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

May 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 28thOctober 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	10th October 2017
Date of Commencement	2nd November 2017
Date of Completion	1st November 2019
Contract Amount including PS and VAT	NRs. 2,611,092,249.63
Progress	
Road Rehabilitation (Asphalt)	40.74%
Sewer Line	85.62%
Storm Drain	100.00%
Road Side Drain	101.18%

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	**With respect to Revised Work Program-01:** Planned: 71.08%, Actual: 67.28%; Lead (+) or Lag (-) by (-) 3.80% Lag Physical progress lagging due to delay in shifting of telecom cable, start of early monsoon, **delay in IPC payment disbursement** and shut down for relocation of electricity by NTC.
Financial Progress up to date (***on the basis of IPC forwarded for disbursement***)	In Percentage: 56.14%, In Figure: NRs. 1,465,761,717.73 (including VAT and PS) up to IPC – 08. IPC – 9 is under perusal.
	In Words: NRs. One Billion Four Hundred Sixty Five Millions Seven Hundred Sixty One Thousand Seven Hundred Seventeen and Seventy Three Paisa 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	17,194.70	2,887.30	85.62%	
b	Manhole	No.	685.00	533.00	152.00	77.81%	
c	Sewer Inlet	No.	1,010.00	555.00	455.00	54.95%	
d	House Connection	No.	3,784.00	1,211.00	2,573.00	32.00%	
2	**Storm Water Drain**						

S.No	Description	Unit	BoQ Quantity	Progress up to date	Remaining	Progress Status expressed in (%)	Remarks
a	RCC Drain	m	652.80	585.00	0.00	100.00%	Revised Length =585m
b	Piles	No.	132.00	138.00	0.00	100.00%	Exceeded
3	**Road**						
a	Subgrade	m	73,860.00	40,656.81	33,203.19	55.05%	
b	Subbase	m	73,860.00	40,656.81	33,203.19	55.05%	
c	Base	m	73,860.00	35,321.82	38,538.18	47.82%	
d	Prime	m	73,860.00	30,088.82	43,771.18	40.74%	
e	Asphalt	m	73,860.00	30,088.82	43,771.18	40.74%	
4	**Road Side Drain**	m	26,050.00	26,356.19		101.18%	

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. T1, T2, T3 & T4 Trunk along with the secondary lines 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	1,304.50	20.00	232.00	2.00	1,536.50	22.00	
3	Hume Pipe (T4)	130.00	4.00	326.00	11.00	-	-	326.00	11.00	
Subtotal in (m)		**2,241.00**	**68.00**	**1,835.50**	**37.00**	**232.00**	**2.00**	**2,067.50**	**39.00**	
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			3,201.50	121.00	
3	HDPE (T3)	9,997.00	316.00	7,849.50	256.00	341.00	8.00	8,190.50	264.00	
4	HDPE (T4)	2,092.00	68.00	1,992.00	55.00			1,992.00	55.00	
Subtotal in (m)		**17,841.00**	**588.00**	**14,786.20**	**486.00**	**341.00**	**8.00**	**15,127.20**	**494.00**	
Total		**20,082.00**	**656.00**	**16,621.70**	**523.00**	**573.00**	**10.00**	**17,194.70**	**533.00**	**85.62%**

SN	Description	BoQ (Nos.)	Up to Pre Month	This month	Total to date	Progress %
1	Sewer inlet	1,010.00	489.00	66.00	555.00	54.95
2	House connection	3,784.00	1,136.00	75.00	1,211.00	32.00

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.

SN	Name of Drain	Length in m					Type of Drain	Work Completed				Length of Covered Drain in m	Remarks
		Original	Revised	Progress		Cumulative		Brick		RCC			
				Previous	This Month			m	m^3	m	m^3		
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 40.65 Km. has been attempted for Sub Base but due to early monsoon and lack of fund the Asphalt work is delaying.

About 30.00 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			
12	S13		1,617.00	1,617.00	1,417.00		1,417.00	1,417.00	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	2,315.00	135.40	2,450.40	2,450.40	1,837.40	1,702.00			
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			

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	
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	580.00	154.32	734.32	734.32	734.32	400.00		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	Banglamukhi Marg	420.00	477.00	477.00		477.00	477.00	477.00	477.00			
22	R7	Manakamana 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			
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	403.00	281.70	684.70	684.70	684.70	357.70		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	
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			

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	
51	R84	West of school	673.00	235.00	330.00	143.20	473.20	473.20	379.20	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	60.00			
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			
	T3L6	Elite club - CDO Office				107.00	107.00	107.00					
	T3L6	Balmandir - Ganesh Mandir				380.00	380.00	380.00					

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	
	T3L6	CDO Office front				49.40	49.40	49.40					
67	T3L6A	Golchha Marga			220.00		220.00	220.00	220.00	220.00			
68	T3L23	Madhumara road			421.00		421.00	421.00	300.00	300.00		358.40	
69	R45	Bata road			505.00		505.00	505.00	295.00	295.00			
70	T3L21				400.00		400.00	400.00	400.00	400.00		774.00	
71	N5				70.00		70.00	70.00	70.00	70.00		122.00	
72	T3L39				400.00		400.00	400.00	400.00	400.00		491.00	
73	T3L39A				130.00		130.00	130.00	130.00	130.00		179.40	
74	T3L39B				80.00		80.00	80.00	80.00	80.00		117.60	
75	R68 - T2L24G				220.00		220.00	220.00					
76	N10				194.00		194.00	194.00					
77	T3L24C				170.00		170.00	170.00					
78	T3L9				278.00		278.00	278.00					
79	R6				935.20	293.00	1,228.20	1,228.20	1,228.20	935.20			
80	N24				136.00		136.00	136.00	136.00	136.00			
81	R31				-	188.70	188.70	188.70	188.70				
82	Bindabasini Marga					352.28	352.28	352.28	352.28				
83	Bhattimode to Hartalihaat					166.50	166.50	166.50	166.50				
84	R73					217.00	217.00	217.00	217.00				
85	R6	Bata Galli				269.00	269.00	269.00	269.00				

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	
86	R9 (R41-R7)					194.80	194.80	194.80	194.80				
87	T3L23C					65.20	65.20	65.20					
88	R44	Thakurbari Road				357.50	357.50	357.50					
89	R102	Main				140.00	140.00	140.00					
90	R102	Branch				71.30	71.30	71.30					
91	R103					170.40	170.40	170.40					
92	R32					188.00	188.00	188.00	188.00				
93	T2L18Y					116.20	116.20	116.20					
94	R20					108.00	108.00	108.00					
	Total		**32,328.43**	**33,733.63**	**36,507.91**	**4,148.90**	**40,656.81**	**40,656.81**	**35,321.82**	**30,088.82**	**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	m^2	
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	

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	36,507.91	4,148.90	40,656.81	55.05%
2	Sub Base	m	73,860.00	36,207.91	4,448.90	40,656.81	55.05%
3	Base	m	73,860.00	32,737.92	2,583.90	35,321.82	47.82%
4	Prime/Tack	m	73,860.00	30,088.82	-	30,088.82	40.74%
5	Asphalt	m	73,860.00	30,088.82	-	30,088.82	40.74%
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		
4	R8		370.00		219.83		219.83	219.83		
5	R7	Devi Marg and Pipal Marg	155.00	155.00	89.58		89.58	89.58		
6	R63	DSP Road	418.79		418.79		418.79	418.79		
7	R9	Baglamukhi path	120.00	103.20	103.20		103.20	103.20		
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		

SN	Road Number	Name of Road	Length in m					Work Completed		Remarks
			Original	Revised	Progress		Total	Brick	RCC	
					Previous	This Month		m	m	
13	R11	Om Shiv Marg	-		200.17	25.00	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		
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		

SN	Road Number	Name of Road	Length in m					Work Completed		Remarks
			Original	Revised	Progress		Total	Brick	RCC	
					Previous	This Month		m	m	
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	1,932.50	40.00	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		
37	R7(b)(Neuro to sidhartha chowk)	Siddhartha Marga	317.00	317.00	300.00		300.00	300.00		
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		720.00	40.00	760.00		760.00	
41	R21(a)	DharamBadh Junction	-	160.00	80.00		80.00	80.00		

SN	Road Number	Name of Road	Length in m					Work Completed		Remarks
			Original	Revised	Progress		Total	Brick	RCC	
					Previous	This Month		m	m	
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	-		150.00	200.00	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		
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		

SN	Road Number	Name of Road	Length in m					Work Completed		Remarks
			Original	Revised	Progress		Total	Brick	RCC	
					Previous	This Month		m	m	
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 (T3Line 10D)	Dadhiram Marga	302.00	302.00	260.00		260.00	260.00		
60	R9, T2 L19	Fanindra Marga	256.00	256.00	215.00	30.00	245.00	245.00		
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		

SN	Road Number	Name of Road	Length in m					Work Completed		Remarks
			Original	Revised	Progress		Total	Brick	RCC	
					Previous	This Month		m	m	
70	R10/R10a	Ram Marga	1,092.41		740.36		740.36	740.36		
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		

SN	Road Number	Name of Road	Length in m					Work Completed		Remarks
			Original	Revised	Progress		Total	Brick	RCC	
					Previous	This Month		m	m	
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		
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				100.00	25.00	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		

SN	Road Number	Name of Road	Length in m					Work Completed		Remarks
			Original	Revised	Progress		Total	Brick	RCC	
					Previous	This Month		m	m	
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				150.00	100.00	250.00	250.00		
105	T3L22B				120.00		120.00	120.00		
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		100.00	100.00		
114	T3L13J				72.53		72.53	72.53		
115	T2L18Y				100.00		100.00	100.00		
116	T2L19P				114.38		114.38	114.38		

SN	Road Number	Name of Road	Length in m					Work Completed		Remarks
			Original	Revised	Progress		Total	Brick	RCC	
					Previous	This Month		m	m	
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			315.00	40.00	355.00	355.00		
121	T2L18K				40.00		40.00	40.00		
122	T3L23C				30.00	35.00	65.00	65.00		
123	T2L24E	Mahabir Marga			60.00		60.00	60.00		
124	R44				370.00	20.00	390.00	390.00		
125	R110				150.00		150.00	150.00		
126	Parichaya Marga				100.00		100.00	100.00		
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	100.00	100.00		
131	T3 Trunk	Sahid & Sanihat Marga			-	495.00	495.00	495.00		
132	T2L19F				-	55.00	55.00	55.00		

SN	Road Number	Name of Road	Length in m					Work Completed		Remarks
			Original	Revised	Progress		Total	Brick	RCC	
					Previous	This Month		m	m	
133	T2L18D				-	20.00	20.00	20.00		
134	R19				-	100.00	100.00	100.00		
135	R83	Shiva Marga			-	120.00	120.00	120.00		
136	T310B, T3L7D (R46)	Rangeli Road			-	250.00	250.00	250.00		
	Total				**24,661.19**	**1,695.00**	**26,356.19**	**25,596.19**	**760.00**	

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 in habitants 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, R27, R28 and R31, etc as per shut down schedules. Similarly, relocation of water supply pipe lines was done at T3L10 permanently and at T3L22A, T3 Trunk and Thakur Bari Road, etc supply were 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	28	82	110	0	10	11	5	84	0
Non local	84	294	365	13	74	66	31	207	0
Indian	19	67	86	0	0	20	20	46	0
TOTAL	**131**	**443**	**561**	**13**	**84**	**97**	**58**	**337**	**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	15th October 2017	339,105,000.00	Mobilization Advance
2	IPC 02	2nd April 2018	261,501,492.21	
3	IPC 03	1st July 2018	316,582,708.58	
4	IPC 04	1st October 2018	105,227,887.17	
5	IPC 05	2nd December 2018	95,951,603.44	
6	IPC 06	3rd 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	
Total amount excluding PA & Mobilization advance till date =			**1,465,761,717.73**	

Note: IPC – 09 is under perusal.

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:

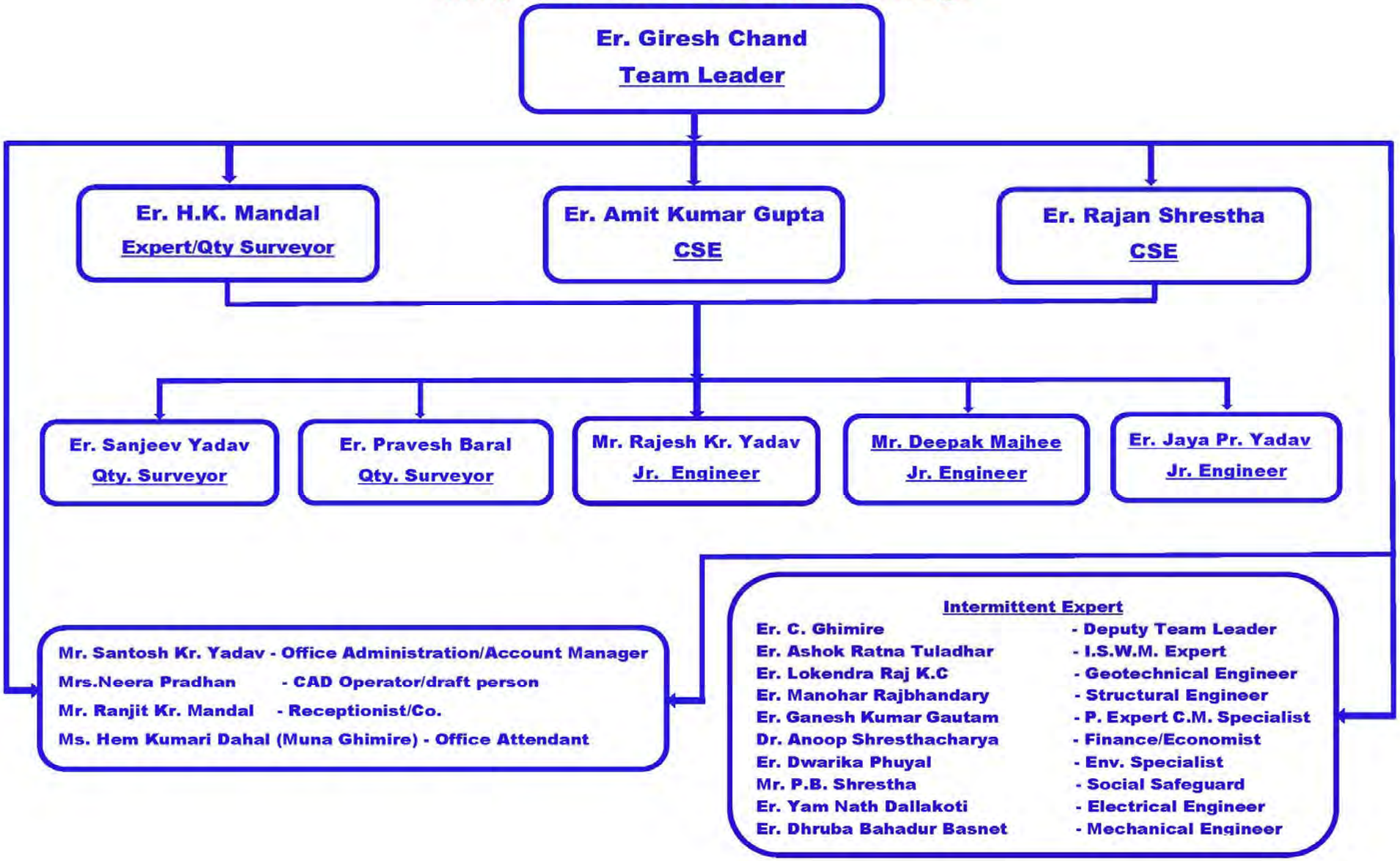
- Detailed Design and Procurement Assistance Phase for integrated solid waste management design (ISWM)
- Monthly progress report and quarterly progress report.
- Semi- annual Environmental monitoring report.
- Semi-annual Safeguard monitoring report.
- Annual progress report including annual Environmental / 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	6th Sep 2017	
2	Ashok Ratna Tuladhar	ISWM (Designer)	6th Sep 2017	Intermittent
3	Dwarika Phuyal	Environmental Safeguard Expert	1 Nov 2017	Intermittent
4	Prakash Bhakata Shrestha	Social Safeguard Monitoring Expert	26th dec-2017	Intermittent
5	Hare Krishna Mandal	Expert/Quantity surveyor	1st Nov 2017	
6	J.P Yadav	Construction Supervision Engineer	1st March 2018	Discontinued the service since 25th April, 2018.
7	A.K Gupta	Construction Supervision Engineer	1st March 2018	
8	Nishant K.C.	Construction Supervision Engineer	2nd April 2018	Discontinued the service since 1stOctober, 2018.
9	Amod Adhikari	Construction Supervision Engineer	7th Oct 2018	Discontinued the service since 1st April, 2019.
10	Rajan Shrestha	CSE/Quantity Surveyor	7th Nov 2017	Work as a CSE from 1st May 2019.
11	Ganesh Kumar Gautam	P. Expert C.M. Specialist	5th May 2019	Intermittent
12	Lokendra Raj K.C.	Geotechical Engineer	5th May 2019	Intermittent
13	Rajesh Kumar Yadav	Junior Engineer-1	6th Sep 2017	
14	Sanjeev Yadav	Qty. Surveyor	5th Nov 2017	
15	Santosh Kumar Yadav	Office Administration/Account Manager	6th Sep 2017	
16	Hem Kumari Dahal (Muna Ghimire)	Office Attendant	6th Sep 2017	
17	Ranjit Kumar Mandal	Receptionist	10th Dec 2017	
18	Pravesh Baral	Junior Engineer-2/Surveyor	10th Dec 2017	

SN	Name	Designation	Joining date	Remarks
19	J.P Yadav	Junior Engineer-3	1st March 2018	
20	Deepak Majhee	Junior Engineer-4	1st March 2018	
21	Arun Kumar Yadav	Junior Engineer-5	16th March 2018	
22	Neera Pradhan	CAD operator/Draft Person	10th Dec 2017	
23	Yub Raj 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

Note- Lagging due to delay in shifting of telecom poles, due to start of early monsoon, **delay in IPC payment disbursement** and shut down for relocation of electricity by NTC.

5.3. KEY EVENTS

The consultant has noted the following key dates for the month of May, 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.	
3	19th May 2019	One day awareness program on sewer system, connection to households and about Operation & Maintenance	BMC, PIU, the Consultant, the Contractor & Stakeholder's.
4	26 – 31 May 2019	Mr Yagya Bahadur Malla, PMC, RUDP, Kathmandu	Site visit including to verify grievances of Pasang Marga (R26).

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	0.00	48,371.00	Under progress
2	Kerb Stone	Rm	147,729.68	77,293.30	0.00	77,293.30	52.32%

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

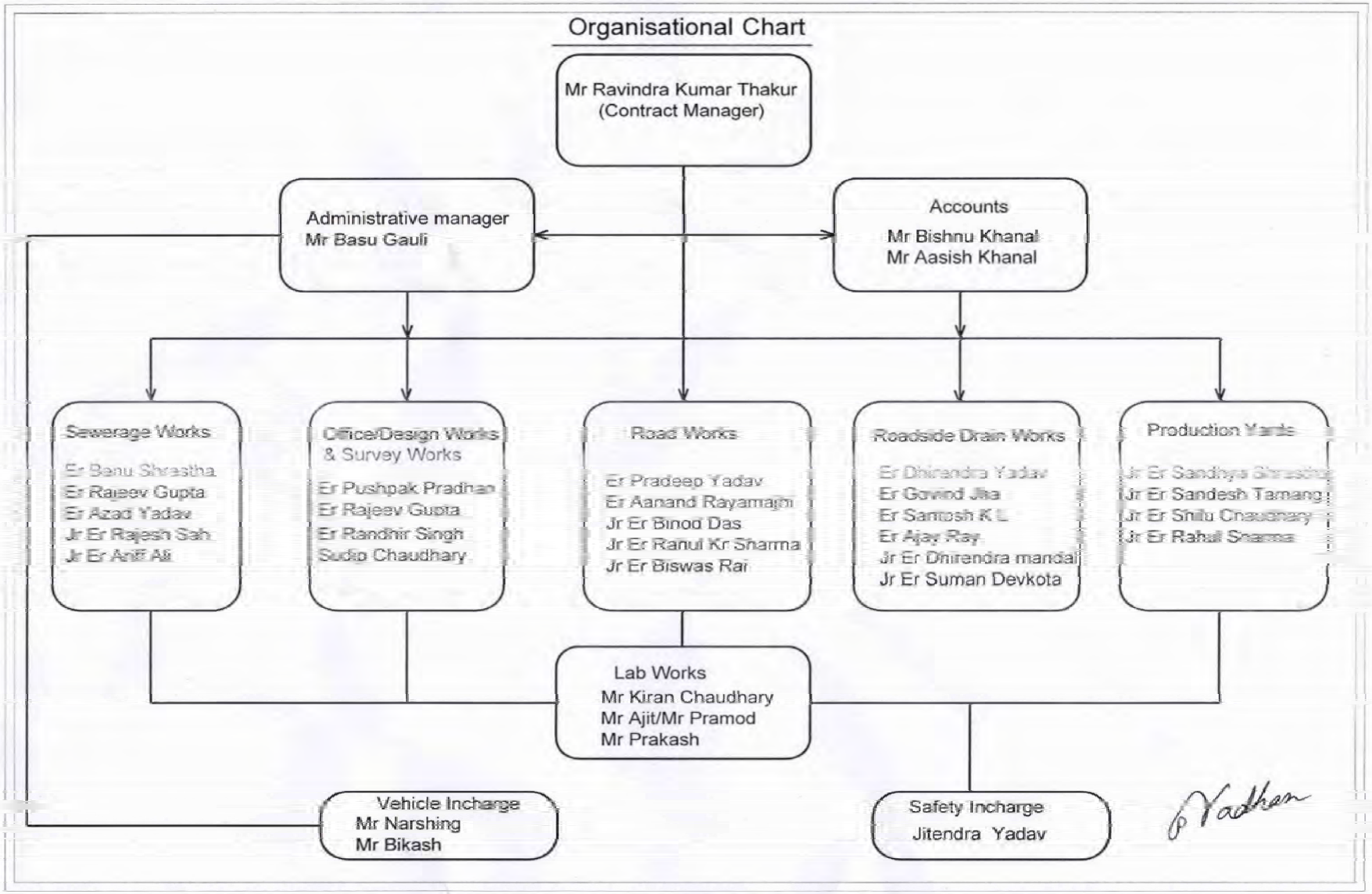
Physical Progress till date							
S.N.	*Description*	*Diameter (mm)*	*Progress*			*Total to Date (RM.)*	*Remarks*
			BoQ (RM)	*Up to Previous month (RM.)*	*This Month (RM.)*		
1	*RCC Pipe*	*300*	*336.00*	*336.00*	*-*	*336.00*	
2	*RCC Pipe*	*450*	*681.00*	*681.00*	*-*	*681.00*	
3	*RCC Pipe*	*500*	*842.00*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

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

Physical Progress till date							
S.N.	Description	Diameter (mm)	BoQ (RM)	Progress		Total to Date (RM.)	Remarks
				Up to Previous month (RM.)	This Month (RM.)		
1	HDPE Pipe	110.00	1,987.20	2,487.20	-	2,487.20	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 OF UPVC Pipe till date,

Physical Progress till date							
S.N.	Description	Diameter (mm)	BoQ (RM)	Progress		Total to Date (RM.)	Remarks
				Up to Previous month (RM)	This Month (Rm.)		
1	UPVC Pipe	160.00	5,050.00	4,800.00	250.00	5,050.00	
2	UPVC Pipe	110.00	5,050.00	4,000.00	1050.00	5,050.00	


Organisational Chart
Mr Ravindra Kumar Thakur
(Contract Manager)
Administrative manager
Mr Basu Gauli
Accounts
Mr Bishnu Khanal
Mr Aasish Khanal
Sewerage Works
Er Banu Shrestha
Er Rajeev Gupta
Er Azad Yadav
Jr Er Rajesh Sah
Jr Er Aniff Ali
Office/Design Works
& Survey Works
Er Pushpak Pradhan
Er Rajeev Gupta
Er Randhir Singh
Sudip Chaudhary
Road Works
Er Pradeep Yadav
Er Aanand Rayamajhi
Jr Er Binod Das
Jr Er Ranul Kr Sharma
Jr Er Biswas Rai
Roadside Drain Works
Er Dhirendra Yadav
Er Govind Jha
Er Santosh K L
Er Ajay Ray
Jr Er Dhirendra mandal
Jr Er Suman Devkota
Production Yards
Jr Er Sandhya Shrestha
Jr Er Sandesh Tamang
Jr Er Shilu Chaudhary
Jr Er Rahul Sharma
Lab Works
Mr Kiran Chaudhary
Mr Ajit/Mr Pramod
Mr Prakash
Vehicle Incharge
Mr Narshing
Mr Bikash
Safety Incharge
Jitendra Yadav

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	-	14	
8	Sub- Engineer	-	12	
9	Accountant	-	2	
10	Lab Technician	-	1	
11	Store Keeper	-	2	
12	Vehicle In charge	-	2	
13	Skilled Labors		131	
14	Unskilled Labors		443	

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	2	
7	Smooth wheeled roller 8 to 10 ton	1	1	
8	Grader	1	3	
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	13	
12	Chips spreader	1	-	
13	Bitumen decanter minimum 4000 Litres. (preheating container) Air compressor	2 2	2 2	
14	Excavator (200 above)	5	2	Backhoe loader-9 nos.
15	Tipping Trucks	15	25	
16	Service vehicle	2	5	
17	Survey equipment (Total station with accessories)	1	1	
18	Theodolite	2	-	
19	Levelling	5	18	
20	Mobile Generator 15-20 KVA	3	11	
21	Mixer Machine	6	10	
22	Concrete Batching Plant	1	-	

S.No	Equipment Type and Characteristics	Min Number required as per Contract	ZHONGHENG CONSTRUCTION Group	Remarks
23	Concrete pump	1	-	
24	Drain cleaner/ Nala cleaner	2	-	
25	Broomer	-	2	
26	Motor Bike	-	15	
27	Plate Compactor	-	6	
28	Water Pump	-	7	

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 and for sewer line.
- 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 line, Sewer inlet and House Connection works.
- Brick Manholes for sewer line.
- Relocation of electric poles and water supply works, etc.

