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10 -ാം സമ്മേളനം

നക്ഷത്ര ചിഹ്നം ഇല്ലാത്ത ചോദ്യം നം. 413

30-01-2024 - ൽ മറുപടിയ്ക്ക്

കിഫ്ബി സഹായത്തോടെ സ്കൂൾ നിർമ്മാണം

ചോദ്യം		ഉത്തരം	
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(എ)	കിഫ്ബി ധനസഹായത്തോടെ നിർമ്മിക്കുന്ന തൃശൂർ ജില്ലയിലെ തിരുവനന്തപുരം ജി.എം.എൽ.പി.എസ്. സ്കൂളിന്റെ നിർമ്മാണം ആരംഭിക്കുവാൻ കഴിയാത്തതിന്റെ കാരണം എന്താണെന്നും പ്രവൃത്തി ആരംഭിക്കുവാൻ വൈകുന്നത് പരിഹരിക്കാൻ സ്വീകരിച്ച നടപടികൾ എന്താണെന്നും വ്യക്തമാക്കാമോ;	(എ)	തൃശൂർ ജില്ലയിലെ തിരുവനന്തപുരം ജി.എം.എൽ.പി.എസ്. സ്കൂളിന്റെ ഡിപിആർ പദ്ധതി നിർവ്വഹണ ഏജൻസി GED003-29 എന്ന സബ് പ്രൊജക്ടിൽ 01.01.2023 നു കിഫ്ബിയിൽ സമർപ്പിച്ചിരുന്നു. ടി ഡിപിആർ കിഫ്ബിയിൽ പരിശോധിക്കുകയും ചില ഭേദഗതികൾ വരുത്തി പുനഃസമർപ്പിക്കാൻ ആവശ്യപ്പെട്ട് 13.07.2023 നു TAR-1 പദ്ധതി നിർവ്വഹണ ഏജൻസിക്കു നൽകിയിരുന്നു. പദ്ധതി നിർവ്വഹണ ഏജൻസി വീണ്ടും സമർപ്പിച്ച ഡി.പി.ആറിൽ ഭേദഗതികൾ പൂർണ്ണമായും വരുത്താത്തതിനാൽ 20.11.2023 നു TAR-2 നൽകിയിരുന്നു. വീണ്ടും പദ്ധതി നിർവ്വഹണ ഏജൻസി സമർപ്പിച്ച പരിഷ്കരിച്ച ഡിപിആർ 11.01.2024 നു പദ്ധതി നിർവ്വഹണ ഏജൻസിയ്ക്ക് TAR-3 സഹിതം അയച്ചു നൽകിയിരുന്നു.ഇപ്രകാരം പൂർണ്ണമായും പരിഷ്കരിച്ച ഡിപിആർ കിഫ്ബിയുടെ നിർദ്ദേശ പ്രകാരം GED003-30 എന്ന മറ്റൊരു സബ് പ്രൊജക്ടിൽ 18.01.2024 നു പദ്ധതി നിർവ്വഹണ ഏജൻസി കിഫ്ബിയിൽ സമർപ്പിച്ചിട്ടുണ്ട്. ഇത് കിഫ്ബിയിൽ പരിശോധനയിലാണ്.
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സെക്ഷൻ ഓഫീസർ

KIIFB Project : Detailed Project Report for Infrastructure Development of GMLPS THIRUVATHRA



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PREFACE

The Government of Kerala had taken initiatives for the Rejuvenation of Government Schools in Kerala. The Kerala Infrastructure Investment Fund Board (KIIFB) is the funding agency for this infrastructure projects. KILA PMU and LID&EW have been entrusted by Government of Kerala for the preparation of Detailed Project Report (DPR) and Execution of this project.

The scope of the work includes:

- 1) Project Feasibility Studies
- 2) Site Surveys and Investigations
- 3) Functional Design
- 4) Engineering Design
- 5) Financial Estimates and Cost projections
- 6) Revenue Streams Identification
- 7) Cost Benefit Analysis and Investment Criteria
- 8) Risk Assessment and Identification of the Mitigation Measures
- 9) Proposal for Project Management Organization
- 10) Contract Management Strategy
- 11) Implementation Schedule and Work Breakdown Structure
- 12) Statutory Clearances
- 13) Quality Management Plan
- 14) Operations and Maintenance Plan

This DPR is prepared to submit to KIIFB to avail funding assistance for the augmentations



of infrastructural facilities at **GMLPS Thiruvathra.**

Chapter 1: SALIENT FEATURES

1.	Title of the project	KILA-KIIFB Project : Detailed Project Report For Infrastructure Development of GMLPS THIRUVATHRA
2.	Department	General Education
3.	District	Thrissur
4.	Taluk	Chavakkad
5.	Corporation/Municipality/Panchayath	Chavakkad Municipality
6.	Legislative Assembly constituency	Guruvayur
7.	Implementing agency/ SPV	KILA PMU(LID&EW)
8.	DPR prepared by	KILA PMU
9.	Project outlay	1.3 Crore
10.	Budget provision	1.3 Crore
11.	Budget speech reference	
12.	Administrative sanction	
13.	Nature of the Project (New building/ Renovation of existing building)	Construction of New building with Ground Floor(3 Class rooms+toilet)&First Floor (1 class room)
14.	Present status of site	Site is clear.trees to be cut.
15.	Need for the project	Details in chapter 5
16.	Details of investigations/ surveys conducted	



	i. Topographical	Attached in annexure 7
	iii. Hydrological	Details in chapter 4
	iv. Others	
17.	Whether Land Acquisition involved?	No
	If yes, furnish details	
18.	Total estimated cost and item wise cost	1.3 Crore
	Whether detailed estimate attached?	Yes
19.	Details of revenue streams, if any	Chapter 8
20.	Details of Cost Benefit Analysis (CBR)	Chapter 9
21.	Details of project risks	Details in chapter 10
22.	Details of project management organization strategy	Details in chapter 11
23.	Details of contract management strategy	Details in chapter 12
24.	Details of Project Implementation Schedule	
24.	Details of statutory clearances	Details in chapter 14
26.	Quality Control infrastructure and mechanism	Details in chapter 15
27.	Operations & Maintenance(O&M) Arrangements of the project after completion	Details in chapter 16
28.	Details of attached drawings	Attached in Annexure 2
29.	Other attachments	Nil

Table 1 Salient Features

1.1 Executive Summary

The public education system of Kerala has played a significant role in developing Kerala Society and it has contributed large number of eminent and talented people to the world. However, due to various reasons, some of the Government schools are not effective and efficient. It is important to rejuvenate the Public Education System to achieve quality education at affordable cost. Rejuvenation is expected to focus on improved academic infrastructure, facilities for promoting extracurricular activities, institutionalizing a better learning practice etc.

Government of Kerala through its ambitious “**Protection of Public Education Mission (PPE Mission)**” is committed to develop world class education facilities at government schools. The project aims at the development of **Upgrading Facilities** at each school by reinforcing their existing strengths through planned intervention.

This Detailed Project Report is an attempt to understand and analyze the requirements of *GMLPS THIRUVATHRA* and propose the development plans for improving the academic and extracurricular excellence.

The key components proposed are:

1.Academic Building

The project is estimated to cost Rs.1.3crore. The school is hopeful of obtaining funding assistance of Rs. 1.3 crore from KIIFB as a part of the PPE mission of Government of Kerala.

The project phasing is planned in the following manner:



<i>Phase</i>	<i>Duration</i>	<i>Components</i>	<i>Total cost in Rs.</i>	<i>Any specific execution strategy/ preparatory act</i>
<i>Phase 1</i>	<i>9 Months</i>	<i>Detailed in Chapter 5</i>	<i>1.3 Cr</i>	<i>As mentioned in Chapter 11</i>

Table 2 Project Phasing

On implementation of the proposal, students will be benefited by improved facilities and environment which will enhance the educational, social and cultural development of the students

CHAPTER 2: PROJECT BACKGROUND

2.1. Introduction

Education is a key factor in development of societies. It helps in developing the social, cultural and economic progress of regions. Science and technology are now established as forces of great power in the shaping of the futures.

India, with more than 1.4 million schools and more than 230 million enrolments, is home to one of the largest and complex school education systems in the world along with China.

Two prominent policies of the Indian government—the Sarva Shiksha Abhiyan (SSA) in 2001 and the Right of Children to Free and Compulsory Education (RTE) Act, 2009 have seen education priorities rise amongst households and catalyzed improvements in educational performance.

In India, Kerala has shown excellent achievement in the education sector with many first of the kind achievements. Kerala was declared as a totally literate state on April 18th 1991 with the highest effective literacy rate of 89.81 per cent. In 2011, the literacy level in Kerala rose



to 93.91 per cent. The disparity, between male and female literacy, is also narrow. It has a high gender parity index (GPI) of 0.97 in the primary classes. The level of disparity in literacy in the different districts in Kerala is also very low (2.6 per cent). It also has the lowest school dropout rates among other Indian states. It was 0.81 per cent in 2006-07 The teacher-student ratio has also improved marginally.

Education practices are continuously evolving and now it is person centered type. This shift to person-centered education will mean the following core principles:

- ❖ To give high priority to nurture and promote creativity both in the personal and collective development of the learners;
- ❖ To give higher valuation to the learners' freedom to explore and inquire, to develop awareness of self and identify - to their questioning, challenging and self-learning habits, to enhance sensitivity, compassion and empathy.
- ❖ Re-direct the institutional systems in education to creative approaches
- ❖ To give strategic importance to the learning process as a person-to-person interaction the teacher and the learner, the learner and other learners, the learner and the person of knowledge or wisdom in the community.
- ❖ To impart thoughtful and well-informed awareness of the social and development problems of contemporary society such as population growth, environmental damage, poverty, racial and ideological conflicts, deepening disparities in qualities of life within the nation and internationally.

Acknowledging the change in education landscape, Government of Kerala launched its ambitious mission to rejuvenate the Public Education system in the State.

2.1.1 Protection of Public Education (PPE) Mission

Government of Kerala has launched the Nava Kerala Mission under which 4 major initiatives are being taken up: Agriculture; Housing; Health; and Education. The initiative



for Education is titled “Protection of Public Education Mission” (PPE Mission”) with the following major objectives:

- I. To upgrade 1000 Government schools to international standards.
- II. All classrooms in High School and Higher Secondary level in Government and Aided sector to be equipped with high-tech facilities and give education a new approach.
- III. To involve Teachers, Alumni, Parents, Parent Teacher Association (PTA), School Development Committee, local community including philanthropists to uplift the LP and UP classrooms to improve the quality of education and move forward according to the current trend in education.
- IV. Special packages for schools who have completed 50 years and 100 years.

Further, Government has decided that each school should prepare the master plan incorporating existing features and proposed buildings, Bio Diversity Park, children’s park, indoor and outdoor stadia, Autism Park etc. The funding for the Mission will come through its own funds, funds raised through Kerala Infrastructure Investment Fund Board (KIIFB), MLA/MP Local Area Development Schemes; funding of local bodies and contribution from the local community. Funding of KIIFB will be directly to SPVs under public sector.

In the above context *GMLPS THIRUVATHRA* has been considered for the rejuvenation of schools program and the Government of Kerala has selected the school for the development of the basic infrastructural facilities.

2.1.2. A Brief Introduction to GMLPS THIRUVATHRA

GOVT.Mappila Lower Primary School, Thiruvathra(*GMLPS THIRUVATHRA*) is located in the ward of 4 ,Chavakkad Municipality of Chavakkad Taluk under chavakkad DEO of Thrissur District.

Tiruvatra Government Mapila Lower Primary School, located in Chavakkad Municipality, was started in 1928. Matramkot Achyuta Vaidyar started a temporary school in his old building.



By 1938, the condition of the building was very bad. In 1940, a new thatched building was built and the school was up to class 5. From 1961 onwards, this school became an LP school up to class IV. The condition of the school building was very bad and collapsed. In 1969, the present building was built and classes started. In 1982, a well, a playground and a surrounding wall were built with the help of the municipality.

The current school strength is 116 with 62 boys & 54 girls with 3 teachers & 2 non teaching staffs

2.2 Project Objective

The project envisages the development of infrastructure of *GMLPS THIRUVATHRA*, to augment the facilities to provide world-class education to the general public. The project objective is to improve the infrastructure in the school in an effort to create a Centre of Excellence in academics by focusing on the following core areas:

- ❖ **Improved learning Environment:** It is essential to have school buildings and classrooms that provide positive learning environment for all students.
- ❖ **Enhanced Teaching, Leading and Learning Opportunities:** All students must have access to high-quality instruction. Highly effective, well-qualified teachers must be equitably distributed across districts and schools. Students, especially in high-need schools and districts, need strong administrators.
- ❖ **Create a collaborative learning and development environment:** Learning and teaching are continuous and long-term activities. Teachers need time and opportunities for collaboration to learn from one another, observe best practice and develop effective instructional standards. Hence, schools will need to use time more effectively and efficiently.
- ❖ **Create a clean and Safe Campus:** In order to facilitate world class learning experience provision of proper waste disposal methods thereby creating the cleanliness. Providing improved safety is also a concern.



2.3. Methodology

The methodology adopted for the preparation of the Detailed Project Report is enumerated below in detail:



Figure 1: Methodology for preparation of Detailed Project Report

Personal interviews and discussions were conducted with the school officials, PTA, and Panchayat president along with site visit and data collection were carried out. The requirements of the school were informed by the school officials and based on the same, the master plan was analyzed.

During the site visit, the existing situation of the school in terms of infrastructure facilities, academic and non-academic excellence were studied and the potential for a Centre of Excellence was identified and discussed with officials.

Project report is prepared after reviewing the existing situation, requirements informed by the school, need analysis, preparing the detailed design and estimates, cost benefit analysis, etc.



2.4. Overview of the Project Area and General Description about the Project Location

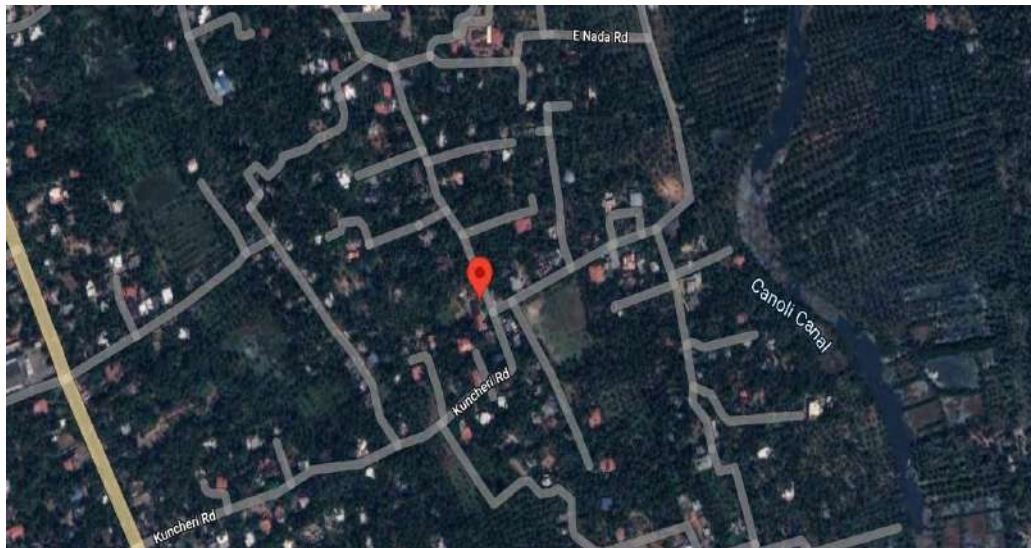


Figure 2 Location of Project Area

GMLPS THIRUVATHRA is located at a distance of 30 km from district headquarters. The



nearest town is Chavakkad which is 3.7 km away from the school.

An overview of the project area is described in the following sections:

2.4.1. Thrissur District

Thrissur (formerly Trichur) is a revenue district of Kerala situated in the central part of that state. Spanning an area of about 3,032 km², Thrissur district is home to over 10% of Kerala's population.

Thrissur district is bordered by the districts of Palakkad and Malappuram to the north, and the districts of Ernakulam and Idukki to the south. The Arabian Sea lies to the west and Western Ghats stretches towards the east.

Thrissur district was formed on 1 July 1949, with the headquarters at Thrissur City. Thrissur is known as the cultural capital of Kerala .It is Located at Latitude-10°31' 0" N, Longitude-76° 13' 0" N. In 2011, Thrissur had population of 3,121,200 of which male and female were 1,480,763 and 1,640,437 respectively.

2.4.2. Chavakkad Taluk

Chavakkad, formerly Chowghat, is a municipality in Thrissur district of Kerala state in India. It is a suburban town of Thrissur city. Chavakkad is noted for its beach and fishing. It lies on National Highway 66 is located about 75 km (47 mi) north of the city of Kochi, 25 km (16 mi) northwest of Thrissur, and 24 km (15 mi) south of Ponnani.



2.4.3 Accessibility to GMLPS THIRUVATHRA

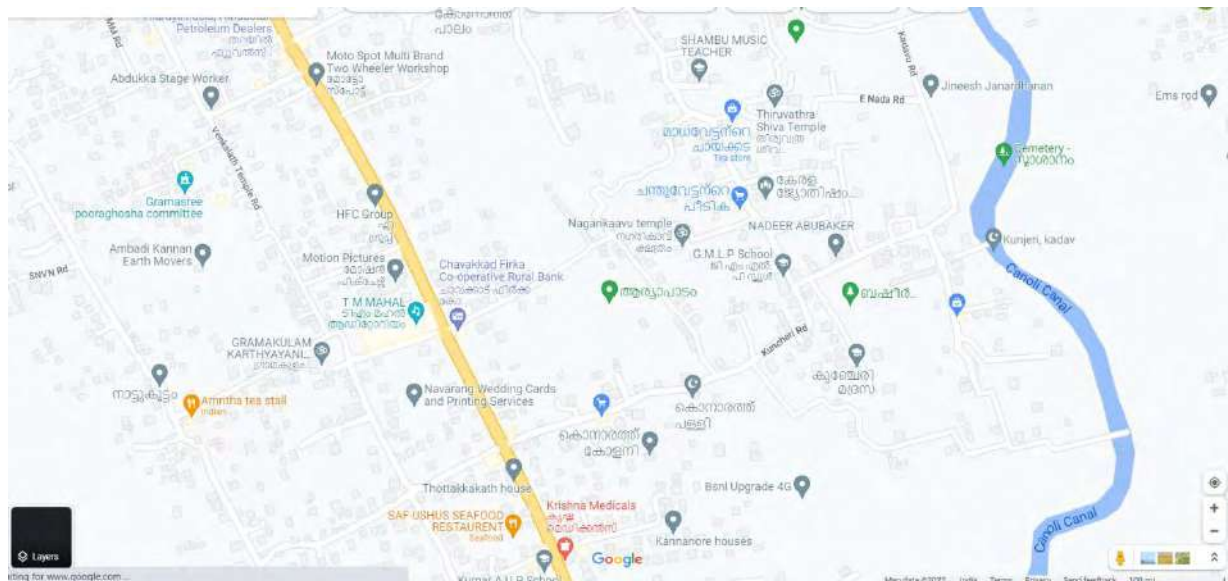


Figure 3 Road Network to *GMLPS THIRUVATHRA*

The school is 750 m away from National Highway 66. The nearest bus stop is Kunjery bus stop .

1. Ecological and Environmental Conditions of the region

The city has more or less the same climatic conditions prevalent else-where the state. The climate is generally mild hot and humid in nature. However the South West Monsoon is usually very heavy. Owing to its natural habitat, Thrissur is also a city of fresh air. According to the Central Pollution Control Board data for the year 2010, of the 180 cities monitored for SO₂, NO₂ and PM₁₀, Thrissur was one of the cities which met the criteria of low pollution (i.e. 50% below the standard) for all air pollutants.

2. Soil and Terrain Condition

The major types of soil found in Thrissur district are

1. Sandy loam
2. Laterite soil



3. Clayey soil.

Sandy loam found in Chavakkad&Kodungallur taluks, Laterite soil found of Eastern part of Thrissur and Western part of Thalappally taluks& Mukundapuram Taluk. Clay soil found in Back-water area of Chavakkad and Mukundapuram taluks. In this site laterite soil is dominant.

Chapter 3: PROJECT FEASIBILITY STUDIES

3.1 Existing Situation Assessment

The existing infrastructural facilities, buildings and facilities, utilities and other auxiliaries, intake and strength, staff and administration and extra-curricular activities are assessed in this chapter.

3.1.1 Infrastructure Facilities

There classroom buildings ,1 office room&toilet blocks in this school compound. Girls and boys have separate toilet blocks is situated here.

3.1.2 Buildings (Existing and under construction) and Facilities

The existing infrastructure details are as below:

SI No	Building Name	Facilities
1.	Building 1	The building is Ground only with tiled roof .
2.	Building 2	The building is Ground only with tiled roof
3.	Building 3	The building is Single storied with RCC roof
4.	Building 4	The building is Single storied with RCC roof
5.	Building 5	The building is single storied with tiled roof

Table 3 Existing Infrastructure Details



3.1.3. Utilities and Auxiliaries

- 1) **Power supply connection:** The school has single-phase connections.
- 2) **Water supply:** The school has one open well.
- 3) **Bio-gas plant:** There is one Bio gas plant,not functional
- 4) **Rain water harvesting:** There is no Rain Harvesting System.
- 5) **Garden:** Yes

3.1.4. Intake and strength

Intake and Strength of students for the last years is 161.

3.1.5. Staff and administration:

Staff Strength of the School is given as Table below.

<i>Sl No:</i>	<i>Section</i>	<i>Head</i>	<i>Teachers</i>	<i>Non-Teaching Staff</i>
<i>1</i>	<i>Pre-primary&LP</i>	<i>1</i>	<i>6</i>	<i>2</i>

Table 4: Details of staff strength and administration

3.2 Stakeholders Consultation

A stakeholders' meeting was organized on 03.11.22, at the school premises, to gauge the requirements in terms of additional infrastructural facilities for the campus, in order to elevate the school. Head Mistress, PTA President&PTA Member were present for the meeting.

The school authorities requested for incorporating following infrastructure



components:

- (a) Sufficient number of classroom
- (b) Toilet
- (c) Staff room

3.3. SWOT Analysis

A close analysis of its strength, weakness, opportunities and threat of Government Higher Secondary school are enumerated below:

(a) Strength:

- ❖ Potential student excellent in Academic and Sports.
- ❖ Strong PTA and teachers
- ❖ Ample support from local governing bodies and the local neighborhood.

(b) Weakness:

- ❖ Drinking water
- ❖ Old buildings

(c) Opportunities:

The ground can be used for sports activities

(d) Threats

O&M fund to maintain the assets in good condition



3.4. Requirement/demand Analysis

School lacks the following facilities:

- (a) Class rooms
- (b) Stage and Auditorium
- (c) Dining hall
- (d) A proper water distribution System
- (e) A proper waste disposal system

3.5. Justification of the components

To overcome these inadequacies mentioned above, augmentation of facilities are required are the same is enumerated in chapter 5.

3.6. Environmental and Sustainability Aspects

As per the item 8(a) of schedule of Environmental Impact Assessment (EIA) Notification, 2006, it is mandatory that building and construction projects $\geq 20000 \text{ m}^2$ and $< 1, 50,000 \text{ m}^2$ of built-up area are categorized as Category B and requires clearance from State Level Environmental Impact Assessment Authority. As the total built up area for the present project fall far below the minimum limit, the project does not attract EIA Notification, 2006.

However, during the construction of proposed buildings, all aspects like noise, dust, wastes including hazardous wastes, etc. may have a temporary impact on environmental equilibrium. Hence, they need to be managed, especially since it happens in an operating school premises.

Various risks have been identified in construction as well as operations phases, and mitigation strategies have been discussed in detail, in Chapter 11.



Chapter 4: SITE SURVEYS AND INVESTIGATIONS

The following figure shows the existing site plan of GMLPS Thiruvathra

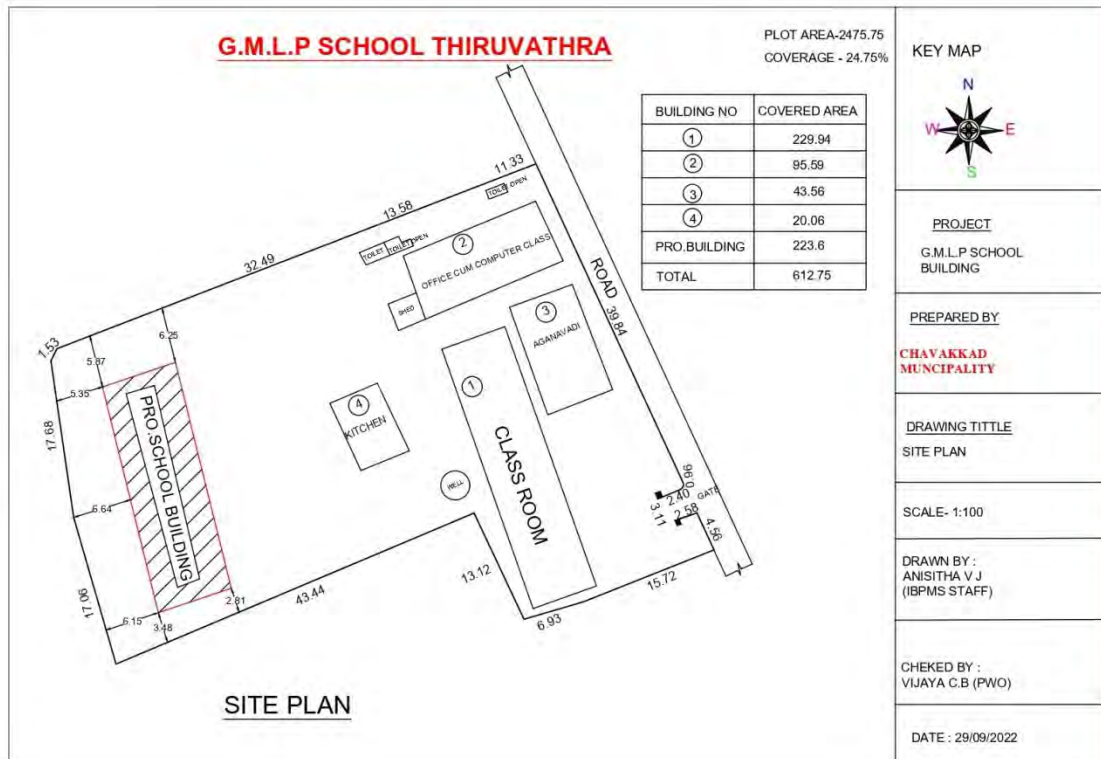


Figure 4 Existing Site Lay out

4.1. Ocular/Reconnaissance Survey

This chapter enumerate in detail about the existing infrastructural facilities at the location:

4.1.1. Land

This institution has 61 cent of land as the school compound: under the survey nos.89 in Manathala village is fully covered masonry compound wall.

4.1.2 Road access, Entrance Gate to the school premises

The school has one entrances. The nearest bus stop is around 750m from the campus. The



above figures represent the entrance to the school



Figure 5 Main Entrance



Figure 6a. Access from left side PROPSING

4.1.3.Compound wall

The school is having compound wall on all 4 sides. It also need a good gate too.





Figure 6 Compound Wall

4.1.4. Buildings

The buildings in the campus include LP,Pre school,kitchen and toilet blocks. The pictures below represent the current building infrastructure at the school.





Figure 7 Building 1



Figure 8 Building 2



Figure 9 Building 3



Figure 10 Building 4



Figure 11 Building 5

4.1.5. Classrooms

Considering the current and future student strength in the school as well as prescribed student classroom ratio, there is a deficiency in number of class rooms. Hence, there is requirement for additional classrooms. The available class rooms also need maintenance and improvements. All the buildings is to be renovated or replaced urgently, it is withstanding only due to the proper maintenance works of authority.

4.1.6 Toilets

The toilets available are insufficient to meet the current strength of boys and girls.







Figure 12 Toilets

4.1.7. Smart Class/ Multimedia room

No smart class rooms available. All class rooms should be provided well protected doors and windows. And proper and safe electrification should be done, especially in old class rooms

4.1.8. Administrative Buildings

This building situated nearer to entrance. In this building Office block & a classroom in Ground floor is there.

4.1.9. Kitchen

The existing kitchen in the school needs immediate attention in quality as well as space requirements. The noon meal is prepared in this kitchen and served for the student at verandah, as there is no separate dining facility available. But a proper dining hall is lacking here, proposal for which has been given to government.



4.1.10 Waste disposal

The school lacks dedicated waste disposal mechanisms and bio gas system installed on campus. And campus cleaning is done as part of clubs. One major waste disposal system is to be done for each class. Separation of waste is to be done at class level itself.

4.1.11 Water Source

The water source is from one open well in this campus. The main water tank situated nearer to open well.

4.1.12 Green Initiatives and Agriculture

There is a Vegetable garden in the school campus at present

4.1.13 Sports/Extra-Curricular activities

The school has students with distinctive talent in sports and interest in sporting activities such as football, athletics etc. Play ground to be constructed.

4.2 Topographical survey details

From the topographical survey conducted it is evident that:-

1. The Site Area is fairly plain dry land.
2. There are 5 Buildings ,toilet blocks and an open Toilet blocks are situated in this compound

4.3 Soil Investigation Report

Soil test done at site and pile foundation is recommended. Soil test result is attached.



4.4 Hydro-geological Survey

Hydro geologically, in general, the aquifer system in Thrissur district can be broadly Divided into Crystalline aquifers (fractured basement rock aquifers), Laterite Aquifers, Lateralized sedimentary (Tertiary) aquifers and alluvial aquifers. Crystalline and Laterite aquifers constitute major part (85%) of the district. In this location laterite aquifers is present but in deeper portions alluvial deposit is seen. One end (lowest level) near to ground is having alluvial aquifers at 12 to 15metres. In this site chance of water logging is less since a small stream is the down nearly 100 mtrs away from the site.

4.5. Primary Surveys

<i>Sl. No:</i>	<i>Particulars</i>	<i>Details</i>	<i>Remarks</i>
1.	<i>Ocular/ Reconnaissance survey</i>	<i>Detailed about the buildings and other facilities available.</i>	<i>Detailed above</i>
2.	<i>Topographical Survey</i>	<i>Contoured terrain with less Vegetation</i>	<i>Attached in Annexure</i>
3.	<i>Hydro-Geological Survey</i>	<i>The aquifers in four distinct geological formations viz alluvial aquifers, laterite aquifers, Tertiary sedimentary rock aquifers and crystalline rock aquifers.</i>	<i>Detailed above</i>

Table 4 Primary Survey Summary



Chapter 5 FUNCTIONAL DESIGN

5.1. GMLPS Thiruvathra Master plan

5.1.1. Background

There are 4 blocks of buildings situated in this compound. first block building is situated nearer to entrance. In this building an open space which is temporarily partitioned to occupy 4 class rooms. In second block building an office room & computer room is included. computer room is now used as class room. Third block is for preprimary, 1 class room is there, Fourth block is used as store room.

5.1.2 Location and context assessment

The school is located at ward 4 of Chavakkad Municipality. The building around the school premises mainly are residential. The access to the school is on the Eastern side of the campus besides Kuncheri road and it is also a main bus route.

5.1.3 Zoning, Circulation and Access

The analysis of buildings and its current uses indicate that there is no proper zoning depending on the use of building. Different departments share the same building hence there is no exclusive building for any of the departments.

The lack of designated pathways for vehicular and pedestrian movement is evident from below figure. The vehicular access to the school campus has to be restricted to the entry zone for better, safer and secure environment for students.

5.1.4 Key Components of GMLPS Thiruvathra Master plan

Laws and Guidelines: After the execution of the proposed aspects within the master plan all existing and new buildings, infrastructure and assets will conform to standards.

Sanitation: As an over design strategy the master plan eliminates most standalone toilet



blocks. Toilets blocks will be within the proposed new buildings.

Energy: The master plan recommends the school management to develop an energy plan including developing an inventory of its existing assets that use energy. Considering that the school will have 5 Nos. RCC roofed buildings by the end of the implementation phase, it is recommended to consider installing a 20kw solar plant by using the terraces of the buildings to position the solar panels.

Water: The GMLPS Thiruvathra master plan proposes a water management plan. This includes developing a water storage system whereby the sourcing of water from existing wells is consolidated..

Waste: The GMLPS Thiruvathra master plan includes a waste management strategy. This includes an organized way to collect and segregate organic and inorganic waste. Waste collection points/bins will be installed at all buildings. The School will develop its own plans to manage its waste through a process to recover, reuse, resale, and disposal.

Autistic students: The master plan at this time is not proposing setting up a designated building/rooms for the needs of an Autism Care. After completion of the construction phase the school management will evaluate the availability of classrooms vis-à-vis enrollment patterns and determine if rooms or sections of the buildings can be designated for this purpose.

Parking: The master plan provides for limited parking within the campus for vehicles. There are sufficient on-street parking options for visitors. Dedicated covered parking will be created for students commuting to school on bicycles.

Security and emergency preparedness: The GMLPS Thiruvathra master plan reevaluates the building designs to ensure there are no open doors with easy access to outside. Compound wall will be given along the boundary. Staff rooms should be allocated in such way that all portion should be under the observation of staffs



Expansion and growth: The GMLPS Thiruvathra master plan provides a schematic on future expansion phase by identifying new areas for construction and buildings that can be remodeled for enhanced use.

Chapter 6: ENGINEERING DESIGN

6.1 General

The newly proposed buildings are multistoried structures with maximum three storeys. A framed structure with RCC column, beam and slab is the ideal solution for such buildings. Monolithic construction is possible with R.C.C framed structures so they can resist earthquakes and vibrations more effectively than load bearing structures.

6.2 Soil condition and Foundation

Bore hole have been taken & Soil report is attached for reference. RCC framed building is proposing with Pile foundation.

6.3 Design Assumptions

6.3.1 Material properties

Concrete

M25 grade of concrete is proposed for all structural elements.

Unit weight of concrete (in kN/m ³)	-	25

Reinforcement Steel

The reinforcement steel proposed is high yield strength deformed bars of grade Fe-500

Conforming to IS: 1786-1985

Unit mass of steel (in Kg/m ³)	-	7850

Modulus of Elasticity (N/mm ²)	-	2.1x10 ⁵

Clear cover to reinforcements



By considering the exposure condition a minimum clear cover to outer reinforcement is provided as per IS standards.

Codes and standards

The latest versions of the following Codes and Standards are used in this calculation:

1. IS: 875 -1987 Part I to part V: - Code of Practice for Design Loads (other than Earthquake) for Buildings and Structures
2. IS: 456-2000 :- Code of Practice for Plain Reinforced Concrete.
3. IS:800-2007 :- Code of Practice for General Construction in Steel
4. SP:16 :- Design aids for Reinforced Concrete to IS:456
5. SP:34 :- Handbook on Concrete Reinforcement & detailing
6. IS:1893-2016:-Criteria for earthquake resistant design of structures

6.3.2 Loading and Analysis

Loads considered

- i. **Dead load:** For calculating Dead load of various elements , weight of building material are taken from standard datas
- ii. **Live load:** Suitable Live Load as per IS: 875 Part-II is also applied as mentioned in the below table

SL. No.	Item	Load (kN/m ²)
1	Class Rooms, Laboratories	3.00
2	Toilet areas	2.00
3	Roof	0.75
4	Kitchen & Dining area	3.00
5	Corridors, Staircase, Passages etc.	4.00
6	Office and Staff rooms	2.50

- iii. **Earthquake load:**Earthquake load as per IS 1893/2016 is taken

6.3.3 Analysis and design methodology



The structure is modeled and analyzed in STAAD pro or ETabs software. Analysis is performed for the various load combinations as per IS: 875 -1987. Limit state Design is carried out for RC members as per IS: 456 – 2000. Forces obtained from the critical combination of loads from the analysis model is taken as the input for design.

6.4.Structural Drawings

Based on the structural analysis and design, layout drawings are prepared for foundation, column, grade beam, floor beam and slab which are attached in annexure.

6.5 Other design / engineering

6.5.1 Electrical System

- ❖ The design and engineering of the electrical installation shall satisfy all statutory requirements of the national and State/local authorities. The electrical system is designed in such a way that energy consumption is minimum through the selection and utilization of efficient electrical fixtures.
- ❖ Good quality of light and ventilation play a significant role in the psychological and biological processes of students, teachers and administrators.
- ❖ Effective classroom lighting scheme will make use of any natural light that is available, with the addition of artificial light where it is necessary. With artificial lighting accounting for the greatest proportion of energy costs in schools, the energy efficiency of any lighting installation will be a primary concern. Good design, specification, management and controls can have a significant impact on limiting electricity consumption, saving energy and keeping running costs to a minimum. LED light fixtures are proposed which can reduce energy consumption by up to 70%, which translates directly into substantially lower utility costs.
- ❖ Adequate ventilation is equally important in classrooms as lighting.

Rooms should also have ventilators & ceiling fans in working conditions so as to



make summer heat and suffocation in monsoons bearable .BEE 5star rated fans are proposed which can reduce energy consumption by up to 30%.

- ❖ MCB distribution boards with RCCB+MCB's are proposed for light and power distribution. Every building will have localized switching and distribution board.
- ❖ Armored XLPE insulated Aluminum conductor cables are proposed for LT power distribution. Cables up to 2.5 sq.mm size will be XLPE/PVC insulated, PVC sheathed, steel braided / wire armored copper cables. The design of distribution system is to achieve voltage drop not exceeding 3% to the farthest cable termination. For internal wiring, Fire Retardant Low Smoke (FRLS), suitable up to 660V grade wires for single phase circuits and 1100 V grade for 3 phase circuits as per IS 694/1990 amended up to date shall be used.
- ❖ Earthing shall be as per Indian Standards (IS 3043: 1987), IEEE Guidelines, and Indian Electricity Rules 1957 with latest amendments.
 - ⌈ Lightning protection as per IS: 2309 / IEC 60305 is proposed for the building depending upon the height.
 - ⌈ Schools across the country are not only working to make their students smarter, but also to make their campuses smarter and more energy efficient. For schools, solar panels can easily offset monthly utility bills. With a larger installation, it may even be possible to switch to 100% renewable energy. As a part of the Up-Gradation and to promote a cost effective energy option, Solar Photo Voltaic (PV) System is proposed to be installed to meet the increasing energy demand.



Chapter 7: FINANCIAL ESTIMATES AND COST PROJECTIONS

7.1 Summary of Cost Estimate

Cost estimate is prepared in PRICE and the same is placed at the annexure. Abstract of the estimate is tabulated below:-

Abstract of the estimate is tabulated below:-

<i>Sl.No</i>	<i>Description</i>	<i>Amount (Rs)</i>
<i>1</i>	<i>CIVIL WORKS</i>	<i>12564241.66</i>
<i>2</i>	<i>ELECTRICAL WORKS</i>	<i>435754.21</i>
	<i>Grand Total (Including 18 % GST Compensation)</i>	<i>12999995.87</i>

Table 5 Abstract of Estimates

Chapter 8: REVENUE STREAMS

The project proposed includes the development of the school building with improvement in the basic amenities to convert it into a Centre of Excellence in education without compromising in other aspects like safety, hygiene, health and comfort to students. Hence the proposal of development of the infrastructural facilities is not intended for revenue generation.

However, some of the other facilities proposed in this project can be intended for revenue generation, which may result in a revenue generation. This revenue can be utilized for operation and maintenance of these facilities, provided these facilities can be used for revenue



generation on non-working days or at any time which will not cause any difficulty to students to use these facilities.

The revenue generating features of this proposal are:

Sl. No.	Identified revenue generating component		Remarks
1	Multi-purpose court/playground	❖ To host tournaments, events, exhibitions etc. ❖ To provide paid coaching services	As per The Prevailing market/ government rate.
2	Class rooms, seminar halls etc.	❖ To conduct skill enhancement programs etc.	As per the prevailing market/ government rate.

Table 6 Revenue Streams

*The facilities will be made available for the above activities for external purpose only on off working hours.

Chapter 9: COST BENEFIT ANALYSIS AND INVESTMENT CRITERIA

Cost benefit analysis is defined as a practical way of assessing the desirability of projects, where it is important to take a long view and a wide view. It implies the enumeration and evaluation of all the relevant costs and benefits.

Public education is a worthy investment for state government, with immense social and economic benefits. Research shows that individuals who graduate and have access to quality education throughout primary and secondary school



are more likely to find gainful employment, have stable families, and be active and productive citizens. They are also less likely to commit serious crimes, less likely to place high demands on the public health care system, and less likely to be enrolled in welfare assistance programs.

A good education provides substantial benefits to individuals and, as individual benefits are aggregated throughout a community, creates broad social and economic benefits.

Investing in public education is thus far more cost-effective for the state than paying for the social and economic consequences of under-funded, low quality schools.

The Cost Benefit Analysis (CBA) is the implicit or explicit assessment of the benefits and costs (i.e., economic costs and economic benefits) associated with an investment project. Benefits and costs may be non-monetary and monetary in nature.

Economic Rate of Return (ERR) and Cost Benefit Ratio (Benefit / Cost) are some of the measure to arrive at the social benefits from any infrastructure project. The financial analysis appraises the project in terms of return on investment while the economic analysis appraises the project contribution to the social and economic welfare of the city, region or country.

Though all the cost and benefits from proposed facility is not possible to be expressed in monetary terms, possible costs and benefits are being measured in monetary terms and evaluated to arrive at a conclusion whether the facility is worth to the society.

The broad benefits of Public Education Rejuvenation programmes are:

a) Increased investment in Human Capital:

Education is universally recognized as a form of investment in human capital that yields economic benefits and contributes to the country's future wealth creation by increasing the productive capacity of the people. By better education it is



expected that the quality and competencies of students and in turn the society is expected to increase. Thus expenditure on education can be partially justified in terms of potential contribution of education to economic growth.

From the CBA data sheet it can be inferred that a cost saving of Rs. 30 lakhs, Rs. 50 lakhs, Rs. 60 lakhs, Rs. 75 lakhs, Rs. 100 lakhs has been considered for the 5 consecutive years.

The calculation is based on the assumption that from a total of 40 students (for HS) in each class 20 students are expected to get employed as scientists, doctors, engineers etc. The same scenario has been considered for Higher Secondary cadre also. This will facilitate benefits to the government as tax, tolls, etc. From the same, we can expect a revenue of Rs. 50 lakhs in the first year and it will increase accordingly as the proposed facilities become fully established and gain appreciation among the public. A total of 50% students has been considered in the first year and it will increase accordingly

b) Gain on Opportunity cost

Students in their desire to get educated from schools with modern amenities, generally travel to far off places. In many such cases, students even spend one hour each in the morning and evening in school bus. The same, otherwise could have utilized for other activities like learning skills, playing games etc.

Hence by providing modern amenities, Government school will enable students to join schools near to their homes.

On implementing the proposed facilities as enumerated in chapter 4, it is expected the students who are availing the facilities will also increase. The students in a locality will prefer the nearby government schools other than private schools. This will facilitate a reduction of each student and will improve the mental mindset of each student to a greater extent.

Considering a total of 20 students are relocated to the nearby schools and a gain of Rs. 10,000/- per year from each student. On assuming all these



scenarios and extrapolating this, it is assumed that a total of Rs. 2 lakhs / unit is expected to save in each year. This can be considered as a benefit to the society.

c) Improved Health and development of children

The rejuvenation is focusing on developing games facilities in each campus. The same will provide more opportunities and facilities for the students to play and practice various games. Physically active children are expected to demonstrate better enthusiasm in academic and extracurricular activities. This will reduce the stress and associated other diseases.

One of the major ingredient in developing all schools developing a large open area. This will further develop into a football ground/ landscaped area, football ground etc. based on the talent of the students that are identified during the stakeholders meeting. On developing the same it will improve the physical activities of each student and will improve the extra-curricular activities and mental stress of student. On accounting all these, it is assumed that there will be a gain of Rs. 2 lakhs/unit on each year. The same is shown in the CBA sheet provided.

d) More savings in Society

Public education is one of the cheapest education facility available and with more number of students joining to public schools will directly result into savings to the family by virtue of lower fees and associated costs. The savings, thus made are now available for other uses including improved healthcare, enhanced personal investments, and more people opting for insurances. Hence, an improved Public education system improves the health / status of the society.

The above enumerated scenarios will facilitate a savings in the society and is assumed to be about Rs. 1 lakh/unit. The same scenario is assumed to be continue for all the years. The same is shown in the CBA sheet provided.



The benefits are summarized as:

<i>Impact</i>	<i>Assumptions and evidence</i>	<i>Certainty</i>
<i>Increased employability</i>	↓ <i>Expects enhanced quality education to more number of students and the skill development activities will have positive impact on the overall development leading to better employability</i>	<i>Medium</i>
<i>Physical and mental health improvement</i>	<i>Better games and playing facilities will improve the physical fitness. This will reduce the stress and improve the mental</i>	<i>High</i>
<i>Opportunity Cost Gains</i>	↓ <i>The students by saving traveling time to school can use more time for doing more creative things they are interested in. This will improve student's overall development.</i>	<i>Medium</i>
<i>Lesser cost for education</i>	↓ <i>More students in Public schools will mean less overall expense for education by society. This will enhance the savings and improve the social life.</i>	<i>Medium</i>



<i>Maximizing the benefits of public education</i>	↓ <i>Public education system has a fixed cost in the form of cost of assets, salary and other expenses. With more students in public schools, the expenses for students gets lowered.</i>	<i>High</i>
<i>More talents in various sectors</i>	↓ <i>The programmes give equal priority to development of various skills and talents.</i> ↓ <i>This will give birth to talents to represent the country in international forums.</i>	<i>High</i>

Table 7 Social Cost Benefit Analysis

The cost benefit analysis has been calculated based on the following assumptions:

	(Amount in lakhs)						
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6 and above (approximate % of benefit for that item to the benefit derived in the FIRST five years)
Investment plan (The total investment planned to be utilized for the development is expected in year 1.)	130						
Gain of investment in human capital		30	50	60	75	100	100
Gain in the opportunity cost		2	2	2	2	2	100
Improved health and development in the Society		2	2	2	2	2	100
More savings in society		1	1	1	1	1	100

Table 8: Assumptions of Cost benefit Analysis

The details showing the CBR analysis are attached in the annexure:

Considering the Net present value of the amount investing and the Net Present value of the revenue from the facilities, the Cost Benefit Ratio (CBR) for GMLPS Thiruvathra is 1.057



Chapter 10 : RISK ASSESSMENT AND MITIGATION MEASURES

As the majority of work involved is construction of the facilities, risks are associated with the project implementation. The occurrence of the unexpected events may adversely affect the timely completion of the project. The chances of such occurrences are verified and the mitigation measures are proposed.

The major risks identified are as follows:

- ❖ Adverse weather condition
- ❖ Unforeseeable shortages of labour or materials
- ❖ Strikes
- ❖ Disputes
- ❖ Damage to person and property due to fire, flood, earth quake, etc.

The chances of occurrence of various unexpected and adverse effects are analyzed considering the ground condition and the mitigation measures are proposed.

Sl.No	Risk	Mitigation measures proposed
1	<i>Adverse weather Condition</i>	¶ <i>Proper planning</i> ¶ <i>Excavations to be completed before monsoon and the super structure to be built up.</i>
2	<i>Shortage of labour and Materials</i>	¶ <i>Proper work scheduling</i> ¶ <i>Shall be handled by the Contractor by making the same available</i>
3	<i>Strikes</i>	¶ <i>This shall be accounted by additional working hours/ augmentation of resources thereafter</i>



4	<i>Disputes</i>	▮ <i>Increased communication and reviews to avoid occurrences of disputes.</i> ▮ <i>Any disputes to be settled without delay by properly assessing the situation and arriving at a win-win situation</i>
5	<i>Damage to person and property due to safety issues or force majeure</i>	▮ <i>Proper safety measures shall be ensured during construction.</i>
6	<i>Project Management risks : This includes change in priorities , overload, communication issues, lack of coordination , in experienced work force, etc.</i>	▮ <i>Institutionalizing an activity based project schedule</i> ▮ <i>Regular reviews and assessment of progress</i> ▮ <i>Shall be avoided by appointing well experienced and reputed organizations as implementation agencies.</i> ▮ <i>Proper monitoring</i> ▮ <i>Constant reviews</i>
7	<i>Organizational risk : This includes in experienced staff, in sufficient time to plan, losing critical staff at critical time, Inconsistent cost, time, scope, and quality objectives</i>	▮ <i>Each unit in the Project Management Organization is planned considering minimizing the organizational risk</i>
8	<i>Objection from the local Community</i>	▮ <i>Settled by setting a time limit without affecting the work progress</i>
9	<i>Contractual relations: Issues arise due to permit and license, new stake holders, priority changes, funding changes</i>	▮ <i>The chance of occurrence of the same is very less as the frame works are completed and freezed in the initial stage itself. However, in case of occurrence immediate measures shall be adopted</i>



10	<i>Security issues due to Laborers</i>	‡ <i>Proper ID cards</i> ‡ <i>Surveillance measures</i> ‡ <i>Entry restrictions</i> ‡ <i>Minimum activities during school time</i>

Table 8 Risk Assesment and Mitigation**Chapter 11: PROJECT MANAGEMENT ORGANISATION**

A Special Purpose Vehicle (SPV) as Project Management and Support Unit (PPE- SU) will be formed for the overall smooth roll out of PPE Mission.

Roles and Responsibilities of various stakeholders are enumerated below:

a) Government

The Government shall facilitate the linkages between parties and different Ministries and their departments and other stakeholders as required for the smooth implementation of PPE Mission.

b) Special Purpose Vehicle (SPV)

In order to implement the project an SPV will be formed. The funds received from KIIFB will be utilized through this SPV. In order to ascertain the timely completion of the project, SPV will appoint an agency, which is called the Implementation Agency. The progress of the work will be monitored by the SPV through the Implementation Agency with the assistance of the Technical committee.

c) Implementing Agencies

The Implementation Agency will be a Government Corporation appointed by the SPV. This unit is responsible for preparing the detail design and tender document, appointing the Contactor for carrying out the construction work, supervision of the work, quality assurance, monitoring the progress of work, etc. Implementation Agency will give detailed



report to SPV on the work progress and fund utilization in each stage of the project. SPV will constantly review the project with the help of Implementation Agency and technical Committee.

***d)* Technical Consultant**

The duties and responsibilities of the Technical Consultant are:

- i.* CEO, PPE mission who has received them from the schools selected by the MLAs in consultation with Government.
- ii.* In case the master plans are not available, prepare them after discussions with the
- iii.* Parent Teacher Association/School Development Committee and the local MLA.
- iv.* Consult with the implementing SPV and develop the DPRs (Detailed Project Reports) for civil works to be completed under PPE Mission.
- v.* These DPRs (as required in DPR formats to be mutually established byLSGD) will be submitted to KIIFB after appropriate discussions.
- vi.* Assist CEO, PPE Mission to prepare agreements to ensure that the SPV/builder is responsible for the maintenance of the newly created school building for at least 5 years.
- vii.* Coordinate with the SPVs to get completion and occupancy certificates.

***e)* School Development Committee/ School level Monitoring Committee:**

The development committee at each school also will be in charge of the project monitoring. The members of the committee will include the Principal, Head Teacher, PTA and other various stake holders.

***f)* Contractor:**

The works will be carried out by the Contactor appointed through the tendering process
The process is summarized as below in figure 13:



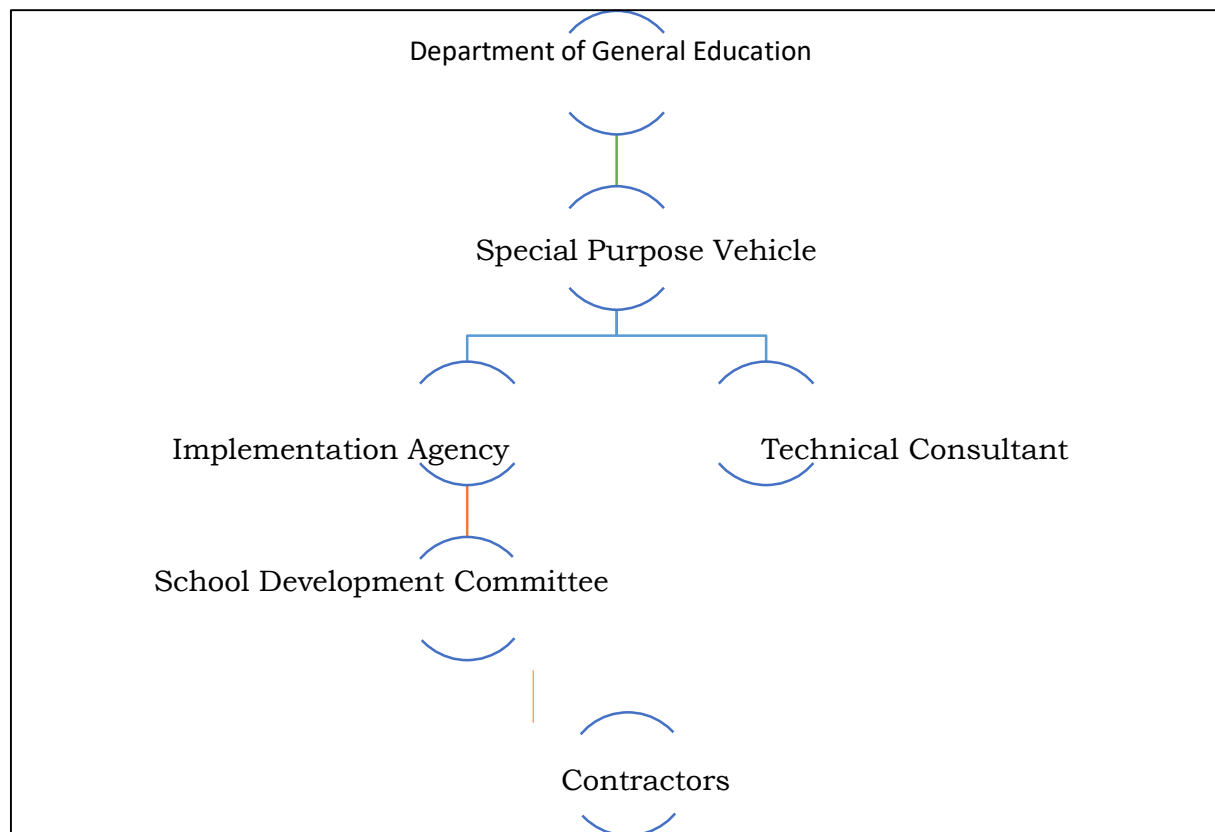


Figure 13 Project Management Organization

Organization chart and Roles and responsibilities of various PMO members:

SPV will engage the implementing agency for implementation of the project. The SPV will monitor the project through a Project Management Unit at its end. A team of engineers



including technical consultant will form this PMU.

The implementing agency will appoint a Project Manager (PM) for the project and he will be responsible to the PMU for all project related matters. The PM will have a team to carry out the site supervision while implementing the project.

(1) Roles and responsibilities of PM:

- (a) Coordinate with PMU
- (b) Ensure project execution as per the agreed scope, cost and time lines
- (c) Ensure quality construction
- (d) Obtaining all the statutory clearances
- (e) Conducting weekly reviews at site and sending weekly reports to PMU and stakeholders
- (f) Ensure the bills are recorded timely and as per the specifications
- (g) Completion and handing over

(2) Roles and responsibilities of Civil Engineer/ electrical engineer:

- (a) Review of execution drawings and carryout the supervision of work as per the drawings and specifications
- (b) Inspection of materials at site for its quality, carryout the quality tests
- (c) Monitoring of work as per the agreed schedule
- (d) Anticipate and resolves hindrances
- (e) Record the measurements

(3) Roles and responsibilities of Safety engineer:

- (a) Carryout the safety audit at site
- (b) Review the safety measures engaged at site



- (c) Ensure proper material stacking/ storage at site
- (d) Ensure safe movement of vehicles, construction equipment, cranes etc
- (e) Responsible for zero accident work execution
- (f) Ensure availability of medical aids at site

(4) Roles and responsibilities of QA/QC engineer:

- (a) Prepare the QA/QC plan
- (b) Ensure adherence to the QA/QC plan
- (c) Prepare the QA/QC report, quality test reports and submit to the PM on weekly basis
- (d) Ensure the material used in the project are approved and agreed makes only

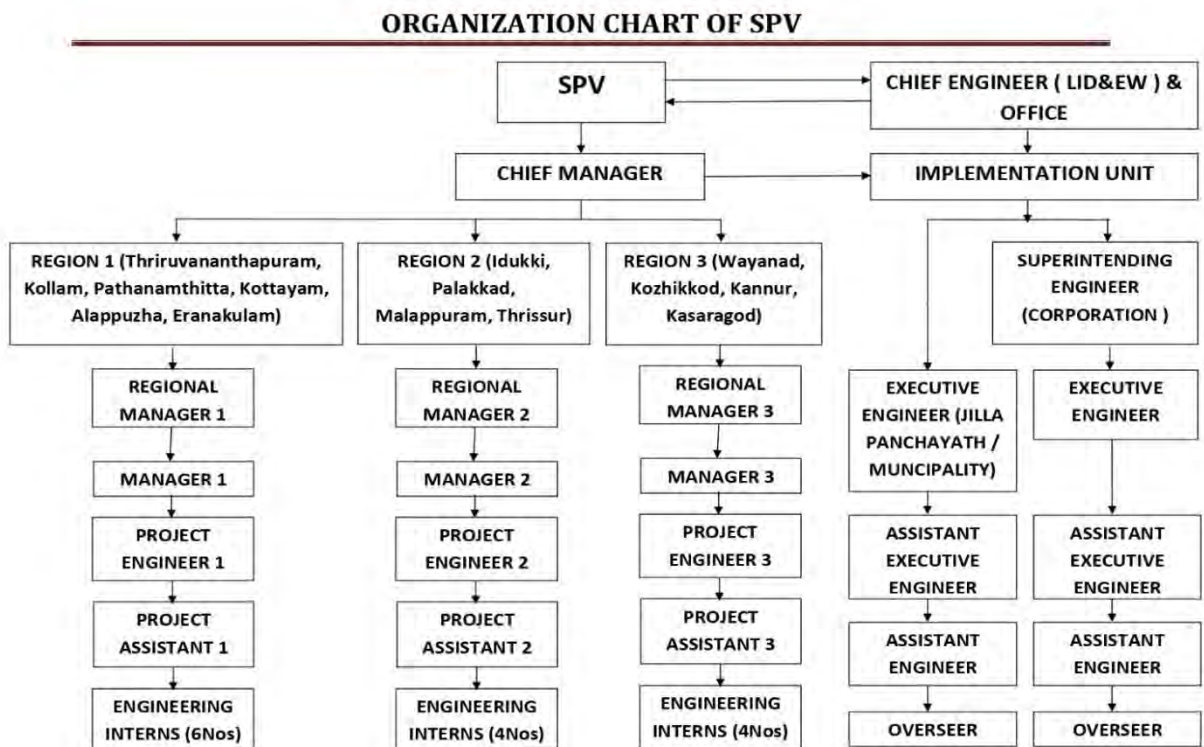


Fig 14 Project management organization of SPV



The SPV, with LID&EW will review the reports, bills, statements from the site and will provide the feedback to the Project Manager.

1) Files need to be kept at site

Quality control register
Concrete cube test register
Drawing register
Cement register
Steel register
Accident & Incident register
Electrical items register
Aggregate register
Solid block register
Mix design register
Material movement register
Inspection request
Material approve and Material Inspection request
Insurance certificate
Quality assurance plan
Calibration certificate
Concrete pour card
Safety toolkit meeting register
Labour register
Test reports file (Third party as per quality manual)



Chapter 12: CONTRACT MANAGEMENT STRATEGY

The project is intended to execute through capable and competent implementing agencies. The agencies with proven track record, recognized by Government of Kerala for executing its works etc are eligible for considering as implementing agencies. Through a fair and transparent process, the agencies will be empanelled. Among these agencies, through suitable means (as decided by the SPV in line with the existing practices and guidelines), selection will be carried out for implementing the project.

The work will be executed as item rate/Percentage rate tender PWD procedures will be adhered to. Project will be implemented by adhering to the laid down procedures from the contractor selection to commissioning. The following procedures need to be followed:

1) Preparation of the tender document:

A detailed Bill of Quantities will be prepared by the Implementing Agency and the tender documents will be finalized. Suitable pre-qualification criteria will be developed and included.

2) Tendering:

Tendering process will be undertaken adhering to the existing procedures.

3) Tender evaluation and selection of the contractor:

All the bids received will be evaluated and the selection of contractor as per the existing norms.

4) Award of work

Work order will be issued to the selected bidder.

5) Signing of Agreement



The contractor to whom which the work is awarded need to sign an agreement with the Implementing Agency.

6) Finalization of the project implementation schedule

Time is the essence of Contract, hence clear time line with details about the works to be completed in each phase or within stipulated time should be mentioned in detail. The project implementation schedule will be a part of the Agreement.

7) Work execution

During execution, the compliance with the Contract conditions and adherence to the Contractual obligations shall be ensured by multiple level reviews under taken by the SPV, technical team and implementation team. The Project manager, who is in charge of the project, member of the implementation team will strictly monitor the project in adhering to the contract conditions. The amendments and changes shall be properly documented and necessary approvals will be obtained from the Approving Authority. All such matters will be routed through the Project Manager.

8) Quality Analysis and Quality Control (QA/QC) plan

The quality analysis and quality control of the works need to be assessed as per the approved QA/QC plan.

9) Site supervision and bill measurement

The Implementation Agency need to set up a proper supervisory plan, to check the status of the work and to do bill measurements and check whether the progress of work is as per the implementation schedule provided.

10) Release of payment

The Contractor can raise the Running Account Bill as per the payment after conducting



the joint inspection at site, as certified by the Project Manager.

11) Commissioning of the project

After completing all the works including civil works, electrical works, mechanical works plumbing instrumentation works, signage works, security systems and other auxiliary works, the Implementing Agency were handover the facilities to the school for inauguration.

Chapter 13: IMPLEMENTATION SCHEDULE AND WBS

Project schedule:

The work has been considered as a composite work combining the civil, electrical and all other utility work packages combined in one contract. The work is expected to commence on 15/03/2024 and end by 14/12/2024. The work in each phase has been scheduled to complete as per the following schedule.

Activity	Months								
	M1	M2	M3	M4	M5	M6	M7	M8	M9
1. Tendering and award Work									
1.1 Issue of tender notice									
1.2 Receipt of bids									
1.3 Bid evaluation/ Selection of Contractor									
1.4 Award of work									
2. Preparatory work and mobilization									
2.1 Signing of contract									
2.2 Obtaining of preliminary statutory approvals									
2.3 Submission of drawings									
2.4 Completion, Mobilization									
3. Implementation of Civil Package									
4. Up gradation of Electrical Works									
5. Up gradation of Utilities									
6. Landscaping, signage, circulation improvement									
7. Procurement and placing of school furniture									
8. Obtaining approvals and Inauguration									

Table 9 Project Implementation Schedule



Chapter 14: STATUTORY CLEARANCES

- ❖ As per the item 8(a) of schedule of EIA Notification, 2006, it is made mandatory that building and construction projects ≥ 20000 m² and $< 1,50,000$ m² of built-up area are categorized as Category B and requires clearance from State Level Environmental Impact Assessment Authority. As the total built up area for the present project fall far below the minimum limit, the project does not attract EIA Notification, 2006.
- ❖ Kerala Panchayat Building Rules (KPBR 2019) is strictly need to be followed for construction of the buildings.

Chapter 15: QUALITY MANAGEMENT PLAN

In order to manage the quality of the work, specific plan is envisaged. Even though quality is the responsibility of each individual involved in the project, a team will be formed with objective to assure quality. The team will be headed by a Quality Manager from the implementation unit whose activities will be reviewed by the SPV. Under the Quality Manager, there will be a quality team consist of inspection and testing unit and site engineers. The quality management organization frame work is as follows:

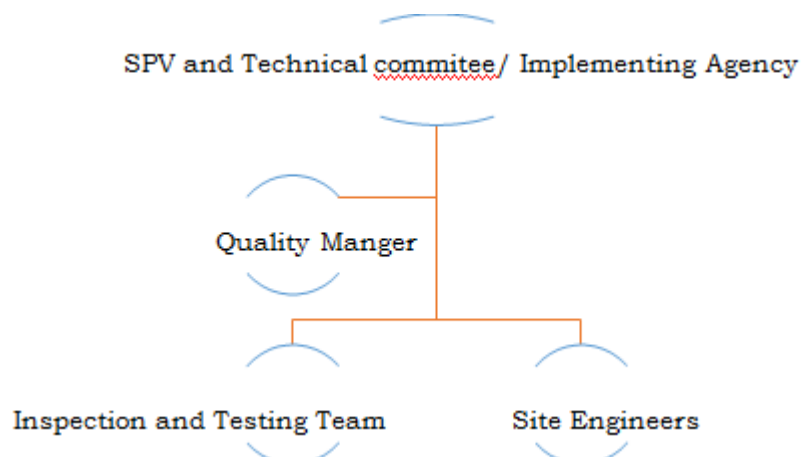


Figure 15 Quality Management Plan

Following documents need to be maintained in order to facilitate quality assurance:



<i>Sl. No.</i>	<i>Description</i>
1.	<i>Material Inspection Report - Structural Steel</i>
2.	<i>Material Inspection Report – Pipe</i>
3.	<i>Welding Inspection Report</i>
4.	<i>Check list for Construction Site Safety</i>
5.	<i>Material Inspection Checklist</i>
6.	<i>In process / Stage Inspection Report</i>
7.	<i>Checklist for Sieve Analysis</i>
8.	<i>Checklist for Water</i>
9.	<i>Checklist for Masonry</i>
10.	<i>Checklist for Plumbing Works</i>
11.	<i>Checklist for Woodwork</i>
12.	<i>Checklist for Internal Plaster</i>
13.	<i>Checklist for External Plaster</i>
14.	<i>Checklist for Flooring and Dado</i>
15.	<i>Checklist for Painting Work</i>
16.	<i>Checklist for Fabrication</i>
17.	<i>Checklist for Builder's Hardware</i>
18.	<i>Checklist for Pre-stressing</i>
19.	<i>Checklist for Electrical works</i>
20.	<i>Checklist for Construction Completed Buildings</i>
21.	<i>Check list for Wiring and Accessories</i>
22.	<i>Check list for Cables and Cabling</i>
23.	<i>Check list for MCB & Distribution Boards</i>
24.	<i>Checklist for Earthing & Lighting</i>
25.	<i>Check list for General Mechanical</i>
26.	<i>Check list for Fire Protection System</i>
27.	<i>Check list for HVAC projects</i>
28.	<i>Check list for HVAC system commissioning</i>
29.	<i>Check list for Requirement for recommendation of Bill</i>
30.	<i>Check list for Checking Measurement</i>

Table 10Quality Assurance

Quality Management system will be as per IS 9001: 2015. All the organizations involved in the implementation has to strictly adhere to the Quality Management Policies. Chapter 16: OPERATIONS AND MAINTENANCE PLAN

O&M plays a vital role in deriving maximum output of any infrastructure. Schools generally lack mechanism/ system for operation and maintenance of its facilities due to various reasons including inadequate fund, lack of dedicated staff etc.

The following are the proposed Operation and Maintenance plans:



a) Creation of a “School Resource Maintenance Committee”

A School Resource Maintenance Committee is to be formed with representatives of all stakeholder members.

b) Maintenance of an O&M fund:

For operation and maintenance proposed to be use the maintenance grand non road of concerned local body.

c) O&M staff

Additional staffs need to be engaged, other than the existing staff, if required for keeping clean and safe campus. The remuneration for these staffs needs to be met from the O&M fund.



ANNEXURES



Annexure -1
Key map of Project Region

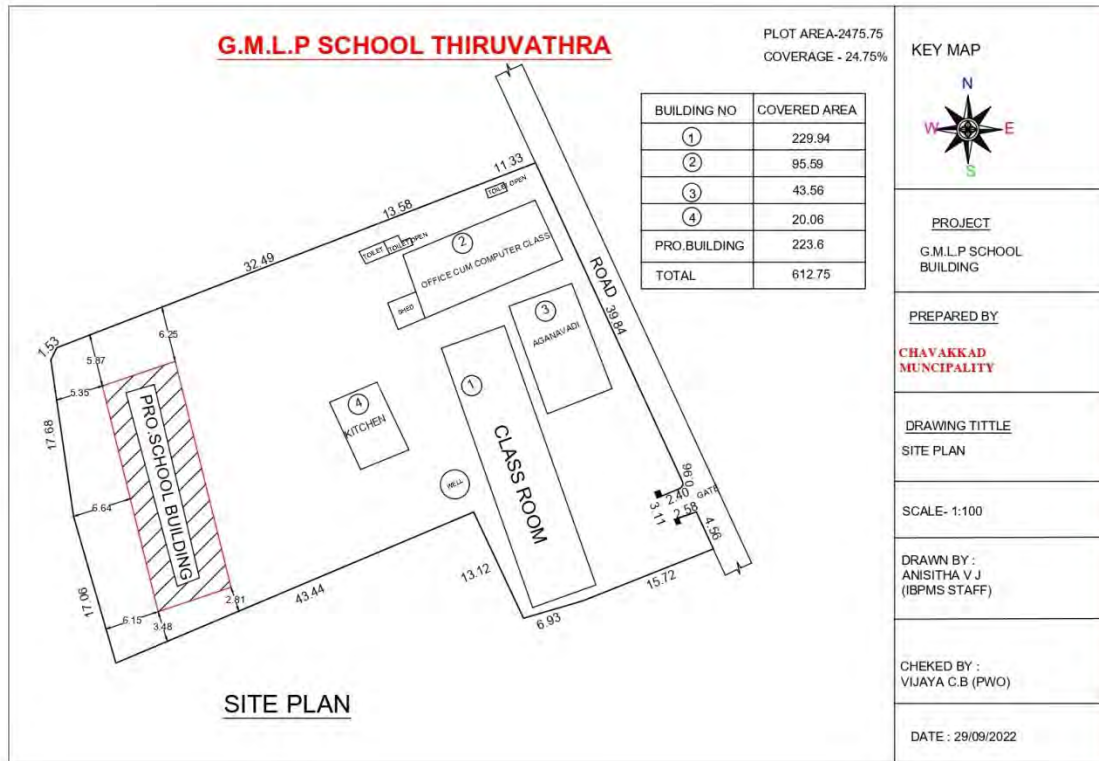


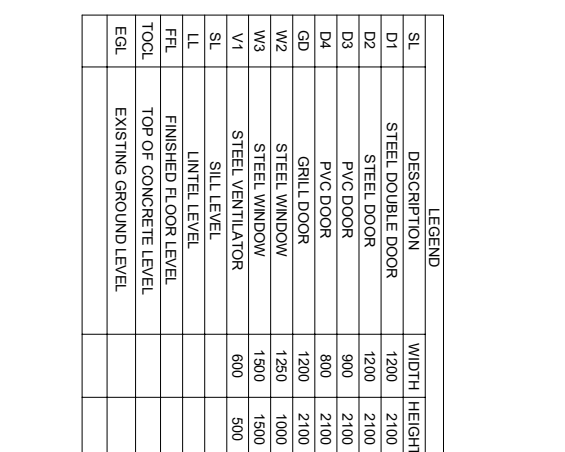
Figure 16 key plan



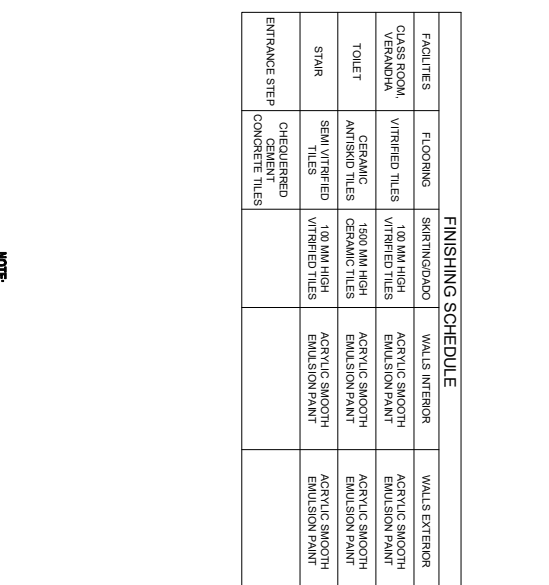
Annexure 2

Drawings





RCC BLOCK OF DIMENSIONS 300X300X300 SHALL BE CASTED AT TERRACE FLOOR BEAM JUNCTIONS WITH NECESSARY APERTANCES FOR DROPPING RAIN



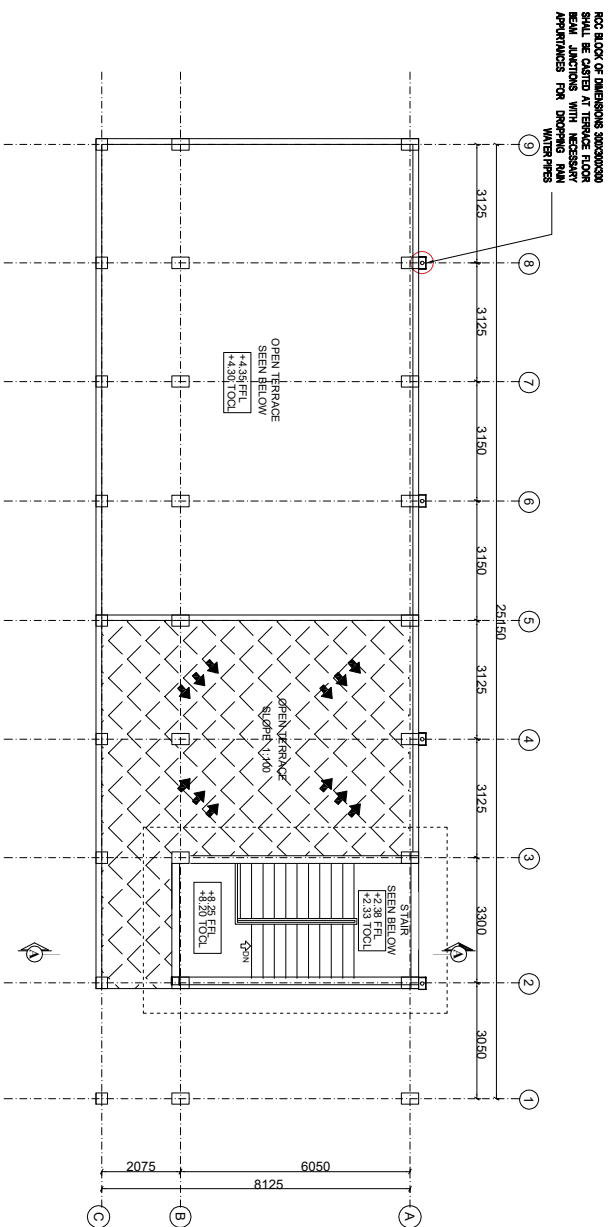
☐ DUMMY COLUMN AT 1200MM HT

1. ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS ARE IN METERS
2. ONLY VERTICAL DIMENSIONS ARE TO BE FOLLOWED.
3. 20.00 ML CORRESPONDS TO FINISHED GROUND LEVEL.
4. THE BUILDING HAS BEEN DESIGNED FOR 0.4 STRUCTURE W.M.Y.
5. ANY DISCREPANCY IN THE DRAWINGS, DIMENSIONS AND SPECIFICATIONS SHALL BE BROUGHT TO THE NOTICE OF THE CONCERNED ENGINEER IN-CHARGE.
6. WALL THICKNESS IS 200 MM WHEREVER NOT SPECIFICALLY MENTIONED.
7. SILL LEVEL AND LINTEL LEVEL SHOWN ARE FROM THE RESPECTIVE FLOOR LEVEL.

FINISHING SCHEDULE					
FACILITIES	FLOORING	SHIRTING/ADO	WALLS INTERIOR	WALLS EXTERIOR	
CLASS ROOM	VITRIFIED TILES	100 MM HIGH	ACRYLIC SMOOTH EMULSION PAINT	ACRYLIC SMOOTH EMULSION PAINT	
VERANDAH	VITRIFIED TILES	VITRIFIED TILES	ACRYLIC SMOOTH EMULSION PAINT	ACRYLIC SMOOTH EMULSION PAINT	
TOILET	CERAMIC ANTISLIP TILES	1500 MM HIGH	ACRYLIC SMOOTH EMULSION PAINT	ACRYLIC SMOOTH EMULSION PAINT	
STAIR	SEMI VITRIFIED TILES	100 MM HIGH	ACRYLIC SMOOTH EMULSION PAINT	ACRYLIC SMOOTH EMULSION PAINT	
ENTRANCE STEP	CHEQUERED CEMENT CONCRETE TILES				

LEGEND			
SL	DESCRIPTION	WIDTH	HEIGHT
D1	STEEL DOUBLE DOOR	1200	2100
D2	STEEL DOOR	1200	2100
D3	PVC DOOR	900	2100
D4	PVC DOOR	800	2100
GD	GRILL DOOR	1200	2100
W2	STEEL WINDOW	1260	1000
W3	STEEL WINDOW	1500	1500
V1	STEEL VENTILATOR	600	500
SL	SILL LEVEL		
LL	LINTEL LEVEL		
FFL	FINISHED FLOOR LEVEL		
TOOL	TOP OF CONCRETE LEVEL		
EGL	EXISTING GROUND LEVEL		

CLIENT		DRAWING STATUS		PROJECT NO.		REVISION	
 		DRAWING STATUS DESIGNED FOR COMMENTS FOR TENDER ONLY SANCTION DRAWINGS FOR INFORMATION GOOD FOR CONSTRUCTION AS BUILT		PROJECT NO. GMR/15/THIRUV/THRA GROUND & FIRST FLOOR PLANS		REVISION 01 1st No.	
A REVENUE ENGINEER GOVERNMENT OF KARNATAKA 1970/1970/1970		ASSISTANT ENGINEER ASSISTANT EXECUTIVE ENGINEER EXECUTIVE ENGINEER SUPERINTENDING ENGINEER		PROJECT NO. GMR/15/THIRUV/THRA GROUND & FIRST FLOOR PLANS		REVISION 01 1st No.	



LEGEND			
SL	DESCRIPTION	WIDTH	HEIGHT
D1	STEEL DOUBLE DOOR	1200	2100
D2	STEEL DOOR	1200	2100
D3	PVC DOOR	900	2100
D4	PVC DOOR	800	2100
GD	GRILL DOOR	1200	2100
W2	STEEL WINDOW	1250	1000
W3	STEEL WINDOW	1500	1500
V1	STEEL VENTILATOR	600	500
SL	SILL LEVEL		
LL	LINTEL LEVEL		
FFL	FINISHED FLOOR LEVEL		
TOOL	TOP OF CONCRETE LEVEL		
EGL	EXISTING GROUND LEVEL		

FINISHING SCHEDULE					
FACILITIES	FLOORING	SKIRTING/GADAO	WALLS INTERIOR	WALLS EXTERIOR	
GLASS ROOM, VERANDA	VITRIFIED TILES	100 MM HIGH VITRIFIED TILES	ACRYLIC SMOOTH EMULSION PAINT	ACRYLIC SMOOTH EMULSION PAINT	
TOILET	CERAMIC TILES	150 MM HIGH CERAMIC TILES	ACRYLIC SMOOTH EMULSION PAINT	ACRYLIC SMOOTH EMULSION PAINT	
STAIR	SEMI VITRIFIED TILES	100 MM HIGH VITRIFIED TILES	ACRYLIC SMOOTH EMULSION PAINT	ACRYLIC SMOOTH EMULSION PAINT	
ENTRANCE STEP	CHEQUERED CEMENT CONCRETE TILES				

TERRACE FLOOR PLAN

☐ DUMMY COLUMN AT 1200MM HT

1. ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS ARE IN METERS
2. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED.
3. 10.00 LY CORRESPONDS TO FINISHED GROUND LEVEL.
4. THE BUILDING HAS BEEN DESIGNED FOR 6+ STRUCTURE ONLY.
5. ANY DISCREPANCY IN THE DRAWINGS, DIMENSIONS AND SPECIFICATIONS SHALL BE BROUGHT TO THE NOTICE OF THE CONCERNED ENGINEER IN-CHARGE.
6. WALL THICKNESS IS 200 MM WHEREVER NOT SPECIFICALLY MENTIONED.
7. SILL LEVEL AND LINTEL LEVEL SHOWN ARE FROM THE RESPECTIVE FLOOR LEVEL.

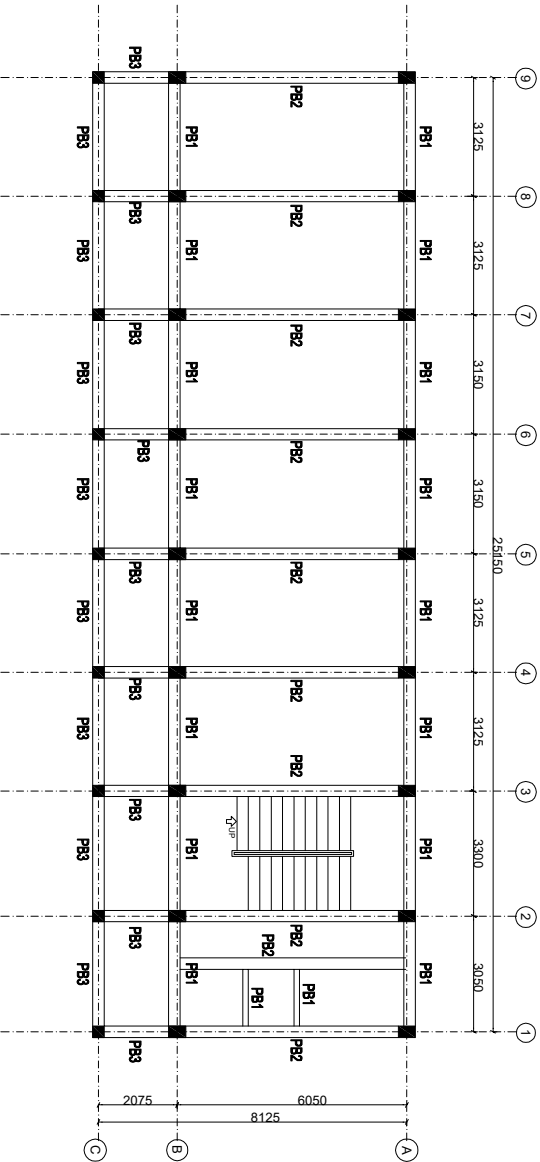
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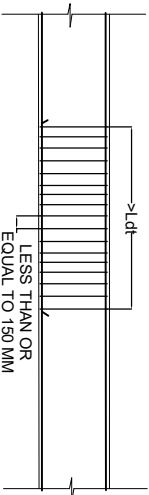
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	B	C	

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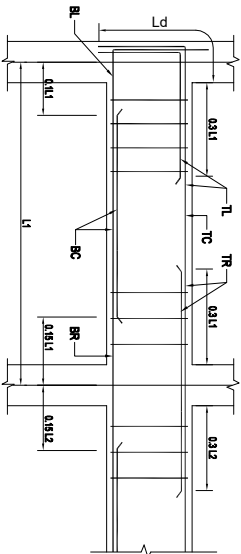


PLINTH BEAM LAYOUT



STIRRUPS ARRANGEMENT AT LAP PORTION IN BEAM

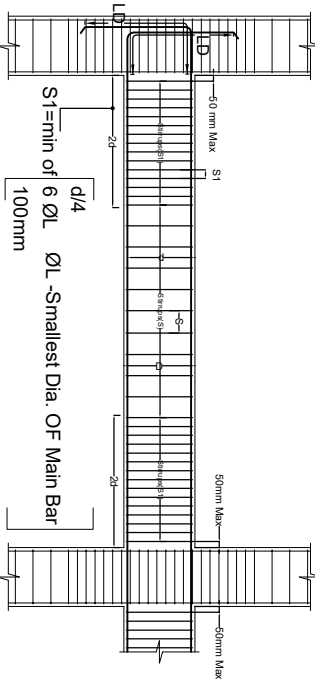
PLINTH BEAM REINFORCEMENT DETAILS							
BEAM ID	Beam Dimension	TOP LEFT (TL)	TOP CENTRE (TC)	TOP RIGHT (TR)	BOTTOM LEFT (BL)	BOTTOM CENTRE (BC)	BOTTOM RIGHT (BR)
PB2	250 X 450	2 Y20 + 1 Y16	2 Y20	2 Y20 + 1 Y16	2 Y20	2 Y20 + 1 Y16	2 Y20
PB1	250 X 450	2 Y16 + 1 Y12	2 Y16	2 Y16 + 1 Y12	2 Y16	2 Y16 + 1 Y12	2 Y16
PB3	250 X 450	3 Y12	2 Y12	3 Y12	2 Y12	3 Y12	2 Y12



CURTAINMENT RULES FOR CONTINUOUS BEAMS (TYPICAL)

- TL - TOP LEFT REINFORCEMENT
- TC - TOP CENTRE REINFORCEMENT
- TR - TOP RIGHT REINFORCEMENT
- BL - BOTTOM LEFT REINFORCEMENT
- BC - BOTTOM CENTRE REINFORCEMENT
- BR - BOTTOM RIGHT REINFORCEMENT

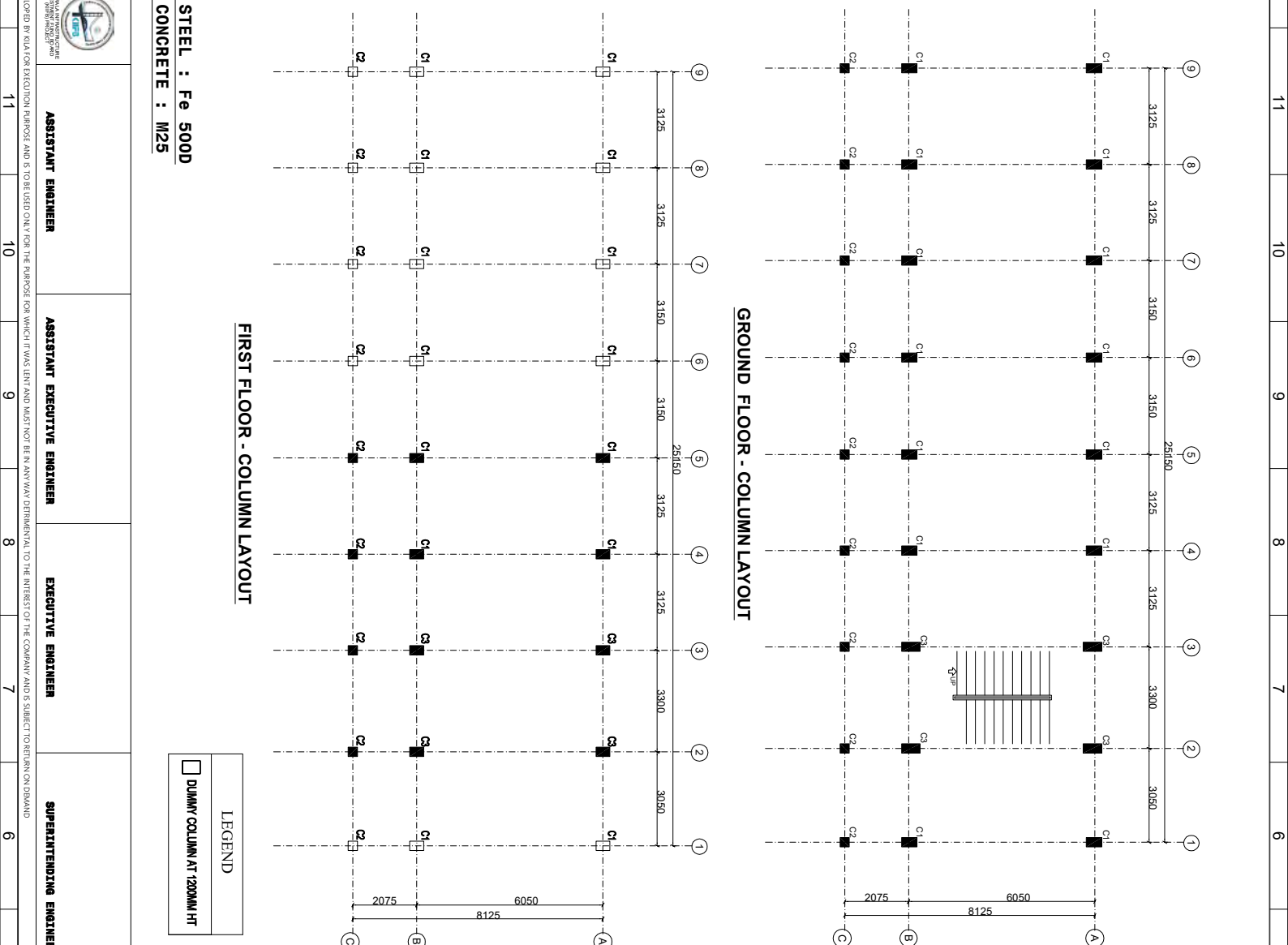
MINIMUM 2 BARS FOR FULL LENGTH ALONG TOP AND BOTTOM FACE



d = EFFECTIVE DEPTH OF BEAM = D - EFFECTIVE COVER
S = GIVEN SPACING OF STIRRUPS IN BEAM DETAILS

DETAILING OF REINFORCEMENT IN BEAMS FOR DUCTILITY

 GOVERNMENT OF KARNATAKA KARNATAKA INSTITUTE OF LOCAL ADMINISTRATION BANGALORE KARNATAKA KARNATAKA INSTITUTE OF LOCAL ADMINISTRATION BANG

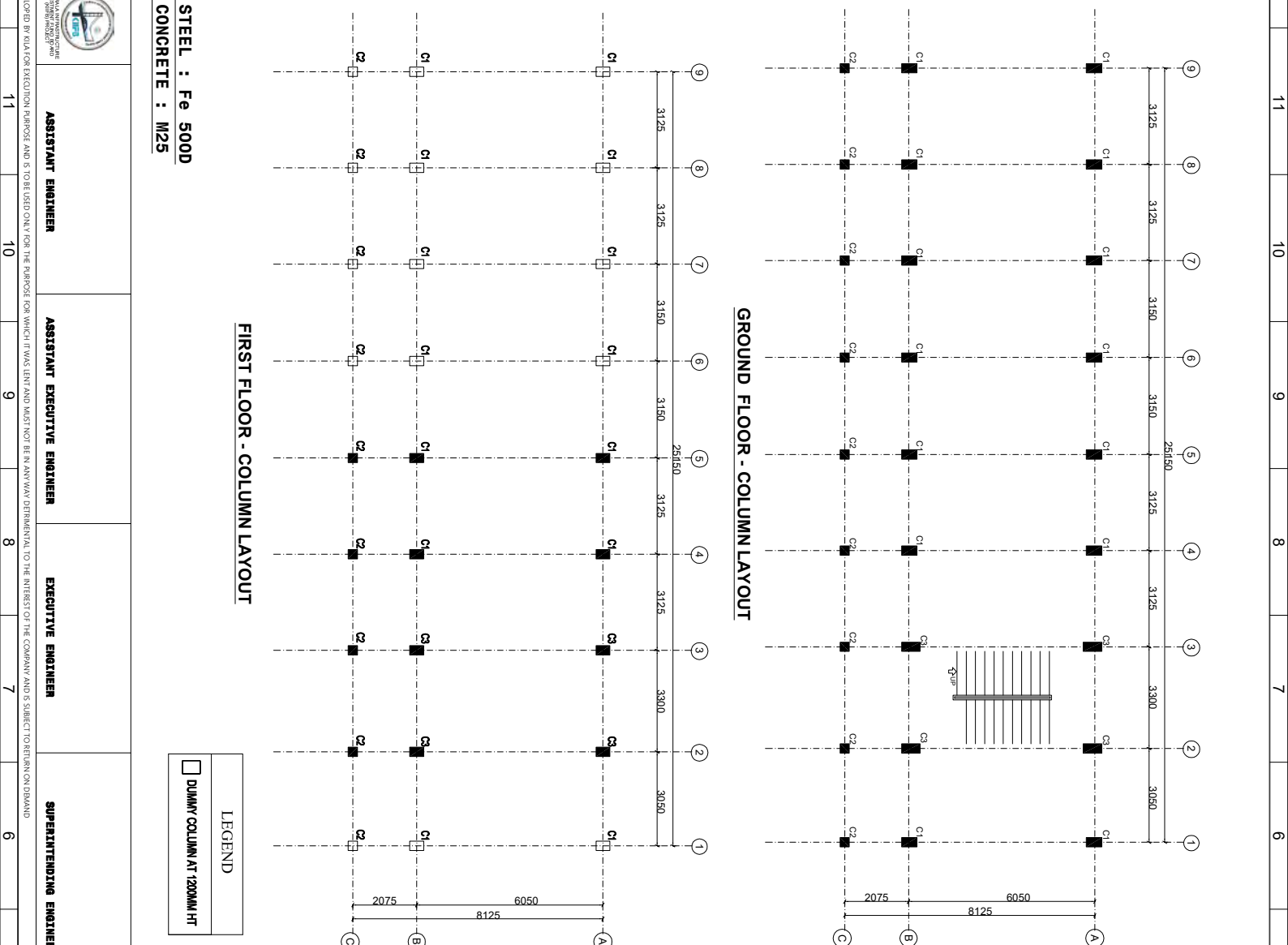


GROUND FLOOR - COLUMN LAYOUT

The diagram illustrates the column layout for the ground floor. It features a grid of columns labeled C1 and C2. The horizontal grid lines are numbered 1 through 6, and the vertical grid lines are numbered 4 through 9. The dimensions for the grid spacing are as follows:

- Horizontal spacing: 3150 units between grid lines 1-2, 25150 units between 2-3, 3125 units between 3-4, and 3125 units between 4-5. The total width is 3150 units.
- Vertical spacing: 3125 units between grid lines 4-5 and 5-6. The total depth is 3125 units.

The columns are arranged in a rectangular pattern, with C1 columns located at the corners and C2 columns located along the edges. The layout is titled "GROUND FLOOR - COLUMN LAYOUT".



9	8

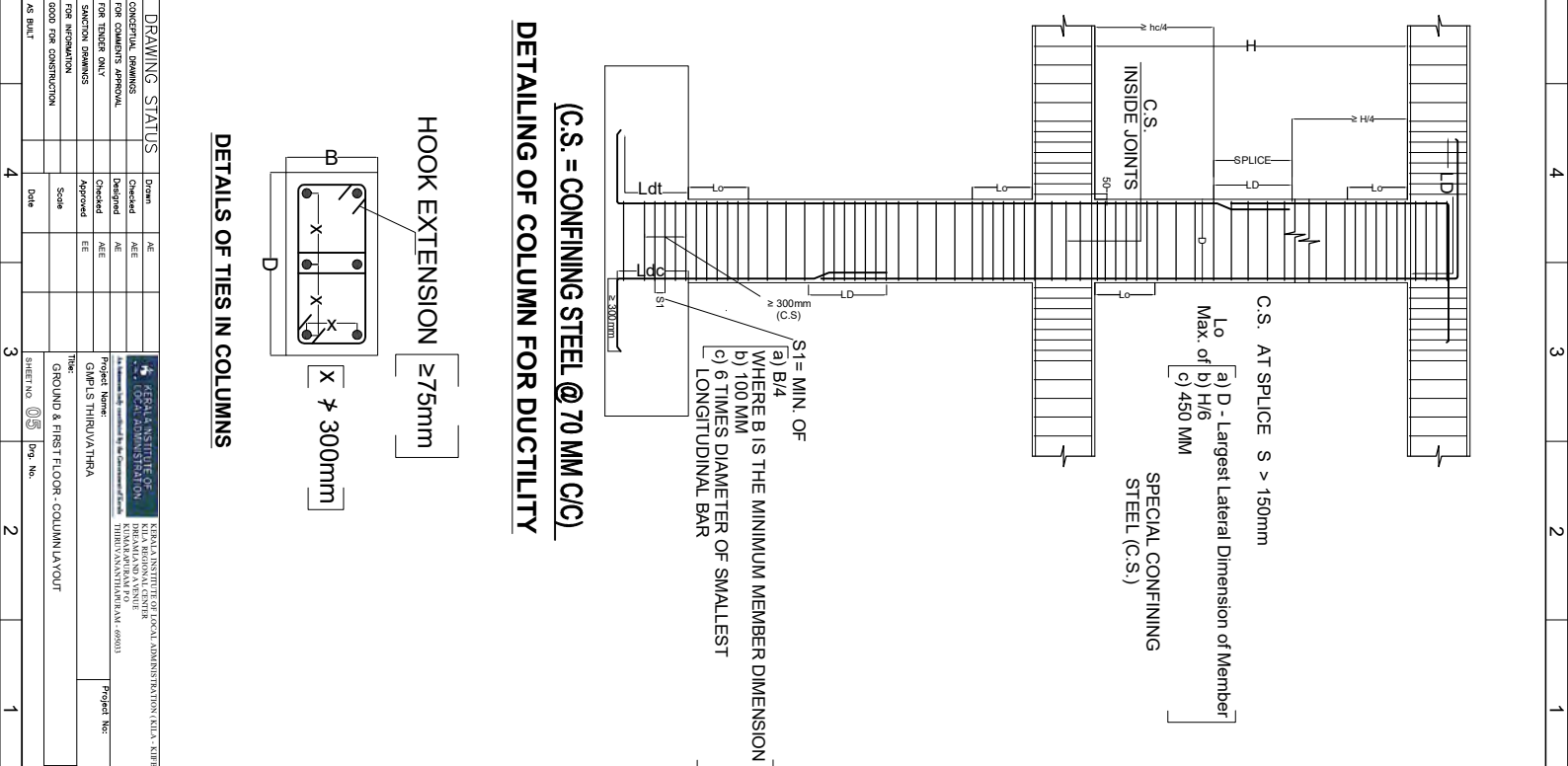
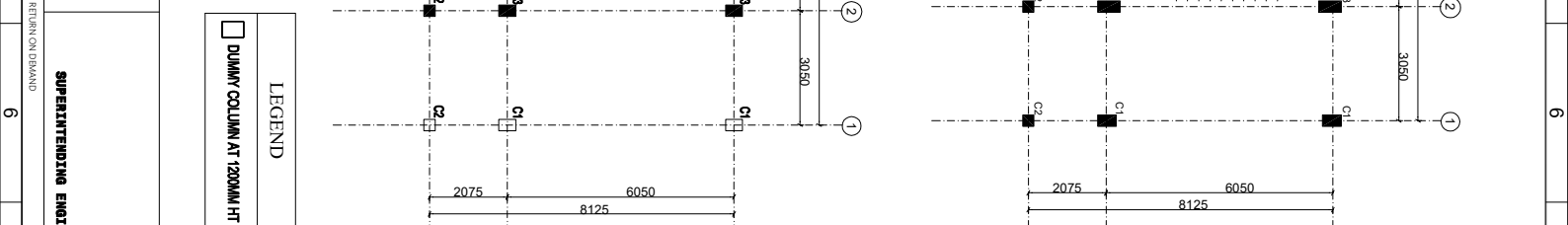
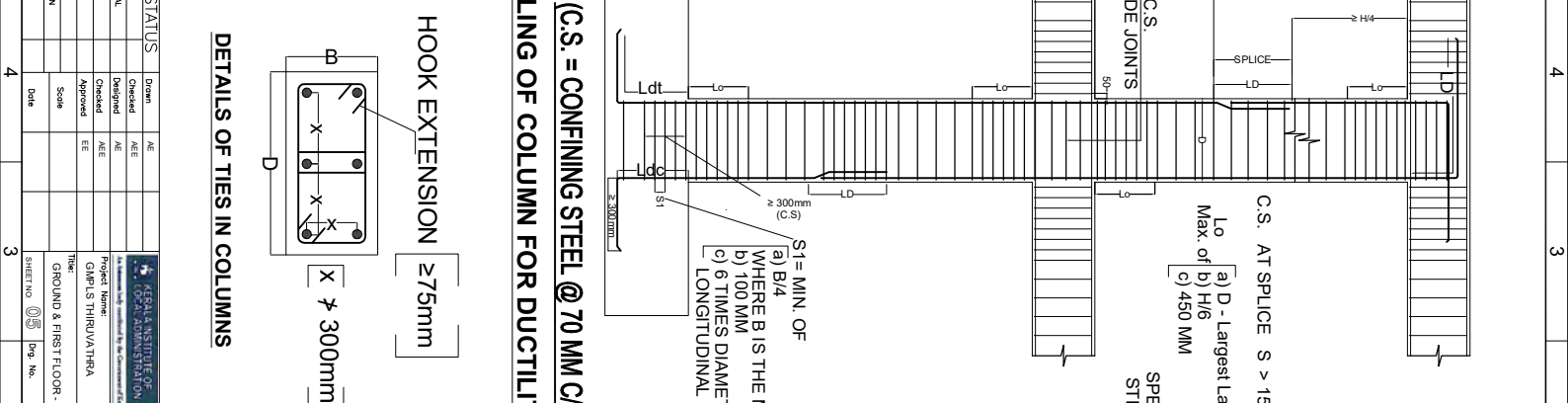
GROUND FLOOR - COLUMN LAYOUT

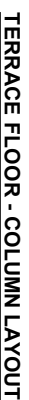
FIRST FLOOR - COLUMN LAYOUT

ASSISTANT EXECUTIVE ENGINEER

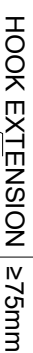
EXECUTIVE ENGINEER

WHICH IT WAS LEFT AND MUST NOT BE IN ANY WAY DETRIMENTAL TO THE INTERESTS

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COLUMN SCHEDULE



CLIENT

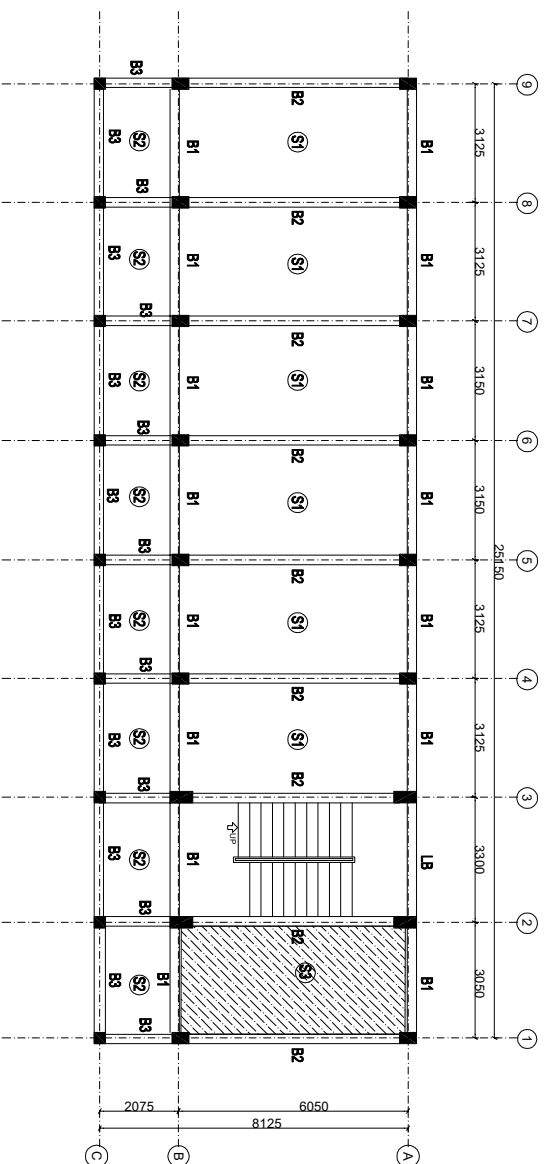


ASSISTANT EXECUTIVE ENGINEER

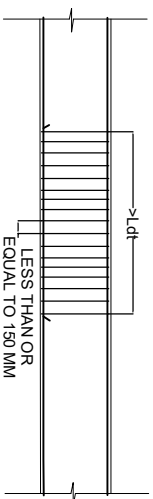
EXECUTIVE ENGINEER

SUPERINTENDING ENGINEER

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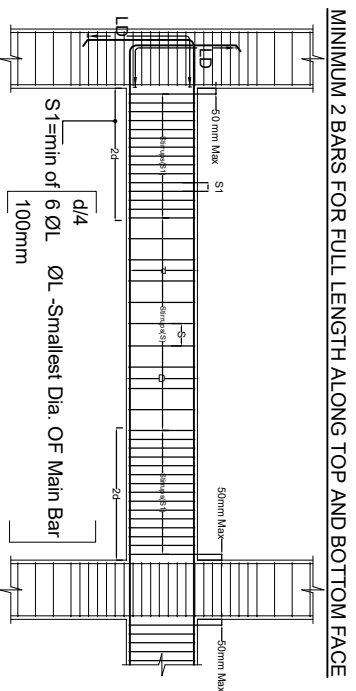
GROUND FLOOR - BEAM & SLAB LAYOUT



STIRRUPS ARRANGEMENT AT LAP PORTION IN BEAM

FIRST FLOOR, TERRACE FLOOR & STAIR ROOM - BEAM REINFORCEMENT DETAILS										
BEAM ID	Beam Dimension	TOP LEFT (TL)	TOP CENTRE (TC)	TOP RIGHT (TR)	BOTTOM LEFT (BL)	BOTTOM CENTRE (BC)	BOTTOM RIGHT (BR)	STIRRUPS LEFT	STIRRUPS CENTRE	STIRRUPS RIGHT
B2	250 X 500	2 Y20+1 Y16	2 Y20	2 Y20+1 Y16	3 Y20	3 Y20	3 Y20	Y8 2L STT @ 100 C/C	Y8 2L STT @ 150 C/C	Y8 2L STT @ 100 C/C
B1	250 X 300	2 Y16+1 Y12	2 Y16	2 Y16+1 Y12	3 Y12	3 Y12	3 Y12	Y8 2L STT @ 100 C/C	Y8 2L STT @ 150 C/C	Y8 2L STT @ 100 C/C
B3	250 X 300	3 Y12	2 Y12	3 Y12	2 Y12	3 Y12	2 Y12	Y8 2L STT @ 100 C/C	Y8 2L STT @ 150 C/C	Y8 2L STT @ 100 C/C

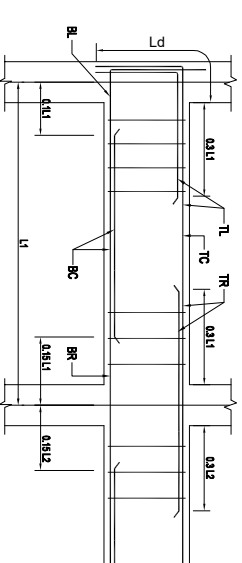
FIRST FLOOR, TERRACE FLOOR & STAIR ROOM - BEAM REINFORCEMENT DETAILS



MINIMUM 2 BARS FOR FULL LENGTH ALONG TOP AND BOTTOM FACE

d = EFFECTIVE DEPTH OF BEAM = D - EFFECTIVE COVER
S = GIVEN SPACING OF STIRRUPS IN BEAM DETAILS

DETAILING OF REINFORCEMENT IN BEAMS FOR DUCTILITY

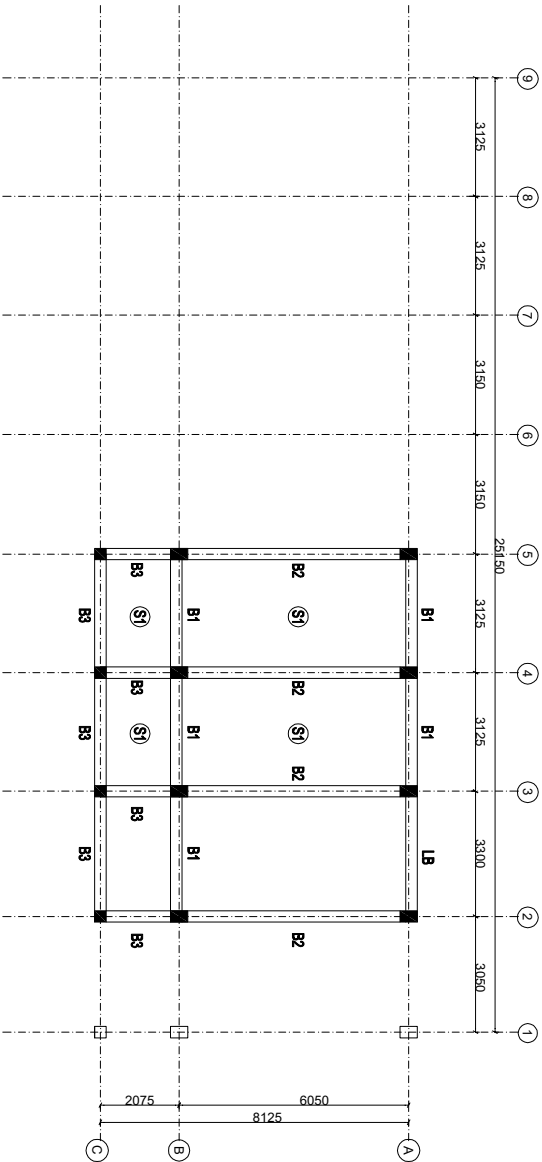


BEAM DETAILING

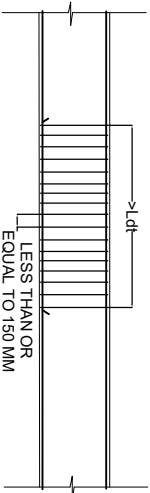
CURTAINMENT RULES FOR CONTINUOUS BEAMS (TYPICAL)

TL	TOP LEFT REINFORCEMENT	BL	BOTTOM LEFT REINFORCEMENT
TC	TOP CENTRE REINFORCEMENT	BC	BOTTOM CENTRE REINFORCEMENT
TR	TOP RIGHT REINFORCEMENT	BR	BOTTOM RIGHT REINFORCEMENT

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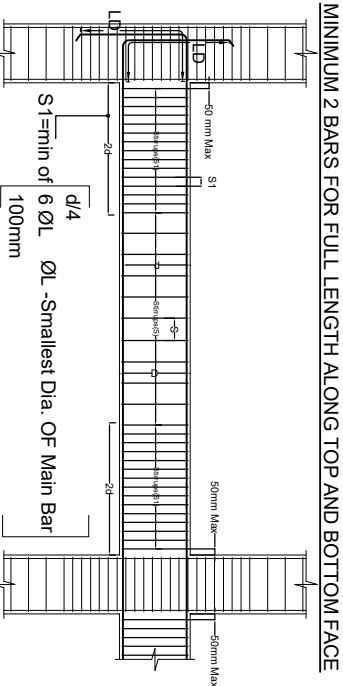


FIRST FLOOR - BEAM & SLAB LAYOUT

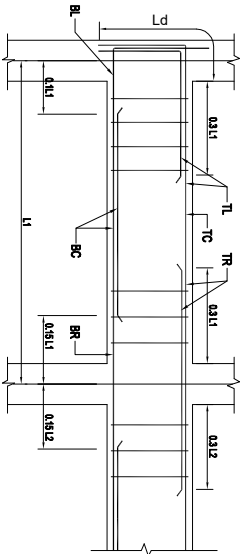


STIRRUPS ARRANGEMENT AT LAP PORTION IN BEAM

FIRST FLOOR, TERRACE FLOOR & STAIR ROOM - BEAM REINFORCEMENT DETAILS										
BEAM ID	Beam Dimension	TOP LEFT (TL)	TOP CENTRE (TC)	TOP RIGHT (TR)	BOTTOM LEFT (BL)	BOTTOM CENTRE (BC)	BOTTOM RIGHT (BR)	STIRRUPS LEFT	STIRRUPS CENTRE	STIRRUPS RIGHT
B2	250 X 500	2 Y20+1 Y16	2 Y20	2 Y20+1 Y16	3 Y20	3 Y20	3 Y20	Y8 2L STI @ 100 C/C	Y8 2L STI @ 150 C/C	Y8 2L STI @ 100 C/C
B1	250 X 300	2 Y16+1 Y12	2 Y16	2 Y16+1 Y12	3 Y12	3 Y12	3 Y12	Y8 2L STI @ 100 C/C	Y8 2L STI @ 150 C/C	Y8 2L STI @ 100 C/C
B3	250 X 300	3 Y12	2 Y12	3 Y12	2 Y12	3 Y12	2 Y12	Y8 2L STI @ 100 C/C	Y8 2L STI @ 150 C/C	Y8 2L STI @ 100 C/C



d = EFFECTIVE DEPTH OF BEAM = D - EFFECTIVE COVER
S = GIVEN SPACING OF STIRRUPS IN BEAM DETAILS
DETAILING OF REINFORCEMENT IN BEAMS FOR DUCTILITY



CURTAINMENT RULES FOR CONTINUOUS BEAMS (TYPICAL)

- TL - TOP LEFT REINFORCEMENT
- TC - TOP CENTRE REINFORCEMENT
- TR - TOP RIGHT REINFORCEMENT
- BL - BOTTOM LEFT REINFORCEMENT
- BC - BOTTOM CENTRE REINFORCEMENT
- BR - BOTTOM RIGHT REINFORCEMENT

KERALA INSTITUTE OF LOCAL ADMINISTRATION (KILA), KUTTIYAD
BRANCH OFFICE
THIRUVANANTHAPURAM - 695003

PROJECT NAME: FIRST FLOOR - BEAM & SLAB LAYOUT WITH DETAILS

PROJECT NO: 12345

DESIGNER: A/E

CHECKED: A/E

FOR COMMENTS APPROVAL: A/E

FOR TENDER ONLY: A/E

SANCTION DRAWINGS: A/E

FOR INFORMATION: A/E

GOOD FOR CONSTRUCTION: A/E

DATE: 12/01/2024

SHEET NO: 01

PAGE NO: 01

CLIENT

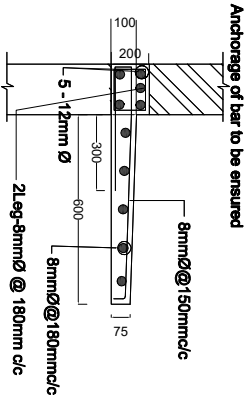
ASSISTANT ENGINEER

ASSISTANT EXECUTIVE ENGINEER

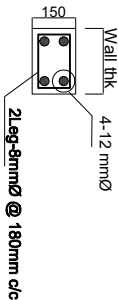
EXECUTIVE ENGINEER

SUPERINTENDING ENGINEER

THIS DRAWING ORIGINALLY DEVELOPED BY KILA FOR EXECUTION PURPOSE AND IS TO BE USED ONLY FOR THE PURPOSE FOR WHICH IT WAS LENT AND MUST NOT BE IN ANY WAY DETRIMENTAL TO THE INTERESTS OF THE COMPANY AND IS SUBJECT TO FORTUITOUS CHANGE



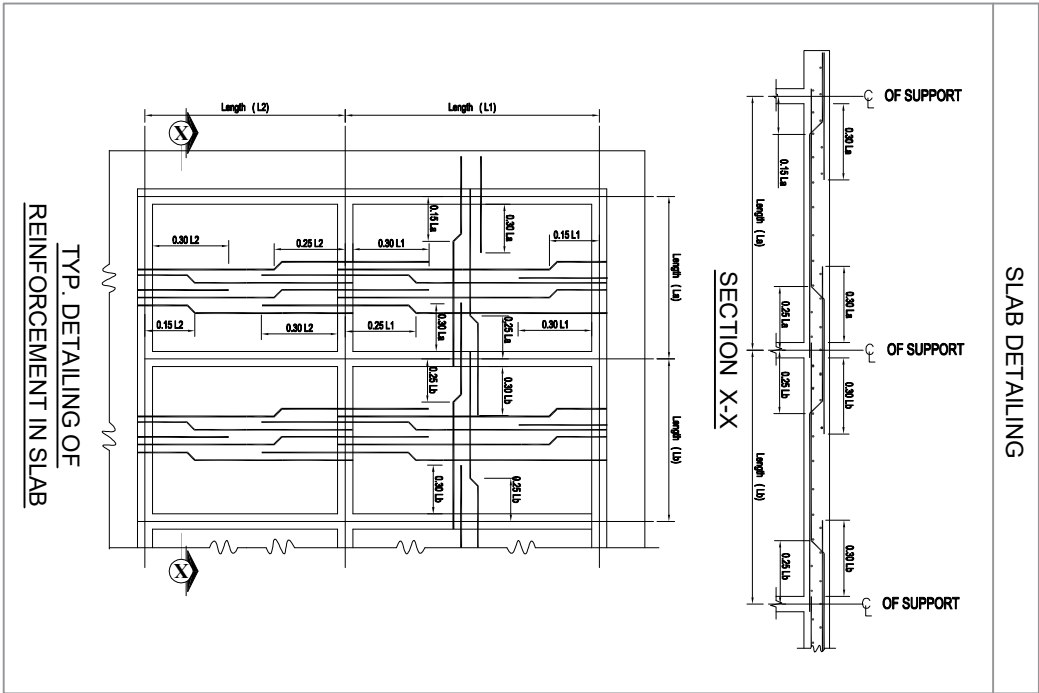
TYPICAL SUNSHADE

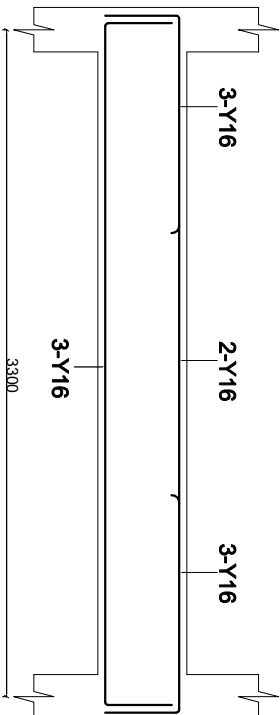
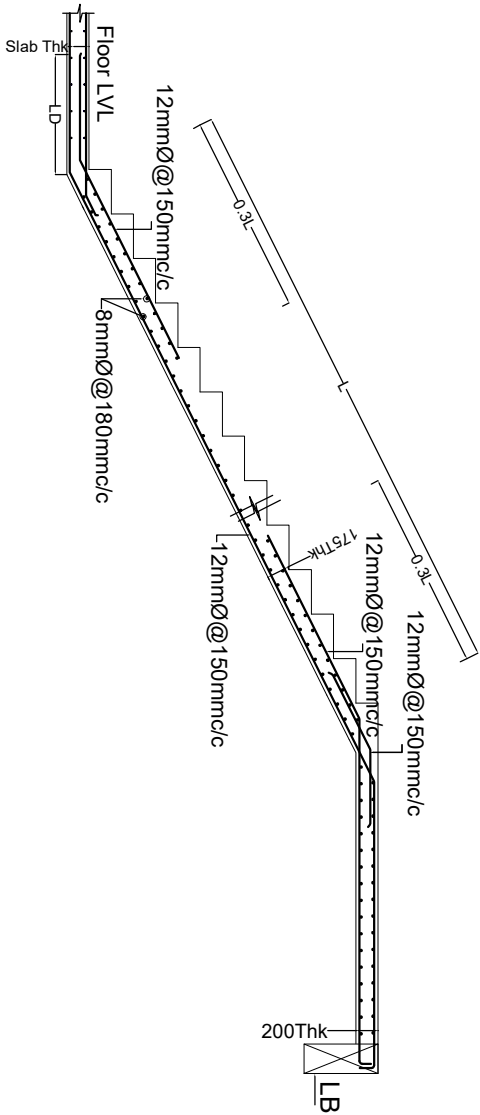


TYPICAL LINTEL OVER BRICK WALL

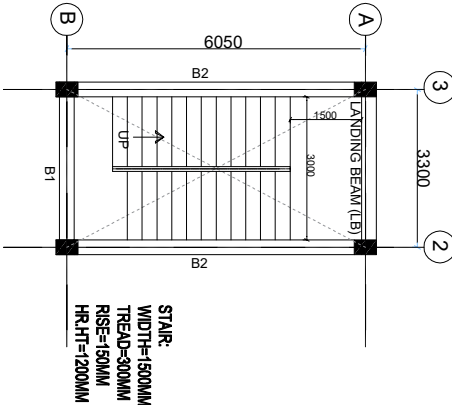
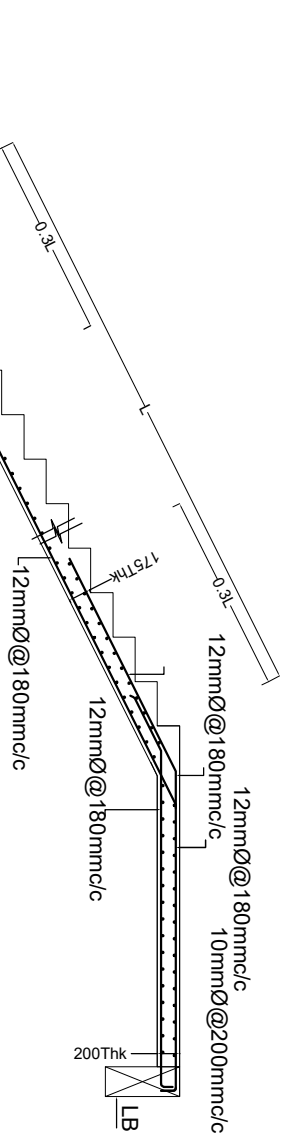
FIRST, TERRACE FLOOR & STAIR ROOM- SLAB REINFORCEMENT DETAILS				
TYPE	THICK	SHORT SPAN	LONG SPAN	TYPE
S1	120 MM	Y10@150MM C/C	Y8@120MM C/C	TWO WAY
S2	120 MM	Y10@150MM C/C	Y8@120MM C/C	TWO WAY
S3	150 MM	Y10@150MM C/C	Y8@120MM C/C	SUNKEN SLAB
S4	120 MM	Y10@180MM C/C	Y10@180MM C/C	TWO WAY

AT LOCATIONS WHERE PVC WATER TANKS ARE TO BE PLACED, PROVIDE S4 SLAB

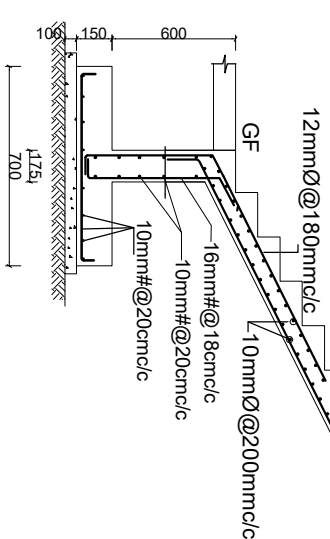




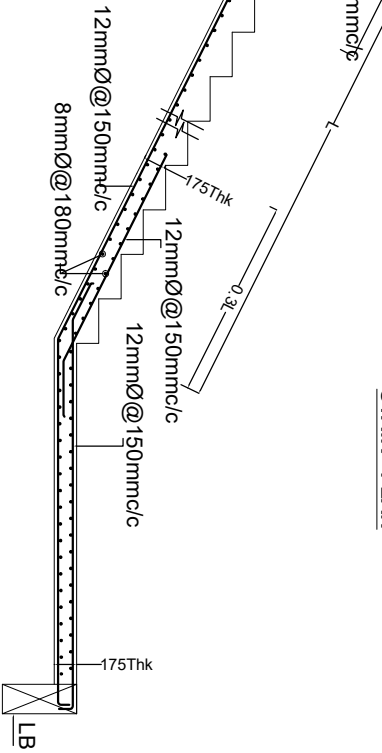
2 LEGGED 8MM DIA @ 140MM C/C AT CENTER
2 LEGGED 8MM DIA @ 90MM C/C AT ENDS
Landing Beam (LB) (250x350)



STAIR - PLAN



STAIR DETAILS



CLIENT

ASSISTANT ENGINEER

EXECUTIVE ENGINEER

SUPERINTENDING ENGINEER

DRAWING STATUS

CONCEPTUAL DRAWINGS	Drawn	AE
FOR COMMENTS APPROVAL	Checked	AE
FOR TENDER ONLY	Checked	AE
SANCTION DRAWINGS	Approved	EE
FOR INFORMATION	Scale	
GOOD FOR CONSTRUCTION	Date	

PROJECT INFORMATION

Project Name: **STAIR DETAILS**

Project No: **10**

DESIGNED BY: **THIRUVANANTHAPURAM**

PROJECT NO: **10**

PROJECT NO: **10**

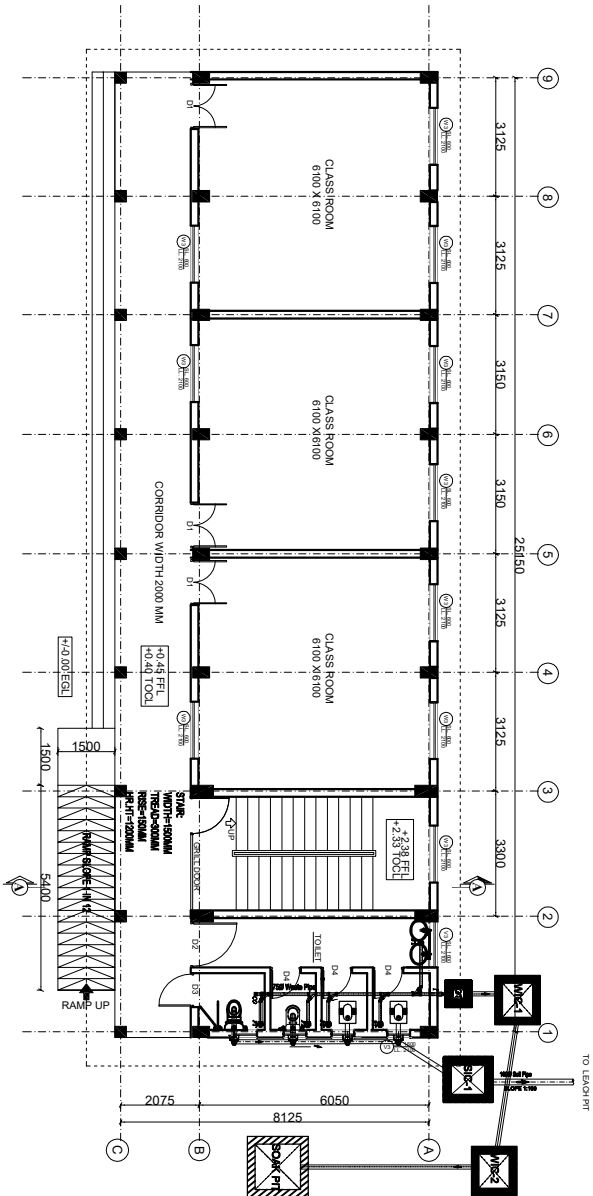
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PROJECT NO: **10**

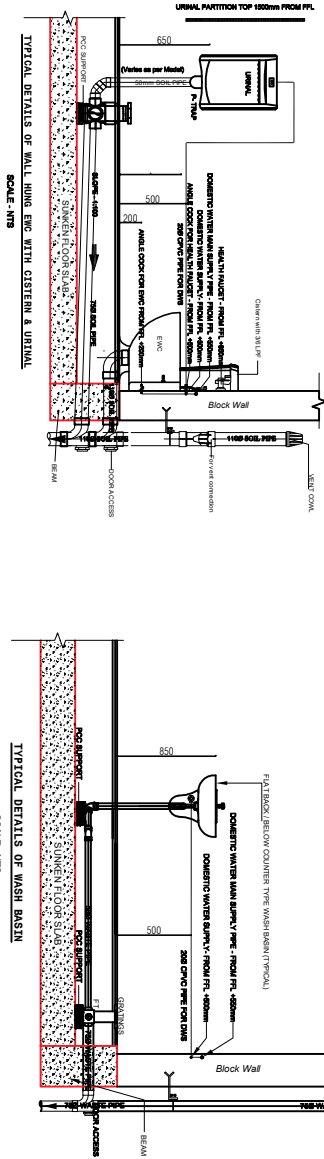
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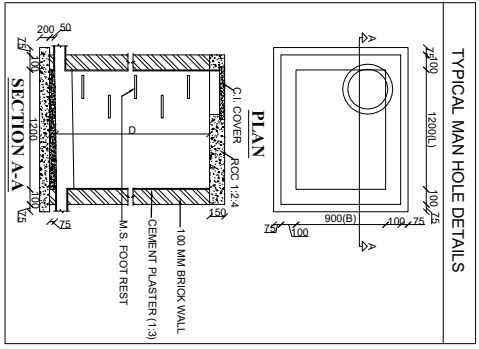
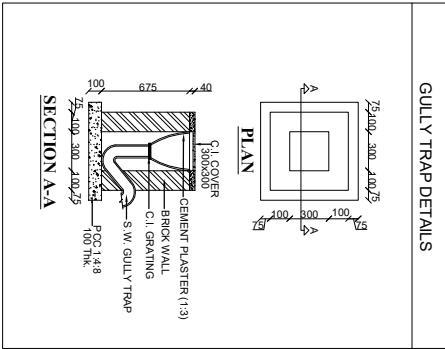
DATE: **10**



GROUND FLOOR - SEWAGE PLUMBING LAYOUT



TYPICAL DETAILS OF WASH BASIN



INVENTORY DETAILS OF MANHOLE			
S/NO.	TYPE	MANHOLE NUMBER	SIZE (MM) (1:500)
1	SOIL MANHOLE	SC-1	900x800x730
2	WASTE MANHOLE	WC-1	900x800x415
		WC-2	1200x900x585

ITEM	DESCRIPTION
1	Wash Basin for Dishwash
2	Health Faucet
3	Urinal
4	Wash Basin
5	Comer Type Wash Basin
6	110 mm Ø Casted Floor Trap for Urinal
7	110 mm Ø Floor Trap with Gatings
8	Brick
9	Gully Trap
10	Soil Man Hole
11	Waste Man Hole
12	Redding Eye
13	Clean Out
14	High Level
15	T/A To Above
16	T/B To Below
17	From Above
18	Insert Level
19	Cover Level
20	High Level
21	T/A To Above
22	T/B To Below
23	From Above

NOTE:

A. - Soil, Waste, Vent & Rain Water Pipe.

1. All external soil & waste pipe (in shaft) are SVP pipe (IS-13522 Type-B) with rubber ring / Seven Wedge Joints.

2. All internal Soil, Waste & Vent pipe (in shaft) are uPVC (IS-4853) dry joint with fittings.

3. All external Soil & Waste line are uPVC (IS-4853) dry joint with fittings.

4. All internal Soil & Waste line are uPVC (IS-4853) dry joint with fittings.

5. All external Rain water line from terrace (shaft) are SVP pipe (IS-13522 Type-A).

B. - Water Supply.

1. All internal & concealed Cold water supply line are SDR-11 grade CPVC pipes & fittings.

2. All hot water supply lines are SDR-11 grade CPVC pipes & fittings.

3. All external cold water supply lines are ASTM SCH-40 with ASTM fittings.

GENERAL NOTES

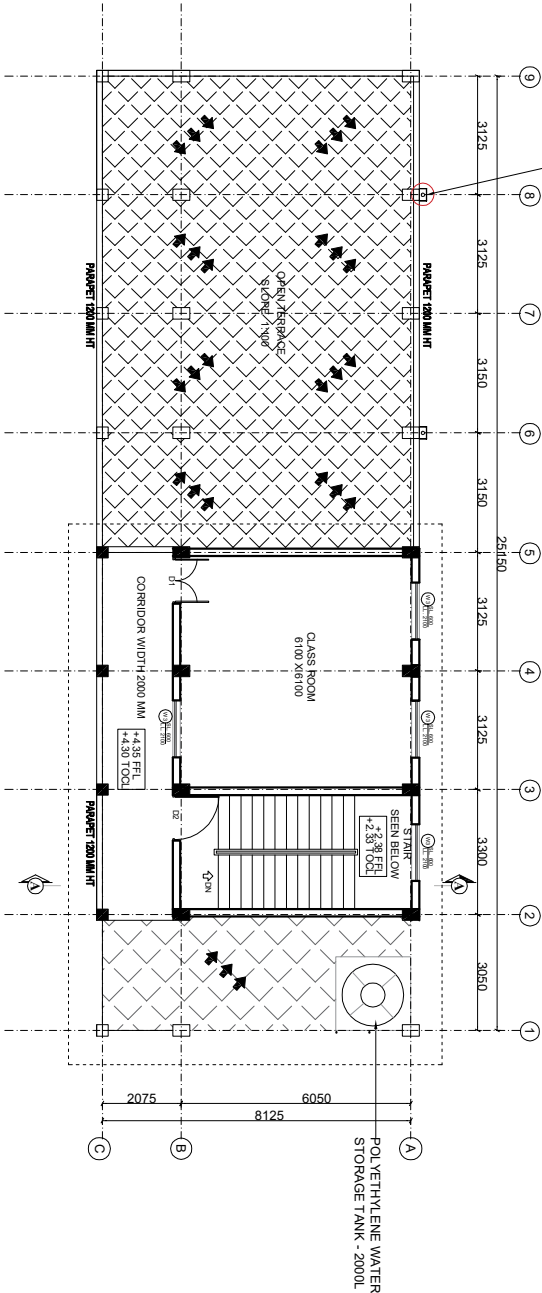
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2. ALL THE ARCHITECTURAL, STRUCTURAL AND SERVICES DRAWINGS SHALL BE REFERRED PRIOR TO CONSTRUCTION AT SITE.

