

# Local Government & Community Development Department

Punjab Cities Program Improvement and Rehabilitation of P2-Mission and Mongi Road & Chowks in DC T.T Singh Unit Gojra

# PC-I

EstimatedCost PKR 152.62Million

January 2023

# District Council Toba Tek Singh Unit Gojra



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# **Punjab Cities Program**

# PC-I Form for Improvement of P2-Mission & Mongi Road & Chowks Project in Gojra City

# **Table of contents**

S. No.	Description	Page No.
1	PC-I Form	1-15
2	Annexure-A Location map	16-18
3	Annexure-B Project cost Estimates	19-125
4	Annexure-C Project Economic Analysis	126-138
5	Annexure-D Project Implementation Period (Gant Chart)	139-140
6	<b>Annexure-E</b> Environment and Social Mitigation & Management Plan	141-170
7	Annexure-F Project Drawings	171-278

#### **PC-I FORM**

for

# Improvement & Rehabilitation of P2-Mission and Mongi Road & Chowks Project in Gojra City

**Project Serial Number** 

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

	Punjab Cities Program				
1. Name of the project	Improvement & Rehabilitation of P2-Mission and Mongi Road &				
	Chowks Project in Gojra city				
2.Location	Gojra was given the status of a Tehsil Headquarter and affiliated with newly established district Toba Tek Singh in 1982. The town of Gojra is located at 72°-41' East and 31°-9' North. The city is located at 50 km from Faisalabad, 170 km from Lahore and 32 km north of Toba Tek Singh.				
3. Authorities responsibl	e for				
i- Sponsoring	Government of the Punjab (through World Bank f	funding)			
ii- Execution	District Council Toba Tek Singh Unit Gojra				
iii- Operation and Maintenance	District Council Toba Tek Singh Unit Gojra				
iv-Concerned Provincial Department	Local Government and Community Development Department Punjab				
4a.Plan Provision					
<ul> <li>If the project is included in medium term/five year plan,</li> </ul>	Punjab Cities Program (PCP) is a World Bank f total cost of USD 236.00 million and comprise components.	funded Program with a es of below mentioned			
specify actual	Total loan from World Bank	USD 200.00 million			
allocation	Component-1 Infrastructure development (PforR)	USD 180.00 million USD			
	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			

	the cleaning and de-silting of existing drains and pipes will be arranged
	by MC Gojra from their own resources.
	The Project has the following objectives;
	<ol> <li>Improvement of service delivery level of the municipal services in the sector of communication.</li> <li>Better travelling facilities for the commuters.</li> <li>Reduction in road accidents.</li> <li>Saving in travelling and repair cost of the vehicles.</li> <li>Reduction in annual maintenance charges of roads and parks</li> <li>Better lit roads and streets adding to security of people travelling at night.</li> <li>Improvement in environments of the city making them livable.</li> <li>Improvement in local and province economy.</li> <li>Improvement in the economic growth potential of the city.</li> </ol>
	Hence, the objectives of the project are in line with the sector objectives
	mentioned at Sr. No-1, 2, 3, 5 and 6 above and the project forms integral
	part of the concerned sector.
6. Description, justificat	tion, 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.
	The roads infrastructure has been damaged and degraded because of lack of repairs and upgradation due to shortage of money and constrained municipal budgets. If these roads & chowks are not improved at this stage, then this infrastructure will be further damaged / degraded giving financial loss to the public as well as private sectors and the growth potential of the city will be adversely affected. Damaged roads will increase the operational expenditure of the vehicles apart from wasting time and giving rise to public frustration and mental agony.
	The only way to keep the infrastructure in operational and functional condition for better travelling and recreational facilities to the inhabitants

	of the city and the surrounding areas, is to improve the roads, chowks and						
	imp	oortant cross roads	5				
ii. Description of the subproject-	Th tot roa	The project comprises of improvement of <b>01 Nos</b> damaged roads with total length of <b>1.57 Km</b> and <b>03 Nos chowks</b> in the city. Detail of these roads has been given in the table below.					
iii Detail of civil works, equipment & machinery and other	The con	e detail of roads structed in the cit	s and y, is gi	chowks to ven below	be improved, rehabilitated or		
physical facilities							
physical facilities	з. N.	Name of road		From-To	Detail of works involved		
	1	P2-Mission Road & Mongi road	Missi Via R Cross to Ta Sian	on Chowk ailway sing Chowk kia Phomin Chowk	<ul> <li>Geometric Improvement</li> <li>Rehabilitation of Existing Pavement Structure</li> <li>Pavement Marking</li> <li>Street Lighting</li> <li>Improvement of drainage system</li> </ul>		
	• (	Chowks or Cross F	Roads				
	S Name of Chowk						
	N.	N.					
	1	Mission Cho	wk	<ul> <li>Geometric</li> <li>Channeliza</li> <li>Rehabilita Structure</li> <li>Pavement</li> <li>Street Light</li> <li>Aesthetic is</li> </ul>	E Improvement of intersection ation of traffic flow tion of Existing Pavement Marking hting improvement of chowk		
	2	Phattak Chow	vk-1	<ul> <li>Geometric</li> <li>Channeliza</li> <li>Rehabilita Structure</li> <li>Pavement</li> <li>Street Light</li> <li>Aesthetic i</li> </ul>	E Improvement of intersection ation of traffic flow tion of Existing Pavement Marking hting improvement of chowk		
	3	Phattak Chow	ık-2	<ul> <li>Geometric</li> <li>Channeliza</li> <li>Rehabilita Structure</li> <li>Pavement</li> <li>Street Light</li> <li>Aesthetic in</li> </ul>	E Improvement of intersection ation of traffic flow tion of Existing Pavement Marking hting improvement of chowk.		

iv Indicate governess	• DC T.T Singh Unit Gojra is facing acute shortage of staff. The smooth					
issues of the sector	sailin	g of the Punjab Cities Program can only be a	ssured when the			
relevant to the	requi	red staff is available with Unit.				
project and strategy	• The F	Repair and maintenance of the municipal service	es is not up to the			
to resolve them	mark	in such Unit. Trainings will be imparted by	PMDFC to the			
	office	ers as well as the field staff under the Program b	out practicing the			
	interv	ventions and method/procedures learnt in these	e trainings is the			
	actua	l requirement in which Units are lacking at	present. Hence			
	incul	cating the mind set for good repair and mainten	ance is the major			
	requi	rement for improving the service delivery level.				
7- Capital Cost of	The sum	mary of the works included in the project is give	en below;			
Project						
		N f 1	Cost			
	<b>5.</b> NO	Name of road	(PKR million)			
	1	P2-Mission Road & Mongi road	96.73			
	2	Drainage System	27.92			
	3	Electrical Works	17.48			
	4	Environment And Social Mitigation Cost	0.49			
		Total 142.64				
	5	Contingencies @2%	2.85			
	6	Punjab Sales Tax @5%	7.13			
		Grand Total	152.62			
	See Annexure-B for details					
i- Indicate date of	The proj	ect estimates have been framed during the mont	h of August			
estimation of the	2022.					
project cost						
11- Basis of determining	The cost estimates have been framed on the basis of bill of quantities					
the estimates be	actually	required at site and unit rates from the Mar	ket Rate System			
provided.	(MRS) issued by the Government of Punjab (District Toba Tek Singh 1 <sup>st</sup>					
	Diannual of year $2023$ ).					
	provide the prevailing market rates					
		ig market fates.				

	The	physical and financial requirements, ye	ear wise are in	cluded in the	
estimation of physical activities	follo	S. #Name of road / chowkYear 2022-202			
	1	P2-Mission Road & Mongi road		100%	
	2	Mission Chowk		100%	
	3	Phattak Chowk-1		100%	
	4	Phattak Chowk-2		100%	
			·		
iv- Phasing of capital cost on the basis of each item of work.	The tabl	phasing of capital cost of the project i e: (All figures are in million rupees)	is included in	the following	
	S. #	Items of Road/chowk	Total (PKR million)	Year 2022-2023 (100%)	
	1	Mission Road & Mongi road	96.73	96.73	
	2	Drainage System	27.92	27.92	
	3	Electrical Works	17.48	17.48	
	4	Environment and Social Mitigation Cost	0.49	0.49	
		Total	142.64	142.64	
	5	Contingencies @2%	2.85	2.85	
	6	Punjab Sales Tax @5%	7.13	7.13	
		Grand Total	152.62	152.62	
8-Annual recurrent cost after completion of the project and source of financing	The roads & chowks are already being repaired and maintained by the DC T.T Singh Unit Gojra out of its own financial resources. No additional cost will be required after completion of the improvement and upgradation of the roads and chowks, rather the repairs cost will be reduced for the initial years. However, the efficiency of the infrastructure and service delivery level will be improved after completion of the project.				
9- Demand & Supply	Existing supply level				
Analysis i- Existing Capacity of services	• E su rc th • D th so bo fu	xisting geometry of the roads and cho ustain the smooth traffic flow. Existing oads and chowk is deteriorated which nee he traffic loading and better riding quality of T.T Singh Unit Gojra is unable to rem he entire area of the city because of degra ome rehabilitation and improvement are of he able to accomplish them because of anding constraints. Very few areas are rem	wk is not well pavement stru ds the rehabilits , nder satisfactor aded infrastruct direly needed b low revenue re asonably serve	I enough to cture of the ation to bear by service to ure wherein ut could not ecovery and d but others	

ii- Projected Demand for 10 years	<ul> <li>Further the infrastructure has not been developed and extended keeping in pace with the growth of population mainly due to migration from rural areas to urban areas. The market prices of the materials and labor have also increased drastically during the last decade which increased the O&amp;M cost of services. This has further degraded the situation and the service delivery level is further deteriorating.</li> <li>Traffic is increasing day by day in Gojra city. Projected traffic of 1 project roads for 10 year is 153 million. Project roads of Unit Gojra needs to be improved to save the travel time and better riding quality.</li> <li>The municipal services require radical improvement to enhance the efficiency of the service to increase service delivery to a satisfactory level. For this purpose, the existing infrastructure will have to be improved.</li> <li>Many shortcomings, problems and bottlenecks have been observed in the existing infrastructure which could not be addressed by MC due to funding constraints and now have been proposed to be addressed by rehabilitation of defective and outlived components of all the municipal services infrastructure.</li> </ul>
<ul> <li>iii- Capacity of other similar projects being implemented in public/private sector</li> </ul>	No other project of this nature is being implemented in public as well as private sector because of funding constrains in the Unit.
iv- Supply and Demand gaps	<ul> <li>The nature of supply and demand gap has been explained in the preceding paras which concludes;</li> <li>Existing condition of the road network is not good enough to bear the traffic load. It's causing excessive delays, increasing travel time, occurring accidents at intersections and vehicles wear and tear due to the poor condition of pavement surface. Increasing traffic load requires the improvement of existing road network and chowk.</li> <li>The existing infrastructure has poor efficiency resulting in unsatisfactory service delivery level.</li> <li>The O&amp;M cost of the infrastructure services is very high because of low efficiency and high market rates while there in a large gap between the O&amp;M expenditure and the revenue recovery.</li> <li>Large subsidies are being injected by Municipal Units to the keep the services in operation</li> <li>Numerous public complaints are the talk of the day.</li> <li>Unsatisfactory municipal delivery is not encouraging the city to become engines of economic growth and hence the GDP of our city is much lower than the peers in the developing world.</li> </ul>

	Hence there is a large gap between the supply and demand which is to be bridged by improvement in the infrastructure and its management.							
v-Designed capacity and output of the project	1. Table showing Name of roads, From and to reaches, length, ROW, metaled width and type of pavement of each road and total length is given below:							
	Sr. #	Road Name	From and To	Pavement Type	ROW	Carriageway Type	Wetaled Width	Leng th (km)
	2	Mission Road & Mongi road	Mission chowk to Takla Phomin Sian chowk	Asphalt Concrete	59 ft single (Varies) 78 ft dual varies	Single and Dual with Median	25 ft single (varies) 60 ft dual varies	1.57 km
	<ol> <li>2. 3 chowks Mission Chowk, station chowk 1, station chowk 2, connecting with P1-Gojra Toba Road. Mission Road &amp; Mongi road, Sammundri Road Hussain &amp; Ansar Colony Road and Chemni Peer road.</li> <li>3. Roads and chowk are designed for 10-year life.</li> <li>4. These roads will carry out the 153.97 Million traffic cumulatively for 10 years.</li> <li>5. Improvement of these roads and chowk will decrease the travel time of commuters which will ultimately improve the economy of city.</li> </ol>							
10. Financial Plan Sources of	Below given loan for the Punjab Cities Program has been funded by World Bank for 16 PCP cities in Punjab.							
financing	Total loan to Government of Pakistan/Punjab     USD 200 million							
Debt	Component-1 for Infrastructure Development USD 180 million							
a) Indicate the local and foreign debt Loan	Component-2 for Investment Project Financing For capacity building of MCs & three Govt. USD 20 million organization and program management.							
	20% share of Municipalities is equivalent to USD 36 million							
	TotalfundsavailableforInfrastructureDevelopmentUSD 216 million							
	Thi	s project wil	l be funded	under this	financi	ng.		

	A. Loan/grant to MC					
	The amount of loan converted to gra	nt to Gojra Unit will be <b>PKR.</b>				
	(122.10) million. The financing of t	he project will be as given				
b) Equity	below:					
	Grant to Unit for the year 2022-2023	PKR 122.10 million				
	(80% of cost of PC-I)					
	20% Co-finance by MC (20% of the	PKR 30.52 million				
	cost of PC-I)					
	Total available funds	PKR 152.62 million				
	<b>B. Project Cost PKR 152.62 million</b> *The loan is from World Bank to Govern	B. Project Cost PKR 152.62 million				
	will trickle down to Gojra Unit as gran	t.				
c) Grants	No grant is being given by Government of Punjab out of ADP funds. The World Bank loan to Government of Pakistan/Punjab will trickle down as grant to unit Gojra from Government of Punjab.					
d) Weighted cost of	Nil					
capital						
11-Project benefits and a	analysis					
i. Financial:	• The project comprises of improveme	nt of roads, chowks and cross				
Income to the project	roads in the city.					
with assumption	• Gojra Unit has no plan to levy user charges /toll tax on the roads as					
	these are internal roads of city and levying of toll tax is not feasible.					
	• However, it is an infrastructure sector project but the capital cost of the					
	project is not intended to be recovered	. The unit will meet the cost of				
	repair and maintenance out of its own	resources. The project economic				
	analysis is given as <b>Annexure-C</b> .					
ii. Social benefits to the	The completion of the project will result	in:				
target group	• Up gradation of the infrastructure					
	• Enhanced life of the roads and ch	owks.				
	• Reduction in travelling time of the commuters.					
	• Reduction of road accidents.					
	• Reduction in consumption of POL resulting in saving of the foreign exchange.					
	Reduction in the operation and maintenance cost of the vehicles.					
	• Improvement in the environment	of the city;				
	Minimized public mental tension	and frustration				
	Improved local economy					
	Improvement of city growth potential	ntial				

iii.Environmental Impact	Construction/Rehabilitation of Roads and Chowks and their subsequent				
negative/positive	long-term use lead to many changes in the environment. There will be				
	some negative impacts during rehabilitation of the Roads and Chowks in				
	the form of noise of the machinery, dismantling of the existing roads, dus				
	pollution, nuisance caused by higher traffic, risked caused by anim				
	intersecting routes or consequences of any	crossing water courses etc.			
	Therefore, it is recommended to develop v	ariant solutions in order to			
	choose the one that would be least harmful to	o the environment, and then			
	to incorporate them in an Environmental	l and Social Management			
	Framework. However, the impacts will be ter	nporary and there will be no			
	negative impacts after completion of the proj	ect, rather, positive impacts,			
	because of improvement in environments of t	he city, will be observed and			
	present traffic hazards and jams will be elimin	nated. Hence overall positive			
	impacts will be experienced due to executio	on and operation of the sub-			
	projects.				
	To facilitate the selection of an optimal solution	tion and for the inclusion of			
	Safe Operating Procedures for Construction	workers/labors; assessment			
	indicators or an Environmental Screening Che	ecklists have been developed			
	which is attached as Annexure E (A) of this	PC-1. The checklist focuses			
	on Environmental Issues and social con-	cerns and ensure that all			
	environmental and social dimensions are ad	lequately considered. Based			
	on. The Environment, Health and Safety S	SOPs for labor/workers are			
	provided as Annexure E (B).				
	E&S Screening Involuntary resettlement che	ecklists and Environment &			
	Social Mitigation plan will be the part of bide	ding documents			
iv. Quantifiable project	The quantifiable project out puts have been g	(iven above in Sr. No-9 (V).			
outputs	The social benefits to the citizen have been o	lescribed at Sr. No-11(11).			
v. Unit cost analysis	The unit cost analysis is produced below;				
	Project capital cost	PKR 152.62 million			
	Population of the city in year 2023	276,925 persons			
	Unit capital cost per capita	PKR 551.15			
		. • • • • •			
	• Unit R&M cost: – The Repair & mainte	nance cost is already being			
	borne by Gojra Unit and there will be no	increase in this cost. Due to			
	improvement of the infrastructure R&M cost will reduce for at least 5				
vi Employment	Fundament Analysis				
generation	<u>Employment Analysis</u> Direct Employment				
(direct and indirect)	a) Planning and Design of projects				
(uncet and mancet)	The planning and design of the projects	has been entrusted to local			
	consultants who have appointed staff and	d experts in road and related			
	disciplines along with their support staf	f The consultants will also			
	appoint their staff for resident supervision	n of the project to verify and			
	certify the items of works to be executed	under this PC-I			
	certify the items of works to be executed				

	b) Execution of the Project
	a) PMDFC
	PMDFC has the project monitoring and supervisory role and the
	company has enough experts and staff to complete this
	assignment. PMDFC has already deployed under mentioned staff
	for these projects:
	Civil Engineers
	<ul> <li>Accounts, administration and audit personnel</li> </ul>
	Urban planners
	• GIS experts
	• Support staff like computer operators, vehicle drivers, office boys
	and guards.
	Procurement experts
	Communication experts
	• Environmental and social experts
	Contract management experts
	b) Consultants
	PMDFC has employed consultants for detailed design and
	resident supervision of the projects who will deploy their staff for
	execution of the project.
	c) Municipality
	Gojra Unit 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;
project cost and	• Result in increased project cost due to escalation in cost of material
viability	and labor.
	• Delay the benefits to the target group
	• Result in further deterioration of the infrastructure and the service
	delivery level.
12-Implementation Sched	ule

a)	Indicate starting and	T	he project is anticipated to commence by March 2023 and to be
	completion date of	c	ompleted by June 2023 with project implementation period of 4 months.
	the project		
b)	Item wise/vear wise	Т	he Gantt chart has been attached at Annexure-D
Ĺ	schedule in line chart		
13	- Management Structu	ire	and manpower requirements
i	Administrative	i	i Planning & design of the project
1.	arrangements for the		The project has been designed by the consultants employed by PMDEC
	implementation of the		and will also carry out the resident supervision of the project
	project		and will also earry out the resident supervision of the project.
			Droporation of aget actimation
		11	The cost estimates have been prepared by the design consultants by
			The cost estimates have been prepared by the design consultants by
			actual measurements are required at site. The execution of the items of
			works included in these estimates /PC-1 will be certified by these
			consultants.
		13	7. Execution of the project
			• The project will be executed by DC T.T Singh Unit Gojra and
			supervised by the Consultants appointed by PMDFC in resident
			supervision mode. The technical staff & experts in PMDFC will
			oversee, co-ordinate 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 Unit 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
			unit Goira
			• The procurement of works and goods will be done by Procurement
			Committee of Goira Unit as per PPRA Rules
			Commuted of Coffu Onit as por TTRATRates.
1		l l	v. Verification of quantities included in PC-Is and Resident
			Supervision of the works by consultants
1			The works will be supervised by Supervision Consultants in resident
			supervision mode by assuring the quantity and quality of works. The
1			consultants will verify the items of work and their quantities contained
			in the PC-Is and cost estimates initially and then the quantities and
1			quality of works included in the contractor claims at the stage of
			novments. Designed will be made by the Unit often these contractor
			payments. Payments will be made by the Unit after these contractor

		claims have been en Manager/Engineer in	ntered n Charg	in the measurement books by the Project ge and pre audited as per LG Works Rules.
<ul> <li>ii- The manpower requirements by skills during execution and operation of the project and;</li> <li>The job description, qualification, experience, age and salary of each post</li> </ul>	a)	PMDFC experts a For rendering assistant 16 MCs, PMDFC has order to facilitate the established by H Multan/Khanewal. Resident Supervise The project will be superployed/deployed b of works and resident	nd staf nce in i as the e Progra PMDFC ion Co upervis by the c t supervis	<b>f</b> mplementation of infrastructure projects in experts and staff in the required fields. In am Units, three regional offices have been C at Gujranwala, Faisalabad and <b>nsultants</b> ed by consultants. The tentative staff to be onsultants for the certification of quantities vision of the project is given below.
	<b>S</b> #	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
	c) d)	Contractor's Techn The contractors will of & non skilled labor supervised by experies of slots for engineers type and quantity of Repair & maintenan MC has its own regu maintenance of the m been observed that maintain the services Hence it is proposed • Fill up the pre	ical sta employ r for e enced E and sk work an nce of t ilar stat nunicip the exi in a ma to; esently	<b>aff, skilled &amp; non skilled labor</b> to the supervisory technical staff and skilled execution of works. The works will be Engineers and sub engineers and the number tilled and non-skilled will depend upon the nd its period of completion. <b>the project</b> ff which has been deployed for repair and bal services infrastructure. However, it has disting staff is not adequate to repair and anner which can give good service delivery.

