

Local Government & Community Development Department

Punjab Cities Program Construction of SWM Parking Area in Okara City

PC-I

Estimated Cost Million PKR. 81.488

August, 2022

Municipal Committee Okara



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Punjab Cities Program

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

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PC-I FORM

for

Construction of Parking Area in Okara City

Project Serial Number

Sector: Local Government & Community Development Department

Sub Sector: Social

1. Name of the project	Punjab Cities Program Construction of Parking Area in Okara city			
1 0				
Okara is the capital city of Okara District in the Punjab province Pakistan. The city is located southwest of the city of Lahore at a dista of 128.6 km and Faisalabad is 100 km bypassing away Ravi River. I nearest major city to Okara is Sahiwal. The city coordinates are 30. North latitude, and 73.45' East longitude. Location map of the city is attached in Annexure-A				
3. Authorities responsible	e for			
i- Sponsoring	Government of the Punjab (through World Bank funding)			
ii- Execution	ntion Municipal Committee Okara			
iii- Operation and Maintenance	Municipal Committee Okara			
iv-Concerned Provincial Department	Local Government and Community Development Department Punjab			
4a.Plan Provision				
i. If the project is included in medium term/five year plan,	Punjab Cities Program (PCP) is a World Bank for total cost of USD 236.00 million and comprise components.			
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 USD 20.00 million is meant for management component compone	ا ت		

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.
	Scope of the work for this particular project includes the construction of Parking shed for SWM Machinery. The Project has the following objectives;

- 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, 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 Okara 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 Okara for provision of better solid waste management facilities to the people of Okara.

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 7.34 Kanals in the city. Detail of the components of Parking Area have been given in the table below.		
iii Detail of civil works,	The detail of Parking Shed for SWM Machinery to be constructed in the		
equipment &	city, is given below:		
machinery and other	Location: 36-Jhory Road near Akbbar chowk		
physical facilities	S. N. Detail of works		
	1 Boundary wall and gate		
	Sheds for vehicles with trusses and Aluzinc sheeting at the top		
	3 Office room with toilet		
	4 Workshop		
	5 Washing ramp		
	6 Sitting room for staff with toilets		
	7 Parking aprons		
	8 Guard room		
	9 Generator pad		
	10 Water supply and drainage system		
	11 Approach road		
iv Indicate governess issues of the sector relevant to the project and strategy to resolve them	 MC Okara is facing acute shortage of staff. The smooth sailing of the Punjab Cities Program can only be assured when the required staff is available with Unit. The Repair and maintenance of the municipal services in not up to the mark in such Unit. Trainings will be imparted by PMDFC to the officers as well as the field staff under the Program but practicing the interventions and method/procedures learnt in these trainings is the 		
	actual requirement in which MCs are lacking at present. Hence inculcating the mind set for good repair and maintenance is the major requirement for improving the service delivery level.		

7- Capital Cost of Project	The sum	mary of the works included in the project is give	en below;	
Froject	S. No	Item of works	Cost (PKR million)	
	1	Office Building	1.259	
	2	Sitting Room	1.118	
	3	Guard Room	0.585	
	4	Store Room	2.249	
	5	Workshop	2.968	
	6	Parking Shed (Size 150' X 32')	13.462	
	7	Parking Shed (Size 120' X 32')	10.845	
	8	Parking Shed (Size 72' X 32') (2 Nos.)	13.138	
	9	Washing Pit	0.518	
	10	Generator Pad	0.164	
	11	Pump Pad	0.015	
	12	Septic Tank	0.296	
	13	External Boundary Wall + Tuff Paver + Lawn	15.382	
	14	External Plumbing Work	1.019	
	15	External Electrical Work	8.416	
	16	Tube Well	4.383	
	17	Environmental Health & Safety Cost	0.112	
	18	Dismantling Work	0.221	
		Total cost	76.157	
		Contingencies @2%	1.523	
		Punjab Sales Tax @5%	3.807	
		Grand Total	81.488	
	See An	nexure-B for details		
i- Indicate date of estimation of the project cost	The project estimates have been framed during the month of August, 2022			
ii- Basis of determining the estimates be provided.	The cost estimates have been framed on the basis of bill of quantities actually required at site and unit rates from the Market Rate System (MRS) issued by the Government of Punjab (District Okara 2 nd biannual of year 2022). For items not available in the MRS, the same have been analyzed as per prevailing market rates.			

iii- Provide year wise
estimation of physical
activities

Physical phasing of the project is included in the following table:				
S. #	Item of works	Year 2022-2023		
1	Boundary wall and gate	100%		
2	Sheds for vehicles with trusses and Aluzinc sheeting at the top	100%		
3	Office room with toilet	100%		
4	Workshop	100%		
5	Washing ramp	100%		
6	Sitting room for staff with toilets	100%		
7	Parking aprons	100%		
8	Guard room	100%		
9	Generator pad	100%		
10	Water supply and drainage system	100%		
11	Approach road	100%		
12	Contingencies & PRS Taxes	100%		

iv- Phasing of capital cost on the basis of each item of work.

Phasing of capital cost of the project is included in the following table: (All figures are in million rupees)

			Year	
S.	Items of Shed	Total cost	2022-2023	
#	Tems of Sired	(Million Rs)	(Million	
			Rs)	
1	Office Building	1.259	1.259	
2	Sitting Room	1.118	1.118	
3	Guard Room	0.585	0.585	
4	Store Room	2.249	2.249	
5	Workshop	2.968	2.968	
6	Parking Shed (Size 150' X 32')	13.462	13.462	
7	Parking Shed (Size 120' X 32')	10.845	10.845	
8	Parking Shed (Size 72' X 32') (2 Nos.)	13.138	13.138	
9	Washing Pit	0.518	0.518	
10	Generator Pad	0.164	0.164	
11	Pump Pad	0.015	0.015	
12	Septic Tank	0.296	0.296	
13	External Boundary Wall + Tuff Paver	15.382	15 202	
13	+ Lawn	13.382	15.382	
14	External Plumbing Work	1.019	1.019	
15	External Electrical Work	8.416	8.416	
16	Tube Well	4.383	4.383	
17	Environmental Health & Safety Cost	0.112	0.112	

	18	Dismantling Work	0.221	0.221	
		PST contingencies	5.331	5.331	
		Total	81.488	81.488	
0.4					
8-Annual recurrent cost after completion of the	Cos	t in Million = Rs. 1.061			
project and source of		tails are attached as Annexure-1)			
financing		tans are accuence as 7 miestare 1)			
9- Demand & Supply	E	xisting supply level			
Analysis		• There is no existing parking facility for the SWM machinery. Resultantly the vehicles are parked at open spaces with no protection.			
i- Existing Capacity of services	• MC Okara 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	tran •The com elem cons envi stree park oper SW •The effic leve •Ma the fund	e Parking area is required to park and apportation and other MC vehicles. The influence and value of parking space and sa a distinct land use that affer a sideration as a distinct land use that affer a sideration as a distinct land use that affer a sideration as a distinct land use that affer a sideration as a distinct land use that affer a sideration as a distinct land use that affer a sideration as a distinct land use that affer a sideration and represent and spaces. The proposal is to come a sideration which are serviced as a sideration which could not be a sideration of the municipal services in construction of the municipal services in the space and some a	es in planning e is more than a mercial uses; cts travel behave reduces the corow. District Coronstruct a parking 28 vehicles. Provement to e delivery to a secks have been eaddressed by I oposed to be addressed by I oposed to	for livable a necessary it merits vior and the necessary and the necessary and the necessary and the necessary are parked in necessary shaded for enhance the satisfactory observed in MC due to	
iii- Capacity of other similar projects being implemented in public/private sector	as p	other project of this nature is being implorivate sector because of funding constra	ins in the Unit.		
iv- Supply and Demand gaps	was	explained above there is no parking are transportation and other MC vehicle ween the supply and demand.		•	

v-Designed capacity and	1)-Table showing details of the parking area is given below:				
output of the project	No of Area			Area	
	Location	Components	Sheds	Total area	Shed area & Nos.
	36-Jhory Road near Akbar chowk	As listed in section-7	4	7.34 Kanals	1 No=150'x32' 1 No=120'x32' 2 Nos =(72'x32')
10. Financial Plan		g shed is design	ed for 28	vehicles of	SWM Machinery. has been funded by
Sources of financing	World Bank for	r 16 PCP cities	in Punjal) .	
<u>Debt</u>	Total loan to C	Government of	Pakistan/	Punjab	USD 200 million
a) Indicate the local and	Component-1	for Infrastructu	ıre Devel	opment	USD 180 million
foreign debt Loan	For capacity	for Investmen building of M nd program ma	ICs & tl	hree Govt.	USD 20 million
	20% share of	USD 36 million			
	Total funds Development This project w	available		rastructure	USD 216 million
			nuer uns	imancing.	
b) Equity	A. Loan/grant to MC The amount of loan converted to grant to MC Okara will be Rs 65.190 million. The financing of the project will be as give n below: Grant to MC Okara from World Bank DVD 65.100 million				
	(80% of cost of PC-I) 20% Co-finance by MC PKR 16.297 million			6 297 million	
		•			
	Total cost of	f project		PKR 8	1.488 million
	 B. Project Cost =Rs. 81.488 million *The loan is from World Bank to Government of Pakistan/Punjab which will trickle down to MC Okara as grant. 				
c) Grants					out of ADP funds.
	The World Bank loan to Government of Pakistan/Punjab will to down as grant to MC from Government of Punjab.			/Punjab will trickle	
d) Weighted cost of	down as grant t		v CI IIIIICII	or runjau.	
d) Weighted cost of capital	Nil				
11-Project benefits and an	<u> </u>				
i.Financial:	No income will be generated from the project and hence the Financial				
	Analysis is no	ot required.			

T		
Income to the project 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	The completion of the project will result in:	
target group	 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	Primary and secondary data has been collected and used to assess the	
negative/positive	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 A		
iv.Quantifiable project	The quantifiable project out puts have bee	n given above in Sr. No-9 (V).	
outputs	The social benefits to the citizen have be	en 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 81.488 million	
	Population of the city in year 2023	425,593 persons	
	Unit capital cost per capita	PKR 191	
		-	
	B)-Unit R&M cost:		
	Annual R&M cost	1,061,574	
	Population of the city in year 2023	425,593 persons	
	Unit R&M cost per capita	PKR 2.49	
	1 1		
vi.Employment generation	Employment Analysis		
(direct and indirect)	Direct Employment		
	a) Planning and Design of projects		
	The planning and design of the projection		
	consultants (JERS Consultancy) wl		
	experts in Structural designing and		
	their support staff. The consultants v	= =	
	resident supervision of the project to	·	
	works to be executed under this PC-I	•	
	b) Execution of the Project		
	a) PMDFC		
	PMDFC has the project monitoring		
	company has enough experts	-	
	assignment. PMDFC has alread	y deployed under mentioned	
	staff for these projects:		
	Civil Engineers		
	Accounts, administration and aud	it personnel	
	 Urban planners 		
	GIS experts		
	Support staff like computer ope	rators, vehicle drivers, office	
	boys and guards.		
	Procurement experts		
	Communication experts		
	Environmental and social experts		
	Contract management experts		
	b) Consultants		
	<u> </u>		

	PMDFC has employed consultants for detailed design and resident supervision of the projects who have deployed their staff for detailed design and resident supervision of the project.
	c) Municipality MC Okara 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
	d) Contractor
	The contractor responsible for execution of the sub project will employ skilled and un-skilled labor on this work.
	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	Increased project cost due to escalation in cost of material and
viability	labor.
	Deterioration of vehicles due to weathering effects
12 Implementation School	Recurrent watch and ward problems for the delayed period
a) Indicate starting and	
completion date of the	The project is anticipated to commence by October, 2022 and to be completed by March 2023 with project implementation period of 06
project	months.
b) Item wise/year wise	The Gant chart has been attached at Annexure-D
schedule in line chart	
13- Management Structur	re and manpower requirements
i. Administrative	ii. Planning & design of the project
arrangements for the	The project has been designed by the consultants employed by
implementation of the project	PMDFC and will also carry out the resident supervision of the
project	project.
	iii. Preparation 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 Okara 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 Okara 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 requirements by skills during execution and operation of the project and;

The job description, qualification, experience, age and salary of each post

a) PMDFC experts and staff

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
14-Additional projects /decisions required to optimize the investment being undertaken	d)	Repair & maintena MC has its own regumaintenance of the menoper of slots for example of the menoper of the meno	nce of a lar staff aunicipathe existes in a propose esently ional stanction transtrage in is will be imple ovincial	f which has been deployed for repair and al services infrastructure. However, it has sting staff is not adequate to repair and manner which can give good service ed to;
	2)		lso defi	&M) staff cient and this is adversely affecting the ober 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.

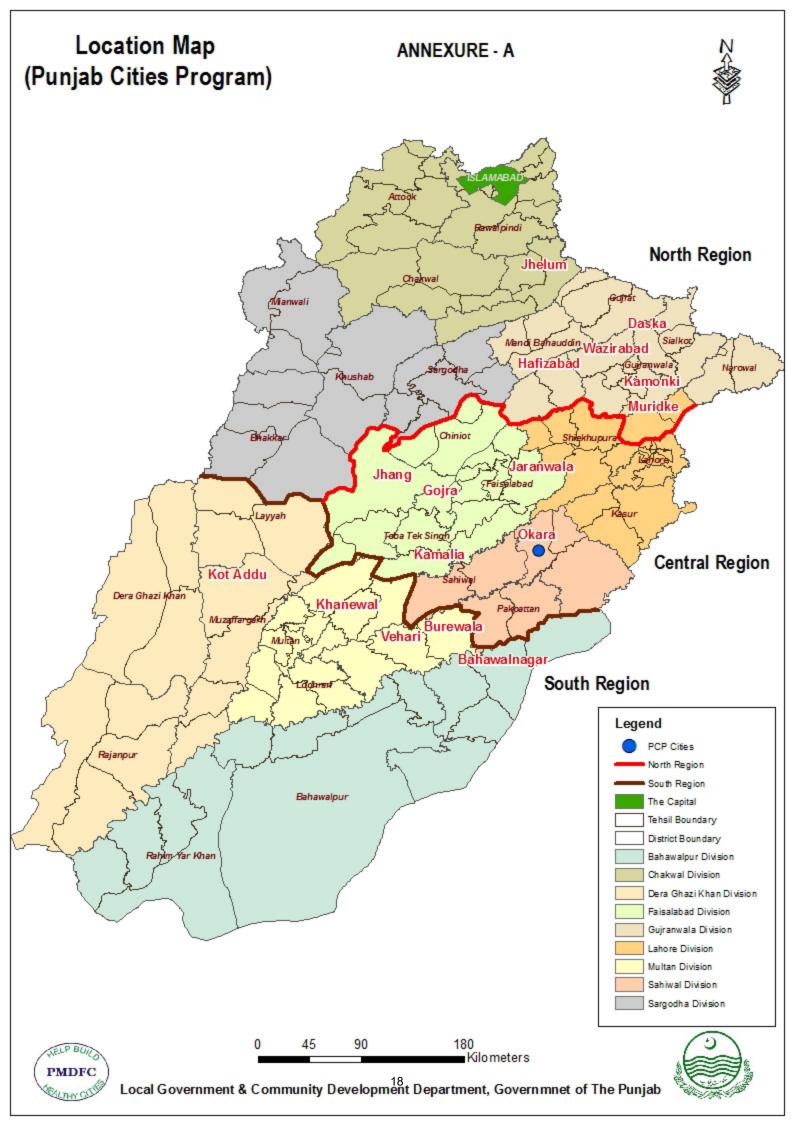
Prepared by	JERS Consultancy (Pvt) Ltd	Stamp & Signatures	
Checked by	Municipal officer (Infrastructure) MC Okara	Stamp & Signatures	
Sheeked by	Chief Officer MC Okara	Stamp & Signatures	
Forwarded by	Administrator MC Okara	Stamp & Signatures	

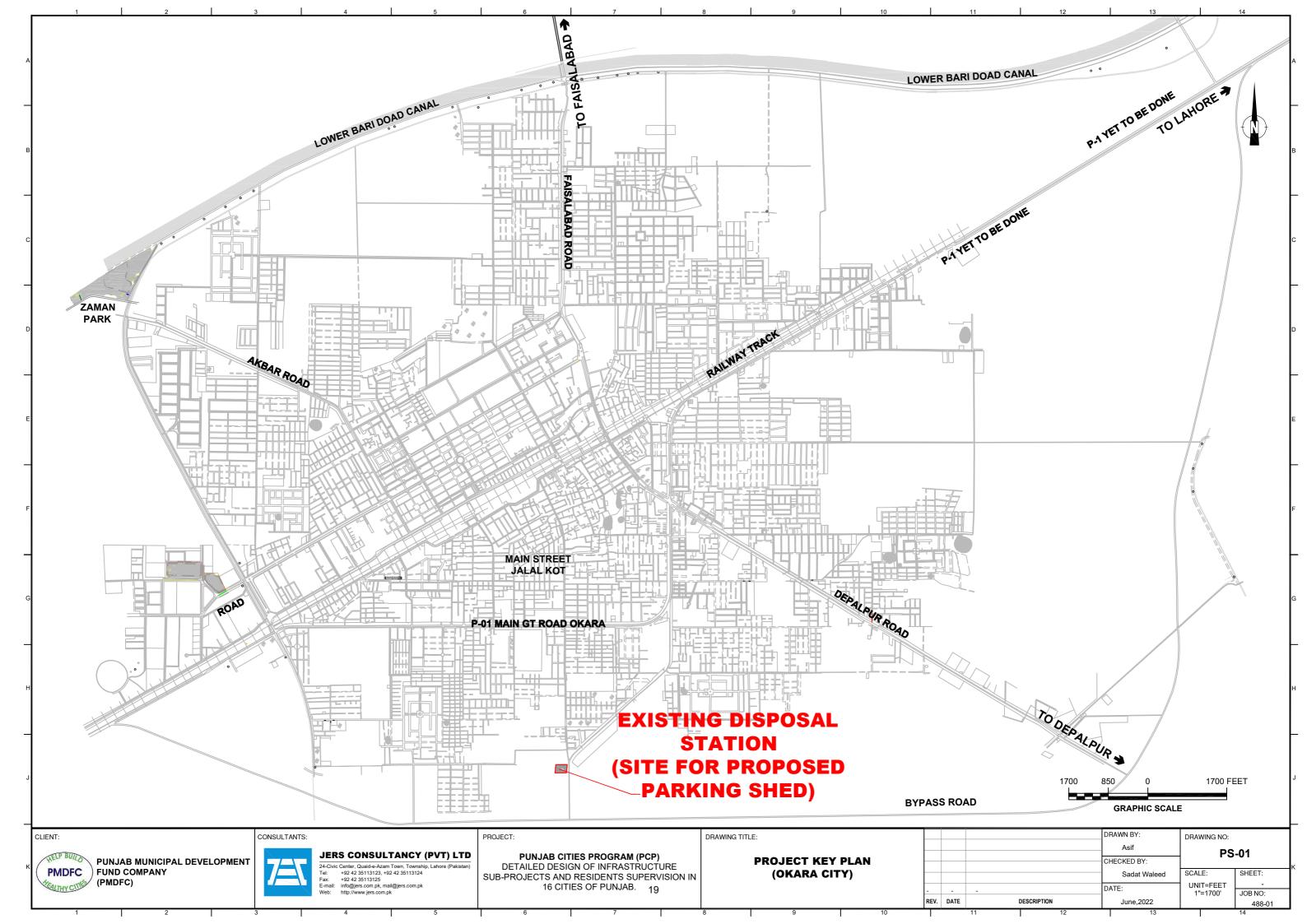
Annexure-1 Annual Recurrent Cost

Annual Recurrent Cost after Completion of the Project

Cost Category	Cost Breakup	Cost per Annum				
Annual Maintenance Cost of	1% of Project Cost	761,574				
The Civil Works	= 0.01*(76,157,412)					
Annual Man Power Cost of	Rs.25,000/month	300,000				
One Guard						
Total cost per Annum (Million Rs.) 1,061,574						

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

Construction SWM Parking Area MC Okara

Detailed Cost Estimate

August, 2022



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DETAILED COST ESTIMATE

SWM PARKING AREA (OKARA)

SUMMARY

Sr. No.	Description	Amount (Rs)
1	OFFICE BUILDING	
i	Civil Work	1,030,779
ii	Plumbing Work	92,474
iii	Electrical Work	135,923
2	SITTING ROOM	
i	Civil Work	922,065
ii	Plumbing Work	81,758
iii	Electrical Work	114,461
3	GUARD ROOM	
i	Civil Work	495,926
ii	Plumbing Work	6,518
iii	Electrical Work	82,940
4	STORE ROOM	
i	Civil Work	2,074,860
ii	Plumbing Work	6,518
iii	Electrical Work	167,953
5	WORK SHOP	
i	Civil Work	2,460,636
ii	Plumbing Work	83,361
iii	Electrical Work	424,106
6	PARKING SHED (SIZE 150' x 32')	
i	Civil Work	12,978,922
iii	Electrical Work	483,292
7	PARKING SHED (SIZE 120' x 32')	
i	Civil Work	10,467,264
iii	Electrical Work	378,115
8	PARKING SHED (SIZE 72' x 32') (2 Nos.)	
i	Civil Work	12,560,493
iii	Electrical Work	578,282
9	WASHING PIT	518,186

DETAILED COST ESTIMATE

SWM PARKINGAREA (OKARA)

SUMMARY

Sr. No.	Description	Amount (Rs)
9	GENERATOR PAD	164,401
10	PUMP PAD	15,093
11	SEPTIC TANK	296,030
12	EXTERNAL WORK (BOUNDARY WALL + TUFF PVER + LAWN)	15,382,645
13	EXTERNAL PLUMBING WORK	1,019,777
14	EXTERNAL ELECTRICAL WORK	8,416,765
15	TUBEWELL	4,383,849
16	ENVIRONMENTAL HEALTH & SAFETY COST	112,425
17	DISMANTLING WORK	221,596
	Total Rs.	76,157,412
	Contingencies @ 2%	1,523,148
	PRA Charges @ 5%	3,807,871
	Total Amount. Rs.	81,488,431

DETAILED COST ESTIMATE

OFFICE BUILDING

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	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	0.48	10,677.75	5,125
			1000CI	0.40	10,077.73	3,123
		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	808.25	9.25	7,476
		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	0.64	28,986.90	18,552
		(4)	100 010	0.0.	20,700.70	10,002
		Brick work in Foundation				
4	7/4/i	Pacca brick work in foundation and plinth in:-				
		Cement, sand mortar:- Ratio 1:5	100 Cft	3.73	30,136.30	112,408
		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) 1½" thick (40 mm)	100 Sft	0.58	8,642.10	5,012
		1) 1/2 tillek (40 lillil)	100 511	0.56	0,042.10	3,012
		Vertical D.P.C				
6	6/38	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	0.78	6,462.40	5,041
					,	,
		Brick work in Super Structure				
7	7/5	Pacca brick work in ground floor:-				
		i) Cement, sand mortar:- Ratio 1:5	100 Cft	6.15	32,320.10	198,769

DETAILED COST ESTIMATE

OFFICE BUILDING

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		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	169.00	556.50	94,049
		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	5.43	31,781.75	172,575
		Sand Filling				
10	7/30	Supplying and filling sand under floor; or plugging in wells.	100 Cft	6.24	2,943.30	18,366
		Brick ballast				
11	6/2	Dry rammed brick or stone ballast, 1½" to 2"(40 mm to 50 mm) gauge.	100 Cft	0.75	9,089.50	6,817
11	6/2	1	100 Cft	0.75	9,089	0.50

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS

SUPERVISION IN 16 CITIES OF PUNJAB

DETAILED COST ESTIMATE

OFFICE BUILDING

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		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	0.38	38,178.90	14,508
		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	192.00	211.60	40,627
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	18.48	292.75	5,410
		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	35.00	240.00	8,400
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	168.00	292.75	49,182
Щ		1) 12 x18 /12 x24 /10 x24 /8 x24 /12 x30	1 61 311	100.00	474.13	47,104

DETAILED COST ESTIMATE

OFFICE BUILDING

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		CL L DL 4				
17	11/10/	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 56	2.27	2 709 60	0.410
		1.3)	100 Sft	2.27	3,708.60	8,419
		Cement Plaster				
18	11/9	Cement Plaster Cement plaster 1:4 upto 20' (6.00 m) height:-				
10	11/7	3/4" (20 mm) thick	100 Sft	7.46	4,379.60	32,672
		57 1 (20 mm) thick	100 511	7.10	1,377.00	32,072
		Pointing				
19	11/18/a	Cement pointing struck joints, on walls, upto 20'				
		(6.00 m) hiehgt:-				
		a) ratio 1:2	100 Sft	7.72	3,518.35	27,162
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	7.72	652.50	5,037
		Distempering				
21	11/23	Distempering:-				
		iii) three coats	100 Sft	9.73	1,295.00	12,600
		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				
		11/4" (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)				
		X O IIIII)	Per Sft	42.00	2,025.05	85,052

DETAILED COST ESTIMATE

OFFICE BUILDING

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
23	12/22	Lock Providing and fixing, approved quality mortice lock.	Each	2.00	771.50	1,543
		D-:4				
24	13/5/c	Paint Painting new surface:- Preparing surface and painting of doors and windows any type (including edges):-	100.00	0.01	1.000.00	1.005
		i) priming coat.	100 Sft	0.84	1,292.00	1,085
		ii) Second coat	100 Sft	0.84	711.40	598
		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	1,081.90	56,259
		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.	100 Sft	2.92	11,356.45	33,161
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	292.00	7.85	2,292
20	0/3.5	Khurras	E- 1	1.00	0.7.7.00	0.55
28	9/15	Khuras on roof 2'x2'x6" (600 x 600 x 150 mm)	Each	1.00	855.00	855
		Bottom Khuras				
29	9/16	Bottom Khuras of brick masonry in cement mortar 1:6, 4'x2'x4½" (1200x600x113 mm) over 3" (75 mm) cement concrete 1:4:8.	Each	1.00	1,727.45	1,727
		Total Rs.				1,030,779
		I otal Rs.				1,000,117

OFFICE BUILDING

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	59.00	2.50	2.50	368.75	Cft
	Toilet wall	1	18.50	2.50	2.50	115.63	Cft
					Total	484.38	Cft
					Total	0.48	0/ a C 64
					Total	0.48	%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.						
	Office wall	1	59.00	7.50		442.50	Sft
	Toilet wall	1	18.50	7.50		138.75	Sft
	Floor	1	16.00	12.00		192.00	Sft
		1	7.00	5.00		35.00	Sft
					Total	808.25	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	1	50.00	2.50	0.22	40.60	
	Office wall	1	59.00	2.50	0.33	48.68	Cft
	Toilet wall	1	18.50	2.50	0.33	15.26	Cft
					Total	63.94	Cft
					Total	0.64	%Cft
					1000	U•U-T	70010

OFFICE BUILDING

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	59.00	1.875	0.25	27.66	Cft
	Step - 2	1	59.00	1.500	0.25	22.13	Cft
	Step - 3	1	59.00	1.125	0.25	16.59	Cft
	Step - 4	1	59.00	0.750	4.92	217.71	Cft
	Toilet wall						
	Step - 1	1	18.50	1.875	0.25	8.67	Cft
	Step - 2	1	18.50	1.500	0.25	6.94	Cft
	Step - 3	1	18.50	1.125	0.25	5.20	Cft
	Step - 4	1	18.50	0.750	4.92	68.27	Cft
					Total	373.16	Cft
					Total	3.73	%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	59.00	0.75		44.25	Sft
	Toilet wall	1	18.50	0.75		13.88	Sft
					Total	58.13	Sft
					Total	0.58	%Sft
	Vertical D.P.C						
6	Providing and laying vertical damp proof course						
	with cement sand plaster and bitumen coating:-	L					
	(a) with one coat of bitumen and one coat of						
	polythene sheet 500 gauge:	L					
	ii) Ratio 1:3 3/4 " thick (20 mm)						
	Office wall	1	59.00		1.00	59.00	Sft
	Toilet wall	1	18.50		1.00	18.50	Sft
					Total	77.50	Sft
					Total	0.78	%Sft

OFFICE BUILDING

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	59.00	0.75	10.50	464.63	Cft
	Toilet wall	1	18.50	0.75	10.50	145.69	Cft
	Parapet Wall	1	73.50	0.38	2.50	68.91	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	614.92	Cft
					Total	6.15	%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.):-						
	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	17.50	13.50	0.50	118.13	Cft
	Toilet Slab	1	6.50	8.50	0.50	27.63	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						
	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	2	7.00	0.75	0.75	7.88	Cft
	V-1	1	3.00	0.75	0.75	1.69	Cft
					Total	169.00	Cft

OFFICE BUILDING

CALCULATION OF QUANTITIES

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)					169.00	Cft
	Top Slab & lintel @ 6.75 lbs / Cft		6.75		=	1,140.75	lbs/cft
				Total	=	1,140.75	lbs/cft
				Total	=	517.58	Kg.
			Add 5% V	Wastage.	=	25.88	Kg.
				Total	=	543	Kg
					Total	5.43	%kg
	Sand Filling						
10	Supplying and filling sand under floor; or plugging in wells.						
	Floor	1	12.00	16.00	2.75	528.00	Cft
	toilet	1	7.00	5.00	2.75	96.25	Cft
					Total	624.25	Cft
					Total	6.24	%Cft
	Brick ballast						
11	Dry rammed brick or stone ballast, 1½" to 2"(40 mm to 50 mm) gauge.						
	Floor	1	12.00	16.00	0.33	63.36	Cft
	toilet	1	7.00	5.00	0.33	11.55	Cft
					Total	74.91	Cft
					Total	0.75	%Cft
	P.C.C						
12	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):	l					
	(f) Ratio 1: 2: 4						
	Floor	1	12.00	16.00	0.17	32.00	Cft
	toilet	1	7.00	5.00	0.17	5.83	Cft
					Total	0.38	%Cft

OFFICE BUILDING

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	16.00		192.00	Sft
					Total	192.00	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						
	(i) 400 mm x 400 mm	1	56.00		0.33	18.48	Sft
					Total	18.48	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	5.00		35.00	Sft
					Total	25.00	CIP4
					Total	35.00	Sft

OFFICE BUILDING

CALCULATION OF QUANTITIES

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	5.00		7.00	70.00	Sft
					Total	168.00	Sft
	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	16.00		192.00	Sft
		1	7.00	5.00		35.00	Sft
		•	7.00	3.00			
					Total	2.27	%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	16.00		10.50	336.00	Sft
	Toilet						
		2	7.00		10.50	147.00	Sft
		2	5.00		10.50	105.00	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	746.00	Sft
					Total	7.46	%Sft

OFFICE BUILDING

CALCULATION OF QUANTITIES

19	Pointing Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:- a) ratio 1:2 Outer Walls	1					
((6.00 m) hiehgt:- a) ratio 1:2	1					
	<i>'</i>	1					
	Outer Walls	1					
			73.50		10.50	771.75	Sft
					Total	771.75	Sft
					Total	7.72	%Sft
]	Extra cost of labour and material for red oxide pigment in cement pointing to match with the colour						
	of bricks.				Total	7.72	%Sft
	D: 4						
	Distempering						
	Distempering:- iii) three coats						
	Office Room						
	Office Room	2	12.00		10.50	252.00	Sft
		2	16.00		10.50	336.00	Sft
,	Toilet		10.00		10.50	330.00	- 511
	Tonet	2	7.00		10.50	147.00	Sft
		2	5.00		10.50	105.00	Sft
	Slab	1	12.00	16.00	10.00	192.00	Sft
	-	1	7.00	5.00		35.00	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	973.00	Sft
					Total	9.73	%Sft

OFFICE BUILDING

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Wooden Door						
22	Providing and fixing 11/2" (40 mm) thick hollow						
	flush doors and windows with commercial ply (3						
	ply) on both faces of deodar wood shutter frame						
	11/4" (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 $1\frac{1}{2}$ "x $1\frac{1}{2}$ "x $\frac{1}{4}$ ", 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	CIP4
					Total	42.00	Sft
	Lock						
23							
	Providing and fixing, approved quality mortice lock.	2				2.00	Each
	Paint						
24	Painting new surface:-						
	Preparing surface and painting of doors and						
	windows any type (including edges):-						
	i) priming coat.						
	ii) Second coat				Total	0.84	Sft
	Steel Window						
25	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 3/4"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:-						
	b) fixed with wire gauze, 22 SWG						
	v) glass pane 5 mm thick						
	W-1	2	6.00		4.00	48.00	Sft
	V-1	1	2.00		2.00	4.00	Sft
					Total	52.00	Sft

OFFICE BUILDING

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Roof Insulation						
26	Single layer of tiles 9"x4½"x1½" (225x113x40						
	mm) laid over 4"(100 mm) earth and 1" (25 mm)	l					
	mud plaster without Bhoosa, grouted with cement	l					
	sand 1:3 on top of RCC roof slab, provided with 34	l					
	lbs. per %Sft. or 1.72 Kg/Sq.m bitumen coating sand blinded.						
	Roof area	1	17.50	13.50		236.25	Sft
		1	6.50	8.50		55.25	Sft
					Total	291.50	Sft
					TD 4 1	2.02	0/ 08/
					Total	2.92	%Sft
27	Supplying and laying polythene sheet over D.P.C.						
21	under floors and on roofs, etc.						
	ii) 500 gauge (.005" thick)				Total	292.00	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
		1				1.00	Eacil

DETAILED COST ESTIMATE

OFFICE BUILDING

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Schedule Item				
		Indian W.C				
1	19-4-i	Providing and fitting glazed earthen ware water				
1	13-4-1	closet, squatter type (Orisa pattern), combined with foot rest.				
		i) white	Each	1.00	2,218.35	2,218
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	2,649.35	2,649
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	5,169.95	5,170
4	19-30	Providing and fixing, chromium plated mixing valve, for wash hand basin, sink or shower.	Each	1.00	2,228.75	2,229
6	19-16	Providing and fixing, chromium plated soap dish.	Each	1.00	278.75	279
8	19-20	Providing and fixing looking glass 55x40 cm (22"x16") size	Each	1.00	638.15	638
9	19-27	Providing and fixing chromium plated bib cock:-				
	17-27	i) 2 cm (3/4")	Each	1.00	1,015.00	1,015
10	19-28	Providing and fixing chromium plated tee stop cock 15mm (1/2").	Each	3.00	955.00	2,865
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	627.95	628
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").	Fach	1.00	1 109 95	1 100
		(12 A12).	Each	1.00	1,108.85	1,109

PUNJAB CITIES PROGRAM (PCP)

DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB

DETAILED COST ESTIMATE

OFFICE BUILDING

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	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	283.15	566
		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	66.50	1,463
		(iii) (1") 32 mm	Rft	16.50	106.90	1,764
		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	1,434.00	1,434
		iii) 1" dia	Each	1.00	1,674.00	1,674
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	88.45	1,769
		(v) 4"(110 mm)	Rft	80.00	217.25	17,380
		(vi) 6"(160 mm)	Rft	20.00	420.65	8,413

DETAILED COST ESTIMATE

OFFICE BUILDING

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	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	106.60	21,320
		Total Rs. (A)				74,583
		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	17,890.62	17,891
		Total Rs. (B)				17,891
						00 (=)
		Total Amount Rs. (A + B)				92,474

DETAILED COST ESTIMATE

OFFICE BUILDING

ELECTRICAL WORKS

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
		Scheduled Items (A)				
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	81.70	30,638
2	C-24/3-iii	Supply and erection of PVC pipe for wiring recessed				
_	2 6	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	94.60	4,730
		completed with all specified. (25 min #a)	100	20.00	700	.,,,,,
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)	Rft.	1,125.00	25.70	28,913
		(3.02)	11111	1,120.00		20,510
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)	Rft.	150.00	40.75	6,113
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	53.80	26,900
		(7.030)	IXII.	300.00	33.00	20,700
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")	Each	12.00	270.60	3,247
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	372.35	372
	1	,, r ()	1	1		

DETAILED COST ESTIMATE

OFFICE BUILDING

ELECTRICAL WORKS

	2 . 1 DT A 1					
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
8	C-24/32-ii	Supply and erection of switches 10/15 Amp.				
o	C-24/32-II	(Recessed Type)	Each	12.00	87.35	1,048
9	C-24/36-i	Supply and erection of 3 pin switch and Plug		4.00	112.00	440
		combined, recessed type. (5Amps)	Each	4.00	112.00	448
10	C-24/36-ii	Supply and erection of 3 pin switch and Plug				
		combined recessed type (10/15Amps)	Each	5.00	149.80	749
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	6.00	2,164.65	12,988
					,	,
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	3,133.00	3,133
		Sub Total (A)				119,278
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	Each	1.00	1,215.00	1,215
14	N.S	Supply, installation and commissioning recessed		1.00	1 420 00	1 420
		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" steel body, complete with				
		capacitor, hanging rod, canopy, blades, dimmers nuts		2.00	7,000,00	14 000
		and bolts complete in all respect.	Each	2.00	7,000.00	14,000
		Sub Total (B)				16,645
		Cub Total (A : D)				125 022
		Sub Total (A+B)				135,923

DETAILED COST ESTIMATE

SITTING ROOM

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Schedule Item				
	2/24/ //	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	0.47	10 (55 55	4.00#
		ii) in ordinary soil.	1000Cft	0.45	10,677.75	4,805
		A st m				
_	26/42	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.	9.0			
		the Engineer menarge.	Sft	716.25	9.25	6,625
		D 1 G 1 G				
2	615	Plain Cement Concrete				
3	6/5	Cement concrete plain including placing,				
		compacting, finishing and curing complete (including screening and washing of stone				
		(including screening and washing of stone aggregate):				
		(i) Ratio 1: 4: 8	100 Cft	0.59	28,986.90	17,102
		(1) Katio 1. 4. 8	100 CIt	0.39	28,980.90	17,102
		Brick work in Foundation				
4	7/4/i	Pacca brick work in foundation and plinth in:-				
	17 17 2	Cement, sand mortar:- Ratio 1:5	100 Cft	3.44	30,136.30	103,669
						,
		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) 1½" thick (40 mm)	100 Sft	0.54	8,642.10	4,667
		Vertical D.P.C				
6	6/38	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:	100			
		ii) Ratio 1:3 3/4 " thick (20 mm)	100 Sft	0.72	6,462.40	4,653
		Brick work in Super Structure				
7	7/5	Pacca brick work in ground floor:-	10-	_		
		i) Cement, sand mortar:- Ratio 1:5	100 Cft	5.64	32,320.10	182,285

DETAILED COST ESTIMATE

SITTING ROOM

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		C 4 W 1				
8	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.):-				
		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	142.50	556.50	79,301
		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	4.58	31,781.75	145,560
		G I True				
10	7/30	Sand Filling Supplying and filling sand under floor; or plugging in wells.	100 Cft	4.95	2,943.30	14,569
		Brick ballast				
11	6/2	Dry rammed brick or stone ballast, 1½" to 2"(40 mm to 50 mm) gauge.	100 Cft	0.59	9,089.50	5,363

DETAILED COST ESTIMATE

SITTING ROOM

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
12	6/5	Plain Cement Concrete Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):				
		Ratio 1: 2: 4	100 Cft	0.30	38,178.90	11,454
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	150.00	211.60	31,740
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	16.50	292.75	4,830
15	10/24	Ceramic Tile 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	30.00	240.00	7,200
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	154.00	292.75	45,084

DETAILED COST ESTIMATE

SITTING ROOM

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		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	1.80	3,708.60	6,675
		Cement Plaster				
18	11/9	Cement plaster 1:4 upto 20' (6.00 m) height:-				
		3/4" (20 mm) thick	100 Sft	6.62	4,379.60	28,993
		Pointing				
19	11/18/a	Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-				
		a) ratio 1:2	100 Sft	7.30	3,518.35	25,684
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	7.30	652.50	4,763
		Distempering				
21	11/23	Distempering:-				
		iii) three coats	100 Sft	8.42	1,295.00	10,904
		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	2,025.05	85,052

DETAILED COST ESTIMATE

SITTING ROOM

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Lock				
23	12/22	Providing and fixing, approved quality mortice lock.	Each	2.00	771.50	1,543
		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	1,292.00	1,085
		ii) Second coat	100 Sft	0.84	711.40	598
		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"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:-				
		b) fixed with wire gauze, 22 SWG				
		v) glass pane 5 mm thick	Per Sft	52.00	1,081.90	56,259
		Roof Insulation				
26	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	2.39	11,356.45	27,142
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	239.00	7.85	1,876
		Vhuuno				
28	9/15	Khurras Khuras on roof 2'x2'x6" (600 x 600 x 150 mm)	Each	1.00	855.00	855
29	9/16	Bottom Khuras Bottom Khuras of brick masonry in cement mortar 1:6, 4'x2'x41/2" (1200x600x113 mm) over 3" (75 mm) cement concrete 1:4:8.	Each	1.00	1,727.45	1,727
		Total Rs.				922,065
						·

SITTING ROOM

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.						
	Room wall	1	53.00	2.50	2.50	331.25	Cft
	Toilet wall	1	18.50	2.50	2.50	115.63	Cft
					Total	446.88	Cft
					Total	0.45	%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	53.00	7.50		397.50	Sft
	Toilet wall	1	18.50	7.50		138.75	Sft
	Floor	1	15.00	10.00		150.00	Sft
		1	6.00	5.00		30.00	Sft
					Total	716.25	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		FO 00	2.50	0.22	40.70	
	Room wall	1	53.00	2.50	0.33	43.73	Cft
	Toilet wall	1	18.50	2.50	0.33	15.26	Cft
		-			Total	58.99	Cft
					Total	0.59	%Cft
		-			Total	0.59	70 CII

SITTING ROOM

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						
	Room wall						
	Step - 1	1	53.00	1.875	0.25	24.84	Cft
	Step - 2	1	53.00	1.500	0.25	19.88	Cft
	Step - 3	1	53.00	1.125	0.25	14.91	Cft
	Step - 4	1	53.00	0.750	4.92	195.57	Cft
	Toilet wall						
	Step - 1	1	18.50	1.875	0.25	8.67	Cft
	Step - 2	1	18.50	1.500	0.25	6.94	Cft
	Step - 3	1	18.50	1.125	0.25	5.20	Cft
	Step - 4	1	18.50	0.750	4.92	68.27	Cft
					Total	344.27	Cft
					Total	3.44	%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)						
	Room wall	1	53.00	0.75		39.75	Sft
	Toilet wall	1	18.50	0.75		13.88	Sft
					Total	53.63	Sft
					Total	0.54	%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)		#2 05		4.00	## OC	~ -
	Room wall	1	53.00		1.00	53.00	Sft
	Toilet wall	1	18.50		1.00	18.50	Sft
					Total	71.50	Sft
					m	o =c	2455
					Total	0.72	%Sft

SITTING ROOM

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						
	Room wall	1	53.00	0.75	10.50	417.38	Cft
	Toilet wall	1	18.50	0.75	10.50	145.69	Cft
	Parapet Wall	1	69.50	0.38	2.50	65.16	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	563.92	Cft
					Total	5.64	%Cft
	Concrete Work						
8	Providing and laying reinforced cement concrete						
	(including prestressed concrete), using coarse sand						
	and screened graded and washed aggregate, in	l					
	required shape and design, including forms, moulds,	l					
	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	16.50	11.50	0.50	94.88	Cft
	Toilet Slab	1	7.50	6.50	0.50	24.38	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						
	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	2	7.00	0.75	0.75	7.88	Cft
	V-1	1	3.00	0.75	0.75	1.69	Cft
					Total	142.50	Cft

SITTING ROOM

CALCULATION OF QUANTITIES

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)					142.50	Cft
	Top Slab & lintel @ 6.75 lbs / Cft		6.75		=	961.88	lbs/cft
				Total	=	961.88	lbs/cft
			A 44 50/	Total	=	436.42 21.82	Kg.
			Add 5%	Wastage. Total	=	458	Kg.
					Total	4.58	%kg
	C1 F211						<u> </u>
10	Sand Filling Supplying and filling sand under floor; or plugging in wells.						
	Floor	1	15.00	10.00	2.75	412.50	Cft
	toilet	1	6.00	5.00	2.75	82.50	Cft
					Total	495.00	Cft
					Total	4.95	%Cft
	Brick ballast						
11	Dry rammed brick or stone ballast, 1½" to 2"(40 mm to 50 mm) gauge.						
	Floor	1	15.00	10.00	0.33	49.50	Cft
	toilet	1	6.00	5.00	0.33	9.90	Cft
					Total	59.40	Cft
					Total	0.59	%Cft
	P.C.C						
12	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):	ı					
	Ratio 1: 2: 4						
	Floor	1	15.00	10.00	0.17	25.00	Cft
	toilet	1	6.00	5.00	0.17	5.00	Cft
					Total	0.30	%Cft

SITTING ROOM

CALCULATION OF QUANTITIES

13 Proglasiz add i/c cur and	orcelain Tile roviding and laying superb quality Porcelain lazed tiles flooring of MASTER brand of specified ze in approved design, Color and Shade with the latest of bond over 3/4" thick (1:3)cement plaster to the cost of sealer for finishing the joints i/c atting grinding complete in all respect as approved and directed by the Engineer Incharge. O (Non-Skid Chequred Tiles) 300mmx300mm roviding and laying superb quality Porcelain lazed tiles of Master brand, skirting/ dado of	1	15.00	10.00		150.00	Sft
gla siz adi i/c cu	lazed tiles flooring of MASTER brand of specified ze in approved design, Color and Shade with thesive / bond over 3/4" thick (1:3)cement plaster to the cost of sealer for finishing the joints i/c atting grinding complete in all respect as approved and directed by the Engineer Incharge. O (Non-Skid Chequred Tiles) 300mmx300mm Troviding and laying superb quality Porcelain lazed tiles of Master brand, skirting/ dado of	1	15.00	10.00		150.00	Sft
siz adi i/c cu and	ze in approved design, Color and Shade with thesive / bond over 3/4" thick (1:3)cement plaster to the cost of sealer for finishing the joints i/c atting grinding complete in all respect as approved and directed by the Engineer Incharge. O (Non-Skid Chequred Tiles) 300mmx300mm roviding and laying superb quality Porcelain lazed tiles of Master brand, skirting/ dado of	1	15.00	10.00		150.00	Sft
ad i/c cu an	thesive / bond over 3/4" thick (1:3)cement plaster to the cost of sealer for finishing the joints i/c atting grinding complete in all respect as approved and directed by the Engineer Incharge. O (Non-Skid Chequred Tiles) 300mmx300mm roviding and laying superb quality Porcelain lazed tiles of Master brand, skirting/ dado of	1	15.00	10.00		150.00	Sft
i/c cu an	c the cost of sealer for finishing the joints i/c atting grinding complete in all respect as approved and directed by the Engineer Incharge. O (Non-Skid Chequred Tiles) 300mmx300mm roviding and laying superb quality Porcelain lazed tiles of Master brand, skirting/ dado of	1	15.00	10.00		150.00	Sft
cu an	atting grinding complete in all respect as approved and directed by the Engineer Incharge. (Non-Skid Chequred Tiles) 300mmx300mm roviding and laying superb quality Porcelain lazed tiles of Master brand, skirting/ dado of	1	15.00	10.00		150.00	Sft
an	o (Non-Skid Chequred Tiles) 300mmx300mm roviding and laying superb quality Porcelain lazed tiles of Master brand, skirting/ dado of	1	15.00	10.00		150.00	Sft
	(Non-Skid Chequred Tiles) 300mmx300mm roviding and laying superb quality Porcelain lazed tiles of Master brand, skirting/ dado of		15.00	10.00		150.00	Sft
(d)	roviding and laying superb quality Porcelain azed tiles of Master brand, skirting/ dado of		15.00	10.00		150.00	Sft
	azed tiles of Master brand, skirting/ dado of						
	azed tiles of Master brand, skirting/ dado of			I	Total	150.00	Sft
	azed tiles of Master brand, skirting/ dado of						
14 Pro							
	pecified size, Color and Shade with adhesive/ bond						
	ver 1/2" thick (1:2)cement plaster i/c the cost of						
	nd sealer for finishing the joints, cutting grinding						
	omplete in all respect as approved and directed by						
	e Engineer Incharge.						
	Full body Glazed Tile						
(i)) 400 mm x 400 mm	1	50.00		0.33	16.50	Sft
					Total	16.50	Sft
Ce	eramic Tile						
	roviding and laying superb quality Ceramic tile						
	oors of Master brand of specified size,						
	lossy/Matt/Texture of approved Color and Shade						
	s per approved design with adhesive bond, over						
	4" thick (1;2) cement sand plaster i/c the cost of						
	ealer for finishing the joints i/c cutting grinding						
	omplete in all respects and as approved and						
dir	rected by the Engineer Incharge.						
i) i	12"x18"/12"x24"/10"x24" /8"x24"/12"x36"	1	6.00	5.00		30.00	Sft
					Total	30.00	Sft
					Total	30.00	211

SITTING ROOM

CALCULATION OF QUANTITIES

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	6.00		7.00	84.00	Sft
		2	5.00		7.00	70.00	Sft
					Total	154.00	Sft
	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	15.00	10.00		150.00	Sft
		1	6.00	5.00		30.00	Sft
					Total	1.80	%Sft
	Cement Plaster						
18	Cement plaster 1:4 upto 20' (6.00 m) height:-						
	3/4" (20 mm) thick						
	Sitting Room						
		2	15.00		10.50	315.00	Sft
		2	10.00		10.50	210.00	Sft
	Toilet		100		10.70	12 < 00	
		2	6.00		10.50	126.00	Sft
	D/1 D 1 W' . 1	2	5.00		10.50	105.00	Sft
	D/d Doors and Window	1	2.50		7.00	(24.50)	C.C.
	D-1 D-2	-1 -1	3.50 2.50		7.00	(24.50) (17.50)	Sft Sft
	W-1	-2	6.00		4.00	(48.00)	Sft
	V-1	-1	2.00		2.00	(4.00)	Sft
		1	2.00		2.00	(1.00)	DIL
					Total	662.00	Sft
					Total	6.62	%Sft

SITTING ROOM

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	69.50		10.50	729.75	Sft
					Total	729.75	Sft
					Total	129.13	SIL
					Total	7.30	%Sft
20	Extra cost of labour and material for red oxide pigment in cement pointing to match with the colour of bricks.				Total	7.30	%Sft
	Distempering						
21	Distempering:-						
	iii) three coats						
	Sitting Room						
		2	15.00		10.50	315.00	Sft
		2	10.00		10.50	210.00	Sft
	Toilet						
		2	6.00		10.50	126.00	Sft
		2	5.00		10.50	105.00	Sft
	Slab	1	15.00	10.00		150.00	Sft
		1	6.00	5.00		30.00	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	842.00	Sft
					Total	8.42	%Sft

SITTING ROOM

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Wooden Door						
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						
	11/4" (30 mm) thick and partal wood braces at about						
	3" (75 mm) apart and deodar wood lipping						
	11/2"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 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
22	Lock						
23	Providing and fixing, approved quality mortice lock.					2.00	
	D-14	2				2.00	Each
24	Paint Painting a consequence						
24	Painting new surface:-						
	Preparing surface and painting of doors and windows any type (including edges):-						
	<u> </u>						
	i) priming coat. ii) Second coat				Total	0.84	Sft
	Steel Window				Total	0.04	SIL
25	Providing and fixing steel windows with openable						
23	glazed panels, using beam section for frame						
	1½"x1"x5/8"x1/8" (40x25x16x3 mm), Z-section for						
	leaves 3/4"x1"x3/4"x1/8" (20x25x20x3 mm), T-	l					
	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,	l					
	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	2	6.00		4.00	48.00	Sft
	V-1	1	2.00		2.00	4.00	Sft
					Total	52.00	CP4
					าบเลา	34.00	Sft

SITTING ROOM

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	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	16.50	11.50		189.75	Sft
		1	7.50	6.50		48.75	Sft
					Total	238.50	Sft
					Total	2.39	%Sft
27	Summing and leading a shaken school area. D.D.C.						
21	Supplying and laying polythene sheet over D.P.C. under floors and on roofs, etc.						
					TD 4 1	220.00	G Ø i
	ii) 500 gauge (.005" thick)				Total	239.00	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'x4½" (1200x600x113 mm) over 3" (75						
	mm) cement concrete 1:4:8.	1				1.00	Each

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS

SUPERVISION IN 16 CITIES OF PUNJAB

DETAILED COST ESTIMATE SITTING ROOM

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	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	2,218.35	2,218
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	2,649.35	2,649
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	5,169.95	5,170
4	19-30	Providing and fixing, chromium plated mixing valve, for wash hand basin, sink or shower.	Each	1.00	2,228.75	2,229
6	19-15	Providing and fixing, chromium plated soap dish.	Each	2.00	278.75	558
8	19-20	Providing and fixing looking glass 55x40 cm (22"x16") size	Each	1.00	638.15	638
9	19-27	Providing and fixing chromium plated bib cock:-				
		i) 2 cm (¾")	Each	1.00	1,015.00	1,015
10	19-28	Providing and fixing chromium plated tee stop cock 15mm (½").	Each	3.00	955.00	2,865
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	627.95	628
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").	l	1.00	1,108.85	1,109
1.2	10.07.**	D II I GUI IIDII				
13	19-35-ii	Providing and fitting "P" trap:- ii) 10 cm (4") glazed.	Each	2.00	202 15	566
	<u> </u>	10 cm (4) grazed. 57	Lacii	2.00	283.15	566

PUNJAB CITIES PROGRAM (PCP)

DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB

DETAILED COST ESTIMATE

SITTING ROOM

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		DDD C D				
14	23-47	PPRC Pipe 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	66.50	1,463
		(iii) (1") 32 mm	Rft	33.00	106.90	3,528
		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	1,434.00	1,434
		iii) 1" dia	Each	1.00	1,674.00	1,674
		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	20.00	88.45	1,769
		(v) 4"(110 mm)	Rft	60.00	217.25	13,035

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS

SUPERVISION IN 16 CITIES OF PUNJAB

DETAILED COST ESTIMATE SITTING ROOM

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	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.	P.Gln	200.00	106.60	21,320
		Total Rs. (A)				63,868
		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	17,890.62	17,891
		Total Rs. (B)				17,891
		Total Amount Rs. (A + B)				81,758

DETAILED COST ESTIMATE

SITTING ROOM

ELECTRICAL WORKS

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
		Scheduled Items (A)				
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.	300.00	81.70	24,510
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.	75.00	94.60	7,095
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).		900.00	25.70	22 120
		(3.029)	KII.	900.00	25.70	23,130
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)	Rft.	250.00	40.75	10,188
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	53.80	26,900
		(7.030)	Kit.	300.00	33.60	20,900
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")	Each	10.00	270.60	2,706
7	C-24/14-ii	Supply and erection of M.S. sheet box of 16 SWG,				
′	C-24/14-11	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	372.35	372
<u> </u>	1	mores for regulators, switches, plugs, etc. (7 x4)	Lacii	1.00	314.33	312

DETAILED COST ESTIMATE

SITTING ROOM

ELECTRICAL WORKS

	2nd BI-Annual-					
Sr. No.	2022 (July to Dec) Okara	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
	G 24/22 **					
8	C-24/32-ii	Supply and erection of switches 10/15 Amp.	Each	8.00	87.35	699
		(Recessed Type)	Eacii	8.00	07.33	099
9	C-24/36-i	Supply and erection of 3 pin switch and Plug				
		combined, recessed type. (5Amps)	Each	4.00	112.00	448
	~ ~					
10	C-24/36-ii	Supply and erection of 3 pin switch and Plug	Eash	5.00	140.00	740
		combined recessed type (10/15Amps)	Each	5.00	149.80	749
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	4.00	1,221.70	4,887
12	C-24/102/a	Providing and fixing Copper winded Exhaust fan				
12	C 2 1/ 102/ u	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.	Г 1	1.00	2 122 00	2 122
		(a) Plastic body (ii) 12 " dia	Each	1.00	3,133.00	3,133
		Sub Total (A)				104,816
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	Eash	1.00	1 215 00	1 215
		all respects	Each	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" steel body, complete with				
		capacitor, hanging rod, canopy, blades, dimmers nuts				
		and bolts complete in all respect.	Each	1.00	7,000.00	7,000
		Cul. Total (D)				9,645
		Sub Total (B)				3,043
		Sub Total (A+B)				114,461
						,

DETAILED COST ESTIMATE

GUARD ROOM

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	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	10,677.75	2,883
		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	28,986.90	10,145
		Brick work in Foundation				
4	7/4/i	Pacca brick work in foundation and plinth in:-				
	7/-7/1	Cement, sand mortar:- Ratio 1:5	100 Cft	2.07	30,136.30	62,382
		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) 1½" thick (40 mm)	100 Sft	0.32	8,642.10	2,765
		Vertical D.P.C				
6	6/38	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	0.43	6,462.40	2,779

DETAILED COST ESTIMATE

GUARD ROOM

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	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	32,320.10	114,736
		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:-	D.CG	75.70	556.50	40.170
		Type C (nominal mix 1: 2: 4)	P.Cft	75.78	556.50	42,172
		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	31,781.75	77,547
		Sand Filling				
10	7/30	Supplying and filling sand under floor; or plugging in wells.	100 Cft	2.75	2,943.30	8,094
		Brick ballast				
11	6/2	Dry rammed brick or stone ballast, 1½" to 2"(40 mm to 50 mm) gauge.	100 Cft	0.33	9,089.50	3,000

DETAILED COST ESTIMATE

GUARD ROOM

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	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	38,178.90	6,490
		D 11 mm				
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	211.60	21,160
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	292.75	3,864
		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	3,708.60	3,709
		Cement Plaster				
16	11/9	Cement plaster 1:4 upto 20' (6.00 m) height:- 3/4" (20 mm) thick	100 Sft	3.80	4,379.60	16,642
		Dointing				
17	11/18/a	Pointing Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-				
		a) ratio 1:2	100 Sft	4.83	3,518.35	16,994
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	652.50	3,152

DETAILED COST ESTIMATE

GUARD ROOM

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		D: /				
10	11/23	Distempering				
19	11/23	Distempering:- iii) three coats	100 Cft	4.90	1 205 00	6 216
		in) three coats	100 Sft	4.80	1,295.00	6,216
		Wooden Door				
20	12/49-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				
		11/4" (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"x1/4" (50 mm x 6 mm)				
			Per Sft	24.50	2,025.05	49,614
		Lock				
21	12/21	Providing and fixing, approved quality mortice lock.				
21	12/21	1 Toviding and Tixing, approved quanty mortice lock.	Each	1.00	771.50	772
		Paint				
22	13/5/c	Painting new surface:-				
		Preparing surface and painting of doors and				
		windows any type (including edges):-				
		i) priming coat.	100 Sft	0.49	1,292.00	633
		ii)Two coat	100 Sft	0.49	711.40	349
		Steel Window				
23	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 3/4"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:-				
		b) fixed with wire gauze, 22 SWG				
		v) glass pane 5 mm thick	Per Sft	16.00	1,081.90	17,310

DETAILED COST ESTIMATE

GUARD ROOM

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	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.		1.32	11,356.45	14,991
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	7.85	1,036
		Khurras				
26	9/15	Khuras on roof 2'x2'x6" (600 x 600 x 150 mm)	Each	1.00	855.00	855
		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	1,727.45	1,727
		Total Rs.				495,926

