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



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



1. PROJECT DESCRIPTION

1.1.INTRODUCTION/BACKGROUND

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

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

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



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

| General Features | | | | | | |
|--|---|--|--|--|--|--|
| Name of Project | Regional Urban Development Project(RUDP) | | | | | |
| | Government of Nepal, | | | | | |
| Executing Agency | 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 | | | | | |
| The Consultant: | | | | | | |
| 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 | 5th September 2020 | | | | | |
| Revised Date of Completion | 12 th April 2022 including DNP & Final Discharge (recommended) | | | | | |
| The Contractor: | | | | | | |
| 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 | 68.93% | | | | | |
| 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. | | | | | |
| (15 W.M.) Design | Due to Socio Environment Problem, Progress of Integrated Solid Waste Management (ISWM) design has been hindered. | | | | | |
| Physical Progress up to date | Planned: 100.00%, Actual: 99.00%; Lead (+) or Lag (-) by (-) 1.00 %; | | | | | |
| Financial Progress up to date (on the | In Percentage: 91.32%, In Figure: NRs. 2,756,577,744.70 (including VAT and PS) up to IPC –21 wrt VO-3. | | | | | |
| basis of IPC forwarded for disbursement) | In Words: NRs. Two Billion Seven Hundred Fifty Six Million Five Hundred Seventy Seven Thousand Seven Hundred Forty Four and Seventy Paisa Only. | | | | | |



3. SUMMARY OF PROGRESS STATUS OF ALL MAJOR COMPONENTS

| S.No. | Description | Unit | Revised Quantity | Progress up to date | Remaining | Progress Status expressed in (%) | Remarks |
|-------|----------------------------|------|---------------------|---------------------|-----------|----------------------------------|---------|
| 1 | Sewer Line | | | | | | |
| a | HDPE/RCC | m | 18,559.80 | 18,559.80 | - | 100.00% | |
| b | Manhole | No. | 606.00 | 606.00 | 1 | 100.00% | |
| c | Sewer Inlet | No. | 691.00 | 691.00 | 1 | 100.00% | |
| d | House Connection | No. | 3,200.00 | 2,970.00 | 230.00 | 92.81% | |
| 2 | Storm Water Drain | | | | | | |
| a | RCC Drain | m | 585.00 | 585.00 | - | 100.00% | |
| b | Piles | No. | 138.00 | 138.00 | ı | 100.00% | |
| 3 | Road | | | | | | |
| a | Subgrade | m | 76,030.00 | 76,030.00 | 1 | 100.00% | |
| b | Sub base | m | 76,030.00 | 76,030.00 | ı | 100.00% | |
| c | Base | m | 75,282.00 | 75,282.00 | ı | 100.00% | |
| d | Prime | m | 75,282.00 | 75,282.00 | - | 100.00% | |
| e | Asphalt | m | 75,282.00 | 75,282.00 | - | 100.00% | |
| 4 | Road Side Drain | m | 41,350.00 | 41,350.00 | - | 100.00% | |
| 5 | Footpath/Interlock work | sqm | 45,086.39 | 31,077.95 | 14,008.44 | 68.93% | |

Note:

Footpath/Interlock has been completed 29,125.00m in length till the end of Feb 2021.



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 SI & 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. | 3,200.00 |
| 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 till date

| | | Revised Q | uantity | Up to Pre Month | | This month | | Total to date | | 70 |
|-------------------|-------------------|------------|-------------------|-----------------|-------------------|------------|-------------------|---------------|-------------------|------------|
| SN | Description | Length (m) | Manhole (Nos.) | Length (m) | Manhole (Nos.) | Length (m) | Manhole (Nos.) | Length (m) | Manhole (Nos.) | Progress % |
| 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 (1 | 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 | 100.00% |



| SN | Description | Revised Quantity | Up to Pre Month | This month | Total to date in Nos. | Progress % |
|----|------------------|------------------|-----------------|------------|-----------------------|------------|
| 1 | Sewer inlet | 691.00 | 564.00 | 127.00 | 691.00 | 100.00 |
| 2 | House connection | 3,200.00 | 2,719.00 | 251.00 | 2,970.00 | 92.81 |



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 till date.

| | | | Length in m | | | | Length of | |
|----|------------------------------------|--|-------------------------|----------------------|------------|-------------------------|--------------------------|-------------------|
| SN | Name of Drain | e of Drain Original Revised Quantity Previous This Month | | Progress | | | Covered Drain in m | Remarks |
| | | | | | Cumulative | Type- RCC, Closed | | |
| 1 | CN2- CN3(Chyangh Baari Nala) | 652.89 | 585.00 | 585.00 | | 585.00 | 585.00 | 100% Completed |
| 2 | CN2-CN3 (Chyangh Baari Nala) | 132 Nos. of piles | 138 Nos. of piles | 138 Nos. of piles | | 138 Nos. of piles | | 100% 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 76.03 km. The summary of physical progress of flexible pavement, rigid pavement and foot paths are as below: -

| SN | Description | Unit | Revised Length | Total Up to this Month | Progress | Remarks |
|----|----------------|------|----------------|---------------------------|----------|----------------------------|
| 1 | Sub grade | m | 76,030.00 | 76,030.00 | 100.00% | |
| 2 | Sub Base | m | 76,030.00 | 76,030.00 | 100.00% | |
| 3 | Base | m | 75,282.00 | 75,282.00 | 100.00% | |
| 4 | Prime/Tack | m | 75,282.00 | 75,282.00 | 100.00% | |
| 5 | Asphalt | m | 75,282.00 | 75,282.00 | 100.00% | |
| 6 | Paint | m | 75,282.00 | 70,105.00 | 93.12% | Quantity = 27,984.00 Sq.m. |
| 7 | Rigid Pavement | m | 210.00 | 210.00 | 100.00% | |



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 till date.

| Work Con | | |
|-----------|---------|-------------------|
| Brick | Remarks | |
| m | m | |
| 39,890.00 | 1460.00 | Total = 41,350.00 |

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 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 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 | Amar Tole, Biratnagar – 8 | Three storey building in 2.5 Katha land with 5 Nos. of toilet with facilities mentioned in bullet No.: 3.2.3 of this report. | Have proper electric lightning system, water supply, |
| 2 | Panchali, Biratnagar – 11 | 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, |
| 3 | Tinpaini, Biratnagar – 2 | Three storey building having land area of 3 Katha with 5 Nos. of toilet and facilities in toilets are mentioned in bullet No.: 3.2.3 of this report. | Have proper electric lightning system, water supply, |
| 4 | Rani, Biratnagar – 15 | 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 | Have proper electric lightning system, water supply, |



| S. No. | Location of Camp | Details | Remarks |
|--------|-------------------------|--|--|
| | | gangs of road workers fulfil the criteria mentioned in bullet No.: 3.2.3 of this report. | |
| 5 | Madhumara yard | Occupied area of 9 Katha | Have proper electric lightning system, water supply and toilets with facilities mentioned in bullet No.: 3.2.3 of this report. |

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 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 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 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. Also the contractor has been instructed to update the OHS as per Standard Operating Procedure for COVID-19: Risk Management at workplace and /or/ if the lockdown prevail further due to COVID-19 and work progress suffer.

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 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 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 date1st, 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). 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 this month were found partially satisfactory.

3.4.5 STATUS OF RELOCATION OF SERVICES

The supply has been providing temporarily as per site condition and where required. Summary of water supply are as tabulated below:

| S.N. | Road Name | Pipe Size (Inch) | Pipe Length (m.) | Remarks |
|------|----------------------|------------------|------------------|---------|
| | | 1" | 6.00 | |
| 1 | B1- Kanchanbari | 2" | 619.00 | |
| 1 | | 4" | 700.00 | |
| | | 6" | 34.00 | |
| | | Sub Total = | 1,359.00 | |
| 2 | T3L10E (Buddha marg) | 2" | 738.40 | |
| | | Sub Total = | 738.40 | |
| 3 | T2I 10 (Dhamas nath) | 2" | 542.40 | |
| 3 | T3L10 (Dharma path) | 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 | D21(Dinavale mana & Brativa mana) | 3" | 122.70 | |
| 0 | R21(Binayak marg & Prativa marg) | 6" | 22.00 | |
| | | Sub Total = | 144.70 | |
| 9 | R29 (Santi 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 | |
| 10 | TO 5 (G . 11) | 3" | 291.50 | |
| 13 | T3L5(Sanihat marg) | 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(Shukra 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 | |
| 23 | TILIOC (Lanchan marg) | 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 | |

Table – 5: Status of Labor at Site

| Labour | La | bour | Comp | osition | | Ethn | ic compos | Madhesi Brahmin/ Chhetri 36 0 | | |
|-----------|---------|-----------|------|---------|---------|-------|-----------|----------------------------------|---|--|
| class | Skilled | Unskilled | Male | Female | Janjati | Dalit | Muslim | Madhesi | • | |
| Local | 17 | 37 | 54 | 0 | 8 | 0 | 10 | 36 | 0 | |
| Non local | 47 | 147 | 194 | 0 | 35 | 34 | 10 | 115 | 0 | |
| Indian | 3 | 12 | 15 | 0 | 0 | 0 | 12 | 3 | 0 | |
| TOTAL | 67 | 196 | 263 | 0 | 43 | 34 | 32 | 154 | 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 | 1st July 2018 | 1st April 2018 to 30th June 2018 | 316,582,708.58 | |
| 4 | IPC 04 | 1st October 2018 | 1st July 2018 to 31st September 2019 | 105,227,887.16 | |
| 5 | IPC 05 | 2 nd December 2018 | 1st October 2018 to 30 th November 2018 | 95,951,603.44 | |
| 6 | IPC 06 | 31 st January 2019 | 1st December 2018 to 31st January 2019 | 264,937,394.98 | |
| 7 | IPC 07 | 12 th April 2019 | 1st February 2019 to 31st March 2019 | 308,805,662.97 | |
| 8 | IPC 08 | 9 th May 2019 | 1st April 2019 to 30th April 2019 | 106,210,198.68 | |
| 9 | IPC 09 | 10 th June 2019 | 1st May 2019 to 31stMay 2019 | 90,419,375.33 | |
| 10 | IPC 10 | 11 th July 2019 | 1st June 2019 to 30th June 2019 | 67,863,056.59 | |
| 11 | IPC 11 | 30 th September 2019 | 1st July 2019 to 30 th | 95,296,297.30 | |



| S.No. | Description | Submission date | Covering date | Submitted Amount(NRs) | Remarks |
|---|-------------|--------------------------------------|---|--------------------------|---------|
| | | | September 2019 | | |
| 12 | IPC 12 | 3 rd November 2019 | 1st October 2019 to 31st 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 | |
| 14 | IPC 14 | 31st December 2019 | 1st December 2019 to 31st December 2019 | 63,509,092.84 | |
| 15 | IPC 15 | 4thFebruary 2020 | 1 st Jan 2020 to 31 st Jan 2020 | 232,027,037.24 | |
| 16 | IPC 16 | 1 st March 2020 | 1st Feb, 2020 to 29th Feb, 2020 | 102,186,834.62 | |
| 17 | IPC 17 | 1st July 2020 | 1stMarch,2020 to 30th June, 2020 | 153,448,663.15 | |
| 18 | IPC 18 | 05 th Oct. 2020 | 1stJuly,2020 to 30th 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 | 17th Jan 2021 | 1st Dec,2020 to 31st 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 | |
| Total amount exc advance till date = | | Mobilization | | 2,756,577,744.70 | |



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:

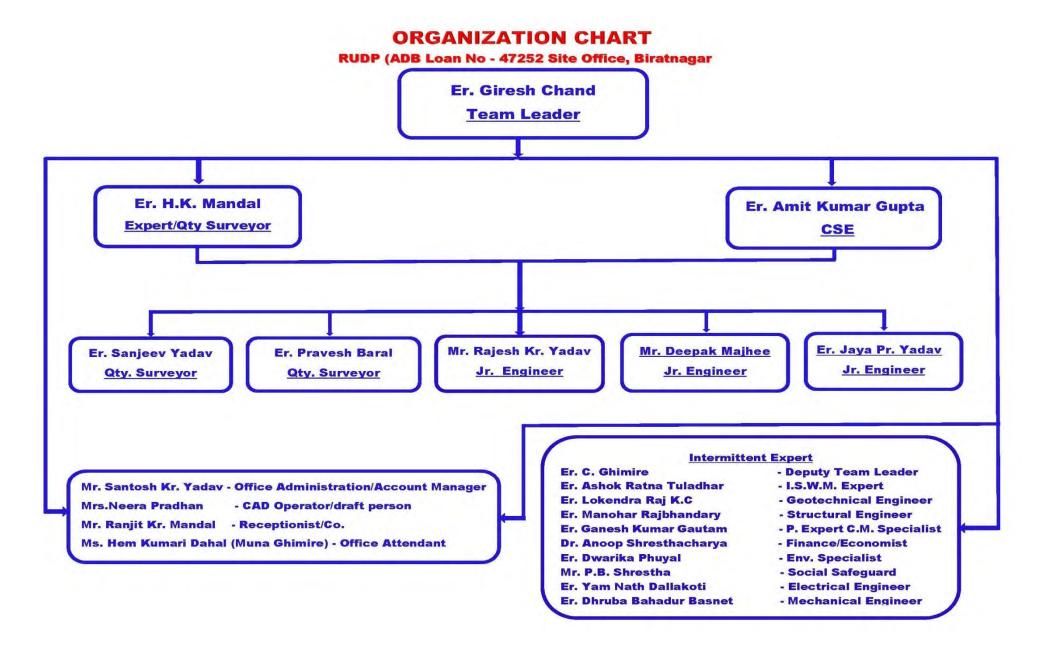
- Monthly progress report and quarterly progress report.
- Semi- annual Environmental monitoring report.
- Semi-annual Safeguard monitoring report.
- Annual progress report including annual Environmental / Social safeguard monitoring report, assets.
- Detailed draft final report for our inputs, including 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







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 | |
| 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 | 1st Nov 2017 | |
| 6 | Mr. Amit Kumar Gupta | Construction Supervision Engineer | 1st March 2018 | |
| 7 | Mr. Rajan Shrestha | CSE/Quantity Surveyor | 7 th Nov 2017 | Working as CSE from 1st May 2019, already resigned which will be effective from 1st Jan 2021. |
| 8 | Mr. Rajesh Kumar Yadav | Junior Engineer-1 | 6 th Sep 2017 | |
| 9 | Mr. Sanjeev Yadav | Qty. Surveyor | 5 th Nov 2017 | |
| 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 | |
| 13 | Mr. Pravesh Baral | Junior Engineer-2 | 10 th Dec 2017 | |
| 14 | Mr. J.P Yadav | Junior Engineer-3 | 1st March 2018 | |
| 15 | Mr. Deepak Majhee | Junior Engineer-4 | 1st March 2018 | |
| 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 TILL DATE

| W. A | Target | This Month | | vement This Month | L | eading | La | gging | n I |
|------------------------------------|---------|-------------|---------|----------------------|---------|-------------|---------|--------------------|---------|
| Month | Monthly | Accumulated | Monthly | Accumulated | Monthly | Accumulated | Monthly | Accumulat ed | Remarks |
| July-18 | 0.15% | 25.17% | 0.78% | 25.18% | 0.63% | 0.01% | | | Leading |
| August-18 | 0.15% | 25.32% | 2.32% | 27.50% | 2.17% | 2.18% | | | Leading |
| September-18 | 5.71% | 31.03% | 1.22% | 28.72% | | | | -2.31% | Lagging |
| October-18 | 7.72% | 38.75% | 2.30% | 31.03% | | | | -7.72% | Lagging |
| November-18 | 7.72% | 46.47% | 5.20% | 36.22% | | | | -10.25% | Lagging |
| December-18 | 7.95% | 54.41% | 3.40% | 39.62% | | | | -14.79% | Lagging |
| January-19 | 7.96% | 62.37% | 5.65% | 45.27% | | | | -17.10% | Lagging |
| Janruary-19 | 7.96% | 70.33% | 5.11% | 50.38% | | | | -19.95% | Lagging |
| Janruary-19 (after Revision) | 5.33% | 50.03% | 5.11% | 50.38% | | 0.35% | | | Leading |
| March -19 | 7.75% | 57.77% | 7.84% | 58.21% | | 0.44% | | | Leading |
| April-19 | 6.82% | 64.59% | 4.53% | 62.74% | | | | -1.85% | Lagging |
| May-19 | 6.49% | 71.08% | 4.54% | 67.28% | | | | -3.80% | Lagging |
| June-19 | 3.95% | 75.03% | 2.05% | 69.33% | | | | -5.70% | Lagging |
| July-19 | 3.90% | 78.93% | 2.19% | 71.52% | | | | -7.41% | Lagging |
| August-19 | 4.97% | 83.90% | 2.01% | 73.53% | | | | -10.37% | Lagging |
| September-19 | 7.45% | 91.35% | 4.97% | 78.50% | NA | NA | -2.48% | -12.85% | Lagging |
| October-19 | 8.56% | 99.91% | 1.14% | 79.64% | NA | NA | -7.42% | -20.27% | Lagging |
| November-19 | 0.09% | 100.00% | 0.33% | 79.97% | 0.24% | NA | NA | -20.03% | Lagging |