ANNEX-1: Photographs of May, 2019

Laying of Base in T3 Trunk

Re adjustment of Sewer manhole wrt the required gradient

Brick work for road side drain at T3 Trunk (Sanihaat to Tapariya eye Hospital)

Curing of precast elements at Contractor's yard

Temporary water supply HDPE 40mm pipes

Dewatering work in T3 Trunk

ANNEX-2: Minutes of Meeting May, 2019

ANNEX-3: Laboratory Test Results of May, 2019

ATTACHED

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Concrete CubeTest Report

							Month			May	
							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	
1	R-7	RUDP-1787	Saptakoshi	OPC	Chisang Khola	3-Apr-19	10-Apr-19	1-May-19		23.05	M20
2	T3L12	RUDP-1788	Saptakoshi	OPC	Chisang Khola	3-Apr-19	10-Apr-19	1-May-19		23.20	M20
3	Rani site	RUDP-1789	Saptakoshi	OPC	Chisang Khola	4-Apr-19	11-Apr-19	2-May-19		23.87	M20
4	Madhumara Yard	RUDP-1790	Saptakoshi	OPC	Chisang Khola	4-Apr-19	11-Apr-19	2-May-19		27.29	M25
5	DDC YARD	RUDP-1791	Saptakoshi	OPC	Chisang Khola	4-Apr-19	11-Apr-19	2-May-19		33.00	M30
6	R-44	RUDP-1792	Saptakoshi	OPC	Chisang Khola	4-Apr-19	11-Apr-19	2-May-19		21.61	M20
7	R-7	RUDP-1793	Saptakoshi	OPC	Chisang Khola	5-Apr-19	12-Apr-19	3-May-19		22.59	M20
8	Koshi yard	RUDP-1794	Saptakoshi	OPC	Chisang Khola	5-Apr-19	12-Apr-19	3-May-19		23.80	M20
9	R-2	RUDP-1795	Saptakoshi	OPC	Chisang Khola	5-Apr-19	12-Apr-19	3-May-19		22.07	M20
10	R-2	RUDP-1796	Saptakoshi	OPC	Chisang Khola	6-Apr-19	13-Apr-19	4-May-19		24.54	M20
11	R-2	RUDP-1797	Saptakoshi	OPC	Chisang Khola	6-Apr-19	13-Apr-19	4-May-19		23.35	M20
12	R-82	RUDP-1798	Saptakoshi	OPC	Chisang Khola	6-Apr-19	13-Apr-19	4-May-19		22.14	M20
13	DDC YARD	RUDP-1799	Saptakoshi	OPC	Chisang Khola	6-Apr-19	13-Apr-19	4-May-19		33.97	M30
14	T2L22A	RUDP-1800	Saptakoshi	OPC	Chisang Khola	7-Apr-19	14-Apr-19	5-May-19		23.41	M20
15	R-110	RUDP-1801	Saptakoshi	OPC	Chisang Khola	7-Apr-19	14-Apr-19	5-May-19		23.12	M20
16	T3L12	RUDP-1802	Saptakoshi	OPC	Chisang Khola	7-Apr-19	14-Apr-19	5-May-19		23.56	M20
17	T3L12	RUDP-1803	Saptakoshi	OPC	Chisang Khola	7-Apr-19	14-Apr-19	5-May-19		24.63	M20
18	Rani site	RUDP-1804	Saptakoshi	OPC	Chisang Khola	7-Apr-19	14-Apr-19	5-May-19		23.65	M20
19	R-82	RUDP-1805	Saptakoshi	OPC	Chisang Khola	8-Apr-19	15-Apr-19	6-May-19		22.53	M20
20	DDC YARD	RUDP-1806	Saptakoshi	OPC	Chisang Khola	8-Apr-19	15-Apr-19	6-May-19		22.75	M20
21	T2L19Y	RUDP-1807	Saptakoshi	OPC	Chisang Khola	8-Apr-19	15-Apr-19	6-May-19		24.24	M20
22	R-82	RUDP-1808	Saptakoshi	OPC	Chisang Khola	9-Apr-19	16-Apr-19	7-May-19		22.89	M20
23	DDC YARD	RUDP-1809	Saptakoshi	OPC	Chisang Khola	9-Apr-19	16-Apr-19	7-May-19		24.76	M20
24	Rani site	RUDP-1810	Saptakoshi	OPC	Chisang Khola	10-Apr-19	17-Apr-19	8-May-19		21.84	M20
25	DDC YARD	RUDP-1811	Saptakoshi	OPC	Chisang Khola	10-Apr-19	17-Apr-19	8-May-19		23.72	M20
26	R-110	RUDP-1812	Saptakoshi	OPC	Chisang Khola	11-Apr-19	18-Apr-19	9-May-19		23.12	M20
27	T1L5	RUDP-1813	Saptakoshi	OPC	Chisang Khola	12-Apr-19	19-Apr-19	10-May-19		23.27	M20
28	DDC YARD	RUDP-1814	Saptakoshi	OPC	Chisang Khola	13-Apr-19	20-Apr-19	11-May-19		33.29	M30
29	R-82	RUDP-1815	Saptakoshi	OPC	Chisang Khola	13-Apr-19	20-Apr-19	11-May-19		22.90	M20
30	T1L5	RUDP-1816	Saptakoshi	OPC	Chisang Khola	13-Apr-19	20-Apr-19	11-May-19		22.67	M20
31	DDC YARD	RUDP-1817	Saptakoshi	OPC	Chisang Khola	13-Apr-19	20-Apr-19	11-May-19		24.17	M20
32	R-2	RUDP-1818	Saptakoshi	OPC	Chisang Khola	14-Apr-19	21-Apr-19	12-May-19		22.67	M20
33	R-110	RUDP-1819	Saptakoshi	OPC	Chisang Khola	14-Apr-19	21-Apr-19	12-May-19		23.27	M20
34	R-46	RUDP-1820	Saptakoshi	OPC	Chisang Khola	15-Apr-19	22-Apr-19	13-May-19		24.17	M20
35	Koshi yard	RUDP-1821	Saptakoshi	OPC	Chisang Khola	15-Apr-19	22-Apr-19	13-May-19		23.49	M20
36	T2L19Y	RUDP-1822	Saptakoshi	OPC	Chisang Khola	16-Apr-19	23-Apr-19	14-May-19		22.52	M20
37	T3L7	RUDP-1823	Saptakoshi	OPC	Chisang Khola	16-Apr-19	23-Apr-19	14-May-19		23.05	M20
38	R-82	RUDP-1824	Saptakoshi	OPC	Chisang Khola	16-Apr-19	23-Apr-19	14-May-19		24.24	M20
39	T3L12	RUDP-1825	Saptakoshi	OPC	Chisang Khola	17-Apr-19	24-Apr-19	15-May-19		22.37	M20
40	R-42	RUDP-1826	Saptakoshi	OPC	Chisang Khola	17-Apr-19	24-Apr-19	15-May-19		22.90	M20
41	T3L12	RUDP-1827	Saptakoshi	OPC	Chisang Khola	17-Apr-19	24-Apr-19	15-May-19		23.50	M20
42	T1L5	RUDP-1828	Saptakoshi	OPC	Chisang Khola	18-Apr-19	25-Apr-19	16-May-19		21.61	M20
43	R-82	RUDP-1829	Saptakoshi	OPC	Chisang Khola	19-Apr-19	26-Apr-19	17-May-19		21.92	M20
44	DDC YARD	RUDP-1830	Saptakoshi	OPC	Chisang Khola	20-Apr-19	27-Apr-19	18-May-19		24.47	M20
45	R-46	RUDP-1831	Saptakoshi	OPC	Chisang Khola	20-Apr-19	27-Apr-19	18-May-19		22.90	M20
46	DDC YARD	RUDP-1832	Saptakoshi	OPC	Chisang Khola	21-Apr-19	28-Apr-19	19-May-19		32.55	M30
47	R-46	RUDP-1833	Saptakoshi	OPC	Chisang Khola	22-Apr-19	29-Apr-19	20-May-19		23.05	M20
48	DDC YARD	RUDP-1834	Saptakoshi	OPC	Chisang Khola	22-Apr-19	29-Apr-19	20-May-19		24.04	M20
49	R-46	RUDP-1835	Saptakoshi	OPC	Chisang Khola	23-Apr-19	30-Apr-19	21-May-19		23.20	M20
50	R-110	RUDP-1836	Saptakoshi	OPC	Chisang Khola	23-Apr-19	30-Apr-19	21-May-19		24.17	M20

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	Submitted By	Verified By		Approved By
Engineer	Contract Manager	Expert Qty Surveyor/CSE		Team Leader
Benu Shrestha	Rabindra K.Thakur	H.K. Mandal/Rajan Shrestha		Giresh Chand

Building Design Authority (P) Ltd./BN/PLUS JV RUDP Biratnagar

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Concrete CubeTest Report

							Month			May	
							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	
51	T3L7	RUDP-1837	Saptakoshi	OPC	Chisang Khola	24-Apr-19	1-May-19	22-May-19	15.72	21.71	M20
52	Koshi-yard	RUDP-1838	Saptakoshi	OPC	Chisang Khola	24-Apr-19	1-May-19	22-May-19	14.75	22.29	M20
53	R-9	RUDP-1839	Saptakoshi	OPC	Chisang Khola	24-Apr-19	1-May-19	22-May-19	16.02	22.26	M20
54	R-110	RUDP-1840	Saptakoshi	OPC	Chisang Khola	24-Apr-19	1-May-19	22-May-19	14.53	22.93	M20
55	DDC-Yard	RUDP-1841	Saptakoshi	OPC	Chisang Khola	24-Apr-19	1-May-19	22-May-19	16.25	22.84	M20
56	T2L19Y	RUDP-1842	Saptakoshi	OPC	Chisang Khola	24-Apr-19	1-May-19	22-May-19	15.65	21.56	M20
57	R-46	RUDP-1843	Saptakoshi	OPC	Chisang Khola	24-Apr-19	1-May-19	22-May-19	15.35	22.51	M20
58	R-44	RUDP-1844	Saptakoshi	OPC	Chisang Khola	24-Apr-19	1-May-19	22-May-19	15.35	21.55	M20
59	T3L10	RUDP-1845	Saptakoshi	OPC	Chisang Khola	24-Apr-19	1-May-19	22-May-19	15.50	23.77	M20
60	Koshi-yard	RUDP-1846	Saptakoshi	OPC	Chisang Khola	24-Apr-19	1-May-19	22-May-19	16.25	23.55	M20
61	R-82	RUDP-1847	Saptakoshi	OPC	Chisang Khola	24-Apr-19	1-May-19	22-May-19	15.35	21.69	M20
62	T3L7C	RUDP-1848	Saptakoshi	OPC	Chisang Khola	24-Apr-19	1-May-19	22-May-19	15.35	22.91	M20
63	Madhumara-yard	RUDP-1849	Saptakoshi	OPC	Chisang Khola	24-Apr-19	1-May-19	22-May-19	18.57	26.55	M25
64	R-82	RUDP-1850	Saptakoshi	OPC	Chisang Khola	24-Apr-19	1-May-19	22-May-19	15.35	21.41	M20
65	R-7	RUDP-1851	Saptakoshi	OPC	Chisang Khola	24-Apr-19	1-May-19	22-May-19	16.25	21.77	M20
66	R-46	RUDP-1852	Saptakoshi	OPC	Chisang Khola	24-Apr-19	1-May-19	22-May-19	14.68	22.00	M20
67	R-83	RUDP-1853	Saptakoshi	OPC	Chisang Khola	24-Apr-19	1-May-19	22-May-19	15.35	22.55	M20
68	DDC-Yard	RUDP-1854	Saptakoshi	OPC	Chisang Khola	24-Apr-19	1-May-19	22-May-19	14.53	22.11	M20
69	R-7	RUDP-1855	Saptakoshi	OPC	Chisang Khola	24-Apr-19	1-May-19	22-May-19	14.16	22.47	M20
70	R-9	RUDP-1856	Saptakoshi	OPC	Chisang Khola	24-Apr-19	1-May-19	22-May-19	15.13	23.06	M20
71	Madhumara-yard	RUDP-1857	Saptakoshi	OPC	Chisang Khola	24-Apr-19	1-May-19	22-May-19	18.19	26.79	M25
72	DDC-Yard	RUDP-1858	Saptakoshi	OPC	Chisang Khola	24-Apr-19	1-May-19	22-May-19	21.71	32.88	M30
73	DDC-Yard	RUDP-1859	Saptakoshi	OPC	Chisang Khola	25-Apr-19	2-May-19	23-May-19	15.80	22.91	M20
74	Koshi-yard	RUDP-1860	Saptakoshi	OPC	Chisang Khola	25-Apr-19	2-May-19	23-May-19	15.20	21.78	M20
75	R-19	RUDP-1861	Saptakoshi	OPC	Chisang Khola	25-Apr-19	2-May-19	23-May-19	15.35	21.78	M20
76	Koshi-yard	RUDP-1862	Saptakoshi	OPC	Chisang Khola	25-Apr-19	2-May-19	23-May-19	15.80	23.35	M20
77	R-82	RUDP-1863	Saptakoshi	OPC	Chisang Khola	25-Apr-19	2-May-19	23-May-19	16.32	21.63	M20
78	T2L19Y	RUDP-1864	Saptakoshi	OPC	Chisang Khola	25-Apr-19	2-May-19	23-May-19	16.25	22.00	M20
79	T1L5	RUDP-1865	Saptakoshi	OPC	Chisang Khola	25-Apr-19	2-May-19	23-May-19	17.21	22.68	M20
80	R-110	RUDP-1866	Saptakoshi	OPC	Chisang Khola	25-Apr-19	2-May-19	23-May-19	15.20	22.26	M20
81	Judi-yard	RUDP-1867	Saptakoshi	OPC	Chisang Khola	25-Apr-19	2-May-19	23-May-19	16.32	22.91	M20
82	T3L22A	RUDP-1868	Saptakoshi	OPC	Chisang Khola	25-Apr-19	2-May-19	23-May-19	16.02	21.71	M20
83	T2L19Y	RUDP-1869	Saptakoshi	OPC	Chisang Khola	25-Apr-19	2-May-19	23-May-19	16.39	23.28	M20
84	Judi-yard	RUDP-1870	Saptakoshi	OPC	Chisang Khola	25-Apr-19	2-May-19	23-May-19	15.43	22.91	M20
85	R-110	RUDP-1871	Saptakoshi	OPC	Chisang Khola	25-Apr-19	2-May-19	23-May-19	15.80	21.86	M20
86	Koshi-yard	RUDP-1872	Saptakoshi	OPC	Chisang Khola	25-Apr-19	2-May-19	23-May-19	16.02	21.56	M20
87	T3L22A	RUDP-1873	Saptakoshi	OPC	Chisang Khola	25-Apr-19	2-May-19	23-May-19	17.06	22.51	M20
88	Madhumara-yard	RUDP-1874	Saptakoshi	OPC	Chisang Khola	25-Apr-19	2-May-19	23-May-19	15.80	21.71	M20
89	Madhumara-yard	RUDP-1875	Saptakoshi	OPC	Chisang Khola	25-Apr-19	2-May-19	23-May-19	17.67	27.14	M25
90	R-9	RUDP-1876	Saptakoshi	OPC	Chisang Khola	25-Apr-19	2-May-19	23-May-19	16.25	21.93	M20
91	R-110	RUDP-1877	Saptakoshi	OPC	Chisang Khola	25-Apr-19	2-May-19	23-May-19	15.20	22.36	M20
92	T2L19Y	RUDP-1878	Saptakoshi	OPC	Chisang Khola	25-Apr-19	2-May-19	23-May-19	16.02	23.50	M20
93	R-82	RUDP-1879	Saptakoshi	OPC	Chisang Khola	25-Apr-19	2-May-19	23-May-19	14.90	22.99	M20
94	R-46	RUDP-1880	Saptakoshi	OPC	Chisang Khola	25-Apr-19	2-May-19	23-May-19	15.35	22.81	M20
95	Madhumara-yard	RUDP-1881	Saptakoshi	OPC	Chisang Khola	26-Apr-19	3-May-19	24-May-19	18.42	26.48	M25
96	R-19	RUDP-1882	Saptakoshi	OPC	Chisang Khola	26-Apr-19	3-May-19	24-May-19	15.72	22.41	M20
97	T3L22A	RUDP-1883	Saptakoshi	OPC	Chisang Khola	26-Apr-19	3-May-19	24-May-19	16.10	21.78	M20
98	Koshi-yard	RUDP-1884	Saptakoshi	OPC	Chisang Khola	26-Apr-19	3-May-19	24-May-19	15.80	22.15	M20
99	T3L10	RUDP-1885	Saptakoshi	OPC	Chisang Khola	26-Apr-19	3-May-19	24-May-19	15.80	22.11	M20

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

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Engineer	Contract Manager	Expert Qty Surveyor/CSE	RUDP	Team Leader
Benu Shrestha	Rabindra K.Thakur	H.K. Mandal/Rajan Shrestha	Biratnagar	Giresh Chand

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Concrete CubeTest Report

							Month			May
							Year			2019
							Type of Material			Conc. Cube
S.N	Location	Lab Ref no	Type of Cement	Brand of Cement	Source of Sand+Aggr	Date of Casting	Date of Testing		Strength, N/mm2		Concrete Grade
							7 Days	28 Days	7 Days	28 Days	
100	R-46	RUDP-1886	Saptakoshi	OPC	Chisang Khola	26-Apr-19	3-May-19	24-May-19	15.13	23.03	M20
101	R-6,Branch line	RUDP-1887	Saptakoshi	OPC	Chisang Khola	26-Apr-19	3-May-19	24-May-19	15.65	22.70	M20
102	Madhumara-yard	RUDP-1888	Saptakoshi	OPC	Chisang Khola	26-Apr-19	3-May-19	24-May-19	18.28	27.31	M25
103	Judi-yard	RUDP-1889	Saptakoshi	OPC	Chisang Khola	26-Apr-19	3-May-19	24-May-19	16.02	23.43	M20
104	T2L19Y	RUDP-1890	Saptakoshi	OPC	Chisang Khola	26-Apr-19	3-May-19	24-May-19	15.65	21.56	M20
105	R-83	RUDP-1891	Saptakoshi	OPC	Chisang Khola	26-Apr-19	3-May-19	24-May-19	16.39	22.03	M20
106	T3L7C	RUDP-1892	Saptakoshi	OPC	Chisang Khola	26-Apr-19	3-May-19	24-May-19	15.35	21.55	M20
107	R-19	RUDP-1893	Saptakoshi	OPC	Chisang Khola	26-Apr-19	3-May-19	24-May-19	15.35	21.86	M20
108	Madhumara-yard	RUDP-1894	Saptakoshi	OPC	Chisang Khola	26-Apr-19	3-May-19	24-May-19	17.67	26.93	M25
109	R-44(T3L9)	RUDP-1895	Saptakoshi	OPC	Chisang Khola	26-Apr-19	3-May-19	24-May-19	15.50	21.93	M20
110	T3L39A	RUDP-1896	Saptakoshi	OPC	Chisang Khola	26-Apr-19	3-May-19	24-May-19	14.31	22.53	M20
111	Koshi-yard	RUDP-1897	Saptakoshi	OPC	Chisang Khola	26-Apr-19	3-May-19	24-May-19	15.80	23.03	M20
112	R-110	RUDP-1898	Saptakoshi	OPC	Chisang Khola	26-Apr-19	3-May-19	24-May-19	15.35	22.88	M20
113	T3L7	RUDP-1899	Saptakoshi	OPC	Chisang Khola	26-Apr-19	3-May-19	24-May-19	16.77	23.10	M20
114	Madhumara-yard	RUDP-1900	Saptakoshi	OPC	Chisang Khola	26-Apr-19	3-May-19	24-May-19	18.57	27.01	M25
115	Koshi-yard	RUDP-1901	Saptakoshi	OPC	Chisang Khola	27-Apr-19	4-May-19	25-May-19	15.13	22.48	M20
116	R-9	RUDP-1902	Saptakoshi	OPC	Chisang Khola	27-Apr-19	4-May-19	25-May-19	15.80	22.13	M20
117	R-82	RUDP-1903	Saptakoshi	OPC	Chisang Khola	27-Apr-19	4-May-19	25-May-19	16.25	22.51	M20
118	T3L22A	RUDP-1904	Saptakoshi	OPC	Chisang Khola	27-Apr-19	4-May-19	25-May-19	14.68	22.59	M20
119	T3L7	RUDP-1905	Saptakoshi	OPC	Chisang Khola	27-Apr-19	4-May-19	25-May-19	14.61	21.93	M20
120	R-6,Branch line	RUDP-1906	Saptakoshi	OPC	Chisang Khola	27-Apr-19	4-May-19	25-May-19	15.28	23.13	M20
121	R-9	RUDP-1907	Saptakoshi	OPC	Chisang Khola	27-Apr-19	4-May-19	25-May-19	15.72	21.78	M20
122	R-46	RUDP-1908	Saptakoshi	OPC	Chisang Khola	27-Apr-19	4-May-19	25-May-19	14.90	23.81	M20
123	R-110	RUDP-1909	Saptakoshi	OPC	Chisang Khola	27-Apr-19	4-May-19	25-May-19	15.80	22.41	M20
124	T2L19Y	RUDP-1910	Saptakoshi	OPC	Chisang Khola	27-Apr-19	4-May-19	25-May-19	14.31	22.18	M20
125	R-82	RUDP-1911	Saptakoshi	OPC	Chisang Khola	27-Apr-19	4-May-19	25-May-19	15.13	21.93	M20
126	Madhumara-yard	RUDP-1912	Saptakoshi	OPC	Chisang Khola	27-Apr-19	4-May-19	25-May-19	17.21	26.17	M25
127	T3L10	RUDP-1913	Saptakoshi	OPC	Chisang Khola	27-Apr-19	4-May-19	25-May-19	15.87	21.78	M20
128	T1L5	RUDP-1914	Saptakoshi	OPC	Chisang Khola	27-Apr-19	4-May-19	25-May-19	14.75	22.73	M20
129	T3L Trunk line	RUDP-1915	Saptakoshi	OPC	Chisang Khola	27-Apr-19	4-May-19	25-May-19	15.35	22.03	M20
130	Madhumara-yard	RUDP-1916	Saptakoshi	OPC	Chisang Khola	27-Apr-19	4-May-19	25-May-19	18.05	27.54	M25
131	R-7	RUDP-1917	Saptakoshi	OPC	Chisang Khola	27-Apr-19	4-May-19	25-May-19	15.20	22.41	M20
132	R-19	RUDP-1918	Saptakoshi	OPC	Chisang Khola	27-Apr-19	4-May-19	25-May-19	15.20	22.81	M20
133	R-83	RUDP-1919	Saptakoshi	OPC	Chisang Khola	27-Apr-19	4-May-19	25-May-19	14.61	23.21	M20
134	Judi-yard	RUDP-1920	Saptakoshi	OPC	Chisang Khola	27-Apr-19	4-May-19	25-May-19	15.13	22.73	M20
135	Koshi-yard	RUDP-1921	Saptakoshi	OPC	Chisang Khola	28-Apr-19	5-May-19	26-May-19	15.50	21.93	M20
136	Judi Yard	RUDP-1922	Saptakoshi	OPC	Chisang Khola	28-Apr-19	5-May-19	26-May-19	16.17	23.28	M20
137	Judi Yard	RUDP-1923	Saptakoshi	OPC	Chisang Khola	28-Apr-19	5-May-19	26-May-19	16.39	21.78	M20
138	T2L19Y	RUDP-1924	Saptakoshi	OPC	Chisang Khola	28-Apr-19	5-May-19	26-May-19	15.50	23.28	M20
139	T3L T LINE	RUDP-1925	Saptakoshi	OPC	Chisang Khola	28-Apr-19	5-May-19	26-May-19	15.50	21.93	M20
140	T3L T LINE	RUDP-1926	Saptakoshi	OPC	Chisang Khola	28-Apr-19	5-May-19	26-May-19	14.90	21.71	M20
141	R-6,Branch line	RUDP-1927	Saptakoshi	OPC	Chisang Khola	28-Apr-19	5-May-19	26-May-19	14.90	22.08	M20
142	Madhumara-yard	RUDP-1928	Saptakoshi	OPC	Chisang Khola	28-Apr-19	5-May-19	26-May-19	17.59	27.36	M25
143	R-110	RUDP-1929	Saptakoshi	OPC	Chisang Khola	28-Apr-19	5-May-19	26-May-19	15.88	23.58	M20
144	Madhumara-yard	RUDP-1930	Saptakoshi	OPC	Chisang Khola	28-Apr-19	5-May-19	26-May-19	15.58	22.08	M20
145	R-19	RUDP-1931	Saptakoshi	OPC	Chisang Khola	28-Apr-19	5-May-19	26-May-19	15.06	23.62	M20
146	Judi Yard	RUDP-1932	Saptakoshi	OPC	Chisang Khola	28-Apr-19	5-May-19	26-May-19	16.47	22.08	M20
147	Madhumara Yard	RUDP-1933	Saptakoshi	OPC	Chisang Khola	28-Apr-19	5-May-19	26-May-19	18.28	22.08	M20
148	T3L T LINE	RUDP-1934	Saptakoshi	OPC	Chisang Khola	28-Apr-19	5-May-19	26-May-19	15.20	21.56	M20
149	T3L T LINE	RUDP-1935	Saptakoshi	OPC	Chisang Khola	28-Apr-19	5-May-19	26-May-19	15.80	22.70	M20
150	R-9	RUDP-1936	Saptakoshi	OPC	Chisang Khola	28-Apr-19	5-May-19	26-May-19	14.90	22.08	M20

Contractor	Consultant
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Engineer	Contract Manager	Expert Qty Surveyor/CSE	Team Leader
Benu Shrestha	Rabindra K.Thakur	H.K. Mandal/Rajan Shrestha	Giresh Chand