GUARD ROOM

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.						
	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						
	Room wall	1	43.00	2.50	0.33	35.48	Cft
					Total	35.48	Cft
					Total	0.35	%Cft

GUARD ROOM

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						
	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
	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)						
	Room wall	1	43.00	0.75		32.25	Sft
					Total	16.13 12.09 158.67 207.05 2.07 32.25 32.25	Sft
					Total	0.32	%Sft
	Vertical D.P.C					2.07 32.25 32.25 0.32 43.00	
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		Sft
					Total	0.43	%Sft

GUARD ROOM

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						
	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
					TD 4.1	2.55	0/ (20)
					Total	3.55	%Cft
	Concrete Work						
8	Providing and laying reinforced cement concrete						
	(including prestressed concrete), using coarse sand	l					
	and screened graded and washed aggregate, in						
	required shape and design, including forms, moulds,	l					
	shuttering, lifting, compacting, curing, rendering	l					
	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	l					
	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

GUARD ROOM

CALCULATION OF QUANTITIES

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)					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% V		=	11.60	Kg.
				Total	=	244	Kg
					Total	2.44	%kg
					10441	2,11	70 N g
	Sand Filling						
10	Supplying and filling sand under floor; or plugging in wells.						
	Floor	1	10.00	10.00	2.75	275.00	Cft
					Total	275.00	Cft
					Total	2.75	%Cft
					Total	4.13	70CIt
	Brick ballast						
11	Dry rammed brick or stone ballast, 1½" to 2"(40 mm to 50 mm) gauge.						
	Floor	1	10.00	10.00	0.33	33.00	Cft
					Total	275.00 2.75	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		10.00	10.00	0.15		
	Floor	1	10.00	10.00	0.17	16.67	Cft
					Total	0.17	%Cft

GUARD ROOM

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
- 1.00	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	l					
	i/c the cost of sealer for finishing the joints i/c	l					
	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
					1000	100.00	510
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.						
	<u> </u>						
	a) Full body Glazed Tile (i) 400 mm x 400 mm	1	40.00		0.33	13.20	Sft
	(1) 400 Hilli X 400 Hilli	1	+0.00		0.55	13.20	511
					Total	13.20	Sft
	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)						
		1	10.00	10.00		100.00	Sft
					Total	1.00	%Sft
	Cement Plaster				Total	1.00	%SIL
16	Cement plaster 1:4 upto 20' (6.00 m) height:-						
	3/4" (20 mm) thick						
	Guard Room						
		2	10.00		10.50	210.00	Sft
	D/ID IW I	2	10.00		10.50	210.00	Sft
	D/d Doors and Window D-1	-1	3.50		7.00	(24.50)	Sft
	W-1	-1	4.00		4.00	(16.00)	Sft
		1	1.00			(10.00)	DIL
					Total	379.50	Sft
					Total	3.80	%Sft
					I otal	3.00	/0311

GUARD ROOM

CALCULATION OF QUANTITIES

CIVIL WORK

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Pointing						
17	Cement pointing struck joints, on walls, upto 20' (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	1 92	%Sft
					Total	4.03	70SIL
18	Extra cost of labour and material for red oxide pigment in cement pointing to match with the colour of bricks.				Total	483.00 1 483.00 1 483.00 1 483.00 1 4.83 1 4.83 1 00 1 00.00 1 00.00 1 00.00 1 479.50	%Sft
	Distempering						
19	Distempering:						
17	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						
	D-1	-1	3.50		7.00	(24.50)	Sft
	W-1	-1	4.00		4.00	(16.00)	Sft
					Total	479.50	Sft
					Total	4.80	%Sft
	Wooden Door						
20	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 1½" (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"x½", 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

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GUARD ROOM

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Lock						
21	Providing and fixing, approved quality mortice lock.						
		1				1.00	Each
	Paint						
22	Painting new surface:-						
	Preparing surface and painting of doors and						
	windows any type (including edges):-						
	i) priming coat.						
	ii)Two coat				Total	0.49	Sft
	Steel Window						
23	Providing and fixing steel windows with openable						
	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"x3/4"x1/8" (20x25x20x3 mm), T-	l					
	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
					Total	16.00	Sft
2 :	Roof Insulation						
24	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	11.50	11.50		132.25	Sft
					Total	132.25	Sft
					Total	1.32	%Sft

GUARD ROOM

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
25	Supplying and laying polythene sheet over D.P.C.						
	under floors and on roofs, etc.						
	ii) 500 gauge (.005" thick)				Total	132.00	Sft
	Khurras						
26	Khuras on roof 2'x2'x6" (600 x 600 x 150 mm)	1				1.00	Each
	Bottom Khuras						
27	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

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) Okara	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		uPVC Pipe				
1	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)				
		(v) 4"(110 mm)	Rft	30.00	217.25	6,518
		Total Rs.				6,517.50

DETAILED COST ESTIMATE

GUARD ROOM

ELECTRICAL WORKS

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
1	C-24/3-ii	Scheduled Items (A) Supply and erection of PVC pipe for wiring recessed				
1	C-24/3-II					
		in walls, including bends, inspection joints, boxes,				
		pull boxes, hook, cutting and repair surface etc.		• • • • • • •	0.4 = 0	4 4 6 40
		completed with all specified. (20 mm i/d)	Rft.	200.00	81.70	16,340
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	94.60	4,730
		ompresse with an specifical (as min 2 e)			,	.,,
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	159.50	15,950
			IXII.	100.00	137.30	13,730
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	25.70	15,420
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)	Rft.	150.00	40.75	6,113
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)		200.00	53.80	10,760
		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			22.00	13,700
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	270.60	2,165

DETAILED COST ESTIMATE

GUARD ROOM

ELECTRICAL WORKS

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	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	372.35	372
9	C-24/32-ii	Supply and erection of switches 10/15 Amp. (Recessed Type)	Each	3.00	87.35	262
10	C-24/36-i	Supply and erection of 3 pin switch and Plug combined, recessed type. (5Amps)	Each	3.00	112.00	336
11	C-24/36-ii	Supply and erection of 3 pin switch and Plug combined recessed type (10/15Amps)	Each	7.00	149.80	1,049
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	1,221.70	2,443
		Sub Total (A)				75,940
13	N.S	Supply, Installation, testing and commissioning of following size 56" steel body, 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+B)				82,940

DETAILED COST ESTIMATE

STORE ROOM

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Schedule Item				
		Excavation				
1	3/21/a/ii	Excavation in foundation of building, bridges and				
	e, = =, ==	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	0.72	10,677.75	7,688
		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.	a.c.	1 (20 00	0.25	4 - 0
		the Engineer include.	Sft	1,628.88	9.25	15,067
		Plain Cement Concrete				
3	6/5	Cement concrete plain including placing,				
3	0,3	compacting, finishing and curing complete				
		(including screening and washing of stone				
		aggregate):				
		(i) Ratio 1: 4: 8	100 Cft	0.94	28,986.90	27,248
		Brick work in Foundation				
4	7/4/i	Pacca brick work in foundation and plinth in:-				
-+	7/4/1	Cement, sand mortar:- Ratio 1:5	100 Cft	5.51	30,136.30	166,051
		Cement, sand mortar Ratio 1.5	100 Cit	3.31	30,130.30	100,031
		Horizontal D.P.C				
5	6/37	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)	100 Sft	0.86	8,642.10	7,432
		Vertical D.P.C				
6	6/38	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 ¾ " thick (20 mm)	100 Sft	1.15	6,462.40	7,432
		Brick work in Super Structure				
7	7/5	Pacca brick work in ground floor:-	100000			·
		i) Cement, sand mortar:- Ratio 1:5	100 Cft	9.25	32,320.10	298,961

DETAILED COST ESTIMATE

STORE ROOM

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		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	598.84	556.50	333,257
		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	19.26	31,781.75	612,117
		a				
10	7 /20	Sand Filling				
10	7/30	Supplying and filling sand under floor; or plugging in wells.	100 Cft	20.34	2,943.30	59,867
		Brick ballast				
11	6/2	Dry rammed brick or stone ballast, 1½" to 2"(40 mm to 50 mm) gauge.	100 Cft	2.44	9,089.50	22,178

DETAILED COST ESTIMATE

STORE ROOM

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Tuff Paver				
12	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)				
		b) 60-mm thick	Per Sft	739.63	151.35	111,943
		Slab Plaster				
13	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	7.40	3,708.60	27,444
		Cement Plaster				
14	11/9	Cement Plaster 1:4 upto 20' (6.00 m) height:-				
		3/4" (20 mm) thick	100 Sft	10.29	4,379.60	45,066
		Pointing				
15	11/18/a	Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-				
		a) ratio 1:2	100 Sft	12.55	3,518.35	44,155
16	11/31	Extra cost of labour and material for red oxide pigment in cement pointing to match with the colour of bricks.	100 Sft	12.55	652.50	8,189
		Distempering				
17	11/23	Distempering:-				
		iii) three coats	100 Sft	17.69	1,295.00	22,909
		Wooden Door				
18	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	2,025.05	49,614

DETAILED COST ESTIMATE

STORE ROOM

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Lock				
19	12/22	Providing and fixing, approved quality mortice lock.	Each	1.00	771.50	772
		Paint				
20	13/5/c	Painting new surface:- Preparing surface and painting of doors and windows any type (including edges):-				
		i) priming coat.	100 Sft	0.49	1,292.00	633
		ii)Two coat	100 Sft	0.49	711.40	349
		Steel Window				
21	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	96.00	1,081.90	103,862
		Roof Insulation				
22	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	8.24	11,356.45	93,577
23	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	824.00	7.85	6,468
		Khurras				
24	9/15	Khuras on roof 2'x2'x6" (600 x 600 x 150 mm)	Each	1.00	855.00	855
		Bottom Khuras				
25	9/16	Bottom Khuras of brick masonry in cement mortar 1:6, 4'x2'x4½" (1200x600x113 mm) over 3" (75 mm) cement concrete 1:4:8.	Each	1.00	1,727.45	1,727
		Total Rs.				2,074,860
		Total Its				_,071,000

STORE ROOM

CALCULATION OF QUANTITIES

				Height	Qty.	Unit
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.						
Room wall	1	114.50	2.50	2.50	715.63	Cft
				Total	715.63	Cft
				Total	0.72	%oCft
Anti-Termite				Total	0.72	/00CIt
<u>*</u>						
Ability-HEXTAR with Ratio (1:250) = 540 Sft or						
equivalent approved liquid applying with shower						
· · · · · · · · · · · · · · · · · · ·						
Engineer Incharge.						
Room wall	1	114.50	7.50		858.75	Sft
Floor	1	25.25	30.50		770.13	Sft
				Total	1,628.88	Sft
Plain Cement Concrete					·	
Cement concrete plain including placing,						
compacting, finishing and curing complete						
(including screening and washing of stone						
Room wall	1	114.50	2.50			Cft
				Total	94.46	Cft
				Total	0.94	%Cft
Brick work in Foundation				10001	0.51	70010
Pacca brick work in foundation and plinth in:-						
Cement, sand mortar:- Ratio 1:5						
Room wall						
Step - 1	1	114.50	1.875	0.25	53.67	Cft
Step - 2	1	114.50	1.500	0.25	42.94	Cft
Step - 3	1	114.50	1.125	0.25	32.20	Cft
Step - 4	1	114.50	0.750	4.92	422.51	Cft
				Total	551.32	Cft
				Total	5.51	%Cft
	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. Room wall Anti-Termite 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 Floor Plain Cement Concrete Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate): (i) Ratio 1: 4: 8 Room wall Brick work in Foundation Pacca brick work in foundation and plinth in:- Cement, sand mortar:- Ratio 1:5 Room wall Step - 1 Step - 2 Step - 3	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. Room wall Anti-Termite 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 Plain Cement Concrete Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate): (i) Ratio 1: 4: 8 Room wall 1 Brick work in Foundation Pacca brick work in foundation and plinth in:- Cement, sand mortar:- Ratio 1:5 Room wall Step - 1 Step - 2 Step - 3	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. Room wall Anti-Termite 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 1 114.50 Plain Cement Concrete Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate): (i) Ratio 1: 4: 8 Room wall 1 114.50 Brick work in Foundation Pacca brick work in foundation and plinth in:- Cement, sand mortar:- Ratio 1:5 Room wall Step - 1 1 114.50 Step - 2 1 114.50	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. Room wall Anti-Termite 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 Plain Cement Concrete Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate): (i) Ratio 1: 4: 8 Room wall 1 114.50 2.50 Brick work in Foundation Pacca brick work in foundation and plinth in:- Cement, sand mortar:- Ratio 1:5 Room wall Step - 1 1 114.50 1.875 Step - 2 1 114.50 1.500 Step - 3	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. Room wall Anti-Termite 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 1 114.50 7.50 Floor 1 25.25 30.50 Plain Cement Concrete Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate): (i) Ratio 1: 4: 8 Room wall 1 114.50 2.50 0.33 Total Brick work in Foundation Pacca brick work in foundation and plinth in:- Cement, sand mortar:- Ratio 1:5 Room wall Step - 1 1 114.50 1.875 0.25 Step - 2 1 114.50 1.700 0.25 Step - 3 Step - 4 1 114.50 0.750 4.92 Total	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. Room wall

STORE ROOM

CALCULATION OF QUANTITIES

Sr. 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) 1½" thick (40 mm)						
	Room wall	1	114.50	0.75		85.88	Sft
					Total	85.88	Sft
					Total	0.86	%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 ¾ " thick (20 mm)						
	Room wall	1	114.50		1.00	114.50	Sft
					Total	114.50	Sft
					7 7. 1	4.4	0 / 570
					Total	1.15	%Sft
	Brick work in Super Structure						
7	Pacca brick work in ground floor:-						
	i) Cement, sand mortar:- Ratio 1:5						
	Room wall	1	114.50	0.75	10.50	901.69	Cft
	Parapet Wall	1	114.50	0.38	2.50	107.34	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
	W-1	-4	6.00	0.75	4.00	(72.00)	Cft
					Total	924.66	Cft
					Total	9.25	%Cft
	Concrete Work						

STORE ROOM

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
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)				0	/	
	Top Slab	1	25.75	32.00	0.50	412.00	Cft
	Slab Beam	2	25.75	1.50	2.00	154.50	Cft
	Sun shade	1	5.50	1.50	0.25	2.06	Cft
	Sun shade	4	8.00	1.50	0.25	12.00	Cft
	Doors and window Lintels						
	D-1	1	4.50	0.75	0.75	2.53	Cft
	W-1	4	7.00	0.75	0.75	15.75	Cft
					T-4-1	500.04	CIE
					Total	598.84	Cft
	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)					598.84	Cft
	Top Slab & lintel @ 6.75 lbs / Cft		6.75		=	4,042.20	lbs/cft
			3.73	Total	=	4,042.20	lbs/cft
				Total	=	1,834.03	Kg.
			Add 5% V		=	91.70	Kg.
				Total	=	1,926	Kg
					Total	19.26	%kg
						2/120	, v.1.5
	Sand Filling						
10	Supplying and filling sand under floor; or plugging in wells.						
	Floor	1	24.25	30.50	2.75	2,033.97	Cft

STORE ROOM

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
					Total	2,033.97	Cft
					Total	20.34	%Cft
					1000	20.01	70010
	Brick ballast						
11	Dry rammed brick or stone ballast, 1½" to 2"(40 mm to 50 mm) gauge.						
	Floor	1	24.25	30.50	0.33	244.08	Cft
					Total	244.08	Cft
					Total	2.44	%Cft
					Total	2,44	70CIt
	Tuff Paver						
12	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)						
	b) 60-mm thick	1	24.25	30.50		739.63	Sft
					Total	739.63	Sft
	Slab Plaster						
13	Cement plaster 3/8" (10 mm) thick under soffit of R.C.C. roof slabs only, upto 20' height. (Ratio:- 1:3)						
		1	24.25	30.50		739.63	Sft
					TF-4-1	7.40	0/ (184
					Total	7.40	%Sft
	Cement Plaster						
14	Cement plaster 1:4 upto 20' (6.00 m) height:-						
	3/4" (20 mm) thick						
	Sitting Room						
		2	24.25		10.50	509.25	Sft
	D/d Doors and Window	2	30.50		10.50	640.50	Sft
	D/d Doors and Window D-1	-1	3.50		7.00	(24.50)	Sft
	W-1	-1 -4	6.00		4.00	(96.00)	Sft
	2		3.00			(20.00)	Dit
					Total	1,029.25	Sft
					T-4 1	10.20	0/50
					Total	10.29	%Sft

STORE ROOM

CALCULATION OF QUANTITIES

15 C	Description Pointing	No.	Length	Width	Height	Qty.	
15 C	~						
	Cement pointing struck joints, on walls, upto 20' 6.00 m) hiehgt:-						
) ratio 1:2 Outer Walls	1	119.50		10.50	1,254.75	Sft
					Total	1,254.75	Sft
					Total	12.55	%Sft
p:	Extra cost of labour and material for red oxide igment in cement pointing to match with the colour f bricks.				Total	12.55	%Sft
	Distempering						
	Distempering:-						
ii	ii) three coats						
S	tore Room	2	24.25		10.50	509.25	Sft
		2	30.50		10.50	640.50	Sft
	Ceiling	1	24.25	30.50		739.63	Sft
D	O/d Doors and Window						
)-1	-1	3.50		7.00	(24.50)	Sft
V	V-1	-4	6.00		4.00	(96.00)	Sft
					Total	1,768.88	Sft
					Total	17.69	%Sft
v	Vooden Door						
fl pr 11 3 11 (f cc 1c	Providing and fixing 1½" (40 mm) thick hollow lush doors and windows with commercial ply (3 dly) on both faces of deodar wood shutter frame ½" (30 mm) thick and partal wood braces at about " (75 mm) apart and deodar wood lipping ½"x3/8" (40 mmx10 mm) fixed with M.S. chowkat frame) including chromium plated fittings, etc. omplete in all respects (without sliding bolt or ock):- M.S. angle iron ½"x½"x¼", welded (40 mmx40 mmx 6mm) with M.S. flat 2"x¼" (50 mm x 6 mm)						
)-1	1	3.50		7.00	24.50	Sft
T.	Lock				Total	24.50	Sft

STORE ROOM

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
19	Providing and fixing, approved quality mortice lock.	1				1.00	Each
	Doi:u4						
20	Paint Painting new surface:-						
20	Preparing surface and painting of doors and						
	windows any type (including edges):-						
	i) priming coat.						
	ii)Two coat				Total	0.49	Sft
	II) I wo com				Total	0.47	SIL
	Steel Window						
21	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 3/4"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:-						
	b) fixed with wire gauze, 22 SWG v) glass pane 5 mm thick						
	W-1	4	6.00		4.00	96.00	CC
	VV - 1	4	0.00		4.00	90.00	Sft
					Total	96.00	Sft
					Total	70.00	SIL
	Roof Insulation						
22	Single layer of tiles 9"x4½"x1½" (225x113x40						
22	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	25.75	32.00		824.00	Sft
	1001 area	-	23.73	32.00	Total	824.00	Sft
					Total	021.00	Sit
					Total	8.24	%Sft
23	Supplying and laying polythene sheet over D.P.C.						
	under floors and on roofs, etc.						
	ii) 500 gauge (.005" thick)				Total	824.00	Sft
	Khurras						
24	Khuras on roof 2'x2'x6" (600 x 600 x 150 mm)	1				1.00	Each

	PUNJAB CITIES PROGRAM (PCP)									
DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS										
SUPERVISION IN 16 CITIES OF PUNJAB										
	STORE ROOM									
	CALCULATION OF QUANTITIES									
	CIVIL V	VORE	K							
Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit			

STORE ROOM

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Bottom Khuras						
25	Bottom Khuras of brick masonry in cement mortar 1:6, 4'x2'x4½" (1200x600x113 mm) over 3" (75						
	mm) cement concrete 1:4:8.	1				1.00	Each

PUNJAB CITIES PROGRAM (PCP)

DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB

DETAILED COST ESTIMATE

STORE ROOM

PLUMBING WORKS

	2nd BI-Annual-					
Sr. No.	2022 (July to Dec) Okara	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		uPVC Pipe				
1	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)				
		(v) 4"(110 mm)	Rft	30.00	217.25	6,518
		Total Rs.				6,517.50

DETAILED COST ESTIMATE

STORE ROOM

ELECTRICAL WORKS

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
		Scheduled Items (A)				
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.	550.00	81.70	44,935
2	G 24/2 :::	a l l i i conta i c				
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.	75.00	94.60	7,095
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)	Rft.	1,650.00	25.70	42,405
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)	Rft.	250.00	40.75	10,188
_	C 24/10- :	Complementary of circular and DVC involved				
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.	300.00	53.80	16,140
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")	Each	8.00	270.60	2,165
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	372.35	372
	1	I.	L			

DETAILED COST ESTIMATE

STORE ROOM

ELECTRICAL WORKS

Sr.	2nd BI-Annual- 2022 (July to	Descrit d	TT- *4	0	Rate	A ((D)
No.	Dec) Okara	Description	Unit.	Quantity	(Rs.)	Amount (Rs.)
8	C-24/32-ii	Supply and erection of switches 10/15 Amp.				
		(Recessed Type)	Each	16.00	87.35	1,398
9	C-24/36-i	Supply and erection of 3 pin switch and Plug				
		combined, recessed type. (5Amps)	Each	6.00	112.00	672
10	C-24/36-ii	Supply and erection of 3 pin switch and Plug				
		combined recessed type (10/15Amps)	Each	6.00	149.80	899
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		12.00	215155	25.05.6
		starters. ii) single rod (40 watts) with one choke and one	Each	12.00	2,164.65	25,976
		starter.	Each	2.00	1,221.70	2,443
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	2.00	3,133.00	6,266
		Sub Total (A)				160,953
13	N.S	Supply, Installation, testing and commissioning of				
		following size 56" steel body, complete with				
		capacitor, hanging rod, canopy, blades, dimmers nuts and bolts complete in all respect.	Each	1.00	7,000.00	7,000
		and complete in an respect.	Lacii	1.00	7,000.00	7,000
		Sub Total (B)				7,000
		Sub Total (A+B)				167,953
		200 2000 (212)				_0.,,00

DETAILED COST ESTIMATE

WORK SHOP

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	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	1.25	10,677.75	13,347
		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	1,919.39	9.25	17.754
			SIL	1,919.39	9.23	17,754
		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	1.16	28,986.90	33,625
4	7/4/:	Brick work in Foundation				
4	7/4/i	Pacca brick work in foundation and plinth in:- Cement, sand mortar:- Ratio 1:5	100 Cft	3.30	30,136.30	99,450
		Centent, Sand mortar Ratio 1.3	100 CIt	3.30	30,130.30	77,430
		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) 1½" thick (40 mm)	100 Sft	0.51	8,642.10	4,407
6	6/38	Vertical D.P.C 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	0.69	6,462.40	4,459
		93				

DETAILED COST ESTIMATE

WORK SHOP

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	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	5.57	32,320.10	180,023
		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	350.30	67,433
		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	171.38	556.50	95,370
9	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	12.13	31,781.75	385,513
10	7/20	Sand Filling				
10	7/30	Supplying and filling sand under floor; or plugging in wells.	100 Cft	18.45	2,943.30	54,304

DETAILED COST ESTIMATE

WORK SHOP

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
11	6/2	Brick ballast Dry rammed brick or stone ballast, 1½" to 2"(40 mm to 50 mm) gauge.	100 Cft	0.56	9,089.50	5,090
		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	0.12	38,178.90	4,581
		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 sargodha querry to site, actual compacted depth shall be considered for payment)				
			100Cft	1.85	21,078.30	38,995
		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	1.85	24,156.91	44,690
		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	100.00	151.35	15,135
		For Work shop c) 80-mm thick	Per Sft	561.00	189.85	106,506

DETAILED COST ESTIMATE

WORK SHOP

10/24	Ceramic Tile 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	70.00		
	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	70.00		
10/25		Per Sft	70.00		
10/25			70.00	202.80	14,196
	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	238.00	209.70	49,909
	Slab Plaster				
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	1.70	3,708.60	6,305
	Cement Plaster				
11/9	Cement plaster 1:4 upto 20' (6.00 m) height:- 3/4" (20 mm) thick	100 Sft	7.15	4,379.60	31,314
	Pointing				
11/18/a	Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-				
	a) ratio 1:2	100 Sft	6.51	3,518.35	22,904
11/31	Extra cost of labour and material for red oxide pigment in cement pointing to match with the colour of bricks.	100 Sft	6.51	652.50	4,248
	Distempering				
11/23	• 0				
-	iii) three coats	100 Sft	8.85	1,295.00	11,461
1 1	1/18/a 11/31	Slab Plaster 1/10/b Cement plaster 3/8" (10 mm) thick under soffit of R.C.C. roof slabs only, upto 20' height. (Ratio:- 1:3) Cement Plaster 11/9 Cement plaster 1:4 upto 20' (6.00 m) height:- 3/4" (20 mm) thick Pointing 1/18/a Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:- a) ratio 1:2 11/31 Extra cost of labour and material for red oxide pigment in cement pointing to match with the colour of bricks. Distempering 11/23 Distempering:-	Slab Plaster 1/10/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 Cement Plaster 11/9 Cement plaster 1:4 upto 20' (6.00 m) height:- 3/4" (20 mm) thick 100 Sft Pointing 1/18/a Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:- a) ratio 1:2 100 Sft 11/31 Extra cost of labour and material for red oxide pigment in cement pointing to match with the colour of bricks. 100 Sft Distempering 11/23 Distempering:-	Slab Plaster 1/10/b Cement plaster 3/8" (10 mm) thick under soffit of R.C.C. roof slabs only, upto 20' height. (Ratio:- 1:3) Cement Plaster 11/9 Cement plaster 1:4 upto 20' (6.00 m) height:- 3/4" (20 mm) thick 100 Sft 7.15 Pointing 1/18/a Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:- a) ratio 1:2 100 Sft 6.51 11/31 Extra cost of labour and material for red oxide pigment in cement pointing to match with the colour of bricks. 100 Sft 6.51 Distempering 11/23 Distempering:-	Slab Plaster 1/10/b Cement plaster 3/8" (10 mm) thick under soffit of R.C.C. roof slabs only, upto 20' height. (Ratio:- 1:3) Cement Plaster 11/9 Cement plaster 1:4 upto 20' (6.00 m) height:- 3/4" (20 mm) thick 100 Sft 7.15 4,379.60 Pointing 1/18/a Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:- a) ratio 1:2 100 Sft 6.51 3,518.35 11/31 Extra cost of labour and material for red oxide pigment in cement pointing to match with the colour of bricks. 100 Sft 6.51 652.50 Distempering Distempering:-

DETAILED COST ESTIMATE

WORK SHOP

Sr. No.	2022 (July to Dec) Okara	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Wooden Door				
23	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	2,025.05	85,052
		Lock				
24	12/22	Providing and fixing, approved quality mortice lock.	Each	2.00	771.50	1,543
		D				
25	13/5/c	Paint Painting new surface:- Preparing surface and painting of doors and windows any type (including edges):-	100 93			1.007
		i) priming coat.	100 Sft	0.84	1,292.00	1,085
		ii)Two coat Steel Window	100 Sft	0.84	711.40	598
26	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	Dor Cft	20.00	1 001 00	21 620
\longrightarrow		v) glass pane 5 mm thick	Per Sft	20.00	1,081.90	21,638

DETAILED COST ESTIMATE

WORK SHOP

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Roof Insulation				
27	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	2.25	11,356.45	25,552
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	225.00	7.85	1,766
20	0/15	Khurras	D1.	1.00	055.00	055
29	9/15	Khuras on roof 2'x2'x6" (600 x 600 x 150 mm)	Each	1.00	855.00	855
		Bottom Khuras				
30	9/16	Bottom Khuras of brick masonry in cement mortar 1:6, 4'x2'x4½" (1200x600x113 mm) over 3" (75 mm) cement concrete 1:4:8.	Each	1.00	1,727.45	1,727
		Doubing Shod				
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	561.00	1,800.00	1,009,800
		Total Rs.				2,460,636

WORK SHOP

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.						
	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	4	7.50	6.00	4.58	824.40	Cft
					Total	1,252.53	Cft
					Total	1.25	%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.						
	Tool Room wall	1	43.00	7.50		322.50	Sft
	Toilet wall	1	25.50	7.50		191.25	Sft
	Floor	1	10.00	10.00		100.00	Sft
		1	10.00	7.00		70.00	Sft
		1	25.50	22.00		561.00	Sft
	Columns	4	27.00	4.58		494.64	Sft
		4	7.50	6.00		180.00	Sft
					Total	1,919.39	Sft
3	Plain Cement Concrete 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	4	7.50	6.00	0.33	59.40	Cft
					Total	115.91	Cft

WORK SHOP

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
					Total	1.16	%Cft
	Brick work in Foundation						
4	Pacca brick work in foundation and plinth in:-						
-+	Cement, sand mortar:- Ratio 1:5						
	Tool Room wall						
		1	43.00	1.875	0.25	20.16	Cft
	Step - 1				-	16.13	
	Step - 2	1	43.00	1.500	0.25		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		25.50	1.055	0.25	11.07	~ 0
	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	%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)						
	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 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
	Brick work in Super Structure						

WORK SHOP

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
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	62.00	0.38	2.50	58.13	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	557.26	Cft
					Total	5.57	%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:-	4	7.00	5.50	1.25	192.50	Cft
	Columnis	+	7.00	3.30	Total	192.50	Cft
					Total	174.50	CIL
	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	225.00	1.00	0.50	112.50	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	4	1.25	1.50	6.50	48.75	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	171.38	Cft
	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)					363.88	Cft
	Top Slab, lintel & Columns @ 7 lbs / Cft		7.00		=	2,547.13	lbs/cft
				Total	=	2,547.13	lbs/cft
				Total	=	1,155.68	Kg.
			Add 5% '	Wastage.	=	57.78	Kg.
				Total	=	1,213	Kg
					Total	12.13	%kg
	Sand Filling						
10	Supplying and filling sand under floor; or plugging in wells.						
	Tool Floor	1	10.00	10.00	2.50	250.00	Cft
	Toilet	1	10.00	7.00	2.75	192.50	Cft
	Work Shop Area	1	25.50	22.00	2.50	1,402.50	Cft
					Total	1,845.00	Cft
					Total	18.45	%Cft
	Brick ballast						
11	Dry rammed brick or stone ballast, 1½" to 2"(40 mm to 50 mm) gauge.						
	Tool Floor	1	10.00	10.00	0.33	33.00	Cft
	Toilet	1	10.00	7.00	0.33	23.10	Cft
					Total	56.10	Cft
					Total	0.56	%Cft
	n a a			1			
	P.C.C						

WORK SHOP

CALCULATION OF QUANTITIES

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	10.00	7.00	0.17	11.67	Cft
					Total	0.12	%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 sargodha querry to site, actual compacted depth shall be considered for payment)						
	Work Shop Area	1	25.50	22.00	0.33	185.13	Cft
	1						
					Total	1.85	%Cft
	Water Bound Macadam						
14	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	25.50	22.00	0.33	185.13	Cft
					Total	1.85	%Cft

WORK SHOP

CALCULATION OF QUANTITIES

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	10.00	10.00		100.00	Sft
	Work Shop Area	1	25.50	22.00		561.00	Sft
16	Ceramic Tile 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	10.00	7.00		70.00	Sft
					Total	70.00	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	10.00		7.00	140.00	Sft
		2	7.00		7.00	98.00	Sft
					Total	238.00	Sft
	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	10.00	10.00		100.00	Sft
		1	10.00	7.00		70.00	Sft
	Cement Plaster				Total	1.70	%Sft

WORK SHOP

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
19	Cement plaster 1:4 upto 20' (6.00 m) height:-						
	3/4" (20 mm) thick						
	Tool Room wall						
		2	10.00		10.50	210.00	Sft
		2	10.00		10.50	210.00	Sft
	Toilet						
		2	10.00		10.50	210.00	Sft
		2	7.00		10.50	147.00	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	715.00	Sft
					Total	7.15	%Sft
	Dainting						
20	Pointing Cement pointing struck joints, on walls, upto 20'						
20	(6.00 m) hiehgt:-						
	a) ratio 1:2						
	Outer Walls	1	62.00		10.50	651.00	Sft
					Total	651.00	Sft
					Total	6.51	%Sft
21	Extra cost of labour and material for red oxide						
	pigment in cement pointing to match with the colour						
	of bricks.				Total	6.51	%Sft
							, , , , ,
	Distempering						
22	Distempering:-						
	iii) three coats						
	Tool Room wall						
		2	10.00		10.50	210.00	Sft
		2	10.00		10.50	210.00	Sft
	Toilet					-	·
		2	10.00		10.50	210.00	Sft
		2	7.00		10.50	147.00	Sft
	Slab	1	10.00	10.00		100.00	Sft
		1	10.00	7.00		70.00	Sft
	D/d Doors and Window						
	D-1	-1	3.50		7.00	(24.50)	Sft

WORK SHOP

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	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	885.00	Sft
					Total	8.85	%Sft
	Wooden Door						
23	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						
	11/4" (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"x ¹ / ₄ " (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
		_				2,00	
	Paint						
25	Painting new surface:-						
	Preparing surface and painting of doors and						
	windows any type (including edges):-						
	i) priming coat.						
	ii)Two coat				Total	0.84	Sft
	Ctool Window						
	Steel Window						

WORK SHOP

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
26	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:-						
	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
					T-4-1	20.00	CP
					Total	20.00	Sft
	Roof Insulation						
27	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	225.00	1.00		225.00	Sft
					Total	225.00	Sft
					Total	2.25	%Sft
28	Supplying and laying polythene sheet over D.P.C. under floors and on roofs, etc.						
	ii) 500 gauge (.005" thick)				Total	225.00	Sft
					_		
	Khurras						
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'x4½" (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.						
		1	25.50	22.00		561.00	Sft
					Total	561.00	Sft

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS

SUPERVISION IN 16 CITIES OF PUNJAB

DETAILED COST ESTIMATE WORK SHOP

PLUMBING WORKS

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Schedule Item Indian W.C				
1	19-4-i	Providing and fitting glazed earthen ware water				
1	17-4-1	closet, squatter type (Orisa pattern), combined with foot rest.				
		i) white	Each	1.00	2,218.35	2,218
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	2,649.35	2,649
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	5,169.95	5,170
		_				
5	19-30	Providing and fixing, chromium plated mixing valve, for wash hand basin, sink or shower.	Each	1.00	2,228.75	2,229
7	19-15	Providing and fixing, chromium plated soap dish.	Each	1.00	278.75	279
8	19-20	Providing and fixing looking glass 55x40 cm (22"x16") size	Each	1.00	638.15	638
9	19-27	Providing and fixing chromium plated bib cock:-				
	17 27	i) 2 cm (34")	Each	1.00	1,015.00	1,015
					,	,
10	19-28	Providing and fixing chromium plated tee stop cock 15mm (½").	Each	3.00	955.00	2,865
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	627.95	628
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").	E. I	1.00	1 100 07	1100
		(12 A12 J.	Each	1.00	1,108.85	1,109

PUNJAB CITIES PROGRAM (PCP)

DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB

DETAILED COST ESTIMATE

WORK SHOP

PLUMBING WORKS

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
12	10.25 ::	Describing and Esting UD! tops				
13	19-35-ii	Providing and fitting "P" trap:- ii) 10 cm (4") glazed.	Each	2.00	283.15	566
		11) 10 cm (+) glazed.	Lacii	2.00	203.13	300
		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	66.50	2,195
		(iii) (1") 32 mm	Rft	33.00	106.90	3,528
		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	1,434.00	1,434
		iii) 1" dia	Each	1.00	1,674.00	1,674
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	10.00	88.45	885
		(v) 4"(110 mm)	Rft	50.00	217.25	10,863
		(vi) 6"(160 mm)	Rft	10.00	420.65	4,207

PUNJAB CITIES PROGRAM (PCP)

DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB

DETAILED COST ESTIMATE

WORK SHOP

		WORK SHOP				
		PLUMBING WORKS				
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	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	106.60	21,320
		Total Rs. (A)				65,470
		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	17,890.62	17,891
		T. (ID. (D.				1= 001
		Total Rs. (B)				17,891
		Total Amount Rs. (A + B)				83,361

DETAILED COST ESTIMATE

WORK SHOP

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
1	C-24/3-ii	Scheduled Items (A) Supply and erection of PVC pipe for wiring recessed				
1	C-24/3-11					
		in walls, including bends, inspection joints, boxes,				
		pull boxes, hook, cutting and repair surface etc.				
		completed with all specified. (20 mm i/d)	Rft.	900.00	81.70	73,530
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.				
			Rft.	100.00	94.60	0.460
		completed with all specified. (25 mm i/d)	KII.	100.00	94.00	9,460
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	185.85	18,585
4	C-24/10a i	Supply and erection of single core PVC insulated				
	2 1/10411	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).	DG	2 700 00	25.70	60.200
		(3.029)	Rft.	2,700.00	25.70	69,390
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)	Rft.	300.00	40.75	12,225
		(1.027)	IXII.	300.00	+0.73	12,223
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.	300.00	53.80	16,140
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	270.60	2,165

DETAILED COST ESTIMATE

WORK SHOP

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	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	372.35	372
9	C-24/32-ii	Supply and erection of switches 10/15 Amp. (Recessed Type)	Each	8.00	87.35	699
10	C-24/36-i	Supply and erection of 3 pin switch and Plug combined, recessed type. (5Amps)	Each	4.00	112.00	448
11	C-24/36-ii	Supply and erection of 3 pin switch and Plug combined recessed type (10/15Amps)	Each	5.00	149.80	749
13	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	3,133.00	3,133
		Sub Total (A)				206,896
14	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	35,035.00	210,210
15	N.S	Supply, Installation, testing and commissioning of following size 56" steel body, complete with capacitor, hanging rod, canopy, blades, dimmers nuts and bolts complete in all respect.		1.00	7,000.00	7,000
				1.03	.,	
		Sub Total (B)				217,210
		Sub Total (A+B)				424,106

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS

SUPERVISION IN 16 CITIES OF PUNJAB DETAILED COST ESTIMATE

PARKING SHED (SIZE 150' x 32')

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	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	3.50	10,677.75	37,372
		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	7,323.72	9.25	67,744
			510	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	7.20	07,711
		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	2.52	28,986.90	73,047
		Concrete Work			,	,
4	6/6	Providing and laying reinforced cement concrete				
'	0, 0	(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:-				
		(2) Type B (nominal mix 1: 2: 4)	P.Cft	840.00	457.75	384,510
		Above foundation				

DETAILED COST ESTIMATE

PARKING SHED (SIZE 150' x 32')

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		(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: 1½: 3)	P.Cft	198.00	612.30	121,235
5	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	59.34	31,781.75	1,885,929
6	7/30	Sand Filling Supplying and filling sand under floor; or plugging in wells. Sub Base Course	100 Cft	48.00	2,943.30	141,278
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 sargodha querry to site, actual compacted depth shall be considered for payment)				
			100Cft	15.84	21,078.30	333,880

DETAILED COST ESTIMATE

PARKING SHED (SIZE 150' x 32')

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
	Omit	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	15.84	24,156.91	382,645
			100011	13.01	21,130.71	302,013
		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	4,800.00	189.85	911,280
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	4,800.00	1,800.00	8,640,000
		Total Rs.				12,978,922

PARKING SHED (SIZE 150' x 32') CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
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.						
	Columns	12	8.50	7.50	4.58 Total	3,503.70 3,503.70	Cft Cft
					Total	3.50	%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.						
	Floor	1	150.00	32.00		4,800.00	Sft
	Columns	12	32.00	4.58		1,758.72	Sft
		12	8.50	7.50		765.00	Sft
					Total	7,323.72	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	12	8.50	7.50	0.33 Total	252.45 252.45	Cft Cft
					Total	2.52	%Cft

PARKING SHED (SIZE 150' x 32') CALCULATION OF QUANTITIES

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	12	8.00	7.00	1.25	840.00	Cft
					Total	840.00	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: 1½: 3)						
	Columns	12	1.50	2.00	5.50	198.00	Cft
	Columns	12	1.50	2.00			
	G. 1777				Total	198.00	Cft
	Steel Work.						
5	Fabrication of mild steel reinforcement for cement	l					
	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)					1,038.00	Cft
	Columns @ 12 lbs / Cft		12.00		=	12,456	lbs/cft
				Total	=	12,456	lbs/cft
				Total	=	5,652	Kg.
			Add 5% V			283	Kg.
				Total	=	5,934	Kg
					Total	59.34	%kg

PARKING SHED (SIZE 150' x 32') CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Sand Filling						
6	Supplying and filling sand under floor; or plugging in wells.						
	Shed	1	150.00	32.00	1.00	4,800.00	Cft
					Total	4,800.00	Cft
					Total	48.00	%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 sargodha querry to site, actual compacted depth shall be considered for payment)						
	Shed	1	150.00	32.00	0.33	1,584.00	Cft
					Total	15.84	%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	150.00	32.00	0.33	1,584.00	Cft

PARKING SHED (SIZE 150' 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	150.00	32.00		4,800	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	150.00	32.00		4,800	Sft

DETAILED COST ESTIMATE

PARKING SHED (SIZE 150' x 32')

	2nd BI-Annual-	<u> </u>				Ī
Sr. No.	2022 (July to Dec) Okara	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
1	C-24/3-iii	Scheduled Items (A) Supply and erection of PVC pipe for wiring recessed				
1	C 2 1/3 III	in walls, including bends, inspection joints, boxes,				
		pull boxes, hook, cutting and repair surface etc.	Rft.	200.00	91.70	24.510
		completed with all specified. (25 mm i/d)	KII.	300.00	81.70	24,510
2	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)		250.00	185.85	46,463
3	C-24/10a.i	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).		000.00	25.70	22.120
		(3.029)	Rft.	900.00	25.70	23,130
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)		600.00	40.75	24,450
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)		200.00	53.80	10,760
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")	Each	6.00	270.60	1,624
						·
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	372.35	372

DETAILED COST ESTIMATE

PARKING SHED (SIZE 150' x 32')

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
8	C-24/32-ii	Supply and erection of switches 10/15 Amp.				
		(Recessed Type)	Each	5.00	87.35	437
9	C-24/36-i	Supply and erection of 3 pin switch and Plug combined, recessed type. (5Amps)	Each	4.00	112.00	448
10	C-24/36-ii	Supply and erection of 3 pin switch and Plug combined recessed type (10/15Amps)	Each	5.00	149.80	749
		Sub Total (A)				132,942
11	N.S	Supply, installation and commissioning high bay light 100W with 120lm/w LED hanging with all accessories complete in all respects	Each	10.00	35,035.00	350,350
		Sub Total (B)				350,350
		Sub Total (A+B)				483,292

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS

SUPERVISION IN 16 CITIES OF PUNJAB DETAILED COST ESTIMATE

PARKING SHED (SIZE 120' x 32')

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	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	2.92	10,677.75	31,179
		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.				
		Engineer incharge.	Sft	5,943.10	9.25	54,974
		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	2.10	28,986.90	60,872
		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.):-				
		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:-				
		(2) Type B (nominal mix 1: 2: 4)	P.Cft	700.00	457.75	320,425
		Above foundation				

DETAILED COST ESTIMATE

PARKING SHED (SIZE 120' x 32')

2022 (July to Dec) Okara	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
	(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: 1½: 3)	P.Cft	165.00	612.30	101,030
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	49.45	31,781.75	1,571,608
7/30	Sand Filling Supplying and filling sand under floor; or plugging				
		100 Cft	38.40	2,943.30	113,023
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 sargodha querry to site, actual compacted depth shall be considered for payment)	100Cft	12.67	21,078.30	267,062
	7/30 18/3/a/ (i) +	(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: 1½: 3) Steel Work. 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) Sand Filling 7/30 Supplying and filling sand under floor; or plugging in wells. Sub Base Course 18/3/a/ 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 sargodha querry to site, actual compacted	(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: 1½: 3) Steel Work. 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) Sand Filling 7/30 Supplying and filling sand under floor; or plugging in wells. 100 Cft Sub Base Course 18/3/a/ 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 sargodha querry to site, actual compacted depth shall be considered for payment)	(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: 1½: 3) Steel Work. 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 49.45 Sand Filling 7/30 Supplying and filling sand under floor; or plugging in wells. 100 Cft 38.40 Sub Base Course 18/3/a/ Providing and laying sub-base course of stone 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 sargodha querry to site, actual compacted depth shall be considered for payment)	Dec Description Cite Quantity (Rs)

DETAILED COST ESTIMATE

PARKING SHED (SIZE 120' x 32')

Water Bound Macadam	Amount (Rs)	Unit Rate (Rs)	Quantity	Unit	Description	2nd BI-Annual- 2022 (July to Dec) Okara	Sr. No.
+ (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) 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 3,840.00 189.85 Parking Shed 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.					Water Bound Macadam		
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 3,840.00 189.85 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.	206.060	24.156.01	12.67		(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	+	8
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 3,840.00 189.85 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.	306,068	24,130.91	12.07	TOUCIL			
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.					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.	10/41	9
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.	729,024	189.85	3,840.00	Per Sft	c) 80-mm thick		
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.					Parking Shed		
310 3,040.00 1,000.00	6,912,000	1,800.00	3,840.00	Sft	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	N.S	10
Total Rs.	10,467,264				Tatal Re		
Tutai KS.	10,707,204				I otal As.		

PARKING SHED (SIZE 120' 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	10	8.50	7.50	4.58	2,919.75	Cft
					Total	2,919.75	Cft
					Total	2.92	%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		120.00 32.00	32.00 4.58		3,840.00 1,465.60	Sft Sft
		10	8.50	7.50		637.50	Sft
					Total	5,943.10	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	10	8.50	7.50	0.33	210.38	Cft
					Total	210.38	Cft
					Total	2.10	%Cft

PARKING SHED (SIZE 120' x 32') CALCULATION OF QUANTITIES

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	10	8.00	7.00	1.25	700.00	Cft
					Total	700.00	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: 1½: 3)	10	1.50	2.00	5.50	1.65.00	GC.
	Columns	10	1.50	2.00	5.50	165.00	Cft
	a				Total	165.00	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)					865.00	Cft
	Columns @ 12 lbs / Cft		12.00		=	10,380	lbs/cft
				Total	=	10,380	lbs/cft
<u> </u>				Total	=	4,710	Kg.
			Add 5% V			235	Kg.
-				Total	=	4,945	Kg
					Total	49.45	%kg

PARKING SHED (SIZE 120' x 32') CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Sand Filling						
6	Supplying and filling sand under floor; or plugging in wells.						
	Shed	1	120.00	32.00	1.00	3,840.00	Cft
					Total	3,840.00	Cft
					Total	29.40	0/ (764
					Total	38.40	%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 sargodha querry to site, actual compacted depth shall be considered for payment)						
	Shed	1	120.00	32.00	0.33	1,267.20	Cft
					Total	12.67	%Cft
					Total	12.07	/0CIt
	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	120.00	32.00	0.33	1,267.20	Cft
					Total	12.67	%Cft

PARKING SHED (SIZE 120' 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	120.00	32.00		3,840	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	120.00	32.00		3,840	Sft

PUNJAB CITIES PROGRAM (PCP)

DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB

DETAILED COST ESTIMATE

PARKING SHED (SIZE 120' x 32')

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
		Scheduled Items (A)				
1	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.	230.00	81.70	18,791
2	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)		120.00	185.85	22,302
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)		700.00	25.70	17,990
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)	Rft.	600.00	40.75	24,450
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)		200.00	53.80	10,760
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")	Each	6.00	270.60	1,624
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	372.35	372
		notes for regulators, switches, prags, etc. (/ X1)	Zuen	1.00	0,2100	

DETAILED COST ESTIMATE

PARKING SHED (SIZE 120' x 32')

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
8	C-24/32-ii	Supply and erection of switches 10/15 Amp. (Recessed Type)	Each	4.00	87.35	349
9	C-24/36-i	Supply and erection of 3 pin switch and Plug combined, recessed type. (5Amps)	Each	4.00	112.00	448
10	C-24/36-ii	Supply and erection of 3 pin switch and Plug combined recessed type (10/15Amps)	Each	5.00	149.80	749
		Sub Total (A)				97,835
11	N.S	Supply, installation and commissioning high bay light 100W with 120lm/w LED hanging with all accessories complete in all respects	Each	8.00	35,035.00	280,280
		Sub Total (B)				280,280
		Sub Total (A+B)				378,115

DETAILED COST ESTIMATE

PARKING SHED (SIZE 72' x 32')

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	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	10,677.75	18,686
		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.		3,565.86	9.25	32,984
			210		7,20	32,701
		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	1.26	28,986.90	36,523
		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.):-				
		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:-				
		(2) Type B (nominal mix 1: 2: 4)	P.Cft	420.00	457.75	192,255
		Above foundation				

DETAILED COST ESTIMATE

PARKING SHED (SIZE 72' x 32')

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		(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: 1½: 3)	P.Cft	99.00	612.30	60,618
		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	31,781.75	942,965
	7 /20	Sand Filling				
6	7/30	Supplying and filling sand under floor; or plugging in wells.	100 Cft	23.04	2,943.30	67,814
		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 sargodha querry to site, actual compacted depth shall be considered for payment)				
			100Cft	7.60	21,078.30	160,195

DETAILED COST ESTIMATE

PARKING SHED (SIZE 72' x 32')

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
	Zama H	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	7.60	24,156.91	183,592
		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	2,304.00	189.85	437,414
		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.		2,304.00	1,800.00	4,147,200
		No of One unit cost				6,280,247
		No of One unit cost				0,280,247
		No of two unit cost				12,560,493

PARKING SHED (SIZE 72' x 32') CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Everyotion						
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.						
	Columns	6	8.50	7.50	4.58 Total	1,751.85 1,751.85	Cft 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	72.00	32.00		2,304.00	Sft
	Columns	6	32.00	4.58		879.36	Sft
		6	8.50	7.50		382.50	Sft
					Total	3,565.86	Sft
	Plain Cement Concrete						
3	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):	l					
	(i) Ratio 1: 4: 8						
	Columns	6	8.50	7.50	0.33	126.23	Cft
					Total	126.23	Cft
					Total	1 26	0/ CP4
					Total	1.26	%Cft

PARKING SHED (SIZE 72' x 32') CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
110.	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
	Al						
	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: 1½: 3)						
	Columns	6	1.50	2.00	5.50	99.00	Cft
	Columns	0	1.50	2.00			Cit
					Total	99.00	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)					519.00	Cft
	Columns @ 12 lbs / Cft		12.00		=	6,228	lbs/cft
				Total	=	6,228	lbs/cft
<u> </u>				Total	=	2,826	Kg.
ļ			Add 5% V			141	Kg.
				Total	=	2,967	Kg

PARKING SHED (SIZE 72' x 32') CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
					Total	29.67	%kg
	Sand Filling						
6	Supplying and filling sand under floor; or plugging						
		1	72.00	32.00	1.00	2,304.00	Cft
			1 = 10 0		Total	2,304.00	Cft
					Total	23.04	%Cft
	Sub Base Course						
Sand Filling 6 Supplying and filling sand under floor; or plugin wells. Shed Sub Base Course 7 Providing and laying sub-base course of sproduct of approved quality and grade including placing, mixing, spreading and compaction of base material to required depth, camber and gradience according to AASHTO T-180 method-D, inclucarriage of all material to site of work complete all respect as per specifications and as directed the engineer incharge. (Pit run or bed run gradient sargodha querry to site, actual compartice depth shall be considered for payment) Shed Water Bound Macadam 8 Providing and laying base course of crushed some (Water Bound Macadam) of approved quality grade including, placing, mixing, spreading compaction of base course material to required depth, camber and grade to achieve 100% maxim modified AASHTO dry density, including carrof all material to site of work complete in all reseas per specifications and as directed by the engine incharge. (Crushed stone aggregate from sarged)							
	Shed	1	72.00	32.00	0.33	760.32	Cft
					Total	7.60	%Cft
					Total	7.00	/0CIt
	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	72.00	32.00	0.33	760.32	Cft
					Total	7.60	%Cft

PARKING SHED (SIZE 72' 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	72.00	32.00		2,304	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	72.00	32.00		2,304	Sft

DETAILED COST ESTIMATE

PARKING SHED (SIZE 72' x 32')

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
		Scheduled Items (A)				
1	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	81.70	12,255
2	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.	160.00	185.85	29,736
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)	Rft.	450.00	25.70	11,565
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)	Rft.	300.00	40.75	12,225
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.	200.00	53.80	10,760
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")	Each	4.00	270.60	1,082
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	372.35	372

DETAILED COST ESTIMATE

PARKING SHED (SIZE 72' x 32')

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
8	C-24/32-ii	Supply and erection of switches 10/15 Amp. (Recessed Type)	Each	3.00	87.35	262
9	C-24/36-i	Supply and erection of 3 pin switch and Plug combined, recessed type. (5Amps)	Each	2.00	112.00	224
10	C-24/36-ii	Supply and erection of 3 pin switch and Plug combined recessed type (10/15Amps)	Each	3.00	149.80	449
		Sub Total (A)				78,931
11	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	35,035.00	210,210
		Sub Total (B)				210,210
		Sub Total (A+B)				289,141
		No of One unit cost				289,141
		No of two unit cost				578,282

DETAILED COST ESTIMATE

WASHING PIT

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	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	0.96	10,677.75	10,251
2	7/30	Sand Filling Supplying and filling sand under floor; or plugging				
		in wells.	100Cft	1.12	2,943.30	3,296
		N. G. A.G.				
3	6/5	Plain Cement Concrete Cement concrete plain including placing,				
7	0/3	compacting, finishing and curing complete (including screening and washing of stone aggregate):				
		(c) Ratio 1: 1½: 3	100 Cft	0.57	43,876.50	25,010
		(f) Ratio 1: 2: 4	100 Cft	0.15	38,178.90	5,727
		(i) Ratio 1: 4: 8	100 Cft	1.12	28,986.90	32,465
		Brick work in Foundation				
4	7/4/i	Pacca brick work in foundation and plinth in:-				
		Cement, sand mortar:- Ratio 1:4	100 Cft	11.04	31,090.30	343,237
		Plaster				
5	11/8/b	Cement plaster 1:3 upto 20' (6.00 m) height:-				
		b) ½" (13 mm) thick	100 Sft	3.32	3,424.50	11,369
		Mosaic flooring				
6	10/22/a	1½"(40 mm) thick mosaic flooring, consisting of ½ "(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	100 Sft	0.88	19,573.00	17,224
				<u></u>		,

DETAILED COST ESTIMATE

WASHING PIT

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	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 ½"(13 mm) thick cement plaster 1:3, including rubbing and polishing, complete with finishing:				
		(a) using grey cement:				
		ii) ½"(13 mm) thick	100 Sft	3.32	20,965.90	69,607
		Total Amount Rs.				518,186

WASHING PIT

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.						
	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: 1½: 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				Total	0.13	70CIt
	Washing Pit	1	35.00	9.67	0.33	111.69	Cft
					Total	1.12	%Cft
	Brick work in Foundation						
4	Pacca brick work in foundation and plinth in:-						
	Cement, sand mortar:- Ratio 1:4						
	Washing Pit		0.00		0.50	0.11	
	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 Side walls	2	9.00 19.00	1.125 3.250	5.50 6.00	55.69 741.00	Cft
	SIGC WAIIS	2	15.00	3.250	3.00	292.50	Cft Cft
			13.00	3.230	Total	1,104.38	Cft
					Total	11.04	%Cft

WASHING PIT

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Plaster						
5	Cement plaster 1:3 upto 20' (6.00 m) height:-						
	b) ½" (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							
U	1½"(40 mm) thick mosaic flooring, consisting of ½						
	"(13 mm) mosaic topping of one part of cement and marble powder in the ratio of 3:1 and two parts of	l					
	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
	(a) using grey cement	1	33.00	2.30		67.30	SIL
					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 ½"(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
					Total	J.C)

DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB

DETAILED COST ESTIMATE

GENERATOR PAD

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	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	0.08	10,677.75	854
2	6/5	Plain Cement Concrete Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):				
		(i) Ratio 1: 4: 8	100 Cft	0.17	28,986.90	4,928
		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	572.70	45,816
		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	31,781.75	96,934

DETAILED COST ESTIMATE

GENERATOR PAD

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Theremopore Sheet				
5	6/35	Providing and fixing theremopore (foamed polythene) sheet in horizontal and vertical expansion joints:				
		a) 1" (25 mm) thick thermopore sheet	Sft	34.58	18.10	626
		Heavy Steel Work				
6	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	32,475.65	14,666
7	25/11	Erection and fitting in position iron trusses, staging of water tanks, etc.	100Kg	0.45	1,277.25	577
		Total Amount Do				164 401
		Total Amount Rs.				164,401

GENERATOR PAD

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.						
	Generator Pad	1	8.84	5.84	1.50	77.44	Cft
					Total	77.44	Cft
					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						
	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 those mentioned in 6(a) (i)&(ii) above not requiring form work (i.e. horizontal shuttering) complete in all respects:-						
		1	8.00	5.00	2.00	80.00	Cft
					Total	80.00	Cft

GENERATOR PAD

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
					T-4-1	2.05	0/1
					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
					7D 4 3	45.16	Kg
					Total	0.45	%Kg
7	Erection and fitting in position iron trusses, staging of						
′	water tanks, etc.				Total	0.45	%Kg
	maior taines, etc.				Total	U. 1 3	/0 K g

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS

SUPERVISION IN 16 CITIES OF PUNJAB

DETAILED COST ESTIMATE PUMP PAD

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	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	0.01	10,677.75	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	28,986.90	870
		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	572.70	4,582
		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	0.30	31,781.75	9,535
		Total Amount Rs.				15,093

PUMP PAD

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.						
	Pump Pad	1	2.50	2.50	1.00	6.25	Cft
					Total	0.01	%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						
	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
					Total	8.00	Cft
					2000	0.00	

PUMP PAD

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)					8.00	Cft
	Pad @ 8 lbs / Cft		8.00		=	64.00	lbs/cft
				Total	=	64.00	lbs/cft
				Total	=	29.04	Kg.
			Add 5%	Wastage.	=	1.45	Kg.
				Total	=	30	Kg
					T	0.20	2/2
					Total	0.30	%kg
					Total	0.30	

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS

SUPERVISION IN 16 CITIES OF PUNJAB DETAILED COST ESTIMATE

SEPTIC TANK

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	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	10,677.75	7,581
		D 1 G 1 G				
2	6/5	Plain Cement Concrete 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	38,178.90	12,981
		(i) Ratio 1: 4: 8	100 Cft	0.55	28,986.90	15,943
		Brick work				
3	7/7/i	Pacca brick work other than building upto 10ft. (3 m)				
		Ratio 1:3	100 Cft	4.21	33,606.10	141,482
		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	556.50	28,173

DETAILED COST ESTIMATE

SEPTIC TANK

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	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	31,781.75	40,224
		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	3,518.35	18,260
		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	11,559.50	23,119
		Angle Iron Step				
8	21/13	Providing and fixing 1¼"x1¼"x3/16" (31x31x5 mm) angle iron step, in manhole chambers, including carriage and setting the same in work to correct lines and levels.	Each	14.00	590.55	8,268
		Total Amount Rs.				296,030
						·

SEPTIC TANK

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.						
	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	
		1	39.00	1.13	0.50	21.94	
		1	39.00	0.75	9.00	263.25	
	Baffle wall	2	6.00	1.13	0.50	6.75	Cft
		2	6.00	0.75	7.00	63.00	Cft
					Total	420.75	Cft
					Total	4.21	%Cft
						.,_1	, , , , ,

SEPTIC TANK

CALCULATION OF QUANTITIES

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/c	eft		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
					TD 4 1	7.10	0/50
					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	Nec
		2				2.00	Nos.

