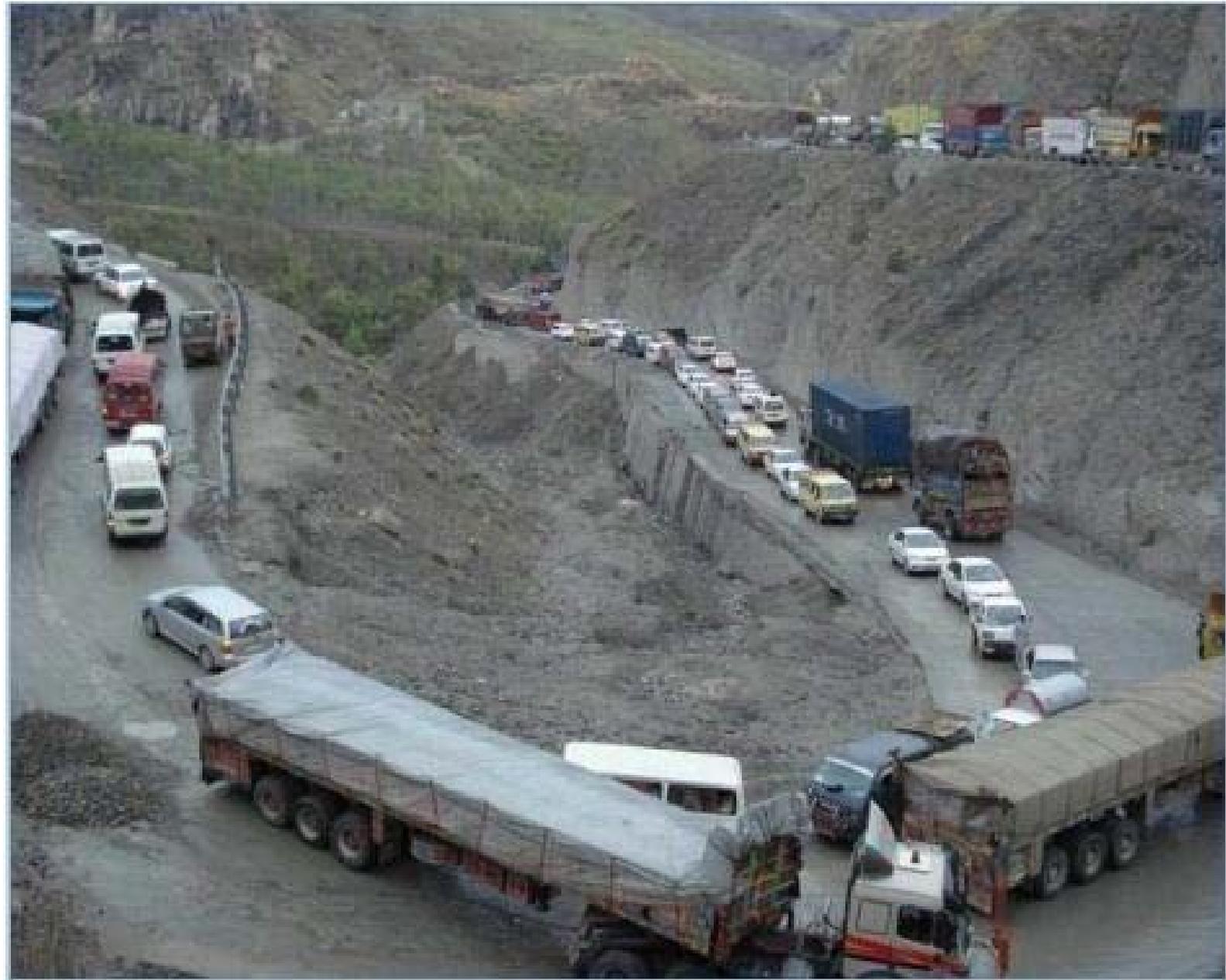




USAID | **PAKISTAN**
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**STRENGTHENING & IMPROVEMENT OF PESHAWAR - TORKHAM ROAD
KHYBER AGENCY, FATA**

