

ORIGINAL



Building Design Authority (P) Ltd

in joint Venture with

B.N. Consultancy Pvt. Ltd and

PLUSH Engineering & architects (P) Ltd Kathmandu.

Monthly Progress Report

Regional Urban Development Project (RUDP)

Project Implementation Unit

Biratnagar, Nepal



June 2019

Biratnagar Metropolitan City (BMC), Nepal

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EXECUTIVE SUMMARY

This Project Monitoring Report mainly covers the Progress achieved in the component of Regional Urban Development Project (RUDP) in Biratnagar Metropolitan City, Nepal. The information has been provided in the following Chapters are mentioned below:

- 1. Introduction/ Background-** It provide brief Account on the Project and its Background stating why, how and when the Project was started in Biratnagar Metropolitan City.
- 2. Salient Feature of Contract Package: RUDP/ICB/BRT/2-** It provides brief Account of Contract Data with Major components of works to be carried out.
- 3. Sub Project Components-** It provides a brief Account on the various Sectors of the Project component summarizing the respective Progress such as Sewer Line, Storm Water Drain, Road side Drain, Roads and Lanes and Electrification Work if any. This Chapter further covers Environment Mitigation Measures and Social Safeguard measures.
- 4. Objective and Scope of the Works-** This Chapter briefly describes the expected output of the Project and Scope of Consultant regarding execution of Work.
- 5. Progress of Sub – Project Components-** This Chapter comprises the status of Work stating what kind of works are under Progress and how much Progress has been achieved till date. It further elaborates on the status of actual achievement versus the Targeted achievement till date. Sometimes, the project gets delayed due to unforeseen obstacles which are rampant in the case of Nepal. Such events are also enlisted to clarify the reason for delay in the project.
- 6. Details of Pre Cast Activities-** In the urban area, as ongoing projects creates a lot of disturbances and difficulties in the life of the people living in the project area, the work has to be conducted in the speedy manner to finish it as soon as possible. Precast of the project components are the best alternative to overcome this issue and details of precast activities are provided in this chapter.
- 7. Contractor’s Manpower and Contractor’s Equipment-** Chapter 7 and Chapter 8 deal with summary of Manpower and Equipment respectively stating whether Resources owned by the Contractor are sufficient for the execution of Contract.

1. PROJECT DESCRIPTION

1.1. INTRODUCTION/BACKGROUND

GoN has negotiated loan with Asian Development Bank for the Regional Urban Development Project (RUDP) in Nepal. The RUDP, in the line with ADB's water and urban operation plans, will construct and upgrade urban infrastructure in eight towns in the Terai Region of Nepal, improve operational effectiveness of these eight municipalities. The project will also build institutional capacity of DUDBC for urban planning, project planning and project preparation in order to proactively shape urbanization in Nepal and implement the National Urban development strategy. Biratnagar is one of the eight municipal towns included in the RUDP. The subcomponent of the RUDP covers the construction and improvement of sewerage, drainage and roads and design of Integrated Solid Waste Management System for Biratnagar Municipality. Building Design Authority (P) Ltd (Nepal), B.N. Consultancy Pvt. Ltd and PLUS Engineers & Architects (P) Ltd Kathmandu and have entered for a Contract of Consulting Services with Regional Urban Development Project (RUDP), Project Implementation Unit (PIU), Biratnagar Metropolitan City on 28th October 2017.

Regional Urban Development Project (RUDP) the Department of Urban Development and Building Construction (DUDBC), under the Ministry of Urban Development (MUD) through the Government of Nepal (GoN) has received the loan from Asian Development Bank (ADB) Loan 47252-NEP.

In line with ADB's Strategy 2020 and based on Nepal's fundamental long term needs and on the GoN's priority, the ADB is continuing to support the Government in (i) improving urban infrastructure; improving access to water supply and sanitation (ii) supporting urban environmental improvement (iii) strengthening the operation and management skills of local governments. The Regional Urban Development Project (RUDP) is forward to promote healthy cities by creating healthier urban environments and was formulated under the PPTA 2010.



2. CONTRACT DATA: - RUDP/ICB/BRT/2

General Features	
Name of Project	Regional Urban Development Project(RUDP)
Executing Agency	Government of Nepal,
	Ministry of Urban Development
	Department of Urban Development and Building Construction (DUDBC)
Implementing Agency	Biratnagar Metropolitan City, Biratnagar
Funded By	Asian Development Bank & Government of Nepal
Package	Construction and Completion of Sewerage, Drainage, Road, Footpath and Road furniture works
Contract No.	RUDP/ICB/BRT/2
Location	Biratnagar Metropolitan City, Biratnagar
Consultant	Building Design Authority (P) LTD in Joint Venture With B.N. consultancy Pvt and PLUS Engineers and Architects (P) Ltd Kathmandu.
Date of Sign of Design and Supervision Consulting Service	28th August 2017
Date of Commencement of Design and Supervision Consulting Service	6th September 2017
Date of Completion	5th September 2020
Contractor	ZHONGHENG Construction Group International Engineering Co Ltd. Beijing, China.
Date of Agreement Made	10 th October 2017
Date of Commencement	2 nd November 2017
Date of Completion	1 st November 2019
Contract Amount including PS and VAT	NRs. 2,611,092,249.63
Progress	
Road Rehabilitation (Asphalt)	46.75%
Sewer Line	88.73%
Storm Drain	100.00%
Road Side Drain	103.31%



General Features	
Integrated Solid Waste Management (ISWM) Design	Inception Report as well as Stakeholder's Analysis, Communication Strategy and Consultation Plan for Integrated Solid Waste Management (ISWM) has already been submitted. Due to Socio Environment Problem, Progress of Integrated Solid Waste Management (ISWM) design has been hindered.
Physical Progress up to date	<p>With respect to Revised Work Program-01: Planned: 75.03%, Actual: 69.33%; Lead (+) or Lag (-) by (-) 5.70% Lag</p> <p>Physical progress lagging due to start of early monsoon, delay in IPC payment disbursement and shut down for relocation of electricity by NTC.</p>
Financial Progress up to date (<i>on the basis of IPC forwarded for disbursement</i>)	In Percentage: 59.65%, In Figure: NRs. 1,557,636,759.29 (including VAT and PS) up to IPC – 09.
	In Words: NRs. One Billion Five Hundred Fifty Seven Millions Six Hundred Thirty Six Thousand Seven Hundred Fifty Nine and Twenty Nine Paise Only.

3. SUMMARY OF PROGRESS STATUS OF ALL MAJOR COMPONENTS

S.No	Description	Unit	BoQ Quantity	Progress up to date	Remaining	Progress Status expressed in (%)	Remarks
1	Sewer Line						
a	HDPE/RCC	m	20,082.00	17,818.50	2,263.50	88.73%	
b	Manhole	No.	685.00	549.00	136.00	80.15%	
c	Sewer Inlet	No.	1,010.00	595.00	415.00	58.91%	
d	House Connection	No.	3,784.00	1,307.00	2,477.00	34.54%	
2	Storm Water Drain						
a	RCC Drain	m	652.80	585.00	0.00	100.00%	Revised Length =585m



S.No	Description	Unit	BoQ Quantity	Progress up to date	Remaining	Progress Status expressed in (%)	Remarks
b	Piles	No.	132.00	138.00	0.00	100.00%	Exceeded
3	Road						
a	Subgrade	m	73,860.00	44,359.41	29,500.59	60.06%	
b	Subbase	m	73,860.00	44,219.21	29,640.79	59.87%	
c	Base	m	73,860.00	38,242.22	35,617.78	51.78%	
d	Prime	m	73,860.00	34,530.14	39,329.86	46.75%	
e	Asphalt	m	73,860.00	34,530.14	39,329.86	46.75%	
4	Road Side Drain	m	26,050.00	26,911.19	(861.19)	103.31%	Exceeded quantity, as approval of VO-01 is under progress

3.1. SUB PROJECT COMPONENTS

3.1.1. SEWER LINES

Trunk Line T1 & T2 were already completed in STIUEIP (Secondary Town Integrated Urban Environmental Improvement Project) and remaining part of sewer lines in T4 completed and T3 have been identified and necessary survey and construction works are in progress. Almost all the lines were completed except some of T3 secondary sewer lines. Details of proposed sewer lines are as below: -



Table 1: PROPOSED ALL MAJOR COMPONENTS OF THE PROJECT

S. No.	Description	Unit	Original Quantity
1	Sewerage Pipe Supply and Installation	m	20,082.00
	Reinforced Concrete Pipe laying and jointing		2241.00
	Line T2 (Secondary)	m	206.00
	Line T3 (Trunk)	m	1905.00
	Line T4 (Trunk)	m	130.00
	HDPE laying and jointing	m	17,841.00
	Line T1 (Secondary)	m	1,825.00
	Line T2 (Secondary)	m	3,927.00
	Line T3 (Secondary)	m	9,997.00
	Line T4 (Secondary)	m	2,092.00
2	Manhole (Brick / RCC)	no.	685.00
3	Sewer Inlet	no.	1,010.00
4	House Connection	no.	3,784.00
5	Reinstatement of Roads	km	73.86
6	Road side Drain	Km	26.05
7	Storm Water Drain	m	652.8



Table: - 2 PHYSICAL PROGRESS IN SEWER LINES till date

SN	Description	BoQ		Up to Pre Month		This month		Total to date		Progress %
		Length (m)	Manhole (Nos.)	Length (m)	Manhole (Nos.)	Length (m)	Manhole (Nos.)	Length (m)	Manhole (Nos.)	
Hume Pipe:										
1	Hume pipe (T2)	206.00	6.00	205.00	6.00			205.00	6.00	
2	Hume pipe (T3)	1,905.00	58.00	1,536.50	22.00	96.00	3.00	1,632.50	25.00	
3	Hume Pipe (T4)	130.00	4.00	130.00	4.00			130.00	4.00	
Subtotal in (m)		2,241.00	68.00	2,067.50	39.00	96.00	3.00	1,967.50	35.00	
HDPE Pipe:										
1	HDPE (T1)	1,825.00	57.00	1,743.20	54.00			1,743.20	54.00	
2	HDPE (T2)	3,927.00	147.00	3,201.50	121.00	(48.10)		3,153.40	121.00	
3	HDPE (T3)	9,997.00	316.00	8,190.50	264.00	712.00	19.00	8,902.50	283.00	
4	HDPE (T4)	2,092.00	68.00	1,992.00	55.00	59.90	1.00	2,051.90	56.00	
Subtotal in (m)		17,841.00	588.00	15,127.20	494.00	723.80	20.00	15,851.00	514.00	



SN	Description	BoQ		Up to Pre Month		This month		Total to date		Progress %
		Length (m)	Manhole (Nos.)	Length (m)	Manhole (Nos.)	Length (m)	Manhole (Nos.)	Length (m)	Manhole (Nos.)	
Total		20,082.00	656.00	17,194.70	533.00	819.80	23.00	17,818.50	549.00	88.73%

SN	Description	BoQ (Nos.)	Up to Pre Month	This month	Total to date	Progress %
1	Sewer inlet	1,010.00	555.00	40.00	595.00	58.91%
2	House connection	3,784.00	1,211.00	96.00	1,307.00	34.54%



3.1.2. STORM WATER DRAIN

The storm water drain CN2, and CN3 has been provisioned in Regional Urban Development Project (RUDP). The Contractor has already completed the works except some minor works at inlet and outlet which have been stopped due to monsoon. The detail of the progress is shown in the table:

Table: 3 PROPOSED and PHYSICAL PROGRESS in STORM WATER DRAINS till date.

S N	Name of Drain	Length in m					Type of Drain	Work Completed				Length of Covered Drain in m	Remarks
		Origin al	Revised	Progress		Cum ulativ e		Brick		RCC			
				Previo us	This Month			m	m³	m	m³		
1	CN2-CN3 (Chyangh Baari Nala)	652.89	585	570	15	585	RCC, closed			585		585	completed
2	CN2-CN3 (Chyangh Baari Nala)	132 nos piles	138	138	0	138 nos.							Piling works completed

3.1.3. ROADS AND LANES

Most of the roads/lanes in Biratnagar are in a poor state due to lack of periodic maintenance, and need improvement where as some of the roads are graveled and would benefit from upgrading. In the areas where drainage and sewerage works are proposed there will be significant impact on the existing roads. The Project has considered on design based on reinstatement, rehabilitation and upgrading of existing roads length 73.86 km. Some of the roads of the project has been completed and some of them are in the process of being upgraded.

Out of 73.86 km. about 44.21 Km. has been attempted for Sub Base but due to early monsoon and lack of fund the Asphalt work is delaying.

About 34.53 km. Asphalt work is completed yet, progressing toward achieving more progress in this regard. The summary of physical progress is presented below: -



Table No:-4 PROPOSED and PHYSICAL PROGRESS of pavement works till date

SN	Road Number	Name of Road	Length in m					Work Completed					Remarks
			Original	Revised	Progress		Total	Sub-base	Base	Asphalt	RCC	Paint	
					Previous	This Month		m	m	m	m	m	
1	R42	Bhagwati Marg	218.00	218.00	218.00		218.00	218.00	218.00	123.00			
2	R5	College Road	970.00	970.00	650.00		650.00	650.00	650.00	599.20			
3	B2	Gauri Shankar Marg	2,777.83	2,777.83	2,152.00		2,152.00	2,152.00	2,152.00	2,152.00	210.00		
4	R65	Satghumti Marg	282.00	320.00	320.00		320.00	320.00	320.00				
5	R107		173.00	215.00	215.00		215.00	215.00	215.00				
6	R107 a		50.00	50.00	50.00		50.00	50.00	50.00				
7	R104	VIP Marg	273.00	273.00	273.00		273.00	273.00	273.00	273.00			
8	R8	Madhumara Marg	600.00	600.00	600.00		600.00	600.00	600.00	582.00			
9	B1	Kanchan Marg	1,172.94	1,173.00	1,173.00		1,173.00	1,173.00	1,106.00	1,106.00		1,106.00	
10	R21	Pratibha Marg	1,320.00	1,320.00	1,330.00		1,330.00	1,330.00	1,330.00	1,330.00		1,012.80	
11	B3	Keshaliya Marg	1,574.00	1,574.00	1,574.00		1,574.00	1,574.00	1,574.00	1,574.00			



SN	Road Number	Name of Road	Length in m					Work Completed					Remarks
			Original	Revised	Progress		Total	Sub-base	Base	Asphalt	RCC	Paint	
					Previous	This Month							
12	S13		1,617.00	1,617.00	1,417.00	200.00	1,617.00	1,617.00	1,417.00	1,417.00		1,812.60	
13	R12	Kanchha Dai Marg	1,192.00		1,297.00		1,297.00	1,297.00	1,297.00	897.00			
14	Rani site	Rani	4,023.00	4,023.00	2,450.40	1,572.60	4,023.00	4,023.00	4,023.00	4,023.00			
15	R16	Satya Marg	604.00	604.00	604.00		604.00	604.00	604.00	542.10			
16	R26	Pasang Marg	617.00	654.00	654.00		654.00	654.00	654.00	654.00			
17	R28	Pustakalaya Marg	635.00	635.00	635.00		635.00	635.00	635.00	339.20			
18	R27	Peepal Marg	810.00	810.00	734.32		734.32	734.32	734.32	734.32		639.20	
19	R25	Devi Marg	599.00	580.00	580.00		580.00	580.00	580.00	561.70			
20	R24	Prabhat Marg	384.41	380.00	518.15		518.15	518.15	518.15	518.15			
21	R37	Banglamukh i Marg	420.00	477.00	477.00		477.00	477.00	477.00	477.00			
22	R7	Manakaman a Marg	814.00	814.00	542.00		542.00	542.00	542.00	242.00			
23	R30	Shanti Marg	212.00	212.00	123.10		123.10	123.10	123.10	123.10			



SN	Road Number	Name of Road	Length in m					Work Completed					Remarks
			Original	Revised	Progress		Total	Sub-base	Base	Asphalt	RCC	Paint	
					Previous	This Month		m	m	m	m	m	
24	R9	Fadindra Marg	123.00	123.00	119.00		119.00	119.00	119.00	119.00			
25	S11	Samrat Marg	660.00	660.00	660.00		660.00	660.00	504.60	504.60		504.60	
26	R22	Amar Marga	373.10	367.65	367.65		367.65	367.65	367.65	367.65			
27	R29	Shanti Marg	620.00	620.00	684.70		684.70	684.70	684.70	684.70		585.60	
28	R36	Gaurav Marg	218.00	218.00	220.00		220.00	220.00	220.00	220.00		440.00	
29	R33	Tarun Marg	285.00	285.00	280.00		280.00	280.00	280.00	280.00			
30	R64	Satya Narayan Marg	121.00	121.00	121.00		121.00	121.00	121.00	-			
31	R8		-	225.00	225.00		225.00	225.00	225.00	225.00			
32	N36		-	190.00	190.00		190.00	190.00	186.95	186.95			
33	R188	Shakti Marg	-	120.00	120.00		120.00	120.00	120.00	120.00			
34	R2	Main Road	-	-	1,085.00		1,085.00	1,085.00	350.00	350.00		350.00	



SN	Road Number	Name of Road	Length in m					Work Completed					Remarks
			Original	Revised	Progress		Total	Sub-base	Base	Asphalt	RCC	Paint	
					Previous	This Month		m	m	m	m	m	
35	T3 Line 6A	Pandit Meghnath Marg	-	220.00	220.00		220.00	220.00	220.00	220.00			
36	T2 Line 24C	Nava Jyoti Marg	-	205.00	205.00		205.00	205.00					
37	T2 Line 24D	Nava Jyoti Marg	-	210.00	210.00		210.00	210.00					
38	R63 (DSP Road)	DSP Road	420.00	420.00	420.00		420.00	420.00	395.00	395.00			
39	R90	Shakti Marg	450.00	320.00	320.00		320.00	320.00	320.00	320.00		640.00	
40	R77	Arniko Marg	80.00	80.00	80.00		80.00	80.00	80.00	80.00			
41	R76	Mitra Marg	270.00	270.00	270.00		270.00	270.00	270.00	270.00		541.20	
42	R183	Nava Jyoti Marg	240.00	240.00	240.00		240.00	240.00	220.00	220.00			
43	T1 L16B	Xenial Front	210.00	210.00	210.00		210.00	210.00	205.00	205.00			
44	T1L16A	Xenial South	140.00		180.00		180.00	180.00	180.00	180.00			
45	R114	Dharanidhar Marg	560.00	560.00	560.00		560.00	560.00	560.00	560.00		560.00	



SN	Road Number	Name of Road	Length in m					Work Completed				Remarks	
			Original	Revised	Progress		Total	Sub-base	Base	Asphalt	RCC		Paint
					Previous	This Month							
46	R113	Kavi Lekh Marg	740.00	740.00	740.00		740.00	740.00	740.00	740.00			
47	R5a		370.00	370.00	370.00		370.00	370.00	370.00	370.00			
48	Rani site B		600.00	520.00	520.00		520.00	520.00	520.00	520.00			
49	R3	Dharamban Marg	-	2,230.00	2,233.00		2,233.00	2,233.00	2,150.30	2,150.30		2,080.30	
50	R78	Sombare - Highway	92.00	92.00	92.00		92.00	92.00	92.00	92.00			
51	R84	West of school	673.00	235.00	473.20		473.20	473.20	236.00	236.00			
52	R85	Machha Line	153.00		160.00		160.00	160.00	160.00	160.00			
53	R87	Mahabir Chowk	150.00	148.00	148.00		148.00	148.00	110.00	110.00			
54	R86	Petrol pump side -R12			293.00		293.00	293.00	293.00	293.00			
55	R11	R18/R86	281.00	281.00	281.00		281.00	281.00	205.00	205.00			
56	N3	Jatuwa	120.00	117.00	117.00		117.00	117.00					
57	N4	Jatuwa	170.00	168.00	168.00		168.00	168.00	168.00	168.00			



SN	Road Number	Name of Road	Length in m					Work Completed				Paint	Remarks
			Original	Revised	Progress		Total	Sub-base	Base	Asphalt	RCC		
					Previous	This Month		m	m	m	m	m	
58	R10	Ram Marga	1,092.00	1,092.00	292.00		292.00	292.00	292.00	292.00		853.20	
59	T2L26F	APF	61.50	61.50	55.00		55.00	55.00					
60	T2L27		80.00	80.00	80.00		80.00	80.00	80.00	80.00			
61	R122		265.55	265.55	265.55		265.55	265.55	265.55	265.55		497.40	
62	N9		220.42	220.42	220.42		220.42	220.42	220.42	220.42			
63	R17		610.06	610.06	365.00		365.00	365.00	365.00	365.00		730.00	
64	R18		465.78	465.78	370.00		370.00	370.00	370.00				
65	N2		75.84	75.84	75.84		75.84	75.84					
66	T3L6	Moti marga			170.00		170.00	170.00	170.00	170.00			
67	T3L6	Elite club - CDO Office			107.00		107.00	107.00					
68	T3L6	Balmandir - Ganesh Mandir			380.00		380.00	380.00					



SN	Road Number	Name of Road	Length in m					Work Completed				Paint	Remarks
			Original	Revised	Progress		Total	Sub-base	Base	Asphalt	RCC		
					Previous	This Month		m	m	m	m	m	
69	T3L6	CDO Office front			49.40		49.40	49.40					
70	T3L6A	Golchha Marga			220.00		220.00	220.00	220.00	220.00			
71	T3L23	Madhumara road			421.00	120.00	541.00	541.00	541.00	541.00		358.40	
72	R45	Bata road			505.00		505.00	505.00	295.00	295.00			
73	T3L21				400.00		400.00	400.00	400.00	400.00		774.00	
74	N5				70.00		70.00	70.00	70.00	70.00		122.00	
75	T3L39				400.00		400.00	400.00	400.00	400.00		491.00	
76	T3L39A				130.00		130.00	130.00	130.00	130.00		179.40	
77	T3L39B				80.00		80.00	80.00	80.00	80.00		117.60	
78	R68 - T2L24G				220.00		220.00	220.00					
79	N10				194.00		194.00	194.00					
80	T3L24C				170.00		170.00	170.00					



SN	Road Number	Name of Road	Length in m					Work Completed				Remarks	
			Original	Revised	Progress		Total	Sub-base	Base	Asphalt	RCC		Paint
					Previous	This Month		m	m	m	m		m
81	T3L9				278.00		278.00	278.00					
82	R6				1,228.20		1,228.20	1,228.20	935.20	935.20			
83	N24				136.00		136.00	136.00	136.00	136.00			
84	R31				188.70		188.70	188.70	188.70	188.70			
85	Bindabas ini Marga				352.28		352.28	352.28	352.28	352.80			
86	Bhattimo de to Hartaliha at				166.50		166.50	166.50	166.50	166.50			
87	R73				217.00		217.00	217.00	217.00	217.00			
88	R6	Bata Galli			269.00		269.00	269.00	269.00				
89	R9 (R41- R7)				194.80		194.80	194.80	194.80				
90	R44	Thakur Bari Road			357.50		357.50	357.50					
91	R102	Main			140.00		140.00	140.00	140.00				



SN	Road Number	Name of Road	Length in m					Work Completed					Remarks
			Original	Revised	Progress		Total	Sub-base	Base	Asphalt	RCC	Paint	
					Previous	This Month		m	m	m	m	m	
92	R102	Branch			71.30		71.30	71.30					
93	R103				170.40		170.40	170.40					
94	R32				188.00		188.00	188.00	188.00				
95	T2L18Y				116.20		116.20	116.20					
96	R20				108.00		108.00	108.00					
97	R82	Everest School				530.00	530.00	530.00	530.00				
98	T1L5					140.00	140.00	140.00					
99	T3L23C	Jay Nepal			65.20	155.00	220.20	80.00	75.00				
100	T3L25B					195.00	195.00	195.00					
101	T3L25C					140.00	140.00	140.00					
102	R3	T3 Trunk				465.00	465.00	465.00					



SN	Road Number	Name of Road	Length in m					Work Completed				Remarks	
			Original	Revised	Progress		Total	Sub-base	Base	Asphalt	RCC		Paint
					Previous	This Month		m	m	m	m		m
103	Nag Mandir to R3					55.00	55.00	55.00	55.00	55.00			
104	R75					130.00	130.00	130.00	130.00	130.00			
	Total		32,328.43	33,733.63	40,656.81	3,702.60	44,359.41	44,219.21	38,242.22	34,530.14	210.00	14,395.30	



Table No:-4.1 Footpath (Work Progress till date)

SN	Road Number	Name of Road	Type*	Category		Length in m					Footpath		Remarks
						Original	Revised	Progress		Cumulative			
				<3m	>3m			Previous	This Month		m	m²	
1	B2	Gauri Shankar Marg	Precast block			2,777.83	2,777.83	1,700.00		1,700.00	1,700.00	3,888.96	
2	S11	Bhatta Chowk to Sankhar Chowk	Precast block			900.00	900.00	300.00		300.00	300.00	270.00	
3	B3 (3)	Keshaliya Road	Precast block					500.00		500.00	500.00	1,200.00	
4	R16	Jatuwa	Precast block					400.00		400.00	400.00	440.00	
5	R21		Precast block					230.00	50.00	280.00	280.00	280.00	
6	Rani		Precast block						850.00	850.00	850.00	510.00	
7	R6	Pratibha to pipal chowk	Precast block						154.00	154.00	154.00	77.00	



Table No:-4.2 Road improvement Works (Work Progress till date)

SN	Description	Unit	Proposed	Total Up to Previous Month	This Month	Total Up to this Month	Progress
1	Subgrade	m	73,860.00	40,656.81	3,702.60	44,359.41	60.06%
2	Sub Base	m	73,860.00	40,656.81	3,562.40	44,219.21	59.87%
3	Base	m	73,860.00	35,321.82	2,920.40	38,242.22	51.78%
4	Prime/Tack	m	73,860.00	30,088.82	4,441.32	34,530.14	46.75%
5	Asphalt	m	73,860.00	30,088.82	4,441.32	34,530.14	46.75%
6	Paint	m	73,860.00	14,395.30	-	14,395.30	19.49%



3.1.4. ROAD SIDE DRAIN

Most of the roads under this project for upgrading is without drain or existing drain in poor condition. The project has provisioned drain at both sides or one side as per the RoW of the road. The contractor has already started drain works at many locations. The progress for the drain works is listed below:

Table No:-4a PROPOSED and PHYSICAL PROGRESS of Road side drain works till date.