SEPTIC TANK

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Angle Iron Step						
8	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				14.00	Nos.

DETAILED COST ESTIMATE

EXTERNAL WORK

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		BOUNDARY WALL				
1	4/13	Dismantling brick work in lime or cement mortar.				
_	1/13	Dismanting offer work in time of cement moreur.	100Cft	80.18	4,317.45	346,173
		Excavation				
2	3/21/a/ii	Excavation in foundation of building, bridges and				
_	0,21,411	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	5.13	10,677.75	54,777
		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	6,183.00	9.25	57,193
		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	6.77	28,986.90	196,241
		Brick work in Foundation				
5	7/4/i	Pacca brick work in foundation and plinth in:-				
		Cement, sand mortar:- Ratio 1:5	100 Cft	30.77	31,221.10	960,673
		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) 1½" thick (40 mm)	100 Sft	6.67	8,642.10	57,643

DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB

DETAILED COST ESTIMATE

EXTERNAL WORK

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Vertical D.P.C				
7	6/38	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	8.51	6,462.40	54,995
		Brick work in Super Structure				
8	7/5	Pacca brick work in ground floor:-				
		i) Cement, sand mortar:- Ratio 1:5	100 Cft	49.41	31,221.10	1,542,635
		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	572.70	21,047
		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	52.36	556.50	29,138
		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	31,781.75	161,769

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS

SUPERVISION IN 16 CITIES OF PUNJAB

DETAILED COST ESTIMATE

EXTERNAL WORK

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Cement Plaster				
11	11/9	Cement plaster 1:4 upto 20' (6.00 m) height:-				
		3/4" (20 mm) thick	100 Sft	64.09	4,220.85	270,514
		Pointing				
12	11/18/a	Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:-				
		a) ratio 1:2	100 Sft	64.09	3,518.35	225,491
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	64.09	652.50	41,819
		7				
14	11/23	Distempering Distempering:-				
14	11/23	iii) three coats	100 Sft	62.08	1,295.00	80,394
		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	1,928.30	221 206
			SIL	120.00	1,926.30	231,396
		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	824.15	1,978
		ii) each subsequent coat of paint.	100 Sft	2.40	490.55	1,177
		Razor Wire				
17	26/46	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	Rft	776.00	500.00	388,000

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS

SUPERVISION IN 16 CITIES OF PUNJAB DETAILED COST ESTIMATE

EXTERNAL WORK

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Tuff Paver				
		Dismantling				
18	4/29	Dismantling brick or flagged flooring without concrete foundation.	100Sft	120.00	863.50	103,620
		Borrow Earth				
19	3/5/i + 3/17	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	54.34	17,222.30	935,860
20	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	1,458.34	572.70	835,189
		Steel Work.				
21	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):-				
		<u> </u>	Į.		1	

DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB

DETAILED COST ESTIMATE

EXTERNAL WORK

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Sub Base Course				
22	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 sargodha querry to site, actual compacted depth shall be considered for payment)				
			100Cft	71.58	21,078.30	1,508,785
		Water Bound Macadam				
23	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	71.58	24,156.91	1,729,151
		Tuff Paver				
24	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	21,690.00	189.85	4,117,847
25	3/32	Turfing slopes of banks or lawns with grass sods including ploughing, laying, setting and watering (Turf got from within a distance of 5 miles (8 Km.) and maintenance for 15 days).	100 Sft	22.85	1,693.10	38,687
		Total Rs. "B"				10,659,592
		Total Rs. "A+B"				15,382,645
		161				

EXTERNAL WORK

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	BOUNDARY WALL						
1	Dismantling brick work in lime or cement mortar.				Total	80.18	%Cft
_	Excavation						
2	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	802.00	2.50	2.50	5,012.50	Cft
	Columns	3	4.00	4.00	2.50	120.00	Cft
					Total	5,132.50	Cft
					Total	5.13	%oCft
	A						
2	Anti-Termite						
3	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	l					
	equivalent approved liquid applying with shower and	l					
	certificate will be provided by the contractor for 10-						
	years complete in all respect as approved by the						
	Engineer Incharge.						
	Boundary wall	1	802.00	7.50		6,015.00	Sft
	Columns	3	16.00	2.50		120.00	Sft
		3	4.00	4.00		48.00	Sft
					Total	6,183.00	Sft
	Plain Cement Concrete						
4	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	802.00	2.50	0.33	661.65	Cft
	Columns	3	4.00	4.00	0.33	15.84	Cft
					Total	677.49	Cft
					Total	(77	0/ CP
					Total	6.77	%Cft

EXTERNAL WORK

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Brick work in Foundation						
5	Pacca brick work in foundation and plinth in:-						
	Cement, sand mortar:- Ratio 1:5						
	Boundary wall						
	Step - 1	1	802.00	1.875	0.25	375.94	Cft
	Step - 2	1	802.00	1.500	0.25	300.75	Cft
	Step - 3	1	802.00	1.125	0.25	225.56	Cft
	Step - 4	1	726.63	0.750	3.42	1,863.79	Cft
	Columns						
	Step - 1	67	1.13	1.13	3.42	290.01	Cft
	Gate Columns	3	6.50	0.38	2.84	20.77	Cft
					Total	3,076.82	Cft
					Total	30.77	%Cft
	Horizontal D.P.C						
6	Providing and laying damp proof course of cement						
U	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	776.00	0.75		582.00	Sft
	Columns	67	1.13	1.13		84.80	Sft
					Total	666.80	Sft
					Total	6.67	%Sft
	Vertical D.P.C						
7	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	776.00		1.00	776.00	Sft
	Columns	67	1.13		1.00	75.38	Sft
					Total	851.38	Sft
					Total	8.51	%Sft

EXTERNAL WORK

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Brick work in Super Structure						
8	Pacca brick work in ground floor:-						
	i) Cement, sand mortar:- Ratio 1:5						
	Boundary wall	1	700.63	0.75	8.00	4,203.75	Cft
	Columns	67	1.13	1.13	8.00	678.38	Cft
	Gate Columns	3	6.50	0.38	8.00	58.50	Cft
					Total	4,940.63	Cft
					Total	49.41	%Cft
	Concrete Work						
9	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
	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

EXTERNAL WORK

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Steel Work.						
10	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
	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						
11	Cement plaster 1:4 upto 20' (6.00 m) height:-						
	3/4" (20 mm) thick						
	Boundary wall	1	700.63		8.00	5,605.00	Sft
	Columns	67	1.50		8.00	804.00	Sft
					Total	6,409.00	Sft
					Total	64.09	%Sft
	Pointing						
12	Cement pointing struck joints, on walls, upto 20'						
12	(6.00 m) hiehgt:-						
	a) ratio 1:2						
	Outer Walls	1	700.63		8.00	5,605.00	Sft
	Columns	67	1.50		8.00	804.00	Sft
					Total	6,409.00	Sft
					Total	64.09	%Sft
13	Extra cost of labour and material for red oxide						
	pigment in cement pointing to match with the colour						
	of bricks.				Total	64.09	%Sft
	Distempering						
14	Distempering:-						
	iii) three coats						
	Boundary wall	1	776.00		8.00	6,208.00	Sft
					Total	6,208.00	Sft
					Total	62.08	%Sft

EXTERNAL WORK

CALCULATION OF QUANTITIES

No.	Description	No.	Length	Width	Height	Qty.	Unit
	Main Gate						
15	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
	,	1	20.00		0.00	120.00	SIL
16	Painting new surface:- 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						
17	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	776.00			776.00	Rft
	Tuff Paver Dismantling						
18	Dismantling brick or flagged flooring without concrete foundation.	1	400	30.00		12,000.00	Sft
					Total	120.00	%Sft

EXTERNAL WORK

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Borrow Earth						
19	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	21,690	1.00	1.00	21,690	Cft
	Existing Wet Well Fill	1	1,018	1.00	15.00	15,270	Cft
		2	491	1.00	15.00	14,728	Cft
		1	177	1.00	15.00	2,651	Cft
					Total	54,339	Cft
					Total	54.34	%oCft
	Concrete Work						
20	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)						
	Existing Wet Well Fill	1	1,018	1.00	0.67	682.07	Cft
		2	491	1.00	0.67	657.86	Cft
		1	177	1.00	0.67	118.41	Cft
					Total	1,458.34	Cft

EXTERNAL WORK

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Steel Work.						
21	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)		3 kg/cf	t		4,375.01	Kg
					Total	43.75	%Kg
	Sub Base Course						
22	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 sargodha querry to site, actual compacted depth shall be considered for payment)						
		1	21,690	1.00	0.33	7,157.70	Cft
					Total	71.58	%Cft
	Water Bound Macadam						
23	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	21,690	1.00	0.33	7,157.70	Cft

EXTERNAL WORK

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Tuff Paver						
24	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	1	21,690	1.00		21,690	Sft
25	Turfing slopes of banks or lawns with grass sods including ploughing, laying, setting and watering (Turf got from within a distance of 5 miles (8 Km.) and maintenance for 15 days).		2,285	1.00		2,285	Sft
					Total	22.85	%Sft

DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB

DETAILED COST ESTIMATE

EXTERNAL WORKS

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Excavation				
1	3/44	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.		4.73	10,677.75	50,452
		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				
		(iii) (1") 32 mm	Rft	350.00	106.90	37,415
		(viii)(2-1/2") 90 mm	Rft	300.00	907.55	272,265
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.				
		iii) 1" dia	Each	2.00	1,674.00	3,348
		vii) 2-1/2" dia	Each	2.00	2,670.00	5,340
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)	Rft	500.00	420.65	210,325

DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB

DETAILED COST ESTIMATE

EXTERNAL WORKS

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	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	7.00	17,890.62	125,234
		HDPE Tank	Eacii	7.00	17,090.02	123,234
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	106.60	159,900
7	N.S	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
		77				
8	3/21/a/ii	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)				
		a) By Manual ii) in ordinary soil.	1000Cft	0.12	10 677 75	1 2/15
		n) in ordinary son.	1000Cft	0.13	10,677.75	1,345

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS

SUPERVISION IN 16 CITIES OF PUNJAB

DETAILED COST ESTIMATE EXTERNAL WORKS

Sr.	2nd BI-Annual- 2022 (July to	Description	Unit	Quantity	Unit Rate	Amount
No.	Dec) Okara	•		·	(Rs)	(Rs)
		District Comment Comments				
9	6/5	Plain Cement Concrete Cement concrete plain including placing,				
9	0/3	Cement concrete plain including placing, compacting, finishing and curing complete				
		(including screening and washing of stone				
		aggregate):				
		(i) Ratio 1: 4: 8	100 Cft	0.18	28,986.90	5,218
			100 010	0.10	20,700.70	0,210
		Brick work in Foundation				
10	7/4/i	Pacca brick work in foundation and plinth in:-				
		Cement, sand mortar:- Ratio 1:5	100 Cft	0.44	30,136.30	13,392
		Brick work in Super Structure				
11	7/5	Pacca brick work in ground floor:-				
		i) Cement, sand mortar:- Ratio 1:5	100 Cft	0.30	32,320.10	9,817
		Concrete Work				
12	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	67.00	556.50	37,286
		Steel Work.				
13	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	2.01	31,781.75	63,881

DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB

DETAILED COST ESTIMATE

EXTERNAL WORKS

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
		Cement Plaster				
14	11/9	Cement plaster 1:4 upto 20' (6.00 m) height:-				
		3/4" (20 mm) thick	100 Sft	1.08	4,220.85	4,559
		Total Rs				1,019,777

DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB

DETAILED COST ESTIMATE

EXTERNAL WORKS

_							
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	1,050.00	1.50	3.00	4,725.00	Cft
					Total	4.73	%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						
	(iii) (1") 32 mm	1	350.00			350.00	Rft
	(viii)(2-1/2") 90 mm	1	300.00			300.00	Rft
3	Valve 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. iii) 1" dia vii) 2-1/2" dia	2 2				2.00	Nos.
	VII) 2-1/2 dia					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	500.00			500.00	Rft
	((1) 6 (160 Hill)	1	500.00			200.00	KIL

DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB

DETAILED COST ESTIMATE

EXTERNAL WORKS

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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.	7				7.00	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.	1500				1,500.00	Gln
	Excavation						
7	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.						
	Columns	4	3.00	3.00	3.50	126.00	Cft
					Total	0.13	%oCft
	Plain Cement Concrete						
8	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):						
	(i) Ratio 1: 4: 8	4	3.00	3.00	0.50	18.00	Cft
					Total	0.18	%Cft
	Brick work in Foundation						
9	Brick work in Foundation Pacca brick work in foundation and plinth in:-						
	Cement, sand mortar:- Ratio 1:5						
	Step -1	4	2.25	2.25	0.50	10.13	Cft
	Step -2	4	1.88	1.88	0.50	7.03	Cft
	Step -3	4	1.50	1.50	0.50	4.50	Cft
	Step -4	4	1.13	1.13	4.50	22.78	Cft
					Total	44.44	Cft

DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB

DETAILED COST ESTIMATE

EXTERNAL WORKS

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Sr. No.	Description	No	Length	Width	Height	Qty.	Unit
					Total	0.44	%Cft

	Brick work in Super Structure						
10	Pacca brick work in ground floor:-						
	i) Cement, sand mortar:- Ratio 1:5	4	1.13	1.13	6.00	30.38	Cft
					T-4-1	0.20	%Cft
					Total	0.30	/0CIt
	Concrete Work						
11	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.):-						
	practing 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)	1	10.00	10.00	0.67	67.00	Cft
1.0	Steel Work.						
12	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)		3 kg/cft			201.00	Kg
					Total	2.01	17
	Cement Plaster				1 Otal	2.01	Kg
13	Cement Plaster Cement plaster 1:4 upto 20' (6.00 m) height:-						
1.0	3/4" (20 mm) thick	4	4.50		6.00	108.00	Sft
	e (20 mm) times:	•	1.50		0.00	100.00	Dit
					Total	1.08	%Sft

DETAILED COST ESTIMATE EXTERNAL ELECTRICAL WORKS

		EXTERNAL ELECTRICAL WORKS					
Sr. No.	2nd BI- Annual- 2022 (July to Dec) Okara	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)	
		Schoduled Items (A)					
		Scheduled Items (A) Excavation					
1	3/21	Excavation in foundation of building, bridges and					
1	3/21	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	3.34	10,677.75	35 685	
		ii) iii ordinary son.	1000011	3.34	10,077.73	35,685	
		RCC Foundation for Poles					
2	6/6	Providing and laying reinforced cement concrete					
2	0/0	(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:-					
		(2) Type B (nominal mix 1: 1½: 3)	Cft	192.00	513.65	98,621	
		Steel Work					
3	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):-	10077	4.00	01.501.55	1.50.550	
		('c) Deformed bars (Grade-60)	100Kg	4.80	31,781.75	152,552	
4	24/109 ;;;	Supply and erection of single core PVC insulated					
+	2 4 /10a.III	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)	Rft.	500.00	40.75	20,375	
		(1.027)	1011.	500.00	40.73	20,373	

DETAILED COST ESTIMATE EXTERNAL ELECTRICAL WORKS

Sr. No.	2nd BI- Annual- 2022 (July to Dec) Okara	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
5	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	1,000.00	185.85	185,850
		iii) 100 mm i/d	Rft	50.00	290.75	14,538
						,
6	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	117.70	58,850
		iv) 16 mm sq (7/0.064")	Rft	100.00	173.95	17,395
7	24/13/c	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	600.00	160.20	96,120
		vi) 7/1.63 mm (7/0.064")	Rft	275.00	306.30	84,233
		c) PVC insulated, PVC sheathed 4 core, 660/1100 volt non armoured cable:-	Kit	273.00	300.30	04,233
		vi) 10 mm (7/0.052")	Rft	50.00	523.85	26,193
		viii) 25 mm (19/0.052")	Rft	225.00	1,204.55	271,024
8	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	106,227.85	637,367
		b) Double Arm				
		(i) 10 mtr height	Each	2.00	109,869.85	219,740

DETAILED COST ESTIMATE EXTERNAL ELECTRICAL WORKS

		EATERNAL ELECTRICAL	- WOR			
Sr. No.	2nd BI- Annual- 2022 (July to Dec) Okara	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
9	24/69/c	Supplying, installation and commissioning of LED Cobra-head Luminaries of specified wattage and lumens conforming to IP 65, Philips/Osram/Thorn with corrosion resistant die casted aluminum housing, silicon gas kit, thermally hardened glass complete with LED drivers, surge protection 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.				
		(v) 90 Watt with 10800 Lumens	Each	10.00	51,675.00	516,750
		(v) 75 Water Will 10000 Earnons	Laci	10.00	31,073.00	310,730
10	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	14,659.25	14,659
		iii) 5x60 Aiiip, 400 voits	Lacii	1.00	14,039.23	14,039
11	25/86	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-WS	Each	5.00	1,101.75	5,509
		DB-Shed&Store	Each	5.00	1,101.75	5,509
		DB-Shed 2& 3	Each	3.00	1,101.75	3,305
		DB- Shed 4	Each	3.00	1,101.75	3,305
		LCP Ext	Each	8.00	1,101.75	8,814
		LCP Internal b) Double Pole	Each	8.00	1,101.75	8,814
		(ii) 6-40 Amp (6 KA)	Each			
		DB-WS	Each	1.00	3,351.75	3,352
		DB-Shed&Store	Each	1.00	3,351.75	3,352
		DB-Shed 2& 3	Each	1.00	3,351.75	3,352
		DB- Shed 4	Each	1.00	3,351.75	3,352
		LCP Ext	Each	1.00	3,351.75	3,352
		LCP Internal	Each	1.00	3,351.75	3,352

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Sr. No.	2nd BI- Annual- 2022 (July to Dec) Okara	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
12	25/88	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	9.00	26,853.00	241,677
13	25/90	P/F wall mounted DB (Distribution Board) made 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-WS	Cft	1.50	18,634.45	27,952
		DB-Shed&Store	Cft	1.50	18,634.45	27,952
		DB-Shed 2& 3	Cft	1.50	18,634.45	27,952
		DB- Shed 4	Cft	1.50	18,634.45	27,952
		LCP Ext	Cft	1.50	18,634.45	27,952
<u> </u>		LCP Internal	Cft	1.50	18,634.45	27,952

Sr. No.	2nd BI- Annual- 2022 (July to Dec) Okara	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
14	25/91	P/F floor mounted Electric Panel board of required				
		depth and size, fabricarted with 14SWG M.S sheet				
		(Indoor/Outdoor Type),derusting, zinc Phosphated,				
		finish with electro static powder coating in approved				
		colour i/c the cost of Lock, Indication lights,thimbles,				
		Copper Comb, Wiring, Netural & Earth Bar,				
		glands, Current Transformers of specified capacity				
		,Door Earthing, Brass glands,bus bars,controles				
		complete in all respects as approved and directed by				
		the Engineer Incharge (Breakers will be Paid				
		Separately).				
		i) LT Switchboards				
		a) 2.50 Ft deep	~ .	17.00		
		(i)300~600A (3.0x6'x2.5')	Cft	45.00	3,433.80	154,521
15	25/92	P/F floor mounted ATS (Auto Transfer Switch) panel				
	23/72	board , fabricarted with 14S WG M.S sheet (Indoor				
		Type) duly painted with 100 microns powder coated				
		paint in approved colour , front access				
		extendable,insulation class of 600 volts IP-44,				
		incomimg & outgoing connections from bottom with				
		flexible copper cable suitable for 415 VAC, 3-phase 4				
		wire, 50 HZ TPN&E system having rated service,				
		short circuit breaking capacity at 400VAC				
		conforming to IEC-947-2 to accomodate given no of				
		circuit components, instruments &				
		accessories, assembled & wired with Electrolitic				
		Copper bus bars at 50 deg and cables duly cleaned				
		down to bare shining metal phosphate, manual change				
		Over i/c the cost of Lock, Indication lights,thimbles,				
		Copper Comb, Wiring, Netural & Earth				
		Bar,CTs,Contactors,Relays, Door Earthing, Brass glands complete in all respects as approved and				
		directed by the Engineer Incharge. (Breakers wil be				
		paid additionally)				
		a) 1.00 Ft deep				
		(i) 15-40 KVA	Each	1.00	789,790.75	789,791
						_

Sr. No.	2nd BI- Annual- 2022 (July to Dec) Okara	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
16	24/105/iii	Supply, insatllation, commissioning and testing of oil				
		cooled type, Step down Power Transformer of				
		specified rating,11/0.415 kV, i/c the cost of lifting				
		hooks, thermometers, LT & HT bushing 5-steps, tap				
		changer, imported double float buchholz relay, 2				
		earthing terminals, roller wheels, connecting terminals				
		for cables M.S box on transformer in order to cover				
		complete L.T side, all necessary materials required for				
		connections on H.T & L.T side, rated voltage				
		11000/415/240 V impedance 6.25% or as specified by				
		WAPDA/IEC system earth: Delta / Star, neutral				
		solidly earthed, i/c Wapda testing charges,complete in				
		all respects made of PEL, Siemens, as approved and				
		directed by the Engineer Incharge				
		(iii) 25 KVA	Each	1.00	329,487.70	329,488
17	25/70	Earthing of iron clad/aluminum switches, etc. with				
		G.I. wire No. 8 SWG in G.I. pipe 15 mm (½") 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.				
		and 2 mode away from building pinian.	Job	10.00	9,592.65	95,927
18	25/72	Bonding to earth with wire on surface, including cost				
10	23/12	of wire, clamps, thimbles, etc.				
		a) G.I. wire:				
		i) 8 SWG	Per			
		2,000.110	Rft.	100.00	23.25	2,325
					- 1	,- -
19	25/76	Supply and erection of 25 mm (1") dia and one metre				
		long lightning conductor copper rod with 5 spikes on				
		ball and base, etc. complete.	Job	10.00	4,274.00	42,740
		Sub Total Scheduled Iter	ms: (A)	- I		4,329,495

Sr. No.	2nd BI- Annual- 2022 (July to Dec) Okara	Description	Unit.	Quantity	Rate (Rs.)	Amount (Rs.)
20	N.S	Supply at site brand new 20KVA Prime Power Diesel Generator with fuel tank for 8 hour opration and Sound and Weather Proof canopy installed and commission at site on RCC PAD as per Manufacturer specifications to bear the Load of 20KVA DGSet complete in all respect, Loding and unloading on site to install on PAD and Control wires from ATS panel to DG Set for smooth operation including all necessary accessories required to complete this job as per enigneer incharge instructions.				
			Set	1.00	3,956,850	3,956,850
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	1.00	56,200	56,200
		ii) Automatic Star Delta Starter ASDS for 7.5kW Motor	Set	1.00	74,220	74,220
		Total Cost (Part B)			Rs.	4,087,270
		Grand Total (Part A + Part B)			Rs.	8,416,765

DETAILED COST ESTIMATE

TUBE WELL

Installation of Tubewell (0.25 Cusec)

Sr. No	2nd BI- Annual- 2022 (July to Dec) Okara	Description		Quantity	Unit Rate (Rs)	Amount (Rs)
	22/5	Pint Dan Dan Dan Lilling of Law Co.				
1	23/5	Direct Rotary/Reverse Rotary drilling of bore for tubewells, in all types of soil except shingle, gravel and rock:-				
		a) from ground level to 200 ft. (60 m) below ground level:-				
		i) 15" to 18" (375 to 450 mm) i/d	P.Rft	200.00	770.65	154,130
		b) exceeding 200 ft. (60 m) depth below ground level:- i) 15" to 18" (375 to 450 mm) i/d	P.Rft	400.00	770.65	308,260
2	23/7	Providing strong substantially built box of deodar wood 4'x2½'x9" (1200x750x225 mm), with compartments, lock and locking arrangement, for preserving samples of				
		strata from bore hole.	Job	1.00	37,136.30	37,136
3	23/8	Furnishing sample of water from borehole each set of 2 bottles.	Per Set of Two bottles	2.00	183.95	368
4	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	100Cft	0.18	38,178.90	6,872
		Housing Pipe				
5	23/15-i	Providing and Installing MS blind pipe (Housing) socket/welded joints, including MS Reducer in tubewell borehole, including jointing/welding with strainer etc. complete in all respect.				
		i) 10" i/d, ½" (250 mm i/d 6 mm) thick	Per Rft	150.00	4,009.15	601,373
		Blind Pipe				
6	23/15	Providing and Installing MS blind pipe (Housing) socket/welded joints, including MS Reducer in tubewell borehole, including jointing/welding with strainer etc. complete in all respect.		270.00	2 221 05	050 700
		e) 6" i/d, 3/16" (150 mm i/d 5 mm) thick	Per Rft	370.00	2,321.05	858,789
		Strainer				
7	23/13	Providing and installing Fiberglass reinforced Polypropelene (FRP) strainer of specifid wall thickness having slot size of 0.9mm to1.00mm in Tubewell bore hole i/c the cost of male/ female coupling with Nylone Strip, studs complete in all respect as approvedanddirectedbytheEngineer Incharge.				
		iv) 6" inch dia	Per Rft	70.00	1,851.45	129,602

		Bail Plug				
8	23/10	Providing and installing M.S. Bail plug in tubewell bore hole:				
		e) 6" i/d, 2 ft. (150 mm i/d 600 mm) long.	Each	1.00	3,751.90	3,752
		Pea Gravel				
9	23/19	Shrouding with graded pea gravel 3/8" to 1/8" around tubewell in borehole	Per Cft	736.00	168.00	123,648
10	23/18 i	Development and Testing (D&T) at 150 % of the rated capacity of tubewell for a minimum period of 72 hours. D&T will include pumping, disposal and backwashing as approved by the Engineer.		72.00	2,828.55	203,656
11	23/16 a	Providing and installing PVC gravel makeup pipe 3" dia class 'B' in tube well bore hole for gravel feeding including sockets, solvents and jointing etc complete in all respect.		40.00	319.50	12,780
		Sluice Valve				
12	23/52	Providing and fixing heavy duty Gate valve of specified diameter and material for pressure rating PN-16 mde of Crane (USA), Hatersly (UK) or Scon (Pakistan) i/c the cost of all accessories flanges,nut/bolt and gaskit where required complete in all respect as approved and directed by the Engineer Incharge.				
		(b) Flange Ended Ductile Iron Valve (ix) 4" dia	Each	1.00	34,860.00	34,860
		Air Valve				
13	23/34b	Providing and fixing, air valve 2½ (65mm) dia of B.S.S.quality and weight (complete with jointing material). Double		1.00	11,458.05	11,458
14	23/54	Providing and fixing heavy duty Check valve of specified diameter and material for pressure rating PN-16 made of Crane (USA), Hatersly (UK) or Scon (Pakistan) i/c the cost of all accessories flanges,nut/bolt and gaskit where required complete in all respect as approved and directed by the Engineer Incharge				
		(b) Flange Ended Ductile Iron Valve				
		(ix) 4" dia	Each	1.00	30,132.00	30,132
		M.S Plate				
15	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.				
		assembling and fixing, but excluding effection in position.	100Kg	0.21	32,475.65	6,769
16	25/11	Erection and fitting in position iron trusses, staging of water tanks, etc.	100Kg	0.21	1,277.25	266
					Total. A	2,523,849
					I otal. A	4,040,049
1.7	NG	NON SCHEDULE ITEMS				
17	NS	Grouting of top 100 ft of annular space between bore and pump housing casing with 1:1 cement sand mortar complete in all respect as per drawings and specifications (Sanitary seal)				
			Per Rft	100.00	500.00	50,000

18	NS	Taking samples and preserving of starta from borehole, from each strata change or as directed by Engineer including submission of starta charts along with results of strata analysis.	Each	10.00	1,000.00	10,000
		PUMP & MOTOR				
19	NS	Providing, installing, testing and lowering submersible pump of 0.25 cusecs capacity against a pumping head of 200 ft. including lowering of bowl assembly about 150 ft. column pipe/setting alongwith flow meter, pressure guage, CI. Bends tail pieces etc. upto duck foot bend, motor control unit and earthing, testing complete in all respects as per specifications, drawings and as approved by the Engineer incharge.		1.00	1,800,000	1,800,000
					Total. B	1,860,000
		Total Amount Rs.			Total A+B	4,383,849

PUNJAB CITIES PROGRAM (PCP)

DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB

DETAILED COST ESTIMATE

DISMANTLING WORK

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
1		Staff Quarter (Size 40 x 17 ft)				
		Dismantling				
1	4/13	Dismantling brick work in lime or cement mortar.	100Cft	10.90	4,317.45	47,066
2	4/20	Dismantling cement concrete reinforced, separating reinforcement from concrete, cleaning and straightening the same		3.40	18,285.70	62,171
3	4/32	a) Removing door with chowkat.	No.	1.00	438.00	438
4	4/32	b) Removing windows and sky lights with chowkat.	No.	2.00	341.50	683
5	4/19	c) Dismantling cement concrete 1:2:4 plain.	100Cft	1.70	11,174.60	18,997
		Deduction				
		Deduction of used bricks from original quantity.	1000 No.	14.72	(3,000.00)	(44,150)
					Total (A)	85,205
2		Staff Quarter (Size 16 x 16 ft)				
		Dismantling				
1	4/13	Dismantling brick work in lime or cement mortar.	100Cft	6.12	4,317.45	26,423
2	4/20	Dismantling cement concrete reinforced, separating reinforcement from concrete, cleaning and straightening the same		1.28	18,285.70	23,406
3	4/32	a) Removing door with chowkat.	No.	1.00	438.00	438
4	4/32	b) Removing windows and sky lights with chowkat.	No.	2.00	341.50	683
5	4/19	c) Dismantling cement concrete 1:2:4 plain.	100Cft	0.64	11,174.60	7,152
		Deduction				
		Deduction of used bricks from original quantity.	1000 No.	8.26	(3,000.00)	(24,786)
					Total (B)	33,315

DETAILED COST ESTIMATE

DISMANTLING WORK

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
3		Pump Room (Size 10 x 12 ft)				
		Dismantling				
1	4/13	Dismantling brick work in lime or cement mortar.	100Cft	4.21	4,317.45	18,166
2	4/20	Dismantling cement concrete reinforced, separating reinforcement from concrete, cleaning and straightening the same		0.60	18,285.70	10,971
3	4/32	a) Removing door with chowkat.	No.	1.00	438.00	438
4	4/32	b) Removing windows and sky lights with chowkat.	No.	2.00	341.50	683
5	4/19	c) Dismantling cement concrete 1:2:4 plain.	100Cft	0.30	11,174.60	3,352
		Deduction				
		Deduction of used bricks from original quantity.	1000 No.	5.68	(3,000.00)	(17,040)
					Total (C)	16,570
4		Parking Shed (Size 40 x 17 ft) Dismantling				
1	4/13	Dismantling brick work in lime or cement mortar.	100Cft	7.08	4,317.45	30,551
2	4/20	Dismantling cement concrete reinforced, separating reinforcement from concrete, cleaning and straightening the same		3.40	18,285.70	62,171
3	4/29	Dismantling brick or flagged flooring without concrete foundation.	100Sft	6.80	863.50	5,872
		Deduction				
		Deduction of used bricks from original quantity.	1000 No.	9.55	(3,000.00)	(28,659)
					Total (D)	86,506
			To	otal Rs. (A+B	B+C+D)	221,596

DISMANTLING WORK

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Staff Quarter (Size 40 x 17 ft)						
	Dismantling						
1	Dismantling brick work in lime or cement mortar.						
		1	114	0.75	11.00	940.50	Cft
		1	114	1.13	0.50	64.13	Cft
		1	114	1.50	0.50	85.50	Cft
					Total	1,090.13	Cft
					Total	10.90	%Cft
2	Dismantling cement concrete reinforced, separating reinforcement from concrete, cleaning and straightening the same						
		1	40.00	17.00	0.50	340.00	Cft
					Total	3.40	%Cft
3	a) Damarina da ar with abandat	1				1.00	NT -
3	a) Removing door with chowkat.	1				1.00	No
4	b) Removing windows and sky lights with chowkat.	2				2.00	No
5	c) Dismantling cement concrete 1:2:4 plain.	1	40.00	17.00	0.25	170.00	Cft
					Total	1.70	%Cft
	Staff Quarter (Size 16 x 16 ft)						
	Dismantling						
1	Dismantling brick work in lime or cement mortar.	1	64	0.75	11.00	528.00	Cft
	8	1	64	1.13	0.50	36.00	Cft
		1	64	1.50	0.50	48.00	Cft
					Total	612.00	Cft
					Total	6.12	%Cft
2	Dismantling cement concrete reinforced, separating reinforcement from concrete, cleaning and straightening the same						
		1	16.00	16.00	0.50	128.00	Cft
					Total	1.28	%Cft
3	a) Removing door with chowkat.	1				1.00	No

DISMANTLING WORK

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
4	b) Removing windows and sky lights with chowkat.	2				2.00	No
5	c) Dismantling cement concrete 1:2:4 plain.	1	16.00	16.00	0.25	64.00	Cft
					Total	0.64	%Cft
	Pump Room (Size 10 x 12 ft)						
	Dismantling						
1	Dismantling brick work in lime or cement mortar.	1	44	0.75	11.00	363.00	Cft
	- C	1	44	1.13	0.50	24.75	Cft
		1	44	1.50	0.50	33.00	Cft
					Total	420.75	Cft
					Total	4.21	%Cft
2	Dismantling cement concrete reinforced, separating reinforcement from concrete, cleaning and straightening the same						
		1	12.00	10.00	0.50	60.00	Cft
					Total	0.60	%Cft
3	a) Removing door with chowkat.	1				1.00	No
4	b) Removing windows and sky lights with chowkat.	2				2.00	No
5	c) Dismantling cement concrete 1:2:4 plain.	1	12.00	10.00	0.25	1.00	Cft
					Total	0.30	%Cft
	Parking Shed (Size 40 x 17 ft)						
	Dismantling						
1	Dismantling brick work in lime or cement mortar.	1	74	0.75	11.00	610.50	Cft
		1	74	1.13	0.50	41.63	Cft
		1	74	1.50	0.50	55.50	Cft
					Total	707.63	Cft
					Total	7.08	%Cft
2	Dismantling cement concrete reinforced, separating reinforcement from concrete, cleaning and straightening the same						
		1	40.00	17.00	0.50	340.00	Cft
					Total	3.40	%Cft

DISMANTLING WORK

CALCULATION OF QUANTITIES

Sr. No.	Description	No.	Length	Width	Height	Qty.	Unit
	Dismantling brick or flagged flooring without concrete foundation.	1	40.00	17.00		680	Sft
	concrete roundation.	1	40.00	17.00	Total	6.80	%Sft

DETAILED COST ESTIMATE

ENVIRONMENTAL HEALTH & SAFETY COST

Sr No	Description	Unit	Quantity	Unit Rate (Rs.)	Amount Rs.
	Labor Safety				
1	Face Masks (3 PLY) Box	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

EARTH WORK LEAD CHART

Rate Analysis Road- 1

Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	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:-	1	1000Cft	1	9,527.90	9,527.90
		i) 95% to 100% maximum modified AASHO dry density.					
2	3/17a.b.c	Carriage					
		upto ¼ mile (400 m).	1	1000 Cft	1	4,248.00	4,248.00
		for every 330 ft. (100 m) additional lead or part thereof, beyond ¼ mile (400 m) upto one mile. (1.6 Km.)	12	1000 Cft	1	47.50	570.00
		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	338.40	2,876.40
		for every ½ mile (800 m) additional lead or part thereof, beyond 5 miles (8 Km).	0	1000 Cft	1	320.35	-
		Total Amount I,000 (Rs.).					17,222.30
		Total Amount Per Cft					17.22

Rate Analysis Road- 2

Description

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 sargodha querry to site, actual compacted depth shall be considered for payment)

Crush	Stone						
Sr. No.	2nd BI- Annual-2022 (July to Dec) Okara	nnual-2022 uly to Dec) Description U		Lead (Km)	Qty	Rate (Rs)	Amount (Rs)
1		Material					
	18-3 a(i)	Pit run or bed run gravel.	100 Cft	1	1	6,621.00	6,621.00
2	,	Carriage				,	•
		1st KM	100 Cft	1	1.2	299.40	359.28
		2nd KM	100 Cft	1	1.2	145.25	174.30
		3rd KM	100 Cft	1	1.2	116.85	140.22
		4th KM	100 Cft	1	1.2	85.30	102.36
	1/1	5th KM	100 Cft	1	1.2	80.20	96.24
	1/1	6th KM	100 Cft	1	1.2	79.00	94.80
		7th KM	100 Cft	1	1.2	74.25	89.10
		8th KM	100 Cft	1	1.2	73.50	88.20
		9th KM	100 Cft	1	1.2	69.55	83.46
		10th KM	100 Cft	1	1.2	65.70	78.84
		From 11 km to 200 km	100 Cft	190.00	1.2	57.25	13,053.00
		201 Kms to 250 Kms	100 Cft	25.00	1.2	3.25	97.50
		Total.					21,078.30
		Total Amount per 100 Cft					21,078.30
		Total cast for Per Cft					210.78

Rate Analysis Road - 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) Okara	Description	Unit	Lead (Km)	Qty	Rate (Rs)	Amount (Rs.)
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)			1	9,458.65	9,458.65
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.					
		1st KM	100 Cft	1	1.22	299.40	365.27
	1 /1	2nd KM	100 Cft	1	1.22	145.25	177.21
	1/1	3rd KM	100 Cft	1	1.22	116.85	142.56
		4th KM	100 Cft	1	1.22	85.30	104.07
		5th KM	100 Cft	1	1.22	80.20	97.84
		6th KM	100 Cft	1	1.22	79.00	96.38
		7th KM	100 Cft	1	1.22	74.25	90.59
		8th KM	100 Cft	1	1.22	73.50	89.67
		9th KM	100 Cft	1	1.22	69.55	84.85
		10th KM	100 Cft	1	1.22	65.70	80.15
		From 11 km to 200 km	100 Cft	190.00	1.22	57.25	13,270.55
		201 Kms to 250 Kms	100 Cft	25.00	1.22	3.25	99.13
		Total.					24,156.91
		Total Amount per 100 Cft					24,156.91
		Total cast for Per Cft					241.57

			Rat	e Analy	sis Roa	d - 4				
Maı	nhole Constru	ection 2 x 2 Ft							Unit	Each
Sr. No.	2nd BI-Annual- 2022 (July to Dec) Okara	Description	No.	Length	Width	Height	Qty	Unit	Rate (Rs)	Amount (Rs)
1	3-42-i	Excavation. (0 to 7 feet depth)	1	3.50	3.50	3.00	36.75	1000 Cft	11,740.40	431.46
2	6-3-b	Cement concrete brick or stone ballast (1:4:8)	1	3.50	3.50	0.33	4.04	100 Cft	24,969.25	1,009.38
3	6-5-f	Base slab	1	3.50	3.50	0.25	3.06	100 Cft	38,178.90	1,169.23
4	6-6-(a)(iii)	Top ring Beam Ratio 1:2:4	1	3.500	3.50	0.33	4.04	100 Cft	457.75	1,850.45
5	6/12 (c)	Steel work		3.00 kg	per cft		14.15	kg	31,781.75	4,496.72
6	7-7-i	Brick Work Ratio 1:3 Step - 1	1	11.00	0.75	2.00	16.50	100 Cft	33,606.10	5,545.01
7	11-8-c	3/4" thick Plaster Ratio 1:3 (External)	1	11.00		2.00	22.00	100 Sft	4,589.85	1,009.77
8	11-18-a	Cement pointing struck joints, on walls (1:2) (Internal)	1	8.00		2.00	16.00	100 Sft	3,518.35	562.94
9	13-9-i	Bitumen Coating on External Plaster	1	11.00		2.00	22.00	100 Sft	2,150.75	473.17
10	19-40-ii	Supply and fitting of cast iron manhole cover ii) 45 cm (18") dia	1				1.00	Each	1,342.50	1,342.50
								Grai	nd Total.	17,891

RATE ANALYSIS

Description

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

								Unit.	Each		
Sr.	Ref	Detail				Unit I	Rate (Briti	sh Syste	m) per Each		
No.	Kei	Detail			Qty		Qty		Rate Per Unit		Amount (Rs.)
		Material									
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

Supply, installation and commissioning recessed 10W LED Down Light complete in all respects.

		1						Unit.	Each
Sr.	Ref	Detail				Unit I	Rate (Britis	sh Syster	n) per Each
No.	Rei	Demi			Q	ty	Rate Per Unit		Amount (Rs.)
		<u>Material</u>							
1	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

RATE ANALYSIS

Description

Supply, installation and commissioning high bay light 100W with 120lm/w LED hanging with all accessories complete in all respects

Unit. Each

Sr.	Ref	Detail				Unit I) per Each		
No.	KCI	Detail		_	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 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			τ	J nit R	ate (Briti	sh System) per Each				
No.	Kei	Detail			Qty		Rate Per Unit		Amount (Rs.)			
		Material										
1	MR	ii) Automatic Star Delta Starter ASDS for 7.5kW Motor			1.00	No.	51,900	No.	51,900			
								Total.	51,900			
2		Carriage & Installation Charges	5	%					2,595			
								Total.	54,495			
		GST 17% on item No. 1	17	%					8,823			
		Contractor's Profit on item No. (1&2)	20	%					10,899			
		Total							74,217			
		ITEM RATES										
		Composite rate Per Each						Rs.	74,220			

RATE ANALYSIS

Description

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 Ea							
No.	Kei	Detail	1		Qty		Rate Per Unit		Amount (Rs.)	
		Material								
1	MR	i) Direct of Line (DOL) Starter for 3kW Moto	or		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	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			
Dof	Detail				Unit Rate (British System) per Sft						
KCI				Qty		Rate Per Unit		Amount (Rs.)			
	Area 1020 Sft										
MR	-			1	Sft	2.421.927	Sft	2,421,927			
	GST	17	%			, ,-		411,728			
							Total.	2,833,655			
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			
	Ref MR	Area 1920 Sft Material MR Supply of PEB Shed (32' x 60') GST MR Installation Charges PST Contractor's Profit on item No. (1&2) Total ITEM RATES Composite rate 1920 Sft	Area 1920 Sft Material MR Supply of PEB Shed (32' x 60') GST 17 MR Installation Charges PST 16 Contractor's Profit on item No. (1&2) 20 Total ITEM RATES Composite rate 1920 Sft	Area 1920 Sft Material MR Supply of PEB Shed (32' x 60') GST 17 % MR Installation Charges PST 16 % Contractor's Profit on item No. (1&2) 20 % Total ITEM RATES Composite rate 1920 Sft	Area 1920 Sft	Naterial Naterial	Nate Per Nate Per	Name			

RATE ANALYSIS

Description

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.

			_		+			Unit.	Each
Sr.	Ref	Dotail		<u> </u>		Unit l	Rate (Britis	h System) per Each
No.	Kei	Detail			Q	ety	Rate Per	Unit	Amount (Rs.)
		Matarial							
1	MR	Material 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

RATE ANALYSIS

Descri	otion				

Supply at site brand new 20KVA Prime Power Diesel Generator with fuel tank for 8 hour opration and Sound and Weather Proof canopy installed and commission at site on RCC PAD as per Manufacturer specifications to bear the Load of 20KVA DGSet complete in all respect, Loding and unloading on site to install on PAD and Control wires from ATS panel to DG Set for smooth operation including all necessary accessories required to complete this job as per enigneer incharge instructions.

							Unit.	Each
Dof	Dotoil				Unit	Rate (Britisl	ı Systen	ı) per Each
Kei	Detail			Qty		Rate Per Unit		Amount (Rs.)
	Material					1 \$ = 225		
MR	Brand New KOHLER-SDMO France Diesel Generator Set, Model K22; 20 kVA Prime			1	No		No	2,522,025
MR	Sound and Weather Proof Canopy			1	No.	245,000	No.	245,000
							Total.	2,767,025
	Transportation & Installation Charges	5	%					138,351
							Total.	2,905,376
	GST 17% on item No. (1&2)	17	%					470,394
	Contractor's Profit on item No. (1,2&3)	20	%					581,075
	Total							3,956,846
	ITEM RATES							
	Composite rate Per Each						Rs.	3,956,850
		Material MR Brand New KOHLER-SDMO France Diesel Generator Set, Model K22; 20 kVA Prime Power MR Sound and Weather Proof Canopy Transportation & Installation Charges GST 17% on item No. (1&2) Contractor's Profit on item No. (1,2&3) Total ITEM RATES	MR Brand New KOHLER-SDMO France Diesel Generator Set, Model K22; 20 kVA Prime Power MR Sound and Weather Proof Canopy Transportation & Installation Charges 5 GST 17% on item No. (1&2) 17 Contractor's Profit on item No. (1,2&3) 20 Total ITEM RATES	MR Brand New KOHLER-SDMO France Diesel Generator Set, Model K22; 20 kVA Prime Power MR Sound and Weather Proof Canopy Transportation & Installation Charges 5 % GST 17% on item No. (1&2) Contractor's Profit on item No. (1,2&3) Total ITEM RATES	MR Brand New KOHLER-SDMO France Diesel Generator Set, Model K22; 20 kVA Prime Power 1 MR Sound and Weather Proof Canopy 1 Transportation & Installation Charges 5 % GST 17% on item No. (1&2) 17 % Contractor's Profit on item No. (1,2&3) 20 % Total ITEM RATES	Ref Detail Oty	Naterial No. 1 1 225	No. Contractor's Profit on item No. (1,2&3) Contractor's Profit on

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

Director

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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	e			
4	Length (m)		18.287				
			27.431	O/O of Stool Line			
			36.574	O/O of Steel Line			
			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	Doco Condition	Exterior Column	Pinned				
9	Base Condition	Interior Column	Pinned				
10	Bracing Types	At Roof	Cable Bracing				
		At Wall					
11	Type of Eave		Eave Gutters & Downs	spouts			
12	Type of Gable		Gable Trim				
13	Fillet Weld of Built u	p Sections	Single Side Welding fo	r 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

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

Section No.2 Building Loads

Sr.	Design Load	Value
1	Design Live Load on Roof (kN/m²)	0.57
2	Design Live Load on Frame (kN/m²)	0.57
3	Co-lateral Load (kN/m²)	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/m²)	0.00

Section No.3 Applicable Codes

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

The 2010 edition of the Low Rise Building Systems
Manual By Metal 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

Section No.4: Material Specifications

Sr.	Building C	omponent	Material Specification	Strength
1	Built-up Section	n		F 2 F. 00
2	Hot Rolled	I-Sections	ASTM A-36	Fy:25.00 kN/cm2
	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	
		Bracing Cable	ASTM A475 Extra High Strength Class 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
	Jug Mous			kN/cm2
7	Base and Gable	e Angles	ASTM A653M Grade 340 Class 1	Fy:34.0
			Z275	kN/cm2
8	Anchor Bolts		ASTM A36M (or Equivalent)	Fy:25.0 kN/cm2
9	High Strength E	Bolts	ASTM A325 Type 1 (Hot-dip Galvanized)	Fy:66.0 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.

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.

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/-			
7	Total Supply Amount (Exclusive of GST)				
	GST @ 17%	2,882,094/-			
	Total Amount (Inclusive of GST)				
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 In	Total Installation Services Amount (Exclusive of PST)				
	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.

Section No.8 Payment Terms Supply Payment

- 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

- 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.

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.

Date



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

05-08-2022

QUOTATION

QTN-01544-1

Customer Name JERS CONSULTANCY PVT

LTD

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 & Co	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.										

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

Switchgear • Automation • Instrumentation • Controls

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

Dated: Messeri Fo: SUA; REF:	Wednesday, 10 August 2022 : JERS CONSULTANT Mr. Asad Malik Quotation for switchgeer components PS/10022022							
R NO		RATING	MODEL	MAKE	ORIGIN	QTY	U/P	TOTAL
	JKW DOL STARTER COMPONENTS BASED O TERASAKI				IAPAN	1 1	25,000	25,000
1	MCCB TP ADJ.	12.5A TO 20A 36KA	\$125NJ	TERASAKI		+ +	6,300	6,300
2	MAGNETIC CONTACTOR TP	INA PACE	TC-18b	TERASAKI	KOREA		8,000	8,000
3	THERMAL OVERLOAD RELAY	6"9A	TK32a	TERASAKI	KOREA	- 1	8,000	9,000
								39,300
	7.5 KW STAR DELTA STARTER COMPONENTS BASED ON TERASAKI			.e _ = - = _		Errors & Omis		
					JAPAN	1	25,000	25,000
1	MCCB TP	20-32A_36KA	5125NJ	TERASAKI		-		
1 2	MCCB TP MAGNETIC CONTACTOR TP (MAIN)	20-32A_36KA	5125NJ TC-18b	TERASAKI	KOREA	1	6,300	6,300
2	MAGNETIC CONTACTOR TP (MAIN)					1	6,300	6,300
		IRA @ACI	TC-18b	TERASAKI	KOREA	1 1	6,300 6,300	6,300 6,300
3	MAGNETIC CONTACTOR TP (MAIN) MAGNETIC CONTACTOR TP (DELTA)	ISA ÇACI	TC-18b TC-18b	TERASAKI TERASAKI	KOREA	1 1 1 1	6,300	6,300
3	MAGNETIC CONTACTOR TP (MAIN) MAGNETIC CONTACTOR TP (DELTA) MAGNETIC CONTACTOR TP (STAR)	IBA @ACJ	TC-18b TC-18b TC-18b	TERASAKI TERASAKI TERASAKI	KOREA KOREA	1 1 1	6,300 6,300	6,300 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 parity 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 'Aconfirmed 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 maintenance co

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







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

Greaves Pakistan (Pvt) ItdHEAD OFFICE

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

Branch Offices

LAHORE

3, Sunder Das Road, Lahore.

UAN: (042) 111-354-111 Tel: (042) 36362241-2

Islamabad

1st Floor, Razia Sharif Plaza, Blue Area, Islamabad.

UAN: (051)-111-354-111 Ext: 5117

Tel: (051) 2344543-7

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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	



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



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

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

Technical Description

<u>Kohler-SDMO:</u> 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:

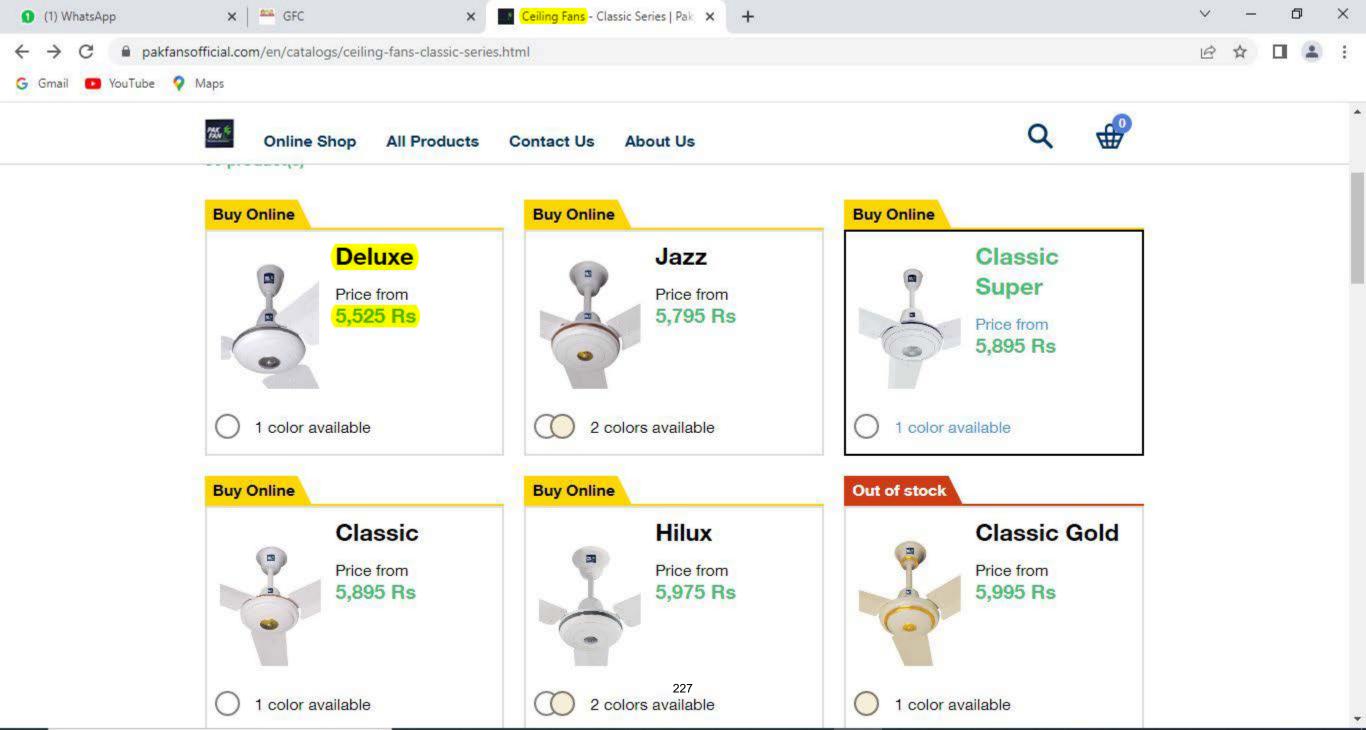
Sr.	Description of Stores	Qty.	Unit Price (\$)	Total Price (\$)
1.	Brand New KOHLER-SDMO France Diesel Generator Set, Model K22; 20 kVA Prime Power and 22 kVA Standby Power @ 50 Hz, 0.8 PF, 400 V, 1500 RPM (as per specifications attached) Kohler Made in France Engine (Complete Machine Manufactured & 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 GS	T/PST)		660,000
	ADD 17% GST ON SUPPLII	ES .		86,700
	ADD 16% PST ON SERVICE	S		24,000
	TOTAL AMOUNT (Including GS	T/PST)		770,700

VALIDITY	1 week only from quotation date, thereafter, subject to our
	re-confirmation.
	Lead Time: 30 kVA: Available ex stock subject
AVAILABILITY	to prior sale
	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/Commissioning
NA/A DD A NITV	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
	Our prices are based on current exchange rates (1\$ = PKR
	220/-) and will be revised if there are any escalation in
	exchange rates. Please note that the quoted rate for 30 kVA
PRICING	DG Set is subject to revision for more than 1% downward
	fluctuation in dollar price.
	Any further duties (including regulatory duty) and taxes,
	imposed after the date of quotation or agreement, will be
	borne by the customer
CUSTOMER RESPONSIBITITY	Any other work which has not been quoted specifically in the
	seller's scope of Supply/Work.
	The subject DG Set is imported and will be supplied to you without
	any value addition. Advance Income Tax has already been paid at
	the import stage U/S 148 of the Income Tax Ordinance 2001, this
	is in compliance to circular No.5 of 2002 dated 11 th April, 2002
TAXES	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 tax
	ordinance 2001, therefore income tax deduction is also not
	applicable on it.

