boards are to be jointed and finished so as to have a flush look which includes filling and finishing with jointing compound, paper tape etc complete as per the recommended practices of India Gypsum.	**SQ.M**	**2675.00**	1,700.00	**45,47,500.00**
	Note: 1.Steps area will be measured and will be included with regular false ceiling area. 2.Supports for the false ceiling where the true ceiling height is more than 5.0 metres shall be paid extra on actuals 3. Rate to include all kinds of profiles and cut outs required for light fixtures, Speakers, Smoke detector, trap doors and AC grills in the ceiling.				
L.2	**Suspended Gypsum grid ceiling** Providing and fixing in true horizontal level 600 mm. X 600 mm false ceiling tiles at all heights as specified in the dwg. The tiles to be of approved texture, design and pattern suspended on interlocking T-grid system of hot dipped all round galvanized iron section of 0.33 mm thickness comprising of main T runners of 15x32 mm of The exposed surface to include pre-coated capping.	**SQ.M**	**QRO**	1,600.00	**0.00**

	The main tee of size 24 x 32 mm to have 0.27 mm gauge at every 1200 mm centre to centre maximum Length 3000 mm, cross T of size 15x32mm of length 1200 mm and secondary intermediate cross T of size 15x32 mm of length 600 mm to form grid module of size 600x600 mm suspended from ceiling using galvanized mild steel item 50 mm long 8mm outer diameter M-6 dash fasteners, 6 mm diameter fully threaded hanger rod upto 1000 mm length and L-shape level adjuster of size 85x25x2 mm, spaced at 1200 mm centre to centre along main 'T'. The system should rest on periphery walls /partitions with the help of GI perimeter wall angle of size 24x24X3000 mm made of 0.40 mm thick sheet, to be fixed to the wall with help of plastic rawl plug at 450 mm centre to centre & 40 mm long dry wall S.S. screws. The exposed bottom portion of all T-sections used in false ceiling support system shall be prepainted with polyester baked paint, for all heights. The work shall be carried out as per specifications, drawings and as per directions of the engineer-in-charge. Make: Gyproc/ Armstrong or equivalent. Note: 1. The tiles should have Humidity Resistance (RH) of 99%, Light Reflectance > 85%, Thermal Conductivity k = 0.052 - 0.057 w/m K 2. Fire Performance as per (BS 476 pt - 6 &7)in true horizontal level 3. NRC 0.55 to 0.6 4. Fine Fissured tiles with 3 coats of white paint on surface to be considered. 5. 12 mm thick beveled tegular calcium silicate false ceiling tile				
L.2a	Same as above for Laminated Gypsum (LaGyp/Boral) grid ceiling.	**SQ.M**	**QRO**	1950	**0.00**
L.3	**ALUMINUM BAFFLE CEILING:** Providing & fixing Vertical Linear Baffle Ceiling made out of Aluminum Extrusions made of Aluminum alloy grade 6063. The baffle blade shall be in size of 100x 25 x3000mm/150x 25 x3000mm in powder coated finish of approved shade or wood grain finish. The baffle blade shall be suspended using C-channel/ Slotted U-profile powder coated to black color/specified colour as oer design at an C/C spacing of 150mm or as specified in dwg. Make: Armstrong of equivalent.				
L.4	Providing and fixing Hilux **Calcium Silicate Board Partition** of 50mm thickness including supporting system comprising of 50mm x 25mm Aluminium Box Sections at 600mm c/c, both ways, horizontally and vertically	**SQ.M**	**50.00**	2,950.00	**147500.00**

	on column and wall. The vertical members should touch the ceiling with horizontal ceiling channel at slab/ beam bottom. The rate should also include necessary strengthening with studs / tracks or channels at doors and other openings. This framing would be covered by 8mm thick and moisture resistant gypsum board/ calcium silicate board by India Gypsum or equivalent on both sides of the studs. The gypsum board joints to be taped and filled with joint filling compound of India Gypsum or equivalent. The entire gypsum board surface to be finished with Birla cement wall putty or equivalent to match the finish on adjoining walls. Provide acoustical sealant at the joint between structure and gypsum board. The rate to include all accessories like angles, clips, screws etc. to secure the studs with tracks and attach gypsum board to steel studs. Length X Height upto false ceiling will be measured for payment as directed by Client/ consultant shall be provided wherever required.				
L.4a	Extra for installation of Minerwool/Rockwool between Hilux Boards for Acoustic Treatment.	**SQ.M**	**QRO**	6550	**0.00**
L.4b	Extra for Providing 10-12 mm thick marine ply of suitable size for fixing TV/ Overhead Cabinets or other suspended items on the wall one side to be finished with 2 mm thick Laminate. Over all assembly should be flushed with total wall thickness. Rate to include additional framework required for installation of required equipment.	**SQ.M**	**QRO**	4500	**0.00**
L.4c	Skirting for Calcium Silicate partitions - Extra for fixing 12 mm thick ply for 75 mm high skirting at the bottom using suitable adhesive for fixing of tiles. Skirting should flush with overall wall thickness.	**SQ.M**	**QRO**	6500	**0.00**
L.5	**12 MM THK INTERNAL FRAMELESS GLAZED PARTITIONS (Make: Dorma/Hafele/Hettich or equivalent)** Partition using 12mm Toughened Glass with all required fittings and fixtures, locking systems etc. The Fixing is to be done using metal channels at the floor, ceiling, and walls to effectively dampen sound transmission without impeding sightlines. This is to be acoustically sealed using silicon gaskets, The glazing is to be fixed between finished floor level & 0.5 mt. below ceiling. Manufacturer to supply all the necessary clips, seals and fixing accessories for the system. All edges of freestanding glass to be edge polish.	**SQ.M**	**50.00**	7,850.00	**392500.00**
L.6	**SINGLE GLAZED TOUGHENED GLASS PARTITIONS WITH -40-45mm FRAME PROFILES** (Hardware make: Dorma/ Geze or Equivalent, Glass: Saint Gobain or equivalent)	**SQ.M**	**QRO**	9500	**0.00**