SN	Road Number	Name of Road	Length in m					Work Completed		Remarks
			Original	Revised	Progress		Total	Brick	RCC	
					Previous	This Month		m	m	
1	B1	Kanchan Marg	-	-	90.00		90.00	90.00		
2	R29	Shanti Marg	270.00		256.52		256.52	256.52		
3	N36				185.88		185.88	185.88		
8	S13	Udaya Marga	-	158.10	158.10		158.10	158.10		
9	N33		-	70.00	70.00		70.00	70.00		
10	R28	Pustakalaya Marg	340.00	278.00	278.00		278.00	278.00		
11	R90	Shakti Marg	320.00		313.25		313.25	313.25		
12	R114	Dharanidhar Marg	-	312.33	312.33		312.33	312.33		
13	R11	Om Shiv Marg	-		225.17		225.17	225.17		
14	R18		-	382.50	381.50		381.50	381.50		
15	R17		-		75.00		75.00	75.00		
16	R113	Kavi Lekhnath Marg	-	312.45	72.45		72.45	72.45		
17	R77	Arniko Marg	97.00		80.00		80.00	80.00		
18	R76	Mitra Marg	272.00	275.00	270.00		270.00	270.00		



SN	Road Number	Name of Road	Length in m					Work Completed		Remarks
			Original	Revised	Progress		Total	Brick	RCC	
					Previous	This Month		m	m	
19	N9	Devi Marga	-		22.70		22.70	22.70		
20	N4		-	170.00	146.38		146.38	146.38		
21	R33	Tarun Marg	-	265.00	264.48		264.48	264.48		
22	R36	Gaurav Marg	218.00		216.45		216.45	216.45		
23	R86	Janpath Marg	215.00		187.55		187.55	187.55		
24	R183	Nava Jyoti Marg	242.00		211.05		211.05	211.05		
25	R7a		77.81		65.00		65.00	65.00		
26	Rani site	Rani B	-	650.00	530.00		530.00	530.00		
27	Rani site	Rani A	-	300.00	270.00		270.00	270.00		
28	N3		-		110.00		110.00	110.00		
29	N5		-		65.00		65.00	65.00		
30	R21	Binayak Marga	-	390.00	388.25		388.25	388.25		
31	R2	Main Road	2,060.00	2,060.00	1,972.50		1,972.50	1,972.50		
32	T1L16B	Xenial Front	-		205.68		205.68	205.68		
33	T1L16A	Xenial South	-	160.00	150.20		150.20	150.20		
34	R75	Tintoliya Marga	135.00	135.00	127.50		127.50	127.50		
35	R122	Amar Marga	-		250.48		250.48	250.48		
36	R18 Branch		-	30.00	30.00		30.00	30.00		



SN	Road Number	Name of Road	Length in m					Work Completed		Remarks
			Original	Revised	Progress		Total	Brick	RCC	
					Previous	This Month		m	m	
37	R7(b)(Neuro to sidhartha chowk)	Siddhartha Marga	317.00	317.00	300.00	30.00	330.00	330.00		
38	R12	Sukra Path	-		290.00		290.00	290.00		
39	R42	Jahada Marga	-		171.00		171.00	171.00		
40	R6	Shahi Marg	460.00		760.00		760.00		760.00	
41	R21(a)	DharamBadh Junction	-	160.00	80.00		80.00	80.00		
42	R78	Binayak Marga	92.00	70.00	70.00		70.00	70.00		
43	R188	Shakti Marg		120.00	115.60		115.60	115.60		
44	R40	Brahma Kumari Marga	-		350.00		350.00	350.00		
45	Rani Site C		-	100.00	97.50		97.50	97.50		
46	Ranit Site D		-	131.45	131.45		131.45	131.45		
47	T3L21	Moti Marga	380.00	380.00	360.95		360.95	360.95		
48	T3L39	Gaheli Marga	-	278.00	270.00		270.00	270.00		
49	T3 Line 39A		-	90.00	90.00		90.00	90.00		
50	T3 L39B		-	-	90.00		90.00	90.00		
51	T2L27	Bhumi Prashasan Junction	92.00	80.00	79.50		79.50	79.50		
52	T4 Line 1	Sailesh Marg	-	197.00	100.00		100.00	100.00		
53	N2				95.00		95.00	95.00		



SN	Road Number	Name of Road	Length in m					Work Completed		Remarks
			Original	Revised	Progress		Total	Brick	RCC	
					Previous	This Month		m	m	
54	T2 Line 26E	College Road	80.00	80.00	90.00		90.00	90.00		
55	T2 Line 18C	Maisthan Marga	-	105.00	102.00		102.00	102.00		
56	T2Line 18A	Makalu Marga	90.00		60.00		60.00	60.00		
57	R6 (T3L11i)		-	275.00	247.50		247.50	247.50		
58	R9 (T3L11k)	Tathasthu Marga	-	200.00	180.00		180.00	180.00		
59	R45 (T3Line10D)	Dadhiram Marga	302.00	302.00	260.00		260.00	260.00		
60	R9, T2 L19	Fanindra Marga	256.00	256.00	245.00	75.00	320.00	320.00		
61	R7c (Neuro to Shanti Chowk	Siddhartha Marga	240.00		305.00		305.00	305.00		
62	R84	School Marga	673.00		663.00		663.00	663.00		
63	R85	Lekhanath Marga	162.00		150.00		150.00	150.00		
64	R87	Byas Marga	160.00		150.00		150.00	150.00		
65	Rani B (Bus park)		-	120.00	90.00		90.00	90.00		
66	R8(a)	Madhumara Marg	218.00		285.00		285.00	285.00		
67	T3L23A		263.47	263.47	100.00		100.00	100.00		
68	Rani E		85.00	85.00	85.00		85.00	85.00		
69	R102	Hamro Marg			132.50		132.50	132.50		
70	R10/R10a	Ram Marga	1,092.41		740.36		740.36	740.36		



SN	Road Number	Name of Road	Length in m					Work Completed		Remarks
			Original	Revised	Progress		Total	Brick	RCC	
					Previous	This Month		m	m	
71	N10	APF	154.48	154.48	150.00		150.00	150.00		
72	R23	Bani Marg	226.12	226.12	200.00		200.00	200.00		
73	R103	Vibuti Marga	173.00	173.00	162.50		162.50	162.50		
74	T3L6	Sahid Marga		350.00	350.00		350.00	350.00		
75	P1, T3L6A	Pandit Meghnath Marga	280.00	280.00	260.00		260.00	260.00		
76	T2 L24C & D	Hanuman Das Marga	176.93	176.93	130.00		130.00	130.00		
77	R99	APF	187.00	187.00	187.00		187.00	187.00		
78	T2 L25		409.00	409.00	150.00		150.00	150.00		
79	R20		190.00	190.00	60.00		60.00	60.00		
80	T2L24F		120.00	120.00	60.00		60.00	60.00		
81	R105		168.19	168.19	150.00		150.00	150.00		
82	R34	Prabhu Marg	151.00	151.00	158.35		158.35	158.35		
83	R35	Garima Marg	138.00	138.00	138.00		138.00	138.00		
84	R107		180.00	180.00	160.00		160.00	160.00		
85	T3L13D		80.00	80.00	70.63		70.63	70.63		
86	T3L13E		70.00	70.00	62.40		62.40	62.40		
87	T3L11E		160.00	160.00	110.00		110.00	110.00		



SN	Road Number	Name of Road	Length in m					Work Completed		Remarks
			Original	Revised	Progress		Total	Brick	RCC	
					Previous	This Month		m	m	
88	B2				76.50		76.50	76.50		
89	R78				35.00		35.00	35.00		
90	R7b				288.50		288.50	288.50		
91	T3L21A				25.00		25.00	25.00		
92	R74				96.00		96.00	96.00		
93	R46				120.00		120.00	120.00		
94	R101				160.00		160.00	160.00		
95	T3L7A				125.00		125.00	125.00		
96	T3L8				75.00		75.00	75.00		
97	R20				100.00		100.00	100.00		
98	R5				200.00		200.00	200.00		
99	R67				110.00		110.00	110.00		
100	R82				350.00		350.00	350.00		
101	T1L13A				100.00		100.00	100.00		
102	T1L14A				150.00		150.00	150.00		
103	R68				200.00		200.00	200.00		
104	T3L22A				250.00	50.00	300.00	300.00		
105	T3L22B				120.00		120.00	120.00		



SN	Road Number	Name of Road	Length in m					Work Completed		Remarks
			Original	Revised	Progress		Total	Brick	RCC	
					Previous	This Month		m	m	
106	T3L25C				130.00		130.00	130.00		
107	T3L11B				60.00		60.00	60.00		
108	T3L11M				50.00		50.00	50.00		
109	R106				70.00		70.00	70.00		
110	R41				520.00		520.00	520.00		
111	T2L19B				110.00		110.00	110.00		
112	R30				180.00		180.00	180.00		
113	T3L13C				100.00	50.00	150.00	150.00		
114	T3L13J				72.53		72.53	72.53		
115	T2L18Y				100.00		100.00	100.00		
116	T2L19P				114.38		114.38	114.38		
117	T2L19Q				126.55		126.55	126.55		
118	R9A				208.73		208.73	208.73		
119	R9B				25.00		25.00	25.00		
120	T3L7	Sahid Marga			355.00		355.00	355.00		
121	T2L18K				40.00		40.00	40.00		
122	T3L23C				65.00	40.00	105.00	105.00		
123	T2L24E	Mahabir Marga			60.00		60.00	60.00		



SN	Road Number	Name of Road	Length in m					Work Completed		Remarks
			Original	Revised	Progress		Total	Brick	RCC	
					Previous	This Month		m	m	
124	R44				390.00		390.00	390.00		
125	R110				150.00		150.00	150.00		
126	Parichaya Marga				100.00	30.00	130.00	130.00		
127	T3L25B				200.00		200.00	200.00		
128	T1L5, 5A				590.00		590.00	590.00		
129	R82				110.00		110.00	110.00		
130	T2L19Y				100.00	50.00	150.00	150.00		
131	T3 Trunk	Sahid & Sanihat Marga			495.00	25.00	520.00	520.00		
132	T2L19F				55.00		55.00	55.00		
133	T2L18D				20.00		20.00	20.00		
134	R19				100.00	75.00	175.00	175.00		
135	R83	Shiva Marga			120.00	5.00	125.00	125.00		
136	T310B, T3L7D (R46)	Rangeli Road			250.00	70.00	320.00	320.00		
137	T3L19G				-	30.00	30.00	30.00		
138	R4	Jatuwa Marga				25.00	25.00	-	25.00	
	Total				26,356.19	555.00	26,911.19	26,126.19	785.00	



3.2. ENVIRONMENTAL ASPECT

The environment has been defined to mean surrounding area including human and natural resources to be affected by execution and after completion of works. The Contractor shall take all precautions for safeguarding the environment during the course of the construction of the works. He shall abide by all prevalent laws, rules and regulations governing pollution and environmental protection mitigation measure specified in the latest publication of “Environmental Management Guidelines” published by the GoN and Projects Environmental management plan.

The Contractor shall prohibit employees from unauthorized use of explosives, poaching wildlife and cutting trees. The contractor shall be responsible for the action of his employees. Environmental protection works, among others, shall also include the following.

3.2.1. BORROW/ QUARRY SITES

The engineer shall have the power to disallow the method of construction and / or the use of borrow or quarry area, if in this opinion, the stability and safety of the works or any adjacent structure is endangered, or there is undue interference with the natural or artificial drainage or the method or use of area will promote undue erosion.

Since the contractor has made agreement for the supply of required materials from the crusher, no approval for quarry and borrow sites are required till date.

3.2.2. DISPOSAL OF SPOIL AND CONSTRUCTION WASTE

Material excess of the requirements for permanent works and unsuitable materials shall be disposed off in location and in the manner as agreed with the Engineer. The location of disposal site shall be such as not to promote instability, destruction of properties and public service system. Exposed area of such disposal site shall be suitably dressed and be planted with suitable vegetation.

The contractor has already provided the safe tipping sites and the excess materials are dumped as per the approved tipped sites. Spoil and construction wastes are disposed at Madhumara site and excess construction materials are stocked at Madhumara site and at the open space at north of Degree College- (Rani Site)

Provision for maintenance of Camps/Office/Stores/Equipment.

This section describes about the works related to maintenance and upgrading of labor camps, contractor's employees camp, contractor's site office, contractor's equipments store yards, contractor's equipment store yards, contractor's precast production yards. The camp should have the proper roofing system. Besides that, it should be spacious, should have proper circulation of the fresh air, should be hygienic, and should have proper electric lightening system & water supply system. It should be neat and clean.

Labor camps are provided at various locations as per requirement and these sites are frequently visited and monitored. The condition is found to be satisfactory. The details of the labor camp is provided in annex.

3.2.3. PROVISION AND MAINTENANCE OF TOILETS

Provision of toilets for labor and employees shall be made to avoid public nuisance as well as pollution of water courses and air. The Contractor shall construct suitable septic tanks and soak pit along with rooms for pit type latrines. Sufficient water must be provided and maintained in the toilets.



Toilets have been provided at each labor camp. The contractor has been instructed to improve the toilet conditions where required.

The numbers of toilets in each camp is also attached hereby in annex. Toilets in all the camps are found to be in the acceptable condition.

3.2.4. CRUSHING PLANTS

Crushing plants shall be located away from the population centers, water intakes, and should not disturb the sensitive echo system. Suitable dust control device should be fitted with crusher to control emission of dust from plant. The crusher plant is located at around 42 km north-east of Biratnagar at a place called Chis yang.

3.2.5. ASPHALT PLANTS AND BATCHING PLANTS

Hot mix plant and batching plant shall be located away from the population centers. The Contractor shall take every precaution to reduce levels of noise, vibration, dust and emission from his plants. No Bituminous material shall be discharged in to drains, nearby trees vegetation; property shall be protected during spray of bitumen etc.

As the concrete quantity of the project is very minimal, there is no need of the separate batch plant for concrete mixing. However, as there are a lot of asphalt concrete works to be done in the project, a separate asphalt plant has been installed, especially for the project, at around 6 Km south of the Biratnagar DSC office at a place called Rani.

3.2.6. OCCUPATIONAL HEALTH AND SAFETY MEASURES

The contractor shall provide personnel protective equipment (PPE) (Helmet, Boots, masks, gloves, jacket, protective glasses etc.) to use. Public notification, safety and warning signs and informative signboards in working sites for work safety shall be provided. The DSC engineer and DSC Environmental safeguard expert supervise and monitor the use of PPEs and other necessary safety measures regularly.

The project is the environmental improvement project and mainly constitutes sewerage and drainage improvement works in BMC besides others. As per ADB guide-lines on Environmental Assessment requirements, this project is classified as Environment Category B. According to Environmental Protection Regulation-2054BS, First Revised (2055 BS) schedule-3, IEE is required for Operations of Sewerage Schemes under Schedule 1.h.2.e (pertaining to Rule3). The final report was submitted to MoUD on 14th May, 2013 and has already been approved.

Installation of functioning sewers and functioning drainage system including roads/lanes improvement in BMC does not possess any adverse environmental impacts to its surrounding. In fact, these will greatly enhance the living conditions/hygiene of the inhabitants and facilitate transportation. Nevertheless, it is imperative to look into positive as well as negative impacts of such infrastructure development works in the urban area.

Training and awareness program regarding health, safety and disease at labour camps and yards on 3 and 4 March 2018 by Safety Prevention Officer Er. Dhiraj Sardar.

A regular monitoring visit by DSC was carried out and a standard site specific environmental monitoring checklist was used to record the present status of the project to verify if work has been done as per EMP Guidelines. A sample of environmental checklist is attached herewith as Annex.



3.3. SOCIAL ASPECT

Regional Urban development Project (RUDP) in Biratnagar has implemented to improve the quality of life and help to achieve higher and more socially inclusive economic growth of people through effective, efficient, and reliable delivery of improved and affordable municipal services. Infrastructure development of drainage and sewerage system as well as roads and lane improvement are the major components of RUDP in Biratnagar Metropolitan City (BMC). Establishment and functioning of Social Safeguard Desk in PIU is a major milestone of social development aspect which has been effective to address all social/community development issues and concerns with active initiation of the DSC. Local labors have been deployed in civil construction works (i.e. in Road side drain / Sub grading works). The Engineer has issued the format of Social Safeguard Monitoring plan which is attached here with.

3.4. SAFEGUARD/ GESI COMPONENT

3.4.1. COMMUNITY AWARENESS:

Conduct regular Community Awareness Consultations within Project Areas to build awareness on Project Objectives, Activities and implementation during site observation, Monitoring and Meetings. Different site visit has been conducted during May, 2018 such as DDC Pre cast yard, Chyangbari Naala Biratnagar-16, Asphalt work at Sai Marg, Sewer Line construction work at Hanumandas Road and Asphalt Plant at Rani Site. Except of Minor, no any major conflict has been found during construction work. The visit was conducted jointly with Environment Safeguard Expert and Social Safeguard Expert. Before commissioning of any works at any stretches, we paste the information templates at certain interval and provide sufficient information to the users regarding it.

3.4.2. GRIEVANCE REDRESSES MECHANISM:

Although many grievances were received verbally, only 9 grievances have been registered formally which have immediately been addressed and resolved. This month, some grievances for some stretches were received verbally and were addressed immediately.

3.4.3. GENDER EQUITY AND SOCIAL INCLUSION (GESI):

Activities related to GESI has been monitored and supervised in all Construction sites. During site visit female workers were found in significant minority (7 numbers) at Construction sites, thus Contractor was instructed as follow:

- i. Encourage to Local female Employment as Labor and skilled man power.
- ii. Manage separate Camp and necessary facilities for female workers to encourage of female Employment.

Camps and construction sites are regularly been monitored to find the status of working force.



3.4.4. STATUS OF SOCIAL AND ENVIRONMENTAL SAFEGUARD MEASURES

The present status to this regard has been reported as below:

During the site visit for Socio Environment monitoring by DSC Environmental and Social Safeguard Expert on date 1st, 2nd and 3rd December, 2018 following issues were found. Social Safeguard revisited the site on 29th, 30th and 31st December.

- i. Efforts are being made to control dust emission at construction site by sprinkling water. As personal safety was given prime importance, construction workers were made to use helmet, globe and jacket while on the construction site.
- ii. Besides that, special attentions were given on the placement of safety board and traffic signboards, safety tools, barricades, tapes, etc. and special care were taken to make sign boards big enough to make them visible from distant.
- iii. Taking into consideration of the fact that the involvement of the significant numbers of female as employee in ADB project is the main project objective of ADB, contractor paid especial attention to have a separate toilet and separate labor camp for female that facilitates and encourages female to get work in the construction field.
- iv. Significant improvement was found to be done in health and sanitation issues in the labor camp than in the previous monitoring visit; like, quality and quantity of drinking water was improved and condition of toilet was found to be enhanced. However, to meet the sanitation condition to predetermined level, further instructions were given by contractor to make provision for sufficient water in toilet and soap for hand-wash. Furthermore, yard in charge was suggested to have sufficient medications, bandages and other necessary first aid equipments.

The implementation of Social and Environmental Safeguard measures during this month was found partially satisfactory. The contractor has conducted water quality test and the report is attached in the Annex.

3.4.5. STATUS OF RELOCATION OF SERVICES

Electric poles were relocated at R7, R12, R6 and R31, etc as per shut down schedules. Similarly, relocation of water supply pipe lines was done at T3L10, T3 Trunk and Thakur Bari Road, etc and where required the supply has been provided temporarily.

Table – 5: Status of Labor at Site

Labour class	Labour		Composition		Ethnic composition				
	Skilled	Unskilled	Male	Female	Janjati	Dalit	Muslim	Madhesi	Brahmin/Chhetri
Local	55	228	284	0	33	53	11	192	0
Non local	44	206	240	0	61	36	30	116	0
Indian	0	0	0	0	0	0	0	0	0
TOTAL	99	434	524	0	94	89	41	308	0



3.5. FINANCIAL PLAN

The Sub-project cost will be disbursed in three years starting from FY2074/2075 to 2076/2077

3.5.1. DISBURSEMENT RECORDS IN CONSTRUCTION

Table – 6: DISBURSEMENT RECORDS in CONSTRUCTION

S.No	Description	Submission date	Submitted Amount(NRs)	Remarks
1	IPC 01	15 th October 2017	339,105,000.00	Mobilization Advance
2	IPC 02	2 nd April 2018	261,501,492.21	
3	IPC 03	1 st July 2018	316,582,708.58	
4	IPC 04	1 st October 2018	105,227,887.17	
5	IPC 05	2 nd December 2018	95,951,603.44	
6	IPC 06	3 rd January 2019	264,937,394.99	
7	IPC 07	12th April 2019	313,626,008.32	
8	IPC 08	9th May 2019	107,934,623.02	
9	IPC 09	10th June 2019	91,875,041.56	
Total amount excluding PA & Mobilization advance till date =			1,557,636,759.29	

4. OBJECTIVES AND SCOPE OF WORKS

4.1. OBJECTIVES

The following are the expected physical infrastructure improvement outputs of the project in Biratnagar:

- Drainage and sewerage systems improvement.
- Urban roads and lanes improvement.

Reference to the deliverables identified in the Project, indicates that there are a number of deliverables related specifically to the design aspects of the above infrastructure improvements with construction works.