Building Design Authority (P) Ltd./BN/PLUS JV RUDP Biratnagar

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Concrete CubeTest Report

							Month				May
							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	
151	Judi Yard	RUDP-1937	Saptakoshi	OPC	Chisang Khola	28-Apr-19	5-May-19	26-May-19	14.83	23.00	M20
152	R-19	RUDP-1938	Saptakoshi	OPC	Chisang Khola	28-Apr-19	5-May-19	26-May-19	15.80	21.11	M20
153	R-110	RUDP-1939	Saptakoshi	OPC	Chisang Khola	28-Apr-19	5-May-19	26-May-19	15.72	22.91	M20
154	Koshi Yard	RUDP-1940	Saptakoshi	OPC	Chisang Khola	28-Apr-19	5-May-19	26-May-19	14.90	22.08	M20
155	T3L T. LINE	RUDP-1941	Saptakoshi	OPC	Chisang Khola	29-Apr-19	6-May-19	27-May-19	16.02	23.21	M20
156	Judi Yard	RUDP-1942	Saptakoshi	OPC	Chisang Khola	29-Apr-19	6-May-19	27-May-19	15.43	21.78	M20
157	T2L19Y	RUDP-1943	Saptakoshi	OPC	Chisang Khola	29-Apr-19	6-May-19	27-May-19	14.98	21.86	M20
158	RR-2	RUDP-1944	Saptakoshi	OPC	Chisang Khola	29-Apr-19	6-May-19	27-May-19	15.57	22.76	M20
159	Rani Buspark-A	RUDP-1945	Saptakoshi	OPC	Chisang Khola	29-Apr-19	6-May-19	27-May-19	16.02	21.18	M20
160	T3L T. LINE	RUDP-1946	Saptakoshi	OPC	Chisang Khola	29-Apr-19	6-May-19	27-May-19	14.68	21.93	M20
161	T2L19X	RUDP-1947	Saptakoshi	OPC	Chisang Khola	29-Apr-19	6-May-19	27-May-19	14.75	22.73	M20
162	T3L22C	RUDP-1948	Saptakoshi	OPC	Chisang Khola	29-Apr-19	6-May-19	27-May-19	15.13	22.33	M20
163	R-9	RUDP-1949	Saptakoshi	OPC	Chisang Khola	29-Apr-19	6-May-19	27-May-19	14.53	22.66	M20
164	R-46	RUDP-1950	Saptakoshi	OPC	Chisang Khola	29-Apr-19	6-May-19	27-May-19	15.87	22.66	M20
165	T3L22A	RUDP-1951	Saptakoshi	OPC	Chisang Khola	29-Apr-19	6-May-19	27-May-19	15.43	23.06	M20
166	T3L7	RUDP-1952	Saptakoshi	OPC	Chisang Khola	29-Apr-19	6-May-19	27-May-19	15.80	23.03	M20
167	R-6 Branch line	RUDP-1953	Saptakoshi	OPC	Chisang Khola	29-Apr-19	6-May-19	27-May-19	15.28	22.88	M20
168	R-9	RUDP-1954	Saptakoshi	OPC	Chisang Khola	29-Apr-19	6-May-19	27-May-19	15.57	22.73	M20
169	R-46	RUDP-1955	Saptakoshi	OPC	Chisang Khola	29-Apr-19	6-May-19	27-May-19	15.80	22.26	M20
170	R-110	RUDP-1956	Saptakoshi	OPC	Chisang Khola	29-Apr-19	6-May-19	27-May-19	15.87	22.18	M20
171	T2L19Y	RUDP-1957	Saptakoshi	OPC	Chisang Khola	29-Apr-19	6-May-19	27-May-19	15.65	23.21	M20
172	T3L10	RUDP-1958	Saptakoshi	OPC	Chisang Khola	29-Apr-19	6-May-19	27-May-19	15.57	22.91	M20
173	T1L5	RUDP-1959	Saptakoshi	OPC	Chisang Khola	29-Apr-19	6-May-19	27-May-19	15.95	22.41	M20
174	R-44	RUDP-1960	Saptakoshi	OPC	Chisang Khola	29-Apr-19	6-May-19	27-May-19	15.72	22.51	M20
175	DDC YARD	RUDP-1961	Saptakoshi	OPC	Chisang Khola	29-Apr-19	6-May-19	27-May-19	21.78	31.47	M30
176	Madhumara Yard	RUDP-1962	Saptakoshi	OPC	Chisang Khola	30-Apr-19	7-May-19	28-May-19	17.36	26.55	M25
177	R-83	RUDP-1963	Saptakoshi	OPC	Chisang Khola	30-Apr-19	7-May-19	28-May-19	16.32	21.63	M20
178	R-9	RUDP-1964	Saptakoshi	OPC	Chisang Khola	30-Apr-19	7-May-19	28-May-19	16.69	22.91	M20
179	T3L10	RUDP-1965	Saptakoshi	OPC	Chisang Khola	30-Apr-19	7-May-19	28-May-19	15.20	21.66	M20
180	Koshi Yard	RUDP-1966	Saptakoshi	OPC	Chisang Khola	30-Apr-19	7-May-19	28-May-19	15.20	22.18	M20
181	T1L5	RUDP-1967	Saptakoshi	OPC	Chisang Khola	30-Apr-19	7-May-19	28-May-19	15.35	21.74	M20
182	T3L7	RUDP-1968	Saptakoshi	OPC	Chisang Khola	30-Apr-19	7-May-19	28-May-19	15.72	22.41	M20
183	DDC YARD	RUDP-1969	Saptakoshi	OPC	Chisang Khola	30-Apr-19	7-May-19	28-May-19	22.53	32.81	M30
184	T3L7	RUDP-1970	Saptakoshi	OPC	Chisang Khola	30-Apr-19	7-May-19	28-May-19	15.35	22.81	M20
185	R-46	RUDP-1971	Saptakoshi	OPC	Chisang Khola	30-Apr-19	7-May-19	28-May-19	15.80	22.76	M20
186	T3L22A	RUDP-1972	Saptakoshi	OPC	Chisang Khola	30-Apr-19	7-May-19	28-May-19	16.32	21.93	M20
187	R-7	RUDP-1973	Saptakoshi	OPC	Chisang Khola	30-Apr-19	7-May-19	28-May-19	15.35	23.28	M20
188	R-110	RUDP-1974	Saptakoshi	OPC	Chisang Khola	30-Apr-19	7-May-19	28-May-19	15.72	21.71	M20
189	R-110	RUDP-1975	Saptakoshi	OPC	Chisang Khola	30-Apr-19	7-May-19	28-May-19	16.69	22.91	M20
190	T1L5	RUDP-1976	Saptakoshi	OPC	Chisang Khola	30-Apr-19	7-May-19	28-May-19	16.32	21.58	M20
191	R-83	RUDP-1977	Saptakoshi	OPC	Chisang Khola	30-Apr-19	7-May-19	28-May-19	14.98	23.28	M20
192	T3L39A	RUDP-1978	Saptakoshi	OPC	Chisang Khola	30-Apr-19	7-May-19	28-May-19	16.77	23.73	M20
193	DDC YARD	RUDP-1979	Saptakoshi	OPC	Chisang Khola	30-Apr-19	7-May-19	28-May-19	15.80	21.63	M20
194	Madhumara Yard	RUDP-1980	Saptakoshi	OPC	Chisang Khola	30-Apr-19	7-May-19	28-May-19	17.21	26.33	M25
195	T3L22A	RUDP-1981	Saptakoshi	OPC	Chisang Khola	1-May-19	8-May-19	29-May-19	15.57	25.28	M20
196	T3L7	RUDP-1982	Saptakoshi	OPC	Chisang Khola	1-May-19	8-May-19	29-May-19	15.95	23.13	M20
197	R-9	RUDP-1983	Saptakoshi	OPC	Chisang Khola	1-May-19	8-May-19	29-May-19	15.72	23.06	M20
198	R-6 Branch line	RUDP-1984	Saptakoshi	OPC	Chisang Khola	1-May-19	8-May-19	29-May-19	15.87	23.06	M20
199	R-46	RUDP-1985	Saptakoshi	OPC	Chisang Khola	1-May-19	8-May-19	29-May-19	15.87	23.13	M20
200	R-110	RUDP-1986	Saptakoshi	OPC	Chisang Khola	1-May-19	8-May-19	29-May-19	16.02	22.99	M20

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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Expert Qty Surveyor/CSE	Team Leader
Benu Shrestha	Rabindra K.Thakur	H.K. Mandal/Rajan Shrestha	Giresh Chand

Building Design Authority (P) Ltd./BN/PLUS RUDP Biratnagar

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Concrete CubeTest Report

							Month			May	
							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	
201	T2L19Y	RUDP-1987	Saptakoshi	OPC	Chisang Khola	1-May-19	8-May-19	29-May-19	15.50	23.65	M20
202	T3L10	RUDP-1988	Saptakoshi	OPC	Chisang Khola	1-May-19	8-May-19	29-May-19	15.87	23.58	M20
203	T1L5	RUDP-1989	Saptakoshi	OPC	Chisang Khola	1-May-19	8-May-19	29-May-19	15.65	23.06	M20
204	R-44	RUDP-1990	Saptakoshi	OPC	Chisang Khola	1-May-19	8-May-19	29-May-19	15.20	23.21	M20
205	T3L T. LINE	RUDP-1991	Saptakoshi	OPC	Chisang Khola	1-May-19	8-May-19	29-May-19	16.10	23.65	M20
206	T3L7C	RUDP-1992	Saptakoshi	OPC	Chisang Khola	1-May-19	8-May-19	29-May-19	15.80	24.54	M20
207	R-7	RUDP-1993	Saptakoshi	OPC	Chisang Khola	1-May-19	8-May-19	29-May-19	15.95	24.02	M20
208	R-19	RUDP-1994	Saptakoshi	OPC	Chisang Khola	1-May-19	8-May-19	29-May-19	15.80	23.95	M20
209	R-83	RUDP-1995	Saptakoshi	OPC	Chisang Khola	1-May-19	8-May-19	29-May-19	15.65	23.43	M20
210	T3L6	RUDP-1996	Saptakoshi	OPC	Chisang Khola	1-May-19	8-May-19	29-May-19	15.95	24.25	M20
211	T3L19A	RUDP-1997	Saptakoshi	OPC	Chisang Khola	1-May-19	8-May-19	29-May-19	15.95	23.65	M20
212	T3L22A	RUDP-1998	Saptakoshi	OPC	Chisang Khola	1-May-19	8-May-19	29-May-19	15.50	23.36	M20
213	T3L7	RUDP-1999	Saptakoshi	OPC	Chisang Khola	1-May-19	8-May-19	29-May-19	15.72	24.25	M20
214	R-6 Branch line	RUDP-2000	Saptakoshi	OPC	Chisang Khola	1-May-19	8-May-19	29-May-19	15.65	23.88	M20
215	R-9	RUDP-2001	Saptakoshi	OPC	Chisang Khola	2-May-19	9-May-19	30-May-19	15.80	23.28	M20
216	R-46	RUDP-2002	Saptakoshi	OPC	Chisang Khola	2-May-19	9-May-19	30-May-19	16.10	23.88	M20
217	T1L5	RUDP-2003	Saptakoshi	OPC	Chisang Khola	2-May-19	9-May-19	30-May-19	14.75	24.39	M20
218	Madhumara Yard	RUDP-2004	Saptakoshi	OPC	Chisang Khola	2-May-19	9-May-19	30-May-19	17.29	27.15	M25
219	Madhumara Yard	RUDP-2005	Saptakoshi	OPC	Chisang Khola	2-May-19	9-May-19	30-May-19	17.67	26.77	M25
220	R-7	RUDP-2006	Saptakoshi	OPC	Chisang Khola	2-May-19	9-May-19	30-May-19	14.75	23.40	M20
221	Judi yard	RUDP-2007	Saptakoshi	OPC	Chisang Khola	2-May-19	9-May-19	30-May-19	14.90	23.11	M20
222	T1L5	RUDP-2008	Saptakoshi	OPC	Chisang Khola	2-May-19	9-May-19	30-May-19	15.80	21.62	M20
223	Koshi Yard	RUDP-2009	Saptakoshi	OPC	Chisang Khola	2-May-19	9-May-19	30-May-19	15.57	22.91	M20
224	R-9	RUDP-2010	Saptakoshi	OPC	Chisang Khola	2-May-19	9-May-19	30-May-19	16.32	24.39	M20
225	R-83	RUDP-2011	Saptakoshi	OPC	Chisang Khola	2-May-19	9-May-19	30-May-19	14.83	23.50	M20
226	T3L7C	RUDP-2012	Saptakoshi	OPC	Chisang Khola	2-May-19	9-May-19	30-May-19	15.57	21.63	M20
227	R-83	RUDP-2013	Saptakoshi	OPC	Chisang Khola	2-May-19	9-May-19	30-May-19	16.69	22.58	M20
228	R-19	RUDP-2014	Saptakoshi	OPC	Chisang Khola	2-May-19	9-May-19	30-May-19	15.43	21.81	M20
229	Madhumara Yard	RUDP-2015	Saptakoshi	OPC	Chisang Khola	2-May-19	9-May-19	30-May-19	18.12	27.09	M25
230	T2L19Y	RUDP-2016	Saptakoshi	OPC	Chisang Khola	2-May-19	9-May-19	30-May-19	15.43	22.91	M20
231	R-46	RUDP-2017	Saptakoshi	OPC	Chisang Khola	2-May-19	9-May-19	30-May-19	16.32	23.73	M20
232	R-9	RUDP-2018	Saptakoshi	OPC	Chisang Khola	2-May-19	9-May-19	30-May-19	15.20	22.18	M20
233	Judi yard	RUDP-2019	Saptakoshi	OPC	Chisang Khola	2-May-19	9-May-19	30-May-19	15.43	22.03	M20
234	T3L7	RUDP-2020	Saptakoshi	OPC	Chisang Khola	2-May-19	9-May-19	30-May-19	16.02	21.71	M20
235	R-6 Branch line	RUDP-2021	Saptakoshi	OPC	Chisang Khola	3-May-19	10-May-19	31-May-19	15.80	21.93	M20
236	R-9	RUDP-2022	Saptakoshi	OPC	Chisang Khola	3-May-19	10-May-19	31-May-19	15.57	18.95	M20
237	R-46	RUDP-2023	Saptakoshi	OPC	Chisang Khola	3-May-19	10-May-19	31-May-19	15.87	21.86	M20
238	R-110	RUDP-2024	Saptakoshi	OPC	Chisang Khola	3-May-19	10-May-19	31-May-19	15.35	21.93	M20
239	T2L19Y	RUDP-2025	Saptakoshi	OPC	Chisang Khola	3-May-19	10-May-19	31-May-19	15.87	21.93	M20
240	T2L10	RUDP-2026	Saptakoshi	OPC	Chisang Khola	3-May-19	10-May-19	31-May-19	15.43	21.71	M20
241	T1L5	RUDP-2027	Saptakoshi	OPC	Chisang Khola	3-May-19	10-May-19	31-May-19	15.87	21.86	M20
242	R-44	RUDP-2028	Saptakoshi	OPC	Chisang Khola	3-May-19	10-May-19	31-May-19	15.72	21.93	M20
243	T3L T. LINE	RUDP-2029	Saptakoshi	OPC	Chisang Khola	3-May-19	10-May-19	31-May-19	15.87	21.86	M20
244	T3L7C	RUDP-2030	Saptakoshi	OPC	Chisang Khola	3-May-19	10-May-19	31-May-19	15.80	21.86	M20
245	R-7	RUDP-2031	Saptakoshi	OPC	Chisang Khola	3-May-19	10-May-19	31-May-19	15.87	22.73	M20
246	R-19	RUDP-2032	Saptakoshi	OPC	Chisang Khola	3-May-19	10-May-19	31-May-19	15.87	22.73	M20
247	T1L5	RUDP-2033	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19	15.28		M20
248	T3L22A	RUDP-2034	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19	15.35		M20
249	Madhumara Yard	RUDP-2035	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19	19.54		M25

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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Expert Qty Surveyor/CSE	Team Leader
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Building Design Authority (P) Ltd./BN/PLUS JV RUDP Biratnagar

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Concrete CubeTest Report

							Month				May
							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	
250	T3L T. LINE	RUDP-2036	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19	15.38		M20
251	T3L10	RUDP-2037	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19	15.50		M20
252	T2L19Y	RUDP-2038	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19	16.54		M20
253	T3L7	RUDP-2039	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19	15.57		M20
254	R-110	RUDP-2040	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19	16.32		M20
255	T2L19Y	RUDP-2041	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19	15.65		M20
256	T1L5	RUDP-2042	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19	16.77		M20
257	R-6(BRANCH Line)	RUDP-2043	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19	15.43		M20
258	T3L39A	RUDP-2044	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19	15.43		M20
259	Madhumara Yard	RUDP-2045	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19	19.37		M25
260	Madhumara Yard	RUDP-2046	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19	15.07		M20
261	R-9	RUDP-2047	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19	15.88		M20
262	Judi Yard'	RUDP-2048	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19	15.80		M20
263	T3L39A	RUDP-2049	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19	16.32		M20
264	T3L T. LINE	RUDP-2050	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19	15.20		M20
265	T3L7C	RUDP-2051	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19	15.87		M20
266	R-7	RUDP-2052	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19	15.72		M20
267	R-19	RUDP-2053	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19	15.80		M20
268	R-83	RUDP-2054	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19	15.87		M20
269	T3L6	RUDP-2055	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19	15.80		M20
270	T3L19A	RUDP-2056	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19	16.02		M20
271	T3L22A	RUDP-2057	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19	15.75		M20
272	T3L7	RUDP-2058	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19	15.57		M20
273	R-6(BRANCH Line)	RUDP-2059	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19	15.87		M20
274	R-9	RUDP-2060	Saptakoshi	OPC	Chisang Khola	4-May-19	11-May-19	1-Jun-19	15.95		M20
275	R-46	RUDP-2061	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19	16.25		M20
276	R-110	RUDP-2062	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19	15.65		M20
277	T2L19Y	RUDP-2063	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19	15.87		M20
278	T3L10	RUDP-2064	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19	15.80		M20
279	T1L5	RUDP-2065	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19	16.32		M20
280	R-44	RUDP-2066	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19	15.87		M20
281	T3L T. LINE	RUDP-2067	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19	16.10		M20
282	T3L7C	RUDP-2068	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19	16.17		M20
283	R-7	RUDP-2069	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19	16.39		M20
284	R-19	RUDP-2070	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19	15.80		M20
285	R-83	RUDP-2071	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19	15.80		M20
286	T3L6	RUDP-2072	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19	15.87		M20
287	T3L19A	RUDP-2073	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19	16.25		M20
288	T3L22A	RUDP-2074	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19	16.62		M20
289	T3L7	RUDP-2075	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19	15.87		M20
290	R-6(BRANCH Line)	RUDP-2076	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19	16.02		M20
291	R-9	RUDP-2077	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19	16.17		M20
292	Judi Yard'	RUDP-2078	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19	15.80		M20
293	Madhumara Yard	RUDP-2079	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19	15.87		M20
294	Koshi Yard	RUDP-2080	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19	15.80		M20
295	R-46	RUDP-2081	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19	16.10		M20
296	R-110	RUDP-2082	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19	16.17		M20
297	T2L19Y	RUDP-2083	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19	15.43		M20

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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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REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Concrete CubeTest Report

							Month			May
							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	
298	T3L10	RUDP-2084	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19	15.72		M20
299	T1L5	RUDP-2085	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19	15.87		M20
300	R-44	RUDP-2086	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19	16.02		M20
301	T3L T. LINE	RUDP-2087	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19	15.87		M20
302	T3L7C	RUDP-2088	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19	16.17		M20
303	R-7	RUDP-2089	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19	16.32		M20
304	R-19	RUDP-2090	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19	15.87		M20
305	Madhumara Yard	RUDP-2091	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19	17.44		M25
306	Judi Yard	RUDP-2092	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19	16.32		M20
307	R-83	RUDP-2093	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19	15.80		M20
308	T3L6	RUDP-2094	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19	16.25		M20
309	TL19A	RUDP-2095	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19	15.95		M20
310	T3L22A	RUDP-2096	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19	15.87		M20
311	T3L7	RUDP-2097	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19	15.87		M20
312	R-6(BRANCH Line)	RUDP-2098	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19	16.17		M20
313	R-9	RUDP-2099	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19	16.25		M20
314	R-46	RUDP-2100	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19	16.17		M20
315	R-110	RUDP-2101	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19	16.10		M20
316	T2L19Y	RUDP-2102	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19	16.54		M20
317	T3L10	RUDP-2103	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19	16.54		M20
318	T1L5	RUDP-2104	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19	15.87		M20
319	R-44	RUDP-2105	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19	16.25		M20
320	T3L T. LINE	RUDP-2106	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19	15.87		M20
321	T3L7C	RUDP-2107	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19	15.80		M20
322	R-7	RUDP-2108	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19	16.54		M20
323	R-19	RUDP-2109	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19	16.10		M20
324	R-83	RUDP-2110	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19	15.95		M20
325	Madhumara Yard	RUDP-2111	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19	17.44		M25
326	T3L6	RUDP-2112	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19	16.32		M20
327	T3L19A	RUDP-2113	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19	15.80		M20
328	Madhumara Yard	RUDP-2114	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19	17.67		M25
329	T3L22A	RUDP-2115	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19	16.32		M20
330	T3L7	RUDP-2116	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19	15.28		M20
331	R-6(BRANCH Line)	RUDP-2117	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19	16.32		M20
332	R-9	RUDP-2118	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19	15.95		M20
333	R-46	RUDP-2119	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19	16.17		M20
334	R-110	RUDP-2120	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19	15.95		M20
335	Judi Yard	RUDP-2121	Saptakoshi	OPC	Chisang Khola	8-May-19	15-May-19	5-Jun-19	17.36		M25
336	Madhumara Yard	RUDP-2122	Saptakoshi	OPC	Chisang Khola	8-May-19	15-May-19	5-Jun-19	17.29		M25
337	T2L19Y	RUDP-2123	Saptakoshi	OPC	Chisang Khola	8-May-19	15-May-19	5-Jun-19	15.87		M20
338	T3L10	RUDP-2124	Saptakoshi	OPC	Chisang Khola	8-May-19	15-May-19	5-Jun-19	16.39		M20
339	T1L5	RUDP-2125	Saptakoshi	OPC	Chisang Khola	8-May-19	15-May-19	5-Jun-19	16.17		M20
340	R-44	RUDP-2126	Saptakoshi	OPC	Chisang Khola	8-May-19	15-May-19	5-Jun-19	16.47		M20
341	T3L T. LINE	RUDP-2127	Saptakoshi	OPC	Chisang Khola	8-May-19	15-May-19	5-Jun-19	16.25		M20
342	T3L7C	RUDP-2128	Saptakoshi	OPC	Chisang Khola	8-May-19	15-May-19	5-Jun-19	15.87		M20
343	R-7	RUDP-2129	Saptakoshi	OPC	Chisang Khola	8-May-19	15-May-19	5-Jun-19	16.02		M20
344	R-19	RUDP-2130	Saptakoshi	OPC	Chisang Khola	8-May-19	15-May-19	5-Jun-19	15.72		M20
345	R-83	RUDP-2131	Saptakoshi	OPC	Chisang Khola	8-May-19	15-May-19	5-Jun-19	15.72		M20

Contractor	Consltant
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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Expert Qty Surveyor/CSE	Team Leader
Benu Shrestha	Rabindra K.Thakur	H.K. Mandal/Rajan Shrestha	Giresh Chand