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.
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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	OC]	Г-22		NO	V-22	-	DEC	2-22		JAN	-23	-	FEB	-23		MA	R-23	3
1	Entrance Gate & Boundary Wall																		
2	Buildings & Allied Structures																		
3	Parking Shed																		
5	Workshop & Washing area																		
6	Walkways & Pathways																		

Annexure-E E&S Checklist and SOPs

	Name of MC	Okara					
	Name of Sector	Solid Waste M	anagement				
	Name of Sub-project	Parking area fo	or Solid Waste Mac	hinery			
	Categorization	Environmenta	al	E-3	Social		S-3
	Identified Environmental and	An existing pa	rking shed will be r	ehabilitated und	er sub-project with minor chan	ges. No	APs reported as per
	Social Issues for further study				& S study required for sub-proj		
	V	•		ning Checklist	<u> </u>		
	Punjab Cities program	Environ	imental & Social Screening Checklist		Punjab Cities program	E	invironmental & Social Screening Checklist
	Instructions:	MENTAL SCREENING CH	ECKLIST	4000	Screening Questions	Yes No	Remarks
	Environmental and Social Focal Persons (ES management, will use this checklist in field for		PCP environmental and social		Special area for protecting biodiversity	V	
	and sub-project proposed to be executed under	r the Program.			Buffer zone of protected area How many Sensitive receptors (Schools, colleges,	1/	
	Deputy Program Officers-Environmental and technically assist and support the ESFPs/MCs in It is to be attached with the main document?	filling in of this Checklist	Tr. 1. 2004 100 100		hospitals and clinics) are within 100 meter of the proposed sub project ⁵ Is there any site of groundwater well within 250 m of		
	This checklist focuses on environmental issue	PO-ESM	ure that rockel dimensions are		the proposed subproject ^a B. Potential Environmental Impacts	1	
	and and considered, involuntary Resettlemen	Screening Checklist will also be	used		Will the Sub-Project cause		1
	(iii) The purpose of this E&S Screening Check and social attributes or to enhance the existing	ists is to identify potential "Neg- environmental & social benefits	tive" impacts of environmental i. Use the "remarks" section to		Impairment of historical/cultural areas:		
	Name of ESFP:				disfiguration of landscape or potential loss/damage to Physical Cultural Resources (PCRs)?		
4	Name of MC: MC Ollana	to the count			2. Disturbance to habitats/biodiversity of	1/	
•	Sub-Project Sector: Solid Land Sub-Project Title: Parkul and	te yanagment for sond worke	machinery .		environmentally sensitive or protected areas?		
	Sub- Project Categorization:	//	8-1		3. Cutting of trees?	/	
			S-2 S-1		 Disruption to habitats/biodiversity of surrounding ccosystem/environment? 	V	A
	Date of Screening: 17/02/ 2021				Generation of wastewater during construction or operation? Pollution of surface water/ground water due to	1	
	Screening Questions	Yes No	Remarks		6. Pollution of surface water/ground water due to wastewater discharge from construction site or due to direct/indirect disposal of waste water?		
	A. Project Siting Is the Sub-Project area adjacent to or within any following:	of the	4		 Alteration of surface water hydrology of waterways resulting in increased sediment in streams/rivers or due to increased soil erosion at construction site? 	1	1
	Environmentally sensitive areas? Is there any site of cultural importance (graveyan shrine, mosque, archeological site) within 100 m proposed subproject?	of the			Deterioration of surface water quality due to silt runoff and sanitary wastes from worker-based camps and chemicals used in construction?	~	
	Legally protected Area (core zone or buffer zone)		20		Over pumping of ground water, leading to salinization and ground subsidence?	/	0.00
	Is there any surface water body (river, canal, strea lake wetland) within 250 meter of the proposed su project ⁴	" V			Serious contamination of soil due to construction works?	1	
	Estuarine	V			11. Aggravation of solid waste problems in the area?	1	
			V	Part of Part of	12. Generation of hazardous waste?	1	
	In all MCs, ESFPs are notified by Local government, MO (IAS) for social sectors. It is means as PC-I analyse engineering satissates of sub-project According to Environmental Assessment developed by NWFP-EP/ Ibid.	re focal persons for environmental soci	or and MO(P) are focal persons		13. Increased air pollution due to sub-project construction and operation?	1	
	1bid.	Continuental Quidelines Sesieman S	chemes as adopted by EPA.		Bid indi		
	PMDFC		Page I of 7		· nat		
					(NO PORT OF THE P		Page 2 of 7

	Yes	No	Remarks				
14. Noise and vibration due to sub-project construction or operation?		1					
15. Creation of temporary breeding habitats for diseases such as those transmitted by mosquitoes and rodents due to solid/liquid?		/		Punjab Cities program			Environmental & Social Screen
16. Use of chemicals during construction?				Screening Questions	Yes	No	Remarks
C: Potential Social Impacts Will the Sub-Project cause				Risks to community health and safety due to the transport, storage, and use and/or disposal of materials such as explosives, fuel and other	100.00	/	
Displacement or involuntary resettlement of people? (physical displacement and/or economic displacement) (If "Yes", please also fill Involuntary Resettlement Screening Checklist)				chemicals during construction and operation? 9. Community safety risks due to both accidental and natural causes, especially where the structural elements or components of the project are accessible to members of the affected community or where their failure could result in injury to the		5	
2. Are there any demographic or socio-economic aspects of the sub-project area that are already vulnerable (e.g., high incidence of marginalized populations, rural-urban migrants, illegal settlements, ethnic minorities, people with disabilities, socially isolated segments of the society and women or children)?		_		community throughout project construction, operation and decommissioning? 10. Are there any demographic or socio-economic aspects of the Project area that are already vulnerable (e.g., high incidence of marginalized populations, rural-urban migrants, illega settlements, ethnic minorities, women or children?)		1	
Disproportionate impacts on the poor, women and children and or other vulnerable groups 7(mentioned above)?		/		cnidren)?			100 Nage
. Temporary impediments in movements of people/transport and animals?	,	1		Prepared By: Name: ZUKiga Ali Shoh	1	Endors Name:	Asil Will
Large population influx during sub-project construction and operation that causes increased burden on social infrastructure and services (such as water supply and sanitation systems)?		~		Name: Zuffen di Shah Signature: Date: Municipal Officor (I & S) Municipal Corporation, Okaro		Signatu Date:	me:
Social conflicts if workers from other areas are hired?		/	Υ μ	· · · · · · · · · · · · · · · · · · ·			
Risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during project construction and operation?	×	1					



Parking Area Details

Punjab Cities Program

Parking areas for Solid Waste Management and other Machinery & Equipment Name of Municipal Committee (Corporation OKARA Date of visit 14-02-2021)

No th	Location of	Coord		Approx.	Approach	road	Av	ailability o		Availability supply p		
	the Land	Land		(Kanals) Condition	Width (ft)	Dia (inch)	Distance (ft.)	Functional ity	Dia (inch)	Distance (ft.)	Remarks	
	Eidfah Road Fire Brigade Colony	Long 73 Lat. 3o	.810264	2.88	Very	24	22	185	Working	5		Back doors of chaters should have to be closed

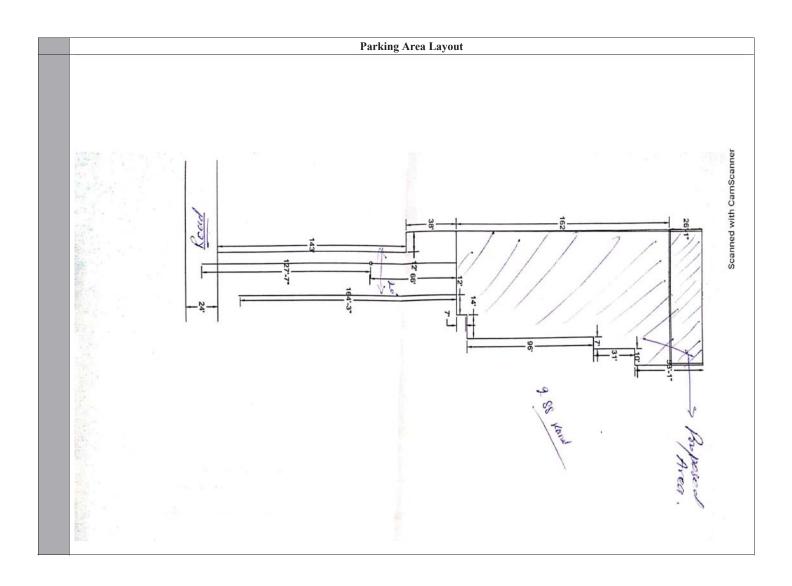
Inhabitation / description of the surrounding area

North Christian Celony / Fire Brigade Colony South Gold Girls Model High School

East D.H.O. Okara West Satzi Mand ! / Fire Brigade Colony

Boundary wall Gate		Sheds			Apron		Any other facility		
Height (ft)	Condition	Availability	Condition	Area (sft)	Type of structure	Condition	Paved/ unpaved	Type of pavement	
NIA	N/A	No	N/A	2150	Calenn without	Normal		Faith	

Regional Progra	ım Officer (ID)	ARE	(Consultants)	MO (I&S) or Su	b Engineer
Name	Signature	Name	Signature	Name	Signature
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ALIAS LANGUM	CA +			7 12	11,



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.

Table 1: Construction Camp Management

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

Activity/ Impact Source	EHS Concerns/issues	Mitigation Measures/ Management Guidelines
Impact Source		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
Disposal of Labor Camp waste	Management of wastes is crucial to minimize impacts on the environment as well as on the health of the workers/labor	extent possible. 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 (clayey, thin concrete) to protect groundwater from

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 will be an increased risk of work crews spreading sexually transmitted infections and HIV/AIDS.	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.
		Provide ambulance facility for the laborers during emergency to be transported to nearest hospitals and telephone/mobile facility to call for Emergency Services 1122.
	2.	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 facilities to the construction camps may create security problems and fire hazards	The Contractor shall: Provide appropriate security personnel (police / home guard or private security guards) and enclosures to prevent unauthorized entry in to the camp area. 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 construction camps to original condition requires demolition of construction camps.	The Contractor shall: 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 landowner) 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	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/	T	Mid-ad- Manager / Manager / Carl Jillian
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
	conditions of the victims	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	The Contractor shall follow the following management measures to reduce health risks to the construction workers and nearby community:
	general public	Drainage Management
		Air Quality Management
		Noise and Vibration Management
Tasining	Lock of over-	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.
	potential diseases.	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.		

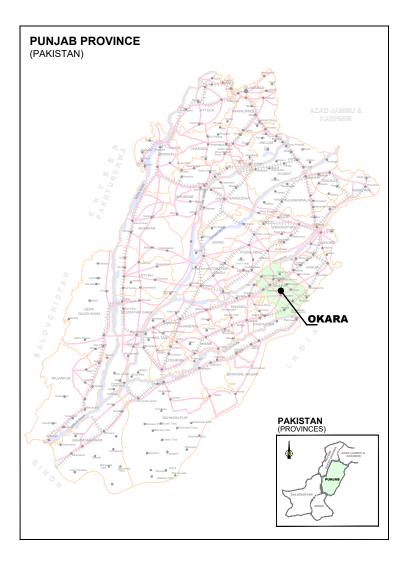
Table 4: Summary of Recommended Personal Protective Equipment According to Hazard4

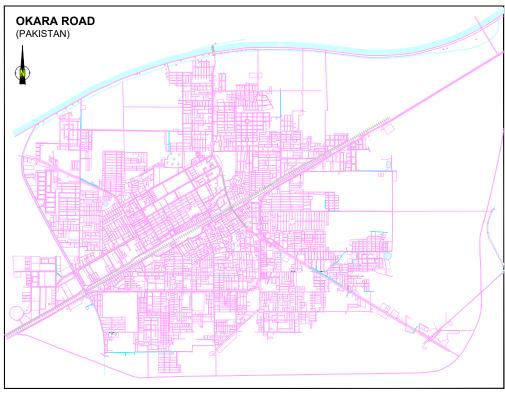
Objective	Workplace Hazards	Suggested PPE		
Eye and face protection	Flying particles, molten metal, liquid chemicals, gases or vapors, light radiation.	Safety Glasses with side-shields, protective shades, etc.		
Head protection	Falling objects, inadequate height clearance, and overhead power cords.	Plastic Helmets with top and side impact protection.		
Hearing protection	Noise, 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, liquids and chemicals.		
Hand protection	Hazardous materials, cuts or lacerations, vibrations, extreme temperatures.	Gloves made of rubber or synthetic materials (Neoprene), leather, steel, insulating materials, etc.		
Respiratory protection Dust, fogs, fumes, mists, gases, smoke vapors.		Facemasks with appropriate filters for dust removal and air purification (chemicals, mists, vapors and gases). Single or multigas 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.	Insulating clothing, body suits, aprons etc. of appropriate materials.		

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

Annexure-F Project Drawings







DESIGN DRAWINGS OF PARKING SHED MC OKARA PUNJAB, PAKISTAN

JULY, 2022

CLIENT:



PUNJAB MUNICIPAL DEVELOPMENT FUND COMPANY (PMDFC) CONSULTANT:



JERS CONSULTANCY (PVT) LTD

24-Civic Center, Quaid-e-Azam Town, Township, Lahore (Pakistan)

Tel: +92 42 35113123, +92 42 35113124

ax: +92 42 35113125

E-mail: info@jers.com.pk, mail@jers.com.pk

: http://www.jers.com.pk

LIST OF DRAWINGS

Sr.No.	DESCRIPTION	DRAWING NO.	Sr.No.	DESCRIPTION	DRAWING NO
	SWM PARKING SHED DRAWINGS			ARCHITECTURAL DRAWINGS	
1	PROJECT KEY PLAN	PS-01	35	LEGEND & NOTES (GUARD ROOM)	A-15
2	PARKING SHED TOPOGRAPHIC SURVEY	PS-02	36	GROUND FLOOR & ROOF PLAN (GUARD ROOM)	A-16
3	PROPOSED SWM PARKING SHED LAYOUT PLAN	PS-03	37	ELEVATION-01, 02 (GUARD ROOM)	A-17
4	PROPOSED SWM PARKING SHED, SUPER IMPOSED ON EXISTING AREA	PS-04	38	SECTION A-A (GUARD ROOM)	A-18
5	GROUND FLOOR PLAN PARKING SHED-1	PS-05	39	DOOR WINDOW SCHEDULE (GUARD ROOM)	A-19
6	ROOF PLAN PARKING SHED-1	PS-06	40	LEGEND & NOTES (WORKSHOP)	A-20
7	RIGID FRAME ELEVATION PARKING SHED-1	PS-07	41	GROUND FLOOR PLAN (WORKSHOP)	A-21
8	FOOTING DETAILS PARKING SHED-1	PS-07-A	42	ROOF PLAN (WORKSHOP)	A-22
9	GROUND FLOOR PLAN PARKING SHED-2	PS-08		RIGID FRAME SECTIONAL ELEVATION A-A (WORKSHOP)	A-23
10	ROOF PLAN PARKING SHED-2	PS-09	43	SECTION B-B (WORKSHOP)	
11	RIGID FRAME ELEVATION PARKING SHED-2	PS-10	44		A-24
12	GROUND FLOOR & ROOF PLAN PARKING SHED-3 & 4	PS-11	45	FOUNDATION DETAIL (WORKSHOP)	A-25
13	RIGID FRAME ELEVATION PARKING SHED-3 & 4	PS-12	46	DOOR WINDOW SCHEDULE (WORKSHOP)	A-26
14	FOOTING DETAILS PARKING SHED-3 & 4	PS-12-A		ELECTRICAL DRAWINGS	
15	WASHING PIT DETAIL	PS-13			
16	BOUNDARY WALL DETAIL	PS-14	47	LEGEND & NOTES	E-00
17	GENERATOR PAD DETAIL	PS-15	48	ELECTRICAL CABLE ROUTE LAYOUT PLAN	E-01
18	ENTERANCE GATE	PS-16	49	EXTERNAL ROAD LIGHTING LAYOUT PLAN	E-02
19	TYPICAL ROAD CROSS SECTION	PS-17	50	LIGHTING & SMALL POWER LAYOUT PLAN (PROPOSED STORE)	E-03
20	PUMP PAD & SEPTIC TANK DETAIL	PS-18	51	LIGHTING & SMALL POWER LAYOUT PLAN OFFICE BLOCK	E-04
	ARCHITECTURAL DRAWINGS		52	LIGHTING & SMALL POWER LAYOUT PLAN SITTING AREA	E-05
21	LEGEND & NOTES (STORE)	A-01	53	LIGHTING & SMALL POWER LAYOUT PLAN GUARD ROOM	E-06
22	GROUND FLOOR & ROOF PLAN (STORE)	A-02	54	LIGHTING & SMALL POWER LAYOUT PLAN WORKSHOP	E-07
23	ELEVATION-01,02& SECTION A-A (STORE)	A-03	55	LIGHTING LAYOUT PLAN PARKING SHED 01	E-08
24	DOOR WINDOW SCHEDULE (STORE)	A-04	56	LIGHTING LAYOUT PLAN PARKING SHED 02 & 03	E-09
25	LEGEND & NOTES (OFFICE BLOCK)	A-05	57	LIGHTING LAYOUT PLAN PARKING SHED 03	E-10
26	GROUND FLOOR & ROOF PLAN (OFFICE BLOCK)	A-06	58	SINGLE LINE LAYOUT PLAN PARKING SHED 01	SLD - 01
27	ELEVATION-01,02& SECTION A-A (OFFICE BLOCK)	A-07	59	DETAIL OF DISTRIBUTION BOARD PARKING SHED 01	SLD - 02
28	ELEVATION-01,02& SECTION A-A (OFFICE BLOCK)	A-08			
29	DOOR WINDOW SCHEDULE (OFFICE BLOCK)	A-09			
30	LEGEND & NOTES (SITTING AREA)	A-10			
31	GROUND FLOOR & ROOF PLAN (SITTING AREA)	A-11			
32	ELEVATION-01,02& SECTION A-A (SITTING AREA)				
33	ELEVATION-01,02& SECTION A-A (SITTING AREA)	A-12			
34	· · ·	A-13			
J4	DOOR WINDOW SCHEDULE (SITTING AREA)	A-14			

Sr.No.	DESCRIPTION	DRAWING NO.	
	PLUMBING DRAWINGS		
60	LEGEND & NOTES		
61	PROPOSED SWM PARKING SHED, WATER SUPPLY SYSTEM	W-01	
62	WATER SUPPLY LAYOUT PLAN OFFICE BLOCK	W-02	
63	WATER SUPPLY GROUND FLOOR SITTING AREA	W-03	
64	GROUND FLOOR WATER SUPPLY LAYOUT WORKSHOP	W-04	
65	PROPOSED SWM PARKING SHED, SEWER SYSTEM	S-01	
66	SEWER SYSTEM GROUND FLOOR & ROOF PLAN PROPOSED STORE	S-02	
67	SEWER SYSTEM GROUND & ROOF LAYOUT PLAN OFFICE BLOCK	S-03	
68	SEWER SYSTEM GROUND FLOOR & ROOF PLAN SITTING AREA	S-04	
69	GROUND FLOOR & ROOF PLAN GUARD ROOM DRAINAGE LAYOUT	S-05	
70	GROUND FLOOR SEWER SYSTEM LAYOUT WORKSHOP	S-06	
71	ROOF PLAN SEWER SYSTEM LAYOUT WORKSHOP	S-07	
72	GROUND FLOOR & ROOF LAYOUT PLAN PARKING SHED-1	D-01	
73	GROUND FLOOR & ROOF LAYOUT PLAN PARKING SHED-2	D-02	
74	GROUND FLOOR & ROOF DRAINAGE LAYOUT PLAN PARKING SHED-3 & 4	D-03	
75	RAIN WATER OUTLET DETAIL	D-04	
76	MISCLLANEOUS DETAIL	M-01	
77	MISCLLANEOUS DETAIL	M-02	

CLIENT: PMDFC PUNJAB MUNICIPAL DEVELOPMENT (PMDFC)

CONSULTANTS:

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PROJECT: PUNJAB CITIES PROGRAM (PCP)

DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB. 248

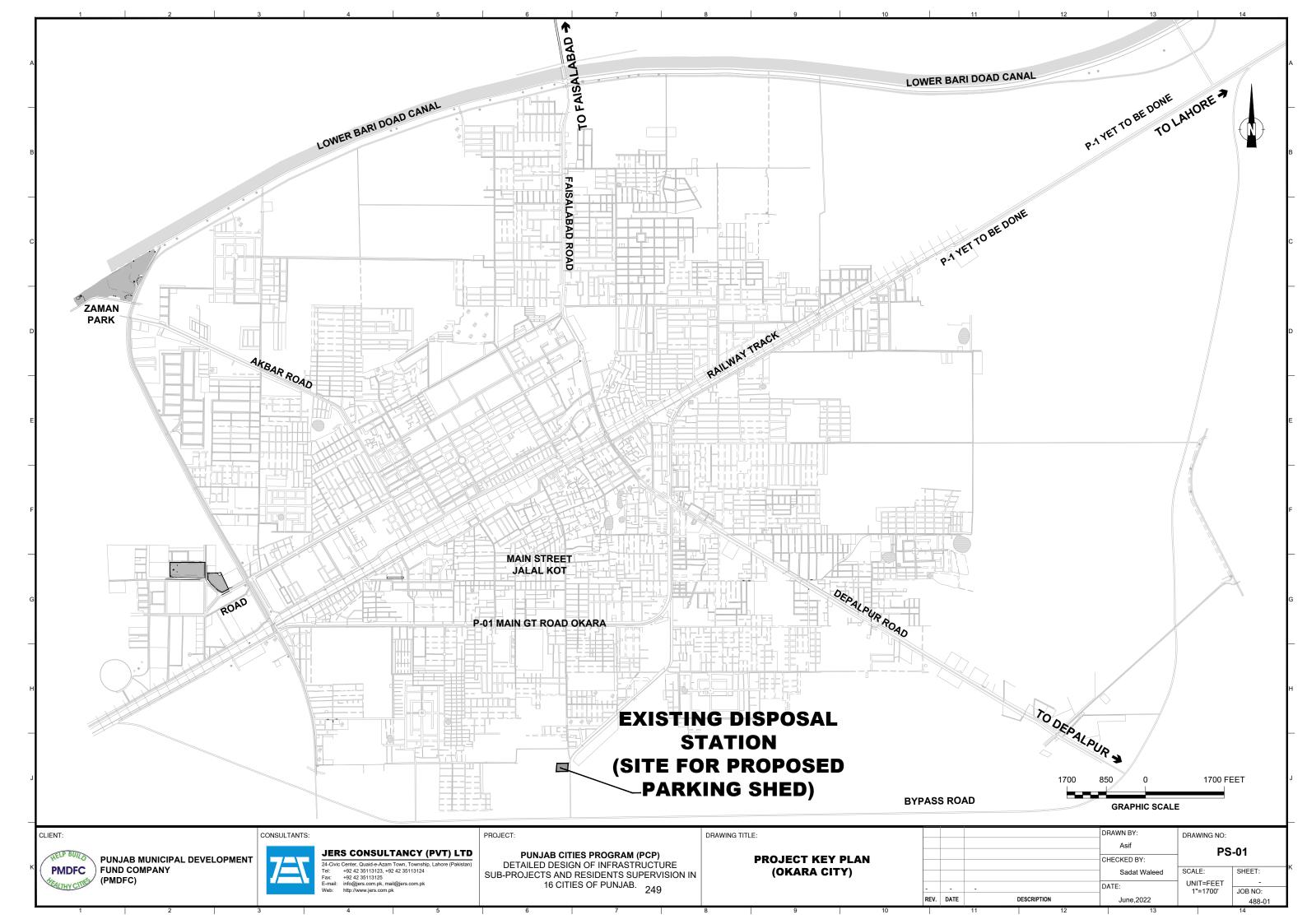
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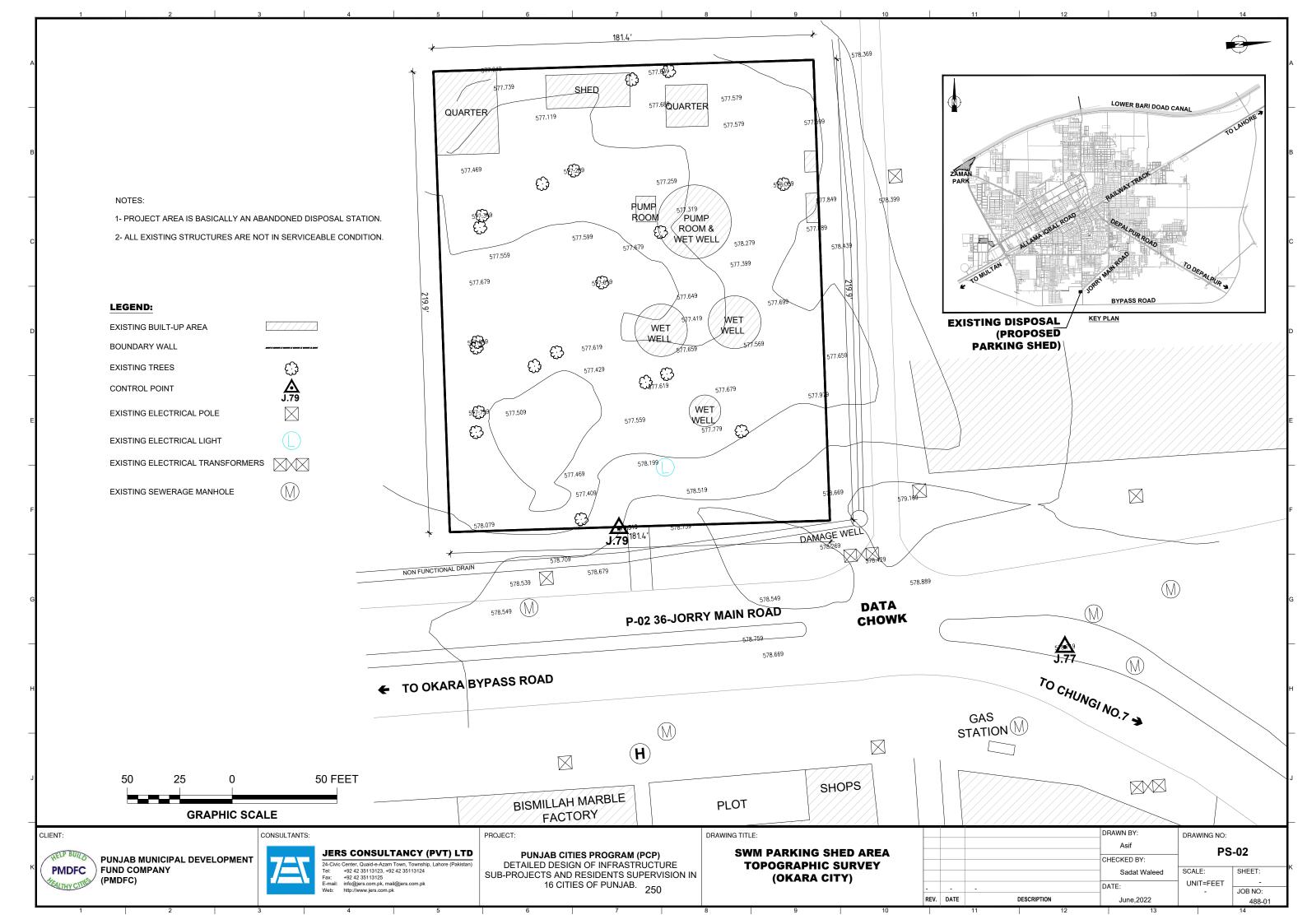
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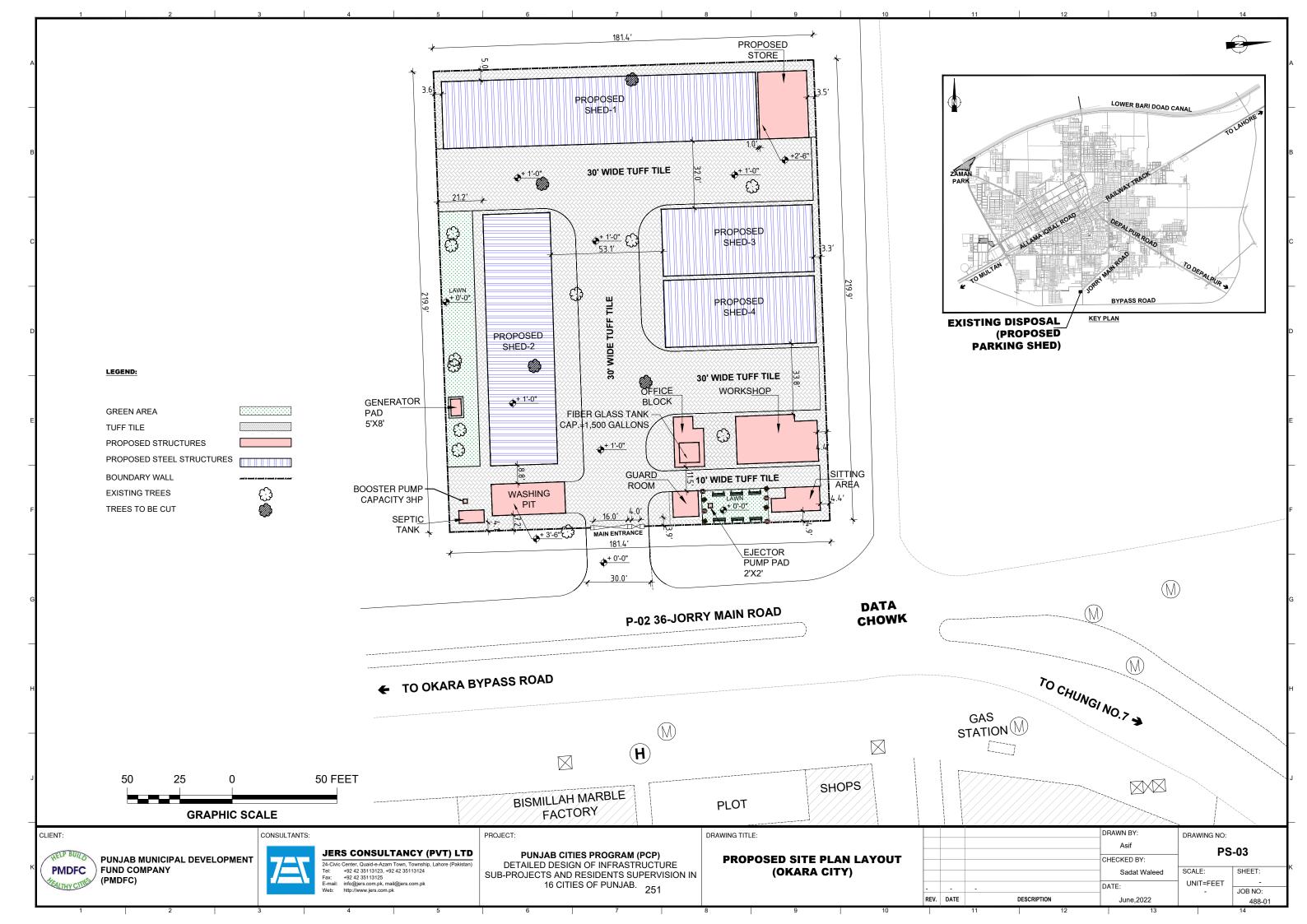
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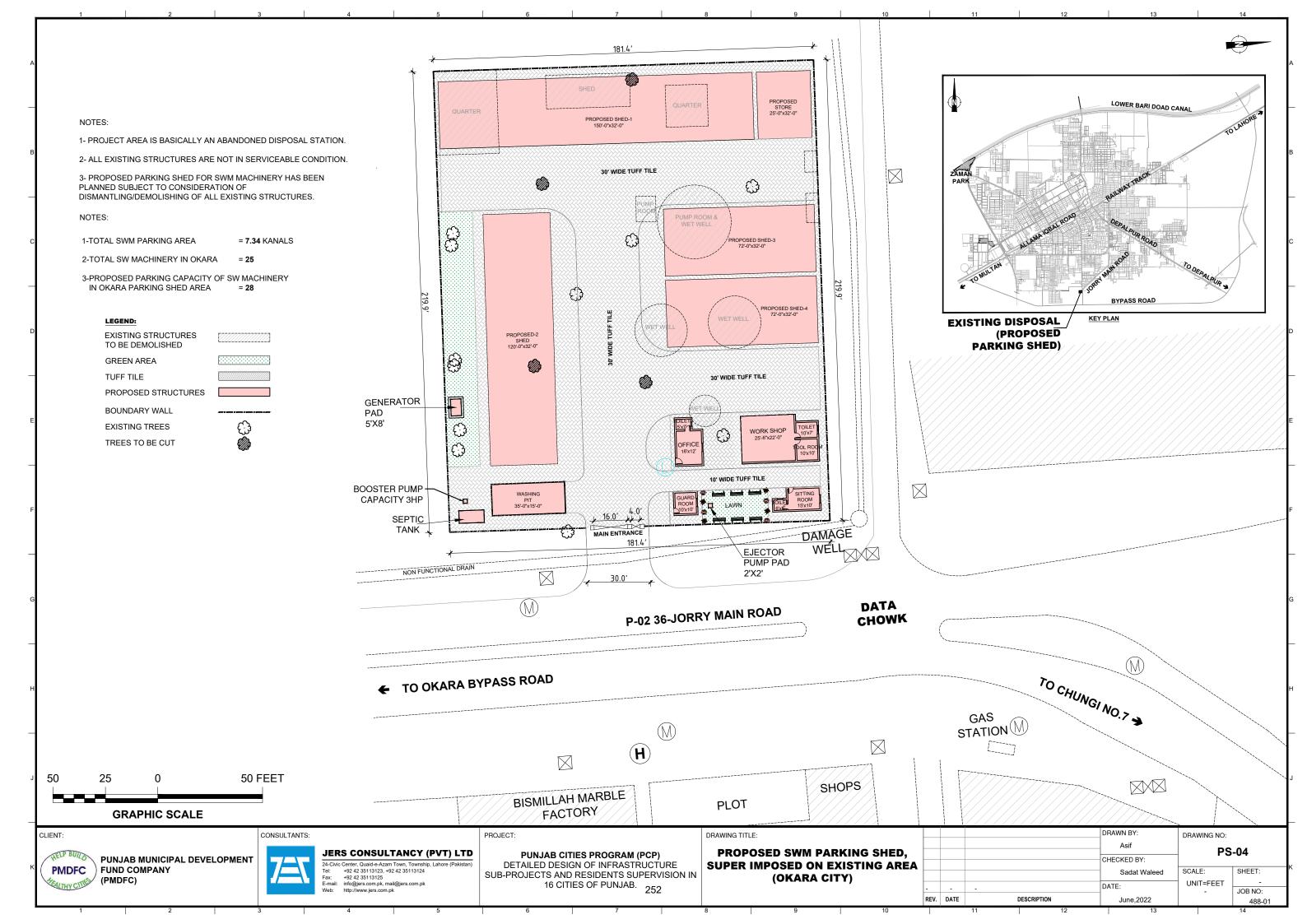
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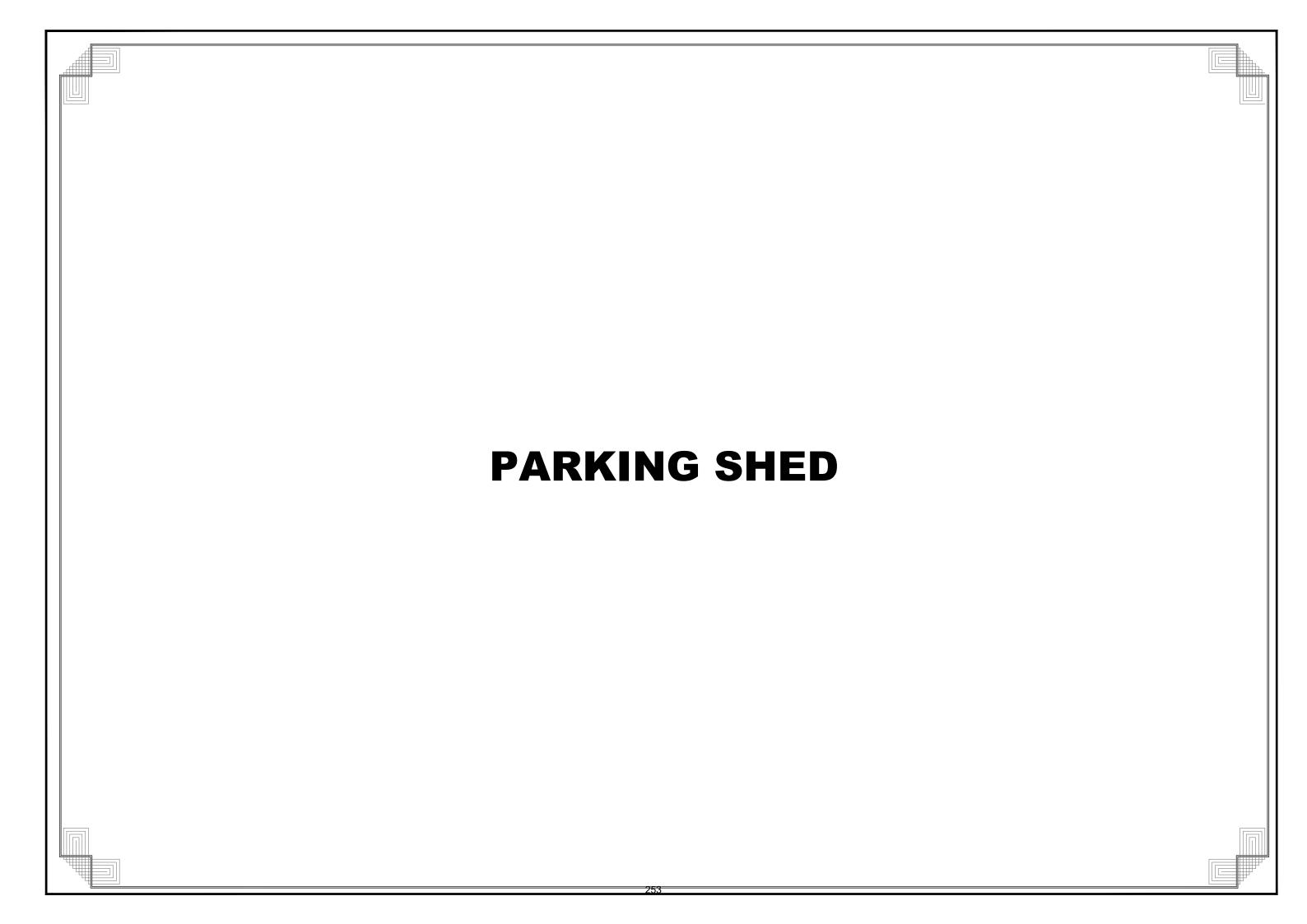
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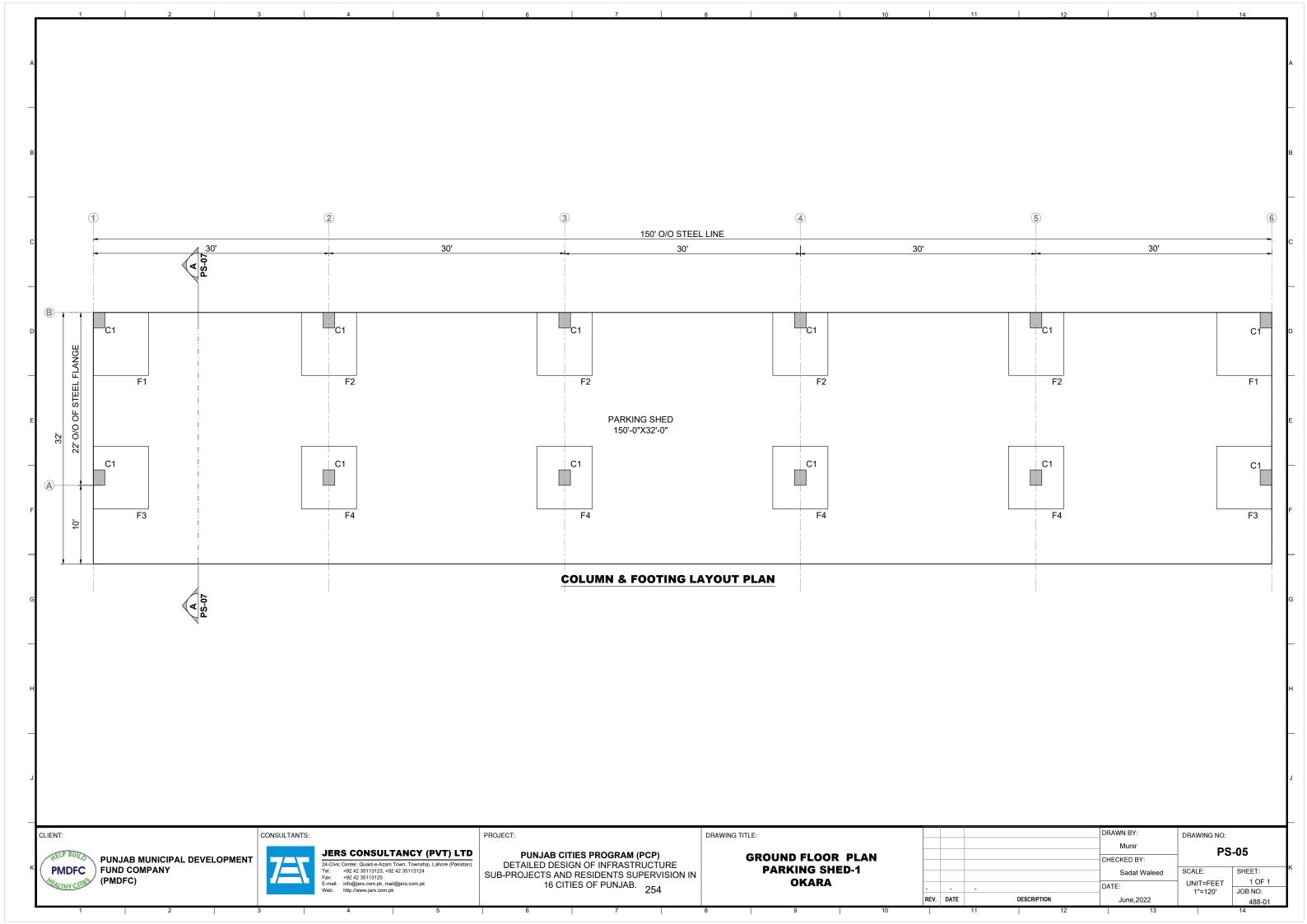