4.2. SCOPE OF WORKS

The scope of works for consultant's services is fairly detailed in the TOR attached with contract Agreement. The main points are summarized below:



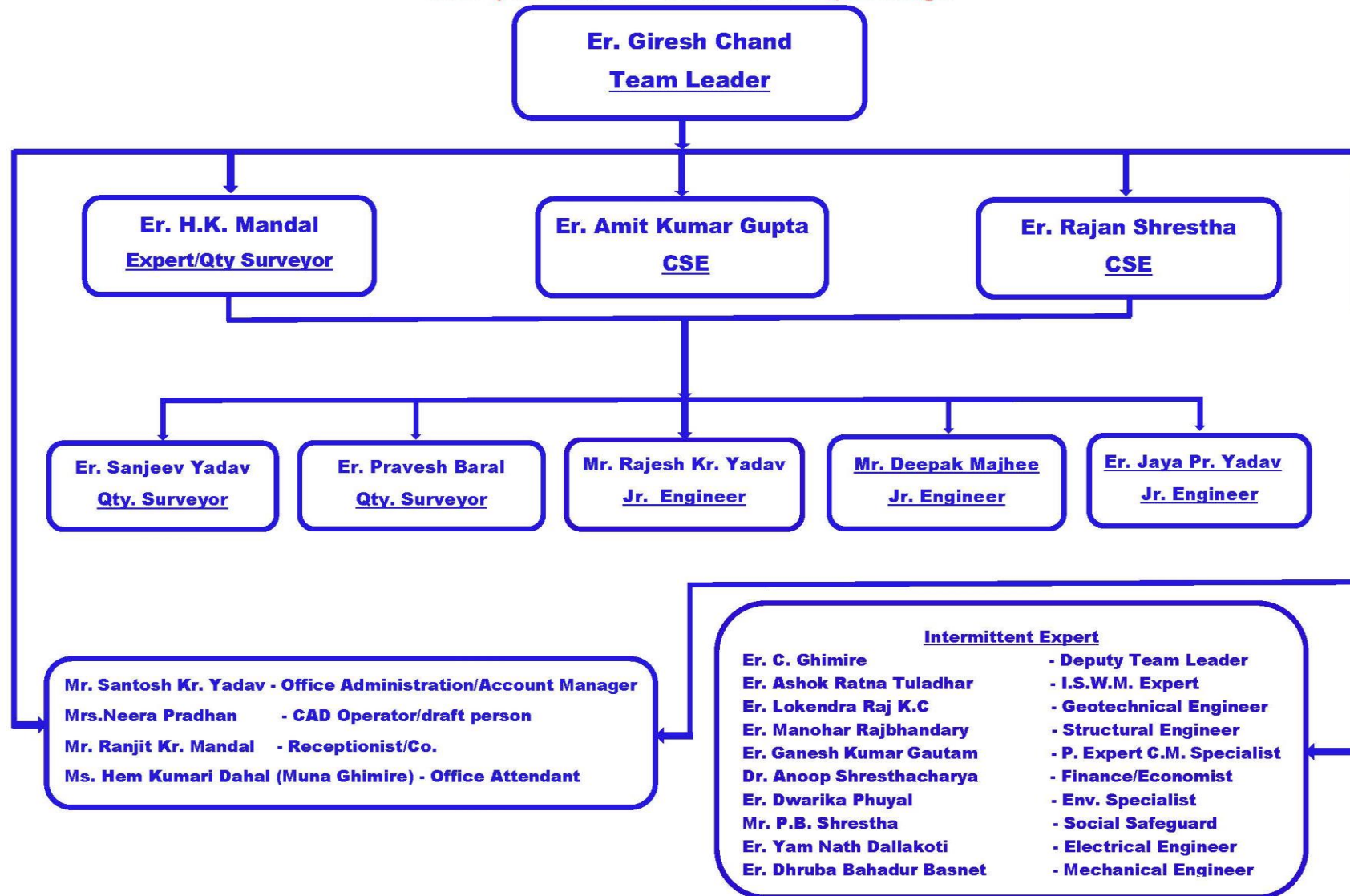
- Detailed Design and Procurement Assistance Phase for integrated solid waste management design (ISWM)
- Monthly progress report and quarterly progress report.
- Semi- annual Environmental monitoring report.
- Semi-annual Safeguard monitoring report.
- Annual progress report including annual Environmental / Social safeguard monitoring report, assets.
- Detailed draft final report for our puts, including to assist the PIU (Employer), status of all supervision and construction works issues, all deliverables under the contacts.
- Sub project completion report, and summary of all other reports, progress and issues under the project.



4.3. ORGANIZATION AND STAFFING

Attached



ORGANIZATION CHART**RUDP (ADB Loan No - 47252 Site Office, Biratnagar)**

4.4. CONSULTANT'S ACTIVITIES IN CONSTRUCTION PHASE

The current staffing of the consultant at project site is as follows:

Table 7: CONSULTANT'S STAFF at Project Site, Biratnagar

SN	Name	Designation	Joining date	Remarks
1	Giresh Chand	Team Leader	6 th Sep 2017	
2	Ashok Ratna Tuladhar	ISWM (Designer)	6 th Sep 2017	Intermittent
3	Dwarika Phuyal	Environmental Safeguard Expert	1 Nov 2017	Intermittent
4	Prakash Bhakata Shrestha	Social Safeguard Monitoring Expert	26 th dec-2017	Intermittent
5	Hare Krishna Mandal	Expert/Quantity surveyor	1 st Nov 2017	
6	J.P Yadav	Construction Supervision Engineer	1 st March 2018	Discontinued the service since 25 th April, 2018.
7	A.K Gupta	Construction Supervision Engineer	1 st March 2018	
8	Nishant K.C.	Construction Supervision Engineer	2 nd April 2018	Discontinued the service since 1 st October, 2018.
9	Amod Adhikari	Construction Supervision Engineer	7 th Oct 2018	Discontinued the service since 1 st April, 2019.
10	Rajan Shrestha	CSE/Quantity Surveyor	7 th Nov 2017	Working as CSE from 1 st May 2019.
11	Rajesh Kumar Yadav	Junior Engineer-1	6 th Sep 2017	
12	Sanjeev Yadav	Qty. Surveyor	5 th Nov 2017	
13	Santosh Kumar Yadav	Office Administration/Account Manager	6 th Sep 2017	
14	Hem Kumari Dahal (Muna Ghimire)	Office Attendant	6 th Sep 2017	
15	Ranjit Kumar Mandal	Receptionist	10 th Dec 2017	
16	Pravesh Baral	Junior Engineer-2	10 th Dec 2017	
17	J.P Yadav	Junior Engineer-3	1 st March 2018	



SN	Name	Designation	Joining date	Remarks
18	Deepak Majhi	Junior Engineer-4	1 st March 2018	
19	Arun Kumar Yadav	Junior Engineer-5	16 th March 2018	Discontinue the service since 1 st April 2019
20	Neera Pradhan	CAD operator/Draft Person	10 th Dec 2017	
21	Yubraj Poudel	Driver	10th Feb-2019	

The consultant has been constantly supervising the contractor's work in daily basis. The consultant is mainly focusing in construction management, contract administration and the following activities but not limited as listed below:

- i. Daily Construction supervision/Surveying works etc.
- ii. Quality control, cost control and time control
- iii. Measurement and Certification of Interim Payment Certificates (IPC)
- iv. Modification and design of Road side drain, storm drainage and sewer lines, manholes etc. as per site condition and approve working drawings as discussed/advised by employer.
- v. Supervise construction material testing and sampling
- vi. Monitor Environment Management Plan and its compliance
- vii. Monitor Social safeguard and Resettlement Plan and its compliance
- viii. Prepare Due Diligence Report of the Project
- ix. Maintain correspondences with the Employer and the Contractor
- x. Assisting PIU

5. PROGRESS OF SUB – PROJECT COMPONENTS

5.1. CONSTRUCTION MATERIALS.

Before using any construction material in the project, as per clause 7.3, engineer gave prior notice to contractor for joint inspection of the construction materials and all materials have been jointly checked and verified. Team leader issued letter to contractor to do the lab test of the construction materials from the authorized organizations and lab reports of the tested materials have been submitted by contractor. Engineer has emphasized on the production of the pre-cast item like (Kerb stone, drain cover slab, manhole etc.) for better work progress of the project. The Contractor has established two production yards for pre-cast item (Kerb stone, drain cover slab, man whole etc.) and production is going on.

The Contractor has informed to borrow RCC NP-3 pipes from Itahari Hume pipe factory or other location and also requested for three Edge bearing test. It will be tested very soon in presence of consultant TL/PIU and contractor representative.

5.2. PROGRESS ACHIEVED TILL DATE

Month	Target This Month		Achievement This Month		Leading		Lagging		Remarks
	Monthly	Accumulated	Monthly	Accumulated	Monthly	Accumulated	Monthly	Accumulated	
July-18	0.15%	25.17%	0.78%	25.18%	0.63%	0.01%		NA	Leading
August-18	0.15%	25.32%	2.32%	27.50%	2.17%	2.18%		NA	Leading
September-18	5.71%	31.03%	1.22%	28.72%	NA	-2.31%		-2.31%	Lagging
October-18	7.72%	38.75%	2.30%	31.03%	NA	-7.72%		-7.72%	Lagging
November-18	7.72%	46.47%	5.20%	36.22%	NA	-10.25%		-10.25%	Lagging
December-18	7.95%	54.41%	3.40%	39.62%	NA	-14.79%		-14.79%	Lagging
January-19	7.96%	62.37%	5.65%	45.27%	NA	-17.10%		-17.10%	Lagging
February-19	7.96%	70.33%	5.11%	50.38%	NA	-19.95%		-19.95%	Lagging
February-19 (after Revision)	5.33%	50.03%	5.11%	50.38%	NA	0.35%		NA	Leading
March -19	7.75%	57.77%	7.84%	58.21%	NA	0.44%		NA	Leading
April-19	6.82%	64.59%	4.53%	62.74%	NA	-1.85%		-1.85%	Lagging
May-19	6.49%	71.08%	4.54%	67.28%	NA	-3.80%		-3.80%	Lagging
June-19	3.95%	75.03%	2.05%	69.33%	NA	-5.70%		-5.70%	Lagging



5.3. KEY EVENTS

The consultant has noted the following key dates for the month of **June**, 2019.

Table 8: KEY DATES of EVENTS / ACTIVITIES

S. No.	Date	Activities/Events	Remarks
1		Frequent visit of sites by the representatives of the employer.	
2	20 th – 21 th June 2019	Site visited by Mr Resham Baniya, Environmental expert, ADB consultant.	



6. DETAILS OF PRE CAST ACTIVITIES.

Table 9: PHYSICAL PROGRESS in PRODUCTION OF PRECAST ITEMS till date,

Physical Progress till date							
S.N.	Description	Unit	Progress			Total to Date (RM.)	Remarks
			BoQ	Up to Previous month (RM.)	This Month (RM.)		
1	Precast Slab	No		48,371.00	1200.00	49,571.00	Under progress
2	Kerb Stone	Rm	147,729.68	77,293.30	2000.00	79,293.30	53.67%

Table 10: PHYSICAL PROGRESS in PRODUCTION/PURCHASE OF RCC Hume Pipe at Itahari till date,

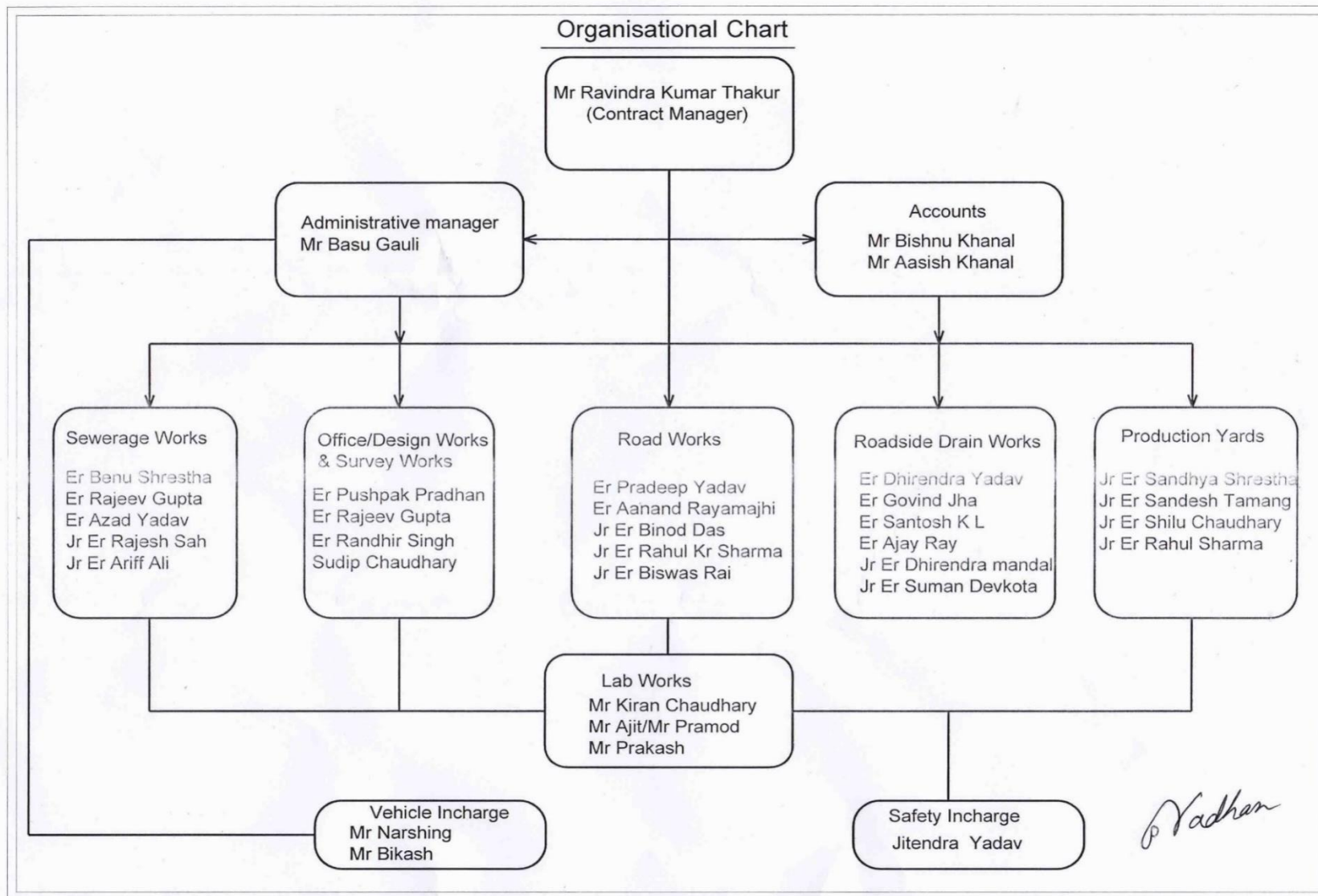
Physical Progress till date							
S.N.	Description	Diameter (mm)	Progress			Total to Date (RM.)	Remarks
			BoQ (RM)	Up to Previous month (RM.)	This Month (RM.)		
1	RCC Pipe	300	336.00	336.00	-	336.00	
2	RCC Pipe	450	681.00	681.00	-	681.00	
3	RCC Pipe	500	842.00	842.00	-	842.00	
4	RCC Pipe	600	382.00	382.00	-	382.00	
	Total						

Table 11: PHYSICAL PROGRESS in PRODUCTION/PURCHASE OF HDPE Pipe till date,

<i>Physical Progress till date</i>							
S.N.	Description	Diameter (mm)	Progress			Total to Date (RM.)	Remarks
			BoQ (RM)	Up to Previous month (RM.)	This Month (RM.)		
1	HDPE Pipe	110.00	1,987.20	2,487.20	2000.00	4,487.20	Under process
2	HDPE Pipe	200.00	16,656.00	16,500.00	-	16,500.00	
3	HDPE Pipe	250.00	115.00	450.00	-	450.00	
Total							

Table 12: PHYSICAL PROGRESS in PRODUCTION/PURCHASE OF UPVC Pipe till date

<i>Physical Progress till date</i>							
S.N.	Description	Diameter (mm)	Progress			Total to Date (RM.)	Remarks
			BoQ (RM)	Up to Previous month (RM)	This Month (Rm.)		
1	UPVC Pipe	160.00	5,050.00	5,050.00	0.00	5,050.00	
2	UPVC Pipe	110.00	5,050.00	5,050.00	0.00	5,050.00	



7. CONTRACTOR'S MANPOWER

Table 13: CONTRACTOR'S KEY STAFFS

S.No	Position	Minimum Number Required as per Contract	ZHONGHENG CONSTRUCTION Group	Remarks
1	Project/Contract Manager (1 No) 15/10 Yrs. (Total/Similar Exp.)	1	1	
2	Civil Engineer-10/6	2	2	
3	Sanitary Engineer- (1no.)-12/8	1	-	
4	Road Engineer-(1no.)-12/8	1	1	
5	Electromechanical Engineer-(1no)-10/5	1	-	
6	Safety Engineer	-	1	
7	Site Engineer	-	17	
8	Sub- Engineer	-	14	
9	Accountant	-	3	
10	Lab Technician	-	1	
11	Store Keeper	-	2	
12	Vehicle In charge	-	3	
13	Skilled Labors		99	
14	Unskilled Labors		434	

8. CONTRACTOR'S EQUIPMENT

Table 14: CONTRACTOR'S EQUIPMENT

S.No	Equipment Type and Characteristics	Min Number required as per Contract	ZHONGHENG CONSTRUCTION Group	Remarks
1	Excavator (200 above)	5	2	Backhoe loader-9 nos.
2	Crane (10 ton capacity)	3	-	
3	Asphalt plant of adequate capacity	1	1	
4	Asphalt pavers	1	1	
5	Vibrating roller	2	4	Among 4nos., 2ton rollers-2nos.
6	Pneumatic tyre roller 8 to 10 ton	2	1	
7	Smooth wheeled roller 8 to 10 ton	1	1	
8	Grader	1	2	
9	Track Dozer (120 to 180 HP)	1	-	
10	Bitumen distributor (4 to 6 Kilo Litres)	1	1	
11	Water browser (minimum 5000 Litres)	3	6	
12	Chips spreader	1	-	
13	Bitumen decanter minimum 4000 Litres. (preheating container)	2	2	
	Air compressor	2	2	
14	Tipping Trucks	5	5	
15	Service vehicle	15	25	
16	Survey equipment (Total station with accessories)	2	5	
17	Theodolite	1	1	
18	Levelling	2	-	
19	Mobile Generator 15-20 KVA	5	10	
20	Mixer Machine	3	9	

S.No	Equipment Type and Characteristics	Min Number required as per Contract	ZHONGHENG CONSTRUCTION Group	Remarks
22	Concrete Batching Plant	1	-	
23	Concrete pump	1	-	
24	Drain cleaner/ Nala cleaner	2	-	
25	Broomer	-	2	
26	Motor Bike	-	11	
27	Plate Compactor	-	4	
28	Water Pump	-	14	

9. WORK PLAN FOR THE NEXT MONTH

Following are the Contractor's works in the next month program.

- Detail Surveying works at various Road sections for sewer line, drainage work and road work.
- Road works
- Road painting works.
- Precast production works at contractor's yard.
- Road Side drain works.
- Laying of Kerb Stone, cover slab and interlocking tiles.
- Sewer inlet and House Connection works.
- Brick Manholes for sewer line.
- Relocation of electric poles and water supply works, etc.

ANNEX-1: Photographs of June, 2019





Road side Drain work at T3 Trunk – DUDBC Office, Biratnagar



At Sanihaat Junction with Team Leader – T3 Trunk



Base course – field density test at R29



Curing of precast elements at Contractor's yard



RCC Road side Drain at R4



Dewatering work at T3 Trunk – Road side drain & crossing

ANNEX-2: Minutes of Meeting June, 2019

ATTACHED



Building Design Authority (P) Ltd

in Joint Venture with

B.N. Consultancy Pvt. Ltd and Plus Engineers & Architects (P) Ltd, Kathmandu, Nepal

REGIONAL URBAN DEVELOPMENT PROJECT (RUDP), ADB Loan No: 47252

Biratnagar Metropolitan city, Biratnagar

MINUTES OF MEETING NO. – 25

Contract: RUDP/ICB/BRT- 02

Date: 7 June, 2019

Time: 5:00 PM

Venue: TL Office, Biratnagar

Attendance

Contractor:

1. Mr. R K Thakur, Contract Manager
2. Mr. Pradip Yadav, Engineer
3. Mr. Dhirendra Yadav, Engineer
4. Mr. Govindha Jha, Engineer
5. Mr. Anand Rayamajhi, Engineer

Consultant:

1. Mr. Giresh Chand, Team Leader
2. Mr. H K Mandal, Expert/Quantity Surveyor
3. Mr. Amit Kumar Gupta, CSE
4. Mr. Rajan Shrestha, CSE

TL, Mr Chand welcomed all participants in the meeting. Following matters were discussed and decided:

S.N.	Minutes	Action by
1.	<p>TL, Mr Chand briefed about present status of the Project and expressed dissatisfaction about the physical progress ie progress up to end of May is 67.28% against 71.08% lag by (-) 3.80%.</p> <p>Mr Chand asked for the reasons for lagging. CM, Mr Thakur replied that the main reason behind the slow progress is delay in IPC payment disbursement. He informed that they are not getting the payment for last 3 (Three) months even though 2 (two) IPCs had already been submitted and the next is under perusal thus he claimed the compounded interest for submitted IPC as per the contract. The next reason was the unpredictable rainfall.</p> <p>TL, Mr Chand said that the contractor could not escape from their contractual obligation due to disbursement etc. and claim against delay payment is concerned, Mr chand assured to forward compensation claim as per the contract.</p>	Employer / Consultant / Contractor

Address: Bargachhi Pipalchowk-05, Biratnagar Email: rudpbdbart@gmail.com



Building Design Authority (P) Ltd

B.N. Consultancy Pvt. Ltd and Plus Engineers & architects (P) Ltd, Kathmandu, Nepal

REGIONAL URBAN DEVELOPMENT PROJECT (RUDP), ADB Loan No: 47252

Biratnagar Metropolitan city, Biratnagar

S.N.	Minutes	Action by
2.	<p>TL, Mr Chand informed that none of the roads were cleared (final) completely till date. He asked the contractor to go through each road and accomplish all the shortcomings e.g. Check the line & level of Kerb stone, tick drain clearance, placement of slabs over drain, weep holes to drain out rainwater from the pavement and maintain the drain gap, etc. He also instructed to complete the weep holes work before laying of Asphalt concrete.</p> <p>Contractor agreed on the same.</p>	Consultant/ Contractor
3.	<p>TL, Mr Chand informed that more than 3 (Three) Kms of drain completed but slab covers have not placed on it yet which has been informed several times verbally as well as in written.</p> <p>Contractor informed that slab placement work going on one by one and assured to complete all the placement works very soon.</p> <p>TL, Mr Chand asked to clean the drain before placing of slab in all the roads. He further emphasized to reconfirm any works remained e.g. plaster, punning etc. before placing slab.</p> <p>Contractor agreed on the same.</p>	Consultant/ Contractor
4.	<p>TL, Mr Chand instructed to verify the top level of each & every drain constructed along with Kerbstone wrt design. Any discrepancies found need to be rectified at the earliest. He emphasized that rainy season is ahead so clean the drain and their outlet properly and provide maximum efforts to clear roads for the traffic movements without any hindrances.</p> <p>Contract Manager agreed upon the same and assured to start as soon as possible.</p>	Consultant/ Contractor
5.	<p>TL, Mr Chand instructed to provide cumulative measurement of IPC in the next IPC</p> <p>Contractor responded positively and assured to fulfill the instruction.</p>	Consultant/ Contractor
6.	<p>TL, Mr Chand informed contractor that curing in tick drain/gutter work were not as per requirement. He further instructed to start prime works after min. 7 days curing of tick drain.</p> <p>Contractor agreed on the same.</p>	Consultant/ Contractor

Address: Bargachhi Pipalchowk-05, Biratnagar Email: rudpbdbtrt@gmail.com



Building Design Authority (P) Ltd

in Joint Venture with
B.N. Consultancy Pvt. Ltd and P.N. Engineers & Architects (P) Ltd, Kathmandu, Nepal
REGIONAL URBAN DEVELOPMENT PROJECT (RUDP), ADB Loan No: 47252
Biratnagar Metropolitan city, Biratnagar

S.N.	Minutes	Action by
7	<p>TL, Mr Chand also enquired for slow progress at R46 (Jaljala Road) drain work as well as backfilling & interlocking works. He emphasized on proper compaction around the manhole, sewer inlet and HCC before lying on the road's layers.</p> <p>Contractor agreed to expedite the work at the earliest and fulfill all shortcomings as discussed.</p>	Consultant/ Contractor