Building Design Authority (P) Ltd./BN/PLUS JV RUDP Biratnagar

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Concrete CubeTest Report

Month	May
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	
346	T3L6	RUDP-2132	Saptakoshi	OPC	Chisang Khola	8-May-19	15-May-19	5-Jun-19	16.10		M20
347	T3L19A	RUDP-2133	Saptakoshi	OPC	Chisang Khola	8-May-19	15-May-19	5-Jun-19	15.80		M20
348	Madhumara Yard	RUDP-2134	Saptakoshi	OPC	Chisang Khola	8-May-19	15-May-19	5-Jun-19	18.28		M25
349	T3L22A	RUDP-2135	Saptakoshi	OPC	Chisang Khola	8-May-19	15-May-19	5-Jun-19	16.32		M20
350	T3L7	RUDP-2136	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19	16.17		M20
351	R-6(BRANCH Line)	RUDP-2137	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19	15.87		M20
352	R-9	RUDP-2138	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19	16.69		M20
353	R-46	RUDP-2139	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19	16.39		M20
354	R-110	RUDP-2140	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19	15.80		M20
355	Madhumara Yard	RUDP-2141	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19	17.44		M25
356	Judi Yard	RUDP-2142	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19	17.14		M20
357	T2L19Y	RUDP-2143	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19	16.77		M20
358	T3L10	RUDP-2144	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19	16.17		M20
359	T1L5	RUDP-2145	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19	16.17		M20
360	R-44	RUDP-2146	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19	16.32		M20
361	T3L T. LINE	RUDP-2147	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19	16.25		M20
362	T3L7C	RUDP-2148	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19	16.20		M20
363	R-7	RUDP-2149	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19	15.87		M20
364	R-19	RUDP-2150	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19	15.95		M20
365	R-83	RUDP-2151	Saptakoshi	OPC	Chisang Khola	10-May-19	17-May-19	7-Jun-19	16.54		M20
366	R-9	RUDP-2152	Saptakoshi	OPC	Chisang Khola	10-May-19	17-May-19	7-Jun-19	15.43		M20
367	R-9	RUDP-2153	Saptakoshi	OPC	Chisang Khola	10-May-19	17-May-19	7-Jun-19	15.43		M20
368	T3L T. LINE	RUDP-2154	Saptakoshi	OPC	Chisang Khola	10-May-19	17-May-19	7-Jun-19	15.87		M20
369	R-46	RUDP-2155	Saptakoshi	OPC	Chisang Khola	10-May-19	17-May-19	7-Jun-19	15.87		M20
370	T2L19Y	RUDP-2156	Saptakoshi	OPC	Chisang Khola	10-May-19	17-May-19	7-Jun-19	15.80		M20
371	R-110	RUDP-2157	Saptakoshi	OPC	Chisang Khola	10-May-19	17-May-19	7-Jun-19	16.32		M20
372	R-19	RUDP-2158	Saptakoshi	OPC	Chisang Khola	10-May-19	17-May-19	7-Jun-19	16.32		M20
373	T3L10	RUDP-2159	Saptakoshi	OPC	Chisang Khola	10-May-19	17-May-19	7-Jun-19	16.17		M20
374	R-83	RUDP-2160	Saptakoshi	OPC	Chisang Khola	10-May-19	17-May-19	7-Jun-19	15.95		M20
375	Madhumara Yard	RUDP-2161	Saptakoshi	OPC	Chisang Khola	10-May-19	17-May-19	7-Jun-19	18.04		M25
376	Judi Yard	RUDP-2162	Saptakoshi	OPC	Chisang Khola	10-May-19	17-May-19	7-Jun-19	16.17		M20
377	Madhumara Yard	RUDP-2163	Saptakoshi	OPC	Chisang Khola	10-May-19	17-May-19	7-Jun-19	17.14		M25
378	R-9	RUDP-2164	Saptakoshi	OPC	Chisang Khola	10-May-19	17-May-19	7-Jun-19	16.32		M20
379	T3L19A	RUDP-2165	Saptakoshi	OPC	Chisang Khola	10-May-19	17-May-19	7-Jun-19	16.69		M20
380	R-6(BRANCH Line)	RUDP-2166	Saptakoshi	OPC	Chisang Khola	10-May-19	17-May-19	7-Jun-19	16.25		M20
381	R-6(BRANCH Line)	RUDP-2167	Saptakoshi	OPC	Chisang Khola	10-May-19	17-May-19	7-Jun-19	15.95		M20
382	T3L T. LINE	RUDP-2168	Saptakoshi	OPC	Chisang Khola	11-May-19	18-May-19	8-Jun-19	16.99		M20
383	R-46	RUDP-2169	Saptakoshi	OPC	Chisang Khola	11-May-19	18-May-19	8-Jun-19	15.80		M20
384	T2L19Y	RUDP-2170	Saptakoshi	OPC	Chisang Khola	11-May-19	18-May-19	8-Jun-19	16.32		M20
385	R-110	RUDP-2171	Saptakoshi	OPC	Chisang Khola	11-May-19	18-May-19	8-Jun-19	15.87		M20
386	R-19	RUDP-2172	Saptakoshi	OPC	Chisang Khola	11-May-19	18-May-19	8-Jun-19	16.32		M20
387	T3L10	RUDP-2173	Saptakoshi	OPC	Chisang Khola	11-May-19	18-May-19	8-Jun-19	15.95		M20
388	R-83	RUDP-2174	Saptakoshi	OPC	Chisang Khola	11-May-19	18-May-19	8-Jun-19	15.95		M20
389	Judi Yard	RUDP-2175	Saptakoshi	OPC	Chisang Khola	11-May-19	18-May-19	8-Jun-19	16.25		M20
390	Madhumara Yard	RUDP-2176	Saptakoshi	OPC	Chisang Khola	11-May-19	18-May-19	8-Jun-19	17.44		M25
391	Madhumara Yard	RUDP-2177	Saptakoshi	OPC	Chisang Khola	11-May-19	18-May-19	8-Jun-19	17.44		M25
392	R-9	RUDP-2178	Saptakoshi	OPC	Chisang Khola	11-May-19	18-May-19	8-Jun-19	16.32		M20
393	T3L39A	RUDP-2179	Saptakoshi	OPC	Chisang Khola	8-May-19	15-May-19	5-Jun-19	16.32		M20

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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	Submitted By	Verified By		Approved By
Engineer	Contract Manager	Expert Qty Surveyor/CSE		Team Leader
Benu Shrestha	Rabindra K.Thakur	H.K. Mandal/Rajan Shrestha		Giresh Chand

RUDP

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Concrete CubeTest Report

							Month			May	
							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	
394	T3L22A	RUDP-2180	Saptakoshi	OPC	Chisang Khola	11-May-19	18-May-19	8-Jun-19	16.32		M20
395	T3L T. LINE	RUDP-2181	Saptakoshi	OPC	Chisang Khola	12-May-19	19-May-19	9-Jun-19	14.98		M20
396	R-83	RUDP-2182	Saptakoshi	OPC	Chisang Khola	12-May-19	19-May-19	9-Jun-19	15.80		M20
397	R-110	RUDP-2183	Saptakoshi	OPC	Chisang Khola	12-May-19	19-May-19	9-Jun-19	14.98		M20
398	Judi Yard	RUDP-2184	Saptakoshi	OPC	Chisang Khola	12-May-19	19-May-19	9-Jun-19	14.98		M20
399	R-46	RUDP-2185	Saptakoshi	OPC	Chisang Khola	12-May-19	19-May-19	9-Jun-19	16.39		M20
400	R-9	RUDP-2186	Saptakoshi	OPC	Chisang Khola	12-May-19	19-May-19	9-Jun-19	14.98		M20
401	Koshi Yard	RUDP-2187	Saptakoshi	OPC	Chisang Khola	12-May-19	19-May-19	9-Jun-19	15.28		M20
402	Madhumara Yard	RUDP-2188	Saptakoshi	OPC	Chisang Khola	12-May-19	19-May-19	9-Jun-19	16.39		M20
403	R-9	RUDP-2189	Saptakoshi	OPC	Chisang Khola	12-May-19	19-May-19	9-Jun-19	16.69		M20
404	T3L39A	RUDP-2190	Saptakoshi	OPC	Chisang Khola	13-May-19	20-May-19	10-Jun-19	14.98		M20
405	R-6(BRANCH Line)	RUDP-2191	Saptakoshi	OPC	Chisang Khola	13-May-19	20-May-19	10-Jun-19	17.14		M20
406	T3L22A	RUDP-2192	Saptakoshi	OPC	Chisang Khola	13-May-19	20-May-19	10-Jun-19	15.43		M20
407	Madhumara Yard	RUDP-2193	Saptakoshi	OPC	Chisang Khola	13-May-19	20-May-19	10-Jun-19	18.12		M25
408	T3L T. LINE	RUDP-2194	Saptakoshi	OPC	Chisang Khola	13-May-19	20-May-19	10-Jun-19	14.83		M20
409	Koshi Yard	RUDP-2195	Saptakoshi	OPC	Chisang Khola	13-May-19	20-May-19	10-Jun-19	14.23		M20
410	R-9	RUDP-2196	Saptakoshi	OPC	Chisang Khola	13-May-19	20-May-19	10-Jun-19	15.95		M20
411	R-83	RUDP-2197	Saptakoshi	OPC	Chisang Khola	13-May-19	20-May-19	10-Jun-19	15.43		M20
412	R-19	RUDP-2198	Saptakoshi	OPC	Chisang Khola	13-May-19	20-May-19	10-Jun-19	16.62		M20
413	R-82	RUDP-2199	Saptakoshi	OPC	Chisang Khola	13-May-19	20-May-19	10-Jun-19	16.62		M20
414	R-9	RUDP-2200	Saptakoshi	OPC	Chisang Khola	14-May-19	21-May-19	11-Jun-19	14.98		M20
415	R-9	RUDP-2201	Saptakoshi	OPC	Chisang Khola	14-May-19	21-May-19	11-Jun-19	16.02		M20
416	T3L7C	RUDP-2202	Saptakoshi	OPC	Chisang Khola	14-May-19	21-May-19	11-Jun-19	14.53		M20
417	R-82	RUDP-2203	Saptakoshi	OPC	Chisang Khola	14-May-19	21-May-19	11-Jun-19	15.13		M20
418	R-44	RUDP-2204	Saptakoshi	OPC	Chisang Khola	14-May-19	21-May-19	11-Jun-19	15.95		M20
419	T3L T. LINE	RUDP-2205	Saptakoshi	OPC	Chisang Khola	14-May-19	21-May-19	11-Jun-19	14.53		M20
420	T3L22A	RUDP-2206	Saptakoshi	OPC	Chisang Khola	14-May-19	21-May-19	11-Jun-19	15.80		M20
421	Koshi Yard	RUDP-2207	Saptakoshi	OPC	Chisang Khola	14-May-19	21-May-19	11-Jun-19	14.53		M20
422	T2L19Y	RUDP-2208	Saptakoshi	OPC	Chisang Khola	14-May-19	21-May-19	11-Jun-19	16.32		M20
423	Madhumara Yard	RUDP-2209	Saptakoshi	OPC	Chisang Khola	14-May-19	21-May-19	11-Jun-19	17.36		M25
424	Judi Yard	RUDP-2210	Saptakoshi	OPC	Chisang Khola	15-May-19	22-May-19	12-Jun-19	14.75		M20
425	R-82	RUDP-2211	Saptakoshi	OPC	Chisang Khola	15-May-19	22-May-19	12-Jun-19	15.28		M20
426	R-9	RUDP-2212	Saptakoshi	OPC	Chisang Khola	15-May-19	22-May-19	12-Jun-19	14.61		M20
427	T3L39A	RUDP-2213	Saptakoshi	OPC	Chisang Khola	15-May-19	22-May-19	12-Jun-19	15.72		M20
428	Judi Yard	RUDP-2214	Saptakoshi	OPC	Chisang Khola	16-May-19	23-May-19	13-Jun-19	14.53		M20
429	T3L39A	RUDP-2215	Saptakoshi	OPC	Chisang Khola	16-May-19	23-May-19	13-Jun-19	15.28		M20
430	Madhumara Yard	RUDP-2216	Saptakoshi	OPC	Chisang Khola	16-May-19	23-May-19	13-Jun-19	17.06		M25
431	R-110	RUDP-2217	Saptakoshi	OPC	Chisang Khola	16-May-19	23-May-19	13-Jun-19	15.43		M20
432	R-9	RUDP-2218	Saptakoshi	OPC	Chisang Khola	16-May-19	23-May-19	13-Jun-19	15.87		M20
433	Koshi Yard	RUDP-2219	Saptakoshi	OPC	Chisang Khola	16-May-19	23-May-19	13-Jun-19	16.10		M20
434	T3L10	RUDP-2220	Saptakoshi	OPC	Chisang Khola	16-May-19	23-May-19	13-Jun-19	14.61		M20
435	R-83	RUDP-2221	Saptakoshi	OPC	Chisang Khola	16-May-19	23-May-19	13-Jun-19	15.28		M20
436	R-9	RUDP-2222	Saptakoshi	OPC	Chisang Khola	16-May-19	23-May-19	13-Jun-19	15.72		M20
437	R-46	RUDP-2223	Saptakoshi	OPC	Chisang Khola	17-May-19	24-May-19	14-Jun-19	15.80		M20
438	R-9	RUDP-2224	Saptakoshi	OPC	Chisang Khola	17-May-19	24-May-19	14-Jun-19	14.90		M20
439	R-6(BRANCH Line)	RUDP-2225	Saptakoshi	OPC	Chisang Khola	17-May-19	24-May-19	14-Jun-19	16.77		M20
440	T2L19Y	RUDP-2226	Saptakoshi	OPC	Chisang Khola	17-May-19	24-May-19	14-Jun-19	15.87		M20
441	Madhumara Yard	RUDP-2227	Saptakoshi	OPC	Chisang Khola	17-May-19	24-May-19	14-Jun-19	16.39		M20

Contractor	Consltant
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	Submitted By	Verified By		Approved By
Engineer	Contract Manager	Expert Qty Surveyor/CSE		Team Leader
Benu Shrestha	Rabindra K.Thakur	H.K. Mandal/Rajan Shrestha		Giresh Chand

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Concrete CubeTest Report

							Month			May	
							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	
442	Madhumara Yard	RUDP-2228	Saptakoshi	OPC	Chisang Khola	17-May-19	24-May-19	14-Jun-19	17.89		M25
443	T3L39A	RUDP-2229	Saptakoshi	OPC	Chisang Khola	17-May-19	24-May-19	14-Jun-19	14.91		M20
444	T3L22A	RUDP-2230	Saptakoshi	OPC	Chisang Khola	18-May-19	25-May-19	15-Jun-19	15.50		M20
445	R-83	RUDP-2231	Saptakoshi	OPC	Chisang Khola	18-May-19	25-May-19	15-Jun-19	14.98		M20
446	Judi Yard	RUDP-2232	Saptakoshi	OPC	Chisang Khola	18-May-19	25-May-19	15-Jun-19	15.65		M20
447	T3L10	RUDP-2233	Saptakoshi	OPC	Chisang Khola	18-May-19	25-May-19	15-Jun-19	14.98		M20
448	R-83	RUDP-2234	Saptakoshi	OPC	Chisang Khola	18-May-19	25-May-19	15-Jun-19	15.13		M20
449	R-110	RUDP-2235	Saptakoshi	OPC	Chisang Khola	19-May-19	26-May-19	16-Jun-19	14.90		M20
450	R-83	RUDP-2236	Saptakoshi	OPC	Chisang Khola	19-May-19	26-May-19	16-Jun-19	14.31		M20
451	Madhumara Yard	RUDP-2237	Saptakoshi	OPC	Chisang Khola	19-May-19	26-May-19	16-Jun-19	18.27		M25
452	T3L T. LINE	RUDP-2238	Saptakoshi	OPC	Chisang Khola	20-May-19	27-May-19	17-Jun-19	15.43		M20
453	Koshi Yard	RUDP-2239	Saptakoshi	OPC	Chisang Khola	20-May-19	27-May-19	17-Jun-19	16.32		M20
454	R-83	RUDP-2240	Saptakoshi	OPC	Chisang Khola	20-May-19	27-May-19	17-Jun-19	16.25		M20
455	R-110	RUDP-2241	Saptakoshi	OPC	Chisang Khola	20-May-19	27-May-19	17-Jun-19	16.47		M20
456	Judi Yard	RUDP-2242	Saptakoshi	OPC	Chisang Khola	21-May-19	28-May-19	18-Jun-19	15.57		M20
457	T3L T. LINE	RUDP-2243	Saptakoshi	OPC	Chisang Khola	21-May-19	28-May-19	18-Jun-19	15.80		M20
458	R-3	RUDP-2244	Saptakoshi	OPC	Chisang Khola	22-May-19	29-May-19	19-Jun-19	14.98		M20
459	R-110	RUDP-2245	Saptakoshi	OPC	Chisang Khola	22-May-19	29-May-19	19-Jun-19	15.43		M20
460	Madhumara Yard	RUDP-2246	Saptakoshi	OPC	Chisang Khola	22-May-19	29-May-19	19-Jun-19	18.42		M25
461	T2L19Y	RUDP-2247	Saptakoshi	OPC	Chisang Khola	22-May-19	29-May-19	19-Jun-19	15.35		M20
462	R-9	RUDP-2248	Saptakoshi	OPC	Chisang Khola	23-May-19	30-May-19	20-Jun-19	15.80		M20
463	R-83	RUDP-2249	Saptakoshi	OPC	Chisang Khola	23-May-19	30-May-19	20-Jun-19	14.98		M20
464	Judi Yard	RUDP-2250	Saptakoshi	OPC	Chisang Khola	23-May-19	30-May-19	20-Jun-19	14.90		M20
465	Madhumara Yard	RUDP-2251	Saptakoshi	OPC	Chisang Khola	24-May-19	31-May-19	21-Jun-19	15.43		M20
466	T3L39A	RUDP-2252	Saptakoshi	OPC	Chisang Khola	24-May-19	31-May-19	21-Jun-19	15.43		M20
467	R-9	RUDP-2253	Saptakoshi	OPC	Chisang Khola	24-May-19	31-May-19	21-Jun-19	15.50		M20
468	T2L19Y	RUDP-2254	Saptakoshi	OPC	Chisang Khola	24-May-19	31-May-19	21-Jun-19	14.46		M20
469	Judi Yard	RUDP-2255	Saptakoshi	OPC	Chisang Khola	24-May-19	31-May-19	21-Jun-19	16.02		M20
470	R-3	RUDP-2256	Saptakoshi	OPC	Chisang Khola	24-May-19	31-May-19	21-Jun-19	15.13		M20

Contractor	Consltant
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	Submitted By	Verified By		Approved By
Engineer	Contract Manager	Expert Qty Surveyor/CSE	RUDP	Team Leader
Benu Shrestha	Rabindra K.Thakur	H.K. Mandal/Rajan Shrestha	Building Design Authority (P) Ltd./BN/PLUS JV * Biratnagar *	Giresh Chand

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Mortar Test Report

							Month			May	
							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	
1	T2L22A	MR-1862	Saptakoshi	OPC	Chisang Khola	3-Apr-19	10-Apr-19	1-May-19		9.89	7.5
2	R-110	MR-1863	Saptakoshi	OPC	Chisang Khola	3-Apr-19	10-Apr-19	1-May-19		8.93	7.5
3	R-2	MR-1864	Saptakoshi	OPC	Chisang Khola	4-Apr-19	11-Apr-19	2-May-19		9.34	7.5
4	R-110	MR-1865	Saptakoshi	OPC	Chisang Khola	4-Apr-19	11-Apr-19	2-May-19		8.11	7.5
5	R-110	MR-1866	Saptakoshi	OPC	Chisang Khola	4-Apr-19	11-Apr-19	2-May-19		8.79	7.5
6	R-2	MR-1867	Saptakoshi	OPC	Chisang Khola	5-Apr-19	12-Apr-19	3-May-19		9.48	7.5
7	R-44	MR-1868	Saptakoshi	OPC	Chisang Khola	5-Apr-19	12-Apr-19	3-May-19		9.20	7.5
8	R-44	MR-1869	Saptakoshi	OPC	Chisang Khola	5-Apr-19	12-Apr-19	3-May-19		9.07	7.5
9	R-82	MR-1870	Saptakoshi	OPC	Chisang Khola	6-Apr-19	13-Apr-19	4-May-19		9.62	7.5
10	R-2	MR-1871	Saptakoshi	OPC	Chisang Khola	6-Apr-19	13-Apr-19	4-May-19		9.62	7.5
11	T1L5	MR-1872	Saptakoshi	OPC	Chisang Khola	7-Apr-19	14-Apr-19	5-May-19		9.89	7.5
12	R-2	MR-1873	Saptakoshi	OPC	Chisang Khola	7-Apr-19	14-Apr-19	5-May-19		8.38	7.5
13	Rani site	MR-1874	Saptakoshi	OPC	Chisang Khola	8-Apr-19	15-Apr-19	6-May-19		8.93	7.5
14	R-44	MR-1875	Saptakoshi	OPC	Chisang Khola	9-Apr-19	16-Apr-19	7-May-19		9.20	7.5
15	R-2	MR-1876	Saptakoshi	OPC	Chisang Khola	10-Apr-19	17-Apr-19	8-May-19		9.20	7.5
16	R-44	MR-1877	Saptakoshi	OPC	Chisang Khola	10-Apr-19	17-Apr-19	8-May-19		8.79	7.5
17	R-82	MR-1878	Saptakoshi	OPC	Chisang Khola	10-Apr-19	17-Apr-19	8-May-19		8.11	7.5
18	R-110	MR-1879	Saptakoshi	OPC	Chisang Khola	11-Apr-19	18-Apr-19	9-May-19		9.20	7.5
19	R-2	MR-1880	Saptakoshi	OPC	Chisang Khola	12-Apr-19	19-Apr-19	10-May-19		8.79	7.5
20	R-7	MR-1881	Saptakoshi	OPC	Chisang Khola	12-Apr-19	19-Apr-19	10-May-19		9.20	7.5
21	R-110	MR-1882	Saptakoshi	OPC	Chisang Khola	12-Apr-19	19-Apr-19	10-May-19		9.62	7.5
22	T1L5	MR-1883	Saptakoshi	OPC	Chisang Khola	12-Apr-19	19-Apr-19	10-May-19		8.24	7.5
23	R-7	MR-1884	Saptakoshi	OPC	Chisang Khola	12-Apr-19	19-Apr-19	10-May-19		10.03	7.5
24	T1L5	MR-1885	Saptakoshi	OPC	Chisang Khola	13-Apr-19	20-Apr-19	11-May-19		9.07	7.5
25	Rani site	MR-1886	Saptakoshi	OPC	Chisang Khola	14-Apr-19	21-Apr-19	12-May-19		8.93	7.5
26	R-2	MR-1887	Saptakoshi	OPC	Chisang Khola	15-Apr-19	22-Apr-19	13-May-19		9.34	7.5
27	T2L19Y	MR-1888	Saptakoshi	OPC	Chisang Khola	15-Apr-19	22-Apr-19	13-May-19		9.62	7.5
28	R-110	MR-1889	Saptakoshi	OPC	Chisang Khola	15-Apr-19	22-Apr-19	13-May-19		8.93	7.5
29	R-2	MR-1890	Saptakoshi	OPC	Chisang Khola	15-Apr-19	22-Apr-19	13-May-19		8.97	7.5
30	T1L5	MR-1891	Saptakoshi	OPC	Chisang Khola	16-Apr-19	23-Apr-19	14-May-19		9.48	7.5
31	Rani site	MR-1892	Saptakoshi	OPC	Chisang Khola	17-Apr-19	24-Apr-19	15-May-19		8.65	7.5
32	T3L7	MR-1893	Saptakoshi	OPC	Chisang Khola	17-Apr-19	24-Apr-19	15-May-19		9.75	7.5
33	R-110	MR-1894	Saptakoshi	OPC	Chisang Khola	17-Apr-19	24-Apr-19	15-May-19		9.07	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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Expert Qty Surveyor/CSE	Team Leader
Benu Shrestha	Rabindra Kr. Thakur	H.K. Mandal/Rajan Shrestha	Giresh Chand

Building Design Authority (P) Ltd./BN/PLUS JV * Biratnagar * RUDP

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Mortar Test Report

							Month			May	
							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	T2L19Y	MR-1895	Saptakoshi	OPC	Chisang Khola	17-Apr-19	24-Apr-19	15-May-19		9.48	7.5
35	R-46	MR-1896	Saptakoshi	OPC	Chisang Khola	18-Apr-19	25-Apr-19	16-May-19		9.75	7.5
36	R-82	MR-1897	Saptakoshi	OPC	Chisang Khola	18-Apr-19	25-Apr-19	16-May-19		9.07	7.5
37	R-110	MR-1898	Saptakoshi	OPC	Chisang Khola	18-Apr-19	25-Apr-19	16-May-19		9.89	7.5
38	R-82	MR-1899	Saptakoshi	OPC	Chisang Khola	18-Apr-19	25-Apr-19	16-May-19		9.20	7.5
39	R-46	MR-1900	Saptakoshi	OPC	Chisang Khola	19-Apr-19	26-Apr-19	17-May-19		8.79	7.5
40	R-42	MR-1901	Saptakoshi	OPC	Chisang Khola	19-Apr-19	26-Apr-19	17-May-19		9.34	7.5
41	R-110	MR-1902	Saptakoshi	OPC	Chisang Khola	19-Apr-19	26-Apr-19	17-May-19		9.89	7.5
42	T3L7	MR-1903	Saptakoshi	OPC	Chisang Khola	19-Apr-19	26-Apr-19	17-May-19		9.07	7.5
43	Rani site	MR-1904	Saptakoshi	OPC	Chisang Khola	19-Apr-19	26-Apr-19	17-May-19		9.34	7.5
44	R-46	MR-1905	Saptakoshi	OPC	Chisang Khola	20-Apr-19	27-Apr-19	18-May-19		9.75	7.5
45	T1L5	MR-1906	Saptakoshi	OPC	Chisang Khola	20-Apr-19	27-Apr-19	18-May-19		8.79	7.5
46	R-46	MR-1907	Saptakoshi	OPC	Chisang Khola	21-Apr-19	28-Apr-19	19-May-19		8.24	7.5
47	R-42	MR-1908	Saptakoshi	OPC	Chisang Khola	21-Apr-19	28-Apr-19	19-May-19		8.93	7.5
48	R-110	MR-1909	Saptakoshi	OPC	Chisang Khola	21-Apr-19	28-Apr-19	19-May-19		9.34	7.5
49	R-46	MR-1910	Saptakoshi	OPC	Chisang Khola	22-Apr-19	29-Apr-19	20-May-19		8.65	7.5
50	R-46	MR-1911	Saptakoshi	OPC	Chisang Khola	22-Apr-19	29-Apr-19	20-May-19		9.20	7.5
51	R-82	MR-1912	Saptakoshi	OPC	Chisang Khola	23-Apr-19	30-Apr-19	21-May-19		9.34	7.5
52	R-110	MR-1913	Saptakoshi	OPC	Chisang Khola	23-Apr-19	30-Apr-19	21-May-19		9.20	7.5
53	R-110	MR-1914	Saptakoshi	OPC	Chisang Khola	23-Apr-19	30-Apr-19	21-May-19		9.48	7.5
54	R-46	MR-1915	Saptakoshi	OPC	Chisang Khola	23-Apr-19	30-Apr-19	21-May-19		10.03	7.5
55	T3L22A	MR-1916	Saptakoshi	OPC	Chisang Khola	24-Apr-19	1-May-19	22-May-19	6.43	10.58	7.5
56	T3L7	MR-1917	Saptakoshi	OPC	Chisang Khola	24-Apr-19	1-May-19	22-May-19	5.73	10.44	7.5
57	R-6 BRANCH LINE	MR-1918	Saptakoshi	OPC	Chisang Khola	24-Apr-19	1-May-19	22-May-19	6.15	9.07	7.5
58	R-9	MR-1919	Saptakoshi	OPC	Chisang Khola	24-Apr-19	1-May-19	22-May-19	5.59	9.75	7.5
59	R-46	MR-1920	Saptakoshi	OPC	Chisang Khola	24-Apr-19	1-May-19	22-May-19	6.29	10.30	7.5
60	R-46	MR-1921	Saptakoshi	OPC	Chisang Khola	24-Apr-19	1-May-19	22-May-19	6.71	9.48	7.5
61	R-110	MR-1922	Saptakoshi	OPC	Chisang Khola	24-Apr-19	1-May-19	22-May-19	5.59	10.72	7.5
62	T2L19Y	MR-1923	Saptakoshi	OPC	Chisang Khola	25-Apr-19	2-May-19	23-May-19	5.45	9.62	7.5
63	T3L10	MR-1924	Saptakoshi	OPC	Chisang Khola	25-Apr-19	2-May-19	23-May-19	6.01	9.89	7.5
64	T1L5	MR-1925	Saptakoshi	OPC	Chisang Khola	25-Apr-19	2-May-19	23-May-19	5.31	8.79	7.5
65	T3L22A	MR-1926	Saptakoshi	OPC	Chisang Khola	25-Apr-19	2-May-19	23-May-19	5.73	8.38	7.5
66	R-44	MR-1927	Saptakoshi	OPC	Chisang Khola	25-Apr-19	2-May-19	23-May-19	5.87	8.24	7.5