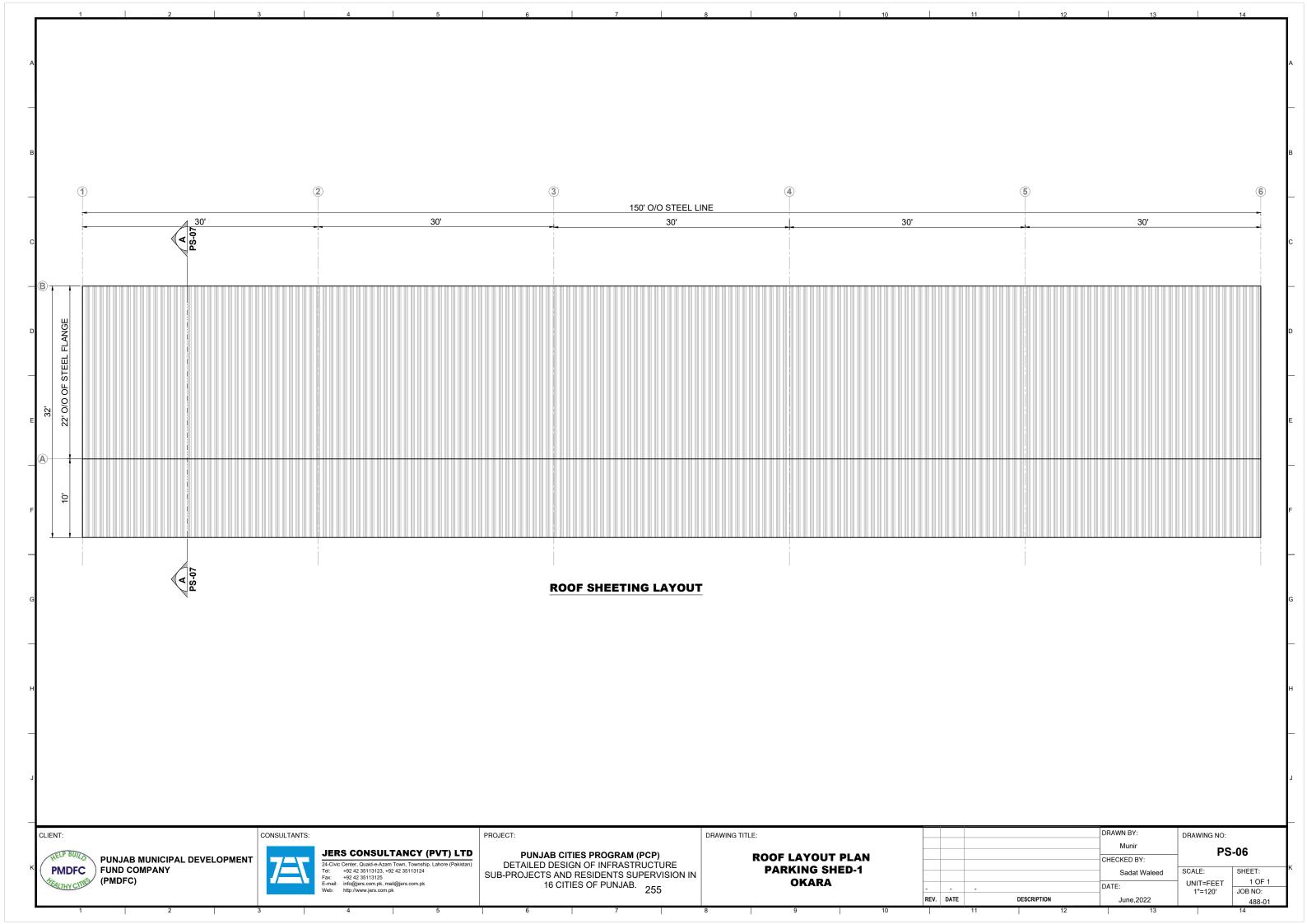


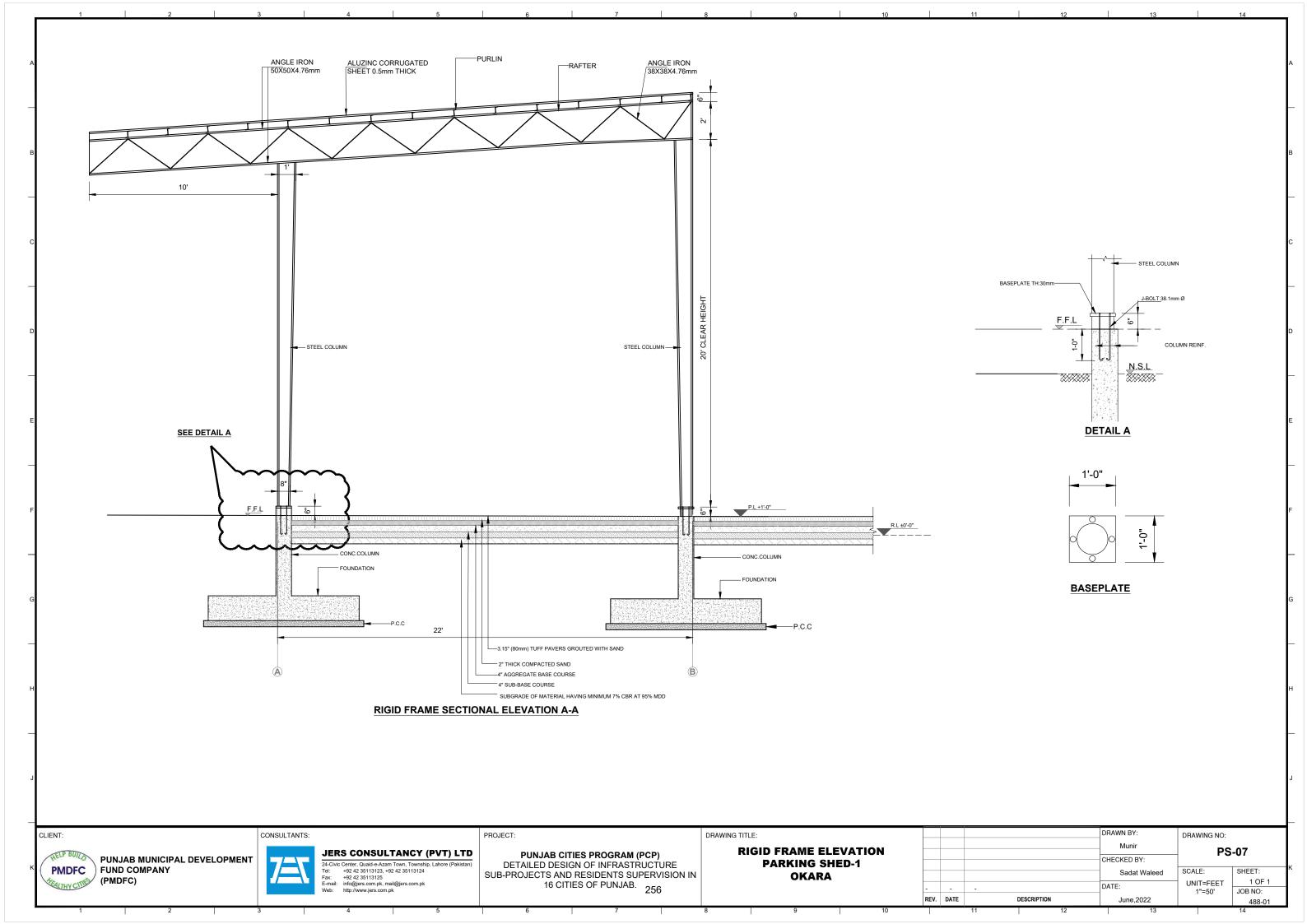


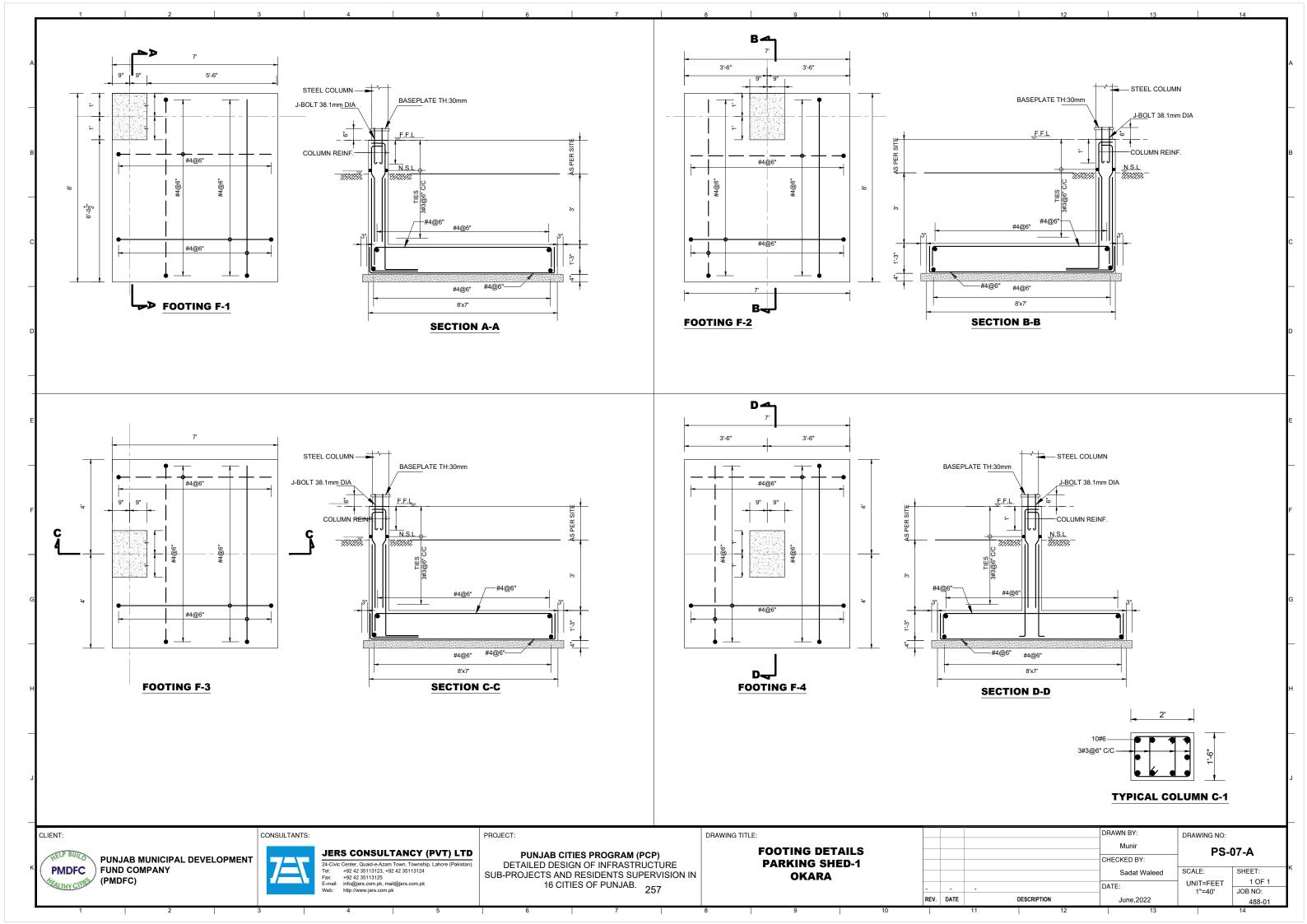


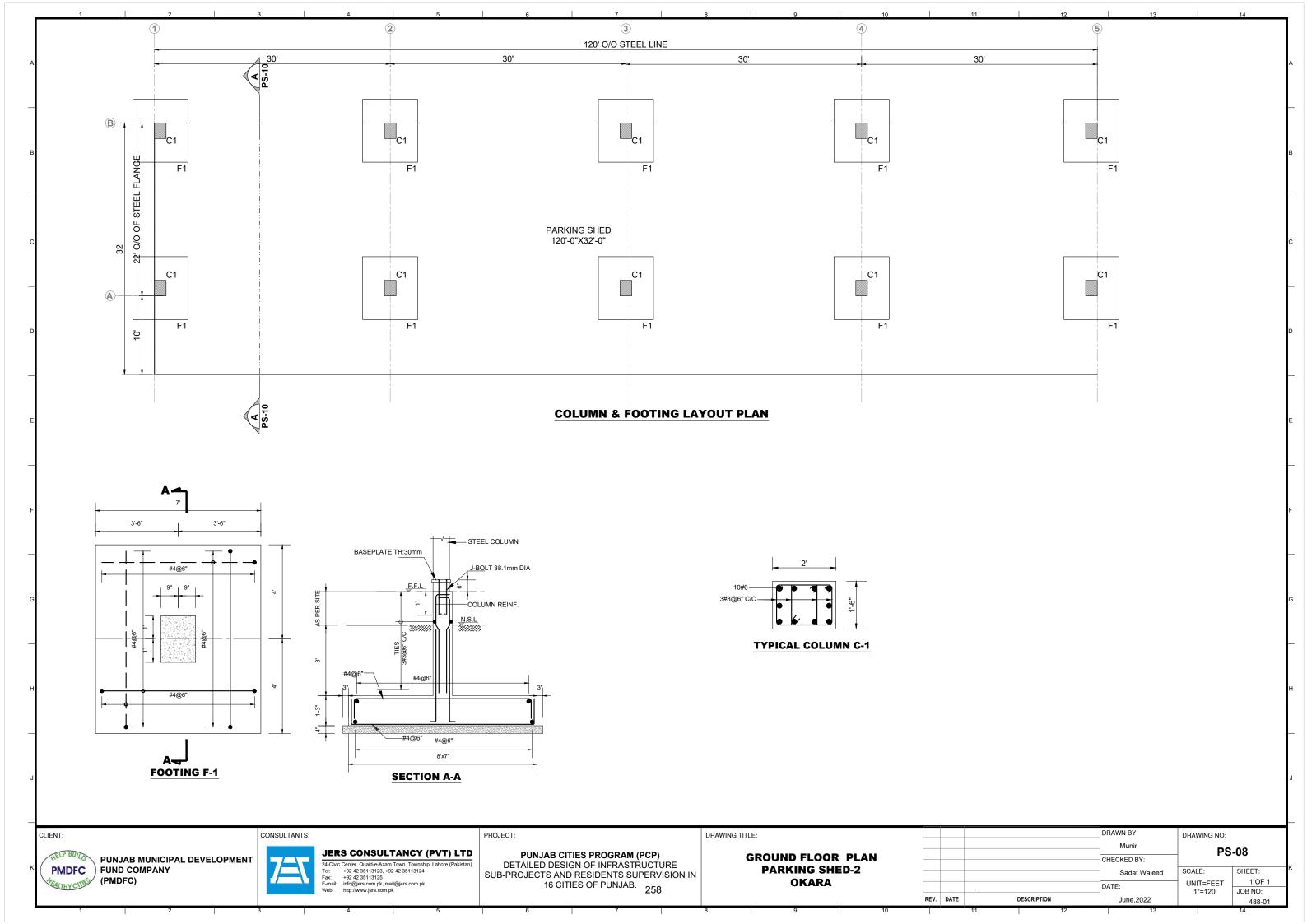


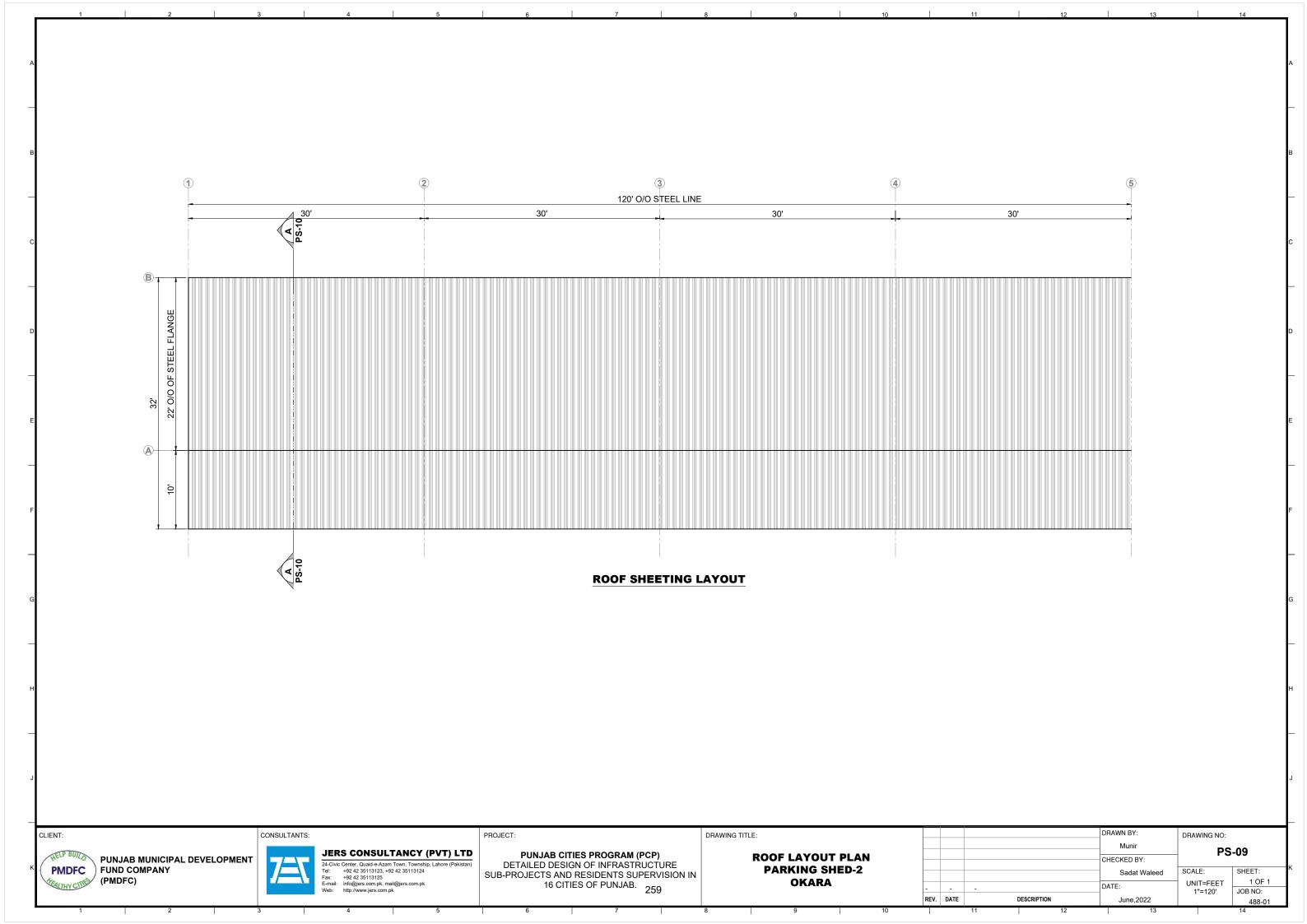


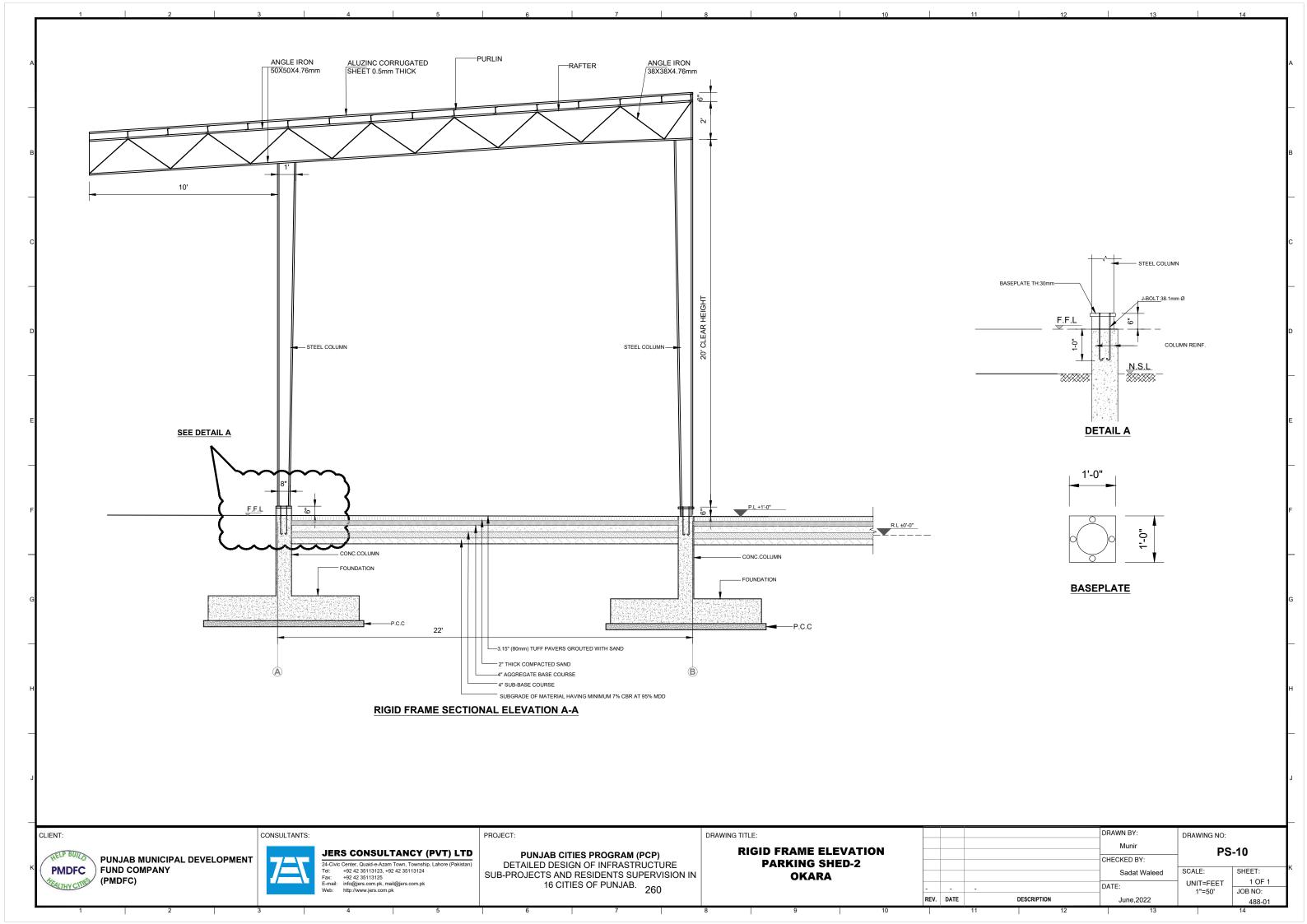


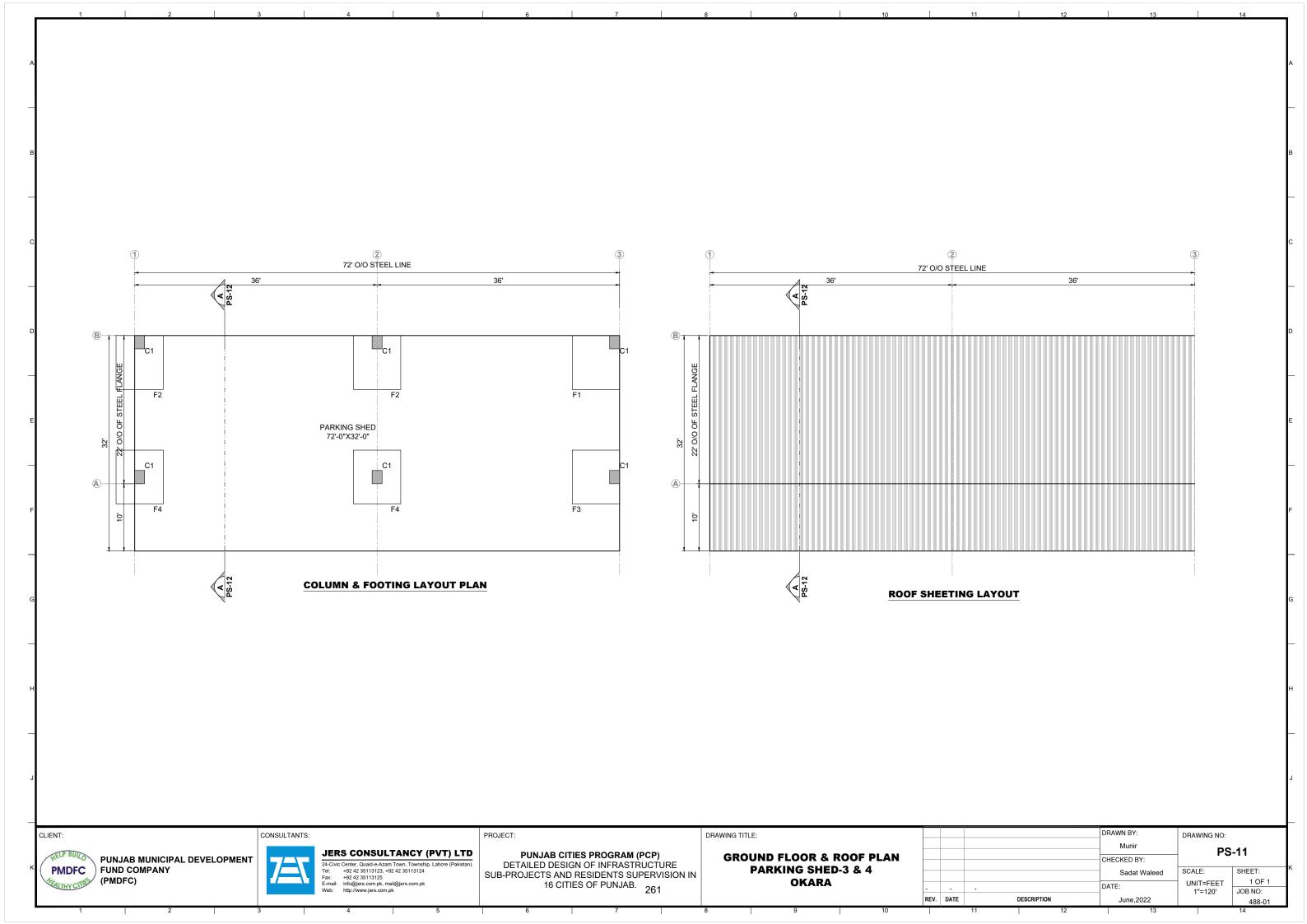


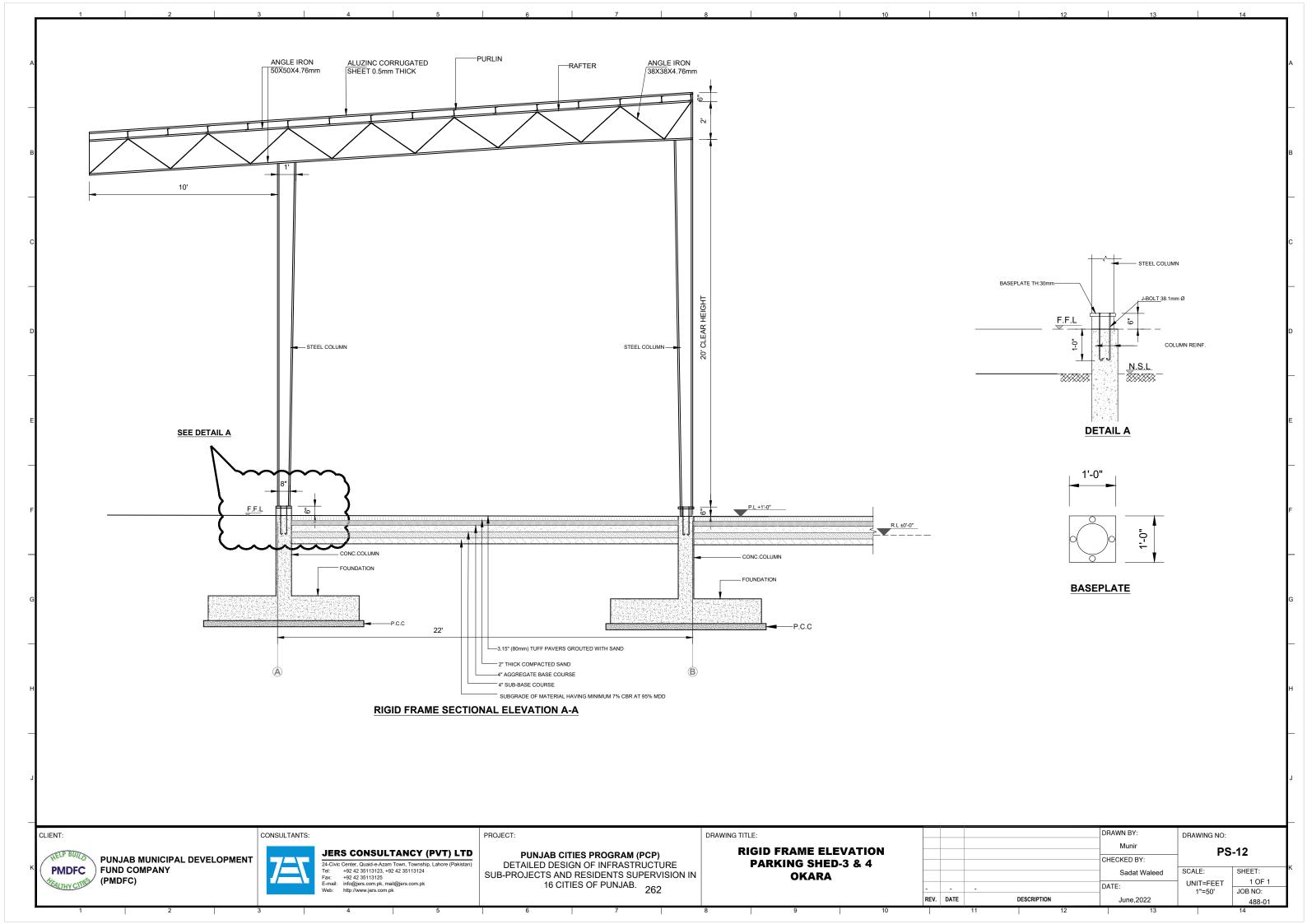


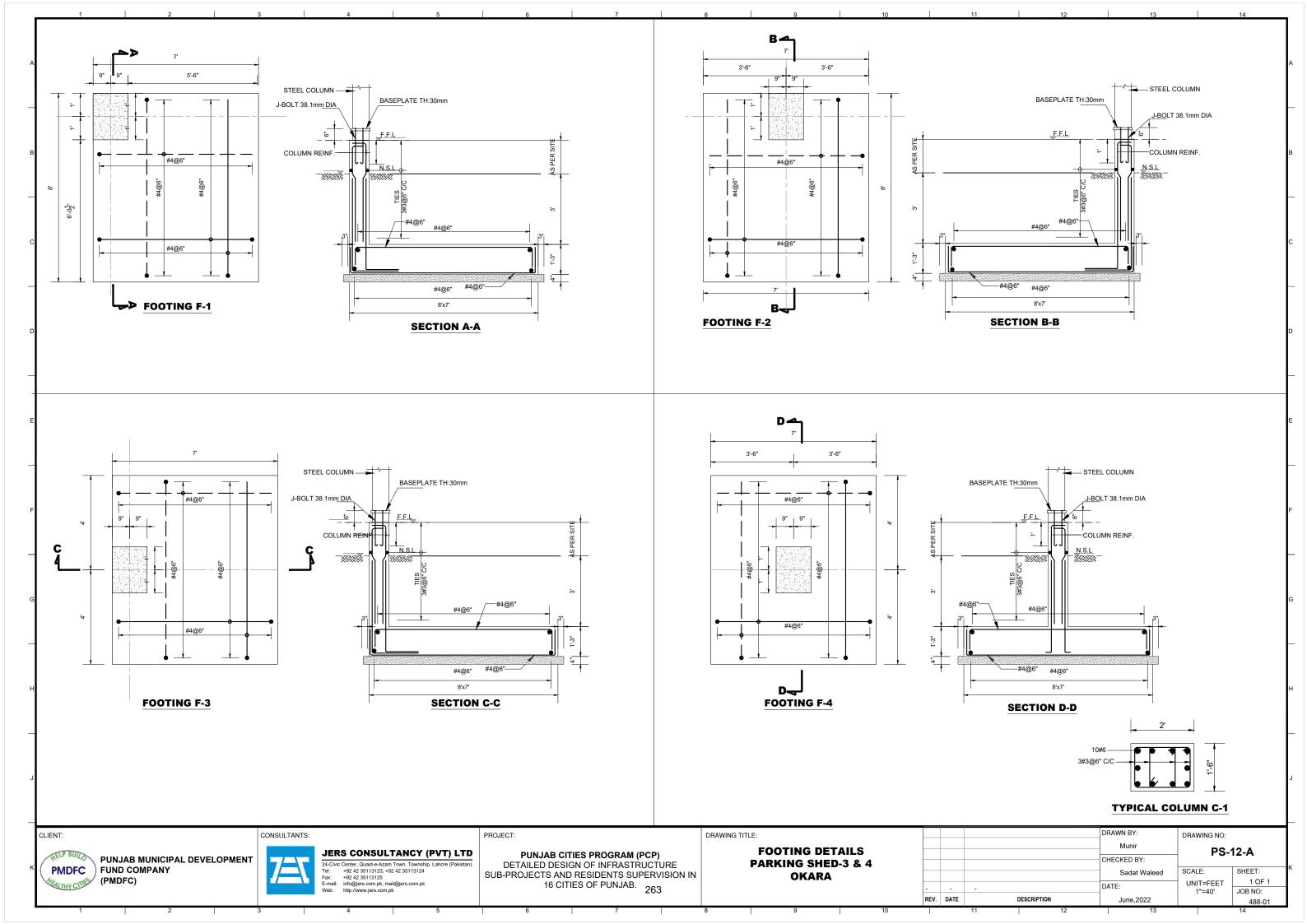


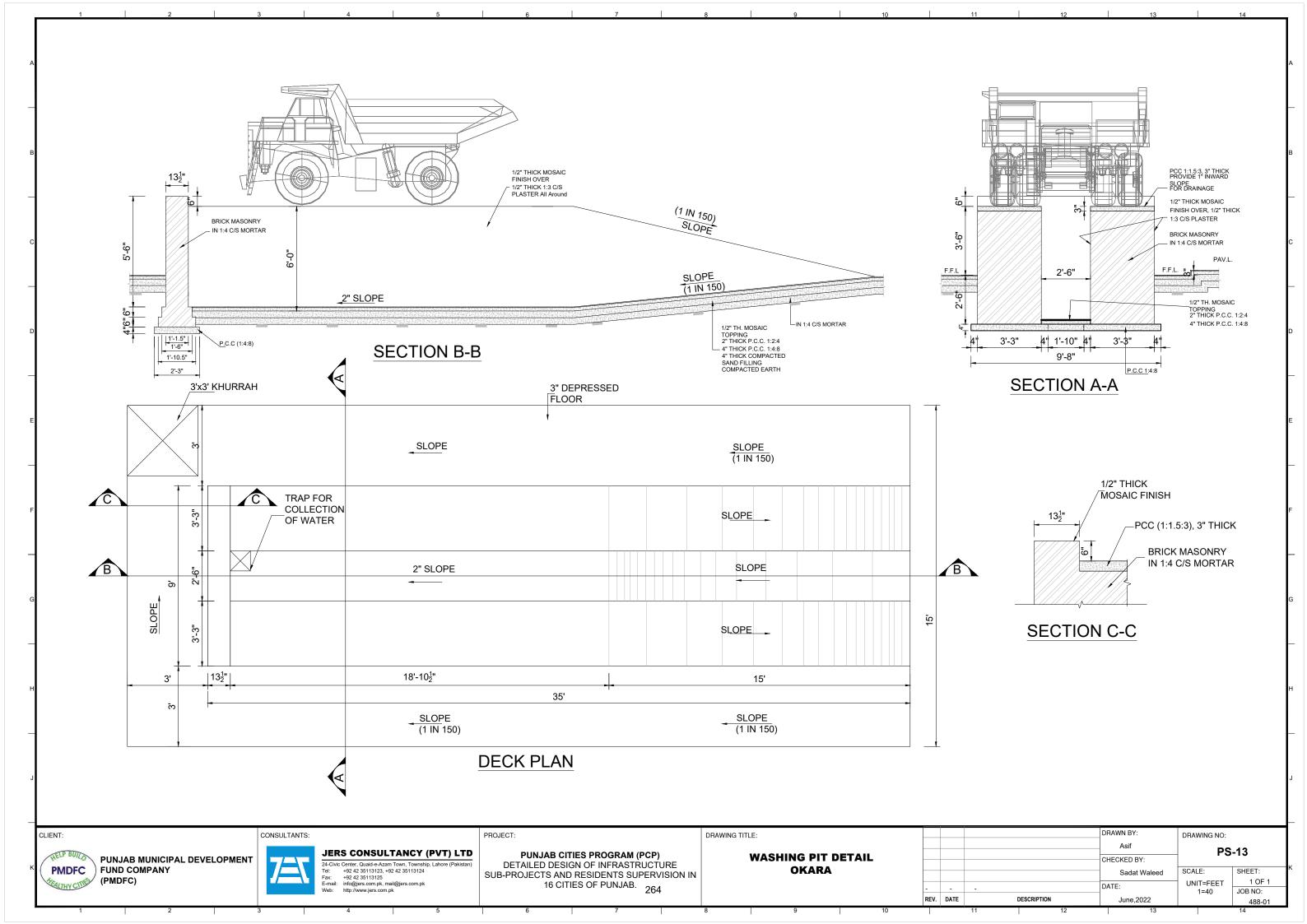


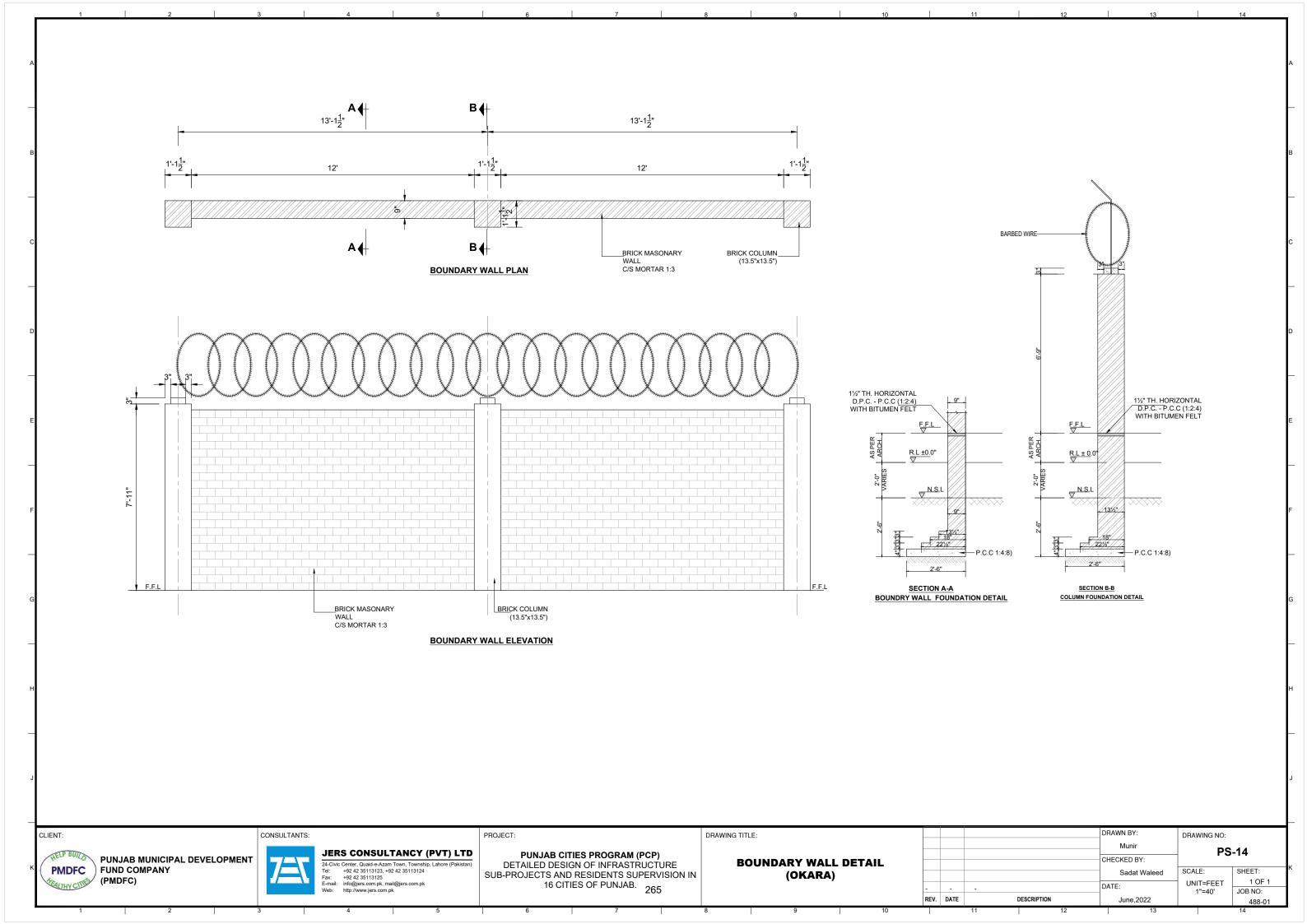


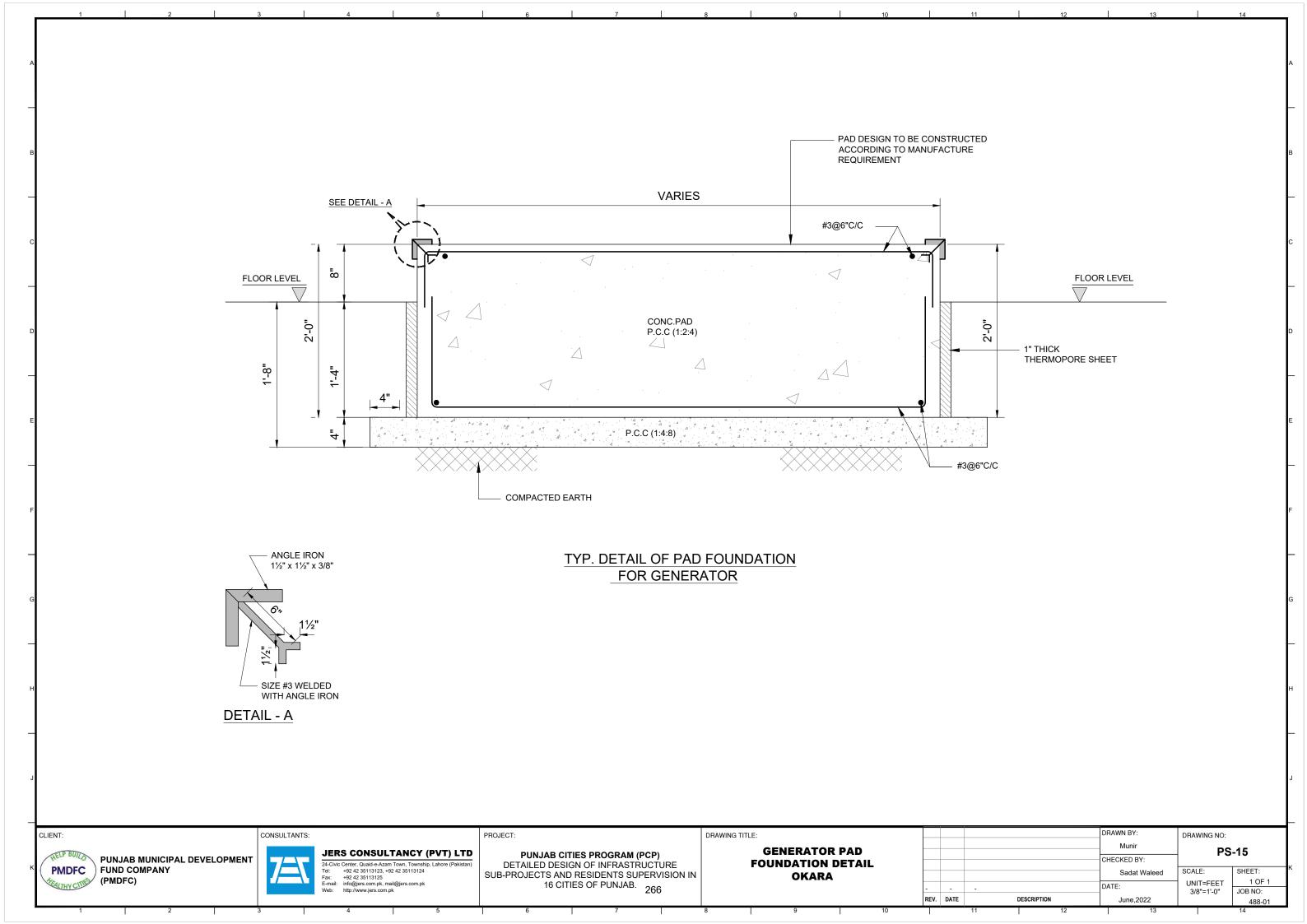


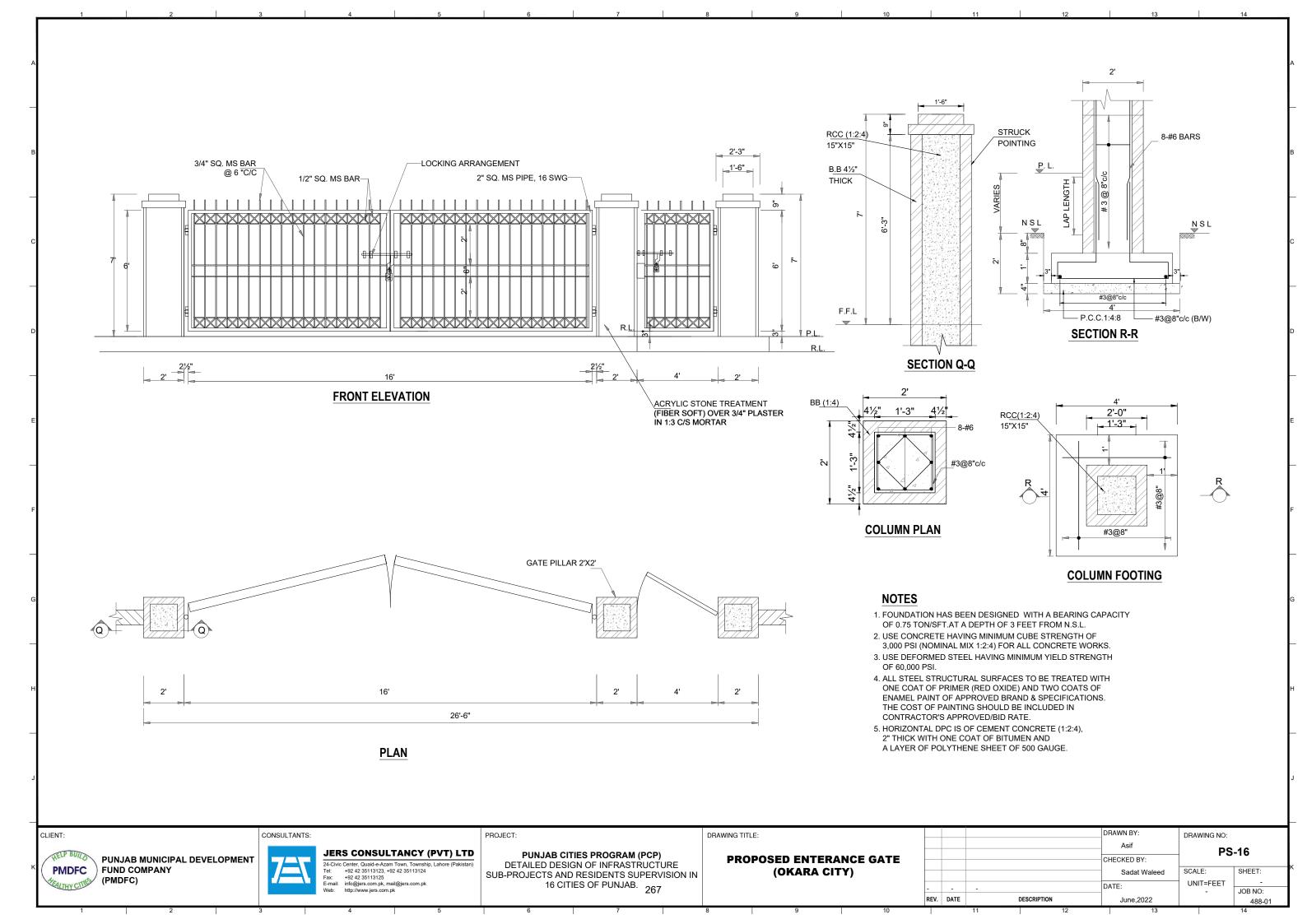


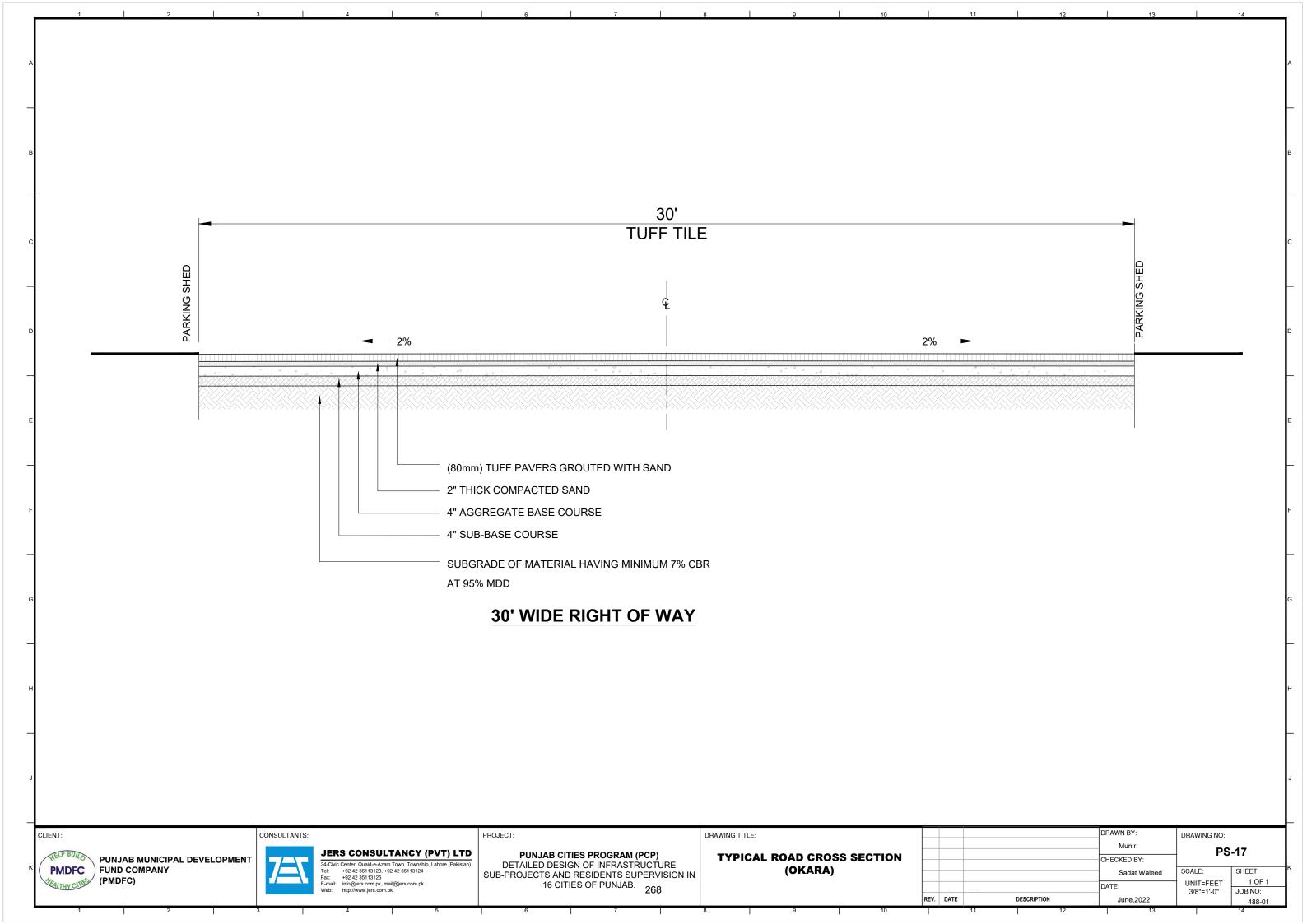


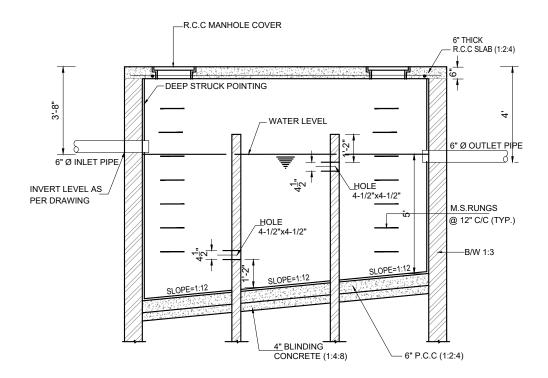




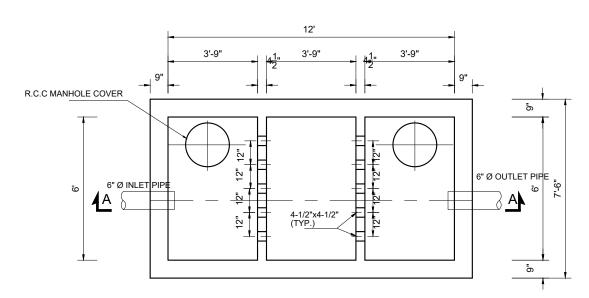




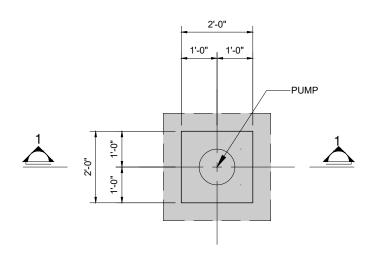




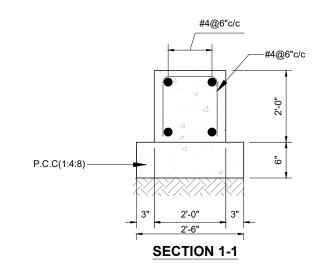
SECTION A-A



SEPTIC TANK PLAN 12-0" x 6'-0"



PUMP FOUNDATION PLAN



DRAWN BY:

Munir

Sadat Waleed

CHECKED BY:

DATE:

DESCRIPTION

PS-18

SHEET:

JOB NO:

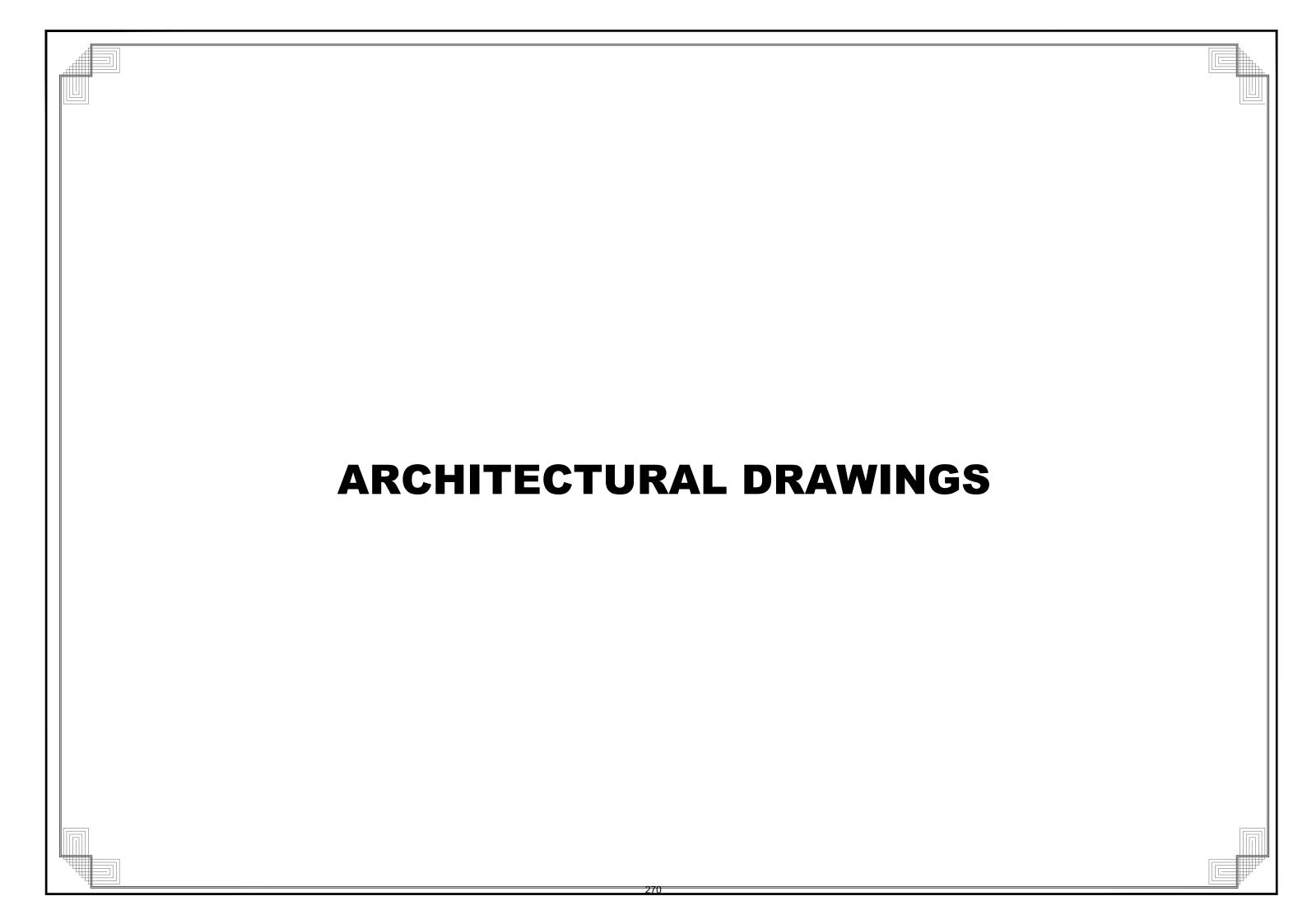
1 OF 1

488-01

SCALE:

UNIT=FEET 1/4"=1'-0"

CLIENT: CONSULTANTS: PROJECT: **PUMP PAD FOUNDATION &** JERS CONSULTANCY (PVT) LTD PUNJAB CITIES PROGRAM (PCP) PUNJAB MUNICIPAL DEVELOPMENT **SEPTIC TANK DETAIL** DETAILED DESIGN OF INFRASTRUCTURE 24-Civic Center, Quaid-e-Azam Town, Township, Lahore (Pakistan PMDFC) FUND COMPANY Center, Qualut-9-Azarii Town, Townsii +92 42 35113123, +92 42 35113124 +92 42 35113125 info@jers.com.pk, mail@jers.com.pk http://www.jers.com.pk SUB-PROJECTS AND RESIDENTS SUPERVISION IN **OKARA** (PMDFC) 16 CITIES OF PUNJAB. 269 REV. DATE



LEGEND
SKIRTING WALL
FLOOR CEILING

- 1 PORCELAIN TILES OF APPROVED SIZE PATTERN AND COLOR
- CERAMIC TILES OF APPROVED SIZE PATTERN AND COLOR 7'-0" HIGH WITH VENILE EMULSION PAINT TILL CEILING. (MATT FINISH ON FLOOR & GLAZZED ON WALL)
- (3) PORCELAIN SLABS FOR TREADS & RISER OF APPROVED COLOR & PATTERN
- 4 DISTAMPER ON C.S PLASTER (APPROVED MAKE & SHADE)
- (5) DISTAMPER PAINT
- 6 P.C.C TUFF PAVERS 80mm THICK HAVING 7000 PSI GRADING STRENGTH OVER 2" THICK SAND
- 7 4" HIGH PORCELAIN TILES SKIRTING

SCHEDULE OF EXTERNAL FINISHES

PROJECT

- 8 DEEP STRUCK POINTING
- 9 9"X4½"X1½" TH. TILES

PUNJAB MUNICIPAL DEVELOPMENT FUND COMPANY (PMDFC)

JERS CONSULTANCY (PVT) LTD

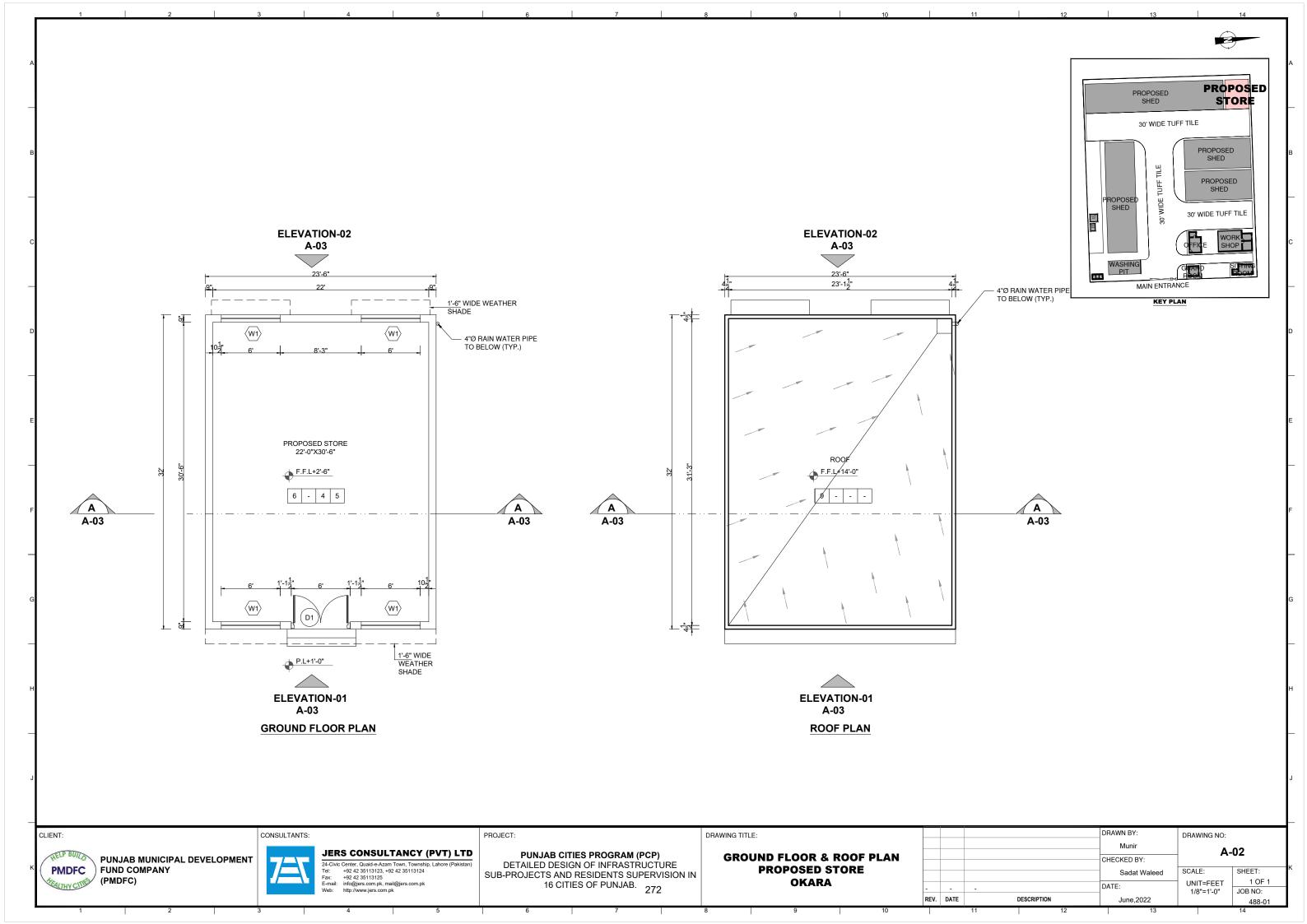
24-Civic Center, Quaid-e-Azam Town, Township, Lahore (Pakistan)
Tel: +92 42 35113123 +92 42 35113124
Fax: +92 42 35113125
E-mail: info@jers.com.pk, mail@jers.com.pk

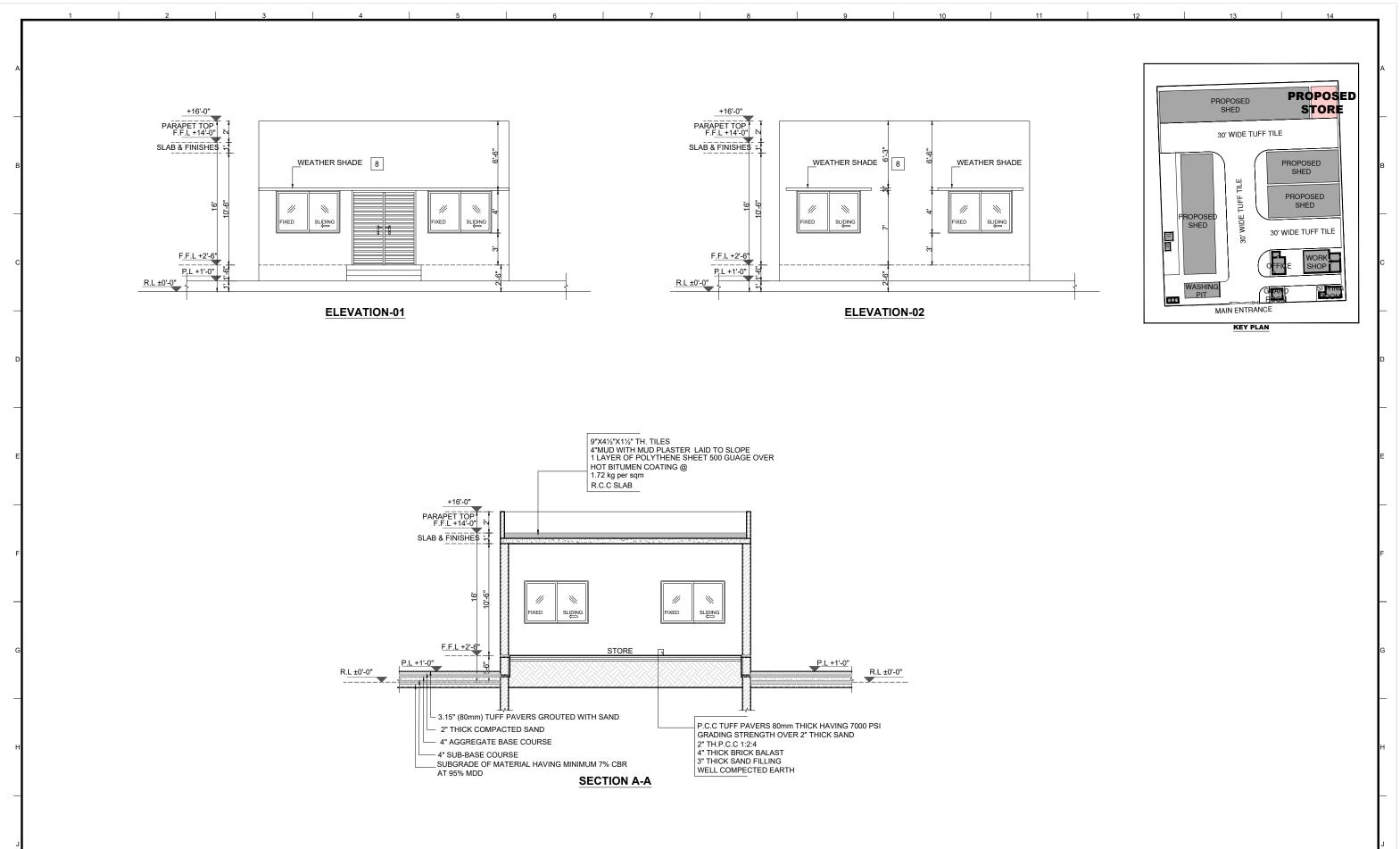
PUNJAB CITIES PROGRAM (PCP)
DETAILED DESIGN OF INFRASTRUCTURE
SUB-PROJECTS AND RESIDENTS SUPERVISION IN
16 CITIES OF PUNJAB.

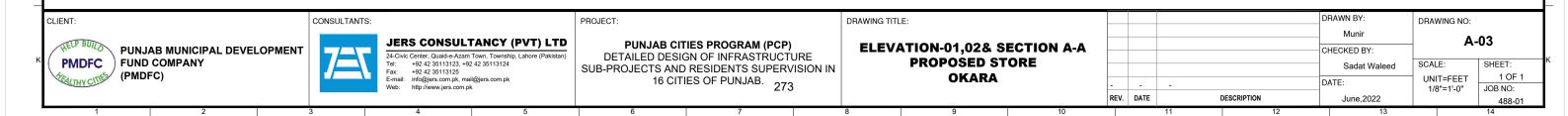
LEGEND & NOTES PROPOSED STORE OKARA | DRAWN BY: | DRAWING NO: | Munir | CHECKED BY: | Sadat Waleed | SCALE: | UNIT=FEET | NTS | NTS | STATE: | NTS | OR NO: | OR NO:

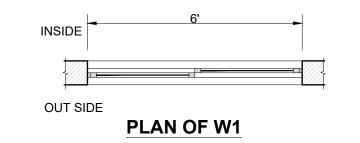
A-01

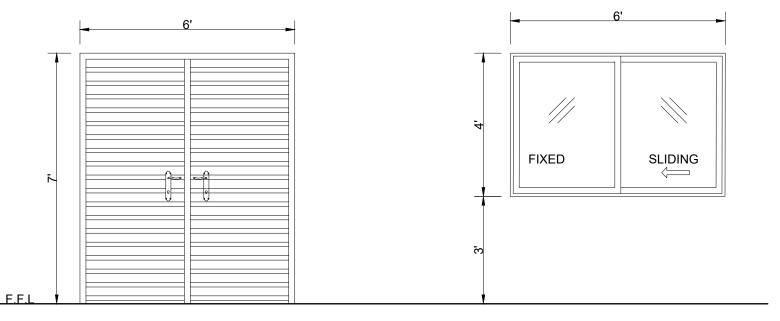
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NTS JOB NO:









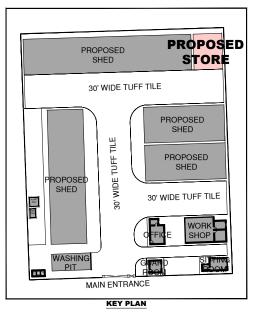


ELEVATION OF D1

SIZE=6'-0"x7'-0"
QUANTITY= 01 NOS. HOLLOW
FLUSH DOOR WITH COMMERCIAL
PLY(3 PLY)

ELEVATION OF W1

SIZE=6'-0"x4'-0"
QUANTITY= 04 NOS.
STEEL SLIDING WINDOW,
FIXED WITH 5MM THICK GLASS
INCLUDING WIRE GAUZE



CLIENT:

PUNJAB MUNICIPAL DEVELOPMENT FUND COMPANY (PMDFC)

CONSULTANTS:

JERS CONSULTANCY (PVT) LTD

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PUNJAB CITIES PROGRAM (PCP)

DETAILED DESIGN OF INFRASTRUCTURE
SUB-PROJECTS AND RESIDENTS SUPERVISION IN

16 CITIES OF PUNJAB. 274

PROJECT:

DOOR WINDOW SCHEDULE PROPOSED STORE OKARA

DRAWING TITLE:

				D	PRAWN BY:	DRAWING NO:	
					Munir	A-04	
				C	CHECKED BY:		
					Sadat Waleed	SCALE:	SHEET:
				Г	DATE:	UNIT=FEET	1 OF 1
	-	-	-		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	3/8"=1'-0"	JOB NO:
	REV.	DATE	DESCRIPTION		June,2022		488-01
_			- 11	40	40		4.4

LEGEND SKIRTING WALL **FLOOR CEILING**

- PORCELAIN TILES OF APPROVED SIZE PATTERN AND COLOR
- CERAMIC TILES OF APPROVED SIZE PATTERN AND COLOR 7'-0" HIGH WITH VENILE EMULSION PAINT TILL CEILING. (MATT FINISH ON FLOOR & GLAZZED ON WALL)
- PORCELAIN SLABS FOR TREADS & RISER OF APPROVED COLOR & PATTERN
- DISTAMPER ON C.S PLASTER (APPROVED MAKE & SHADE)
- (5) **DISTAMPER PAINT**
- P.C.C TUFF PAVERS 80mm THICK HAVING 7000 PSI GRADING STRENGTH OVER 2" THICK SAND
- 4" HIGH PORCELAIN TILES SKIRTING

SCHEDULE OF EXTERNAL FINISHES

PROJECT

- DEEP STRUCK POINTING
- 9"X41/2"X11/2" TH. TILES

CLIENT: **PUNJAB MUNICIPAL DEVELOPMENT** FUND COMPANY (PMDFC)

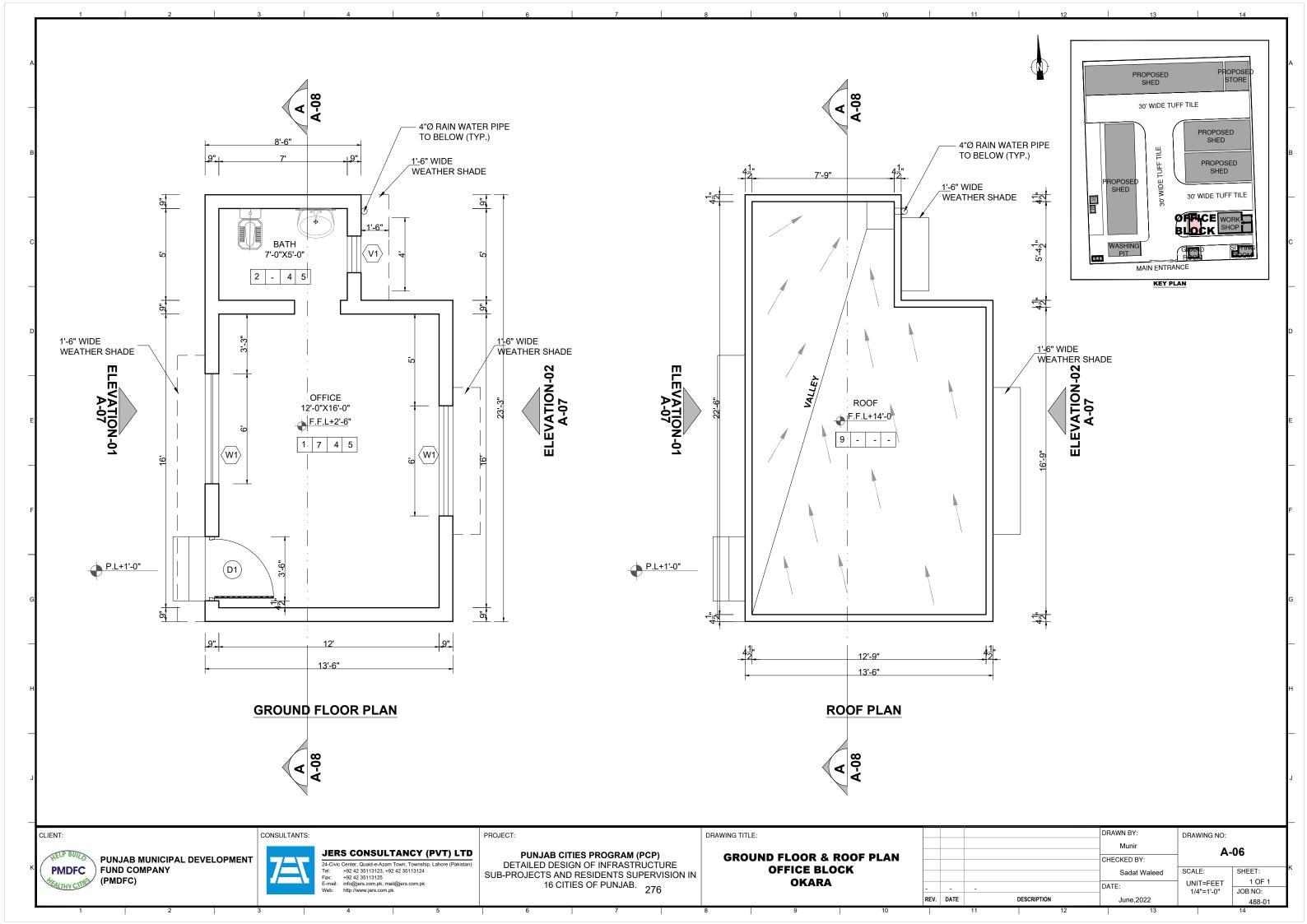
CONSULTANTS: JERS CONSULTANCY (PVT) LTD

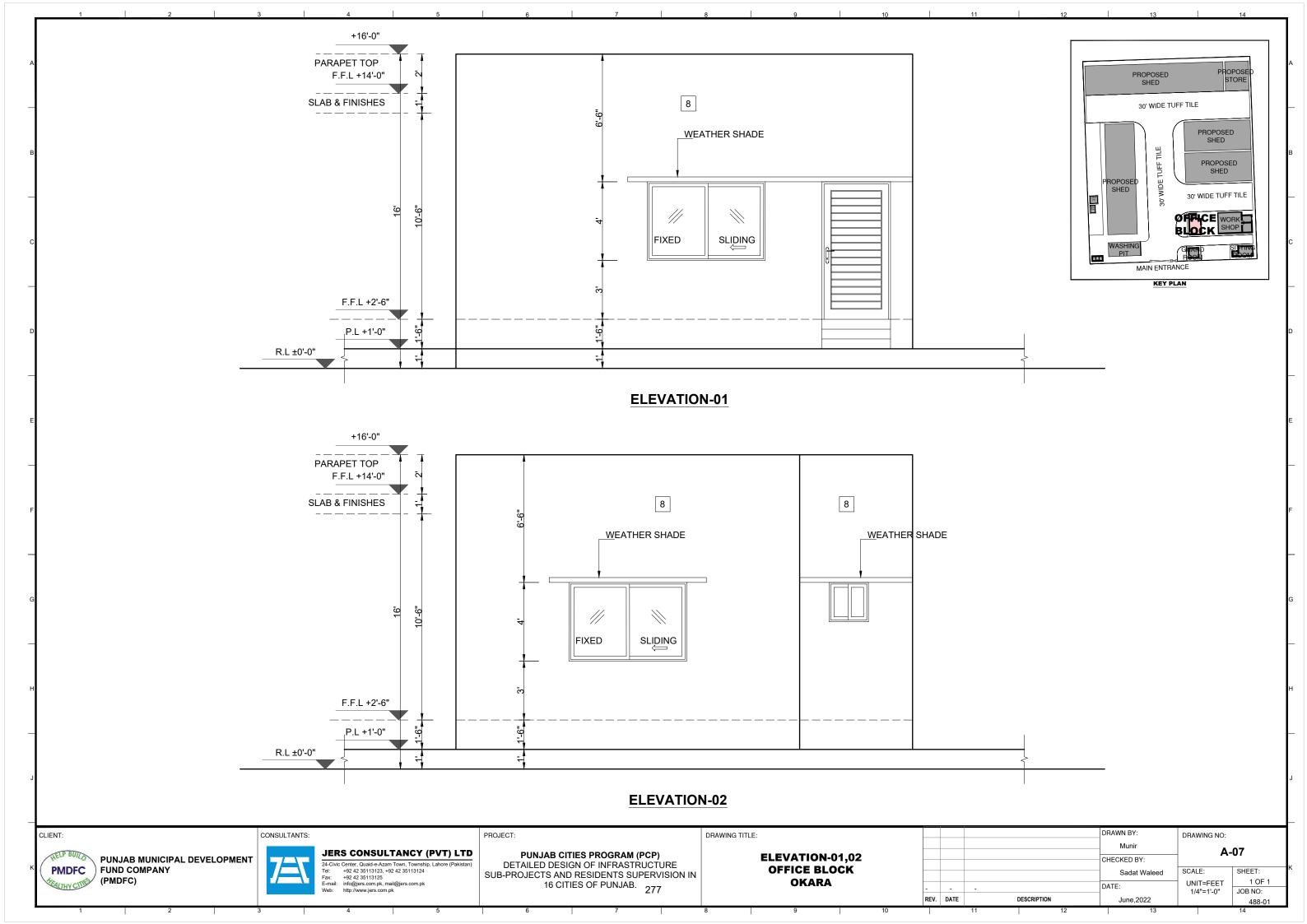
PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB.