* Address: Bargachhi Pipalchowk-05, Biratnagar. Email: rudpbdabrt@gmail.com

Meeting Minute: 13

Regional Urban Development Project (RUDP), Biratnagar**Meeting of Safeguard Desk (SD)**

Venue: Project Implementation Unit (PIU), Biratnagar

Date: June 21, 2019 (2076/03/06)

Participants:

Err

. Bharat Kumar Neupane

Project Manager, PIU/RUDP, Biratnagar

Mr. Punam Kumar Dahal

Chief, social Development, PIU/RUDP, Biratnagar

Mr. Prakash Bhakta Shrestha

Social Safeguard Expert, DSC/RUDP, Biratnagar

Er. Dwarika Phuyal

Environmental Safeguard Expert DSC/RUDP, Biratnagar

Discussion and Decisions:

S. No.	Agenda	Discussion and Decisions
1	SD meeting	The 13 th . Meeting of SD, RUDP, Biratnagar held in RUDP/PIU office. There is no major complains has been registered in the desk.
2	Progress envisaged in labor camps as safeguard measures.	Discussed on labor facilities in labor camp following facilities are found during labor camp site visit: i) Sufficient available of drinking water service. ii) Provided facilities mosquito net found not sufficient, contractor requested to provide sufficient mosquito net and fans iii) Provided toilet facilities with provision of sufficient water and soap for hand washing found not improved than before visit and the contractor therefore again instructed to provide improved toilet with soap and water. iv) Separate toilets for gents and ladies are provided in Labour camp at Madhumara. v) No fire wood used. LPG has been provided by contractor at labour camp for cooking. vi) Tube well water quality of madhumara yard, was not tested. Contractor instructed to perform water quality test of new wells of labor camp prior to use for drinking. vii) There were not provision of solid waste collection facilities in labor camps. Garbage were found haphazardly throwing

Page 1



		<p>here and there in camp. Contractor again instructed to provide separate dust bins to collect bio-degradable and non-biodegradable wastes in camps.</p> <p>viii) Provided labor camp made of CGI sheet at Madhumara yard still found not relocated or improved than before visit, therefore the contractor again instructed to relocate or improve the camp so as to prevent from storm. The existing camp will be unsafe and may cause minor to major injuries to labors due to high speed wind or storm.</p> <p>ix) Labor found not aware on use of PPEs, contractor should aware labors on personnel safety during construction work.</p>
4	Satisfactorily progress envisaged of implementation of safeguard measures including barricades and sign boards.	<p>i) Discussed over the dust emission during construction dust contractor has been sprinkling water over dust prone area, however was not sufficient, contractor therefore instructed to increase the frequency of water sprinkling in dust prone area within construction sites and near by unpaved surfaces.</p> <p>ii) Discussed over the Use of personnel Protective Equipment like, helmet, boots, glove, and jackets by labors was found partly compliance. The contractor instructed for full compliance.</p> <p>iii) Contractors has found aware on child right, and instruct strictly no use of child labor.</p> <p>iv) Contractor has provided the site and personnel safety tools, barricades and traffic signs and improved than before.</p> <p>v) Discussed over the matter of drain cover, almost completed road side drains found cover with RCC cover, however in few sections completed drain left open. Therefore contractor instructed to place immediately the drain cover by clearing the completed drain.</p>
5	Encourage of Female employment.	<p>i) Contractor instructed to encourage employing as labor and skilled man power to local female.</p> <p>ii) Contractor instructed to manage separate camp and necessary facilities for female workers to encourage of employment.</p> <p>iii) Priority should be given to employ local labors.</p>
6	Others	<p>The overall safeguard compliance found partially satisfactory. Contractor instructed for full compliance of all safeguard measures.</p>






ANNEX-3: Laboratory Test Results of June, 2019

ATTACHED



REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No: RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report

[illegible]

Sp

Contractor

ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING

CO. LTD

Consultant

BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH
B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS &
ARCHITECTS (P) LTD, KATHMANDU, NEPAL

ARCHITECTS (P) LTD, KATHMANDU, NEPAL

Checked By
Engineer
Benu shrestha

.....
Submitted By
Contract Manager
Rabindra Kr. Thakur

Verified By
Expert Qty Surveyor/CSE
H.K. Mandal/Rajan Shrestha

 **Approved By**
Team Leader
Gireesh Chand

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Field Density Test

Location:-N-27

[illegible]

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No: RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report

Location:-R-9 (T3L11K)

[illegible]

Contractor

ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD

BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N.
CONSULTANCY PVT. LTD AND PUS ENGINEERS & ARCHITECTS (P)
LTD KATHMANDU, NEPAL

Checked By
Engineer
Benu Shresth

Submitted By
Contract Manager
Rabindra Kr. Thakur

Verified By
Export Qty Surveyor/CSE
H.K. Mandal/Rajan Shrestha

Approved By
Team Leader
Gireesh Chand

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City
Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Field Density Test

Location:-R-9, (T3L11K)

[illegible]

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City


Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report

Location:-T3L23C


							Month:	June		
							Year	2019		
							Type of Material	Sub grade		
Location:-T3L23C										
Sn.	Lab.Ref no.	Location/Chainage	Source of Sample	Date of Testing	MDD	OMC	PI%	CBR%	Remarks	
1	RUDP-SG-01	T3L23,(0+080)	Existing Road	11-Jun-19	1.963	8.65	9.10	6.26		
Sp. Limit								<18	>3	

Contractor

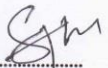


ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD


Consultant




BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL




**Checked By
Engineer
Benu Shrestha**



**Submitted By
Contract Manager
Rabindra kr. Thakur**



**Verified By
Expert Qty Surveyor/CSE
H.K. Mandal/Rajan Shrestha**



**Approved By
Team Leader
Giresh Chand**

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City
Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Field Density Test

Location:-T3L23C

[illegible]

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report

Location:-R-12

[illegible]

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Field Density Test

Location:- R-12

[illegible]







REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report

Location:-R-105

							Month:		June	
							Year		2019	
							Type of Material		Sub grade	
Sr.	Lab.Ref no.	Location/Chainage	Source of Sample	Date of Testing	MDD	OMC	PI%	CBR%	Remarks	
1	RUDP-SG-01	R-105,(0+100)	Existing Road	2-Jun-19	2.050	6.80	8.57	6.10		
Sp. Limit							<18	>3		
Contractor					Consultant					
ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD					BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL					
										
 Checked By Engineer Benu Shrestha					 Submitted By Contract Manager Rabindra kr. Thakur					
					 Verified By Expert Qty Surveyor/CSE H.K. Mandal/Rajan Shrestha					
					 Approved By Team Leader Giresch Chand					

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Field Density Test

Location:- R-105

[illegible]

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City
Contract No: RUDP/ICB/BRT-02
Summary Sheet of Monthly Test Report

Supplementary Sheet of Information Test Reports

Location:-Rani-site,(Hadtali-hatt)

[illegible]

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City
Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Field Density Test

Location:-Rani-site,hadtali hatt

[illegible]

<p>Contractor</p> <p>ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD</p>	<p>Consultant</p> <p>BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL</p>
<p>..... Checked By Engineer Benu Shrestha</p> <p>..... Submitted By Contract Manager Rabindra Kr. Thakur</p>	<p>..... Verified By Expert Qty Surveyor/CSE H.K. Mandal/Rajan Shrestha</p> <p>..... Approved By Team Leader Giresh Chand</p>

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No: RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report

Location:-R-7, (R-27 to R-18)

[illegible]

Contractor

ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO.

CONCLUSION

BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH
B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS
(P) LTD, KATHMANDU, NEPAL

Checked By
Engineer
Benu Shresth

Submitted By
Contract Manager
Rabindra Kr.Thakur

Export Qty Surveyor/CSE
H.K. Mandal/Rajan Shrestha

Approved By
Team Leader
Giresch Chand

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Field Density Test

Location:-R-7 ,(R-27 to R-18)

[illegible]

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report

Location:-R-82

						Month:		June	
						Year		2019	
						Type of Material		Sub grade	
Location:-R-82									
Sn.	Lab.Ref no.	Location/Chainage	Source of Sample	Date of Testing	MDD	OMC	PI%	CBR%	Remarks
1	RUDP-SG-01	R-82,(0+380)	Existing Road	4-Jun-19	1.990	7.25	9.16	6.30	
		</							

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Field Density Test

Location:-R-82

[illegible]

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report

[illegible]

Spec. Limit:

Contractor

ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL
ENGINEERING CO., LTD

Consultant

BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N.
CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD,
KATHMANDU, NEPAL

Checked By
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Benu Shrestha

Submitted By
Contract Manager
Rabindra Kr. Thakur

Verified By
Qty Engineer/CSE
H.K. Mandal/Rajan Shro

Approved By
Team Leader
Gireesh Chand

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City
Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Field Density Test

Location:-R-9 (R-37 to R-40)

[illegible]

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report

[illegible]

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Field Density Test

Location:-R-40

[illegible]

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report

[illegible]

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City
Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Field Density Test

Location:-R-12

Month	June
Year	2019
Type of Material	Sub-Base

[illegible]

<p>Contractor</p> <p>ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD</p> <p><i>[Stamp: ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD, CHINA]</i></p>	<p>Consultant</p> <p>BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL</p> <p><i>[Stamp: Building Design Authority (P) Ltd. in Joint Venture with B.N. Consultancy Pvt. Ltd. and Plus Engineers & Architects (P) Ltd. Biratnagar * M/S. Srinagar]</i></p>
<p><i>[Signature]</i></p> <p>.....</p> <p>Checked By Engineer Benu shrestha</p> <p><i>[Signature]</i></p> <p>.....</p> <p>Submitted By Contract Manager Rabindra Kr. Thakur</p>	<p><i>[Signature]</i></p> <p>.....</p> <p>Verified By Expert Qty Surveyor/CSE H.K. Mandal/Rajan Shrestha</p> <p><i>[Signature]</i></p> <p>.....</p> <p>Approved By Team Leader Giresh Chand</p>

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No: RUDP/CB/BRT-02

Daily Application Rate Check for Priming work

SUMMARY FOR THE MONTH OF June 2019

Type of Bitumen: 80/100 P.G

Cut-off Percentage: MC 70: MC 30

SN NO	Location	Date of Priming	Station From	Station to	Side of Priming	Area of Priming (M)	Intersection Area m2	Total Area m2	Bitumen Consumption (Ltr)	Application Rate By Deep Ltr/m2	Application Rate Bit Tray Test Ltr/m2
1	Rani-Manthapokhari	1-Jun	0+000	0+360	Both side	2008.8	0	2008.8	2450	1.02	1.04
2	Rani Buspark(B)	1-Jun	0+000	0+136	Both Side	565.76	0	565.76	600	1.06	1.06
3	Rani Buspark(A)	1-Jun	0+000	0+096	Both Side	634	0	634	650	1.04	1.03
4	RR-1	1-Jun	0+240	0+490	Both Side	1870	0	1870	2000	1.07	1.04
5	Hartali hatt	03-Jun-19	0+000	0+160	Both Side	612.8	0	612.8	650	1.06	1.06
7	R-27	03-Jun-19	0+000	0+150	Both Side	645	0	645	700	1.09	1.05
6	R-31	07-Jun-19	0+000	0+186	Both Side	783.06	0	783.06	850	1.09	1.03
8	R-29	14-Jun-19	0+000	0+282	Both Side	1421.28	0	1421.28	1500	1.06	1.05
9	N-27	21-Jun-19	0+000	0+355	Both Side	1242.05	0	1242.05	1300	1.05	1.04
10	R-73	23-Jun-19	0+000	0+216	Both Side	1278.72	0	1278.72	1400	1.09	1.07
11	R-7	23-Jun-19	0+000	0+165	Both Side	932	0	932	1000	1.07	1.04
12	T3L23	24-Jun-19	0+000	0+328	Both Side	1106.76	275	1106.76	1200	1.08	1.03
								Total	14300		

Required specification for Prime coat 1.0 Lit/M2 ± 5% Specific Gravity of Bitumen 1.033

Contractor

ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD

Consultant

BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL

Checked By
Engineer
Benu ShresthaSubmitted By
Contract Manager
Rabindra Kr. ThakurVerified By
Expert Qty Surveyor/CSE
H.K. Mandal/Rajin ShresthaApproved By
Team Leader
Gresh Chaud

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No: RUDP/ICB/BRT-02

Test Result BY MARSHALL METHOD (AASHTO T 245-78)

SUMMARY FOR THE MONTH OF June 2019

[illegible]

REMARKS:

Contractor

ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO., LTD

ED IN JOINT

BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY
PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL

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.....
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H.K. Mandal

Approved By
Team Leader
Gireesh Chand

REGIONAL URBAN DEVELOPMENT PROJECT
Biratnagar Metropolitan City

Contract No: RUDP/ICB/BRT-02

Daily Application Rate Check for TACK COAT



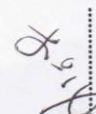

SUMMARY FOR THE MONTH OF JUNE 2019

Type of Bitumen: 80/100 P.G

S.N.	Location	Date of Tack coat	Station From	Station to	Side of Tack coat	Area of Tack coat	Intersection Area m2	Total Area M2	Bitumen Consumption	Application Rate By Dip Lit/m2	Application Rate Bt Tray Test Lit/m2
1	Hartali hatt	11-Jun-19	0+000	0+160	BHS	611.2	0	611.20	350	0.57	0.55
2	Rani-Buspark, A	11-Jun-19	0+000	0+096	BHS	629.76	0	629.76	350	0.56	0.53
3	Rani-Buspark, B	12-Jun-19	0+000	0+136	BHS	561.68	0	561.68	300	0.53	0.5
4	Rani-Mantha pokhari	13-Jun-19	0+000	0+360	BHS	2667.6	0	2667.60	1550	0.58	0.53
5	RR-1	13-Jun-19	0+240	0+490	BHS	1870	0	1870.00	1100	0.59	0.54
6	R-27	16-Jun-19	0+000	0+150	BHS	694.05	0	694.05	400	0.58	0.54
7	R-31	16-Jun-19	0+000	0+186	BHS	848.16	0	848.16	500	0.59	0.54
8	R-75	19-Jun-19	0+000	0+120	BHS	842.4	0	842.40	500	0.59	0.55
9	R-29	19-Jun-19	0+000	0+282	BHS	1426.92	0	1426.92	800	0.56	0.53
10	R-27	24-Jun-19	0+000	0+355	BHS	1327.7	0	1327.70	750	0.56	0.54
11	R-73	24-Jun-19	0+000	0+216	BHS	1278.72	0	1278.72	700	0.55	0.52
12	T3L23	26-Jun-19	0+180	0+328	BHS	1152.41	320.65	1473.06	650	0.56	0.51
13	R-7	26-Jun-19	0+000	0+165	BHS	693	0	693.00	400	0.58	0.52
14	R-7	26-Jun-19	0+335	0+400	BHS	254.15	0	254.15	150	0.59	0.56

Required tack coat is 0.40 to 0.60 Lit/M2 According to Road Note -3, Section 711.2

Specific Gravity of Bitumen 1.033

Contractor	Consultant
<p align="center">ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD</p> <p align="center">  Checked By Engineer Benu Shrestha </p>	<p align="center">BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL</p> <p align="center">  Submitted By Contract Manager Rabindra Kr. Thakur </p> <p align="center">  Verified By Expert Qty Surveyor/CSE H.K. Mandal/Rajan Shrestha </p> <p align="center">  Approved By Team Leader Gireesh Chand </p>

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report

Location :-R-82															Month:	June
															Year	2019
															Type of Material	Sub-base
Sn.	Lab.Ref no.	Location of Sample	Source of Sample	Date of Testing	Sieve Size in mm / passing % By Weight							MDD	OMC	Pl%	CBR%	Remarks
					63.0	37.5	20.0	10.0	5.0	2.36	1.18					
1	RUDP-SB-01	R-82.(0+150)	Chisang Khola	7-Jun-19	100	87.67	70.49	52.16	40.84	32.87	16.02	10.48	6.70	1.18	40.00	
2	RUDP-SB-02	R-82.(0+300)	Chisang Khola	7-Jun-19	100	88.44	71.37	53.00	40.58	33.84	17.12	12.74		1.06		
3	RUDP-SB-03	R-82.(0+500)	Chisang Khola	7-Jun-19	100	89.24	70.63	54.52	42.84	24.67	17.38	11.44		1.93		

Spec. Limit:

Contractor

ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL
ENGINEERING CO.,LTD

Consultant

BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY
PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL

.....
Checked By
Engineer
Benu Shrestha

Submitted By
Contract Manager
Rabindra Kr. Thakur

Verified By
Expert Qty Surveyor/CSE
H.K. Mandal/Rajan Shrestha

Approved By
Team Leader
Gireesh Chand

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Field Density Test

Location:-R-82

[illegible]

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

SUMMARY SHEET OF CEMENT TEST

SPECIAL TEST REPORT													Month Year	June 2019
S.N.	Lab Ref.no	Type of cement	Tetsing Date	Consistency & Setting Time			Soundness s(mm)	Fineness (%)	Date of Casting	Date of Testing		Strength N/mm²		Remarks
				Normal Cons.(%)	Initial(Min)	Final (min)				7 Days	28 Days	7 days	28 Days	
1	45	Saptakoshi opc	9-May-19	29.75	95.00	235.00	2.05	2.85	10-May-19	17-May-19	7-Jun-19		46.55	
2	46	Saptakoshi opc	17-May-19	31.25	110.00	295.00	1.59	2.75	18-May-19	25-May-19	15-Jun-19		46.25	
3	47	Saptakoshi opc	2-Jun-19	30.50	114.00	283.00	2.52	2.70	3-Jun-19	10-jun-19	1-Jul-19	29.51		
4	48	Saptakoshi opc	1-Jun-19	31.25	117.00	275.00	1.42	2.32	12-Jun-19	19-Jun-19	10-Jul-19	28.48		

Comments:-

Sp.Limit:

Consultant

Contractor

**BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N.
CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P)
LTD, KATHMANDU, NEPAL**

**ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL
ENGINEERING CO. LTD**

Checked By
Engineer
Benu Shrestha

Submitted By
Contract Manager
Rabindra Kr. Thakur

Verified By
Export Qty Surveyor/CSE
H.K. Mandal/Rajan Shrestha

Approved By
Team Leader
Giresh Chaud

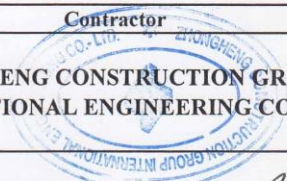



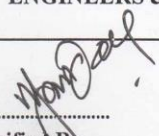

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Mortar Test Report

							Month		June		
							Year		2019		
							Description of Sample		Brick Wall		
S.N.	Location	Lab Ref.no.	Type of Cement	Brand of Cement	Source of Sand	Date of Casting	Date of Testing		Strength, N/mm ²		Type of Grade
							7 Days	28 Days	7 Days	28 Days	
1	R-6 Branch line	MR-1961	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19		9.20	7.5
2	T3L7C	MR-1962	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19		9.62	7.5
3	T1L5	MR-1963	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19		9.75	7.5
4	R-110	MR-1964	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19		9.75	7.5
5	R-46	MR-1965	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19		10.58	7.5
6	T2L19Y	MR-1966	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19		8.65	7.5
7	T3L T. LINE	MR-1967	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19		8.54	7.5
8	T3L7	MR-1968	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19		10.44	7.5
9	T3L39A	MR-1969	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19		9.07	7.5
10	R-83	MR-1970	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19		8.11	7.5
11	T3L10	MR-1971	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19		8.52	7.5
12	R-6 Branch line	MR-1972	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19		9.62	7.5
13	T3L22A	MR-1973	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19		8.38	7.5
14	R-19	MR-1974	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19		7.97	7.5
15	T3L10	MR-1975	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19		9.07	7.5
16	R-7	MR-1976	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19		8.24	7.5
17	R-9	MR-1977	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19		10.30	7.5
18	R-44	MR-1978	Saptakoshi	OPC	Chisang Khola	10-May-19	17-May-19	7-Jun-19		8.93	7.5
19	R-46	MR-1979	Saptakoshi	OPC	Chisang Khola	10-May-19	17-May-19	7-Jun-19		8.79	7.5
20	T2L19Y	MR-1980	Saptakoshi	OPC	Chisang Khola	10-May-19	17-May-19	7-Jun-19		10.03	7.5
21	R-9	MR-1981	Saptakoshi	OPC	Chisang Khola	12-May-19	19-May-19	9-Jun-19		9.34	7.5
22	T2L19Y	MR-1982	Saptakoshi	OPC	Chisang Khola	12-May-19	19-May-19	9-Jun-19		8.93	7.5
23	R-19	MR-1983	Saptakoshi	OPC	Chisang Khola	12-May-19	19-May-19	9-Jun-19		10.03	7.5
24	T3L6	MR-1984	Saptakoshi	OPC	Chisang Khola	13-May-19	20-May-19	10-Jun-19		8.65	7.5
25	T3L39A	MR-1985	Saptakoshi	OPC	Chisang Khola	13-May-19	20-May-19	10-Jun-19		9.20	7.5
26	R-7	MR-1986	Saptakoshi	OPC	Chisang Khola	13-May-19	20-May-19	10-Jun-19		7.97	7.5
27	R-83	MR-1987	Saptakoshi	OPC	Chisang Khola	13-May-19	20-May-19	10-Jun-19		10.03	7.5
28	T3L T. LINE	MR-1988	Saptakoshi	OPC	Chisang Khola	13-May-19	20-May-19	10-Jun-19		9.62	7.5
29	R-46	MR-1989	Saptakoshi	OPC	Chisang Khola	14-May-19	21-May-19	11-Jun-19		8.65	7.5
30	T2L19Y	MR-1990	Saptakoshi	OPC	Chisang Khola	14-May-19	21-May-19	11-Jun-19		9.89	7.5
31	R-110	MR-1991	Saptakoshi	OPC	Chisang Khola	14-May-19	21-May-19	11-Jun-19		8.24	7.5
32	R-9	MR-1992	Saptakoshi	OPC	Chisang Khola	14-May-19	21-May-19	11-Jun-19		9.34	7.5
33	R-46	MR-1993	Saptakoshi	OPC	Chisang Khola	14-May-19	21-May-19	11-Jun-19		9.34	7.5

Contractor  ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD		Consultant  BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL	
 Checked By Engineer Benu Shrestha	 Submitted By Contract Manager Rabindra Kr. Thakur	 Verified By Expert Qty Surveyor/CSE H.K. Mandal/Rajan Shrestha	 Approved By Team Leader Giresch Chand