	Providing & Fixing of Glass Partition System of 40-45mm frame profile i.e., Single glazed Plain Modular system consist of Aluminium section of 25*40*2mm thick. All sections duly anodised up to 15-20 microns with 6060-T6 grade and required accessories ie glass to glass aluminium I sections, T section & 90 degree sections & Glass packing to adjust the floor level. Ceiling profile, Floor profile and wall profile are 25 mm visible face and 40 mm wide with 10mm toughen glass & insertion of Thermoplastic gasket to adhere the glass firm & airtight.The sound reduction Value is from 32 to 36 Db.				
L.6a	Supply & Installation of Single Leaf Door System with Door Frames including 40-45mm frame profiles to match with the partition system. **Size of door: 900 x 2200.** Supply of 10mm thick Toughened Glass to be inclusive in the rate. All the below mentioned hardware to also be inclsive in the rate Hardware of Door closer, hinges for Glass Door, H Type Pull Handle -25mm Dia X 600mm Length of SS 304 Grade and center lock at bottom of door.	**NOS**	**QRO**	30500	**0.00**
L.6b	Same as L.6a by for Double Leaf Door System of **Size: 1500 x 2200.**	**NOS**	**QRO**	45500	**0.00**
L.7	**Acoustic Sliding Folding Partition:** Supply, fabrication and installing at site of Acoustic Sliding Folding Partition wall with minimum 50 DB noise reduction with aluminum top track – for holding the partition panels; with necessary rectangular sandwich plates as required. The system to have special extruded aluminum profiles – on both ends and horizontal stiffeners so as to form a rigid framework. The same to be duly fitted with extending rubber gaskets (seal) at the top & at the bottom level; filling the framework with fiber glass. Panels to be supplied in a FABRIC FINISHED CONDITION. The colour and sample of the finishing fabric to be approved by Client/Architect Rate to be inclusive of supply & installation of the system with Acousting testing complete - certificate of the same to be made available to client.	**SQ.M**	**QRO**	44500	**0.00**
	TOILET PARTITIONS				
L.8	Floor Mounted Toilet Cubicle System (L-shape) made of High Pressure Laminate, 12-15 mm thk. Standard Dimension of 1950 mm Height x 1400 mm Width x 1900 mm Depth, Which Includes a 750mm Width x 1800 mm Height Door. The cubicles to be mounted on floor without any gap from the finished floor level. Item to include: a) SS Top Rail b) SS Hinges – Gravity to close	**NOS**	**80.00**	40,500.00	**3240000.00**

	c) SS Privacy Thumb turn latch with Occupancy Indicator d) SS Coat Hook e) SS Door Knob f) SS Adjustable leg i) Rubber Door Stopper Lining j) SS Screws & Wall Plug. k) SS Foot Latch Approved Make : Merino / Greenlam or Equivalent				
	TOTAL OF SECTION -L : CEILINGS & PARTITIONS				**83,27,500.00**

(14) SECTION -M: MISCELLANEOUS

SR. NO	DESCRIPTION OF WORKS	UNIT	TOTAL QUANTITY	RATE INR	AMOUNT INR
M.1	Supplying ,Fabrication and erection of **SS handrails** of tubular materials with necessary cleats and support plate at all levels including elbow bends, sockets all required fasteners and 1 coat of Imoder primer. All flush finished with no sharp corners				
	Top rail/Verticals @ 1.0m c/c - 50 mm dia /2 mm thk,				
	Middle Rail - 2 no's - 20mm dia / 1.50mm thk	**RM**	**150.00**	3,800.00	**5,70,000.00**
M.2	Supplying ,Fabrication and erection of **MS handrails** of tubular materials with necessary cleats and support plate at all levels including elbow bends, sockets all required fasteners and 1 coat of Imoder primer. All flush finished with no sharp corners				
	Top rail/Verticals @ 1.0m c/c - 50mm dia /2 mm thk, Middle Rail - 2 no's - 20mm dia / 1.50mm thk				
i	For Staircase	**RM**	**150.00**	2,850.00	**4,27,500.00**
ii	For Mezzanine/Platforms	**RM**	**QRO**	2,850.00	**0.00**
M.3	**Specification For Aluminium Composite Panel cladding.**				
	Providing and fixing of aluminium composite panel (PVDF) with frame work made out of 38 mm x 38 mm x 2.5 mm thick "L" angle with MS "L" brackets, fasteners, bolts, screws etc with necessary accessories like cleats, rivets, weather sealant, baker rod etc and with 4 mm thick (0.50 + 3.00 + 0.50 - exterior) aluminium composite panel of APPROVED MAKE(ALCO BOND / ALCO PANEL) of approved shade.	**SQ.M**	**QRO**	5,500.00	**0.00**

M.4	**Specification For Structural Glazing**				
	Cost of glass including cutting, edge grinding, wasteges, stacking, carrying to heights and fixing in appropriate locations is to be included in the quoted rate as per the details for all items. Note: Mode of Measurement for façade elements shall be only visible elevation areas i.e.. Module centre to centre,End to End for RCC/Masonry openings .All flashings @ Jamb level, Cill etc of ACP/Stone/Aluminium sheet/Any metal panel along with All soffits shall not be paid extra as they are considered part of the system. Item Rate shall include the following:Design, engineer, furnish, fabricate, package, deliver (to jobsite) and install: Structural Glazing System comprising of extruded Vertical Aluminium mullions and Horizontal transom Powder Coated finish of 40 Microns (Colour as specified by architects) for all the visible aluminium Section. The mullions and transoms are installed on MS brackets along with EPDM separators. The brackets (Plates) are to be secured to RCC slab/beams with Anchor Bolts.The framing members provide no structural support for the building and the curtain wall is deemed to be a lightweight façade which is intended to separate the external from the internal of the building.				
	This system shall have visible silicone grooves filled in vertical and horizontal grooves.Gaskets are employed as water barrier between the composite mullion, head and sill junctions as indicated in the drawings. These gaskets shall be EPDM and are to be designed to provide a water tight system.				
a	The Vision Panel shall be Single glazed with 12 mm Monolothic (HS) Glass Unit.	**SQ.M**	**50.00**	9,350.00	**4,67,500.00**
b	The Vision Panel shall be Double glazed 24 MM (6+12+6) Insulated (HS)Glass Unit.	**SQ.M**	**50.00**	12,000.00	**6,00,000.00**
c	Extra for making Top hung openable windows using heavy duty friction stay as indicated in the drawings. Complete with Hardware and accessories	**SQ.M**	**QRO**	5,000.00	**0.00**
M.5	**Façade Louvres:** Supply and installation of powder coated extruded aluminium louvres with mimimum 60% of free area,complete with metallic framework and fixing accessories to be fixed on external walls.	**SQ.M**	**QRO**	6,500.00	**0.00**
M.6	**Façade-Brick Texture Tile Cladding:** Exterior stone cladding panels anchored to backup structure with joints filled with mortar and sealants.	**SQ.M**	**QRO**	650.00	**0.00**
M.7 a	**Films - Frosted :** Providing & fixing frosted film (of 3M or equivalent make) electronically /	**SQ.M**	**25.00**	1,250.00	**31,250.00**