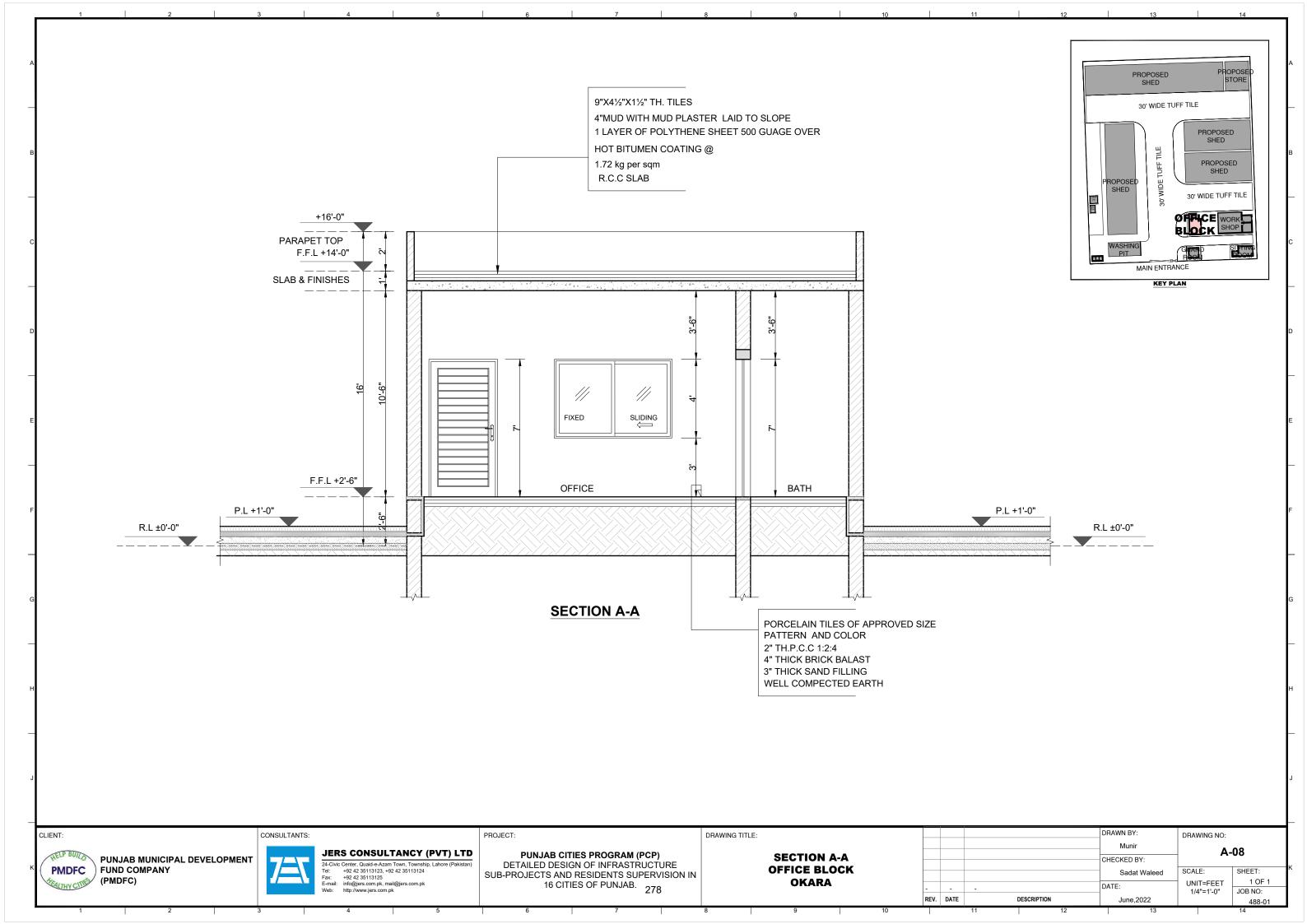
LEGEND & NOTES OFFICE BLOCK OKARA

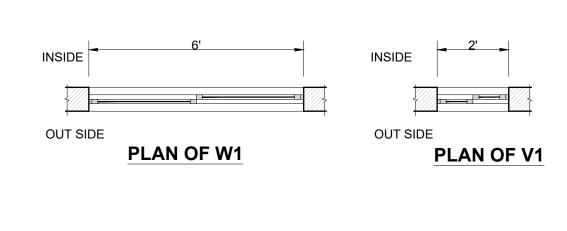
DRAWN BY DRAWING NO: Munir CHECKED BY: Sadat Waleed DATE: REV. DATE

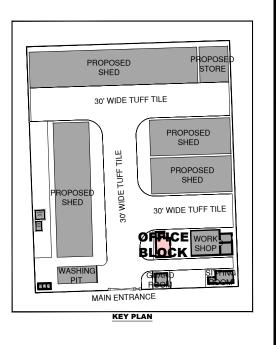
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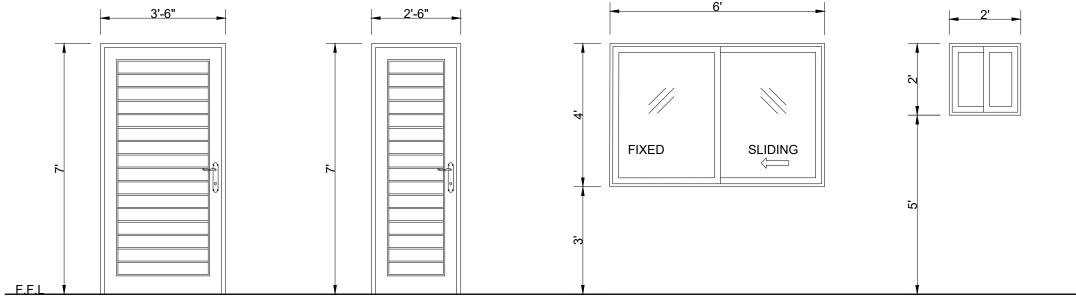












ELEVATION OF D1

SIZE=3'-6"x7'-0" QUANTITY= 01 NOS. HOLLOW FLUSH DOOR WITH COMMERCIAL PLY(3 PLY)

ELEVATION OF D2

SIZE=2'-6"x7'-0" QUANTITY= 01 NOS. HOLLOW FLUSH DOOR WITH COMMERCIAL PLY(3 PLY)

PROJECT:

ELEVATION OF W1

SIZE=6'-0"x4'-0" QUANTITY= 02 NOS. STEEL SLIDING WINDOW, FIXED WITH 5MM THICK GLASS **INCLUDING WIRE GAUZE**

DRAWING TITLE:

ELEVATION OF V1

SIZE=2'-0"x2'-0" QUANTITY= 01 NOS. STEEL SLIDING WINDOW, FIXED WITH 5MM THICK GLASS **INCLUDING WIRE GAUZE**

CLIENT: PUNJAB MUNICIPAL DEVELOPMENT

PMDFC) FUND COMPANY

(PMDFC)



JERS CONSULTANCY (PVT) LTD 24-Civic Center, Quaid-e-Azam Town, Township, Lahore (Pakistan Center, Qualut-9-Azarii Town, Townsii +92 42 35113123, +92 42 35113124 +92 42 35113125 info@jers.com.pk, mail@jers.com.pk http://www.jers.com.pk

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB. 279

DOOR WINDOW SCHEDULE OFFICE BLOCK OKARA

			DRAWN BY:	DRAWING NO:	
			Munir	A-09	
			CHECKED BY:		
			Sadat Waleed	SCALE:	SHEET:
			DATE:	UNIT=FEET	1 OF 1
-	-	-	DATE.	3/8"=1'-0"	JOB NO:
REV.	DATE	DESCRIPTION	June,2022		488-01

LEGEND
SKIRTING WALL
FLOOR CEILING

- 1 PORCELAIN TILES OF APPROVED SIZE PATTERN AND COLOR
- CERAMIC TILES OF APPROVED SIZE PATTERN AND COLOR 7'-0" HIGH WITH VENILE EMULSION PAINT TILL CEILING. (MATT FINISH ON FLOOR & GLAZZED ON WALL)
- (3) PORCELAIN SLABS FOR TREADS & RISER OF APPROVED COLOR & PATTERN
- 4 DISTAMPER ON C.S PLASTER (APPROVED MAKE & SHADE)
- (5) DISTAMPER PAINT
- 6 P.C.C TUFF PAVERS 80mm THICK HAVING 7000 PSI GRADING STRENGTH OVER 2" THICK SAND
- (7) 4" HIGH PORCELAIN TILES SKIRTING

SCHEDULE OF EXTERNAL FINISHES

PROJECT

- 8 DEEP STRUCK POINTING
- 9 9"X4½"X1½" TH. TILES

PUNJAB MUNICIPAL DEVELOPMENT FUND COMPANY (PMDFC)

JERS CONSULTANCY (PVT) LTD

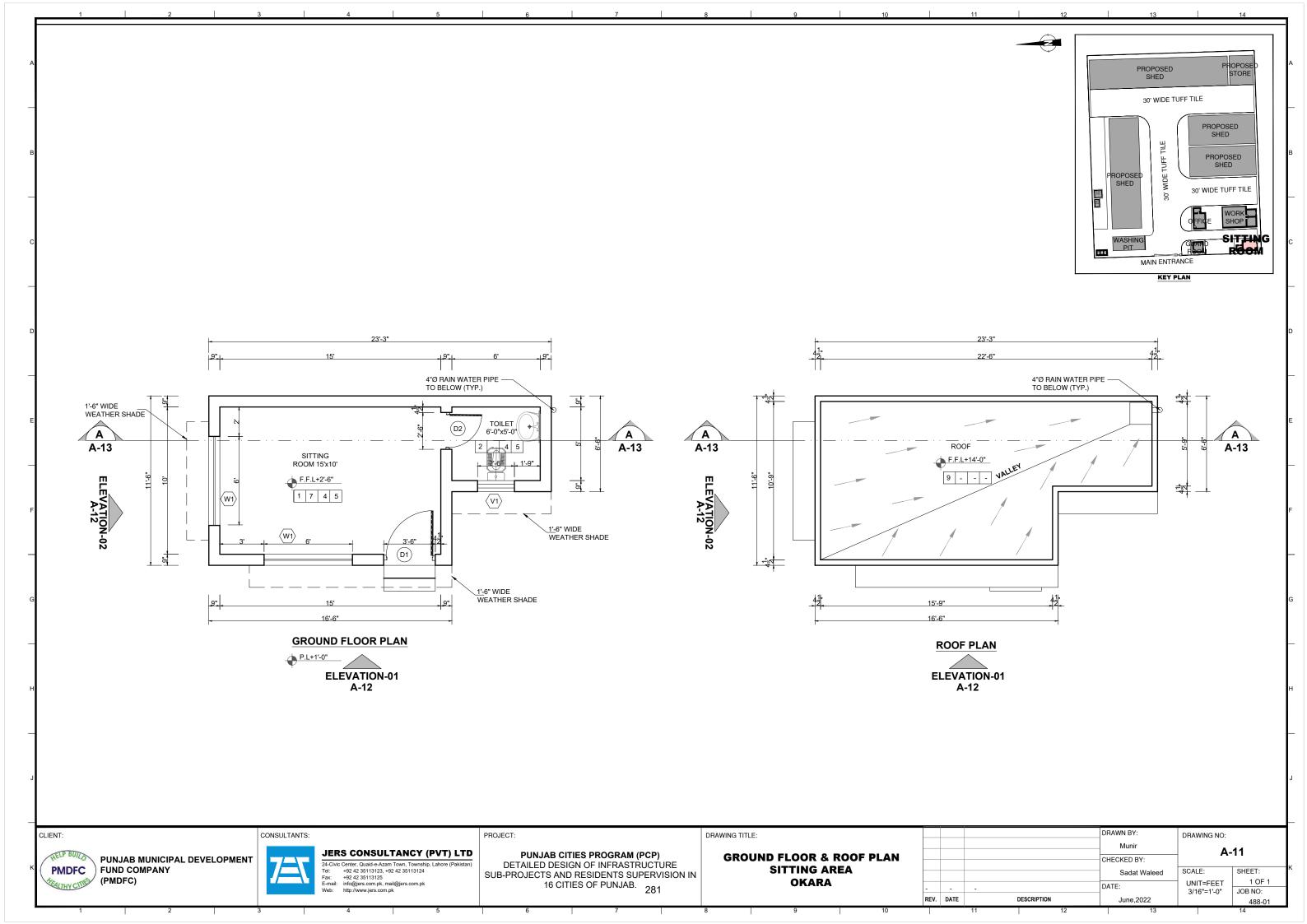
24-Civic Center, Quaid-e-Azam Town, Township, Lahore (Pakistan)
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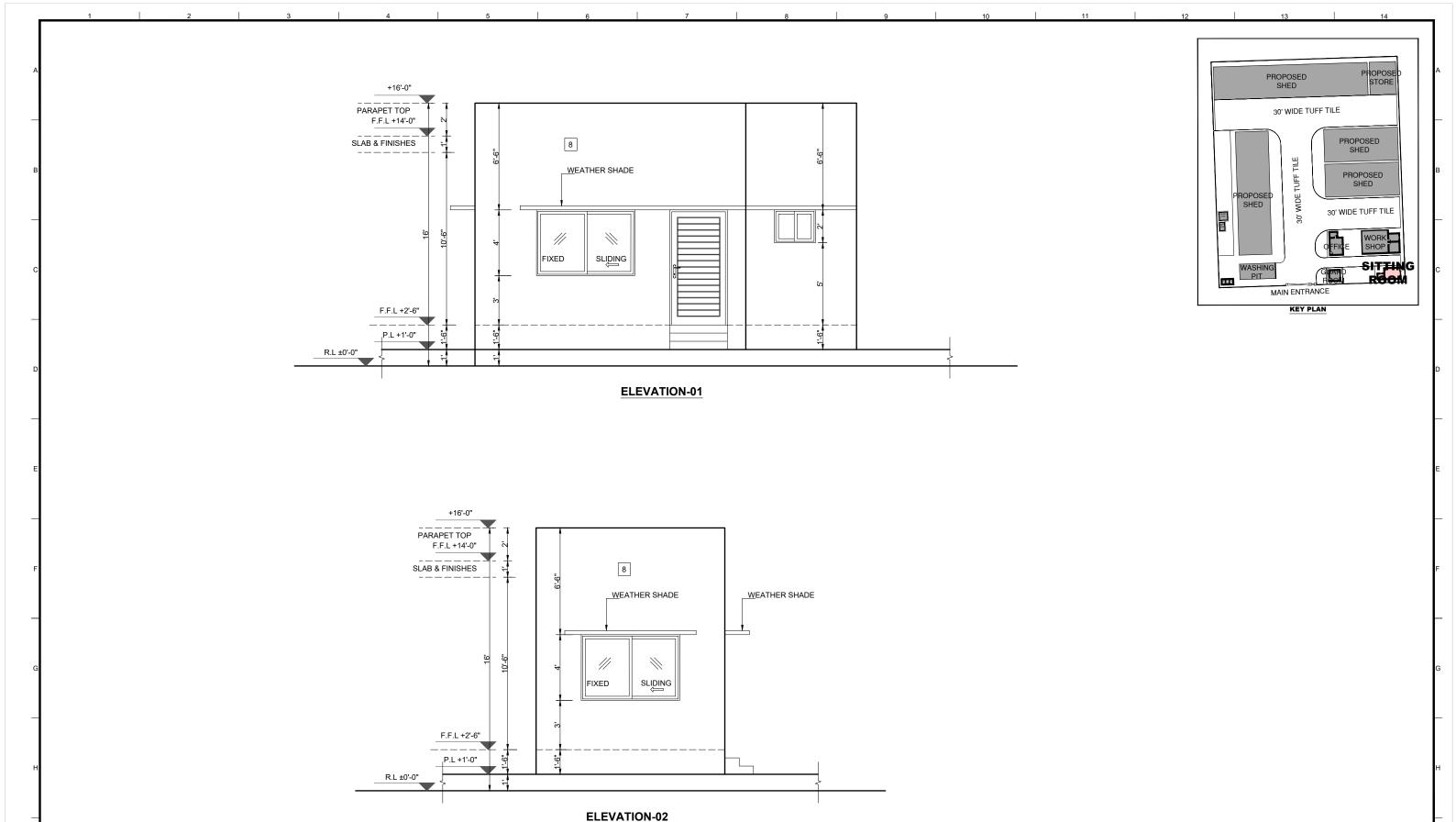
CONSULTANTS:

PUNJAB CITIES PROGRAM (PCP)
DETAILED DESIGN OF INFRASTRUCTURE
SUB-PROJECTS AND RESIDENTS SUPERVISION IN
16 CITIES OF PUNJAB. 290

LEGEND & NOTES SITTING AREA OKARA

DRAWING NO:





DRAWN BY: CLIENT: DRAWING TITLE: CONSULTANTS: PROJECT: DRAWING NO: Munir A-12 JERS CONSULTANCY (PVT) LTD PUNJAB CITIES PROGRAM (PCP) PMDFC PUNJAB MUNICIPAL DEVELOPMENT FUND COMPANY **ELEVATION-01 & 02** CHECKED BY:

 24-Civic Center, Quaid-e-Azam Town, Township, Lahore (Pakistan)

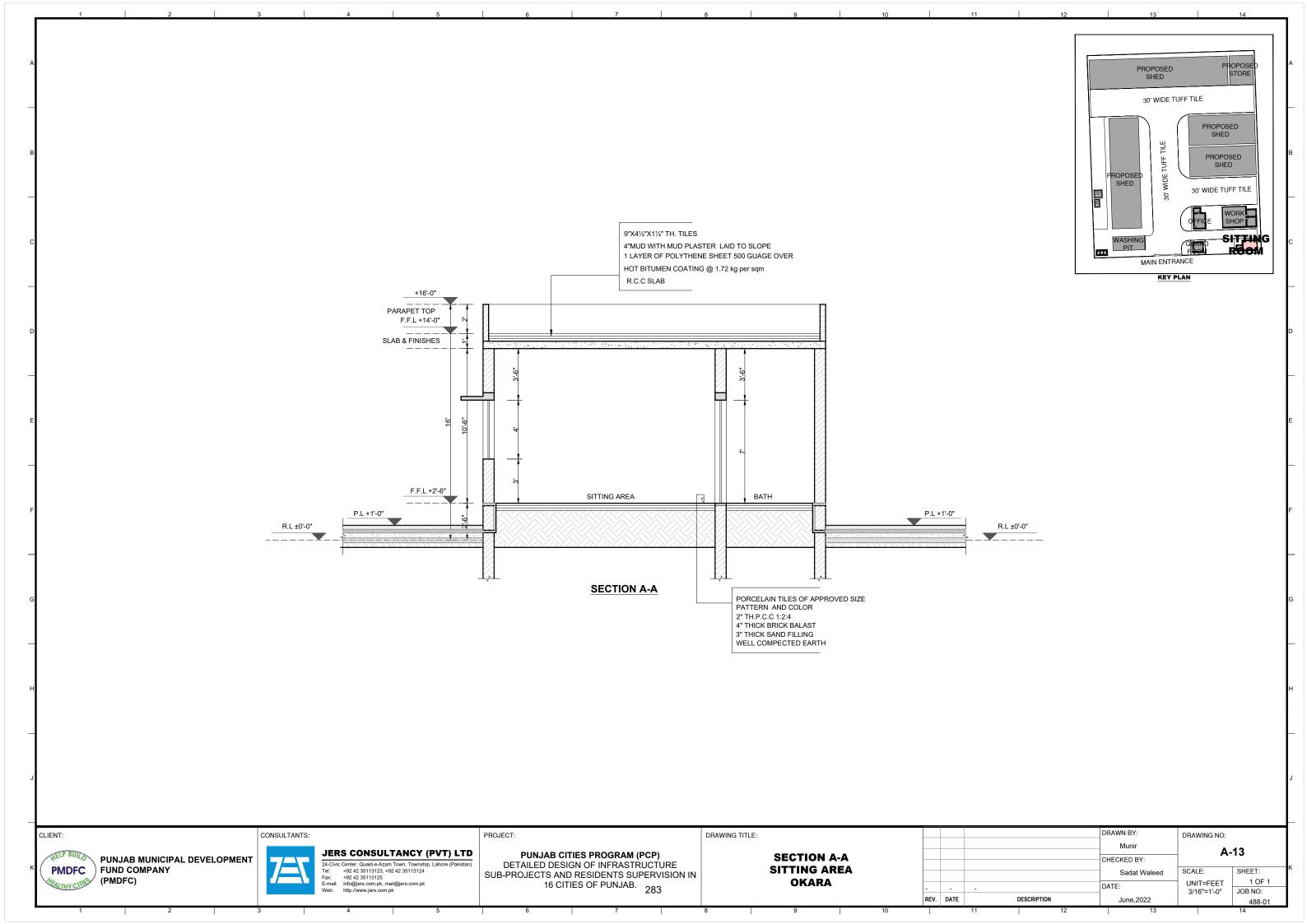
 Tel:
 +92 42 35113123, +92 42 35113124

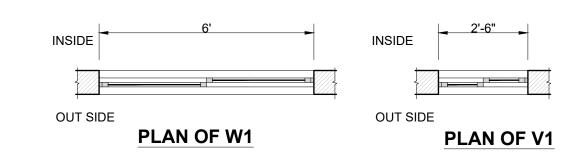
 Fax:
 +92 42 35113125

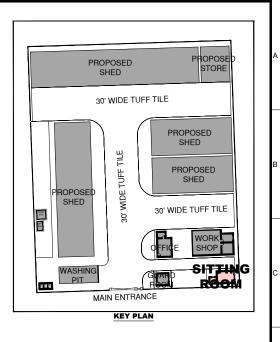
 E-mall:
 info@jers.com.pk, mail@jers.com.pk

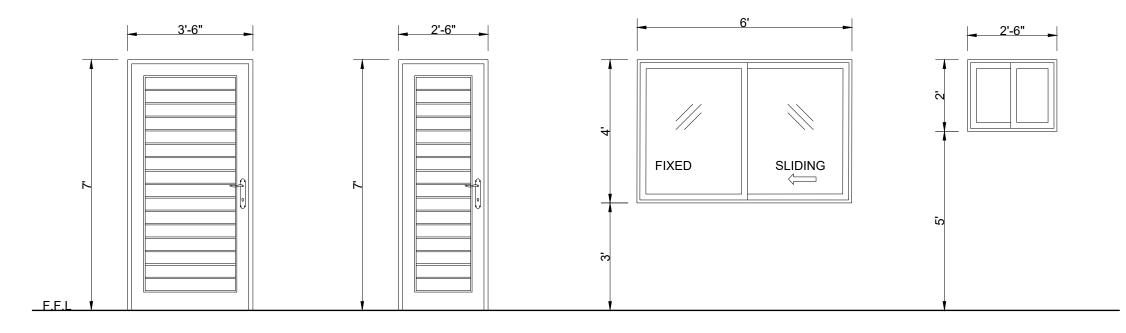
 Web:
 http://www.jers.com.pk

 DETAILED DESIGN OF INFRASTRUCTURE **SITTING AREA** Sadat Waleed SCALE: SHEET: SUB-PROJECTS AND RESIDENTS SUPERVISION IN (PMDFC) 16 CITIES OF PUNJAB. 282 **OKARA** 1 OF 1 UNIT=FEET 3/16"=1'-0" DATE: JOB NO: REV. DATE DESCRIPTION 488-01









ELEVATION OF D1

SIZE=3'-6"x7'-0" QUANTITY= 01 NOS. HOLLOW FLUSH DOOR WITH COMMERCIAL PLY(3 PLY)

ELEVATION OF D2

SIZE=2'-6"x7'-0" QUANTITY= 01 NOS. HOLLOW FLUSH DOOR WITH COMMERCIAL PLY(3 PLY)

PROJECT:

ELEVATION OF W1

SIZE=6'-0"x4'-0" QUANTITY= 02 NOS. STEEL SLIDING WINDOW, FIXED WITH 5MM THICK GLASS INCLUDING WIRE GAUZE

DRAWING TITLE:

ELEVATION OF V1

SIZE=2'-6"x2'-0" QUANTITY= 01 NOS. STEEL SLIDING WINDOW, FIXED WITH 5MM THICK GLASS INCLUDING WIRE GAUZE

PUNJAB MUNICIPAL DEVELOPMENT
FUND COMPANY
(PMDFC)

CONSULTANTS:

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PUNJAB CITIES PROGRAM (PCP)
DETAILED DESIGN OF INFRASTRUCTURE
SUB-PROJECTS AND RESIDENTS SUPERVISION IN
16 CITIES OF PUNJAB.
284

DOOR WINDOW SCHEDULE SITTING AREA OKARA

				DRAWN BY:	DRAWING NO:	
				Munir	A-14	
				CHECKED BY:		
				Sadat Waleed	SCALE:	SHEET:
Н				DATE:	UNIT=FEET 3/8"=1'-0"	1 OF 1
	-	-	-	DATE.		JOB NO:
	REV.	DATE	DESCRIPTION	June,2022		488-01
			11 12	13		14

LEGEND
SKIRTING WALL
FLOOR CEILING

- 1 PORCELAIN TILES OF APPROVED SIZE PATTERN AND COLOR
- CERAMIC TILES OF APPROVED SIZE PATTERN AND COLOR 7'-0" HIGH WITH VENILE EMULSION PAINT TILL CEILING. (MATT FINISH ON FLOOR & GLAZZED ON WALL)
- (3) PORCELAIN SLABS FOR TREADS & RISER OF APPROVED COLOR & PATTERN
- 4 DISTAMPER ON C.S PLASTER (APPROVED MAKE & SHADE)
- (5) DISTAMPER PAINT
- 6 P.C.C TUFF PAVERS 80mm THICK HAVING 7000 PSI GRADING STRENGTH OVER 2" THICK SAND
- (7) 4" HIGH PORCELAIN TILES SKIRTING

SCHEDULE OF EXTERNAL FINISHES

PROJECT

- 8 DEEP STRUCK POINTING
- 9 9"X4½"X1½" TH. TILES

PUNJAB MUNICIPAL DEVELOPMENT FUND COMPANY (PMDFC)

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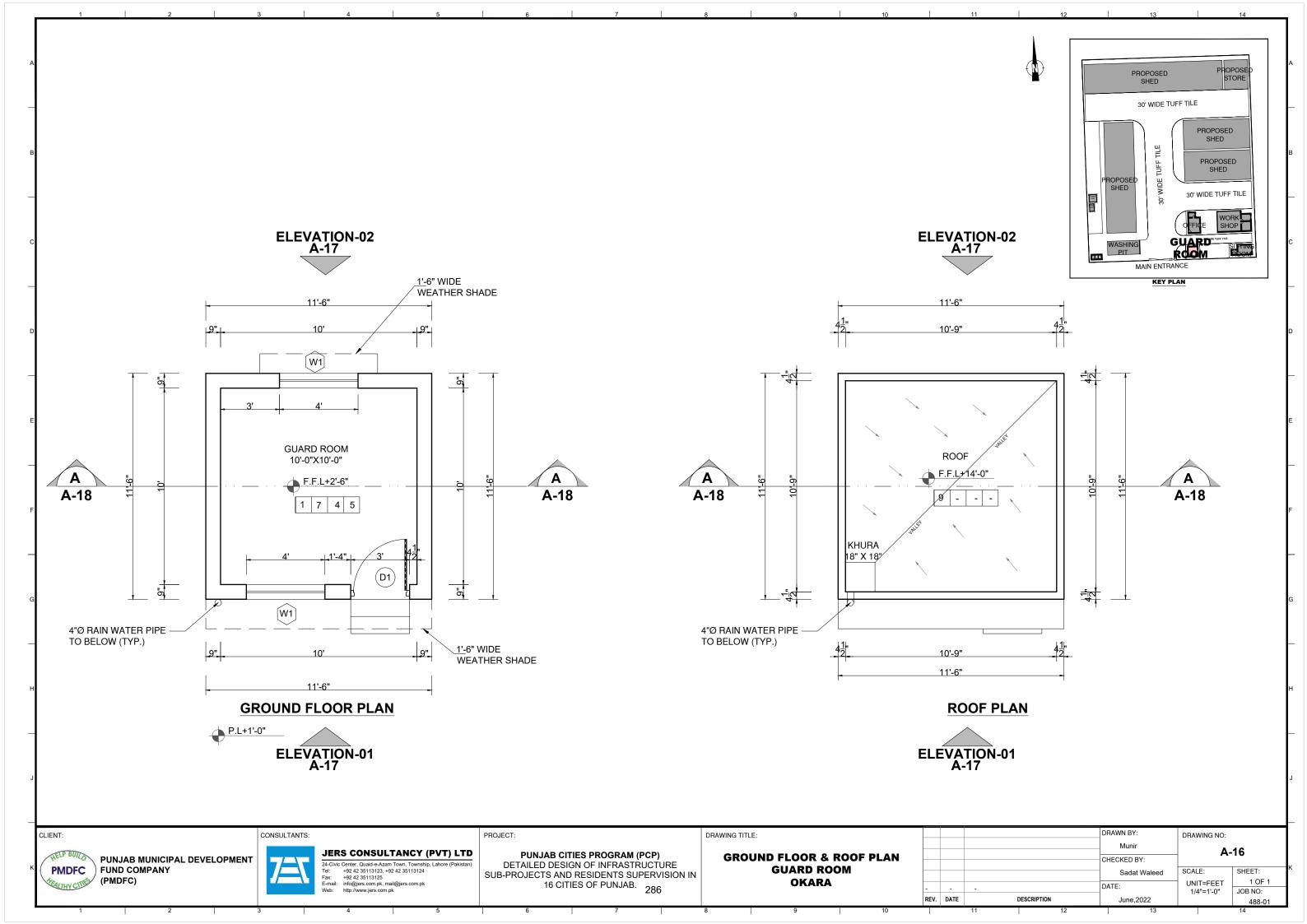
PUNJAB CITIES PROGRAM (PCP)
DETAILED DESIGN OF INFRASTRUCTURE
SUB-PROJECTS AND RESIDENTS SUPERVISION IN
16 CITIES OF PUNJAB.

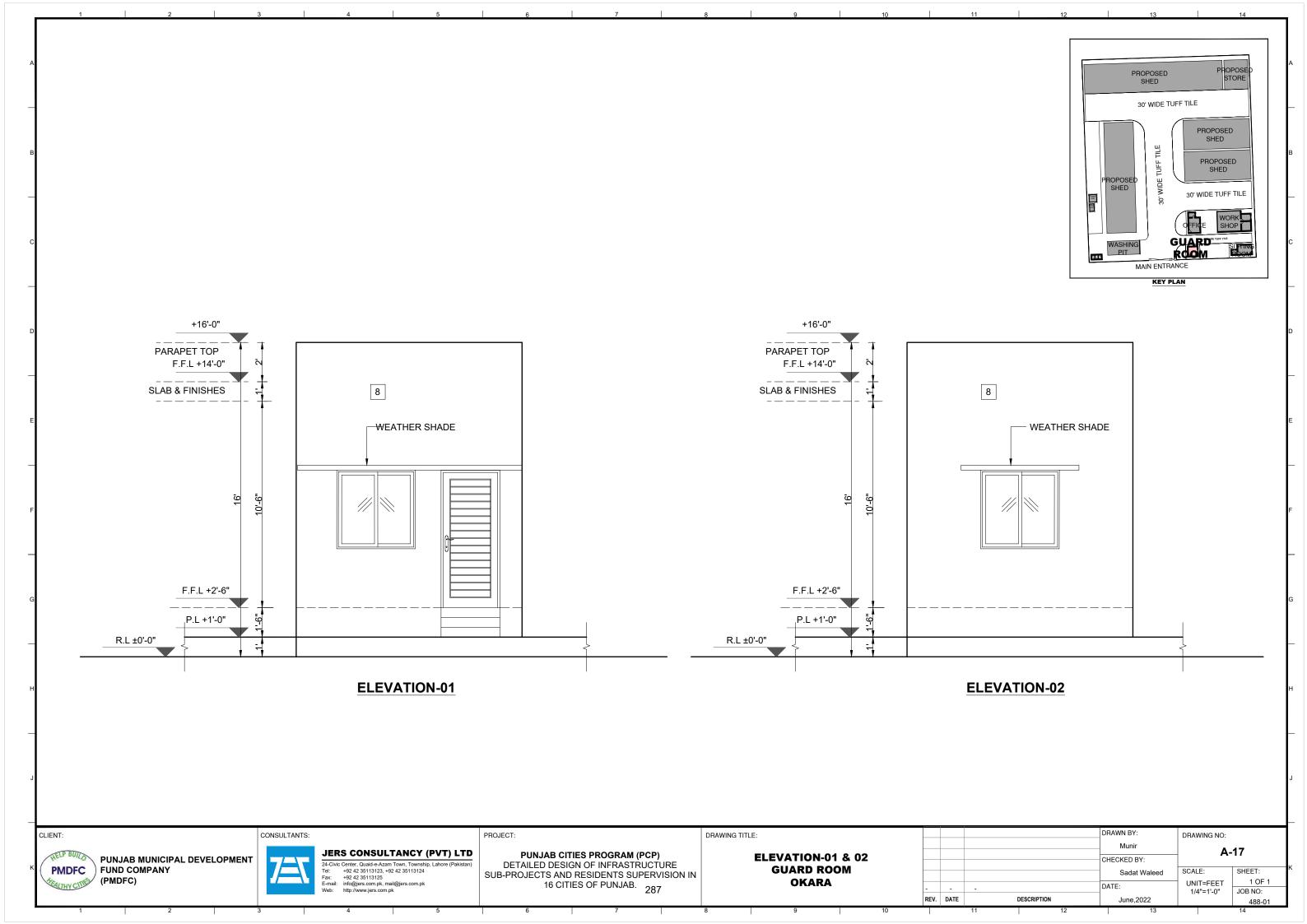
LEGEND & NOTES GUARD ROOM OKARA

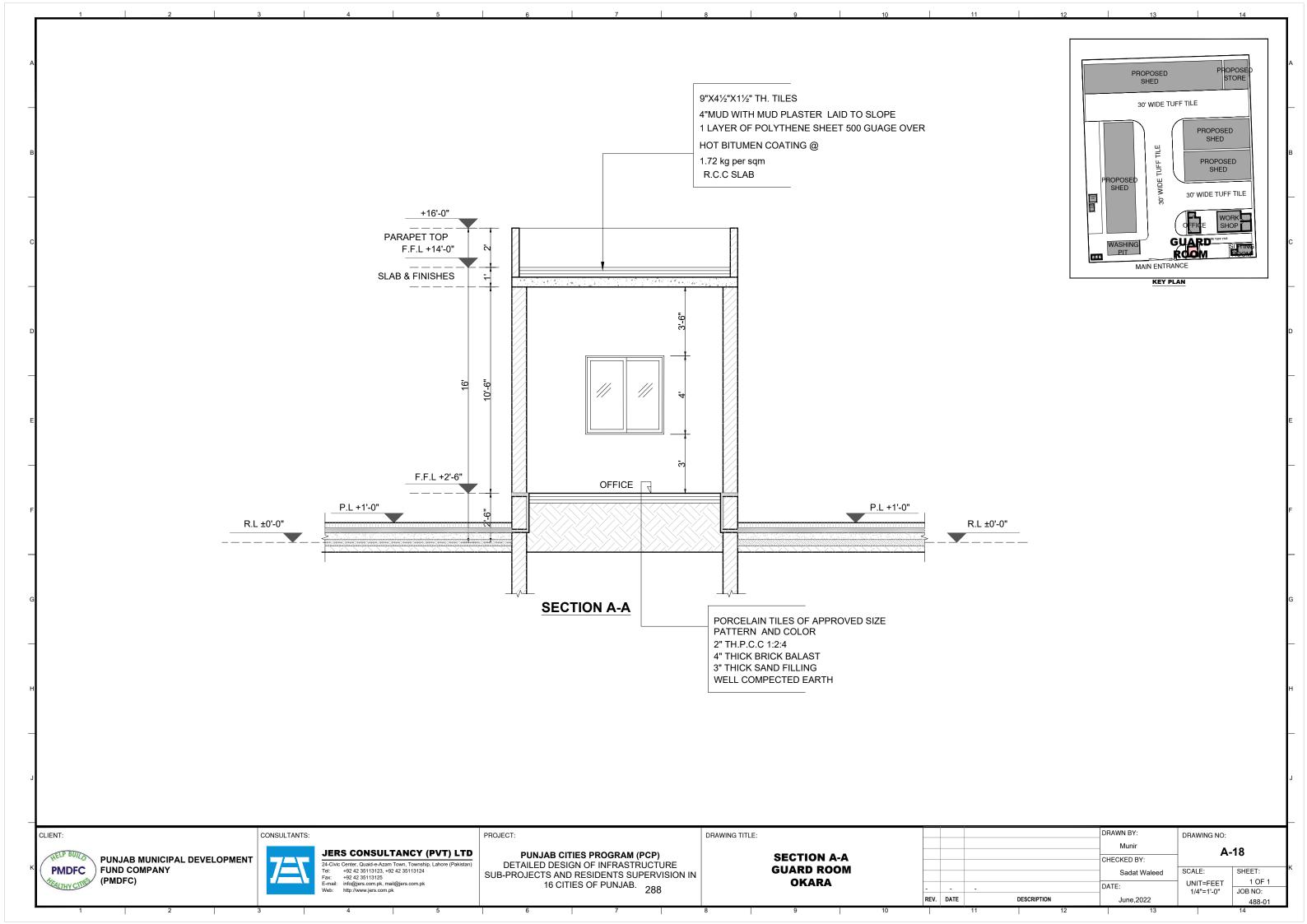
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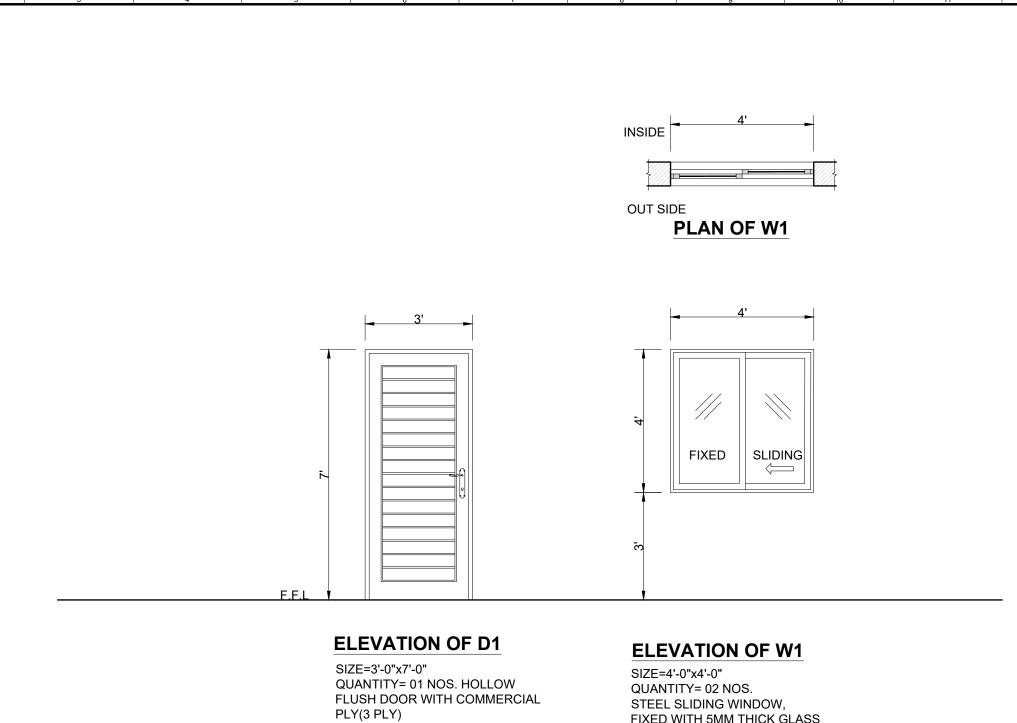
1 OF 1

JOB NO:









FIXED WITH 5MM THICK GLASS INCLUDING WIRE GAUZE

PROPOSE STORE

PROPOSED SHED

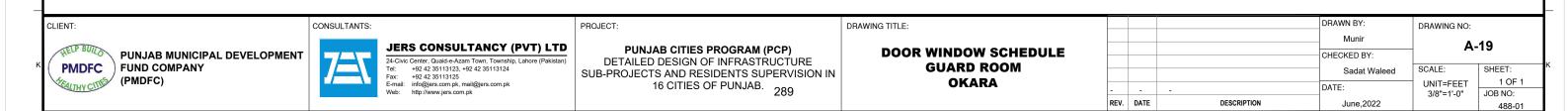
PROPOSED SHED

30' WIDE TUFF TILE

PROPOSED SHED

30' WIDE TUFF TILE

MAIN ENTRANCE KEY PLAN



SCHEDULE OF INTERNAL FINISHES

LEGEND
SKIRTING WALL
FLOOR CEILING

- (1) PORCELAIN TILES OF APPROVED SIZE PATTERN AND COLOR
- CERAMIC TILES OF APPROVED SIZE PATTERN AND COLOR 7'-0" HIGH WITH VENILE EMULSION PAINT TILL CEILING. (MATT FINISH ON FLOOR & GLAZZED ON WALL)
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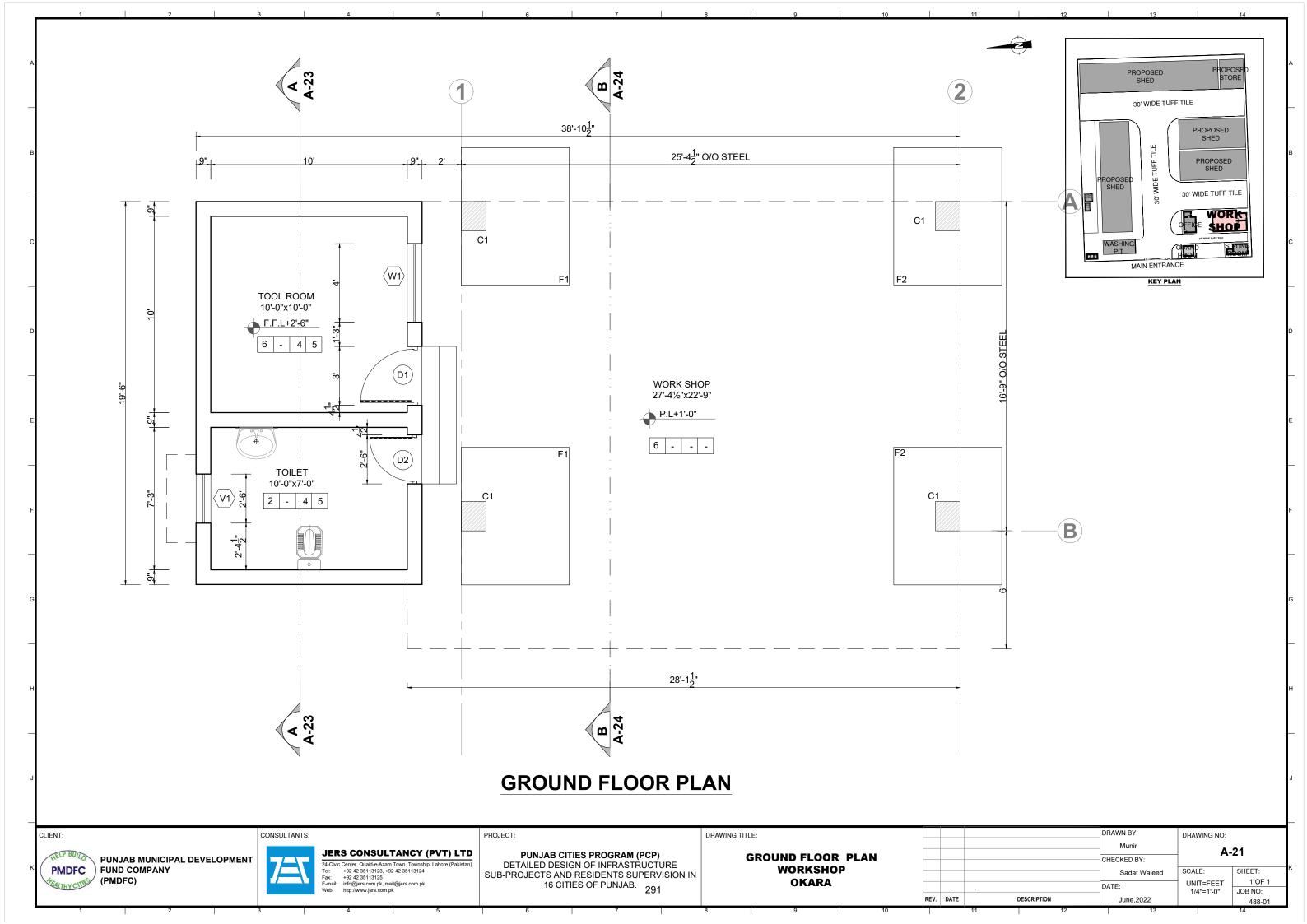
PUNJAB CITIES PROGRAM (PCP)
DETAILED DESIGN OF INFRASTRUCTURE
SUB-PROJECTS AND RESIDENTS SUPERVISION IN
16 CITIES OF PUNJAB.

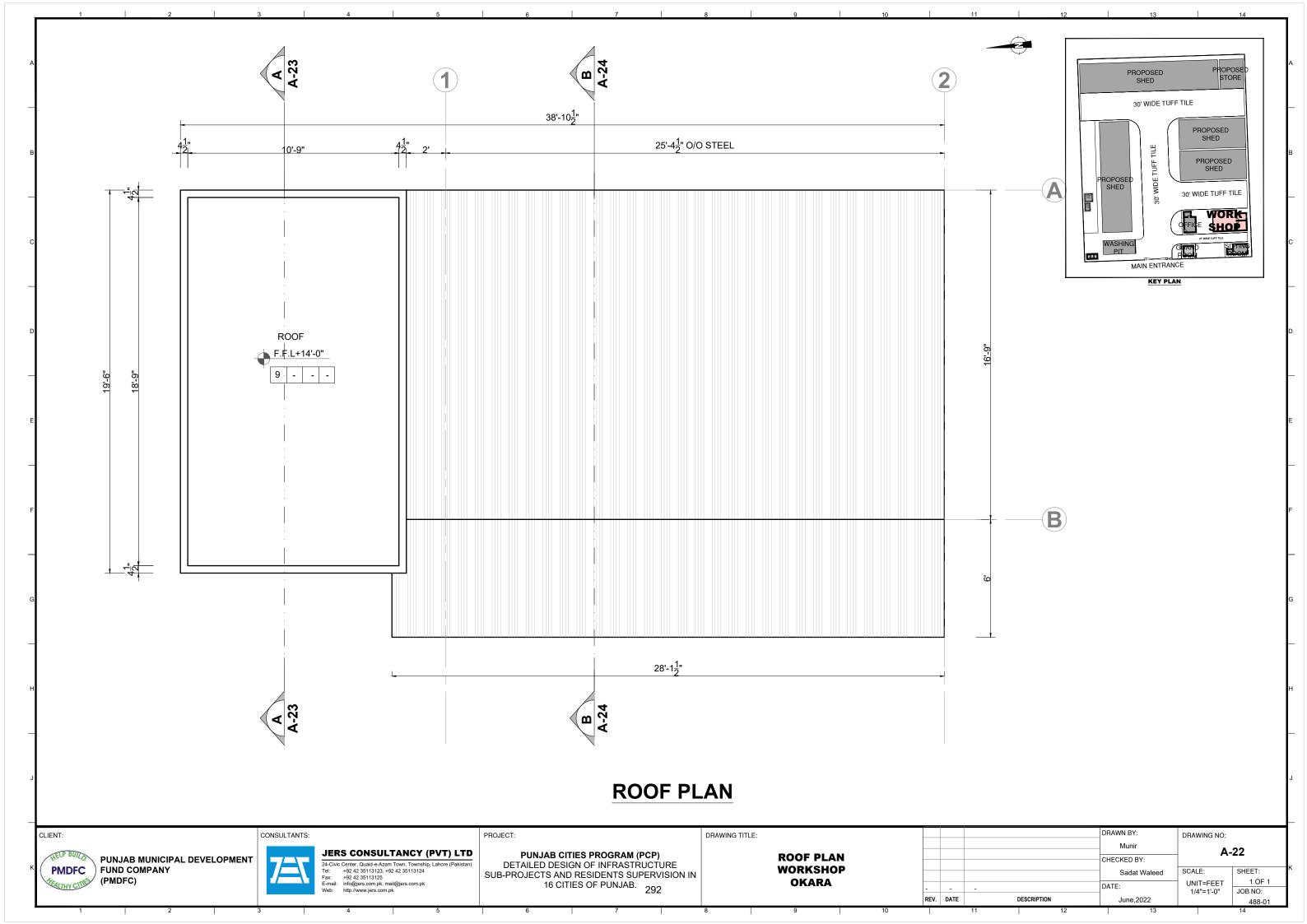
LEGEND & NOTES WORKSHOP OKARA

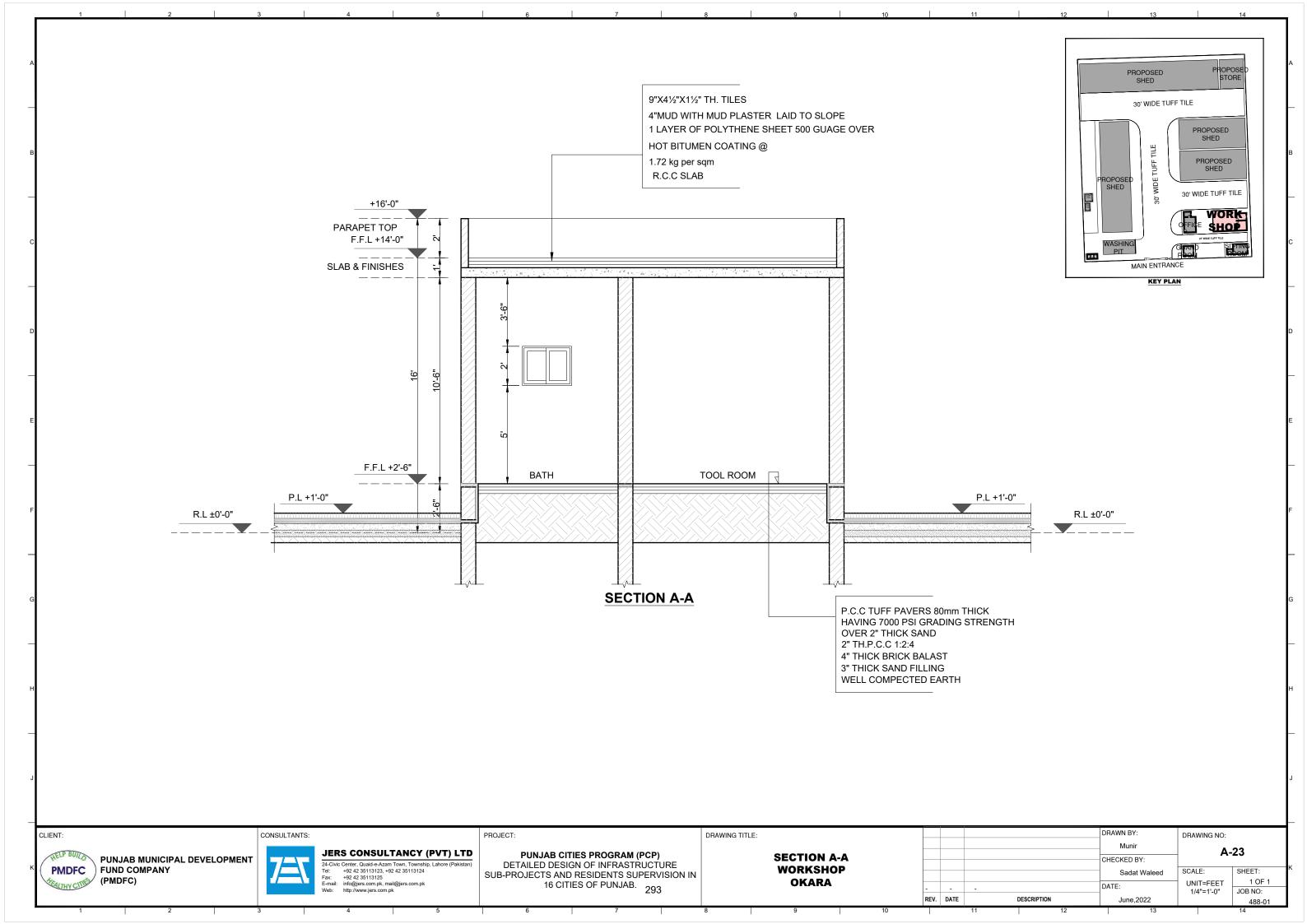
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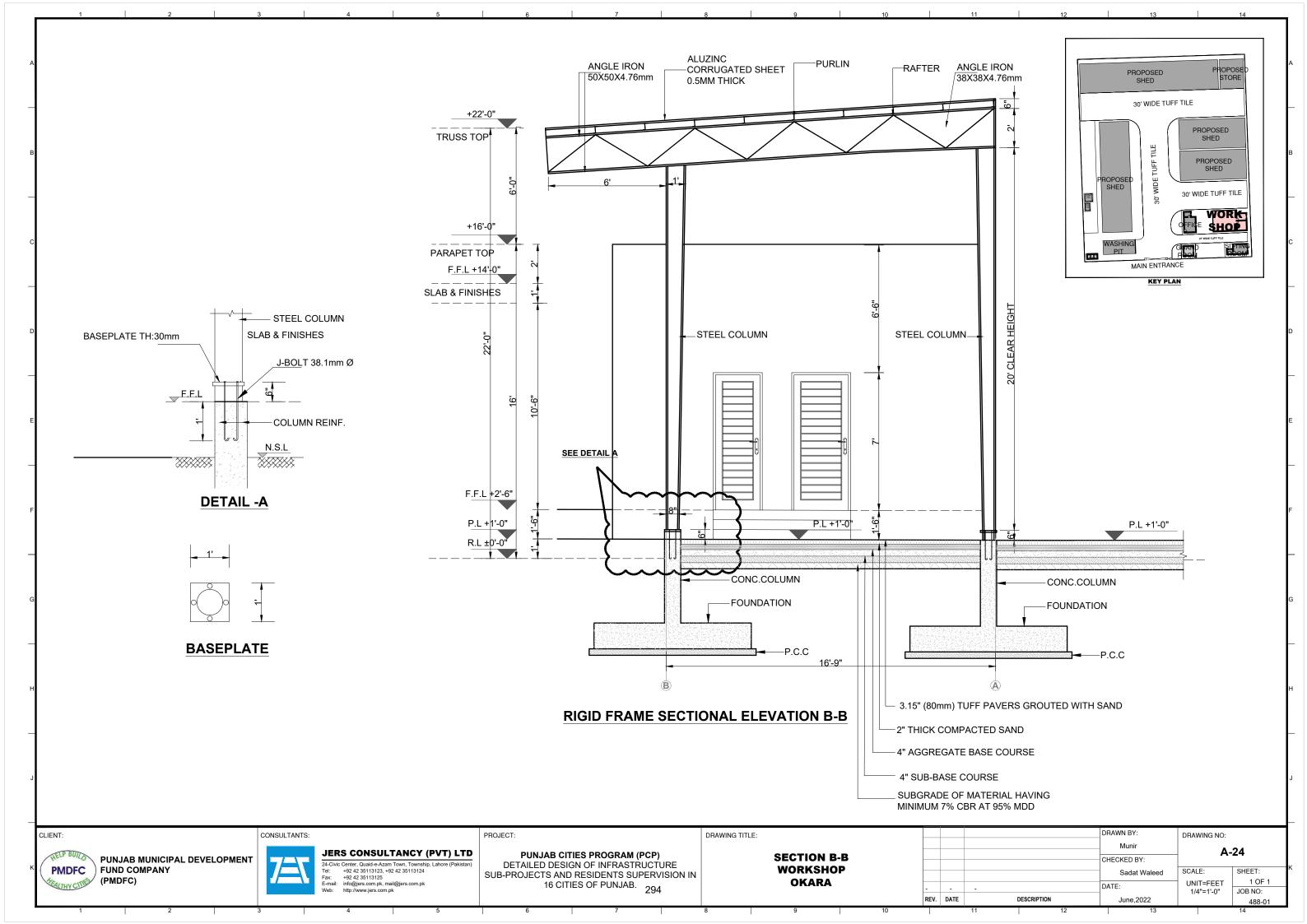
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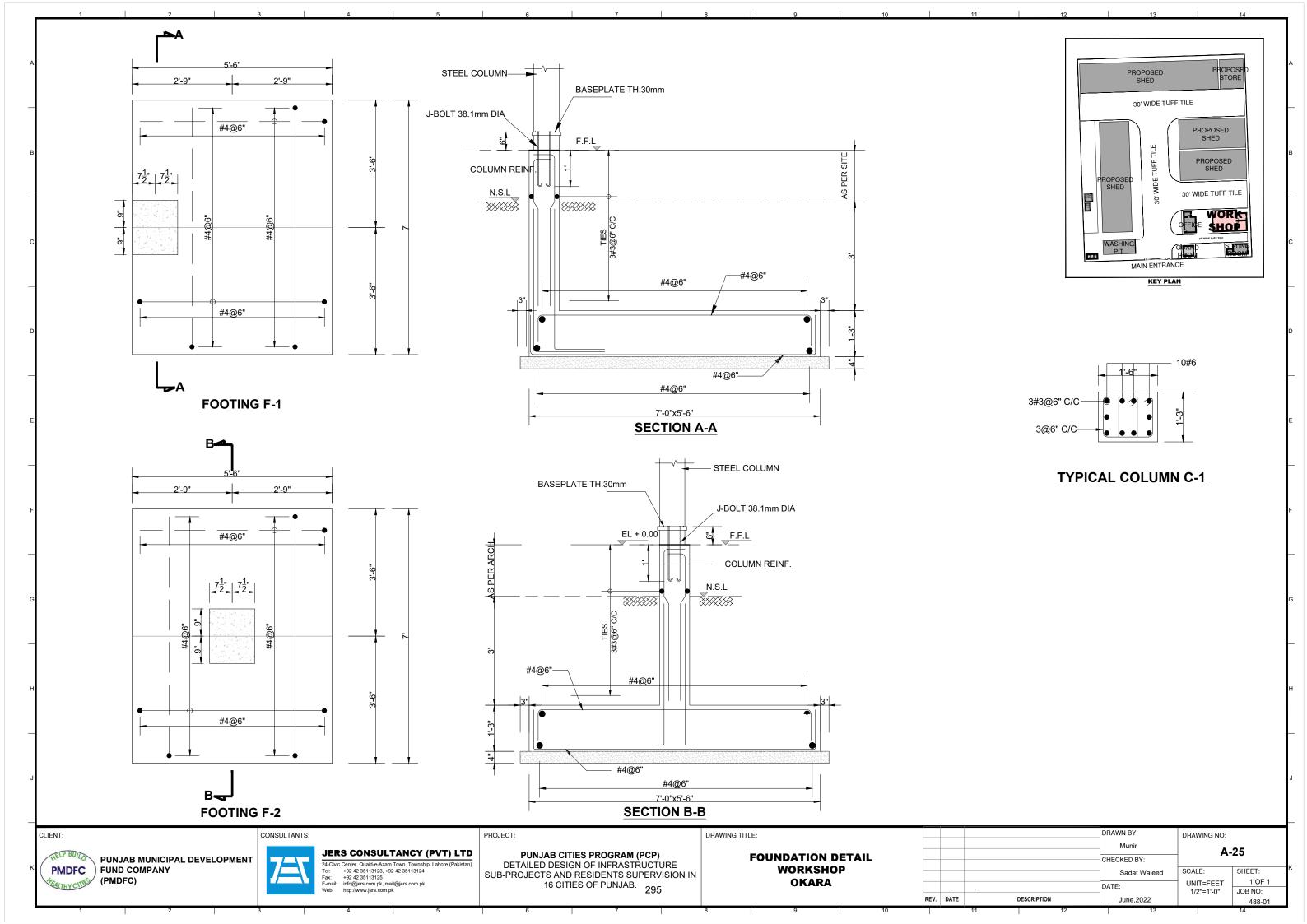
NTS JOB NO: 488-01

