In association with

Brisbane City Enterprise Pty Ltd, Australia
AQUA Consultant and Associates Ltd, Bangladesh
Building Design Authority, Nepal
CEMAT Consultants, Nepal

Monthly Progress Report (June, 2015)

Secondary Towns Integrated Urban Environmental Improvement Project (STIUEIP), Biratnagar, Nepal

07 July 2015

Biratnagar Sub-Metropolitan City, Nepal

AUSTRALIA | ASIA | MIDDLE EAST | AFRICA | PACIFIC

Project Name:	Secondary Towns Integrated Urban Environmental Improvement Project (STIUEIP)
Project Number:	56064023
Report for:	Biratnagar Sub Metropolitan City, Nepal

PREPARATION, REVIEW and AUTHORISATION

Revision	Date	Prepared by	Reviewed by	Approved for Issue by
	07 July 2015	DSC		

ISSUE REGISTER

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SMEC COMPANY DETAILS

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1. SALIENT FEATURE of Contract Package: STIUEIP/W/BRT/ICB-01

General Features	
Name of Project	Secondary Towns Integrated Urban Environmental Improvement Project (STIUEIP)
Executing Agency	Government of Nepal, Ministry of Urban Development Department of Urban Development and Building Construction (DUDBC)
Implementing Agency	Biratnagar Sub-Metropolitan City
Funded By	Asian Development Bank & Government of Nepal
Package	Sewerage and Drainage Network, Wastewater Treatment Plant and Road and Lanes Improvement Sub Project
Contract No.	STIUEIP/W/BRT/ICB-01
Location	Biratnagar Sub-Metropolitan City
Consultant	SMEC in association with Brisbane/AQUA/BDA/CEMAT
Contractor	CTCE-KALIKA Joint Venture
Date of Commencement	8tth December, 2013
Date of Completion	25th May, 2016
Contract Period	900 days from date of commencement
Time elapsed till June 2015	570 days from date of commencement (**63.0%)**
Contract amount with Provisional Sum	NRs. 2,119,054,525.90
Add 13%VAT	NRs. 272,278,000.00
Variation Order No 1 with 13% VAT	NRs 99,753,075.60
Total Contract Amount with VAT & PS	NRs. 2,491,085,601.50
Paid Amount of IPC 01	NRs. 209,400,000.00 (Mobilization Advance Payment)
Paid Amount of IPC 11	**NRs. 153,035,836.24** (Refer from Contractor's submission on 5th July 2015 and it is under review)
Total Paid Amount from IPC 01 to IPC 11	**NRs. 999,524,520.18 (Approximate Amount) (40%** including Mob. Adv. Payment wrt NRs 2,491,085,601.50)

2 INTRODUCTION / BACKGROUND

1. SMEC International Pty (Australia) in association with Brisbane City Enterprise Pty Ltd (Australia), AQUA Consultant and Associates Ltd (Bangladesh), Building Design Authority (Nepal) and CEMAT Consultants (Nepal) have entered for a Contract of Consulting Services with Secondary Towns Integrated Urban Environmental Improvement Project (STIUEIP), Project Implementation Unit(PIU), Biratnagar Sub metropolitan City on 7th December 2011. This monthly Progress Report of June, 2015 has been submitted to the PIU as per the Work Program proposed in the consultant's technical proposal as well as TOR of the consultant.

2. Secondary Towns Integrated Urban Environmental Improvement Project (STIUEIP), 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 2650-NEP. As per PAM contribution from GoN is 3.99 million USD, Asian Development Bank (ADB) 18.86 million USD and Biratnagar Sub-metropolitan City (BSMC) 1.99 million USD while contingency is 2.88 million USD for Secondary Town Integrated Urban Environmental Improvement Project (STIUEIP), Biratnagar. The cost sharing has been revised in April, 2013 as: Government of Nepal (GoN) is 5.960 Million USD, Asian Development Bank (ADB) 24.214 Million USD, TDF loan 4.098 Million USD and Biratnagar Sub-metropolitan City (BSMC) 2.980 Million USD and in total **37.252** Million USD.

3. 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 proposed project Secondary Towns Integrated Urban Environmental Improvement Project (STIUEIP) is another step forward to promote healthy cities by creating healthier urban environments and was formulated under the PPTA 2010.

   - Contract of consulting services signed on 07 December 2011.
   - Design works commenced on 01 January 2012.
   - Final design works submitted to the Client on March 2013
   - Contract of construction works signed on 02 December 2013
   - Construction works commenced on 08 December 2013
   - Contractor's Work Program (Revision 02) under review 05 December 2014

3. SUB-PROJECT COMPONENTS

3.1 SEWER LINES

4. The prioritized sewer lines for Final Detailed Engineering Report of BSMC are as follows:

Table 1: Proposed Sewer Lines in BSMC

S N.	Description	Unit	Quantity
1	**Sewerage Pipe Supply and Installation**		**62,835.0**
	Reinforced Concrete Pipe laying and jointing		**15,748.0**
	Line T1 (Secondary Line T2 (Trunk)	m m	3,788.0 7,506.0
	Line T3 (Trunk)	m	4,136.0
	Line T4 (Secondary)	m	318.0
	HDPE laying and jointing		**47,087.0**
	Line T1 (Secondary	m	7,124.0
	Line T2 (Trunk)	m	19,410.0
	Line T3 (Trunk)	m	18,341.0
	Line T4 (Secondary)	m	22,12.0
2	**Manhole (Brick / RCC)**	**no.**	**2,019**
3	**Sewer Inlet**	**no.**	**3,766.00**
4	House connection	no.	5,930.00
5	Reinstatement of Roads	km	64.50

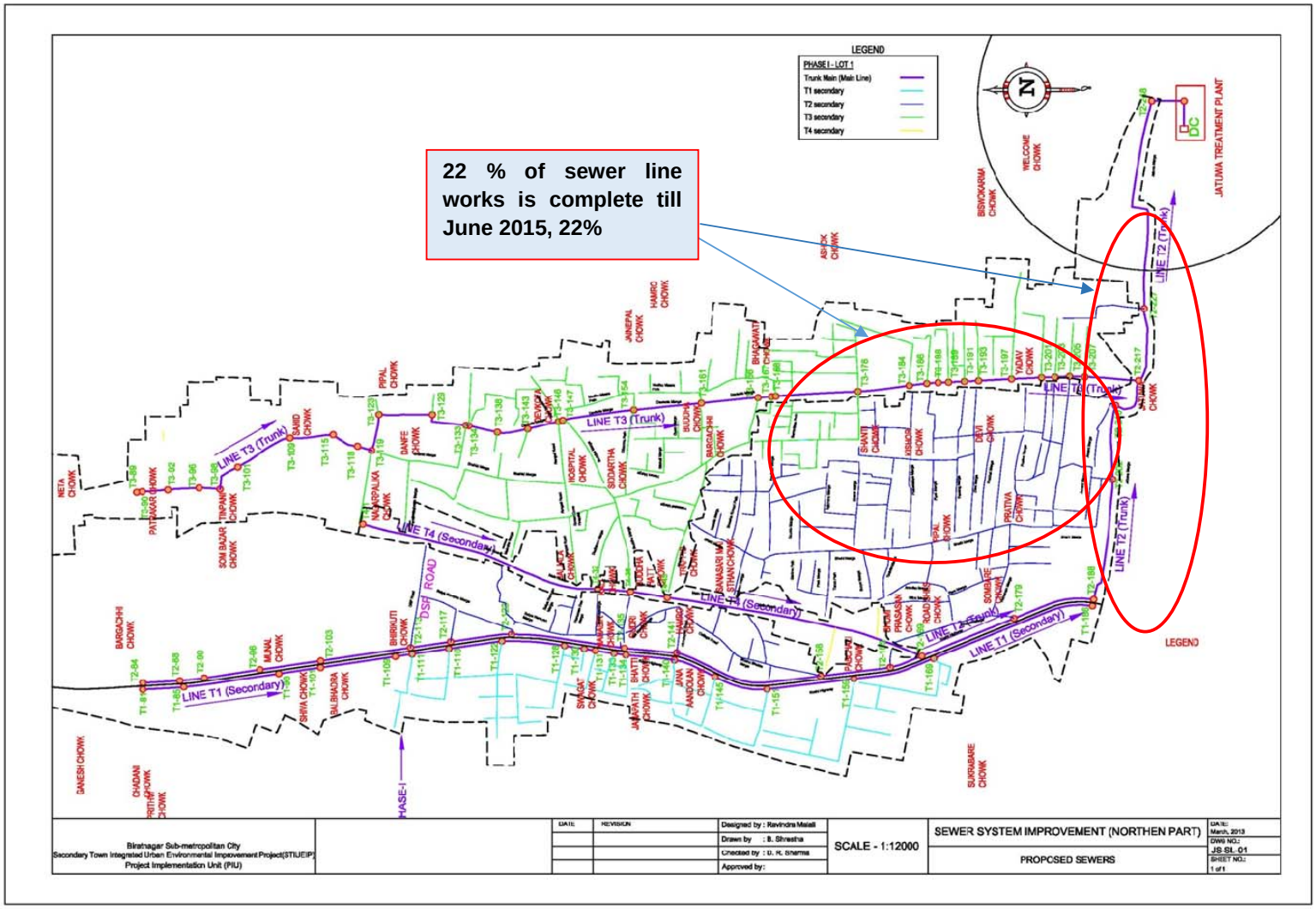


FIGURE. 1 PROPOSED SEWER LINES IN BSMC

3.2 Storm Water Drains

5. Most of the storm drains (S13, S11, S9, S5, B1, B2, B3, CN2, CN3 and southern parts) have been provisioned as Phase I priority works. The major storm drain outlets as planned are 14 numbers and catchment areas and discharges are respectively 1,324.2 Ha and 73.21 cum/sec.

Table 2: Proposed Storm Water Drains in BSMC

S. No.	Description	Unit	Quantity
A	**Storm Drain for Northern Parts**		**39,379.00**
I	Storm Drain Lines	m	**25,388**
II	Culvert	no	41
III	Outfall	no	15
IV	Rain Inlet	no	30
V	Manhole	no	30
VI	Canal Crossing	no	11
B	**Storm Drain for Southern Part**		
I	Brick Masonry Drain	m	**13,991**
II	Cleaning and Maintenance of Existing Drain	m	7,273
III	Culverts	no	38
C	**Rehabilitation of Existing Drain**		
I	Drain Cover	m	30,467
II	Cleaning and Maintenance of Existing Drain	m	33,601

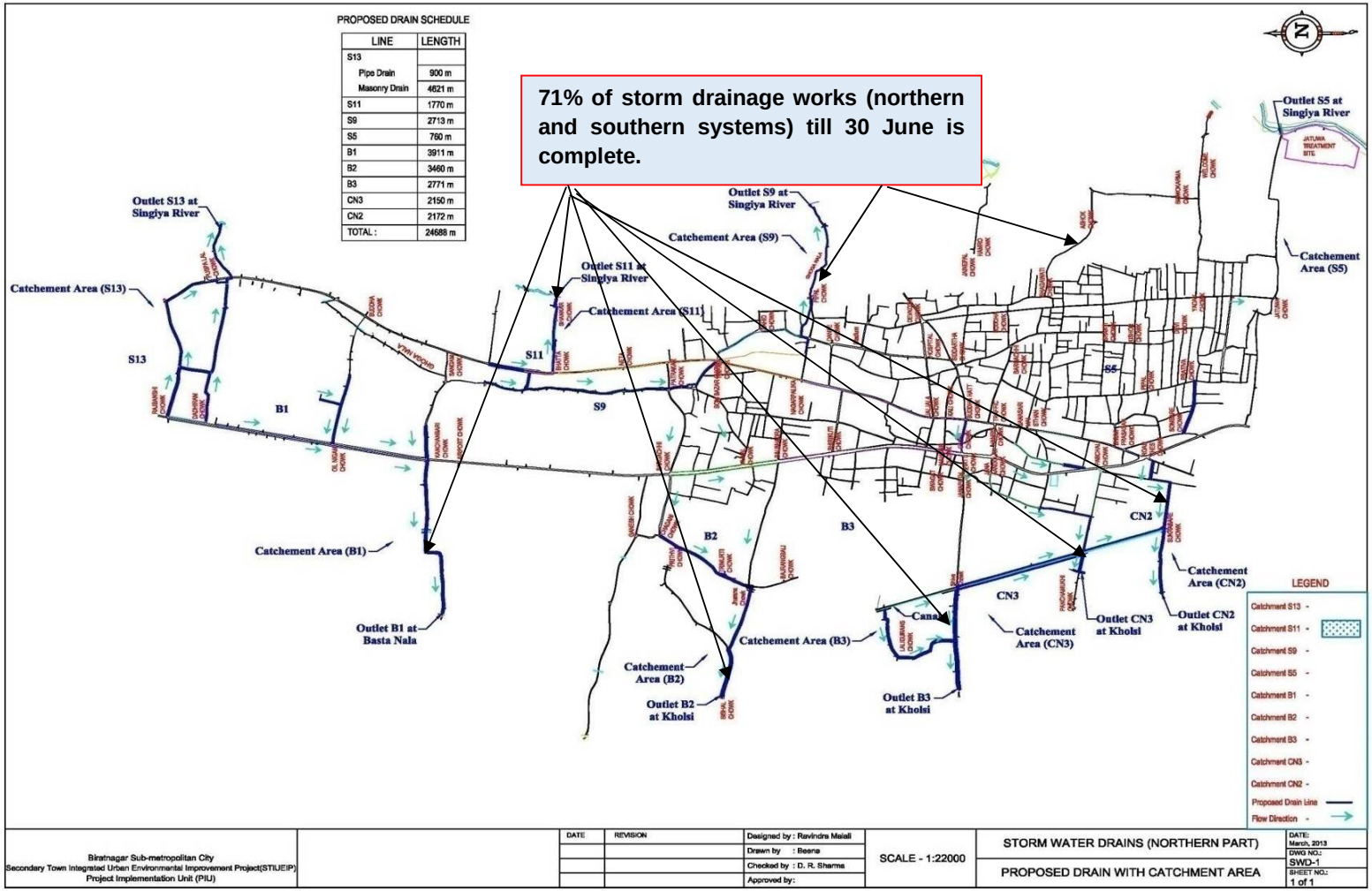


Figure 2: Proposed Storm Water Drains in BSMC (Northern Drainage System)

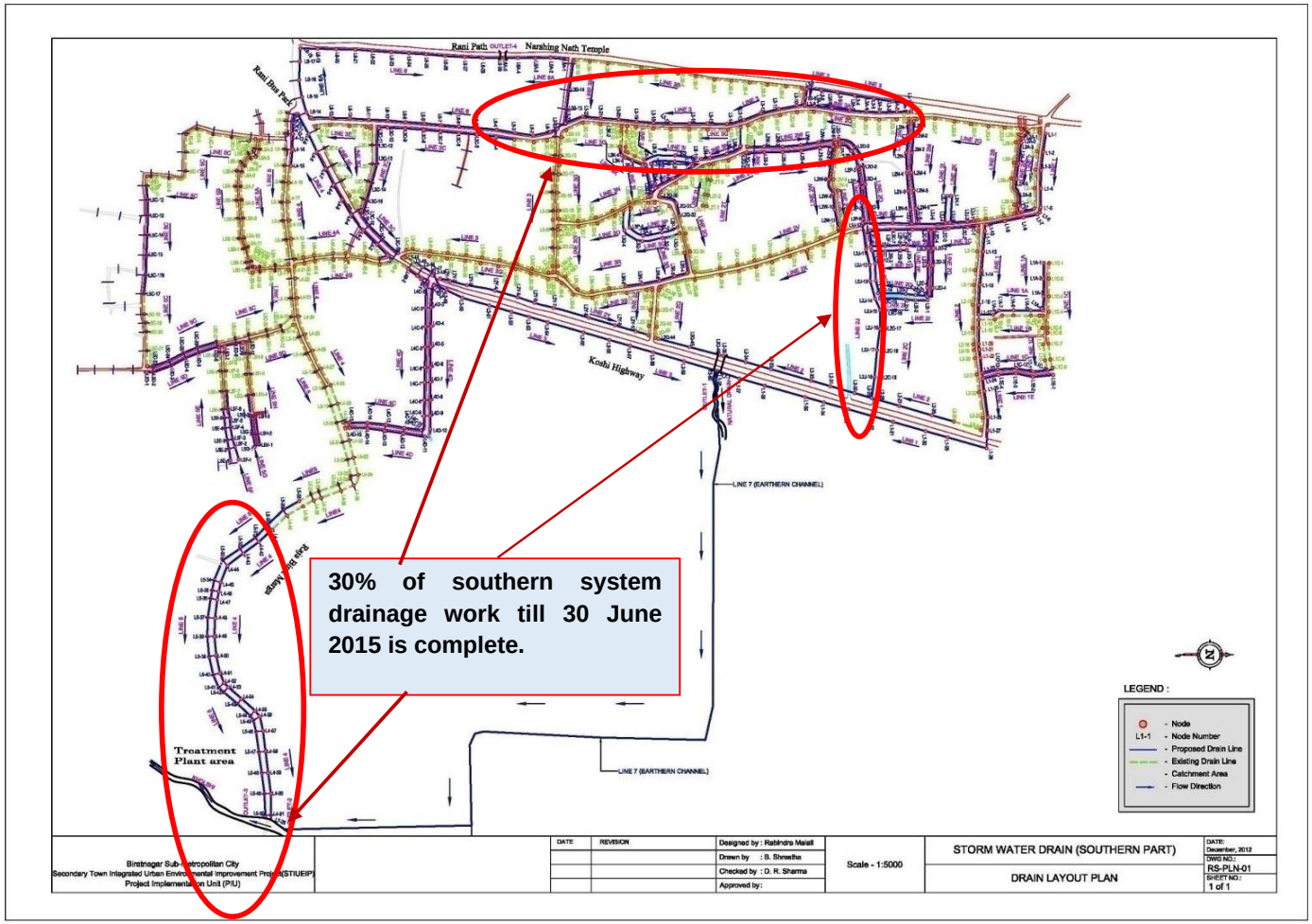


Figure 3: Proposed Storm Water Drains in BSMC (Southern Drainage System)

3.3 WASTE WATER TREATMENT PLANTS

6. The quantity of domestic waste water is calculated using water supply rate at 90 liters per person per day in the design year 2035, out of which 80% is converted into waste water. Maximum quantity of waste water is calculated taking peak factor of 1.99 to 2.5. Minimum quantity of sewage is taken as 30% of the average quantity. Commercial / Institutional / Industrial waste water quantity is calculated as 0.10 LPS/ha. While in filtration quantity is calculated as 0.14 LPS/ha in the design year 2035. The total quantity of commercial / institutional / industrial and infiltration waste water estimated as 237.79 LPS in the design year 2035 which is very large in comparison with domestic waste water quantity of 207.18 LPS. The maximum quantity (peak flow) of waste water in the design year 2035 for both Phase I and Phase II areas is estimated at 650.08LPS. The maximum quantity of the waste water for Phase I areas only is estimated at 213.97 LPS. The capacity of the Phase I WWTP has been adopted as 214LPS. The capacity of the Phase II WWTP will be thus 436LPS. Features of WWTP at Jatuwa are as follows:

Table 3: Proposed Waste Water Components in BSMC

S.N.	Description	Unit	No
	Waste Water Treatment Plant Component		
1	By Pass Chamber	no	1
2	Distribution Chamber	no	1
3	Bar Screen Chamber	no	2
4	Sump well with Pumping Station	no	2
5	Collection Chamber1	no	1
6	Oil & Grease Chamber	no	2
7	CollectionChamber2	no	1
8	Grit Chamber	no	2
9	CollectionChamber3	no	1
10	Anaerobic Pond	no	3
11	Facultative Pond	no	3
12	Collection Chamber4	no	1
13	Outfall Structure	no	1
14	Sludge Drying Bed	no	10
15	Enclosure Chamber Shed	no	1
16	Guard House	no	1
17	Office Cum Lab Building	no	1
18	Workshop Building	no	1
19	Generator / Changing House	no	1
20	Entrance Gate	no	1
21	Boundary wall	m	1,340
22	Shallow Tube Well with water Tank	set	1
23	Landscaping and Plantation works	sqm	99,915
24	Site clearance, grubbing, surface dressing	sqm	99,915

25	Road and Drain Improvement	m	1,440
26	River training works	m	600
27	Electro mechanical works	Set	1
28	Lab Equipment and installation	Set	1

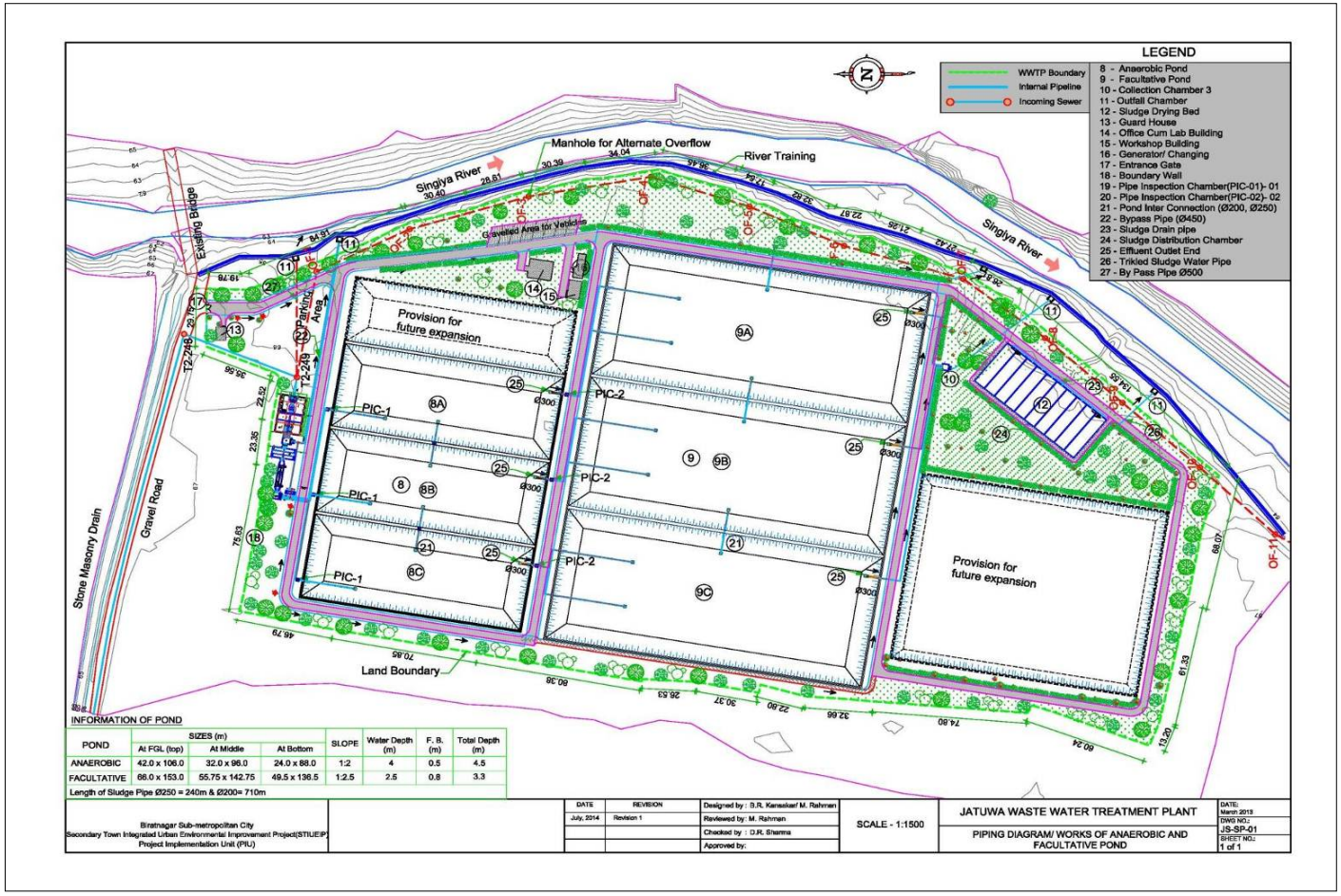


Figure 4: Proposed Waste Water Treatment Plant at Jatuwa in BSMC

3.4 Roads and Lanes

7. Most of the roads / lanes in Biratnagar are in a poor state due to lack of periodic maintenance, and need improvement, whereas 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. Almost necessary streets are already constructed and hence the Project has considered on design based on reinstatement, rehabilitation and upgrading of existing roads and lanes.

Table 4: Proposed Roads in BSMC

Description of Item	Quantity
Main Road Improvements (Road from Puspalal Chowk to Bhatta Chowk)	2.5 Km
Reinstatement and Road Improvements (under sewer line installation)	62.0 Km

3.5 Environmental Aspect

8. The project is environmental improvement project and mainly constitutes works on sewerage and drainage improvement works in BSMC besides others. As per ADB guidelines on Environmental Assessment requirements, this project is classified as Environment Category B. According to Environmental Protection Guidelines, 2054BS, First Revised (2055BS) schedule-3, IEE is required for Operations of Sewerage Schemes under Schedule 1.h.2.e (pertaining to Rule 3). The final report on IEE was submitted and MUD had approved the IEE on May14, 2013.

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

10. DSC has prepared and submitted Environmental Progress Reports (Semi-Annual) October 2014 – March 2015 and Quarterly Updated Environmental Report, January – March on 27 May 2015. The next Quarterly Updated Environmental Report for the months of April, May and June 2015 will be submitted soon.

3.6 Social Aspect

11. Secondary Towns Integrated Urban Environmental Improvement Project (STIUEIP) in Biratnagar has commenced from 2010 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 STIUEIP in Biratnagar Sub-metropolitan City (BSMC). Besides this, community development and institutional strengthening components, the two other objective focused components of STIUEIP Biratnagar, are running various social development programs and activities.

Social development component is one of the major components of STIUEIP Biratnagar that comprises of various social development programs and activities like community development program (CDP), awareness raising, skill development, health and sanitation. Social Development Specialist (SDS) in Design and Supervision Consultant (DSC) is deputed to assist the Project Implementation Unit (PIU) in implementing effectively the social activities to achieve the project goal

as envisaged by the project. Monitoring of ongoing social development activities and consultation meetings with community people are the general tasks to be accomplished as regular basis.

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. The eighth meeting of safeguard desk held this month.

The regular monitoring visits have provided insights into the social development aspects of the project to the DSC. The community development programs are going on through the Tole Lane Organizations (TLOs). Almost 130 TLOs of 17 wards of the BSMC have been mobilized for this. Prior to the start of such community development activities, the DSC had analyzed the data of poor and disadvantaged groups (DAGs) living in the various tole/ clusters identified by the poverty mapping by applying the participatory tools. Based on the poverty indicators, all details have been documented and shown in the social map. The program area for community development programs has been extended to most poverty stricken area scattered across several wards of the BSMC. The Community Development Program includes meetings, orientation, awareness activities, skill development trainings and health, hygiene and sanitation activities which are conducted and organized by the NGO (FriPAD).

12. DSC has prepared minutes of meeting No 7, please refer to **Annex-6.**

3.7 Financial Plan

13. The Sub project cost will be disbursed in three years starting from FY2013/14 to 2015/16.

It has estimated that 20 percent of the Sub project cost will be disbursed in first year.

Similarly, in second year, 50 percent will be disbursed. Finally, remaining 30 percent of Sub project cost will be disbursed in third year.

3.8 DISBURSEMENT RECORDS IN CONSTRUCTION

Table 5: Disbursement Record in Construction to Date

S.N.	Description of Payment	Payment Items	Amount in NRs.
1	M/S Prabidhi International	Ditch Cleaning Equipment	3,300,000.00
2	M/S CTCE-Kalika JV	IPC 01	209,400,000.00
3	M/S CTCE-Kalika JV	IPC 02	27,853,500.98
4	M/S CTCE-Kalika JV	IPC 03	47,507,270.95
5	M/S CTCE-Kalika JV	IPC 04	42,241,392.52
6	M/S CTCE-Kalika JV	IPC 05	22,035,291.99
7	M/S CTCE-Kalika JV	IPC 06	85,573,541.38
8	M/S CTCE-Kalika JV	IPC 07	76,203,672.17
9	M/S CTCE-Kalika JV	IPC-08	115,297549.23
10	M/S CTCE-Kalika JV	IPC-09	109,414,317.97
11	M/S CTCE-Kalika JV	IPC-10	110,962,146.75
12	M/S CTCE-Kalika JV	IPC-11	153,035,836.24 (Approx.)
		Total in NRs.	**999,524,520.18**

4. OBJECTIVES AND SCOPE OF WORKS

4.1 OBJECTIVES

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

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

15. 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

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

A. Detailed Design and Procurement Assistance Phase
   1. Surveys verification of Feasibility Studies and GIS Base Maps
   2. Finalization of Design Criteria, Preparation of Manuals, Guidelines and Systems.
   3. Specific design requirements for the sub projects
      - Improvement and development of drainage and sewerage systems
      - Improvement of urban roads and lanes
   4. Project Planning and Management Support to PIU
   5. Detailed Engineering Design

B. Construction and Post Construction Management Phase
   1. Construction Management and Contract Administration
   2. Environmental and Social Compliance Monitoring
   3. Implementation of Community Development Program, Community Mobilization and GESI Action Plan
   4. Capacity Building of the Municipality and Service Providers for Operational Sustainability

C. Communications, Reporting and Deliverables (Inception Report, Monthly Progress Reports, Interim Report for each of the outputs, Annual Progress Report, Draft Final Report for each of the outputs and Final Report).

5 PROGRESS OF SUB-PROJECT COMPONENTS

5.1 STORM WATER DRAINS

17. The Contractor has not met the target set for storm water drain construction in this month. The works had been affected by less effort observed during this month. The contractor has completed about 28 km out of 41km, 68%.

5.2 SEWER LINES

18. The Contractor has submitted to the Consultant monthly programs of March and April 2015 for the sewer line works. The Contractor has completed about 14 km out of 63 km (22%) sewer line with HDPE pipes and RCC pipes. The construction of manhole, sewer inlets and house connection chambers are in progress.

The proposal of the precast concrete manholes, sewer inlets and house connection chambers

has been submitted for review and approval. A conditional approval in consultation with the Employer has been given to the Contractor to prepare few numbers and to demonstrate at site. If the proposal comes out to be economical, time effective and environmental friendly and structurally strong enough to carry out the function of their respective items, then the Consultant will release for unconditional approval.

Recently, the precast concrete house connection chambers, sewer inlets and manholes are being installed at sites and found to be effective and we are able to open traffic at the shortest possible time and especially where the business center with crowds (in R5 and R65 Roads) are very efficient and effective . This has reduced disturbances to the local people and road users, dumping of construction materials, workers and working for long period. This is found to be environment friendly too. Hence, the adaptation of precast units for sewer lines found to be effective and efficient.

During the site visit of delegate at different time in the construction period from BSMC, PMSC, ADB, PCO, local political representatives, TLO, Executive Director of TDF and the Secretary of Ministry of Urban Development have commended.

The payment for the respective item of works as appropriate is being paid under each IPCs for the cash flow and to account disbursement in ADB's disbursement book. The unconditional approval to proceed with production of precast units will be granted within couple of weeks.

5.3 WASTEWATER TREATMENT PLANT

19. Office cum laboratory building, workshop building and generator / changing house at WWTP, Jatuwa are complete. The Contractor has stopped all activities at WWTP site.

5.4 ROAD AND LANES IMPROVEMENT WORKS

20. The Contractor has completed the rehabilitation / repair of existing drain of about 6 km in R2 road. The Contractor has shifted more than 218 numbers of electrical poles and 35 numbers of telephone poles. The shifting of the pole was scheduled to complete by 28th Chaitra 2071 (11 April 2015). But still there are number of poles to be shifted. The installation of Kerbs for footpath in is progress.

The Contractor had started to prepare subgrade and sub-base after discussion held at ADB Office Kathmandu on 25th May 2015. The Contractor had tried to continue with the success if 100m sub-base laying but unfortunately the Contractor has to stop the work due to unfavorable weather condition during this rainy season.

5.5 CONSTRUCTION MATERIALS

21. The contractor has stocked sufficient construction materials like coarse aggregates, fine aggregates, cement, reinforcement etc at his yard, Katahari. The fabrication of steel moulds for precast units- manholes, sewer inlets and house connection chamber are in progress.

5.6 CONSTRUCTION MATERIAL TESTING LAB

22. Construction material testing laboratory has been set up at the Contractor's camp at Katahari.

Necessary suitability and routine tests for construction materials are being carried out in regular basis. The details of the test results of the month are in summary of Lab test results in Annex-7.

5.7 PHYSICAL PROGRESS TILL END OF JUNE 2015

23. The total physical progress achieved till 30 June 2015 is about 34 % whereas the cumulative planned progress till April 2015 is 57%. The progress of the work is lagging behind by 23% compared to the planned works till end of June 2015 (based on work scheduled Rev 02).