	• Recruit additional start as per need of the infrastructure after obtaining the sanctions from the competent authorities.					
	obtaining the sanctions from the competent authorities.					
14-Additional projects	1)Shortage & frequent transfers of Provincially appointed staff					
/decisions required to	MC is facing shortage in provincially appointed and locally appointed					
optimize the investment	cadres. This will seriously affect the pace of progress of the program					
being undertaken	and the implementation of the infrastructure projects may be delayed.					
	Provincial Government should fill up the vacant staff immediately for					
	ontimizing the investments in MC					
	optimizing the investments in MC.					
2) Repair & Maintenance (R&M) staff						
	The R&M staff is also deficient and this is adversely affecting the					
	service delivery level. Number 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					
	avtension of services additionally required staff has not been					
	extension of services, additionally required start 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	JERS Consultancy (Pvt) Ltd	Signatures	
by			
	Municipal Officer (Infrastructure) DC T.T Singh Unit Gojra	Signatures	
Checked by	Chief Officer DC T.T Singh Unit Gojra	Signatures	
	Administrator District Unit T.T Singh Unit Gojra	Signatures	
Vetted by	Senior Program Officer PMDFC	Signatures	

Annexure-A Location Map





Annexure-B Cost Estimate

#### **ROAD WORKS**

#### DC T.T SINGH UNIT GOJRA

#### DETAILED COST ESTIMATE

#### SUMMARY

Sr. No.	Description	Amount (Rs.)
1	ROAD WORKS	96,738,993
2	STORMWATER DRAINAGE SYSTEM	27,924,480
3	ELECTRICAL WORKS	17,487,059
4	ENVIRONMENT AND SOCIAL MITIGATION COST	494,060
	Total Amount (Rs.)	142,644,592
	Contingencies @ 2%	2,852,892
	PRA Charges @ 5%	7,132,230
	Total Amount. Rs.	152,629,713

	PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB						
	INFRASTRUCTURE WORK						
	DC T.T SINGH UNIT GOJRA						
	DETAILED COST ESTIMATE						
	SUMMARY						
Sr. No.	Description	Amount (Rs.)					
1	ROAD WORKS						
1.2	P-2 MISSION & MONGI ROAD (1.57 Km)	96,738,993					
	1) Total Amount. Rs.	96,738,993					
2	STORMWATER DRAINAGE SYSTEM						
2.2	P-2 MISSION & MONGI ROAD	27,924,480					
	2) Total Amount. Rs.	27,924,480					
3	ELECTRICAL WORKS						
3.2	P-2 MISSION & MONGI ROAD	17,487,059					
	3) Total Amount. Rs.	17,487,059					
4	ENVIRONMENT AND SOCIAL MITIGATION COST	494,060					
	Total Amount (Rs.) "1+2+3+4"	142,644,592					
	Say Millions	142.64					



#### DETAILED COST ESTIMATE

#### P-2 MISSION & MONGI ROAD

Sr. No	1st BI-Annual- 2023 (Jan to Jun) T. Tek Singh	Description	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
		ROAD WORK				
		Dismantling				
1	4/29	Dismantling brick or flagged flooring without				
		concrete foundation.	100Cft	84.00	942.50	79,170
2	N.S	Dismantling / Demolishing of existing kerb				
		stone as directed by Engineer's Incharge,				
		Complete in all respect	Rft	3,000.00	27.72	83,160
3	N.S	Dismantling / Demolishing of existing Tuff				
		Paver as directed by Engineer's Incharge,				
		Complete in all respect	Sft	11,200.00	10.40	116,480
		Scarifying				
4	18/11	Scarifying old road surface including removal				
		of debris within 1 chain (30 m).	100Sft	1,681.25	462.00	776,738
		Excavation				
5	3/7	Earthwork excavation in open cutting upto 5'-				
		0" (1.5 m) depth for storm water channels,				
		drains, sullage drains in open areas, roads,				
		streets, lanes, including under pinning of walls				
		and shoring to protect existing works,				
		shuttering and timbering the trenches, dressed				
		to designed level and dimensions, trimming,				
		removal of surface water from trenches, back				
		of and dragged within 50 ft (15 m) load				
		of and dressed within 50 ft. (15 fil) lead				
		i) ordinary	1000Cft	52.07	9,852.50	513,020
		Compaction of Earthwork				
6	3/5	Compaction of earthwork with power road				
		roller, including ploughing, mixing, moistening				
		earth to optimum moisture content in layers,				
		etc. complete.				
		i) 95% to 100% maximum modified AASHO				
		dry density.	1000Cft	46.60	9,963.35	464,292

#### DETAILED COST ESTIMATE

#### P-2 MISSION & MONGI ROAD

Sr. No	1st BI-Annual- 2023 (Jan to Jun) T. Tek Singh	Description	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
		Sub Base Course				
7	18/3/a/	Providing and laying sub-base course of stone				
	(i)	product of approved quality and grade				
	+	including, placing, mixing, spreading and				
	1/1	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. (Crushed stone				
		aggregate from Sargodha querry to site, actual				
		compacted depth shall be considered for				
		payment)	100 00	207.54	14070 75	4 60 6 070
			TOOCH	307.54	14,979.75	4,606,872
		Water Bound Magadam				
8	18/4/a	Providing and laying base course of crushed				
0	+	stone (Water Bound Macadam) of approved				
	1/1	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	1.204.07	22,483,43	27.071.618
				,	,	, ,
		Prime Coat				
9	18/6	Providing and laying bituminous priming coat,				
		using 10 lbs. kerosene oil and 10 lbs. binder				
		per 100 Sft. or 0.5 Kg kerosene and 0.5 Kg				
		binder per square metre.	100Sft	1,688.75	1,968.15	3,323,713
10	18/7	Providing and laying bituminous tack coat,				
		using 10 lbs. of bitumen per 100 Sft (0.49 Kg	10000	1 001 =0	1 000 05	1 110 100
		of offurinen per sq.m.)	100Sft	1,081.50	1,033.85	1,118,109

#### DETAILED COST ESTIMATE

#### P-2 MISSION & MONGI ROAD

		KOADS NET W				
Sr. No	1st BI-Annual- 2023 (Jan to Jun) T. Tek Singh	Description	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
		Carpeting				
		ABC				
11	18/10/a + 1/1	Providing and laying plant premixed bituminous carpet, including compaction and finishing to required camber, grade and density. (2 inch thick) (iii) 4% Bitumen	Per inch thickness per 100Sft.	1,081.50	13,829.32	14,956,410
		AWC				
12	18/10/a + 1/1	Providing and laying plant premixed bituminous carpet, including compaction and finishing to required camber, grade and density. (2 inch thick) (iv) 4.5% Bitumen	Per inch thickness per 100Sft.	607.25	14,747.92	8,955,674
13	18/10/a + 1/1	Providing and laying plant premixed bituminous carpet, including compaction and finishing to required camber, grade and density. (1.50 inch thick) (iv) 4.5% Bitumen	Per inch thickness per 100Sft.	1,081.50	11,060.94	11,962,407
		Paint For Traffic Lanes				
14	13/36	Painting Traffic Lane Marking of specified width (1.5mm thick), with Thermoplastic (TP) Paint including Glass Beads, complete in all respect, as approved and directed by Engineer incharge.				
		ii) 6" wide	Rft	17,125.00	59.20	1,013,800
15	6/52/b	Kerb Stone Providing and fixing precast Edge Kerb Stone (4" to 6" thick), of 3500 PSI Compressive Strength, embeded in PCC 1:2:4 over lean concrete 1:4:8 etc. complete in all respect.				
		b) With Painting				
		(i) 14" high	P.Rft	500.00	535.05	267,525
		Daint for Evicting Kark Stone				
		ann for Existing Kerb Stoffe Painting old surfaces:-				
16	13/4	f) Painting small detached articles, not exceeding one square foot (Sq.m) of painted surface:-		20.00		20.225
		1) first coat	100Nos.	20.00	1,466.95	29,339
		11) each subsequent coat	100Nos.	20.00	1,189.45	23,789

#### DETAILED COST ESTIMATE

#### P-2 MISSION & MONGI ROAD

Sr. No	1st BI-Annual- 2023 (Jan to Jun) T. Tek Singh	Description	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
		Tuff Paver				
17	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	Sft	93,193.75	197.40	18,396,446
		Pood Edging				
18	18/5	Providing and laying road edging of 3" (75 mm) wide and 9" (225 mm) deep brick on end, complete in all respects.	Rft	9,700.00	54.75	531,075
		P.C.C (Between Asphalt and Tuff Paver)				
19	6/5	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate):				
		(f) Ratio 1: 2: 4	100Cft	16.01	38,723.50	619,963
		Cat Eyes				
20	18/28	Providing & fixing Cat Eyes of size 4"x4"x3/4" duly casted with specified material having plastic strip containing mini retro- reflective glass beads of color white /red/ yellow having specifid reflections, quality & shape i/c the cost of self built in12mm dia x120mm long steel zinc plate dnail, fixing to road with epoxy/ hammering with separate nail				
		b) Aluminium Alloy				
		(1) Dual-Directional				
		(ii) 43x2=86 Glass beads a side	Each	712.00	747.70	532,362
		(B) Uni-Directional				
		(ii) 43 Glass beads a side	Each	800.00	585.70	468,560
21	18/25/a	Providing, fabrication and fixing pole mounted Direction Board/ road delineator of any shape and size, with specified Sheet and thickness, supported with G.I Channel, (excluding the cost of vertical post and painting) etc complete in all respect.				
		(a) G.I Sheet 14 SWG				
		CIRCULAR/TRIANGULAR				
		3 ft size	P. Sft	60.00	997.20	59,832

#### DETAILED COST ESTIMATE

#### P-2 MISSION & MONGI ROAD

Sr. No	1st BI-Annual- 2023 (Jan to Jun) T. Tek Singh	Description	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
22	18/27/b	Providing, fabrication and fixing Vertical Post comprising of medium quality G.I Pipe of specified diameter, including the cost of clamping arrangements, top cover, hold fasts embeded in PCC 1:2:4 etc, complete in all respect				
		(b) 3 inch diameter	Rft	110.00	1,538.20	169,202
23	13/42/a	Lettering and printing of signage /direction boards/ road delineators of any colour by machine i/c cost of Digital Lettering, Lamination & pasting etc complete in all respect.				
		a) High Intensity Prismatic (HIP) Tape	P. Sft	60.00	1,203.95	72,237
22	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	150.00	1 848 00	277 200
			100 SIL	130.00	1,040.00	277,200
23	N.S	Rehabilitation of existing monument (Existing Kerb Stone Replacement, Tiles Replacement and Paint Works)	Provision al Sum	1.00	250,000.00	250,000
		Total Amount Rs.				96,738,993
		DRAINAGE SVSTEM				
		Dismantling				
1	4/19/c	c) Dismantling cement concrete 1.2.4 plain	100Cft	0.65	12 196 80	7 904
1	T/ 1 // U	c) Dismanting commence oncrete 1.2.4 plain.	100011	0.05	12,170.00	7,704
2	4/13	Dismantling brick work in lime or cement mortar.	100Cft	28.13	4,712.40	132,536

#### DETAILED COST ESTIMATE

#### P-2 MISSION & MONGI ROAD

Sr. No	1st BI-Annual- 2023 (Jan to Jun) T. Tek Singh	Description	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
		Excavation				
3	3/7/i	Earthwork excavation in open cutting upto 5'- 0" (1.5 m) depth for storm water channels, drains, sullage drains in open areas, roads, streets, lanes, including under pinning of walls and shoring to protect existing works, shuttering and timbering the trenches, dressed to designed level and dimensions, trimming, removal of surface water fromtrenches, back filling and surplus excavated material disposed of and dressed within 50 ft. (15 m) lead:- i) in ordinary soil.				
			1000Cft	67.00	9,852.50	660,118
		P.C.C				
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	100Cft	53.13	29,723.50	1,579,210
		(f) Ratio 1: 2: 4	100Cft	156.00	38,723.50	6,040,866
5	7/7/:	Brick Work				
5	// //1	(3 m) Cement, sand mortar:- Ratio 1:3	100Cft	206.80	33,467.90	6,921,030
6	7/10	Extra for pacca brick work in steining of wells or any other circular masonry.	100Cft	1.30	2,881.20	3,734
		Plaster				
7	11/8/b	Cement plaster 1:3 upto 20' (6.00 m) height:-				
		b) <sup>1</sup> /2" (13 mm) thick	100Sft	227.46	3,639.10	827,736
		D C C Weels				
8	6/6/a/i/3	Providing and laying reinforced cement concrete (i/c pre-stressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, i/c 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, complete				

#### DETAILED COST ESTIMATE

#### P-2 MISSION & MONGI ROAD

Sr. No	1st BI-Annual- 2023 (Jan to Jun) T. Tek Singh	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 pre-cast laid in position, or pre-stressed members cast in situ, complete in all respect. Type C (nominal mix 1:2:4)				
		1111 (1.2.4)	P Cft	6,097.00	583.25	3,556,075
		Steel				
9	6/12/b	Fabrication of mild steel reinforcement for cement concrete, i/c cutting, bending, laying in position, making joints and fastening, i/c cost of bending wire and labour charges for bending of steel reinforcement (also includes removal of rust from deformed bars)				
		('b) Deformed bars (Grade-40)	100Kg	186.73	31,554.70	5,892,167
10	21/8	Constructing standard gully grating chamber, 3'x2 <sup>1</sup> / <sub>2</sub> ' (900x750 mm), with chinaware trap as per PHED Drawing STD/PD No. 3 of 1977, complete in all respects.	Each	26.00	17,047.40	443,232
11	7/30	Supplying and filling sand under floor; or plugging in wells.	100Cft	13.00	2,982.00	38,766
		uPVC Pine				
12	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.				
		<b>Type (SDR 41/SN-4)</b>	DA	520.00	155.00	226 600
		(VII) 8 (200 IIIIII)	Kİİ	520.00	455.00	230,000

#### DETAILED COST ESTIMATE

#### P-2 MISSION & MONGI ROAD

Sr. No	1st BI-Annual- 2023 (Jan to Jun) T. Tek Singh	Description	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)		
		Kerb Stone						
13	6/52/b	Providing and fixing precast Edge Kerb Stone (4" to 6" thick), of 3500 PSI Compressive Strength, embeded in PCC 1:2:4 over lean concrete 1:4:8 etc. complete in all respect.						
		b) With Painting						
		(i) 14" high	P.Rft	2,500.00	535.05	1,337,625		
		RPC Manhole Cover						
14	N.S	Providing and fixing RPC Manhole Cover Manufactured with 100% Reinforced Plastic Composite Material, 650 mm dia with clear opening size 600 mm (24" dia) and RPC manhole frame having dia meter 790 mm (Complete)						
		(Certified under ISO 9001-2015)	Each	20.00	11,844.00	236,880		
		Manhole Cover						
15	MR	Old/existing Manhole cover and Frame complete set shift to MC store.	Set	20.00	500.00	10,000		
		Total Amount (Rs)				27,924,480		
		ELECTRICAL WORKS						
		Excavation						
1	3/21	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 a) By Manual						
		ii) in ordinary soil.	%oCft	15.48	11,658.25	180.470		
					,	,		

#### DETAILED COST ESTIMATE

#### P-2 MISSION & MONGI ROAD

Sr. No	1st BI-Annual- 2023 (Jan to Jun) T. Tek Singh	Description	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
		<b>RCC Foundation for Poles</b>				
2	6/6	Providing and laying reinforced cement				
		concrete (including prestressed concrete),				
		using coarse sand and screened graded and				
		washed aggregate, in required shape and				
		design, including forms, moulds, shuttering,				
		lifting, compacting, curing, rendering and				
		finishing exposed surface, complete (but				
		excluding the cost of steel reinforcement, its				
		fabrication and placing in position, etc.):-				
		(a)(iii) Reinforced cement concrete in slab of				
		rafts / strip foundation, base slab of column				
		and retaining walls; etc and footing beams,				
		other structural members other than those				
		mentioned in 6(a) (i)&(ii) above not requiring				
		form work (i.e. horizontal shuttering) complete				
		in all respects:-				
		(3) Type C (nominal mix 1: 2: 4)	Cft	1,104.00	473.85	523,130
		Steel Work				
3	6/12/h	Fabrication of mild steel reinforcement for				
5	0,12,0	cement concrete, including cutting, bending,				
		laving in position, making joints and				
		fastenings, including cost of binding wire and				
		labour charges for binding of steel				
		reinforcement (also includes removal of rust				
		from bars):-				
		('b) Deformed bars (Grade-40)	100Kg	27.60	31,554.70	870,910
	<u> </u>					
4	24/6	Supply and erection PVC pipe for recessed				
		wiring (main and sub-main) purpose, including				
		bends, specials, etc. In noor, wan of trenches				
		i) 50 mm i/d	Rft	5,750.00	177.75	1,022,063
5	24/12	Supply and amotion of single core DVC				
3	24/12	insulated PVC sheathed copper conductor				
		660/1100 volts grade cable in prelaid G L				
		pipe/M.S. conduits /PVC nine/G.I. wire/				
		trenches, etc (rate for cable only):-				
		ii) 6 mm sq (7/0.044")	Rft	920.00	119.20	109.664
						,

#### DETAILED COST ESTIMATE

#### P-2 MISSION & MONGI ROAD

	KOADS IVE I WORK						
Sr. No	1st BI-Annual- 2023 (Jan to Jun) T. Tek Singh	Description	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)	
6	24/13	Supply and erection of copper conductor cables for service connection, in prelaid pipe/G.I. wire / trenches, etc. (rate for cable only):-					
		b) PVC insulated, PVC sheathed 3 core, 600/1000 volt cable:-					
		<ul> <li>iii) 7/0.74 mm (7/0.029")</li> <li>c) PVC insulated, PVC sheathed 4 core, 600/1000 volt non armoured cable:-</li> </ul>	Rft	1,840.00	114.25	210,220	
		vi) 10 mm (7/0.052")	Rft	5,750.00	525.75	3,023,063	
		vii) 16 mm (7/0.064")	Rft	100.00	694.80	69,480	
7	24/68	Supplying, installation testing and commissioning of Octagonal shape electric street light pole, made of hot dipped 4.5 mm thick (7 SWG) galvanized steel ,tappered from 225 mm at bottom to 100 mm at top,with 1500 mmx60 mm dia. arm for luminaire installation, duly G.I.welded with 470x470x20 mm base plate with the help of 4 no triangular stiffeners 100x350x20 mm of GI sheet,with built in junction box with shutter,i/c the cost of nuts & J-rag bolts, duly fixed in prelaid concrete foundation, foundation will be paid additionally as approved and directed by the Engineer Incharge. a) Single Arm					
		(i) 10 mtr height	Each	29.00	116,325.30	3,373.434	
		b) Double Arm			,	, - , -	
		(i) 10 mtr height	Each	17.00	120,141.30	2,042,402	

#### DETAILED COST ESTIMATE

#### P-2 MISSION & MONGI ROAD

Sr. No	1st BI-Annual- 2023 (Jan to Jun) T. Tek Singh	Description	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
8	24/69/c	Supplying, installation and commissioning of				
		LED Cobra-head Luminaries of specified				
		wattage and lumens conforming to IP 66 & IK				
		08 or above Philips/ Osram/ Thorn or				
		equivalent with corrosion resistant die casted				
		Aluminum housing, silicon gasket in special				
		groove, UV stable & scratch resistant synthetic				
		materials, thermally hardened glass complete				
		with LED Chip (Philips				
		Lumiled/Cree/Nichia/Osram make or				
		equivalent), programmable LED driver				
		(Harvard/ TCI/ Lumotech/ Philips/ VOSSLOH				
		Schwabe/Lightech make or equivalent),				
		minimum 10kV surge protection rating 1/c the				
		cost of all accessories/ components required				
		for proper operation, fully flexible for future				
		upgradation and easy replacements for				
		maintenance purposes, bucket elevator charges				
		as approved and directed by the Engineer				
		incharge.				
		c) 120 I m/Watt				
		(v) 90 Watt with 10800 Lumens	Fach	29.00	52 598 60	1 525 359
		(viji) 150 Watt with 18000 Lumens	Each	27.00	62 198 60	2 114 752
		(viii) 150 watt with 10000 lumens	Lacii	54.00	02,190.00	2,114,732
9	24/77	Supply and erection of electric energy meter.				
		including meter testing fee, etc.				
		b) three phase, 4 wires:				
		ii) 3x50 Amp, 400 volts	Each	1.00	15,843.30	15,843
		<u>^</u>				

#### DETAILED COST ESTIMATE

#### P-2 MISSION & MONGI ROAD

	1st DI Annual					
Sr. No	2023 (Jan to Jun) T. Tek Singh	Description	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
10	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	581,485.15	581,485
11	24/70	Earthing of iron clad/aluminum switches, etc. with G.I. wire No. 8 SWG in G.I. pipe 15 mm ( <sup>1</sup> / <sub>2</sub> ") 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.	Job	49.00	10,199.15	499,758
		Sub Total Scheduled Items: (A)				16,162,033

#### DETAILED COST ESTIMATE

#### P-2 MISSION & MONGI ROAD

			-									
Sr. No	1st BI-Annual- 2023 (Jan to Jun) T. Tek Singh	Description	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)						
	Non Schedule	Part-B										
12	N.S	Fabrication, Supply, testing and										
		commissioning of following Light control										
		panels (LCP), floor standing weather proof, IP										
		65 Rated of appropriate size, made of MS										
		Sheet 16 SWG with hinged door, handle,										
		catcher, 2 coats of antirust and powder coated										
		paint of approved colour, AC3 megnatic										
		contactor, photocell for automatic operation of										
		lights, CBs, Hand/Off/Auto switch, push										
		button and all necessary accessories complete										
		in all respects. LCP shall be manufactured as										
		per specifications, single line diagram										
		complete in all respect up to the satisfaction of										
		Engineer incharge.										
	(a)	LCP-3 Phase	No.	1.00	325,026	325,026						
13	N.S	Shifting of 4 Nos. Wapda Electric Poles	Job			600,000						
14	N.S	Electric Connection Charges	Each	1.00	400,000	400,000						
		Total Cost (Part B)			Rs.	1,325,026						
		<b>Grand Total (Part A + Part B)</b>			Rs.	17,487,059						
		Grand Total Amount Rs.				142,150,532						
	PUNJAB CITIES DETAILED DESIGN OF INFRASTRUCT SUPERVISION IN 16	PROG TURE \$ CITII	RAM (PC) SUB-PROJ ES OF PUN	P) IECTS AI NJAB	ND RESII	DENTS						
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	P-2 MISSION & MONGI ROAD CALCULATION OF QUANTITES											
	CALCULATION OF QUANTITES ROADS NET WORK											
	ROADS N	ET WO	ORK		I							
Sr. No	r.     Description     No.     Length     Width     Height     Qty.     Unit.											
	Dismantling											
1	Dismantling brick or flagged flooring without concrete foundation.											
		2	600	7.00		8,400	Sft					
					Total.	84.00	Sft					
2	Dismantling / Demolishing of existing kerb stone as directed by Engineer's Incharge, Complete in all respect											
		2	1,500			3,000	Rft					
					Total.	3,000	Rft					
3	Dismantling / Demolishing of existing Tuff Paver as directed by Engineer's Incharge, Complete in all respect											
		1	1,400	8.00		11,200	Sft					
					Total.	11,200	Sft					
						,						
	Scarifying											
4	Scarifying old road surface including removal of debris within 1 chain (30 m).											
	RD 0+000 to 1+500	1	1,500	64.00		96,000	Sft					
	RD 1+500 to 1+800	1	300	40.50		12,150	Sft					
	RD 2+700 to 3+100	1	400	36.00		14,400	Sft					
	RD 3+100 to 4+000	1	900	21.00		18,900	Sft					
	RD 4+000 to 5+000	1	1,000	14.00		14,000	Sft					
	RD 5+000 to 5+150	1	150	24.50		3,675	Sft					
	Chowk	2	150	30.00		9,000	Sft					
					Total	168,125	Sft					
					Totel	1 691 25	0/ <u> </u>					
					i utali	1,001.23	/0.511					

	PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB								
	P.2 MISSION &		IGI ROAD	JAD					
	CALCULATION	OF O	UANTITE	S					
	ROADS N	ET W	ORK	-					
Sr. No	Description	No.	Length	Width	Height	Qty.	Unit.		
	Excavation								
5	Earthwork excavation in open cutting upto 5'-0" (1.5 m) depth for storm water channels, drains, sullage drains in open areas, roads, streets, lanes, including under pinning of walls and shoring to protect existing works, shuttering and timbering the trenches, dressed to designed level and dimensions, trimming, removal of surface water from trenches, back filling and surplus excavated material disposed of and dressed within 50 ft. (15 m) lead:-								
	For Tuff Paver Shoulders								
	RD 0+000 to 1+500	1	1,500	15.00	0.50	11,250	Cft		
	RD 1+500 to 1+800	1	300	19.00	0.50	2,850	Cft		
	RD 1+800 to 2+400	1	500	11.00	1.25	6,875	Cft		
	RD 2+400 to 2+500	1	100	9.00	1.25	1,125	Cft		
	RD 2+600 to 2+700	1	100	9.00	1.25	1,125	Cft		
	RD 2+700 to 3+100	1	400	16.75	0.50	3,350	Cft		
	RD 3+100 to 4+000	1	900	23.50	0.50	10,575	Cft		
-	RD 4+000 to 5+000	1	1,000	24.50	0.50	12,250	Cft		
	RD 5+000 to 5+150	1	150	35.63	0.50	2,672	Cft		
					Total	52,072	Cft		
					Total.	52.07	%Cft		
	Compaction of Earthwork								
6	Compaction of earthwork with power road roller, including ploughing, mixing, moistening earth to optimum moisture content in layers, etc. complete. i) 95% to 100% maximum modified AASHO dry density.								
	For Tuff Paver Shoulders								
	RD 0+000 to 1+500	1	1,500	15.00	0.50	11,250	Cft		
	RD 1+500 to 1+800	1	300	19.00	0.50	2,850	Cft		
L	RD 1+800 to 2+400	1	500	11.00	0.50	2,750	Cft		
	RD 2+400 to 2+500	1	100	9.00	0.50	450	Cft		
	RD 2+600 to 2+700	1	100	9.00	0.50	450	Cft		
	RD 2+700 to 3+100	1	400	16.75	0.50	3,350	Cft		
	RD 3+100 to 4+000	1	900	23.50	0.50	10,575	Cft		
L	RD 4+000 to 5+000	1	1,000	24.50	0.50	12,250	Cft		
	RD 5+000 to 5+150	1	150	35.63	0.50	2,672	Cft		
					Total	46,597	Cft		
					Total.	46.60	%oCft		

	PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUR-PROJECTS AND DESIDENTS								
	DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB								
	SUPERVISION IN 16	CITI	ES OF PUI	NJAB					
	P-2 MISSION &	$\frac{1}{0}$ MON	GI KOAD	C					
	CALCULATION POADS N	UT Q FT W		5					
			JKK						
Sr.	Description	No.	Length	Width	Height	Oty.	Unit.		
No	<b>^</b>		0		0				
	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. (Crushed stone aggregate								
	from Sargodha querry to site, actual compacted								
	depth shall be considered for payment)								
	For Tuff Paver Shoulders								
	RD 0+000 to 1+500	1	1,500	15.00	0.33	7,425	Cft		
	RD 1+500 to 1+800	1	300	19.00	0.33	1,881	Cft		
	RD 1+800 to 2+400	1	500	11.00	0.33	1,815	Cft		
	RD 2+400 to 2+500	1	100	9.00	0.33	297	Cft		
	RD 2+600 to 2+700	1	100	9.00	0.33	297	Cft		
	RD 2+700 to 3+100	1	400	16.75	0.33	2.211	Cft		
	RD 3+100 to 4+000	1	900	23.50	0.33	6,980	Cft		
	RD 4+000 to 5+000	1	1,000	24.50	0.33	8,085	Cft		
	RD 5+000 to 5+150	1	150	35.63	0.33	1,763	Cft		
					Total	30,754	Cft		
					<b>T</b> ( )	207 54	0/ CB		
					10181.	307.54	%CII		
	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)								
	Crushed stone aggregate from approved quarry								
	For Road								
	RD 0+000 to 1+500	1	1,500	64.00	0.50	48,000	Cft		
	RD 1+500 to 1+800	1	300	40.50	0.50	6,075	Cft		

	PUNJAB CITIES DETAILED DESIGN OF INFRASTRUCT	PROG	RAM (PC)	Р) Ігстя мі	ND DECH	OFNTS					
	SUPERVISION IN 16	<b>CITI</b>	ES OF PUN	NJAB	NU KESII	DEN19					
	P-2 MISSION & MONGI ROAD CALCULATION OF QUANTITES										
	CALCULATION	OF Q	UANTITE	S							
	ROADS N	ET W	ORK								
Sr. No	Description	No.	Length	Width	Height	Qty.	Unit.				
	RD 2+700 to 3+100	1	400	36.00	0.50	7,200	Cft				
	RD 3+100 to 4+000	1	900	21.00	0.50	9,450	Cft				
	RD 4+000 to 5+000	1	1,000	14.00	0.50	7,000	Cft				
	RD 5+000 to 5+150	1	150	24.50	0.50	1,838	Cft				
	Leveling Layer	1	400	40.00	0.33	5,280	Cft				
	Chowk	2	150	30.00	0.50	4,500	Cft				
	For Tuff Paver										
	RD 0+000 to 1+500	1	1,500	15.00	0.33	7,500	Cft				
	RD 1+500 to 1+800	1	300	19.00	0.33	1,900	Cft				
	RD 1+800 to 2+400	1	500	11.00	0.33	1,833	Cft				
	RD 2+400 to 2+500	1	100	9.00	0.33	300	Cft				
	RD 2+600 to 2+700	1	100	9.00	0.33	300	Cft				
	RD 2+700 to 3+100	1	400	16.75	0.33	2,233	Cft				
	RD 3+100 to 4+000	1	900	23.50	0.33	7,050	Cft				
	RD 4+000 to 5+000	1	1,000	24.50	0.33	8,167	Cft				
	RD 5+000 to 5+150	1	150	35.63	0.33	1,781	Cft				
					Total	120,407	Cft				
					Total.	1,204.07	%Cft				
	Prime Creek										
0	Prime Coal Droviding and laying bituminous priming cost using										
9	10 lbs kerosene oil and 10 lbs binder per 100 Sft or										
	0.5 Kg kerosene and 0.5 Kg binder per square metre.										
	one any neroscale and one any online per square monor										
	RD 0+000 to 1+500	1	1,500	64.00		96,000	Sft				
	RD 1+500 to 1+800	1	300	40.50		12,150	Sft				
	RD 2+700 to 3+100	1	400	36.00		14,400	Sft				
	RD 3+100 to 4+000	1	900	21.00		18,900	Sft				
	RD 4+000 to 5+000	1	1,000	14.00		14,000	Sft				
	RD 5+000 to 5+150	1	150	24.50		3,675	Sft				
	Chowk	2	150	30.00		9,000	Sft				
	Approach Roads	2	25	15.00		750	Sft				
				10.00							
				10.00	Total	168,875	Sft				
					Total	168,875	Sft				
					Total Total.	168,875 1,688.75	Sft %Sft				
10	Providing and laying bituminous tack coat using 10				Total Total.	168,875 1,688.75	Sft %Sft				
10	Providing and laying bituminous tack coat, using 10 lbs. of bitumen per 100 Sft (0.49 Kg of bitumen per				Total Total.	168,875 1,688.75	Sft %Sft				
10	Providing and laying bituminous tack coat, using 10 lbs. of bitumen per 100 Sft (0.49 Kg of bitumen per sq.m.)				Total Total.	168,875 1,688.75	Sft %Sft				
10	Providing and laying bituminous tack coat, using 10 lbs. of bitumen per 100 Sft (0.49 Kg of bitumen per sq.m.) RD 0+000 to 1+500	1	1,500	64.00	Total Total.	168,875 1,688.75 96,000	Sft %Sft Sft				

#### P-2 MISSION & MONGI ROAD **CALCULATION OF QUANTITES**

	KUADS N.	EI WO	ORK				
Sr. No	Description	No.	Length	Width	Height	Qty.	Unit.
					Total	108,150	Sft
					Total.	1,081.50	%Sft
	Carpeting						
	ABC						
11	Providing and laying plant premixed bituminous carpet, including compaction and finishing to required camber, grade and density. (2 inch thick) (iii) 4% Bitumen						
	RD 0+000 to 1+500	1	1,500	64.00		96,000	Sft
	RD 1+500 to 1+800	1	300	40.50		12,150	Sft
					Total	108,150	Sft
					Total.	1,081.50	%Sft
	AWC						
12	<b>AWC</b> Providing and laying plant premixed bituminous carpet, including compaction and finishing to required camber, grade and density. (2 inch thick) (iv) 4.5% Bitumen						
12	AWC Providing and laying plant premixed bituminous carpet, including compaction and finishing to required camber, grade and density. (2 inch thick) (iv) 4.5% Bitumen RD 2+700 to 3+100	1	400	36.00		14,400	Sft
12	AWC Providing and laying plant premixed bituminous carpet, including compaction and finishing to required camber, grade and density. (2 inch thick) (iv) 4.5% Bitumen RD 2+700 to 3+100 RD 3+100 to 4+000	1	400 900	36.00 21.00		14,400 18,900	Sft Sft
12	AWC Providing and laying plant premixed bituminous carpet, including compaction and finishing to required camber, grade and density. (2 inch thick) (iv) 4.5% Bitumen RD 2+700 to 3+100 RD 3+100 to 4+000 RD 4+000 to 5+000	1 1 1 1	400 900 1,000	36.00 21.00 14.00		14,400 18,900 14,000	Sft Sft Sft
12	AWC Providing and laying plant premixed bituminous carpet, including compaction and finishing to required camber, grade and density. (2 inch thick) (iv) 4.5% Bitumen RD 2+700 to 3+100 RD 3+100 to 4+000 RD 4+000 to 5+000 RD 5+000 to 5+150	1 1 1 1 1	400 900 1,000 150	36.00 21.00 14.00 24.50		14,400 18,900 14,000 3,675	Sft Sft Sft Sft
12	AWC Providing and laying plant premixed bituminous carpet, including compaction and finishing to required camber, grade and density. (2 inch thick) (iv) 4.5% Bitumen RD 2+700 to 3+100 RD 3+100 to 4+000 RD 4+000 to 5+000 RD 5+000 to 5+150 Chowk	1 1 1 1 2	400 900 1,000 150 150	36.00 21.00 14.00 24.50 30.00		14,400 18,900 14,000 3,675 9,000	Sft Sft Sft Sft Sft
	AWC Providing and laying plant premixed bituminous carpet, including compaction and finishing to required camber, grade and density. (2 inch thick) (iv) 4.5% Bitumen RD 2+700 to 3+100 RD 3+100 to 4+000 RD 4+000 to 5+000 RD 5+000 to 5+150 Chowk Approach Roads	1 1 1 1 2 2	400 900 1,000 150 150 25	36.00 21.00 14.00 24.50 30.00 15.00		14,400 18,900 14,000 3,675 9,000 750	Sft Sft Sft Sft Sft Sft Sft
	AWC Providing and laying plant premixed bituminous carpet, including compaction and finishing to required camber, grade and density. (2 inch thick) (iv) 4.5% Bitumen RD 2+700 to 3+100 RD 3+100 to 4+000 RD 3+100 to 5+000 RD 5+000 to 5+150 Chowk Approach Roads	1 1 1 1 2 2	400 900 1,000 150 150 25	36.00 21.00 14.00 24.50 30.00 15.00	Total	14,400 18,900 14,000 3,675 9,000 750 60,725	Sft Sft Sft Sft Sft Sft Sft Sft
	AWC Providing and laying plant premixed bituminous carpet, including compaction and finishing to required camber, grade and density. (2 inch thick) (iv) 4.5% Bitumen RD 2+700 to 3+100 RD 3+100 to 4+000 RD 4+000 to 5+000 RD 5+000 to 5+150 Chowk Approach Roads	1 1 1 2 2	400 900 1,000 150 150 25	36.00 21.00 14.00 24.50 30.00 15.00	Total	14,400 18,900 14,000 3,675 9,000 750 60,725	Sft Sft Sft Sft Sft Sft Sft Sft
	AWC Providing and laying plant premixed bituminous carpet, including compaction and finishing to required camber, grade and density. (2 inch thick) (iv) 4.5% Bitumen RD 2+700 to 3+100 RD 3+100 to 4+000 RD 4+000 to 5+000 RD 5+000 to 5+150 Chowk Approach Roads	1 1 1 2 2	400 900 1,000 150 150 25	36.00 21.00 14.00 24.50 30.00 15.00	Total	14,400 18,900 14,000 3,675 9,000 750 60,725 <b>607.25</b>	Sft Sft Sft Sft Sft Sft Sft Sft Sft

	PUNJAB CITIES	PROG	RAM (PC	P)							
	DETAILED DESIGN OF INFRASTRUCT	URE	SUB-PROJ	IECTS A	ND RESI	DENTS					
	SUPERVISION IN 16	CITI	ES OF PUI	NJAB							
	P-2 MISSION & MONGI ROAD CALCULATION OF QUANTITES										
	CALCULATION	OF Q	UANTITE	S							
	ROADS N	ET W	ORK								
Sr											
No	Description	No.	Length	Width	Height	Qty.	Unit.				
13	Providing and laying plant premixed bituminous										
	carpet, including compaction and finishing to										
	required camber, grade and density. (1.50 inch thick)										
	(iv) 4.5% Bitumen										
	RD 0+000 to 1+500	1	1,500	64.00		96,000	Sft				
	RD 1+500 to 1+800	1	300	40.50		12,150	Sft				
					Total	108,150	Sft				
					Total.	1,081.50	%Sft				
	Paint For Traffic Lanes										
14	Painting Traffic Lane Marking of specified width										
	(1.5mm thick), with Thermoplastic (TP) Paint										
	including Glass Beads, complete in all respect, as										
	approved and directed by Engineer incharge.										
	RD 0+000 to 1+500	5	1,500			7,500	Rft				
	RD 1+500 to 1+800	2.5	300			750	Rft				
	RD 1+800 to 2+400	5	500			2,500	Rft				
	RD 2+400 to 2+500	2.5	100			250	Rft				
	RD 2+700 to 3+100	2.5	400			1,000	Rft				
	RD 3+100 to 4+000	2.5	900			2,250	Rft				
	RD 4+000 to 5+000	2.5	1,000			2,500	Rft				
	RD 5+000 to 5+150	2.5	150			375	Rft				
					Total.	17,125	Rft				
15	Providing and fixing precast Edge Kerb Stone (4" to										
	6" thick), of 3500 PSI Compressive Strength,										
	embeded in PCC 1:2:4 over lean concrete 1:4:8 etc.										
	complete in all respect.										
	b) With Painting										
	(1) 14 nign	-					Da				
	RD 2+400 to 2+500	1	500			500	Rft				
					Total.	500	Rft				
	Paint for Existing Kerb Stone										
16	Painting old surfaces:-										
	f) Painting small detached articles, not exceeding										
	one square foot (Sq.m) of painted surface:-										
	i) first coat										
	ii) each subsequent coat										

	PUNJAB CITIES	PROG	RAM (PC	P)			
	DETAILED DESIGN OF INFRASTRUCT	URE	SUB-PROJ	ECTS A	ND RESI	DENTS	
	SUPERVISION IN 16	CITI	ES OF PUN	NJAB			
	P-2 MISSION &	MON	GI ROAD	~			
	CALCULATION	OF Q	UANTITE	8			
	ROADS N	ET WO	ORK				
Sr.							
No	Description	No.	Length	Width	Height	Qty.	Unit.
	RD 0+000 to 1+500	1	1,500			1,500	Nos
	RD 1+800 to 2+400	1	500			500	Nos
					Total	20.00	%Nos.
	Tuff Paver						
17	Providing and laying Tuff pavers, having 7000 PSI,				<u> </u>		
	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						
	RD 0+000 to 1+500	1	1,500	15.00		22,500	Sft
	RD 1+500 to 1+800	1	300	19.00		5,700	Sft
	RD 1+800 to 2+400	1	500	11.00		5,500	Sft
	RD 2+400 to 2+500	1	100	9.00		900	Sft
	RD 2+600 to 2+700	1	100	9.00		900	Sft
	RD 2+700 to 3+100	1	400	16.75		6,700	Sft
	RD 3+100 to 4+000	1	900	23.50		21,150	Sft
	RD 4+000 to 5+000	1	1,000	24.50		24,500	Sft
	RD 5+000 to 5+150	1	150	35.63		5,344	Sft
					Total	93 194	Sft
					Iotun	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Sit
	Road Edging						
18	Providing and laving road edging of 3" (75 mm)						
	wide and 9" (225 mm) deep brick on end, complete						
	in all respects.						
	RD 0+000 to 1+500	2	1,500			3,000	Rft
	RD 1+500 to 1+800	2	300			600	Rft
	RD 1+800 to 2+400	2	500			1,000	Rft
	RD 2+400 to 2+500	2	100			200	Rft
	RD 2+700 to 3+100	2	400			800	Rft
	RD 3+100 to 4+000	2	900			1,800	Rft
	RD 4+000 to 5+000	2	1,000			2,000	Rft
	RD 5+000 to 5+150	2	150			300	Rft
					Total.	9,700	Rft

	PUNJAB CITIES	PROG	RAM (PC	P)			
	DETAILED DESIGN OF INFRASTRUCT	TURE	SUB-PROJ	IECTS A	ND RESI	DENTS	
	SUPERVISION IN 16	CITI	ES OF PUI	NJAB			
	P-2 MISSION &	MON	GI ROAD	<u>q</u>			
	CALCULATION POADS N	OF Q FT W		8			
	KOADS N		JAK				
Sr.	Description	No	Length	Width	Height	Oty	Unit
No	Description	110.	Length	· · iutii	meight	<u></u>	om.
	P.C.C (Between Asphalt and Tuff Paver)						
19	Cement concrete plain including placing,						
	compacting, finishing and curing complete						
	(including screening and washing of stone						
	(f) Ratio 1: 2: 4						
	RD 0+000 to 1+500	2	1,500	0.33	0.50	495	Cft
	RD 1+500 to 1+800	2	300	0.33	0.50	99	Cft
	RD 1+800 to 2+400	2	500	0.33	0.50	165	Cft
	RD 2+400 to 2+500	2	100	0.33	0.50	33	Cft
	RD 2+700 to 3+100	2	400	0.33	0.50	132	Cft
	RD 3+100 to 4+000	2	900	0.33	0.50	297	Cft
	RD 4+000 to 5+000	2	1,000	0.33	0.50	330	Cft
	RD 5+000 to 5+150	2	150	0.33	0.50	50	Cft
					Total	1,601	Cft
					Total.	16.01	%Cft
	Cat Eyes						
20	Providing & fixing Cat Eyes of size 4"x4"x3/4" duly						
	casted with specified material having plastic strip						
	containing mini retro-reflective glass beads of color						
	white /red/ yellow having specifid reflections,						
	quality & shape 1/c the cost of self built in 12mm dia						
	x120mm long steel zinc plate dnail, fixing to foad						
	with epoxy/ naminering with separate nan complete.						
	b) Aluminium Alloy						
	(1) Dual-Directional						
	(ii) 43x2=86 Glass beads a side	712				712	Each
	(B) Uni-Directional						
	(ii) 43 Glass beads a side	800				800	Each
21	Providing, fabrication and fixing pole mounted						
	Direction Board/ road delineator of any shape and						
	size, with specified Sheet and thickness, supported						
	with G.I Channel, (excluding the cost of vertical post						
	and painting) etc complete in an respect.						
	(a) G I Shoot 14 SWC						
	2 ft size	10	2.00	2.00		<u>()</u>	<u></u>
		10	3.00	2.00		OU	Sit
1							

	PUNJAB CITIES DETAILED DESIGN OF INFRASTRUCT	PROG TURE \$	RAM (PC) SUB-PROJ	P) IECTS AI	ND RESI	DENTS					
	SUPERVISION IN 16 CITIES OF PUNJAB P-2 MISSION & MONGI ROAD										
	P-2 MISSION & CALCULATION	OF O	GI KOAD HANTITE	S							
	ROADS N	ET W	ORK	<u> </u>							
Sr. No	Description	No.	Length	Width	Height	Qty.	Unit.				
22	Providing, fabrication and fixing Vertical Post comprising of medium quality G.I Pipe of specified diameter, including the cost of clamping arrangements, top cover, hold fasts embedded in PCC 1:2:4 etc, complete in all respect										
	(b) 3 inch diameter	10	11			110	Rft				
23	Lettering and printing of signage /direction boards/ road delineators of any colour by machine i/c cost of Digital Lettering, Lamination & pasting etc complete in all respect.										
	a) High Intensity Prismatic (HIP) Tape					60	Sft				
22	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).										
	RD 0+000 to 1+500	1	1,500	10.00		15,000	Sft				
					Total	150.00	%Sft				
	DRAINAGE SYSTEM										
1	Dismantling										
1	c) Dismanting cement concrete 1:2:4 plain.	20	8.64	0.75	0.50	64.80	Cft				
		20	0.04	0.75	0.30	04.80	Cit				
					Total	0.65	%Cft				
						0.00	,				
2	Dismantling brick work in lime or cement mortar.										
		2	1,250	0.75	1.50	2,812.50	Cft				
					Total	28.13	%Cft				