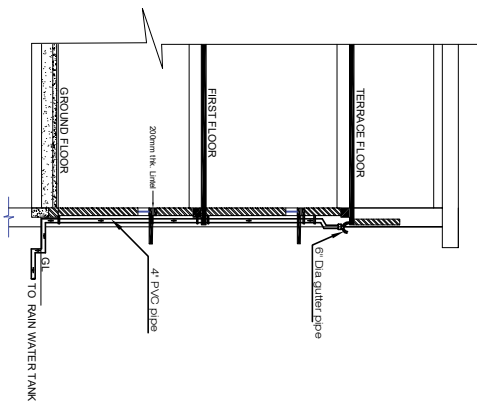
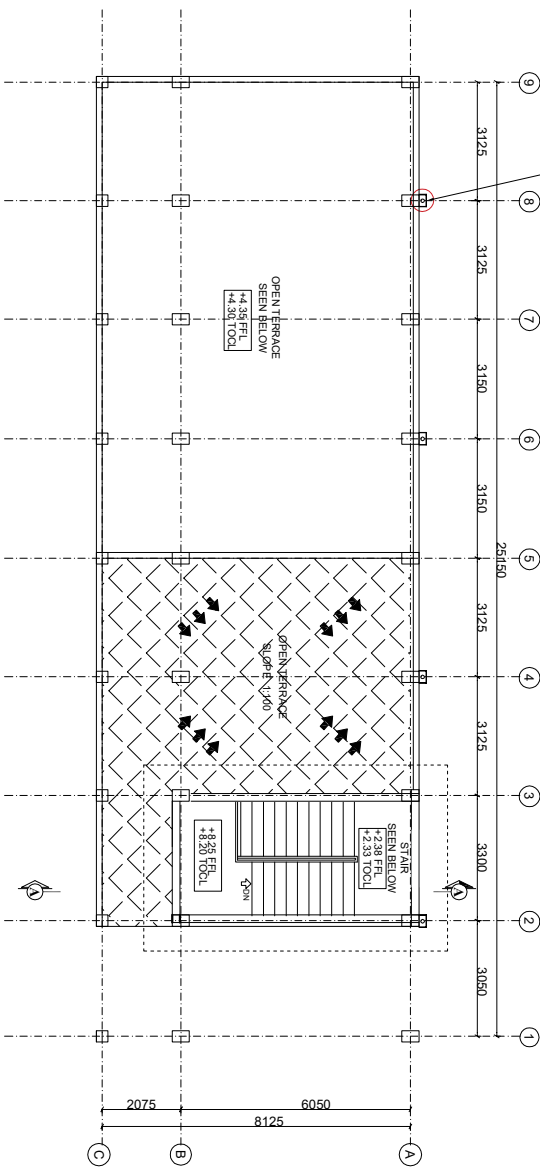
ROOF BLOCK OF DIMENSIONS 3000X3000 SHALL BE CASTED AT TERRACE FLOOR BEAM JOINTS WITH NECESSARY APPLIANCES FOR DROPPING RAIN WATER PIPES

ROOF BLOCK OF DIMENSIONS 3000X3000 SHALL BE CASTED AT TERRACE FLOOR BEAM JOINTS WITH NECESSARY APPLIANCES FOR DROPPING RAIN WATER PIPES

FIRST FLOOR - RAINWATER PLUMBING LAYOUT



TERRACE FLOOR - RAINWATER PLUMBING LAYOUT



TYPICAL SECTION SHOWING
RAIN WATER DOW PIPE



CLIENT

ASSISTANT ENGINEER

ASSISTANT EXECUTIVE ENGINEER

EXECUTIVE ENGINEER

SUPERINTENDING ENGINEER

DRAWING STATUS

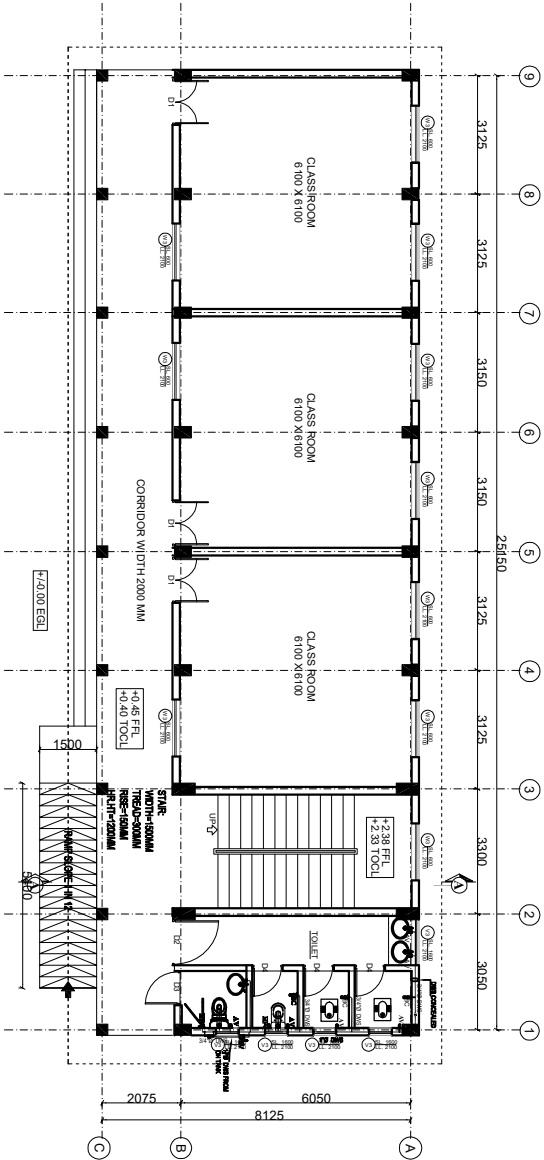
Drawn	AE
Checked	AE
For Comments Approval	AE
For Tender Only	AE
Sanction Drawings	EE
For Information	Scale
Good for Construction	AS BUILT

PROJECT NAME: GMLPS THIRUVATHIYA

PROJECT NO: 15

SHEET NO: 1

PAGE NO: 1



GROUND FLOOR - WATER SUPPLY PLUMBING LAYOUT

1. DRAWINGS NOT TO BE SCALED.
2. ALL THE ARCHITECTURAL, STRUCTURAL AND SERVICES DRAWINGS SHALL BE REFERRED PRIOR TO CONSTRUCTION AT SITE.

B. - Water Supply.

1. All internal & concealed Cold water supply lines are CPVC pipes & fittings.

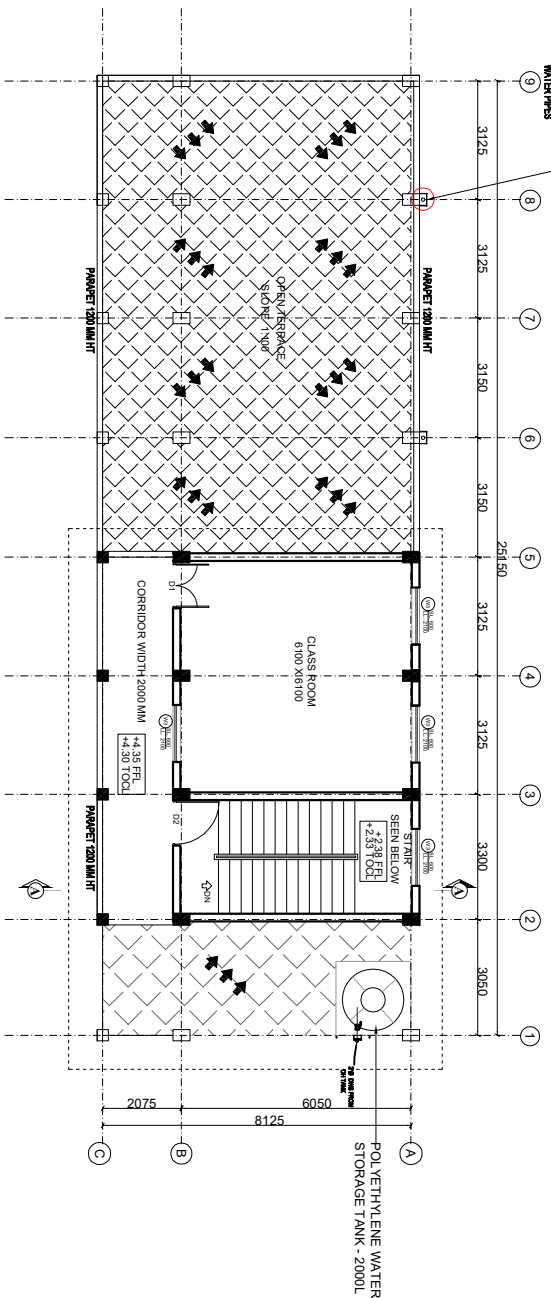
LEGEND

ITEM	DESCRIPTION
	Domestic water line
	European Water Closet (Floor Mounting with Flush Tank)
	Wash Basin
	Disabled European Water Closet
	Wash Basin for Disabled
	Counter Type Wash basin
	Urinal
	Health Faucet
	Bib cock
	Angle Valve
	Ball Valve
	Domestic Water Supply
	High Level
	To Above
	To Below
	From Above

NOTE: PLUMBING DRAWINGS PREPERED AS PER AVAILABLE DATAS.
FURTHER CHANGES SHALL BE DONE AS PER SITE CONDITION

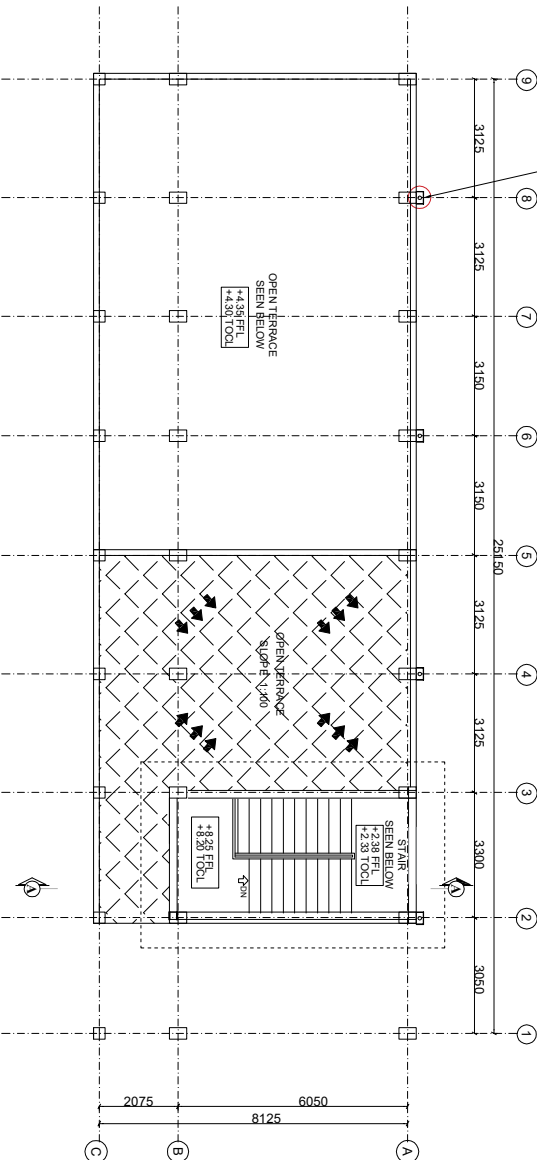
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SANCTION DRAWINGS		Approved	EE		
FOR REGISTRATION		Scale			
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ASSISTANT ENGINE					

ROOF FLOOR OF BUILDINGS SURROUNDING
SHALL BE COVERED AT TERRACE FLOOR
BEAM JOINTS WITH NECESSARY
APPROPRIATE FOR DRAINING MAIN
WATER PIPES



FIRST FLOOR - WATER SUPPLY PLUMBING LAYOUT

ROOF FLOOR OF DIMENSIONS 3000X3000
SHALL BE COVERED AT TERRACE FLOOR
BEAM JOINTS WITH NECESSARY
APPROPRIATE FOR DRAINING MAIN
WATER PIPES



TERRACE FLOOR - WATER SUPPLY PLUMBING LAYOUT

NOTE: PLUMBING DRAWINGS PREPARED AS PER AVAILABLE DATAS.
FURTHER CHANGES SHALL BE DONE AS PER SITE CONDITION

1. DRAWINGS NOT TO BE SCALED.
2. ALL THE ARCHITECTURAL, STRUCTURAL AND
SERVICES DRAWINGS SHALL BE REFERRED
PRIOR TO CONSTRUCTION AT SITE.

B - Water Supply.
1. All internal & concealed Cold water supply
lines are CPVC pipes & fittings.

LEGEND

ITEM	DESCRIPTION
	Domestic water line
	European Water Closet (Floor Mounting with Flush Tank)
	Wash Basin
	Disabled European Water Closet
	Wash Basin for Disabled
	Counter Type Wash basin
	Urinal
	Health Faucet
	Bib cock
	Angle Valve
	Ball Valve
	Domestic Water Supply
	High Level
	To Above
	To Below
	From Above

CLIENT

ASSISTANT ENGINEER

ASSISTANT EXECUTIVE ENGINEER

EXECUTIVE ENGINEER

SUPERINTENDING ENGINEER

DRAWING STATUS

CONCEPTUAL DRAWINGS	Drawn	AE
FOR COMMENTS APPROVAL	Checked	AE
FOR TENDER ONLY	Designed	AE
SANCTION DRAWINGS	Approved	EE
FOR INFORMATION	Scale	
GOOD FOR CONSTRUCTION		

PROJECT NAME:

GAIL'S THIRUVANTHRA

PROJECT NO:

10001

DATE:

17/07/2024

SHEET NO:

17

PAGE NO:

17

PROJECT NAME:

FIRST FLOOR - WATER SUPPLY PLUMBING LAYOUT

PROJECT NO:

10001

DATE:

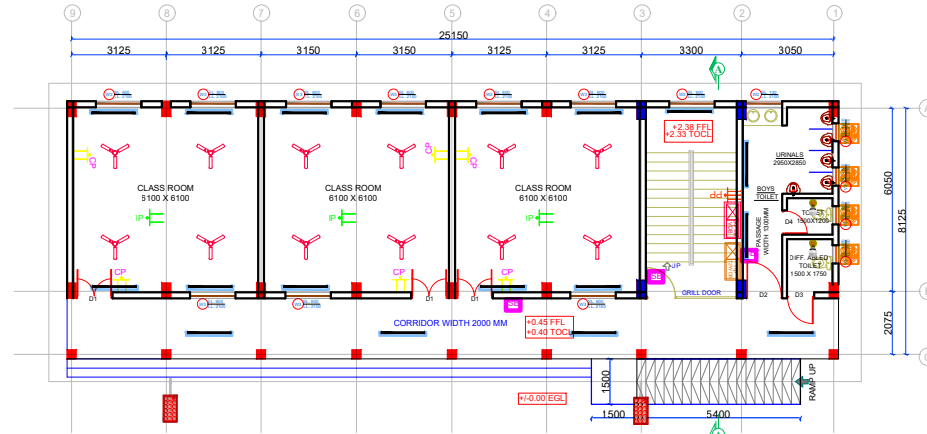
17/07/2024

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PAGE NO:

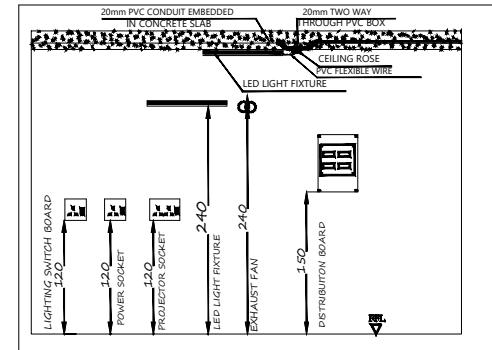
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GROUND FLOOR - ELECTRICAL POINTS LAYOUT

SL.NO.	SYMBOL	SPECIFICATION
1		Angle batten with LED
2		LED Tube Light
3		Bulk head with LED
4		LED Street light
5		1200 mm ceiling fan
6		Exhaust fan
7		Independent plug
8		Combined plug
9		6/16 A Power plug
10		2 No.CPB
11		3φ 8 Way VDB
12		3φ 6 Way DB
13		CIRCUIT CONDUIT LAYOUT
14		POINTS CONDUIT LAYOUT
15		POINT WIRING
16		SWITCH BOARD WITHOUT CP
17		HDMI CONDUIT

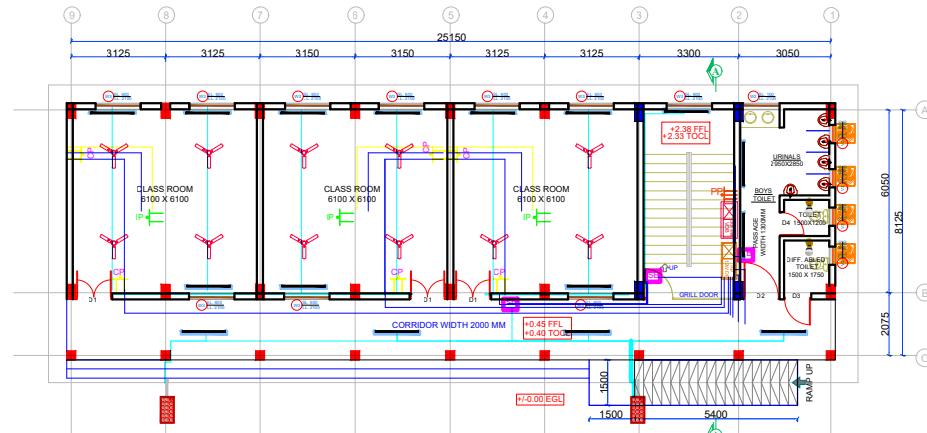
ABDUL VAHID KP
ENGINEER CONSULTANT ELECTRICAL
KILA



STANDARD MOUNTING HEIGHTS OF ELECTRICAL ACCESSORIES (SCALE : NTS)

CLIENT DEPARTMENT OF GENERAL EDUCATION A KERALA INFRASTRUCTURE PROJECT (KIP)	ASSISTANT ENGINEER	ASSISTANT EXECUTIVE ENGINEER	EXECUTIVE ENGINEER	SUPERINTENDING ENGINEER	DRAWING STATUS	Drawn: AE Checked: AE Designed: AE Checked: AEE Approved: EE Scale: Date:	Project Name: GMPLS THIRUVATHIRA Project No.: Title: GROUND FLOOR - ELECTRICAL POINTS LAYOUT Rev:
					CONCEPTUAL DRAWINGS FOR COMMENTS APPROVAL FOR TENDER ONLY SANCTION DRAWINGS FOR INFORMATION GOOD FOR CONSTRUCTION AS BUILT	SHEET NO. 01 Dwg. No.	

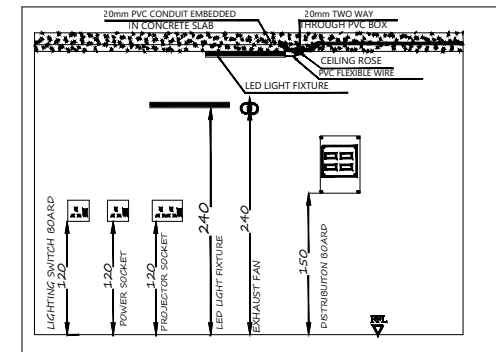
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GROUND FLOOR CONDUIT LAYOUT

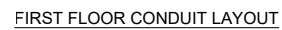
SL.NO.	SYMBOL	SPECIFICATION
1		Angle batten with LED
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3		Bulk head with LED
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6		Exhaust fan
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14		POINTS CONDUIT LAYOUT
15		POINT WIRING
16		SWITCH BOARD WITHOUT CP
17		HDMI CONDUIT

ABDUL VAHID KP
ENGINEER CONSULTANT ELECTRICAL
KILA



STANDARD MOUNTING HEIGHTS OF
ELECTRICAL ACCESSORIES (SCALE : NTS)

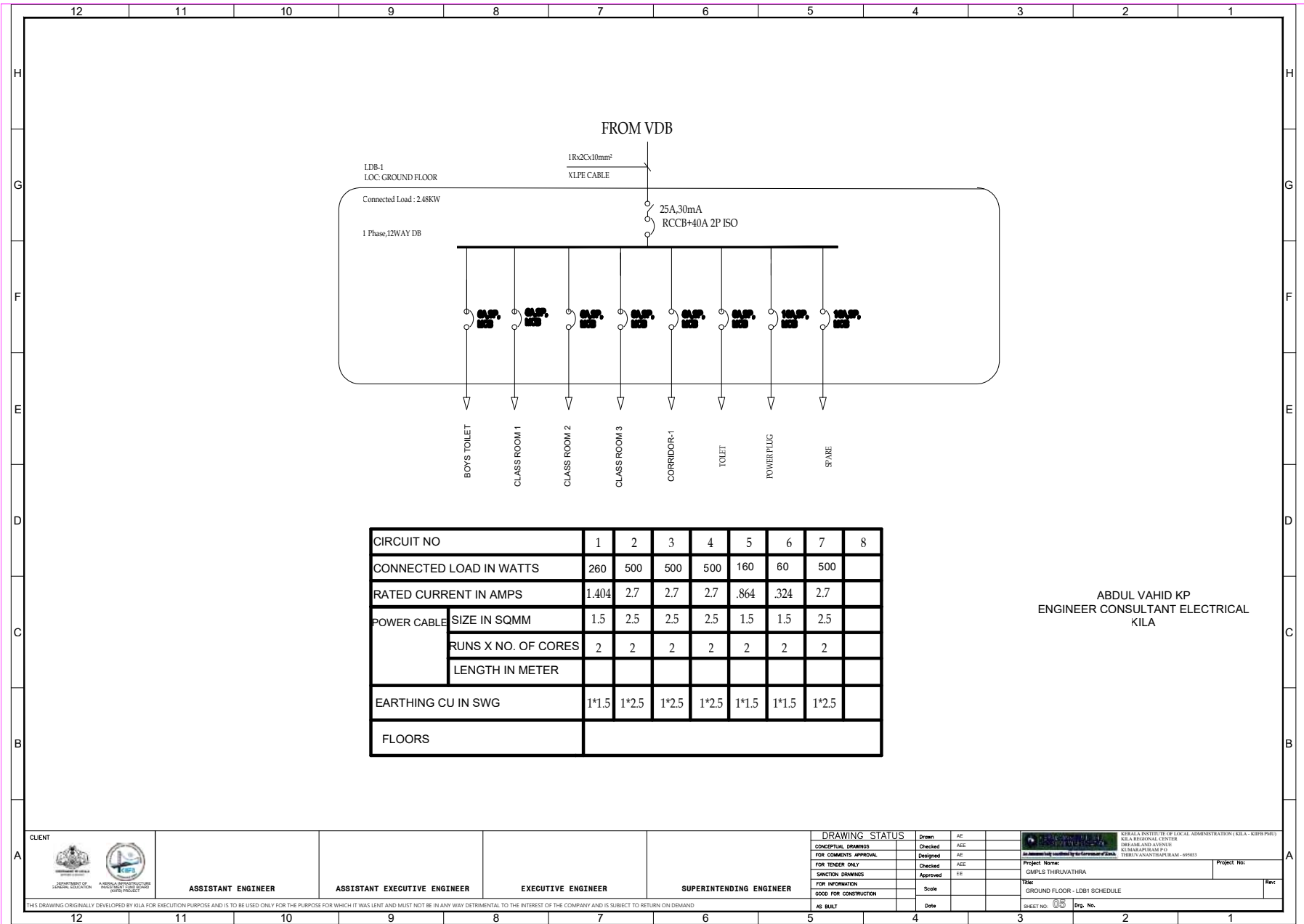
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THIS DRAWING ORIGINALLY DEVELOPED BY KILA FOR EXECUTION PURPOSE AND IS TO BE USED ONLY FOR THE PURPOSE FOR WHICH IT WAS LENT AND MUST NOT BE IN ANY WAY DETRIMENTAL TO THE INTEREST OF THE COMPANY AND IS SUBJECT TO RETURN ON DEMAND.									
DRAWING STATUS CONCEPTUAL DRAWING: ☒ Drawn: AE FOR COMMENTS APPROVAL: ☒ AE FOR TENDER ONLY: ☒ AE SANCTION DRAWING: ☒ EE FOR INFORMATION: ☐ Scale: GOOD FOR CONSTRUCTION: ☐ Date: AS BUILT: ☐		Drawn: AE Checked: AEE Designed: AE Approved: EE Scale: Date: SHEET NO. 03		KERALA INSTITUTE OF LOCAL ADMINISTRATION (KILA - KIRIPPAU) KILA REGIONAL CENTER DREAM AND VISION KUMARAPURAM P.O. THIRUVANANTHAPURAM - 695033 Project Name: GMPLS THIRUVATHIRA Title: GROUND FLOOR - ELECTRICAL CONDUIT LAYOUT Rev:		Project No: Date: SHEET NO. 03 Dwg. No.			

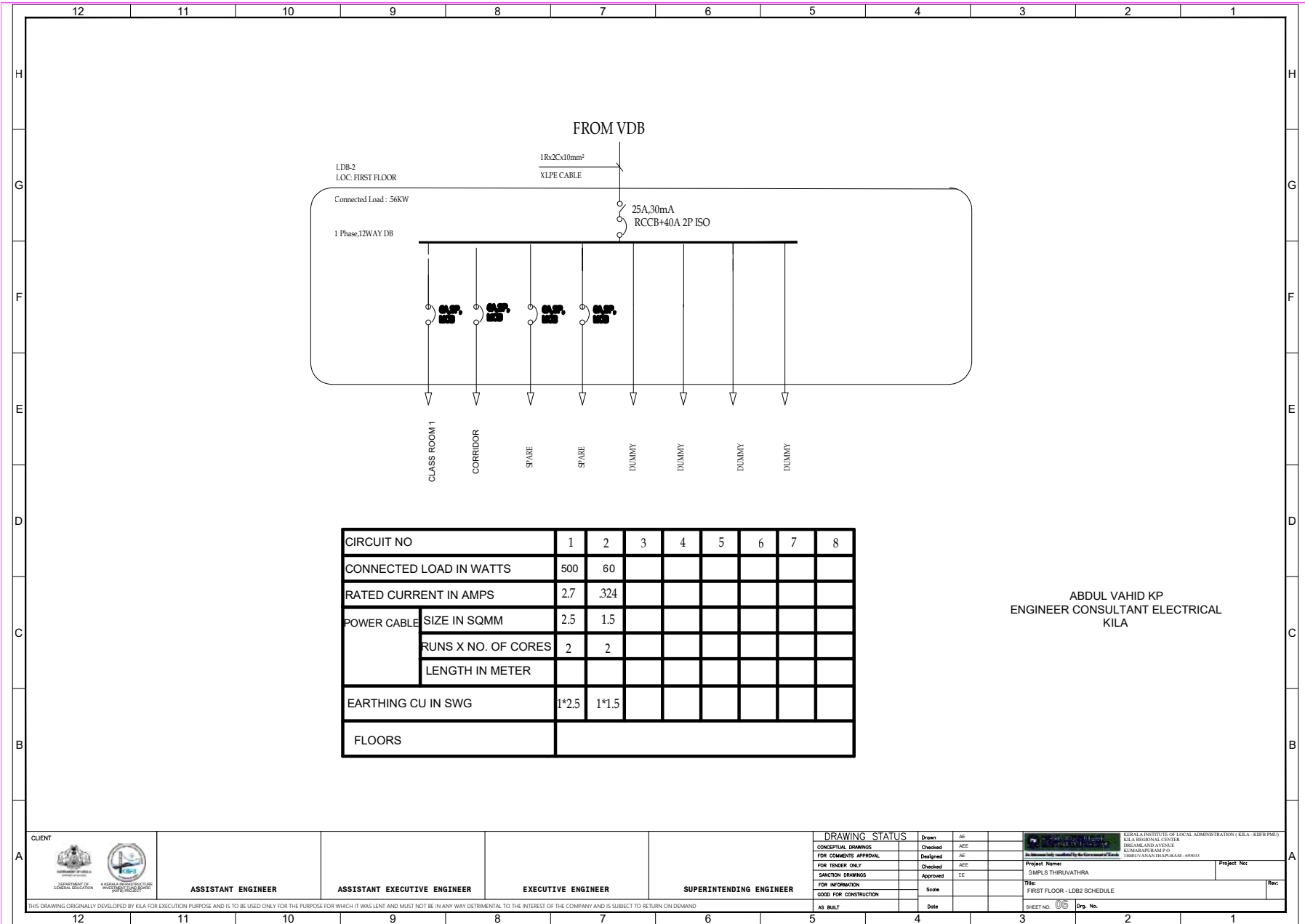


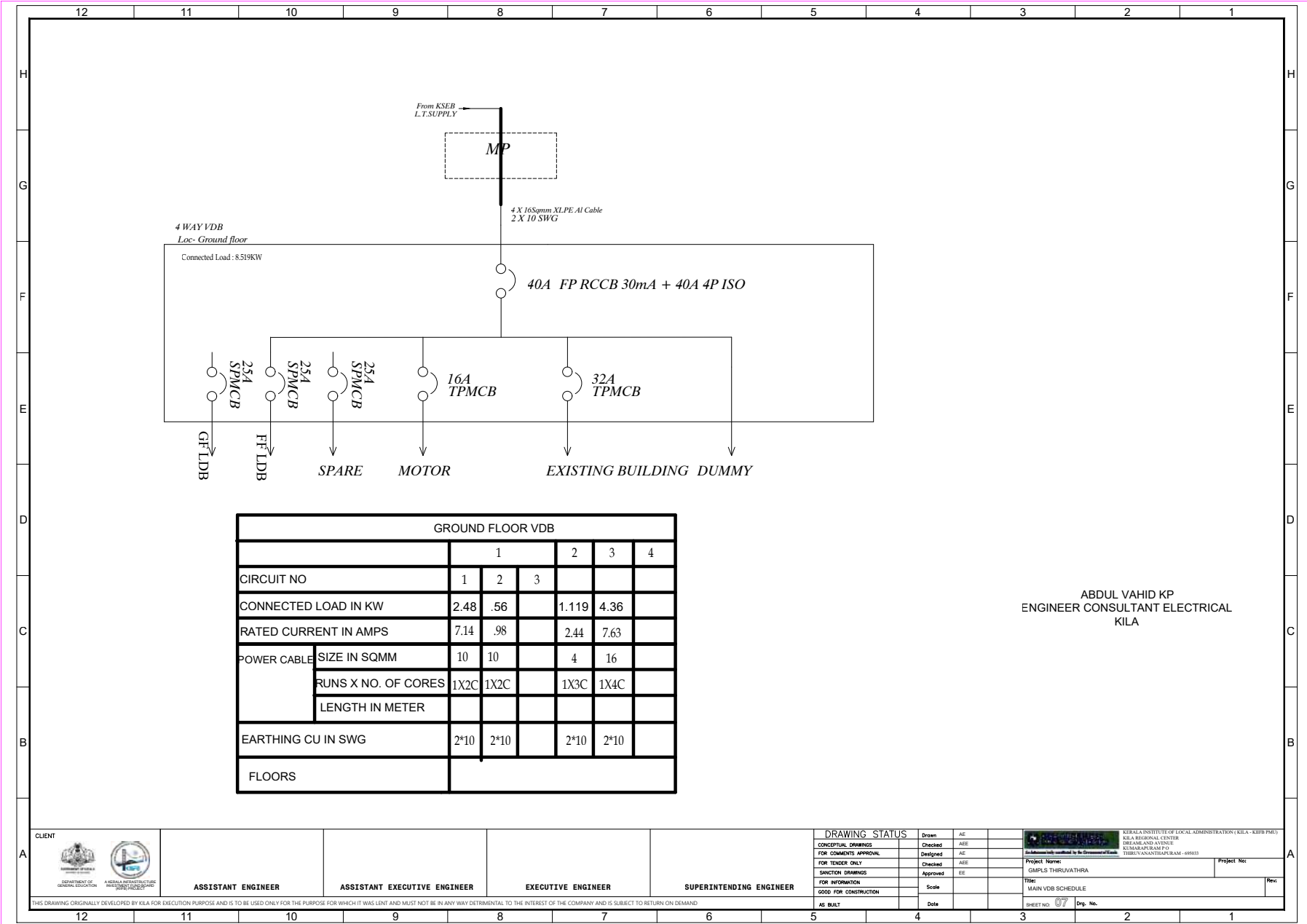
ABDUL VAHID KP
ENGINEER CONSULTANT ELECTRICAL
KILA



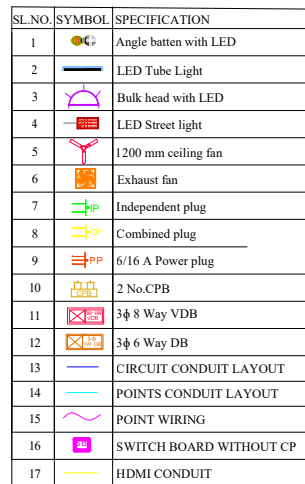
 DEPARTMENT OF GENERAL EDUCATION	 KERALA INSTITUTE OF LOCAL ADMINISTRATION (KILA - KILB PARI) KILA REGIONAL CENTRE DREAMLAND AVENUE KILASAPATTAN P.O. THIRUVANANTHAPURAM - 695031	CLIENT	ASSISTANT ENGINEER	ASSISTANT EXECUTIVE ENGINEER	EXECUTIVE ENGINEER	SUPERINTENDING ENGINEER	DRAWING STATUS				 KERALA INSTITUTE OF LOCAL ADMINISTRATION (KILA - KILB PARI) KILA REGIONAL CENTRE DREAMLAND AVENUE KILASAPATTAN P.O. THIRUVANANTHAPURAM - 695031	Project Name: SAMPLE THIRUVATHIRA	Project No: 1												
							DRAWN AE	CHECKED AEE	DESIGNED AEE	APPROVED EE				SCALE 1:100	DATE 04/04/2024	SHEET NO. 04	Dwg. No. 2								
THIS DRAWING ORIGINALLY DEVELOPED BY KILA FOR EXECUTION PURPOSE AND IS TO BE USED ONLY FOR THE PURPOSE FOR WHICH IT WAS LENT AND MUST NOT BE IN ANY WAY DETRIMENTAL TO THE INTEREST OF THE COMPANY AND IS SUBJECT TO RETURN ON DEMAND														12	11	10	9	8	7	6	5	4	3	2	1



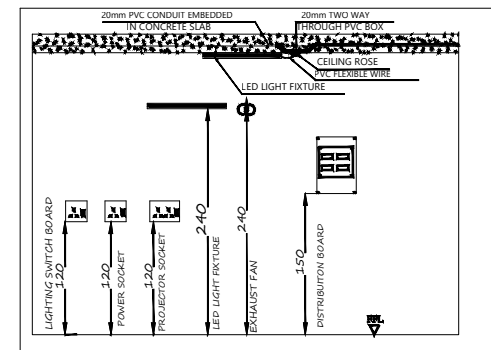




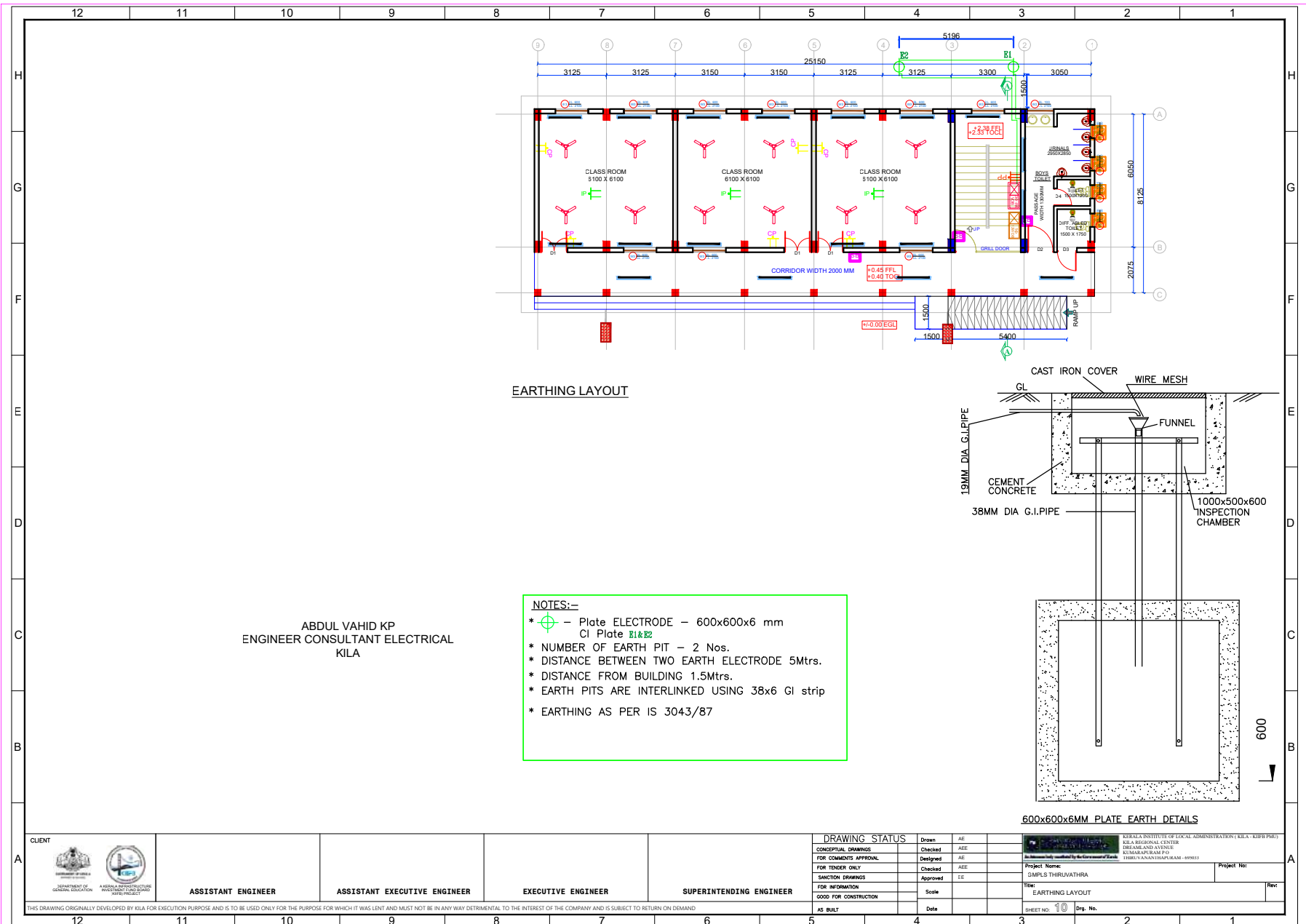
 						DRAWING STATUS Drawn: AE Checked: AE For Comments Approval: AE For Tender Only: AE Section Drawings: AE For Information: EE Good for Construction: EE AS BUILT: EE		Drawn: AE Checked: AE Designed: AE Approved: EE Score: EE Date: EE		 KERALA INSTITUTE OF LOCAL ADMINISTRATION (KILA - KIRIPPALE) KILA REGIONAL CENTER DREAMS AND AVOIDS KILASAPATTANAM P.O. THIRUVANANTHAPURAM - 690013 Project No: _____ Title: GROUND FLOOR - CONTROL WIRING SHEET NO: 08 Dwg. No. _____	
ASSISTANT ENGINEER		ASSISTANT EXECUTIVE ENGINEER		EXECUTIVE ENGINEER		SUPERINTENDING ENGINEER					
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12	11	10	9	8	7	6	5	4	3	2	1



ABDUL VAHID KP
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KILA



STANDARD MOUNTING HEIGHTS OF ELECTRICAL ACCESSORIES (SCALE : NTS)



Annexure – 3**Estimate Report**

GMLPS Thiruvathra has been included in the list of works proposed in KIIFB project of govt of Kerala. The work has been proposed to construct class rooms for GMLPS Thiruvathra in Chavakkad Municipality. This govt school is one of the most reputed educational institutions in Chavakkad Municipality. As per the essentiality certificate of head master of the school there is shortage of class rooms. More over the classes are conducting in the old buildings, which are tiled & RCC roof and most of them are damaged and beyond repair. The new KIIFB project, Includes 3 Class rooms & Toilet in the Ground Floor & 1 class room in First Floor. In this building, in two floors, provided class rooms of size 610x610 and veranda of width 200 cm.

The building is designed as a framed structure with columns and beams. Sufficient Foundation design is provided referring the soil test report. Detailed design drawings for architectural and structural drawings were attached with this.

The major items of the work are Pile foundation, centering and shuttering for column, beams, shade and slab, RCC M-25 for column, lintel roof slab, beams and stair, solid block masonry in cm 1:6, plastering in cm 1:6, flooring with vitrified tiles, steel work for frames & shutters of windows, and doors. flooring with ceramic antiskid tiles for toilet block, etc. Provisions for plumbing and sanitary works, provision for Providing & Fixing Granite Name Board are also included in this estimate. Provision for 18% GST Included in the estimate. Amount for civil work come to Rs. 1,25,64,241.66/-

The work is proposed to be executed through Tender. Estimate is prepared based on 2018 Delhi Schedule of rates (Cost of Index -35.59%) with adding contractor's profit and Over Head Charges. Estimate amount comes to Rs. 12999995.87 /-.



Annexure – 4
Detailed Estimate



EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

GENERAL ABSTRACT

KIIFB-KILA 1 CRORE PROJECT-INFRASTRUCTURE DEVELOPEMENT AT GMLPS
THIRUVATHRA(SCHOOL CODE-24215)-THRISSUR-Construction of new building(G+1)-
Composite Civil Work

Sl No	Head Description	Amount
1	EARTHWORK EXCAVATION	64838.38
2	CEMENT CONCRETE WORKS	309612.38
3	CENTERING AND SHUTTERING WORKS	857922.03
4	RCC WORKS	3430006.00
5	STEEL REINFORCEMENT WORKS	2865696.84
6	MASONRY WORKS	608367.30
7	CEMENT PLASTERING WORKS	623442.97
8	JOINERIES	437048.34
9	STEEL WORKS	46366.94
10	PAINTING WORKS	429779.73
11	TILES WORK	651185.65
12	PLUMBING WORKS	187855.64
13	WATER PROOFING WORKS	124678.72
14	NAME BOARD	10861.50
	Total Estimation PAC	10647662.42
C	Extra Charges	
C.001	Provision for GST	
	10647662.42 18.00%	1916579.24
	Grand Total	0.00
	Round off	0.00
	Rounded Total(Rs)	12564241.66
	Rupees One Crore Twenty Five Lakh Sixty Four Thousand Two Hundred and Forty One	

Approved By

(PEN:),

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

DETAILED ESTIMATE

**KIIFB-KILA 1 CRORE PROJECT-INFRASTRUCTURE DEVELOPEMENT AT GMLPS
THIRUVATHRA(SCHOOL CODE-24215)-THRISSUR-Construction of new building(G+1)-
Composite Civil Work**

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
1	EARTHWORK EXCAVATION						
1.001	2.6.1						
	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead up to 50 m and lift up to 1.5 m, disposed earth to be levelled and neatly dressed.All kinds of soil						
	PILE CAP						
	P50	9.0000 0	1.000	1.000	0.900	1.0000 00	8.100
	2P50	18.000 00	2.700	1.400	1.150	1.0000 00	78.246
	Total						86.346
	SEPTIC TANK&SOAK PIT						
	SEPTIC TANK	1.0000 0	3.000	6.000	1.500		27.000
	SOAK PIT	1.0000 0	2.000	2.000	1.500		6.000
	Total						33.000
	Total Quantity in cum						119.346
1.002	2.8.1						
	Earth work in excavation by mechanical means (Hydraulic excavator) /manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift up to 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.All kinds of soil						
	PLINTH BEAM AND DR WORKS						
	DR	2.0000 0	16.500	0.600	0.600		11.880
	DR	2.0000 0	3.700	0.600	0.600		2.664
	PB	7.0000 0	3.700	0.300	0.100		0.777
	PB-TOILET PORTION	1.0000 0	6.050	0.250	0.100		0.151
	PB-TOILET PORTION	2.0000 0	1.550	0.250	0.100		0.078

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	PB-STAIR STARTER	1.0000 0	3.000	0.250	0.100		0.075
	Total						15.625
	STEP&RAMP						
	RAMP	1.0000 0	9.050	1.500	0.100		1.358
	STEP	1.0000 0	15.000	1.050	0.100		1.575
	Total						2.933
	Total Quantity in cum						18.558
1.003	2.25						
	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundation etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m.						
	Filling						
		1.0000 0	119.346+ 18.558			0.8000 00	110.323
	Total						110.323
	Total Quantity in cum						110.323
1.004	50.2.25.1						
	Filling with contractor's own earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m as per direction of site Engineer-in-charge						
	FILLING						
		1.0000 0	10.000				10.000
	Total						10.000
	Total Quantity in cum						10.000
2	CEMENT CONCRETE WORKS						
2.001	4.1.8						
	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40 nominal size)						
	PILE CAP BOTTOM PCC						
	P50	9.0000 0	0.900	0.900	0.100		0.729
	2P50	18.000 00	1.300	2.600	0.100		6.084
	Total						6.813
	RAMP						

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	SLOPE TOP	1.0000 0	7.200	1.200	0.075		0.648
	LANDING TOP	1.0000 0	1.200	1.200	0.075		0.108
	Total						0.756
	INSIDE						
	CLASSROOM	3.0000 0	6.100	6.100	0.075		8.372
	TOILET	1.0000 0	3.050	6.100	0.075		1.395
	STAIR	1.0000 0	3.300	6.100	0.075		1.510
	VERANDAH	1.0000 0	25.15+.3	2.000	0.075		3.818
	Total						15.095
	SEPTIC TANK PCC						
		1.0000 0	3.000	6.000	0.100		1.800
	Total						1.800
	PLINTH BEAM BOTTOM PCC						
	PB	4.0000 0	2.850	0.250	0.100		0.285
	PB	2.0000 0	2.825	0.250	0.100		0.141
	PB	1.0000 0	2.750	0.250	0.100		0.069
	PB	1.0000 0	3.000	0.250	0.100		0.075
	PB	2.0000 0	5.500	0.600	0.100		0.660
	PB	2.0000 0	1.700	0.600	0.100		0.204
	PB	7.0000 0	5.500	0.250	0.100		0.963
	PB	7.0000 0	1.700	0.250	0.100		0.298
	PB-TOILET PORTION	1.0000 0	6.050	0.250	0.100		0.151
	PB-TOILET PORTION	2.0000 0	1.550	0.250	0.100		0.078
	PB-STAIR STARTER	1.0000 0	3.000	0.250	0.100		0.075
	Total						2.999

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Total Quantity in cum						27.463
2.002	4.2.5	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor, etc. up to floor five level, excluding the cost of centering, shuttering and finishing: 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)					
	DUMMY COLUMN						
	Main columns	14.0000 00	0.500	0.300	1.200		2.520
	Main columns	4.0000 0	0.600	0.300	1.200		0.864
	Verandah columns	9.0000 0	0.300	0.300	1.200		0.972
	Total						4.356
	Total Quantity in cum						4.356
2.003	2.34.1	Supplying chemical emulsion in sealed containers including delivery as specified. Chlorpyrifos / Lindane emulsifiable concentrate of 20%					
	GF Area						
		1.0000 0	25.500	8.300		0.5500 00	116.408
	Total						116.408
	Total Quantity in Litre						116.408
2.004	2.35.3.1	Diluting and injecting chemical emulsion for POST -CONSTRUCTIONAL anti-termite treatment (excluding the cost of chemical emulsion): Treatment of soil under existing floors using chemical emulsion @ one litre per hole, 300 mm apart including drilling 12 mm diameter holes and plugging with cement mortar 1:2 (1 cement : 2 coarse sand) to match the existing floor: With Chlorpyrifos/Lindane E.C. 20% with 1% concentration					
	Dilution & injection						
	Class room	3.0000 0	6.100	6.100			111.630
	Toilet	1.0000 0	3.050	6.100			18.605
	stair	1.0000 0	3.300	6.100			20.130
	verandah	1.0000 0	25.15+.3	2.000			50.900
	Total						201.265
	Total Quantity in sqm						201.265

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
3	CENTERING AND SHUTTERING WORKS						
3.001	5.9.1						
	Centering and shuttering including strutting, etc. and removal of form for:Foundations, footings, bases of columns, etc for mass concrete						
	PILE CAP&PCC						
	PC50	9.0000 0	3.200		0.650		18.720
	2PC50	18.000 00	7.400		0.900		119.880
	PC50 PCC	9.0000 0	3.200		0.100		2.880
	2PC50 PCC	18.000 00	7.400		0.100		13.320
	Total						154.800
	COLUMN UPTO GL						
	P50	9.0000 0	1.200		0.150		1.620
	2P50	14.000 00	1.600		0.150		3.360
	2P50	4.0000 0	1.800		0.150		1.080
	Total						6.060
	Total Quantity in sqm						160.860
3.002	5.9.5						
	Centering and shuttering including strutting, etc. and removal of form for:Lintels, beams, plinth beams, girders bressumers and cantilevers						
	PLINTH BEAM BOTTOM PCC ABOVE DR						
	DR	16.000 00	2.850		0.100		4.560
	DR	8.0000 0	2.825		0.100		2.260
	DR	4.0000 0	2.750		0.100		1.100
	DR	4.0000 0	3.000		0.100		1.200
	Total						9.120
	Lintel GF FF						
	B1	24.000 00	2.825	0.150			10.170
	B1	8.0000 0	2.850	0.150			3.420
	B1	8.0000 0	3.000	0.150			3.600

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	B1	4.0000 0	2.750	0.150			1.650
	B2	18.000 00	5.600	0.150			15.120
	B3	4.0000 0	1.700	0.800			5.440
	VERANDAH B3	6.0000 0	2.825	0.800			13.560
	VERANDAH B3	2.0000 0	2.850	0.800			4.560
	VERANDAH B3	2.0000 0	3.000	0.800			4.800
	VERANDAH B3	1.0000 0	2.750	0.800			2.200
	Total						64.520
	Plinth Beam						
	Horizontal	24.000 00	2.850	0.450			30.780
		12.000 00	2.825	0.450			15.255
		6.0000 0	2.800	0.450			7.560
		6.0000 0	3.000	0.450			8.100
	vertical	18.000 00	5.550	0.450			44.955
	Varandah	18.000 00	1.700	0.450			13.770
	Toilet inside	2.0000 0	6.050	0.450			5.445
	Toilet inside	4.0000 0	1.450	0.450			2.610
	Total						128.475
	Floor beams GF FF						
	B1	12.000 00	2.825	0.610			20.679
	B1	4.0000 0	2.850	0.610			6.954
	B1	4.0000 0	3.000	0.610			7.320
	B1	2.0000 0	2.750	0.610			3.355
	B2	13.000 00	5.600	1.010			73.528

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(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%)

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	B3	13.000 00	1.700	0.610			13.481
	B3	6.0000 0	2.825	0.610			10.340
	B3	2.0000 0	2.850	0.610			3.477
	B3	2.0000 0	3.000	0.610			3.660
	B3	1.0000 0	2.750	0.610			1.678
	Total						144.472
	Total Quantity in sqm						346.587
3.003	5.9.6						
	Centering and shuttering including strutting, etc. and removal of form for:Columns, Pillars, Piers, Abutments, Posts and Struts						
	GF&FF						
	Main columns	18.000 00	1.600	3.780			108.864
	Main columns	8.0000 0	1.800	3.780			54.432
	Varandah columns	13.000 00	1.200	3.780			58.968
	Total						222.264
	DUMMY COLUMN						
	Main columns	14.000 00	1.600	1.200			26.880
	Main columns	4.0000 0	1.800	1.200			8.640
	Varandah columns	9.0000 0	1.200	1.200			12.960
	Total						48.480
	Total Quantity in sqm						270.744
3.004	5.9.7						
	Centering and shuttering including strutting, etc. and removal of form for:Stairs, (excluding landings) except spiral - staircases)						
	WAIST SLAB						
	Waist slab(GF FF SF)	2.0000 0	4.090	1.600			13.088
	Total						13.088
	Total Quantity in sqm						13.088
3.005	5.9.18						

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Centering and shuttering including strutting, etc. and removal of form for:Small surfaces such as cantilever ends, brackets and ends of steps, caps and bases to pilasters and columns and the like						
	STEP ENDS						
	Steps ends	52.000 00	0.500	0.300	0.150		1.170
	Total						1.170
	Total Quantity in sqm						1.170
3.006	5.9.19						
	Centering and shuttering including strutting, etc. and removal of form for:Weather shade, Chajjas, corbels etc., including edges						
	SUNSHADE						
	Sunshde-GF	1.0000 0	72.370	0.850			61.515
	Sunshde-FF	1.0000 0	2*(3.125 +3.125+3 .3+.3+.9+ 8.125+2 5+.15+.9)	0.850			34.298
	Total						95.813
	Total Quantity in sqm						95.813
3.007	5.9.3						
	Centering and shuttering including strutting, etc. and removal of form for:Suspended floors, roofs, landings, balconies and access platform						
	Slab GF FF&STAIR ROOM						
	Class Room GF&FF	8.0000 0	3.000	6.100			146.400
	Landing	1.0000 0	3.000	1.500			4.500
		1.0000 0	3.210	6.13-1.5- 3.9			2.343
	Varandah GF FF	8.0000 0	3.000	1.700			40.800
	Toilet + stair verandah portion	2.0000 0	3.000	1.700			10.200
	Toilets	1.0000 0	2.900	6.100			17.690
	Slab projection	1.0000 0	120.000	0.200			24.000
	Total						245.933
	Total Quantity in sqm						245.933
3.008	5.9.16.1						

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Centering and shuttering including strutting, etc. and removal of form for: Edges of slabs and breaks in floors and walls Under 20 cm wide						
	EDGES OF SLAB						
	Waist slab	4.0000 0	5.470				21.880
	Riser	52.000 00	1.600				83.200
	Roof slab edges	1.0000 0	120.000				120.000
		4.0000 0	1.600				6.400
	Total						231.480
	Total Quantity in metre						231.480
4	RCC WORKS						
4.001	OD282344/2023-2024						
	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer - in-charge. All work upto plinth level						
	LEACH PIT SLAB						
		1.0000 0	3.000	2.200	0.120	1.0000 00	0.792
	Total						0.792
	PILE CAP						
	P50	9.0000 0	0.800	0.800	0.650	1.0000 00	3.744
	2P50	18.000 00	2.500	1.200	0.900	1.0000 00	48.600
	Total						52.344
	PLINTH BEAM						
	Long ways	12.000 00	2.850	0.250	0.450	1.0000 00	3.848
		6.0000 0	2.825	0.250	0.450	1.0000 00	1.907
		3.0000 0	3.000	0.250	0.450	1.0000 00	1.013
		3.0000 0	2.900	0.250	0.450	1.0000 00	0.979
		9.0000 0	1.700	0.250	0.450	1.0000 00	1.721

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Short ways	9.0000 0	5.550	0.250	0.450	1.0000 00	5.619
	Toilet	1.0000 0	6.050	0.250	0.450	1.0000 00	0.681
		2.0000 0	1.450	0.250	0.450	1.0000 00	0.326
	Total						16.094
	COLUMN UPTO GL						
	P50	9.0000 0	0.300	0.300	0.150		0.122
	2P50	14.0000 00	0.500	0.300	0.150		0.315
	2P50	4.0000 0	0.600	0.300	0.150		0.108
	Total						0.545
	Total Quantity in cum						69.775
4.002	OD282343/2023-2024						
	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer - in-charge. All work above plinth level upto floor V level						
	Sunshade (GF FF)						
	Sunshade GF	1.0000 0	72.370	0.800	0.085	1.0000 00	4.921
	Sunshde-FF	1.0000 0	2*(3.125 +3.125+3 .3+.3+.9+ 8.125+.2 5+.15+.9)	0.800	0.085	1.0000 00	2.744
	Total						7.665
	Column GF FF & SF						
	Main column-C1	18.0000 00	0.500	0.300	3.780	1.0000 00	10.206
	Main columns-C1 PLINTH HT	14.0000 00	0.500	0.300	0.450	1.0000 00	0.945
	STAIR columns-C3 PLINTH HT	4.0000 0	0.600	0.300	0.450	1.0000 00	0.324
	VERANDAH columns-C2 PLINTH HT	9.0000 0	0.300	0.300	0.450	1.0000 00	0.365
	Stair portion -C3 GF&FF	8.0000 0	0.600	0.300	3.780	1.0000 00	5.443

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Verandah columns-C2 GF&FF	13.000 00	0.300	0.300	3.780	1.0000 00	4.423
	Total						21.706
	Lintel (GF FF)						
	B1	12.000 00	2.825	0.200	0.150		1.017
	B1	4.0000 0	2.850	0.200	0.150		0.342
	B1	4.0000 0	3.000	0.200	0.150		0.360
	B1	2.0000 0	2.750	0.200	0.150		0.165
	B2	11.000 00	5.600	0.200	0.150		1.848
	B3	4.0000 0	1.700	0.200	0.150		0.204
	VERANDAH B3	6.0000 0	2.825	0.200	0.300		1.017
	VERANDAH B3	2.0000 0	2.850	0.200	0.300		0.342
	VERANDAH B3	2.0000 0	3.000	0.200	0.300		0.360
	VERANDAH B3	1.0000 0	2.750	0.200	0.300		0.165
	Total						5.820
	Beams (GF FF)						
	B1	12.000 00	2.825	0.250	.3-.12		1.526
	B1	4.0000 0	2.850	0.250	.3-.12		0.513
	B1	4.0000 0	3.000	0.250	.3-.12		0.540
	B1	2.0000 0	2.750	0.250	.3-.12		0.248
	B2	14.000 00	5.600	0.250	.50-.12		7.448
	B3	13.000 00	1.700	0.250	0.180		0.995
	B3	6.0000 0	2.825	0.250	0.180		0.763
	B3	2.0000 0	2.850	0.250	0.180		0.257
	B3	2.0000 0	3.000	0.250	0.180		0.270

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	B3	1.0000 0	2.750	0.250	0.180		0.124
	Total						12.684
	STAIR						
	Waist slab	2.0000 0	4.090	1.500	0.200	1.0000 00	2.454
	Steps	13.000 00	0.300	0.150	1.500	1.0000 00	0.878
	Landing	1.0000 0	3.100	1.500	0.200	1.0000 00	0.930
	Total						4.262
	Slabs (GF FF)						
	Roof slab GF	1.0000 0	25.650	8.550	0.120	1.0000 00	26.317
	Roof slab FF	1.0000 0	3.125+3. 125+3.3+ .3+.6	8.550	0.120	1.0000 00	10.722
	DEDUCTION stair room	- 2.0000 0	3.100	3.9+1.5	0.120	1.0000 00	-4.018
	Total						33.021
	Total Quantity in cum						85.158
4.003	20.2.4 Boring, providing and installing bored cast-in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring, with bentonite solution and temporary casing of appropriate length for setting out and removal of same and the length of the pile to be embedded in the pile cap etc. all complete, including removal of excavated earth with all lifts and leads (Length of pile for payment shall be measured upto bottom of pile cap).500 mm dia piles						
	500 MM DIA PILE						
		45.000 00			15.000		675.000
	Total						675.000
	Total Quantity in metre						675.000
4.004	20.6.2.1 Vertical load testing of piles in accordance with IS 2911(Part IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & the direction of engineer -in-Charge. Single pile above 50 tonne and upto 100 tonne capacityInitial test						
	INITIAL TEST						

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
		1.0000 0					1.000
	Total						1.000
	Total Quantity in per test						1.000
4.005	20.6.2.2						
	Vertical load testing of piles in accordance with IS 2911(Part IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & the direction of engineer -in-Charge. Single pile above 50 tonne and upto 100 tonne capacityRoutine test						
	ROUTINE TEST						
		2.0000 0					2.000
	Total						2.000
	Total Quantity in per test						2.000
5	STEEL REINFORCEMENT WORKS						
5.001	5.22A.6						
	Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete above plinth level.Thermo - Mechanically Treated bars of grade Fe-500D or more						
	Steel reinforcement						
	Plinth beam	1.0000 0	16.094	120.000			1931.280
	PILE CAP	1.0000 0	48.6+3.7 44	120.000			6281.280
	PILE	45.0000 00	3.14/4	.5*.5	15.000	65.000 000	8610.469
	Leach pit slab	1.0000 0	0.792	77.125			61.083
	Columns upto roof level	1.0000 0	21.706	200.000			4341.200
	Beams	1.0000 0	12.684	150.000			1902.600
	Lintels	1.0000 0	5.820	100.000			582.000
	Stair	1.0000 0	4.262	100.000			426.200
	Sunshade	1.0000 0	7.665	110.000			843.150
	Roof slab	1.0000 0	33.021	100.000			3302.100
	Dummy column	1.0000 0	4.356	200.000			871.200

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Total						29152.56 2
	Total Quantity in kg						29152.56 2
6	MASONRY WORKS						
6.001	50.6.1.5						
	Solid block masonry using pre cast solid blocks (Factory made) of size 30x20x20cm or nearest available size confirming to IS 2185 Part I of 1979 for super structure up to floor two level thickness 20cm and above in: CM 1:6 (1 cement : 6 coarse sand) etc complete						
	DEDUCTION						
	D1-Doors	4.0000 0	1.200	0.200	2.100		-2.016
	W3-Windows	14.000 00	1.500	0.200	1.350		-5.670
	W2-Windows	1.0000 0	1.250	0.200	1.000		-0.250
	D2- doors	1.0000 0	1.200	0.200	2.100		-0.504
	V1- Ventilator	4.0000 0	0.600	0.200	0.500		-0.240
	Total						-8.680
	GF FF						
	Stair room back	2.0000 0	3.000	0.200	3.9-0.4- 0.12-.15		3.876
	Toilet front and back	4.0000 0	2.900	0.200	3.778- 0.18		8.347
	Class room wall GF	12.000 00	2.850	0.200	3.9-0.4- .12- 0.15		22.093
	Class room wall GF	6.0000 0	5.550	0.200	3.9-.55- .12-0.15		20.513
	Class room wall FF	3.0000 0	5.550	0.200	3.9-.55- .12-0.15		10.256
	Above beam front side GF	1.0000 0	8*2.85	0.200	3.778- 2.1- 0.3- 0.18		5.463
	Above beam front side GF	1.0000 0	3.000	0.200	3.778- 2.1- 0.3- 0.18		0.719

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Above beam front side FF	1.0000 0	3*2.85	0.200	3.778- 2.1- 0.3- 0.18		2.049
	Above beam front side FF	1.0000 0	3.000	0.200	3.778- 2.1- 0.3- 0.18		0.719
	Above beam front side GF&FF	4.0000 0	1.700	0.200	3.778- 2.1- 0.3- 0.18		1.629
	Total						75.664
	Total Quantity in cum						66.984
6.002	60.7.1 DRY RUBBLE MASONRY _ Dry rubble without concrete levelling course masonry with good quality blasted rubble including packing to compactness to lines and levels cost and conveyance of all materials labour charges etc. complete as per direction of Departmental officers at site						
	DR WORK						
	RAMP	1.0000 0	7.2+1.5	0.450	0.350		1.370
	RAMP FOUNDATION	1.0000 0	7.2+1.5+ 1.5	0.600	0.450		2.754
	HORIZONTAL OUTER	8.0000 0	2.850	0.450	0.500		5.130
	HORIZONTAL OUTER	4.0000 0	2.825	0.450	0.500		2.543
	HORIZONTAL OUTER	2.0000 0	3.000	0.450	0.500		1.350
	HORIZONTAL OUTER	2.0000 0	2.750	0.450	0.500		1.238
	VERTICAL OUTER	2.0000 0	1.700	0.450	0.500		0.765
	VERTICAL OUTER	2.0000 0	5.500	0.450	0.500		2.475
	Total						17.625
	Total Quantity in cum						17.625
6.003	50.6.1.4 Solid block masonry using pre cast solid blocks (Factory made) of size 30x20x20cm or nearest available size confirming to IS 2185 part I of 1979 for foundation and plinth with thickness 20cm and above in: CM 1:6 (1 cement : 6 coarse sand) etc complete						
	STEPS						
	Steps	8.0000 0	6.600	0.200	0.150	1.0000 00	1.584
		4.0000 0	3.400	0.200	0.150	1.0000 00	0.408

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
		4.0000 0	1.200	0.200	0.150	1.0000 00	0.144
	Total						2.136
	Total Quantity in cum						2.136
6.004	50.6.1.6						
	Solid block masonry using pre cast solid blocks (Factory made) of size 30x20x20cm or nearest available size confirming to IS 2185 part I of 1979 for super structure above floor two level upto floor five level thickness 20cm and above in : CM 1:6 (1 cement : 6 coarse sand sand) etc complete						
	Headroom						
	Head room	2.0000 0	5.500	0.200	1.200	1.0000 00	2.640
		2.0000 0	3.000	0.200	1.200	1.0000 00	1.440
	Total						4.080
	Total Quantity in cum						4.080
6.005	50.6.2.2						
	Solid masonry using pre cast solid blocks (factory made) of size 30x20x15cm or nearest available size confirming to IS 2185 part I of 1979 for super structure up to floor two level with thickness 15cm in : CM 1:6 (1 cement : 6 coarse sand) etc complete						
	Parapet wall first floor						
		1.0000 0	3.300	0.150	1.200		0.594
		2.0000 0	2.850	0.150	1.200		1.026
		2.0000 0	1.700	0.150	1.200		0.612
	EXTRA FOR OPEN SPACE	1.0000 0	2*(6.1+3.05+8.125)	0.150	0.300		1.555
	Total						3.787
	GF TOILET						
	Bathroom partitions	1.0000 0	6.050	0.150	2.400		2.178
	Bathroom partitions	3.0000 0	1.500	0.150	2.400		1.620
	deduction	- 3.0000 0	0.800	0.150	2.100		-0.756
	Total						3.042
	Total Quantity in cum						6.829
6.006	50.6.2.3						

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Solid block masonry using pre cast solid blocks (Factory made) of size 30x20x15cm or nearest available size confirming to IS 2185 part I of 1979 for super structure above floor two level upto floor five level with thickness 15cm in : CM 1:6 (1 cement : 6 coarse sand) etc complete						
	ABOVE FF CLASS ROOMS						
		1.0000 0	2*(8.125 +6.1)	0.150	0.300		1.280
	Total						1.280
	Total Quantity in cum						1.280
7	CEMENT PLASTERING WORKS						
7.001	13.16.1						
	6 mm cement plaster of mix:1:3 (1 cement : 3 fine sand)						
	Ceiling (GF FF)						
	Class room	4.0000 0	6.100	6.100			148.840
	Verandah	1.0000 0	25.250	2.000			50.500
	Verandah	1.0000 0	3.125+3.125+3.3+.3	2.000			19.700
	Toilet	1.0000 0	2.900	6.100			17.690
	Landing	1.0000 0	3.000	1.500			4.500
	Waist slab	2.0000 0	4.600	1.500			13.800
	Slab projections	4.0000 0	25.650	0.200			20.520
		4.0000 0	8.550	0.200			6.840
	Sunshade	1.0000 0	70.770	1.000			70.770
	Sunshade	1.0000 0	2*(3.125+3.125+3.3+.3+.9+8.125+25+.15+.9)	1.000			40.350
	Total						393.510
	Total Quantity in sqm						393.510
7.002	13.9.1						
	Cement plaster 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement.12 mm cement plaster						
	Cement plaster						

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Roof top	1.0000 0	25.250	8.150			205.788
	Stair room	- 1.0000 0	6.100		3.000		-18.300
	Above sunshade GF	2.0000 0	26.1+8.5	0.850	1.000	1.0000 00	58.820
	Above sunshade FF	2.0000 0	3.3+3.25 +3.25+8. 5+.3	0.850	1.000	1.0000 00	31.620
	Total						277.928
	Total Quantity in sqm						277.928
7.003	13.1.2						
	12 mm cement plaster of mix:1:6 (1 cement : 6 fine sand).						
	wall plastering						
	Class rooms	4.0000 0	24.400	3.780			368.928
	TOILET	1.0000 0	3.05+6.1 +3.05+6. 1	3.780			69.174
	TOILET GF	2.0000 0	6.100	3.780			46.116
	TOILET GF	6.0000 0	1.500	3.780			34.020
	STAIR ROOM INSIDE	1.0000 0	3+6.1+3+ 6.1		1.200		21.840
	Column projections	8.0000 0	0.600	3.780			18.144
		9.0000 0	1.200	2.100			22.680
		9.0000 0	1.200	2.1-1.2			9.720
	Stair PORTION	2.0000 0	16.010	3.780			121.036
	Beam projections	16.000 00	5.500	0.500			44.000
		28.000 00	1.750	0.500			24.500
	D-Doors	- 4.0000 0	1.200	2.100			-10.080
	W3-Windows	- 14.000 00	1.500	1.350			-28.350

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	W2-Window	1.0000 0	1.000	1.250			-1.250
	D2-Doors	2.0000 0	1.200	2.100			-5.040
	D3- Door	1.0000 0	0.900	2.100			-1.890
	D4-Doors	3.0000 0	0.800	2.100			-5.040
	V1- Ventilator	4.0000 0	0.600	0.500			-1.200
	outside GF	2.0000 0	25.15+.3		3.9+.45		221.415
		2.0000 0	6.1+.5		3.9+.45		57.420
	above lintel GF	1.0000 0	2+25.15+ 2+.3		1.200		35.340
	OUTSIDE FF	2.0000 0	6.1+3.3+. 3		3.900		75.660
		2.0000 0	6.1+.5		3.900		51.480
	above lintel FF	1.0000 0	2+6.1+3. 3+.3+2		1.200		16.440
	STAIR ROOM OUTSIDE	1.0000 0	3.3+6.1+ 3.3+6.1		1.200		22.560
	PARAPET WALL FF	2.0000 0	2+6.1+3. 3+3+6.1+ 2+3.1		1.275		65.280
	ABOVE GF FOR OPEN SPACE	2.0000 0	2*(6.1+6. 1+3.05+8 .125)		0.375		35.063
	ABOVE FF FOR OPEN SPACE	2.0000 0	2*(6.1+8. 125)		0.375		21.338
	Total						1329.304
	Total Quantity in sqm						1329.304
7.004	13.7.1						
	12 mm cement plaster finished with a floating coat of neat cement of mix:1:3 (1 cement : 3 fine sand)						
	FLOATING COAT						
	Black Board	4.0000 0	3.000	1.200			14.400

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Total						14.400
	Total Quantity in sqm						14.400
8	JOINERIES						
8.001	OD214746/2023-2024						
	Supplying and fixing pressed steel window of standard pattern with frame as per profile of IS 4351 of section 105*60mm using 18G (1.2mm thick CRCA) sheet and shutters made of section 75*30 cm for outer styles and horizontal members and then insered with enclosed and stiffned sheet 26R qas per specification with Z incromate primer coat measured in sequence metre including all charges for fixing handle, aldrop, butt hinges etc complete						
	WINDOW						
	W3-WINDOW	14.000 00	1.500	1.500			31.500
	W2-WINDOW	1.0000 0	1.000	1.250			1.250
	Total						32.750
	Total Quantity in sqm						32.750
8.002	OD214747/2023-2024						
	Supplying and fixing pressed steel door of standard pattern with frame as per profile of IS 4351 of section 105*60mm using 18G (1.2mm thick CRCA) sheet and shutters made of section 75*30 cm for outer styles and horizontal members and then insered with enclosed and stiffned sheet 26R qas per specification with Z incromate primer coat measured in sequence metre including all charges for fixing handle, aldrop, butt hinges etc complete						
	DOORS						
	D1 & D2-Doors	5.0000 0	1.200	2.100			12.600
	Stair room exit	1.0000 0	1.200	2.100			2.520
	Total						15.120
	Total Quantity in sqm						15.120
8.003	21.1.1.2						
	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS : 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminnium snap beading for glazing /paneling, C.P. brass/ stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge.(Glazing, paneling and dash fasteners to be paid for separately): For fixed portionPowder coated aluminium (minimum thickness of powder coating 50 micron)						

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	V						
	V	5.0000 0	0.600		0.500	5.0000 00	7.500
	Total						7.500
	Total Quantity in kg						7.500
8.004	21.1.2.2						
	For shutters of doors, windows & ventilators including providing and fixing hinges / pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber/ neoprene gasket required (Fittings shall be paid for separately) Powder coated aluminium (minimum thickness of powder coating 50 micron)						
	V						
		5.0000 0	0.500		0.600	5.0000 00	7.500
	Total						7.500
	Total Quantity in kg						7.500
8.005	21.3.1						
	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of Engineer - in -Charge. (Cost of aluminium snap beading shall be paid in basic item): With float glass panes of 4.0 mm thickness						
	V						
		5.0000 0	0.500		0.600		1.500
	Total						1.500
	Total Quantity in sqm						1.500
8.006	9.48.1						
	Providing and fixing M.S. Grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete. Fixed to steel windows by welding						
	VENTILATOR						
		5.0000 0	0.600		0.500	10.000 000	15.000
	Total						15.000
	Grill over stair						
		1.0000 0	3.000	3.500		20.000 000	210.000
	Total						210.000
	Total Quantity in kg						225.000
8.007	10.28						

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners, stainless steel bolts etc., of required size on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.)						
	DA TOILET						
	32 MM SS PIPE-FOR GRAB BARS	4.0000 0	1.000			2.7000 00	10.800
	HINGED GRAB BARS 32 MM SS	1.0000 0	2.000			3.0000 00	6.000
	Total						16.800
	Total Quantity in kg						16.800
8.008	10.26.1						
	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying priming coat of approves steel primer.M.S. tube						
	HANDRAIL-Ramp&Stair						
	63 MM DIA	1.0000 0	1.200			2.5300 00	3.036
	50 MM DIA POST	4.0000 0	1.100			2.0120 00	8.853
	40 MM DIA HORIZONTAL POST	1.0000 0	8.000			2.0100 00	16.080
	20 MM DIA VERTICAL	65.000 00	0.800			0.7120 00	37.024
	20 MM FLAT HORIZONTAL POST	4.0000 0	8.000			0.7120 00	22.784
	63 MM DIA	2.0000 0	1.200			2.5300 00	6.072
	50 MM DIA POST	8.0000 0	1.100			2.0120 00	17.706
	40 MM DIA HORIZONTAL	6.0000 0	5.000			1.4920 00	44.760
	20 MM DIA VERTICAL	180.00 000	0.800			0.7120 00	102.528
	20 MM DIA FLAT VERTICAL	18.000 00	4.000			0.7120 00	51.264

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(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Total						310.107
	Total Quantity in kg						310.107
8.009	10.25.1						
	Item Shifted to Sub head 14 as item 14.73 Item Shifted to head 14 as item 14.74 Steel work welded in built up sections/framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required. In stringers, treads, landings etc. of stair cases, including use of chequered plate wherever required, all complete						
	TERRACE FLOOR ladder						
	Top angle hand rail 35*35	2.0000 0	4.100			2.5700 00	21.074
	mid rail angle 25*25	2.0000 0	4.100			1.4500 00	11.890
	Top angle stair rail 35*35	2.0000 0	4.100			2.5700 00	21.074
	bottom angle stair rail 35*35	2.0000 0	4.100			2.5700 00	21.074
	35*35 angle post	6.0000 0	0.980			2.5700 00	15.112
	25*25 angle post	2.0000 0	0.980			1.4500 00	2.842
	steps 25*25 angle	26.0000 00	0.900			1.4500 00	33.930
	steps 25*25 angle	26.0000 00	0.250			1.4500 00	9.425
	25 flat	52.0000 00	0.880			0.5900 00	26.998
	25 flat	26.0000 00	0.290			0.5900 00	4.449
	support angle 35*35	2.0000 0	1.970			2.5700 00	10.126
	support angle 35*35	2.0000 0	1.020			2.5700 00	5.243
	Total						183.237
	Total Quantity in kg						183.237
8.010	OD214748/2023-2024						
	Providing and fixing PVC fibre door including frame ,shutter and all cost of materials, labour charges and fixing charges etc						
	PVC fibre door						
	D4	3.0000 0	0.800		2.100		5.040
	D3	1.0000 0	0.900		2.100		1.890

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Total						6.930
	Total Quantity in sqm						6.930
9	STEEL WORKS						
9.001	50.10.2						
	Steel work for purlin/single section with G I pipes including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete						
	Roof						
	Wall plate (80x40mm)	3.0000 0	4.300	2.530			32.637
	Rafter (80x40mm)	4.0000 0	7.400	2.530			74.888
	Reeper (50x25mm)	6.0000 0	4.400	1.570			41.448
	Total						148.973
	Total Quantity in kg						148.973
9.002	OD214745/2023-2024						
	Roofing with GI hard colour powder coated traffod sheets 0.35mm thick or nearest available thickness with overlaps of 150mm at ends and GI hook or crank CI bolt and nuts including plain washers and bitumen washers etc complete						
	Roofing sheet						
	Head room	1.0000 0	10.000	4.500			45.000
	Total						45.000
	Total Quantity in sqm						45.000
10	PAINTING WORKS						
10.00	13.43.1						
1	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface:Water thinnable cement primer						
	PRIMER						
	CEILING	1.0000 0	393.51+9 0				483.510
	WALL	1.0000 0	1329.304				1329.304
	Total						1812.814
	Total Quantity in sqm						1812.814
10.00	13.60.1						
2	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade:Two or more coats on new work						

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	painting						
		1.0000 0	1812.814				1812.814
	Total						1812.814
	Total Quantity in sqm						1812.814
10.00 3	13.61.1						
	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade:Two or more coats on new work						
	painting on steel work						
	D1-Doors	4.0000 0	1.200	2.100		2.6000 00	26.208
	D2	1.0000 0	1.200	2.100		2.6000 00	6.552
	W3- Window	14.000 00	1.500	1.500		2.6000 00	81.900
	W2- Window	1.0000 0	1.250	1.000		2.6000 00	3.250
	V1- Ventilator	4.0000 0	0.600	0.500		1.0000 00	1.200
	GF GRILL	1.0000 0	3.000	3.500			10.500
	HAND RAIL	1.0000 0	45.000	1.000		1.0000 00	45.000
	for steel ladder	1.0000 0	4.500	1.500		1.0000 00	6.750
	Total						181.360
	Total Quantity in sqm						181.360
10.00 4	14.61						
	Painting (one or more coats) with black japan paint of approved brand and manufacturing to given an even shade.						
	CLASS ROOM BOARD						
		4.0000 0	3.000	1.200			14.400
	Total						14.400
	Total Quantity in sqm						14.400
11	TILES WORK						
11.00 1	11.41.2						
	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS : 15622, of approved make, in all colours and shades, laid on 20 mm thick cement mortar 1:4(1 cement : 4 coarse sand), including grouting the joints with white cement and matching pigments etc., complete.Size of Tile 600 x 600 mm.						

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Tiles work						
	Landing	2.0000 0	3.000	1.500			9.000
	Rise	26.000 00	1.700	0.150			6.630
	Thread	26.000 00	1.700	0.300			13.260
	Step (rise)	4.0000 0	15.000	0.150			9.000
	Skirting	1.0000 0	150.000	0.075			11.250
	Class room	4.0000 0	6.100	6.100			148.840
	Verandah	1.0000 0	25.250	2.000			50.500
	Verandah	1.0000 0	3.125+3. 125+3.3+ .3	2.000			19.700
	STAIR ROOM- gf floor	1.0000 0	3.300	6.100			20.130
	Total						288.310
	Total Quantity in sqm						288.310
11.00 2	11.36 Providing and fixing I st quality ceramic glazed wall tiles conforming to IS : 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer -in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3 kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.						
	GF						
	TOILET	2.0000 0	5.400		2.100		22.680
	TOILET	1.0000 0	6.000		2.100		12.600
		1.0000 0	6.400		2.100		13.440
	passage	1.0000 0	14.000		2.100		29.400
	Total						78.120
	Total Quantity in sqm						78.120
11.00 3	OD214744/2023-2024						

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Providing and laying ceramic anti skid floor tiles of size 300x300 mm (thickness to be specified by the manufacturer), of 1st quality conforming to IS 15622, of approved make, in colours such as white, ivory,Grey, Fume Red brown, laid on 20mm thick cement mortar 1:4 (1 cement:4 coarse sand), including pointing the joints with white cement and matching pigment etc. complete						
	RAMP&STEP						
	RAMP	1.0000 0	1.5+7.2	1.500			13.050
	STEP	3.0000 0	15.000	0.300			13.500
	Total						26.550
	GF toilet						
	Toilet	1.0000 0	1.750	1.500			2.625
	Toilet	2.0000 0	1.500	1.200			3.600
	Toilet	1.0000 0	1.500	1.500			2.250
	passage	1.0000 0	1.300	6.100			7.930
	door area	4.0000 0	0.800	0.150			0.480
	Total						16.885
	Total Quantity in sqm						43.435
12	PLUMBING WORKS						
12.00 1	17.7.2	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require:White Vitreous China Wash basin size 630 x 450 mm with a single 15 mm C.P. brass pillar tap					
	Wash basin						
	Wash basin	3.0000 0					3.000
	Total						3.000
	Total Quantity in each						3.000
12.00 2	17.2.2	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required:W.C. pan with ISI marked black solid plastic seat and lid					
	Water closet						

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	FF	2.0000 0					2.000
	Total						2.000
	Total Quantity in each						2.000
12.00 3	50.18.7.2.2 Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step PVC solvent cement and testing of joints complete as per direction of Engineer -in-Charge 20 mm dia 10 Kgf/cm2- Internal work - Exposed on wall						
	GF						
	Outer	1.0000 0	8.61+3.4 7				12.080
	Outer	1.0000 0	3.840				3.840
	inside toilet	5.0000 0	2.000				10.000
	urinal	1.0000 0	2.500				2.500
		3.0000 0	1.200				3.600
	wash girls	1.0000 0	4.000				4.000
		1.0000 0	4.000				4.000
	Total						40.020
	Total Quantity in metre						40.020
12.00 4	18.7.1 Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer -in-Charge. Internal work - Exposed on wall 15 mm nominal outer dia pipes						
	CPVC						
		10.000 00	2.000				20.000
	Total						20.000
	Total Quantity in metre						20.000
12.00 5	18.7.2						

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer -in-Charge. Internal work - Exposed on wall 20 mm nominal outer dia pipes						
	CPVC						
		1.0000 0	10.000				10.000
	Total						10.000
	Total Quantity in metre						10.000
12.00 6	50.18.7.6.1						
	Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step PVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge 50 mm dia 10 Kgf/cm - Internal work- Exposed on wall						
	PVC pipes						
	Pumping main	1.0000 0	50.000				50.000
	Total						50.000
	Total Quantity in metre						50.000
12.00 7	50.18.8.7.1						
	Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes with one step PVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge. Concealed work including cutting chases and making good the wall etc. 63 mm pipe 6 Kgf/cm2						
	PVC pipes						
	Distribution	1.0000 0	40.000				40.000
	Total						40.000
	Total Quantity in metre						40.000
12.00 8	18.17.4						
	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :50 mm nominal bore						
	Valve						
	Distribution line	1.0000 0	1.000				1.000
	Total						1.000
	Total Quantity in each						1.000
12.00 9	18.49.1						
	Providing and fixing C.P brass bib cock of approved quality conforming to IS: 8931.15 mm nominal bore						

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	C.P brass bib cock						
	For connections	1.0000 0	8.000				8.000
	Total						8.000
	Total Quantity in each						8.000
12.01 0	50.18.9.19.2						
	Providing and fixing PVC pipes including fixing the pipe with clamps/clips at 1.00 m spacing. This includes jointing of pipes with one step PVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge 110 m dia 4 Kgf/cm ² - External work - Exposed on wall						
	PVC pipes						
	Leach pit	1.0000 0	45.000				45.000
	Total						45.000
	Total Quantity in metre						45.000
12.01 1	50.17.1.4						
	Supplying and fixing CP Health faucet good quality including cost of materials and labour charges etc. complete as per the direction of site engineer-in-charge.						
	CP health faucet						
		4.0000 0					4.000
	Total						4.000
	Total Quantity in no						4.000
12.01 2	50.18.9.20.3						
	Providing and fixing PVC moulded fittings /accessories for Rigid PVC pipes, including jointing with PVC solvent cement - 63 mm dia Door Elbow						
	PVC fittings						
		7.0000 0					7.000
	Total						7.000
	Total Quantity in no						7.000
12.01 3	50.18.9.22.3						
	Providing and fixing PVC moulded fittings/ accessories for Rigid PVC pipes, including jointing with PVC solvent cement-110 mm dia Door Elbow						
	PVC fittings						
		7.0000 0					7.000
	Total						7.000
	Total Quantity in no						7.000

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
12.01 4	50.18.9.22.4						
	Providing and fixing PVC moulded fittings/ accessories for Rigid PVC pipes, including jointing with PVC solvent cement- 110 mm dia Bend						
	PVC fittings						
		10.000 00					10.000
	Total						10.000
	Total Quantity in no						10.000
12.01 5	50.18.9.22.5						
	Providing and fixing PVC moulded fittings/ accessories for Rigid PVC pipes including jointing with PVC solvent cement 110x110x110 mm dia Tee						
	PVC fittings						
		7.0000 0					7.000
	Total						7.000
	Total Quantity in no						7.000
12.01 6	18.48						
	Providing and placing on terrace (at all floor levels) polyethylene water storage tank :ISI 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.						
	Water tank						
	Tank	1.0000 0	2000.000				2000.000
	Total						2000.000
	Total Quantity in Litre						2000.000
12.01 7	51.19.ST4						
	Supplying and installing ready made PVC Septic tank including the cost of carriage, trenching, placing at the level below ground level as specified as per the direction of engineer in charge (Provision for CC/RCC/Sand/06mm aggregate for the preparation of bed shall be paid separately) 4. 35 to 50 flush capacity						
	SEPTIC TANK						
		1.0000 0					1.000
	Total						1.000
	Total Quantity in each						1.000
12.01 8	17.1.1						

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100 mm Sand Cast Iron P or S trap, 10 litter low level white P.V.C.flushing cistern, including flush pipe, manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever require:White Vitreous china Orissa pattern W.C. pan of size 580x440 mm with integral type foot rests						
	INDIAN CLOSET						
		2.0000 0					2.000
	Total						2.000
	Total Quantity in each						2.000
13	WATER PROOFING WORKS						
13.00 1	22.6 Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of applying : a) after surface preparation, first layer of slurry of cement @ 0.488 kg/ sqm mixed with water proofing cement compound @ 0.253 kg/ sqm. laying second layer of fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/ sqm mixed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30 cm on parapet wall and tucked into groove in parapet all around. d) fourth and final layer of brick tilling with cement mortar (which will be paid for separately. For the purpose of measurement the entire treated surface will be measured)						
	Water proof						
	Sunshade	1.0000 0	66.550	1.100			73.205
	Total						73.205
	Total Quantity in sqm						73.205
13.00 2	4.17 Making plinth protection 50 mm thick of cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) over 75 mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including finishing the top smooth.						
	PLINTH PROTECTION						
		2.0000 0	20.000	1.500			60.000
	Total						60.000
	Total Quantity in sqm						60.000
13.00 3	16.68						

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Providing and laying 60 mm thick factory made cement concrete interlocking paver block of M - 30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50 mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge.						
	Front area						
		1.0000 0	25.000	1.400			35.000
	Total						35.000
	Total Quantity in sqm						35.000
13.00 4	13.71						
	Lettering with black Japan pint of approved brand and manufacture						
	Schhol name						
		50.000 00			3.000		150.000
	Total						150.000
	Total Quantity in per Letter per cm height						150.000
14	NAME BOARD						
14.00 1	13.71						
	Lettering with black Japan pint of approved brand and manufacture						
	Name board						
		65.000 00	30.000				1950.000
	Total						1950.000
	Total Quantity in per Letter per cm height						1950.000

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ABSTRACT ESTIMATE

**KIIFB-KILA 1 CRORE PROJECT-INFRASTRUCTURE DEVELOPEMENT AT GMLPS
THIRUVATHRA(SCHOOL CODE-24215)-THRISSUR-Construction of new building(G+1)-
Composite Civil Work**

SI No	Specification	Quantity	Rate	Amount
1	EARTHWORK EXCAVATION			
1.001	2.6.1 Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead up to 50 m and lift up to 1.5 m, disposed earth to be levelled and neatly dressed.All kinds of soil			
	Net Total	119.346cum	@214.03/cum	25543.62
1.002	2.8.1 Earth work in excavation by mechanical means (Hydraulic excavator) /manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift up to 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.All kinds of soil			
	Net Total	18.558cum	@296.98/cum	5511.35
1.003	2.25 Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundation etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m.			
	Net Total	110.323cum	@258.56/cum	28525.11
1.004	50.2.25.1 Filling with contractor's own earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m as per direction of site Engineer-in-charge			
	Net Total	10.000cum	@525.83/cum	5258.30
	Heading Total(Rs)			64838.38
2	CEMENT CONCRETE WORKS			
2.001	4.1.8 Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40 nominal size)			
	Net Total	27.463cum	@6814.88/cum	187157.05
2.002	4.2.5 Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts,			

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Sl No	Specification	Quantity	Rate	Amount
	struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor, etc. up to floor five level, excluding the cost of centering, shuttering and finishing: 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)			
	Net Total	4.356cum	@9446.18/cum	41147.56
2.003	2.34.1			
	Supplying chemical emulsion in sealed containers including delivery as specified. Chlorpyrifos / Lindane emulsifiable concentrate of 20%			
	Net Total	116.408Litre	@236.39/Litre	27517.69
2.004	2.35.3.1			
	Diluting and injecting chemical emulsion for POST -CONSTRUCTIONAL anti-termite treatment (excluding the cost of chemical emulsion): Treatment of soil under existing floors using chemical emulsion @ one litre per hole, 300 mm apart including drilling 12 mm diameter holes and plugging with cement mortar 1:2 (1 cement : 2 coarse sand) to match the existing floor: With Chlorpyrifos/Lindane E.C. 20% with 1% concentration			
	Net Total	201.265sqm	@267.26/sqm	53790.08
	Heading Total(Rs)			309612.38
3	CENTERING AND SHUTTERING WORKS			
3.001	5.9.1			
	Centering and shuttering including strutting, etc. and removal of form for: Foundations, footings, bases of columns, etc for mass concrete			
	Net Total	160.860sqm	@335.31/sqm	53937.97
3.002	5.9.5			
	Centering and shuttering including strutting, etc. and removal of form for: Lintels, beams, plinth beams, girders, bressumers and cantilevers			
	Net Total	346.587sqm	@649.80/sqm	225212.23
3.003	5.9.6			
	Centering and shuttering including strutting, etc. and removal of form for: Columns, Pillars, Piers, Abutments, Posts and Struts			
	Net Total	270.744sqm	@863.61/sqm	233817.23
3.004	5.9.7			
	Centering and shuttering including strutting, etc. and removal of form for: Stairs, (excluding landings) except spiral - staircases)			
	Net Total	13.088sqm	@732.54/sqm	9587.48
3.005	5.9.18			
	Centering and shuttering including strutting, etc. and removal of form for: Small surfaces such as cantilever ends, brackets and ends of steps, caps and bases to pilasters and columns and the like			
	Net Total	1.170sqm	@910.72/sqm	1065.54
3.006	5.9.19			

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Sl No	Specification	Quantity	Rate	Amount
	Centering and shuttering including strutting, etc. and removal of form for:Weather shade, Chajjas, corbels etc., including edges			
	Net Total	95.813sqm	@902.55/sqm	86476.02
3.007	5.9.3			
	Centering and shuttering including strutting, etc. and removal of form for:Suspended floors, roofs, landings, balconies and access platform			
	Net Total	245.933sqm	@815.75/sqm	200619.84
3.008	5.9.16.1			
	Centering and shuttering including strutting, etc. and removal of form for:Edges of slabs and breaks in floors and wallsUnder 20 cm wide			
	Net Total	231.480metre	@203.93/metre	47205.72
	Heading Total(Rs)			857922.03
4	RCC WORKS			
4.001	OD282344/2023-2024			
	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer - in-charge.All work upto plinth level			
	Net Total	69.775cum	@9413.54/cum	656829.75
4.002	OD282343/2023-2024			
	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer - in-charge.All work above plinth level upto floor V level			
	Net Total	85.158cum	@11065.65/cum	942328.62
4.003	20.2.4			
	Boring, providing and installing bored cast-in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring, with bentonite solution and temporary casing of appropriate length for setting out and removal of same and the length of the pile to be embedded in the pile cap etc. all complete, including removal of excavated earth with all lifts and leads (Length of pile for payment shall be measured upto bottom of pile cap).500 mm dia piles			
	Net Total	675.000metre	@2500.05/metre	1687533.75
4.004	20.6.2.1			
	Vertical load testing of piles in accordance with IS 2911(Part IV) including installation of loading platform and preparation of pile head or construction of test			

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SI No	Specification	Quantity	Rate	Amount
	cap and dismantling of test cap after test etc. complete as per specification & the direction of engineer -in-Charge. Single pile above 50 tonne and upto 100 tonne capacityInitial test			
	Net Total	1.000per test	@70869.50/per test	70869.50
4.005	20.6.2.2 Vertical load testing of piles in accordance with IS 2911(Part IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & the direction of engineer -in-Charge. Single pile above 50 tonne and upto 100 tonne capacityRoutine test			
	Net Total	2.000per test	@36222.19/per test	72444.38
	Heading Total(Rs)			3430006.00
5 STEEL REINFORCEMENT WORKS				
5.001	5.22A.6 Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete above plinth level.Thermo - Mechanically Treated bars of grade Fe-500D or more			
	Net Total	29152.562kg	@98.30/kg	2865696.84
	Heading Total(Rs)			2865696.84
6 MASONRY WORKS				
6.001	50.6.1.5 Solid block masonry using pre cast solid blocks (Factory made) of size 30x20x20cm or nearest available size confirming to IS 2185 Part I of 1979 for super structure up to floor two level thickness 20cm and above in: CM 1:6 (1 cement : 6 coarse sand) etc complete			
	Net Total	66.984cum	@6644.12/cum	445049.73
6.002	60.7.1 DRY RUBBLE MASONRY _ Dry rubble without concrete levelling course masonry with good quality blasted rubble including packing to compactness to lines and levels cost and conveyance of all materials labour charges etc. complete as per direction of Departmental officers at site			
	Net Total	17.625cum	@3491.47/cum	61537.16
6.003	50.6.1.4 Solid block masonry using pre cast solid blocks (Factory made) of size 30x20x20cm or nearest available size confirming to IS 2185 part I of 1979 for foundation and plinth with thickness 20cm and above in: CM 1:6 (1 cement : 6 coarse sand) etc complete			
	Net Total	2.136cum	@5950.33/cum	12709.90
6.004	50.6.1.6 Solid block masonry using pre cast solid blocks (Factory made) of size 30x20x20cm or nearest available size confirming to IS 2185 part I of 1979 for super structure			

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Sl No	Specification	Quantity	Rate	Amount
	above floor two level upto floor five level thickness 20cm and above in : CM 1:6 (1 cement : 6 coarse sand sand) etc complete			
	Net Total	4.080cum	@7637.14/cum	31159.53
6.005	50.6.2.2			
	Solid masonry using pre cast solid blocks (factory made) of size 30x20x15cm or nearest available size confirming to IS 2185 part I of 1979 for super structure up to floor two level with thickness 15cm in : CM 1:6 (1 cement : 6 coarse sand) etc complete			
	Net Total	6.829cum	@6984.82/cum	47699.34
6.006	50.6.2.3			
	Solid block masonry using pre cast solid blocks (Factory made) of size 30x20x15cm or nearest available size confirming to IS 2185 part I of 1979 for super structure above floor two level upto floor five level with thickness 15cm in : CM 1:6 (1 cement : 6 coarse sand) etc complete			
	Net Total	1.280cum	@7977.84/cum	10211.64
	Heading Total(Rs)			608367.30
7	CEMENT PLASTERING WORKS			
7.001	13.16.1			
	6 mm cement plaster of mix:1:3 (1 cement : 3 fine sand)			
	Net Total	393.510sqm	@267.59/sqm	105299.34
7.002	13.9.1			
	Cement plaster 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement.12 mm cement plaster			
	Net Total	277.928sqm	@412.14/sqm	114545.25
7.003	13.1.2			
	12 mm cement plaster of mix:1:6 (1 cement : 6 fine sand).			
	Net Total	1329.304sqm	@299.27/sqm	397820.81
7.004	13.7.1			
	12 mm cement plaster finished with a floating coat of neat cement of mix:1:3 (1 cement : 3 fine sand)			
	Net Total	14.400sqm	@401.22/sqm	5777.57
	Heading Total(Rs)			623442.97
8	JOINERIES			
8.001	OD214746/2023-2024			
	Supplying and fixing pressed steel window of standard pattern with frame as per profile of IS 4351 of section 105*60mm using 18G (1.2mm thick CRCA) sheet and shutters made of section 75*30 cm for outer styles and horizondal members and then insered with enclosed and stiffned sheet 26R gas per specification with Z incromate primer coat measured in sequence metre including all charges for fixing handle, aldrops, butt hinges etc complete			
	Net Total	32.750sqm	@6073.23/sqm	198898.28

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Sl No	Specification	Quantity	Rate	Amount
8.002	OD214747/2023-2024 Supplying and fixing pressed steel door of standard pattern with frame as per profile of IS 4351 of section 105*60mm using 18G (1.2mm thick CRCA) sheet and shutters made of section 75*30 cm for outer styles and horizontal members and then inserted with enclosed and stiffened sheet 26R as per specification with Z incromate primer coat measured in sequence metre including all charges for fixing handle, aldop, butt hinges etc complete			
	Net Total	15.120sqm	@5654.37/sqm	85494.07
8.003	21.1.1.2 Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS : 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing /paneling, C.P. brass/ stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge.(Glazing, paneling and dash fasteners to be paid for separately): For fixed portion Powder coated aluminium (minimum thickness of powder coating 50 micron)			
	Net Total	7.500kg	@537.09/kg	4028.18
8.004	21.1.2.2 For shutters of doors, windows & ventilators including providing and fixing hinges / pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber/ neoprene gasket required (Fittings shall be paid for separately) Powder coated aluminium (minimum thickness of powder coating 50 micron)			
	Net Total	7.500kg	@643.12/kg	4823.40
8.005	21.3.1 Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of Engineer - in -Charge. (Cost of aluminium snap beading shall be paid in basic item): With float glass panes of 4.0 mm thickness			
	Net Total	1.500sqm	@1176.64/sqm	1764.96
8.006	9.48.1 Providing and fixing M.S. Grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete. Fixed to steel windows by welding			
	Net Total	225.000kg	@194.59/kg	43782.75
8.007	10.28 Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts			

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Sl No	Specification	Quantity	Rate	Amount
	and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners, stainless steel bolts etc., of required size on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.)			
	Net Total	16.800kg	@677.37/kg	11379.82
8.008	10.26.1			
	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying priming coat of approved steel primer.M.S. tube			
	Net Total	310.107kg	@171.43/kg	53161.64
8.009	10.25.1			
	Item Shifted to Sub head 14 as item 14.73 Item Shifted to head 14 as item 14.74 Steel work welded in built up sections/framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.In stringers, treads,landings etc. of stair cases, including use of chequered plate wherever required, all complete			
	Net Total	183.237kg	@110.25/kg	20201.88
8.010	OD214748/2023-2024			
	Providing and fixing PVC fibre door including frame ,shutter and all cost of materials, labour charges and fixing charges etc			
	Net Total	6.930sqm	@1949.98/sqm	13513.36
	Heading Total(Rs)			437048.34
9	STEEL WORKS			
9.001	50.10.2			
	Steel work for purlin/single section with G I pipes including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete			
	Net Total	148.973kg	@152.35/kg	22696.04
9.002	OD214745/2023-2024			
	Roofing with GI hard colour powder coated traffod sheets 0.35mm thick or nearest available thickness with overlaps of 150mm at ends and GI hook or crank CI bolt and nuts including plain washers and bitumen washers etc complete			
	Net Total	45.000sqm	@526.02/sqm	23670.90
	Heading Total(Rs)			46366.94
10	PAINTING WORKS			
10.001	13.43.1			
	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface:Water thinnable cement primer			
	Net Total	1812.814sqm	@70.66/sqm	128093.44

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SI No	Specification	Quantity	Rate	Amount
10.002	13.60.1			
	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade:Two or more coats on new work			
	Net Total	1812.814sqm	@151.43/sqm	274514.42
10.003	13.61.1			
	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade:Two or more coats on new work			
	Net Total	181.360sqm	@143.05/sqm	25943.55
10.004	14.61			
	Painting (one or more coats) with black japan paint of approved brand and manufacturing to given an even shade.			
	Net Total	14.400sqm	@85.30/sqm	1228.32
	Heading Total(Rs)			429779.73
11	TILES WORK			
11.001	11.41.2			
	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS : 15622, of approved make, in all colours and shades, laid on 20 mm thick cement mortar 1:4(1 cement : 4 coarse sand), including grouting the joints with white cement and matching pigments etc., complete.Size of Tile 600 x 600 mm.			
	Net Total	288.310sqm	@1766.29/sqm	509239.07
11.002	11.36			
	Providing and fixing I st quality ceramic glazed wall tiles conforming to IS : 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer -in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3 kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.			
	Net Total	78.120sqm	@1212.74/sqm	94739.25
11.003	OD214744/2023-2024			
	Providing and laying ceramic anti skid floor tiles of size 300x300 mm (thickness to be specified by the manufacturer), of 1st quality conforming to IS 15622, of approved make, in colours such as white, ivory,Grey, Fume Red brown, laid on 20mm thick cement mortar 1:4 (1 cement:4 coarse sand), including pointing the joints with white cement and matching pigment etc. complete			
	Net Total	43.435sqm	@1086.85/sqm	47207.33
	Heading Total(Rs)			651185.65
12	PLUMBING WORKS			
12.001	17.7.2			
	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require:White Vitreous China Wash			

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Sl No	Specification	Quantity	Rate	Amount
	basin size 630 x 450 mm with a single 15 mm C.P. brass pillar tap			
	Net Total	3.000each	@3238.51/each	9715.53
12.002	17.2.2			
	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required:W.C. pan with ISI marked black solid plastic seat and lid			
	Net Total	2.000each	@6050.89/each	12101.78
12.003	50.18.7.2.2			
	Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step PVC solvent cement and testing of joints complete as per direction of Engineer -in-Charge 20 mm dia 10 Kgf/cm2- Internal work - Exposed on wall			
	Net Total	40.020metre	@242.08/metre	9688.04
12.004	18.7.1			
	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer -in-Charge. Internal work - Exposed on wall 15 mm nominal outer dia pipes			
	Net Total	20.000metre	@284.31/metre	5686.20
12.005	18.7.2			
	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer -in-Charge. Internal work - Exposed on wall 20 mm nominal outer dia pipes			
	Net Total	10.000metre	@361.29/metre	3612.90
12.006	50.18.7.6.1			
	Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step PVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge 50 mm dia 10 Kgf/cm - Internal work- Exposed on wall			
	Net Total	50.000metre	@415.45/metre	20772.50
12.007	50.18.8.7.1			
	Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes with one step PVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge. Concealed work including cutting chases and making good the wall etc. 63 mm pipe 6 Kgf/cm2			
	Net Total	40.000metre	@609.49/metre	24379.60

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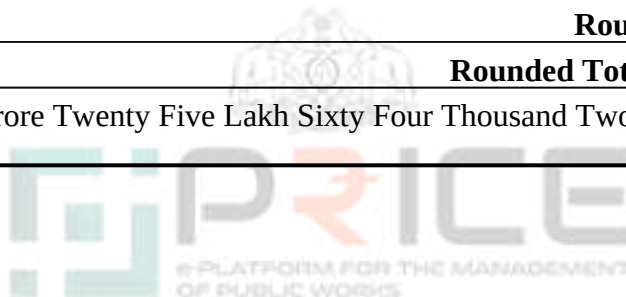
Sl No	Specification	Quantity	Rate	Amount
12.008	18.17.4			
	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :50 mm nominal bore			
	Net Total	1.000each	@1023.11/each	1023.11
12.009	18.49.1			
	Providing and fixing C.P brass bib cock of approved quality conforming to IS: 8931.15 mm nominal bore			
	Net Total	8.000each	@493.15/each	3945.20
12.010	50.18.9.19.2			
	Providing and fixing PVC pipes including fixing the pipe with clamps/clips at 1.00 m spacing. This includes jointing of pipes with one step PVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge 110 m dia 4 Kgf/cm ² - External work - Exposed on wall			
	Net Total	45.000metre	@331.72/metre	14927.40
12.011	50.17.1.4			
	Supplying and fixing CP Health faucet good quality including cost of materials and labour charges etc. complete as per the direction of site engineer-in-charge.			
	Net Total	4.000no	@758.13/no	3032.52
12.012	50.18.9.20.3			
	Providing and fixing PVC moulded fittings /accessories for Rigid PVC pipes, including jointing with PVC solvent cement - 63 mm dia Door Elbow			
	Net Total	7.000no	@80.47/no	563.29
12.013	50.18.9.22.3			
	Providing and fixing PVC moulded fittings/ accessories for Rigid PVC pipes, including jointing with PVC solvent cement-110 mm dia Door Elbow			
	Net Total	7.000no	@132.02/no	924.14
12.014	50.18.9.22.4			
	Providing and fixing PVC moulded fittings/ accessories for Rigid PVC pipes, including jointing with PVC solvent cement- 110 mm dia Bend			
	Net Total	10.000no	@161.06/no	1610.60
12.015	50.18.9.22.5			
	Providing and fixing PVC moulded fittings/ accessories for Rigid PVC pipes including jointing with PVC solvent cement 110x110x110 mm dia Tee			
	Net Total	7.000no	@174.81/no	1223.67
12.016	18.48			
	Providing and placing on terrace (at all floor levels) polyethylene water storage tank :ISI 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.			
	Net Total	2000.000Litre	@10.37/Litre	20740.00
12.017	51.19.ST4			
	Supplying and installing ready made PVC Septic tank including the cost of carriage, trenching, placing at the level below ground level as specified as per the direction of engineer in charge (Provision for CC/RCC/Sand/06mm aggregate for the preparation of bed shall be paid separately) 4.45 to 50 flush capacity			

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SI No	Specification	Quantity	Rate	Amount
	Net Total	1.000each	@41145.92/each	41145.92
12.018	17.1.1			
	Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100 mm Sand Cast Iron P or S trap, 10 litter low level white P.V.C.flushing cistern, including flush pipe, manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever require:White Vitreous china Orissa pattern W.C. pan of size 580x440 mm with integral type foot rests			
	Net Total	2.000each	@6381.62/each	12763.24
	Heading Total(Rs)			187855.64
13	WATER PROOFING WORKS			
13.001	22.6			
	Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of applying : a) after surface preparation, first layer of slurry of cement @ 0.488 kg/ sqm mixed with water proofing cement compound @ 0.253 kg/ sqm. laying second layer of fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/ sqm mixed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30 cm on parapet wall and tucked into groove in parapet all around. d) fourth and final layer of brick tilling with cement mortar (which will be paid for separately. For the purpose of measurement the entire treated surface will be measured)			
	Net Total	73.205sqm	@615.67/sqm	45070.12
13.002	4.17			
	Making plinth protection 50 mm thick of cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) over 75 mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including finishing the top smooth.			
	Net Total	60.000sqm	@722.82/sqm	43369.20
13.003	16.68			
	Providing and laying 60 mm thick factory made cement concrete interlocking paver block of M - 30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50 mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge.			
	Net Total	35.000sqm	@1011.54/sqm	35403.90
13.004	13.71			
	Lettering with black Japan pint of approved brand and manufacture			
	Net Total	150.000per Letter per cm height	@5.57/per Letter per cm height	835.50
	Heading Total(Rs)			124678.72

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SI No	Specification	Quantity	Rate	Amount
14	NAME BOARD			
14.001	13.71			
	Lettering with black Japan pint of approved brand and manufacture			
	Net Total	1950.000per Letter per cm height	@5.57/per Letter per cm height	10861.50
	Heading Total(Rs)			10861.50
	Total Estimation PAC			10647662.42
16	Extra Charges			
15.001	Provision for GST			
		10647662.42	18.00%	1916579.24
	Grand Total			0.00
	Round off			0.00
	Rounded Total(Rs)			12564241.66
	Rupees One Crore Twenty Five Lakh Sixty Four Thousand Two Hundred and Forty One			



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DATA ANALYSIS

KIIFB-KILA 1 CRORE PROJECT-INFRASTRUCTURE DEVELOPEMENT AT GMLPS
THIRUVATHRA(SCHOOL CODE-24215)-THRISSUR-Construction of new building(G+1)-
Composite Civil Work

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
1:EARTHWORK EXCAVATION						
1.001-Specification code: 2.6.1						
Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead up to 50 m and lift up to 1.5 m, disposed earth to be levelled and neatly dressed. All kinds of soil						
Details of cost for 10 cum. Average output of Hydraulic Excavator per hour = 30cum						
Labour						L
0115		Coolie				
		Day	1.20000	558.00	669.60	L1
0128		Mate				
		Day	0.32000	617.00	197.44	L2
Tools&Plants(Hire charges)						T
0020		Hydraulic Excavator (3D) with driver and fuel				
		Day	0.04000	7000.00	287.00	T1
0018		Hire and running charges of loader				
		Day	0.04000	5000.00	205.00	T2
Total			10.000	cum	1359.04	
Unit Total			1.000	cum	135.90	
Add Water Charge			135.90	@1.00%	1.36	
Total					137.26	
Add Contractors Profit & Overhead			137.26	@15.00%	20.59	
Total					157.85	
Add Cost Index			157.85	@35.59%	56.18	
Total					214.03	
GRAND TOTAL				cum	214.03	

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Note						
1.002-Specification code: 2.8.1						
Earth work in excavation by mechanical means (Hydraulic excavator) /manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift up to 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m. All kinds of soil						
Details of cost for 10 cum.						
Labour						L
0115		Coolie				
		Day	2.05000	558.00	1143.90	L1
0128		Mate				
		Day	0.40000	617.00	246.80	L2
Tools&Plants(Hire charges)						T
0018		Hire and running charges of loader				
		Day	0.04000	5000.00	206.25	T1
0020		Hydraulic Excavator (3D) with driver and fuel				
		Day	0.04000	7000.00	288.75	T2
Total			10.000	cum	1885.70	
Unit Total			1.000	cum	188.57	
Add Water Charge			188.57	@1.00%	1.89	
Total					190.46	
Add Contractors Profit & Overhead			190.46	@15.00%	28.57	
Total					219.03	
Add Cost Index			219.03	@35.59%	77.95	
Total					296.98	
GRAND TOTAL				cum	296.98	
Note						
1.003-Specification code: 2.25						
Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundation etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m.						
Details of cost for 10 cum.						

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Labour					L	
0101		Bhisti				
		Day	0.20000	617.00	123.40	L1
0128		Mate				
		Day	0.20000	617.00	123.40	L2
0115		Coolie				
		Day	2.50000	558.00	1395.00	L3
Total		10.000	cum	1641.80		
Unit Total		1.000	cum	164.18		
Add Water Charge		164.18	@1.00%	1.64		
Total				165.82		
Add Contractors Profit & Overhead		165.82	@15.00%	24.87		
Total				190.69		
Add Cost Index		190.69	@35.59%	67.87		
Total				258.56		
GRAND TOTAL			cum	258.56		
Note						
1.004-Specification code: 50.2.25.1						
Filling with contractor's own earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m as per direction of site Engineer-in-charge						
Details of cost for one each						
Material					M	
0979		Royalty for good earth				
		cum	1.00000	40.00	40.00	M1
Carriage					C	
2241		Carriage of Good earth				
		cum	1.00000	129.71	129.71	C1
Labour					L	
0115		Coolie				

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Day	0.25000	558.00	139.50	L1
0101		Bhisti				
		Day	0.02000	617.00	12.34	L2
0128		Mate				
		Day	0.02000	617.00	12.34	L3
Total			1.000	cum	333.89	
Unit Total			1.000	cum	333.89	
Add Water Charge			333.89	@1.00%	3.34	
Total					337.23	
Add Contractors Profit & Overhead			337.23	@15.00%	50.58	
Total					387.81	
Add Cost Index			387.81	@35.59%	138.02	
Total					525.83	
GRAND TOTAL				cum	525.83	
Note						
2:CEMENT CONCRETE WORKS						
2.001-Specification code: 4.1.8						
Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level: 1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40 nominal size)						
Details of cost for 1 cum						
Material						M
0982		Coarse sand (zone III)				
		cum	0.47000	1350.00	634.50	M1
0293		Stone Aggregate(single size): 40 mm nominal size (0.70 cum - 7.5% for voids i.e. 0.05 = 0.65 cum)				
		cum	0.65000	1300.00	845.00	M2
0367		Portland Cement (0.1175 cum)				
		tonne	0.17000	4940.00	839.80	M3
0295		Stone Aggregate(single size):20 mm nominal size nominal size				
		cum	0.24000	1350.00	324.00	M4

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Carriage					C	
2203		Carriage of Coarse sand				
		cum	0.47000	103.77	48.77	C1
2206		Carriage of Stone aggregate 40 mm nominal size and above				
		cum	0.65000	112.79	73.31	C2
2209		Carriage of Cement				
		tonne	0.17000	92.24	15.68	C3
2202		Carriage of Stone aggregate below 40 mm nominal size				
		cum	0.24000	103.77	24.90	C4
Labour					L	
0114		Beldar				
		Day	1.63000	558.00	909.54	L1
0101		Bhisti				
		Day	0.70000	617.00	431.90	L2
0155		Mason (average)				
		Day	0.10000	709.00	70.90	L3
Tools&Plants(Hire charges)					T	
0002		Hire charges of Concrete Mixer 0.25 to 0.40 cum with Hopper				
		Day	0.07000	800.00	56.00	T1
9999		Sundries				
		L.S	13.52000	2.00	27.04	T2
0012		Vibrator (Needle type 40 mm)				
		Day	0.07000	370.00	25.90	T3
Total			1.000	cum	4327.24	
Unit Total			1.000	cum	4327.24	
Add Water Charge			4327.24	@1.00%	43.27	
Total					4370.51	
Add Contractors Profit & Overhead			4370.51	@15.00%	655.58	
Total					5026.09	
Add Cost Index			5026.09	@35.59%	1788.79	

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Total					6814.88	
GRAND TOTAL				cum	6814.88	
Note						
2.002-Specification code: 4.2.5						
Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts,buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor, etc. up to floor five level, excluding the cost of centering, shuttering and finishing: 1:3:6 (1 cement : 3 coarse sand :6 graded stone aggregate 20 mm nominal size)						
Details of cost for 1 cum						
Material						M
0295		Stone Aggregate(single size):20 mm nominal size				
		cum	0.70000	1350.00	945.00	M1
0297		Stone Aggregate(single size): 10 mm nominal size				
		cum	0.24000	1350.00	324.00	M2
0982		Coarse sand (zone III)				
		cum	0.47000	1350.00	634.50	M3
0367		Portland Cement (0.15674 cum)				
		tonne	0.22000	4940.00	1086.80	M4
Carriage						C
2202		Carriage of Stone aggregate below 40 mm nominal size				
		cum	0.94000	103.77	97.54	C1
2209		Carriage of Cement				
		tonne	0.22000	92.24	20.29	C2
2203		Carriage of Coarse sand				
		cum	0.47000	103.77	48.77	C3
Labour						L
0101		Bhisti				
		Day	0.70000	617.00	431.90	L1
0114		Beldar				
		Day	0.90000	558.00	502.20	L2
0115						

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Coolie				
		Day	0.78000	558.00	435.24	L3
0115		Coolie				
		Day	1.88000	558.00	1049.04	L4
0124		Mason (brick layer)2nd class				
		Day	0.06000	679.00	40.74	L5
0123		Mason (brick layer) Ist class				
		Day	0.06000	738.00	44.28	L6
Tools&Plants(Hire charges)						T
9999		Sundries				
		L.S	13.52000	2.00	27.04	T1
9999		Sundries Scaffolding (17.60x2.5 avg.)				
		L.S	114.40000	2.00	228.80	T2
0012		Vibrator (Needle type 40 mm)				
		Day	0.07000	370.00	25.90	T3
0002		Hire charges of Concrete Mixer 0.25 to 0.40 cum with Hopper				
		Day	0.07000	800.00	56.00	T4
Total			1.000	cum	5998.04	
Unit Total			1.000	cum	5998.04	
Add Water Charge			5998.04	@1.00%	59.98	
Total					6058.02	
Add Contractors Profit & Overhead			6058.02	@15.00%	908.70	
Total					6966.72	
Add Cost Index			6966.72	@35.59%	2479.46	
Total					9446.18	
GRAND TOTAL				cum	9446.18	
Note						
2.003-Specification code: 2.34.1						
Supplying chemical emulsion in sealed containers including delivery as specified. Chlorpyrifos / Lindane emulsifiable concentrate of 20%						

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(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Details of cost for 100 litres						
Material						M
7022		Chlorpyriphos 20% E.C. / Lindane 20% E.C.				
		Litre	100.00000	150.00	15000.00	M1
Carriage						C
2342		Carriage of Solvent/ Diesel				
		quintal	1.00000	10.38	10.38	C1
Total			100.000	Litre	15010.38	
Unit Total			1.000	Litre	150.10	
Add Water Charge			150.10	@1.00%	1.50	
Total					151.60	
Add Contractors Profit & Overhead			151.60	@15.00%	22.74	
Total					174.34	
Add Cost Index			174.34	@35.59%	62.05	
Total					236.39	
GRAND TOTAL				Litre	236.39	
Note						
2.004-Specification code: 2.35.3.1						
Diluting and injecting chemical emulsion for POST -CONSTRUCTIONAL anti-termite treatment (excluding the cost of chemical emulsion): Treatment of soil under existing floors using chemical emulsion @ one litre per hole, 300 mm apart including drilling 12 mm diameter holes and plugging with cement mortar 1:2 (1 cement : 2 coarse sand) to match the existing floor: With Chlorpyriphos/Lindane E.C. 20% with 1% concentration						
Details of cost for 9 sqm (3 metre x 3 metre) No. of holes - 100 nos. Chlorpyriphos 1% required 100x1 litre = 100 litres Chlorpyriphos 20% E.C. = 100/20 = 5.0 litres Chlorpyriphos 20% E.C./Lindane 20% E.C. 5 Litres (to be supplied free of cost)						
Labour						L
0114		Beldar				
		Day	2.00000	558.00	1116.00	L1
0124		Mason (brick layer)2nd class				
		Day	0.50000	679.00	339.50	L2
Tools&Plants(Hire charges)						T
9999		Sundries				

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(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		L.S	35.88000	2.00	71.76	T1
Total			9.000	sqm	1527.26	
Unit Total			1.000	sqm	169.70	
Add Water Charge			169.70	@1.00%	1.70	
Total					171.40	
Add Contractors Profit & Overhead			171.40	@15.00%	25.71	
Total					197.11	
Add Cost Index			197.11	@35.59%	70.15	
Total					267.26	
GRAND TOTAL				sqm	267.26	
Note						
3:CENTERING AND SHUTTERING WORKS						
3.001-Specification code: 5.9.1						
Centering and shuttering including strutting, etc. and removal of form for: Foundations, footings, bases of columns, etc for mass concrete						
Details of cost for footing size 2.7mx2.7mx 1.00m Contact area = 10.8sqm						
Material						M
7330		M.S. Tube 40 mm dia Qty taken for cost of using once = $10.8 \times 0.85 / 40 = 0.2295$				
		metre	0.23000	215.00	49.34	M1
7329		Single clip Qty taken for cost of using once = $8 \times 0.85 / 40 = 0.17$				
		each	0.17000	59.00	10.03	M2
7326		Corner angle 45x45x5 mm 1.50 m long Qty taken for cost of using once = $4 \times 0.85 / 40 = 0.085$				
		each	0.09000	240.00	20.40	M3
7327		100 mm channel shoulder 2.5 m long Qty taken for cost of using once = $8 \times 0.85 / 40 = 0.17$				
		each	0.17000	910.00	154.70	M4
7328		Double clip (bridge clip) Qty taken for cost of using once = $16 \times 0.85 / 40 = 0.34$				
		each	0.34000	76.00	25.84	M5
7319		Assuming shuttering material will become unserviceable after use of 40 times. Adding for maintenance @ 10% of cost Taking salvage value after full use of material @ 25% of cost wall form panel 1250x500 mm				

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(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Qty taken for cost of using once = $16 \times 0.85 / 40 = 0.34$				
		each	0.34000	860.00	292.40	M6
Carriage						C
9977		Carriage				
		L.S	78.00000	2.00	156.00	C1
Labour						L
0116		Fitter(grade1)				
		Day	0.75000	738.00	553.50	L1
0114		Beldar				
		Day	1.50000	558.00	837.00	L2
Tools&Plants(Hire charges)						T
9999		Sundries Shuttering oil				
		L.S	52.00000	2.00	104.00	T1
9999		Sundries				
		L.S	26.00000	2.00	52.00	T2
9999		Sundries Assembly nuts 7 bolts Qty taken for cost of using once = $1040 \times 0.85 / 40 = 22.10$				
		L.S	22.10000	2.00	44.20	T3
Total			10.800	sqm	2299.41	
Unit Total			1.000	sqm	212.91	
Add Water Charge			212.91	@1.00%	2.13	
Total					215.04	
Add Contractors Profit & Overhead			215.04	@15.00%	32.26	
Total					247.30	
Add Cost Index			247.30	@35.59%	88.01	
Total					335.31	
GRAND TOTAL				sqm	335.31	
Note						
3.002-Specification code: 5.9.5						
Centering and shuttering including strutting, etc. and removal of form for:						

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Lintels, beams, plinth beams, girders bressumers and cantilevers						
Details of cost for a beam of 6 m clear span, 0.50 m deep 0.30 m wide and height 3.5 m from floor cubical contents 6.60x0.5x0.3 = 0.99 cum 1x1.30x6.00 = 7.80 sqm						
Material						M
7344		Beam clamp 300-380 mm (450-1070 mm) Qty taken for cost of using once = 5x0.85/40 = 0.1063 m				
		each set	0.11000	355.00	37.74	M1
7343		Adjustable telescopic prop 3 m (2.02-3.75m) Qty taken for using once = 6x0.85/40 = 0.1275m				
		each	0.13000	955.00	121.76	M2
Labour						L
0116		Fitter(grade1)				
		Day	1.25000	738.00	922.50	L1
0114		Beldar				
		Day	2.50000	558.00	1395.00	L2
Tools&Plants(Hire charges)						T
9999		Sundries Assembly nut & bolts etc. Qty taken for cost of using once = 1040x0.85/40 = 22.10				
		L.S	22.10000	2.00	44.20	T1
9999		Sundries Carriage				
		L.S	78.00000	2.00	156.00	T2
9999		Sundries paper tape etc				
		L.S	24.61000	2.00	49.22	T3
9999		Sundries Shuttering oil				
		L.S	39.00000	2.00	78.00	T4
Sub Data						S
10.1		Assuming shuttering will become unserviceable after use of 40 times Add maintenance charges @ 10% of cost of material Less salvage value of material after full use @25% of cost of material 1. Steel plats for side and bottom (plate size 1.20 x 0.50 m) Angle 40x40x5mm , 2x1.20 = 2.40 m , 3x0.50 = 1.50 m Total 3.90 m @ 3.00 kg/m = 11.70 kg sheet 1.6 mm thick 1.20 m x 0.50 m =0.60 sqm 0.60 sqm @ 12.55				

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		kg/sqm. = 7.53 kg. Weight of one plate = 19.23 kg. Add for wastage 5% 0.96 kg. Total = 20.19 kg Total weight of all plates 3x5x20.19 = 302.85 kg Qty taken for cost of using once= 302.85 x 85/40 = 6.4356 kg Steel Work : Structural steel work in single section, fixed with or without connecting plate, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.				
		kilogram	6.44000	64.31	413.87	S1
Total			7.800	sqm	3218.29	
Unit Total			1.000	sqm	412.60	
Add Water Charge			412.60	@1.00%	4.13	
Total					416.73	
Add Contractors Profit & Overhead			416.73	@15.00%	62.51	
Total					479.24	
Add Cost Index			479.24	@35.59%	170.56	
Total					649.80	
GRAND TOTAL				sqm	649.80	
Note						
3.003-Specification code: 5.9.6						
Centering and shuttering including strutting, etc. and removal of form for: Columns, Pillars, Piers, Abutments, Posts and Struts						
Details of cost for 4.5 sqm. Size of column 450x450mm and 2.5 m high Area of contact = 4x0.45x2.5 = 4.5 sqm MATERIAL: Assuming shuttering will become unserviceable after use of 40 times Add maintenance charges @ 10 % of cost of material Less salvage value of material after full use @ 25% of cost of material						
Material						M
7331		Wall form panel 1250x450xmm Qty taken for cost of using once = $8 \times 0.85 / 40 = 0.17$				
		each	0.17000	860.00	146.20	M1
7332		Corner angle 45x45x5 mm 2.50 long Qty taken for cost of using once = $4 \times 0.85 / 40 = 0.085$				
		each	0.09000	255.00	21.68	M2
7333		Column clamp 450x1070 mm Qty taken for cost of using once = $5 \times 0.85 / 40 = 0.1063$				
		each	0.11000	965.00	102.58	M3
7334		Prop 2 m (2-3.5m) Qty taken for cost of using once = $4 \times 0.85 / 40 = 0.085$				

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		each	0.09000	635.00	53.98	M4
Carriage						C
9977		Carriage				
		L.S	52.00000	2.00	104.00	C1
Labour						L
0114		Beldar				
		Day	2.00000	558.00	1116.00	L1
0116		Fitter(grade1)				
		Day	1.00000	738.00	738.00	L2
Tools&Plants(Hire charges)						T
9999		Sundries				
		Qty taken for cost of using once = $1300 \times 0.85 / 40 = 27.62$				
		L.S	27.62000	2.00	55.24	T1
9999		Sundries				
		Shuttering oil				
		L.S	39.00000	2.00	78.00	T2
9999		Sundries				
		Carriage				
		L.S	26.00000	2.00	52.00	T3
Total			4.500	sqm	2467.68	
Unit Total			1.000	sqm	548.37	
Add Water Charge			548.37	@1.00%	5.48	
Total					553.85	
Add Contractors Profit & Overhead			553.85	@15.00%	83.08	
Total					636.93	
Add Cost Index			636.93	@35.59%	226.68	
Total					863.61	
GRAND TOTAL				sqm	863.61	
Note						
3.004-Specification code: 5.9.7						
Centering and shuttering including strutting, etc. and removal of form for: Stairs, (excluding landings) except spiral - staircases)						

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(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Details of cost for 5.79 sqm. Details of staircase, 3.40 m clear span including 1 m landing						
Material						M
0302		Second class kail wood in scantling = $2 \times 4 \times 0.80 = 6.40$ m Qty taken for cost using once = $6.4/8 = 0.8$ m Safeda ballies 125 mm diameter				
		metre	0.80000	40.00	32.00	M1
1197		(ii) Batten 100mm x 75 mm $4 \times 1.30 \times 0.100 \times 0.075 = 0.039$ cum = 39 cudm Qty taken for cost using once = $39/8 = 4.875$ cudm Second class kail wood in scantling				
		1 cud m	4.88000	260.00	126.75	M2
1198		(i) Cost of plank 38 mm (2nd class kail wood) Waist $2.69 \times 1.30 = 3.50$ sqm. Side shuttering of steps and side of waist steps = $8 \times 1.30 \times 1.15 = 1.56$ sqm Face of landing $1 \times 1.30 \times 0.15 = 0.20$ sqm. Side of waist $2.69 \times 0.13 = 0.35$ sqm. Side of steps- $8 \times 0.50 \times 0.30 \times 0.15 = 0.18$ sqm. Total = 5.79 sqm. Wastage 5% = 0.29 sqm. Total = 6.08 sq. Cubical content - $6.08 \times 0.038 = 0.231$ cum = 231 cudm Qty taken for cost using once = $231/8 = 28.875$ cudm Second class kail wood in planks				
		1 cud m	28.88000	260.00	750.75	M3
Carriage						C
2204		Planks = 0.231 cum, Battens = 0.039 cum. Ballies $6.4 \times 3.142 / 4 \times (0.125)^2 = 0.079$ cum. Total = 0.349 cum. Qty taken for cost using once = $0.349/8 = 0.04363$ cum Carriage of Timber				
		cum	0.04000	118.59	5.17	C1
Labour						L
0114		Beldar				
		Day	1.00000	558.00	558.00	L1
0112		For assembling, erection, dismantling and cleaning Carpenter 2nd class				
		Day	1.75000	679.00	1188.25	L2
Tools&Plants(Hire charges)						T
9999		Sundries				
		L.S	16.12000	2.00	32.24	T1
Total			5.790	sqm	2693.16	
Unit Total			1.000	sqm	465.14	
Add Water Charge			465.14	@1.00%	4.65	

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Total			469.79	
		Add Contractors Profit & Overhead	469.79	@15.00%	70.47	
		Total			540.26	
		Add Cost Index	540.26	@35.59%	192.28	
		Total			732.54	
		GRAND TOTAL		sqm	732.54	
Note						
3.005-Specification code: 5.9.18						
Centering and shuttering including strutting, etc. and removal of form for: Small surfaces such as cantilever ends, brackets and ends of steps, caps and bases to pilasters and columns and the like						
Details of cost for a bracket 1.20m projected Front area 0.50x0.60m , End area 0.50x0.75m Area in contact with concrete = $2 \times \{(0.60+0.75)/2 \times 1.2\} = 1.62$ sqm Front 0.5x0.6 = 0.30 sqm, Bottom 0.5x1.21 = 0.605 sqm Total = 2.525 sqm						
Material						M
1198		Assuming that the timber will become unserviceable after being used 8 times. (I) Plank 30mm thick. Sides $2 \times \{(0.60+0.75)/2 \times 1.238\} = 1.6713$ sqm Battens $0.576 \times 1.21 = 0.697$, Front $0.5 \times 0.638 = 0.319$, Total = 2.687 sqm. Cubical contents $2.687 \times 0.038 = 0.102$ cum, Wastage @ 5% = 0.005 cum, Total = 0.107 cum. Qty taken for cost using once = $107/8 = 13.375$ cudm Second class kail wood in planks or equivalent local soft wood				
		1 cud m	13.38000	260.00	347.75	M1
2447		(iii) Bailies 125 mm dia. $1 \times 2.5 = 2.50$ m , $1 \times 2.65 = 2.65$ m Total = 5.15 m Wastage 5% = 0.26 m , Total = 5.41 m Qty taken for cost using once = $5.41/8 = 0.6763$ m Hollock ballies 125 mm diameter				
		metre	0.68000	35.00	23.67	M2
1197		(ii) Battens- $0.05 \times 0.05 \times 1.238 = 2.476$ m , $2 \times 1.21 = 2.42$ m , $2 \times 0.688 = 1.376$ m , $2 \times 0.838 = 1.676$ m , $30 \times 0.5 = 1.50$ m Total = 9.448m Cubical contents $9.448 \times 0.05 \times 0.05 = 0.024$ cum , Wastage 5% = 0.0012 cum. Total = 0.0252 cum = 25.2 cudm Qty taken for cost using once = $25.2/8 = 3.15$ cudm Second class kail wood in scantling				
		1 cud m	3.15000	260.00	81.90	M3
Carriage						C
2204		Planks = 0.107 cum, Battens = 0.0252 cum Bailies $5.41 \times 22/7 \times (0.125)^2/4 = 0.066$ cum Total = 0.198 cum Qty taken for cost using once = $0.198/8 = 0.0248$ cudm Carriage of Timber				
		cum	0.02000	118.59	2.94	C1

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Labour						L
0114		Beldar				
		Day	0.80000	558.00	446.40	L1
0112		Labour for assembling, erection, dismantling & cleaning Carpenter 2nd class				
		Day	0.80000	679.00	543.20	L2
Tools&Plants(Hire charges)						T
9999		Sundries				
		L.S	7.15000	2.00	14.30	T1
Total			2.525	sqm	1460.16	
Unit Total			1.000	sqm	578.28	
Add Water Charge			578.28	@1.00%	5.78	
Total					584.06	
Add Contractors Profit & Overhead			584.06	@15.00%	87.61	
Total					671.67	
Add Cost Index			671.67	@35.59%	239.05	
Total					910.72	
GRAND TOTAL				sqm	910.72	
Note						
3.006-Specification code: 5.9.19						
Centering and shuttering including strutting, etc. and removal of form for: Weather shade, Chajjas, corbels etc., including edges						
Details of cost for a weather shade Area of centering and shuttering = 0.954 sqm For a weather shade over a window of size 1.5x1.2m Size of weather shade 1.80x0.45m Thickness at front = 0.05 m Thickness at fixed edge = 0.07m Area in contact with concrete Bottom 1X0.45X1.80 = 0.810 , 1x0.05x1.80 = 0.094 , 2x0.45x0.06 = 0.027 Total = 0.954 sqm						
Material						M
2447		(iii) Bailies 125 mm dia. 2x2.1 = 4.2 m , Wastage 5% = 0.21 m , Total = 4.41 m Qty taken for cost using once = 4.41/8 = 0.5513 m Hollock ballies 125 mm diameter				
		metre	0.55000	35.00	19.30	M1
1198		Assuming that the timber will become unserviceable after being used 8 times. (i) Planking 38 mm thick. Bottom 1x1.876x0.488 = 0.915 sqm. , 1x1.876x0.05 = 0.94 sqm. , 2x0.45x0.06 = 0.27 sqm. Total = 1.036 sqm , Add 5% wastage = 0.052 sqm. Total = 1.088 sqm. Cubic contents 1.088x0.038=0.041 cum=41 cudm Qty taken for cost using once = 41/8				

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		= 5.125 cu dm Second class kail wood in planks				
		1 cu dm	5.13000	260.00	133.25	M2
1197		(ii) Battens 2x0.60x0.075x0.10 = 0.009 Ends with bearing center 1x0.45x0.075x0.10 = 0.003 Total = 0.012 cum = 12 cu dm Qty taken for cost using once = 12/8= 1.50 cu dm Second class kail wood in scantling				
		1 cu dm	1.50000	260.00	39.00	M3
Carriage						C
2204		Plank = 0.041 cum. , Battens = 0.012 cum. Bailies 4.41x22/7x(0.125) ² /4 = 0.054 cum. Total = 0.107 cum Qty taken for cost using once = 0.107/8 = 0.01338 cum Carriage of Timber				
		cum	0.01000	118.59	1.59	C1
Labour						L
0114		Beldar				
		Day	0.25000	558.00	139.50	L1
0112		Labour for assembling, erection, dismantling & cleaning Carpenter 2nd class				
		Day	0.30000	679.00	203.70	L2
Tools&Plants(Hire charges)						T
9999		Sundries				
		L.S	5.20000	2.00	10.40	T1
Total			0.954	sqm	546.74	
Unit Total			1.000	sqm	573.10	
Add Water Charge			573.10	@1.00%	5.73	
Total					578.83	
Add Contractors Profit & Overhead			578.83	@15.00%	86.82	
Total					665.65	
Add Cost Index			665.65	@35.59%	236.90	
Total					902.55	
GRAND TOTAL				sqm	902.55	
Note						
3.007-Specification code: 5.9.3						

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Centering and shuttering including strutting, etc. and removal of form for: Suspended floors, roofs, landings, balconies and access platform						
Details of cost for a room 4.5x3 = 13.50 sqm height 3.5 m						
Material						M
7343		Adjustable telescopic prop 3 m (2.02-3.75m)				
		each	0.13000	955.00	121.76	M1
7342		Adding for maintenance @ 10% of cost Taking salvage value after full use of material @ 25% of cost 1. Plates (size 0.75x0.60) Angle 40x40x5 mm , 2x0.75 = 1.5 m , 2x0.60 = 1.20 m = 2.70 m @ 3.00 kg/m = 8.10 kg sheet 1.6 mm thick , 0.75x0.60 = 0.45 sqm 0.45 sqm @ 12.55 kg/sqm = 5.65 kg Weight of one plate = 13.75 kg Add for wastage @ 5% = 0.69 kg , Total = 14.44 kg Total weight of all plates = 5x6x14.44= 433.20 kg. Qty taken for cost using once = 433.2x0.85/40 = 9.2055 kg Adjustable span ESO+SI (2.35-3.40) Qty taken for cost using once = 5x0.85/40 =0.1063				
		each	0.11000	1480.00	157.32	M2
Labour						L
0116		Fitter(grade1)				
		Day	3.00000	738.00	2214.00	L1
0114		Beldar				
		Day	6.00000	558.00	3348.00	L2
Tools&Plants(Hire charges)						T
9999		Sundries				
		L.S	22.10000	2.00	44.20	T1
9999		Sundries				
		L.S	130.00000	2.00	260.00	T2
9999		Sundries				
		L.S	49.70000	2.00	99.40	T3
9999		Sundries				
		L.S	78.00000	2.00	156.00	T4
Sub Data						S
10.1		Steel Work : Structural steel work in single section, fixed with or without connecting plate, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.				