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Mortar Test Report

							Month		June		
							Year		2019		
							Description of Sample		Brick Wall		
S.N.	Location	Lab Ref.no.	Type of Cement	Brand of Cement	Source of Sand	Date of Casting	Date of Testing		Strength, N/mm2		Type of Grade
							7 Days	28 Days	7 Days	28 Days	
34	R-6 Branch line	MR-1994	Saptakoshi	OPC	Chisang Khola	16-May-19	23-May-19	13-Jun-19		8.52	7.5
35	T3L7	MR-1995	Saptakoshi	OPC	Chisang Khola	16-May-19	23-May-19	13-Jun-19		9.34	7.5
36	T3L7	MR-1996	Saptakoshi	OPC	Chisang Khola	16-May-19	23-May-19	13-Jun-19		9.07	7.5
37	T3L22A	MR-1997	Saptakoshi	OPC	Chisang Khola	16-May-19	23-May-19	13-Jun-19		8.24	7.5
38	R-46	MR-1998	Saptakoshi	OPC	Chisang Khola	16-May-19	23-May-19	13-Jun-19		9.07	7.5
39	R-110	MR-1999	Saptakoshi	OPC	Chisang Khola	16-May-19	23-May-19	13-Jun-19		8.93	7.5
40	T3L10	MR-2000	Saptakoshi	OPC	Chisang Khola	18-May-19	25-May-19	15-Jun-19		9.20	7.5
41	R-44	MR-2001	Saptakoshi	OPC	Chisang Khola	18-May-19	25-May-19	15-Jun-19		8.93	7.5
42	R-82	MR-2002	Saptakoshi	OPC	Chisang Khola	18-May-19	25-May-19	15-Jun-19		9.89	7.5
43	T3L7C	MR-2003	Saptakoshi	OPC	Chisang Khola	19-May-19	26-May-19	16-Jun-19		9.34	7.5
44	R-7	MR-2004	Saptakoshi	OPC	Chisang Khola	19-May-19	26-May-19	16-Jun-19		9.48	7.5
45	R-19	MR-2005	Saptakoshi	OPC	Chisang Khola	19-May-19	26-May-19	16-Jun-19		10.44	7.5
46	R-83	MR-2006	Saptakoshi	OPC	Chisang Khola	19-May-19	26-May-19	16-Jun-19		9.89	7.5
47	T3L6	MR-2007	Saptakoshi	OPC	Chisang Khola	19-May-19	26-May-19	16-Jun-19		8.11	7.5
48	R-44	MR-2008	Saptakoshi	OPC	Chisang Khola	21-May-19	28-May-19	18-Jun-19		9.07	7.5
49	R-7	MR-2009	Saptakoshi	OPC	Chisang Khola	21-May-19	28-May-19	18-Jun-19		9.62	7.5
50	T3L T. LINE	MR-2010	Saptakoshi	OPC	Chisang Khola	21-May-19	28-May-19	18-Jun-19		9.20	7.5
51	R-9	MR-2011	Saptakoshi	OPC	Chisang Khola	21-May-19	28-May-19	18-Jun-19		8.52	7.5
52	T2L19Y	MR-2012	Saptakoshi	OPC	Chisang Khola	22-May-19	29-May-19	19-Jun-19		10.30	7.5
53	R-46	MR-2013	Saptakoshi	OPC	Chisang Khola	22-May-19	29-May-19	19-Jun-19		8.24	7.5
54	T3L10	MR-2014	Saptakoshi	OPC	Chisang Khola	22-May-19	29-May-19	19-Jun-19		10.03	7.5
55	R-83	MR-2015	Saptakoshi	OPC	Chisang Khola	23-May-19	30-May-19	20-Jun-19		10.03	7.5
56	R-9	MR-2016	Saptakoshi	OPC	Chisang Khola	23-May-19	30-May-19	20-Jun-19		9.34	7.5
57	R-46	MR-2017	Saptakoshi	OPC	Chisang Khola	23-May-19	30-May-19	20-Jun-19		10.58	7.5
58	R-7	MR-2018	Saptakoshi	OPC	Chisang Khola	23-May-19	30-May-19	20-Jun-19		9.20	7.5
59	R-19	MR-2019	Saptakoshi	OPC	Chisang Khola	24-May-19	31-May-19	21-Jun-19		8.79	7.5
60	R-83	MR-2020	Saptakoshi	OPC	Chisang Khola	24-May-19	31-May-19	21-Jun-19		9.00	7.5
61	T2L19Y	MR-2021	Saptakoshi	OPC	Chisang Khola	24-May-19	31-May-19	21-Jun-19		9.62	7.5
62	R-46	MR-2022	Saptakoshi	OPC	Chisang Khola	24-May-19	31-May-19	21-Jun-19		7.97	7.5
63	T3L T. LINE	MR-2023	Saptakoshi	OPC	Chisang Khola	24-May-19	31-May-19	21-Jun-19		10.30	7.5
64	R-44	MR-2024	Saptakoshi	OPC	Chisang Khola	24-May-19	31-May-19	21-Jun-19		9.62	7.5
65	R-7	MR-2025	Saptakoshi	OPC	Chisang Khola	24-May-19	31-May-19	21-Jun-19		9.20	7.5

Contractor		Consultant	
ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD		BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL	
Checked By Engineer Benu Shrestha	Submitted By Contract Manager Rabindra Kr. Thakur	Verified By Expert Qty Surveyor/CSE H.K. Mandal/Rajan Shrestha	Approved By Team Leader Giresch Chand



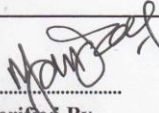



REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Mortar Test Report

							Month		June		
							Year		2019		
							Description of Sample		Brick Wall		
S.N.	Location	Lab Ref.no.	Type of Cement	Brand of Cement	Source of Sand	Date of Casting	Date of Testing		Strength, N/mm ²		Type of Grade
							7 Days	28 Days	7 Days	28 Days	
66	T2L23C	MR-2026	Saptakoshi	OPC	Chisang Khola	25-May-19	1-Jun-19	22-Jun-19	6.57	8.38	7.5
67	R-3	MR-2027	Saptakoshi	OPC	Chisang Khola	25-May-19	1-Jun-19	22-Jun-19	5.87	8.65	7.5
68	R-19	MR-2028	Saptakoshi	OPC	Chisang Khola	25-May-19	1-Jun-19	22-Jun-19	6.29	8.52	7.5
69	T2L19Y	MR-2029	Saptakoshi	OPC	Chisang Khola	26-May-19	2-Jun-19	23-Jun-19	6.99	9.07	7.5
70	T3L39A	MR-2030	Saptakoshi	OPC	Chisang Khola	26-May-19	2-Jun-19	23-Jun-19	6.85	8.65	7.5
71	R-19	MR-2031	Saptakoshi	OPC	Chisang Khola	26-May-19	2-Jun-19	23-Jun-19	6.29	9.07	7.5
72	T3L Trunk line	MR-2032	Saptakoshi	OPC	Chisang Khola	26-May-19	2-Jun-19	23-Jun-19	6.29	8.52	7.5
73	R-9	MR-2033	Saptakoshi	OPC	Chisang Khola	27-May-19	3-Jun-19	24-Jun-19	6.99	9.34	7.5
74	T3L7C	MR-2034	Saptakoshi	OPC	Chisang Khola	28-May-19	4-Jun-19	25-Jun-19	6.43	8.52	7.5
75	R-6 (Branch Road)	MR-2035	Saptakoshi	OPC	Chisang Khola	28-May-19	4-Jun-19	25-Jun-19	6.01	8.24	7.5
76	T3L39A	MR-2036	Saptakoshi	OPC	Chisang Khola	28-May-19	4-Jun-19	25-Jun-19	6.71	8.79	7.5
77	T3L23C	MR-2037	Saptakoshi	OPC	Chisang Khola	29-May-19	5-Jun-19	26-Jun-19	6.15	8.52	7.5
78	R-110	MR-2038	Saptakoshi	OPC	Chisang Khola	29-May-19	5-Jun-19	26-Jun-19	5.87	9.20	7.5
79	R-19	MR-2039	Saptakoshi	OPC	Chisang Khola	29-May-19	5-Jun-19	26-Jun-19	6.29	8.52	7.5
80	R-3	MR-2040	Saptakoshi	OPC	Chisang Khola	29-May-19	5-Jun-19	26-Jun-19	6.01	7.97	7.5
81	T3L22A	MR-2041	Saptakoshi	OPC	Chisang Khola	29-May-19	5-Jun-19	26-Jun-19	6.01	8.65	7.5
82	R-9	MR-2042	Saptakoshi	OPC	Chisang Khola	30-May-19	6-Jun-19	27-Jun-19	6.99	9.42	7.5
83	R-83	MR-2043	Saptakoshi	OPC	Chisang Khola	30-May-19	6-Jun-19	27-Jun-19	6.57	8.79	7.5
84	R-9	MR-2044	Saptakoshi	OPC	Chisang Khola	31-May-19	7-Jun-19	28-Jun-19	6.85	7.97	7.5
85	T3L10	MR-2045	Saptakoshi	OPC	Chisang Khola	31-May-19	7-Jun-19	28-Jun-19	6.43	9.07	7.5
86	R-2	MR-2046	Saptakoshi	OPC	Chisang Khola	31-May-19	7-Jun-19	28-Jun-19	6.01	9.48	7.5
87	T3L39A	MR-2047	Saptakoshi	OPC	Chisang Khola	31-May-19	7-Jun-19	28-Jun-19	6.71	8.79	7.5
88	R-9	MR-2048	Saptakoshi	OPC	Chisang Khola	1-Jun-19	8-Jun-19	29-Jun-19	6.15	9.34	7.5
89	R-110	MR-2049	Saptakoshi	OPC	Chisang Khola	1-Jun-19	8-Jun-19	29-Jun-19	6.57	8.79	7.5
90	R-19	MR-2050	Saptakoshi	OPC	Chisang Khola	1-Jun-19	8-Jun-19	29-Jun-19	6.99	9.62	7.5
91	T3L Trunk line	MR-2051	Saptakoshi	OPC	Chisang Khola	1-Jun-19	8-Jun-19	29-Jun-19	6.71	8.79	7.5
92	T3L10	MR-2052	Saptakoshi	OPC	Chisang Khola	2-Jun-19	9-Jun-19	30-Jun-19	6.29	8.79	7.5
93	R-19	MR-2053	Saptakoshi	OPC	Chisang Khola	2-Jun-19	9-Jun-19	30-Jun-19	6.01	8.52	7.5
94	T3L5	MR-2054	Saptakoshi	OPC	Chisang Khola	3-Jun-19	10-Jun-19	1-Jul-19	6.85	✓	7.5
95	T2L19Y	MR-2055	Saptakoshi	OPC	Chisang Khola	3-Jun-19	10-Jun-19	1-Jul-19	6.99		7.5
96	T3L7B	MR-2056	Saptakoshi	OPC	Chisang Khola	3-Jun-19	10-Jun-19	1-Jul-19	6.01		7.5
97	T3L Trunk line	MR-2057	Saptakoshi	OPC	Chisang Khola	3-Jun-19	10-Jun-19	1-Jul-19	6.85	✓	7.5
Contractor							Consultant				
ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD							BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL				
 Checked By Engineer Benu Shrestha							 Submitted By Contract Manager Rabindra Kr. Thakur				
							 Verified By Expert Qty Surveyor/CSE H.K. Mandal/Rajan Shrestha				
							 Approved By Team Leader Giresh Chand				



REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Mortar Test Report

							Month		June		
							Year		2019		
							Description of Sample		Brick Wall		
S.N.	Location	Lab Ref.no.	Type of Cement	Brand of Cement	Source of Sand	Date of Casting	Date of Testing		Strength, N/mm2		Type of Grade
							7 Days	28 Days	7 Days	28 Days	
98	R-19	MR-2058	Saptakoshi	OPC	Chisang Khola	3-Jun-19	10-Jun-19	1-Jul-19	6.01		7.5
99	T2L19X	MR-2059	Saptakoshi	OPC	Chisang Khola	3-Jun-19	10-Jun-19	1-Jul-19	6.85		7.5
100	R-3	MR-2060	Saptakoshi	OPC	Chisang Khola	3-Jun-19	10-Jun-19	1-Jul-19	6.01		7.5
101	R-83	MR-2061	Saptakoshi	OPC	Chisang Khola	4-Jun-19	11-Jun-19	2-Jul-19	6.71		7.5
102	R-6(Branch	MR-2062	Saptakoshi	OPC	Chisang Khola	4-Jun-19	11-Jun-19	2-Jul-19	6.15		7.5
103	R-110	MR-2063	Saptakoshi	OPC	Chisang Khola	4-Jun-19	11-Jun-19	2-Jul-19	6.85		7.5
104	T3L7B	MR-2064	Saptakoshi	OPC	Chisang Khola	4-Jun-19	11-Jun-19	2-Jul-19	6.15		7.5
105	T2L19X	MR-2065	Saptakoshi	OPC	Chisang Khola	5-Jun-19	12-Jun-19	3-Jul-19	8.85		7.5
106	R-9	MR-2066	Saptakoshi	OPC	Chisang Khola	5-Jun-19	12-Jun-19	3-Jul-19	6.99		7.5
107	R-6 (Branch	MR-2067	Saptakoshi	OPC	Chisang Khola	6-Jun-19	13-Jun-19	4-Jul-19	6.01		7.5
108	T3L7C	MR-2068	Saptakoshi	OPC	Chisang Khola	6-Jun-19	13-Jun-19	4-Jul-19	6.43		7.5
109	T2L19Y	MR-2069	Saptakoshi	OPC	Chisang Khola	7-Jun-19	14-Jun-19	5-Jul-19	6.57		7.5
110	R-19	MR-2070	Saptakoshi	OPC	Chisang Khola	7-Jun-19	14-Jun-19	5-Jul-19	6.15		7.5
111	T2L19Y	MR-2071	Saptakoshi	OPC	Chisang Khola	8-Jun-19	15-Jun-19	6-Jul-19	6.85		7.5
112	R-9	MR-2072	Saptakoshi	OPC	Chisang Khola	8-Jun-19	15-Jun-19	6-Jul-19	6.01		7.5
113	R-6 (Branch	MR-2073	Saptakoshi	OPC	Chisang Khola	8-Jun-19	15-Jun-19	6-Jul-19	6.71		7.5
114	T3L7C	MR-2074	Saptakoshi	OPC	Chisang Khola	8-Jun-19	15-Jun-19	6-Jul-19	6.15		7.5
115	R-83	MR-2075	Saptakoshi	OPC	Chisang Khola	9-Jun-19	16-Jun-19	7-Jul-19	6.85		7.5
116	T2L19Y	MR-2076	Saptakoshi	OPC	Chisang Khola	9-Jun-19	9-Jun-19	7-Jul-19	6.85		7.5
117	T3L10	MR-2077	Saptakoshi	OPC	Chisang Khola	10-Jun-19	17-Jun-19	8-Jul-19	7.13		7.5
118	T3L7B	MR-2078	Saptakoshi	OPC	Chisang Khola	10-Jun-19	17-Jun-19	8-Jul-19	6.85		7.5
119	T3L5	MR-2079	Saptakoshi	OPC	Chisang Khola	10-Jun-19	17-Jun-19	8-Jul-19	6.99		7.5
120	R-2	MR-2080	Saptakoshi	OPC	Chisang Khola	10-Jun-19	17-Jun-19	8-Jul-19	6.43		7.5
121	R-9	MR-2081	Saptakoshi	OPC	Chisang Khola	10-Jun-19	17-Jun-19	8-Jul-19	6.99		7.5
122	T3L39A	MR-2082	Saptakoshi	OPC	Chisang Khola	11-Jun-19	18-Jun-19	9-Jul-19	6.01		7.5
123	T3L5	MR-2083	Saptakoshi	OPC	Chisang Khola	12-Jun-19	19-Jun-19	10-Jul-19	6.57		7.5
124	R-19	MR-2084	Saptakoshi	OPC	Chisang Khola	13-Jun-19	20-Jun-19	11-Jul-19	6.85		7.5
125	R-83	MR-2085	Saptakoshi	OPC	Chisang Khola	13-Jun-19	20-Jun-19	11-Jul-19	6.43		7.5
126	T3L5	MR-2086	Saptakoshi	OPC	Chisang Khola	13-Jun-19	20-Jun-19	11-Jul-19	6.71		7.5
127	T2L19Y	MR-2087	Saptakoshi	OPC	Chisang Khola	14-Jun-19	21-Jun-19	12-Jul-19	6.99		7.5
128	R-83	MR-2088	Saptakoshi	OPC	Chisang Khola	14-Jun-19	21-Jun-19	12-Jul-19	6.57		7.5
129	T3L10	MR-2089	Saptakoshi	OPC	Chisang Khola	14-Jun-19	21-Jun-19	12-Jul-19	6.99		7.5
Contractor						Consultant					
ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD						BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL					
Checked By Engineer Benu Shrestha						Submitted By Contract Manager Rabindra Kr. Thakur					
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REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Mortar Test Report

							Month		June		
							Year		2019		
							Description of Sample		Brick Wall		
S.N.	Location	Lab Ref.no.	Type of Cement	Brand of Cement	Source of Sand	Date of Casting	Date of Testing		Strength, N/mm2		Type of Grade
							7 Days	28 Days	7 Days	28 Days	
98	R-19	MR-2058	Saptakoshi	OPC	Chisang Khola	3-Jun-19	10-Jun-19	1-Jul-19	6.01		7.5
99	T2L19X	MR-2059	Saptakoshi	OPC	Chisang Khola	3-Jun-19	10-Jun-19	1-Jul-19	6.85		7.5
100	R-3	MR-2060	Saptakoshi	OPC	Chisang Khola	3-Jun-19	10-Jun-19	1-Jul-19	6.01		7.5
101	R-83	MR-2061	Saptakoshi	OPC	Chisang Khola	4-Jun-19	11-Jun-19	2-Jul-19	6.71		7.5
102	R-6(Branch	MR-2062	Saptakoshi	OPC	Chisang Khola	4-Jun-19	11-Jun-19	2-Jul-19	6.15		7.5
103	R-110	MR-2063	Saptakoshi	OPC	Chisang Khola	4-Jun-19	11-Jun-19	2-Jul-19	6.85		7.5
104	T3L7B	MR-2064	Saptakoshi	OPC	Chisang Khola	4-Jun-19	11-Jun-19	2-Jul-19	6.15		7.5
105	T2L19X	MR-2065	Saptakoshi	OPC	Chisang Khola	5-Jun-19	12-Jun-19	3-Jul-19	8.85		7.5
106	R-9	MR-2066	Saptakoshi	OPC	Chisang Khola	5-Jun-19	12-Jun-19	3-Jul-19	6.99		7.5
107	R-6 (Branch	MR-2067	Saptakoshi	OPC	Chisang Khola	6-Jun-19	13-Jun-19	4-Jul-19	6.01		7.5
108	T3L7C	MR-2068	Saptakoshi	OPC	Chisang Khola	6-Jun-19	13-Jun-19	4-Jul-19	6.43		7.5
109	T2L19Y	MR-2069	Saptakoshi	OPC	Chisang Khola	7-Jun-19	14-Jun-19	5-Jul-19	6.57		7.5
110	R-19	MR-2070	Saptakoshi	OPC	Chisang Khola	7-Jun-19	14-Jun-19	5-Jul-19	6.15		7.5
111	T2L19Y	MR-2071	Saptakoshi	OPC	Chisang Khola	8-Jun-19	15-Jun-19	6-Jul-19	6.85		7.5
112	R-9	MR-2072	Saptakoshi	OPC	Chisang Khola	8-Jun-19	15-Jun-19	6-Jul-19	6.01		7.5
113	R-6 (Branch	MR-2073	Saptakoshi	OPC	Chisang Khola	8-Jun-19	15-Jun-19	6-Jul-19	6.71		7.5
114	T3L7C	MR-2074	Saptakoshi	OPC	Chisang Khola	8-Jun-19	15-Jun-19	6-Jul-19	6.15		7.5
115	R-83	MR-2075	Saptakoshi	OPC	Chisang Khola	9-Jun-19	16-Jun-19	7-Jul-19	6.85		7.5
116	T2L19Y	MR-2076	Saptakoshi	OPC	Chisang Khola	9-Jun-19	9-Jun-19	7-Jul-19	6.85		7.5
117	T3L10	MR-2077	Saptakoshi	OPC	Chisang Khola	10-Jun-19	17-Jun-19	8-Jul-19	7.13		7.5
118	T3L7B	MR-2078	Saptakoshi	OPC	Chisang Khola	10-Jun-19	17-Jun-19	8-Jul-19	6.85		7.5
119	T3L5	MR-2079	Saptakoshi	OPC	Chisang Khola	10-Jun-19	17-Jun-19	8-Jul-19	6.99		7.5
120	R-2	MR-2080	Saptakoshi	OPC	Chisang Khola	10-Jun-19	17-Jun-19	8-Jul-19	6.43		7.5
121	R-9	MR-2081	Saptakoshi	OPC	Chisang Khola	10-Jun-19	17-Jun-19	8-Jul-19	6.99		7.5
122	T3L39A	MR-2082	Saptakoshi	OPC	Chisang Khola	11-Jun-19	18-Jun-19	9-Jul-19	6.01		7.5
123	T3L5	MR-2083	Saptakoshi	OPC	Chisang Khola	12-Jun-19	19-Jun-19	10-Jul-19	6.57		7.5
124	R-19	MR-2084	Saptakoshi	OPC	Chisang Khola	13-Jun-19	20-Jun-19	11-Jul-19	6.85		7.5
125	R-83	MR-2085	Saptakoshi	OPC	Chisang Khola	13-Jun-19	20-Jun-19	11-Jul-19	6.43		7.5
126	T3L5	MR-2086	Saptakoshi	OPC	Chisang Khola	13-Jun-19	20-Jun-19	11-Jul-19	6.71		7.5
127	T2L19Y	MR-2087	Saptakoshi	OPC	Chisang Khola	14-Jun-19	21-Jun-19	12-Jul-19	6.99		7.5
128	R-83	MR-2088	Saptakoshi	OPC	Chisang Khola	14-Jun-19	21-Jun-19	12-Jul-19	6.57		7.5
129	T3L10	MR-2089	Saptakoshi	OPC	Chisang Khola	14-Jun-19	21-Jun-19	12-Jul-19	6.99	✓	7.5

Contractor		Consultant	
ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD		BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL	
Checked By Engineer Benu Shrestha	Submitted By Contract Manager Rabindra Kr. Thakur	Verified By Expert Qty Surveyor/CSE H.K. Mandal/Rajan Shrestha	Approved By Team Leader Giresch Chand



REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Mortar Test Report



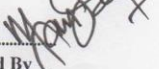

							Month		June		
							Year		2019		
							Description of Sample		Brick Wall		
S.N.	Location	Lab Ref.no.	Type of Cement	Brand of Cement	Source of Sand	Date of Casting	Date of Testing		Strength, N/mm2		Type of Grade
							7 Days	28 Days	7 Days	28 Days	
98	T3L7B	MR-2090	Saptakoshi	OPC	Chisang Khola	15-Jun-19	22-Jun-19	13-Jul-19	6.01		7.5
99	R-9	MR-2091	Saptakoshi	OPC	Chisang Khola	16-Jun-19	23-Jun-19	14-Jul-19	6.85		7.5
100	T3L7B	MR-2092	Saptakoshi	OPC	Chisang Khola	16-Jun-19	23-Jun-19	14-Jul-19	6.85		7.5
101	T2L19Y	MR-2093	Saptakoshi	OPC	Chisang Khola	17-Jun-19	24-Jun-19	15-Jul-19	6.85		7.5
102	T3L10	MR-2094	Saptakoshi	OPC	Chisang Khola	17-Jun-19	24-Jun-19	15-Jul-19	6.99		7.5
103	T3L13C	MR-2095	Saptakoshi	OPC	Chisang Khola	18-Jun-19	25-Jun-19	16-Jul-19	6.01		7.5
104	T3L5	MR-2096	Saptakoshi	OPC	Chisang Khola	18-Jun-19	25-Jun-19	16-Jul-19	6.99		7.5
105	R-6 (Branch	MR-2097	Saptakoshi	OPC	Chisang Khola	18-Jun-19	25-Jun-19	16-Jul-19	6.15		7.5
106	T2L19X	MR-2098	Saptakoshi	OPC	Chisang Khola	19-Jun-19	26-Jun-19	17-Jul-19	6.85		7.5
107	R-19	MR-2099	Saptakoshi	OPC	Chisang Khola	19-Jun-19	26-Jun-19	17-Jul-19	7.13		7.5
108	T2L19G	MR-2100	Saptakoshi	OPC	Chisang Khola	20-Jun-19	27-Jun-19	18-Jul-19	6.71		7.5
109	T3L7C	MR-2101	Saptakoshi	OPC	Chisang Khola	20-Jun-19	27-Jun-19	18-Jul-19	6.85		7.5
110	T2L19Y	MR-2102	Saptakoshi	OPC	Chisang Khola	20-Jun-19	27-Jun-19	18-Jul-19	6.71		7.5
111	R-19	MR-2103	Saptakoshi	OPC	Chisang Khola	20-Jun-19	27-Jun-19	18-Jul-19	6.57		7.5
112	T3L7C	MR-2104	Saptakoshi	OPC	Chisang Khola	20-Jun-19	27-Jun-19	18-Jul-19	6.99		7.5
113	T2L19G	MR-2105	Saptakoshi	OPC	Chisang Khola	21-Jun-19	28-Jun-19	19-Jul-19	6.85		7.5
114	R-19	MR-2106	Saptakoshi	OPC	Chisang Khola	21-Jun-19	28-Jun-19	19-Jul-19	6.15		7.5
115	T3L39	MR-2107	Saptakoshi	OPC	Chisang Khola	21-Jun-19	28-Jun-19	19-Jul-19	6.99		7.5
116	R-9	MR-2108	Saptakoshi	OPC	Chisang Khola	21-Jun-19	9-Jun-19	19-Jul-19	6.57		7.5
117	T3L7C	MR-2109	Saptakoshi	OPC	Chisang Khola	21-Jun-19	28-Jun-19	19-Jul-19	6.99		7.5
118	T3L5	MR-2110	Saptakoshi	OPC	Chisang Khola	21-Jun-19	28-Jun-19	19-Jul-19	6.01		7.5
119	R-19	MR-2111	Saptakoshi	OPC	Chisang Khola	21-Jun-19	28-Jun-19	19-Jul-19	6.85		7.5
120	T3L7C	MR-2112	Saptakoshi	OPC	Chisang Khola	21-Jun-19	28-Jun-19	19-Jul-19	6.99		7.5
121	R-19	MR-2113	Saptakoshi	OPC	Chisang Khola	22-Jun-19	29-Jun-19	20-Jul-19	6.01		7.5
122	T3L5	MR-2114	Saptakoshi	OPC	Chisang Khola	22-Jun-19	29-Jun-19	20-Jul-19	6.15		7.5
123	T3L13C	MR-2115	Saptakoshi	OPC	Chisang Khola	22-Jun-19	29-Jun-19	20-Jul-19	6.85		7.5
124	T2L19G	MR-2116	Saptakoshi	OPC	Chisang Khola	22-Jun-19	29-Jun-19	20-Jul-19	6.43		7.5
125	T3L39	MR-2117	Saptakoshi	OPC	Chisang Khola	23-Jun-19	30-Jun-19	21-Jul-19	6.99		7.5
126	T2L19G	MR-2118	Saptakoshi	OPC	Chisang Khola	23-Jun-19	30-Jun-19	21-Jul-19	6.29		7.5
Contractor						Consultant					
ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD						BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL					
<div>Checked By Engineer Benu Shrestha</div>						<div>Submitted By Contract Manager Rabindra Kr. Thakur</div>					
						<div>Verified By Expert Qty Surveyor/CSE H.K. Mandal/Rajan Shrestha</div>					
						<div>Approved By Team Leader Giresch Chand</div>					