| Month | Target | This Month | | vement This Month | L | eading | La | gging | Damada |
|---|---------|-------------|---------|----------------------|---------|-------------|---------|--------------|----------|
| Month | Monthly | Accumulated | Monthly | Accumulated | Monthly | Accumulated | Monthly | Accumulat ed | Remarks |
| December- 2019 (after Revision-2) | 5.00% | 72.98% | 5.14% | 73.12% | 0.14% | 0.14% | NA | NA | Leading |
| January-20 | 6.00% | 78.98% | 10.62% | 83.74% | 4.62% | 4.76% | NA | NA | Leading |
| Janruary-20 | 6.70% | 85.68% | 1.48% | 85.22% | NA | NA | -5.22% | -0.46% | Lagging |
| March-20 | 6.80% | 92.48% | 1.67% | 86.89% | NA | NA | -5.13% | -5.59% | Lagging |
| April-20 | 7.00% | 99.48% | 0.00% | 86.89% | NA | NA | -7.00% | -12.59% | Lagging |
| May-20 | 0.52% | 100.00% | 0.86% | 87.75% | 0.34% | NA | NA | -12.25% | Lagging |
| June-20 | | | 1.15% | 88.90% | | | | | |
| July-20 | | | 0.84% | 82.97% | | | | | wrt VO-2 |
| August-20 | | | 0.14% | 83.11% | | | | | |
| September- 20 | 5.00% | 88.11% | 2.94% | 86.05% | | | -2.06% | -2.06% | |
| October-20 | 3.00% | 91.11% | 1.05% | 87.10% | | | -1.95% | -4.01% | |
| November-20 | 5.82% | 96.93% | 1.59% | 88.69% | | | -4.23% | -8.24% | |
| December-20 | 3.07% | 100.00% | 3.04% | 91.73% | | | -0.03% | -8.27% | |
| January - 21 | 5.17% | 96.90% | 5.18% | 96.91% | 0.01% | 0.01% | | | Wrt VO-3 |
| Feb 2021 | 3.10% | 100.00% | 2.09% | 99.00% | | | 1.01% | 1.00% | |

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 | | The cost claim has been determined and recommended by DSC for further action to PIU. | |
| 3 | | Revised EOT and VO-4 of the consultant (DSC) has been approved. | |
| 4 | 11 th Feb 2021 | Chaired meeting at PIU, Office, Biratnagar | |
| 5 | | According to GCC/PCC Clause 10.1 towards issuance of Taking over certificate to the contractor on his request, minor outstanding & defect lists are already prepared jointly and Engineer's assessment Report has been submitted to The employer / PIU for their concurrence. | |
| 6 | | Draft Project Completion Report will be submitted soon. | |
| 7 | | Draft As Built Drawing report has been submitted by the contractor on 10 th Feb 2021 which is under scrutiny. | |



6. DETAILS OF PRE CAST ACTIVITIES

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

| | Physical Progress till date | | | | | | | | | |
|------|-----------------------------|------|------------|----------------------------|------------------------|---------------------------|----------------|--|--|--|
| | | | | Progress | | | | | | |
| S.N. | Description | Unit | BoQ | Up to Previous month (RM.) | This Month (RM.) | Total to Date (RM.) | Remarks | | | |
| 1 | Precast Slab | No | | 97,101.00 | 500.00 | 97,601.00 | Under progress | | | |
| 2 | Kerb Stone | Rm | 127,247.02 | 104,290.80 | | 104,290.80 | 81.95% | | | |

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

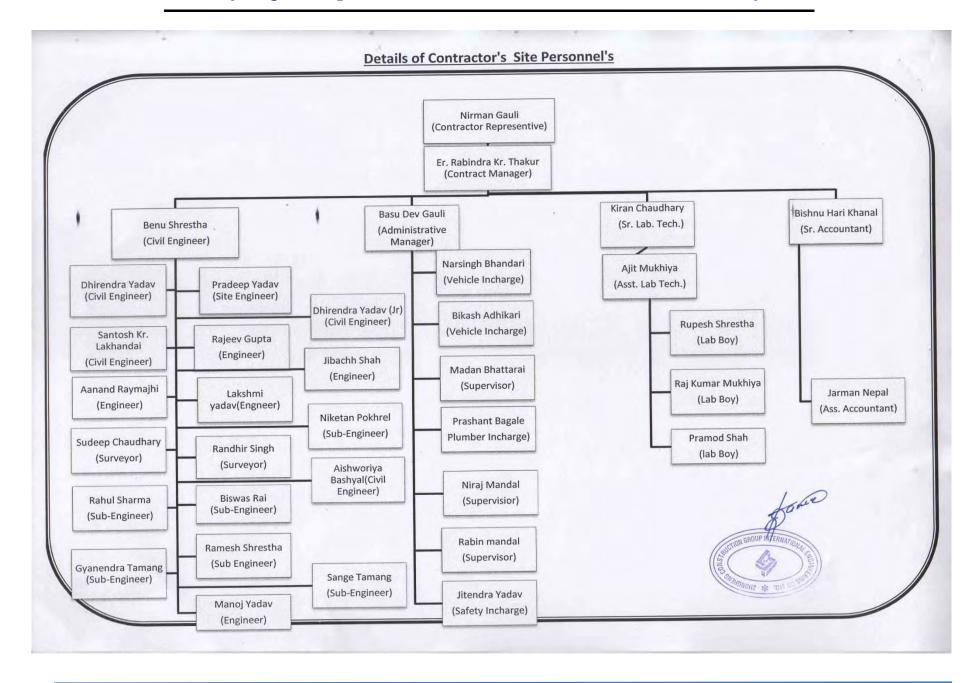
| Physical Progress till date | | | | | | | |
|-----------------------------|-------------|------------------|-------------|----------------------------|------------------------|---------------------------|---------|
| | | | Progress | | | | |
| S.N. | Description | Diameter (mm) | BoQ (RM) | Up to Previous month (RM.) | This Month (RM.) | Total to Date (RM.) | Remarks |
| 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 | |

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

| Physical Progress till date | | | | | | | | |
|-----------------------------|-------------|------------------|-------------|-------------------------------------|------------------------|---------------------------|---------|--|
| | | | | Progi | ress | | Remarks | |
| S.N. | Description | Diameter (mm) | BoQ (RM) | Up to Previous month (RM.) | This Month (RM.) | Total to Date (RM.) | | |
| 1 | HDPE Pipe | 110.00 | 1,987.20 | 4,487.20 | - | 4,487.20 | | |
| 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 | | |

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

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





7. CONTRACTOR'S MANPOWER

Table 13: CONTRACTOR'S KEY STAFFS.

| S.No. | Position | Minimum Number Required as per Contract | ZHONGHENG CONSTRUCTION Group | Remarks |
|-------|--|---|------------------------------------|---------|
| 1 | Project/Contract Manager (1 No) 15/10 Yrs. (Total/Similar Exp.) | 1 | 1 | |
| 2 | Civil Engineer-10/6 | 2 | 2 | |
| 3 | Sanitary Engineer- (1no.)-12/8 | 1 | - | |
| 4 | Road Engineer-(1no.)-12/8 | 1 | 1 | |
| 5 | Electromechanical Engineer-(1no)-10/5 | 1 | - | |
| 6 | Safety Engineer/In charge | - | 1 | |
| 7 | Site Engineer | - | 3 | |
| 8 | Sub- Engineer/Surveyor | - | 4 | |
| 9 | Accountant | - | 2 | |
| 10 | Senior Lab Technician | - | 1 | |
| 11 | Lab Technician | | 2 | |
| 12 | Store Keeper | - | 1 | |
| 13 | Vehicle In charge | - | 1 | |
| 14 | Skilled Labors | | 67 | |
| 15 | Unskilled Labors | | 196 | |



8. CONTRACTOR'S EQUIPMENT

Table 14: CONTRACTOR'S EQUIPMENT

| S.No. | Equipment Type and Characteristics | Min Number required as per Contract | ZHONGHENG CONSTRUCTI ON Group | Remarks |
|-------|---|---|-------------------------------------|------------------------|
| 1 | Excavator (200 above) | 5 | 0 | Backhoe loader - 4Nos. |
| 2 | Crane (10 ton capacity) | 3 | 1 | |
| 3 | Asphalt plant of adequate capacity | 1 | 1 | |
| 4 | Asphalt pavers | 1 | 1 | |
| 5 | Vibrating roller | 2 | 2 | |
| 6 | Pneumatic tyre roller 8 to 10 ton | 2 | 1 | |
| 7 | Smooth wheeled roller 8 to 10 ton | 1 | 2 | |
| 8 | Grader | 1 | 2 | |
| 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 | 6 | |
| 12 | Chips spreader | 1 | - | |
| 13 | Bitumen decanter minimum 4000 Liters. (preheating container) | 2 | 2 | |
| | Air compressor | 2 | 2 | |
| 14 | Tipping Trucks | 5 | 1 | Tipper-3 |
| 15 | Service vehicle | 15 | 3 | Tractor = 12 Nos. |

| S.No. | Equipment Type and Characteristics | Min Number required as per Contract | ZHONGHENG CONSTRUCTI ON Group | Remarks |
|-------|---|---|-------------------------------------|---------|
| 16 | Survey equipment (Total station with accessories) | 2 | 1 | |
| 17 | Theodolite | 1 | ı | |
| 18 | Levelling | 2 | 5 | |
| 19 | Mobile Generator 15-20 KVA | 5 | 6 | |
| 20 | Mixer Machine | 3 | 5 | |
| 21 | Concrete Batching Plant | 1 | - | |
| 22 | Concrete pump | 1 | - | |
| 23 | Drain cleaner/ Nala cleaner | 2 | - | |
| 24 | Broomer | - | 2 | |
| 25 | Motor Bike | - | 12 | |
| 26 | Plate Compactor | - | 5 | |
| 27 | Water Pump | - | 4 | |

9. WORK PLAN FOR THE NEXT MONTH

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

- Joint measurement, preparation and verification of As Built Drawings.
- Precast elements production works at contractor's yard.
- Road Side drain maintenance work
- Laying of Kerb Stone, cover slab and interlocking tiles.
- Painting work
- Placement of House Connection works.
- Relocation of water supply works.
- Repair & Maintenance works according to Outstanding & defect lists, etc.



ANNEX-1: Photographs of February 2021



Culvert at Keshaliya road Canal



Culvert at Keshaliya road Canal





Zebra Crossing at Devkota Chowk



Road R109



ANNEX-2: Minutes of Meeting February 2021

Minutes of Meeting - RUDP, Biratnagar

MINUTES OF MEETING

Contract: Regional Urban Development Project (RUDP), Biratnagar, RUDP/ICB/BRT/2, ADB Loan No: 47252-NEP

Date: 11th February 2021

Time: 11: 00AM

Venue: PIU Office, Biratnagar

Attendance

| Em | ployer: | |
|-----|-------------------------------|---|
| 1 | Mr. Bharat Kumar Neupane | Project Manager (PM), PIU |
| 2 | Mr. Prakash Narayan Chaudhary | Deputy Project Manager (DPM), PIU |
| 3 | Mr. Ghanashyam Kafley | Project Engineer, PIU |
| 4 | Mr. Anil Singh | Electrical Engineer, PIU |
| 5 | Mr. Mister K.C. | Account Officer, PIU |
| Cor | tractor: | |
| 1 | Mr. Ravindra Kumar Thakur | CM, M/S Zhongheng Construction Group International Engineering Co. Ltd. |
| Cor | sultant: | |
| 1 | Mr. Giresh Chand | TL, DSC 4 |
| 2 | Mr. Amit Kumar | CSE, DSC |
| 3 | Mr. Hare Krishna Mandal | Quantity Surveyor/Expert, DSC |

The meeting was chaired by PM, Mr. Bharat Kumar Neupane and he welcomed all the participants in the meeting. Following matters were discussed and decided:

| S. NO. | Minutes | Action by |
|--------|--|---------------------------------------|
| 1 | TL, Mr Chand informed that the contractor M/S ZHONGHENG Construction Group International Engineering Co Ltd. Beijing, China has requested for Taking Over Certificate (TOC) via his letter ref ⁿ No.: 289-RUDPBRT-2017/18 on 8 th Feb 2021 according to GCC/PCC Sub - Clause No.: 10.1. And till date about 97% of physical progress achieved. | The employer, contractor & consultant |
| | PM, Mr Neupane advised to initiate the process of issuance of TOC as per the contract. Prepare the lists of outstanding as well as defects in the presence of representatives of PIU. | |
| | TL, Mr Chand requested that arrange for site visit by all the three parties (PIU, The contractor & DSC) to verify/check the works and to proceed as per contract toward issuance of TOC. | Brimpie |

ANNEX-3: Laboratory Test Results of February 2021

| | REG | Co | ratnagar Me ontract No:- R | VELOPM etropolitan C UDP/ICB/BRT Monthly Test Repo | ity -02 | PRO | OJE | CT | | |
|------|--------------------------------------|-------------------|---|---|---------------------------|-------------|-------------|---------------------|--------|--|
| | | | | | | Mor | | | oruary | |
| | | Lo | cation:-T1L1 | 4R | | Тур | | Sub grade | | |
| Sn. | Lab.Ref no. | Location/Chainage | Source of Sample | Date of Testing | MDD | Mate OMC | rial PI% | CBR% | Remark | |
| 1 | RUDP-S-01 | T1L14B,(0+090) | Existing Road | 1-Feb-21 | 1.950 | 8.38 | 7,82 | 8.91 | | |
| | | | | | | 0.00 | 7.02 | 0.01 | | |
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| Ch | necked By Engineer endra Yadav | F | Submitted By Contract Manager Labindra kr. Thakur | Verified By Expert Qty Surveyor | | Biratnag | T | oproved eam Lead | ler | |

| | REGIO | ONAL U | Biratna Contrac | igar M t No:- I | EVELO Letropolita RUDP/ICB of Field Dens | an City BRT-02 | T PRO. | JECT | |
|-----|--|--------------|--------------------|--------------------|--|-------------------|--|---|-------------------|
| | | | | | sz ciela bells | T. Test | Month | Febru | uarv |
| | | | Loca | tion:-T1 | I 14D | | Year | 202 | 21 |
| | | | Loca | Moistu | re content % | Densit | ype of Material y(gm/cc) | Sub-G Compac | |
| Sn. | Lab.Ref.no | Testing Date | Chanage | | Field MC% | Max.Drv | Field Dry density, gm/cc | Compaction % | Specified % |
| 2 | RUDP-SG-FD-1, L/S | | 0+050 | 8.40 | 7.61 | 1.950 | 1.879 | 96.37 | 95 |
| - | RUDP-SG-FD-1, R/S | 2-Feb-21 | 0+110 | 8.40 | 7.25 | 1.950 | 1.871 | 95.94 | 95 |
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| Di | Checked By Engineer hirendra Yadav | Si | ablanted B | y ager | Verified Expert Qty S | By urveyor | UDP E | | |
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| | REC | i i | RBAN DEV Biratnagar Met Contract No:- RU Summary Sheet of M | ropolitan Cit DP/ICB/BRT-0 | V | PRO | JE(| CT | |
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| | | | | | | Mor | | | bruary 2021 |
| | | | Location:-R-72 | | | Typ Mate | e of | | grade |
| Sn. | Lab.Ref no. | Location/Chainage | Source of Sample | Date of Testing | MDD | OMC | PI% | CBR% | Remark |
| 1 | RUDP-SG-01 | R-72,(0+045) | Existing Road | 3-Feb-21 | 1.985 | 10.00 | 8.36 | 9.48 | |
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| | | | Loc | cation:-R- | 72 | | Year Type of Material | | 21 |
| | | | | Moisture | e content % | | ity(gm/cc) | Compa | Grade ction % |
| Sn. | Lab.Ref.no | Testing Date | Chainage | OMC% | Field MC% | Max.Dr density gm/cc | | Compaction % | Specified % |
| 1 | RUDP-SG-FD-1, R/S | | 0+030 | 10.00 | 8.08 | 1.985 | 1.905 | 95.95 | 95 |
| 2 | RUDP-SG-FD-1, L/S | 4-Feb-21 | 0+080 | 10.00 | 7.24 | 1.985 | 1.925 | 96.95 | 95 |
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| | | | | | | Mor | | | oruary |
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| . 1 | | Location/Chainage | 11 0 11 11 11 | ration:-R-122 | | Mate | rial | Sub | grade |
| Sn. | Lab.Ref no. | Location/Chainage | Source of Sample | Date of Testing | MDD | OMC | PI% | CBR% | Remark |
| 1 | RUDP-SG-01 | R-122,(0+130) | Existing Road | 1-Feb-21 | 2.050 | 6.98 | 6.03 | 7.40 | 1 |
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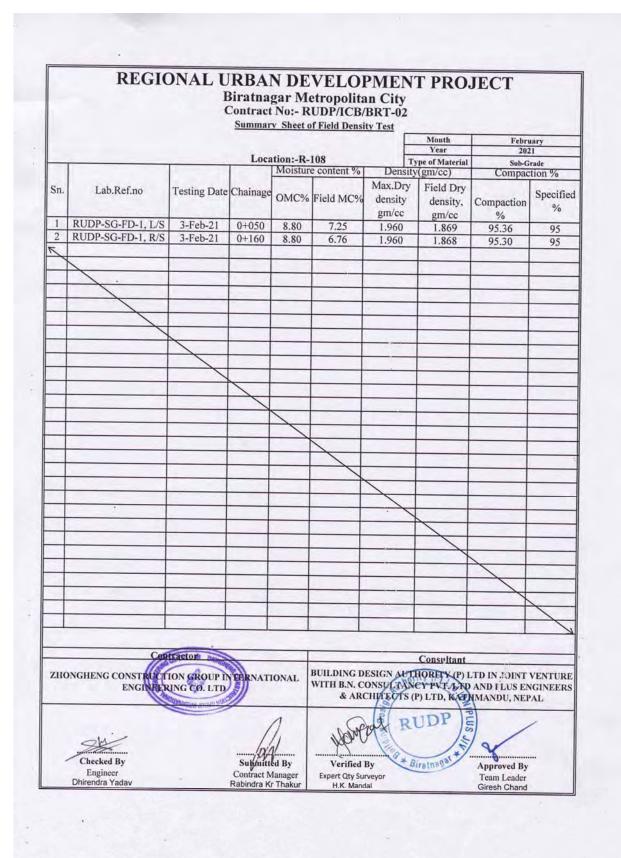