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		kilogram	9.21000	64.31	592.01	S1
Total			13.500	sqm	6992.69	
Unit Total			1.000	sqm	517.98	
Add Water Charge			517.98	@1.00%	5.18	
Total					523.16	
Add Contractors Profit & Overhead			523.16	@15.00%	78.47	
Total					601.63	
Add Cost Index			601.63	@35.59%	214.12	
Total					815.75	
GRAND TOTAL				sqm	815.75	
Note						
3.008-Specification code: 5.9.16.1						
Centering and shuttering including strutting, etc. and removal of form for: Edges of slabs and breaks in floors and walls Under 20 cm wide						
Details of cost for a 3mx3m slab 15cms thick 12m edge Length						
Material						M
1197		(ii) Battens 75 mm x 100 mm (2nd class Kail wood) Horizontal 2x4x0.075x0.1x0.5 = 0.030, Horizontal 2x4x0.075x0.1 x 1.5 = 0.090 (iii) Vertical battens = 16x0.15x0.075x0.030m = 0.0054 (iv) Struts 16x0.25x0.07x0.075 = 0.0225 Total = 0.1479 Wastage @ 5% = 0.0074 Total = 0.1553 cum = 155 cudm Qty taken for cost of using once = 155/8 = 19.375 cudm Second class kail wood in scantling				
		1 cud m	19.38000	260.00	503.75	M1
1198		Assuming that the timber will become unserviceable after being used 8 times. (i) Planks 30 mm thick (2nd class Kail wood or equivalent local soft wood) 4x3x0.15x0.030 = 0.54 cum Wastage @ 5% = 0.003 cum. , Total = 0.057 cum 57 cudm Qty taken for cost of using once = 57/8 = 7.125 cudm Second class kail wood in planks				
		1 cud m	7.13000	260.00	185.25	M2
Carriage						C
2204		Planks = 0.057 cum, Batte4ns = 0.057 cum. Total = 0.212 cum. Qty taken for cost of using once = 0.212/8 =0.0265 cum Carriage of Timber				
		cum	0.03000	118.59	3.14	C1
Labour						L

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsr year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
0112		For assembling erection dismantling & cleaning Carpenter 2nd class				
		Day	0.81000	679.00	549.99	L1
0114		Beldar				
		Day	0.54000	558.00	301.32	L2
Tools&Plants(Hire charges)					T	
9999		Sundries				
		L.S	5.20000	2.00	10.40	T1
Total		12.000	metre	1553.85		
Unit Total		1.000	metre	129.49		
Add Water Charge		129.49	@1.00%	1.29		
Total				130.78		
Add Contractors Profit & Overhead		130.78	@15.00%	19.62		
Total				150.40		
Add Cost Index		150.40	@35.59%	53.53		
Total				203.93		
GRAND TOTAL			metre	203.93		
Note						
4:RCC WORKS						
4.001-Specification code: OD282344/2023-2024						
Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer - in-charge.All work upto plinth level						
Details of cost for 1. 00 cum						
Material					M	
0295		Stone Aggregate(single size):20 mm nominal size				
		cum	0.57000	1350.00	769.50	M1
0297		Stone Aggregate(single size): 10 mm nominal size				
		cum	0.28000	1350.00	378.00	M2
0982		Coarse sand (zone III)				

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		cum	0.42500	1350.00	573.75	M3
0367		Portland Cement				
		tonne	0.33000	4940.00	1630.20	M4
7318		Plasticizer / super plasticizer 0.50% of cement				
		kilogram	1.65000	36.00	59.40	M5
Carriage						C
2202		Carriage of Stone aggregate below 40 mm nominal size				
		cum	0.85000	103.77	88.20	C1
2203		Carriage of Coarse sand				
		cum	0.42500	103.77	44.10	C2
2209		Carriage of Cement				
		tonne	0.33000	92.24	30.44	C3
Labour						L
0155		Labour for pouring, consolidating & curing Mason (average)				
		Day	0.17000	709.00	120.53	L1
0114		Beldar				
		Day	2.00000	558.00	1116.00	L2
0101		Bhisti				
		Day	0.90000	617.00	555.30	L3
Tools&Plants(Hire charges)						T
0004		Production cost, pumping to respective floors and laying in position Production cost of concrete by batch mix plant				
		cum	1.00000	350.00	350.00	T1
0009		Pumping charges of concrete including Hire charges of pump, piping work & accessories etc.				
		cum	1.00000	210.00	210.00	T2
0012		Vibrator (Needle type 40 mm)				
		Day	0.07000	370.00	25.90	T3
9999		Sundries				
		L.S	13.00000	2.00	26.00	T4

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Total	1.000	cum	5977.32	
		Unit Total	1.000	cum	5977.32	
		Add Water Charge	5977.32	@1.00%	59.77	
		Total			6037.09	
		Add Contractors Profit & Overhead	6037.09	@15.00%	905.56	
		Total			6942.65	
		Add Cost Index	6942.65	@35.59%	2470.89	
		Total			9413.54	
		GRAND TOTAL		cum	9413.54	
Note						
4.002-Specification code: OD282343/2023-2024						
Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer - in-charge. All work above plinth level upto floor V level						
Details of cost for 1.00 cum						
Material						M
0295		Stone Aggregate(single size):20 mm nominal size				
		cum	0.57000	1350.00	769.50	M1
0297		Stone Aggregate(single size): 10 mm nominal size				
		cum	0.28000	1350.00	378.00	M2
0982		Coarse sand (zone III)				
		cum	0.42500	1350.00	573.75	M3
0367		Portland Cement				
		tonne	0.33000	4940.00	1630.20	M4
7318		Plasticizer / super plasticizer				
		kilogram	1.65000	36.00	59.40	M5
Carriage						C
2202		Carriage of Stone aggregate below 40 mm nominal size				
		cum	0.85000	103.77	88.20	C1
2203		Carriage of Coarse sand				

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		cum	0.42500	103.77	44.10	C2
2209		Carriage of Cement				
		tonne	0.33000	92.24	30.44	C3
Labour						L
0155		Labour for pouring, consolidating & curing Mason (average)				
		Day	0.17000	709.00	120.53	L1
0114		Beldar				
		Day	2.00000	558.00	1116.00	L2
0101		Bhisti				
		Day	0.90000	617.00	555.30	L3
0115		(Extra labour for lifting material upto floor V level : = 0.75 x 2.5 = 1.88) Coolie				
		Day	1.88000	558.00	1049.04	L4
Tools&Plants(Hire charges)						T
0004		Production cost, pumping to respective floors and laying inposition Production cost of concrete by batch mix plant				
		cum	1.00000	350.00	350.00	T1
0009		Pumping charges of concrete including Hire charges of pump, piping work & accessories etc.				
		cum	1.00000	210.00	210.00	T2
0012		Vibrator (Needle type 40 mm)				
		Day	0.07000	370.00	25.90	T3
9999		Sundries				
		L.S	13.00000	2.00	26.00	T4
Total			1.000	cum	7026.36	
Unit Total			1.000	cum	7026.36	
Add Water Charge			7026.36	@1.00%	70.26	
Total					7096.62	
Add Contractors Profit & Overhead			7096.62	@15.00%	1064.49	
Total					8161.11	

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Add Cost Index			8161.11	@35.59%	2904.54	
Total					11065.65	
GRAND TOTAL				cum	11065.65	
Note						
4.003-Specification code: 20.2.4						
Boring, providing and installing bored cast-in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring, with bentonite solution and temporary casing of appropriate length for setting out and removal of same and the length of the pile to be embedded in the pile cap etc. all complete, including removal of excavated earth with all lifts and leads (Length of pile for payment shall be measured upto bottom of pile cap). 500 mm dia piles						
Details of cost for 20 m length of pile						
Material						M
7183		Bentonite				
		tonne	0.28000	2960.00	828.80	M1
Labour						L
0114		Beldar				
		Day	2.50000	558.00	1395.00	L1
0130		Work supervisor Mistry				
		Day	0.12000	738.00	88.56	L2
Tools&Plants(Hire charges)						T
0026		Hire and running charges of bentonite pump				
		Day	0.38000	3500.00	1330.00	T1
0025		Hire and running charges of light crane				
		Day	0.06000	3000.00	180.00	T2
0015		Hire and running charges of Tripod and Mechanical Winch machine complete with power unit and accessories				
		Day	1.20000	1900.00	2280.00	T3
9999		Sundries				
		L.S	87.95000	2.00	175.90	T4
0018		Hire and running charges of loader				
		Day	0.30000	5000.00	1500.00	T5

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
0017		Hire and running charges of tipper				
		Day	0.30000	1700.00	510.00	T6
Sub Data					S	
5.33.1		Concrete 3.14/4x0.50?x20 = 3.925 cum Reinforced Cement Concrete : All work upto plinth level				
		cum	3.93000	5977.32	23460.98	S1
Total		20.000	metre	31749.24		
Unit Total		1.000	metre	1587.46		
Add Water Charge		1587.46	@1.00%	15.87		
Total				1603.33		
Add Contractors Profit & Overhead		1603.33	@15.00%	240.50		
Total				1843.83		
Add Cost Index		1843.83	@35.59%	656.22		
Total				2500.05		
GRAND TOTAL			metre	2500.05		
Note						
4.004-Specification code: 20.6.2.1						
Vertical load testing of piles in accordance with IS 2911(Part IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & the direction of engineer -in-Charge. Single pile above 50 tonne and upto 100 tonne capacity Initial test						
Details of cost for 1 test						
Material					M	
7247		Vertical load testing (INITIAL) of piles in accordance with IS : 2911(Part -IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. compete as per specification & above 50MT and up to 100 MT				
		per test	1.00000	45000.00	45000.00	M1
Total		1.000	per test	45000.00		
Unit Total		1.000	per test	45000.00		
Add Water Charge		45000.00	@1.00%	450.00		
Total				45450.00		
Add Contractors Profit & Overhead		45450.00	@15.00%	6817.50		
Total				52267.50		

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Add Cost Index	52267.50	@35.59%	18602.00	
		Total			70869.50	
		GRAND TOTAL		per test	70869.50	
Note						
4.005-Specification code: 20.6.2.2						
Vertical load testing of piles in accordance with IS 2911(Part IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & the direction of engineer -in-Charge. Single pile above 50 tonne and upto 100 tonne capacity Routine test						
Details of cost for 1 test						
Material						M
7250		Cyclic vertical load testing of piles in accordance with IS : 2911(Part-IV) including preparation of pile head etc. for Single pile above 50 tonne capacity pile and up to 100 tonne capacity pile				
		per test	1.00000	23000.00	23000.00	M1
		Total	1.000	per test	23000.00	
		Unit Total	1.000	per test	23000.00	
		Add Water Charge	23000.00	@1.00%	230.00	
		Total			23230.00	
		Add Contractors Profit & Overhead	23230.00	@15.00%	3484.50	
		Total			26714.50	
		Add Cost Index	26714.50	@35.59%	9507.69	
		Total			36222.19	
		GRAND TOTAL		per test	36222.19	
Note						
5:STEEL REINFORCEMENT WORKS						
5.001-Specification code: 5.22A.6						
Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete above plinth level. Thermo - Mechanically Treated bars of grade Fe-500D or more						
Details of cost for 1 quintal						
Material						M
1005		Deformed twisted steel bars = 1.00 q + Add 5% Wastage = 0.05 Total = 1.05 q Twisted steel/deformed bars				

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		quintal	1.05000	4600.00	4830.00	M1
Carriage						C
2205		Carriage of Steel 1.05/10 = 0.105t				
		tonne	0.11000	92.24	9.69	C1
Labour						L
0114		Beldar				
		Day	1.00000	558.00	558.00	L1
0102		For straightening, cutting, bending, binding and placing in position Blacksmith 1st class				
		Day	1.00000	738.00	738.00	L2
Tools&Plants(Hire charges)						T
9999		Sundries Cover block				
		L.S	26.00000	2.00	52.00	T1
9999		Sundries				
		L.S	26.91000	2.00	53.82	T2
Total			100.000	kg	6241.51	
Unit Total			1.000	kg	62.42	
Add Water Charge			62.42	@1.00%	0.62	
Total					63.04	
Add Contractors Profit & Overhead			63.04	@15.00%	9.46	
Total					72.50	
Add Cost Index			72.50	@35.59%	25.80	
Total					98.30	
GRAND TOTAL				kg	98.30	
Note						
6:MASONRY WORKS						
6.001-Specification code: 50.6.1.5						
Solid block masonry using pre cast solid blocks (Factory made) of size 30x20x20cm or nearest available size confirming to IS 2185 Part I of 1979 for super structure up to floor two level thickness 20cm and above in: CM 1:6 (1 cement : 6 coarse sand) etc complete						
Details of cost for one cum						

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Material					M	
	MR2	Solid blocks of size 30x20x20cm				
		each	77.00000	36.50	2810.50	M1
Labour					L	
0124		Mason (brick layer)2nd class				
		Day	0.47000	679.00	319.13	L1
0123		Mason (brick layer) Ist class				
		Day	0.47000	738.00	346.86	L2
0101		Bhisti				
		Day	0.20000	617.00	123.40	L3
0115		Coolie				
		Day	1.80000	558.00	1004.40	L4
Tools&Plants(Hire charges)					T	
9999		Sundries				
		L.S	22.36000	2.00	44.72	T1
9999		Sundries				
		L.S	2.73000	2.00	5.46	T2
Sub Data					S	
3.11		Rate as per item Number 3.11 of SH: Mortars Mortars : Cement mortar 1:6 (1 cement : 6 coarse sand).				
		cum	0.09000	3356.14	302.05	S1
Total			1.000	cum	4956.52	
Unit Total			1.000	cum	4956.52	
Add Water Charge			4956.52	@1.00%	49.57	
Total					5006.09	
Add Contractors Profit & Overhead			5006.09	@15.00%	750.91	
Total					5757.00	
Add Cost Index			2492.60	@35.59%	887.12	
Total					6644.12	
GRAND TOTAL				cum	6644.12	

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(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Note						
6.002-Specification code: 60.7.1						
DRY RUBBLE MASONRY _ Dry rubble without concrete levelling course masonry with good quality blasted rubble including packing to compactness to lines and levels cost and conveyance of all materials labour charges etc. complete as per direction of Departmental officers at site						
Details of cost for 1 cum.						
Material						M
1157		Stone for masonry work				
		cum	1.05000	1100.00	1155.00	M1
Carriage						C
2215		Carriage of Soling stone & masonry stone				
		cum	1.05000	122.08	128.18	C1
Labour						L
0114		Beldar				
		Day	0.70000	558.00	390.60	L1
0125		Mason (for plain stone work) 2nd class				
		Day	0.80000	679.00	543.20	L2
Total			1.000	cum	2216.98	
Unit Total			1.000	cum	2216.98	
Add Water Charge			2216.98	@1.00%	22.17	
Total					2239.15	
Add Contractors Profit & Overhead			2239.15	@15.00%	335.87	
Total					2575.02	
Add Cost Index			2575.02	@35.59%	916.45	
Total					3491.47	
GRAND TOTAL				cum	3491.47	
Note						
6.003-Specification code: 50.6.1.4						
Solid block masonry using pre cast solid blocks (Factory made) of size 30x20x20cm or nearest available size confirming to IS 2185 part I of 1979 for foundation and plinth with thickness 20cm and above in: CM 1:6 (1 cement : 6 coarse sand) etc complete						
Details of cost for one cum.						

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(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Material					M	
	MR2	Solid blocks of size 30x20x20cm				
		each	77.00000	36.50	2810.50	M1
Labour					L	
0115		Coolie				
		Day	1.37000	558.00	764.46	L1
0123		Mason (brick layer) Ist class				
		Day	0.36000	738.00	265.68	L2
0124		Mason (brick layer)2nd class				
		Day	0.36000	679.00	244.44	L3
0101		Bhisti				
		Day	0.20000	617.00	123.40	L4
Tools&Plants(Hire charges)					T	
9999		Sundries				
		L.S	2.73000	2.00	5.46	T1
Sub Data					S	
3.11		Rate as per item Number 3.11 of SH: Mortars Mortars : Cement mortar 1:6 (1 cement : 6 coarse sand).				
		cum	0.09000	3356.14	302.05	S1
		Total	1.000	cum	4515.99	
		Unit Total	1.000	cum	4515.99	
		Add Water Charge	4515.99	@1.00%	45.16	
		Total			4561.15	
		Add Contractors Profit & Overhead	4561.15	@15.00%	684.17	
		Total			5245.32	
		Add Cost Index	1980.92	@35.59%	705.01	
		Total			5950.33	
		GRAND TOTAL		cum	5950.33	
Note						
6.004-Specification code: 50.6.1.6						

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(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Solid block masonry using pre cast solid blocks (Factory made) of size 30x20x20cm or nearest available size confirming to IS 2185 part I of 1979 for super structure above floor two level upto floor five level thickness 20cm and above in : CM 1:6 (1 cement : 6 coarse sand sand) etc complete						
Details of cost for one cum						
Material						M
	MR2	Solid blocks of size 30x20x20cm				
		each	77.00000	36.50	2810.50	M1
Labour						L
0101		Bhisti				
		Day	0.20000	617.00	123.40	L1
0115		Coolie				
		Day	1.13000	558.00	630.54	L2
0123		Mason (brick layer) Ist class				
		Day	0.47000	738.00	346.86	L3
0124		Mason (brick layer)2nd class				
		Day	0.47000	679.00	319.13	L4
0115		Coolie				
		Day	1.80000	558.00	1004.40	L5
Tools&Plants(Hire charges)						T
9999		Sundries Scaffolding Extra labour element required for lifting of materials (above floor two level upto floor five level)				
		L.S	22.36000	2.00	44.72	T1
9999		Sundries				
		L.S	2.73000	2.00	5.46	T2
Sub Data						S
3.11		Rate as per item Number 3.11 of SH: Mortars Mortars : Cement mortar 1:6 (1 cement : 6 coarse sand).				
		cum	0.09000	3356.14	302.05	S1
Total			1.000	cum	5587.06	
Unit Total			1.000	cum	5587.06	

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Add Water Charge	5587.06	@1.00%	55.87	
		Total			5642.93	
		Add Contractors Profit & Overhead	5642.93	@15.00%	846.44	
		Total			6489.37	
		Add Cost Index	3224.98	@35.59%	1147.77	
		Total			7637.14	
		GRAND TOTAL		cum	7637.14	
Note						
6.005-Specification code: 50.6.2.2						
Solid masonry using pre cast solid blocks (factory made) of size 30x20x15cm or nearest available size confirming to IS 2185 part I of 1979 for super structure up to floor two level with thickness 15cm in : CM 1:6 (1 cement : 6 coarse sand) etc complete						
Details of cost for 1 cum						
Material						M
	MR4	Solid blocks of size 30x20x15cm				
		each	103.00000	26.25	2703.75	M1
Labour						L
0124		Mason (brick layer)2nd class				
		Day	0.53000	679.00	359.87	L1
0123		Mason (brick layer) Ist class				
		Day	0.53000	738.00	391.14	L2
0101		Bhisti				
		Day	0.45000	617.00	277.65	L3
0115		Coolie				
		Day	1.90000	558.00	1060.20	L4
Tools&Plants(Hire charges)						T
9999		Sundries				
		L.S	2.73000	2.00	5.46	T1
9999		Sundries				
		L.S	22.36000	2.00	44.72	T2

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Sub Data					S	
3.11		Rate as per item Number 3.11 of SH: Mortars Mortars : Cement mortar 1:6 (1 cement : 6 coarse sand).				
		cum	0.09000	3356.14	302.05	S1
Total			1.000	cum	5144.84	
Unit Total			1.000	cum	5144.84	
Add Water Charge			5144.84	@1.00%	51.45	
Total					5196.29	
Add Contractors Profit & Overhead			5196.29	@15.00%	779.44	
Total					5975.73	
Add Cost Index			2835.33	@35.59%	1009.09	
Total					6984.82	
GRAND TOTAL				cum	6984.82	
Note						
6.006-Specification code: 50.6.2.3						
Solid block masonry using pre cast solid blocks (Factory made) of size 30x20x15cm or nearest available size confirming to IS 2185 part I of 1979 for super structure above floor two level upto floor five level with thickness 15cm in : CM 1:6 (1 cement : 6 coarse sand) etc complete						
Details of cost for one cum						
Material						M
	MR4	Solid blocks of size 30x20x15cm				
		each	103.00000	26.25	2703.75	M1
Labour						L
0123		Mason (brick layer) Ist class				
		Day	0.53000	738.00	391.14	L1
0124		Mason (brick layer)2nd class				
		Day	0.53000	679.00	359.87	L2
0115		Coolie				
		Day	1.90000	558.00	1060.20	L3
0101		Bhisti				

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Day	0.45000	617.00	277.65	L4
0115		Coolie				
		Day	1.13000	558.00	630.54	L5
Tools&Plants(Hire charges)						T
9999		Sundries				
		L.S	2.73000	2.00	5.46	T1
9999		Sundries Scaffolding Extra labour element required for lifting of materials (above floor two level upto floor five level)				
		L.S	22.36000	2.00	44.72	T2
Sub Data						S
3.11		Rate as per item Number 3.11 of SH: Mortars Mortars : Cement mortar 1:6 (1 cement : 6 coarse sand).				
		cum	0.09000	3356.14	302.05	S1
		Total	1.000	cum	5775.38	
		Unit Total	1.000	cum	5775.38	
		Add Water Charge	5775.38	@1.00%	57.75	
		Total			5833.13	
		Add Contractors Profit & Overhead	5833.13	@15.00%	874.97	
		Total			6708.10	
		Add Cost Index	3567.70	@35.59%	1269.74	
		Total			7977.84	
		GRAND TOTAL		cum	7977.84	
Note						
7:CEMENT PLASTERING WORKS						
7.001-Specification code: 13.16.1						
6 mm cement plaster of mix: 1:3 (1 cement : 3 fine sand)						
Details of cost for 10 sqm						
Labour						L
0155		Mason (average)				
		Day	0.51000	709.00	361.59	L1
0115						

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Coolie				
		Day	0.75000	558.00	418.50	L2
0101		Bhisti				
		Day	0.92000	617.00	567.64	L3
Tools&Plants(Hire charges)					T	
9999		Scaffolding and Sundries				
		L.S	11.70000	2.00	23.40	T1
9999		Sundries Extra for removing burrs, cleaning with wire brushes, pock making with pointed tool etc.				
		L.S	13.39000	2.00	26.78	T2
Sub Data					S	
3.3		Mortars : Cement mortar 1:3 (1 cement : 3 fine sand) Rate as per Item Number 3.3 of SH: Mortars				
		cum	0.07000	4183.02	301.18	S1
		Total	10.000	sqm	1699.09	
		Unit Total	1.000	sqm	169.91	
		Add Water Charge	169.91	@1.00%	1.70	
		Total			171.61	
		Add Contractors Profit & Overhead	171.61	@15.00%	25.74	
		Total			197.35	
		Add Cost Index	197.35	@35.59%	70.24	
		Total			267.59	
		GRAND TOTAL		sqm	267.59	
Note						
7.002-Specification code: 13.9.1						
Cement plaster 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement. 12 mm cement plaster						
Details of cost for 10 sqm						
Material					M	
0367		Portland Cement (OPC-43 grade}				
		tonne	0.02000	4940.00	98.80	M1

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Carriage					C	
2209		Carriage of Cement				
		tonne	0.02000	92.24	1.84	C1
Labour					L	
0101		Bhisti				
		Day	0.92000	617.00	567.64	L1
0115		Coolie				
		Day	0.27000	558.00	150.66	L2
0155		Mason (average)				
		Day	0.67000	709.00	475.03	L3
0155		Mason (average)				
		Day	0.27000	709.00	191.43	L4
0115		Coolie				
		Day	0.75000	558.00	418.50	L5
Tools&Plants(Hire charges)					T	
9999		Scaffolding and Sundries				
		L.S	8.06000	2.00	16.12	T1
9999		Scaffolding and Sundries				
		L.S	12.61000	2.00	25.22	T2
Sub Data					S	
3.8		Mortars : Cement mortar 1:3 (1 cement : 3 coarse sand). Rate as per Item Number 3.8 of SH: Mortars				
		cum	0.14000	4664.52	671.69	S1
Total			10.000	sqm	2616.93	
Unit Total			1.000	sqm	261.69	
Add Water Charge			261.69	@1.00%	2.62	
Total					264.31	
Add Contractors Profit & Overhead			264.31	@15.00%	39.65	

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(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Total			303.96	
		Add Cost Index	303.96	@35.59%	108.18	
		Total			412.14	
		GRAND TOTAL		sqm	412.14	
Note						
7.003-Specification code: 13.1.2						
12 mm cement plaster of mix: 1:6 (1 cement : 6 fine sand).						
Details of cost for 10 sqm.						
Labour						L
0115		Coolie				
		Day	0.75000	558.00	418.50	L1
0155		Mason (average)				
		Day	0.67000	709.00	475.03	L2
0101		Bhisti				
		Day	0.92000	617.00	567.64	L3
Tools&Plants(Hire charges)						T
9999		Scaffolding and Sundries				
		L.S	12.61000	2.00	25.22	T1
Sub Data						S
3.6		Mortars : Cement mortar 1:6 (1 cement : 6 fine sand). Rate as per Item Number 3.6 of SH: Mortars				
		cum	0.14000	2874.64	413.95	S1
		Total	10.000	sqm	1900.34	
		Unit Total	1.000	sqm	190.03	
		Add Water Charge	190.03	@1.00%	1.90	
		Total			191.93	
		Add Contractors Profit & Overhead	191.93	@15.00%	28.79	
		Total			220.72	
		Add Cost Index	220.72	@35.59%	78.55	
		Total			299.27	

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(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
GRAND TOTAL				sqm	299.27	
Note						
7.004-Specification code: 13.7.1						
12 mm cement plaster finished with a floating coat of neat cement of mix: 1:3 (1 cement : 3 fine sand)						
Details of cost for 10 sqm						
Material						M
0367		Portland Cement (OPC-43 grade)				
		tonne	0.02000	4940.00	98.80	M1
Carriage						C
2209		Carriage of Cement				
		tonne	0.02000	92.24	1.84	C1
Labour						L
0115		Coolie				
		Day	0.75000	558.00	418.50	L1
0155		Mason (average)				
		Day	0.67000	709.00	475.03	L2
0101		Bhisti				
		Day	0.92000	617.00	567.64	L3
0155		Mason (average)				
		Day	0.27000	709.00	191.43	L4
0115		Coolie				
		Day	0.27000	558.00	150.66	L5
Tools&Plants(Hire charges)						T
9999		Scaffolding and Sundries				
		L.S	8.06000	2.00	16.12	T1
9999		Scaffolding and Sundries				
		L.S	12.61000	2.00	25.22	T2

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Sub Data					S	
3.3		Mortars : Cement mortar 1:3 (1 cement : 3 fine sand) Rate as per Item Number 3.3 of SH: Mortars				
		cum	0.14000	4183.02	602.35	S1
Total		10.000	sqm	2547.59		
Unit Total		1.000	sqm	254.76		
Add Water Charge		254.76	@1.00%	2.55		
Total				257.31		
Add Contractors Profit & Overhead		257.31	@15.00%	38.60		
Total				295.91		
Add Cost Index		295.91	@35.59%	105.31		
Total				401.22		
GRAND TOTAL			sqm	401.22		
Note						
8:JOINERIES						
8.001-Specification code: OD214746/2023-2024						
Supplying and fixing pressed steel window of standard pattern with frame as per profile of IS 4351 of section 105*60mm using 18G (1.2mm thick CRCA) sheet and shutters made of section 75*30 cm for outer styles and horizontal members and then insered with enclosed and stiffned sheet 26R gas per specification with Z incromate primer coat measured in sequence metre including all charges for fixing handle, aldrep, butt hinges etc complete						
Material					M	
	MR	supplying and fixing pressed steel window and Ventilators of standard pattern with frames as per profile of sections 82x62mm embossed sheet shutter 50x20 mm special channel shutter,12mm dia rod 25*5mm flat with 75 mm SS hings 50mm SS hook ,125mm SS stay and horizontal members handle for windows with section 105x60mm using 16G sheet and shutter made of sections 75x30cm outer styles and horizontal members and then inserted with stiffened s				
		each	1.00000	11250.00	11250.00	M1
Labour					L	
0114		Beldar				
		Day	0.20000	558.00	111.60	L1
0115						

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Coolie				
		Day	0.20000	558.00	111.60	L2
0123		Mason (brick layer) Ist class				
		Day	0.20000	738.00	147.60	L3
Tools&Plants(Hire charges)						T
9999		Sundries				
		L.S	4.42000	2.00	8.84	T1
Total			2.250	sqm	11629.64	
Unit Total			1.000	sqm	5168.73	
Add Water Charge			5168.73	@1.00%	51.69	
Total					5220.42	
Add Contractors Profit & Overhead			5220.42	@15.00%	783.06	
Total					6003.48	
Add Cost Index			195.98	@35.59%	69.75	
Total					6073.23	
GRAND TOTAL				sqm	6073.23	
Note						
8.002-Specification code: OD214747/2023-2024						
Supplying and fixing pressed steel door of standard pattern with frame as per profile of IS 4351 of section 105*60mm using 18G (1.2mm thick CRCA) sheet and shutters made of section 75*30 cm for outer styles and horizontal members and then inserted with enclosed and stiffened sheet 26R as per specification with Z incromate primer coat measured in sequence metre including all charges for fixing handle, aldop, butt hinges etc complete						
Material						M
	MR	supplyig and fixing pressed steel door of standard pattern wih frame as per profile of IS 43512 of section 105*60 mm using 18G (1.2mm thick CRCA) sheet and shutters made of section 75*30 cm for outer styles and horizontal members and then inserted with enclosed and stiffned sheet 26R as per specification with Z incromate primer coat				
		each	1.00000	9700.00	9700.00	M1
Labour						L
0114		Beldar				
		Day	0.20000	558.00	111.60	L1

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(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
0115		Coolie				
		Day	0.20000	558.00	111.60	L2
0123		Mason (brick layer) Ist class				
		Day	0.20000	738.00	147.60	L3
Tools&Plants(Hire charges)					T	
9999		Sundries				
		L.S	7.51000	2.00	15.02	T1
Total		2.100	sqm	10085.82		
Unit Total		1.000	sqm	4802.77		
Add Water Charge		4802.77	@1.00%	48.03		
Total				4850.80		
Add Contractors Profit & Overhead		4850.80	@15.00%	727.62		
Total				5578.42		
Add Cost Index		213.39	@35.59%	75.95		
Total				5654.37		
GRAND TOTAL			sqm	5654.37		
Note						
8.003-Specification code: 21.1.1.2						
Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS : 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing /paneling, C.P. brass/ stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge.(Glazing, paneling and dash fasteners to be paid for separately):						
For fixed portion						
Powder coated aluminium (minimum thickness of powder coating 50 micron)						
Details of cost for 40.02 kg						
Material					M	
7306		(i) External member of the frame (Jindal section no 4605) V = 2x2.40 = 4.80 m H = 2x3x0.95 = 5.70 m = 10.50 m @ 1.653 kg/m = 17.36 kg (ii) Internal member of the frame (Jindal section no 4604) V = 2x2.40 = 4.80 m H = 1x3x0.95 = 2.85 m = 7.65 m @ 1.692 kg/m = 12.94 kg (iii) Aluminium snap beading on both side (Jindal section no 4407) 2x6x2 (1.14+0.95) = 50.16 m Snap beading = 50.16 m @ 0.176 kg/m = 8.33				

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		kg (iv) Angle cleat 38x38x4.8 mm 50 mm long 18x0.05 = 0.900 m @ 0.985 kg/m = 0.89 kg Sub total =40.02 kg Add 5% wastage = 2.00 kg Total = 42.02 kg Aluminium T or L Sections				
		kilogram	42.02000	190.00	7983.80	M1
7392		(vi) Epoxy Powder coating 50 microns on aluminium sections				
		kilogram	42.02000	61.00	2563.22	M2
0589		(v) C.P. brass /stainless steel screws 20 mm for cleat angle 18x4 = 72 Nos Chromium plated Brass screws 20 mm				
		1 nos	72.00000	160.00	115.20	M3
Carriage						C
9977		Carriage of material				
		L.S	52.00000	2.00	104.00	C1
Labour						L
0114		Beldar				
		Day	1.00000	558.00	558.00	L1
0100		Bandhani				
		Day	0.05000	617.00	30.85	L2
0116		For fabrication of frame Fitter(grade1)				
		Day	2.00000	738.00	1476.00	L3
0139		Skilled Beldar (for floor rubbing etc.)				
		Day	1.00000	617.00	617.00	L4
Tools&Plants(Hire charges)						T
9999		Sundries Labour for drilling holes, hire charges of drill, electricity charges, carriage of dash hold fastners and sundries				
		L.S	100.00000	2.00	200.00	T1
Total			40.020	kg	13648.07	
Unit Total			1.000	kg	341.03	
Add Water Charge			341.03	@1.00%	3.41	

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Total					344.44	
Add Contractors Profit & Overhead			344.44	@15.00%	51.67	
Total					396.11	
Add Cost Index			396.11	@35.59%	140.98	
Total					537.09	
GRAND TOTAL				kg	537.09	
Note						
8.004-Specification code: 21.1.2.2						
For shutters of doors, windows & ventilators including providing and fixing hinges / pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber/ neoprene gasket required (Fittings shall be paid for separately) Powder coated aluminium (minimum thickness of powder coating 50 micron)						
Details of cost for 20.21 kg						
Material						M
0589		(ix) C.P. brass/ stainless steel screws 20 mm For cleat 12x4 = 48,For cleat 4x8 = 32,For glazing plate @ 15 cm centre to centre in 75 cm length 2x6 = 12 Total = 92 Nos. Chromium plated Brass screws 20 mm				
		1 nos	92.00000	160.00	147.20	M1
7390		(xii) Neoprene/ EPDM rubber gasket in groove of meeting style Neoprene / EPDM rubber gasket				
		metre	2.35000	19.00	44.65	M2
7306		(i) Hanging style (Jindal section no 4524) 1x2.35 = 2.35 m @ 2.53 kg/m = 5.95 kg (ii) Meeting style (Jindal section no 4526) 1x2.35 = 2.35 m @ 2.465 kg/m = 5.79 kg (iii) Top & bottom rail (Jindal section n o 4510) 2x0.75 = 1.50 m @ 2.48 kg/m = 3.72 kg (iv) Lock rail (Jindal section no 4524) 1x0.75 = 0.75 m @ 2.53 kg/m = 1.90 kg (v) Glazing plate (Jindal section no 440) on one side of lock rail 1x0.75 = 0.75 m @ 0.459 kg/m =0.34 kg (vi) Aluminium snap beading (Jindal section no 4497) on both side 2x2 (0.75+1.26) = 8.04 m 2x2 (0.75+0.81) = 6.24 m = 14.28 m @ 0.176 kg/m = 2.51 kg (vii) Aluminium angle cleat 38x38x 4.8 mm 35 mm long 3x4x0.035 = 0.42 m @ 0.985 kg/m = 0.41 kg Sub total = 20.62 kg Add 5% wastage = 1.03 kg Total = 21.65 kg Aluminium T or L Sections				
		kilogram	21.65000	190.00	4113.50	M3
7392		(x) Epoxy Powder coating 50 microns on aluminium sections				
		kilogram	21.65000	61.00	1320.65	M4
0689		Anodised Aluminium butt hinges 100x75x4 mm				

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		1 nos	4.00000	393.00	157.20	M5
Carriage						C
9977		Carriage of material				
		L.S	31.20000	2.00	62.40	C1
Labour						L
0116		Fitter(grade1)				
		Day	1.00000	738.00	738.00	L1
0114		Beldar				
		Day	0.50000	558.00	279.00	L2
0111		For fixing the shutter including hinges : Carpender Ist Class				
		Day	0.20000	738.00	147.60	L3
0100		Bandhani				
		Day	0.40000	617.00	246.80	L4
0114		Beldar				
		Day	0.50000	558.00	279.00	L5
0139		Skilled Beldar (for floor rubbing etc.)				
		Day	1.00000	617.00	617.00	L6
Tools&Plants(Hire charges)						T
9999		Sundries Labour for making provision for fittings and carriage of screws etc. including sundries				
		L.S	50.00000	2.00	100.00	T1
Total			20.210	kg	8253.00	
Unit Total			1.000	kg	408.36	
Add Water Charge			408.36	@1.00%	4.08	
Total					412.44	
Add Contractors Profit & Overhead			412.44	@15.00%	61.87	
Total					474.31	

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(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Add Cost Index			474.31	@35.59%	168.81	
Total					643.12	
GRAND TOTAL				kg	643.12	
Note						
8.005-Specification code: 21.3.1						
Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of Engineer - in -Charge. (Cost of aluminium snap beading shall be paid in basic item):						
With float glass panes of 4.0 mm thickness						
Details of cost for 1 sqm						
Material						M
7390		Neoprene / EPDM rubber gasket				
		metre	6.00000	19.00	114.00	M1
2406		Float glass panes 4.00 mm thick = 1.00 sqm Add for wastage and breakage @ 10% = 0.10 sqm. Total = 1.10 sqm Float glass sheet of nominal thickness 4 mm (weight not less than 10 kg/sqm)				
		sqm	1.10000	300.00	330.00	M2
Carriage						C
9988		Carriage and sundries of gasket				
		L.S	6.89000	2.00	13.78	C1
9977		Carriage of glass				
		L.S	2.42000	2.00	4.84	C2
Labour						L
0112		Carpenter 2nd class				
		Day	0.23000	679.00	156.17	L1
0114		Beldar				
		Day	0.23000	558.00	128.34	L2
Total			1.000	sqm	747.13	
Unit Total			1.000	sqm	747.13	
Add Water Charge			747.13	@1.00%	7.47	

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Total			754.60	
Add Contractors Profit & Overhead			754.60	@15.00%	113.19	
		Total			867.79	
Add Cost Index			867.79	@35.59%	308.85	
		Total			1176.64	
GRAND TOTAL				sqm	1176.64	
Note						
8.006-Specification code: 9.48.1						
Providing and fixing M.S. Grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete. Fixed to steel windows by welding						
Details of cost for a grill 90x120 cm = 1.08 sqm.						
Material						M
1003		M.S. bar 16 mm diameter - 11x86cm = 9.46 m. @ 1.58 kg/m = 14.95 kg + Add wastage @ 10% = 1.50 kg. Total = 16.45 kg . @1.58kg/m = 14.95 kg.Say 0.165 quintal Mild Steel round bar above 12 mm dia				
		quintal	0.17000	4400.00	726.00	M1
1008		M.S. flat 25x3.15mm 2x120cm = 2.40m+ 2x90cm = 1.80m+ 1x120cm = 1.20m+ 2x15cm = 0.30m Total =5.70m 5.70m @ 0.63kg/m = 3.59kg+ Add wastage @ 10% = 0.36kg. Total = 3.95kg. Say 4 kg. or 0.04q Flats up to 10 mm in thickness				
		quintal	0.04000	4500.00	180.00	M2
Carriage						C
2205		Carriage of Steel 0.165 + 0.04 = 0.205 q = 0.0205 t Say 0.02 tonne				
		tonne	0.02000	92.24	1.84	C1
Labour						L
0102		Blacksmith 1st class				
		Day	0.86000	738.00	634.68	L1
0114		Beldar				
		Day	1.10000	558.00	613.80	L2
Tools&Plants(Hire charges)						T
9999		Sundries				

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Welding charges				
		L.S	19.76000	2.00	39.52	T1
9999		Sundries				
		L.S	26.91000	2.00	53.82	T2
Sub Data						S
13.50.3		Priming coat: Area=1x0.9x1.2x1=1.08 sqm Finishing : With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel galvanised iron /steel works				
		sqm	1.08000	37.89	40.92	S1
Total			18.540	kg	2290.58	
Unit Total			1.000	kg	123.55	
Add Water Charge			123.55	@1.00%	1.24	
Total					124.79	
Add Contractors Profit & Overhead			124.79	@15.00%	18.72	
Total					143.51	
Add Cost Index			143.51	@35.59%	51.08	
Total					194.59	
GRAND TOTAL				kg	194.59	
Note						
8.007-Specification code: 10.28						
Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners, stainless steel bolts etc., of required size on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.)						
Details of cost for 2 kg						
Material						M
4001		Qty= 2kg + Add wastage @ 5% = 0.10 Total = 2.1 kg Stainless steel (Grade - 304) hollow section round/square tubes				
		kg	2.10000	220.00	462.00	M1
4002		Stainless steel bolts /square bar and plates				
		kg	1.00000	115.00	115.00	M2
Labour						L

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
0102		For fabrication, assembling, errection, welding, curvaturing, grinding, buffling etc. Blacksmith 1st class				
		Day	0.06000	738.00	44.28	L1
0114		Beldar				
		Day	0.20000	558.00	111.60	L2
0100		Bandhani				
		Day	0.02000	617.00	12.34	L3
Tools&Plants(Hire charges)					T	
9999		Sundries Welding of stainless steel section				
		L.S	30.00000	2.00	60.00	T1
9999		Sundries Curvaturing, grinding, finishing, buffing				
		L.S	20.00000	2.00	40.00	T2
9999		Sundries for making good wall and floors				
		L.S	7.50000	2.00	15.00	T3
Total		2.000	kg	860.22		
Unit Total		1.000	kg	430.11		
Add Water Charge		430.11	@1.00%	4.30		
Total				434.41		
Add Contractors Profit & Overhead		434.41	@15.00%	65.16		
Total				499.57		
Add Cost Index		499.57	@35.59%	177.80		
Total				677.37		
GRAND TOTAL			kg	677.37		
Note						
8.008-Specification code: 10.26.1						
Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying priming coat of approves steel primer. M.S. tube						
Detail of cost for 19.49 kg Details of cost for hand rail of railing of two flights of staircase,						

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
length of hand rail = 5.40m						
Material						M
4009		M.S. tube 40mm nominal bore (medium) = 5.40m @ 3.61kg/m= 19.49kg Add wastage @ 5% = 0.97 kg Total = 20.46 kg Mild steel tubes hot finished welded type				
		kilogram	20.46000	57.00	1166.22	M1
1215		Welding by electric plant				
		cm	72.00000	2.00	144.00	M2
Carriage						C
2205		Carriage of Steel 20.46kg = 0.205q				
		tonne	0.02050	92.24	1.89	C1
Labour						L
0102		Blacksmith 1st class				
		Day	0.24000	738.00	177.12	L1
0114		Beldar				
		Day	0.90000	558.00	502.20	L2
0100		Bandhani				
		Day	0.12000	617.00	74.04	L3
Tools&Plants(Hire charges)						T
9999		Sundries				
		L.S	12.48000	2.00	24.96	T1
Sub Data						S
13.50.3		Priming coat 40mm dia.Tube 5.4x22/7x0.0483 = 0.82 sqm Rate as per item no 13.50.3 of SH : Finishing : With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel galvanised iron /steel works				
		sqm	0.82000	37.89	31.07	S1
Total			19.490	kg	2121.50	
Unit Total			1.000	kg	108.85	
Add Water Charge			108.85	@1.00%	1.09	
Total					109.94	
				@15.00%	16.49	

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Add Contractors Profit & Overhead	109.94			
		Total			126.43	
		Add Cost Index	126.43	@35.59%	45.00	
		Total			171.43	
		GRAND TOTAL		kg	171.43	
Note						
8.009-Specification code: 10.25.1						
Item Shifted to Sub head 14 as item 14.73 Item Shifted to head 14 as item 14.74 Steel work welded in built up sections/framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required. In stringers, treads, landings etc. of stair cases, including use of chequered plate wherever required, all complete						
Detail of cost for 5.331 kg Details of cost for a flight of staircase of 2.8 m height with tread and riser of 200 mm & 0.60m wide.						
Material						M
1007		(i) Unequal angles as stringers 75x50x6mm 4x12.69x5.6 = 284.25 Kg. Add wastage @ 5% = 14.21 Kg. Total = 298.46kg. Say 2.985q (ii) unequal angles at sides -50x30x5mm 2x14x0.2x3.00=16.8kg. Add wastage @ 5% = 0.84kg. Total = 17.64 kg. Say 0.176q Total = 3.161q Structural steel such as tees, angles, channels and R.S. joists				
		quintal	3.16100	4600.00	14540.60	M1
1010		(iii) plate for tread 8mm thick 14x7.5 = 105.00kg+ Add wastage @ 5% = 5.25kg. Total = 110.25kg. Say 1.103q Mild steel plates				
		quintal	1.10300	4800.00	5294.40	M2
1549		(iv) G.I. pipe for rolling 40mm 2x12.69m = 25.38m+ Add wastage @ 5% = 1.27m Total = 26.65m G.I. pipes 40 mm dia				
		metre	26.65000	250.00	6662.50	M3
1003		(v) M.S. round bars 16mm dia. 15x0.75x2x1.58 = 35.55kg.+ Add wastage @ 5% = 1.78kg. Total = 37.33 Kg. Say 0.373q Mild Steel round bar above 12 mm dia				
		quintal	0.37300	4400.00	1641.20	M4
1215		Welding by electric plant 23.20 m = 2320cm				
		cm	2320.00000	2.00	4640.00	M5
Carriage						C

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
2205		Carriage of Steel (3.161+1.103+0.373) = 4.637 q = 0.4637 tonne				
		tonne	0.46370	92.24	42.77	C1
2271		Carriage of G.I. pipes below 100 mm dia approx. wt. 3.72x26.65=99.14kg = 0.0991q.				
		tonne	0.09910	92.24	9.14	C2
Labour					L	
0102		Blacksmith 1st class				
		Day	1.85000	738.00	1365.30	L1
0114		Beldar				
		Day	1.25000	558.00	697.50	L2
0100		Bandhani				
		Day	0.60000	617.00	370.20	L3
Tools&Plants(Hire charges)					T	
9999		Sundries				
		L.S	110.89000	2.00	221.78	T1
Sub Data					S	
13.50.3		Applying priming coat (i) steps 2.4x14 = 33.60sqm.+ (ii) angles-4x12.69x0.25 = 12.69sqm.+ (iii) Bars and other components = 2.00 sqm. (L.S.) Total = 48.29 sqm Rate as per item no 13.50.3 of SH Finishing : With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel galvanised iron /steel works				
		sqm	48.29000	37.89	1829.71	S1
Total			533.100	kg	37315.10	
Unit Total			1.000	kg	70.00	
Add Water Charge			70.00	@1.00%	0.70	
Total					70.70	
Add Contractors Profit & Overhead			70.70	@15.00%	10.61	
Total					81.31	
Add Cost Index			81.31	@35.59%	28.94	
Total					110.25	
GRAND TOTAL				kg	110.25	

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Note						
8.010-Specification code: OD214748/2023-2024						
Providing and fixing PVC fibre door including frame ,shutter and all cost of materials, labour charges and fixing charges etc						
Material						M
	MR	PVC fibre door				
		sqm	1.00000	1400.00	1400.00	M1
Labour						L
0156		Carpenter (average)				
		Day	0.15000	709.00	106.35	L1
0114		Beldar				
		Day	0.15000	558.00	83.70	L2
Tools&Plants(Hire charges)						T
9999		Sundries				
		L.S	7.80000	2.00	15.60	T1
		Total	1.000	sqm	1605.65	
		Unit Total	1.000	sqm	1605.65	
		Add Water Charge	1605.65	@1.00%	16.06	
		Total			1621.71	
		Add Contractors Profit & Overhead	1621.71	@15.00%	243.26	
		Total			1864.97	
		Add Cost Index	238.87	@35.59%	85.01	
		Total			1949.98	
		GRAND TOTAL		sqm	1949.98	
Note						
9:STEEL WORKS						
9.001-Specification code: 50.10.2						
Steel work for purlin/single section with G I pipes including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete						
Details of cost for 39.06 kg						

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Material					M	
1215		Welding charges:- Ends 3.14x4=12.56 Connections:- 4x4=16 = 28.56cm say 29cm Welding by electric plant For cutting, assembling & erection				
		cm	29.00000	2.00	58.00	M1
1549		G.I. pipes 40 mm dia				
		metre	10.50000	250.00	2625.00	M2
Carriage					C	
2205		Carriage of Steel 40 mm dia. tube 10.5m @ 3.72kg/m=390.6kg				
		tonne	0.39000	92.24	36.03	C1
Labour					L	
0100		Bandhani				
		Day	0.15000	617.00	92.55	L1
0114		Beldar				
		Day	1.10000	558.00	613.80	L2
0102		Blacksmith 1st class				
		Day	0.30000	738.00	221.40	L3
Tools&Plants(Hire charges)					T	
9999		Sundries				
		L.S	16.14000	2.00	32.28	T1
Sub Data					S	
13.50.3		Priming coat 40 mm dia. tube 10.50x0.125m= 2.62= 2.62sqm Finishing : With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel galvanised iron /steel works Rate as per item Number 13.50.3 of SH: Finishing				
		sqm	2.62000	37.89	99.27	S1
Total			39.060	kg	3778.33	
Unit Total			1.000	kg	96.73	
Add Water Charge			96.73	@1.00%	0.97	
Total					97.70	
Add Contractors Profit & Overhead			97.70	@15.00%	14.66	

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Total			112.36	
		Add Cost Index	112.36	@35.59%	39.99	
		Total			152.35	
		GRAND TOTAL		kg	152.35	
Note						
9.002-Specification code: OD214745/2023-2024						
Roofing with GI hard colour powder coated traffod sheets 0.35mm thick or nearest available thickness with overlaps of 150mm at ends and GI hook or crank CI bolt and nuts including plain washers and bitumen washers etc complete						
Material						M
1023		Galvanised steel J or L hooks 8 mm dia				
		10 nos	406.00000	120.00	4872.00	M1
1208		Bitumen washer				
		100 nos	406.00000	30.00	121.80	M2
1209		G.I. Plain washer thick				
		100 nos	406.00000	35.00	142.10	M3
	MR	GI hard colour powder coated traffod sheets 0.35mm thick (Add 10% for lap and wastage)				
		sqm	202.97000	300.00	60891.00	M4
Labour						L
0112		Carpenter 2nd class				
		Day	7.97000	679.00	5411.63	L1
0114		Beldar				
		Day	7.97000	558.00	4447.26	L2
0130		Mistry				
		Day	1.99000	738.00	1468.62	L3
Tools&Plants(Hire charges)						T
9999		Sundries				
		L.S	6.88000	2.00	13.76	T1

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
9999		Sundries				
		L.S	33.74000	2.00	67.48	T2
9999		Sundries				
		L.S	88.78000	2.00	177.56	T3
		Total	184.520	sqm	77613.21	
		Unit Total	1.000	sqm	420.62	
		Add Water Charge	420.62	@1.00%	4.21	
		Total			424.83	
		Add Contractors Profit & Overhead	424.83	@15.00%	63.72	
		Total			488.55	
		Add Cost Index	105.27	@35.59%	37.47	
		Total			526.02	
		GRAND TOTAL		sqm	526.02	
Note						
10:PAINTING WORKS						
10.001-Specification code: 13.43.1						
Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface: Water thinnable cement primer						
Details of cost for 10 sqm						
Material						M
0808		Water thinnable cement primer for interior wall surface, having VOC content less than 50 gms/litre				
		Litre	0.70000	50.00	35.00	M1
Carriage						C
9988		Carriage and sundries including carriage				
		L.S	8.06000	2.00	16.12	C1
Labour						L
0131		Painter				
		Day	0.40000	679.00	271.60	L1
0115		Coolie				
		Day	0.20000	558.00	111.60	L2

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Tools&Plants(Hire charges)					T	
9999		Sundries Brushes, putty etc.				
		L.S	7.15000	2.00	14.30	T1
		Total	10.000	sqm	448.62	
		Unit Total	1.000	sqm	44.86	
		Add Water Charge	44.86	@1.00%	0.45	
		Total			45.31	
		Add Contractors Profit & Overhead	45.31	@15.00%	6.80	
		Total			52.11	
		Add Cost Index	52.11	@35.59%	18.55	
		Total			70.66	
		GRAND TOTAL		sqm	70.66	
Note						
10.002-Specification code: 13.60.1						
Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade: Two or more coats on new work						
Details of cost for10 sqm						
Material						M
0835		Plastic emulsion paint				
		Litre	1.21000	200.00	242.00	M1
Carriage						C
9977		Carriage of material				
		L.S	1.43000	2.00	2.86	C1
Labour						L
0115		Coolie				
		Day	0.54000	558.00	301.32	L1
0131		Painter				
		Day	0.54000	679.00	366.66	L2
Tools&Plants(Hire charges)						T
9999		Sundries				

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		L.S	6.76000	2.00	13.52	T1
9999		Sundries Brushes, sand paper etc.				
		L.S	10.79000	2.00	21.58	T2
9999		Sundries Materials for filling in holes and cracks (putty etc.)				
		L.S	6.76000	2.00	13.52	T3
Total			10.000	sqm	961.46	
Unit Total			1.000	sqm	96.15	
Add Water Charge			96.15	@1.00%	0.96	
Total					97.11	
Add Contractors Profit & Overhead			97.11	@15.00%	14.57	
Total					111.68	
Add Cost Index			111.68	@35.59%	39.75	
Total					151.43	
GRAND TOTAL				sqm	151.43	
Note						
10.003-Specification code: 13.61.1						
Painting with synthetic enamel paint of approved brand and manufacture to give an even shade: Two or more coats on new work						
Details of cost for 10 sqm						
Material						M
0833		Synthetic enamel paint in black or chocolate shade				
		Litre	1.16000	170.00	197.20	M1
Carriage						C
9977		Carriage of material				
		L.S	1.43000	2.00	2.86	C1
Labour						L
0115		Coolie				
		Day	0.54000	558.00	301.32	L1
0131		Painter				

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Day	0.54000	679.00	366.66	L2
Tools&Plants(Hire charges)						T
9999		Sundries Brushes, sand paper etc.				
		L.S	6.76000	2.00	13.52	T1
9999		Sundries				
		L.S	8.06000	2.00	16.12	T2
9999		Sundries Materials for filling in holes and cracks (putty etc.)				
		L.S	5.33000	2.00	10.66	T3
Total			10.000	sqm	908.34	
Unit Total			1.000	sqm	90.83	
Add Water Charge			90.83	@1.00%	0.91	
Total					91.74	
Add Contractors Profit & Overhead			91.74	@15.00%	13.76	
Total					105.50	
Add Cost Index			105.50	@35.59%	37.55	
Total					143.05	
GRAND TOTAL				sqm	143.05	
Note						
10.004-Specification code: 14.61						
Painting (one or more coats) with black japan paint of approved brand and manufacturing to given an even shade.						
Details of cost for 10 sqm						
Material						M
0829		Black Japan				
		Litre	0.70000	90.00	63.00	M1
Carriage						C
9977		Carriage				
		L.S	0.52000	2.00	1.04	C1
Labour						L
0131		Painter				

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Day	0.36000	679.00	244.44	L1
0115		Coolie				
		Day	0.36000	558.00	200.88	L2
Tools&Plants(Hire charges)						T
9999		Sundries Putty etc				
		L.S	2.73000	2.00	5.46	T1
9999		Sundries Brushes, sand paper etc				
		L.S	5.33000	2.00	10.66	T2
9999		Sundries				
		L.S	8.06000	2.00	16.12	T3
Total			10.000	sqm	541.60	
Unit Total			1.000	sqm	54.16	
Add Water Charge			54.16	@1.00%	0.54	
Total					54.70	
Add Contractors Profit & Overhead			54.70	@15.00%	8.21	
Total					62.91	
Add Cost Index			62.91	@35.59%	22.39	
Total					85.30	
GRAND TOTAL				sqm	85.30	
Note						
11:TILES WORK						
11.001-Specification code: 11.41.2						
Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS : 15622, of approved make, in all colours and shades, laid on 20 mm thick cement mortar 1:4(1 cement : 4 coarse sand), including grouting the joints with white cement and matching pigments etc., complete. Size of Tile 600 x 600 mm.						
Details of cost for 1 sqm.						
Material						M
8621		Vitrified floor tiles 60x60 cm size = 1.000 sqm Add for wastage & breakage @ 2.5 % = 0.025 sqm Total = 1.025 sqm Vitrified floor tile 60x60 cm				
		sqm	1.03000	659.72	676.21	M1

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
0367		Cement for slurry over bed @ 3.3 kg per sqm Portland Cement				
		tonne	0.00000	4940.00	16.30	M2
Carriage					C	
9977		Carriage of tiles				
		L.S	6.24000	2.00	12.48	C1
9988		Carriage and sundries including carriage of cement etc				
		L.S	26.91000	2.00	53.82	C2
Labour					L	
0115		Coolie				
		Day	0.20000	558.00	111.60	L1
0123		Mason (brick layer) Ist class				
		Day	0.20000	738.00	147.60	L2
Tools&Plants(Hire charges)					T	
9999		Sundries Mortar for pointing in white cement				
		L.S	3.64000	2.00	7.28	T1
Sub Data					S	
3.9		20 mm thick Cement Mortars : Cement mortar 1.4 (1 cement : 4 coarse sand). Rate as per Item Number 3.9 of SH: Mortars				
		cum	0.02000	4010.33	96.25	S1
Total			1.000	sqm	1121.54	
Unit Total			1.000	sqm	1121.54	
Add Water Charge			1121.54	@1.00%	11.22	
Total					1132.76	
Add Contractors Profit & Overhead			1132.76	@15.00%	169.91	
Total					1302.67	
Add Cost Index			1302.67	@35.59%	463.62	
Total					1766.29	
GRAND TOTAL				sqm	1766.29	

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Note						
11.002-Specification code: 11.36						
Providing and fixing I st quality ceramic glazed wall tiles conforming to IS : 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer -in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3 kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.						
Details of cost for 1 sqm						
Material						M
0367		Cement for slurry over bed @ 3.3 kg per sqm Portland Cement				
		tonne	0.00000	4940.00	16.30	M1
7800		Ceramic Glazed tiles = 1.00 sqm Add for wastage & breakage @ 2.5 % =0.025 sqm Total = 1.025 sqm Ceramic Glazed Tiles Ist quality minimum thickness 5 mm in all colours shades and designs except burgundy, bottle green black				
		sqm	1.03000	212.00	217.30	M2
Carriage						C
9988		Carriage and sundries of cement etc.				
		L.S	26.91000	2.00	53.82	C1
9977		Carriage of tiles				
		L.S	6.24000	2.00	12.48	C2
Labour						L
0115		Coolie				
		Day	0.25000	558.00	139.50	L1
0123		Mason (brick layer) Ist class				
		Day	0.25000	738.00	184.50	L2
Tools&Plants(Hire charges)						T
9999		Sundries Mortar for pointing in white cement				
		L.S	40.43000	2.00	80.86	T1
Sub Data						S

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
3.8		12 mm thick cement mortar 1:3 (1 cement : 3 coarse sand) Mortars : Cement mortar 1:3 (1 cement : 3 coarse sand).				
		cum	0.01000	4664.52	65.30	S1
Total		1.000	sqm	770.06		
Unit Total		1.000	sqm	770.06		
Add Water Charge		770.06	@1.00%	7.70		
Total				777.76		
Add Contractors Profit & Overhead		777.76	@15.00%	116.66		
Total				894.42		
Add Cost Index		894.42	@35.59%	318.32		
Total				1212.74		
GRAND TOTAL			sqm	1212.74		
Note						
11.003-Specification code: OD214744/2023-2024						
Providing and laying ceramic anti skid floor tiles of size 300x300 mm (thickness to be specified by the manufacturer), of 1st quality conforming to IS 15622, of approved make, in colours such as white, ivory,Grey, Fume Red brown, laid on 20mm thick cement mortar 1:4 (1 cement:4 coarse sand), including pointing the joints with white cement and matching pigment etc. complete						
Material					M	
	MR	Ceramic anti skid floor tiles of 1st quality size 300x300 mm in all shades and designs of white, Ivory , grey fume Red brown etc.				
		per sqm	1.02500	280.00	287.00	M1
0367		Portland Cement				
		tonne	0.00330	4940.00	16.30	M2
Carriage					C	
9977		Carriage				
		L.S	6.24000	2.00	12.48	C1
9988		Carriage and sundries				
		L.S	26.91000	2.00	53.82	C2
Labour					L	
0123		Mason (brick layer) Ist class				
		Day	0.20000	738.00	147.60	L1

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
0115		Coolie				
		Day	0.20000	558.00	111.60	L2
Tools&Plants(Hire charges)					T	
9999		Sundries				
		L.S	20.20000	2.00	40.40	T1
Sub Data					S	
3.9		Cement mortar 1.4 (1 cement : 4 coarse sand).				
		cum	0.02400	4010.33	96.25	S1
Total			1.000	sqm	765.45	
Unit Total			1.000	sqm	765.45	
Add Water Charge			765.45	@1.00%	7.65	
Total					773.10	
Add Contractors Profit & Overhead			773.10	@15.00%	115.97	
Total					889.07	
Add Cost Index			555.71	@35.59%	197.78	
Total					1086.85	
GRAND TOTAL				sqm	1086.85	
Note						
12:PLUMBING WORKS						
12.001-Specification code: 17.7.2						
Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require: White Vitreous China Wash basin size 630 x 450 mm with a single 15 mm C.P. brass pillar tap						
Details of cost for one no.						
Material						M
1885		15 mm C.P.brass tap				
		each	1.00000	207.00	207.00	M1
1947		Vitreous China flat back wash basin 630x450 mm				
		each	1.00000	725.00	725.00	M2
1309		C.I. bracket for wash basin and sinks				
		pair	1.00000	88.00	88.00	M3
1951		C.P. brass waste 32 mm				

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		each	1.00000	80.00	80.00	M4
Carriage						C
9977		Carriage of materials				
		L.S	13.52000	2.00	27.04	C1
Labour						L
0123		Mason (brick layer) Ist class				
		Day	0.33000	738.00	243.54	L1
0114		Beldar				
		Day	0.63000	558.00	351.54	L2
0116		Fitter(grade1)				
		Day	0.30000	738.00	221.40	L3
Tools&Plants(Hire charges)						T
9999		Sundries Painting of brackets, fittings etc.				
		L.S	26.91000	2.00	53.82	T1
9999		Sundries Red lead, white lead and gasket				
		L.S	16.12000	2.00	32.24	T2
9999		Sundries Cement, sand and grit etc.				
		L.S	13.39000	2.00	26.78	T3
Total			1.000	each	2056.36	
Unit Total			1.000	each	2056.36	
Add Water Charge			2056.36	@1.00%	20.56	
Total					2076.92	
Add Contractors Profit & Overhead			2076.92	@15.00%	311.54	
Total					2388.46	
Add Cost Index			2388.46	@35.59%	850.05	
Total					3238.51	
GRAND TOTAL				each	3238.51	
Note						

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
12.002-Specification code: 17.2.2						
Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required: W.C. pan with ISI marked black solid plastic seat and lid						
Details of cost for 1 pan						
Material						M
1955		Vitreous china pedestal type wate closet				
		each	1.00000	1000.00	1000.00	M1
7358		Flushing Cistern P.V.C. 10 lts capacity (low level) (white) (with fittings, accessories and flush pipe)				
		each	1.00000	575.00	575.00	M2
1876		Black plastic seat (soild) with lid C.P.brass hinges and rubber buffers				
		each	1.00000	310.00	310.00	M3
Carriage						C
9977		Carriage of materials				
		L.S	26.91000	2.00	53.82	C1
Labour						L
0123		Mason (brick layer) Ist class				
		Day	0.50000	738.00	369.00	L1
0116		Fitter(grade1)				
		Day	1.25000	738.00	922.50	L2
0114		Beldar				
		Day	1.00000	558.00	558.00	L3
Tools&Plants(Hire charges)						T
9999		Sundries Cement , sand and grit etc.				
		L.S	26.91000	2.00	53.82	T1
Total			1.000	each	3842.14	
Unit Total			1.000	each	3842.14	
Add Water Charge			3842.14	@1.00%	38.42	

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Total			3880.56	
Add Contractors Profit & Overhead			3880.56	@15.00%	582.08	
		Total			4462.64	
Add Cost Index			4462.64	@35.59%	1588.25	
		Total			6050.89	
GRAND TOTAL				each	6050.89	
Note						
12.003-Specification code: 50.18.7.2.2						
Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step PVC solvent cement and testing of joints complete as per direction of Engineer -in-Charge 20 mm dia 10 Kgf/cm2- Internal work - Exposed on wall						
Details of cost for 10 metre						
Material						M
	MR41	PVC pipe 20 mm outer dia 10 kfg/cm2 (Adding 15% for fittings wastage)				
		metre	11.50000	30.00	345.00	M1
Labour						L
0117		Assistant Fitter or 2nd class fitter				
		Day	0.98000	679.00	665.42	L1
0114		Beldar				
		Day	0.66000	558.00	368.28	L2
0116		Fitter(grade1)				
		Day	0.33000	738.00	243.54	L3
Tools&Plants(Hire charges)						T
9999		Sundries				
		L.S	2.73000	2.00	5.46	T1
		Total	10.000	metre	1627.70	
		Unit Total	1.000	metre	162.77	
Add Water Charge			162.77	@1.00%	1.63	
		Total			164.40	

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Add Contractors Profit & Overhead			164.40	@15.00%	24.66	
Total					189.06	
Add Cost Index			148.98	@35.59%	53.02	
Total					242.08	
GRAND TOTAL				metre	242.08	
Note						
12.004-Specification code: 18.7.1						
Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer -in-Charge. Internal work - Exposed on wall 15 mm nominal outer dia pipes						
Details of cost for 10 meter						
Material						M
8636		Chlorinated Polyvinyl - Chloride (CPVC) pipe 15 mm outer dia				
		metre	10.00000	48.55	485.50	M1
Labour						L
0116		Fitter(grade1)				
		Day	0.33000	738.00	243.54	L1
0117		Assistant Fitter or 2nd class fitter				
		Day	0.82000	679.00	556.78	L2
0114		Beldar				
		Day	0.66000	558.00	368.28	L3
Tools&Plants(Hire charges)						T
9999		Sundries Cement, Sand grit etc.				
		L.S	2.73000	2.00	5.46	T1
Additional Charges						A
tcode		Other Charge @ 30% of :(M1)				
		L.S	0.30000	485.50	145.65	A1
Total			10.000	metre	1805.21	
Unit Total			1.000	metre	180.52	

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Add Water Charge	180.52	@1.00%	1.81	
		Total			182.33	
		Add Contractors Profit & Overhead	182.33	@15.00%	27.35	
		Total			209.68	
		Add Cost Index	209.68	@35.59%	74.63	
		Total			284.31	
		GRAND TOTAL		metre	284.31	
Note						
12.005-Specification code: 18.7.2						
Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer -in-Charge. Internal work - Exposed on wall 20 mm nominal outer dia pipes						
Details of cost for 10 meter						
Material						M
8637		Chlorinated Polyvinyl - Chloride (CPVC) pipe 20 mm outer dia				
		metre	10.00000	77.80	778.00	M1
Labour						L
0114		Beldar				
		Day	0.66000	558.00	368.28	L1
0117		Assistant Fitter or 2nd class fitter				
		Day	0.98000	679.00	665.42	L2
0116		Fitter(grade1)				
		Day	0.33000	738.00	243.54	L3
Tools&Plants(Hire charges)						T
9999		Sundries Cement, sand and grit etc.				
		L.S	2.73000	2.00	5.46	T1
Additional Charges						A
tcode		Other Charge @ 30% of :(M1)				
		L.S	0.30000	778.00	233.40	A1

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Total	10.000	metre	2294.10	
		Unit Total	1.000	metre	229.41	
		Add Water Charge	229.41	@1.00%	2.29	
		Total			231.70	
		Add Contractors Profit & Overhead	231.70	@15.00%	34.76	
		Total			266.46	
		Add Cost Index	266.46	@35.59%	94.83	
		Total			361.29	
		GRAND TOTAL		metre	361.29	
Note						
12.006-Specification code: 50.18.7.6.1						
Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step PVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge 50 mm dia 10 Kfg/cm - Internal work- Exposed on wall						
Details of cost for 10 metre						
Material						M
	MR48	PVC pipe 50 mm outer dia. 10 kgf/cm2 (15% added for fittings and wastage etc)				
		metre	11.50000	90.00	1035.00	M1
Labour						L
0116		Fitter(grade1)				
		Day	0.33000	738.00	243.54	L1
0114		Beldar				
		Day	1.31000	558.00	730.98	L2
0117		Assistant Fitter or 2nd class fitter				
		Day	1.31000	679.00	889.49	L3
Tools&Plants(Hire charges)						T
9999		Sundries Adhesive and sundries etc				
		L.S	5.33000	2.00	10.66	T1
		Total	10.000	metre	2909.67	

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Unit Total			1.000	metre	290.97	
Add Water Charge			290.97	@1.00%	2.91	
Total					293.88	
Add Contractors Profit & Overhead			293.88	@15.00%	44.08	
Total					337.96	
Add Cost Index			217.74	@35.59%	77.49	
Total					415.45	
GRAND TOTAL				metre	415.45	
Note						
12.007-Specification code: 50.18.8.7.1						
Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes with one step PVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge. Concealed work including cutting chases and making good the wall etc. 63 mm pipe 6 Kgf/cm2						
Details of cost for 10 metres						
Material						M
	MR50	PVC pipe 63 mm outer dia . 6kgf/cm2 (Adding 5% for wastage, etc)				
		metre	10.50000	118.00	1239.00	M1
Labour						L
0116		Fitter(grade1)				
		Day	0.33000	738.00	243.54	L1
0117		Assistant Fitter or 2nd class fitter				
		Day	0.66000	679.00	448.14	L2
0114		Beldar				
		Day	0.66000	558.00	368.28	L3
Sub Data						S
50.18.78		Rate as per item Number 50.18.78 of SH: Approved Observed data Approved Observed data : Making chases up to 12.5x12.5 cm in walls including making good and finishing with matching surface after housing pipe etc. Making chases upto 12.5x12.5 cm in walls and making good the same				
		metre	10.00000	189.62	1896.20	S1

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Total			10.000	metre	4195.16	
Unit Total			1.000	metre	419.52	
Add Water Charge			419.52	@1.00%	4.20	
Total					423.72	
Add Contractors Profit & Overhead			423.72	@15.00%	63.56	
Total					487.28	
Add Cost Index			343.37	@35.59%	122.21	
Total					609.49	
GRAND TOTAL				metre	609.49	
Note						
12.008-Specification code: 18.17.4						
Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) : 50 mm nominal bore						
Details of cost for one no						
Material						M
1930		Brass full way valve with C.I. wheel (screwed end) 50 mm dia				M1
		each	1.00000	620.00	620.00	
Carriage						C
9988		Carriage and sundries of materials and fixing charge				C1
		L.S	14.82000	2.00	29.64	
Total			1.000	each	649.64	
Unit Total			1.000	each	649.64	
Add Water Charge			649.64	@1.00%	6.50	
Total					656.14	
Add Contractors Profit & Overhead			656.14	@15.00%	98.42	
Total					754.56	
Add Cost Index			754.56	@35.59%	268.55	
Total					1023.11	
GRAND TOTAL				each	1023.11	
Note						
12.009-Specification code: 18.49.1						
Providing and fixing C.P brass bib cock of approved quality conforming to IS: 8931. 15 mm nominal bore						

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Details of cost for one no.						
Material						M
7257		C.P.Brass bibcock 15 mm				
		each	1.00000	290.00	290.00	M1
Carriage						C
9988		Carriage and sundries of material and fixing charges				
		L.S	11.57000	2.00	23.14	C1
Total			1.000	each	313.14	
Unit Total			1.000	each	313.14	
Add Water Charge			313.14	@1.00%	3.13	
Total					316.27	
Add Contractors Profit & Overhead			316.27	@15.00%	47.44	
Total					363.71	
Add Cost Index			363.71	@35.59%	129.44	
Total					493.15	
GRAND TOTAL				each	493.15	
Note						
12.010-Specification code: 50.18.9.19.2						
Providing and fixing PVC pipes including fixing the pipe with clamps/clips at 1.00 m spacing. This includes jointing of pipes with one step PVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge 110 m dia 4 Kgf/cm2 - External work - Exposed on wall						
Details of cost for 10.00 metre						
Material						M
	MR55	PVC pipe 110 mm outer dia. 4kgf/cm2 (5% added for wastage etc)				
		metre	10.50000	170.00	1785.00	M1
Labour						L
0114		Beldar				
		Day	0.62000	558.00	345.96	L1
0116		Fitter(grade1)				
		Day	0.32000	738.00	236.16	L2

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
0100		Bandhani				
		Day	0.13000	617.00	80.21	L3
Tools&Plants(Hire charges)					T	
9999		Sundries Scaffolding etc.				
		L.S	30.98000	2.00	61.96	T1
9999		Sundries Adhesive, and sundries etc.				
		L.S	10.27000	2.00	20.54	T2
9999		Sundries Carriage of materials				
		L.S	22.53000	2.00	45.06	T3
Total		10.000	metre	2574.89		
Unit Total		1.000	metre	257.49		
Add Water Charge		257.49	@1.00%	2.57		
Total				260.06		
Add Contractors Profit & Overhead		260.06	@15.00%	39.01		
Total				299.07		
Add Cost Index		91.75	@35.59%	32.65		
Total				331.72		
GRAND TOTAL			metre	331.72		
Note						
12.011-Specification code: 50.17.1.4						
Supplying and fixing CP Health faucet good quality including cost of materials and labour charges etc. complete as per the direction of site engineer-in-charge.						
Details of cost for 10.00 Nos.						
Material					M	
	MR36	Health Faucet average quality				
		each	10.00000	650.00	6500.00	M1
Tools&Plants(Hire charges)					T	
9999		Sundries Carriage of material and fixing charges				
		L.S	10.00000	2.00	20.00	T1

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Total			10.000	no	6520.00	
Unit Total			1.000	no	652.00	
Add Water Charge			652.00	@1.00%	6.52	
Total					658.52	
Add Contractors Profit & Overhead			658.52	@15.00%	98.78	
Total					757.30	
Add Cost Index			2.32	@35.59%	0.83	
Total					758.13	
GRAND TOTAL				no	758.13	
Note						
12.012-Specification code: 50.18.9.20.3						
Providing and fixing PVC moulded fittings /accessories for Rigid PVC pipes, including jointing with PVC solvent cement - 63 mm dia Door Elbow						
Details of cost for one no.						
Material						M
	MR59	PVC door Elbow 63 mm dia				
		each	1.00000	36.50	36.50	M1
Tools&Plants(Hire charges)						T
9999		Sundries Carriage and fixing charges				
		L.S	9.36000	2.00	18.72	T1
9999		Sundries Adhesive, and sundries etc.				
		L.S	2.73000	2.00	5.46	T2
Total			1.000	no	60.68	
Unit Total			1.000	no	60.68	
Add Water Charge			60.68	@1.00%	0.61	
Total					61.29	
Add Contractors Profit & Overhead			61.29	@15.00%	9.19	
Total					70.48	
Add Cost Index			28.08	@35.59%	9.99	
Total					80.47	
GRAND TOTAL				no	80.47	

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Note						
12.013-Specification code: 50.18.9.22.3						
Providing and fixing PVC moulded fittings/ accessories for Rigid PVC pipes, including jointing with PVC solvent cement-110 mm dia Door Elbow						
Details of cost for 1 no.						
Material						M
	MR79	PVC door Elbow 110 mm dia				
		each	1.00000	77.00	77.00	M1
Tools&Plants(Hire charges)						T
9999		Sundries Adhesive, and sundries etc.				
		L.S	2.73000	2.00	5.46	T1
9999		Sundries Carriage and fixing charges				
		L.S	10.79000	2.00	21.58	T2
		Total	1.000	no	104.04	
		Unit Total	1.000	no	104.04	
		Add Water Charge	104.04	@1.00%	1.04	
		Total			105.08	
		Add Contractors Profit & Overhead	105.08	@15.00%	15.76	
		Total			120.84	
		Add Cost Index	31.41	@35.59%	11.18	
		Total			132.02	
		GRAND TOTAL		no	132.02	
Note						
12.014-Specification code: 50.18.9.22.4						
Providing and fixing PVC moulded fittings/ accessories for Rigid PVC pipes, including jointing with PVC solvent cement- 110 mm dia Bend						
Details of cost for one no.						
Material						M
	MR80	PVC bend 110 mm dia				
		each	1.00000	102.00	102.00	M1
Tools&Plants(Hire charges)						T

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
9999		Sundries Adhesive, and sundries etc.				
		L.S	2.73000	2.00	5.46	T1
9999		Sundries Carriage and fixing charges				
		L.S	10.79000	2.00	21.58	T2
		Total	1.000	no	129.04	
		Unit Total	1.000	no	129.04	
		Add Water Charge	129.04	@1.00%	1.29	
		Total			130.33	
		Add Contractors Profit & Overhead	130.33	@15.00%	19.55	
		Total			149.88	
		Add Cost Index	31.41	@35.59%	11.18	
		Total			161.06	
		GRAND TOTAL		no	161.06	
Note						
12.015-Specification code: 50.18.9.22.5						
Providing and fixing PVC moulded fittings/ accessories for Rigid PVC pipes including jointing with PVC solvent cement 110x110x110 mm dia Tee						
Details of cost for 1 no.						
Material						M
	MR81	PVC Tee 110x110x110mm dia				
		each	1.00000	112.00	112.00	M1
Tools&Plants(Hire charges)						T
9999		Sundries Adhesive, and sundries etc.				
		L.S	3.41000	2.00	6.82	T1
9999		Sundries Carriage and fixing charges				
		L.S	10.79000	2.00	21.58	T2
		Total	1.000	no	140.40	
		Unit Total	1.000	no	140.40	
		Add Water Charge	140.40	@1.00%	1.40	
					141.80	

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Total						
Add Contractors Profit & Overhead			141.80	@15.00%	21.27	
Total					163.07	
Add Cost Index			32.98	@35.59%	11.74	
Total					174.81	
GRAND TOTAL				no	174.81	
Note						
12.016-Specification code: 18.48						
Providing and placing on terrace (at all floor levels) polyethylene water storage tank :ISI 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.						
Details of cost for 500 litres tank one no.						
Material						M
1649		Polyethylene water storage tank with cover and suitable locking arrangemnet				
		per litre	500.00000	5.50	2750.00	M1
Carriage						C
9977		Carriage to site				
		L.S	179.40000	2.00	358.80	C1
Tools&Plants(Hire charges)						T
9999		Sundries Placing at terrace				
		L.S	89.70000	2.00	179.40	T1
Total			500.000	Litre	3288.20	
Unit Total			1.000	Litre	6.58	
Add Water Charge			6.58	@1.00%	0.07	
Total					6.65	
Add Contractors Profit & Overhead			6.65	@15.00%	1.00	
Total					7.65	
Add Cost Index			7.65	@35.59%	2.72	
Total					10.37	
GRAND TOTAL				Litre	10.37	
Note						

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
12.017-Specification code: 51.19.ST4						
Supplying and installing ready made PVC Septic tank including the cost of carriage, trenching, placing at the level below ground level as specified as per the direction of engineer in charge (Provision for CC/RCC/Sand/06mm aggregate for the preparation of bed shall be paid separately) 4. 35 to 50 flush capacity						
Details of cost for 1 no						
Material						M
	MR96	PVC Septic Tank - 35 to 50 flush capacity				
		each	1.00000	34000.00	34000.00	M1
Tools&Plants(Hire charges)						T
9999		Sundries Placing at specified level including back filling as necessary				
		L.S	22.43000	2.00	44.85	T1
9999		Sundries Carriage to site				
		L.S	179.40000	2.00	358.80	T2
Sub Data						S
2.8.1		Earth Work : All kinds of soil (L=2.60, B=1.20, D=1.10)				
		cum	3.43000	188.57	647.17	S1
Total			1.000	each	35050.82	
Unit Total			1.000	each	35050.82	
Add Water Charge			35050.82	@1.00%	350.51	
Total					35401.33	
Add Contractors Profit & Overhead			35401.33	@15.00%	5310.20	
Total					40711.53	
Add Cost Index			1220.53	@35.59%	434.39	
Total					41145.92	
GRAND TOTAL				each	41145.92	
Note						
12.018-Specification code: 17.1.1						
Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100 mm Sand Cast Iron P or S trap, 10 litter low level white P.V.C.flushing cistern, including flush pipe, manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever require: White Vitreous china Orissa pattern W.C. pan of size 580x440 mm with integral type foot rests						

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Details of cost for 1 pan						
Material						M
1896		100 mm S.C.I. trap with vent heel				
		each	1.00000	320.00	320.00	M1
1954		Vitreous China orrisa type w.c. pan size 580 mm				
		each	1.00000	1200.00	1200.00	M2
7358		Flushing Cistern P.V.C. 10 lts capacity (low level) (white) (with fittings, accessories and flush pipe)				
		each	1.00000	575.00	575.00	M3
Carriage						C
9977		Carriage of materials				
		L.S	26.91000	2.00	53.82	C1
Labour						L
0116		Fitter(grade1)				
		Day	1.25000	738.00	922.50	L1
0114		Beldar				
		Day	1.00000	558.00	558.00	L2
0123		Mason (brick layer) Ist class				
		Day	0.50000	738.00	369.00	L3
Tools&Plants(Hire charges)						T
9999		Sundries Cement, sand and grit etc.				
		L.S	26.91000	2.00	53.82	T1
Total			1.000	each	4052.14	
Unit Total			1.000	each	4052.14	
Add Water Charge			4052.14	@1.00%	40.52	
Total					4092.66	
Add Contractors Profit & Overhead			4092.66	@15.00%	613.90	
Total					4706.56	
Add Cost Index			4706.56	@35.59%	1675.06	

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Total					6381.62	
GRAND TOTAL				each	6381.62	
Note						
13:WATER PROOFING WORKS						
13.001-Specification code: 22.6						
Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of applying : a) after surface preparation, first layer of slurry of cement @ 0.488 kg/ sqm mixed with water proofing cement compound @ 0.253 kg/ sqm. laying second layer of fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/ sqm mixed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30 cm on parapet wall and tucked into groove in parapet all around. d) fourth and final layer of brick tilling with cement mortar (which will be paid for separately. For the purpose of measurement the entire treated surface will be measured)						
Details of cost for 10 sqm						
Material						M
8501		Bonding material 1.6 kgx30x2 = 96 kg Bitumen (blown/ residual type) =10x(0.253+0.67)= 9.23 kg Wastage 5% = 0.46 kg Total = 9.69 kg Polymer modified cementation coating				
		kilogram	9.69000	140.00	1356.60	M1
8502		Fibre glass cloth Fibre Glass cloth = 10.00 sqm Wastage @ 10 % = 1.00 sqm Total = 11.00 sqm				
		sqm	11.00000	25.00	275.00	M2
0367		Cement= 10x (1.289 + 0.488)= 17.77 kg Sealing fillets @ 10% = 1.77 kg Total = 19.54 kg = 0.020 tonne Portland Cement (OPC-43 grade)				
		tonne	0.02000	4940.00	98.80	M3
Carriage						C
2209		Carriage of Cement				
		tonne	0.02000	92.24	1.84	C1
Labour						L
0114		Beldar				
		Day	1.00000	558.00	558.00	L1

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
0155		Mason (average)				
		Day	2.00000	709.00	1418.00	L2
0101		Bhisti				
		Day	0.25000	617.00	154.25	L3
Tools&Plants(Hire charges)					T	
9999		Sundries brushes etc.				
		L.S	23.40000	2.00	46.80	T1
Total		10.000	sqm	3909.29		
Unit Total		1.000	sqm	390.93		
Add Water Charge		390.93	@1.00%	3.91		
Total				394.84		
Add Contractors Profit & Overhead		394.84	@15.00%	59.23		
Total				454.07		
Add Cost Index		454.07	@35.59%	161.60		
Total				615.67		
GRAND TOTAL			sqm	615.67		
Note						
13.002-Specification code: 4.17						
Making plinth protection 50 mm thick of cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) over 75 mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including finishing the top smooth.						
Details of cost for 10 sqm. MATERIAL:						
Material					M	
0287		Brick Aggregate (single size):40 mm nominal size				
		cum	0.75000	650.00	487.50	M1
0983		Fine sand (zone IV)				
		cum	0.06000	900.00	54.00	M2
0295		Stone Aggregate(single size):20 mm nominal size				
		cum	0.35000	1350.00	472.50	M3
0297		Stone Aggregate(single size): 10 mm nominal size				

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		cum	0.12000	1350.00	162.00	M4
0982		Coarse sand (zone III)				
		cum	0.23000	1350.00	310.50	M5
0367		Portland Cement				
		tonne	0.11000	4940.00	543.40	M6
Carriage						C
2260		Carriage of Brick aggregate				
		cum	0.75000	112.79	84.59	C1
2261		Carriage of Fine sand (1 part badarpur sand : 2 parts jamuna sand				
		cum	0.06000	103.77	6.23	C2
2202		Carriage of Stone aggregate below 40 mm nominal size				
		cum	0.47000	103.77	48.77	C3
2203		Carriage of Coarse sand				
		cum	0.23000	103.77	23.87	C4
2209		Carriage of Cement				
		tonne	0.11000	92.24	10.15	C5
Labour						L
0114		Beldar				
		Day	0.16000	558.00	89.28	L1
0115		Coolie				
		Day	0.11000	558.00	61.38	L2
0114		Beldar				
		Day	1.00000	558.00	558.00	L3
0123		Mason (brick layer) Ist class				
		Day	0.05000	738.00	36.90	L4
0101		Bhisti				
		Day	0.33000	617.00	203.61	L5
0155		Mason (average)				

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Day	0.27000	709.00	191.43	L6
0114		Beldar				
		Day	1.08000	558.00	602.64	L7
0115		Coolie				
		Day	1.08000	558.00	602.64	L8
Tools&Plants(Hire charges)						T
9999		Sundries				
		L.S	13.39000	2.00	26.78	T1
9999		Sundries				
		L.S	6.76000	2.00	13.52	T2
Total			10.000	sqm	4589.69	
Unit Total			1.000	sqm	458.97	
Add Water Charge			458.97	@1.00%	4.59	
Total					463.56	
Add Contractors Profit & Overhead			463.56	@15.00%	69.53	
Total					533.09	
Add Cost Index			533.09	@35.59%	189.73	
Total					722.82	
GRAND TOTAL				sqm	722.82	
Note						
13.003-Specification code: 16.68						
Providing and laying 60 mm thick factory made cement concrete interlocking paver block of M - 30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50 mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge.						
Details of cost of 10 sqm						
Material						M
8689		Interlocking C.C. paver block (60 mm thick, M-30)				
		Bedding Layer 50 mm thick				
		sqm	10.00000	400.00	4000.00	M1
0982		Coarse sand (zone III)				
		= 10x0.050 = 0.50 cum				
		cum	0.50000	1350.00	675.00	M2

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
0983		Fine sand (zone IV)				
		cum	0.15000	900.00	135.00	M3
Carriage					C	
2203		Carriage of Coarse sand				
		cum	0.50000	103.77	51.89	C1
2261		Carriage of Fine sand (1 part badarpur sand : 2 parts jamuna sand				
		cum	0.15000	103.77	15.57	C2
Labour					L	
0123		Laying charges (Based on actual observation) Mason (brick layer) Ist class				
		Day	0.50000	738.00	369.00	L1
0124		Mason (brick layer)2nd class				
		Day	0.50000	679.00	339.50	L2
0114		Beldar				
		Day	1.00000	558.00	558.00	L3
0115		Coolie				
		Day	0.50000	558.00	279.00	L4
Total			10.000	sqm	6422.96	
Unit Total			1.000	sqm	642.30	
Add Water Charge			642.30	@1.00%	6.42	
Total					648.72	
Add Contractors Profit & Overhead			648.72	@15.00%	97.31	
Total					746.03	
Add Cost Index			746.03	@35.59%	265.51	
Total					1011.54	
GRAND TOTAL				sqm	1011.54	
Note						
13.004-Specification code: 13.71						
Lettering with black Japan pint of approved brand and manufacture						
Details of cost for 100 letters of 15 cm height						

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Material					M	
0829		Black Japan				
		Litre	0.56000	90.00	50.40	M1
Carriage					C	
9977		Carriage				
		L.S	0.91000	2.00	1.82	C1
Labour					L	
0131		Painter				
		Day	6.00000	679.00	4074.00	L1
0115		Coolie				
		Day	2.00000	558.00	1116.00	L2
Tools&Plants(Hire charges)					T	
9999		Sundries Painting brushes, turpentine, stencil etc.				
		L.S	13.39000	2.00	26.78	T1
9999		Sundries				
		L.S	8.06000	2.00	16.12	T2
		Total	1496.250	per Letter per cm height	5285.12	
		Unit Total	1.000	per Letter per cm height	3.53	
		Add Water Charge	3.53	@1.00%	0.04	
		Total			3.57	
		Add Contractors Profit & Overhead	3.57	@15.00%	0.54	
		Total			4.11	
		Add Cost Index	4.11	@35.59%	1.46	
		Total			5.57	
		GRAND TOTAL		per Letter per cm height	5.57	
Note						
14:NAME BOARD						
14.001-Specification code: 13.71						

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Lettering with black Japan pint of approved brand and manufacture						
Details of cost for 100 letters of 15 cm height						
Material						M
0829		Black Japan				
		Litre	0.56000	90.00	50.40	M1
Carriage						C
9977		Carriage				
		L.S	0.91000	2.00	1.82	C1
Labour						L
0131		Painter				
		Day	6.00000	679.00	4074.00	L1
0115		Coolie				
		Day	2.00000	558.00	1116.00	L2
Tools&Plants(Hire charges)						T
9999		Sundries				
		L.S	8.06000	2.00	16.12	T1
9999		Sundries Painting brushes, turpentine, stencil etc.				
		L.S	13.39000	2.00	26.78	T2
Total			1496.250	per Letter per cm height	5285.12	
Unit Total			1.000	per Letter per cm height	3.53	
Add Water Charge			3.53	@1.00%	0.04	
Total					3.57	
Add Contractors Profit & Overhead			3.57	@15.00%	0.54	
Total					4.11	
Add Cost Index			4.11	@35.59%	1.46	
Total					5.57	
GRAND TOTAL				per Letter per cm height	5.57	
Note						

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Approved By

(PEN:),



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GENERAL ABSTRACT

KIIFB-KILA 1 CRORE PROJECT-INFRASTRUCTURE DEVELOPEMENT AT GMLPS
THIRUVATHRA(SCHOOL CODE-24215)-THRISSUR-Construction of new building(G+1)-
Composite Electrical Work

Sl No	Head Description	Amount
1	WIRING	133084.51
2	DB AND ACCESSORIES	39277.71
3	CABLES AND CABLING	32670.56
4	ELECTRICAL FITTINGS	85499.66
5	EARTHING	34055.11
6	WATER PUMP	44695.68
	Total Estimation PAC	369283.23
C	Extra Charges	
C.001	Provision for GST	
	369283.23 18.00%	66470.98
	Grand Total	0.00
	Round off	0.00
	Rounded Total(Rs)	435754.21
	Rupees Four Lakh Thirty Five Thousand Seven Hundred and Fifty Four	

Approved By

(PEN:),

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DETAILED ESTIMATE

KIIFB-KILA 1 CRORE PROJECT-INFRASTRUCTURE DEVELOPEMENT AT GMLPS
THIRUVATHRA(SCHOOL CODE-24215)-THRISSUR-Construction of new building(G+1)-
Composite Electrical Work

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
1	WIRING						
1.001	1.10.3						
	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required.Group C						
	POINT						
	TUBE LIGHT POINT	23.000 00					23.000
	FAN POINT	16.000 00					16.000
	BULB POINT	2.0000 0					2.000
	EXHAUST POINT	4.0000 0					4.000
	OUTSIDE POINT	2.0000 0					2.000
	Total						47.000
	Total Quantity in point						47.000
1.002	1.11						
	Wiring for twin control light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required.						
	STAIR						
		1.0000 0					1.000
	Total						1.000
	Total Quantity in point						1.000
1.003	1.14.1						
	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface / recessed medium class PVC conduit as required 2x1.5 sq.mm + 1x1.5 sq.mm earth wire						

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	CIRCUIT WIRING						
	LIGHT CIRCUIT	1.0000 0	4*21+27 +12+3.00 0				126.000
	LIGHT CIRCUIT	1.0000 0	4*10				40.000
	Total						166.000
	Total Quantity in metre						166.000
1.004	1.14.2						
	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface / recessed medium class PVC conduit as required 2X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire						
	CIRCUIT WIRING						
		1.0000 0	14*4+18 +12+6+6 +9				107.000
	Total						107.000
	Total Quantity in metre						107.000
1.005	1.21.1						
	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/ recess including cutting the wall and making good the same in case of recessed conduit as required. 20 mm						
	SPEAKER CONDUIT						
		1.0000 0	24+12+4 *2.5000				46.000
	Total						46.000
	Total Quantity in metre						46.000
1.006	1.21.2						
	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/ recess including cutting the wall and making good the same in case of recessed conduit as required. 25 mm						
	25 MM						
		1.0000 0	5.000				5.000
	Total						5.000
	Total Quantity in metre						5.000
1.007	1.21.3						
	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/ recess including cutting the wall and making good the same in case of recessed conduit as required. 32 mm						
	HDMI						

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
		1.0000 0	4*9.000				36.000
	Total						36.000
	Total Quantity in metre						36.000
1.008	1.24.1						
	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.5/6 amps switch						
	PROJECTOR						
		4.0000 0					4.000
	Total						4.000
	Total Quantity in each						4.000
1.009	1.24.3						
	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.15/16 amp switch						
	POWER SWITCH						
		1.0000 0					1.000
	Total						1.000
	Total Quantity in each						1.000
1.010	1.24.4						
	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.3 pin 5/6 amp socket outlet						
	PROJECTOR						
		4.0000 0					4.000
	Total						4.000
	Total Quantity in each						4.000
1.011	1.24.5						
	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.6 pin 15/16 amp socket outlet						
	POWER SOCKET						
		1.0000 0					1.000
	Total						1.000
	Total Quantity in each						1.000
1.012	1.24.8						

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.Bell push						
	BELL PUSH						
		1.0000 0					1.000
	Total						1.000
	Total Quantity in each						1.000
1.013	1.25						
	Supplying and fixing two module stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.						
	FAN REGULATOR						
		16.000 00					16.000
	Total						16.000
	Total Quantity in each						16.000
1.014	1.26						
	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.						
	DUMMY SWITCH						
		6.0000 0					6.000
	Total						6.000
	Total Quantity in each						6.000
1.015	1.27.1						
	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required.1 or 2 Module (75mmX75mm)						
	PROJECTOR POINT						
		5.0000 0					5.000
	Total						5.000
	Total Quantity in each						5.000
1.016	1.31						
	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, connection etc. as required. (For light plugs to be used in non residential buildings).						
	COMBINED PLUG						

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
		8.0000 0					8.000
	Total						8.000
	Total Quantity in each						8.000
1.017	1.33						
	Supplying and fixing 3 pin, 5 amp ceiling rose on the existing junction box/ wooden block including connection etc as required.						
	ALL WIRING						
	POINT WIRING	45.000 00					45.000
	TWIN WIRING	1.0000 0					1.000
	Total						46.000
	Total Quantity in each						46.000
1.018	1.58						
	Supplying and fixing PVC batten/ angle holder including connection etc. as required.						
	TOILET ANGLE HOLDER						
		2.0000 0					2.000
	Total						2.000
	Total Quantity in each						2.000
1.019	1.27.2						
	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required.3 Module (100mmX75mm)						
	3MD BOX AND PLATE FOR 16A PLUG						
		1.0000 0					1.000
	Total						1.000
	Total Quantity in each						1.000
2	DB AND ACCESSORIES						
2.001	90.11.1.14						
	Supply and installation of sheet steel, phosphatised and painted, dust and vermin proof enclosure of MCB DB including copper /brass bus bar, neutral link, earth bus and DIN rail suitable for fixing MCB/ isolator etc. fixed on wall using suitable anchor bolts or fixed in recess including cutting hole on the wall , making good the damages, colour washing etc. as required4 way (8+12) - double cover TPN vertical DB with provision for fixing 4P MCB / Isolator/ RCCB/ RCBO as incomer and SP/ TP MCB as outgoing (IP 42/43)						
	VDB						
		1.0000 0					1.000

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Total						1.000
	Total Quantity in each						1.000
2.002	2.13.1						
	Supplying and fixing following rating, four pole, 415 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.40 amps						
	LDB INCOMER						
		1.0000 0					1.000
	Total						1.000
	Total Quantity in each						1.000
2.003	2.15.2						
	Supplying and fixing following rating, four pole, (three phase and neutral), 415 volts, residual current circuit breaker (RCCB), having a sensitivity current upto 300 milliamperes in the existing MCB DB complete with connections, testing and commissioning etc. as required.40 amps						
	RCCB LDB						
		1.0000 0					1.000
	Total						1.000
	Total Quantity in each						1.000
2.004	2.10.4						
	Supplying and fixing 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.Triple pole						
	VDB OUTGOINGS						
		2.0000 0					2.000
	Total						2.000
	Total Quantity in each						2.000
2.005	2.10.1						
	Supplying and fixing 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.Single pole						
	MCB						
		15.000 00					15.000
	Total						15.000
	Total Quantity in each						15.000
2.006	2.11						

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(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.						
	MCB DUMMY						
		10.000 00					10.000
	Total						10.000
	Total Quantity in each						10.000
2.007	2.3.3						
	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCBIRCCB/Isolator12 way, Double door						
	LDB						
		2.0000 0					2.000
	Total						2.000
	Total Quantity in each						2.000
2.008	2.12.1						
	Supplying and fixing following rating, double pole, 240 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.40 amps						
	LDB INCOMER						
		2.0000 0					2.000
	Total						2.000
	Total Quantity in each						2.000
2.009	2.14.1						
	Supplying and fixing following rating, double pole, (single phase and neutral), 240 volts, residual current circuit breaker (RCCB), having a sensitivity current upto 300 milliamperes in the existing MCB DB complete with connections, testing and commissioning etc. as required.25 amps						
	LDB INCOMER						
		2.0000 0					2.000
	Total						2.000
	Total Quantity in each						2.000
2.010	OD211544/2023-2024						
	Supply and installation of dust and Vermin proof wall mounding meter box 450x375x200mm SINTEX make GSMB 4537 or equilent make with base plate suitable to fix 3 phase energy meter and fix to fix in the box 3 Nos of 63 A,415 V HRC bakelite fuse fitting with HRC fuse link,63 A 2 way neutral link etc						

EST No. :LSGD/PMUKILA/EST/85418/2022_17_1_1 (Edit Id : 1)
(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	METER BOARD						
		1.0000 0					1.000
	Total						1.000
	Total Quantity in each						1.000
2.011	OD211545/2023-2024						
	Supply and providing 63ATPN disconnecter fuse switch unit in sheet steel enclosure with ISI marked HRC fuse on wall / angle iron frame including drilling holes in frame making connections etc as required						
	DISCONNECTOR FUSE						
		1.0000 0					1.000
	Total						1.000
	Total Quantity in each						1.000
2.012	OD351860/2023-2024						
	Supplying and fixing Cable End Box (Loose Wire Box) (IP 43) suitable for following triple pole and neutral, sheet steel, MCB distribution board, 415 V, on surface/ recess, complete with testing and commissioning etc. as required.For 4 way, Double door VERTICAL DB						
	4WAY VERTICAL DD DB CABLE END BOX						
		1.0000 0					1.000
	Total						1.000
	Total Quantity in each						1.000
2.013	OD351861/2023-2024						
	Supplying and fixing Cable End Box (Loose Wire Box) (IP 43) suitable for following single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with testing and commissioning etc. as required. 2For 12 way, Double door SPN MCBDB						
	12WAY SPN DD DB CABLE END BOX						
		2.0000 0					2.000
	Total						2.000
	Total Quantity in each						2.000
3	CABLES AND CABLING						
3.001	7.1.1						
	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required.Upto 35 sq. mm						
	METER BOARD TO VDB						

EST No. :LSGD/PMUKILA/EST/85418/2022_17_1_1 (Edit Id : 1)
(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
		1.0000 0	32.000				32.000
	Total						32.000
	Total Quantity in metre						32.000
3.002	7.5.1						
	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size in the existing RCC/ HUME/ METAL pipe as required.Upto 35 sq. mm						
	CABLE GAURD						
		8.0000 0					8.000
	Total						8.000
	Total Quantity in metre						8.000
3.003	7.7.1						
	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on wall surface as required.Upto 35 sq. mm (clamped with 1mm thick saddle)						
	VDB TO LDB						
		1.0000 0	3+9+12+ 12+4				40.000
	Total						40.000
	Total Quantity in metre						40.000
3.004	7.10						
	Supplying and fixing cable route marker with 10 cm X 10 cm X 5 mm thick G.I. plate with inscription there on, bolted /welded to 35 mm X 35 mm X 6 mm angle iron, 60 cm long and fixing the same in ground as required.						
	CABLE ROUTE						
		4.0000 0					4.000
	Total						4.000
	Total Quantity in no						4.000
3.005	9.1.33						
	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required.4 X 16 sq. mm (28mm)						
	LDB CABLE TERMINATION						
		2.0000 0					2.000
	Total						2.000

EST No. :LSGD/PMUKILA/EST/85418/2022_17_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Total Quantity in set						2.000
3.006	OD209840/2023-2024						
	"Supply of the following size 1.1kV grade XLPE insulated PVC sheathed, armoured Aluminium conductor power cable confirming to IS 7098 (part 1) ammended upto date. - 4Cx16sq.mm Al Cable"						
	VDB TO LDB						
		1.0000 0	64.000				64.000
	Total						64.000
	Total Quantity in metre						64.000
3.007	OD209841/2023-2024						
	Supply and laying of 3CX4sqmm submersible copper flexible cable						
	MOTOR						
		1.0000 0	24.000				24.000
	Total						24.000
	Total Quantity in metre						24.000
3.008	OD209842/2023-2024						
	Supply of the following size 1.1kV grade XLPE insulated PVC sheathed, armoured Aluminium conductor power cable confirming to IS 7098 (part 1) ammended upto date. - 2Cx10sq.mm Al Cable"						
	LDB Cable						
		1.0000 0	16.000				16.000
	Total						16.000
	Total Quantity in metre						16.000
3.009	9.1.2						
	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required. 2 X 10 sq. mm (19mm)						
	LDB CABLE TERMINATION						
		4.0000 0					4.000
	Total						4.000
	Total Quantity in set						4.000
4	ELECTRICAL FITTINGS						
4.001	1.41						

EST No. :LSGD/PMUKILA/EST/85418/2022_17_1_1 (Edit Id : 1)
(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Installation, testing and commissioning of pre - wired, fluorescent fitting/ compact fluorescent fitting of all types, complete with all accessories and tube etc. directly on ceiling/ wall, including connection with 1.5 sq.mm FRLS PVC insulated, copper conductor, single core cable and earthing etc. as required.						
	TUBE FITTING						
		24.000 00					24.000
	Total						24.000
	Total Quantity in each						24.000
4.002	1.49						
	Numbering of ceiling fan / exhaust fan/ fluorescent fittings as required.						
	NUMBERING						
		48.000 00					48.000
	Total						48.000
	Total Quantity in each						48.000
4.003	1.50.1						
	Installation of exhaust fan in the existing opening, including making good the damage connection testing, commissioning etc. as required.Upto 450 mm sweep						
	EXHAUST FAN FITTING						
		4.0000 0					4.000
	Total						4.000
	Total Quantity in each						4.000
4.004	OD209834/2023-2024						
	Supply, conveyance, installation, testing and commissioning of ceiling fans of the following sizes using standard accessories excluding resistance type regulator, wiring the down rod with 16/0.20mm PVC insulated and PVC sheathed 650/1100V grade 3 core round copper conductor flex wire or with extended original wiring etc. as required.1200mm sweep -5star rated ceiling fan(BLDC) complete with 300mm down rod , canopies, shackles and blades working on 230V/240V single phase A/C						
	BLDC FAN						
		16.000 00					16.000
	Total						16.000
	Total Quantity in each						16.000
4.005	OD209835/2023-2024						
	Supply of indoor industrial surface mounted LED tube and batten along with driver , surge protector,system wattage of 20+/-2 Watts,lumen output of lamp greater than 1600lumen, power factor >0.9,rated life of L70 @ 50,000 hours, system efficacy greater than 70lumen/watt and including all necessary accessories as required complete.						

EST No. :LSGD/PMUKILA/EST/85418/2022_17_1_1 (Edit Id : 1)
(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	20W TUBE LIGHT						
		24.000 00					24.000
	Total						24.000
	Total Quantity in each						24.000
4.006	OD209836/2023-2024						
	Supply of 250 mm sweep,900 rpm light duty exhaust fan in plastic body with self opening louvers working on 230 V AC supply complete with all accessories as required.						
	TOILET EXHAUS FAN						
		4.0000 0					4.000
	Total						4.000
	Total Quantity in each						4.000
4.007	OD209837/2023-2024						
	Supply of 9W bulb						
	TOILET BULB						
		2.0000 0					2.000
	Total						2.000
	Total Quantity in each						2.000
4.008	OD209838/2023-2024						
	Supply and fixing of 36/40 W, 4000 lumen LED, IP 66 street light fitting with aluminium housing, stove enameled CRCA sheet steel reflector cover, acrylic cover complete with THD 0.98, RoHS compliant, duly wired up for use on 230 V AC supply.						
	STREET LIGHT						
		2.0000 0					2.000
	Total						2.000
	Total Quantity in each						2.000
5	EARTHING						
5.001	5.4						
	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.						
	PLATE EARTHING						
		2.0000 0					2.000
	Total						2.000

EST No. :LSGD/PMUKILA/EST/85418/2022_17_1_1 (Edit Id : 1)
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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Total Quantity in set						2.000
5.002	5.9						
	Supplying and laying 25 mm X 5 mm G.I strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with G.I. nut, bolt, spring, washer etc. as required.(Jointing shall be done by overlapping and with 2 sets of G.I. nut bolt & spring washer spaced at 50mm)						
	EARTH STRIP BELOW GROUND						
		1.0000 0	35.000				35.000
	Total						35.000
	Total Quantity in metre						35.000
5.003	5.15						
	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.						
	EARTH STRIP ABOVE GROUND						
		1.0000 0	15.000				15.000
	Total						15.000
	Total Quantity in metre						15.000
5.004	90.16.1.3						
	Supply and drawing bare earthing conductors of the following sizes along with wiring/ cables and giving connection as required3.15 mm copper conductor (10 SWG)						
	RUNNING CABLE EARTH CONDUCTORS 10SWG						
		1.0000 0	160.000				160.000
	Total						160.000
	Total Quantity in metre						160.000
6	WATER PUMP						
6.001	OD209839/2023-2024						
	Horizontal Multistage pump for Domestic Water Supply - Supply, Fixing, Testing and Commissioning of Single Phase Horizontal Multistage pump having SS Shaft, Impeller, Body. Mechanical Seal Carbon & Ceramic / Graphite Alumina. Pump should be capable to deliver 2.6 lps @ 25mtr head, Head range 8 to37mtrs (4.1 lps to 0.4 lps), with 1.1kW/1.5 HP with motor efficiency more than 85% with Wall mounting Microprocessor based common control Panel to operate the pump, Dry run , Phase Reversal Protections etc. level controller for Auto Start/ Stop Function , Digital display , Float Switches, Auto / Manual Operation with suitable rating Single Phase contactor, Overload relay, etc with all mounting accessories ,protection covering shall be IP54 with CRCA powder coated housing.						
	PUMP						
		1.0000 0					1.000

EST No. :LSGD/PMUKILA/EST/85418/2022_17_1_1 (Edit Id : 1)
 (Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Total						1.000
	Total Quantity in each						1.000
6.002	OD213669/2023-2024						
	Providing, fixing, commission and install in position following Portable Fire Extinguisher as per BIS 2190 and BIS: 15683:2006 and with relevant ISI Stamping/Marking. ABC Dry Chemical Powder, Store Pressure Type - 4 Kg.						
	ABC DRY CHEMICAL						
		1.0000 0					1.000
	Total						1.000
	Total Quantity in each						1.000
6.003	OD213672/2023-2024						
	Supplying and installing in position self glowing sign boards of size (150 X 400 mm) made of luminescentsafely, rigid sheet in green colour, photo luminescent ACP sheet in protective glass with two hangingchains & necessary supports to hang it on ceiling.						
	SIGN BOARD						
		1.0000 0					1.000
	Total						1.000
	Total Quantity in each						1.000

EST No. :LSGD/PMUKILA/EST/85418/2022_17_1_1 (Edit Id : 1)
(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

ABSTRACT ESTIMATE

KIIFB-KILA 1 CRORE PROJECT-INFRASTRUCTURE DEVELOPEMENT AT GMLPS
THIRUVATHRA(SCHOOL CODE-24215)-THRISSUR-Construction of new building(G+1)-
Composite Electrical Work

SI No	Specification	Quantity	Rate	Amount
1	WIRING			
1.001	1.10.3 Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required.Group C			
	Net Total	47.000point	@1176.66/point	55303.02
1.002	1.11 Wiring for twin control light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required.			
	Net Total	1.000point	@1256.19/point	1256.19
1.003	1.14.1 Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface / recessed medium class PVC conduit as required2x1.5 sq.mm + 1x1.5 sq.mm earth wire			
	Net Total	166.000metre	@173.07/metre	28729.62
1.004	1.14.2 Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface / recessed medium class PVC conduit as required2X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire			
	Net Total	107.000metre	@198.12/metre	21198.84
1.005	1.21.1 Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/ recess including cutting the wall and making good the same in case of recessed conduit as required.20 mm			
	Net Total	46.000metre	@99.28/metre	4566.88
1.006	1.21.2 Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/ recess including cutting the wall and making good the same in case of recessed conduit as required.25 mm			

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Sl No	Specification	Quantity	Rate	Amount
	Net Total	5.000metre	@107.48/metre	537.40
1.007	1.21.3			
	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/ recess including cutting the wall and making good the same in case of recessed conduit as required.32 mm			
	Net Total	36.000metre	@109.56/metre	3944.16
1.008	1.24.1			
	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.5/6 amps switch			
	Net Total	4.000each	@101.45/each	405.80
1.009	1.24.3			
	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.15/16 amp switch			
	Net Total	1.000each	@156.57/each	156.57
1.010	1.24.4			
	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.3 pin 5/6 amp socket outlet			
	Net Total	4.000each	@131.94/each	527.76
1.011	1.24.5			
	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.6 pin 15/16 amp socket outlet			
	Net Total	1.000each	@207.76/each	207.76
1.012	1.24.8			
	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.Bell push			
	Net Total	1.000each	@149.49/each	149.49
1.013	1.25			
	Supplying and fixing two module stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.			
	Net Total	16.000each	@406.42/each	6502.72
1.014	1.26			
	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.			
	Net Total	6.000each	@38.02/each	228.12
1.015	1.27.1			

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SI No	Specification	Quantity	Rate	Amount
	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required.1 or 2 Module (75mmX75mm)			
	Net Total	5.000each	@288.78/each	1443.90
1.016	1.31			
	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, connection etc. as required. (For light plugs to be used in non residential buildings).			
	Net Total	8.000each	@476.73/each	3813.84
1.017	1.33			
	Supplying and fixing 3 pin, 5 amp ceiling rose on the existing junction box/ wooden block including connection etc as required.			
	Net Total	46.000each	@77.83/each	3580.18
1.018	1.58			
	Supplying and fixing PVC batten/ angle holder including connection etc. as required.			
	Net Total	2.000each	@107.18/each	214.36
1.019	1.27.2			
	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required.3 Module (100mmX75mm)			
	Net Total	1.000each	@317.90/each	317.90
Heading Total(Rs)				133084.51
2 DB AND ACCESSORIES				
2.001	90.11.1.14			
	Supply and installation of sheet steel, phosphatised and painted, dust and vermin proof enclosure of MCB DB including copper /brass bus bar, neutral link, earth bus and DIN rail suitable for fixing MCB/ isolator etc. fixed on wall using suitable anchor bolts or fixed in recess including cutting hole on the wall , making good the damages, colour washing etc. as required4 way (8+12) - double cover TPN vertical DB with provision for fixing 4P MCB / Isolator/ RCCB/ RCBO as incomer and SP/ TP MCB as outgoing (IP 42/43)			
	Net Total	1.000each	@6555.87/each	6555.87
2.002	2.13.1			
	Supplying and fixing following rating, four pole, 415 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.40 amps			
	Net Total	1.000each	@989.20/each	989.20
2.003	2.15.2			
	Supplying and fixing following rating, four pole, (three phase and neutral), 415 volts, residual current circuit breaker (RCCB), having a sensitivity current upto 300 milliamperes in the existing MCB DB complete with connections, testing and commissioning etc. as			

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SI No	Specification	Quantity	Rate	Amount
	required.40 amps			
	Net Total	1.000each	@3121.58/each	3121.58
2.004	2.10.4			
	Supplying and fixing 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.Triple pole			
	Net Total	2.000each	@982.02/each	1964.04
2.005	2.10.1			
	Supplying and fixing 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.Single pole			
	Net Total	15.000each	@237.11/each	3556.65
2.006	2.11			
	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.			
	Net Total	10.000each	@9.78/each	97.80
2.007	2.3.3			
	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCBIRCCB/Isolator12 way, Double door			
	Net Total	2.000each	@2440.31/each	4880.62
2.008	2.12.1			
	Supplying and fixing following rating, double pole, 240 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.40 amps			
	Net Total	2.000each	@402.47/each	804.94
2.009	2.14.1			
	Supplying and fixing following rating, double pole, (single phase and neutral), 240 volts, residual current circuit breaker (RCCB), having a sensitivity current upto 300 milliamperes in the existing MCB DB complete with connections, testing and commissioning etc. as required.25 amps			
	Net Total	2.000each	@2290.97/each	4581.94
2.010	OD211544/2023-2024			
	Supply and installation of dust and Vermin proof wall mounding meter box 450x375x200mm SINTEX make GSMB 4537 or equilent make with base plate suitable to fix 3 phase energy meter and fix to fix in the box 3 Nos of 63 A,415 V HRC bakelite fuse fitting with HRC fuse link,63 A 2 way neutral link etc			
	Net Total	1.000each	@5749.43/each	5749.43
2.011	OD211545/2023-2024			
	Supply and providing 63ATPN disconnecter fuse switch unit in sheet steel			

EST No. :LSGD/PMUKILA/EST/85418/2022_17_1_1 (Edit Id : 1)
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Sl No	Specification	Quantity	Rate	Amount
	enclosure with ISI marked HRC fuse on wall / angle iron frame including drilling holes in frame making connections etc as required			
	Net Total	1.000each	@4620.65/each	4620.65
2.012	OD351860/2023-2024			
	Supplying and fixing Cable End Box (Loose Wire Box) (IP 43) suitable for following triple pole and neutral, sheet steel, MCB distribution board, 415 V, on surface/ recess, complete with testing and commissioning etc. as required. For 4 way, Double door VERTICAL DB			
	Net Total	1.000each	@874.05/each	874.05
2.013	OD351861/2023-2024			
	Supplying and fixing Cable End Box (Loose Wire Box) (IP 43) suitable for following single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with testing and commissioning etc. as required. 2 For 12 way, Double door SPN MCB DB			
	Net Total	2.000each	@740.47/each	1480.94
	Heading Total(Rs)			39277.71
3	CABLES AND CABLING			
3.001	7.1.1			
	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required. Upto 35 sq. mm			
	Net Total	32.000metre	@384.40/metre	12300.80
3.002	7.5.1			
	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size in the existing RCC/ HUME/ METAL pipe as required. Upto 35 sq. mm			
	Net Total	8.000metre	@36.37/metre	290.96
3.003	7.7.1			
	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on wall surface as required. Upto 35 sq. mm (clamped with 1mm thick saddle)			
	Net Total	40.000metre	@46.20/metre	1848.00
3.004	7.10			
	Supplying and fixing cable route marker with 10 cm X 10 cm X 5 mm thick G.I. plate with inscription there on, bolted /welded to 35 mm X 35 mm X 6 mm angle iron, 60 cm long and fixing the same in ground as required.			
	Net Total	4.000no	@455.34/no	1821.36
3.005	9.1.33			

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SI No	Specification	Quantity	Rate	Amount
	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required.4 X 16 sq. mm (28mm)			
	Net Total	2.000set	@296.68/set	593.36
3.006	OD209840/2023-2024			
	"Supply of the following size 1.1kV grade XLPE insulated PVC sheathed, armoured Aluminium conductor power cable confirming to IS 7098 (part 1) ammended upto date. - 4Cx16sq.mm Al Cable"			
	Net Total	64.000metre	@152.57/metre	9764.48
3.007	OD209841/2023-2024			
	Supply and laying of 3CX4sqmm submersible copper flexible cable			
	Net Total	24.000metre	@139.38/metre	3345.12
3.008	OD209842/2023-2024			
	Supply of the following size 1.1kV grade XLPE insulated PVC sheathed, armoured Aluminium conductor power cable confirming to IS 7098 (part 1) ammended upto date. - 2Cx10sq.mm Al Cable"			
	Net Total	16.000metre	@110.34/metre	1765.44
3.009	9.1.2			
	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required.2 X 10 sq. mm (19mm)			
	Net Total	4.000set	@235.26/set	941.04
	Heading Total(Rs)			32670.56
4 ELECTRICAL FITTINGS				
4.001	1.41			
	Installation, testing and commissioning of pre - wired, fluorescent fitting/ compact fluorescent fitting of all types, complete with all accessories and tube etc. directly on ceiling/ wall, including connection with 1.5 sq.mm FRLS PVC insulated, copper conductor, single core cable and earthing etc. as required.			
	Net Total	24.000each	@199.32/each	4783.68
4.002	1.49			
	Numbering of ceiling fan / exhaust fan/ fluorescent fittings as required.			
	Net Total	48.000each	@57.18/each	2744.64
4.003	1.50.1			
	Installation of exhaust fan in the existing opening, including making good the damage connection testing, commissioning etc. as required.Upto 450 mm sweep			
	Net Total	4.000each	@431.16/each	1724.64

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(Dsr year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

Sl No	Specification	Quantity	Rate	Amount
4.004	OD209834/2023-2024 Supply, conveyance, installation, testing and commissioning of ceiling fans of the following sizes using standard accessories excluding resistance type regulator, wiring the down rod with 16/0.20mm PVC insulated and PVC sheathed 650/1100V grade 3 core round copper conductor flex wire or with extended original wiring etc. as required.1200mm sweep -5star rated ceiling fan(BLDC) complete with 300mm down rod , canopies, shackles and blades working on 230V/240V single phase A/C			
	Net Total	16.000each	@2439.15/each	39026.40
4.005	OD209835/2023-2024 Supply of indoor industrial surface mounted LED tube and batten along with driver , surge protector,system wattage of 20+/-2 Watts,lumen output of lamp greater than 1600lumen, power factor >0.9,rated life of L70 @ 50,000 hours, system efficacy greater than 70lumen/watt and including all necessary accessories as required complete.			
	Net Total	24.000each	@985.19/each	23644.56
4.006	OD209836/2023-2024 Supply of 250 mm sweep,900 rpm light duty exhaust fan in plastic body with self opening louvers working on 230 V AC supply complete with all accessories as required.			
	Net Total	4.000each	@1245.16/each	4980.64
4.007	OD209837/2023-2024 Supply of 9W bulb			
	Net Total	2.000each	@116.15/each	232.30
4.008	OD209838/2023-2024 Supply and fixing of 36/40 W, 4000 lumen LED, IP 66 street light fitting with aluminium housing, stove enameled CRCA sheet steel reflector cover, acrylic cover complete with THD 0.98, RoHS compliant, duly wired up for use on 230 V AC supply.			
	Net Total	2.000each	@4181.40/each	8362.80
	Heading Total(Rs)			85499.66
5	EARTHING			
5.001	5.4 Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.			
	Net Total	2.000set	@7390.03/set	14780.06
5.002	5.9 Supplying and laying 25 mm X 5 mm G.I strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with G.I. nut, bolt, spring, washer etc. as required.(Jointing shall be done by overlapping and with 2 sets of G.I. nut bolt & spring washer spaced at 50mm)			
	Net Total	35.000metre	@155.20/metre	5432.00

EST No. :LSGD/PMUKILA/EST/85418/2022_17_1_1 (Edit Id : 1)
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Sl No	Specification	Quantity	Rate	Amount
5.003	5.15			
	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.			
	Net Total	15.000metre	@245.43/metre	3681.45
5.004	90.16.1.3			
	Supply and drawing bare earthing conductors of the following sizes along with wiring/ cables and giving connection as required 3.15 mm copper conductor (10 SWG)			
	Net Total	160.000metre	@63.51/metre	10161.60
	Heading Total(Rs)			34055.11
6	WATER PUMP			
6.001	OD209839/2023-2024			
	Horizontal Multistage pump for Domestic Water Supply - Supply, Fixing, Testing and Commissioning of Single Phase Horizontal Multistage pump having SS Shaft, Impeller, Body. Mechanical Seal Carbon & Ceramic / Graphite Alumina. Pump should be capable to deliver 2.6 lps @ 25mtr head, Head range 8 to 37mtrs (4.1 lps to 0.4 lps), with 1.1kW/1.5 HP with motor efficiency more than 85% with Wall mounting Microprocessor based common control Panel to operate the pump, Dry run , Phase Reversal Protections etc. level controller for Auto Start/ Stop Function , Digital display , Float Switches, Auto / Manual Operation with suitable rating Single Phase contactor, Overload relay, etc with all mounting accessories , protection covering shall be IP54 with CRCA powder coated housing.			
	Net Total	1.000each	@40652.50/each	40652.50
6.002	OD213669/2023-2024			
	Providing, fixing, commission and install in position following Portable Fire Extinguisher as per BIS 2190 and BIS: 15683:2006 and with relevant ISI Stamping/Marking. ABC Dry Chemical Powder, Store Pressure Type - 4 Kg.			
	Net Total	1.000each	@3346.28/each	3346.28
6.003	OD213672/2023-2024			
	Supplying and installing in position self glowing sign boards of size (150 X 400 mm) made of luminescentsafely, rigid sheet in green colour, photo luminescent ACP sheet in protective glass with two hangingchains & necessary supports to hang it on ceiling.			
	Net Total	1.000each	@696.90/each	696.90
	Heading Total(Rs)			44695.68
	Total Estimation PAC			369283.23
8	Extra Charges			
7.001	Provision for GST			
		369283.23	18.00%	66470.98
	Grand Total			0.00

EST No. :LSGD/PMUKILA/EST/85418/2022_17_1_1 (Edit Id : 1)
 (Dsr year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

Sl No	Specification	Quantity	Rate	Amount
			Round off	0.00
			Rounded Total(Rs)	435754.21
	Rupees Four Lakh Thirty Five Thousand Seven Hundred and Fifty Four			



EST No. :LSGD/PMUKILA/EST/85418/2022_17_1_1 (Edit Id : 1)
(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

DATA ANALYSIS

KIIFB-KILA 1 CRORE PROJECT-INFRASTRUCTURE DEVELOPEMENT AT GMLPS
THIRUVATHRA(SCHOOL CODE-24215)-THRISSUR-Construction of new building(G+1)-
Composite Electrical Work

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
1:WIRING						
1.001-Specification code: 1.10.3						
Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required. Group C						
Material						M
1234		20 mm PVC couplers				
		each	2.00000	3.00	6.00	M1
1101		1.5 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable = 2 x 5 + 1 x 2.5 = 12.5 + 0.65 (wastage@ 5%) = 13.15m				
		metre	13.15000	9.00	118.35	M2
2857		PVC fastener 40mm long				
		each	9.00000	0.30	2.70	M3
1402		S.P. 5/6 amps, one way modular switch, ISI marked				
		each	1.00000	28.00	28.00	M4
1421		Modular base & cover plate for 2 module				
		each	0.50000	37.50	18.75	M5
2935		Cement, paint, sand etc.				
		L.S	1.00000	5.00	5.00	M6
1300		Modular GI box for 2 module				
		each	0.50000	22.50	11.25	M7
1239		20 mm PVC junction box, one way				
		each	1.00000	10.00	10.00	M8
1218		20 mm iron staples/saddles/ screws				
		each	9.00000	1.50	13.50	M9

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(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
1229		20 mm PVC bends				
		each	1.00000	4.71	4.71	M10
1224		20 mm dia, ISI marked, PVC conduit = 4.5 + 0.23 (wastage@ 5%) = 4.73 m				
		metre	4.73000	10.44	49.38	M11
Labour					L	
1001		Wireman				
		Day	0.30000	673.00	201.90	L1
1007		Khallasi				
		Day	0.40000	553.00	221.20	L2
1010		Mason, Grade 2				
		Day	0.10000	612.00	61.20	L3
		Total	1.000	point	751.94	
		Unit Total	1.000	point	751.94	
		Add Cartage	267.64	@1.00%	2.68	
		Total			754.62	
		Add Contractors Profit & Overhead	754.62	@15.00%	113.19	
		Total			867.81	
		Add Cost Index	867.81	@35.59%	308.85	
		Total			1176.66	
		GRAND TOTAL		point	1176.66	
Note						
1.002-Specification code: 1.11						
Wiring for twin control light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required.						
Material					M	
1239		20 mm PVC junction box, one way				
		each	1.00000	10.00	10.00	M1
1229		20 mm PVC bends				

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		each	1.00000	4.71	4.71	M2
1234		20 mm PVC couplers				
		each	2.00000	3.00	6.00	M3
1300		Modular GI box for 2 module				
		each	0.50000	22.50	11.25	M4
1421		Modular base & cover plate for 2 module				
		each	0.50000	37.50	18.75	M5
1403		S.P. 5/6 amps, two way modular switch, ISI marked				
		each	1.00000	56.50	56.50	M6
2857		PVC fastener 40mm long				
		each	9.00000	0.30	2.70	M7
2935		Cement, paint, sand etc.				
		L.S	1.00000	5.00	5.00	M8
1101		1.5 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable 2x5 + 1x2.5 = 12.5 + 0.65 (wastage @ 5%) = 13.15m				
		metre	13.15000	9.00	118.35	M9
1240		20 mm PVC junction box, two way				
		each	2.00000	11.00	22.00	M10
1218		20 mm iron staples/saddles/ screws				
		each	9.00000	1.50	13.50	M11
1224		20 mm dia, ISI marked, PVC conduit = 4.5 + 0.23 (wastage @ 5%) = 4.73m				
		metre	4.73000	10.44	49.38	M12
Labour						L
1007		Khallasi				
		Day	0.40000	553.00	221.20	L1
1001		Wireman				
		Day	0.30000	673.00	201.90	L2
1010		Mason, Grade 2				
		Day	0.10000	612.00	61.20	L3

EST No. :LSGD/PMUKILA/EST/85418/2022_17_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Total	1.000	point	802.44	
		Unit Total	1.000	point	802.44	
		Add Cartage	318.14	@1.00%	3.18	
		Total			805.62	
		Add Contractors Profit & Overhead	805.62	@15.00%	120.84	
		Total			926.46	
		Add Cost Index	926.46	@35.59%	329.73	
		Total			1256.19	
		GRAND TOTAL		point	1256.19	
Note						
1.003-Specification code: 1.14.1						
Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface / recessed medium class PVC conduit as required 2x1.5 sq.mm + 1x1.5 sq.mm earth wire						
Material						M
1229		20 mm PVC bends				
		each	4.00000	4.71	18.84	M1
1101		1.5 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable =50.5x3 = 151.5 + 7.58 (wastage @ 5%) = 159.08m				
		metre	159.08000	9.00	1431.72	M2
2935		Cement, paint, sand etc.				
		L.S	1.00000	5.00	5.00	M3
1234		20 mm PVC couplers				
		each	15.00000	3.00	45.00	M4
1218		20 mm iron staples/saddles/ screws				
		each	85.00000	1.50	127.50	M5
1224		20 mm dia, ISI marked, PVC conduit = 50 + 2.5 (wastage @ 5%) = 52.5m				
		metre	52.50000	10.44	548.10	M6
2857		PVC fastener 40mm long				
		each	85.00000	0.30	25.50	M7
Labour						L