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Concrete Cube Test Report

S.N.	Location	Lab Ref.no.	Type of Cement	Brand of Cement	Source of Sand+Agg.	Date of Casting	Month		June	
							Year		2019	
							Type of Material		Conc. Cube	
							Date of Testing		Strength, N/mm2	
							7 Days	28 Days	7 Days	28 Days
1	T1L5	RUDP-2033	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19		22.81
2	T3L22A	RUDP-2034	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19		22.73
3	Madhumara Yard	RUDP-2035	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19		27.37
4	T3L T. LINE	RUDP-2036	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19		23.28
5	T3L10	RUDP-2037	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19		23.80
6	T2L19Y	RUDP-2038	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19		22.51
7	T3L7	RUDP-2039	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19		23.13
8	R-110	RUDP-2040	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19		22.39
9	T2L19Y	RUDP-2041	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19		23.06
10	T1L5	RUDP-2042	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19		24.25
11	R-6(BRANCH Line)	RUDP-2043	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19		23.28
12	T3L39A	RUDP-2044	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19		23.28
13	Madhumara Yard	RUDP-2045	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19		27.98
14	Madhumara Yard	RUDP-2046	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19		23.36
15	R-9	RUDP-2047	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19		22.58
16	Judi Yard	RUDP-2048	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19		23.33
17	T3L39A	RUDP-2049	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19		24.32
18	T3L T. LINE	RUDP-2050	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19		23.47
19	T3L7C	RUDP-2051	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19		23.84
20	R-7	RUDP-2052	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19		22.58
21	R-19	RUDP-2053	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19		24.54
22	R-83	RUDP-2054	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19		23.00
23	T3L6	RUDP-2055	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19		22.66
24	T3L19A	RUDP-2056	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19		23.73
25	T3L22A	RUDP-2057	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19		22.88
26	T3L7	RUDP-2058	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19		22.48
27	R-6(BRANCH Line)	RUDP-2059	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19		23.76
28	R-9	RUDP-2060	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19		23.88
29	R-46	RUDP-2061	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19		22.88
30	R-110	RUDP-2062	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19		23.70
31	T2L19Y	RUDP-2063	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19		22.66
32	T3L10	RUDP-2064	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19		24.17
33	T1L5	RUDP-2065	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19		22.51
34	R-44	RUDP-2066	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19		23.10
35	T3L T. LINE	RUDP-2067	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19		23.73
36	T3L7C	RUDP-2068	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19		22.81
37	R-7	RUDP-2069	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19		24.02
38	R-19	RUDP-2070	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19		23.03
39	R-83	RUDP-2071	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19		22.88
40	T3L6	RUDP-2072	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19		22.08
41	T3L19A	RUDP-2073	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19		23.73
42	T3L22A	RUDP-2074	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19		22.59
43	T3L7	RUDP-2075	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19		22.78
44	R-6(BRANCH Line)	RUDP-2076	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19		23.73
45	R-9	RUDP-2077	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19		23.70
46	Judi Yard	RUDP-2078	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19		22.58
47	Madhumara Yard	RUDP-2079	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19		22.73
48	Koshi Yard	RUDP-2080	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19		23.25
49	R-46	RUDP-2081	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19		22.63
50	R-110	RUDP-2082	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19		23.28
51	T2L19Y	RUDP-2083	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19		23.28
Contractor						Constant				
ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD						BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL				
 Checked By Engineer Benu Shrestha						 Submitted By Contract Manager Rabindra K. Thakur				
 Verified By Expert Qty Surveyor/CSE H.K. Mandal/Rajan Shrestha						 Approved By Team Leader Gireesh Chand				



REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Concrete Cube Test Report

							Month		June		
							Year		2019		
							Type of Material		Conc. Cube		
S.N.	Location	Lab Ref.no.	Type of Cement	Brand of Cement	Source of Sand+Agg.	Date of Casting	Date of Testing		Strength, N/mm2		Concrete Grade
							7 Days	28 Days	7 Days	28 Days	
52	T3L10	RUDP-2084	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19		23.73	M20
53	T1L5	RUDP-2085	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19		23.43	M20
54	R-44	RUDP-2086	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19		22.48	M20
55	T3L T. LINE	RUDP-2087	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19		23.73	M20
56	T3L7C	RUDP-2088	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19		23.33	M20
57	R-7	RUDP-2089	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19		22.11	M20
58	R-19	RUDP-2090	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19		23.88	M20
59	Madhumara Yard	RUDP-2091	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19		27.16	M25
60	Judi Yard	RUDP-2092	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19		23.73	M20
61	R-83	RUDP-2093	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19		23.58	M20
62	T3L6	RUDP-2094	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19		23.58	M20
63	TL19A	RUDP-2095	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19		23.77	M20
64	T3L22A	RUDP-2096	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19		22.66	M20
65	T3L7	RUDP-2097	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19		22.81	M20
66	R-6(BRANCH Line)	RUDP-2098	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19		23.50	M20
67	R-9	RUDP-2099	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19		22.66	M20
68	R-46	RUDP-2100	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19		23.58	M20
69	R-110	RUDP-2101	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19		23.43	M20
70	T2L19Y	RUDP-2102	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19		22.63	M20
71	T3L10	RUDP-2103	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19		23.58	M20
72	T1L5	RUDP-2104	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19		22.96	M20
73	R-44	RUDP-2105	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19		23.25	M20
74	T3L T. LINE	RUDP-2106	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19		23.73	M20
75	T3L7C	RUDP-2107	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19		23.03	M20
76	R-7	RUDP-2108	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19		23.50	M20
77	R-19	RUDP-2109	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19		24.32	M20
78	R-83	RUDP-2110	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19		23.73	M20
79	Madhumara Yard	RUDP-2111	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19		22.66	M20
80	T3L6	RUDP-2112	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19		22.00	M20
81	T3L19A	RUDP-2113	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19		22.56	M20
82	Madhumara Yard	RUDP-2114	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19		26.48	M25
83	T3L22A	RUDP-2115	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19		22.00	M20
84	T3L7	RUDP-2116	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19		23.03	M20
85	R-6(BRANCH Line)	RUDP-2117	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19		23.40	M20
86	R-9	RUDP-2118	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19		22.55	M20
87	R-46	RUDP-2119	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19		23.25	M20
88	R-110	RUDP-2120	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19		23.65	M20
89	Judi Yard	RUDP-2121	Saptakoshi	OPC	Chisang Khola	8-May-19	15-May-19	5-Jun-19		26.79	M25
90	Madhumara Yard	RUDP-2122	Saptakoshi	OPC	Chisang Khola	8-May-19	15-May-19	5-Jun-19		27.16	M25
91	T2L19Y	RUDP-2123	Saptakoshi	OPC	Chisang Khola	8-May-19	15-May-19	5-Jun-19		23.25	M20
92	T3L10	RUDP-2124	Saptakoshi	OPC	Chisang Khola	8-May-19	15-May-19	5-Jun-19		23.03	M20
93	T1L5	RUDP-2125	Saptakoshi	OPC	Chisang Khola	8-May-19	15-May-19	5-Jun-19		23.92	M20
94	R-44	RUDP-2126	Saptakoshi	OPC	Chisang Khola	8-May-19	15-May-19	5-Jun-19		23.88	M20
95	T3L T. LINE	RUDP-2127	Saptakoshi	OPC	Chisang Khola	8-May-19	15-May-19	5-Jun-19		22.81	M20
96	T3L7C	RUDP-2128	Saptakoshi	OPC	Chisang Khola	8-May-19	15-May-19	5-Jun-19		23.21	M20
97	R-7	RUDP-2129	Saptakoshi	OPC	Chisang Khola	8-May-19	15-May-19	5-Jun-19		22.88	M20
98	R-19	RUDP-2130	Saptakoshi	OPC	Chisang Khola	8-May-19	15-May-19	5-Jun-19		23.48	M20
99	R-83	RUDP-2131	Saptakoshi	OPC	Chisang Khola	8-May-19	15-May-19	5-Jun-19		22.73	M20
Contractor							Constant				
ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD							BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL				
Checked By Engineer Benu Shrestha							Submitted By Contract Manager Rabindra K.Thakur				
Verified By Expert Qty Surveyor/CSE H.K. Mandal/Rajan Shrestha							Approved By Team Leader Giresch Chand				



REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Concrete Cube Test Report

							Month		June		
							Year		2019		
							Type of Material		Conc. Cube		
S.N.	Location	Lab Ref.no.	Type of Cement	Brand of Cement	Source of Sand+Agg.	Date of Casting	Date of Testing		Strength, N/mm2	Concrete Grade	
							7 Days	28 Days			
100	T3L6	RUDP-2132	Saptakoshi	OPC	Chisang Khola	8-May-19	15-May-19	5-Jun-19		23.40	M20
101	T3L19A	RUDP-2133	Saptakoshi	OPC	Chisang Khola	8-May-19	15-May-19	5-Jun-19		23.50	M20
102	Madhumara Yard	RUDP-2134	Saptakoshi	OPC	Chisang Khola	8-May-19	15-May-19	5-Jun-19		27.15	M25
103	T3L22A	RUDP-2135	Saptakoshi	OPC	Chisang Khola	8-May-19	15-May-19	5-Jun-19		23.55	M20
104	T3L7	RUDP-2136	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19		22.88	M20
105	R-6(BRANCH)	RUDP-2137	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19		23.03	M20
106	R-9	RUDP-2138	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19		23.48	M20
107	R-46	RUDP-2139	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19		23.13	M20
108	R-110	RUDP-2140	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19		22.73	M20
109	Madhumara Yard	RUDP-2141	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19		27.30	M25
110	Judi Yard	RUDP-2142	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19		22.48	M20
111	T2L19Y	RUDP-2143	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19		23.77	M20
112	T3L10	RUDP-2144	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19		22.88	M20
113	T1L5	RUDP-2145	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19		24.02	M20
114	R-44	RUDP-2146	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19		23.06	M20
115	T3L T. LINE	RUDP-2147	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19		23.40	M20
116	T3L7C	RUDP-2148	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19		24.32	M20
117	R-7	RUDP-2149	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19		22.88	M20
118	R-19	RUDP-2150	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19		24.54	M20
119	R-83	RUDP-2151	Saptakoshi	OPC	Chisang Khola	10-May-19	17-May-19	7-Jun-19		23.18	M20
120	R-9	RUDP-2152	Saptakoshi	OPC	Chisang Khola	10-May-19	17-May-19	7-Jun-19		22.00	M20
121	R-9	RUDP-2153	Saptakoshi	OPC	Chisang Khola	10-May-19	17-May-19	7-Jun-19		22.33	M20
122	T3L T. LINE	RUDP-2154	Saptakoshi	OPC	Chisang Khola	10-May-19	17-May-19	7-Jun-19		23.03	M20
123	R-46	RUDP-2155	Saptakoshi	OPC	Chisang Khola	10-May-19	17-May-19	7-Jun-19		24.10	M20
124	T2L19Y	RUDP-2156	Saptakoshi	OPC	Chisang Khola	10-May-19	17-May-19	7-Jun-19		24.47	M20
125	R-110	RUDP-2157	Saptakoshi	OPC	Chisang Khola	10-May-19	17-May-19	7-Jun-19		23.48	M20
126	R-19	RUDP-2158	Saptakoshi	OPC	Chisang Khola	10-May-19	17-May-19	7-Jun-19		23.50	M20
127	T3L10	RUDP-2159	Saptakoshi	OPC	Chisang Khola	10-May-19	17-May-19	7-Jun-19		22.78	M20
128	R-83	RUDP-2160	Saptakoshi	OPC	Chisang Khola	10-May-19	17-May-19	7-Jun-19		23.10	M20
129	Madhumara Yard	RUDP-2161	Saptakoshi	OPC	Chisang Khola	10-May-19	17-May-19	7-Jun-19		27.30	M25
130	Judi Yard	RUDP-2162	Saptakoshi	OPC	Chisang Khola	10-May-19	17-May-19	7-Jun-19		22.03	M20
131	Madhumara Yard	RUDP-2163	Saptakoshi	OPC	Chisang Khola	10-May-19	17-May-19	7-Jun-19		26.78	M25
132	R-9	RUDP-2164	Saptakoshi	OPC	Chisang Khola	10-May-19	17-May-19	7-Jun-19		23.55	M20
133	T3L19A	RUDP-2165	Saptakoshi	OPC	Chisang Khola	10-May-19	17-May-19	7-Jun-19		23.10	M20
134	R-6(BRANCH)	RUDP-2166	Saptakoshi	OPC	Chisang Khola	10-May-19	17-May-19	7-Jun-19		22.26	M20
135	R-6(BRANCH)	RUDP-2167	Saptakoshi	OPC	Chisang Khola	10-May-19	17-May-19	7-Jun-19		23.43	M20
136	T3L T. LINE	RUDP-2168	Saptakoshi	OPC	Chisang Khola	11-May-19	18-May-19	8-Jun-19		23.77	M20
137	R-46	RUDP-2169	Saptakoshi	OPC	Chisang Khola	11-May-19	18-May-19	8-Jun-19		23.18	M20
138	T2L19Y	RUDP-2170	Saptakoshi	OPC	Chisang Khola	11-May-19	18-May-19	8-Jun-19		22.92	M20
139	R-110	RUDP-2171	Saptakoshi	OPC	Chisang Khola	11-May-19	18-May-19	8-Jun-19		22.26	M20
140	R-19	RUDP-2172	Saptakoshi	OPC	Chisang Khola	11-May-19	18-May-19	8-Jun-19		22.81	M20
141	T3L10	RUDP-2173	Saptakoshi	OPC	Chisang Khola	11-May-19	18-May-19	8-Jun-19		23.36	M20
142	R-83	RUDP-2174	Saptakoshi	OPC	Chisang Khola	11-May-19	18-May-19	8-Jun-19		22.92	M20
143	Judi Yard	RUDP-2175	Saptakoshi	OPC	Chisang Khola	11-May-19	18-May-19	8-Jun-19		24.17	M20
144	Madhumara Yard	RUDP-2176	Saptakoshi	OPC	Chisang Khola	11-May-19	18-May-19	8-Jun-19		27.01	M25
145	Madhumara Yard	RUDP-2177	Saptakoshi	OPC	Chisang Khola	11-May-19	18-May-19	8-Jun-19		27.60	M25
146	R-9	RUDP-2178	Saptakoshi	OPC	Chisang Khola	11-May-19	18-May-19	8-Jun-19		22.81	M20
147	T3L39A	RUDP-2179	Saptakoshi	OPC	Chisang Khola	8-May-19	15-May-19	5-Jun-19		22.63	M20
Contractor						Constant					
ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD						BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHIMANDU, NEPAL					
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Verified By Expert Qty Surveyor/CSE H.K. Mandal/Rajan Shrestha						Approved By Team Leader Giresch Chand					



REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Concrete Cube Test Report

							Month		June		
							Year		2019		
							Type of Material		Conc. Cube		
S.N.	Location	Lab Ref.no.	Type of Cement	Brand of Cement	Source of Sand+Agg.	Date of Casting	Date of Testing		Strength, N/mm2		Concrete Grade
							7 Days	28 Days	7 Days	28 Days	
148	T3L22A	RUDP-2180	Saptakoshi	OPC	Chisang Khola	11-May-19	18-May-19	8-Jun-19		23.43	M20
149	T3L T. LINE	RUDP-2181	Saptakoshi	OPC	Chisang Khola	12-May-19	19-May-19	9-Jun-19		23.77	M20
150	R-83	RUDP-2182	Saptakoshi	OPC	Chisang Khola	12-May-19	19-May-19	9-Jun-19		22.88	M20
151	R-110	RUDP-2183	Saptakoshi	OPC	Chisang Khola	12-May-19	19-May-19	9-Jun-19		22.26	M20
152	Judi Yard	RUDP-2184	Saptakoshi	OPC	Chisang Khola	12-May-19	19-May-19	9-Jun-19		24.17	M20
153	R-46	RUDP-2185	Saptakoshi	OPC	Chisang Khola	12-May-19	19-May-19	9-Jun-19		22.88	M20
154	R-9	RUDP-2186	Saptakoshi	OPC	Chisang Khola	12-May-19	19-May-19	9-Jun-19		22.78	M20
155	Koshi Yard	RUDP-2187	Saptakoshi	OPC	Chisang Khola	12-May-19	19-May-19	9-Jun-19		23.80	M20
156	Madhumara Yard	RUDP-2188	Saptakoshi	OPC	Chisang Khola	12-May-19	19-May-19	9-Jun-19		23.88	M20
157	R-9	RUDP-2189	Saptakoshi	OPC	Chisang Khola	12-May-19	19-May-19	9-Jun-19		22.73	M20
158	T3L39A	RUDP-2190	Saptakoshi	OPC	Chisang Khola	13-May-19	20-May-19	10-Jun-19		22.56	M20
159	R-6(BRANCH Line)	RUDP-2191	Saptakoshi	OPC	Chisang Khola	13-May-19	20-May-19	10-Jun-19		23.40	M20
160	T3L22A	RUDP-2192	Saptakoshi	OPC	Chisang Khola	13-May-19	20-May-19	10-Jun-19		23.50	M20
161	Madhumara Yard	RUDP-2193	Saptakoshi	OPC	Chisang Khola	13-May-19	20-May-19	10-Jun-19		27.30	M25
162	T3L T. LINE	RUDP-2194	Saptakoshi	OPC	Chisang Khola	13-May-19	20-May-19	10-Jun-19		22.56	M20
163	Koshi Yard	RUDP-2195	Saptakoshi	OPC	Chisang Khola	13-May-19	20-May-19	10-Jun-19		23.95	M20
164	R-9	RUDP-2196	Saptakoshi	OPC	Chisang Khola	13-May-19	20-May-19	10-Jun-19		22.63	M20
165	R-83	RUDP-2197	Saptakoshi	OPC	Chisang Khola	13-May-19	20-May-19	10-Jun-19		22.88	M20
166	R-19	RUDP-2198	Saptakoshi	OPC	Chisang Khola	13-May-19	20-May-19	10-Jun-19		23.80	M20
167	R-82	RUDP-2199	Saptakoshi	OPC	Chisang Khola	13-May-19	20-May-19	10-Jun-19		22.33	M20
168	R-9	RUDP-2200	Saptakoshi	OPC	Chisang Khola	14-May-19	21-May-19	11-Jun-19		23.95	M20
169	R-9	RUDP-2201	Saptakoshi	OPC	Chisang Khola	14-May-19	21-May-19	11-Jun-19		23.73	M20
170	T3L7C	RUDP-2202	Saptakoshi	OPC	Chisang Khola	14-May-19	21-May-19	11-Jun-19		23.25	M20
171	R-82	RUDP-2203	Saptakoshi	OPC	Chisang Khola	14-May-19	21-May-19	11-Jun-19		22.95	M20
172	R-44	RUDP-2204	Saptakoshi	OPC	Chisang Khola	14-May-19	21-May-19	11-Jun-19		23.03	M20
173	T3L T. LINE	RUDP-2205	Saptakoshi	OPC	Chisang Khola	14-May-19	21-May-19	11-Jun-19		24.47	M20
174	T3L22A	RUDP-2206	Saptakoshi	OPC	Chisang Khola	14-May-19	21-May-19	11-Jun-19		22.88	M20
175	Koshi Yard	RUDP-2207	Saptakoshi	OPC	Chisang Khola	14-May-19	21-May-19	11-Jun-19		24.32	M20
176	T2L19Y	RUDP-2208	Saptakoshi	OPC	Chisang Khola	14-May-19	21-May-19	11-Jun-19		23.77	M20
177	Madhumara Yard	RUDP-2209	Saptakoshi	OPC	Chisang Khola	14-May-19	21-May-19	11-Jun-19		27.23	M25
178	Judi Yard	RUDP-2210	Saptakoshi	OPC	Chisang Khola	15-May-19	22-May-19	12-Jun-19		23.80	M20
179	R-82	RUDP-2211	Saptakoshi	OPC	Chisang Khola	15-May-19	22-May-19	12-Jun-19		22.81	M20
180	R-9	RUDP-2212	Saptakoshi	OPC	Chisang Khola	15-May-19	22-May-19	12-Jun-19		24.32	M20
181	T3L39A	RUDP-2213	Saptakoshi	OPC	Chisang Khola	15-May-19	22-May-19	12-Jun-19		22.99	M20
182	Judi Yard	RUDP-2214	Saptakoshi	OPC	Chisang Khola	16-May-19	23-May-19	13-Jun-19		24.47	M20
183	T3L39A	RUDP-2215	Saptakoshi	OPC	Chisang Khola	16-May-19	23-May-19	13-Jun-19		23.13	M20
184	Madhumara Yard	RUDP-2216	Saptakoshi	OPC	Chisang Khola	16-May-19	23-May-19	13-Jun-19		26.85	M25
185	R-110	RUDP-2217	Saptakoshi	OPC	Chisang Khola	16-May-19	23-May-19	13-Jun-19		23.80	M20
186	R-9	RUDP-2218	Saptakoshi	OPC	Chisang Khola	16-May-19	23-May-19	13-Jun-19		23.65	M20
187	Koshi Yard	RUDP-2219	Saptakoshi	OPC	Chisang Khola	16-May-19	23-May-19	13-Jun-19		24.02	M20
188	T3L10	RUDP-2220	Saptakoshi	OPC	Chisang Khola	16-May-19	23-May-19	13-Jun-19		23.21	M20
189	R-83	RUDP-2221	Saptakoshi	OPC	Chisang Khola	16-May-19	23-May-19	13-Jun-19		22.73	M20
190	R-9	RUDP-2222	Saptakoshi	OPC	Chisang Khola	16-May-19	23-May-19	13-Jun-19		22.08	M20
191	R-46	RUDP-2223	Saptakoshi	OPC	Chisang Khola	17-May-19	24-May-19	14-Jun-19		22.58	M20
192	R-9	RUDP-2224	Saptakoshi	OPC	Chisang Khola	17-May-19	24-May-19	14-Jun-19		22.73	M20
193	R-6(BRANCH Line)	RUDP-2225	Saptakoshi	OPC	Chisang Khola	17-May-19	24-May-19	14-Jun-19		23.03	M20
194	T2L19Y	RUDP-2226	Saptakoshi	OPC	Chisang Khola	17-May-19	24-May-19	14-Jun-19		22.70	M20
195	Madhumara Yard	RUDP-2227	Saptakoshi	OPC	Chisang Khola	17-May-19	24-May-19	14-Jun-19		23.65	M20
Contractor							Constant				
ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD							BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL				
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Submitted By Contract Manager Rabindra K.Thakur							Approved By Team Leader Giresh Chand				