Table 6: Plan Vs Actual Progress till June 2015

Plan Vs Progress										
Month	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	15-Jun
Cumulative Planned work Rev 01 (%)	17.098	18.514	26.588	36.398	46.281	56.947	67.003	76.728	86.593	94.037
Cumulative Planned work Rev 02 (%)				14.04	20.11	28.74	37.22	44.94	51.60	57.295
Cumulative Actual Achievment (%)	5.81	5.98	9.29	10.77	12.57	17.57	21.82	25.25	27.85	34.317
Progress to date wrt the revised work plan (%)		(12.53)	(17.30)	(3.27)	(7.54)	(11.17)	(15.40)	(19.69)	(23.75)	(22.98)

The contractor is lagging behind by **23 %** in his own program whereas **63.0 %** of the contract period has already been elapsed.

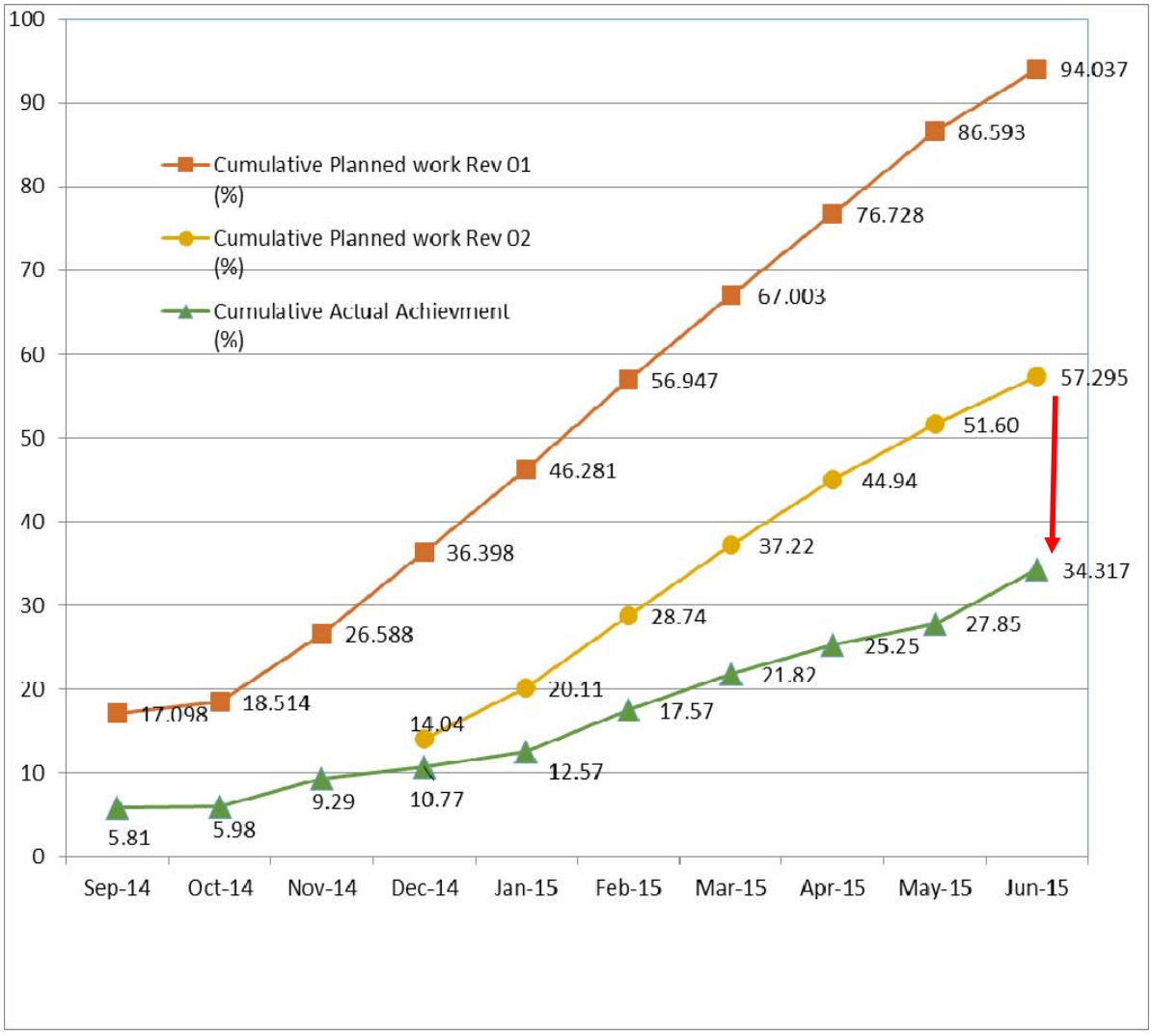


Figure 5: Plan Vs Actual Progress till end of June 2015.

6 SUMMARY OF ACTIVITIES CARRIED OUT UP TO PREVIOUS MONTHS

6.1 ORGANIZATION AND STAFFING

The Project has involvement of different organization and the staffing as shown below.

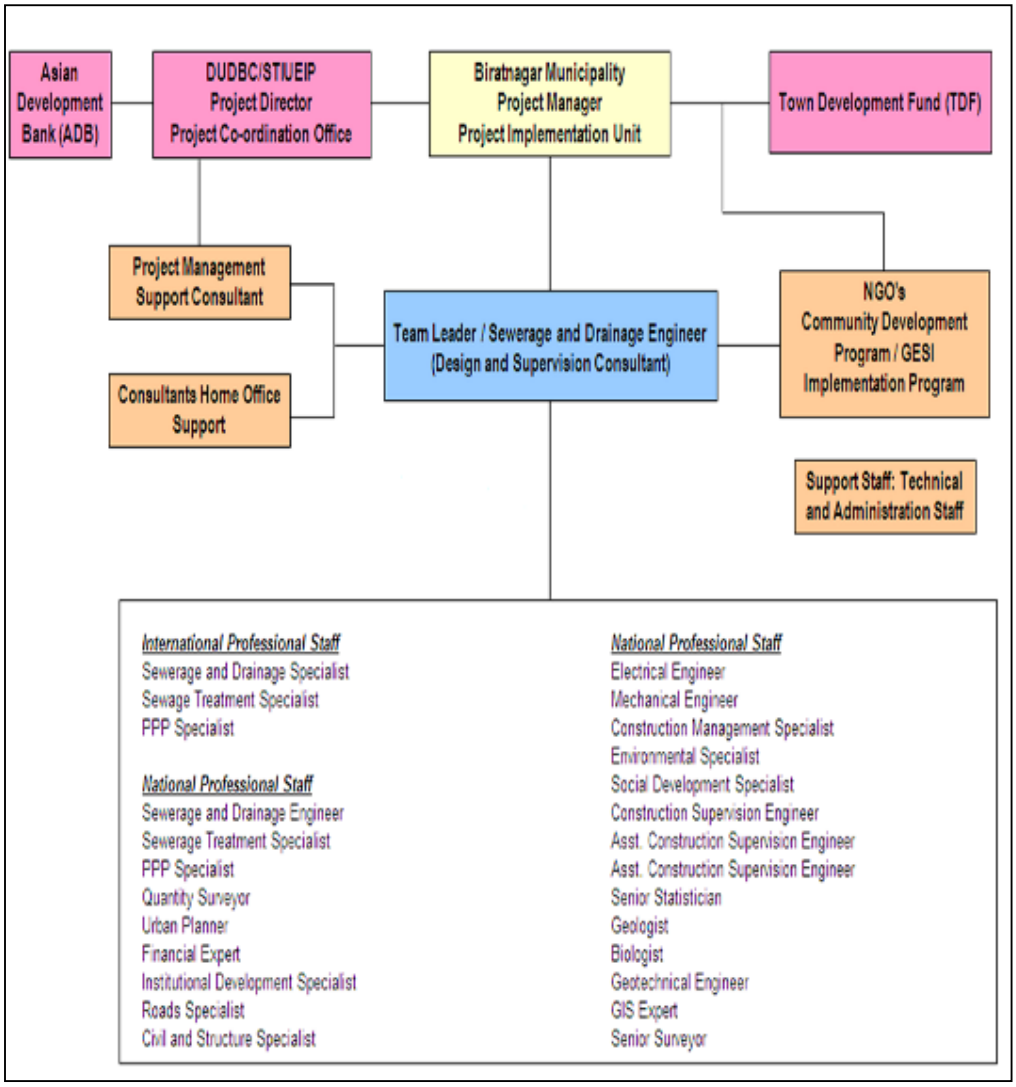


Figure 6: Organization and Staffing of STIUEIP, Biratnagar

6.2 Inception Report

24. The Inception Report was prepared and submitted on 29 February, 2012.

6.3 Conceptual Catchment Plan and Design Criteria

25. The Conceptual Catchment Plan and Design Criteria was prepared and presented in PCO on 30 March, 2012.

6.4 Survey

26. The survey was completed in August, 2012

6.5 Design

27. The design of sewer lines, storm drains, WWTPs and appurtenances and final detailed design and estimates were submitted in March 2013.

28. During construction B2, B3 and S5 alternate design was also submitted. Similarly, CN2 and CN3 were submitted as the community request to reduce the size. The size was reviewed with 1 year return period as per the suggestion made by PMSC during field visit. Minor modifications in drawings are being carried out for considering the site condition and progress.

6.6 Pre-construction Activity

29. After successful completion of one stage two envelope bidding procedure the construction contract for STIUEIP/W/BRT/ICB-01 was signed on December 2, 2013 with M/S CTCE- Kalika JV, Baluwatar, Kathmandu.

6.7 Draft Report

30. The construction/contract timing schedule was needed to incorporate some additional time of about 4-5 months to account for decision re-making process, tender award procedures.

31. The total cost as per PPTA and earlier designs increased drastically and came to be NRs. **7,274,465,206.69** and therefore needs curtailments and revisions had to be made as per suggestions by PIU in final report.

32. The overall works proposed in the PPTA and the area coverage with connection was thus needed to be phased out.

6.8 Final Report

33. The DSC submitted the Final Reports adopting cost reduction exercise by phasing out of the works. The estimated cost of the Project was reduced and kept as NRs. **3, 278, 140, 000, 00 with a lot of exercises in March 2013.**

34. The sharing of cost by concerned institutions is as follows

Table 7: Agency-wise Financial Contribution to BSMC

Contributors	Amount (US$)	Amount (NRs.)	%
Government of Nepal (GoN)	5,960,256	524,502,513	16.00%
Asian Development Bank (ADB)	24,213,539	2,130,791,460	65.00%
Biratnagar Sub-Metropolitan City (BSMC)	2,980,128	262,251,257	8.00%
Town Development Fund (TDF)	4,097,676	360,595,478	11.00%

6.9 CONSULTANT'S ACTIVITIES IN CONSTRUCTION PHASE

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

Table 8: Consultant's Staff at Project Site, Biratnagar

S. No	Name	Position
1	Mohan Kumar Tuladhar	Team Leader
2	Dil Bahadur Rana	Construction Supervision Engineer
3	Jay Prakash Yadav	Asst. Construction Supervision Engineer-1
4	Bhakta Raj Shakya	Asst. Construction Supervision Engineer-2
5	Bala Ram Mayalu	Social Development Specialist
6	Rajesh Yadav	Junior Engineeer-1
7	Sujan Shrestha	Junior Engineeer-2
8	Ashok Kafle	Junior Engineeer-3
9	Santosh Dahal	Junior Engineeer-4
10	Saroj Bhattrai	Junior Engineeer-5
11	Santosh Yadav	Office Manager (from 18 April 2015)
12	Ramji Gimire	Driver-1
13	Suman Ghimire	Driver-2
14	Ramila Ghimire	Office Assistant

36. 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 as listed below:

i. Daily Construction supervision

ii. Quality control, cost control and time control

iii. Measurement and Certification of Interim Payment Certificates (IPC)

iv. Modification and design of storm drainage and sewer lines, manholes etc.as per site condition and approve working drawings

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. Meet obligation of reporting requirement – Updated Environmental Progress Report, Updated Resettlement Progress Report, Monthly Progress Report, Semi-Annual Updated Resettlement Progress Report

ix. Prepare Due Diligence Report of the Project

x. Prepare Variations Order

xi. Maintain correspondences with the Employer and the Contractor

xii. Assist to PIU

6.10 KEY DATES

The consultant has noted the following key dates for the month of May 2015

Table 9: Key dates of events /Activities:

S. No	Date	Activities/Events	Remarks
1	25 June 2015	Meeting at PM's Office PIU Biratnagar and site visit by representatives from PCO, ADB, PMSC, DSC and the Contractor	The meeting was focused on the issues of delayed progress and its planning for recovery for the next working season. The participants of the site visit were: 1. Mr. Parag Kayastha, Project Deputy Director, PCO 2. Mr. Indu Dhakal, Consultant for ADB 3. Mr. Prayag Lal Joshi, Dty. Team Leader, PMSC 4. Mr. Upendra Prasad Baral, Project Manager, PIU 5. Mr. Bharat Neupane, Deputy Project Manager, PIU 6. Mr. Mohan K Tuladhar, Team Leader, DSC 7. Mr. Dil Bahadur Rana, Const. Supervision Engineer, DSC 8. Mr. Ujjwal Prasai, Project Manager, CTCE_KALIKA JV 9. Mr. Santosh Pudasaini, Engineer, CTCE_KALIKA JV

7 DETAILS OF ACTIVITIES CARRIED OUT IN THIS MONTH

7.1 PHYSICAL PROGRESS IN THIS MONTH

Table 10: Physical Progress in Storm Water Drains:

Physical Progress till 30 June 2015						
S.N.	Location	Proposed Length (m)	Progress		Total to date (m)	Progress (%)
			Up to May 2015 (m)	This Month (m)		
1	B1	3,580.00	3,540.00	-	3,540.00	99%
2	B2	3,742.00	3,120.00	222.00	3,342.00	89%
3	B3	3,514.00	3,326.00	-	3,326.00	95%
4	S5	740.00	-	-	-	0%
5	S9	3,178.00	810.00	-	810.00	25%
6	S11	2,092.00	1,434.00	-	1,434.00	69%
7	S13	5,640.00	4,073.00	221.00	4,294.00	76%
8	CN2	2,273.00	2,216.00	-	2,216.00	97%
9	CN3	2,170.00	1,470.00	23.00	1,493.00	69%
10	Rani Area	8,483.00	2,431.00	90.00	2,521.00	30%
11	R2 (Rehab)	6,000.00	6,120.00	205.00	6,325.00	105%
	Total	**41,412.00**	**28,540.00**		**29,301.00**	71%

Note: There is increment in length of drain in R2 road and some length corrected to S13 from previous monthly progress report, April 2015.

Table 11: Physical Progress in Sewer Lines: Till 30 June 2015

Physical Progress till 30 June 2015						
S.N.	Location	Proposed Length (m)	Progress		Total to date (m)	Progress (%)
			Up to May 2015 (m)	This Month (m)		
1	T1	10,912				0%
2	T2	27,128	7,402.00	940.00	**8,342.00**	31%
3	T3	23,070	5,172.00	587.00	**5,759.00**	25%
4	T4	2,530				0%
	Total	**63,640**	**7,991.00**		**14,101.00**	**22%**

Table 12: Physical Progress in Manholes: Till 30 June 2015

S.N.	Description	Progress		Total to date (m)
		Up to May 2015 (m)	This Month (m)	
1	House Connection Chambers	96.00	49.00	**145.00**
2	Sewer Inlet	210.00	59.00	**269.00**
3	Manholes	422.00	68.00	**490.00**

Table 13: Physical Progress in Roads and Lanes: Till 30 June 2015

S.N.	Location	Proposed Length (km)	Progress		Total to date (m)	Progress (%)
			Up to April Month (m)	This Month (m)		
1	T1, T2,T3,T4 and R2	65.0	-	0		Installation of Kerbs /drain covers in progress. Shifting/ relocation of waters supply pipelines on R2 road is complete now. Subbase laying in a 100m long stretch is complete.
	Total	**65.0**				

Table 14: Physical Progress in Waste Water Component at WWTP, Jatuwa:

S.N.	Location	Description	Completed Items to Date	Progress in %
1	Jatuwa	Excavation of Anaerobic Pond	3 nos	**No Activities at WWTP Site in this month**
2	Jatuwa	Excavation of Facultative Pond	2 nos	
3	Jatuwa	River Training Work	600 m	
4	Jatuwa	Boundary Wall	580 m	
5	Jatuwa	Office Cum Lab Building		
6	Jatuwa	Workshop Building		
7	Jatuwa	Generator / Changing House		

Table 15: Physical Progress of Precast Concrete Works: Till 30 June 2015

S.N.	Location	Description	Up to May 2015	This Month	Total to date	Remarks
1	Katahari	Precast Slab	45,903	2,5,14	48,417	Previous qty corrected
2	Katahari	Precuts	4,065	42	4,107	
3	Katahari	Kerb Stone	5,812	0	5,812	

Table 16: Physical Progress of Hume Pipe (NP3): Production Detail till 30 June 2015 in Numbers

S.N.	Diameter (mm) (No)	Pipes Required	Up to previous month, May (No)	This Month (No)	Total to date , June 2015 (No)	Pipes to produce (Balance)	Remarks
1	200		1,562	0	1,562		
2	300		166	37	203		
3	350		201	48	249		
4	400		233	43	276		
5	450		146	55	201		
6	500		288	35	323		
7	600		845	95	940		
8	700		1,072	120	1,192		
9	900		263	0	263		
10	1000		587	25	612		
11	1600		267	4	271		
	Total		**5,584**	**462**	**6046**		

Contractor's Manpower:

Table 17: Contractor's key staffs:

Designation	No	Remarks
Project / Contract Manager	1	
Planning Engineer/Construction Engineer	1	
Construction Engineer	1	
Site Engineers	5	
Quality Control Manager	1	
Office/Bill Engineer	1	
Junior Engineer	10	
Sub Overseers	6	
Safety Manager / Senior Site Supervisor	1	
Accountant / Office Manager	1	
Lab Assistant	3	
Store Keeper	1	
Light Drivers	6	
Machine Operator	14	
Site Supervisor	5	
Other Supporting Staff	18	
Skilled Labor at Site	25	M:20; F:5
Unskilled Labor at Site	80	M:68; F:12
Total Labour	107	M:88 , F :17

Contractor's Equipment:
Table 18: Contractor's Equipment:

Equipment	No	Remarks
Back Hoe JCB	8	
Loader	1	
Excavator	5	
Excavator with Long Boom	1	
Plate Compactor	2	
Concrete Mixer	6	
Concrete Batching Plant	1	
Kerb Stone Machine	1	
Trailer	2	
Transit Mixer	2	
Water Bowser	1	
Steel Cutter	4	
Dumping Tractor	8	
Monkey Jumper	1	
Needle Vibrator	8	
Tipper	17	
Total Station	1	
Level Machine	6	
Jeep	6	
Motor Bike	10	
Asphalt Plant	1	
Asphalt Paver	1	
Crane	1	
Tractor	9	
Concrete Transit Mixture	3	

7.2 Cumulative Progress (S Curve)

Contractor's Revised Cumulative Progress S-Curve

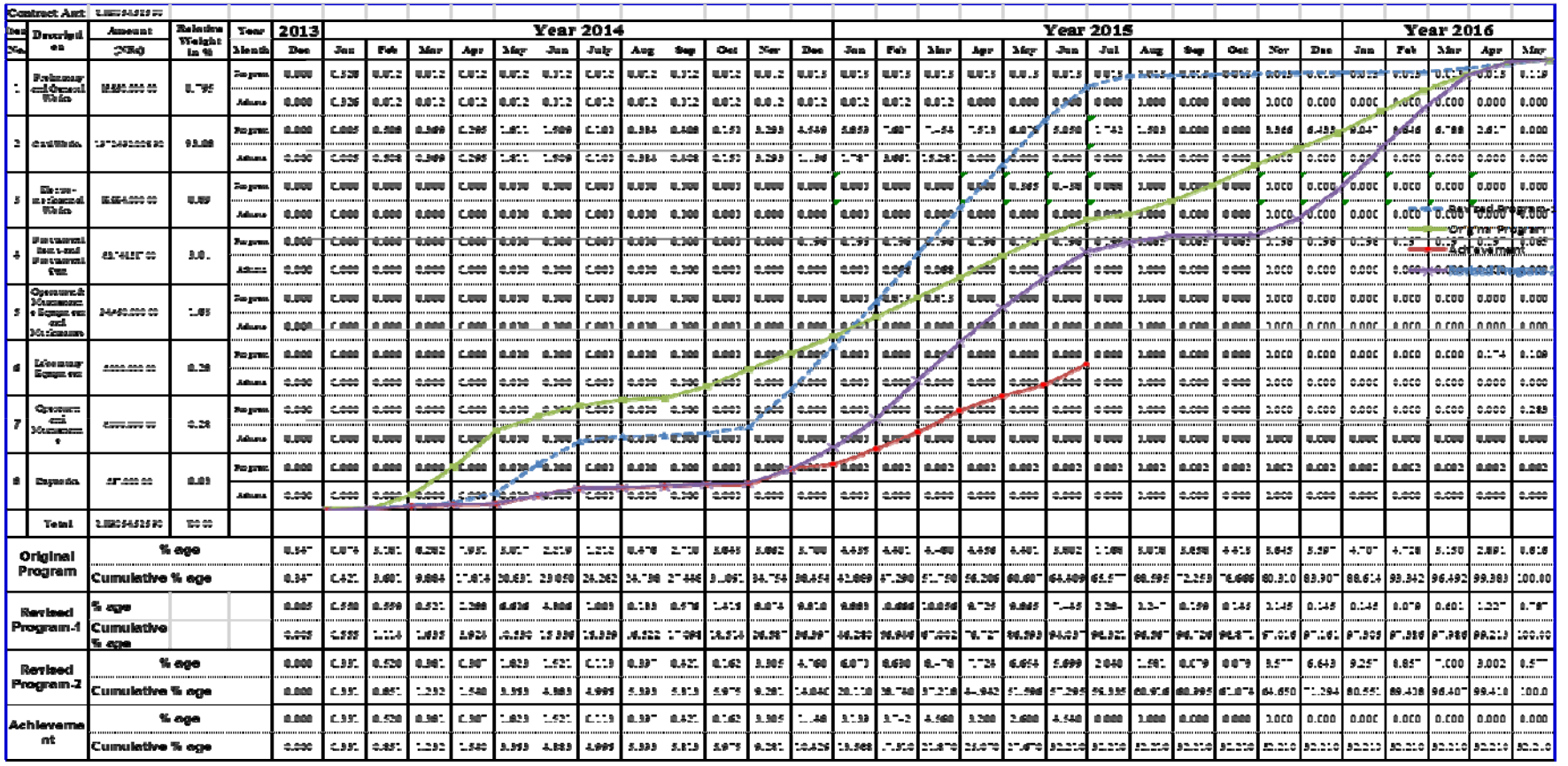


Figure 7: S- Curve of Physical Progress

8 DETAILS OF SAFEGUARD ACTIVITIES (SOCIAL, ENVIRONMENTAL AND RESETTLEMENT ACTIVITIES AND ISSUES)

This report records the project implementation performance of social safeguard aspect for the duration of June, 2015 and highlights the key activities undertaken during the period. The activities on the social development during the period are summarized below:

8.1 SOCIAL ISSUES

8.1.1 OPERATIONAL GUIDELINES FOR COMMUNITY MOBILIZATION AND IMPLEMENTATION OF CDP

- **VISIT, INTERACTION AND CONSULTATION WITH COMMUNITY PEOPLE**

37. Social Development Specialist (SDS) of the DSC is closely monitoring the social issues resulted due to the project activities. Visiting and interacting with people, Tole Lane Organizations (TLOs) and formal and informal consultation meetings are going on in this regard.

The project is regularly disseminating the information and message to community people about the project features, its purpose, methods of use and functionality of infrastructure under construction by the project through such consultation meetings. These meetings are fruitful to provide prior information regarding the project construction activities before execution at the community level. It is an appropriate platform to interact and make dialogue between 4 Cs (The Client, Consultant, Contractor and Community) about the project features, prime objectives, purpose, work methodology and potential threats/ cautions to be adopted during the project implementation.

The visits, meetings and consultations with community people at TLOs have provided many opportunities to obtain people's views and perception towards the project. Community people of those particular localities used to discuss extensively in the project features and have been provided some suggestions for efficient carryover of the project components and assured cooperation and coordination in the project execution in their localities.

Social Development Specialist (SDS)/ DSC along with of PIU, NGO staffs have been actively participated in the meetings. SDS/DSC usually been facilitating the consultation meetings, support to prepare meeting minutes and obtain decisions.

Apart from of this, many field visits and observations with community are also important to disseminate project message and monitor project features in the community. Monitoring visits along with Project Manager (PM), TL/DSC and TL/CDP to the core project area, community development program area and construction sites have been beneficial to make insight to the project progress, its effectiveness and challenges.

- **SAFEGUARD DESK**

38. A Safeguard Desk established in the project has been effective in planning, monitoring and follow up of all social development/ safeguard issues including the resettlement plan. It has been started as a functional mechanism consisting of PIU, NGO and DSC for this purpose. The desk consists of the Social Development Chief of PIU, Team Leader of CDP/ NGO and SDS of DSC with close consultation and guidance of PM/ PIU. It is in compliance with the Aide Memoire of last ADB Mission (21 April-12 May 2014). It is decided that the desk will review, update and discuss the progress, issues, constraints and challenges of social aspects, Community Development Program and implementation of resettlement plan as well as monitoring of social development activities.

On 10th June 2015, a regular meeting of the social safeguard desk has been held. The desk meeting reviewed the consultation meeting outputs and the purpose of the meeting that was to address some public concerns regarding on the road, drainage construction and sewerage pipe laying works in the project communities. The meeting perceived that such consultations should be continued to obtain people's feedback, suggestions and idea for way forward. (Meeting Minute in Annex 6)

- **ToT on Gender and Social Inclusion (GESI) Mainstreaming**

39. The project has been envisaged a 'Training of Trainers (ToT) on GESI Mainstreaming' for Biratnagar Sub Metropolitan City (BSMC) Office and STIUEIP project staff. The Aide Memoir Report of the ADB Review Mission has also noted about the training to be conducted in Biratnagar for the staff of municipality and related agencies. The Mission has recommended for conducting GESI training relating to urban infrastructure development to staff of municipality, municipal steering committee, PIU, local stakeholder agency and make them accountable for the better results. In line with this, the project is going to conduct Gender and Social Inclusion (GESI) Sensitization Training within this or next month.

Safeguard desk members discussed and reviewed the proposed 'ToT on GESI Mainstreaming' proposal. Social Development Specialist (SDS) of DSC has reviewed the detail proposal and adjusted budget accordingly for the 'Training of Trainers (ToT)' model. The training arrangement will be decided after the approval of this proposal by the project authority. Primarily it will be a 5 days training focusing mainly on Gender and Social inclusion Action Plan (GESIAP) comprising other project elements. About 35 participants from Biratnagar Sub Metropolitan City (BSMC) office and project staffs will be participated in the training.

- **Update of Small Facilities Construction and other Activities in CDP/STIUEIP**

40. The latest safeguard desk meeting has reviewed all ongoing and completed small facilities infrastructure and other activities implemented under the Community Development Program (CDP), a component of STIUEIP. It provided a common understanding and status information of infrastructures and activities under the CDP program to all safeguard desk members.

On 21st June, the SDS of DSC attended a meeting organized by PIU/STIUEIP and CDP/FriPAD for appraisal of community development programs. It is an interaction program between User's Committees (UCs), Tole Lane Organizations (TLOs), monitoring committees and project officials. SDS/DSC attended this program and provided feedback and suggestion to the organizer. He also briefed his view in the meeting in a way to make the users committee more inclusive and participatory in terms of Gender Equality and Social Inclusion (GESI). TL/CDP presented the update progress status of each activities implemented under small facilities infrastructure and other awareness activities in that meeting.

A glimpse of community development program has been obtained by the presentation in the appraisal and interaction meeting. Total 7417.36 m. roads and 13246.32 m. drains are under construction through small facilities infrastructure by CDP/STIUEIP. Regarding on the household toilet, total 458 nos. such toilets has been built by May 2015. Similarly 10 hand pumps has been installed, 45 hand pump platforms built and 5 public toilets are constructing.

- **Social Audit**

42. A social audit is an attempt to measure a project's actual social performance against its social objectives. The social audit generally used for more than simply monitoring and evaluating social performance. The audit is conducted jointly by the project and the people, especially by those people who are affected by, or are the intended beneficiaries, the activity being audited. It is a tool for empowerment of the stakeholders for comprehensive verification of records and the field.

In line with this, the User's Committee (UC) of 'Rehabilitation of Public Toilet, Compound Wall and Shed Construction at Hartali Hat, Rani' has conducted social audit on 11th June 2015. The rehabilitation project has been executed under 'small facilities infrastructure' provision of Community Development Program (CDP)/STIUEIP. The construction activities are now over and being used by the community. FriPAD, the NGO to support in executing of such small facilities infrastructure has been assisted UC to organize social audit. The responsible executive of UC presented the purpose and construction procedure of the facility in the meeting of social audit. About 50/60 beneficiary people were attended in the meeting. The secretary of UC presented the detail expenditure records and resources (physical and financial) provided by the project in the meeting. The beneficiaries discussed on the resources provided by project and expenditure for the completion of toilet rehabilitation, compound wall and shed construction.

SDS/DSC participated in the social audit meeting as an observer and provided formal feedback, suggestions and input as the organizer requested for it. He addressed the meeting by encouraging people to maintain accountability and transparency in every public development endeavor.

- **Employment in Project**

43 The core activities of the project i.e. sewerage pipe laying, drain construction and road/ lane improvement provided employment to about 250 in a day this month. The employed human resources varied from skilled engineer/ project manager to general labor, supervisor, (sub) overseers and mechanics. However, a very few women (16%) are working in the construction activities as skilled and unskilled labor but they are paid equal to men for similar type of work. Three women Assistant Sub-Engineers are also working at construction sites after completing OJT (on the job training) successfully at the same sites from different CTEVT affiliated institutes of nearby districts. The contractor has been suggested to increase the work opportunity to women in different types of works.

- **General**

44. Sewer/ Drainage lines are being laid in the public rights of way (RoW). During construction, if any trees or crops or structures demolished, it shall be properly addressed with compensation. Private individuals or shopkeepers will also be looked into if their livelihood is affected by the disturbance during constructions/ pipe laying works.

Apart from this, the project did not encounter any resettlement or re-location and any compensation issue in the month June 2015.

9 KEY ISSUES AND REMARKS / REASON FOR DEVIATION (IF ANY) AFFECTING PROGRESS

45. Following are the key issues affected in progress:

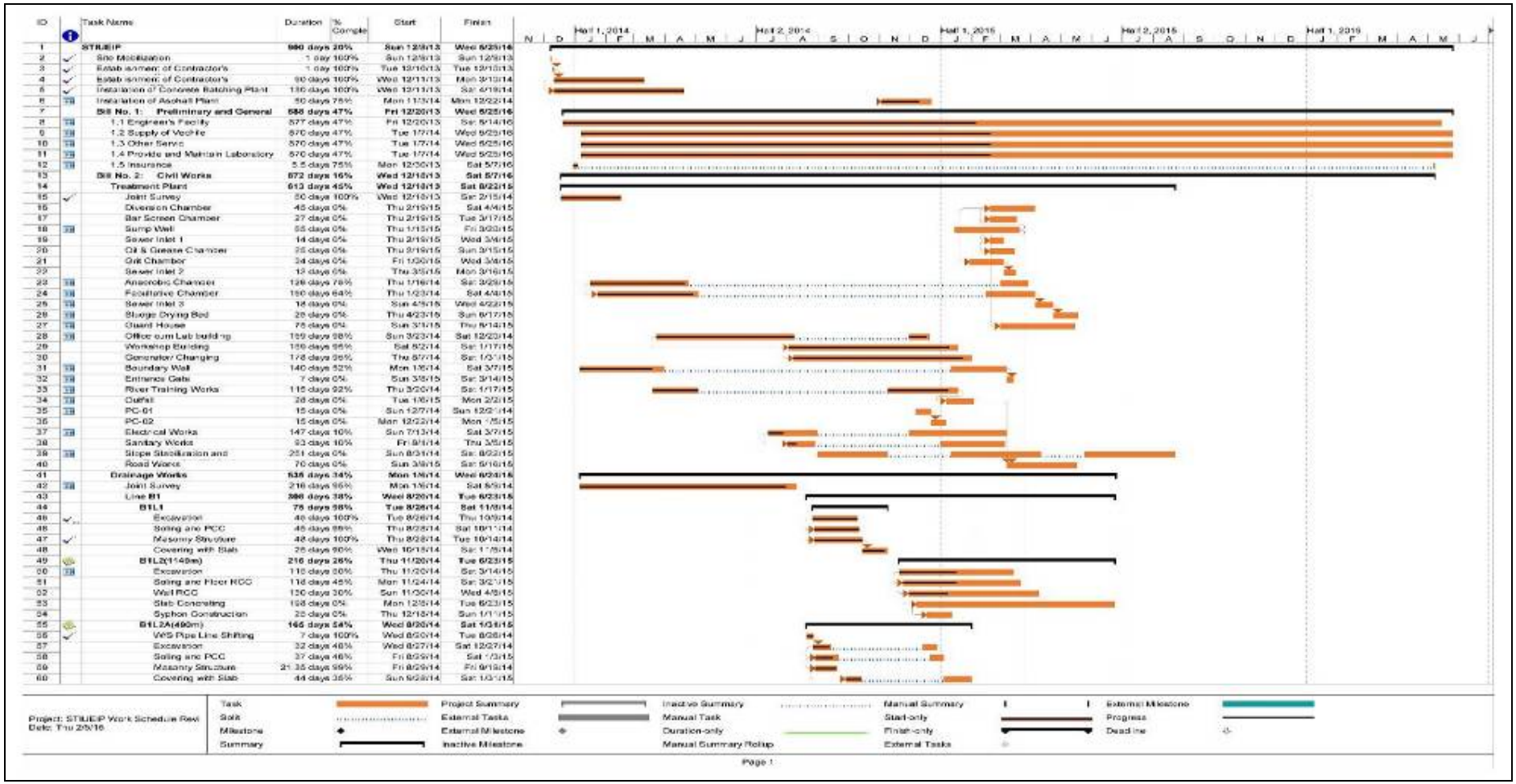
- Limited site possession and access to site within Right of Way (RoW)
- Contractor is lacking with qualified and experienced technical personnel, especially engineers (Civil, Sanitary, Electromechanical and Road Engineer).
- Shifting of electrical poles, transformers and telephone lines are in progress with very slow pace. This is one if the main cause which has directly impacted road works progress.
- Frequent rainfall started in this month and difficult to excavate trench for sewer pipes as well for storm drainage works.