EST No. :LSGD/PMUKILA/EST/85418/2022_17_1_1 (Edit Id : 1)
(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
1007		Khallasi				
		Day	2.75000	553.00	1520.75	L1
1001		Wireman				
		Day	2.00000	673.00	1346.00	L2
1010		Mason, Grade 2				
		Day	0.75000	612.00	459.00	L3
		Total	50.000	metre	5527.41	
		Unit Total	1.000	metre	110.55	
		Add Cartage	44.03	@1.00%	0.44	
		Total			110.99	
		Add Contractors Profit & Overhead	110.99	@15.00%	16.65	
		Total			127.64	
		Add Cost Index	127.64	@35.59%	45.43	
		Total			173.07	
		GRAND TOTAL		metre	173.07	
Note						
1.004-Specification code: 1.14.2						
Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface / recessed medium class PVC conduit as required 2X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire						
Material						M
1229		20 mm PVC bends				
		each	4.00000	4.71	18.84	M1
1224		20 mm dia, ISI marked, PVC conduit = 50 + 2.5 (wastage @ 5%) = 52.5m				
		metre	52.50000	10.44	548.10	M2
2935		Cement, paint, sand etc.				
		L.S	1.00000	5.00	5.00	M3
1102		2.5 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable =50.5x3 = 151.5 + 7.58 (wastage @ 5%) = 159.08m				

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		metre	159.08000	14.00	2227.12	M4
2857		PVC fastener 40mm long				
		each	85.00000	0.30	25.50	M5
1218		20 mm iron staples/saddles/ screws				
		each	85.00000	1.50	127.50	M6
1234		20 mm PVC couplers				
		each	15.00000	3.00	45.00	M7
Labour						L
1007		Khallasi				
		Day	2.75000	553.00	1520.75	L1
1001		Wireman				
		Day	2.00000	673.00	1346.00	L2
1010		Mason, Grade 2				
		Day	0.75000	612.00	459.00	L3
Total			50.000	metre	6322.81	
Unit Total			1.000	metre	126.46	
Add Cartage			59.94	@1.00%	0.60	
Total					127.06	
Add Contractors Profit & Overhead			127.06	@15.00%	19.06	
Total					146.12	
Add Cost Index			146.12	@35.59%	52.00	
Total					198.12	
GRAND TOTAL				metre	198.12	
Note						
1.005-Specification code: 1.21.1						
Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/ recess including cutting the wall and making good the same in case of recessed conduit as required. 20 mm						
Material						M
1224		20 mm dia, ISI marked, PVC conduit = 50.0 + 2.5 (wastage@ 5%) = 52.50 m				

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		metre	52.50000	10.44	548.10	M1
2857		PVC fastener 40mm long				
		each	85.00000	0.30	25.50	M2
1218		20 mm iron staples/saddles/ screws				
		each	85.00000	1.50	127.50	M3
1234		20 mm PVC couplers				
		each	15.00000	3.00	45.00	M4
1229		20 mm PVC bends				
		each	4.00000	4.71	18.84	M5
2935		Cement, paint, sand etc.				
		L.S	1.00000	5.00	5.00	M6
Labour						L
1007		Khallasi				
		Day	2.00000	553.00	1106.00	L1
1001		Wireman				
		Day	1.25000	673.00	841.25	L2
1010		Mason, Grade 2				
		Day	0.75000	612.00	459.00	L3
Total			50.000	metre	3176.19	
Unit Total			1.000	metre	63.52	
Add Cartage			15.40	@1.00%	0.15	
Total					63.67	
Add Contractors Profit & Overhead			63.67	@15.00%	9.55	
Total					73.22	
Add Cost Index			73.22	@35.59%	26.06	
Total					99.28	
GRAND TOTAL				metre	99.28	
Note						
1.006-Specification code: 1.21.2						
Supplying and fixing of following sizes of medium class PVC conduit along with accessories in						

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
surface/ recess including cutting the wall and making good the same in case of recessed conduit as required. 25 mm						
Material						M
1225		25 mm dia, ISI marked, PVC conduit = 50.0 + 2.5 (wastage@ 5%) = 52.50 m				
		metre	52.50000	14.00	735.00	M1
1235		25 mm PVC couplers				
		each	15.00000	4.00	60.00	M2
1219		25 mm iron staples/saddles/screws				
		each	85.00000	2.10	178.50	M3
2857		PVC fastener 40mm long				
		each	85.00000	0.30	25.50	M4
2935		Cement, paint, sand etc.				
		L.S	1.00000	5.00	5.00	M5
1230		25 mm PVC bends				
		each	4.00000	6.40	25.60	M6
Labour						L
1010		Mason, Grade 2				
		Day	0.75000	612.00	459.00	L1
1001		Wireman				
		Day	1.25000	673.00	841.25	L2
1007		Khallasi				
		Day	2.00000	553.00	1106.00	L3
Total			50.000	metre	3435.85	
Unit Total			1.000	metre	68.72	
Add Cartage			20.59	@1.00%	0.21	
Total					68.93	
Add Contractors Profit & Overhead			68.93	@15.00%	10.34	
Total					79.27	
Add Cost Index			79.27	@35.59%	28.21	

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Total			107.48	
		GRAND TOTAL		metre	107.48	
Note						
1.007-Specification code: 1.21.3						
Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/ recess including cutting the wall and making good the same in case of recessed conduit as required. 32 mm						
Material						M
1231		32 mm PVC bends				
		each	4.00000	9.00	36.00	M1
2935		Cement, paint, sand etc.				
		L.S	1.00000	5.00	5.00	M2
2857		PVC fastener 40mm long				
		each	85.00000	0.30	25.50	M3
1236		32 mm PVC couplers				
		each	15.00000	6.00	90.00	M4
1226		32 mm dia. ISI marked, PVC conduit = 50.0 + 2.5 (wastage@ 5%) = 52.50 m				
		metre	52.50000	12.79	671.48	M5
1220		32 mm iron staples/saddles/screws				
		each	85.00000	3.15	267.75	M6
Labour						L
1001		Wireman				
		Day	1.25000	673.00	841.25	L1
1010		Mason, Grade 2				
		Day	0.75000	612.00	459.00	L2
1007		Khallasi				
		Day	2.00000	553.00	1106.00	L3
		Total	50.000	metre	3501.98	
		Unit Total	1.000	metre	70.04	
		Add Cartage	21.91	@1.00%	0.22	

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Total			70.26	
		Add Contractors Profit & Overhead	70.26	@15.00%	10.54	
		Total			80.80	
		Add Cost Index	80.80	@35.59%	28.76	
		Total			109.56	
		GRAND TOTAL		metre	109.56	
Note						
1.008-Specification code: 1.24.1						
Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. 5/6 amps switch						
Details of cost for one each MATERIAL						
Material						M
1402		S.P. 5/6 amps, one way modular switch, ISI marked				
		each	1.00000	28.00	28.00	M1
Labour						L
1001		Wireman				
		Day	0.03000	673.00	20.19	L1
1007		Khallasi				
		Day	0.03000	553.00	16.59	L2
		Total	1.000	each	64.78	
		Unit Total	1.000	each	64.78	
		Add Cartage	28.00	@1.00%	0.28	
		Total			65.06	
		Add Contractors Profit & Overhead	65.06	@15.00%	9.76	
		Total			74.82	
		Add Cost Index	74.82	@35.59%	26.63	
		Total			101.45	
		GRAND TOTAL		each	101.45	
Note						
1.009-Specification code: 1.24.3						
Supplying and fixing following modular switch/ socket on the existing modular plate & switch						

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
box including connections but excluding modular plate etc. as required. 15/16 amp switch						
Details of cost for one each MATERIAL						
Material						M
1404		S.P.15/16 amps, one way modular switch, ISI marked				
		each	1.00000	63.00	63.00	M1
Labour						L
1001		Wireman				
		Day	0.03000	673.00	20.19	L1
1007		Khallasi				
		Day	0.03000	553.00	16.59	L2
Total			1.000	each	99.78	
Unit Total			1.000	each	99.78	
Add Cartage			63.00	@1.00%	0.63	
Total					100.41	
Add Contractors Profit & Overhead			100.41	@15.00%	15.06	
Total					115.47	
Add Cost Index			115.47	@35.59%	41.10	
Total					156.57	
GRAND TOTAL				each	156.57	
Note						
1.010-Specification code: 1.24.4						
Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. 3 pin 5/6 amp socket outlet						
Details of cost for one each MATERIAL						
Material						M
1405		3 pin 5/6 amps modular socket outlet, ISI marked				
		each	1.00000	59.50	59.50	M1
Labour						L
1007		Khallasi				
		Day	0.02000	553.00	11.06	L1

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(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
1001		Wireman				
		Day	0.02000	673.00	13.46	L2
Total		1.000	each	84.02		
Unit Total		1.000	each	84.02		
Add Cartage		59.50	@1.00%	0.60		
Total				84.62		
Add Contractors Profit & Overhead		84.62	@15.00%	12.69		
Total				97.31		
Add Cost Index		97.31	@35.59%	34.63		
Total				131.94		
GRAND TOTAL			each	131.94		
Note						
1.011-Specification code: 1.24.5						
Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. 6 pin 15/16 amp socket outlet						
Details of cost for one each MATERIAL						
Material					M	
1406		6 pin 15/16 amps modular socket outlet, ISI marked				
		each	1.00000	95.50	95.50	M1
Labour					L	
1001		Wireman				
		Day	0.03000	673.00	20.19	L1
1007		Khallasi				
		Day	0.03000	553.00	16.59	L2
Total		1.000	each	132.28		
Unit Total		1.000	each	132.28		
Add Cartage		95.50	@1.00%	0.96		
Total				133.24		
Add Contractors Profit & Overhead		133.24	@15.00%	19.99		
Total				153.23		

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Add Cost Index	153.23	@35.59%	54.53	
		Total			207.76	
		GRAND TOTAL		each	207.76	
Note						
1.012-Specification code: 1.24.8						
Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. Bell push						
Details of cost for one each MATERIAL:						
Material						M
1407		Modular bell push, ISI marked				
		each	1.00000	58.50	58.50	M1
Labour						L
1001		Wireman				
		Day	0.03000	673.00	20.19	L1
1007		Khallasi				
		Day	0.03000	553.00	16.59	L2
		Total	1.000	each	95.28	
		Unit Total	1.000	each	95.28	
		Add Cartage	58.50	@1.00%	0.59	
		Total			95.87	
		Add Contractors Profit & Overhead	95.87	@15.00%	14.38	
		Total			110.25	
		Add Cost Index	110.25	@35.59%	39.24	
		Total			149.49	
		GRAND TOTAL		each	149.49	
Note						
1.013-Specification code: 1.25						
Supplying and fixing two module stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.						
COST FOR EACH MATERIALS						
Material						M

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
1408		Stepped type Modular Fan regulator (2 module)				
		each	1.00000	209.50	209.50	M1
Labour					L	
1007		Khallasi				
		Day	0.04000	553.00	22.12	L1
1001		Wireman				
		Day	0.04000	673.00	26.92	L2
		Total	1.000	each	258.54	
		Unit Total	1.000	each	258.54	
		Add Cartage	209.50	@1.00%	2.10	
		Total			260.64	
		Add Contractors Profit & Overhead	260.64	@15.00%	39.10	
		Total			299.74	
		Add Cost Index	299.74	@35.59%	106.68	
		Total			406.42	
		GRAND TOTAL		each	406.42	
Note						
1.014-Specification code: 1.26						
Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.						
Details of cost for one each MATERIAL:						
Material						M
1411		Modular blanking plate				
		each	1.00000	12.00	12.00	M1
Labour						L
1007		Khallasi				
		Day	0.01000	553.00	5.53	L1
1001		Wireman				
		Day	0.01000	673.00	6.73	L2
			1.000	each	24.26	

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Total				
		Unit Total	1.000	each	24.26	
		Add Cartage	12.00	@1.00%	0.12	
		Total			24.38	
		Add Contractors Profit & Overhead	24.38	@15.00%	3.66	
		Total			28.04	
		Add Cost Index	28.04	@35.59%	9.98	
		Total			38.02	
		GRAND TOTAL		each	38.02	
Note						
1.015-Specification code: 1.27.1						
Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required. 1 or 2 Module (75mmX75mm)						
Details of cost for one each MATERIAL						
Material						M
1421		Modular base & cover plate for 2 module				
		each	1.00000	37.50	37.50	M1
2857		PVC fastener 40mm long				
		each	2.00000	0.30	0.60	M2
2935		Cement, paint, sand etc.				
		L.S	1.00000	5.00	5.00	M3
1300		Modular GI box for 2 module				
		each	1.00000	22.50	22.50	M4
Labour						L
1001		Wireman				
		Day	0.04000	673.00	26.92	L1
1007		Khallasi				
		Day	0.10000	553.00	55.30	L2
1010		Mason, Grade 2				
		Day	0.06000	612.00	36.72	L3

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Total	1.000	each	184.54	
		Unit Total	1.000	each	184.54	
		Add Cartage	65.60	@1.00%	0.66	
		Total			185.20	
		Add Contractors Profit & Overhead	185.20	@15.00%	27.78	
		Total			212.98	
		Add Cost Index	212.98	@35.59%	75.80	
		Total			288.78	
		GRAND TOTAL		each	288.78	
Note						
1.016-Specification code: 1.31						
Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, connection etc. as required. (For light plugs to be used in non residential buildings).						
Details of cost for one each MATERIAL:						
Material						M
1405		3 pin 5/6 amps modular socket outlet, ISI marked				
		each	1.00000	59.50	59.50	M1
1301		Modular GI box for 3 module				
		each	1.00000	30.50	30.50	M2
2935		Cement, paint, sand etc.				
		L.S	1.00000	5.00	5.00	M3
2857		PVC fastener 40mm long				
		each	2.00000	0.30	0.60	M4
1422		Modular base & cover plate for 3 module				
		each	1.00000	48.00	48.00	M5
1402		S.P. 5/6 amps, one way modular switch, ISI marked				
		each	1.00000	28.00	28.00	M6
Labour						L
1007		Khallasi				
		Day	0.11000	553.00	60.83	L1

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
1001		Wireman				
		Day	0.07000	673.00	47.11	L2
1010		Mason, Grade 2				
		Day	0.04000	612.00	24.48	L3
		Total	1.000	each	304.02	
		Unit Total	1.000	each	304.02	
		Add Cartage	171.60	@1.00%	1.72	
		Total			305.74	
		Add Contractors Profit & Overhead	305.74	@15.00%	45.86	
		Total			351.60	
		Add Cost Index	351.60	@35.59%	125.13	
		Total			476.73	
		GRAND TOTAL		each	476.73	
Note						
1.017-Specification code: 1.33						
Supplying and fixing 3 pin, 5 amp ceiling rose on the existing junction box/ wooden block including connection etc as required.						
Details of cost for one each MATERIAL						
Material						M
2851		Al. Alloy/ cadmium plated iron screws, 20 mm				
		each	2.00000	0.50	1.00	M1
1401		Ceiling rose, 3 pin, 5 amps ISI marked				
		each	1.00000	12.00	12.00	M2
Labour						L
1001		Wireman				
		Day	0.03000	673.00	20.19	L1
1007		Khallasi				
		Day	0.03000	553.00	16.59	L2
		Total	1.000	each	49.78	

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Unit Total			1.000	each	49.78	
Add Cartage			13.00	@1.00%	0.13	
Total					49.91	
Add Contractors Profit & Overhead			49.91	@15.00%	7.49	
Total					57.40	
Add Cost Index			57.40	@35.59%	20.43	
Total					77.83	
GRAND TOTAL				each	77.83	
Note						
1.018-Specification code: 1.58						
Supplying and fixing PVC batten/ angle holder including connection etc. as required.						
Details of cost for one each MATERIAL						
Material						M
2851		Al. Alloy/ cadmium plated iron screws, 20 mm				
		each	3.00000	0.50	1.50	M1
1452		PVC Batten/ Angle Holder				
		each	1.00000	18.00	18.00	M2
Labour						L
1001		Wireman				
		Day	0.04000	673.00	26.92	L1
1007		Khallasi				
		Day	0.04000	553.00	22.12	L2
Total			1.000	each	68.54	
Unit Total			1.000	each	68.54	
Add Cartage			19.50	@1.00%	0.20	
Total					68.74	
Add Contractors Profit & Overhead			68.74	@15.00%	10.31	
Total					79.05	
Add Cost Index			79.05	@35.59%	28.13	
Total					107.18	

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
GRAND TOTAL				each	107.18	
Note						
1.019-Specification code: 1.27.2						
Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required. 3 Module (100mmX75mm)						
Details of cost for one each MATERIAL						
Material						M
2935		Cement, paint, sand etc.				
		L.S	1.00000	5.00	5.00	M1
1301		Modular GI box for 3 module				
		each	1.00000	30.50	30.50	M2
1422		Modular base & cover plate for 3 module				
		each	1.00000	48.00	48.00	M3
2857		PVC fastener 40mm long				
		each	2.00000	0.30	0.60	M4
Labour						L
1001		Wireman				
		Day	0.04000	673.00	26.92	L1
1010		Mason, Grade 2				
		Day	0.06000	612.00	36.72	L2
1007		Khallasi				
		Day	0.10000	553.00	55.30	L3
Total			1.000	each	203.04	
Unit Total			1.000	each	203.04	
Add Cartage			84.10	@1.00%	0.84	
Total					203.88	
Add Contractors Profit & Overhead			203.88	@15.00%	30.58	
Total					234.46	
Add Cost Index			234.46	@35.59%	83.44	
Total					317.90	

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
GRAND TOTAL				each	317.90	
Note						
2:DB AND ACCESSORIES						
2.001-Specification code: 90.11.1.14						
Supply and installation of sheet steel, phosphatised and painted, dust and vermin proof enclosure of MCB DB including copper /brass bus bar, neutral link, earth bus and DIN rail suitable for fixing MCB/ isolator etc. fixed on wall using suitable anchor bolts or fixed in recess including cutting hole on the wall , making good the damages, colour washing etc. as required 4 way (8+12) - double cover TPN vertical DB with provision for fixing 4P MCB / Isolator/ RCCB/ RCBO as incomer and SP/ TP MCB as outgoing (IP 42/43)						
COST FOR 1 EACH A1 MATERIALS						
Material						M
	MR1331	4 way (8 + 12) double cover TPN vertical DB with provision for fixing 4P MCB / Isolator/ RCCB/RCBO as incomer and SP/ TP MCB as outgoing (IP 42/43)				
		each	1.00000	5254.24	5254.24	M1
2860		6 mm dia rivet/ stud/ bolts and nuts				
		each	4.00000	3.25	13.00	M2
Labour						L
1010		Mason, Grade 2				
		Day	0.12000	612.00	73.44	L1
1001		Wireman				
		Day	0.12000	673.00	80.76	L2
	MR719	Wireman Helper				
		Day	0.24000	600.00	144.00	L3
Additional Charges						A
tcode		Hire charges for T & P @ 0.25% of :(M1+M2+L1+L2+L3+A1)				
		L.S	0.00000	5571.94	13.93	A1
tcode		Cement, sand etc. 50% of :(M2)				
		L.S	0.50000	13.00	6.50	A2
Total			1.000	each	5585.87	
Unit Total			1.000	each	5585.87	

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Add Cartage	5286.92	@1.00%	52.87	
		Total			5638.74	
		Add Contractors Profit & Overhead	5638.74	@15.00%	845.81	
		Total			6484.55	
		Add Cost Index	200.40	@35.59%	71.32	
		Total			6555.87	
		GRAND TOTAL		each	6555.87	
Note						
2.002-Specification code: 2.13.1						
Supplying and fixing following rating, four pole, 415 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required. 40 amps						
Details of cost for one each MATERIAL						
Material						M
1714		40 amps., 4 pole isolator				
		each	1.00000	531.00	531.00	M1
Labour						L
1007		Khallasi				
		Day	0.08000	553.00	44.24	L1
1001		Wireman				
		Day	0.08000	673.00	53.84	L2
		Total	1.000	each	629.08	
		Unit Total	1.000	each	629.08	
		Add Cartage	531.00	@1.00%	5.31	
		Total			634.39	
		Add Contractors Profit & Overhead	634.39	@15.00%	95.16	
		Total			729.55	
		Add Cost Index	729.55	@35.59%	259.65	
		Total			989.20	
		GRAND TOTAL		each	989.20	
Note						
2.003-Specification code: 2.15.2						

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Supplying and fixing following rating, four pole, (three phase and neutral), 415 volts, residual current circuit breaker (RCCB), having a sensitivity current upto 300 milliamperes in the existing MCB DB complete with connections, testing and commissioning etc. as required. 40 amps						
Details of cost for one each						
Material						M
1721		40 amps. rating, 4 pole RCCB, 100mA/300mA				
		each	1.00000	1885.00	1885.00	M1
Labour						L
1007		Khallasi				
		Day	0.08000	553.00	44.24	L1
1001		Wireman				
		Day	0.08000	673.00	53.84	L2
		Total	1.000	each	1983.08	
		Unit Total	1.000	each	1983.08	
		Add Cartage	1885.00	@1.00%	18.85	
		Total			2001.93	
		Add Contractors Profit & Overhead	2001.93	@15.00%	300.29	
		Total			2302.22	
		Add Cost Index	2302.22	@35.59%	819.36	
		Total			3121.58	
		GRAND TOTAL		each	3121.58	
Note						
2.004-Specification code: 2.10.4						
Supplying and fixing 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required. Triple pole						
Details of cost for one each MATERIAL						
Material						M
1709		6 amps. to 32 amps. ratings, TP MCB,				
		each	1.00000	575.00	575.00	M1
Labour						L

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
1007		Khallasi				
		Day	0.04000	553.00	22.12	L1
1001		Wireman				
		Day	0.04000	673.00	26.92	L2
		Total	1.000	each	624.04	
		Unit Total	1.000	each	624.04	
		Add Cartage	575.00	@1.00%	5.75	
		Total			629.79	
		Add Contractors Profit & Overhead	629.79	@15.00%	94.47	
		Total			724.26	
		Add Cost Index	724.26	@35.59%	257.76	
		Total			982.02	
		GRAND TOTAL		each	982.02	
Note						
2.005-Specification code: 2.10.1						
Supplying and fixing 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.						
Single pole						
Details of cost for one each MATERIAL						
Material						M
1706		6 amps. to 32 amps. ratings, SP MCB,				
		each	1.00000	102.00	102.00	M1
Labour						L
1007		Khallasi				
		Day	0.04000	553.00	22.12	L1
1001		Wireman				
		Day	0.04000	673.00	26.92	L2
		Total	1.000	each	151.04	
		Unit Total	1.000	each	151.04	
		Add Cartage	102.00	@1.00%	1.02	

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Total			152.06	
		Add Contractors Profit & Overhead	152.06	@15.00%	22.81	
		Total			174.87	
		Add Cost Index	174.87	@35.59%	62.24	
		Total			237.11	
		GRAND TOTAL		each	237.11	
Note						
2.006-Specification code: 2.11						
Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.						
Details of cost for one each MATERIAL						
Material						M
1711		Single pole, blanking plate				
		each	1.00000	5.00	5.00	M1
Labour						L
1001		Wireman				
		Day	0.00000	673.00	0.67	L1
1007		Khallasi				
		Day	0.00000	553.00	0.55	L2
		Total	1.000	each	6.22	
		Unit Total	1.000	each	6.22	
		Add Cartage	5.00	@1.00%	0.05	
		Total			6.27	
		Add Contractors Profit & Overhead	6.27	@15.00%	0.94	
		Total			7.21	
		Add Cost Index	7.21	@35.59%	2.57	
		Total			9.78	
		GRAND TOTAL		each	9.78	
Note						
2.007-Specification code: 2.3.3						
Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution						

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCBIRCCB/Isolator 12 way, Double door						
Details of cost for one each MATERIALS						
Material						M
2935		Cement, paint, sand etc.				
		L.S	1.00000	5.00	5.00	M1
1740		2+6 way, SPN, double door MCB DB				
		each	1.00000	1287.00	1287.00	M2
2855		Steel fastener 6 mm X 75 mm				
		each	4.00000	5.50	22.00	M3
Labour						L
1010		Mason, Grade 2				
		Day	0.12000	612.00	73.44	L1
1001		Wireman				
		Day	0.08000	673.00	53.84	L2
1007		Khallasi				
		Day	0.20000	553.00	110.60	L3
Total			1.000	each	1551.88	
Unit Total			1.000	each	1551.88	
Add Cartage			1314.00	@1.00%	13.14	
Total					1565.02	
Add Contractors Profit & Overhead			1565.02	@15.00%	234.75	
Total					1799.77	
Add Cost Index			1799.77	@35.59%	640.54	
Total					2440.31	
GRAND TOTAL				each	2440.31	
Note						
2.008-Specification code: 2.12.1						
Supplying and fixing following rating, double pole, 240 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.						

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
40 amps						
Details of cost for one each MATERIAL						
Material						M
1712		40 amps., 2 pole isolator				
		each	1.00000	207.00	207.00	M1
Labour						L
1007		Khallasi				
		Day	0.04000	553.00	22.12	L1
1001		Wireman				
		Day	0.04000	673.00	26.92	L2
Total			1.000	each	256.04	
Unit Total			1.000	each	256.04	
Add Cartage			207.00	@1.00%	2.07	
Total					258.11	
Add Contractors Profit & Overhead			258.11	@15.00%	38.72	
Total					296.83	
Add Cost Index			296.83	@35.59%	105.64	
Total					402.47	
GRAND TOTAL				each	402.47	
Note						
2.009-Specification code: 2.14.1						
Supplying and fixing following rating, double pole, (single phase and neutral), 240 volts, residual current circuit breaker (RCCB), having a sensitivity current upto 300 milliamperes in the existing MCB DB complete with connections, testing and commissioning etc. as required. 25 amps						
Details of cost for one each MATERIAL						
Material						M
1717		25 amps. rating, 2 pole RCCB, 100mA/300mA				
		each	1.00000	1394.00	1394.00	M1
Labour						L
1007		Khallasi				

EST No. :LSGD/PMUKILA/EST/85418/2022_17_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Day	0.05000	553.00	27.65	L1
1001		Wireman				
		Day	0.05000	673.00	33.65	L2
		Total	1.000	each	1455.30	
		Unit Total	1.000	each	1455.30	
		Add Cartage	1394.00	@1.00%	13.94	
		Total			1469.24	
		Add Contractors Profit & Overhead	1469.24	@15.00%	220.39	
		Total			1689.63	
		Add Cost Index	1689.63	@35.59%	601.34	
		Total			2290.97	
		GRAND TOTAL		each	2290.97	
Note						
2.010-Specification code: OD211544/2023-2024						
Supply and installation of dust and Vermin proof wall mounding meter box 450x375x200mm SINTEX make GSMB 4537 or equilent make with base plate suitable to fix 3 phase energy meter and fix to fix in the box 3 Nos of 63 A,415 V HRC bakelite fuse fitting with HRC fuse link,63 A 2 way neutral link etc						
Material						M
	MR	meter board syntex				
		each	1.00000	4950.00	4950.00	M1
		Total	1.000	each	4950.00	
		Unit Total	1.000	each	4950.00	
		Add Cartage	4950.00	@1.00%	49.50	
		Total			4999.50	
		Add Contractors Profit & Overhead	4999.50	@15.00%	749.93	
		Total			5749.43	
		Add Cost Index	0.00	@35.59%	0.00	
		Total			5749.43	
		GRAND TOTAL		each	5749.43	
Note						
2.011-Specification code: OD211545/2023-2024						

EST No. :LSGD/PMUKILA/EST/85418/2022_17_1_1 (Edit Id : 1)
(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Supply and providing 63ATPN disconnector fuse switch unit in sheet steel enclosure with ISI marked HRC fuse on wall / angle iron frame including drilling holes in frame making connections etc as required						
Material						M
	MR	63 A TPN Switch Disconnecter fuse unit with enclosure with ISI marked HRC fuses				
		mm	1.00000	3675.00	3675.00	M1
	MR	25x3mm bolt and nut				
		each	4.00000	2.00	8.00	M2
	MR	Rubber /PVC bushes				
		mm	4.00000	0.50	2.00	M3
	MR	R Earthing and shoulders				
		each	1.00000	11.00	11.00	M4
Labour						L
	MR718	Wireman Assistant				
		Day	0.20000	675.00	135.00	L1
	MR720	Khalasi				
		Day	0.20000	750.00	150.00	L2
		Total	1.000	each	3981.00	
		Unit Total	1.000	each	3981.00	
		Add Cartage	3696.00	@1.00%	36.96	
		Total			4017.96	
		Add Contractors Profit & Overhead	4017.96	@15.00%	602.69	
		Total			4620.65	
		Add Cost Index	0.00	@35.59%	0.00	
		Total			4620.65	
		GRAND TOTAL		each	4620.65	
Note						
2.012-Specification code: OD351860/2023-2024						
Supplying and fixing Cable End Box (Loose Wire Box) (IP 43) suitable for following triple pole and neutral, sheet steel, MCB distribution board, 415 V, on surface/ recess, complete with						

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(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
testing and commissioning etc. as required.For 4 way, Double door VERTICAL DB						
Details of cost for one each MATERIAL						
Material						M
2855		Steel fastener 6 mm X 75 mm				
		each	4.00000	5.50	22.00	M1
2935		Cement, paint, sand etc.				
		L.S	1.00000	5.00	5.00	M2
	MR	Cable End Boxes for 4 Way VERTICAL DB				
		each	1.00000	535.00	535.00	M3
Labour						L
1001		Wireman				
		Day	0.06000	673.00	40.38	L1
1010		Mason, Grade 2				
		Day	0.10000	612.00	61.20	L2
1007		Khallasi				
		Day	0.06000	553.00	33.18	L3
Total			1.000	each	696.76	
Unit Total			1.000	each	696.76	
Add Cartage			562.00	@1.00%	5.62	
Total					702.38	
Add Contractors Profit & Overhead			702.38	@15.00%	105.36	
Total					807.74	
Add Cost Index			186.33	@35.59%	66.31	
Total					874.05	
GRAND TOTAL				each	874.05	
Note						
2.013-Specification code: OD351861/2023-2024						
Supplying and fixing Cable End Box (Loose Wire Box) (IP 43) suitable for following single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with testing and commissioning etc. as required. 2For 12 way, Double door SPN MCBDB						
Material						M

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(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
2855		Steel fastener 6 mm X 75 mm				
		each	4.00000	5.50	22.00	M1
2935		Cement, paint, sand etc.				
		L.S	1.00000	5.00	5.00	M2
	MR	CABL END BOX 12WAY SPN DD DB				
		each	1.00000	420.00	420.00	M3
Labour					L	
1001		Wireman				
		Day	0.06000	673.00	40.38	L1
1010		Mason, Grade 2				
		Day	0.10000	612.00	61.20	L2
1007		Khallasi				
		Day	0.06000	553.00	33.18	L3
		Total	1.000	each	581.76	
		Unit Total	1.000	each	581.76	
		Add Cartage	447.00	@1.00%	4.47	
		Total			586.23	
		Add Contractors Profit & Overhead	586.23	@15.00%	87.93	
		Total			674.16	
		Add Cost Index	186.33	@35.59%	66.31	
		Total			740.47	
		GRAND TOTAL		each	740.47	
Note						
3:CABLES AND CABLING						
3.001-Specification code: 7.1.1						
Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required. Upto 35 sq. mm						
Details of cost for 100 metres						
Material						M

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(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
2946		Fine sand				
		cum	8.76000	806.00	7060.56	M1
2945		Common burnt clay F.P.S. (non modular) bricks class designation 7.5 =874+ 44 (Wastage @ 5%) = 918 Nos				
		each	918.00000	4.00	3672.00	M2
Labour					L	
1001		Wireman				
		Day	1.00000	673.00	673.00	L1
1007		Khallasi				
		Day	4.00000	553.00	2212.00	L2
Sub Data					S	
14.4		Civil Items : Excavation for cable trenches in soft soil, depth upto 1.2 m including dressing of sides lift upto 1.5 m, including getting out the excavated soil, refilling with sand and or good soil after laying of cable/ pipe etc in layers of 20 cm, ramming, watering and disposal of surplus excavated soil as directed, within a lead of 50 metres.				
		cum	26.26000	416.11	10927.05	S1
Total			100.000	metre	24544.61	
Unit Total			1.000	metre	245.45	
Add Cartage			107.33	@1.00%	1.07	
Total					246.52	
Add Contractors Profit & Overhead			246.52	@15.00%	36.98	
Total					283.50	
Add Cost Index			283.50	@35.59%	100.90	
Total					384.40	
GRAND TOTAL				metre	384.40	
Note						
3.002-Specification code: 7.5.1						
Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size in the existing RCC/ HUME/ METAL pipe as required. Upto 35 sq. mm						
Details of cost for 100 metres						
Labour					L	

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(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
1001		Wireman				
		Day	1.00000	673.00	673.00	L1
1007		Khallasi				
		Day	3.00000	553.00	1659.00	L2
		Total	100.000	metre	2332.00	
		Unit Total	1.000	metre	23.32	
		Add Cartage	0.00	@1.00%	0.00	
		Total			23.32	
		Add Contractors Profit & Overhead	23.32	@15.00%	3.50	
		Total			26.82	
		Add Cost Index	26.82	@35.59%	9.55	
		Total			36.37	
		GRAND TOTAL		metre	36.37	
Note						
3.003-Specification code: 7.7.1						
Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on wall surface as required. Upto 35 sq. mm (clamped with 1mm thick saddle)						
Details of cost for 100 Meters						
Material						M
2881		GI saddles 19mm x 0.55mm for conduit				
		each	226.00000	1.00	226.00	M1
2857		PVC fastener 40mm long				
		each	452.00000	0.30	135.60	M2
2854		Iron screws, 45 mm X 6 mm				
		each	452.00000	1.10	497.20	M3
2935		Cement, paint, sand etc.				
		L.S	2.00000	5.00	10.00	M4
Labour						L
1001		Wireman				

EST No. :LSGD/PMUKILA/EST/85418/2022_17_1_1 (Edit Id : 1)
(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Day	1.00000	673.00	673.00	L1
1007		Khallasi				
		Day	2.00000	553.00	1106.00	L2
1010		Mason, Grade 2				
		Day	0.50000	612.00	306.00	L3
Total			100.000	metre	2953.80	
Unit Total			1.000	metre	29.54	
Add Cartage			8.69	@1.00%	0.09	
Total					29.63	
Add Contractors Profit & Overhead			29.63	@15.00%	4.44	
Total					34.07	
Add Cost Index			34.07	@35.59%	12.13	
Total					46.20	
GRAND TOTAL				metre	46.20	
Note						
3.004-Specification code: 7.10						
Supplying and fixing cable route marker with 10 cm X 10 cm X 5 mm thick G.I. plate with inscription there on, bolted /welded to 35 mm X 35 mm X 6 mm angle iron, 60 cm long and fixing the same in ground as required.						
Details of cost for 1 No						
Material						M
2936		Painting with primer and finish paint				
		L.S	1.00000	5.00	5.00	M1
2868		16 mm X 40 mm bolts and nuts with washers				
		set	2.00000	6.30	12.60	M2
2806		35 mm X 35 mm X 5 mm angle iron				
		kg	1.97000	33.00	65.01	M3
2926		G.I. plate (10cm X 10 cm X 5 mm)				
		kg	0.39000	55.00	21.45	M4
Labour						L
1007						

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(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Khallasi				
		Day	0.12000	553.00	66.36	L1
1006		Painter				
		Day	0.08000	612.00	47.12	L2
1005		Fitter, Grade 2				
		Day	0.12000	612.00	73.44	L3
Total			1.000	no	290.98	
Unit Total			1.000	no	290.98	
Add Cartage			104.06	@1.00%	1.04	
Total					292.02	
Add Contractors Profit & Overhead			292.02	@15.00%	43.80	
Total					335.82	
Add Cost Index			335.82	@35.59%	119.52	
Total					455.34	
GRAND TOTAL				no	455.34	
Note						
3.005-Specification code: 9.1.33						
Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required. 4 X 16 sq. mm (28mm)						
Details of cost for 1 Set						
Material						M
2133		Brass compression gland for (28 mm) 4 X 16 sq. mm 1.1 KV grade cable				
		set	1.00000	59.00	59.00	M1
2203		Aluminium lugs for 16 sq.mm cable				
		each	4.00000	2.00	8.00	M2
Labour						L
1002		Cable jointer				
		Day	0.10000	673.00	67.30	L1

EST No. :LSGD/PMUKILA/EST/85418/2022_17_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
1007		Khallasi				
		Day	0.10000	553.00	55.30	L2
Total		1.000	set	189.60		
Unit Total		1.000	set	189.60		
Add Cartage		67.00	@1.00%	0.67		
Total				190.27		
Add Contractors Profit & Overhead		190.27	@15.00%	28.54		
Total				218.81		
Add Cost Index		218.81	@35.59%	77.87		
Total				296.68		
GRAND TOTAL			set	296.68		
Note						
3.006-Specification code: OD209840/2023-2024						
"Supply of the following size 1.1kV grade XLPE insulated PVC sheathed, armoured Aluminium conductor power cable confirming to IS 7098 (part 1) ammended upto date. - 4Cx16sq.mm Al Cable"						
Material					M	
	MR808	16 sqmm 4 core PVC/XLPE insulated armoured cable with aluminium conductors for working voltages up to and including 1100 volts conforming IS 1584/part I/1988 for PVC IS 7098 part I for XLPE				
		metre	1.00000	131.36	131.36	M1
Total		1.000	metre	131.36		
Unit Total		1.000	metre	131.36		
Add Cartage		131.36	@1.00%	1.31		
Total				132.67		
Add Contractors Profit & Overhead		132.67	@15.00%	19.90		
Total				152.57		
Add Cost Index		0.00	@35.59%	0.00		
Total				152.57		
GRAND TOTAL			metre	152.57		
Note						
3.007-Specification code: OD209841/2023-2024						

EST No. :LSGD/PMUKILA/EST/85418/2022_17_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Supply and laying of 3CX4sqmm submersible copper flexible cable						
Material						M
	MR	3CX4 sqmm Flat cable				
		metre	1.00000	120.00	120.00	M1
Total		1.000	metre	120.00		
Unit Total		1.000	metre	120.00		
Add Cartage		120.00	@1.00%	1.20		
Total				121.20		
Add Contractors Profit & Overhead		121.20	@15.00%	18.18		
Total				139.38		
Add Cost Index		0.00	@35.59%	0.00		
Total				139.38		
GRAND TOTAL			metre	139.38		
Note						
3.008-Specification code: OD209842/2023-2024						
Supply of the following size 1.1kV grade XLPE insulated PVC sheathed, armoured Aluminium conductor power cable confirming to IS 7098 (part 1) ammended upto date. - 2Cx10sq.mm Al Cable"						
Material						M
	MR	Supply of the following size 1.1kV grade XLPE insulated PVC sheathed, armoured Aluminium conductor power cable confirming to IS 7098 (part 1) ammended upto date. - 2Cx10sq.mm Al Cable"				
		metre	1.00000	95.00	95.00	M1
Total		1.000	metre	95.00		
Unit Total		1.000	metre	95.00		
Add Cartage		95.00	@1.00%	0.95		
Total				95.95		
Add Contractors Profit & Overhead		95.95	@15.00%	14.39		
Total				110.34		
Add Cost Index		0.00	@35.59%	0.00		
Total				110.34		
GRAND TOTAL			metre	110.34		
Note						

EST No. :LSGD/PMUKILA/EST/85418/2022_17_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
3.009-Specification code: 9.1.2						
Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required. 2 X 10 sq. mm (19mm)						
Details of cost for 1 Set						
Material						M
2202		Aluminium lugs for 10 sq. mm cable				
		each	2.00000	1.00	2.00	M1
2102		Brass compression gland (19 mm) for 2 X 10 sq. mm 1.1 KV grade cable				
		set	1.00000	26.00	26.00	M2
Labour						L
1002		Cable jointer				
		Day	0.10000	673.00	67.30	L1
1007		Khallasi				
		Day	0.10000	553.00	55.30	L2
Total		1.000	set	150.60		
Unit Total		1.000	set	150.60		
Add Cartage		28.00	@1.00%	0.28		
Total				150.88		
Add Contractors Profit & Overhead		150.88	@15.00%	22.63		
Total				173.51		
Add Cost Index		173.51	@35.59%	61.75		
Total				235.26		
GRAND TOTAL			set	235.26		
Note						
4:ELECTRICAL FITTINGS						
4.001-Specification code: 1.41						
Installation, testing and commissioning of pre - wired, fluorescent fitting/ compact fluorescent fitting of all types, complete with all accessories and tube etc. directly on ceiling/ wall, including connection with 1.5 sq.mm FRLS PVC insulated, copper conductor, single core cable and earthing etc. as required.						

EST No. :LSGD/PMUKILA/EST/85418/2022_17_1_1 (Edit Id : 1)
(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Details of cost for one each MATERIAL						
Material						M
2857		PVC fastener 40mm long				
		each	1.00000	0.30	0.30	M1
2852		Iron screws, 35 mm X 6 mm				
		each	2.00000	1.00	2.00	M2
1101		1.5 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable = 0.30 + 0.02 (Wastage @5%) = 0.32m				
		metre	0.32000	9.00	2.88	M3
Labour						L
1007		Khallasi				
		Day	0.10000	553.00	55.30	L1
1001		Wireman				
		Day	0.10000	673.00	67.30	L2
		Total	1.000	each	127.78	
		Unit Total	1.000	each	127.78	
		Add Cartage	5.18	@1.00%	0.05	
		Total			127.83	
		Add Contractors Profit & Overhead	127.83	@15.00%	19.17	
		Total			147.00	
		Add Cost Index	147.00	@35.59%	52.32	
		Total			199.32	
		GRAND TOTAL		each	199.32	
Note						
4.002-Specification code: 1.49						
Numbering of ceiling fan / exhaust fan/ fluorescent fittings as required.						
Details of cost for 100 Fans MATERIAL						
Material						M
2944		Paint				
		Litre	1.00000	170.00	170.00	M1

EST No. :LSGD/PMUKILA/EST/85418/2022_17_1_1 (Edit Id : 1)
(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Labour					L	
1007		Khallasi				
		Day	3.00000	553.00	1659.00	L1
1006		Painter				
		Day	3.00000	612.00	1836.00	L2
		Total	100.000	each	3665.00	
		Unit Total	1.000	each	36.65	
		Add Cartage	1.70	@1.00%	0.02	
		Total			36.67	
		Add Contractors Profit & Overhead	36.67	@15.00%	5.50	
		Total			42.17	
		Add Cost Index	42.17	@35.59%	15.01	
		Total			57.18	
		GRAND TOTAL		each	57.18	
Note						
4.003-Specification code: 1.50.1						
Installation of exhaust fan in the existing opening, including making good the damage connection testing, commissioning etc. as required.						
Upto 450 mm sweep						
Details of cost for one each MATERIAL:						
Material						M
2855		Steel fastener 6 mm X 75 mm				
		each	4.00000	5.50	22.00	M1
1108		16/0.20 mm (0.5 sqmm) twin core FRLS PVC sheathed, flat flexible copper cable				
		metre	1.00000	9.00	9.00	M2
Labour						L
1001		Wireman				
		Day	0.20000	673.00	134.60	L1
1007		Khallasi				
		Day	0.20000	553.00	110.60	L2

EST No. :LSGD/PMUKILA/EST/85418/2022_17_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Total	1.000	each	276.20	
		Unit Total	1.000	each	276.20	
		Add Cartage	31.00	@1.00%	0.31	
		Total			276.51	
		Add Contractors Profit & Overhead	276.51	@15.00%	41.48	
		Total			317.99	
		Add Cost Index	317.99	@35.59%	113.17	
		Total			431.16	
		GRAND TOTAL		each	431.16	

Note

4.004-Specification code: OD209834/2023-2024

Supply, conveyance, installation, testing and commissioning of ceiling fans of the following sizes using standard accessories excluding resistance type regulator, wiring the down rod with 16/0.20mm PVC insulated and PVC sheathed 650/1100V grade 3 core round copper conductor flex wire or with extended original wiring etc. as required. 1200mm sweep -5star rated ceiling fan(BLDC) complete with 300mm down rod , canopies, shackles and blades working on 230V/240V single phase A/C

Material						M
	MR	BLDC FAN WITH REGULATOR				
		each	1.00000	2100.00	2100.00	M1
		Total	1.000	each	2100.00	
		Unit Total	1.000	each	2100.00	
		Add Cartage	2100.00	@1.00%	21.00	
		Total			2121.00	
		Add Contractors Profit & Overhead	2121.00	@15.00%	318.15	
		Total			2439.15	
		Add Cost Index	0.00	@35.59%	0.00	
		Total			2439.15	
		GRAND TOTAL		each	2439.15	

Note

4.005-Specification code: OD209835/2023-2024

Supply of indoor industrial surface mounted LED tube and batten along with driver , surge protector, system wattage of 20+/-2 Watts, lumen output of lamp greater than 1600lumen, power factor >0.9, rated life of L70 @ 50,000 hours, system efficacy greater than 70lumen/watt and

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
including all necessary accessories as required complete.						
Material						M
	MR1163	1x20 W LED box type tube fittings. The fittings shall be made from CRCA MS sheet of minimum thickness 0.50 mm nominal thickness inside & outside (including LED Tube).				
		each	1.00000	848.21	848.21	M1
		Total	1.000	each	848.21	
		Unit Total	1.000	each	848.21	
		Add Cartage	848.21	@1.00%	8.48	
		Total			856.69	
		Add Contractors Profit & Overhead	856.69	@15.00%	128.50	
		Total			985.19	
		Add Cost Index	0.00	@35.59%	0.00	
		Total			985.19	
		GRAND TOTAL		each	985.19	
Note						
4.006-Specification code: OD209836/2023-2024						
Supply of 250 mm sweep,900 rpm light duty exhaust fan in plastic body with self opening louvers working on 230 V AC supply complete with all accessories as required.						
Material						M
	MR1196	250 mm sweep Light Duty Exhaust fan in plastic body with self opening lowers working on 230V single phase A/C				
		each	1.00000	1072.03	1072.03	M1
		Total	1.000	each	1072.03	
		Unit Total	1.000	each	1072.03	
		Add Cartage	1072.03	@1.00%	10.72	
		Total			1082.75	
		Add Contractors Profit & Overhead	1082.75	@15.00%	162.41	
		Total			1245.16	
		Add Cost Index	0.00	@35.59%	0.00	
		Total			1245.16	
		GRAND TOTAL		each	1245.16	
Note						

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
4.007-Specification code: OD209837/2023-2024						
Supply of 9W bulb						
Material						M
	MR	9W BULB				
		each	1.00000	100.00	100.00	M1
		Total	1.000	each	100.00	
		Unit Total	1.000	each	100.00	
		Add Cartage	100.00	@1.00%	1.00	
		Total			101.00	
		Add Contractors Profit & Overhead	101.00	@15.00%	15.15	
		Total			116.15	
		Add Cost Index	0.00	@35.59%	0.00	
		Total			116.15	
		GRAND TOTAL		each	116.15	
Note						
4.008-Specification code: OD209838/2023-2024						
Supply and fixing of 36/40 W, 4000 lumen LED, IP 66 street light fitting with aluminium housing, stove enameled CRCA sheet steel reflector cover, acrylic cover complete with THD 0.98, RoHS compliant, duly wired up for use on 230 V AC supply.						
Material						M
	MR	STREET LIGHT FITTING				
		each	1.00000	3600.00	3600.00	M1
		Total	1.000	each	3600.00	
		Unit Total	1.000	each	3600.00	
		Add Cartage	3600.00	@1.00%	36.00	
		Total			3636.00	
		Add Contractors Profit & Overhead	3636.00	@15.00%	545.40	
		Total			4181.40	
		Add Cost Index	0.00	@35.59%	0.00	
		Total			4181.40	
		GRAND TOTAL		each	4181.40	
Note						

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
5:EARTHING						
5.001-Specification code: 5.4						
Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.						
Details of cost for one Set MATERIAL						
Material						M
2915		600 mm X 600 mm X 6 mm thick G.I. plate				
		each	1.00000	1438.00	1438.00	M1
2945		Common burnt clay F.P.S. (non modular) bricks class designation 7.5				
		each	50.00000	4.00	200.00	M2
2948		Cement				
		tonne	0.01000	6300.00	63.00	M3
2946		Fine sand				
		cum	0.03000	806.00	24.18	M4
2943		Salt				
		kg	5.00000	8.00	40.00	M5
2825		20 mm dia. G.I.Pipe (medium class) = 2.70 + 0.14 (Wastage @ 5%) = 2.84m				
		metre	2.84000	111.00	315.24	M6
2941		Charcoal				
		kg	96.00000	8.00	768.00	M7
2919		G.I. nuts and through bolts with washer				
		each	1.00000	26.00	26.00	M8
2918		Funnel				
		each	1.00000	19.00	19.00	M9
2922		CI/MS cover plate hinged to FRL Same with Locking arrangement				
		each	1.00000	277.00	277.00	M10
Labour						L
1010		Mason, Grade 2				
		Day	0.20000	612.00	122.40	L1
1001						

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Wireman				
		Day	0.50000	673.00	336.50	L2
1007		Khallasi				
		Day	0.50000	553.00	276.50	L3
1012		Beldar/coolie				
		Day	1.45000	553.00	801.85	L4
Total			1.000	set	4707.67	
Unit Total			1.000	set	4707.67	
Add Cartage			3170.42	@1.00%	31.70	
Total					4739.37	
Add Contractors Profit & Overhead			4739.37	@15.00%	710.91	
Total					5450.28	
Add Cost Index			5450.28	@35.59%	1939.75	
Total					7390.03	
GRAND TOTAL				set	7390.03	
Note						
5.002-Specification code: 5.9						
Supplying and laying 25 mm X 5 mm G.I strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with G.I. nut, bolt, spring, washer etc. as required.(Jointing shall be done by overlapping and with 2 sets of G.I. nut bolt & spring washer spaced at 50mm)						
Material						M
2913		25 mm X 6 mm G.I. strip (1.2 kg/mtr) = 30x1.2 = 36.0 + 1.8 (wastage @ 5%) = 37.8 Kg.				
		kg	37.80000	55.00	2079.00	M1
Labour						L
1007		Khallasi				
		Day	0.13000	553.00	69.13	L1
1085		Solder jointing				
		each	5.00000	12.00	60.00	L2

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
1001		Wireman				
		Day	0.13000	673.00	84.13	L3
1002		Cable jointer				
		Day	1.00000	673.00	673.00	L4
		Total	30.000	metre	2965.26	
		Unit Total	1.000	metre	98.84	
		Add Cartage	69.30	@1.00%	0.69	
		Total			99.53	
		Add Contractors Profit & Overhead	99.53	@15.00%	14.93	
		Total			114.46	
		Add Cost Index	114.46	@35.59%	40.74	
		Total			155.20	
		GRAND TOTAL		metre	155.20	
Note						
5.003-Specification code: 5.15						
Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.						
Details of cost for 10 Metres MATERIAL						
Material						M
2851		Al. Alloy/ cadmium plated iron screws, 20 mm				
		each	34.00000	0.50	17.00	M1
2917		GI saddle 20mm x 3 mm				
		each	17.00000	2.50	42.50	M2
2912		25 mm X 5 mm G.I. strip (1.0 kg/mtr) = 10x1.0 = 10.0 + 0.5 (Wastage @ 5%) = 10.5kg				
		kg	10.50000	57.00	598.50	M3
2857		PVC fastener 40mm long				
		each	17.00000	0.30	5.10	M4
Labour						L
1010		Mason, Grade 2				

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Day	0.25000	612.00	153.00	L1
1007		Khallasi				
		Day	0.75000	553.00	414.75	L2
1001		Wireman				
		Day	0.50000	673.00	336.50	L3
Total			10.000	metre	1567.35	
Unit Total			1.000	metre	156.74	
Add Cartage			66.31	@1.00%	0.66	
Total					157.40	
Add Contractors Profit & Overhead			157.40	@15.00%	23.61	
Total					181.01	
Add Cost Index			181.01	@35.59%	64.42	
Total					245.43	
GRAND TOTAL				metre	245.43	
Note						
5.004-Specification code: 90.16.1.3						
Supply and drawing bare earthing conductors of the following sizes along with wiring/ cables and giving connection as required 3.15 mm copper conductor (10 SWG)						
No. 10 SWG copper wire @0.0738kg/m MATERIALS						
Material						M
	MR2043	Copper wire 0 to 14 SWG				
		kg	3.69000	493.22	1819.98	M1
Labour						L
1016		Mate				
		Day	0.50000	553.00	276.50	L1
1001		Wireman				
		Day	0.50000	673.00	336.50	L2
Additional Charges						A
tcode		Wastage @ 5% of :(M1)				

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		L.S	0.05000	1819.98	91.00	A1
Total			50.000	metre	2523.98	
Unit Total			1.000	metre	50.48	
Add Cartage			38.22	@1.00%	0.38	
Total					50.86	
Add Contractors Profit & Overhead			50.86	@15.00%	7.63	
Total					58.49	
Add Cost Index			14.10	@35.59%	5.02	
Total					63.51	
GRAND TOTAL				metre	63.51	
Note						
6:WATER PUMP						
6.001-Specification code: OD209839/2023-2024						
Horizontal Multistage pump for Domestic Water Supply - Supply, Fixing, Testing and Commissioning of Single Phase Horizontal Multistage pump having SS Shaft, Impeller, Body. Mechanical Seal Carbon & Ceramic / Graphite Alumina. Pump should be capable to deliver 2.6 lps @ 25mtr head, Head range 8 to37mtrs (4.1 lps to 0.4 lps), with 1.1kW/1.5 HP with motor efficiency more than 85% with Wall mounting Microprocessor based common control Panel to operate the pump, Dry run , Phase Reversal Protections etc. level controller for Auto Start/ Stop Function , Digital display , Float Switches, Auto / Manual Operation with suitable rating Single Phase contactor, Overload relay, etc with all mounting accessories ,protection covering shall be IP54 with CRCA powder coated housing.						
Material						M
	MR	WATER PUMP				
		each	1.00000	35000.00	35000.00	M1
Total			1.000	each	35000.00	
Unit Total			1.000	each	35000.00	
Add Cartage			35000.00	@1.00%	350.00	
Total					35350.00	
Add Contractors Profit & Overhead			35350.00	@15.00%	5302.50	
Total					40652.50	
Add Cost Index			0.00	@35.59%	0.00	
Total					40652.50	
GRAND TOTAL				each	40652.50	

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Note						
6.002-Specification code: OD213669/2023-2024						
Providing, fixing, commission and install in position following Portable Fire Extinguisher as per BIS 2190 and BIS: 15683:2006 and with relevant ISI Stamping/Marking. ABC Dry Chemical Powder, Store Pressure Type - 4 Kg.						
Material						M
	MR2382	Fire Extinguisher-ABC 5 Kg Type				
		each	1.00000	2881.00	2881.00	M1
		Total	1.000	each	2881.00	
		Unit Total	1.000	each	2881.00	
		Add Cartage	2881.00	@1.00%	28.81	
		Total			2909.81	
		Add Contractors Profit & Overhead	2909.81	@15.00%	436.47	
		Total			3346.28	
		Add Cost Index	0.00	@35.59%	0.00	
		Total			3346.28	
		GRAND TOTAL		each	3346.28	
Note						
6.003-Specification code: OD213672/2023-2024						
Supplying and installing in position self glowing sign boards of size (150 X 400 mm) made of luminescentsafely, rigid sheet in green colour, photo luminescent ACP sheet in protective glass with two hangingchains & necessary supports to hang it on ceiling.						
Material						M
	MR	SIGN BOARD				
		each	1.00000	600.00	600.00	M1
		Total	1.000	each	600.00	
		Unit Total	1.000	each	600.00	
		Add Cartage	600.00	@1.00%	6.00	
		Total			606.00	
		Add Contractors Profit & Overhead	606.00	@15.00%	90.90	
		Total			696.90	
			0.00	@35.59%	0.00	

EST No. :LSGD/PMUKILA/EST/85418/2022_17_1_1 (Edit Id : 1)
 (Dsr year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Add Cost Index						
Total					696.90	
GRAND TOTAL				each	696.90	
Note						

Approved By

(PEN:),



Annexure – 5
Certificates and minutes



Ph : 0487-2615054

G.M.L.P. SCHOOL THIRUVATHRA

P.O. THIRUVATHRA - 680 516
E-mail : gmlpschool@gmail.com

School Code : 24215

Sub District : CHAVAKKAD

Date: 16.09.22

ഭരണ
പ്രധാനധികാരി
ജി.എം.എൽ.പി.എസ്. കോളേജ്
തിരുവത്ത്.

സർക്കാർ
ഉപജ്ഞാതാക്കൾക്ക് അറിയിപ്പ്
കീഴ്.

വിഷയം :- 1121 മാനദണ്ഡം വന്ന ഒരു സ്കൂളിന്റെ പേര് തിരുത്തലിനെക്കുറിച്ച്.

സൂചന :- പൊതുവിദ്യാഭ്യാസ വകുപ്പ്
നമ്പർ: നവ. 3032/2022 GEDN തിരുത്തലിനെക്കുറിച്ചുള്ള
16-06-2022

സർ,
ഭരണ പ്രധാന മന്ത്രിയുടെ പരിശോധനയിൽ ഉൾക്കൊള്ളുന്ന ഒരു
വിജ്ഞാപനത്തിന്റെ പേര് തെറ്റായതാണ് തെറ്റായി മാറ്റിക്കൊടുക്കുന്നത്.
സ്കൂൾ കോഡ് 24215 അധിഷ്ഠിതമായ ഒരു സ്കൂളിന്റെ
പേര് ജി.എം.എൽ.പി. സ്കൂൾ തിരുവത്ത് എന്നാണ്
ഉള്ളതെന്ന് സാക്ഷ്യപ്പെടുത്തുന്നു.

Attested



തിരുവത്ത്
16-09-2022.

VISWANADHAN, K. B.
Secretary
Chavakkad Municipality



മേൽ
പ്രധാനധികാരി
സോ.മി.കോളേജ്
[Signature]

Headmistress
GMLPS, Thiruvathra
P.O. THIRUVATHRA



Ph : 0487-2615054

G.M.L.P. SCHOOL THIRUVATHRA

P.O. THIRUVATHRA - 680 516
E-mail : gmlpschool@gmail.com

School Code : 24215

Sub District : CHAVAKKAD

Date... 3/11/2022

ജി.എം.എൽ.പി. എസ് സ്കൂളിലെ 'പുതിയ സ്കൂൾ കെട്ടിടം' നിർമ്മാണച്ചുമട്ടായി യോഗങ്ങൾ 3/11/2022 ന് 3.30ന് പി.ടി.എ. കമ്മിറ്റി കൂടി. കിലയിൽ നിന്ന് ഭരണസമിതി സ്കൂളിന്റെ പ്രവേശന മാതൃക പ്രാധാന്യപൂർവ്വം ഉദ്യോഗസ്ഥർക്കും അധ്യാപകർക്കും നൽകി. കിലയുടെ പ്രതിനിധികളും, ഗ്രൂപ്പിന്റെ അധ്യക്ഷൻമാരും കൗൺസിലർമാരും ട്രൈബ്യൂണൽ സെൻസിറ്റൈവ് വന്നതും, പല മേൽ പരിശോധനയ്ക്കായി റെഗുലർ ഭരണസമിതിയുടെ ചുമതല വർദ്ധിച്ചു. മേൽപ്പറഞ്ഞ പരിശോധനയ്ക്ക് basement ന് മാറ്റം വരുത്താൻ സാധ്യതയുള്ളതായതും മറ്റും ഉദ്യോഗസ്ഥർ പറഞ്ഞതുകൊണ്ട് ചർച്ചയ്ക്കായി.

ഭരണസമിതിയ്ക്ക് കിലയിൽ നിന്ന് പല പദ്ധതികൾ ഉണ്ടെന്നും ഓഫീസിൽ താൽപ്പര്യം വർദ്ധിച്ചതും കിലയിൽ സ്കൂൾ ഭരണസമിതിയ്ക്ക് പരിശോധനാ ഭാഗത്ത് പരിശോധനാ നിർമ്മാണമായി. ഓഫീസിൽ പരിശോധനയ്ക്ക് കൊണ്ട് കൂടിയതും കിലയിൽ നൽകിയതും എന്നത് സാധ്യതയുള്ളതായതും ചർച്ചയ്ക്കായി.

P.T.A കമ്മിറ്റിയിൽ ഉൾപ്പെട്ടവർ.

1. ഗുണാധിപതി P.T.A President
2. വിദ്യാർത്ഥി P.T.A അംഗം
3. അദ്ധ്യാപകൻ P.T.A അംഗം
4. സെക്രട്ടറി P.T.A അംഗം

എസ്. പ്രൊഫ. എസ്. കെ. ഹെഡ്മിസ്റ്റർ
HEADMASTER
G.M.L.P. SCHOOL
THIRUVATHRA

G.M.L.P. SCHOOL
THIRUVATHRA
SCHOOL CODE: 24215
BOISE CODE: 3201030303



COVERAGE CALCULATION SHEET

BUILDINGS	COVERED AREA
Existing Building (1)	229.94
Existing Building (2)	95.59
Existing Building (3)	43.56
Existing Building (4)	20.06
Proposed Building (1)	218.87
Total Covered Area	608.02 m ²
Total Plot Area	2475.75 m ²
Coverage	24.56 %

It is certified that the
coverage conforms KMBR 2019

Jessy T. J.
JESSY. T. J.
ASSISTANT ENGINEER
PEN-369542
CHAVAKKAD MUNICIPALITY

Rishma P. P.
RISHMA. P. P.
ASSISTANT EXECUTIVE ENGINEER
PEN No: 671066
LSGD (LID & EW)
CHAVAKKAD MUNICIPALITY



SUB SOIL INVESTIGATION REPORT
on
KILA-KIIFB PROJECT-CONSTRUCTION OF A
SCHOOL BUILDING- 1&3 CRORE CATEGORY
GLPS ,THIRUVATRA IN THRISSUR DISTRICT

CLIENT: CHIEF MANAGER,KILA,
THIRUVANANTHAPURAM

Consultant
PRAKASH BABU M
LANDMASS ENGINEERS&CONTRACTORS
KANNUR-2

JULY- 2023

INTRODUCTION

It is proposed to construct a School Building under KILA-KIIFB project, 1&3 crore category for GLPS, Thiruvatra In Thrissur District

As per letter no CM/PMU/KILA-KIIFB/G-100/21/R2 dated 04/02/2023 from the Chief manager, KILA issued work order for soil investigation to M/S Landmass Engineers and contractors Kannur-2. Accordingly the sub soil investigation was carried out.

DETAILS OF SITE

The proposed site is situated at Thiruvatra. Two bore holes were taken at the proposed site. The location of Bore hole was marked in the location and shown in map. Fig-1.

DETAILS OF INVESTIGATION

Wash boring equipment was mobilized at the site on 24/02/2023 and the work was completed on 25/02/23. Bentonite slurry was used to keep the bore hole intact. Standard penetration test were conducted at regular intervals or wherever there is a change in soil strata.

The soil profile obtained during investigation in Two boreholes is presented in bore log chart

ANALYSIS OF RESULTS

General soil profile at the site is almost same. The soil profile are as follows:

In BH1, silty sandy clay was seen formed up to 2.00m depth and N value at 1.50 was 16. below this depth and up to 1.20 depth decayed wood was seen formed and N value @3.00 was 7., Below 3.00 m depth and up to 12m medium sandy clay



was formed and N value at 4.50m,6.00,7.50m,9.00,10.50 and 12.00 were 8,12,8,10,13 and 22 respectively. Below 12.00m fine and stiff sandy clay was seen formed up to 14.00m and below this depth medium and coarse sand layer was seen formed for a depth of 12.80m. and N values at 13.50 was 38 and at 15m,17m,19m,21m,23m,25m and 26.8m were RB respectively Hard rock was seen formed at 26.80 Boring terminated at 27.80 m depth .

In BH2, fine sandy soil was seen formed up to 1.80m depth and N value at 1.50 was 15. below this depth and up to 1.00 depth decayed wood was seen formed and N value @3.00 was 7., Below 3.00 m depth and up to 12m medium sandy clay was formed for 4.30 depth. and N value at 4.50m,6.00, and 7.50m were 7,11.7 respectively. Below this depth fine sandy clay was seen formed for 5.20m depth and N value at 9.00,10.50 and 12.00 were 12.,22 and 42 respectively. Below this depth fine and stiff sandy clay was seen formed up to 15.00m and below this depth medium and coarse sand layer was seen formed for a depth of 11.20m. and N values at 13.50 was >50 and at 15m,17m,19m,21m,23m,25m and 26..2m were >50,>50,>50,>50,42,42 and 44 respectively Hard rock was seen formed at 26.2 Boring terminated at 27.20 m depth .

RECOMMENDATIONS

Test results from field and laboratory analysis ,it is recommended to have Pile foundation up to 15.00 m depth.. The SBC at this depth in two bore holes are >50.00t/m².



Load carrying capacity of Pile for various diameters are summarized below

Dia.of Pile in cm	Load Carrying Capacity in KN	Remarks
30	900.00	
40	1400.00	
50	1950.00	

SUMMARY

As per letter no CM/PMU/KILA-KIIFB/G-100/21/R2 dated 04/02/2023 from the Chief manager ,KILA issued work order for soil investigation to M/S Landmass Engineers and contractors Kannur-2. Accordingly the sub soil investigation was carried out.

The soil profile obtained in bore hole is presented. Based on the field tests, **Test results from field and laboratory analysis ,it is recommended to have Pile foundation up to 15.00 m depth** The above recommendations are made based on the field and laboratory tests conducted at specified locations. If any variations in soil profile or properties of soil is met with other than that mentioned in the report, fresh recommendations may be obtained from the LANDMASS, engineers & contractors ,Kannur -2



PRAKASH BABU. M, MIE
ENGINEER-A
 CHARTERED CIVIL ENGINEER (M-1764947)
 INSTITUTION OF ENGINEERS (INDIA)
 Mob: 9447216826

**LANDMASS ENGINEERS & CONTRACTORS
KANNUR-2**

PROJECT : KILA-KIIFB-COSTRUCTION OF GOVT:SCHOOLS-1&3CRORE CATEGORY

Borelog chart & Data sheet

GLPS, THIRUVATRA, THRISSUR
CLIENT: MANAGER, KILA-KIIFB PROJECT, THIRUVANANTHAPURAM

Date of Commencement : 24/02/2023

TYPE OF BORING: ROTARY DRILLING
Bore Hole No-1/2

Date of Completion: 24/02/2023

Ground water level 3.00m

Depth below GL m	Soil Profile	Visual description of soil	Thickness of layer in m	Standard penetration test data				Depth of sample		Remarks
				15 cm	30 cm	45 cm	N value			
1.50		Silty sandy clay	2.00	7	8	8	16			
3.00		Decayed wood	1.20	2	4	3	7			
4.50				3	4	4	8			
6.00				3	5	7	12			
7.50		Medium sandy clay(grey)	8.80	4	4	4	8			
9.00				4	5	5	10			
10.50				5	6	7	13			
12.00				7	8	14	22			
13.50		Fine and stiff sandy clay	2.00	13	18	20	>38			
15.00				25	>50	>50	>50			
17.00				>50	>50	>50	>50			
19.00				>50	>50	>50	>50			
21.00		Medium to Coarse sand	12.80	31	>50	>50	>50			
23.00				18	22	20	42			
25.00				17	22	22	44			
26.80				SPT REBOUND						
27.80		Hard rock	1.00							
Bore hole terminated at 27.80m										


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LANDMASS ENGINEERS & CONTRACTORS
KANNUR-2

PROJECT : KILA-KIIFB-COSTRUCTION OF GOVT:SCHOOLS-1&3CRORE CATEGORY

Borelog chart & Data sheet

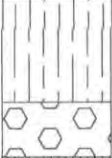
GLPS, THIRUVATRA, THRISSUR
CLIENT: MANAGER, KILA-KIIFB PROJECT, THIRUVANANTHAPURAM

Date of Commencement : 25/02/2023

TYPE OF BORING: ROTARY DRILLING
Bore Hole No-2/2

Date of Completion: 25/02/2023

Ground water level 3.00m

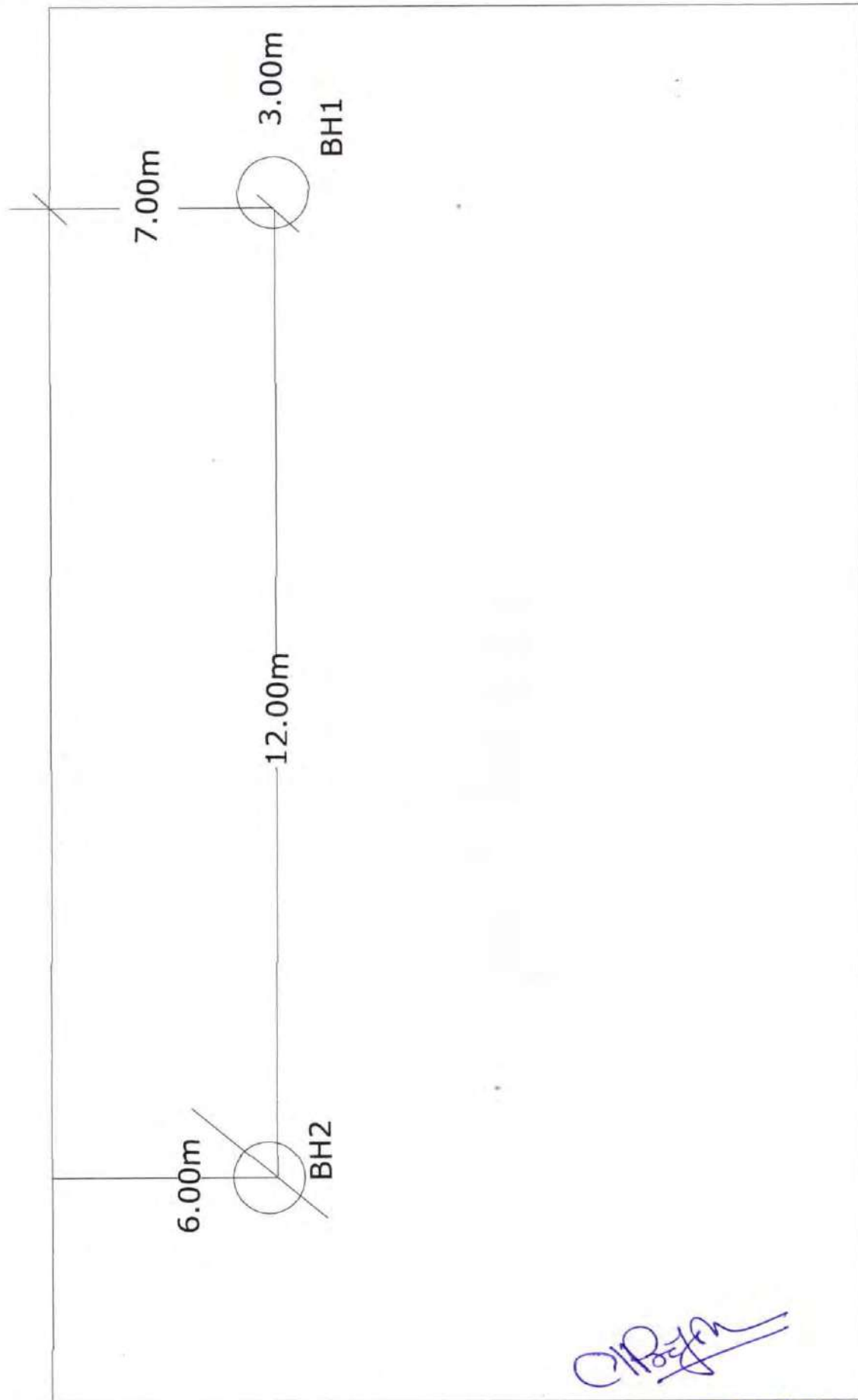
Depth below GL m	Soil Profile	Visual description of soil	Thickness of layer in m	Standard penetration test data				Depth of sample		Remarks
				15 cm	30 cm	45 cm	N value			
1.50		Fine sandy soil	1.80	7	7	8	15			
3.00		Decayed wood	1.00	2	4	3	7			
4.50		Medium sandy clay(grey)	4.30	3	3	4	7			
6.00				4	5	6	11			
7.50				3	3	4	7			
9.00		Fine sandy clay(white)	5.20	4	5	7	12			
10.50				8	8	14	22			
12.00				14	20	22	42			
13.50		Very Fine stiff sandy clay(grey)	2.70	27	>50	>50	>50			
15.00				>50	>50	>50	>50			
17.00				>50	>50	>50	>50			
19.00		Medium to Coarse sand	11.20	24	27	>50	>50			
21.00				17	22	20	42			
23.00				16	22	20	42			
25.00				17	22	22	44			
26.20				SPT REBOUND						
27.20		Hard rock	1.00							
		Bore hole terminated at 27.20m								

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ENGINEER-A
CHARTERED CIVIL ENGINEER (M-1764947)
INSTITUTION OF ENGINEERS (INDIA)
Mob: 9447216826

LOCATION OF BORE HOLE

PROJECT : KILA-KIIFB-COSTRUCTION OF GOVT:SCHOOLS-1&3CRORE CATEGORY

GVHSS . THIRUVATRA, THRISSUR DT



PRAKASH BABU. M, MIE
ENGINEER-A
CHARTERED CIVIL ENGINEER (M-1764947)
INSTITUTION OF ENGINEERS (INDIA)
Mob: 9447216826

TEST REPORT

Information's given by the Client :

Project Name	Proposed GLPS @ Thiruvathra, Trichur.			Ground Water Level : 3.00 m Below G/L		
Project Client	BH NO - 1			Total Depth In Meter : 27.80 m		
Sample Description	24/02/2023			15/07/2023		
Sampling Date	IJK/23/33			Rotary Drilling		
Lab Reference Number						

"N" Value	Depth in m	Sample Number	Type of Sample	Description of soil	Natural water content (%)	IS Classification	Liquid Limit %	Plastic Limit %	Plasticity Index	Fines %	Type of Boring			Type Of Test	Cohesion c kg/cm ²	Angle of internal friction ϕ
											Sand %	Gravel %	Specific gravity			
16	1.50	SPT-1	DS	CLAYEY SILTY, FINE SAND (GREY)	20	SM				18	82	0	2.61			
7	3.00	SPT-2	DS	CLAYEY SILTY, SANDY, DECAYED WOOD (GREYISH BLACK)	90	OL			NIL	20	20	0				
8	4.50	SPT-3	DS	SILTY CLAYEY, MEDIUM SAND (GREY)	22	SC				25	75	0				
12	6.00	SPT-4	DS	SILTY CLAYEY, MEDIUM SAND (GREY)	20	SC				22	78	0	2.61			
8	7.50	SPT-5	DS	SILTY CLAYEY, MEDIUM SAND (GREY)	22	SC	37	20	17	28	72	0				
10	9.00	SPT-6	DS	SILTY CLAYEY, MEDIUM SAND (GREY)	21	SC				25	75	0		D.S	0.06	32
13	10.50	SPT-7	DS	SILTY CLAYEY, MEDIUM SAND (GREY)	23	SC				29	71	0	2.62			
22	12.00	SPT-8	DS	SILTY CLAYEY, MEDIUM SAND (GREY)	22	SC				30	70	0				
38	13.50	SPT-9	DS	SILTY CLAYEY, MEDIUM SAND (GREY)	32	SC	46	22	24	48	52	0				
>50	15.00	SPT-10	DS	SILTY, MEDIUM TO COARSE SAND (GREY)	16	SP-SM				10	90	0	2.62			

NOTE : DECAYED WOOD IS NOT SPECIFICALLY MENTIONED


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"N" Value	Depth in m	Sample Number	Type of Sample	Description of soil	Natural water content (%)	IS Classification	Liquid Limit %	Plastic Limit %	Plasticity index	Fines %	Type of Boring			Type Of Test	Cohesion c kg/cm ²	Angle of internal friction θ
											Sand %	Gravel %	Specific gravity			
>50	17.00	SPT-11	DS	SLIGHTLY SILTY, MEDIUM TO COARSE SAND (GREY)	16	SP-SM				8	92	0	2.62	D.S	0	36
	19.00	SPT-12	DS	SLIGHTLY SILTY, MEDIUM TO COARSE SAND (GREY)	18	SP				5	95	0				
	21.00	SPT-13	DS	SLIGHTLY SILTY, MEDIUM TO COARSE SAND (GREY)	18	SP			NIL	5	95	0	2.64			
42	23.00	SPT-14	DS	SLIGHTLY SILTY, MEDIUM TO COARSE SAND (GREY)	15	SP				2	98	0		D.S	0	39
44	25.00	SPT-15	DS	SLIGHTLY SILTY, MEDIUM TO COARSE SAND (GREY)	15	SP				2	98	0	2.65			
	26.80	SPT-REBOUNDED		HARD ROCK												

Sheet No : 2


 PRAKASH BABU, M. MIE
 ENGINEER-A
 CHARTERED CIVIL ENGINEERS (INDIA)
 INSTITUTION OF ENGINEERS (INDIA)
 Mob: 9447216826

LOAD CARRYING CAPACITY OF PILE FOR THE PROJECT – GLPS THIRUVATRA,

THRISSUR

As per the soil recommendation, Bored cast in situ - pile foundation up to depth 15 m terminating in medium to coarse sand. The recommended load for different diameter of piles seems to be at a higher side. So providing the calculation for 0.5m diameter pile, by considering the soil profile from the report.

$$Q_u = A_p (1 + D\gamma N_\gamma + P_D N_q) + \sum_{i=1}^n K_i P_{Di} \tan \delta_i A_{si} \quad (\text{As per IS 2911-2010})$$

Ultimate Load, $Q_u = Q_b + Q_f$ Granular soil

Layer Thickness	Description of soil						
1.8 m	Fine sand soil	G	=	2.61	C	=	0 kN/m ²
		N	=	15	γ	=	17.9 kN/m ³
		ϕ	=	31			

1 m	Decayed wood	G	=	0	C	=	0 kN/m ²
		N	=	7	γ	=	0 kN/m ³
		ϕ	=	0			

4.3 m	Medium sandy clay	G	=	2.61	C	=	0 kN/m ²
		N	=	11	γ	=	18.1 kN/m ³
		ϕ	=	30			

5.2 m	Fines sandy clay	G	=	2.62	C	=	0 kN/m ²
		N	=	26	γ	=	18.3 kN/m ³
		ϕ	=	35			

2.7 m	Fine stiff sand clay	G	=	2.62	C	=	0 kN/m ²
		N	=	50	γ	=	17.6 kN/m ³
		ϕ	=	41			

Sectional Area of Pile at Base, A_b	=	0.196	m ²	0.5m dia pile
Pile Shaft Area, A_s	=	19.16	m ²	12.2m Length
Total Base Load of Pile, Q_b	=	601.41	kN	

Total Skin Load of Pile, Q_t	=	1411.91	kN	
Q_u		2013	kN	
Factor of Safety, FOS		2.5		
Allowable Load, Q_a	=	$2013/2.5$	kN	
Q_a	=	805	kN	
Pile group efficiency	=	0.8		
Q_{safe}	=	645	kN	Single pile

SHARANYA VS

5/12/2023


CHITHRA U V
PEN : 613579
Regional Manager (Technical)
Project Management Unit
KILA, Thiruvananthapuram

G.M.L.P. SCHOOL THIRUVATHRA

Ph : 0487-2615054

School Code : 24215

P.O. THIRUVATHRA - 680 516
E-mail : gmlpsschool@gmail.com

Sub District : CHAVAKKAD

Date... 22/11/2023

പ്രിയപ്പെട്ടവരേ,

KiFB

സാക്ഷ്യപത്രം.

ജി.എം.എൽ.പി. തിരുവത്ര സ്കൂളിൽ ചേർത്തിരുന്ന
സ്കൂൾ തൊട്ടിയിൽ ചേർത്തിരുന്നതിനായി സാക്ഷ്യപത്രം,
മറ്റു ജനക്കൂട്ടങ്ങളെ സൗകര്യത്തിനായി മനിലിന്റെ ഭാഗമായി
പൊതുജനങ്ങൾ. കൂടാതെ വന്നി വരുന്നതിനുള്ള
സൗകര്യം ഉറപ്പുവരുത്തുന്നതിനായി വഴി തടയ്ക്കലായി നിർമ്മിക്കുന്ന
കുറ്റികളുടെ ഡ്രിങ്ക് പൊതുജന മാനദണ്ഡം നടപ്പിലാക്കി
ഉടനെ പ്രവർത്തിക്കുന്നതാണെന്നും ഇതിനാൽ സാക്ഷ്യപത്രം
അർപ്പണം.



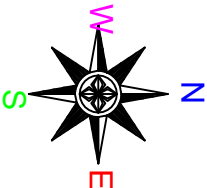
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പ്രധാനധ്യക്ഷിനി.
[Signature]
HEADMISTRESS
G. M. L. P. SCHOOL
THIRUVATHRA



G.M.L.P SCHOOL THIRUVATHRA

PLOT AREA-2475.75
COVERAGE - 24.75%

KEY MAP



PROJECT
G.M.L.P SCHOOL
BUILDING

PREPARED BY
CHAVAKKAD
MUNICIPALITY

DRAWING TITILE
SITE PLAN

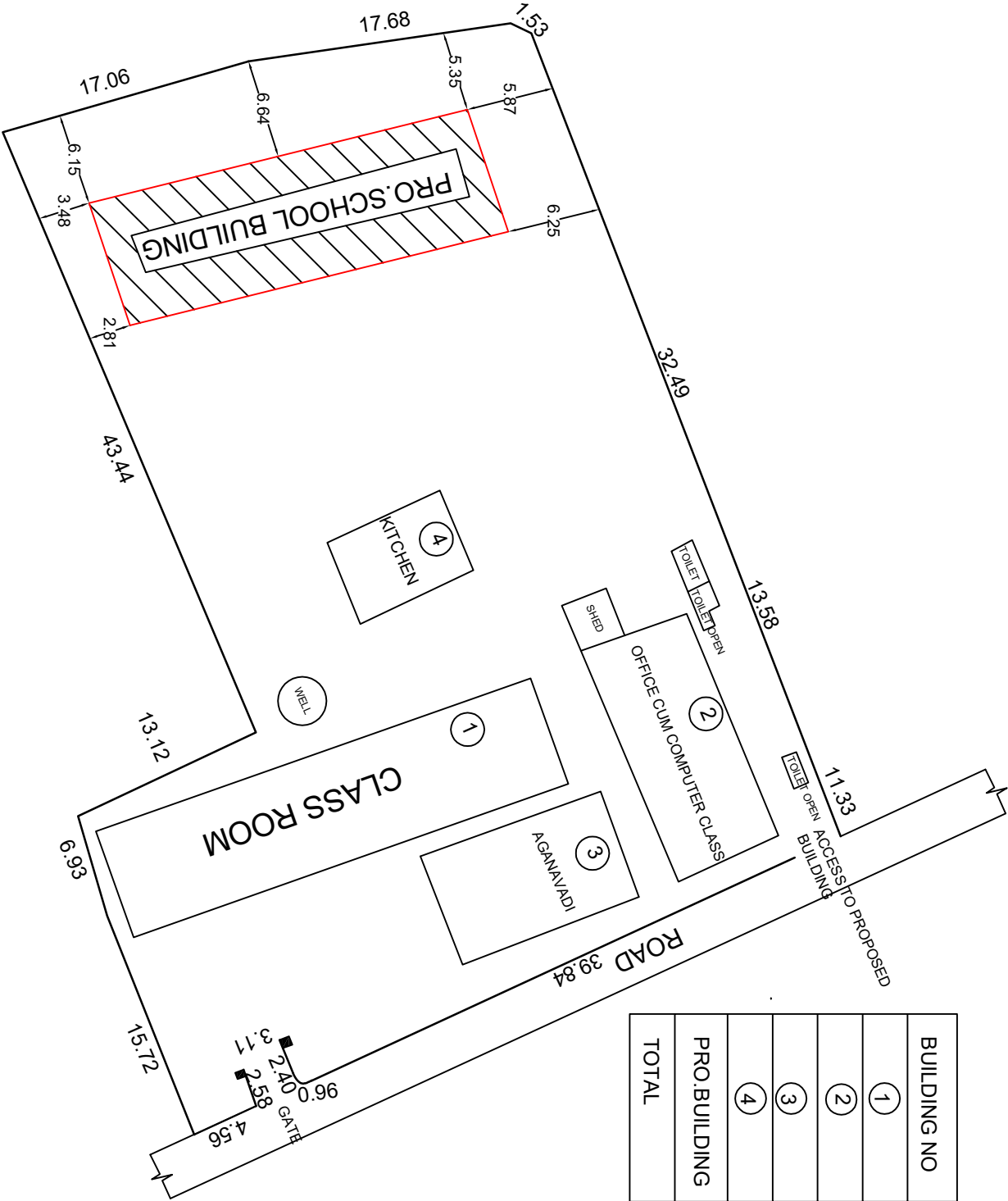
SCALE- 1:100

DRAWN BY :
ANISITHA V J
(IBPMS STAFF)

CHEKED BY :
VIJAYA C.B (PWO)

DATE : 29/09/2022

BUILDING NO	COVERED AREA
①	229.94
②	95.59
③	43.56
④	20.06
PRO BUILDING	223.6
TOTAL	612.75



SITE PLAN

Ph : 0487-2615054

G.M.L.P. SCHOOL

THIRUVATHRA

School Code : 24215

 P.O. THIRUVATHRA - 680 516
 E-mail : gmlpsschool@gmail.com

Sub District : CHAVAKKAD

Date... 16/8/2023.

Strength of school as on June 2023.

	Boys	Girls	
Students	$\frac{91}{}$	$\frac{77}{}$	$= \underline{168}$

Teachers -

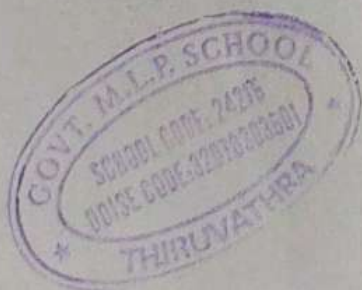
HM	-	1	} Teaching staff.
LPSA	-	4	
Preprimary TR	-	1	
Daily wage TR	-	1	

Total

7

PTCM	-	1	} Non teaching staff.
Preprimary Aya	-	1	

2



HEADMISTRESS
G.M.L.P. SCHOOL
THIRUVATHRA

File No: GED003-30-PA-01

KERALA INFRASTRUCTURE INVESTMENT FUND BOARD

NOTE

Sub:- PROJECTS -- Appraisal file for GED003-30 : Trivandrum, Kollam, Malappuram, Thrissur, Alapuzha

Note #1 Harikrishnan R, APR-2, 30-Mar-2023 04:47 PM

SPV has submitted the DPR's of the following schools.

- 1.GUPS Ayiroor (TVM)
- 2.GLPS Kuruthamkode (Trivandrum)
- 3.GLPS Kottampally ,Kollam,
- 4.GLPS Koyippad Kollam,
- 5.GLPS Edamon Kollam
- 6.GLPS Edappana Kollam
- 7.GUPS Odampally Alapuzha
8. GLPS Tharish Malappuram
9. GUPS Azhikkode Thrissur
10. GHSS Pazhamthottam

The DPR's may be seen on attachment left. File is forwarded to PE seat for forwarding the DPR's to RP for appraisal.

Note #2 Harikrishnan R, APR-2, 30-Mar-2023 04:47 PM

Action [Submit for Document Verification] in Workflow [Appraisal File Flow -v1]performed.

Note #3 Saleel K, TE-1, 03-Jun-2023 04:40 PM

Action [Submit] in Workflow [Appraisal File Flow -v1]performed.

Note #4 Harikrishnan R, APR-2, 03-Jun-2023 04:46 PM

Please see the TAR of GHSS Pazhamthottam and GUPS Odampally Alapuzha on attachment. The TAR's are forwarded to SPV for compliance.

Note #5 Harikrishnan R, APR-2, 03-Jun-2023 04:53 PM

Action [Send to SPV for updation] in Workflow [Appraisal File Flow -v1]performed.

Note #6 Dr Joy Elamon ., SPV-KILA-SPV-KILA6612, 13-Jul-2023 04:47 PM

As per the request of KIIFB file is returning.

Note #7 Dr Joy Elamon ., SPV-KILA-SPV-KILA6612, 13-Jul-2023 04:47 PM

Action [Document Updated] in Workflow [Appraisal File Flow -v1]performed.

Note #8 Harikrishnan R, APR-2, 13-Jul-2023 05:00 PM

TARs of the following schools were forwarded to SPV on 03.06.2023 .

1. GUPS Odampally
2. GHSS Pazhamthottam

Please see the TAR and Site Visit Report of the following schools:-

1. GUPS Ayiroor
2. GLPS Kuruthamkode
3. GLPS Kottampally
4. GLPS Koyippad

File is returned to SPV for TAR reply.

Note #9 Harikrishnan R, APR-2, 13-Jul-2023 05:00 PM

Action [Send to SPV for updation] in Workflow [Appraisal File Flow -v1]performed.

Note #10 Dr Joy Elamon ., SPV-KILA-SPV-KILA6612, 04-Aug-2023 11:21 AM

Submitting TAR complaine and DPR of GHSS Pazhamthom and GUPS Ayiroor.

Note #11 Dr Joy Elamon ., SPV-KILA-SPV-KILA6612, 04-Aug-2023 11:21 AM

Action [Document Updated] in Workflow [Appraisal File Flow -v1]performed.

Note #12 Harikrishnan R, APR-2, 04-Aug-2023 04:09 PM

Please see the TAR of GLPS Tarish on attachment.

Note #13 Harikrishnan R, APR-2, 04-Aug-2023 04:10 PM

Action [Send to SPV for updation] in Workflow [Appraisal File Flow -v1]performed.

Note #14 Dr Joy Elamon ., SPV-KILA-SPV-KILA6612, 04-Aug-2023 04:46 PM

Submitting TAR complaine and DPR .

Note #15 Dr Joy Elamon ., SPV-KILA-SPV-KILA6612, 04-Aug-2023 04:46 PM

Action [Document Updated] in Workflow [Appraisal File Flow -v1]performed.

Note #16 Harikrishnan R, APR-2, 10-Aug-2023 01:33 PM

As per the request from SPV, File is returned.

Note #17 Harikrishnan R, APR-2, 10-Aug-2023 01:33 PM

Action [Send to SPV for updation] in Workflow [Appraisal File Flow -v1]performed.

Note #18 Dr Joy Elamon ., SPV-KILA-SPV-KILA6612, 10-Aug-2023 01:38 PM

GLPS Koipad DPR and complaine note is submitting for approval.

Note #19 Dr Joy Elamon ., SPV-KILA-SPV-KILA6612, 10-Aug-2023 01:38 PM

Action [Document Updated] in Workflow [Appraisal File Flow -v1]performed.

Note #20 Harikrishnan R, APR-2, 18-Aug-2023 01:06 PM

Please see the TAR of Govt UP School Azhikode on attachment.

Note #21 Harikrishnan R, APR-2, 18-Aug-2023 01:07 PM

Action [Send to SPV for updation] in Workflow [Appraisal File Flow -v1]performed.

Note #22 Dr Joy Elamon ., SPV-KILA-SPV-KILA6612, 02-Sep-2023 12:13 PM

Submitting the TAR reply of GLPS TARISH

Note #23 Dr Joy Elamon ., SPV-KILA-SPV-KILA6612, 02-Sep-2023 12:13 PM

Action [Document Updated] in Workflow [Appraisal File Flow -v1]performed.

Note #24 Harikrishnan R, APR-2, 04-Sep-2023 04:36 PM

Please see the TAR reply of GLPS TARISH from SPV. Please forward the TAR reply to RP.

Note #25 (Seen.) Harikrishnan R, APR-2, 04-Sep-2023 04:37 PM

Note #26 Harikrishnan R, APR-2, 04-Sep-2023 04:37 PM

Action [Forward] in Workflow [Appraisal File Flow -v1]performed.

Note #27 Neeraja M, PE-8 (PAD), 05-Sep-2023 11:32 AM

Compliances and TAR reply has been forwarded to concerned RP's.

Note #28 Neeraja M, PE-8 (PAD), 05-Sep-2023 11:32 AM

Action [Return] in Workflow [Appraisal File Flow -v1]performed.

Note #29 Harikrishnan R, APR-2, 08-Sep-2023 12:36 PM

As per the request from SPV, file is returned to SPV.

Note #30 Harikrishnan R, APR-2, 08-Sep-2023 12:36 PM

Action [Send to SPV for updation] in Workflow [Appraisal File Flow -v1]performed.

Note #31 Dr Joy Elamon ., SPV-KILA-SPV-KILA6612, 08-Sep-2023 12:54 PM

Submitting DPR and complaince TAR of GLPS KOTTAMPALLY for approval.

Note #32 Dr Joy Elamon ., SPV-KILA-SPV-KILA6612, 08-Sep-2023 12:54 PM

Action [Document Updated] in Workflow [Appraisal File Flow -v1]performed.

Note #33 Harikrishnan R, APR-2, 19-Sep-2023 06:50 AM

Please see TAR reply of GLPS KOTTAMPALLY provided by SPV on attachment. Please forward this TAR reply to RP.

Note #34 (Seen.) Harikrishnan R, APR-2, 19-Sep-2023 06:50 AM

Note #35 Harikrishnan R, APR-2, 19-Sep-2023 06:50 AM

Action [Forward] in Workflow [Appraisal File Flow -v1]performed.

Note #36 Neeraja M, PE-8 (PAD), 23-Sep-2023 05:26 PM

TAR reply has been forwarded to RP for further actions.

Note #37 Neeraja M, PE-8 (PAD), 23-Sep-2023 05:26 PM

Action [Return] in Workflow [Appraisal File Flow -v1]performed.

Note #38 Harikrishnan R, APR-2, 21-Oct-2023 12:00 PM

As per the request from spv, file is forwarded to spv for uploading documents.

Note #39 Harikrishnan R, APR-2, 21-Oct-2023 12:02 PM

Action [Send to SPV for updation] in Workflow [Appraisal File Flow -v1]performed.

Note #40 Dr Joy Elamon ., SPV-KILA-SPV-KILA6612, 21-Oct-2023 12:06 PM

Submitting the TAR reply of GUPS Azhikode with revised DPR

Note #41 Dr Joy Elamon ., SPV-KILA-SPV-KILA6612, 21-Oct-2023 12:07 PM

Action [Document Updated] in Workflow [Appraisal File Flow -v1]performed.

Note #42 Harikrishnan R, APR-2, 23-Oct-2023 04:07 PM

Please see the TAR reply of GUPS Azhikode with revised DPR submitted by SPV on attachment. Please forward the documents to RP.

Note #43 (Seen.) Harikrishnan R, APR-2, 23-Oct-2023 04:07 PM

Note #44 Harikrishnan R, APR-2, 23-Oct-2023 04:07 PM

Action [Forward] in Workflow [Appraisal File Flow -v1] performed.

Note #45 Neeraja M, PE-8 (PAD), 30-Oct-2023 11:14 AM

Forwarded.

Note #46 Neeraja M, PE-8 (PAD), 30-Oct-2023 11:15 AM

Action [Return] in Workflow [Appraisal File Flow -v1] performed.

Note #47 Harikrishnan R, APR-2, 03-Nov-2023 11:20 AM

As per the request from SPV, File is returned to upload TAR reply.

Note #48 Harikrishnan R, APR-2, 03-Nov-2023 11:20 AM

Action [Send to SPV for updation] in Workflow [Appraisal File Flow -v1] performed.

Note #49 Dr Joy Elamon ., SPV-KILA-SPV-KILA6612, 03-Nov-2023 11:39 AM

Submitting GUPS Odampally DPR and TAR complaine for approval.

Note #50 Dr Joy Elamon ., SPV-KILA-SPV-KILA6612, 03-Nov-2023 11:39 AM

Action [Document Updated] in Workflow [Appraisal File Flow -v1] performed.

Note #51 Harikrishnan R, APR-2, 04-Nov-2023 03:52 PM

SPV has submitted GUPS Odampally DPR and TAR complaine for approval.

Note #52 (Seen.) Harikrishnan R, APR-2, 04-Nov-2023 03:53 PM

Note #53 Harikrishnan R, APR-2, 04-Nov-2023 03:53 PM

Action [Forward] in Workflow [Appraisal File Flow -v1] performed.

Note #54 (Seen.) Neeraja M, PE-8 (PAD), 15-Nov-2023 12:11 PM

Note #55 Neeraja M, PE-8 (PAD), 15-Nov-2023 12:11 PM

Action [Forward] in Workflow [Appraisal File Flow -v1] performed.

Note #56 JEESON CHERIYAN, PE-17-PAD, 15-Nov-2023 12:39 PM

As discussed, file is been forwarded.

Note #57 (Seen.) JEESON CHERIYAN, PE-17-PAD, 15-Nov-2023 12:39 PM

Note #58 JEESON CHERIYAN, PE-17-PAD, 15-Nov-2023 12:39 PM

Action [Forward] in Workflow [Appraisal File Flow -v1] performed.

Note #59 Neeraja M, PE-8 (PAD), 20-Nov-2023 01:55 PM

File may be returned to SPV.

Note #60 Neeraja M, PE-8 (PAD), 20-Nov-2023 01:55 PM

Action [Return] in Workflow [Appraisal File Flow -v1]performed.

Note #61 Harikrishnan R, APR-2, 20-Nov-2023 04:38 PM

Please see the TAR II of GUPS Azhikode and TAR of Govt LPS Edamon and TAR of Govt Tribal LPS Edappana Chadayamangalam Kollam on attachment.

Note #62 Harikrishnan R, APR-2, 20-Nov-2023 04:40 PM

Please see the TAR II of GUPS Azhikode and TAR of Govt LPS Edamon and TAR of Govt Tribal LPS Edappana Chadayamangalam Kollam on attachment.

Note #63 Harikrishnan R, APR-2, 20-Nov-2023 04:41 PM

Action [Send to SPV for updation] in Workflow [Appraisal File Flow -v1]performed.

Note #64 Dr Joy Elamon ., SPV-KILA-SPV-KILA6612, 28-Nov-2023 05:16 PM

Submitting the TAR-II reply of GUPS Azhikode for approval

Note #65 Dr Joy Elamon ., SPV-KILA-SPV-KILA6612, 28-Nov-2023 05:16 PM

Action [Document Updated] in Workflow [Appraisal File Flow -v1]performed.

Note #66 Harikrishnan R, APR-2, 05-Dec-2023 12:46 AM

Please see TAR II Reply of GUPS Azhikode given by SPV.

Note #67 (Seen.) Harikrishnan R, APR-2, 05-Dec-2023 12:47 AM

Note #68 Harikrishnan R, APR-2, 05-Dec-2023 12:47 AM

Action [Forward] in Workflow [Appraisal File Flow -v1]performed.

Note #69 (Seen.) Neeraja M, PE-8 (PAD), 13-Dec-2023 02:52 PM

Note #70 Neeraja M, PE-8 (PAD), 13-Dec-2023 02:52 PM

Action [Return] in Workflow [Appraisal File Flow -v1]performed.

Note #71 Harikrishnan R, APR-2, 16-Dec-2023 02:21 PM

Please note in the file that the TAR reply received from SPV is forwarded to RP or not.

Note #72 (Seen.) Harikrishnan R, APR-2, 16-Dec-2023 02:22 PM

Note #72 (Seen.) Harikrishnan R, APR-2, 16-Dec-2023 02:22 PM

Note #72 (Seen.) Harikrishnan R, APR-2, 16-Dec-2023 02:22 PM

Note #72 (Seen.) Harikrishnan R, APR-2, 16-Dec-2023 02:22 PM

Note #72 (Seen.) Harikrishnan R, APR-2, 16-Dec-2023 02:22 PM

Note #72 (Seen.) Harikrishnan R, APR-2, 16-Dec-2023 02:22 PM

Note #72 (Seen.) Harikrishnan R, APR-2, 16-Dec-2023 02:22 PM

Note #72 (Seen.) Harikrishnan R, APR-2, 16-Dec-2023 02:22 PM

Note #72 (Seen.) Harikrishnan R, APR-2, 16-Dec-2023 02:22 PM

Note #73 Harikrishnan R, APR-2, 16-Dec-2023 02:22 PM

Action [Forward] in Workflow [Appraisal File Flow -v1]performed.

Note #73 Harikrishnan R, APR-2, 16-Dec-2023 02:22 PM

Action [Forward] in Workflow [Appraisal File Flow -v1]performed.

Note #73 Harikrishnan R, APR-2, 16-Dec-2023 02:22 PM

Action [Forward] in Workflow [Appraisal File Flow -v1]performed.

Note #73 Harikrishnan R, APR-2, 16-Dec-2023 02:22 PM

Action [Forward] in Workflow [Appraisal File Flow -v1]performed.

Note #73 Harikrishnan R, APR-2, 16-Dec-2023 02:22 PM

Action [Forward] in Workflow [Appraisal File Flow -v1]performed.

Note #73 Harikrishnan R, APR-2, 16-Dec-2023 02:22 PM

Action [Forward] in Workflow [Appraisal File Flow -v1]performed.

Note #73 Harikrishnan R, APR-2, 16-Dec-2023 02:22 PM

Action [Forward] in Workflow [Appraisal File Flow -v1]performed.

Note #73 Harikrishnan R, APR-2, 16-Dec-2023 02:22 PM

Action [Forward] in Workflow [Appraisal File Flow -v1]performed.

Note #73 Harikrishnan R, APR-2, 16-Dec-2023 02:22 PM

Action [Forward] in Workflow [Appraisal File Flow -v1]performed.

Note #90 Neeraja M, PE-8 (PAD), 22-Dec-2023 12:27 PM

TAR II reply forwarded to RP.

Note #91 Neeraja M, PE-8 (PAD), 22-Dec-2023 12:27 PM

Action [Return] in Workflow [Appraisal File Flow -v1]performed.

Note #92 Harikrishnan R, APR-2, 18-Jan-2024 11:08 AM

As per the request from SPV, File is returned to SPV.

Note #93 Harikrishnan R, APR-2, 18-Jan-2024 11:08 AM

Action [Send to SPV for updation] in Workflow [Appraisal File Flow -v1]performed.

Note #94 Dr Joy Elamon ., SPV-KILA-SPV-KILA6612, 18-Jan-2024 12:25 PM

As per the telephonic conversation and meeting conducted from KIIFB, submitting the revised DPR of GLPS Thiruvathra and GUPS Karumathra with soil report and compliance report in cluster GED003-30 taken from GED003-29 for appraisal process.

Note #95 Dr Joy Elamon ., SPV-KILA-SPV-KILA6612, 18-Jan-2024 12:29 PM

List of schools in this cluster

1. GLPS KOIPPAD
2. GUPS ODAMPALLY
3. GHSS PAZHAMHOTTAM
4. GLPS KURUTHAMCODE
5. GLPS KOTTAMPALLY

6. GUPS AYIROOR
7. GLPS THARISH
8. GUPS AZHIKODE
9. GTLPS EDAPPANA
10. GLPS EDAMON
11. GLPS THIRUVATHRA
12. GUPS KARUMATHRA

Note #96 Dr Joy Elamon ., SPV-KILA-SPV-KILA6612, 18-Jan-2024 12:29 PM

Action [Document Updated] in Workflow [Appraisal File Flow -v1] performed.

Note #97 Harikrishnan R, APR-2, 18-Jan-2024 02:39 PM

Action [Send to SPV for updation] in Workflow [Appraisal File Flow -v1] performed.

Note #98 Dr Joy Elamon ., SPV-KILA-SPV-KILA6612, 18-Jan-2024 02:54 PM

Action [Document Updated] in Workflow [Appraisal File Flow -v1] performed.

Note #99 (Seen.) Harikrishnan R, APR-2, 19-Jan-2024 10:58 AM

Note #100 Harikrishnan R, APR-2, 19-Jan-2024 10:58 AM

Action [Forward] in Workflow [Appraisal File Flow -v1] performed.



Accounts Officer

"ഭരണഭാഷ- മാതൃഭാഷ"



കേരള സർക്കാർ

സംഗ്രഹം

പൊതുവിദ്യാഭ്യാസ വകുപ്പ് - പൊതുവിദ്യാഭ്യാസ സംരക്ഷണ യജ്ഞം പദ്ധതി - 2018-19 വർഷത്തെ ബഡ്ജറ്റ് പ്രസംഗം - ഒരു കോടി രൂപയുടെ കിഫ്ബി പദ്ധതിയിൽ ഉൾപ്പെടുത്തി പശ്ചാത്തല സൗകര്യത്തിന് തെരഞ്ഞെടുക്കപ്പെട്ട 446 സ്കൂളുകളിൽ ഉൾപ്പെട്ട 35 സ്കൂളുകളുടെ നിർമ്മാണം സാധ്യമാകാത്ത സാഹചര്യത്തിൽ പകരം സ്കൂളുകൾ ഉൾപ്പെടുത്തി പുതുക്കിയ ഭരണാനുമതി ഉത്തരവ് പുറപ്പെടുവിക്കുന്നു.

പൊതുവിദ്യാഭ്യാസ (എം) വകുപ്പ്

സ.ഉ.(സാധാ) നം.3632/2022/GEDN തീയതി, തിരുവനന്തപുരം, 16-06-2022

- പരാമർശം:-
1. സ.ഉ(സാ.ധാ)നം. 2396/2019/പൊ.വി.വ തീയതി, 18/06/2019
 2. സ.ഉ(സാ.ധാ)നം. 3302/2019/പൊ.വി.വ തീയതി, 17/08/2019
 3. വിദ്യാകിരണം, ചീഫ് എക്സിക്യൂട്ടീവ് ഓഫീസറുടെ 20/04/2022-ലെ 71/2019/KEM നമ്പർ കത്ത്

ഉത്തരവ്

പരാമർശം (1) പ്രകാരം കിഫ്ബിയുടെ 1 കോടി രൂപ ധനസഹായത്തോടെ പശ്ചാത്തല സൗകര്യ വികസനത്തിനായി തെരഞ്ഞെടുത്ത 500 നും 1000 നുമിടയിൽ കുട്ടികൾ പഠിക്കുന്ന 446 സ്കൂളുകൾക്ക് നിർമ്മാണ പ്രവർത്തനങ്ങൾക്കുള്ള ഭരണാനുമതി നൽകുകയും പരാമർശം (2) പ്രകാരം പദ്ധതി രൂപീകരണത്തിന് സ്പെഷ്യൽ പരപ്പസ് വെഹിക്കിൾ(SPV) ആയി തദ്ദേശ സ്വയംഭരണ വകുപ്പിന്റെ കീഴിലുള്ള കിലയെ ചുമതലപ്പെടുത്തിയും ഉത്തരവ് പുറപ്പെടുവിച്ചിരുന്നു. പ്രസ്തുത സ്കൂളുകളുടെ ഡി.പി.ആർ കിഫ്ബിയുടെ പരിഗണനയ്ക്കായി സമർപ്പിച്ചപ്പോൾ 23 സ്കൂളുകൾക്ക് കിഫ്ബി മറ്റു പദ്ധതികളിൽ ഫണ്ടുവരിച്ചിട്ടുള്ളതിനാൽ (ഫിഷറീസ് വകുപ്പ് മുഖാന്തിരമുള്ള തീരദേശ വികസന ഫണ്ട്) ഇനിയും തുക അനുവദിക്കില്ല എന്നറിയിച്ചതായും കൂടാതെ സ്ഥലം ലഭ്യമല്ലാത്തതും കെട്ടിടം ആവശ്യമില്ലായെന്നും കണ്ടെത്തിയതുമായ 18 സ്കൂളുകളുടെ നിർമ്മാണം സാധ്യമാകില്ല എന്നും കില അറിയിച്ചതിനെത്തുടർന്ന് തീരദേശ ഫണ്ടിലുൾപ്പെട്ട 23 സ്കൂളുകളും സ്ഥലം ലഭ്യമല്ലാത്ത 18 സ്കൂളുകളിൽ 12 സ്കൂളുകളും ഉൾപ്പെടെ 35(23+12) സ്കൂളുകളുടെ ലിസ്റ്റ് ഭരണാനുമതി ലഭ്യമാക്കുന്നതിനായി വിദ്യാകിരണം സി.ഇ.ഒ സർക്കാരിലേയ്ക്ക് ശുപാർശ ചെയ്തു.

2) സർക്കാർ ഇക്കാര്യം വിശദമായി പരിശോധിച്ചു. ആയതിന്റെ അടിസ്ഥാനത്തിൽ 2018-19 വർഷത്തെ ബഡ്ജറ്റ് പ്രസംഗത്തിന്റെ അടിസ്ഥാനത്തിൽ ഒരു കോടി രൂപയുടെ കിഫ്ബി പദ്ധതിയിൽ ഉൾപ്പെടുത്തി പശ്ചാത്തല വികസനത്തിന് തെരഞ്ഞെടുക്കപ്പെട്ട 446 സ്കൂളുകളിൽ നിർമ്മാണം സാധ്യമാകാത്ത 35 സ്കൂളുകൾക്ക് പകരം ശുപാർശ ചെയ്തിട്ടുള്ള ചുവടെ ചേർക്കുന്ന സ്കൂളുകൾക്ക് ഭരണാനുമതി നൽകി ഉത്തരവ് പുറപ്പെടുവിക്കുന്നു.

പരാമർശം (1) ലെ ഉത്തരവ് ഇപ്രകാരം ഭേദഗതികളോടെ നിലനിൽക്കുന്നതാണ്.

(ഗവർണ്ണറുടെ ഉത്തരവിൻ പ്രകാരം)

എ പി എം മുഹമ്മദ് ഹനീഷ്
പ്രിൻസിപ്പൽ സെക്രട്ടറി

പൊതുവിദ്യാഭ്യാസ ഡയറക്ടർ, തിരുവനന്തപുരം
അക്കാണ്ടൻ്റ് ജനറൽ (ആഡിറ്റ് / എ & ഇ), തിരുവനന്തപുരം
ചീഫ് എക്സിക്യൂട്ടീവ് ഓഫീസർ ,വിദ്യാകിരണം, തിരുവനന്തപുരം
ചീഫ് എക്സിക്യൂട്ടീവ് ഓഫീസർ, കിഫ്ബി, തിരുവനന്തപുരം
ഡയറക്ടർ, കില, മുളങ്കുന്നത്തുകാവ് , തൃശ്ശൂർ
ധനകാര്യ വകുപ്പ്
ഐ & പി.ആർ (വെബ് & ന്യൂ മീഡിയ) വകുപ്പ്
കരുതൽ ഫയൽ/ഓഫീസ് കോപ്പി

ഉത്തരവിൻ പ്രകാരം

സെക്ഷൻ ഓഫീസർ

പകർപ്പ് :- ബഹു.പൊതുവിദ്യാഭ്യാസ വകുപ്പ് മന്ത്രിയുടെ പി.എസിന്
പൊതുവിദ്യാഭ്യാസ വകുപ്പ് പ്രിൻസിപ്പൽ സെക്രട്ടറിയുടെ പി.എയ്ക്ക്

ANNEXURE -I

ക്രമ.നം	ജില്ല	1 കോടി കിഫ്ബി ഫണ്ടിൽ ഉൾപ്പെടുത്തി അനുമതി നൽകിയ സ്കൂളുകളിൽ not feasible category യിൽപ്പെടുന്ന സ്കൂളുകൾ	കിഫ്ബി ഫണ്ട് ലഭിക്കാത്തതിന്റെ കാരണം	പകരം ഫണ്ട് അനുവദിക്കുന്ന സ്കൂൾ
1	തിരുവനന്തപുരം	ജി.എൽ.പി.എസ് വർക്കല	നേരത്തേ തന്നെ കിഫ്ബി തുക അനുവദിച്ചിട്ടുണ്ട്. (തീരദേശ ഫണ്ട്)	ഗവൺമെന്റ് യു.പി.എസ് അയിരൂർ (School Code — 42243)
2	തിരുവനന്തപുരം	കളത്തുമ്മൽ ജി.എച്ച്.എസ്	നബാർഡ് ഫണ്ട് വഴി 6.5 കോടി രൂപയുടെ നിർമ്മാണ പ്രവർത്തനങ്ങൾ നടക്കുന്നു. കൂടുതൽ നിർമ്മാണത്തിന് സ്ഥലം ലഭ്യമല്ലാത്തതിനാൽ.	കരുതംകോട് എൽ.പി സ്കൂൾ (School Code — 44311)
3	കൊല്ലം	ജി.വി.എച്ച്.എസ്.എസ് ചെറിയഴിക്കൽ	നേരത്തേ തന്നെ കിഫ്ബി തുക അനുവദിച്ചിട്ടുണ്ട് (തീരദേശ ഫണ്ട്).	ഗവൺമെന്റ് ന്യൂഎൽ.പി.എസ് ഇടമൺ (School Code — 40408)
4	കൊല്ലം	ജി.എഫ്.എച്ച്.എസ്.എസ് കുഴിത്തറ	നേരത്തേ തന്നെ കിഫ്ബി തുക അനുവദിച്ചിട്ടുണ്ട്. (തീരദേശ ഫണ്ട്).	ജി.എൽ.പി.എസ് കൊറ്റംപള്ളി (School Code — 41206)
5	കൊല്ലം	യു.പി.ജി.എച്ച്.എസ്.എസ് കരുനാഗപ്പള്ളി	നേരത്തേ തന്നെ കിഫ്ബി തുക അനുവദിച്ചിട്ടുണ്ട് (തീരദേശ ഫണ്ട്).	ജി.റ്റി.എൽ.പി.എസ് ഇടപ്പന (School Code — 40202)
6	കൊല്ലം	ജി.എച്ച്.എസ് ചിറക്കര	നേരത്തേ തന്നെ കിഫ്ബി തുക അനുവദിച്ചിട്ടുണ്ട് (തീരദേശ ഫണ്ട്).	ജി.എൽ.പി.എസ് കോയിപ്പാട് (School Code —)
7	കൊല്ലം	ജി.എച്ച്.എസ്.എസ് വെസ്റ്റ് കല്ലട	നേരത്തേ തന്നെ കിഫ്ബി തുക അനുവദിച്ചിട്ടുണ്ട് (തീരദേശ ഫണ്ട്).	ജി.എൽ.പി.എസ് നെടിയവീള (School Code — 39518)
8	ആലപ്പുഴ	ജി.എച്ച്.എസ് വീയപുരം	നേരത്തേ തന്നെ കിഫ്ബി തുക അനുവദിച്ചിട്ടുണ്ട് (തീരദേശ ഫണ്ട്).	കെ.കെ.കുമാരപിള്ള സ്മാരക ഗവണ്മെന്റ് ഹൈസ്കൂൾ കരുമാടി (School Code — 46017)
9	ആലപ്പുഴ	ജി.യു.പി.എസ് കാർത്തികപ്പള്ളി	നേരത്തേ തന്നെ കിഫ്ബി തുക അനുവദിച്ചിട്ടുണ്ട് (തീരദേശ ഫണ്ട്).	ഗവൺമെന്റ് എൽ.പി.എസ്. കാണിച്ചനല്ലൂർ (School Code — 35430)
10	ആലപ്പുഴ	ജി.വി.എച്ച്.എസ്.എസ് കോടംത്തുരുത്ത്	നേരത്തേ തന്നെ കിഫ്ബി തുക അനുവദിച്ചിട്ടുണ്ട് (തീരദേശ ഫണ്ട്).	ഗവണ്മെന്റ് യു.പി.എസ് ഓടമ്പള്ളി, പാണാവള്ളി (School Code —

[illegible]

ക്രമ നമ്പർ	സ്കോളർഷിപ്പ്	ജി.എഫ്.എച്ച്.എസ്.എസ് പുതിയാപ്പ	ആവശ്യമില്ല എന്ന് കണ്ടെത്തിയിട്ടുണ്ട്.	GLPS കൂടൽ (School Code — 38705)
24	കോഴിക്കോട്	ജി.വി.എച്ച്.എസ്.എസ് കുറ്റിച്ചിറ	സ്ഥലം ലഭ്യമല്ല.	ഗവണ്മെന്റ് മോഡൽ ഹയർ സെക്കന്ററി സ്കൂൾ
25	കോഴിക്കോട്	ജി.എം.യു.പി.എസ് കൊടിയത്തൂർ	സ്ഥലം ലഭ്യമല്ല.	ഗവണ്മെന്റ് യു.പി.എസ് തോട്ടമുക്കം (School Code — 47337)
26	കണ്ണൂർ	ജി.എച്ച്.എസ്.എസ് പാലയാട്	നേരത്തേ തന്നെ കിഫ്ബി തുക അനുവദിച്ചിട്ടുണ്ട് (തീരദേശ ഫണ്ട്).	ജി.യു.പി.എസ് തിമിരി (School Code — 13771)
27	കണ്ണൂർ	ജി.വി.എച്ച്.എസ്.എസ് കൊടുവള്ളി	നേരത്തേ തന്നെ കിഫ്ബി തുക അനുവദിച്ചിട്ടുണ്ട് (തീരദേശ ഫണ്ട്).	ജി.എച്ച്.എസ്.എസ് കാവുണ്ടാഗം (School Code — HS — 14010 HSE — 13112)
28	കണ്ണൂർ	ഗവൺമെന്റ് സിറ്റി എച്ച്.എസ്.എസ് കണ്ണൂർ	നേരത്തേ തന്നെ കിഫ്ബി തുക അനുവദിച്ചിട്ടുണ്ട് (തീരദേശ ഫണ്ട്).	ജി.യു.പി.എസ് മുഴക്കടം (School Code —)
29	കണ്ണൂർ	ജി.ജി.എച്ച്.എസ്.എസ് മാടായി	നേരത്തേ തന്നെ കിഫ്ബി തുക അനുവദിച്ചിട്ടുണ്ട് തീരദേശ ഫണ്ട്).	ജി.എൽ.പി.എസ് തെക്കേക്കര (School Code — 13519)
30	കണ്ണൂർ	ജി.എച്ച്.എസ്.എസ് രാമനളി	നേരത്തേ തന്നെ കിഫ്ബി തുക അനുവദിച്ചിട്ടുണ്ട് (തീരദേശ ഫണ്ട്).	ജി.എൽ.പി.എസ് നരമ്പിൽ (School Code — 13910)
31	കണ്ണൂർ	ജി.എം.യു.പി.എസ് മാടായി	സ്ഥലം ലഭ്യമല്ല.	ജി.എൻ.യു.പി.എസ് നരിക്കോട് (School Code — 13561)
32	കാസർഗോഡ്	ജി.എച്ച്.എസ്.എസ് ബങ്കറ മഞ്ചേശ്വര	നേരത്തേ തന്നെ കിഫ്ബി തുക അനുവദിച്ചിട്ടുണ്ട് (തീരദേശ ഫണ്ട്).	ജി.എച്ച്.എസ്.എസ് ഉപ്പള (School Code — HS — 11015 HSE — 14039)
33	കാസർഗോഡ്	ജി.എഫ്.എച്ച്.എസ്.എസ് പടന്നേക്കടപ്പുറം	നേരത്തേ തന്നെ കിഫ്ബി തുക അനുവദിച്ചിട്ടുണ്ട് (തീരദേശ ഫണ്ട്).	സി.എച്ച്.എം.കെ.എസ്. ജി. എച്ച്. എസ്. എസ് പെരുമ്പട്ട(School Code — HS — 12066 HSE — 14105)
34	കാസർഗോഡ്	ജി.എച്ച്.എസ്.എസ് പാക്കം	നേരത്തേ തന്നെ കിഫ്ബി തുക അനുവദിച്ചിട്ടുണ്ട് (തീരദേശ ഫണ്ട്).	ജി.യു.പി.എസ് പൂപ്പൂർ (School Code - 12244)
35	കാസർഗോഡ്	ജി.എം.യു.പി.എസ് പള്ളിക്കര	നേരത്തേ തന്നെ കിഫ്ബി തുക അനുവദിച്ചിട്ടുണ്ട്. (തീരദേശ ഫണ്ട്).	ജി.യു.പി.എസ് കൂട്ടക്കുനി (School Code — 12239)

က.စ.(ကဒယ) က.3632/2022/GEDN



GOVERNMENT OF KERALA

Abstract

Finance (Infrastructure) Department – Public Education rejuvenation Mission - KIIFB funding for Infrastructure facilities in Govt. Schools- Excess amount on account of revision of DSR to 2018 and enhancement of GST to 18% - General guidelines - orders - issued.

FINANCE (INFRASTRUCTURE) DEPARTMENT

G.O.(Rt)No. 3588/2022/Fin

Dated, Thiruvananthapuram. 12/05/2022

Read:- 1. GO(P)No. 114/2021/Fin Dated, 13.08.2021.
2. GO(P)No. 161/2021/Fin Dated, 02.12.2021.
3. Notification No. 15/2021- Central Tax (Rate) New Delhi, 18th November, 2021.

ORDER

Presently KIIFB is funding infrastructure improvement projects for Government Schools in the following categories.

1. Betterment of Infrastructure facilities in 446 schools(GED003-00) - 1 Crore
2. Betterment of Infrastructure facilities in 229 schools (GED008-00) - 3 Crore
3. PPE Mission-Upgradation of one school in each constituency
(GED005-00) – 5 Crore

On account of the adoption of DSR 2018 and enhancement of GST on public works to 18%, the cost of projects has increased roughly to 30% of the initial envisaged cost. Now various SPVs are asking for clarification and revised funding sanction.

Government have examined the matter in detail and are pleased to increase the ceiling limit for all school projects (GED 003 - 00,GED005-00,GED008-00) which are yet to be tendered/retendered and needs revision of DSR to 2018 to Rs 1.30 Cr/ 3.90 Cr/ 6.50 Cr against Rs 1 Cr/3Cr/5 Cr respectively .

(BY ORDER OF THE GOVERNOR)

ANIE JULA THOMAS
ADDITIONAL SECRETARY

To

The Principal Accountant General (A&E/ G&SSA), Kerala, Thiruvananthapuram
The Accountant General (E&RSA), Kerala,, Thiruvananthapuram
The Chief Executive Officer, Kerala Infrastructure Investment Fund Board
All SPVs
All Administrative Departments
The Nodal Officer (www.finance.kerala.gov.in / www.kiifb.org)
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Forwarded / By Order



Section Officer



TECHNICAL APPRAISAL REPORT

AUGMENTING INFRASTRUCTURE FACILITIES AT THE GOVERNMENTMAPPILA LP SCHOOL THIRUVATHRA (SCHOOLCODE:24215) IN TRISSUR DISTRICT.

Rep. No. : TAR-2023-TRAN GED003-29

Date : June 2023



1. SALIENT FEATURES

1.1 Project details in brief: -

Project details	Comments
Salient Features	
➤ Project Name	Augmenting Infrastructure Facilities – Govt. Mappila Lower Primary School Thiruvathra (School Code 24215) in Trissur District.
➤ District	Trissur
➤ Taluk	Kodungallur
➤ Constituency	Kaipamangalam
➤ Corporation/ Municipality/ Panchayat	Chavakkad Municipality
➤ Department/Client	General Education Department
➤ SPV	Kerala Institute of Local Administration (KILA) GO(Rt) No 3302/2019 GED Dt.17/08/2019
➤ Report Prepared by	Kerala Institute of Local Administration (KILA)
➤ Budget Speech Reference	Finance Budget speech 2018-19 – Under Education Protection Mission
➤ Budget Provision	₹ 1.30 Crore
➤ Project outlay	₹ 1.30 Crore
➤ Administrative sanction	i)GO(Rt) No 2396/2019/GED Dt. 18/06/2019. ii)G. O. (Rt) No. 3632/2022/GEDN Dt.16/06/2022
Functional Details	
➤ Location & Topography	Govt.Mappila Lower Primary School, Thiruvathra is located in ward of 4 ,Chavakkad Municipality of Chavakkad Taluk under Chavakkad DEO of Thrissur District.
➤ Proposal in brief	RCC framed G+1 structure with 3 classrooms in GF & 1 classroom in FF. Filler wall will be with factory-made precast solid block, steel doors, and windows, vitrified tile flooring etc.
Engineering Design	
➤ Subsoil investigation	Soil investigation report not submitted.
➤ Foundation for the proposed structure	Inverted T beam with strip footing.
➤ Drawings attached	Architectural, Structural drawing, Electrical drawings, plumbing etc. are attached.
➤ Total Built-up area	
O&M	
DLP	Defect liability period of 5 years
Details of Operation and Maintenance	O&M arrangement will be made by the administrative department/committee will be constituted by the client department.



Financial Estimate	
➤ Plinth area rate	₹ 31063/Sqm (without GST)
➤ Price	Estimate prepared in PRICE
➤ Cost Index	35.59.% (Trissur Dist.)
➤ Detailed estimate	Attached with the DPR
➤ Services	
a) Electrical	Electrical components shall be as per statutory requirements. LT 3-phase connection & lightning protection shall be as per IS: 2309 / IEC 60305.
b) Fire	The fire protection system shall be as per NBC
c) ELV	The public surveillance and public addressing system have to be provided, as an ELV system.
d) Plumbing	The domestic, and non-domestic water supply, drainage system, domestic pumps, etc. must be included in the plumbing system.
Cost Benefit Analysis	To be submitted by the SPV
Implementation Schedule & WBS	
➤ WBS chart	Attached with the DPR. An exhaustive WBS shall be submitted by the SPV.
➤ Duration	9 months
Project Management organization	Organizational structure is provided.
Contract Management Strategy	The contract management strategy is detailed in the report.
Quality Management Plan	As per IS 9001:2015
Risk assessment and Mitigation Measures	Risks during the implementation have been reported.

OBSERVATIONS

- 1) The student strength of the school at present is 116 with 62 boys & 54 girls. Teaching and the non-teaching staff are 3 & 2 respectively. As there is deficiency of The proposal includes the construction of G+1 structure having 4 classrooms with a total built-up area of 354.66 m².
- 2) This institution has 61 cent of land in Sy Nos.89 in Manathala village. Compound is fully covered by masonry wall.
- 3) Proper Soil investigation report with borehole data and foundation recommendation from Geotechnical Engineer shall be submitted, and the foundation shall be based on the recommendation of report.
- 4) The assumptions for the structural design of the building including the loading and



analysis are explained and are not satisfactory. M25 grade of concrete is proposed for all structural elements. The structure is modeled and analyzed in E Tabs software it is reported. The analysis is performed for the various load combinations as per IS: 875 - 1987. Limit state Design is carried out for RC members as per IS: 456 – 2000.

- 5) Currently, the School has single-phase electric connection.
- 6) One open well is available on the school premises. There is no rainwater harvesting system there.
- 7) There is no need for any demolition for the construction of new building.
- 8) The estimate has been prepared in PRICE based on DSR 2018 with the corresponding Cost Index(35.59%) of Trissur District.
- 9) Our assessment of the maximum axial load on columns for the 3-story structure indicate that, it will be around 500 KN. Even considering an SBC of 10 kN/m², the use of costly strip footing is unjustifiable. As such, instead of costly strip footing, isolated column footing will suffice for the structure. The savings in foundation cost could be used to complete two more classrooms. Therefore, the structural design and estimate should be revised accordingly to make the building economically viable.
- 10) The student and staff strength reported in the DPR seems to be different in different pages. Please provide the exact details of the student and staff strength so that we can correct the DPR.
- 11) Cost- Benefit ratio may also be worked out and submitted.
- 12) WBS shall also be revised, and the start and completion date may be added.
- 13) The access available at exact building location, without demolition of part of existing building may also be reported.
- 14) The Cost of Civil Works submitted is Rs1,05,19,758.66 and for Electrical Work is Rs 4,96,983.85/- and the Grand Total comes to **1,29,99,756.16** /-.
- 15) Normally, 6-classrooms can be completed with Rs 1.30 Cr in other centers. Therefore, in addition to foundation change, cost optimization is essential for all the items in the estimate.
- 16) Provision for using extra cement in RCC works: As per CTE direction wide circular no 1/335/2016-FIN, extra cement shall not be payable, Hence RCC specifications with



provisions of the same may be examined and removed accordingly while submitting the TS documents. SPV may make sure that necessary arrangements are made in tender conditions or may be removed from RCC specifications.

- 17) Minimum grade of concrete for water tanks and septic tanks: M25 grade concrete is seen considered for water tanks & septic tanks. As per IS 456 (Table 5) and IS 3370 (table 1), the minimum grade of concrete for water retaining structures shall be M30 grade – SPV shall ensure that the necessary provision is included in the TS.
- 18) Selection of flooring materials: SPV may use suitable flooring material considering the financial aspect of the project, since flooring materials doesn't have any functional importance on the project SPV may choose wisely the flooring materials to be adopted, Unwanted substitution of flooring materials as extra items and thereby creating financial implications on the project may be avoided from SPVs side.
- 19) Add for plaster drip course in seen included estimates: The item is seen included in estimates of schools. As per Cl 13.1.4.3 of CPWD specs, "All corners, arrises, angles and junctions shall be truly vertical or horizontal as the case may be and shall be carefully finished. Rounding or chamfering corners, arrises, provision of grooves at junctions etc. where required shall be done without any extra payment. Such rounding, chamfering or grooving shall be carried out with proper templates or battens to the sizes required. Hence the item shall be excluded while preparing TS estimate.
- 20) Provision of edge molding for granite flooring: The provision of edge molding for granite works is seen considered in the estimate as a separate item. This shall not be included as a separate item as the same is included in the specifications of granite flooring.
- 21) Layouts regarding the mounting height of sanitary and CP fittings shall be obtained.
- 22) A Detailed load chart regarding the existing connected load and proposed load in the premises shall be obtained.
- 23) A detailed DB & cable schedule shall be obtained.
- 24) The Electrical SLD, earthing and cable route layouts are missing in the DPR. The SPV has to submit the same. The SPV has submitted the light & power layout.
- 25) SPV may consider the quantity of 1 runs as well as 2 runs 1.5sqmm FRLS wire for the point wiring if required.
- 26) The cable end boxes shall be considered for the cable glanding.



- 27) The leakage current for the incomer breaker's of the light as well as power DB should be of 30 milliampere.
- 28) The SPV has to confirm whether the earthing type as well as the number of the pits has been considered based on the earth fault calculations.
- 29) Item 4.002 & 4.005 – The ITC of the ceiling fan has been considered twice with respect to these items. The same has to be corrected.
- 30) The rate analysis in price format of the same shall also be submitted.
- 31) Firefighting provisions as per KMBR/NBC regulations shall be considered.
- 32) Duly considering all the inferences, the revised DPR of the project should be submitted as soon as possible.



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O R D E R

Presently KIIFB is funding infrastructure improvement projects for Government Schools in the following categories.

1. Betterment of Infrastructure facilities in 446 schools(GED003-00) - 1 Crore
2. Betterment of Infrastructure facilities in 229 schools (GED008-00) - 3 Crore
3. PPE Mission-Upgradation of one school in each constituency
 (GED005-00) – 5 Crore

On account of the adoption of DSR 2018 and enhancement of GST on public works to 18%, the cost of projects has increased roughly to 30% of the initial envisaged cost. Now various SPVs are asking for clarification and revised funding sanction.

Government have examined the matter in detail and are pleased to increase the ceiling limit for all school projects (GED 003 - 00,GED005-00,GED008-00) which are yet to be tendered/retendered and needs revision of DSR to 2018 to Rs 1.30 Cr/ 3.90 Cr/ 6.50 Cr against Rs 1 Cr/3Cr/5 Cr respectively .