	computer plotter cut applied on glass partition in pattern as per drawings complete (Basic Rate Rs. 75/- per sqft)				
M.7 b	**Films - Clear :** Providing & fixing clear film (of llumar or equivalent make) applied on glass partition / windows. complete (Basic Rate Rs. 50/- per sqft)	**SQ.M**	**QRO**	1,050.00	**0.00**
M.8	**Roller Blinds:** Supplying & fixing Roller blinds of approved shade and type including all fittings of approved quality complete. (Pfifer/Hunter Douglas make.)	**SQ.M**	**QRO**	4,050.00	**0.00**
a	Same as above but using Blackout Blinds.	**SQ.M**	**QRO**	5,500.00	**0.00**
M.9	**Entry Gate:** Providing and fixing in position MS gate for compound wall at entrance consisting of m.s. hollow sections, vertical bracers , m.s. flats , m.s.plates, including all fittings ,steel rollers, guide plates etc. fixed in plain cement concrete M15 with m.s. brackets , cleats, stoppers, bearings , latch & locking arrangements, angle iron, door stoppers etc. embedded in concrete , tower bolts , G.I. pipe pieces, M.S. aldrops with necessary cutting , welding , wastage etc.with a coat of primer followed by three coats of synthetic enamel paint of approved colour etc. complete all as per shop drawing provided by vendors.work also includes Providing, fabricating and erecting mechanicaly operated sliding gate of size as per below, consisting of 75 x75 MS pipe all arround, 38 x 38 MS pipe (vertical) @ 750mm c/c, 25 x 25 MS pipe (horizontal) @ 150mm c/c including providing and fixing of perforated MS panels 750mm x 150mm and semitranperant polycarbonate panels 750mm x 150mm in alternate bays, bottom rail, supporting frame, all fixures and locking arrangement as per detailed drawing etc. all complete.				
i	Automatic motorised control gate (Including supply & Installation of motor) **1)7500mm (W) x1800mm (H) Material Gate +1500(W) wicket gate**	**SQ.M**	**4.00**	50,000.00	**2,00,000.00**
ii	Manually operated **1)7500mm (W) x1800mm (H) Material Gate +1500(W) wicket gate**	**SQ.M**	**QRO**	45,000.00	**0.00**
M.10	**Supply and fixing of Insect killer** (PCI Make, Sticky type Fly Catcher with Sleeved tubes, Model Spider or equivalent)	**NOS.**	**QRO**	9,500.00	**0.00**
M.11	**Supply and Fixing of Air Curtain - Wall Mounted** Galvanised, Corrosion resistant, Heavy Duty steel construction, Epoxy Enamel paint finish, Motors - Custom, Direct drive energy efficient moters 120/220V 50/60Hz, Two speed Hi/Low Switch, Air Curtain should be interlinked with the door operation. Scope inclusive of Limit Switch. Rates should be including supply and installation. (Make Russel/ Technocrats/ Euronics).	**NOS.**	**QRO**	60,500.00	**0.00**

M.12	**Magnetic Marker Board :** Supply & installation of magnetic marker board	**SQ.M**	**QRO**	1,650.00	**0.00**
M.13	**Soft Board :** Supply & install soft boards (Basic rate of fabric Rs. 500/ per meter)	**SQ.M**	**QRO**	4,500.00	**0.00**
M.14	**SS Corner Guards :** Supply & install SS corner guards 75mm x 75mm - 3mm thick. (Upto 900mm height)	**RM**	**QRO**	3,500.00	**0.00**
M.15	**Acoustic Panel on Walls :** Supply & install acoustic panel on walls finished in fabric (Basic rate of fabric Rs. 700/- per meter.) Optra acoustic panels by Armstrong or equivalent, Thickness: 25mm.	**SQ.M**	**QRO**	2,000.00	**0.00**
M.16	Supply and Indtallation of **Projector System** comprising of following:	**NOS**	**QRO**	2,50,000.00	**0.00**
a	LCD Projector - 3200 Lumens, WUXGA resl. 15000:1 Contrast, 1 HDMI Input, 4:3 aspect Ratio, Epson - EB - X31				
b	Ceiling Projector Mounting Kit				
c	Motorised Projector Screen - 8' x 8' - 120"Dia.				
d	Cables(VGA,HDMI)- 15 Mtr. Each, Face Plates - VGA, HDMI, Trunking and Cabling from Table to Ceiling. Costs should be inclusive of Testing Commissioing of the complete Projector System				
M.17	LED smart TV - LG 108 cms (43 inches) 4K Ultra HD Smart LED TV 43UM7780PTA or equivalent with Wall Mounting Stand. Cables(HDMI)- 15 Mtr. Each, Face Plates - HDMI, Trunking and Cabling from Table to TV. Costs should be inclusive of Testing Commissioing of the complete LED smart TV System	**NOS**	**QRO**	75,000.00	**0.00**
M.17a	Same as above but for 32 inches LED TV	**NOS**	**QRO**	1,25,000.00	**0.00**
M.18	Providing **Under Counter Cabinet** in Washrooms and Pantry with 1 central shelf with Openable doors with SS Hinges and Other Hardware and Concealed Handles made of 10-12mm thk marine ply and finished with Approved Laminate Finish (Laminate make: Merino/ Greenlam/ Viva)				
a	Size 1: 1500x600x750mm	**LS**	**QRO**	25,000.00	**0.00**
b	Size 2: 3000x600x750mm	**LS**	**QRO**	47,500.00	**0.00**
c	Size 3: 3500x600x750mm	**LS**	**QRO**	65,500.00	**0.00**

M.19	Providing and applying of approved Wallpaper at specified areas as per drawing. The rate should include checking the surface for eveness, moisture, surface preparattion, application of Wallpaper etc. to the satisfaction of the EIC.	**SQ.M**	**QRO**	1,500.00	**0.00**
	TOTAL OF SECTION -M : MISCELEANEOUS WORKS.				**22,96,250.00**

(15) SECTION - P: PILE WORKS

SR. NO	DESCRIPTION OF WORKS	UNIT	TOTAL QUANTITY	RATE INR	AMOUNT INR
N.1	**Setting up of vertical bore pile equipment** to locate pile, using **mechanical** driven by **rotary drill method** in all sorts of Soil viz. Sand, Clay, Soft and hard murrum etc. including all necessary tools, tackles, equipment, man power and supervision, including bentonite slurry and disposal off slurry after use in a manner prescribed so as not to contaminate the soil/ground water, including carting of debris/soil, dewatering, cleaning, unloading, stacking, spreading leveling, compacting / consolidated surplus material within 500 mtr lead as directed. (Line out will be in scope the pile contractor) (Depth of pile will be measured from cut off level) (Approx. Depth of pile - 18 to 24 mtr.)				
a	For 450mm dia.	**RM**	**6060**	1000	**60,60,000.00**
b	For 600mm dia.	**RM**	**26900**	1200	**3,22,80,000.00**
C	For 750mm dia.	**RM**	**1000**	1550	**15,50,000.00**
N.2	**Permanent MS liner:** Supplying , Providing & Placing in position **Permanent 6mm thk. MS liner casing** pipe to retain unstable strata of bore holes up to required depth.				
a	For 450mm dia.	**RM**	**2424**	250	**6,06,000.00**
b	For 600mm dia.	**RM**	**8690**	280	**24,33,200.00**
C	For 750mm dia.	**RM**	**280**	450	**1,26,000.00**
N.3	**Temporary MS liner:** Supplying , Providing, Placing in position & Removing **Temporary MS liner casing** pipe to retain unstable strata of bore holes up to required depth.				
a	For 450mm dia.	**RM**	**QRO**	300	**-**
b	For 600mm dia.	**RM**	**QRO**	320	**-**
c	For 750mm dia.	**RM**	**QRO**	600	**-**
N.4	**Providing M30 grade concrete with minimum cement content of 400 Kg/cu.m** using 20 mm & down-size graded machine crushed stone aggregate	**CUM**	**9190**	6200	**5,69,78,000.00**