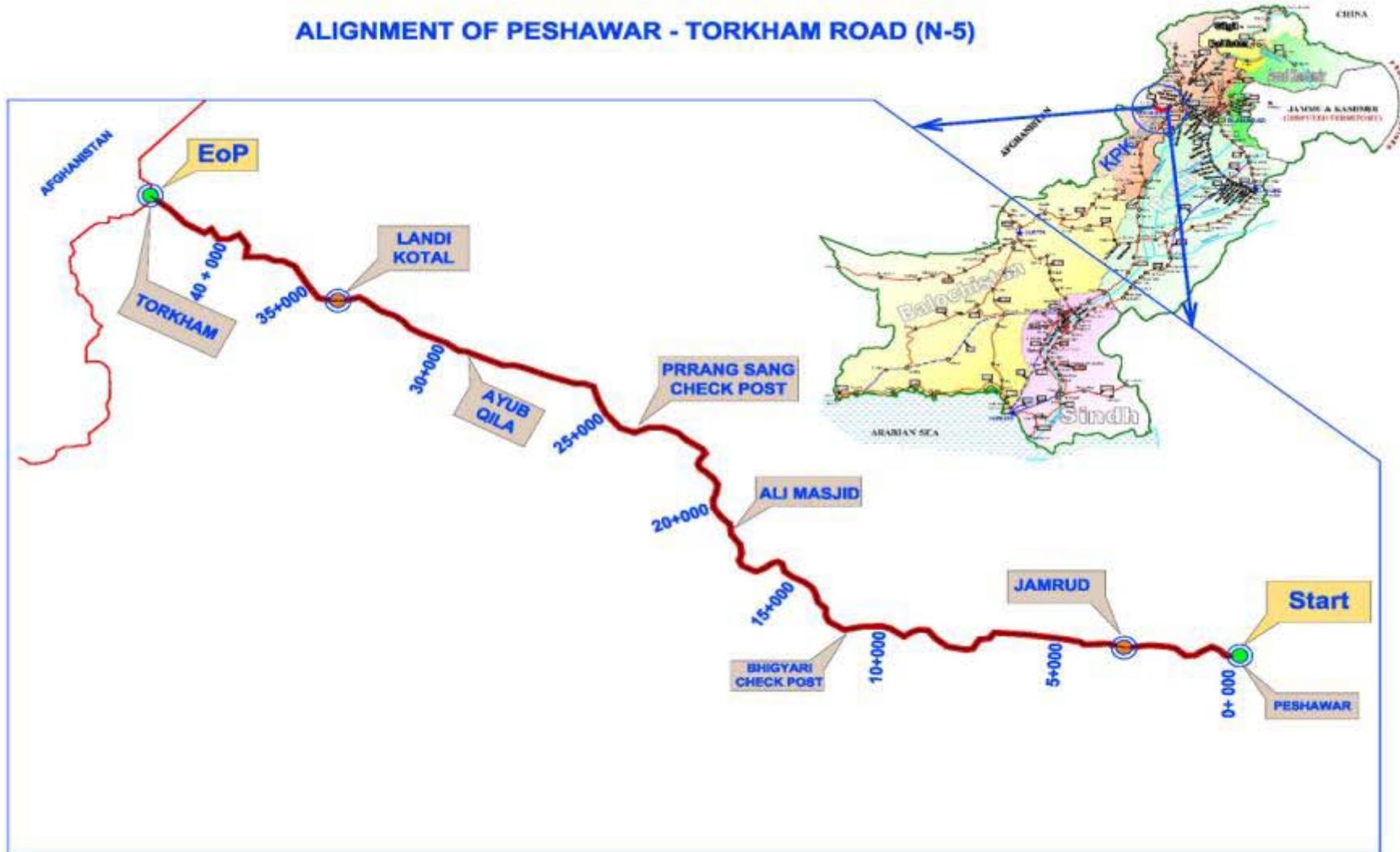
MONTHLY PROGRESS REPORT # 23
JANUARY 2015

TABLE OF CONTENTS

SUMMARY	2
1 INTRODUCTION	4
1.1 PROJECT BACKGROUND	5
1.2 SCOPE OF WORK.....	6
1.3 GENERAL CONTRACT DATA	7
1.4 SECTIONS DATA	8
1.5 ALIGNMENT SKETCHES.....	9
1.6 TYPICAL CROSS SECTIONS OF ROAD	14
2 M&E SERVICES & PROGRESS OF ACTIVITIES	17
2.1 M&E CONSULTANTS MAJOR ACTIVITIES DURING THE MONTH.....	18
2.2 MATTERS REQUIRING ATTENTION	19
2.2.1 COMPLETION OF SECTION I, II AND III	19
2.2.2 PROCESS OF PC-1s APPROVAL	19
2.2.3 COMPLEXITY IN MAINTAINING TRAFFIC ON DIVERSIONS / DETOURS.....	19
2.2.4 DELAY IN UTILITIES SHIFTING FROM CONSTRUCTION CORRIDOR.....	19
2.2.5 ENVIRONMENTAL COMPLIANCE.....	19
2.3 SECTION WISE ACTIVITIES STATUS	20
3 CIVIL WORKS SECTION-I	22
3.1 CUMULATIVE MILESTONE WISE PROGRESS STATUS (SECTION-I)	23
3.2 PHYSICAL PROGRESS STATUS (SECTION-I)	24
3.3 CULVERTS PHYSICAL PROGRESS STATUS (SECTION-I).....	25
4 CIVIL WORKS SECTION-II	26
4.1 CUMULATIVE MILESTONE WISE PROGRESS STATUS (SECTION – II).....	27
4.2 PAVEMENT CONSTRUCTION PHYSICAL PROGRESS STATUS (SECTION – II).....	29
4.3 CULVERTS PHYSICAL PROGRESS STATUS (SECTION-II).....	30
5 CIVIL WORKS SECTION-III	31
5.1 CUMULATIVE MILESTONE WISE PROGRESS STATUS (SECTION - III).....	32
5.2 PAVEMENT CONSTRUCTION PHYSICAL PROGRESS STATUS (SECTION – III)	35
5.3 CULVERTS PHYSICAL PROGRESS STATUS (SECTION – III).....	37
6 BRIDGES	38
6.1 BRIDGE (KM: 09+560) CUMULATIVE MILESTONE WISE PROGRESS STATUS	39
6.2 BRIDGE (KM: 09+560) PHYSICAL PROGRESS STATUS	40
6.3 BRIDGE (KM: 18+475) PHYSICAL PROGRESS STATUS	41
6.4 BRIDGE (KM: 23+750) CUMULATIVE MILESTONE WISE PROGRESS STATUS	42
6.5 BRIDGE (KM: 23+750) PHYSICAL PROGRESS STATUS	43
6.6 BRIDGE (KM: 27+250) PHYSICAL PROGRESS STATUS	44
6.7 MCC (KM: 11+190) CUMULATIVE MILESTONE WISE PROGRESS STATUS	45
6.8 MCC (KM: 22+925) CUMULATIVE MILESTONE WISE PROGRESS STATUS	46
6.9 MULTICELL CULVERT PHYSICAL PROGRESS STATUS	47
7 MATERIAL TESTING REPORTS	48
7.1 SUMMARY OF FIELD DENSITY TESTS.....	49

