

Local Government & Community Development Department

Punjab Cities Program Construction of SWM Parking Area in Daska City

PC-I

EstimatedCostMillionPKR.33.134

August 2022

Municipal Committee Daska



JERS CONSULTANCY (PVT) LTD (Formely Jers Engineering Consultants)

24-Civic Center, Qusid-e-Azam Town, Township, Lahore (Pakistan) Tel: +92 42 35113123, +92 42 35113124 Fax: +92 42 35113125 E-mail: info@jers.com.pk, mail@jers.com.pk Web: http://www.jers.com.pk



Punjab Cities Program

PC-I Form for Construction of SWM Parking Area in Daska City

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PC-I FORM

for

Construction of Parking Area in Daska City

Project Serial Number

Sector :	Local Government & Community Development Department
Sub Sector:	Social

1. Name of the project	Name of the projectPunjab Cities Program Construction of Parking Area in Daska city			
2.Location	Daska Town is located at 74° -21' East and 32°-20' North at a			
	Location map of the city is attached in Annexur	re-A		
3. Authorities responsible	e for			
i- Sponsoring	Government of the Punjab (through World Bank	(funding)		
ii- Execution	Municipal Committee Daska			
iii- Operation and Maintenance	Municipal Committee Daska			
iv-Concerned Provincial Department	Local Government and Community Development Department Punjab			
4a.Plan Provision				
 If the project is included in medium term/five year plan, 	Punjab Cities Program (PCP) is a World Bank f total cost of USD 236.00 million and comprise components.	es of below mentioned		
specify actual	Total loan from World Bank	USD 200.00 million		
allocation	Component-1 Infrastructure development (PforR)	USD 180.00 million		
	Component-2 Technical Assistance	USD 20.00 million		
	MCs share (20% of PforR component) equivalent to:	USD 36.00 million		
	Total Program cost	USD 236.00 million		
Component-2 i-e Technical Assistance component of Program co USD 20.00 million is meant for management cost of the Program				

ii- If not included in the current plan, what warrants its inclusion and how it is now proposed to be accommodated	capacity building of MCs & Government Departments and is included in the medium term/ five-year plan and has been funded now in ADP 2022-23 - under General Serial No-1769 with allocation of PKR 1329.90 million as foreign component.
iii If the project is proposed to be financed out of block provision indicate.	The Project is being financed by World Bank as Donor along with 20% co-financing from the Program Units and is not proposed to be financed out of block allocation.
4b- Provision in the current year PSDP/ADP	PKR. 1329.90.00 million under ADP 2022-23 General Serial No 1769 as described above.
5. Project objectives and its relationship with sector objectives	 Sector Objectives The sector objectives include: Provision of efficient and effective municipality services to the masses. Community development through improving basic infrastructure. Clean and green environment for better living standards. Effective use of land through master planning of urban areas. Social uplifting and cohesion through provision of public open spaces and play grounds. Ease in mobility and communication. Cost efficient Solid Waste Management through waste to energy initiatives. Capacity building of Local Governments. Efficient Road network to make areas easily accessible Objectives of the Project The Punjab Cities Program aims at improvement of infrastructure of municipal services such as roads, cross roads, street lights, parks and parking shed for SWM machinery for improved communication and recreational facilities.

	1. Provision of suitable parking area for the MC Vehicles.
	2. Making MC self-sufficient in small repairs to the machinery &
	Equipment possessed by MC
	3. Provision of a washing facilities for the vehicles
	4. Effective protection to the vehicles against the solar radiation and
	Ultraviolet rays, rain, hail, wind, and dust.
	5. Slowing down the deterioration of vehicles, therefore reducing the cost of maintenance.
	6. Enhancement of the security of vehicles during non-working
	hours.
	7. Better watch and ward of MC machinery and equipment and reduction of losses due to theft of equipment and spares.
	8. Provision of better solid waste management service by protection of the machinery and equipment.
	Hence, the objectives of the project are in line with the sector objectives
	at serial No-1, 2, 3 & 7 and the project forms integral part of the
	concerned sector.
6. Description, justification	on, technical parameters and technology transfer aspects
i. Present Condition	As per PLGA-12019 Urban Local Governments (ULGs) are basically
	and wholly responsible for delivery of the municipal services with a
	service delivery level which should satisfy the consumers and citizen.
	Unfortunately, the prevalent conditions of the service delivery are not
	encouraging in the city.
	The major reason of unsatisfactory service delivery is the lack of proper
	maintenance of the municipal infrastructure in all sectors causing
	consumer dissatisfaction at one end and degradation of the
	infrastructure on the other end apart from very low revenue recovery as
	the consumers are reluctant to pay because of deteriorated service
	delivery.
	MC Daska has some machinery and equipment which is already being
	used for collection and disposal of the solid waste. Under Punjab Cities
	Program modern, efficient and cost-effective machinery and equipment
	has been provided to MC Daska for provision of better solid waste
	management facilities to the people of Daska.
	At present, there is no appropriate parking space available with MC for
	the existing and newly procured machinery and equipment and dire need
	for parking area facility is being felt. Currently the solid waste
	machinery is being parked under open sky in various spaces available
	with MC. Absence of permanent parking space can cause machinery

	deterioration and compromise its safety that will lead to non- sustainability of solid waste management.		
ii. Description of the subproject-	The project comprises of construction of Parking Area for solid waste management and other machinery and equipment possessed by MC over an area of 2.65 Kanals in the city. Detail of the components of Parking Area have been given in the table below.		
 iii Detail of civil works, equipment & machinery and other physical facilities 	The detail of Parking Shed for SWM Machinery to be constructed in the city, is given below: Location: Stadium Road		
physical facilities	S. Detail of works		
	1Boundary wall and Entrance gate2Sheds for vehicles with trusses and Aluzinc sheeting at the top3Office room with toilet4Workshop with tool room and toilet5Washing ramp7Parking aprons8Guard room9Generator pad10Water supply and drainage system		
iv Indicate governess issues of the sector relevant to the project and strategy to resolve them			

7- Capital Cost of Project	The sum	mary of the works included in the project is give	en below;		
	S. No	Item of works	Cost (PKR million)		
	1	Office Building	1.202		
	3	Guard Room	0.588		
	5	Workshop	2.901		
	6	Parking Shed (Size 85' X 32')	7.952		
	7	Parking Shed (Size 60' X 32')	5.780		
	9	Washing Pit	0.539		
	10	Generator Pad	0.155		
	11	Pump Pad	0.014		
	12	Septic Tank	0.303		
	13	External Boundary Wall + Tuff Paver + Lawn	6.759		
	14	External Plumbing Work	0.826		
	15	External Electrical Work	3.774		
	17	Environmental Mitigation Cost	0.112		
	18	Dismantling Work	0.055		
		Total cost	30.967		
		Contingencies @2%	0.619		
		Punjab Sales Tax @5%	1.548		
		Grand Total	33.134		
	See Annexure-B for details				
 Indicate date of estimation of the project cost 	The proj 2022	ect estimates have been framed during the month	n of August,		
i- Basis of determining the estimates be provided.	actually (MRS) i Annual o For item	estimates have been framed on the basis of bil required at site and unit rates from the Market ssued by the Government of Punjab (District S of year 2022). s not available in the MRS, the same have been a ng market rates.	t Rate System Sialkot 2 nd B		

iii- Provide year wise estimation of physical activities	S. #			g table: Year 2022-2023
	1	Boundary wall and gate		100%
	2	Sheds for vehicles with trusses and Al	uzinc	100%
		sheeting at the top		
	3	Office room with toilet		100%
	4	Workshop with tool room and toilet		100%
	5	Washing ramp		100%
	7	Parking aprons		100%
	8	Guard room		100%
	9	Generator pad		100%
	10	Water supply and drainage system		100%
	12	Contingencies & PRS Taxes		100%
on the basis of each item of work.		figures are in million rupees)		Year
item of work.	S.		Total cost	2022-2023
	#	Items of Shed	(Million Rs)	(Million
			· · · ·	Rs)
	1	Office Building	1.202	1.202
	3	Guard Room	0.588	0.588
		Workshop	2.901	2.901
		Parking Shed (Size 85' X 32')	7.952	7.952
		Parking Shed (Size 60' X 32')	5.780	5.780
	9	Washing Pit	0.539	0.539
	10	Generator Pad	0.155	0.155
	11	Pump Pad	0.014	0.014
	12	Septic Tank	0.303	0.303
	13	External Boundary Wall + Tuff Paver + Lawn	6.759	6.759
	14	External Plumbing Work	0.826	0.826
	15	External Electrical Work	3.774	3.774
	16	Environmental Mitigation Cost	0.112	0.112
	17	Dismantling Work	0.055	0.055
	╽┠──┤	Project Cost	30.967	30.967
	18	Contingencies @2%	0.619	0.619
		-		

	Total Cost 33.134 33.134				
8-Annual recurrent cost after completion of the project and source of financing	Cost in Million = Rs. 0.631 (details attached in Annexure-1)				
9- Demand & Supply	Existing supply level				
Analysis i- Existing Capacity of services	 There is no existing parking facility for the SWM machinery. Resultantly the vehicles are parked at open spaces with no protection. MC Daska is unable to protect the solid waste transportation and other MC vehicles because of non-availability of appropriate parking area. 				
ii- Projected Demand for 10 years	 parking area. The Parking area is required to park and protect the solid waste transportation and other MC vehicles. The influence and value of parking spaces in planning for livable communities is very essential. Parking space is more than a necessary element of larger residential or commercial uses; it merits consideration as a distinct land use that affects travel behavior and the environment. The provision of parking lots reduces the congestion on streets and roads and improves traffic flow. District Daska lacks parking space for the SWM Machinery which are therefore parked in open or rental spaces. The proposal is to construct a parking shed for SWM machinery to accommodate a total of 10 vehicles. The municipal services require radical improvement to enhance the efficiency of the service to increase service delivery to a satisfactory level. Many shortcomings, problems and bottlenecks have been observed in the present situation which could not be addressed by MC due to funding constraints and now have been proposed to be addressed by 				
 iii- Capacity of other similar projects being implemented in public/private sector 	No other project of this nature is being implemented in public as well as private sector because of funding constrains in the Unit.				
iv- Supply and Demand gaps	As explained above there is no parking area in Daska City for solid waste transportation and other MC vehicles. So there is a large gap between the supply and demand.				
v-Designed capacity and output of the project	1)-Table showing details of the parking area is given below:LocationComponentsNo. of ShedsAreaTotal areaShed area & Nos.				

					I
	Stadium Road	As listed in section-7	02		1 No= 85'x32' 1 No= 60'x32'
	2)-Parking shed is designed for 10-year life.3)-This Parking shed is designed for 10 vehicles of SWM Machinery.				
10. Financial Plan	e e		•	U U	has been funded by
Sources of financing		r 16 PCP cities	5		,
<u>Debt</u>		Government of			USD 200 million
a) Indicate the local and	-	for Infrastructu		1	USD 180 million
foreign debt Loan	For capacity	for Investmen building of M and program ma	ICs & t	hree Govt.	USD 20 million
	20% share of	Municipalities i	is equiva	lent to	USD 36 million
	Total funds Development	available	for Int	frastructure	USD 216 million
	This project w	vill be funded u	nder this	financing.	
b) Equity	A. Loan/grant to MC The amount of loan converted to grant to MC Daska will be Rs 26.507 million. The financing of the project will be as given below:				
	Grant to MC Daska from World Bank (80% of cost of PC-I) PKR 20			6.507 million	
	20% Co-fin	ance by MC		PKR 6	.628 million
	Total cost o	f project		PKR 3	3.134 million
c) Grants	*The loan is fro which will tr	ost =Rs. 33.13 om World Bank ickle down to N ing given by Go	to Gove AC Dask	ernment of P a as grant.	akistan/Punjab
The World Bank loan to Gove down as grant to MC from Gov				/Punjab will trickle	
d) Weighted cost of capital					
11-Project benefits and an	alysis				
i.Financial:	• No income will be generated from the project and hence the Financial				
Income to the project	Analysis is not required.				
with assumption	• It is a social sector project and the capital cost of the project is not intended to be recovered. MC will meet the cost of repair and maintenance out of its own resources. The project economic analysis is given as Annexure-C .				

ii.Social benefits to the target group	 The completion of the project will result in: Provision of suitable parking area for the MC Vehicles. Making MC self-sufficient in small repairs to the machinery & Equipment possessed by MC Provision of a washing facilities for the vehicles Effective protection to the vehicles against the solar radiation and Ultraviolet rays, rain, hail, wind, and dust. Slowing down the deterioration of vehicles, therefore reducing the cost of maintenance. Enhancement of the security of vehicles during non-working hours. Better watch and ward of MC machinery and equipment and reduction of losses due to theft of equipment and spares. Provision of better solid waste management service by protection of the machinery and equipment.
iii.Environmental Impact negative/positive	Primary and secondary data has been collected and used to assess the environmental impacts of the proposed Parking Area. Site visit was conducted to the project area for the proposed works and to assess the baseline in order to evaluate whether there are any key receptors that will need to be considered during the project works to prevent any long term and irreversible impacts. The activities to be conducted under the project were screened for potential impacts at the design/pre- construction, construction and operation phases of the Parking Sheds. This 'activity wise' screening enabled to obtain a clear picture of the expected level of impacts resulting from the different activities and helped identify required mitigation measures to mitigate them to within acceptable limits as per the guidelines provided by the World Bank in the form of Environment and Social Management Framework. However, the impacts will be temporary and there will be no negative impacts after completion of the project, rather, during the operation phase of the Parking Sheds, mostly positive impacts are expected. To facilitate the selection of an optimal solution and for the inclusion of Safe Operating Procedures for Construction workers/labors; assessment indicators or an Environmental Screening Checklist has been developed which is attached as Annexure E (A) of this PC-1. The checklist focuses on Environmental Issues and social concerns and ensure that all environmental and social dimensions are adequately considered. Based on the remarks of the screening checklist, Environment and Social Management Plans (ESMPs) does not need to be prepared. However, the necessary cost for Environment Health and Safety of Workers has been incorporated in the PC-1. The Environment, Health and Safety SOPs for labor/workers are provided as Annexure E (B).

iv.Quantifiable project	The quantifiable project out puts have been	en given above in Sr. No-9 (V).				
outputs	The social benefits to the citizen have been described at Sr. No-11(ii).					
v.Unit cost analysis	A) Capital Unit Cost					
	The unit cost analysis is produced below					
	Project capital cost	PKR 33.134 million				
	Population of the city in year 2023	244,245 persons				
	Unit capital cost per capita	PKR 135.6				
	B)-Unit R&M cost:					
	Annual R&M cost	PKR. 631,347				
	Population of the city in year 2023	244,245 persons				
	Unit R&M cost per capita	2.6				
vi.Employment generation	Employment Analysis					
(direct and indirect)	Direct Employment					
	a) Planning and Design of projects					
	The planning and design of the proj	ect has been entrusted to local				
	consultants (JERS Consultancy) who have appointed staff and					
	experts in Structural designing and related disciplines along with					
	their support staff. The consultants will also appoint their staff for					
	resident supervision of the project to verify and certify the items of					
	works to be executed under this PC-I.					
	b) Execution of the Project					
	a) PMDFC					
	PMDFC has the project monitoring and supervisory role a					
	company has enough experts and staff to complete t					
	assignment. PMDFC has already deployed under mention staff for these projects:					
	1 5					
	Civil Engineers	114				
	 Accounts, administration and audit personnel Urban planners 					
	Urban planners					
	• GIS experts					
	Support staff like computer oper bous and guards	erators, venicle drivers, office				
	boys and guards.					
	• Procurement experts					
	Communication experts					
	• Environmental and social experts	8				
	Contract management experts					
	b) Consultants					
	PMDFC has employed consult	ants for detailed design and				
	resident supervision of the proj	•				
	staff for detailed design and resid					
		1 F J				

	a) Municipality
	 <i>c)</i> Municipality MC Daska has regular staff like engineers, sub engineers and other administrative & accounts keeping staff which will be responsible for execution of the project and contract management. No additional staff will be needed for execution of this project
	 <i>Contractor</i> The contractor responsible for execution of the sub project will employ skilled and un-skilled labor on this work.
	Indirect Employment
	Indirect Employment Indirect employment for production of material such as cement, steel, stone metal, bitumen, bricks etc. will be generated.
vii.Impacts of delays on	The impact of delay in project implementation will result in;
project cost and viability	• Increased project cost due to escalation in cost of material and labor.
	• Deterioration of vehicles due to weathering effects
	• Recurrent watch and ward problems for the delayed period
12-Implementation Sched	ule
a) Indicate starting and completion date of the project	The project is anticipated to commence by December, 2022 and to be completed by May 2023 with project implementation period of 06 months.
b) Item wise/year wise schedule in line chart	The Gant chart has been attached at Annexure-D
13- Management Structur	e and manpower requirements
i. Administrative	ii. Planning & design of the project
arrangements for the implementation of the project	The project has been designed by the consultants employed by PMDFC and will also carry out the resident supervision of the project.
	iii. Preparation of cost estimation
	The cost estimation of cost estimation The cost estimates have been prepared by the design consultants by actual measurements and requirements at site. The execution of the items of works included in these estimates /PC-I will be certified by these consultants.
	 iv. Execution of the project The project will be executed by MC Daska and supervised by the Consultants appointed by PMDFC in resident supervision mode. The technical staff & experts in PMDFC will oversee, coordinate and collaborate in the project planning, design and implementation through their experts in head office located in

	 Lahore and regional offices. The reporting of progress to LG & CDD & World bank and troubleshooting will also be responsibility of PMDFC. MO (I&S) of the MC has been designated as Project Manager /Engineer in Charge of the project. The supervision of the works will also be carried out by these municipal officers along with their support engineering staff. All supervisory staff is available with MC. The procurement of works and goods will be done by Procurement Committee of Daska Unit as per PPRA Rules.
	 v. Verification of quantities included in PC-Is and Resident Supervision of the works by consultants The works will be supervised by Supervision Consultants in resident supervision mode by assuring the quantity and quality of works. The consultants will verify the items of work and their quantities contained in the PC-Is and cost estimates initially and then the quantities and quality of works included in the contractor claims at the stage of payments. Payments will be made by the MC after these contractor claims have been entered in the measurement books by the Project Manager/Engineer in Charge and pre audited as per LG Works Rules.
ii)The manpower	a) PMDFC experts and staff
requirements by skills during execution and operation of the project and; The job description, qualification, experience, age and salary of each post	 For rendering assistance in implementation of infrastructure projects in 16 MCs, PMDFC has the experts and staff in the required fields. In order to facilitate the Program Units, three regional offices have been established by PMDFC at Gujranwala, Faisalabad and Multan/Khanewal. b) Resident Supervision Consultants The project will be supervised by consultants. The tentative staff to be employed/deployed by the consultants for the certification of quantities of works and resident supervision of the project is given below:

	S #	Personnel	Nos	Qualification
	1	Chief Resident Engineer/Team Leader	01	BSc;/BE in Civil engineering from HEC approved University with minimum 20 years' professional experience and 5 years' experience on similar assignment or MSC; Civil Engineering/Public Health Engineering/Environmental Engineering with Bachelor in Civil Engineering and minimum 15 years, experience, with 5 years on similar assignments on urban planning, designing and construction supervision assignment.
	2	Assistant Resident Engineer	01	Bachelor Degree in Civil engineering with minimum 8 years' experience in site supervision and execution for projects of similar nature
	3	Site Inspectors	01	DAE in Civil with minimum 10 years' experience in site supervision for projects of similar nature
	d)	Repair & maintena MC has its own regu maintenance of the m been observed that t	nce of lar staf nunicipathe exist	f which has been deployed for repair and al services infrastructure. However, it has sting staff is not adequate to repair and
			es in a propos	manner which can give good service ed to;
		Recruit addition obtaining the	ional st sanctio	aff as per need of the infrastructure after ons from the competent authorities.
14-Additional projects /decisions required to optimize the investment being undertaken	1)	MC is facing show appointed cadres. The program and the may be delayed. Pro-	rtage i nis will e imple ovincia	sfers of Provincially appointed staff in provincially appointed and locally seriously affect the pace of progress of ementation of the infrastructure projects I Government should fill up the vacant izing the investments in MC.
	2)		lso defi	&M) staff icient and this is adversely affecting the nber of slots are vacant but MC is not

	 allowed to recruit the persons to fill these slots due to ban on recruitments. Further the sanctioned strength of the field staff is much lesser than the actual requirement because with the increase in population and extension of services, additionally required staff has not been sanctioned by the competent authorities. Both of the above issues need to be addressed for optimal utilization of the investments and giving targeted benefits to the resident population of these cities.
15-Certificate	Certified that the project proposal has been prepared on the basis of guidelines provided by the Planning Commission for the preparation of PC-I for social sectors projects.

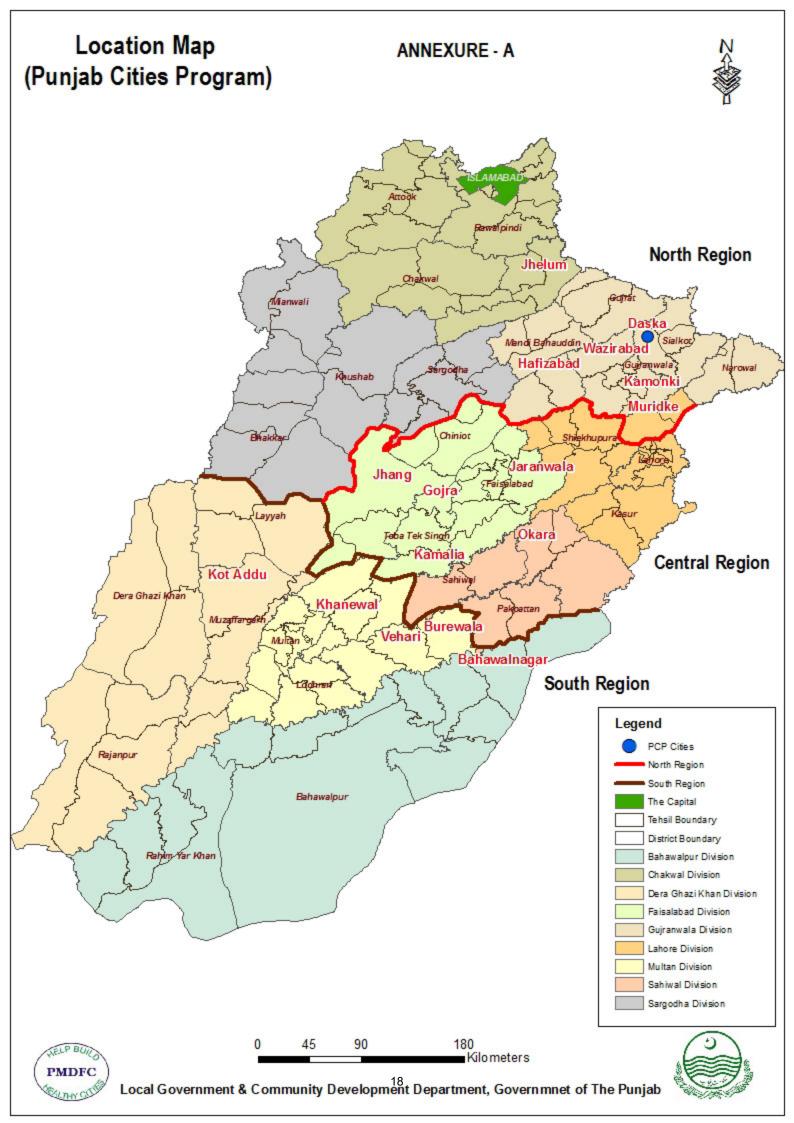
Prepared by	JERS Consultancy (Pvt) Ltd	Stamp & Signatures	
Checked by	Municipal officer (Infrastructure) MC Daska	Stamp & Signatures	
	Chief Officer MC Daska	Stamp & Signatures	
Forwarded by	Administrator MC Daska	Stamp & Signatures	

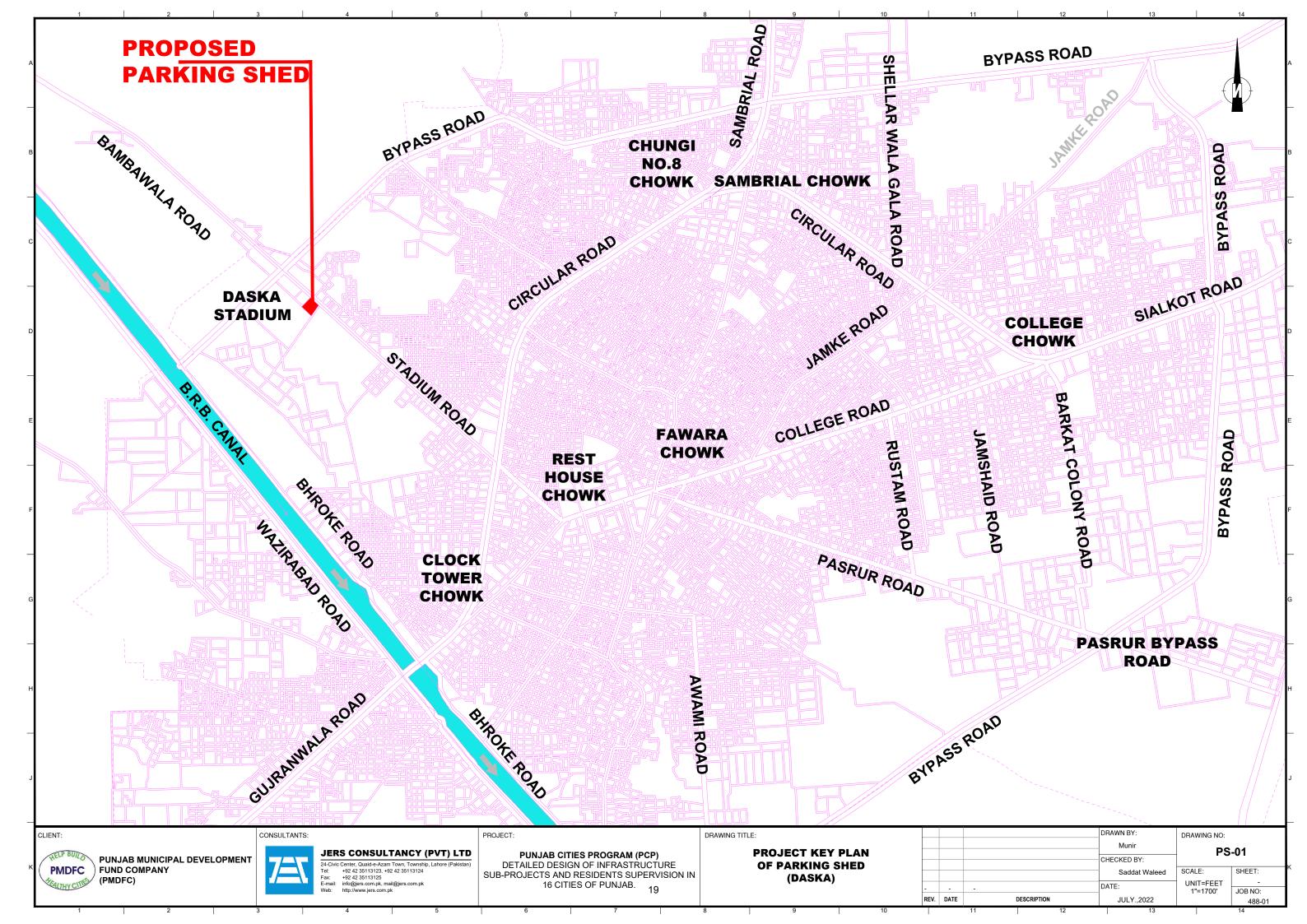
Annexure-1 Annual Recurrent Cost

Annual Recurrent Cost after Completion of the Project

Cost Category	Cost Breakup	Cost per Annum
Annual Maintenance Cost of The Civil Works	1% of Project Cost = 0.01*(33,134,790)	331,347
Annual Man Power Cost of One Guard	Rs.25,000/month	300,000
	Total cost per Annum (Million Rs.)	631,347

Annexure-A Location Map





Annexure-B Rough Cost Estimate



Punjab Municipal Development Fund Company

Consultancy Services for Detailed Design of Infrastructure sub-projects (Parking Sheds, Parks, Roads, Chowks, etc.) and Resident Supervision in 16 Cities of Punjab

<u>Construction of SWM Parking Area</u> <u>MC Daska</u>

Detailed Cost Estimate

August, 2022



JERS CONSULTANCY (PVT) LTD (Formely Jers Engineering Consultants)

24-Civic Center, Quaid-e-Azam Town, Township, Lahore (Pakistan) Tel: +92 42 35113123, +92 42 35113124 Fax: +92 42 35113125 E-mail: info@jers.com.pk, mail@jers.com.pk Web: http://www.jers_ppm.pk



DETAILED COST ESTIMATE

SWM PARKING AREA (DASKA)

SUMMARY

SUMMARI	
Description	Amount (Rs)
OFFICE BUILDING	
Civil Work	951,724
Plumbing Work	95,690
Electrical Work	155,300
GUARD ROOM	
Civil Work	494,972
Plumbing Work	6,522
Electrical Work	86,843
WORK SHOP	
Civil Work	2,307,501
Plumbing Work	85,661
Electrical Work	508,428
PARKING SHED (SIZE 85' x 32')	
Civil Work	7,638,201
Electrical Work	314,328
PARKING SHED (SIZE 60' x 32')	
	5,465,998
Electrical Work	314,328
WASHING PIT	539,685
GENERATOR PAD	155,309
PUMP PAD	14,179
SEPTIC TANK	303,958
EXTERNAL WORK (BOUNDARY WALL + TUFF PAVER + LAWN)	6,759,735
EXTERNAL PLUMBING WORK	826,915
EXTERNAL ELECTRICAL WORK	3,774,128
ENVIRONMENTAL HEALTH & SAFETY COST	112,425
DISMANTLING WORK	55,266
Total Rs.	30,967,093
Contingencies @ 2%	619,342
PKA Charges @ 5%	1,548,355
Total Amount. Rs.	33,134,790
	DescriptionOFFICE BUILDINGCivil WorkPlumbing WorkElectrical WorkGUARD ROOMCivil WorkPlumbing WorkElectrical WorkElectrical WorkWORK SHOPCivil WorkPlumbing WorkElectrical WorkENTERNAL PLUMBING WORKEXTERNAL PLUMBING WORKENVIRONMENTAL HEALTH & SAFETY COSTDISMANTLING WORKEnvirencies @ 2%PRA Charges @ 5%

DETAILED COST ESTIMATE

OFFICE BUILDING

		CIVIL WORK				
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Sabadula Harr				
		Schedule Item Excavation				
1	3/21/a/ii	Excavation Excavation in foundation of building, bridges and				
1	J/ 2 1/ d/ 11	other structures, including dagbelling, dressing,				
		refilling around structure with excavated earth,				
		watering and ramming lead upto one chain (30 m)				
		and lift upto 5 ft. (1.5 m)				
		a) By Manual				
		ii) in ordinary soil.	1000Cft	0.45	10,712.60	4,821
		Anti-Termite				
2	26/43	Spraying termite proofing by using liquid FMC/				
		Biflex/ Terminex Exin/ Ms Hextar or equivalent				
		@ specified suspension concenterate (SC),				
		Mixing Ability-HEXTAR with Ratio (1:250) =				
		540 Sft or equivalent approved liquid applying				
		with shower and certificate will be provided by				
		the contractor for 10-years complete in all respect				
		as approved by the Engineer Incharge.	Sft	729.75	9.25	6,750
		Plain Cement Concrete				
3	6/5	Cement concrete plain including placing,				
		compacting, finishing and curing complete				
		(including screening and washing of stone				
		aggregate):				
		(i) Ratio 1: 4: 8	100 Cft	0.60	29,079.80	17,448
		Brick work in Foundation				
4	7/4/i	Pacca brick work in foundation and plinth in:-				
		Cement, sand mortar:- Ratio 1:5	100 Cft	3.49	31,875.60	111,246
		Horizontal D.P.C				
5	6/36	Providing and laying damp proof course of				
		cement concrete 1:2:4 (using cement, sand and				
		shingle), including bitumen coating :-				
		(a) with one coat bitumen and one coat polythene				
		sheet 500gauge				
		i) 1 ¹ / ₂ " thick (40 mm)	100 Sft	0.54	8,711.65	4,704

DETAILED COST ESTIMATE

OFFICE BUILDING

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Vertical D.P.C				
6	6/37	Providing and laying vertical damp proof course with cement sand plaster and bitumen coating:-				
		(a) with one coat of bitumen and one coat of polythene sheet 500 gauge:				
		ii) Ratio 1:3 ³ / ₄ " thick (20 mm)	100 Sft	0.73	6,525.25	4,763
		Brick work in Super Structure				
7	7/5	Pacca brick work in ground floor:-				
-		i) Cement, sand mortar:- Ratio 1:5	100 Cft	5.69	34,090.60	193,976
		Concrete Work				
8	6/6	Providing and laying reinforced cement concrete (including prestressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.):-				
		Above foundation				
		(a) (i) Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects:-				
		Type C (nominal mix 1: 2: 4)	P.Cft	146.25	556.05	81,322
		Steel Work.				
9	6/12/c	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-				
		Deformed bars (Grade-60)	100kg	4.70	31,814.75	149,529
		Sand Filling				
10	7/30	Supplying and filling sand under floor; or plugging in wells.	100 Cft	5.12	2,944.60	15,076

DETAILED COST ESTIMATE

OFFICE BUILDING

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)	
		Brick ballast					
11	6/2	Dry rammed brick or stone ballast, 1 ¹ / ₂ " to 2"(40 mm to 50 mm) gauge.	100 Cft	0.61	9,035.40	5,512	
		Plain Cement Concrete					
12	6/5/f	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):					
		(f) Ratio 1: 2: 4	100 Cft	0.31	38,271.80	11,864	
		Porcelain Tile					
13	10/42/d	Providing and laying superb quality Porcelain glazed tiles flooring of MASTER brand of specified size in approved design, Color and Shade with adhesive / bond over 3/4" thick (1:3)cement plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respect as approved and directed by the Engineer Incharge.					
		d) (Non-Skid Chequred Tiles) 300mmx300mm	Per Sft	144.00	213.00	30,672	
14	10/43/a	Providing and laying superb quality Porcelain glazed tiles of Master brand, skirting/ dado of specified size, Color and Shade with adhesive/ bond over 1/2" thick (1:2)cement plaster i/c the cost of and sealer for finishing the joints, cutting grinding complete in all respect as approved and directed by the Engineer Incharge.					
		a) Full body Glazed Tile					
		(i) 400 mm x 400 mm	Per Sft	15.84	294.15	4,659	

DETAILED COST ESTIMATE

OFFICE BUILDING

	2nd BI-Annual-					
Sr. No.	2022 (July to Dec) Sialkot	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Ceramic Tile				
15	10/24	Providing and laying superb quality Ceramic tile floors of Master brand of specified size, Glossy/Matt/Texture of approved Color and Shade as per approved design with adhesive bond, over 3/4" thick (1;2) cement sand plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respects and as approved and directed by the Engineer Incharge.				
		i) 12"x18"/12"x24"/10"x24" /8"x24"/12"x36"	Per Sft	42.00	241.40	10,139
16	10/25	Providing and laying superb quality Ceramic tiles dado of Master brand of specified size, Glossy/Matt/Texture skirting / dado of approved Color and Shade with adhesive bond over1/2" thick (1:2)cement plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respects as approved and directed by the Engineer Incharge.				
		i) 12"x18"/12"x24"/10"x24" /8"x24"/12"x36"	Per Sft	182.00	294.15	53,535
		Slab Plaster				
17	11/10/b	Cement plaster 3/8" (10 mm) thick under soffit of R.C.C. roof slabs only, upto 20' height. (Ratio:-1:3)	100 Sft	1.86	3,765.60	7,004
		Cement Plaster				
18	11/9	Cement plaster 1:4 upto 20' (6.00 m) height:-				
		3/4" (20 mm) thick	100 Sft	6.83	4,437.45	30,308
		Pointing				
19	11/18/a	Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-				
		a) ratio 1:2	100 Sft	9.45	3,575.35	33,787
20	11/31	Extra cost of labour and material for red oxide pigment in cement pointing to match with the				
		colour of bricks.	100 Sft	9.45	669.00	6,322

DETAILED COST ESTIMATE

OFFICE BUILDING

	2nd BI-Annual-				I	
Sr. No.	2022 (July to Dec) Sialkot	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
	Slaikot	Distempering				
21	11/23	Distempering:-				
21		iii) three coats	100 Sft	8.69	1,309.95	11,383
						i
		Wooden Door				
22	12/50-i	Providing and fixing 1½" (40 mm) thick hollow flush doors and windows with commercial ply (3 ply) on both faces of deodar wood shutter frame 1¼" (30 mm) thick and partal wood braces at about 3" (75 mm) apart and deodar wood lipping 1½"x3/8" (40 mmx10 mm) fixed with M.S. chowkat (frame) including chromium plated fittings, etc. complete in all respects (without sliding bolt or lock):- M.S. angle iron 1½"x1½"x¼", welded (40 mmx40 mmx 6mm) with M.S. flat 2"x¼" (50 mm				
		x 6 mm)	Per Sft	42.00	1,519.85	63,834
			reisit	42.00	1,319.03	03,034
		Lock				
23	12/22	Providing and fixing, approved quality mortice				
		lock.	Each	2.00	799.00	1,598
		Paint				
24	13/5/c	Painting new surface:- Preparing surface and painting of doors and windows any type (including edges):-				
		i) priming coat.	100 Sft	0.84	1,325.50	1,113
		ii) Second coat	100 Sft	0.84	722.60	607
		Steel Window				
25	25/41/b	Providing and fixing steel windows with openable glazed panels, using beam section for frame 1½"x1"x5/8"x1/8" (40x25x16x3 mm), Z-section for leaves ¾"x1"x¾"x1/8" (20x25x20x3 mm), T-section sashes 1"x1"x1/8" (25x25x3 mm), glass panes, wooden screed for glazing embedded over a thin layer of putty duly screwed with leaves, brass fittings, holdfast, duly painted, complete in all respects, including all cost of material and labour, etc. as per approved design and as directed by the Engineer-in-charge:-				
		b) fixed with wire gauze, 22 SWG				
		v) glass pane 5 mm thick	Per Sft	52.00	1,089.75	56,667

DETAILED COST ESTIMATE

OFFICE BUILDING

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Roof Insulation				
26	9/5	Single layer of tiles 9"x4½"x1½" (225x113x40 mm) laid over 4"(100 mm) earth and 1" (25 mm) mud plaster without Bhoosa, grouted with cement sand 1:3 on top of RCC roof slab, provided with 34 lbs. per %Sft. or 1.72 Kg/Sq.m bitumen coating sand blinded.				
		coating sand binded.	100 Sft	2.46	11,779.70	28,978
27	26/37/ii	Supplying and laying polythene sheet over D.P.C. under floors and on roofs, etc.				
		ii) 500 gauge (.005" thick)	Per Sft	246.00	6.00	1,476
		Khurras				
28	9/15	Khuras on roof 2'x2'x6" (600 x 600 x 150 mm)	Each	1.00	866.40	866
		Bottom Khuras				
29	9/16	Bottom Khuras of brick masonry in cement mortar 1:6, 4'x2'x4 ¹ / ₂ " (1200x600x113 mm) over 3" (75 mm) cement concrete 1:4:8.	Each	1.00	1,762.85	1,763
		Total Rs.				951,724

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Excavation						
1	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)						
	ii) in ordinary soil.						
	Office wall	1	51.00	2.50	2.50	318.75	Cft
	Toilet wall	1	21.50	2.50	2.50	134.38	Cft
					Total	453.13	Cft
					Total	0.45	%oCf
	Anti-Termite						
2	Spraying termite proofing by using liquid FMC/ Biflex/ Terminex Exin/ Ms Hextar or equivalent @ specified suspension concenterate (SC), Mixing Ability-HEXTAR with Ratio (1:250) = 540 Sft or equivalent approved liquid applying with shower and certificate will be provided by the contractor for 10-years complete in all respect as approved by the Engineer Incharge.						
	Office wall	1	51.00	7.50		382.50	Sft
	Toilet wall	1	21.50	7.50		161.25	Sft
	Floor	1	12.00	12.00		144.00	Sft
		1	7.00	6.00		42.00	Sft
					Total	729.75	Sft
	Plain Cement Concrete						
3	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):						
	(i) Ratio 1: 4: 8						
	Office wall	1	51.00	2.50	0.33	42.08	Cft
	Toilet wall	1	21.50	2.50	0.33	17.74	Cft
					Total	59.81	Cft
					Total	0.60	%Cft

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Brick work in Foundation						
4	Pacca brick work in foundation and plinth in:-						
	Cement, sand mortar:- Ratio 1:5						
	Office wall						
	Step - 1	1	51.00	1.875	0.25	23.91	Cft
	Step - 2	1	51.00	1.500	0.25	19.13	Cft
	Step - 3	1	51.00	1.125	0.25	14.34	Cft
	Step - 4	1	51.00	0.750	4.92	188.19	Cft
	Toilet wall						
	Step - 1	1	21.50	1.875	0.25	10.08	Cft
	Step - 2	1	21.50	1.500	0.25	8.06	Cft
	Step - 3	1	21.50	1.125	0.25	6.05	Cft
	Step - 4	1	21.50	0.750	4.92	79.34	Cft
					Total	349.09	Cft
					Total	3.49	%Cft
	Horizontal D.P.C						
5	Providing and laying damp proof course of cement						
	concrete $1:2:4$ (using cement, sand and shingle),						
	including bitumen coating :-						
	(a) with one coat bitumen and one coat polythene						
	sheet 500gauge						
	i) 1½" thick (40 mm)						
	Office wall	1	51.00	0.75		38.25	Sft
	Toilet wall	1	21.50	0.75		16.13	Sft
		-		0170	Total	54.38	Sft
					Total	51.50	bit
					Total	0.54	%Sft
					10001	0.54	/0010
	Vertical D.P.C						
6	Providing and laying vertical damp proof course						
0	with cement sand plaster and bitumen coating:-						
	(a) with one coat of bitumen and one coat of						
	polythene sheet 500 gauge:						
	ii) Ratio 1:3 ³ / ₄ " thick (20 mm)						
	Office wall	1	51.00		1.00	51.00	Sft
	Toilet wall	1	21.50		1.00	21.50	Sft
		1	21.30		Total	72.50	Sft
					10141	12.30	511
					Total	0.73	%Sft
					Total	0.73	70 5 11

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Brick work in Super Structure						
7	Pacca brick work in ground floor:-						
	i) Cement, sand mortar:- Ratio 1:5						
	Office wall	1	51.00	0.75	10.50	401.63	Cft
	Toilet wall	1	21.50	0.75	10.50	169.31	Cft
	Parapet Wall	1	66.50	0.38	2.50	62.34	Cft
	Entrance step	2	4.00	1.00	0.75	6.00	Cft
	D/d Doors and Window						
	D-1	-1	3.50	0.75	7.00	(18.38)	Cft
	D-2	-1	2.50	0.75	7.00	(13.13)	Cft
	W-1	-2	6.00	0.75	4.00	(36.00)	Cft
	V-1	-1	2.00	0.70	2.00	(2.80)	Cft
						(,	
					Total	568.98	Cft
					Total	2001/0	
					Total	5.69	%Cf
					Totul	0.07	7001
	Concrete Work						
8	Providing and laying reinforced cement concrete						
	(including prestressed concrete), using coarse sand						
	and screened graded and washed aggregate, in						
	required shape and design, including forms,						
	moulds, shuttering, lifting, compacting, curing,						
	rendering and finishing exposed surface, complete						
	(but excluding the cost of steel reinforcement, its						
	fabrication and placing in position, etc.):-						
	Above foundation						
	(a) (i) Reinforced cement concrete in roof slab,						
	beams, columns lintels, girders and other structural						
	members laid in situ or precast laid in position, or						
	prestressed members cast in situ, complete in all						
	respects:-						
	Type C (nominal mix 1: 2: 4)						
	Top Slab	1	13.50	13.50	0.50	91.13	Cft
	Toilet Slab	1	8.50	7.50	0.50	31.88	Cft
	Sun shade	1	5.50	1.50	0.25	2.06	Cft
	Sun shade	2	8.00	1.50	0.25	6.00	Cft
	Sun shade	1	3.00	1.50	0.25	1.13	Cft
	Doors and window Lintels	1	5.00	1.50	0.23	1.13	CII
	D-1	1	4.50	0.75	0.75	2.53	Cft
	D-1 D-2			0.75	0.75	1.97	
		1	3.50				Cft
	W-1	2	7.00	0.75	0.75	7.88	Cft
	V-1	1	3.00	0.75	0.75	1.69	Cft
					Total	146.25	Cft

CALCULATION OF QUANTITIES

a							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Steel Work.						
9	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-						
	Deformed bars (Grade-60)					146.25	Cft
	Top Slab & lintel @ 6.75 lbs / Cft		6.75		=	987.19	lbs/cft
			0.75	Total	=	987.19	lbs/cft
				Total	=	447.91	Kg.
			Add 5%		=	22.40	Kg.
				Total	=	470	Kg
					Total	4.70	%kg
	Sand Filling						
10	Supplying and filling sand under floor; or plugging in wells.						
	Floor	1	12.00	12.00	2.75	396.00	Cft
	toilet	1	7.00	6.00	2.75	115.50	Cft
					Total	511.50	Cft
					Total	5.12	%Cft
11	Brick ballast Dry rammed brick or stone ballast, 1½" to 2"(40 mm to 50 mm) gauge.						
	Floor	1	12.00	12.00	0.33	47.52	Cft
	toilet	1	7.00	6.00	0.33	13.86	Cft
					Total	61.38	Cft
					Total	0.61	%Cft
	P.C.C						
12	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):						
	(f) Ratio 1: 2: 4						
	Floor	1	12.00	12.00	0.17	24.00	Cft
	toilet	1	7.00	6.00	0.17	7.00	Cft
					Total	0.31	%Cft