(BY ORDER OF THE GOVERNOR)

ANIE JULA THOMAS
ADDITIONAL SECRETARY

To

The Principal Accountant General (A&E/ G&SSA), Kerala, Thiruvananthapuram
The Accountant General (E&RSA), Kerala,, Thiruvananthapuram
The Chief Executive Officer, Kerala Infrastructure Investment Fund Board
All SPVs
All Administrative Departments
The Nodal Officer (www.finance.kerala.gov.in / www.kiifb.org)
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Section Officer

COMPLIANCE REPORT FOR OBSERVATIONS IN TAR

Report No.TAR-2023-TRAN

Project Name: GMLPS Thiruvathra

Project Code: GED003-29

SPV: KILA

Please Note that this school Comes in Guruvayur LAC,In TAR Its given as Kaipamangalam LAC

Observations:

SL	OBSERVATIONS	COMPLIANCE
1	The student strength of the school at present is 116 with 62 boys & 54 girls. Teaching and the non-teaching staff are 3 & 2 respectively. As there is deficiency of The proposal includes the construction of G+1 structure having 4 classrooms with a total built-up area of 354.66 m ² .	Updated Staff and student Strength for the current year 2023-24 Attachment 1
2	This institution has 61 cent of land in Sy Nos.89 in Manathala village. Compound is fully covered by masonry wall.	-
3	Proper Soil investigation report with borehole data and foundation recommendation from Geotechnical Engineer shall be submitted, and the foundation shall be based on the recommendation of report.	Soil investigation report is appended as Attachment 2
4	The assumptions for the structural design of the building including the loading and analysis are explained and are not satisfactory. M25 grade of concrete is proposed for all structural elements. The structure is modeled and analyzed in E Tabs software it is reported. The analysis is performed for the various load combinations as per IS: 875 - 1987. Limit	DESIGN REVISED

	state Design is carried out for RC members as per IS: 456 – 2000.	
5	Currently, the School has single-phase electric connection.	-
6	One open well is available on the school premises. There is no rainwater harvesting system there.	-
7	There is no need for any demolition for the construction of new building.	-
8	The estimate has been prepared in PRICE based on DSR 2018 with the corresponding Cost Index(35.59%) of Trissur District.	-
9	Our assessment of the maximum axial load on columns for the 3-story structure indicate that, it will be around 500 KN. Even considering an SBC of 10 kN/m ² , the use of costly strip footing is unjustifiable. As such, instead of costly strip footing, isolated column footing will suffice for the structure. The savings in foundation cost could be used to complete two more classrooms. Therefore, the structural design and estimate should be revised accordingly to make the building economically viable.	Based on the soil report, pile foundation is adopted. Detailed Estimate and drawings are attached in DPR. Only 4 class rooms can be constructed with this amount. Full finishing work & fittings of toilet in the first floor is not included in the estimate to limit the amount to 1,30,00,000/-
10	The student and staff strength reported in the DPR seems to be different in different pages. Please provide the exact details of the student and staff strength so that we can correct the DPR.	DPR Corrected as per observations
11	Cost- Benefit ratio may also be worked out and submitted.	Added
12	WBS shall also be revised, and the start and completion date may be added.	Updated with Expected start date and end date, WBS may be submitted during

		initial stage of execution
13	The access available at exact building location, without demolition of part of existing building may also be reported.	Gate is marked in site plan. After the proposed building will be functioning, Block 1 and toilet blocks in the right side will be demolished.
14	The Cost of Civil Works submitted is Rs1,05,19,758.66 and for Electrical Work is Rs 4,96,983.85/- and the Grand Total comes to 1,29,99,756.16 /-.	Estimate Updated. For Civil Work=12566657.63/- For Electrical Work=433172.4/- Grant Total=12999830.03/-
15	Normally, 6-classrooms can be completed with Rs 1.30 Cr in other centers. Therefore, in addition to foundation change, cost optimization is essential for all the items in the estimate.	Estimate revised and 4 number of classrooms are only possible.
16	Provision for using extra cement in RCC works: As per CTE direction wide circular no 1/335/2016-FIN, extra cements shall not be payable, Hence RCC specifications with provisions of the same may be examined and removed accordingly while submitting the TS documents. SPV may make sure that necessary arrangements are made in tender conditions or may be removed from RCC specifications.	Noted.
17	Minimum grade of concrete for water tanks and septic tanks: M25 grade concrete is seen considered for water tanks & septic tanks. As per IS 456(Table 5) and IS 3370 (table 1), the minimum grade of concrete for water retaining structures shall be M30 grade – SPV shall ensure that the necessary provision is included in the TS.	Noted. Ready made PVC Septic tank & polyethylene water storage tank are proposing here.

18	Selection of flooring materials: SPV may use suitable flooring material considering the financial aspect of the project, since flooring materials doesn't have any functional importance on the project SPV may choose wisely the flooring materials to be adopted, Unwanted substitution of flooring materials as extra items and thereby creating financial implications on the project may be avoided from SPVs side.	Noted.
19	Add for plaster drip course in seen included estimates: The item is seen included in estimates of schools. As per Cl 13.1.4.3 of CPWD specs, "All corners, arises, angles and junctions shall be truly vertical or horizontal as the case may be and shall be carefully finished. Rounding or chamfering corners, arrises, provision of grooves at junctions etc. where required shall be done without any extra payment. Such rounding, chamfering or grooving shall be carried out with proper templates or battens to the sizes required. Hence the item shall be excluded while preparing TS estimate.	Noted.
20	Provision of edge molding for granite flooring: The provision of edge molding for granite works is seen considered in the estimate as a separate item. This shall not be included as a separate item as the same is included in the specifications of granite flooring.	Noted.
21	Layouts regarding the mounting height of sanitary and CP fittings shall be obtained.	DPR updated with drawings

22	A Detailed load chart regarding the existing connected load and proposed load in the premises shall be obtained.	Noted and will submit along with TS.
23	A detailed DB & cable schedule shall be obtained.	Noted and will submit along with TS.
24	The Electrical SLD, earthing and cable route layouts are missing in the DPR. The SPV has to submit the same. The SPV has submitted the light & power layout.	Noted and will submit along with TS.
25	SPV may consider the quantity of 1 runs as well as 2 runs 1.5sqmm FRLS wire for the point wiring if required.	Noted.The 1 run and 2 runs of 1.5 sq mm not required.
26	The cable end boxes shall be considered for the cable glanding.	Complied.
27	The leakage current for the incomer breaker's of the light as well as power DB should be of 30 milliampere.	Leakage current for the incomer breaker is taken the same upto 300mA. while execution 30mA is to be taken.
28	The SPV has to confirm whether the earthing type as well as the number of the pits has been considered based on the earth fault calculations.	Noted.
29	Item 4.002 & 4.005 – The ITC of the ceiling fan has been considered twice with respect to these items. The same has to be corrected.	The item added for the extra length needed for the fan rad and core cables.The item removed from the Estimate.
30	The rate analysis in price format of the same shall also be submitted.	Added in DPR
31	Firefighting provisions as per KMBR/NBC regulations shall be considered.	Consider the Fire extinguisher and sign board.
32	Duly considering all the inferences, the revised DPR of the project should be submitted as soon as possible	HEREWITH SUBMITTING REVISED DPR CONSIDERING ALL THE INFERENCES.

SUB SOIL INVESTIGATION REPORT
on
KILA-KIIFB PROJECT-CONSTRUCTION OF A
SCHOOL BUILDING-1 &3 CRORE CATEGORY
GLPS ,THIRUVATRA IN THRISSUR DISTRICT

CLIENT: CHIEF MANAGER,KILA,
THIRUVANANTHAPURAM

Consultant
PRAKASH BABU M
LANDMASS ENGINEERS&CONTRACTORS
KANNUR-2

JULY- 2023

INTRODUCTION

It is proposed to construct a School Building under KILA-KIIFB project, 1&3 crore category for GLPS, Thiruvatra In Thrissur District

As per letter no CM/PMU/KILA-KIIFB/G-100/21/R2 dated 04/02/2023 from the Chief manager, KILA issued work order for soil investigation to M/S Landmass Engineers and contractors Kannur-2. Accordingly the sub soil investigation was carried out.

DETAILS OF SITE

The proposed site is situated at Thiruvatra. Two bore holes were taken at the proposed site. The location of Bore hole was marked in the location and shown in map. Fig-1.

DETAILS OF INVESTIGATION

Wash boring equipment was mobilized at the site on 24/02/2023 and the work was completed on 25/02/23. Bentonite slurry was used to keep the bore hole intact. Standard penetration test were conducted at regular intervals or wherever there is a change in soil strata.

The soil profile obtained during investigation in Two boreholes is presented in bore log chart

ANALYSIS OF RESULTS

General soil profile at the site is almost same. The soil profile are as follows:

In BH1, silty sandy clay was seen formed up to 2.00m depth and N value at 1.50 was 16. below this depth and up to 1.20 depth decayed wood was seen formed and N value @3.00 was 7., Below 3.00 m depth and up to 12m medium sandy clay



was formed and N value at 4.50m,6.00,7.50m,9.00,10.50 and 12.00 were 8,12,8,10,13 and 22 respectively. Below 12.00m fine and stiff sandy clay was seen formed up to 14.00m and below this depth medium and coarse sand layer was seen formed for a depth of 12.80m. and N values at 13.50 was 38 and at 15m,17m,19m,21m,23m,25m and 26.8m were RB respectively Hard rock was seen formed at 26.80 Boring terminated at 27.80 m depth .

In BH2, fine sandy soil was seen formed up to 1.80m depth and N value at 1.50 was 15. below this depth and up to 1.00 depth decayed wood was seen formed and N value @3.00 was 7., Below 3.00 m depth and up to 12m medium sandy clay was formed for 4.30 depth. and N value at 4.50m,6.00, and 7.50m were 7,11.7 respectively. Below this depth fine sandy clay was seen formed for 5.20m depth and N value at 9.00,10.50 and 12.00 were 12.,22 and 42 respectively. Below this depth fine and stiff sandy clay was seen formed up to 15.00m and below this depth medium and coarse sand layer was seen formed for a depth of 11.20m. and N values at 13.50 was >50 and at 15m,17m,19m,21m,23m,25m and 26.2m were >50,>50,>50,>50,42,42 and 44 respectively Hard rock was seen formed at 26.2 Boring terminated at 27.20 m depth .

RECOMMENDATIONS

Test results from field and laboratory analysis ,it is recommended to have Pile foundation up to 15.00 m depth.. The SBC calculated from 'N' Values for different layers are given below



Bore hole No.	Depth in 'm'	Soil type	Allowable bearing capacity (t/m^2)
BH ₁			
"	1.50	silty sandy clay	16.00
	3.00	Decayed wood	7.00
"	4.50	Medium sandy clay	8.00
	6.00	medium sandy clay	12.00
	7.50	Medium sandy clay	8.00
	9.00	Medium sandy clay	10.00
	10.50	Medium sandy clay	14.00
	12.00	Fine and stiff sandy clay	23.00
	13.50	Fine and stiff sandy clay	38.00
	15.00	Medium to coarse sand	>50.00
	17.00	Medium to coarse sand	>50.00
	19.00	Medium to coarse sand	>50.00
	21.00	Medium to coarse sand	>50.00
	23.00	Medium to coarse sand	43.00
	25.00	medium to coarse sand	44.00
	26.80	Hard rock	100-200
BH ₂			
"	1.50	fine sandy soil	15.00
	3.00	Decayed wood	7.00
"	4.50	Medium sandy clay	7.00
	6.00	Medium sandy clay	11.00
	7.50	Medium sandy clay	7.00
	9.00	fine sandy clay	12.00
	10.50	fine sandy clay	22.00
	12.00	Fine sandy clay	42.00
	13.50	Fine and stiff sandy clay	>50.00

	15.00	Fine and stiff sandy clay	>50.00
	17.00	Medium to coarse sand	>50.00
	19.00	Medium to coarse sand	>50.00
	21.00	Medium to coarse sand	42.00
	23.00	Medium to coarse sand	42.00
	25.00	Medium to coarse sand	44.00
	26.80	Hard rock	100-200

Load carrying capacity of Pile for various diameters are summarized below

Dia.of Pile in cm	Load Carrying Capacity in KN	Remarks
30	900.00	
40	1400.00	
50	1950.00	

SUMMARY

As per letter no CM/PMU/KILA-KIIFB/G-100/21/R2 dated 04/02/2023 from the Chief manager ,KILA issued work order for soil investigation to M/S Landmass Engineers and contractors Kannur-2. Accordingly the sub soil investigation was carried out.

The soil profile obtained in bore hole is presented. Based on the field tests, Test results from field and laboratory analysis ,it is recommended to have Pile

foundation up to 15.00 m depth The above recommendations are made based on the field and laboratory tests conducted at specified locations. If any variations in soil profile or properties of soil is met with other than that mentioned in the report, fresh recommendations may be obtained from the LANDMASS, engineers & contractors ,Kannur -2



Consultant

PRAKASH BABU. M, MIE
ENGINEER-A
CHARTED CIVIL ENGINEER (M-1764947)
INSTITUTION OF ENGINEERS (INDIA)

LANDMASS ENGINEERS & CONTRACTORS
KANNUR-2

PROJECT : KILA-KIIFB-COSTRUCTION OF GOVT:SCHOOLS-1&3CRORE CATEGORY

GLPS, THIRUVATRA, THRISSUR
CLIENT: MANAGER, KILA-KIIFB PROJECT, THIRUVANANTHAPURAM

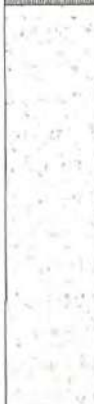
TYPE OF BORING: ROTARY DRILLING
Bore Hole No-1/2

Borelog chart & Data sheet

Date of Commencement : 24/02/2023

Date of Completion: 24/02/2023

Ground water level 3.00m

Depth below GL m	Soil Profile	Visual description of soil	Thickness of layer in m	Standard penetration test data				Depth of sample	Remarks
				15 cm	30 cm	45 cm	N value		
1.50		Silty sandy clay	2.00	7	8	8	16		
3.00		Decayed wood	1.20	2	4	3	7		
4.50		Medium sandy clay(grey)	8.80	3	4	4	8		
6.00				3	5	7	12		
7.50				4	4	4	8		
9.00				4	5	5	10		
10.50				5	6	7	13		
12.00				7	8	14	22		
13.50		Fine and stiff sandy clay	2.00	13	18	20	>38		
15.00		Medium to Coarse sand	12.80	25	>50	>50	>50		
17.00				>50	>50	>50	>50		
19.00				>50	>50	>50	>50		
21.00				31	>50	>50	>50		
23.00				18	22	20	42		
25.00				17	22	22	44		
26.80		Hard rock	1.00	SPT REBOUND					
27.80									
		Bore hole terminated at 27.80m							



PRAKASH BABU. M, MIE
ENGINEER-A
CHARTED CIVIL ENGINEER (M-1764947)
INSTITUTION OF ENGINEERS (INDIA)


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ENGINEER-A
CHARTED CIVIL ENGINEER (M-1764947)
INSTITUTION OF ENGINEERS (INDIA)

**LANDMASS ENGINEERS & CONTRACTORS
KANNUR-2**

PROJECT : KILA-KIIFB-COSTRUCTION OF GOVT:SCHOOLS-1&3CRORE CATEGORY

GLPS, THIRUVATRA, THRISSUR
CLIENT: MANAGER, KILA-KIIFB PROJECT, THIRUVANANTHAPURAM

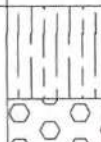
TYPE OF BORING: ROTARY DRILLING
Bore Hole No-2/2

Borelog chart & Data sheet

Date of Commencement : 25/02/2023

Date of Completion: 25/02/2023

Ground water level 3.00m

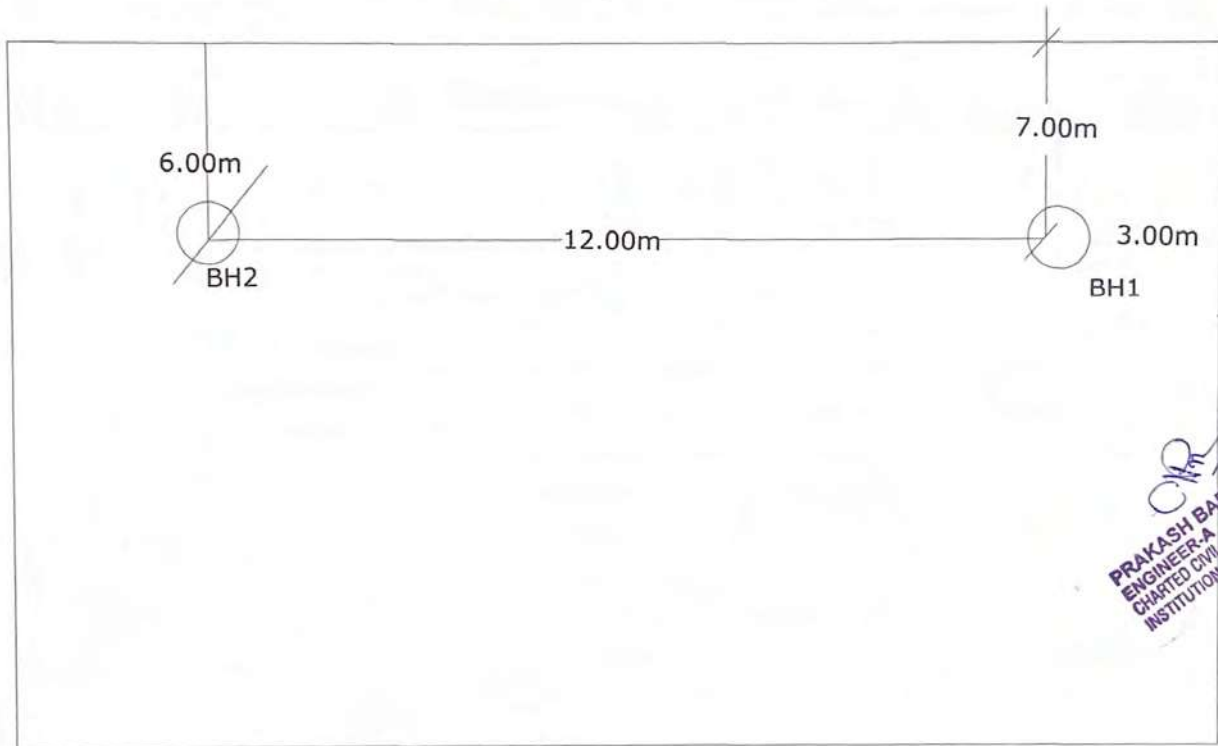
Depth below GL m	Soil Profile	Visual desription of soil	Thickness of layer in m	Standard penetration test data				Depth of sample	Remarks
				15 cm	30 cm	45 cm	N value		
1.50		Fine sandy soil	1.80	7	7	8	15		
3.00		Decayed wood	1.00	2	4	3	7		
4.50		Medium sandy clay(grey)	4.30	3	3	4	7		
6.00				4	5	6	11		
7.50				3	3	4	7		
9.00		Fine sandy clay(white)	5.20	4	5	7	12		
10.50				8	8	14	22		
12.00				14	20	22	42		
13.50		VeryFine stiff sandy clay(grey)	2.70	27	>50	>50	>50		
15.00				>50	>50	>50	>50		
17.00		Medium to Coarse sand	11.20	>50	>50	>50	>50		
19.00				24	27	>50	>50		
21.00				17	22	20	42		
23.00				16	22	20	42		
25.00				17	22	22	44		
26.20		Hard rock	1.00	SPT REBOUND					
27.20									
Bore hole terminated at 27.20m									

PRAKASH BABU. M, MIE
ENGINEER-A
CHARTED CIVIL ENGINEER (M-1784947)
FEDEATION OF ENGINEERS (INDIA)

PRAKASH BABU. M, MIE
ENGINEER-A
CHARTED CIVIL ENGINEER (M-1764947)
INSTITUTION OF ENGINEERS (INDIA)

LOCATION OF BORE HOLE

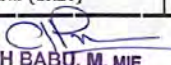
PROJECT : KILA-KIIFB-COSTRUCTION OF GOVT:SCHOOLS-1&3CRORE CATEGORY
GVHSS . THIRUVATRA, THRISSUR DT




PRAKASH BABU. M, MIE
ENGINEER-A
CHARTED CIVIL ENGINEER M-1786947
INSTITUTION OF ENGINEERS (INDIA)

TEST REPORT																
Information's given by the Client :																
Project Name		Proposed GLPS @ Thiruvathra, Trichur.										Ground Water Level : 3.00 m Below G/L				
Project Client												Total Depth In Meter :				
Sample Description		BH NO - 1										27.80 m				
Sampling Date		24-02-2023					Sample Received Date					15-07-2023				
Lab Reference Number		IJK/23/33										Type of Boring				
												Rotary Drilling				
"N" Value	Depth in m	Sample Number	Type of Sample	Description of soil	Natural water content (%)	IS Classification	Liquid Limit %	Plastic Limit %	Plasticity index	Fines %	Sand %	Gravel %	Specific gravity	Type Of Test	Cohesion c kg/cm ²	Angle of internal friction #
16	1.50	SPT-1	DS	CLAYEY SILTY, FINE SAND (GREY)	20	SM				18	82	0	2.61			
7	3.00	SPT-2	DS	CLAYEY SILTY, SANDY, DECAYED WOOD (GREYISH BLACK)	90	OL			NIL	20	20	0				
8	4.50	SPT-3	DS	SILTY CLAYEY, MEDIUM SAND (GREY)	22	SC				25	75	0				
12	6.00	SPT-4	DS	SILTY CLAYEY, MEDIUM SAND (GREY)	20	SC				22	78	0	2.61			
8	7.50	SPT-5	DS	SILTY CLAYEY, MEDIUM SAND (GREY)	22	SC	37	20	17	28	72	0				
10	9.00	SPT-6	DS	SILTY CLAYEY, MEDIUM SAND (GREY)	21	SC				25	75	0		D.S	0.06	32
13	10.50	SPT-7	DS	SILTY CLAYEY, MEDIUM SAND (GREY)	23	SC				29	71	0	2.62			
22	12.00	SPT-8	DS	SILTY CLAYEY, MEDIUM SAND (GREY)	22	SC				30	70	0				
38	13.50	SPT-9	DS	SILTY CLAYEY, MEDIUM SAND (GREY)	32	SC	46	22	24	48	52	0				
>50	15.00	SPT-10	DS	SILTY, MEDIUM TO COARSE SAND (GREY)	16	SP-SM				10	90	0	2.62			

NOTE: DECAYED WOOD IS NOT SPECIFICALLY MENTIONED



PRAKASH BABU. M, MIE
ENGINEER-A
CHARTED CIVIL ENGINEER (M-1764947)
INSTITUTION OF ENGINEERS (INDIA)

Sheet No : 1

TEST REPORT																
Information given by the Client :																
Project Name		Proposed GLPS @ Thiruvathra, Trichur.										Ground Water Level : 3.00 m Below G/L				
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Sample Description		BH NO - 1		Sampling Date		24-02-2023		Sample Received Date		15-07-2023		27.80 m				
Lab Reference Number		IJK/23/33										Type of Boring		Rotary Drilling		
"N" Value	Depth in m	Sample Number	Type of Sample	Description of soil	Natural water content (%)	IS Classification	Liquid Limit %	Plastic Limit %	Plasticity index	Fines %	Sand %	Gravel %	Specific gravity	Type Of Test	Cohesion c kg/cm ²	Angle of internal friction ϕ
>50	17.00	SPT-11	DS	SLIGHTLY SILTY, MEDIUM TO COARSE SAND (GREY)	16	SP-SM				8	92	0	2.62	D.S	0	36
	19.00	SPT-12	DS	SLIGHTLY SILTY, MEDIUM TO COARSE SAND (GREY)	18	SP				5	95	0				
	21.00	SPT-13	DS	SLIGHTLY SILTY, MEDIUM TO COARSE SAND (GREY)	18	SP			NIL	5	95	0	2.64			
42	23.00	SPT-14	DS	SLIGHTLY SILTY, MEDIUM TO COARSE SAND (GREY)	15	SP				2	98	0		D.S	0	39
44	25.00	SPT-15	DS	SLIGHTLY SILTY, MEDIUM TO COARSE SAND (GREY)	15	SP				2	98	0	2.65			
	26.80	SPT-REBO INDED		HARD ROCK												

PRAKASH BABU. M. MIE
ENGINEER-A
 CHARTED CIVIL ENGINEER (M-1764947)
 INSTITUTION OF ENGINEERS (INDIA)

Sheet No : 2



LANDMASS ENGINEERS & CONTRACTORS

Soil Investigation | Structural Design | Survey | Levels
Material Testing | Plan | Estimation & Costing | E-Tendering.

Mob: 9447216826

Prakashbabu. M

Reg.No E-2050/08/24327/KKD/917/2022/EA(ENGINEER-A),

Chartered Civil Engineer(India) M-1764947

GSTIN 32AEVPP0892E1Z8

To,

DATE 18/07/2023

The Director General
Kerala Institute Of Local Administration,
Mulamkunnathukavu PO
Thrissur 680581, Kerala, India
GSTIN: 32AABTK4493J1ZH

INVOICE NO-13

Name of work: Proposed Building Construction for GLPS at Thiruvatra, Thrissur District

GST NO: 32AEVPP0892E1Z8

PAN NO: AEVPP0892E

Sl No	DESCRIPTION	RATE	QTY	AMOUNT	REMARKS
1	Mobilization including transportation of all equipments a) Machine boring	12000	1	12000.00	
2	Shifting charge bore to bore	1500/each	1	1500.00	
3	a) Boring charge up to 10m b) 10-20 c) 20-30	5500/bore 650/m 700/m	2 bore 20.00 13.00	11000.00 13000.00 9100.00	
4	Boring through soft rock	3000/m	nil	-----	
5	Hard rock	4000/m	2.00	8000.00	
6	Recovering UD samples	nil	nil	-----	
7	Conducting SPT	250/each	32nos	8000.00	
8	Recovering Disturbed samples	250/each	32nos	8000.00	
9	Compilation of all field datas with recommendation ,	5000/set	1set	5000.00	
	Total			75600.00	
	GST 16%			13608.00	
	Grand Total			89208.00	

AMOUNT IN WORDS Eighty nine thousand two hundred eight only


PRAKASH BABU. M, MIE
ENGINEER-A
CHARTED CIVIL ENGINEER (M-1764947)
INSTITUTION OF ENGINEERS (INDIA)

TAR-II- GED003-29- GMLPS Thiruvathra

Observations:

SL	Observations	Compliance	Compliance report
1	The student strength of the school at present is 116 with 62 boys & 54 girls. Teaching and the non-teaching staff are 3 & 2 respectively. As there is deficiency of classrooms, the proposal includes the construction of G+1 structure having 4 classrooms with a total built-up area of 354.66 m ² .	Updated Staff and student Strength for the current year 2023-24 Attachment 1	Attached
3	Proper Soil investigation report with borehole data and foundation recommendation from Geotechnical Engineer shall be submitted, and the foundation shall be based on the recommendation of report.	Soil investigation report is appended as Attachment 2	Attached. Comments pertaining to the soil investigation report attached as Annexure may be seen.
4	The assumptions for the structural design of the building including the loading and analysis are explained and are not satisfactory. M25 grade of concrete is proposed for all structural elements. The structure is modeled and analyzed in E Tabs software it is reported. The analysis is performed for the various load combinations as per IS: 875 - 1987. Limit state Design is carried out for RC members as per IS: 456 – 2000.	DESIGN REVISED	Complied
9	Our assessment of the maximum axial load on columns for the 3-story structure indicate that, it will be around 500 KN. Even considering an SBC of 10 kN/m ² , the use of costly strip footing is unjustifiable. As such, instead of costly strip footing, isolated column footing will	Based on the soil report, pile foundation is adopted. Detailed Estimate and drawings are attached in DPR.	Detailed Report attached as Annexure I may be seen

	suffice for the structure. The savings in foundation cost could be used to complete two more classrooms. Therefore, the structural design and estimate should be revised accordingly to make the building economically viable.	Only 4 classrooms can be constructed with this amount. Full finishing work & fittings of toilet in the first floor is not included in the estimate to limit the amount to 1,30,00000/-	
10	The student and staff strength reported in the DPR seems to be different in different pages. Please provide the exact details of the student and staff strength so that we can correct the DPR.	DPR Corrected as per observations	Complied
11	Cost- Benefit ratio may also be worked out and submitted.	Added	Complied.
12	WBS shall also be revised, and the start and completion date may be added.	Updated with Expected start date and end date, WBS may be submitted during initial stage of execution	Noted.
13	The access available at exact building location, without demolition of part of existing building may also be reported.	Gate is marked in site plan. After the proposed building will be functioning, Block 1 and toilet blocks in the right side will be demolished.	Gate is marked in site plan. However access towards proposed building is necessary. SPV has mentioned that Block 1 and toilet blocks in right side will be demolished after functioning of Proposed building

			which is not acceptable.
14	The Cost of Civil Works submitted is Rs1,05,19,758.66 and for Electrical Work is Rs 4,96,983.85/- and the Grand Total comes to 1,29,99,756.16 /-.	Estimate Updated. For Civil Work=12566657.63/- For Electrical Work=433172.4/- Grant Total=12999830.03/-	Estimate seen updated. Hence complied.
15	Normally, 6-classrooms can be completed with Rs 1.30 Cr in other centers. Therefore, in addition to foundation change, cost optimization is essential for all the items in the estimate.	Estimate revised and 4 number of classrooms are only possible.	Considering the Comments pertaining to the soil investigation report attached as Annexure-1, cost optimization may be done.
16	Provision for using extra cement in RCC works: As per CTE direction wide circular no 1/335/2016-FIN, extra cement shall not be payable, Hence RCC specifications with provisions of the same may be examined and removed accordingly while submitting the TS documents. SPV may make sure that necessary arrangements are made in tender conditions or may be removed from RCC specifications.	Noted.	The item is not seen replaced/removed in the estimate
17	Minimum grade of concrete for water tanks and septic tanks: M25 grade concrete is seen considered for water tanks & septic tanks. As per IS 456(Table 5) and IS 3370 (table 1), the minimum grade of concrete for water retaining structures shall be M30 grade – SPV shall	Noted. Ready-made PVC Septic tank & polyethylene water storage tank are proposing here.	Noted.

	ensure that the necessary provision is included in the TS.		
18	Selection of flooring materials: SPV may use suitable flooring material considering the financial aspect of the project, since flooring materials doesn't have any functional importance on the project SPV may choose wisely the flooring materials to be adopted, Unwanted substitution of flooring materials as extra items and thereby creating financial implications on the project may be avoided from SPVs side.	Noted.	Noted
19	Add for plaster drip course in seen included estimates: The item is seen included in estimates of schools. As per Cl 13.1.4.3 of CPWD specs, "All corners, arises, angles and junctions shall be truly vertical or horizontal as the case may be and shall be carefully finished. Rounding or chamfering corners, arrises, provision of grooves at junctions etc. where required shall be done without any extra payment. Such rounding, chamfering or grooving shall be carried out with proper templates or battens to the sizes required. Hence the item shall be excluded while preparing TS estimate.	Noted.	Noted.
20	Provision of edge molding for granite flooring: The provision of edge molding for granite works is seen considered in the estimate as a separate item. This shall not be included as a separate item as the same is included in the specifications of granite flooring.	Noted.	

21	Layouts regarding the mounting height of sanitary and CP fittings shall be obtained.	DPR updated with drawings	Noted
22	A Detailed load chart regarding the existing connected load and proposed load in the premises shall be obtained.	Noted and will submit along with TS.	Load chart shall be submitted in the appraisal stage itself.
23	A detailed DB & cable schedule shall be obtained.	Noted and will submit along with TS.	Noted.
24	The Electrical SLD, earthing and cable route layouts are missing in the DPR. The SPV has to submit the same. The SPV has submitted the light & power layout.	Noted and will submit along with TS.	The Electrical SLD, earthing and cable route layouts shall be submitted in the appraisal stage itself.
25	SPV may consider the quantity of 1 runs as well as 2 runs 1.5sqmm FRLS wire for the point wiring if required.	Noted. The 1 run and 2 runs of 1.5 sq mm not required.	Noted.
26	The cable end boxes shall be considered for the cable glanding.	Complied.	Noted.
27	The leakage current for the incomer breaker's of the light as well as power DB should be of 30 milliampere.	Leakage current for the incomer breaker is taken the same upto 300mA. while execution 30mA is to be taken.	Noted.
28	The SPV has to confirm whether the earthing type as well as the number of the pits has been considered based on the earth fault calculations.	Noted.	Noted.
29	Item 4.002 & 4.005 – The ITC of the ceiling fan has been considered twice with respect to these items. The same has to be corrected.	The item added for the extra length needed for the fan rad and core cables. The item	Noted.

		removed from the Estimate.	
30	The rate analysis in price format of the same shall also be submitted.	Added in DPR	Noted.
31	Firefighting provisions as per KMBR/NBC regulations shall be considered.	Consider the Fire extinguisher and sign board.	Noted.

Annexure-I

The following comments about the revised proposal of the project: -

Based on the provided detailed estimate and soil exploration facts, it is noticed that the suggestions made by the soil investigation do not align with the foundation provisions.

The table of load-carrying capacity of piles only considers 300mm, 400mm, and 500mm piles, while the estimate proposes 600mm piles. This appears to be on the higher side; since the maximum axial load expected at the foundation for a three-story building here is less than 70 MT.

The soil exploration details submitted are found unclear. The "N" values and the safe bearing capacity (SBC) values are the same figures, which is only possible under certain conditions. As these conditions are not described in the report, there are concerns about the SBC statistics and pile load-carrying capacity.

In summary, soil exploration details furnished are not satisfactory. Safe bearing capacity of the soil, its recommendations, and the foundation provisions recommended seems doubtful. Henceforth, it is advised that a qualified geotechnical engineer be consulted to review the boring logs and provide a comprehensive, clear, and to-the-point soil exploration report.

Specifically, the following concerns may be looked into:

- The foundation provisions do not tally with the soil investigation recommendations.
- The proposed 600mm piles may be oversized for the expected load.
- The "N" values and the SBC values are the same figures, but the conditions necessary for this to be true are not specified.
- The soil exploration report is not comprehensive, clear, and to the point.
- With the present SBC, even isolated footings seem adequate.

Also, the following may also be attended.

- The exact built-up and floor areas may be added to the architectural plan.
- If toilet facilities are there on the 1st floor, the floor plan may be modified accordingly.

KIIFB Project : Detailed Project Report for Infrastructure Development of GMLPS THIRUVATHRA



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PREFACE

The Government of Kerala had taken initiatives for the Rejuvenation of Government Schools in Kerala. The Kerala Infrastructure Investment Fund Board (KIIFB) is the funding agency for this infrastructure projects. KILA PMU and LID&EW have been entrusted by Government of Kerala for the preparation of Detailed Project Report (DPR) and Execution of this project.

The scope of the work includes:

- 1) Project Feasibility Studies
- 2) Site Surveys and Investigations
- 3) Functional Design
- 4) Engineering Design
- 5) Financial Estimates and Cost projections
- 6) Revenue Streams Identification
- 7) Cost Benefit Analysis and Investment Criteria
- 8) Risk Assessment and Identification of the Mitigation Measures
- 9) Proposal for Project Management Organization
- 10) Contract Management Strategy
- 11) Implementation Schedule and Work Breakdown Structure
- 12) Statutory Clearances
- 13) Quality Management Plan
- 14) Operations and Maintenance Plan

This DPR is prepared to submit to KIIFB to avail funding assistance for the augmentations



of infrastructural facilities at **GMLPS Thiruvathra.**

Chapter 1: SALIENT FEATURES

1.	Title of the project	KILA-KIIFB Project : Detailed Project Report For Infrastructure Development of GMLPS THIRUVATHRA
2.	Department	General Education
3.	District	Thrissur
4.	Taluk	Chavakkad
5.	Corporation/Municipality/Panchayath	Chavakkad Municipality
6.	Legislative Assembly constituency	Guruvayur
7.	Implementing agency/ SPV	KILA PMU(LID&EW)
8.	DPR prepared by	KILA PMU
9.	Project outlay	1.3 Crore
10.	Budget provision	1.3 Crore
11.	Budget speech reference	
12.	Administrative sanction	
13.	Nature of the Project (New building/ Renovation of existing building)	Construction of New building with Ground Floor,First Floor & Stair Room with toilet facilities
14.	Present status of site	Site is clear.trees to be cut.
15.	Need for the project	Details in chapter 5
16.	Details of investigations/ surveys conducted	



	i. Topographical	Attached in annexure 7
	iii. Hydrological	Details in chapter 4
	iv. Others	
17.	Whether Land Acquisition involved?	No
	If yes, furnish details	
18.	Total estimated cost and item wise cost	1.3 Crore
	Whether detailed estimate attached?	Yes
19.	Details of revenue streams, if any	Chapter 8
20.	Details of Cost Benefit Analysis (CBR)	Chapter 9
21.	Details of project risks	Details in chapter 10
22.	Details of project management organization strategy	Details in chapter 11
23.	Details of contract management strategy	Details in chapter 12
24.	Details of Project Implementation Schedule	
24.	Details of statutory clearances	Details in chapter 14
26.	Quality Control infrastructure and mechanism	Details in chapter 15
27.	Operations & Maintenance(O&M) Arrangements of the project after completion	Details in chapter 16
28.	Details of attached drawings	Attached in Annexure 2
29.	Other attachments	Nil

Table 1 Salient Features

1.1 Executive Summary

The public education system of Kerala has played a significant role in developing Kerala Society and it has contributed large number of eminent and talented people to the world. However, due to various reasons, some of the Government schools are not effective and efficient. It is important to rejuvenate the Public Education System to achieve quality education at affordable cost. Rejuvenation is expected to focus on improved academic infrastructure, facilities for promoting extracurricular activities, institutionalizing a better learning practice etc.

Government of Kerala through its ambitious “**Protection of Public Education Mission (PPE Mission)**” is committed to develop world class education facilities at government schools. The project aims at the development of **Upgrading Facilities** at each school by reinforcing their existing strengths through planned intervention.

This Detailed Project Report is an attempt to understand and analyze the requirements of *GMLPS THIRUVATHRA* and propose the development plans for improving the academic and extracurricular excellence.

The key components proposed are:

1.Academic Building

The project is estimated to cost Rs.1.3crore. The school is hopeful of obtaining funding assistance of Rs. 1.3 crore from KIIFB as a part of the PPE mission of Government of Kerala.

The project phasing is planned in the following manner:



<i>Phase</i>	<i>Duration</i>	<i>Components</i>	<i>Total cost in Rs.</i>	<i>Any specific execution strategy/ preparatory act</i>
<i>Phase 1</i>	<i>9 Months</i>	<i>Detailed in Chapter 5</i>	<i>1.3 Cr</i>	<i>As mentioned in Chapter 11</i>

Table 2 Project Phasing

On implementation of the proposal, students will be benefited by improved facilities and environment which will enhance the educational, social and cultural development of the students

CHAPTER 2: PROJECT BACKGROUND

2.1. Introduction

Education is a key factor in development of societies. It helps in developing the social, cultural and economic progress of regions. Science and technology are now established as forces of great power in the shaping of the futures.

India, with more than 1.4 million schools and more than 230 million enrolments, is home to one of the largest and complex school education systems in the world along with China.

Two prominent policies of the Indian government—the Sarva Shiksha Abhiyan (SSA) in 2001 and the Right of Children to Free and Compulsory Education (RTE) Act, 2009 have seen education priorities rise amongst households and catalyzed improvements in educational performance.

In India, Kerala has shown excellent achievement in the education sector with many first of the kind achievements. Kerala was declared as a totally literate state on April 18th 1991 with the highest effective literacy rate of 89.81 per cent. In 2011, the literacy level in Kerala rose



to 93.91 per cent. The disparity, between male and female literacy, is also narrow. It has a high gender parity index (GPI) of 0.97 in the primary classes. The level of disparity in literacy in the different districts in Kerala is also very low (2.6 per cent). It also has the lowest school dropout rates among other Indian states. It was 0.81 per cent in 2006-07 The teacher-student ratio has also improved marginally.

Education practices are continuously evolving and now it is person centered type. This shift to person-centered education will mean the following core principles:

- ❖ To give high priority to nurture and promote creativity both in the personal and collective development of the learners;
- ❖ To give higher valuation to the learners' freedom to explore and inquire, to develop awareness of self and identify - to their questioning, challenging and self-learning habits, to enhance sensitivity, compassion and empathy.
- ❖ Re-direct the institutional systems in education to creative approaches
- ❖ To give strategic importance to the learning process as a person-to-person interaction the teacher and the learner, the learner and other learners, the learner and the person of knowledge or wisdom in the community.
- ❖ To impart thoughtful and well-informed awareness of the social and development problems of contemporary society such as population growth, environmental damage, poverty, racial and ideological conflicts, deepening disparities in qualities of life within the nation and internationally.

Acknowledging the change in education landscape, Government of Kerala launched its ambitious mission to rejuvenate the Public Education system in the State.

2.1.1 Protection of Public Education (PPE) Mission

Government of Kerala has launched the Nava Kerala Mission under which 4 major initiatives are being taken up: Agriculture; Housing; Health; and Education. The initiative



for Education is titled “Protection of Public Education Mission” (PPE Mission”) with the following major objectives:

- I. To upgrade 1000 Government schools to international standards.
- II. All classrooms in High School and Higher Secondary level in Government and Aided sector to be equipped with high-tech facilities and give education a new approach.
- III. To involve Teachers, Alumni, Parents, Parent Teacher Association (PTA), School Development Committee, local community including philanthropists to uplift the LP and UP classrooms to improve the quality of education and move forward according to the current trend in education.
- IV. Special packages for schools who have completed 50 years and 100 years.

Further, Government has decided that each school should prepare the master plan incorporating existing features and proposed buildings, Bio Diversity Park, children’s park, indoor and outdoor stadia, Autism Park etc. The funding for the Mission will come through its own funds, funds raised through Kerala Infrastructure Investment Fund Board (KIIFB), MLA/MP Local Area Development Schemes; funding of local bodies and contribution from the local community. Funding of KIIFB will be directly to SPVs under public sector.

In the above context *GMLPS THIRUVATHRA* has been considered for the rejuvenation of schools program and the Government of Kerala has selected the school for the development of the basic infrastructural facilities.

2.1.2. A Brief Introduction to GMLPS THIRUVATHRA

GOVT.Mappila Lower Primary School, Thiruvathra(*GMLPS THIRUVATHRA*) is located in the ward of 4 ,Chavakkad Municipality of Chavakkad Taluk under chavakkad DEO of Thrissur District.

Tiruvatra Government Mapila Lower Primary School, located in Chavakkad Municipality, was started in 1928. Matramkot Achyuta Vaidyar started a temporary school in his old building.



By 1938, the condition of the building was very bad. In 1940, a new thatched building was built and the school was up to class 5. From 1961 onwards, this school became an LP school up to class IV. The condition of the school building was very bad and collapsed. In 1969, the present building was built and classes started. In 1982, a well, a playground and a surrounding wall were built with the help of the municipality.

The current school strength is 116 with 62 boys & 54 girls with 3 teachers & 2 non teaching staffs

2.2 Project Objective

The project envisages the development of infrastructure of *GMLPS THIRUVATHRA*, to augment the facilities to provide world-class education to the general public. The project objective is to improve the infrastructure in the school in an effort to create a Centre of Excellence in academics by focusing on the following core areas:

- ❖ **Improved learning Environment:** It is essential to have school buildings and classrooms that provide positive learning environment for all students.
- ❖ **Enhanced Teaching, Learning and Learning Opportunities:** All students must have access to high-quality instruction. Highly effective, well-qualified teachers must be equitably distributed across districts and schools. Students, especially in high-need schools and districts, need strong administrators.
- ❖ **Create a collaborative learning and development environment:** Learning and teaching are continuous and long-term activities. Teachers need time and opportunities for collaboration to learn from one another, observe best practice and develop effective instructional standards. Hence, schools will need to use time more effectively and efficiently.
- ❖ **Create a clean and Safe Campus:** In order to facilitate world class learning experience provision of proper waste disposal methods thereby creating the cleanliness. Providing improved safety is also a concern.



2.3. Methodology

The methodology adopted for the preparation of the Detailed Project Report is enumerated below in detail:

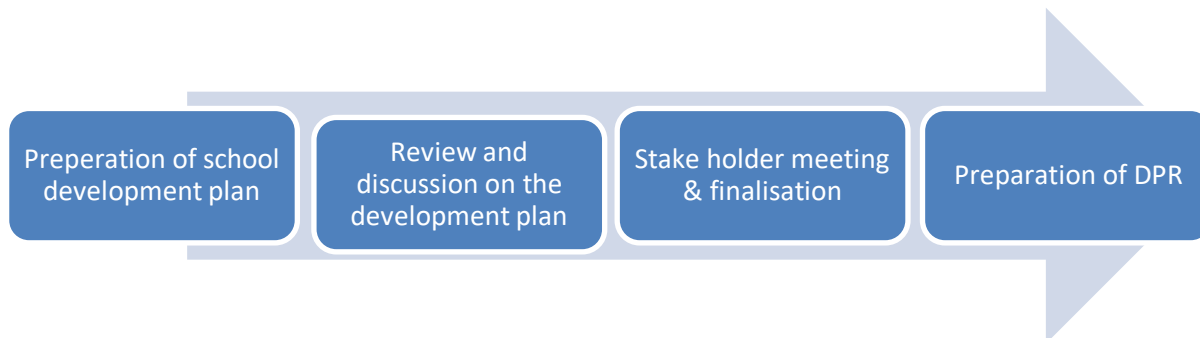


Figure 1: Methodology for preparation of Detailed Project Report

Personal interviews and discussions were conducted with the school officials, PTA, and Panchayat president along with site visit and data collection were carried out. The requirements of the school were informed by the school officials and based on the same, the master plan was analyzed.

During the site visit, the existing situation of the school in terms of infrastructure facilities, academic and non-academic excellence were studied and the potential for a Centre of Excellence was identified and discussed with officials.

Project report is prepared after reviewing the existing situation, requirements informed by the school, need analysis, preparing the detailed design and estimates, cost benefit analysis, etc.



2.4. Overview of the Project Area and General Description about the Project Location

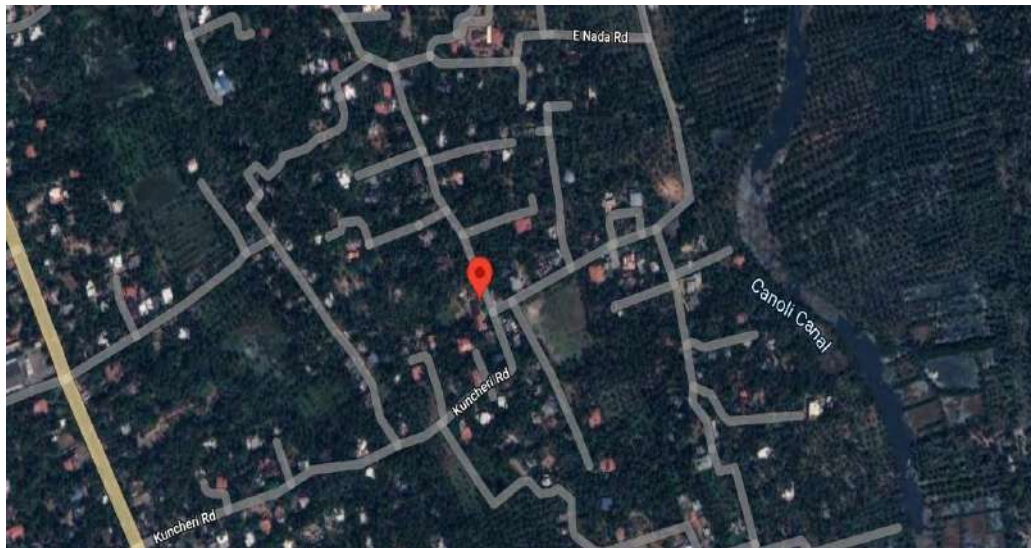


Figure 2 Location of Project Area

GMLPS THIRUVATHRA is located at a distance of 30 km from district headquarters. The



nearest town is Chavakkad which is 3.7 km away from the school.

An overview of the project area is described in the following sections:

2.4.1. Thrissur District

Thrissur (formerly Trichur) is a revenue district of Kerala situated in the central part of that state. Spanning an area of about 3,032 km², Thrissur district is home to over 10% of Kerala's population.

Thrissur district is bordered by the districts of Palakkad and Malappuram to the north, and the districts of Ernakulam and Idukki to the south. The Arabian Sea lies to the west and Western Ghats stretches towards the east.

Thrissur district was formed on 1 July 1949, with the headquarters at Thrissur City. Thrissur is known as the cultural capital of Kerala .It is Located at Latitude-10°31' 0" N,Longitude-76° 13' 0" N. In 2011, Thrissur had population of 3,121,200 of which male and female were 1,480,763 and 1,640,437 respectively.

2.4.2. Chavakkad Taluk

Chavakkad, formerly Chowghat, is a municipality in Thrissur district of Kerala state in India. It is a suburban town of Thrissur city. Chavakkad is noted for its beach and fishing. It lies on National Highway 66 is located about 75 km (47 mi) north of the city of Kochi, 25 km (16 mi) northwest of Thrissur, and 24 km (15 mi) south of Ponnani.



2.4.3 Accessibility to GMLPS THIRUVATHRA

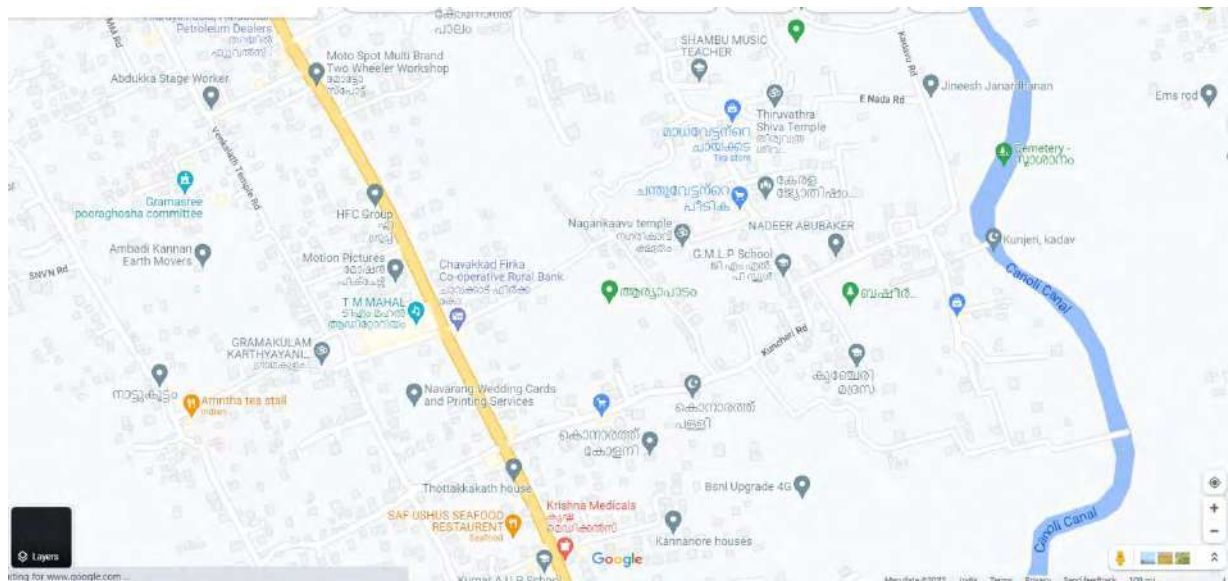


Figure 3 Road Network to *GMLPS THIRUVATHRA*

The school is 750 m away from National Highway 66. The nearest bus stop is Kunjery bus stop .

1. Ecological and Environmental Conditions of the region

The city has more or less the same climatic conditions prevalent else-where the state. The climate is generally mild hot and humid in nature. However the South West Monsoon is usually very heavy. Owing to its natural habitat, Thrissur is also a city of fresh air. According to the Central Pollution Control Board data for the year 2010, of the 180 cities monitored for SO₂, NO₂ and PM₁₀, Thrissur was one of the cities which met the criteria of low pollution (i.e. 50% below the standard) for all air pollutants.

2. Soil and Terrain Condition

The major types of soil found in Thrissur district are

1. Sandy loam
2. Laterite soil



3. Clayey soil.

Sandy loam found in Chavakkad&Kodungallur taluks, Laterite soil found of Eastern part of Thrissur and Western part of Thalappally taluks& Mukundapuram Taluk. Clay soil found in Back-water area of Chavakkad and Mukundapuram taluks. In this site laterite soil is dominant.

Chapter 3: PROJECT FEASIBILITY STUDIES

3.1 Existing Situation Assessment

The existing infrastructural facilities, buildings and facilities, utilities and other auxiliaries, intake and strength, staff and administration and extra-curricular activities are assessed in this chapter.

3.1.1 Infrastructure Facilities

There classroom buildings ,1 office room&toilet blocks in this school compound. Girls and boys have separate toilet blocks is situated here.

3.1.2 Buildings (Existing and under construction) and Facilities

The existing infrastructure details are as below:

SI No	Building Name	Facilities
1.	Building 1	The building is Ground only with tiled roof .
2.	Building 2	The building is Ground only with tiled roof
3.	Building 3	The building is Single storied with RCC roof
4.	Building 4	The building is Single storied with RCC roof
5.	Building 5	The building is single storied with tiled roof

Table 3 Existing Infrastructure Details



3.1.3. Utilities and Auxiliaries

- 1) **Power supply connection:** The school has single-phase connections.
- 2) **Water supply:** The school has one open well.
- 3) **Bio-gas plant:** There is one Bio gas plant,not functional
- 4) **Rain water harvesting:** There is no Rain Harvesting System.
- 5) **Garden:** Yes

3.1.4. Intake and strength

Intake and Strength of students for the last years is 161.

3.1.5. Staff and administration:

Staff Strength of the School is given as Table below.

<i>Sl No:</i>	<i>Section</i>	<i>Head</i>	<i>Teachers</i>	<i>Non-Teaching Staff</i>
<i>1</i>	<i>Pre-primary&LP</i>	<i>1</i>	<i>6</i>	<i>2</i>

Table 4: Details of staff strength and administration

3.2 Stakeholders Consultation

A stakeholders' meeting was organized on 03.11.22, at the school premises, to gauge the requirements in terms of additional infrastructural facilities for the campus, in order to elevate the school. Head Mistress, PTA President&PTA Member were present for the meeting.

The school authorities requested for incorporating following infrastructure



components:

- (a) Sufficient number of classroom
- (b) Toilet
- (c) Staff room

3.3. SWOT Analysis

A close analysis of its strength, weakness, opportunities and threat of Government Higher Secondary school are enumerated below:

(a) Strength:

- ❖ Potential student excellent in Academic and Sports.
- ❖ Strong PTA and teachers
- ❖ Ample support from local governing bodies and the local neighborhood.

(b) Weakness:

- ❖ Drinking water
- ❖ Old buildings

(c) Opportunities:

The ground can be used for sports activities

(d) Threats

O&M fund to maintain the assets in good condition



3.4. Requirement/demand Analysis

School lacks the following facilities:

- (a) Class rooms
- (b) Stage and Auditorium
- (c) Dining hall
- (d) A proper water distribution System
- (e) A proper waste disposal system

3.5. Justification of the components

To overcome these inadequacies mentioned above, augmentation of facilities are required are the same is enumerated in chapter 5.

3.6. Environmental and Sustainability Aspects

As per the item 8(a) of schedule of Environmental Impact Assessment (EIA) Notification, 2006, it is mandatory that building and construction projects $\geq 20000 \text{ m}^2$ and $< 1, 50,000 \text{ m}^2$ of built-up area are categorized as Category B and requires clearance from State Level Environmental Impact Assessment Authority. As the total built up area for the present project fall far below the minimum limit, the project does not attract EIA Notification, 2006.

However, during the construction of proposed buildings, all aspects like noise, dust, wastes including hazardous wastes, etc. may have a temporary impact on environmental equilibrium. Hence, they need to be managed, especially since it happens in an operating school premises.

Various risks have been identified in construction as well as operations phases, and mitigation strategies have been discussed in detail, in Chapter 11.



Chapter 4: SITE SURVEYS AND INVESTIGATIONS

The following figure shows the existing site plan of GMLPS Thiruvathra

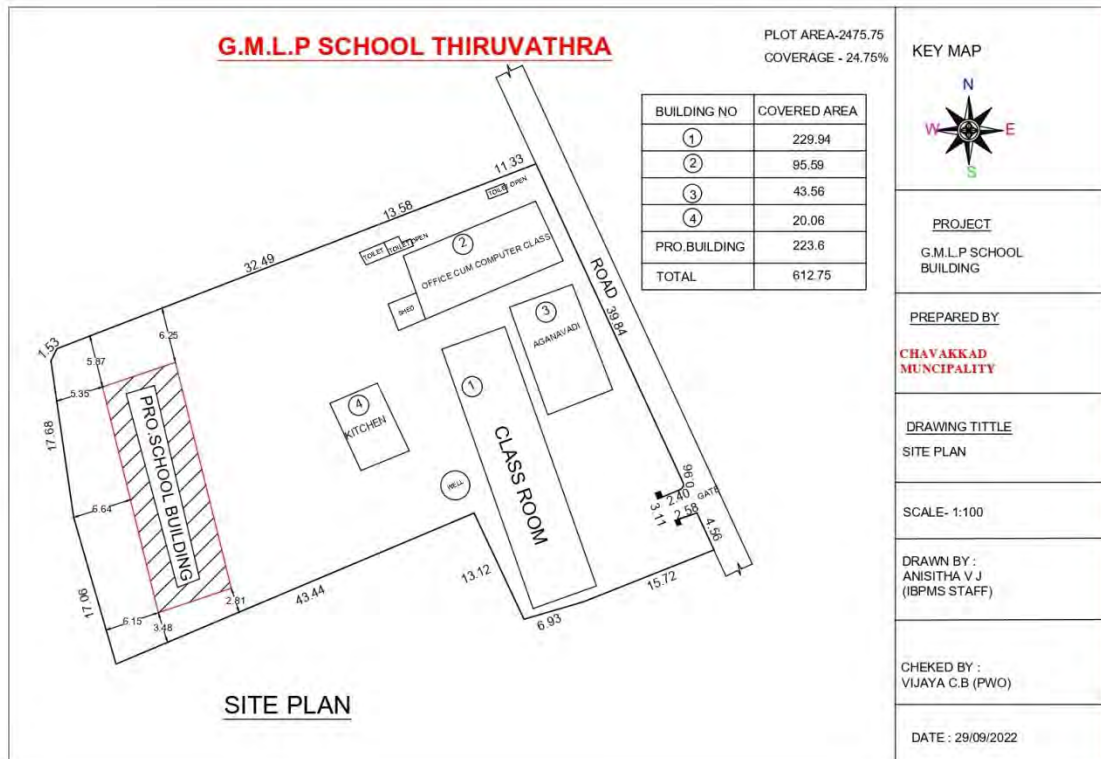


Figure 4 Existing Site Lay out

4.1. Ocular/Reconnaissance Survey

This chapter enumerate in detail about the existing infrastructural facilities at the location:

4.1.1. Land

This institution has 61 cent of land as the school compound: under the survey nos.89 in Manathala village is fully covered masonry compound wall.

4.1.2 Road access, Entrance Gate to the school premises

The school has one entrances. The nearest bus stop is around 750m from the campus. The



above figures represent the entrance to the school



Figure 5 Main Entrance



Figure 6a. Access from left side PROPSING

4.1.3.Compound wall

The school is having compound wall on all 4 sides. It also need a good gate too.





Figure 6 Compound Wall

4.1.4. Buildings

The buildings in the campus include LP,Pre school,kitchen and toilet blocks. The pictures below represent the current building infrastructure at the school.





Figure 7 Building 1



Figure 8 Building 2



Figure 9 Building 3



Figure 10 Building 4



Figure 11 Building 5

4.1.5. Classrooms

Considering the current and future student strength in the school as well as prescribed student classroom ratio, there is a deficiency in number of class rooms. Hence, there is requirement for additional classrooms. The available class rooms also need maintenance and improvements. All the buildings is to be renovated or replaced urgently, it is withstanding only due to the proper maintenance works of authority.

4.1.6 Toilets

The toilets available are insufficient to meet the current strength of boys and girls.







Figure 12 Toilets

4.1.7. Smart Class/ Multimedia room

No smart class rooms available. All class rooms should be provided well protected doors and windows. And proper and safe electrification should be done, especially in old class rooms

4.1.8. Administrative Buildings

This building situated nearer to entrance. In this building Office block & a classroom in Ground floor is there.

4.1.9. Kitchen

The existing kitchen in the school needs immediate attention in quality as well as space requirements. The noon meal is prepared in this kitchen and served for the student at verandah, as there is no separate dining facility available. But a proper dining hall is lacking here, proposal for which has been given to government.



4.1.10 Waste disposal

The school lacks dedicated waste disposal mechanisms and bio gas system installed on campus. And campus cleaning is done as part of clubs. One major waste disposal system is to be done for each class. Separation of waste is to be done at class level itself.

4.1.11 Water Source

The water source is from one open well in this campus. The main water tank situated nearer to open well.

4.1.12 Green Initiatives and Agriculture

There is a Vegetable garden in the school campus at present

4.1.13 Sports/Extra-Curricular activities

The school has students with distinctive talent in sports and interest in sporting activities such as football, athletics etc. Play ground to be constructed.

4.2 Topographical survey details

From the topographical survey conducted it is evident that:-

1. The Site Area is fairly plain dry land.
2. There are 5 Buildings ,toilet blocks and an open Toilet blocks are situated in this compound

4.3 Soil Investigation Report

Soil test done at site and pile foundation is recommended. Soil test result is attached.



4.4 Hydro-geological Survey

Hydro geologically, in general, the aquifer system in Thrissur district can be broadly Divided into Crystalline aquifers (fractured basement rock aquifers), Laterite Aquifers, Lateralized sedimentary (Tertiary) aquifers and alluvial aquifers. Crystalline and Laterite aquifers constitute major part (85%) of the district. In this location laterite aquifers is present but in deeper portions alluvial deposit is seen. One end (lowest level) near to ground is having alluvial aquifers at 12 to 15metres. In this site chance of water logging is less since a small stream is the down nearly 100 mtrs away from the site.

4.5. Primary Surveys

<i>Sl. No:</i>	<i>Particulars</i>	<i>Details</i>	<i>Remarks</i>
1.	<i>Ocular/ Reconnaissance survey</i>	<i>Detailed about the buildings and other facilities available.</i>	<i>Detailed above</i>
2.	<i>Topographical Survey</i>	<i>Contoured terrain with less Vegetation</i>	<i>Attached in Annexure</i>
3.	<i>Hydro-Geological Survey</i>	<i>The aquifers in four distinct geological formations viz alluvial aquifers, laterite aquifers, Tertiary sedimentary rock aquifers and crystalline rock aquifers.</i>	<i>Detailed above</i>

Table 4 Primary Survey Summary



Chapter 5 FUNCTIONAL DESIGN

5.1. GMLPS Thiruvathra Master plan

5.1.1. Background

There are 4 blocks of buildings situated in this compound. first block building is situated nearer to entrance. In this building an open space which is temporarily partitioned to occupy 4 class rooms. In second block building an office room & computer room is included. computer room is now used as class room. Third block is for preprimary, 1 class room is there, Fourth block is used as store room.

5.1.2 Location and context assessment

The school is located at ward 4 of Chavakkad Municipality. The building around the school premises mainly are residential. The access to the school is on the Eastern side of the campus besides Kuncheri road and it is also a main bus route.

5.1.3 Zoning, Circulation and Access

The analysis of buildings and its current uses indicate that there is no proper zoning depending on the use of building. Different departments share the same building hence there is no exclusive building for any of the departments.

The lack of designated pathways for vehicular and pedestrian movement is evident from below figure. The vehicular access to the school campus has to be restricted to the entry zone for better, safer and secure environment for students.

5.1.4 Key Components of GMLPS Thiruvathra Master plan

Laws and Guidelines: After the execution of the proposed aspects within the master plan all existing and new buildings, infrastructure and assets will conform to standards.

Sanitation: As an over design strategy the master plan eliminates most standalone toilet



blocks. Toilets blocks will be within the proposed new buildings.

Energy: The master plan recommends the school management to develop an energy plan including developing an inventory of its existing assets that use energy. Considering that the school will have 5 Nos. RCC roofed buildings by the end of the implementation phase, it is recommended to consider installing a 20kw solar plant by using the terraces of the buildings to position the solar panels.

Water: The GMLPS Thiruvathra master plan proposes a water management plan. This includes developing a water storage system whereby the sourcing of water from existing wells is consolidated..

Waste: The GMLPS Thiruvathra master plan includes a waste management strategy. This includes an organized way to collect and segregate organic and inorganic waste. Waste collection points/bins will be installed at all buildings. The School will develop its own plans to manage its waste through a process to recover, reuse, resale, and disposal.

Autistic students: The master plan at this time is not proposing setting up a designated building/rooms for the needs of an Autism Care. After completion of the construction phase the school management will evaluate the availability of classrooms vis-à-vis enrollment patterns and determine if rooms or sections of the buildings can be designated for this purpose.

Parking: The master plan provides for limited parking within the campus for vehicles. There are sufficient on-street parking options for visitors. Dedicated covered parking will be created for students commuting to school on bicycles.

Security and emergency preparedness: The GMLPS Thiruvathra master plan reevaluates the building designs to ensure there are no open doors with easy access to outside. Compound wall will be given along the boundary. Staff rooms should be allocated in such way that all portion should be under the observation of staffs



Expansion and growth: The GMLPS Thiruvathra master plan provides a schematic on future expansion phase by identifying new areas for construction and buildings that can be remodeled for enhanced use.

Chapter 6: ENGINEERING DESIGN

6.1 General

The newly proposed buildings are multistoried structures with maximum three storeys. A framed structure with RCC column, beam and slab is the ideal solution for such buildings. Monolithic construction is possible with R.C.C framed structures so they can resist earthquakes and vibrations more effectively than load bearing structures.

6.2 Soil condition and Foundation

Bore hole have been taken & Soil report is attached for reference. RCC frmaed building is proposing with Pile foundation.

6.3 Design Assumptions

6.3.1 Material properties

Concrete

M25 grade of concrete is proposed for all structural elements.

Unit weight of concrete (in kN/m ³)	-	25

Reinforcement Steel

The reinforcement steel proposed is high yield strength deformed bars of grade Fe-500
Conforming to IS: 1786-1985

Unit mass of steel (in Kg/m ³)	-	7850

Modulus of Elasticity (N/mm ²)	-	2.1x10 ⁵

Clear cover to reinforcements



By considering the exposure condition a minimum clear cover to outer reinforcement is provided as per IS standards.

Codes and standards

The latest versions of the following Codes and Standards are used in this calculation:

1. IS: 875 -1987 Part I to part V: - Code of Practice for Design Loads (other than Earthquake) for Buildings and Structures
2. IS: 456-2000 :- Code of Practice for Plain Reinforced Concrete.
3. IS:800-2007 :- Code of Practice for General Construction in Steel
4. SP:16 :- Design aids for Reinforced Concrete to IS:456
5. SP:34 :- Handbook on Concrete Reinforcement & detailing
6. IS:1893-2016:-Criteria for earthquake resistant design of structures

6.3.2 Loading and Analysis

Loads considered

- i. **Dead load:** For calculating Dead load of various elements , weight of building material are taken from standard datas
- ii. **Live load:** Suitable Live Load as per IS: 875 Part-II is also applied as mentioned in the below table

SL. No.	Item	Load (kN/m ²)
1	Class Rooms, Laboratories	3.00
2	Toilet areas	2.00
3	Roof	0.75
4	Kitchen & Dining area	3.00
5	Corridors, Staircase, Passages etc.	4.00
6	Office and Staff rooms	2.50

- iii. **Earthquake load:**Earthquake load as per IS 1893/2016 is taken

6.3.3 Analysis and design methodology



The structure is modeled and analyzed in STAAD pro or ETabs software. Analysis is performed for the various load combinations as per IS: 875 -1987. Limit state Design is carried out for RC members as per IS: 456 – 2000. Forces obtained from the critical combination of loads from the analysis model is taken as the input for design.

6.4.Structural Drawings

Based on the structural analysis and design, layout drawings are prepared for foundation, column, grade beam, floor beam and slab which are attached in annexure.

6.5 Other design / engineering

6.5.1 Electrical System

- ❖ The design and engineering of the electrical installation shall satisfy all statutory requirements of the national and State/local authorities. The electrical system is designed in such a way that energy consumption is minimum through the selection and utilization of efficient electrical fixtures.
- ❖ Good quality of light and ventilation play a significant role in the psychological and biological processes of students, teachers and administrators.
- ❖ Effective classroom lighting scheme will make use of any natural light that is available, with the addition of artificial light where it is necessary. With artificial lighting accounting for the greatest proportion of energy costs in schools, the energy efficiency of any lighting installation will be a primary concern. Good design, specification, management and controls can have a significant impact on limiting electricity consumption, saving energy and keeping running costs to a minimum. LED light fixtures are proposed which can reduce energy consumption by up to 70%, which translates directly into substantially lower utility costs.
- ❖ Adequate ventilation is equally important in classrooms as lighting.

Rooms should also have ventilators & ceiling fans in working conditions so as to



make summer heat and suffocation in monsoons bearable .BEE 5star rated fans are proposed which can reduce energy consumption by up to 30%.

- ❖ MCB distribution boards with RCCB+MCB's are proposed for light and power distribution. Every building will have localized switching and distribution board.
- ❖ Armored XLPE insulated Aluminum conductor cables are proposed for LT power distribution. Cables up to 2.5 sq.mm size will be XLPE/PVC insulated, PVC sheathed, steel braided / wire armored copper cables. The design of distribution system is to achieve voltage drop not exceeding 3% to the farthest cable termination. For internal wiring, Fire Retardant Low Smoke (FRLS), suitable up to 660V grade wires for single phase circuits and 1100 V grade for 3 phase circuits as per IS 694/1990 amended up to date shall be used.
- ❖ Earthing shall be as per Indian Standards (IS 3043: 1987), IEEE Guidelines, and Indian Electricity Rules 1957 with latest amendments.
 - ⌈ Lightning protection as per IS: 2309 / IEC 60305 is proposed for the building depending upon the height.
 - ⌈ Schools across the country are not only working to make their students smarter, but also to make their campuses smarter and more energy efficient. For schools, solar panels can easily offset monthly utility bills. With a larger installation, it may even be possible to switch to 100% renewable energy. As a part of the Up-Gradation and to promote a cost effective energy option, Solar Photo Voltaic (PV) System is proposed to be installed to meet the increasing energy demand.



Chapter 7: FINANCIAL ESTIMATES AND COST PROJECTIONS

7.1 Summary of Cost Estimate

Cost estimate is prepared in PRICE and the same is placed at the annexure. Abstract of the estimate is tabulated below:-

Abstract of the estimate is tabulated below:-

<i>Sl.No</i>	<i>Description</i>	<i>Amount (Rs)</i>
<i>1</i>	<i>CIVIL WORKS</i>	<i>12566696.15</i>
<i>2</i>	<i>ELECTRICAL WORKS</i>	<i>433172.4</i>
	<i>Grand Total (Including 18 % GST Compensation)</i>	<i>12999868.55</i>

Table 5 Abstract of Estimates

Chapter 8: REVENUE STREAMS

The project proposed includes the development of the school building with improvement in the basic amenities to convert it into a Centre of Excellence in education without compromising in other aspects like safety, hygiene, health and comfort to students. Hence the proposal of development of the infrastructural facilities is not intended for revenue generation.

However, some of the other facilities proposed in this project can be intended for revenue generation, which may result in a revenue generation. This revenue can be utilized for operation and maintenance of these facilities, provided these facilities can be used for revenue



generation on non-working days or at any time which will not cause any difficulty to students to use these facilities.

The revenue generating features of this proposal are:

Sl. No.	Identified revenue generating component		Remarks
1	Multi-purpose court/playground	❖ To host tournaments, events, exhibitions etc. ❖ To provide paid coaching services	As per the Prevailing market/ government rate.
2	Class rooms, seminar halls etc.	❖ To conduct skill enhancement programs etc.	As per the prevailing market/ government rate.

Table 6 Revenue Streams

*The facilities will be made available for the above activities for external purpose only on off working hours.

Chapter 9: COST BENEFIT ANALYSIS AND INVESTMENT CRITERIA

Cost benefit analysis is defined as a practical way of assessing the desirability of projects, where it is important to take a long view and a wide view. It implies the enumeration and evaluation of all the relevant costs and benefits.

Public education is a worthy investment for state government, with immense social and economic benefits. Research shows that individuals who graduate and have access to quality education throughout primary and secondary school



are more likely to find gainful employment, have stable families, and be active and productive citizens. They are also less likely to commit serious crimes, less likely to place high demands on the public health care system, and less likely to be enrolled in welfare assistance programs.

A good education provides substantial benefits to individuals and, as individual benefits are aggregated throughout a community, creates broad social and economic benefits.

Investing in public education is thus far more cost-effective for the state than paying for the social and economic consequences of under-funded, low quality schools.

The Cost Benefit Analysis (CBA) is the implicit or explicit assessment of the benefits and costs (i.e., economic costs and economic benefits) associated with an investment project. Benefits and costs may be non-monetary and monetary in nature.

Economic Rate of Return (ERR) and Cost Benefit Ratio (Benefit / Cost) are some of the measure to arrive at the social benefits from any infrastructure project. The financial analysis appraises the project in terms of return on investment while the economic analysis appraises the project contribution to the social and economic welfare of the city, region or country.

Though all the cost and benefits from proposed facility is not possible to be expressed in monetary terms, possible costs and benefits are being measured in monetary terms and evaluated to arrive at a conclusion whether the facility is worth to the society.

The broad benefits of Public Education Rejuvenation programmes are:

a) Increased investment in Human Capital:

Education is universally recognized as a form of investment in human capital that yields economic benefits and contributes to the country's future wealth creation by increasing the productive capacity of the people. By better education it is



expected that the quality and competencies of students and in turn the society is expected to increase. Thus expenditure on education can be partially justified in terms of potential contribution of education to economic growth.

From the CBA data sheet it can be inferred that a cost saving of Rs. 30 lakhs, Rs. 50 lakhs, Rs. 60 lakhs, Rs. 75 lakhs, Rs. 100 lakhs has been considered for the 5 consecutive years.

The calculation is based on the assumption that from a total of 40 students (for HS) in each class 20 students are expected to get employed as scientists, doctors, engineers etc. The same scenario has been considered for Higher Secondary cadre also. This will facilitate benefits to the government as tax, tolls, etc. From the same, we can expect a revenue of Rs. 50 lakhs in the first year and it will increase accordingly as the proposed facilities become fully established and gain appreciation among the public. A total of 50% students has been considered in the first year and it will increase accordingly

b) Gain on Opportunity cost

Students in their desire to get educated from schools with modern amenities, generally travel to far off places. In many such cases, students even spend one hour each in the morning and evening in school bus. The same, otherwise could have utilized for other activities like learning skills, playing games etc.

Hence by providing modern amenities, Government school will enable students to join schools near to their homes.

On implementing the proposed facilities as enumerated in chapter 4, it is expected the students who are availing the facilities will also increase. The students in a locality will prefer the nearby government schools other than private schools. This will facilitate a reduction of each student and will improve the mental mindset of each student to a greater extent.

Considering a total of 20 students are relocated to the nearby schools and a gain of Rs. 10,000/- per year from each student. On assuming all these



scenarios and extrapolating this, it is assumed that a total of Rs. 2 lakhs / unit is expected to save in each year. This can be considered as a benefit to the society.

c) Improved Health and development of children

The rejuvenation is focusing on developing games facilities in each campus. The same will provide more opportunities and facilities for the students to play and practice various games. Physically active children are expected to demonstrate better enthusiasm in academic and extracurricular activities. This will reduce the stress and associated other diseases.

One of the major ingredient in developing all schools developing a large open area. This will further develop into a football ground/ landscaped area, football ground etc. based on the talent of the students that are identified during the stakeholders meeting. On developing the same it will improve the physical activities of each student and will improve the extra-curricular activities and mental stress of student. On accounting all these, it is assumed that there will be a gain of Rs. 2 lakhs/unit on each year. The same is shown in the CBA sheet provided.

d) More savings in Society

Public education is one of the cheapest education facility available and with more number of students joining to public schools will directly result into savings to the family by virtue of lower fees and associated costs. The savings, thus made are now available for other uses including improved healthcare, enhanced personal investments, and more people opting for insurances. Hence, an improved Public education system improves the health / status of the society.

The above enumerated scenarios will facilitate a savings in the society and is assumed to be about Rs. 1 lakh/unit. The same scenario is assumed to be continue for all the years. The same is shown in the CBA sheet provided.



The benefits are summarized as:

<i>Impact</i>	<i>Assumptions and evidence</i>	<i>Certainty</i>
<i>Increased employability</i>	↓ <i>Expects enhanced quality education to more number of students and the skill development activities will have positive impact on the overall development leading to better employability</i>	<i>Medium</i>
<i>Physical and mental health improvement</i>	<i>Better games and playing facilities will improve the physical fitness. This will reduce the stress and improve the mental</i>	<i>High</i>
<i>Opportunity Cost Gains</i>	↓ <i>The students by saving traveling time to school can use more time for doing more creative things they are interested in. This will improve student's overall development.</i>	<i>Medium</i>
<i>Lesser cost for education</i>	↓ <i>More students in Public schools will mean less overall expense for education by society. This will enhance the savings and improve the social life.</i>	<i>Medium</i>



<i>Maximizing the benefits of public education</i>	↓ <i>Public education system has a fixed cost in the form of cost of assets, salary and other expenses. With more students in public schools, the expenses for students gets lowered.</i>	<i>High</i>
<i>More talents in various sectors</i>	↓ <i>The programmes give equal priority to development of various skills and talents.</i> ↓ <i>This will give birth to talents to represent the country in international forums.</i>	<i>High</i>

Table 7 Social Cost Benefit Analysis

The cost benefit analysis has been calculated based on the following assumptions:

	(Amount in lakhs)						
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6 and above (approximate % of benefit for that item to the benefit derived in the FIRST five years)
Investment plan (The total investment planned to be utilized for the development is expected in year 1.)	130						
Gain of investment in human capital		30	50	60	75	100	100
Gain in the opportunity cost		2	2	2	2	2	100
Improved health and development in the Society		2	2	2	2	2	100
More savings in society		1	1	1	1	1	100

Table 8: Assumptions of Cost benefit Analysis

The details showing the CBR analysis are attached in the annexure:

Considering the Net present value of the amount investing and the Net Present value of the revenue from the facilities, the Cost Benefit Ratio (CBR) for GMLPS Thiruvathra is 1.057



Chapter 10 : RISK ASSESSMENT AND MITIGATION MEASURES

As the majority of work involved is construction of the facilities, risks are associated with the project implementation. The occurrence of the unexpected events may adversely affect the timely completion of the project. The chances of such occurrences are verified and the mitigation measures are proposed.

The major risks identified are as follows:

- ❖ Adverse weather condition
- ❖ Unforeseeable shortages of labour or materials
- ❖ Strikes
- ❖ Disputes
- ❖ Damage to person and property due to fire, flood, earth quake, etc.

The chances of occurrence of various unexpected and adverse effects are analyzed considering the ground condition and the mitigation measures are proposed.

Sl.No	Risk	Mitigation measures proposed
1	<i>Adverse weather Condition</i>	¶ <i>Proper planning</i> ¶ <i>Excavations to be completed before monsoon and the super structure to be built up.</i>
2	<i>Shortage of labour and Materials</i>	¶ <i>Proper work scheduling</i> ¶ <i>Shall be handled by the Contractor by making the same available</i>
3	<i>Strikes</i>	¶ <i>This shall be accounted by additional working hours/ augmentation of resources thereafter</i>



4	<i>Disputes</i>	▮ <i>Increased communication and reviews to avoid occurrences of disputes.</i> ▮ <i>Any disputes to be settled without delay by properly assessing the situation and arriving at a win-win situation</i>
5	<i>Damage to person and property due to safety issues or force majeure</i>	▮ <i>Proper safety measures shall be ensured during construction.</i>
6	<i>Project Management risks : This includes change in priorities , overload, communication issues, lack of coordination , in experienced work force, etc.</i>	▮ <i>Institutionalizing an activity based project schedule</i> ▮ <i>Regular reviews and assessment of progress</i> ▮ <i>Shall be avoided by appointing well experienced and reputed organizations as implementation agencies.</i> ▮ <i>Proper monitoring</i> ▮ <i>Constant reviews</i>
7	<i>Organizational risk : This includes in experienced staff, in sufficient time to plan, losing critical staff at critical time, Inconsistent cost, time, scope, and quality objectives</i>	▮ <i>Each unit in the Project Management Organization is planned considering minimizing the organizational risk</i>
8	<i>Objection from the local Community</i>	▮ <i>Settled by setting a time limit without affecting the work progress</i>
9	<i>Contractual relations: Issues arise due to permit and license, new stake holders, priority changes, funding changes</i>	▮ <i>The chance of occurrence of the same is very less as the frame works are completed and freezed in the initial stage itself. However, in case of occurrence immediate measures shall be adopted</i>



10	<i>Security issues due to Laborers</i>	‡ <i>Proper ID cards</i> ‡ <i>Surveillance measures</i> ‡ <i>Entry restrictions</i> ‡ <i>Minimum activities during school time</i>

Table 8 Risk Assesment and Mitigation**Chapter 11: PROJECT MANAGEMENT ORGANISATION**

A Special Purpose Vehicle (SPV) as Project Management and Support Unit (PPE- SU) will be formed for the overall smooth roll out of PPE Mission.

Roles and Responsibilities of various stakeholders are enumerated below:

a) Government

The Government shall facilitate the linkages between parties and different Ministries and their departments and other stakeholders as required for the smooth implementation of PPE Mission.

b) Special Purpose Vehicle (SPV)

In order to implement the project an SPV will be formed. The funds received from KIIFB will be utilized through this SPV. In order to ascertain the timely completion of the project, SPV will appoint an agency, which is called the Implementation Agency. The progress of the work will be monitored by the SPV through the Implementation Agency with the assistance of the Technical committee.

c) Implementing Agencies

The Implementation Agency will be a Government Corporation appointed by the SPV. This unit is responsible for preparing the detail design and tender document, appointing the Contactor for carrying out the construction work, supervision of the work, quality assurance, monitoring the progress of work, etc. Implementation Agency will give detailed



report to SPV on the work progress and fund utilization in each stage of the project. SPV will constantly review the project with the help of Implementation Agency and technical Committee.

***d)* Technical Consultant**

The duties and responsibilities of the Technical Consultant are:

- i.* CEO, PPE mission who has received them from the schools selected by the MLAs in consultation with Government.
- ii.* In case the master plans are not available, prepare them after discussions with the
- iii.* Parent Teacher Association/School Development Committee and the local MLA.
- iv.* Consult with the implementing SPV and develop the DPRs (Detailed Project Reports) for civil works to be completed under PPE Mission.
- v.* These DPRs (as required in DPR formats to be mutually established byLSGD) will be submitted to KIIFB after appropriate discussions.
- vi.* Assist CEO, PPE Mission to prepare agreements to ensure that the SPV/builder is responsible for the maintenance of the newly created school building for at least 5 years.
- vii.* Coordinate with the SPVs to get completion and occupancy certificates.

***e)* School Development Committee/ School level Monitoring Committee:**

The development committee at each school also will be in charge of the project monitoring. The members of the committee will include the Principal, Head Teacher, PTA and other various stake holders.

***f)* Contractor:**

The works will be carried out by the Contactor appointed through the tendering process
The process is summarized as below in figure 13:



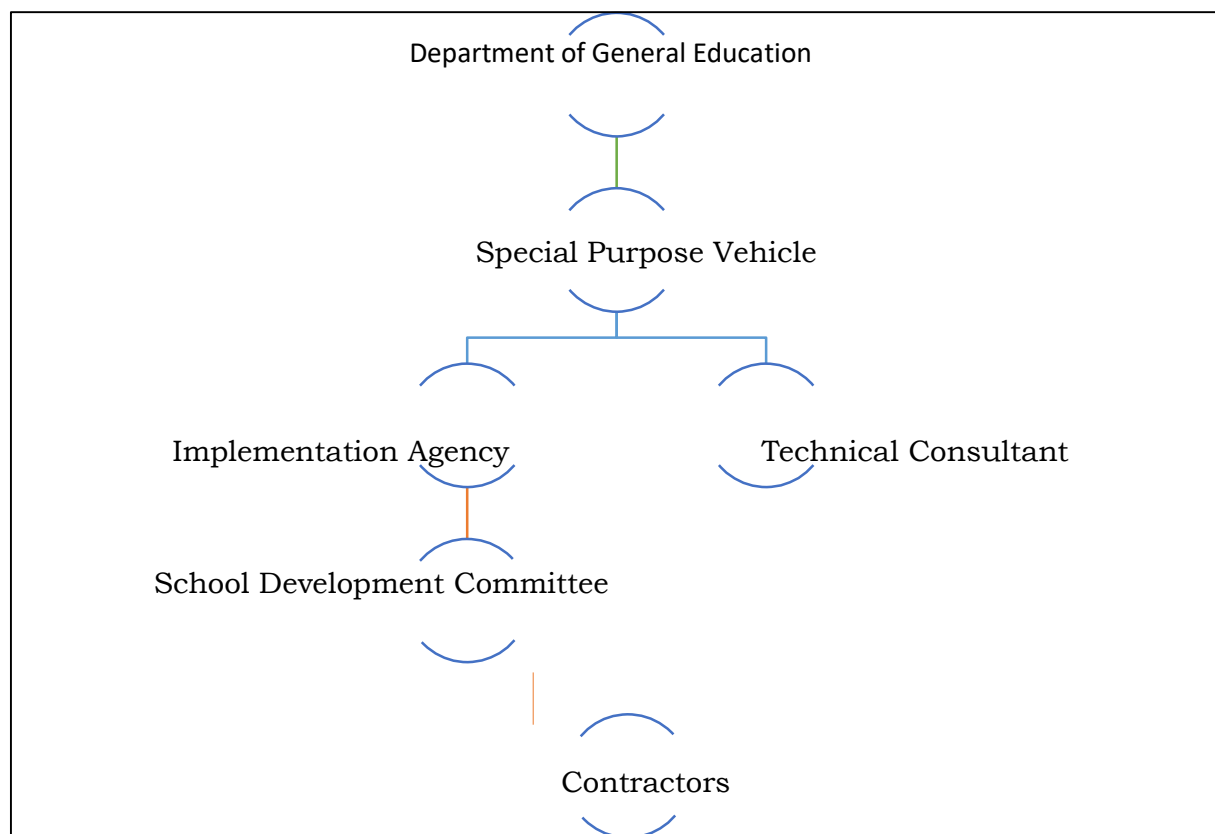


Figure 13 Project Management Organization

Organization chart and Roles and responsibilities of various PMO members:

SPV will engage the implementing agency for implementation of the project. The SPV will monitor the project through a Project Management Unit at its end. A team of engineers



including technical consultant will form this PMU.

The implementing agency will appoint a Project Manager (PM) for the project and he will be responsible to the PMU for all project related matters. The PM will have a team to carry out the site supervision while implementing the project.

(1) Roles and responsibilities of PM:

- (a) Coordinate with PMU
- (b) Ensure project execution as per the agreed scope, cost and time lines
- (c) Ensure quality construction
- (d) Obtaining all the statutory clearances
- (e) Conducting weekly reviews at site and sending weekly reports to PMU and stakeholders
- (f) Ensure the bills are recorded timely and as per the specifications
- (g) Completion and handing over

(2) Roles and responsibilities of Civil Engineer/ electrical engineer:

- (a) Review of execution drawings and carryout the supervision of work as per the drawings and specifications
- (b) Inspection of materials at site for its quality, carryout the quality tests
- (c) Monitoring of work as per the agreed schedule
- (d) Anticipate and resolves hindrances
- (e) Record the measurements

(3) Roles and responsibilities of Safety engineer:

- (a) Carryout the safety audit at site
- (b) Review the safety measures engaged at site



- (c) Ensure proper material stacking/ storage at site
- (d) Ensure safe movement of vehicles, construction equipment, cranes etc
- (e) Responsible for zero accident work execution
- (f) Ensure availability of medical aids at site

(4) Roles and responsibilities of QA/QC engineer:

- (a) Prepare the QA/QC plan
- (b) Ensure adherence to the QA/QC plan
- (c) Prepare the QA/QC report, quality test reports and submit to the PM on weekly basis
- (d) Ensure the material used in the project are approved and agreed makes only

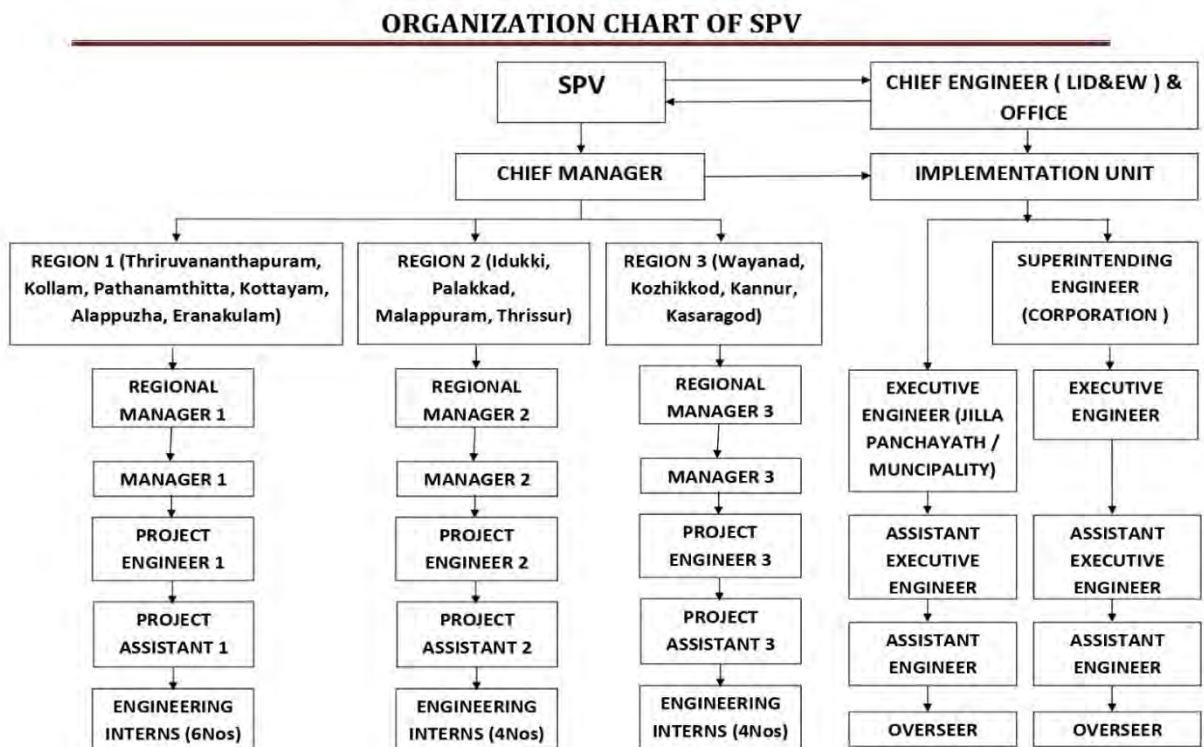


Fig 14 Project management organization of SPV



The SPV, with LID&EW will review the reports, bills, statements from the site and will provide the feedback to the Project Manager.

1) Files need to be kept at site

Quality control register
Concrete cube test register
Drawing register
Cement register
Steel register
Accident & Incident register
Electrical items register
Aggregate register
Solid block register
Mix design register
Material movement register
Inspection request
Material approve and Material Inspection request
Insurance certificate
Quality assurance plan
Calibration certificate
Concrete pour card
Safety toolkit meeting register
Labour register
Test reports file (Third party as per quality manual)



Chapter 12: CONTRACT MANAGEMENT STRATEGY

The project is intended to execute through capable and competent implementing agencies. The agencies with proven track record, recognized by Government of Kerala for executing its works etc are eligible for considering as implementing agencies. Through a fair and transparent process, the agencies will be empanelled. Among these agencies, through suitable means (as decided by the SPV in line with the existing practices and guidelines), selection will be carried out for implementing the project.

The work will be executed as item rate/Percentage rate tender PWD procedures will be adhered to. Project will be implemented by adhering to the laid down procedures from the contractor selection to commissioning. The following procedures need to be followed:

1) Preparation of the tender document:

A detailed Bill of Quantities will be prepared by the Implementing Agency and the tender documents will be finalized. Suitable pre-qualification criteria will be developed and included.

2) Tendering:

Tendering process will be undertaken adhering to the existing procedures.

3) Tender evaluation and selection of the contractor:

All the bids received will be evaluated and the selection of contractor as per the existing norms.

4) Award of work

Work order will be issued to the selected bidder.

5) Signing of Agreement



The contractor to whom which the work is awarded need to sign an agreement with the Implementing Agency.

6) Finalization of the project implementation schedule

Time is the essence of Contract, hence clear time line with details about the works to be completed in each phase or within stipulated time should be mentioned in detail. The project implementation schedule will be a part of the Agreement.

7) Work execution

During execution, the compliance with the Contract conditions and adherence to the Contractual obligations shall be ensured by multiple level reviews under taken by the SPV, technical team and implementation team. The Project manager, who is in charge of the project, member of the implementation team will strictly monitor the project in adhering to the contract conditions. The amendments and changes shall be properly documented and necessary approvals will be obtained from the Approving Authority. All such matters will be routed through the Project Manager.

8) Quality Analysis and Quality Control (QA/QC) plan

The quality analysis and quality control of the works need to be assessed as per the approved QA/QC plan.

9) Site supervision and bill measurement

The Implementation Agency need to set up a proper supervisory plan, to check the status of the work and to do bill measurements and check whether the progress of work is as per the implementation schedule provided.

10) Release of payment

The Contractor can raise the Running Account Bill as per the payment after conducting



the joint inspection at site, as certified by the Project Manager.

11) Commissioning of the project

After completing all the works including civil works, electrical works, mechanical works plumbing instrumentation works, signage works, security systems and other auxiliary works, the Implementing Agency were handover the facilities to the school for inauguration.

Chapter 13: IMPLEMENTATION SCHEDULE AND WBS

Project schedule:

The work has been considered as a composite work combining the civil, electrical and all other utility work packages combined in one contract. The work is expected to commence on 15/03/2024 and end by 14/12/2024. The work in each phase has been scheduled to complete as per the following schedule.

Activity	Months								
	M1	M2	M3	M4	M5	M6	M7	M8	M9
1. Tendering and award Work									
1.1 Issue of tender notice									
1.2 Receipt of bids									
1.3 Bid evaluation/ Selection of Contractor									
1.4 Award of work									
2. Preparatory work and mobilization									
2.1 Signing of contract									
2.2 Obtaining of preliminary statutory approvals									
2.3 Submission of drawings									
2.4 Completion, Mobilization									
3. Implementation of Civil Package									
4. Up gradation of Electrical Works									
5. Up gradation of Utilities									
6. Landscaping, signage, circulation improvement									
7. Procurement and placing of school furniture									
8. Obtaining approvals and Inauguration									

Table 9 Project Implementation Schedule



Chapter 14: STATUTORY CLEARANCES

- ❖ As per the item 8(a) of schedule of EIA Notification, 2006, it is made mandatory that building and construction projects ≥ 20000 m² and $< 1,50,000$ m² of built-up area are categorized as Category B and requires clearance from State Level Environmental Impact Assessment Authority. As the total built up area for the present project fall far below the minimum limit, the project does not attract EIA Notification, 2006.
- ❖ Kerala Panchayat Building Rules (KPBR 2019) is strictly need to be followed for construction of the buildings.

Chapter 15: QUALITY MANAGEMENT PLAN

In order to manage the quality of the work, specific plan is envisaged. Even though quality is the responsibility of each individual involved in the project, a team will be formed with objective to assure quality. The team will be headed by a Quality Manager from the implementation unit whose activities will be reviewed by the SPV. Under the Quality Manager, there will be a quality team consist of inspection and testing unit and site engineers. The quality management organization frame work is as follows:

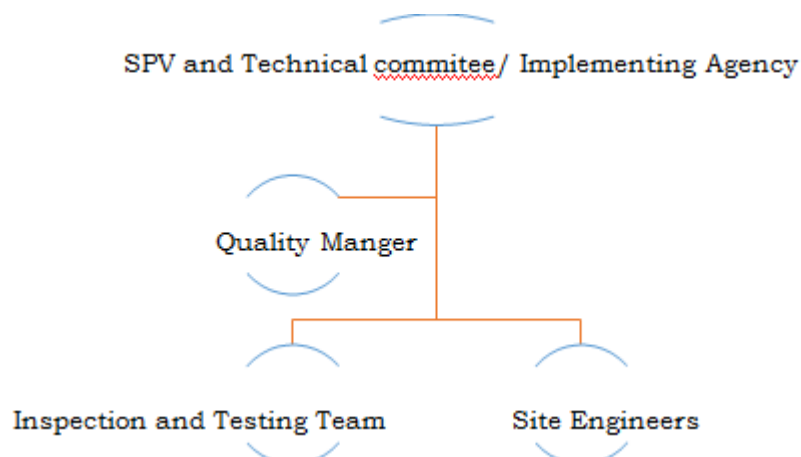


Figure 15 Quality Management Plan

Following documents need to be maintained in order to facilitate quality assurance:



<i>Sl. No.</i>	<i>Description</i>
1.	<i>Material Inspection Report - Structural Steel</i>
2.	<i>Material Inspection Report – Pipe</i>
3.	<i>Welding Inspection Report</i>
4.	<i>Check list for Construction Site Safety</i>
5.	<i>Material Inspection Checklist</i>
6.	<i>In process / Stage Inspection Report</i>
7.	<i>Checklist for Sieve Analysis</i>
8.	<i>Checklist for Water</i>
9.	<i>Checklist for Masonry</i>
10.	<i>Checklist for Plumbing Works</i>
11.	<i>Checklist for Woodwork</i>
12.	<i>Checklist for Internal Plaster</i>
13.	<i>Checklist for External Plaster</i>
14.	<i>Checklist for Flooring and Dado</i>
15.	<i>Checklist for Painting Work</i>
16.	<i>Checklist for Fabrication</i>
17.	<i>Checklist for Builder's Hardware</i>
18.	<i>Checklist for Pre-stressing</i>
19.	<i>Checklist for Electrical works</i>
20.	<i>Checklist for Construction Completed Buildings</i>
21.	<i>Check list for Wiring and Accessories</i>
22.	<i>Check list for Cables and Cabling</i>
23.	<i>Check list for MCB & Distribution Boards</i>
24.	<i>Checklist for Earthing & Lighting</i>
25.	<i>Check list for General Mechanical</i>
26.	<i>Check list for Fire Protection System</i>
27.	<i>Check list for HVAC projects</i>
28.	<i>Check list for HVAC system commissioning</i>
29.	<i>Check list for Requirement for recommendation of Bill</i>
30.	<i>Check list for Checking Measurement</i>

Table 10Quality Assurance

Quality Management system will be as per IS 9001: 2015. All the organizations involved in the implementation has to strictly adhere to the Quality Management Policies. Chapter 16: OPERATIONS AND MAINTENANCE PLAN

O&M plays a vital role in deriving maximum output of any infrastructure. Schools generally lack mechanism/ system for operation and maintenance of its facilities due to various reasons including inadequate fund, lack of dedicated staff etc.

The following are the proposed Operation and Maintenance plans:



a) Creation of a “School Resource Maintenance Committee”

A School Resource Maintenance Committee is to be formed with representatives of all stakeholder members.

b) Maintenance of an O&M fund:

For operation and maintenance proposed to be use the maintenance grand non road of concerned local body.

c) O&M staff

Additional staffs need to be engaged, other than the existing staff, if required for keeping clean and safe campus. The remuneration for these staffs needs to be met from the O&M fund.



ANNEXURES



Annexure -1
Key map of Project Region

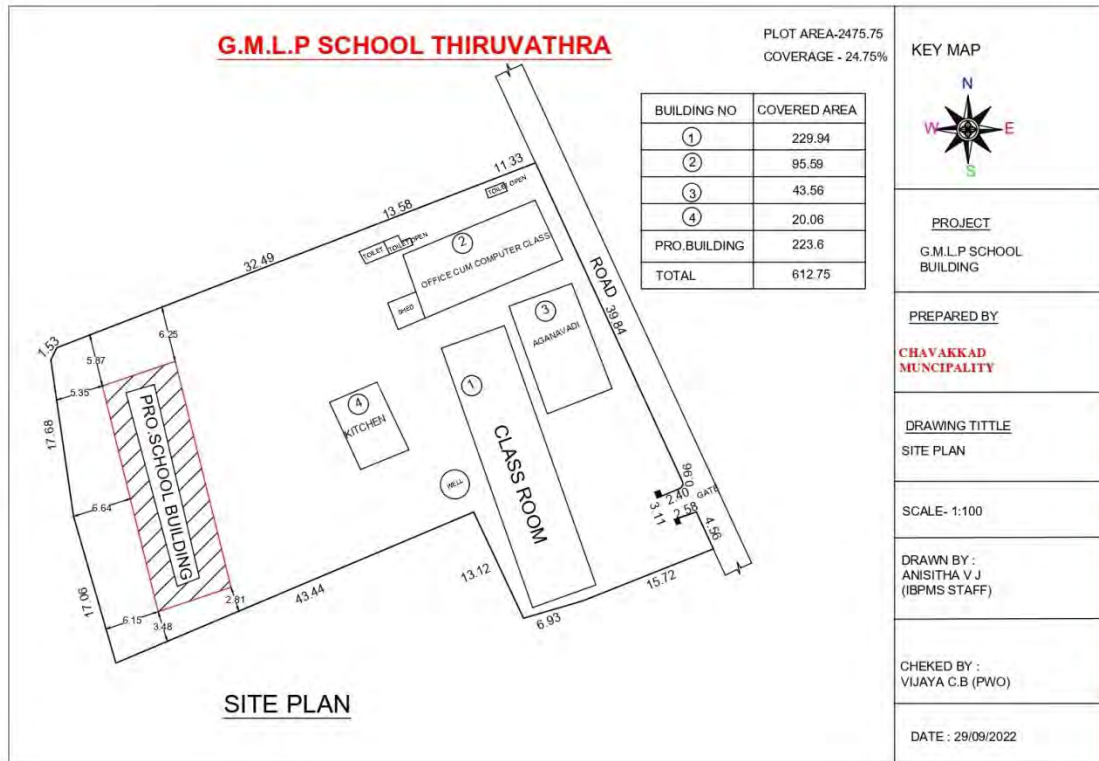


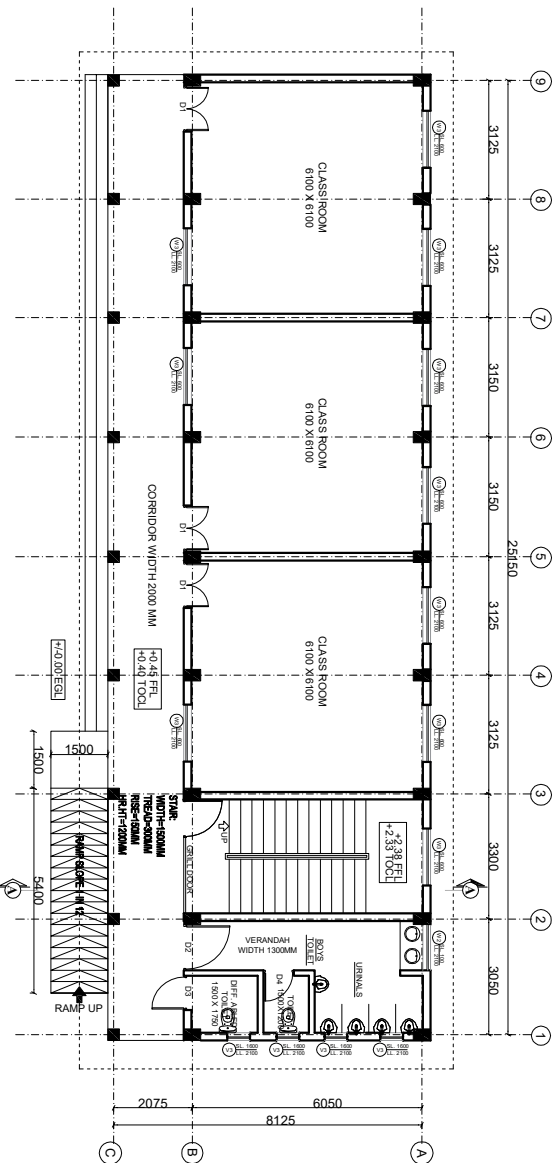
Figure 16 key plan



Annexure 2

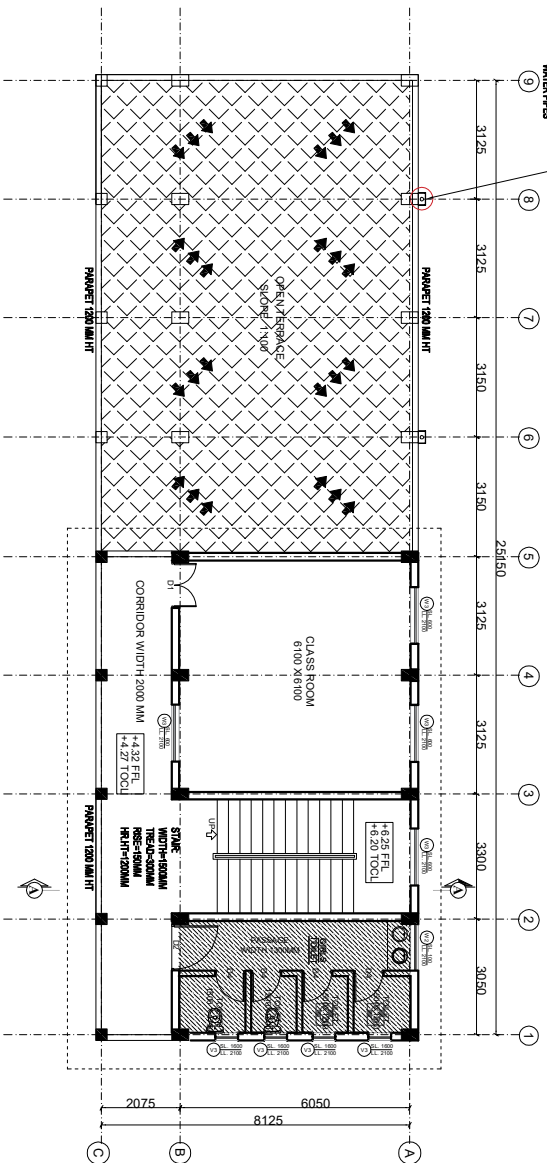
Drawings





GROUND FLOOR PLAN
BUILT UP AREA 216.33 M2

ROOF SLOPE OF DIMENSIONS 3000/3000
SHALL BE CARVED AT TERRACE FLOOR
LEVEL AND SHALL BE SLOPED TOWARDS
DRAINAGE APPOINTMENT FOR DRAINING RAIN
WATER PIPES



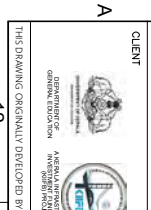
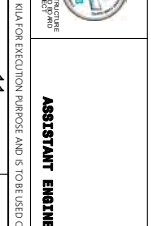
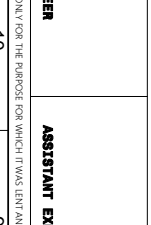
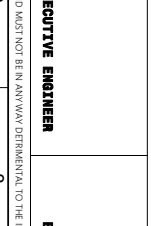
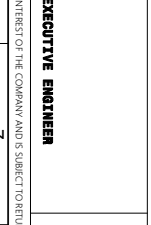
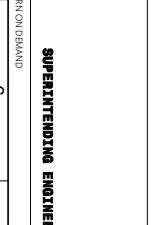
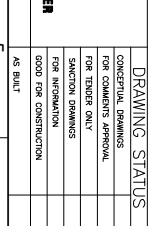
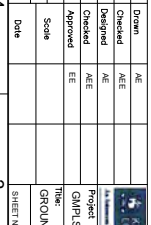
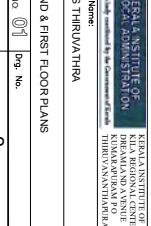
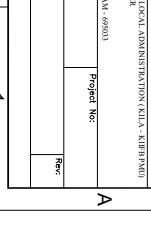
FIRST FLOOR PLAN
BUILT UP AREA 108.8 M2

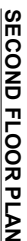
LEGEND	
☐	DUMMY COLUMN AT 1200MM HT

LEGEND		
SL	DESCRIPTION	WIDTH HEIGHT
D1	STEEL DOUBLE DOOR	1200 2100
D2	STEEL DOOR	1200 2100
D3	PVC DOOR	900 2100
D4	PVC DOOR	800 2100
GD	GRILL DOOR	1200 2100
W2	STEEL WINDOW	1250 1000
W3	STEEL WINDOW	1500 1500
V1	STEEL VENTILATOR	600 500
SL	SILL LEVEL	
LL	LINTEL LEVEL	
FFL	FINISHED FLOOR LEVEL	
TOCL	TOP OF CONCRETE LEVEL	
EGL	EXISTING GROUND LEVEL	

FINISHING SCHEDULE			
FACILITIES	FLOORING	WALLS INTERIOR	WALLS EXTERIOR
CLASS ROOM, VERANDHA	VITRIFIED TILES	ACRYLIC SMOOTH EMULSION PAINT	ACRYLIC SMOOTH EMULSION PAINT
TOILET	CERAMIC TILES	1500 MM HIGH CERAMIC TILES	ACRYLIC SMOOTH EMULSION PAINT
STAR	SEMI VITRIFIED TILES	110 MM HIGH VITRIFIED TILES	ACRYLIC SMOOTH EMULSION PAINT
ENTRANCE STEP	CHEQUERED CEMENT CONCRETE TILES		

- NOTE:
- ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS ARE IN METERS
 - ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED.
 - 3400 MM CORRESPONDS TO FINISHED GROUND LEVEL.
 - THE BUILDING HAS BEEN DESIGNED FOR G+2 STRUCTURE ONLY.
 - ANY DISCREPANCY IN THE DRAWINGS, DIMENSIONS AND SPECIFICATIONS SHALL BE BROUGHT TO THE NOTICE OF THE CONCERNED ENGINEER IN CHARGE.
 - WALL THICKNESS IS 200 MM WHEREVER NOT SPECIFICALLY MENTIONED.
 - SILL LEVEL AND LINTEL LEVEL SHOWN ARE FROM THE RESPECTIVE FLOOR LEVEL.

CLIENT		DRAWING STATUS		PROJECT INFORMATION	
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		☐ A/E		Project No: DR/2019/001	
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EGL	EXISTING GROUND LEVEL

FINISHING SCHEDULE

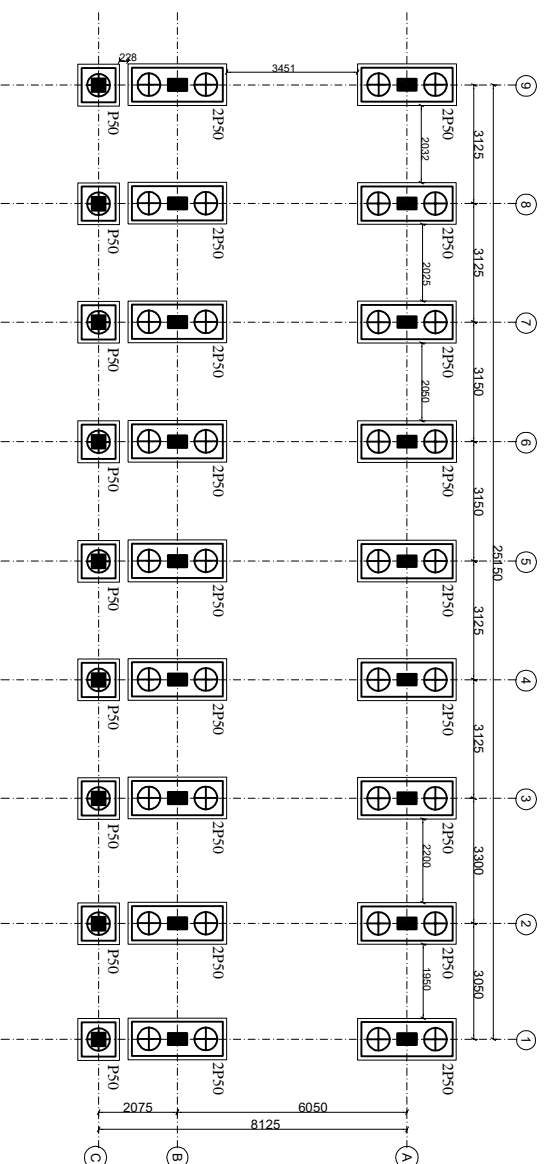
LEGEND

☐ DUMMY COLUMN AT 1200MM HT

1. ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS ARE IN METERS
2. ONLY 4 WHOLE DIMENSIONS ARE TO BE FOLLOWED.
3. 24.00 LT. CORRESPONDS TO FINISHED GROUND LEVEL.
4. THE BUILDING HAS BEEN DESIGNED FOR 6th STRUCTURE ONLY.
5. ANY DISCREPANCY IN THE DIMENSIONS, DIMENSIONS AND SPECIFICATIONS SHALL BE BROUGHT TO THE NOTICE OF THE CONCERNED ENGINEER-IN-CHARGE.
6. WALL THICKNESS IS 200 MM WHEREVER NOT SPECIFICALLY MENTIONED.
7. SILL LEVEL AND LEVEL LINE SHOWN ARE FROM THE RESPECTIVE FLOOR LEVEL.

DRAWING STATUS



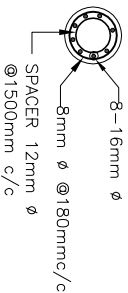
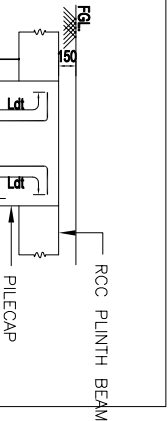


PILE & PILE CAP LAYOUT

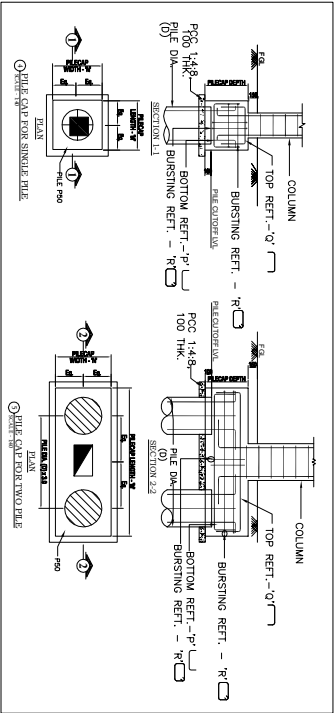
GENERAL NOTES

1. This drawing should be read in conjunction with other relevant architectural and structural drawings and all relevant sections of the design specifications.
2. All dimensions are in mm unless otherwise specified.
3. Only written dimensions shall be followed.
4. Concrete shall be of M25 grade as per IS 456:2000. The grade of steel shall be Fe500D.
5. Clear cover to reinforcement
 - a) Column-40mm b) Footing-50mm, c) Slab -20mm, d) Beam -25mm.
6. Pile capacity considered: 50cm dia - 805 kN
 1. Lap length is 55d, where 'd' is diameter of bar
2. Development length for bars in tension 'L_{dt}' shall be 49d and in compression 'L_{dc}' shall be 39d where d is the nominal bar diameter
3. Building is designed for G+2 floor only

 NATIONAL INSTITUTE OF LOCAL ADMINISTRATION กรมส่งเสริมการปกครองส่วนท้องถิ่น 101 ถนนวิภาวดีรังสิต แขวงจตุจักร กรุงเทพมหานคร 10700 โทร. 02-5610000 โทรสาร 02-5610001	 กรมส่งเสริมการปกครองส่วนท้องถิ่น 101 ถนนวิภาวดีรังสิต แขวงจตุจักร กรุงเทพมหานคร 10700 โทร. 02-5610000 โทรสาร 02-5610001	ASSISTANT ENGINEER	ASSISTANT EXECUTIVE ENGINEER	EXECUTIVE ENGINEER	SUPERINTENDING ENGINEER	DRAWING STATUS		SHEET No. 04 Proj. No.	Title:	Rev.
						CONCEPT, DRAWINGS FOR COMMENTS APPROVAL FOR TENDER ONLY SANCTION DRAWINGS GOOD FOR CONSTRUCTION AS BUILT?	Drawn A/E Checked A/E Designed A/E Checked A/E Approved E/E Score			
THIS DRAWING ORIGINALLY DEVELOPED BY NILA FOR EXECUTION PURPOSE AND IS TO BE USED ONLY FOR THE PURPOSE FOR WHICH IT WAS INTD AND MUST NOT BE IN ANYWAY DETRIMENTAL TO THE INTEREST OF THE COMPANY AND IS SUBJECT TO RETURN ON DEMAND										
PILE & PILE CAP LAYOUT										



PILE -SECTION 1.1
SCALE - 1:50



PILE DETAILING			
PILE TYPE	PILE DIA (D) in mm"	PILE LENGTH in Metre"	PILE CAPACITY (T)
P50	500	15	8 Y 16 Y8 @ 150 CC 80.5
* SAFE LOAD CAPACITY OF PILE ASSUMED SHALL BE CONFIRMED BY ROUTINE LOAD TEST AT SITE			

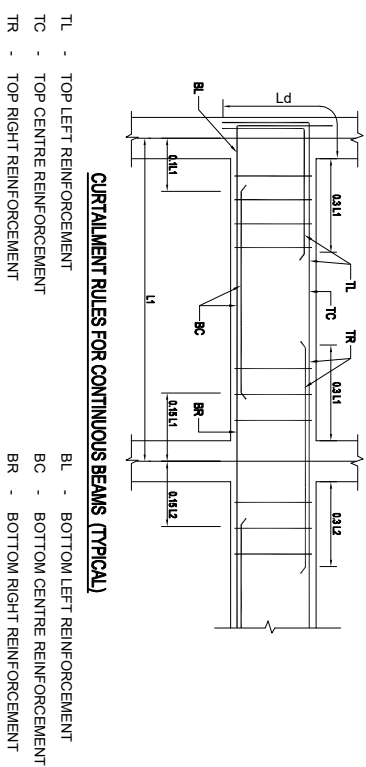
DETAILS OF PILE CAP					
PILE CAP SIZE			REFT DETAILS		
PILE CAP TYPE	PILE DIA (D) in mm"	LENGTH (L) in mm"	DEPTH in mm"	BOTTOM REFT (P)	TOP REFT (Q)
1P50	500	800	650	Y16 @ 150CC	Y12 @ 150CC
2P50	500	2500	900	Y16 @ 150CC	Y12 @ 200CC

CLIENT		ASSISTANT ENGINEER		ASSISTANT EXECUTIVE ENGINEER		EXECUTIVE ENGINEER		SUPERINTENDING ENGINEER	

DRAWING STATUS		FOR COMMENTS APPROVAL		FOR TENDER ONLY		FOR INFORMATION		FOR CONSTRUCTION	
Drawn	AE	Checked	AE	Designed	AE	Approved	EE	Scale	AS BUILT

Project Name: GMP L5 THIRUVATHIRA		Project No:	
Title: FOUNDATION DETAILS		Page No.	

THIS DRAWING ORIGINALLY DEVELOPED BY KAL FOR ERECTION PURPOSE AND IS TO BE USED ONLY FOR THE PURPOSE FOR WHICH IT WAS LISTED AND MUST NOT BE IN ANY WAY DETRIMENTAL TO THE INTEREST OF THE COMPANY AND IS SUBJECT TO MODIFICATION WITHOUT NOTICE.



CURTAILMENT RULES FOR CONTINUOUS BEAMS (TYPICAL)

TL - TOP LEFT REINFORCEMENT	BL - BOTTOM LEFT REINFORCEMENT
TC - TOP CENTRE REINFORCEMENT	BC - BOTTOM CENTRE REINFORCEMENT
TR - TOP RIGHT REINFORCEMENT	BR - BOTTOM RIGHT REINFORCEMENT

S1= $\sqrt{\min}$ of 6 ØL ØL -Smallest Dia. OF Main Bar

d = EFFECTIVE DEPTH OF BEAM = D - EFFECTIVE COVER

S = GIVEN SPACING OF STIRRUPS IN BEAM DETAILS

DETAILING OF REINFORCEMENT IN BEAMS FOR DUCTILITY

CLIENT



DEPARTMENT OF
GENERAL EDUCATION
A KERALA INFRASTRUCTURE
INVESTMENT FUND PROJECT
(PIMP) PROJECT

ASSISTANT ENGINEER

ASSISTANT EXECUTIVE ENGINEER

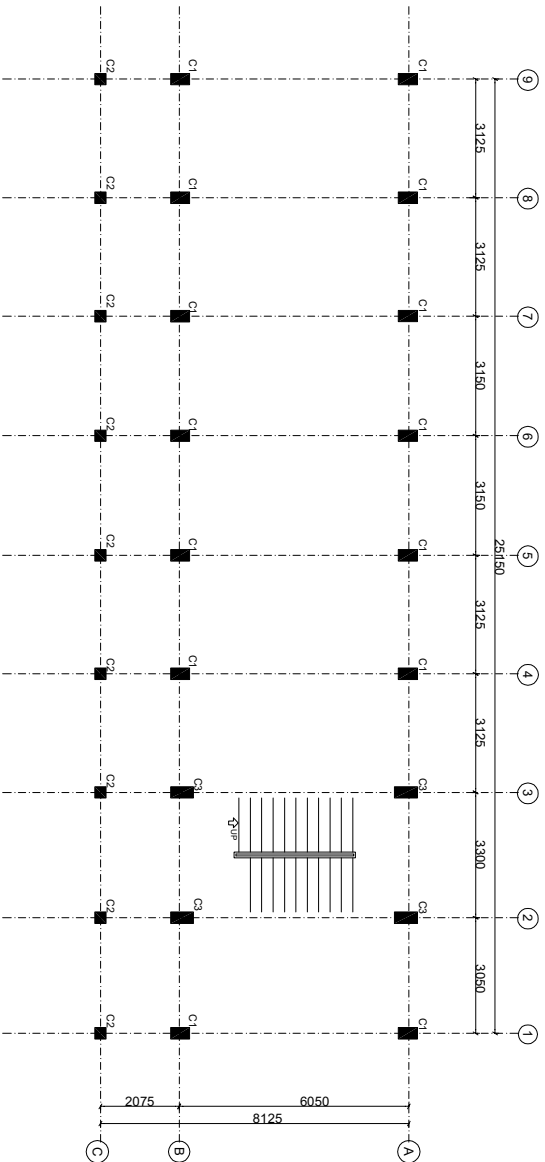
EXECUTIVE ENGINEER

SUPERINTENDING ENGINEER

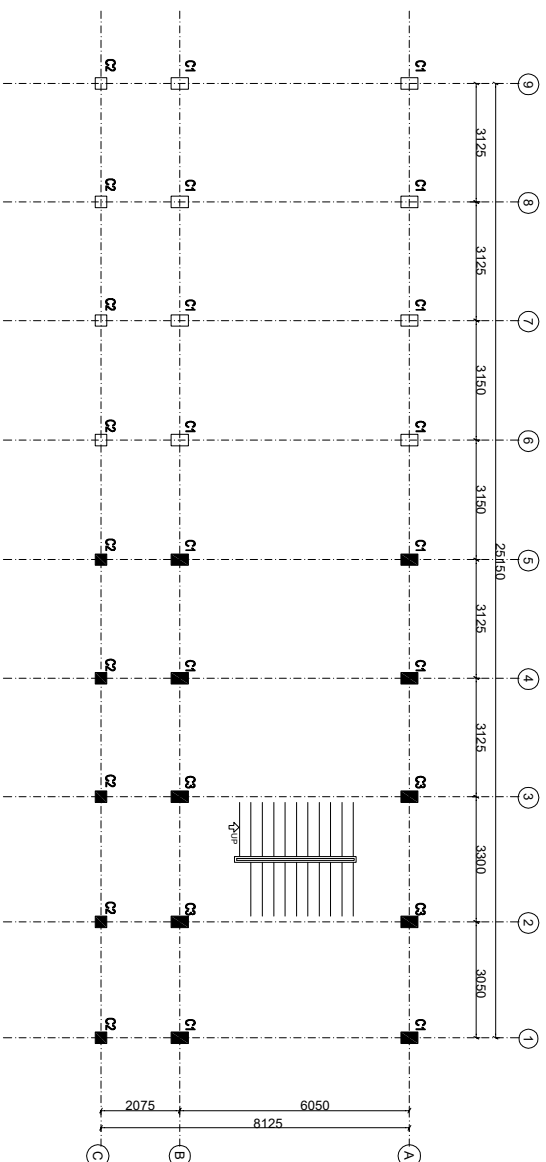
DRAWING STATUS

 KARNATAKA GOVT DEPARTMENT OF P.W.D. BANGALORE PROJECT NO. 07		Project Name	Project No.	Rev.
CONCEPT DRAWINGS	Checked	AE		
FOR COMMENTS APPROVAL	Designed	AE		
FOR TENDER ONLY	Checked	AE		
SECTION DRAWINGS				
FOR INFORMATION	Approved	EE		
0000 FOR CONSTRUCTION				
Scale				
Date				

THIS DRAWING ORIGINALLY DEVELOPED BY KILA FOR EXECUTION PURPOSE AND IS TO BE USED ONLY FOR THE PURPOSE FOR WHICH IT WAS LENT AND MUST NOT BE IN ANYWAY DETRIMENTAL TO THE INTEREST OF THE COMPANY AND IS SUBJECT TO RETURN ON DEMAND



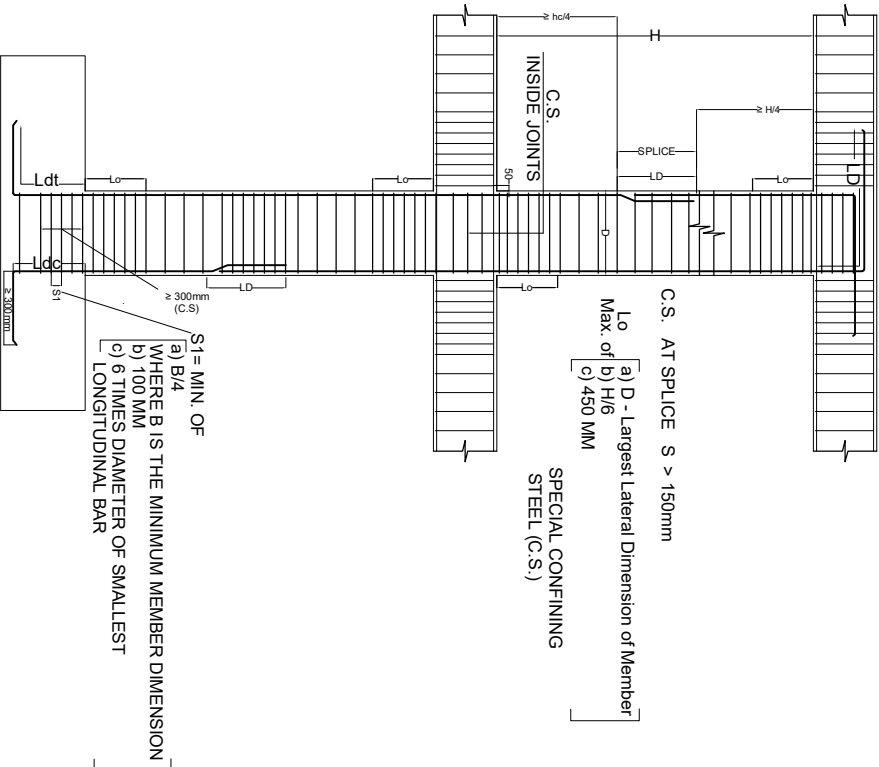
GROUND FLOOR - COLUMN LAYOUT



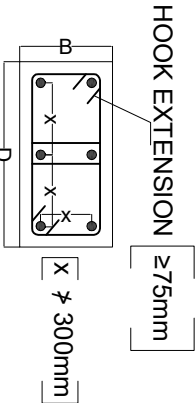
FIRST FLOOR - COLUMN LAYOUT

LEGEND

☐ DUMMY COLUMN AT 1200MM HT



DETAILING OF COLUMN FOR DUCTILITY
(C.S. = CONFINING STEEL @ 70 MM C/C)



DETAILS OF TIES IN COLUMNS

GRADE OF STEEL : Fe 500D
GRADE OF CONCRETE : M25

CLIENT

ASSISTANT ENGINEER

ASSISTANT EXECUTIVE ENGINEER

EXECUTIVE ENGINEER

SUPERINTENDING ENGINEER

DRAWING STATUS

CONCEPTUAL DRAWINGS	Drawn	AE	
FOR COMMENTS APPROVAL	Designed	AE	
FOR TENDER ONLY	Checked	AE	
SANCTION DRAWINGS	Approved	EE	
FOR INFORMATION	Scale		
GOOD FOR CONSTRUCTION	AS BUILT		

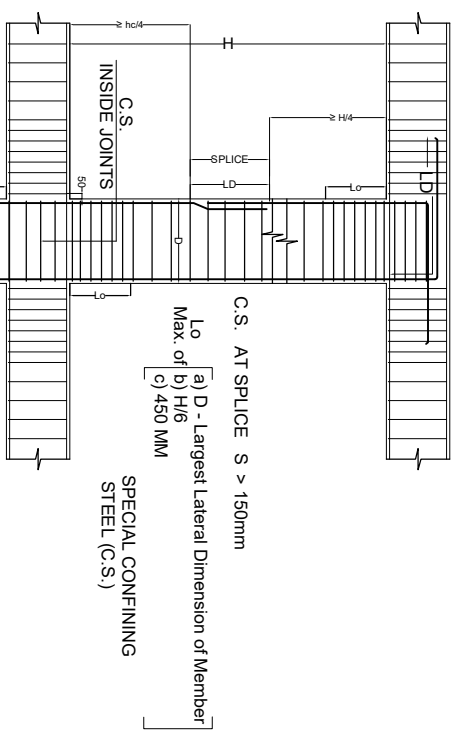
KERALA INSTITUTE OF LOCAL ADMINISTRATION (KILA, KILBTRIM)
LOCAL ADMINISTRATION
THIRUVANANTHAPURAM - 695003

Project Name:
GNPLS THIRUVATHIRA

Project No:
GROUND & FIRST FLOOR - COLUMN LAYOUT

Sheet No:
Pg. No.

THIS DRAWING ORIGINALLY DEVELOPED BY KILA FOR ELECTION PURPOSES AND IS TO BE USED ONLY FOR THE PURPOSE FOR WHICH IT WAS LISTED AND MUST NOT BE IN ANY WAY DETRIMENTAL TO THE INTERESTS OF THE COMPANY AND IS SUBJECT TO FURTHER MODIFICATION



LEGEND

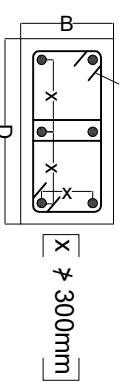
☐ DUMMY COLUMN AT 1200MM HT

(TWO LEGGED STRIRUPS)
Y8 STRIRUPS @ 150MM C/C
COLUMN - C3
(300 X 600)
(Y8 @ 70 MM C/C UP
TO 650 MM FROM BEAM
COLUMN JUNCTION)

GRADE OF STEEL : Fe 500D
GRADE OF CONCRETE : M25

CLIENT	ASSISTANT ENGINEER	ASSISTANT EXECUTIVE ENGINEER	EXECUTIVE ENGINEER	SUPERINTENDING ENGINEER
 KERALA INSTITUTE OF LOCAL ADMINISTRATION OFFICE NO. 10/11, MOOLAKKAL DEPARTMENT OF LOCAL GOVERNMENT GOVERNMENT OF KERALA	 KERALA INSTITUTE OF LOCAL ADMINISTRATION OFFICE NO. 10/11, MOOLAKKAL DEPARTMENT OF LOCAL GOVERNMENT GOVERNMENT OF KERALA	 KERALA INSTITUTE OF LOCAL ADMINISTRATION OFFICE NO. 10/11, MOOLAKKAL DEPARTMENT OF LOCAL GOVERNMENT GOVERNMENT OF KERALA	 KERALA INSTITUTE OF LOCAL ADMINISTRATION OFFICE NO. 10/11, MOOLAKKAL DEPARTMENT OF LOCAL GOVERNMENT GOVERNMENT OF KERALA	 KERALA INSTITUTE OF LOCAL ADMINISTRATION OFFICE NO. 10/11, MOOLAKKAL DEPARTMENT OF LOCAL GOVERNMENT GOVERNMENT OF KERALA
THIS DRAWING ORIGINALLY DEVELOPED BY I/A FOR EXECUTION PURPOSE AND IS TO BE USED ONLY FOR THE PURPOSE FOR WHICH IT WAS LEFT AND MUST NOT BE IN ANYWAY DETRIMENTAL TO THE INTEREST OF THE COMPANY AND IS SUBJECT TO RETURN ON DEMAND				
DRAWING STATUS				
Design	AE			
Checked	AE			
FOR COMMENTS APPROVAL	AE			
FOR TENDER ONLY	Checked			
SANCTION DRAWINGS	EE			
FOR REVISION				
GOOD FOR CONSTRUCTION	Scdn			
AS BUILT				
 KERALA INSTITUTE OF LOCAL ADMINISTRATION OFFICE NO. 10/11, MOOLAKKAL DEPARTMENT OF LOCAL GOVERNMENT GOVERNMENT OF KERALA				
Project Name: TERRACE FLOOR - COLUMN LAYOUT Project No: _____ Date: _____ Scale: _____ Sheet No: _____ of _____ Rev: _____				

HOOK EXTENSION $\geq 75\text{mm}$

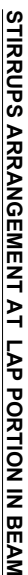




CURTAILMENT RULES FOR CONTINUOUS BEAMS (TYPICAL)

TL - TOP LEFT REINFORCEMENT	BL - BOTTOM LEFT REINFORCEMENT
TC - TOP CENTRE REINFORCEMENT	BC - BOTTOM CENTRE REINFORCEMENT
TR - TOP RIGHT REINFORCEMENT	BR - BOTTOM RIGHT REINFORCEMENT

LEGEND
SUNKEN 250 MM DEPTH



FIRST FLOOR, TERRACE FLOOR & STAIR ROOM - BEAM REINFORCEMENT DETAILS										
BEAM ID	Beam Dimension	TOP LEFT (TL)	TOP CENTRE (TC)	TOP RIGHT (TR)	BOTTOM LEFT (BL)	BOTTOM CENTRE (BC)	BOTTOM RIGHT (BR)	STIRRUPS LEFT	STIRRUPS CENTRE	STIRRUPS RIGHT
B2	250 X 500	2 Y20+1 Y16	2 Y20	2 Y20+1 Y16	3 Y20	3 Y20	3 Y20	Y8 2L STI @ 100 C/C	Y8 2L STI @ 150 C/C	Y8 2L STI @ 100 C/C
B1	250 X 300	2 Y16+1 Y12	2 Y16	2 Y16+1 Y12	3 Y12	3 Y12	3 Y12	Y8 2L STI @ 100 C/C	Y8 2L STI @ 150 C/C	Y8 2L STI @ 100 C/C
B3	250 X 300	3 Y12	2 Y12	3 Y12	2 Y12	3 Y12	2 Y12	Y8 2L STI @ 100 C/C	Y8 2L STI @ 150 C/C	Y8 2L STI @ 100 C/C



DETAILING OF REINFORCEMENT IN BEAMS FOR DUCTILITY

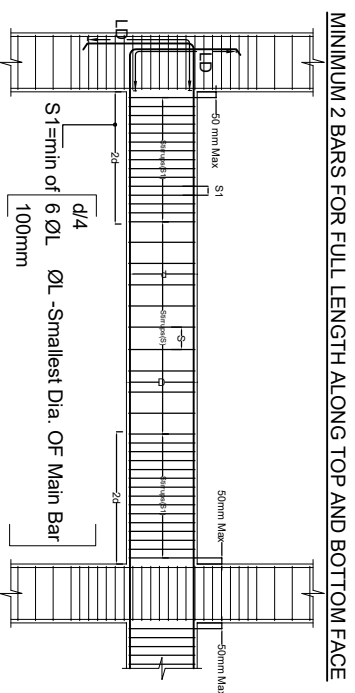
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TL - TOP LEFT REINFORCEMENT	BL - BOTTOM LEFT REINFORCEMENT
TC - TOP CENTRE REINFORCEMENT	BC - BOTTOM CENTRE REINFORCEMENT
TR - TOP RIGHT REINFORCEMENT	BR - BOTTOM RIGHT REINFORCEMENT

Diagram illustrating the required length of reinforcement bars. The length is indicated as being greater than or equal to the development length (L_{dt}) and also as being less than or equal to 150 mm.