7.2	SUMMARY OF EARTH WORK QUALITY TESTS	50
7.3	WATER BOUND MACADAM QUALITY TEST REPORTS	51
7.4	ASPHALTIC BASE COURSE QUALITY TESTS REPORT	52
7.5	ASPHALTIC WEARING COURSE QUALITY TESTS REPORT	52
7.6	AGGREGATE QUALITY TESTS FOR CONCRETE	53
7.7	AGGREGATE QUALITY TESTS FOR ASPHALTIC WEARING COURSE	54
7.8	SUMMARY OF CONCRETE COMPRESSIVE STRENGTH.....	55
7.9	SUMMARY OF ASPHALTIC BASE COURSE CORE COMPACTION 1ST LAYER	57
7.10	SUMMARY OF ASPHALTIC BASE COURSE CORE COMPACTION 2ND LAYER	59
7.11	SUMMARY OF ASPHALTIC WEARING COURSE CORE COMPACTION	61
7.12	SUMMARY OF CORE THICKNESS OF ASPHALTIC BASE COURSE 1ST LAYER	63
7.13	SUMMARY OF CORE THICKNESS OF ASPHALTIC BASE COURSE 2ND LAYER	64
7.14	SUMMARY OF CORE THICKNESS OF ASPHALTIC WEARING COURSE	65
8	ENVIRONMENTAL COMPLIANCE MONITORING	66
9	APPENDICES	78
9.1	IPC'S SUMMARY TABLE.....	79
9.2	CONTRACTOR IPC's (SECTION-I)	79
9.3	CONTRACTOR IPC's (SECTION-II)	80
9.4	CONTRACTOR IPC's (SECTION-III)	80
9.5	CONTRACTOR IPC's (02 BRIDGES & 02 MC CULVERTS)	81
9.6	RECORD OF COORDINATION MEETINGS / JOINT SITE VISITS	82
9.7	MOBILIZATION OF M&E STAFF	83
10	PROJECT PHOTOGRAPHS	87

ALIGNMENT OF PESHAWAR - TORKHAM ROAD (N-5)



SUMMARY

Peshawar – Torkham road is an integral part of National Highway (N-5), a vital piece of the nation’s infrastructure, which connects Pakistan with Afghanistan at Torkham border and plays an important role in the economic activities as well as providing timely logistic support to the security agencies deployed in Khyber Agency. The project “Strengthening & Improvement of Peshawar Torkham Road” is funded with United State Agency for International Development (USAID) grant amounting to USD 67 Millions and implemented by FATA Secretariat as project proponent through Frontier Works Organization (FWO) as EPC (Engineer, Procure, and Construct) Contractor.

The 46 KM Peshawar – Torkham road (PTR) has been split into multiple sections for designing / construction purposes due to inherited site specific conditions such as live traffic corridor, gigantic hilly terrain, safety and security restrictions etc. Work on project was commenced by FWO on October 15, 2012. The initially agreed completion date of December 31, 2014 as per Article 4 of the Activity Agreement No AID-015-DOD, has now been extended for one additional year. Three PILs signed for Sec I, II, and III & 01 PIL for 02 Bridges & 02 MCC expired on December 31, 2014. However, as per para (c) of the attachment titled “Fixed Amount Reimbursement” to the respective PILs, reimbursement requests can be entertained up to three months i.e. March 31, 2015.

With completion of rigid pavement in Section III and drain type D-3 in Sec II & III during the reporting month (January, 2015), the first 03 sections of PTR are substantially complete with minor / ancillary works in progress. Similarly, construction work continued in Sec IV to IX. The contractor teams utilized 24 days out 25 of available working days in the reporting month. The overall certified amount till the end of reporting month was USD 28,949,124.

FWO was constantly advised for demonstrating good environmental practice in conformity with the construction environmental management plan.