CALCULATION OF QUANTITIES

Sr.							
No.	Description	No.	Length	Width	Height	Qty.	Unit
	Porcelain Tile						
13	Providing and laying superb quality Porcelain						
	glazed tiles flooring of MASTER brand of						
	specified size in approved design, Color and Shade						
	with adhesive / bond over 3/4" thick (1:3)cement						
	plaster i/c the cost of sealer for finishing the joints						
	i/c cutting grinding complete in all respect as						
	approved and directed by the Engineer Incharge.						
	d) (Non-Skid Chequred Tiles) 300mmx300mm	1	12.00	12.00		144.00	Sft
					Total	144.00	Sft
14	Providing and laying superb quality Porcelain						
	glazed tiles of Master brand, skirting/ dado of						
	specified size, Color and Shade with adhesive/						
	bond over 1/2" thick (1:2)cement plaster i/c the						
	cost of and sealer for finishing the joints, cutting						
	grinding complete in all respect as approved and						
	directed by the Engineer Incharge.						
	a) Full body Glazed Tile	1	40.00		0.00	17.04	
	(i) 400 mm x 400 mm	1	48.00		0.33	15.84	Sft
					Total	15.84	Sft
	Ceramic Tile						
15	Providing and laying superb quality Ceramic tile						
	floors of Master brand of specified size,						
	Glossy/Matt/Texture of approved Color and Shade						
	as per approved design with adhesive bond, over						
	3/4" thick (1;2) cement sand plaster i/c the cost of						
	sealer for finishing the joints i/c cutting grinding						
	complete in all respects and as approved and						
	directed by the Engineer Incharge.						
	i) 12"x18"/12"x24"/10"x24" /8"x24"/12"x36"	1	7.00	6.00		42.00	Sft
					Total	12.00	C to
			1	1	Total	42.00	Sft

OFFICE BUILDING CALCULATION OF QUANTITIES

C							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
16	Providing and laying superb quality Ceramic tiles						
	dado of Master brand of specified size,						
	Glossy/Matt/Texture skirting / dado of approved						
	Color and Shade with adhesive bond over1/2" thick						
	(1:2)cement plaster i/c the cost of sealer for						
	finishing the joints i/c cutting grinding complete in						
	all respects as approved and directed by the						
	Engineer Incharge.						
	i) 12"x18"/12"x24"/10"x24" /8"x24"/12"x36"	2	7.00		7.00	98.00	Sft
		2	6.00		7.00	84.00	Sft
					Total	182.00	Sft
					Iotai	102.00	BIU
	Slab Plaster						
17	Cement plaster 3/8" (10 mm) thick under soffit of						
	R.C.C. roof slabs only, upto 20' height. (Ratio:-						
	1:3)						
		1	12.00	12.00		144.00	Sft
		1	7.00	6.00		42.00	Sft
					Total	1.86	%Sft
	Cement Plaster						
18	Cement plaster 1:4 upto 20' (6.00 m) height:-						
	3/4" (20 mm) thick						
	Office Room						
		2	12.00		10.50	252.00	Sft
		2	12.00		10.50	252.00	Sft
	Toilet						
		2	7.00		10.50	147.00	
		2	6.00		10.50	126.00	Sft
	D/d Doors and Window					(2.1 0.)	
	D-1	-1	3.50		7.00	(24.50)	Sft
	D-2	-1	2.50		7.00	(17.50)	Sft
	W-1	-2	6.00		4.00	(48.00)	Sft
	V-1	-1	2.00		2.00	(4.00)	Sft
					Total	683.00	Sft
					Total	6.83	%Sft
						0.00	,0010

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Pointing						
19	Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-						
	a) ratio 1:2						
	Outer Walls	1	70.00		13.50	945.00	Sft
					Total	945.00	Sft
					Total	9.45	%Sft
20	Extra cost of labour and material for red oxide						
	pigment in cement pointing to match with the colour of bricks.				Total	9.45	%Sft
	Distempering						
21	Distempering:-						
	iii) three coats						
	Office Room						
		2	12.00		10.50	252.00	Sft
		2	12.00		10.50	252.00	Sft
	Toilet						
		2	7.00		10.50	147.00	Sft
		2	6.00		10.50	126.00	Sft
	Slab	1	12.00	12.00		144.00	Sft
		1	7.00	6.00		42.00	Sft
	D/d Doors and Window						
	D-1	-1	3.50		7.00	(24.50)	Sft
	D-2	-1	2.50		7.00	(17.50)	Sft
	W-1	-2	6.00		4.00	(48.00)	Sft
	V-1	-1	2.00		2.00	(4.00)	Sft
					Total	869.00	Sft
					Total	8.69	%Sft

CALCULATION OF QUANTITIES

No.DescriptionNo.LengthWidthHeightOty.Wooden Door22Providing and fixing 1½" (40 mm) thick hollow flush doors and windows with commercial ply (3 ply) on both faces of deodar wood shutter frame 1¼" (30 mm) thick and partal wood braces at about 3" (75 mm) apart and deodar wood lipping 1½" X33" (40 mmX10 mm) fixed with M.S. chowkat (frame) including chromium plated fittings, etc. complete in all respects (without sliding bolt or lock):- M.S. angle iron 1½"x1½"x¼", welded (40 mmx40 mmx 6mm) with M.S. flat 2"x¼" (50 mm x 6 mm)13.507.0024.50D-113.507.0017.50D-212.507.0017.50D-212.507.0017.50D-212.507.0017.50D-212.507.0024.50D-113.507.0024.50D-212.507.0017.50D-212.507.0017.50Providing and fixing, approved quality mortice lock.222.00Paint15.507.01124Painting coat.110.84Steel Window1110.84Steel Window110.84Steel Window110.84glazed panels. using beam section for frame lb%"x1/x8"x1/x8" (20x25x10x3 mm), T- section sashes 1"x1"x1/8" (20x25x10x3 mm), T- section sashes 1"x1"x1/8" (20x25x10x3 mm), T- section sashes 1"x1"x1/8" (20x25x20x3 mm), T- section sashes 1"x1"x1/8" (20x25x10x3 m									
22 Providing and fixing 1½" (40 mm) thick hollow flush doors and windows with commercial ply (3 ply) on both faces of deodar wood shutter frame 1¼" (30 mm) thick and partal wood braces at about 3" (75 mm) apart and deodar wood lipping 1½"x3/8" (40 mmx10 mm) fixed with M.S. chowkat (frame) including chromium plated fittings, etc. complete in all respects (without sliding bolt or lock): M.S. angle iron 1½"x1½"x4", welded (40 mmx40 mmx 6 mm) D-1 1 3.50 7.00 24.50 D-2 1 2.50 7.00 17.50 D-2 1 2.50 7.00 17.50 D-2 1 2.50 7.00 17.50 D-2 2 2.00 2.00 2.00 Paint 2 2.00 2.00 2.00 Proparing surface:- 2 2.00 2.00 Preparing surface and painting of doors and windows any type (including edges):- 1 0.84 Steel Window 2 7.01 0.84 Steel Window 2 5.00 0.84 Steel Window 2 5.00 0.84 Steel Window 2 5.02 1 25 Providing and fixing steel windows with openable glazed panels, using beam section for frame 1½"x1/x5/8"x1/8" (25x25x3	Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit	
flush doors and windows with commercial ply (3 ply) on both faces of deodar wood shutter frame 1¼" (30 mm) thick and partal wood braces at about 3" (75 mm) apart and deodar wood lipping 1½"x338" (40 mmx10 mm) fixed with M.S. chowkat (frame) including chromium plated fittings, etc. complete in all respects (without sliding bolt or lock):- M.S. angle iron 1½"x1½"x¼", welded (40 mmx40 mmx 6mm) with M.S. flat 2"x¼" (50 mm x 6 mm) D-1 1 3.50 7.00 24.50 D-2 1 2.50 7.00 17.50 Lock 1 3.50 7.00 24.50 Lock 2 2 2.00 Paint 2 2.00 2.00 Paint 2 2.00 2.00 Paint 2 2.00 2.00 Paint 2 2.00 2.00 Pinint 2 2.00 2.00 Paint 2 2.00 2.00 Pinit 2 2.00 2.00 Paint 2 2.00 2.00 Paint 2 2.00 2.00 Paint 2 0.00 0.00 25 Providing and fixing steel windows with openable glazed panels, using beam section for frame 1½"x11"x5%"x1/8" (25x25x3 m		Wooden Door							
ply) on both faces of deodar wood shutter frame 1¼" (30 mm) thick and partal wood braces at about 3" (75 mm) apart and deodar wood lipping 1½"x3/8" (40 mmx10 mm) fixed with M.S. chowkat (frame) including chromium plated fittings tot or lock):- M.S. angle iron 1½"x11/4"x1/4", welded (40 mmx40 mmx 6mm) with M.S. flat 2"x1/4" (50 mm x 6 mm)13.507.0024.50D-113.507.0017.50D-212.507.0017.50Lock212.001023Providing and fixing, approved quality mortice lock.22.00Paint222.00Paint210.001) Second coat10.0024Painting surface and painting of doors and windows any type (including edges):- i) priming coat.111) Second coat110.84Steel Window210.84Steel Window210.84jazed panels, using beam section for frame H/2"x11"x5/8"x1/8" (20x25x20x3 mm), T- section sashes 1"x1"x1/8" (2	22	Providing and fixing 11/2" (40 mm) thick hollow							
1¼" (30 mm) thick and partal wood braces at about 3" (75 mm) apart and deodar wood lipping 1½" (37 mm) apart and deodar wood lipping 1½" (37 mm) apart and deodar wood lipping 1½" (37 mm) apart and deodar wood lipping 1½" (37 mm) apart and deodar wood lipping 1½" (37 mm) fixed with M.S. 14 chowkat (frame) including chromium plated fittings, etc. complete in all respects (without sliding bolt or lock):- 1 M.S. angle iron 1½"x1½"x14", welded (40 mmx40 mmx 6 mm) 1 3.50 7.00 24.50 D-1 1 3.50 7.00 17.50 D-2 1 2.50 7.00 17.50 Lock 2 7.00 17.50 23 Providing and fixing, approved quality mortice lock. 2 2 2.00 Paint 2 2 2.00 2.00 24 Painting new surface:- 7 7.01 0.84 Steel Window 2 7.01 0.84 3.0		flush doors and windows with commercial ply (3							
3" (75 mm) apart and deodar wood lipping 1½"x3/8" (40 mmx10 mm) fixed with M.S. chowkat (frame) including chromium plated fittings, etc. complete in all respects (without sliding bolt or lock):- Image: Complete in all respects (without sliding bolt or lock):- M.S. angle iron 1½"x1½"x1½"x1½" x1½" x1½" x1½" x1½" x1½		ply) on both faces of deodar wood shutter frame							
1½"x3/8" (40 mmx10 mm) fixed with M.S. chowkat (frame) including chromium plated fittings, etc. complete in all respects (without sliding bolt or lock):- M.S. angle iron 1½"x1½"x¼", welded (40 mmx40 mmx 6mm) with M.S. flat 2"x¼" (50 mm x 6 mm)		1 ¹ / ₄ " (30 mm) thick and partal wood braces at about							
chowkat (frame) including chromium plated fittings, etc. complete in all respects (without sliding bolt or lock):- M.S. angle iron 1½711/2*14", welded (40 mmx40 mmx 6mm) with M.S. flat 2"x4" (50 mm x 6 mm)Image: State		3" (75 mm) apart and deodar wood lipping							
fittings, etc. complete in all respects (without sliding bolt or lock):- M.S. angle iron 11/s"x11/z"x1/a", welded (40 mmx40 mmx 6mm) with M.S. flat 2"x1/a" (50 mm x 6 mm)Image: State S									
sliding bolt or lock):- M.S. angle iron 1½"x1½"x¼", welded (40 mmx40 Immx 6mm) Immx 6mm) Immx 6mm D-1 1 3.50 7.00 24.50 D-2 1 2.50 7.00 17.50 Immx 6mm) with M.S. flat 2"x¼" (50 mm x 6 mm) Immx 6 mm Immx 6 mm Immx 6 mm D-1 1 3.50 7.00 24.50 D-2 1 2.50 7.00 17.50 Immx 6mm Immx 6 mm Immx 6 mm Immx 6 mm Immx 6 mm Lock Immx 6 mm Immx 6 mm Immx 6 mm Immx 6 mm 23 Providing and fixing, approved quality mortice lock. 2 Immx 6 mm Immx 6 mm 24 Paint Immx 6 mm 24 Painting new surface:- Immx 6 mm Immx 6 mm Immx 6 mm Immx 6 mm 24 Painting new surface:- Imm 6 mm Immx 6 mm Immx 6 mm Immx 6 mm 25 Providing and fixing steel windows with openable glazed panels, using beam section for frame 14% x1%3% x1%8 (X0x25x16x3 mm), Z-section for leaves ¾ x1"x3%8"x1%8" (20x25x25x20x3 mm), T-section sashes I									
M.S. angle iron $1/2^*x11/2^*x14''$, welded (40 mmx40 mmx 6mm) with M.S. flat $2^*x14''$ (50 mm x 6 mm) Image: Second Secon									
mmx 6mm) with M.S. flat 2"x¼" (50 mm x 6 mm) I I 3.50 7.00 24.50 D-1 1 3.50 7.00 17.50 D-2 1 2.50 7.00 17.50 Lock I I 0 III 42.00 Lock I IIII IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII									
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D-212.507.0017.50LockIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII		mmx 6mm) with M.S. flat $2^x \frac{1}{4}$ (50 mm x 6 mm)							
D-212.507.0017.50LockITotal42.00Lock2II23Providing and fixing, approved quality mortice lock.2I24Painting new surface:- Preparing surface and painting of doors and windows any type (including edges):-IIi) priming coat.IIIii) Second coatIIISteel WindowII25Providing and fixing steel windows with openable glazed panels, using beam section for frame 1½"x1"x5/8"x1/8" (20x25x16x3 mm), Z-section for leaves ¾"x1"x¾"x1/8" (20x25x20x3 mm), T- section sashes 1"x1"x1/8" (25x25x3 mm), glass panes, wooden screed for glazing embedded over a thin layer of putty duly screwed with leaves, brass fittings, holdfast, duly painted, complete in all respects, including all cost of material and labour, etc. as per approved design and as directed by the Engineer-in-charge:-IIb) fixed with wire gauze, 22 SWG W-1IIIw-126.004.0048.00		N 4		2.50		- 00	24.50		
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23Providing and fixing, approved quality mortice lock.222.00Paint222.00Paint222.0024Painting new surface:- Preparing surface and painting of doors and windows any type (including edges):-222i) priming coat.2222ii) Second coat2770tal0.84Steel Window2222225Providing and fixing steel windows with openable 						Total	42.00	Sft	
lock.222.00Paint222.00Paint24Painting new surface:- Preparing surface and painting of doors and windows any type (including edges):-i) priming coat. </td <td></td> <td>Lock</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		Lock							
PaintImage: section same section for frame 11/2"x1"x5/8"x1/8" (40x25x16x3 mm), Z-section for leaves 3/4"x1"x1/8" (25x25x3 mm), glass panes, wooden screed for glazing embedded over a thin layer of putty duly screwed with leaves, brass fittings, holdfast, duly painted, complete in all respects, including all cost of material and labour, etc. as per approved design and as directed by the Engineer-in-charge:-Image: section scale	23								
24Painting new surface:- Preparing surface and painting of doors and windows any type (including edges):- i) priming coat.Image: Constraint of the second secon			2				2.00	Each	
Preparing surface and painting of doors and windows any type (including edges):-Image: constraint of the second coatImage: constraint of the second coati) priming coat.Image: constraint of the second coatImage: constraint of the second coatImage: constraint of the second coatSteel WindowImage: constraint of the second coatImage: constraint of the second coatImage: constraint of the second coat25Providing and fixing steel windows with openable glazed panels, using beam section for frame 1½"x1"x5/8"x1/8" (40x25x16x3 mm), Z-section for leaves 34"x1"x34"x1/8" (20x25x20x3 mm), T- section sashes 1"x1"x1/8" (25x25x3 mm), glass panes, wooden screed for glazing embedded over a thin layer of putty duly screwed with leaves, brass fittings, holdfast, duly painted, complete in all respects, including all cost of material and labour, etc. as per approved design and as directed by the Engineer-in-charge:-Image: constraint of the second constra									
windows any type (including edges):-Image: constraint of the second coatImage: constraint of the second coatii) Second coatImage: constraint of the second coatImage: constraint of the second coat25Providing and fixing steel windows with openable glazed panels, using beam section for frame l1½"x1"x5/8"x1/8" (40x25x16x3 mm), Z-section for leaves ¾"x1"x¾"x1/8" (20x25x20x3 mm), T- section sashes 1"x1"x1/8" (25x25x3 mm), glass panes, wooden screed for glazing embedded over a thin layer of putty duly screwed with leaves, brass fittings, holdfast, duly painted, complete in all respects, including all cost of material and labour, etc. as per approved design and as directed by the Engineer-in-charge:-Image: constraint of the second constraint of the	24								
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ii) Second coatTotal0.84Steel Window25Providing and fixing steel windows with openable glazed panels, using beam section for frame 1½"x1"x5/8"x1/8" (40x25x16x3 mm), Z-section for leaves ¾"x1"x¾"x1/8" (20x25x20x3 mm), T- section sashes 1"x1"x1/8" (25x25x3 mm), glass panes, wooden screed for glazing embedded over a thin layer of putty duly screwed with leaves, brass fittings, holdfast, duly painted, complete in all respects, including all cost of material and labour, etc. as per approved design and as directed by the Engineer-in-charge:									
Steel WindowImage: Steel Windows with openable glazed panels, using beam section for frame 1½"x1"x5/8"x1/8" (40x25x16x3 mm), Z-section for leaves ¾"x1"x¾"x1/8" (20x25x20x3 mm), T- section sashes 1"x1"x1/8" (25x25x3 mm), glass panes, wooden screed for glazing embedded over a thin layer of putty duly screwed with leaves, brass fittings, holdfast, duly painted, complete in all respects, including all cost of material and labour, etc. as per approved design and as directed by the Engineer-in-charge:-Image: Image: Complete in all b) fixed with wire gauze, 22 SWGImage: Image: Complete in section with wire gauze, 22 SWGW-126.004.0048.00									
25Providing and fixing steel windows with openable glazed panels, using beam section for frame 1½"x1"x5/8"x1/8" (40x25x16x3 mm), Z-section for leaves ¾"x1"x3/4"x1/8" (20x25x20x3 mm), T- section sashes 1"x1"x1/8" (25x25x3 mm), glass panes, wooden screed for glazing embedded over a thin layer of putty duly screwed with leaves, brass fittings, holdfast, duly painted, complete in all respects, including all cost of material and labour, etc. as per approved design and as directed by the Engineer-in-charge:-Image: Complete in all panes, wooden screed for glazing embedded over a thin layer of putty duly screwed with leaves, brass fittings, holdfast, duly painted, complete in all respects, including all cost of material and labour, etc. as per approved design and as directed by the Engineer-in-charge:-Image: Complete in all respects, including all cost of material and labour, etc. as per approved design and as directed by the Engineer-in-charge:-Image: Complete in all respects, including all cost of material and labour, etc. as per approved design and as directed by the Engineer-in-charge:-Image: Complete in all respects, including all cost of material and labour, etc. as per approved design and as directed by the Engineer-in-charge:-Image: Complete in all respects, including all cost of material and labour, etc. as per approved design and as directed by the Engineer-in-charge:-Image: Complete in all respects, including all cost of material and labour, etc. as per approved design and as directed by the Engineer-in-charge:-Image: Complete in all respects, including all cost of material and labour, etc. as per approved design and as directed by the etc. as per approved design and as directed by the etc. as per approved design and as directed by the etc. as per approved design and as directed b		· ·				Total	0.84	Sft	
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for leaves ¾"x1"x¾"x1/8" (20x25x20x3 mm), T- section sashes 1"x1"x1/8" (25x25x3 mm), glass panes, wooden screed for glazing embedded over a thin layer of putty duly screwed with leaves, brass fittings, holdfast, duly painted, complete in all respects, including all cost of material and labour, etc. as per approved design and as directed by the Engineer-in-charge:-Image: Complete in all material and labour, etc. as per approved design and as directed by the Engineer-in-charge:-b) fixed with wire gauze, 22 SWGImage: Complete in worden and the state of the									
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v) glass pane 5 mm thick 2 6.00 4.00 48.00									
v) glass pane 5 mm thick 2 6.00 4.00 48.00		b) fixed with wire gauze, 22 SWG							
W-1 2 6.00 4.00 48.00									
V-1 1 2.00 2.00 4.00			2	6.00		4.00	48.00	Sft	
		V-1	1	2.00		2.00	4.00	Sft	
Total 52.00						Total	52 00	Sft	

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
110.							
	Roof Insulation						
26	Single layer of tiles 9"x4½"x1½" (225x113x40 mm) laid over 4"(100 mm) earth and 1" (25 mm) mud plaster without Bhoosa, grouted with cement sand 1:3 on top of RCC roof slab, provided with 34 lbs. per %Sft. or 1.72 Kg/Sq.m bitumen coating sand blinded.						
	Roof area	1	13.50	13.50		182.25	Sft
		1	8.50	7.50		63.75	Sft
					Total	246.00	Sft
					Total	2.46	%Sft
27	Supplying and laying polythene sheet over D.P.C. under floors and on roofs, etc.						
	ii) 500 gauge (.005" thick)				Total	246.00	Sft
	Khurras						
28	Khuras on roof 2'x2'x6" (600 x 600 x 150 mm)	1				1.00	Each
	Bottom Khuras						
29	Bottom Khuras of brick masonry in cement mortar 1:6, 4'x2'x4 ¹ / ₂ " (1200x600x113 mm) over 3" (75						
	mm) cement concrete 1:4:8.	1				1.00	Each

DETAILED COST ESTIMATE

OFFICE BUILDING

PLUMBING WORKS

		PLUMBING WORKS				
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Schedule Item				
		Indian W.C				
1	19-4-i	Providing and fitting glazed earthen ware water closet, squatter type (Orisa pattern), combined with foot rest.				
		i) white	Each	1.00	2,235.35	2,235
2	19-13-i	Providing and fitting plastic made low down flushing cistern 13.63 litre (3 gallons) capacity, including bracket set, copper connection, etc. complete.				
		i) white	Each	1.00	2,666.60	2,667
3	19-7-i	Providing and fitting glazed earthen ware wash hand basin 56x40 cm (22"x16") including bracket set, waste pipe and waste coupling, etc.				
		i) white, with pedestal	Each	1.00	5,187.45	5,187
4	19-30	Providing and fixing, chromium plated mixing valve, for wash hand basin, sink or shower.	Each	1.00	2,231.50	2,232
6	19-16	Providing and fixing, chromium plated soap dish.	Each	1.00	280.40	280
8	19-20	Providing and fixing looking glass 55x40 cm (22"x16") size	Each	1.00	642.30	642
9	19-27	Providing and fixing chromium plated bib cock:-				
,	17 21	i) 2 cm (³ / ₄ ")	Each	1.00	1,017.20	1,017
10	19-28	Providing and fixing chromium plated tee stop cock 15mm (¹ / ₂ ").	Each	3.00	957.20	2,872
11	19-34-i	Providing and fixing, floor trap of cast iron, including concrete chamber all round, and C.I. grating:- i) 10x5 cm (4"x2")		1.00	634.55	635
12	19-36	Providing and fitting 10 cm (4") gully trap, including cement concrete, cost of PVC grating $15x15$ cm (6"x6") and masonry chamber 30x30 cm (12 "x12").		1.00	1,141.10	1,141

DETAILED COST ESTIMATE

OFFICE BUILDING

		PLUMBING WORKS				
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
13	19-35-ii	Providing and fitting "P" trap:-				
-		ii) 10 cm (4") glazed.	Each	2.00	288.65	577
		PPRC Pipe				
14	23-47	Providing, laying, testing and commissioning of POLYPROPYLENE RANDOM COPOLYMER (PPRC)water supply pipe made of (Dadex/ Popular /Beta/ BBJ)with specified pressure rating PN (PRESSURE NOMINAL) and conforming to DIN8077-8078 code i/c cost of solvent, specials, making jharries complete in all respect as approved and directedby Engineer Incharge.(Internal / External Diameters mentioned).				
		b) PN-20 pipe				
		(ii) (3/4") 25 mm	Rft	22.00	66.60	1,465
		(iii) (1") 32 mm	Rft	16.50	107.05	1,766
		Valve				
15	23/46	Providing and fixing CP heavy duty brass Ball valve with CP handle of specified dia meter made of Faisal/ Sonex/ Master best quality or equivalent complete in all respect as approved and directed by the Engineer Incharge.				
		ii) 3/4" dia	Each	1.00	1,447.20	1,447
		iii) 1" dia	Each	1.00	1,687.20	1,687
16	19-47	uPVC Pipe Providing, fixing, testing and commissioning of μ- PVC (Unplasticized polyvinyl Chloride)Nikasi /waste pipe make of dadex/Popular/Beta/BBJ plain/ socket ended conforming to code EN-1401 of specified SDR (Standard Dimension Ratio)including the cost of specials and Solvents complete in all respect as approved and directed by the Engineer Incharge				
		Type (SDR 41/SN-4)				
		(iii) 2"(60 mm)	Rft	20.00	89.00	1,780
		(v) 4"(110 mm)	Rft	80.00	260.70	20,856
		(vi) 6"(160 mm)	Rft	20.00	381.65	7,633

DETAILED COST ESTIMATE

OFFICE BUILDING

PLUMBING WORKS

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		HDPE Tank				
17	19/51	Providing and hoisting vertical /horizontal type storage tank of required capacity made of rotationally molded from (HDPE), double ply polyethelene of approved manufacturer i/c cost of making connection for inlet/outlet pipe, float valve i/c all cost of specials & labour complete in all respect as approved and directed by the Engineer Incharge.		200.00	106.75	21,350
		Total Rs. (A)				77,47(
		Non-Schedule Item				
18	N.S	Providing and making Manhole 2'x2' internal size including 9" thick brick masonry (1:4), 1/2" th. Plastering (1:3) i/side, benching with PCC 1:2:4 4" th. with cement finish, including manhole cover, complete in all respects.	Each	1.00	18,219.61	18,220
		Total Rs. (B)				18,220
		Total Amount Rs. (A + B)				95,690

DETAILED COST ESTIMATE

OFFICE BUILDING

ELECTDICAL WORKS

	1	ELECTRICAL WORK	S	ГГ		
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
1	C-24/3-ii	Supply and erection of PVC pipe for wiring recessed in walls, including bends, inspection joints,				
		boxes, pull boxes, hook, cutting and repair surface etc. completed with all specified. (20 mm i/d)	Rft.	375.00	83.70	31,388
2	C-24/3-iii	Supply and erection of PVC pipe for wiring recessed in walls, including bends, inspection joints, boxes, pull boxes, hook, cutting and repair surface etc. completed with all specified. (25 mm i/d)	Rft.	100.00	96.85	9,685
3	C-24/10a.i	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (3.029)		1,125.00	26.10	29,363
4	C-24/10a.iii	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (7.029)		300.00	41.15	12,345
5	C-24/10a.iv	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (7.036)	Rft.	500.00	54.25	27,125
6	C-24/14-i	Supply and erection of M.S. sheet box of 16 SWG, 10 cm (4") deep, with 4.75 mm thick (3/16") bakelite sheet top, for recessed wiring, including making holes for regulators, switches, plugs, etc. (4"x4")		12.00	277.20	3,326
7	C-24/14-ii	Supply and erection of M.S. sheet box of 16 SWG, 10 cm (4") deep, with 4.75 mm thick (3/16") bakelite sheet top, for recessed wiring, including making holes for regulators, switches, plugs, etc. (7"x4")		1.00	380.60	381

DETAILED COST ESTIMATE

OFFICE BUILDING

FIFCTRICAL WORKS

	1	ELECTRICAL WORK	S			
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
8	C-24/32-ii	Supply and erection of switches 10/15 Amp. (Recessed Type)	Each	12.00	88.70	1,064
9	C-24/36-i	Supply and erection of 3 pin switch and Plug combined, recessed type. (5Amps)	Each	4.00	113.30	453
10	C-24/36-ii	Supply and erection of 3 pin switch and Plug combined recessed type (10/15Amps)	Each	5.00	151.10	756
11	C-24/43	Supply and erection of tube light, including rod, choke, starter with frame, flexible wire, including connection from ceiling rose, etc., complete i) double rod (80 watts) with two chokes and 2 starters.	Each	9.00	2,181.65	19,635
12	C-24/102/a	Providing and fixing Copper winded Exhaust fan with louver and shutter made of Pak/Younas /G.F.C. i/c the cost of necessary cable and hardware for connection from ceiling rose complete as approved and directed by Engineer Incharge.				
		(a) Plastic body (ii) 12 " dia	Each	1.00	3,134.75	3,135
		Sub Total (A)				138,655
13	N.S	Supply, installation and commissioning of wall mounted mirror LED light 10 watt with tube rod and frame all necessary fixing accessories, complete in all respects		1.00	1,215.00	1,215
14	N.S	Supply, installation and commissioning recessed 10W LED Down Light complete in all respects	Each	1.00	1,430.00	1,430
15	N.S	Supply, Installation, testing and commissioning of following size 56" ceiling fan, complete with capacitor, hanging rod, canopy, blades, dimmers nuts and bolts complete in all respect.		2.00	7,000.00	14,000
		Sub Total (B)				16,645
		Sub Total (A+B)				155,300
		Sub Total (A+B)				133,300

DETAILED COST ESTIMATE

GUARD ROOM

		CIVIL WORK				
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Schedule Item				
		Excavation				
1	3/21/a/ii	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)				
		a) By Manual				
		ii) in ordinary soil.	1000Cft	0.27	10,712.60	2,892
ļ		Anti-Termite				
2	26/43	Spraying termite proofing by using liquid FMC/ Biflex/ Terminex Exin/ Ms Hextar or equivalent @ specified suspension concenterate (SC), Mixing Ability-HEXTAR with Ratio (1:250) = 540 Sft or equivalent approved liquid applying with shower and certificate will be provided by the contractor for 10-years complete in all respect as approved by the Engineer Incharge.	Sft	422.50	9.25	3,908
		Plain Cement Concrete				
3	6/5	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):				
		(i) Ratio 1: 4: 8	100 Cft	0.35	29,079.80	10,178
		Detala analatia Essenda tian				
1	7/4/i	Brick work in Foundation Pacca brick work in foundation and plinth in:-				
4	//4/1	Cement, sand mortar:- Ratio 1:5	100 Cft	2.07	31,875.60	65,982
		Coment, sand mortal." Katto 1.5		2.07	51,075.00	05,962
		Horizontal D.P.C				
5	6/35	Providing and laying damp proof course of cement concrete 1 : 2 : 4 (using cement, sand and shingle), including bitumen coating :-				
		(a) with one coat bitumen and one coat polythene				
		sheet 500gauge				
		i) 1 ¹ / ₂ " thick (40 mm)	100 Sft	0.32	8,711.65	2,788
		Vertical D.B.C.				
6	6/35	Vertical D.P.C Providing and laying vertical damp proof course				
0	0/33	with cement sand plaster and bitumen coating:-				
		(a) with one coat of bitumen and one coat of				
		polythene sheet 500 gauge:				
		ii) Ratio 1:3 ³ / ₄ " thick (20 mm)	100 Sft	0.43	6,525.25	2,806

DETAILED COST ESTIMATE

GUARD ROOM CIVIL WORK

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Brick work in Super Structure				
7	7/5	Pacca brick work in ground floor:-				
		i) Cement, sand mortar:- Ratio 1:5	100 Cft	3.55	34,090.60	121,022
		Concrete Work				
8	6/6	Providing and laying reinforced cement concrete (including prestressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.):-				
		Above foundation				
		(a) (i) Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects:-				
		Type C (nominal mix 1: 2: 4)	P.Cft	75.78	556.05	42,138
		Steel Work.				
9	6/12/c	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-				
		Deformed bars (Grade-60)	100kg	2.44	31,814.75	77,628
		Sand Filling				
10	7/30	Supplying and filling sand under floor; or plugging in wells.	100 Cft	2.75	2,944.60	8,098
		Brick ballast				
11	6/2	Dry rammed brick or stone ballast, 1 ¹ / ₂ " to 2"(40 mm to 50 mm) gauge.	100 Cft	0.33	9,035.40	2,982

DETAILED COST ESTIMATE

GUARD ROOM CIVIL WORK

	2nd BI-Annual-					
Sr. No.	2022 (July to Dec) Sialkot	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Plain Cement Concrete				
12	6/5	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):				
		Ratio 1: 2: 4	100 Cft	0.17	38,271.80	6,506
		Porcelain Tile				
13	10/42/d	Providing and laying superb quality Porcelain glazed tiles flooring of MASTER brand of specified size in approved design, Color and Shade with adhesive / bond over 3/4" thick (1:3)cement plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respect as approved and directed by the Engineer Incharge.				
		d) (Non-Skid Chequred Tiles) 300mmx300mm	Per Sft	100.00	213.00	21,300
14	10/43/a	Providing and laying superb quality Porcelain glazed tiles of Master brand, skirting/ dado of specified size, Color and Shade with adhesive/ bond over 1/2" thick (1:2)cement plaster i/c the cost of and sealer for finishing the joints, cutting grinding complete in all respect as approved and directed by the Engineer Incharge.				
		a) Full body Glazed Tile				
		(i) 400 mm x 400 mm	Per Sft	13.20	294.15	3,883
		Slab Plaster				
15	11/10/b	Cement plaster 3/8" (10 mm) thick under soffit of R.C.C. roof slabs only, upto 20' height. (Ratio:-1:3)	100 Sft	1.00	3,765.60	3,766
		Cement Plaster				
16	11/9	Cement plaster 1:4 upto 20' (6.00 m) height:-				
		3/4" (20 mm) thick	100 Sft	3.80	4,437.45	16,862
		Pointing				
17	11/18/a	Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-				
		a) ratio 1:2	100 Sft	4.83	3,575.35	17,269
18	11/31	Extra cost of labour and material for red oxide pigment in cement pointing to match with the				
		colour of bricks.	100 Sft	4.83	669.00	3,231

DETAILED COST ESTIMATE

GUARD ROOM CIVIL WORK

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Distempering				
19	11/23	Distempering:-				
17	11/23	iii) three coats	100 Sft	4.80	1,309.95	6,288
			100 51	4.00	1,507.75	0,200
		Wooden Door				
20	12/50-i	Providing and fixing 1½" (40 mm) thick hollow flush doors and windows with commercial ply (3 ply) on both faces of deodar wood shutter frame 1¼" (30 mm) thick and partal wood braces at about 3" (75 mm) apart and deodar wood lipping 1½"x3/8" (40 mmx10 mm) fixed with M.S. chowkat (frame) including chromium plated fittings, etc. complete in all respects (without sliding bolt or lock):- M.S. angle iron 1½"x1½"x¼", welded (40 mmx40 mmx 6mm) with M.S. flat 2"x¼" (50 mm x 6 mm)				
			Per Sft	24.50	1,519.85	37,236
		Lock				
21	12/22	Providing and fixing, approved quality mortice				
21	12/22	lock.	Each	1.00	799.00	799
		D =1=4				
22	13/5/c	Paint Painting new surface:-				
22	13/5/0	Preparing surface and painting of doors and windows any type (including edges):-				
		i) priming coat.	100 Sft	0.49	1,325.50	649
		ii)Two coat	100 Sft	0.49	722.60	354
		Steel Window				
23	25/41/b	Providing and fixing steel windows with openable glazed panels, using beam section for frame $1\frac{1}{2}x1x5/8x1/8$ ($40x25x16x3$ mm), Z-section for leaves $\frac{3}{4}x1x3\frac{1}{8}$ ($20x25x20x3$ mm), T-section sashes $1x1x1/8$ ($25x25x3$ mm), glass panes, wooden screed for glazing embedded over a thin layer of putty duly screwed with leaves, brass fittings, holdfast, duly painted, complete in all respects, including all cost of material and labour, etc. as per approved design and as directed by the Engineer-in-charge:-				
		b) fixed with wire gauze, 22 SWG				
		v) glass pane 5 mm thick	Per Sft	16.00	1,089.75	17,436

DETAILED COST ESTIMATE

GUARD ROOM

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Roof Insulation				
24	9/35	Single layer of tiles 9"x4½"x1½" (225x113x40 mm) laid over 4"(100 mm) earth and 1" (25 mm) mud plaster without Bhoosa, grouted with cement sand 1:3 on top of RCC roof slab, provided with 34 lbs. per %Sft. or 1.72 Kg/Sq.m bitumen coating				
		sand blinded.	100 Sft	1.32	11,779.70	15,549
25	26/37/ii	Supplying and laying polythene sheet over D.P.C. under floors and on roofs, etc.				
		ii) 500 gauge (.005" thick)	Per Sft	132.00	6.00	792
		Khurras				
26	9/15	Khuras on roof 2'x2'x6" (600 x 600 x 150 mm)	Each	1.00	866.40	866
		Bottom Khuras				
27	9/16	Bottom Khuras of brick masonry in cement mortar 1:6, 4'x2'x4 ¹ / ₂ " (1200x600x113 mm) over 3" (75 mm) cement concrete 1:4:8.	Each	1.00	1,762.85	1,763
		Total Rs.				494,972

GUARD ROOM

CALCULATION OF QUANTITIES

~	1	1	1				
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
1.00							
	Excavation						
1	Excavation in foundation of building, bridges and						
	other structures, including dagbelling, dressing,						
	refilling around structure with excavated earth,						
	watering and ramming lead upto one chain (30 m)						
	and lift upto 5 ft. (1.5 m)						
	ii) in ordinary soil.	-	12.00	2.50	2.50	2 60 55	~ ~ ~
	Room wall	1	43.00	2.50	2.50	268.75	Cft
					Total	268.75	Cft
					Total	0.27	%oCft
							,
	Anti-Termite						
2	Spraying termite proofing by using liquid FMC/						
	Biflex/ Terminex Exin/ Ms Hextar or equivalent @						
	specified suspension concenterate (SC), Mixing						
	Ability-HEXTAR with Ratio $(1:250) = 540$ Sft or						
	equivalent approved liquid applying with shower						
	and certificate will be provided by the contractor						
	for 10-years complete in all respect as approved by						
	the Engineer Incharge.						
	Room wall	1	43.00	7.50		322.50	Sft
	Floor	1	10.00	10.00		100.00	Sft
					Total	422.50	Sft
	Plain Cement Concrete						
3	Cement concrete plain including placing,						
	compacting, finishing and curing complete						
	(including screening and washing of stone						
	aggregate):						
	(i) Ratio 1: 4: 8		12.00	2.50	0.00		
	Room wall	1	43.00	2.50	0.33	35.48	Cft
					Total	35.48	Cft
					Total	0.35	%Cft
	Brick work in Foundation						
4	Pacca brick work in foundation and plinth in:-						
	Cement, sand mortar:- Ratio 1:5						
	Room wall						
	Step - 1	1	43.00	1.875	0.25	20.16	Cft
	Step - 2	1	43.00	1.500	0.25	16.13	Cft
	Step - 3	1	43.00	1.125	0.25	12.09	Cft
	Step - 4	1	43.00	0.750	4.92	158.67	Cft
					Total	207.05	Cft
					Total	2.07	%Cft

GUARD ROOM

CALCULATION OF QUANTITIES

Sr.	Description	NT-	T	W ² J41	II.:-1.4	04	T	
No.	Description	No.	Length	Width	Height	Qty.	Unit	
	Horizontal D.P.C							
5	Providing and laying damp proof course of cement							
	concrete 1 : 2 : 4 (using cement, sand and shingle),							
	including bitumen coating :-							
	(a) with one coat bitumen and one coat polythene							
	sheet 500gauge							
	i) 1 ¹ / ₂ " thick (40 mm)							
	Room wall	1	43.00	0.75		32.25	Sft	
					Total	32.25	Sft	
					Total	0.32	%Sft	
	Vertical D.P.C							
6	Providing and laying vertical damp proof course							
	with cement sand plaster and bitumen coating:-							
	(a) with one coat of bitumen and one coat of							
	polythene sheet 500 gauge:							
	ii) Ratio 1:3 ³ / ₄ " thick (20 mm)							
	Room wall	1	43.00		1.00	43.00	Sft	
					Total	43.00	Sft	
					Total	0.43	%Sft	
	Brick work in Super Structure							
7	Pacca brick work in ground floor:-							
	i) Cement, sand mortar:- Ratio 1:5					32.25 Sft 0.32 %Sft 43.00 Sft 43.00 Sft		
	Room wall	1	43.00	0.75	10.50	338.63	Cft	
	Parapet Wall	1	43.00	0.38	2.50	40.31	Cft	
	Entrance step	2	4.00	1.00	0.75	6.00	Cft	
	D/d Doors and Window							
	D-1	-1	3.50	0.75	7.00	(18.38)	Cft	
	W-1	-1	4.00	0.75	4.00	(12.00)	Cft	
					Total	354.56	Cft	
					Total	3.55	%Cft	

GUARD ROOM

CALCULATION OF QUANTITIES

Sr.							
No.	Description	No.	Length	Width	Height	Qty.	Unit
	Concrete Work						
8	Providing and laying reinforced cement concrete						
	(including prestressed concrete), using coarse sand						
	and screened graded and washed aggregate, in						
	required shape and design, including forms,						
	moulds, shuttering, lifting, compacting, curing,						
	rendering and finishing exposed surface, complete						
	(but excluding the cost of steel reinforcement, its						
	fabrication and placing in position, etc.):-						
	Above foundation						
	(a) (i) Reinforced cement concrete in roof slab,						
	beams, columns lintels, girders and other structural						
	members laid in situ or precast laid in position, or						
	prestressed members cast in situ, complete in all						
	respects:-						
	Type C (nominal mix 1: 2: 4)						
	Top Slab	1	11.50	11.50	0.50	66.13	Cft
	Sun shade	1	5.50	1.50	0.25	2.06	Cft
	Sun shade	1	6.00	1.50	0.25	2.25	Cft
	Doors and window Lintels						
	D-1	1	4.50	0.75	0.75	2.53	Cft
	W-1	1	5.00	0.75	0.75	2.81	Cft
					Total	75.78	Cft
	Steel Work.						
9	Fabrication of mild steel reinforcement for cement						
7	concrete, including cutting, bending, laying in						
	position, making joints and fastenings, including						
	cost of binding wire and labour charges for binding						
	of steel reinforcement (also includes removal of						
	rust from bars):-						
	Deformed bars (Grade-60)					75.78	Cft
	Top Slab & lintel @ 6.75 lbs / Cft		6.75		=	511.52	lbs/cft
				Total	=	511.52	lbs/cft
				Total	=	232.09	Kg.
			Add 5%	Wastage.	=	11.60	Kg.
				Total	=	244	Kg
							a · -
					Total	2.44	%kg

GUARD ROOM

CALCULATION OF QUANTITIES

Sr.			.	****			TT •
No.	Description	No.	Length	Width	Height	Qty.	Unit
	Sand Filling						
10	Supplying and filling sand under floor; or plugging						
	in wells.			10.00			
	Floor	1	10.00	10.00	2.75	275.00	Cft
					Total	275.00	Cft
					Total	2.75	%Cft
	Brick ballast						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
11	Dry rammed brick or stone ballast, 1 ¹ / ₂ " to 2"(40						
	mm to 50 mm) gauge.						
	Floor	1	10.00	10.00	0.33	33.00	Cft
					Total	33.00	Cft
					Total	0.33	%Cft
	P.C.C						
12	Cement concrete plain including placing,						
	compacting, finishing and curing complete						
	(including screening and washing of stone						
	aggregate):						
	Ratio 1: 2: 4						
	Floor	1	10.00	10.00	0.17	16.67	Cft
						0.45	
					Total	0.17	%Cft
10	Porcelain Tile						
13	Providing and laying superb quality Porcelain glazed tiles flooring of MASTER brand of						
	specified size in approved design, Color and Shade						
	with adhesive / bond over $3/4$ " thick (1:3)cement						
	plaster i/c the cost of sealer for finishing the joints						
	i/c cutting grinding complete in all respect as						
	approved and directed by the Engineer Incharge.						
	d) (Non-Skid Chequred Tiles) 300mmx300mm	1	10.00	10.00		100.00	Sft
					Total	100.00	Sft
14	Providing and laying superb quality Porcelain				Total	100.00	511
14	glazed tiles of Master brand, skirting/ dado of						
	specified size, Color and Shade with adhesive/						
	bond over $1/2$ " thick (1:2)cement plaster i/c the						
	cost of and sealer for finishing the joints, cutting						
	grinding complete in all respect as approved and						
	directed by the Engineer Incharge.						
	a) Full body Glazed Tile						
	(i) 400 mm x 400 mm	1	40.00		0.33	13.20	Sft
					Total	13.20	Sft