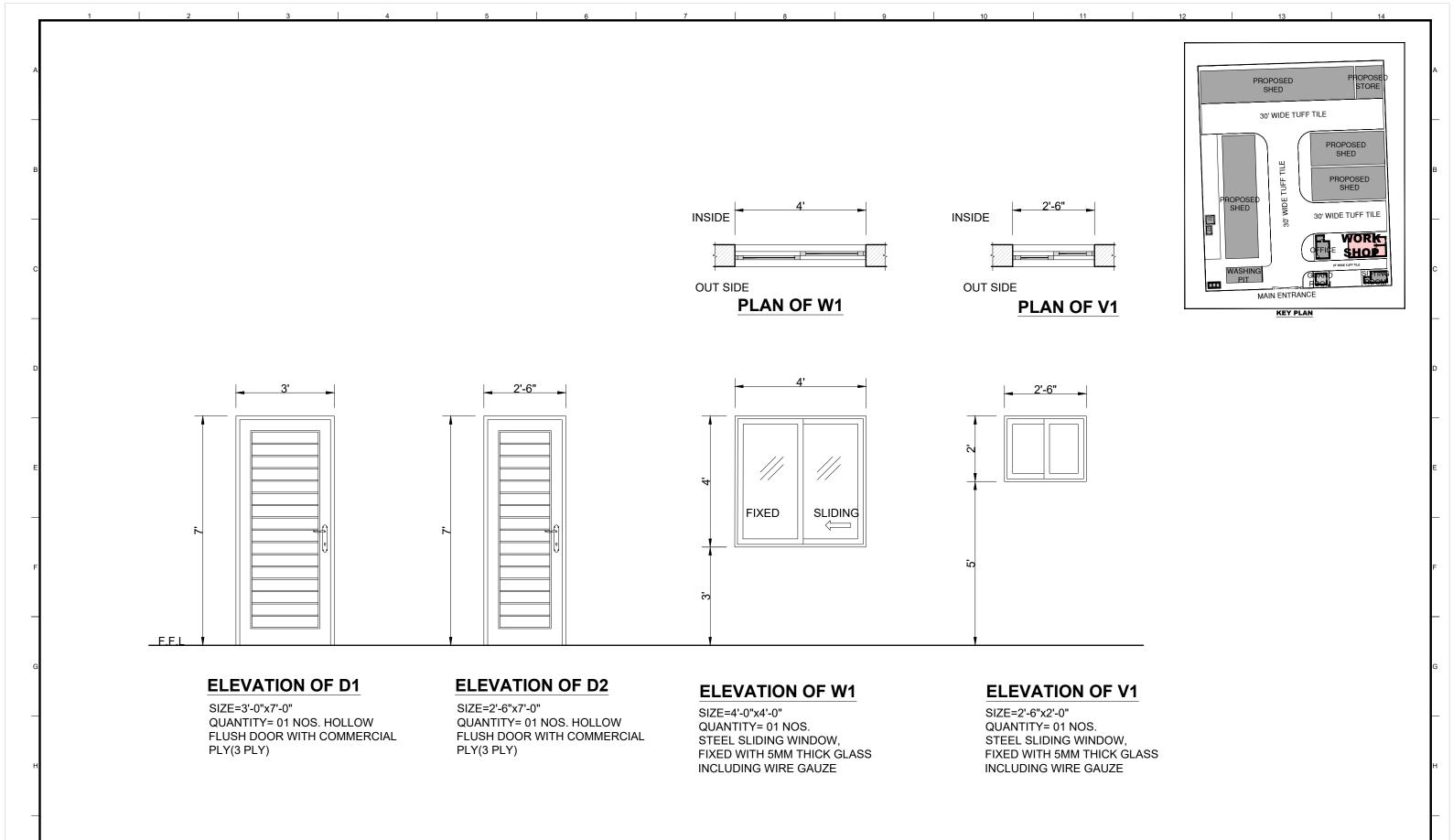
















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PROJECT:

PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB. 296

DOOR WINDOW SCHEDULE WORKSHOP

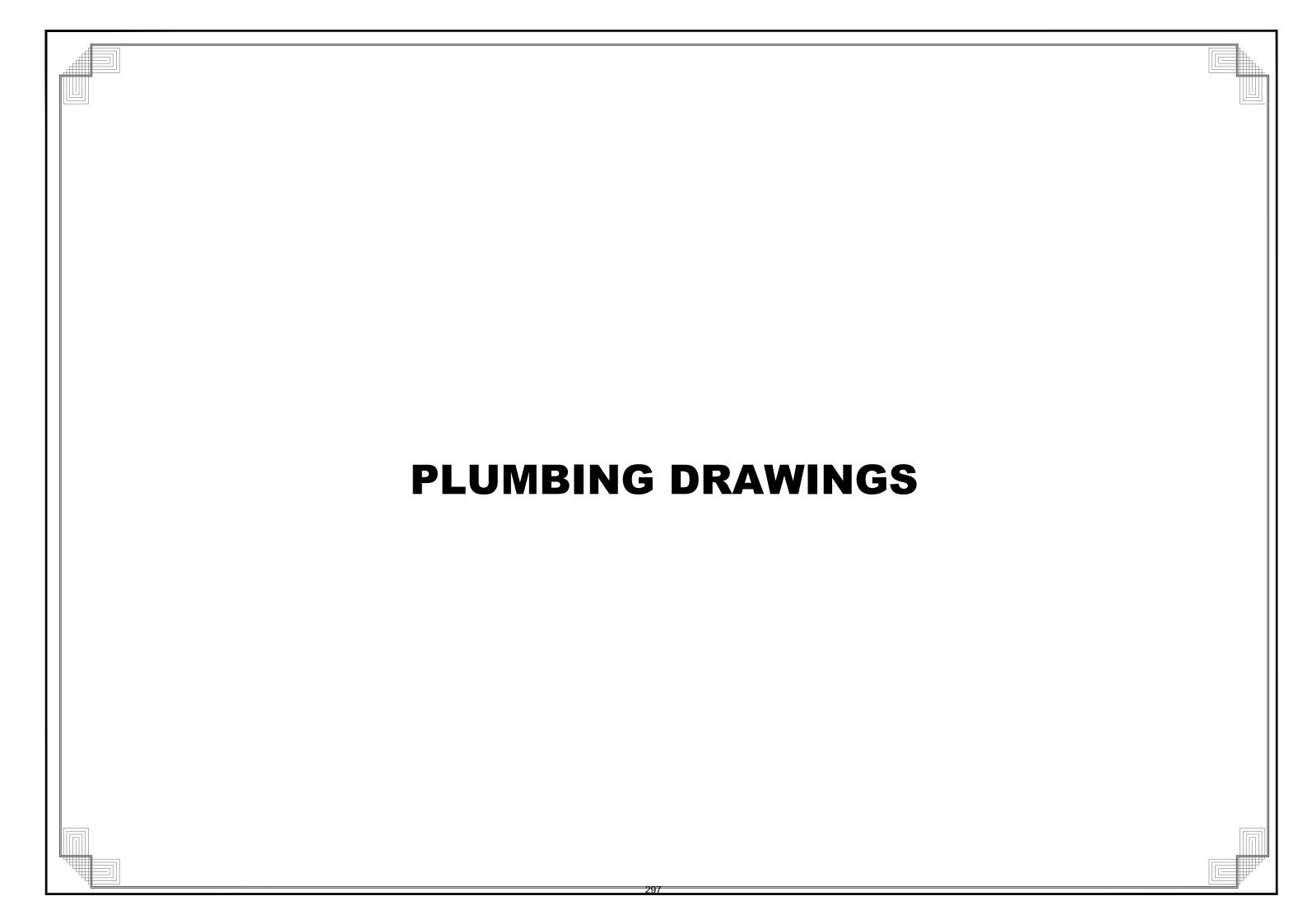
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DRAWING TITLE:

			DRAWN BY:	DRAWING NO:	
			Munir	A-	26
			CHECKED BY:		20
			Sadat Waleed	SCALE:	SHEET:
			DATE:	UNIT=FEET	1 OF 1
	-	-	DATE.	3/8"=1'-0"	JOB NO:
EV.	DATE	DESCRIPTION	June,2022		488-01

1 OF 1

488-01



LEGEND & NOTES:

WATER SUPPLY, FIRE FIGHTING

SEWERAGE SYSTEM

LEGEND

LEGEND

COLD WATER PIPE (C.W)

HOT WATER PIPE (H.W) =======

=====

HOT WATER RETURN PIPE (H.W.R)

FIRE FIGHTING PIPE

GAS SUPPLY PIPE

FIRE CABINET

SPRINKLER

ISOLATION VAVLE

WASTE WATER PIPE SOIL PIPE SEWER PIPE 4"Ø FLOOR DAIN WITH P- TRAP GULLY TRAP MANHOLE (3'x3') MH

NOTES

- ALL WATER SUPPLY PIPE DIAMETERS MENTIONED
 ARE EXTERNAL DIAMETERS UNLESS OTHERWISE MENTIONED
- 2. PROVIDE ISOLATION (GATE) VALVE ON ALL COLD & HOT WATER SUPPLY LINES AT THE INLET TO EACH TOILET. VALVES SHALL BE INSTALLED AT ACCESSIBLE LOCATIONS
- 3. ALL WATER SUPPLY PIPES ARE POLYPROPYLENE RANDOM PIPE (PPR-PN 20) UNLESS OTHERWISE MENTIONED
- 4. ALL WATER SUPPLY PIPES FITTINGS SUCH AS BENDS, TEES, SOCKETS, ARE PPR (PN 25) UNLESS OTHERWISE MENTIONED
- 5. PROVIDE THERMAL INSULATION ON ALL HOT WATER & HOT WATER RETURN PIPES
- 6. ALL WATER SUPPLY PIPES ARE SUSPENDED ALONG CEILING OR CONCEALED IN WALLS.
- 7. ALL WATER SUPPLY PIPES WITHIN THE BUILDING SHALL RUN AT HIGH LEVEL UNLESS OTHERWISE SPECIFIED
- 8. ALL WCs, WASH BASINS AND SINKS TO BE PROVIDED WITH T STOP COCKS
- 9. CONTRACTOR SHALL VERIFY THE PUMPING FOR ALL PUMPS AS PER THE SITE CONDITION AND SHALL INFORM TO THE ENGINEER FOR ANY VARIATION
- 10 ALL PUMP SHALL BE PROVIDED WITH FLEXIBLE CONNECTOR AT SUCTION AND DISCHARGE
- 11. PROVIDE ISOLATION / STOP COCKS AT ALL GAS CONNECTIONS BURNERS
- 12. FIRE WATER PIPE SHALL BE M.S SCHEDULE 40 UNLESS OTHER WISE MENTIONED
- 13. PROVIDE PRESSURE REDUCING VALVES (PRV)
 ON HOT & COLD WATER PIPES ABOVE FALSE CEILING
 IN EACH BATHROOM, KITCHEN, etc WITH INLET PRESSURE
 AT 120 PSI AND OUT PRESSURE UPTO 30 PSI.

NOTES

- 1. ALL SOIL, WASTE, VENT & DRAINAGE PIPES DIAMETERS MENTIONED ARE NOMINAL DIAMETERS UNLESS OTHERWISE MENTIONED
- 2. ALL SOIL, WASTE AND VENT PIPES
 ARE uPVC (UNPLASTICSED POLYVINYL CHLORIDE)
 CLASS B UNLESS OTHERWISE MENTIONED
- 3. ALL MANHOLE COVERS SHALL BE OF HEAVY DUTY CAST IRON
- 4. INVERT LEVELS WILL BE ADJUSTED AS PER SITE CONDITION
- 5. ALL DIAMETERS MENTIONED ARE NOMINAL DIAMETERS
- 6. ALL VERTICAL WC'S & URINALS WILL BE PROVIDED WITH MUSLIM SHOWER
- ALL RAIN WATER DISPOSAL PIPES SHALL BE
 OF uPVC CLASS-B & HORIZONTAL (ON LOWER FLOOR) SHALL BE uPVC CLASS D.
- THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS
- 9. ALL SEWEAGE PIPING FROM FIXTURES TO MANHOLES AND GULLY TRAPS SHALL BE OF uPVC
- 10. ALL CLEAN OUTS & FLOOR DRIANS SHALL BE COORDINATE WITH INTERIOR
- 11. MINIMUM SLOPE OF SOIL AND WASTE PIPES ARE AS UNDER

PIPE DIA.	SLOPE
3"	1:50
4"	1:100
6"	1:150
9"	1:200

DRAWING TITLE:

CLIENT:



CONSULTANTS:

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24-Civic Center, Quaid-e-Azam Town, Township, Lahore (Pakistan Tel: +92 42 35113123, +92 42 35113124 Fax: +92 42 35113125 Familia Jinfolius com pk mail@lers.com pk

PROJECT

PUNJAB CITIES PROGRAM (PCP)

DETAILED DESIGN OF INFRASTRUCTURE
SUB-PROJECTS AND RESIDENTS SUPERVISION IN
16 CITIES OF PUNJAB.

LEGEND & NOTES OKARA

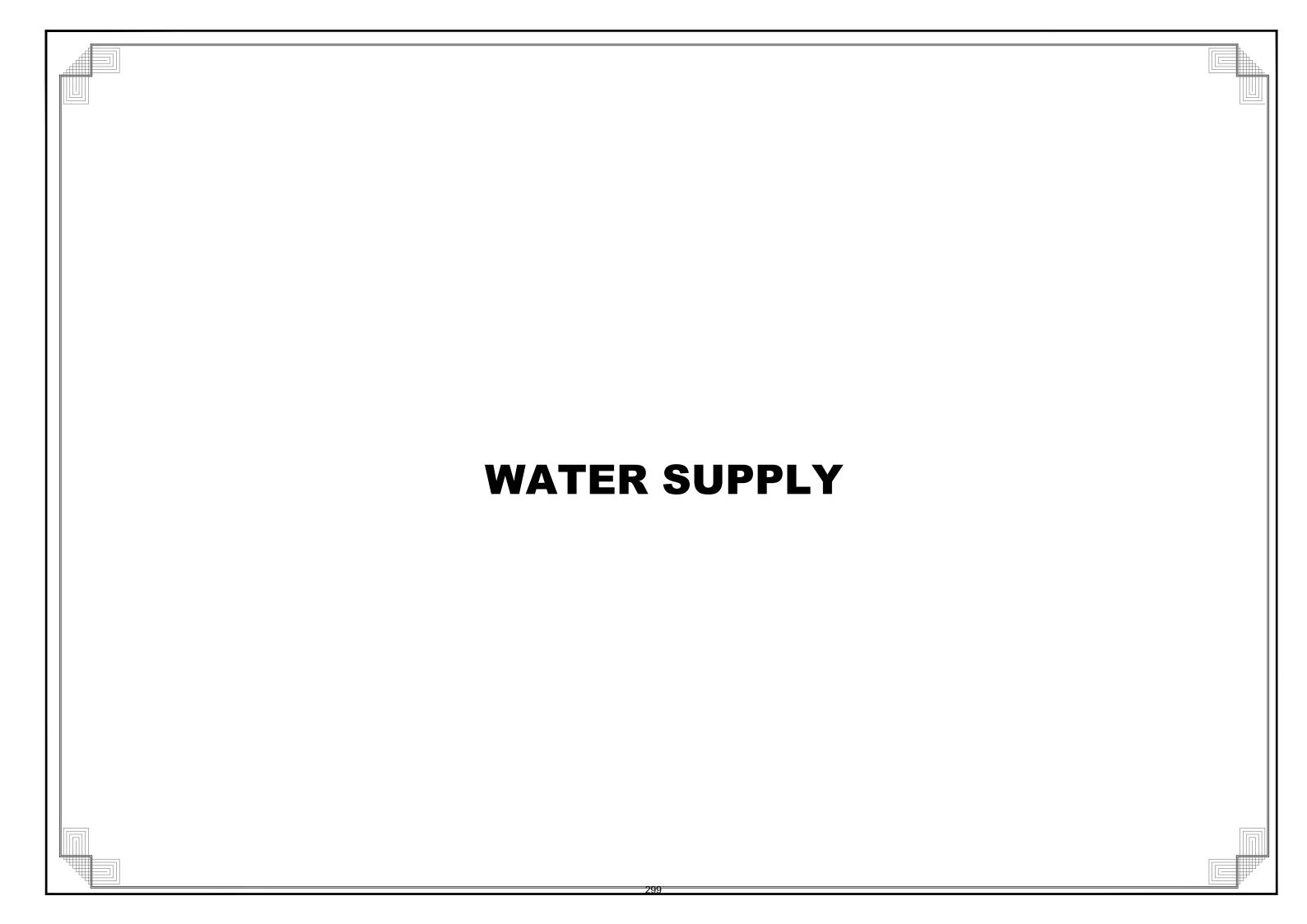
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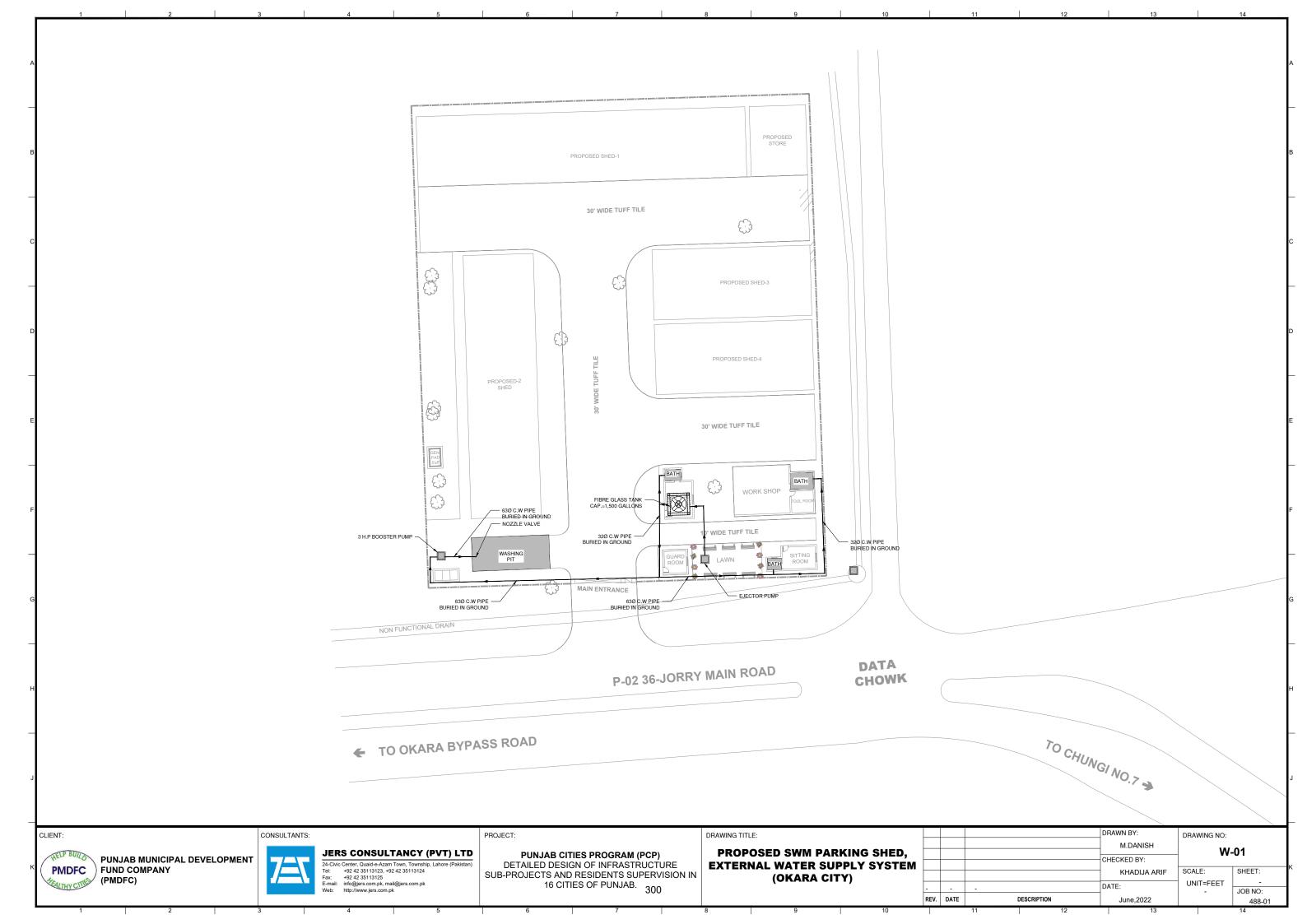
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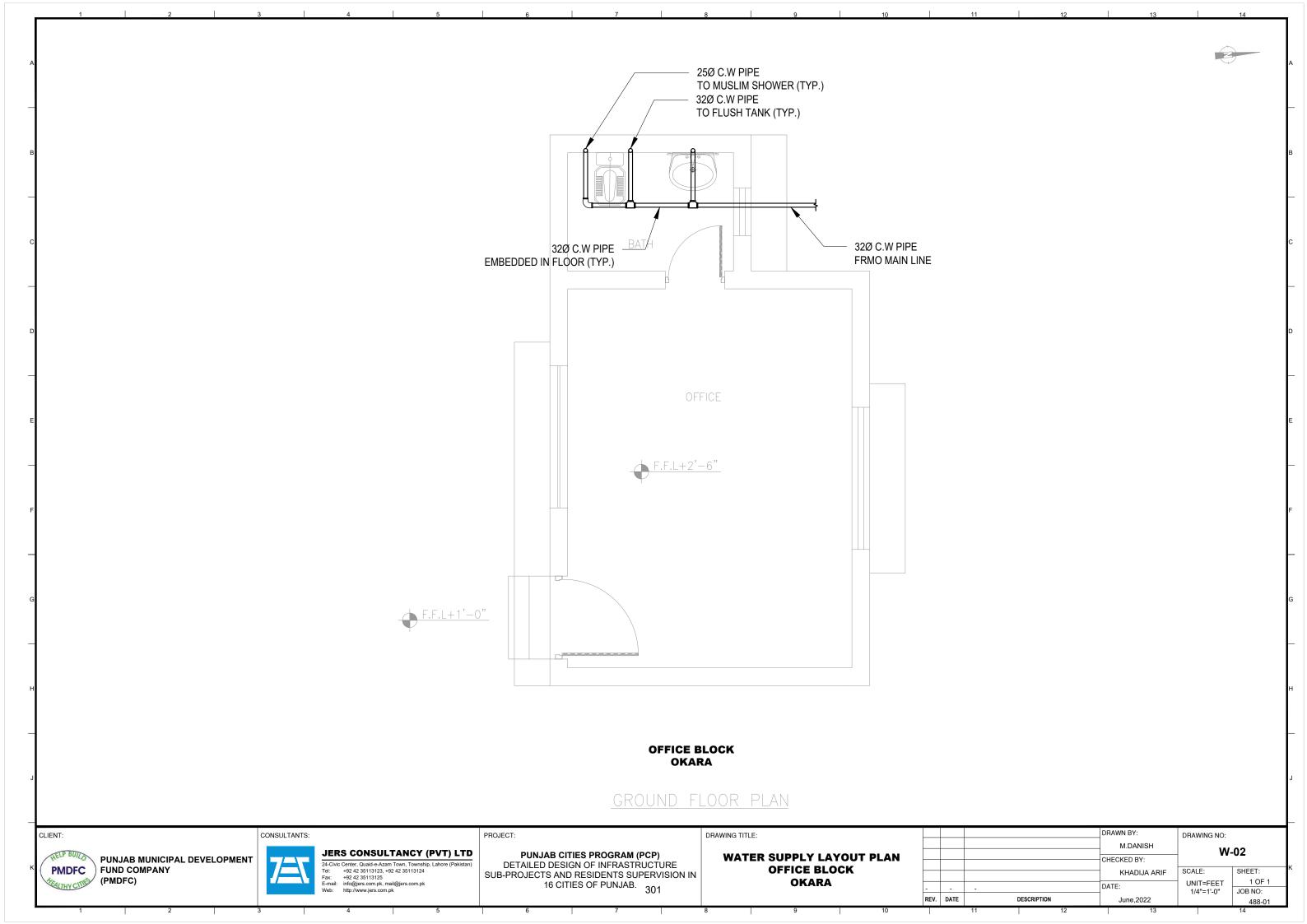
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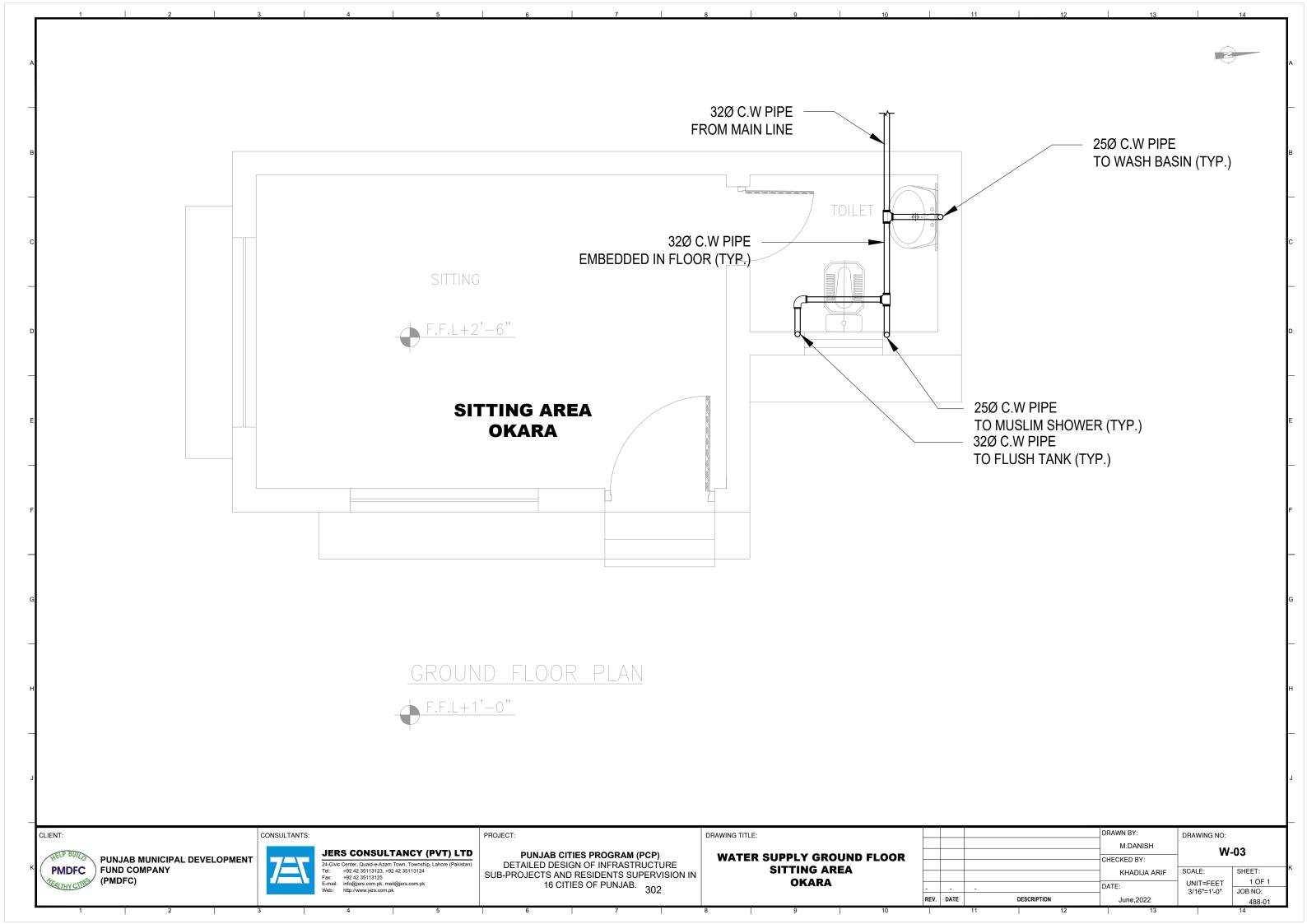
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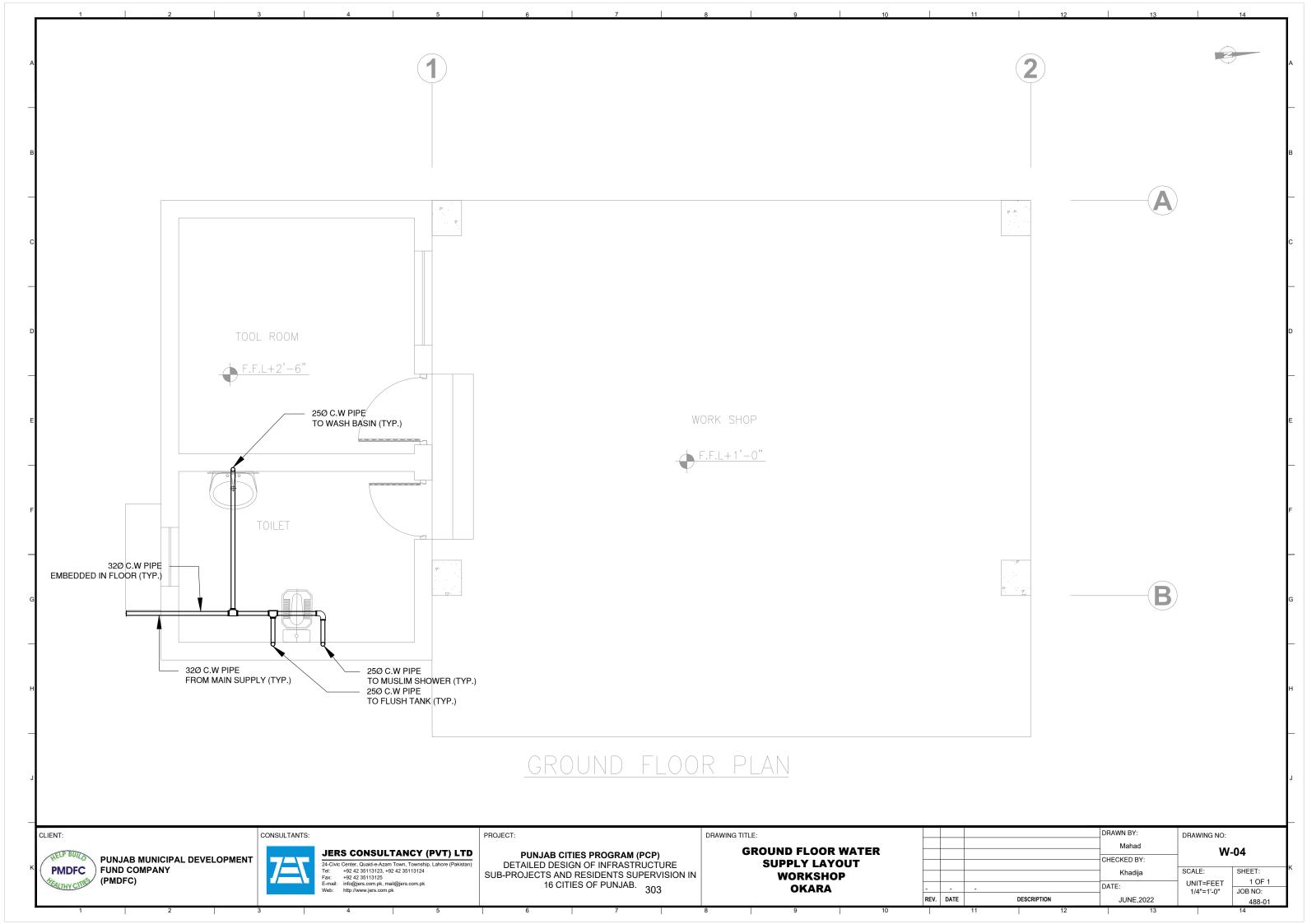
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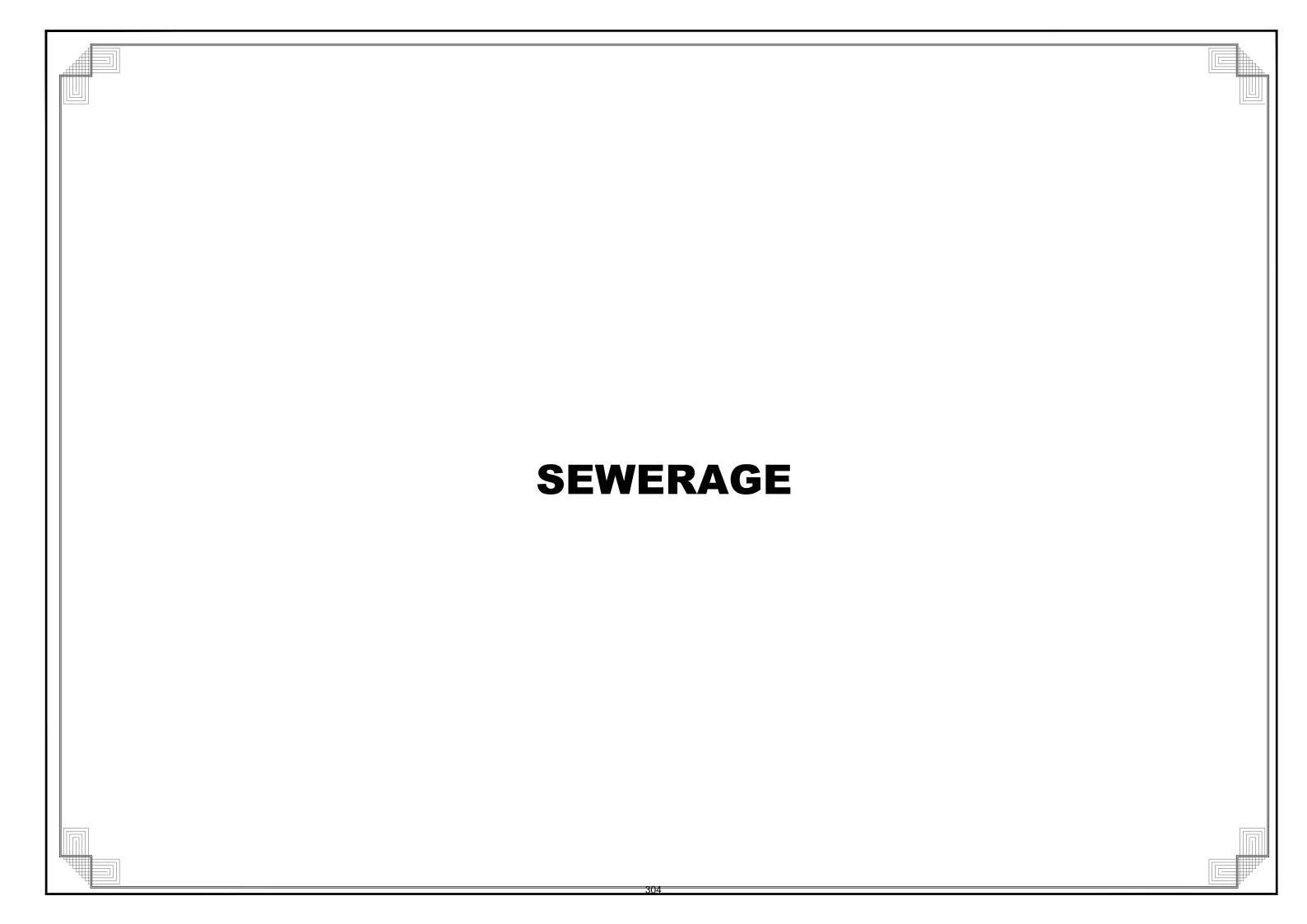


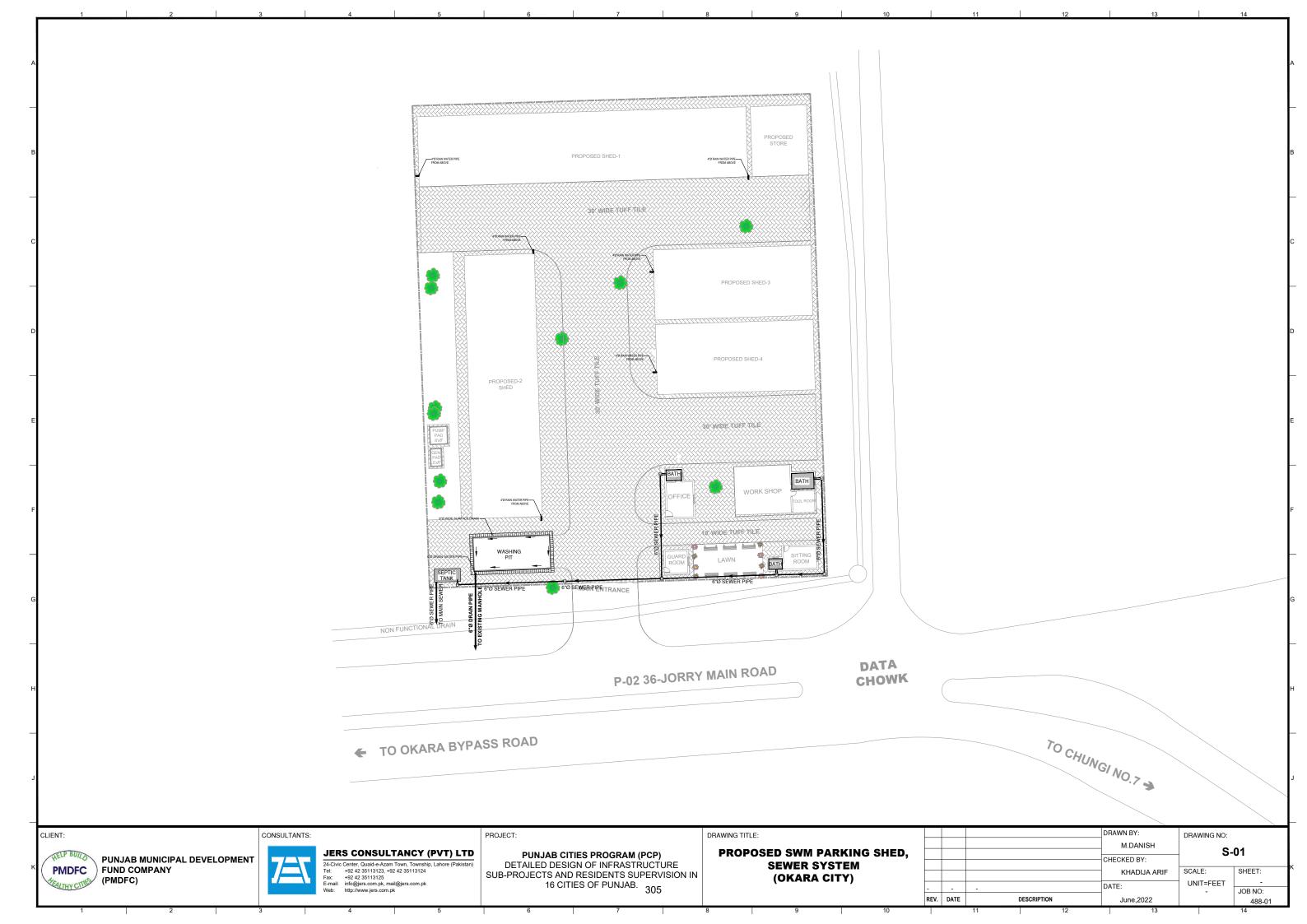


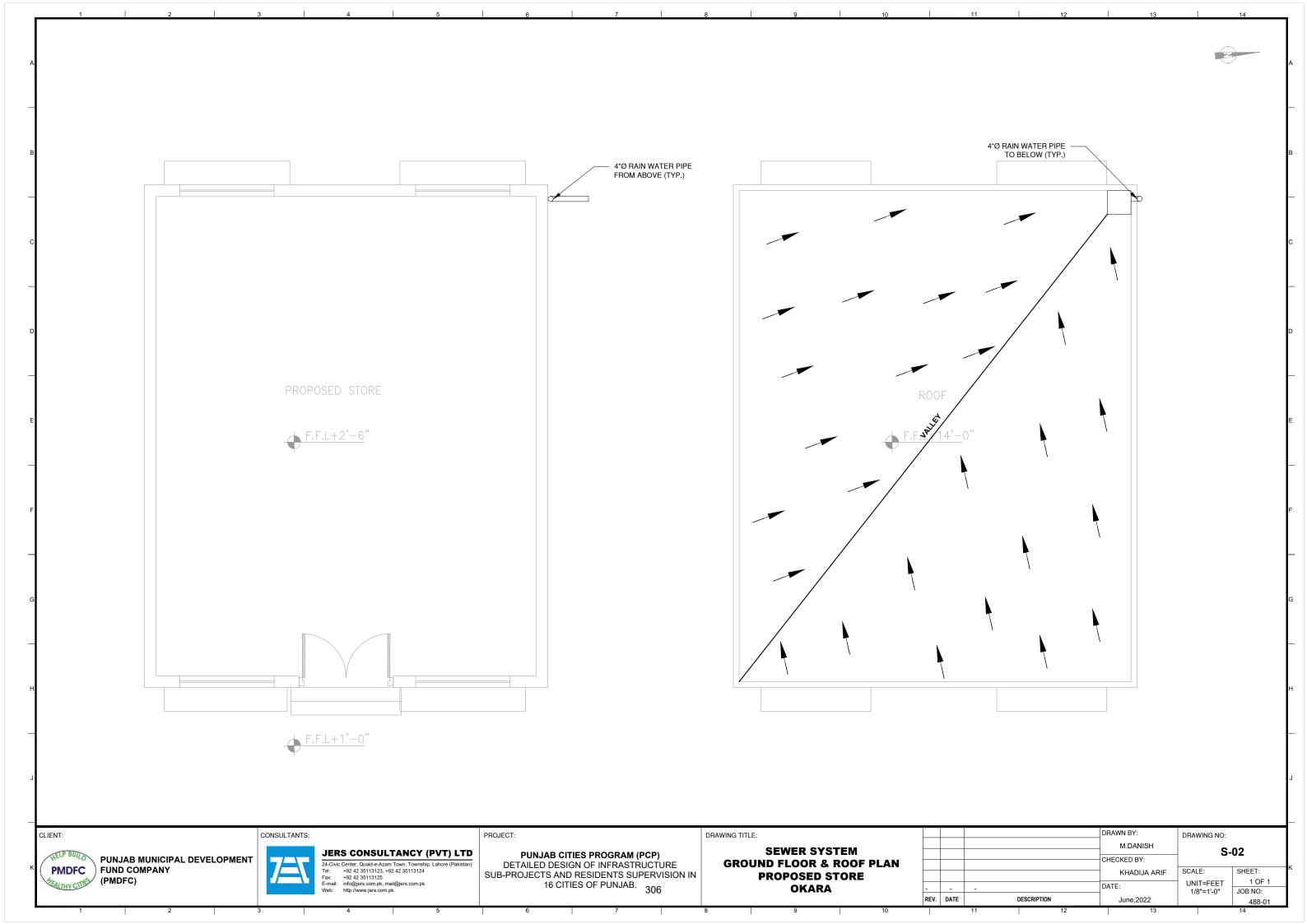




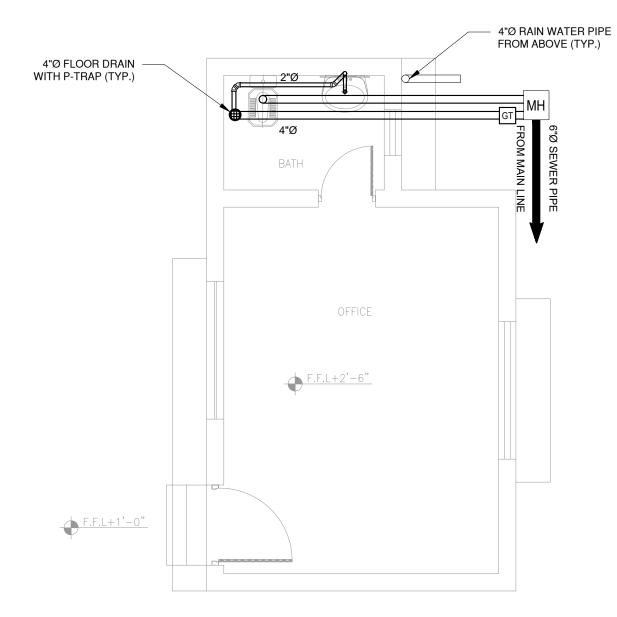












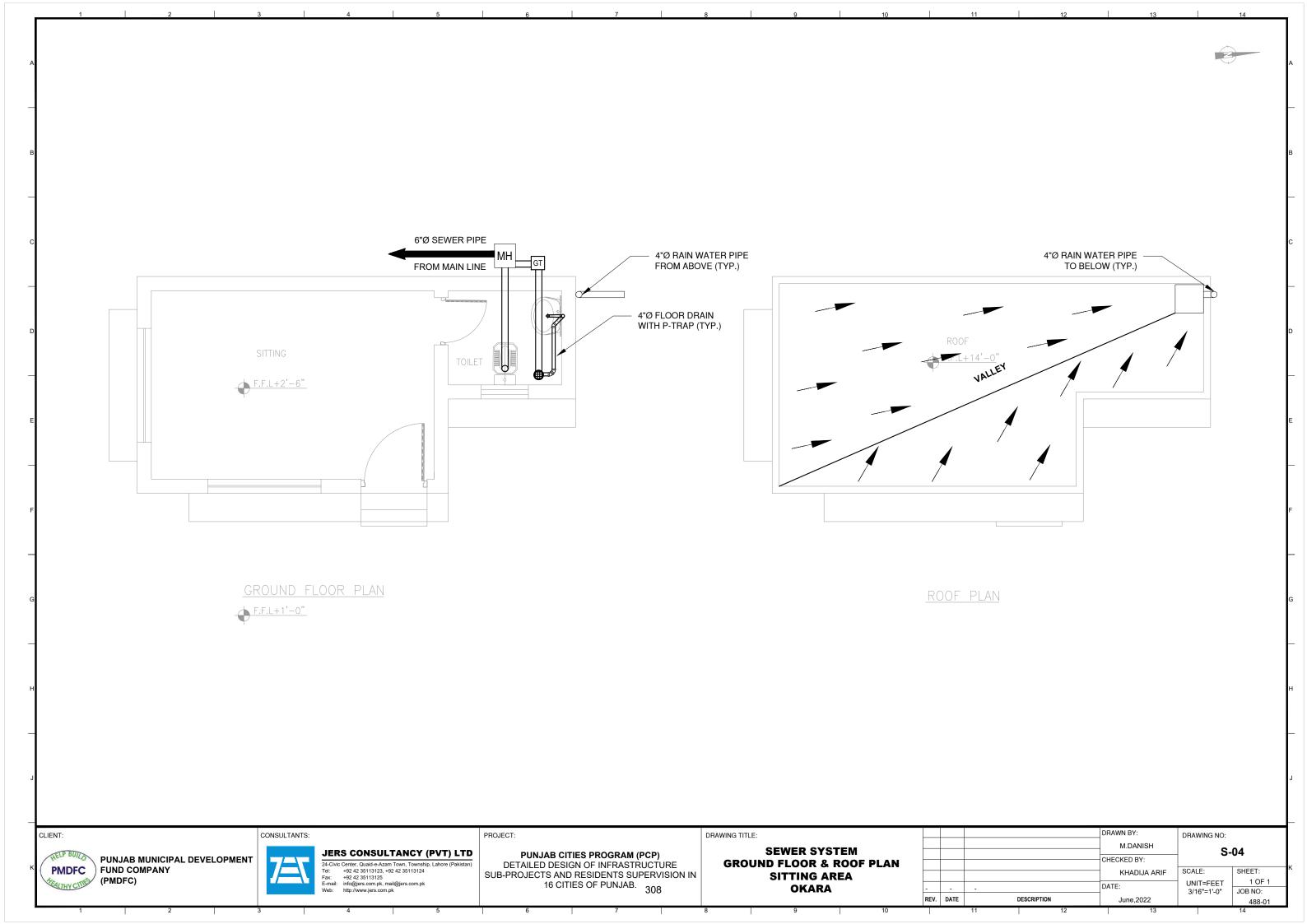
4"Ø RAIN WATER PIPE TO BELOW (TYP.) ROOF F.F.L+1'-0"

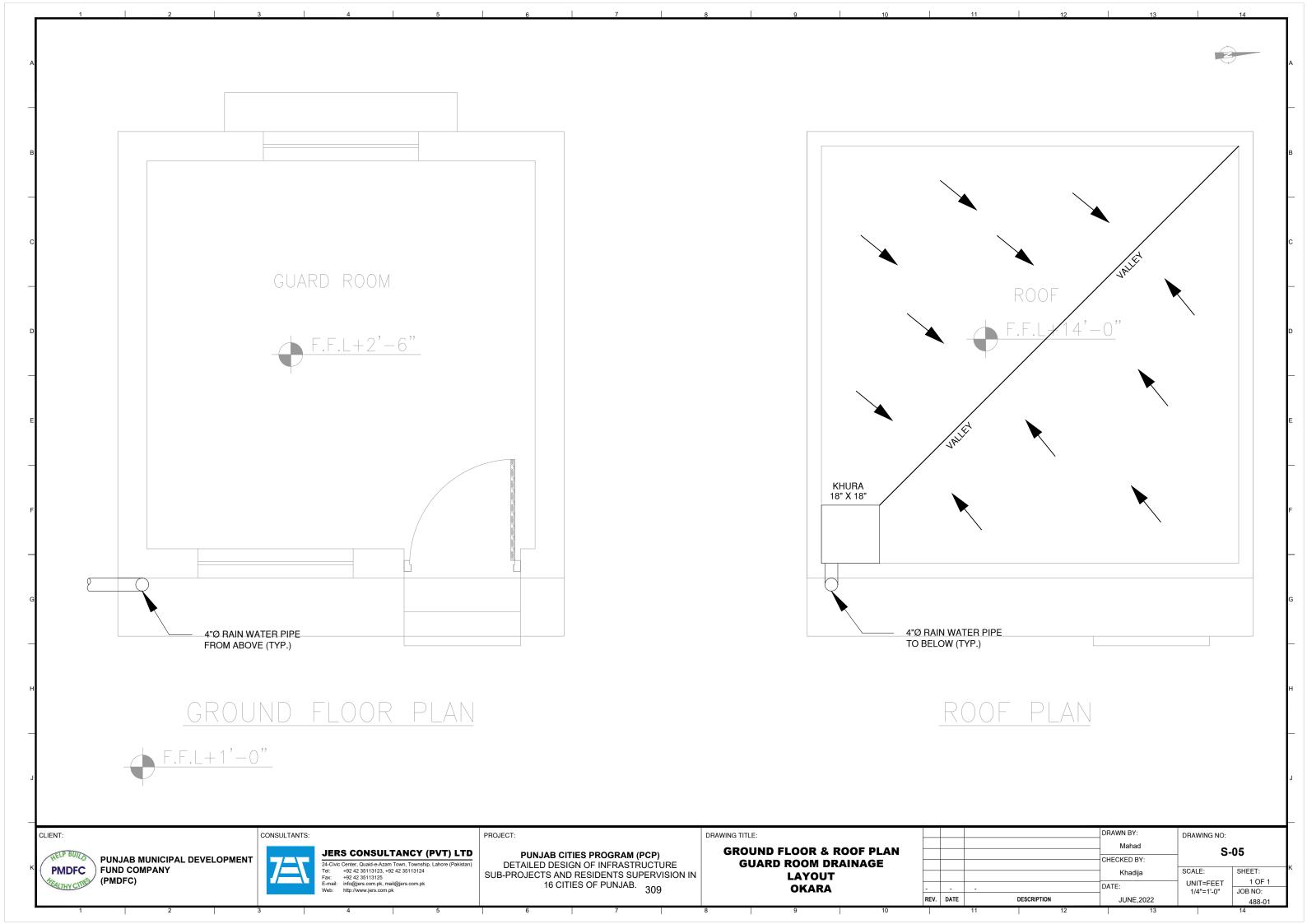
OFFICE BLOCK OKARA

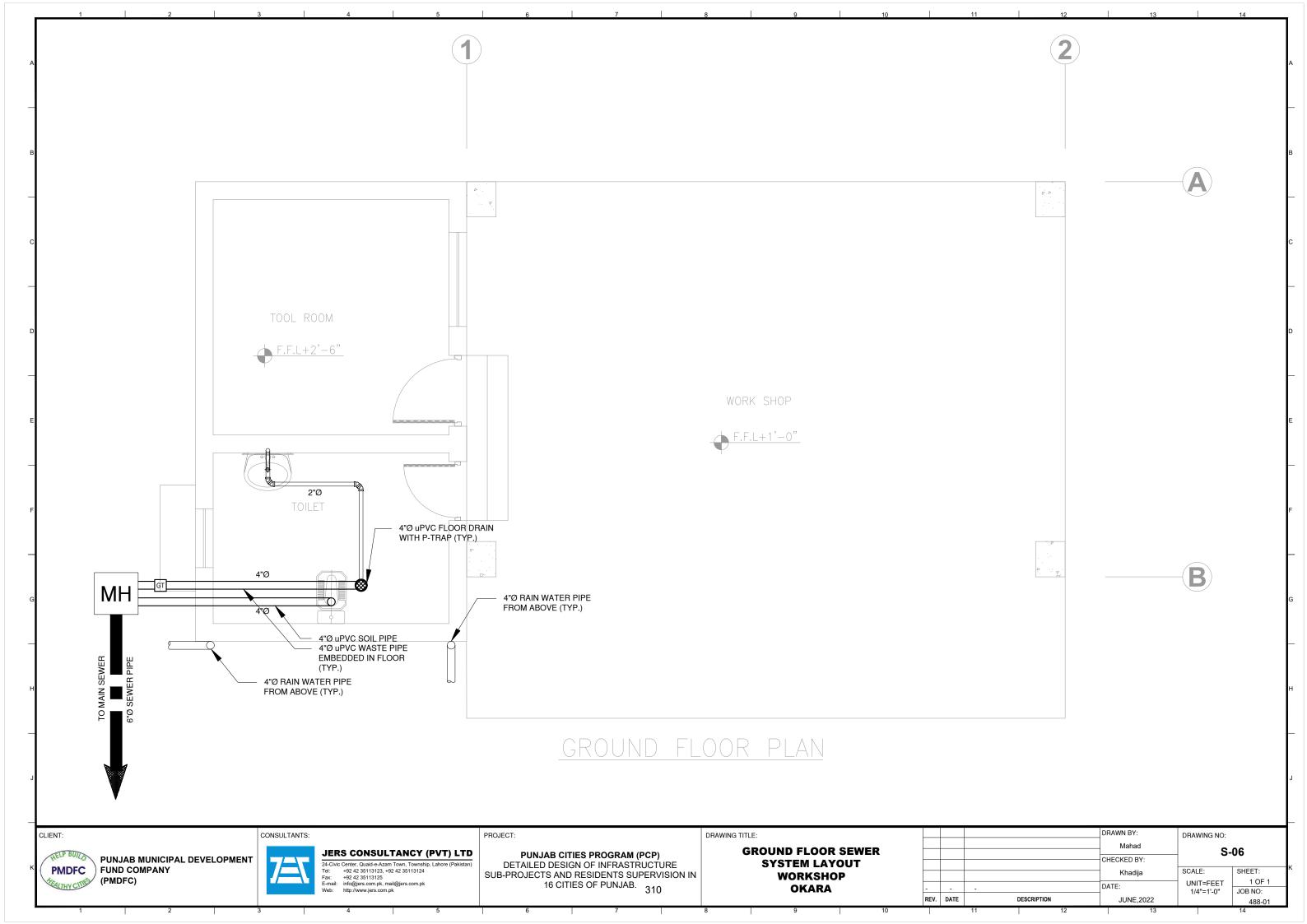
GROUND FLOOR PLAN

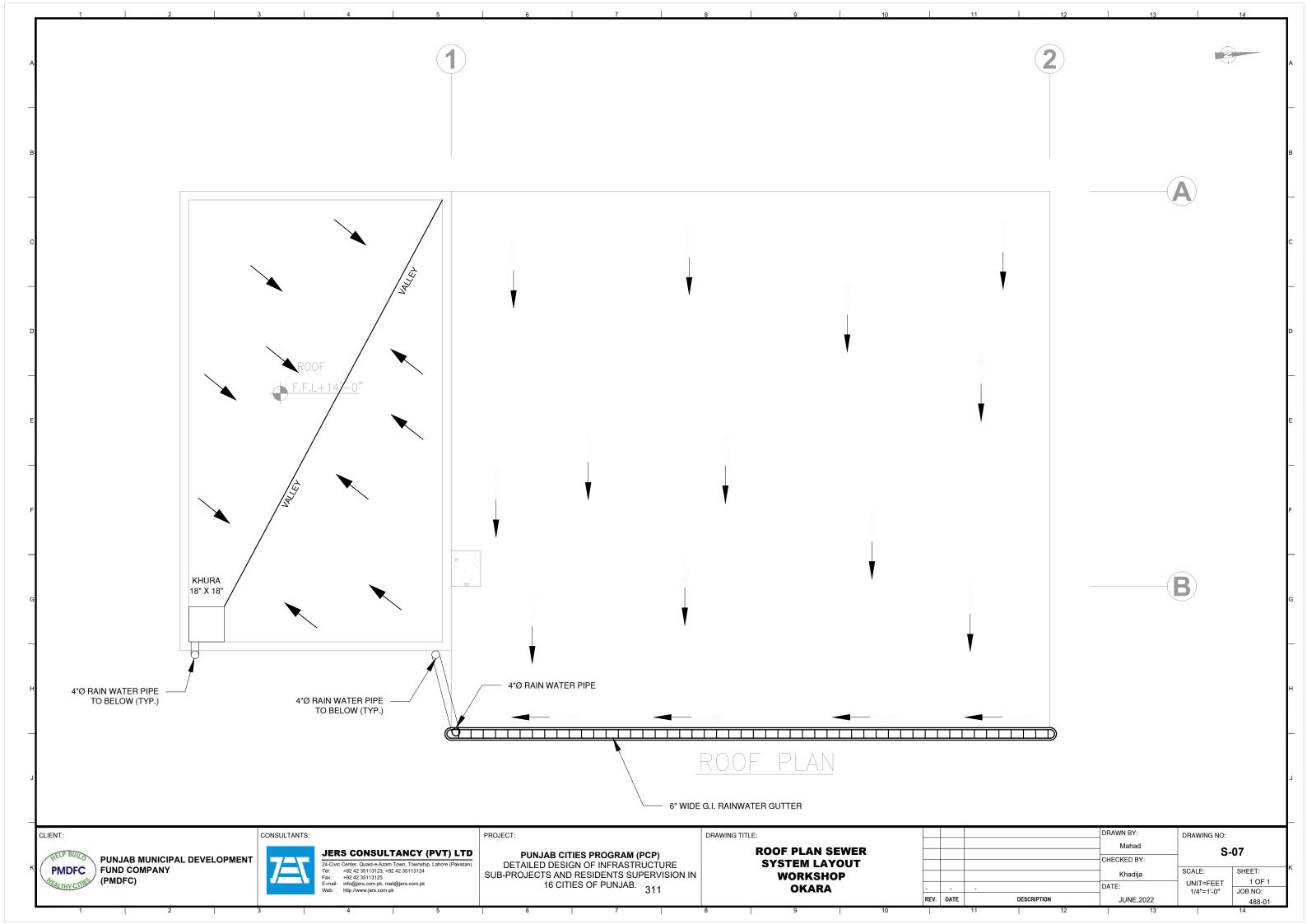
ROOF PLA

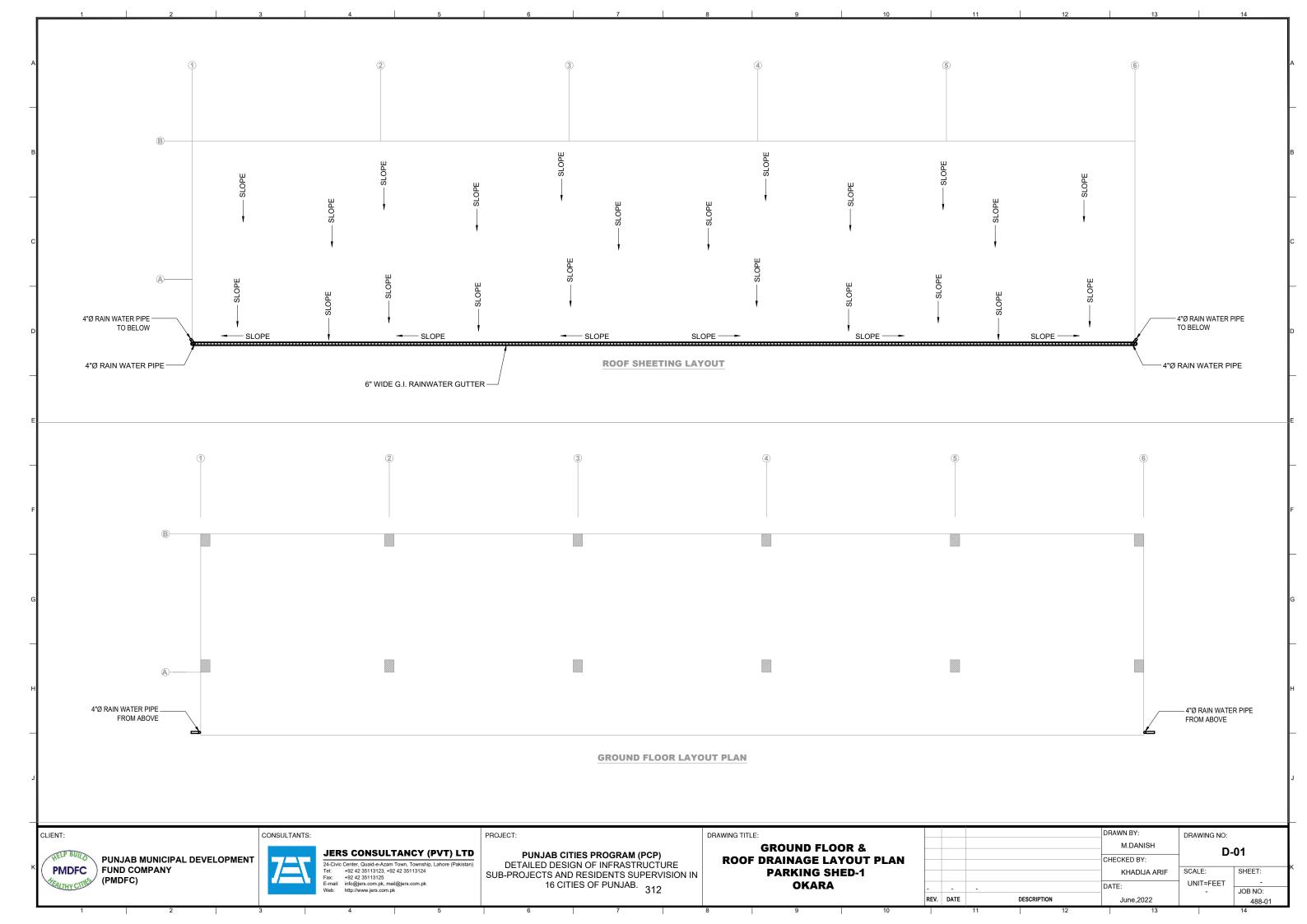
CLIENT:	CONSULTANTS:		PROJECT:	DRAWING TITLE:		DRAWN BY:	DRAWING NO:
PUNJAB MUNICIPAL DEVELOPMENT FUND COMPANY (PMDFC)	/= X	JERS CONSULTANCY (PVT) LTD 24-Civic Center, Quaid-e-Azam Town, Township, Lahore (Pakistan) Tel: +92 42 35113123, +92 42 35113124 Fax: +92 42 35113125 E-mail: info@jers.com.pk, mail@jers.com.pk Web: http://www.jers.com.pk	. I GNOAD GITTEG I ROCKAIII (I GI)	SEWER SYSTEM GROUND & ROOF LAYOUT PLAN OFFICE BLOCK OKARA	REV. DATE DESCRIPTION	M.DANISH CHECKED BY: KHADIJA ARIF DATE: June,2022	S-03 SCALE: SHEET: UNIT=FEET 1 OF 1 1/4"=1'-0" JOB NO: 488-01