Physical progress till the end of reporting period presented as under:

Section I - (KM: 0+000 To 9+000)	99%
Section II - (KM: 9+000 To 14+000)	96%
Section III - (KM: 14+000 To 19+000)	94%
Section IV - (KM: 19+000 To 24+000)	57%
Section V - (KM: 24+000 To 29+000)	53%
Section VI - (KM: 29+000 To 33+000)	33%
Bridge (KM: 9+560)	98%
Bridge (KM: 18+475)	98%

Bridge (KM: 23+750)	77%
Bridge (KM: 27+000)	12%
Bridge (KM: 27+250)	55%
Multicell Culvert (KM: 11+190)	98%
Multicell Culvert (KM: 22+925)	95%

26 KM of both flexible & rigid pavement is substantially completed and open for traffic. About 3.5 KM Asphaltic base course has been cumulatively completed in Sec VI (KM: 29+000 To 33+000) and Sec VII (KM 33+000 To 37+000). Roadway excavation is progressing well in Sec VII, VIII, IX & Loop-III for widening & improvement in the geometry of the road.

INTRODUCTION

1.1 PROJECT BACKGROUND

The Federally Administered Tribal Area (FATA) Secretariat of the Government of Pakistan (GoP) under the Quick Impact Projects (QIPs) in the Khyber Agency has inked an agreement with USAID for financial assistance in the form of a Grant for Strengthening and Improvement of 46 KM long existing two-lane, two-way carriageway from Peshawar to Torkham (N – 5). The Project will support the GoP in improving accessibility to the remotely located areas of Khyber agency and enhance logistic support to law enforcing agencies, besides assisting trade between Pakistan and Afghanistan. The Sponsoring agency for the Peshawar Torkham Road Project is FATA secretariat, headed by Additional Chief Secretary FATA. The Executing agency is Frontier Works Organization (FWO).

Table: 1

Civil Works Package Features									
Physical Limits	Peshawar to Torkham								
Feature	Section – I	Section – II	Section – III	Section – IV	Section – V	Section – VI	Section – VII	Section – VIII	Section – IX
Kilometers	0+000 to 9+000	9+000 to 14+000	14+000 to 19+000 & Loop-I	19+000 to 21+100 22+400 to 24+000 & Loop-II	21+100 to 22+400 24+000 to 29+000	29+000 to 33+000	33+000 to 37+000	37+000 to 41+000	41+000 to 43+465 & Loop-III
Black Top	Total 12.3 meter (7.3 meter carriageway & 2.5 meter structural shoulders on either side)								
Completion Period	807 Calendar Days								

1.2 SCOPE OF WORK

The project involves widening, strengthening and improvement of the existing two lane carriageway, including construction of new cross drainage structures, bridges, rigid pavements and earth retaining structures spread over 46 KM. The entire road length has been split into multiple sections for designing / construction purposes. Length of each section varies according to topographical features and live traffic conditions along the project route.

Being an EPC form of contract, FWO is fully responsible for design and construction of the project in conformity with the NHA's specifications and standard engineering practices. NESPAK is providing design and quality control services to FWO. While AGES Consultants has been entrusted with the Construction Monitoring and Evaluation Services including Quality Assurance and Environmental Monitoring of the project on behalf of the USAID Pakistan Mission.

1.3 GENERAL CONTRACT DATA

1.	Name of Project	Strengthening and Improvement of Peshawar Torkham Road (N-5) Khyber Agency FATA
2.	Project Construction Cost	US \$ 67 Million
3.	Donor Agency	USAID PAKISTAN
4.	Donor's Agency Representative	Engr. Farhat Ali Shah Banori, USAID/COR
5.	Sponsoring Agency	FATA Secretariat, Peshawar
6.	Sponsoring Agency Representative	Mr. Muhammad Ali, Project Director, PMU FATA
7.	Executing Agency	Frontier Works Organization (FWO)
8.	Executing Agency Representative	Col. Shahzada Adil Sultan (Project Director FWO)
9.	M&E Consultants	AGES Consultants
10.	M&E Consultants Representative	Engr. Aziz-ul- Haq, Project Manager
11.	Time for Completion	807 Calendar Days
12.	Mode of Construction Contract	EPC (Engineer, Procure and Construct) Contract
13.	Chronology	
	Signing of MoU (USAID–FATA–NHA)	Sep 18, 2012
	Signing of Consultancy Contract (USAID – AGES)	Sep 30, 2012
	M&E Consultants Mobilization	Oct 01, 2012
	Project Date of Commencement	Oct 15, 2012
	Project Original Date of Completion	Dec 31, 2014
	Project Revised Date of Completion	Dec 31, 2015