GUARD ROOM

CALCULATION OF QUANTITIES

Sr.	Description	No.	Longth	Width	Hojaht	Oty	Unit
No.	Description	110.	Length	wiaui	Height	Qty.	Unit
	Slab Plaster						
15	Cement plaster $3/8"$ (10 mm) thick under soffit of						
	R.C.C. roof slabs only, upto 20' height. (Ratio:-						
	1:3)		10.00	10.00		100.00	
		1	10.00	10.00		100.00	Sft
					Total	1.00	%Sf
	Cement Plaster				Total	1.00	/031
16	Cement plaster 1:4 upto 20' (6.00 m) height:-						
10	3/4" (20 mm) thick						
	Guard Room						
		2	10.00		10.50	210.00	Sft
		2	10.00		10.50	210.00	Sft
	D/d Doors and Window	4	10.00		10.30	210.00	SIL
	D-1	-1	3.50		7.00	(24.50)	Sft
	W-1	-1 -1	4.00		4.00	(16.00)	Sft
	w-1	-1	4.00		4.00	(10.00)	511
					Total	379.50	Sft
					Total	379.30	511
					Total	3.80	%Sf
					Total	5.00	7051
	Pointing						
17	Cement pointing struck joints, on walls, upto 20'						
17	(6.00 m) hiehgt:-						
	a) ratio 1:2						
	Outer Walls	1	46.00		10.50	483.00	Sft
						402.00	
					Total	483.00	Sft
					Total	4.83	%Sf
10	Fortune and a C 1.1 and and and the form and and the						
18	Extra cost of labour and material for red oxide						
	pigment in cement pointing to match with the colour of bricks.				T-4-1	4.02	0/ 00
	colour of blicks.				Total	4.83	%Sf
	Distempering						
19	Distempering:-						
	iii) three coats						
	Guard Room						
		2	10.00		10.50	210.00	Sft
		2	10.00		10.50	210.00	Sft
	Ceiling	1	10.00	10.00		100.00	Sft
	D/d Doors and Window	-	10.00	- 0.00			211
	D-1	-1	3.50		7.00	(24.50)	Sft
	W-1	-1	4.00		4.00	(16.00)	Sft
		1			7.00	(10.00)	511

GUARD ROOM

CALCULATION OF QUANTITIES

Description	No.	Length	Width	Height	Qty.	Unit
				Total	479.50	Sft
				Total	4.80	%Sf
Wooden Door						
Providing and fixing 1½" (40 mm) thick hollow flush doors and windows with commercial ply (3 ply) on both faces of deodar wood shutter frame 1¼" (30 mm) thick and partal wood braces at about 3" (75 mm) apart and deodar wood lipping 1½"x3/8" (40 mmx10 mm) fixed with M.S. chowkat (frame) including chromium plated fittings, etc. complete in all respects (without sliding bolt or lock):- M.S. angle iron 1½"x1½"x¼", welded (40 mmx40 mmx 6mm) with M.S. flat 2"x¼" (50 mm x 6 mm)						
D-1	1	3.50		7.00	24.50	Sft
				Total	24.50	Sft
Lock						
Providing and fixing, approved quality mortice lock.	1				1.00	Eacl
Paint						
Painting new surface:-				Total	0.49	Sft
Steel Window						
Providing and fixing steel windows with openable glazed panels, using beam section for frame 1 ¹ / ₂ "x1"x5/8"x1/8" (40x25x16x3 mm), Z-section for leaves ³ / ₄ "x1"x ³ / ₄ "x1/8" (20x25x20x3 mm), T-section sashes 1"x1"x1/8" (25x25x3 mm), glass panes, wooden screed for glazing embedded over a thin layer of putty duly screwed with leaves, brass fittings, holdfast, duly painted, complete in all respects, including all cost of material and labour, etc. as per approved design and as directed by the Engineer-in-charge:-						
	Wooden Door Providing and fixing 1½" (40 mm) thick hollow flush doors and windows with commercial ply (3 ply) on both faces of deodar wood shutter frame 1¼" (30 mm) thick and partal wood braces at about 3" (75 mm) apart and deodar wood lipping 1½"x3/8" (40 mmx10 mm) fixed with M.S. chowkat (frame) including chromium plated fittings, etc. complete in all respects (without sliding bolt or lock):- M.S. angle iron 1½"x1½"x1¼", welded (40 mmx40 mmx 6mm) with M.S. flat 2"x1¼" (50 mm x 6 mm) D-1 Lock Providing and fixing, approved quality mortice lock. Paint Painting new surface:- Preparing surface and painting of doors and windows any type (including edges):- i) priming coat. ii)Two coat Steel Window Providing and fixing steel windows with openable glazed panels, using beam section for frame 1½"x1"x5/8"x1/8" (40x25x16x3 mm), Z-section for leaves ¾"x1"x¾"x1/8" (20x25x20x3 mm), T-section sashes 1"x1"x1/8" (25x25x3 mm), glass panes, wooden screed for glazing embedded over a thin layer of putty duly screwed with leaves, brass fittings, holdfast, duly painted, complete in all respects, inclu	Wooden Door Providing and fixing 1½" (40 mm) thick hollow flush doors and windows with commercial ply (3 ply) on both faces of deodar wood shutter frame 1¼" (30 mm) thick and partal wood braces at about 3" (75 mm) apart and deodar wood lipping 1¼" x3/8" (40 mmx10 mm) fixed with M.S. chowkat (frame) including chromium plated fittings, etc. complete in all respects (without sliding bolt or lock):- M.S. angle iron 1½" x1½" x¼", welded (40 mmx40 mmx 6mm) with M.S. flat 2"x¼" (50 mm x 6 mm) D-1 1 Lock Providing and fixing, approved quality mortice lock. 1 Providing and fixing, approved quality mortice lock. Preparing surface:- Preparing surface and painting of doors and windows any type (including edges):- i) priming coat. ii)Two coat Steel Window Providing and fixing steel windows with openable glazed panels, using beam section for frame 1½"x1"x5/8"x1/8" (40x25x16x3 mm), Z-section for leaves ¾"x1"x¾"x18" (20x25x20x3 mm), T-section sashes 1"x1"x1/8" (25x25x3 mm), glass panes, wooden sc	Wooden Door Providing and fixing 1½" (40 mm) thick hollow flush doors and windows with commercial ply (3 ply) on both faces of deodar wood shutter frame 1¼" (30 mm) thick and partal wood braces at about 3" (75 mm) apart and deodar wood lipping 1½"x3/8" (40 mmx10 mm) fixed with M.S. chowkat (frame) including chromium plated fittings, etc. complete in all respects (without sliding bolt or lock):- M.S. angle iron 1½"x1½"x¼", welded (40 mmx40 mmx 6mm) with M.S. flat 2"x¼" (50 mm x 6 mm) D-1 1 D-1 1 D-1 1 Stel Providing and fixing, approved quality mortice lock. 1 Providing and fixing, approved quality mortice lock. 1 Preparing surface and painting of doors and windows any type (including edges):- i) priming coat. 1 ii)Two coat 1 Steel Window Providing and fixing steel windows with openable glazed panels, using beam section for frame 1/2"x1"x5/8"x1/8" (20x25x20x3 mm), T-section sahes 1"x1"x1/8" (25x25x3 mm), glass panes, wooden screed for glazing embedded over a thin layer of putty duly screwed with leave	Wooden Door Providing and fixing 1½" (40 mm) thick hollow flush doors and windows with commercial ply (3 ply) on both faces of deodar wood shutter frame 1¼" (30 mm) thick and partal wood braces at about 3" (75 mm) apart and deodar wood lipping 1½"x3/8" (40 mmx10 mm) fixed with M.S. chowkat (frame) including chromium plated fittings, etc. complete in all respects (without sliding bolt or lock):- M.S. angle iron 1½"x1½"x¼", welded (40 mmx40 mmx 6mm) with M.S. flat 2"x¼" (50 mm x 6 mm) D-1 1 D-1 1 D-1 1 M.S. angle iron 1½"x1½"x¼", welded (40 mmx40 mmx 6mm) with M.S. flat 2"x¼" (50 mm x 6 mm) D-1 1 D-1 1 D-1 1 Browiding and fixing, approved quality mortice lock. 1 Providing and fixing, approved quality mortice lock. 1 Preparing surface and painting of doors and windows any type (including edges):- 1 i) priming coat. 1 ii) Two coat 1 Steel Window 1 Providing and fixing steel windows with openable glazed panels, using beam section for frame 1½"x1"x5/8"x1/8" (40x25x16x3 mm), Z-section for leaves ¾"x1"x¾"x1/8" (20x25x20x3 mm), T- section sashes 1"x1"x1/8" (20x25x20x3 mm), Jass panes, wooden screed for glazing embedded over a thin layer of putt	Image: Constraint of the second se	Image: Constraint of the second se

GUARD ROOM

CALCULATION OF QUANTITIES

glass pane 5 mm thick -1 oof Insulation ngle layer of tiles 9"x4½"x1½" (225x113x40 m) laid over 4"(100 mm) earth and 1" (25 mm) ud plaster without Bhoosa, grouted with cement nd 1:3 on top of RCC roof slab, provided with 34 s. per %Sft. or 1.72 Kg/Sq.m bitumen coating nd blinded. poof area		4.00		4.00 Total	16.00 16.00	Sft Sft
oof Insulation ngle layer of tiles 9"x4½"x1½" (225x113x40 m) laid over 4"(100 mm) earth and 1" (25 mm) ud plaster without Bhoosa, grouted with cement nd 1:3 on top of RCC roof slab, provided with 34 s. per %Sft. or 1.72 Kg/Sq.m bitumen coating nd blinded.		4.00				
ngle layer of tiles 9"x4½"x1½" (225x113x40 m) laid over 4"(100 mm) earth and 1" (25 mm) ud plaster without Bhoosa, grouted with cement nd 1:3 on top of RCC roof slab, provided with 34 s. per %Sft. or 1.72 Kg/Sq.m bitumen coating nd blinded.				Total	16.00	Sft
ngle layer of tiles 9"x4½"x1½" (225x113x40 m) laid over 4"(100 mm) earth and 1" (25 mm) ud plaster without Bhoosa, grouted with cement nd 1:3 on top of RCC roof slab, provided with 34 s. per %Sft. or 1.72 Kg/Sq.m bitumen coating nd blinded.						
m) laid over 4"(100 mm) earth and 1" (25 mm) ud plaster without Bhoosa, grouted with cement nd 1:3 on top of RCC roof slab, provided with 34 s. per %Sft. or 1.72 Kg/Sq.m bitumen coating nd blinded.						
oof area						
	1	11.50	11.50		132.25	Sft
				Total	132.25	Sft
				Total	1.32	%Sft
applying and laying polythene sheet over D.P.C. ader floors and on roofs, etc. 500 gauge (.005" thick)				Total	132.00	Sft
				1000	102.00	511
hurras						
huras on roof 2'x2'x6" (600 x 600 x 150 mm)	1				1.00	Each
ottom Khuras						
					1 00	Each
h h	urras uras on roof 2'x2'x6" (600 x 600 x 150 mm) ttom Khuras ttom Khuras of brick masonry in cement mortar	urras 1 uras on roof 2'x2'x6" (600 x 600 x 150 mm) 1 ttom Khuras 1 ttom Khuras of brick masonry in cement mortar , 4'x2'x4½" (1200x600x113 mm) over 3" (75	urras 1 uras on roof 2'x2'x6" (600 x 600 x 150 mm) 1 ttom Khuras 1 ttom Khuras of brick masonry in cement mortar 1	urras 1 uras on roof 2'x2'x6" (600 x 600 x 150 mm) 1 ttom Khuras 1 ttom Khuras of brick masonry in cement mortar 1 , 4'x2'x4½" (1200x600x113 mm) over 3" (75 1	urras 1 uras on roof 2'x2'x6" (600 x 600 x 150 mm) 1 ttom Khuras 1 ttom Khuras of brick masonry in cement mortar 1 , 4'x2'x4½" (1200x600x113 mm) over 3" (75 1	urras 1 1.00 uras on roof 2'x2'x6" (600 x 600 x 150 mm) 1 1.00 ttom Khuras 1 1.00 ttom Khuras of brick masonry in cement mortar 1 1 , 4'x2'x4½" (1200x600x113 mm) over 3" (75 1 1

	PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB DETAILED COST ESTIMATE GUARD ROOM PLUMBING WORKS										
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)					
1	19-47	uPVC Pipe Providing, fixing, testing and commissioning of μ- PVC (Unplasticized polyvinyl Chloride)Nikasi /waste pipe make of dadex/Popular/Beta/BBJ plain/ socket ended conforming to code EN-1401 of specified SDR (Standard Dimension Ratio)including the cost of specials and Solvents complete in all respect as approved and directed by									
		the Engineer Incharge Type (SDR 41/SN-4) (v) 4"(110 mm) Total Rs.	Rft	30.00	217.40	6,522 6,522.00					

DETAILED COST ESTIMATE

GUARD ROOM

ELECTRICAL WORKS

		ELECTRICAL WORK	.S			
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
1	C-24/3-ii	<u>Scheduled Items (A)</u> Supply and erection of PVC pipe for wiring				
1	C-24/J-II	recessed in walls, including bends, inspection joints,				
		boxes, pull boxes, hook, cutting and repair surface		200.00	02 70	16740
		etc. completed with all specified. (20 mm i/d)	Rft.	200.00	83.70	16,740
2	C-24/3-iii	Supply and erection of PVC pipe for wiring				
		recessed in walls, including bends, inspection joints,				
		boxes, pull boxes, hook, cutting and repair surface				
		etc. completed with all specified. (25 mm i/d)	Rft.	50.00	96.85	4,843
3	C-24/6-i	Supply and erection PVC pipe for recessed wiring (main and sub-main) purpose, including bends,				
		specials, etc. in floor, wall or trenches (50mm)	Rft.	100.00	188.45	18,845
4	C-24/10a.i	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only).				
		(3.029)	Rft.	600.00	26.10	15,660
5	C-24/10a.iii	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (7.029)		150.00	41.15	6,173
6	C-24/10a.iv	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only).				
		(7.036)	Rft.	200.00	54.25	10,850
7	C-24/14-i	Supply and erection of M.S. sheet box of 16 SWG, 10 cm (4") deep, with 4.75 mm thick (3/16") bakelite sheet top, for recessed wiring, including making holes for regulators, switches, plugs, etc.				
		(4"x4")	Each	8.00	277.20	2,218

DETAILED COST ESTIMATE

GUARD ROOM

		ELECTRICAL WORK	S			
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
8	C-24/14-ii	Supply and erection of M.S. sheet box of 16 SWG, 10 cm (4") deep, with 4.75 mm thick (3/16") bakelite sheet top, for recessed wiring, including making holes for regulators, switches, plugs, etc. $(7"x4")$	Each	1.00	380.60	381
9	C-24/32-ii	Supply and erection of switches 10/15 Amp. (Recessed Type)	Each	3.00	88.70	266
10	C-24/36-i	Supply and erection of 3 pin switch and Plug combined, recessed type. (5Amps)	Each	3.00	113.30	340
11	C-24/36-ii	Supply and erection of 3 pin switch and Plug combined recessed type (10/15Amps)	Each	7.00	151.10	1,058
12	C-24/43	Supply and erection of tube light, including rod, choke, starter with frame, flexible wire, including connection from ceiling rose, etc., complete				
		ii) single rod (40 watts) with one choke and one starter.	Each	2.00	1,235.30	2,471
		Sub Total (A)				79,843
13	N.S	Supply, Installation, testing and commissioning of following size 56" ceiling fan, complete with capacitor, hanging rod, canopy, blades, dimmers nuts and bolts complete in all respect.	Each	1.00	7,000.00	7,000
		Sub Total (B)				7,000
		Sub Total (A . D)				06 017
		Sub Total (A+B)				86,843

DETAILED COST ESTIMATE

WORK SHOP

Sr. No.	2nd BI-Annual- 2022 (July to Dec)	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
100	Sialkot				(165)	(10)
		Schedule Item				
		Excavation				
1	3/21/a/ii	Excavation in foundation of building, bridges and				
		other structures, including dagbelling, dressing, refilling around structure with excavated earth,				
		watering and ramming lead upto one chain (30 m)				
		and lift upto 5 ft. (1.5 m)				
		a) By Manual				
		ii) in ordinary soil.	1000Cft	1.22	10,712.60	13,069
		Anti-Termite				
2	26/43	Spraying termite proofing by using liquid FMC/				
		Biflex/ Terminex Exin/ Ms Hextar or equivalent @ specified suspension concenterate (SC), Mixing				
		Ability-HEXTAR with Ratio $(1:250) = 540$ Sft or				
		equivalent approved liquid applying with shower				
		and certificate will be provided by the contractor				
		for 10-years complete in all respect as approved by				
		the Engineer Incharge.	Sft	1,714.14	9.25	15,856
		Plain Cement Concrete				
3	6/5	Cement concrete plain including placing,				
		compacting, finishing and curing complete				
		(including screening and washing of stone aggregate):				
		(i) Ratio 1: 4: 8	100 Cft	1.11	29,079.80	32,279
			100 Cit	1.11	29,019.00	52,217
		Brick work in Foundation				
4	7/4/i	Pacca brick work in foundation and plinth in:-				
		Cement, sand mortar:- Ratio 1:5	100 Cft	3.03	31,875.60	96,583
		Horizontal D.P.C				
5	6/36	Providing and laying damp proof course of cement				
		concrete 1 : 2 : 4 (using cement, sand and shingle),				
		including bitumen coating :-				
		(a) with one coat bitumen and one coat polythene				
		sheet 500gauge				
		i) 1 ¹ /2" thick (40 mm)	100 Sft	0.47	8,711.65	4,094
		Vertical D.P.C				
6	6/37	Providing and laying vertical damp proof course				
0	0/37	with cement sand plaster and bitumen coating:-				
		(a) with one coat of bitumen and one coat of				
		polythene sheet 500 gauge:				
		ii) Ratio 1:3 ³ / ₄ " thick (20 mm)	100 Sft	0.63	6,525.25	4,111

DETAILED COST ESTIMATE

WORK SHOP

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)	
		Brick work in Super Structure					
7	7/5	Pacca brick work in ground floor:-					
		i) Cement, sand mortar:- Ratio 1:5	100 Cft	5.17	34,090.60	176,248	
		Concrete Work					
8	6/6	Providing and laying reinforced cement concrete (including prestressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.):-					
		In Foundation					
		 (a)(iii) Reinforced cement concrete in slab of rafts / strip foundation, base slab of column and retaining walls; etc and footing beams, other structural members other than those mentioned in 6(a) (i)&(ii) above not requiring form work (i.e. horizontal shuttering) complete in all respects:- 					
		(3) Type C (nominal mix 1: 2: 4)	P.Cft	192.50	456.85	87,944	
		Above foundation					
		(a) (i) Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects:-					
		Type C (nominal mix 1: 2: 4)	P.Cft	153.88	556.05	85,562	
		Steel Work.					
9	6/12/c	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-					
		Deformed bars (Grade-60)	100kg	11.55	31,814.75	367,460	
			-				
10	7/20	Sand Filling					
10	7/30	Supplying and filling sand under floor; or plugging in wells.	100 Cft	14.34	2,944.60	42,226	

DETAILED COST ESTIMATE

WORK SHOP

	CIVIL WORK								
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)			
		Brick ballast							
11	6/2	Dry rammed brick or stone ballast, 11/2" to 2"(40							
		mm to 50 mm) gauge.	100 Cft	0.46	9,035.40	4,156			
		Plain Cement Concrete							
12	6/5	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):							
		Ratio 1: 2: 4	100 Cft	0.11	38,271.80	4,210			
		Sub Base Course							
13	18/3/a/ (i) + 1/1	Providing and laying sub-base course of stone product of approved quality and grade including, placing, mixing, spreading and compaction of sub base material to required depth, camber and grade to achieve 98% maximum dry density determined according to AASHTO T-180 method-D, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Pit run or bed run gravel from Dina querry to site, actual compacted depth shall be considered for payment)							
			100Cft	1.42	17,448.30	24,777			
		Water Bound Macadam							
14	18/4/a + 1/1	Providing and laying base course of crushed stone (Water Bound Macadam) of approved quality and grade including, placing, mixing, spreading and compaction of base course material to required depth, camber and grade to achieve 100% maximum modified AASHTO dry density, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Crushed stone aggregate from sargodha querry to site, actual compacted depth shall be considered for payment)	100Cft	1.42	29,058.30	41,263			
		Tuff Paver							
15	10/41	Providing and laying Tuff pavers, having 7000 PSI, crushing strength of approved manufacturer, over 2" to 3" sand cushion i/c grouting with sand in joints i/c finishing to require slope. complete in all respect. (50% Grey / 50% Coloured)							
		For Tool Room b) 60-mm thick	Per Sft	74.00	158.05	11,696			
		For Work shop c) 80-mm thick	Per Sft	429.00	196.55	84,320			

DETAILED COST ESTIMATE

WORK SHOP

	CIVIL WORK							
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)		
		Ceramic Tile						
16	10/24	Providing and laying superb quality Ceramic tile floors of Master brand of specified size, Glossy/Matt/Texture of approved Color and Shade as per approved design with adhesive bond, over 3/4" thick (1;2) cement sand plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respects and as approved and directed by the Engineer Incharge.						
		i) 12"x18"/12"x24"/10"x24" /8"x24"/12"x36"	Per Sft	64.00	241.40	15,450		
17	10/25	Providing and laying superb quality Ceramic tiles dado of Master brand of specified size, Glossy/Matt/Texture skirting / dado of approved Color and Shade with adhesive bond over1/2" thick (1:2)cement plaster i/c the cost of sealer for finishing the joints i/c cutting grinding complete in all respects as approved and directed by the Engineer Incharge.						
		i) 12"x18"/12"x24"/10"x24" /8"x24"/12"x36"	Per Sft	224.00	294.15	65,890		
		Slab Plaster						
18	11/10/b	Cement plaster 3/8" (10 mm) thick under soffit of R.C.C. roof slabs only, upto 20' height. (Ratio:- 1:3)	100 Sft	1.38	3,765.60	5,197		
		Cement Plaster						
19	11/9	Cement plaster 1:4 upto 20' (6.00 m) height:-						
		3/4" (20 mm) thick	100 Sft	6.36	4,437.45	28,222		
		Pointing						
20	11/18/a	Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-						
		a) ratio 1:2	100 Sft	8.40	3,575.35	30,033		
21	11/31	Extra cost of labour and material for red oxide pigment in cement pointing to match with the colour of bricks.	100 Sft	8.40	669.00	5,620		
			100 510	5.10	002.00	2,020		
		Distempering						
22	11/23	Distempering:-						
44								

DETAILED COST ESTIMATE

WORK SHOP

	2nd BI-Annual-					
Sr. No.	2022 (July to Dec) Sialkot	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
	Siaikot	Wooden Door				
23	12/50-i	Providing and fixing 1 ¹ / ₂ " (40 mm) thick hollow				
		flush doors and windows with commercial ply (3				
		ply) on both faces of deodar wood shutter frame				
		1 ¹ / ₄ " (30 mm) thick and partal wood braces at about				
		3" (75 mm) apart and deodar wood lipping				
		$1\frac{1}{2}$ "x3/8" (40 mmx10 mm) fixed with M.S.				
		chowkat (frame) including chromium plated				
		fittings, etc. complete in all respects (without				
		sliding bolt or lock):-				
		M.S. angle iron $1\frac{1}{2}x1\frac{1}{2}x1\frac{4}{4}$, welded (40 mmx40 mmx 6mm) with M.S. flat $2x1\frac{4}{4}$ (50 mm x 6 mm)				
		$\begin{array}{c} \text{Initial of min} \text{ with WLS. Hat 2 x 4} (30 \text{ min} x 0 \text{ min}) \end{array}$				
			Per Sft	42.00	1,519.85	63,834
		T1-				
24	12/22	Lock Providing and fixing, approved quality mortice				
24	12/22	lock.	Each	2.00	799.00	1 509
			Eacii	2.00	799.00	1,598
		Paint				
25	13/5/c	Painting new surface:-				
		Preparing surface and painting of doors and				
		windows any type (including edges):-				
		i) priming coat.	100 Sft	0.84	1,325.50	1,113
		ii)Two coat	100 Sft	0.84	722.60	607
		Steel Window				
26	25/41/b	Providing and fixing steel windows with openable				
20	23/41/0	glazed panels, using beam section for frame				
		$1\frac{1}{2}$ "x1"x5/8"x1/8" (40x25x16x3 mm), Z-section				
		for leaves ³ / ₄ "x1"x ³ / ₄ "x1/8" (20x25x20x3 mm), T-				
		section sashes 1"x1"x1/8" (25x25x3 mm), glass				
		panes, wooden screed for glazing embedded over a				
		thin layer of putty duly screwed with leaves, brass				
		fittings, holdfast, duly painted, complete in all				
		respects, including all cost of material and labour,				
		etc. as per approved design and as directed by the				
		Engineer-in-charge:-				
		b) fixed with wire gauze, 22 SWG				
		v) glass pane 5 mm thick	Per Sft	20.00	1,089.75	21,795

DETAILED COST ESTIMATE

WORK SHOP

	2nd BI-Annual-					
Sr. No.	2022 (July to Dec) Sialkot	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Roof Insulation				
27	9/5	Single layer of tiles 9"x41/2"x11/2" (225x113x40				
		mm) laid over 4"(100 mm) earth and 1" (25 mm)				
		mud plaster without Bhoosa, grouted with cement				
		sand 1:3 on top of RCC roof slab, provided with 34				
		lbs. per %Sft. or 1.72 Kg/Sq.m bitumen coating				
		sand blinded.	100 Sft	1.90	11,779.70	22,381
						,
28	26/37/ii	Supplying and laying polythene sheet over D.P.C.				
		under floors and on roofs, etc.				
		ii) 500 gauge (.005" thick)	Per Sft	190.00	6.00	1,140
		Khurras				
29	9/15	Khuras on roof 2'x2'x6" (600 x 600 x 150 mm)	Each	1.00	866.40	866
		Bottom Khuras				
30	9/16	Bottom Khuras of brick masonry in cement mortar				
		1:6, 4'x2'x4 ¹ / ₂ " (1200x600x113 mm) over 3" (75				
		mm) cement concrete 1:4:8.	Each	1.00	1,762.85	1,763
		Parking Shed				
31	N.S	Providing, laying and fixing in position shed as per				
		drawings, manufacturer's specifications and as				
		directed by Engineer Incharge. This item includes				
		Aluzinc corrugated sheet of 0.5 to 0.6 mm thick				
		fixed with rivet and bolts over Purlins and truss				
		frame of 50X50X4.75 mm with approved Colour/				
		paint supported with Steel Hexagonal / round				
		shaped Columns size 200 to 300 mm diameter				
		fitted with J-Type bolt having length 450 to 500				
		mm and not less than 38mm diameter. This item				
		includes all kind of leads, lifts, fitting charges etc.				
		complete in all respect excluding Cost of				
		substructure i.e. foundation. Approval of				
		manufacturer must be sought prior to placing order.				
			Sft	520.00	1,800.00	936,000
		Total Rs.				2,307,501
						2,307,301

WORK SHOP CALCULATION OF QUANTITIES

	CIVIL WORK							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit	
	Excavation							
1	Excavation Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)							
	ii) in ordinary soil.							
	Tool Room wall	1	43.00	2.50	2.50	268.75	Cft	
	Toilet wall	1	25.50	2.50	2.50	159.38	Cft	
	Columns	6	7.50	6.00	4.58	1,236.60	Cft	
					Total	1,664.73	Cft	
					Total	1.66	%oC	
	Anti-Termite							
2	Spraying termite proofing by using liquid FMC/ Biflex/ Terminex Exin/ Ms Hextar or equivalent @ specified suspension concenterate (SC), Mixing Ability-HEXTAR with Ratio (1:250) = 540 Sft or equivalent approved liquid applying with shower and certificate will be provided by the contractor for 10- years complete in all respect as approved by the Engineer Incharge.							
	Tool Room wall	1	43.00	7.50		322.50	Sft	
	Toilet wall	1	25.50	7.50		191.25	Sft	
	Floor	1	8.00	8.00		64.00	Sft	
		1	8.00	12.00		96.00	Sft	
		1	20.00	26.00		520.00	Sft	
	Columns	6	27.00	4.58		741.96	Sft	
		6	7.50	6.00		270.00	Sft	
					Total	2,205.71	Sft	
	Plain Cement Concrete							
3	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):							
	(i) Ratio 1: 4: 8							
	Tool Room wall	1	43.00	2.50	0.33	35.48	Cft	
	Toilet wall	1	25.50	2.50	0.33	21.04	Cft	
	Columns	6	7.50	6.00	0.33	89.10	Cft	
					Total	145.61	Cft	
					Total	1.46	%C	
							12	

WORK SHOP CALCULATION OF QUANTITIES

	CIVIL W						
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Brick work in Foundation						
4	Pacca brick work in foundation and plinth in:-						
	Cement, sand mortar:- Ratio 1:5						
	Tool Room wall						
	Step - 1	1	43.00	1.875	0.25	20.16	Cft
	Step - 2	1	43.00	1.500	0.25	16.13	Cft
	Step - 3	1	43.00	1.125	0.25	12.09	Cft
	Step - 4	1	43.00	0.750	4.92	158.67	Cft
	Toilet wall						
	Step - 1	1	25.50	1.875	0.25	11.95	Cft
	Step - 2	1	25.50	1.500	0.25	9.56	Cft
	Step - 3	1	25.50	1.125	0.25	7.17	Cft
	Step - 4	1	25.50	0.750	4.92	94.10	Cft
					Total	329.83	Cft
					Total	3.30	%Cf
	Horizontal D.P.C						
5	Providing and laying damp proof course of cement						
	concrete 1 : 2 : 4 (using cement, sand and shingle),						
	including bitumen coating :-						
	(a) with one coat bitumen and one coat polythene						
	sheet 500gauge						
	i) 1 ¹ / ₂ " thick (40 mm)						
	Tool Room wall	1	43.00	0.75		32.25	Sft
	Toilet wall	1	25.50	0.75		19.13	Sft
					Total	51.38	Sft
					Total	0.51	%Sft
	Vertical D.P.C						
6	Providing and laying vertical damp proof course with						
0	cement sand plaster and bitumen coating:-						
	(a) with one coat of bitumen and one coat of polythene sheet 500 gauge:						
	ii) Ratio 1:3 ³ / ₄ " thick (20 mm)						
	Tool Room wall	1	43.00		1.00	43.00	Sft
	Toilet wall	1	25.50		1.00	25.50	Sft
					Total	68.50	Sft
					Total	0.69	%Sft
						'	

WORK SHOP CALCULATION OF QUANTITIES

CIVIL WORK							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Brick work in Super Structure						
7	Pacca brick work in ground floor:-						
	i) Cement, sand mortar:- Ratio 1:5						
	Tool Room wall	1	43.00	0.75	10.50	338.63	Cft
	Toilet wall	1	25.50	0.75	10.50	200.81	Cft
	Parapet Wall	1	63.50	0.38	2.50	59.53	Cft
	Entrance step	2	4.00	1.00	0.75	6.00	Cft
	D/d Doors and Window						
	D-1	-1	3.50	0.75	7.00	(18.38)	Cft
	D-2	-1	2.50	0.75	7.00	(13.13)	Cft
	W-1	-1	4.00	0.75	4.00	(12.00)	Cft
	V-1	-1	2.00	0.70	2.00	(2.80)	Cft
					Total	558.67	Cft
					Total	5.59	%Cft
	Concrete Work						
8	Providing and laying reinforced cement concrete						
	(including prestressed concrete), using coarse sand						
	and screened graded and washed aggregate, in						
	required shape and design, including forms, moulds,						
	shuttering, lifting, compacting, curing, rendering and						
	finishing exposed surface, complete (but excluding						
	the cost of steel reinforcement, its fabrication and						
	placing in position, etc.):-						
	In Foundation						
	(a)(iii) Reinforced cement concrete in slab of rafts /						
	strip foundation, base slab of column and retaining						
	walls; etc and footing beams, other structural						
	members other than those mentioned in						
	6(a) (i)&(ii) above not requiring form work (i.e.						
	horizontal shuttering) complete in all respects:-						
	Columns	6	7.00	5.50	1.25	288.75	Cft
					Total	288.75	Cft
	Above foundation						
	(a) (i) Reinforced cement concrete in roof slab,						
	beams, columns lintels, girders and other structural						
	members laid in situ or precast laid in position, or						
	prestressed members cast in situ, complete in all						
	respects:-						
	Type C (nominal mix 1: 2: 4)						
	Top Slab	1	215.00	1.00	0.50	107.50	Cft

WORK SHOP CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Sun shade	1	3.00	1.50	0.25	1.13	Cft
	Columns	6	1.25	1.50	6.50	73.13	Cft
	Doors and window Lintels						
	D-1	1	4.50	0.75	0.75	2.53	Cft
	D-2	1	3.50	0.75	0.75	1.97	Cft
	W-1	1	5.00	0.75	0.75	2.81	Cft
	V-1	1	3.00	0.75	0.75	1.69	Cft
					Total	190.75	Cft
	Steel Work.						
9	Fabrication of mild steel reinforcement for cement						
7	concrete, including cutting, bending, laying in						
	position, making joints and fastenings, including cost						
	of binding wire and labour charges for binding of						
	steel reinforcement (also includes removal of rust						
	from bars):-						
	Deformed bars (Grade-60)					479.50	Cft
	Top Slab, lintel & Columns @ 7 lbs / Cft		7.00	1	=	3,356.50	lbs/cft
				Total	=	3,356.50	lbs/cft
			A 11 70/	Total	=	1,522.91	Kg.
			Add 5%	Wastage.	=	76.15	Kg.
				Total	-	1,599	Kg
					Total	15.99	%kg
	Sand Filling						
10	Supplying and filling sand under floor; or plugging in wells.						
	Tool Floor	1	8.00	12.00	2.50	240.00	Cft
	Toilet	1	8.00	8.00	2.75	176.00	Cft
	Work Shop Area	1	20.00	26.00	2.50	1,300.00	Cft
					Total	1,716.00	Cft
					Total	17.16	%Cft
	Brick ballast						
11	Dry rammed brick or stone ballast, 1 ¹ / ₂ " to 2"(40 mm to 50 mm) gauge.						
	Tool Floor	1	8.00	12.00	0.33	31.68	Cft
	Toilet	1	8.00	8.00	0.33	21.12	Cft
					Total	52.80	Cft
					Total	0.53	%Cft
	P.C.C						

WORK SHOP

CALCULATION OF QUANTITIES

	CIVIL WORK						
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
12	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):						
	Ratio 1: 2: 4						
	Toilet	1	8.00	8.00	0.17	10.67	Cft
					Total	0.11	%Cft
	Sub Base Course						
13	Providing and laying sub-base course of stone product of approved quality and grade including, placing, mixing, spreading and compaction of sub base material to required depth, camber and grade to achieve 98% maximum dry density determined according to AASHTO T-180 method-D, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Pit run or bed run gravel from Dina querry to site, actual compacted depth shall be considered for payment)						
	Work Shop Area	1	20.00	26.00	0.33 Total	171.60 1.72	Cft %Cf
14	Water Bound Macadam Providing and laying base course of crushed stone (Water Bound Macadam) of approved quality and grade including, placing, mixing, spreading and compaction of base course material to required depth, camber and grade to achieve 100% maximum modified AASHTO dry density, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Crushed stone aggregate from sargodha querry to site, actual compacted depth shall be considered for payment)						
	Work Shop Area	1	20.00	26.00	0.33	171.60	Cft
						1.72	%Cf

WORK SHOP

CALCULATION OF QUANTITIES

CIVIL WORK	

	CIVIL W						
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
15	Providing and laying Tuff pavers, having 7000 PSI,						
	crushing strength of approved manufacturer, over 2"						
	to 3" sand cushion i/c grouting with sand in joints i/c						
	finishing to require slope. complete in all respect.						
	(50% Grey / 50% Coloured)						
	For Tool Room b) 60-mm thick						
	Tool Floor	1	8.00	12.00		96.00	Sft
	Work Shop Area	1	20.00	26.00		520.00	Sft
	Ceramic Tile						
16	Providing and laying superb quality Ceramic tile						
	floors of Master brand of specified size,						
	Glossy/Matt/Texture of approved Color and Shade as						
	per approved design with adhesive bond, over 3/4"						
	thick (1;2) cement sand plaster i/c the cost of sealer						
	for finishing the joints i/c cutting grinding complete						
	in all respects and as approved and directed by the						
	Engineer Incharge.						
	i) 12"x18"/12"x24"/10"x24" /8"x24"/12"x36"	1	8.00	8.00		64.00	Sft
					Total	64.00	Sft
17	Providing and laying superb quality Ceramic tiles						
	dado of Master brand of specified size,						
	Glossy/Matt/Texture skirting / dado of approved						
	Color and Shade with adhesive bond over1/2" thick						
	(1:2)cement plaster i/c the cost of sealer for finishing						
	the joints i/c cutting grinding complete in all respects						
	as approved and directed by the Engineer Incharge.						
	i) 12"x18"/12"x24"/10"x24" /8"x24"/12"x36"	2	8.00		7.00	112.00	Sft
		2	8.00		7.00	112.00	Sft
					Total	224.00	Sft
					TOLAL	22 4. UU	511
	Slab Plaster						
18	Cement plaster 3/8" (10 mm) thick under soffit of R.C.C. roof slabs only, upto 20' height. (Ratio:- 1:3)						
		1	8.00	12.00		96.00	Sft
		1	8.00	8.00		64.00	Sft
					Total	1.60	%Sft

CALCULATION OF QUANTITIES

	CIVIL W	ORK					
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Cement Plaster						
19	Cement plaster 1:4 upto 20' (6.00 m) height:-						
	3/4" (20 mm) thick						
	Tool Room wall						
		2	8.00		10.50	168.00	Sft
		2	12.00		10.50	252.00	Sft
	Toilet						
		2	8.00		10.50	168.00	Sft
		2	8.00		10.50	168.00	Sft
	D/d Doors and Window						
	D-1	-1	3.50		7.00	(24.50)	Sft
	D-2	-1	2.50		7.00	(17.50)	Sft
	W-1	-1	4.00		4.00	(16.00)	Sft
	V-1	-1	2.00		2.00	(4.00)	Sft
					Total	694.00	Sft
					Total	6.94	%Sft
	Pointing						
20	Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-						
	a) ratio 1:2						
	Outer Walls	1	63.50		10.50	666.75	Sft
					Total	666.75	Sft
					Total	6.67	%Sft
21	Extra cost of labour and material for red oxide						
	pigment in cement pointing to match with the colour						
	of bricks.				Total	6.67	%Sft
	Distempering						
22	Distempering:-						
	iii) three coats						
	Tool Room wall						
		2	8.00		10.50	168.00	Sft
		2	12.00		10.50	252.00	Sft
	Toilet						
		2	8.00		10.50	168.00	Sft
		2	8.00		10.50	168.00	Sft
	Slab	1	8.00	12.00		96.00	Sft
		1	8.00	8.00		64.00	Sft

WORK SHOP CALCULATION OF QUANTITIES

Sr.							
No.	Description	No.	Length	Width	Height	Qty.	Unit
	D/d Doors and Window						
	D-1	-1	3.50		7.00	(24.50)	Sft
	D-2	-1	2.50		7.00	(17.50)	Sft
	W-1	-1	4.00		4.00	(16.00)	Sft
	V-1	-1	2.00		2.00	(4.00)	Sft
					Total	854.00	Sft
					Total	8.54	%Sft
					Totul	0.01	/0010
	Wooden Door						
	Providing and fixing 1½" (40 mm) thick hollow flush doors and windows with commercial ply (3 ply) on both faces of deodar wood shutter frame 1¼" (30 mm) thick and partal wood braces at about 3" (75 mm) apart and deodar wood lipping 1½"x3/8" (40 mmx10 mm) fixed with M.S. chowkat (frame) including chromium plated fittings, etc. complete in all respects (without sliding bolt or lock):- M.S. angle iron 1½"x1½"x¼", welded (40 mmx40 mmx 6mm) with M.S. flat 2"x¼" (50 mm x 6 mm)						
	D-1	1	3.50		7.00	24.50	Sft
	D-2	1	2.50		7.00	17.50	Sft
					Total	42.00	Sft
	Lock						
24	Providing and fixing, approved quality mortice lock.	2				2.00	Each
	Paint						
	Painting new surface:-						
25	Preparing surface and painting of doors and windows any type (including edges):-						
25	Preparing surface and painting of doors and windows						

WORK SHOP

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit				
	Steel Window										
26	Providing and fixing steel windows with openable										
	glazed panels, using beam section for frame										
	1 ¹ / ₂ "x1"x5/8"x1/8" (40x25x16x3 mm), Z-section for										
	leaves ³ / ₄ "x1"x ³ / ₄ "x1/8" (20x25x20x3 mm), T-section										
	sashes 1"x1"x1/8" (25x25x3 mm), glass panes,										
	wooden screed for glazing embedded over a thin										
	layer of putty duly screwed with leaves, brass										
	fittings, holdfast, duly painted, complete in all										
	respects, including all cost of material and labour,										
	etc. as per approved design and as directed by the										
	Engineer-in-charge:-										
	b) fixed with wire gauze, 22 SWG										
	v) glass pane 5 mm thick										
	W-1	1	4.00		4.00	16.00	Sft				
	V-1	1	2.00		2.00	4.00	Sft				
					Total	20.00	Sft				
	Roof Insulation										
27	Single layer of tiles 9"x4 ¹ / ₂ "x1 ¹ / ₂ " (225x113x40 mm)										
	laid over 4"(100 mm) earth and 1" (25 mm) mud										
	plaster without Bhoosa, grouted with cement sand 1:3										
	on top of RCC roof slab, provided with 34 lbs. per										
	% Sft. or 1.72 Kg/Sq.m bitumen coating sand blinded.										
	Roof area	1	215.00	1.00		215.00	Sft				
					Total	215.00	Sft				
					Total	2.15	%Sft				
28	Supplying and laying polythene sheet over D.P.C.										
	under floors and on roofs, etc.										
	ii) 500 gauge (.005" thick)				Total	215.00	Sft				
	771										
20	Khurras	1				1 00	D - 1				
29	Khuras on roof 2'x2'x6" (600 x 600 x 150 mm)	1				1.00	Each				
	Bottom Khuras										
30	Bottom Khuras of brick masonry in cement mortar										
	1:6, 4'x2'x4 ¹ / ₂ " (1200x600x113 mm) over 3" (75 mm)										
	cement concrete 1:4:8.	1				1.00	Each				

WORK SHOP

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Parking Shed						
31	Providing, laying and fixing in position shed as per drawings, manufacturer's specifications and as directed by Engineer Incharge. This item includes Aluzinc corrugated sheet of 0.5 to 0.6 mm thick fixed with rivet and bolts over Purlins and truss frame of 50X50X4.75 mm with approved Colour/ paint supported with Steel Hexagonal / round shaped Columns size 200 to 300 mm diameter fitted with J- Type bolt having length 450 to 500 mm and not less than 38mm diameter. This item includes all kind of leads, lifts, fitting charges etc. complete in all respect excluding Cost of substructure i.e. foundation. Approval of manufacturer must be sought prior to placing order.		20.00	26.00		520.00	0.6
		1	20.00	20.00		520.00	Sft
					Total	520.00	Sft

DETAILED COST ESTIMATE

		PLUMBING WORKS				
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Schedule Item				
		Indian W.C				
1	19-4-i	Providing and fitting glazed earthen ware water closet, squatter type (Orisa pattern), combined with foot rest.				
		i) white	Each	1.00	2,235.35	2,235
2	19-13-i	Providing and fitting plastic made low down flushing cistern 13.63 litre (3 gallons) capacity, including bracket set, copper connection, etc. complete.				
		i) white	Each	1.00	2,666.60	2,667
3	19-7-i	Providing and fitting glazed earthen ware wash hand basin 56x40 cm (22"x16") including bracket set, waste pipe and waste coupling, etc.				
		i) white, with pedestal	Each	1.00	5,187.45	5,187
5	19-30	Providing and fixing, chromium plated mixing valve, for wash hand basin, sink or shower.	Each	1.00	2,231.50	2,232
7	19-15	Providing and fixing, chromium plated soap dish.	Each	1.00	280.40	280
8	19-20	Providing and fixing looking glass 55x40 cm (22"x16") size	Each	1.00	642.30	642
9	19-27	Providing and fixing chromium plated bib cock:-				
,	1921	i) 2 cm (³ 4")	Each	1.00	1,017.20	1,017
10	19-28	Providing and fixing chromium plated tee stop cock 15mm (1/2").	Each	3.00	957.20	2,872
11	19-34-i	Providing and fixing, floor trap of cast iron, including concrete chamber all round, and C.I. grating:-				,
		i) 10x5 cm (4"x2")	Each	1.00	634.55	635
12	19-36	Providing and fitting 10 cm (4") gully trap, including cement concrete, cost of PVC grating 15x15 cm (6"x6") and masonry chamber 30x30 cm (12"x12").		1.00	1 1/1 10	1 1 4 1
		(12 A12).	Each	1.00	1,141.10	1,141

DETAILED COST ESTIMATE

		WORK SHOP PLUMBING WORKS						
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)		
13	19-35-ii	Providing and fitting "P" trap:-						
15	17-55-11	ii) 10 cm (4") glazed.	Each	2.00	288.65	577		
		PPRC Pipe						
14	23-47	Providing, laying, testing and commissioning of POLYPROPYLENE RANDOM COPOLYMER (PPRC)water supply pipe made of (Dadex/ Popular /Beta/ BBJ)with specified pressure rating PN (PRESSURE NOMINAL) and conforming to DIN8077-8078 code i/c cost of solvent, specials, making jharries complete in all respect as approved and directedby Engineer Incharge.(Internal / External Diameters mentioned).						
		b) PN-20 pipe						
		(ii) (3/4") 25 mm	Rft	33.00	66.60	2,198		
		(iii) (1") 32 mm	Rft	33.00	107.05	3,533		
		Valve						
15	23/46	Providing and fixing CP heavy duty brass Ball valve with CP handle of specified dia meter made of Faisal/ Sonex/ Master best quality or equivalent complete in all respect as approved and directed by the Engineer Incharge.						
		ii) 3/4" dia	Each	1.00	1,447.20	1,447		
		iii) 1" dia	Each	1.00	1,687.20	1,687		
		uPVC Pipe						
16	19-47	Providing, fixing, testing and commissioning of µ- PVC (Unplasticized polyvinyl Chloride)Nikasi /waste pipe make of dadex/Popular/Beta/BBJ plain/ socket ended conforming to code EN-1401 of specified SDR (Standard Dimension Ratio)including the cost of specials and Solvents complete in all respect as approved and directed by the Engineer Incharge						
		Type (SDR 41/SN-4)						
		(iii) 2"(60 mm)	Rft	10.00	89.00	890		
		(v) 4"(110 mm)	Rft	50.00	260.70	13,035		
		(vi) 6"(160 mm)	Rft	10.00	381.65	3,817		