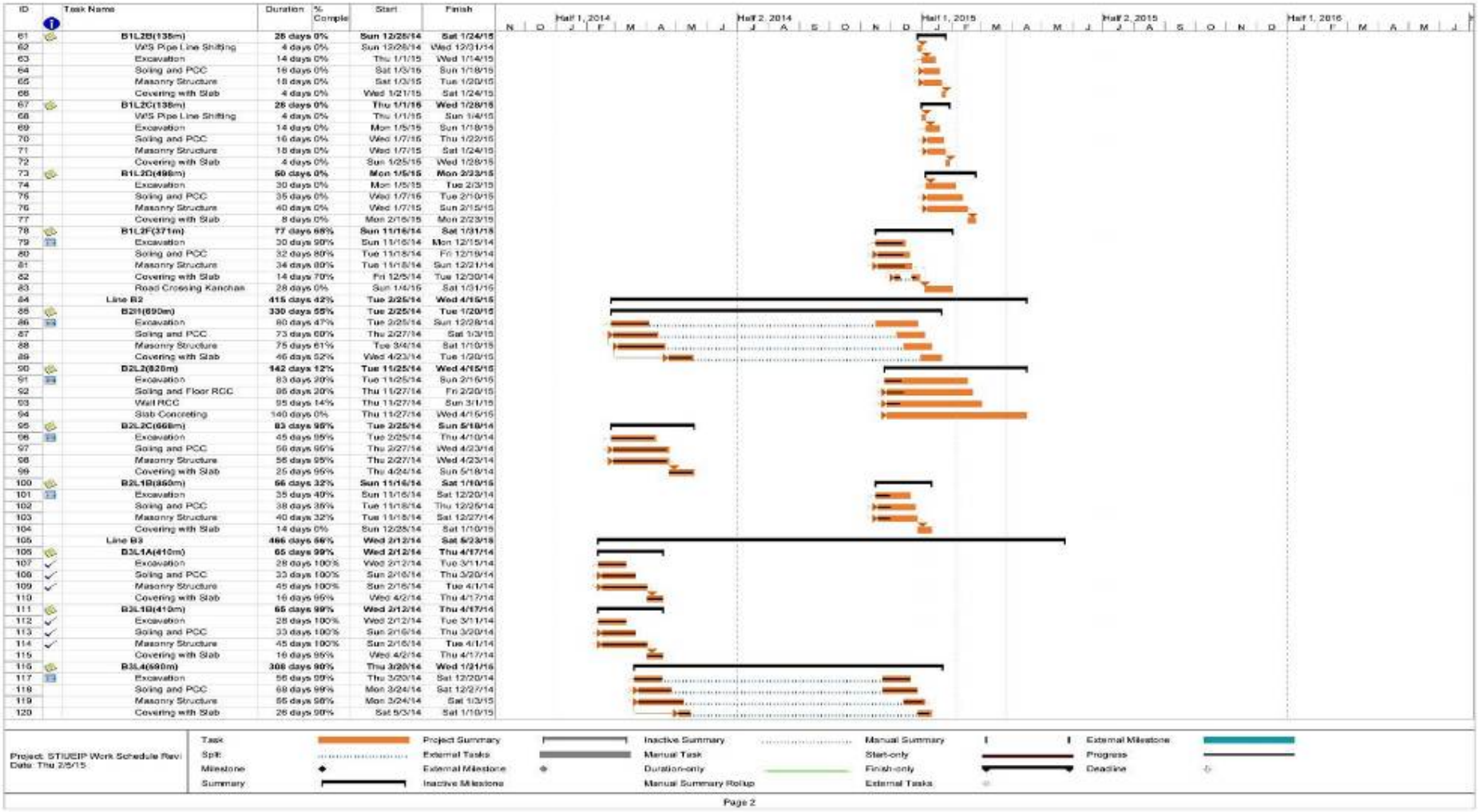
10 WORK PLAN FOR THE NEXT MONTH

46. Following are the Contractor's works in the next month **(Please refer to the contractor's progress report for quantitative plan works for next month):**
    - Production of precast RCC items (Hume pipe, kerb stone, chamber, manhole, drain cover slab etc)
    - Suitability tests and routine tests of construction materials at Lab and at site
    - Maintain the existing roads where the sewer lines are already installed.

ANNEX-1: Work Schedule (Rev.02) (Under Review) and Progress June 2015

Note: Please refer to the contractor's progress report for detail and complete work program.



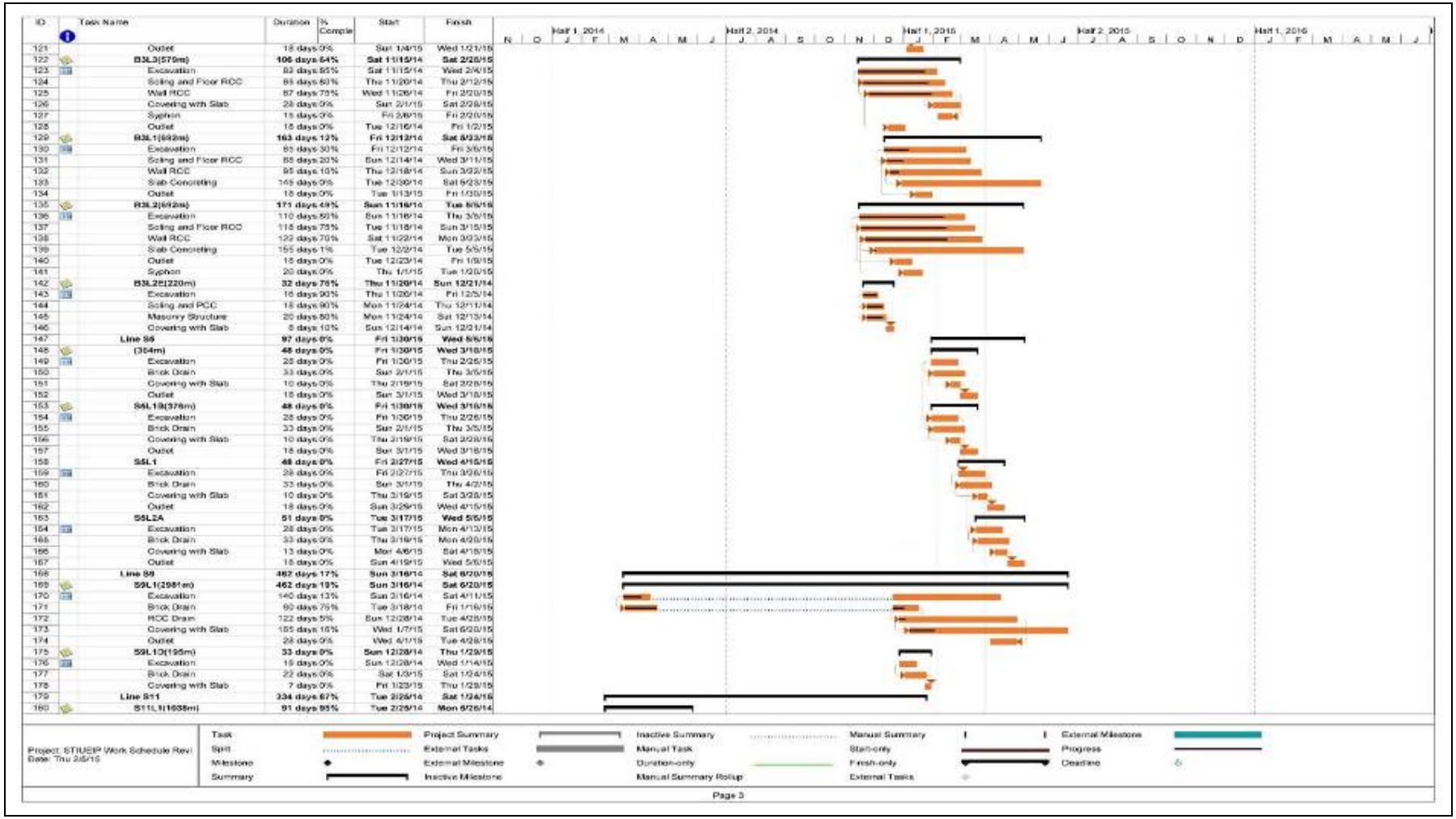


ID	Task Name	Duration	% Comple	Start	Finish
61	**B1L2B(135m)**	**28 days**	**0%**	**Sun 12/28/14**	**Sat 1/24/15**
62	WS Pipe Line Shifting	4 days	0%	Sun 12/28/14	Wed 12/31/14
63	Excavation	14 days	0%	Thu 1/1/15	Wed 1/14/15
64	Soling and PCC	16 days	0%	Sat 1/3/15	Sun 1/18/15
65	Masonry Structure	18 days	0%	Sat 1/3/15	Tue 1/20/15
66	Covering with Slab	4 days	0%	Wed 1/21/15	Sat 1/24/15
67	**B1L2C(138m)**	**28 days**	**0%**	**Thu 1/1/15**	**Wed 1/28/15**
68	WS Pipe Line Shifting	4 days	0%	Thu 1/1/15	Sun 1/4/15
69	Excavation	14 days	0%	Mon 1/5/15	Sun 1/18/15
70	Soling and PCC	16 days	0%	Wed 1/7/15	Thu 1/22/15
71	Masonry Structure	18 days	0%	Wed 1/7/15	Sat 1/24/15
72	Covering with Slab	4 days	0%	Sun 1/25/15	Wed 1/28/15
73	**B1L2D(498m)**	**50 days**	**0%**	**Mon 1/5/15**	**Mon 2/23/15**
74	Excavation	30 days	0%	Mon 1/5/15	Tue 2/3/15
75	Soling and PCC	35 days	0%	Wed 1/7/15	Tue 2/10/15
76	Masonry Structure	40 days	0%	Wed 1/7/15	Sun 2/15/15
77	Covering with Slab	8 days	0%	Mon 2/16/15	Mon 2/23/15
78	**B1L2F(371m)**	**77 days**	**68%**	**Sun 11/16/14**	**Sat 1/31/15**
79	Excavation	30 days	90%	Sun 11/16/14	Mon 12/15/14
80	Soling and PCC	32 days	80%	Tue 11/18/14	Fri 12/19/14
81	Masonry Structure	34 days	80%	Tue 11/18/14	Sun 12/21/14
82	Covering with Slab	14 days	70%	Fri 12/5/14	Tue 12/30/14
83	Road Crossing Kanchan	28 days	0%	Sun 1/4/15	Sat 1/31/15
84	**Line B2**	**415 days**	**42%**	**Tue 2/25/14**	**Wed 4/15/15**
85	**B2I(690m)**	**330 days**	**55%**	**Tue 2/25/14**	**Tue 1/20/15**
86	Excavation	80 days	47%	Tue 2/25/14	Sun 12/28/14
87	Soling and PCC	73 days	60%	Thu 2/27/14	Sat 1/3/15
88	Masonry Structure	75 days	61%	Tue 3/4/14	Sat 1/10/15
89	Covering with Slab	46 days	52%	Wed 4/23/14	Tue 1/20/15
90	**B2L2(828m)**	**142 days**	**12%**	**Tue 11/25/14**	**Wed 4/15/15**
91	Excavation	83 days	20%	Tue 11/25/14	Sun 2/15/15
92	Soling and Floor RCC	86 days	20%	Thu 11/27/14	Fri 2/20/15
93	Wall RCC	95 days	14%	Thu 11/27/14	Sun 3/1/15
94	Slab Concreting	140 days	0%	Thu 11/27/14	Wed 4/15/15
95	**B2L2C(668m)**	**83 days**	**95%**	**Tue 2/25/14**	**Sun 5/18/14**
96	Excavation	45 days	95%	Tue 2/25/14	Thu 4/10/14
97	Soling and PCC	56 days	95%	Thu 2/27/14	Wed 4/23/14
98	Masonry Structure	56 days	95%	Thu 2/27/14	Wed 4/23/14
99	Covering with Slab	25 days	95%	Thu 4/24/14	Sun 5/18/14
100	**B2L1B(860m)**	**66 days**	**32%**	**Sun 11/16/14**	**Sat 1/10/15**
101	Excavation	35 days	40%	Sun 11/16/14	Sat 12/20/14
102	Soling and PCC	38 days	35%	Tue 11/18/14	Thu 12/25/14
103	Masonry Structure	40 days	32%	Tue 11/18/14	Sat 12/27/14
104	Covering with Slab	14 days	0%	Sun 12/28/14	Sat 1/10/15
105	**Line B3**	**466 days**	**66%**	**Wed 2/12/14**	**Sat 5/23/15**
106	**B3L1A(410m)**	**65 days**	**99%**	**Wed 2/12/14**	**Thu 4/17/14**
107	Excavation	28 days	100%	Wed 2/12/14	Tue 3/11/14
108	Soling and PCC	33 days	100%	Sun 2/16/14	Thu 3/20/14
109	Masonry Structure	45 days	100%	Sun 2/16/14	Tue 4/1/14
110	Covering with Slab	16 days	99%	Wed 4/2/14	Thu 4/17/14
111	**B3L1B(410m)**	**65 days**	**99%**	**Wed 2/12/14**	**Thu 4/17/14**
112	Excavation	28 days	100%	Wed 2/12/14	Tue 3/11/14
113	Soling and PCC	33 days	100%	Sun 2/16/14	Thu 3/20/14
114	Masonry Structure	45 days	100%	Sun 2/16/14	Tue 4/1/14
115	Covering with Slab	16 days	99%	Wed 4/2/14	Thu 4/17/14
116	**B3L4(690m)**	**308 days**	**90%**	**Thu 3/20/14**	**Wed 1/21/15**
117	Excavation	56 days	99%	Thu 3/20/14	Sat 12/20/14
118	Soling and PCC	69 days	99%	Mon 3/24/14	Sat 12/27/14
119	Masonry Structure	55 days	98%	Mon 3/24/14	Sat 1/3/15
120	Covering with Slab	26 days	90%	Sat 5/3/14	Sat 1/10/15

Project: STUDIP Work Schedule Revi
Date: Thu 2/5/15

Task | Split | Milestone | Summary | Project Summary | External Tasks | External Milestone | Inactive Milestone | Inactive Summary | Manual Task | Duration-only | Manual Summary Rollup | Manual Summary | Start-only | Finish-only | External Tasks | External Milestone | Progress | Deadline

Page 2


ID
Task Name
Duration
% Comple
Start
Finish
Half 1, 2014
Half 2, 2014
Half 1, 2015
Half 2, 2015
Half 1, 2016
121 Outlet 18 days 0% Sat 1/4/15 Wed 1/21/15
122 S3L3(570m) 106 days 64% Sat 11/15/14 Sat 2/28/15
123 Excavation 82 days 85% Sat 11/15/14 Wed 2/4/15
124 Soling and Floor RCC 88 days 80% Thu 11/20/14 Thu 2/12/15
125 Wall RCC 87 days 75% Wed 11/26/14 Fri 2/20/15
126 Covering with Slab 28 days 0% Sun 2/1/15 Sat 2/28/15
127 Syphon 15 days 0% Fri 2/6/15 Fri 2/20/15
128 Outlet 18 days 0% Tue 12/16/14 Fri 1/2/15
129 S3L1(693m) 163 days 12% Fri 12/12/14 Sat 6/13/15
130 Excavation 85 days 30% Fri 12/12/14 Fri 3/6/15
131 Soling and Floor RCC 85 days 20% Sun 12/14/14 Wed 3/11/15
132 Wall RCC 85 days 10% Thu 12/18/14 Sun 3/22/15
133 Slab Concreting 149 days 0% Tue 12/30/14 Sat 6/13/15
134 Outlet 18 days 0% Tue 1/13/15 Fri 1/30/15
135 S3L2(620m) 171 days 49% Sun 11/16/14 Tue 5/5/15
136 Excavation 110 days 60% Sun 11/16/14 Thu 3/5/15
137 Soling and Floor RCC 115 days 75% Tue 11/18/14 Sun 3/15/15
138 Wall RCC 122 days 70% Sat 11/22/14 Mon 3/23/15
139 Slab Concreting 155 days 1% Tue 12/2/14 Tue 5/5/15
140 Outlet 18 days 0% Tue 12/23/14 Fri 1/9/15
141 Syphon 20 days 0% Thu 1/1/15 Tue 1/20/15
142 S3L2E(220m) 32 days 76% Thu 11/20/14 Sun 12/21/14
143 Excavation 16 days 90% Thu 11/20/14 Fri 12/5/14
144 Soling and PCC 18 days 90% Mon 11/24/14 Thu 12/11/14
145 Masonry Structure 20 days 50% Mon 11/24/14 Sat 12/13/14
146 Covering with Slab 8 days 10% Sun 12/14/14 Sun 12/21/14
147 Line S6 97 days 0% Fri 1/30/15 Wed 5/6/15
148 (364m) 48 days 0% Fri 1/30/15 Wed 3/18/15
149 Excavation 28 days 0% Fri 1/30/15 Thu 2/26/15
150 Brick Drain 33 days 0% Sun 2/1/15 Thu 3/5/15
151 Covering with Slab 10 days 0% Thu 2/19/15 Sat 2/28/15
152 Outlet 18 days 0% Sun 3/1/15 Wed 3/18/15
153 S6L1B(376m) 48 days 0% Fri 1/30/15 Wed 3/18/15
154 Excavation 28 days 0% Fri 1/30/15 Thu 2/26/15
155 Brick Drain 33 days 0% Sun 2/1/15 Thu 3/5/15
156 Covering with Slab 10 days 0% Thu 2/19/15 Sat 2/28/15
157 Outlet 18 days 0% Sun 3/1/15 Wed 3/18/15
158 S6L1 48 days 0% Fri 2/27/15 Wed 4/15/15
159 Excavation 28 days 0% Fri 2/27/15 Thu 3/26/15
160 Brick Drain 33 days 0% Sun 3/1/15 Thu 4/2/15
161 Covering with Slab 10 days 0% Thu 3/19/15 Sat 3/28/15
162 Outlet 18 days 0% Sun 3/29/15 Wed 4/15/15
163 S6L2A 51 days 0% Tue 3/17/15 Wed 5/6/15
164 Excavation 28 days 0% Tue 3/17/15 Mon 4/13/15
165 Brick Drain 33 days 0% Thu 3/19/15 Mon 4/20/15
166 Covering with Slab 13 days 0% Mon 4/6/15 Sat 4/18/15
167 Outlet 18 days 0% Sun 4/19/15 Wed 5/6/15
168 Line S8 462 days 17% Sun 3/16/14 Sat 6/20/15
169 S8L1(2581m) 462 days 13% Sun 3/16/14 Sat 6/20/15
170 Excavation 140 days 13% Sun 3/16/14 Sat 4/11/15
171 Brick Drain 60 days 75% Tue 3/18/14 Fri 1/16/15
172 RCC Drain 122 days 5% Sun 12/28/14 Tue 4/28/15
173 Covering with Slab 155 days 16% Wed 1/7/15 Sat 6/20/15
174 Outlet 28 days 0% Wed 4/1/15 Tue 4/28/15
175 S8L1D(195m) 33 days 0% Sun 12/28/14 Thu 1/29/15
176 Excavation 16 days 0% Sun 12/28/14 Wed 1/14/15
177 Brick Drain 22 days 0% Sat 1/3/15 Sat 1/24/15
178 Covering with Slab 7 days 0% Fri 1/23/15 Thu 1/29/15
179 Line S11 334 days 67% Tue 2/25/14 Sat 1/24/15
180 S11L1(1638m) 91 days 95% Tue 2/25/14 Mon 6/26/14
Project: STUDIP Work Schedule Revi
Date: Thu 2/5/15
Task
Split
Milestone
Summary
Project Summary
External Tasks
External Milestone
Inactive Milestone
Inactive Summary
Manual Task
Duration-only
Manual Summary Rollup
Manual Summary
Start-only
Finish-only
External Tasks
External Milestone
Progress
Deadline
Page 3

ANNEX2: PHOTOGRAPHS – JUNE 2015

Scarification of Existing Road Surface of R2 (Pushpalal) Road for Sub-grade Preparation

Preparation of Subgrade at R2 Road for 100 m

Sub-base prepared in a 100 m length at R2 Road

Brick Masonry Drain at Radha Krishna Chowk,B2

Brick Masonry Drain at Mantapokhari, Line 4D (Southern Storm Drainage System)

Brick Masonry Drain at Hattalihat (Southern Storm Drainage System)

ANNEX-3: FINANCIAL STATUS (DETAILS OF SUBMITTED INVOICES AND RECEIPT OF PAYMENTS WITH KEY DATES)

Invoice #	For Month	Invoice Amount including VAT		Received Amount		Remarks
Invoice 01	Advance	NRs. 9,866,160.40	USD 104,621.20	NRs. 9,866,160.40	USD 104,621.20	Received
Invoice 02	Inception Report	NRs. 1,947, 420.08	USD 52,721.00	Rs. 1,947, 420.08	USD 52,721.00	Received
Invoice 03	Jan +Feb, 2012-months Invoice	NRs. 2,387,262.11	USD 4, 243.15	NRs.2,329,310.81	USD 4, 243.15	Received
Invoice 04	March, 2012	NRs. 537,546.65	USD 2,276.95	NRs. 351,430.00	USD 2,276.95	Received
Invoice 05	April, 2012	NRs. 396,065.00		NPR 267,810.00		Received
Invoice 06	Vehicle Invoice	NRs. 8,000,000.00		NRs. 8,000,000.00		Received
Invoice 07	May- month Invoice	NRs. 502,324.55		NRs 250,860.00		Received
Invoice 08	June-month Invoice	NRs. 464,430.00		NRs 262,160.00		Received
Invoice09	Interim Report		USD 70,295.04		USD 70,295.04	Received

Invoice #	For Month	Invoice Amount including VAT		Received Amount		Remarks
Invoice 10	Interim Report	NRs. 2,596,560.10		NRs 2,596,560.10		Received
Invoice 11	April-June,2012		USD 1,270.00		USD 1,270.00	Received
Invoice 12	July-month Invoice		USD 2,015.00		USD 2,015.00	Received
Invoice 13	Survey Invoice I	NRs. 2,166,775.00		NRs. 2,166,775.00		Received
Invoice 14	July-month Invoice	NRs. 669,751.00		NRs. 321,146.00		Received
Invoice 15	August month Invoice	NRs. 337,870.00	USD 000.00	NPR 314,140.00		Received
Invoice 16	September month Invoice	NRs. 328, 830.00	USD 3, 361.75	NRs. 314,140.00	USD 1,854.75	Received
Invoice 17	Survey Works Invoice II	NRs. 1,166,775.00		NRs. 1,166,775.00		Received
Invoice 18	Monthly Invoice Oct.12	NRs. 357,080.00	USD 2,895.00	NRs. 324,310.00	USD 2,895.00	Received
Invoice 19	Environmental Base line survey	NRs.144,634.35		NRs. 125,769.00		Received
Invoice 20	Monthly Invoice Nov.12	NRs. 331,090.00	US$. 4,407.00	NRs. 324,310.00	USD. 4,407.00	Received
Invoice 21	Monthly Invoice-Dec.2012	NRs. 449,175.00	US$ 1,909.70	Nrs. 350,865.00	USD 1,909.70	Received

Invoice 22	Draft Report Invoice	NRs. 5,193,120.21	US$140,590.08	NRs. 5,193,120.21	USD 91,587.31	Received
Invoice 23	Geotechnical Investigation Invoice	NRs. 191,741.23		NRs.166,731.00		Received
Invoice 24	Vehicle hard top Invoice	NRs. 707,125.70		NRs. 707,125.70		Received
Invoice 25	Monthly Invoice Jan13	NRs. 410,868.00	USD 4,327.90	NRs. 380,923.00	USD 3103.40	Received
Invoice 26	Monthly Invoice Feb13	NRs.324,310.00	USD 3,051.00	NRs.324,310.00	USD 2,203.50	Received
Invoice 27	Monthly Invoice Mar 13	NRs. 404,467.68	USD 4553.90	NRs. 361,600.00	USD 4553.90	Received
Invoice 28	Final Report Invoice	NRs. 3,245,700.13	USD 87,868.80	NRs. 3,245,700.13	USD 85,350.48	Received
Invoice 29	Monthly Invoice April 13	NRs. 340,695.00	USD 1,322.10	NRs. 324,310.00	USD 881.40	Received
Invoice 30	Monthly Invoice May 13	NRs. 671,951.00	USD 4,4435.25	NRs. 576,700.02	USD 4,4435.25	Received
Invoice 31	Monthly Invoice June 13	NRs. 1,107,583.06	USD 2,203.50	NRs.448,376.81	USD 2,203.50	Received
Invoice 32	Additional Survey	NRs. 1,050,052.00				Not received
Invoice 33	Monthly Invoice July 13	NRs. 589,490.49	USD 1,542.45	NRs 481,693.01	USD 1,101.75	Received

Invoice 34	Monthly Invoice August 13	NRs. 701,094.94	USD 00.00	NRs 629,499.89	USD 0.00	Received
Invoice 35	Monthly Invoice Sept. 13	NRs. 424,773.78	USD 00.00	NRs 424,772.45	USD 0.00	Received
Invoice 36	Monthly Invoice Oct. 13	NRs. 458,661.35	USD 00.00	NRs 408,710.78	USD 0.00	Received
Invoice 37	Monthly Invoice Nov. 13	NRs. 450,085.78	USD 0.00	NRs 431,600.15	USD 0.00	Received
Invoice 38	Monthly Invoice Dec. 13	NRs. 501,084.94	USD 00.00	NRs 481,693.01	USD 0.00	Received
Invoice 39	Monthly Invoice Jan. 2014	NRs. 695,501.44	USD 00.00	NRs. 609,960.44	USD 0.00	Received
Invoice 40	Monthly Invoice Feb. 2014	NRs. 613,180.94	USD 00.00	NRs. 613,180.94	USD 0.00	Received
Invoice 41	Monthly Invoice Mar. 2014	NRs.1,308,022.46	USD 00.00	NRs. 961,794.30	USD 0.00	Received
Invoice 42	Monthly Invoice Apr. 2014	NRs. 861,039.32	USD 00.00	NRs. 812,918.13	USD 0.00	Received
Invoice 42	Geotechnical Inv. II	NRs. 549,989.85	USD 00.00	NRs. 546,232.96	USD 0.00	Received
Invoice 43	Monthly Invoice May 2014	NRs. 1,170,291.64	USD 00.00	NRs. 1,119,306.04	USD 0.00	Received
Invoice 44	Monthly Invoice June 2014	NRs.1,163,214.09	USD19,313.42	NRs. 1,098,669.08	USD 0.00	Received

Invoice 45	Monthly Invoice July 2014	NRs. 854,199.00	USD18,465.92	NRs. 812,253.40	USD 0.00	Received
Invoice 46	Monthly Invoice August 2014	NRs 865,951.00	USD 0.00	NRs. 819,485.40	USD 0.00	Received
Invoice 47	Monthly Invoice September 2014	NRs 777,343.07	USD 0.00	NRs. 647,031.02	USD 0.00	Received
Invoice 48	Monthly Invoice October 2014	NRs 841,778.13	USD 0.00	NRs. 736,326.53	USD 0.00	Received
Invoice 49	Monthly Invoice November 2014	NRs 1,306,536.89	USD 0.00	NRs. 1,020,026.24	USD 0.00	Received
Invoice 50	Monthly Invoice December 2014	NRs 1,348,791.74	USD 0.00	NRs. 1,192,968.59	USD 0.00	Received
Invoice 51	Monthly Invoice Jan 2015	NRs 1,255,351.08	USD 0.00	NRs. 1,184,301.04	USD 0.00	Received
Invoice 52	Monthly Invoice Feb 2015	NRs 1,319,642.66	USD 0.00	NRs. 1,033,834.74	USD 0.00	Received
Invoice 53	Monthly Invoice Mar 2015	NRs 2,414,019.91	USD 0.00	NRs. 1,795,604.58	USD 0.00	Received
Invoice 54	Monthly Invoice Apr 2015	NRS 1,483,793.91	USD 0.00			Received

ANNEX-4: STATUS OF ACTIONS AGREED WITH PREVIOUS ADB LOAN REVIEW MISSION

S. No.	Agreed Items in ADB Review Mission with DSC on 2-4 December 2014	Status	Responsibility
1	Updated Semi-Annual Resettlement and Social Aspect Report	Report Submitted on 14 January 2015	DSC/PMSC
2	DSC will review its construction supervision plan (including international experts inputs) against the contractors approved scheduled and submit it to PIU.	Draft Plan submitted	DSC
3	Submission of implementation status of EMP to ADB in quarterly basis	Report Submitted till March 2015, 2014 and additional Semi-Annual Oct 2014 - March 2015	DSC/PMSC

ANNEX-5: PROFESSIONAL INPUT AS PER CONTRACT VS INPUT USED TILL THIS REPORTING PERIOD

S.No.	Expert / Position	Total man months Input (as per agreement)			Man months Used in 2012/013/014/2015			Balance
A	Professional Staff	Design	Construction	Total	Up to May 2015	June 2015	Total	
A1	**International Professional Staff**				Up to May	June 2015	Total	

S.No.	Expert / Position	Total man months Input (as per agreement)			Man months Used in 2012/013/014/2015			Balance
					2015			
1	Sewerage and Drainage Engineer	8	4	12	7.37	0.00	7.37	4.63
2	Sewage Treatment Specialist (1 day at May, 2014)	5	4	9	6.01	0.00	6.01	2.99
3	PPP Specialist	2		2	2.00	0.00	2.0	0.00
A2	**Domestic Professional Staff**				**Up to May 2015**	**June 2015**	**Total**	**Balance**
4	Team Leader/ S-D Engineer	12	24	36	30.23	1.00	31.23	5.77
5	Sewage Treatment Specialist	8	18	26	11.0	0.00	11.0	15.00
6	Procurement Specialist	5	2	7	8.75	0.00	8.75	(1.75)
7	DTL/ Quantity Surveyor	9		9	10.0	0.00	10.0	(1.00)
8	Urban Planner	4	2	6	5.0	0.00	5.0	1.00
9	Financial Expert	5		5	6.0	0.00	6.0	(1.00)
10	Institutional Development Specialist	2	3	5	2.0	0.00	2.0	3.00
11	PPP Specialist	3		3	3,0	0.00	3,0	0.00

S.No.	Expert / Position	Total man months Input (as per agreement)			Man months Used in 2012/013/014/2015			Balance
12	Roads Specialist	4	8	12	7.00	0.00	7.00	5.00
13	Civil and Structural Specialist	6	2	8	7.95	0.00	7.95	0.05
14	Electrical Engineer	3	1	4	3.50	0.00	3.50	0.50
15	Mechanical Engineer	3	1	4	3.90	0.00	3.90	0.10
16	Construction Management Specialist		10	10	0.83	0.00	0.83	9.17
17	Environmental Specialist	8	12	20	14.59	0.00	14.59	5.41
18	Social Development Specialist	8	15	23	19.00	1.00	20.00	3.00
19	Construction Supervision Engineer		30	30	17.00	1.00	18.00	12.00
20	Asst. Construction S Engineer- 1		30	30	11.50	1.00	12.50	17.50
	Asst. Construction S Engineer- 2		30	30	13.70	1.00	14.70	15.30
21	Senior Statistician	4		4	4.00	0.00	4.00	0.00
22	Geologist	1		1	1.00	0.00	1.00	0.00
23	Biologist	1		1	1.00	0.00	1.00	0.00
24	Geo-technical Engineer	1		1	2.40	0.00	2.40	(1.40)

S.No.	Expert / Position	Total man months Input (as per agreement)			Man months Used in 2012/013/014/2015			Balance
25	GIS Expert	2		2	4.00	0.00	4.00	(2.00)
26	Senior Surveyor	2		2	2.00	0.00	2.00	0.00
	Network Modular				8.00	0.00	8.00	(8.00)
	Hydrologist				4.00	0.00	4.00	(4.00)
A-3	Support Staff							
27	Junior Engineer-1			49	41.00	1.00	42.00	7.00
	Junior Engineer-2			49	41.00	1.00	42.00	7.00
	Junior Engineer-3			24	8.00	1.00	9.00	15.00
	Junior Engineer-4			49	4.33	1.00	5.33	45.67
	Junior Engineer-5			49	1.70	1.00	2.70	46.30
	CAD Operators			20	0.00	0.00	0.00	20.00
28	Accountant / Office Manager			49	41.00	1.00	42.00	7.00
29	Secretary / Computer Operator			49	39.25	1.00	40.25	8.25
30	Driver-1			49	34.27	1.00	34.27	14.73

S.No.	Expert / Position	Total man months Input (as per agreement)			Man months Used in 2012/013/014/2015			Balance
	Driver-2			49	33.10	1.00	33.10	15.90
30	Office Assistant			49	40.50	1.00	40.50	8.50

ANNEX-6: MINUTES OF MEETING – JUNE 2015

List of Minute of Meeting

1. Consultative Meeting at Ward No 13, 20 May 2015
2. Minutes of Meeting No 07- 31 May 2015
3. Minutes of Meeting No 08- Safeguard Desk, 10 June 2015

सप्तकोशी शहरी एकिकृत शहरी वातावरण सुधार परियोजना

STIUEIP

आयोजना क्षेत्रका समुदायसँग आयोजना सम्बन्धित जानकारी प्रवाह गर्ने र समुदायको सुझाव संकलन गर्न आयोजीत छलफल / अन्तरक्रिया कार्यक्रम

Consultation Meeting

विराटनगर उप महानगरपालिका वार्ड नं. १३

अरनिको उच्च मा. वि.

