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Building Design Authority (P) Ltd

in joint Venture with

B.N. Consultancy Pvt. Ltd and

PLUSH Engineering & architects (P) Ltd, Kathmandu.

Quarterly Progress Report

(Period Cover: from Oct 2021 to Dec 2021)

Regional Urban Development Project (RUDP)

Project Implementation Unit

Biratnagar, Nepal



Jan 2022

Biratnagar Metropolitan City (BMC), Nepal

Table of Contents

EXECUTIVE SUMMARY	III
1. PROJECT DESCRIPTION	5
1.1. INTRODUCTION/BACKGROUND	5
2. CONTRACT DATA: - RUDP/ICB/BRT/2.....	6
3. SUMMARY OF PROGRESS STATUS OF ALL MAJOR COMPONENTS	8
3.1. SUB PROJECT COMPONENTS.....	9
3.1.1 SEWER LINES.....	9
3.1.2 STORM WATER DRAIN.....	12
3.1.3 ROADS AND LANES	12
3.1.4 ROAD SIDE DRAIN	13
3.2. ENVIRONMENTAL ASPECT	13
3.2.1 BORROW/ QUARRY SITES.....	13
3.2.2 DISPOSAL OF SPOIL AND CONSTRUCTION WASTE.....	13
3.2.3 PROVISION AND MAINTENANCE OF TOILETS.....	15
3.2.4 CRUSHING PLANTS	15
3.2.5 ASPHALT PLANTS AND BATCHING PLANTS	15
3.2.6 OCCUPATIONAL HEALTH AND SAFETY MEASURES.....	16
3.3. SOCIAL ASPECT	16
3.4. SAFEGUARD/ GESI COMPONENT	17
3.4.1 COMMUNITY AWARENESS:.....	17
3.4.2 GRIEVANCE REDRESSES MECHANISM:	17
3.4.3 GENDER EQUITY AND SOCIAL INCLUSION (GESI):	17
3.4.4 STATUS OF SOCIAL AND ENVIRONMENTAL SAFEGUARD MEASURES	17
3.4.5 STATUS OF RELOCATION OF SERVICES	18
3.5. FINANCIAL PLAN	21
3.5.1 DISBURSEMENT RECORDS IN CONSTRUCTION.....	21
4. OBJECTIVES AND SCOPE OF WORKS.....	23
4.1. OBJECTIVES	23
4.2. SCOPE OF WORKS.....	23
4.3. ORGANIZATION AND STAFFING	24
4.4. CONSULTANT'S ACTIVITIES IN CONSTRUCTION PHASE	26
5. PROGRESS OF SUB – PROJECT COMPONENTS	28
5.1. CONSTRUCTION MATERIALS	28
5.2. PROGRESS ACHIEVED DURING July-Sept 2021	28
5.3. KEYEVENTS.....	29
6. DETAILS OF PRE CAST ACTIVITIES.....	30
7. CONTRACTOR'S MANPOWER	33
8. CONTRACTOR'S EQUIPMENT	34



9. WORK PLAN FOR THE NEXT MONTH.....	35
ANNEX-1: PHOTOGRAPHS	36
ANNEX-2: MINUTES OF MEETING.....	47
ANNEX-3: SEWER VERIFICATION RESULTS.....	48
ANNEX – 3.A (WATER TEST REPORT)	58
ANNEX- 4: SOCIAL& ENVIRONMENT SAFEGUARD	59
ANNEX- 5: SOP HEALTH MONITORING FORMAT.....	60
ANNEX-6: S-CURVE	61
ANNEX-7: MASTER PLAN OF RUDP PROJECT.....	63

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. Subproject 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 during Jan - March 2021. It further elaborates on the status of actual achievement versus the Targeted achievement during Jan -March 2021. Sometimes, the project gets delayed due to unforeseen obstacles which are rampant in the case of Nepal. Such events are also enlisted to clarify the reason for delay in the project.
- 6. Details of Pre Cast Activities-**In the urban area, as ongoing projects creates a lot of disturbances and difficulties in the life of the people living in the project area, the work has to be conducted in the speedy manner to finish it as soon as possible. Precast of the project components are the best alternative to overcome this issue and details of precast activities are provided in this chapter.
- 7. Contractor's Manpower and Contractor's Equipment-** Chapter 7 and Chapter 8 deal with summary of Manpower and Equipment respectively stating whether Resources owned by the Contractor are sufficient for the execution of Contract.



1. PROJECT DESCRIPTION

1.1.INTRODUCTION/BACKGROUND

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

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

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



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

General Features	
Name of Project	Regional Urban Development Project(RUDP)
Executing Agency	Government of Nepal,
	Ministry of Urban Development
	Department of Urban Development and Building Construction (DUDBC)
Implementing Agency	Biratnagar Metropolitan City, Biratnagar
Funded By	Asian Development Bank & Government of Nepal
Package	Construction and Completion of Sewerage, Drainage, Road, Footpath and Road furniture works
Contract No.	RUDP/ICB/BRT/2
Location	Biratnagar Metropolitan City, Biratnagar
<u>The Consultant:</u>	
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	28 th August 2017
Date of Commencement of Design and Supervision Consulting Service	6 th September 2017
Date of Completion	5 th September 2020
Revised Date of Completion	12 th April 2022 including DNP & Final Discharge (recommended)
<u>The Contractor:</u>	
Contractor	ZHONGHENG Construction Group International Engineering Co Ltd. Beijing, China.
Date of Agreement Made	10 th October 2017
Date of Commencement	2 nd November 2017
Date of Completion	1 st November 2019
Revised Date of Completion	11 th February 2021
Contract Amount including PS and VAT	NRs. 2,611,092,249.63



General Features	
Contract Amount including PS and VAT (After arithmetic correction)	NRs. 2,611,088,390.60
Additional Financing 100% funded by BMC after VO-2 (provisional items)	NRs. 39,999,966.94
Revised Contract Amount including PS and VAT	NRs. 3,018,488,228.77 (excluding Additional Financing 100% funded by BMC NRs. 39,999,966.94).
Progress	
Road Rehabilitation (Asphalt)	100.00%
Sewer Line	100.00%
Storm Drain	100.00%
Road Side Drain	100.00%
Footpath/Interlock work	70.91%
Integrated Solid Waste Management (ISWM) Design	<p>Inception Report as well as Stakeholder's Analysis, Communication Strategy and Consultation Plan for Integrated Solid Waste Management (ISWM) has already been submitted.</p> <p>Due to Socio Environment Problem, Progress of Integrated Solid Waste Management (ISWM) design has been hindered.</p>
Physical Progress during Oct - Dec 2021	99.68% till Dec 2021, Outstanding works completed excluding footpath and defect works are in progress. The contractor promised to complete on time.
Financial Progress during Oct - Dec 2021 (<i>on the basis of IPC forwarded for disbursement</i>)	During Oct – Dec 2021: In Percentage: 0.00% , In Figure: NRs. 0.00 (including VAT and PS)
	In Words: NRs. Zero and Zero Paisa Only.
	Till date recommended NRs. 2,982,427,102.25, (In words: Nepalese Rupees Two Billion Nine Hundred Eighty Two Million Four Hundred Twenty Seven Thousand One Hundred Two and Twenty Five Paisa Only.
Date of Issuance of Taking Over Certificate (TOC)	7th March 2021
Start of Defect Notification Period (DNP)	12th February 2021
End of Defect Notification Period (DNP)	12th February 2022



3. SUMMARY OF PROGRESS STATUS OF ALL MAJOR COMPONENTS

S.No	Description	Unit	Revised Quantity (in VO-3)	Progress till Sept 2021	Progress till Dec 2021	Progress during Sept-Dec 2021	Progress Status expressed in (%) wrt VO-3	Remarks
1	Sewer Line							
a	HDPE/RCC	m	18,559.80	18,559.80	18,559.80	-	0.00%	
b	Manhole	No.	606.00	606.00	606.00	-	0.00%	
c	Sewer Inlet	No.	691.00	691.00	691.00	-	0.00%	
d	House Connection	No.	2,906.00	2,876.00	2,900.00	24.00	0.83%	
2	Storm Water Drain							
a	RCC Drain	m	585.00	585.00	585.00	-	0.00%	
b	Piles	No.	138.00	138.00	138.00	-	0.00%	
3	Road							
a	Subgrade	m	77,709.90	77,709.90	77,709.90	-	0.00%	
b	Subbase	m	77,709.90	77,709.90	77,709.90	-	0.00%	
c	Base	m	77,219.00	77,219.00	77,219.00	-	0.00%	
d	Prime	m	77,219.00	77,219.00	77,219.00	-	0.00%	
e	Asphalt	m	77,219.00	77,219.00	77,219.00	-	0.00%	
4	Road Side Drain	m	42,822.71	42,822.71	42,822.71	-	0.00%	Brick
		m	1,678.08	1,678.08	1,678.08	-	0.00%	RCC
5	Footpath / Interlock work	Sq. m.	45,086.39	33,670.75	35,370.75	1,700.00	3.77%	incl. R28 & R37
	excl. gaps = 26,169.89m in length	m.		35,779.06	35,779.06	-		incl. Gaps,

Note:

Footpath/Interlock works are progressing.