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| | | | Location | | | | of Material | Sub-C | Frade |
| | | | | Moistur | e content % | Density | (gm/cc) | Compac | ction % |
| SN. | Lab.Ref.no | Testing Date | Chainage | ОМС% | Field MC% | Max.Dry density gm/cc | Field Dry density, gm/cc | Compaction % | Specified % |
| 1 | RUDP-SG-FD-1, R/S | 2-Feb-21 | 0+030 | 6.98 | 4.94 | 2.050 | 1.987 | 96.91 | 95 |
| | RUDP-SG-FD-1, R/S | 2-Feb-21 | 0+070 | 6.98 | 5.96 | 2.050 | 1.952 | 95.21 | 95 |
| 3 | RUDP-SG-FD-1, C/L | 2-Feb-21 | 0+120 | 6.98 | 5.72 | 2.050 | 1.986 | 96.90 | 95 |
| 4 | RUDP-SG-FD-1, L/S | 2-Feb-21 | 0+180 | 6.98 | 5.50 | 2.050 | 1.968 | 95.99 | 95 |
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| | | | | | | Mor | | | ruary |
| | * | | Location:-R-108 | | | Year Type of | | | 021 grade |
| Sn. | Lab.Ref no. | Location/Chainage | Source of Sample | Date of Testing | MDD | Mate OMC | rial PI% | | |
| 200 | 30,72,40,70,40 | | | - | | OMC | PI% | CBR% | Remark |
| | RUDP-SG-01 | R-108,(0+110) | Existing Road | 1-Feb-21 | 1.960 | 8.80 | 9.09 | 7.00 | |
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| | hecked By Engineer | | Submitted By Contract Manager | Verified By Expert Qty surveyor | Biratnag | | Appro Team L | ved By | |







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| Sn. | Lab.Ref no. | Location/Chainage | Source of Sample | | | | rial | 1000 | | |
| 1 | RUDP-SG-01 | 21.1.00.000 | 14.2 4 14.40 | Date of Testing | MDD | OMC | PI% | CBR% | Remark | |
| | KUDP-SG-01 | N-1,(0+030) | Existing Road | 1-Feb-21 | 1.975 | 8.78 | 7.99 | 9.78 | | |
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| E | hecked By Engineer endra yadav | | Sulfmitted By Contract Manager | Verified By Expert Qty Surveyor | RUDE | MIPIUS JIV | Approv Team L | ved By | ••• | |



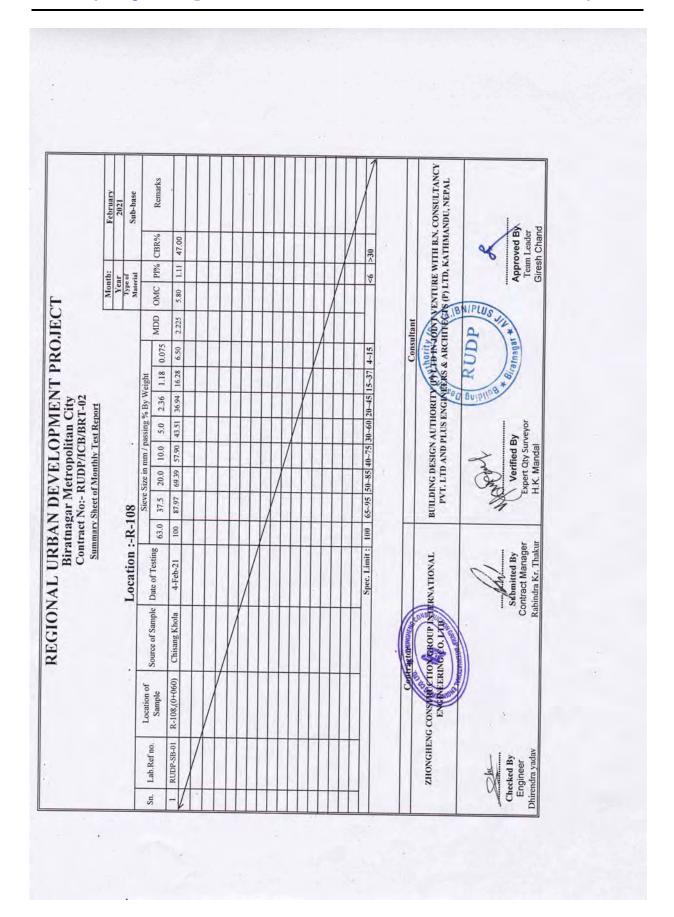
| | KEGI | ONAL | Biratna Contrac | gar M t No:- F | etropolit RUDP/ICB of Field Dens | an City /BRT-02 | NT PRO | JECT | |
|-----|-----------------------------|--------------|--------------------|-------------------|--|--------------------|---|---------------------------|--------------|
| | | | | | | | Month Year | | ruary 021 |
| | | | Loc | ation:-N- | | | Type of Material | Sub-Grade Compaction % | |
| | | | | Moistur | e content % | Max.Dry | ty(gm/cc) | Compa | iction % |
| Sn. | Lab.Ref.no | Testing Date | Chainage | OMC% | Field MC% | density gm/cc | Field Dry density, gm/cc | Compaction % | Specified % |
| 1 | RUDP-SG-FD-1, L/S | 1-Feb-21 | 0+030 | 8.78 | 6.34 | 1.975 | 1.898 | 96.10 | 95 |
| 2 | RUDP-SG-FD-1, R/S | 1-Feb-21 | 0+070 | 8.78 | 6,26 | 1.975 | 1.918 | 97.11 | 95 |
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| | Checked By | | Submitt | A | Verified | ul (| Biratnagat * | Approved By | |
| | Engineer Dhirendra yadav | | Contract N | lanager | Expert Qty Sun | | | Team Leader | |
| | Differiora yadav | | Rabindra K | . inakur | H.K. Mandal | | | Giresh Chand | |





| | | | Contra | ct No:- | Tetropoli RUDP/ICI t of Field Der | B/BRT-0 | y 2 | | |
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| | | | | | | | Month | Febr | uarv |
| | | | Loant | ion:-T3 | LACE | | Year | 20 | |
| | | | Locat | Moistur | e content % | | Type of Material ty(gm/cc) | Sub- | |
| Sn. | Lab.Ref.no | T | | | l coment 70 | Max.Dry | | Compac | tion % |
| 311. | | Testing Date | Chainage | ОМС% | Field MC% | density gm/cc | density, gm/cc | Compaction % | Specified % |
| 1 | RUDP-SB-FD-1, L/S | 3-Feb-21 | 0+020 | 6.10 | 5.08 | 2.219 | 2.118 | 95.45 | 95 |
| 2 | RUDP-SB-FD-1,R/S | 3-Feb-21 | 0+060 | 6.10 | 4.39 | 2.219 | 2.132 | 96.10 | 95 |
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| | | ulimitted By stract Manager | | | erified By | | | Approved By | |
| | | indra Kr. Thakur | | | rt Qty Surveyor .k. Mandal | | | Team Leader Giresh Chand | |
| | | | | - ' | | | | Giresh Chand | |





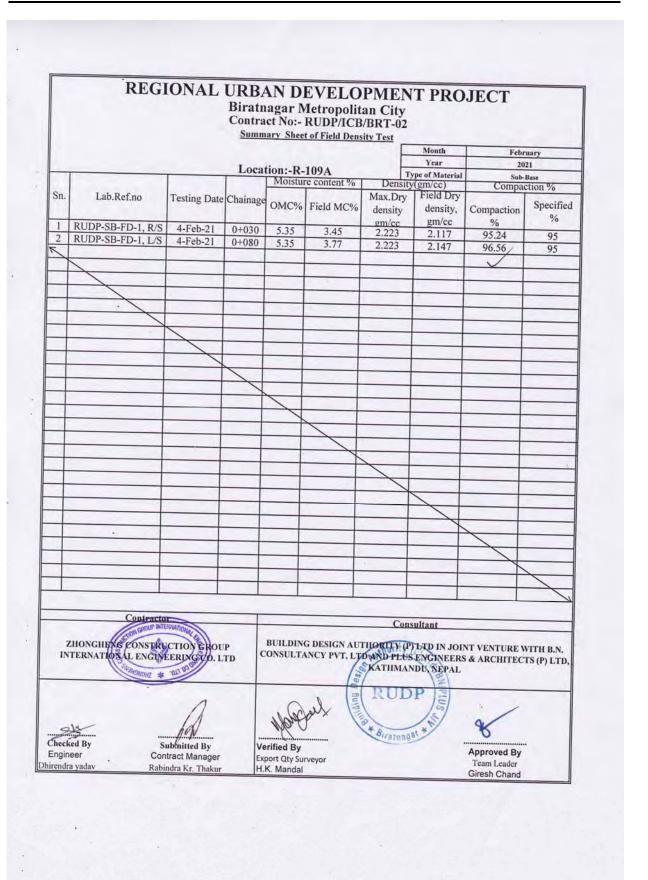


| | , KEGI | ONAL | Biratn Contra | agar M ct No:- I | LVELO Ietropolita RUDP/ICB of Field Dens | an City BRT-02 | T PRO | JECT | |
|------------|--------------------------------|-----------------|------------------|---------------------|--|--------------------------------|---|----------------------------|-----------------------|
| | | | | | | | Month | Febr | ruary |
| | | | 7 | | *00 | 1 | Year | 20 | 21 |
| | | | Loca | tion:-R | re content % | Dane | Type of Material | | Base |
| | | | | | C content /8 | Max.Dry | ty(gm/cc) | Compa | ction % |
| Sn. | Lab.Ref.no | Testing Date | Chainage | OMC% | Field MC% | density gm/cc | Field Dry density, gm/cc | Compaction % | Specified % |
| 1 | RUDP-SB-FD-1, R/S | 5-Feb-21 | 0+030 | 5.80 | 3.13 | 2.225 | 2.147 | 96.47 | 95 |
| 2 | RUDP-SB-FD-1, L/S | 5-Feb-21 | 0+070 | 5.80 | 4.92 | 2.225 | 2.117 | 95.13 | 95 |
| 3 | RUDP-SB-FD-1, R/S | 5-Feb-21 | 0+130 | 5.80 | 4.28 | 2.225 | 2.144 | 96.36 | 95 |
| 4 | RUDP-SB-FD-1, L/S | 5-Feb-21 | 0+150 | 5.80 | 4.34 | 2.225 | 2.136 | 95.99 | 95 |
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| | Cuntract | Town a | | | | Varia | nsultant | | |
| IN | ZHONGMENG CONSERVATIONAL ENGIN | CTION CROI | UP LTD | BUILDIN | TANCY PVT | THORITY LTD AND TD, KATH | (P) LTD IN JOI PLUS ENGINE MANDU, NEP | FRS & ADCHE | WITH B.N FECTS (P) |
| Chec | | Submitted By | | Verified By | 9 | Biratna | gar * M | Approved By | |
| - | neer Co | ntract Manager | | xport Qty S | | | | Approved By Team Leader | |
| Service of | Ira yadav • Rah | indra Kr. Thaku | | I.K. Manda | | | | Giresh Chanc | |















| | REGIO | 1 | Biratna Contrac | gar M No:- R | VELO etropolita UDP/ICB/ of Field Densi | n City BRT-02 | NT PRO | JECT | |
|-----|---------------------------------------|----------------------------------|--------------------|-----------------|---|----------------------------|-----------------------------|--------------|-------------|
| | | | | | | | Month | Febru | uary |
| | | | | | | | Year | 202 | 21 |
| | | | Locat | ion:-T3 | L22 | | Type of Material | Sub-Base | |
| | | | | Moisture | e content % | | ity(gm/cc) | Compac | ction % |
| Sn. | Lab.Ref.no | Testing Date | Chainage | OMC% | Field MC% | Max.Dr density gm/cc | density, | Compaction % | Specified % |
| 1 | RUDP-SB-FD-1, L/S | 3-Feb-21 | 0+360 | 6.45 | 5.55 | 2.228 | 2.125 | 95.37 | 95 |
| 2 | RUDP-SB-FD-1, R/S | 3-Feb-21 | 0+410 | 6.45 | 5.01 | 2.228 | 2.162 | 97.05 | 95 |
| 3 | RUDP-SB-FD-1, L/S | 3-Feb-21 | 0+480 | 6.45 | 4.65 | 2.228 | 2.153 | 96.61 | 95 |
| 4 | RUDP-SB-FD-1, R/S | 3-Feb-21 | 0+520 | 6.45 | 5.29 | 2.228 | 2.159 | 96.89 | 95 |
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| | ZHONCHENDONGROU | PHIEFMARIONA | OUP | BUILD | ING DESIGN | AUTHORI | TY (P) LTD IN | JOINT VENTU | RE WITH B.N |
| | ZHONGHEN CONSTITUTE INTERNATIONAL ENG | INEERING CO |). LTD | CONS | | LTD, K | ND PLUS ENGI ATHMANDU, N | EPAL | HITECIS (P) |
| | A | * | | War | gar (| RI | JDP SIPES | X | / |
| 5 | Z. Addi. | | *** | Vorifical | By | (* A) | - X 5 | Approved | Bv |
| | hecked By | Submitted B | | Verified | ty Surveyor | PILA | tnagar * | Team Lea | |
| | ngineer rendra Yadav | Contract Mana Rabindra Kr. Th | | H.K. ma | | | | Giresh Ch | |