२०७२ जेठ ६ गते बुधवार ८:३० बजे

उपस्थिति :

संयुक्त नगर समन्वय टोल संगठन संयोजक - श्री राजेश मास्के - [signature]

9842291275 - सन्जु मास्के [signature]

021-471980 - अनिल निरौला [signature]

021-469364 - [illegible] यादव [signature]

विराटनगर उपमहानगरपालिका STIUEIP SD. सुमन दाहाल [signature]

[illegible] कोइराला PAD - [signature]

(१) किरण राज सुवेदी — 9842042893 [signature]

(२) केदार गौतम बिरा-१३ 9842069520 [signature]

(३) ध्रुव प्र० आचार्य - बिरा-१३ - 471-756 [signature]

(४) कुलशेखर दाहाल बिराट-१२ 9842026088 [signature]

(५) रेणुका ढकाल 9842986379 रेणु

(६) शान्ती राम खनाल Fripad - [signature]

(७) सुमन गुप्ता 9862004080 सुमन

(८) मधु नापकोटा 471033 [signature]

9) Dipesh Subedi 9802774000 Subedi

10) Dinesh Subedi. 9852020567 [signature]

11) Kamala Kumari [signature]

12) Raj [illegible] Kumari [signature]

13) [illegible] कुमारी 9842100769 [signature]

14) Murari Dahal — 9842297800 [signature]

15) [illegible] Sapkota 470699 [signature]

१६ सुवास चन्द्र गौतम [signature]

[illegible]

१८. अनुज कुमार यादव - 9842101616 — [signature]
१९. ज्योति राजभण्डारी 9842024715 — [signature]
१९ सन्तोष पुडासैनी 9802728027 [signature]
२०. बलराम मायालु SDSIDSC 9841249718 [signature]
२१. नूर जंग शाही STIUEIP/CDP 9852027952 [signature]
२२ द्रौपदी ढकाल 9842089416
२३ शोभा पौडेल [signature]
२४ नवनीत बस्नेत [signature]

समुदाय बाट माग भई आएका मुद्दाहरू भन्नाई सरोकार वाला निकाय र आयोजना कन्ट्र्याक्टर तथा कर्मचारी हरू बाट निम्न अनुसार निर्णय गरियो

(१) आयोजनाको बोर्डमा सम्पूर्ण जानकारी गराइने

(२) उपभोक्ता वा समुदाय बाट माग भई आएका नयाँ [illegible] कुरा हरू माथी छलफल गरि सुझाव ~~निर्णय~~ हरू संकलन गरियो।

(क) निर्माणको क्रममा पानी बिजुली जस्ता उपभोगमा आउने सुविधा हरू बिग्रे भत्केमा तत्काल योजना संगै मिलाउने

(ख) खनेजोते कार्य गर्नु अघि समुदाय संग समन्वय गरि समय अवधि तोकी समयमा काम सिध्याउने र पर्ने शर्त सुरु गर्ने।

(ग) यातायातको व्यवस्था अवरोध भएको कारण यसलाई निर्माण कार्य सुरु गर्नु अघि [illegible] हरू ठाउँठाउँमा राख्ने कार्य गर्ने

(घ) निर्माणको क्रममा भत्केका ढुंगा नाला तथा बाटो हरू समयमा मिलाउने पनि।

(ङ) कन्ट्र्याक्टर वा निर्माण कार्यको जिम्मा लिएको ठेकेदार वा पक्षले काम गर्दा हुँदै [illegible] तोकिएको समयमा काम सम्पन्न गरे।

(च) अरनिको पथको निर्माण कार्य समयमा सम्पन्न हुन नसक्ने हालमा वर्षाको कारणले गर्दा हालमा स्थगित गरी वर्षा पछि संचालन गर्ने गरी छलफल गरियो।

(छ) आयोजना सञ्चालन/सम्पन्न गर्नेका निम्ति सम्बन्धित सरोकार वालाहरुबिच समन्वय र सहकार्य गर्ने र यसमा हामी समुदायबाट आवश्यक सहयोग र समन्वय गर्ने प्रतिवद्धता व्यक्त गरिएको।

Secondary Towns Integrated Urban Environmental Improvement Project (STIUEIP) Biratnagar

Meeting of Safeguard Desk

Venue : Project Implementation Unit (PIU), Biratnagar
Date : June 10, 2015
Time : 13:30-15:30

Participants:

Upendra Prasad Baral- Project Manager/ STIUEIP, Biratnagar

Punam Kumar Dahal- Chief, Social Development/ PIU, STIUEIP Biratnagar

Noor Jang Thapa- Team Leader/ CDP, STIUEIP

Bala Ram Mayalu- Social Development Specialist/ DSC, STIUEIP

Discussion and Decisions

The following note summarizes major topics deliberated during the meeting and the decision reached.

S. No.	Agenda	Discussions and Decisions
1.	Review of Community Consultation Meeting	The 8th meeting of Safeguard Desk/ STIUEIP Biratnagar held as a regular monthly meeting with review of previous decisions and discussions on additional agendas. The first agenda was to review of community consultation meeting held this month as per the decision of last safeguard desk meeting. SDS/DSC shared the consultation meeting outcome. The meeting was conducted on 20th May at Araniko HSS in ward no. 13 of BSMC. It is significant for obtaining mass consensus on the sewerage line construction along the lanes of Araniko 'ka' and Araniko 'kha' TLOs. The meeting was in line with a planned initiative to disseminate the information and message to community people about the project features, its purpose, and methods of use and functionality of infrastructure under construction by the project. The meeting was fruitful to provide prior information regarding the project construction activities before execution at the community level. It was an appropriate platform to interact and make dialogue between 4 Cs (The Client, Consultant, Contractor and Community) about the project features, prime objectives, purpose, work methodology and potential threats/ cautions to be adopted during the project implementation. The meeting with community people at Araniko HSS, Tin Tolia, Biratnagar, also provided an opportunity to obtain people's views and perception towards the project. Community people of that locality discussed extensively in the project

		features and provided some suggestions for efficient carryover of the project components and assured cooperation and coordination in the project execution in their localities. Social Development Chief (SDC) of PIU (the Client), TL/CDP, SDS and ACSE from DSC (the Consultant), Engineer from Contractor actively participated in the meeting. SDS/DSC and SM/CDP facilitated the consultation meeting, supported to prepare meeting minute and obtained decisions.
2.	GESI training	SDS/DSC tabled a letter from PCO/STIUEIP obtained through PIU at the meeting regarding to GESI ToT. The letter depicts four instruction points to be applied in the forthcoming GESI sensitization training in our project context. As the letter portrays that it is outcome of review and effectiveness study of concerned responsible experts; i.e., ADB consultant Mr. Sangram Singh Lama, GESI consultant of DUDBC Mr. Samir Dhakal and PMSC Social Development and GESI Expert Mr. Rajendra Kumar Pandit. So, this meeting decided to adopt all these suggestions and recommendations in our context learnt from Birgunj and Butwal for the forthcoming GESI ToT and GESI mainstreaming training/ orientation. The major actions will be; • Review the proposal as GESI ToT and GESI mainstreaming training/ orientation in a single proposal. SDS/DSC will review, update, prepare and submit this proposal within few days to PIU. • The training/ orientation will be for 5 or 6 days. • If needed 6 days training, the first 2 days will be for all project stakeholders, political party's leaders, journalists, contractor and municipality personnel. Remaining 4 days will be especially focused on GESI 'ToT' and only the municipality staffs and NGOs affiliated with municipality would be eligible for participation. • Follow the session plan as GESI- ToT organized by Birgunj and Butwal which were finalized by series of interactions among ADB experts, DUDBC GESI expert and DSCs. The potential participants for proposed training will be about 35 nos. The proposed budget will be revised accordingly.
3.	Update of CDP/ Skill development trainings	TL/ CDP and SDC/PIU shared the status of skill development trainings. PM/PIU instructed to appraise the collected training needs and process after the end of this fiscal year.

Secondary Towns Integrated Urban Environmental Improvement Project (STIUEIP), Biratnagar

MEETING NOTES

Sewerage and Drainage Network, Wastewater Treatment Plant, and Roads and Lanes Improvement Subproject

(Contract # STIUEIP/W/BRT/ICB-01)

Meeting held: Date : 31 May 2015
Time : 2:00 PM
Venue : Project Manager's Office at PIU, Biratnagar

Subject : Progress Meeting No 07

Client BSMC , STIUEIP , Government of Nepal(GoN)

Present

1. Mr. Gopal Prasad Regmi, Executive Officer (EO), BSMC
2. Mr. Upendra Prasad Baral, Project Manager (PM), STIUEIP, PIU
3. Mr. Bharat Neupane, Deputy Project Manager(DPM), STIUEIP, PIU
4. Mr. Anil Singh, Project Engineer(PE), STIUEIP, PIU
5. Mr. Prakash Chaudhari, Project Engineer(PE), STIUEIP, PIU
6. Mr. Ghanendra Katwal, Project Engineer(PE), STIUEIP, PIU
7. Mr. Mohan Kumar Tuladhar, Team Leader, Consultant
8. Mr. Jaya Prakasha Yadav, Asst. Const. Supervision Engineer, Consultant
9. Mr. Bhakta R. Shakya, Asst. Const. Supervision Engineer, Consultant
10. Mr.Ujjwal Prasai, Project Manager, CTCE- Kalika JV, Contractor
11. Mr. Mahesh Subedi, Construction Engineer, CTCE- Kalika JV, Contractor
12. Mr. Santosh Pudasaini. Engineer, CTCE- Kalika JV, Contractor

	ACTION by
The meeting was chaired by Mr. Gopal Prasad Regmi, EO. The meeting was open by Mr. Upendra Prasad Baral, PM. Mr. Baral has expressed his serious concern about the completion of storm drainage. Mr. Baral reiterated and reminded the Contractor that the critical sections such as construction of syphon, outlets and connection between drains have to complete before the monsoon. He expressed that this awareness had repeatedly reminded in several discussion and previous meetings.	Contractor Consultant
Mr. Baral said that the Contractor should start planning now for next season in detail and prepare for full swing construction activities without any disruption.	Contractor
Mr. Baral also emphasized in the meeting that the roadside drain and the water supply line within the area of sewerage coverage will be addressed in Variation Order No 2. This matter had been also discussed during meeting at ADB Office on 25 May 2015 and the meeting has agreed to proceed for the shifting/relocation/replacement of water supply pipe lines.	Contractor/ Consultant
Mr. Baral emphasized the Contractor to prepare a detail plan of individual sewer lines for the next working season with date of start and completion.	Contractor/ Consultant
Mr. Prasai raised the issue of RoW and difficulties to prepare complete plan for his activities to complete the project on time. Mr. Prasai also reiterated that this issue has also been repeated in meeting with ADB, PCO, PIU, Consultant and Contractor in Kathmandu on 22-25 May 2015. Mr Prasia also said that delay in R2 road is caused by the shifting of water supply pipelines.	
Mr. Neupane suggested the Contractor to plan completely entire sewer lines for the next season considering the full RoW / access to sites. The Employer is now aware of RoW and its impact on plan of the Contractor to complete the project on time. The Employer has plan to complete all site clearance for access to site/RoW by end of rainy season.	Employer
Mr. Tuladhar has explained work progress till end of May 2015, the total work progress is about 28% and it is expected about 32-34 % work progress by the end of June 2015. Mr. Tuladhar also expressed that the Contractor has not worked at Waste Water Treatment Plant (WWTP) site which is an independent site, there is no question of RoW, public disturbances. The Contractor should have done works in this site so that the disbursement would have been increased by 3-4% during this working season.	Contractor

Mr. Tuladhar said that the Employer requires to clean the Chiyanbari Nala from CN2 outlet to downstream side about 1200m and upstream site from outlet to overhead water tank and out let of CN3. The meeting asked the Contractor to use machine for some section of the Nala where possible and labours at other section of the above stretch. The meeting agreed to pay the Contractor for this activities from the Dayworks and Provisional Sums.	Contractor
Mr. Prasai responded that the work for sump well had started but due to difficulties such as unexpected rain, labour problems due to earthquakes and others that has been stopped now. Mr. Prasai also assured us that the work will be resumed and carried out as much as possible in this working season in this area.	Contractor
Mr. Regmi summarized the meeting content and expressed his serious concern about RoW clearance, complete work plan for next season and initiation of R2 road works in coming days if weather permits.	Contractor
Mr Regmi expressed that we have learned lesson in this season and now all Employer, Consultant and Contractor should work together as a team for the next season to complete the project on time.	Employer/ Consultant/ Contractor
Distribution: **To** the Client, Contractor and Consultant	

The meeting was closed at 4:15 PM.

ANNEX-7: LABORATORY TEST RESULTS OF JUNE 2015

Note: Please refer to the contractor's progress report for detail and complete lab reports.

ANNEX-8: CONTRACTOR'S PROGRESS REPORT- JUNE 2015

Table of Contents

1 Salient Feature

A. General Features	
Employer	Government of Nepal (GoN), Ministry of Urban Development Department of Urban Development and Building Construction
Funded By	Asian Development Bank & Government of Nepal
Project	Biratnagar Sub-Metropolitan City Secondary Towns Integrated Urban Environmental Improvement Project(STIUEIP)
Contract No.	STIUEIP/W/BRT/ICB-01
Location	Biratnagar Sub-Metropolitan City
Consultant	SMEC-Brisbane-AQUA-BDA-CEMAT
Contractor	CTCE-KALIKA JV.
Commencement Date	December 8th, 2013
Completion Date	25th of May 2016
Contract Period	30 month
Contract amount with Provisional Sum	NRs 2,119,054,525.90
Add 13% VAT	NRs 272,278,000.00
Grand Total Contract amount with VAT&PS	NRs 2,391,332,525.90

2 Introduction

This Secondary Town Integrated Urban Environmental Improvement Project (STIUEIP), Sewerage and Drainage Network, Wastewater Treatment Plant and Lanes Improvement Subproject Biratnagar is funded by Asian Development Bank and Government of Nepal. The project area is in the Morang district, Biratnagar Sub-metropolitan City which lies in the Eastern Part of Nepal.

3 Sub-Project Components

The Town Integrated Urban Environmental Improvement Project (STIUEIP) consists of following Sub-Project Components:

- Sewerage and Drainage Network Subproject
  A separate system of storm water drainage and sewer line will be constructed at Biratnagar under this project.
- Wastewater Treatment Plant Subproject
  A Waste Water Treatment Plant (WWTP) will be constructed at Jatuwa, draining the wastewater finally to Singhiya River.
- Road and Lanes Improvement Subproject
  Existing road sections at different part of Biratnagar will be upgraded providing proper drainage facility.

4 Scope of works

The activities to be undertaken according to the Contract Agreement are as follows:

a. To carry out all necessary topographic surveys, soils investigations, laboratory analysis or related investigations where necessary to supplement the data provided by the Employer.
b. To prepare working drawings for all elements of the Works.
c. To undertake all steps necessary for upgrading of roads and bridges, all related to access to the Site, or other related matters, where his opinion differ significantly from those produced by the Employer.
d. Preparation of stockyards for pipes, fittings and other materials and equipment.
e. To take all steps necessary for the temporary or permanent diversion of services and the maintenance of services during the execution of the Works, including diversion of overhead with underground power lines, telephone ducts, water supply mains and

distribution lines (pipes), sewers and other underground services as required along the route of the pipelines.

f. To supply all pipes, valves, fittings and other materials and equipment required for construction of the Works. The Contractor's supply items may include manufacture, collection, transportation and delivery to Site. The Contractor will be responsible for ensuring that all procedures are adequately covered and that the materials fully confirm to the Contract requirements. These responsibilities will include all necessary charges or dues related to insurance, freight, taxes (including customs and excise duties, surcharges etc.) and all testing and inspections for quality control.

g. To provide all necessary staff (including civil engineers, specialists, administrators, site supervision personnel) and workmen (including all necessary specialists, operators, tradesmen, artisans etc. in addition to semi-skilled and unskilled workers)necessary for execution of the Works through to completion. Where appropriate, the contractor shall provide all suitable facilities and accommodation for the staff and workmen and he shall make provision for all costs related to such provisions and for medical, re-location, taxes or other expenses.

h. To provide all equipment, machinery, tools etc. and related spares, maintenance and consumables necessary for implementation of the Works.

i. To provide all site offices, stores, workshops and facilities necessary for use by the Employer, Engineer and support staff and for the Contractor himself and his supporting staff

j. To undertake all operations necessary to complete the Works. These operations shall include: excavation, provision, haulage and installation of suitable bedding and backfill material and disposal of surplus excavated material; distribution, laying adjoining of pipes; installation of all special pipe work, valves etc. and construction of all related concrete or other activities together with all testing and disinfection of completed Works. The Contractor's attention is drawn to the restricted working space between Rajbanshi Chowk to Rani, Biratnagar where the sewer pipes, drains and road/lane is to be laid in a narrow road. In this section work in addition to that associated with the trunk main, will include but not be limited to, removal and replacement of a sewer laid in the road and reinstatement of road surface.

k. To liaise with other contractors on the site and to ensure harmonious co-operation with them so that conflicts are avoided and areas of common interest, constructional interface or potential overlaps are addressed without cost to the Employer or delays in completion.

l. To prepare documentary records of the Works in the form of "as-built" drawings and GIS data, schedules etc., and to train staff of the Employer in the procedures for laying pipes, valves and fittings.

m. All the above activities shall be performed in a professional way and with good engineering and/or constructional practice. Upon completion of the Works the scheme shall be fully operational with minimum disruption or inconvenience to interested parties, including land owners, and there shall be no outstanding matters requiring attention.

5 Brief on procurement packages

The procurement procedures for construction material have already been started. Agreements have been made with the renowned factories for the procurement of Brick, Cement, Steel, uPVC, HDPE pipe, machinery and equipment, electrical components, manhole covers, rubber rings etc.

6 Details of the project execution

6.1 Physical Progress (Achievement till the month)

a) Storm Water Drain Sub-Project (Work Progress till the date)

Drain	Lines	Length	Total Length (m)	Drain Construction (m)				Remarks
				Till Previous Month	Till This Month	This Month Work	Plan for Next Month	
B1	B1L1	1198.98	3950	1,198.98	1,198.98	-		
	B1L2	1148.98		692.00	720.00	28.00		
	B1L2A	465.77		490.00	490.00	-		
	B1L2B	137.09		137.00	137.00	-		
	B1L2C	137.09				-		
	B1L2D	490.97		500.00	500.00	-		
	B1L2F	371.22		370.00	370.00	-		
						-		
B2	B2L1	1425	3742	1,063.00	1,063.00	-		
	B2L2	828.03		728.00	828.00	100.00		
	B2L2C	639.22		631.00	631.00	-		
	B2L1B	849.47		850.00	850.00	-		
						-		
B3	B3L1A	422.96	3514	420.96	420.96	-		
	B3L1B	421.1		421.10	421.10	-		
	B3L1	669.7		510.00	603.00	93.00		
	B3L2	691.56		481.00	498.80	17.80		
	B3L2E	220.42		200.00	200.00	-		
	B3L3	578.74		578.00	578.00	-		
	B3L4	509.5		509.50	509.50	-		
						-		
S9	S9L1	2981.85	3178	660.00	660.00	-		
	S9L1D	195.65				-		
						-		
S11	S11L1	794	1817	794.00	794.00	-		
	S11L1A	265.75		265.75	265.75	-		
	S11L1B	107.5		107.50	107.50	-		
	S11L2	650		650.00	650.00	-		
						-		
S13	S13L2	1001	4555	951.00	951.00	-		
	S131A	718.33		568.33	768.00	199.67		
	S13L1B	276		276.00	276.00	-		
	S13L1C	284		284.00	284.00	-		
	S13L1D	535.04		535.04	535.04	-		
	S13L1E	572.02		342.02	342.02	-		
	S13L1F	524		524.00	723.00	199.00		
	Hume Pip	645		545.00	545.00	-		
						-		
CN2	CN2L2	949.23	2273	915.00	915.00	-		
	CN2L1	994.5		325.00	325.00	-		
	CN2L1A	134.02				-		
	CN2L1B	195.27				-		
						-		
CN3	CN3L1	715.91	2170	715.91	715.91	-		
	CN3L2	997.5		475.00	475.00	-		
						-		
S5	S5L1A	364.07	740			-		
	S5L1B	376				-		
						-		
Rani	L5	630	7617	630.00	630.00	-		
	L2M	166			141.00	141.00		
	L2J	426		200.00	290.00	90.00		
	L3	316		266.00	266.00	-		
	L4	2111		174.00	174.00	-		
	L4C	381		381.00	381.00	-		
	L4D	381		200.00	345.00	145.00		
	L6	970		250.00	349.00	99.00		
Road Side Drains	R2	4700	4700	3,520.00	3,630.00	110.00		
	R5	740	740	650.00	700.00	50.00		
	R64	121	121		121.00	121.00		
Total Length					**25,557.56**	**1,222.47**		

b) Sewerage Sub-Project (Work Progress till the date)

Sewer Line	Lines	Length	Total Length (m)	Sewer Construction (m)								Remarks
				Till Previous Month	Till This Month	This Month Work	Plan for Next Month	Total Manholes	Sewer Inlet	House Connections	uPVC Pipe	
T2 Trunk 1000 dia hume pipe			1729	1,202.00	1,815.00	613.00	600.00	22				
T2 Trunk 900 dia hume pipe			518	518.00	518.00	-		15				
T3 Trunk 700 dia hume Pipe			1472	1,101.00	1,290.00	189.00	400.00	30				
T3 Trunk 600 dia hume Pipe			1141	92.00	187.00	95.00	600.00					
Line T2L19 400 dia Hume Pip			487	300.00	300.00	-	100.00	10				
Line T2L19 500 dia Hume Pip			45	45.00	45.00	-		1				
Total length of Hume Pipe					**4,155.00**	**897.00**						
T2 Sec												
	18L			74.70	74.70	-		2				
	18P			139.60	139.60	-		5				
	18Q				195.40	195.40		7				
	18R			150.00	357.30	207.30		12				
	18V			54.80	54.80	-		2				
	18Y			151.00	170.80	19.80		6				
	18Z			46.60	46.60	-		2				
	19b			272.30	272.30	-		9				
	19c			241.00	276.30	35.30		9				
	19e			156.00	160.50	4.50		5				
	19f			202.50	204.10	1.60		7	14.00			
	19g			67.80	67.80	-		2	4.00			
	19h			181.40	181.40	-		6	12.00			
	19j			355.00	355.00	-		12	24.00	12.00		
	19k			172.50	172.50	-		6				
	19l			180.00	210.30	30.30		7				
	19ma			179.40	179.40	-		6				
	19mb			232.35	232.35	-		8				
	19n		17167	162.50	162.50	-		5				
	19o			114.70	114.70	-		4				
	19p			126.00	140.90	14.90		5				
	19q			234.20	234.20	-		8				
	19r			264.20	264.20	-		9				
	19s			271.00	271.00	-		9				
	19t			179.50	179.50	-		6		18.00	145.00	
	19u				61.80	61.80		2				
	19R			110.70	110.70	-		4				
	19T			137.60	137.60	-		5				
	19U			61.80	61.80	-		2				
	19V			208.30	208.30	-		7				
	19W			50.80	50.80	-		2				
	19X				49.80	49.80		2				
	19Y				86.70	86.70		3				
	19Z				66.80	66.80		2				
	22			260.10	260.10	-		9	10.00			
	23			217.00	217.00	-		7	6.00			
	24A			260.70	260.70	-		13	20.00	4.00		
						-		-				
T3 Sec						-		-				
	13F				123.60	123.60		4				
	25B			201.40	201.40	-		7				
	25C			139.60	139.60	-		5	9.00			
	26			126.50	126.50	-		4				
	26A			65.80	65.80	-		2				
	26B			71.80	71.80	-		2				
	26C			190.00	334.10	144.10		11				
	26D			50.80	50.80	-		2				
	26E			358.80	358.80	-		12				
	26F			108.60	108.60	-		4				
	26G			70.80	70.80	-		2				
	26H			55.60	55.60	-		2				
	27		22664	281.00	281.00	-		9				
	28			247.10	247.10	-		8				
	29				73.80	73.80		2				
	30				245.10	245.10		8				
	31			157.00	174.40	17.40		6				
	31A				171.50	171.50		6				
	32			219.20	219.20	-		7				
	33			391.80	391.80	-		13	25.00	35.00		
	33A			121.20	121.20	-		4				
	33B			161.00	161.00	-		5				
	34			208.00	312.70	104.70		10	14.00	12.00		
	35			223.30	223.30	-		7	14.00	15.00		
	36			114.00	160.50	46.50		5				
	37			204.30	204.30	-		7				
						-						
Total Length of HDPE Pipe				**7,998**	**10,985**	**1,239**		**312**	**152**	**96**	**145**	

c) Wastewater Treatment Plant Sub-Project (Work Progress till the date)

S.N.	Description of Work	This month	Total Length/Nos	Program for Next Month	Remarks
1	Excavation of Ponds-Anaerobic	0	3 nos		
2	Excavation of Ponds-Facultative	0	2 nos		
3	River Training Works	0	515m		
4	Boundary wall construction	0	580 m		
5	Office cum lab building, WWTP, Jatuwa	All complete except finishing works			
5	Workshop Building & Generator/Changing Building, WWTP, Jatuwa	All complete except finishing works			
6	Sump Well	Partially excavated			

d) Production of Precast Items from Slab Casting Yard, Katahari

S.N.	Description	Unit	Quantity			Remarks
			Till Previous Month	Till This Month	This Month Work	
1	Slabs	Nos	45903	48417	2514	
2	Precuts	Nos.	4065	4107	42	
3	Kerb Stone	Nos.	5812	5812	0	

e) Production of Precast Chambers at Yard Katahari

S.N.	Description	Unit	Quantity			Remarks
			Till Previous Month	Till This Month	This Month Work	
1	Manhole	Set	505	700	195	
2	Sewer Inlet	Set	682	922	240	
3	House Connection	Set	728	963	235	

f) Hume Pipe Production from Hume Pipe Production Factory, Itahari

S.N.	1	2	3	4	5	6	7	8	9	10	11
Diameter	200mm Ø	300mm Ø	350mm Ø	400mm Ø	450mm Ø	500mm Ø	600mm Ø	700mm Ø	900mm Ø	1000mm Ø	1600mm Ø
No of Moulds	38	3	2	2	2	3	8	8	2	4	2
Previous Month Production	1562	166	201	233	146	288	845	1072	263	587	267
This Month Production	0	37	48	43	55	35	95	120	0	25	4
Total Production	1562	203	249	276	201	323	940	1192	263	612	271

6.2 Financial Progress and Cash Flow

Detail of payment:

Installment Number	Net Payble Amount (NRs.)	Remarks
IPC 01	200,940,000.00	Advance Payment 01
IPC 02	27,853,500.98	IPC 2
IPC 03	47,507,270.95	IPC 3
IPC 04	42,241,392.52	IPC 04
IPC 05	22,035,291.99	IPC 05
IPC 06	85,573,541.38	IPC 06
IPC 07	76,203,672.17	IPC 07
IPC 08	115,297,549.23	IPC 08
IPC 09	109,414,317.97	IPC 09
IPC 10	124,715,663.77	IPC 10
IPC 11	160,430,981.96	IPC 11
Total=	**811,273,182.92**	

7 Details of Safeguard activities

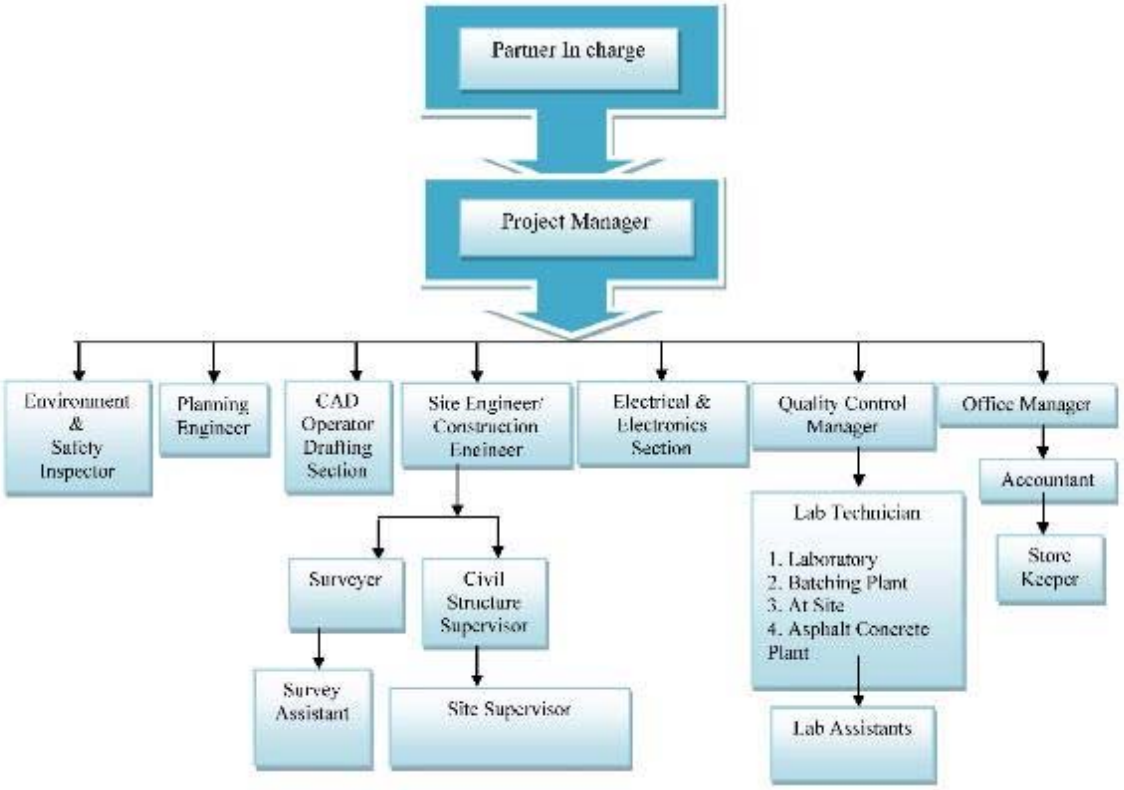
Till the date no such issues have been faced relating to the Social, Environmental and Resettlement matter.