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). But after various discussion, formal communication & meetings with representatives of BMC, PIU, representatives of Department of Road & representatives of six lane's contractor regarding timely execution and completion of rectification, raising, repair, maintenance, placement of missing CI covers and cleansing works of sewer system in N-S Highway (Six lanes) which damaged by the contractor of six lane highway. Yet no further progresses have been observed towards repair & maintenance works of sewer lines at N-S Highway which certainly have an effect on the successful completion of the project. Sewer lines under RUDP has been 100% completed and remaining HCC works are in progress along with maintenance work of sewer lines, sewer inlet and house chamber connections as per instruction. Details of all major components of the project are as illustrated in Table – 1 and the Progress of sewer lines under RUDP are as tabulated below in Table-2:-



Table 1: PROPOSED ALL MAJOR COMPONENTS OF THE PROJECT

S. No.	Description	Unit	Revised Quantity
1	Sewerage Pipe Supply and Installation	m	18,559.80
	Reinforced Concrete Pipe laying and jointing		1,967.50
	Line T2 (Secondary)	m	205.00
	Line T3 (Trunk)	m	1,632.50
	Line T4 (Trunk)	m	130.00
	HDPE laying and jointing	m	16,592.30
	Line T1 (Secondary)	m	1,743.20
	Line T2 (Secondary)	m	3,153.40
	Line T3 (Secondary)	m	9,643.80
	Line T4 (Secondary)	m	2,051.90
2	Manhole (Brick / RCC)	no.	606.00
3	Sewer Inlet	no.	691.00
4	House Connection	no.	2906.00
5	Reinstatement of Roads	km	75.282
6	Road side Drain	Km	41.35
7	Storm Water Drain	m	585.00



Table: - 2 PHYSICAL PROGRESS IN SEWER LINES during Oct-Dec 2021

SN	Description	Revised Quantity (VO - 3)		Till Sept 2021		Till Dec 2021		Total during Oct - Dec 2021		Progress %
		Length (m)	Manhole (Nos.)	Length (m)	Manhole (Nos.)	Length (m)	Manhole (Nos.)	Length (m)	Manhole (Nos.)	
Hume Pipe:										
1	Hume pipe (T2)	205.00	6.00	205.00	6.00	205.00	6.00	-	-	
2	Hume pipe (T3)	1,632.50	25.00	1,632.50	25.00	1,632.50	25.00	-	-	
3	Hume Pipe (T4)	130.00	4.00	130.00	4.00	130.00	4.00	-	-	
Subtotal in (m)		1,967.50	35.00	1,967.50	35.00	1,967.50	35.00	-	-	
HDPE Pipe:										
1	HDPE (T1)	1,743.20	54.00	1,743.20	54.00	1,743.20	54.00	-	-	
2	HDPE (T2)	3,153.40	121.00	3,153.40	121.00	3,153.40	121.00	-	-	
3	HDPE (T3)	9,643.80	340.00	9,643.80	340.00	9,643.80	340.00	-	-	
4	HDPE (T4)	2,051.90	56.00	2,051.90	56.00	2,051.90	56.00	-	-	
Subtotal in (m)		16,592.30	571.00	16,592.30	571.00	16,592.30	571.00	-	-	
Total		18,559.80	606.00	18,559.80	606.00	18,559.80	606.00	-	-	0.00%

SN	Description	Revised Quantity (VO - 3)	till Sept 2021	till Dec 2021	Total during Oct - Dec 2021	Progress %
1	Sewer inlet	691.00	691.00	691.00	0.00	0.00%
2	House connection	2,906.00	2,876.00	2,900.00	24.00	0.83%



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 100% of the Storm water drain works and is in full function. The detail of the progress is shown in the table 3:

Table: 3 PROPOSED and PHYSICAL PROGRESS in STORM WATER DRAINS during Oct-Dec 2021.

SN	Name of Drain	Unit	Approved Quantity	Progress				Remarks
				Progress till end of Sept 2021	Progress till end of Dec 2021	progress status during Oct - Dec 2021	Progress Status during Oct - Dec 2021 expressed in (%)	
1	CN2-CN3 (Chyangh Baari Nala)		585.00	585.00	585.00	-	0.00%	RCC, closed
2	CN2-CN3 (Chyangh Baari Nala)		138.00	138.00	138.00	-	0.00%	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 77.21 km. Patching work at the places where repair of old existing water supply pipe lines are ongoing. The summary of physical progress of flexible pavement, rigid pavement and foot paths are as below: -

SN	Description	Unit	Revised Quantity (in VO-3)	Progress till Sept 2021	Progress till Dec 2021	Progress during Oct-Dec 2021	Progress
1	Subgrade	m	77,709.90	77,709.90	77,709.90	-	0.00%
2	Sub Base	m	77,709.90	77,709.90	77,709.90	-	0.00%
3	Base	m	77,219.00	77,219.00	77,219.00	-	0.00%
4	Prime/Tack	m	77,219.00	77,219.00	77,219.00	-	0.00%
5	Asphalt	m	77,219.00	77,219.00	77,219.00	-	0.00%
6	Paint	m	76,639.63	74,339.63	74,339.63	-	0.00%
7	Rigid Pavement	m	210.00	210.00	210.00	-	0.00%
8	Interlock / footpath	Sq. m.	45,086.39	33,670.75	35,370.75	1,700.00	3.77%



3.1.4 ROAD SIDE DRAIN

Most of the roads under this project for upgrading is without drain or existing drain are in poor condition, on instruction from the employer at various stretches the construction works were ongoing and some of them have been completed. The project has provisioned drain at either sides or one side as per available RoW of the road. The progress for the drain works is as listed below:

Table No:-4a PROPOSED and PHYSICAL PROGRESS of Road side drain works during July-Sept 2021.

SN	Description	Unit	Revised Quantity (in VO-3)	Progress till Sept 2021	Progress till Dec 2021	Progress during Oct-Dec 2021	Progress
1	Brick Drain	m	42,822.71	42,822.71	42,822.71	-	0.00%
2	RCC Drain	m	1,678.08	1,678.08	1,678.08	-	0.00%

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 with the owner of crusher plant for the supply of required materials from the crusher, no approval for quarry and borrow sites are required during Jan -March 2021.

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 at Madhumara Yard 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 similarly excess construction materials are stocked at Madhumara site and at the open space of north side 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 equipment 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 camps areas below:

S. No.	Location of Camp	Details	Remarks
1	Panchali, Biratnagar – 11	<ul style="list-style-type: none"> Office space three & half storey building in 4.5 Katha land with 5 Nos. of toilet with facilities mentioned in bullet No.: 3.2.3 of this report. Staff quarter is of one storey building with 2 Nos. of Toilet with facilities mentioned in bullet No.: 3.2.3 of this report. Staff quarter is of three storey building but only one storey has been taken in rent, having 2 Nos. of Toilet with facilities mentioned in bullet No.: 3.2.3 of this report. 	Have proper electric lightning system, water supply,
2	Rani, Biratnagar – 15	<ul style="list-style-type: none"> Yard space in 10 Katha land with 4 Nos. of toilet with facilities mentioned in bullet No.: 3.2.3 of this report. Asphalt plant is having 2 Biggha land possess 6 Nos. of Toilet which are going to use by the gangs of road workers fulfil the criteria mentioned in bullet No.: 3.2.3 of this report. 	Have proper electric lightning system, water supply,



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. 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 eco 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 Chisyang.