FIRST FLOOR, TERRACE FLOOR & STAIR ROOM - BEAM REINFORCEMENT DETAILS										
BEAM ID	Beam Dimension	TOP LEFT (TL)	TOP CENTRE (TC)	TOP RIGHT (TR)	BOTTOM LEFT (BL)	BOTTOM CENTRE (BC)	BOTTOM RIGHT (BR)	STIRRUPS LEFT	STIRRUPS CENTRE	STIRRUPS RIGHT
B2	250 X 500	2 Y20+ Y16	2 Y20	2 Y20+ Y16	3 Y20	3 Y20	3 Y20	Y8 2L STH @ 100 C/C	Y8 2L STH @ 150 C/C	Y8 2L STH @ 100 C/C
B1	250 X 300	2 Y16+ Y12	2 Y16	2 Y16+ Y12	3 Y12	3 Y12	3 Y12	Y8 2L STH @ 100 C/C	Y8 2L STH @ 150 C/C	Y8 2L STH @ 100 C/C
B3	250 X 300	3 Y12	2 Y12	3 Y12	2 Y12	3 Y12	2 Y12	Y8 2L STH @ 100 C/C	Y8 2L STH @ 150 C/C	Y8 2L STH @ 100 C/C

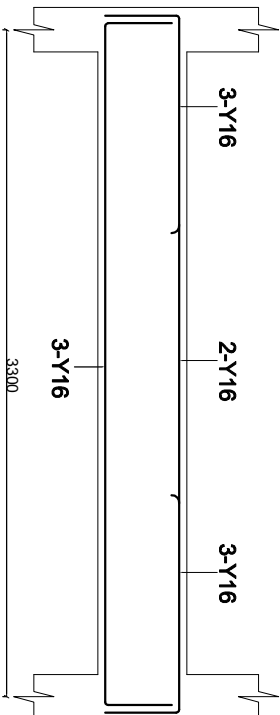
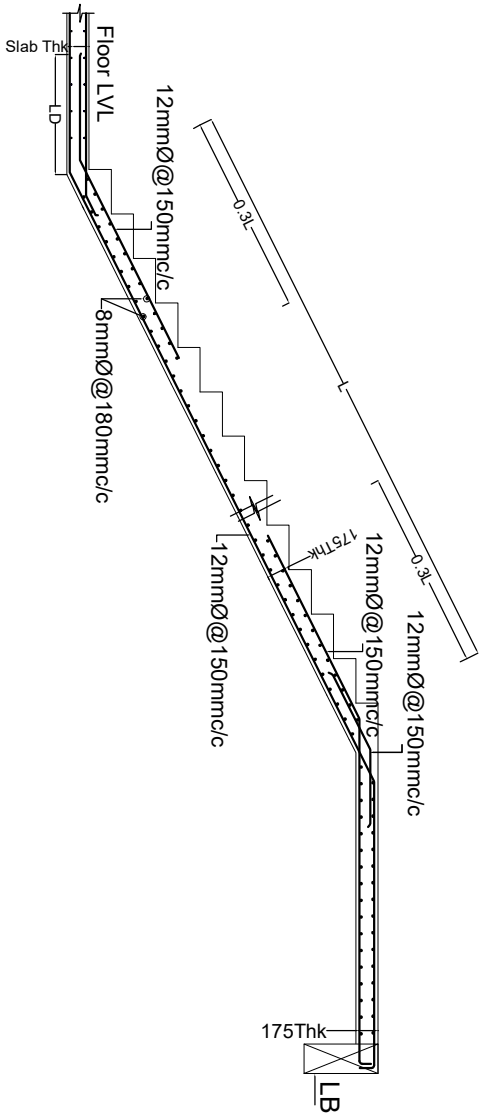


MINIMUM 2 BARS FOR FULL LENGTH ALONG TOP AND BOTTOM FACE

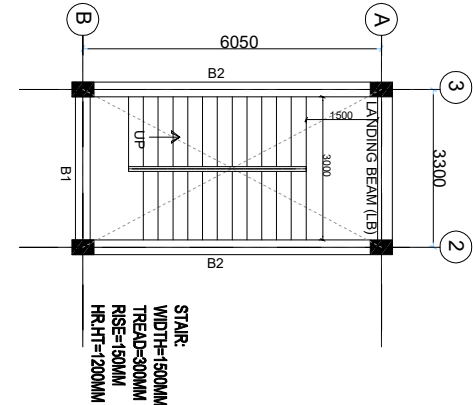
d = EFFECTIVE DEPTH OF BEAM = D - EFFECTIVE COVER
S = GIVEN SPACING OF STIRRUPS IN BEAM DETAILS

DETAILING OF REINFORCEMENT IN BEAMS FOR DUCTILITY

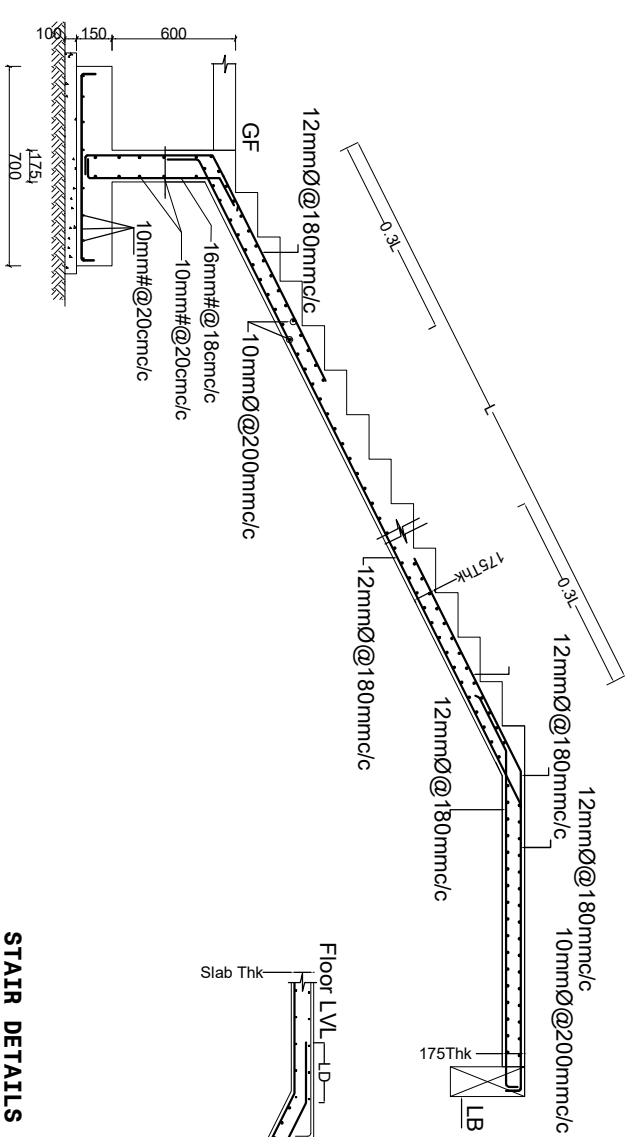
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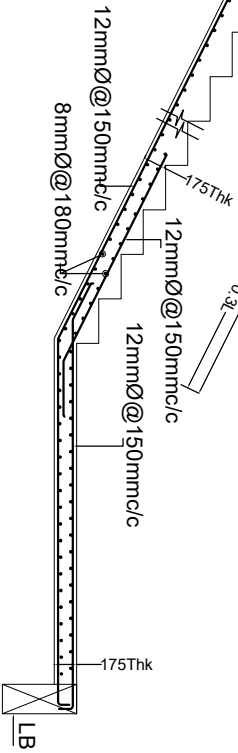
2 LEGGED 8MM DIA @ 140MM C/C AT CENTER
2 LEGGED 8MM DIA @ 90MM C/C AT ENDS
Landing Beam (LB) (250x350)



STAIR - PLAN

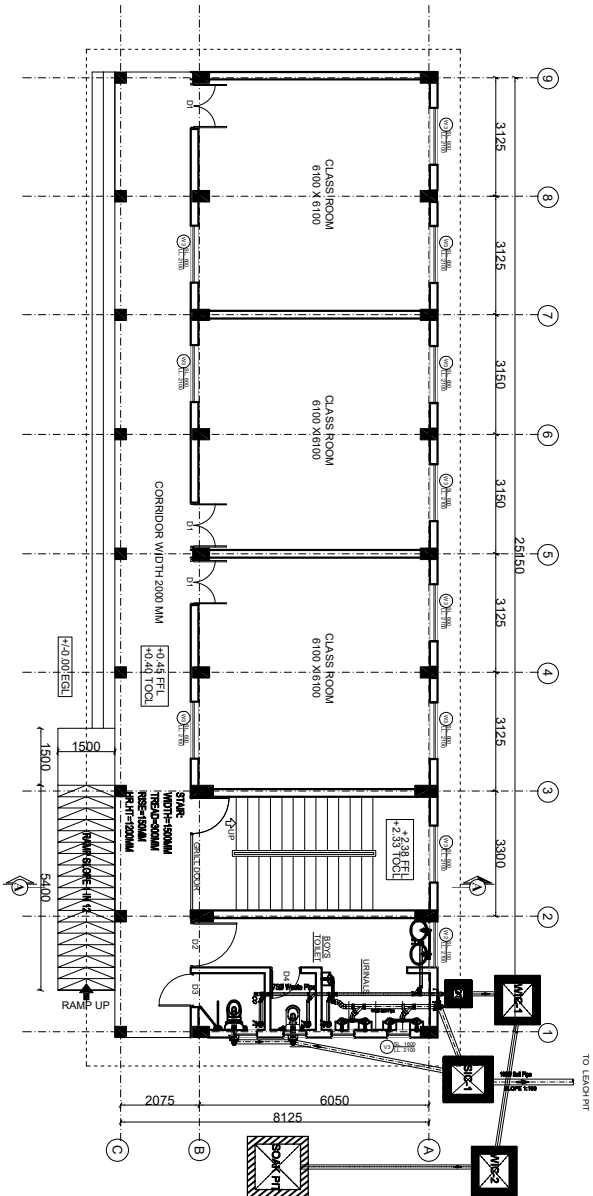


STAIR DETAILS

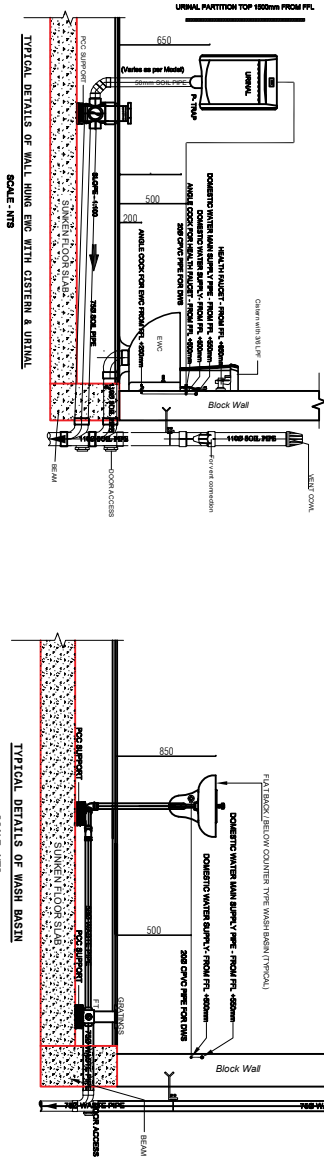


STAIR DETAILS

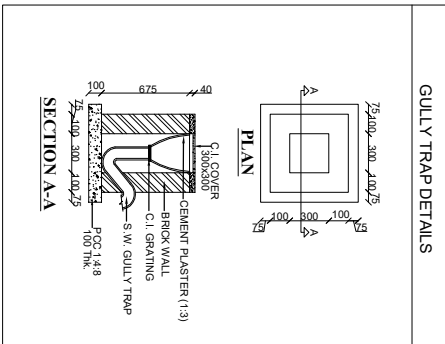
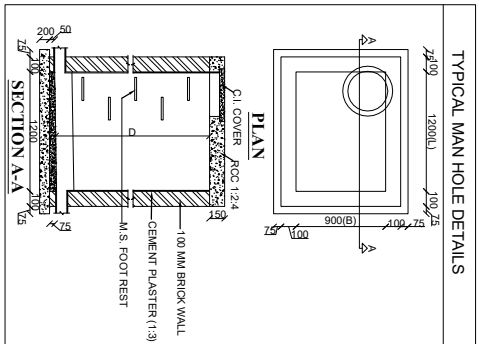
CLIENT			NATIONAL INSTITUTE OF LOCAL ADMINISTRATION 100, PHRAKASIT VANGUARD THIRUMANGALAM ROAD - 695003	DRAWING STATUS	CONCEPTUAL DRAWINGS	Drawn	AE	PROJECT INFORMATION		NATIONAL INSTITUTE OF LOCAL ADMINISTRATION 100, PHRAKASIT VANGUARD THIRUMANGALAM ROAD - 695003	Project Name: GAILPUS THIRUVATTARA	Project No: 	Sheet No:
					FOR COMMENTS APPROVAL	Designed	AE						
					FOR TENDER ONLY	Checked	AE						
					SANCTION DRAWINGS	Approved	EE						
					FOR INFORMATION	Scale							
					GOOD FOR CONSTRUCTION								
ASSISTANT ENGINEER			ASSISTANT ENGINEER			EXECUTIVE ENGINEER			SUPERINTENDING ENGINEER				
ASSISTANT ENGINEER			ASSISTANT ENGINEER			EXECUTIVE ENGINEER			SUPERINTENDING ENGINEER				
THIS DRAWING ORIGINALLY DEVELOPED BY NILA FOR EXECUTION PURPOSES AND IS TO BE USED ONLY FOR THE PURPOSES FOR WHICH IT WAS LENT AND MUST NOT BE IN ANY WAY DETRIMENTAL TO THE INTERESTS OF THE COMPANY AND IS SUBJECT TO RETURN ON DEMAND													
AS BUILT													
SHEET NO: 10													
Page No. 													



GROUND FLOOR - SEWAGE PLUMBING LAYOUT



TYPICAL DETAILS OF WASH BASIN



INVENTORY DETAILS OF MANHOLE			
S/NO.	TYPE	MANHOLE NUMBER	SIZE (MM) (1:500)
1	SOIL MANHOLE	SC-1	900x800x730
2	WASTE MANHOLE	WC-1	900x800x415
		WC-2	1200x900x585

LEGEND	
ITEM	DESCRIPTION
	with C Pipe Soil Line
	with B Water Waste Line
	with E Water Waste Line
	with F Water Waste Line
	with G Water Waste Line
	with H Water Waste Line
	with I Water Waste Line
	with J Water Waste Line
	with K Water Waste Line
	with L Water Waste Line
	with M Water Waste Line
	with N Water Waste Line
	with O Water Waste Line
	with P Water Waste Line
	with Q Water Waste Line
	with R Water Waste Line
	with S Water Waste Line
	with T Water Waste Line
	with U Water Waste Line
	with V Water Waste Line
	with W Water Waste Line
	with X Water Waste Line
	with Y Water Waste Line
	with Z Water Waste Line

NOTE:

A. - Soil, Waste, Vent & Rain Water Pipe.

1. All external soil & waste pipe (in shaft) are SVP pipe (IS 13522 - Type-B) with rubber ring / solvent welded joints.

2. All internal soil, waste & vent pipe (in shaft) are uPVC (IS 4853) with rubber ring fittings.

3. All external soil & waste line are uPVC (IS 4853) with rubber ring fittings.

4. All internal soil & waste line (flexible rain water pipes) are uPVC (IS 4853) with rubber ring fittings.

5. All external rain water line from terrace (shaft) are SVP pipe (IS 13522 - Type-A).

B. - Water Supply.

1. All internal & concealed cold water supply line are SDR-11 grade CPVC pipes & fittings.

2. All hot water supply lines are SDR-11 grade CPVC pipes & fittings.

3. All external cold water supply lines are ASTM SCH-40 with ASTM fittings.

GENERAL NOTES

1. DRAWINGS NOT TO BE SCALED.

2. ALL THE ARCHITECTURAL, STRUCTURAL AND SERVICES DRAWINGS SHALL BE REFERRED PRIOR TO CONSTRUCTION AT SITE.

CLIENT

KERALA INSTITUTE OF LOCAL ADMINISTRATION (KILA), KUTTIYAM

THIRUVANANTHAPURAM - 695003

ASSISTANT ENGINEER

GROUND FLOOR - SERVICE PLUMBING LAYOUT

ASSISTANT EXECUTIVE ENGINEER

EXECUTIVE ENGINEER

SUPERINTENDING ENGINEER

DRAWING STATUS

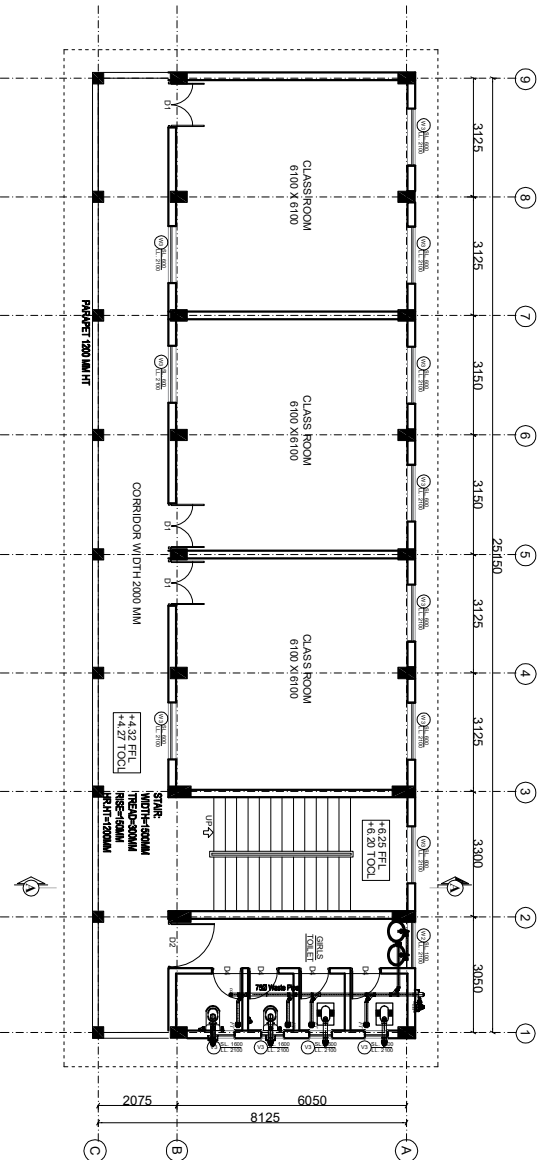
Drawn	AE
Checked	AE
For Comments Approval	AE
For Tender Only	AE
Sanction Drawings	EE
For Information	Scale
Good for Construction	AS BUILT

PROJECT NAME: GAIL PS Thiruvananthapuram

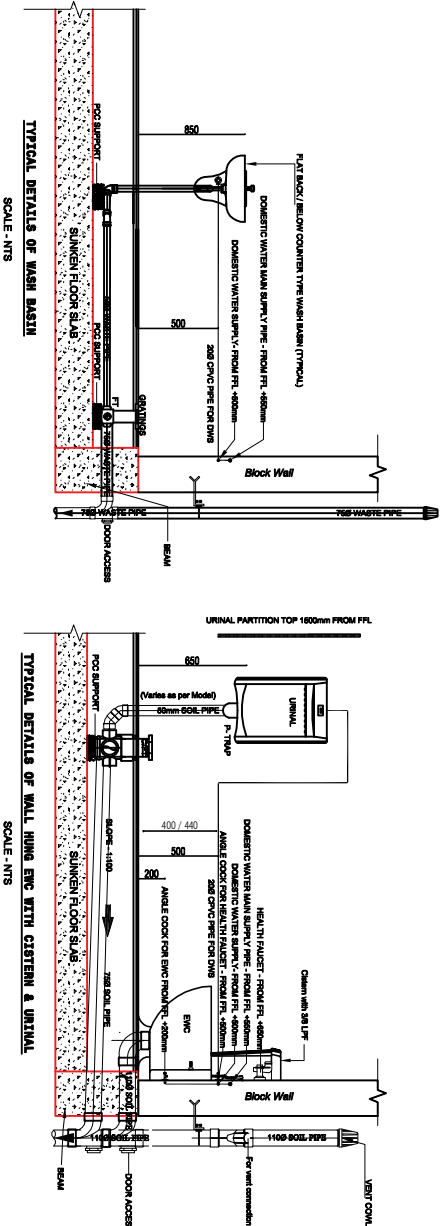
PROJECT NO.: 100/25

SHEET NO.: 1/3

Page No.: 2



FIRST FLOOR - SEWAGE PLUMBING LAYOUT



SANITARY CALCULATIONS

SL	BUILDING	OCCUPANCY	BUILT UP AREA	OCCUPANT LOAD				CLOSET				WASH BASIN			
				MALE	FEMALE	TOTAL		MALE	FEMALE	URINAL		MALE	FEMALE	URINAL	
1	EDUCATIONAL	GROUP B	454.76 SQ.M	51 NOS	26 NOS	77 NOS		1 FOR 40 BOYS	1 FOR 25 GIRLS	1 FOR 50 PERSONS		1 FOR 40 BOYS	1 FOR 40 GIRLS	1.0 NOS	
Provided								2 NOS	4 NOS	5 NOS		2 NOS			

NOTE : Total occupant load for sanitary calculations shall be computed at the rate of not less than 1 person per 5 sq. m of built-up area and 2/3 of occupant load is considered as male and 1/3 as female as per KNBS/CPBR-2019 Rule-34(i)

CLIENT



AERIAL INSTITUTE OF ARCHITECTURE

ASSISTANT ENGINEER

ASSISTANT EXECUTIVE ENGINEER

EXECUTIVE ENGINEER

SUPERINTENDING ENGINEER

DRAWING STATUS

CONCEPTUAL DRAWINGS	Drawn	AE
FOR COMMENTS APPROVAL	Designed	AE
FOR TENDER ONLY	Checked	AE
SANCTION DRAWINGS	Approved	EE
FOR INFORMATION	Scale	
GOOD FOR CONSTRUCTION	AS BUILT	
	Date	

AERIAL INSTITUTE OF ARCHITECTURE
BANGALORE
THIRUVANANTHAPURAM - 695003

Project Name:

GMLPS THIRUVANANTHAPURAM

Project No:

First

ITEM	DESCRIPTION
1	upVC Pipe Soil Line
2	upVC Pipe Waste Line
3	Rain water pipe line
4	European Water Close(WC)
5	(Wall Mounting with Flush Tank)
6	Deashed European Water Closet
7	Wash Basin for Disabled
8	Health Faucet
9	Urinal
10	Wash Basin
11	Counter Type Wash basin
12	100 mm ØC concealed Floor Trap for Urinal
13	100 mm Ø Floor Trap with Gratings
14	Block
15	Grp Trap
16	Soil Vent Pipe
17	Waste Vent Pipe
18	Roofing Eye
19	Chimney
20	High Level
21	To Above
22	To Below
23	From Above
24	Invert Level
25	Cover Level
26	High Level
27	To Above
28	To Below
29	From Above

NOTE:

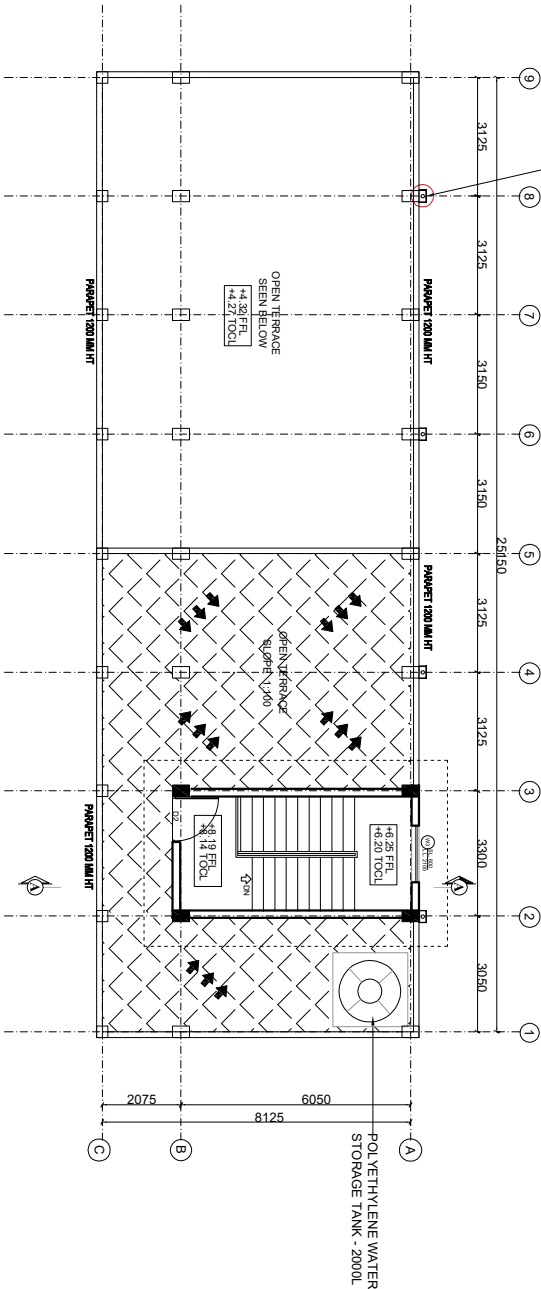
- A. Soil, Waste, Vent & Rain Water pipe:
 1. All internal & external soil & waste pipes are SDR-11 grade CPVC pipes.
 2. All internal soil, waste & vent pipe (in soil) are upVC (IS-4885) Beglcon with fittings.
 3. All external soil & waste pipe are upVC (IS-4885) Beglcon with fittings.
 4. All rain water pipes (down pipes) are upVC (IS-4885) Beglcon with fittings.
 5. All external rain water lines from terrace (Shall) are SDR pipe (IS-1592 - type A)
- B. Water Supply:
 1. All internal & concealed cold water supply lines are SDR-11 grade CPVC pipes & fittings.
 2. All hot water supply lines are SDR-11 grade CPVC pipes & fittings.
 3. All external cold water supply lines are ASTM SC-H40 with ASTM fittings.

GENERAL NOTE

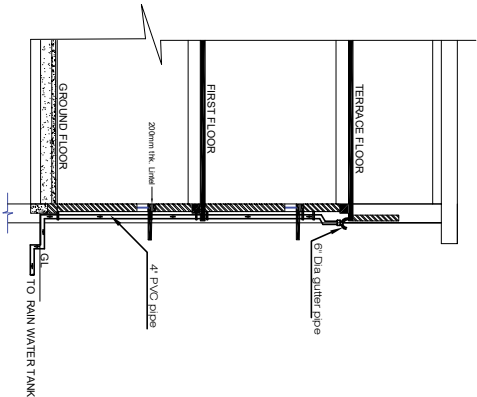
1. DRAWINGS NOT TO BE SCALED
2. ALL DIMENSIONS ARE IN METERS
3. SERVICES DRAWINGS SHALL BE REFERRED PRIOR TO CONSTRUCTION AT SITE.

NO BLOCK OF DRAINAGE APPROVED
SHALL BE CASTED AT TERRACE FLOOR
BEAM JUNCTIONS WITH NECESSARY
APPROPRIATE FOR DROPPING RAIN
WATER PIPES

SECOND FLOOR PLAN



TERRACE FLOOR - RAINWATER PLUMBING LAYOUT

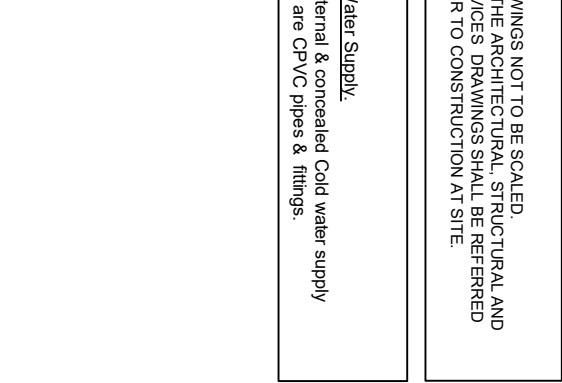


TYPICAL SECTION SHOWING
RAIN WATER DOW PIPE

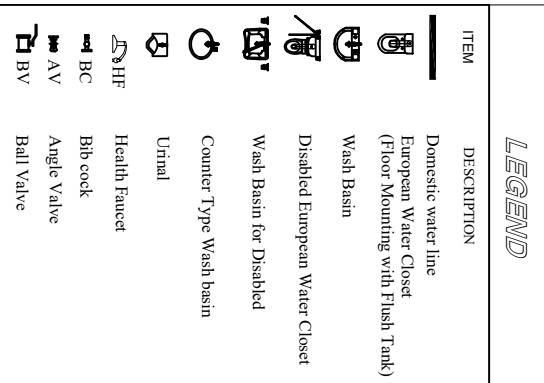
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FOR INFORMATION		GOOD FOR CONSTRUCTION		AS BUILT		DATE		SHEET NO.	
12		11		10		9		8	
7		6		5		4		3	
2		1							

B. - Water Supply.

1. All internal & concealed Cold water supply lines are CPVC pipes & fittings.



GROUND FLOOR & FIRST FLOOR - WATER SUPPLY PLUMBING LAYOUT

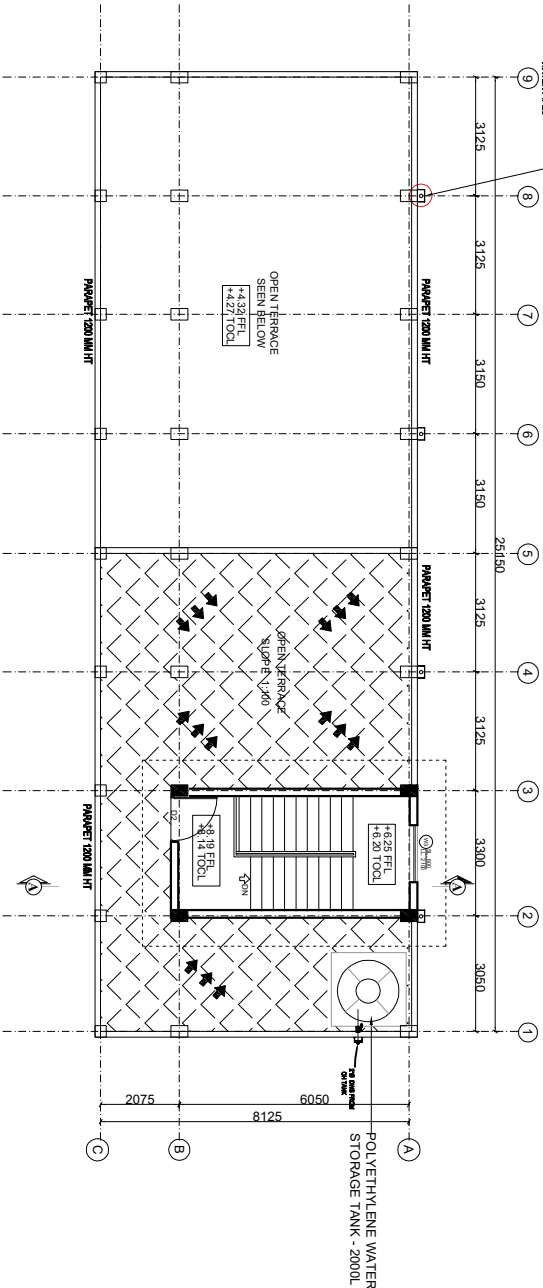


NOTE: PLUMBING DRAWINGS PREPARED AS PER AVAILABLE DATAS.
FURTHER CHANGES SHALL BE DONE AS PER SITE CONDITION

[illegible]

NOT BLIND OF IMMERGING SURFACES
SHOULD BE USED AT ALL JOINTS AND
BEAM JUNCTIONS WITH NECESSARY
APPLIANCES FOR DROPPING MAIN
WATER PIPES

SECOND FLOOR PLAN



TERRACE FLOOR - WATER SUPPLY PLUMBING LAYOUT

NOTE: PLUMBING DRAWINGS PREPARED AS PER AVAILABLE DATAS.
FURTHER CHANGES SHALL BE DONE AS PER SITE CONDITION

1. DRAWINGS NOT TO BE SCALED
2. ALL THE ARCHITECTURAL, STRUCTURAL AND SERVICES DRAWINGS SHALL BE REFERRED PRIOR TO CONSTRUCTION AT SITE.

B. - Water Supply.
1. All internal & concealed cold water supply lines are CPVC pipes & fittings.

LEGEND

ITEM	DESCRIPTION
	Domestic water line
	European Water Closet (Floor Mounting with Flush Tank)
	Wash Basin
	Disabled European Water Closet
	Wash Basin for Disabled
	Counter Type Wash basin
	Urinal
	Health Faucet
	Bib cock
	Angle Valve
	Ball Valve
	Domestic Water Supply
	High Level
	T/A To Above
	T/B To Below
	F/A From Above

CLIENT

ASSISTANT ENGINEER

ASSISTANT EXECUTIVE ENGINEER

EXECUTIVE ENGINEER

SUPERINTENDING ENGINEER

DRAWING STATUS

CONCEPTUAL DRAWINGS	FOR COMMENTS APPROVAL	FOR TENDER ONLY	SANCTION DRAWINGS	FOR INFORMATION	GOOD FOR CONSTRUCTION
Drawn	Checked	Checked	Approved	Scale	Date
AE	AE	AE	EE		

Project Name: GAILUS THIRUVATHIRA

Project No:

Sheet No: 7

KERALA INSTITUTE OF LOCAL ADMINISTRATION (KILA) KUTTIYAD

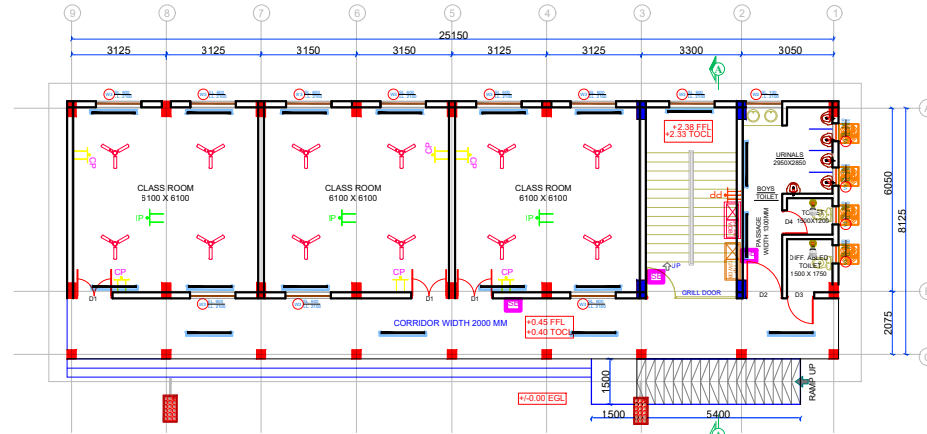
BRANCH OFFICE

THIRUVANANTHAPURAM - 695003

Project Name: GAILUS THIRUVATHIRA

Project No:

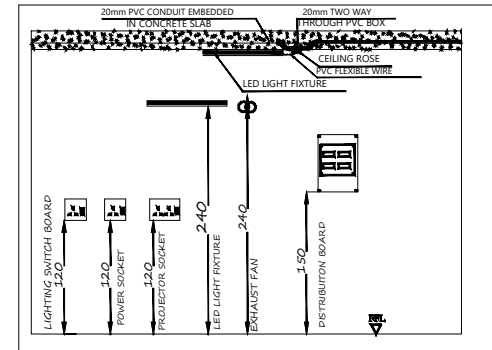
Sheet No: 7



GROUND FLOOR - ELECTRICAL POINTS LAYOUT

SL.NO.	SYMBOL	SPECIFICATION
1		Angle batten with LED
2		LED Tube Light
3		Bulk head with LED
4		LED Street light
5		1200 mm ceiling fan
6		Exhaust fan
7		Independent plug
8		Combined plug
9		6/16 A Power plug
10		2 No.CPB
11		3φ 8 Way VDB
12		3φ 6 Way DB
13		CIRCUIT CONDUIT LAYOUT
14		POINTS CONDUIT LAYOUT
15		POINT WIRING
16		SWITCH BOARD WITHOUT CP
17		HDMI CONDUIT

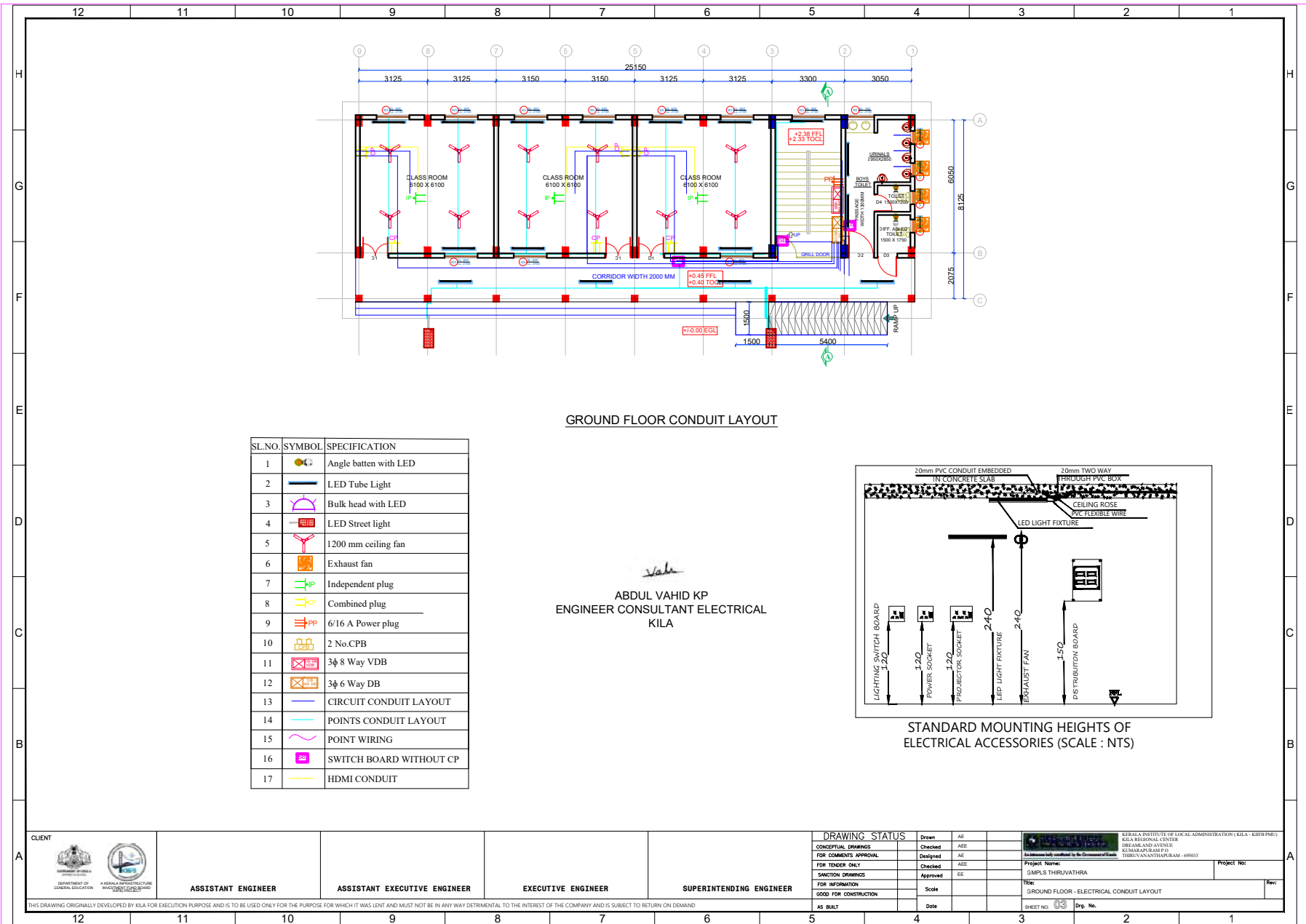
Abdul Wahid
ABDUL VAHID KP
ENGINEER CONSULTANT ELECTRICAL
KILA

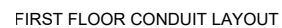


STANDARD MOUNTING HEIGHTS OF ELECTRICAL ACCESSORIES (SCALE : NTS)

CLIENT DEPARTMENT OF GENERAL EDUCATION A KERALA INFRASTRUCTURE PROJECT (KIP) (KIP-1000) KILA REGIONAL CENTER KILA REGIONAL CENTER KILAPURAM PO THIRUVANANTHAPURAM - 695013	ASSISTANT ENGINEER	ASSISTANT EXECUTIVE ENGINEER	EXECUTIVE ENGINEER	SUPERINTENDING ENGINEER	DRAWING STATUS	Drawn: AE Checked: AE Designed: AE Checked: AEE Approved: EE Scale: _____ Date: _____	Project Name: GMPLS THIRUVATHIRA Project No: _____ Title: GROUND FLOOR - ELECTRICAL POINTS LAYOUT SHEET NO: 01 Dwg. No: _____
					FOR TENDER ONLY SANCTION DRAWINGS FOR INFORMATION GOOD FOR CONSTRUCTION AS BUILT	Drawn: AE Checked: AE Designed: AE Checked: AEE Approved: EE Scale: _____ Date: _____	Project Name: GMPLS THIRUVATHIRA Project No: _____ Title: GROUND FLOOR - ELECTRICAL POINTS LAYOUT SHEET NO: 01 Dwg. No: _____

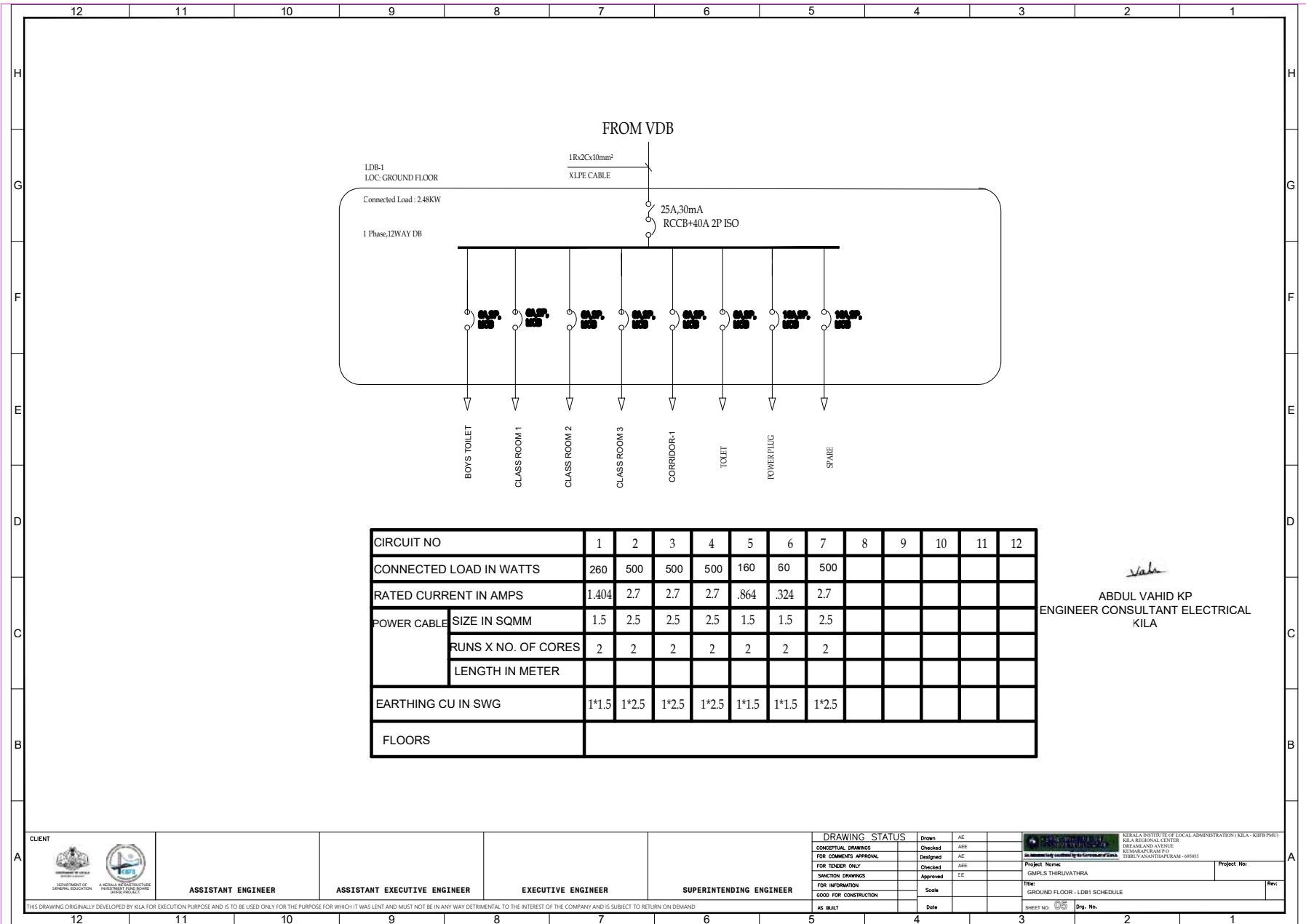
 DEPARTMENT OF GENERAL EDUCATION KERALA INSTITUTE OF LOCAL ADMINISTRATION THIRUVANANTHAPURAM	 ASSISTANT ENGINEER	ASSISTANT EXECUTIVE ENGINEER	EXECUTIVE ENGINEER	SUPERINTENDING ENGINEER	DRAWING STATUS				 KERALA INSTITUTE OF LOCAL ADMINISTRATION (KILA - KILIP F&E) 10A, ORIGINAL LEVELS DREAM AND AVENUE ESTABLISHMENT THIRUVANANTHAPURAM - 690033	Project No:	Rev:	
					DRAWN	AE	DATE	DATE				
					CHECKED	AEE						
					FOR COMMENTS APPROVAL	Designated	AE					
					FOR TENDER ONLY	Checked	AEE					
					PROJECT NAME	Approved	EE					
					SECTION DRAWING							
					FOR INFORMATION GOOD FOR CONSTRUCTION			Scale				
					AS BUILT			Date				
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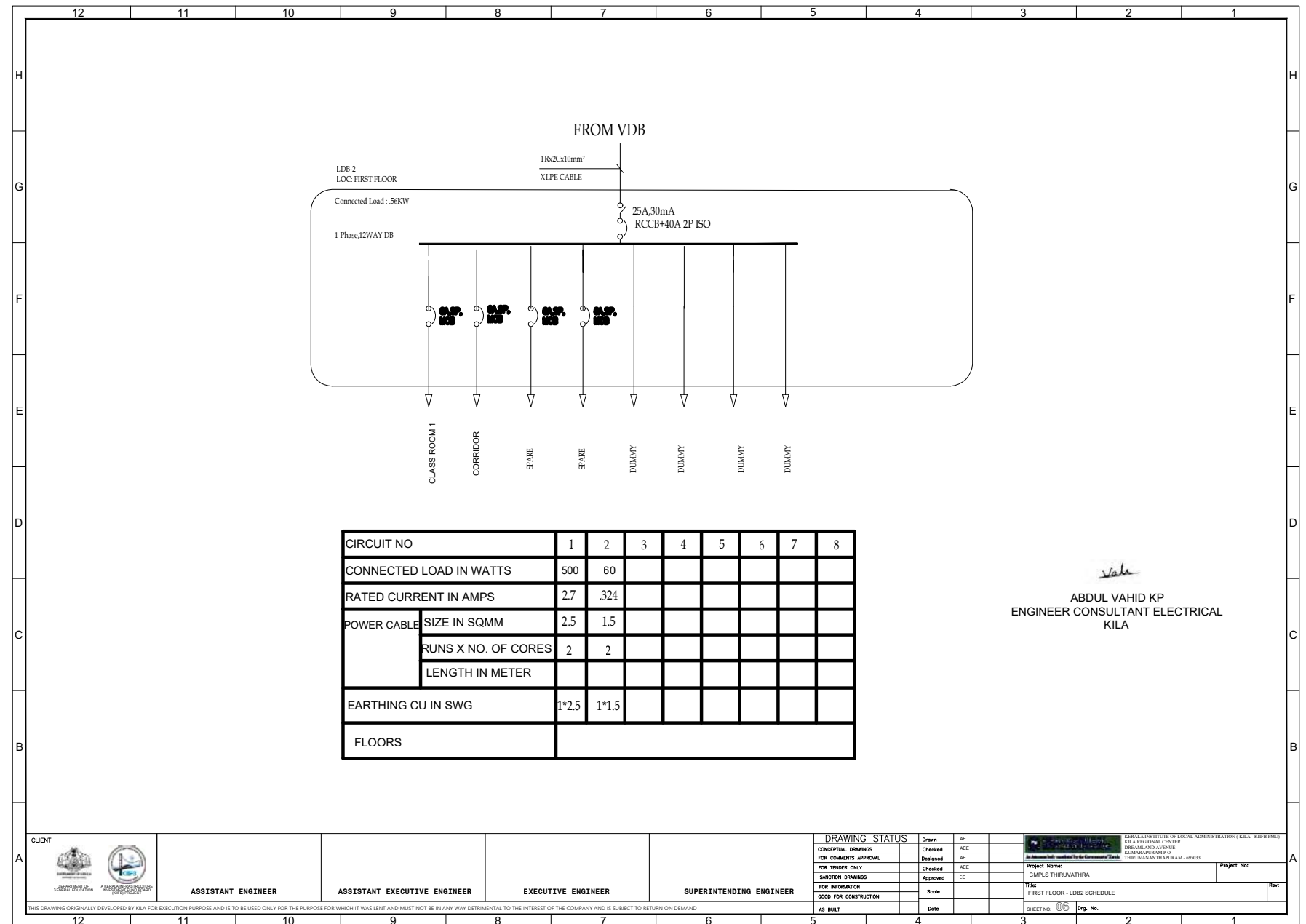


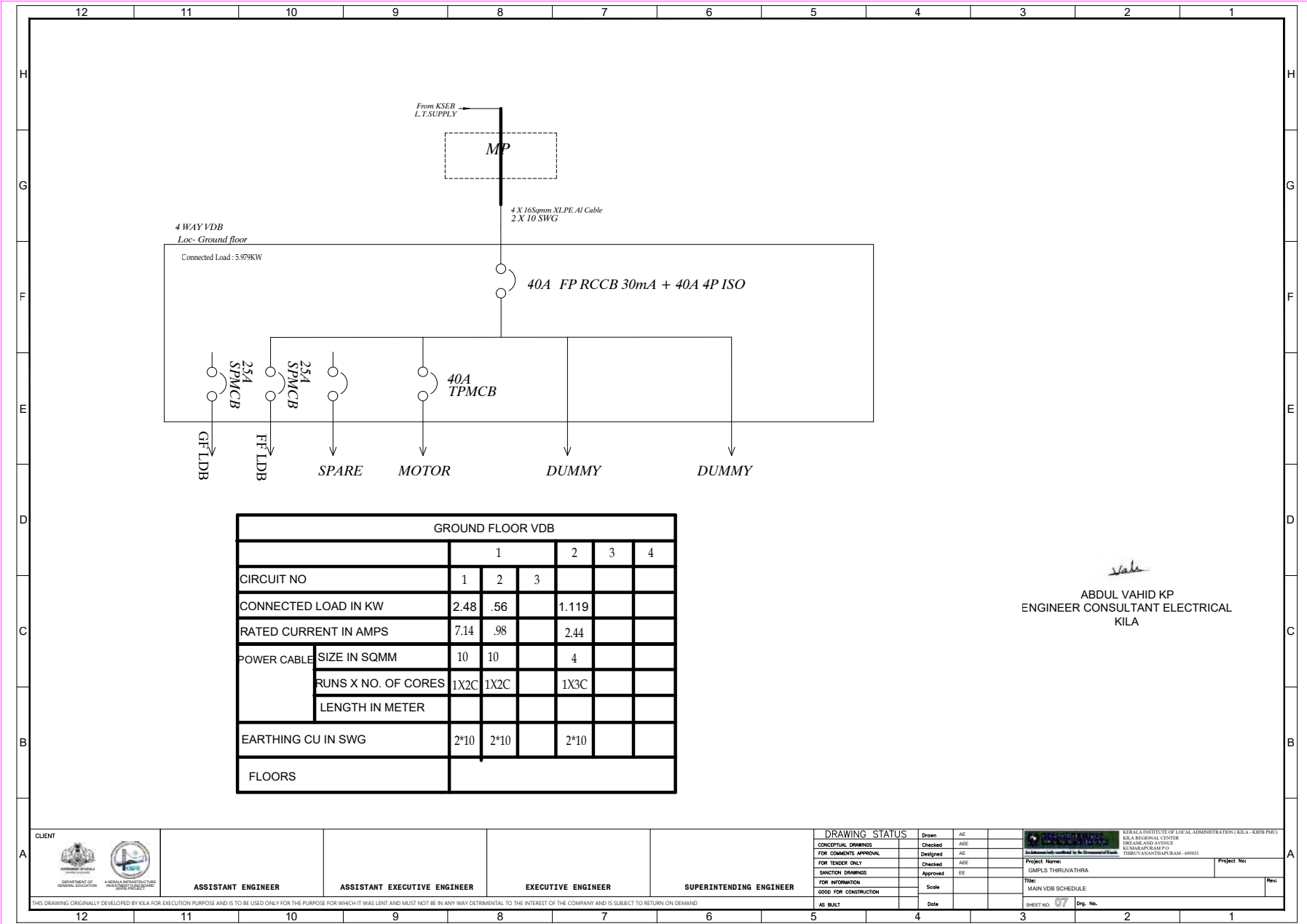


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ABDUL VAHID KP
ENGINEER CONSULTANT ELECTRICAL
KILA

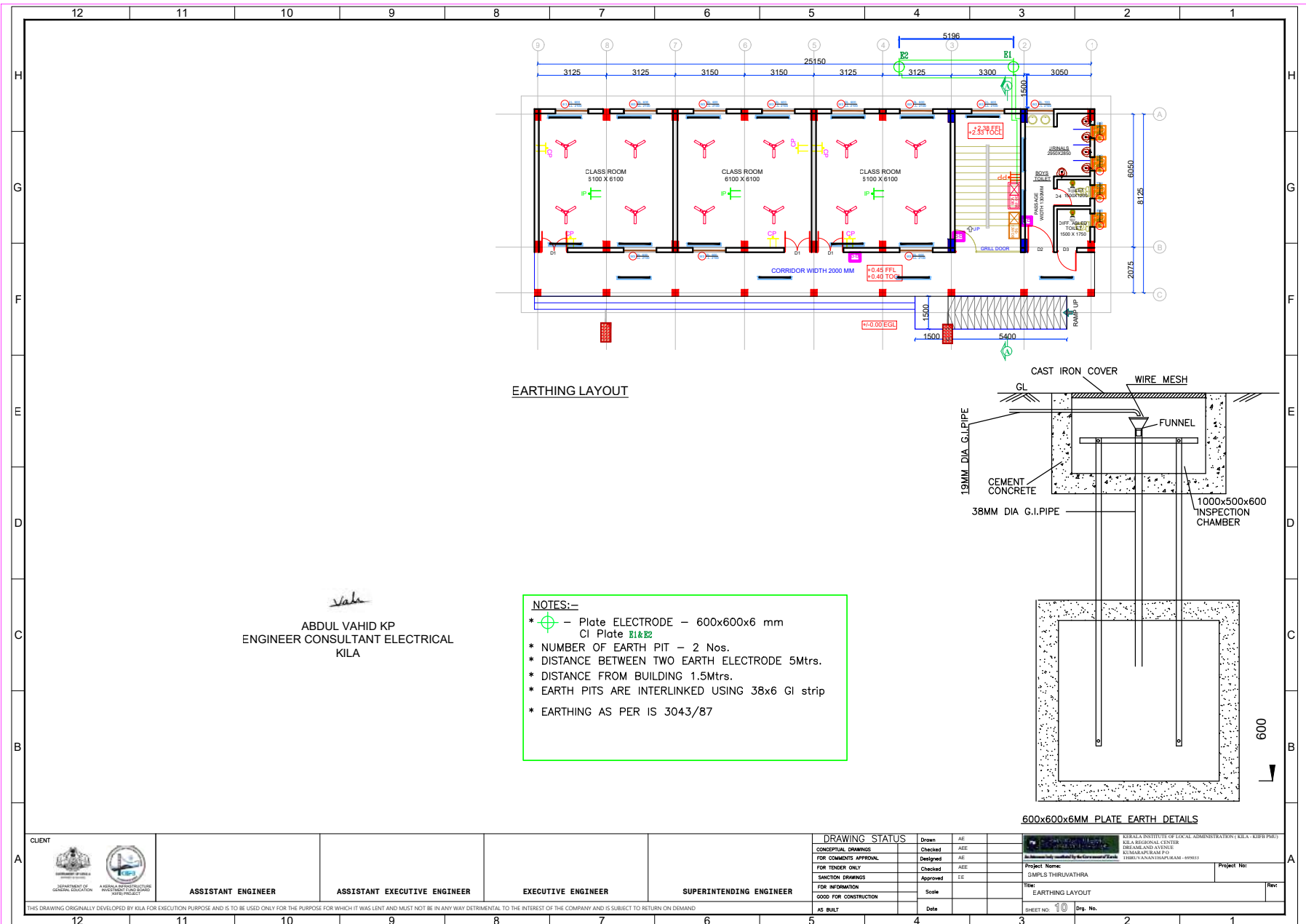
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Annexure – 3**Estimate Report**

GMLPS Thiruvathra has been included in the list of works proposed in KIIFB project of govt of Kerala. The work has been proposed to construct class rooms for GMLPS Thiruvathra in Chavakkad Municipality. This govt school is one of the most reputed educational institutions in Chavakkad Municipality. As per the essentiality certificate of head master of the school there is shortage of class rooms. More over the classes are conducting in the old buildings, which are tiled & RCC roof and most of them are damaged and beyond repair. The new KIIFB project, Includes 3 Class rooms in Ground Floor, 1 class room in First Floor & Stair room with toilet block in each floor. In this building, in two floors, provided class rooms of size 610x610 and veranda of width 200 cm. The building is designed as a framed structure with columns and beams. Sufficient Foundation design is provided referring the soil test report. Detailed design drawings for architectural and structural drawings were attached with this. There are 14 Nos. of column with 30x50, 4 Nos. of column with 30x60cm size & 9 nos. of veranda columns having size 30x30cm. The major items of the work are Earth work for Pile foundation, PCC bed concreting, footing concreting, centering and shuttering for column, beams, shade and slab, RCC M-25 for column, lintel roof slab, beams and stair, solid block masonry in cm 1:6, plastering in cm 1:6, flooring with vitrified tiles, steel work for frames & shutters of windows, and doors. flooring with ceramic tiles for toilet block, etc. Provisions for plumbing and sanitary works are also included in this estimate. Provision for Providing & Fixing Granite Name Board. Provision for 18% GST Included in the estimate. Amount for civil work come to Rs. 1,25,66,696.15/-

The work is proposed to be executed through Tender. Estimate is prepared based on 2018 Delhi Schedule of rates (Cost of Index -35.59%) with adding contractor's profit and Over Head Charges. Estimate amount comes to Rs.12999868.55/-.



Annexure – 4
Detailed Estimate



EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

GENERAL ABSTRACT

KIIFB-KILA 1 CRORE PROJECT-INFRASTRUCTURE DEVELOPEMENT AT GMLPS
THIRUVATHRA(SCHOOL CODE-24215)-THRISSUR-Construction of new building(G+1)-
Composite Civil Work

Sl No	Head Description	Amount
1	EARTHWORK EXCAVATION	64838.38
2	CEMENT CONCRETE WORKS	327344.02
3	CENTERING AND SHUTTERING WORKS	963347.14
4	RCC WORKS	2864863.34
5	STEEL REINFORCEMENT WORKS	2624351.57
6	MASONRY WORKS	728771.43
7	CEMENT PLASTERING WORKS	654830.62
8	JOINERIES	737704.91
9	STEEL WORKS	40685.92
10	PAINTING WORKS	451356.52
11	TILES WORK	721244.56
12	PLUMBING WORKS	267596.99
13	WATER PROOFING WORKS	191945.60
14	NAME BOARD	10861.50
	Total Estimation PAC	10649742.50
C	Extra Charges	
C.001	Provision for GST	
	10649742.50 18.00%	1916953.65
	Grand Total	0.00
	Round off	0.00
	Rounded Total(Rs)	12566696.15
	Rupees One Crore Twenty Five Lakh Sixty Six Thousand Six Hundred and Ninety Six	

Approved By

(PEN:),

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

DETAILED ESTIMATE

KIIFB-KILA 1 CRORE PROJECT-INFRASTRUCTURE DEVELOPEMENT AT GMLPS
THIRUVATHRA(SCHOOL CODE-24215)-THRISSUR-Construction of new building(G+1)-
Composite Civil Work

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
1	EARTHWORK EXCAVATION						
1.001	2.6.1						
	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead up to 50 m and lift up to 1.5 m, disposed earth to be levelled and neatly dressed.All kinds of soil						
	PILE CAP						
	P50	9.0000 0	1.000	1.000	0.900	1.0000 00	8.100
	2P50	18.000 00	2.700	1.400	1.150	1.0000 00	78.246
	Total						86.346
	SEPTIC TANK&SOAK PIT						
	SEPTIC TANK	1.0000 0	3.000	6.000	1.500		27.000
	SOAK PIT	1.0000 0	2.000	2.000	1.500		6.000
	Total						33.000
	Total Quantity in cum						119.346
1.002	2.8.1						
	Earth work in excavation by mechanical means (Hydraulic excavator) /manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift up to 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.All kinds of soil						
	PLINTH BEAM AND DR WORKS						
	DR	2.0000 0	16.500	0.600	0.600		11.880
	DR	2.0000 0	3.700	0.600	0.600		2.664
	PB	7.0000 0	3.700	0.300	0.100		0.777
	PB-TOILET PORTION	1.0000 0	6.050	0.250	0.100		0.151
	PB-TOILET PORTION	2.0000 0	1.550	0.250	0.100		0.078

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	PB-STAIR STARTER	1.0000 0	3.000	0.250	0.100		0.075
	Total						15.625
	STEP&RAMP						
	RAMP	1.0000 0	9.050	1.500	0.100		1.358
	STEP	1.0000 0	15.000	1.050	0.100		1.575
	Total						2.933
	Total Quantity in cum						18.558
1.003	2.25						
	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundation etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m.						
	Filling						
		1.0000 0	119.346+ 18.558			0.8000 00	110.323
	Total						110.323
	Total Quantity in cum						110.323
1.004	50.2.25.1						
	Filling with contractor's own earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m as per direction of site Engineer-in-charge						
	FILLING						
		1.0000 0	10.000				10.000
	Total						10.000
	Total Quantity in cum						10.000
2	CEMENT CONCRETE WORKS						
2.001	4.1.8						
	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40 nominal size)						
	PLINTH BEAM BOTTOM PCC						
	DR	8.0000 0	2.850	0.450	0.100		1.026
	DR	4.0000 0	2.825	0.450	0.100		0.509
	DR	2.0000 0	2.750	0.450	0.100		0.248

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	DR	2.0000 0	3.000	0.450	0.100		0.270
	PB	4.0000 0	2.850	0.250	0.100		0.285
	PB	2.0000 0	2.825	0.250	0.100		0.141
	PB	1.0000 0	2.750	0.250	0.100		0.069
	PB	1.0000 0	3.000	0.250	0.100		0.075
	PB	2.0000 0	5.500	0.600	0.100		0.660
	PB	2.0000 0	1.700	0.600	0.100		0.204
	PB	7.0000 0	5.500	0.250	0.100		0.963
	PB	7.0000 0	1.700	0.250	0.100		0.298
	PB-TOILET PORTION	1.0000 0	6.050	0.250	0.100		0.151
	PB-TOILET PORTION	2.0000 0	1.550	0.250	0.100		0.078
	PB-STAIR STARTER	1.0000 0	3.000	0.250	0.100		0.075
	Total						5.052
	SEPTIC TANK PCC						
		1.0000 0	3.000	6.000	0.100		1.800
	Total						1.800
	INSIDE						
	CLASSROOM	3.0000 0	6.100	6.100	0.075		8.372
	TOILET	1.0000 0	3.050	6.100	0.075		1.395
	STAIR	1.0000 0	3.300	6.100	0.075		1.510
	VERANDAH	1.0000 0	25.15+.3	2.000	0.075		3.818
	Total						15.095
	PILE CAP BOTTOM PCC						
	P50	9.0000 0	0.900	0.900	0.100		0.729
	2P50	18.0000 00	1.300	2.600	0.100		6.084

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(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Total						6.813
	RAMP						
	SLOPE TOP	1.0000 0	7.200	1.200	0.075		0.648
	LANDING TOP	1.0000 0	1.200	1.200	0.075		0.108
	Total						0.756
	Total Quantity in cum						29.516
2.002	4.2.5						
	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts,buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor, etc. up to floor five level, excluding the cost of centering, shuttering and finishing:1:3:6 (1 cement : 3 coarse sand :6 graded stone aggregate 20 mm nominal size)						
	DUMMY COLUMN						
	Main columns	14.000 00	0.500	0.450	1.200		3.780
	Verandah columns	9.0000 0	0.300	0.300	1.200		0.972
	Total						4.752
	Total Quantity in cum						4.752
2.003	2.34.1						
	Supplying chemical emulsion in sealed containers including delivery as specified.Chlorpyriphos / Lindane emulsifiable concentrate of 20%						
	Area						
		1.0000 0	25.500	8.300		0.5500 00	116.408
	Total						116.408
	Total Quantity in Litre						116.408
2.004	2.35.3.1						
	Diluting and injecting chemical emulsion for POST -CONSTRUCTIONAL anti-termite treatment (excluding the cost of chemical emulsion): Treatment of soil under existing floors using chemical emulsion @ one litre per hole, 300 mm apart including drilling 12 mm diameter holes and plugging with cement mortar 1:2 (1 cement : 2 coarse sand) to match the existing floor:With Chlorpyriphos/Lindane E.C. 20% with 1% concentration						
	Diluting and injection						
	CLASSROOM	3.0000 0	6.100	6.100			111.630
	TOILET	1.0000 0	3.050	6.100			18.605

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	STAIR	1.0000 0	3.300	6.100			20.130
	VERANDAH	1.0000 0	25.15+.3	2.000			50.900
	Total						201.265
	Total Quantity in sqm						201.265
3	CENTERING AND SHUTTERING WORKS						
3.001	5.9.1						
	Centering and shuttering including strutting, etc. and removal of form for:Foundations, footings, bases of columns, etc for mass concrete						
	PILE CAP&PCC						
	PC50	9.0000 0	3.200		0.650		18.720
	2PC50	18.000 00	7.400		0.900		119.880
	PC50 PCC	9.0000 0	3.200		0.100		2.880
	2PC50 PCC	18.000 00	7.400		0.100		13.320
	Total						154.800
	COLUMN UPTO GL						
	P50	9.0000 0	1.200		0.150		1.620
	2P50	14.000 00	1.600		0.150		3.360
	2P50	4.0000 0	1.800		0.150		1.080
	Total						6.060
	Total Quantity in sqm						160.860
3.002	5.9.5						
	Centering and shuttering including strutting, etc. and removal of form for:Lintels, beams, plinth beams, girders bressumers and cantilevers						
	Lintel GF FF						
	B1	24.000 00	2.825	0.150			10.170
	B1	8.0000 0	2.850	0.150			3.420
	B1	8.0000 0	3.000	0.150			3.600
	B1	8.0000 0	2.750	0.150			3.300

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	B2	24.000 00	5.600	0.150			20.160
	B3	8.0000 0	1.700	0.150			2.040
	B3 -TOILET INNER	6.0000 0	1.400	0.150			1.260
	VERANDAH B3	6.0000 0	2.825	0.800			13.560
	VERANDAH B3	2.0000 0	2.850	0.800			4.560
	VERANDAH B3	2.0000 0	3.000	0.800			4.800
	VERANDAH B3	2.0000 0	2.750	0.800			4.400
	Total						71.270
	Floor beams GF FF						
	B1	12.000 00	2.825	0.610			20.679
	B1	4.0000 0	2.850	0.610			6.954
	B1	4.0000 0	3.000	0.610			7.320
	B1	4.0000 0	2.750	0.610			6.710
	B2	15.000 00	5.600	1.010			84.840
	B3	14.000 00	1.700	0.610			14.518
	B3	6.0000 0	2.825	0.610			10.340
	B3	2.0000 0	2.850	0.610			3.477
	B3	2.0000 0	3.000	0.610			3.660
	B3	2.0000 0	2.750	0.610			3.355
	Total						161.853
	Plinth Beam						
	Horizontal	24.000 00	2.850	0.450			30.780
		12.000 00	2.825	0.450			15.255
		6.0000 0	2.800	0.450			7.560

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
		6.0000 0	3.000	0.450			8.100
	vertical	18.000 00	5.550	0.450			44.955
	Varandah	18.000 00	1.700	0.450			13.770
	Toilet inside	2.0000 0	6.050	0.450			5.445
	Toilet inside	4.0000 0	1.450	0.450			2.610
	Total						128.475
	PLINTH BEAM BOTTOM PCC ABOVE DR						
	DR	16.000 00	2.850		0.100		4.560
	DR	8.0000 0	2.825		0.100		2.260
	DR	4.0000 0	2.750		0.100		1.100
	DR	4.0000 0	3.000		0.100		1.200
	Total						9.120
	Total Quantity in sqm						370.718
3.003	5.9.6						
	Centering and shuttering including strutting, etc. and removal of form for: Columns, Pillars, Piers, Abutments, Posts and Struts						
	DUMMY COLUMN						
	Main columns	14.000 00	1.600	1.200			26.880
	Varandah columns	9.0000 0	1.200	1.200			12.960
	Total						39.840
	GF FF& STAIR ROOM						
	Main columns	20.000 00	1.600	3.750			120.000
	Main columns	8.0000 0	1.800	3.750			54.000
	Main columns-SF	4.0000 0	1.800	2.400			17.280
	Varandah columns	14.000 00	1.200	3.750			63.000
	Total						254.280
	Total Quantity in sqm						294.120
3.004	5.9.7						

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Centering and shuttering including strutting, etc. and removal of form for:Stairs, (excluding landings) except spiral - staircases)						
	Centering and shuttering						
	Waist slab(GF FF SF)	4.0000 0	4.090	1.600			26.176
	Total						26.176
	Total Quantity in sqm						26.176
3.005	5.9.18						
	Centering and shuttering including strutting, etc. and removal of form for:Small surfaces such as cantilever ends, brackets and ends of steps, caps and bases to pilasters and columns and the like						
	Centering and shuttering						
	Steps ends	104.00 000	0.500	0.300	0.150		2.340
	Total						2.340
	Total Quantity in sqm						2.340
3.006	5.9.19						
	Centering and shuttering including strutting, etc. and removal of form for:Weather shade, Chajjas, corbels etc., including edges						
	Centering and shuttering						
	Sunshde-GF	1.0000 0	72.370	0.970			70.199
	Sunshde-FF	1.0000 0	2*(3.125 +3.125+3 .3+3.05+ 3+.9+8.1 25+.25+ 15+.9)	0.970			45.057
	Total						115.256
	Total Quantity in sqm						115.256
3.007	5.9.3						
	Centering and shuttering including strutting, etc. and removal of form for:Suspended floors, roofs, landings, balconies and access platform						
	Slab GF FF&STAIR ROOM						
	Class Room GF	6.0000 0	3.000	6.100			109.800
	Class Room FF	2.0000 0	3.000	6.100			36.600
	Landing	2.0000 0	3.000	1.500			9.000
		2.0000 0	3.210	6.13-1.5- 3.9			4.687

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Varandah GF	6.0000 0	3.000	1.700			30.600
	Varandah FF	2.0000 0	3.000	1.700			10.200
	Toilet + stair verandah portion	4.0000 0	3.000	1.700			20.400
	Toilets	2.0000 0	2.900	6.100			35.380
	Slab projection	2.0000 0	70.770	0.200			28.308
	Total						284.975
	Total Quantity in sqm						284.975
3.008	5.9.16.1						
	Centering and shuttering including strutting, etc. and removal of form for: Edges of slabs and breaks in floors and wallsUnder 20 cm wide						
	Centering and shuttering						
	Waist slab	8.0000 0	5.470				43.760
	Riser	52.000 00	1.600				83.200
	Roof slab edges	2.0000 0	72.370				144.740
		4.0000 0	1.600				6.400
	Total						278.100
	Total Quantity in metre						278.100
4	RCC WORKS						
4.001	OD282344/2023-2024						
	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer - in-charge.All work upto plinth level						
	COLUMN UPTO GL						
	P50	9.0000 0	0.300	0.300	0.150		0.122
	2P50	14.000 00	0.500	0.300	0.150		0.315
	2P50	4.0000 0	0.600	0.300	0.150		0.108
	Total						0.545

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	LEACH PIT SLAB						
		1.0000 0	3.000	2.200	0.120	1.0000 00	0.792
	Total						0.792
	PLINTH BEAM						
	Long ways	12.000 00	2.850	0.250	0.450	1.0000 00	3.848
		6.0000 0	2.825	0.250	0.450	1.0000 00	1.907
		3.0000 0	3.000	0.250	0.450	1.0000 00	1.013
		3.0000 0	2.900	0.250	0.450	1.0000 00	0.979
		9.0000 0	1.700	0.250	0.450	1.0000 00	1.721
	Short ways	9.0000 0	5.550	0.250	0.450	1.0000 00	5.619
	Toilet	1.0000 0	6.050	0.250	0.450	1.0000 00	0.681
		2.0000 0	1.450	0.250	0.450	1.0000 00	0.326
	Total						16.094
	PILE CAP						
	P50	9.0000 0	0.800	0.800	0.650	1.0000 00	3.744
	2P50	18.000 00	2.500	1.200	0.900	1.0000 00	48.600
	Total						52.344
	Total Quantity in cum						69.775
4.002	OD282343/2023-2024						
	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer - in-charge. All work above plinth level upto floor V level						
	Column GF FF & SF						
	Main column	20.000 00	0.500	0.300	3.750	1.0000 00	11.250
		8.0000 0	0.600	0.300	3.750	1.0000 00	5.400
	Verandah columns	14.000 00	0.300	0.300	3.750	1.0000 00	4.725

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Head room	4.0000 0	0.600	0.300	2.400	1.0000 00	1.728
	Total						23.103
	Beams (GF FF)						
	B1	12.000 00	2.825	0.250	.3-.12		1.526
	B1	4.0000 0	2.850	0.250	.3-.12		0.513
	B1	4.0000 0	3.000	0.250	.3-.12		0.540
	B1	4.0000 0	2.750	0.250	.3-.12		0.495
	B2	15.000 00	5.600	0.250	.50-.12		7.980
	B3	14.000 00	1.700	0.250	0.180		1.071
	B3	6.0000 0	2.825	0.250	0.180		0.763
	B3	2.0000 0	2.850	0.250	0.180		0.257
	B3	2.0000 0	3.000	0.250	0.180		0.270
	B3	2.0000 0	2.750	0.250	0.180		0.248
	Total						13.663
	STAIR						
	Waist slab	4.0000 0	4.090	1.500	0.175	1.0000 00	4.295
	Steps	26.000 00	0.300	0.150	1.500	1.0000 00	1.755
	Landing	2.0000 0	3.100	1.500	0.175	1.0000 00	1.628
	Total						7.678
	Slabs (GF FF)						
	Roof slab GF&FF	1.0000 0	25.650	8.550	0.120	1.0000 00	26.317
	Roof slab GF	1.0000 0	3.125+3.125+3.3+3.05+.3+.6	8.550	0.120	1.0000 00	13.851
	DEDUCTION stair room	- 2.0000 0	3.100	3.9+1.5	0.120	1.0000 00	-4.018
	Total						36.150

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Sunshade (GF FF)						
	Sunshade GF	1.0000 0	72.370	0.800	0.085	1.0000 00	4.921
	Sunshde-FF	1.0000 0	2*(3.125 +3.125+3 .3+3.05+. 3+.9+8.1 25+.25+. 15+.9)	0.800	0.085	1.0000 00	3.159
	Total						8.080
	Lintel (GF FF)						
	B1	12.000 00	2.825	0.200	0.150		1.017
	B1	4.0000 0	2.850	0.200	0.150		0.342
	B1	4.0000 0	3.000	0.200	0.150		0.360
	B1	4.0000 0	2.750	0.200	0.150		0.330
	B2	12.000 00	5.600	0.200	0.150		2.016
	B3	4.0000 0	1.700	0.200	0.150		0.204
	B3 -TOILET INNER	3.0000 0	1.400	0.150	0.150		0.095
	VERANDAH B3	6.0000 0	2.825	0.200	0.300		1.017
	VERANDAH B3	2.0000 0	2.850	0.200	0.300		0.342
	VERANDAH B3	2.0000 0	3.000	0.200	0.300		0.360
	VERANDAH B3	2.0000 0	2.750	0.200	0.300		0.330
	Total						6.413
	Total Quantity in cum						95.087
4.003	20.2.4						
	Boring, providing and installing bored cast-in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring, with bentonite solution and temporary casing of appropriate length for setting out and removal of same and the length of the pile to be embedded in the pile cap etc. all complete, including removal of excavated earth with all lifts and leads (Length of pile for payment shall be measured upto bottom of pile cap).500 mm dia piles						
	500 MM DIA PILE						

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
		27.000 00			15.000		405.000
	Total						405.000
	Total Quantity in metre						405.000
4.004	20.6.2.1						
	Vertical load testing of piles in accordance with IS 2911(Part IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & the direction of engineer -in-Charge. Single pile above 50 tonne and upto 100 tonne capacityInitial test						
	INITIAL TEST						
		1.0000 0					1.000
	Total						1.000
	Total Quantity in per test						1.000
4.005	20.6.2.2						
	Vertical load testing of piles in accordance with IS 2911(Part IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & the direction of engineer -in-Charge. Single pile above 50 tonne and upto 100 tonne capacityRoutine test						
	ROUTINE TEST						
		2.0000 0					2.000
	Total						2.000
	Total Quantity in per test						2.000
5	STEEL REINFORCEMENT WORKS						
5.001	5.22A.6						
	Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete above plinth level.Thermo - Mechanically Treated bars of grade Fe-500D or more						
	Steel reinforcement						
	Plinth beam	1.0000 0	16.094	120.000			1931.280
	PILE CAP	1.0000 0	48.6+3.7 44	120.000			6281.280
	PILE	27.000 00	3.14/4	.5*.5	15.000	65.000 000	5166.281
	Leach pit slab	1.0000 0	0.792	105.000			83.160
	Columns upto roof level	1.0000 0	23.103	200.000			4620.600

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Beams	1.0000 0	13.663	150.000			2049.450
	Lintels	1.0000 0	6.413	120.000			769.560
	Stair	1.0000 0	7.678	90.000			691.020
	Sunshade	1.0000 0	8.080	98.000			791.840
	Roof slab	1.0000 0	36.150	90.000			3253.500
	Dummy column	1.0000 0	4.752	200.000			950.400
	COLUMN UPTO GL	1.0000 0	0.545	200.000			109.000
	Total						26697.37 1
	Total Quantity in kg						26697.37 1
6	MASONRY WORKS						
6.001	50.6.1.5						
	Solid block masonry using pre cast solid blocks (Factory made) of size 30x20x20cm or nearest available size confirming to IS 2185 Part I of 1979 for super structure up to floor two level thickness 20cm and above in: CM 1:6 (1 cement : 6 coarse sand) etc complete						
	At First floor						
	On the side of bathroom verandah	1.0000 0	3.130	0.200	0.900		0.563
	Total						0.563
	DEDUCTION						
	D1-Doors	- 4.0000 0	1.200	0.200	2.100		-2.016
	W3-Windows	- 14.0000 00	1.500	0.200	1.350		-5.670
	W2-Windows	- 2.0000 0	1.250	0.200	1.000		-0.500
	D2- doors	- 2.0000 0	1.200	0.200	2.100		-1.008
	V1- Ventilator	- 8.0000 0	0.600	0.200	0.500		-0.480

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Total						-9.674
	GF FF						
	Stair room back	2.0000 0	3.000	0.200	3.75-0.4- 0.12-.15		3.696
	Toilet front and back	4.0000 0	2.900	0.200	3.75-0.18		8.282
	Class room wall GF	12.000 00	2.850	0.200	3.75-0.4- .12- 0.15		21.067
	Class room wall FF	4.0000 0	2.850	0.200	3.75-0.4- .12- 0.15		7.022
	Class room wall GF	6.0000 0	5.550	0.200	3.75-.55- .12-0.15		19.514
	Class room wall FF	4.0000 0	5.550	0.200	3.75-.55- .12-0.15		13.009
	Above beam front side GF	1.0000 0	8*2.85	0.200	3.75-2.1- 0.3-0.18		5.335
	Above beam front side GF	1.0000 0	3.000	0.200	3.75-2.1- 0.3-0.18		0.702
	Above beam front side FF	1.0000 0	3*2.85	0.200	3.75-2.1- 0.3-0.18		2.001
	Above beam front side FF	1.0000 0	3.000	0.200	3.75-2.1- 0.3-0.18		0.702
	Above beam front side GF&FF	4.0000 0	1.700	0.200	3.75-2.1- 0.3-0.18		1.591
	Total						82.921
	Total Quantity in cum						73.810
6.002	60.7.1						
	DRY RUBBLE MASONRY _ Dry rubble without concrete levelling course masonry with good quality blasted rubble including packing to compactness to lines and levels cost and conveyance of all materials labour charges etc. complete as per direction of Departmental officers at site						
	DR WORK						
	RAMP	1.0000 0	7.2+1.5	0.450	0.350		1.370
	RAMP FOUNDATION	1.0000 0	7.2+1.5+ 1.5	0.600	0.450		2.754
	HORIZONTAL OUTER	8.0000 0	2.850	0.450	0.500		5.130
	HORIZONTAL OUTER	4.0000 0	2.825	0.450	0.500		2.543
	HORIZONTAL OUTER	2.0000 0	3.000	0.450	0.500		1.350
	HORIZONTAL OUTER	2.0000 0	2.750	0.450	0.500		1.238

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	VERTICAL OUTER	2.0000 0	1.700	0.450	0.500		0.765
	VERTICAL OUTER	2.0000 0	5.500	0.450	0.500		2.475
	Total						17.625
	Total Quantity in cum						17.625
6.003	50.6.1.4 Solid block masonry using pre cast solid blocks (Factory made) of size 30x20x20cm or nearest available size confirming to IS 2185 part I of 1979 for foundation and plinth with thickness 20cm and above in: CM 1:6 (1 cement : 6 coarse sand) etc complete						
	STEPS						
	Steps	8.0000 0	6.600	0.200	0.150	1.0000 00	1.584
		4.0000 0	3.400	0.200	0.150	1.0000 00	0.408
		4.0000 0	1.200	0.200	0.150	1.0000 00	0.144
	Total						2.136
	Total Quantity in cum						2.136
6.004	50.6.1.6 Solid block masonry using pre cast solid blocks (Factory made) of size 30x20x20cm or nearest available size confirming to IS 2185 part I of 1979 for super structure above floor two level upto floor five level thickness 20cm and above in : CM 1:6 (1 cement : 6 coarse sand sand) etc complete						
	Headroom						
	Head room	2.0000 0	5.500	0.200	2.400	1.0000 00	5.280
		2.0000 0	3.000	0.200	2.400	1.0000 00	2.880
	Total						8.160
	Total Quantity in cum						8.160
6.005	50.6.2.3 Solid block masonry using pre cast solid blocks (Factory made) of size 30x20x15cm or nearest available size confirming to IS 2185 part I of 1979 for super structure above floor two level upto floor five level with thickness 15cm in : CM 1:6 (1 cement : 6 coarse sand) etc complete						
	SF PARAPET						
		6.0000 0	2.850	0.150	1.200	1.0000 00	3.078
		1.0000 0	3.000	0.150	1.200	1.0000 00	0.540
		2.0000 0	1.7+5.5	0.150	1.200	1.0000 00	2.592

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Total						6.210
	Total Quantity in cum						6.210
6.006	50.6.2.2						
	Solid masonry using pre cast solid blocks (factory made) of size 30x20x15cm or nearest available size confirming to IS 2185 part I of 1979 for super structure up to floor two level with thickness 15cm in : CM 1:6 (1 cement : 6 coarse sand) etc complete						
	Ground floor						
	Bathroom partitions	1.0000 0	1.500	0.150	2.400		0.540
		1.0000 0	1.200	0.150	2.400		0.432
	Deduction	- 1.0000 0	0.800	0.150	2.100		-0.252
	Total						0.720
	FF						
	Bathroom partitions	1.0000 0	6.050	0.150	2.400		2.178
	Bathroom partitions	3.0000 0	1.500	0.150	2.400		1.620
	deduction	- 3.0000 0	0.800	0.150	2.100		-0.756
	Total						3.042
	Parapet wall first floor						
		1.0000 0	3.000	0.150	1.200		0.540
		1.0000 0	2.750	0.150	1.200		0.495
		2.0000 0	2.825	0.150	1.200		1.017
		2.0000 0	1.700	0.150	1.200		0.612
	Total						2.664
	DA Toilet						
		1.0000 0	1.750	0.200	2.400		0.840
		1.0000 0	1.500	0.200	2.400		0.720
		- 1.0000 0	1.200	0.200	2.100		-0.504

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Total						1.056
	Total Quantity in cum						7.482
7	CEMENT PLASTERING WORKS						
7.001	13.16.1						
	6 mm cement plaster of mix:1:3 (1 cement : 3 fine sand)						
	Ceiling (GF FF)						
	Class room	4.0000 0	6.100	6.100			148.840
	Verandah	1.0000 0	25.250	2.000			50.500
	Verandah	1.0000 0	3.125+3. 125+3.3+ 3.05+3.3	2.000			25.800
	Toilet	2.0000 0	2.900	6.100			35.380
	Landing	2.0000 0	3.000	1.500			9.000
	Waist slab	4.0000 0	4.600	1.500			27.600
	Slab projections	4.0000 0	25.650	0.200			20.520
		4.0000 0	8.550	0.200			6.840
	Sunshade	1.0000 0	70.770	1.000			70.770
	Sunshade	1.0000 0	2*(3.125 +3.125+3 .3+3.05+ 3+.9+8.1 25+.25+ 15+.9)	1.000			46.450
	Total						441.700
	Total Quantity in sqm						441.700
7.002	13.9.1						
	Cement plaster 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement.12 mm cement plaster						
	Cement plaster						
	Roof top	1.0000 0	25.250	8.150			205.788
	Stair room	- 1.0000 0	6.100		3.000		-18.300
	Above sunshade GF	2.0000 0	26.100	3.75-2.1- 1	1.000	1.0000 00	33.930

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Above sunshade FF	2.0000 0	3.125+3. 125+3.3+ 3.05+3	3.75-2.1- 1	1.000	1.0000 00	16.770
	Total						238.188
	Total Quantity in sqm						238.188
7.003	13.1.2						
	12 mm cement plaster of mix:1:6 (1 cement : 6 fine sand).						
	wall plastering						
	Class rooms	4.0000 0	24.400	3.750			366.000
	TOILET	2.0000 0	3.05+6.1 +3.05+6. 1	3.750			137.250
	TOILET GF	1.0000 0	1.5+1.2+ 1.5	3.750			15.750
	TOILET GF	1.0000 0	1.5+1.75	3.750			12.188
	URINALS GF	6.0000 0	0.900	1.500			8.100
	TOILET FF	2.0000 0	6.100	3.750			45.750
	TOILET FF	6.0000 0	1.500	3.750			33.750
	STAIR ROOM INSIDE	1.0000 0	3+6.1+3+ 6.1		2.400		43.680
	Column projections	8.0000 0	0.600	3.750			18.000
		9.0000 0	1.200	2.100			22.680
		9.0000 0	1.200	2.1-1.2			9.720
	Stair PORTION	2.0000 0	16.010	3.750			120.075
	Beam projections	16.000 00	5.500	0.500			44.000
		28.000 00	1.750	0.500			24.500
	D-Doors	- 5.0000 0	1.200	2.100			-12.600
	W3-Windows	- 8.0000 0	1.500	1.350			-16.200

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	W2-Window	2.0000 0	1.000	1.250			-2.500
	D2-Doors	2.0000 0	1.200	2.100			-5.040
	D3- Door	1.0000 0	0.900	2.100			-1.890
	D4-Doors	4.0000 0	0.800	2.100			-6.720
	V1- Ventilator	8.0000 0	0.600	0.500			-2.400
	outside GF	2.0000 0	25.15+.3		3.75+.45		213.780
		2.0000 0	6.05+.45		3.75+.45		54.600
	OUTSIDE FF	2.0000 0	3.125+3.125+3.3+3.05+.3		3.750		96.750
		2.0000 0	6.05+.45		3.750		48.750
	STAIR ROOM OUTSIDE	1.0000 0	3.3+6.1+3.3+6.1		2.400		45.120
	PARAPET WALL FF	2.0000 0	12.901+2+2		1.275		43.098
	PARAPET WALL SF	2.0000 0	3.125+3.125+3.05+8.125+8.125+3.05+3.125+3.125+.3		1.275		89.633
	Total						1445.824
	Total Quantity in sqm						1445.824
7.004	13.7.1						
	12 mm cement plaster finished with a floating coat of neat cement of mix:1:3 (1 cement : 3 fine sand)						
	FLOATING COAT						
	Black Board	4.0000 0	3.000	1.200			14.400
	Total						14.400
	Total Quantity in sqm						14.400
8	JOINERIES						

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
8.001	OD214746/2023-2024						
	Supplying and fixing pressed steel window of standard pattern with frame as per profile of IS 4351 of section 105*60mm using 18G (1.2mm thick CRCA) sheet and shutters made of section 75*30 cm for outer styles and horizontal members and then inserted with enclosed and stiffened sheet 26R gas per specification with Z incromate primer coat measured in sequence metre including all charges for fixing handle, aldrop, butt hinges etc complete						
	WINDOW						
	W3-WINDOW	14.000 00	1.500	1.500			31.500
	W2-WINDOW	2.0000 0	1.000	1.250			2.500
	Total						34.000
	Total Quantity in sqm						34.000
8.002	OD214747/2023-2024						
	Supplying and fixing pressed steel door of standard pattern with frame as per profile of IS 4351 of section 105*60mm using 18G (1.2mm thick CRCA) sheet and shutters made of section 75*30 cm for outer styles and horizontal members and then inserted with enclosed and stiffened sheet 26R gas per specification with Z incromate primer coat measured in sequence metre including all charges for fixing handle, aldrop, butt hinges etc complete						
	DOORS						
	D1 & D2-Doors	6.0000 0	1.200	2.100			15.120
	Stair room exit	1.0000 0	1.200	2.100			2.520
	Total						17.640
	Total Quantity in sqm						17.640
8.003	21.1.1.2						
	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS : 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing /paneling, C.P. brass/ stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge.(Glazing, paneling and dash fasteners to be paid for separately): For fixed portion Powder coated aluminium (minimum thickness of powder coating 50 micron)						
	V						
	V	8.0000 0	0.600		0.500	5.0000 00	12.000
	Total						12.000

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Total Quantity in kg						12.000
8.004	21.1.2.2						
	For shutters of doors, windows & ventilators including providing and fixing hinges / pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber/ neoprene gasket required (Fittings shall be paid for separately) Powder coated aluminium (minimum thickness of powder coating 50 micron)						
	V						
		8.0000 0	0.500		0.600	5.0000 00	12.000
	Total						12.000
	Total Quantity in kg						12.000
8.005	21.3.1						
	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of Engineer - in -Charge. (Cost of aluminium snap beading shall be paid in basic item): With float glass panes of 4.0 mm thickness						
	V						
		8.0000 0	0.500		0.600		2.400
	Total						2.400
	Total Quantity in sqm						2.400
8.006	9.48.1						
	Providing and fixing M.S. Grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete. Fixed to steel windows by welding						
	VENTILATOR						
		8.0000 0	0.600		0.500	10.000 000	24.000
	Total						24.000
	Grill over stair						
		1.0000 0	3.000	3.500		20.000 000	210.000
	Total						210.000
	Total Quantity in kg						234.000
8.007	10.28						

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners, stainless steel bolts etc., of required size on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.)						
	RAMP						
	63 MM DIA	1.0000 0	1.200			2.5300 00	3.036
	50 MM DIA POST	4.0000 0	1.100			2.0120 00	8.853
	40 MM DIA HORIZONTAL POST	1.0000 0	8.000			2.0100 00	16.080
	20 MM DIA VERTICAL	65.000 00	0.800			0.7120 00	37.024
	20 MM FLAT HORIZONTAL POST	4.0000 0	8.000			0.7120 00	22.784
	Total						87.777
	HANDRAIL						
	63 MM DIA	4.0000 0	1.200			2.5300 00	12.144
	50 MM DIA POST	16.000 00	1.100			2.0120 00	35.411
	40 MM DIA HORIZONTAL	12.000 00	5.000			1.4920 00	89.520
	20 MM DIA VERTICAL	320.00 000	0.800			0.7120 00	182.272
	20 MM DIA FLAT VERTICAL	32.000 00	4.000			0.7120 00	91.136
	Total						410.483
	DA TOILET						
	32 MM SS PIPE-FOR GRAB BARS	4.0000 0	1.000			2.7000 00	10.800
	HINGED GRAB BARS 32 MM SS	1.0000 0	2.000			3.0000 00	6.000
	Total						16.800
	Total Quantity in kg						515.060
8.008	OD214748/2023-2024						

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Providing and fixing PVC fibre door including frame ,shutter and all cost of materials, labour charges and fixing charges etc						
	PVC fibre door						
	D4	5.0000 0	0.800		2.100		8.400
	D3	1.0000 0	0.900		2.100		1.890
	Total						10.290
	Total Quantity in sqm						10.290
9	STEEL WORKS						
9.001	50.10.2						
	Steel work for purlin/single section with G I pipes including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete						
	Roof						
	Wall plate (80x40mm)	3.0000 0	4.300	2.530			32.637
	Rafter (80x40mm)	4.0000 0	7.400	2.530			74.888
	Reeper (50x25mm)	6.0000 0	4.400	1.570			41.448
	Total						148.973
	Total Quantity in kg						148.973
9.002	OD214745/2023-2024						
	Roofing with GI hard colour powder coated traffod sheets 0.35mm thick or nearest available thickness with overlaps of 150mm at ends and GI hook or crank CI bolt and nuts including plain washers and bitumen washers etc complete						
	Roofing sheet						
	Head room	1.0000 0	7.600	4.500			34.200
	Total						34.200
	Total Quantity in sqm						34.200
10	PAINTING WORKS						
10.00 1	13.43.1						
	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface:Water thinnable cement primer						
	PRIMER						
	CEILING	1.0000 0	441.700+ 50				491.700

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsr year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	WALL	1.0000 0	1445.824				1445.824
	Total						1937.524
	Total Quantity in sqm						1937.524
10.00 2	13.60.1						
	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade:Two or more coats on new work						
	painting						
		1.0000 0	1937.524				1937.524
	Total						1937.524
	Total Quantity in sqm						1937.524
10.00 3	13.61.1						
	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade:Two or more coats on new work						
	painting on steel work						
	D1-Doors	5.0000 0	1.200	2.100		2.6000 00	32.760
	D2	2.0000 0	1.200	2.100		2.6000 00	13.104
	W3- Window	14.000 00	1.500	1.500		2.6000 00	81.900
	W2- Window	2.0000 0	1.250	1.000		2.6000 00	6.500
	V1- Ventilator	8.0000 0	0.600	0.500		1.0000 00	2.400
	GF GRILL	1.0000 0	3.000	3.500			10.500
	Total						147.164
	Total Quantity in sqm						147.164
11	TILES WORK						
11.00 1	11.41.2						
	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS : 15622, of approved make, in all colours and shades, laid on 20 mm thick cement mortar 1:4(1 cement : 4 coarse sand), including grouting the joints with white cement and matching pigments etc., complete.Size of Tile 600 x 600 mm.						
	Tiles work						
	Landing	2.0000 0	3.000	1.500			9.000
	Rise	52.000 00	1.700	0.150			13.260

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Thread	52.000 00	1.700	0.300			26.520
	Step (rise)	4.0000 0	15.000	0.150			9.000
	Skirting	1.0000 0	150.000	0.075			11.250
	Class room	4.0000 0	6.100	6.100			148.840
	Verandah	1.0000 0	25.250	2.000			50.500
	Verandah	1.0000 0	3.125+3. 125+3.3+ 3.05+3.3	2.000			25.800
	STAIR ROOM- SLAB	1.0000 0	3.300	6.100			20.130
	Total						314.300
	Total Quantity in sqm						314.300
11.00 2	11.36 Providing and fixing I st quality ceramic glazed wall tiles conforming to IS : 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer -in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3 kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.						
	FIRST FLOOR						
	TOILET	4.0000 0	5.400		1.500		32.400
		1.0000 0	6.400		1.500		9.600
		1.0000 0	3.400		1.500		5.100
	Total						47.100
	Ground floor						
	Disabled toilet	1.0000 0	5.800	1.500			8.700
	Toilet	1.0000 0	4.800	1.500			7.200
		1.0000 0	10.500	1.500			15.750
		1.0000 0	2.400	1.500			3.600
	Total						35.250
	Total Quantity in sqm						82.350

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
11.00 3	OD214744/2023-2024						
	Providing and laying ceramic anti skid floor tiles of size 300x300 mm (thickness to be specified by the manufacturer), of 1st quality conforming to IS 15622, of approved make, in colours such as white, ivory, Grey, Fume Red brown, laid on 20mm thick cement mortar 1:4 (1 cement:4 coarse sand), including pointing the joints with white cement and matching pigment etc. complete						
	RAMP&STEP						
	RAMP	1.0000 0	1.5+7.2	1.500			13.050
	STEP	3.0000 0	15.000	0.300			13.500
	Total						26.550
	GF						
	DA Toilet	1.0000 0	1.750	1.500			2.625
	Toilet	1.0000 0	1.500	1.200			1.800
	Urinals	1.0000 0	2.850	2.900			8.265
	Passage	1.0000 0	1.300	3.500			4.550
	Door area	1.0000 0	1.750	0.150			0.263
	Total						17.503
	FIRST FLOOR toilet						
	Toilet	1.0000 0	1.750	1.500			2.625
	Toilet	2.0000 0	1.500	1.200			3.600
	Toilet	1.0000 0	1.500	1.500			2.250
	passage	1.0000 0	1.300	6.100			7.930
	door area	4.0000 0	0.800	0.150			0.480
	Total						16.885
	Total Quantity in sqm						60.938
12	PLUMBING WORKS						
12.00 1	17.7.2						
	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require: White Vitreous China Wash basin size 630 x 450 mm with a single 15 mm C.P. brass pillar tap						

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Wash basin						
	Wash basin	8.0000 0					8.000
	Total						8.000
	Total Quantity in each						8.000
12.00 2	17.2.2						
	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required:W.C. pan with ISI marked black solid plastic seat and lid						
	Water closet						
	GF	2.0000 0					2.000
	FF	2.0000 0					2.000
	Total						4.000
	Total Quantity in each						4.000
12.00 3	17.4.1						
	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350 mm and 340x410x265 mm sizes respectively with automatic flushing cistern with standard flush pipe and C.P. brass spreaders with brass unions and G.I. clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required:One urinal basin with 5 litre white P.V.C. automatic flushing cistern						
	Urinal basin						
		5.0000 0					5.000
	Total						5.000
	Total Quantity in each						5.000
12.00 4	50.18.7.2.2						
	Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step PVC solvent cement and testing of joints complete as per direction of Engineer -in-Charge 20 mm dia 10 Kg/cm ² - Internal work - Exposed on wall						
	Ground floor						
	Outer	1.0000 0	8.61+3.4 7				12.080
	Inside toilets	5.0000 0	2.000				10.000
	Urinal	1.0000 0	2.500				2.500

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
		3.0000 0	1.200				3.600
	Wash girls	1.0000 0	4.000				4.000
	Boys	1.0000 0	4.000				4.000
	Total						36.180
	FF						
	Outer	1.0000 0	8.61+3.4 7				12.080
	Outer	1.0000 0	3.840				3.840
	inside toilet	5.0000 0	2.000				10.000
	urinal	1.0000 0	2.500				2.500
		3.0000 0	1.200				3.600
	wash girls	1.0000 0	4.000				4.000
		1.0000 0	4.000				4.000
	Total						40.020
	Total Quantity in metre						76.200
12.00 5	18.7.1						
	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer -in-Charge. Internal work - Exposed on wall 15 mm nominal outer dia pipes						
	CPVC						
		10.000 00	2.000				20.000
	Total						20.000
	Total Quantity in metre						20.000
12.00 6	18.7.2						
	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer -in-Charge. Internal work - Exposed on wall 20 mm nominal outer dia pipes						
	CPVC						

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
		1.0000 0	10.000				10.000
	Total						10.000
	Total Quantity in metre						10.000
12.00 7	50.18.7.6.1						
	Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step PVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge 50 mm dia 10 Kgf/cm - Internal work- Exposed on wall						
	PVC pipes						
	Pumping main	1.0000 0	50.000				50.000
	Total						50.000
	Total Quantity in metre						50.000
12.00 8	50.18.8.7.1						
	Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes with one step PVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge. Concealed work including cutting chases and making good the wall etc. 63 mm pipe 6 Kgf/cm2						
	PVC pipes						
	Distribution	1.0000 0	40.000				40.000
	Total						40.000
	Total Quantity in metre						40.000
12.00 9	18.17.4						
	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :50 mm nominal bore						
	Valve						
	Distribution line	1.0000 0	1.000				1.000
	Total						1.000
	Total Quantity in each						1.000
12.01 0	18.49.1						
	Providing and fixing C.P brass bib cock of approved quality conforming to IS: 8931.15 mm nominal bore						
	C.P brass bib cock						
	For connections	1.0000 0	11.000				11.000
	Total						11.000
	Total Quantity in each						11.000

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
12.01 1	50.18.9.19.2 Providing and fixing PVC pipes including fixing the pipe with clamps/clips at 1.00 m spacing. This includes jointing of pipes with one step PVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge 110 m dia 4 Kgf/cm ² - External work - Exposed on wall						
	PVC pipes						
	Leach pit	1.0000 0	45.000				45.000
	Total						45.000
	Total Quantity in metre						45.000
12.01 2	50.17.1.4 Supplying and fixing CP Health faucet good quality including cost of materials and labour charges etc. complete as per the direction of site engineer-in-charge.						
	CP health faucet						
		6.0000 0					6.000
	Total						6.000
	Total Quantity in no						6.000
12.01 3	50.18.9.20.3 Providing and fixing PVC moulded fittings /accessories for Rigid PVC pipes, including jointing with PVC solvent cement - 63 mm dia Door Elbow						
	PVC fittings						
		7.0000 0					7.000
	Total						7.000
	Total Quantity in no						7.000
12.01 4	50.18.9.22.3 Providing and fixing PVC moulded fittings/ accessories for Rigid PVC pipes, including jointing with PVC solvent cement-110 mm dia Door Elbow						
	PVC fittings						
		7.0000 0					7.000
	Total						7.000
	Total Quantity in no						7.000
12.01 5	50.18.9.22.4 Providing and fixing PVC moulded fittings/ accessories for Rigid PVC pipes, including jointing with PVC solvent cement- 110 mm dia Bend						
	PVC fittings						
		10.000 00					10.000
	Total						10.000

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Total Quantity in no						10.000
12.01 6	50.18.9.22.5 Providing and fixing PVC moulded fittings/ accessories for Rigid PVC pipes including jointing with PVC solvent cement 110x110x110 mm dia Tee						
	PVC fittings						
		7.0000 0					7.000
	Total						7.000
	Total Quantity in no						7.000
12.01 7	18.48 Providing and placing on terrace (at all floor levels) polyethylene water storage tank :ISI 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.						
	Water tank						
	Tank	1.0000 0	3000.000				3000.000
	Total						3000.000
	Total Quantity in Litre						3000.000
12.01 8	51.19.ST4 Supplying and installing ready made PVC Septic tank including the cost of carriage, trenching, placing at the level below ground level as specified as per the direction of engineer in charge (Provision for CC/RCC/Sand/06mm aggregate for the preparation of bed shall be paid separately) 4. 35 to 50 flush capacity						
	SEPTIC TANK						
		1.0000 0					1.000
	Total						1.000
	Total Quantity in each						1.000
12.01 9	17.1.1 Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100 mm Sand Cast Iron P or S trap, 10 litter low level white P.V.C.flushing cistern, including flush pipe, manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever require:White Vitreous china Orissa pattern W.C. pan of size 580x440 mm with integral type foot rests						
	INDIAN CLOSET						
		2.0000 0					2.000
	Total						2.000
	Total Quantity in each						2.000
13	WATER PROOFING WORKS						

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
13.00 1	22.6 Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of applying : a) after surface preparation, first layer of slurry of cement @ 0.488 kg/ sqm mixed with water proofing cement compound @ 0.253 kg/ sqm. laying second layer of fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/ sqm mixed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30 cm on parapet wall and tucked into groove in parapet all around. d) fourth and final layer of brick tilling with cement mortar (which will be paid for separately. For the purpose of measurement the entire treated surface will be measured)						
	Water proof						
	Sunshade	1.0000 0	66.550	1.100			73.205
	Total						73.205
	Total Quantity in sqm						73.205
13.00 2	22.5 Providing and laying water proofing treatment in sunken portion of WCs, bathroom etc., by applying cement slurry mixed with water proofing cement compound consisting of applying : a) First layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. This layer will be allowed to air cure for 4 hours. b) Second layer of slurry of cement @ 0.242 kg /sqm mixed with water proofing cement compound @ 0.126 kg/ sqm. This layer will be allowed to air cure for 4 hours followed with water curing for 48 hours. The rate includes preparation of surface, treatment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry.						
	FF TOILET						
		1.0000 0	6.500	3.500			22.750
	Total						22.750
	Total Quantity in sqm						22.750
13.00 3	16.68 Providing and laying 60 mm thick factory made cement concrete interlocking paver block of M - 30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50 mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge.						
	FRONT YARD PAVING						
		1.0000 0	30.000	3.000			90.000
	Total						90.000
	Total Quantity in sqm						90.000

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
13.00 4	4.17 Making plinth protection 50 mm thick of cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) over 75 mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including finishing the top smooth.						
	PLINTH PROTECTION						
		2.0000 0	20.000	1.500			60.000
	Total						60.000
	Total Quantity in sqm						60.000
14	NAME BOARD						
14.00 1	13.71 Lettering with black Japan pint of approved brand and manufacture						
	Name board						
		65.000 00	30.000				1950.000
	Total						1950.000
	Total Quantity in per Letter per cm height						1950.000

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

ABSTRACT ESTIMATE

**KIIFB-KILA 1 CRORE PROJECT-INFRASTRUCTURE DEVELOPEMENT AT GMLPS
THIRUVATHRA(SCHOOL CODE-24215)-THRISSUR-Construction of new building(G+1)-
Composite Civil Work**

Sl No	Specification	Quantity	Rate	Amount
1	EARTHWORK EXCAVATION			
1.001	2.6.1 Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead up to 50 m and lift up to 1.5 m, disposed earth to be levelled and neatly dressed.All kinds of soil			
	Net Total	119.346cum	@214.03/cum	25543.62
1.002	2.8.1 Earth work in excavation by mechanical means (Hydraulic excavator) /manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift up to 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.All kinds of soil			
	Net Total	18.558cum	@296.98/cum	5511.35
1.003	2.25 Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundation etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m.			
	Net Total	110.323cum	@258.56/cum	28525.11
1.004	50.2.25.1 Filling with contractor's own earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m as per direction of site Engineer-in-charge			
	Net Total	10.000cum	@525.83/cum	5258.30
	Heading Total(Rs)			64838.38
2	CEMENT CONCRETE WORKS			
2.001	4.1.8 Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40 nominal size)			
	Net Total	29.516cum	@6814.88/cum	201148.00
2.002	4.2.5 Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts,			

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Sl No	Specification	Quantity	Rate	Amount
	struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor, etc. up to floor five level, excluding the cost of centering, shuttering and finishing: 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)			
	Net Total	4.752cum	@9446.18/cum	44888.25
2.003	2.34.1			
	Supplying chemical emulsion in sealed containers including delivery as specified. Chlorpyrifos / Lindane emulsifiable concentrate of 20%			
	Net Total	116.408Litre	@236.39/Litre	27517.69
2.004	2.35.3.1			
	Diluting and injecting chemical emulsion for POST -CONSTRUCTIONAL anti-termite treatment (excluding the cost of chemical emulsion): Treatment of soil under existing floors using chemical emulsion @ one litre per hole, 300 mm apart including drilling 12 mm diameter holes and plugging with cement mortar 1:2 (1 cement : 2 coarse sand) to match the existing floor: With Chlorpyrifos/Lindane E.C. 20% with 1% concentration			
	Net Total	201.265sqm	@267.26/sqm	53790.08
	Heading Total(Rs)			327344.02
3	CENTERING AND SHUTTERING WORKS			
3.001	5.9.1			
	Centering and shuttering including strutting, etc. and removal of form for: Foundations, footings, bases of columns, etc for mass concrete			
	Net Total	160.860sqm	@335.31/sqm	53937.97
3.002	5.9.5			
	Centering and shuttering including strutting, etc. and removal of form for: Lintels, beams, plinth beams, girders, bressumers and cantilevers			
	Net Total	370.718sqm	@649.80/sqm	240892.56
3.003	5.9.6			
	Centering and shuttering including strutting, etc. and removal of form for: Columns, Pillars, Piers, Abutments, Posts and Struts			
	Net Total	294.120sqm	@863.61/sqm	254004.97
3.004	5.9.7			
	Centering and shuttering including strutting, etc. and removal of form for: Stairs, (excluding landings) except spiral - staircases)			
	Net Total	26.176sqm	@732.54/sqm	19174.97
3.005	5.9.18			
	Centering and shuttering including strutting, etc. and removal of form for: Small surfaces such as cantilever ends, brackets and ends of steps, caps and bases to pilasters and columns and the like			
	Net Total	2.340sqm	@910.72/sqm	2131.08
3.006	5.9.19			

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Sl No	Specification	Quantity	Rate	Amount
	Centering and shuttering including strutting, etc. and removal of form for:Weather shade, Chajjas, corbels etc., including edges			
	Net Total	115.256sqm	@902.55/sqm	104024.30
3.007	5.9.3			
	Centering and shuttering including strutting, etc. and removal of form for:Suspended floors, roofs, landings, balconies and access platform			
	Net Total	284.975sqm	@815.75/sqm	232468.36
3.008	5.9.16.1			
	Centering and shuttering including strutting, etc. and removal of form for:Edges of slabs and breaks in floors and wallsUnder 20 cm wide			
	Net Total	278.100metre	@203.93/metre	56712.93
	Heading Total(Rs)			963347.14
4	RCC WORKS			
4.001	OD282344/2023-2024			
	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer - in-charge.All work upto plinth level			
	Net Total	69.775cum	@9413.54/cum	656829.75
4.002	OD282343/2023-2024			
	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer - in-charge.All work above plinth level upto floor V level			
	Net Total	95.087cum	@11065.65/cum	1052199.46
4.003	20.2.4			
	Boring, providing and installing bored cast-in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring, with bentonite solution and temporary casing of appropriate length for setting out and removal of same and the length of the pile to be embedded in the pile cap etc. all complete, including removal of excavated earth with all lifts and leads (Length of pile for payment shall be measured upto bottom of pile cap).500 mm dia piles			
	Net Total	405.000metre	@2500.05/metre	1012520.25
4.004	20.6.2.1			
	Vertical load testing of piles in accordance with IS 2911(Part IV) including installation of loading platform and preparation of pile head or construction of test			

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SI No	Specification	Quantity	Rate	Amount
	cap and dismantling of test cap after test etc. complete as per specification & the direction of engineer -in-Charge. Single pile above 50 tonne and upto 100 tonne capacityInitial test			
	Net Total	1.000per test	@70869.50/per test	70869.50
4.005	20.6.2.2 Vertical load testing of piles in accordance with IS 2911(Part IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & the direction of engineer -in-Charge. Single pile above 50 tonne and upto 100 tonne capacityRoutine test			
	Net Total	2.000per test	@36222.19/per test	72444.38
	Heading Total(Rs)			2864863.34
5 STEEL REINFORCEMENT WORKS				
5.001	5.22A.6 Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete above plinth level.Thermo - Mechanically Treated bars of grade Fe-500D or more			
	Net Total	26697.371kg	@98.30/kg	2624351.57
	Heading Total(Rs)			2624351.57
6 MASONRY WORKS				
6.001	50.6.1.5 Solid block masonry using pre cast solid blocks (Factory made) of size 30x20x20cm or nearest available size confirming to IS 2185 Part I of 1979 for super structure up to floor two level thickness 20cm and above in: CM 1:6 (1 cement : 6 coarse sand) etc complete			
	Net Total	73.810cum	@6644.12/cum	490402.50
6.002	60.7.1 DRY RUBBLE MASONRY _ Dry rubble without concrete levelling course masonry with good quality blasted rubble including packing to compactness to lines and levels cost and conveyance of all materials labour charges etc. complete as per direction of Departmental officers at site			
	Net Total	17.625cum	@3491.47/cum	61537.16
6.003	50.6.1.4 Solid block masonry using pre cast solid blocks (Factory made) of size 30x20x20cm or nearest available size confirming to IS 2185 part I of 1979 for foundation and plinth with thickness 20cm and above in: CM 1:6 (1 cement : 6 coarse sand) etc complete			
	Net Total	2.136cum	@5950.33/cum	12709.90
6.004	50.6.1.6 Solid block masonry using pre cast solid blocks (Factory made) of size 30x20x20cm or nearest available size confirming to IS 2185 part I of 1979 for super structure			

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Sl No	Specification	Quantity	Rate	Amount
	above floor two level upto floor five level thickness 20cm and above in : CM 1:6 (1 cement : 6 coarse sand sand) etc complete			
	Net Total	8.160cum	@7637.14/cum	62319.06
6.005	50.6.2.3			
	Solid block masonry using pre cast solid blocks (Factory made) of size 30x20x15cm or nearest available size confirming to IS 2185 part I of 1979 for super structure above floor two level upto floor five level with thickness 15cm in : CM 1:6 (1 cement : 6 coarse sand) etc complete			
	Net Total	6.210cum	@7977.84/cum	49542.39
6.006	50.6.2.2			
	Solid masonry using pre cast solid blocks (factory made) of size 30x20x15cm or nearest available size confirming to IS 2185 part I of 1979 for super structure up to floor two level with thickness 15cm in : CM 1:6 (1 cement : 6 coarse sand) etc complete			
	Net Total	7.482cum	@6984.82/cum	52260.42
	Heading Total(Rs)			728771.43
7	CEMENT PLASTERING WORKS			
7.001	13.16.1			
	6 mm cement plaster of mix:1:3 (1 cement : 3 fine sand)			
	Net Total	441.700sqm	@267.59/sqm	118194.50
7.002	13.9.1			
	Cement plaster 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement.12 mm cement plaster			
	Net Total	238.188sqm	@412.14/sqm	98166.80
7.003	13.1.2			
	12 mm cement plaster of mix:1:6 (1 cement : 6 fine sand).			
	Net Total	1445.824sqm	@299.27/sqm	432691.75
7.004	13.7.1			
	12 mm cement plaster finished with a floating coat of neat cement of mix:1:3 (1 cement : 3 fine sand)			
	Net Total	14.400sqm	@401.22/sqm	5777.57
	Heading Total(Rs)			654830.62
8	JOINERIES			
8.001	OD214746/2023-2024			
	Supplying and fixing pressed steel window of standard pattern with frame as per profile of IS 4351 of section 105*60mm using 18G (1.2mm thick CRCA) sheet and shutters made of section 75*30 cm for outer styles and horizondal members and then insered with enclosed and stiffned sheet 26R gas per specification with Z incromate primer coat measured in sequence metre including all charges for fixing handle, aldrops, butt hinges etc complete			
	Net Total	34.000sqm	@6073.23/sqm	206489.82

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Sl No	Specification	Quantity	Rate	Amount
8.002	OD214747/2023-2024 Supplying and fixing pressed steel door of standard pattern with frame as per profile of IS 4351 of section 105*60mm using 18G (1.2mm thick CRCA) sheet and shutters made of section 75*30 cm for outer styles and horizontal members and then inserted with enclosed and stiffened sheet 26R as per specification with Z incromate primer coat measured in sequence metre including all charges for fixing handle, aldop, butt hinges etc complete			
	Net Total	17.640sqm	@5654.37/sqm	99743.09
8.003	21.1.1.2 Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS : 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing /paneling, C.P. brass/ stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge.(Glazing, paneling and dash fasteners to be paid for separately): For fixed portion Powder coated aluminium (minimum thickness of powder coating 50 micron)			
	Net Total	12.000kg	@537.09/kg	6445.08
8.004	21.1.2.2 For shutters of doors, windows & ventilators including providing and fixing hinges / pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber/ neoprene gasket required (Fittings shall be paid for separately) Powder coated aluminium (minimum thickness of powder coating 50 micron)			
	Net Total	12.000kg	@643.12/kg	7717.44
8.005	21.3.1 Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of Engineer - in -Charge. (Cost of aluminium snap beading shall be paid in basic item):With float glass panes of 4.0 mm thickness			
	Net Total	2.400sqm	@1176.64/sqm	2823.94
8.006	9.48.1 Providing and fixing M.S. Grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete.Fixed to steel windows by welding			
	Net Total	234.000kg	@194.59/kg	45534.06
8.007	10.28 Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts			

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Sl No	Specification	Quantity	Rate	Amount
	and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners, stainless steel bolts etc., of required size on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.)			
	Net Total	515.060kg	@677.37/kg	348886.19
8.008	OD214748/2023-2024			
	Providing and fixing PVC fibre door including frame ,shutter and all cost of materials, labour charges and fixing charges etc			
	Net Total	10.290sqm	@1949.98/sqm	20065.29
	Heading Total(Rs)			737704.91
9	STEEL WORKS			
9.001	50.10.2			
	Steel work for purlin/single section with G I pipes including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete			
	Net Total	148.973kg	@152.35/kg	22696.04
9.002	OD214745/2023-2024			
	Roofing with GI hard colour powder coated traffod sheets 0.35mm thick or nearest available thickness with overlaps of 150mm at ends and GI hook or crank CI bolt and nuts including plain washers and bitumen washers etc complete			
	Net Total	34.200sqm	@526.02/sqm	17989.88
	Heading Total(Rs)			40685.92
10	PAINTING WORKS			
10.001	13.43.1			
	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface:Water thinnable cement primer			
	Net Total	1937.524sqm	@70.66/sqm	136905.45
10.002	13.60.1			
	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade:Two or more coats on new work			
	Net Total	1937.524sqm	@151.43/sqm	293399.26
10.003	13.61.1			
	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade:Two or more coats on new work			
	Net Total	147.164sqm	@143.05/sqm	21051.81
	Heading Total(Rs)			451356.52
11	TILES WORK			

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Sl No	Specification	Quantity	Rate	Amount
11.001	11.41.2 Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS : 15622, of approved make, in all colours and shades, laid on 20 mm thick cement mortar 1:4 (1 cement : 4 coarse sand), including grouting the joints with white cement and matching pigments etc., complete. Size of Tile 600 x 600 mm.			
	Net Total	314.300sqm	@1766.29/sqm	555144.95
11.002	11.36 Providing and fixing I st quality ceramic glazed wall tiles conforming to IS : 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer -in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3 kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.			
	Net Total	82.350sqm	@1212.74/sqm	99869.14
11.003	OD214744/2023-2024 Providing and laying ceramic anti skid floor tiles of size 300x300 mm (thickness to be specified by the manufacturer), of 1st quality conforming to IS 15622, of approved make, in colours such as white, ivory, Grey, Fume Red brown, laid on 20mm thick cement mortar 1:4 (1 cement:4 coarse sand), including pointing the joints with white cement and matching pigment etc. complete			
	Net Total	60.938sqm	@1086.85/sqm	66230.47
	Heading Total(Rs)			721244.56
12	PLUMBING WORKS			
12.001	17.7.2 Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require: White Vitreous China Wash basin size 630 x 450 mm with a single 15 mm C.P. brass pillar tap			
	Net Total	8.000each	@3238.51/each	25908.08
12.002	17.2.2 Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required: W.C. pan with ISI marked black solid plastic seat and lid			
	Net Total	4.000each	@6050.89/each	24203.56
12.003	17.4.1 Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350 mm and 340x410x265 mm sizes respectively with automatic flushing cistern with standard flush pipe and C.P. brass spreaders with brass unions and G.I. clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required: One urinal basin			

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Sl No	Specification	Quantity	Rate	Amount
	with 5 litre white P.V.C. automatic flushing cistern			
	Net Total	5.000each	@5864.57/each	29322.85
12.004	50.18.7.2.2			
	Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step PVC solvent cement and testing of joints complete as per direction of Engineer -in-Charge 20 mm dia 10 Kgf/cm2- Internal work - Exposed on wall			
	Net Total	76.200metre	@242.08/metre	18446.50
12.005	18.7.1			
	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer -in-Charge. Internal work - Exposed on wall 15 mm nominal outer dia pipes			
	Net Total	20.000metre	@284.31/metre	5686.20
12.006	18.7.2			
	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer -in-Charge. Internal work - Exposed on wall 20 mm nominal outer dia pipes			
	Net Total	10.000metre	@361.29/metre	3612.90
12.007	50.18.7.6.1			
	Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step PVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge 50 mm dia 10 Kgf/cm - Internal work- Exposed on wall			
	Net Total	50.000metre	@415.45/metre	20772.50
12.008	50.18.8.7.1			
	Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes with one step PVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge. Concealed work including cutting chases and making good the wall etc. 63 mm pipe 6 Kgf/cm2			
	Net Total	40.000metre	@609.49/metre	24379.60
12.009	18.17.4			
	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :50 mm nominal bore			
	Net Total	1.000each	@1023.11/each	1023.11
12.010	18.49.1			
	Providing and fixing C.P brass bib cock of approved quality conforming to IS: 8931.15 mm nominal bore			

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Sl No	Specification	Quantity	Rate	Amount
	Net Total	11.000each	@493.15/each	5424.65
12.011	50.18.9.19.2			
	Providing and fixing PVC pipes including fixing the pipe with clamps/clips at 1.00 m spacing. This includes jointing of pipes with one step PVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge 110 m dia 4 Kgf/cm ² - External work - Exposed on wall			
	Net Total	45.000metre	@331.72/metre	14927.40
12.012	50.17.1.4			
	Supplying and fixing CP Health faucet good quality including cost of materials and labour charges etc. complete as per the direction of site engineer-in-charge.			
	Net Total	6.000no	@758.13/no	4548.78
12.013	50.18.9.20.3			
	Providing and fixing PVC moulded fittings /accessories for Rigid PVC pipes, including jointing with PVC solvent cement - 63 mm dia Door Elbow			
	Net Total	7.000no	@80.47/no	563.29
12.014	50.18.9.22.3			
	Providing and fixing PVC moulded fittings/ accessories for Rigid PVC pipes, including jointing with PVC solvent cement-110 mm dia Door Elbow			
	Net Total	7.000no	@132.02/no	924.14
12.015	50.18.9.22.4			
	Providing and fixing PVC moulded fittings/ accessories for Rigid PVC pipes, including jointing with PVC solvent cement- 110 mm dia Bend			
	Net Total	10.000no	@161.06/no	1610.60
12.016	50.18.9.22.5			
	Providing and fixing PVC moulded fittings/ accessories for Rigid PVC pipes including jointing with PVC solvent cement 110x110x110 mm dia Tee			
	Net Total	7.000no	@174.81/no	1223.67
12.017	18.48			
	Providing and placing on terrace (at all floor levels) polyethylene water storage tank :ISI 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.			
	Net Total	3000.000Litre	@10.37/Litre	31110.00
12.018	51.19.ST4			
	Supplying and installing ready made PVC Septic tank including the cost of carriage, trenching, placing at the level below ground level as specified as per the direction of engineer in charge (Provision for CC/RCC/Sand/06mm aggregate for the preparation of bed shall be paid separately) 4. 35 to 50 flush capacity			
	Net Total	1.000each	@41145.92/each	41145.92
12.019	17.1.1			
	Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100 mm			

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Sl No	Specification	Quantity	Rate	Amount
	Sand Cast Iron P or S trap, 10 litter low level white P.V.C.flushing cistern, including flush pipe, manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever require:White Vitreous china Orissa pattern W.C. pan of size 580x440 mm with integral type foot rests			
	Net Total	2.000each	@6381.62/each	12763.24
	Heading Total(Rs)			267596.99
13	WATER PROOFING WORKS			
13.001	22.6			
	Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of applying : a) after surface preparation, first layer of slurry of cement @ 0.488 kg/ sqm mixed with water proofing cement compound @ 0.253 kg/ sqm. laying second layer of fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/ sqm mixed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30 cm on parapet wall and tucked into groove in parapet all around. d) fourth and final layer of brick tilling with cement mortar (which will be paid for separately. For the purpose of measurement the entire treated surface will be measured)			
	Net Total	73.205sqm	@615.67/sqm	45070.12
13.002	22.5			
	Providing and laying water proofing treatment in sunken portion of WCs, bathroom etc., by applying cement slurry mixed with water proofing cement compound consisting of applying : a) First layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. This layer will be allowed to air cure for 4 hours. b) Second layer of slurry of cement @ 0.242 kg /sqm mixed with water proofing cement compound @ 0.126 kg/ sqm. This layer will be allowed to air cure for 4 hours followed with water curing for 48 hours. The rate includes preparation of surface, treatment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry.			
	Net Total	22.750sqm	@548.03/sqm	12467.68
13.003	16.68			
	Providing and laying 60 mm thick factory made cement concrete interlocking paver block of M - 30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50 mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge.			
	Net Total	90.000sqm	@1011.54/sqm	91038.60
13.004	4.17			
	Making plinth protection 50 mm thick of cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) over 75 mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including finishing the top smooth.			
	Net Total	60.000sqm	@722.82/sqm	43369.20

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SI No	Specification	Quantity	Rate	Amount
	Heading Total(Rs)			191945.60
14	NAME BOARD			
14.001	13.71			
	Lettering with black Japan pint of approved brand and manufacture			
	Net Total	1950.000per Letter per cm height	@5.57/per Letter per cm height	10861.50
	Heading Total(Rs)			10861.50
	Total Estimation PAC			10649742.50
16	Extra Charges			
15.001	Provision for GST			
		10649742.50	18.00%	1916953.65
	Grand Total			0.00
	Round off			0.00
	Rounded Total(Rs)			12566696.15
	Rupees One Crore Twenty Five Lakh Sixty Six Thousand Six Hundred and Ninety Six			

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DATA ANALYSIS

**KIIFB-KILA 1 CRORE PROJECT-INFRASTRUCTURE DEVELOPEMENT AT GMLPS
THIRUVATHRA(SCHOOL CODE-24215)-THRISSUR-Construction of new building(G+1)-
Composite Civil Work**

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
1:EARTHWORK EXCAVATION						
1.001-Specification code: 2.6.1						
Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead up to 50 m and lift up to 1.5 m, disposed earth to be levelled and neatly dressed. All kinds of soil						
Details of cost for 10 cum. Average output of Hydraulic Excavator per hour = 30cum						
Labour						L
0115		Coolie				
		Day	1.20000	558.00	669.60	L1
0128		Mate				
		Day	0.32000	617.00	197.44	L2
Tools&Plants(Hire charges)						T
0020		Hydraulic Excavator (3D) with driver and fuel				
		Day	0.04000	7000.00	287.00	T1
0018		Hire and running charges of loader				
		Day	0.04000	5000.00	205.00	T2
Total			10.000	cum	1359.04	
Unit Total			1.000	cum	135.90	
Add Water Charge			135.90	@1.00%	1.36	
Total					137.26	
Add Contractors Profit & Overhead			137.26	@15.00%	20.59	
Total					157.85	
Add Cost Index			157.85	@35.59%	56.18	
Total					214.03	
GRAND TOTAL				cum	214.03	

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Note						
1.002-Specification code: 2.8.1						
Earth work in excavation by mechanical means (Hydraulic excavator) /manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift up to 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m. All kinds of soil						
Details of cost for 10 cum.						
Labour						L
0115		Coolie				
		Day	2.05000	558.00	1143.90	L1
0128		Mate				
		Day	0.40000	617.00	246.80	L2
Tools&Plants(Hire charges)						T
0018		Hire and running charges of loader				
		Day	0.04000	5000.00	206.25	T1
0020		Hydraulic Excavator (3D) with driver and fuel				
		Day	0.04000	7000.00	288.75	T2
Total			10.000	cum	1885.70	
Unit Total			1.000	cum	188.57	
Add Water Charge			188.57	@1.00%	1.89	
Total					190.46	
Add Contractors Profit & Overhead			190.46	@15.00%	28.57	
Total					219.03	
Add Cost Index			219.03	@35.59%	77.95	
Total					296.98	
GRAND TOTAL				cum	296.98	
Note						
1.003-Specification code: 2.25						
Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundation etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m.						
Details of cost for 10 cum.						