8 Key Issues and Remarks

Following issues were raised and solved as per instruction of Engineer:

- Sewer line construction at secondary lines is undertaking on few right of way cleared sites only. Still most of the parts of secondary lines are to be cleared till right of way.
- Rainfall occurring mostly daily this month has obstructed the Hume pipe laying, manhole construction and drain construction.
- Sewer line laying and drain works has been stopped due to monsoon at the end of the month.

9 Work Plan Professional input



S.N.	Designation	No.	Remarks
1	Project/ Contract Manager	1	
2	Planning/ Construction Engineer	1	
3	Construction Engineer	1	
4	Site Engineers	5	
5	Quality Control Manager	1	
6	Office/ Bill Engineer	1	
7	Junior Engineer	10	
8	Sub-Overseer	6	
9	Senior Site Supervisor/Safety Manager	1	
10	Accountant/ Office Manager	1	
11	Lab Assistant	3	
12	Site Supervisor	5	
13	Store Keeper	4	

14	Light Drivers	6	
15	Machine Operator	14	
16	Other Supporting Staffs	18	
17	Skilled Labors	25	20m/ 5f
18	Unskilled Labors	80	68m/ 12f

Laborers at site work

The detail of laborers is listed in table below.

Details of Labor

S.N.	Labour Type	Numbers		Remarks
Skilled Labor				
1.	Mason/carpenter	10		
2.	Plumber	4		
3.	Electrician	3		
4.	Bar Bender	8		
5.	Wielder	6		
6.	Scaffold	6		
7.	Drivers	18		
Unskilled Labor				
	Labor	**Male**	**Female**	
1.	Labors (Skilled)	20	5	25
2.	Labors (Unskilled)	68	12	80
Total		88	17	

S.N.	Name	Designation	Attendance Days
1	Ujjwal Prasai	Project Manager	25
2	Santosh Pudasaini	Planning/ Construction Engineer	22
3	Mahesh Subedi	Construction Engineer	25
4	Umesh Kumar Dangol	Site Engineer	25
5	Uddhav Bhatta	Site Engineer	25
6	Roshan Prasad Gupta	Site Engineer	25
7	Surya Kadel	Office Engineer	18
8	Niraj Raut	Site Engineer	20
9	Sujeet Dahal	Office/ Bill Engineer	25
10	Sunil Chaudhary	Quality Control Manager	25
11	Vishwo Bandhu Mainali	Accountant/ Office Manager	25
12	Krishna Adhikari	Jr. Accountant	25
13	Narayan Rijal	Senior Site Supervisor/Safety Manager	20
14	Sagar Shrestha	Junior Engineer	25
15	Dipesh Kumar Chaudhary	Junior Engineer	10
16	Suraj Chaudhary	Junior Engineer	25
17	Suman Tamang	Junior Engineer	25
18	Sujan Singh Thakuri	Junior Engineer	25
19	Bipin Rai	Junior Engineer	25
20	Saroj Shrestha	Junior Engineer	25
21	Suman Shrestha	Junior Engineer	25
22	Bishal Shrestha	Junior Engineer	25
23	Sanjay Shrestha	Junior Engineer	25
24	Sabita Thapa	Sub-Overseer	25
25	Angira Rai	Sub-Overseer	25
26	Rojina LG	Sub-Overseer	20
27	Gaurab Subba	Sub-Overseer	25
28	Prakash Bhattrai	Sub-Overseer	25
29	Pradip Rai	Sub-Overseer	25
30	Ajaya Rai	Site Supervisor	25
31	Uttar Karki	Site Supervisor	25
32	Ishowr Adhikari	Site Supervisor	25

33	Santosh Mukhiya	Site Supervisor	25
34	Anil Pokhrel	Site Supervisor	25
35	Prasasan Rajbansi	Site Supervisor	25
36	Tanka Pokhrel	Store Manager	25
37	Manoj Pandit	Store Assistant	25
38	Nirnaya Upreti	Store Assistant	25
39	Gopi Yadav	Store Assistant	25
40	Dipesh Dahal	Lab Assistant	25
41	Ramesh Koirala	Lab Assistant	25
42	Mahakanta Risidev	Lab Assistant	25
43	Sandeep Pyakurel	Light Driver (7621)	24
44	Gurucharan Yadhav	Light Driver (1082)	14
45	Kiran Manandhar	Light Driver (1086)	25
46	Satya Dhimal	Light Driver	25
47	Dip Budathoki	Light Driver	25
48	Mangal Kisku	JCB Operator	25
49	Surya Bdr. Malla	Loader Operator	17
50	Rupana Chaudhary	TM Driver	25
51	Bhabesh Rai	Batching Operator	20
52	Chandan Roy	Pc-200 Operator	25
53	Jeet Bdr Gurung	Teller (4423) Driver	25
54	Ananda Rajbansi	Electrician	25
55	Kamal Yadhav	Electrician	25
56	Pappu Yadav	Mechanic	25
57	Mukesh Mandal	Mechanic	25
58	Bhanu Bhakta Kafle	Plumber	22
59	Ganga Ram Dhital	Plumber	25
60	Niroj K. Puri	TM Driver(7561)	20
61	Dhan Kaji Gurung	TM Helper	25
62	Indra RajBansi	Tractor Driver (6204)	25
63	Kartik Thrau	Tractor Driver (8304)	25
64	Tilak Ghalan	Transit mixer Driver	25
65	Nakkul Paddhar	Tanker Driver	25

66	Udit Narayan	Tanker Driver	25
67	Basudev Yadav	Tractor Driver	25
68	Sudeep Rajbansi	JCB Helper	25
69	Manita Shrestha	Kitchen Helper	25
70	Kalpana Tamang	Kitchen Helper	25
71	Sita Thapa	Kitchen Helper	25
72	Pabitra Rai	Kitchen Helper	25

Details of Equipment

S.N.	Particular	Model/Type	Capacity	Working Status		
				No of used Equipment	Status	Remarks
A	**Vehicle and Equipment**					
A.1	**Excavators**					
	Komatsu Long Boom PC200	PC200		1	Good	
	Komatsu Excavator PC200	PC200		2	Good	Breakdown for few days
	Komatsu Excavator PC120	PC 120		1	Good	
	Kobelko Excavator 75	Kobelko 75		1	Good	Breakdown for few days
	Cat Excavator 320	Cattepiller		1	Good	
A.2	**JCB**					
	JCB Hydra	JCB		1	Good	
	JCB Loader	JCB		1	Good	
	JCB Backhoe	JCB		6	Good	
A.3	**Grader**					
	Komatsu Grader GD405	Komatsu		1	Good	
A.4	**Crane/Teller**					
	Crane with Teller			1	Good	
	Teller			2	Good	
A.5	**Water Tanker**					
	Water Tanker		12000 Lt.	1	Good	
A.6	**Tractors/Tipper**					
	Tractors	Indian	3 m^3	9	Good	
	Tipper		15 m^3	17	Good	
A.7	**Service Vehicle**				Good	
	Jeep	Pajero	5 door	2	Good	
	Jeep	Landcrusher	5 door	1	Good	
	Jeep	Indian/Tata Sumo	5 door	1	Good	
	Jeep	Indian/Bolero	5 door	1	Good	
	Pickup	Indian/Mahindra	4 door	1	Good	
	Motorbike	125CC		10	Good	
A.8	**Other Equipment and Tools**					
	Kerb Stone Machine Set			1	Not Used	
	Generator	Jackson	125KVA	1	Good	
	Generator	Kirloskar	25KVA	1	Good	
	Generator	Kirloskar	15KVA	1	Good	
	Generator	Honda	5KVA	1	Good	

	Welding Machine	Oswal,India	650amp	1	Good	
	Welding Machine		350amp	1	Good	
	Welding Machine		250amp	1	Good	
	Diesel tank with Pump		60000 Ltr.	1	Good	
	Stand Drill Machine	India	1 HP	1	Good	
	Gas Cutter Set			1	Good	
	Pipe Cutter			1	Good	
	Hand Grinder			1	Good	
	Plate Compactor			2	Good	
	Monkey Jumper			1	Good	
B	**Concreting Unit**					
	Batching Plant CONMAT all Set	CONMAT, India	45 m3/ hr	1	Good	
	Electric Vibrator with Needle			10	Good	
	Bar Bending Machine		4 ton/hr	3	Good	
	Bar Cutter Machine		4 ton/hr	3	Good	
	Isuzu Transit Mixture		5 m^3	1	Good	
	Concrete Mixture Hydraulic			2	Good	
	Manual Mixture Machine			6	Good	
C	**Asphalt Concrete Production**					
	Asphalt Concrete Plant		50 ton/ hr	1	Not Used	
	Asphalt Paver Machine			1	Not Used	

10 Conclusion

Monsoon has started and most of the sites are closed till outlets. Backfilling has completed and roads are opened for public. All the civil works has been stopped for the monsoon will continue after the monsoon.

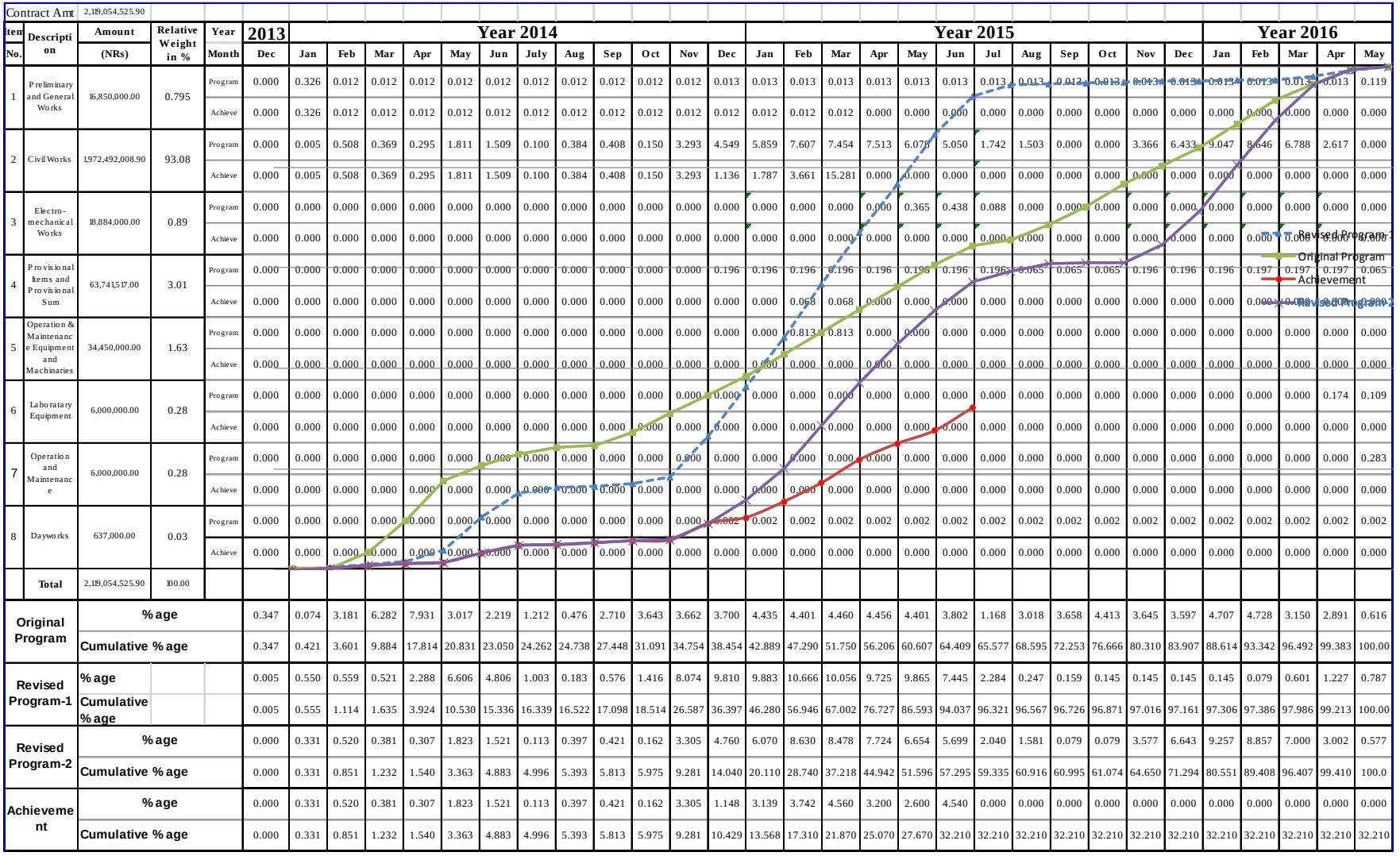
Right of way marking is undertaking throughout the month. It shall continue coming months too.

ANNEX

S – Curve

Contract Amt 2,19,054,525.90

Item No.	Description	Amount (NRs)	Relative Weight in %	Year	2013	Year 2014												Year 2015												Year 2016				
				Month	Dec	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
1	Preliminary and General Works	16,850,000.00	0.795	Program	0.000	0.326	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.012	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.119
				Achieve	0.000	0.326	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	Civil Works	1,972,492,008.90	93.08	Program	0.000	0.005	0.508	0.369	0.295	1.811	1.509	0.100	0.384	0.408	0.150	3.293	4.549	5.859	7.607	7.454	7.513	6.078	5.050	1.742	1.503	0.000	0.000	3.366	6.433	9.047	8.646	6.788	2.617	0.000
				Achieve	0.000	0.005	0.508	0.369	0.295	1.811	1.509	0.100	0.384	0.408	0.150	3.293	1.136	1.787	3.661	15.281	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3	Electro-mechanical Works	18,884,000.00	0.89	Program	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.365	0.438	0.088	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
				Achieve	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4	Provisional Items and Provisional Sum	63,741,517.00	3.01	Program	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.196	0.196	0.196	0.196	0.196	0.196	0.196	0.196	0.065	0.065	0.065	0.196	0.196	0.196	0.197	0.197	0.197	0.065
				Achieve	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.068	0.068	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
5	Operation & Maintenance Equipment and Machinaries	34,450,000.00	1.63	Program	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.813	0.813	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
				Achieve	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
6	Laboratary Equipment	6,000,000.00	0.28	Program	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.174	0.109
				Achieve	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7	Operation and Maintenance	6,000,000.00	0.28	Program	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.283
				Achieve	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
8	Dayworks	637,000.00	0.03	Program	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
				Achieve	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Total	2,19,054,525.90	100.00																														
Original Program	% age				0.347	0.074	3.181	6.282	7.931	3.017	2.219	1.212	0.476	2.710	3.643	3.662	3.700	4.435	4.401	4.460	4.456	4.401	3.802	1.168	3.018	3.658	4.413	3.645	3.597	4.707	4.728	3.150	2.891	0.616
	Cumulative % age				0.347	0.421	3.601	9.884	17.814	20.831	23.050	24.262	24.738	27.448	31.091	34.754	38.454	42.889	47.290	51.750	56.206	60.607	64.409	65.577	68.595	72.253	76.666	80.310	83.907	88.614	93.342	96.492	99.383	100.00
Revised Program-1	% age				0.005	0.550	0.559	0.521	2.288	6.606	4.806	1.003	0.183	0.576	1.416	8.074	9.810	9.883	10.666	10.056	9.725	9.865	7.445	2.284	0.247	0.159	0.145	0.145	0.145	0.145	0.079	0.601	1.227	0.787
	Cumulative % age				0.005	0.555	1.114	1.635	3.924	10.530	15.336	16.339	16.522	17.098	18.514	26.587	36.397	46.280	56.946	67.002	76.727	86.593	94.037	96.321	96.567	96.726	96.871	97.016	97.161	97.306	97.386	97.986	99.213	100.00
Revised Program-2	% age				0.000	0.331	0.520	0.381	0.307	1.823	1.521	0.113	0.397	0.421	0.162	3.305	4.760	6.070	8.630	8.478	7.724	6.654	5.699	2.040	1.581	0.079	0.079	3.577	6.643	9.257	8.857	7.000	3.002	0.577
	Cumulative % age				0.000	0.331	0.851	1.232	1.540	3.363	4.883	4.996	5.393	5.813	5.975	9.281	14.040	20.110	28.740	37.218	44.942	51.596	57.295	59.335	60.916	60.995	61.074	64.650	71.294	80.551	89.408	96.407	99.410	100.0
Achievement	% age				0.000	0.331	0.520	0.381	0.307	1.823	1.521	0.113	0.397	0.421	0.162	3.305	1.148	3.139	3.742	4.560	3.200	2.600	4.540	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Cumulative % age				0.000	0.331	0.851	1.232	1.540	3.363	4.883	4.996	5.393	5.813	5.975	9.281	10.429	13.568	17.310	21.870	25.070	27.670	32.210	32.210	32.210	32.210	32.210	32.210	32.210	32.210	32.210	32.210	32.210	32.210



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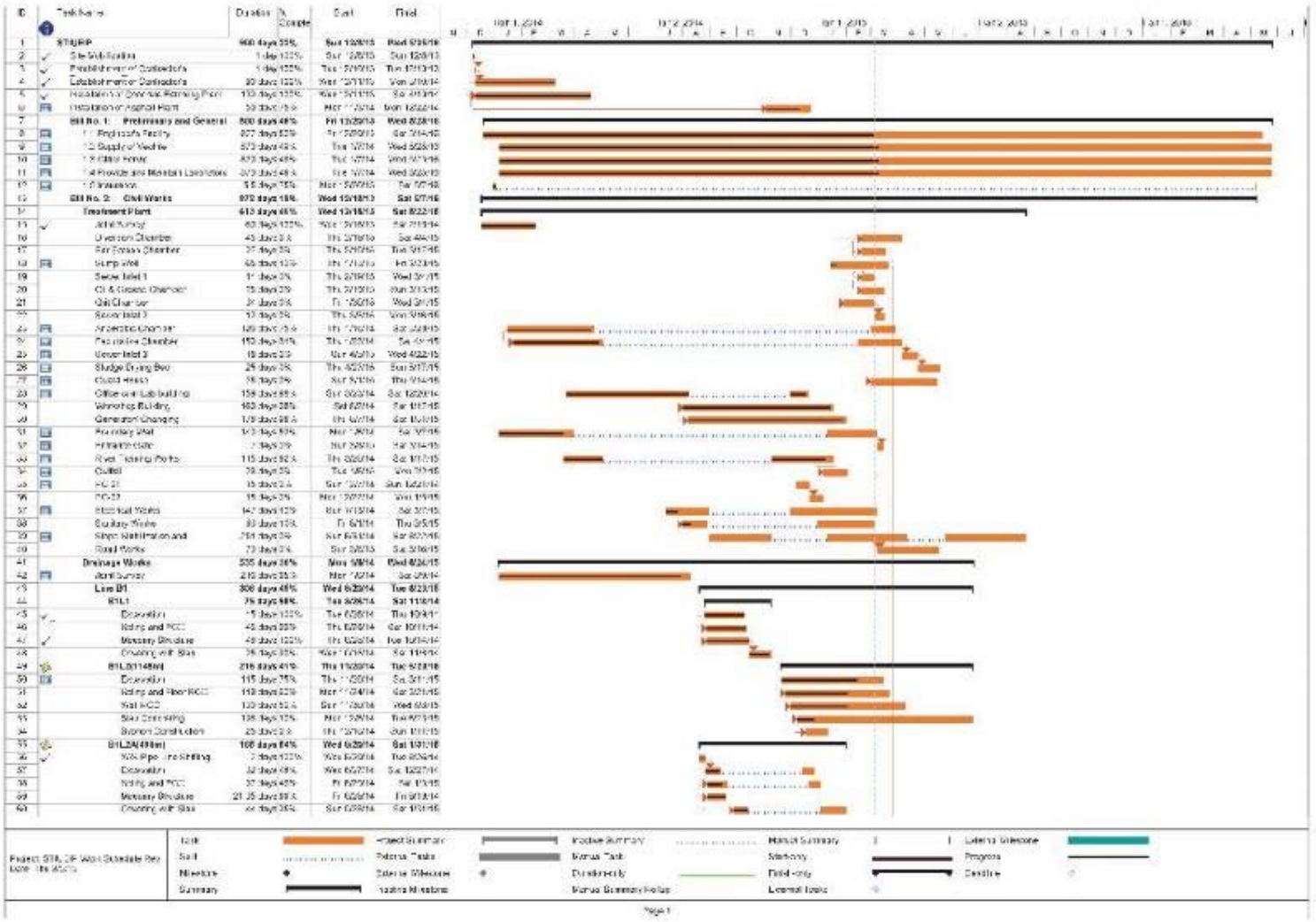
Site Office: Katahari, Judi

Work Schedule and Progress



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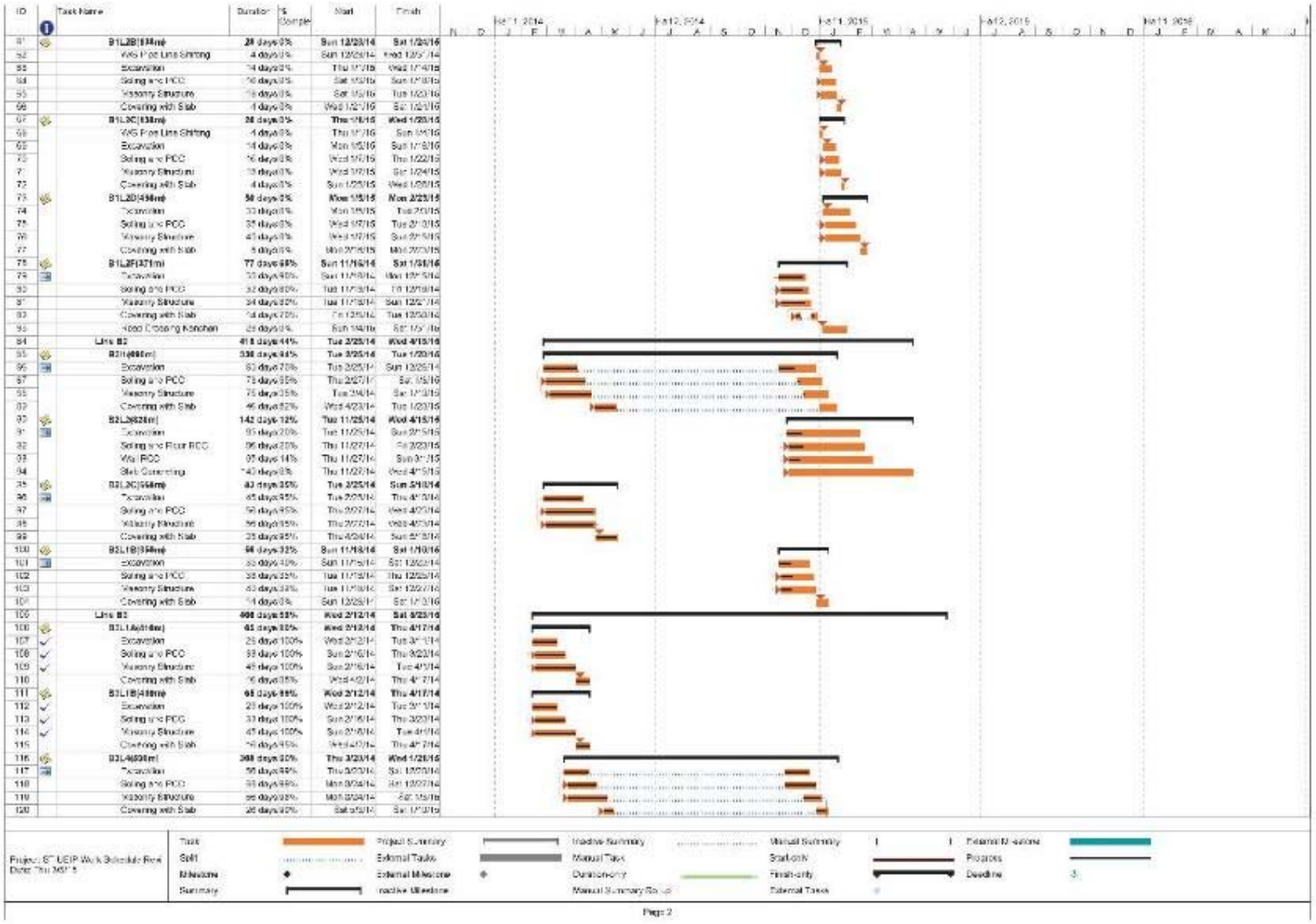

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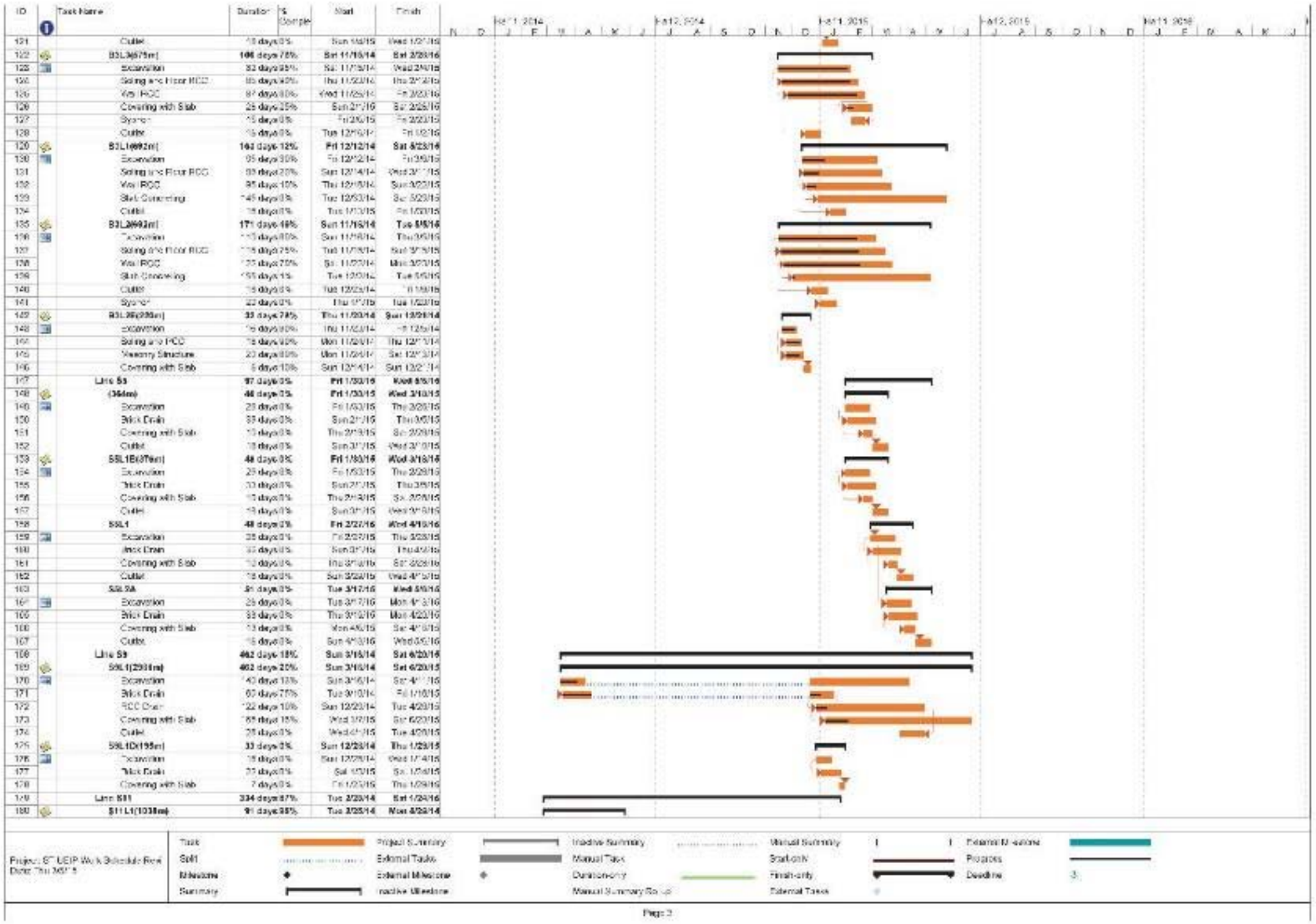

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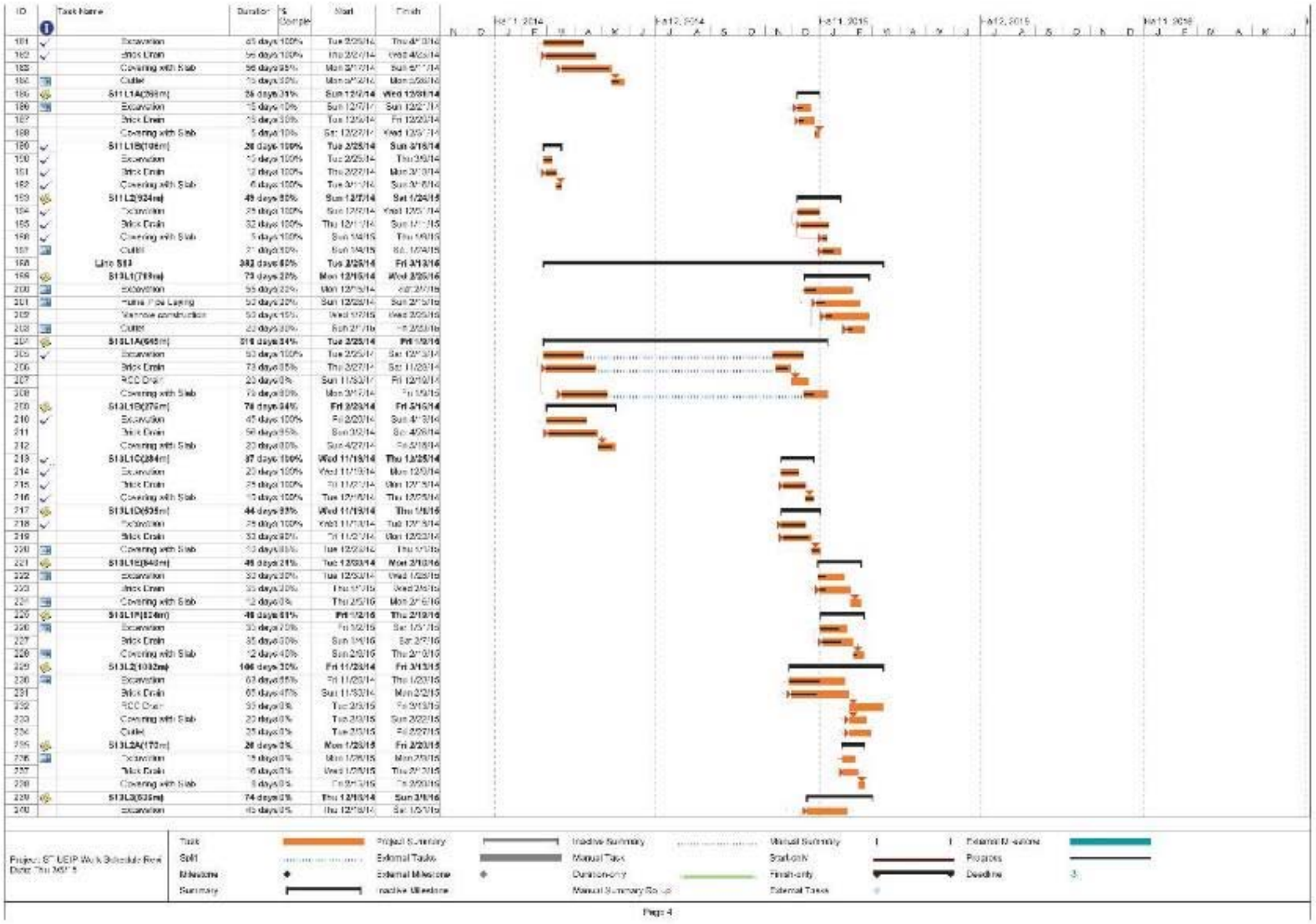