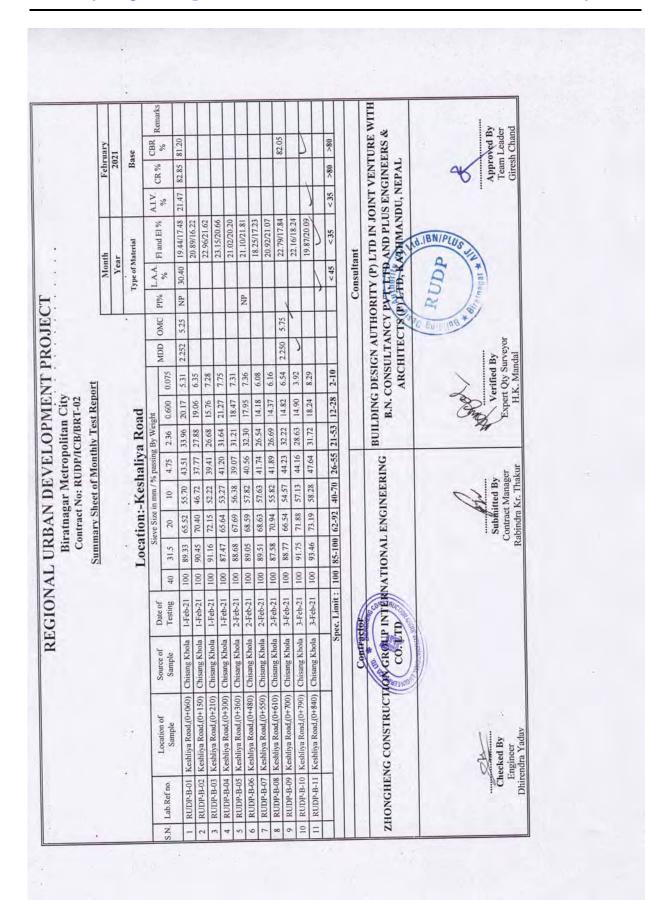






| | REGI | ONAL | Biratna Contrac | gar M t No:- F | etropolita RUDP/ICB of Field Dens | an City /BRT-02 | T PRO | JECT | |
|-----|--|--|--------------------|-------------------|---|--------------------|---|------------------------------------|------------------------|
| | | | Summa | Ly Sheet | of Field Dens | ity Test | Month | | |
| | | | | | | - | Year | | uary |
| | | | Location | :-S-13 | Outlet | 70 | pe of Material | 20 | Z1 Base |
| | | | | | e content % | Density | (gm/cc) | Compa | |
| Sn. | Lab.Ref.no | Testing Date | Chainage | ОМС% | Field MC% | Max.Dry density | Field Dry density, | Compaction | Specifie |
| 1 | RUDP-SB-FD-1, R/S | 1-Feb-21 | 0:020 | 5.70 | 100 | gm/cc | gm/cc | % | |
| 2 | RUDP-SB-FD-1, L/S | 1-Feb-21 | 0+030 | 5.70 | 4.92 | 2.223 | 2.143 | 96.39 | 95 |
| 3 | | | 0+060 | 5.70 | 4.35 | 2.223 | 2.136 | 96.09 | 95 |
| 4 | RUDP-SB-FD-1, R/S RUDP-SB-FD-1, L/S | 1-Feb-21 | 0+110 | 5.70 | 4.74 | 2.223 | 2.155 | 96.93 | 95 |
| | | 1-Feb-21 | 0+130 | 5.70 | 3.87 | 2.223 | 2.160 | 97.16 | 95 |
| 5 | RUDP-SB-FD-1, R/S | 1-Feb-21 | 0+190 | 5.70 | 3.90 | 2.223 | 2.150 | 96.62 | 95 |
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| | Contraction Gallery | THE STATE OF THE S | | DITT ST | C DECLOS | | nsultant | | |
| 1 | ZHONGHING CONST INTERNATIONAL ENGINEERING | NEERING CO. | DUP LTD | CONSU | LTANCY PVT | LTD AND I | P) LTD IN JO PLUS ENGIN MANDU, NE | DINT VENTURI EERS & ARCH PAL | E WITH B. ITECTS (P |
| - | du - | 6 | | אנוער. | 1/6 | RU | 100 | 4 | |
| | cked By | Submitted By | | top. | Verified By | * Birate | agai * E | Approved By | |

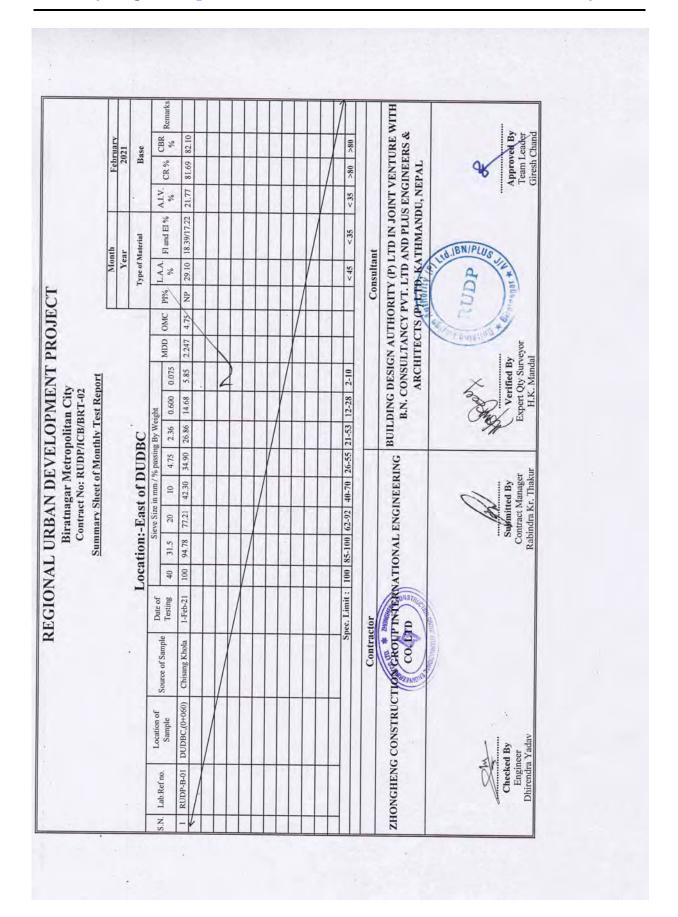






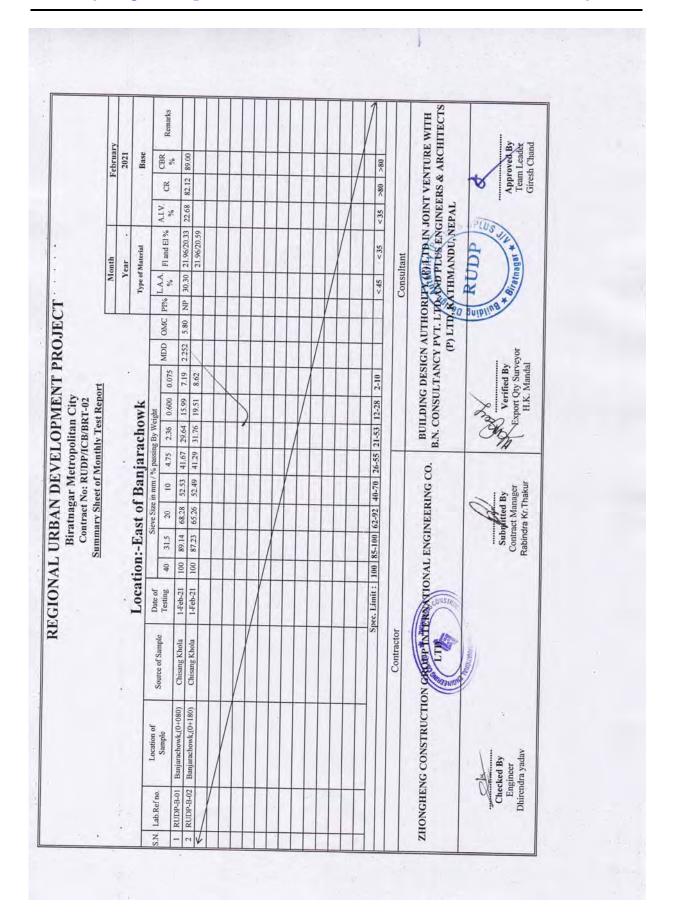
| | REGI | ONAL | Biratn Contrac | agar M | EVELO Ietropolit RUDP/ICB of Field Dens | an Cit | NT PRO | DJECT | |
|-------------|---|--|-------------------|---------|--|----------------------------|---|----------------------------|--------------------------|
| | | | | | | | Month | Febr | ruary |
| | | 4 | | | | | Year | 20 |)21 |
| Location:-I | | | | Keshali | ya Road | | Type of Material | | ase - |
| | 200 | | | Moistur | e content % | | sity(gm/cc) | Compa | ction % |
| Sn. | Lab.Ref.no | Testing Date | Chainage | OMC% | Field MC% | Max.Dr density gm/cc | density, | Compaction % | Specified % |
| 1 | RUDP-B-FD-1, R/S | 3-Feb-21 | 0+020 | 5.25 | 5.17 | 2.252 | _ | 99.07 | 98 |
| 2 | RUDP-B-FD-1, L/S | 3-Feb-21 | 0+080 | 5.25 | 5.08 | 2.252 | 2.222 | 98.66 | 98 |
| 3 | RUDP-B-FD-1, R/S | 3-Feb-21 | 0+120 | 5.25 | 4.16 | 2.252 | 2.241 | 99.53 | 98 |
| 4 | RUDP-B-FD-1, L/S | 3-Feb-21 | 0+160 | 5.25 | 3.88 | 2.252 | 2.232 | 99.12 | 98 |
| 5 | RUDP-B-FD-1, L/S | 3-Feb-21 | 0+200 | 5.25 | 4.61 | 2.252 | 2.227 | 98.91 | 98 |
| 6 | RUDP-B-FD-1, R/S | 3-Feb-21 | 0+250 | 5.25 | 3.33 | 2.252 | 2.227 | 98.87 | 98 |
| 7 | RUDP-B-FD-1, L/S | 3-Feb-21 | 0+290 | 5.25 | 3.54 | 2.252 | 2.213 | 98.26 | 98 |
| 8 | RUDP-B-FD-1, L/S | 3-Feb-21 | 0+340 | 5.25 | 4.39 | 2.252 | 2.234 | 99.19 | 98 |
| 9 | RUDP-B-FD-1, R/S | 3-Feb-21 | 0+380 | 5.25 | 3.80 | 2.252 | 2.246 | 99.73 | 98 |
| 10 | RUDP-B-FD-2, R/S | 3-Feb-21 | 0+430 | 5.25 | 3.69 | 2.252 | 2.244 | 99.64 | 98 |
| 11 | RUDP-B-FD-2, L/S | 3-Feb-21 | 0+460 | 5.25 | 4.82 | 2.252 | 2.227 | 98.87 | 98 |
| 12 | RUDP-B-FD-2, R/S | 3-Feb-21 | 0+500 | 5.75 | 3.47 | 2.250 | 2.247 | 99.87 | 98 |
| 13 | RUDP-B-FD-2, L/S | 3-Feb-21 | 0+540 | 5.75 | 3.25 | 2.250 | 2.245 | 99.79 | 98 |
| 14 | RUDP-B-FD-2, L/S | 3-Feb-21 | 0+580 | 5.75 | 4.43 | 2.250 | 2.231 | 99.14 | 98 |
| 15 | RUDP-B-FD-2, R/S | 3-Feb-21 | 0+600 | 5.75 | 3.33 | 2.250 | 2,225 | 98.90 | 98 |
| 16 | RUDP-B-FD-2, L/S | 3-Feb-21 | 0+640 | 5.75 | 4.29 | 2.250 | 2.197 | 98.62 | 98 |
| 17 | RUDP-B-FD-2, L/S | 3-Feb-21 | 0+690 | 5.75 | 3.99 | 2.250 | 2.227 | 98.99 | 98 |
| 18 | RUDP-B-FD-2, R/S | 3-Feb-21 | 0+720 | 5.75 | 3.84 | 2.250 | 2.225 | 98.89 | 98 |
| 19 | RUDP-B-FD-2, R/S | 4-Feb-21 | 0+760 | 5.75 | 4.49 | 2.250 | 2.231 | 99.15 | 98 |
| 20 | RUDP-B-FD-2, L/S | 4-Feb-21 | 0+790 | 5.75 | 5,29 | 2.250 | 2.217 | 98.51 | 98 |
| 21 | RUDP-B-FD-2, R/S | 4-Feb-21 | 0+810 | 5.75 | 4.16 | 2.250 | 2.227 | 98.96 | 98 |
| 22 | RUDP-B-FD-2, L/S | 4-Feb-21 | 0+850 | 5.75 | 3.88 | 2.250 | 2.212 | 98.32 | 98 |
| | | | | | | 2.200 | 2.212 | 70.92 | 70 |
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| | Coptrac | INTERIVATIONAL TELES | | | | auth | Consultant | | |
| 12 | ZHONGHENG CONST | RI CTION GRO | DUP LTD | BUILDIN | LTANCY PVT | ETO AN | Y (P) LTB IN VO D PLUS ENGIN THMANDU NE | EERS & ARCH | E WITH B.N ITECTS (P) |
| | Checked By Engineer Dhirendra Yaday | Submittee Contract Ma Rabindra Kr. | nager | Exp | Verified By Pert Qty Surveyo H.K. Mandal | upplind * 8iii | atnagar * his | Approved By Team Leader | |







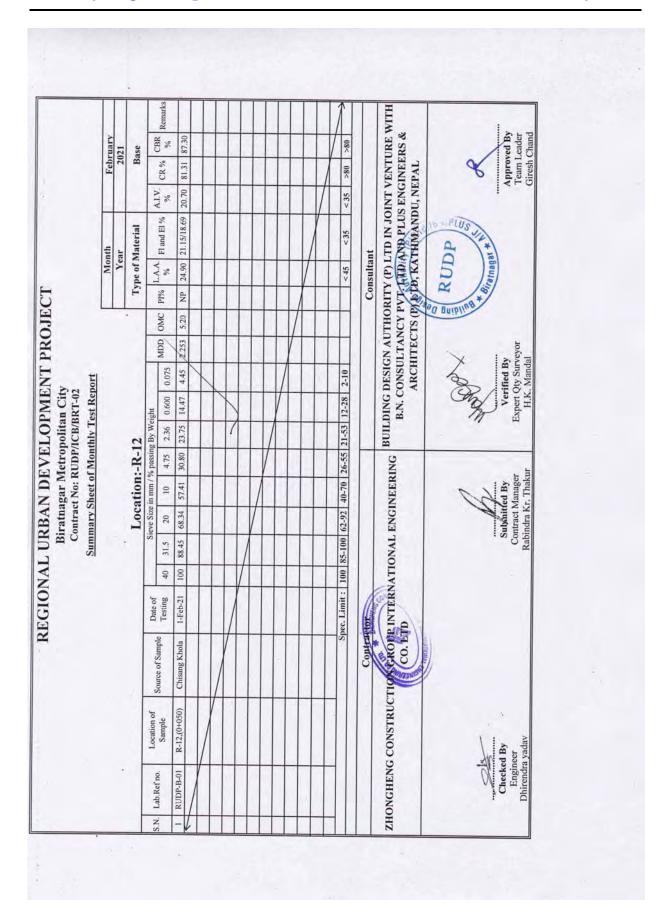
| | REGI | ONAL | Biratn Contra | agar N ct No:- | EVELO Ietropoli RUDP/ICI t of Field Den | tan City B/BRT-0 | NT PRO | JECT | |
|------|---|--|------------------|----------------------------------|--|---------------------|--|--|------------------------|
| | | | | | | | Month | Febr | |
| | | | | | | | Year | 20 | |
| | | | Loca | | e content % | | Type of Material | Ba | |
| Sn. | Lab.Ref.no | Testing Date | Chainaga | | | | ity(gm/cc) Field Dry | Compaction | ction % |
| Sii. | Lab.rel.no | resting Date | Chamage | OMC% | Field MC% | Max.Dry | Security of the Control of the Contr | % | Specified |
| 1 | RUDP-B-FD-1, R/S | 2-Feb-21 | 0+020 | 4.75 | 3.91 | density 2.247 | density, 2.242 | 99.79 | 98 |
| 2 | RUDP-B-FD-1, L/S | 2-Feb-21 | 0+055 | 4.75 | 4.06 | 2.247 | 2.223 | 98.92 | 98 |
| 3 | RUDP-B-FD-1, R/S | 2-Feb-21 | 0+080 | 4.75 | 5.34 | 2.247 | 2.223 | 98.37 | 98 |
| 1 | | 2100-21 | 0.000 | 4.13 | 5.54 | 2,241 | 2.210 | / | 98 |
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| | ON GROUP IN | ERMATION | | | | | | | |
| _ | Contrac | | | | | 1 | Consultant | | |
| 11 | ZHONGHENE CONST NTERNATIONAL ENGI | NEERING CO. | UP LTD | CONSU | LTANCY PV | THORIT | Y (P) LTD IN JO D PLUS ENGINE | ERS & ARCHI | WITH B.N. TECTS (P) |
| | Checked By Engineer Dhirendra Yaday | Submittee Contract Ma Rabindra Kr. | anager | Verif Expert Qty H.K. Mano | fied By Surveyor | Buillind + Bira | magar * Miss | Approved By Team Leader Giresh Chanc | |