Contractor	Consultant
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Building Design Authority (P) Ltd./BN/PLUS JV RUDP Biratnagar

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Mortar Test Report

							Month			May	
							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	
67	R-82	MR-1928	Saptakoshi	OPC	Chisang Khola	27-Apr-19	4-May-19	25-May-19	5.59	7.97	7.5
68	T3L7	MR-1929	Saptakoshi	OPC	Chisang Khola	27-Apr-19	4-May-19	25-May-19	6.01	8.79	7.5
69	R-6 BRANCH LINE	MR-1930	Saptakoshi	OPC	Chisang Khola	27-Apr-19	4-May-19	25-May-19	5.87	9.48	7.5
70	T3L7	MR-1931	Saptakoshi	OPC	Chisang Khola	27-Apr-19	4-May-19	25-May-19	6.29	9.89	7.5
71	R-44	MR-1932	Saptakoshi	OPC	Chisang Khola	27-Apr-19	4-May-19	25-May-19	5.87	8.24	7.5
72	R-9	MR-1933	Saptakoshi	OPC	Chisang Khola	27-Apr-19	4-May-19	25-May-19	5.87	8.11	7.5
73	R-46	MR-1934	Saptakoshi	OPC	Chisang Khola	28-Apr-19	5-May-19	26-May-19	5.59	8.38	7.5
74	R-7	MR-1935	Saptakoshi	OPC	Chisang Khola	28-Apr-19	5-May-19	26-May-19	6.29	8.79	7.5
75	R-44	MR-1936	Saptakoshi	OPC	Chisang Khola	28-Apr-19	5-May-19	26-May-19	5.87	9.48	7.5
76	T3L T. LINE	MR-1937	Saptakoshi	OPC	Chisang Khola	28-Apr-19	5-May-19	26-May-19	5.73	7.97	7.5
77	T3L7C	MR-1938	Saptakoshi	OPC	Chisang Khola	28-Apr-19	5-May-19	26-May-19	6.01	8.79	7.5
78	R-7	MR-1939	Saptakoshi	OPC	Chisang Khola	28-Apr-19	5-May-19	26-May-19	5.59	8.52	7.5
79	R-19	MR-1940	Saptakoshi	OPC	Chisang Khola	29-Apr-19	6-May-19	27-May-19	6.01	9.62	7.5
80	T3L22A	MR-1941	Saptakoshi	OPC	Chisang Khola	29-Apr-19	6-May-19	27-May-19	6.57	9.89	7.5
81	R-46	MR-1942	Saptakoshi	OPC	Chisang Khola	29-Apr-19	6-May-19	27-May-19	5.87	10.03	7.5
82	R-9	MR-1943	Saptakoshi	OPC	Chisang Khola	29-Apr-19	6-May-19	27-May-19	6.71	10.58	7.5
83	T2L19Y	MR-1944	Saptakoshi	OPC	Chisang Khola	29-Apr-19	6-May-19	27-May-19	5.59	8.24	7.5
84	R-44	MR-1945	Saptakoshi	OPC	Chisang Khola	29-Apr-19	6-May-19	27-May-19	5.87	9.07	7.5
85	R-82	MR-1946	Saptakoshi	OPC	Chisang Khola	30-Apr-19	7-May-19	28-May-19	6.43	9.62	7.5
86	R-110	MR-1947	Saptakoshi	OPC	Chisang Khola	30-Apr-19	7-May-19	28-May-19	6.01	10.17	7.5
87	T3L22A	MR-1948	Saptakoshi	OPC	Chisang Khola	30-Apr-19	7-May-19	28-May-19	5.73	8.24	7.5
88	R-7	MR-1949	Saptakoshi	OPC	Chisang Khola	30-Apr-19	7-May-19	28-May-19	6.29	8.38	7.5
89	R-46	MR-1950	Saptakoshi	OPC	Chisang Khola	1-May-19	8-May-19	29-May-19	5.73	8.65	7.5
90	T3L T. LINE	MR-1951	Saptakoshi	OPC	Chisang Khola	1-May-19	8-May-19	29-May-19	6.43	9.20	7.5
91	R-7	MR-1952	Saptakoshi	OPC	Chisang Khola	1-May-19	8-May-19	29-May-19	5.59	8.24	7.5
92	R-82	MR-1953	Saptakoshi	OPC	Chisang Khola	1-May-19	8-May-19	29-May-19	5.73	9.07	7.5
93	R-44	MR-1954	Saptakoshi	OPC	Chisang Khola	2-May-19	9-May-19	30-May-19	6.15	8.38	7.5
94	R-83	MR-1955	Saptakoshi	OPC	Chisang Khola	2-May-19	9-May-19	30-May-19	5.59	8.79	7.5
95	T3L6	MR-1956	Saptakoshi	OPC	Chisang Khola	2-May-19	9-May-19	30-May-19	5.73	8.65	7.5
96	T3L22A	MR-1957	Saptakoshi	OPC	Chisang Khola	3-May-19	10-May-19	31-May-19	5.59	9.62	7.5
97	T3L39A	MR-1958	Saptakoshi	OPC	Chisang Khola	3-May-19	10-May-19	31-May-19	6.71	9.48	7.5
98	T3L6	MR-1959	Saptakoshi	OPC	Chisang Khola	3-May-19	10-May-19	31-May-19	6.15	10.03	7.5
99	R-19	MR-1960	Saptakoshi	OPC	Chisang Khola	3-May-19	10-May-19	31-May-19	6.29	10.72	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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Expert Qty Surveyor/CS	Team Leader
Benu Shrestha	Rabindra Kr. Thakur	H.K. Mandal/Rajan Shrestha	Giresh Chand

Building Design Authority (P) Ltd./BN/PLUS J/V RUDP Biratnagar

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Mortar Test Report

							Month			May	
							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	
100	R-6 Branch line	MR-1961	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19	5.87		7.5
101	T3L7C	MR-1962	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19	6.57		7.5
102	T1L5	MR-1963	Saptakoshi	OPC	Chisang Khola	5-May-19	12-May-19	2-Jun-19	6.15		7.5
103	R-110	MR-1964	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19	6.85		7.5
104	R-46	MR-1965	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19	5.87		7.5
105	T2L19Y	MR-1966	Saptakoshi	OPC	Chisang Khola	6-May-19	13-May-19	3-Jun-19	6.57		7.5
106	T3L T LINE	MR-1967	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19	6.15		7.5
107	T3L7	MR-1968	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19	5.45		7.5
108	T3L39A	MR-1969	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19	6.43		7.5
109	R-83	MR-1970	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19	6.01		7.5
110	T3L10	MR-1971	Saptakoshi	OPC	Chisang Khola	7-May-19	14-May-19	4-Jun-19	6.57		7.5
111	R-6 Branch line	MR-1972	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19	5.59		7.5
112	T3L22A	MR-1973	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19	6.43		7.5
113	R-19	MR-1974	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19	6.85		7.5
114	T3L10	MR-1975	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19	5.73		7.5
115	R-7	MR-1976	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19	6.15		7.5
116	R-9	MR-1977	Saptakoshi	OPC	Chisang Khola	9-May-19	16-May-19	6-Jun-19	6.99		7.5
117	R-44	MR-1978	Saptakoshi	OPC	Chisang Khola	10-May-19	17-May-19	7-Jun-19	6.85		7.5
118	R-46	MR-1979	Saptakoshi	OPC	Chisang Khola	10-May-19	17-May-19	7-Jun-19	6.29		7.5
119	T2L19Y	MR-1980	Saptakoshi	OPC	Chisang Khola	10-May-19	17-May-19	7-Jun-19	5.59		7.5
120	R-9	MR-1981	Saptakoshi	OPC	Chisang Khola	12-May-19	19-May-19	9-Jun-19	6.01		7.5
121	T2L19Y	MR-1982	Saptakoshi	OPC	Chisang Khola	12-May-19	19-May-19	9-Jun-19	5.87		7.5
122	R-19	MR-1983	Saptakoshi	OPC	Chisang Khola	12-May-19	19-May-19	9-Jun-19	5.73		7.5
123	T3L6	MR-1984	Saptakoshi	OPC	Chisang Khola	13-May-19	20-May-19	10-Jun-19	6.57		7.5
124	T3L39A	MR-1985	Saptakoshi	OPC	Chisang Khola	13-May-19	20-May-19	10-Jun-19	6.01		7.5
125	R-7	MR-1986	Saptakoshi	OPC	Chisang Khola	13-May-19	20-May-19	10-Jun-19	6.85		7.5
126	R-83	MR-1987	Saptakoshi	OPC	Chisang Khola	13-May-19	20-May-19	10-Jun-19	6.85		7.5
127	T3L T LINE	MR-1988	Saptakoshi	OPC	Chisang Khola	13-May-19	20-May-19	10-Jun-19	7.13		7.5
128	R-46	MR-1989	Saptakoshi	OPC	Chisang Khola	14-May-19	21-May-19	11-Jun-19	5.45		7.5
129	T2L19Y	MR-1990	Saptakoshi	OPC	Chisang Khola	14-May-19	21-May-19	11-Jun-19	6.01		7.5
130	R-110	MR-1991	Saptakoshi	OPC	Chisang Khola	14-May-19	21-May-19	11-Jun-19	6.43		7.5
131	R-9	MR-1992	Saptakoshi	OPC	Chisang Khola	14-May-19	21-May-19	11-Jun-19	6.71		7.5
132	R-46	MR-1993	Saptakoshi	OPC	Chisang Khola	14-May-19	21-May-19	11-Jun-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

Checked By	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Expert Qty Surveyor/CE	Team Leader
Benu Shrestha	Rabindra Kr. Thakur	H.K. Mandal/Rajan Shrestha	Giresh Chand

Building Design Authority (P) Ltd.,BN/PLUS JV RUDP Biratnagar

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Mortar Test Report

							Month			May	
							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	
133	R-6 Branch line	MR-1994	Saptakoshi	OPC	Chisang Khola	16-May-19	23-May-19	13-Jun-19	5.31		7.5
134	T3L7	MR-1995	Saptakoshi	OPC	Chisang Khola	16-May-19	23-May-19	13-Jun-19	6.01		7.5
135	T3L7	MR-1996	Saptakoshi	OPC	Chisang Khola	16-May-19	23-May-19	13-Jun-19	7.27		7.5
136	T3L22A	MR-1997	Saptakoshi	OPC	Chisang Khola	16-May-19	23-May-19	13-Jun-19	5.73		7.5
137	R-46	MR-1998	Saptakoshi	OPC	Chisang Khola	16-May-19	23-May-19	13-Jun-19	5.73		7.5
138	R-110	MR-1999	Saptakoshi	OPC	Chisang Khola	16-May-19	23-May-19	13-Jun-19	6.99		7.5
139	T3L10	MR-2000	Saptakoshi	OPC	Chisang Khola	18-May-19	25-May-19	15-Jun-19	5.17		7.5
140	R-44	MR-2001	Saptakoshi	OPC	Chisang Khola	18-May-19	25-May-19	15-Jun-19	6.01		7.5
141	R-82	MR-2002	Saptakoshi	OPC	Chisang Khola	18-May-19	25-May-19	15-Jun-19	6.57		7.5
142	T3L7C	MR-2003	Saptakoshi	OPC	Chisang Khola	19-May-19	26-May-19	16-Jun-19	6.57		7.5
143	R-7	MR-2004	Saptakoshi	OPC	Chisang Khola	19-May-19	26-May-19	16-Jun-19	6.01		7.5
144	R-19	MR-2005	Saptakoshi	OPC	Chisang Khola	19-May-19	26-May-19	16-Jun-19	6.29		7.5
145	R-83	MR-2006	Saptakoshi	OPC	Chisang Khola	19-May-19	26-May-19	16-Jun-19	6.71		7.5
146	T3L6	MR-2007	Saptakoshi	OPC	Chisang Khola	19-May-19	26-May-19	16-Jun-19	6.57		7.5
147	R-44	MR-2008	Saptakoshi	OPC	Chisang Khola	21-May-19	28-May-19	18-Jun-19	6.71		7.5
148	R-7	MR-2009	Saptakoshi	OPC	Chisang Khola	21-May-19	28-May-19	18-Jun-19	5.59		7.5
149	T3L T LINE	MR-2010	Saptakoshi	OPC	Chisang Khola	21-May-19	28-May-19	18-Jun-19	6.71		7.5
150	R-9	MR-2011	Saptakoshi	OPC	Chisang Khola	21-May-19	28-May-19	18-Jun-19	5.59		7.5
151	T2L19Y	MR-2012	Saptakoshi	OPC	Chisang Khola	22-May-19	29-May-19	19-Jun-19	6.57		7.5
152	R-46	MR-2013	Saptakoshi	OPC	Chisang Khola	22-May-19	29-May-19	19-Jun-19	6.99		7.5
153	T3L10	MR-2014	Saptakoshi	OPC	Chisang Khola	22-May-19	29-May-19	19-Jun-19	6.43		7.5
154	R-83	MR-2015	Saptakoshi	OPC	Chisang Khola	23-May-19	30-May-19	20-Jun-19	6.01		7.5
155	R-9	MR-2016	Saptakoshi	OPC	Chisang Khola	23-May-19	30-May-19	20-Jun-19	5.31		7.5
156	R-46	MR-2017	Saptakoshi	OPC	Chisang Khola	23-May-19	30-May-19	20-Jun-19	6.15		7.5
157	R-7	MR-2018	Saptakoshi	OPC	Chisang Khola	23-May-19	30-May-19	20-Jun-19	6.43		7.5
158	R-19	MR-2019	Saptakoshi	OPC	Chisang Khola	24-May-19	31-May-19	21-Jun-19	5.73		7.5
159	R-83	MR-2020	Saptakoshi	OPC	Chisang Khola	24-May-19	31-May-19	21-Jun-19	6.71		7.5
160	T2L19Y	MR-2021	Saptakoshi	OPC	Chisang Khola	24-May-19	31-May-19	21-Jun-19	5.31		7.5
161	R-46	MR-2022	Saptakoshi	OPC	Chisang Khola	24-May-19	31-May-19	21-Jun-19	5.73		7.5
162	T3L T. LINE	MR-2023	Saptakoshi	OPC	Chisang Khola	24-May-19	31-May-19	21-Jun-19	6.71		7.5
163	R-44	MR-2024	Saptakoshi	OPC	Chisang Khola	24-May-19	31-May-19	21-Jun-19	6.85		7.5
164	R-7	MR-2025	Saptakoshi	OPC	Chisang Khola	24-May-19	31-May-19	21-Jun-19	5.87		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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Expert Qty Surveyor/CSE	Team Leader
Benu Shrestha	Rabindra Kr. Thakur	H.K. Mandal/Rajan Shrestha	Giresh Chand

RUDP

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report

Month: May
Year: 2019
Type of Material: Sub-base

Location :-R-44,(T3L10E)

Sn.	Lab.Ref no.	Location of Sample	Source of Sample	Date of Testing	Sieve Size in mm / passing % By Weight								MDD	OMC	PI%	CBR%	Remarks
					63.0	37.5	20.0	10.0	5.0	2.36	1.18	0.075					
1	RUDP-SB-01	R-44,(0+150)	Chisang Khola	22-May-19	100	91.36	74.83	57.89	33.86	27.03	16.56	8.04	2.226	6.20	0.90	62.20	
2	RUDP-SB-02	R-44,(0+300)	Chisang Khola	22-May-19	100	91.72	71.77	57.46	32.47	27.52	20.79	3.37			NP		
				Spec. Limit :	100	65-95	50-85	40-75	30-60	20-45	15-37	4-15			<6	>30	

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 Export Qty Surveyor/CSE H.K. mandal/Rajan Shrestha	Approved By Team Leader Giresh Chand

Building Design Authority (P) Ltd. B.N. Plus Biratnagar RUDP

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Field Density Test

Month	May
Year	2019
Type of Material	Sub-Base

Location:-R-44,(T3L10E)

Sn.	Lab.Ref.no	Testing Date	Chainage	Moisture content %		Density(gm/cc)		Compaction %	
				OMC%	Field MC%	Max.Dry density	Field Dry density,	Compaction	Specified %
1	RUDP-SB-FD-1, L/S	26-May-19	0+050	6.20	5.55	2.226	2.147	96.43	95
2	RUDP-SB-FD-1, C/L	26-May-19	0+090	6.20	5.01	2.226	2.180	98.31	95
3	RUDP-SB-FD-1, R/S	26-May-19	0+150	6.20	4.65	2.226	2.151	96.65	95
4	RUDP-SB-FD-1, L/S	26-May-19	0+190	6.20	5.44	2.226	2.170	97.47	95
5	RUDP-SB-FD-1, C/L	26-May-19	0+240	6.20	5.29	2.226	2.161	97.07	95
6	RUDP-SB-FD-1, R/S	26-May-19	0+300	6.20	5.98	2.226	2.171	97.43	95

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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Export Qty Surveyor/CSE	Team Leader
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Building Design Authority (P) Ltd./BN/PLUS JV RUDP Biratnagar

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report

Month:	May
Year	2019
Type of Material	Sub grade

Location:-N-27

Sn.	Lab.Ref no.	Location/Chainage	Source of Sample	Date of Testing	MDD	OMC	PI%	CBR%	Remarks
1	RUDP-SG-01	N-27,(0+150)	Existing Road	16-May-19	1.898	9.90	10.85	6.14	
1	RUDP-SG-02	N-27,(0+250)	Existing Road	16-May-19	2.070	8.80	9.01	7.62	

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	Submitted By	Verified By	Approved By
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REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Field Density Test

Month	May
Year	2019
Type of Material	Sub-Grade

Location:-N-27

Sn.	Lab.Ref.no	Testing Date	Chanage	Moisture content %		Density(gm/cc)		Compaction %	
				OMC%	Field MC%	Max.Dry density gm/cc	Field Dry density, gm/cc	Compaction %	Specified %
1	RUDP-SG-FD-1, L/S	19-May-19	0+060	9.90	8.70	1.898	1.839	96.88	95
2	RUDP-SG-FD-1, R/S	19-May-19	0+100	9.90	8.88	1.898	1.841	97.02	95
3	RUDP-SG-FD-1, L/S	19-May-19	0+150	9.90	8.99	1.898	1.852	97.59	95
4	RUDP-SG-FD-1, R/S	19-May-19	0+200	9.90	7.14	1.898	1.843	97.08	95
5	RUDP-SG-FD-1, R/S	19-May-19	0+250	8.80	7.20	2.070	2.007	96.95	95
6	RUDP-SG-FD-1, L/S	19-May-19	0+310	8.80	7.27	2.070	2.023	97.75	95

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	Submitted By	Verified By	Approved By
Engineer Benu Shrestha	Contract Manager Rabindra Kr.Thakur	Expert Qty Surveyor/CSE H.K. Mandal/Rjan Shrestha	Team Leader Giresh Chand

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report

Month:	May
Year	2019
Type of Material	Sub grade

Location:-R-102

Sn.	Lab.Ref no.	Location/Chainage	Source of Sample	Date of Testing	MDD	OMC	PI%	CBR%	Remarks
1	RUDP-SG-01	R-102,(0+100)	Existing Road	14-May-19	1.985	8.20	10.27	7.24	

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	Submitted By	Verified By	Approved By
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Building Design Authority (P) Ltd./BN/PLUS JV Biratnagar RUDP

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Field Density Test

Month	May
Year	2019
Type of Material	Sub-Grade

Location:-R-102

Sn.	Lab.Ref.no	Testing Date	Chanage	Moisture content %		Density(gm/cc)		Compaction %	
				OMC%	Field MC%	Max.Dry density gm/cc	Field Dry density, gm/cc	Compaction %	Specified %
1	RUDP-SG-FD-1, R/S	19-May-19	0+050	8.20	8.79	1.985	1.913	96.37	95
2	RUDP-SG-FD-1, C/L	19-May-19	0+100	8.20	8.67	1.985	1.926	97.04	95
3	RUDP-SG-FD-1, L/S	19-May-19	0+160	8.20	7.82	1.985	1.962	98.85	95
4	RUDP-SG-FD-1, C/L	19-May-19	0+210	8.20	8.24	1.985	1.934	97.43	95
5	RUDP-SG-FD-1, R/S	19-May-19	0+280	8.20	7.21	1.985	1.915	96.49	95

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	Submitted By	Verified By	Approved By
Engineer Benu Shrestha	Contract Manager Rabindra Kr. Thakur	Expert Qty Surveyor/CSE H.K. Mandal/Rajan Shrestha	Team Leader Giresh Chand

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report

Month:	May
Year	2019
Type of Material	Sub grade

Location:-T2L19P

Sn.	Lab.Ref no.	Location/Chainage	Source of Sample	Date of Testing	MDD	OMC	PI%	CBR%	Remarks
1	RUDP-SG-01	T2L19P,(0+100)	Existing Road	24-May-19	1.990	7.50	10.37	6.50	

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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Expert Qty Surveyor/CSE	Team Leader
Benu Shrestha	Rabindra kr. Thakur	H.K. Mandal/Rajan Shrestha	Giresh Chand

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Field Density Test

Month	May
Year	2018
Type of Material	Sub-Grade

Location:-T2L19P

Sn.	Lab.Ref.no	Testing Date	Chanage	Moisture content %		Density(gm/cc)		Compaction %	
				OMC%	Field MC%	Max.Dry density gm/cc	Field Dry density, gm/cc	Compaction %	Specified %
1	RUDP-SG-FD-1, R/S	26-May-19	0+020	7.50	7.06	1.990	1.916	96.27	95
2	RUDP-SG-FD-1, R/S	26-May-19	0+050	7.50	6.59	1.990	1.933	97.12	95
3	RUDP-SG-FD-1, C/L	26-May-19	0+080	7.50	6.16	1.990	1.924	96.67	95
4	RUDP-SG-FD-1, L/S	26-May-19	0+110	7.50	7.04	1.990	1.907	95.84	95

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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Expert Qty Surveyor/CSE	Team Leader
Benu Shrestha	Rabindra Kr. Thakur	H.K. Mandal/Rajan Shrestha	Giresh Chand

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No: RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report

Month: May
Year: 2019

Location:-T3L11 i

S.N	Lab Ref no.	Location of Sample	Source of Sample	Date of Testing	Sieve Size in mm / % passing By Weight								MDD	OMC	Type of Material					Base		Remarks
					40	31.5	20	10	4.75	2.36	0.6	0.075			PI%	L A A %	FI and EI %	A I.V. %	CR	CBR %		
1	RUDP-B-01	T3L11 I,(0+100)	Chisang Khola	24-May-19	100	90.31	65.42	47.16	34.82	24.44	14.26	5.59	2.251	5.75	NP	33.57	25.85/18.09	25.78	82.46	84.10		
2	RUDP-B-02	T3L11 I,(0+200)	Chisang Khola	24-May-19	100	95.29	67.61	42.54	35.38	30.51	16.80	3.79			NP	32.23	25.56/22.42	21.14	83.00			
				Spec. Limit :	100	85-100	62-93	40-70	26-55	21-53	12-28	2-10				< 45	< 35	< 35	>80	>80		

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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Export Qty Surveyor/CSE	Team Leader
Benu Shresth	Rabindra Kr Thakur	H.K. Mandal/Rajan Shrestha	Ghresh Chand

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Field Density Test

Month	May
Year	2019
Type of Material	Base

Location:-T3L11i

Sn.	Lab.Ref.no	Testing Date	Chainage	Moisture content %		Density(gm/cc)		Compaction %	
				OMC%	Field MC%	Max.Dry density	Field Dry density,	Compaction %	Specified %
1	RUDP-B-FD-1, R/S	28-May-19	0+050	5.75	5.92	2.251	2.239	99.46	98
2	RUDP-B-FD-1, C/L	28-May-19	0+100	5.75	5.46	2.251	2.234	99.23	98
3	RUDP-B-FD-1, L/S	28-May-19	0+140	5.75	5.27	2.251	2.241	99.54	98
4	RUDP-B-FD-1, C/L	28-May-19	0+160	5.75	5.02	2.251	2.222	98.69	98
5	RUDP-B-FD-1, L/S	28-May-19	0+200	5.75	5.65	2.251	2.240	99.53	98
6	RUDP-B-FD-1, R/S	28-May-19	0+250	5.75	5.89	2.251	2.242	99.60	98

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	Submitted By	Verified By	Approved By
Engineer Benu Shrestha	Contract Manager Rabindra Kr. Thakur	Expert Qty Surveyor/CSE H.K. Mandal/Rajan Shrestha	Team Leader Giresh Chand

Building Design Authority (P) Ltd./BN/PLUS JV RUDP Biratnagar

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report

Month:	May
Year	2019
Type of Material	Sub grade

Location:-R-46

Sn.	Lab.Ref no.	Location/Chainage	Source of Sample	Date of Testing	MDD	OMC	PI%	CBR%	Remarks
1	RUDP-SG-01	R-46 (0+260)	Existing Road	21-May-19	1.990	8.30	11.10	8.00	

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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Expert Qty Surveyor/CSE	Team Leader
Benu Shrestha	Rabindra kr. Thakur	H.K. Mandal/Rajan Shrestha	Giresh Chand