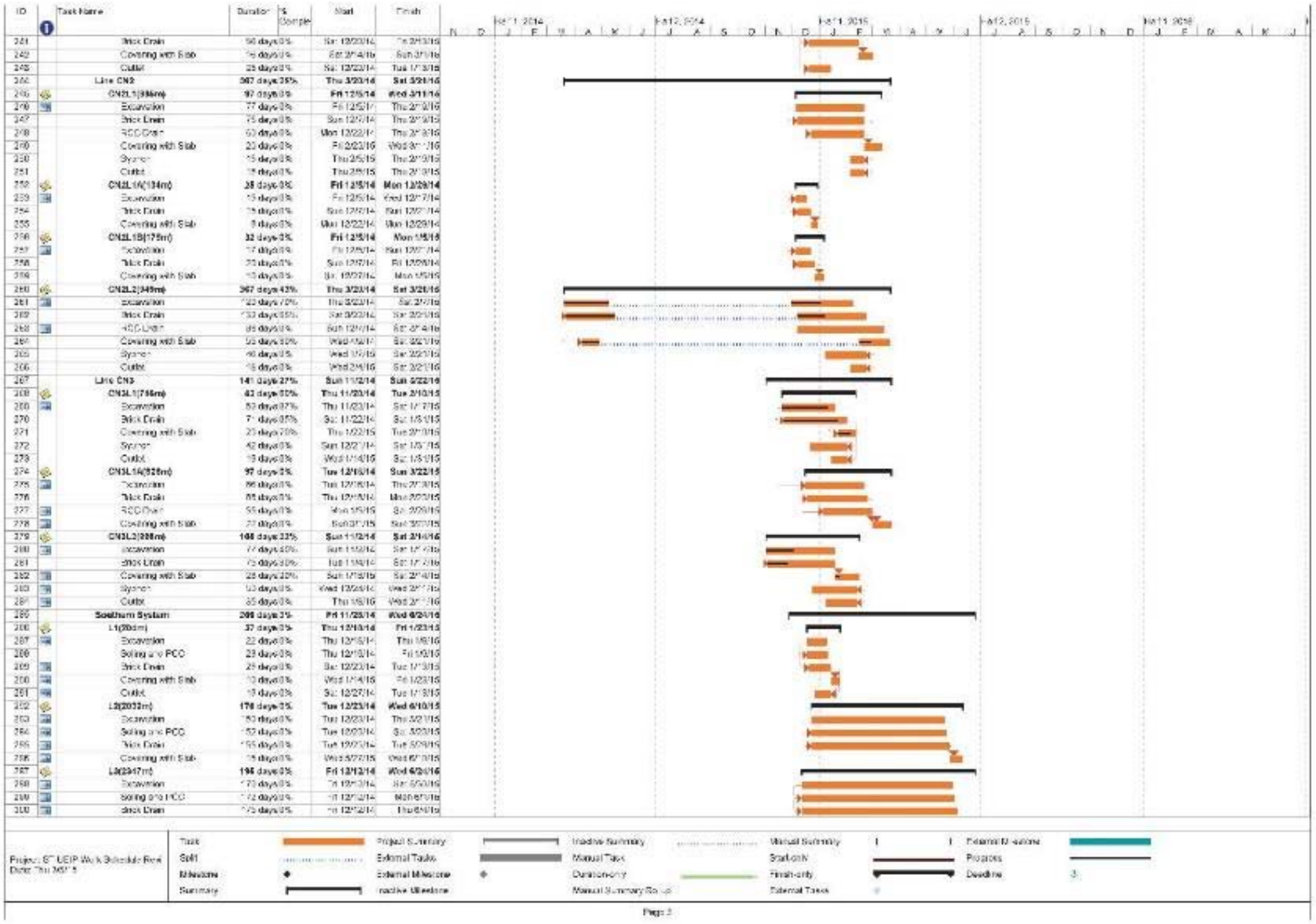

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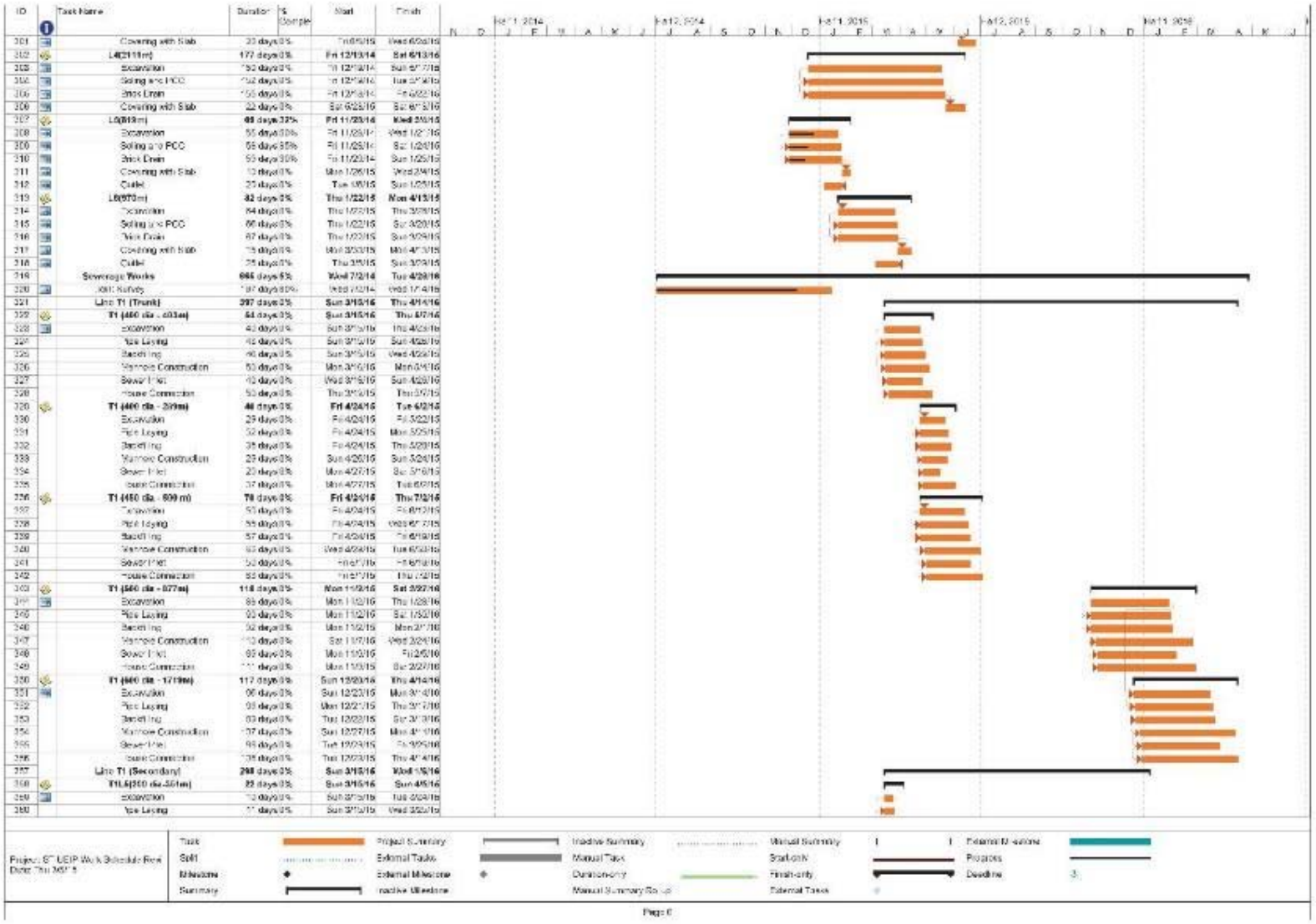

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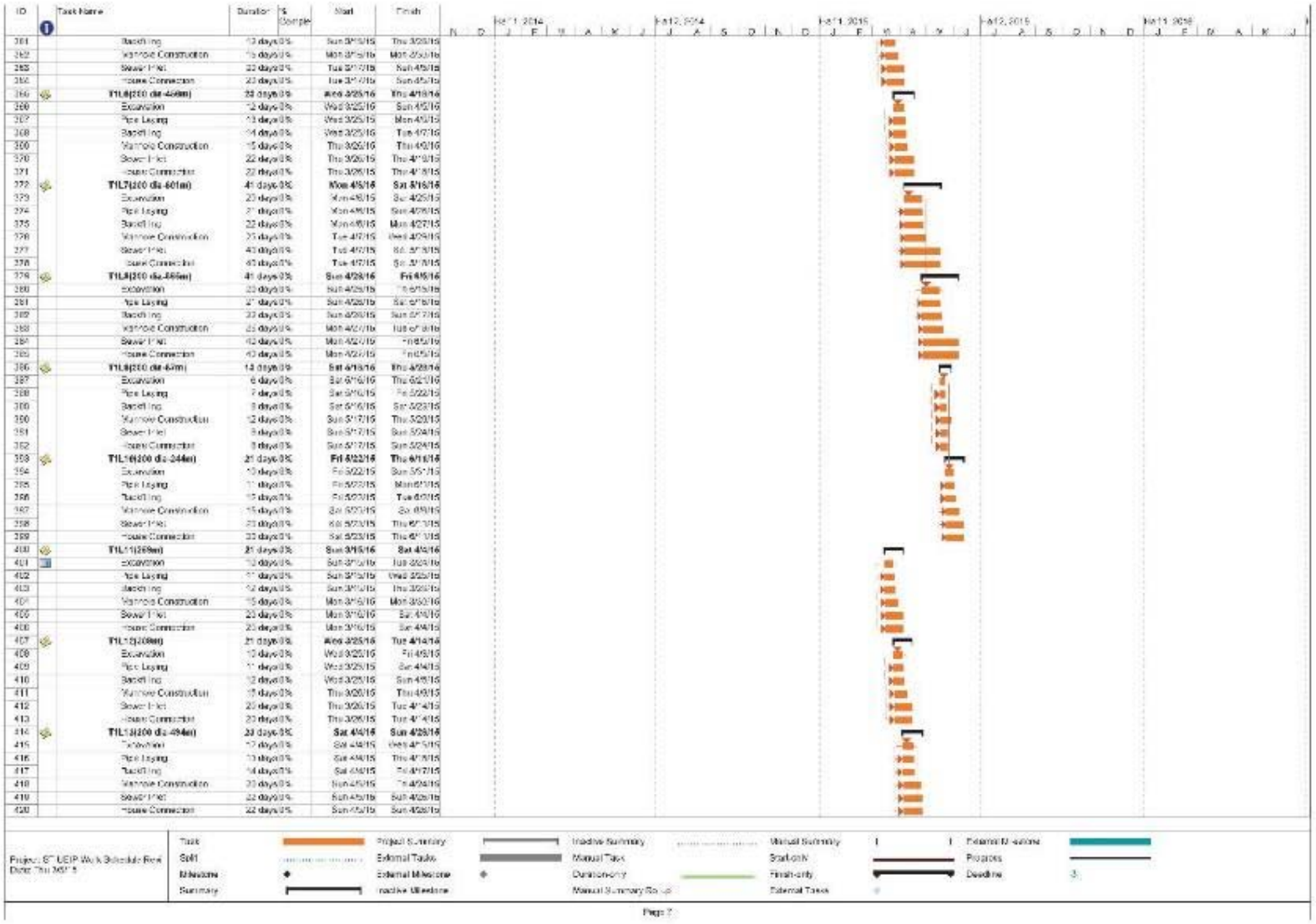

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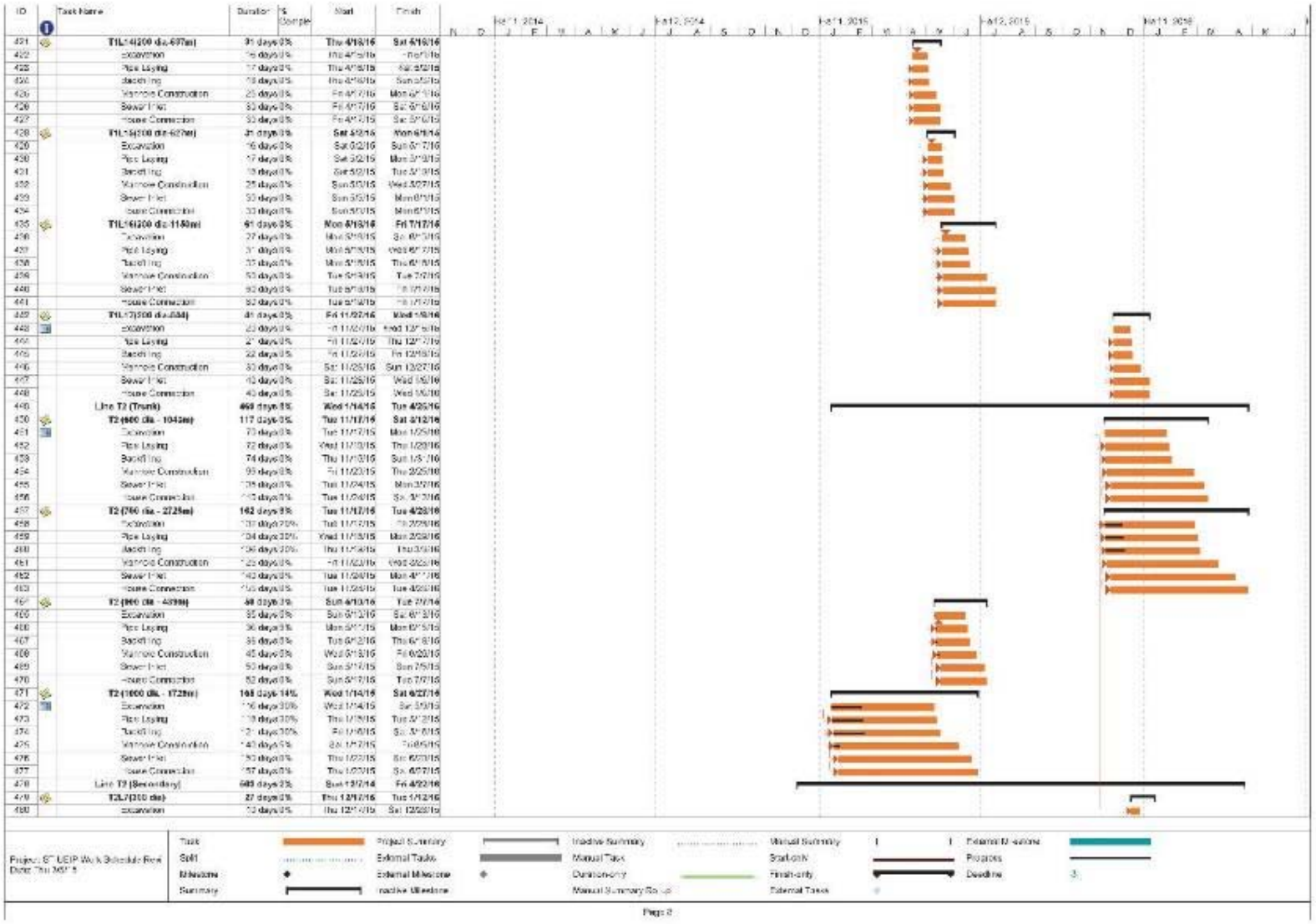

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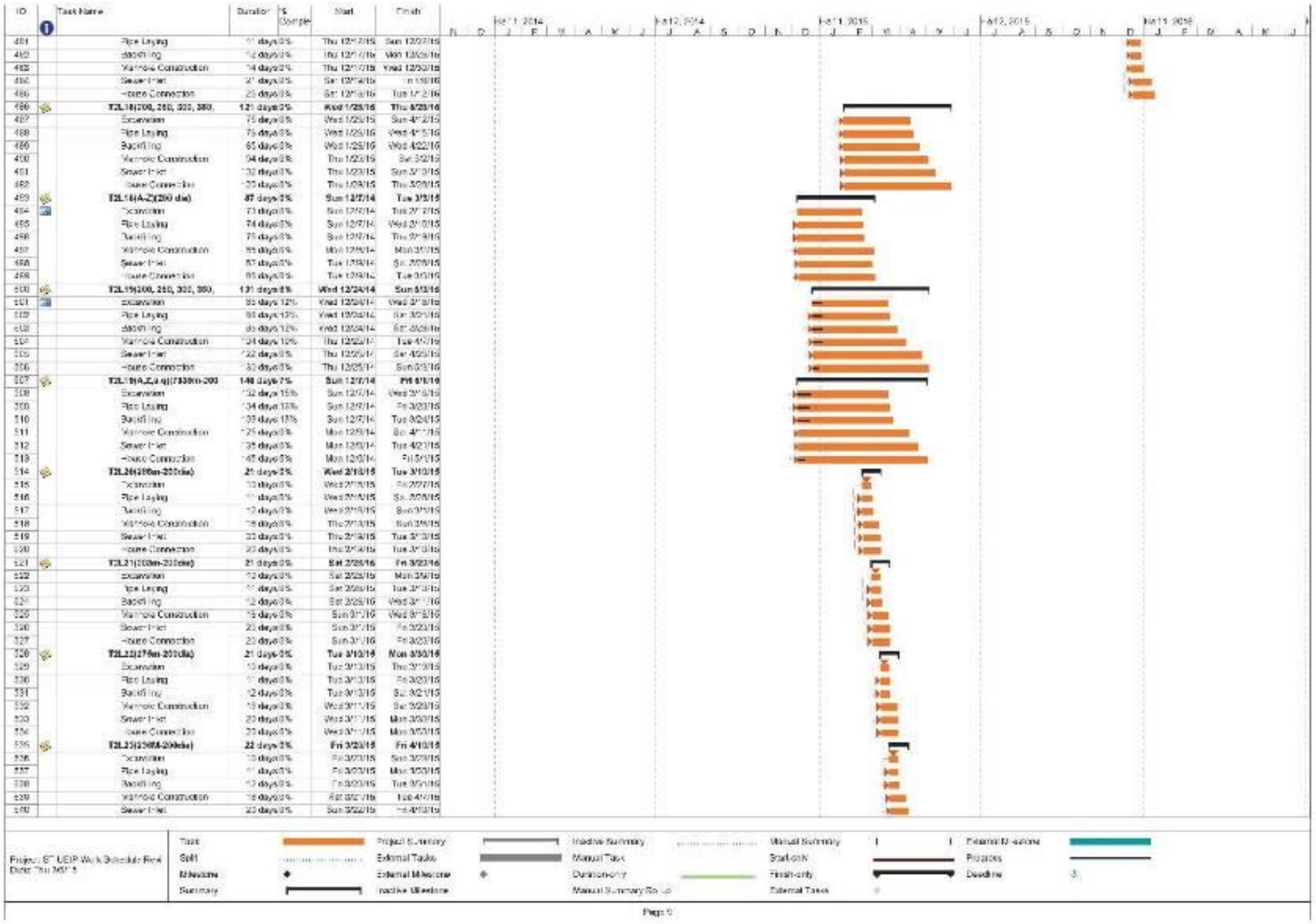

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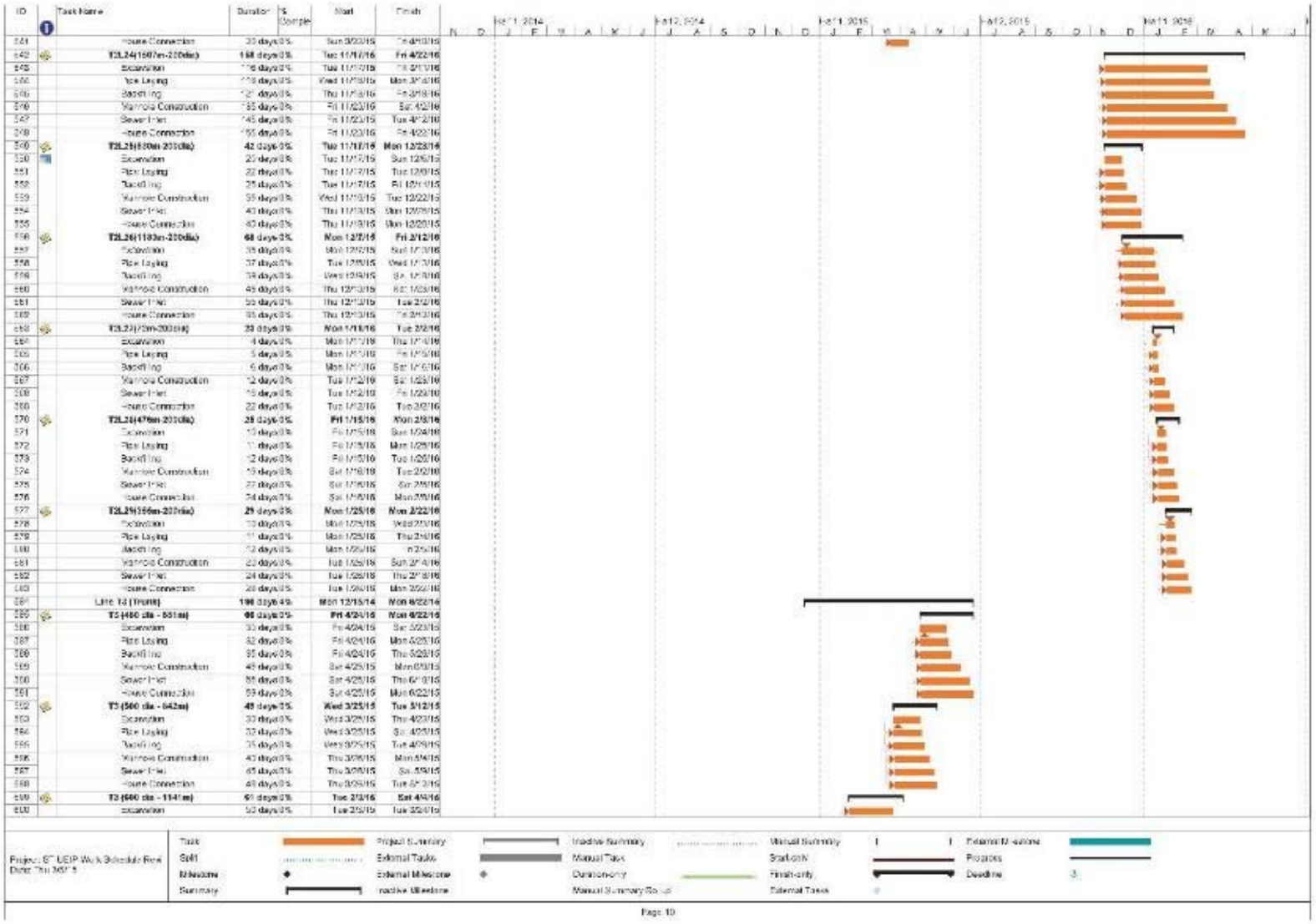

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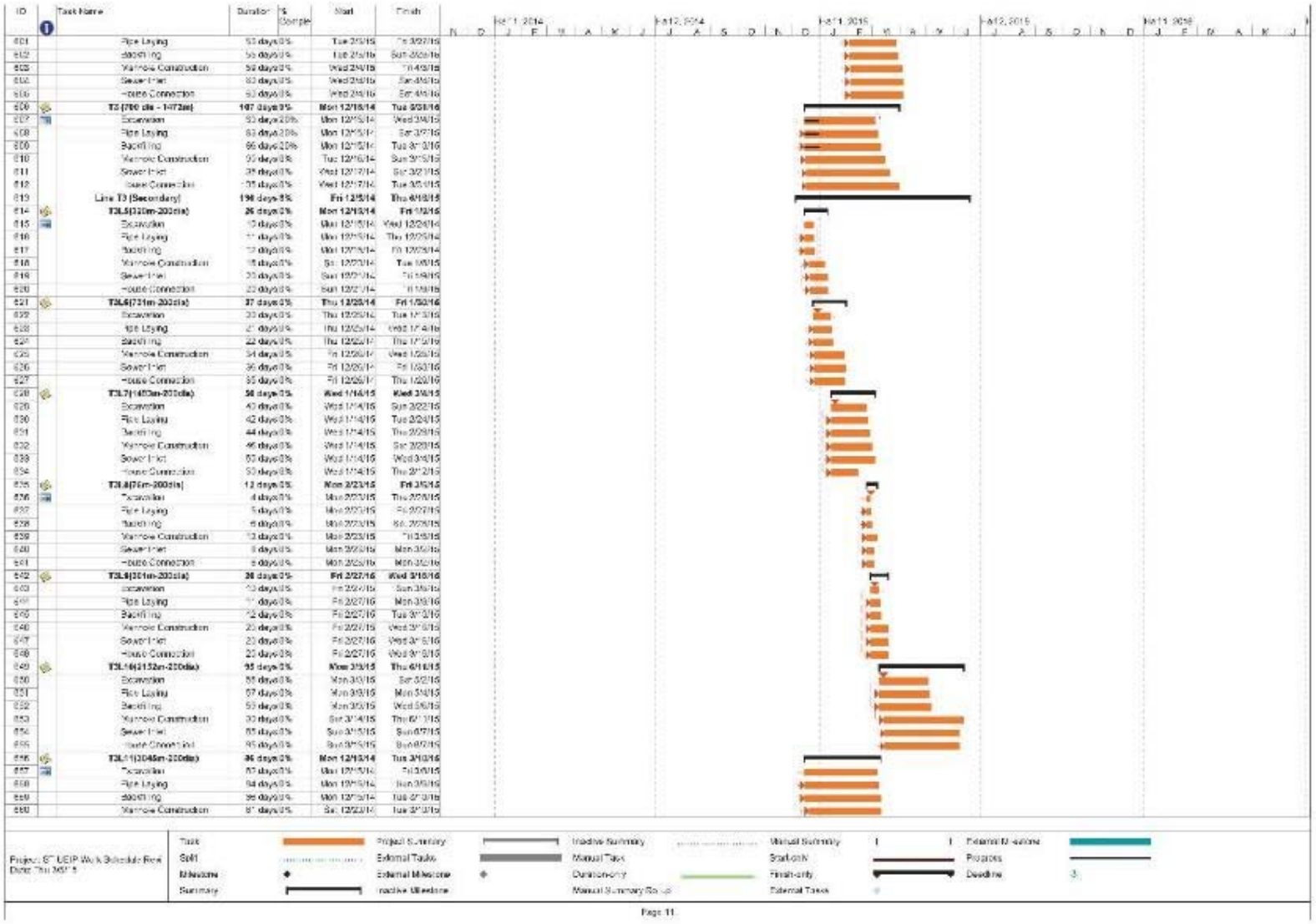

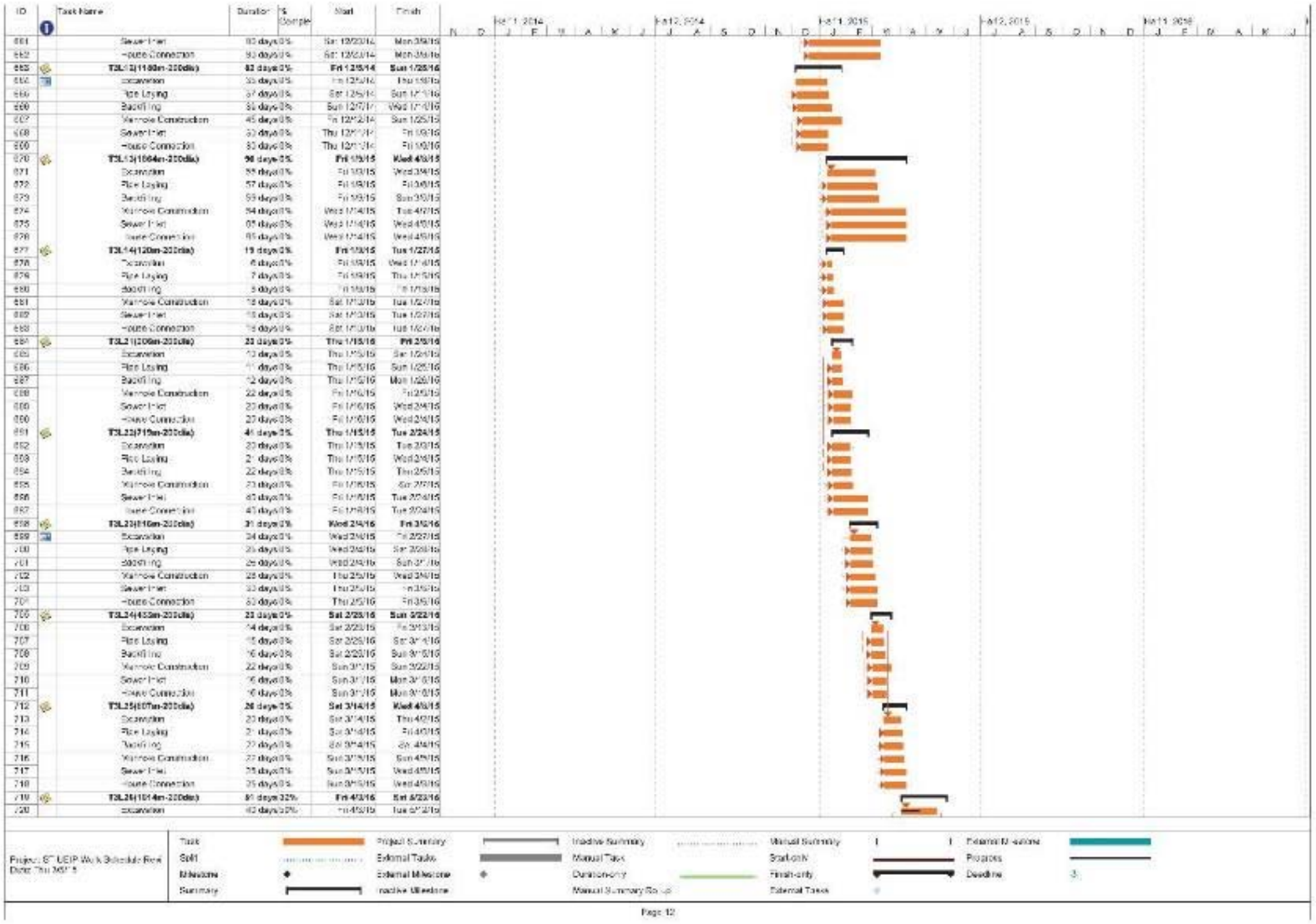

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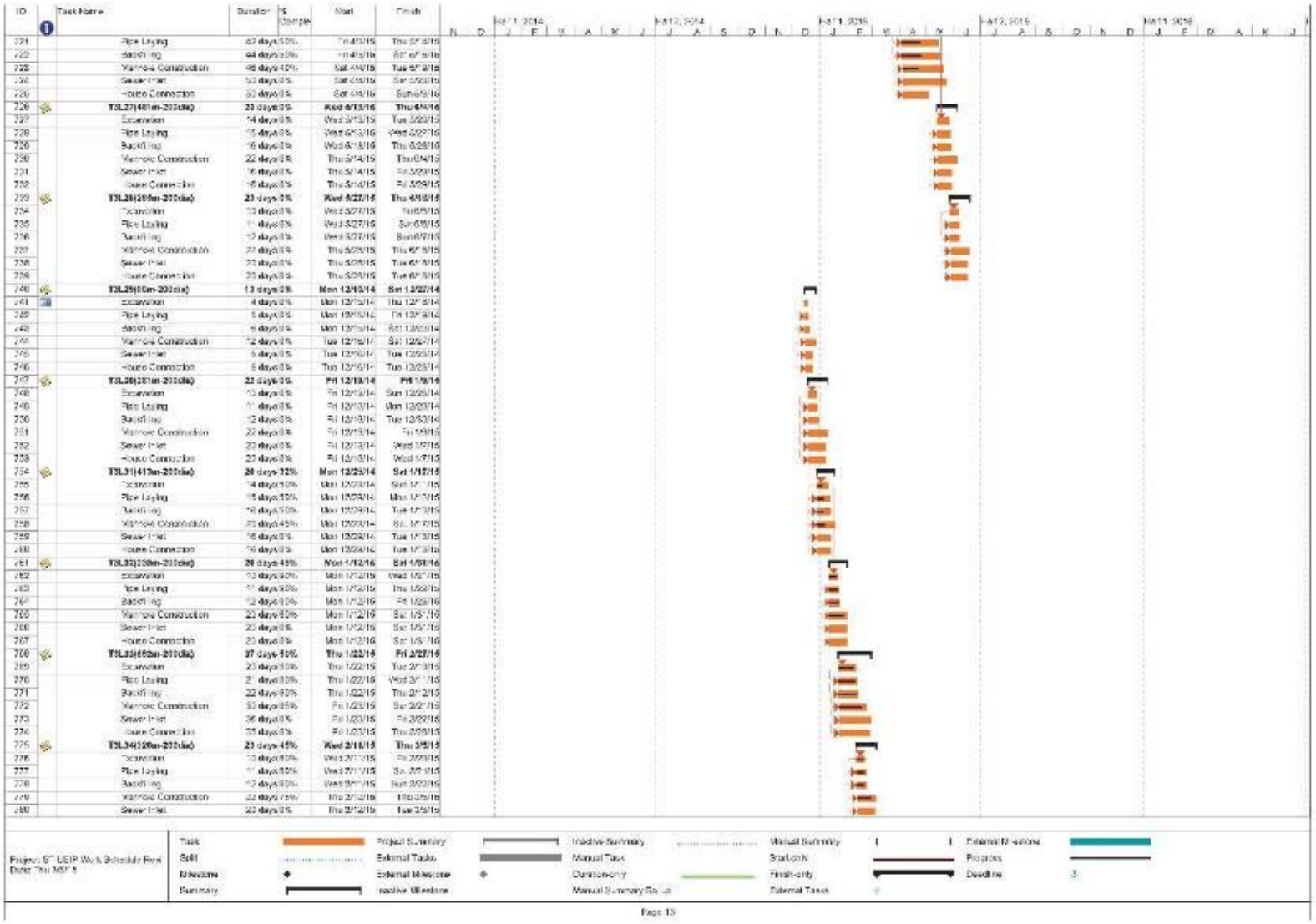