Since the contractor has made agreement with the owner of crusher plant for the supply of required materials from the crusher, no approval for quarry and borrow sites are required till date certainly minimize the dust pollution.

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 about 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 SOP for COVID-19 Risk Management at Workplace has already been approved by the Employer. The contractor has already been instructed for the implementation at workplace and sites as per approved SOP. The contractor has already procured and supplied goods as approved by the Employer.

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

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

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

A regular monitoring visit by DSC was carried out and a standard site specific environmental monitoring checklist was used to record the present status of the project to verify if work has been done as per EMP Guidelines. A sample of environmental checklist is attached in each MPR as Annex. Also the contractor has been instructed to update the OHS as per Standard Operating Procedure for COVID-19: Risk Management at workplace.

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 / Sub Base / Base works and production of precast items, etc.).The Engineer has issued the format of Social Safeguard Monitoring plan which is attached in each MPR.



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 frequently 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 are received verbally and written, all Total 267 no. of grievances have been registered formally up to November 2020. Among them, 17 grievances are registered in GRC desk, total 77 no. of grievances are listed in PIU registered. Similarly, 162 grievances are received through telephone in PIU. Received all grievances have immediately been addressed and solved. Received grievances are tabled in Social Safeguard desk, SD discussed over different grievances and social and environmental agendas to immediate mitigate of public complains. Total 15 no. of SD meeting has held up to this reporting period. Project manager has chaired the meeting. GRC meeting has held as per need and mayor has chaired the meeting.

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 (6 numbers) at Construction sites, thus Contractor was instructed as follow:

- i. Encourage to Local female Employment as Labor and skilled manpower.
- 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 equipment's.
- v. Efforts are being made to control the spread of virus, TL, Mr. Chand strictly instructed to obey protocol of GoN & Local governance. Frequently, organizing the awareness program and training on how to fight against CORONA Virus (COVID-19) & new variant OMICRON. Emphasized on how to use PPE, physical distancing, managing workers before construction, security procedure at entry/exit, changing & shower, role & responsibilities of the employer, consultant & contractor and how to check the worksite & disinfect (Wakening us about to maintain distancing, wash hand frequently, how to stay at camp, to use sanitizer and wear mask to protect yourself).The contractor's submitted Standard Operating Procedures for COVID-19 Risk Management at Workplace SoP has already been approved and the procurement and supply of goods as per SoP has already been done.
- vi. Separate Isolation room in emergency, sanitizer, thermal gun for fever detection, oximeter etc are provided in Contractor's camp and Consultant's office.

The implementation of Social and Environmental Safeguard measures during Jan – March 2021 were found partially satisfactory.

3.4.5 STATUS OF RELOCATION OF SERVICES

The supply has been providing temporarily as per site condition and where disturbed due to construction work. Summary of water supply up to date are as tabulated below:

S.N.	Road Name	Pipe Size (Inch)	Pipe Length (m.)	Remarks
1	B1- Kanchanbari	1"	6.00	
		2"	619.00	
		4"	700.00	
		6"	34.00	
	Sub Total =		1,359.00	
2	T3L10E (Buddha marg)	2"	738.40	
	Sub Total =		738.40	
3	T3L10 (Dharma path)	2"	542.40	
		3"	106.70	
	Sub Total =		649.10	
4	T3L39 (Gaheli marg)	2"	324.00	



S.N.	Road Name	Pipe Size (Inch)	Pipe Length (m.)	Remarks
		Sub Total =	324.00	
5	T3L39A	2"	207.00	
		Sub Total =	207.00	
6	T3L39B	1.5"	210.00	
		Sub Total =	210.00	
7	T3L23C	2"	177.60	
		Sub Total =	177.60	
8	R21(Binayak marg & Prativa marg)	3"	122.70	
		6"	22.00	
		Sub Total =	144.70	
9	R29 (Shanti marg)	4"	18.40	
		Sub Total =	18.40	
10	T3L21 (Moti marg)	2"	1,083.60	
		Sub Total =	1,083.60	
11	T3L22A (Indra marg)	2"	819.00	
		Sub Total =	819.00	
12	T3L22B	2"	273.50	
		Sub Total =	273.50	
13	T3L5(Sanihat marg)	3"	291.50	
		8"	19.20	
		Sub Total =	310.70	
14	R181	2"	396.00	
		Sub Total =	396.00	
15	T3 trunk (Sanihat to Devkota Chowk)	3"	2,364.30	
		Sub Total =	2,364.30	
16	T3trunk (Tinpaini to Hospital Chowk)	3"	3,008.00	
		Sub Total =	3,008.00	
17	T3L6 (Moti marg)	2"	317.30	
		Sub Total =	317.30	
18	T3L10F (Shiva marg)	2"	306.70	
		Sub Total =	306.70	
19	R24 (Prabhat marg)	2"	769.00	
		Sub Total =	769.00	
20	T3L18D	2"	160.00	
		Sub Total =	160.00	
21	R12(Sukra path)	2"	300.00	
		Sub Total =	300.00	
22	R6	2"	1,376.20	
		Sub Total =	1,376.20	



S.N.	Road Name	Pipe Size (Inch)	Pipe Length (m.)	Remarks
23	T1L16C (Panchali marg)	2"	408.00	
		4"	1.20	
	Sub Total =		409.20	
24	R3 Branch	2"	24.00	
	Sub Total =		24.00	
25	R5 (Chulachuli marg)	2"	483.00	
	Sub Total =		483.00	
26	R26 (Pasang marg)	2"	500.00	
	Sub Total =		500.00	
27	Keshaliya Road	3"	500.00	
		2"	480.00	
	Sub Total =		980.00	
	Total =		17,708.70	

Note: T2L19H, Hanumandas Marga are in progress.

Table – 5: Status of Labor at Site

Labour class	Labour		Composition		Ethnic composition				
	Skilled	Unskilled	Male	Female	Janjati	Dalit	Muslim	Madhesi	Brahmin/Chhetri
Local	27	27	51	2	8	0	10	35	0
Non local	17	65	7	0	4	0	2	1	0
Indian	3	10	0	0	0	0	0	0	0
TOTAL	15	45	58	2	12	0	12	36	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	Covering date	Submitted Amount(NRs)	Remarks
1	IPC 01	15 th October 2017		339,105,000.00	Mobilization Advance
2	IPC 02	2 nd April 2018	2 nd November 2017 to 31 st March 2018	261,501,492.21	
3	IPC 03	1 st July 2018	1 st April 2018 to 30 th June 2018	316,582,708.58	
4	IPC 04	1 st October 2018	1 st July 2018 to 31 st September 2019	105,227,887.16	
5	IPC 05	2 nd December 2018	1 st October 2018 to 30 th November 2018	95,951,603.44	
6	IPC 06	31 st January 2019	1 st December 2018 to 31 st January 2019	264,937,394.98	
7	IPC 07	12 th April 2019	1 st February 2019 to 31 st March 2019	308,805,662.97	
8	IPC 08	9 th May 2019	1 st April 2019 to 30 th April 2019	106,210,198.68	
9	IPC 09	10 th June 2019	1 st May 2019 to 31 st May 2019	90,419,375.33	
10	IPC 10	11 th July 2019	1 st June 2019 to 30 th June 2019	67,863,056.59	
11	IPC 11	30 th September 2019	1 st July 2019 to 30 th September 2019	95,296,297.30	
12	IPC 12	3 rd November 2019	1 st October 2019 to 31 st October 2019	53,113,369.86	
13	IPC 13	30 th November 2019	4 th June 2019 to 30 th June 2019	125,965,923.87	



S.No.	Description	Submission date	Covering date	Submitted Amount(NRs)	Remarks
14	IPC 14	31 st December 2019	1 st December 2019 to 31 st December 2019	63,509,092.84	
15	IPC 15	4 th February 2020	1 st Jan 2020 to 31 st Jan 2020	232,027,037.24	
16	IPC 16	1 st March 2020	1 st Feb, 2020 to 29 th Feb, 2020	102,186,834.62	
17	IPC 17	1 st July 2020	1 st March, 2020 to 30 th June, 2020	153,448,663.15	
18	IPC 18	05 th Oct. 2020	1 st July, 2020 to 30 th Sep, 2020	90,563,317.45	
19	IPC 19	2 nd Dec. 2020	1 st Nov, 2020 to 30 th Nov, 2020	88,324,292.52	
20	IPC 20	17 th Jan 2021	1 st Dec, 2020 to 31 st Dec, 2020	70,349,421.43	
21	IPC 21	11 th Feb 2021	1 st Jan 2021 to 31 st Jan 2021	64,294,114.48	
22	IPC 22		1 st to 11 th Feb 2021	136,291,793.56	
23	Statement at completion		12 th to 30 th April 2021	89,557,563.99	
Total amount excluding PA & Mobilization advance till date				2,982,427,102.25	