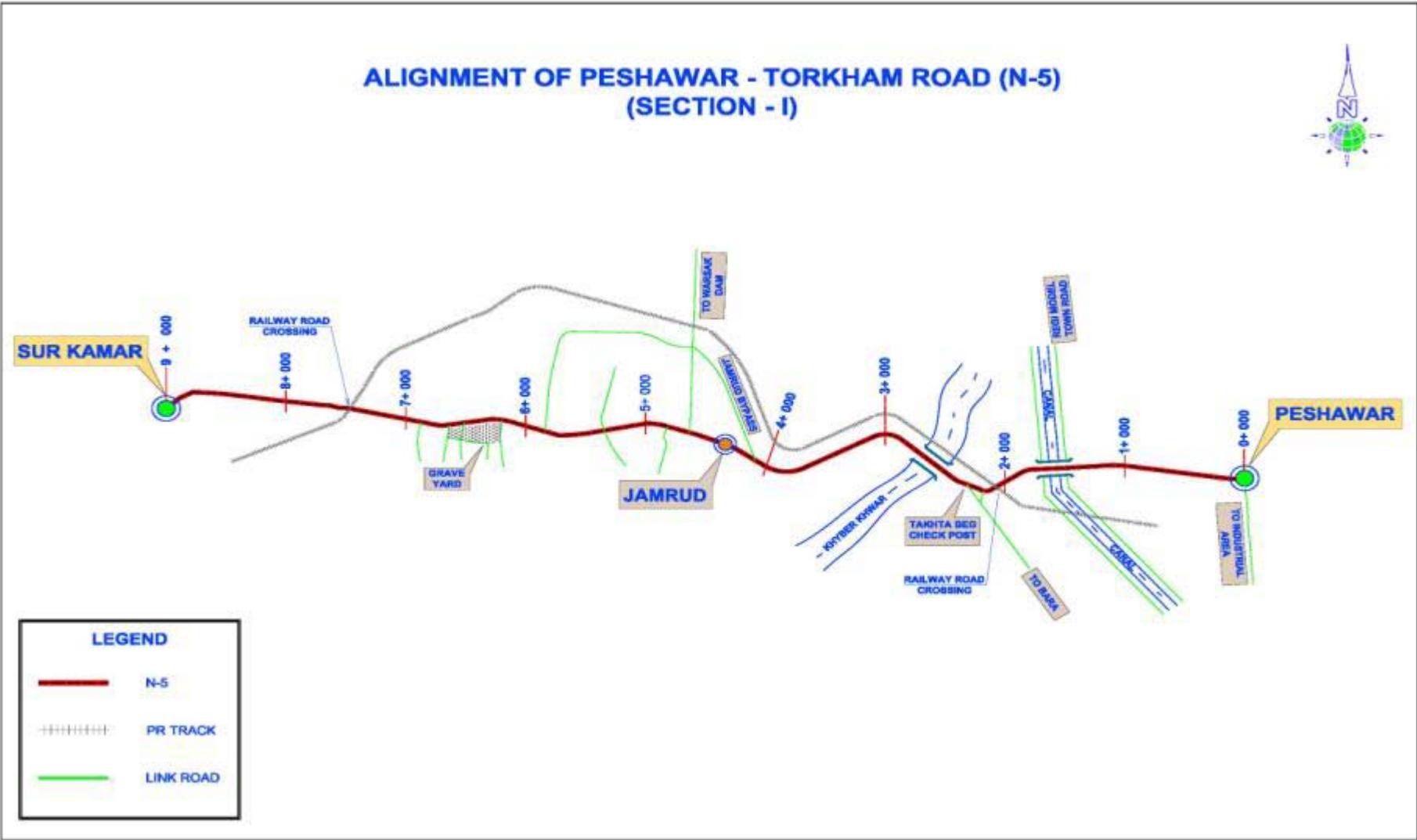
1.4 SECTIONS DATA

1.	Name of Package	Section – I (CH: KM: 0+000 to CH: KM: 9+000)
2.	PIL # 01 Cost (Section – I)	Rs. 937.939 Million (US \$ 9.978 M)
3.	Approval of PIL (Section – I)	Jan 10, 2013
1.	Name of Package	Section – II (CH: KM: 9+000 to CH: KM: 14+000)
2.	PIL # 02 Cost (Section – II)	Rs. 985.266 Million (US \$ 9.383 M)
3.	Approval of PIL (Section – II)	Dec, 18, 2013
1.	Name of Package	Section – III (CH: KM: 14+000 to CH: KM: 19+000 & Loop-I)
2.	PIL # 03 Cost (Section – III)	Rs. 989.320 Million (US \$ 9.512 M)
3.	Approval of PIL (Section – III)	Feb, 04, 2014
1.	Name of Package	Construction of Two Bridges and Two Multi-cell Culverts
2.	PIL # 04 Cost	Rs. 348.5 Million (US \$ 3.668 M)
3.	Approval of PIL	June 27, 2014