DETAILED COST ESTIMATE

		WORK SHOP									
	PLUMBING WORKS										
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)					
		HDPE Tank									
17	19/51	Providing and hoisting vertical /horizontal type storage tank of required capacity made of rotationally molded from (HDPE), double ply polyethelene of approved manufacturer i/c cost of making connection for inlet/outlet pipe, float valve i/c all cost of specials & labour complete in all respect as approved and directed by the Engineer Incharge.		200.00	106.75	21,350					
		Total Rs. (A)				67,442					
		Non-Schedule Item									
18	N.S	Providing and making Manhole 2'x2' internal size including 9" thick brick masonry (1:4), 1/2" th. Plastering (1:3) i/side, benching with PCC 1:2:4 4" th. with cement finish, including manhole cover, complete in all respects.	Each	1.00	18,219.61	18,220					
		Total Rs. (B)				18,220					
		Total Amount Rs. (A + B)				85,661					

DETAILED	COST ESTIMATE	

	ELECTRICAL WORKS									
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)				
		Schodulod Home (A)								
1	C-24/3-ii	<u>Scheduled Items (A)</u> Supply and erection of PVC pipe for wiring recessed								
	02000	in walls, including bends, inspection joints, boxes,								
		pull boxes, hook, cutting and repair surface etc.								
		completed with all specified. (20 mm i/d)	Rft.	1,050.00	83.70	87,885				
		completed with an specified. (20 min 7d)	Kit.	1,050.00	05.70	07,005				
2	C-24/3-iii	Supply and erection of PVC pipe for wiring recessed								
		in walls, including bends, inspection joints, boxes,								
		pull boxes, hook, cutting and repair surface etc.								
		completed with all specified. (25 mm i/d)	Rft.	150.00	96.85	14,528				
2	0.24/10									
3	C-24/10a.1	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only).								
		(3.029)	Rft.	3,000.00	26.10	78,300				
4	C-24/10a.iii	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (7.029)		900.00	41.15	37,035				
5	C-24/10a.iv	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (7.036)		600.00	54.25	32,550				
6	C-24/14-i	Supply and erection of M.S. sheet box of 16 SWG,								
0	U-24/14-1	10 cm (4") deep, with 4.75 mm thick $(3/16")$ bakelite								
		sheet top, for recessed wiring, including making		8 00	277.20	2 210				
		holes for regulators, switches, plugs, etc. (4"x4")	Each	8.00	277.20	2,218				
7	C-24/14-ii	Supply and erection of M.S. sheet box of 16 SWG,								
		10 cm (4") deep, with 4.75 mm thick (3/16") bakelite								
		sheet top, for recessed wiring, including making								
		holes for regulators, switches, plugs, etc. (7"x4")	Each	1.00	380.60	381				

DETAILED COST ESTIMATE

	T	ELECTRICAL WORK	S	1		
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
8	C-24/32-ii	Supply and erection of switches 10/15 Amp. (Recessed Type)	Each	10.00	88.70	887
9	C-24/36-i	Supply and erection of 3 pin switch and Plug combined, recessed type. (5Amps)	Each	4.00	113.30	453
10	C-24/36-ii	Supply and erection of 3 pin switch and Plug combined recessed type (10/15Amps)	Each	8.00	151.10	1,209
11	C-24/43	Supply and erection of tube light, including rod, choke, starter with frame, flexible wire, including connection from ceiling rose, etc., complete				
		ii) single rod (40 watts) with one choke and one starter.	Each	4	1,235.30	4,941
12	C-24/102/a	Providing and fixing Copper winded Exhaust fan with louver and shutter made of Pak/Younas /G.F.C. i/c the cost of necessary cable and hardware for connection from ceiling rose complete as approved and directed by Engineer Incharge.				
		(a) Plastic body (ii) 12 " dia	Each	1.00	3,134.75	3,135
		Sub Total (A)				283,003
13	N.S	Supply, installation and commissioning high bay light 100W with 120lm/w LED hanging with all accessories complete in all respects		6.00	35,035.00	210,210
	N.S	Supply, installation and commissioning of wall mounted mirror LED light 10 watt with tube rod and frame all necessary fixing accessories, complete in all respects		1.00	1,215.00	1,215
14	N.S	Supply, Installation, testing and commissioning of following size 56" ceiling fan, complete with capacitor, hanging rod, canopy, blades, dimmers nuts and bolts complete in all respect.		2.00	7,000.00	14,000
		Sub Total (B)				225,425
		Sub Total (A+B)				508,428

DETAILED COST ESTIMATE

PARKING SHED (SIZE 85' x 32')

	2nd BI-Annual-					
Sr. No.	2002 (July to Dec) Sialkot	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Schedule Item				
		Excavation				
1	3/21/a/ii	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)				
		a) By Manual				
		ii) in ordinary soil.	1000Cft	2.34	10,712.60	25,067
		Anti-Termite				
2	26/43	Spraying termite proofing by using liquid FMC/ Biflex/ Terminex Exin/ Ms Hextar or equivalent @ specified suspension concenterate (SC), Mixing Ability-HEXTAR with Ratio (1:250) = 540 Sft or equivalent approved liquid applying with shower and certificate will be provided by the contractor for 10-years complete in all respect as approved by the Engineer Incharge.	Sft	4,402.48	9.25	40,723
		Plain Cement Concrete				
3	6/5	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate): (i) Ratio 1: 4: 8	100 Cft	1.68	29,079.80	48,854
		Concernate Woods				
4	6/6	Concrete Work Providing and laying reinforced cement concrete (including prestressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.):-				
		In Foundation				
		(a)(iii) Reinforced cement concrete in slab of rafts / strip foundation, base slab of column and retaining walls; etc and footing beams, other structural members other than those mentioned in 6(a) (i)&(ii) above not requiring form work (i.e. horizontal shuttering) complete in all respects:-				
		(3) Type C (nominal mix 1: 2: 4)	P.Cft	560.00	456.85	255,836
			1.011	200.00	750.05	255,050

DETAILED COST ESTIMATE

PARKING SHED (SIZE 85' x 32')

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Above foundation				
		(a) (i) Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects:-				
		(2) Type B (nominal mix 1: 1 ¹ / ₂ : 3)	P.Cft	132.00	612.05	80,791
		Steel Work.				
5	6/12/c	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-				
		Deformed bars (Grade-60)	100kg	39.56	31,814.75	1,258,592
		Sand Filling				
6	7/30	Supplying and filling sand under floor; or plugging in wells.	100 Cft	27.20	2,944.60	80,093
		Sub Base Course				
7	18/3/a/ (i) + 1/1	Providing and laying sub-base course of stone product of approved quality and grade including, placing, mixing, spreading and compaction of sub base material to required depth, camber and grade to achieve 98% maximum dry density determined according to AASHTO T-180 method-D, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Pit run or bed run gravel from Dina querry to site, actual compacted depth shall be considered for payment)				
			100Cft	8.98	17,448.30	156,686
					-	

DETAILED COST ESTIMATE

PARKING SHED (SIZE 85' x 32')

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)	
	Cimile V	Water Bound Macadam					
8	18/4/a + 1/1	Providing and laying base course of crushed stone (Water Bound Macadam) of approved quality and grade including, placing, mixing, spreading and compaction of base course material to required depth, camber and grade to achieve 100% maximum modified AASHTO dry density, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Crushed stone					
		aggregate from sargodha querry to site, actual compacted depth shall be considered for payment)	100Cft	8.98	29,058.30	260,943	
						, -	
9	10/41	Tuff Paver Providing and laying Tuff pavers, having 7000 PSI, crushing strength of approved manufacturer, over 2" to 3" sand cushion i/c grouting with sand in joints i/c finishing to require slope. complete in all respect. (50% Grey / 50% Coloured)					
		c) 80-mm thick	Per Sft	2,720.00	196.55	534,616	
		Parking Shed					
10	N.S	Providing, laying and fixing in position shed as per drawings, manufacturer's specifications and as directed by Engineer Incharge. This item includes Aluzinc corrugated sheet of 0.5 to 0.6 mm thick fixed with rivet and bolts over Purlins and truss frame of 50X50X4.75 mm with approved Colour/ paint supported with Steel Hexagonal / round shaped Columns size 200 to 300 mm diameter fitted with J-Type bolt having length 450 to 500 mm and not less than 38mm diameter. This item includes all kind of leads, lifts, fitting charges etc. complete in all respect excluding Cost of substructure i.e. foundation. Approval of manufacturer must be sought prior to placing order.	Sft	2,720.00	1,800.00	4,896,000	
			511	2,720.00	1,800.00	4,890,000	

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB PARKING SHED (SIZE 85' x 32')

CALCULATION OF QUANTITIES

	CIVIL WORK							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit	
	Excavation							
1	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)							
	ii) in ordinary soil.							
	Columns	8	8.50	7.50	4.58	2,335.80	Cft	
					Total	2,335.80	Cft	
					Total	2.34	%oCft	
	Anti-Termite							
2	Spraying termite proofing by using liquid FMC/ Biflex/ Terminex Exin/ Ms Hextar or equivalent @ specified suspension concenterate (SC), Mixing Ability-HEXTAR with Ratio (1:250) = 540 Sft or equivalent approved liquid applying with shower and certificate will be provided by the contractor for 10-years complete in all respect as approved by the Engineer Incharge. Floor Columns		85.00 32.00 8.50	32.00 4.58 7.50		2,720.00 1,172.48 510.00	Sft Sft Sft	
					Total	4,402.48	Sft	
	Plain Cement Concrete							
3	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):							
	(i) Ratio 1: 4: 8							
	Columns	8	8.50	7.50	0.33	168.30	Cft	
					Total	168.30	Cft	
					Total	1.68	%Cft	

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB PARKING SHED (SIZE 85' x 32')

CALCULATION OF QUANTITIES

	CIVIL W						
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Concrete Work						
4	Providing and laying reinforced cement concrete (including prestressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.):-						
	In Foundation						
	(a)(iii) Reinforced cement concrete in slab of rafts / strip foundation, base slab of column and retaining walls; etc and footing beams, other structural members other than those mentioned in 6(a) (i)&(ii) above not requiring form work (i.e. horizontal shuttering) complete in all respects:-						
	Columns	8	8.00	7.00	1.25	560.00	Cft
					Total	560.00	Cft
	Above foundation						
	(a) (i) Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects:-						
	(2) Type B (nominal mix 1: 1 ¹ / ₂ : 3)						
	Columns	8	1.50	2.00	5.50	132.00	Cft
					Total	132.00	Cft
	Steel Work.						
5	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-						
_	Deformed bars (Grade-60)					692.00	Cft
	Columns @ 12 lbs / Cft		12.00		=	8,304	lbs/cft
				Total	=	8,304	lbs/cft
				Total	=	3,768	Kg.
			Add 5% V		=	188	Kg.
				Total	=	3,956	Kg
					Total	39.56	%kg

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB PARKING SHED (SIZE 85' x 32')

CALCULATION OF QUANTITIES

		0112	-				
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Sand Filling						
6	Supplying and filling sand under floor; or plugging in wells.						
	Shed	1	85.00	32.00	1.00	2,720.00	Cft
					Total	2,720.00	Cft
					Total	27.20	%Cft
	Sub Base Course						
7	Providing and laying sub-base course of stone product of approved quality and grade including, placing, mixing, spreading and compaction of sub base material to required depth, camber and grade to achieve 98% maximum dry density determined according to AASHTO T-180 method-D, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Pit run or bed run gravel from Dina querry to site, actual compacted depth shall be considered for payment)						
	Shed	1	85.00	32.00	0.33	897.60	Cft
					Total	8.98	%Cft
8	Water Bound Macadam Providing and laying base course of crushed stone (Water Bound Macadam) of approved quality and grade including, placing, mixing, spreading and compaction of base course material to required depth, camber and grade to achieve 100% maximum modified AASHTO dry density, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Crushed stone aggregate from sargodha querry to site, actual compacted depth shall be considered for payment)						
	Shed	1	85.00	32.00	0.33	897.60	Cft
					Total	8.98	%Cft
					Total	8.98	

PARKING SHED (SIZE 85' x 32') CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
9	Providing and laying Tuff pavers, having 7000 PSI, crushing strength of approved manufacturer, over 2" to 3" sand cushion i/c grouting with sand in joints i/c finishing to require slope. complete in all respect. (50% Grey / 50% Coloured)						
	Shed	1	85.00	32.00		2,720	Sft
	Parking Shed						
10	Providing, laying and fixing in position shed as per drawings, manufacturer's specifications and as directed by Engineer Incharge. This item includes Aluzinc corrugated sheet of 0.5 to 0.6 mm thick fixed with rivet and bolts over Purlins and truss frame of 50X50X4.75 mm with approved Colour/ paint supported with Steel Hexagonal / round shaped Columns size 200 to 300 mm diameter fitted with J-Type bolt having length 450 to 500 mm and not less than 38mm diameter. This item includes all kind of leads, lifts, fitting charges etc. complete in all respect excluding Cost of substructure i.e. foundation. Approval of manufacturer must be sought prior to placing order.						
		1	85.00	32.00		2,720	Sft

DETAILED COST ESTIMATE

PARKING SHED (SIZE 85' x 32')

FI ECTDICAL WORKS

	1	ELECTRICAL WORK	S			I
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
1	C-24/3-iii	Scheduled Items (A)				
1	C-24/5-III	Supply and erection of PVC pipe for wiring				
		recessed in walls, including bends, inspection joints,				
		boxes, pull boxes, hook, cutting and repair surface				
		etc. completed with all specified. (25 mm i/d)	Rft.	500.00	96.85	48,425
2	C-24/10a.i	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (3.029)		700.00	26.10	18,270
3	C-24/10a.iii	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (7.029)		600.00	41.15	24,690
4	C-24/10a.iv	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (7.036)		200.00	54.25	10,850
5	C-24/14-i	Supply and erection of M.S. sheet box of 16 SWG, 10 cm (4") deep, with 4.75 mm thick (3/16") bakelite sheet top, for recessed wiring, including making holes for regulators, switches, plugs, etc. (4"x4")		2.00	277.20	554
6	C-24/14-ii	Supply and erection of M.S. sheet box of 16 SWG, 10 cm (4") deep, with 4.75 mm thick ($3/16$ ") bakelite sheet top, for recessed wiring, including making holes for regulators, switches, plugs, etc. (7 "x4")		1.00	380.60	381
7	C-24/32-ii	Supply and erection of switches 10/15 Amp. (Recessed Type)	Each	6.00	88.70	532
8	C-24/36-i	Supply and erection of 3 pin switch and Plug				
		combined, recessed type. (5Amps)	Each	1.00	113.30	113

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB DETAILED COST ESTIMATE PARKING SHED (SIZE 85' x 32') ELECTRICAL WORKS										
2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)					
C-24/36-ii	Supply and erection of 3 pin switch and Plug combined recessed type (10/15Amps)	Each	2.00	151.10	302					
	Sub Total (A)				104,118					
N.S			6.00	35,035.00	210,210					
	Sub Total (B)				210,210					
	Sub Total (A+B)				314,328					
	2nd BI-Annual- 2022 (July to Dec) Sialkot C-24/36-ii	DETAILED DESIGN OF INFRASTRUCTURE SUB- SUPERVISION IN 16 CITIES O DETAILED COST ESTIM PARKING SHED (SIZE 85' ELECTRICAL WORK 2nd BI-Annual- 2022 (July to Dec) Sialkot C-24/36-ii Supply and erection of 3 pin switch and Plug combined recessed type (10/15Amps) C-24/36-ii Supply and erection of 3 pin switch and Plug combined recessed type (10/15Amps) Sub Total (A) N.S Supply, installation and commissioning high bay light 100W with 120lm/w LED hanging with all accessories complete in all respects Sub Total (B) Sub Total (B)	DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJE SUPERVISION IN 16 CITIES OF PUNAL DETAILED COST ESTIMATE PARKING SHED (SIZE 85' x 32') ELECTRICAL WORKS Image: Supervision State of Stat	SUPERVISION IN 16 CITIES OF PUNJAB DETAILED COST ESTIMATE PARKING SHED (SIZE 85' x 32') ELECTRICAL WORKS Clean and commission of a pin switch and Plug combined recessed type (10/15Amps) Unit. Quantity C-24/36-ii Supply and erection of 3 pin switch and Plug combined recessed type (10/15Amps) Each 2.00 C-24/36-ii Supply installation and commissioning high bay light 100W with 120lm/w LED hanging with all accessories complete in all respects Each 6.00 N.S Supply, installation and commissioning high bay light 100W with 120lm/w LED hanging with all accessories complete in all respects Each 6.00 Ion and commissioning high bay light 100W with 120lm/w LED hanging with all accessories complete in all respects Each 6.00 Sub Total (B) Ion and commissioning high bay light 100W with 120lm/w LED hanging with all accessories complete in all respects Ion and complexity and the sector of the secto	DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB DETAILED COST ESTIMATE DETAILED COST ESTIMATE PARKING SHED (SIZE 85' x 32') ELECTRICAL WORKS Quantity Dec Image: Colspan="2">Colspan="2" Colspan="2" Colspan="2" Colspan="2" Colspan="2" Colspan="2" Colspan="2" Colspan="2" Colspan="2" Colspan="2" Colspan="2" Colspan="2" Colspan="2" <th colspan<="" td=""></th>					

DETAILED COST ESTIMATE

PARKING SHED (SIZE 60' x 32')

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Schedule Item				
		Excavation				
1	3/21/a/ii	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)				
		a) By Manual				
		ii) in ordinary soil.	1000Cft	1.75	10,712.60	18,747
		Anti-Termite				
2	26/43	Spraying termite proofing by using liquid FMC/ Biflex/ Terminex Exin/ Ms Hextar or equivalent @ specified suspension concenterate (SC), Mixing Ability-HEXTAR with Ratio (1:250) = 540 Sft or equivalent approved liquid applying with shower and certificate will be provided by the contractor for 10-years complete in all respect as approved by the Engineer Incharge.	Sft	3,181.86	9.25	29,432
3	6/5	Plain Cement ConcreteCement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):(i) Ratio 1: 4: 8	100 Cft	1.26	29,079.80	36,641
4	6/6	Concrete Work Providing and laying reinforced cement concrete (including prestressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.):-				
		In Foundation				
		 (a)(iii) Reinforced cement concrete in slab of rafts / strip foundation, base slab of column and retaining walls; etc and footing beams, other structural members other than those mentioned in 6(a) (i)&(ii) above not requiring form work (i.e. horizontal shuttering) complete in all respects:- 				
		(3) Type C (nominal mix 1: 2: 4)	P.Cft	420.00	456.85	191,877
		(3) Type C (noninal mix 1. 2. 4)	r.cn	420.00	40.00	171,0/

DETAILED COST ESTIMATE

PARKING SHED (SIZE 60' x 32')

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Above foundation				
		(a) (i) Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects:-				
		(2) Type B (nominal mix 1: 1 ¹ / ₂ : 3)	P.Cft	99.00	612.05	60,593
		Steel Work.				
5	6/12/c	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-				
		Deformed bars (Grade-60)	100kg	29.67	31,814.75	943,944
		Sand Filling				
6	7/30	Supplying and filling sand under floor; or plugging in wells.	100 Cft	19.20	2,944.60	56,536
		Sub Base Course				
7	18/3/a/ (i) + 1/1	Providing and laying sub-base course of stone product of approved quality and grade including, placing, mixing, spreading and compaction of sub base material to required depth, camber and grade to achieve 98% maximum dry density determined according to AASHTO T-180 method-D, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Pit run or bed run gravel from Dina querry to site, actual compacted depth shall be considered for payment)				
			100Cft	6.34	17,448.30	110,622
					,	,

DETAILED COST ESTIMATE

PARKING SHED (SIZE 60' x 32')

	2nd BI-Annual-					
Sr. No.	2022 (July to Dec) Sialkot	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Water Bound Macadam				
8	18/4/a + 1/1	Providing and laying base course of crushed stone (Water Bound Macadam) of approved quality and grade including, placing, mixing, spreading and compaction of base course material to required depth, camber and grade to achieve 100% maximum modified AASHTO dry density, including carriage of all material to site of work				
		complete in all respect as per specifications and as directed by the engineer incharge. (Crushed stone aggregate from sargodha querry to site, actual compacted depth shall be considered for payment)				
			100Cft	6.34	29,058.30	184,230
		Tuff Paver				
9	10/41	Providing and laying Tuff pavers, having 7000 PSI, crushing strength of approved manufacturer, over 2" to 3" sand cushion i/c grouting with sand in joints i/c finishing to require slope. complete in all respect. (50% Grey / 50% Coloured)				
		c) 80-mm thick	Per Sft	1,920.00	196.55	377,376
		Parking Shed				
10	N.S	Providing, laying and fixing in position shed as per drawings, manufacturer's specifications and as directed by Engineer Incharge. This item includes Aluzinc corrugated sheet of 0.5 to 0.6 mm thick fixed with rivet and bolts over Purlins and truss frame of 50X50X4.75 mm with approved Colour/ paint supported with Steel Hexagonal / round shaped Columns size 200 to 300 mm diameter fitted with J-Type bolt having length 450 to 500 mm and not less than 38mm diameter. This item includes all kind of leads, lifts, fitting charges etc. complete in all respect excluding Cost of substructure i.e. foundation. Approval of manufacturer must be sought prior to placing order.	Sft	1,920.00	1,800.00	3,456,000
						E 478 000
		No of One unit cost				5,465,998

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB PARKING SHED (SIZE 60' x 32')

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Excavation						
1	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)						
	ii) in ordinary soil.						
	Columns	6	8.50	7.50	4.58	1,751.85	Cft
					Total	1,751.85	Cft
					Total	1.75	%oCft
	Anti-Termite						
2	Spraying termite proofing by using liquid FMC/ Biflex/ Terminex Exin/ Ms Hextar or equivalent @ specified suspension concenterate (SC), Mixing Ability-HEXTAR with Ratio (1:250) = 540 Sft or equivalent approved liquid applying with shower and certificate will be provided by the contractor for 10-years complete in all respect as approved by the Engineer Incharge.						
	Floor	1	60.00	32.00		1,920.00	Sft
	Columns	6	32.00	4.58		879.36	Sft
		6	8.50	7.50		382.50	Sft
					Total	3,181.86	Sft
	Plain Cement Concrete						
3	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):						
	(i) Ratio 1: 4: 8						
	Columns	6	8.50	7.50	0.33	126.23	Cft
					Total	126.23	Cft
					Total	1.26	%Cft

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB PARKING SHED (SIZE 60' x 32')

CALCULATION OF QUANTITIES

C							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Concrete Work						
4	Providing and laying reinforced cement concrete						
	(including prestressed concrete), using coarse sand						
	and screened graded and washed aggregate, in						
	required shape and design, including forms,						
	moulds, shuttering, lifting, compacting, curing,						
	rendering and finishing exposed surface, complete						
	(but excluding the cost of steel reinforcement, its						
	fabrication and placing in position, etc.):-						
	In Foundation						
	(a)(iii) Reinforced cement concrete in slab of rafts /						
	strip foundation, base slab of column and retaining						
	walls; etc and footing beams, other structural						
	members other than those mentioned in						
	6(a) (i)&(ii) above not requiring form work (i.e.						
	horizontal shuttering) complete in all respects:-						
	Columns	6	8.00	7.00	1.25	420.00	Cft
					Total	420.00	Cft
	Above foundation						
	(a) (i) Reinforced cement concrete in roof slab,						
	beams, columns lintels, girders and other structural						
	members laid in situ or precast laid in position, or						
	prestressed members cast in situ, complete in all						
	respects:-						
	(2) Type B (nominal mix 1: 1 ¹ / ₂ : 3)						
	Columns	6	1.50	2.00	5.50	99.00	Cft
					Total	99.00	Cft
	Steel Work.						
5	Fabrication of mild steel reinforcement for cement						
5	concrete, including cutting, bending, laying in						
	position, making joints and fastenings, including						
	cost of binding wire and labour charges for binding						
	of steel reinforcement (also includes removal of						
	rust from bars):-						
	Deformed bars (Grade-60)					519.00	Cft
	Columns @ 12 lbs / Cft		12.00		=	6,228	lbs/cft
				Total	=	6,228	lbs/cft
				Total	=	2,826	Kg.
			Add 5% V	Ū	=	141	Kg.
				Total	=	2,967	Kg

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB PARKING SHED (SIZE 60' x 32')

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
					Total	29.67	%kg
	Sand Filling						
б	Supplying and filling sand under floor; or plugging in wells.						
	Shed	1	60.00	32.00	1.00	1,920.00	Cft
					Total	1,920.00	Cft
					Total	19.20	%Cft
	Sub Base Course						
7	Providing and laying sub-base course of stone product of approved quality and grade including, placing, mixing, spreading and compaction of sub base material to required depth, camber and grade to achieve 98% maximum dry density determined according to AASHTO T-180 method-D, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Pit run or bed run gravel from Dina querry to site, actual compacted depth shall be considered for payment)						
	Shed	1	60.00	32.00	0.33	633.60	Cft
					Total	6.34	%Cft
	Water Bound Macadam						
8	Providing and laying base course of crushed stone (Water Bound Macadam) of approved quality and grade including, placing, mixing, spreading and compaction of base course material to required depth, camber and grade to achieve 100% maximum modified AASHTO dry density, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Crushed stone aggregate from sargodha querry to site, actual compacted depth shall be considered for payment)						
	Shed	1	60.00	32.00	0.33	633.60	Cft

PARKING SHED (SIZE 60' x 32') CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
9	Providing and laying Tuff pavers, having 7000 PSI, crushing strength of approved manufacturer, over 2" to 3" sand cushion i/c grouting with sand in joints i/c finishing to require slope. complete in all respect. (50% Grey / 50% Coloured)						
	Shed	1	60.00	32.00		1,920	Sft
	Parking Shed						
10	Providing, laying and fixing in position shed as per drawings, manufacturer's specifications and as directed by Engineer Incharge. This item includes Aluzinc corrugated sheet of 0.5 to 0.6 mm thick fixed with rivet and bolts over Purlins and truss frame of 50X50X4.75 mm with approved Colour/ paint supported with Steel Hexagonal / round shaped Columns size 200 to 300 mm diameter fitted with J-Type bolt having length 450 to 500 mm and not less than 38mm diameter. This item includes all kind of leads, lifts, fitting charges etc. complete in all respect excluding Cost of substructure i.e. foundation. Approval of manufacturer must be sought prior to placing order.						
		1	60.00	32.00		1,920	Sft

DETAILED COST ESTIMATE

PARKING SHED (SIZE 85' x 32')

FI ECTDICAL WORKS

	ELECTRICAL WORKS								
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)			
1	C-24/3-iii	Scheduled Items (A)							
1	C-24/5-III	Supply and erection of PVC pipe for wiring							
		recessed in walls, including bends, inspection joints,							
		boxes, pull boxes, hook, cutting and repair surface							
		etc. completed with all specified. (25 mm i/d)	Rft.	500.00	96.85	48,425			
2	C-24/10a.i	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (3.029)		700.00	26.10	18,270			
3	C-24/10a.iii	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (7.029)		600.00	41.15	24,690			
4	C-24/10a.iv	Supply and erection of single core PVC insulated copper conductor cables, in prelaid PVC pipe/M.S. conduit/G.I pipe/wooden strip batten/wooden casing an capping/G.I. wire/trenches (rate for cables only). (7.036)		200.00	54.25	10,850			
5	C-24/14-i	Supply and erection of M.S. sheet box of 16 SWG, 10 cm (4") deep, with 4.75 mm thick (3/16") bakelite sheet top, for recessed wiring, including making holes for regulators, switches, plugs, etc. (4"x4")		2.00	277.20	554			
6	C-24/14-ii	Supply and erection of M.S. sheet box of 16 SWG, 10 cm (4") deep, with 4.75 mm thick (3/16") bakelite sheet top, for recessed wiring, including making holes for regulators, switches, plugs, etc. $(7"x4")$		1.00	380.60	381			
7	C-24/32-ii	Supply and erection of switches 10/15 Amp. (Recessed Type)	Each	6.00	88.70	532			
8	C-24/36-i	Supply and erection of 3 pin switch and Plug							
		combined, recessed type. (5Amps)	Each	1.00	113.30	113			

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB DETAILED COST ESTIMATE PARKING SHED (SIZE 85' x 32') ELECTRICAL WORKS									
2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)				
C-24/36-ii	Supply and erection of 3 pin switch and Plug combined recessed type (10/15Amps)	Each	2.00	151.10	302				
	Sub Total (A)				104,118				
N.S			6.00	35,035.00	210,210				
	Sub Total (B)				210,210				
	Sub Total (A+B)				314,328				
	2nd BI-Annual- 2022 (July to Dec) Sialkot C-24/36-ii	DETAILED DESIGN OF INFRASTRUCTURE SUB- SUPERVISION IN 16 CITIES O DETAILED COST ESTIM PARKING SHED (SIZE 85' ELECTRICAL WORK 2nd BI-Annual- 2022 (July to Dec) Sialkot C-24/36-ii Supply and erection of 3 pin switch and Plug combined recessed type (10/15Amps) C-24/36-ii Supply and erection of 3 pin switch and Plug combined recessed type (10/15Amps) Sub Total (A) N.S Supply, installation and commissioning high bay light 100W with 120lm/w LED hanging with all accessories complete in all respects Sub Total (B) Sub Total (B)	DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJE SUPERVISION IN 16 CITIES OF PUNAL DETAILED COST ESTIMATE PARKING SHED (SIZE 85' x 32') ELECTRICAL WORKS Image: Supervision Stream of Stream	DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND SUPERVISION IN 16 CITIES OF PUNJAB DETAILED COST ESTIMATE PARKING SHED (SIZE 85' x 32') ELECTRICAL WORKS 2nd BI-Annual- 2022 (July to Dec) Sialkot Quantity C-24/36-ii Supply and erection of 3 pin switch and Plug combined recessed type (10/15Amps) Each 2.00 N.S Supply, installation and commissioning high bay light 100W with 120lm/w LED hanging with all accessories complete in all respects Each 6.00 Sub Total (B) Lach C.00	DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB DETAILED COST ESTIMATE DETAILED COST ESTIMATE PARKING SHED (SIZE 85' x 32') ELECTRICAL WORKS Quantity 1000000000000000000000000000000000000				

DETAILED COST ESTIMATE

WASHING PIT

compacting, finishing and curing com (including screening and washing of aggregate): (c) Ratio 1: 1½: 3 (f) Ratio 1: 2: 4 (i) Ratio 1: 4: 8 Brick work in Foundation 4 7/4/i Plaster 5 11/8/b Cement plaster 1:3 upto 20' (6.00 m) height:- b) ½" (13 mm) thick Mosaic flooring 6 10/22/a 1½"(40 mm) thick mosaic flooring, consisting "(13 mm) mosaic topping of one part of cement marble powder in the ratio of 3:1 and two part marble chips, laid over 1"(25 mm) thick flooring rubbing rubbing rubbing rubbing rubbing				
Excavation 1 3/21/a/ii Excavation in foundation of building, bridge other structures, including dagbelling, dre refilling around structure with excavated watering and ramming lead upto one chain (2 and lift upto 5 ft. (1.5 m) a) By Manual ii) in ordinary soil. Sand Filling 2 7/30 Supplying and filling sand under floor; or plu in wells. Plain Cement Concrete 3 6/5 Cement concrete plain including plating screening and washing of aggregate): (c) Ratio 1: 1½: 3 (c) Ratio 1: 1½: 3 (f) Ratio 1: 2: 4 Brick work in Foundation 4 7/4/i Plaster 5 11/8/b Cement plaster 1:3 upto 20' (6.00 m) height:-b) ½'' (13 mm) thick Mosaic flooring 6 10/22/a 1½''(40 mm) thick mosaic flooring, consisting "(13 mm) mosaic topping of one part of cemer marble powder in the ratio of 3:1 and two pa marble chips, laid over 1"(25 mm) thick floit:2:4 cement concrete, including rubbing	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
1 3/21/a/ii Excavation in foundation of building, bridge other structures, including dagbelling, dre refilling around structure with excavated watering and ramming lead upto one chain (2 and lift upto 5 ft. (1.5 m) a) By Manual ii) in ordinary soil. 2 7/30 Supplying and filling sand under floor; or plu in wells. 2 7/30 Supplying and filling sand under floor; or plu in wells. 3 6/5 Cement Concrete 3 6/5 Cement concrete plain including placompacting, finishing and curing con (including screening and washing of aggregate): (c) Ratio 1: 1½: 3 (f) Ratio 1: 2: 4 (i) Ratio 1: 2: 4 (i) Ratio 1: 4: 8 9 Brick work in Foundation 4 7/4/i Pacca brick work in foundation and plinth in:-Cement, sand mortar:- Ratio 1:4 9 Plaster 5 5 11/8/b Cement plaster 1:3 upto 20' (6.00 m) height:-b) ½''' (13 mm) thick 6 10/22/a 1½''(40 mm) thick mosaic flooring, consisting "(13 mm) mosaic topping of one part of cemer marble powder in the ratio of 3:1 and two pa marble chips, laid over 1"(25 mm) thick flooring: consisting "(12: 4 cement concrete, including rubbing rub				
ii) in ordinary soil. Sand Filling 2 7/30 Supplying and filling sand under floor; or plu in wells. 3 6/5 Cement concrete 3 6/5 Cement concrete plain including pla compacting, finishing and curing con (including screening and washing of aggregate): (c) Ratio 1: 1½: 3 (f) Ratio 1: 2: 4 (i) Ratio 1: 2: 4 (i) Ratio 1: 4: 8 Brick work in Foundation 4 7/4/i Pacca brick work in foundation and plinth in:- Cement, sand mortar:- Ratio 1:4 Plaster 5 11/8/b Cement plaster 1:3 upto 20' (6.00 m) height:- b) ½" (13 mm) thick Mosaic flooring 6 10/22/a 1½"(40 mm) thick mosaic flooring, consisting "(13 mm) mosaic topping of one part of cement marble powder in the ratio of 3:1 and two pa marble chips, laid over 1"(25 mm) thick flot 1:2:4 cement concrete, including rubbing	essing, earth,			
Sand Filling 2 7/30 Supplying and filling sand under floor; or pluin wells. 3 6/5 Cement concrete 3 6/5 Cement concrete plain including platomatic compacting, finishing and curing compacting, finishing and curing compacting, finishing and curing compacting for aggregate): (c) Ratio 1: 1½: 3 (f) Ratio 1: 1½: 3 (f) Ratio 1: 2: 4 (i) Ratio 1: 4: 8 Brick work in Foundation 4 7/4/i Pacca brick work in foundation and plinth in:- Cement, sand mortar:- Ratio 1:4 Plaster 5 11/8/b Cement plaster 1:3 upto 20' (6.00 m) height:- b) ½" (13 mm) thick Mosaic flooring 6 10/22/a 1½"(40 mm) thick mosaic flooring, consisting "(13 mm) mosaic topping of one part of cement marble powder in the ratio of 3:1 and two patient chips, laid over 1"(25 mm) thick flot 1:2:4 cement concrete, including rubbing				
2 7/30 Supplying and filling sand under floor; or pluin wells. 3 6/5 Plain Cement Concrete 3 6/5 Cement concrete plain including placement compacting, finishing and curing condition (including screening and washing of aggregate): (c) Ratio 1: 1½: 3 (c) Ratio 1: 1½: 3 (f) Ratio 1: 2: 4 (i) Ratio 1: 2: 4 (i) Ratio 1: 4: 8 Plaster 5 11/8/b Cement plaster 1:3 upto 20' (6.00 m) height:-b) ½" (13 mm) thick 6 10/22/a 1½"(40 mm) thick mosaic flooring, consisting "(13 mm) mosaic topping of one part of cement marble powder in the ratio of 3:1 and two pa marble chips, laid over 1"(25 mm) thick flooring rubbing	1000Cft	0.96	10,712.60	10,284
2 7/30 Supplying and filling sand under floor; or pluin wells. 3 6/5 Plain Cement Concrete 3 6/5 Cement concrete plain including placement compacting, finishing and curing condition (including screening and washing of aggregate): (c) Ratio 1: 1½: 3 (c) Ratio 1: 1½: 3 (f) Ratio 1: 2: 4 (i) Ratio 1: 2: 4 (i) Ratio 1: 4: 8 Plaster 5 11/8/b Cement plaster 1:3 upto 20' (6.00 m) height:-b) ½" (13 mm) thick 6 10/22/a 1½"(40 mm) thick mosaic flooring, consisting "(13 mm) mosaic topping of one part of cement marble powder in the ratio of 3:1 and two pa marble chips, laid over 1"(25 mm) thick flooring rubbing				
in wells. 3 6/5 Cement concrete 3 6/5 Cement concrete plain including placompacting, finishing and curing con (including screening and washing of aggregate): (c) Ratio 1: 1½: 3 (f) Ratio 1: 1½: 3 (f) Ratio 1: 2: 4 (i) Ratio 1: 4: 8 Brick work in Foundation 4 7/4/i Plaster 5 11/8/b Cement plaster 1:3 upto 20' (6.00 m) height:-b) ½'' (13 mm) thick Mosaic flooring 6 10/22/a 1½''(40 mm) thick mosaic flooring, consisting "(13 mm) mosaic topping of one part of cemer marble powder in the ratio of 3:1 and two pa marble chips, laid over 1"(25 mm) thick flooring rubbing rubbi				
3 6/5 Cement concrete plain including plat compacting, finishing and curing com (including screening and washing of aggregate): (c) Ratio 1: 1½: 3 (f) Ratio 1: 1½: 3 (f) Ratio 1: 2: 4 (i) Ratio 1: 4: 8 (i) Ratio 1: 4: 8 (i) Ratio 1: 4: 8 Example (i) Ratio 1: 4: 8 Plaster (i) Ratio 1: 3 upto 20' (6.00 m) height:- b) ½" (13 mm) thick (i) Mosaic flooring 6 10/22/a 1½"(40 mm) thick mosaic flooring, consisting "(13 mm) mosaic topping of one part of cemer marble powder in the ratio of 3:1 and two pa marble chips, laid over 1"(25 mm) thick flooring rubbing	100Cft	1.12	2,944.60	3,298
3 6/5 Cement concrete plain including plat compacting, finishing and curing com (including screening and washing of aggregate): (c) Ratio 1: 1½: 3 (f) Ratio 1: 1½: 3 (f) Ratio 1: 2: 4 (i) Ratio 1: 4: 8 (i) Ratio 1: 4: 8 (i) Ratio 1: 4: 8 Example (i) Ratio 1: 4: 8 Plaster (i) Ratio 1: 3 upto 20' (6.00 m) height:- b) ½" (13 mm) thick (i) Mosaic flooring 6 10/22/a 1½"(40 mm) thick mosaic flooring, consisting "(13 mm) mosaic topping of one part of cemer marble powder in the ratio of 3:1 and two pa marble chips, laid over 1"(25 mm) thick flooring rubbing				
(f) Ratio 1: 2: 4 (i) Ratio 1: 4: 8 Brick work in Foundation 4 7/4/i Pacca brick work in foundation and plinth in:- Cement, sand mortar:- Ratio 1:4 Plaster 5 11/8/b Cement plaster 1:3 upto 20' (6.00 m) height:- b) ½" (13 mm) thick Mosaic flooring 6 10/22/a 1½"(40 mm) thick mosaic flooring, consisting "(13 mm) mosaic topping of one part of cement marble powder in the ratio of 3:1 and two pation marble chips, laid over 1"(25 mm) thick flooring 1:2:4 cement concrete, including rubbing	acing, nplete stone			
(i) Ratio 1: 4: 8 Brick work in Foundation 4 7/4/i Pacca brick work in foundation and plinth in:- Cement, sand mortar:- Ratio 1:4 Plaster 5 11/8/b Cement plaster 1:3 upto 20' (6.00 m) height:- b) ½" (13 mm) thick Mosaic flooring 6 10/22/a 1½" (40 mm) thick mosaic flooring, consisting "(13 mm) mosaic topping of one part of cement marble powder in the ratio of 3:1 and two pation marble chips, laid over 1"(25 mm) thick flooring 1:2:4 cement concrete, including rubbing	100 Cft	0.57	43,969.40	25,063
Brick work in Foundation 4 7/4/i Pacca brick work in foundation and plinth in:- Cement, sand mortar:- Ratio 1:4 9 Plaster 5 11/8/b Cement plaster 1:3 upto 20' (6.00 m) height:- b) ½" (13 mm) thick 6 10/22/a 1½"(40 mm) thick mosaic flooring, consisting "(13 mm) mosaic topping of one part of cemen marble powder in the ratio of 3:1 and two pa marble chips, laid over 1"(25 mm) thick flooring	100 Cft	0.15	38,271.80	5,741
4 7/4/i Pacca brick work in foundation and plinth in:- Cement, sand mortar:- Ratio 1:4 9 Plaster 5 11/8/b Cement plaster 1:3 upto 20' (6.00 m) height:- b) ½" (13 mm) thick 6 10/22/a 1½" (40 mm) thick mosaic flooring, consisting "(13 mm) mosaic topping of one part of cement marble powder in the ratio of 3:1 and two pa marble chips, laid over 1"(25 mm) thick flooring, rubbing	100 Cft	1.12	29,079.80	32,569
5 11/8/b Cement plaster 1:3 upto 20' (6.00 m) height:- b) ½" (13 mm) thick Mosaic flooring 6 10/22/a 1½" (40 mm) thick mosaic flooring, consisting "(13 mm) mosaic topping of one part of cemen marble powder in the ratio of 3:1 and two pa marble chips, laid over 1"(25 mm) thick flooring 1:2:4		11.04	32,829.60	362,439
5 11/8/b Cement plaster 1:3 upto 20' (6.00 m) height:- b) ½" (13 mm) thick b) ½" (13 mm) thick Mosaic flooring Mosaic flooring 6 10/22/a 1½" (40 mm) thick mosaic flooring, consisting "(13 mm) mosaic topping of one part of cemen marble powder in the ratio of 3:1 and two pa marble chips, laid over 1"(25 mm) thick flooring rubbing				
b) ½" (13 mm) thick Mosaic flooring 6 10/22/a 1½" (40 mm) thick mosaic flooring, consisting "(13 mm) mosaic topping of one part of cemer marble powder in the ratio of 3:1 and two pa marble chips, laid over 1"(25 mm) thick flor 1:2:4 cement concrete, including rubbing				
6 10/22/a 1 ¹ / ₂ "(40 mm) thick mosaic flooring, consisting "(13 mm) mosaic topping of one part of cemer marble powder in the ratio of 3:1 and two pa marble chips, laid over 1"(25 mm) thick flo 1:2:4 cement concrete, including rubbing	100 Sft	3.32	3,468.30	11,515
6 10/22/a 1 ¹ / ₂ "(40 mm) thick mosaic flooring, consisting "(13 mm) mosaic topping of one part of cemer marble powder in the ratio of 3:1 and two pa marble chips, laid over 1"(25 mm) thick flo 1:2:4 cement concrete, including rubbing				
polishing complete with finishing :-	nt and arts of oor of			
(a) using grey cement	100 Sft	0.88	19,991.35	17,592

	DE	PUNJAB CITIES PROGRA ETAILED DESIGN OF INFRASTRUCTURE SUP SUPERVISION IN 16 CITIES (DETAILED COST ESTIN WASHING PIT	B-PROJ OF PUN	ECTS AND	RESIDENTS					
	CIVIL WORK									
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)				
		Mosaic dado or skirting								
7	10/37	Mosaic dado or skirting with one part of cement and marble powder in the ratio of 3:1 and two parts of marble chips, laid over $\frac{1}{2}$ "(13 mm) thick cement plaster 1:3, including rubbing and polishing, complete with finishing:								
		(a) using grey cement:								
		ii) ¹ / ₂ "(13 mm) thick	100 Sft	3.32	21,441.10	71,184				
		Total Amount Rs.				539,685				

CALCULATION OF QUANTITIES

	1						1
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Excavation						
1	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)						
	ii) in ordinary soil.						
	Washing Pit	1	35.00	9.67	2.83	958.93	Cft
					Total	0.96	%oCft
2	Supplying and filling sand under floor; or plugging in wells.	1	35.00	9.67	0.33	111.69	Cft
					Total	1.12	%Cft
	Plain Cement Concrete						
3	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):						
	(c) Ratio 1: 1 ¹ / ₂ : 3	2	35.00	3.25	0.25	56.88	Cft
					Total	0.57	%Cft
	(f) Ratio 1: 2: 4	1	35.00	2.50	0.17	14.58	Cft
					Total	0.15	%Cft
	(i) Ratio 1: 4: 8				10141	0.15	70011
	Washing Pit	1	35.00	9.67	0.33	111.69	Cft
					Total	1.12	%Cft
4	Brick work in Foundation						
4	Pacca brick work in foundation and plinth in:- Cement, sand mortar:- Ratio 1:4						
	Washing Pit						
	Step - 1	1	9.00	1.875	0.50	8.44	Cft
	Step - 2	1	9.00	1.500	0.50	6.75	Cft
	Step - 3	1	9.00	1.125	5.50	55.69	Cft
	Side walls	2	19.00	3.250	6.00	741.00	Cft
		2	15.00	3.250	3.00	292.50	Cft
					Total	1,104.38	Cft
					Total	11.04	%Cft