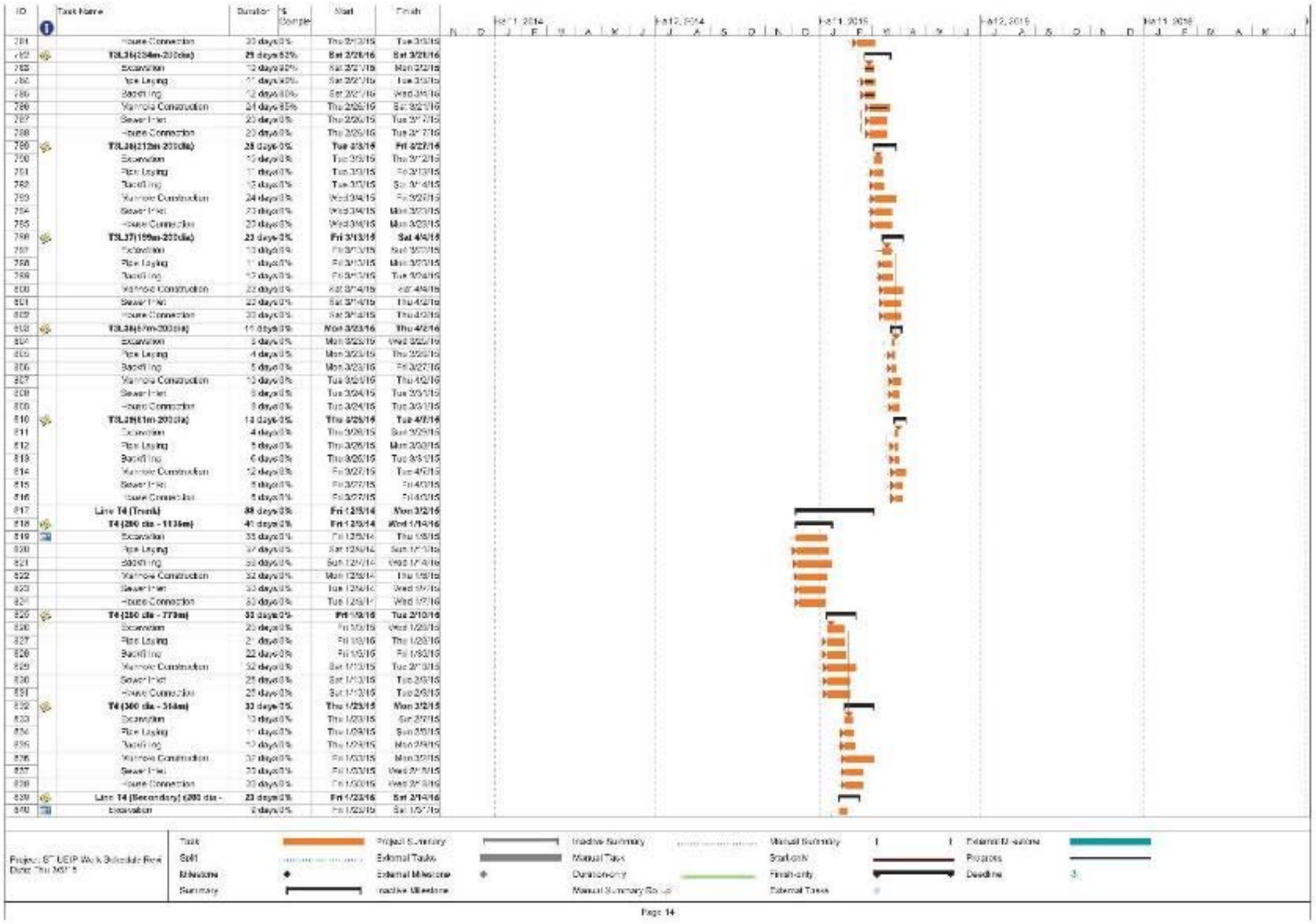

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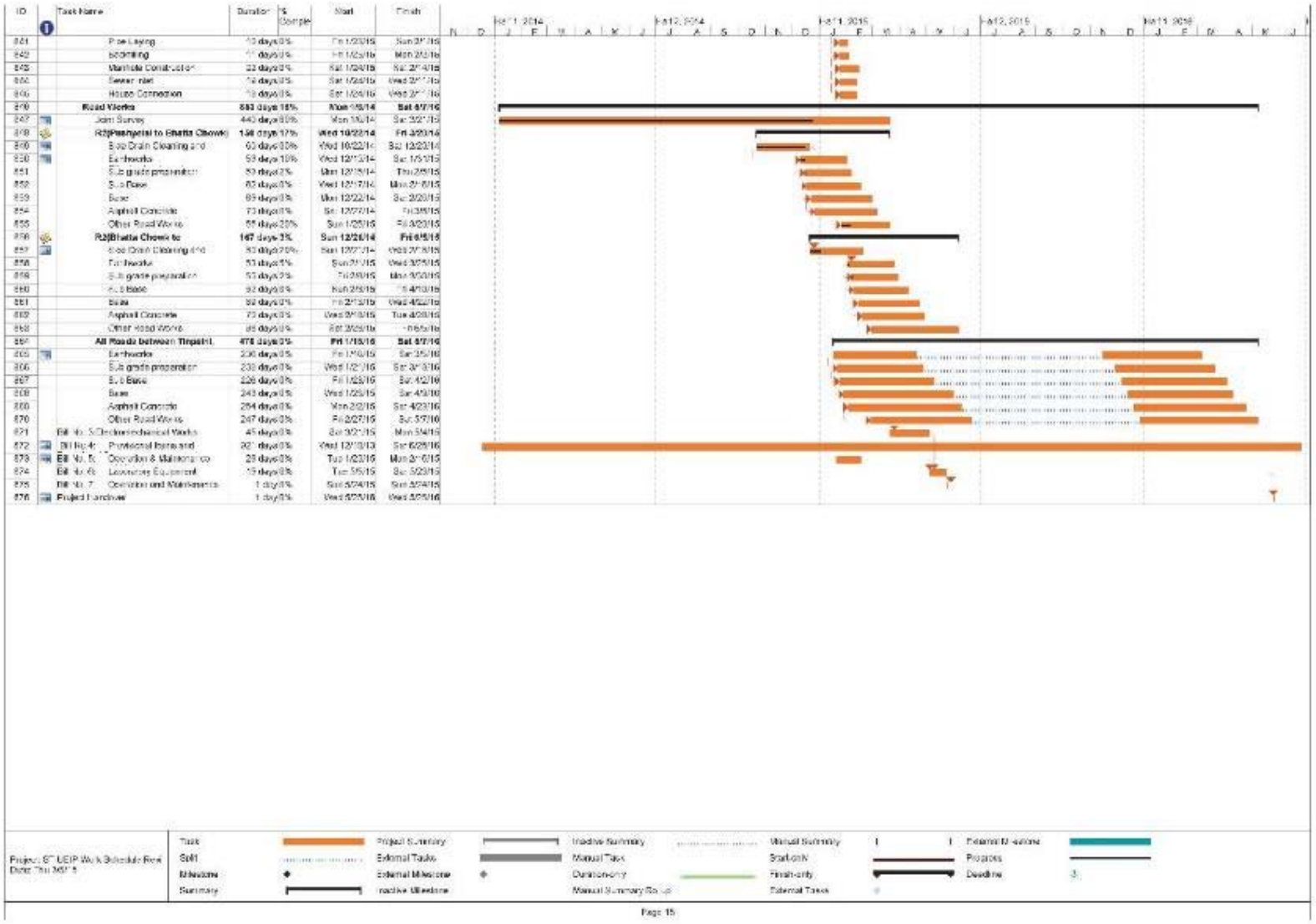

Photographs of the Month

Figure 1 Stock precast units at Yard

Figure 2 Stock precast Chambers at Yard

Figure 3 Stock Pipes at Yard

Figure 4 A visit by delegate form Ministry of Finance

Figure 5 Road maintenance at Madhumara

Figure 6 Road maintenance at Sombare chowk

Figure 7 Completed drain and sub base road inundated due to lack of outfall at R65

Figure 8 Sub base laying at Road R5 (Satghumti)

Figure 9 Sub base completed road section of R5

Figure 10 Visit by delegate from PMSC and PIU at right of way not cleared sites

Figure 11 Visit by delegate from PMSC, PCO, PIU and consultant at Hume pipe laying site Jatuwa

Figure 12 Vist at site B1 outlet

Figure 13 R2 road sub base completed section

Figure 14 Visit by delegate at R2 road

Figure 15 Meeting at PIU regarding progress of work

Figure 16 Manhole construction at Line B2

Figure 17 Right of way marking

Figure 18 CN3 storm drain project area

Figure 19 Backfilling and compaction at Hume pipe laying site T2 Trunk

Figure 20 Sewer line T2 Trunk at Jatuwa

Figure 21 Drain and Hume pipe laying site B2

Figure 22 Backfilling at secondary line 13F

Figure 23 Sub base completed road section road R65 (Satghumti)

Figure 24 Micro concreting at drain B2

Figure 25 Subgrade preparation at Road R65

Figure 26 Concreting at drain B2

Site-Specific EMAP Monitoring Checklist

Name of Contractor: M/S CTCE-KALIKA J.V. Contract No: STIUEIP/W/BRT/ICB-01 For the Month of June 2015
Consulting Engineers: SMEC-Brisbane-AQUA-BDA-CEMAT

(Insert sign √, or scale where applicable)

Project stage	Project Activity	Potential Environmental Impacts	Proposed mitigation measures	Mitigation Compliance	Mitigation Effectiveness	DSC Remarks				
Preparation for construction				**Indicate in 1-5 scale**	**Indicate in 1-5 scale**	**Compliance (C); Non Compliance (NC) Not applicable (NA)**				
						C			**NC**	**NA**
						<25%	25-50%	**>75%**		
	Identify the temporary areas required by the project and locate them with proper marking	May result social tensions	Prepare the details of temporary land acquisition and other private properties	2	2					
			Submit to Supervising Engineer	2	2					
			Follow RAP for temporary acquisition	2	2					
	Submit applications to get an approval Submit such agreement and permits to Supervising Engineers for official information	May result social conflict and legal obstructions resulting in delay of work	Obtain Letters of Approval and Agreement for (i) temporary acquisition of land and properties (ii) relocation of religious site, foot trails, (iii) disruption of water supply, and others	2	2					
	Delineate and peg the areas required	May result social conflict and legal obstructions resulting in delay of work Pegging of project area	Pegging of all constructions site and labor camp	2	2					
			Maintain records of trees and other properties likely to be affected	2	2					
	Construct workforce camp	Haphazard camps resulting in social stress and degradation of local environment	Establish workforce camp at designated site only	2	2					
	Make employment policy for local and affected people as per EMP	Local people may be deprived of opportunities, Minors may be employed	Employ local people (not under age 14) especially SPAF, and PAF in jobs	2	2					
			Settle wage rate based on DWEC and provide the list of employees to Supervising Engineer	2	2					

Project stage	Project Activity	Potential Environmental Impacts	Proposed mitigation measures	Mitigation Compliance	Mitigation Effectiveness	DSC Remarks				
				Indicate in 1-5 scale	Indicate in 1-5 scale	Compliance (C); Non Compliance (NC) Not applicable (NA)				
						C			NC	NA
						<25%	25-50%	>75%		
Construction Phase: Physical Environment	**Construction Activity**									
	Adopt cut and fill principle during earthworks Disposal of excess materials in designated area Apply Bio-engineering for controlling of erosion and Gully	Soil Erosion sedimentation and slope instability	Adopt 'cut and fill' approach, wherever possible	2	2					
			Avoid works during monsoon	2	2					
			Provide proper drainage facilities	3	3					
			Stockpile top soil for reuse	2	3					
			Adopt gully control and bioengineering	2	3					
			Procure aggregates from already existing sites	2	2					
			Dispose spoil in designated area	2	3					
	Quarrying from river bed	Change in River Hydrology and River Morphology	Avoid Quarrying/Mining activity in river/streams for extraction of materials required for project shall not be done so that change the river cross sections and longitudinal profile do not occur	2	2					
			Ensure care so that irrigation canal/channel are not adversely affected by the project construction	2	1					
			Ensure care of stone spout in order not to disturb the existing flow.	2	1					

Project stage	Project Activity	Potential Environmental Impacts	Proposed mitigation measures	Mitigation Compliance	Mitigation Effectiveness	DSC Remarks				
				Indicate in 1-5 scale	Indicate in 1-5 scale	Compliance (C); Non Compliance (NC) Not applicable (NA)				
						C			NC	NA
						<25%	25-50%	>75%		
	Disturbance of drainage Dumping of waste in the river Construct of toilets in the camps Storing of materials in the project area Handling of toxic materials Dumping of excess materials Quarry operation	Water Pollution	Avoid camping facility within drainage	1	1					
			Prohibition on dumping of wastes in the water source	2	2					
			Provision of sanitary facility and prohibition on defecation in open areas	2	2					
			Proper storage of construction aggregates, hazardous, and toxic materials and proper disposal of chemical containers, packaging materials, plastic bags provide training to workforce on safe handling of toxic materials	2	2					
			Disposal of waste in the designated area	2	2					
			provide dumping site and waste treatment facility	2	3					
			Avoid excessive mining from riverbed.	2	2					
	Movement of vehicles Operation of crusher Earthworks Stockpiling of construction waste and construction materials	Air Quality deterioration	Spraying of water in dry season at construction site and disposal site (Three time a day)	2	2					

Project stage	Project Activity	Potential Environmental Impacts	Proposed mitigation measures	Mitigation Compliance	Mitigation Effectiveness	DSC Remarks				
				Indicate in 1-5 scale	Indicate in 1-5 scale	Compliance (C); Non Compliance (NC) Not applicable (NA)				
						C			NC	NA
						<25%	25-50%	>75%		
			Limit speed of construction vehicle	2	2					
			Safe place	2	2					
			Regularly maintain equipment and cover the stockpile	2	3					
			Compliance of vehicles with National Vehicle Mass Emission Standards, 2756 BS	2	2					
			Arrange proper ventilation in confined working areas	3	2					
	Movement of vehicles Operation of crusher Operation of construction machineries and equipment Horn honking	Noise and vibration	Fit mufflers to control noise							
			speed limit of construction vehicle	2	2					
			Use light horn in vehicles	2	2					
			Maintenance of equipment	2	2					
			Prohibit the operation of crushing plant between 7 PM to 6 AM	3	2					
			Compensate the damages caused by vibration	3	3					

Project stage	Project Activity	Potential Environmental Impacts	Proposed mitigation measures	Mitigation Compliance	Mitigation Effectiveness	DSC Remarks				
				Indicate in 1-5 scale	Indicate in 1-5 scale	Compliance (C); Non Compliance (NC) Not applicable (NA)				
						C			NC	NA
						<25%	25-50%	>75%		
	Scrapping of top spoil	Effect on Soil quality	Stockpile reusable top soil properly in safe yard	1	2					
	Storage of fuel, lubricating oil, chemicals etc.	Solid waste problems, health risk	Store all materials, toxic, non-toxic and hazardous materials in safe place (warehouse)	1	1					
	Project activities producing wastes such as used tyres, lubricating oil, exhausted battery etc		Collect, segregate and dispose waste at designated area	2	2					
Construction Phase: Biological Environment	**Construction Activity**									
	vegetation clearance for construction of project structures	Vegetation clearance	Cut only marked trees	2	1					
	Fuel wood and NTFPs collection by workforce	Loss of vegetation species	Prohibit fuel wood and timber collection	2	1					
			Prohibit illegal NTFPs collection and Trade	3	2					
	vegetation clearance for construction of project structures and compensation to them		Provide LPG/kerosene to workforce	3	2					
			Stockpile the felled trees and take permission from concerned authority for its use	2	3					
			Plant trees @ 5 times of each felled trees	2	3					
			Compensate for affected trees from private and community forests	3	3					

Project stage	Project Activity	Potential Environmental Impacts	Proposed mitigation measures	Mitigation Compliance	Mitigation Effectiveness	DSC Remarks				
				Indicate in 1-5 scale	Indicate in 1-5 scale	Compliance (C); Non Compliance (NC) Not applicable (NA)				
						C			NC	NA
						<25%	25-50%	>75%		
Construction Phase: Socio-Economic Environment	compensation and Rehabilitation as per RAP	Land Intake and compensation to affected people	Avoid involuntary displacement	3	3					
			Compensation, Rehabilitation and employment opportunity to the affected people	2	3					
			Provide all possible assistance to the displaced people until the displaced people are settled	3	3					
			Provide disturbance and rehabilitation cost	3	4					
			Protect traditional rights of locals	1	1					
			Compensate for any loss of crops, trees and other natural resources	3	3					
			Establish technical committee to assess damage caused by vibration for compensation	3	3					
	Reinstatement of damaged community services and infrastructures	Reinstatement of community services and infrastructures	Compensate or reinstate community assets such as temples, bridges and irrigation canals, electricity poles, telephone lines, drinking water pipes, sewerage lines, roads, trails, cremation sites etc	3	3					

Project stage	Project Activity	Potential Environmental Impacts	Proposed mitigation measures	Mitigation Compliance	Mitigation Effectiveness	DSC Remarks				
				Indicate in 1-5 scale	Indicate in 1-5 scale	Compliance (C); Non Compliance (NC) Not applicable (NA)				
						C			NC	NA
						<25%	25-50%	>75%		
	Influx of outside workforce, money and disharmony activity	Increase in crime and community stress	Instruct Workforce for not to indulge in Gambling and drinking alcohol	3	2					
			Prohibit Visiting of workers to nearby village after 7 pm and living outside	3	2					
			Instruct workforce to respect local culture, tradition, rights etc.	3	2					
			Request police to patrol in the camp site and adjoining villages	3	2					
			Launch awareness programs concerning the human trafficking and possibility of spread of STDs and HIV/AIDS	3	2					
	Project Activities relating to health and safety issues at work areas	Health and hygiene (unsafe working conditions, accidents, fire hazard, transmission of communicable disease)	Provide facilities of health check, proper sanitation and hygiene, health care, control of epidemic diseases to workforce	2	1					
			Provide awareness on STD, HIV/AIDS	2	1					
			Place adequate warning system, signboard, hoarding post and prohibit visiting risky area as necessary	2	1					
			Make available first aid kits ambulance and fire fighting gears	1	1					
			Make available protection gears to all construction workers and compensate for the loss of life or any type of injuries	1	1					
	Dislocation of archaeological artifacts, if any	Loss of Archaeological and cultural sites	Protect archaeological and cultural sites In case of relocation, consult local community	3	2					

Project stage	Project Activity	Potential Environmental Impacts	Proposed mitigation measures	Mitigation Compliance	Mitigation Effectiveness	DSC Remarks				
Preparation for construction				**Indicate in 1-5 scale**	**Indicate in 1-5 scale**	**Compliance (C); Non Compliance (NC) Not applicable (NA)**				
						C			**NC**	**NA**
						<25%	25-50%	**>75%**		
	Demolition of unnecessary structures	Decline in aesthetics and inconvenience to people	Remove all unnecessary structures and reinstall the facilities and others to the original condition	3	2					
	Traffic management at construction sites	Traffic Congestion	Provide information about construction schedule to the local people	3	2					

Space for additional remarks (if any):

Prepared by: **CTCE/KALIKA JV** Submitted to: **SMEC-Brisbane-AQUA-BDA-CEMAT**

Date of submission: **July, 2014**

Note: *Scale 1. Very Good (all implemented); 2. Good (the majority implemented); 3. Fair (some implemented); 4. Poor (few implemented); 5. Very Poor (very few or no implemented*

LAB REPORT

SUMMARY

Secondary Town Integrated Urban Environmental Improvement Project

Biratnagar Sub-Metropolitan city

Contract Package: STIUEIP/W/BRT/ICB-01

DAILY WEATHER RECORD

FOR THE MONTH OF JUNE 2015

Date	WEATHER Record							Temp.c	
	Sunny	Foggy	Windy	Cloudy	Morning Rain HRS	Night Rain Hrs.	Day Rain Hrs.	9:00 AM	Rain fall mm
1	Sunny							34.5	
2	Sunny							35.6	
3	Sunny							36.8	
4	Sunny							37.5	
5	Sunny							38	
6	Sunny							40	
7				Cloudy				32	
8				Cloudy			Day Rain Hrs.	32	18mm
9				Cloudy	Morning Rain HRS	Night Rain Hrs.		30	45mm
10				Cloudy				28	14mm
11	Sunny							30	
12				Cloudy				32	10mm
13				Cloudy				30	
14				Cloudy	Morning Rain HRS	Night Rain Hrs.		28	22mm
15	Sunny							30	
16				Cloudy	Morning Rain HRS	Night Rain Hrs.		32	48mm
17	Sunny							30	
18	Sunny				Morning Rain HRS	Night Rain Hrs.		28	20mm
19				Cloudy				28	20mm
20				Cloudy				34	
21	Sunny							30	
22				Cloudy		Day Rain Hrs.		32	18mm
23				Cloudy	Morning Rain HRS			29	10mm
24				Cloudy	Morning Rain HRS			30	12mm
25	Sunny							29	
26	Sunny				Morning Rain HRS			30	12mm
27	Sunny				Morning Rain HRS	Night Rain Hrs.		32	70mm
28	Sunny							30	
29	Sunny							30	
30	Sunny							29	

SMEC-Brisbane-AQUA-BDA-CEMAT	CTCE-KALIKA J/V
Approved by CSE	Submitted by Project Manager
Record Checked by Junior Engineer	Record Reported by Q.C Manager
Consultants Reps	Contractors Reps

Secondary Towns Integrated Uraban Environmental Improvement Project

Biratnagar Sub-Metropolitant City

TEST RESULT SUMMARY SHEET For the Month of JUNE 2015

STIUEIP

COMPRESSIVE STRENGTH OF BRICKS (Process Control Test)

Ref. STIUEIP LAB/	Date of Testing	Location	Chanage	BRAND NAME 1 st class brick	Water Absorption	Compressive Strength N/mm2	SCALE OF Sample From
MR254	2/6/2015	T2 Line	Man hole No 214	SHREE		11.80	1500 Nos-5 Nos
MR255	2/6/2015	T2 Line	Man hole No 214	SHREE		11.71	1500 Nos-5 Nos
MR256	2/6/2015	T2 Line	Man hole No 214	SHREE		11.66	1500 Nos-5 Nos
MR257	10/6/2015	T2 Line	Man hole	SHREE		10.88	1500 Nos-5 Nos
MR258	14/6/2015	RANI	RANI	SHREE		11.72	1500 Nos-5 Nos
MR259	23/6/2015	RANI	RANI	SHREE		11.69	1500 Nos-5 Nos
MR260	23/6/2015	RANI	RANI	SHREE		11.60	1500 Nos-5 Nos
MR261	30/6/2015	B2	Radha krishana chowck	SHREE		8.47	3000 Nos-5 Nos (failed)
MR262	30/6/2015	S13L1F	S13L1F	AMBEY		10.10	1500 Nos-5 Nos

Please Remove the heap of bricks from the site as per SI-CSE-73

Total 45 Nos Brick Crushed

Specification	IS1077,IS2180or NS1/2035	I0%<	> 10N/MM2 ±5%

SMEC-Brisbane-AQUA-BDA-CEMAT	CTCE-KALIKA J/V
Approved by Construction Supervision Engineer	Submitted by Project Manager
Test Checked by Junior Engineer	Test conducted by Q.C Manager
Consultantr Reps	Contractor Reps

SECONDARY TOWNS INTEGRATED URABAN ENVIRONMENTAL IMPROVEMENT PROJECT

Biratnagar Sub-Metropolitant City

Summery of Concrete Crushed Aggregate 20mm down For The Month Of JUNE 2015

S.N.	DESCRIPTION / SOURCE	TYPE OF MAT.	LAB REF. NO.	Grain Siza Distribution				FI %	LAA %	ACV.	Unit Wt %	Sp. Gr.	REMARKS
				25	20	10	4.75						
1	B3 RCC Concrete Work	Cr Aggregates	MR79	100	97.53	49.63	5.50	12.93	31.88	20.0			Aggregates
2	B3 RCC Concrete Work	Cr Aggregates	MR80	100	96.46	47.23	4.75						Source
3	B3 RCC Concrete Work	Cr Aggregates	MR81	100	97.20	46.15	4.62						Om shree
4	B2 RCC Concrete Work	Cr Aggregates	MR82	100	96.98	48.57	5.51	12.13	31.68	19.4			
5	B2 RCC Concrete Work	Cr Aggregates	MR83	100	96.36	38.48	4.08						
6	B2 RCC Concrete Work	Cr Aggregates	MR84	100	97.20	42.84	5.25						Crusher
7	B1 RCC Concrete Work	Cr Aggregates	MR85	100	96.09	44.67	5.18	12.58	32.04	19.8			Plant
8	B1 RCC Concrete Work	Cr Aggregates	MR86	100	97.48	43.95	5.91						
9	B1 RCC Concrete Work	Cr Aggregates	MR87	100	97.31	40.89	4.17						
Section 900:IS 383-1970 Required		Gradednominal size 20mm		100	95-100	25-55	0-10	Less 15%	Less 35%	Less 30%			

SMEC-Brisbane-AQUA-CEMAT-BDA

Approved by CSE

Test Checked by Junior Engineer

CTCE-KALIKA J/V

Submitted by Project Manager

Test conducted by Q.C Manager

SECONDARY TOWNS INTEGRATED URABAN ENVIRONMENTAL IMPROVEMENT PROJECT

Biratnagar Sub-Metropolitant City

Summery of Concrete Crushed Aggregate 20mm down **For The Month Of JUNE 2015**

S.N.	DESCRIPTION / SOURCE	TYPE OF MAT.	LAB REF. NO.	Grain Siza Distribution				FI	LAA	ACV	Unit Wt	Sp. Gr.	REMARKS
				25	20	10	4.75	%	%		%		
10	MAN HOLE CASTING YARD	Cr Aggregates	MR88	100	95.75	38.40	4.22	12.64	31.80	18.8			Aggregates
11	MAN HOLE CASTING YARD	Cr Aggregates	MR89	100	95.82	39.38	5.74						Source
12	SLAB CASTING YARD	Cr Aggregates	MR90	100	96.18	39.58	5.57	12.55	32.24	18.9			Om shree
13	RANI CONCRETE WORK	Cr Aggregates	MR91	100	96.75	39.27	4.89	12.95	32.12	19.2			
14	S13 Concrete Work	Cr Aggregates	MR92	100	95.23	36.78	4.45	12.40	32.52	19.0			
													Crusher
													Plant
Section 900:IS 383-1970 Required		Gradednominal size 20mm		100	95-100	25-55	0-10	Less 15%	Less 35%	Less 30%			

SMEC-Brisbane-AQUA-CEMAT-BDA

Approved by CSE

Test Checked by Junior Engineer

CTCE-KALIKA J/V

Submitted by Project Manager

Test conducted by Q.C Manager

SECONDARY TOWNS INTEGRATED URABAN ENVIRONMENTAL IMPROVEMENT PROJECT

BiratnagarSub-Metropolitant City

CEMENT TEST SUMMERY

For the Month of JUNE 2015

S.N.	Lab. Ref. NO.	Description of cement	Testing Date	Consistency & Setting Time			Remarks
				Norm. Const.	Intial(min.)	Final(min.)	
1	MR32	SHIVAM OPC G43	2/6/2015	33.10	250	305	All Cement
2	MR33	SHIVAM OPC G43	7/6/2015	34.30	290	325	Are
3	MR34	SHIVAM OPC G43	10/6/2015	33.70	240	370	Nepali
4	MR35	SHIVAM OPC G43	15/6/2015	34.40	305	450	BRAND
5	MR36	SHIVAM OPC G43	22/6/2015	34.90	285	375	QPC
6	MR37	SHIVAM OPC G43	28/6/2015	35.40	295	390	
7	MR38	SHIVAM OPC G43	30/6/2015	36.00	300	400	
Requirements in accordance with BS 12					> 45 Min.	10 Hrs	

SMCE-Brisbane-AQUA-BDA	CTCE-KALIKA J/V
Approved by C.S.E	Submitted by Project Manager
Test Checked by Junior Engineer	Test Conducted by Q.C Manager
Consultant Reps	Contractores Reps

SECONDARY TOWNS INTEGRATED URABAN ENVIRONMENTAL IMPROVEMENT PROJECT

Biratnagar Sub-Metropolitant City

Summary of Fine Concrete Aggregates Sand FOR THE MONTH OF JUNE 2015

S.N.	DESCRIPTION / LOCATION	LAB REF. NO:	Grain Siza Distribution 10	4.75	2.36	1.18	0.6	0.3	0.15	Sp Gr	Water Absorption %	Unit Weight gm/cc	REMARKS
1	B3 RCC Concrete Work	MR79	100.00	93.48	81.12	57.89	41.65	20.71	5.03				source
2	B3 RCC Concrete Work	MR80	100.00	93.03	79.98	56.02	40.61	19.01	4.16				om shree
3	B3 RCC Concrete Work	MR81	100.00	92.17	79.24	56.74	41.30	19.89	4.78				
4	B2 RCC Concrete Work	MR82	100.00	91.15	81.49	60.16	43.26	16.70	5.43				
5	B2 RCC Concrete Work	MR83	100.00	91.20	81.27	60.30	42.70	16.67	4.31				
6	B2 RCC Concrete Work	MR84	100.00	91.65	81.02	60.15	42.13	16.70	3.42				
7	B1 RCC Concrete Work	MR85	100.00	90.20	80.00	57.80	42.60	16.60	4.60				
8	B1 RCC Concrete Work	MR86	100.00	90.56	78.33	57.04	42.04	16.85	5.00				
9	B1 RCC Concrete Work	MR87	100.00	91.85	78.90	57.63	41.33	17.75	6.71				
10	MAN HOLE CASTING	MR88	100.00	90.33	79.22	57.00	40.53	14.20	3.50				crusher
11	MAN HOLE CASTING	MR89	100.00	91.46	78.06	58.06	41.17	15.34	4.27				plant
Specifacation Limit is 383-1970 Zone -2			100-100	90-100	75-100	55-90	35-59	8-30	0-10				

SMEC-BRISBANE-AQUA-CEMAT-BDA

Approved by C.S.E

Test Checked by Junior Engineer

Consultant Reps

CTCE-KALIKA J/V

Submitted by Project Manager

Test Conducted by Q.C Manager

Contractor Reps

SECONDARY TOWNS INTEGRATED URABAN ENVIRONMENTAL IMPROVEMENT PROJECT

Biratnagar Sub-Metropolitant City

Summary of Fine Concrete Aggregates Sand FOR THE MONTH OF JUNE 2015

S.N.	DESCRIPTION / LOCATION	LAB REF. NO:	Grain Siza Distribution 10	4.75	2.36	1.18	0.6	0.3	0.15	Sp Gr	Water Absorption %	Unit Weight gm/cc	REMARKS
12	SLAB CASTING YARD	MR90	100.00	91.35	77.87	57.14	40.24	14.49	4.02				source
13	RANI CONCRETE WORK	MR91	100.00	91.36	79.73	59.91	39.20	16.99	6.26				om shree
14	S13 Concrete Work	MR92	100.00	92.84	81.94	61.49	39.25	15.82	5.82				
													crusher
													plant
Specifacation Limit is 383-1970 Zone -2			100-100	90-100	75-100	55-90	35-59	8-30	0-10				

SMEC-BRISBANE-AQUA-CEMAT-BDA

Approved by C.S.E

Test Checked by Junior Engineer

Consultant Reps

CTCE-KALIKA J/V

Submitted by Project Manager

Test Conducted by Q.C Manager

Contractor Reps

SECONDARY TOWNS INTEGRATED URABAN ENVIRONMENTAL IMPROVEMENT PROJECT

Biratnagar Sub-Metropolitant City

SUMMARY OF FIELD DENSITY TEST

FOR THE MONTH OF JUNE 2015

Description : Field Density Tests on R2 ch:1+280 to 1+390

S.N.	L/Ref. No.	Date	Location/ Area	MDD Gm/CC	Degree of Compaction, %		Remarks
1	FD-02	9/6/2015	1+290 CL	2.15	98.99	ok	
2	FD-02	9/6/2015	1+320 CL	2.5	114.9	ok	
3	FD-02	9/6/2015	1+370 LHS MID	3.12	143.64	ok	
4	FD-02	9/6/2015	1+370 Shoulder	1.61	83.34	Failled	
5	FD-02	9/6/2015	1+380 Shoulder	2.24	115.68	ok	
6	FD-02	9/6/2015	1+370 Shoulder	3.09	159.83	ok	
Specification Requirement				1.968	>95	>95	

Note:1+370 shoulder Re-test after Re-compaction & watering

Please retest MDD & density.