	& Placing Reinforced Concrete in **piles by Tremie arrangement** adding admixtures & plasticizer of approved make, muck disposal, curing, excavation, disposal of soil, chipping / breaking of pile up to cut off level (approx. 1.5mtr.), etc. all complete. **(Reinforcements shall be measured separately). Pile shall be measured up to cut off level. Contractor may use RMC or Site mix**				
N.5	Providing, Cutting, Straightening, Bending, Placing High Yield Strength Deformed bars **of grade Fe500 D CRS conforming to IS 1786** in position by proper handling, cleaning, tack welding to lap joints of longitudinal bars, assembling, binding with soft 16 gauge annealed MS black iron binding wire including loading/unloading, wastage, transport, etc. all complete.	**MT**	**695**	81500	**5,66,42,500.00**
N.6	**Initial Test on Piles**				
N.6.1	**Carrying out initial vertical load test** on **single test pile** conforming to IS 2911-part iv for a test load up to **2.5 times the safe load** including all necessary arrangements such as jacks, equipment, machinery, measuring devices, structural frame work for platform and kentledge/counter weights, recording instruments, test report in specified format, loading, excavation, dewatering, including chipping / dismantling of concrete, surface preparation etc. all complete as required **(Providing and installing test piles shall be measured and paid separately under relevant item**) Test piles will remain in position till the completion of the project.				
a	For 450mm dia.	**NOS**	**1.00**	115000	**1,15,000.00**
b	For 600mm dia.	**NOS**	**1.00**	200000	**2,00,000.00**
c	For 750mm dia.	**NOS**	**1.00**	275000	**2,75,000.00**
N.6.2	**Carrying out Dynamic test on test piles** confirming to IS 9716 as directed by the Engineer/Client for a test load up to **2.5 times the safe load** including all necessary arrangements such as jacks, equipment, machinery, measuring devices, structural frame work for platform and kentledge/counter weights, recording instruments, test report in specified format, loading, excavation, dewatering, including chipping/dismantling of concrete, surface preparation etc. all complete as required **(providing and installing test piles shall be measured and paid separately)** for pile with dia. as below. Test piles will remain in position till the completion of the project.				
a	For 450mm dia.	**NOS**	**1.00**	83025	**83,025.00**
b	For 600mm dia.	**NOS**	**1.00**	110700	**1,10,700.00**

c	For 750mm dia.	**NOS**	**1.00**	138375	**1,38,375.00**
N.6.3	**Carrying out initial lateral load test** on two/group **test piles** conforming to IS 2911-part iv for a test load up to **2.5 times the safe load** including all necessary arrangements such as jacks, equipment, machinery, measuring devices, structural frame work for platform and kentledge/counterweights, recording instruments, test report in specified format, loading, excavation, dewatering, including chipping/dismantling of concrete, surface preparation etc. all complete as required **(providing and installing test piles shall be measured and paid separately**.) Test piles will remain in position till the completion of the project.				
a	For 450mm dia.	**NOS**	**1.00**	80000	**80,000.00**
b	For 600mm dia.	**NOS**	**1.00**	90000	**90,000.00**
c	For 750mm dia.	**NOS**	**1.00**	100000	**1,00,000.00**
N.6.4	**Carrying out initial Pull Out test** on **single test pile** conforming to IS 2911-part iv for a test load up to **2 times the safe load** including all necessary arrangements such as jacks, equipment, machinery, measuring devices, structural frame work for platform and kentledge/counter weights, recording instruments, test report in specified format, loading, excavation, dewatering, including chipping/dismantling of concrete, surface preparation etc. all complete as required **(providing and installing test piles shall be measured and paid separately)** for pile with dia. as below. Test piles will remain in position till the completion of the project.				
a	For 450mm dia.	**NOS**	**1.00**	110700	**1,10,700.00**
b	For 600mm dia.	**NOS**	**1.00**	147600	**1,47,600.00**
c	For 750mm dia.	**NOS**	**1.00**	184500	**1,84,500.00**
N.7	**Routing Test On pile**				
N.7.1	**Carrying out routine vertical load test** on **single working pile** conforming to IS 2911-part iv for a **test load of 1.5 times** the safe load including all necessary arrangements such as jacks, equipment, machinery, measuring devices, structural frame work for platform and kentledge/counterweights, recording instruments, test report in specified format, loading, excavation, dewatering, chipping/dismantling of concrete, surface preparation etc. all complete as required for pile having diameter of :				
a	For 450mm dia.	**NOS**	**2.00**	83025	**1,66,050.00**
b	For 600mm dia.	**NOS**	**2.00**	110700	**2,21,400.00**

c	For 750mm dia.	**NOS**	**2.00**	138375	**2,76,750.00**
N.7.2	**Carrying out routine lateral load test** on two/group w**orking pile** conforming to IS 2911-part iv for a **test load of 1.5 times** the safe load including all necessary arrangements such as jacks, equipment, machinery, measuring devices, structural frame work for platform and kentledge/counterweights, recording instruments, test report in specified format, loading, excavation, dewatering, chipping/dismantling of concrete, surface preparation etc. all complete as required for pile having diameter of :				
a	For 450mm dia.	**NOS**	**2.00**	68500	**1,37,000.00**
b	For 600mm dia.	**NOS**	**2.00**	115500	**2,31,000.00**
c	For 750mm dia.	**NOS**	**2.00**	130000	**2,60,000.00**
N.7.3	**Carrying out routine Pull Out test** on **single working pile** conforming to IS 2911-part iv for a test load of 1.5 times the safe load including all necessary arrangements such as jacks, equipment, machinery, measuring devices, structural frame work for platform and kentledge/counterweights, recording instruments, test report in specified format, loading, excavation, dewatering, chipping/dismantling of concrete, surface preparation etc. all complete as required for pile having diameter of :				
a	For 450mm dia.	**NOS**	**2.00**	67500	**1,35,000.00**
b	For 600mm dia.	**NOS**	**2.00**	90000	**1,80,000.00**
c	For 750mm dia.	**NOS**	**2.00**	112500	**2,25,000.00**
N.8	**Carrying out NDT / Integrity test on Test piles & Working piles** conforming to IS 14893/ASTM D 5882 as directed by the Engineer/Owner including excavation, dewatering, all plant & equipment, machinery, measuring device, recording instruments, chipping/dismantling of concrete, surface preparation etc. all complete.	**NOS**	**1820.00**	900	**16,38,000.00**
N.9	**Setting up of Auger, under remear, for boring under-remead piles manually** in all sorts of Soil viz. Sand, Clay, Soft soil and murrum etc. including all necessary tools, tackles, man power and supervision, **including forming bulb of 2.5 times pile diameter comfirming to IS 2911** carting of debris / soil, dewatering, cleaning, unloading, stacking, spreading leveling, compacting / consolidated surplus material within 500 mtr lead as directed. (Line out will be in scope the pile contractor) **(Depth of pile will be measured from cut off length)**				
a	300 mm dia 6.0 m long single bulb piles confirming to IS 2911	**Nos**	**600.00**	2100	**12,60,000.00**