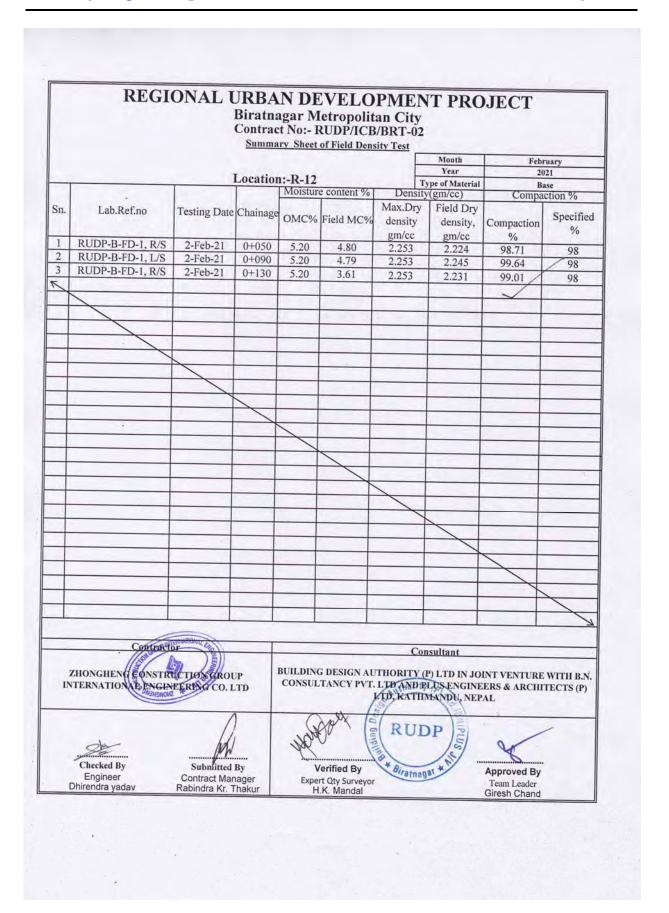


| | R | EGIONA | Bi | ratnaga ntract N | r Metrop | LOPMEN' colitan City (ICB/BRT-02 Density Test | Γ PRO. | JECT | |
|-----|--|---------------------------|----------|------------------------|---------------------------|---|--------------------------------|--------------------------------|------------------------------|
| | | | | | | | Month | F | ebruary |
| | | 7 2224 | | | | | Year | | 2021 |
| - | | Locat | ion:-Eas | t of Ban | jarachowk | | of Material | | Base |
| | | | | Moistur | e content % | Density(g | m/cc) | Com | paction % |
| Sn. | Lab.Ref.no | Testing Date | Chainage | OMC% | Field MC% | Max.Dry density gm/cc | Field Dry density, gm/ce | Compaction % | Specified % |
| 1 | RUDP-B-FD-1, R/S | 2-Feb-21 | 0+040 | 5.80 | 4.31 | 2.252 | 2.228 | 98.94 | 98 |
| 2 | RUDP-B-FD-1, L/S | 2-Feb-21 | 0+080 | 5.80 | 4.89 | 2.252 | 2.229 | 98.98 | 98 |
| 3 | RUDP-B-FD-1, R/S | 2-Feb-21 | 0+120 | 5.80 | 4.28 | 2.252 | 2.232 | 99.10 | 98 |
| 4 | RUDP-B-FD-1, L/S | 2-Feb-21 | 0+150 | 5.80 | 2.95 | 2.252 | 2.231 | 99.07 | 98 |
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| | Content | UP INTERNATIONS | - | | | - | | | |
| | 1/5 | 150 | 5 | | | Cor | sultant | | |
| 1 | ZHONGHENG CONSTRUCTION LENGTH | NEERING TO L | TD | BUILDING PVT. L | DESIGN AUT TD AND PLUS | HORIEND LTD I | JOINT VEN | TURE WITH B.N P) LTD, KATHM | i. CONSULTANO ANDU, NEPAL |
| | Sharing the same of the same o | 6 | 7 | 100 | Cool | RUD | P | 8 | |
| - | Checked By Engineer | Submitted Contract Mar | | Verifi kpert Qty Su | ed By | Biretnag | 81 7 | Approved | |
| | Ohirendra yadav | Rabindra Kr. T | | .K. Mandai | | | | Team Lead | er |

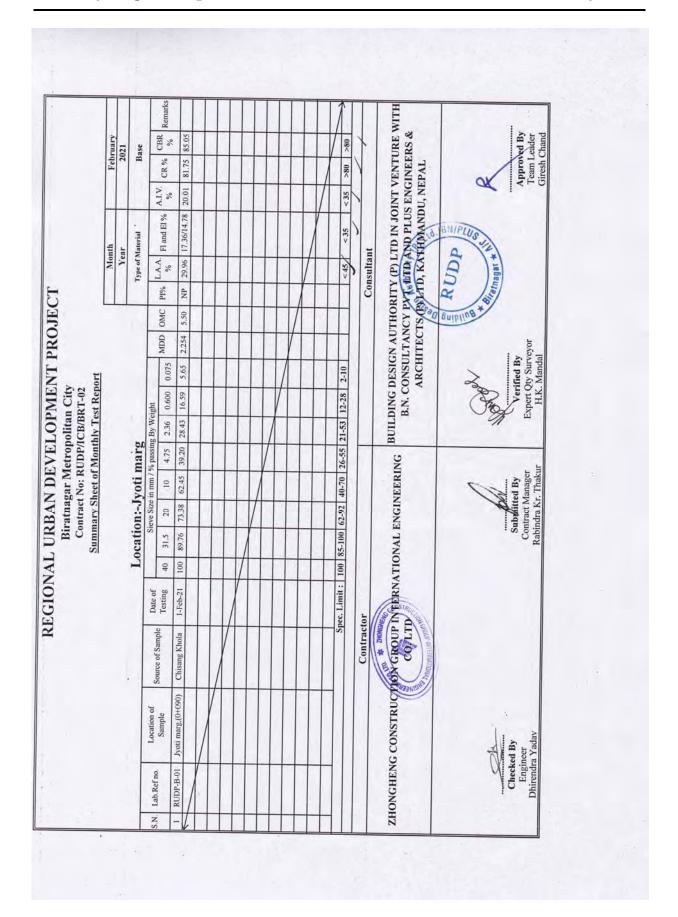








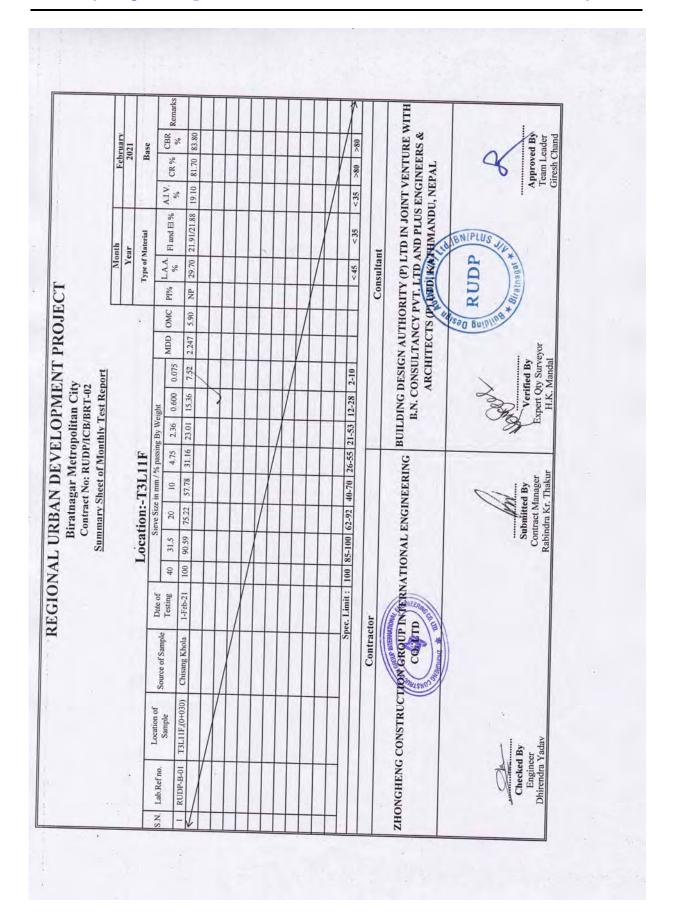






| | REGIO |)NAL U | livatnac | rar Ma | VELOI etropolita UDP/ICB/ | in City | | JECT | |
|-----|-----------------------------------|--------------|----------------|----------|----------------------------------|------------------|--|---------------------------------------|--------------------------|
| | | , | Summar | v Sheet | of Field Densi | ty Test | | | |
| | | | | | | | Month | Febru 202 | |
| | | | 2000 | | | - | Year | Ba | |
| | | Loc | ation:-Je | oyti ma | rg e content % | Densit | ype of Material y(gm/cc) | Compac | ction % |
| | | | - | Moisture | Content 70 | Max.Dry | The second secon | | Specified |
| Sn. | Lab.Ref.no | Testing Date | Chainage | OMC% | Field MC% | density gm/cc | density, gm/cc | Compaction % | % |
| | | | 01040 | 5.50 | 5.43 | 2.254 | 2.235 | 99.17 | 98 |
| 1 | RUDP-B-FD-1, L/S | 1-Feb-21 | 0+040 | 5.50 | 5.21 | 2.254 | 2.217 | 98.36 | 98 |
| 2 | RUDP-B-FD-1, C/L | 1-Feb-21 | 0+080 | 5.50 | 5.38 | 2.254 | 2.213 | 98.20 | 98 |
| 3 | RUDP-B-FD-1, R/S | 1-Feb-21 | 0+150 | 3.30 | 5,50 | | | 1 | |
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| | Cont | ractornanona | | | | | Consultant | Territory o | 1.8. A. S. E. E. |
| | ZHONGHENG CON INTERNATIONAL EN | CHARTION | ROUP O. LTD | BUIL | SULTANCY | SLITD, K | ATHMANDU, | N JOINT VENT GINEERS & AR NEPAL | URE WITH E CHITECTS (|
| | Checked By Engineer | | nitted By | Expert | ed By Otty Surveyor Mandal | Sun RI | Gratnaga ** | Approve Team Le Giresh C | ader |







| | | | Sum | mary Sh | :- RUDP/IC | ensity Test | i c | | |
|-----|---|---|----------|-------------------------------------|--------------|----------------------------|---|-----------------------------------|--------------------------|
| | | | | | | | Month Year | | bruary 2021 |
| | | | ocation: | | F content % | | Type of Material | | Base |
| Sn. | Tel-D-C | | | IVIOISIU | re content % | Dens | sity(gm/cc) | Comp | action % |
| 1 | Lab.Ref.no | Testing Date | - | ОМС% | Field MC% | Max.Dr density gm/cc | density | Compactio n % | Specified % |
| 2 | RUDP-B-FD-1, RHS | 1-Feb-21 1-Feb-21 | 0+020 | 5.90 | 5.07 | 2.247 | 2.209 | 98.29 | 98 |
| | Rebi Bibi, Kils | 1-Feb-21 | 0+060 | 5.90 | 4.93 | 2.247 | 2.233 | 99.38 | 98 |
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| - | Contracto | UP INTERNATIONAL | | | | C | onsultant | | 1 |
| Z | HONGHENG CONSTRU TERNATIONAL ENGINE | CTION GROUDERING CO. | rD C | BUILDIN | | Katti | (P) LTD IN JOIN US ENGINEERS IANDY, NEPAL | & ARCHITEC | VITH B.N. TS (P) LTD, |
| | Checked By Engineer irendra Yaday | Submitted B Contract Mana Rabindra Kr. Th | ger Expe | Verified ert Qty Sur . Mandal | и Бу | RU RU | 15 | Approved E Team Leade Giresh Chan | |

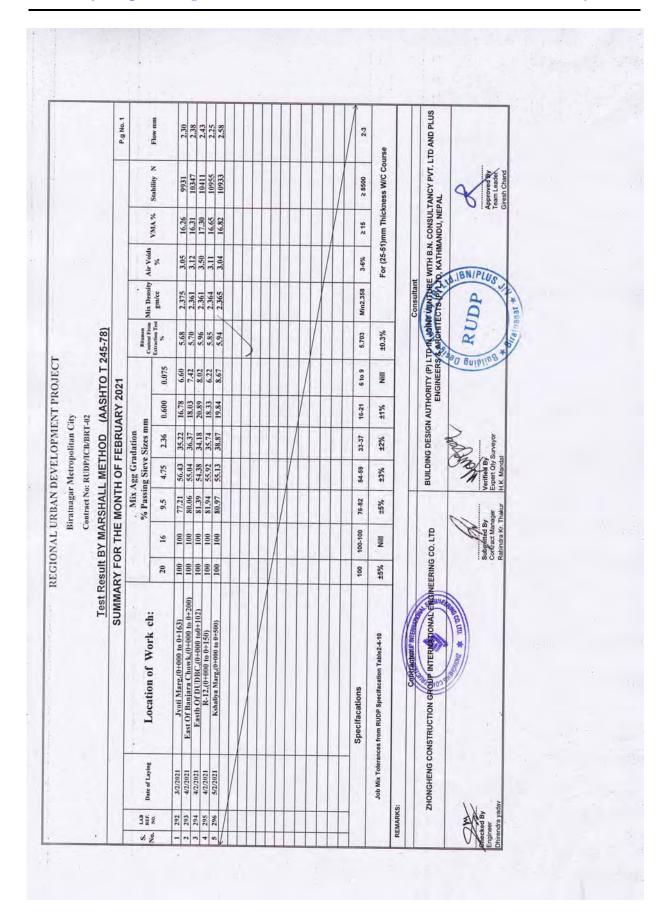


| 02 ming work | SUMMARY FOR THE MONTH OF FEBRUARY 2021 | Page no 1 of 1 | Total Bitumen Application Rate Application Rate Area M2 Consumption (Ltr) By Deep Ltr/m2 Bt Tray Test Ltr/m2 | 1.07 | 1550.00 1610 1.03 1.04 | 744.60 800 1.07 1.04 | 516.00 540 1.05 1.03 | 4050.00 4400 1.09 1.05 | Total 8225 | | | Specific Gravity of Bitumen 1.020 | Consultant | BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY PVT. LTD AND RLUS ENGINEERS & ARCHITECTS (P) LTD (ASTHMANDU, NEPAL | d By Approved By Approved By Team Leader Team Leader Team Leader Team Leader |
|--|--|------------------------------|--|------------|------------------------|----------------------|----------------------|------------------------|------------|--|-----------|---|------------|---|--|
| Contract No: RUDP/ICB/BRT-02 Daily Application Rate Check for Priming work | E MONTH O | | Intersection Area m2 | 0.00 | 0.00 | 00:00 | 0.00 | 0.00 | | | | | | BUILDING D | Averified By Experiment Of Surveyor H.K. Mandal |
| et No: RUD | RY FOR TH | | Area of Priming (m2) | 815.00 | 1560.00 | 744.60 | 516.00 | 4050.00 | | | | t 1.0 Lit/M | | RING CO. | Subfaitted By Contract Manager Rabindra Kr. Thakur |
| Contrac | SUMMAR | | Side of Priming | Both side | Both Side | Both Side | Both Side | Both Side | | | | rime coa | | ERNATIONAL ENGINEERING CO. | Subfiited By Contract Manager Rabindra Kr. Thaker |
| Daily | | | Station n to | 0+163 | 0+200 | 0+102 | 0+150 | 0+200 | | | 1*% // | ion for | | NATION | |
| | | | Sta | 0+000 | 000+0 | 000+0 | 000+0 | 0+000 | | | | ecificat | Contractor | | A LEADING MITES |
| | O | AC30 | Date of Priming | 2-Feb-21 | 3-Feb-21 | 3-Feb-21 | 3-Feb-21 | 04-Feb-21 | | | | Required specification for Prime coat 1.0 Lit/M2 ± 5% | Con | CTION GRO | AND MIEHARDING |
| | Type of Bitumen:80/100 P.G | Cutter Percentage:MC 70:MC30 | Location | Jyoti marg | East of Banjarachowk | East of DUDBC | R-12 | Keshaliya Marg | | | | Re | | ZHONGHENG CONSTRUCTION GROUP IN | Checked By Engineer Dhirendra Yadav |
| | Type o | Cutter | N ON | - | 2 | 60 | 4 | 2 | | | | | | ZHO | , - |