CALCULATION OF QUANTITIES CIVIL WORK

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
1101	Plaster						
5	Cement plaster 1:3 upto 20' (6.00 m) height:-						
	b) ¹ / ₂ " (13 mm) thick						
	Wall	1	2.50		5.50	13.75	Sft
	Side Wall	2	19.00		6.00	228.00	Sft
		2	15.00		3.00	90.00	Sft
					Total	331.75	Sft
					Total	3.32	%Sft
	Mosaic flooring						
6	1 ¹ / ₂ "(40 mm) thick mosaic flooring, consisting of ¹ / ₂ "(13 mm) mosaic topping of one part of cement and marble powder in the ratio of 3:1 and two parts of marble chips, laid over 1"(25 mm) thick floor of 1:2:4 cement concrete, including rubbing and polishing complete with finishing :-						
	(a) using grey cement	1	35.00	2.50		87.50	Sft
					Total	0.88	%Sft
	Mosaic dado or skirting						
7	Mosaic dado or skirting with one part of cement and marble powder in the ratio of 3:1 and two parts of marble chips, laid over ¹ / ₂ "(13 mm) thick cement plaster 1:3, including rubbing and polishing, complete with finishing:						
		1	2.50		5.50	13.75	Sft
		2	19.00		6.00	228.00	Sft
		2	15.00		3.00	90.00	Sft
					Total	331.75	Sft
					Total	3.32	%Sft

DETAILED COST ESTIMATE

GENERATOR PAD CIVIL WORK

Sr.	2nd BI-Annual- 2022 (July to				Unit Rate	Amount
No.	Dec) Sialkot	Description	Unit	Quantity	(Rs)	(Rs)
		Excavation				
1	3/21/a/ii	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)				
		a) By Manual				
		ii) in ordinary soil.	1000Cft	0.08	10,712.60	857
2	6/5	Plain Cement ConcreteCement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):				
		(i) Ratio 1: 4: 8	100 Cft	0.17	29,079.80	4,944
		Concrete Work				
3	6/6	Providing and laying reinforced cement concrete (including prestressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.):-				
		In Foundation				
		(a)(iii) Reinforced cement concrete in slab of rafts / strip foundation, base slab of column and retaining walls; etc and footing beams, other structural members other than those mentioned in 6(a) (i)&(ii) above not requiring form work (i.e. horizontal shuttering) complete in all respects:-				
		(3) Type C (nominal mix 1: 2: 4)	P.Cft	80.00	456.85	36,548
	- 11 - 1	Steel Work.				
4	6/12/c	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-				
		Deformed bars (Grade-60)	100kg	3.05	31,814.75	97,035

DETAILED COST ESTIMATE

GENERATOR PAD

2nd BI-Annual- 2022 (July to Dec) Sialkot 6/35	Description Theremopore Sheet Providing and fixing theremopore (foamed polythene) sheet in horizontal and vertical expansion joints: a) 1" (25 mm) thick thermopore sheet	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
6/35	Providing and fixing theremopore (foamed polythene) sheet in horizontal and vertical expansion joints:				
6/35	polythene) sheet in horizontal and vertical expansion joints:				
	a) 1" (25 mm) thick thermonore sheet				
	a) 1 (25 mm) thek thermopore sneet	Sft	34.58	18.40	636
	Heavy Steel Work				
25/10	Fabrication of heavy steel work, with angle, tees, flat iron round iron and sheet iron for making trusses, girders, tanks, etc., including cutting, drilling, revitting, handling, assembling and fixing, but excluding erection in position.	100Kg	0.45	32,548.60	14,699
25/11	Erection and fitting in position iron trusses, staging of water tanks, etc.	100Kg	0.45	1,307.85	591
	Total Amount Rs.				155,309
	25/11	 trusses, girders, tanks, etc., including cutting, drilling, revitting, handling, assembling and fixing, but excluding erection in position. 25/11 Erection and fitting in position iron trusses, staging of water tanks, etc. 	trusses, girders, tanks, etc., including cutting, drilling, revitting, handling, assembling and fixing, but excluding erection in position. 100Kg 25/11 Erection and fitting in position iron trusses, staging of water tanks, etc. 100Kg	trusses, girders, tanks, etc., including cutting, drilling, revitting, handling, assembling and fixing, but excluding erection in position. 100Kg 0.45 25/11 Erection and fitting in position iron trusses, staging of water tanks, etc. 100Kg 0.45	trusses, girders, tanks, etc., including cutting, drilling, revitting, handling, assembling and fixing, but excluding erection in position. 100Kg 0.45 32,548.60 25/11 Erection and fitting in position iron trusses, staging of water tanks, etc. 100Kg 0.45 1,307.85

CALCULATION OF QUANTITIES

Sr.							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Excavation						
1	Excavation in foundation of building, bridges and						
	other structures, including dagbelling, dressing,						
	refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m)						
	and lift upto 5 ft. (1.5 m)						
	· · · ·						
	ii) in ordinary soil. Generator Pad	1	8.84	5.84	1.50	77.44	Cft
		1	0.04	5.04	Total	77.44	Cft
					Total	77.77	Cit
					Total	0.08	%oCft
	Plain Cement Concrete						
2	Cement concrete plain including placing,						
	compacting, finishing and curing complete						
	(including screening and washing of stone						
	aggregate):						
	(i) Ratio 1: 4: 8	1	0.04	5 0 4	0.22	17.04	06
	Generator Pad	1	8.84	5.84	0.33	17.04	Cft
					Total	17.04	Cft
					Total	0.17	%Cft
	Concrete Work						
3	Providing and laying reinforced cement concrete						
	(including prestressed concrete), using coarse sand						
	and screened graded and washed aggregate, in						
	required shape and design, including forms, moulds,						
	shuttering, lifting, compacting, curing, rendering and						
	finishing exposed surface, complete (but excluding						
	the cost of steel reinforcement, its fabrication and						
	placing in position, etc.):-						
	In Foundation						
	(a)(iii) Reinforced cement concrete in slab of rafts /						
	strip foundation, base slab of column and retaining						
	walls; etc and footing beams, other structural members other than these mentioned in $f(a)$ (i) $f(i)$						
	members other than those mentioned in $6(a)$ (i)&(ii) above not requiring form work (i.e. horizontal						
	shuttering) complete in all respects:-						
	6, · · · · · · · · · · · · · · · · · · ·	1	8.00	5.00	2.00	80.00	Cft
		1	0.00	5.00	2.00	00.00	CII
					Total	80.00	Cft

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Steel Work.						
4	Fabrication of mild steel reinforcement for cement						
	concrete, including cutting, bending, laying in						
	position, making joints and fastenings, including cost						
	of binding wire and labour charges for binding of						
	steel reinforcement (also includes removal of rust						
	from bars):-						
	Deformed bars (Grade-60)					80.00	Cft
	Pad @ 8 lbs / Cft		8.00		=	640.00	lbs/cft
				Total	=	640.00	lbs/cft
				Total	=	290.38	Kg.
			Add 5%	Wastage.	=	14.52	Kg.
				Total	=	305	Kg
					Total	3.05	%kg
	Theremopore Sheet						
5	Providing and fixing theremopore (foamed						
	polythene) sheet in horizontal and vertical expansion						
	joints:						
	a) 1" (25 mm) thick thermopore sheet	1	26.00		1.33	34.58	Sft
	Heavy Steel Work						
6	Fabrication of heavy steel work, with angle, tees, flat						
	iron round iron and sheet iron for making trusses,						
	girders, tanks, etc., including cutting, drilling,						
	revitting, handling, assembling and fixing, but						
	excluding erection in position.						
	Angle Iron 1-1/2" x1-1/2"x3/8"	1	26.00	0.25	0.03	0.20	Cft
	Steel Density 490lbs/cft					99.53	lbs
						45.16	Kg
					Total	0.45	%Kg
7	Erection and fitting in position iron trusses, staging						
	of water tanks, etc.				Total	0.45	%Kg
<u> </u>	······································				1.0141	0.10	//116

DETAILED COST ESTIMATE

PUMP PAD

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)		
		Excavation						
1	3/21/a/ii	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)						
		a) By Manual	100000	0.01	10.712.00	107		
		ii) in ordinary soil.	1000Cft	0.01	10,712.60	107		
		Plain Cement Concrete						
2	6/5	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate): (i) Ratio 1: 4: 8	100 Cft	0.03	29,079.80	872		
		Concrete Work						
3	6/6	Providing and laying reinforced cement concrete (including prestressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.):-						
		In Foundation						
		(a)(iii) Reinforced cement concrete in slab of rafts / strip foundation, base slab of column and retaining walls; etc and footing beams, other structural members other than those mentioned in 6(a) (i)&(ii) above not requiring form work (i.e. horizontal shuttering) complete in all respects:-						
		(3) Type C (nominal mix 1: 2: 4)	P.Cft	8.00	456.85	3,655		
4	6/12/c	Steel Work. Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-						
		Deformed bars (Grade-60)	100kg	0.30	31,814.75	9,544		
		Total Amount Rs.				14,179		

PUMP PAD CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Excavation						
1	Excavation Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)						
	ii) in ordinary soil.						
	Pump Pad	1	2.50	2.50	1.00	6.25	Cft
					Total	0.01	%oCf
	Plain Cement Concrete						
2	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):						
	(i) Ratio 1: 4: 8						
	Pump Pad	1	2.50	2.50	0.50	3.13	Cft
					Total	3.13	Cft
					Total	0.03	%Cft
	Concrete Work						
3	Providing and laying reinforced cement concrete (including prestressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.):-						
	In Foundation						
	(a)(iii) Reinforced cement concrete in slab of rafts / strip foundation, base slab of column and retaining walls; etc and footing beams, other structural members other than those mentioned in 6(a) (i)&(ii) above not requiring form work (i.e. horizontal shuttering) complete in all respects:-						
		1	2.00	2.00	2.00	8.00	Cft

CALCULATION OF QUANTITIES CIVIL WORK

Sr. No. Length Width Height Qty. Unit Description No. Steel Work. Fabrication of mild steel reinforcement for cement 4 concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-Deformed bars (Grade-60) 8.00 Cft Pad @ 8 lbs / Cft 8.00 64.00 lbs/cft = lbs/cft Total = 64.00 Total = 29.04 Kg. Add 5% Wastage. = 1.45 Kg. Total = 30 Kg %kg Total 0.30

DETAILED COST ESTIMATE

SEPTIC TANK

	2.1DI 4						
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)	
		Excavation					
1	3/21/a/ii	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)					
		a) By Manual					
		ii) in ordinary soil.	1000Cft	0.71	10,712.60	7,606	
		Plain Cement Concrete					
2	6/5	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):					
		(f) Ratio 1: 2: 4	100 Cft	0.34	38,271.80	13,012	
		(i) Ratio 1: 4: 8	100 Cft	0.55	29,079.80	15,994	
3	7/7/i	Brick work Pacca brick work other than building upto 10ft. (3 m)					
		Ratio 1:3	100 Cft	4.21	35,372.90	148,920	
		Concrete Work					
4	6/6	Providing and laying reinforced cement concrete (including prestressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.):-					
		(a) (i) Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects:-					
		Type C (nominal mix 1: 2: 4)	P.Cft	50.63	556.05	28,150	

DETAILED COST ESTIMATE

SEPTIC TANK

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Steel Work.				
5	6/12/c	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-				
		Deformed bars (Grade-60)	100kg	1.27	31,814.75	40,266
		Cement Pointing				
6	11/18/a	Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-				
		a) ratio 1:2	100Sft	5.19	3,575.35	18,556
		RCC Manhole Cover				
7	21/15/A	Providing and fixing 6" thick R.C.C. manhole cover with tee shaped C.I. frame of 22" I/d (frame weighing 37.324 Kg. or one maund as per Standard Drawing STD/PD No. 6, of 1977, complete in all respect.	Each	2.00	11,565.15	23,130
		Angle Iron Step				
8	21/13	Providing and fixing 1 ¹ / ₄ "x1 ¹ / ₄ "x3/16" (31x31x5 mm) angle iron step, in manhole chambers, including carriage and setting the same in work to correct lines and levels.		11.00	50.1.55	0.001
		correct lines and levels.	Each	14.00	594.55	8,324
		Total Amount Rs.				303,958

SEPTIC TANK

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit				
	Excavation										
1	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)										
	ii) in ordinary soil.										
	Septic tank	1	13.50	7.50	7.00	708.75	Cft				
					Total	708.75	Cft				
					Total	0.71	%oCft				
	Plain Cement Concrete										
2	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):										
	(f) Ratio 1: 2: 4	3	3.75	6.00	0.50	33.75	Cft				
					Total	33.75	Cft				
					Total	0.34	%Cft				
	(i) Ratio 1: 4: 8										
	Septic tank	3	3.75	6.00	0.33	22.50	Cft				
	Outer Wall	1	39.00	2.00	0.33	26.00	Cft				
	Baffle wall	2	6.00	1.50	0.33	6.00	Cft				
					Total	54.50	Cft				
					Total	0.55	%Cft				
	Brick work										
3	Pacca brick work other than building upto 10ft. (3 m)										
	Ratio 1:3										
	Outer wall	1	39.00	1.88	0.50	36.56	Cft				
		1	39.00	1.50	0.50	29.25	Cft				
		1	39.00	1.13	0.50	21.94	Cft				
		1	39.00	0.75	9.00	263.25	Cft				
	Baffle wall	2	6.00	1.13	0.50	6.75	Cft				
		2	6.00	0.75	7.00	63.00					
					Total	420.75	Cft				
					Total	4.21	%Cft				

SEPTIC TANK

CALCULATION OF QUANTITIES

	CIVIL WORK										
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit				
	Concrete Work										
4	Providing and laying reinforced cement concrete (including prestressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds,										
	shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.):-										
	(a) (i) Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects:-										
	Type C (nominal mix 1: 2: 4)	1	13.50	7.50	0.50	50.63	Cft				
	Steel Work.										
5	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-										
	Deformed bars (Grade-60)		2.50 kg/	cft		126.56	Kg				
					Total	1.27	%Kg				
	Cement Pointing										
6	Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-										
	a) ratio 1:2	1	39.00		9.00	351.00	Sft				
		4	6.00		7.00	168.00	Sft				
					Total	519.00	Sft				
					Total	5.19	%Sft				
	RCC Manhole Cover										
7	Providing and fixing 6" thick R.C.C. manhole cover with tee shaped C.I. frame of 22" I/d (frame										
	weighing 37.324 Kg. or one maund as per Standard Drawing STD/PD No. 6, of 1977, complete in all										
	respect.	2				2.00	Nos.				

	PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB SEPTIC TANK CALCULATION OF QUANTITIES CIVIL WORK									
Sr. No.	Sr. Description No Length Width Height Oty Unit									
8	Angle Iron Step Providing and fixing 1 ¹ / ₄ "x1 ¹ / ₄ "x3/16" (31x31x5 mm) angle iron step, in manhole chambers, including carriage and setting the same in work to correct lines and levels.					14.00	Nos.			

DETAILED COST ESTIMATE

EXTERNAL WORK

Sr. No.	2nd BI-Annual 2022 (July to Dec) Sialkot	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		BOUNDARY WALL				
		Dismantling				
1	4/38	Dismantling rolled steel beams or iron rails, etc.	100Kg	16.00	836.25	13,380
		Excavation				
2	3/21/a/ii	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)				
		a) By Manual				
		ii) in ordinary soil.	1000Cft	0.50	10,712.60	5,356
		Anti-Termite				
3	26/43	Spraying termite proofing by using liquid FMC/ Biflex/ Terminex Exin/ Ms Hextar or equivalent @ specified suspension concenterate (SC), Mixing Ability-HEXTAR with Ratio (1:250) = 540 Sft or equivalent approved liquid applying with shower and certificate will be provided by the contractor for 10-years complete in all respect as approved by the Engineer Incharge.	Sft	618.00	9.25	5,717
				01000	,	0,111
		Plain Cement Concrete				
4	6/5	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):				
		(i) Ratio 1: 4: 8	100 Cft	0.65	29,079.80	18,902
		Brick work in Foundation				
5	7/4/i	Pacca brick work in foundation and plinth in:-				
		Cement, sand mortar:- Ratio 1:5	100 Cft	2.49	31,875.60	79,370
		Horizontal D.P.C				
6	6/36	Providing and laying damp proof course of cement concrete 1 : 2 : 4 (using cement, sand and shingle), including bitumen coating :-				
		(a) with one coat bitumen and one coat polythene sheet 500gauge				
		i) 1 ¹ / ₂ " thick (40 mm)	100 Sft	0.32	8,711.65	2,788

DETAILED COST ESTIMATE

EXTERNAL WORK

	2nd BI-Annual-					
Sr. No.	2022 (July to Dec)	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
	Sialkot	Vertical D.P.C				
7	6/37	Providing and laying vertical damp proof course with cement sand plaster and bitumen coating:-				
		(a) with one coat of bitumen and one coat of polythene sheet 500 gauge:				
		ii) Ratio 1:3 ³ / ₄ " thick (20 mm)	100 Sft	0.40	6,525.25	2,610
		Brick work in Super Structure				
8	7/5	Pacca brick work in ground floor:-				
		i) Cement, sand mortar:- Ratio 1:5	100 Cft	17.09	34,090.60	582,608
		Concrete Work				
9	6/6	Providing and laying reinforced cement concrete (including prestressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.):-				
		In Foundation (a)(iii) Reinforced cement concrete in slab of rafts / strip foundation, base slab of column and retaining walls; etc and footing beams, other structural members other than those mentioned in 6(a) (i)&(ii) above not requiring form work (i.e. horizontal shuttering) complete in all respects:-				
		(3) Type C (nominal mix 1: 2: 4)	P.Cft	36.75	456.85	16,789
		Above foundation		00110		10,707
		(a) (i) Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects:-				
		Type C (nominal mix 1: 2: 4)	P.Cft	52.36	556.05	29,114
		Steel Work.				
10	6/12/c	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-				
		Deformed bars (Grade-60)	100kg	5.09	31,814.75	161,937

DETAILED COST ESTIMATE

EXTERNAL WORK

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Cement Plaster				
11	11/9	Cement plaster 1:4 upto 20' (6.00 m) height:-				
	11/2	3/4" (20 mm) thick	100 Sft	21.77	4,437.45	96,603
					7	
10	11/10/	Pointing				
12	11/18/a	Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-				
		a) ratio 1:2	100 Sft	21.77	3,575.35	77,835
12	11/21					
13	11/31	Extra cost of labour and material for red oxide				
		pigment in cement pointing to match with the colour of bricks.	100 Sft	21.77	669.00	14,564
			100 Sit	21.77	009.00	14,304
		Distempering				
14	11/23	Distempering:-				
		iii) three coats	100 Sft	21.77	1,309.95	28,518
						,
1.7	25/20	Main Gate				
15	25/30	Making and fixing steel grated doors, complete				
		with locking arrangement, angle iron frame 2"x2"x3/8" (50x50x10 mm) and ³ / ₄ " (20 mm)				
		square bars 4" (100 mm) centre to centre.	Sft	120.00	1,933.80	222.056
			SIL	120.00	1,955.60	232,056
		Painting new surface:-				
16	13/5/d	d) Preparing surface and painting guard bars, gates of iron bars, gratings, railing (including standards, braces, etc.) and in similar open work:-				
		i) priming coat.	100 Sft	2.40	841.35	2,019
		ii) each subsequent coat of paint.	100 Sft	2.40	497.25	1,193
17	26/46	Razor Wire Providing and fixing anti climb high security galvanized razor cut wire having double sharp four U-shaped pointed 0.5 mm thick (22mmx15 mm barbs) spaced @ 33 mm c/c cladded over 2.5 mm dia high tensile Core wire making coil fencing of specified diameter @ 4" c/c fixed on 2'-3" high				
		M/S angle iron post $1\frac{1}{2}$ "x $1\frac{1}{2}$ "x $3/16$ " embedded in base of PCC (1:2:4) (4"x4"x9") @ 4' apart i/c the cost of 2 No. bars $3/8$ " dia welded horizantally with angle iron posts , binding wire, painting of posts, etc. complete in all respects as pproved and directed by the Engineer incharge.				
		(ii) 18 " diameter	Rft	425.00	502.80	213,690

DETAILED COST ESTIMATE

EXTERNAL WORK

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Deduction				
18		Deduction of used steel grill from original quantity.	Kg	1,600.00	(100.00)	(160,000)
		Total Rs. "A"				1,425,051
		Tuff Paver				
18	3/5/i + 3/17	Borrow Earth Earthwork in ordinary soil for embankment including ploughing and mixing with blade grade or disc harrow or other suitable equipment and compaction by mechanical means at optimum moisture content and dressing to designed section, complete in all respects:- 90% to 95% maximum modified dry density as determined according to AASHTO T-180 method- D including Transportation of earth.	1000Cft	14.53	17,256.33	250,734
		Sub Base Course				
19	18/3/a/ (i) + 1/1	Providing and laying sub-base course of stone product of approved quality and grade including, placing, mixing, spreading and compaction of sub base material to required depth, camber and grade to achieve 98% maximum dry density determined according to AASHTO T-180 method-D, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Pit run or bed run gravel from Dina querry to site, actual compacted depth shall be considered for payment)				
			100Cft	47.93	17,448.30	836,297

DETAILED COST ESTIMATE

EXTERNAL WORK

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Water Bound Macadam				
20	18/4/a + 1/1	Providing and laying base course of crushed stone (Water Bound Macadam) of approved quality and grade including, placing, mixing, spreading and compaction of base course material to required depth, camber and grade to achieve 100% maximum modified AASHTO dry density, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Crushed stone aggregate from sargodha querry to site, actual compacted depth shall be considered for payment)				
			100Cft	47.93	29,058.30	1,392,764
		Tuff Paver				
21	10/41	Providing and laying Tuff pavers, having 7000 PSI, crushing strength of approved manufacturer, over 2" to 3" sand cushion i/c grouting with sand in joints i/c finishing to require slope. complete in all respect. (50% Grey / 50% Coloured)				
		c) 80-mm thick	Per Sft	14,525.00	196.55	2,854,889
		Total Rs. "B"				5,334,684
		Total Rs. "A+B"				6,759,735

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit				
	BOUNDARY WALL										
	Dismantling										
1	Dismantling rolled steel beams or iron rails, etc.	1	160.00		5.00	800.00	Sft				
	2 kg /sft					1,600.00	Kgs				
					Total	16.00	%Kgs				
							0				
	Excavation										
1	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)										
	ii) in ordinary soil.										
	Boundary wall	1	60.00	2.50	2.50	375.00	Cft				
	Columns	3	4.00	4.00	2.50	120.00	Cft				
		5			Total	495.00	Cft				
					1000						
					Total	0.50	%oCft				
	Anti-Termite										
2	Spraying termite proofing by using liquid FMC/ Biflex/ Terminex Exin/ Ms Hextar or equivalent @ specified suspension concenterate (SC), Mixing Ability-HEXTAR with Ratio (1:250) = 540 Sft or equivalent approved liquid applying with shower and certificate will be provided by the contractor for 10- years complete in all respect as approved by the Engineer Incharge.										
	Boundary wall	1	60.00	7.50		450.00	Sft				
	Columns	3	16.00	2.50		120.00	Sft				
		3	4.00	4.00		48.00	Sft				
					Total	618.00	Sft				
	Plain Cement Concrete										
3	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):										
	(i) Ratio 1: 4: 8										
	Boundary wall	1	60.00	2.50	0.33	49.50	Cft				
	Columns	3	4.00	4.00	0.33	15.84	Cft				
					Total	65.34	Cft				
					Total	0.65	%Cft				
					I Utdl	0.03	/0UI				

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Brick work in Foundation						
4	Pacca brick work in foundation and plinth in:-						
	Cement, sand mortar:- Ratio 1:5						
	Boundary wall						
	Step - 1	1	60.00	1.875	0.25	28.13	Cft
	Step - 2	1	60.00	1.500	0.25	22.50	Cft
	Step - 3	1	60.00	1.125	0.25	16.88	Cft
	Step - 4	1	54.38	0.750	3.42	139.47	Cft
	Columns						
	Step - 1	5	1.13	1.13	3.42	21.64	Cft
	Gate Columns	3	6.50	0.38	2.84	20.77	Cft
					Total	249.38	Cft
						A 40	
					Total	2.49	%Cft
	Horizontal D.P.C						
5	Providing and laying damp proof course of cement						
5	concrete $1:2:4$ (using cement, sand and shingle),						
	including bitumen coating :-						
	(a) with one coat bitumen and one coat polythene						
	sheet 500gauge						
	i) 1½" thick (40 mm)						
	Boundary wall	1	34.00	0.75		25.50	Sft
	Columns	5	1.13	1.13		6.33	Sft
	Columns	5	1.15	1.15	Total	31.83	Sft
					Total	51.05	511
					Total	0.32	%Sft
	Vertical D.P.C						
6	Providing and laying vertical damp proof course with cement sand plaster and bitumen coating:-						
	(a) with one coat of bitumen and one coat of polythene sheet 500 gauge:						
	ii) Ratio 1:3 ³ / ₄ " thick (20 mm)						
	Boundary wall	1	34.00		1.00	34.00	Sft
	Columns	5	1.13		1.00	5.63	Sft
					Total	39.63	Sft
						0.40	
					Total	0.40	%Sft
	Brick work in Super Structure						
7	Pacca brick work in ground floor:-						
/	i) Cement, sand mortar:- Ratio 1:5						
	Boundary wall	1	28.38	0.75	7.00	148.97	Cft
	Columns	5	1.13	1.13	7.00	44.30	Cft
	Gate Columns	3	6.50	0.38	7.00		Cft
	Uaie Columnis	5	0.30	0.38	7.00	51.19	CII

CALCULATION OF QUANTITIES

C							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Raising of Boundary wall by 4' - 6"	1	380.00	0.75	4.50	1,282.50	Cft
	Columns	32	1.13	1.13	4.50	182.25	Cft
					Total	1,709.20	Cft
					Total	17.09	%Cft
	Concrete Work						
8	Providing and laying reinforced cement concrete (including prestressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.):-						
	In Foundation (a)(iii) Reinforced cement concrete in slab of rafts / strip foundation, base slab of column and retaining walls; etc and footing beams, other structural members other than those mentioned in 6(a) (i)&(ii) above not requiring form work (i.e. horizontal shuttering) complete in all respects:-						
	Gate Columns	3	3.50	3.50	1.00	36.75	Cft
					Total	36.75	Cft
					Totai	30.75	Cli
	Above foundation						
	(a) (i) Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects:-						
	Type C (nominal mix 1: 2: 4)						
	Gate Columns	3	1.25	1.25	11.17	52.36	Cft
					Total	52.36	Cft
						52.00	
	Steel Work.						
9	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-						
	Deformed bars (Grade-60)					89.11	Cft

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Columns @ 12 lbs / Cft		12.00		=	1,069.31	lbs/cft
				Total	=	1,069.31	lbs/cft
				Total	=	485.17	Kg.
			Add 5%	Wastage.	=	24.26	Kg.
				Total	=	509	Kg
					Total	5.09	%kg
	Cement Plaster						
10	Cement plaster 1:4 upto 20' (6.00 m) height:-						
	3/4" (20 mm) thick						
	Boundary wall	1	28.38		7.00	198.63	Sft
	Columns	5	1.50		7.00	52.50	Sft
	Raising of Boundary wall by 4' - 6"	1	380.00		4.50	1,710.00	Sft
	Columns	32	1.50		4.50	216.00	Sft
					Total	2,177.13	Sft
					Total	21.77	%Sft
	Pointing						
11	Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-						
	a) ratio 1:2						
	Outer Walls	1	28.38		7.00	198.63	Sft
	Columns	5	1.50		7.00	52.50	Sft
	Raising of Boundary wall by 4' - 6"	1	380.00		4.50	1,710.00	Sft
	Columns	32	1.50		4.50	216.00	Sft
					Total	2,177.13	Sft
					Total	21.77	%Sft
12	Extra cost of labour and material for red oxide pigment in cement pointing to match with the colour						
	of bricks.				Total	21.77	%Sft
	Distempering						
13	Distempering:-						
	iii) three coats				Total	2,177.13	Sft
	Boundary wall						
					Total	21.77	%Sft
	Main Gate						
14	Making and fixing steel grated doors, complete with locking arrangement, angle iron frame 2"x2"x3/8" (50x50x10 mm) and ³ / ₄ " (20 mm) square bars 4" (100						
	mm) centre to centre.	1	20.00		6.00	120.00	Sft

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Painting new surface:-						
15	d) Preparing surface and painting guard bars, gates of iron bars, gratings, railing (including standards, braces, etc.) and in similar open work:-						
	i) priming coat.					2.40	%Sft
	ii) each subsequent coat of paint.					2.40	%Sft
	Razor Wire						
16	Providing and fixing anti climb high security galvanized razor cut wire having double sharp four U shaped pointed 0.5 mm thick (22mmx15 mm barbs) spaced @ 33 mm c/c cladded over 2.5 mm dia high tensile Core wire making coil fencing of specified diameter @ 4" c/c fixed on 2'-3" high M/S angle iron post 1½"x1½"x3/16" embeded in base of PCC (1:2:4) (4"x4"x9") @ 4' apart i/c the cost of 2 No. bars 3/8" dia welded horizantally with angle iron posts , binding wire, painting of posts, etc. complete in all respects as pproved and directed by the Engineer incharge.						
	(ii) 18 " diameter	1	425.00			425.00	Rft
	Borrow Earth						
1	Earthwork in ordinary soil for embankment including ploughing and mixing with blade grade or disc harrow or other suitable equipment and compaction by mechanical means at optimum moisture content and dressing to designed section, complete in all respects:- 90% to 95% maximum modified dry density as determined according to AASHTO T-180 method-D including Transportation of earth.		Area				
	Total Area	1	14,525	1.00	1.00	14,525	Cft
					Total	14,525	Cft
					Total	14.53	%oCft

EXTERNAL WORK CALCULATION OF QUANTITIES

Sr.	Description	No.	Length	Width	Height	Qty.	Unit
No.	Sub Base Course						
2	Providing and laying sub-base course of stone product of approved quality and grade including, placing, mixing, spreading and compaction of sub base material to required depth, camber and grade to achieve 98% maximum dry density determined according to AASHTO T-180 method-D, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Pit run or bed run gravel from Dina querry to site, actual compacted depth shall be considered for payment)						
		1	14,525	1.00	0.33	4,793.25	Cft
					Total	47.93	%Cft
	Water Bound Macadam						
3	Providing and laying base course of crushed stone (Water Bound Macadam) of approved quality and grade including, placing, mixing, spreading and compaction of base course material to required depth, camber and grade to achieve 100% maximum modified AASHTO dry density, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Crushed stone aggregate from sargodha querry to site, actual compacted depth shall be considered for payment)						
		1	14,525	1.00	0.33	4,793.25	Cft
	T				Total	47.93	%Cft
4	Tuff Paver Providing and laying Tuff pavers, having 7000 PSI, crushing strength of approved manufacturer, over 2" to 3" sand cushion i/c grouting with sand in joints i/c finishing to require slope. complete in all respect. (50% Grey / 50% Coloured)		14 525	1.00		14 525	Çî4
	c) 80-mm thick	1	14,525	1.00		14,525	Sft

		EXTERNAL PLUMBING V	VORKS			
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
1	3/44	Excavation Excavation of trenches in all kinds of soil, except cutting rock, for watersupply pipelines upto 5 ft. (1.5 m) depth from ground level, including trimming, dressing sides, leveling the beds of trenches to correct grade and cutting pits for joints, etc. complete in all respects.		2.49	7,647.00	19,070
		PPRC Pipe				
2	23-47	Providing, laying, testing and commissioning of POLYPROPYLENE RANDOM COPOLYMER (PPRC) water supply pipe made of (Dadex/ Popular /Beta/ BBJ)with specified pressure rating PN (PRESSURE NOMINAL) and conforming to DIN8077-8078 code i/c cost of solvent, specials, making jharries complete in all respect as approved and directedby Engineer Incharge.(Internal / External Diameters mentioned).				
		b) PN-20 pipe				
		(v)(1-1/2") 50 mm	Rft	45.00	249.35	11,221
		(vi)(2") 63 mm	Rft	130.00	378.05	49,147
		Valve				
3	23/46	Providing and fixing CP heavy duty brass Ball valve with CP handle of specified dia meter made of Faisal/ Sonex/ Master best quality or equivalent complete in all respect as approved and directed by the Engineer Incharge.				
		v) 1-1/2" dia	Each	2.00	2,143.20	4,286
		vi) 2" dia	Each	2.00	2,563.20	5,126
4	19/47	uPVC Pipe Providing, fixing, testing and commissioning of μ- PVC (Unplasticized polyvinyl Chloride)Nikasi /waste pipe make of dadex/Popular/Beta/BBJ plain/ socket ended conforming to code EN-1401 of specified SDR (Standard Dimension Ratio)including the cost of specials and Solvents complete in all respect as approved and directed by the Engineer Incharge				
		Type (SDR 41/SN-4) (vi) 6"(160 mm)				

		EXTERNAL PLUMBING V	VORKS			
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
5	N.S	Providing and making Manhole 2'x2' internal size including 9" thick brick masonry (1:4), 1/2" th. Plastering (1:3) i/side, benching with PCC 1:2:4 4" th. with cement finish, including manhole cover, complete in all respects.	Each	8.00	18,219.61	145,757
		HDPE Tank				
6	19/51	Providing and hoisting vertical /horizontal type storage tank of required capacity made of rotationally molded from (HDPE), double ply polyethelene of approved manufacturer i/c cost of making connection for inlet/outlet pipe, float valve i/c all cost of specials & labour complete in all respect as approved and directed by the Engineer Incharge.	P.Gln	1,500	106.75	160,125
		Ejector Pump				
7	23/45/ii	P/F Ejector Pump of specified Suction and Delivery heads, coupled with Single Phase Seimen Electric Motor of required rating for water supply i/c the cost of connection charges, necessary wire, PVC pipes etc complete in all respect as approved and directed by the Engineer Incharge.				
		ii) G-IV (2-1/2"x2") with 2.5 HP Electric Motor,38-Mtr Suction and 38 M delivery head	Each	1.00	17,940.90	17,941
		Boring				
8	23/1	Boring for tubewell in all types of soil except shingle and rock, from ground level to 100 ft. (30 m) depth, including sinking and withdrawing of casing pipe, complete:-				
		c) 5" (125 mm) i/d	Rft	100.00	597.40	59,740
9	23/2	Boring for tubewell in all types of soil except shingle, gravel & rock, from a depth of 100.1 ft. to 200 ft. (30 to 60 m) below ground level, including sinking and withdrawing of casing pipe, complete:-				
		a) 5" (125 mm) i/d	Rft	50.00	1,001.00	50,050
10	23/16	Providing and installing P.V.C. blind pipe, B.S.S. Class `B', in tubewell bore hole, including sockets and solvents and jointing with strainer, etc. complete.				
		b) 4" i/d (100 mm)	Rft	50.00	484.80	24,240

	1	EXTERNAL PLUMBING V	VORKS		I	
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
11	23/17	Providing and installing P.V.C. blind pipe, B.S.S. Class `D', in tubewell bore hole, including sockets and solvents and jointing with strainer, etc. complete. b) 1 ¹ / ₂ " i/d (40 mm)	Rft	150.00	158.80	22 820
		c) 2" i/d (50 mm)	Rft	70.00	230.60	23,820 16,142
12	23/11	Providing and installing, P.V.C. strainer B.S.S. Class 'B', in tubewell bore hole, including sockets and solvents, etc. complete:-				
		a) 3" i/d (75 mm)	Rft	30.00	175.25	5,258
13	23/14	Providing and installing P.V.C. Bail/End plug, in tubewell bore hole:-				
		a) B.S.S. Class `B' i) 3" i/d (75 mm)	Rft	1.00	86.35	86
			KII	1.00	80.55	80
14	N.S	Booster Pump Providing, installing, Fixing and commisioning of reciprocating pump with a capacity of 30 USGPM against a total head of 90 ft Cast Iron, Cylinder & Piston Rod in S.S., Crank Shaft in super finish S.G. Iron, Gland Nut in Brass and abrasion proof silently working Valves fitted on easily Feat accessible S.S., ABS or Cast Iron Valve Plate with Brass Seats, All Gaskets are in Rubber and Rocker Rail in Galvanized Mild Steel with Insulation Bushes complete system installed upto satisfaction of engineer in charge, complete in all respects	Each	1.00	20,000	20,000
		Dismantling				
15	4/46	Dismantling and removing road pavement, etc., including screening and stacking of byproducts upto one chain lead (30 metre).	100Cft	5.00	2,720.85	13,604
16	21/12	Restoration of metalled road, on laid service line, including compaction:-				
		a) Carpetted road, with 2" (50 mm) carpet and 10" (250 mm) depth of stone metal for sub-base and base.	100Sft	5.00	17,361.50	86,808

	EXTERNAL PL	JMBIN	NG WORK	S			
Sr. No.	Description	No	Length	Width	Height	Qty.	Unit
	Excavation						
1	Excavation of trenches in all kinds of soil, except cutting rock, for watersupply pipelines upto 5 ft. (1.5 m) depth from ground level, including trimming, dressing sides, leveling the beds of trenches to correct grade and cutting pits for joints, etc. complete in all respects.						
	Water supply Pipe+Drainage pipe	1	475.00	1.50	3.50	2,493.75	Cft
					Total	2.49	%oCft
	PPRC Pipe						
2	Providing, laying, testing and commissioning of POLYPROPYLENE RANDOM COPOLYMER (PPRC) water supply pipe made of (Dadex/ Popular /Beta/ BBJ)with specified pressure rating PN (PRESSURE NOMINAL) and conforming to DIN8077-8078 code i/c cost of solvent, specials, making jharries complete in all respect as approved and directedby Engineer Incharge.(Internal / External Diameters mentioned).						
	b) PN-20 pipe						
	(v)(1-1/2") 50 mm	1	45.00			45.00	Rft
	(vi)(2") 63 mm	1	130.00			130.00	Rft
	Valve						
3	Providing and fixing CP heavy duty brass Ball valve with CP handle of specified dia meter made of Faisal/ Sonex/ Master best quality or equivalent complete in all respect as approved and directed by the Engineer Incharge.						
	v) 1-1/2" dia	2				2.00	Nos.
	vi) 2" dia	2				2.00	Nos.
	uPVC Pipe						
4	Providing, fixing, testing and commissioning of μ - PVC (Unplasticized polyvinyl Chloride)Nikasi /waste pipe make of dadex/Popular/Beta/BBJ plain/ socket ended conforming to code EN-1401 of specified SDR (Standard Dimension Ratio)including the cost of specials and Solvents complete in all respect as approved and directed by the Engineer Incharge						
	Type (SDR 41/SN-4) (vi) 6"(160 mm)	1	300.00			300.00	Rft

DETAILED COST ESTIMATE EXTERNAL PLUMBING WORKS

	EXTERNAL PLU	JMBIN	IG WORK	S			
Sr. No.	Description	No	Length	Width	Height	Qty.	Unit
5	Providing and making Manhole 2'x2' internal size including 9" thick brick masonry (1:4), 1/2" th. Plastering (1:3) i/side, benching with PCC 1:2:4 4"						
	th. with cement finish, including manhole cover, complete in all respects.	8				8.00	Nos.
	HDPE Tank						
6	Providing and hoisting vertical /horizontal type storage tank of required capacity made of rotationally molded from (HDPE), double ply polyethelene of approved manufacturer i/c cost of making connection for inlet/outlet pipe, float valve i/c all cost of specials & labour complete in all respect as approved and directed by the Engineer Incharge.					1,500.00	Gln
7	Dismantling and removing road pavement, etc., including screening and stacking of byproducts upto one chain lead (30 metre).						
		1	200.00	2.50	1.00	500.00	Cft
					Total	5.00	%Cft
8	Restoration of metalled road, on laid service line, including compaction:-						
	a) Carpetted road, with 2" (50 mm) carpet and 10" (250 mm) depth of stone metal for sub-base and						
	base.	1	200.00	2.50		500.00	Sft
					Total	5.00	%Sft

		EXTERNAL ELECTRICAL	WORK	S		
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
		Scheduled Items (A)				
		Excavation				
1	3/21	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m)				
		a) By Manual				
		ii) in ordinary soil.	1000Cft	1.54	10,712.60	16,519
		RCC Foundation for Poles				
2	6/6	Providing and laying reinforced cement concrete (including prestressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.):-				
		(a)(iii) Reinforced cement concrete in slab of rafts / strip foundation, base slab of column and retaining walls; etc and footing beams, other structural members other than those mentioned in 6(a) (i)&(ii) above not requiring form work (i.e. horizontal shuttering) complete in all respects:-				
		(3) Type C (nominal mix 1: 2: 4)	Cft	192.00	456.85	87,715
		Steel Work				
3	6/12/b	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-				
		('b) Deformed bars (Grade-40)	100Kg	4.80	31,425.00	150,840

		EXTERNAL ELECTRICAL	WORF	KS		
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
4	24/6	Supply and erection PVC pipe for recessed wiring (main and sub-main) purpose, including bends, specials, etc. in floor, wall or trenches:-				
		i) 50 mm i/d	Rft	450.00	188.45	84,803
5	24/12	Supply and erection of single core PVC insulated, PVC sheathed copper conductor, 660/1100 volts grade cable, in prelaid G.I. pipe/M.S. conduits/PVC pipe/G.I. wire/trenches, etc (rate for cable only):-				
		ii) 6 mm sq (7/0.044")	Rft	500.00	118.20	59,100
		iv) 16 mm sq (7/0.064")	Rft	100.00	174.50	17,450
6	24/13	Supply and erection of copper conductor cables for service connection, in prelaid pipe/G.I. wire / trenches, etc. (rate for cable only):-				
		a) PVC insulated, PVC sheathed twin core, 250/440 volts.				
		v) 7/1.12 mm (7/0.044")	Rft	1,200.00	160.75	192,900
		c) PVC insulated, PVC sheathed 4 core, 660/1100 volt non armoured cable:-	Tur	1,200100	100.72	1,2,,,00
		vi) 10 mm (7/0.052")	Rft	50.00	524.50	26,225
		vii) 16 mm (7/0.064")	Rft	50.00	643.55	32,178
7	24/68	Supplying,installation testing and commissioning of Octagonal shape electric street light pole, made of hot dipped 4.5 mm thick (7 SWG) galvanized steel ,tappered from 225 mm at bottom to 100 mm at top,with 1500 mmx60 mm dia. arm for luminaire installation, duly G.I.welded with 470x470x20 mm base plate with the help of 4 no triangular stiffeners 100x350x20 mm of GI sheet,with built in junction box with shutter,i/c the cost of nuts & J-rag bolts, duly fixed in prelaid concrete foundation, foundation will be paid additionally as approved and directed by the Engineer Incharge.				
		a) Single Arm				
		(i) 10 mtr height	Each	6.00	106,330.20	637,981
		b) Double Arm	D - 1	2.00	100.072.20	010.044
		(i) 10 mtr height	Each	2.00	109,972.20	219,944

		EXTERNAL ELECTRICAL	WORK	KS		
Sr. No.	2nd BI-Annual 2022 (July to Dec) Sialkot	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
8	24/69/c	Supplying, installation and commissioning of LED Cobra-head Luminaries of specified wattage and lumens conforming to IP 66 & IK 08 or above Philips/Osram/Thorn or equivalent with corrosion resistant die casted Aluminum housing, silicon gasket in special groove, UV stable & scratch resistant synthetic materials, thermally hardened glass complete with LED Chip (Philips Lumiled/Cree/Nichia/Osram make or equivalent), programmable LED driver (Harvard /TCI/ Lumotech /Philips/ VOSSLOH Schwabe / Lightech make or equivalent), minimum 10kV surge protection rating i/c the cost of all accessories/ components required for proper operation, fully flexible for future upgradation and easy replacements for maintenance purposes, bucket elevator charges as approved and directed by the Engineer Incharge.				
		c) 120 Lm/Watt				
		(v) 90 Watt with 10800 Lumens	Each	10.00	53,307.60	533,076
9	24/77	Supply and erection of electric energy meter, including meter testing fee, etc. b) three phase, 4 wires: iii) 3x80 Amp, 400 volts	Each	1.00	14,693.25	14,693
10	24/05					
10	24/86	Suppling,Installation and comissioning of MCB (Miniature Circuit Breaker) of specified rating made of LEGRAND FRANCE/ GE U.S.A / SCHNEIDER GERMANY /SIEMEN GERMAN/ TERASAKI JAPAN/ ABB SWITZERLAND in prelaid DBs and Panels i/c the cost of screwes,necessary wire complete in all respect as approved and directed by the Engineer Incharge.				
		a) Single Pole				
		(ii) 6-40 Amp (6 KA) DB-Office	Each	6.00	1,103.05	6,618
		DB-WS	Each	9.00	1,103.05	9,927
		DB-Guard Room	Each	6.00	1,103.05	6,618
		c) Tripple Pole				
		(ii) 6-40 Amp (6 KA)				
		DB-Office	Each	1.00	6,754.30	6,754
		DB-WS	Each	3.00	6,754.30	20,263
		DB-Guard Room	Each	1.00	6,754.30	6,754