	PUNJAB CITIES DETAILED DESIGN OF INFRASTRUCT SUPERVISION IN 16	PROG URE CITI	RAM (PC) SUB-PROJ ES OF PUN	P) IECTS Al NJAB	ND RESII	DENTS					
	P-2 MISSION & MONGI ROAD CALCULATION OF OUANTITES										
	CALCULATION	OF Q	UANTITE	S							
	ROADS N	ET W	ORK								
Sr. No	Description	No.	Length	Width	Height	Qty.	Unit.				
	Excavation										
3	Earthwork excavation in open cutting upto 5'-0" (1.5 m) depth for storm water channels, drains, sullage drains in open areas, roads, streets, lanes, including under pinning of walls and shoring to protect existing works, shuttering and timbering the trenches, dressed to designed level and dimensions, trimming, removal of surface water fromtrenches, back filling and surplus excavated material disposed of and dressed within 50 ft. (15 m) lead:- i) in ordinary soil.										
	Pipe Laying	26	20.00	2.50	2.50	3,250	Cft				
	1'-6" wide drain	1	5,000	4.25	3.00	63,750	Cft				
					Total	67,000	Cft				
					Total	67.00	%oCft				
-											
	P.C.C										
4	<b>P.C.C</b> Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone										
4	P.C.C Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone (i) Ratio 1: 4: 8										
4	P.C.C Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone (i) Ratio 1: 4: 8 1'-6" wide drain	1	5,000	4.25	0.25	5,313	Cft				
4	P.C.C Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone (i) Ratio 1: 4: 8 1'-6" wide drain	1	5,000	4.25	0.25 Total	5,313 5,313	Cft Cft				
4	P.C.C Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone (i) Ratio 1: 4: 8 1'-6" wide drain	1	5,000	4.25	0.25 Total Total	5,313 5,313 <b>53.13</b>	Cft Cft %Cft				
4	P.C.C Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone (i) Ratio 1: 4: 8 1'-6" wide drain	1	5,000	4.25	0.25 Total Total	5,313 5,313 53.13	Cft Cft %Cft				
4	P.C.C Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone (i) Ratio 1: 4: 8 1'-6" wide drain (f) Ratio 1: 2: 4	1	5,000	4.25	0.25 Total Total	5,313 5,313 <b>53.13</b>	Cft Cft %Cft				
4	P.C.C Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone (i) Ratio 1: 4: 8 1'-6" wide drain (f) Ratio 1: 2: 4 1'-6" wide drain	1	5,000	4.25	0.25 Total Total 0.50	5,313 5,313 53.13 10,625	Cft Cft Cft Cft				
	P.C.C Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone (i) Ratio 1: 4: 8 1'-6" wide drain (f) Ratio 1: 2: 4 1'-6" wide drain Benching Topping	1 1 1 1 2	5,000 5,000 5,000 5,000	4.25	0.25 Total Total 0.50 0.25	5,313 5,313 53.13 10,625 1,875 1,250	Cft Cft %Cft Cft Cft Cft				
4	P.C.C Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone (i) Ratio 1: 4: 8 1'-6" wide drain (f) Ratio 1: 2: 4 1'-6" wide drain Benching Topping Pine Laving	1 1 1 1 2 26	5,000 5,000 5,000 5,000 10	4.25 4.25 1.50 0.75 1.50	0.25 Total Total 0.50 0.25 0.17 1.50	5,313 5,313 53.13 10,625 1,875 1,250 585	Cft Cft Cft Cft Cft Cft Cft				
	P.C.C Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone (i) Ratio 1: 4: 8 1'-6" wide drain (f) Ratio 1: 2: 4 1'-6" wide drain Benching Topping Pipe Laying For manhole neck	1 1 1 1 2 26 20	5,000 5,000 5,000 5,000 5,000 10 8,64	4.25 4.25 1.50 0.75 1.50 0.75	0.25 Total Total 0.50 0.25 0.17 1.50 0.50	5,313 5,313 53.13 53.13 10,625 1,875 1,250 585 65	Cft Cft Cft Cft Cft Cft Cft Cft Cft				
	P.C.C Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone (i) Ratio 1: 4: 8 1'-6" wide drain (f) Ratio 1: 2: 4 1'-6" wide drain Benching Topping Pipe Laying For manhole neck Drain	1 1 1 2 26 20 1	5,000 5,000 5,000 5,000 5,000 10 8.64 2,400	4.25 4.25 1.50 0.75 1.50 0.75 2.00	0.25 Total Total 0.50 0.25 0.17 1.50 0.50 0.25	5,313 5,313 53.13 53.13 10,625 1,875 1,250 585 65 1,200	Cft Cft Cft Cft Cft Cft Cft Cft Cft Cft				
	P.C.C Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone (i) Ratio 1: 4: 8 1'-6" wide drain (f) Ratio 1: 2: 4 1'-6" wide drain Benching Topping Pipe Laying For manhole neck Drain	1 1 1 2 26 20 1	5,000 5,000 5,000 5,000 10 8.64 2,400	4.25 4.25 1.50 0.75 1.50 0.75 2.00	0.25 Total Total 0.50 0.25 0.17 1.50 0.50 0.25 Total	5,313 5,313 5,313 53.13 10,625 1,875 1,250 585 65 1,200 15,600	Cft Cft Cft Cft Cft Cft Cft Cft Cft Cft				
	P.C.C Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone (i) Ratio 1: 4: 8 1'-6" wide drain (f) Ratio 1: 2: 4 1'-6" wide drain Benching Topping Pipe Laying For manhole neck Drain	1 1 1 2 26 20 1	5,000 5,000 5,000 5,000 10 8.64 2,400	4.25 4.25 1.50 0.75 1.50 0.75 2.00	0.25 Total Total 0.50 0.25 0.17 1.50 0.50 0.25 Total	5,313 5,313 53.13 53.13 10,625 1,875 1,250 585 65 1,200 15,600	Cft Cft Cft Cft Cft Cft Cft Cft Cft Cft				
	P.C.C Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone (i) Ratio 1: 4: 8 1'-6" wide drain (f) Ratio 1: 2: 4 1'-6" wide drain Benching Topping Pipe Laying For manhole neck Drain	1 1 1 2 26 20 1	5,000 5,000 5,000 5,000 10 8.64 2,400	4.25 4.25 1.50 0.75 1.50 0.75 2.00	0.25 Total Total 0.50 0.25 0.17 1.50 0.25 Total Total	5,313 5,313 53.13 53.13 10,625 1,875 1,250 585 65 1,200 15,600 <b>156.00</b>	Cft Cft Cft Cft Cft Cft Cft Cft Cft Cft				

	PUNJAB CITIES DETAILED DESIGN OF INFRASTRUCT SUDEDVISION IN 14	PROG	RAM (PC SUB-PROJ	P) IECTS AI NIAP	ND RESI	DENTS					
	DIPERVISION IN 10 P-2 MISSION &	MON	IGI ROAD	ŊAĎ							
	CALCULATION OF QUANTITES ROADS NET WORK										
	ROADS N	ET W	ORK								
Sr. No	Description	No.	Length	Width	Height	Qty.	Unit.				
5	Pacca brick work other than building upto 10ft. (3 m) Cement, sand mortar:- Ratio 1:3										
	1'-6" wide drain	2	5,000	1.125	1.00	11,250	Cft				
		2	5,000	0.75	1.00	7,500	Cft				
	For manhole neck	20	8.64	0.75	1.00	130	Cft				
	Drain	2	2,400	0.75	0.50	1,800	Cft				
					Total	20,680	Cft				
					Total	206.80	%Cft				
6	Extra for pacca brick work in steining of wells or any other circular masonry.				Total	1.30	%Cft				
7	Cement plaster 1:3 upto 20' (6.00 m) height:-										
	b) <sup>1</sup> / <sub>2</sub> " (13 mm) thick										
	1'-6" wide drain	2	5,000		2.00	20,000	Sft				
	For manhole neck $(26 \times 2 = 52)$	40	8.64		1.00	346	Sft				
	Drain	2	2,400		0.50	2,400	Sft				
					Total	22,746	Sft				
					Total	227.46	%Sft				
	R.C.C Work										
8	Providing and laying reinforced cement concrete (i/c										
	pre-stressed concrete), using coarse sand and										
	screened graded and washed aggregate, in required										
	shape and design, 1/c forms, moulds, shuttering,										
	avposed surface, complete (but excluding the cost of										
	steel reinforcement its fabrication and placing in										
	position, complete										
	a).(i) Reinforced cement concrete in roof slab,										
	beams, columns, lintels, girders and other structural										
	members laid in situ or pre-cast laid in position, or										
	pre-stressed members cast in situ, complete in all										
	respect. Type C (nominal mix 1:2:4)										
	1'-6" wide drain	0.4	5,000	3.50	0.67	4,690.00	Cft				
	Drain	0.25	2,400	3.50	0.67	1,407.00	Cft				
L					Total	6,097.00	Cft				

	PUNJAB CITIES DETAILED DESIGN OF INFRASTRUCT SUPERVISION IN 16	PROG TURE	GRAM (PC) SUB-PROJ ES OF PUI	P) IECTS AI NJAB	ND RESII	DENTS						
	P-2 MISSION &	MON	GI ROAD									
	CALCULATION OF QUANTITES ROADS NET WORK											
	ROADS N	ET W	ORK		1							
Sr												
No	Description	No.	Length	Width	Height	Qty.	Unit.					
	Steel											
9	Fabrication of mild steel reinforcement for cement concrete, i/c cutting, bending, laying in position, making joints and fastening, i/c cost of bending wire and labour charges for bending of steel reinforcement (also includes removal of rust from deformed bars)											
	Concrete Qty		6,097	Cft @	6.75	41,155	lbs/cft					
						18,673	kg					
					Total	186.73	Kg					
10	Gully Grating Chamber											
10	(900x750 mm), with chinaware trap as per PHED Drawing STD/PD No. 3 of 1977, complete in all respects.	26				26.00	Each					
11	Supplying and filling sand under floor: or plugging											
	in wells.	26	20.00	2.50	1.00	13.00	%Cft					
	uPVC Pipe											
12	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 <b>Type (SDR 41/SN-4)</b>											
	(vii) 8"(200 mm)	26	20.00			520	Rft					
	V. 1.6(											
13	<b>Kerb Stone</b> Providing and fixing precast Edge Kerb Stone (4" to 6" thick), of 3500 PSI Compressive Strength, embeded in PCC 1:2:4 over lean concrete 1:4:8 etc. complete in all respect.											
	b) With Painting	0.5	5,000			2,500	Rft					

	PUNJAB CITIES	PROG	RAM (PC	P)			
	DETAILED DESIGN OF INFRASTRUCT SUPERVISION IN 16	URE	SUB-PROJ FS OF PUI	IECTS AI NIAR	ND RESI	DENTS	
	P-2 MISSION &		IGI ROAD	JAD			
	CALCULATION	OF Q	UANTITE	S			
	ROADS N	ET W	ORK				
Sr.	Description	No	Length	Width	Height	Oty	Unit
No		110.	Length	·· iutii	mengine	213.	Cint.
14	<b>RPC Manhole Cover</b> Providing and fixing RPC Manhole Cover Manufactured with 100% Reinforced Plastic Composite Material, 650 mm dia with clear opening size 600 mm (24" dia) and RPC manhole frame having dia meter 790 mm (Complete) (Certified under ISO 9001-2015)	20				20	Each
	FLECTRICAL WORKS						
	Scheduled Items (A)						
	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)						
	a) By Manual						
	ii) in ordinary soil.						
	For pipe 50mm dia from TR to LCP and LCP to	1	5.750	1.00	2.50	14.375	Cft
	Light Poles	46	2.00	2.00	6.00	1,104	Cft
					Total	15,479	Cft
					Total	15.48	%oCft
	RCC Foundation for Poles						
2	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.):-						
	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)						
	Light Poles	46	2.00	2.00	6.00	1,104	Cft
						4 4 0 4 0 0	
					Total	1,104.00	Cft

	PUNJAB CITIES DETAILED DESIGN OF INFRASTRUCT SUPERVISION IN 16	PROG URE CITI	RAM (PC SUB-PROJ ES OF PUI	P) IECTS Al NJAB	ND RESI	DENTS	
	P-2 MISSION &	MON	GI ROAD	~			
	CALCULATION ROADS N	OF Q FT W	UANTITE ORK	<b>S</b>			
Sr. No	Description	No.	Length	Width	Height	Qty.	Unit.
	Steel Work						
3	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):-						
	('c) Deformed bars (Grade-40)		2.50Kg/C	ft		2,760	Kg
					Total	27 60	Κσ
					Total	27.00	
4	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						
	From LCP to Pole and pole to pole (Up + Down)	46	125.00			5,750	Rft
5	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")						
	For two nos. Earthing lead	46	20.00			920	Rft
6	Supply and erection of copper conductor cables for service connection, in prelaid pipe/G.I. wire / trenches, etc. (rate for cable only):-						
	b) PVC insulated, PVC sheathed 3 core, 660/1100 volt cable:-						
	iii) 7/0.74 mm (7/0.029")						
	From Terminal Box to light fixture on pole (P+N+E)	46	40.00			1,840	Rft
	c) PVC insulated, PVC sheathed 4 core, 660/1100 volt non armoured cable:-						
L	vi) 10 mm (7/0.052")	46	125.00			5,750	Rft
	vii) 16 mm (7/0.064")	1	100.00			100	Rft

	PUNJAB CITIES	PROG	RAM (PC	P)			
	DETAILED DESIGN OF INFRASTRUCT	URE	SUB-PROJ	IECTS AI	ND RESI	DENTS	
	P.2 MISSION &		ICI ROAD	NJAD			
	CALCULATION	OF Q	UANTITE	S			
	ROADS N	ET W	ORK				
~						1	
Sr. No	Description	No.	Length	Width	Height	Qty.	Unit.
7	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	29				29	Nos
	b) Double Arm						1105
	(i) 10 mtr height	17				17	Nos
8	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.						
	c) 120 Lm/Watt						
	(v) 90 Watt with 10800 Lumens	29				29	Nos
	(v) 90 Watt with 10800 Lumens	34				34	Nos
9	Supply and erection of electric energy meter, including meter testing fee, etc.						
	ii) 3x50 Amp, 400 volts	1				1.00	Nos

	PUNJAB CITIES PROGRAM (PCP) DETAILED DESIGN OF INFRASTRUCTURE SUB-PROJECTS AND RESIDENTS SUPERVISION IN 16 CITIES OF PUNJAB							
	P-2 MISSION &	MON	IGI ROAD					
	CALCULATION ROADS N	OF Q ET W	UANTITE ORK	8				
Sr								
No	Description	No.	Length	Width	Height	Qty.	Unit.	
10	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	1				1.00	Nos.	
11	Earthing of iron clad/aluminum switches, etc. with G.I. wire No. 8 SWG in G.I. pipe 15 mm ( $\frac{1}{2}$ ") dia, recessed or on surface of wall and floor, complete with 1.5 metre long G.I. pipe, 50 mm (2") dia with reducing socket 4 to 5 metre below ground level, and 2 metre away from building plinth.	49				49.00	No.	
12	Fabrication, Supply, testing and commissioning of following Light control panels (LCP), floor standing weather proof, IP 65 Rated of appropriate size, made of MS Sheet 16 SWG with hinged door, handle, catcher, 2 coats of antirust and powder coated paint of approved colour, AC3 megnatic contactor, photocell for automatic operation of lights, CBs, Hand/Off/Auto switch, push button and all necessary accessories complete in all respects. LCP shall be manufactured as per specifications, single line diagram complete in all respect up to the satisfaction of Engineer incharge.							
	LCP-3 Phase	1				1.00	Nos.	
13	Shifting of 4 Nos. Wapda Electric Poles							
14	Electric Connection Charges	1				1.00	Each	

## ENVIRONMENTAL HEALTH SAFETY BUDGET

#### DETAILED COST ESTIMATE

#### ENVIRONMENT AND SOCIAL MITIGATION COST

Sr	Description	Unit	Quantity	Unit Rate	Amount
No	Description	Ст	Quantity	( <b>Rs.</b> )	Rs.
	Labor Safoty				
1	Eace Macks (3 PLV)	Nos	20.00	700.00	14,000
2	Safaty Cum Shoes	Nos	20.00	1 350 00	10,800
3	Hand Gloves	Nos	8.00	245.00	1 960
4	First Aid Box	1103	0.00	243.00	1,900
т	(Including essential Medicine)	Nos	1.00	5 000 00	5 000
5	Safety Hard Helmets MSA	Nos	9.00	2 000 00	18 000
6	Safety Goggles	Nos	8.00	550.00	4 400
7	Reflective Safety Vests	Nos	8.00	550.00	4 400
8	Ear Plugs	Nos	8.00	500.00	4,000
	2	1105	0.00	Sub Total	62,560
	Working Site Safety				
1	Reflective Safety Signs Boards	Nos	3.00	10,000.00	30,000
2	Reflective Safety PVC Cones (18 inch)	Nos	20.00	1,200.00	24,000
3	Road Guiding Portable Delineators with Chain	Nos	6.00	1,500.00	9,000
4	Reflective Safety Barricading Tape	Nos	51.00	1,500.00	76,500
5	Emergency Portable Light	Nos	3.00	5,000.00	15,000
6	Solid Waste Collection Drums	Nos	6.00	5,000.00	30,000
7	Fire Extinguishers DCP	Nos	1.00	7,000.00	7,000
				Sub Total	191,500
	Others				
1	Pole Hanging Waste Bins	Nos.	4.00	10,000	40,000
2	Water Sprinkling				
	(Dust Abatement)	L.S	1.00	100,000	100,000
	BCC Campaign and waste collection system	L.S	1.00	100,000	100,000
				Sub Total	240,000
	Total Amount (Rs)				494,060
<u> </u>					

## RATE ANALYSIS

Rate Analysis Road- 2

Descr	iption						
Provie	ling and laying	g sub-base course of stone product of approved q	uality and g	rade inclu	ding, pla	cing, mixing,	, spreading and
compa	action of sub b	ase material to required depth, camber and grade t	o achieve 98	8% maxim	um dry d	ensity determ	nined according
to AA	SHTO T-180	method-D, including carriage of all material to sit	e of work c	omplete ir	n all resp	ect as per spe	ecifications and
as dir	ected by the e	ngineer incharge. (Crushed stone aggregate from	Sargodha q	juerry to s	ite, actua	al compacted	depth shall be
consic	lered for paym	ent)					
Crusł	n Stone						125 KM
Sr. No.	1st BI-Annual- 2023 (Jan to Jun) T. Tek Singh	Description	Unit	Lead (Km)	Qty	Rate (Rs)	Amount (Rs)
1		Material					
	18-3 a(i)	i) Pit run or bed run gravel.	100 Cft	1	1	6,503.25	6,503.25
2		Carriage					
	-	1st KM	100 Cft	1	1.20	305.40	366.48
		2nd KM	100 Cft	1	1.20	145.65	174.78
		3rd KM	100 Cft	1	1.20	114.10	136.92
		4th KM	100 Cft	1	1.20	81.20	97.44
	1/1	5th KM	100 Cft	1	1.20	75.85	91.02
	1/1	6th KM	100 Cft	1	1.20	74.60	89.52
		7th KM	100 Cft	1	1.20	69.60	83.52
		8th KM	100 Cft	1	1.20	68.85	82.62
		9th KM	100 Cft	1	1.20	64.75	77.70
		10th KM	100 Cft	1	1.20	60.75	72.90
		From 11 km to 200 km	100 Cft	115	1.20	52.20	7,203.60
		Total.					14,979.75
		Total Amount per 100 Cft					14,979.75
		Total Cost for Per Cft					149.80

#### 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)

							125 KM
Sr. No.	1st BI-Annual- 2023 (Jan to Jun) T. Tek Singh	Description	Unit	Lead (Km)	Qty	Rate (Rs)	Amount (Rs.)
1	18/4(a)	Providing and laying base course of crushed stone (Water Bound Macadam) of approved quality and grade including, placing, mixing, spreading and compaction of base course material to required depth, camber and grade to achieve 100% maximum modified AASHTO dry density, including carriage of all material to site of work complete in all respect as per specifications and as directed by the engineer incharge. (Crushed stone aggregate from Sargodha querry to site, actual compacted depth shall be considered for payment)	100 Cft		1	13,865,65	13,865,65
			100 CIt		1	15,805.05	15,805.05
2	1/1	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	305.40	372 50
		2nd KM	100 Cft	1	1.22	145.65	177.69
		3rd KM	100 Cft	1	1.22	114.10	139.20
		4th KM	100 Cft	1	1.22	81.20	99.06
		5th KM	100 Cft	1	1.22	75.85	92.54
		6th KM	100 Cft	1	1.22	74.60	91.01
		7th KM	100 Cft	1	1.22	69.60	84.91
		8th KM	100 Cft	1	1.22	68.85	84.00
		9th KM	100 Cft	1	1.22	64.75	79.00
		10th KM	100 Cft	1	1.22	60.75	74.12
		From 11 km to 200 km	100 Cft	115	1.22	52.20	7,323.66
		Total.					22,483.43
		Total Amount per 100 Cft					22,483.43
		Total Cost for Per Cft					224.83

Rate Analysis Road - 4

AB	С						
Prov and (iii)	viding and lay density. (2 in 4% Bitumen	ying plant premixed bituminous carpet, including on thick)	compaction	n and f	finishing	to required ca	mber, grade
Sr. No.	1st BI-Annual- 2023 (Jan to Jun) T. Tek Singh	Description	Unit	Lead (Km)	Qty	Rate (Rs)	125 Km Amount (Rs.)
1	18/10/a	Providing and laying plant premixed bituminous carpet, including compaction and finishing to required camber, grade and density. (2 inch thick) (iii) 4% Bitumen	per inch thickness per 100Sft.		1.00	12,951.30	12,951.30
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	0.1243	305.40	37.96
		2nd KM	100 Cft	1	0.1243	145.65	18.10
	1/1	3rd KM	100 Cft	1	0.1243	114.10	14.18
		4th KM	100 Cft	1	0.1243	81.20	10.09
		5th KM	100 Cft	1	0.1243	75.85	9.43
		6th KM	100 Cft	1	0.1243	74.60	9.27
		7th KM	100 Cft	1	0.1243	69.60	8.65
		8th KM	100 Cft	1	0.1243	68.85	8.56
		9th KM	100 Cft	1	0.1243	64.75	8.05
		10th KM	100 Cft	1	0.1243	60.75	7.55
		From 11 km to 200 km	100 Cft	115	0.1243	52.20	746.17
		Total.					13,829.32
		Total Amount per 100 Sft					13,829.32
		Total Cost for Day Sft					120 20
							130.29

Rate Analysis Road - 5

AW	ν C						
Prov and (iv)	viding and lay density. (2 in 4.5% Bitume	ying plant premixed bituminous carpet, including on thick)	compaction	n and f	inishing	to required ca	amber, grade
	<u> </u>						125 Km
Sr. No.	1st BI-Annual- 2023 (Jan to Jun) T. Tek Singh	Description	Unit	Lead (Km)	Qty	Rate (Rs)	Amount (Rs.)
1	18/10/a	Providing and laying plant premixed bituminous carpet, including compaction and finishing to required camber, grade and density. (2 inch thick) (iv) 4.5% Bitumen	Per inch thickness per 100Sft.		1.00	13,869.90	13,869.90
2		Carriage of 100 cft of all materials like stone aggregate spawl kanker lime surkhi etc or 150 cft of timber by truck or by any other means owned by the contratcor.					
			100.00		0.10.10	205.40	27.04
		Ist KM	100 Cft	1	0.1243	305.40	3/.90
	1/1	2nd KM	100 Cft	1	0.1245	145.05	18.10
	1/1	3rd KM	100 Cft	1	0.1245	114.10 81.20	14.18
			100 CIL 100 Cft	1	0.1245	01.20	0.03
			100 Cft	1	0.1245	73.65	9.43
		7th KM	100 Cft	1	0.1243	69.60	8.65
		8th KM	100 Cft	1	0.1243	68.85	8.56
		9th KM	100 Cft	1	0.1243	64.75	8.05
		10th KM	100 Cft	1	0.1243	60.75	7.55
		From 11 km to 200 km	100 Cft	115	0.1243	52.20	746.17
		Total.					14,747.92
		Total Amount per 100 Sft					14,747.92
		Total Cost for Per Sft					147.48
	ĺ		1				

Rate Analysis Road - 5A

AW	C						
Prov and (iv)	viding and lay density. (1.5) 4.5% Bitume	ying plant premixed bituminous carpet, including o 0 inch thick) en	compaction	n and f	ïnishing	to required ca	amber, grade
							125 Km
Sr. No.	1st BI-Annual- 2023 (Jan to Jun) T. Tek Singh	Description	Unit	Lead (Km)	Qty	Rate (Rs)	Amount (Rs.)
1	18/10/a	Providing and laying plant premixed bituminous carpet, including compaction and finishing to required camber, grade and density. (1.50 inch thick) (iv) 4.5% Bitumen	Per inch thickness per 100Sft.		1.00	10,402.43	10,402.43
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.					
		1-4 VM	100 CA	1	0.0022	205.40	28.47
		1St KM	100 CIt	1	0.0932	305.40	28.47
	1/1	3rd KM	100 Cft	1	0.0932	114.10	10.64
	-, -	4th KM	100 Cft	1	0.0932	81.20	7 57
		5th KM	100 Cft	1	0.0932	75.85	7.07
		6th KM	100 Cft	1	0.0932	74.60	6.95
		7th KM	100 Cft	1	0.0932	69.60	6.49
		8th KM	100 Cft	1	0.0932	68.85	6.42
		9th KM	100 Cft	1	0.0932	64.75	6.04
		10th KM	100 Cft	1	0.0932	60.75	5.66
		From 11 km to 200 km	100 Cft	115	0.0932	52.20	559.63
		Total.					11,060.94
		Total Amount per 100 Sft					11,060.94
		Total Cost for Don St					110 / 1
		10tal Cost for Per Sit					110.01