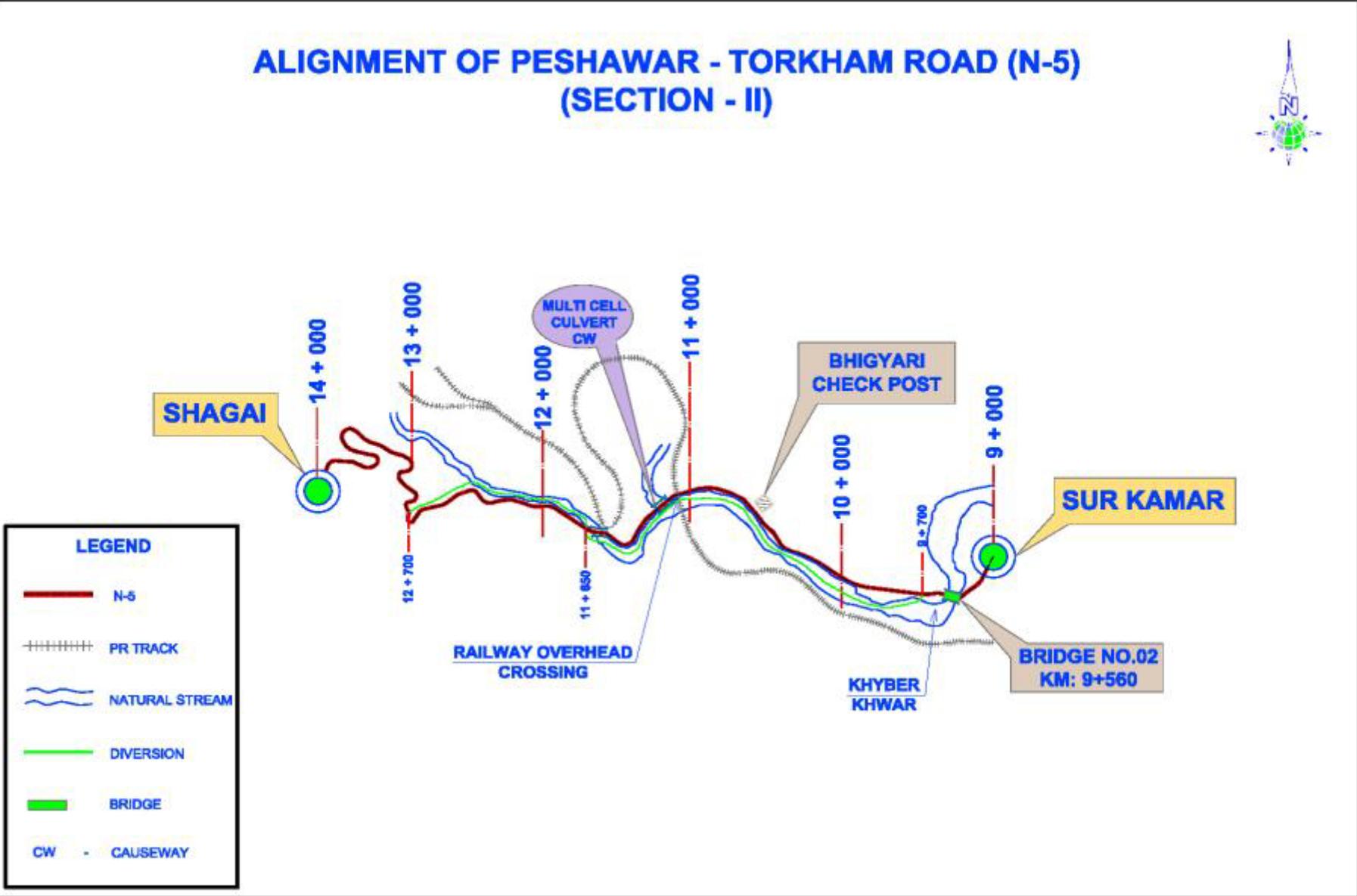
UPCOMING PILS

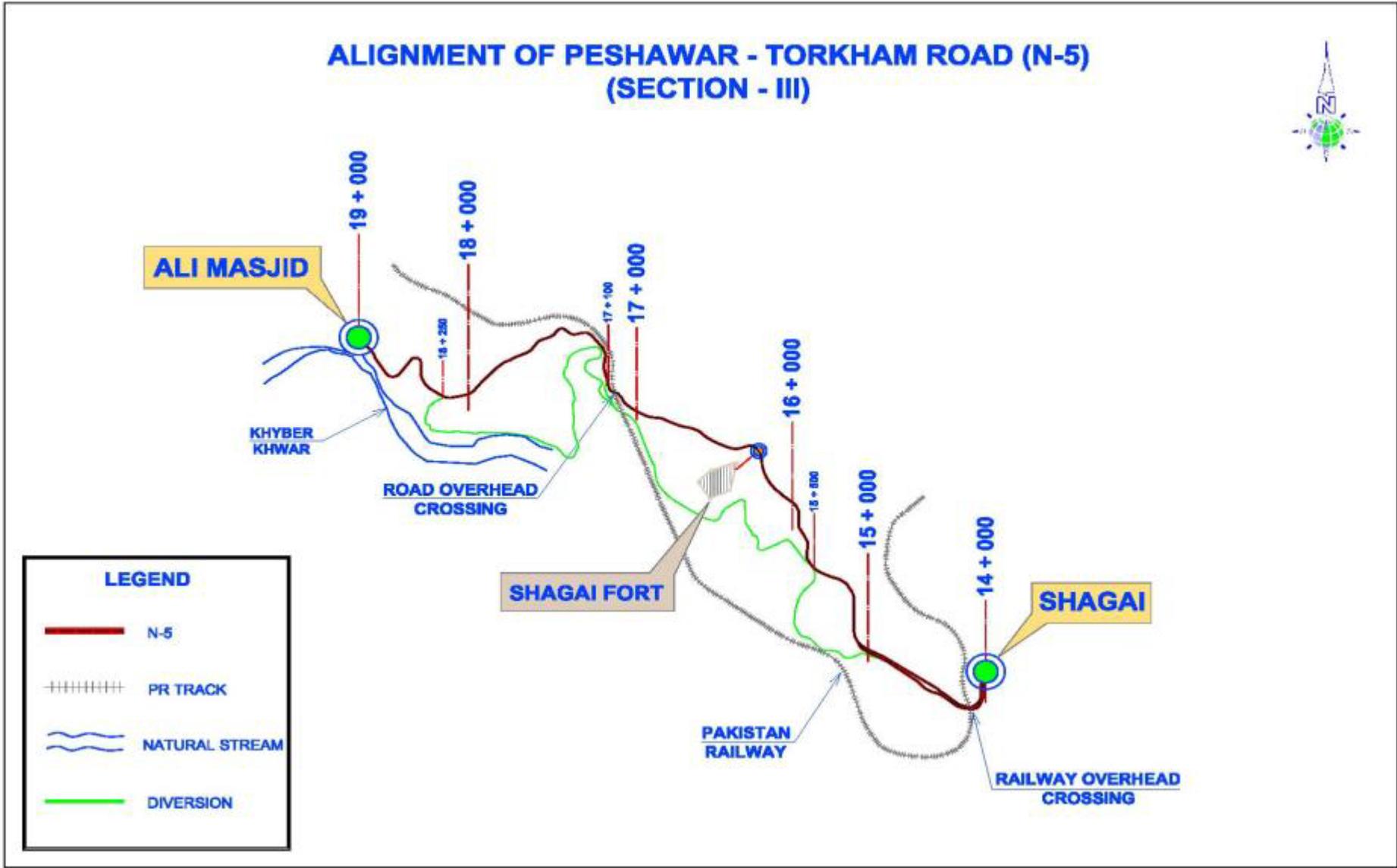
1.	Name of Package	Section – IV (CH: KM: 19+000 to 21+000 CH: KM: 22+400 to 24+000 & Loop-II)
2.	PIL # 05 Cost	Rs. 927.102 Million
3.	Approval of PIL	Awaited
1.	Name of Package	Section –V (CH: KM: 21+100 to 22+400; CH: KM: 24+000 to 29+000)
2.	PIL # 06 Cost	Rs. 878.301 Million
3.	Approval of PIL	Awaited
1.	Name of Package	Construction of 06 Bridges (03 Rehabilitation & 03 New Construction)
2.	PIL # 07 Cost	Rs. 270.823 Million
3.	Approval of PIL	Awaited
1.	Name of Package	Section –VI (CH: KM: 29+100 to 33+000)
2.	PIL # 08 Cost	Rs. 684.5 Million
3.	Approval of PIL	Awaited