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(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Labour					L	
0101		Bhisti				
		Day	0.20000	617.00	123.40	L1
0128		Mate				
		Day	0.20000	617.00	123.40	L2
0115		Coolie				
		Day	2.50000	558.00	1395.00	L3
Total		10.000	cum	1641.80		
Unit Total		1.000	cum	164.18		
Add Water Charge		164.18	@1.00%	1.64		
Total				165.82		
Add Contractors Profit & Overhead		165.82	@15.00%	24.87		
Total				190.69		
Add Cost Index		190.69	@35.59%	67.87		
Total				258.56		
GRAND TOTAL			cum	258.56		
Note						
1.004-Specification code: 50.2.25.1						
Filling with contractor's own earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m as per direction of site Engineer-in-charge						
Details of cost for one each						
Material					M	
0979		Royalty for good earth				
		cum	1.00000	40.00	40.00	M1
Carriage					C	
2241		Carriage of Good earth				
		cum	1.00000	129.71	129.71	C1
Labour					L	
0115		Coolie				

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Day	0.25000	558.00	139.50	L1
0101		Bhisti				
		Day	0.02000	617.00	12.34	L2
0128		Mate				
		Day	0.02000	617.00	12.34	L3
Total			1.000	cum	333.89	
Unit Total			1.000	cum	333.89	
Add Water Charge			333.89	@1.00%	3.34	
Total					337.23	
Add Contractors Profit & Overhead			337.23	@15.00%	50.58	
Total					387.81	
Add Cost Index			387.81	@35.59%	138.02	
Total					525.83	
GRAND TOTAL				cum	525.83	
Note						
2:CEMENT CONCRETE WORKS						
2.001-Specification code: 4.1.8						
Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level: 1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40 nominal size)						
Details of cost for 1 cum						
Material						M
0982		Coarse sand (zone III)				
		cum	0.47000	1350.00	634.50	M1
0293		Stone Aggregate(single size): 40 mm nominal size (0.70 cum - 7.5% for voids i.e. 0.05 = 0.65 cum)				
		cum	0.65000	1300.00	845.00	M2
0367		Portland Cement (0.1175 cum)				
		tonne	0.17000	4940.00	839.80	M3
0295		Stone Aggregate(single size):20 mm nominal size nominal size				
		cum	0.24000	1350.00	324.00	M4

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Carriage					C	
2203		Carriage of Coarse sand				
		cum	0.47000	103.77	48.77	C1
2206		Carriage of Stone aggregate 40 mm nominal size and above				
		cum	0.65000	112.79	73.31	C2
2209		Carriage of Cement				
		tonne	0.17000	92.24	15.68	C3
2202		Carriage of Stone aggregate below 40 mm nominal size				
		cum	0.24000	103.77	24.90	C4
Labour					L	
0114		Beldar				
		Day	1.63000	558.00	909.54	L1
0101		Bhisti				
		Day	0.70000	617.00	431.90	L2
0155		Mason (average)				
		Day	0.10000	709.00	70.90	L3
Tools&Plants(Hire charges)					T	
0002		Hire charges of Concrete Mixer 0.25 to 0.40 cum with Hopper				
		Day	0.07000	800.00	56.00	T1
9999		Sundries				
		L.S	13.52000	2.00	27.04	T2
0012		Vibrator (Needle type 40 mm)				
		Day	0.07000	370.00	25.90	T3
Total		1.000	cum	4327.24		
Unit Total		1.000	cum	4327.24		
Add Water Charge		4327.24	@1.00%	43.27		
Total				4370.51		
Add Contractors Profit & Overhead		4370.51	@15.00%	655.58		
Total				5026.09		
Add Cost Index		5026.09	@35.59%	1788.79		

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(Dsr year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Total					6814.88	
GRAND TOTAL				cum	6814.88	
Note						
2.002-Specification code: 4.2.5						
Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts,buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor, etc. up to floor five level, excluding the cost of centering, shuttering and finishing: 1:3:6 (1 cement : 3 coarse sand :6 graded stone aggregate 20 mm nominal size)						
Details of cost for 1 cum						
Material						M
0295		Stone Aggregate(single size):20 mm nominal size				
		cum	0.70000	1350.00	945.00	M1
0297		Stone Aggregate(single size): 10 mm nominal size				
		cum	0.24000	1350.00	324.00	M2
0982		Coarse sand (zone III)				
		cum	0.47000	1350.00	634.50	M3
0367		Portland Cement (0.15674 cum)				
		tonne	0.22000	4940.00	1086.80	M4
Carriage						C
2202		Carriage of Stone aggregate below 40 mm nominal size				
		cum	0.94000	103.77	97.54	C1
2209		Carriage of Cement				
		tonne	0.22000	92.24	20.29	C2
2203		Carriage of Coarse sand				
		cum	0.47000	103.77	48.77	C3
Labour						L
0101		Bhisti				
		Day	0.70000	617.00	431.90	L1
0114		Beldar				
		Day	0.90000	558.00	502.20	L2
0115						

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Coolie				
		Day	0.78000	558.00	435.24	L3
0115		Coolie				
		Day	1.88000	558.00	1049.04	L4
0124		Mason (brick layer)2nd class				
		Day	0.06000	679.00	40.74	L5
0123		Mason (brick layer) Ist class				
		Day	0.06000	738.00	44.28	L6
Tools&Plants(Hire charges)						T
9999		Sundries				
		L.S	13.52000	2.00	27.04	T1
9999		Sundries Scaffolding (17.60x2.5 avg.)				
		L.S	114.40000	2.00	228.80	T2
0012		Vibrator (Needle type 40 mm)				
		Day	0.07000	370.00	25.90	T3
0002		Hire charges of Concrete Mixer 0.25 to 0.40 cum with Hopper				
		Day	0.07000	800.00	56.00	T4
Total			1.000	cum	5998.04	
Unit Total			1.000	cum	5998.04	
Add Water Charge			5998.04	@1.00%	59.98	
Total					6058.02	
Add Contractors Profit & Overhead			6058.02	@15.00%	908.70	
Total					6966.72	
Add Cost Index			6966.72	@35.59%	2479.46	
Total					9446.18	
GRAND TOTAL				cum	9446.18	
Note						
2.003-Specification code: 2.34.1						
Supplying chemical emulsion in sealed containers including delivery as specified. Chlorpyrifos / Lindane emulsifiable concentrate of 20%						

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(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Details of cost for 100 litres						
Material						M
7022		Chlorpyriphos 20% E.C. / Lindane 20% E.C.				
		Litre	100.00000	150.00	15000.00	M1
Carriage						C
2342		Carriage of Solvent/ Diesel				
		quintal	1.00000	10.38	10.38	C1
Total			100.000	Litre	15010.38	
Unit Total			1.000	Litre	150.10	
Add Water Charge			150.10	@1.00%	1.50	
Total					151.60	
Add Contractors Profit & Overhead			151.60	@15.00%	22.74	
Total					174.34	
Add Cost Index			174.34	@35.59%	62.05	
Total					236.39	
GRAND TOTAL				Litre	236.39	
Note						
2.004-Specification code: 2.35.3.1						
Diluting and injecting chemical emulsion for POST -CONSTRUCTIONAL anti-termite treatment (excluding the cost of chemical emulsion): Treatment of soil under existing floors using chemical emulsion @ one litre per hole, 300 mm apart including drilling 12 mm diameter holes and plugging with cement mortar 1:2 (1 cement : 2 coarse sand) to match the existing floor: With Chlorpyriphos/Lindane E.C. 20% with 1% concentration						
Details of cost for 9 sqm (3 metre x 3 metre) No. of holes - 100 nos. Chlorpyriphos 1% required 100x1 litre = 100 litres Chlorpyriphos 20% E.C. = 100/20 = 5.0 litres Chlorpyriphos 20% E.C./Lindane 20% E.C. 5 Litres (to be supplied free of cost)						
Labour						L
0114		Beldar				
		Day	2.00000	558.00	1116.00	L1
0124		Mason (brick layer)2nd class				
		Day	0.50000	679.00	339.50	L2
Tools&Plants(Hire charges)						T
9999		Sundries				

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(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		L.S	35.88000	2.00	71.76	T1
Total			9.000	sqm	1527.26	
Unit Total			1.000	sqm	169.70	
Add Water Charge			169.70	@1.00%	1.70	
Total					171.40	
Add Contractors Profit & Overhead			171.40	@15.00%	25.71	
Total					197.11	
Add Cost Index			197.11	@35.59%	70.15	
Total					267.26	
GRAND TOTAL				sqm	267.26	
Note						
3:CENTERING AND SHUTTERING WORKS						
3.001-Specification code: 5.9.1						
Centering and shuttering including strutting, etc. and removal of form for: Foundations, footings, bases of columns, etc for mass concrete						
Details of cost for footing size 2.7mx2.7mx 1.00m Contact area = 10.8sqm						
Material						M
7330		M.S. Tube 40 mm dia Qty taken for cost of using once = $10.8 \times 0.85 / 40 = 0.2295$				
		metre	0.23000	215.00	49.34	M1
7329		Single clip Qty taken for cost of using once = $8 \times 0.85 / 40 = 0.17$				
		each	0.17000	59.00	10.03	M2
7326		Corner angle 45x45x5 mm 1.50 m long Qty taken for cost of using once = $4 \times 0.85 / 40 = 0.085$				
		each	0.09000	240.00	20.40	M3
7327		100 mm channel shoulder 2.5 m long Qty taken for cost of using once = $8 \times 0.85 / 40 = 0.17$				
		each	0.17000	910.00	154.70	M4
7328		Double clip (bridge clip) Qty taken for cost of using once = $16 \times 0.85 / 40 = 0.34$				
		each	0.34000	76.00	25.84	M5
7319		Assuming shuttering material will become unserviceable after use of 40 times. Adding for maintenance @ 10% of cost Taking salvage value after full use of material @ 25% of cost wall form panel 1250x500 mm				

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(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Qty taken for cost of using once = $16 \times 0.85 / 40 = 0.34$				
		each	0.34000	860.00	292.40	M6
Carriage						C
9977		Carriage				
		L.S	78.00000	2.00	156.00	C1
Labour						L
0116		Fitter(grade1)				
		Day	0.75000	738.00	553.50	L1
0114		Beldar				
		Day	1.50000	558.00	837.00	L2
Tools&Plants(Hire charges)						T
9999		Sundries Shuttering oil				
		L.S	52.00000	2.00	104.00	T1
9999		Sundries				
		L.S	26.00000	2.00	52.00	T2
9999		Sundries Assembly nuts 7 bolts Qty taken for cost of using once = $1040 \times 0.85 / 40 = 22.10$				
		L.S	22.10000	2.00	44.20	T3
Total			10.800	sqm	2299.41	
Unit Total			1.000	sqm	212.91	
Add Water Charge			212.91	@1.00%	2.13	
Total					215.04	
Add Contractors Profit & Overhead			215.04	@15.00%	32.26	
Total					247.30	
Add Cost Index			247.30	@35.59%	88.01	
Total					335.31	
GRAND TOTAL				sqm	335.31	
Note						
3.002-Specification code: 5.9.5						
Centering and shuttering including strutting, etc. and removal of form for:						

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Lintels, beams, plinth beams, girders bressumers and cantilevers						
Details of cost for a beam of 6 m clear span, 0.50 m deep 0.30 m wide and height 3.5 m from floor cubical contents 6.60x0.5x0.3 = 0.99 cum 1x1.30x6.00 = 7.80 sqm						
Material						M
7344		Beam clamp 300-380 mm (450-1070 mm) Qty taken for cost of using once = 5x0.85/40 = 0.1063 m				
		each set	0.11000	355.00	37.74	M1
7343		Adjustable telescopic prop 3 m (2.02-3.75m) Qty taken for using once = 6x0.85/40 = 0.1275m				
		each	0.13000	955.00	121.76	M2
Labour						L
0116		Fitter(grade1)				
		Day	1.25000	738.00	922.50	L1
0114		Beldar				
		Day	2.50000	558.00	1395.00	L2
Tools&Plants(Hire charges)						T
9999		Sundries Assembly nut & bolts etc. Qty taken for cost of using once = 1040x0.85/40 = 22.10				
		L.S	22.10000	2.00	44.20	T1
9999		Sundries Carriage				
		L.S	78.00000	2.00	156.00	T2
9999		Sundries paper tape etc				
		L.S	24.61000	2.00	49.22	T3
9999		Sundries Shuttering oil				
		L.S	39.00000	2.00	78.00	T4
Sub Data						S
10.1		Assuming shuttering will become unserviceable after use of 40 times Add maintenance charges @ 10% of cost of material Less salvage value of material after full use @25% of cost of material 1. Steel plats for side and bottom (plate size 1.20 x 0.50 m) Angle 40x40x5mm , 2x1.20 = 2.40 m , 3x0.50 = 1.50 m Total 3.90 m @ 3.00 kg/m = 11.70 kg sheet 1.6 mm thick 1.20 m x 0.50 m =0.60 sqm 0.60 sqm @ 12.55				

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		kg/sqm. = 7.53 kg. Weight of one plate = 19.23 kg. Add for wastage 5% 0.96 kg. Total = 20.19 kg Total weight of all plates 3x5x20.19 = 302.85 kg Qty taken for cost of using once= 302.85 x 85/40 = 6.4356 kg Steel Work : Structural steel work in single section, fixed with or without connecting plate, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.				
		kilogram	6.44000	64.31	413.87	S1
Total			7.800	sqm	3218.29	
Unit Total			1.000	sqm	412.60	
Add Water Charge			412.60	@1.00%	4.13	
Total					416.73	
Add Contractors Profit & Overhead			416.73	@15.00%	62.51	
Total					479.24	
Add Cost Index			479.24	@35.59%	170.56	
Total					649.80	
GRAND TOTAL				sqm	649.80	
Note						
3.003-Specification code: 5.9.6						
Centering and shuttering including strutting, etc. and removal of form for: Columns, Pillars, Piers, Abutments, Posts and Struts						
Details of cost for 4.5 sqm. Size of column 450x450mm and 2.5 m high Area of contact = 4x0.45x2.5 = 4.5 sqm MATERIAL: Assuming shuttering will become unserviceable after use of 40 times Add maintenance charges @ 10 % of cost of material Less salvage value of material after full use @ 25% of cost of material						
Material						M
7331		Wall form panel 1250x450xmm Qty taken for cost of using once = $8 \times 0.85 / 40 = 0.17$				
		each	0.17000	860.00	146.20	M1
7332		Corner angle 45x45x5 mm 2.50 long Qty taken for cost of using once = $4 \times 0.85 / 40 = 0.085$				
		each	0.09000	255.00	21.68	M2
7333		Column clamp 450x1070 mm Qty taken for cost of using once = $5 \times 0.85 / 40 = 0.1063$				
		each	0.11000	965.00	102.58	M3
7334		Prop 2 m (2-3.5m) Qty taken for cost of using once = $4 \times 0.85 / 40 = 0.085$				

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(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		each	0.09000	635.00	53.98	M4
Carriage						C
9977		Carriage				
		L.S	52.00000	2.00	104.00	C1
Labour						L
0114		Beldar				
		Day	2.00000	558.00	1116.00	L1
0116		Fitter(grade1)				
		Day	1.00000	738.00	738.00	L2
Tools&Plants(Hire charges)						T
9999		Sundries				
		Qty taken for cost of using once = $1300 \times 0.85 / 40 = 27.62$				
		L.S	27.62000	2.00	55.24	T1
9999		Sundries				
		Shuttering oil				
		L.S	39.00000	2.00	78.00	T2
9999		Sundries				
		Carriage				
		L.S	26.00000	2.00	52.00	T3
Total			4.500	sqm	2467.68	
Unit Total			1.000	sqm	548.37	
Add Water Charge			548.37	@1.00%	5.48	
Total					553.85	
Add Contractors Profit & Overhead			553.85	@15.00%	83.08	
Total					636.93	
Add Cost Index			636.93	@35.59%	226.68	
Total					863.61	
GRAND TOTAL				sqm	863.61	
Note						
3.004-Specification code: 5.9.7						
Centering and shuttering including strutting, etc. and removal of form for: Stairs, (excluding landings) except spiral - staircases)						

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Details of cost for 5.79 sqm. Details of staircase, 3.40 m clear span including 1 m landing						
Material						M
0302		Second class kail wood in scantling = $2 \times 4 \times 0.80 = 6.40$ m Qty taken for cost using once = $6.4/8 = 0.8$ m Safeda ballies 125 mm diameter				
		metre	0.80000	40.00	32.00	M1
1197		(ii) Batten 100mm x 75 mm $4 \times 1.30 \times 0.100 \times 0.075 = 0.039$ cum = 39 cudm Qty taken for cost using once = $39/8 = 4.875$ cudm Second class kail wood in scantling				
		1 cud m	4.88000	260.00	126.75	M2
1198		(i) Cost of plank 38 mm (2nd class kail wood) Waist $2.69 \times 1.30 = 3.50$ sqm. Side shuttering of steps and side of waist steps = $8 \times 1.30 \times 1.15 = 1.56$ sqm Face of landing $1 \times 1.30 \times 0.15 = 0.20$ sqm. Side of waist $2.69 \times 0.13 = 0.35$ sqm. Side of steps- $8 \times 0.50 \times 0.30 \times 0.15 = 0.18$ sqm. Total = 5.79 sqm. Wastage 5% = 0.29 sqm. Total = 6.08 sq. Cubical content - $6.08 \times 0.038 = 0.231$ cum = 231 cudm Qty taken for cost using once = $231/8 = 28.875$ cudm Second class kail wood in planks				
		1 cud m	28.88000	260.00	750.75	M3
Carriage						C
2204		Planks = 0.231 cum, Battens = 0.039 cum. Ballies $6.4 \times 3.142 / 4 \times (0.125)^2 = 0.079$ cum. Total = 0.349 cum. Qty taken for cost using once = $0.349/8 = 0.04363$ cum Carriage of Timber				
		cum	0.04000	118.59	5.17	C1
Labour						L
0114		Beldar				
		Day	1.00000	558.00	558.00	L1
0112		For assembling, erection, dismantling and cleaning Carpenter 2nd class				
		Day	1.75000	679.00	1188.25	L2
Tools&Plants(Hire charges)						T
9999		Sundries				
		L.S	16.12000	2.00	32.24	T1
Total			5.790	sqm	2693.16	
Unit Total			1.000	sqm	465.14	
Add Water Charge			465.14	@1.00%	4.65	

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Total			469.79	
Add Contractors Profit & Overhead			469.79	@15.00%	70.47	
		Total			540.26	
Add Cost Index			540.26	@35.59%	192.28	
		Total			732.54	
GRAND TOTAL				sqm	732.54	
Note						
3.005-Specification code: 5.9.18						
Centering and shuttering including strutting, etc. and removal of form for: Small surfaces such as cantilever ends, brackets and ends of steps, caps and bases to pilasters and columns and the like						
Details of cost for a bracket 1.20m projected Front area 0.50x0.60m , End area 0.50x0.75m Area in contact with concrete = $2 \times \{(0.60+0.75)/2 \times 1.2\} = 1.62$ sqm Front 0.5x0.6 = 0.30 sqm, Bottom 0.5x1.21 = 0.605 sqm Total = 2.525 sqm						
Material						M
1198		Assuming that the timber will become unserviceable after being used 8 times. (I) Plank 30mm thick. Sides $2 \times \{(0.60+0.75)/2 \times 1.238\} = 1.6713$ sqm Battens $0.576 \times 1.21 = 0.697$, Front $0.5 \times 0.638 = 0.319$, Total = 2.687 sqm. Cubical contents $2.687 \times 0.038 = 0.102$ cum, Wastage @ 5% = 0.005 cum, Total = 0.107 cum. Qty taken for cost using once = $107/8 = 13.375$ cudm Second class kail wood in planks or equivalent local soft wood				
		1 cud m	13.38000	260.00	347.75	M1
2447		(iii) Bailies 125 mm dia. $1 \times 2.5 = 2.50$ m , $1 \times 2.65 = 2.65$ m Total = 5.15 m Wastage 5% = 0.26 m , Total = 5.41 m Qty taken for cost using once = $5.41/8 = 0.6763$ m Hollock ballies 125 mm diameter				
		metre	0.68000	35.00	23.67	M2
1197		(ii) Battens- $0.05 \times 0.05 \times 1.238 = 2.476$ m , $2 \times 1.21 = 2.42$ m , $2 \times 0.688 = 1.376$ m , $2 \times 0.838 = 1.676$ m , $30 \times 0.5 = 1.50$ m Total = 9.448m Cubical contents $9.448 \times 0.05 \times 0.05 = 0.024$ cum , Wastage 5% = 0.0012 cum. Total = 0.0252 cum = 25.2 cudm Qty taken for cost using once = $25.2/8 = 3.15$ cudm Second class kail wood in scantling				
		1 cud m	3.15000	260.00	81.90	M3
Carriage						C
2204		Planks = 0.107 cum, Battens = 0.0252 cum Baillies $5.41 \times 22/7 \times (0.125)^{2/4} = 0.066$ cum Total = 0.198 cum Qty taken for cost using once = $0.198/8 = 0.0248$ cudm Carriage of Timber				
		cum	0.02000	118.59	2.94	C1

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(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Labour						L
0114		Beldar				
		Day	0.80000	558.00	446.40	L1
0112		Labour for assembling, erection, dismantling & cleaning Carpenter 2nd class				
		Day	0.80000	679.00	543.20	L2
Tools&Plants(Hire charges)						T
9999		Sundries				
		L.S	7.15000	2.00	14.30	T1
Total			2.525	sqm	1460.16	
Unit Total			1.000	sqm	578.28	
Add Water Charge			578.28	@1.00%	5.78	
Total					584.06	
Add Contractors Profit & Overhead			584.06	@15.00%	87.61	
Total					671.67	
Add Cost Index			671.67	@35.59%	239.05	
Total					910.72	
GRAND TOTAL				sqm	910.72	
Note						
3.006-Specification code: 5.9.19						
Centering and shuttering including strutting, etc. and removal of form for: Weather shade, Chajjas, corbels etc., including edges						
Details of cost for a weather shade Area of centering and shuttering = 0.954 sqm For a weather shade over a window of size 1.5x1.2m Size of weather shade 1.80x0.45m Thickness at front = 0.05 m Thickness at fixed edge = 0.07m Area in contact with concrete Bottom 1X0.45X1.80 = 0.810 , 1x0.05x1.80 = 0.094 , 2x0.45x0.06 = 0.027 Total = 0.954 sqm						
Material						M
2447		(iii) Bailies 125 mm dia. 2x2.1 = 4.2 m , Wastage 5% = 0.21 m , Total = 4.41 m Qty taken for cost using once = 4.41/8 = 0.5513 m Hollock ballies 125 mm diameter				
		metre	0.55000	35.00	19.30	M1
1198		Assuming that the timber will become unserviceable after being used 8 times. (i) Planking 38 mm thick. Bottom 1x1.876x0.488 = 0.915 sqm. , 1x1.876x0.05 = 0.94 sqm. , 2x0.45x0.06 = 0.27 sqm. Total = 1.036 sqm , Add 5% wastage = 0.052 sqm. Total = 1.088 sqm. Cubic contents 1.088x0.038=0.041 cum=41 cudm Qty taken for cost using once = 41/8				

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		= 5.125 cu dm Second class kail wood in planks				
		1 cu dm	5.13000	260.00	133.25	M2
1197		(ii) Battens 2x0.60x0.075x0.10 = 0.009 Ends with bearing center 1x0.45x0.075x0.10 = 0.003 Total = 0.012 cum = 12 cu dm Qty taken for cost using once = 12/8 = 1.50 cu dm Second class kail wood in scantling				
		1 cu dm	1.50000	260.00	39.00	M3
Carriage						C
2204		Plank = 0.041 cum. , Battens = 0.012 cum. Bailies 4.41x22/7x(0.125) ² /4 = 0.054 cum. Total = 0.107 cum Qty taken for cost using once = 0.107/8 = 0.01338 cum Carriage of Timber				
		cum	0.01000	118.59	1.59	C1
Labour						L
0114		Beldar				
		Day	0.25000	558.00	139.50	L1
0112		Labour for assembling, erection, dismantling & cleaning Carpenter 2nd class				
		Day	0.30000	679.00	203.70	L2
Tools&Plants(Hire charges)						T
9999		Sundries				
		L.S	5.20000	2.00	10.40	T1
Total			0.954	sqm	546.74	
Unit Total			1.000	sqm	573.10	
Add Water Charge			573.10	@1.00%	5.73	
Total					578.83	
Add Contractors Profit & Overhead			578.83	@15.00%	86.82	
Total					665.65	
Add Cost Index			665.65	@35.59%	236.90	
Total					902.55	
GRAND TOTAL				sqm	902.55	
Note						
3.007-Specification code: 5.9.3						

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Centering and shuttering including strutting, etc. and removal of form for: Suspended floors, roofs, landings, balconies and access platform						
Details of cost for a room 4.5x3 = 13.50 sqm height 3.5 m						
Material						M
7343		Adjustable telescopic prop 3 m (2.02-3.75m)				
		each	0.13000	955.00	121.76	M1
7342		Adding for maintenance @ 10% of cost Taking salvage value after full use of material @ 25% of cost 1. Plates (size 0.75x0.60) Angle 40x40x5 mm , 2x0.75 = 1.5 m , 2x0.60 = 1.20 m = 2.70 m @ 3.00 kg/m = 8.10 kg sheet 1.6 mm thick , 0.75x0.60 = 0.45 sqm 0.45 sqm @ 12.55 kg/sqm = 5.65 kg Weight of one plate = 13.75 kg Add for wastage @ 5% = 0.69 kg , Total = 14.44 kg Total weight of all plates = 5x6x14.44= 433.20 kg. Qty taken for cost using once = 433.2x0.85/40 = 9.2055 kg Adjustable span ESO+SI (2.35-3.40) Qty taken for cost using once = 5x0.85/40 =0.1063				
		each	0.11000	1480.00	157.32	M2
Labour						L
0116		Fitter(grade1)				
		Day	3.00000	738.00	2214.00	L1
0114		Beldar				
		Day	6.00000	558.00	3348.00	L2
Tools&Plants(Hire charges)						T
9999		Sundries				
		L.S	22.10000	2.00	44.20	T1
9999		Sundries				
		L.S	130.00000	2.00	260.00	T2
9999		Sundries				
		L.S	49.70000	2.00	99.40	T3
9999		Sundries				
		L.S	78.00000	2.00	156.00	T4
Sub Data						S
10.1		Steel Work : Structural steel work in single section, fixed with or without connecting plate, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.				

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		kilogram	9.21000	64.31	592.01	S1
Total			13.500	sqm	6992.69	
Unit Total			1.000	sqm	517.98	
Add Water Charge			517.98	@1.00%	5.18	
Total					523.16	
Add Contractors Profit & Overhead			523.16	@15.00%	78.47	
Total					601.63	
Add Cost Index			601.63	@35.59%	214.12	
Total					815.75	
GRAND TOTAL				sqm	815.75	
Note						
3.008-Specification code: 5.9.16.1						
Centering and shuttering including strutting, etc. and removal of form for: Edges of slabs and breaks in floors and walls Under 20 cm wide						
Details of cost for a 3mx3m slab 15cms thick 12m edge Length						
Material						M
1197		(ii) Battens 75 mm x 100 mm (2nd class Kail wood) Horizontal 2x4x0.075x0.1x0.5 = 0.030, Horizontal 2x4x0.075x0.1 x 1.5 = 0.090 (iii) Vertical battens = 16x0.15x0.075x0.030m = 0.0054 (iv) Struts 16x0.25x0.07x0.075 = 0.0225 Total = 0.1479 Wastage @ 5% = 0.0074 Total = 0.1553 cum = 155 cudm Qty taken for cost of using once = 155/8 = 19.375 cudm Second class kail wood in scantling				
		1 cud m	19.38000	260.00	503.75	M1
1198		Assuming that the timber will become unserviceable after being used 8 times. (i) Planks 30 mm thick (2nd class Kail wood or equivalent local soft wood) 4x3x0.15x0.030 = 0.54 cum Wastage @ 5% = 0.003 cum. , Total = 0.057 cum 57 cudm Qty taken for cost of using once = 57/8 = 7.125 cudm Second class kail wood in planks				
		1 cud m	7.13000	260.00	185.25	M2
Carriage						C
2204		Planks = 0.057 cum, Batte4ns = 0.057 cum. Total = 0.212 cum. Qty taken for cost of using once = 0.212/8 =0.0265 cum Carriage of Timber				
		cum	0.03000	118.59	3.14	C1
Labour						L

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsr year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
0112		For assembling erection dismantling & cleaning Carpenter 2nd class				
		Day	0.81000	679.00	549.99	L1
0114		Beldar				
		Day	0.54000	558.00	301.32	L2
Tools&Plants(Hire charges)					T	
9999		Sundries				
		L.S	5.20000	2.00	10.40	T1
		Total	12.000	metre	1553.85	
		Unit Total	1.000	metre	129.49	
		Add Water Charge	129.49	@1.00%	1.29	
		Total			130.78	
		Add Contractors Profit & Overhead	130.78	@15.00%	19.62	
		Total			150.40	
		Add Cost Index	150.40	@35.59%	53.53	
		Total			203.93	
		GRAND TOTAL		metre	203.93	
Note						
4:RCC WORKS						
4.001-Specification code: OD282344/2023-2024						
Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer - in-charge.All work upto plinth level						
Details of cost for 1. 00 cum						
Material						M
0295		Stone Aggregate(single size):20 mm nominal size				
		cum	0.57000	1350.00	769.50	M1
0297		Stone Aggregate(single size): 10 mm nominal size				
		cum	0.28000	1350.00	378.00	M2
0982		Coarse sand (zone III)				

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		cum	0.42500	1350.00	573.75	M3
0367		Portland Cement				
		tonne	0.33000	4940.00	1630.20	M4
7318		Plasticizer / super plasticizer 0.50% of cement				
		kilogram	1.65000	36.00	59.40	M5
Carriage						C
2202		Carriage of Stone aggregate below 40 mm nominal size				
		cum	0.85000	103.77	88.20	C1
2203		Carriage of Coarse sand				
		cum	0.42500	103.77	44.10	C2
2209		Carriage of Cement				
		tonne	0.33000	92.24	30.44	C3
Labour						L
0155		Labour for pouring, consolidating & curing Mason (average)				
		Day	0.17000	709.00	120.53	L1
0114		Beldar				
		Day	2.00000	558.00	1116.00	L2
0101		Bhisti				
		Day	0.90000	617.00	555.30	L3
Tools&Plants(Hire charges)						T
0004		Production cost, pumping to respective floors and laying in position Production cost of concrete by batch mix plant				
		cum	1.00000	350.00	350.00	T1
0009		Pumping charges of concrete including Hire charges of pump, piping work & accessories etc.				
		cum	1.00000	210.00	210.00	T2
0012		Vibrator (Needle type 40 mm)				
		Day	0.07000	370.00	25.90	T3
9999		Sundries				
		L.S	13.00000	2.00	26.00	T4

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Total	1.000	cum	5977.32	
		Unit Total	1.000	cum	5977.32	
		Add Water Charge	5977.32	@1.00%	59.77	
		Total			6037.09	
		Add Contractors Profit & Overhead	6037.09	@15.00%	905.56	
		Total			6942.65	
		Add Cost Index	6942.65	@35.59%	2470.89	
		Total			9413.54	
		GRAND TOTAL		cum	9413.54	
Note						
4.002-Specification code: OD282343/2023-2024						
Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer - in-charge. All work above plinth level upto floor V level						
Details of cost for 1.00 cum						
Material						M
0295		Stone Aggregate(single size):20 mm nominal size				
		cum	0.57000	1350.00	769.50	M1
0297		Stone Aggregate(single size): 10 mm nominal size				
		cum	0.28000	1350.00	378.00	M2
0982		Coarse sand (zone III)				
		cum	0.42500	1350.00	573.75	M3
0367		Portland Cement				
		tonne	0.33000	4940.00	1630.20	M4
7318		Plasticizer / super plasticizer				
		kilogram	1.65000	36.00	59.40	M5
Carriage						C
2202		Carriage of Stone aggregate below 40 mm nominal size				
		cum	0.85000	103.77	88.20	C1
2203		Carriage of Coarse sand				

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		cum	0.42500	103.77	44.10	C2
2209		Carriage of Cement				
		tonne	0.33000	92.24	30.44	C3
Labour						L
0155		Labour for pouring, consolidating & curing Mason (average)				
		Day	0.17000	709.00	120.53	L1
0114		Beldar				
		Day	2.00000	558.00	1116.00	L2
0101		Bhisti				
		Day	0.90000	617.00	555.30	L3
0115		(Extra labour for lifting material upto floor V level : = 0.75 x 2.5 = 1.88) Coolie				
		Day	1.88000	558.00	1049.04	L4
Tools&Plants(Hire charges)						T
0004		Production cost, pumping to respective floors and laying inposition Production cost of concrete by batch mix plant				
		cum	1.00000	350.00	350.00	T1
0009		Pumping charges of concrete including Hire charges of pump, piping work & accessories etc.				
		cum	1.00000	210.00	210.00	T2
0012		Vibrator (Needle type 40 mm)				
		Day	0.07000	370.00	25.90	T3
9999		Sundries				
		L.S	13.00000	2.00	26.00	T4
Total			1.000	cum	7026.36	
Unit Total			1.000	cum	7026.36	
Add Water Charge			7026.36	@1.00%	70.26	
Total					7096.62	
Add Contractors Profit & Overhead			7096.62	@15.00%	1064.49	
Total					8161.11	

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Add Cost Index	8161.11	@35.59%	2904.54	
		Total			11065.65	
		GRAND TOTAL		cum	11065.65	
Note						
4.003-Specification code: 20.2.4						
Boring, providing and installing bored cast-in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap to carry a safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of boring, with bentonite solution and temporary casing of appropriate length for setting out and removal of same and the length of the pile to be embedded in the pile cap etc. all complete, including removal of excavated earth with all lifts and leads (Length of pile for payment shall be measured upto bottom of pile cap). 500 mm dia piles						
Details of cost for 20 m length of pile						
Material						M
7183		Bentonite				
		tonne	0.28000	2960.00	828.80	M1
Labour						L
0114		Beldar				
		Day	2.50000	558.00	1395.00	L1
0130		Work supervisor Mistry				
		Day	0.12000	738.00	88.56	L2
Tools&Plants(Hire charges)						T
0026		Hire and running charges of bentonite pump				
		Day	0.38000	3500.00	1330.00	T1
0025		Hire and running charges of light crane				
		Day	0.06000	3000.00	180.00	T2
0015		Hire and running charges of Tripod and Mechanical Winch machine complete with power unit and accessories				
		Day	1.20000	1900.00	2280.00	T3
9999		Sundries				
		L.S	87.95000	2.00	175.90	T4
0018		Hire and running charges of loader				
		Day	0.30000	5000.00	1500.00	T5

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
0017		Hire and running charges of tipper				
		Day	0.30000	1700.00	510.00	T6
Sub Data					S	
5.33.1		Concrete 3.14/4x0.50?x20 = 3.925 cum Reinforced Cement Concrete : All work upto plinth level				
		cum	3.93000	5977.32	23460.98	S1
Total		20.000	metre	31749.24		
Unit Total		1.000	metre	1587.46		
Add Water Charge		1587.46	@1.00%	15.87		
Total				1603.33		
Add Contractors Profit & Overhead		1603.33	@15.00%	240.50		
Total				1843.83		
Add Cost Index		1843.83	@35.59%	656.22		
Total				2500.05		
GRAND TOTAL			metre	2500.05		
Note						
4.004-Specification code: 20.6.2.1						
Vertical load testing of piles in accordance with IS 2911(Part IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & the direction of engineer -in-Charge. Single pile above 50 tonne and upto 100 tonne capacity Initial test						
Details of cost for 1 test						
Material					M	
7247		Vertical load testing (INITIAL) of piles in accordance with IS : 2911(Part -IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. compete as per specification & above 50MT and up to 100 MT				
		per test	1.00000	45000.00	45000.00	M1
Total		1.000	per test	45000.00		
Unit Total		1.000	per test	45000.00		
Add Water Charge		45000.00	@1.00%	450.00		
Total				45450.00		
Add Contractors Profit & Overhead		45450.00	@15.00%	6817.50		
Total				52267.50		

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(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Add Cost Index	52267.50	@35.59%	18602.00	
		Total			70869.50	
		GRAND TOTAL		per test	70869.50	
Note						
4.005-Specification code: 20.6.2.2						
Vertical load testing of piles in accordance with IS 2911(Part IV) including installation of loading platform and preparation of pile head or construction of test cap and dismantling of test cap after test etc. complete as per specification & the direction of engineer -in-Charge. Single pile above 50 tonne and upto 100 tonne capacity Routine test						
Details of cost for 1 test						
Material						M
7250		Cyclic vertical load testing of piles in accordance with IS : 2911(Part-IV) including preparation of pile head etc. for Single pile above 50 tonne capacity pile and up to 100 tonne capacity pile				
		per test	1.00000	23000.00	23000.00	M1
		Total	1.000	per test	23000.00	
		Unit Total	1.000	per test	23000.00	
		Add Water Charge	23000.00	@1.00%	230.00	
		Total			23230.00	
		Add Contractors Profit & Overhead	23230.00	@15.00%	3484.50	
		Total			26714.50	
		Add Cost Index	26714.50	@35.59%	9507.69	
		Total			36222.19	
		GRAND TOTAL		per test	36222.19	
Note						
5:STEEL REINFORCEMENT WORKS						
5.001-Specification code: 5.22A.6						
Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete above plinth level. Thermo - Mechanically Treated bars of grade Fe-500D or more						
Details of cost for 1 quintal						
Material						M
1005		Deformed twisted steel bars = 1.00 q + Add 5% Wastage = 0.05 Total = 1.05 q Twisted steel/deformed bars				

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(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		quintal	1.05000	4600.00	4830.00	M1
Carriage						C
2205		Carriage of Steel 1.05/10 = 0.105t				
		tonne	0.11000	92.24	9.69	C1
Labour						L
0114		Beldar				
		Day	1.00000	558.00	558.00	L1
0102		For straightening, cutting, bending, binding and placing in position Blacksmith 1st class				
		Day	1.00000	738.00	738.00	L2
Tools&Plants(Hire charges)						T
9999		Sundries Cover block				
		L.S	26.00000	2.00	52.00	T1
9999		Sundries				
		L.S	26.91000	2.00	53.82	T2
Total			100.000	kg	6241.51	
Unit Total			1.000	kg	62.42	
Add Water Charge			62.42	@1.00%	0.62	
Total					63.04	
Add Contractors Profit & Overhead			63.04	@15.00%	9.46	
Total					72.50	
Add Cost Index			72.50	@35.59%	25.80	
Total					98.30	
GRAND TOTAL				kg	98.30	
Note						
6:MASONRY WORKS						
6.001-Specification code: 50.6.1.5						
Solid block masonry using pre cast solid blocks (Factory made) of size 30x20x20cm or nearest available size confirming to IS 2185 Part I of 1979 for super structure up to floor two level thickness 20cm and above in: CM 1:6 (1 cement : 6 coarse sand) etc complete						
Details of cost for one cum						

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(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Material					M	
	MR2	Solid blocks of size 30x20x20cm				
		each	77.00000	36.50	2810.50	M1
Labour					L	
0124		Mason (brick layer)2nd class				
		Day	0.47000	679.00	319.13	L1
0123		Mason (brick layer) Ist class				
		Day	0.47000	738.00	346.86	L2
0101		Bhisti				
		Day	0.20000	617.00	123.40	L3
0115		Coolie				
		Day	1.80000	558.00	1004.40	L4
Tools&Plants(Hire charges)					T	
9999		Sundries				
		L.S	22.36000	2.00	44.72	T1
9999		Sundries				
		L.S	2.73000	2.00	5.46	T2
Sub Data					S	
3.11		Rate as per item Number 3.11 of SH: Mortars Mortars : Cement mortar 1:6 (1 cement : 6 coarse sand).				
		cum	0.09000	3356.14	302.05	S1
Total			1.000	cum	4956.52	
Unit Total			1.000	cum	4956.52	
Add Water Charge			4956.52	@1.00%	49.57	
Total					5006.09	
Add Contractors Profit & Overhead			5006.09	@15.00%	750.91	
Total					5757.00	
Add Cost Index			2492.60	@35.59%	887.12	
Total					6644.12	
GRAND TOTAL				cum	6644.12	

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(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Note						
6.002-Specification code: 60.7.1						
DRY RUBBLE MASONRY _ Dry rubble without concrete levelling course masonry with good quality blasted rubble including packing to compactness to lines and levels cost and conveyance of all materials labour charges etc. complete as per direction of Departmental officers at site						
Details of cost for 1 cum.						
Material						M
1157		Stone for masonry work				
		cum	1.05000	1100.00	1155.00	M1
Carriage						C
2215		Carriage of Soling stone & masonry stone				
		cum	1.05000	122.08	128.18	C1
Labour						L
0114		Beldar				
		Day	0.70000	558.00	390.60	L1
0125		Mason (for plain stone work) 2nd class				
		Day	0.80000	679.00	543.20	L2
Total			1.000	cum	2216.98	
Unit Total			1.000	cum	2216.98	
Add Water Charge			2216.98	@1.00%	22.17	
Total					2239.15	
Add Contractors Profit & Overhead			2239.15	@15.00%	335.87	
Total					2575.02	
Add Cost Index			2575.02	@35.59%	916.45	
Total					3491.47	
GRAND TOTAL				cum	3491.47	
Note						
6.003-Specification code: 50.6.1.4						
Solid block masonry using pre cast solid blocks (Factory made) of size 30x20x20cm or nearest available size confirming to IS 2185 part I of 1979 for foundation and plinth with thickness 20cm and above in: CM 1:6 (1 cement : 6 coarse sand) etc complete						
Details of cost for one cum.						

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(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Material					M	
	MR2	Solid blocks of size 30x20x20cm				
		each	77.00000	36.50	2810.50	M1
Labour					L	
0115		Coolie				
		Day	1.37000	558.00	764.46	L1
0123		Mason (brick layer) Ist class				
		Day	0.36000	738.00	265.68	L2
0124		Mason (brick layer)2nd class				
		Day	0.36000	679.00	244.44	L3
0101		Bhisti				
		Day	0.20000	617.00	123.40	L4
Tools&Plants(Hire charges)					T	
9999		Sundries				
		L.S	2.73000	2.00	5.46	T1
Sub Data					S	
3.11		Rate as per item Number 3.11 of SH: Mortars Mortars : Cement mortar 1:6 (1 cement : 6 coarse sand).				
		cum	0.09000	3356.14	302.05	S1
		Total	1.000	cum	4515.99	
		Unit Total	1.000	cum	4515.99	
		Add Water Charge	4515.99	@1.00%	45.16	
		Total			4561.15	
		Add Contractors Profit & Overhead	4561.15	@15.00%	684.17	
		Total			5245.32	
		Add Cost Index	1980.92	@35.59%	705.01	
		Total			5950.33	
		GRAND TOTAL		cum	5950.33	
Note						
6.004-Specification code: 50.6.1.6						

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(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Solid block masonry using pre cast solid blocks (Factory made) of size 30x20x20cm or nearest available size confirming to IS 2185 part I of 1979 for super structure above floor two level upto floor five level thickness 20cm and above in : CM 1:6 (1 cement : 6 coarse sand sand) etc complete						
Details of cost for one cum						
Material						M
	MR2	Solid blocks of size 30x20x20cm				
		each	77.00000	36.50	2810.50	M1
Labour						L
0101		Bhisti				
		Day	0.20000	617.00	123.40	L1
0115		Coolie				
		Day	1.13000	558.00	630.54	L2
0123		Mason (brick layer) Ist class				
		Day	0.47000	738.00	346.86	L3
0124		Mason (brick layer)2nd class				
		Day	0.47000	679.00	319.13	L4
0115		Coolie				
		Day	1.80000	558.00	1004.40	L5
Tools&Plants(Hire charges)						T
9999		Sundries Scaffolding Extra labour element required for lifting of materials (above floor two level upto floor five level)				
		L.S	22.36000	2.00	44.72	T1
9999		Sundries				
		L.S	2.73000	2.00	5.46	T2
Sub Data						S
3.11		Rate as per item Number 3.11 of SH: Mortars Mortars : Cement mortar 1:6 (1 cement : 6 coarse sand).				
		cum	0.09000	3356.14	302.05	S1
Total			1.000	cum	5587.06	
Unit Total			1.000	cum	5587.06	

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Add Water Charge	5587.06	@1.00%	55.87	
		Total			5642.93	
		Add Contractors Profit & Overhead	5642.93	@15.00%	846.44	
		Total			6489.37	
		Add Cost Index	3224.98	@35.59%	1147.77	
		Total			7637.14	
		GRAND TOTAL		cum	7637.14	
Note						
6.005-Specification code: 50.6.2.3						
Solid block masonry using pre cast solid blocks (Factory made) of size 30x20x15cm or nearest available size confirming to IS 2185 part I of 1979 for super structure above floor two level upto floor five level with thickness 15cm in : CM 1:6 (1 cement : 6 coarse sand) etc complete						
Details of cost for one cum						
Material						M
	MR4	Solid blocks of size 30x20x15cm				
		each	103.00000	26.25	2703.75	M1
Labour						L
0115		Coolie				
		Day	1.13000	558.00	630.54	L1
0101		Bhisti				
		Day	0.45000	617.00	277.65	L2
0115		Coolie				
		Day	1.90000	558.00	1060.20	L3
0123		Mason (brick layer) Ist class				
		Day	0.53000	738.00	391.14	L4
0124		Mason (brick layer)2nd class				
		Day	0.53000	679.00	359.87	L5
Tools&Plants(Hire charges)						T
9999		Sundries Scaffolding Extra labour element required for lifting of materials (				

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		above floor two level upto floor five level)				
		L.S	22.36000	2.00	44.72	T1
9999		Sundries				
		L.S	2.73000	2.00	5.46	T2
Sub Data						S
3.11		Rate as per item Number 3.11 of SH: Mortars Mortars : Cement mortar 1:6 (1 cement : 6 coarse sand).				
		cum	0.09000	3356.14	302.05	S1
Total			1.000	cum	5775.38	
Unit Total			1.000	cum	5775.38	
Add Water Charge			5775.38	@1.00%	57.75	
Total					5833.13	
Add Contractors Profit & Overhead			5833.13	@15.00%	874.97	
Total					6708.10	
Add Cost Index			3567.70	@35.59%	1269.74	
Total					7977.84	
GRAND TOTAL				cum	7977.84	
Note						
6.006-Specification code: 50.6.2.2						
Solid masonry using pre cast solid blocks (factory made) of size 30x20x15cm or nearest available size confirming to IS 2185 part I of 1979 for super structure up to floor two level with thickness 15cm in : CM 1:6 (1 cement : 6 coarse sand) etc complete						
Details of cost for 1 cum						
Material						M
	MR4	Solid blocks of size 30x20x15cm				
		each	103.00000	26.25	2703.75	M1
Labour						L
0124		Mason (brick layer)2nd class				
		Day	0.53000	679.00	359.87	L1
0123		Mason (brick layer) Ist class				
		Day	0.53000	738.00	391.14	L2

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
0101		Bhisti				
		Day	0.45000	617.00	277.65	L3
0115		Coolie				
		Day	1.90000	558.00	1060.20	L4
Tools&Plants(Hire charges)					T	
9999		Sundries				
		L.S	2.73000	2.00	5.46	T1
9999		Sundries				
		L.S	22.36000	2.00	44.72	T2
Sub Data					S	
3.11		Rate as per item Number 3.11 of SH: Mortars Mortars : Cement mortar 1:6 (1 cement : 6 coarse sand).				
		cum	0.09000	3356.14	302.05	S1
		Total	1.000	cum	5144.84	
		Unit Total	1.000	cum	5144.84	
		Add Water Charge	5144.84	@1.00%	51.45	
		Total			5196.29	
		Add Contractors Profit & Overhead	5196.29	@15.00%	779.44	
		Total			5975.73	
		Add Cost Index	2835.33	@35.59%	1009.09	
		Total			6984.82	
		GRAND TOTAL		cum	6984.82	
Note						
7:CEMENT PLASTERING WORKS						
7.001-Specification code: 13.16.1						
6 mm cement plaster of mix: 1:3 (1 cement : 3 fine sand)						
Details of cost for 10 sqm						
Labour					L	
0155		Mason (average)				
		Day	0.51000	709.00	361.59	L1

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
0115		Coolie				
		Day	0.75000	558.00	418.50	L2
0101		Bhisti				
		Day	0.92000	617.00	567.64	L3
Tools&Plants(Hire charges)					T	
9999		Scaffolding and Sundries				
		L.S	11.70000	2.00	23.40	T1
9999		Sundries Extra for removing burrs, cleaning with wire brushes, pock making with pointed tool etc.				
		L.S	13.39000	2.00	26.78	T2
Sub Data					S	
3.3		Mortars : Cement mortar 1:3 (1 cement : 3 fine sand) Rate as per Item Number 3.3 of SH: Mortars				
		cum	0.07000	4183.02	301.18	S1
Total		10.000	sqm	1699.09		
Unit Total		1.000	sqm	169.91		
Add Water Charge		169.91	@1.00%	1.70		
Total				171.61		
Add Contractors Profit & Overhead		171.61	@15.00%	25.74		
Total				197.35		
Add Cost Index		197.35	@35.59%	70.24		
Total				267.59		
GRAND TOTAL			sqm	267.59		
Note						
7.002-Specification code: 13.9.1						
Cement plaster 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement. 12 mm cement plaster						
Details of cost for 10 sqm						
Material					M	
0367		Portland Cement (OPC-43 grade)				

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(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		tonne	0.02000	4940.00	98.80	M1
Carriage						C
2209		Carriage of Cement				
		tonne	0.02000	92.24	1.84	C1
Labour						L
0101		Bhisti				
		Day	0.92000	617.00	567.64	L1
0115		Coolie				
		Day	0.27000	558.00	150.66	L2
0155		Mason (average)				
		Day	0.67000	709.00	475.03	L3
0155		Mason (average)				
		Day	0.27000	709.00	191.43	L4
0115		Coolie				
		Day	0.75000	558.00	418.50	L5
Tools&Plants(Hire charges)						T
9999		Scaffolding and Sundries				
		L.S	8.06000	2.00	16.12	T1
9999		Scaffolding and Sundries				
		L.S	12.61000	2.00	25.22	T2
Sub Data						S
3.8		Mortars : Cement mortar 1:3 (1 cement : 3 coarse sand). Rate as per Item Number 3.8 of SH: Mortars				
		cum	0.14000	4664.52	671.69	S1
Total			10.000	sqm	2616.93	
Unit Total			1.000	sqm	261.69	
Add Water Charge			261.69	@1.00%	2.62	
Total					264.31	

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(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Add Contractors Profit & Overhead			264.31	@15.00%	39.65	
Total					303.96	
Add Cost Index			303.96	@35.59%	108.18	
Total					412.14	
GRAND TOTAL				sqm	412.14	
Note						
7.003-Specification code: 13.1.2						
12 mm cement plaster of mix: 1:6 (1 cement : 6 fine sand).						
Details of cost for 10 sqm.						
Labour						L
0115		Coolie				
		Day	0.75000	558.00	418.50	L1
0155		Mason (average)				
		Day	0.67000	709.00	475.03	L2
0101		Bhisti				
		Day	0.92000	617.00	567.64	L3
Tools&Plants(Hire charges)						T
9999		Scaffolding and Sundries				
		L.S	12.61000	2.00	25.22	T1
Sub Data						S
3.6		Mortars : Cement mortar 1:6 (1 cement : 6 fine sand). Rate as per Item Number 3.6 of SH: Mortars				
		cum	0.14000	2874.64	413.95	S1
Total			10.000	sqm	1900.34	
Unit Total			1.000	sqm	190.03	
Add Water Charge			190.03	@1.00%	1.90	
Total					191.93	
Add Contractors Profit & Overhead			191.93	@15.00%	28.79	
Total					220.72	
Add Cost Index			220.72	@35.59%	78.55	
Total					299.27	

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(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
GRAND TOTAL				sqm	299.27	
Note						
7.004-Specification code: 13.7.1						
12 mm cement plaster finished with a floating coat of neat cement of mix: 1:3 (1 cement : 3 fine sand)						
Details of cost for 10 sqm						
Material						M
0367		Portland Cement (OPC-43 grade)				
		tonne	0.02000	4940.00	98.80	M1
Carriage						C
2209		Carriage of Cement				
		tonne	0.02000	92.24	1.84	C1
Labour						L
0115		Coolie				
		Day	0.75000	558.00	418.50	L1
0155		Mason (average)				
		Day	0.67000	709.00	475.03	L2
0101		Bhisti				
		Day	0.92000	617.00	567.64	L3
0155		Mason (average)				
		Day	0.27000	709.00	191.43	L4
0115		Coolie				
		Day	0.27000	558.00	150.66	L5
Tools&Plants(Hire charges)						T
9999		Scaffolding and Sundries				
		L.S	8.06000	2.00	16.12	T1
9999		Scaffolding and Sundries				
		L.S	12.61000	2.00	25.22	T2

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Sub Data						S
3.3		Mortars : Cement mortar 1:3 (1 cement : 3 fine sand) Rate as per Item Number 3.3 of SH: Mortars				
		cum	0.14000	4183.02	602.35	S1
Total			10.000	sqm	2547.59	
Unit Total			1.000	sqm	254.76	
Add Water Charge			254.76	@1.00%	2.55	
Total					257.31	
Add Contractors Profit & Overhead			257.31	@15.00%	38.60	
Total					295.91	
Add Cost Index			295.91	@35.59%	105.31	
Total					401.22	
GRAND TOTAL				sqm	401.22	
Note						
8:JOINERIES						
8.001-Specification code: OD214746/2023-2024						
Supplying and fixing pressed steel window of standard pattern with frame as per profile of IS 4351 of section 105*60mm using 18G (1.2mm thick CRCA) sheet and shutters made of section 75*30 cm for outer styles and horizontal members and then insered with enclosed and stiffned sheet 26R gas per specification with Z incromate primer coat measured in sequence metre including all charges for fixing handle, aldrep, butt hinges etc complete						
Material						M
	MR	supplying and fixing pressed steel window and Ventilators of standard pattern with frames as per profile of sections 82x62mm embossed sheet shutter 50x20 mm special channel shutter,12mm dia rod 25*5mm flat with 75 mm SS hings 50mm SS hook ,125mm SS stay and horizontal members handle for windows with section 105x60mm using 16G sheet and shutter made of sections 75x30cm outer styles and horizontal members and then inserted with stiffened s				
		each	1.00000	11250.00	11250.00	M1
Labour						L
0114		Beldar				
		Day	0.20000	558.00	111.60	L1
0115						

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Coolie				
		Day	0.20000	558.00	111.60	L2
0123		Mason (brick layer) Ist class				
		Day	0.20000	738.00	147.60	L3
Tools&Plants(Hire charges)						T
9999		Sundries				
		L.S	4.42000	2.00	8.84	T1
Total			2.250	sqm	11629.64	
Unit Total			1.000	sqm	5168.73	
Add Water Charge			5168.73	@1.00%	51.69	
Total					5220.42	
Add Contractors Profit & Overhead			5220.42	@15.00%	783.06	
Total					6003.48	
Add Cost Index			195.98	@35.59%	69.75	
Total					6073.23	
GRAND TOTAL				sqm	6073.23	
Note						
8.002-Specification code: OD214747/2023-2024						
Supplying and fixing pressed steel door of standard pattern with frame as per profile of IS 4351 of section 105*60mm using 18G (1.2mm thick CRCA) sheet and shutters made of section 75*30 cm for outer styles and horizontal members and then inserted with enclosed and stiffened sheet 26R as per specification with Z incromate primer coat measured in sequence metre including all charges for fixing handle, aldop, butt hinges etc complete						
Material						M
	MR	supplyig and fixing pressed steel door of standard pattern wih frame as per profile of IS 43512 of section 105*60 mm using 18G (1.2mm thick CRCA) sheet and shutters made of section 75*30 cm for outer styles and horizontal members and then inserted with enclosed and stiffned sheet 26R as per specification with Z incromate primer coat				
		each	1.00000	9700.00	9700.00	M1
Labour						L
0114		Beldar				
		Day	0.20000	558.00	111.60	L1

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
0115		Coolie				
		Day	0.20000	558.00	111.60	L2
0123		Mason (brick layer) Ist class				
		Day	0.20000	738.00	147.60	L3
Tools&Plants(Hire charges)					T	
9999		Sundries				
		L.S	7.51000	2.00	15.02	T1
Total		2.100	sqm	10085.82		
Unit Total		1.000	sqm	4802.77		
Add Water Charge		4802.77	@1.00%	48.03		
Total				4850.80		
Add Contractors Profit & Overhead		4850.80	@15.00%	727.62		
Total				5578.42		
Add Cost Index		213.39	@35.59%	75.95		
Total				5654.37		
GRAND TOTAL			sqm	5654.37		
Note						
8.003-Specification code: 21.1.1.2						
Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS : 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing /paneling, C.P. brass/ stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge.(Glazing, paneling and dash fasteners to be paid for separately): For fixed portion Powder coated aluminium (minimum thickness of powder coating 50 micron)						
Details of cost for 40.02 kg						
Material					M	
7306		(i) External member of the frame (Jindal section no 4605) V = 2x2.40 = 4.80 m H = 2x3x0.95 = 5.70 m = 10.50 m @ 1.653 kg/m = 17.36 kg (ii) Internal member of the frame (Jindal section no 4604) V = 2x2.40 = 4.80 m H = 1x3x0.95 = 2.85 m = 7.65 m @ 1.692 kg/m = 12.94 kg (iii) Aluminium snap beading on both side (Jindal section no 4407) 2x6x2 (1.14+0.95) = 50.16 m Snap beading = 50.16 m @ 0.176 kg/m = 8.33				

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(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		kg (iv) Angle cleat 38x38x4.8 mm 50 mm long 18x0.05 = 0.900 m @ 0.985 kg/m = 0.89 kg Sub total =40.02 kg Add 5% wastage = 2.00 kg Total = 42.02 kg Aluminium T or L Sections				
		kilogram	42.02000	190.00	7983.80	M1
7392		(vi) Epoxy Powder coating 50 microns on aluminium sections				
		kilogram	42.02000	61.00	2563.22	M2
0589		(v) C.P. brass /stainless steel screws 20 mm for cleat angle 18x4 = 72 Nos Chromium plated Brass screws 20 mm				
		1 nos	72.00000	160.00	115.20	M3
Carriage						C
9977		Carriage of material				
		L.S	52.00000	2.00	104.00	C1
Labour						L
0114		Beldar				
		Day	1.00000	558.00	558.00	L1
0100		Bandhani				
		Day	0.05000	617.00	30.85	L2
0116		For fabrication of frame Fitter(grade1)				
		Day	2.00000	738.00	1476.00	L3
0139		Skilled Beldar (for floor rubbing etc.)				
		Day	1.00000	617.00	617.00	L4
Tools&Plants(Hire charges)						T
9999		Sundries Labour for drilling holes, hire charges of drill, electricity charges, carriage of dash hold fastners and sundries				
		L.S	100.00000	2.00	200.00	T1
Total			40.020	kg	13648.07	
Unit Total			1.000	kg	341.03	
Add Water Charge			341.03	@1.00%	3.41	

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(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Total			344.44	
		Add Contractors Profit & Overhead	344.44	@15.00%	51.67	
		Total			396.11	
		Add Cost Index	396.11	@35.59%	140.98	
		Total			537.09	
		GRAND TOTAL		kg	537.09	
Note						
8.004-Specification code: 21.1.2.2						
For shutters of doors, windows & ventilators including providing and fixing hinges / pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber/ neoprene gasket required (Fittings shall be paid for separately) Powder coated aluminium (minimum thickness of powder coating 50 micron)						
Details of cost for 20.21 kg						
Material						M
0589		(ix) C.P. brass/ stainless steel screws 20 mm For cleat 12x4 = 48,For cleat 4x8 = 32,For glazing plate @ 15 cm centre to centre in 75 cm length 2x6 = 12 Total = 92 Nos. Chromium plated Brass screws 20 mm				
		1 nos	92.00000	160.00	147.20	M1
7390		(xii) Neoprene/ EPDM rubber gasket in groove of meeting style Neoprene / EPDM rubber gasket				
		metre	2.35000	19.00	44.65	M2
7306		(i) Hanging style (Jindal section no 4524) 1x2.35 = 2.35 m @ 2.53 kg/m = 5.95 kg (ii) Meeting style (Jindal section no 4526) 1x2.35 = 2.35 m @ 2.465 kg/m = 5.79 kg (iii) Top & bottom rail (Jindal section n o 4510) 2x0.75 = 1.50 m @ 2.48 kg/m = 3.72 kg (iv) Lock rail (Jindal section no 4524) 1x0.75 = 0.75 m @ 2.53 kg/m = 1.90 kg (v) Glazing plate (Jindal section no 440) on one side of lock rail 1x0.75 = 0.75 m @ 0.459 kg/m =0.34 kg (vi) Aluminium snap beading (Jindal section no 4497) on both side 2x2 (0.75+1.26) = 8.04 m 2x2 (0.75+0.81) = 6.24 m = 14.28 m @ 0.176 kg/m = 2.51 kg (vii) Aluminium angle cleat 38x38x 4.8 mm 35 mm long 3x4x0.035 = 0.42 m @ 0.985 kg/m = 0.41 kg Sub total = 20.62 kg Add 5% wastage = 1.03 kg Total = 21.65 kg Aluminium T or L Sections				
		kilogram	21.65000	190.00	4113.50	M3
7392		(x) Epoxy Powder coating 50 microns on aluminium sections				
		kilogram	21.65000	61.00	1320.65	M4
0689		Anodised Aluminium butt hinges 100x75x4 mm				

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(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		1 nos	4.00000	393.00	157.20	M5
Carriage						C
9977		Carriage of material				
		L.S	31.20000	2.00	62.40	C1
Labour						L
0116		Fitter(grade1)				
		Day	1.00000	738.00	738.00	L1
0114		Beldar				
		Day	0.50000	558.00	279.00	L2
0111		For fixing the shutter including hinges : Carpender Ist Class				
		Day	0.20000	738.00	147.60	L3
0100		Bandhani				
		Day	0.40000	617.00	246.80	L4
0114		Beldar				
		Day	0.50000	558.00	279.00	L5
0139		Skilled Beldar (for floor rubbing etc.)				
		Day	1.00000	617.00	617.00	L6
Tools&Plants(Hire charges)						T
9999		Sundries Labour for making provision for fittings and carriage of screws etc. including sundries				
		L.S	50.00000	2.00	100.00	T1
Total			20.210	kg	8253.00	
Unit Total			1.000	kg	408.36	
Add Water Charge			408.36	@1.00%	4.08	
Total					412.44	
Add Contractors Profit & Overhead			412.44	@15.00%	61.87	
Total					474.31	

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Add Cost Index			474.31	@35.59%	168.81	
Total					643.12	
GRAND TOTAL				kg	643.12	
Note						
8.005-Specification code: 21.3.1						
Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of Engineer - in -Charge. (Cost of aluminium snap beading shall be paid in basic item):						
With float glass panes of 4.0 mm thickness						
Details of cost for 1 sqm						
Material						M
7390		Neoprene / EPDM rubber gasket				
		metre	6.00000	19.00	114.00	M1
2406		Float glass panes 4.00 mm thick = 1.00 sqm Add for wastage and breakage @ 10% = 0.10 sqm. Total = 1.10 sqm Float glass sheet of nominal thickness 4 mm (weight not less than 10 kg/sqm)				
		sqm	1.10000	300.00	330.00	M2
Carriage						C
9988		Carriage and sundries of gasket				
		L.S	6.89000	2.00	13.78	C1
9977		Carriage of glass				
		L.S	2.42000	2.00	4.84	C2
Labour						L
0112		Carpenter 2nd class				
		Day	0.23000	679.00	156.17	L1
0114		Beldar				
		Day	0.23000	558.00	128.34	L2
Total			1.000	sqm	747.13	
Unit Total			1.000	sqm	747.13	
Add Water Charge			747.13	@1.00%	7.47	

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(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Total			754.60	
Add Contractors Profit & Overhead			754.60	@15.00%	113.19	
		Total			867.79	
Add Cost Index			867.79	@35.59%	308.85	
		Total			1176.64	
GRAND TOTAL				sqm	1176.64	
Note						
8.006-Specification code: 9.48.1						
Providing and fixing M.S. Grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete. Fixed to steel windows by welding						
Details of cost for a grill 90x120 cm = 1.08 sqm.						
Material						M
1003		M.S. bar 16 mm diameter - 11x86cm = 9.46 m. @ 1.58 kg/m = 14.95 kg + Add wastage @ 10% = 1.50 kg. Total = 16.45 kg . @1.58kg/m = 14.95 kg.Say 0.165 quintal Mild Steel round bar above 12 mm dia				
		quintal	0.17000	4400.00	726.00	M1
1008		M.S. flat 25x3.15mm 2x120cm = 2.40m+ 2x90cm = 1.80m+ 1x120cm = 1.20m+ 2x15cm = 0.30m Total =5.70m 5.70m @ 0.63kg/m = 3.59kg+ Add wastage @ 10% = 0.36kg. Total = 3.95kg. Say 4 kg. or 0.04q Flats up to 10 mm in thickness				
		quintal	0.04000	4500.00	180.00	M2
Carriage						C
2205		Carriage of Steel 0.165 + 0.04 = 0.205 q = 0.0205 t Say 0.02 tonne				
		tonne	0.02000	92.24	1.84	C1
Labour						L
0102		Blacksmith 1st class				
		Day	0.86000	738.00	634.68	L1
0114		Beldar				
		Day	1.10000	558.00	613.80	L2
Tools&Plants(Hire charges)						T
9999		Sundries				

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(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Welding charges				
		L.S	19.76000	2.00	39.52	T1
9999		Sundries				
		L.S	26.91000	2.00	53.82	T2
Sub Data						S
13.50.3		Priming coat: Area=1x0.9x1.2x1=1.08 sqm Finishing : With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel galvanised iron /steel works				
		sqm	1.08000	37.89	40.92	S1
Total			18.540	kg	2290.58	
Unit Total			1.000	kg	123.55	
Add Water Charge			123.55	@1.00%	1.24	
Total					124.79	
Add Contractors Profit & Overhead			124.79	@15.00%	18.72	
Total					143.51	
Add Cost Index			143.51	@35.59%	51.08	
Total					194.59	
GRAND TOTAL				kg	194.59	
Note						
8.007-Specification code: 10.28						
Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners, stainless steel bolts etc., of required size on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.)						
Details of cost for 2 kg						
Material						M
4001		Qty= 2kg + Add wastage @ 5% = 0.10 Total = 2.1 kg Stainless steel (Grade - 304) hollow section round/square tubes				
		kg	2.10000	220.00	462.00	M1
4002		Stainless steel bolts /square bar and plates				
		kg	1.00000	115.00	115.00	M2
Labour						L

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
0102		For fabrication, assembling, errection, welding, curvaturing, grinding, buffling etc. Blacksmith 1st class				
		Day	0.06000	738.00	44.28	L1
0114		Beldar				
		Day	0.20000	558.00	111.60	L2
0100		Bandhani				
		Day	0.02000	617.00	12.34	L3
Tools&Plants(Hire charges)					T	
9999		Sundries Welding of stainless steel section				
		L.S	30.00000	2.00	60.00	T1
9999		Sundries Curvaturing, grinding, finishing, buffing				
		L.S	20.00000	2.00	40.00	T2
9999		Sundries for making good wall and floors				
		L.S	7.50000	2.00	15.00	T3
		Total	2.000	kg	860.22	
		Unit Total	1.000	kg	430.11	
		Add Water Charge	430.11	@1.00%	4.30	
		Total			434.41	
		Add Contractors Profit & Overhead	434.41	@15.00%	65.16	
		Total			499.57	
		Add Cost Index	499.57	@35.59%	177.80	
		Total			677.37	
		GRAND TOTAL		kg	677.37	
Note						
8.008-Specification code: OD214748/2023-2024						
Providing and fixing PVC fibre door including frame ,shutter and all cost of materials, labour charges and fixing charges etc						
Material						M

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
	MR	PVC fibre door				
		sqm	1.00000	1400.00	1400.00	M1
Labour						L
0156		Carpenter (average)				
		Day	0.15000	709.00	106.35	L1
0114		Beldar				
		Day	0.15000	558.00	83.70	L2
Tools&Plants(Hire charges)						T
9999		Sundries				
		L.S	7.80000	2.00	15.60	T1
Total			1.000	sqm	1605.65	
Unit Total			1.000	sqm	1605.65	
Add Water Charge			1605.65	@1.00%	16.06	
Total					1621.71	
Add Contractors Profit & Overhead			1621.71	@15.00%	243.26	
Total					1864.97	
Add Cost Index			238.87	@35.59%	85.01	
Total					1949.98	
GRAND TOTAL				sqm	1949.98	
Note						
9:STEEL WORKS						
9.001-Specification code: 50.10.2						
Steel work for purlin/single section with G I pipes including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete						
Details of cost for 39.06 kg						
Material						M
1215		Welding charges:- Ends 3.14x4=12.56 Connections:- 4x4=16 = 28.56cm say 29cm Welding by electric plant For cutting, assembling & erection				
		cm	29.00000	2.00	58.00	M1

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(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
1549		G.I. pipes 40 mm dia				
		metre	10.50000	250.00	2625.00	M2
Carriage					C	
2205		Carriage of Steel 40 mm dia. tube 10.5m @ 3.72kg/m=390.6kg				
		tonne	0.39000	92.24	36.03	C1
Labour					L	
0100		Bandhani				
		Day	0.15000	617.00	92.55	L1
0114		Beldar				
		Day	1.10000	558.00	613.80	L2
0102		Blacksmith 1st class				
		Day	0.30000	738.00	221.40	L3
Tools&Plants(Hire charges)					T	
9999		Sundries				
		L.S	16.14000	2.00	32.28	T1
Sub Data					S	
13.50.3		Priming coat 40 mm dia. tube 10.50x0.125m= 2.62= 2.62sqm Finishing : With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel galvanised iron /steel works Rate as per item Number 13.50.3 of SH: Finishing				
		sqm	2.62000	37.89	99.27	S1
Total			39.060	kg	3778.33	
Unit Total			1.000	kg	96.73	
Add Water Charge			96.73	@1.00%	0.97	
Total					97.70	
Add Contractors Profit & Overhead			97.70	@15.00%	14.66	
Total					112.36	
Add Cost Index			112.36	@35.59%	39.99	
Total					152.35	
GRAND TOTAL				kg	152.35	
Note						

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
9.002-Specification code: OD214745/2023-2024						
Roofing with GI hard colour powder coated traffod sheets 0.35mm thick or nearest available thickness with overlaps of 150mm at ends and GI hook or crank CI bolt and nuts including plain washers and bitumen washers etc complete						
Material						M
1023		Galvanised steel J or L hooks 8 mm dia				
		10 nos	406.00000	120.00	4872.00	M1
1208		Bitumen washer				
		100 nos	406.00000	30.00	121.80	M2
1209		G.I. Plain washer thick				
		100 nos	406.00000	35.00	142.10	M3
	MR	GI hard colour powder coated traffod sheets 0.35mm thick (Add 10% for lap and wastage)				
		sqm	202.97000	300.00	60891.00	M4
Labour						L
0112		Carpenter 2nd class				
		Day	7.97000	679.00	5411.63	L1
0114		Beldar				
		Day	7.97000	558.00	4447.26	L2
0130		Mistry				
		Day	1.99000	738.00	1468.62	L3
Tools&Plants(Hire charges)						T
9999		Sundries				
		L.S	6.88000	2.00	13.76	T1
9999		Sundries				
		L.S	33.74000	2.00	67.48	T2
9999		Sundries				
		L.S	88.78000	2.00	177.56	T3
Total			184.520	sqm	77613.21	

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Unit Total			1.000	sqm	420.62	
Add Water Charge			420.62	@1.00%	4.21	
Total					424.83	
Add Contractors Profit & Overhead			424.83	@15.00%	63.72	
Total					488.55	
Add Cost Index			105.27	@35.59%	37.47	
Total					526.02	
GRAND TOTAL				sqm	526.02	
Note						
10:PAINTING WORKS						
10.001-Specification code: 13.43.1						
Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface: Water thinnable cement primer						
Details of cost for 10 sqm						
Material						M
0808		Water thinnable cement primer for interior wall surface, having VOC content less than 50 gms/litre				
		Litre	0.70000	50.00	35.00	M1
Carriage						C
9988		Carriage and sundries including carriage				
		L.S	8.06000	2.00	16.12	C1
Labour						L
0131		Painter				
		Day	0.40000	679.00	271.60	L1
0115		Coolie				
		Day	0.20000	558.00	111.60	L2
Tools&Plants(Hire charges)						T
9999		Sundries Brushes, putty etc.				
		L.S	7.15000	2.00	14.30	T1
Total			10.000	sqm	448.62	

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Unit Total			1.000	sqm	44.86	
Add Water Charge			44.86	@1.00%	0.45	
Total					45.31	
Add Contractors Profit & Overhead			45.31	@15.00%	6.80	
Total					52.11	
Add Cost Index			52.11	@35.59%	18.55	
Total					70.66	
GRAND TOTAL				sqm	70.66	
Note						
10.002-Specification code: 13.60.1						
Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade: Two or more coats on new work						
Details of cost for10 sqm						
Material						M
0835		Plastic emulsion paint				
		Litre	1.21000	200.00	242.00	M1
Carriage						C
9977		Carriage of material				
		L.S	1.43000	2.00	2.86	C1
Labour						L
0115		Coolie				
		Day	0.54000	558.00	301.32	L1
0131		Painter				
		Day	0.54000	679.00	366.66	L2
Tools&Plants(Hire charges)						T
9999		Sundries				
		L.S	6.76000	2.00	13.52	T1
9999		Sundries Brushes, sand paper etc.				
		L.S	10.79000	2.00	21.58	T2
9999		Sundries				

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Materials for filling in holes and cracks (putty etc.)				
		L.S	6.76000	2.00	13.52	T3
Total			10.000	sqm	961.46	
Unit Total			1.000	sqm	96.15	
Add Water Charge			96.15	@1.00%	0.96	
Total					97.11	
Add Contractors Profit & Overhead			97.11	@15.00%	14.57	
Total					111.68	
Add Cost Index			111.68	@35.59%	39.75	
Total					151.43	
GRAND TOTAL				sqm	151.43	
Note						
10.003-Specification code: 13.61.1						
Painting with synthetic enamel paint of approved brand and manufacture to give an even shade: Two or more coats on new work						
Details of cost for 10 sqm						
Material						M
0833		Synthetic enamel paint in black or chocolate shade				
		Litre	1.16000	170.00	197.20	M1
Carriage						C
9977		Carriage of material				
		L.S	1.43000	2.00	2.86	C1
Labour						L
0115		Coolie				
		Day	0.54000	558.00	301.32	L1
0131		Painter				
		Day	0.54000	679.00	366.66	L2
Tools&Plants(Hire charges)						T
9999		Sundries Brushes, sand paper etc.				
		L.S	6.76000	2.00	13.52	T1

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
9999		Sundries				
		L.S	8.06000	2.00	16.12	T2
9999		Sundries Materials for filling in holes and cracks (putty etc.)				
		L.S	5.33000	2.00	10.66	T3
		Total	10.000	sqm	908.34	
		Unit Total	1.000	sqm	90.83	
		Add Water Charge	90.83	@1.00%	0.91	
		Total			91.74	
		Add Contractors Profit & Overhead	91.74	@15.00%	13.76	
		Total			105.50	
		Add Cost Index	105.50	@35.59%	37.55	
		Total			143.05	
		GRAND TOTAL		sqm	143.05	
Note						
11:TILES WORK						
11.001-Specification code: 11.41.2						
Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS : 15622, of approved make, in all colours and shades, laid on 20 mm thick cement mortar 1:4(1 cement : 4 coarse sand), including grouting the joints with white cement and matching pigments etc., complete. Size of Tile 600 x 600 mm.						
Details of cost for 1 sqm.						
Material						M
8621		Vitrified floor tiles 60x60 cm size = 1.000 sqm Add for wastage & breakage @ 2.5 % = 0.025 sqm Total = 1.025 sqm Vitrified floor tile 60x60 cm				
		sqm	1.03000	659.72	676.21	M1
0367		Cement for slurry over bed @ 3.3 kg per sqm Portland Cement				
		tonne	0.00000	4940.00	16.30	M2
Carriage						C
9977		Carriage of tiles				
		L.S	6.24000	2.00	12.48	C1
9988		Carriage and sundries				

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		including carriage of cement etc				
		L.S	26.91000	2.00	53.82	C2
Labour						L
0115		Coolie				
		Day	0.20000	558.00	111.60	L1
0123		Mason (brick layer) Ist class				
		Day	0.20000	738.00	147.60	L2
Tools&Plants(Hire charges)						T
9999		Sundries Mortar for pointing in white cement				
		L.S	3.64000	2.00	7.28	T1
Sub Data						S
3.9		20 mm thick Cement Mortars : Cement mortar 1:4 (1 cement : 4 coarse sand). Rate as per Item Number 3.9 of SH: Mortars				
		cum	0.02000	4010.33	96.25	S1
Total			1.000	sqm	1121.54	
Unit Total			1.000	sqm	1121.54	
Add Water Charge			1121.54	@1.00%	11.22	
Total					1132.76	
Add Contractors Profit & Overhead			1132.76	@15.00%	169.91	
Total					1302.67	
Add Cost Index			1302.67	@35.59%	463.62	
Total					1766.29	
GRAND TOTAL				sqm	1766.29	
Note						
11.002-Specification code: 11.36						
Providing and fixing I st quality ceramic glazed wall tiles conforming to IS : 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer -in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3 kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.						

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Details of cost for 1 sqm						
Material						M
0367		Cement for slurry over bed @ 3.3 kg per sqm Portland Cement				
		tonne	0.00000	4940.00	16.30	M1
7800		Ceramic Glazed tiles = 1.00 sqm Add for wastage & breakage @ 2.5 % =0.025 sqm Total = 1.025 sqm Ceramic Glazed Tiles Ist quality minimum thickness 5 mm in all colours shades and designs except burgundy, bottle green black				
		sqm	1.03000	212.00	217.30	M2
Carriage						C
9988		Carriage and sundries of cement etc.				
		L.S	26.91000	2.00	53.82	C1
9977		Carriage of tiles				
		L.S	6.24000	2.00	12.48	C2
Labour						L
0115		Coolie				
		Day	0.25000	558.00	139.50	L1
0123		Mason (brick layer) Ist class				
		Day	0.25000	738.00	184.50	L2
Tools&Plants(Hire charges)						T
9999		Sundries Mortar for pointing in white cement				
		L.S	40.43000	2.00	80.86	T1
Sub Data						S
3.8		12 mm thick cement mortar 1:3 (1 cement : 3 coarse sand) Mortars : Cement mortar 1:3 (1 cement : 3 coarse sand).				
		cum	0.01000	4664.52	65.30	S1
Total			1.000	sqm	770.06	
Unit Total			1.000	sqm	770.06	
Add Water Charge			770.06	@1.00%	7.70	
Total					777.76	

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Add Contractors Profit & Overhead	777.76	@15.00%	116.66	
		Total			894.42	
		Add Cost Index	894.42	@35.59%	318.32	
		Total			1212.74	
		GRAND TOTAL		sqm	1212.74	
Note						
11.003-Specification code: OD214744/2023-2024						
Providing and laying ceramic anti skid floor tiles of size 300x300 mm (thickness to be specified by the manufacturer), of 1st quality conforming to IS 15622, of approved make, in colours such as white, ivory, Grey, Fume Red brown, laid on 20mm thick cement mortar 1:4 (1 cement:4 coarse sand), including pointing the joints with white cement and matching pigment etc. complete						
Material						M
	MR	Ceramic anti skid floor tiles of 1st quality size 300x300 mm in all shades and designs of white, Ivory , grey fume Red brown etc.				
		per sqm	1.02500	280.00	287.00	M1
0367		Portland Cement				
		tonne	0.00330	4940.00	16.30	M2
Carriage						C
9977		Carriage				
		L.S	6.24000	2.00	12.48	C1
9988		Carriage and sundries				
		L.S	26.91000	2.00	53.82	C2
Labour						L
0123		Mason (brick layer) Ist class				
		Day	0.20000	738.00	147.60	L1
0115		Coolie				
		Day	0.20000	558.00	111.60	L2
Tools&Plants(Hire charges)						T
9999		Sundries				
		L.S	20.20000	2.00	40.40	T1
Sub Data						S

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
3.9		Cement mortar 1.4 (1 cement : 4 coarse sand).				
		cum	0.02400	4010.33	96.25	S1
Total			1.000	sqm	765.45	
Unit Total			1.000	sqm	765.45	
Add Water Charge			765.45	@1.00%	7.65	
Total					773.10	
Add Contractors Profit & Overhead			773.10	@15.00%	115.97	
Total					889.07	
Add Cost Index			555.71	@35.59%	197.78	
Total					1086.85	
GRAND TOTAL				sqm	1086.85	
Note						
12:PLUMBING WORKS						
12.001-Specification code: 17.7.2						
Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require: White Vitreous China Wash basin size 630 x 450 mm with a single 15 mm C.P. brass pillar tap						
Details of cost for one no.						
Material						M
1885		15 mm C.P.brass tap				
		each	1.00000	207.00	207.00	M1
1947		Vitreous China flat back wash basin 630x450 mm				
		each	1.00000	725.00	725.00	M2
1309		C.I. bracket for wash basin and sinks				
		pair	1.00000	88.00	88.00	M3
1951		C.P. brass waste 32 mm				
		each	1.00000	80.00	80.00	M4
Carriage						C
9977		Carriage of materials				
		L.S	13.52000	2.00	27.04	C1
Labour						L
0123						

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Mason (brick layer) Ist class				
		Day	0.33000	738.00	243.54	L1
0114		Beldar				
		Day	0.63000	558.00	351.54	L2
0116		Fitter(grade1)				
		Day	0.30000	738.00	221.40	L3
Tools&Plants(Hire charges)						T
9999		Sundries Painting of brackets, fittings etc.				
		L.S	26.91000	2.00	53.82	T1
9999		Sundries Red lead, white lead and gasket				
		L.S	16.12000	2.00	32.24	T2
9999		Sundries Cement, sand and grit etc.				
		L.S	13.39000	2.00	26.78	T3
Total			1.000	each	2056.36	
Unit Total			1.000	each	2056.36	
Add Water Charge			2056.36	@1.00%	20.56	
Total					2076.92	
Add Contractors Profit & Overhead			2076.92	@15.00%	311.54	
Total					2388.46	
Add Cost Index			2388.46	@35.59%	850.05	
Total					3238.51	
GRAND TOTAL				each	3238.51	
Note						
12.002-Specification code: 17.2.2						
Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required: W.C. pan with ISI marked black solid plastic seat and lid						
Details of cost for 1 pan						
Material						M

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
1955		Vitreous china pedestal type wate closet				
		each	1.00000	1000.00	1000.00	M1
7358		Flushing Cistern P.V.C. 10 lts capacity (low level) (white) (with fittings, accessories and flush pipe)				
		each	1.00000	575.00	575.00	M2
1876		Black plastic seat (soild) with lid C.P.brass hinges and rubber buffers				
		each	1.00000	310.00	310.00	M3
Carriage					C	
9977		Carriage of materials				
		L.S	26.91000	2.00	53.82	C1
Labour					L	
0123		Mason (brick layer) Ist class				
		Day	0.50000	738.00	369.00	L1
0116		Fitter(grade1)				
		Day	1.25000	738.00	922.50	L2
0114		Beldar				
		Day	1.00000	558.00	558.00	L3
Tools&Plants(Hire charges)					T	
9999		Sundries Cement , sand and grit etc.				
		L.S	26.91000	2.00	53.82	T1
Total			1.000	each	3842.14	
Unit Total			1.000	each	3842.14	
Add Water Charge			3842.14	@1.00%	38.42	
Total					3880.56	
Add Contractors Profit & Overhead			3880.56	@15.00%	582.08	
Total					4462.64	
Add Cost Index			4462.64	@35.59%	1588.25	
Total					6050.89	
GRAND TOTAL				each	6050.89	

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Note						
12.003-Specification code: 17.4.1						
Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350 mm and 340x410x265 mm sizes respectively with automatic flushing cistern with standard flush pipe and C.P. brass spreaders with brass unions and G.I. clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required: One urinal basin with 5 litre white P.V.C. automatic flushing cistern						
Details of cost for one no						
Material						M
7375		G.I. flush pipe and C.P. brass spreader including C.P. connecting pipe Single lipped urinal				
		each	1.00000	445.00	445.00	M1
7359		P.V.C. automatic flushing cistern 5 lts capacity				
		each	1.00000	470.00	470.00	M2
1913		Vitreous china lipped front urinal				
		each	1.00000	460.00	460.00	M3
Carriage						C
9977		Carriage of materials				
		L.S	26.91000	2.00	53.82	C1
Labour						L
0116		Fitter(grade1)				
		Day	0.88000	738.00	649.44	L1
0123		Mason (brick layer) Ist class				
		Day	0.88000	738.00	649.44	L2
0114		Beldar				
		Day	1.50000	558.00	837.00	L3
Tools&Plants(Hire charges)						T
9999		Sundries Cement, sand and grit etc.				
		L.S	13.52000	2.00	27.04	T1
9999		Sundries Painting of fittings etc				

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		L.S	39.00000	2.00	78.00	T2
9999		Sundries Red lead, white lead and gasket				
		L.S	13.52000	2.00	27.04	T3
9999		Sundries Plugs, screws etc				
		L.S	13.52000	2.00	27.04	T4
Total			1.000	each	3723.82	
Unit Total			1.000	each	3723.82	
Add Water Charge			3723.82	@1.00%	37.24	
Total					3761.06	
Add Contractors Profit & Overhead			3761.06	@15.00%	564.16	
Total					4325.22	
Add Cost Index			4325.22	@35.59%	1539.35	
Total					5864.57	
GRAND TOTAL				each	5864.57	
Note						
12.004-Specification code: 50.18.7.2.2						
Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step PVC solvent cement and testing of joints complete as per direction of Engineer -in-Charge 20 mm dia 10 Kgf/cm2- Internal work - Exposed on wall						
Details of cost for 10 metre						
Material						M
	MR41	PVC pipe 20 mm outer dia 10 kfg/cm2 (Adding 15% for fittings wastage)				
		metre	11.50000	30.00	345.00	M1
Labour						L
0117		Assistant Fitter or 2nd class fitter				
		Day	0.98000	679.00	665.42	L1
0114		Beldar				
		Day	0.66000	558.00	368.28	L2
0116						

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Fitter(grade1)				
		Day	0.33000	738.00	243.54	L3
Tools&Plants(Hire charges)						T
9999		Sundries				
		L.S	2.73000	2.00	5.46	T1
Total			10.000	metre	1627.70	
Unit Total			1.000	metre	162.77	
Add Water Charge			162.77	@1.00%	1.63	
Total					164.40	
Add Contractors Profit & Overhead			164.40	@15.00%	24.66	
Total					189.06	
Add Cost Index			148.98	@35.59%	53.02	
Total					242.08	
GRAND TOTAL				metre	242.08	
Note						
12.005-Specification code: 18.7.1						
Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer -in-Charge. Internal work - Exposed on wall 15 mm nominal outer dia pipes						
Details of cost for 10 meter						
Material						M
8636		Chlorinated Polyvinyl - Chloride (CPVC) pipe 15 mm outer dia				
		metre	10.00000	48.55	485.50	M1
Labour						L
0116		Fitter(grade1)				
		Day	0.33000	738.00	243.54	L1
0117		Assistant Fitter or 2nd class fitter				
		Day	0.82000	679.00	556.78	L2
0114		Beldar				

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Day	0.66000	558.00	368.28	L3
Tools&Plants(Hire charges)						T
9999		Sundries Cement, Sand grit etc.				
		L.S	2.73000	2.00	5.46	T1
Additional Charges						A
tcode		Other Charge @ 30% of :(M1)				
		L.S	0.30000	485.50	145.65	A1
Total			10.000	metre	1805.21	
Unit Total			1.000	metre	180.52	
Add Water Charge			180.52	@1.00%	1.81	
Total					182.33	
Add Contractors Profit & Overhead			182.33	@15.00%	27.35	
Total					209.68	
Add Cost Index			209.68	@35.59%	74.63	
Total					284.31	
GRAND TOTAL				metre	284.31	
Note						
12.006-Specification code: 18.7.2						
Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer -in-Charge. Internal work - Exposed on wall 20 mm nominal outer dia pipes						
Details of cost for 10 meter						
Material						M
8637		Chlorinated Polyvinyl - Chloride (CPVC) pipe 20 mm outer dia				
		metre	10.00000	77.80	778.00	M1
Labour						L
0114		Beldar				
		Day	0.66000	558.00	368.28	L1
0117		Assistant Fitter or 2nd class fitter				

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Day	0.98000	679.00	665.42	L2
0116		Fitter(grade1)				
		Day	0.33000	738.00	243.54	L3
Tools&Plants(Hire charges)						T
9999		Sundries Cement, sand and grit etc.				
		L.S	2.73000	2.00	5.46	T1
Additional Charges						A
tcode		Other Charge @ 30% of :(M1)				
		L.S	0.30000	778.00	233.40	A1
Total			10.000	metre	2294.10	
Unit Total			1.000	metre	229.41	
Add Water Charge			229.41	@1.00%	2.29	
Total					231.70	
Add Contractors Profit & Overhead			231.70	@15.00%	34.76	
Total					266.46	
Add Cost Index			266.46	@35.59%	94.83	
Total					361.29	
GRAND TOTAL				metre	361.29	
Note						
12.007-Specification code: 50.18.7.6.1						
Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step PVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge 50 mm dia 10 Kfg/cm - Internal work-Exposed on wall						
Details of cost for 10 metre						
Material						M
	MR48	PVC pipe 50 mm outer dia. 10 kgf/cm2 (15% added for fittings and wastage etc)				
		metre	11.50000	90.00	1035.00	M1
Labour						L
0116		Fitter(grade1)				

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsr year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Day	0.33000	738.00	243.54	L1
0114		Beldar				
		Day	1.31000	558.00	730.98	L2
0117		Assistant Fitter or 2nd class fitter				
		Day	1.31000	679.00	889.49	L3
Tools&Plants(Hire charges)						T
9999		Sundries Adhesive and sundries etc				
		L.S	5.33000	2.00	10.66	T1
Total			10.000	metre	2909.67	
Unit Total			1.000	metre	290.97	
Add Water Charge			290.97	@1.00%	2.91	
Total					293.88	
Add Contractors Profit & Overhead			293.88	@15.00%	44.08	
Total					337.96	
Add Cost Index			217.74	@35.59%	77.49	
Total					415.45	
GRAND TOTAL				metre	415.45	
Note						
12.008-Specification code: 50.18.8.7.1						
Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes with one step PVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge. Concealed work including cutting chases and making good the wall etc. 63 mm pipe 6 Kgf/cm2						
Details of cost for 10 metres						
Material						M
	MR50	PVC pipe 63 mm outer dia . 6kgf/cm2 (Adding 5% for wastage, etc)				
		metre	10.50000	118.00	1239.00	M1
Labour						L
0116		Fitter(grade1)				
		Day	0.33000	738.00	243.54	L1

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
0117		Assistant Fitter or 2nd class fitter				
		Day	0.66000	679.00	448.14	L2
0114		Beldar				
		Day	0.66000	558.00	368.28	L3
Sub Data					S	
50.18.78		Rate as per item Number 50.18.78 of SH: Approved Observed data Approved Observed data : Making chases up to 12.5x12.5 cm in walls including making good and finishing with matching surface after housing pipe etc. Making chases upto 12.5x12.5 cm in walls and making good the same				
		metre	10.00000	189.62	1896.20	S1
Total		10.000	metre	4195.16		
Unit Total		1.000	metre	419.52		
Add Water Charge		419.52	@1.00%	4.20		
Total				423.72		
Add Contractors Profit & Overhead		423.72	@15.00%	63.56		
Total				487.28		
Add Cost Index		343.37	@35.59%	122.21		
Total				609.49		
GRAND TOTAL			metre	609.49		
Note						
12.009-Specification code: 18.17.4						
Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) : 50 mm nominal bore						
Details of cost for one no						
Material					M	
1930		Brass full way valve with C.I. wheel (screwed end) 50 mm dia				
		each	1.00000	620.00	620.00	M1
Carriage					C	
9988		Carriage and sundries of materials and fixing charge				
		L.S	14.82000	2.00	29.64	C1
Total		1.000	each	649.64		

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Unit Total			1.000	each	649.64	
Add Water Charge			649.64	@1.00%	6.50	
Total					656.14	
Add Contractors Profit & Overhead			656.14	@15.00%	98.42	
Total					754.56	
Add Cost Index			754.56	@35.59%	268.55	
Total					1023.11	
GRAND TOTAL				each	1023.11	
Note						
12.010-Specification code: 18.49.1						
Providing and fixing C.P brass bib cock of approved quality conforming to IS: 8931. 15 mm nominal bore						
Details of cost for one no.						
Material						M
7257		C.P.Brass bibcock 15 mm				
		each	1.00000	290.00	290.00	M1
Carriage						C
9988		Carriage and sundries of material and fixing charges				
		L.S	11.57000	2.00	23.14	C1
Total			1.000	each	313.14	
Unit Total			1.000	each	313.14	
Add Water Charge			313.14	@1.00%	3.13	
Total					316.27	
Add Contractors Profit & Overhead			316.27	@15.00%	47.44	
Total					363.71	
Add Cost Index			363.71	@35.59%	129.44	
Total					493.15	
GRAND TOTAL				each	493.15	
Note						
12.011-Specification code: 50.18.9.19.2						
Providing and fixing PVC pipes including fixing the pipe with clamps/clips at 1.00 m spacing. This includes jointing of pipes with one step PVC solvent cement and testing of joints complete						

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(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
as per direction of Engineer-in-Charge 110 m dia 4 Kgf/cm2 - External work - Exposed on wall						
Details of cost for 10.00 metre						
Material						M
	MR55	PVC pipe 110 mm outer dia. 4kgf/cm2 (5% added for wastage etc)				
		metre	10.50000	170.00	1785.00	M1
Labour						L
0114		Beldar				
		Day	0.62000	558.00	345.96	L1
0116		Fitter(grade1)				
		Day	0.32000	738.00	236.16	L2
0100		Bandhani				
		Day	0.13000	617.00	80.21	L3
Tools&Plants(Hire charges)						T
9999		Sundries Scaffolding etc.				
		L.S	30.98000	2.00	61.96	T1
9999		Sundries Adhesive, and sundries etc.				
		L.S	10.27000	2.00	20.54	T2
9999		Sundries Carriage of materials				
		L.S	22.53000	2.00	45.06	T3
Total			10.000	metre	2574.89	
Unit Total			1.000	metre	257.49	
Add Water Charge			257.49	@1.00%	2.57	
Total					260.06	
Add Contractors Profit & Overhead			260.06	@15.00%	39.01	
Total					299.07	
Add Cost Index			91.75	@35.59%	32.65	
Total					331.72	
GRAND TOTAL				metre	331.72	

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Note						
12.012-Specification code: 50.17.1.4						
Supplying and fixing CP Health faucet good quality including cost of materials and labour charges etc. complete as per the direction of site engineer-in-charge.						
Details of cost for 10.00 Nos.						
Material						M
	MR36	Health Faucet average quality				
		each	10.00000	650.00	6500.00	M1
Tools&Plants(Hire charges)						T
9999		Sundries Carriage of material and fixing charges				
		L.S	10.00000	2.00	20.00	T1
Total			10.000	no	6520.00	
Unit Total			1.000	no	652.00	
Add Water Charge			652.00	@1.00%	6.52	
Total					658.52	
Add Contractors Profit & Overhead			658.52	@15.00%	98.78	
Total					757.30	
Add Cost Index			2.32	@35.59%	0.83	
Total					758.13	
GRAND TOTAL				no	758.13	
Note						
12.013-Specification code: 50.18.9.20.3						
Providing and fixing PVC moulded fittings /accessories for Rigid PVC pipes, including jointing with PVC solvent cement - 63 mm dia Door Elbow						
Details of cost for one no.						
Material						M
	MR59	PVC door Elbow 63 mm dia				
		each	1.00000	36.50	36.50	M1
Tools&Plants(Hire charges)						T
9999		Sundries Carriage and fixing charges				
		L.S	9.36000	2.00	18.72	T1

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
9999		Sundries Adhesive, and sundries etc.				
		L.S	2.73000	2.00	5.46	T2
Total		1.000	no	60.68		
Unit Total		1.000	no	60.68		
Add Water Charge		60.68	@1.00%	0.61		
Total				61.29		
Add Contractors Profit & Overhead		61.29	@15.00%	9.19		
Total				70.48		
Add Cost Index		28.08	@35.59%	9.99		
Total				80.47		
GRAND TOTAL			no	80.47		
Note						
12.014-Specification code: 50.18.9.22.3						
Providing and fixing PVC moulded fittings/ accessories for Rigid PVC pipes, including jointing with PVC solvent cement-110 mm dia Door Elbow						
Details of cost for 1 no.						
Material					M	
	MR79	PVC door Elbow 110 mm dia				
		each	1.00000	77.00	77.00	M1
Tools&Plants(Hire charges)					T	
9999		Sundries Adhesive, and sundries etc.				
		L.S	2.73000	2.00	5.46	T1
9999		Sundries Carriage and fixing charges				
		L.S	10.79000	2.00	21.58	T2
Total		1.000	no	104.04		
Unit Total		1.000	no	104.04		
Add Water Charge		104.04	@1.00%	1.04		
Total				105.08		
Add Contractors Profit & Overhead		105.08	@15.00%	15.76		
Total				120.84		

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Add Cost Index			31.41	@35.59%	11.18	
Total					132.02	
GRAND TOTAL				no	132.02	
Note						
12.015-Specification code: 50.18.9.22.4						
Providing and fixing PVC moulded fittings/ accessories for Rigid PVC pipes, including jointing with PVC solvent cement- 110 mm dia Bend						
Details of cost for one no.						
Material						M
	MR80	PVC bend 110 mm dia				
		each	1.00000	102.00	102.00	M1
Tools&Plants(Hire charges)						T
9999		Sundries Adhesive, and sundries etc.				
		L.S	2.73000	2.00	5.46	T1
9999		Sundries Carriage and fixing charges				
		L.S	10.79000	2.00	21.58	T2
Total		1.000	no	129.04		
Unit Total		1.000	no	129.04		
Add Water Charge		129.04	@1.00%	1.29		
Total				130.33		
Add Contractors Profit & Overhead		130.33	@15.00%	19.55		
Total				149.88		
Add Cost Index		31.41	@35.59%	11.18		
Total				161.06		
GRAND TOTAL			no	161.06		
Note						
12.016-Specification code: 50.18.9.22.5						
Providing and fixing PVC moulded fittings/ accessories for Rigid PVC pipes including jointing with PVC solvent cement 110x110x110 mm dia Tee						
Details of cost for 1 no.						
Material						M

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(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
	MR81	PVC Tee 110x110x110mm dia				
		each	1.00000	112.00	112.00	M1
Tools&Plants(Hire charges)						T
9999		Sundries Adhesive, and sundries etc.				
		L.S	3.41000	2.00	6.82	T1
9999		Sundries Carriage and fixing charges				
		L.S	10.79000	2.00	21.58	T2
Total			1.000	no	140.40	
Unit Total			1.000	no	140.40	
Add Water Charge			140.40	@1.00%	1.40	
Total					141.80	
Add Contractors Profit & Overhead			141.80	@15.00%	21.27	
Total					163.07	
Add Cost Index			32.98	@35.59%	11.74	
Total					174.81	
GRAND TOTAL				no	174.81	
Note						
12.017-Specification code: 18.48						
Providing and placing on terrace (at all floor levels) polyethylene water storage tank :ISI 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.						
Details of cost for 500 litres tank one no.						
Material						M
1649		Polyethylene water storage tank with cover and suitable locking arrangemnet				
		per litre	500.00000	5.50	2750.00	M1
Carriage						C
9977		Carriage to site				
		L.S	179.40000	2.00	358.80	C1
Tools&Plants(Hire charges)						T
9999		Sundries				

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(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Placing at terrace				
		L.S	89.70000	2.00	179.40	T1
Total			500.000	Litre	3288.20	
Unit Total			1.000	Litre	6.58	
Add Water Charge			6.58	@1.00%	0.07	
Total					6.65	
Add Contractors Profit & Overhead			6.65	@15.00%	1.00	
Total					7.65	
Add Cost Index			7.65	@35.59%	2.72	
Total					10.37	
GRAND TOTAL				Litre	10.37	
Note						
12.018-Specification code: 51.19.ST4						
Supplying and installing ready made PVC Septic tank including the cost of carriage, trenching, placing at the level below ground level as specified as per the direction of engineer in charge (Provision for CC/RCC/Sand/06mm aggregate for the preparation of bed shall be paid separately) 4. 35 to 50 flush capacity						
Details of cost for 1 no						
Material						M
	MR96	PVC Septic Tank - 35 to 50 flush capacity				
		each	1.00000	34000.00	34000.00	M1
Tools&Plants(Hire charges)						T
9999		Sundries Placing at specified level including back filling as necessary				
		L.S	22.43000	2.00	44.85	T1
9999		Sundries Carriage to site				
		L.S	179.40000	2.00	358.80	T2
Sub Data						S
2.8.1		Earth Work : All kinds of soil (L=2.60, B=1.20, D=1.10)				
		cum	3.43000	188.57	647.17	S1
Total			1.000	each	35050.82	
Unit Total			1.000	each	35050.82	

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Add Water Charge	35050.82	@1.00%	350.51	
		Total			35401.33	
		Add Contractors Profit & Overhead	35401.33	@15.00%	5310.20	
		Total			40711.53	
		Add Cost Index	1220.53	@35.59%	434.39	
		Total			41145.92	
		GRAND TOTAL		each	41145.92	
Note						
12.019-Specification code: 17.1.1						
Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100 mm Sand Cast Iron P or S trap, 10 litter low level white P.V.C.flushing cistern, including flush pipe, manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever require: White Vitreous china Orissa pattern W.C. pan of size 580x440 mm with integral type foot rests						
Details of cost for 1 pan						
Material						M
1896		100 mm S.C.I. trap with vent heel				
		each	1.00000	320.00	320.00	M1
1954		Vitreous China orrisa type w.c. pan size 580 mm				
		each	1.00000	1200.00	1200.00	M2
7358		Flushing Cistern P.V.C. 10 lts capacity (low level) (white) (with fittings, accessories and flush pipe)				
		each	1.00000	575.00	575.00	M3
Carriage						C
9977		Carriage of materials				
		L.S	26.91000	2.00	53.82	C1
Labour						L
0116		Fitter(grade1)				
		Day	1.25000	738.00	922.50	L1
0114		Beldar				
		Day	1.00000	558.00	558.00	L2
0123		Mason (brick layer) Ist class				

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Day	0.50000	738.00	369.00	L3
Tools&Plants(Hire charges)						T
9999		Sundries Cement, sand and grit etc.				
		L.S	26.91000	2.00	53.82	T1
Total			1.000	each	4052.14	
Unit Total			1.000	each	4052.14	
Add Water Charge			4052.14	@1.00%	40.52	
Total					4092.66	
Add Contractors Profit & Overhead			4092.66	@15.00%	613.90	
Total					4706.56	
Add Cost Index			4706.56	@35.59%	1675.06	
Total					6381.62	
GRAND TOTAL				each	6381.62	
Note						
13:WATER PROOFING WORKS						
13.001-Specification code: 22.6						
Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of applying : a) after surface preparation, first layer of slurry of cement @ 0.488 kg/ sqm mixed with water proofing cement compound @ 0.253 kg/ sqm. laying second layer of fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/ sqm mixed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30 cm on parapet wall and tucked into groove in parapet all around. d) fourth and final layer of brick tilling with cement mortar (which will be paid for separately. For the purpose of measurement the entire treated surface will be measured)						
Details of cost for 10 sqm						
Material						M
8501		Bonding material 1.6 kgx30x2 = 96 kg Bitumen (blown/ residual type) =10x(0.253+0.67)= 9.23 kg Wastage 5% = 0.46 kg Total = 9.69 kg Polymer modified cementation coating				
		kilogram	9.69000	140.00	1356.60	M1
8502		Fibre glass cloth Fibre Glass cloth = 10.00 sqm Wastage @ 10 % = 1.00 sqm Total = 11.00 sqm				

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(Dsr year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		sqm	11.00000	25.00	275.00	M2
0367		Cement= 10x (1.289 + 0.488)= 17.77 kg Sealing fillets @ 10% = 1.77 kg Total = 19.54 kg = 0.020 tonne Portland Cement (OPC-43 grade)				
		tonne	0.02000	4940.00	98.80	M3
Carriage						C
2209		Carriage of Cement				
		tonne	0.02000	92.24	1.84	C1
Labour						L
0114		Beldar				
		Day	1.00000	558.00	558.00	L1
0155		Mason (average)				
		Day	2.00000	709.00	1418.00	L2
0101		Bhisti				
		Day	0.25000	617.00	154.25	L3
Tools&Plants(Hire charges)						T
9999		Sundries brushes etc.				
		L.S	23.40000	2.00	46.80	T1
Total			10.000	sqm	3909.29	
Unit Total			1.000	sqm	390.93	
Add Water Charge			390.93	@1.00%	3.91	
Total					394.84	
Add Contractors Profit & Overhead			394.84	@15.00%	59.23	
Total					454.07	
Add Cost Index			454.07	@35.59%	161.60	
Total					615.67	
GRAND TOTAL				sqm	615.67	
Note						
13.002-Specification code: 22.5						

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Providing and laying water proofing treatment in sunken portion of WCs, bathroom etc., by applying cement slurry mixed with water proofing cement compound consisting of applying : a) First layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. This layer will be allowed to air cure for 4 hours. b) Second layer of slurry of cement @ 0.242 kg /sqm mixed with water proofing cement compound @ 0.126 kg/ sqm. This layer will be allowed to air cure for 4 hours followed with water curing for 48 hours. The rate includes preparation of surface, treatment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry.						
Details of cost for 10 sqm						
Material						M
0367		Cement 10x(0.488 + 0.242) = 7.30 kg Sealing fillets 10 x 0.5 kg = 5.00 kg Total = 12.30 kg = 0.012 tonne Portland Cement (OPC-43 grade)				
		tonne	0.01000	4940.00	59.28	M1
8501		Bonding material 1.6 kgx30x2 = 96 kg Bitumen (blown/residual type) 10x(0.25+0.126) = 3.79 kg Sealing fillets 10x0.10 kg / sqm = 1.00 kg Wastage @ 5% on 4.79 kg = 0.24 kg Total = 5.03 kg Say 5.00 kg Polymer modified cementation coating				
		kilogram	5.00000	140.00	700.00	M2
Carriage						C
2209		Carriage of Cement				
		tonne	0.01000	92.24	1.11	C1
Labour						L
0114		Beldar				
		Day	2.00000	558.00	1116.00	L1
0101		Bhisti				
		Day	0.25000	617.00	154.25	L2
0155		Mason (average)				
		Day	2.00000	709.00	1418.00	L3
Tools&Plants(Hire charges)						T
9999		Sundries brushes etc.				
		L.S	15.60000	2.00	31.20	T1
Total			10.000	sqm	3479.84	
				sqm	347.98	

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Unit Total			1.000			
Add Water Charge			347.98	@1.00%	3.48	
Total					351.46	
Add Contractors Profit & Overhead			351.46	@15.00%	52.72	
Total					404.18	
Add Cost Index			404.18	@35.59%	143.85	
Total					548.03	
GRAND TOTAL				sqm	548.03	
Note						
13.003-Specification code: 16.68						
Providing and laying 60 mm thick factory made cement concrete interlocking paver block of M - 30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50 mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge.						
Details of cost of 10 sqm						
Material						M
8689		Interlocking C.C. paver block (60 mm thick, M-30) Bedding Layer 50 mm thick				
		sqm	10.00000	400.00	4000.00	M1
0982		Coarse sand (zone III) = 10x0.050 = 0.50 cum				
		cum	0.50000	1350.00	675.00	M2
0983		Fine sand (zone IV)				
		cum	0.15000	900.00	135.00	M3
Carriage						C
2203		Carriage of Coarse sand				
		cum	0.50000	103.77	51.89	C1
2261		Carriage of Fine sand (1 part badarpur sand : 2 parts jamuna sand)				
		cum	0.15000	103.77	15.57	C2
Labour						L
0123		Laying charges (Based on actual observation) Mason (brick layer) Ist class				
		Day	0.50000	738.00	369.00	L1

EST No. :LSGD/PMUKILA/EST/85418/2022_9_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
0124		Mason (brick layer)2nd class				
		Day	0.50000	679.00	339.50	L2
0114		Beldar				
		Day	1.00000	558.00	558.00	L3
0115		Coolie				
		Day	0.50000	558.00	279.00	L4
Total		10.000	sqm	6422.96		
Unit Total		1.000	sqm	642.30		
Add Water Charge		642.30	@1.00%	6.42		
Total				648.72		
Add Contractors Profit & Overhead		648.72	@15.00%	97.31		
Total				746.03		
Add Cost Index		746.03	@35.59%	265.51		
Total				1011.54		
GRAND TOTAL			sqm	1011.54		
Note						
13.004-Specification code: 4.17						
Making plinth protection 50 mm thick of cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) over 75 mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including finishing the top smooth.						
Details of cost for 10 sqm. MATERIAL:						
Material					M	
0287		Brick Aggregate (single size):40 mm nominal size				
		cum	0.75000	650.00	487.50	M1
0983		Fine sand (zone IV)				
		cum	0.06000	900.00	54.00	M2
0295		Stone Aggregate(single size):20 mm nominal size				
		cum	0.35000	1350.00	472.50	M3
0297		Stone Aggregate(single size): 10 mm nominal size				
		cum	0.12000	1350.00	162.00	M4

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
0982		Coarse sand (zone III)				
		cum	0.23000	1350.00	310.50	M5
0367		Portland Cement				
		tonne	0.11000	4940.00	543.40	M6
Carriage					C	
2260		Carriage of Brick aggregate				
		cum	0.75000	112.79	84.59	C1
2261		Carriage of Fine sand (1 part badarpur sand : 2 parts jamuna sand)				
		cum	0.06000	103.77	6.23	C2
2202		Carriage of Stone aggregate below 40 mm nominal size				
		cum	0.47000	103.77	48.77	C3
2203		Carriage of Coarse sand				
		cum	0.23000	103.77	23.87	C4
2209		Carriage of Cement				
		tonne	0.11000	92.24	10.15	C5
Labour					L	
0114		Beldar				
		Day	0.16000	558.00	89.28	L1
0115		Coolie				
		Day	0.11000	558.00	61.38	L2
0114		Beldar				
		Day	1.00000	558.00	558.00	L3
0123		Mason (brick layer) Ist class				
		Day	0.05000	738.00	36.90	L4
0101		Bhisti				
		Day	0.33000	617.00	203.61	L5
0155		Mason (average)				
		Day	0.27000	709.00	191.43	L6

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
0114		Beldar				
		Day	1.08000	558.00	602.64	L7
0115		Coolie				
		Day	1.08000	558.00	602.64	L8
Tools&Plants(Hire charges)					T	
9999		Sundries				
		L.S	13.39000	2.00	26.78	T1
9999		Sundries				
		L.S	6.76000	2.00	13.52	T2
Total		10.000	sqm	4589.69		
Unit Total		1.000	sqm	458.97		
Add Water Charge		458.97	@1.00%	4.59		
Total				463.56		
Add Contractors Profit & Overhead		463.56	@15.00%	69.53		
Total				533.09		
Add Cost Index		533.09	@35.59%	189.73		
Total				722.82		
GRAND TOTAL			sqm	722.82		
Note						
14:NAME BOARD						
14.001-Specification code: 13.71						
Lettering with black Japan pint of approved brand and manufacture						
Details of cost for 100 letters of 15 cm height						
Material					M	
0829		Black Japan				
		Litre	0.56000	90.00	50.40	M1
Carriage					C	
9977		Carriage				
		L.S	0.91000	2.00	1.82	C1
Labour					L	

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
0131		Painter				
		Day	6.00000	679.00	4074.00	L1
0115		Coolie				
		Day	2.00000	558.00	1116.00	L2
Tools&Plants(Hire charges)					T	
9999		Sundries				
		L.S	8.06000	2.00	16.12	T1
9999		Sundries Painting brushes, turpentine, stencil etc.				
		L.S	13.39000	2.00	26.78	T2
Total		1496.250	per Letter per cm height	5285.12		
Unit Total		1.000	per Letter per cm height	3.53		
Add Water Charge		3.53	@1.00%	0.04		
Total				3.57		
Add Contractors Profit & Overhead		3.57	@15.00%	0.54		
Total				4.11		
Add Cost Index		4.11	@35.59%	1.46		
Total				5.57		
GRAND TOTAL			per Letter per cm height	5.57		
Note						

Approved By

(PEN:),

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GENERAL ABSTRACT

KIIFB-KILA 1 CRORE PROJECT-INFRASTRUCTURE DEVELOPEMENT AT GMLPS
THIRUVATHRA(SCHOOL CODE-24215)-THRISSUR-Construction of new building(G+1)-
Composite Electrical Work

Sl No	Head Description	Amount
1	WIRING	139092.16
2	DB AND ACCESSORIES	35258.71
3	CABLES AND CABLING	32820.92
4	ELECTRICAL FITTINGS	85499.66
5	EARTHING	29728.12
6	WATER PUMP	44695.68
	Total Estimation PAC	367095.25
C	Extra Charges	
C.001	Provision for GST	
	367095.25 18.00%	66077.15
	Grand Total	0.00
	Round off	0.00
	Rounded Total(Rs)	433172.40
	Rupees Four Lakh Thirty Three Thousand One Hundred and Seventy Two	

Approved By

(PEN:),

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DETAILED ESTIMATE

KIIFB-KILA 1 CRORE PROJECT-INFRASTRUCTURE DEVELOPEMENT AT GMLPS
THIRUVATHRA(SCHOOL CODE-24215)-THRISSUR-Construction of new building(G+1)-
Composite Electrical Work

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
1	WIRING						
1.001	1.10.3						
	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required.Group C						
	POINT						
	TUBE LIGHT POINT	23.000 00					23.000
	FAN POINT	16.000 00					16.000
	BULB POINT	2.0000 0					2.000
	EXHAUST POINT	4.0000 0					4.000
	OUTSIDE POINT	2.0000 0					2.000
	Total						47.000
	Total Quantity in point						47.000
1.002	1.11						
	Wiring for twin control light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required.						
	STAIR						
		1.0000 0					1.000
	Total						1.000
	Total Quantity in point						1.000
1.003	1.14.1						
	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface / recessed medium class PVC conduit as required 2x1.5 sq.mm + 1x1.5 sq.mm earth wire						

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	CIRCUIT WIRING						
	LIGHT CIRCUIT	1.0000 0	110.000				110.000
	Total						110.000
	Total Quantity in metre						110.000
1.004	1.14.2						
	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface / recessed medium class PVC conduit as required2X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire						
	CIRCUIT WIRING						
		1.0000 0	180.000				180.000
	Total						180.000
	Total Quantity in metre						180.000
1.005	1.21.1						
	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/ recess including cutting the wall and making good the same in case of recessed conduit as required.20 mm						
	SPEAKER CONDUIT						
		1.0000 0	40.000				40.000
	Total						40.000
	Total Quantity in metre						40.000
1.006	1.21.2						
	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/ recess including cutting the wall and making good the same in case of recessed conduit as required.25 mm						
	SPEAKER						
		1.0000 0	10.000				10.000
	Total						10.000
	Total Quantity in metre						10.000
1.007	1.21.3						
	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/ recess including cutting the wall and making good the same in case of recessed conduit as required.32 mm						
	HDMI						
		1.0000 0	25.000				25.000
	Total						25.000
	Total Quantity in metre						25.000

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
1.008	1.24.1						
	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.5/6 amps switch						
	PROJECTOR						
		4.0000 0					4.000
	Total						4.000
	Total Quantity in each						4.000
1.009	1.24.3						
	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.15/16 amp switch						
	POWER SWITCH						
		2.0000 0					2.000
	Total						2.000
	Total Quantity in each						2.000
1.010	1.24.4						
	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.3 pin 5/6 amp socket outlet						
	PROJECTOR						
		4.0000 0					4.000
	Total						4.000
	Total Quantity in each						4.000
1.011	1.24.5						
	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.6 pin 15/16 amp socket outlet						
	POWER SOCKET						
		2.0000 0					2.000
	Total						2.000
	Total Quantity in each						2.000
1.012	1.24.8						
	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.Bell push						
	BELL PUSH						

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
		1.0000 0					1.000
	Total						1.000
	Total Quantity in each						1.000
1.013	1.25						
	Supplying and fixing two module stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.						
	FAN REGULATOR						
		16.000 00					16.000
	Total						16.000
	Total Quantity in each						16.000
1.014	1.26						
	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.						
	DUMMY SWITCH						
		15.000 00					15.000
	Total						15.000
	Total Quantity in each						15.000
1.015	1.27.1						
	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required.1 or 2 Module (75mmX75mm)						
	PROJECTOR POINT						
		5.0000 0					5.000
	Total						5.000
	Total Quantity in each						5.000
1.016	1.31						
	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, connection etc. as required. (For light plugs to be used in non residential buildings).						
	COMBINED PLUG						
		8.0000 0					8.000
	Total						8.000
	Total Quantity in each						8.000
1.017	1.33						

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Supplying and fixing 3 pin, 5 amp ceiling rose on the existing junction box/ wooden block including connection etc as required.						
	ALL WIRING						
	POINT WIRING	45.000 00					45.000
	TWIN WIRING	1.0000 0					1.000
	GROUP WIRING	2.0000 0					2.000
	Total						48.000
	Total Quantity in each						48.000
1.018	1.55.3						
	Wiring for group controlled (looped) light point/fan point/exhaust fan point/ call bell point (without independent switch etc.) with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed PVC conduit, and earthing the point with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable etc. as required.Group C						
	CORRIDOR						
		2.0000 0					2.000
	Total						2.000
	Total Quantity in point						2.000
1.019	1.58						
	Supplying and fixing PVC batten/ angle holder including connection etc. as required.						
	TOILET ANGLE HOLDER						
		2.0000 0					2.000
	Total						2.000
	Total Quantity in each						2.000
1.020	1.27.2						
	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required.3 Module (100mmX75mm)						
	3MD BOX AND PLATE FOR 16A PLUG						
		2.0000 0					2.000
	Total						2.000
	Total Quantity in each						2.000
2	DB AND ACCESSORIES						
2.001	90.11.1.14						

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Supply and installation of sheet steel, phosphatised and painted, dust and vermin proof enclosure of MCB DB including copper /brass bus bar, neutral link, earth bus and DIN rail suitable for fixing MCB/ isolator etc. fixed on wall using suitable anchor bolts or fixed in recess including cutting hole on the wall , making good the damages, colour washing etc. as required 4 way (8+12) - double cover TPN vertical DB with provision for fixing 4P MCB / Isolator/ RCCB/ RCBO as incomer and SP/ TP MCB as outgoing (IP 42/43)						
	VDB						
		1.0000 0					1.000
	Total						1.000
	Total Quantity in each						1.000
2.002	2.13.1						
	Supplying and fixing following rating, four pole, 415 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.40 amps						
	LDB INCOMER						
		1.0000 0					1.000
	Total						1.000
	Total Quantity in each						1.000
2.003	2.15.2						
	Supplying and fixing following rating, four pole, (three phase and neutral), 415 volts, residual current circuit breaker (RCCB), having a sensitivity current upto 300 milliamperes in the existing MCB DB complete with connections, testing and commissioning etc. as required.40 amps						
	RCCB LDB						
		1.0000 0					1.000
	Total						1.000
	Total Quantity in each						1.000
2.004	2.10.4						
	Supplying and fixing 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.Triple pole						
	VDB OUTGOINGS						
		1.0000 0					1.000
	Total						1.000
	Total Quantity in each						1.000
2.005	2.10.1						

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Supplying and fixing 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.Single pole						
	MCB						
		12.000 00					12.000
	Total						12.000
	Total Quantity in each						12.000
2.006	2.11						
	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.						
	MCB DUMMY						
		13.000 00					13.000
	Total						13.000
	Total Quantity in each						13.000
2.007	2.3.3						
	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCBIRCCB/Isolator12 way, Double door						
	LDB						
		2.0000 0					2.000
	Total						2.000
	Total Quantity in each						2.000
2.008	2.12.1						
	Supplying and fixing following rating, double pole, 240 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.40 amps						
	LDB INCOMER						
		2.0000 0					2.000
	Total						2.000
	Total Quantity in each						2.000
2.009	2.14.1						
	Supplying and fixing following rating, double pole, (single phase and neutral), 240 volts, residual current circuit breaker (RCCB), having a sensitivity current upto 300 milliamperes in the existing MCB DB complete with connections, testing and commissioning etc. as required.25 amps						
	LDB INCOMER						

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
		2.0000 0					2.000
	Total						2.000
	Total Quantity in each						2.000
2.010	OD211544/2023-2024						
	Supply and installation of dust and Vermin proof wall mounding meter box 450x375x200mm SINTEX make GSMB 4537 or equilent make with base plate suitable to fix 3 phase energy meter and fix to fix in the box 3 Nos of 63 A, 415 V HRC bakelite fuse fitting with HRC fuse link, 63 A 2 way neutral link etc						
	METER BOARD						
		1.0000 0					1.000
	Total						1.000
	Total Quantity in each						1.000
2.011	OD211545/2023-2024						
	Supply and providing 63ATPN disconnecter fuse switch unit in sheet steel enclosure with ISI marked HRC fuse on wall / angle iron frame including drilling holes in frame making connections etc as required						
	DISCONNECTOR FUSE						
		1.0000 0					1.000
	Total						1.000
	Total Quantity in each						1.000
2.012	2.23.3						
	Supplying and fixing Cable End Box (Loose Wire Box) (IP 43) suitable for following single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with testing and commissioning etc. as required. 2For 10 way, Double door SPN MCBDB						
	Total Quantity in each						0.000
2.013	2.24.1						
	Supplying and fixing Cable End Box (Loose Wire Box) (IP 43) suitable for following triple pole and neutral, sheet steel, MCB distribution board, 415 V, on surface/ recess, complete with testing and commissioning etc. as required. For 4 way, Double door TPN MCBDB						
	Total Quantity in each						0.000
3	CABLES AND CABLING						
3.001	7.1.1						
	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required. Upto 35 sq. mm						

EST No. :LSGD/PMUKILA/EST/85418/2022_17_1_1 (Edit Id : 1)
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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	METER BOARD TO VDB						
		1.0000 0	32.000				32.000
	Total						32.000
	Total Quantity in metre						32.000
3.002	7.5.1						
	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size in the existing RCC/ HUME/ METAL pipe as required.Upto 35 sq. mm						
	CABLE GAURD						
		20.000 00					20.000
	Total						20.000
	Total Quantity in metre						20.000
3.003	7.7.1						
	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on wall surface as required.Upto 35 sq. mm (clamped with 1mm thick saddle)						
	VDB TO LDB						
		1.0000 0	40.000				40.000
	Total						40.000
	Total Quantity in metre						40.000
3.004	7.10						
	Supplying and fixing cable route marker with 10 cm X 10 cm X 5 mm thick G.I. plate with inscription there on, bolted /welded to 35 mm X 35 mm X 6 mm angle iron, 60 cm long and fixing the same in ground as required.						
	CABLE ROUTE						
		4.0000 0					4.000
	Total						4.000
	Total Quantity in no						4.000
3.005	9.1.33						
	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required.4 X 16 sq. mm (28mm)						
	LDB CABLE TERMINATION						
		2.0000 0					2.000

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(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Total						2.000
	Total Quantity in set						2.000
3.006	OD209840/2023-2024						
	"Supply of the following size 1.1kV grade XLPE insulated PVC sheathed, armoured Aluminium conductor power cable confirming to IS 7098 (part 1) ammended upto date. - 4Cx16sq.mm Al Cable"						
	VDB TO LDB						
		1.0000 0	52.000				52.000
	Total						52.000
	Total Quantity in metre						52.000
3.007	OD209841/2023-2024						
	Supply and laying of 3CX4sqmm submersible copper flexible cable						
	MOTOR						
		1.0000 0	24.000				24.000
	Total						24.000
	Total Quantity in metre						24.000
3.008	OD209842/2023-2024						
	Supply of the following size 1.1kV grade XLPE insulated PVC sheathed, armoured Aluminium conductor power cable confirming to IS 7098 (part 1) ammended upto date. - 2Cx10sq.mm Al Cable"						
	LDB Cable						
		1.0000 0	30.000				30.000
	Total						30.000
	Total Quantity in metre						30.000
3.009	9.1.2						
	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required.2 X 10 sq. mm (19mm)						
	LDB CABLE TERMINATION						
		4.0000 0					4.000
	Total						4.000
	Total Quantity in set						4.000
4	ELECTRICAL FITTINGS						
4.001	1.41						

EST No. :LSGD/PMUKILA/EST/85418/2022_17_1_1 (Edit Id : 1)
(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Installation, testing and commissioning of pre - wired, fluorescent fitting/ compact fluorescent fitting of all types, complete with all accessories and tube etc. directly on ceiling/ wall, including connection with 1.5 sq.mm FRLS PVC insulated, copper conductor, single core cable and earthing etc. as required.						
	TUBE FITTING						
		24.000 00					24.000
	Total						24.000
	Total Quantity in each						24.000
4.002	1.49						
	Numbering of ceiling fan / exhaust fan/ fluorescent fittings as required.						
	NUMBERING						
		48.000 00					48.000
	Total						48.000
	Total Quantity in each						48.000
4.003	1.50.1						
	Installation of exhaust fan in the existing opening, including making good the damage connection testing, commissioning etc. as required.Upto 450 mm sweep						
	EXHAUST FAN FITTING						
		4.0000 0					4.000
	Total						4.000
	Total Quantity in each						4.000
4.004	OD209834/2023-2024						
	Supply, conveyance, installation, testing and commissioning of ceiling fans of the following sizes using standard accessories excluding resistance type regulator, wiring the down rod with 16/0.20mm PVC insulated and PVC sheathed 650/1100V grade 3 core round copper conductor flex wire or with extended original wiring etc. as required.1200mm sweep -5star rated ceiling fan(BLDC) complete with 300mm down rod , canopies, shackles and blades working on 230V/240V single phase A/C						
	BLDC FAN						
		16.000 00					16.000
	Total						16.000
	Total Quantity in each						16.000
4.005	OD209835/2023-2024						
	Supply of indoor industrial surface mounted LED tube and batten along with driver , surge protector,system wattage of 20+/-2 Watts,lumen output of lamp greater than 1600lumen, power factor >0.9,rated life of L70 @ 50,000 hours, system efficacy greater than 70lumen/watt and including all necessary accessories as required complete.						

EST No. :LSGD/PMUKILA/EST/85418/2022_17_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	20W TUBE LIGHT						
		24.000 00					24.000
	Total						24.000
	Total Quantity in each						24.000
4.006	OD209836/2023-2024						
	Supply of 250 mm sweep, 900 rpm light duty exhaust fan in plastic body with self opening louvers working on 230 V AC supply complete with all accessories as required.						
	TOILET EXHAUS FAN						
		4.0000 0					4.000
	Total						4.000
	Total Quantity in each						4.000
4.007	OD209837/2023-2024						
	Supply of 9W bulb						
	TOILET BULB						
		2.0000 0					2.000
	Total						2.000
	Total Quantity in each						2.000
4.008	OD209838/2023-2024						
	Supply and fixing of 36/40 W, 4000 lumen LED, IP 66 street light fitting with aluminium housing, stove enameled CRCA sheet steel reflector cover, acrylic cover complete with THD 0.98, RoHS compliant, duly wired up for use on 230 V AC supply.						
	STREET LIGHT						
		2.0000 0					2.000
	Total						2.000
	Total Quantity in each						2.000
5	EARTHING						
5.001	5.4						
	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.						
	PLATE EARTHING						
		2.0000 0					2.000
	Total						2.000

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Total Quantity in set						2.000
5.002	5.9						
	Supplying and laying 25 mm X 5 mm G.I strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with G.I. nut, bolt, spring, washer etc. as required.(Jointing shall be done by overlapping and with 2 sets of G.I. nut bolt & spring washer spaced at 50mm)						
	EARTH STRIP BELOW GROUND						
		1.0000 0	35.000				35.000
	Total						35.000
	Total Quantity in metre						35.000
5.003	5.15						
	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.						
	EARTH STRIP ABOVE GROUND						
		1.0000 0	15.000				15.000
	Total						15.000
	Total Quantity in metre						15.000
5.004	90.16.1.3						
	Supply and drawing bare earthing conductors of the following sizes along with wiring/ cables and giving connection as required3.15 mm copper conductor (10 SWG)						
	RUNNING CABLE EARTH CONDUCTORS 10SWG						
		1.0000 0	75.000				75.000
	Total						75.000
	Total Quantity in metre						75.000
5.005	90.16.1.2						
	Supply and drawing bare earthing conductors of the following sizes along with wiring/ cables and giving connection as required2.65 mm copper conductor (12 SWG)						
	VDB TO DB EARTH						
		24.000 00					24.000
	Total						24.000
	Total Quantity in metre						24.000
6	WATER PUMP						
6.001	OD209839/2023-2024						

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Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Horizontal Multistage pump for Domestic Water Supply - Supply, Fixing, Testing and Commissioning of Single Phase Horizontal Multistage pump having SS Shaft, Impeller, Body. Mechanical Seal Carbon & Ceramic / Graphite Alumina. Pump should be capable to deliver 2.6 lps @ 25mtr head, Head range 8 to 37mtrs (4.1 lps to 0.4 lps), with 1.1kW/1.5 HP with motor efficiency more than 85% with Wall mounting Microprocessor based common control Panel to operate the pump, Dry run , Phase Reversal Protections etc. level controller for Auto Start/ Stop Function , Digital display , Float Switches, Auto / Manual Operation with suitable rating Single Phase contactor, Overload relay, etc with all mounting accessories ,protection covering shall be IP54 with CRCA powder coated housing.						
	PUMP						
		1.0000 0					1.000
	Total						1.000
	Total Quantity in each						1.000
6.002	OD213669/2023-2024						
	Providing, fixing, commission and install in position following Portable Fire Extinguisher as per BIS 2190 and BIS: 15683:2006 and with relevant ISI Stamping/Marking. ABC Dry Chemical Powder, Store Pressure Type - 4 Kg.						
	ABC DRY CHEMICAL						
		1.0000 0					1.000
	Total						1.000
	Total Quantity in each						1.000
6.003	OD213672/2023-2024						
	Supplying and installing in position self glowing sign boards of size (150 X 400 mm) made of luminescentsafely, rigid sheet in green colour, photo luminescent ACP sheet in protective glass with two hangingchains & necessary supports to hang it on ceiling.						
	SIGN BOARD						
		1.0000 0					1.000
	Total						1.000
	Total Quantity in each						1.000

EST No. :LSGD/PMUKILA/EST/85418/2022_17_1_1 (Edit Id : 1)
(Dsr year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

ABSTRACT ESTIMATE

**KIIFB-KILA 1 CRORE PROJECT-INFRASTRUCTURE DEVELOPEMENT AT GMLPS
THIRUVATHRA(SCHOOL CODE-24215)-THRISSUR-Construction of new building(G+1)-
Composite Electrical Work**

SI No	Specification	Quantity	Rate	Amount
1	WIRING			
1.001	1.10.3 Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required.Group C			
	Net Total	47.000point	@1176.66/point	55303.02
1.002	1.11 Wiring for twin control light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required.			
	Net Total	1.000point	@1256.19/point	1256.19
1.003	1.14.1 Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface / recessed medium class PVC conduit as required2x1.5 sq.mm + 1x1.5 sq.mm earth wire			
	Net Total	110.000metre	@173.07/metre	19037.70
1.004	1.14.2 Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface / recessed medium class PVC conduit as required2X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire			
	Net Total	180.000metre	@198.12/metre	35661.60
1.005	1.21.1 Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/ recess including cutting the wall and making good the same in case of recessed conduit as required.20 mm			
	Net Total	40.000metre	@99.28/metre	3971.20
1.006	1.21.2 Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/ recess including cutting the wall and making good the same in case of recessed conduit as required.25 mm			

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Sl No	Specification	Quantity	Rate	Amount
	Net Total	10.000metre	@107.48/metre	1074.80
1.007	1.21.3			
	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/ recess including cutting the wall and making good the same in case of recessed conduit as required.32 mm			
	Net Total	25.000metre	@109.56/metre	2739.00
1.008	1.24.1			
	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.5/6 amps switch			
	Net Total	4.000each	@101.45/each	405.80
1.009	1.24.3			
	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.15/16 amp switch			
	Net Total	2.000each	@156.57/each	313.14
1.010	1.24.4			
	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.3 pin 5/6 amp socket outlet			
	Net Total	4.000each	@131.94/each	527.76
1.011	1.24.5			
	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.6 pin 15/16 amp socket outlet			
	Net Total	2.000each	@207.76/each	415.52
1.012	1.24.8			
	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.Bell push			
	Net Total	1.000each	@149.49/each	149.49
1.013	1.25			
	Supplying and fixing two module stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.			
	Net Total	16.000each	@406.42/each	6502.72
1.014	1.26			
	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.			
	Net Total	15.000each	@38.02/each	570.30
1.015	1.27.1			

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Sl No	Specification	Quantity	Rate	Amount
	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required.1 or 2 Module (75mmX75mm)			
	Net Total	5.000each	@288.78/each	1443.90
1.016	1.31			
	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, connection etc. as required. (For light plugs to be used in non residential buildings).			
	Net Total	8.000each	@476.73/each	3813.84
1.017	1.33			
	Supplying and fixing 3 pin, 5 amp ceiling rose on the existing junction box/ wooden block including connection etc as required.			
	Net Total	48.000each	@77.83/each	3735.84
1.018	1.55.3			
	Wiring for group controlled (looped) light point/fan point/exhaust fan point/ call bell point (without independent switch etc.) with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed PVC conduit, and earthing the point with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable etc. as required.Group C			
	Net Total	2.000point	@660.09/point	1320.18
1.019	1.58			
	Supplying and fixing PVC batten/ angle holder including connection etc. as required.			
	Net Total	2.000each	@107.18/each	214.36
1.020	1.27.2			
	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required.3 Module (100mmX75mm)			
	Net Total	2.000each	@317.90/each	635.80
Heading Total(Rs)				139092.16
2 DB AND ACCESSORIES				
2.001	90.11.1.14			
	Supply and installation of sheet steel, phosphatised and painted, dust and vermin proof enclosure of MCB DB including copper /brass bus bar, neutral link, earth bus and DIN rail suitable for fixing MCB/ isolator etc. fixed on wall using suitable anchor bolts or fixed in recess including cutting hole on the wall , making good the damages, colour washing etc. as required4 way (8+12) - double cover TPN vertical DB with provision for fixing 4P MCB / Isolator/ RCCB/ RCBO as incomer and SP/ TP MCB as outgoing (IP 42/43)			
	Net Total	1.000each	@6555.87/each	6555.87
2.002	2.13.1			
	Supplying and fixing following rating, four pole, 415 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.40			

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Sl No	Specification	Quantity	Rate	Amount
	amps			
	Net Total	1.000each	@989.20/each	989.20
2.003	2.15.2			
	Supplying and fixing following rating, four pole, (three phase and neutral), 415 volts, residual current circuit breaker (RCCB), having a sensitivity current upto 300 milliamperes in the existing MCB DB complete with connections, testing and commissioning etc. as required.40 amps			
	Net Total	1.000each	@3121.58/each	3121.58
2.004	2.10.4			
	Supplying and fixing 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.Triple pole			
	Net Total	1.000each	@982.02/each	982.02
2.005	2.10.1			
	Supplying and fixing 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.Single pole			
	Net Total	12.000each	@237.11/each	2845.32
2.006	2.11			
	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.			
	Net Total	13.000each	@9.78/each	127.14
2.007	2.3.3			
	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCBIRCCB/Isolator12 way, Double door			
	Net Total	2.000each	@2440.31/each	4880.62
2.008	2.12.1			
	Supplying and fixing following rating, double pole, 240 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.40 amps			
	Net Total	2.000each	@402.47/each	804.94
2.009	2.14.1			
	Supplying and fixing following rating, double pole, (single phase and neutral), 240 volts, residual current circuit breaker (RCCB), having a sensitivity current upto 300 milliamperes in the existing MCB DB complete with connections, testing and commissioning etc. as required.25 amps			
	Net Total	2.000each	@2290.97/each	4581.94
2.010	OD211544/2023-2024			

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SI No	Specification	Quantity	Rate	Amount
	Supply and installation of dust and Vermin proof wall mounding meter box 450x375x200mm SINTEX make GSMB 4537 or equivalent make with base plate suitable to fix 3 phase energy meter and fix to fix in the box 3 Nos of 63 A,415 V HRC bakelite fuse fitting with HRC fuse link,63 A 2 way neutral link etc			
	Net Total	1.000each	@5749.43/each	5749.43
2.011	OD211545/2023-2024			
	Supply and providing 63ATPN disconnecter fuse switch unit in sheet steel enclosure with ISI marked HRC fuse on wall / angle iron frame including drilling holes in frame making connections etc as required			
	Net Total	1.000each	@4620.65/each	4620.65
2.012	2.23.3			
	Supplying and fixing Cable End Box (Loose Wire Box) (IP 43) suitable for following single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with testing and commissioning etc. as required. 2For 10 way, Double door SPN MCBDB			
	Net Total	0.000each	@887.33/each	0.00
2.013	2.24.1			
	Supplying and fixing Cable End Box (Loose Wire Box) (IP 43) suitable for following triple pole and neutral, sheet steel, MCB distribution board, 415 V, on surface/ recess, complete with testing and commissioning etc. as required.For 4 way, Double door TPN MCBDB			
	Net Total	0.000each	@1075.24/each	0.00
	Heading Total(Rs)			35258.71
3	CABLES AND CABLING			
3.001	7.1.1			
	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required.Upto 35 sq. mm			
	Net Total	32.000metre	@384.40/metre	12300.80
3.002	7.5.1			
	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size in the existing RCC/ HUME/ METAL pipe as required.Upto 35 sq. mm			
	Net Total	20.000metre	@36.37/metre	727.40
3.003	7.7.1			
	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on wall surface as required.Upto 35 sq. mm (clamped with 1mm thick saddle)			
	Net Total	40.000metre	@46.20/metre	1848.00

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SI No	Specification	Quantity	Rate	Amount
3.004	7.10			
	Supplying and fixing cable route marker with 10 cm X 10 cm X 5 mm thick G.I. plate with inscription there on, bolted /welded to 35 mm X 35 mm X 6 mm angle iron, 60 cm long and fixing the same in ground as required.			
	Net Total	4.000no	@455.34/no	1821.36
3.005	9.1.33			
	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required.4 X 16 sq. mm (28mm)			
	Net Total	2.000set	@296.68/set	593.36
3.006	OD209840/2023-2024			
	"Supply of the following size 1.1kV grade XLPE insulated PVC sheathed, armoured Aluminium conductor power cable confirming to IS 7098 (part 1) ammended upto date. - 4Cx16sq.mm Al Cable"			
	Net Total	52.000metre	@152.57/metre	7933.64
3.007	OD209841/2023-2024			
	Supply and laying of 3CX4sqmm submersible copper flexible cable			
	Net Total	24.000metre	@139.38/metre	3345.12
3.008	OD209842/2023-2024			
	Supply of the following size 1.1kV grade XLPE insulated PVC sheathed, armoured Aluminium conductor power cable confirming to IS 7098 (part 1) ammended upto date. - 2Cx10sq.mm Al Cable"			
	Net Total	30.000metre	@110.34/metre	3310.20
3.009	9.1.2			
	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required.2 X 10 sq. mm (19mm)			
	Net Total	4.000set	@235.26/set	941.04
	Heading Total(Rs)			32820.92
4 ELECTRICAL FITTINGS				
4.001	1.41			
	Installation, testing and commissioning of pre - wired, fluorescent fitting/ compact fluorescent fitting of all types, complete with all accessories and tube etc. directly on ceiling/ wall, including connection with 1.5 sq.mm FRLS PVC insulated, copper conductor, single core cable and earthing etc. as required.			
	Net Total	24.000each	@199.32/each	4783.68
4.002	1.49			
	Numbering of ceiling fan / exhaust fan/ fluorescent fittings as required.			