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Field Density Test

Month	May
Year	2019
Type of Material	Sub-Grade

Location:-R-46

Sn.	Lab.Ref.no	Testing Date	Chanage	Moisture content %		Density(gm/cc)		Compaction %	
				OMC%	Field MC%	Max.Dry density gm/cc	Field Dry density, gm/cc	Compaction %	Specified %
1	RUDP-SG-FD-1, R/S	27-May-19	0+260	8.30	6.98	1.990	1.917	96.33	95
2	RUDP-SG-FD-1, C/L	27-May-19	0+350	8.30	6.96	1.990	1.917	96.34	95

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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Expert Qty Surveyor/CSE	Team Leader
Benu shrestha	Rabindra Kr. Thakur	H.K. Mandal/Rajan Shrestha	Giresh Chand

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report

Month:	May
Year	2019
Type of Material	Sub grade

Location:-R-44(T3L10E)

Sn.	Lab.Ref no.	Location/Chainage	Source of Sample	Date of Testing	MDD	OMC	PI%	CBR%	Remarks
1	RUDP-SG-01	R-44(T3L10E),0+100	Existing Road	6-May-19	1.987	8.40	9.68	7.10	

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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Export Qty Surveyor/CSE	Team Leader
Benu Shrestha	Rabindra Kr. Thakur	H.K. Mandal/Rajan Shrestha	Giresh Chand

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Field Density Test

Month	May
Year	2019
Type of Material	Sub-Grade

Location:-R-44,(T3L10E)

Sn.	Lab.Ref.no	Testing Date	Chanage	Moisture content %		Density(gm/cc)		Compaction %	
				OMC%	Field MC%	Max.Dry density gm/cc	Field Dry density, gm/cc	Compaction %	Specified %
1	RUDP-SG-FD-1, L/S	6-May-19	0+040	8.40	7.07	1.987	1.933	97.31	95
2	RUDP-SG-FD-1, R/S	6-May-19	0+090	8.40	7.22	1.987	1.913	96.29	95
3	RUDP-SG-FD-1, L/S	6-May-19	0+120	8.40	6.62	1.987	1.910	96.14	95
4	RUDP-SG-FD-1, R/S	6-May-19	0+180	8.40	7.03	1.987	1.910	96.14	95
5	RUDP-SG-FD-1, R/S	6-May-19	0+220	8.40	7.93	1.987	1.930	97.13	95
6	RUDP-SG-FD-1, C/L	6-May-19	0+250	8.40	6.88	1.987	1.913	96.28	95
7	RUDP-SG-FD-1, L/R	6-May-19	0+300	8.40	7.24	1.987	1.930	97.14	95

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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Export Qty Surveyor/CSE	Team Leader
Benu Shrestha	Rabindra Kr. Thakur	H.K. Mandal/Rajan Shrestha	Giresh Chand

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report

Month: May
Year: 2019
Type of Material: Sub-base

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

Sn.	Lab Ref no.	Location of Sample	Source of Sample	Date of Testing	Sieve Size in mm / passing % By Weight								MDD	OMC	PI%	CBR%	Remarks
					63.0	37.5	20.0	10.0	5.0	2.36	1.18	0.075					
1	RUDP-SB-01	R-7,(0+100)	Chisang Khola	21-May-19	100	91.87	75.70	58.27	38.25	25.33	16.80	9.16	2.338	6.45	7.80	46.00	
2	RUDP-SB-02	R-7,(0+200)	Chisang Khola	21-May-19	100	90.04	72.94	58.62	39.76	30.60	18.74	8.74			NP		
3	RUDP-SB-03	R-7,(0+300)	Chisang Khola	22-May-19	100	89.08	70.65	59.15	40.05	30.72	17.76	8.44			7.11		
4	RUDP-SB-04	R-7,(0+400)	Chisang Khola	22-May-19	100	91.10	65.40	52.64	36.38	29.20	16.68	8.29			NP		
				Spec. Limit :	100	65~95	50~85	40~75	30~60	20~45	15~37	4~15			<6	>30	

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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Export City Surveyor/CSE	Team Leader
Benu Shrestha	Rabindra Kr. Thakur	H.K. mandal/Rajan Shrestha	Giresh Chand

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Field Density Test

Month	May
Year	2019
Type of Material	Sub-Base

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

Sn.	Lab.Ref.no	Testing Date	Chainage	Moisture content %		Density(gm/cc)		Compaction %	
				OMC%	Field MC%	Max.Dry density	Field Dry density,	Compaction	Specified %
1	RUDP-SB-FD-1, L/S	24-May-19	0+090	6.45	5.55	2.228	2.142	96.16	95
2	RUDP-SB-FD-1, C/L	24-May-19	0+160	6.45	5.01	2.228	2.184	98.03	95
3	RUDP-SB-FD-1, R/S	24-May-19	0+210	6.45	4.65	2.228	2.147	96.37	95
4	RUDP-SB-FD-1, L/S	24-May-19	0+290	6.45	5.29	2.228	2.165	97.19	95
5	RUDP-SB-FD-1, R/S	24-May-19	0+320	6.45	5.29	2.228	2.156	96.76	95
6	RUDP-SB-FD-1, R/S	24-May-19	0+350	6.45	5.98	2.228	2.165	97.16	95
7	RUDP-SB-FD-1, L/S	24-May-19	0+390	6.45	5.45	2.228	2.120	95.57	95

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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Export Qty Surveyor/CSE	Team Leader
Benu Shrestha	Rabindra Kr. Thakur	H.K. mandal/Rajan Shrestha	Giresh Chand

RUDP

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No: RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report

Month	May
Year	2019
Type of Material	Base

Location:-T3L23,(Around Nagmandir)

S.N	Lab.Ref.no	Location of Sample	Source of Sample	Date of Testing	Sieve Size in mm / % passing By Weight								MDD	OMC	PI%	L.A.A %	FI and EI %	A.I.V. %	CR %	CBR %	Remarks
					40	31.5	20	10	4.75	2.36	0.6	0.075									
1	RUDP-B-01	T3L23,(0+090)	Chisang Khola	5-May-19	100	91.70	73.55	58.81	36.23	28.70	18.12	8.41	2.253	5.10	NP	32.28	23.40/18.44	24.68	81.02	88.20	
				Spec. Limit :	100	85-100	62-92	40-70	26-55	21-53	12-28	2-10				< 45	< 35	< 35	>80	>80	

Contractor	Consultant
ZHONGHENG CONSTRUCTION GROUP INTERNATIONAL ENGINEERING PVT. 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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Expert Qty Surveyor/CSE	Team Leader
Benu shrestha	Rabindra Kr. Thakur	H.K. Mandal/Rajan Shrestha	Giresh Chand

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Field Density Test

Month	May
Year	2019
Type of Material	Base

Location:-T3L23,(Around Nagmandir)

Sn.	Lab.Ref.no	Testing Date	Chainage	Moisture content %		Density(gm/cc)		Compaction %	
				OMC%	Field MC%	Max.Dry density	Field Dry density,	Compaction %	Specified %
1	RUDP-B-FD-1, L/S	7-May-19	0+020	5.10	5.45	2.253	2.217	98.47	98
2	RUDP-B-FD-1, C/L	7-May-19	0+060	5.10	5.02	2.253	2.251	99.92	98
3	RUDP-B-FD-1, R/S	7-May-19	0+080	5.10	5.46	2.253	2.244	99.58	98

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	Submitted By	Verified By	Approved By
Engineer Benu shrestha	Contract Manager Rabindra Kr. Thakur	Expert Qty Surveyor/CSE H.K. Mandal/Rajan Shrestha	Team Leader Giresh Chand

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report

Month:	May
Year	2019
Type of Material	Sub-base

Location :-T2L24C

Sn.	Lab.Ref no.	Location of Sample	Source of Sample	Date of Testing	Sieve Size in mm / passing % By Weight								MDD	OMC	PI%	CBR%	Remarks
					63.0	37.5	20.0	10.0	5.0	2.36	1.18	0.078					
1	RUDP-SB-01	T2L24C,(0+100	Chisang Khola	5-May-19	100	90.04	71.31	56.50	38.98	30.77	17.11	7.47	2.220	5.80	1.90	41.00	
				Spec. Limit :	100	65–95	50–85	40–75	30–60	20–45	15–37	4–15			<6	>30	

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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Qty Engineer/CSI	Team Leader
Benu Shrestha	Rabindra Kr. Thakur	H.K. Mandal/Rajan Shrestha	Giresh Chand

RUDP

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Field Density Test

Month	May
Year	2019
Type of Material	Sub-Base

Location:-T2L24C

Sn.	Lab.Ref.no	Testing Date	Chainage	Moisture content %		Density(gm/cc)		Compaction %	
				OMC%	Field MC%	Max.Dry density	Field Dry density,	Compaction	Specified %
1	RUDP-SB-FD-1, R/S	5-May-19	0+050	5.80	4.65	2.220	2.157	97.18	95
2	RUDP-SB-FD-1, L/S	5-May-19	0+080	5.80	6.54	2.220	2.133	96.07	95
3	RUDP-SB-FD-1, C/L	5-May-19	0+120	5.80	5.30	2.220	2.179	98.15	95
4	RUDP-SB-FD-1, L/S	5-May-19	0+150	5.80	5.36	2.220	2.150	96.83	95
5	RUDP-SB-FD-1, R/S	5-May-19	0+170	5.80	5.18	2.220	2.183	97.80	95

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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Export Qty Surveyor/CSE	Team Leader
Benu Shrestha	Rabindra Kr. Thakur	H.k. Mandal/Rajan Shrestha	Giresh Chand

RUDP Building Design Authority (P) Ltd. Biratnagar

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report

Month: May
Year 2019
Type of Material: Sub-base

Location :-R-84

Sn.	Lab.Ref no.	Location of Sample	Source of Sample	Date of Testing	Sieve Size in mm / passing % By Weight								MDD	OMC	PI%	CBR%	Remarks
					63.0	37.5	20.0	10.0	5.0	2.36	1.18	0.075					
1	RUDP-SB-01	R-84 (01+00)	Chisang Khola	5-May-19	100	89.91	69.59	53.77	36.88	28.86	16.82	5.56	2.228	6.25	2.22	30.80	
				Spec. Limit :	100	65-95	50-85	40-75	30-60	20-45	15-37	4-15			<6	>30	

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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Qty Engineer/CSE	Team Leader
Benu Shrestha	Rabindra Kr. Thakur	H.K. Mandal/Rajan Shrestha	Giresh Chand

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Field Density Test

Month	May
Year	2019
Type of Material	Sub-Base

Location:-R-84

Sn.	Lab.Ref.no	Testing Date	Chainage	Moisture content %		Density(gm/cc)		Compaction %	
				OMC%	Field MC%	Max.Dry density	Field Dry density,	Compaction	Specified %
1	RUDP-SB-FD-1, R/S	6-May-19	0+060	6.25	5.90	2.228	2.182	97.95	95
2	RUDP-SB-FD-1, L/S	6-May-19	0+090	6.25	5.42	2.228	2.165	97.16	95
3	RUDP-SB-FD-1, R/S	6-May-19	0+120	6.25	5.52	2.228	2.144	96.21	95

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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Export Qty Surveyor/CSE	Team Leader
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Building Design Authority (P) Ltd./BN/PLUS J/V * Biratnagar * RUDP

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No: RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report

Month	May
Year	2019
Type of Material	Base

Location:-R-27

S.N	Lab Ref no.	Location of Sample	Source of Sample	Date of Testing	Sieve Size in mm / % passing By Weight								MDD	OMC	PI%	L.A.A %	LL and LL%	A.I.V. %	CR %	CBR %	Remarks
					40	31.5	20	10	4.75	2.36	0.6	0.075									
1	RUDP-B-01	R-27,(0+070)	Chisang Khola	9-May-19	100	91.84	80.11	59.80	34.52	25.60	14.15	3.23	2.244	4.80	NP	31.00	21.30/17.30	26.39	87.91	84.80	
				Spec. Limit :	100	85-100	62-93	40-70	26-55	21-53	12-28	2-10				< 45	< 35	< 35	>80	>80	

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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Expert Qty Surveyor/CSE	Team Leader
Benu shrestha	Rabindra Kr. Thakur	H.K. Mandal/Rajan Shrestha	Giresh Chand

RUDP

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Field Density Test

Month	May
Year	2019
Type of Material	Base

Location:-R-27

Sn.	Lab.Ref.no	Testing Date	Chainage	Moisture content %		Density(gm/cc)		Compaction %	
				OMC%	Field MC%	Max.Dry density	Field Dry density,	Compaction %	Specified %
1	RUDP-B-FD-1, L/S	12-May-19	0+040	4.80	5.71	2.244	2.224	99.10	98
2	RUDP-B-FD-1, C/L	12-May-19	0+080	4.80	4.63	2.244	2.206	98.30	98
2	RUDP-B-FD-1, L/S	12-May-19	0+110	4.80	5.07	2.244	2.227	99.23	98
2	RUDP-B-FD-1, R/S	12-May-19	0+140	4.80	4.42	2.244	2.227	99.26	98

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	Submitted By	Verified By	Approved By
Engineer Benu shrestha	Contract Manager Rabindra Kr. Thakur	Expert Qty Surveyor/CSE H.K. Mandal/Rajan Shrestha	Team Leader Giresh Chand

RUDP

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No: RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report

Month	May
Year	2019

Location:-R-75

S.N	Lab Ref no.	Location of Sample	Source of Sample	Date of Testing	Sieve Size in mm (% passing By Weight) 40	31.5	20	10	4.75	2.36	0.6	0.075	MDD	OMC	Type of Material: PI%	L.A.A %	FI and EI %	Base: A.I.V %	CR %	CBR %	Remarks
1	RUDP-B-01	R-75.(0+100)	Chisang Khola	1-May-19	100	90.25	72.49	58.12	33.40	24.92	14.84	9.81	2.256	5.70	NP	29.80	22.71/20.19	25.16	83.70	84.50	
				Spec. Limit :	100	85-100	67-92	40-70	26-55	21-53	12-28	2-10				≤45	≤35	<35	>80	>80	

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	Submitted By	Verified By	Approved By
Engineer Benu shrestha	Contract Manager Rabindra Kr. Thakur	Expert Qty Surveyor/CSE H.K. Mandal/Rajan Shrestha	Team Leader Giresh Chand

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Field Density Test

Month	May
Year	2019
Type of Material	Base

Location:-R-75

Sn.	Lab.Ref.no	Testing Date	Chainage	Moisture content %		Density(gm/cc)		Compaction %	
				OMC%	Field MC%	Max.Dry density	Field Dry density,	Compaction %	Specified %
1	RUDP-B-FD-1, R/S	3-May-19	0+020	5.70	4.52	2.256	2.233	98.99	98
2	RUDP-B-FD-1, C/L	3-May-19	0+050	5.70	5.01	2.256	2.247	99.61	98
3	RUDP-B-FD-1, R/S	3-May-19	0+070	5.70	4.71	2.256	2.254	99.90	98
4	RUDP-B-FD-1, C/L	3-May-19	0+090	5.70	5.23	2.256	2.214	98.16	98
5	RUDP-B-FD-1, L/S	3-May-19	0+120	5.70	4.86	2.256	2.244	99.45	98

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	Submitted By	Verified By	Approved By
Engineer Benu shrestha	Contract Manager Rabindra Kr. Thakur	Expert Qty Surveyor/CSE H.K. Mandal/Rajan Shrestha	Team Leader Giresh Chand

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No: RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report

Month	May
Year	2019
Type of Material	Base

Location:-Rani-buspark(A)

S.N	Lab Ref no.	Location of Sample	Source of Sample	Date of Testing	Sieve Size in mm / % passing By Weight								MDD	OMC	PI%	L.A.A. %	Fl and El %	ALV %	CR %	CBR %	Remarks
					40	31.5	20	10	4.75	2.36	0.6	0.075									
1	RUDP-B-01	Rani-buspark,(0+050)	Chisang Khola	2-May-19	100	90.21	72.38	57.65	32.94	24.06	15.11	5.80	2.248	4.80	NP	30.20	21.18/19.18	23.28	81.46	81.00	
				Spec. Limit :	100	85-100	62-92	40-70	26-55	21-43	12-28	2-10				<45	<35	<35	>80	>80	

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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Expert Qty Surveyor/CSE	Team Leader
Benu shrestha	Rabindra Kr. Thakur	H.K. Mandal/Rajan Shrestha	Giresh Chand

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Field Density Test

Month	May
Year	2019
Type of Material	Base

Location:-Rani buspark (A)

Sn.	Lab.Ref.no	Testing Date	Chainage	Moisture content %		Density(gm/cc)		Compaction %	
				OMC%	Field MC%	Max.Dry density	Field Dry density,	Compaction %	Specified %
1	RUDP-B-FD-1, R/S	3-May-19	0+020	4.80	5.79	2.248	2.229	99.18	98
2	RUDP-B-FD-1, C/L	3-May-19	0+050	4.80	5.96	2.248	2.220	98.76	98
3	RUDP-B-FD-1, R/S	3-May-19	0+070	4.80	5.38	2.248	2.207	98.18	98

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	Submitted By	Verified By	Approved By
Engineer Benu shrestha	Contract Manager Rabindra Kr. Thakur	Expert Qty Surveyor/CSE H.K. Mandal/Rajan Shrestha	Team Leader Giresh Chand

RUDP Building Design Authority (P) Ltd. IBN/Plus JV Biratnagar

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No: RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report

Month	Year	Type of Material	Base
May	2019		

Location:-Rani-buspark(B)

S.N	Lab Ref no	Location of Sample	Source of Sample	Date of Testing	Sieve Size in mm / % passing By Weight								MDD	OMC	PRN	L.A.A. %	FI and EI %	A.I.V %	CR %	CBR %	Remarks
					40	31.5	20	10	4.75	2.36	0.6	0.075									
1	RUDP-B-01	Rani-buspark(A),(0+050)	Chisang Khola	2-May-19	100	90.32	69.58	51.18	39.97	31.91	22.81	6.80	2.240	5.25	NP	30.08	23.50/21.08	25.24	88.15	83.100	
				Spec. Limit :	100	85-100	62-92	40-70	26-55	21-53	12-28	2-10				< 45	< 35	<35	>80	>80	

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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Expert Qty Surveyor/CSR	Team Leader
Benu shrestha	Rabindra Kr. Thakur	H.K. Mandal/Rajan Shrestha	Hiresh Chand

RUDP

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Field Density Test

Month	May
Year	2019
Type of Material	Base

Location:-Rani buspark (B)

Sn.	Lab.Ref.no	Testing Date	Chainage	Moisture content %		Density(gm/cc)		Compaction %	
				OMC%	Field MC%	Max.Dry density	Field Dry density,	Compaction %	Specified %
1	RUDP-B-FD-1, L/S	3-May-19	0+030	5.25	5.27	2.242	2.235	99.67	98
2	RUDP-B-FD-1, C/L	3-May-19	0+060	5.25	5.99	2.242	2.202	98.20	98
3	RUDP-B-FD-1, R/S	3-May-19	0+070	5.25	5.63	2.242	2.223	99.15	98
4	RUDP-B-FD-1, L/S	3-May-19	0+120	5.25	5.58	2.242	2.220	99.03	98

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	Submitted By	Verified By	Approved By
Engineer Benu shrestha	Contract Manager Rabindra Kr. Thakur	Expert Qty Surveyor/CSE H.K. Mandal/Rajan Shrestha	Team Leader Giresh Chand

RUDP

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No: RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report

Month Year | **May 2019**

Location:-S13-B

S.N	Lab.Ref.no.	Location of Sample	Source of Sample	Date of Testing	Sieve Size in mm / % passing By Weight								MDD	OMC	Type of Material			Base			Remarks
					40	31.5	20	10	4.75	2.36	0.6	0.075			PI%	L.A.A %	Flood LI %	A.I.V. %	CR %	FDR %	
1	RUDP-B-01	S13-B,(0+130)	Chisang Khola	8-May-19	100	90.83	73.87	57.99	33.23	24.42	13.20	8.08	2.255	5.00	NP	30.80	24.52/19.13	23.07	83.02	84.00	
				Spec. Limit :	100	85-100	62-92	40-70	26-55	21-53	12-28	2-10				< 45	< 35	< 35	>80	>80	

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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Expert Qty Surveyor/CSE	Team Leader
Benu shrestha	Rabindra Kr. Thakur	H.K. Mandal/Rajan Shrestha	Giresh Chand

RUDP Biratnagar

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Field Density Test

Month	May
Year	2019
Type of Material	Base

Location:-S13-B

Sn.	Lab.Ref.no	Testing Date	Chainage	Moisture content %		Density(gm/cc)		Compaction %	
				OMC%	Field MC%	Max.Dry density	Field Dry density,	Compaction %	Specified %
1	RUDP-B-FD-1, L/S	8-May-19	0+050	5.00	4.40	2.255	2.236	99.15	98
2	RUDP-B-FD-1, R/S	8-May-19	0+080	5.00	5.13	2.255	2.245	99.54	98
3	RUDP-B-FD-1, L/S	8-May-19	0+120	5.00	5.90	2.255	2.229	98.83	98
4	RUDP-B-FD-1, C/L	8-May-19	0+150	5.00	5.34	2.255	2.212	98.09	98
5	RUDP-B-FD-1, L/S	8-May-19	0+180	5.00	4.87	2.255	2.243	99.49	98

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	Submitted By	Verified By	Approved By
Engineer Benu shrestha	Contract Manager Rabindra Kr. Thakur	Expert Qty Surveyor/CSE H.K. Mandal/Rajan Shrestha	Team Leader Giresh Chand

RUDP

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report

Month: May
Year 2019
Type of Material: Sub-base

Location :-R-27

Sn.	Lab.Ref no.	Location of Sample	Source of Sample	Date of Testing	Sieve Size in mm / passing % By Weight								MDD	OMC	PI%	CBR%	Remarks
					63.0	37.8	20.0	10.0	5.0	2.36	1.18	0.075					
1	RUDP-SB-01	R-27,(0+080)	Chisang Khola	3-May-19	100	88.12	69.79	54.07	35.24	24.79	16.19	8.60	2.228	6.45	1.89	46.00	
				Spec. Limit :	100	65-95	50-85	40-75	30-60	20-45	15-37	4-15			<6	>30	

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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	City Engineer/CSE	Team Leader
Benu Shrestha	Rabindra Kr. Thakur	H.R. Mandal/Rajan Shrestha	Ghresh Chand

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Field Density Test

Month	May
Year	2019
Type of Material	Sub-Base

Location:-R-27

Sn.	Lab.Ref.no	Testing Date	Chainage	Moisture content %		Density(gm/cc)		Compaction %	
				OMC%	Field MC%	Max.Dry density	Field Dry density,	Compaction	Specified %
1	RUDP-SB-FD-1, L/S	4-May-19	0+040	6.45	5.55	2.228	2.142	96.16	95
2	RUDP-SB-FD-1, C/L	4-May-19	0+080	6.45	5.01	2.228	2.184	98.03	95
3	RUDP-SB-FD-1, R/S	4-May-19	0+100	6.45	5.23	2.228	2.135	95.84	95

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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Export Qty Surveyor/CSE	Team Leader
Benu Shrestha	Rabindra Kr. Thakur	H.k. Mandal/Rajan Shrestha	Giresh Chand

RUDP Building Design Authority Pvt. Ltd. PLUS JV Biratnagar

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report

Location:-R-6,(Balaju temple to Neuro Road)

Month:	May
Year	2019
Type of Material	Sub grade

Sn.	Lab.Ref no.	Location/Chainage	Source of Sample	Date of Testing	MDD	OMC	PI%	CBR%	Remarks
1	RUDP-SG-01	R-6,(0+150)	Existing Road	2-May-19	1.990	8.30	10.90	8.00	
2	RUDP-SG-02	R-6,(0+350)	Existing Road	2-May-19	1.982	7.50	8.12	7.89	

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
Expoert 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

Month	May
Year	2019
Type of Material	Sub-Grade

Location:-R-6,(Balaju Temple to neuro Road)

Sn.	Lab.Ref.no	Testing Date	Chanage	Moisture content %		Density(gm/cc)		Compaction %	
				OMC%	Field MC%	Max.Dry density gm/cc	Field Dry density, gm/cc	Compaction %	Specified %
1	RUDP-SG-FD-1, L/S	4-May-19	0+040	8.30	6.98	1.990	1.917	96.33	95
2	RUDP-SG-FD-1, C/L	4-May-19	0+100	8.30	6.96	1.990	1.915	96.23	95
3	RUDP-SG-FD-1, R/S	4-May-19	0+180	8.30	6.61	1.990	1.910	97.01	95
4	RUDP-SG-FD-1, C/L	4-May-19	0+220	8.30	6.15	1.990	1.954	96.68	95
5	RUDP-SG-FD-1, R/S	4-May-19	0+240	8.30	6.29	1.990	1.969	97.78	95
6	RUDP-SG-FD-1, C/L	4-May-19	0+350	7.50	7.31	1.982	1.921	96.94	95
7	RUDP-SG-FD-1, L/S	4-May-19	0+320	7.50	6.70	1.982	1.937	96.84	95
8	RUDP-SG-FD-1, R/S	4-May-19	0+400	7.50	6.88	1.982	1.934	97.57	95

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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Export Qty Surveyor/CSE	Team Leader
Benu Shrestha	Rabindra Kr. Thakur	H.K.Mandal/Rajan Shrestha	Giresh Chand

RUDP

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report

Month:	May
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+150)	Existing Road	3-May-19	1.950	8.40	9.71	6.40	

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	Submitted By	Verified By	Approved By
Engineer Benu Shrestha	Contract Manager Rabindra Kr. Thakur	Expert Qty Surveyor/CSE H.K. Mandal/Rajan Shrestha	Team Leader Giresh Chand