b	450 mm dia 6.0 m long single bulb piles confirming to IS 2911	**Nos**	**30.00**	3100	**93,000.00**
N.10	**Providing M25 grade concrete** using 20 mm & down-size graded machine crushed stone aggregate & Placing Reinforced Concrete in **piles by funnel or Tremie arrangement** adding admixtures & plasticizer of approved make, curing, chipping / breaking of pile up to cut off level (approx. 1.0 mtr.), etc. all complete. **(Reinforcements shall be measured separately). Pile shall be measured up to cut off level. Contractor may use RMC or Site mix**	**Cu.m**	**360**	5800	**20,88,000.00**
N.11	Providing, Cutting, Straightening, Bending, Placing High Yield Strength Deformed bars **of grade Fe500 conforming to IS 1786** in position in under-remead piles by proper handling, cleaning, tack welding to lap joints of longitudinal bars, assembling, binding with soft 16 gauge annealed MS black iron binding wire including loading / unloading, wastage, transport, etc. all complete.	**MT**	**30**	77500	**23,25,000.00**
N.12	**Stone Column**				
	Mobilisation of all plant, equipment etc. for installation of rammed stone column ground improvement works and demobilisation etc. complete as per specification including carting away of bored muck as directed.				
	Providing and installing 600mm dia. rammed stone columns, (500mm rammed to 600mm dia) of 7m to 9m length as measured from the specified finished or cut off level with tip level as directed as per specification with minimum stipulated net consumption 140 % of the nominal volume in compacted condition. Item includes filling empty bore with murrum and compacting the same. (Approx No. of stone columns - 350)	**RM**	**QRO**	15000	**-**
	Conducting routine single stone column load test with 30 T load transfer arrangements as per IS 15284 (Part 1)	**NOS**	**QRO**	76800	**-**
	Conducting group load test on 4 stone columns with maximum load of 400T placed on RCC pad of 4m *4m sq including providing the RCC pad	**NOS**	**QRO**	614400	**-**
	Conducting a set of SPT tests @ 1 m c/c and preserving samples by executing boreholes (1 set includes 1 BH of 10m length below GL and 9 SPT, cost of mobilization, boring & SPT included.)	**NOS**	**QRO**	175000	**-**
	TOTAL OF SECTION-P PILE DRIVING WORKS.				**16,75,46,800.00**

(16) SECTION-O: COMPOUND WALL

SR.NO	DESCRIPTION OF WORKS	UNIT	TOTAL QUANTITY	RATE INR	AMOUNT INR
O.1	Earth work excavation in foundations , plinth beams,column footings, rafts,trenches, sumps, drains, etc.in all types of soils including shoring, strutting, dewatering the subsoil water and pumping the same atleast 100 m away from the excavations including backfilling around foundations, basement and plinth with selected excavated earth by Engineer in charge in 200 mm thick layers, watering, compacting with plate vibrators or Rollers to give 95% proctor density in 200 mm thk layers to give 95% proctor density at OMC as specified and as directed, and disposing the surplus earth with an initial lead of 100 m etc. complete.				
	a. NGL to 1.50 m lvl	**CUM**	**400**	140.00	**56,000.00**
	b. 1.50 m lvl to 3.0 m lvl	**CUM**	**200**	185.00	**37,000.00**
O.2	Providing 230mm thick compacted thickness soling using hard stone metal of approved quality from approved quarry, spreading & laying of 75 mm to 100 mm size hard stone metal, all neatly hand packed so as to fill all voids with 40 mm metal & gravel and rolling with 10 ton power roller , to make up for settlements and roll again to given lines and levels etc., complete .	**SQ.M**	**1750**	500.00	**8,75,000.00**
O.3	Providing & Fixing of Pre-cast Concrete wall , including of Horizontal Planks/ Panels & Vertical Post or columns of min.M20 grade. Horizontal Plank consist of 6 ft. length, 1ft high, 2 inch depth & RCC preacst col of 6 inch thickness. The height of wall to be 6 feet above Ground level , with excavation & backfilling, soling in soft soils , fixing of Post in ground by providing block foundation, fixing the panels in slot of post as per specification.	**RM**	**QRO**	3,850.00	**-**
O.4	Providing Decorative CI Grill / Wall railings for compound wall as per design of Architect. Works including painting , anchoring in Brick wall , rcc column , fixtures, providing insert plates, anchoring all accessories as per drg.				
	a) Fixing of 2ft x 2ft grill / railing	**RM**	**QRO**	1,650.00	**-**
	b) Fixing of 2ft x 3 ft grill / railing	**RM**	**QRO**	1,950.00	**-**
O.5	Providing, machine mixing and laying plain cement concrete (PCC) in foundations for columns footing, bases of walls, plinths, rafts, plinth beams, floor slabs, plinth protection to make up level etc : complete at all heights, and depths as per the drawing and to the satisfaction of the EIC. Size of aggregate to be 20 mm or as directed by the EIC. (including Shuttering work)				
	M10	**CUM**	**130**	4,520.00	**5,87,600.00**

O.6	Providing and laying Site Mix / RMC **Concrete of specified grade** with approved design mix, using approved admixtures; vibrating, curing, hacking to the concrete surface ,scaffolding as required, dewatering by pumping / bailing out water, cleaning, preparing surfaces, etc., for footing, plinth beam, retaining wall, pedestals, columns, mullions, intermidate beams, coping beams at any level, location all complete to the satisfaction of the EIC.				
a	M25	**CUM**	**1840**	5,650.00	**1,03,96,000.00**
O.7	**Providing & erecting rigid form work** for retaining compound wall foundation pedestals, column plinth beam coping etc. with necessary supports, bracings, stays, etc. keeping in position during concreting as directed & as specified including removal of the same, & shifting it at proper location, etc. all inclusive.	**Sq.m**	**4440**	625.00	**27,75,000.00**
O.8	Supplying, Providing, Straightening, cutting, hooking, bending & placing in position as per drawings and details, including cost of annealed GI binding wire of 18 swag, high strength ribbed TMT reinforcement bar conforming to IS 1786 for all RCC components such as raft, foundations, columns, retaining walls, pedestals, beams, etc. including transport loading, unloading, shifting as and when required, all complete as specified and as directed for sub structures & superstructures at any height and at all levels.				
a	High yield strength ribbed TMT Reinforcement bars, conforming to IS: 1786. (Grade Fe 500)	**MT**	**150**	77,500.00	**1,16,25,000.00**
O.9	Providing and laying first class brick masonary 230 mm thk or more in cm 1:5 with bricks having crushing strength of 50kg/cm2 using locally available good quality approved table moulded chamber burnt stock bricks of approved quality for all levels including raking the joings, curing , scaffolding etc complete. Patli should be cast at 1.0 m interval for respective heights.				
	In plinth & superstructure at all levels of compound wall.	**SQ.M**	**3200**	1,450.00	**46,40,000.00**
O.10	Providing and applying sand faced plaster in two layers undercoat 12 mm thick in cement mortar 1:5 using coarse sand and 8 mm thick top layer in cement mortar 1:3 using fine sand to external/internal surface at all levels including surface preparation, staging, scaffolding, roughening, curing etc., complete as per specification for:				
	a) 20 mm thick	**SQ.M**	**3200**	450.00	**14,40,000.00**
O.11	Providing, Fabricating & Fixing in position MS Angle 50X50X6 in 'Y' shape for fencing on the top of compound wall as shown in the drawing & directed	**MT**	**20**	46,000.00	**9,20,000.00**