DETAILED COST ESTIMATE

EXTERNAL ELECTRICAL WORKS

		EXTERNAL ELECTRICAL		6		
Sr. No.	2nd BI-Annual 2022 (July to Dec) Sialkot	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
11	24/88	Supplying, Installation and commissioning of MCCB (Moulded Case Circuit Breaker) of specified rating made of LEGRAND FRANCE/ GE U.S.A / SCHNEIDER GERMANY / TERASAKI JAPAN/ABB SWITZERL(with adjustable Thermal- Magnetic Trip) in prelaid DBs and Panels i/c the cost of screws, necessary wire complete in all respect as approved and directed by the Engineer Incharge				
		a) Tripple Pole With Adjustable Thermal-Magnetic Trip /Electronic Trip (60-100%)				
		(i) 25-100 Amp(25 KA)				
		MPB	Each	1.00	26,854.30	26,854
		with 16SWG Sheet (Recessded/Surface mounted Type), Powder coated Paint, i/c the cost of Lock, Indication lights,Thimble, Copper Comb, Wiring, Netural & Earth Bar, Door Earthing, Digital Voltmeter, Digital Ammeter,Volt Selector Switch,Ammeter selector switch,Current Transformers and Controles Complete in all respect as approved and directed by the Engineer Incharge (Breakers will be Paid Separately).				
		(a) 6" deep				
		(i) 20~60A (18"x24"x6")				
		DB-Office	Cft	1.50	18,691.40	28,037
		DB-WS DB-Guard Room	Cft Cft	1.50 1.50	18,691.40 18,691.40	28,037
		MPB	Cft	1.50	18,691.40	28,037 28,037
			Cit	1.50	10,071.40	20,037
13	24/70	Earthing of iron clad/aluminum switches, etc. with G.I. wire No. 8 SWG in G.I. pipe 15 mm ($\frac{1}{2}$ ") dia, recessed or on surface of wall and floor, complete with 1.5 metre long G.I. pipe, 50 mm (2") dia with reducing socket 4 to 5 metre below ground level, and 2 metre away from building plinth.		13.00	9,635.35	125,260
14	24/72	Bonding to earth with wire on surface, including cost of wire, clamps, thimbles, etc.				
		a) G.I. wire:				
		i) 8 SWG	Per Rft.	250.00	23.70	5,925

		EXTERNAL ELECTRICAL		KS		
Sr. No.	2nd BI-Annual 2022 (July to Dec) Sialkot	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
		CCTV System				
		PVC Pipe				
15	24/3	Supply and erection of PVC pipe for wiring recessed in walls, including inspection boxes, pull boxes, hooks, cutting jharries, and repairing surface, etc., complete with all specials.				
		iii) 25 mm i/d	Rft	1,450.00	94.60	137,170
		Cable				
16	24/106	Supply, Installation and commissioning of wiring with 4-pair data Cable, 23 AWG UL/EN listed cable * Conforming to following standards: TIA/EIA 568 /ISO/IEC 11801, in prelaid conduit / cable tray from including all accessories, Manufacturer /OEM Authorization, Make: Schneider / i-connect UK/3M Corning USA/ D-Link/ Pollo Australian or equivalent complete in all respect as approved and directed by Engineer Incharge.				
		a) UTP (Unshielded Twisted pair)				
		(i)CAT-6 (Min.1G @ 250MHz or higher)	Rft	1,450.00	32.05	46,473
		NVR				
17	24/116	Supply & Installation of NVR (Network Video Recorder) for Real Time View of specified Channels, video and Audio channels,Supported protocoles: ONVIF, RTSP etc, Internal HDDs mount support: 2/4/8 or higher as per site requirement, Monitor outputs,(HDMI, 4K Ultra HD), VGA (Video Graphic array), Support Raid 5/6, Embeded OS, Data Encryption, Min. 1 x RJ-45 1000Mbps Ports, with PC Video Monitoring Software, Web Server, Embedded Server complete in all respect. made of AXIS Europe/NOVAS Europe /Avigilon by Motrola USA /Huawei, Pollo Australia or equivalent as approved and directed by the Engineer Incharge.				
		(i) 8-Channel	Each	1.00	72,927.30	72,927
18	24/117	Supply, Installation and Connection of Surveillance Grade Hard Drives (HDD) of Specified Capacity for CCTV System Backup. made of Seagate / WD, Pollo Australia or equivalent, as approved and directed by Engineer Incharge.				
		(i) 4 TB(Tera Bite)	Each	1.00	21,903.00	21,903

	2nd DI Annual					
Sr. No.	2nd BI-Annual 2022 (July to Dec) Sialkot	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
19	24/124	Supply, installation & connecting IP based Camera of specified resolution, lens, motorized, auto-iris and auto-focus function, f=3-12 mm, D/N function-IR cut filter, Video content analysis based on Deep learning,micro SD card support, WDR, Min, illumination: 0.007 Ix (01xIR on), IR LED,range upto 40 m, pivacy zone, motion detection, system reaction to alarm event i/c the cost of mounting bracket, accessories, made of AXIS Europe/ NOVAS Europe/ Avigilon by Motorla USA/Bosch Germany, Pollo Australia or equivalent, as approved as directed by the Engineer Incharge.				
		b) 8 Mega Pixel				
		(i) Fixed Bullet Type	Each	6.00	80,834.70	485,008
		Sub Total Scheduled Iter	ns: (A)	· · · · · · · · · · · · · · · · · · ·		3,164,028
20	N.S	Supply, installation, testing and commissioning of 32" LED monitor of make SAMSUNG, LG, Sony with stand including cost of all necessary accessories complete in all respect.		1.00	97,700	97,700
21	N.S.	Supply, installation, testing, and comissioning of following equipment to be installed in already made DB Box for motor including cost of all necessary accessories i.e: contactors, relay, indication lights, with ON/OFF push button complete in all respects.				
		i) Direct of Line (DOL) Starter for 3kW Motor	Set	2.00	56,200	112,400
22	N.S.	Shifting of light Pole	Job	1.00	50,000	50,000
23	N.S.	Shifting of Transformer	Job	1.00	350,000	350,000
		Total Cost (Part B)				(40.400
					Rs.	610,100
		Grand Total (Part A + Part B)			Rs.	3,774,128

DETAILED COST ESTIMATE

ENVIRONMENTAL HEALTH & SAFETY COST

Sr No	Description	Unit	Quantity	Unit Rate (Rs.)	Amount Rs.
	Labor Safety				
1	Face Masks (3 PLY)	Nos	10.00	700.00	7,000
2	Safety Gum Shoes	Nos	15.00	1,350.00	20,250
3	Hand Gloves	Nos	15.00	245.00	3,675
4	First Aid Box (Including essential Medicine)	Nos	1.00	5,000.00	5,000
5	Safety Hard Helmets MSA	Nos	15.00	2,000.00	30,000
6	Safety Goggles	Nos	15.00	550.00	8,250
7	Reflective Safety Vests	Nos	15.00	550.00	8,250
				Sub Total	82,425
	Working Site Safety				
1	Reflective Safety Signs Boards	Nos	2.00	10,000.00	20,000
2	Reflective Safety Barricading Tape	Nos	2.00	1,500.00	3,000
3	Fire Extinguishers DCP	Nos	1.00	7,000.00	7,000
				Sub Total	30,000
	Total Amount (Rs)				112,425

DETAILED COST ESTIMATE

DISMANTLING WORK

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
1		Damaged Pump Room (Size 25 x 25 ft)				
		Dismantling				
1	4/13	Dismantling brick work in lime or cement mortar.	100Cft	9.85	4,330.90	42,657
2	4/20	Dismantling cement concrete reinforced, separating reinforcement from concrete, cleaning and straightening the same	100Cft	3.13	18,342.70	57,321
3	4/32	a) Removing door with chowkat.	No.	2.00	448.45	897
4	4 4/32 b) Removing windows and sky lights with chowkat.		No.	2.00	350.45	701
5	4/19	c) Dismantling cement concrete 1:2:4 plain.	100Cft	1.56	11,209.45	17,515
		Sub Total (A)				119,090
		Deduction				
		Deduction of used bricks from original quantity.	1000 No.	13.30	(4,800.00)	(63,824)
		Sub Total (B)				(63,824)
		Grand Total (A+B)				55,266

CALCULATION OF QUANTITIES

Sr.							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Damaged Pump Room (Size 25 x 25 ft)						
	Dismantling						
1	Dismantling brick work in lime or cement mortar.						
		1	103	0.75	11.00	849.75	Cft
		1	103	1.13	0.50	57.94	Cft
		1	103	1.50	0.50	77.25	Cft
					Total	984.94	Cft
					Total	9.85	%Cft
2	Dismantling cement concrete reinforced, separating reinforcement from concrete, cleaning and straightening the same						
		1	25.00	25.00	0.50	312.50	Cft
					Total	3.13	%Cft
3	a) Removing door with chowkat.	2				2.00	No
4	b) Removing windows and sky lights with chowkat.	2				2.00	No
5	c) Dismantling cement concrete 1:2:4 plain.	1	25.00	25.00	0.25	156.25	Cft
					Total	1.56	%Cft

	DET	PUNJAB CITIES PROGRAM (FAILED DESIGN OF INFRASTRUCTURE SUB-PI			D RI	ESIDENTS						
		SUPERVISION IN 16 CITIES OF		AB								
	EARTH WORK LEAD CHART											
		Rate Analysis - 1										
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Lead	Unit.	Qty	Rate (Rs)	Amount (Rs)					
1	3/5/i	Earthowrk in ordinary soil for embankments lead upto 100 ft. (30 m), including ploughing and mixing with blade grade or disc harrow or other suitable equipment, and compaction by mechanical means at optimum moisture content and dressing to designed section, complete in all respects:-		1000Cft	1	9,552.55	9,552.55					
		i) 95% to 100% maximum modified AASHO dry density.										
2	3/17a.b.c	Carriage										
		upto ¼ mile (400 m).	1	1000 Cft	1	4,341.40	4,341.40					
		for every 330 ft. (100 m) additional lead or part thereof, beyond ¹ / ₄ mile (400 m) upto one mile. (1.6 Km.)	12	1000 Cft	1	40.25	483.00					
		for every ¼ mile (400 m) additional lead or part thereof, beyond one mile (1.6 Km.) upto 5 mile (8 Km).	8.5	1000 Cft	1	338.75	2,879.38					
		for every ½ mile (800 m) additional lead or part thereof, beyond 5 miles (8 Km).	0	1000 Cft	1	320.70						
		Total Amount I,000 (Rs.).					17,256.33					
		Total Amount Per Cft					17.26					

Rate Analysis - 2

Rate Analysis - 2											
	iption										
Provid	ling and layin	g sub-base course of stone product of appro	ved quality and gra	ade includi	ing, plac	ing, mixing, sj	preading and				
accord specif	ling to AASH	base material to required depth, camber and TO T-180 method-D, including carriage of as directed by the engineer incharge. (Pit run idered for payment)	all material to site	of work co	omplete i	in all respect a	s per				
-	n Stone						135 km				
Sr. No.	2nd BI- Annual-2022 (July to Dec) Sialkot	Description	Unit	Lead (Km)	Qty	Rate (Rs)	Amount (Rs)				
1		Material									
	18-3 a(i)	Pit run or bed run gravel.	100 Cft	1	1	7,545.00	7,545.00				
2		Carriage									
		1st KM	100 Cft	1	1.2	299.80	359.76				
		2nd KM	100 Cft	1	1.2	145.45	174.54				
		3rd KM	100 Cft	1	1.2	117.00	140.40				
		4th KM	100 Cft	1	1.2	85.40	102.48				
	1/1	5th KM	100 Cft	1	1.2	80.25	96.30				
	1/1	6th KM	100 Cft	1	1.2	79.10	94.92				
		7th KM	100 Cft	1	1.2	74.30	89.10				
		8th KM	100 Cft	1	1.2	73.60	88.32				
		9th KM	100 Cft	1	1.2	69.60	83.52				
		10th KM	100 Cft	1	1.2	65.75	78.90				
		From 11 km to 200 km	100 Cft	125.00	1.2	57.30	8,595.00				
		Total.					17,448.30				
		Total Amount per 100 Cft					17,448.30				
		Total cast for Per Cft					174.48				

Rate Analysis - 3

Providing and laying base course of crushed stone (Water Bound Macadam) of approved quality and grade including, placing, mixing, spreading and compaction of base course material to required depth, camber and grade to achieve 100% maximum modified AASHTO dry density, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Crushed stone aggregate from sargodha querry to site, actual compacted depth shall be considered for payment)

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	Unit	Lead (Km)	Qty	Rate (Rs)	Amount (Rs.)
1	18/4(a)	Providing and laying base course of crushed stone (Water Bound Macadam) of approved quality and grade including, placing, mixing, spreading and compaction of base course material to required depth, camber and grade to achieve 100% maximum modified AASHTO dry density, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Crushed stone aggregate from sargodha querry to site, actual compacted depth shall be considered for payment)			1	14,251.05	14,251.05
2		Carriage of 100 cft of all materials like stone aggregate spawl kanker lime surkhi etc or 150 cft of timber by truck or by any other means owned by the contratcor.					
			100 00				
		1st KM	100 Cft	1	1.22	299.80	365.76
	1/1	2nd KM	100 Cft	1	1.22	145.45	177.45
	1/1	3rd KM	100 Cft	1	1.22	117.00	142.74
		4th KM	100 Cft	1	1.22	85.40	104.19
		5th KM	100 Cft	1	1.22	80.25	97.91
		6th KM 7th KM	100 Cft 100 Cft	1	1.22	79.10 74.30	96.50 90.65
	•	8th KM	100 Cft	1	1.22	74.30	90.65
	-	9th KM	100 Cft	1	1.22	69.60	84.91
		10th KM	100 Cft	1	1.22	65.75	80.22
		From 11 km to 200 km	100 Cft	190.00	1.22	57.30	13,282.14
		From 200 km to 250 km	100 Cft	50.00	1.2	3.25	195.00
		Total.					29,058.30
		Total Amount per 100 Cft					29,058.30
		Total cast for Per Cft					290.58

		SULEKVI		Rate An	-		0110112			
Mar	nhole Constru	ction 2 x 2 Ft							Unit	Each
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Sialkot	Description	No.	Length	Width	Height	Qty	Unit	Rate (Rs)	Amount (Rs)
1		Excavation.								
	3-42-i	(0 to 7 feet depth)	1	3.50	3.50	3.00	36.75	1000 Cft	11,770.45	432.56
2	6-3-b	Cement concrete brick or stone ballast (1:4:8)	1	3.50	3.50	0.33	4.04	100 Cft	24,950.60	1,008.63
3	6-5-f	Base slab	1	3.50	3.50	0.25	3.06	100 Cft	38,271.80	1,172.07
4	6-6-(a)(iii)	Top ring Beam Ratio 1:2:4	1	3.500	3.50	0.33	4.04	100 Cft	456.85	1,846.82
5	6/12 (c)	Steel work		3.00 kg	per cft		14.15	kg	31,814.75	4,501.39
6	7-7-i	Brick Work Ratio 1:3 Step - 1	1	11.00	0.75	2.00	16.50	100 Cft	35,372.90	5,836.53
7	11-8-c	3/4" thick Plaster Ratio 1:3 (External)	1	11.00		2.00	22.00	100 Sft	4,647.65	1,022.48
8	11-18-a	Cement pointing struck joints, on walls (1:2) (Internal)	1	8.00		2.00	16.00	100 Sft	3,575.35	572.06
9	13-9-i	Bitumen Coating on External Plaster	1	11.00		2.00	22.00	100 Sft	2,187.60	481.27
10	19-40-ii	Supply and fitting of cast iron manhole cover ii) 45 cm (18") dia	1				1.00	Each	1,345.80	1,345.80
								Grar	nd Total.	18,220

		RATE	ANAL	YSI	S								
Descr	iption												
		lation and commissioning of wall mounte	d mirro	or LE	ED ligh	nt 10 v	vatt with tu	ibe rod a	nd frame all				
necess	ary fixi	ng accessories, complete in all respects											
								Unit.	Each				
Sr.	Ref	Detail				Unit Rate (British System) per E							
No.	Iter		1	1	Qty		Rate Pe	er Unit	Amount (Rs.)				
		<u>Material</u>											
1	MR	Mirror Light			1.00	No	850	No.	850.00				
								Total.	850.00				
2		Carriage & Installation Charges	5	%					42.50				
								Total.	892.50				
		GST 17% on item No. 1	17	%					144.50				
		Contractor's Profit on item No. (1&2)	20	%					178.50				
		Total							1,215.50				
		ITEM RATES											
		Composite rate Per Each						Rs.	1,215.00				

RATE ANALYSIS

Description	D	escr	ip	tic	n
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Supply, installation and commissioning recessed 10W LED Down Light complete in all respects.

							Unit.	Each
Dof	Detail		Unit R	ate (Britis	sh Systen	n) per Each		
Kei	Detan			Qty		Rate Pe	r Unit	Amount (Rs.)
	Material							
MR	LED Down Light			1.00	No.	1,000	No.	1,000.00
							Total.	1,000.00
2	Carriage & Installation Charges	5	%					50.00
							Total.	1,050.00
	GST 17% on item No. 1	17	%					170.00
	Contractor's Profit on item No. (1&2)	20	%					210.00
	Total							1,430.00
	ITEM RATES							
	Composite rate Per Each						Rs.	1,430.00
	Ref MR	Material MR LED Down Light MR Carriage & Installation Charges Carriage & Installation Charges GST 17% on item No. 1 Contractor's Profit on item No. (1&2) Total ITEM RATES Item No. 1	Material Image: matrix interval and i	Material Image: Constraint of the second	Ref Detail Q Material I I I MR LED Down Light I I I Image: A state of the stat	RefDetail $Q U V$ MaterialIIIMRLED Down LightIIIILED Down LightII <thi< td=""><td>RefDetailQ_{U}Rate PerMaterialIIIIIMRLED Down LightIIIIIILED Down LightIIIIIICarriage & Installation Charges5%IIIIIIIIIIIGST 17% on item No. 117%IIIITotalIIIIIIITotalIII<t< td=""><td>Image: space of the systemImage: space of the syste</td></t<></td></thi<>	RefDetail Q_{U} Rate PerMaterialIIIIIMRLED Down LightIIIIIILED Down LightIIIIIICarriage & Installation Charges5%IIIIIIIIIIIGST 17% on item No. 117%IIIITotalIIIIIIITotalIII <t< td=""><td>Image: space of the systemImage: space of the syste</td></t<>	Image: space of the systemImage: space of the syste

		SUPERVISION IN	10 C11	IES	OF	PUNJA	AD		
		RATE	ANAL	YSIS	5				
Descr	iption								
	y, instal respects	lation and commissioning high bay light 10	00W wit	h 12	0lm/w	LED I	hanging with	h all acce	essories complete
								Unit.	Each
Sr. Ref Detail					Unit F	Rate (Britis	h System	n) per Each	
No.	Kei	Kei Detaii			Qty		Rate Per	Unit	Amount (Rs.)
		Material							
1 MR	Highbay Light			1.00	No.	24,500	No.	24,500	
								Total.	24,500
2		Carriage & Installation Charges	5	%					1,225
								Total.	25,725
		GST 17% on item No. 1	17	%					4,165
		Contractor's Profit on item No. (1&2)	20	%					5,145
		Total							35,035
		ITEM RATES							
		Composite rate Per Each						Rs.	35,035

RATE ANALYSIS

Description							
Supply, installation, testing, and comissioning of following	eauip	ment	to be	insta	lled in alread	v made D	B Box for motor

Supply, installation, testing, and comissioning of following equipment to be installed in already made DB Box for motor including cost of all necessary accessories i.e. contactors, relay, indication lights, with ON/OFF push button complete in all respects.

								Unit.	Each			
Sr. Ref		Detail				Unit Rate (British System) per Each						
No.	KU				Qty		Rate Per	Unit	Amount (Rs.)			
		<u>Material</u>										
1 MR	MR	i) Direct of Line (DOL) Starter for 3kW M	otor		1.00	No.	39,300	No.	39,300			
								Total.	39,300			
2		Carriage & Installation Charges	5	%					1,965			
								Total.	41,265			
		GST 17% on item No. 1	17	%					6,681			
		Contractor's Profit on item No. (1&2)	20	%					8,253			
		Total							56,199			
		ITEM RATES										
		Composite rate Per Each						Rs.	56,200			

RATE ANALYSIS

Description				

Providing, laying and fixing in position shed as per drawings, manufacturer's specifications and as directed by Engineer Incharge. This item includes Aluzinc corrugated sheet of 0.5 to 0.6 mm thick fixed with rivet and bolts over Purlins and truss frame of 50X50X4.75 mm with approved Colour/ paint supported with Steel Hexagonal / round shaped Columns size 200 to 300 mm diameter fitted with J-Type bolt having length 450 to 500 mm and not less than 38mm diameter. This item includes all kind of leads, lifts, fitting charges etc. complete in all respect excluding Cost of substructure i.e. foundation. Approval of manufacturer must be sought prior to placing order.

								Unit.	Per Sft
Sr. Ref		Detail	Unit Rate (British System) per Sft						
No.	Ku	Detail		Qty		Qty	Rate Per Unit		Amount (Rs.)
		Area 1920 Sft							
		<u>Material</u>							
1	MR	Supply of PEB Shed (32' x 60')			1	Sft	2,421,927	Sft	2,421,927
		GST	17	%					411,728
								Total.	2,833,655
2	MR	Installation Charges							100,914
		PST	16	%					16,146
								Total.	117,061
		Contractor's Profit on item No. (1&2)	20	%					504,568
		Total							3,455,284
		ITEM RATES							
		Composite rate 1920 Sft						Rs.	3,455,290
		Composite rate Per Sft						Rs.	1,800

		SUPERVISION IN							
		RATE	ANAL	YSIS	5				
	iption								
		lation, testing and commissioning of follows, dimmers nuts and bolts complete in all re-	-	56"	ceilin	g fan, o	complete wi	th capac	itor, hanging roo
								Unit.	Each
Sr. Ref Detail				<u> </u>		Unit F	Rate (Britisl	h System	ı) per Each
No. Kei						ty	Rate Per Unit		Amount (Rs.)
		Material							
1 MR	Ceiling Fan			1.00	No.	5,525	No.	5,525	
								Total.	5,525
2		Carriage & Installation Charges	5	%					276.25
								Total.	5,801
		Contractor's Profit on item No. (1&2)	20	%					1,160
		Total							6,962
		ITEM RATES							
		Composite rate Per Each						Rs.	6,961
		Say						Rs.	7,000







Address: 189/190 – Commercial Area, Airline Society, Khayaban-e-Jinnah, Lahore

Date: April 26th, 2022

Client: M/s Jers Consultancy

Reference No: PEBS-22-069 Project Name: Parking Shed

Dear Sir,

Thank you for giving us the opportunity to submit our proposal for the above-mentioned project.

PEBS proposal is based on the drawings and data provided by you and is in accordance with PEBS standard design practices and terms & conditions of sale.

PEBS scope of work covers design, fabrication, supply and installation of Pre-Engineered Building in strict accordance to the standards and specifications of PEBS, unless otherwise stated in the proposal.

PEBS intends to comply with your project requirement however kindly refer Section 9 of this proposal for exclusions, deviations and assumptions which are applicable to this offer.

Prices are valid for a period of 3 days from the date of this quote.

We are keen to secure this project and start new business relations with your esteemed company.

We assure you of superior quality of our buildings and best after sale services.

Sincerely

Fssa Khalin

Director







WAHDAT INDUSTRIAL SERVICES (PRIVATE) LIMITED Address: 189/190 – Commercial Area, Airline Society, Khayaban-e-Jinnah, Lahore

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Address: 189/190 – Commercial Area, Airline Society, Khayaban-e-Jinnah, Lahore

Section No.1: Building Parameters

Sr.	Building Description						
1	Frame Type		Mono-Slope				
2	Number of interior C	Columns	-				
3	Width (m)		9.753 O/O of Steel Line	е			
4	Length (m)		18.287				
			27.431	O/O of Steel Line			
			36.574	0/0 0J Steel Lille			
			45.718				
5	Clear Height (m)		6.096				
6	Roof Slope (Rise: Run)		As per design				
7	Bay Spacing (m)		As per design				
8	Width Module		-				
9	Base Condition	Exterior Column	ו Pinned				
9	Base Condition	Interior Column	Pinned				
10	Bracing Types	At Roof	Cable Bracing				
		At Wall					
11	Type of Eave		Eave Gutters & Downspouts				
12	Type of Gable		Gable Trim				
13	Fillet Weld of Built u	p Sections	Single Side Welding for all Built up Sections				

Sr.	Wall Conditions	
1	Front Side Wall	Open
2	Back Side Wall	Open
3	Left End Wall	Open
4	Right End Wall	Open







Address: 189/190 – Commercial Area, Airline Society, Khayaban-e-Jinnah, Lahore

Item	Roof and Wall Cladding					
Roof Cladding	Outer Sheet	0.5mm (Nominal) Pre-Painted Aluzinc Sheets (Imported)				
	Insulation	Not Applicable				
	Inner Sheet	Not Applicable				
Wall Cladding	Outer Sheet	Not Applicable				
	Insulation	Not Applicable				
	Inner Sheet	Not Applicable				

Exclusions

- All kind of works not offered in our scope of supplies & services.
- Any civil works including but not limited to RCC Screed, Brick Masonry, Excavation, Foundation Works, D.P.C, Flooring, and Plastering is not included in our scope.
- Doors, window, false ceiling, Glasswork, Fascia etc.
- Anchor bolts fixing, Foundations, Electrification and Plumbing etc.
- Electricity and water at site during erection







Address: 189/190 – Commercial Area, Airline Society, Khayaban-e-Jinnah, Lahore

Section No.2 Building Loads

Sr.	Design Load	Value
1	Design Live Load on Roof (kN/m ²)	0.57
2	Design Live Load on Frame (kN/m ²)	0.57
3	Co-lateral Load (kN/m ²)	0.00
4	Wind Speed (km/hr)	135
5	Wind Exposure Category	В
6	Seismic Zone	2B (as per UBC 1997)
7	Rainfall Intensity (mm/hr)	150 mm/hr.
8	Solar Loading (kN/m ²)	0.00

Section No.3 Applicable Codes

Loads applied on buildings and tolerances for fabrication and erection are in accordance with:

The2010editionoftheLowRiseBuildingSystems ManualByMetal Building Manufacturers Association, Inc. (MBMA) 1300 Summer Ave., Cleveland, Ohio 44115,USA

Hot rolled sections and built up sections are designed in accordance with:

The 2005 edition of the Manual of Steel Construction, By American Institute of Steel Construction, Inc. (AISC) 1 East Wacker Drive, Suite 3100, Chicago, Illinois 606012001,

Cold formed members are designed in accordance with:

The 2001 Edition of Cold Formed Steel design Manual By American Iron and Steel Institute (AISI) 1000 16th Street, NW, Washington, DC 20036, USA

Welding and its inspection / testing for Steel Structure Fabrication will be in accordance with:

The latest Edition of Structural Welding Code - Steel (AWS D1.1: 2008) By American Welding Society (AWS) 550 NW LeJeune Road, Miami, FL 33126, USA







Address: 189/190 – Commercial Area, Airline Society, Khayaban-e-Jinnah, Lahore

Section No.4: Material Specifications

Sr.	Building C	omponent	Material Specification	Strength
1	Built-up Sectio	n		Ev::2E 00
2	Hot Rolled	I-Sections	ASTM A-36	Fy:25.00 kN/cm2
2	Sections	Channels		
	Cold Formed	Purlins	ASTM A653M Grade 340 Class 1	Fy:34.0
3	Secondary Members	Girts	Z275	kN/cm2
4	Sheeting	Roof	PPGL as per	Fy:34.0
4	Panels	Wall	ASTM A792M Grade 345B Class	kN/cm2
			1 AZM150	
		BracingASTM A475 Extra High StrengthCableClass A		Pu: 120kN
5	Diagonal "X" Bracing	Bracing Rods	ASTM A36M (or Equivalent)	Fy:25.0 kN/cm2
		Flange Braces	ASTM A36 (or Equivalent)	Fy: 25 kN/cm2
6	Sag Rods		ASTM A36M (or Equivalent)	Fy:25.0
				kN/cm2
7	Base and Gable	e Angles	ASTM A653M Grade 340 Class 1 Z275	Fy:34.0 kN/cm2
8	Anchor Bolts		ASTM A36M (or Equivalent)	Fy:25.0
0				kN/cm2
9	High Strength I	Bolts	ASTM A325 Type 1 (Hot-dip	Fy:66.0
			Galvanized)	kN/cm2

Material Finish

- All primary members will be cleaned and then painted with single coat of red oxide primer (DFT 30-40 microns) and then painted with final enamel paint. (70-80 microns)
- All secondary members will be made of pre-galvanized coil.







Address: 189/190 – Commercial Area, Airline Society, Khayaban-e-Jinnah, Lahore

Section No.5: Approval Drawings

Approval drawings under this agreement will be submitted in 2 weeks from the date of receipt of the following:

- Signed Contract
- Advance Payment

Client must sign and return the Approval drawings to PEBS within 1 week of receipt of these drawings.

Variation requested by client after submission of Approval drawings will result in change in contract price and delivery period. Such change must be mutually agreed in writing as Variation Order.

Section No.6 Delivery Schedule

PEBS will design, fabricate and dispatch the material to Job site in 08-10 weeks. However, this period will begin from the latest date of receipt and acceptance of the following:

- Signed Contact
- Advance Payment
- Receipt of Signed Approval Drawings from client
- In case of any variation, Clients written acceptance for variation in price and delivery period.

Delivery period mentioned above is dependent on client fulfilling all its obligation in a timely manner, including the return of approval drawings and adhering to agreed payment schedule.

Erection of the Building will start after the arrival of first dispatch material at job site. **Erection schedule** will be established at the finalization stage.







Address: 189/190 – Commercial Area, Airline Society, Khayaban-e-Jinnah, Lahore

Section No. 7: Prices

Sr. #	Description	Price (PKR)
1	Supply of PEB Shed (32' x 60')	2,421,927/-
2	Supply of PEB Shed (32'x 90')	3,632,891/-
3	Supply of PEB Shed (32' x 120')	4,843,855/-
4	Supply of PEB Shed (32' x 150')	6,054,818/-
	Total Supply Amount (Exclusive of GST)	16,953,491/-
	GST @ 17%	2,882,094/-
	Total Amount (Inclusive of GST)	19,835,585/-

1	Installation Services (32' x 60')	100,914/-
2	Installation Services (32'x 90')	151,371/-
3	Installation Services (32' x 120')	201,827/-
4	Installation Services (32' x 150')	252,283/-
Total Installation Services Amount (Exclusive of PST)		706,395/-
	PST 16%	
	Total Amount Inclusive of PST)	819,419/-

The Supply amount is subjected to sales tax on supplies. Applicable percentage (17%) will be added to our bill and sales tax invoice will be provided of the same upon receipt by Wahdat Industrial Services (Pvt) Ltd.

The Supply amount is subjected to 4% income tax under section 153(1)(a)(Income tax Ordinance). Client shall provide withholding challans of the same.

The Installation services amount is subjected to sales tax on services. Applicable percentage (16%) will be added to our bill and sales tax invoice will be provided of the same upon receipt by Ittefaq Building Solutions (Pvt) Ltd.

The Installation services amount is subjected to 8% income tax under section 153(1)(B)(Income tax Ordinance 2001). Client shall provide withholding challans of the same.







Address: 189/190 – Commercial Area, Airline Society, Khayaban-e-Jinnah, Lahore

Section No.8 Payment Terms

Supply Payment

- o 50% Advance on Signing of Contract or Receipt of PO
- 25% Before Dispatch of Building Framing
- o 25% Before Dispatch of Building Sheeting

Installation Services Payment

- o 50% Before Installation Services
- 50% After completion of Installation Services

Section No.9: Deviations, Exclusions and Assumptions

Manufacturing and supply will be initiated only after receipt of complete engineering package duly approved by the Client.

Both parties agreed that the price quoted in this quotation is based on a lump sum basis calculated according to the building descriptions as well as the required loading and codes shown above and not as a re-measurable basis. Hence, the project weight given at the quotation stage is only indicative and no claim will be entertained in case of a reduction in the building weight after the final design or the shipment. However, should there be any revision to the scope of the work after signing of the contract which may result in an increase or decrease in the contract value.







Address: 189/190 – Commercial Area, Airline Society, Khayaban-e-Jinnah, Lahore

Section No. 10 Standard Terms and Conditions

• Changes / Revisions

Any change or revision to the above stated scope of supply may lead to a variation in the price and the delivery period. A change must not hold payment for work completed as per original contract.

Additional Works

For any additional work (which is not included in our scope of work) cost will be charged separately from given price

Escalation clause

Prices are quoted as per prevailing market conditions: any change in material price can affect the quoted price after expiry of quotation validity period.

• Proposal Validity

Prices are valid for a period of 3 days from the date of this quote.

If the job (project) is not "Finalized by the client" within 3 days from the date of entering this order, it will be subject to delivery change and price change in accordance with the prevailing delivery schedules and prices at the end of above noted period.

• Termination of Agreement

If clients terminate the agreement after payment of advance and submission of approval drawings by PEBS then PEBS have right to keep the advance payment to cover the expenses that occurred during that period and client will have no claim on that payment.

OPPLE See Beyond URFA ELECTRIC (SMC) PVT LTD. NTN# . 5381194 , SRTN# 3277876163771

HOUSE NO E279/1, STREET NO 2, RIFFLE RANGE ROAD WALTON ROAD LAHORE CANTT. WWW.OPPLE.COM Email: OPPLE.ECOTEK@GMAIL.COM Mobile : 0301-8440368, 0332-3877786

QUOTATION

QTN-01544-1

Customer Name	JERS CONSULTANCY PVT LTD	Date	05-08-2022
Contact	JERS CONSULTANCY PVT LTD		
Mobile No	MR ASAD: 03004315935		

Sr	Description	Quantity	Rate	Amount
1	140053331 LED-HML455A-D0.2*40-6500K-Knight	Nos 1	Rs 4,000.00	Rs 4,000.00
2	503002016210 LED-E1-T5 batten-870mm-10.5W-4000K	Nos 1	Rs 850.00	Rs 850.00
3	540001136310 LEDDownlight RC-US R150-12W-6500-WH-SASA - PF >.95	Nos 1	Rs 1,000.00	Rs 1,000.00
4	540001136310 WITH BACK BOX LEDDownlight RC-US R150-12W-6500-WH-SASA - PF >.95	Nos 1	Rs 1,500.00	Rs 1,500.00
5	545001007410 LEDHighbay-P4 110W-5700-60+100D-GY-GP	Nos 1	Rs 24,500.00	Rs 24,500.00

Total	Rs 31,850.00
Grand Total	Rs 31,850.00
Rounded Total	Rs 31,850.00
In Words	PKR Thirty One Thousand, Eight Hundred And Fifty only.

Terms & Conditions:					
PRICE:	Ex-Warehouse				
PAYMENT:	100% Advance payment.				
DELIVERY:	Subject to availability of stock otherwise 7-8 weeks from the date of confirmed PO/Advance.				

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TAXES & DUTIES:	Quoted Price Ex-clusive of GST 17% , Incom Tax 4.5% not be deducted , exemption certificate available.
DUTIES: As per Govt. rules and regulations, In case of any change in the terrif from Govt. of Pakistan that will be applicable accordingly.	
VALIDITY:	20 days.
WARRANTY:	2 Year Warranty against any manufacturing defect.
OTHER:	Force majour clause is applicable, partial payment and partial payment is allowed.

RIZWAN HUSSAIN

Cell: +92 301 8440368

JC JUBILEE CORPORATION

Switchgear • Automation • Instrumentation • Controls

L

Technology Driven Quality Service

First Floor, Fakhri Trade Centre, Shahrah-e-Liaquat, P.O. Box: 677, Karachi-74200 Pakistan. UAN: 021 111 000 520 Tel: +92 21 3260 2200-07 (8 lines), Fax: +92 21 3260 2211 Web: www.jubileecorporation.com Email: jubilee.corp@cyber.net.pk

lessers ol UA: EF:	Wednesday, 10 August 2022 ; JERS CONSULTANT Mr, Asad Malik Quotation for switchgeer components PS/10082022							1014
R NO:	DESCRIPTION	RATING	MODEL	MAKE	ORIGIN	QTY	U/P	TOTAL
	3KW DOL STARTER COMPONENTS BASED ON TERASAKI							
1	MCCB TP ADI	12 5A TO 204 36KA	\$125NJ	TERASAKI	JAPAN	1	25,000	25,000
2	MAGNETIC CONTACTOR TP	INA PACI	TC-18b	TERASAKI	KOREA	1	6,300	6,300
1	THERMAL OVERLOAD RELAY	6-14	TK32a	TERASAKI	KOREA	1	8,000	8,000
								39,300
	7 S KW STAR DELTA STARTER COMPONENTS BASED ON TERASAKI	and the second		TERATAKI		Errors & Omit	li na la co	ed (E&OE)
1	BASED ON TERASAKI MCCB TP	20-324,36XA	5125NJ	TERASAKI	JAPAN	Errors & Omis	25,000	ed (E&OE) 25,000
2	BASED ON TERASAKI MCCB TP MAGNETIC CONTACTOR TP (MAIN)	20-324,3684 184 @AC3	TC-18b	TERASAKI	JAPAN KOREA	Errors & Omit	25,000 6,300	ed (E&OE) 25,000 6,300
2 3	BASED ON TERASAKI MCCB TP MAGNETIC CONTACTOR TP (MAIN) MAGNETIC CONTACTOR TP (DELITA)	20-324,3684 184 @4C3 184 @4C3	TC-18b TC-18b	TERASAKI TERASAKI	JAPAN KOREA KOREA	Errors & Omin	25,000 6,300 6,300	25,000 6,300 6,300
2	BASED ON TERASAKI MCCB TP MAGNETIC CONTACTOR TP (MAIN)	20-324,3684 184 @AC3	TC-18b	TERASAKI	JAPAN KOREA	Erron & Omin	25,000 6,300	25,000 6,300

TERMS & CONDITIONS

Price Validity:

7 days from the date of offer submission. For further extension in validity, our confirmation in writing is necessary.

Our prices are calculated on current date of currency panty against PKR. In the event of any change in international currency rates / currency devaluation by government until final supply of order, rate difference will be on customer account.

Prices are calculated on present custom duties and government taxes. Any change in government regulation or duties and taxes at the time of import of material or during execution of order against customer ficonfirmed Purchase order will be on customer account.

Delivery Period:

Mostly from ready stocks. Remaining about 12-14 weeks from the date of confirmed purchase order and advance payment, whichever is later.

Any changes / revision / addition in purchase order after confirmation, delivery date will reset accordingly.

Force Majeure

Our offer is subject to usual Force Majeure clause.

General Sales Tax:

General Sales Tax will be charged on the offered prices adhering to the law of Government of Pakistan. [Note: Sales Tax @ 17% will charge to you if you are a registered person (under Sales Tax Act, 1990). If you are unregistered person (as per law) then additional 3% will charge as further tax.]

Our supplies are excluded from SWHT under SRO 897 of 2013 (Point (c)) issued by FBR on October 4, 2013 as the commercial importers who paid value addition tax on such goods at the time of import as prescribed under Chapter X of the Sales Tax Special Procedure Rules, 2007 are excluded from the provision of these rules and the Sales Tax Special (Withholding) Rules, 2007 shall not be applicable on such supplies.

Payment terms

100% advance payment along with confirm purchase order with Sales Tax.

Income Tax:

Our supplies are exempted from WHT u/s 153(5) of the income Tax Ordinance, 2001 as all taxes are duly paid at import stage u/s 148 against the supplies made to you by us.

Warranty;

One-year warranty against any manufacturing defects. Our liability excludes natural wear & tear, defects arising after transfer of risk owing transport risks, installation, operation, maintenance contrary to manuals and instructions, mishandling or negligence on part of the customer.

Upon receipt of customer's Intimation, we shall within adequate time repair or replace, at our option, the defective part, to bring the product in working condition.

ADIL SHER DEPUTY MANAGER PROJECTS MANSOOR PASHA GM PROJECTS







JERS CONSULTANCY (PVT.) LTD. PROPOSAL FOR 20 kVA & 30 kVA KOHLER-SDMO FRANCE BRANDED DGSETS

Greaves Pakistan (Pvt) Itd HEAD OFFICE

Modern Motor House, Beaumont Road, Karachi-75530, Pakistan UAN: 021-111-354-111

Branch Offices

Islamabad

1st Floor, Razia Sharif Plaza, Blue Area, Islamabad. UAN: (051)-111-354-111 Ext: 5117 Tel: (051) 2344543-7

LAHORE

3, Sunder Das Road, Lahore. UAN: (042) 111-354-111 Tel: (042) 36362241-2

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S. No.	CONTENTS			
1.	Kohler SDMO Dealer Ship Certificate	Annex-A		
2.	Executive Summary	Annex-B		
3.	Price Summary	Annex-C		
4.	Terms and condition	Annex-D		
5.	Data Sheet Of Generators			

KOHLER

TO WHOM IT MAY CONCERN

Subject : SALE AUTHORIZATION FOR 2022

We undersigned SDMO INDUSTRIES, 270 rue Kérervern, 29490 Guipavas, FRANCE,

Hereby confirm that the company GREAVES PAKISTAN (Pvt) Limited having its principal place of business at Modern Motors House, Beaumont Road, Post Box 4908, Karachi 75530, PAKISTAN, is authorized on its behalf to sell, install and maintain the KOHLER-SDMO branded products in the territory of PAKISTAN.

This agreement is valid for one year from the date of signature of this authorization and might be renewed for a one-year period with the written agreement of SDMO Industries.

Each party shall be entitled to terminate this agreement at any moment by giving a 3 (Three) month notice by registered mail.

Neither party shall be required to compensate the other solely by virtue of termination of this agreement.

The sale of our products to GREAVES PAKISTAN (Pvt) Limited is subject to our General Conditions of Sale in force on the date of the order of which GREAVES PAKISTAN (Pvt) Limited has been informed.

This authorization cancels and replaces any previous contracts, correspondence or exchanges of any nature which have the same or similar purpose.

Made in Brest on November 30, 2021.

Olivier ANDRIEU Director Sales Distribution, PS EMEA

...un, PŞ E

SDMO Industries

Headquarters / Siège social : 270 rue de Kerervern - 29490 Guipavas Tel. + 33 (0)2 98 41 41 41 SDMO Industries CS 40047 – 29801 Brest Cedex 9 – France SDMO Industries – SAS au capital de 17 066 520 € - R.C.S. Bret 3348 202 985 – N° TVA Intracommunautaire : FR60548202985 www.kohler-sdmo.com



GREAVES PAKISTAN (PVT.) LIMITED

Razia Sharif Plaza, 1st Floor, 90-Jinnah Avenue, Blue Area, Islamabad, Pakistan



Ref # GFG/LHR/0596/TI NTN # 0698508-4 AUG 11, 2022

M/s. Jers Consultancy (Pvt.) Limited 24 Civic Center Street, Township Commercial Area, Lahore – Pakistan

Kind Atten. : Mr. Asad Khalid

 SUBJECT
 : PROPOSAL FOR KOHLER-SDMO 20 kVA & 30 kVA PRIME

 RATINGDIESEL GENERATORS

Dear Sir,

We are pleased to submit our competitive proposal formulated for subject mentioned rating along with salient features of our branded **Diesel GenSet – KOHLER-SDMO (Made in France)** for your review and kind consideration.

We **Greaves Pakistan** is one of the leading names in the business hub of Pakistan, We are authorized dealer of Kohler-SDMO DG Sets (100 Years Old) which has achieved an enormous success throughout the world complying with ISO 9001 quality standards. A strong and committed team from Greaves Pakistan ensures that the offered package gives you best value for your investment.

Greaves Pakistan has its head office in **Karachi**, offices located at **Islamabad**, **Lahore**, **Faisalabad**, **Multan**, **Hyderabad and Peshawar**. Our trained and qualified Engineers are available to provide complete backup support after sales services at your door step 24/7 any time. A complete range of spare parts are kept in order to meet any emergency requirement both during and after the warranty period.

We are also leading business oriented company in Cement Industry-Cherat Cement, CNG-Comp Air, Air conditioning-York, and UPS-ETN Power.

Sincerely,

Engr. Tahir Imran Deputy Manager Sales Power Generation Division Contact: 0336-5366494 tahir.imran@gfg.com.pk





KOHLER-SDMO FRANCE (FOREIGN COUPLED) BRANDED DIESEL GENERATING SET 20 kVA Prime & 30 kVA Prime

Technical Description

Kohler-SDMO: Powered with Kohler France Engine & Leroy Somer Alternator commercially branded as Kohler.