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

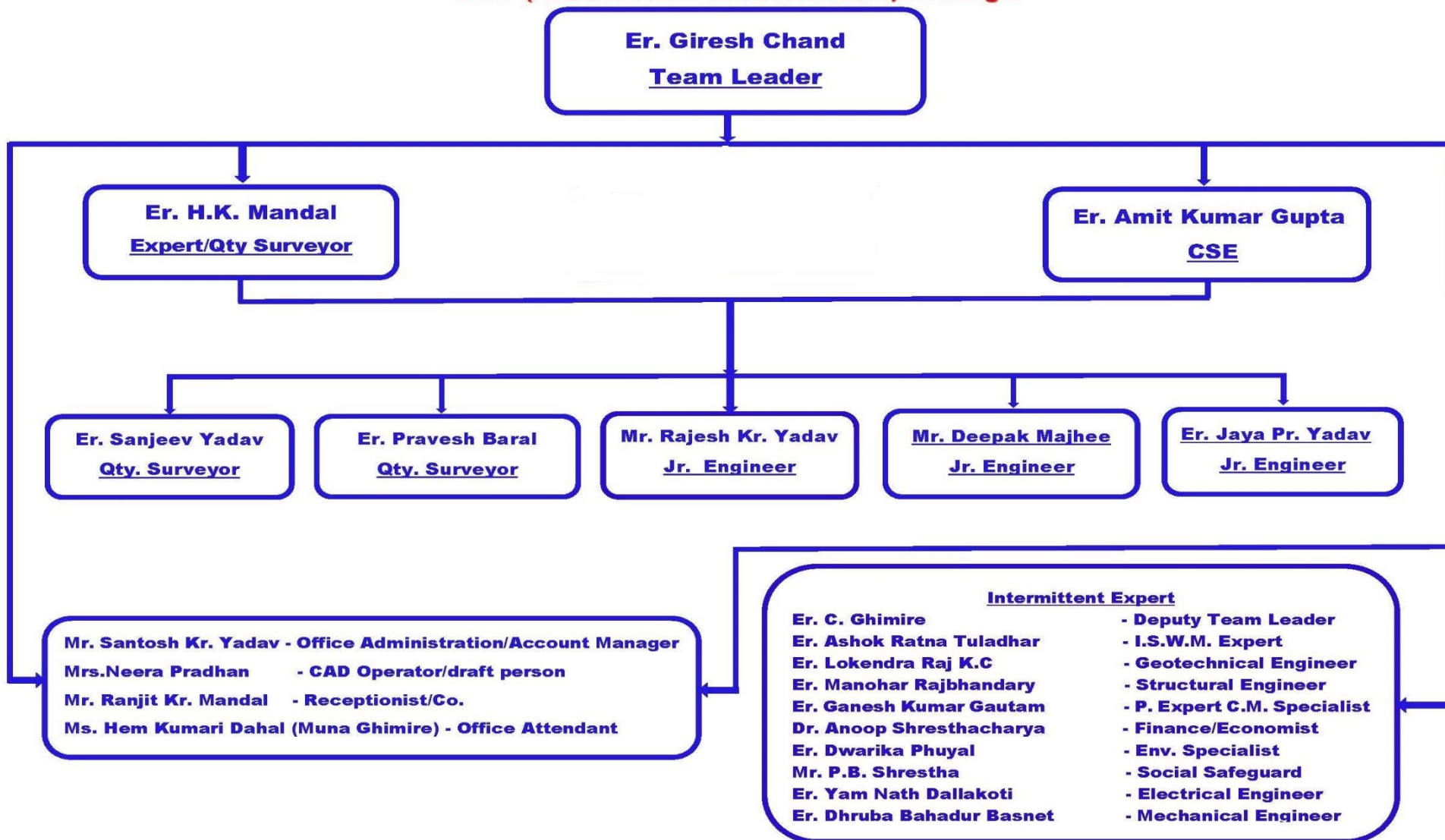
The scope of works for consultant's services is fairly detailed in the TOR attached with contract Agreement. The main points are summarized below:

- 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 inputs, 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	Mr. Giresh Chand	Team Leader	6 th Sep 2017	Intermittent
2	Mr. Ashok Ratna Tuladhar	ISWM (Designer)	6 th Sep 2017	Intermittent
3	Mr. Dwarika Phuyal	Environmental Safeguard Expert	1 Nov 2017	Intermittent
4	Mr. Prakash Bhakata Shrestha	Social Safeguard Monitoring Expert	26 th Dec 2017	Intermittent
5	Mr. Hare Krishna Mandal	Expert/Quantity surveyor	1 st Nov 2017	Discontinue
6	Mr. Amit Kumar Gupta	Construction Supervision Engineer	1 st March 2018	
7	Mr. Rajan Shrestha	CSE/Quantity Surveyor	7 th Nov 2017	Resigned
8	Mr. Rajesh Kumar Yadav	Junior Engineer-1	6 th Sep 2017	
9	Mr. Sanjeev Yadav	Qty. Surveyor	5 th Nov 2017	Discontinue
10	Mr. Santosh Kumar Yadav	Office Administration/Account Manager	6 th Sep 2017	
11	Mr. Hem Kumari Dahal (Muna Ghimire)	Office Attendant	6 th Sep 2017	
12	Mr. Ranjit Kumar Mandal	Receptionist	10 th Dec 2017	Discontinue
13	Mr. Pravesh Baral	Junior Engineer-2	10 th Dec 2017	Discontinue
14	Mr. J.P Yadav	Junior Engineer-3	1 st March 2018	Discontinue
15	Mr. Deepak Majhee	Junior Engineer-4	1 st March 2018	Discontinue
16	Mrs. Neera Pradhan	CAD operator/Draft Person	10 th Dec 2017	
17	Mr. Youb Raj Poudel	Driver	10 th 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, etc.) for better work progress of the project. The Contractor has established two production yards at Koshi project and Madhumara camp for pre-cast items like Kerb stone, drain cover slab, sewer precast elements, etc. Only Production at Koshi project yard 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 has been tested in presence of consultant TL, PIU and contractor representative, as construction of sewer lines are completed so no more RCC NP-3 pipes needed.

5.2.PROGRESS ACHIEVED DURING July-Sept 2021

- 99.68% till the end of Dec 2021,
- 99.49% till the end of Sept 2021,
- Progress achieved during Oct – Dec 2021 is 0.19%.

Outstanding works completed excluding footpath and defect works are ongoing. The contractor promised to complete before the end of DNP.

NOTE: DNP started after 11th Feb 2021. Physical progresses of outstanding and defect works are little bit slowly due to weather and due to rumor of COVID-19/Omicron. The contractor promised to complete before the end of DNP.

As per statement at completion,

- Outstanding work's Amount = **NRs. 31,912,201.44** excluding VAT (footpath & others are in progress);
- Cost Claim = **NRs. 5,408,221.35;**
- CPA on outstanding works = **NRs. 5,408,222.35;**



5.3.KEYEVENTS

The consultant has noted the following key dates for this month.