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Field Density Test

Month	May
Year	2019
Type of Material	Sub-Grade

Location:-R-82

Sn.	Lab.Ref.no	Testing Date	Chanage	Moisture content %		Density(gm/cc)		Compaction %	
				OMC%	Field MC%	Max.Dry density gm/cc	Field Dry density, gm/cc	Compaction %	Specified %
1	RUDP-SG-FD-1, L/S	5-May-19	0+050	8.40	8.70	1.950	1.891	96.96	95
2	RUDP-SG-FD-1, R/S	5-May-19	0+110	8.40	8.88	1.950	1.879	96.33	95
3	RUDP-SG-FD-1, L/S	5-May-19	0+170	8.40	8.99	1.950	1.906	97.72	95
4	RUDP-SG-FD-1, R/S	5-May-19	0+210	8.40	7.14	1.950	1.863	95.54	95
5	RUDP-SG-FD-1, R/S	5-May-19	0+250	8.40	7.20	1.950	1.887	96.76	95
6	RUDP-SG-FD-1, L/S	5-May-19	0+300	8.40	7.27	1.950	1.895	97.18	95

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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Expert Qty Surveyor/CSE	Team Leader
Benu Shrestha	Rabindra Thakur	H.K. Mandal/Rjan Shrestha	Giresh Chand

RUDP Biratnagar

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report

Month:	May
Year	2019
Type of Material	Sub grade

Location:-R-7,(PIU Front)

Sn.	Lab.Ref no.	Location/Chainage	Source of Sample	Date of Testing	MDD	OMC	PI%	CBR%	Remarks
1	RUDP-SG-01	R-7,(0+600)	Existing Road	1-May-19	2.010	8.35	10.06	6.96	

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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Export Qty Surveyor/CSE	Team Leader
Benu Shrestha	Rabindra Kr. Thakur	H.K. Mandal/Rajan Shrestha	Giresh Chand

RUDP

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Field Density Test

Month	May
Year	2019
Type of Material	Sub-Grade

Location:-R-7,(PIU Front)

Sn.	Lab.Ref.no	Testing Date	Chanage	Moisture content %		Density(gm/cc)		Compaction %	
				OMC%	Field MC%	Max.Dry density gm/cc	Field Dry density, gm/cc	Compaction %	Specified %
1	RUDP-SG-FD-1, L/S	2-May-19	0+550	8.35	8.07	2.010	1.916	95.30	95
2	RUDP-SG-FD-1, R/S	2-May-19	0+580	8.35	7.99	2.010	1.947	96.84	95
3	RUDP-SG-FD-1, L/S	2-May-19	0+600	8.35	8.40	2.010	1.934	96.20	95
4	RUDP-SG-FD-1, R/S	2-May-19	0+620	8.35	7.34	2.010	1.883	95.84	

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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Export Qty Surveyor/CSE	Team Leader
Benu Shrestha	Rabindra Kr. Thakur	H.K. Mandal/Rajan Shrestha	Giresh Chand

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report

Month:	May
Year	2019
Type of Material	Sub grade

Location:-Rani,Bhattimode (A)

Sn.	Lab.Ref no.	Location/Chainage	Source of Sample	Date of Testing	MDD	OMC	PI%	CBR%	Remarks
1	RUDP-SG-01	Rani,Bhattimode,(0+100)	Existing Road	4-May-19	1.986	7.40	10.24	7.36	

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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Expert Qty Surveyor/CSE	Team Leader
Benu Shrestha	Rabindra Kr. Thakur	H.K. Mandal/Rajan Shrestha	Giresh Chand

RUDP Building Authority (P) Ltd. * Biratnagar * Air Plus

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Field Density Test

Month	May
Year	2019
Type of Material	Sub-Grade

Location:-Rani,Bhattimode (A)

Sn.	Lab.Ref.no	Testing Date	Chanage	Moisture content %		Density(gm/cc)		Compaction %	
				OMC%	Field MC%	Max.Dry density gm/cc	Field Dry density, gm/cc	Compaction %	Specified %
1	RUDP-SG-FD-1, L/S	6-May-19	0+040	7.40	7.80	1.986	1.911	96.25	95
2	RUDP-SG-FD-1, R/S	6-May-19	0+080	7.40	7.28	1.986	1.907	96.00	95
3	RUDP-SG-FD-1, L/S	6-May-19	0+120	7.40	7.36	1.986	1.904	95.89	95
4	RUDP-SG-FD-1, R/S	6-May-19	0+180	7.40	6.88	1.986	1.923	96.84	95

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	Submitted By	Verified By	Approved By
Engineer Benu Shrestha	Contract Manager Rabindra Kr. Thakur	Expert Qty Surveyor/CSE H.K. Mandal/Rjan Shrestha	Team Leader Giresh Chand

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No: RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report

Month	May
Year	2019
Type of Material	Base

Location:-S13-C

S.N	Lab Ref no	Location of Sample	Source of Sample	Date of Testing	Sieve Size in mm / % passing By Weight								MDD	OMC	PI%	L.A.A %	F.I.(or) E.I. %	A.I.V. %	CBR %	CBR %	Remarks
					40	31.5	20	10	4.75	2.36	0.6	0.075									
1	RUDP-B-01	S13-C,(0+020)	Chisang Khola	8-May-19	100	91.78	80.64	60.19	40.31	29.01	17.28	5.11	2.246	4.60	NP	33.76	22.33/17.14	25.73	85.92	86.00	
				Spec. Limit :	100	85-100	62-92	40-70	26-55	21-53	12-28	2-10				≤ 45	≤ 35	< 35	>80	>80	

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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Export Qty Surveyor/CSE	Team Leader
Benu shrestha	Rabindra Kr. Thakur	H.K. Mondal/Rajan Shrestha	Girish Chand

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Field Density Test

Month	May
Year	2019
Type of Material	Base

Location:-S13-C

Sn.	Lab.Ref.no	Testing Date	Chainage	Moisture content %		Density(gm/cc)		Compaction %	
				OMC%	Field MC%	Max.Dry density	Field Dry density,	Compaction %	Specified %
1	RUDP-B-FD-1, L/S	11-May-19	0+020	4.60	4.78	2.245	2.202	98.09	98
2	RUDP-B-FD-1, R/S	11-May-19	0+040	4.60	4.33	2.245	2.235	99.56	98

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	Submitted By	Verified By	Approved By
Engineer Benu shrestha	Contract Manager Rabindra Kr. Thakur	Expert Qty Surveyor/CSE H.K. Mandal/Rajan Shrestha	Team Leader Giresh Chand

REGIONAL URBAN DEVELOPMENT PROJECT

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

Summary Sheet of Monthly Test Report of Concrete Sand

Month Year	May 2019
Type of Material	Concrete Sand

S.n.	Lab.Ref.no.	Date of Test	Location of Sample	Source of Sample	Sieve Size in mm / % Passing by weight 10	4.75	2.36	1.18	0.600	0.300	0.150	Clay Content%	Remarks
1	RUDP-CS-331	2-May-19	T3L22A	Chisang Khola	100.00	95.31	81.36	53.71	17.11	8.43	3.95	1.57	
2	RUDP-CS-332	3-May-19	T3L7	Chisang Khola	100.00	92.77	77.31	55.19	30.16	10.42	4.71	1.21	
3	RUDP-CS-333	5-May-19	R-6 (Branch Line)	Chisang Khola	100.00	92.77	74.80	52.82	29.96	9.89	4.15	1.47	
4	RUDP-CS-334	6-May-19	R-9	Chisang Khola	100.00	92.97	74.71	53.40	30.68	10.44	4.26	1.10	
5	RUDP-CS-335	7-May-19	R-46	Chisang Khola	100.00	92.72	75.66	54.46	32.71	11.69	4.78	1.40	
6	RUDP-CS-336	7-May-19	R-110	Chisang Khola	100.00	92.46	76.28	54.94	32.77	12.16	4.89	1.44	
7	RUDP-CS-337	9-May-19	T2L19Y	Chisang Khola	100.00	92.62	75.67	53.48	31.89	12.35	4.69	1.64	
8	RUDP-CS-338	10-May-19	T3L10	Chisang Khola	100.00	95.01	77.47	55.51	31.99	11.45	4.71	1.54	
9	RUDP-CS-339	11-May-19	T1L5	Chisang Khola	100.00	94.84	77.95	55.75	32.70	11.93	5.44	1.21	
10	RUDP-CS-340	12-May-19	T2L19Y	Chisang Khola	100.00	94.99	77.44	54.84	31.94	11.47	5.25	1.03	
11	RUDP-CS-341	13-May-19	R-44 (T3L9)	Chisang Khola	100.00	94.72	77.27	54.64	31.90	11.54	5.47	1.09	
12	RUDP-CS-342	14-May-19	R-82	Chisang Khola	100.00	94.53	76.73	53.56	32.35	12.24	5.37	1.11	
13	RUDP-CS-343	15-May-19	T3L.(Trunk line)	Chisang Khola	100.00	93.98	73.68	52.35	32.50	12.44	4.94	1.41	
14	RUDP-CS-344	16-May-19	T3L7C	Chisang Khola	100.00	95.07	86.77	61.26	36.86	15.33	6.09	1.49	
15	RUDP-CS-345	17-May-19	R-7	Chisang Khola	100.00	94.88	88.01	62.98	37.51	15.68	6.00	1.27	
16	RUDP-CS-346	18-May-19	Koshi Yard	Chisang Khola	100.00	95.02	86.92	60.71	35.45	13.80	5.70	0.98	
17	RUDP-CS-347	19-May-19	R-19	Chisang Khola	100.00	94.48	86.10	62.29	36.34	14.07	5.82	1.11	
18	RUDP-CS-348	20-May-19	Judi Yard	Chisang Khola	100.00	94.85	83.00	53.20	33.93	12.93	5.33	1.01	
				Spec. Limit :	100	89~100	60~100	30~100	15~100	5~70	0~15	<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

RUDP

Checked By
Engineer
Benu Shrestha

Submitted By
Contract Manager
Rabindra K. Thakur

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

Approved By
Team Leader
Girish Chand

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report of Cancrete Sand

Month	May
Year	2019
Type of Material	Cancrete Sand

S.n.	Lab Ref no.	Date of Test	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		
19	RUDP-CS-349	21-May-19	R-83	Chisang Khola	100.00	95.38	85.13	54.59	33.67	13.12	5.06	1.20	
20	RUDP-CS-350	22-May-19	Madhumara Yard	Chisang Khola	100.00	94.76	83.23	54.62	34.83	13.75	5.36	1.21	
21	RUDP-CS-351	24-May-19	T3L6	Chisang khola	100.00	94.70	84.44	57.69	37.59	15.50	5.65	1.27	
22	RUDP-CS-352	27-May-19	T3L39A	Chisang khola	100.00	94.33	83.81	55.35	36.59	15.78	5.79	1.32	
				Spec. Limit :	100	89~100	60~100	30~100	15~100	5~70	0~15	<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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Expert Qty Surveyor/CSE	Team Leader
Benu Shrestha	Rabindra K. Thakur	H.K. Mandal/Rajan Shrestha	Ghresh Chand

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report

Month: May
Year: 2019
Type of Material: Sub-base

Location :-R-73

Sn.	Lab.Ref no.	Location of Sample	Source of Sample	Date of Testing	Sieve Size in mm / passing % By Weight								MDD	OMC	PI%	CBR%	Remarks
					63.0	37.5	20.0	10.0	5.0	2.36	1.18	0.075					
1	RUDP-SB-01	R-73,(0+100)	Chisang Khola	10-May-19	100	88.52	69.60	53.69	36.18	28.39	17.60	6.82	2.226	6.00	1.77	43.00	
2	RUDP-SB-02	R-73,(0+200)	Chisang Khola	10-May-19	100	89.98	71.94	56.48	36.72	29.06	19.69	8.59			2.39		
				Spec. Limit :	100	65-95	50-85	40-75	30-60	20-45	15-37	4-15			<6	>30	

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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Qty Engineer/CSE	Team Leader
Benu Shrestha	Rabindra Kr. Thakur	H.K. Mandal/Rajan Shrestha	Giresh Chand

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Field Density Test

Month	May
Year	2019
Type of Material	Sub-Base

Location:-R-73

Sn.	Lab.Ref.no	Testing Date	Chainage	Moisture content %		Density(gm/cc)		Compaction %	
				OMC%	Field MC%	Max.Dry density	Field Dry density,	Compaction	Specified %
1	RUDP-SB-FD-1, R/S	12-May-19	0+040	6.00	6.18	2.226	2.164	97.19	95
2	RUDP-SB-FD-1, L/S	12-May-19	0+080	6.00	5.81	2.226	2.147	96.47	95
3	RUDP-SB-FD-1, R/S	12-May-19	0+120	6.00	6.03	2.226	2.165	97.24	95
4	RUDP-SB-FD-1, L/S	12-May-19	0+190	6.00	5.21	2.226	2.153	96.71	95
5	RUDP-SB-FD-1, R/S	12-May-19	0+210	6.00	6.50	2.226	2.201	98.59	95

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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Export Qty Surveyor/CSE	Team Leader
Benu Shrestha	Rabindra Kr. Thakur	H.k. Mandal/Rajan Shrestha	Giresh Chand

RUDP Building Design Authority (P) Ltd. (BN/PLUS J/V) Biratnagar

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report

Month	May
Year	2019
Type of Material	Sub-base

Location :-R-7,PIU Front

Sn.	Lab.Ref no.	Location of Sample	Source of Sample	Date of Testing	Sieve Size in mm / passing % By Weight								MDD	OMC	PI%	CBR%	Remarks
					63.0	37.5	20.0	10.0	5.0	2.36	1.18	0.075					
1	RUDP-SB-01	R-7(PIU Front)	Chisang Khola	4-May-19	100	90.23	71.17	54.44	36.43	27.23	16.11	9.51	2.223	6.40	1.84	47.00	
				Spec. Limit :	100	65~95	50~85	40~75	30~60	20~45	15~37	4~15			<6	>30	

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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Qty Engineer/CSE	Team Leader
Benu Shrestha	Rabindra Kr. Thakur	H.K. Mandal/Rajan Shrestha	Giresh Chand

RUDP

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Field Density Test

Month	May
Year	2019
Type of Material	Sub-Base

Location:-R-7,(PIU Front)

Sn.	Lab.Ref.no	Testing Date	Chainage	Moisture content %		Density(gm/cc)		Compaction %	
				OMC%	Field MC%	Max.Dry density	Field Dry density,	Compaction	Specified %
1	RUDP-SB-FD-1, L/S	4-May-19	0+040	6.40	6.85	2.223	2.163	97.30	95
2	RUDP-SB-FD-1, C/L	4-May-19	0+080	6.40	5.76	2.223	2.131	95.86	95
3	RUDP-SB-FD-1, R/S	4-May-19	0+100	6.40	6.62	2.223	2.160	97.15	95
4	RUDP-SB-FD-1, L/S	5-May-19	0+101	6.40	5.31	2.223	2.168	97.44	95

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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Export Qty Surveyor/CSE	Team Leader
Benu Shrestha	Rabindra Kr. Thakur	H.k. Mandal/Rajan Shrestha	Giresh Chand

RUDP Building * Biratnagar * JV PLUS

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report

Month:	May
Year	2019
Type of Material	Sub-base

Location :-R-29

Sn.	Lab.Ref no.	Location of Sample	Sourse of Sample	Date of Testing	Sieve Size in mm / passing % by Weight								MDD	OMC	PI%	CBR%	Remarks
					63.0	37.5	20.0	10.0	5.0	2.36	1.18	0.075					
1	RUDP-SB-01	R-29,(0+350)	Chisang Khola	7-May-19	100	89.20	70.04	53.61	33.93	24.94	17.54	11.02	2.232	5.90	2.77	44.00	
2	RUDP-SB-02	R-29,(0+550)	Chisang Khola	7-May-19	100	89.10	68.82	50.35	35.83	24.18	16.72	6.09			2.98		
				Spec. Limit :	100	65-95	50-85	40-75	30-60	20-45	15-37	4-15			<6	>30	

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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Qty Engineer/CSI	Team Leader
Benu Shrestha	Rabindra Kr. Thakur	H.K. Mandal/Rajan Shrestha	Girish Chand

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Field Density Test

Month	May
Year	2019
Type of Material	Sub-Base

Location:-R-29

Sn.	Lab.Ref.no	Testing Date	Chainage	Moisture content %		Density(gm/cc)		Compaction %	
				OMC%	Field MC%	Max.Dry density	Field Dry density,	Compaction	Specified %
1	RUDP-SB-FD-1, L/S	9-May-19	0+380	5.90	5.55	2.232	2.153	96.45	95
2	RUDP-SB-FD-1, C/L	9-May-19	0+420	5.90	5.01	2.232	2.195	98.34	95
3	RUDP-SB-FD-1, R/S	9-May-19	0+450	5.90	5.23	2.232	2.146	96.14	95
4	RUDP-SB-FD-1, L/S	9-May-19	0+480	5.90	5.44	2.232	2.176	97.50	95
5	RUDP-SB-FD-1, R/S	9-May-19	0+510	5.90	5.29	2.232	2.169	97.16	95
6	RUDP-SB-FD-1, R/S	9-May-19	0+550	5.90	5.98	2.232	2.180	97.66	95
7	RUDP-SB-FD-1, L/S	9-May-19	0+580	5.90	5.40	2.232	2.155	96.55	95
8	RUDP-SB-FD-1, R/S	9-May-19	0+600	5.90	5.01	2.232	2.163	96.90	95

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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Export Qty Surveyor/CSE	Team Leader
Benu Shrestha	Rabindra Kr. Thakur	H.k. Mandal/Rajan Shrestha	Giresh Chand

RUDP Building Design Authority * Biratnagar * JV PLUS

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report

Month: May
Year 2019
Type of Material: Sub-base

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

Sn.	Lab Ref no.	Location of Sample	Source of Sample	Date of Testing	Sieve Size in mm / passing % By Weight								MDD	OMC	PI%	CBR%	Remarks
					63.0	37.5	20.0	10.0	5.0	2.36	1.18	0.075					
1	RUDP-SB-01	R-6,(0+300)	Chisang Khola	8-May-19	100	89.25	68.99	52.83	32.82	26.54	16.15	7.40	2.218	5.80	2.16	41.20	
2	RUDP-SB-02	R-6,(0+400)	Chisang Khola	8-May-19	100	89.65	67.86	50.55	32.10	24.86	18.71	9.96			1.90		
3	RUDP-SB-03	R-6,(0+550)	Chisang Khola	8-May-19	100	91.33	72.97	57.37	37.21	30.70	19.06	11.34			2.10		
				Spec. Limit :	100	65-95	50-85	40-75	30-60	20-45	15-37	4-15			<6	>30	

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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	City Engineer/CSE	Team Leader
Benu Shrestha	Rabindra Kr. Thakur	H.K. Mandal/Rajan Shrestha	Giresh Chand

RUDP

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Field Density Test

Month	May
Year	2019
Type of Material	Sub-Base

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

Sn.	Lab.Ref.no	Testing Date	Chainage	Moisture content %		Density(gm/cc)		Compaction %	
				OMC%	Field MC%	Max.Dry density	Field Dry density,	Compaction	Specified %
1	RUDP-SB-FD-1, L/S	10-May-19	0+050	5.80	5.85	2.218	2.171	97.89	95
2	RUDP-SB-FD-1, C/L	10-May-19	0+280	5.80	5.92	2.218	2.133	96.17	95
3	RUDP-SB-FD-1, R/S	10-May-19	0+310	5.80	5.23	2.218	2.133	96.18	95
4	RUDP-SB-FD-1, L/S	10-May-19	0+360	5.80	4.90	2.218	2.185	98.51	95
5	RUDP-SB-FD-1, R/S	10-May-19	0+400	5.80	5.32	2.218	2.168	97.73	95
6	RUDP-SB-FD-1, R/S	10-May-19	0+450	5.80	5.44	2.218	2.133	96.18	95
7	RUDP-SB-FD-1, L/S	10-May-19	0+500	5.80	5.43	2.218	2.162	96.84	95

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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Export Qty Surveyor/CSE	Team Leader
Benu Shrestha	Rabindra Kr. Thakur	H.k. Mandal/Rajan Shrestha	Giresh Chand

RUDP

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet Of Monthly Test Report

Month	May
Year	2019
Type of Material	Brick

S.N.	Lab Ref.No.	Testing Date	Location of Sample	Source of Brick	Name Of Brick	Water Absorption of Brick(%)	Strength of Brick(N/mm²)	Remarks
1	549	3-May-19	T2L22A	Dadarbairya	ACC	14.78	14.15	
2	550	3-May-19	T3L7	Dadarbairya	ACC	15.04	13.12	
3	551	3-May-19	T3L7	Dadarbairya	ACC	14.85	14.59	
4	552	3-May-19	R-6 (Branch Line)	Dadarbairya	ANAND	13.68	15.01	
5	553	4-May-19	R-110	Dadarbairya	ACC	15.50	14.15	
6	554	4-May-19	R-46	Dadarbairya	ACC	13.19	15.11	
7	555	4-May-19	R-9	Dadarbairya	ACC	13.54	13.12	
8	556	4-May-19	T2L19Y	Dadarbairya	ACC	14.03	14.29	
9	557	4-May-19	R-110	Dadarbairya	ACC	13.79	13.27	
10	558	6-May-19	T1L5	Dadarbairya	ACC	15.36	14.49	
11	559	6-May-19	R-44	Dadarbairya	ACC	14.65	14.19	
12	560	6-May-19	R-82	Dadarbairya	ACC	13.99	13.83	
13	561	6-May-19	T3L (Trunk Line)	Dadarbairya	ACC	16.88	14.21	
14	562	6-May-19	T3L22A	Dadarbairya	ACC	15.34	13.42	
15	563	6-May-19	T3L22A	Dadarbairya	ACC	13.32	12.61	
16	564	7-May-19	R-7	Dadarbairya	ACC	14.82	13.79	
17	565	7-May-19	R-19	Dadarbairya	ACC	15.06	13.52	
18	566	7-May-19	R-83	Dadarbairya	ACC	13.48	14.16	
19	567	8-May-19	T3L6	Dadarbairya	ACC	12.54	13.87	
20	568	8-May-19	T3L39A	Dadarbairya	ACC	12.40	13.33	
21	569	8-May-19	T2L22A	Dadarbairya	ACC	13.25	13.79	
22	570	8-May-19	T3L7	Dadarbairya	ACC	14.16	14.15	
23	571	10-May-19	R-6 (Branch Line)	Dadarbairya	ANAND	14.39	13.43	
24	572	10-May-19	R-6 (Branch Line	Dadarbairya	ANAND	14.51	13.44	
25	573	10-May-19	R-9	Dadarbairya	ACC	15.21	13.82	
26	574	10-May-19	R-46	Dadarbairya	ACC	13.38	14.20	
27	575	10-May-19	R-46	Dadarbairya	ACC	14.84	13.88	
28	576	10-May-19	R-46	Dadarbairya	ACC	13.86	12.72	
29	577	12-May-19	T3L7C	Dadarbairya	ACC	14.56	14.37	
30	578	12-May-19	T2L19Y	Dadarbairya	ACC	14.50	12.74	
			Sp. Limit			<20%	>8 to 10 N/mm²	

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 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 Monthly Test Report

Month	May
Year	2019
Type of Material	Brick

S.N.	Lab Ref.No.	Testing Date	Location of Sample	Source of Brick	Name Of Brick	Water Absorption of Brick(%)	Strength of Brick(N/mm²)	Remarks
31	579	12-May-19	T2L19Y	Dadarbairya	ACC	14.70	15.57	
32	580	13-May-19	R-7	Dadarbairya	ACC	13.14	15.96	
33	581	13-May-19	R-110	Dadarbairya	ACC	13.64	15.27	
34	582	13-May-19	R-46	Dadarbairya	ACC	14.02	15.83	
35	583	13-May-19	R-44	Dadarbairya	ACC	13.93	14.95	
36	584	13-May-19	R-82	Dadarbairya	ACC	12.97	15.98	
37	585	15-May-19	T3L (Trunk Line)	Dadarbairya	ACC	13.29	16.36	
38	586	15-May-19	T3L (Trunk Line)	Dadarbairya	ACC	14.61	14.25	
39	587	15-May-19	R-6 ,Branch line	Dadarbairya	Aanand	12.72	15.37	
40	588	15-May-19	T3L7	Dadarbairya	ACC	15.19	14.86	
41	589	15-May-19	R-9	Dadarbairya	ACC	12.11	17.14	
42	590	15-May-19	T2L19Y	Dadarbairya	ACC	11.94	16.32	
43	591	15-May-19	T1L5	Dadarbairya	ACC	12.82	15.17	
44	592	15-May-19	T3L7C	Dadarbairya	ACC	12.97	16.38	
45	593	17-May-19	T3L22A	Dadarbairya	ACC	15.48	15.31	
46	594	17-May-19	R-110	Dadarbairya	ACC	16.29	14.28	
47	595	17-May-19	R-82	Dadarbairya	ACC	14.81	13.48	
48	596	17-May-19	R-44	Dadarbairya	ACC	12.46	15.05	
49	597	17-May-19	T3L (Trunk Line)	Dadarbairya	ACC	14.81	14.12	
50	598	17-May-19	R-7	Dadarbairya	ACC	12.61	14.26	
51	599	17-May-19	R-19	Dadarbairya	ACC	13.35	15.28	
52	600	17-May-19	R-19	Dadarbairya	ACC	14.97	14.96	
53	601	17-May-19	R-83	Dadarbairya	ACC	15.29	15.02	
54	602	17-May-19	R-83	Dadarbairya	ACC	13.71	13.89	
55	603	17-May-19	T3L6	Dadarbairya	ACC	13.04	14.79	
56	604	17-May-19	T3L39A	Dadarbairya	ACC	14.39	16.78	
57	605	18-May-19	R-19	Dadarbairya	ACC	15.12	14.48	
58	606	18-May-19	R-7	Dadarbairya	ACC	17.04	16.01	
59	607	18-May-19	R-110	Dadarbairya	ACC	14.12	15.73	
60	608	18-May-19	R-110	Dadarbairya	ACC	15.17	14.67	
			Sp. Limit			<20%	>8 to 10 N/mm²	