	by EIC at site, etc. complete. Only steel will be free issue (supplied by client, civil conctractor to procure the same from stockyard)				
O.12	Supplying and fixing barbed wire fencing using 12 gauge GI twisted wire tied to the MS Angle(ISA 50 X 50 x 6) using 16 gauge binding wire @ required interval with 14swg **7 point barb point** as shown in drawing or directed by EIC and same with two cross diagonals MS Angle including painting of the barb wire with silver oil base colour etc., complete. Structural steel is supplied by client)	**RM**	**1750**	450.00	**7,87,500.00**
O.13	Providing & fixing 150 diameter PVC pipe (or equivalent) as weep hole , 2 no.s in each bay of Compound wall panel, with wire mesh or screening mesh as protection from both sides. All complete as shown in drawing.	**NOS.**	**1750**	550.00	**9,62,500.00**
O.14	Providing & fixing of stone pitching at required slope all around the compound wall backfilling on the external side of plot with natural stones quarried laid flat or laid with projections boulders including watering, compacting as specified and as directed by the Consultants ,and finish to given level etc complete.protection to the embankment slope against erosion. The stone layers should consist of thickness 150mm-200mm with cement grout in the gaps & voids.	**Sq.m**	**5560**	660.00	**36,69,600.00**
O.15	Prepare the surfaces of all external wall at all heights and apply 2 coats of cement paint of approved make and shade including a coat of primer, curing etc including scaffolding at required level .complete	**SQ.M**	**3550**	120.00	**4,26,000.00**
			TOTAL OF SECTION-O: COMPOUND WALL		**3,91,97,200.00**

(17) SEC Q MISC GEN. Revised

SR.NO	DESCRIPTION OF WORKS	UNIT	TOTAL QTY.	RATE	AMOUNT
	Notes:				
1	The below items under this section are for Quote rate only "QRO" & no direct connection with any of the item in the preceding sections. These items & rates applicable only based on Client's request for particular equipment / labour.				
2	Construction machinery supply rates shall include operator & necessary tools & tackles.				
3	Dismanting work shall be carried out only after approval form Engineer In charge.				
4	Contractor to arrange necessary machinery, tools & tackles, specialist if required & rate shall be all inclusive.				
5	The dismantling / breaking shall be at any level, location as specified.				

6	Steel structure dismantling shall be done with adequate care & precaution to reuse the structure sections as directed.				
7	Under Misc. general section-Q the mentioned items are only for "quote Rate only". And shall be applicable as & when required with prior approval from client. None of these items / rate shall be clubbed / added with other BOQ sections.				
Q.1	**Supply**				
a	Tractor	Day	QRO	1800	-
b	Dumper	Day	QRO	9000	-
c	JCB supply	Hrs	QRO	1080	-
d	Breaker with manpower	Day	QRO	1800	-
e	Hydra	Hrs	QRO	1080	-
f	Dewatering Pump (5HP Min.)	Hrs	QRO	150	-
g	Crane for 20 MT lifting	Day	QRO	28200	-
Q.2	**Dismantling old / new work with labou**r, tools and machinery and cart away material up to 1500 m, including removing Insert plates, pipe sleeves, reinforcement cutting etc complete. (Any Height with Including Scaffolding /staging)				
a	Removing / Breaking **/ Dismantling existing brick walls**, carefully and without collateral damage, including plaster of any thickness, removing doors/windows stacking the same for disposal and clearing the site of the debris. Area will not be deducted for Door & Window.	**SQ.M**	QRO	350	-
b	Removing / Breaking **/ Dismantling existing loose plaster** in walls, ceiling, likely to fall off, of any thickness, carefully without collateral damage and clearing the site of the debris. The work shall begin only after Engineer In charge approval.	**SQ.M**	QRO	150	-
c	**Removing wall & columns tiles** / stones & existing Skirting of any type by using stone cutting machine, to ensure minimum noise and disturbance, including removing bed mortar and disposing it off with all leads and lifts for laying of new brick wall or concealing the wires/trays etc. complete as directed. Item to include cement bedding, PCC or Brick Bat Coba that needs to be dismantled. In wall tiles, back plaster to be removed too.	**SQ.M**	QRO	300	-
d	**Breaking RCC structural elements such as** footing, Column, Beam, slab, Lintel, chajja, Coping etc. of concrete mix up to M30 . All RCC Structure.(Any Height with Including Scaffolding /staging)	**CU.M**	QRO	3500	-

e	PCC, RCC grade slab of concrete mix up to M30 up to 200mm thick for floor, RCC road etc. at Gr. Lvl.	**CU.M**	QRO	2500	-
Q.3	**Dismantling old / new steel structure** with labour, tools and machinery and cart away material up to 1500 m, including removing Insert plates, pipe sleeves, reinforcement cutting etc complete.(Any Height with Including Scaffolding /staging)	**MT**	QRO	15000	-
Q.4	Removing of Rubble soiling at any depth..	**Cu.m**	QRO	180	-
Q.5	Removing / breaking flooring at any height with all tools & tackles				
a	Concrete / IPS flooring	**SQ.M**	QRO	450	-
b	Ceramic / Kota / Granite flooring	**SQ.M**	QRO	300	-
C	Paver Block Pathway at ground level	**SQ.M**	QRO	150	-
Q.6	Cutting of Existing TMT bar from concrete surface (dia. Of bars consider upto 25 mm .)	**NOS**	QRO	50	-
Q.7	Core cutting in slabs, beams as per requirement and finishing the same. size upto150 mm dia and thickness is 350mm with minimum disturbance in noise and no structural damage to RCC Members. Upto 150mm in dia. For sizes above, the rate shall be a derived pro-rata basis rate. This will be carried out under supervision and by a specialized contractor at site.	**NOS**	QRO	3692	-
Q.8	Providing & Fixing of Hard Barricading by using GI corrugated sheet 0.6 mm thick & 3.0 m long and up to 3.0 mt ht with using MS pipe as per instruction given by Engineer- incharge , dismantling , Excavation , Grouting , etc as complete . (Removing and material shifting shall be not paid separately) Sheet fixing by using SDST screw of 60 mm long .	RM	QRO	3200	-
Q.9	Grouting of MS /GI Pipe sleeves with necessary flanges, Puddle flange , in RCC wall /Brick wall as direct. Including of cuttout making & Grouting With Water proof compound 1:1:2 mix at all ht. as per Instruction at site ..				
a	Only fixing of 25 mm to 100 mm dia.	NOS	QRO	2000	-
b	Only fixing of 150 mm to 300 mm dia.	NOS	QRO	2500	-
Q.10	Labour charges for per day of 8 hrs. working time :				
a	Unskilled Labour	NOS	QRO	750	-
b	Skilled Labour -	NOS	QRO	900	-
c	Mason	NOS	QRO	960	-
d	Carpenter	NOS	QRO	960	-
e	Fitter	NOS	QRO	960	-
f	Plumber	NOS	QRO	1050	-