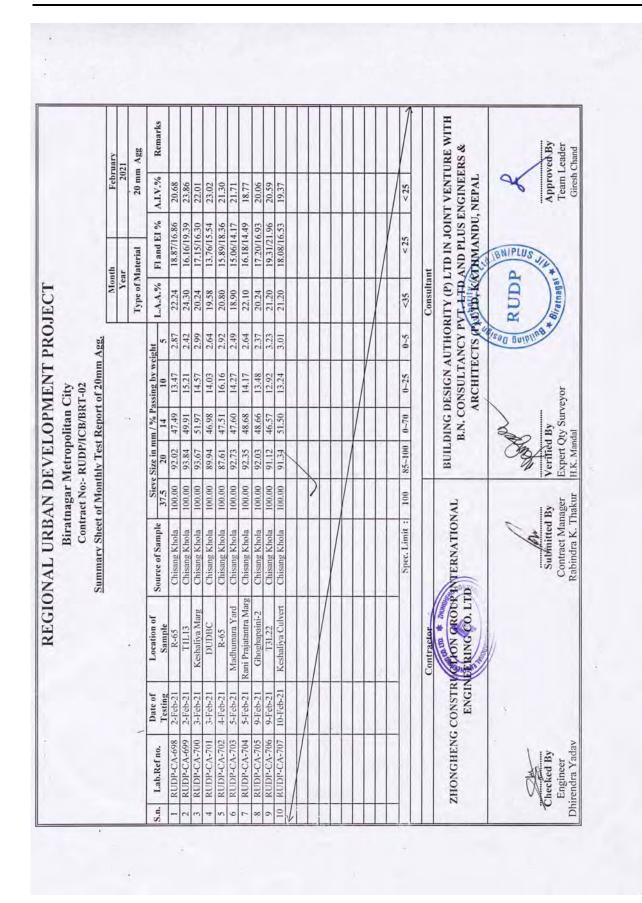


| | | α Ο | EGIONAI I Co aily Appli | REGIONAL URBAN DEVELOPMENT PROJECT Biratnagar Metropolitan City Contract No: RUDP/ICB/BRT-02 | EVELOPN Tetropolita UDP/ICB/ | IENT PRO. n City BRT-02 | ECT | | | |
|---|-----------------------|------------|----------------------------------|--|------------------------------------|---|------------------------------------|--------------------------|--|---|
| Type of Bitumen:80/100 P.G | | | SUMMARY | SUMMARY FOR THE MONTH OF FEBRUARY-2021 | ONTH OF F | EBRUARY-2 | 021 021 | | | |
| Location | Date of | | Station | Side of | Area of | Intersection | Total | | | Page no 1 of 1 |
| Jvoti mara | Rack coat | From | to | Tack coat | Tack coat | Area m2 | Area M2 | Consumption | Application Rate By Dip Lit/m2 | Application Rate |
| 0 | 70010 | 000+0 | 0+163 | BHS | 815 | 0 | 815.00 | 470 | | 0.56 |
| East of banjarachowk | 4-Feb-21 | 0+000 | 0+200 | BHS | 926.6 | 0 | 1560 | 860 | 0.55 | 0.53 |
| East of DUDBC | 4-Feb-21 | 000+0 | 0+102 | BHS | 744.6 | 0 | 744.60 | 400 | 240 | |
| C, C | | | | | | | | 200 | 40.0 | 0.55 |
| N-12 | 4-Feb-21 | 000+0 | 0+150 | BHS | 009 | 0 | 00.009 | 320 | 0.53 | 0.56 |
| Keshaliya marg | 5-Feb-21 | 000+0 | 0+200 | BHS | 4050 | 0 | 4050.00 | 2250 | 0.56 | 0.54 |
| | | | | | | | Total | 4300 | | |
| Required | 10000 | | | | | | | | | |
| Dalinhavi | nequired tack coat is | 3.0 | 40 to 0.6 | 0.40 to 0.60Lit/M2 / | Accordin | According to Road Note -3, Section 711.2 | d Note -3 | ,Section | 711.2 | |
| | | | Speci | Specific Gravity of Bitumen 1.020 | of Bitume | n 1.020 | | | | |
| | Contr | Contractor | ONGE | | | | | Concultant | ţuc. | |
| ZHONGHENG CONSTRUCTION GROUPS INTERIOR | N GROUPE | NTERNAT | ATIONAL ENG | NATIONAL ENGINEERING CO. LTD | | BUILDING D B.N. CO A | ESIGN AUT NSULTANO RCHITECTS | PATITY OF | DESIGN AUTHORITY (PLTD IN JOINT VENT ONSULTANOX PYT. LTD AND PLUS ENGINE ARCHITECTS (P) LTD, KATHMANDII NEDALI | BUILDING DESIGN AUTHORITY (P) LTD IN JOINT VENTURE WITH B.N. CONSULTANCY BYT. LTD AND PLUS ENGINEERS & ARCHITECTS (P) LTD. KATHMANDI! NEDA! |
| Checked By Engineer Dhirendra Yadav | | | | Submitted By Contract Manager Rabindra Kr, Thakur | | Verified By Expert Qty Surveyor H.K. Mandal | veyor | RUDP * Siliatinagat * | WPLUS JA | Approved By |
| | | | | | | | | | 5 | con Chand |









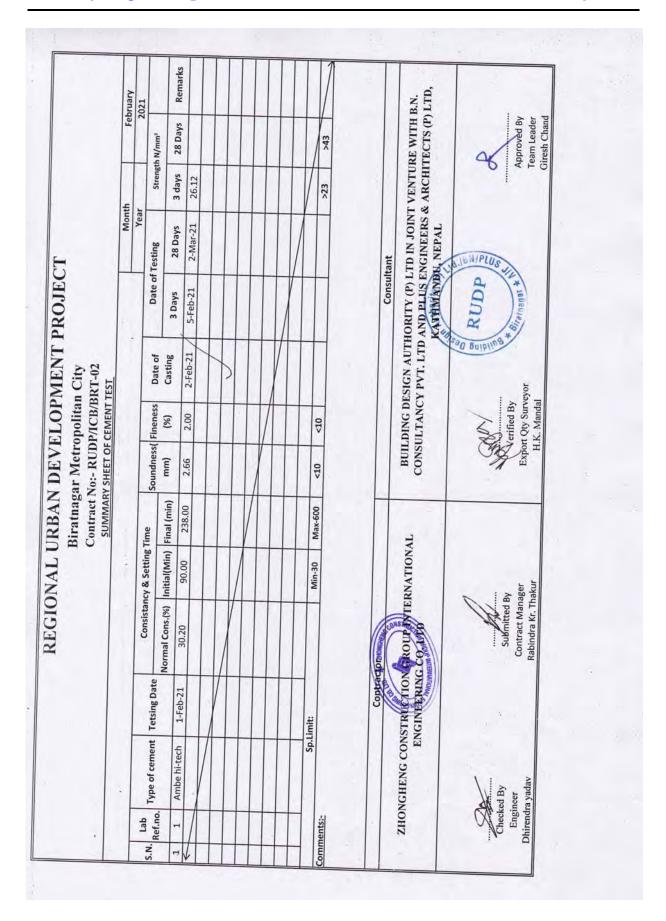






| | | | | RBAN DEV Biratnagar Met ontract No:- RU | ropolitan (| City | ECT | |
|------|-----------------------------|--------------|---|---|------------------|--|--|------------------|
| | | | | mary Sheet Of M | | | | |
| | | 5. | - | | | Treport. | Month | February |
| | | | | | | | Year | 2021 |
| s.n. | Lab Ref.No. | Testing Date | Location of Sample | Source of Brick | Name of Brick | Water Absorption of Brick(%) | Type of Material Strength of Brick(N/mm²) | Brick Remarks |
| 1 | 1359 | 1-Feb-21 | R-72 | Dadarbairya | Aanand | 13.82 | | |
| 2 | 1360 | 1-Feb-21 | Rani Prajatantra Marg | Dadarbairya | Aanand | 13.78 | 16.11 | |
| 3 | 1361 | 2-Feb-21 | R-65 | Dadarbairya | Aanand | 14.02 | 14.14 | |
| 4 | 1362 | 3-Feb-21 | R-72 | Dadarbairya | Aanand | 13.51 | 15.66 | |
| 5 | 1363 | 4-Feb-21 | R-65 | Dadarbairya | ACC | 16.14 | 15.00 | |
| 6 | 1364 | 5-Feb-21 | Rani Prajatantra Marg | Dadarbairya | ACC | 14.64 | 16.03 | |
| 7 | 1365 | 6-Feb-21 | Rani Prajatantra Marg | Dadarbairya | ACC | 13.90 | 15.04 | |
| 1 | | | | | nec | 15.70 | 15.04 | |
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| | | | Sp. Limit | | | <20% | >8 to 10 N/mm ² | |
| omr | nents:- | | Cantractor 2 | | | Consu | lltant | |
| Z | HONGH | | ECTION CROUP LEVEL | RNATIONAL | WITH B.N. (| DESIGN AUTHORIT CONSULTANCE EVIL CHITEOTE (P) LTD, | LTD AND PLUS EN | GINEERS & |
| Eng | ked By ineer ra Yaday | | Submitted I Contract Man Rabindra Kr. T | ager | | RUI *Biratnag erified By t Qly Surveyor | 15/ | Ву |







| | | REGI | E | Biratnag Contract | N DEVELO gar Metropol No:- RUDP/IC heet of Mortar | itan City B/BRT-02 | | DJECT | | | |
|---------|------------------|-----------------|-----------------|----------------------|--|-----------------------|-----------|----------------|----------|---------------|---------|
| | | | | | | | | Page no | . 1 of 1 | | |
| | | | | | | | | Month | | Feb | ruary |
| | | | | | | | | Year | | | 021 |
| b. | | | | | | | Descr | iption of Samp | nle | | k Wall |
| No. | | Lab | | | | | | of Testing | | | 77 411 |
| S.N. | Location | Ref.no. | Type of Cement | Brand of Cement | Source of Sand | Date of Casting | 7 Days | 28 Days | 7 Days | , N/mm2 28 | Type of |
| 1 | R-72 | MR-3014 | Ambe Hi-Tech | OPC | Chisang Khola | 71-01 | | | Days | Days | |
| 2 | R-65 | MR-3015 | Ambe Hi-Tech | OPC | Chisang Khola | 7-Jan-21 | 14-Jan-21 | 4-Feb-21 | | 9.71 | 7.5 |
| 3 | R-72 | MR-3016 | Ambe Hi-Tech | OPC | | 9-Jan-21 | 16-Jan-21 | 6-Feb-21 | | 8.90 | 7.5 |
| 4 | R-65 | MR-3017 | Ambe Hi-Tech | | Chisang Khola | 25-Jan-21 | 1-Feb-21 | 22-Feb-21 | 6.47 | | 7.5 |
| 5 | Rani Prajatantra | MR-3018 | Ambe Hi-Tech | OPC | Chisang Khola | 27-Jan-21 | 3-Feb-21 | 24-Feb-21 | 6.07 | | 7.5 |
| 6 | R-72 | | | OPC | Chisang Khola | 30-Jan-21 | 6-Feb-21 | 27-Feb-21 | 6.74 | | 7.5 |
| 2 | N-12 | MR-3019 | Ambe Hi-Tech | OPC | Chisang Khola | 1-Feb-21 | 8-Feb-21 | 1-Mar-21 | 7.15 | | 7.5 |
| | | | | | | | | | / | | 7.0 |
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| INTE | RNATIONAL | ENGINE | RING CO. L | TD | ENGINEER | S & AROU | TECTE | P) I TD V | TIDA | ANDY | LUS |
| | SONOMINEN | W OU DAY | / | | | No. of | NEPAL | I) LID, KA | THM | ANDU | , |
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| cked I | By | | | | | OIII | 15 | | | | |
| ineer | , | | Submitted 1 | | erified By | 10 | 15/ | | Appro | oved B | y |
| endra Y | /aday | | Contract Man | | xpert Qty Surve | yor * Birate | agar | | | Leade | |
| unuld I | auav | | Rabindra Kr. Th | akur H | .K. Mandal | | | | | Chanc | |



| | | | REGIO | | JRBAN DE Biratnagar M Contract No:- R nary Sheet of Co | etropolita UDP/ICB/ | n City BRT-02 | PROJE | СТ | | |
|-------|------------------------|------------------------|---|------------|---|------------------------|--------------------------------------|------------------------|----------|-------------------------------------|---------------|
| | | | | | | | | | | Page No 1 of | |
| | | | | | | | | Month | | | oruary 021 |
| | | | 1 | | | | 1 | ype of Mater | ial | | . Cube |
| S.N. | Location | Lab Ref.no. | Type of Cement | Brand o | | Date of | | Testing | | th, N/mm2 | Concrete |
| 0 | R-65 | RUDP-3805 | Ambe Hi-Tech | OPC | | Casting | 7 Days | 28 Days | 7 Days | 28 Days | Grade |
| 2 | Bargachhi,(0+320) | -RUDP-3806 | Ambe Hi-Tech | OPC | Chisang Khola | 10-Jan-21 | 17-Jan-21 | 7-Feb-21 | | 22.28 | M20 |
| 3 | TIL13 | RUDP-3807 | Ambe Hi-Tech | OPC | Chisang Khola Chisang Khola | 12-Jan-21 25-Jan-21 | 19-Jan-21 | 9-Feb-21 | | 21.42 | M20 |
| 4 | R-65 | RUDP-3808 | Ambe Hi-Tech | OPC | Chisang Khola | 25-Jan-21 | 1-Feb-21 1-Feb-21 | 22-Feb-21 22-Feb-21 | 16.52 | | M20 |
| 5 | Keshaliya Culvert | RUDP-3809 | Ambe Hi-Tech | OPC | Chisang Khola | 26-Jan-21 | 2-Feb-21 | 23-Feb-21 | 16.76 | | M20 |
| 6 | Keshaliya Culvert | RUDP-3810 | Ambe Hi-Tech | OPC | Chisang Khola | 26-Jan-21 | 2-Feb-21 | 23-Feb-21 | 19.61 | | M25 |
| 7 | DUDBC | RUDP-3811 | Ambe Hi-Tech | OPC | Chisang Khola | 26-Jan-21 | 2-Feb-21 | 23-Feb-21 | 17.69 | | M25 M20 |
| 9 | T3L22 R-65 | RUDP-3812 | Ambe Hi-Tech | OPC | Chisang Khola | 27-Jan-21 | 3-Feb-21 | 24-Feb-21 | 16.76 | | M20 |
| .10 | Keshaliya Culvert | RUDP-3813 RUDP-3814 | Ambe Hi-Tech | OPC | Chisang Khola | 27-Jan-21 | 3-Feb-21 | 24-Feb-21 | 17.85 | | M20 |
| н | R-65 | RUDP-3815 | Ambe Hi-Tech | OPC | Chisang Khola | 27-Jan-21 | 3-Feb-21 | 24-Feb-21 | 18.79 | | M25 |
| 12 | Keshaliya Culvert | RUDP-3816 | Ambe Hi-Tech | OPC | Chisang Khola | 27-Jan-21 | 3-Feb-21 | 24-Feb-21 | 16.29 | | M20 |
| 13 | Keshaliya Culvert | RUDP-3817 | Ambe Hi-Tech | OPC | Chisang Khola Chisang Khola | 29-Jan-21 | 5-Feb-21 | 26-Feb-21 | 19.03 | | M25 |
| 14 | Keshaliya Culvert | RUDP-3818 | Ambe Hi-Tech | OPC | Chisang Khola | 29-Jan-21 29-Jan-21 | 5-Feb-21 | 26-Feb-21 | 19.45 | | M25 |
| 15 | R-12 | RUDP-3819 | Ambe Hi-Tech | OPC | Chisang Khola | 29-Jan-21 29-Jan-21 | 5-Feb-21 5-Feb-21 | 26-Feb-21 26-Feb-21 | 19.03 | | M25 |
| 16 | Rami Prajatanra Marg | RUDP-3820 | Ambe Hi-Tech | OPC | Chisang Khola | 30-Jan-21 | 6-Feb-21 | 20-Feb-21 27-Feb-21 | 16.47 | | M20 |
| 17 | Keshaliya Culvert | RUDP-3821 | Ambe Hi-Tech | OPC | Chisang Khola | 30-Jan-21 | 6-Feb-21 | 27-Feb-21 | 16.05 | | M25 |
| 18 | Keshaliya Culvert | RUDP-3822 | Ambe Hi-Tech | OPC | Chisang Khola | 2-Feb-21 | 9-Feb-21 | 2-Mar-21 | 18.59 | | M20 |
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| - | | Contractor | | | | | Cons | sultant | | | 1 |
| ZI | IONGHENGA ERNATIONA | ONSTRU- L ENGINE | CTION GRO | DUP LTD | BUILDING DE CONSULTAN | CI PVI. | THORFTY (P LIDAND PL TD, KATHM | US ENGIN | EERS & A | TURE WIT | TH B.N. |
| Sh | d By | THOWAY A ZHONG | | | Man and a second | O no. | 120 | | | V | |
| ginee | | * | Submitted Contract Ma Rabindra K.Tl | nager | Verified By Expert Qty Surve H.K. Mandal | yor | * Biratna | 181 | Tea | oroved By Im Leader esh Chand | |