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Concrete Cube Test Report

							Month		June		
							Year		2019		
							Type of Material		Conc. Cube		
S.N.	Location	Lab Ref.no.	Type of Cement	Brand of Cement	Source of Sand+Agg.	Date of Casting	Date of Testing		Strength, N/mm2		Concrete Grade
							7 Days	28 Days	7 Days	28 Days	
196	Madhumara Yard	RUDP-2228	Saptakoshi	OPC	Chisang Khola	17-May-19	24-May-19	14-Jun-19		26.55	M25
197	T3L39A	RUDP-2229	Saptakoshi	OPC	Chisang Khola	17-May-19	24-May-19	14-Jun-19		22.73	M20
198	T3L22A	RUDP-2230	Saptakoshi	OPC	Chisang Khola	18-May-19	25-May-19	15-Jun-19		23.58	M20
199	R-83	RUDP-2231	Saptakoshi	OPC	Chisang Khola	18-May-19	25-May-19	15-Jun-19		23.43	M20
200	Judi Yard	RUDP-2232	Saptakoshi	OPC	Chisang Khola	18-May-19	25-May-19	15-Jun-19		23.25	M20
201	T3L10	RUDP-2233	Saptakoshi	OPC	Chisang Khola	18-May-19	25-May-19	15-Jun-19		23.25	M20
202	R-83	RUDP-2234	Saptakoshi	OPC	Chisang Khola	18-May-19	25-May-19	15-Jun-19		22.41	M20
203	R-110	RUDP-2235	Saptakoshi	OPC	Chisang Khola	19-May-19	26-May-19	16-Jun-19		23.21	M20
204	R-83	RUDP-2236	Saptakoshi	OPC	Chisang Khola	19-May-19	26-May-19	16-Jun-19		24.10	M20
205	Madhumara Yard	RUDP-2237	Saptakoshi	OPC	Chisang Khola	19-May-19	26-May-19	16-Jun-19		27.08	M25
206	T3L T. LINE	RUDP-2238	Saptakoshi	OPC	Chisang Khola	20-May-19	27-May-19	17-Jun-19		23.21	M20
207	Koshi Yard	RUDP-2239	Saptakoshi	OPC	Chisang Khola	20-May-19	27-May-19	17-Jun-19		22.99	M20
208	R-83	RUDP-2240	Saptakoshi	OPC	Chisang Khola	20-May-19	27-May-19	17-Jun-19		22.08	M20
209	R-110	RUDP-2241	Saptakoshi	OPC	Chisang Khola	20-May-19	27-May-19	17-Jun-19		22.11	M20
210	Judi Yard	RUDP-2242	Saptakoshi	OPC	Chisang Khola	21-May-19	28-May-19	18-Jun-19		23.65	M20
211	T3L T. LINE	RUDP-2243	Saptakoshi	OPC	Chisang Khola	21-May-19	28-May-19	18-Jun-19		22.66	M20
212	R-3	RUDP-2244	Saptakoshi	OPC	Chisang Khola	22-May-19	29-May-19	19-Jun-19		22.26	M20
213	R-110	RUDP-2245	Saptakoshi	OPC	Chisang Khola	22-May-19	29-May-19	19-Jun-19		21.89	M20
214	Madhumara Yard	RUDP-2246	Saptakoshi	OPC	Chisang Khola	22-May-19	29-May-19	19-Jun-19		26.40	M25
215	T2L19Y	RUDP-2247	Saptakoshi	OPC	Chisang Khola	22-May-19	29-May-19	19-Jun-19		22.08	M20
216	R-9	RUDP-2248	Saptakoshi	OPC	Chisang Khola	23-May-19	30-May-19	20-Jun-19		21.78	M20
217	R-83	RUDP-2249	Saptakoshi	OPC	Chisang Khola	23-May-19	30-May-19	20-Jun-19		23.48	M20
218	Judi Yard	RUDP-2250	Saptakoshi	OPC	Chisang Khola	23-May-19	30-May-19	20-Jun-19		23.50	M20
219	Madhumara Yard	RUDP-2251	Saptakoshi	OPC	Chisang Khola	24-May-19	31-May-19	21-Jun-19		23.80	M20
220	T3L39A	RUDP-2252	Saptakoshi	OPC	Chisang Khola	24-May-19	31-May-19	21-Jun-19		22.56	M20
221	R-9	RUDP-2253	Saptakoshi	OPC	Chisang Khola	24-May-19	31-May-19	21-Jun-19		21.78	M20
222	T2L19Y	RUDP-2254	Saptakoshi	OPC	Chisang Khola	24-May-19	31-May-19	21-Jun-19		23.88	M20
223	Judi Yard	RUDP-2255	Saptakoshi	OPC	Chisang Khola	24-May-19	31-May-19	21-Jun-19		23.88	M20
224	R-3	RUDP-2256	Saptakoshi	OPC	Chisang Khola	24-May-19	31-May-19	21-Jun-19		23.21	M20
225	T3L T. LINE	RUDP-2257	Saptakoshi	OPC	Chisang Khola	25-May-19	1-Jun-19	22-Jun-19	15.80	21.71	M20
226	T323C	RUDP-2258	Saptakoshi	OPC	Chisang Khola	25-May-19	1-Jun-19	22-Jun-19	15.80	22.91	M20
227	Koshi Yard	RUDP-2259	Saptakoshi	OPC	Chisang Khola	25-May-19	1-Jun-19	22-Jun-19	15.87	23.36	M20
228	R-3	RUDP-2260	Saptakoshi	OPC	Chisang Khola	25-May-19	1-Jun-19	22-Jun-19	14.53	21.58	M20
229	R-46	RUDP-2261	Saptakoshi	OPC	Chisang Khola	25-May-19	1-Jun-19	22-Jun-19	15.50	22.36	M20
230	Judi Yard	RUDP-2262	Saptakoshi	OPC	Chisang Khola	25-May-19	1-Jun-19	22-Jun-19	16.32	22.96	M20
231	T3L7B	RUDP-2263	Saptakoshi	OPC	Chisang Khola	26-May-19	2-Jun-19	23-Jun-19	16.54	21.71	M20
232	R-19	RUDP-2264	Saptakoshi	OPC	Chisang Khola	26-May-19	2-Jun-19	23-Jun-19	14.98	22.91	M20
233	Madhumara Yard	RUDP-2265	Saptakoshi	OPC	Chisang Khola	26-May-19	2-Jun-19	23-Jun-19	18.57	27.31	M25
234	R-3	RUDP-2266	Saptakoshi	OPC	Chisang Khola	26-May-19	2-Jun-19	23-Jun-19	15.20	23.06	M20
235	T3L10	RUDP-2267	Saptakoshi	OPC	Chisang Khola	27-May-19	3-Jun-19	24-Jun-19	16.39	22.66	M20
236	Madhumara Yard	RUDP-2268	Saptakoshi	OPC	Chisang Khola	28-May-19	4-Jun-19	25-Jun-19	15.20	23.06	M20
237	T3L7B	RUDP-2269	Saptakoshi	OPC	Chisang Khola	28-May-19	4-Jun-19	25-Jun-19	16.32	21.71	M20
238	Koshi Yard	RUDP-2270	Saptakoshi	OPC	Chisang Khola	28-May-19	4-Jun-19	25-Jun-19	16.77	21.96	M20
239	Madhumara Yard	RUDP-2271	Saptakoshi	OPC	Chisang Khola	29-May-19	5-Jun-19	26-Jun-19	18.35	27.43	M25
240	R-19	RUDP-2272	Saptakoshi	OPC	Chisang Khola	29-May-19	5-Jun-19	26-Jun-19	17.21	21.56	M20
241	R-9	RUDP-2273	Saptakoshi	OPC	Chisang Khola	30-May-19	6-Jun-19	27-Jun-19	15.43	21.71	M20
242	R-83	RUDP-2274	Saptakoshi	OPC	Chisang Khola	30-May-19	6-Jun-19	27-Jun-19	16.32	23.05	M20
243	T2L19Y	RUDP-2275	Saptakoshi	OPC	Chisang Khola	30-Jun-19	7-Jul-19	28-Jul-19	15.28	21.86	M20
Contractor						Constant					
ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD						BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL					
Checked By Engineer Benu Shrestha						Verified By Expert Qty Surveyor/CSE H.K. Mandal/Rajan Shrestha					
Submitted By Contract Manager Rabindra K.Thakur						Approved By Team Leader Giresh Chand					



REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Concrete Cube Test Report

							Month		June		
							Year		2019		
							Type of Material		Conc. Cube		
S.N.	Location	Lab Ref.no.	Type of Cement	Brand of Cement	Source of Sand+Agg.	Date of Casting	Date of Testing		Strength, N/mm2		Concrete Grade
							7 Days	28 Days	7 Days	28 Days	
244	T3L10	RUDP-2276	Saptakoshi	OPC	Chisang Khola	31-May-19	7-Jun-19	28-Jun-19	16.32	22.91	M20
245	R-2	RUDP-2277	Saptakoshi	OPC	Chisang Khola	31-May-19	7-Jun-19	28-Jun-19	17.06	22.30	M20
246	T2L19X	RUDP-2278	Saptakoshi	OPC	Chisang Khola	31-May-19	7-Jun-19	28-Jun-19	16.77	23.13	M20
247	T3L39A	RUDP-2279	Saptakoshi	OPC	Chisang Khola	31-May-19	7-Jun-19	28-Jun-19	14.98	21.71	M20
248	R-83	RUDP-2280	Saptakoshi	OPC	Chisang Khola	1-Jun-19	8-Jun-19	29-Jun-19	17.21	21.56	M20
249	R-9	RUDP-2281	Saptakoshi	OPC	Chisang Khola	1-Jun-19	8-Jun-19	29-Jun-19	15.87	23.05	M20
250	T3L10	RUDP-2282	Saptakoshi	OPC	Chisang Khola	2-Jun-19	9-Jun-19	30-Jun-19	16.77	21.71	M20
251	T3L T. LINE	RUDP-2283	Saptakoshi	OPC	Chisang Khola	3-Jun-19	10-Jun-19	1-Jul-19	15.50		M20
252	Koshi Yard	RUDP-2284	Saptakoshi	OPC	Chisang Khola	3-Jun-19	10-Jun-19	1-Jul-19	16.77		M20
253	T3L10	RUDP-2285	Saptakoshi	OPC	Chisang Khola	3-Jun-19	10-Jun-19	1-Jul-19	15.87		M25
254	Judi Yard	RUDP-2286	Saptakoshi	OPC	Chisang Khola	3-Jun-19	10-Jun-19	1-Jul-19	16.54		M20
255	Madhumara Yard	RUDP-2287	Saptakoshi	OPC	Chisang Khola	4-Jun-19	11-Jun-19	2-Jul-19	18.27		M25
256	R-9	RUDP-2288	Saptakoshi	OPC	Chisang Khola	5-Jun-19	12-Jun-19	3-Jul-19	15.43		M20
257	Koshi Yard	RUDP-2289	Saptakoshi	OPC	Chisang Khola	5-Jun-19	12-Jun-19	3-Jul-19	16.62		M20
258	R-3	RUDP-2290	Saptakoshi	OPC	Chisang Khola	5-Jun-19	12-Jun-19	3-Jul-19	15.43		M20
259	R-46	RUDP-2291	Saptakoshi	OPC	Chisang Khola	5-Jun-19	12-Jun-19	3-Jul-19	16.17		M20
260	R-110	RUDP-2292	Saptakoshi	OPC	Chisang Khola	6-Jun-19	13-Jun-19	4-Jul-19	17.06		M20
261	Judi Yard	RUDP-2293	Saptakoshi	OPC	Chisang Khola	6-Jun-19	13-Jun-19	4-Jul-19	16.17		M20
262	R-83	RUDP-2294	Saptakoshi	OPC	Chisang Khola	7-Jun-19	14-Jun-19	5-Jul-19	15.43		M20
263	T2L19X	RUDP-2295	Saptakoshi	OPC	Chisang Khola	7-Jun-19	14-Jun-19	5-Jul-19	16.77		M20
264	R-110	RUDP-2296	Saptakoshi	OPC	Chisang Khola	7-Jun-19	14-Jun-19	5-Jul-19	15.43		M20
265	R-9	RUDP-2297	Saptakoshi	OPC	Chisang Khola	7-Jun-19	14-Jun-19	5-Jul-19	14.98		M20
266	R-6,Branch Road	RUDP-2298	Saptakoshi	OPC	Chisang Khola	8-Jun-19	15-Jun-19	6-Jul-19	15.57		M20
267	Madhumara Yard	RUDP-2299	Saptakoshi	OPC	Chisang Khola	9-Jun-19	16-Jun-19	7-Jul-19	18.57		M20
268	R-2	RUDP-2300	Saptakoshi	OPC	Chisang Khola	9-Jun-19	16-Jun-19	7-Jul-19	16.32		M20
269	R-73	RUDP-2301	Saptakoshi	OPC	Chisang Khola	9-Jun-19	16-Jun-19	7-Jul-19	17.06		M20
270	T3L5	RUDP-2302	Saptakoshi	OPC	Chisang Khola	9-Jun-19	16-Jun-19	7-Jul-19	16.25		M20
271	T37C	RUDP-2303	Saptakoshi	OPC	Chisang Khola	10-Jun-19	17-Jun-19	8-Jul-19	14.53		M20
272	Madhumara Yard	RUDP-2304	Saptakoshi	OPC	Chisang Khola	11-Jun-19	18-Jun-19	9-Jul-19	16.47		M20
273	R-9	RUDP-2305	Saptakoshi	OPC	Chisang Khola	12-Jun-19	19-Jun-19	10-Jul-19	15.87		M20
274	R-6,Branch Road	RUDP-2306	Saptakoshi	OPC	Chisang Khola	12-Jun-19	19-Jun-19	10-Jul-19	16.54		M20
275	Koshi Yard	RUDP-2307	Saptakoshi	OPC	Chisang Khola	12-Jun-19	19-Jun-19	10-Jul-19	15.43		M20
276	T2L19Y	RUDP-2308	Saptakoshi	OPC	Chisang Khola	12-Jun-19	19-Jun-19	10-Jul-19	16.77		M20
277	T2L19Y	RUDP-2309	Saptakoshi	OPC	Chisang Khola	12-Jun-19	19-Jun-19	10-Jul-19	15.50		M20
278	R-19	RUDP-2310	Saptakoshi	OPC	Chisang Khola	12-Jun-19	19-Jun-19	10-Jul-19	16.02		M20
279	T3L T. LINE	RUDP-2311	Saptakoshi	OPC	Chisang Khola	12-Jun-19	19-Jun-19	10-Jul-19	16.39		M20
280	Madhumara Yard	RUDP-2312	Saptakoshi	OPC	Chisang Khola	13-Jun-19	20-Jun-19	11-Jul-19	17.97		M25
281	R-6,Branch Road	RUDP-2313	Saptakoshi	OPC	Chisang Khola	14-Jun-19	21-Jun-19	12-Jul-19	14.91		M20
282	T3L7B	RUDP-2314	Saptakoshi	OPC	Chisang Khola	14-Jun-19	21-Jun-19	12-Jul-19	17.21		M20
283	T3L5	RUDP-2315	Saptakoshi	OPC	Chisang Khola	15-Jun-19	22-Jun-19	13-Jul-19	15.13		M20
284	T3L7C	RUDP-2316	Saptakoshi	OPC	Chisang Khola	15-Jun-19	22-Jun-19	13-Jul-19	16.25		M20
285	Koshi Yard	RUDP-2317	Saptakoshi	OPC	Chisang Khola	15-Jun-19	22-Jun-19	13-Jul-19	15.50		M20
286	R-110	RUDP-2318	Saptakoshi	OPC	Chisang Khola	16-Jun-19	23-Jun-19	14-Jul-19	16.32		M20
287	T3L22A	RUDP-2319	Saptakoshi	OPC	Chisang Khola	16-Jun-19	23-Jun-19	14-Jul-19	14.98		M20
288	R-19	RUDP-2320	Saptakoshi	OPC	Chisang Khola	16-Jun-19	23-Jun-19	14-Jul-19	16.10		M20
289	T2L19Y	RUDP-2321	Saptakoshi	OPC	Chisang Khola	16-Jun-19	23-Jun-19	14-Jul-19	15.43		M20
290	Koshi Yard	RUDP-2322	Saptakoshi	OPC	Chisang Khola	16-Jun-19	23-Jun-19	14-Jul-19	16.02		M20
291	T3L T. LINE	RUDP-2323	Saptakoshi	OPC	Chisang Khola	16-Jun-19	23-Jun-19	14-Jul-19	15.05		M20
Contractor							Constant				
ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD							BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL				
<div>Checked By Engineer Benu Shrestha</div>							<div>Submitted By Contract Manager Rabindra K. Thakur</div>				
<div>Verified By Expert Qty Surveyor/CSE H.K. Mandal/Rajan Shrestha</div>							<div>Approved By Team Leader Gireesh Chand</div>				



REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Concrete Cube Test Report





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REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet Of Monthly Test Report

S.N.	Lab Ref.No.	Testing Date	Location of Sample	Source of Brick	Name Of Brick	Water Absorption of Brick(%)	Month	June
							Year	2019
							Type of Material	Brick
1	662	2-Jun-19	R-7	Dadarbairya	ACC	15.28	13.83	
2	663	3-Jun-19	T3L (Trunk Line)	Dadarbairya	ACC	13.84	12.02	
3	664	3-Jun-19	T3L (Trunk Line)	Dadarbairya	ACC	14.09	12.54	
4	665	4-Jun-19	R-3	Dadarbairya	ACC	13.80	12.95	
5	666	5-Jun-19	T3L7B	Dadarbairya	ACC	14.42	13.57	
6	667	6-Jun-19	R-46	Dadarbairya	ACC	13.57	14.61	
7	668	9-Jun-19	T2L19X	Dadarbairya	ACC	14.41	13.24	
8	669	10-Jun-19	R-19	Dadarbairya	ACC	14.69	12.90	
9	670	11-Jun-19	T2L19Y	Dadarbairya	ACC	14.48	14.50	
10	671	11-Jun-19	T3L39A	Dadarbairya	ACC	14.03	13.06	
11	672	11-Jun-19	T3L (Trunk Line)	Dadarbairya	ACC	14.03	13.94	
12	673	12-Jun-19	T3L10	Dadarbairya	ACC	13.66	14.02	
13	674	12-Jun-19	R-110	Dadarbairya	ACC	13.64	13.73	
14	675	13-Jun-19	R-83	Dadarbairya	ACC	12.69	13.40	
15	676	13-Jun-19	R-9	Dadarbairya	ACC	13.21	12.46	
16	677	14-Jun-19	T3L22A	Dadarbairya	ACC	15.85	13.42	
17	678	14-Jun-19	R-2,(Tinpaini)	Dadarbairya	ACC	13.73	13.36	
18	679	15-Jun-19	T3L (Trunk Line)	Dadarbairya	ACC	14.24	12.98	
19	680	16-Jun-19	R-9	Dadarbairya	ACC	14.11	13.94	
20	681	16-Jun-19	T3L7B	Dadarbairya	ACC	14.53	15.03	
21	682	17-Jun-19	R-110	Dadarbairya	ACC	13.16	12.66	
22	683	17-Jun-19	R-83	Dadarbairya	ACC	11.88	13.32	
23	684	18-Jun-19	T3L5	Dadarbairya	ACC	12.67	13.13	
24	685	18-Jun-19	R-9	Dadarbairya	ACC	12.92	11.42	
25	686	18-Jun-19	T3L7C	Dadarbairya	ACC	14.05	14.08	
26	687	19-Jun-19	T3L5	Dadarbairya	ACC	14.01	14.82	
27	688	19-Jun-19	T3L24C	Dadarbairya	ACC	14.66	14.82	
28	689	19-Jun-19	T3L (Trunk Line)	Dadarbairya	ACC	13.90	13.85	
29	690	20-Jun-19	T3L5	Dadarbairya	ACC	15.11	12.42	
30	691	21-Jun-19	T3L13C	Dadarbairya	ACC	13.00	14.19	
Sp. Limit						<20%	>8 to 10 N/mm ²	
Comments:-								
Contractor				Consultant				
ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD				BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL				
 Checked By Engineer Benru Shrestha				 Submitted By Contract Manager Rabindra Kr. Thakur				
				 Verified By Expert Qty Surveyor/CSE H.K.Mandal/Rajan Shrestha				
				 Approved By Team Leader Gireesh Chand				



REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City
Contract No:- RUDP/ICB/BRT-02
Summary Sheet Of Monthly Test Report

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REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City
Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report of Concrete Sand

S.n.	Lab. Ref no.	Date of Testing	Location of Sample	Source of Sample	Sieve Size in mm / % Passing by weight										Clay Content%	Remarks
					10	4.75	2.36	1.18	0.600	0.300	0.150					
1	RUDP-CS-353	2-Jun-19	T3L23C	Chisang Khola	100.00	94.71	83.96	55.90	36.78	16.44	5.81	1.15				
2	RUDP-CS-354	3-Jun-19	T3 Trunk line	Chisang Khola	100.00	94.49	83.59	55.71	36.29	15.71	4.64	1.59				
3	RUDP-CS-355	4-Jun-19	T3L7B	Chisang Khola	100.00	94.46	84.06	56.06	36.55	16.22	5.08	1.42				
4	RUDP-CS-356	5-Jun-19	R3	Chisang Khola	100.00	94.40	83.49	55.72	36.09	15.94	4.68	1.30				
5	RUDP-CS-357	6-Jun-19	R46	Chisang Khola	100.00	94.84	84.34	56.40	35.46	15.89	4.88	1.57				
6	RUDP-CS-358	7-Jun-19	T2L19X	Chisang Khola	100.00	94.85	84.09	55.73	35.88	16.32	5.03	1.97				
7	RUDP-CS-359	9-Jun-19	R19	Chisang Khola	100.00	95.95	87.00	46.24	29.62	13.43	4.29	1.15				
8	RUDP-CS-360	10-Jun-19	T2L 19Y	Chisang Khola	100.00	94.72	84.04	57.74	37.15	17.03	5.40	1.28				
9	RUDP-CS-361	13-Jun-19	T3L 39A	Chisang Khola	100.00	95.28	84.97	56.77	38.07	14.98	4.55	1.47				
10	RUDP-CS-362	14-Jun-19	T3L 10	Chisang Khola	100.00	94.61	82.59	46.65	25.49	17.72	5.64	1.03				
11	RUDP-CS-363	15-Jun-19	R-83	Chisang Khola	100.00	94.91	82.75	57.18	36.98	16.42	4.90	1.96				
12	RUDP-CS-364	16-Jun-19	R110	Chisang Khola	100.00	94.42	83.85	57.13	36.82	16.21	4.70	1.69				
13	RUDP-CS-365	17-Jun-19	Madhumara Yard	Chisang Khola	100.00	94.80	83.82	56.69	36.88	16.21	5.33	1.19				
14	RUDP-CS-366	18-Jun-19	R 9	Chisang Khola	100.00	94.67	83.67	56.69	36.88	16.21	5.33	1.19				
15	RUDP-CS-367	19-Jun-19	Koshi yard	Chisang Khola	100.00	94.51	83.17	56.56	36.67	16.08	5.09	1.74				
16	RUDP-CS-368	20-Jun-19	T3L 22A	Chisang Khola	100.00	94.69	83.67	57.14	37.03	16.73	5.31	1.01				
17	RUDP-CS-369	20-Jun-19	Madhumara Yard	Chisang Khola	100.00	93.29	78.46	47.95	30.27	16.03	8.83	1.67				
18	RUDP-CS-370	21-Jun-19	Judi Yard	Chisang Khola	100.00	94.90	83.65	56.51	36.17	16.12	4.98	1.56				
Spec. Limit :					100	89-100	68-100	30-100	15-100	5-70	0-15	<3%				

Contractor		Consultant	
ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING CO. LTD		BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD, KATHMANDU, NEPAL	
Checked By Engineer Benu Shrestha	Submitted By Contract Manager Rabindra K. Thakur	Verified By Expert Qty Surveyor/CSE H.K. Mandal	Approved By Team Leader Gireesh Chand

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report of Concrete Sand

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REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report of 20mm Agg.