EST No. :LSGD/PMUKILA/EST/85418/2022_17_1_1 (Edit Id : 1)
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Sl No	Specification	Quantity	Rate	Amount
	Net Total	48.000each	@57.18/each	2744.64
4.003	1.50.1			
	Installation of exhaust fan in the existing opening, including making good the damage connection testing, commissioning etc. as required.Upto 450 mm sweep			
	Net Total	4.000each	@431.16/each	1724.64
4.004	OD209834/2023-2024			
	Supply, conveyance, installation, testing and commissioning of ceiling fans of the following sizes using standard accessories excluding resistance type regulator, wiring the down rod with 16/0.20mm PVC insulated and PVC sheathed 650/1100V grade 3 core round copper conductor flex wire or with extended original wiring etc. as required.1200mm sweep -5star rated ceiling fan(BLDC) complete with 300mm down rod , canopies, shackles and blades working on 230V/240V single phase A/C			
	Net Total	16.000each	@2439.15/each	39026.40
4.005	OD209835/2023-2024			
	Supply of indoor industrial surface mounted LED tube and batten along with driver , surge protector,system wattage of 20+/-2 Watts,lumen output of lamp greater than 1600lumen, power factor >0.9,rated life of L70 @ 50,000 hours, system efficacy greater than 70lumen/watt and including all necessary accessories as required complete.			
	Net Total	24.000each	@985.19/each	23644.56
4.006	OD209836/2023-2024			
	Supply of 250 mm sweep,900 rpm light duty exhaust fan in plastic body with self opening louvers working on 230 V AC supply complete with all accessories as required.			
	Net Total	4.000each	@1245.16/each	4980.64
4.007	OD209837/2023-2024			
	Supply of 9W bulb			
	Net Total	2.000each	@116.15/each	232.30
4.008	OD209838/2023-2024			
	Supply and fixing of 36/40 W, 4000 lumen LED, IP 66 street light fitting with aluminium housing, stove enameled CRCA sheet steel reflector cover, acrylic cover complete with THD 0.98, RoHS compliant, duly wired up for use on 230 V AC supply.			
	Net Total	2.000each	@4181.40/each	8362.80
	Heading Total(Rs)			85499.66
5	EARTHING			
5.001	5.4			
	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.			
	Net Total	2.000set	@7390.03/set	14780.06

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SI No	Specification	Quantity	Rate	Amount
5.002	5.9			
	Supplying and laying 25 mm X 5 mm G.I strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with G.I. nut, bolt, spring, washer etc. as required.(Jointing shall be done by overlapping and with 2 sets of G.I. nut bolt & spring washer spaced at 50mm)			
	Net Total	35.000metre	@155.20/metre	5432.00
5.003	5.15			
	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.			
	Net Total	15.000metre	@245.43/metre	3681.45
5.004	90.16.1.3			
	Supply and drawing bare earthing conductors of the following sizes along with wiring/ cables and giving connection as required3.15 mm copper conductor (10 SWG)			
	Net Total	75.000metre	@63.51/metre	4763.25
5.005	90.16.1.2			
	Supply and drawing bare earthing conductors of the following sizes along with wiring/ cables and giving connection as required2.65 mm copper conductor (12 SWG)			
	Net Total	24.000metre	@44.64/metre	1071.36
	Heading Total(Rs)			29728.12
6 WATER PUMP				
6.001	OD209839/2023-2024			
	Horizontal Multistage pump for Domestic Water Supply - Supply, Fixing, Testing and Commissioning of Single Phase Horizontal Multistage pump having SS Shaft, Impeller, Body. Mechanical Seal Carbon & Ceramic / Graphite Alumina. Pump should be capable to deliver 2.6 lps @ 25mtr head, Head range 8 to37mtrs (4.1 lps to 0.4 lps), with 1.1kW/1.5 HP with motor efficiency more than 85% with Wall mounting Microprocessor based common control Panel to operate the pump, Dry run , Phase Reversal Protections etc. level controller for Auto Start/ Stop Function , Digital display , Float Switches, Auto / Manual Operation with suitable rating Single Phase contactor, Overload relay, etc with all mounting accessories ,protection covering shall be IP54 with CRCA powder coated housing.			
	Net Total	1.000each	@40652.50/each	40652.50
6.002	OD213669/2023-2024			
	Providing, fixing, commission and install in position following Portable Fire Extinguisher as per BIS 2190 and BIS: 15683:2006 and with relevant ISI Stamping/Marking. ABC Dry Chemical Powder, Store Pressure Type - 4 Kg.			
	Net Total	1.000each	@3346.28/each	3346.28
6.003	OD213672/2023-2024			

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Sl No	Specification	Quantity	Rate	Amount
	Supplying and installing in position self glowing sign boards of size (150 X 400 mm) made of luminescentsafely, rigid sheet in green colour, photo luminescent ACP sheet in protective glass with two hangingchains & necessary supports to hang it on ceiling.			
	Net Total	1.000each	@696.90/each	696.90
	Heading Total(Rs)			44695.68
	Total Estimation PAC			367095.25
8	Extra Charges			
7.001	Provision for GST			
		367095.25	18.00%	66077.15
	Grand Total			0.00
	Round off			0.00
	Rounded Total(Rs)			433172.40
	Rupees Four Lakh Thirty Three Thousand One Hundred and Seventy Two			



EST No. :LSGD/PMUKILA/EST/85418/2022_17_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

DATA ANALYSIS

**KIIFB-KILA 1 CRORE PROJECT-INFRASTRUCTURE DEVELOPEMENT AT GMLPS
THIRUVATHRA(SCHOOL CODE-24215)-THRISSUR-Construction of new building(G+1)-
Composite Electrical Work**

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
1:WIRING						
1.001-Specification code: 1.10.3						
Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required.						
Group C						
Material						M
1234		20 mm PVC couplers				
		each	2.00000	3.00	6.00	M1
1101		1.5 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable = 2 x 5 + 1 x 2.5 = 12.5 + 0.65 (wastage@ 5%) = 13.15m				
		metre	13.15000	9.00	118.35	M2
2857		PVC fastener 40mm long				
		each	9.00000	0.30	2.70	M3
1402		S.P. 5/6 amps, one way modular switch, ISI marked				
		each	1.00000	28.00	28.00	M4
1421		Modular base & cover plate for 2 module				
		each	0.50000	37.50	18.75	M5
2935		Cement, paint, sand etc.				
		L.S	1.00000	5.00	5.00	M6
1300		Modular GI box for 2 module				
		each	0.50000	22.50	11.25	M7
1239		20 mm PVC junction box, one way				
		each	1.00000	10.00	10.00	M8
1218		20 mm iron staples/saddles/ screws				
		each	9.00000	1.50	13.50	M9

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(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
1229		20 mm PVC bends				
		each	1.00000	4.71	4.71	M10
1224		20 mm dia, ISI marked, PVC conduit = 4.5 + 0.23 (wastage@ 5%) = 4.73 m				
		metre	4.73000	10.44	49.38	M11
Labour					L	
1001		Wireman				
		Day	0.30000	673.00	201.90	L1
1007		Khallasi				
		Day	0.40000	553.00	221.20	L2
1010		Mason, Grade 2				
		Day	0.10000	612.00	61.20	L3
		Total	1.000	point	751.94	
		Unit Total	1.000	point	751.94	
		Add Cartage	267.64	@1.00%	2.68	
		Total			754.62	
		Add Contractors Profit & Overhead	754.62	@15.00%	113.19	
		Total			867.81	
		Add Cost Index	867.81	@35.59%	308.85	
		Total			1176.66	
		GRAND TOTAL		point	1176.66	
Note						
1.002-Specification code: 1.11						
Wiring for twin control light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required.						
Material					M	
1239		20 mm PVC junction box, one way				
		each	1.00000	10.00	10.00	M1
1229		20 mm PVC bends				

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		each	1.00000	4.71	4.71	M2
1234		20 mm PVC couplers				
		each	2.00000	3.00	6.00	M3
1300		Modular GI box for 2 module				
		each	0.50000	22.50	11.25	M4
1421		Modular base & cover plate for 2 module				
		each	0.50000	37.50	18.75	M5
1403		S.P. 5/6 amps, two way modular switch, ISI marked				
		each	1.00000	56.50	56.50	M6
2857		PVC fastener 40mm long				
		each	9.00000	0.30	2.70	M7
2935		Cement, paint, sand etc.				
		L.S	1.00000	5.00	5.00	M8
1101		1.5 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable 2x5 + 1x2.5 = 12.5 + 0.65 (wastage @ 5%) = 13.15m				
		metre	13.15000	9.00	118.35	M9
1240		20 mm PVC junction box, two way				
		each	2.00000	11.00	22.00	M10
1218		20 mm iron staples/saddles/ screws				
		each	9.00000	1.50	13.50	M11
1224		20 mm dia, ISI marked, PVC conduit = 4.5 + 0.23 (wastage @ 5%) = 4.73m				
		metre	4.73000	10.44	49.38	M12
Labour						L
1007		Khallasi				
		Day	0.40000	553.00	221.20	L1
1001		Wireman				
		Day	0.30000	673.00	201.90	L2
1010		Mason, Grade 2				
		Day	0.10000	612.00	61.20	L3

EST No. :LSGD/PMUKILA/EST/85418/2022_17_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Total	1.000	point	802.44	
		Unit Total	1.000	point	802.44	
		Add Cartage	318.14	@1.00%	3.18	
		Total			805.62	
		Add Contractors Profit & Overhead	805.62	@15.00%	120.84	
		Total			926.46	
		Add Cost Index	926.46	@35.59%	329.73	
		Total			1256.19	
		GRAND TOTAL		point	1256.19	
Note						
1.003-Specification code: 1.14.1						
Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface / recessed medium class PVC conduit as required 2x1.5 sq.mm + 1x1.5 sq.mm earth wire						
Material						M
1229		20 mm PVC bends				
		each	4.00000	4.71	18.84	M1
1101		1.5 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable =50.5x3 = 151.5 + 7.58 (wastage @ 5%) = 159.08m				
		metre	159.08000	9.00	1431.72	M2
2935		Cement, paint, sand etc.				
		L.S	1.00000	5.00	5.00	M3
1234		20 mm PVC couplers				
		each	15.00000	3.00	45.00	M4
1218		20 mm iron staples/saddles/ screws				
		each	85.00000	1.50	127.50	M5
1224		20 mm dia, ISI marked, PVC conduit = 50 + 2.5 (wastage @ 5%) = 52.5m				
		metre	52.50000	10.44	548.10	M6
2857		PVC fastener 40mm long				
		each	85.00000	0.30	25.50	M7
Labour						L

EST No. :LSGD/PMUKILA/EST/85418/2022_17_1_1 (Edit Id : 1)
(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
1007		Khallasi				
		Day	2.75000	553.00	1520.75	L1
1001		Wireman				
		Day	2.00000	673.00	1346.00	L2
1010		Mason, Grade 2				
		Day	0.75000	612.00	459.00	L3
		Total	50.000	metre	5527.41	
		Unit Total	1.000	metre	110.55	
		Add Cartage	44.03	@1.00%	0.44	
		Total			110.99	
		Add Contractors Profit & Overhead	110.99	@15.00%	16.65	
		Total			127.64	
		Add Cost Index	127.64	@35.59%	45.43	
		Total			173.07	
		GRAND TOTAL		metre	173.07	
Note						
1.004-Specification code: 1.14.2						
Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface / recessed medium class PVC conduit as required 2X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire						
Material						M
1229		20 mm PVC bends				
		each	4.00000	4.71	18.84	M1
1224		20 mm dia, ISI marked, PVC conduit = 50 + 2.5 (wastage @ 5%) = 52.5m				
		metre	52.50000	10.44	548.10	M2
2935		Cement, paint, sand etc.				
		L.S	1.00000	5.00	5.00	M3
1102		2.5 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable =50.5x3 = 151.5 + 7.58 (wastage @ 5%) = 159.08m				

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		metre	159.08000	14.00	2227.12	M4
2857		PVC fastener 40mm long				
		each	85.00000	0.30	25.50	M5
1218		20 mm iron staples/saddles/ screws				
		each	85.00000	1.50	127.50	M6
1234		20 mm PVC couplers				
		each	15.00000	3.00	45.00	M7
Labour						L
1007		Khallasi				
		Day	2.75000	553.00	1520.75	L1
1001		Wireman				
		Day	2.00000	673.00	1346.00	L2
1010		Mason, Grade 2				
		Day	0.75000	612.00	459.00	L3
Total			50.000	metre	6322.81	
Unit Total			1.000	metre	126.46	
Add Cartage			59.94	@1.00%	0.60	
Total					127.06	
Add Contractors Profit & Overhead			127.06	@15.00%	19.06	
Total					146.12	
Add Cost Index			146.12	@35.59%	52.00	
Total					198.12	
GRAND TOTAL				metre	198.12	
Note						
1.005-Specification code: 1.21.1						
Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/ recess including cutting the wall and making good the same in case of recessed conduit as required. 20 mm						
Material						M
1224		20 mm dia, ISI marked, PVC conduit = 50.0 + 2.5 (wastage@ 5%) = 52.50 m				

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		metre	52.50000	10.44	548.10	M1
2857		PVC fastener 40mm long				
		each	85.00000	0.30	25.50	M2
1218		20 mm iron staples/saddles/ screws				
		each	85.00000	1.50	127.50	M3
1234		20 mm PVC couplers				
		each	15.00000	3.00	45.00	M4
1229		20 mm PVC bends				
		each	4.00000	4.71	18.84	M5
2935		Cement, paint, sand etc.				
		L.S	1.00000	5.00	5.00	M6
Labour						L
1007		Khallasi				
		Day	2.00000	553.00	1106.00	L1
1001		Wireman				
		Day	1.25000	673.00	841.25	L2
1010		Mason, Grade 2				
		Day	0.75000	612.00	459.00	L3
Total			50.000	metre	3176.19	
Unit Total			1.000	metre	63.52	
Add Cartage			15.40	@1.00%	0.15	
Total					63.67	
Add Contractors Profit & Overhead			63.67	@15.00%	9.55	
Total					73.22	
Add Cost Index			73.22	@35.59%	26.06	
Total					99.28	
GRAND TOTAL				metre	99.28	
Note						
1.006-Specification code: 1.21.2						
Supplying and fixing of following sizes of medium class PVC conduit along with accessories in						

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
surface/ recess including cutting the wall and making good the same in case of recessed conduit as required. 25 mm						
Material						M
1225		25 mm dia, ISI marked, PVC conduit = 50.0 + 2.5 (wastage@ 5%) = 52.50 m				
		metre	52.50000	14.00	735.00	M1
1235		25 mm PVC couplers				
		each	15.00000	4.00	60.00	M2
1219		25 mm iron staples/saddles/screws				
		each	85.00000	2.10	178.50	M3
2857		PVC fastener 40mm long				
		each	85.00000	0.30	25.50	M4
2935		Cement, paint, sand etc.				
		L.S	1.00000	5.00	5.00	M5
1230		25 mm PVC bends				
		each	4.00000	6.40	25.60	M6
Labour						L
1010		Mason, Grade 2				
		Day	0.75000	612.00	459.00	L1
1001		Wireman				
		Day	1.25000	673.00	841.25	L2
1007		Khallasi				
		Day	2.00000	553.00	1106.00	L3
Total			50.000	metre	3435.85	
Unit Total			1.000	metre	68.72	
Add Cartage			20.59	@1.00%	0.21	
Total					68.93	
Add Contractors Profit & Overhead			68.93	@15.00%	10.34	
Total					79.27	
Add Cost Index			79.27	@35.59%	28.21	

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Total					107.48	
GRAND TOTAL				metre	107.48	
Note						
1.007-Specification code: 1.21.3						
Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/ recess including cutting the wall and making good the same in case of recessed conduit as required. 32 mm						
Material						M
1231		32 mm PVC bends				
		each	4.00000	9.00	36.00	M1
2935		Cement, paint, sand etc.				
		L.S	1.00000	5.00	5.00	M2
2857		PVC fastener 40mm long				
		each	85.00000	0.30	25.50	M3
1236		32 mm PVC couplers				
		each	15.00000	6.00	90.00	M4
1226		32 mm dia. ISI marked, PVC conduit = 50.0 + 2.5 (wastage@ 5%) = 52.50 m				
		metre	52.50000	12.79	671.48	M5
1220		32 mm iron staples/saddles/screws				
		each	85.00000	3.15	267.75	M6
Labour						L
1001		Wireman				
		Day	1.25000	673.00	841.25	L1
1010		Mason, Grade 2				
		Day	0.75000	612.00	459.00	L2
1007		Khallasi				
		Day	2.00000	553.00	1106.00	L3
Total			50.000	metre	3501.98	
Unit Total			1.000	metre	70.04	
Add Cartage			21.91	@1.00%	0.22	

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Total			70.26	
		Add Contractors Profit & Overhead	70.26	@15.00%	10.54	
		Total			80.80	
		Add Cost Index	80.80	@35.59%	28.76	
		Total			109.56	
		GRAND TOTAL		metre	109.56	
Note						
1.008-Specification code: 1.24.1						
Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. 5/6 amps switch						
Details of cost for one each MATERIAL						
Material						M
1402		S.P. 5/6 amps, one way modular switch, ISI marked				
		each	1.00000	28.00	28.00	M1
Labour						L
1001		Wireman				
		Day	0.03000	673.00	20.19	L1
1007		Khallasi				
		Day	0.03000	553.00	16.59	L2
		Total	1.000	each	64.78	
		Unit Total	1.000	each	64.78	
		Add Cartage	28.00	@1.00%	0.28	
		Total			65.06	
		Add Contractors Profit & Overhead	65.06	@15.00%	9.76	
		Total			74.82	
		Add Cost Index	74.82	@35.59%	26.63	
		Total			101.45	
		GRAND TOTAL		each	101.45	
Note						
1.009-Specification code: 1.24.3						
Supplying and fixing following modular switch/ socket on the existing modular plate & switch						

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
box including connections but excluding modular plate etc. as required. 15/16 amp switch						
Details of cost for one each MATERIAL						
Material						M
1404		S.P.15/16 amps, one way modular switch, ISI marked				
		each	1.00000	63.00	63.00	M1
Labour						L
1001		Wireman				
		Day	0.03000	673.00	20.19	L1
1007		Khallasi				
		Day	0.03000	553.00	16.59	L2
Total			1.000	each	99.78	
Unit Total			1.000	each	99.78	
Add Cartage			63.00	@1.00%	0.63	
Total					100.41	
Add Contractors Profit & Overhead			100.41	@15.00%	15.06	
Total					115.47	
Add Cost Index			115.47	@35.59%	41.10	
Total					156.57	
GRAND TOTAL				each	156.57	
Note						
1.010-Specification code: 1.24.4						
Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. 3 pin 5/6 amp socket outlet						
Details of cost for one each MATERIAL						
Material						M
1405		3 pin 5/6 amps modular socket outlet, ISI marked				
		each	1.00000	59.50	59.50	M1
Labour						L
1007		Khallasi				
		Day	0.02000	553.00	11.06	L1

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
1001		Wireman				
		Day	0.02000	673.00	13.46	L2
Total		1.000	each	84.02		
Unit Total		1.000	each	84.02		
Add Cartage		59.50	@1.00%	0.60		
Total				84.62		
Add Contractors Profit & Overhead		84.62	@15.00%	12.69		
Total				97.31		
Add Cost Index		97.31	@35.59%	34.63		
Total				131.94		
GRAND TOTAL			each	131.94		
Note						
1.011-Specification code: 1.24.5						
Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. 6 pin 15/16 amp socket outlet						
Details of cost for one each MATERIAL						
Material					M	
1406		6 pin 15/16 amps modular socket outlet, ISI marked				
		each	1.00000	95.50	95.50	M1
Labour					L	
1001		Wireman				
		Day	0.03000	673.00	20.19	L1
1007		Khallasi				
		Day	0.03000	553.00	16.59	L2
Total		1.000	each	132.28		
Unit Total		1.000	each	132.28		
Add Cartage		95.50	@1.00%	0.96		
Total				133.24		
Add Contractors Profit & Overhead		133.24	@15.00%	19.99		
Total				153.23		

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Add Cost Index			153.23	@35.59%	54.53	
Total					207.76	
GRAND TOTAL				each	207.76	
Note						
1.012-Specification code: 1.24.8						
Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. Bell push						
Details of cost for one each MATERIAL:						
Material						M
1407		Modular bell push, ISI marked				
		each	1.00000	58.50	58.50	M1
Labour						L
1001		Wireman				
		Day	0.03000	673.00	20.19	L1
1007		Khallasi				
		Day	0.03000	553.00	16.59	L2
Total			1.000	each	95.28	
Unit Total			1.000	each	95.28	
Add Cartage			58.50	@1.00%	0.59	
Total					95.87	
Add Contractors Profit & Overhead			95.87	@15.00%	14.38	
Total					110.25	
Add Cost Index			110.25	@35.59%	39.24	
Total					149.49	
GRAND TOTAL				each	149.49	
Note						
1.013-Specification code: 1.25						
Supplying and fixing two module stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.						
COST FOR EACH MATERIALS						
Material						M

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
1408		Stepped type Modular Fan regulator (2 module)				
		each	1.00000	209.50	209.50	M1
Labour					L	
1007		Khallasi				
		Day	0.04000	553.00	22.12	L1
1001		Wireman				
		Day	0.04000	673.00	26.92	L2
		Total	1.000	each	258.54	
		Unit Total	1.000	each	258.54	
		Add Cartage	209.50	@1.00%	2.10	
		Total			260.64	
		Add Contractors Profit & Overhead	260.64	@15.00%	39.10	
		Total			299.74	
		Add Cost Index	299.74	@35.59%	106.68	
		Total			406.42	
		GRAND TOTAL		each	406.42	
Note						
1.014-Specification code: 1.26						
Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.						
Details of cost for one each MATERIAL:						
Material					M	
1411		Modular blanking plate				
		each	1.00000	12.00	12.00	M1
Labour					L	
1007		Khallasi				
		Day	0.01000	553.00	5.53	L1
1001		Wireman				
		Day	0.01000	673.00	6.73	L2
			1.000	each	24.26	

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Total				
		Unit Total	1.000	each	24.26	
		Add Cartage	12.00	@1.00%	0.12	
		Total			24.38	
		Add Contractors Profit & Overhead	24.38	@15.00%	3.66	
		Total			28.04	
		Add Cost Index	28.04	@35.59%	9.98	
		Total			38.02	
		GRAND TOTAL		each	38.02	
Note						
1.015-Specification code: 1.27.1						
Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required. 1 or 2 Module (75mmX75mm)						
Details of cost for one each MATERIAL						
Material						M
1421		Modular base & cover plate for 2 module				
		each	1.00000	37.50	37.50	M1
2857		PVC fastener 40mm long				
		each	2.00000	0.30	0.60	M2
2935		Cement, paint, sand etc.				
		L.S	1.00000	5.00	5.00	M3
1300		Modular GI box for 2 module				
		each	1.00000	22.50	22.50	M4
Labour						L
1001		Wireman				
		Day	0.04000	673.00	26.92	L1
1007		Khallasi				
		Day	0.10000	553.00	55.30	L2
1010		Mason, Grade 2				
		Day	0.06000	612.00	36.72	L3

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Total	1.000	each	184.54	
		Unit Total	1.000	each	184.54	
		Add Cartage	65.60	@1.00%	0.66	
		Total			185.20	
		Add Contractors Profit & Overhead	185.20	@15.00%	27.78	
		Total			212.98	
		Add Cost Index	212.98	@35.59%	75.80	
		Total			288.78	
		GRAND TOTAL		each	288.78	
Note						
1.016-Specification code: 1.31						
Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, connection etc. as required. (For light plugs to be used in non residential buildings).						
Details of cost for one each MATERIAL:						
Material						M
1405		3 pin 5/6 amps modular socket outlet, ISI marked				
		each	1.00000	59.50	59.50	M1
1301		Modular GI box for 3 module				
		each	1.00000	30.50	30.50	M2
2935		Cement, paint, sand etc.				
		L.S	1.00000	5.00	5.00	M3
2857		PVC fastener 40mm long				
		each	2.00000	0.30	0.60	M4
1422		Modular base & cover plate for 3 module				
		each	1.00000	48.00	48.00	M5
1402		S.P. 5/6 amps, one way modular switch, ISI marked				
		each	1.00000	28.00	28.00	M6
Labour						L
1007		Khallasi				
		Day	0.11000	553.00	60.83	L1

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
1001		Wireman				
		Day	0.07000	673.00	47.11	L2
1010		Mason, Grade 2				
		Day	0.04000	612.00	24.48	L3
		Total	1.000	each	304.02	
		Unit Total	1.000	each	304.02	
		Add Cartage	171.60	@1.00%	1.72	
		Total			305.74	
		Add Contractors Profit & Overhead	305.74	@15.00%	45.86	
		Total			351.60	
		Add Cost Index	351.60	@35.59%	125.13	
		Total			476.73	
		GRAND TOTAL		each	476.73	
Note						
1.017-Specification code: 1.33						
Supplying and fixing 3 pin, 5 amp ceiling rose on the existing junction box/ wooden block including connection etc as required.						
Details of cost for one each MATERIAL						
Material						M
2851		Al. Alloy/ cadmium plated iron screws, 20 mm				
		each	2.00000	0.50	1.00	M1
1401		Ceiling rose, 3 pin, 5 amps ISI marked				
		each	1.00000	12.00	12.00	M2
Labour						L
1001		Wireman				
		Day	0.03000	673.00	20.19	L1
1007		Khallasi				
		Day	0.03000	553.00	16.59	L2
		Total	1.000	each	49.78	

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Unit Total			1.000	each	49.78	
Add Cartage			13.00	@1.00%	0.13	
Total					49.91	
Add Contractors Profit & Overhead			49.91	@15.00%	7.49	
Total					57.40	
Add Cost Index			57.40	@35.59%	20.43	
Total					77.83	
GRAND TOTAL				each	77.83	
Note						
1.018-Specification code: 1.55.3						
Wiring for group controlled (looped) light point/fan point/exhaust fan point/ call bell point (without independent switch etc.) with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed PVC conduit, and earthing the point with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable etc. as required.						
Group C						
Material						M
1218		20 mm iron staples/saddles/ screws				
		each	6.00000	1.50	9.00	M1
1224		20 mm dia, ISI marked, PVC conduit = 4.5-1.5= 3 + 0.15 (wastage @5%) = 3.15 m				
		metre	3.15000	10.44	32.89	M2
1101		1.5 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable = 3x5=15-1.5x3= 10.5 + 0.52 (wastage @ 5%) = 11.02 m				
		metre	11.02000	9.00	99.18	M3
1211		20 mm sockets				
		each	1.00000	5.00	5.00	M4
Labour						L
1001		Wireman				
		Day	0.20000	673.00	134.60	L1
1007		Khallasi				
		Day	0.20000	553.00	110.60	L2
1010		Mason, Grade 2				

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Day	0.05000	612.00	30.60	L3
Total			1.000	point	421.87	
Unit Total			1.000	point	421.87	
Add Cartage			146.07	@1.00%	1.46	
Total					423.33	
Add Contractors Profit & Overhead			423.33	@15.00%	63.50	
Total					486.83	
Add Cost Index			486.83	@35.59%	173.26	
Total					660.09	
GRAND TOTAL				point	660.09	
Note						
1.019-Specification code: 1.58						
Supplying and fixing PVC batten/ angle holder including connection etc. as required.						
Details of cost for one each MATERIAL						
Material						M
2851		Al. Alloy/ cadmium plated iron screws, 20 mm				
		each	3.00000	0.50	1.50	M1
1452		PVC Batten/ Angle Holder				
		each	1.00000	18.00	18.00	M2
Labour						L
1001		Wireman				
		Day	0.04000	673.00	26.92	L1
1007		Khallasi				
		Day	0.04000	553.00	22.12	L2
Total			1.000	each	68.54	
Unit Total			1.000	each	68.54	
Add Cartage			19.50	@1.00%	0.20	
Total					68.74	
Add Contractors Profit & Overhead			68.74	@15.00%	10.31	
Total					79.05	

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Add Cost Index	79.05	@35.59%	28.13	
		Total			107.18	
		GRAND TOTAL		each	107.18	
Note						
1.020-Specification code: 1.27.2						
Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required. 3 Module (100mmX75mm)						
Details of cost for one each MATERIAL						
Material						M
2935		Cement, paint, sand etc.				
		L.S	1.00000	5.00	5.00	M1
1301		Modular GI box for 3 module				
		each	1.00000	30.50	30.50	M2
1422		Modular base & cover plate for 3 module				
		each	1.00000	48.00	48.00	M3
2857		PVC fastener 40mm long				
		each	2.00000	0.30	0.60	M4
Labour						L
1001		Wireman				
		Day	0.04000	673.00	26.92	L1
1010		Mason, Grade 2				
		Day	0.06000	612.00	36.72	L2
1007		Khallasi				
		Day	0.10000	553.00	55.30	L3
		Total	1.000	each	203.04	
		Unit Total	1.000	each	203.04	
		Add Cartage	84.10	@1.00%	0.84	
		Total			203.88	
		Add Contractors Profit & Overhead	203.88	@15.00%	30.58	
		Total			234.46	

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Add Cost Index	234.46	@35.59%	83.44	
		Total			317.90	
		GRAND TOTAL		each	317.90	
Note						
2:DB AND ACCESSORIES						
2.001-Specification code: 90.11.1.14						
Supply and installation of sheet steel, phosphatised and painted, dust and vermin proof enclosure of MCB DB including copper /brass bus bar, neutral link, earth bus and DIN rail suitable for fixing MCB/ isolator etc. fixed on wall using suitable anchor bolts or fixed in recess including cutting hole on the wall , making good the damages, colour washing etc. as required						
4 way (8+12) - double cover TPN vertical DB with provision for fixing 4P MCB / Isolator/ RCCB/ RCBO as incomer and SP/ TP MCB as outgoing (IP 42/43)						
COST FOR 1 EACH A1 MATERIALS						
Material						M
	MR1331	4 way (8 + 12) double cover TPN vertical DB with provision for fixing 4P MCB / Isolator/ RCCB/RCBO as incomer and SP/ TP MCB as outgoing (IP 42/43)				
		each	1.00000	5254.24	5254.24	M1
2860		6 mm dia rivet/ stud/ bolts and nuts				
		each	4.00000	3.25	13.00	M2
Labour						L
1010		Mason, Grade 2				
		Day	0.12000	612.00	73.44	L1
1001		Wireman				
		Day	0.12000	673.00	80.76	L2
	MR719	Wireman Helper				
		Day	0.24000	600.00	144.00	L3
Additional Charges						A
tcode		Hire charges for T & P @ 0.25% of :(M1+M2+L1+L2+L3+A1)				
		L.S	0.00000	5571.94	13.93	A1
tcode		Cement, sand etc. 50% of :(M2)				
		L.S	0.50000	13.00	6.50	A2

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Total	1.000	each	5585.87	
		Unit Total	1.000	each	5585.87	
		Add Cartage	5286.92	@1.00%	52.87	
		Total			5638.74	
		Add Contractors Profit & Overhead	5638.74	@15.00%	845.81	
		Total			6484.55	
		Add Cost Index	200.40	@35.59%	71.32	
		Total			6555.87	
		GRAND TOTAL		each	6555.87	
Note						
2.002-Specification code: 2.13.1						
Supplying and fixing following rating, four pole, 415 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required. 40 amps						
Details of cost for one each MATERIAL						
Material						M
1714		40 amps., 4 pole isolator				
		each	1.00000	531.00	531.00	M1
Labour						L
1007		Khallasi				
		Day	0.08000	553.00	44.24	L1
1001		Wireman				
		Day	0.08000	673.00	53.84	L2
		Total	1.000	each	629.08	
		Unit Total	1.000	each	629.08	
		Add Cartage	531.00	@1.00%	5.31	
		Total			634.39	
		Add Contractors Profit & Overhead	634.39	@15.00%	95.16	
		Total			729.55	
		Add Cost Index	729.55	@35.59%	259.65	
		Total			989.20	
		GRAND TOTAL		each	989.20	

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Note						
2.003-Specification code: 2.15.2						
Supplying and fixing following rating, four pole, (three phase and neutral), 415 volts, residual current circuit breaker (RCCB), having a sensitivity current upto 300 milliamperes in the existing MCB DB complete with connections, testing and commissioning etc. as required. 40 amps						
Details of cost for one each						
Material						M
1721		40 amps. rating, 4 pole RCCB, 100mA/300mA				
		each	1.00000	1885.00	1885.00	M1
Labour						L
1007		Khallasi				
		Day	0.08000	553.00	44.24	L1
1001		Wireman				
		Day	0.08000	673.00	53.84	L2
		Total	1.000	each	1983.08	
		Unit Total	1.000	each	1983.08	
		Add Cartage	1885.00	@1.00%	18.85	
		Total			2001.93	
		Add Contractors Profit & Overhead	2001.93	@15.00%	300.29	
		Total			2302.22	
		Add Cost Index	2302.22	@35.59%	819.36	
		Total			3121.58	
		GRAND TOTAL		each	3121.58	
Note						
2.004-Specification code: 2.10.4						
Supplying and fixing 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required. Triple pole						
Details of cost for one each MATERIAL						
Material						M
1709		6 amps. to 32 amps. ratings, TP MCB,				
		each	1.00000	575.00	575.00	M1

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Labour					L	
1007		Khallasi				
		Day	0.04000	553.00	22.12	L1
1001		Wireman				
		Day	0.04000	673.00	26.92	L2
Total		1.000	each	624.04		
Unit Total		1.000	each	624.04		
Add Cartage		575.00	@1.00%	5.75		
Total				629.79		
Add Contractors Profit & Overhead		629.79	@15.00%	94.47		
Total				724.26		
Add Cost Index		724.26	@35.59%	257.76		
Total				982.02		
GRAND TOTAL			each	982.02		
Note						
2.005-Specification code: 2.10.1						
Supplying and fixing 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.						
Single pole						
Details of cost for one each MATERIAL						
Material					M	
1706		6 amps. to 32 amps. ratings, SP MCB,				
		each	1.00000	102.00	102.00	M1
Labour					L	
1007		Khallasi				
		Day	0.04000	553.00	22.12	L1
1001		Wireman				
		Day	0.04000	673.00	26.92	L2
Total		1.000	each	151.04		
Unit Total		1.000	each	151.04		

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Add Cartage	102.00	@1.00%	1.02	
		Total			152.06	
		Add Contractors Profit & Overhead	152.06	@15.00%	22.81	
		Total			174.87	
		Add Cost Index	174.87	@35.59%	62.24	
		Total			237.11	
		GRAND TOTAL		each	237.11	
Note						
2.006-Specification code: 2.11						
Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.						
Details of cost for one each MATERIAL						
Material						M
1711		Single pole, blanking plate				
		each	1.00000	5.00	5.00	M1
Labour						L
1001		Wireman				
		Day	0.00000	673.00	0.67	L1
1007		Khallasi				
		Day	0.00000	553.00	0.55	L2
		Total	1.000	each	6.22	
		Unit Total	1.000	each	6.22	
		Add Cartage	5.00	@1.00%	0.05	
		Total			6.27	
		Add Contractors Profit & Overhead	6.27	@15.00%	0.94	
		Total			7.21	
		Add Cost Index	7.21	@35.59%	2.57	
		Total			9.78	
		GRAND TOTAL		each	9.78	
Note						
2.007-Specification code: 2.3.3						

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCBIRCCB/Isolator 12 way, Double door						
Details of cost for one each MATERIALS						
Material						M
2935		Cement, paint, sand etc.				
		L.S	1.00000	5.00	5.00	M1
1740		2+6 way, SPN, double door MCB DB				
		each	1.00000	1287.00	1287.00	M2
2855		Steel fastener 6 mm X 75 mm				
		each	4.00000	5.50	22.00	M3
Labour						L
1010		Mason, Grade 2				
		Day	0.12000	612.00	73.44	L1
1001		Wireman				
		Day	0.08000	673.00	53.84	L2
1007		Khallasi				
		Day	0.20000	553.00	110.60	L3
Total			1.000	each	1551.88	
Unit Total			1.000	each	1551.88	
Add Cartage			1314.00	@1.00%	13.14	
Total					1565.02	
Add Contractors Profit & Overhead			1565.02	@15.00%	234.75	
Total					1799.77	
Add Cost Index			1799.77	@35.59%	640.54	
Total					2440.31	
GRAND TOTAL				each	2440.31	
Note						
2.008-Specification code: 2.12.1						
Supplying and fixing following rating, double pole, 240 volts, isolator in the existing MCB DB						

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
complete with connections, testing and commissioning etc. as required. 40 amps						
Details of cost for one each MATERIAL						
Material						M
1712		40 amps., 2 pole isolator				
		each	1.00000	207.00	207.00	M1
Labour						L
1007		Khallasi				
		Day	0.04000	553.00	22.12	L1
1001		Wireman				
		Day	0.04000	673.00	26.92	L2
Total			1.000	each	256.04	
Unit Total			1.000	each	256.04	
Add Cartage			207.00	@1.00%	2.07	
Total					258.11	
Add Contractors Profit & Overhead			258.11	@15.00%	38.72	
Total					296.83	
Add Cost Index			296.83	@35.59%	105.64	
Total					402.47	
GRAND TOTAL				each	402.47	
Note						
2.009-Specification code: 2.14.1						
Supplying and fixing following rating, double pole, (single phase and neutral), 240 volts, residual current circuit breaker (RCCB), having a sensitivity current upto 300 milliamperes in the existing MCB DB complete with connections, testing and commissioning etc. as required. 25 amps						
Details of cost for one each MATERIAL						
Material						M
1717		25 amps. rating, 2 pole RCCB, 100mA/300mA				
		each	1.00000	1394.00	1394.00	M1
Labour						L
1007						

EST No. :LSGD/PMUKILA/EST/85418/2022_17_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Khallasi				
		Day	0.05000	553.00	27.65	L1
1001		Wireman				
		Day	0.05000	673.00	33.65	L2
Total		1.000	each	1455.30		
Unit Total		1.000	each	1455.30		
Add Cartage		1394.00	@1.00%	13.94		
Total				1469.24		
Add Contractors Profit & Overhead		1469.24	@15.00%	220.39		
Total				1689.63		
Add Cost Index		1689.63	@35.59%	601.34		
Total				2290.97		
GRAND TOTAL			each	2290.97		
Note						
2.010-Specification code: OD211544/2023-2024						
Supply and installation of dust and Vermin proof wall mounding meter box 450x375x200mm SINTEX make GSMB 4537 or equilent make with base plate suitable to fix 3 phase energy meter and fix to fix in the box 3 Nos of 63 A,415 V HRC bakelite fuse fitting with HRC fuse link,63 A 2 way neutral link etc						
Material					M	
	MR	meter board syntax				
		each	1.00000	4950.00	4950.00	M1
Total		1.000	each	4950.00		
Unit Total		1.000	each	4950.00		
Add Cartage		4950.00	@1.00%	49.50		
Total				4999.50		
Add Contractors Profit & Overhead		4999.50	@15.00%	749.93		
Total				5749.43		
Add Cost Index		0.00	@35.59%	0.00		
Total				5749.43		
GRAND TOTAL			each	5749.43		
Note						

EST No. :LSGD/PMUKILA/EST/85418/2022_17_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
2.011-Specification code: OD211545/2023-2024						
Supply and providing 63ATPN disconnecter fuse switch unit in sheet steel enclosure with ISI marked HRC fuse on wall / angle iron frame including drilling holes in frame making connections etc as required						
Material						M
	MR	63 A TPN Switch Disconnecter fuse unit with enclosure with ISI marked HRC fuses				
		mm	1.00000	3675.00	3675.00	M1
	MR	25x3mm bolt and nut				
		each	4.00000	2.00	8.00	M2
	MR	Rubber /PVC bushes				
		mm	4.00000	0.50	2.00	M3
	MR	R Earthing and shoulders				
		each	1.00000	11.00	11.00	M4
Labour						L
	MR718	Wireman Assistant				
		Day	0.20000	675.00	135.00	L1
	MR720	Khalasi				
		Day	0.20000	750.00	150.00	L2
		Total	1.000	each	3981.00	
		Unit Total	1.000	each	3981.00	
		Add Cartage	3696.00	@1.00%	36.96	
		Total			4017.96	
		Add Contractors Profit & Overhead	4017.96	@15.00%	602.69	
		Total			4620.65	
		Add Cost Index	0.00	@35.59%	0.00	
		Total			4620.65	
		GRAND TOTAL		each	4620.65	
Note						
2.012-Specification code: 2.23.3						
Supplying and fixing Cable End Box (Loose Wire Box) (IP 43) suitable for following single						

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with testing and commissioning etc. as required. 2 For 10 way, Double door SPN MCBDB						
Material						M
1803		Cable End Boxes for 10 Way SPN DD DB				
		each	1.00000	403.00	403.00	M1
2855		Steel fastener 6 mm X 75 mm				
		each	4.00000	5.50	22.00	M2
2935		Cement, paint, sand etc.				
		L.S	1.00000	5.00	5.00	M3
Labour						L
1007		Khallasi				
		Day	0.06000	553.00	33.18	L1
1010		Mason, Grade 2				
		Day	0.10000	612.00	61.20	L2
1001		Wireman				
		Day	0.06000	673.00	40.38	L3
Total		1.000	each	564.76		
Unit Total		1.000	each	564.76		
Add Cartage		430.00	@1.00%	4.30		
Total				569.06		
Add Contractors Profit & Overhead		569.06	@15.00%	85.36		
Total				654.42		
Add Cost Index		654.42	@35.59%	232.91		
Total				887.33		
GRAND TOTAL			each	887.33		
Note						
2.013-Specification code: 2.24.1						
Supplying and fixing Cable End Box (Loose Wire Box) (IP 43) suitable for following triple pole and neutral, sheet steel, MCB distribution board, 415 V, on surface/ recess, complete with testing and commissioning etc. as required. For 4 way, Double door TPN MCBDB						

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(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Details of cost for one each MATERIAL						
Material						M
1805		Cable End Boxes for 4 Way TPN DD DB				
		each	1.00000	522.32	522.32	M1
2935		Cement, paint, sand etc.				
		L.S	1.00000	5.00	5.00	M2
2855		Steel fastener 6 mm X 75 mm				
		each	4.00000	5.50	22.00	M3
Labour						L
1010		Mason, Grade 2				
		Day	0.10000	612.00	61.20	L1
1007		Khallasi				
		Day	0.06000	553.00	33.18	L2
1001		Wireman				
		Day	0.06000	673.00	40.38	L3
Total			1.000	each	684.08	
Unit Total			1.000	each	684.08	
Add Cartage			549.32	@1.00%	5.49	
Total					689.57	
Add Contractors Profit & Overhead			689.57	@15.00%	103.44	
Total					793.01	
Add Cost Index			793.01	@35.59%	282.23	
Total					1075.24	
GRAND TOTAL				each	1075.24	
Note						
3:CABLES AND CABLING						
3.001-Specification code: 7.1.1						
Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required. Upto 35 sq. mm						

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Details of cost for 100 metres						
Material						M
2946		Fine sand				
		cum	8.76000	806.00	7060.56	M1
2945		Common burnt clay F.P.S. (non modular) bricks class designation 7.5 =874+ 44 (Wastage @ 5%) = 918 Nos				
		each	918.00000	4.00	3672.00	M2
Labour						L
1001		Wireman				
		Day	1.00000	673.00	673.00	L1
1007		Khallasi				
		Day	4.00000	553.00	2212.00	L2
Sub Data						S
14.4		Civil Items : Excavation for cable trenches in soft soil, depth upto 1.2 m including dressing of sides lift upto 1.5 m, including getting out the excavated soil, refilling with sand and or good soil after laying of cable/ pipe etc in layers of 20 cm, ramming, watering and disposal of surplus excavated soil as directed, within a lead of 50 metres.				
		cum	26.26000	416.11	10927.05	S1
Total			100.000	metre	24544.61	
Unit Total			1.000	metre	245.45	
Add Cartage			107.33	@1.00%	1.07	
Total					246.52	
Add Contractors Profit & Overhead			246.52	@15.00%	36.98	
Total					283.50	
Add Cost Index			283.50	@35.59%	100.90	
Total					384.40	
GRAND TOTAL				metre	384.40	
Note						
3.002-Specification code: 7.5.1						
Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size in the existing RCC/ HUME/ METAL pipe as required. Upto 35 sq. mm						

EST No. :LSGD/PMUKILA/EST/85418/2022_17_1_1 (Edit Id : 1)
(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Details of cost for 100 metres						
Labour						L
1001		Wireman				
		Day	1.00000	673.00	673.00	L1
1007		Khallasi				
		Day	3.00000	553.00	1659.00	L2
Total			100.000	metre	2332.00	
Unit Total			1.000	metre	23.32	
Add Cartage			0.00	@1.00%	0.00	
Total					23.32	
Add Contractors Profit & Overhead			23.32	@15.00%	3.50	
Total					26.82	
Add Cost Index			26.82	@35.59%	9.55	
Total					36.37	
GRAND TOTAL				metre	36.37	
Note						
3.003-Specification code: 7.7.1						
Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on wall surface as required. Upto 35 sq. mm (clamped with 1mm thick saddle)						
Details of cost for 100 Meters						
Material						M
2881		GI saddles 19mm x 0.55mm for conduit				
		each	226.00000	1.00	226.00	M1
2857		PVC fastener 40mm long				
		each	452.00000	0.30	135.60	M2
2854		Iron screws, 45 mm X 6 mm				
		each	452.00000	1.10	497.20	M3
2935		Cement, paint, sand etc.				
		L.S	2.00000	5.00	10.00	M4
Labour						L

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(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
1001		Wireman				
		Day	1.00000	673.00	673.00	L1
1007		Khallasi				
		Day	2.00000	553.00	1106.00	L2
1010		Mason, Grade 2				
		Day	0.50000	612.00	306.00	L3
		Total	100.000	metre	2953.80	
		Unit Total	1.000	metre	29.54	
		Add Cartage	8.69	@1.00%	0.09	
		Total			29.63	
		Add Contractors Profit & Overhead	29.63	@15.00%	4.44	
		Total			34.07	
		Add Cost Index	34.07	@35.59%	12.13	
		Total			46.20	
		GRAND TOTAL		metre	46.20	
Note						
3.004-Specification code: 7.10						
Supplying and fixing cable route marker with 10 cm X 10 cm X 5 mm thick G.I. plate with inscription there on, bolted /welded to 35 mm X 35 mm X 6 mm angle iron, 60 cm long and fixing the same in ground as required.						
Details of cost for 1 No						
Material						M
2936		Painting with primer and finish paint				
		L.S	1.00000	5.00	5.00	M1
2868		16 mm X 40 mm bolts and nuts with washers				
		set	2.00000	6.30	12.60	M2
2806		35 mm X 35 mm X 5 mm angle iron				
		kg	1.97000	33.00	65.01	M3
2926		G.I. plate (10cm X 10 cm X 5 mm)				
		kg	0.39000	55.00	21.45	M4

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Labour					L	
1007		Khallasi				
		Day	0.12000	553.00	66.36	L1
1006		Painter				
		Day	0.08000	612.00	47.12	L2
1005		Fitter, Grade 2				
		Day	0.12000	612.00	73.44	L3
Total		1.000	no	290.98		
Unit Total		1.000	no	290.98		
Add Cartage		104.06	@1.00%	1.04		
Total				292.02		
Add Contractors Profit & Overhead		292.02	@15.00%	43.80		
Total				335.82		
Add Cost Index		335.82	@35.59%	119.52		
Total				455.34		
GRAND TOTAL			no	455.34		
Note						
3.005-Specification code: 9.1.33						
Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required. 4 X 16 sq. mm (28mm)						
Details of cost for 1 Set						
Material					M	
2133		Brass compression gland for (28 mm) 4 X 16 sq. mm 1.1 KV grade cable				
		set	1.00000	59.00	59.00	M1
2203		Aluminium lugs for 16 sq.mm cable				
		each	4.00000	2.00	8.00	M2
Labour					L	
1002		Cable jointer				

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(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Day	0.10000	673.00	67.30	L1
1007		Khallasi				
		Day	0.10000	553.00	55.30	L2
Total			1.000	set	189.60	
Unit Total			1.000	set	189.60	
Add Cartage			67.00	@1.00%	0.67	
Total					190.27	
Add Contractors Profit & Overhead			190.27	@15.00%	28.54	
Total					218.81	
Add Cost Index			218.81	@35.59%	77.87	
Total					296.68	
GRAND TOTAL				set	296.68	
Note						
3.006-Specification code: OD209840/2023-2024						
"Supply of the following size 1.1kV grade XLPE insulated PVC sheathed, armoured Aluminium conductor power cable confirming to IS 7098 (part 1) ammended upto date. - 4Cx16sq.mm Al Cable"						
Material						M
	MR808	16 sqmm 4 core PVC/XLPE insulated armoured cable with aluminium conductors for working voltages up to and including 1100 volts conforming IS 1584/part I/1988 for PVC IS 7098 part I for XLPE				
		metre	1.00000	131.36	131.36	M1
Total			1.000	metre	131.36	
Unit Total			1.000	metre	131.36	
Add Cartage			131.36	@1.00%	1.31	
Total					132.67	
Add Contractors Profit & Overhead			132.67	@15.00%	19.90	
Total					152.57	
Add Cost Index			0.00	@35.59%	0.00	
Total					152.57	
GRAND TOTAL				metre	152.57	
Note						
3.007-Specification code: OD209841/2023-2024						

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(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Supply and laying of 3CX4sqmm submersible copper flexible cable						
Material						M
	MR	3CX4 sqmm Flat cable				
		metre	1.00000	120.00	120.00	M1
Total		1.000	metre	120.00		
Unit Total		1.000	metre	120.00		
Add Cartage		120.00	@1.00%	1.20		
Total				121.20		
Add Contractors Profit & Overhead		121.20	@15.00%	18.18		
Total				139.38		
Add Cost Index		0.00	@35.59%	0.00		
Total				139.38		
GRAND TOTAL			metre	139.38		
Note						
3.008-Specification code: OD209842/2023-2024						
Supply of the following size 1.1kV grade XLPE insulated PVC sheathed, armoured Aluminium conductor power cable confirming to IS 7098 (part 1) ammended upto date. - 2Cx10sq.mm Al Cable"						
Material						M
	MR	Supply of the following size 1.1kV grade XLPE insulated PVC sheathed, armoured Aluminium conductor power cable confirming to IS 7098 (part 1) ammended upto date. - 2Cx10sq.mm Al Cable"				
		metre	1.00000	95.00	95.00	M1
Total		1.000	metre	95.00		
Unit Total		1.000	metre	95.00		
Add Cartage		95.00	@1.00%	0.95		
Total				95.95		
Add Contractors Profit & Overhead		95.95	@15.00%	14.39		
Total				110.34		
Add Cost Index		0.00	@35.59%	0.00		
Total				110.34		
GRAND TOTAL			metre	110.34		
Note						

EST No. :LSGD/PMUKILA/EST/85418/2022_17_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
3.009-Specification code: 9.1.2						
Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required. 2 X 10 sq. mm (19mm)						
Details of cost for 1 Set						
Material						M
2202		Aluminium lugs for 10 sq. mm cable				
		each	2.00000	1.00	2.00	M1
2102		Brass compression gland (19 mm) for 2 X 10 sq. mm 1.1 KV grade cable				
		set	1.00000	26.00	26.00	M2
Labour						L
1002		Cable jointer				
		Day	0.10000	673.00	67.30	L1
1007		Khallasi				
		Day	0.10000	553.00	55.30	L2
Total			1.000	set	150.60	
Unit Total			1.000	set	150.60	
Add Cartage			28.00	@1.00%	0.28	
Total					150.88	
Add Contractors Profit & Overhead			150.88	@15.00%	22.63	
Total					173.51	
Add Cost Index			173.51	@35.59%	61.75	
Total					235.26	
GRAND TOTAL				set	235.26	
Note						
4:ELECTRICAL FITTINGS						
4.001-Specification code: 1.41						
Installation, testing and commissioning of pre - wired, fluorescent fitting/ compact fluorescent fitting of all types, complete with all accessories and tube etc. directly on ceiling/ wall, including connection with 1.5 sq.mm FRLS PVC insulated, copper conductor, single core cable and earthing etc. as required.						

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(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Details of cost for one each MATERIAL						
Material						M
2857		PVC fastener 40mm long				
		each	1.00000	0.30	0.30	M1
2852		Iron screws, 35 mm X 6 mm				
		each	2.00000	1.00	2.00	M2
1101		1.5 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable = 0.30 + 0.02 (Wastage @5%) = 0.32m				
		metre	0.32000	9.00	2.88	M3
Labour						L
1007		Khallasi				
		Day	0.10000	553.00	55.30	L1
1001		Wireman				
		Day	0.10000	673.00	67.30	L2
Total		1.000	each	127.78		
Unit Total		1.000	each	127.78		
Add Cartage		5.18	@1.00%	0.05		
Total				127.83		
Add Contractors Profit & Overhead		127.83	@15.00%	19.17		
Total				147.00		
Add Cost Index		147.00	@35.59%	52.32		
Total				199.32		
GRAND TOTAL			each	199.32		
Note						
4.002-Specification code: 1.49						
Numbering of ceiling fan / exhaust fan/ fluorescent fittings as required.						
Details of cost for 100 Fans MATERIAL						
Material						M
2944		Paint				
		Litre	1.00000	170.00	170.00	M1

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(Dsor year : 2018,Cost Index (Place : Trichur,Value : 135.59),GST : 18%

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Labour					L	
1007		Khallasi				
		Day	3.00000	553.00	1659.00	L1
1006		Painter				
		Day	3.00000	612.00	1836.00	L2
		Total	100.000	each	3665.00	
		Unit Total	1.000	each	36.65	
		Add Cartage	1.70	@1.00%	0.02	
		Total			36.67	
		Add Contractors Profit & Overhead	36.67	@15.00%	5.50	
		Total			42.17	
		Add Cost Index	42.17	@35.59%	15.01	
		Total			57.18	
		GRAND TOTAL		each	57.18	
Note						
4.003-Specification code: 1.50.1						
Installation of exhaust fan in the existing opening, including making good the damage connection testing, commissioning etc. as required.						
Upto 450 mm sweep						
Details of cost for one each MATERIAL:						
Material					M	
2855		Steel fastener 6 mm X 75 mm				
		each	4.00000	5.50	22.00	M1
1108		16/0.20 mm (0.5 sqmm) twin core FRLS PVC sheathed, flat flexible copper cable				
		metre	1.00000	9.00	9.00	M2
Labour					L	
1001		Wireman				
		Day	0.20000	673.00	134.60	L1
1007		Khallasi				
		Day	0.20000	553.00	110.60	L2

EST No. :LSGD/PMUKILA/EST/85418/2022_17_1_1 (Edit Id : 1)
(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Total	1.000	each	276.20	
		Unit Total	1.000	each	276.20	
		Add Cartage	31.00	@1.00%	0.31	
		Total			276.51	
		Add Contractors Profit & Overhead	276.51	@15.00%	41.48	
		Total			317.99	
		Add Cost Index	317.99	@35.59%	113.17	
		Total			431.16	
		GRAND TOTAL		each	431.16	

Note

4.004-Specification code: OD209834/2023-2024

Supply, conveyance, installation, testing and commissioning of ceiling fans of the following sizes using standard accessories excluding resistance type regulator, wiring the down rod with 16/0.20mm PVC insulated and PVC sheathed 650/1100V grade 3 core round copper conductor flex wire or with extended original wiring etc. as required. 1200mm sweep -5star rated ceiling fan(BLDC) complete with 300mm down rod , canopies, shackles and blades working on 230V/240V single phase A/C

Material						M
	MR	BLDC FAN WITH REGULATOR				
		each	1.00000	2100.00	2100.00	M1
		Total	1.000	each	2100.00	
		Unit Total	1.000	each	2100.00	
		Add Cartage	2100.00	@1.00%	21.00	
		Total			2121.00	
		Add Contractors Profit & Overhead	2121.00	@15.00%	318.15	
		Total			2439.15	
		Add Cost Index	0.00	@35.59%	0.00	
		Total			2439.15	
		GRAND TOTAL		each	2439.15	

Note

4.005-Specification code: OD209835/2023-2024

Supply of indoor industrial surface mounted LED tube and batten along with driver , surge protector, system wattage of 20+/-2 Watts, lumen output of lamp greater than 1600lumen, power factor >0.9, rated life of L70 @ 50,000 hours, system efficacy greater than 70lumen/watt and

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
including all necessary accessories as required complete.						
Material						M
	MR1163	1x20 W LED box type tube fittings. The fittings shall be made from CRCA MS sheet of minimum thickness 0.50 mm nominal thickness inside & outside (including LED Tube).				
		each	1.00000	848.21	848.21	M1
		Total	1.000	each	848.21	
		Unit Total	1.000	each	848.21	
		Add Cartage	848.21	@1.00%	8.48	
		Total			856.69	
		Add Contractors Profit & Overhead	856.69	@15.00%	128.50	
		Total			985.19	
		Add Cost Index	0.00	@35.59%	0.00	
		Total			985.19	
		GRAND TOTAL		each	985.19	
Note						
4.006-Specification code: OD209836/2023-2024						
Supply of 250 mm sweep,900 rpm light duty exhaust fan in plastic body with self opening louvers working on 230 V AC supply complete with all accessories as required.						
Material						M
	MR1196	250 mm sweep Light Duty Exhaust fan in plastic body with self opening lowers working on 230V single phase A/C				
		each	1.00000	1072.03	1072.03	M1
		Total	1.000	each	1072.03	
		Unit Total	1.000	each	1072.03	
		Add Cartage	1072.03	@1.00%	10.72	
		Total			1082.75	
		Add Contractors Profit & Overhead	1082.75	@15.00%	162.41	
		Total			1245.16	
		Add Cost Index	0.00	@35.59%	0.00	
		Total			1245.16	
		GRAND TOTAL		each	1245.16	
Note						

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
4.007-Specification code: OD209837/2023-2024						
Supply of 9W bulb						
Material						M
	MR	9W BULB				
		each	1.00000	100.00	100.00	M1
		Total	1.000	each	100.00	
		Unit Total	1.000	each	100.00	
		Add Cartage	100.00	@1.00%	1.00	
		Total			101.00	
		Add Contractors Profit & Overhead	101.00	@15.00%	15.15	
		Total			116.15	
		Add Cost Index	0.00	@35.59%	0.00	
		Total			116.15	
		GRAND TOTAL		each	116.15	
Note						
4.008-Specification code: OD209838/2023-2024						
Supply and fixing of 36/40 W, 4000 lumen LED, IP 66 street light fitting with aluminium housing, stove enameled CRCA sheet steel reflector cover, acrylic cover complete with THD 0.98, RoHS compliant, duly wired up for use on 230 V AC supply.						
Material						M
	MR	STREET LIGHT FITTING				
		each	1.00000	3600.00	3600.00	M1
		Total	1.000	each	3600.00	
		Unit Total	1.000	each	3600.00	
		Add Cartage	3600.00	@1.00%	36.00	
		Total			3636.00	
		Add Contractors Profit & Overhead	3636.00	@15.00%	545.40	
		Total			4181.40	
		Add Cost Index	0.00	@35.59%	0.00	
		Total			4181.40	
		GRAND TOTAL		each	4181.40	
Note						

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
5:EARTHING						
5.001-Specification code: 5.4						
Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.						
Details of cost for one Set MATERIAL						
Material						M
2915		600 mm X 600 mm X 6 mm thick G.I. plate				
		each	1.00000	1438.00	1438.00	M1
2945		Common burnt clay F.P.S. (non modular) bricks class designation 7.5				
		each	50.00000	4.00	200.00	M2
2948		Cement				
		tonne	0.01000	6300.00	63.00	M3
2946		Fine sand				
		cum	0.03000	806.00	24.18	M4
2943		Salt				
		kg	5.00000	8.00	40.00	M5
2825		20 mm dia. G.I.Pipe (medium class) = 2.70 + 0.14 (Wastage @ 5%) = 2.84m				
		metre	2.84000	111.00	315.24	M6
2941		Charcoal				
		kg	96.00000	8.00	768.00	M7
2919		G.I. nuts and through bolts with washer				
		each	1.00000	26.00	26.00	M8
2918		Funnel				
		each	1.00000	19.00	19.00	M9
2922		CI/MS cover plate hinged to FRL Same with Locking arrangement				
		each	1.00000	277.00	277.00	M10
Labour						L
1010		Mason, Grade 2				
		Day	0.20000	612.00	122.40	L1
1001						

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Wireman				
		Day	0.50000	673.00	336.50	L2
1007		Khallasi				
		Day	0.50000	553.00	276.50	L3
1012		Beldar/coolie				
		Day	1.45000	553.00	801.85	L4
Total			1.000	set	4707.67	
Unit Total			1.000	set	4707.67	
Add Cartage			3170.42	@1.00%	31.70	
Total					4739.37	
Add Contractors Profit & Overhead			4739.37	@15.00%	710.91	
Total					5450.28	
Add Cost Index			5450.28	@35.59%	1939.75	
Total					7390.03	
GRAND TOTAL				set	7390.03	
Note						
5.002-Specification code: 5.9						
Supplying and laying 25 mm X 5 mm G.I strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with G.I. nut, bolt, spring, washer etc. as required.(Jointing shall be done by overlapping and with 2 sets of G.I. nut bolt & spring washer spaced at 50mm)						
Material						M
2913		25 mm X 6 mm G.I. strip (1.2 kg/mtr) = 30x1.2 = 36.0 + 1.8 (wastage @ 5%) = 37.8 Kg.				
		kg	37.80000	55.00	2079.00	M1
Labour						L
1007		Khallasi				
		Day	0.13000	553.00	69.13	L1
1085		Solder jointing				
		each	5.00000	12.00	60.00	L2

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
1001		Wireman				
		Day	0.13000	673.00	84.13	L3
1002		Cable jointer				
		Day	1.00000	673.00	673.00	L4
		Total	30.000	metre	2965.26	
		Unit Total	1.000	metre	98.84	
		Add Cartage	69.30	@1.00%	0.69	
		Total			99.53	
		Add Contractors Profit & Overhead	99.53	@15.00%	14.93	
		Total			114.46	
		Add Cost Index	114.46	@35.59%	40.74	
		Total			155.20	
		GRAND TOTAL		metre	155.20	
Note						
5.003-Specification code: 5.15						
Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.						
Details of cost for 10 Metres MATERIAL						
Material						M
2851		Al. Alloy/ cadmium plated iron screws, 20 mm				
		each	34.00000	0.50	17.00	M1
2917		GI saddle 20mm x 3 mm				
		each	17.00000	2.50	42.50	M2
2912		25 mm X 5 mm G.I. strip (1.0 kg/mtr) = 10x1.0 = 10.0 + 0.5 (Wastage @ 5%) = 10.5kg				
		kg	10.50000	57.00	598.50	M3
2857		PVC fastener 40mm long				
		each	17.00000	0.30	5.10	M4
Labour						L
1010		Mason, Grade 2				

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Day	0.25000	612.00	153.00	L1
1007		Khallasi				
		Day	0.75000	553.00	414.75	L2
1001		Wireman				
		Day	0.50000	673.00	336.50	L3
Total			10.000	metre	1567.35	
Unit Total			1.000	metre	156.74	
Add Cartage			66.31	@1.00%	0.66	
Total					157.40	
Add Contractors Profit & Overhead			157.40	@15.00%	23.61	
Total					181.01	
Add Cost Index			181.01	@35.59%	64.42	
Total					245.43	
GRAND TOTAL				metre	245.43	
Note						
5.004-Specification code: 90.16.1.3						
Supply and drawing bare earthing conductors of the following sizes along with wiring/ cables and giving connection as required 3.15 mm copper conductor (10 SWG)						
No. 10 SWG copper wire @0.0738kg/m MATERIALS						
Material						M
	MR2043	Copper wire 0 to 14 SWG				
		kg	3.69000	493.22	1819.98	M1
Labour						L
1016		Mate				
		Day	0.50000	553.00	276.50	L1
1001		Wireman				
		Day	0.50000	673.00	336.50	L2
Additional Charges						A
tcode		Wastage @ 5% of :(M1)				

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		L.S	0.05000	1819.98	91.00	A1
Total			50.000	metre	2523.98	
Unit Total			1.000	metre	50.48	
Add Cartage			38.22	@1.00%	0.38	
Total					50.86	
Add Contractors Profit & Overhead			50.86	@15.00%	7.63	
Total					58.49	
Add Cost Index			14.10	@35.59%	5.02	
Total					63.51	
GRAND TOTAL				metre	63.51	
Note						
5.005-Specification code: 90.16.1.2						
Supply and drawing bare earthing conductors of the following sizes along with wiring/ cables and giving connection as required 2.65 mm copper conductor (12 SWG)						
No. 12 S W G copper (12 S W G) MATERIALS						
Material						M
	MR2043	Copper wire 0 to 14 SWG				
		kg	2.44000	493.22	1203.46	M1
Labour						L
1001		Wireman				
		Day	0.40000	673.00	269.20	L1
1016		Mate				
		Day	0.40000	553.00	221.20	L2
Additional Charges						A
tcode		Wastage @ 5% of :(M1)				
		L.S	0.05000	1203.46	60.17	A1
Total			50.000	metre	1754.03	
Unit Total			1.000	metre	35.08	
Add Cartage			25.27	@1.00%	0.25	
Total					35.33	
Add Contractors Profit & Overhead			35.33	@15.00%	5.30	

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SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
		Total			40.63	
		Add Cost Index	11.28	@35.59%	4.01	
		Total			44.64	
		GRAND TOTAL		metre	44.64	
Note						
6:WATER PUMP						
6.001-Specification code: OD209839/2023-2024						
Horizontal Multistage pump for Domestic Water Supply - Supply, Fixing, Testing and Commissioning of Single Phase Horizontal Multistage pump having SS Shaft, Impeller, Body. Mechanical Seal Carbon & Ceramic / Graphite Alumina. Pump should be capable to deliver 2.6 lps @ 25mtr head, Head range 8 to 37mtrs (4.1 lps to 0.4 lps), with 1.1kW/1.5 HP with motor efficiency more than 85% with Wall mounting Microprocessor based common control Panel to operate the pump, Dry run , Phase Reversal Protections etc. level controller for Auto Start/ Stop Function , Digital display , Float Switches, Auto / Manual Operation with suitable rating Single Phase contactor, Overload relay, etc with all mounting accessories ,protection covering shall be IP54 with CRCA powder coated housing.						
Material						M
	MR	WATER PUMP				
		each	1.00000	35000.00	35000.00	M1
		Total	1.000	each	35000.00	
		Unit Total	1.000	each	35000.00	
		Add Cartage	35000.00	@1.00%	350.00	
		Total			35350.00	
		Add Contractors Profit & Overhead	35350.00	@15.00%	5302.50	
		Total			40652.50	
		Add Cost Index	0.00	@35.59%	0.00	
		Total			40652.50	
		GRAND TOTAL		each	40652.50	
Note						
6.002-Specification code: OD213669/2023-2024						
Providing, fixing, commission and install in position following Portable Fire Extinguisher as per BIS 2190 and BIS: 15683:2006 and with relevant ISI Stamping/Marking. ABC Dry Chemical Powder, Store Pressure Type - 4 Kg.						

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(Dsor year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%)

SOR/Spec Code	MR code	Description/Remarks				
		Unit	Quantity	Rate	Amount	Label
Material					M	
	MR2382	Fire Extinguisher-ABC 5 Kg Type				
		each	1.00000	2881.00	2881.00	M1
		Total	1.000	each	2881.00	
		Unit Total	1.000	each	2881.00	
		Add Cartage	2881.00	@1.00%	28.81	
		Total			2909.81	
		Add Contractors Profit & Overhead	2909.81	@15.00%	436.47	
		Total			3346.28	
		Add Cost Index	0.00	@35.59%	0.00	
		Total			3346.28	
		GRAND TOTAL		each	3346.28	
Note						
6.003-Specification code: OD213672/2023-2024						
Supplying and installing in position self glowing sign boards of size (150 X 400 mm) made of luminescentsafely, rigid sheet in green colour, photo luminescent ACP sheet in protective glass with two hangingchains & necessary supports to hang it on ceiling.						
Material					M	
	MR	SIGN BOARD				
		each	1.00000	600.00	600.00	M1
		Total	1.000	each	600.00	
		Unit Total	1.000	each	600.00	
		Add Cartage	600.00	@1.00%	6.00	
		Total			606.00	
		Add Contractors Profit & Overhead	606.00	@15.00%	90.90	
		Total			696.90	
		Add Cost Index	0.00	@35.59%	0.00	
		Total			696.90	
		GRAND TOTAL		each	696.90	
Note						

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(Dsr year : 2018, Cost Index (Place : Trichur, Value : 135.59), GST : 18%

Approved By

(PEN:),



Annexure – 5
Certificates and minutes



Ph : 0487-2615054

G.M.L.P. SCHOOL THIRUVATHRA

P.O. THIRUVATHRA - 680 516
E-mail : gmlpschool@gmail.com

School Code : 24215

Sub District : CHAVAKKAD

Date: 16.09.22

ഭരണ
പ്രധാനധികാരി
ജി.എം.എൽ.പി.എസ്. കോളേജ്
തിരുവത്ത്.

സർക്കാർ
ഉപജ്ഞാതാക്കൾക്ക് അറിയിപ്പ്
കീഴ്.

വിഷയം :- 1121 മാനദണ്ഡം വന്ന ഒരു സ്കൂളിന്റെ പേര് തിരുത്തലിനെക്കുറിച്ച്.

സൂചന :- പൊതുവിദ്യാഭ്യാസ വകുപ്പ്
നമ്പർ (വായ) നമ്പ. 3032/2022 GEDN തിരുത്തലിനെക്കുറിച്ചുള്ള
16-06-2022

സർ,
ഭരണ പ്രധാന മന്ത്രിയുടെ പരിശോധനയിൽ ഉൾക്കൊള്ളുന്ന ഒരു
വിജ്ഞാപനത്തിന്റെ പേര് തിരുത്തലിനെക്കുറിച്ച് താഴെപ്പറയുന്നവർക്ക്.
സ്കൂൾ കോഡ് 24215 അധിഷ്ഠിതമായ ഒരു സ്കൂളിന്റെ
പേര് ജി.എം.എൽ.പി. സ്കൂൾ തിരുവത്ത് എന്നാണ്
ഉദ്ദേശിക്കുന്നത് സാക്ഷ്യപ്പെടുത്തുന്നു.

Attested



തിരുവത്ത്
16-09-2022.

VISWANADHAN, K. B.
Secretary
Chavakkad Municipality



മേൽ
പ്രധാനധികാരി
തോ.പി.കുമാർ



Headmistress
GMLPS, Thiruvathra
P.O. THIRUVATHRA



Ph : 0487-2615054

G.M.L.P. SCHOOL THIRUVATHRA

P.O. THIRUVATHRA - 680 516
E-mail : gmlpschool@gmail.com

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Sub District : CHAVAKKAD

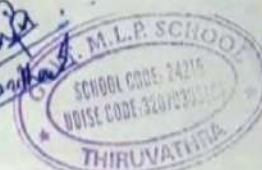
Date... 3/11/2022

ജി.എം.എൽ.പി. എസ് സ്കൂളിലെ 'പുതിയ സ്കൂൾ
 കെട്ടിടം' നിർമ്മാണച്ചുമടായി യോഗമുദയ്ക്ക് 3/11/2022 ന് 3.30ന്
 പി.ടി.എ. കമ്മിറ്റി കൂടി. കിലയിൽ നിന്ന് ഭരണസമിതി സ്കൂളിന്റെ
 പ്രവേശന മാതൃക പ്രാധാന്യപൂർവ്വം ഉദ്യോഗസ്ഥർക്കും അധ്യാപകർക്കും
 നൽകി. കിലയുടെ പ്രതിനിധികളും, ഗവണ്മെന്റ് എഞ്ചിനീയർമാരും
 കൗൺസിലർമാരും ട്രൈബ്യൂണൽ സെൻസിറ്റൈവ് വന്നതും, പട്ടണമുക്ക്
 പരിശോധനയ്ക്കായി വെച്ച് ഭരണസമിതിയുടെ തൊട്ടു പോലത്തും ചർച്ച
 ചെയ്തു. മണ്ണിന്റെ ഫലനശേഷിയിൽ basement ന് മാറ്റം വരുത്തി
 സാധ്യതയുള്ളതായതും മറ്റും ഉദ്യോഗസ്ഥർ പറഞ്ഞതുകൊണ്ട്
 ചർച്ചചെയ്തു.

ഭരണസമിതിയ്ക്ക് കിലയിൽ നിന്ന് വന്ന പത്ത് അംഗീകരിച്ചതായും
 ഓഫീസിലെ തൊട്ടു പടർലിംഗിൽ സ്കൂൾ ഭരണസമിതിയ്ക്ക് പരിശോധന
 ഭാഗത്ത് പരിശോധന നിർമ്മാണമായി. ഓഫീസിലെ പരിശോധന
 തൊട്ടു ഭൂമിയിൽ കെട്ടിടത്തിൽ നൽകിയിട്ടുള്ളതും അതാണ് സാധ്യ
 തയ്ക്കുള്ളതും ചെയ്തു.

P.T.A കമ്മിറ്റിയിൽ ഉൾപ്പെട്ടവർ
 1. ജി.എം.എൽ.പി. P.T.A President
 2. വിജയലക്ഷ്മി P.T.A അംഗം
 3. അനൂപ് P.T.A അംഗം
 4. സാബി P.T.A അംഗം

എസ്
 പ്രധാനപ്രധാന
 B. K. R.
 HEADMASTER
 G.M.L.P. SCHOOL
 THIRUVATHRA





COVERAGE CALCULATION SHEET

BUILDINGS	COVERED AREA
Existing Building (1)	229.94
Existing Building (2)	95.59
Existing Building (3)	43.56
Existing Building (4)	20.06
Proposed Building (1)	218.87
Total Covered Area	608.02 m ²
Total Plot Area	2475.75 m ²
Coverage	24.56 %

It is certified that the
coverage conforms KMBR 2019

Jessy T. J.
JESSY. T. J.
ASSISTANT ENGINEER
PEN-369542
CHAVAKKAD MUNICIPALITY

Rishma P. P.
RISHMA. P. P.
ASSISTANT EXECUTIVE ENGINEER
PEN No: 671066
LSGD (LID & EW)
CHAVAKKAD MUNICIPALITY



SUB SOIL INVESTIGATION REPORT
on
KILA-KIIFB PROJECT-CONSTRUCTION OF A
SCHOOL BUILDING- 1&3 CRORE CATEGORY
GLPS ,THIRUVATRA IN THRISSUR DISTRICT

CLIENT: CHIEF MANAGER,KILA,
THIRUVANANTHAPURAM

Consultant
PRAKASH BABU M
LANDMASS ENGINEERS&CONTRACTORS
KANNUR-2

JULY- 2023

INTRODUCTION

It is proposed to construct a School Building under KILA-KIIFB project, 1&3 crore category for GLPS, Thiruvatra In Thrissur District

As per letter no CM/PMU/KILA-KIIFB/G-100/21/R2 dated 04/02/2023 from the Chief manager, KILA issued work order for soil investigation to M/S Landmass Engineers and contractors Kannur-2. Accordingly the sub soil investigation was carried out.

DETAILS OF SITE

The proposed site is situated at Thiruvatra. Two bore holes were taken at the proposed site. The location of Bore hole was marked in the location and shown in map. Fig-1.

DETAILS OF INVESTIGATION

Wash boring equipment was mobilized at the site on 24/02/2023 and the work was completed on 25/02/23. Bentonite slurry was used to keep the bore hole intact. Standard penetration test were conducted at regular intervals or wherever there is a change in soil strata.

The soil profile obtained during investigation in Two boreholes is presented in bore log chart

ANALYSIS OF RESULTS

General soil profile at the site is almost same. The soil profile are as follows:

In BH1, silty sandy clay was seen formed up to 2.00m depth and N value at 1.50 was 16. below this depth and up to 1.20 depth decayed wood was seen formed and N value @3.00 was 7., Below 3.00 m depth and up to 12m medium sandy clay



was formed and N value at 4.50m,6.00,7.50m,9.00,10.50 and 12.00 were 8,12,8,10,13 and 22 respectively. Below 12.00m fine and stiff sandy clay was seen formed up to 14.00m and below this depth medium and coarse sand layer was seen formed for a depth of 12.80m. and N values at 13.50 was 38 and at 15m,17m,19m,21m,23m,25m and 26.8m were RB respectively Hard rock was seen formed at 26.80 Boring terminated at 27.80 m depth .

In BH2, fine sandy soil was seen formed up to 1.80m depth and N value at 1.50 was 15. below this depth and up to 1.00 depth decayed wood was seen formed and N value @3.00 was 7., Below 3.00 m depth and up to 12m medium sandy clay was formed for 4.30 depth. and N value at 4.50m,6.00, and 7.50m were 7,11.7 respectively. Below this depth fine sandy clay was seen formed for 5.20m depth and N value at 9.00,10.50 and 12.00 were 12.,22 and 42 respectively. Below this depth fine and stiff sandy clay was seen formed up to 15.00m and below this depth medium and coarse sand layer was seen formed for a depth of 11.20m. and N values at 13.50 was >50 and at 15m,17m,19m,21m,23m,25m and 26.2m were >50,>50,>50,>50,42,42 and 44 respectively Hard rock was seen formed at 26.2 Boring terminated at 27.20 m depth .

RECOMMENDATIONS

Test results from field and laboratory analysis ,it is recommended to have Pile foundation up to 15.00 m depth.. The SBC at this depth in two bore holes are >50.00t/m².



Load carrying capacity of Pile for various diameters are summarized below

Dia.of Pile in cm	Load Carrying Capacity in KN	Remarks
30	900.00	
40	1400.00	
50	1950.00	

SUMMARY

As per letter no CM/PMU/KILA-KIIFB/G-100/21/R2 dated 04/02/2023 from the Chief manager ,KILA issued work order for soil investigation to M/S Landmass Engineers and contractors Kannur-2. Accordingly the sub soil investigation was carried out.

The soil profile obtained in bore hole is presented. Based on the field tests, **Test results from field and laboratory analysis ,it is recommended to have Pile foundation up to 15.00 m depth** The above recommendations are made based on the field and laboratory tests conducted at specified locations. If any variations in soil profile or properties of soil is met with other than that mentioned in the report, fresh recommendations may be obtained from the LANDMASS, engineers & contractors ,Kannur -2



PRAKASH BABU. M, MIE
ENGINEER-A
 CHARTERED CIVIL ENGINEER (M-1764947)
 INSTITUTION OF ENGINEERS (INDIA)
 Mob: 9447216826

LANDMASS ENGINEERS & CONTRACTORS
KANNUR-2

PROJECT : KILA-KIIFB-COSTRUCTION OF GOVT:SCHOOLS-1&3CRORE CATEGORY

Borelog chart & Data sheet

GLPS, THIRUVATRA, THRISSUR
CLIENT: MANAGER, KILA-KIIFB PROJECT, THIRUVANANTHAPURAM

Date of Commencement : 24/02/2023

TYPE OF BORING: ROTARY DRILLING
Bore Hole No-1/2

Date of Completion: 24/02/2023

Ground water level 3.00m

Depth below GL m	Soil Profile	Visual description of soil	Thickness of layer in m	Standard penetration test data				Depth of sample		Remarks
				15 cm	30 cm	45 cm	N value			
1.50		Silty sandy clay	2.00	7	8	8	16			
3.00		Decayed wood	1.20	2	4	3	7			
4.50				3	4	4	8			
6.00				3	5	7	12			
7.50		Medium sandy clay(grey)	8.80	4	4	4	8			
9.00				4	5	5	10			
10.50				5	6	7	13			
12.00				7	8	14	22			
13.50		Fine and stiff sandy clay	2.00	13	18	20	>38			
15.00				25	>50	>50	>50			
17.00				>50	>50	>50	>50			
19.00				>50	>50	>50	>50			
21.00		Medium to Coarse sand	12.80	31	>50	>50	>50			
23.00				18	22	20	42			
25.00				17	22	22	44			
26.80				SPT REBOUND						
27.80		Hard rock	1.00							
		Bore hole terminated at 27.80m								


PRAKASH BABU. M, MIE
ENGINEER-A
CHARTERED CIVIL ENGINEER (M-1764947)
INSTITUTION OF ENGINEERS (INDIA)
 Mob: 9447216826

LANDMASS ENGINEERS & CONTRACTORS
KANNUR-2

PROJECT : KILA-KIIFB-COSTRUCTION OF GOVT:SCHOOLS-1&3CRORE CATEGORY

Borelog chart & Data sheet

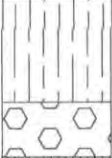
GLPS, THIRUVATRA, THRISSUR
CLIENT: MANAGER, KILA-KIIFB PROJECT, THIRUVANANTHAPURAM

Date of Commencement : 25/02/2023

TYPE OF BORING: ROTARY DRILLING
Bore Hole No-2/2

Date of Completion: 25/02/2023

Ground water level 3.00m

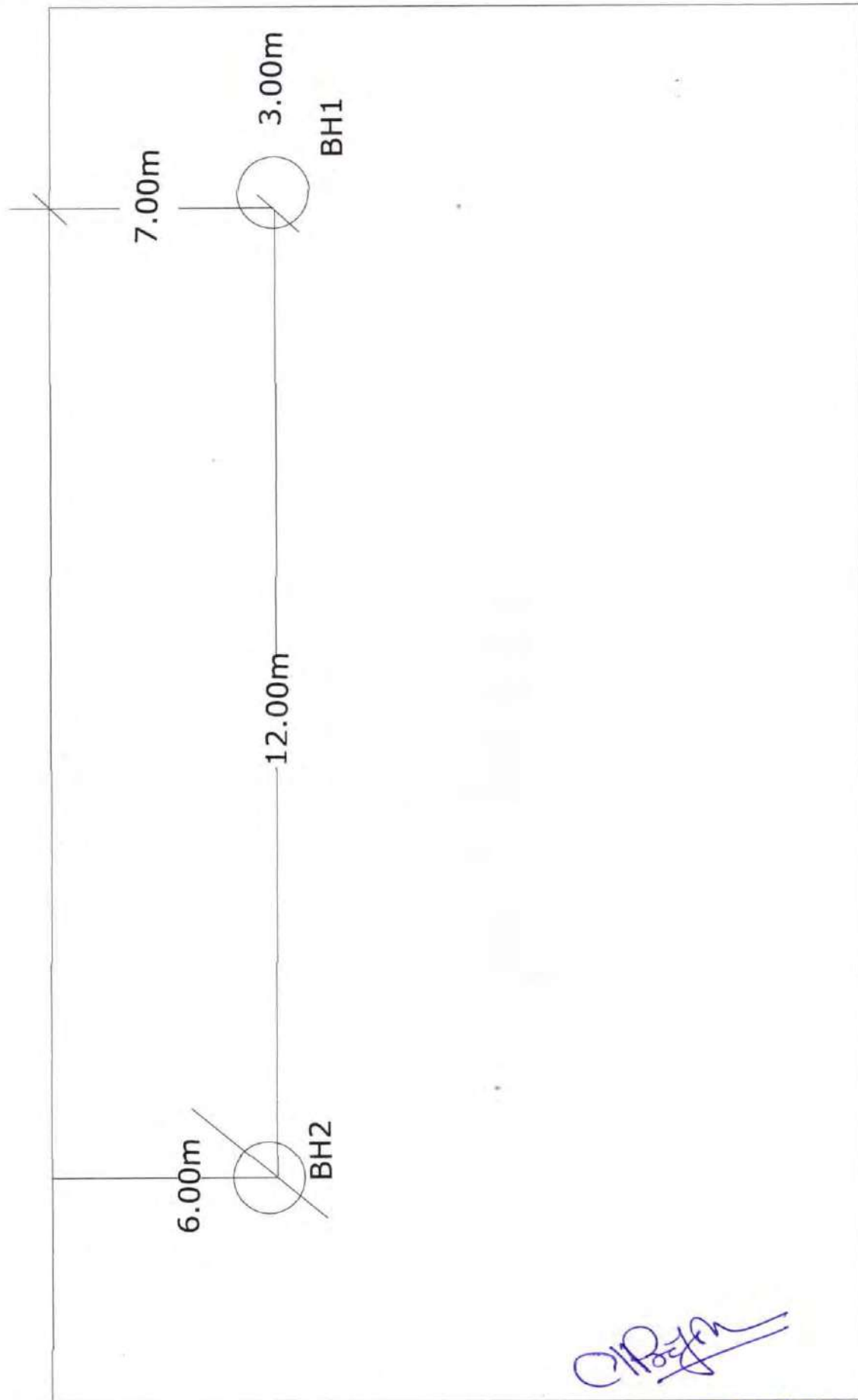
Depth below GL m	Soil Profile	Visual description of soil	Thickness of layer in m	Standard penetration test data				Depth of sample	Remarks
				15 cm	30 cm	45 cm	N value		
1.50		Fine sandy soil	1.80	7	7	8	15		
3.00		Decayed wood	1.00	2	4	3	7		
4.50		Medium sandy clay (grey)	4.30	3	3	4	7		
6.00				4	5	6	11		
7.50				3	3	4	7		
9.00		Fine sandy clay (white)	5.20	4	5	7	12		
10.50				8	8	14	22		
12.00				14	20	22	42		
13.50		Very Fine stiff sandy clay (grey)	2.70	27	>50	>50	>50		
15.00				>50	>50	>50	>50		
17.00				>50	>50	>50	>50		
19.00		Medium to Coarse sand	11.20	24	27	>50	>50		
21.00				17	22	20	42		
23.00				16	22	20	42		
25.00				17	22	22	44		
26.20				SPT REBOUND					
27.20		Hard rock	1.00						
		Bore hole terminated at 27.20m							

PRAKASH BABU. M, MIE
ENGINEER-A
CHARTERED CIVIL ENGINEER (M-1764947)
INSTITUTION OF ENGINEERS (INDIA)
Mob: 9447216826

LOCATION OF BORE HOLE

PROJECT : KILA-KIIFB-COSTRUCTION OF GOVT:SCHOOLS-1&3CRORE CATEGORY

GVHSS . THIRUVATRA, THRISSUR DT



PRAKASH BABU. M, MIE
ENGINEER-A
CHARTERED CIVIL ENGINEER (M-1764947)
INSTITUTION OF ENGINEERS (INDIA)
Mob: 9447216826

TEST REPORT

Information's given by the Client :										Ground Water Level : 3.00 m Below G/L									
Project Name				Proposed GLPS @ Thiruvathra, Trichur.															
Project Client																			
Sample Description				BH NO - 1															
Sampling Date				24/02/2023				Sample Received Date				15/07/2023				Total Depth In Meter : 27.80 m			
Lab Reference Number				Type of Boring												Rotary Drilling			
"N" Value	Depth in m	Sample Number	Type of Sample	Description of soil	Natural water content (%)	IS Classification	Liquid Limit %	Plastic Limit %	Plasticity Index	Fines %	Sand %	Gravel %	Specific gravity	Type Of Test	Cohesion c kg/cm ²	Angle of internal friction ϕ			
16	1.50	SPT-1	DS	CLAYEY SILTY, FINE SAND (GREY)	20	SM				18	82	0	2.61						
7	3.00	SPT-2	DS	CLAYEY SILTY, SANDY, DECAYED WOOD (GREYISH BLACK)	90	OL			NIL	20	20	0							
8	4.50	SPT-3	DS	SILTY CLAYEY, MEDIUM SAND (GREY)	22	SC				25	75	0							
12	6.00	SPT-4	DS	SILTY CLAYEY, MEDIUM SAND (GREY)	20	SC				22	78	0	2.61						
8	7.50	SPT-5	DS	SILTY CLAYEY, MEDIUM SAND (GREY)	22	SC	37	20	17	28	72	0							
10	9.00	SPT-6	DS	SILTY CLAYEY, MEDIUM SAND (GREY)	21	SC				25	75	0		D.S	0.06	32			
13	10.50	SPT-7	DS	SILTY CLAYEY, MEDIUM SAND (GREY)	23	SC				29	71	0	2.62						
22	12.00	SPT-8	DS	SILTY CLAYEY, MEDIUM SAND (GREY)	22	SC				30	70	0							
38	13.50	SPT-9	DS	SILTY CLAYEY, MEDIUM SAND (GREY)	32	SC	46	22	24	48	52	0							
>50	15.00	SPT-10	DS	SILTY, MEDIUM TO COARSE SAND (GREY)	16	SP-SM				10	90	0	2.62						

NOTE : DECAYED WOOD IS NOT SPECIFICALLY MENTIONED


PRAKASH BABU. M., MIE
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 ENGINEER-A
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 INSTITUTION OF ENGINEERS
 Mob: 9447216826

TEST REPORT

Information's given by the Client :

Project Name	Proposed GLPS @ Thiruvathra, Trichur.			Ground Water Level : 3.00 m Below G/L
Project Client	BH NO - 1			Total Depth In Meter : 27.80 m
Sample Description	24/02/2023			
Sampling Date	IJK/23/33			
Lab Reference Number	15/07/2023			

"N" Value	Depth in m	Sample Number	Type of Sample	Description of soil	Natural water content (%)	IS Classification	Liquid Limit %	Plastic Limit %	Plasticity index	Fines %	Type of Boring			Type Of Test	Cohesion c kg/cm ²	Angle of internal friction θ
											Sand %	Gravel %	Specific gravity			
>50	17.00	SPT-11	DS	SLIGHTLY SILTY, MEDIUM TO COARSE SAND (GREY)	16	SP-SM				8	92	0	2.62	D.S	0	36
	19.00	SPT-12	DS	SLIGHTLY SILTY, MEDIUM TO COARSE SAND (GREY)	18	SP				5	95	0				
	21.00	SPT-13	DS	SLIGHTLY SILTY, MEDIUM TO COARSE SAND (GREY)	18	SP			NIL	5	95	0	2.64			
42	23.00	SPT-14	DS	SLIGHTLY SILTY, MEDIUM TO COARSE SAND (GREY)	15	SP				2	98	0		D.S	0	39
44	25.00	SPT-15	DS	SLIGHTLY SILTY, MEDIUM TO COARSE SAND (GREY)	15	SP				2	98	0	2.65			
	26.80	SPT-REBOUNDED		HARD ROCK												

Sheet No : 2


 PRAKASH BABU, M. MIE
 ENGINEER-A
 CHARTERED CIVIL ENGINEERS (INDIA)
 INSTITUTION OF ENGINEERS
 Mob: 9447216826

LOAD CARRYING CAPACITY OF PILE FOR THE PROJECT – GLPS THIRUVATRA,

THRISSUR

As per the soil recommendation, Bored cast in situ - pile foundation up to depth 15 m terminating in medium to coarse sand. The recommended load for different diameter of piles seems to be at a higher side. So providing the calculation for 0.5m diameter pile, by considering the soil profile from the report.

$$Q_u = A_p (1 + D\gamma N_\gamma + P_D N_q) + \sum_{i=1}^n K_i P_{Di} \tan \delta_i A_{si} \quad (\text{As per IS 2911-2010})$$

Ultimate Load, $Q_u = Q_b + Q_r$ Granular soil

Layer Thickness	Description of soil						
1.8 m	Fine sand soil	G	=	2.61	C	=	0 kN/m ²
		N	=	15	γ	=	17.9 kN/m ³
		ϕ	=	31			

1 m	Decayed wood	G	=	0	C	=	0 kN/m ²
		N	=	7	γ	=	0 kN/m ³
		ϕ	=	0			

4.3 m	Medium sandy clay	G	=	2.61	C	=	0 kN/m ²
		N	=	11	γ	=	18.1 kN/m ³
		ϕ	=	30			

5.2 m	Fines sandy clay	G	=	2.62	C	=	0 kN/m ²
		N	=	26	γ	=	18.3 kN/m ³
		ϕ	=	35			

2.7 m	Fine stiff sand clay	G	=	2.62	C	=	0 kN/m ²
		N	=	50	γ	=	17.6 kN/m ³
		ϕ	=	41			

Sectional Area of Pile at Base, A_b	=	0.196	m ²	0.5m dia pile
Pile Shaft Area, A_s	=	19.16	m ²	12.2m Length
Total Base Load of Pile, Q_b	=	601.41	kN	

Total Skin Load of Pile, Q_t	=	1411.91	kN	
Q_u		2013	kN	
Factor of Safety, FOS		2.5		
Allowable Load, Q_a	=	$2013/2.5$	kN	
Q_a	=	805	kN	
Pile group efficiency	=	0.8		
Q_{safe}	=	645	kN	Single pile

SHARANYA VS

5/12/2023


CHITHRA U V
PEN : 613579
Regional Manager (Technical)
Project Management Unit
KILA, Thiruvananthapuram

G.M.L.P. SCHOOL THIRUVATHRA

Ph : 0487-2615054

School Code : 24215

P.O. THIRUVATHRA - 680 516
E-mail : gmlpsschool@gmail.com

Sub District : CHAVAKKAD

Date...22/11/2023

പ്രിയപ്പെട്ടവരേ,

KiFB

സാക്ഷ്യപത്രം.

ജി.എം.എൽ.പി. തിരുവത്ര സ്കൂളിൽ ചേർത്തിരുന്ന
സ്കൂൾ തൊട്ടിയിൽ ചേർത്തിരുന്നതിനായി സാക്ഷ്യപത്രം,
മറ്റു ജനക്കൂട്ടങ്ങളിൽ സൗകര്യത്തിനായി മെലിയിക്കുക ഉദ്ദേശം
പോലിച്ചിട്ടുണ്ട്. കൂടാതെ വെള്ള വെള്ളത്തിനുള്ള
സൗകര്യം ഉൾക്കൊള്ളുന്നതിനായി വെള്ള തടയുമായി നിൽക്കുന്ന
കുട്ടികളുടെ urinal പോലിച്ചു മറ്റാരുടെ നടുവിൽ
ഉടനെ പ്രവേശിക്കുന്നതാണെന്നും ഇതിനാൽ സാക്ഷ്യപത്രം
അയക്കുന്നു.



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പ്രധാനധ്യക്ഷിനി.

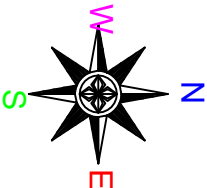
[Signature]
HEADMISTRESS
G. M. L. P. SCHOOL
THIRUVATHRA



G.M.L.P SCHOOL THIRUVATHRA

PLOT AREA-2475.75
COVERAGE - 24.75%

KEY MAP



PROJECT
G.M.L.P SCHOOL
BUILDING

PREPARED BY
CHAVAKKAD
MUNICIPALITY

DRAWING TITILE
SITE PLAN

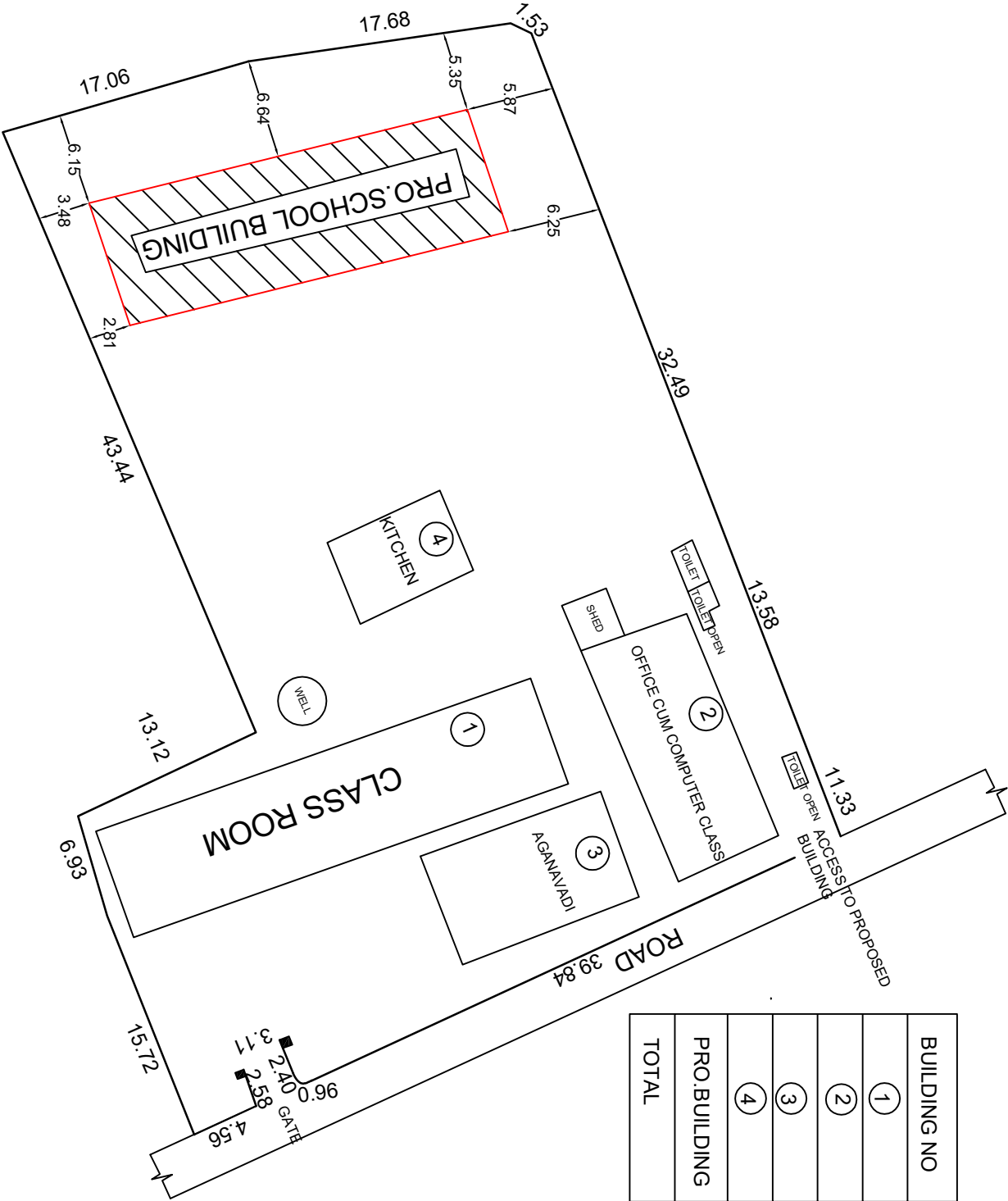
SCALE- 1:100

DRAWN BY :
ANISITHA V J
(IBPMS STAFF)

CHEKED BY :
VIJAYA C.B (PWO)

DATE : 29/09/2022

BUILDING NO	COVERED AREA
①	229.94
②	95.59
③	43.56
④	20.06
PRO BUILDING	223.6
TOTAL	612.75



SITE PLAN

Ph : 0487-2615054

G.M.L.P. SCHOOL

THIRUVATHRA

School Code : 24215

 P.O. THIRUVATHRA - 680 516
 E-mail : gmlpsschool@gmail.com

Sub District : CHAVAKKAD

Date... 16/8/2023.

Strength of school as on June 2023.

	Boys	Girls	
Students	$\frac{91}{}$	$\frac{77}{}$	$= \underline{168}$

Teachers -

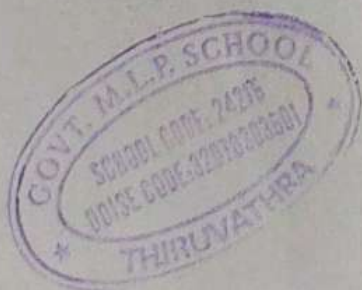
HM	-	1	} Teaching staff.
LPSA	-	4	
Preprimary TR	-	1	
Daily wage TR	-	1	

Total

7

PTCM	-	1	} Non teaching staff.
Preprimary Aya	-	1	

2



HEADMISTRESS
G.M.L.P. SCHOOL
THIRUVATHRA

COMPLIANCE REPORT FOR OBSERVATIONS IN TAR II Report

No.TAR-2023-TRAN

Project Name: GMLPS Thiruvathra

Project Code: GED003-29

SPV: KILA

Please Note that this school Comes in Guruvayur LAC, In TAR Its given as Kaipamangalam LAC

Observations:

SL	OBSERVATIONS	TAR 2 REMARKS	REPLY
1	The student strength of the school at present is 116 with 62 boys & 54 girls. Teaching and the non-teaching staff are 3 & 2 respectively. As there is deficiency of The proposal includes the construction of G+1 structure having 4 classrooms with a total built-up area of 354.66 m ² .	Attached	-
3	Proper Soil investigation report with borehole data and foundation recommendation from Geotechnical Engineer shall be submitted, and the foundation shall be based on the	Attached. Comments pertaining to the soil investigation report attached as Annexure may be seen.	Compiled and report is attached regarding soil investigation

	recommendation of report.		
4	The assumptions for the structural design of the building including the loading and analysis are explained and are not satisfactory. M25 grade of concrete is proposed for all structural elements. The structure is modeled and analyzed in E Tabs software it is reported. The analysis is performed for the various load combinations as per IS: 875 - 1987. Limit state Design is carried out for RC members as per IS: 456 – 2000.	Complied	-
9	Our assessment of the maximum axial load on columns for the 3-story structure indicate that, it will be around 500 KN. Even considering an SBC of 10 kN/m ² , the use of costly strip footing is unjustifiable. As such, instead of costly strip footing, isolated column footing will suffice for the structure. The savings in foundation cost could be used to complete two more	Detailed Report attached as Annexe I may be seen	Soil report & Pile load carrying capacity calculation is attached. As per the foundation recommendation, only 4 class rooms and toilets in GF&FF are only possible and the estimate is attached.

	classrooms. Therefore, the structural design and estimate should be revised accordingly to make the building economically viable.		
10	The student and staff strength reported in the DPR seems to be different in different pages. Please provide the exact details of the student and staff strength so that we can correct the DPR.	Complied	-
11	Cost- Benefit ratio may also be worked out and submitted.	Complied	-
12	WBS shall also be revised, and the start and completion date may be added.	Noted.	-
13	The access available at exact building location, without demolition of part of existing building may also be reported.	Gate is marked in site plan. However access towards proposed building is necessary. SPV has mentioned that Block 1 and toilet blocks in right side will be demolished after functioning of Proposed building which is not acceptable.	Access may be provided in the left side of the compound. Letter from the school authorities and some photos are attached for verification.

14	The Cost of Civil Works submitted is Rs1,05,19,758.66 and for Electrical Work is Rs 4,96,983.85/- and the Grand Total comes to 1,29,99,756.16 /-.	Estimate seen updated. Hence complied.	Estimate is Revised According to soil report and foundation design. Civil work=12566696.15/- Electrical work=433172.4/- Total=12999868.55/-
15	Normally, 6-classrooms can be completed with Rs 1.30 Cr in other centers. Therefore, in addition to foundation change, cost optimization is essential for all the items in the estimate.	Considering the Comments pertaining to the soil investigation report attached as Annexure-1, cost optimization may be done.	Soil report & Pile load carrying capacity calculation is attached. As per the foundation recommendation, only 4 class rooms and toilets in GF&FF are only possible and the estimate is attached.
16	Provision for using extra cement in RCC works: As per CTE direction wide circular no 1/335/2016-FIN, extra cement shall not be payable, Hence RCC specifications with provisions of the same may be examined and	The item is not seen replaced/removed in the estimate	Compiled.

	removed accordingly while submitting the TS documents. SPV may make sure that necessary arrangements are made in tender conditions or may be removed from RCC specifications.		
17	Minimum grade of concrete for water tanks and septic tanks: M25 grade concrete is seen considered for water tanks & septic tanks. As per IS 456(Table 5) and IS 3370 (table 1), the minimum grade of concrete for water retaining structures shall be M30 grade – SPV shall ensure that the necessary provision is included in the TS.	Noted.	-
18	Selection of flooring materials: SPV may use suitable flooring material considering the financial aspect of the project, since flooring materials doesn't have any functional importance on the project SPV may choose wisely the flooring materials to be adopted, Unwanted substitution of flooring materials	Noted.	-

	as extra items and thereby creating financial implications on the project may be avoided from SPVs side.		
19	Add for plaster drip course in seen included estimates: The item is seen included in estimates of schools. As per Cl 13.1.4.3 of CPWD specs, “All corners, arises, angles and junctions shall be truly vertical or horizontal as the case may be and shall be carefully finished. Rounding or chamfering corners, arrises, provision of grooves at junctions etc. where required shall be done without any extra payment. Such rounding, chamfering or grooving shall be carried out with proper templates or battens to the sizes required. Hence the item shall be excluded while preparing TS estimate.	Noted.	-
20	Provision of edge molding for granite flooring: The provision of edge molding for granite works is seen considered in the estimate as a separate item. This	Noted.	-

	shall not be included as a separate item as the same is included in the specifications of granite flooring.		
21	Layouts regarding the mounting height of sanitary and CP fittings shall be obtained.	Noted.	-
22	A Detailed load chart regarding the existing connected load and proposed load in the premises shall be obtained.	Load chart shall be submitted in the appraisal stage itself.	Attached
23	A detailed DB & cable schedule shall be obtained.	Noted.	-
24	The Electrical SLD, earthing and cable route layouts are missing in the DPR. The SPV has to submit the same. The SPV has submitted the light & power layout.	The Electrical SLD, earthing and cable route layouts shall be submitted in the appraisal stage itself.	Attached
25	SPV may consider the quantity of 1 runs as well as 2 runs 1.5sqmm FRLS wire for the point wiring if required.	Noted.	-
26	The cable end boxes shall be considered for the cable glanding.	Noted.	-
27	The leakage current for the incomer breaker's of the light as	Noted.	-

	well as power DB should be of 30 milliampere.		
28	The SPV has to confirm whether the earthing type as well as the number of the pits has been considered based on the earth fault calculations.	Noted.	-
29	Item 4.002 & 4.005 – The ITC of the ceiling fan has been considered twice with respect to these items. The same has to be corrected.	Noted.	-
30	The rate analysis in price format of the same shall also be submitted.	Noted.	-
31	Firefighting provisions as per KMBR/NBC regulations shall be considered.	Noted.	-

Annexure-I –Reply

Opinion of geotechnical expert was seeked. As discussed by him new soil report & Pile load calculation sheet attached

Also, the following may also be attended.

➤ The exact built-up and floor areas may be added to the architectural plan. –

Compiled and revised drawing attached

➤ If toilet facilities are there on the 1st floor, the floor plan may be modified accordingly.-***Compiled and revised drawing attached***

TAR-III-GED003-29-GLPS Thiruvathra

- The foundation has now been changed to pile foundations, and 50 mm diameter piles are recommended as per the soil report. As per the drawing attached in the DPR, there are $2 \times 18 + 1 \times 9 = 45$ piles. However, in the estimate, provision is made only for 27 piles. SPV shall cross check this and shall make necessary corrections in the estimate/drawings.

File No: GED003-29-PA-01

KERALA INFRASTRUCTURE INVESTMENT FUND BOARD

NOTE

Sub:- PROJECTS - - Appraisal file for GED003-29 : Thrissur, Malappuram Cluster

Note #1 Harikrishnan R, APR-2, 10-Mar-2023 02:42 PM

Appraisal file has been initiated vide orders on DPR file. The DPR's of the following schools have been forwarded to Resource Person, KIIFB.

1. GLPS Thiruvatra
2. GUPS karumatra
3. GMUPS Ponmala
4. GUPS Muthiriparamba
5. GUPS chokkad
6. GLPS Manjeri

Note #2 Harikrishnan R, APR-2, 30-Mar-2023 03:28 PM

Action [Submit for Document Verification] in Workflow [Appraisal File Flow -v1] performed.

Note #3 Rismi M, PE-15-PAD, 13-Jul-2023 05:08 PM

Action [Submit] in Workflow [Appraisal File Flow -v1] performed.

Note #4 Harikrishnan R, APR-2, 13-Jul-2023 05:12 PM

Please see the TAR of GMLPS Thiruvatra on attachment. File is returned to SPV for obtaining TAR reply.

Note #5 Harikrishnan R, APR-2, 13-Jul-2023 05:13 PM

Action [Send to SPV for updation] in Workflow [Appraisal File Flow -v1] performed.

Note #6 Dr Joy Elamon ., SPV-KILA-SPV-KILA6612, 25-Jul-2023 04:15 PM

As per the telephonic conversation the file is returning for further proceedings

Note #7 Dr Joy Elamon ., SPV-KILA-SPV-KILA6612, 25-Jul-2023 04:16 PM

Action [Document Updated] in Workflow [Appraisal File Flow -v1] performed.

Note #8 Harikrishnan R, APR-2, 26-Jul-2023 12:45 PM

Please see the TAR of GMUPS Ponmala on attachment. TAR is forwarded for compliance.

Note #9 Harikrishnan R, APR-2, 26-Jul-2023 12:45 PM

Action [Send to SPV for updation] in Workflow [Appraisal File Flow -v1]

]performed.

Note #10 Dr Joy Elamon ., SPV-KILA-SPV-KILA6612, 17-Aug-2023 05:11 PM

Action [Document Updated] in Workflow [Appraisal File Flow -v1]performed.

Note #11 Harikrishnan R, APR-2, 17-Aug-2023 05:13 PM

Please see the TAR of GUPS Muthiraparamba on attachment. TAR is forwarded for compliance.

Note #12 Harikrishnan R, APR-2, 17-Aug-2023 05:13 PM

Action [Send to SPV for updation] in Workflow [Appraisal File Flow -v1]performed.

Note #13 Dr Joy Elamon ., SPV-KILA-SPV-KILA6612, 26-Sep-2023 04:52 PM

Submitting the TAR reply of GUPS Ponmala and GUPS Muthiraparamba

Note #14 Dr Joy Elamon ., SPV-KILA-SPV-KILA6612, 26-Sep-2023 04:52 PM

Action [Document Updated] in Workflow [Appraisal File Flow -v1]performed.

Note #15 Harikrishnan R, APR-2, 07-Oct-2023 12:30 PM

TAR reply of GUPS Ponmala and GUPS Muthiraparamba may be seen on attachment. This may be forwarded to RP.

Note #16 (Seen.) Harikrishnan R, APR-2, 07-Oct-2023 12:30 PM

Note #17 Harikrishnan R, APR-2, 07-Oct-2023 12:30 PM

Action [Forward] in Workflow [Appraisal File Flow -v1]performed.

Note #18 Neeraja M, PE-8 (PAD), 09-Oct-2023 12:11 PM

TAR reply of GUPS Ponmala and GUPS Muthiraparamba forwarded to RP.

Note #19 Neeraja M, PE-8 (PAD), 09-Oct-2023 12:11 PM

Action [Return] in Workflow [Appraisal File Flow -v1]performed.

Note #20 Harikrishnan R, APR-2, 12-Oct-2023 12:14 AM

Please see the TAR of GUPS Chokkad on attachment. File is forwarded for compliance.

Note #21 Harikrishnan R, APR-2, 12-Oct-2023 12:15 AM

Action [Send to SPV for updation] in Workflow [Appraisal File Flow -v1]performed.

Note #22 Athira S S ., SPV-KILA-SPV-ATHIRA, 12-Oct-2023 11:41 AM

Returning the file as per telephonic conversation

Note #23 Athira S S ., SPV-KILA-SPV-ATHIRA, 12-Oct-2023 11:41 AM

Action [Document Updated] in Workflow [Appraisal File Flow -v1]performed.

Note #24 Harikrishnan R, APR-2, 12-Oct-2023 12:09 PM

TAR of GUPS Karumathra is forwarded for compliance.

Note #25 Harikrishnan R, APR-2, 12-Oct-2023 12:09 PM

Action [Send to SPV for updation] in Workflow [Appraisal File Flow -v1]performed.

Note #26 Dr Joy Elamon ., SPV-KILA-SPV-KILA6612, 13-Oct-2023 11:08 AM

Submitting the TAR REPLY OF GMLPS Thiruvathra

Note #27 Dr Joy Elamon ., SPV-KILA-SPV-KILA6612, 13-Oct-2023 11:08 AM

Action [Document Updated] in Workflow [Appraisal File Flow -v1]performed.

Note #28 Harikrishnan R, APR-2, 18-Oct-2023 08:59 AM

Please see the TAR reply of GMLPS Thiruvathra and forward it to RP.

Note #29 (Seen.) Harikrishnan R, APR-2, 18-Oct-2023 08:59 AM

Note #30 Harikrishnan R, APR-2, 18-Oct-2023 08:59 AM

Action [Forward] in Workflow [Appraisal File Flow -v1]performed.

Note #31 Neeraja M, PE-8 (PAD), 18-Oct-2023 10:37 AM

TAR reply forwarded to RP.

Note #32 Neeraja M, PE-8 (PAD), 18-Oct-2023 10:37 AM

Action [Return] in Workflow [Appraisal File Flow -v1]performed.

Note #33 Harikrishnan R, APR-2, 18-Oct-2023 03:29 PM

Please see the TAR of GLPS Manjeri on attachment. The TAR is forwarded to SPV for compliance.

Note #34 Harikrishnan R, APR-2, 18-Oct-2023 03:29 PM

Action [Send to SPV for updation] in Workflow [Appraisal File Flow -v1] performed.

Note #35 Dr Joy Elamon ., SPV-KILA-SPV-KILA6612, 01-Nov-2023 11:00 PM

Submitting the TAR reply and revised DPR of GUPS KARUMATHRA

Note #36 Dr Joy Elamon ., SPV-KILA-SPV-KILA6612, 01-Nov-2023 11:00 PM

Action [Document Updated] in Workflow [Appraisal File Flow -v1] performed.

Note #37 Harikrishnan R, APR-2, 10-Nov-2023 11:54 AM

Please see the TAR reply and revised DPR of GUPS KARUMATHRA on attachment. Please forward these to RP.

Note #38 (Seen.) Harikrishnan R, APR-2, 10-Nov-2023 11:56 AM

Note #39 Harikrishnan R, APR-2, 10-Nov-2023 11:56 AM

Action [Forward] in Workflow [Appraisal File Flow -v1] performed.

Note #40 Neeraja M, PE-8 (PAD), 20-Nov-2023 04:57 PM

File may be returned to SPV.

Note #41 Neeraja M, PE-8 (PAD), 20-Nov-2023 04:57 PM

Action [Return] in Workflow [Appraisal File Flow -v1] performed.

Note #42 Harikrishnan R, APR-2, 20-Nov-2023 05:08 PM

Please see the TAR II of GMLPS Thiruvathra on attachment.

TAR-II- GED003-29- GMLPS Thiruvathra

Observations:

SL	Observations	Compliance	Compliance report
1	The student strength of the school at present is 116 with 62 boys & 54 girls. Teaching and the non-teaching staff are 3 & 2 respectively. As there is deficiency of classrooms, the proposal includes the construction of G+1 structure having 4 classrooms with a total built-up area of 354.66 m ² .	Updated Staff and student Strength for the current year 2023-24 Attachment 1	Attached
3	Proper Soil investigation report with borehole data and foundation recommendation from Geotechnical Engineer shall be submitted, and the foundation shall be based on the recommendation of report.	Soil investigation report is appended as Attachment 2	Attached. Comments pertaining to the soil investigation report attached as Annexure may be seen.
4	The assumptions for the structural design of the building including the loading and analysis are explained and are not satisfactory. M25 grade of concrete is proposed for all structural elements. The structure is modeled and analyzed in E Tabs software it is reported. The analysis is performed for the various load combinations as per IS: 875 - 1987. Limit state Design is carried out for RC members as per IS: 456 – 2000.	DESIGN REVISED	Complied
9	Our assessment of the maximum axial load on columns for the 3-story structure indicate that, it will be around 500 KN. Even considering an SBC of 10 kN/m ² , the use of costly strip footing is unjustifiable. As such, instead of costly strip footing, isolated column footing will	Based on the soil report, pile foundation is adopted. Detailed Estimate and drawings are attached in DPR.	Detailed Report attached as Annexure I may be seen

	suffice for the structure. The savings in foundation cost could be used to complete two more classrooms. Therefore, the structural design and estimate should be revised accordingly to make the building economically viable.	Only 4 classrooms can be constructed with this amount. Full finishing work & fittings of toilet in the first floor is not included in the estimate to limit the amount to 1,30,00000/-	
10	The student and staff strength reported in the DPR seems to be different in different pages. Please provide the exact details of the student and staff strength so that we can correct the DPR.	DPR Corrected as per observations	Complied
11	Cost- Benefit ratio may also be worked out and submitted.	Added	Complied.
12	WBS shall also be revised, and the start and completion date may be added.	Updated with Expected start date and end date, WBS may be submitted during initial stage of execution	Noted.
13	The access available at exact building location, without demolition of part of existing building may also be reported.	Gate is marked in site plan. After the proposed building will be functioning, Block 1 and toilet blocks in the right side will be demolished.	Gate is marked in site plan. However access towards proposed building is necessary. SPV has mentioned that Block 1 and toilet blocks in right side will be demolished after functioning of Proposed building

			which is not acceptable.
14	The Cost of Civil Works submitted is Rs1,05,19,758.66 and for Electrical Work is Rs 4,96,983.85/- and the Grand Total comes to 1,29,99,756.16 /-.	Estimate Updated. For Civil Work=12566657.63/- For Electrical Work=433172.4/- Grant Total=12999830.03/-	Estimate seen updated. Hence complied.
15	Normally, 6-classrooms can be completed with Rs 1.30 Cr in other centers. Therefore, in addition to foundation change, cost optimization is essential for all the items in the estimate.	Estimate revised and 4 number of classrooms are only possible.	Considering the Comments pertaining to the soil investigation report attached as Annexure-1, cost optimization may be done.
16	Provision for using extra cement in RCC works: As per CTE direction wide circular no 1/335/2016-FIN, extra cement shall not be payable, Hence RCC specifications with provisions of the same may be examined and removed accordingly while submitting the TS documents. SPV may make sure that necessary arrangements are made in tender conditions or may be removed from RCC specifications.	Noted.	The item is not seen replaced/removed in the estimate
17	Minimum grade of concrete for water tanks and septic tanks: M25 grade concrete is seen considered for water tanks & septic tanks. As per IS 456(Table 5) and IS 3370 (table 1), the minimum grade of concrete for water retaining structures shall be M30 grade – SPV shall	Noted. Ready-made PVC Septic tank & polyethylene water storage tank are proposing here.	Noted.

	ensure that the necessary provision is included in the TS.		
18	Selection of flooring materials: SPV may use suitable flooring material considering the financial aspect of the project, since flooring materials doesn't have any functional importance on the project SPV may choose wisely the flooring materials to be adopted, Unwanted substitution of flooring materials as extra items and thereby creating financial implications on the project may be avoided from SPVs side.	Noted.	Noted
19	Add for plaster drip course in seen included estimates: The item is seen included in estimates of schools. As per Cl 13.1.4.3 of CPWD specs, "All corners, arises, angles and junctions shall be truly vertical or horizontal as the case may be and shall be carefully finished. Rounding or chamfering corners, arrises, provision of grooves at junctions etc. where required shall be done without any extra payment. Such rounding, chamfering or grooving shall be carried out with proper templates or battens to the sizes required. Hence the item shall be excluded while preparing TS estimate.	Noted.	Noted.
20	Provision of edge molding for granite flooring: The provision of edge molding for granite works is seen considered in the estimate as a separate item. This shall not be included as a separate item as the same is included in the specifications of granite flooring.	Noted.	

21	Layouts regarding the mounting height of sanitary and CP fittings shall be obtained.	DPR updated with drawings	Noted
22	A Detailed load chart regarding the existing connected load and proposed load in the premises shall be obtained.	Noted and will submit along with TS.	Load chart shall be submitted in the appraisal stage itself.
23	A detailed DB & cable schedule shall be obtained.	Noted and will submit along with TS.	Noted.
24	The Electrical SLD, earthing and cable route layouts are missing in the DPR. The SPV has to submit the same. The SPV has submitted the light & power layout.	Noted and will submit along with TS.	The Electrical SLD, earthing and cable route layouts shall be submitted in the appraisal stage itself.
25	SPV may consider the quantity of 1 runs as well as 2 runs 1.5sqmm FRLS wire for the point wiring if required.	Noted. The 1 run and 2 runs of 1.5 sq mm not required.	Noted.
26	The cable end boxes shall be considered for the cable glanding.	Complied.	Noted.
27	The leakage current for the incomer breaker's of the light as well as power DB should be of 30 milliampere.	Leakage current for the incomer breaker is taken the same upto 300mA. while execution 30mA is to be taken.	Noted.
28	The SPV has to confirm whether the earthing type as well as the number of the pits has been considered based on the earth fault calculations.	Noted.	Noted.
29	Item 4.002 & 4.005 – The ITC of the ceiling fan has been considered twice with respect to these items. The same has to be corrected.	The item added for the extra length needed for the fan rad and core cables.The item	Noted.

		removed from the Estimate.	
30	The rate analysis in price format of the same shall also be submitted.	Added in DPR	Noted.
31	Firefighting provisions as per KMBR/NBC regulations shall be considered.	Consider the Fire extinguisher and sign board.	Noted.

Annexure-I

The following comments about the revised proposal of the project: -

Based on the provided detailed estimate and soil exploration facts, it is noticed that the suggestions made by the soil investigation do not align with the foundation provisions.

The table of load-carrying capacity of piles only considers 300mm, 400mm, and 500mm piles, while the estimate proposes 600mm piles. This appears to be on the higher side; since the maximum axial load expected at the foundation for a three-story building here is less than 70 MT.

The soil exploration details submitted are found unclear. The "N" values and the safe bearing capacity (SBC) values are the same figures, which is only possible under certain conditions. As these conditions are not described in the report, there are concerns about the SBC statistics and pile load-carrying capacity.

In summary, soil exploration details furnished are not satisfactory. Safe bearing capacity of the soil, its recommendations, and the foundation provisions recommended seems doubtful. Henceforth, it is advised that a qualified geotechnical engineer be consulted to review the boring logs and provide a comprehensive, clear, and to-the-point soil exploration report.

Specifically, the following concerns may be looked into:

- The foundation provisions do not tally with the soil investigation recommendations.
- The proposed 600mm piles may be oversized for the expected load.
- The "N" values and the SBC values are the same figures, but the conditions necessary for this to be true are not specified.
- The soil exploration report is not comprehensive, clear, and to the point.
- With the present SBC, even isolated footings seem adequate.

Also, the following may also be attended.

- The exact built-up and floor areas may be added to the architectural plan.
- If toilet facilities are there on the 1st floor, the floor plan may be modified accordingly.

Note #43 Harikrishnan R, APR-2, 20-Nov-2023 05:09 PM

Action [Send to SPV for updation] in Workflow [Appraisal File Flow -v1]performed.

Note #44 Athira S S ., SPV-KILA-SPV-ATHIRA, 05-Dec-2023 03:59 PM

Submitting the TAR II reply of GMLPS THIRUVATHRA along with revised DPR

Note #45 Athira S S ., SPV-KILA-SPV-ATHIRA, 05-Dec-2023 03:59 PM

Action [Document Updated] in Workflow [Appraisal File Flow -v1]performed.

Note #46 (Seen.) Harikrishnan R, APR-2, 08-Dec-2023 10:50 AM

Note #47 Harikrishnan R, APR-2, 08-Dec-2023 10:50 AM

Action [Forward] in Workflow [Appraisal File Flow -v1]performed.

Note #48 (Seen.) Neeraja M, PE-8 (PAD), 08-Dec-2023 12:56 PM

Note #49 Neeraja M, PE-8 (PAD), 08-Dec-2023 12:56 PM

Action [Forward] in Workflow [Appraisal File Flow -v1]performed.

Note #50 Chithrakala RP, PE-25-PAD, 08-Dec-2023 01:19 PM

TAR II of GUPS PONMALA attached herewith TAR II gups ponmala

Note #51 (Seen.) Chithrakala RP, PE-25-PAD, 08-Dec-2023 01:20 PM

Note #52 Chithrakala RP, PE-25-PAD, 08-Dec-2023 01:20 PM

Action [Forward] in Workflow [Appraisal File Flow -v1]performed.

Note #53 Nandu T, APM-9, 11-Dec-2023 12:50 PM

TAR II of GUPS PONMALA attached may please be seen.
Requesting orders for returning the file to SPV.

Note #54 (Seen.) Nandu T, APM-9, 11-Dec-2023 12:52 PM

Note #55 Nandu T, APM-9, 11-Dec-2023 12:52 PM

Action [Forward] in Workflow [Appraisal File Flow -v1]performed.

Note #56 Abhilash Vijayan, PM4.PA, 13-Dec-2023 04:07 PM

[Note Para #53](#) approved.

Note #57 Abhilash Vijayan, PM4.PA, 13-Dec-2023 04:08 PM

Action [Return] in Workflow [Appraisal File Flow -v1]performed.

Note #58 Nandu T, APM-9, 14-Dec-2023 06:30 PM

Please see the TAR II of GUPS Ponmala for compliance.

Note #59 Nandu T, APM-9, 14-Dec-2023 06:30 PM

Action [Send to SPV for updation] in Workflow [Appraisal File Flow -v1]performed.

Note #60 Dr Joy Elamon ., SPV-KILA-SPV-KILA6612, 10-Jan-2024 04:36 PM

Action [Document Updated] in Workflow [Appraisal File Flow -v1]performed.

Note #61 (Seen.) Harikrishnan R, APR-2, 10-Jan-2024 04:41 PM

Note #62 Harikrishnan R, APR-2, 10-Jan-2024 04:41 PM

Action [Forward] in Workflow [Appraisal File Flow -v1]performed.

Note #63 Neeraja M, PE-8 (PAD), 10-Jan-2024 04:53 PM

TAR III of GLPS Thiruvathra is attached for further actions.

Note #64 (Seen.) Neeraja M, PE-8 (PAD), 10-Jan-2024 04:53 PM

Note #65 Neeraja M, PE-8 (PAD), 10-Jan-2024 04:53 PM

Action [Forward] in Workflow [Appraisal File Flow -v1]performed.

Note #66 Nandu T, APM-9, 11-Jan-2024 10:56 AM

TAR III of GLPS Thiruvathra is attached for urgent compliance.

Note #67 Nandu T, APM-9, 11-Jan-2024 10:56 AM

Action [Return] in Workflow [Appraisal File Flow -v1]performed.

Note #68 Nandu T, APM-9, 11-Jan-2024 10:57 AM

Action [Send to SPV for updation] in Workflow [Appraisal File Flow -v1]performed.



Accounts Officer