SMEC-Brisbane-AQUA-CEMAT-BDA

Approved by C.S.E

Test Checked by Junior Engineer

Consultant Reps

CTCE-KALIKA J/V

Submitted by Project Manager

Test Conducted by Q.C Manager

Contractors Reps

SECONDARY TOWNS INTEGRATED URABAN ENVIRONMENTAL IMPROVEMENT PROJECT

Biratnagar Sub-Metropolitant City

SUMMARY OF CUBE COMPRESSIVE STRENGTH TEST M30/20 MAN HOLE CASTING WORK MIX

FOR THE MONTH OF JUNE 2015

S.N.	Lab Ref No.	Date of Casting	Deatails of Mix	Location	Ratio by MASS				Materials		Cube Crushing ,N/mm2		Remarks
				Structure	Water	Cement	Sand	Aggregate	Cement Brand	Aggregate/Sand	7 days	28-Days	
1	MR27	1/5/2015	M30 Work mix	MANHOLE YARD	0.36	1	1.28	2.1	SHIVAM	Om shree C/plant	22.1	33.6	
2	MR28	7/5/2015	M30 Work mix	MANHOLE YARD	0.36	1	1.28	2.1	SHIVAM	Om shree C/plant	23.1	32.0	
3	MR29	18/5/2015	M30 Work mix	MANHOLE YARD	0.36	1	1.28	2.1	SHIVAM	Om shree C/plant	23.7	31.9	
4	MR30	19/5/2015	M30 Work mix	MANHOLE YARD	0.36	1	1.28	2.1	SHIVAM	Om shree C/plant	23.2	33.2	
5	MR31	23/5/2015	M30 Work mix	MANHOLE YARD	0.36	1	1.28	2.1	SHIVAM	Om shree C/plant	23.2	31.7	
6	MR32	28/5/2015	M30 Work mix	MANHOLE YARD	0.36	1	1.28	2.1	SHIVAM	Om shree C/plant	27.3	31.7	
										Total cube crushed 36 NOS			

Specifacation Limit Table For M30/20 on 7 days Age Min 67% of Total Compressive Strength — Min Required 20.1 30

SMEC-Brisbane-AQUA-BDA

Approved by Construction Supervision Engineer/CSE

Test checked by Junior Engineer

Consultants Reps

CTCE-KALIKA J/V

Submitted by Project Manager

Test conducted by Q.C Manager

Contractors Reps

SECONDARY TOWN INTEGRATED URABAN ENVIRONMENTAL IMPROVEMENT PROJECT

Biratnagar-Sub-Metropolitant City

SUMMERY OF THE MORTAR WORK MIX CUBE FOR THE MONTH OFJUNE 2015

S.N.	Cube No.	Name of Cement	Location/Structure	Details of MIX	Casting Date	Consistency & Setting Time			7 day's cube Crushing		28 day's cube crushing		Remarks
						Norm. Const.	Intial(min.)	Final(min.)	Date	Str. N/mm2	Date	Str. N/mm2	
21	209	Shivam	R5 sath ghumti	1:4 by volume	15/5/2015	34.90	250	345	22/5/2015	7.89	13/6/2015	8.98	
22	210	Shivam	CN3	1:4 by volume	17/5/2015	34.90	250	345	24/5/2015	6.80	15/6/2015	8.44	
23	211	Shivam	CN2	1:4 by volume	17/5/2015	34.90	250	345	24/5/2015	6.94	15/6/2015	8.44	
24	212	Shivam	R5 sath ghumti	1:4 by volume	19/5/2015	34.90	250	345	26/5/2015	6.80	17/6/2015	8.44	
25	213	Shivam	R5 sath ghumti	1:4 by volume	19/5/2015	34.90	250	345	26/5/2015	5.99	17/6/2015	9.39	
26	214	Shivam	RANI	1:4 by volume	20/5/2015	34.90	250	345	27/5/2015	5.99	18/6/2015	8.03	
27	215	Shivam	R5 sath ghumti	1:4 by volume	20/5/2015	34.90	250	345	27/5/2015	6.39	18/6/2015	8.44	
28	216	Shivam	CN2	1:4 by volume	21/5/2015	34.90	250	345	28/5/2015	5.85	19/6/2015	9.39	
29	217	Shivam	R5 sath ghumti	1:4 by volume	22/5/2015	34.90	250	345	29/5/2015	6.12	20/6/2015	9.52	
30	218	Shivam	R2 Road	1:4 by volume	23/5/2015	34.90	250	345	30/5/2015	6.67	21/6/2015	9.66	
31	219	Shivam	R2 Road	1:4 by volume	24/5/2015	34.90	250	345	31/5/2015	6.53	22/6/2015	8.57	
32	220	Shivam	R5 sath ghumti	1:4 by volume	25/5/2015	34.90	250	345	1/6/2015	5.85	23/6/2015	7.89	
33	221	Shivam	RANI	1:4 by volume	25/5/2015	34.30	290	405	1/6/2015	6.39	23/6/2015	8.44	
34	222	Shivam	S13L1F	1:4 by volume	28/5/2015	34.30	290	405	3/6/2015	7.48	24/6/2015	8.30	
35	223	Shivam	S13L1F	1:4 by volume	29/5/2015	34.30	290	405	5/6/2015	6.94	26/6/2015	8.71	
36	224	Shivam	CN3	1:4 by volume	2/6/2015	33.10	290	305	9/6/2015	6.53	30/6/2015	8.30	
37	225	Shivam	CN2	1:4 by volume	2/6/2015	33.10	290	305	9/6/2015	7.07	30/6/2015	7.62	
										Total no of mortar crushed 222Nos			

According to is 2250-1981

MIN 45m Max 600m Required strength on 28 days not less than 5 or 7.5 N/MM2

SMEC-Brisbane-AQUA-BDA-CEMAT

Approved by Construction Supervision Engineer/CSE

Test Checked by Junior Engineer

Consultants Reps

CTCE-KALIKA J/V

Submitted by Project Manager

Test conducted by Q.C Manager

Contractore Reps

SECONDARY TOWN INTEGRATED URABAN ENVIRONMENTAL IMPROVEMENT PROJECT

Biratnagar-Sub-Metropolitant City

SUMMERY OF THE MORTAR WORK MIX CUBE FOR THE MONTH OFJUNE 2015

S.N.	Cube No.	Name of Cement	Location/Structure	Details of MIX	Casting Date	Consistency & Setting Time			7 day's cube Crushing		28 day's cube crushing		Remarks
						Norm. Const.	Intial(min.)	Final(min.)	Date	Str. N/mm2	Date	Str. N/mm2	
1	189	Shivam	RANI	1:4 by volume	30/4/2015	30.30	210	315	7/5/2015	6.80	28/5/2015	9.66	
2	190	Shivam	National Trading	1:4 by volume	30/4/2015	30.30	210	315	7/5/2015	7.21	28/5/2015	8.84	
3	191	Shivam	RANI	1:4 by volume	1/5/2015	34.90	255	315	8/5/2015	6.26	29/5/2015	8.98	
4	192	Shivam	CN2	1:4 by volume	1/5/2015	34.90	255	315	8/5/2015	7.21	29/5/2015	8.57	
5	193	Shivam	R2 Road	1:4 by volume	1/5/2015	34.90	255	315	8/5/2015	7.21	29/5/2015	9.25	
6	194	Shivam	S13L1F	1:4 by volume	2/5/2015	34.90	255	315	9/5/2015	6.94	30/5/2015	8.98	
7	195	Shivam	R2 Road 4+150	1:4 by volume	2/5/2015	34.90	255	315	9/5/2015	7.35	30/5/2015	9.25	
8	196	Shivam	RANI	1:4 by volume	3/5/2015	34.30	240	330	10/5/2015	8.16	31/5/2015	8.57	
9	197	Shivam	CN3	1:4 by volume	3/5/2015	34.30	240	330	10/5/2015	7.48	31/5/2015	8.44	
10	198	Shivam	Sewerage Line	1:4 by volume	4/5/2015	34.30	240	330	11/5/2015	7.07	1/6/2015	9.39	
11	199	Shivam	CN3	1:4 by volume	7/5/2015	34.30	240	330	14/5/2015	7.07	5/6/2015	8.16	
12	200	Shivam	CN3	1:4 by volume	7/5/2015	34.30	240	330	14/5/2015	5.99	5/6/2015	8.03	
13	201	Shivam	R2 Road 4+165	1:4 by volume	7/5/2015	34.30	240	330	14/5/2015	6.12	5/6/2015	7.48	
14	202	Shivam	R2 Road 4+175	1:4 by volume	9/5/2015	34.30	240	330	16/5/2015	6.67	7/6/2015	7.62	
15	203	Shivam	S13L1F	1:4 by volume	11/5/2015	34.90	250	345	18/5/2015	7.07	9/6/2015	9.66	
16	204	Shivam	RANI	1:4 by volume	11/5/2015	34.90	250	345	18/5/2015	6.12	9/6/2015	9.52	
17	205	Shivam	S13L1F	1:4 by volume	12/5/2015	34.90	250	345	19/5/2015	6.80	10/6/2015	9.39	
18	206	Shivam	RANI	1:4 by volume	14/5/2015	34.90	250	345	21/5/2015	7.76	12/6/2015	10.07	
19	207	Shivam	RANI	1:4 by volume	14/5/2015	34.90	250	345	21/5/2015	7.62	12/6/2015	9.66	
20	208	Shivam	RANI	1:4 by volume	14/5/2015	34.90	250	345	21/5/2015	6.80	12/6/2015	7.76	

According to is 2250-1981

MIN 45m Max 600m Required strength on 28 days not less than 5 or 7.5 N/MM2

SMEC-Brisbane-AQUA-BDA-CEMAT

Approved by Construction Supervision Engineer/CSE

Test Checked by Junior Engineer

Consultants Reps

CTCE-KALIKA J/V

Submitted by Project Manager

Test conducted by Q.C Manager

Contractore Reps

SECONDARY TOWNS INTEGRATED URABAN ENVIRONMENTAL IMPROVEMENT PROJECT

BIRATNAGAR Sub-Metropolitant City

Monthly Laboratory Testing Report

(For The Month OFJUNE 2015)

STIUEIP

Consultants:SMEC-Brisbane-AQUA-CEMAT-BDA

Contractors: CTCE- KALIKA J/V

S. No.	Description of Material	Type of test	Total No. of Test upto previous month	Test Performed for this month				Total No. of Test upto This month	Remarks
				No. of Tests	Passed	Failed	Retest Recommended		
		PI	2	0	0	0		2	
		CBR	2	0	0	0		2	
		Field density							
11	Back Fill Material	Sieve analysis							
		MDD & OMC							
		Field density							
		CBR							
12	CS Base	Sieve analysis	2	0	0	0		2	
	Crushed Stone Base	MDD & OMC	2	0	0	0		2	
	Material Laying	C.B.R	2	0	0	0		2	
		FI + EI	1	0	0	0		1	
		LAA	1	0	0	0		1	
		SSS	0	0	0	0		0	
		ACV/AIV	1	0	0	0		1	
		Field Density							
13	ASHPHALT CONCRETE	Sieve analysis							
	Combine Mixed	FI / EI							
		ACV							
	Individual Ca&FA Test	LAA							
		Unit weight							
		SSS							
14	BITUMEN TEST	Penetration at25.c	2	0	0			2	
	80/100 Bitumen	Softeing point(ring ball)	2	0	0			2	
	As per DORbook section	Flash point/Fire Point	2	0	0			2	
	600 Table 6.14/is 73	Ductility at25.c	2	0	0			2	
		Specific at 25.c	2	0	0			2	

SECONDARY TOWNS INTEGRATED URABAN ENVIRONMENTAL IMPROVEMENT PROJECT

BIRATNAGAR Sub-Metropolitant City

Monthly Laboratory Testing Report

(For The Month OFJUNE 2015)

STIUEIP

Consultants:SMEC-Brisbane-AQUA-CEMAT-BDA **Contractors: CTCE- KALIKA J/V**

S. No.	Description of Material	Type of test	Total No. of Test upto previous month	Test Performed for this month				Total No. of Test upto This month	Remarks
				No. of Tests	Passed	Failed	Retest Recommended		
1	Granular Material/Gravel material	Sieve analysis	2	0	0	0		2	
		MDD & OMC							
		C.B.R							
		Field Density							
2	SUB GRADE Preparation asPere Specifacation	MDD & OMC	4	0	0	0		4	
		Field density	3	7	6	1		10	
		C.B.R	5	0	0	0		5	
3	BRICK WORK	Water Absorption	185	0	0	0		185	
	Required Test	Compressive Strength	1288	45	44	1		1333	
4	Masonry Mortar (CM 7.05)	Compressive strength	1092	222	222	0		1314	
5	CONCRETE AGGREGATE								
	Coarse aggregate (20 mm)	Sieve analysis (20 mm)	79	14	14	0		93	
		LAA	51	7	7	0		58	
		Specific Gravity	8	7	7	0		15	
		FI / EI	73	7	7	0		80	
		ACV	58	7	7	0		65	
		SSS							
		Unit weight	2	0	0	0		2	
	Fine aggregate (Sand)	Sieve analysis	70	14	14	0		84	
		Sand Equivalent Test(S.E)							
		Unit weight	2	0	0	0		2	
6	CONCRETE MIX DESIGN	Concrete mix Design	75	0	0	0		75	
	ConcreteM15/20,M20/20	Compressive strength	738	0	0	0		738	
	M25/20,&M30/20	Slump test	72	0	0	0		72	
7	CEMENT Required Test								
	OPC Cement	Setting time	31	7	7	0		38	
		Normal Consistency	31	7	7	0		38	
		Compressive strength	38	0	0	0		38	
8	CONCRETE								
	Work Mix Test M15,M20,M25,M30	Compressive strength	2083	492	490	2		2575	
9	REINFORCEMENT	Required Test							8,10,12,16
	Reinforcement tore steel	As per Specifacation	5	0	0	0		5	20,25 mm dia
10	PAVEMENT MATERIALS								
	Sub Base Materials	Sieve analysis	2	3	3	0		5	
		MDD & OMC	2	0	0	0		2	

SECONDARY TOWNS INTEGRATED URABAN ENVIRONMENTAL IMPROVEMENT PROJECT

BIRATNAGAR Sub-Metropolitant City

Monthly Laboratory Testing Report

(For The Month OFJUNE 2015)

STIUEIP

Consultants:SMEC-Brisbane-AQUA-CEMAT-BDA **Contractors: CTCE- KALIKA J/V**

S. No.	Description of Material	Type of test	Total No. of Test upto previous month	Test Performed for this month				Total No. of Test upto This month	Remarks
				No. of Tests	Passed	Failed	Retest Recommended		
		Water Content	2	0	0			2	
		Loss on Heating for 5 hrs	2	0	0			2	
		Pen- of residue after loss on Heating		0	0			2	
		Solubility in tricloroethylene	2	0	0			2	
15	Humpipe Test	Three Edge Bearing Load Test	2	0	0			2	200mm to 1600mm 1 each
16	Marshall Stability Test	Bulk density							
		Stability							
		Flow							
		Air voides							
		Bitumen extraction							
		Voids in Mineral Agg							
		Job mix in AC Plant							
		Core Field Density							
17	BITUMEN SPREAD TEST								
	Prime coat	Application rate							
	Tack coat	Application rate							
18	Machines/Equipment								
	Caliberation of compressive		2						2
	Testing machine								
	1000&500 KN Manuall								
19	MISCELLANEOUS								
	G.I Wire(Gabion Boxes)		5						5
	Factory Test Report of Cement		8						8
	Factory Test Report of Iron Steel		4						4
	Factory Test Report of 80/100 Bitumen		2						2
	Factory Test Report of UPVC/HDP Pipe		2						2

MDD/OMC = Max Dry Dennsity

Optimum Moisture Content

SSS = Sodium Sulphate Soundness

ACV = Aggregtae Crushing Value

CBR=California Bearing Ratio

LAA = Los Angeles Abrasion

AIV=Aggregate Impact Value

SE=Sand Equivqlent

JMC=Job Mix Formula

SMEC-Brisbane-AQUA-BDA-CEMAT
Approved by C.S.E
Checked by Junior Engineer
Consultant Reps

CTCE-KALIKA J/V
Submitted by Project Manager
Prepaid by Q.C Manager
Contractors Reps

SECONDARY TOWNS INTEGRATED URABAN ENVIRONMENTAL IMPROVEMENT PROJECT
Biratnagar Sub-Metropolitant City
SUMMARY OF CUBE COMPRESSIVE STRENGTH TEST M20/20 SLAB CASTING WORK MIX FOR THE MONTH OF JUNE 2015

S.N.	Lab Ref No.	Date of Casting	Deatails of Mix	Location Structure	Ratio by VOLUME				Materials		Cube Crushing ,N/mm2		Remarks
					Water	Cement	Sand	Aggregate	Cement Brand	Aggregate/Sand	7 days	28-Days	
1	MR88	1/5/2015	M20 Work mix	SLAB YARD	0.50	1	2	3.5	SHIVAM	Om shree C/plant	16.4	22.4	
2	MR89	3/5/2015	M20 Work mix	SLAB YARD	0.50	1	2	3.5	SHIVAM	Om shree C/plant	17.3	23.4	
3	MR90	5/5/2015	M20 Work mix	SLAB YARD	0.50	1	2	3.5	SHIVAM	Om shree C/plant	17.3	22.5	
4	MR91	7/5/2015	M20 Work mix	SLAB YARD	0.50	1	2	3.5	SHIVAM	Om shree C/plant	16.5	22.6	
5	MR92	10/5/2015	M20 Work mix	SLAB YARD	0.50	1	2	3.5	SHIVAM	Om shree C/plant	16.4	23.3	
6	MR93	11/5/2015	M20 Work mix	SLAB YARD	0.50	1	2	3.5	SHIVAM	Om shree C/plant	16.6	21.5	
7	MR94	13/5/2015	M20 Work mix	SLAB YARD	0.50	1	2	3.5	SHIVAM	Om shree C/plant	16.0	21.5	
8	MR95	14/5/2015	M20 Work mix	SLAB YARD	0.50	1	2	3.5	SHIVAM	Om shree C/plant	16.2	21.5	
9	MR96	18/5/2015	M20 Work mix	SLAB YARD	0.50	1	2	3.5	SHIVAM	Om shree C/plant	16.9	22.2	
10	MR97	20/5/2015	M20 Work mix	SLAB YARD	0.50	1	2	3.5	SHIVAM	Om shree C/plant	16.7	22.1	
11	MR98	24/5/2015	M20 Work mix	SLAB YARD	0.50	1	2	3.5	SHIVAM	Om shree C/plant	16.7	22.1	
12	MR99	24/5/2015	M20 Work mix	SLAB YARD	0.50	1	2	3.5	SHIVAM	Om shree C/plant	16.4	21.8	
13	MR100	2/6/2015	M20 Work mix	SLAB YARD	0.50	1	2	3.5	SHIVAM	Om shree C/plant	15.4	21.9	

Total cube crushed 78 Nos on JUNE

Specifacation Limit Table For M20/20 on 7 days Age Min 67% of Total Compressive Strength — Min Required 13.4 20

SMEC-Brisbane-AQUA-BDA

Approved by Construction Supervision Engineer/CSE

Test checked by Junior Engineer

Consultants Reps

CTCE-KALIKA J/V

Submitted by Project Manager

Test conducted by Q.C Manager

Contractors Reps

SECONDARY TOWNS INTEGRATED URABAN ENVIRONENTAL IMPROVEMENT PROJECT

Biratnagar Sub-Metropolitant City **STIUEIP**

MONTHLY Test Result Summary Sheet For The Month of ... 2015 JUNE

GRAVEL MATERIAL/SUB BASE (Process Control)

According to Part 2.Section 6A-Technical Specifacations&DQR Specifacation Section 1201(3)C Physical Requirement

Ref. No.	Date Tested	Location/ Chainage	Grading sieve size (mm) (% passing by weight)								Lab. OMC (%)	Soaked CBR (%)	Lab. MDD (g/cc)	Remarks
			63	37.5	20	10	5	2.360	1.18	0.075				
MR15	15/6/2015	Sample collected from R5	100	94.32	75.03	59.74	48.37	43.83	35.61	5.23				
MR16	18/6/2015	Sample collected from R5	100	93.59	63.09	50.66	39.25	35.53	28.46	4.82				
MR17	19/6/2015	Sample collected fromR5&R85	100	88.03	65.87	53.10	42.11	38.27	31.40	6.60				
Required Specifacation			100	65-95	50-85	40-75	30-60	20-45	15-37	4-15		≥ 30		

NOTE:

SMEC-Brisbane-AQUA-CEMAT-BDA	CTCE-KALIKA J/V
Approved by C.S.E	Submit by Project Manager
Test Checked by Junior Engineer	Test Conducted by Q.C Manager
Consultant Reps	Consultant Reps

SECONDARY TOWNS INTEGRATED URABAN ENVIRONMENTAL IMPROVEMENT PROJECT

Biratnagar Sub-Metropolitant City

SUMMARY OF CUBE COMPRESSIVE STRENGTH TEST M15/20,M20/20& M25/20 Work Mix

FOR THE MONTH OF JUNE 2015

S.N.	Lab Ref No.	Date of Casting	Deatails of Mix	Location	Ratio by VOLUME				Type of Material		Cube Crushing ,N/mm2		Remarks
				Structure	Water	Cement	Sand	Aggregate	Cement Brand	Aggregate/Sand	7 days	28-Days	
1	238	28/4/2015	M25 Work mix	B3 RCC TOP SLAB	0.46	1	1.87	3.25	Shivam	Om shree C/plant	20.00	27.41	
2	239	30/4/2015	M20 Work mix	B1 Hum pipe PCC out let	0.50	1	2	3.5	Shivam	Om shree C/plant	16.74	22.37	
3	240	2/5/2015	M20 Work mix	SEWERAGE Line PCC	0.50	1	2	3.5	Shivam	Om shree C/plant	15.85	22.52	
4	241	3/5/2015	M20 Work mix	SEWERAGE Line PCC	0.50	1	2	3.5	Shivam	Om shree C/plant	16.30	22.22	
5	242	3/5/2015	M20 Work mix	RANI PCC BED CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	16.22	21.48	
6	243	3/5/2015	M15 work mix	B3L1 PCC Leainer concrete	0.52	1	2	4	Shivam	Om shree C/plant	12.74	17.93	
7	244	4/5/2015	M20 Work mix	RANI PCC BED CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	16.67	21.19	
8	245	4/5/2015	M20 Work mix	S11 SHEAR WALL CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	17.33	21.04	
9	246	4/5/2015	M20 Work mix	T2 Line PCC Concrete	0.50	1	2	3.5	Shivam	Om shree C/plant	17.48	21.33	
10	247	4/5/2015	M20 Work mix	T2 Line PCC Concrete	0.50	1	2	3.5	Shivam	Om shree C/plant	17.19	21.33	
11	248	4/5/2015	M20 Work mix	B3 L1 SHEAR WALL CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	18.07	22.67	
12	249	5/5/2015	M20 Work mix	B3 L1 SHEAR WALL CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	17.04	21.70	
13	250	5/5/2015	M25 Work mix	B3L1 RCC TOP SLAB	0.46	1	1.87	3.25	Shivam	Om shree C/plant	19.19	26.89	
14	251	5/5/2015	M25 Work mix	B2L2 RCC TOP SLAB	0.46	1	1.87	3.25	Shivam	Om shree C/plant	20.07	27.04	
15	252	5/5/2015	M20 Work mix	CN2 PCC BED CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	17.19	21.63	
16	253	6/5/2015	M20 Work mix	RANI PCC BED CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	17.78	20.89	
17	254	6/5/2015	M15 work mix	B3L1 PCC Leainer concrete	0.52	1	2	4	Shivam	Om shree C/plant	12.74	16.74	
18	255	6/5/2015	M20 Work mix	B3 L1 SHEAR WALL CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	16.30	20.74	
19	256	6/5/2015	M15 work mix	B3 L2 SHEAR WALL CONCRETE	0.52	1	2	4	Shivam	Om shree C/plant	11.26	16.30	
20	257	6/5/2015	M20 Work mix	B1 0+630 SHEAR WALL concrete	0.50	1	2	3.5	Shivam	Om shree C/plant	17.93	21.78	

Total 120 NOS cube crushed JUNE

Specifacation Limit Table For M15/20 on 7 days Age Min 67% of Total Compressive Strength	Min Required	10.05	15
Specifacation Limit Table For M20/20 on 7 days Age Min 67% of Total Compressive Strength	Min Required	13.4	20
Specifacation Limit Table For M25/20 on 7 days Age Min 67% of Total Compressive Strength	Min Required	16.75	25

SMEC-Brisbane-AQUA-BDA	CTCE-KALIKA J/V
Approved by Construction Supervision Engineer/CSE	Submitted by Project Manager
Test checked by Junior Engineer	Test conducted by Q.C Manager
Consultants Reps	Contractors Reps

SECONDARY TOWNS INTEGRATED URABAN ENVIRONMENTAL IMPROVEMENT PROJECT
Biratnagar Sub-Metropolitant City
SUMMARY OF CUBE COMPRESSIVE STRENGTH TEST M15/20,M20/20& M25/20 Work Mix
FOR THE MONTH OF JUNE 2015

S.N.	Lab Ref No.	Date of Casting	Deatails of Mix	Location	Ratio by VOLUME				Type of Material		Cube Crushing ,N/mm2		Remarks
				Structure	Water	Cement	Sand	Aggregate	Cement Brand	Aggregate/Sand	7 days	28-Days	
21	258	7/5/2015	M20 Work mix	B3 L1 SHEAR WALL CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	17.63	22.37	
22	259	8/5/2015	M20 Work mix	B3 L1 SHEAR WALL CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	17.70	22.52	
23	260	9/5/2015	M20 Work mix	B3 L1 SHEAR WALL CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	17.19	22.74	
24	261	9/5/2015	M20 Work mix	B3L2A SHEAR WALL CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	16.89	21.78	
25	262	9/5/2015	M20 Work mix	B1 L1 SHEAR WALL CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	17.70	21.56	
26	263	9/5/2015	M25 Work mix	B3L1 RCC TOP SLAB	0.46	1	1.87	3.25	Shivam	Om shree C/plant	19.26	27.56	
27	264	10/5/2015	M20 Work mix	B1 L1 SHEAR WALL CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	17.70	21.56	
28	265	10/5/2015	M20 Work mix	B1 L1 SHEAR WALL CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	17.70	22.30	
29	266	10/5/2015	M20 Work mix	B3 L1 SHEAR WALL CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	17.63	24.44	
30	267	11/5/2015	M20 Work mix	B3 L1 SHEAR WALL CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	16.89	22.22	
31	268	11/5/2015	M20 Work mix	S11 SHEAR WALL CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	16.44	22.74	
32	269	11/5/2015	M20 Work mix	B2 L1 SHEAR WALL CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	16.89	20.74	
33	270	11/5/2015	M20 Work mix	B2 L1 SHEAR WALL CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	16.44	21.93	
34	271	11/5/2015	M20 Work mix	B2 Hum pipe PCC out let	0.50	1	2	3.5	Shivam	Om shree C/plant	15.93	22.22	
35	272	11/5/2015	M20 Work mix	B3 L1 SHEAR WALL CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	17.48	23.85	
36	273	12/5/2015	M20 Work mix	B3 L1 SHEAR WALL CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	15.70	23.56	
37	274	12/5/2015	M20 Work mix	CN3 PCC BED CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	16.74	24.59	
38	275	12/5/2015	M20 Work mix	B1 L1 SHEAR WALL CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	15.41	24.59	
39	276	12/5/2015	M20 Work mix	RANI PCC BED CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	17.33	24.15	
40	277	13/5/2015	M20 Work mix	R2 PCC Ch 4+160to 4+190	0.50	1	2	3.5	Shivam	Om shree C/plant	16.30	23.85	
													Total 120 NOS cube crushed JUNE
				Specifacation Limit Table For M15/20 on 7 days Age Min 67% of Total Compressive Strength						Min Required	10.05	15	
				Specifacation Limit Table For M20/20 on 7 days Age Min 67% of Total Compressive Strength						Min Required	13.4	20	
				Specifacation Limit Table For M25/20 on 7 days Age Min 67% of Total Compressive Strength						Min Required	16.75	25	

SMEC-Brisbane-AQUA-BDA	CTCE-KALIKA J/V
Approved by Construction Supervision Engineer/CSE	Submitted by Project Manager
Test checked by Junior Engineer	Test conducted by Q.C Manager
Consultants Reps	Contractors Reps

SECONDARY TOWNS INTEGRATED URABAN ENVIRONMENTAL IMPROVEMENT PROJECT

Biratnagar Sub-Metropolitant City

SUMMARY OF CUBE COMPRESSIVE STRENGTH TEST M15/20,M20/20& M25/20 Work Mix

FOR THE MONTH OF JUNE 2015

S.N.	Lab Ref No.	Date of Casting	Deatails of Mix	Location / Structure	Ratio by VOLUME				Type of Material		Cube Crushing ,N/mm2		Remarks
					Water	Cement	Sand	Aggregate	Cement Brand	Aggregate/Sand	7 days	28-Days	
41	278	13/5/2015	M20 Work mix	B1 L1 SHEAR WALL CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	16.15	24.00	
42	279	14/5/2015	M20 Work mix	RANI PCC BED CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	17.48	22.00	
43	280	14/5/2015	M20 Work mix	B1 L1 SHEAR WALL CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	16.15	23.85	
44	281	14/5/2015	M20 Work mix	RANI PCC BED CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	15.85	23.26	
45	282	14/5/2015	M15 Work mix	B2 Hum pipe PCC out let	0.50	1	2	3.5	Shivam	Om shree C/plant	13.33	17.19	
46	283	15/5/2015	M25 Work mix	B1L1 RCC TOP SLAB	0.46	1	1.87	3.25	Shivam	Om shree C/plant	21.26	27.33	
47	284	18/5/20154	M25 Work mix	B3L1 RCC TOP SLAB	0.46	1	1.87	3.25	Shivam	Om shree C/plant	20.67	26.81	
48	285	19/5/2015	M20 Work mix	B2 Hum pipe PCC out let	0.50	1	2	3.5	Shivam	Om shree C/plant	17.19	22.52	
49	286	21/5/2015	M20 Work mix	B3 L1 SHEAR WALL CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	17.48	22.15	
50	287	21/5/2015	M20 Work mix	B3 L1 SHEAR WALL CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	16.74	22.37	
51	288	21/5/2015	M20 Work mix	B1 L1 SHEAR WALL CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	18.22	22.52	
52	289	22/5/2015	M20 Work mix	B3 L1 SHEAR WALL CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	17.19	24.59	
53	290	22/5/2015	M20 Work mix	B1 L1 SHEAR WALL CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	17.48	23.26	
54	291	23/5/2015	M20 Work mix	B2 SHEAR WALL CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	15.70	23.23	
55	292	25/5/2015	M20 Work mix	B1 L1 SHEAR WALL CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	16.59	22.00	
56	293	25/5/2015	M20 Work mix	B1 L1 SHEAR WALL CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	16.74	22.52	
57	294	28/5/2015	M20 Work mix	B1 L1 SHEAR WALL CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	17.48	23.11	
58	295	31/5/2015	M20 Work mix	B2 SHEAR WALL CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	16.89	23.70	
59	296	31/5/2015	M20 Work mix	B1 L1 SHEAR WALL CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	16.00	22.52	
60	296	31/5/2015	M20 Work mix	B1 L1 SHEAR WALL CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	16.00	22.52	
61	297	31/5/2015	M20 Work mix	B2 SHEAR WALL CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	16.00	22.37	
62	298	2/6/2015	M20 Work mix	B3 L1 SHEAR WALL CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	14.96	22.67	
63	299	2/6/2015	M20 Work mix	B1 L1 SHEAR WALL CONCRETE	0.50	1	2	3.5	Shivam	Om shree C/plant	15.70	22.37	

Total 378 NOS cube crushed on JUNE

Specifacation Limit Table For M15/20 on 7 days Age Min 67% of Total Compressive Strength	Min Required	10.05	15
Specifacation Limit Table For M20/20 on 7 days Age Min 67% of Total Compressive Strength	Min Required	13.4	20
Specifacation Limit Table For M25/20 on 7 days Age Min 67% of Total Compressive Strength	Min Required	16.75	25

SMEC-Brisbane-AQUA-BDA

Approved by Construction Supervision Engineer/CSE

Test checked by Junior Engineer

Consultants Reps

CTCE-KALIKA J/V

Submitted by Project Manager

Test conducted by Q.C Manager

Contractors Reps