S.n.	Lab.Ref no.	Date of Testing	Location of Sample	Source of Sample	Sieve Size in mm / % Passing by weight					Type of Material			Remarks
					37.5	20	14	10	5	L.A.A. %	Fl and El %	A.I.V. %	
1	RUDP-CA-353	2-Jun-19	T3L23C	Chisang Khola	100.00	93.64	26.50	10.71	3.40	24.34	18.53/17.23	19.21	
2	RUDP-CA-354	3-Jun-19	T3Trunk Line	Chisang Khola	100.00	93.79	26.77	12.29	3.51	26.16	19.43/16.63	18.75	
3	RUDP-CA-355	4-Jun-19	Madhumara Yard	Chisang Khola	100.00	93.67	25.81	11.49	3.13	24.24	20.69/18.69	20.34	
4	RUDP-CA-356	6-Jun-19	T3L7B	Chisang Khola	100.00	91.16	26.70	10.84	1.80	21.60	19.47/17.43	19.83	
5	RUDP-CA-357	6-Jun-19	Koshi Yard	Chisang Khola	100.00	94.32	28.27	14.63	2.25	23.10	21.00/18.40	20.66	
6	RUDP-CA-358	7-Jun-19	R-46	Chisang Khola	100.00	90.95	24.70	10.54	2.62	28.30	20.57/18.10	20.43	
7	RUDP-CA-359	8-Jun-19	T2L19X	Chisang Khola	100.00	89.60	27.51	11.62	3.00	24.22	19.25/18.87	22.82	
8	RUDP-CA-360	9-Jun-19	Koshi Yard	Chisang Khola	100.00	89.86	26.53	11.49	3.63	26.84	19.65/18.47	18.72	
9	RUDP-CA-361	11-Jun-19	R-9	Chisang Khola	100.00	89.57	26.02	11.20	2.17	28.76	18.32/17.44	19.72	
10	RUDP-CA-362	13-Jun-19	Madhumara Yard	Chisang Khola	100.00	89.78	26.18	12.44	1.68	27.76	19.02/17.43	21.58	
11	RUDP-CA-363	13-Jun-19	T3L10	Chisang Khola	100.00	90.48	28.51	11.38	2.06	25.10	18.73/17.85	19.98	
12	RUDP-CA-364	14-Jun-19	T3L10	Chisang Khola	100.00	87.80	17.02	6.60	2.15	28.10	18.40/15.27	20.86	
13	RUDP-CA-365	15-Jun-19	R-110	Chisang Khola	100.00	89.67	18.37	4.07	1.88	27.76	18.38/16.15	19.80	
14	RUDP-CA-366	16-Jun-19	R-6,(Branch Road)	Chisang Khola	100.00	92.61	22.78	3.99	1.60	29.04	19.59/16.38	20.15	
15	RUDP-CA-367	18-Jun-19	T3L5	Chisang Khola	100.00	87.32	17.50	2.57	1.14	28.02	20.76/17.02	20.79	
16	RUDP-CA-368	19-Jun-19	T3L7C	Chisang Khola	100.00	88.11	20.55	4.19	2.02	27.76	19.37/18.07	21.08	
17	RUDP-CA-369	21-Jun-19	R-19	Chisang Khola	100.00	88.61	20.14	3.56	1.36	28.10	20.36/18.07	19.92	
18	RUDP-CA-370	21-Jun-19	Madhumara Yard	Chisang Khola	100.00	88.06	22.26	2.67	1.19	27.76	20.02/18.74	20.26	
19	RUDP-CA-371	21-Jun-19	T2L19X	Chisang Khola	100.00	87.29	21.30	3.01	1.35	29.50	19.21/17.63	17.67	
Spec. Limit :					100	85-100	0-70	0-25	0-5	<35	<25	<25	

Contractor

Consultant

ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL
ENGINEERING CO. LTDBUILDING DESIGN AUTHORITY (PVT) LTD IN JOINT VENTURE WITH
B.N. CONSULTANCY PVT LTD AND PLUS ENGINEERS &
ARCHITECTS (P) LTD, KATHMANDU, NEPALChecked By
Engineer
Benu ShresthaSubmitted By
Contract Manager
Rabindra K. ThakurVerified By
Expert Qty Surveyor/CSE
H.K. Mandal/Rajan ShresthaApproved By
Team Leader
Giresh Chand

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report of 20mm Agg.

[illegible]

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No: RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report

[illegible]

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Field Density Test

Location:-R-6,(South of Prativa Chowk)

[illegible]

ANNEX-4: SOCIAL & ENVIRONMENT SAFEGUARD

Monitoring Formats Attached – June 2019



Regional Urban Development Project (RUDP)
Social Safeguard Monitoring
Status of Key Social Issues Compliance

Subproject Road : -RUDP/ICB/BRT/2

Month/Year: June 2019

Name of Contractor :-ZHONGGHENG Construction

GroupInternational Engineering Co pvt Beijing China.

Contract Package: RUDP/ICB/BRT/2

S.N	Key Social Issue	Compliance Status			Implementing Agency	Note of Remarks	Deadline
		Full	Partial	None			
1	Availability of drinking water services	√					
2	Availability of toilet facility in campsite	√					
3	Legal source of fuel wood use			√			
4	Legal document of fuel wood source			√			
5	Use of safety accessories	√					
6	Availability of first aid facility	√					
7	Basic wage rate to construction workers	√					
8	Equal wage rate to male and female workers		√				
9	Compensation of temporarily occupied land	√					
10	Compensation of temporarily occupied buildings	√					
11	Legal document of temporarily occupied assets	√					
12	Non use of child labour in construction activities	√					



Prepared by:

Verified by:

Monitored by:



Environmental Monitoring Format
Regional Urban Development Project (RUDP)/Biratnagar

Name of Sub Project: RUDP/ Biratnagar

Contract Package: RUDP/ICB/BRT/02

Sub-project Component: - Road Lanes Improvement / Sewerage Drainage

Month: June 2019

Checklist

SN	Activity	Description/Present Status (Compliance/Partially Compliance/Non Compliance)	Remarks/ Corrective actions for Non-Compliance
1	Training		
1.1	Health, Safety and EMP trainings and awareness	Yes	
1.2	Others awareness and skill trainings	No	
2	Occupational health and safety		
2.1	Insurance for workers	Yes	
2.2	Personal Protective Equipment (PPE) provided to labors and is using (helmet, facemasks, muffles, gloves, boots, jacket, goggles etc.)	Daily Provided	
2.3	Public notification Safety and warning signs and informative signboards in working sites for work safety	Yes Provided	
2.4	Use of barricades, caution tape and flag	Daily Used	
3	Campsite management		
3.1	Location	Judi, Keshaliya, Shanti Chowk, Rani	
3.2	First aid facilities available at camp and worksites	Yes	
3.3	Drinking water supply and sanitation facilities/ pit latrines	Tap water/ Hand Pump	
3.4	Waste Disposal and Management facilities	Yes	
3.5	Type of fuel used for cooking	L.P.G	
4	Spoil and Construction material Management		
4.1	Cut and fill balance maintained or not, Reuse of spoil materials	Cut & Fill balance maintained	
4.2	Use of safe spoil disposal locations	Not Applicable	
4.3	Disturbance to Pedestrian and traffic movement	No any disturbance to pedestrians & traffic	

4.4	Use of private land and agreement with land owners	movement Yes	
5	Air, Noise and Water Pollution		
5.1	Dust emission and Noise pollution sites	Water sprinkled by tanker on such sites.	
5.2	Water quality monitoring result and locations	ok	
5.3	Block age of natural drainages ,water logging, drain water discharge into farmland/risky areas	Not Applicable	
6	Quarrying of construction materials and Plants Installment		
6.1	Quarry/borrow operation sites	Not Applicable	
6.2	Crusher plant and Asphalt plant operation restoration	Asphalt Plant	
7	Impact/Disruption of Private properties		
7.1	Building structures	Not Applicable	
7.2	Other utilities	Not Applicable	
8	Impact/disruption of public infrastructures		
8.1	Irrigation canal	Not Applicable	
8.2	Water supply pipe	Not Applicable	
8.3	Access road	Not Applicable	
8.4	Electric/Telephone pole	Not Applicable	
8.5	Others	Not Applicable	
9	Sites for cultural and religious values		
9.1	Cultural and religious sensitive spots (if any)	Not Applicable	
10	Forest and vegetation		
10.1	Number of trees removal	00	
10.2	No of tree plantation (Roadside)	Not Applicable	
11	Accident cases and records	No any records	
12	Employment to local people		
12.1	Men and women	Yes, both men and women	
12.2	Child labor (if any)	No	
13	Establishment of Safeguard desk and meeting	Yes	
14	Grievances from local people and addressed	Yes	



S.NO	LOCATION	TYPES OF WORK	TYPES OF WORKERS	LABOUR		COMPOSITION		ETHNIC COMPOSITION				
				SKILLED	UNSKILLED	MALE	FEMALE	JANJATI	DALIT	MUSLIM	MADHESI	BRAHMIN/CHHETRI
1	R6	Gutter	LOCAL	4	17	21			10		11	
			NON LOCAL									
			INDIAN									
			TOTAL	21								
2	N27	Ashphalt	LOCAL									
			NON LOCAL	3	12	15		25			15	
			INDIAN									
			TOTAL	15								
3	R7	Brooming	LOCAL	2	12	15					15	
			NON LOCAL									
			INDIAN									
			TOTAL	14								
4	R12	House Connection	LOCAL	3	8	11					11	
			NON LOCAL									
			INDIAN									
			TOTAL	11								
5	T3L7C	DRAIN	LOCAL									
			NON LOCAL	4	16	20		5	10	5		
			INDIAN									
			TOTAL	20								
6	Rani	Site Clearance	LOCAL									
			NON LOCAL	3	17	10					10	
			INDIAN									
			TOTAL	20								
7	T3L39	Drain	LOCAL	4	12	16		5	1		10	
			NON LOCAL									
			INDIAN									
			TOTAL	16								
8	T3Trunk	Crossing	LOCAL	3	7	10					10	
			NON LOCAL									
			INDIAN									
			TOTAL	10								
9	R3 Trunk	DRAIN	LOCAL									
			NON LOCAL	4	18	22			2	20		
			INDIAN									
			TOTAL	22								
10	T1L5	MH Raise	LOCAL	2	5	7					7	
			NON LOCAL									
			INDIAN									
			TOTAL	7								
11	T3L19G	Drain	LOCAL									
			NON LOCAL	2	15	17			7		10	
			INDIAN									
			TOTAL	17								
12	R9	Drain	LOCAL									
			NON LOCAL	3	16	19					19	
			INDIAN									
			TOTAL	19								
13	B1	DRAIN RISE	LOCAL	3	12	15					15	
			NON LOCAL									
			INDIAN									
			TOTAL	15								
14	N27	Weep Hole	LOCAL									
			NON LOCAL	1	9	10		7	3			
			INDIAN									
			TOTAL	10								
15	Madhumara	Drain	LOCAL	4	18	22				5	17	
			NON LOCAL									
			INDIAN									
			TOTAL	22								
16	B2	Drain Raise	LOCAL	3	15	18			8		10	
			NON LOCAL									
			INDIAN									

			TOTAL	18									
17	T3L7G	DRAIN	LOCAL										
			NON LOCAL	4	16	20			8		12		
			INDIAN										
			TOTAL	20									
18	Koshi Yard	Production	LOCAL										
			NON LOCAL	5	17	22							
			INDIAN										
			TOTAL	22									
19	Madhumara Yard	Production	LOCAL	6	18	24		4	5	1	14		
			NON LOCAL										
			INDIAN										
			TOTAL	24									
20	judi Yard	Production	LOCAL	8	36	44		14	10		20		
			NON LOCAL										
			INDIAN										
			TOTAL	44									
21	T2L22B	Drain	LOCAL	4	18	22		5	5		12		
			NON LOCAL										
			INDIAN										
			TOTAL	22									
22	R82	Base Final	LOCAL	2	9	11			5		6		
			NON LOCAL										
			INDIAN										
			TOTAL	11									
23	R6	RCC Drain	LOCAL										
			NON LOCAL										
			INDIAN										
			TOTAL										
24	T3L22B	DRAIN	LOCAL										
			NON LOCAL	2	8	10					10		
			INDIAN										
			TOTAL	10									
25	R6	KerbStone	LOCAL	2	12	14					14		
			NON LOCAL										
			INDIAN										
			TOTAL	14									
26	T3 Trunk	Drain	LOCAL	3	16	19			9		10		
			NON LOCAL										
			INDIAN										
			TOTAL	19									
27	R19	DRAIN	LOCAL										
			NON LOCAL	3	17	20		5		5	10		
			INDIAN										
			TOTAL	20									
28	T2L19X	DRAIN	LOCAL	2	13	15		5		5	10		
			NON LOCAL										
			INDIAN										
			TOTAL	15									
29	R110	DRAIN	LOCAL										
			NON LOCAL	2	17	19		9			10		
			INDIAN										
			TOTAL	19									
30	R26	Gutter	LOCAL										
			NON LOCAL	4	16	20		10			10		
			INDIAN										
			TOTAL	20									
31	R7	Electric Work	LOCAL										
			NON LOCAL	4	12	16			6		10		
			INDIAN										
			TOTAL	16									
			LABOUR CLASS	LABOUR		COMPOSITION				ETHNIC COMPOSITION			
				SKILLED	UNSKILLED	MALE	FEMALE	JANJATI	DALIT	MUSLIM	MADHESI	BRAHMIN/CHHETRI	
			LOCAL	55	228	284	0	33	53	11	192		0
			NON LOCAL	44	206	240	0	61	36	30	116		0
			INDIAN	0	0	0	0	0	0	0	0		0
			TOTAL	99	434	524	0	94	89	41	308		0

Regional Urban Development Project (RUDP)
Project Implementation Unit (PIU)
Biratnagar, Nepal
Labour Data

Month/Year: June 2019												
S.NO	LOCATION	TYPES OF WORK	TYPES OF WORKERS	LABOUR		COMPOSITION		ETHNIC COMPOSITION				
				SKILLED	UNSKILLED	MALE	FEMALE	JANJATI	DALIT	MUSLIM	MADHESI	BRAHMIN/CHHETRI
1	R6	Gutter	LOCAL	4	17	21			10		11	
			NON LOCAL									
			INDIAN									
			TOTAL	21								
2	N27	Ashphalt	LOCAL									
			NON LOCAL	3	12	15		25			15	
			INDIAN									
			TOTAL	15								
3	R7	Brooming	LOCAL	2	12	15					15	
			NON LOCAL									
			INDIAN									
			TOTAL	14								
4	R12	House Connection	LOCAL	3	8	11					11	
			NON LOCAL									
			INDIAN									
			TOTAL	11								
5	T3L7C	DRAIN	LOCAL									
			NON LOCAL	4	16	20		5	10	5		
			INDIAN									
			TOTAL	20								
6	Rani	Site Clearence	LOCAL									
			NON LOCAL	3	17	10					10	
			INDIAN									
			TOTAL	20								
7	T3L39	Drain	LOCAL	4	12	16		5	1		10	
			NON LOCAL									
			INDIAN									
			TOTAL	16								
8	T3Trunk	Crossing	LOCAL	3	7	10					10	
			NON LOCAL									
			INDIAN									
			TOTAL	10								
9	R3 Trunk	DRAIN	LOCAL									
			NON LOCAL	4	18	22			2	20		
			INDIAN									
			TOTAL	22								
10	T1L5	MH Raise	LOCAL	2	5	7					7	
			NON LOCAL									
			INDIAN									
			TOTAL	7								
11	T3L19G	Drain	LOCAL									
			NON LOCAL	2	15	17			7		10	
			INDIAN									
			TOTAL	17								
12	R9	Drain	LOCAL									
			NON LOCAL	3	16	19					19	
			INDIAN									
			TOTAL	19								
13	B1	DRAIN RISE	LOCAL	3	12	15					15	
			NON LOCAL									
			INDIAN									
			TOTAL	15								
14	N27	Weed Hole	LOCAL									
			NON LOCAL	1	9	10		7	3			
			INDIAN									
			TOTAL	10								



Regional Urban Development Project (RUDP)
Project Implementation Unit (PIU)
Biratnagar, Nepal
Labour Data

Month/Year: June 2019										
15	Madhumara	Drain	LOCAL	4	18	22			5	17
			NON LOCAL							
			INDIAN							
			TOTAL	22						
16	B2	Drain Raise	LOCAL	3	15	18		8		10
			NON LOCAL							
			INDIAN							
			TOTAL	18						
17	T3L7G	DRAIN	LOCAL							
			NON LOCAL	4	16	20		8		12
			INDIAN							
			TOTAL	20						
18	Koshi Yard	Production	LOCAL							
			NON LOCAL	5	17	22				
			INDIAN							
			TOTAL	22						
19	Madhumara Yard	Production	LOCAL	6	18	24		4	5	1
			NON LOCAL							
			INDIAN							
			TOTAL	24						
20	judi Yard	Production	LOCAL	8	36	44		14	10	20
			NON LOCAL							
			INDIAN							
			TOTAL	44						
21	T2L22B	Drain	LOCAL	4	18	22		5	5	12
			NON LOCAL							
			INDIAN							
			TOTAL	22						
22	R82	Base Final	LOCAL	2	9	11			5	6
			NON LOCAL							
			INDIAN							
			TOTAL	11						
23	R6	RCC Drain	LOCAL							
			NON LOCAL							
			INDIAN							
			TOTAL							
24	T3L22B	DRAIN	LOCAL							
			NON LOCAL	2	8	10				10
			INDIAN							
			TOTAL	10						
25	R6	KerbStone	LOCAL	2	12	14				14
			NON LOCAL							
			INDIAN							
			TOTAL	14						
26	T3 Trunk	Drain	LOCAL	3	16	19		9		10
			NON LOCAL							
			INDIAN							
			TOTAL	19						
27	R19	DRAIN	LOCAL							
			NON LOCAL	3	17	20		5	5	10
			INDIAN							
			TOTAL	20						
28	T2L19X	DRAIN	LOCAL	2	13	15		5	5	10
			NON LOCAL							
			INDIAN							
			TOTAL	15						



Regional Urban Development Project (RUDP)
Project Implementation Unit (PIU)
Biratnagar, Nepal
Labour Data

											Month/Year: June 2019	
29	R110	DRAIN	LOCAL									
			NON LOCAL	2	17	19		9		10		
			INDIAN									
			TOTAL	19								
30	R26	Gutter	LOCAL									
			NON LOCAL	4	16	20		10		10		
			INDIAN									
			TOTAL	20								
31	R7	Electric Work	LOCAL									
			NON LOCAL	4	12	16		6		10		
			INDIAN									
			TOTAL	16								
				LABOUR		COMPOSITION				ETHNIC COMPOSITION		
LABOUR CLASS			SKILLED	UNSKILLED	MALE	FEMALE	JANJATI	DALIT	MUSLIM	MADHESI	BRAHMIN/CHHETRI	
LOCAL			55	228	284	0	33	53	11	192	0	
NON LOCAL			44	206	240	0	61	36	30	116	0	
INDIAN			0	0	0	0	0	0	0	0	0	
TOTAL			99	434	524	0	94	89	41	308	0	

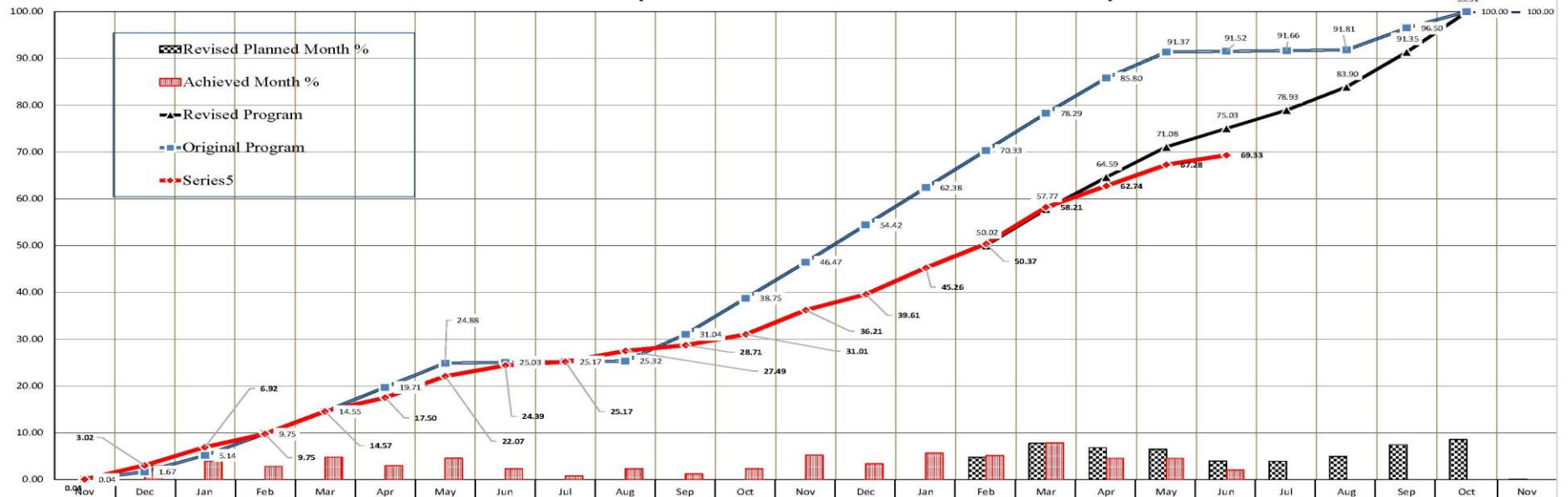


ANNEX-5: S-Curve

ATTACHED – June 2019



**BIRATNAGAR METROPOLITAN CITY
REGIONAL URBAN DEVELOPMENT PROJECT (RUDP)
S-CURVE (REVISED WORK PROGRAM-01)**



Year/Month	2017				2018												2019											
	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov			
	Scheduled Work Program														Revised Work program - 01													
Original Planned Month %	0.04	1.63	3.48	4.60	4.80	5.17	5.17	0.15	0.15	0.15	5.71	7.72	7.72	7.95	7.96	7.96	7.51	5.57	0.15	0.15	0.15	4.69	3.51	0.00				
Original Planned Cum %	0.04	1.67	5.14	9.75	14.55	19.71	24.88	25.03	25.17	25.32	31.04	38.75	46.47	54.42	62.38	70.33	78.29	85.80	91.37	91.52	91.66	91.81	96.50	100.00	100.00			
Achieved month %	0.04	2.98	3.90	2.83	4.82	2.93	4.57	2.32	0.78	2.32	1.22	2.30	5.20	3.40	5.65	5.11	7.84	4.53	4.54	2.05								
Achieved Progress Cum%	0.04	3.02	6.92	9.75	14.57	17.50	22.07	24.39	25.17	27.49	28.71	31.01	36.21	39.61	45.26	50.37	58.21	62.74	67.28	69.33								
Revised Planned Month %																4.76	7.75	6.82	6.49	3.95	3.90	4.97	7.45	8.56	0.090			
Revised Planned Cum %																50.02	57.77	64.59	71.08	75.03	78.93	83.90	91.35	99.91	100.00			
Revised planned month Amount in 100000																1099.89	1790.79	1575.90	1499.65	912.73	901.17	1148.42	1721.47	1977.96	20.80			
Achieved Month Amount in 100000																1180.77	1811.59	1046.75	1049.06	473.69								
Revised planned Cum Amount in 100000																11558.80	13349.59	14925.49	16425.14	17337.86	18239.04	19387.45	21108.93	23086.89	23107.68			
Achieved Cum Amount in 100000																11639.67	13451.26	14498.01	15547.07	16020.76								

Note: Our Claim for Extension of Time remain valid as per contract.



Annex-6: Master Plan of RUDP Project