Table 8: KEY DATES of EVENTS / ACTIVITIES

S. No.	Date	Activities/Events	Remarks
1		As usual frequent site visit from the employer & PIU's representatives.	
2	12 th Nov 2020	The cost claim has been determined and recommended by DSC for further action to PIU.	
3	21 st Feb 2021	Revised EOT and VO-4 of the consultant (DSC) has been approved.	
4	25 th March 2021	Draft Project Completion Report submitted.	
5	10 th Feb 2021	Draft As Built Drawing report has been submitted by the contractor which is under scrutiny.	
6	7 th March 2021	Issued Taking over certificate (TOC)	
7	12 th Feb 2021	Defect Notification Period start	
8	12 th Feb 2022	Defect Notification Period end	
9	10 th June 2021	Statement at Completion submitted to PIU	



6. DETAILS OF PRE CAST ACTIVITIES

Table 9: PHYSICAL PROGRESS in PRODUCTION OF PRECAST ITEMS during Oct-Dec 2021,

Physical Progress till during Oct-Dec 2021								
S.N.	Description	Unit	Approved Quantity	Progress				Remarks
				Progress till end of Sept 2021	Progress till end of Dec 2021	progress status during Oct - Dec 2021	Progress Status during Oct - Dec 2021 expressed in (%)	
1	Precast Slab	No		171,342.00	171,342.00	0.00		Under progress
2	Kerb Stone	Rm	127,247.02	104,885.91	104,885.91	0.00	0.00%	

Table 10: PHYSICAL PROGRESS in PRODUCTION/PURCHASE OF RCC Hume Pipe at Itahari during Oct-Dec 2021,

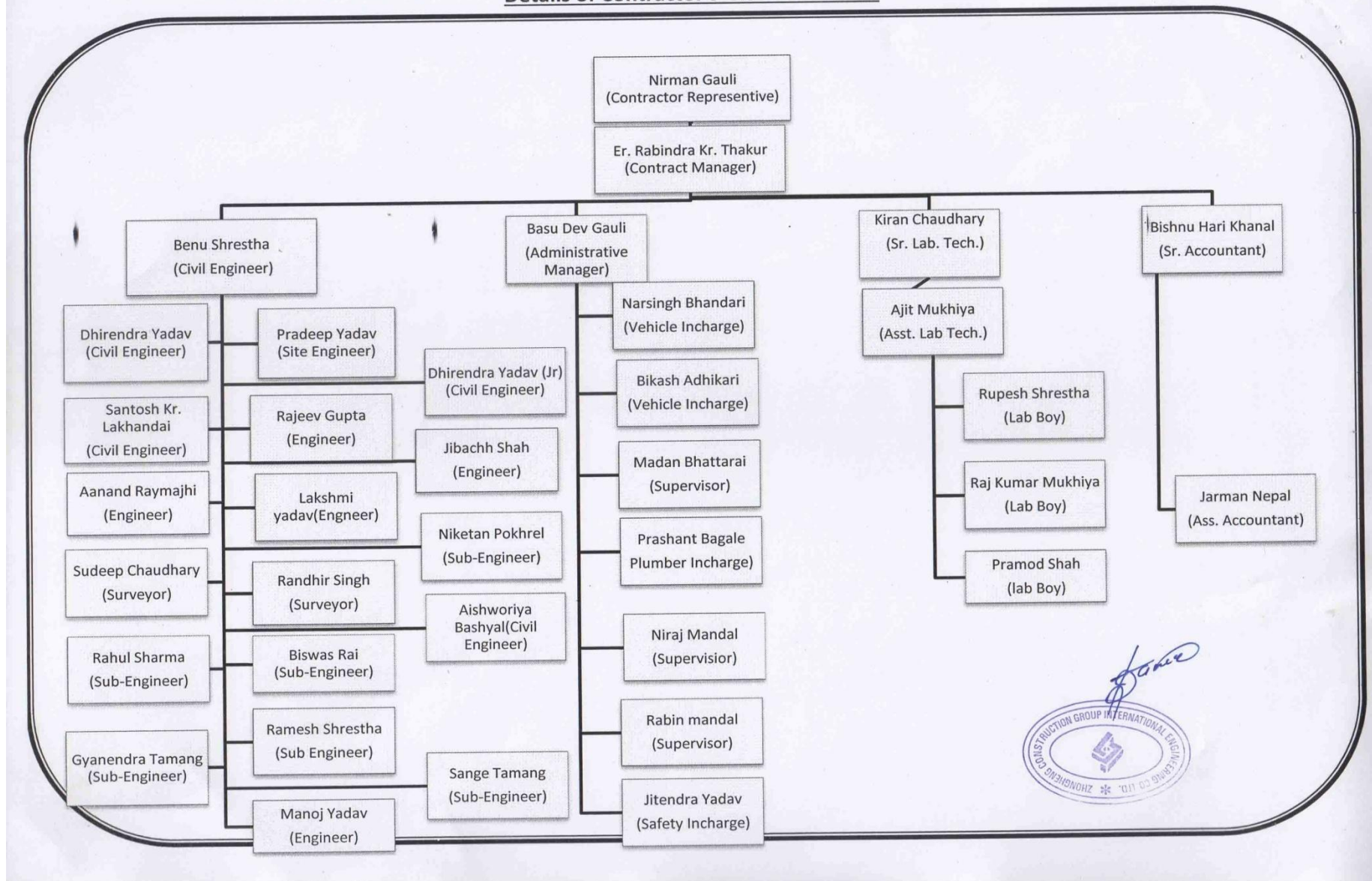
S.N.	Description	Diameter (mm)	Unit	Approved Quantity	Progress till end of Dec 2021 (Corrected)	Remarks
1	RCC Pipe	300	Rm.	337.50	337.50	Completed
2	RCC Pipe	450	Rm.	342.70	342.70	Completed
3	RCC Pipe	500	Rm.	827.50	827.50	Completed
4	RCC Pipe	600	Rm.	432.50	432.50	Completed
	Total			1940.20	1940.20	100.00%

Table 11: PHYSICAL PROGRESS in PRODUCTION/PURCHASE OF HDPE Pipe during Oct-Dec 2021.

S.N.	Diameter (mm)	Unit	Approved Quantity	Progress				Remarks
				Progress till end of Sept 2021	Progress till end of Dec 2021 (Corrected)	progress status during Oct – Dec 2021	Progress Status during Oct – Dec 2021 expressed in (%)	
1	110.00	Rm.	9,858.64	9,858.64	9,858.64	0.00	0%	Under process
2	200.00	Rm.	15,213.30	15,213.30	15,213.30	0.00	0%	
3	250.00	Rm.	1,153.50	1,153.50	1,153.50	0.00	0%	

Table 12: PHYSICAL PROGRESS in PRODUCTION/PURCHASE OF UPVC Pipe during Oct-Dec 2021.

S.N.	Description	Diameter (mm)	Unit	Approved Quantity	Progress				Remarks
					Progress till end of Sept 2021	Progress till end of Dec 2021 (Corrected)	progress status during Oct – Dec 2021	Progress Status during Oct – Dec 2021 expressed in (%)	
1	UPVC Pipe	160.00	Rm .	3,250.83	3,250.83	3,250.83	0.00	0%	
2	UPVC Pipe	110.00	Rm .	24,148.08	23,826.87	23,826.87	0.00	0%	

Details of Contractor's Site Personnel's

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	1	
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/In charge	-	1	
7	Site Engineer	-	1	
8	Sub- Engineer/Surveyor	-	4	
9	Accountant	-	1	
10	Senior Lab Technician	-	1	
11	Lab Technician		1	
12	Store Keeper	-	1	
13	Vehicle In charge	-	1	
14	Skilled Labors		15	
15	Unskilled Labors		45	

Avg. manpower inputs each month almost same as of last quarterly period.



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	0	Backhoe loader - 1Nos.
2	Crane (10 ton capacity)	3	1	
3	Asphalt plant of adequate capacity	1	1	
4	Asphalt pavers	1	1	
5	Vibrating roller	2	1	
6	Pneumatic tyre roller 8 to 10 ton	2	1	
7	Smooth wheeled roller 8 to 10 ton	1	1	
8	Grader	1	0	
9	Track Dozer (120 to 180 HP)	1	-	
10	Bitumen distributor (4 to 6 Kilo Liters)	1	1	
11	Water browser (minimum 5000 Liters)	3	3	
12	Chips spreader	1	-	
13	Bitumen decanter minimum 4000 Liters. (preheating container)	2	2	
	Air compressor	2	2	
14	Tipping Trucks	5	1	Tipper-2
15	Service vehicle	12	2	Tractor = 5 Nos.