ANNEX - 3.a (Water Test Report)





(Morang Merchants' Association Complex) Pdt Meghraj Marga (Goshwara Road), Biratnagar-7, Nepal

Tel: +977-21-576887 Fax: +977-21-524732

Date: 4th January 2021

Test Report

Name of the Client Aashish Nirman Sewa (P) Ltd. Location Biratnagar, Morang Sampled by Client Date of Collection 30-12-2020 Source of Sample Bore Well Date of Analysis 31-12-2020 Type of Sample Drinking Water Date of Completion 04-01-2021 Sample code No SN- 276 A (W) 2020 Client Code Office

| SN | Parameters | Units | WHO guideline value | NDWQS (MCL) | Results | Method |
|----|--|------------|---------------------|-------------|------------|----------------|
| 1 | pH | | 6.5 - 8.5 | 6.5 - 8.5 | 6.75 | APHA-4500 H+ |
| 2 | Conductivity | μS/cm | | 1500 | 685 | APHA-2510 |
| 3 | Turbidity | NTU | 5 | 5(10) | 0 | APHA-2130B |
| 4 | Colour | Hazen | 15 | 5(15) | 0.5 | APHA-2120 C |
| 5 | Total dissolved solids | mg/L | 1000 | 1000 | 342.5 | APHA-2540 C |
| 6 | Fluoride as (F) | mg/L | 1.5 | 0.5-1.5 | 0.47 | APHA-2500 D |
| 7 | Ammonia as (NH ₄ -N) | mg/L | 1.5 | 1.5 | <0.05 | APHA-4500 |
| 8 | Nitrate as (NO ₃ -N) | mg/L | 50 | 50 | <0.05 | APHA-4500 |
| 9 | Chloride as (CI) | mg/L | 250 | 250 | 113.96 | APHA-2500 B |
| 10 | Total Hardness as (CaCO ₃) | mg/L | 500 | 500 | 223 | APHA-2340 |
| 11 | Calcium | mg/L | | 200 | 42.88 | APHA-3500 |
| 12 | Iron (Fe) | mg/L | 0.3 | 0.3(3) | 0.37 | APHA-3111 B |
| 13 | Manganese (Mn) | mg/L | 0.1 | 0.2 | 1.69 | APHA-3111 B |
| 14 | Arsenic (As) | mg/L | 0.01 | 0.05 | <0.005 | APHA-3500-As B |
| 15 | Total Coliform | CFU/100 ml | Nil | Nil | 10 | APHA-9215 |
| 16 | Fecal Coliform | CFU/100 ml | Nil | Nil | 6 | APHA-9215 |
| 17 | Zinc as (Zn) | mg/L | | 3 | <0.05 | APHA-3111 B |
| 18 | Lead as (Pb) | mg/L | | 0.01 | 0.1 | APHA-3111 B |
| 19 | Cadmium as (Cd) | mg/L | | 0.003 | <0.003 | APHA-3111 B |
| 20 | T- Chromium as (T-Cr) | mg/L | | 0.05 | <0.05 | APHA-3111 B |
| 21 | Residual Chlorine | mg/L | | 0.1-0.2 | 0 | APHA-4500 |
| 22 | Sulphate | mg/L | 4 5 | 250 | 29 | Gravimetric |
| 23 | Odour | | | | Odourless: | Sensory |

Comment: Except Iron, Manganese, Lead, Total Coliform & Fecal Coliform, other obtained results are within the range of National Drinking Water Quality Standard (NDWQS).

MCL: Maximum Concentration Limit.

Analyst

Authorized signature Lab In-charge

P.O. Box 104, Email: nenscbri@gmail.com /seamnmnaesc@gmail.com







(Morang Merchants' Association Complex) Pdt. Meghraj Marga (Goshwara Road), Biratnagar-7, Nepal

Tel: +977-21-576887 Fax: +977-21-524732

Date: 4th January 2021

Test Report

| Name of the Client | Aashish Nirman Sewa (P) Ltd. | Location | Biratnagar, Morang |
|--------------------|------------------------------|--------------------|--------------------|
| Sampled by | Client | Date of Collection | 30-12-2020 |
| Source of Sample | Bore Well | Date of Analysis | 31-12-2020 |
| Type of Sample | Drinking Water | Date of Completion | 04-01-2021 |
| Sample code No | SN- 276 B (W) 2020 | Client Code | Koshi Yard |

| SN | Parameters | Units | WHO guideline value | NDWQS (MCL) | Results | Method |
|----|--|------------|---------------------|-------------|------------|----------------|
| 1 | pH | - | 6.5 - 8.5 | 6.5 - 8.5 | 6.71 | APHA-4500 H |
| 2 | Conductivity | μS/cm | | 1500 | 336 | APHA-2510 |
| 3 | Turbidity | NTU | 5 | 5(10) | 8 | APHA-2130E |
| 4 | Colour | Hazen | 15 | 5(15) | 0.5 | APHA-2120 C |
| 5 | Total dissolved solids | mg/L | 1000 | 1000 | 168 | APHA-2540 C |
| 6 | Fluoride as (F) | mg/L | 1.5 | 0.5-1.5 | 0.48 | APHA-2500 D |
| 7 | Ammonia as (NH ₄ -N) | mg/L | 1.5 | 1.5 | 0.07 | APHA-4500 |
| 8 | Nitrate as (NO ₃ -N) | mg/L | 50 | 50 | <0.05 | APHA-4500 |
| 9 | Chloride as (CI) | mg/L | 250 | 250 | 25 | APHA-2500 B |
| 10 | Total Hardness as (CaCO ₃) | mg/L | 500 | 500 | 113 | APHA-2340 |
| 11 | Calcium | mg/L | 1 | 200 | 28.46 | APHA-3500 |
| 12 | Iron (Fe) | mg/L | 0.3 | 0.3(3) | 5.57 | APHA-3111 B |
| 13 | Manganese (Mn) | mg/L | 0.1 | 0.2 | 1.05 | APHA-3111 B |
| 14 | Arsenic (As) | mg/L | 0.01 | 0.05 | <0.005 | APHA-3500-As B |
| 15 | Total Coliform | CFU/100 ml | Nil | Nil | Nil | APHA-9215 |
| 16 | Fecal Coliform | CFU/100 ml | Nil | Nil | Nil | APHA-9215 |
| 17 | Zinc as (Zn) | mg/L | | 3 | <0.05 | APHA-3111 B |
| 18 | Lead as (Pb) | mg/L | 1 | 0.01 | 0.12 | APHA-3111 B |
| 19 | Cadmium as (Cd) | mg/L | - | 0.003 | <0.003 | APHA-3111 B |
| 20 | T- Chromium as (T-Cr) | mg/L | | 0.05 | <0.05 | APHA-3111 B |
| 21 | Residual Chlorine | mg/L | | 0.1-0.2 | 0 | APHA-4500 |
| 22 | Sulphate | mg/L | | 250 | 28 | Gravimetric |
| 23 | Odour | | | | Odourless. | Sensory |

Comment: Except Turbidity, Iron, Manganese & Lead, other obtained results are within the range of National Drinking Water

Quality Standard (NDWQS).

MCL: Maximum Concentration Limit.

At Scrifelow

drinking

Authorized signature
Lab In-charge

Prepared by

Jour Party

P.O. Box 104, Email: nenscbrt@gmail.com /seamnmmaesc@gmail.com







(Morang Merchants' Association Complex) Pdt Meghraj Marga (Goshwara Road), Biratnagar-7, Nepal

Tel: +977-21-576887 Fax: +977-21-524732

Date: 4th January 2021

Test Report

Name of the Client Aashish Nirman Sewa (P) Ltd. Location Biratnagar, Morang Sampled by Date of Collection 30-12-2020 Source of Sample Bore Well Date of Analysis 31-12-2020 Type of Sample Drinking Water Date of Completion 04-01-2021 Sample code No SN- 276 C (W) 2020 Client Code Staff Camp- Shanti Chowk House

| SN | Parameters | Units | WHO guideline value | NDWQS (MCL) | Results | Method |
|-----|--|---------------|---------------------|-------------|------------|----------------|
| 1 | pH | - | 6.5 - 8.5 | 6.5 - 8.5 | 6.58 | APHA-4500 H4 |
| 2 | Conductivity | μS/cm | | 1500 | 271.3 | |
| 3 | Turbidity | NTU | 5 | 5(10) | >10 | APHA-2510 |
| 4 | Colour | Hazen | 15 | 5(15) | 1 | APHA-2130B |
| 5 | Total dissolved solids | mg/L | 1000 | 1000 | | APHA-2120 C |
| 6 | Fluoride as (F) | mg/L | 1.5 | 0.5-1.5 | 135.65 | APHA-2540 C |
| 7 | Ammonia as (NH ₄ -N) | mg/L | 1.5 | | 0.31 | APHA-2500 D |
| 8 | Nitrate as (NO ₃ -N) | mg/L | 50 | 1.5 | <0.05 | APHA-4500 |
| 9 | Chloride as (CI) | mg/L | | 50 | <0.05 | APHA-4500 |
| 10 | Total Hardness as (CaCO ₃) | mg/L | 250 | 250 | 15 | APHA-2500 B |
| 11 | Calcium | | 500 | 500 | 89 | APHA-2340 |
| 12 | Iron (Fe) | mg/L | - | 200 | 26.45 | APHA-3500 |
| 13 | | mg/L | 0.3 | 0.3(3) | 28.67 | APHA-3111 B |
| 14 | Manganese (Mn) | mg/L | 0.1 | 0.2 | 1.96 | APHA-3111 B |
| | Arsenic (As) | mg/L | 0.01 | 0.05 | <0.005 | APHA-3500-As B |
| 15 | Total Coliform | CFU/100 ml | Nil | Nil | 5 | APHA-9215 |
| 16 | Fecal Coliform | CFU/100 ml | Nil | Nil | 3 | APHA-9215 |
| 17 | Zinc as (Zn) | mg/L | | 3 | 0.05 | APHA-3111 B |
| 8 | Lead as (Pb) | mg/L | | 0.01 | 0.11 | |
| 9 | Cadmium as (Cd) | mg/L | | 0.003 | <0.003 | APHA-3111 B |
| 0 | T- Chromium as (T-Cr) | mg/L | | 0.05 | 20000 | APHA-3111 B |
| 1 | Residual Chlorine | mg/L | | | 0.08 | APHA-3111 B |
| 2 | Sulphate | mg/L | | 0.1-0.2 | 0 | APHA-4500 |
| 3 | Odour | mg/L | * | 250 | 37 | Gravimetric |
| mme | ent: Except Turbidity, Iron, Mar | manage Lond T | No. of the same | | Odourless. | Sensory |

the range of National Drinking Water Quality Standard (NDWQS)
MCL: Maximum Concentration Limit.

Analyst

Authorized signature

P.O. Box 104, Email. nenscbrt@gmail.com /seamnmmaesc@gmail.com





(Morang Merchants' Association Complex) Pdt.Meghraj Marga (Goshwara Road), Biratnagar-7, Nepal

Tel: +977-21-576887 Fax: +977-21-524732

Date: 4th January 2021

Test Report

Name of the Client Aashish Nirman Sewa (P) Ltd. Location Biratnagar, Morang Sampled by Client Date of Collection 30-12-2020 Source of Sample Bore Well Date of Analysis 31-12-2020 Type of Sample Drinking Water Date of Completion 04-01-2021 Sample code No SN- 276 D (W) 2020 Client Code Madhumara Yard

| SN | Parameters | Units | WHO guideline value | NDWQS (MCL) | Results | Method |
|----|--|------------|---------------------|-------------|-----------|----------------|
| 1 | pH | - | 6.5 - 8.5 | 6.5 - 8.5 | 6.68 | APHA-4500 H+ |
| 2 | Conductivity | μS/cm | | 1500 | 492 | APHA-2510 |
| 3 | Turbidity | NTU | 5 | 5(10) | >10 | APHA-2130B |
| 4 | Colour | Hazen | 15 | 5(15) | 0.5 | APHA-2120 C |
| 5 | Total dissolved solids | mg/L | 1000 | 1000 | 246 | APHA-2540 C |
| 6 | Fluoride as (F) | mg/L | 1.5 | 0.5-1.5 | 0.24 | APHA-2500 D |
| 7 | Ammonia as (NH ₄ -N) | mg/L | 1.5 | 1.5 | <0.05 | APHA-4500 |
| 8 | Nitrate as (NO ₃ -N) | mg/L | 50 | 50 | < 0.05 | APHA-4500 |
| 9 | Chloride as (CI) | mg/L | 250 | 250 | 45.98 | APHA-2500 B |
| 10 | Total Hardness as (CaCO ₃) | mg/L | 500 | 500 | 159 | APHA-2340 |
| 11 | Calcium | mg/L | | 200 | 34.87 | APHA-3500 |
| 12 | Iron (Fe) | mg/L | 0.3 | 0.3(3) | 4.67 | APHA-3111 B |
| 13 | Manganese (Mn) | mg/L | 0.1 | 0.2 | 2.67 | APHA-3111 B |
| 14 | Arsenic (As) | mg/L | 0.01 | 0.05 | <0.005 | APHA-3500-As B |
| 15 | Total Coliform | CFU/100 ml | Nil | Nil | Nil | APHA-9215 |
| 16 | Fecal Coliform | CFU/100 ml | Nil | NII | Nil | APHA-9215 |
| 17 | Zinc as (Zn) | mg/L | | 3 | 0.91 | APHA-3111 B |
| 18 | Lead as (Pb) | mg/L | | 0.01 | 0.13 | APHA-3111 B |
| 19 | Cadmium as (Cd) | mg/L | | 0.003 | <0.003 | APHA-3111 B |
| 20 | T- Chromium as (T-Cr) | mg/L | | 0.05 | 0.50 | APHA-3111 B |
| 21 | Residual Chlorine | mg/L | | 0.1-0.2 | 0 | APHA-4500 |
| 22 | Sulphate | mg/L | | 250 | 28 | Gravimetric |
| 23 | Odour | | 4 | | Odourless | Sensory |

Comment: Except Turbidity, Iron , Manganese, Lea Water Quality Standard (NDWQS). MCL: Maximum Concentration Limit.