			Rate Analy	sis R	oad - 6				
Dese	cription								
Disn	antling / l	Demolishing of existing Tuff Paver a	s directed by	e Engir	eer's Incha	arge, C	omplete in a	ll respect	
Disr	nantling	of Tuff Paver						Unit.	100 Sft
Sr.	Ref				Ur	nit Rat	e (British Sy	ystem) per	100 Sft
No.	Input Rate	Detail			Qty		Rate P	er Unit	Amount (Rs.)
		LADOUD							
		LABOUR							
2	LB-015	Cooly un-skilled			0.75	Nos.	1,050.00	per day	787.50
								Total.	787.50
		Sundries	10	%					78.75
							Tota	l Rs.	866.25
		Contractor's Profit	20	%					173.25
		Total							1,039.50
		ITEM RATES							
		Composite rate per 100 Sft						Rs.	1,039.50
		Composite rate per Sft						Rs.	10.40

		SULERVI			ILS OF I	UNJ	10		
			Rate Analy	ysis R	oad - 7				
Desc	ription								
Dism	antling / I	Demolishing of existing kerb stone a	s directed by	Engin	eer's Incha	rge, Co	omplete in al	l respect	
Disn	nantling	Kerb stone						Unit.	100 Rft
Sr.	Ref	Dotoil			Un	it Rat	e (British Sy	vstem) per	100 Rft
No.	Rate	Detan	1		Qty		Rate P	er Unit	Amount (Rs.)
		LABOUR							
-	LD 015				2.00	N	1.050.00		2 100 00
2	LB-012	Cooly un-skilled			2.00	NOS.	1,050.00	per day	2,100.00
								Total.	2,100.00
		Sundries	10	%					210.00
							Tota	l Rs.	2,310.00
		Contractor's Profit	20	%					462.00
		Total							2,772.00
		ITEM RATES							
		Composite rate per 100 Rft						Rs.	2,772.00
		Composite rate per Rft						Rs.	27.72
µ									

Rate Analysis Road - 8

Description				

Providing and fixing RPC Manhole Cover Manufactured with 100% Reinforced Plastic Composite Material, 650 mm dia with clear opening size 600 mm (24" dia) and RPC manhole frame having dia meter 790 mm (Complete) (Certified under ISO 9001-2015)

Mai	nhole Co	ver						Unit.	Each
Sr.	Ref	Detail				Unit H	Rate (British	n System) po	er Each
No.	Rate	Detan	etan			Qty		er Unit	Amount (Rs.)
	Page								
	No112								
1	A	RPC Manhole Cover			1.00	No	8400	No	8,400.00
		Carriage							700
								Total Rs.	9,100.00
		LABOUR							
2	LB-024	Skilled Cooly			0.50	Nos.	1,400.00	per day	700.00
								Total.	700.00
		Sundries	10	%					70.00
							Tota	l Rs.	770.00
								(1 - 2)	0.070.00
							Total	(1+2)	9,870.00
		Contractor's Profit	20	%					1,974.00
		Total							11,844
		ITEM RATES							
								D	11.044
		Composite rate Set						KS.	11,844

#### Rate Analysis Road - 9

	v							
Description								
Fabrication, Supply, testing and commissioning of follow	ving 1	Lig	ht contro	l pane	els (LCP), fl	oor standing	g weather	

proof, IP 65 Rated of appropriate size, made of MS Sheet 16 SWG with hinged door, handle, catcher, 2 coats of antirust and powder coated paint of approved colour, AC3 megnatic contactor, photocell for automatic operation of lights, CBs, Hand/Off/Auto switch, push button and all necessary accessories complete in all respects. LCP shall be manufactured as per specifications, single line diagram complete in all respect up to the satisfaction of Engineer incharge.

LCP	•	·						Unit.	Each	
Sr.	Ref		Unit Rate (British System) per Each							
No.	Input Rate	Detail			Qty	ÿ	Rate Pe	er Unit	Amount (Rs.)	
1	MR	LCP			1.00	No	270,855	No.	270,855	
								Total	270,855	
		Contractor's Profit	20	%					54,171	
		Total							325,026	
		ITEM RATES								
		Composite rate Set						Rs.	325,026	

#### **Cost for PPEs from different Sources**

#### 1. Face Masks (3PLY)



2. Safety Gum Shoes



### 3. Hand Gloves

4.

🍦 Daraz	Search in Daraz	
Categories 🗸		
ools DIY & Outdoor > Protecti	ive Clothing & Equipme	> Safety Gloves > Nitrile gloves XL
	SIZE	Mitrile gloves XL         *****       58 Ratings   5 Answered Questions       <       <         Brand: Ingco   More Protective Clothing & Equipment from Ingco
		Rs. 245 Rs. 325 -25% Promotions Spend Rs. 18,000 get Rs. 800 off
NITRILE GLOVES	HGNG01	Color family White
< 🔝		Size XL XL
Safety Hard h	elmets	
🁌 Daraz	Search in D	araz
Categories 🗸		
Motors > Automotiv	ve 🗦 Auto Parts & Spares	s > Ignition & Electrical > Plates with Sensors > Construction Safety Helmets, Electric
	. 0	Construction Safety Helmets, Electrical Engineering Helmets, Labor Helmets, High Quality Male and Female Work Hats
	•	Quantity - 1 + Only 1 items left

#### 5. Safety Goggles



#### Product Specification:

- Conforms to ANSI Z87.1 and CE EN166
- + Full-view full-slice structure prevents UV and withstands impact
- Fit to wearing the corrective glasses, also can be used as visitors glasses
- Can defend against splash particles in the round
- Packed by double blister

6. Reflective Safety Vest



• STOCK AVAILABILITY: In Stock • MODEL: BEHR-2587		PRESCOTT Investor Inde Prot
		PRESCOT
Rs540/-		
	V MARTIN C	100000000000000000000000000000000000000
	0 CART	
1 <del></del> ADD T(	D CART	
ADD TO WISH LIST	G CART	HIS PRODUCT

7. Infrared Thermometer





8. Fire Extinguishers









DCP Fire Extinguishers, Fire Extinguishers, Fire Fig... DCP Fire Extinguisher 6 kg NAFFCO



DCP FIRE EXTINGUISHERS, FIRE EXTINGUISHERS, FIRE FIG 6 KG DCP Fire Extinguisher Bavaria ...

Rs6,800.00

#### 9. PVC Cones and Delineators



**10.Delineators with Chain** 







# Annexure-C Project Economic Analysis

#### FINANCIAL ANALYSIS ROAD NETWORK

#### **TABLE - 9.1**

#### AVERAGE OPERATING SPEEDS

Km/Hr

#### WITHOUT PROJECT CONDITION

Years	Cars/Jeeps	Hiace Wagon/	Coaster/	Buses	Trucks	Trucks	Trucks
		Dickup	Pickup Mini Rusos			3-AXLE & 4-	5-AXLE &
		Ріскир	WIIII Buses		Z-AALE	AXLE	6-AXLE
Base Year(2022)	25	20	20	15	15	15	15
2029	20	15	15	10	10	10	10
2037	15	10	10	10	10	10	10

#### WITH PROJECT CONDITION

Years	Cars/Jeeps	Hiace Wagon/	Coaster/	Buses	Trucks	Trucks	Trucks
		Dickup				3-AXLE & 4-	5-AXLE &
		Ріскир	WIIII Buses		Z-AALE	AXLE	6-AXLE
Base Year(2022)	25	20	20	15	15	15	15
2029	20	15	15	10	10	10	10
2037	15	10	10	10	10	10	10

#### TABLE - 9.3 VEHICLE OPERATING COSTS FOR POOR ROAD CONDITIONS WITHOUT PROJECT

-									
SPEEDS	MOTOR	RICKSHAW	CAR	WAGON	MINI-BUS	BUS	TRUCK	TRUCK	TRUCK
	CYCLE						2-AXLE	3-AXLE & 4-AXLE	5-AXLE & 6-AXLE
10	4.94	6.86	56.39	57.04	68.24	97.79	103.44	109.08	114.72
15	4.21	5.89	47.21	47.89	57.70	82.34	86.88	92.52	98.16
20	3.80	5.35	42.43	43.08	52.15	74.07	75.86	81.50	87.14
25	3.53	5.00	39.47	40.32	48.67	68.87	67.55	73.19	78.83
30	3.35	4.76	37.48	38.27	46.28	65.37	61.01	66.65	72.29
35	3.23	4.60	36.09	36.79	44.55	63.00	55.82	61.46	67.10
40	3.16	4.51	35.10	35.70	43.28	61.46	51.79	57.43	63.07
45	3.12	4.47	34.42	34.89	42.35	60.58	48.80	54.44	60.08
50	3.12	4.47	33.99	34.31	41.69	60.28	46.78	52.42	58.07
55	3.16	4.53	33.76	33.91	41.26	60.48	45.70	51.34	56.98
60	3.22	4.64	33.71	33.68	41.03	61.14	45.52	51.16	56.80
65	3.30	4.77	33.82	33.58	40.98	62.24	46.22	51.86	57.50
70	3.42	4.95	34.09	33.62	41.09	63.76	47.80	53.44	59.08
75	3.56	5.18	34.49	33.77	41.36	65.68	50.23	55.87	61.51
80	3.73	5.42	35.02	34.04	41.76	67.99	53.51	59.15	64.79
85	3.93	5.73	35.68	34.41	42.31	70.68	57.63	63.28	68.92

Rs/Km

#### TABLE- 9.4 FOR GOOD ROAD CONDITIONS WITH PROJECT

									Rs/Km
SPEEDS	MOTOR	RICKSHAW	CAR	WAGON	MINI-BUS	BUS	TRUCK	TRUCK	TRUCK
								3-AXLE & 4-	5-AXLE & 6-
	CYCLE						2-AXLE	AXLE	AXLE
10	3.71	5.12	35.59	34.99	41.42	61.63	65.14	69.34	73.54
15	3.08	4.29	28.49	28.17	33.56	50.94	54.02	58.23	62.43
20	2.73	3.83	24.80	24.60	29.44	45.22	46.71	50.92	55.12
25	2.50	3.53	22.53	22.35	26.84	41.60	41.22	45.42	49.62
30	2.35	3.33	21.00	20.80	25.05	39.13	36.87	41.08	45.28
35	2.25	3.19	19.92	19.67	23.75	37.40	33.40	37.60	41.80
40	2.19	3.11	19.16	18.83	22.77	36.21	30.65	34.85	39.06
45	2.15	3.07	18.62	18.20	22.05	35.43	28.55	32.76	36.96
50	2.15	3.08	18.26	17.73	21.51	35.01	27.06	31.26	35.46
55	2.17	3.12	18.06	17.39	21.13	34.89	26.13	30.33	34.54
60	2.21	3.19	17.99	17.17	20.88	35.05	25.76	29.96	34.16
65	2.28	3.30	18.04	17.06	20.76	35.48	25.92	30.12	34.32
70	2.37	3.44	18.19	17.03	20.74	36.14	26.61	30.81	35.01
75	2.49	3.61	18.45	17.09	20.83	37.04	27.82	32.02	36.22
80	2.62	3.81	18.80	17.23	21.01	38.17	29.54	33.74	37.94
85	2.77	4.04	19.24	17.44	21.29	39.52	31.77	35.98	40.18
90	2.95	4.31	19.77	17.73	21.65	41.08	31.77	35.98	40.18
# TABLE - 9.5VALUE OF TRAVEL TIME

DESCRIPTION	MOTORCYCLE	CAR	WAGON	COASTER/ FLYING COACH	TRUCK	BUS
TRAVEL TIME VALUE OF PASSENGERS/OCCUPANTS						
Average Income of Passenger (Rs./Month)	40,000	60,000	30,000	22,000	35,000	30,000
Average Income of Passenger (Rs./Annum)	480,000	720,000	360,000	264,000	420,000	360,000
Working Hours /Annum	2424	2424	2424	2424	2424	2424
Rate of passenger Rs./Hour	198	297	149	109	173	149
No. of Occupants	2.00	5.00	16.00	29.00	2.00	45.00
Travel Time Value of occupantsin financial terms (Rs./Hour)	396.04	1485.15	2376.24	3158.42	346.53	6683.17
Travel Time Value of occupantsin economic terms(Rs./Hour) 25%	99.01	371.29	594.06	789.60	86.63	1670.79

NOTE:- 'The value of travel time in a number of studies have been estimated at 25% to 33% of the wage rate due to lack of information on the split of work and non-work travel among passengers and the 'proportion of non-wage earners among passengers.

#### TABLE - 9.6 Gojra (1.57 km) ANNUAL VEHICLE OPERATING COST WITHOUT PROJECT

				(Million Rs.)	
Years	Voc/Km (Rs.)	Traffic Volume ADT	Distance Annual	Total Cost Million Rs.	
Motor Cyclos Picksbow	_		NIII		
Base Vear(2022)	1 26	3200	573	7 82	
2029	4.20	5440	573	14.26	
2037	5.05	9792	573	28.34	
Cars					
Base Year(2022)	39.47	540	573	12.22	
2029	42.43	918	573	22.32	
2037	47.21	1652	573	44.70	
Wagons					
Base Year(2022)	43.08	5	573	0.12	
2029	47.89	8	573	0.22	
2037	57.04	15	573	0.48	
Bus					
Base Year(2022)	82.34	3	573	0.13	
2029	97.79	5	573	0.25	
2037	97.79	8	573	0.46	
T.Trolly + Trucks 2-AXLE					
Base Year(2022)	86.88	12	573	0.61	
2029	103.44	21	573	1.23	
2037	103.44	37	573	2.22	
Trucks 3-AXLE & 4-AXLE					
Base Year(2022)	92.52	0	573	-	
2029	109.08	0	573	-	
2037	109.08	0	573	-	
Trucks 5-AXLE & 6-AXLE					
Base Year(2022)	98.16	0	573	-	
2029	114.72	0	573	-	
2037	114.72	0	573	-	
TOTAL					
Base Year(2022)				20.89	
2029				38.29	
2037				76.19	

#### TABLE - 9.7 Gojra (1.57 km) ANNUAL VEHICLE OPERATING COST WITH PROJECT

				(Million Rs.)
Years	Voc/Km (Rs.)	Traffic Volume ADT	Distance Annual Km	Total Cost Million Rs.
Motor Cycles\Rickshaw Base Year(2022) 2029 2037	2.65 2.72 2.84	3200 5440 9792	573 573 573	4.86 8.48 15.95
<b>Cars</b> Base Year(2022) 2029 2037	19.16 19.92 21.00	540 918 1652	573 573 573	5.93 10.48 19.89
Wagons Base Year(2022) 2029 2037	18.83 19.67 20.80	5 8 15	573 573 573	0.05 0.09 0.17
<b>Bus</b> Base Year(2022) 2029 2037	36.21 37.40 39.13	3 5 8	573 573 573	0.06 0.10 0.18
T.Trolly + Trucks 2-Axle Base Year(2022) 2029 2037	22.77 23.75 25.05	12 21 37	573 573 573	0.16 0.28 0.54
Trucks 3-AXLE & 4-AXLE Base Year(2022) 2029 2037	34.85 37.60 41.08	0 0 0	573 573 573	- - -
Trucks 5-AXLE & 6-AXLE Base Year(2022) 2029 2037	39.06 41.80 45.28	0 0 0	573 573 573	- - -
<b>TOTAL</b> Base Year(2022) 2029 2037				11.05 19.43 36.73

#### TABLE - 9.8 Gojra (1.57 km)

			(Million Rs.)
VEADC	VEHICLE OP	ERATING COSTS	
YEARS	WITHOUT	WITH	SAVINGS
	PROJECT	PROJECT	
Base Year(2022)	20.89	11.05	9.84
2029	38.29	19.43	18.86
2037	76.19	36.73	39.47
		TOTAL	68.16

#### TABLE - 9.9 Gojra (1.57 km) ANNUAL VALUE OF TRAVEL TIME COST WITHOUT PROJECT

				(Million Rs.)
	VOT	Traffic Volume	Distance	Total Cost
Years	Rs/km	ADT	Annual	Million Rs.
			( Km)	
Motor Cycles\Rickshaw				
Base Year(2022)	3.96	3200	573	7.26
2029	4.95	5440	573	15.43
2037	6.60	9792	573	37.04
Cars				
Base Year(2022)	14.85	540	573	4.60
2029	18.56	918	573	9.77
2037	24.75	1652	573	23.44
Wagons				
Base Year(2022)	29.70	5	573	0.08
2029	39.60	8	573	0.18
2037	59.41	15	573	0.50
Bus				
Base Year(2022)	39.48	3	573	0.06
2029	52.64	5	573	0.14
2037	78.96	8	573	0.37
T.Trolly + Trucks 2-Axle				
Base Year(2022)	5.78	12	573	0.04
2029	8.66	21	573	0.10
2037	8.66	37	573	0.19
Trucks 3-AXLE & 4-AXLE				
Base Year(2022)	5.78	0	573	-
2029	8.66	0	573	-
2037	8.66	0	573	-
Trucks 5-AXLE & 6-AXLE	†	1		
Base Year(2022)	5.78	0	573	-
2029	8.66	0	573	-
2037	8.66	0	573	-
TOTAL	1			
Base Year(2022)				12
2029				26
2037				62

Note :"VOT" means value of Travel Cost

#### TABLE - 9.10 Gojra (1.57 km) ANNUAL VALUE OF TRAVEL TIME COST WITH PROJECT

				(Million Rs.)
	VOT	Traffic Volume	Distance	Total Cost
Years	Rs/km	ADT	Annual ( Km)	Million Rs.
Motor Cycles\Rickshaw				
Base Year(2022)	2.65	3200	573	4.86
2029	2.72	5440	573	8.48
2037	2.84	9792	573	15.95
Cars				
Base Year(2022)	19.16	540	573	5.93
2029	19.92	918	573	10.48
2037	21.00	1652	573	19.89
Wagons				
Base Year(2022)	18.83	5	573	0.05
2029	19.67	8	573	0.09
2037	20.80	15	573	0.17
Bus				
Base Year(2022)	36.21	3	573	0.06
2029	37.40	5	573	0.10
2037	39.13	8	573	0.18
T.Trolly + Trucks 2-Axle				
Base Year(2022)	22.77	12	573	0.16
2029	23.75	21	573	0.28
2037	25.05	37	573	0.54
Trucks 3-AXLE & 4-AXLE				
Base Year(2022)	34.85	0	573	-
2029	37.60	0	573	-
2037	41.08	0	573	-
Trucks 5-AXLE & 6-AXLE				
Base Year(2022)	39.06	0	573	-
2029	41.80	0	573	-
2037	45.28	0	573	-
TOTAL				
Base Year(2022)				11.05
2029				19.43
2037				36.73

### TABLE - 9.11 Gojra (1.57 km)

			(Million Rs.)
YEARS	ANNUAL VALUE OF	SAVINGS	
	WITHOUT	WITH	
	PROJECT	PROJECT	
Base Year(2022)	12.04	11.05	0.99
2029	25.62	19.43	6.19
2037	61.53	36.73	24.80
		TOTAL	31.98

## TABLE - 9.12 Gojra (1.57 km) TOTAL PROJECT BENEFITS

			(Million Rs.)
YEARS	SAV	TOTAL SAVINGS	
	voc	VOTT	
Base Year(2022) 2029 2037	9.84 18.86 39.47	0.99 6.19 24.80	10.82 25.05 64.27
	-	TOTAL	100

# TABLE - 9.13Gojra (1.57 km)Calculation of Economic Internal Rate of Return

								Million Rs.
	PRO	JECT ECONOMIC	COSTS	Project	Ne	et Benefits Patterr	n at Economic Pri	ces
Years	Investment	0 & M	Total	Economic				
			Costs	Benefits	(a)	(b)	(c)	(d)
1	142	0.00	132.87	0.00	-132.87	-132.87	-146.16	-146.16
2		0.66	0.66	10.82	10.16	9.08	10.09	9.01
3		0.66	0.66	12.45	11.78	10.54	11.72	10.47
4		0.66	0.66	14.32	13.65	12.22	13.59	12.15
5		0.66	0.66	16.46	15.80	14.15	15.73	14.09
6		0.66	0.66	18.93	18.27	16.38	18.20	16.31
7		0.66	0.66	21.77	21.11	18.93	21.04	18.86
8		0.66	0.66	25.04	24.37	21.87	24.31	21.80
9		0.66	0.66	28.79	28.13	25.25	28.06	25.18
10		0.66	0.66	33.11	32.45	29.14	32.38	29.07
11		0.66	0.66	34.77	34.10	30.63	34.04	30.56
12		0.66	0.66	36.51	35.84	32.19	35.78	32.13
13		0.66	0.66	38.33	37.67	33.84	37.60	33.77
14		0.66	0.66	40.25	39.59	35.56	39.52	35.49
15		0.66	0.66	42.26	41.60	37.37	41.53	37.31
Total :	132.87	9.30	142.17	1331.38	231.66	194.27	217.44	180.06
DISCO	OUNT RATES	PRESENT WO	RTH OF COST	Present Worth of Benfefit		NET PRESE	NT WORTH	
	10 %	120.79	125.24	207.35	27.22	11.97	14.69	-0.55
	12 %	118.63	122.57	161.97	8.07	-4.99	-4.19	-17.25
	18 %	112.60	115.42	87.53	-29.57	-38.15	-41.11	-49.70
	20 %	110.73	113.28	73.80	-37.63	-45.20	-48.96	-56.52
ECONOMI	IC INTERNAL RAT	E OF RETURN 129	% DR		13.00	11.36	11.52	9.94
BENEFIT C	COST / RATIO AT :	12 % D.R						

\* A factor of 0.9 has been used for Capital Cost and O&M Cost in the Economics Terms.

(a) Base Case assuming 10 Years period of analysis.

(b) Benefits decreased by 10 %

(c) Cost over-run by 10 %

(d) Benefit reduction and cost over-run both occuring simultaneously.