S.No.	Equipment Type and Characteristics	Min Number required as per Contract	ZHONGHENG CONSTRUCTION Group	Remarks
16	Survey equipment (Total station with accessories)	2	1	
17	Theodolite	1	-	
18	Levelling	2	1	
19	Mobile Generator 15-20 KVA	5	2	
20	Mixer Machine	3	2	
21	Concrete Batching Plant	1	-	
22	Concrete pump	1	-	
23	Drain cleaner/ Nala cleaner	2	-	
24	Broomer	-	1	
25	Motor Bike	-	6	
26	Plate Compactor	-	2	
27	Water Pump	-	1	

Note: After Sept 2021 to accomplish the defect & outstanding work as mentioned in Engineer's Assessment Report.

9. WORK PLAN FOR THE NEXT MONTH

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

- Outstanding works –
 - Interlock/footpath and drain top cover slab (precast & in - situ), etc.
- Repair & Maintenance works according to defect lists, etc.



ANNEX-1: Photographs

Defects & joint verification works





















Old existing water supply pipe lines repair & maintenance



ANNEX-2: Minutes of Meeting

N/A



ANNEX-3: Sewer Verification Results



Biratnagar Metropolis
Regional Urban Development Project (RUDP)
Project Implementation Unit
Biratnagar, Nepal

Sewer Line Check List
(Sewer Inlet & House Chamber)

Biratnagar Metropolitan City
Regional Urban Development Project (RUDP)
Project Implementation Unit, Biratnagar, Nepal
Construction and Completion of Sewerage, Drainage, Road, Footpath and Road Furniture Works
Contract No: RUDP/ICB/BRT/02
SEWER LINE CHECK LIST

S.N.	Sewer Line	Sewer Inlet		House Connection Chamber		Consultant Representative	PIU Representative	Remarks
		Left	Right	Left	Right			
1	T2 Line 5A	OK	OK	OK	OK	Handwritten signature	ghf	In manhole Pounding
2	T2 LINE 6	OK	OK	OK	OK	Handwritten signature	ghf	In manhole Pounding
	T2 LINE 8B	OK	OK	OK	OK	Handwritten signature	ghf	All clear
	T2 LINE 10	OK	OK	OK	OK	Handwritten signature	ghf	In manhole Pounding
	T2 LINE 11	OK	OK	OK	OK	Handwritten signature	ghf	In manhole Pounding
	T2 LINE 13A	OK	—	OK	OK	Handwritten signature	ghf	All clear
	T2 LINE 14B	—	—	OK	OK	Handwritten signature	ghf	All clear
	T2 LINE 14C	—	—	OK	OK	Handwritten signature	ghf	All clear
	T2 LINE 18	OK	OK	OK	OK	Handwritten signature	ghf	Load buddh/R39 to R36/ manhole Pounding
	T2 LINE 18A	OK	OK	OK	OK	Handwritten signature	ghf	All clear



Biratnagar Metropolitan City
Regional Urban Development Project (RUDP)
Project Implementation Unit, Biratnagar, Nepal
Construction and Completion of Sewerage, Drainage, Road, Footpath and Road Furniture Works
Contract No. RUDP/CB/BRT/02
SEWER LINE CHECK LIST

Sewer Line	Sewer Inlet		House Connection Chamber		Consultant Representative	PIU Representative	Remarks
	Left	Right	Left	Right			
TZLINE 158	—	—	OK	OK	gshf	gshf	All clear
TZLINE 159	OK	—	OK	OK	gshf	gshf	All clear
TZLINE 160	—	—	OK	OK	gshf	gshf	All clear
TZLINE 161	—	—	OK	OK	gshf	gshf	In manhole ponding
TZLINE 162	—	—	OK	OK	gshf	gshf	All clear
TZLINE 163	—	—	OK	OK	gshf	gshf	same difficult by medical force
TZLINE 164	—	—	OK	OK	gshf	gshf	All clear
TZLINE 165	—	—	OK	OK	gshf	gshf	All clear
TZLINE 166	—	—	OK	OK	gshf	gshf	All clear
TZLINE 167	OK	OK	OK	OK	gshf	gshf	All clear
TZLINE 168	OK	OK	OK	OK	gshf	gshf	All clear

Bratt Nagar Metropolitan City
Regional Urban Development Project (RUDP)
Project Implementation Unit, Bratt Nagar, Nepal
Construction and Completion of Sewerage, Drainage, Road, Footpath and Road Furniture Works
Contract No. RUP/PO/05/21/01
SEWER LINE CHECK LIST

No.	Sewer Line	Sewer inlet		House Connection Quantity		Consultant Representative	PU Representative	Remarks
		Left	Right	Left	Right			
1	1000	Q	Q	Q	Q	Handwritten signature	glt	All clear
2	1000	Q	Q	Q	Q	Handwritten signature	glt	All clear
3	1000	Q	Q	Q	Q	Handwritten signature	glt	All clear
4	1000	Q	Q	Q	Q	Handwritten signature	glt	All clear
5	1000	—	—	Q	Q	Handwritten signature	glt	All clear
6	1000	Q	Q	Q	Q	Handwritten signature	glt	All clear
7	1000	Q	Q	Q	Q	Handwritten signature	glt	In manhole ponding
8	1000	Q	Q	Q	Q	Handwritten signature	glt	All clear
9	1000	Q	Q	Q	Q	Handwritten signature	glt	All clear
10	1000	Q	Q	Q	Q	Handwritten signature	glt	1) Terrain close to municipal channel close. 2) municipal to canal 20 manhole ponding

Biratnagar Metropolitan City
Regional Urban Development Project (RUDP)
Project Implementation Unit, Biratnagar, Nepal
Construction and Completion of Sewerage, Drainage, Road, Footpath and Road Furniture Works
Contract No: RUDP/CB/BRT/02
SEWER LINE CHECK LIST

Sewer Line	Sewer Inlet		House Connection Chamber		Consultant Representative	PIU Representative	Remarks
	Left	Right	Left	Right			
LINE 6	OK	OK	OK	OK	<i>[Signature]</i>	<i>[Signature]</i>	All clear
LINE 6A	OK	OK	OK	OK	<i>[Signature]</i>	<i>[Signature]</i>	All clear
LINE 6A100	OK	OK	-	-	<i>[Signature]</i>	<i>[Signature]</i>	In manhole pounding
LINE 7	OK	OK	OK	OK	<i>[Signature]</i>	<i>[Signature]</i>	In manhole pounding
LINE 7A	-	-	OK	OK	<i>[Signature]</i>	<i>[Signature]</i>	In manhole pounding
LINE 7B	-	-	OK	OK	<i>[Signature]</i>	<i>[Signature]</i>	In manhole pounding
LINE 8	-	-	OK	OK	<i>[Signature]</i>	<i>[Signature]</i>	All clear
LINE 9	OK	OK	OK	OK	<i>[Signature]</i>	<i>[Signature]</i>	All clear
LINE 10	OK	OK	OK	OK	<i>[Signature]</i>	<i>[Signature]</i>	In manhole pounding
LINE 10A	-	-	OK	OK	<i>[Signature]</i>	<i>[Signature]</i>	In manhole pounding

Biratnagar Metropolitan City
Regional Urban Development Project (RUDP)
Project Implementation Unit, Biratnagar, Nepal
Construction and Completion of Sewerage, Drainage, Road, Footpath and Road Furniture Works
Contract No: RUDP/ICB/BRT/02
SEWER LINE CHECK LIST

S.N.	Sewer Line	Sewer Inlet		House Connection Chamber		Consultant Representative	PIU Representative	Remarks
		Left	Right	Left	Right			
41	TS LINE 108/73L7C	OK	OK	OK	OK	<i>[Signature]</i>	<i>[Signature]</i>	All clear
42	TS LINE 109	-	-	OK	OK	<i>[Signature]</i>	<i>[Signature]</i>	In manhole pumping
43	TS LINE 110	-	-	OK	OK	<i>[Signature]</i>	<i>[Signature]</i>	In manhole pumping
44	TS LINE 111	OK	OK	OK	OK	<i>[Signature]</i>	<i>[Signature]</i>	All clear
45	TS LINE 112	OK	OK	OK	OK	<i>[Signature]</i>	<i>[Signature]</i>	All clear
46	TS LINE 113	-	-	OK	OK	<i>[Signature]</i>	<i>[Signature]</i>	In manhole pumping
47	TS LINE 114	OK	-	OK	OK	<i>[Signature]</i>	<i>[Signature]</i>	In manhole pumping
48	TS LINE 115	-	-	OK	OK	<i>[Signature]</i>	<i>[Signature]</i>	In manhole pumping
49	TS LINE 116	OK	OK	OK	OK	<i>[Signature]</i>	<i>[Signature]</i>	All clear
50	TS LINE 117	-	-	OK	OK	<i>[Signature]</i>	<i>[Signature]</i>	In manhole pumping