Complete Machine Manufactured & Shipped from France factory

Diesel Generator 1500 RPM, 400 Volts, 0.8 P.F, 50 HZ

Salient Features:

- IP23 Protection
- Class H Insulation
- Automatic Voltage Regulator
- Emergency Push Button
- User O&M Manual
- ➢ First Oil Filled
- First Coolant Filled.
- Engine Sump Oil Drain Tap
- Engine Coolant Drain
- Control Systems
- > One Set Instruction Manual And Electrical Wiring Diagram
- Automatic Engine Shutdown Protections
- Batteries

PRICE SUMMARY SHEET

(Seller's Scope of Supply)

20kVA & 30 kVA PRIME RATING

DG SETS

IMPORTED ITEMS:

Sr.	Description of Stores	Qty.	Unit Price (\$)	Total Price (\$)
1.	Brand New KOHLER-SDMO France Diesel Generator Set, Model K22; 20 kVA Prime Power and 22 kVA Standby Power @ 50 Hz, 0.8 PF, 400 V, 1500 RPM (as per specifications attached) Kohler Made in France Engine (Complete Machine Manufactured & Shipped from France Factory)	1 No.	11,209/-\$	11,209/- \$
2.	Brand New KOHLER-SDMO France Diesel Generator Set, Model K33; 30 kVA Prime Power and 33 kVA Standby Power @ 50 Hz, 0.8 PF, 400 V, 1500 RPM (as per specifications attached) Kohler Made in France Engine (Complete Machine Manufactured & Shipped from France Factory)	1 No.	11,628/-\$	11,628/-\$
	TOTAL AMOUNT (Excluding GST) – FOR Ka	arachi Rat	e	22,837/- \$

LOCAL EQUIPMENT & WORKS:

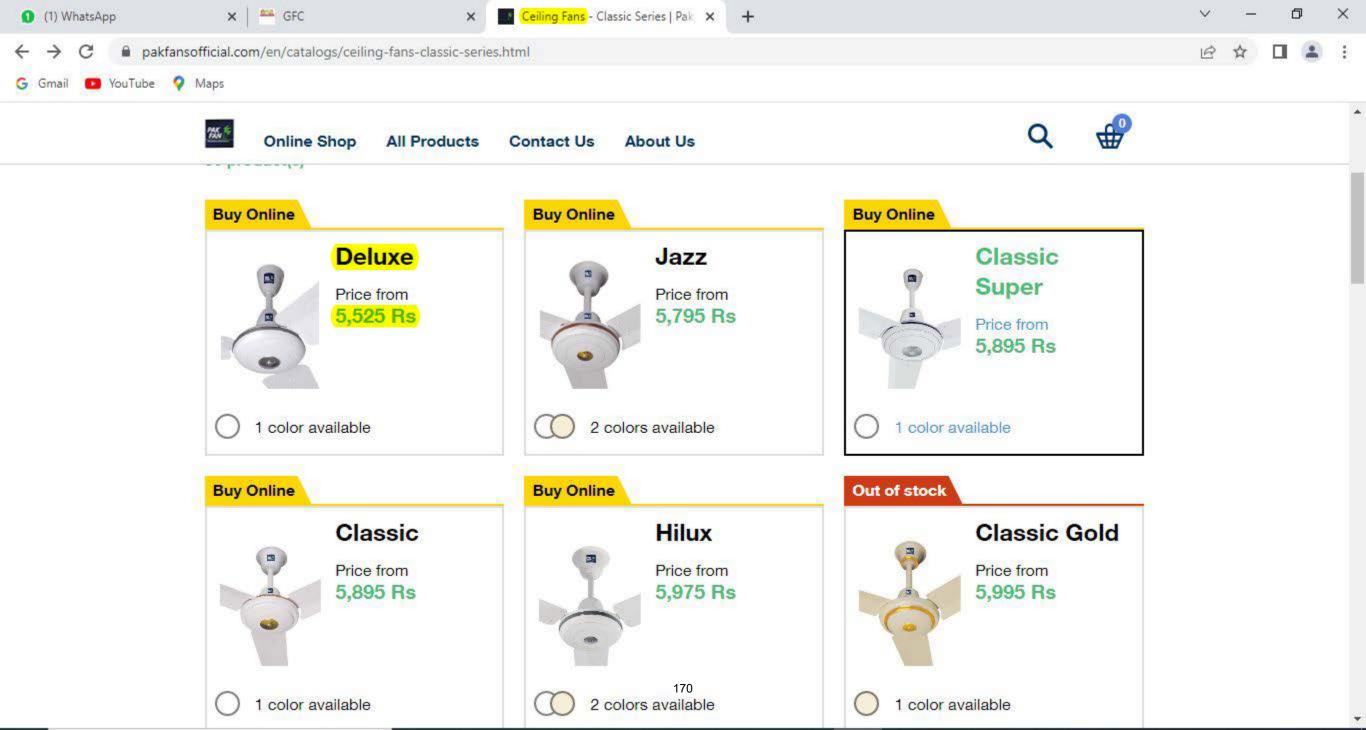
Sr.	Description of stores.	Qty.	Unit Price	Total Price				
1.	Supply of sound and weather proof canopy approximate size of provided drawing is 14 SWG base frame and 14/16 swg structure fabricated of Mild steel with less than 85 dba at 3 mtrs in open area – 20 kVA DG	1 No.	245,000	245,000				
2.	Supply of sound and weather proof canopy approximate size of provided drawing is 14 SWG base frame and 14/16 swg structure fabricated of Mild steel with less than 85 dba at 3 mtrs in open area – 30 kVA DG	1 No.	265,000	265,000				
3.	Charges for Transportation of Power Generating Sets from Karachi till site on ground (including loading, unloading)	2 JOB	75,000	150,000				
	TOTAL AMOUNT (Excluding GST/PST)							
	86,700							
	24,000							
	770,700							

GENERAL TERMS & CONDITIONS

VALIDITY	<u>1 week</u> only from quotation date, thereafter, subject to our re-confirmation.						
	Lead Time: 30 kVA: Available ex stock subjec						
	to prior sale						
AVAILABILITY	20 kVA: 4-5 Months. Please confirm at the time of						
	award of order.						
	Local Items: 04 Weeks after issuance of PO & approval of technical submittal.						
PAYMENT TERMS	100% of advance payment with confirmed purchase order.						
	1 year warranty or 1000hrs* after Delivery/Commissionin						
	whichever comes first.						
WARRANTY	(Standard KOHLER SDMO Warranty Certificate will govern) *For manufacturing default only						
FORCE MAJEURE	This offer is subject to standard force majeure conditions						
PRICING	Our prices are based on current exchange rates (1\$ = PKF 220/-) and will be revised if there are any escalation in exchange rates. Please note that the quoted rate for 30 kV/DG Set is subject to revision for more than 1% downward						
	fluctuation in dollar price. Any further duties (including regulatory duty) and taxe imposed after the date of quotation or agreement, will b borne by the customer						
CUSTOMER RESPONSIBITITY	Any other work which has not been quoted specifically in th seller's scope of Supply/Work.						
TAXES	The subject DG Set is imported and will be supplied to you without any value addition. Advance Income Tax has already been paid a the import stage U/S 148 of the Income Tax Ordinance 2001, th is in compliance to circular No.5 of 2002 dated 11 th April, 200 issued by CBR. Hence tax under section 153 shall not be deducted from the payment of the cost of Generators (imported) under clause 47 (A) of Part IV of the second schedule to the income ta ordinance 2001, therefore income tax deduction is also not applicable on it.						
GREAVES PAKISTAN (PVT) I TD							

L/C TERMS Establishment of 100% Irrevocable Letter of Credit at sight is required either by the Supplier or Client against PRINCIPLE PROFORMA INVOICE which will be provided from KOHLER- SDMO FRANCE. All charges pertaining to LC establishment and confirmation will be borne by the customer.
--





ANNEXURE C ECONOMIC BENEFITS

Economic Benefits

The construction of parking shed can be beneficial for the community in multiple ways. The Economic benefits of a parking shed are given below:

- A safe yard is provided for SWM vehicles in mechanized form.
- Parking shed helps to save a lot of energy. Car parking shade can be very beneficial to save a lot of energy by protecting it from the heat sun. The shades can allow maintaining a cooler environment for the vehicles and also reduces the amount of energy required to cool down from the heat of the sun.
- The parking shed helps in prevention of vehicles from rusting, sunlight, weather conditions, etc.
- In-house workshops are provided for the repairing and maintenance of vehicles.
- The parking shed provides safety to SWM vehicles.
- The parking shed helps in prevention from heating up of engines.

Annexure-D Gant Chart

TENTATIVE PROJECT IMPLEMENTATION SCHEDULE FOR CONSTRUCTION OF PARKING SHED FOR SWM MACHINERY YEAR (2022-2023)

Sr.No	Activity Name	DEC	C- 22		JAN	-22]	FEB	-22	I	MAR	2-23		APR	R-23		MA	Y-23	
1	Boundary wall & Gate																		
2	Building & Allied Structures																		
3	Parking Shed																		
4	Workshop & Washing area																		
5	Walkways & Pathways																		

Annexure-E E&S Checklist and SOPs

Environmental & Social Screening Checklist

Instructions:

Environmental and Social Focal Persons (ESFPs)¹ nominated by the MCs for PCP environmental and social management, will use this checklist in field for environmental and social screening and categorization of each and every sub-project proposed to be executed under the Program.

Deputy Program Officers-Environmental and Social Management deputed by PMDFC in regional offices will technically assist and support the ESFPs/MCs in filling in of this Checklist

It is to be attached with the main document² of sub-projects at planning stage and will be duly signed by the relevant ESFP and endorsed by the respective DPO-ESM

This checklist focuses on environmental issues and social concerns. To ensure that social dimensions are adequately considered, Involuntary Resettlement Screening Checklist will also be used

(iii) The purpose of this E&S Screening Checklists is to identify potential "Negative" impacts of environmental and social attributes or to enhance the existing environmental & social benefits. Use the "remarks" section to discuss any anticipated mitigation measures.

Name of ESFP: Uzair Arshad	•		
Name of MC: Daska. Sub-Project Sector: Solid wast Sub-Project Title: Development of Sub-Project Categorization	Machiney .	11- Soldweste	machine Desten
Sub-Project Title: Development of	Sarlenty she	af the l	Stadie
Sub- Project Categorization:	E-1	S-1	
	E-2	S-2	
	E-3	S-3	

Date of Screening:

Anticipated Project Activities

construction of parking shed. Workshop. Service station quard rorm.

Estimated Cost of Subprojects

Tentative Completion Time/Duration

Estimated Labor for Subproject

² It is meant as PC-I and/or engineering estimates of sub-project



¹ In all MCs, ESFPs are notified by Local government; MO (I&S) are focal persons for environmental sector and MO(P) are focal persons for social sectors.

1	Screening Questions	Yes	No	Remarks	
/	A. Project Siting				
	Is the Sub-Project area adjacent to or within any of the foll				
ŀ	Environmentally sensitive areas?				-
F	Legally protected Area	′	~	Not observed	-
-	Any surface water body (river, canal, stream, lake, wetland) within 250 meter of the proposed sub project ³		//	v	_
	Estuarine		1	ų	-
	Special area for protecting biodiversity	1	/	4	-
-	Buffer zone of protected area		1	1/	-
-	Mangroves Forest		1	4	
5	Man-made forest /game reserve, orchid /crops or any other area of environmental importance		/	ч	
	Socially sensitive /important areas/communities/ people	e?			
P((C Te	CRs and or any site of cultural/religious importance Graveyard, Shrine, Mosque, Church, Gordwarah, emple, Fort, archeological/historical site) within 100 m f the proposed subproject ⁴		/	Not observed.	
Se	ensitive receptors (Schools, colleges, hospitals and inics) within 100 meter of the proposed sub project ⁵		1	<i>ħ</i>	
Ar Ch	ny graveyard of local community (Muslims or hristians)		4		
An pro inc mig peo isol	ny demographic or socio-economic aspects of the sub- oject area that are already vulnerable (e.g., high cidence of marginalized populations, rural-urban grants, illegal settlements, squatters, ethnic minorities, ople with disabilities, people in old age, socially olated segments ⁶ of the society and women or ildren)?			~	
Alr	ready existing infrastructure ⁷ (including public enities) which may be required to dismantle or may affected temporarily by any means?		~	· · · ·	
В.	Potential Environmental Impacts Il the Sub-Project cause				
	Disturbance to habitats/biodiversity of environmentally sensitive or protected areas?		/	Not anticepated	meter will l
2.	Cutting of trees?		/	Not involved disig	1 1 1 1 1 1 1
	Disruption to habitats/biodiversity of surrounding ecosystem/environment?	;		Nos outivpated	in trees

³ Ibid.

⁴ According to Environmental Assessment Guidelines adopted by Punjab EPA

5 Ibid

⁶due to caste, creed, religion or gender e.g. transgender

⁷Sewerage /Drainage system, Water supply lines, tube-wells, WAPDA/Telephone transmission lines/electric poles, Railway tracks, Gas pipelines, Roads, Shops/Plazas, Banks, Industry, Disposal stations etc.



 Generation of wastewater during construction or operation? 	/	6
 Pollution of surface water/ground water due to wastewater discharge from construction site or due to direct/indirect disposal of waste water? 		ķ
 Alteration of surface water hydrology of waterways resulting in increased sediment in streams/rivers or due to increased soil erosion at construction site? 		1
 Deterioration of surface water quality due to silt runoff and sanitary wastes from worker-based camps and chemicals used in construction? 	/	0
 Over pumping of ground water, leading to salinization and ground subsidence? 	/	"
9. Serious contamination of soil due to construction works?	/	4
10. Aggravation of solid waste problems in the area?		4
11. Generation of hazardous waste?		4
12. Increased air pollution due to sub-project construction and operation?	/	4
13. Noise and vibration due to sub-project construction or operation?	/	"
14. Creation of temporary breeding habitats for diseases such as those transmitted by mosquitoes and rodents due to solid/liquid?	/	"
15. Use of chemicals during construction?	/	
C: Potential Social Impacts Will the Sub-Project cause		
 Impairment of historical/cultural areas; disfiguration of landscape or potential loss/damage to Physical Cultural Resources (PCRs)? 	/	ŀ
 Displacement or involuntary resettlement of people? (physical displacement and/or economic displacement) (If "Yes", please also fill Involuntary Resettlement Screening Checklist) 	/	ŀ
3. Disproportionate impacts on the poor, women and children and or other vulnerable groups ⁸ (mentioned above)?	/	lr
 Temporary impediments in movements of people/transport and animals? 	/	ľ

⁸ Women, Children, Women headed households, People in old age, people having disabilities, socially isolated community groups and or people living below the poverty line

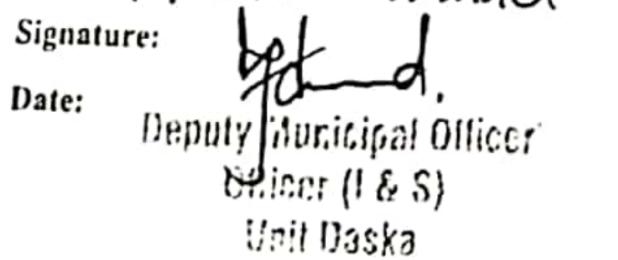


co bu	arge population influx during sub-project instruction and operation that causes increased irden on social infrastructure and services (such as iter supply and sanitation systems)?		/	
6. So hin	cial conflicts if workers from other areas are ed?		1	17
heat biol	ks and vulnerabilities related to occupational th and safety due to physical, chemical, ogical, and radiological hazards during project struction and operation?	1	1	v
mater	s to community health and safety due to the port, storage, and use and/or disposal of rials such as explosives, fuel and other icals during construction and operation?		/	"
to me their fa through decomin	munity safety risks due to both accidental and al causes, especially where the structural ints or components of the project are accessible inbers of the affected community or where ailure could result in injury to the community hout project construction, operation and missioning?		/	U
above)	mpact on sensitive receptors (mentioned		/	4
infrastru	pact of negative nature on already existing acture including public amenities		/	4

Prepared By:

Name: M. Uzair Arshad

Endorsed By: DPO-ESS. Name: Jehmine Coran



	lenmina (C	
Signature:		
Date:	- (F	



PUNJAB CITIES PROGRAM

ENVIRONMENT, HEALTH AND SAFETY SOPs FOR LABOR/WORKERS

Labor /workers play key role in the infrastructure development and construction activities. The objective of preparation of the EHS SOPs for Labor/Workers is to address environment, health and safety issues related to the proposed sub-project implementation. These SOPs will provide guidelines to be followed by the contractors for effective management of EHS issues related to labor/workers/daily wagers (including women). These SOPs will be annexed in the general conditions of all the contracts carried out under the PCP. These SOPs are designed for Punjab Cities Program and will be applicable to all types of labor/workers/daily wagers (including women), hired for the construction activities under PCP. Following are the anticipated Environment, Health and Safety issues and their recommended mitigation measures.

Activity/ Impact Source	EHS Concerns/issues	Mitigation Measures/ Management Guidelines
Siting and Location of construction camps	Camp sites for construction workers are the important locations that have significant impacts such as health and safety hazards on labor/workers Lack of proper infrastructure facilities, such as housing, water supply and sanitation facilities will increase pressure on the local services and generate substandard living standards and health hazards.	The Contractor shall: Locate the construction camps at areas which are acceptable from environmental, cultural or social point of view. Consider the location of construction camps away from communities in order to avoid social conflict with the surrounding communities. Submit to the relevant MC for approval of a detailed layout plan for the development of the construction camp showing the relative locations of all temporary buildings and facilities that are to be constructed together with the location of site roads, fuel storage areas (for use in power supply generators), solid waste management and dumping locations, and drainage facilities, prior to the development of the construction camps. Local authorities responsible for health, religious and security shall be duly informed on the set up of camp facilities so as to maintain effective surveillance over public health, social and security matters
Construction Camp Facilities	Lack of proper infrastructure facilities, such as housing, water supply and sanitation facilities will generate social issues and impacts on health and environment.	Contractor shall provide the following facilities in the campsites: Adequate ventilation facilities Safe and reliable drinking water supply for personal hygiene (washing or bathing) Adequate housing for all workers Safe and reliable drinking water supply. Water supply from tube wells that meets the Punjab Environment Quality Standards Hygienic sanitary facilities, hand washing facilities and sewerage system. The toilets and domestic waste water will be collected

Table 1: Construction Camp Management

EHS Concerns/issues	Mitigation Measures/ Management Guidelines
EHS Concerns/issues	through a common sewerage. Provide separate latrines and bathing places for males and females with total isolation by wall or by location. Female toilets should be clearly marked in language or signage clearly understood by the persons using them to avoid miscommunication. The minimum number of toilet facilities required is one toilet for every ten persons. Storm water drainage facilities. Both sides of roads are to be provided with shallow v drains to drain off storm water to a silt retention pond which shall be sized to provide a minimum of 20 minutes retention of storm water flow from the whole site. Channel all discharge from the silt retention pond to natural drainage via a grassed swale at least 20 meters in length with suitable longitudinal gradient. Paved internal roads. Ensure with grass/vegetation coverage to be made of the use of top soil that there is no dust generation from the loose/exposed sandy surface. Pave the internal roads of at least haring-bond bricks to suppress dusts and to work against possible muddy surface during monsoon. Provide child crèches for women working on the
	construction site. The crèche should have facilities for dormitory, kitchen, indoor/outdoor play area. Schools should be attached to these crèches so that children are not deprived of education whose mothers are construction workers Provide in-house community/common entertainment facilities. Dependence of local entertainment outlets by construction camps to be discouraged/prohibited to the extent possible.
Management of wastes is crucial to minimize impacts on the environment as well as on the health of the workers/labor	The Contractor shall: Ensure proper collection and disposal of solid wastes within the construction camps Insist waste separation by source; organic wastes in one pot and inorganic wastes in another pot at household level. Store inorganic wastes in a safe place within the household and clear organic wastes on daily basis to waste collector. Establish waste collection, transportation and disposal systems at their own. Dispose organic wastes in a designated safe place on daily basis. At the end of the day cover the organic wastes with a thin layer of sand so that flies, mosquitoes, dogs, cats, rats, are not attracted. One may dig a large hole to put organic wastes in it; take care to protect groundwater from contamination by leachate formed due to decomposition. Cover the bed of the pit with impervious layer of materials
	Management of wastes is crucial to minimize impacts on the environment as well as on the health of the

Activity/ Impact Source	EHS Concerns/issues	Mitigation Measures/ Management Guidelines
		contamination.
		Locate the garbage pit/waste disposal site min 500 m away from the residence so that peoples are not disturbed with the odor likely to be produced from anaerobic decomposition of wastes at the waste dumping places. Encompass the waste dumping place by fencing and tree plantation to prevent children to enter and play with.
		All solid waste will be collected and removed from the work camps and disposed in approval waste disposal sites.
Fuel supplies	Illegal sourcing of fuel	The Contractor shall:
for cooking purposes	wood by construction workers will impact the natural flora and fauna	Provide fuel to the construction camps for their domestic purpose, in order to discourage them to use fuel wood or other biomass.
		Make available alternative fuels like natural gas or kerosene on ration to the workforce to prevent them using biomass for cooking.
		Conduct awareness campaigns to educate workers on preserving the protecting of biodiversity in the project area, and relevant government regulations and punishments on wildlife protection.
Health and	There will be a potential	The Contractor shall:
Hygiene	for diseases to be transmitted including	Provide adequate health care facilities within construction sites.
	COVID-19, malaria, exacerbated by inadequate health and safety practices. There	Provide first aid box facility at the construction site round the clock. Maintain stock of medicines in the first aid facility in camp sites facility and appoint fulltime designated first aider or nurse.
	will be an increased risk of work crews spreading sexually transmitted infections and HIV/AIDS.	Provide ambulance facility for the laborers during emergency to be transported to nearest hospitals and telephone/mobile facility to call for Emergency Services 1122.
		Initial health screening of the laborers coming from outside areas
		Train all construction workers in basic sanitation and health care issues and safety matters, and on the specific hazards of their work
		Provide HIV awareness programming, including STI (sexually transmitted infections) and HIV information, education and communication for all workers on regular basis
		Provide adequate drainage facilities throughout camps to ensure that disease vectors habitats (stagnant water bodies, puddles) do not form.
		Regular mosquito repellant sprays in monsoon.
		Carryout short training sessions on best hygiene practices to

Activity/ Impact Source	EHS Concerns/issues	Mitigation Measures/ Management Guidelines
		be mandatorily participated by all workers.
		Place display boards at strategic locations within the camps containing messages on best hygienic practices
		Place display boards of contact information of nearest dispensary/health clinic/hospital
Safety	In adequate safety	The Contractor shall:
	facilities to the construction camps may create security problems	Provide appropriate security personnel (police / home guard or private security guards) and enclosures to prevent unauthorized entry in to the camp area.
	and fire hazards	Maintain register to keep track on a head count of persons present in the camp at any given time.
		Encourage use of flame proof material for the construction of labor housing/site office. Ensure that these houses/rooms are of sound construction and capable of withstanding storms/cyclones.
		Provide appropriate type of firefighting equipment suitable for the construction camps
		Display emergency contact numbers clearly and prominently at strategic places in camps.
		Communicate the roles and responsibilities of laborers in case of emergency in the monthly meetings with contractor.
Food Safety	There is potential for exposure to poisonous substances by ingestion	Suitable arrangements are to be made for provision of clean eating areas where workers are not exposed to the hazardous or noxious substances
Site Restoration	Restoration of the	The Contractor shall:
	construction camps to original condition requires demolition of construction camps.	Dismantle and remove from the site all facilities established within the construction camp including the perimeter fence and lockable gates at the completion of the construction work.
		Dismantle camps in phases as the work decreases (do not wait for completion of the entire work.
		Give prior notice to the laborers before demolishing their camps/units
		Maintain the noise levels within the national standards during demolition activities
		Different contractors should be hired to demolish different structures to promote recycling or reuse of demolished material.
		Reuse the demolition debris to a maximum extent. Dispose remaining debris at the designated waste disposal site by MCs/ESFPs.
		Handover the construction camps with all built facilities as it is if agreement between both parties (contactor and land- owner) has been made so.

Activity/ Impact Source	EHS Concerns/issues	Mitigation Measures/ Management Guidelines
		Restore the site to its original condition or to an agreed condition with the landowner defined prior to the commencement of the works (in writing). Not make false promises to the laborers for future employment in O&M of the project.

Table 2: Cultural and Religious Issues

Activity/ Impact Source	Environmental Impacts	Mitigation Measures/ Management Guidelines
Construction	Disturbance in	The Contractor shall:
activities	,• •,•	Provide separate prayer facilities (men and women) to the construction workers.
		Show appropriate and non-biased behavior with all construction workers irrespective of their religious or cultural affinities
		Allow the workers to participate in praying during construction time
		Inform the local authorities responsible for health, religious and security duly informed before commencement of civil works so as to maintain effective surveillance over public health, social and security matters
		In case of working during COVID-19 pandemic, SOPs for prayers in Mosque issued by the Government of Punjab, will be applicable and it will be responsibility of contractor to sensitize the labor/workers about it

Table 3: Workers/Labor Health and Safety at Construction Site

Activity/ Impact Source	Impacts	Mitigation Measures/ Management Guidelines
Construction Activities	Construction works may pose health and safety risks to the construction workers and site visitors leading to severe injuries and deaths. The population in the proximity of the construction site and the construction workers will be exposed to a number of (i) biophysical health risk factors, (e.g. noise,	The Contractor shall: Implement suitable safety standards for all workers and site visitors which should not be less than those laid down on the international standards (e.g. International Labor Office guideline on 'Safety and Health in Construction; World Bank Group's 'Environmental Health and Safety Guidelines') and contractor's own national standards or statutory regulations, in addition to complying with the national acts and rules of the Government of Pakistan Provide the workers with a safe and healthy work environment, taking into account inherent risks in its particular construction activity and specific classes of

Activity/ Impact Source	Impacts	Mitigation Measures/ Management Guidelines
	dust, chemicals, construction material, solid waste, waste water, vector transmitted diseases etc), (ii) risk factors resulting from human behavior (e.g. STD, HIV etc) and (iii) road accidents from construction traffic.	hazards in the work areas, Provide Personal Protection Equipment (PPEs)1 for workers, such as safety boots, helmets, masks, gloves, protective clothing, goggles, full-face eye shields, and ear protection. Maintain the PPE properly by cleaning dirty ones and replacing them with the damaged ones. Safety procedures include provision of information, training and protective clothing to workers involved in hazardous operations and proper performance of their job Appoint an environment, health and safety manager to look after the health and safety of the workers Inform the local authorities responsible for health, religious and security before commencement of civil works and establishment of construction camps so as to maintain effective surveillance over public health, social and security matters
	Child and pregnant labor	The Contractor shall: not hire children of less than 14 years of age and pregnant women or women who delivered a child within 8 preceding weeks, in accordance with the Employment of Children Act (2015)2 and Pakistani Labor Laws and policies respectively.

1 Table 4 presents general examples of occupational hazards and types of PPE available for different purposes.

2 The ECA 2015 defines a child as a person who has not completed his/her 14th year of age. The ECA states that no child shall be employed or permitted to work in any of the occupations set forth in the ECA (such as transport sector, railways, construction, and ports) or in any workshop wherein any of the processes defined in the Act is carried out

Activity/ Impact Source	Impacts	Mitigation Measures/ Management Guidelines
Accidents	Lack of first aid facilities and health care facilities in the immediate vicinity will aggravate the health conditions of the victims	 Provide health care facilities and first aid facilities are readily available. Appropriately equipped first-aid stations should be easily accessible throughout the place of work Document and report occupational accidents, diseases, and incidents. Prevent accidents, injury, and disease arising from, associated with, or occurring in the course of work by minimizing, so far as reasonably practicable, the causes of hazards. In a manner consistent with good international industry practice. Identify potential hazards to workers, particularly those that may be life-threatening and provide necessary preventive and protective measures. Provide awareness to the construction drivers to strictly follow the driving rules Provide adequate lighting in the construction area and along the roads
Water and sanitation facilities at the construction sites	Lack of Water sanitation facilities at construction sites cause inconvenience to the construction workers and affect their personal hygiene.	The contractor shall provide separate portable toilets and hand washing facilities at the construction sites, if about 25 people are working the whole day for a month. Location of portable facilities should be at least six m away from storm drain system and surface waters. These portable toilets should be cleaned once a day and all the sewerage should be pumped from the collection tank once a day and should be brought to the common septic tank for further treatment. Contractor should provide bottled drinking water facilities to the construction workers at all the construction sites.
Other issues	Potential risks on health and hygiene of construction workers and general public	The Contractor shall follow the following management measures to reduce health risks to the construction workers and nearby community: Drainage Management Air Quality Management Noise and Vibration Management Road Transport and Road Traffic Management
Trainings	Lack of awareness and basic knowledge in health care among the construction workforce, make them susceptible to potential diseases.	The Contractor shall: Train all construction workers in basic sanitation and health care issues (e.g., how to avoid COVID-193, malaria and transmission of sexually transmitted infections (STI) HIV/AIDS. Train all construction workers in general health and safety matters, and on the specific hazards of their work Training should consist of basic hazard awareness, site specific

3 .SOPs issued by the GoPunjab during COVID-19 Pandemic will be implemented

Activity/ Impact Source	Impacts	Mitigation Measures/ Management Guidelines
		hazards, safe work practices, and emergency procedures for fire, evacuation, and natural disaster, as appropriate.
		Commence the COVID-19, malaria, HIV/AIDS and STI education campaign before the start of the construction phase and complement it with by a strong condom marketing, increased access to condoms in the area as well as to voluntary counseling and testing.
		Implement COVID-19, malaria, HIV/AIDS and STI education campaign targeting all workers hired, international and national, female and male, skilled, semi- and unskilled occupations, at the time of recruitment and thereafter pursued throughout the construction phase on ongoing and regular basis. This should be complemented by easy access to condoms at the workplace as well as to voluntary counseling and testing.

 Table 4: Summary of Recommended Personal Protective Equipment According to Hazard4

Objective	Workplace Hazards	Suggested PPE	
Eye and face protection	Flying particles, molten metal, liquid chemicals, gases or vapors, light radiation.	Safety Glasses with side-shields, protective shades, etc.	
Head protection	Falling objects, inadequate height clearance, and overhead power cords.	Plastic Helmets with top and side impace protection.	
Hearing protection	bise, ultra-sound. Hearing protectors (ear plugs or ear muffs).		
Foot protection	Falling or rolling objects, pointed objects. Corrosive or hot liquids.	Safety shoes and boots for protection against moving & falling objects, liquid and chemicals.	
Hand protection	Hazardous materials, cuts or lacerations, vibrations, extreme temperatures. Gloves made of rubber or synthet materials (Neoprene), leather, stee insulating materials, etc.		
Respiratory protection	Dust, fogs, fumes, mists, gases, smokes, vapors.	Facemasks with appropriate filters for dust removal and air purification (chemicals mists, vapors and gases). Single or multi- gas personal monitors, if available.	
	Oxygen deficiency	Portable or supplied air (fixed lines). On-site rescue equipment.	
Body/leg protection	Extreme temperatures, hazardous materials, biological agents, cutting and laceration.	s Insulating clothing, body suits, aprons etc. d of appropriate materials.	

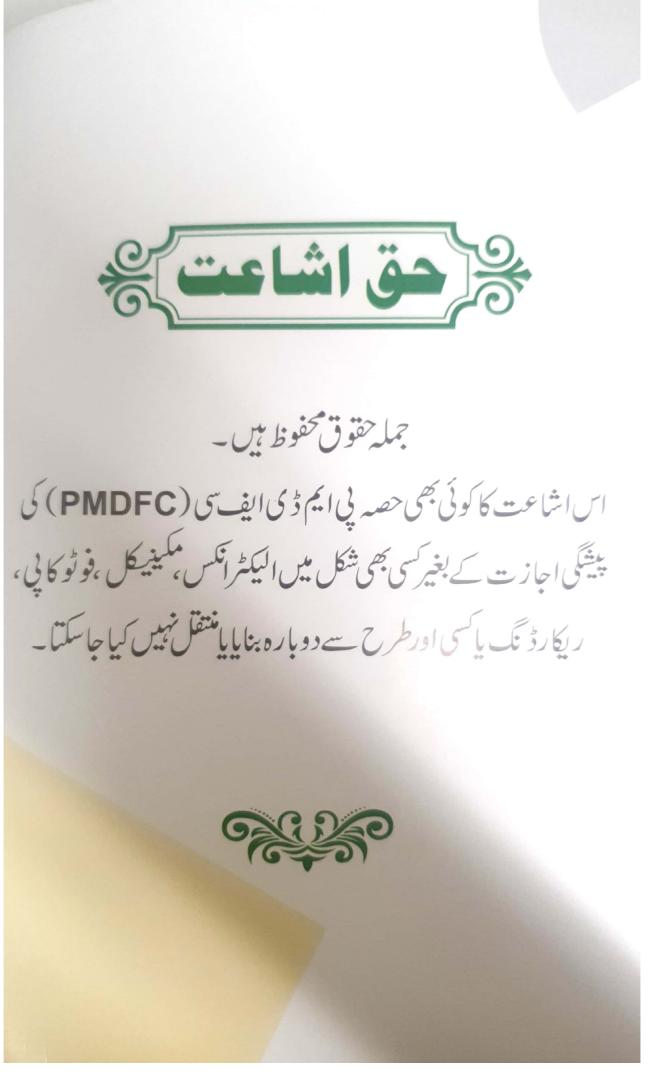
4 Source: IFC Environmental, Health, and Safety (EHS) Guidelines

PUNJAB CITIES PROGRAM (PCP)

ا<u>ککام بوربا ب</u> تکنید کیدمدد مد مود

TMAWAZIRABAD

تر قیاتی منصوبوں کی تغییر ومرمت کے دوران کام کرنے والے مزدوروں مردرز (بشمول خواتین لیبر مردرز) کی صحت ، حفاظت اور ماحول کے لئے معیاری اصول وضوابط





لوکل گور نمن ایند کمیونی ڈویلپمنٹ ڈیپار شمنٹ اور پنجاب میون پل ڈویلپمنٹ فند کمپنی (PMDFC) نے درلڈ بینک کے اشتراک سے بنجاب سیٹرز پروگرام (PCP) کا کامیابی سے اجرا کردیا ہے . اس منصوبے کے تحت صوبہ پنجاب کے 16 چھوٹے شہروں (MCs) بشمول ہما ولنگر ، بور یوالا ، خانیوال ، کوٹ ادو، وہاڑی ، گوجرہ ، جھنگ ، کمالیہ ، اوکا ڑا، ڈسکہ ، حافظ آباد، جہلم ، کاموکی ، مرید کے افتد کر استر ترقیاتی کاموں پر کامیابی سے کام جاری ہے ۔ ان ترقیاتی منصوبوں میں ویسٹ مینڈ مین کی فراہمی ، نکامی آ جہ استان کے مرت ، کمیونی پارٹس کی بحالی اور قدرتی آ فات کی روک تھام کے منصوبہ جات شامل ہیں ۔

، پنجاب سیٹیز پروگرام (PCP) کے منصوبہ جات کی تکمیل کے دوران ساجی اور ماحولیاتی مسائل کی جانچ پڑتال اوراس کے طل کے لئے انوائر منظل اینڈ سوشل سیف گارڈز (ESSs) ٹیم نے انوائر منظل اینڈ سوشل مینجہنٹ فریم ورک (ESMF) بنایا ہے . مختلف منصوبہ جات اسی فریم ورک کی روسے پایہ سیمیل تک پہنچ رہے ہیں۔

تعمراتی اور ترقیاتی کاموں کی تحمیل میں تعمیراتی جگہوں پر کام کرنے والے مزدوروں رلیبر (بشمول خواتین) کی صحت اور کام کرنے کے دوران حفاظت بہت اہمیت رکھتی ہے - اس اہم مسئلہ کو لکو ظِ خاطر رکھتے ہوئے، پی ایم ڈی ایف سی کے زیر اہتمام پنجاب سٹیز پر وگرام کی انواز نمنٹ اینڈ سوشل مینجمنٹ ٹیم نے " تر قیاتی منصوبوں کی تعمیر و مرمت کے دوران کام کرنے والے مزدوروں ، ورکرز (بشمول خواتین لیبر رورکرز) کی صحت ، حفاظت اور ماحول کی لیے بنیا دی اصول وضوالط"



اغراض ومقاصد

ا_ بحوزہ معاری اصول وضوابط پنجاب سیٹیز پروگرام (PCP) کے تحت بنجاب میونیک ڈویلیمنٹ فنڈ کمپنی (PMDFC) کے ماہرین ما حولیات نے بروگرام ڈائر یکٹر (PCP) اورڈیٹی بروگرام ڈائر یکٹر (PCP) کی زیرتگرانی تشکیل دیے ہیں۔ ۲_شہری ترقی کے ترقباتی منصوبہ جات کی تغمیر ومرمت میں مز دور/درکرز بنیادی کردار ادا کرتے ہیں۔ ان (SOPs) کابنیادی مقصد مز دور ادر (بشمول خواتین کیبر / ورکرز) کو تعمیراتی جگہوں (Constrcution sites) اور ليبر كيميس ميں ماحولياتي اور ساجی تحفظ فراہم کرنا اور صحت، ماحولیات اور کسی خطرنا ک صورتحال ے بچنے کے لئے حفاظت فراہم کرنا ہے۔ ۳- یہ SOPs (PCP) پنجاب سیٹیز پردگرام کے تحت 16 شہروں کی میونیل کمیٹیز/کاریوریشنز میں تعمیر دمرمت کے تمام پراجیکٹس برلاگوہوں گے۔ ۳- یه SOPs مزدوروں کا م کرنے والوں رد پہاڑی دار (بشمول خواتین) بربلاتخصیص لاگوہوں گے۔ ۵_ان SOPs کوموٹر اور یقینی بنانے کے لئے اُنھیں ٹھکید اروں کے کنٹریکٹ کا حصبہ بنانا اوران پڑمل درآ مدکرانا میونیل کمیشیز/کارپوریشنز کی ذمہ داری ہے۔ جسے بی ایم ڈی ایف سی کی متعلقہ پروگرام ٹیم یقینی بنائے -5



پاکستان کی ترقی میں تغمیراتی کاموں کے دوران کام کرنے والامز دور طبقہ نہایت اہمیت کا حامل ہے اور الح صحت و تندر متی سے متعلق مسائل کا مؤثر حل انتہائی ضروری ہے۔ " ترقیاتی منصوبوں کی تغمیر و مرمت کے دوران کام کرنے والے مزدوروں رورکرز (بشمول خواتین لیبر رورکرز) کی صحت، حفاظت اور ماحول کیلئے بنیادی اصول وضوابط " کی اشاعت و



محمد عا مرنذ بر پروگرام ڈائریکٹر پنجاب سیٹیز پروگرام (PCP)



زیر نگرانی



افتخار رسول

ڈ پٹی پروگرام ڈائر یکٹر پنجاب سیٹیز پروگرام(PCP)

تکنیکی ٹیم رضوانه انجم پروگرام آفیسر(انوایزنمنٹ اینڈ سوشل سیف گارڈ ز) پنجاب سييرز پروگرام(PCP) تهمينهكرن کنزی ند ڈپٹی پروگرام آفیسر (ESSs) ريسرج إينالسط پنجاب سيٹيز پروگرام (PCP) پنجاب سييرز پروگرام (PCP)



۱. مزدور / لیبر کیلیے عارضی کیمپ / رہائش گاہ کے انتظام و قیام کے لئے جگہ کا انتخاب

///

مسائل

- م مقامی آبادی کے دسائل پراضافی بوجھ
 - م مقامی آبادی سے تناز عات کا خدشہ
 - م سابق، مذہبی، اور سکیورٹی کے مسائل۔

حفاظتي اقدامات

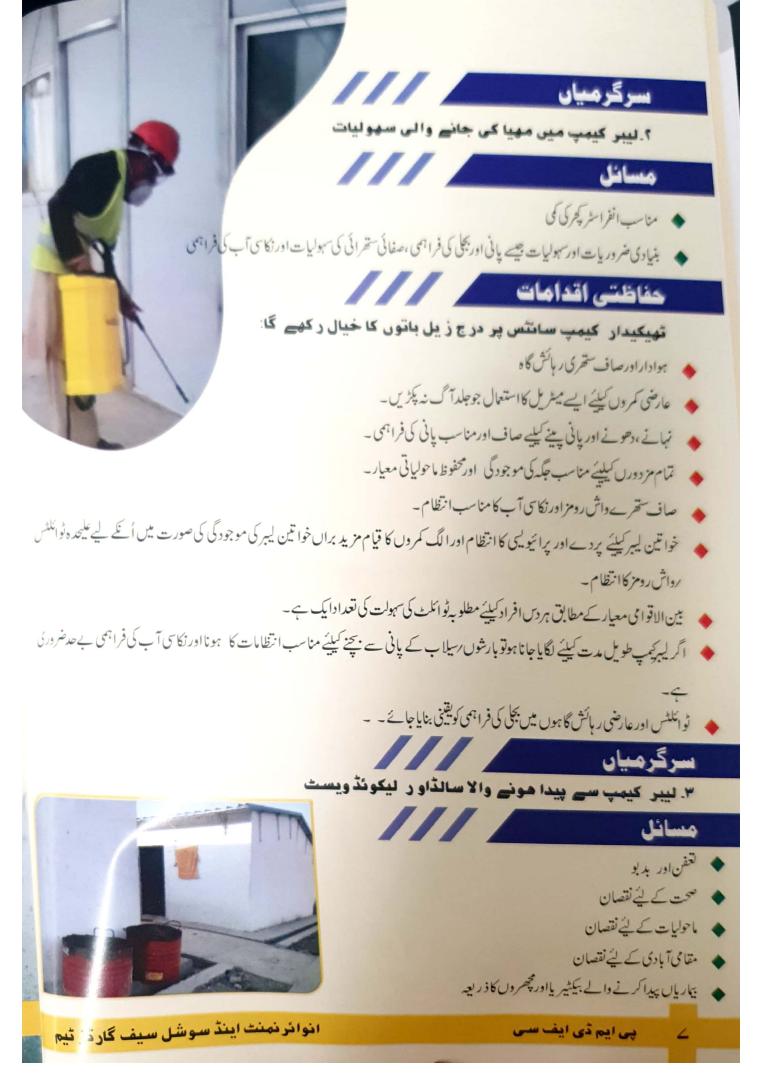


تھیکیدار لیبر کیمپس کے قیام کے وقت مندر جہ ذیل ہاتوں کا خیال رکھے گا: کیمپس ایی جگہوں پرلگائے جا کیں جو ماحولیاتی، نہ ہی، سماجی اور ثقافتی نقط نظر ۔ قابل قبول ہوں۔ مقائی آبادی کے ساتھ کسی تنازعہ ہے بچنے کے لیئے آبادی ہے دور جگہ کا انتخاب کیا جائے پر کیمپ کی جگہ اور سہولیات ۔ متعلق ایک تفصیلی نقشہ تیار کر متعلقہ میونپل کمیٹی رکار پوریش میں جح کرایا جائے۔ دیگر مقائی ادارے جیسے صحت ، سکیورٹی وغیرہ کو لیبر کیمپ کے مقام اور مدت کے بارے طلع کیا جائے تا کہ کی نا گہانی صورتحال ہے، پچا جائے۔ پر کیمپ کی جگہ اور سہولیات ۔ متعلق ایک تفصیلی نقشہ تیار کر کے متعلقہ میونپل کمیٹی رکار پوریش میں جح کرایا جائے۔ پر کیمپس کے قیام کیلیئے عارضی جگہ رزمین کا حصول زمین کے مالک کی مرضی، طرکہ دہ کرایا اور با قاعدہ تحریری معاہدے کی صورتحال ہے۔ پر کیمپس سے قیام کیلیئے عارضی جگہ رزمین کا حصول زمین کے مالک کی مرضی، طرکہ دہ کرایا وربا قاعدہ تحریری معاہدے کی صورت میں کیا جائے۔ پر کیمپس سے ملحقہ بنیا دی سہولتوں جیسے پنے کاپانی اور نکا تی آب کا نظامات سے ماحولیاتی آلودگی میں اضافہ نہ ہو



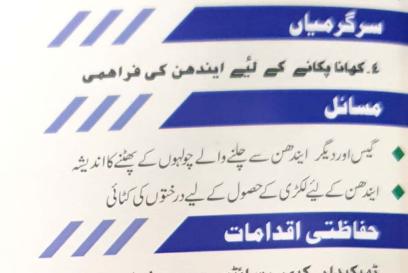
انوائر نمنٹ اینڈ سوشل سیف گارڈز ٹیم

پی ایم ڈی ایف سی



حفاظت ما ملاہ میں اور کو اکرک اور کجن کو ڈاکرک کے لیے الگ الگ کوڑادانوں کا انتظام روز مرہ پیدا ہونے والے کو ڈاکرک اور کجن کے کو ڈاکرکٹ کے لیے الگ الگ کوڑادانوں کا انتظام میونیل ممینی رکار پوریشن کی جانب سے خت کردہ جگہ پرروزانہ کی بنیاد پرکوڑ کے واٹھ نے اور تاف کرنے کا مناسب انتظام عارض لو انکٹس سے پیدا شدہ فضلے اور کیکو یڈو ایٹ کو حفظان صحت کے اصواوں کے مطابق ٹی مکانے لگا نے کا انتظام ہے عارض لو انکٹس سے پیدا شدہ فضلے کو ٹیکا کے محار کہ 2000 میٹر دور جگہ کا انتظام کے مطابق ٹی مکانے رکھ دوکوں کی رہائش مدہو۔ رہائش داخل نہ ہوں اور چھر اور بد یو تھی پیدا نہ ہو۔

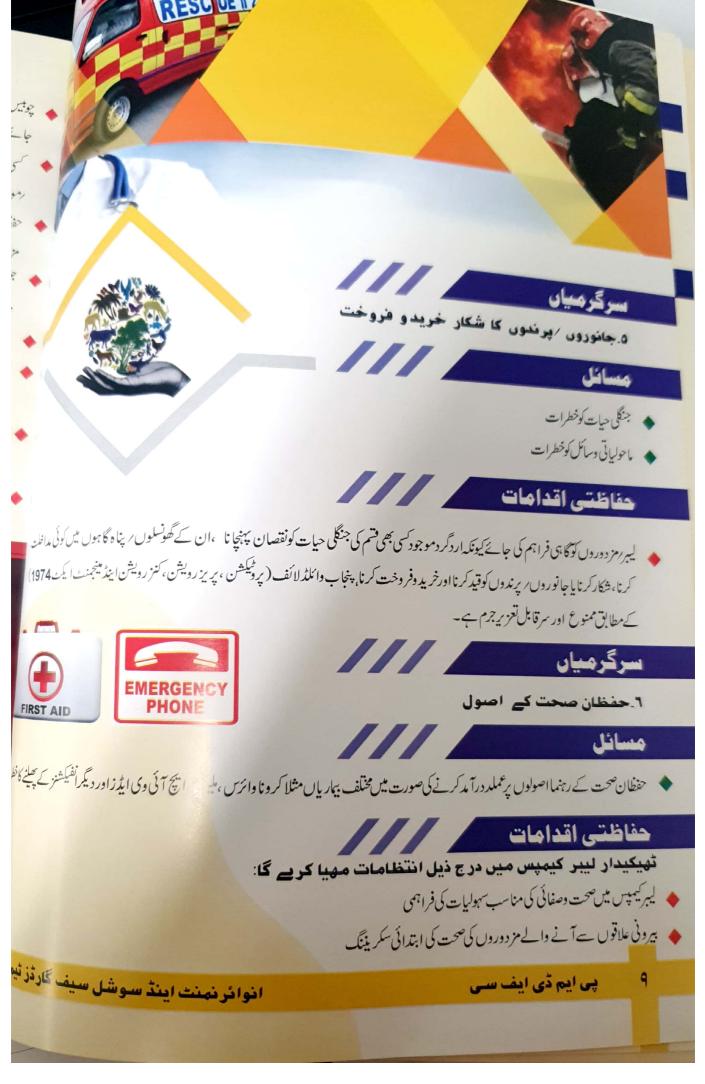




ٹھیکیدار کیمپ سائٹس پر درج زیل سہولیات مہیا کریے گا۔

 لیبر کیمیس میں کھانا پکانے، کمروں کہ گرم رکھنے نیز سر دیوں میں نہانے اور دھونے کے لیے گرم پانی کے لیے ایند شن کی لکڑی یا دیگر بائیو گیس استعال کرنے کی حوصلہ تکنی کریں اور ایند شن کیلیے درختوں کی کٹائی نہ کریں۔
 درختوں اور ارد گرد جنگلات کی حفاظت کیلیے مزدوروں رلیبر کو آگاہی دی جائے۔
 کھانا پکانے کے لیئے قدرتی گیس یامٹی کے تیل کے حفوظ چو لہے استعال کیے جاپیں۔