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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Expert Qty Surveyor/CSE	Team Leader
Benu shrestha	Rabindra Kr. Thakur	H.K.Mandal/Rajan Shrestha	Giresh Chand

RUDP

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet Of Monthly Test Report

Month	May
Year	2019
Type of Material	Brick

S.N.	Lab Ref.No.	Testing Date	Location of Sample	Source of Brick	Name Of Brick	Water Absorption of Brick(%)	Strength of Brick(N/mm²)	Remarks
61	609	18-May-19	T3L39A	Dadarbairya	ACC	15.27	13.23	
62	610	18-May-19	R-44	Dadarbairya	ACC	14.77	14.13	
63	611	19-May-19	T3L22A	Dadarbairya	ACC	13.21	14.65	
64	612	19-May-19	T3L7	Dadarbairya	ACC	15.06	11.60	
65	613	19-May-19	R-6 ,Branch line	Dadarbairya	ACC	12.51	11.38	
66	614	19-May-19	R-9	Dadarbairya	ACC	14.47	12.43	
67	615	19-May-19	R-46	Dadarbairya	ACC	15.45	12.15	
68	616	19-May-19	R-110	Dadarbairya	ACC	15.31	12.64	
69	617	19-May-19	T2L19Y	Dadarbairya	ACC	15.24	11.88	
70	618	19-May-19	T3L10	Dadarbairya	ACC	15.63	12.04	
71	619	20-May-19	T1L5	Dadarbairya	ACC	15.64	12.82	
72	620	20-May-19	R-44,(T3L9)	Dadarbairya	ACC	15.02	12.58	
73	621	20-May-19	R-82	Dadarbairya	ACC	14.33	12.28	
74	622	20-May-19	T3L (Trunk Line)	Dadarbairya	ACC	14.02	14.04	
75	623	20-May-19	T3L7C	Dadarbairya	ACC	14.82	12.37	
76	624	20-May-19	R-7	Dadarbairya	ACC	16.82	13.61	
77	625	20-May-19	R-19	Dadarbairya	ACC	14.58	12.73	
78	626	20-May-19	R-83	Dadarbairya	ACC	15.09	12.80	
79	627	21-May-19	T3L6	Dadarbairya	ACC	14.86	12.13	
80	628	21-May-19	T3L39A	Dadarbairya	ACC	17.10	11.87	
81	629	21-May-19	T3L22A	Dadarbairya	ACC	15.97	11.70	
82	630	21-May-19	T3L7	Dadarbairya	ACC	14.72	11.80	
83	631	21-May-19	R-6 ,Branch line	Dadarbairya	ACC	15.10	12.54	
84	632	21-May-19	R-9	Dadarbairya	ACC	14.31	12.09	
85	633	22-May-19	R-46	Dadarbairya	ACC	15.47	12.10	
86	634	22-May-19	R-110	Dadarbairya	ACC	15.04	11.74	
87	635	22-May-19	T2L19Y	Dadarbairya	ACC	15.99	11.27	
88	636	22-May-19	T3L10	Dadarbairya	ACC	14.59	11.61	
89	637	22-May-19	T1L5	Dadarbairya	ACC	15.23	11.54	
90	638	23-May-19	R-44,(T3L9)	Dadarbairya	ACC	14.92	12.30	
			Sp. Limit			<20%	>8 to 10 N/mm²	

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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Expert Qty Surveyor/CSE	Team Leader
Benu shrestha	Rabindra Kr. Thakur	H.K.Mandal/Rajan Shrestha	Giresh Chand

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet Of Monthly Test Report

Month	May
Year	2019
Type of Material	Brick

S.N.	Lab Ref.No.	Testing Date	Location of Sample	Source of Brick	Name Of Brick	Water Absorption of Brick(%)	Strength of Brick(N/mm²)	Remarks
91	639	23-May-19	R-82	Dadarbairya	ACC	14.41	11.94	
92	640	23-May-19	T3L (Trunk Line)	Dadarbairya	ACC	14.38	12.44	
93	641	23-May-19	T3L7C	Dadarbairya	ACC	15.39	11.87	
94	642	23-May-19	R-7	Dadarbairya	ACC	14.81	12.27	
95	643	23-May-19	R-19	Dadarbairya	ACC	15.26	11.86	
96	644	24-May-19	R-83	Dadarbairya	ACC	14.46	11.99	
97	645	24-May-19	T3L6	Dadarbairya	ACC	14.03	11.62	
98	646	24-May-19	T3L39A	Dadarbairya	ACC	13.77	12.58	
99	647	24-May-19	T3L39A	Dadarbairya	ACC	14.12	11.80	
100	648	24-May-19	T3L22A	Dadarbairya	ACC	15.79	11.83	
101	649	24-May-19	T3L7	Dadarbairya	ACC	15.28	12.20	
102	650	24-May-19	R-6 (Branch line)	Dadarbairya	ACC	15.78	12.15	
103	651	24-May-19	R-9	Dadarbairya	ACC	15.34	12.14	
104	652	24-May-19	R-46	Dadarbairya	ACC	15.06	11.54	
105	653	25-May-19	R-110	Dadarbairya	ACC	15.38	12.28	
106	654	25-May-19	T2L19Y	Dadarbairya	ACC	13.82	11.60	
107	655	25-May-19	T3L110	Dadarbairya	ACC	14.42	11.95	
108	656	25-May-19	T1L5	Dadarbairya	ACC	14.70	12.15	
109	657	25-May-19	R-44,(T3L9)	Dadarbairya	ACC	14.98	12.70	
110	658	25-May-19	R-82	Dadarbairya	ACC	15.72	13.15	
111	659	25-May-19	T3L (Trunk Line)	Dadarbairya	ACC	15.37	12.86	
112	660	25-May-19	T3L7C	Dadarbairya	ACC	15.53	12.58	
113	661	25-May-19	R-7	Dadarbairya	ACC	15.60	12.70	
			Sp. Limit			<20%	>8 to 10 N/mm²	

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
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 Monthly Test Report

Month:	May
Year	2019
Type of Material	Sub-base

Location :-T3L11i

Sn.	Lab.Ref no.	Location of Sample	Source of Sample	Date of Testing	Sieve Size in mm / passing % By Weight								MDD	OMC	PI%	CBR%	Remarks
					63.0	37.5	20.0	10.0	5.0	2.36	1.18	0.075					
1	RUDP-SB-01	T3L11 i,(0+100)	Chisang Khola	23-May-19	100	89.78	72.69	59.36	40.19	31.17	17.00	5.62	2.225	5.80	1.40	44.80	
2	RUDP-SB-02	T3L11 i,(0+200)	Chisang Khola	23-May-19	100	83.88	66.18	49.33	39.03	33.39	16.83	565.00			1.69		
				Spec. Limit :	100	65-95	50-85	40-75	30-60	20-45	15-37	4-15			<6	>30	

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	Submitted By	Verified By	Approved By
Engineer	Contract Manager	Qty Engineer/CSE	Team Leader
Benu Shrestha	Rabindra Kr. Thakur	U.K. Mandal/Rajan Shrestha	Giresh Chand

RUDP

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Field Density Test

Month	May
Year	2019
Type of Material	Sub-Base

Location:-T3L11i

Sn.	Lab.Ref.no	Testing Date	Chainage	Moisture content %		Density(gm/cc)		Compaction %	
				OMC%	Field MC%	Max.Dry density	Field Dry density,	Compaction	Specified %
1	RUDP-SB-FD-1, L/S	24-May-19	0+020	5.80	5.90	2.225	2.182	98.08	95
2	RUDP-SB-FD-1, C/L	24-May-19	0+050	5.80	5.42	2.225	2.165	97.29	95
3	RUDP-SB-FD-1, R/S	24-May-19	0+090	5.80	5.52	2.225	2.144	96.34	95
4	RUDP-SB-FD-1, L/S	24-May-19	0+150	5.80	5.21	2.225	2.150	96.63	95
5	RUDP-SB-FD-1, R/S	24-May-19	0+170	5.80	6.50	2.225	2.198	98.78	95
6	RUDP-SB-FD-1, R/S	24-May-19	0+190	5.80	5.98	2.225	2.165	97.30	95
7	RUDP-SB-FD-1, L/S	24-May-19	0+200	5.80	5.40	2.225	2.145	96.12	95

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
Export 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 Monthly Test Report of 20mm Agg.

Month	May
Year	2019
Type of Material	20 mm Agg

S.n.	Lab.Ref no.	Date of Testing	Location of Sample	Source of Sample	Sieve Size in mm / % Passing by weight					L.A.A.%	Fl and El %	A.I.V %	Remarks
					37.5	20	14	10	5				
1	RUDP-CA-331	3-May-19	T3L22A	Chisang Khola	100.00	95.31	39.18	5.09	2.43	30.96	19.03/17.92	21.32	
2	RUDP-CA-332	4-May-19	T3L7	Chisang Khola	100.00	94.70	14.98	5.14	1.90	30.20	19.02/17.43	21.86	
3	RUDP-CA-333	5-May-19	R-6 (Branch Line)	Chisang Khola	100.00	94.92	15.68	6.16	1.71	28.60	18.51/17.23	22.51	
4	RUDP-CA-334	6-May-19	Madhumara Yard	Chisang Khola	100.00	94.84	15.95	6.90	2.06	30.58	17.99/15.44	18.44	
5	RUDP-CA-335	7-May-19	R-9	Chisang Khola	100.00	94.72	16.66	6.82	2.01	30.38	18.94/17.97	22.02	
6	RUDP-CA-336	8-May-19	R-46	Chisang Khola	100.00	95.14	16.79	6.88	2.18	30.02	19.08/18.29	22.88	
7	RUDP-CA-337	9-May-19	R-110	Chisang Khola	100.00	94.65	16.83	6.92	2.14	29.58	18.45/17.45	18.87	
8	RUDP-CA-338	10-May-19	Madhumara Yard	Chisang Khola	100.00	94.23	17.57	7.53	2.16	30.66	18.61/16.09	20.21	
9	RUDP-CA-339	11-May-19	T2L19Y	Chisang Khola	100.00	93.57	16.67	7.58	1.81	30.12	17.99/15.65	20.09	
10	RUDP-CA-340	12-May-19	T3L10	Chisang Khola	100.00	94.22	17.18	7.24	1.40	30.70	19.59/16.60	20.52	
11	RUDP-CA-341	13-May-19	Koshi-yard	Chisang Khola	100.00	90.25	20.71	7.96	3.00	30.02	19.44/18.57	21.75	
12	RUDP-CA-342	14-May-19	R-44 (T3L9)	Chisang Khola	100.00	93.03	22.18	8.54	3.28	30.06	23.01/21.00	21.15	
13	RUDP-CA-343	15-May-19	R-82	Chisang Khola	100.00	93.11	23.85	10.64	3.75	30.44	21.99/20.72	20.23	
14	RUDP-CA-344	16-May-19	Koshi Yard	Chisang Khola	100.00	92.87	23.91	10.56	3.85	30.78	21.91/20.96	18.55	
15	RUDP-CA-345	17-May-19	T3L (Trunk Line)	Chisang Khola	100.00	93.10	23.91	11.16	3.61	29.72	21.31/20.32	18.26	
16	RUDP-CA-346	18-May-19	T3L7C	Chisang Khola	100.00	93.71	23.01	9.71	3.04	30.02	21.46/20.48	18.81	
17	RUDP-CA-347	19-May-19	R-7	Chisang Khola	100.00	92.89	23.15	9.80	2.69	28.26	20.26/18.73	15.61	
18	RUDP-CA-348	20-May-19	R-19	Chisang Khola	100.00	93.70	22.03	9.79	3.67	31.78	20.22/19.60	19.05	
19	RUDP-CA-349	21-May-19	Judi Yard	Chisang Khola	100.00	94.00	23.25	10.81	3.27	28.06	20.21/18.87	19.78	
20	RUDP-CA-350	22-May-19	R-83	Chisang Khola	100.00	94.38	27.19	9.85	3.58	30.78	20.85/19.47	21.63	
				Spec. Limit :	100	85–100	0–70	0–25	0–5	<35	<25	<25	

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 K. Thakur

Verified By
Expert Qty Surveyor/L.S.E.
H.K. Mandal/Rajan Shrestha

RUDP

Approved By
Team Leader
Ghesh Chand

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

Summary Sheet of Monthly Test Report of 20mm Agg.

Month / Year	May 2019
Type of Material	20 mm Agg

S.n.	Lab.Ref no.	Date of Testing	Location of Sample	Source of Sample	Sieve Size in mm / % Passing by weight					L.A.A.%	F/I and E/I %	A.I.V.%	Remarks
					37.5	20	14	10	5				
21	RUDP-CA-351	23-May-19	T3L6	Chisang Khola	100.00	93.04	26.34	8.93	3.02	29.28	20.30/19.52	17.95	
22	RUDP-CA-352	24-May-19	T3L39A	Chisang Khola	100.00	93.55	26.69	10.89	3.46	26.38	20.43/16.99	18.34	
				Spec. Limit :	100	85-100	0-70	0-25	0-5	<35	< 25	< 25	

Contractor

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Checked By
Engineer
Benu Shrestha

Submitted By
Contract Manager
Rabindra K. Thakur

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

RUDP

Approved By
Team Leader
Girish Chand

REGIONAL URBAN DEVELOPMENT PROJECT

Biratnagar Metropolitan City

Contract No:- RUDP/ICB/BRT-02

SUMMARY SHEET OF CEMENT TEST

Month: May, Year: 2019

S.N.	Lab Ref.no	Type of cement	Testing Date	Consistancy & Setting Time			Soundness (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	42	Saptakoshi opc							4-Apr-19	11-Apr-19	2-May-19		46.66	
2	43	Saptakoshi opc							14-Apr-19	21-Apr-19	12-May-19		47.06	
3	44	Saptakoshi opc	2-May-19	31.50	125.00	216.00	2.47	2.57	3-May-19	10-May-19	31-May-19	27.44	47.88	
4	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	26.52		
5	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	28.48		
		Sp.Limit:			Min-30	Max-600	<10	<10				>23	>43	

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	Submitted By	Verified By		Approved By
Engineer	Contract Manager	Export Qty Surveyor/Lab	RUDP	Team Leader
Benu Shrestha	Rabindra Kr. Thakur	H.K. Mandal/Rajan Shrestha		Girish Chand

ANNEX-4: SOCIAL & ENVIRONMENT SAFEGUARD

Monitoring Formats Attached – May 2019

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: May 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	DDC, Kanchanbari, 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	

Regional Urban Development Project (RUDP)

Social Safeguard Monitoring

Status of Key Social Issues Compliance

Subproject Road : -RUDP/ICB/BRT/2

Month/Year:May 2019

Name of Contractor :-ZHONGGHENG Construction GroupInternational Engineering Co pvt Beijing Chaina.

Contract Package: RUDP/ICB/BRT/2

S.N	Key Social Issuse	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:

Biratnagar Metropolitant City

Regional Urban Development Project

Construction and Completion Of Sewerage, Drainage, Road, Footpath and Road Furniture Works (RUDP/ICB/BRT)

LABOUR DATA **May-19**

S.NO	LOCATION	TYPES OF WORK	TYPES OF WORKERS	LABOUR		COMPOSITION		ETHNIC COMPOSITION				
				SKILLED	UNSKILLED	MALE	FEMALE	JANJATI	DALIT	MUSLIM	MADHESI	BRAHMIN/CHHETRI
1	R83	DRAIN	LOCAL	3	12	15			5	5	5	
			NON LOCAL									
			INDIAN									
			TOTAL	15								
2	R19	Drain	LOCAL									
			NON LOCAL	4	16	20		10			10	
			INDIAN									
			TOTAL	20								
3	R12	H. Connection	LOCAL	3	7	10					10	
			NON LOCAL									
			INDIAN									
			TOTAL	10								
4	R82	H. Connection	LOCAL	3	7	10					10	
			NON LOCAL									
			INDIAN									
			TOTAL	10								
5	R12	Sub-Base	LOCAL	2	5	7					7	
			NON LOCAL									
			INDIAN									
			TOTAL	7								
6	T3L22A	Drain	LOCAL									
			NON LOCAL									
			INDIAN	4	11	15			5		10	
			TOTAL	15								
7	R46 (Group A)	Drain	LOCAL									
			NON LOCAL	5	17	22		5	5		12	
			INDIAN									
			TOTAL	22								

Biratnagar Metropolitant City

Regional Urban Development Project

Construction and Completion Of Sewerage, Drainage, Road, Footpath and Road Furniture Works (RUDP/ICB/BRT)

LABOUR DATA May-19

S.NO	LOCATION	TYPES OF WORK	TYPES OF WORKERS	LABOUR		COMPOSITION		ETHNIC COMPOSITION				
				SKILLED	UNSKILLED	MALE	FEMALE	JANJATI	DALIT	MUSLIM	MADHESI	BRAHMIN/CHHETRI
8	R46 (Group B)	Drain	LOCAL									
			NON LOCAL	4	12	16		6			10	
			INDIAN									
			TOTAL	16								
9	R6	Drain	LOCAL									
			NON LOCAL									
			INDIAN	5	20	25			10	15		
			TOTAL	25								
10	T3L10B	Drain	LOCAL									
			NON LOCAL									
			INDIAN	5	16	21			5	5	11	
			TOTAL	21								
11	Koshi Yard	Production	LOCAL									
			NON LOCAL	5	26	31		15		16		
			INDIAN									
			TOTAL	31								
12	Madhumara Yard	Production	LOCAL									
			NON LOCAL	7	25	32		4	10		18	
			INDIAN									
			TOTAL	32								
13	Judi Yard	Production	LOCAL									
			NON LOCAL	8	30	38		8	10		20	
			INDIAN									
			TOTAL	38								
14	R46	Sewer Inlet	LOCAL	2	3	5					5	
			NON LOCAL									
			INDIAN									
			TOTAL	5								

Biratnagar Metropolitant City

Regional Urban Development Project

Construction and Completion Of Sewerage, Drainage, Road, Footpath and Road Furniture Works (RUDP/ICB/BRT)

LABOUR DATA **May-19**

S.NO	LOCATION	TYPES OF WORK	TYPES OF WORKERS	LABOUR		COMPOSITION		ETHNIC COMPOSITION				
				SKILLED	UNSKILLED	MALE	FEMALE	JANJATI	DALIT	MUSLIM	MADHESI	BRAHMIN/CHHETRI
15	B2	Drain Rise	LOCAL									
			NON LOCAL	4	17	21				10	11	
			INDIAN									
			TOTAL	21								
16	T3L39A	Drain	LOCAL									
			NON LOCAL	2	9	8	3				11	
			INDIAN									
			TOTAL	11								
17	T3L22A	Drain	LOCAL									
			NON LOCAL	5	16	21			11		10	
			INDIAN									
			TOTAL	21								
18	S13	Weep hole & pipe fitting	LOCAL									
			NON LOCAL	3	4	7					7	
			INDIAN									
			TOTAL	7								
19	B3	Drain Rise	LOCAL									
			NON LOCAL	5	14	19				5	14	
			INDIAN									
			TOTAL	19								
20	R9	DRAIN	LOCAL	4	16	20					20	
			NON LOCAL									
			INDIAN									
			TOTAL	20								
21	R6	Kerb stone	LOCAL									
			NON LOCAL	5	18	23			13		10	
			INDIAN									
			TOTAL	23								

Biratnagar Metropolitant City

Regional Urban Development Project

Construction and Completion Of Sewerage, Drainage, Road, Footpath and Road Furniture Works (RUDP/ICB/BRT)

LABOUR DATA **May-19**

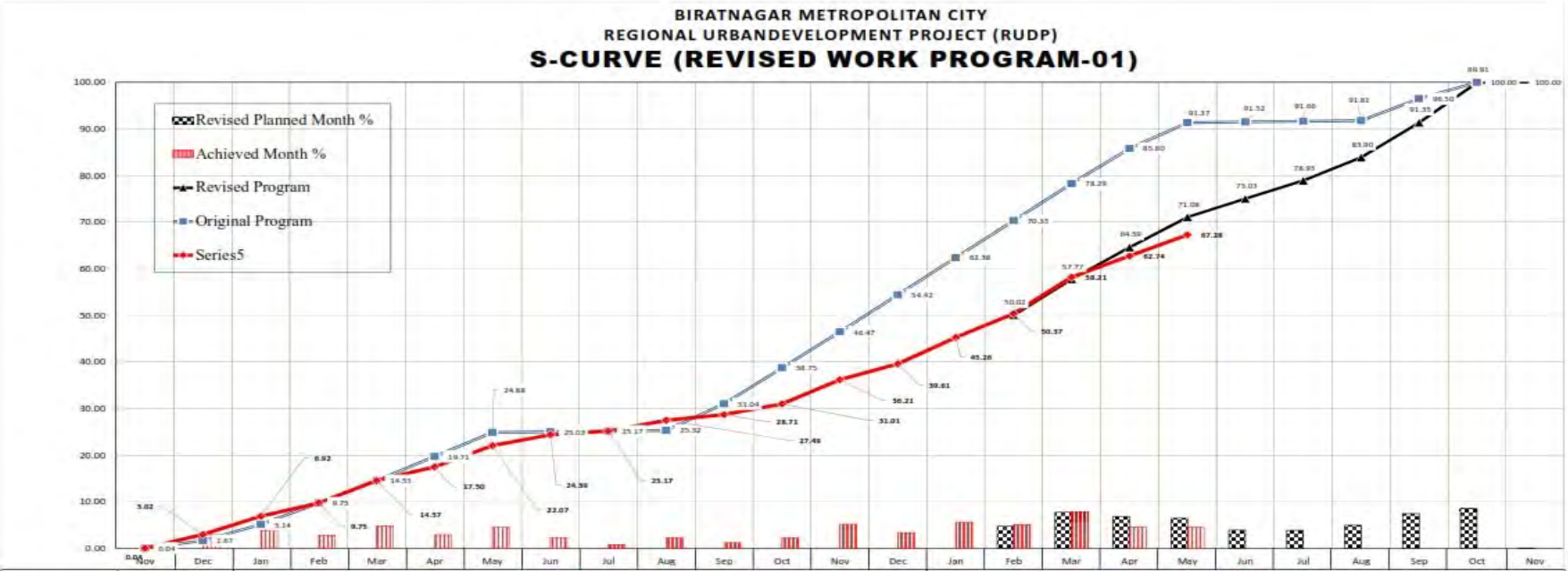
S.NO	LOCATION	TYPES OF WORK	TYPES OF WORKERS	LABOUR		COMPOSITION		ETHNIC COMPOSITION				
				SKILLED	UNSKILLED	MALE	FEMALE	JANJATI	DALIT	MUSLIM	MADHESI	BRAHMIN/CHHETRI
22	R7	Electric work	LOCAL									
			NON LOCAL	4	12	16		6			10	
			INDIAN									
			TOTAL	16								
23	T2L19Y	Drain	LOCAL									
			NON LOCAL	5	10	5	10				15	
			INDIAN									
			TOTAL	15								
24	T3L7	DRAIN	LOCAL	4	12	16			6		10	
			NON LOCAL									
			INDIAN									
			TOTAL	16								
25	R7	Drain	LOCAL									
			NON LOCAL									
			INDIAN	5	20	25					25	
			TOTAL	25								
26	Rani Manthapokhary	Prime	LOCAL									
			NON LOCAL	5	22	27		10	2		15	
			INDIAN									
			TOTAL	27								
27	T3L5	DRAIN	LOCAL									
			NON LOCAL	5	16	21		5	10		6	
			INDIAN									
			TOTAL	21								
28	T3 Trunk line	Drain	LOCAL									
			NON LOCAL	4	18	22		5	5		12	
			INDIAN									
			TOTAL	22								

Biratnagar Metropolitant City												
Regional Urban Development Project												
Construction and Completion Of Sewerage, Drainage, Road, Footpath and Road Furniture Works (RUDP/ICB/BRT)												
LABOUR DATA												May-19
S.NO	LOCATION	TYPES OF WORK	TYPES OF WORKERS	LABOUR		COMPOSITION		ETHNIC COMPOSITION				
				SKILLED	UNSKILLED	MALE	FEMALE	JANJATI	DALIT	MUSLIM	MADHESI	BRAHMIN/CHHETRI
29	T3 Trunk line(B)	DRAIN	LOCAL	5	17	22		10			12	
			NON LOCAL									
			INDIAN									
			TOTAL	22								
30	Rani Mil Area	M.H Rise	LOCAL	2	3	5					5	
			NON LOCAL									
			INDIAN									
			TOTAL	5								
31	T2L19x	Drain	LOCAL									
			NON LOCAL	4	12	16					16	
			INDIAN									
			TOTAL	16								

Biratnagar Metropolitant City									
Regional Urban Development Project									
Construction and Completion Of Sewerage, Drainage, Road, Footpath and Road Furniture Works (RUDP/ICB/BRT)									
LABOUR DATA									May-19
LABOUR CLASS	LABOUR		COMPOSITION		ETHNIC COMPOSITION				
	SKILLED	UNSKILLED	MALE	FEMALE	JANJATI	DALIT	MUSLIM	MADHESI	BRAHMIN/CHHETRI
LOCAL	28	82	110	0	10	11	5	84	0
NON LOCAL	84	294	365	13	74	66	31	207	0
INDIAN	19	67	86	0	0	20	20	46	0
TOTAL	131	443	561	13	84	97	56	337	0

ANNEX-5: S-Curve

ATTACHED – May 2019



Year/Month	2017 Nov	2017 Dec	2018 Jan	2018 Feb	2018 Mar	2018 Apr	2018 May	2018 Jun	2018 Jul	2018 Aug	2018 Sep	2018 Oct	2018 Nov	2018 Dec	2019 Jan	2019 Feb	2019 Mar	2019 Apr	2019 May	2019 Jun	2019 Jul	2019 Aug	2019 Sep	2019 Oct	2019 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	7.96	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	5.26	3.40	5.65	5.11	7.84	4.53	4.54						
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						
Revised Planned Month %																4.76	7.75	6.82	6.49	3.95	3.90	4.97	7.45	8.56	0.000
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						
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						

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

Annex-6: Master Plan of RUDP Project

RUDP PROJECT