Analyst

Authorized signature

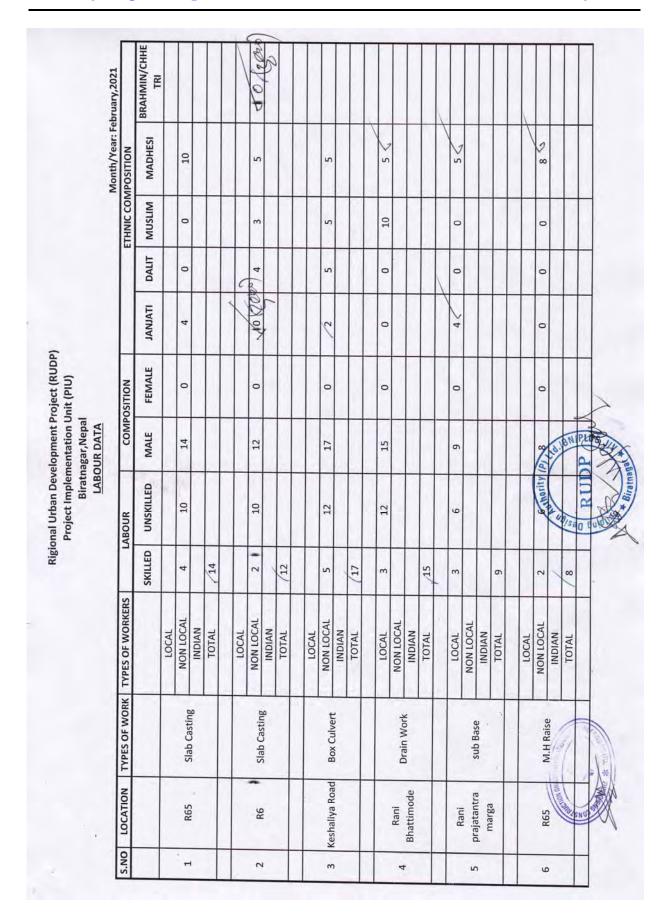
P.O. Box 104, Email; nenscbrt@gmail.com /seamnmmaesc@gmail.com



ANNEX- 4: SOCIAL& ENVIRONMENT SAFEGUARD

Monitoring Formats- February 2021







Month/Year: February, 2021 12 2 2 m 0 0 0 0 0 0 0 S 0 m 0 0 4 4 0 4 0 3 Rigional Urban Development Project (RUDP) Project Implementation Unit (PIU) 0 0 0 0 0 0 0 Biratnagar, Nepal LABOUR DATA 16 12 10 12 6 6 12 00 00 16 4 12 10 12 m 4 6 11 6 NON LOCAL NON LOCAL LOCAL NON LOCAL NON LOCAL NON LOCAL INDIAN NON LOCAL INDIAN TOTAL NON LOCAL INDIAN INDIAN INDIAN TOTAL TOTAL LOCAL INDIAN LOCAL TOTAL TOTAL INDIAN LOCAL TOTAL LOCAL TOTAL LOCAL interlock Cleaning Interlock Cleaning MH Cleaning Kerb Stone Interlock interlock Interlock R3 Trunk Line R3 Runk Line Rani P.Magar R114 R2 RS 1 œ 6 10 11 12 13

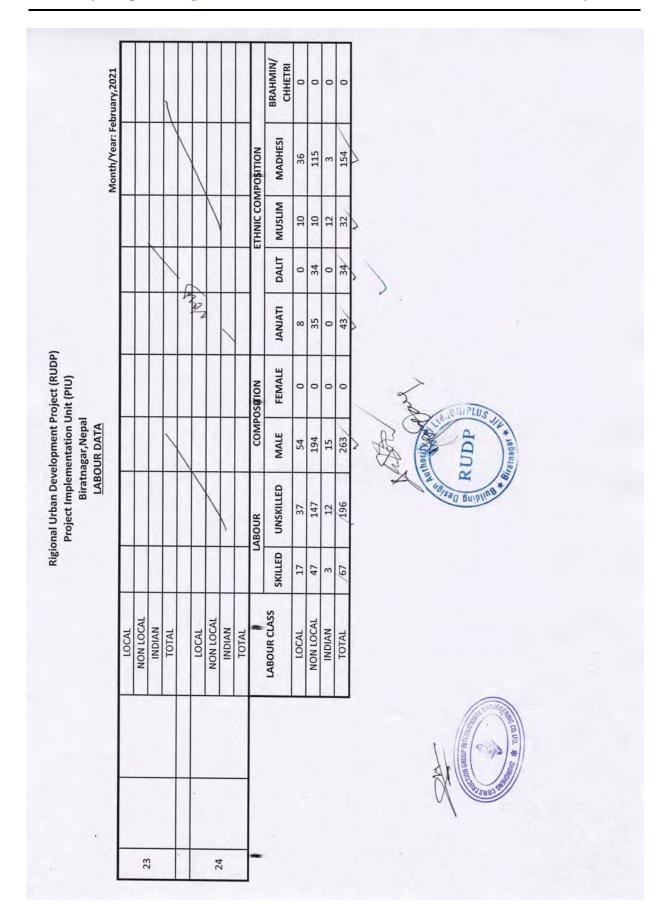














<u>Environmental Monitoring Format</u> Regional Urban Development Project (RUDP)/Biratnagar

Name of Sub Project: RUDP/ Biratnagar Contract Package: RUDP/ICB/BRT/02

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

Month: February 2021

Checklist

| SN | Activity | Description/Present Status (Compliance/Partially Compliance/Non Compliance | Remarks/ Corrective actions for Non-Compliance |
|-----------|--|--|--|
| 1.1 | Training Health, Safety and EMP trainings and awareness | Yes | |
| 1.2 | Others awareness and skill trainings | No | |
| 2 | Campsite management | | |
| 2.1 | Location | Pichra, Shanti Chowk, Rani | |
| 2.2 | First aid facilities available at camp and worksites | Yes | |
| 2.3 | Drinking water supply and sanitation facilities/ pit latrines | | |
| 2.4 | Waste Disposal and | Tap water/ Hand Pump Yes | |
| 2.5 | Management facilities Type of fuel used for cooking | L.P.G | |
| 3 | Spoil and Construction material Management | | |
| 3.1 | Cut and fill balance maintained or not, Reuse of spoil materials | Cut & Fill balance maintained | |
| 3.2 | Use of safe spoil disposal locations | Not Applicable | |
| 3.3 | Disturbance to Pedestrian and traffic movement | No any disturbance to pedestrians & traffic | |
| 3.4 | Use of private land and agreement with land owners | movement Yes | |
| 4.1 | Air, Noise and Water Pollution Dust emission and Noise pollution sites | Water sprinkled by tanker on such sites. | |
| 4.2 | Water quality monitoring result and locations | ok | * * |
| 4.3 | Block age of natural drainages ,water logging, drain water discharge into farmland/risky areas | Not Applicable | Pilia |
| 5.1 (3.1) | Quarrying of construction materials and Plants Installment Quarry/borrow operation sites | Not Applicable RU | 121 |



| 5.2 | Crusher plant and Asphalt plant operation restoration | Asphalt Plant | |
|-----------------|---|----------------------------------|--|
| 6 6.1 6.2 | Impact/Disruption of Private properties Building structures Other utilities | Not Applicable Not Applicable | |
| 7 7.1 | Sites for cultural and religious values Cultural and religious sensitive spots (if any) | Not Applicable | |
| 8 8.1 8.2 | Forest and vegetation Number of trees removal No of tree plantation (Roadside) | 00 Not Applicable | |
| 9 | Accident cases and records | No any records | |
| 10.1 10.2 | Employment to local people Men and women Child labor (if any) | Yes, both men and women No | |
| 11 | Establishment of Safeguard desk and meeting | Yes | |
| 12 | Grievances from local people and addressed | Yes | |
| 13 | SOP Approved | | |
| 13.1 | Taking Temperature with infrared thermometer NC150 | Yes | |
| 13.2 | Hand Sanitization with Automatic Dispenser | Yes | |





Occupational health and safety

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: February 2021

| - | L - | -1-1 | liet |
|---|-----|------|------|
| | ne | CK | HET |

| SN | Activity | Description/Present Status (Compliance/Partially Compliance/Non Compliance | Remarks/ Corrective actions for Non- Compliance |
|-----|---|--|---|
| 1 | Occupational health and safety | | |
| 1.1 | Insurance for workers | Yes | |
| 1.2 | Personal Protective Equipment (PPE) provided to labors and is using (helmet, facemasks, muffles, gloves, boots, jacket, goggles etc.) | Daily Provided | |
| 1.3 | Public notification Safety and warning signs and informative signboards in working sites for work safety | Yes Provided | |
| 1.4 | Use of barricades, caution tape and flag | Daily Used | |





A. Staffs Name List

| SN. | Name | Position | Contact No | Remarks | | |
|-----|-----------------------|----------------------|------------|---------|--|--|
| 1 | Ravindra kumar Thakur | CM | 9801159860 | | | |
| 2 | Dhirendra Yadav - | Engineer | 9801225283 | | | |
| 3 | Randhir Singh | Engineer | 9801159918 | | | |
| 4 | Pradeep Yadav | Engineer | 9801159896 | | | |
| 5 | Jibachha Sah | Engineer | 9805932183 | | | |
| 6 | Dhirendra yadav jr | Engineer | 9805913881 | | | |
| 7 | Aanand Rayamajhi | Engineer | 9801157317 | | | |
| 8 | Rahul Kr Sharma | Sub-Engineer | 9801159862 | | | |
| 9 | Sudip Chaudhary | Surveyor | 9801159859 | | | |
| 10 | Sange Tamang | Sub-Engineer | | | | |
| 11 | Ramesh Shrestha | Sub-Engineer | | | | |
| 12 | Jitendra Yadav | Safety incharge | 9801160166 | | | |
| 13 | Kiran Chaudhary | SLT | 9801225281 | | | |
| 14 | Pramod shah | LT | 9815779383 | | | |
| 15 | Raj kr Mukhiya | LT | | | | |
| 16 | Bishnu Hari Khanal | Chief Accountant | 9801157314 | | | |
| 17 | Jarman Nepal | Assistant Accountant | | | | |
| 18 | Narsingh Bhandari | Vehicle incharge | 9801157318 | | | |
| 19 | Madan Bhattarai | Store Keeper | 9801159634 | | | |





B. Details of Equipment at Site / Contractor's yard

| S.N | Equipment Type and Characteristics | ZHONGHENG CONSTRUCTION GROUP |
|-----|--|------------------------------|
| 1 | Excavator | 0 |
| 2 | Backhoe Loader | 4 |
| 3 | Asphalt plant of adequate capacity | 1 |
| 4 | Asphalt pavers | 1 |
| 5 | Vibrating roller | 2 |
| 6 | Pneumatic tyre roller 8 to 10 ton | 1 |
| 7 | Smooth wheeled roller 8 to 10 ton | 2 |
| 8 | Tipper | 3 |
| 9 | Crane | 1 |
| 10 | Water Tank | 1 |
| 11 | Grader | 2 |
| 12 | Bitumen distributor (4 to 6 Kilo litre)- | 1 |
| 13 | Water browser (minimum 5000 Litres) | 6 |
| 14 | Chips spreader | 0 |
| 15 | Bitumen decanter minimum 18000 Litres. | 2 |
| 16 | Air compressor | 2 |
| 17 | Tipping Trucks | 1 |
| 18 | Service vehicle | 3 |
| 19 | Total station | 1 |
| 20 | Auto Level | 5 |
| 21 | Mobile Generator 15-20 Kva | 6 |
| 22 | Mixer Machine | 5 |
| 23 | Broomer | 2 |
| 24 | Plate Compactor | 5 |
| 25 | Water Pump | 4 |
| 26 | Motorbike | 12 |
| 27 | Tractor | 12 |







ANNEX- 5: SOP Health Monitoring Format

February 2021



| | | | | B DS | CIDP | 22 | | Date: 28/ | 02 202 |
|-------|----------------------|------------|-----------------|------------|---------------------|----------------------------|--|--------------------------------------|-------------|
| | Project Name: | Constructi | on and Completi | on B sewer | age, draina | ge Road, Footp | oath and Road furnit | ure works (| Contract No |
| | | | | 8 * B | * Birstnaga* Yes/No | | | | |
| S.No. | Staff Name | Position | Temperature | Cold | Cough | Difficulty in Breathing | Have you done hand sanitization before entering site/office | Has the person wearing mask | Remarks |
| 1 | Giresh Chand | TL | 95.9 | No | NO | NO | yes | Hes | |
| 2 | H.K. Mandal | E./Qty S. | 96.4 | NO | VO | NO | HES | 408 | P- 99 |
| 3 | Amit Kumar Gupta | CSE | 96.9 | No | NO | No | 408 | 428 | A - 99 |
| 4 | Santosh Kumar Yadav | OM | 96.9 | No | NO | NO | yes | yes | P- 97 |
| 5 | Rajesh Kumar Yadav | Jr. | 93.3 | NO | NO | No | 408 | 1409 | P-98 |
| 6 | Deepak Majhee | Jr. | 95.1 | No | NO | No | yes | Sach | P- 98 |
| 7 | Jaya Prakash Yadav | Jr. | 96.8 | No | No | NO | 48 | Yes | P-98 |
| 8 | Youba Raj Poudel | Driver | 96.9 | NO | No | No | 48 | 3400 | P-99 |
| 9 | Pulkit Gothiya Yadav | Driver | 93.2 | 40 | No | NO | yes | 408 | P- 99 |
| 10 | Rudra Kharel | O/A | 95.1 | No | 40 | 40 | yes | 408 | P- 99 |
| 11 | Shiv Shankar Mandal | Guard | 95.6 | No | YO | NO | 408 | 428 | P - 95 |

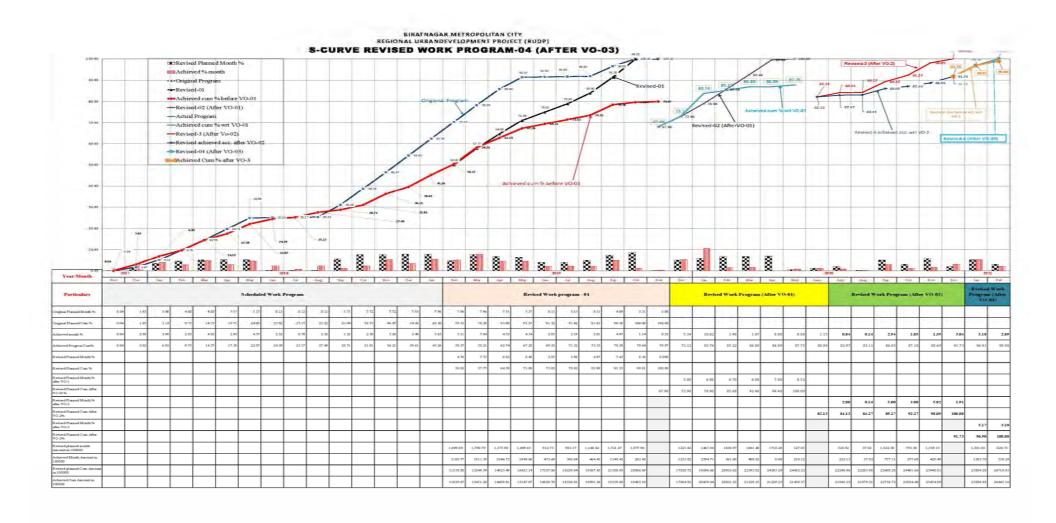
| | | | | DS | UDP | PLUS | | Date: 29 | 102/2022 |
|-------|----------------------|------------|-----------------|-------------|-------------------------|----------------------------|--|--------------------------------------|------------------|
| | Project Name: | Constructi | on and Completi | on of sewer | age, draina | ge, Road, Footp | oath and Road furnit | ure works (| Contract No: |
| | | | | 1 | REDEPTICE/BRT/02 Yes/No | | | | |
| S.No. | Staff Name | Position | Temperature | Cold | Cough | Difficulty in Breathing | Have you done hand sanitization before entering site/office | Has the person wearing mask | Remarks |
| 1 | Giresh Chand | TL | 971 | No | No | No | yes | 400 | |
| 2 | H.K. Mandal | E./Qty S. | 95.2 | No | po | No | yes | yes | 14-80 |
| 3 | Amit Kumar Gupta | CSE | 97.1 | No | No | No | yes | yes | P- 99 |
| 4 | Santosh Kumar Yadav | ОМ | 96.3 | No | No | NO | yes | yes | P- 99 H- 74 |
| 5 | Rajesh Kumar Yadav | Jr. | 96.5 | No | No | No | yes | yes | P- 98 H- 79 |
| 6 | Deepak Majhee | Jr. | 94.3 | No | No | No | yee | 400 | P- 99 H- 80 |
| 7 | Jaya Prakash Yadav | Jr. | 95.3 | No | Na | No | yes: | yes | P- 98 H- 78 |
| 8 | Youba Raj Poudel | Driver | 96.2 | ho | No | No | Hes | yes | P- 99 H- 73 |
| 9 | Pulkit Gothiya Yadav | Driver | 96.4 | No | No | No | Hel | 948 | P - 99 H - 79 |
| 10 | Rudra Kharel | O/A | 96.5 | No | No | 40 | yes | Hes | P- 99 |
| 11 | Shiv Shankar Mandal | Guard | 94.6 | No | NO | No | yes | yes | H- 80 |



ANNEX-6: S-Curve

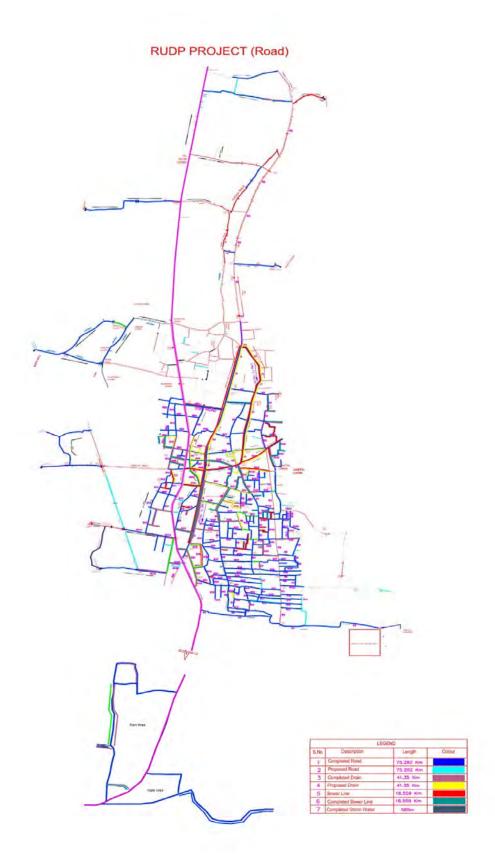
(ATTACHED)







ANNEX-7: Master Plan of RUDP Project



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