g	Painter	NOS		QRO	900	-
h	Mechanical Fitter	NOS		QRO	950	-
i	Welder	NOS		QRO	1050	-
Q.11	Supply of Water Tanker for any requirment at construction site	per trip		QRO	1200	-
	TOTAL OF SECTION -Q : EQUIPMENTS Supply & Works.					**-**

KRUTI NAGINBHAI MOKANI

Digitally signed by KRUTI NAGINBHAI MOKANI
Date: 2025.06.25 20:17:46 +05'30'

Place: Surat.
Date : 25/06/2025

MOKANI KRUTI N.
Chartered Engineer
Reg. No. AM1978643
Registered Valuer (L&B , P&M)
Land Building: IBBI/RV/08/2019/11861
Plant Machinery: IBBI/RV/07/2022/14888

Mokani Kruti N.
Chartered Engineer
Reg. No.: AM1978643
Valuer of Plant & Machinery

Annexure : C - Cost of Plant and Machinery and Other Subsidiaries.

Sr. No.	PI No	Date	Company Name	Product	Qty	Basic Value	Packagiing and Forwarding Charges- Imcl.	Fright charges- Imcl.a	Installation Commissioning and Testing Charges - Imcl.	Total Basic Amount (INR) without GST	GST on Packing & Forwarding, Freight and Installation Charges	GST on P&M	Total	Rate of Conversion	Total (INR)	Total (INR Million)
1	BVT/042/BVT RAYZON/2024 - 25/Rev-1	25-03-2025	Bangalore Vacuum Technology	Nw Iso Dn 50 Ss304 Seamless Pipes Thick :2mm Pump To Scrubber And Stand Byscrubber To Running Scrubber	1,859.00	2,600.00	7,08,289.10	7,08,289.10	58,79,586.00	3,00,12,250.00	11,12,974.20	8,70,012.00	57,03,412.00	1.00	4,27,10,619.20	42.71
				Dn 50 Ss304 Elbow 90 Degree	2,113.00	820.00						3,11,878.80	20,44,538.80	1.00		
				Dn 50 Ss304 T-Joint	452.00	1,840.00						1,49,702.40	9,81,382.40	1.00		
				Aluminium KF 50 Coupling (Clamp, O-Ringand Center-Ring Each 1 No.)	3,204.00	705.00						4,06,587.60	26,65,407.60	1.00		
				Aluminium Dn40 Coupling (Clamp, O-Ringand Center-Ring Each 1 No.)	280.00	610.00						30,744.00	2,01,544.00	1.00		
				Kf40 To Dn 63 Reducer Ss304	515.00	3,500.00						3,24,450.00	21,26,950.00	1.00		
				Dn63 Clamping Set (Dn 63 Centring Oringclaw Clamps)	515.00	1,190.00						1,10,313.00	7,23,163.00	1.00		
				Kf 50 To 40 Reducer Ss304	185.00	2,700.00						89,910.00	5,89,410.00	1.00		
				Dn Iso Kf-50 Flexible Bellow 250 Mm Long	130.00	3,098.00						72,493.20	4,75,233.20	1.00		
				Dn Iso Kf-50 Flexible Bellow 150mm Long	669.00	2,700.00						3,25,134.00	21,31,434.00	1.00		
				Manually Operated 2 Way Valve Kf-50	512.00	14,500.00						13,36,320.00	87,60,320.00	1.00		
				Socket End Bored Kf-50 Flange	4,656.00	1,000.00						8,38,080.00	54,94,080.00	1.00		
				Gi Support: Gi Channel, L-Plates,Straight Plates, Bolt With Spring Nuts,Pipe Clamp	1.00	29,81,000.00						5,36,580.00	35,17,580.00	1.00		

Sr. No.	PI No	Date	Company Name	Product	Qty	Basic Value	Packagiing and Forwarding Charges- Imcl.	Fright charges- Imcl.a	Installation Commissioning and Testing Charges - Imcl.	Total Basic Amount (INR) without GST	GST on Packing & Forwarding, Freight and Installation Charges	GST on P&M	Total	Rate of Conversion	Total (INR)	Total (INR Million)
2	GnBS/KITPL/Dec-24/005_Rev-1.1	09-05-2025	GnBS Eco Co Ltd, South Korea - (Kiansh International Technologies Pvt. Ltd Exclusive Authorized Sales and Service Representative of	GnBS Plasma & Wet Gas AbatementSystem – NSPW-KAN-II for TOPConSolar Cell Manufacturing withRedundancy Plan	38.00	85,000.00	-	-	-	27,91,36,600.00	-	-	$ 32,30,000.00	86.42	27,91,36,600.00	279.14
				Actuator 3way ball valve WS3BNW50-65D-SV-CCW for Redundancy management	108.00	1,200.00				1,12,00,032.00	-		$ 1,29,600.00	86.42	1,12,00,032.00	11.20
3	S2025032101	21-03-2025	Shenzhen S.C New Energy Technology Corporation	3.5 GW TOPCon Production Line Turnkey Solution on G12R (182 x 210 mm) wafer basis	1.00	7,50,00,000.00	-	-	-	6,48,15,00,000.00	-	-	$ 7,50,00,000.00	86.42	6,48,15,00,000.00	6,481.50
4	RZS/297624 Rev. # 02	03-01-2025	Spectrum Pharma TECH Consultants Pvt. Ltd.	CLEANROOM & MEP PACKAGES +CIVIL, STRUCTURE AND ARCHITECTURE PACKAGES	1.00	2,50,00,000.00	-	-	-	2,50,00,000.00	-	45,00,000.00	2,95,00,000.00	1.00	2,95,00,000.00	29.50
5	5673138	06-04-2025	Atlas Copco India Ltd	100% Oil Free (Class 0) Screw Compressor	3.00	1,84,56,196.00	6,53,349.34	-	-	5,53,68,588.00	99,663.46	99,66,345.84	6,59,88,283.18	1.00	6,59,88,283.18	65.99
6	Rayzon-202401	04-01-2025	Shanghai Electronics Engineering Design & Research Institute Co., Ltd	Design for 3.5 GW Cell project	1.00	$3,72,000.00	-	-	-	3,21,48,240.00	-	-	$ 3,72,000.00	86.42	3,21,48,240.00	32.15
7	Offer/JRF/REP/25-26/O-021 B	07-04-2025	JR Fibreglass Industries Pvt. Ltd.	Fume Scrubbing System	1.00	37,07,92,000.00	-	-	-	37,07,92,000.00	-	6,67,42,560.00	43,75,34,560.00	1.00	43,75,34,560.00	437.53
8	LP/24-25/111	06-01-2025	Luthra Pneumsys	SITC of compressed air pipeline	1.00	5,13,59,335.00		-	-	5,13,59,335.00	-	92,44,680.30	6,06,04,015.30	1.00	6,06,04,015.30	60.60
9	UHP/24-25/Rayzon/013011-R1	13-03-2025	UHP Technologies Pvt Ltd	GDS : Gas Delivery Equipment and Distribution System	1.00	69,66,00,000.00	-	-	-	69,66,00,000.00	-	12,53,88,000.00	82,19,88,000.00	1.00	82,19,88,000.00	821.99
				CDS : Chemical Delivery Equipments and Distribution System	1.00	48,40,00,000.00	-	-	-	48,40,00,000.00	-	8,71,20,000.00	57,11,20,000.00	1.00	57,11,20,000.00	571.12