Scanned with CamScanner

چوہیں گھنٹے لیبر کیمپس میں پرفرسٹ ایڈ بکس کی سہولت موجود ہو۔ کیمپ سائٹ <mark>س میں ابتدائی طبی امداد سے متعلقہ دواؤں کا موجود ہونا یق</mark> ینی بنایا جائے ۔اورطویل المدتی کیمپ کی صورت میں کسی ڈسپنسر رڈاکٹر کاکیمپ میں موجود ہونا چاہئیے ۔
کسی ایم جنسی کے دوران مز دوروں کے لیے ایم ویٹس کی سہولت فراہم کی جامےاورا یم جنسی سروسز 1122 یا 15 پر کال کرنے کے لیے ٹیلیفون رمہ مائل کی سہولت مہیا کی جائے ۔
مزدوروں کی شرکت کو یقینی بنایا جائے۔ مزدوروں کی شرکت کو یقینی بنایا جائے۔
جنسی طور پزشقل ہونے والی بیماریوں اورایڈرز وغیرہ کے بارے میں مزدوروں کو کمل معلومات فراہم کی جائیں اوران بیماریوں سے بچنے کے لیے م حفاظتی اصول اپنانے پرزور دیا جائے۔
پچھروں اور دیگر بیکٹیر یا کو پیدا ہونے سے روکنے کیلئے حفاظتی سپر پر لازمی کرائے جائیں۔
کرونا سے بچنے کے لیئے ابتدائی سکریڈنگ یقینی بنائیں اور بار بار باتھ دھونے پرزوردیں اور علامات ظاہر ھونے پرفوری طور پردیگر مزدوروں سے آئرولیشن کے کمل اصولوں پرشختی سے ممل کیا جائے۔
🔶 لیبر کیمپس کے اندر مناسب مقامات پر حفظان صحت کے اصولوں سے متعلقہ پیغامات اور طریقے ڈسپلے کیے جایئ اور تربیتی پروگرام کا اہتمام کیا
-26
قریبی ڈسپینسری رہیلتھ کلینک رہیپتال کے رابطہ نمبر وغیرہ واضح مقامات پرآ ویزاں کئے جائیں۔

SECURITY سرگرمیاں ۷ سکیور ٹی اور حفاظت کی سہو لیات مسائل ا سكور ٹي سے مسائل ورى كاخطره و بشت گردی کاخطره • آگ لکنے کے خطرات حفاظتي اقدامات 🔶 کیمی کے گردحفاظتی باڑ کی فراہمی حفاظتى المكار (يوليس يانجى سكيور ٹى گارڈ رہوم گارڈ وغيرہ) كى تعيناتى 🔶 کیمی میں موجودافراد کی صحیح تعداداورآ مدورفت کا حساب کتاب رکھنے کے لیے رجسٹر میں اندراج۔ آگ ۔ جیاؤ کے لیئے لیبرکیمیں بنانے میں ایسا کوئی میٹریل استعمال نہ کیا جا ہے جس ہے آگ لگنے کا ندیشہ ہو۔ 🔶 بارش،طوفان،سیلاب وغیرہ سے بیچنے کیلےاس بات کو یقینی بنایا جائے کر کیمپ سما ترف اور عارضی کمر <mark>سے رہائش گا ہیں محفو</mark>ظ رہیں۔ لیبر کیمپس میں آگ بچھانے والا آلات موجود ہوں جن پرانگی آخری معیاد کی تاریخ درج سے اور سکیورٹی گارڈیا لیبر وغیرہ میں سے نگ افرادکوآگ بچھانے والے آلداستعال کرنے کی تربیت دی جائے۔ ليركيم يين واضح مقامات پر ہنگامی را يرجنسي را بط نمبر نماياں درج ہوں۔ ٹھیکیدار، لیبر کے ساتھ ماہانہ میٹنگز میں ایمرجنسی کی صورت میں ہرایک مز دورکواسکی ذمہ دا<mark>ریوں اور تربیت سے آگ</mark>اہ کرے^{ادرا کی تقبل^{نگ} ان اند} کنسلننٹ اور میون کمیٹی رکار پوریشن کوفراہم کرے۔ اور کسی بھی قشم کی شکایات ایک رجسٹر میں درج کرے۔ انوائر نمنٹ اینڈ سوشل سیف گلان 11 پی ایم ڈی ایف سی





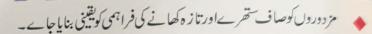
Food Safety محت کے اصولوں پر مبنی خوراک Food

مسائل

فودْ بواتر تك كاخدشه

بارىكادر

حفاظتي اقدامات



سرگرمیاں

٩.مذهبي و سماجي ميل جول

مسائل

مذہبی عبادات میں رکاوٹ

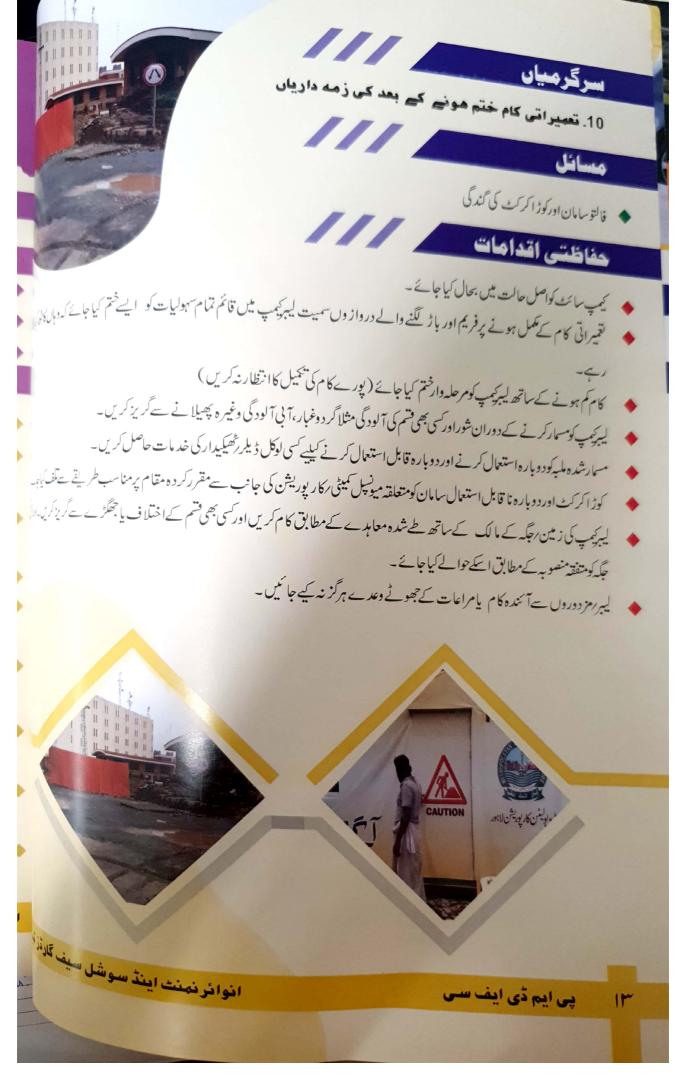
- الجاجى تعلقات ميں دشوارى
- ساجی، ثقافتی اور مذہبی خیالات میں شدت پسندی پالڑائی جھگڑ اوغیرہ

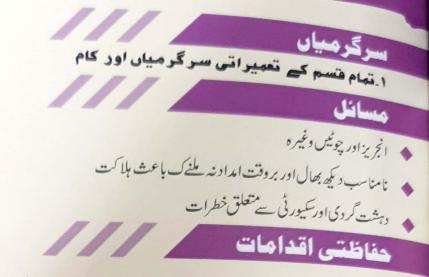
حفاظتي اقداهات

- مزدوروں رلیبر کوان کے مذہب اور فرقے کے مطابق مذہبی عبادات کی سہولیات فراہم کرنا۔
- 🔶 خواتین لیبر کی موجودگی کی صورت میں ان کے لیے علیحدہ وضو، نمازاور پردے کا اہتمام کیا جائے۔
- متمام مزددروں کی مذہبی، ثقافتی یا فرقے کی وابستگی سے قطع نظر غیر متعصّبانہ اور برابری کاسلوک کیا جائے۔
- مزدوردں کو تعمیراتی کام کے دوران نماز میں شرکت کرنے یا دیگر عبادات کی اجازت دی جائے ا<mark>وراس سلسلے میں مذہبی اور سکیور ٹی امور کے ذمہ دار</mark> مقامی حکام کو تعمیراتی کاموں کے آغاز سے پہلے باضابطہ طور پر آگاہ کیا جائے تا کہ صحت عامہ، معاشرتی اور حفاظتی امور پرموژنگرانی برقراررہ سکے۔

پی ایم ڈی ایف سی ۱۲

أنوائر نمنت اينڈ سوشل سيف گارڈز ٹيم







- متام مزدوروں رلیبر سے مقامی رمین الاقوامی معیار کے مطابق مناسب حفاظتی اور قانونی ضوابط کی پیروی کردائی جائے۔
- کام کی جگہ پر اردگرد کے علاقوں میں موجود دہشت گردی اور سکیورٹی کے خطرات کے مطابق حکمت عملی کی بروقت تیاری اور ایک محفوظ وضحت مند ماحول مہیا کیا جائے۔
- مزدورورں رلیبر کیلیے ذاتی حفاظت کے سامان (PPEs) کی فراہمی مثلا حفاظتی جوتے ، ہیلم طے، ماسک، دستانے، حفاظتی لباس، چشمے، چہرے اور کان کی حفاظت کے سامان وغیرہ کی فراہمی
 - 🖌 تمام مزدوروں رلیبر کوذاتی حفاظت کے سازوسامان کے بارے میں مکمل آگاہی اوراستعال کے طریقے کارکے بارے تربیت کا نتظام۔
- ۔ اگر تعمیراتی کام ایک ماہ سے زائد عرصہ کیلئے جاری رہنا ہوتو تمام مدت کے لیئے صحت، صفائی اور تربیت یافتہ ماحولیات کی تعیناتی کی جائے جو مزدوردں کی صحت،صفائی اور ماحولیات کے امور کی نگرانی کرے اورانھیں تربیت وآگا ہی فراہم کرے۔
- تعمیراتی کاموں کے دوران کسی چوٹ لگنے را نجریز کی صورت میں مزدور رکیبر کے علاج معالیج کی سہولت مہیا کرنا اور بروفت ہیپتال رڈ سپنسر کی و غیرہ پہچانا ٹھیکیدار کی ذمہ داری ہے۔
- مزید برآن دوران تعمیر تعمیر اتی کام کی وجہ سے لگنے والی چوٹ رانجریز کے نتیج میں ہلاکت ہوجانے کی وجہ سے مزدور رلیبر کی انشورنس اور اس کر بروفت ادائیگی کویقینی بنایا جائے۔
- ایم جنسی رابطه نمبر مثلا ریسکیو**1122یا15**اور دیگر قریبی مہپتالوں رڈ سپنسری وغیرہ کے نمبر تعمیر ات<mark>ی جگہوں پر واضح درج ہونے جاہیں اور کال کے</mark> سہولت فراہم کی جائے۔
- شہری ترقی کے تعمیراتی منصوبہ جات کے اغاز سے قبل صحت ، مذہبی اموراور شہری تحفظ رسکیورٹی فراہم کرنے والے مقامی اداروں کوآگاہ رکھا جا۔ اوران سلسلے میں متعلقہ میونپل کمیٹی رکار پوریشن کے تعاون سے موثر حکمت عملی تشکیل دی جائے۔

پی ایم ڈی ایف سی

انوائرنمنٹ اینڈ سوشل سیف گارڈز ٹیم

۲۔تمام مسم کی تعمیراتی سر گرمیاں اور کنسٹر کشن کے کام

15 سال سے کم عمر بچوں کی صحت اور تعلیم کا نقصان 18 سال اور اس سے کم عمر بچوں کی صحت کا نقصان حاملہ مز دور عور توں کی صحت سے متعلقہ خطرات

حفاظتي اقدامات

مسائل

دی پنجاب رسٹرکشن آن ایمپلائمنٹ آف چلڈرن ایکٹ 2016 کے مطابق15سال سے کم عمر بچوں کومزدوری یاکسی سرگرمی کے لیئے کام پر نہیں رکھا جاسکتا۔

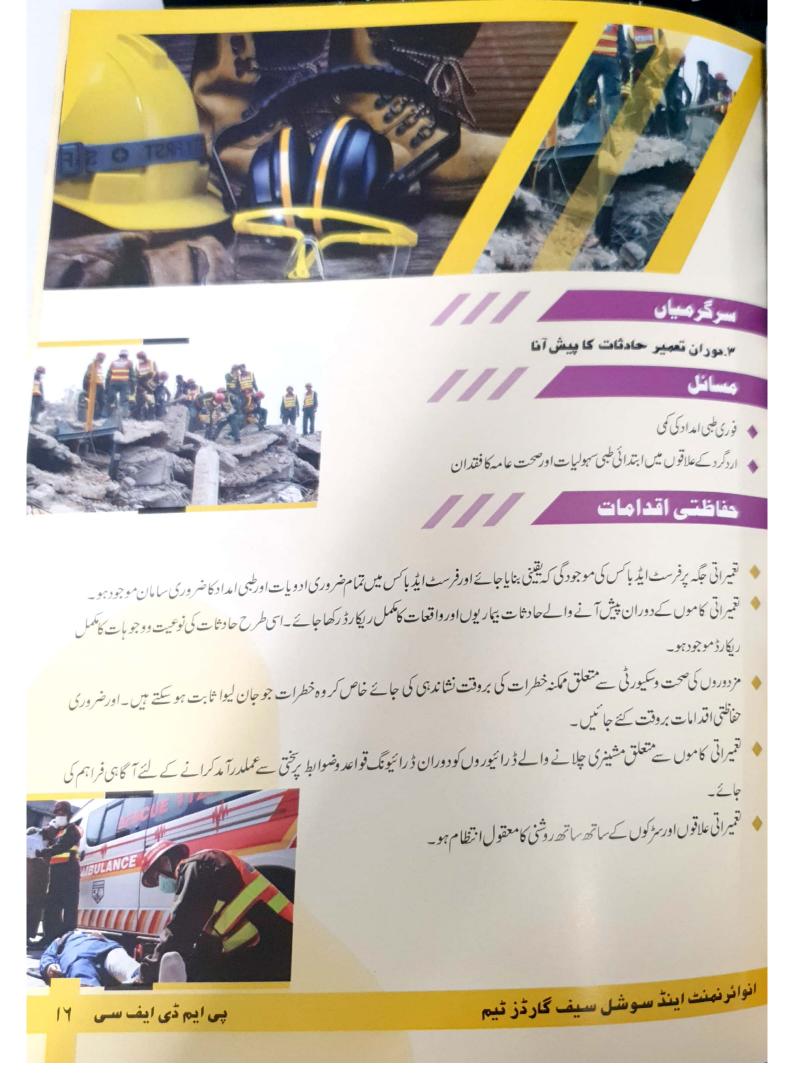
- ویسٹ پاکستان میٹرنٹی بنیفٹ آردیننس **1958 کے مطابق حاملہ خواتین یا ایسی خواتین جنہوں نے** چھ ہفتے قبل بچے کوجنم دیا ہو، کومز دوری یاکسی سرگرمی کے لیئے کام پرنہیں رکھا جاسکتا۔
- دی پنجاب رسٹرکشن آن ایمپلائمنٹ آف چلڈرن ایکٹ2016 کے مطابق18 سال اوراس سے کم عمر کے بچوں کہ محنت مزدوری کے ایسے کام کے لیے تھیں رکھا جاسکتا جن میں صحت کو نقصان پنچنے یاچوٹ لگنے یاکسی کیمیائی زہر یلے مادے سے <mark>نقصان پنچنے یا جہاں مڈی ٹوٹے کا اندیشہ ہو۔</mark>

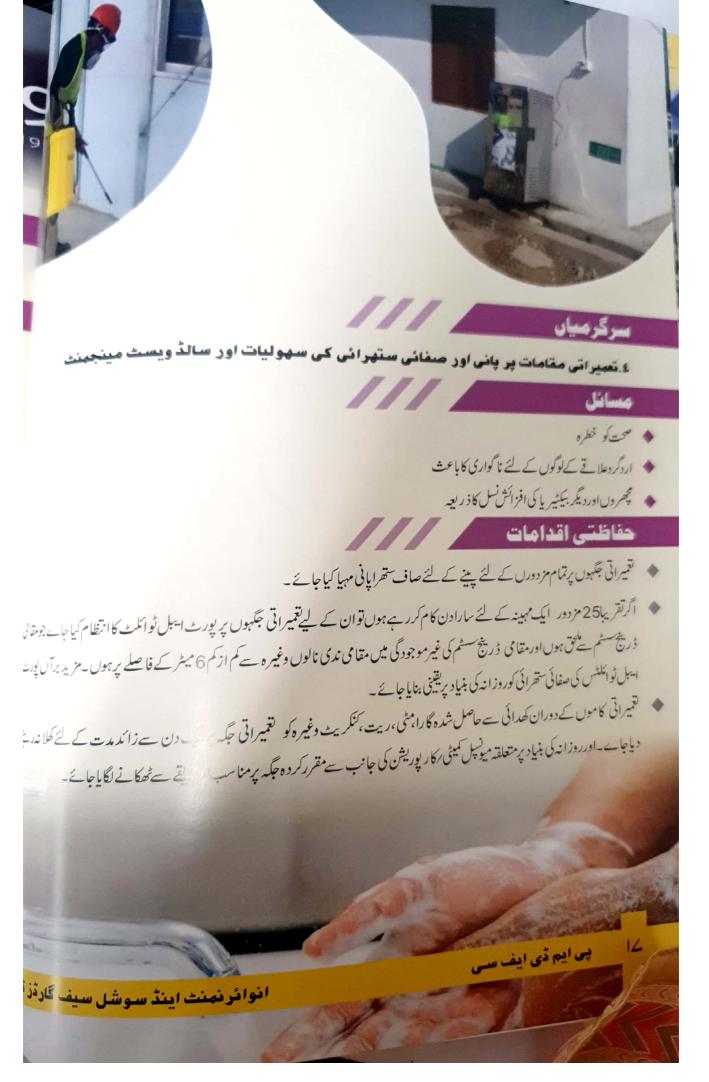


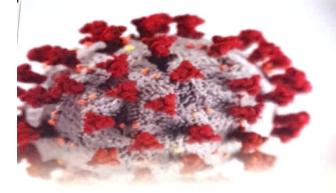
انوائر نمنٹ اینڈ سوشل سیف گارڈز ٹیم

10

پی ایم ڈی ایف سی







کرونا وائرس کی وہا کے دوران حفاظتی تدابیر

CORONAVIRUS DISEASE 2019

مفاظتى اقدامات

سرگرمیاں

گورنمنٹ آف پنجاب اور ورلڈ بنک کی مدایات کے مطابق کرونا کی وبا کے دوران درج ذیل حفاظتی اقدامات کی پابندی کروانا کنٹریکٹر کی ذمہ داری مے :

- کرونادائرس کی وبا کے دنوں میں کنسٹرکشن سائٹ پر ہاتھ دھونے کیلتے پانی (پورٹ ایبل ہینڈ داشنگ کی سہولت)اورصابن مہیا کیا جائے اور لیبرکوبار بارصابن سے ہاتھ دھونے کی تلقین کی جائے۔ لیبرکیمپس میں اورکنسٹرکشن سائٹ پرسوشل ڈیسٹینسنگ (6m کا فاصلہ) کے اصولوں کو مدنظر رکھا جائے۔
- اگر کسی مریض میں دائر کی علامات (خشک کھانسی، نزلہ، زکام، بخاروغیرہ) پائی جائیں تو اسے فوراً دوسرے مزدوروں ہے آئسولیٹ کر دیاجائے اور ٹیسٹ کروانے کیلئے کہا جائے۔

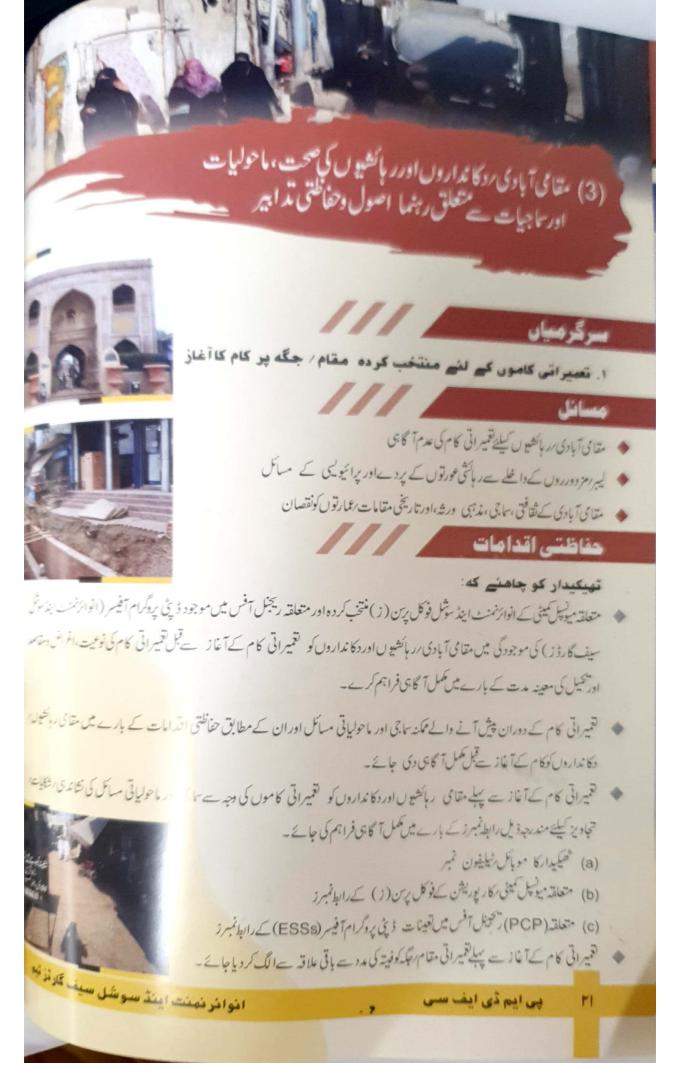
دان کنسٹرکشن سائٹ پردیگر PPEs کے ساتھ ساتھ مزدوروں کو ماسک لازمی استعال کرایا جائے۔



لتہیراتی کاموں کے دوران خطرات/حادثات سے چی جی مال کا بیات کا طلار تصويري داتى حفاظت تعميراتي كام اڑنے والے ذرات کا ستعال جیسے پکھلی ہوئی مقصد حفاظتي عينكيس دهات مائع کیمیکل ، پیس، اور بخارات، روشنی کی آنکھوں اور چہرے کی او پراوراطراف نفصان سے بچاؤ کیلئے ایے تمام کام جن میں گرنے کا خطرہ ہو، بلندی پر حفاظت/ تحفظ بلاستك تح جميلم ف کام کرنا بقمیراتی کام کوسنجا لنے اور دوسری جگہ پر سر کی حفاظت/ تحفظ ساعت کی حفاظت کے آلدجات جیسے کن پیش منتقل كرف والحكام-كهدائي/شور پيداكر في والحكام يا بهارى اايتريك یندر پال بلنے اور گرنے والی اشیاء، مائعات اور کیمیائی مشیزی استعال کرنے کی وجہ سے شور۔ سماعت کی حفاظت/ تحفظ تمام تعميراتي كام جن ميں چيزوں كا كرنايا تھمانا، موادیے بچاؤ کیلیے حفاظتی جوتے یا بوٹ نو کیلی اشیاشامل ہوں ۔ گلانے والایا گرم مائع ، پاؤں کی حفاظت/ تحفظ رېژيامصنوعي مواد(نيورويېن)، چېژا، شيل، بجري كي في حر الثمانا-جسماني صحت كيليح نقصان ده سامان جیسے کچر بے کو غير موصل مواد سے بنے گلوز سنجالنا،ایسے کام جس میں کاٹ یا گہرے زخم لگنے ماتهوں کی حفاظت/ تحفظ کاندیشہو،ارتعاش، بہت زیادہ درجہ حرارت۔ ایک جگہ سے دوسری جگہ لے جانے والے یا ایک ہی جگہ پڑے مواد کی فراہمی تعمیراتی جگہ دهول، دهند، شعلے، کیسیں، دهواں، بخارات 1 يربيحاة كاسامان چېرے کے ماسک جن میں دھول ہٹانے اور ہواکوصاف رکھنے کیلئے (کیمیائی مواد، تحفظ تنفس دھند، بخارات اور کیسوں سے)مناسب فلٹر آسيجن کی کمی لگے ہوں مناسب ميٹريل سے بے غير موصل كيڑے، تمام کام جن میں شدید درجہ حرارت ، نقصان دہ جسم / ٹانگوں کی حفاظت/ اييرن وغيره مواد، حیاتیاتی ایجن، چھوٹے یا گہرے زخم لگنے کا تحفظ انديشهو ہیلم ہے، حفاظتی عینکیں ، کے گلوز اورر بڑ تمام تعميراتي كام جو 4 فث ياس سے زيادہ كى 42 اونچائی پر کام کرتے ھوئے کے بوٹ اونچائی پر کے جانے ہوں بشمول سٹریٹ لائٹس حفاظت وغيره 1 13 تمام تعميراتي كام جو 4 فث يااس - زائداد نيجائي اونچائی پر کام کرتے ھوئے ایک ساتھی فرد برسلسل ایک دن کیلئے کیے جانے ہوں حفاظت انوائر نمنٹ اینڈ سوشل سیف گارڈ پی ایم ڈی ایف سی 19

Summary of Recommended Personal Protective Equipment According to Hazard

Eye and face protectionFlying patholesials, gases of vapors, light radiation.shields, protective shades, etc.Head protectionFalling objects, inadequate height clearance, and overhead power cords.Plastic Helmets with top and side impact protection.Hearing protectionNoise, ultra-sound.Plastic Helmets with top and side impact protectors (ear plugs or ear muffs).Foot protectionFalling or rolling objects, pointed objects. Corrosive or hot liquids.Safety shoes and boots for protection against moving & falling objects, liquids and chemicals.Hand protectionHazardous materials, cuts or la cerations, vibrations, extreme temperatures.Safety shoes and boots for protection against moving & falling objects, liquids and chemicals.Respiratory protectionDust, fogs, fumes, mists, gases, smokes, vapors.Facemasks with appropriate filters for dust removal and air purification (chemicals, mists, vapors and gases). Single or multigap personal monitors, if available.Body/leg protectionExtreme temperatures, hazardous materials, cuting and trails, sological agents, cutting and suits, aprons etc.Insulating clothing, body suits, aprons etc.	Objective	Workplace Hazards	Suggested PPE	Piet.
Head protectionheight clearance, and overhead power cords.side impact protection.Hearing protectionNoise, ultra-sound.Hearing protectors (ear plugs or ear muffs).Foot protectionFalling or rolling objects, pointed objects. Corrosive or hot liquids.Safety shoes and boots for protection against moving & falling objects, liquids and chemicals.Hand protectionHazardous materials, cuts or lacerations, vibrations, extreme temperatures.Safety shoes made of rubber or synthetic materials (Neoprene), leather, steel, insulating materials, etc.Respiratory protectionDust, fogs, fumes, mists, gases, smokes, vapors.Facemasks with appropriate filters for dust removal and air putfication (chemicals, mists, vapors and gases). Single or multi-gas personal monitors, if available.Dust, fogs, fumes, mists, star ardous materials, extreme temperatures, hazardous materials, olds agaes, single or multi-gas personal monitors, if available.Insulating clothing, body suits, aprons etc.Body/leg protectionExtreme temperatures, hazardous materials, biological agents, cutting andInsulating clothing, bodyWorking at *heightRehabilitation ProjectsHelmet, Safety glasses,		liquid chemicals, gases or	shields, protective shades,	Picture
Hearing protectionNoise, ultra-sound.or ear muffs).Foot protectionFalling or rolling objects, pointed objects. Corrosive or hot liquids.Safety shoes and boots for protection against moving & falling objects, liquids and chemicals.Hand protectionHazardous materials, cuts or lacerations, vibrations, extreme temperatures.Safety shoes and boots for protection, gainst moving & falling objects, liquids and chemicals.Respiratory protectionDust, fogs, fumes, mists, gases, smokes, vapors.Facemasks with appropriate filters for dust removal and air putification (chemicals, mists, igases). Single or wapors and gases). Single or wapors and gases). Single or wapors and gases). Single or sulti-gasersonal monitors, if available.Insulating clothing, body suits, aprons etc.Body/leg protectionExtreme temperatures, hazardous materials, biological agents, cutting andInsulating clothing, body suits, aprons etc.Working at *heightRehabilitation ProjectsHelmet, Safety glasses,		height clearance, and overhead		
Foot protectionFailing of rolling objects, pointed objects. Corrosive or hot liquids.protection against moving & falling objects, liquids and chemicals.Hand protectionHazardous materials, cuts or lacerations, vibrations, extreme temperatures.Gloves made of rubber or synthetic materials, etc.Respiratory protectionDust, fogs, fumes, mists, gases, smokes, vapors.Facemasks with appropriate filters for dust removal and air purification (chemicals, mists, vapors and gases). Single or multi-gas personal monitors, if available.Body/leg protectionExtreme temperatures, hazardous materials, biological agents, cutting and wrking at *heightRehabilitation ProjectsInsulating clothing, body suits, affety glasses,		Noise, ultra-sound.		
Hand protectionHazardous materials, cuts or lacerations, vibrations, extreme temperatures.synthetic materials (Neoprene), leather, steel, insulating materials, etc.Respiratory protectionDust, fogs, fumes, mists, gases, smokes, vapors.Facemasks with appropriate filters for dust removal and air purification (chemicals, mists, vapors and gases). Single or multi-gas personal monitors, if available.Body/leg protectionExtreme temperatures, hazardous materials, biological agents, cutting and Rehabilitation ProjectsInsulating clothing, body suits, aprons etc.Working at *heightRehabilitation ProjectsHelmet, Safety glasses,		pointed objects. Corrosive or	protection against moving & falling objects, liquids and	
Respiratory protectionDust, fogs, fumes, mists, gases, smokes, vapors.filters for dust removal and air purification (chemicals, mists, vapors and gases). Single or multi-gas personal monitors, if available.Body/leg protectionExtreme temperatures, hazardous materials, biological agents, cutting andInsulating clothing, body suits, aprons etc.Working at *heightRehabilitation ProjectsHelmet, Safety glasses,	Hanu	lacerations, vibrations,	synthetic materials (Neoprene), leather, steel,	Y.
Body/leg Extreme temperatures, Insulating clothing, body protection Extreme temperatures, Insulating clothing, body Working at *height Rehabilitation Projects Helmet, Safety glasses,			filters for dust removal and air purification (chemicals, mists, vapors and gases). Single or multi-gas personal monitors,	1
Body/leg h a z a r d o u s m a t e r i a l s, biological agents, cutting and suits, aprons etc. Working at *height Rehabilitation Projects Helmet, Safety glasses,		Oxygen deficiency	Portable or supplied air (fixed	1
Working at *height		hazardous materials,		.35
	-	Rehabilitation Projects	Helmet, Safety glasses,	
······································		New Construction Projects	Anchor, belt, lanyard,	-



قد رنی تجدر مقام پرواضح بورڈ نصب کرد کیے جائم میں جن پر درج ذیل پیغامات را حکامات لکھے ہوں: (۵) قدر ان کام کی نوعیت (۵) رنیف میں رکاوٹ کی صورت میں متباول رائے کا نشان اور عارضی رکاوٹ کا پیغام (۵) ایر ضمی اور شکایت کیلیئے را اطب نمبرز (۵) ایر ضمی اور شکایت کیلیئے را اطب نمبرز (۵) محکم کی جائر کی جائر کی حدود میں موجود ثقافتی ، سماجی، مذہبی ورشہ ، تاریخی عمارتوں اور مذہبی مقامات بیسے قبر رتی کام کی جگہ کے ارد گرد 100 میٹر تک کی حدود میں موجود ثقافتی ، سماجی، مذہبی ورشہ ، تاریخی عمارتوں اور مذہبی مقامات بیسے قبر رتی ماہ مندر، گرجا گھروں وغیرہ کو کسی قسم کا نقصان نہ پہنچایا جائے اور ان کی حدود میں کوڑا کر کٹ ڈالنے یا فالتو پانی چھوڑ نے سے گریز کیا جنرین کام روں دیا جائے اور محمد کی حدود میں متعلقہ متا می حکم ہے رجوع کیا جائے اور کام کہ ڈالنے یا فالتو پانی تھوڑ نے سے گریز کیا جنرین کام روں دیا جائے ہے اور محمد کا میں متعامی میں متعلقہ متا می حکم ہے رجوع کیا جائے اور میں کام کی میں میں کی کام کی میں میں محمد میں متعامی جائے گریز کیا

سرگرمیاں

2-کپدائی کی جگہ اور اس سے متعلقہ کام اور نالوں کی صفائی اور اس سے حاصل شدہ بہل وغیرہ

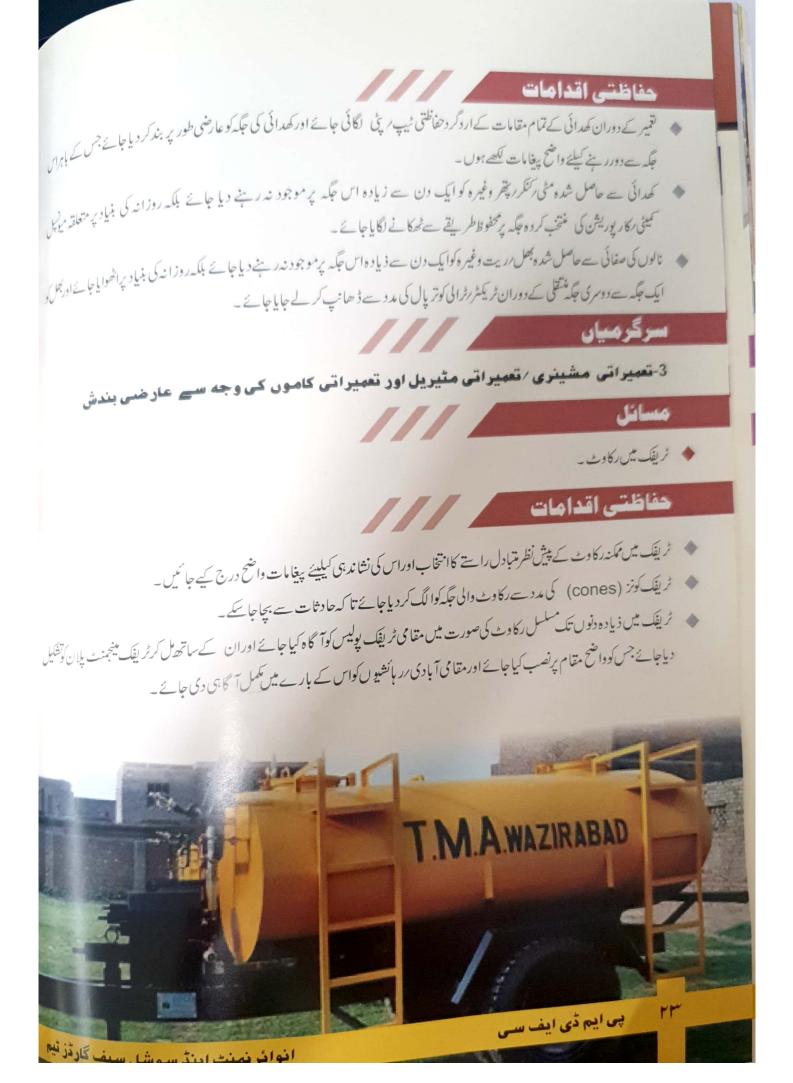
مسائل

حُدانی سے حاصل شدہ مٹی رکنگر کے ڈچیر (Debris) سے رہائشیوں کی آمدور ڈت اورٹر یفک میں رکاوٹ ىتانى بالشيول كىلىيۇ ناگوارى كاباعث مچروں اور دیگر بیماری چھیلانے والے جراشیم کی افز اکش کا ذ ربعیہ کھدائی کی جگہ پر گرنے اور حادثات کے خطرات وانرنمنت اینڈ سوشل سیف گارڈز ٹیم

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11



ہ۔ 4۔تعمیر اتی کاموں کی وجہ سے راستوں میں عارضی رکاوٹ اور زمین کا عارضی حصول

> روز مرہ معمولات اور کا موں میں رکاوٹ رہائٹی خواتین کیلئے آنے جانے میں رکاوٹ دکانداروں کے دکانوں کے آگے رکاوٹیں اور گا ہکوں کیلئے مشکلات مستقل وعارضی سٹالز لگا کر بیچنے والے چھوٹے بڑے مستقل دکانداروں کا گا مکہ کم ہوجانے کی وجہ سے مالی نقصان

حفاظتي اقدامات

مسائل

تعمیراتی کیمپ لگانے بعمیراتی کام کرنے کامشینری اور سیرانی منامان کو تصویر الطاکا پابندہوگا۔ پرادا کی جائے گا۔اورتحریری معاہد کے کامور سیری شکیدارتمام تو اعد وضوالط کا پابندہوگا۔ تعمیراتی کاموں کیمپ وغیرہ لگانے کے لیے عارضی زیرن حاصل کرنے کے لئے مقامی رہائشیوں سے مشاورت اوردنوں کے حیاب کے کرایدادر اس کا کمل طریقہ کا روضع کرتے با قاعدہ لکھا جائے گا۔اورخلاف ورزی کی صورت میں ٹھیکیدارذ مہدارہوگا۔



FTY-

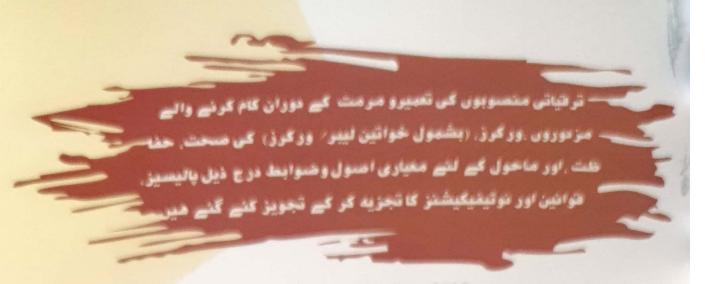


- تعمیراتی علاقے میں موجود ہپتالوں، سکولوں رکا کجوں وغیرہ اور رہائٹی گھروں ردکا نوں کی تمام تفصیلات کی رپورٹ متعلقہ میونیل کمیٹی کے دفتر میں موجود ہوتی چاہئے جو کہ تعمیلار کے کنٹریک کا حصہ ہوگی۔ اور شحیکیداران تفصیلات کے مطابق ایسا پلان تر تیب دے گاجس سے اردگرد بنارتوں مرد بالنقوں ایسان میں جو کہ تعمیکیدار کے کنٹریک کا حصہ ہوگی۔ اور شحیکیداران تفصیلات کے مطابق ایسا پلان تر تیب دے گاجس سے اردگرد بنارتوں مرد بالنقوں اور کا خصہ ہوگی۔ اور شحیکیداران تفصیلات کے مطابق ایسا پلان تر تیب دے گاجس سے اردگر دبنارتوں مرد بالنقوں اور کا خصہ ہوگی۔ اور شحیکیداران تفصیلات کے مطابق ایسا پلان تر تیب دے گاجس سے اردگر دبنارتوں مرد بالنقوں اور کہ سے کا حصہ ہوگی۔ اور شعیکیداران تفصیلات کے مطابق ایسا پلان تر تیب دے گاجس سے اردگر دبنارتوں مرد بالنقوں اور کو کم سے کم پریشانی کا سامنا کر نا پڑے مثلا زیادہ شور پیدا کرنے والے کام دن کے اس حصوبیں کئے جائیں جب سیترالوں، اور دکا توں اور کو کم سے کم پریشانی کا سامنا کر نا پڑے مثلا زیادہ شور پیدا کرنے والے کام دن کے اس حصوبیں کئے جائیں جب سیترالوں، اور سکولوں رکا لجوں دغیرہ کے مصروف اوقات کا رنہ ہوں اور ایسے کا مجن کی وجہ سے راستوں کی عارضی بند ش ضردری ہوں دہ رہ کھی میں تھ بین جو کیں جب سیترالوں، اور سکولوں رکا لجوں دغیرہ کے مصروف اوقات کا رنہ ہوں اور ایسے کا مجن کی وجہ سے راستوں کی عارضی بند ش ضردری ہوں دہ را تو کی تیں ہوں دہ را توں کی تعارف میں میں میں میں میں کئے جائیں جب رہائشیوں کی آمدورف نہ ہو۔
- تعمیراتی کاموں کے دوران پیداشدہ فاضل پانی یا پورٹیبل ٹو انگٹس کا پانی رفضلہ وغیرہ کا محفوظ اور مناسب طریقے سے ٹھکانے لگانے کا بندوبست کیا جائے اور فاضل پانی کو پینے کے صاف پانی کے ساتھ شامل ہونے سے بچانے کا ہزمکن قدم اٹھایا جائے۔
- واٹر سپلائی کی سیموں یا ایسی تمام کام جن کی وجہ سے رہائشیوں کو پانی یا سیور بنی وغیرہ میں عارضی بندش کا سامنا کرنا پڑ سکتا ہو۔، ایسے تمام کا موں کے آغاز سے پہلے رہائشیوں کو پیشگی اطلاع دی جائے اور متبادل انتظامات کا خاطر خواہ انتظام کیا جائے۔
- تعمیراتی کاموں کی وجہ سے درختوں کی کٹائی سے ہر حال میں گریز کیا جائے اور نا گزیر صورت حال میں ایک درخت کی کٹائی کے متبادل کے طور پر چار درخت لگا ناضروری میں۔
- تعمیراتی جگہ پر پیدا ہونے دالےکوڑا کرکٹ کوٹھکانے لگانے کیلئے ڈسٹ بن لگائے جائیں اوران کوروزانہ کی بنیاد پر متعلقہ میونیل کمیٹی کی طرف سے مقرر کردہ مقام پڑھکانے لگایا جائے۔
 - کوڑا کرکٹ اور فاضل پانی اردگر دموجو دفسلوں اور ندی نالوں میں چھینکنے سے گریز کریں۔
 - گردد غبارادر ہوائی آلودگی کی صورت میں پانی کا با قاعدہ تچھڑ کاؤ کریں۔
 تعمیر اتی کام کی مدت اور نوعیت کے مطابق کام کے آغاز سے پہلے، کام کے دوران اور کام کے بعد ﷺ
- مستعمیرانی کام کی مدت ادر نوعیت کے مطابق کام کے آغاز سے پہلے،کام کے دوران اور کام کے بعد شرکی آلودگی ، ہوائی آلودگی اور آبی آلودگی کے نمونہ جات حاصل کر کے ان کی جانچ پڑتال کرانا ٹھیکیدار کی ذمہ داری ہے۔ اس سلسلے میں ریجنل آشن میں موجود ڈپٹی پروگرام آفیسر (ESSs) سے مزید رہنمائی حاصل کریں۔

لتمیراتی کا مکمل ہوجانے کے بعدعلاقے کی صفائی ستھرائی اور ماحولیاتی خوبصورتی کا خاص <mark>خیال رکھیں اور پہلے سے بہتر حالت میں چھوڑیں</mark>۔

* بر مراورت آف با کتان کرمونو کس نبر 25 برطابق 2009 حالد نبر "کتک آف ٹریز قار کیتال دوائیلانگ پا جیکت لامور "تخیراتی کاموں کے دوران برایک درخت کی کتائی کے تبادل چارد دخت لگ با بک کم پی ایم ڈی ایف سی اسی کار ڈز شیم

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- The Punjab Occupational Health & Safety Act, 2019
- General Environment, Health & Safety (EHS) Guidelines by International Finance Corporation (IFC), World Bank
- International Labour Standards of International Labour Organization (ILO)
- Punjab Tehsil/Town Municipal Administration (Works) Rules 2003 (Amendments 2016)
- The Punjab Restriction on Employment of Children Act, 2016
- The West Pakistan Maternity Benefit Ordinance, 1958
- ESF/Safeguards Interim Note: COVID-19 Considerations in Construction / Civil Works Projects - World Bank Guidelines
- Health & safety SOPs for Construction Workers/Sector for COVID 19
- Punjab Wildlife (Protection, Preservation, Conservation and Management) Act, 1974