Biratnagar Metropolitan City
Regional Urban Development Project (RUDP)
Project Implementation Unit, Biratnagar, Nepal
Construction and Completion of Sewerage, Drainage, Road, Footpath and Road Furniture Works
Contract No: RUDP/CB/BRT/02
SEWER LINE CHECK LIST

Sewer Line	Sewer Inlet		House Connection Chamber		Consultant Representative	PSU Representative	Remarks
	Left	Right	Left	Right			
TS LINE 12A	OK	OK	OK	OK	<i>[Signature]</i>	<i>[Signature]</i>	All clear
TS LINE 11 M	—	—	OK	OK	<i>[Signature]</i>	<i>[Signature]</i>	All clear
TS LINE 11 N	—	—	OK	OK	<i>[Signature]</i>	<i>[Signature]</i>	All clear
TS Line 12	—	—	OK	OK	<i>[Signature]</i>	<i>[Signature]</i>	All clear
TS LINE 12A	—	—	—	—	<i>[Signature]</i>	<i>[Signature]</i>	pcc slab band work <i>[Signature]</i>
TS Line 12B	—	—	OK	OK	<i>[Signature]</i>	<i>[Signature]</i>	All clear
TS Line 12C	—	—	OK	OK	<i>[Signature]</i>	<i>[Signature]</i>	All clear
TS LINE 12F	—	—	OK	OK	<i>[Signature]</i>	<i>[Signature]</i>	All clear
TS Line 12G	—	—	OK	OK	<i>[Signature]</i>	<i>[Signature]</i>	In manhole pumping
TS LINE 12H	—	—	OK	OK	<i>[Signature]</i>	<i>[Signature]</i>	In manhole pumping

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SEWER LINE CHECK LIST

Sewer Line	Sewer Inlet		House Connection Chamber		Consultant Representative	PIU Representative	Remarks
	Left	Right	Left	Right			
TS Line 20	—	—	OK	OK	Signature	Signature	All closed
TS Line 21A	—	—	OK	OK	Signature	Signature	All closed
TS Line 21	OK	OK	OK	OK	Signature	ghf	In manhole pumping
TS Line 21A	OK	OK	OK	OK	Signature	ghf	In manhole pumping
TS Line 21B	—	—	OK	OK	Signature	ghf	In manhole pumping
TS Line 22	OK	OK	OK	OK	Signature	ghf	In manhole pumping
TS Line 22A	—	—	OK	OK	Signature	ghf	In manhole pumping
TS Line 22B	—	—	OK	OK	Signature	ghf	In manhole pumping
TS Line 23	OK	OK	OK	OK	Signature	ghf	In manhole pumping
TS Line 23A	—	—	OK	OK	Signature	ghf	In manhole pumping

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SEWER LINE CHECK LIST

Sewer Line	Sewer Inlet		House Connection Chamber		Consultant Representative	PIU Representative	Remark's
	Left	Right	Left	Right			
TS/INE 23B	-	-	OK	OK	<i>[Signature]</i>	<i>[Signature]</i>	In manhole pounding
TS/INE 39	OK	OK	OK	OK	<i>[Signature]</i>	<i>[Signature]</i>	In manhole pounding
TS/INE 39A	OK	OK	OK	OK	<i>[Signature]</i>	<i>[Signature]</i>	In manhole pounding
TS/INE 39B	OK	OK	OK	OK	<i>[Signature]</i>	<i>[Signature]</i>	All clear
T3 Line	-	-	OK	OK	<i>[Signature]</i>	<i>[Signature]</i>	All clear
T4/INE 1	OK	OK	OK	OK	<i>[Signature]</i>	<i>[Signature]</i>	All clear
T4 Line Trunk	OK	OK	OK	OK	<i>[Signature]</i>	<i>[Signature]</i>	All clear
T2 Line 7 (DSP Road)	OK	OK	OK	OK	<i>[Signature]</i>	<i>[Signature]</i>	All clear
T3 Trunk	OK	OK	OK	OK	<i>[Signature]</i>	<i>[Signature]</i>	1) Tinpauri to samihatt chaur 2) Samihatt chaur to Dev Kata chaur pounding



ANNEX – 3.a (Water Test Report)

(If required, we'll make available)



ANNEX- 4: SOCIAL& ENVIRONMENT SAFEGUARD

(If required, we'll make available)



ANNEX- 5: SOP Health Monitoring Format

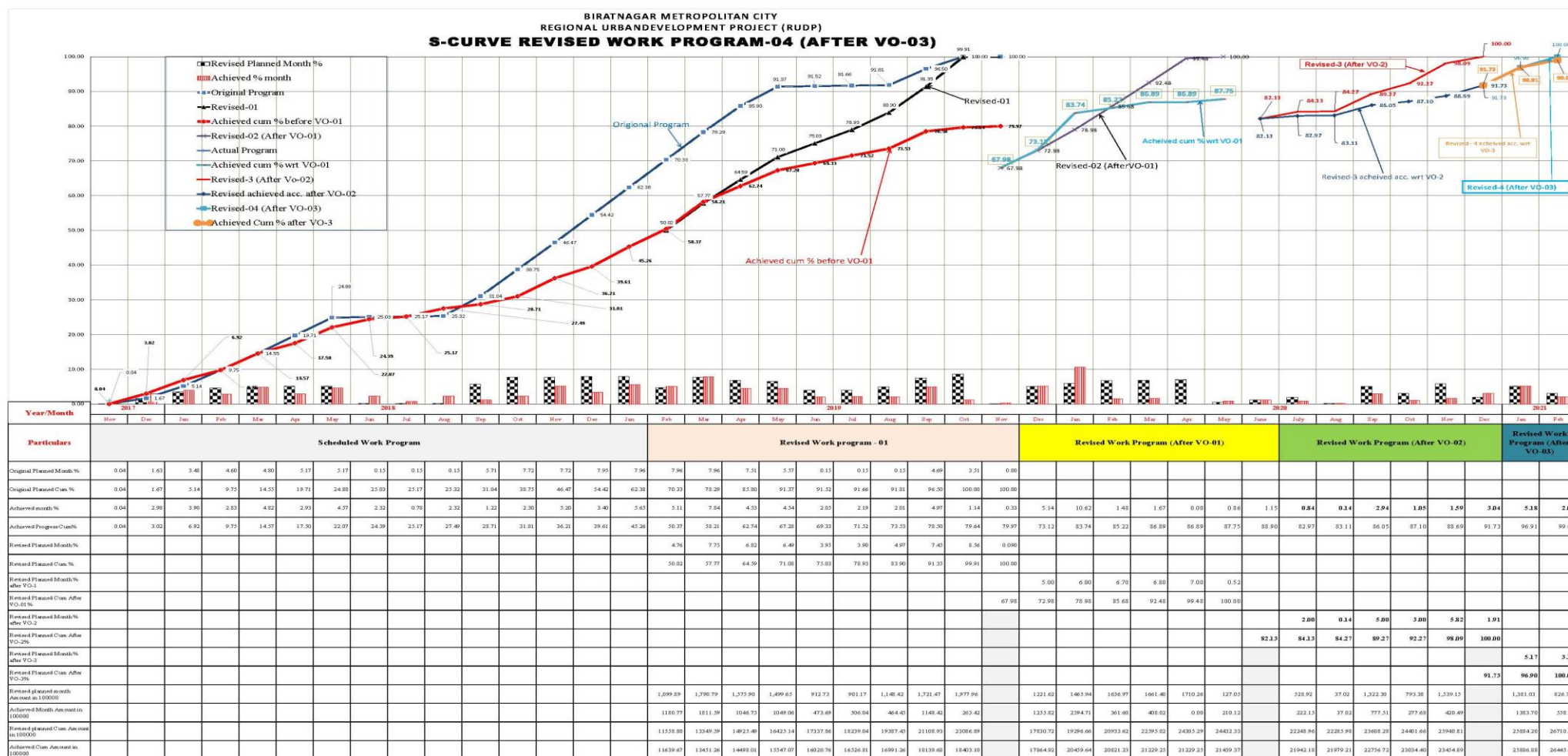
(If required, we'll make available)