Annexure-D Gant Chart

# TENTATIVE PROJECT IMPLEMENTATION SCHEDULE FOR Improvement of P2-Mission & Mongi Road & Chowks

## In GOJRA CITY

## YEAR (2022-2023)

Road	March	-23	A	April-23	3		May-2	23		Jun-2	23	
P2-(Mission & Mongi Road), CP1,CP2 &CP3												

# **Annexure-E**

# **Environment and Social Mitigation and Management Plan**

#### ENVIRONMENTAL AND SOCIAL SCREENING CHECKLIST

#### Instructions:

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

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

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

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

(iii) Answer the questions assuming the "without mitigation" case. The purpose is to identify potential impacts. Use the "remarks" section to discuss any anticipated mitigation measures

#### Name of Enumerator/ESFP: Shahrukh Arif MOI & S, M. Asad MOP

Name of City/MC/LG: MC Gojra

Sub-Project Sector: Roads of Gojra

Sub-Project Title: Rehabilitation of Mission & Mongi Road near Railway Chowk, Toba Tek Singh 1.57 km

Sub- Project Categorization:

E-1	S-1	
E-2	S-2	
E-3	<b>S-3</b>	

#### Date of Screening: 16-11-2022

#### **Anticipated Project Activities:**

- Base-Sub-Base Overlay
- Asphalt Pavement
- Tuff Pavement on Shoulders
- Signage/Direction Boards
- Median Development
- R&M of existing green belts
- Road Lights

Estimated Cost of Sub-Project as per PC-1: 142.17 (PKR million)

Approx. Completion Time: 03 Months

#### Estimated Labor for Sub-Project: 25-30

Screening Questions	Yes	No	Remarks
A. Project Siting			
Is the Sub-Project area adjacent to or within any of	the fol	llowing	?
Environmentally sensitive areas?			
Cultural heritage site		~	No cultural heritage site observed within 250 meters of periphery of Sub-Project.
Legally protected Area (core zone or buffer zone)		~	No legally protected area exists within 250 meters of radius of sub-Project.
Any surface water body (river, canal, stream, lake,		$\checkmark$	No surface body observed nearby sub-Project
wetland) within 250 meters of proposed project?			location.
Mangrove Forest		$\checkmark$	No mangrove forest observed.
Estuarine		~	No estuarine exists in Sub-Project proposed scope of work.
Special area for protecting biodiversity		$\checkmark$	No protected area or buffer zone lies within
Buffer zone of protected area		$\checkmark$	peripheral zone of sub-Project.
Man-made forest /game reserve, orchid/crops or		$\checkmark$	No forest/crops/orchids etc. observed within
any other area of environmental importance			jurisdiction of Sub-project.
Socially sensitive/Important areas/communities/	people	e?	•
PCRs and or any site of cultural/religious importance (Graveyard, Shrine, Mosque, Church, Gordwarah, Temple, Fort, archeological/historical site) within 100 m of the proposed subproject		•	No PCRs exists within 100 meters of periphery of Sub-Project which will be negatively impacted due to any work activities.
Sensitive receptors (Schools, colleges, hospitals and clinics) within 100 meters of the proposed sub project	~		Some educational institutes, one church, bishop house as shown hereunder were observed within 100 m at the proposed project site but outside of construction limits and project activity will not have any significant impact on these facilities. Govt. Post Graduate College Govt. MC School Divisional Model School Saint John's Cathedral School & Church
Any graveyard of local community (Muslims or Christians)		~	No graveyard observed.
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, squatters, ethnic minorities, people with disabilities, people in old age, socially isolated segments of the society and women or children)?		~	It's a small scale project regarding rehabilitation of existing road surface. Hence, no demographically or socio-economically vulnerable aspects of the sub-project were observed.
Already existing infrastructure (including public amenities) which may be required to dismantle or may be affected temporarily by any means?	~		The land belongs to MC and all sub-project activities will be carried out there. Similarly, existing road is to be rehabilitated hence, portable items of the shopkeeper will be relocated temporarily and no significant dismantling is envisaged.
<b>B.</b> Potential Environmental Impacts			
will the Sub-Project cause:			The approach is the test of the test
1. Disturbance to habitats/biodiversity of environmentally sensitive or protected areas?		~	The proposed project site doesn't have any environmentally sensitive or protected areas.
2. Cutting of trees?		~	No cutting of trees required as per scope of work under Sub-Project.

3.	Disruption to habitats/biodiversity of surrounding ecosystem/environment?		~	No disruption to any habitat/ecosystem due to any Sub-Project activities.
4.	Generation of wastewater during construction or operation?		~	No wastewater generation envisaged as per scope of work during construction as well as operational phase.
5.	Pollution of surface water/ground water due to wastewater discharge from construction site or due to direct/indirect disposal of waste water?		~	No such impact is anticipated.
6.	Alteration of surface water hydrology of waterways resulting in increased sediment in streams/rivers or due to increased soil erosion at construction site?		~	No alteration of any waterway involved in the scope of Sub-Project.
7.	Deterioration of surface water quality due to silt runoff and sanitary wastes from worker- based camps and chemicals used in construction?		~	No labor camps are required to be established as per limited work activities under Sub- Project.
8.	Over pumping of ground water, leading to salinization and ground subsidence?		~	Over pumping of ground water is not required for this sub project.
9.	Serious contamination of soil due to construction works?		~	No such impact is expected.
10. 11.	Aggravation of solid waste problems in the area? Generation of hazardous waste?	~		Negligible impact projected and need mitigation plan during construction phase. Designated waste site will be proposed. Generated waste is to be collected at regular interval from the site.
12.	Increased air pollution due to sub-project construction and operation?	✓		Suspended dust particles during execution phase might pollute the surrounding air. Hence, water sprinkling at the site is proposed.
13.	Noise and vibration due to sub-project construction or operation?	~		Minor impact of noise and vibration owing to movement of heavy vehicles is envisaged during execution phase.
14.	Creation of temporary breeding habitats for diseases such as those transmitted by mosquitoes and rodents due to solid/liquid?		~	No such impact is anticipated as probability of liquid waste is low. However, waste bins at the site would be placed for storage of organic waste if any.
15.	Use of chemicals during construction?		~	In the light of sub-project scope, no hazardous chemical will be used during execution phase.
C: Wi	Potential Social Impacts Il the Sub-Project cause			
1. dist lost (PC	Impairment of historical/cultural areas; Figuration of landscape or potential s/damage to Physical Cultural Resources CRs)?		✓	No damage to any PCRs required under scope of Sub-Project.
2. peo disj	Displacement or involuntary resettlement of ple? (Physical displacement and/or economic placement)	✓		No significant displacement/ any sort of resettlement/ economic loss is envisaged due to any Sub-Project interventions. Access to business activities might temporarily be affected during execution phase.

3. Disproportionate impacts on the poor, women and children and or other vulnerable groups <sup>1</sup> (mentioned above)?		~	No Disproportionate impacts on the poor, women and children and or other vulnerable groups are anticipated during execution phase
4. Temporary impediments in movements of people/transport and animals?	<b>√</b>		There will be temporary hindrance in the movement of traffic and pedestrians during execution phase of the project. Nearby shop owners have been informed during public consultation phase.
5. 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)?		~	It's a small scale time framework project so population influx or increased burden on social infrastructure and services will not be effected.
6. Social conflicts if workers from other areas are hired?		$\checkmark$	Preference will be given locals for work to avoid any conflict.
7. Risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during project construction and operation?	~		Measures would be taken to address or alleviate the probability of OHS risk during execution phase through administrative controls. However, stringent SOPs regarding actualization of PPEs during execution phase will be implemented at the proposed project site.
8. Risks to community health and safety due to the transport, storage, and use and/or disposal of materials such as explosives, fuel and other chemicals during construction and operation?		~	Likelihood of such risks and hazards is low as per the scope of the project.
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 community throughout project construction, operation and decommissioning?	~		To avoid unfortunate events, site safety should be implemented in true spirit in the form of signages, reflective tapes awareness boards by the contractors and so on.
10. Any impact on sensitive receptors (mentioned above)		~	No significant impact is anticipated during execution phase. However, water sprinkling would be ensured to tackle the suspended dust particles.
11. Any impact of negative nature on already existing infrastructure including public amenities	~		There is no significant impact expected to any public infrastructure owing to project activities. Access to business would be temporarily disturbed; already informed during public consultation phase. In the long run, this project is in the favor of local community and they are willing to corporate and wanted MC to get this project completed in a timely manner.
Prepared By:			Endorsed By:
Name: Haider Ali			Name: Asif Gillani
Designation: Consultant			Designation: Deputy Program Officer ESSs

Signature:

Date: 16-11-2022

Signature: Date:

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<sup>&</sup>lt;sup>1</sup> Women, Children, Women headed households, People in old age, people having disabilities, socially isolated community groups and or people living below the poverty line

#### INVOLUNTARY RESETTLEMENT SCREENING CHECKLIST

Name of City/MC/LG: MC Gojra M. Asad MOP

Sub-Project Sector: Roads

Sub-Project Title: Rehabilitation of Mission & Mongi Road 1.57 km

Sub- Project Categorization: S-1 S-2 S-3

Date of Screening: 16-11-2022

SECTION 1	Yes	No	Expected	Remarks
Does the project require land acquisition? Yes/No If yes, then describe the type of land being acquired from the categories below:	-	~		No land will be required for the execution of Sub-Project.
Has any AED been conducted at the proposed location by the government <sup>1</sup> ? Yes/No		~		No AED has been conducted on the proposed location by MC.
Land (Quantify and describe types of land being acquired in "remarks column".				Not applicable
Government and LG owned land free of occupation (agriculture or settlement)	✓			Sub-project site under possession of MC and free from all sort of settlements. Shops for commercial activities over there also belong to MC Gojra.
Government or state-owned land (other than LG) free of occupation (agriculture or settlement)		~		
Private land		$\checkmark$		
Residential		$\checkmark$		
Commercial		✓		Not Applicable
Agricultural		✓		-
Communal		$\checkmark$		
Others (specify in "remarks").		~		-
Name of owner/owners and type of ownership document if available.	~			MC Gojra owns the land for Sub- Project.
If land is being acquired, describe any structures constructed on it		~		No land needs to be acquired under Sub-Project.
Land-based assets:		$\checkmark$		
Residential structures		✓		
Commercial structures (specify in "remarks")		✓		Not Applicable
Community structures (specify in "remarks")		$\checkmark$		-
Agriculture structures (specify in "remarks")		~		
Public utilities (specify in "remarks")		~		No public utilities and structures would be damaged during execution phase
Others (specify in "remarks")		✓		Not Applicable
If agricultural land is being acquired, specify the following:		~		No agriculture land required under Sub-Project.

SECTION 1	Yes	No	Expected	Remarks
Agriculture related impacts		✓		
Crops and vegetables (specify types and cropping area in "remarks)		✓		Not Applicable
Trees (specify number and types in "remarks").		✓		
Others (specify in "remarks").		~		
Affected Persons (APs)		✓		No APs as per scope of work and its impacts.
Will any people be displaced from the land when acquired? Yes/No		~		No displacement of any people required under Sub-Project.
Number of APs		~		No APs as per scope of work and its impacts.
Males & Females		✓		
Titled landowners		$\checkmark$		
Tenants and sharecroppers		✓		Not Applicable
Leaseholders		✓		
Agriculture wage laborers		✓		
Encroachers and squatters (specify in remarks column)		~		Displayed portable items outside the shops can be moved and for that no compensation is required. This aspect has been discussed during public consultation phase.
Vulnerable APs (e.g. women headed households, minors and aged, orphans, disabled persons, and those below the poverty line). Specify the number and vulnerability in "remarks".		~		No Vulnerable APs recorded as per Sub-Project interventions.
Others (specify in "remarks")		~		Not Applicable
How will people be affected?		~		Construction of storm water drain can temporarily disturb the business activities. This aspect has been covered and communicated to the public during public consultation phase. businesses.

Prepared By:	Endorsed By:
Name: Haider Ali	Name: Asif Gillani
Designation: Consultant	<b>Designation:</b> Deputy Program Officer ESSs
Signature:	Signature:
Date: 16-11-2022	Date:

<sup>&</sup>lt;sup>1</sup> The sub-projects have to avoid all locations where any government led AED has been conducted



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#### ENVIRONMENTAL AND SOCIAL SCREENING CHECKLIST

#### Instructions:

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

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

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

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

(iii) Answer the questions assuming the "without mitigation" case. The purpose is to identify potential impacts. Use the "remarks" section to discuss any anticipated mitigation measures

#### Name of Enumerator/ESFP: Shahrukh Arif MOI & S, M. Asad MOP

Name of City/MC/LG: MC Gojra

Sub-Project Sector: Chowks

Sub-Project Title: Beautification of Mission Chowk

Sub- Project Categorization:	<b>E-1</b>	S-1	
	E-2	S-2	
	E-3	<b>S-3</b>	

#### Date of Screening: 16-11-2022

#### **Anticipated Project Activities:**

- Geometric Improvement of intersection
- Channelization of traffic flow
- Rehabilitation of Existing Pavement Structure
- Pavement Marking
- Street Lighting
- Aesthetic improvement of chowk

#### Estimated Cost of Sub-Project: 141.17 (PKR million)

#### Approx. Completion Time: 02 Months

#### Estimated Labor for Sub-Project: 20-25

Screening Questions	Yes	No	Remarks					
A. Project Siting Is the Sub-Project area adjacent to or within any of the following? Environmentally sensitive areas?								
Cultural heritage site		✓	No cultural heritage site observed within 250 meters of periphery of Sub-Project.					
Legally protected Area (core zone or buffer zone)		✓	No legally protected area exists within 250 meters of radius of sub-Project.					
Any surface water body (river, canal, stream, lake, wetland) within 250 meters of proposed project?		~	No surface body observed nearby sub-Project location.					
Mangrove Forest		$\checkmark$	No mangrove forest observed.					

Estuarine		$\checkmark$	No estuarine exists in Sub-Project proposed scope of work.
Special area for protecting biodiversity		$\checkmark$	No protected area or buffer zone lies within
Buffer zone of protected area		$\checkmark$	peripheral zone of sub-Project.
Man-made forest /game reserve, orchid/crops or		$\checkmark$	No forest/crops/orchids etc. observed within
any other area of environmental importance			jurisdiction of Sub-project.
Socially sensitive/Important areas/communities/	people	?	
PCRs and or any site of cultural/religious	$\checkmark$		One Masjid exists within 100 meters of
importance (Graveyard, Shrine, Mosque, Church,			periphery of Sub-Project which will not be
Gordwarah, Temple, Fort, archeological/historical			negatively impacted due to any work activities.
site) within 100 m of the proposed subproject			
Sensitive receptors (Schools, colleges, hospitals			No such sensitive receptors observed nearby
and clinics) within 100 meters of the proposed sub		$\checkmark$	location of Sub-Project that are outside of
project			construction limits.
Any graveyard of local community (Muslims or		$\checkmark$	No graveyard observed.
Christians)			
Any demographic or socio-economic aspects of		$\checkmark$	It's a small-scale project regarding
the sub-project area that are already vulnerable			rehabilitation of existing chowk. Hence, no
(e.g., high incidence of marginalized populations,			demographically or socio-economically
rural-urban migrants, illegal settlements,			vulnerable aspects of the sub-project were
squatters, ethnic minorities, people with			observed.
disabilities, people in old age, socially isolated			
segments of the society and women or children)?			
Already existing infrastructure (including public			No dismantling to any public infrastructure
amenities) which may be required to dismantle or		$\checkmark$	envisaged.
may be affected temporarily by any means?			
<b>B.</b> Potential Environmental Impacts			
Will the Sub-Project cause:			
16. Disturbance to habitats/biodiversity of		✓	The proposed project site doesn't have any
environmentally sensitive or protected areas?			environmentally sensitive or protected areas
			environmentariy sensitive of protected areas.
17. Cutting of trees?		✓	No cutting of trees required as per scope of
			work under Sub-Project
18 Disruption to habitats/biodiversity of		$\checkmark$	No disruption to any habitat/ecosystem due to
surrounding ecosystem/environment?		•	any Sub Project activities
			any Sub-Hoject activities.
19. Generation of wastewater during construction		v	No wastewater generation envisaged as per
or operation?			scope of work during construction as well as
			operational phase.
20. Pollution of surface water/ground water due to		$\checkmark$	No such impact is anticipated.
wastewater discharge from construction site or			
due to direct/indirect disposal of waste water?		,	
21. Alteration of surface water hydrology of		$\checkmark$	No alteration of any waterway involved in the
waterways resulting in increased sediment in			scope of Sub-Project.
streams/rivers or due to increased soil erosion			
at construction site?	<u>                                     </u>		
22. Deterioration of surface water quality due to		v	No labor camps are required to be established
based comps and chamicals used in			as per limited work activities under Sub-
construction?			Project.
	├──┤	/	
23. Over pumping of ground water, leading to		✓	Over pumping of ground water is not required
salinization and ground subsidence?			tor this sub project.
24. Serious contamination of soil due to		$\checkmark$	No such impact is expected.
construction works?			

<ul><li>25. Aggravation of solid waste problems in the area?</li><li>26. Generation of hazardous waste?</li></ul>	~		Negligible impact projected and need mitigation plan during construction phase. Designated waste site will be proposed. Generated waste is to be collected at regular
			interval from the site.
27. Increased air pollution due to sub-project construction and operation?		~	Negligible impact envisaged.
28. Noise and vibration due to sub-project construction or operation?		~	Negligible impact envisaged
29. Creation of temporary breeding habitats for diseases such as those transmitted by mosquitoes and rodents due to solid/liquid?		~	No such impact is anticipated.
30. Use of chemicals during construction?		✓	In the light of sub-project scope, no hazardous chemical will be used during execution phase.
<b>C: Potential Social Impacts</b> Will the Sub-Project cause:			
1. Impairment of historical/cultural areas; disfiguration of landscape or potential loss/damage to Physical Cultural Resources (PCRs)?		~	No damage to any PCRs required under scope of Sub-Project.
2. Displacement or involuntary resettlement of people? (Physical displacement and/or economic displacement)		~	No significant displacement/ any sort of resettlement/ economic loss is envisaged due to any Sub-Project interventions.
3. Disproportionate impacts on the poor, women and children and or other vulnerable groups <sup>2</sup> (mentioned above)?		~	No disproportionate impacts on the poor, women and children and or other vulnerable groups are anticipated during execution phase
4. Temporary impediments in movements of people/transport and animals?	~		There will be temporary hindrance in the movement of traffic and pedestrians during execution phase of the project.
5. 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)?		~	It's a small-scale time framework project so population influx or increased burden on social infrastructure and services will not be effected.
6. Social conflicts if workers from other areas are hired?		✓	Preference will be given locals for work to avoid any conflict.
7. Risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during project construction and operation?	~		Measures would be taken to address or alleviate the probability of OHS risk during execution phase through administrative controls. However, stringent SOPs regarding actualization of PPEs during execution phase will be implemented at the proposed project site.
8. Risks to community health and safety due to the transport, storage, and use and/or disposal of materials such as explosives, fuel and other chemicals during construction and operation?		~	Likelihood of such risks and hazards is low as per the scope of the project.

 $<sup>^{2}</sup>$  Women, Children, Women headed households, People in old age, people having disabilities, socially isolated community groups and or people living below the poverty line

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 community throughout project construction, operation and decommissioning?	~		To avoid unfortunate events, site safety should be implemented in true spirit in the form of signages, reflective tapes awareness boards by the contractors and so on.
10. Any impact on sensitive receptors (mentioned above)		~	No significant impact is anticipated during execution phase. However, water sprinkling would be ensured to tackle the suspended dust particles.
11. Any impact of negative nature on already existing infrastructure including public amenities	$\checkmark$		No negative impact on any existing infrastructure envisaged.

#### **Prepared By:**

Name: Haider Ali

Designation: Individual Consultant, PCP

Signature:

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**Endorsed By:** 

Name: Asif Gillani

**Designation:** Deputy Program Officer ESSs PMDFC

Signature:

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#### INVOLUNTARY RESETTLEMENT SCREENING CHECKLIST

Name of City/MC/LG: MC Gojra M. Asad MOP

Sub-Project Sector: Chowks

Sub-Project Title: Beautification of Mission Chowk

Sub- Project Categorization: S-1 S-2

S-3

Date of Screening: 16-11-2022

SECTION 1	Yes	No	Expected	Remarks	
Does the project require land acquisition? Yes/No				No land will be required for the	
If yes, then describe the type of land being acquired from the categories below:	-	~		execution of Sub-Project.	
Has any AED been conducted at the proposed location by the government <sup>1</sup> ? Yes/No		~		No AED has been conducted on the proposed location by MC.	
Land (Quantify and describe types of land being acquired in "remarks column".				Not applicable	
Government and LG owned land free of occupation (agriculture or settlement)	~			Sub-project site under possession of MC and free from all sort of settlements.	
Government or state-owned land (other than LG) free of occupation (agriculture or settlement)		✓			
Private land		$\checkmark$			
Residential		$\checkmark$			
Commercial		$\checkmark$		Not Applicable	
Agricultural		✓		-	
Communal		✓			
Others (specify in "remarks").		~			
Name of owner/owners and type of ownership document if available.	✓			MC Gojra owns the land for Sub- Project.	
If land is being acquired, describe any structures constructed on it		~		No land needs to be acquired under Sub-Project.	
Land-based assets:		$\checkmark$			
Residential structures		$\checkmark$			
Commercial structures (specify in "remarks")		$\checkmark$		Not Applicable	
Community structures (specify in "remarks")		$\checkmark$			
Agriculture structures (specify in "remarks")		~			
Public utilities (specify in "remarks")		~		No public utilities and structures would be damaged during execution phase	
Others (specify in "remarks")		$\checkmark$		Not Applicable	
If agricultural land is being acquired, specify the following:		✓		No agriculture land required under Sub-Project.	
Agriculture related impacts		$\checkmark$			
Crops and vegetables (specify types and cropping area in "remarks).		$\checkmark$		Not Applicable	
Trees (specify number and types in "remarks").		✓			
Others (specify in "remarks").		✓			

SECTION 1	Yes	No	Expected	Remarks	
Affected Persons (APs)		✓		No APs as per scope of work and its impacts.	
Will any people be displaced from the land when acquired? Yes/No		✓		No displacement of any people required under Sub-Project.	
Number of APs		~		No APs as per scope of work and its impacts.	
Males & Females		$\checkmark$			
Titled landowners		$\checkmark$			
Tenants and sharecroppers		$\checkmark$		Not Applicable	
Leaseholders		$\checkmark$			
Agriculture wage laborers		$\checkmark$		1	
Encroachers and squatters (specify in remarks column)		~		No encroachment in chowk under scope of work.	
Vulnerable APs (e.g. women headed households, minors and aged, orphans, disabled persons, and those below the poverty line). Specify the number and vulnerability in "remarks".		~		No Vulnerable APs recorded as per Sub-Project interventions.	
Others (specify in "remarks")		✓		Not Applicable	
How will people be affected?	~			Rehabilitation of chowk can temporarily disturb the business activities.	

#### **Prepared By:**

Name: Haider Ali

**Designation:** Individual Consultant PCP

Signature:

Nº H

#### **Endorsed By:**

Name: Asif Gillani

**Designation:** Deputy Program Officer ESSs PMDFC

April J Signature:

<sup>&</sup>lt;sup>1</sup> The sub-projects have to avoid all locations where any government led AED has been conducted



#### ENVIRONMENTAL AND SOCIAL SCREENING CHECKLIST

#### Instructions:

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

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

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

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

(iii) Answer the questions assuming the "without mitigation" case. The purpose is to identify potential impacts. Use the "remarks" section to discuss any anticipated mitigation measures

#### Name of Enumerator/ESFP: Shahrukh Arif MOI & S, M. Asad MOP

Name of City/MC/LG: MC Gojra

Sub-Project Sector: Chowks

Sub-Project Title: Beautification of Railway Phattak Chowk - I

Sub- Project Categorization:	<b>E-1</b>	S-1	
	E-2	S-2	
	E-3	S-3	

Date of Screening: 16-11-2022

#### **Anticipated Project Activities:**

- Geometric Improvement of intersection
- Channelization of traffic flow
- Rehabilitation of Existing Pavement Structure
- Pavement Marking
- Street Lighting
- Aesthetic improvement of chowk

Estimated Cost of Sub-Project: 142.17 (PKR million)

#### Approx. Completion Time: 02 Months

#### Estimated Labor for Sub-Project: 20-25

Screening Questions	Yes	No	Remarks
A. Project Siting			
Is the Sub-Project area adjacent to or within any of	the fol	lowing	
Environmentally sensitive areas?			
Cultural heritage site		$\checkmark$	No cultural heritage site observed within 250
			meters of periphery of Sub-Project.
Legelly motosted Area (core zone or hyffor zone)		~	No legally protected area exists within 250
Legany protected Area (core zone or burner zone)			meters of radius of sub-Project.