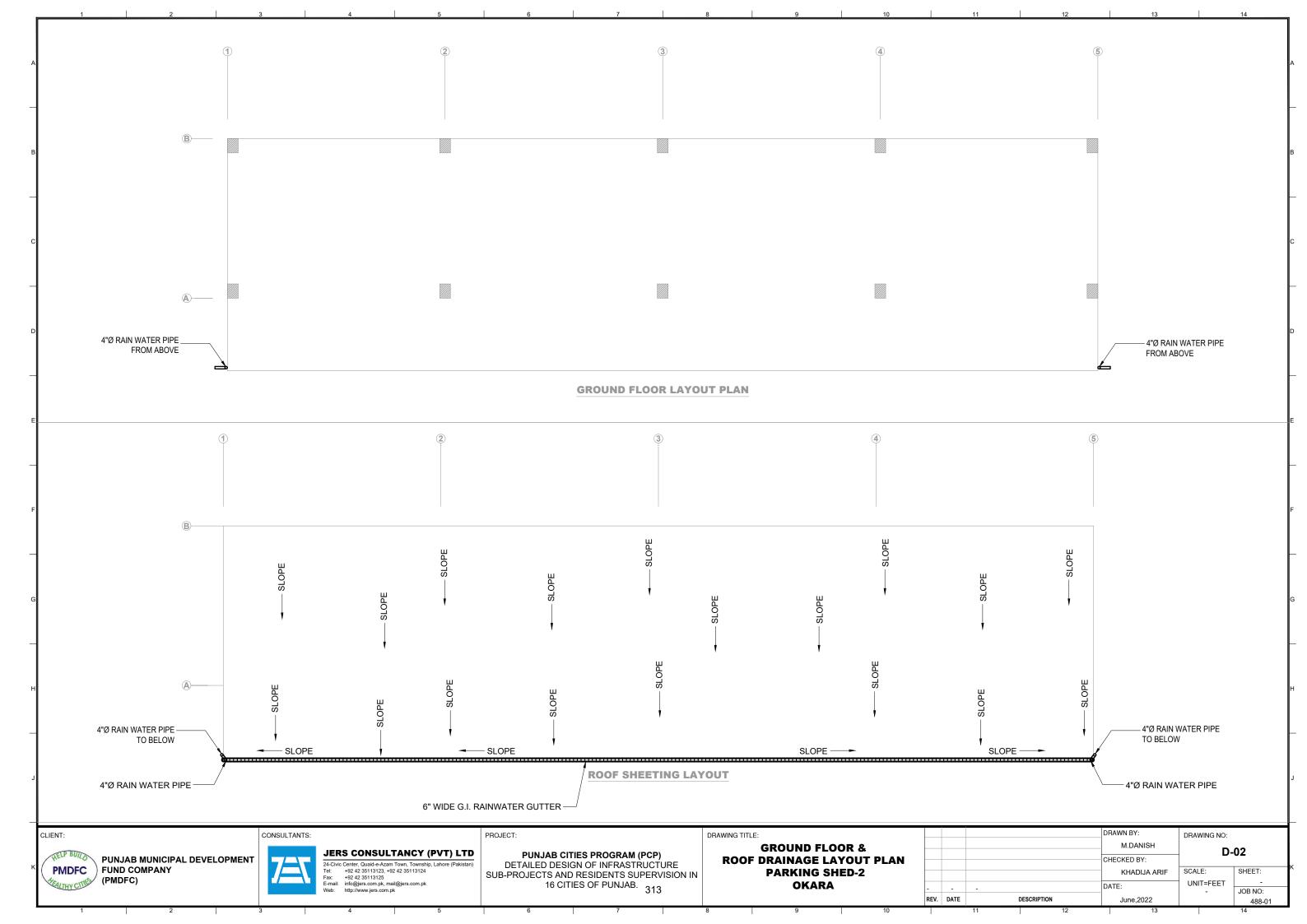


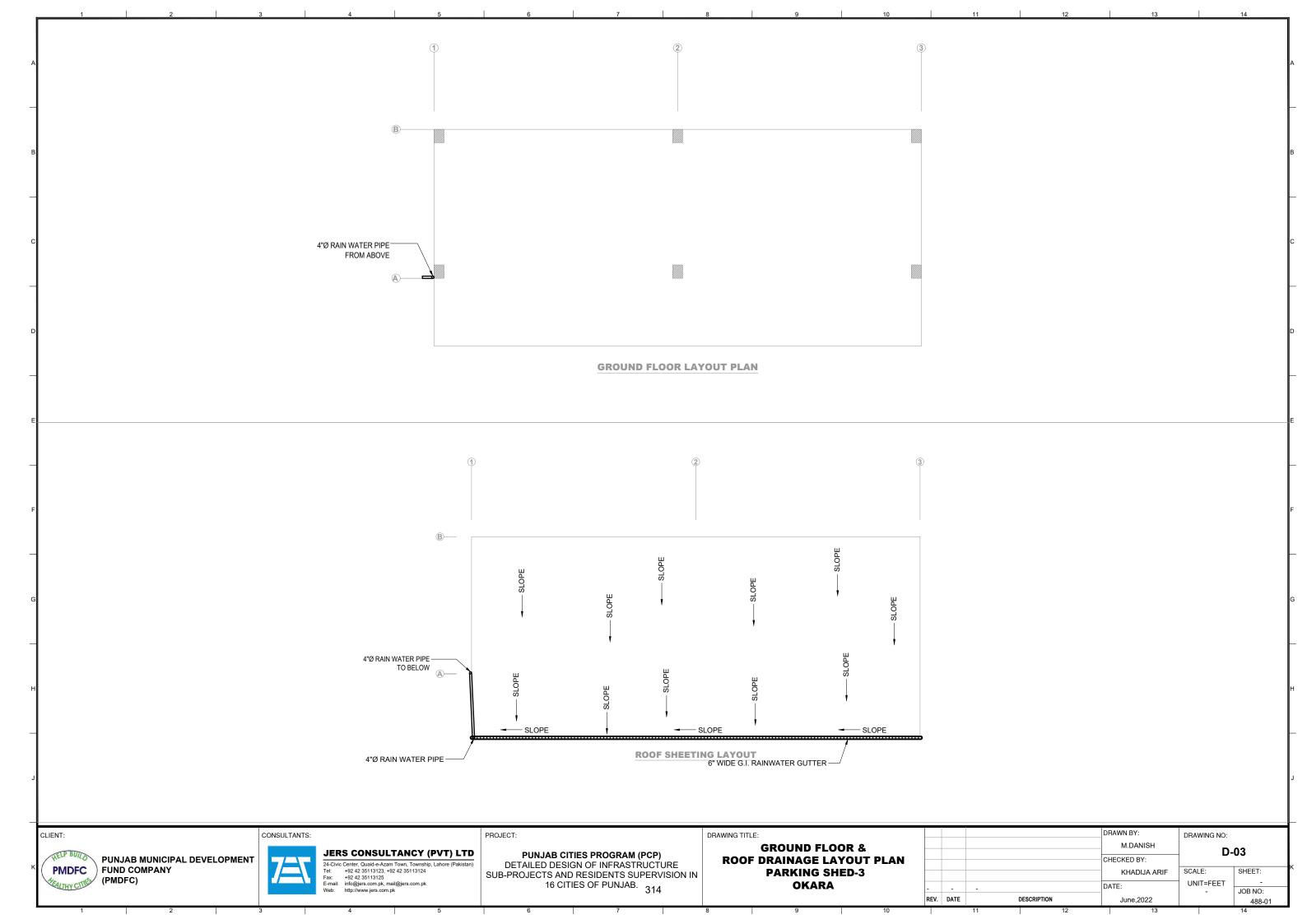


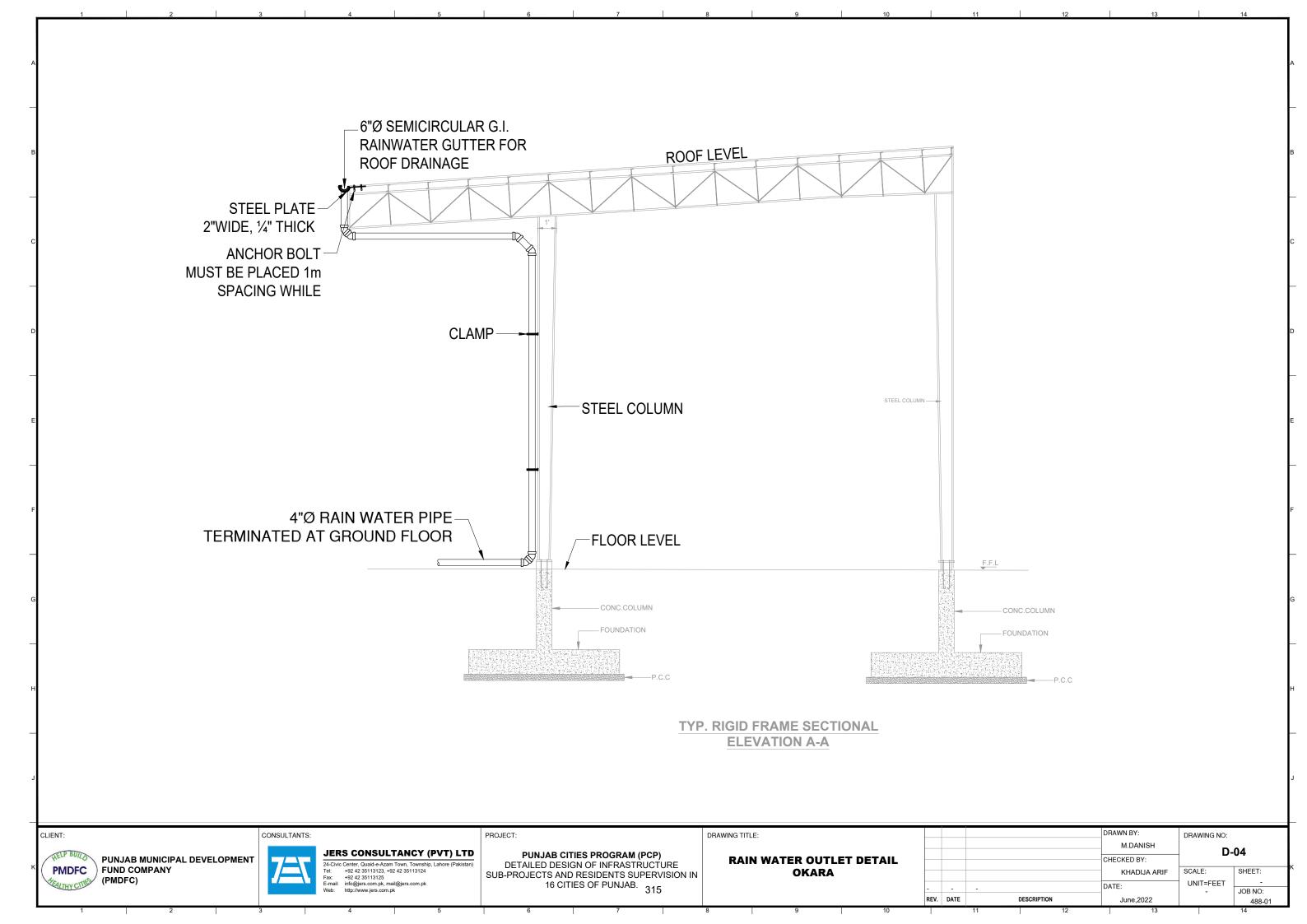


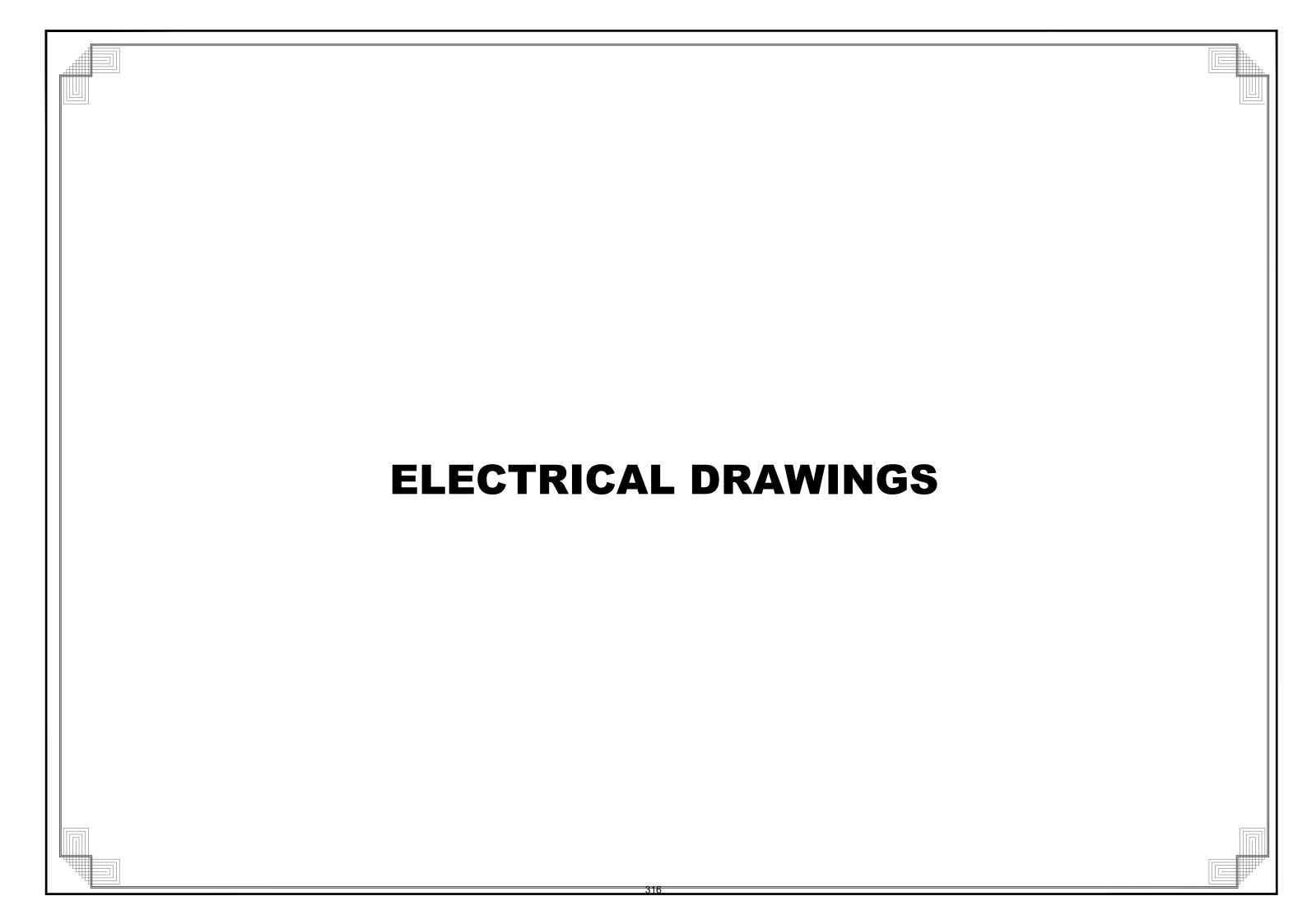














	1 LIGHT FITTINGS & FIXTURES					
S.NO	S.NO SYMBOLS DESCRIPTION					
1	1	WASHROOM MIRROR LIGHT 9 WATTS LED	6" ABOVE MIRROR			
2		SURFACE MOUNTED TUBE LIGHT WITH 2x40 WATTS LED ROD	SURFACE MOUNTED			
3	0	DOWN LIGHT 12 WATTS LED LAMP	SURFACE MOUNTED			
4	•	HIGH BAY HANGING LIGHT 50 WATTS LED LAMP	HANGING OF STEEL STRUCTURE			
5		100 WATTS LED FLOOD LIGHT ON 10M HIGH M.S POLE WITH FOUNDATION	GROUND			
6	-	EXHAUST FAN	7'-0 ABOVE FFC			
7		DISTRIBUTION BOARD	4'-0" FROM FFC			
8	-	SURFACE MOUNTED TUBE LIGHT WITH 1x40 WATTS LED ROD	SURFACE MOUNTED			

	2 WIRING ACCESSORIES							
S.NO	SYMBOLS	DESCRIPTION	MAKE	MOUNTING HEIGHT				
1	•	GANG TYPE SWITCH 10AMPS, INDICATES NUMBER OF SWITCHES ON GANG PLATE		+3'-6" FROM F.F.L				
2	▲SAC:1	16 AMP SWITCH SOCKET FOR SPLIT AC ON GANG PLATE		7'-6" FROM F.F.L NEAR AC				
3	А	3 PIN COMBINED SWITCH SOCKET 15 AMPS ON M.S JUNCTION BOX		+0'-9" FROM F.F.L				
4	Ф	3 PIN COMBINED SWITCH SOCKET UNIVERSAL 13 AMP SOCKET ON M.S JUNCTION BOX		+0'-9" FROM F.F.L				
5	4	CELING FAN POINT WITH 5/8"ø M.S HOOK		ROOF SUSPENDED				
	<u></u>	2x3 PIN COMBINED SWITCH SOCKET UNIVERSAL 13AMP SOCKET		+0'-9" FROM F.F.L				

	CAPACITY OF CONDUITS							
S.NO	CAP	ACITY OF COND	UITS	MAXIMUM PV	NUMBER OF C	ABLES IN ZES		
1	NOMINAL CONDUCTOR SIZE-mmSq	NO & DIA OF WIRES	OVER ALL DIAMETER	3/4" DIA (20mm DIA)	1" DIA (25mm DIA)	1-1/4" DIA (32mm DIA)		
2	1.5	1/1.38	3.1	10	18	30		
3	2.5	1/1.78	3.5	8	14	23		
4	2.5	7/0.67	3.8	7	12	20		
5	4	7/0.85	4.3	5	9	15		
6	10	7/1.04	4.9	4	7	12		
7	16	7/1.35	6.2	2	4	7		
8	16	7/1.78	7.3	-	3	5		
9	25	7/2.14	9.0	-	2	3		
10	35	19/1.53	10.3	_	-	2		

GENERAL NOTES:-

A LEGEND.

- REFER TO LEGEND FOR THOSE SYMBOLS ONLY MENTIONED ON ALL LAYOUT PLANS. OTHER SYMBOLS SHOWN IN LECEND BUT NOT ACTUALLY SHOWN ON LAYOUT DRAWINGS MAY PLEASE BE IGNORED.
- **B** ELECTRICAL WORKS.
- THE FOLLOWING NOTES SHALL IN GENERAL APPLY TO ALL ELECTRICAL DEAWINGS. THE INSTRUCTIONS IN THESE NOTES SHALL BE FOLLOWED UNLESS ALL ELECTRICAL WORKS PERTAINING TO WIRING OF ELECTRICAL SYSTEMS SHALL STRICTLY CONFORM TO I.E.E LATEST EDITION OF RULES & REGULATIONS.
- **ELECTRICAL DRAWINGS** ALL ELECTRICAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH BOQ, TECHNICAL SPECIFICATIONS AND IN CO-ORDINATION WITH ARCHITECTURAL, STRUCTURAL, PLUMBING AND HVAC DRAWINGS.

DIMENSIONS ON ELECTRICAL

3 LAYOUT PLANS ALL DIMENSIONS IF SHOWN ON THE ELECTRICAL LAYOUT PLANS ARE APPROXIMATE. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO ALL NECESSARY CALCULATIONS TO ARRIVE AT THE ACTUAL DIMENSIONS/MEASUREMENTS IN CO-ORDINATION WITH ALL OTHER PREPERVANT DRAWNINGS OF OTHER PREPERVANT DRAWNINGS OF OTHER PROPERVANT DRAWNINGS OF OTHER DRAWNINGS OTHER DRAWNINGS OF OTHER DRAWNINGS OTHER DRAWNINGS OF OTHER DRAWNINGS OF OTHER DRAWNINGS OF OTHER DRAWNINGS OTHER DRAWNINGS OF OTHER DRAWNIN

RELEVANT DRAWINGS OF OTHER

4 SHOP DRAWINGS

THE ELECTRICAL CONTRACTOR SHALL PREPARE
ELECTRICAL SHOP DRAWINGS WITH ALL
NECESSARY RELEVANT DETAILS. THE SHOP
DRAWINGS SHALL BE SUBMITTED TO
ENGINEER TENDER DRAWING BEFORE THE
COMMENCEMENT OF ANY WORKS AT SITE.

DISTRIBUTION BOAT

"LIGHT" & "POWER"

ALL DISTRIBUTION BOARD
DRAWINGS SHALL BE CON
DRAWINGS SHALL BE CON
INSTALLED AT 4FT (1000
SHOWN IN LEGEND/DRAWI

5 CO-ORDINATION

THE ELECTRICAL CONTRACTOR SHALL DO ALL NECASSARY CO-ORDINATION OF ELECTRICAL WORKS AND ALLIED SYSTEMS WITH ALL OTHER SERVICES AT

BALANCING OF

ELECTRICAL LOADS

ELECTRICAL LOADS ON ALL 3 PHASES SHALL BE BALANCED ON THE ELECTRICAL WORKS AT THE TIME OF TESTING AND COMMISSIONING OF THE ELECTRICAL INSTALLATIONS.

ELECTRICAL WIRING.

ALL WIRING SHALL BE DONE IN PVC CONDUIT TO BE CONCEALED IN WALLS, SLABS, COLUMNS AND FLOORS OR AS SHOWN ON DRAWINGS.

B THE WIRING SHOULD BE STARTED ONLY AFTER THE CONDUIT SYSTEM HAS BEEN COMPLETED AND ALL OUTLET BOXES ARE FIXED AT THEIR RESPECTIVE POSITIONS.

9 PVC CONDUITS.

ALL PVC CONDUIT SHALL BE OF 3/4" OR 1"
DIA (DEPENDING UPON NUMBER OF WIRES)
FROM SWITCH BOARD TO LIGHT POINTS & 1"
DIA FROM DBS TO SWITCH BOARDS AND
POWER SOCKETS OR AS SHOWN ON DRAWINGS.

10 LUBRICATION.

NO LUBRICATION EXCEPT AS RECOMMENDED BY MANUFACTURER SHALL BE USED FOR PULLING OF WIRES IN PVC CONDUITS. NO OIL OF ANY KIND SHALL

III COLOUR CODING

COLOUR CODING FOR WIRING SHALL BE AS FOLLOWS: RED, YELLOW AND BLUE FOR PHASES, BLACK FOR NEUTRAL AND GREEN / YELLOW FOR CPC (EARTH).

SIZE OF WIRES

FOLLOWING SIZES OF PVC INSULATED WIRES WITH COPPER CONDUCTORS SHALL BE USED FOR INTERNAL WIRING, UNLESS STATED OTHERWISE.

DRAWING TITLE:

- [12.1] 1.5mm sq PVC INSULATED WIRES SHALL BE USED FROM SWITCH BOARD TO LIGHT POINTS AND 5 Amps SOCKETS OR AS SPECIFIED IN B.O.Q
- SPECIFIED IN B.O.Q

 2.5mm sq PVC INSULATED WIRES SHALL BE
 USED FROM DB TO SWITCH BOARDS FOR
 LIGHTING CIRCUITS.

 3 OR AS SHOWN ON DRAWING/BOQ SHALL BE
 USED FOR WIRING FROM DB TO POWER
 SOCKETS.

 3 BACK BOXES
 4 LI BACK BOXES FOR SWITCHES & SOCKETS

BACK BOXES
ALL BACK BOXES FOR SWITCHES & SOCKETS
SHALL MADE OF POLYECARBUNATE SHEET
165WG OR AS SPECIFIED IN BOQ WITH
EARTH TERMINAL SIZE OF BACK BOX SHALL
CORRESPOND TO THE SIZE OF SWITCHES/SOCKETS

EARTHING OF POINTS.

ALL ELECTRICAL AND POWER SOCKETS SHALL BE PROPERLY EARTHED WITH 2.5mm sq PVC INSULATED WIRES OF COLOUR GREEN-YELLOW.

[4] CAPACITY OF CONDUITS.

THE NUMBER OF WIRES TO BE PULLED IN ANY CONDUIT FOR WIRING PURPOSES SHALL CONFORM TO I.E.E RULES & REGULATIONS

CONDUIT FOR LIGHT WIRING.

WIRING SHALL BE DONE IN 3/4" & 1" DIA PVC CONDUIT FOR LIGHT POINTS AND CIRCUIT WIRING ON NORMAL/ GENERATOR SUPPLY OR AS SPECIFIED IN BOQ OR AS SHOWN ON DRAWINGS. DISTRIBUTION BOARDS

ALL DISTRIBUTION BOARDS SHOWN ON DRAWINGS SHALL BE CONCEALED IN WALL & INSTALLED AT 4FT (1000mm) F.F.L OR AS SHOWN IN LEGEND/DRAWINGS.

TELEPHONE CONDUIT

- PVC CONDUIT SHALL BE 1"(25mm) DIA FOR WIRING OF TELEPHONE POINTS, PVC CONDUIT SHALL BE BURIED IN FLOOR /SLAB & WALLS FROM TOBS TO TELEPHONE POINTS, OR AS SHOWN ON DRAWINGS./B.O.Q

 FIRE ALARM WIRING.
- PVC CONDUIT SHALL BE 1"(25mm) DIA FOR WIRING OF FIRE ALARM POINTS,PVC CONDUIT SHALL BE BURIED IN FLOOR /SLAB & WALLS FROM FACP TO FIRE ALARM POINTS, OR AS SHOWN ON DRAWINGS./B.O.Q
- **E** FIRE ALARM JUNCTION BOX (FAJB). G.I JUNCTION BOX 225x150x100mm 16 SWG WITH COVER CONCEALED IN WALL AT 225mmBELOW SLAB TO FACILITATE PULLING OF FIRE ALARM CABLES.

E CLOSE CIRCUIT TV (CCTV) WIRING.

PVC CONDUIT SHALL BE 1"(25mm) DIA FOR WIRING OF CCTV SYSTEM.PVC CONDUIT SHALL BE BURIED IN SLAB, WALLS & COLUMNS OR AS SHOWN ON DRAWING/BOQ

CLOSE CIRCUIT TV JUNCTION BOX (CCJB).

[2] G.I JUNCTION BOX 225x150x100mm 16 SWG WITH COVER CONCEALED IN WALL AT 225BELOW SLAB TO FACILITATE PULLING OF CLOSE CIRCUIT TV CABLES.

F OTHER SYSTEMS.

25mm DIA PVC CONDUIT SHALL BE USED FOR WIRING OF ALL OTHER SYSTEMS UNLESS OTHERWISE MENTIONED ON PLANS OR AS SPECIFIED IN B.O.Q 1

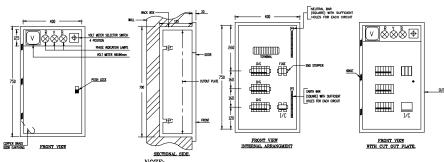
© ELECTRICAL CONSULATANT.

ELECTRICAL CONTRACTOR TO CONSULT
ELECTRICAL CONSULTANT/ENGINEER FOR ANY
FURTHER CLARIFICATIONS. NO ASSUMPTIONS
SHOULD BE MADE SHOULD BE MADE.

H ELECTRICAL TESTS.

CONTRACTOR SHALL CARRY OUT ALL ELECTRICAL TESTS AT HIS EXPENSE THROUGH LICENSED ELECTRICAL SUPERVISOR IN THE PRESENCE OF ENGINEER INCHARGE OR HIS REPRESENTATIVE.

TENTATIVE CONSTRUCTIONAL DETAIL OF:-DISTRIBUTION BOARD (DB) RECESSED TYPE



GIVEN BY DB MANUFACTURER/SUPPLIER

NOTE:-DIMENSIONS SHOWN ARE INDICATIVE ONLY AND NOT NECESSARILY BE FOLLOWED. HOWEVER ACTUAL DIMENSIONS OF DB SHALL BE

CLIENT:



CONSULTANTS:

JERS CONSULTANCY (PVT) LTD

24-Civic Center, Quaid-e-Azam Town, Township, Lahore (Pakistan +92 42 35113123, +92 42 35113124 +92 42 35113125

PUNJAB CITIES PROGRAM (PCP)

DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB. 317

LEGEND & NOTES OKARA

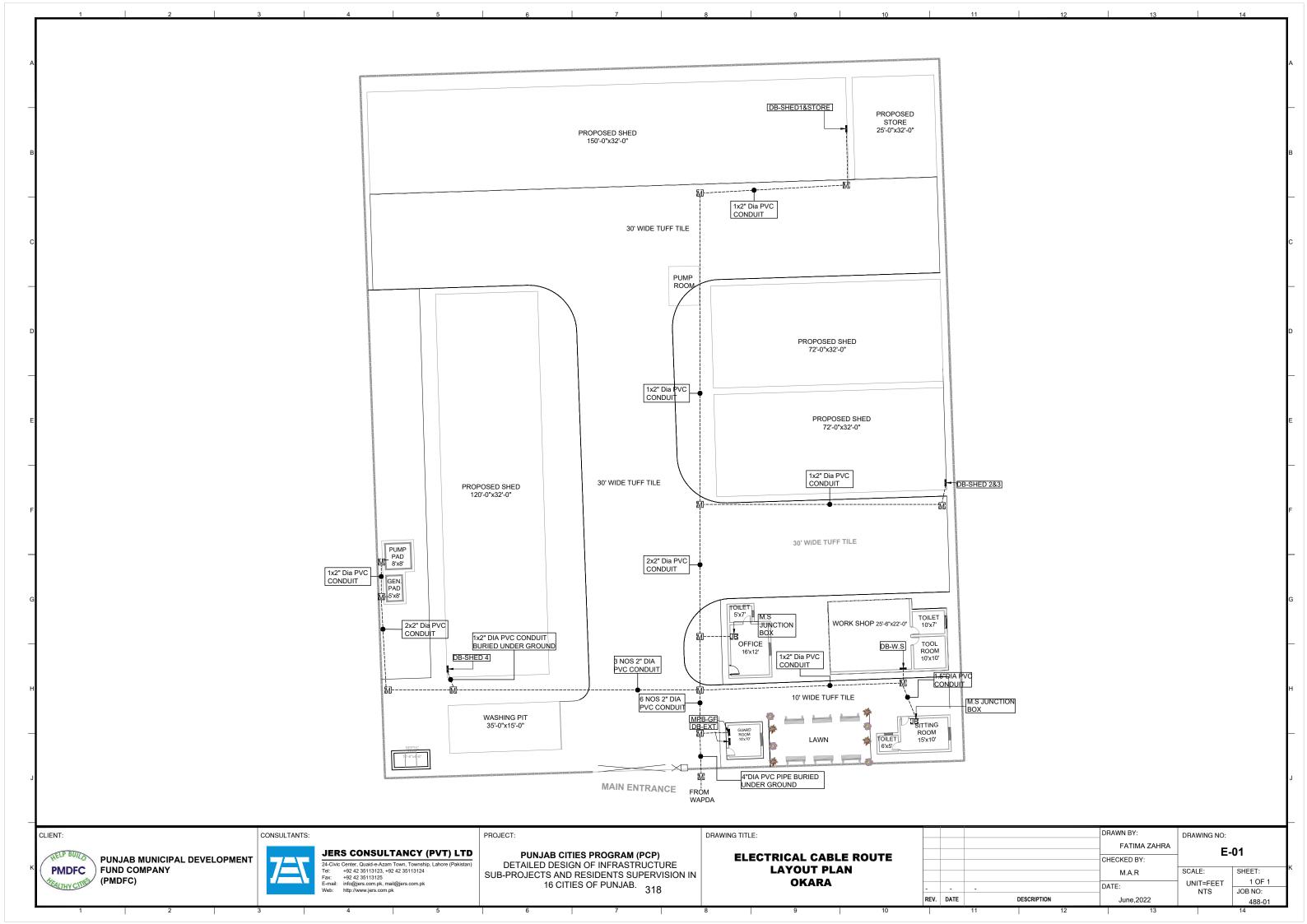
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				FATIMA ZAHRA	DRAWING NO.
				CHECKED BY:	
				M.A.R	SCALE:
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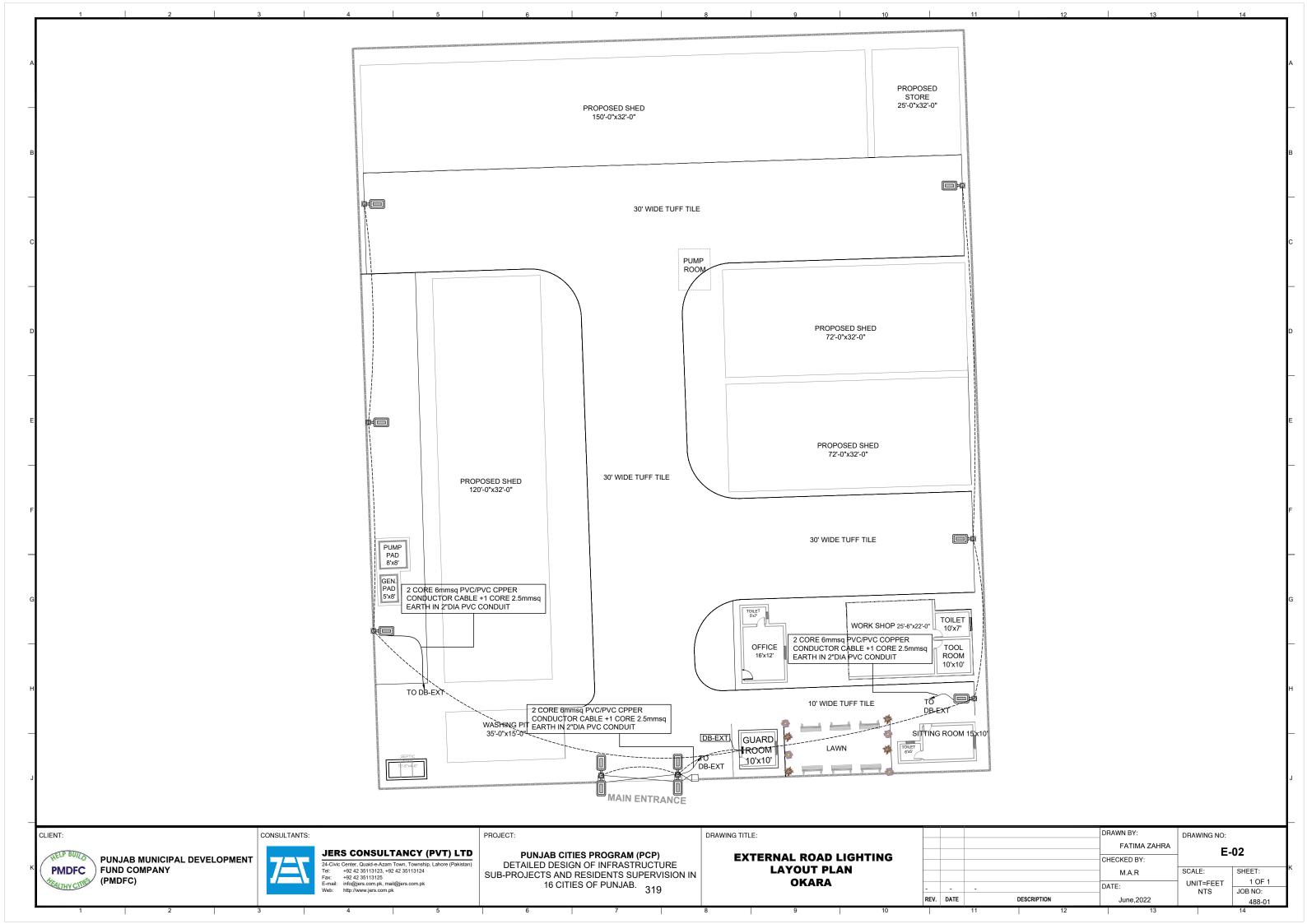
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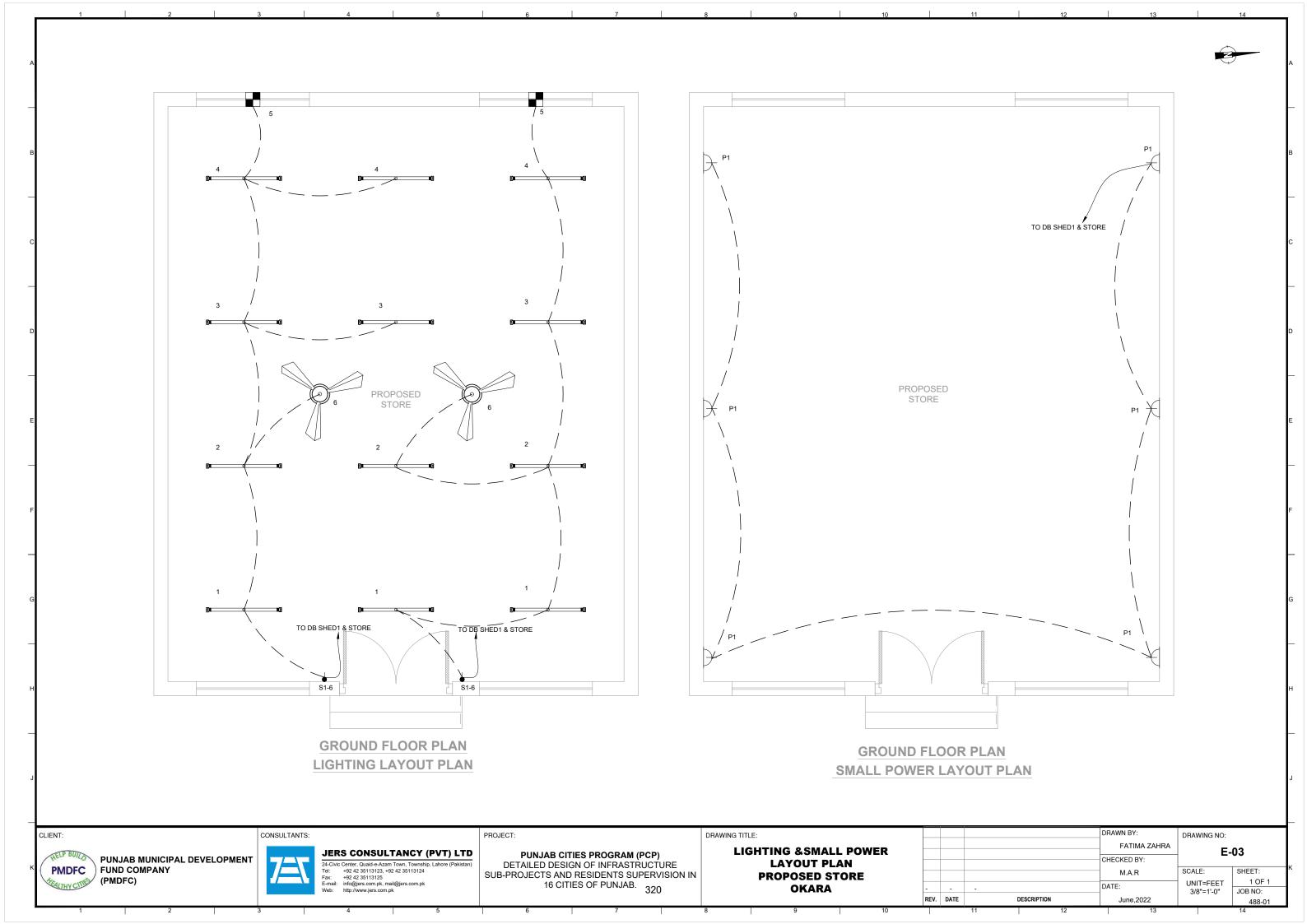
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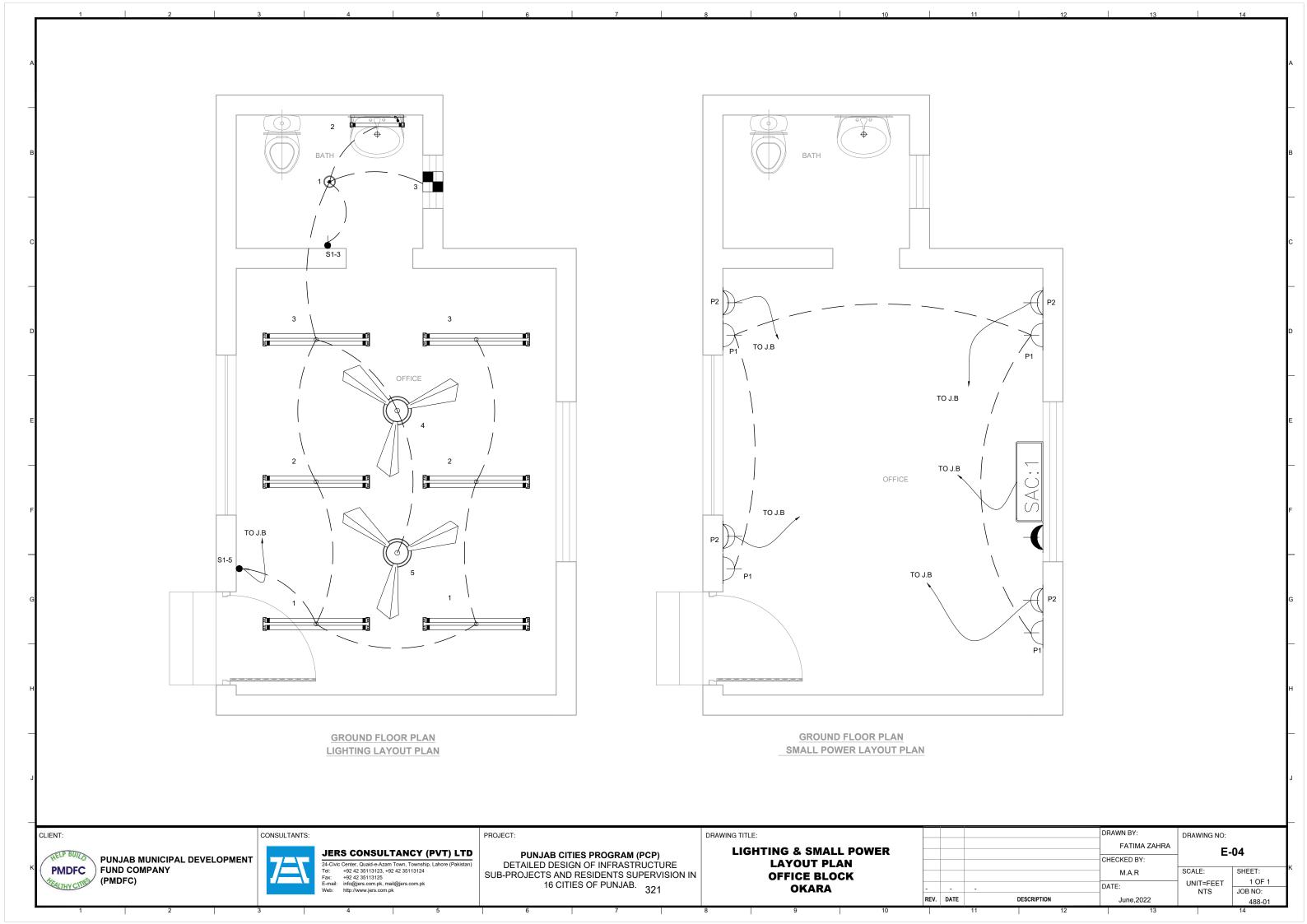
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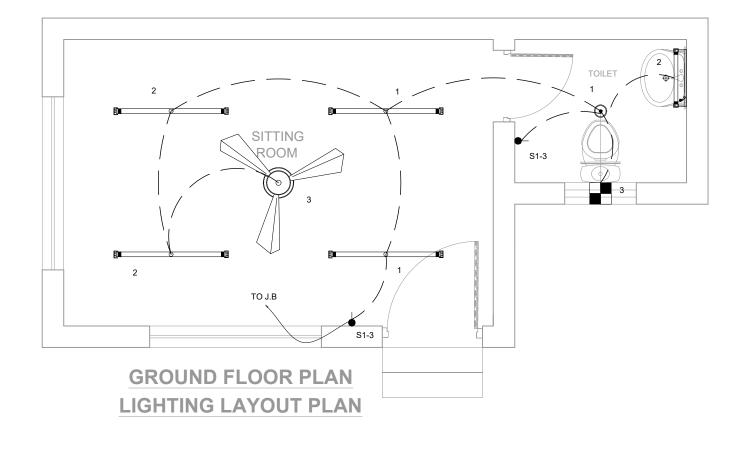
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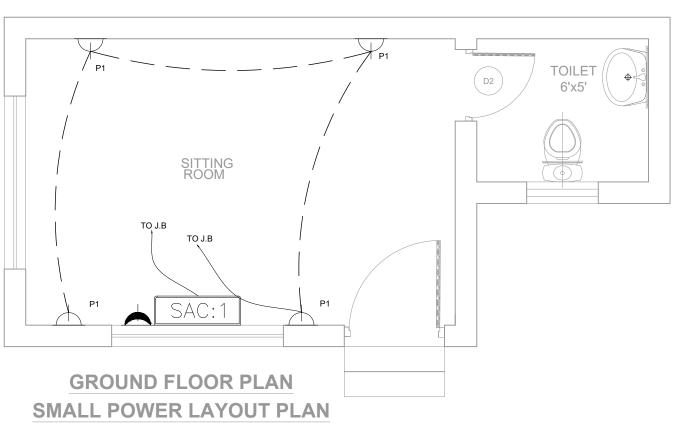












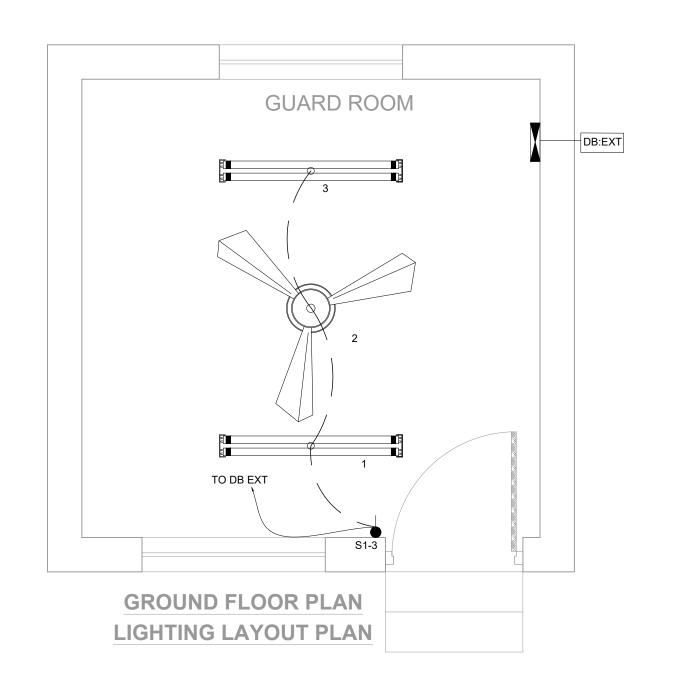
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PMDFC FUND COMPANY JERS CONSULTANCY (PVT) LTD PUNJAB CITIES PROGRAM (PCP) CHECKED BY:
 24-Civic Center, Quaid-e-Azam Town, Township, Lahore (Pakistan)

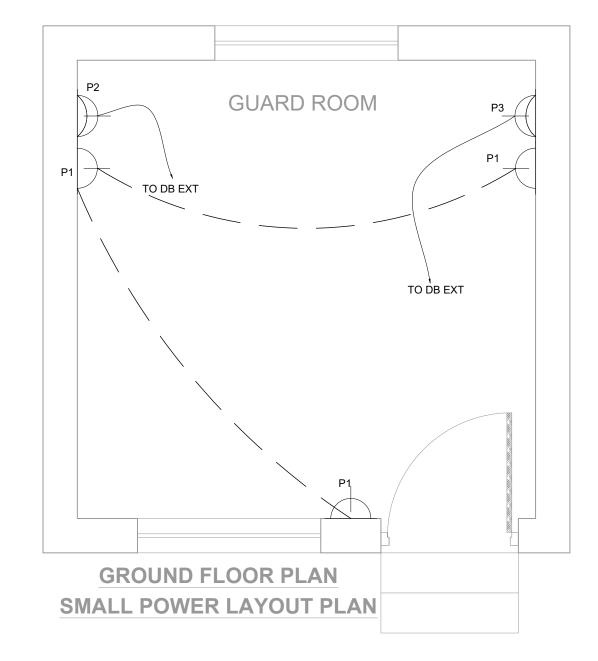
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 E-mail:
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 Web:
 http://www.jers.com.pk
 LAYOUT PLAN DETAILED DESIGN OF INFRASTRUCTURE SCALE: M.A.R SHEET: SUB-PROJECTS AND RESIDENTS SUPERVISION IN **SITTING AREA** (PMDFC) 16 CITIES OF PUNJAB. 322 1 OF 1 UNIT=FEET NTS DATE: **OKARA** JOB NO: REV. DATE





CLIENT:

PUNJAB MUNICIPAL DEVELOPMENT
FUND COMPANY
(PMDFC)

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Fax: +92 42 35113125
E-mail: info@jers.com.pk, mail@jers.com.pk

CONSULTANTS:

PROJECT:

PUNJAB CITIES PROGRAM (PCP)
DETAILED DESIGN OF INFRASTRUCTI

DETAILED DESIGN OF INFRASTRUCTURE
SUB-PROJECTS AND RESIDENTS SUPERVISION IN
16 CITIES OF PUNJAB.
323

LIGHTING & SMALL POWER LAYOUT PLAN GUARD ROOM OKARA

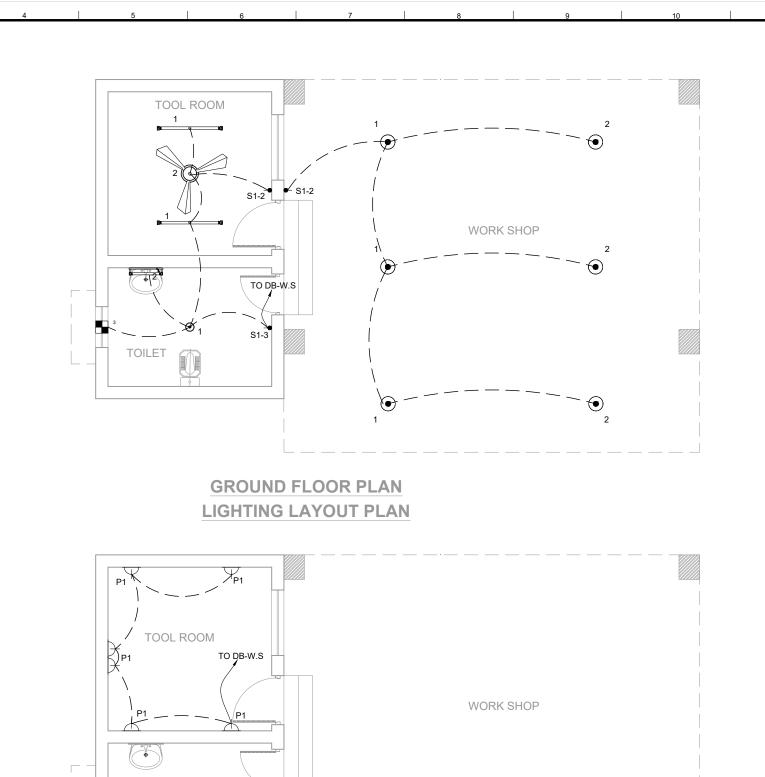
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				FATIMA ZAHRA	
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SHEET:

JOB NO:

1 OF 1



GROUND FLOOR PLAN SMALL POWER LAYOUT PLAN

TOILET

DRAWN BY: CLIENT: CONSULTANTS: PROJECT: DRAWING NO: FATIMA ZAHRA **LIGHTING & SMALL POWER** E-07 PUNJAB MUNICIPAL DEVELOPMENT
PMDFC FUND COMPANY JERS CONSULTANCY (PVT) LTD PUNJAB CITIES PROGRAM (PCP) CHECKED BY:
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 E-mail:
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 Web:
 http://www.jers.com.pk
 LAYOUT PLAN DETAILED DESIGN OF INFRASTRUCTURE SCALE: M.A.R SHEET: SUB-PROJECTS AND RESIDENTS SUPERVISION IN **WORKSHOP** (PMDFC) 16 CITIES OF PUNJAB. 324 1 OF 1 UNIT=FEET NTS **OKARA** DATE: JOB NO: REV. DATE DESCRIPTION 488-01