ANNEX-6: S-Curve

(ATTACHED)

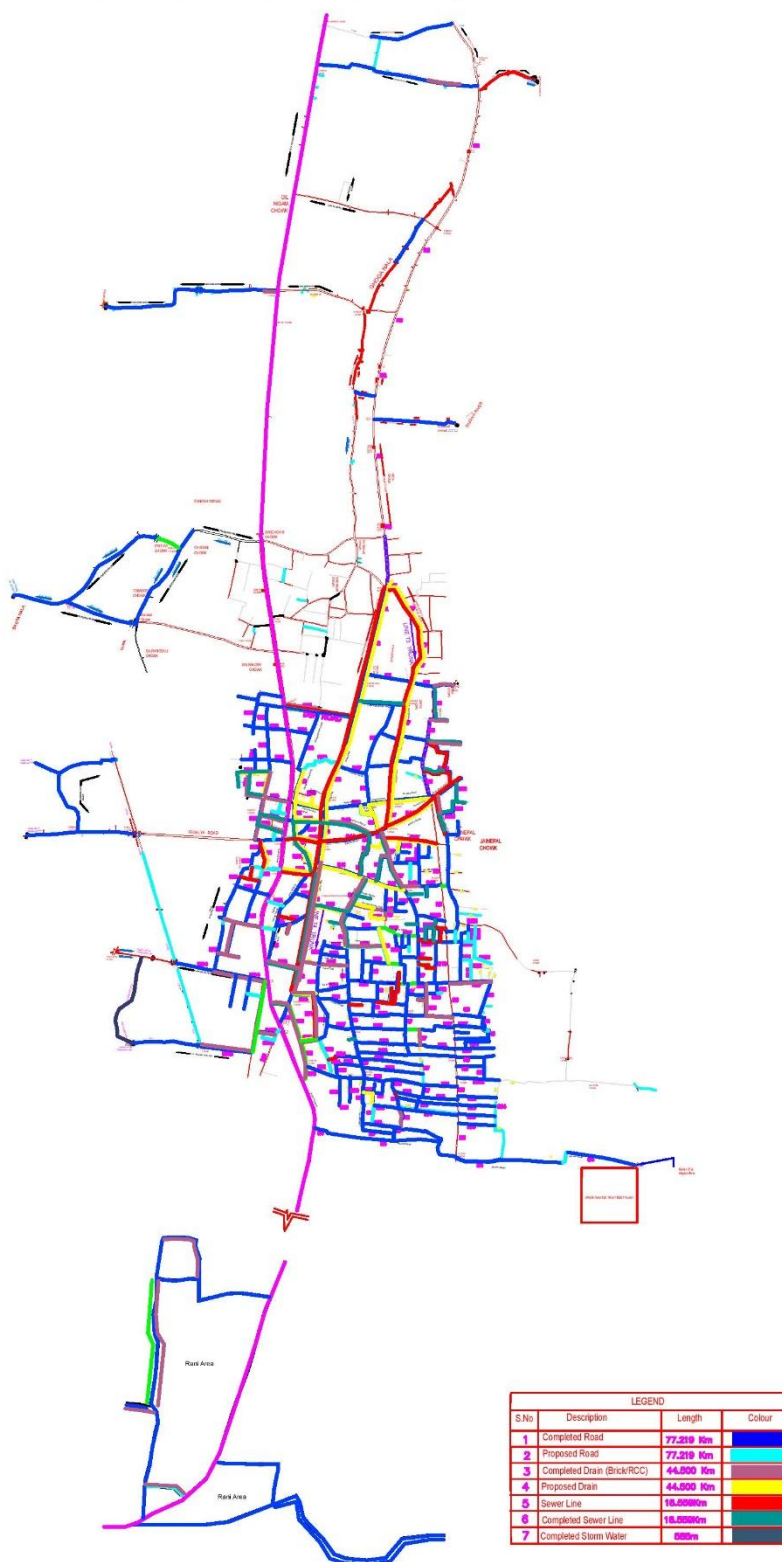




ANNEX-7: Master Plan of RUDP Project

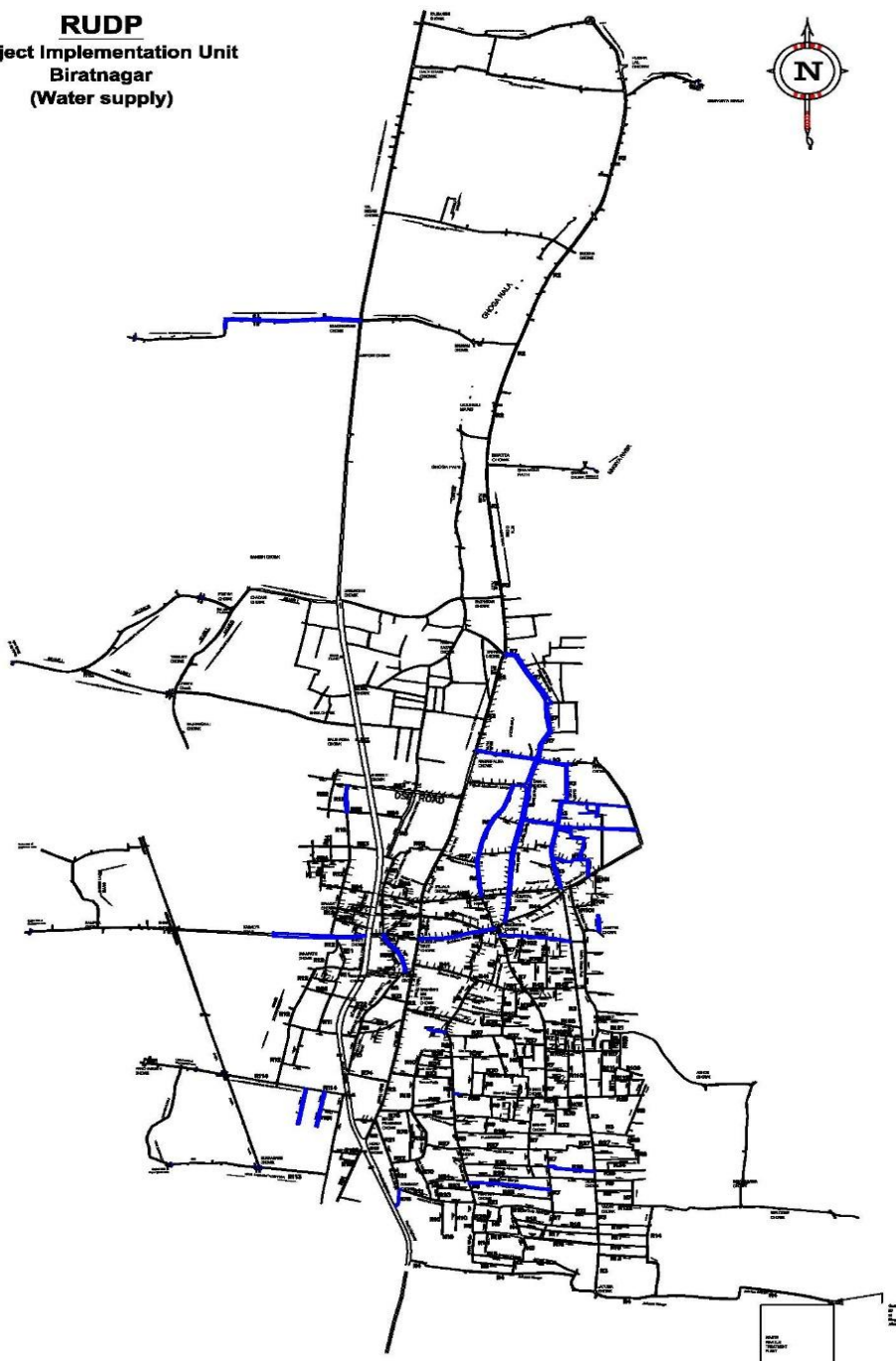


RUDP PROJECT (Road & Other components)



Drawing of Water Supply works (provisional Items: 100% Funded by BMC)

RUDP
Project Implementation Unit
Biratnagar
(Water supply)



LEGENDS			
S.No.	Description	Length	Colour
1	Water supply	17.70 Km	