Any surface water body (river, canal, stream, lake,		✓	No surface body observed nearby sub-Project
wetland) within 250 meters of proposed project?			location.
Mangrove Forest		✓	No mangrove forest observed.
Estuarine		✓	No estuarine exists in Sub-Project proposed scope of work.
Special area for protecting biodiversity		$\checkmark$	No protected area or buffer zone lies within
Buffer zone of protected area		✓	peripheral zone of sub-Project.
Man-made forest /game reserve, orchid/crops or		✓	No forest/crops/orchids etc. observed within
any other area of environmental importance			jurisdiction of Sub-project.
Socially sensitive/Important areas/communities/	people?	?	
PCRs and or any site of cultural/religious importance (Graveyard, Shrine, Mosque, Church, Gordwarah, Temple, Fort, archeological/historical site) within 100 m of the proposed subproject		~	No PCRs exists within 100 meters of periphery of Sub-Project which will be negatively impacted due to any work activities.
Sensitive receptors (Schools, colleges, hospitals			No such sensitive receptors observed nearby
and clinics) within 100 meters of the proposed sub		$\checkmark$	location of Sub-Project that are outside of
project			construction limits.
Any gravevard of local community (Muslims or		$\checkmark$	No gravevard observed.
Christians)			
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, squatters, ethnic minorities, people with disabilities, people in old age, socially isolated segments of the society and women or children)?		✓	It's a small-scale project regarding rehabilitation of existing chowk. Hence, no demographically or socio-economically vulnerable aspects of the sub-project were observed.
Already existing infrastructure (including public			No dismantling to any public infrastructure
amenities) which may be required to dismantle or		✓	envisaged.
may be affected temporarily by any means?			
<b>B.</b> Potential Environmental Impacts			
Will the Sub-Project cause:			
31 Disturbance to habitats/biodiversity of		$\checkmark$	The proposed project site doesn't have any
environmentally sensitive or protected areas?		-	environmentally sensitive or protected areas
environmentary sensitive of protected areas.			environmentarity sensitive of protected areas.
32. Cutting of trees?		✓	No cutting of trees required as per scope of work under Sub-Project.
33. Disruption to habitats/biodiversity of		$\checkmark$	No disruption to any habitat/ecosystem due to
surrounding ecosystem/environment?			any Sub-Project activities.
34 Generation of wastewater during construction		$\checkmark$	No wastewater generation envisaged as per
or operation?		-	scope of work during construction as well as operational phase.
35. Pollution of surface water/ground water due to		$\checkmark$	No such impact is anticipated.
wastewater discharge from construction site or			I I
due to direct/indirect disposal of waste water?			
36. Alteration of surface water hydrology of		$\checkmark$	No alteration of any waterway involved in the
waterways resulting in increased sediment in			scope of Sub-Project.
streams/rivers or due to increased soil erosion			J
at construction site?			
37. Deterioration of surface water quality due to		$\checkmark$	No labor camps are required to be established
silt runoff and sanitary wastes from worker-			as per limited work activities under Sub-
based camps and chemicals used in			Project.
construction?			÷
38. Over pumping of ground water, leading to salinization and ground subsidence?		✓	Over pumping of ground water is not required for this sub project.

39. Serious contamination of soil due to construction works?		✓	No such impact is expected.
<ul><li>40. Aggravation of solid waste problems in the area?</li><li>41. Generation of hazardous waste?</li></ul>	· •		Negligible impact projected and need mitigation plan during construction phase. Designated waste site will be proposed. Generated waste is to be collected at regular interval from the site.
42. Increased air pollution due to sub-project construction and operation?		✓ 	Negligible impact envisaged.
43. Noise and vibration due to sub-project construction or operation?		~	Negligible impact envisaged
44. Creation of temporary breeding habitats for diseases such as those transmitted by mosquitoes and rodents due to solid/liquid?		<b>~</b>	No such impact is anticipated.
45. Use of chemicals during construction?		~	In the light of sub-project scope, no hazardous chemical will be used during execution phase.
C: Potential Social Impacts Will the Sub-Project cause:			
1. Impairment of historical/cultural areas; disfiguration of landscape or potential loss/damage to Physical Cultural Resources (PCRs)?		~	No damage to any PCRs required under scope of Sub-Project.
2. Displacement or involuntary resettlement of people? (Physical displacement and/or economic displacement)		~	No significant displacement/ any sort of resettlement/ economic loss is envisaged due to any Sub-Project interventions.
3. Disproportionate impacts on the poor, women and children and or other vulnerable groups <sup>3</sup> (mentioned above)?		~	No disproportionate impacts on the poor, women and children and or other vulnerable groups are anticipated during execution phase
4. Temporary impediments in movements of people/transport and animals?	~		There will be temporary hindrance in the movement of traffic and pedestrians during execution phase of the project.
5. 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)?		~	It's a small-scale time framework project so population influx or increased burden on social infrastructure and services will not be effected.
6. Social conflicts if workers from other areas are hired?		✓	Preference will be given locals for work to avoid any conflict.
7. Risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during project construction and operation?	~		Measures would be taken to address or alleviate the probability of OHS risk during execution phase through administrative controls. However, stringent SOPs regarding actualization of PPEs during execution phase will be implemented at the proposed project site.
8. Risks to community health and safety due to the transport, storage, and use and/or disposal of materials such as explosives, fuel and other chemicals during construction and operation?		*	Likelihood of such risks and hazards is low as per the scope of the project.

 $<sup>^{3}</sup>$  Women, Children, Women headed households, People in old age, people having disabilities, socially isolated community groups and or people living below the poverty line

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 community throughout project construction, operation and decommissioning?	~		To avoid unfortunate events, site safety should be implemented in true spirit in the form of signages, reflective tapes awareness boards by the contractors and so on.
10. Any impact on sensitive receptors (mentioned above)		~	No significant impact is anticipated during execution phase. However, water sprinkling would be ensured to tackle the suspended dust particles.
11. Any impact of negative nature on already existing infrastructure including public amenities	~		No negative impact on any existing infrastructure envisaged.

#### **Prepared By:**

Name: Haider Ali

Designation: Individual Consultant, PCP

Signature:

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**Endorsed By:** 

Name: Asif Gillani

**Designation:** Deputy Program Officer ESSs PMDFC

Signature:

Next of

#### INVOLUNTARY RESETTLEMENT SCREENING CHECKLIST

Name of City/MC/LG: MC Gojra M Asad MOP

Sub-Project Sector: Chowks

Sub-Project Title: Beautification of Railway Phattak Chowk - I

Sub- Project Categorization: S-1

S-3

Date of Screening: 16-11-2022

SECTION 1	Yes	No	Expected	Remarks
Does the project require land acquisition? Yes/No				No land will be required for the
If yes, then describe the type of land being acquired from the categories below:		~		execution of Sub-Project.
Has any AED been conducted at the proposed location by the government <sup>1</sup> ? Yes/No		~		No AED has been conducted on the proposed location by MC.
Land (Quantify and describe types of land being acquired in "remarks column".				Not applicable
Government and LG owned land free of occupation (agriculture or settlement)	~			Sub-project site under possession of MC and free from all sort of settlements.
Government or state-owned land (other than LG) free of		$\checkmark$		
occupation (agriculture or settlement)				
Private land		$\checkmark$		
Residential		$\checkmark$		
Commercial		✓		Not Applicable
Agricultural		✓		-
Communal		$\checkmark$		
Others (specify in "remarks").		~		-
Name of owner/owners and type of ownership document if available.	✓			MC Gojra owns the land for Sub- Project.
If land is being acquired, describe any structures constructed on it		~		No land needs to be acquired under Sub-Project.
Land-based assets:		$\checkmark$		
Residential structures		✓		
Commercial structures (specify in "remarks")		$\checkmark$		Not Applicable
Community structures (specify in "remarks")		$\checkmark$		
Agriculture structures (specify in "remarks")		✓		
Public utilities (specify in "remarks")		~		No public utilities and structures would be damaged during execution phase
Others (specify in "remarks")		~		Not Applicable
If agricultural land is being acquired, specify the following:		✓		No agriculture land required under Sub-Project.
Agriculture related impacts		✓		
Crops and vegetables (specify types and cropping area in "remarks).		~		Not Applicable
Trees (specify number and types in "remarks").		<ul> <li>✓</li> </ul>		
Others (specify in "remarks").		$\checkmark$		

SECTION 1	Yes	No	Expected	Remarks
Affected Persons (APs)		✓		No APs as per scope of work and its impacts.
Will any people be displaced from the land when acquired? Yes/No		✓		No displacement of any people required under Sub-Project.
Number of APs		~		No APs as per scope of work and its impacts.
Males & Females		$\checkmark$		
Titled landowners		$\checkmark$		
Tenants and sharecroppers		$\checkmark$		Not Applicable
Leaseholders		$\checkmark$		
Agriculture wage laborers		$\checkmark$		
Encroachers and squatters (specify in remarks column)		~		No encroachment in chowk under scope of work.
Vulnerable APs (e.g. women headed households, minors and aged, orphans, disabled persons, and those below the poverty line). Specify the number and vulnerability in "remarks".		~		No Vulnerable APs recorded as per Sub-Project interventions.
Others (specify in "remarks")		~		Not Applicable
How will people be affected?	~			Rehabilitation of chowk can temporarily disturb the business activities.

#### **Prepared By:**

Name: Haider Ali

**Designation:** Individual Consultant PCP

Signature:

Nº H

#### **Endorsed By:**

Name: Asif Gillani

**Designation:** Deputy Program Officer ESSs PMDFC

April J Signature:

<sup>&</sup>lt;sup>1</sup> The sub-projects have to avoid all locations where any government led AED has been conducted



#### ENVIRONMENTAL AND SOCIAL SCREENING CHECKLIST

#### Instructions:

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

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

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

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

(iii) Answer the questions assuming the "without mitigation" case. The purpose is to identify potential impacts. Use the "remarks" section to discuss any anticipated mitigation measures

#### Name of Enumerator/ESFP: Shahrukh Arif MOI & S, M. Asad MOP

Name of City/MC/LG: MC Gojra

Sub-Project Sector: Chowks

Sub-Project Title: Beautification of Railway Phattak Chowk - II

Sub- Project Categorization:	E-1	S-1	
	E-2	S-2	
	E-3	S-3	

Date of Screening: 16-11-2022

#### **Anticipated Project Activities:**

- Geometric Improvement of intersection
- Channelization of traffic flow
- Rehabilitation of Existing Pavement Structure
- Pavement Marking
- Street Lighting
- Aesthetic improvement of chowk

Estimated Cost of Sub-Project: 142.17 (PKR million)

#### Approx. Completion Time: 02 Months

#### Estimated Labor for Sub-Project: 20-25

Screening Questions	Yes	No	Remarks
A. Project Siting			
Is the Sub-Project area adjacent to or within any of	the fol	lowing	
Environmentally sensitive areas?			
Cultural heritage site		$\checkmark$	No cultural heritage site observed within 250
			meters of periphery of Sub-Project.
Legelly motosted Area (core zone or hyffor zone)		~	No legally protected area exists within 250
Legany protected Area (core zone or burner zone)			meters of radius of sub-Project.

Any surface water body (river, canal, stream, lake,		✓	No surface body observed nearby sub-Project
wetland) within 250 meters of proposed project?			location.
Mangrove Forest		✓	No mangrove forest observed.
Estuarine		✓	No estuarine exists in Sub-Project proposed scope of work.
Special area for protecting biodiversity		$\checkmark$	No protected area or buffer zone lies within
Buffer zone of protected area		✓	peripheral zone of sub-Project.
Man-made forest /game reserve, orchid/crops or		✓	No forest/crops/orchids etc. observed within
any other area of environmental importance			jurisdiction of Sub-project.
Socially sensitive/Important areas/communities/	people?	?	
PCRs and or any site of cultural/religious importance (Graveyard, Shrine, Mosque, Church, Gordwarah, Temple, Fort, archeological/historical site) within 100 m of the proposed subproject		✓	No PCRs exists within 100 meters of periphery of Sub-Project which will be negatively impacted due to any work activities.
Sensitive receptors (Schools, colleges, hospitals			No such sensitive receptors observed nearby
and clinics) within 100 meters of the proposed sub		$\checkmark$	location of Sub-Project that are outside of
project			construction limits.
Any graveyard of local community (Muslims or		$\checkmark$	No graveyard observed.
Christians)			
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, squatters, ethnic minorities, people with disabilities, people in old age, socially isolated segments of the society and women or children)?		✓	It's a small-scale project regarding rehabilitation of existing chowk. Hence, no demographically or socio-economically vulnerable aspects of the sub-project were observed.
Already existing infrastructure (including public			No dismantling to any public infrastructure
amenities) which may be required to dismantle or		$\checkmark$	envisaged.
may be affected temporarily by any means?			
<b>B.</b> Potential Environmental Impacts			
Will the Sub-Project cause:			
46. Disturbance to habitats/biodiversity of		$\checkmark$	The proposed project site doesn't have any
environmentally sensitive or protected areas?			environmentally sensitive or protected areas
j i i j i i i i i i i i i i i i i i i i			
47. Cutting of trees?		✓	No cutting of trees required as per scope of work under Sub-Project.
48. Disruption to habitats/biodiversity of		$\checkmark$	No disruption to any habitat/ecosystem due to
surrounding ecosystem/environment?			any Sub-Project activities.
49 Generation of wastewater during construction		$\checkmark$	No wastewater generation envisaged as per
or operation?			scope of work during construction as well as operational phase.
50. Pollution of surface water/ground water due to		$\checkmark$	No such impact is anticipated.
wastewater discharge from construction site or			1 1
due to direct/indirect disposal of waste water?			
51. Alteration of surface water hydrology of		$\checkmark$	No alteration of any waterway involved in the
waterways resulting in increased sediment in			scope of Sub-Project.
streams/rivers or due to increased soil erosion			J
at construction site?			
52. Deterioration of surface water quality due to		$\checkmark$	No labor camps are required to be established
silt runoff and sanitary wastes from worker-			as per limited work activities under Sub-
based camps and chemicals used in			Project.
construction?			÷
53. Over pumping of ground water, leading to salinization and ground subsidence?		✓	Over pumping of ground water is not required for this sub project.
54. Serious contamination of soil due to construction works?		~	No such impact is expected.
---	-----	---	--
<ul><li>55. Aggravation of solid waste problems in the area?</li><li>56. Generation of hazardous waste?</li></ul>	· ·		Negligible impact projected and need mitigation plan during construction phase. Designated waste site will be proposed. Generated waste is to be collected at regular interval from the site.
57. Increased air pollution due to sub-project construction and operation?		✓ 	Negligible impact envisaged.
58. Noise and vibration due to sub-project construction or operation?		<ul> <li>✓</li> </ul>	Negligible impact envisaged
59. Creation of temporary breeding habitats for diseases such as those transmitted by mosquitoes and rodents due to solid/liquid?		<b>~</b>	No such impact is anticipated.
60. Use of chemicals during construction?		~	In the light of sub-project scope, no hazardous chemical will be used during execution phase.
<b>C: Potential Social Impacts</b> Will the Sub-Project cause:			
1. Impairment of historical/cultural areas; disfiguration of landscape or potential loss/damage to Physical Cultural Resources (PCRs)?		~	No damage to any PCRs required under scope of Sub-Project.
2. Displacement or involuntary resettlement of people? (Physical displacement and/or economic displacement)		~	No significant displacement/ any sort of resettlement/ economic loss is envisaged due to any Sub-Project interventions.
3. Disproportionate impacts on the poor, women and children and or other vulnerable groups <sup>4</sup> (mentioned above)?		<ul> <li>Image: A start of the start of</li></ul>	No disproportionate impacts on the poor, women and children and or other vulnerable groups are anticipated during execution phase
4. Temporary impediments in movements of people/transport and animals?	~		There will be temporary hindrance in the movement of traffic and pedestrians during execution phase of the project.
5. 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)?		~	It's a small-scale time framework project so population influx or increased burden on social infrastructure and services will not be effected.
6. Social conflicts if workers from other areas are hired?		~	Preference will be given locals for work to avoid any conflict.
7. Risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during project construction and operation?	~		Measures would be taken to address or alleviate the probability of OHS risk during execution phase through administrative controls. However, stringent SOPs regarding actualization of PPEs during execution phase will be implemented at the proposed project site.
8. Risks to community health and safety due to the transport, storage, and use and/or disposal of materials such as explosives, fuel and other chemicals during construction and operation?		~	Likelihood of such risks and hazards is low as per the scope of the project.

 $<sup>^4</sup>$  Women, Children, Women headed households, People in old age, people having disabilities, socially isolated community groups and or people living below the poverty line

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 community throughout project construction, operation and decommissioning?	~		To avoid unfortunate events, site safety should be implemented in true spirit in the form of signages, reflective tapes awareness boards by the contractors and so on.
10. Any impact on sensitive receptors (mentioned above)		~	No significant impact is anticipated during execution phase. However, water sprinkling would be ensured to tackle the suspended dust particles.
11. Any impact of negative nature on already existing infrastructure including public amenities	$\checkmark$		No negative impact on any existing infrastructure envisaged.

#### **Prepared By:**

Name: Haider Ali

Designation: Individual Consultant, PCP

Signature:

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**Endorsed By:** 

Name: Asif Gillani

**Designation:** Deputy Program Officer ESSs PMDFC

Signature:

Next J

#### INVOLUNTARY RESETTLEMENT SCREENING CHECKLIST

Name of City/MC/LG: MC Gojra M Asad MOP

Sub-Project Sector: Chowks

Sub-Project Title: Beautification of Railway Phattak Chowk - II

Sub- Project Categorization: S-1

S-3

Date of Screening: 16-11-2022

SECTION 1	Yes	No	Expected	Remarks
Does the project require land acquisition? Yes/No				No land will be required for the
If yes, then describe the type of land being acquired from the categories below:		~		execution of Sub-Project.
Has any AED been conducted at the proposed location by the government <sup>1</sup> ? Yes/No		~		No AED has been conducted on the proposed location by MC.
Land (Quantify and describe types of land being acquired in "remarks column".				Not applicable
Government and LG owned land free of occupation (agriculture or settlement)	~			Sub-project site under possession of MC and free from all sort of settlements.
Government or state-owned land (other than LG) free of		$\checkmark$		
occupation (agriculture or settlement)				
Private land		$\checkmark$		
Residential		$\checkmark$		
Commercial		✓		Not Applicable
Agricultural		✓		-
Communal		✓		
Others (specify in "remarks").		~		-
Name of owner/owners and type of ownership document if available.	✓			MC Gojra owns the land for Sub- Project.
If land is being acquired, describe any structures constructed on it		~		No land needs to be acquired under Sub-Project.
Land-based assets:		$\checkmark$		
Residential structures		✓		
Commercial structures (specify in "remarks")		$\checkmark$		Not Applicable
Community structures (specify in "remarks")		✓		
Agriculture structures (specify in "remarks")		✓		
Public utilities (specify in "remarks")		<b>√</b>		No public utilities and structures would be damaged during execution phase
Others (specify in "remarks")		✓		Not Applicable
If agricultural land is being acquired, specify the following:		~		No agriculture land required under Sub-Project.
Agriculture related impacts		$\checkmark$		
Crops and vegetables (specify types and cropping area in "remarks).		<ul> <li>✓</li> </ul>		Not Applicable
Trees (specify number and types in "remarks").		✓		
Others (specify in "remarks").		$\checkmark$		

SECTION 1	Yes	No	Expected	Remarks
Affected Persons (APs)		✓		No APs as per scope of work and its impacts.
Will any people be displaced from the land when acquired? Yes/No		✓		No displacement of any people required under Sub-Project.
Number of APs		~		No APs as per scope of work and its impacts.
Males & Females		$\checkmark$		
Titled landowners		$\checkmark$		
Tenants and sharecroppers		$\checkmark$		Not Applicable
Leaseholders		$\checkmark$		
Agriculture wage laborers		$\checkmark$		
Encroachers and squatters (specify in remarks column)		~		No encroachment in chowk under scope of work.
Vulnerable APs (e.g. women headed households, minors and aged, orphans, disabled persons, and those below the poverty line). Specify the number and vulnerability in "remarks".		~		No Vulnerable APs recorded as per Sub-Project interventions.
Others (specify in "remarks")		✓		Not Applicable
How will people be affected?	~			Rehabilitation of chowk can temporarily disturb the business activities.