Sr. No.	PI No	Date	Company Name	Product	Qty	Basic Value	Packagiing and Forwarding Charges- Imcl.	Fright charges- Imcl.a	Installation Commissioning and Testing Charges - Imcl.	Total Basic Amount (INR) without GST	GST on Packing & Forwarding, Freight and Installation Charges	GST on P&M	Total	Rate of Conversion	Total (INR)	Total (INR Million)
10	4135522	10-05-2025	Atlas Copco India Ltd	Oil Free Air Compressor Model ZR500 VSD	1.00	EUR 6,55,000.00	-	-	-	6,41,44,150.00	-	-	EUR 6,55,000.00	97.93	6,41,44,150.00	64.14
11	QD1025/KP/R0	09-05-2025	Avant Garde Cleanroom & Engg. Solutions Pvt. Ltd.	Supply & Erection of Items for HVAC & PCW Work for 3.5 GW Solar Cell Manufacturing Plant	1.00	1,70,00,00,000.00	-	-	-	1,70,00,00,000.00	-	30,60,00,000.00	2,00,60,00,000.00	1.00	2,00,60,00,000.00	2,006.00
12		09-05-2025	Zuvay Technologies Pvt. Ltd.	Offline Tools	1.00	$16,01,436.00	-	-	-	13,83,96,099.12	-	-	$ 16,01,436.00	86.42	13,83,96,099.12	138.40
13	MG/24-25/264-268/R2	13-05-2025	Membrane Group India Pvt Ltd	Upw, Dilute Etp & Recycling, Abatement ETP And Recycling, Concentrate ETP, And ZLD System (Capacity-3.5 Gw) INCL. Design, Engineering, Supply, Installation & Commissioning of Intermediate Transfer System	1.00	1,30,52,00,000.00		-	-	1,30,52,00,000.00	-	23,49,36,000.00	1,54,01,36,000.00	1.00	1,54,01,36,000.00	1,540.14
14	Jyona/Rayzon/2025-26/133	13-05-2025	Jyona Power	Electrical	1.00	50,00,00,000.00				50,00,00,000.00	-	90000000	59,00,00,000.00	1.00	59,00,00,000.00	590.00
15	IkyamProposalforS/4HANAImplementation	24-01-2025	IkyamSolutions Pvt. Ltd,	SAP Implementation	1.00	17,60,00,000.00				17,60,00,000.00	-	31680000	20,76,80,000.00	1.00	20,76,80,000.00	207.68
16		21-06-2025	Riya Advisories & Projects	2 nos of Feeder Bay Suitable for Double Circuit 66KV Cable Line to be erected at 66 KV GETCO Source S/S		1,44,22,700.00				1,44,22,700.00	-	2596086	1,70,18,786.00	1.00	1,70,18,786.00	17.02
				66kv ,Double Circuit (6+1) 630 sq.mm XLPE U/G cable, from 66 KV GETCO S/S		4,91,47,525.00				4,91,47,525.00	-	8846554.5	5,79,94,079.50	1.00	5,79,94,079.50	57.99
				66KV S/S at Client End- 2 X 30 MVA Double Bay, 66/11 kV S/S		3,06,50,650.00				3,06,50,650.00	-	5517117	3,61,67,767.00	1.00	3,61,67,767.00	36.17
				Civil Work at client end		1,79,39,925.00				1,79,39,925.00	-	3229186.5	2,11,69,111.50	1.00	2,11,69,111.50	21.17
				Open Access		52,40,000.00				52,40,000.00	-	943200	61,83,200.00	1.00	61,83,200.00	6.18
				66 KV (E), 630 mm. sq. XLPE Power Cable.- GETCO SS		8,08,50,000.00				8,08,50,000.00	-	14553000	9,54,03,000.00	1.00	9,54,03,000.00	95.40
				2X 30 MVA, 66/11 kV Power transformers		8,00,00,000.00				8,00,00,000.00	-	14400000	9,44,00,000.00	1.00	9,44,00,000.00	94.40
17		19-06-2025	Krishna Corporation	Fire & Safety	1.00	2,40,42,975.00				2,40,42,975.00	-	4327735.5	2,83,70,710.50	1.00	28370710.5	28.37
			Total							12,70,31,51,069.12	12,12,637.66	1,02,53,92,670.64			13,73,64,93,253.30	13,736.49

The exchange rate (1 USD= 86.42 INR and 1 EURO= 97.93 INR) has been considered from 1 Dec. 2024 to 25 Feb. 2025 Source: https://www.x-rates.com/average/?from=USD&to=INR&amount=1&year=2025

All quotations valid up to Sept 30th , 2025.

KRUTI NAGINBHAI MOKANI

Digitally signed by KRUTI NAGINBHAI MOKANI
Date: 2025.06.25 20:17:58 +05'30'

Place: Surat.
Date : 25/06/2025

MOKANI KRUTI N.
Chartered Engineer
Reg. No. AM1978643
Registered Valuer (L&B , P&M)
Land Building: IBBI/RV/08/2019/11861
Plant Machinery: IBBI/RV/07/2022/14888

Mokani Kruti N.
Chartered Engineer
Reg. No.: AM1978643
Valuer of Plant & Machinery