#### **Prepared By:**

Name: Haider Ali

**Designation:** Individual Consultant PCP

Signature:

Nº H

#### **Endorsed By:**

Name: Asif Gillani

**Designation:** Deputy Program Officer ESSs PMDFC

April J Signature:

<sup>&</sup>lt;sup>1</sup> The sub-projects have to avoid all locations where any government led AED has been conducted



Environment & Social Mitigation & Management cost							
Item	Quantity	Tentative Cost/Item- Rs./-	Total Cost				
A-PPEs	-						
Face Masks (3 PLY) - box	20	300	6000				
Safety Hard Helmets	8	3,000	24000				
Safety Shoes	8	3,000	24000				
Hand Gloves	8	1,000	8000				
Ear Plugs	8	500	4000				
Reflective Safety Vest	8	1,000	8000				
Safety Goggles	8	500	4000				
B-Community Health	and Safety	10.000	10000				
First Alu Box Complete	2	10,000	45000				
Safety Signs	20	1,000	2000				
Safety Tanes	50	1,000	75000				
Portable Delineator with chain	5	2,200	11000				
Emergency Portable Lights	3	3,000	9000				
Solid Waste Collection Drums with Cover	3	12,000	36000				
Fire Fighting Equipment Purchase and refilling	1	10,000	10000				
BCC Campaign and waste collection system	Lump sum		100,000				
Water Sprinkling	Lur	mp sum	100,000				
Total (PKR)-A+B			494,000				

#### Environmental and Social Mitigation Plan

Proposed Sub- project activities	Potential Env/Soc Impacts	Mitigation Measures	Monitoring Indicators	Monitoring Frequency	Responsibility
Proposed Sub- project activities Dismantling, Excavation (Cold milling of existing road surface)	<ul> <li>a) Environmental Issues:</li> <li>Dust which may affect visibility</li> <li>Noise from machineries/ equipment</li> <li>Contamination of nearby surface water source</li> <li>Construction waste may be generated due these activities</li> <li>Safety hazards to labor and nearby resident population.</li> <li>Worse House Keeping</li> <li>b) Social Issues:</li> </ul>	Mitigation Measures         Construction Phase         • Solid waste will be properly disposed off at designated place of MC.         • Updated and tuned machinery will be used to control noise.         • Water sprinkling will be carried out at consecutive intervals as per instruction         • Avoiding construction activities during nights.         • Removal of excess matter/ debris from the site immediately.         • Provide PPEs.	Monitoring Indicators Visual/ Pictures	Monitoring Frequency • Daily site visit during constru ction phase • Fortnig htly/W eekly/ Daily • Once	<ul> <li>ESFPs</li> <li>Construction Supervision Consultant</li> <li>DPO ESSs</li> </ul>
	<ul> <li>Solid waste may cause disturbance in mobility</li> <li>Temporary blockage of road may restrict mobility</li> <li>Conflict with public and public complaints</li> <li>Temporary loss of structures and private property</li> </ul>	<ul> <li>Provide appropriate signage near the construction activities to sensitize the communities and minimize accidents.</li> <li>The contact Nos. of focal person of Grievance Redress Committee will be displayed at different locations and residents will also be informed about it.</li> </ul>		during the constru ction phase	

	Presence of Physical Cultural Resources (PCRs) of Archeological importance	<ul> <li>Construction work will be scheduled in such a way that business of the shopkeepers will not be affected. Alternate road will be provided. Contractor will make sure that labor must not damage the property and structures of the communities. In case of damage compensation will be provided as per entitlements.</li> </ul>	
Construction material storage, handling and use	<ul> <li>Environmental Issues:</li> <li>Ground water may also be contaminated due to the any oil spillages from machinery.</li> <li>Health risk to workers and local inhabitants.</li> <li>Poor Housekeeping</li> <li>Social Issues:</li> <li>Land acquisition for storage of construction material</li> <li>Accidents/Injuries expected if neglected</li> <li>Blockage of passage for pedestrians</li> <li>Haphazard arrangement of construction material</li> </ul>	<ul> <li>Material will be appropriately secured to ensure safe passage between the destinations during transportation.</li> <li>Loads/heaps will have appropriate cover to prevent spillage and contractor should be responsible for any clean up resulting from any failure.</li> <li>Materials will not be loaded to a higher level than the side and tail boards and shall be covered with a good quality tarpaulin;</li> <li>If land acquired for storage of machinery &amp; materials on temporarily basis: Contractor is liable to compensate the land owner according to agreement/negotiations/voluntarily</li> <li>Visual/ Pictures</li> <li>Pictures</li> <li>Pictures<!--</td--><td><ul> <li>ESFPs</li> <li>Construction Supervision Consultant</li> <li>DPO ESSs</li> </ul></td></li></ul>	<ul> <li>ESFPs</li> <li>Construction Supervision Consultant</li> <li>DPO ESSs</li> </ul>

Labor Camp (if established by Contractor)	<ul> <li>Health impacts due to absence of housing and sanitation facilities in labor camp.</li> <li>Security of labor</li> <li>Unhygienic conditions</li> </ul>	<ul> <li>Contractor will lay/utilize construction materials as per work requirement from his storage site.</li> <li>Contractor will use night vision reflective signboards/ reflective tapes to cordon off the area during construction/demolition activities.</li> <li>Contractor will ensure provision of appropriate housing, water supply, and sanitation facilities to construction labor.</li> <li>Good housekeeping will be ensured inside campsite</li> <li>Labor will be provided with quality food.</li> <li>Better heating &amp; cooling facilities will be provided by the Contractor as per season accordingly.</li> <li>Better to accommodate labor in Containers Camps/houses with all amenities.</li> <li>Contractor will submit Campsite Management Plan and approve from DPO-ESSs before the execution of work.</li> </ul>	Visual/ Pictures	<ul> <li>Daily site visit during constru ction phase</li> <li>Fortnig htly/W eekly/ Daily</li> <li>Once during the constru ction phase</li> </ul>	<ul> <li>ESFPs</li> <li>Construction Supervision Consultant</li> <li>DPO ESSs</li> </ul>
Vehicle Movements	<ul> <li>Traffic congestion</li> <li>Conflicts</li> </ul>	<ul> <li>Alternative routes will be provided.</li> <li>Sign boards and posters will also be displayed at project site and adjacent areas as well. Inform the residents about timing, schedule and construction work duration.</li> </ul>	Visual/ Pictures	• Daily site visit during constru	<ul> <li>ESFPs</li> <li>Construction</li> <li>Supervision</li> </ul>

		• Work will be done in portions so that the alternate road may be used safely and vehicles movement will not be disturbed.		ction phase • Fortnig htly/W eekly/ Daily • Once during the constru ction phase	•	Consul tant DPO ESSs
Site Safety Issues	• Accidents	Contractor will ensure site safety using safety cautions (night vision), boards, flagmen, cordon tapes etc. for smooth flow of traffic during the construction phase of the Sub-Project.	Visual/ Pictures	<ul> <li>Daily site visit during constru ction phase</li> <li>Fortnig htly/W eekly/ Daily</li> <li>Once during the constru ction phase</li> </ul>	•	ESFPs Constr uction Superv ision Consul tant DPO ESSs
Public access	Problems for pedestrians. Normal mode of transport may be disturbed during Sub-project execution.	<ul><li> Alternate access route will be made sure.</li><li> Cordon off construction zone.</li></ul>	Visual/ Pictures	Daily site visit	•	ESFPs Constr uction

Occupational Health & Safety	<ul> <li>Injuries to workers/LTI</li> </ul>	<ul> <li>Contractor will follow HSE SOPs for all activities on the site.</li> <li>Workers will be trained and guided to follow SOPs and will be provided</li> </ul>	Visual/	during constru ction phase • Fortnig htly/W eekly/ Daily • Once during the constru ction phase • Daily site visit	<ul> <li>Supervision</li> <li>Consultant</li> <li>DPO ESSs</li> <li>ESFPs</li> <li>Construction</li> </ul>
		<ul> <li>Safety Shoes, Gloves, Chemical Masks etc.) wherever required.</li> <li>First aid will be provided onsite</li> <li>Careful monitoring will also be carried out.</li> </ul>		<ul> <li>ction phase</li> <li>Fortnig htly/W eekly/ Daily</li> </ul>	Consul tant • DPO ESSs
				Once during the constru ction phase	

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Laying of Asphalt	0	Injuries to workers	• Contractor will provide Safety Shoes,	Visual/	•	Daily	•	ESFPs
			Hand Gloves, Safety Helmet,	Dioturas		site	•	Constr
			Reflective Vest to all the labor.	Fictures		visit		uction
						during		Superv
						constru		ision
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						Daily		
					•	Once		
						during		
						the		
						constru		
						ction		
						phase		
Damage to Public	0	Accidents/Incidents/Injuries	• Contractor will ensure no damage to	Visual/	•	Daily	•	ESFPs
Infrastructure/utiliti	0	Structural loss	public utilities or structures.	D		site	•	Constr
es	0	Social Conflicts	• Contractor will provide compensation	Pictures		visit		uction
			for the damages to entitles			during		Superv
			accordingly.			constru		ision
						ction		Consul
						phase		tant
					•	Fortnig	•	DPO
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					constr	uction		
					phase		1	

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Sexual Harassment- Labor Influx- Child Labor	<ul> <li>Social Conflicts</li> </ul>	<ul> <li>Contractor will give behavioral training to the workforce.</li> <li>Contractor will hire local labor for unskilled works.</li> <li>No child labor is allowed onsite below 14 years.</li> </ul>	Visual/ Pictures/Re ported/Com plains by public during visit	<ul> <li>Daily site visit during constru ction phase</li> <li>Fortnig</li> </ul>	<ul> <li>ESFPs</li> <li>Construction Supervision Consultant</li> <li>DPO</li> </ul>
				htly/W eekly/ Daily Once during the construction phase	ESSs
CoViD-19 SOPs	• Spread of Corona among	Contractor will provide face masks to	Visual/	Daily	ESFPs
implementation	• Spread of Corona among the labor	<ul> <li>Contractor will provide face masks to the labor on daily basis to reduce Corona impact.</li> <li>Contractor will follow CoViD-19 guidelines during construction works</li> </ul>	Visual/ Pictures	<ul> <li>Daily site visit during constru ction phase</li> <li>Fortnig htly/W eekly/ Daily</li> <li>Once during the constru ction phase</li> </ul>	<ul> <li>ESFPs</li> <li>Construction Supervision Consultant</li> <li>DPO ESSs</li> </ul>

Street Lights	<ul> <li>Health and Safety of workers</li> </ul>	<ul> <li>SOPs of Work at Height provided in the PMDFC SOPs for labor/construction workers will be strictly followed</li> </ul>	Site pictures	• At the time of installa tion	<ul> <li>MC</li> <li>Region al office PMDF C</li> <li>Superv ision consult ants</li> </ul>			
Road Maintenance- Road Furniture	<ul> <li>Accidents</li> <li>Complains</li> </ul>	<ul> <li>MC will maintain road lighting system for night vision.</li> <li>Road surface will be repaired/maintained by MC.</li> <li>Road furniture will be maintained by MC.</li> </ul>	Visual/ Pictures		• MC Officia ls			

PUNJAB CITIES PROGRAM (PCP)

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

TMAWAZIRABAD

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





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

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

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



اغراض ومقاصد

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



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



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



زیر نگرانی



افتخار رسول

ڈ پٹی پروگرام ڈائر یکٹر پنجاب سیٹیز پروگرام(PCP)

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



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

///

مسائل

- ا مقامی آبادی کے دسائل براضافی بوجھ
  - م مقامی آبادی سے تنازعات کا خدشہ
  - م سابق، مذہبی، اور سکیورٹی کے مسائل۔

### حفاظتي اقدامات



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



پی ایم ڈی ایف سی



حفاظت مقد او نے والے کوڑا کرک اور کچن کے کوڑا کرکٹ کے لیے الگ الگ کوڑادانوں کا انظام مونیل سمیٹی رکار پوریشن کی جانب سے نتخب کردہ جگہ پردوزانہ کی بنیاد پرکوڑ کے واض نے اور تاخب کر محکامت انتظام۔ عارض ٹو انگٹس سے پیدا شدہ فضلے اور کیکو یڈویسٹ کو حفظان صحت کے اصواوں کے مطابق ٹیوکا نے لگانتظام۔ فضل کو ٹیکل نے لگ نے کہ پکش گاہ ہے کم از کم 500 میٹر دور جگہ کا انتخاب کیا جائے جس کے اردگر دلوکوں کی رہائش نہ ہو۔ رہائش داخل نہ ہوں اور پچھراور بد یو تھی پیدا نہ ہو۔





ٹھیکیدار کیمپ سائٹس پر درج زیل سہولیات مہیا کریے گا۔

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





Scanned with CamScanner

چوہیں گھنٹے لیبر کیمپس میں پرفرسٹ ایڈ کبس کی سہولت موجود ہو۔ کیمپ سائٹس میں ابتدائی طبی امداد سے متعلقہ دواؤں کا موجود ہونا یقینی بنایا جائے ۔ اورطویل المدتی کیمپ کی صورت میں کسی ڈسپنسر رڈاکٹر کاکیمپ میں موجود ہونا چاہئیے ۔
سی ایم جنسی کے دوران مزدوروں کے لیے ایم ولینس کی سہولت فراہم کی جامے اورا پر جنسی سروسز 1122 یا 15 پر کال کرنے کے لیے ٹیلیفون رمو بائل کی سہولت مہیا کی جائے ۔
حفظان صحت کے بہترین اصولوں ، صفائی ستھرائی اور صحت کی دیکھ بھال کے امور کیلیے مزدوروں رلیبر کو تربیت فراہم کی جائے جس میں تمام مزدوروں کی شرکت کویفینی بنایا جائے۔
جنسی طور پرتنقل ہونے والی بیماریوں اورایڈز وغیرہ کے بارے میں مزدوروں کو کمل معلومات فراہم کی جائیں اوران بیماریوں سے بچنے کے لیے ر حفاظتی اصول اپنانے پرزور دیا جائے۔
پچھروں اور دیگر بیکٹیریا کو پیدا ہونے سے روکنے کیلیئے حفاظتی سپر پر از می کرائے جائیں۔
کرونا سے بیچنے کے لیئے ابتدائی سکریننگ یقینی بنائیں اور بار بار ہاتھ دھونے پرزوردیں اور علامات خاہر ھونے پرفوری طور پردیگر مزدوروں سے آئسولیشن کے کمل اصولوں پرتختی سے ممل کیا جائے۔
🔶 لیبر کیمپس کے اندر مناسب مقامات پر حفظان صحت کے اصولوں سے متعلقہ پیغامات اور طریقے ڈسپلے کیے جایئن اور تربیتی پروگرام کا اہتمام کیا
-26
قریبی ڈسپینسری رہیلتھ کلینک رہیپتال کے رابطہ نمبر وغیرہ واضح مقامات پر آویزاں کئے جائیں۔

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



URUS IIII S HAUMOS AISEASI ELE HEALTH SELATION HEALTH SELATION BISING IIIII S HAUMOS

Food Safety محت کے اصولوں پر مبنی خوراک Food

مسائل

فود بواتر تككاخدشه

یاریکاڈر

#### حفاظتي اقدامات

مزدوروں کوصاف ستھرےاورتازہ کھانے کی فراہمی کویقینی بنایا جاہے۔

سرگرمیاں

٩.مذهبي و سماجي ميل جول

### مسائل

- مذہبی عبادات میں رکاوٹ
- 🔹 ساجی تعلقات میں دشواری
- ساجی، ثقافتی اور مذہبی خیالات میں شدت پسندی پالڑائی جھگڑ اوغیرہ

## حفاظتي اقداهات

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

پی ایم ڈی ایف سی ۱۲

# أنوائر نمنت اينڈ سوشل سيف گارڈز ٹيم







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

پی ایم ڈی ایف سی

انوائرنمنٹ اینڈ سوشل سیف گارڈز ٹیم

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

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

حفاظتي اقدامات

مسائل

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

- ویسٹ پاکستان میٹرنٹی مذیف آردیننس **1958 کے مطابق حاملہ خواتین یا ایسی خواتین جنہوں نے چ**ھ ہفتے قبل بچے کوجنم دیا ہو، کومز دوری یا کسی سرگر می کے لیئے کام پرنہیں رکھا جاسکتا۔
- دی پنجاب رسٹرکشن آن ایمپلائمنٹ آف چلڈرن ایکٹ2016 کے مطابق18 سال اوراس سے کم عمر کے بچوں کہ محنت مزدوری کے ایسے کام کے لیے خصیں رکھا جاسکتا جن میں صحت کو نقصان چنچنے یا چوٹ لگنے یا کسی کیمیائی زہر یلے مادے سے <mark>نقصان چنچنے یا جہاں مڈی ٹوٹنے کا اندیشہ ہو۔</mark>



انوائر نمنٹ اینڈ سوشل سیف گارڈز ٹیم

10

پی ایم ڈی ایف سی







کرونا وائرس کی وہا کے دوران حفاظتی تدابیر

CORONAVIRUS DISEASE 2019

# مفاظتی اقدامات

سرگرمیاں

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

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

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



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

# Summary of Recommended Personal Protective Equipment According to Hazard

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, smokes, vapors.	Facemasks with appropriate filters for dust removal and air purification (chemicals, mists, vapors and gases). Single or multi-gas personal monitors, if available.
	Oxygen deficiency	Portable or supplied air (fixed
Body/leg protection	Extreme temperatures, hazardous materials, biological agents, cutting and	Insulating clothing, body suits, aprons etc.
Working at	Rehabilitation Projects	Helmet, Safety glasses,
noi Sut	New Construction Projects	Anchor, belt, lanyard,
*In general, use	of PPEs is required for any height of 4 ft or more.	Ref: OSHA standards
ی ایف سبی ۲۰	پی ایم در	ں سیف گارڈز ٹیم


لتيراتي جدر مقام پرواضح بور دُنصب كرديتي جائيس ،جن پر درج ذيل پيغامات را حکامات لکھے ہوں: (a) تغیراتی کام کی نوعیت المارزیک میں رکاوٹ کی صورت میں متبادل رائے کا نشان اور عارضی رکاوٹ کا پیغام (c)ایم جنسی اور شکایت کیلیئے رابط نمبر ز (PMDFC)(d) کی جانب سے جاری کردہ ساجی وماحولیاتی پیغامات رمینی یوسٹر ز۔ تراتی کام کی جگہ کے ارد گرد 0 0 1 میٹر تک کی حدود میں موجود ثقافتی، ساجی، مذہبی ورثہ ، تاریخی عمارتوں اور مذہبی مقامات جیسے تریزان،میاجد،مندر،گرجا گھروں وغیرہ کوکسی قشم کا نقصان نہ پہنچایا جائے اوران کی حدود میں کوڑا کرکٹ ڈالنے یا فالتویانی چھوڑنے سے گریز کیا وئے مزید برآل کھدائی کے دوران کسی نئے آثارِقد برمد ملنے کی صورت میں متعلقہ مقامی محکمے سے رجوع کیا جائے اور کھدائی کا کام بند کر کے لتميراتي كام روك دياجات\_

سرگرمیاں

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

مسائل

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

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11



Scanned with CamScanner

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

ودزمره معمولات اوركامول ميں ركاوي د ہائتی خواتین کیلیج آنے جانے میں رکاوٹ دکانداروں کے دکانوں کے آگے رکا وٹیس اور گا ہکوں کیلئے مشکلات مستقل وعارضی سٹالز لگا کر بیچنے والے چھوٹے بڑے مستقل دکا نداروں کا گا بکہ م ہوجانے کی وجہ سے مالی نقصان

حفاظتي اقدامات

مسائل

تقمیراتی علاقے میں اردگر دموجود تمام چھوٹی بڑی دکانوں بھیلوپ ، عارضی خوانچہ فروشوں اورگھر دں کامکمل سروے ( تعداداور مالی حثیت دغیرہ )اد ان پر ممکنہ سماجی اور ماحولیاتی اثرات کا جائزہ لے کرایک تفصیلی رپورٹ اور متعلقہ پلان میو پل کمیٹی رکار پوریشن کے دفتر میں موجود ہونی چاہئے جو که فوکل پرسنز، متعلقہ علاقائی آفس میں موجود ڈپٹی پروگرام آفیسر (ESSs) کے ساتھ قیمیراتی کاموں کی مالیت کا ندازہ لگائے دقت تیار جائیگی ۔اس رپورٹ اور پلان میں موجود ساجی اور ماحولیاتی مسائل کے حل کیلیختص رقم اوران کاضیح طریقے سے استعال ٹھیکیدار کے کنٹر یک -bria ر ہائشیوں کیلیئے آنے جانے اور دکانوں *رگھر و*ں تک رسائی کے لیے م**تبادل راستے مہیا کرناٹھیکیدارکی ذمہ دار**ی ہے۔ دکانوں رکھڑوں رٹھیلوں وغیرہ کے باہر سی بھی قشم کے نقصان یا توڑ پھوڑ کی صورت میں ٹھکید ارطے شدہ ضوابط کے مطابق اس کی قیمت متاثرہ لوگوں لیبر رمز دورکوتر بیت دی جائے کہ وہ اردگر در ہائشی عورتوں اور بچوں کے آنے جانے میں کوئی رکاوٹ نہ بنیں اور رہائشیوں کے ساتھ بلاضرورت کو اداكر حگا-ميل جول نەرھيس-

لتمیراتی کیمپ لگانے بتمیراتی کام کرنے یامشینری اور لتمیراتی سامان رکھنے کے لیئے عارضی طور پر حاصل کی گئی زمین کا کرانیہ ما لک مکان کودقت برادا کی جائے گا۔اور تحریری معاہد ، کی صورت میں تھی دارتما مقو اعد وضوالط کا پابند ہوگا۔ لتحمیراتی کاموں رکیمپ وغیرہ لگانے کے لیتے عارضی زمین حاصل کرنے کے لئے مقامی رہائشیوں سے مشاورت اوردنوں کے حساب سے کرایہ اور اس کامکمل طریقہ کا روضع کرکے باقاعدہ لکھا جائے گا۔اورخلاف ورزی کی صورت میں ٹھیکیدار ذمہ دار ہوگا۔



FTY-



- تعمیراتی علاقے میں موجود ہپتالوں، سکولوں رکالجوں وغیرہ اور رہائتی گھروں ردکانوں کی تمام تفصیلات کی رپورٹ متعلقہ میونیل کمیٹی کے دفتر میں موجود ہوتی چاہئے جو کہ تعمیکیدار کے کنٹریکٹ کا حصہ ہوگی۔ اور شھیکیداران تفصیلات کے مطابق ایسا پلان تر تیب دے کا ررہائشیوں اور دکانداروں کو کم سے کم پریشانی کا سامنا کرنا پڑے مثلا زیادہ شور پیدا کرنے والے کام دن کے اس جصے میں کئے جائیں جب سپتالوں، اور سکولوں رکالجوں وغیرہ کے مصروف اوقات کا رنہ ہوں اور ایسے کا مجن کی وجہ سے راستوں کی عارض بندش ضردری ہوں وہ را کو کہتے جایئ جب رہائشیوں کی آمد ورفت نہ ہو۔
- تعمیراتی کاموں کے دوران پیداشدہ فاضل پانی یا پورٹیبل ٹو انگٹس کا پانی رفضلہ وغیرہ کا محفوظ اور مناسب طریقے سے ٹھکانے لگانے کا بندوبست کیا جائے اور فاضل پانی کو پینے کے صاف پانی کے ساتھ شامل ہونے سے بچانے کا ہزمکن قدم اٹھایا جائے۔
- واٹر سپلائی کی سکیموں یا ایسی تمام کا مجن کی دجہ سے رہائشیوں کو پانی یا سیور تن وغیرہ میں عارضی بندش کا سامنا کرنا پڑ سکتا ہو۔، ایسے تمام کا موں کے آغاز سے پہلے رہائشیوں کو پیشگی اطلاع دی جائے اور متبادل انتظامات کا خاطر خواہ انتظام کیا جائے۔
- تعمیراتی کاموں کی وجہ سے درختوں کی کٹائی سے ہر حال میں گریز کیا جائے اور ناگز برصورت حال میں ایک درخت کی کٹائی کے متبادل کے طور پر چار درخت لگا ناضروری میں۔
- التمیراتی جگہ پر پیدا ہونے دالےکوڑا کرکٹ کوٹھکانے لگانے کیلئے ڈسٹ بن لگائے جائیں اوران کوروزانہ کی بنیاد پر متعلقہ میونیل کمیٹی کی طرف سے مقرر کر دہ مقام پرٹھکانے لگایا جائے۔
  - کوڑا کرکٹ اور فاضل پانی اردگر دموجو دفصلوں اور ندی نالوں میں بھینکنے سے گریز کریں۔
    - م گردد غباراور ہوائی آلودگی کی صورت میں پانی کا با قاعدہ چھڑ کاؤ کریں۔
- تعمیراتی کام کی مدت اورنوعیت کے مطابق کام کے آغاز سے پہلے، کام کے دوران اور کام کے بعد شرک آلودگی، ہوائی آلودگی اور آبی آلودگی کے نعمیراتی کام کی مدت اورنوعیت کے مطابق کام کے آغاز سے پہلے، کام کے دوران اور کام کے بعد شرک آلودگی، ہوائی آلودگی اور آبی آلودگی کے نمو نہ جات حاصل کر کے ان کی جار پخ پڑتال کرانا ٹھیکیدار کی ذمہ داری ہے۔ اس سلسلے میں ریجنل آشن میں موجود ڈپٹی پروگرام آفیسر (ESSs) سے مزید رہنمائی حاصل کر ہے۔

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

\* برایم و ن آن یا کتان کرورو یکی نبر 25 بطابق 2009 حال نبر ( کتل آف از یا دائیز تک پاجیک الامود " تیراتی کاموں کردران برایک درخت کی کنائی کتادل پاردرخت لگ عاب کر پی ایم ڈی ایف سی ان کو شرک سیف گار ڈز شیم

٢۵



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