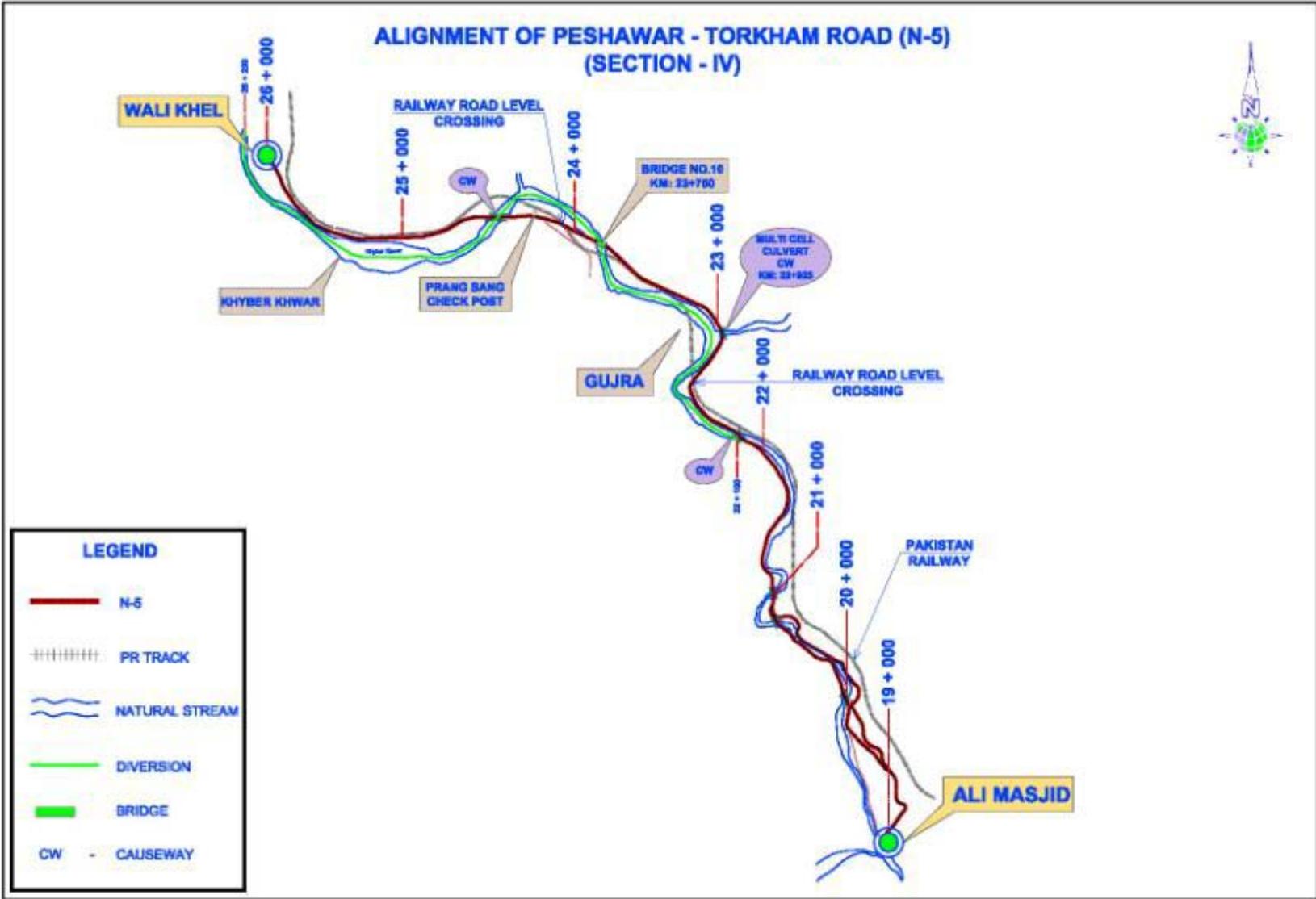
1.5 ALIGNMENT SKETCHES

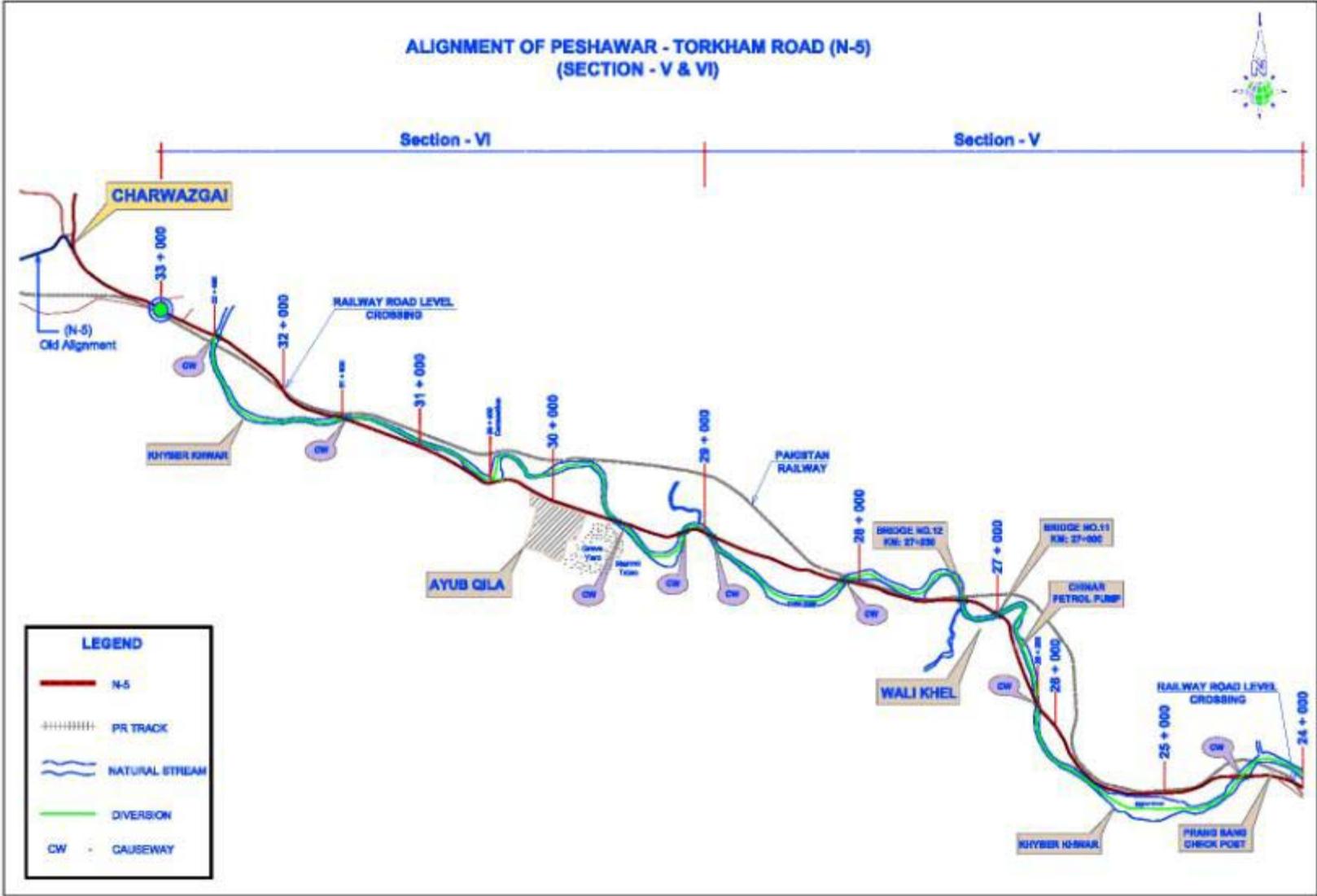


ALIGNMENT OF PESHAWAR - TORKHAM ROAD (N-5) (SECTION - II)

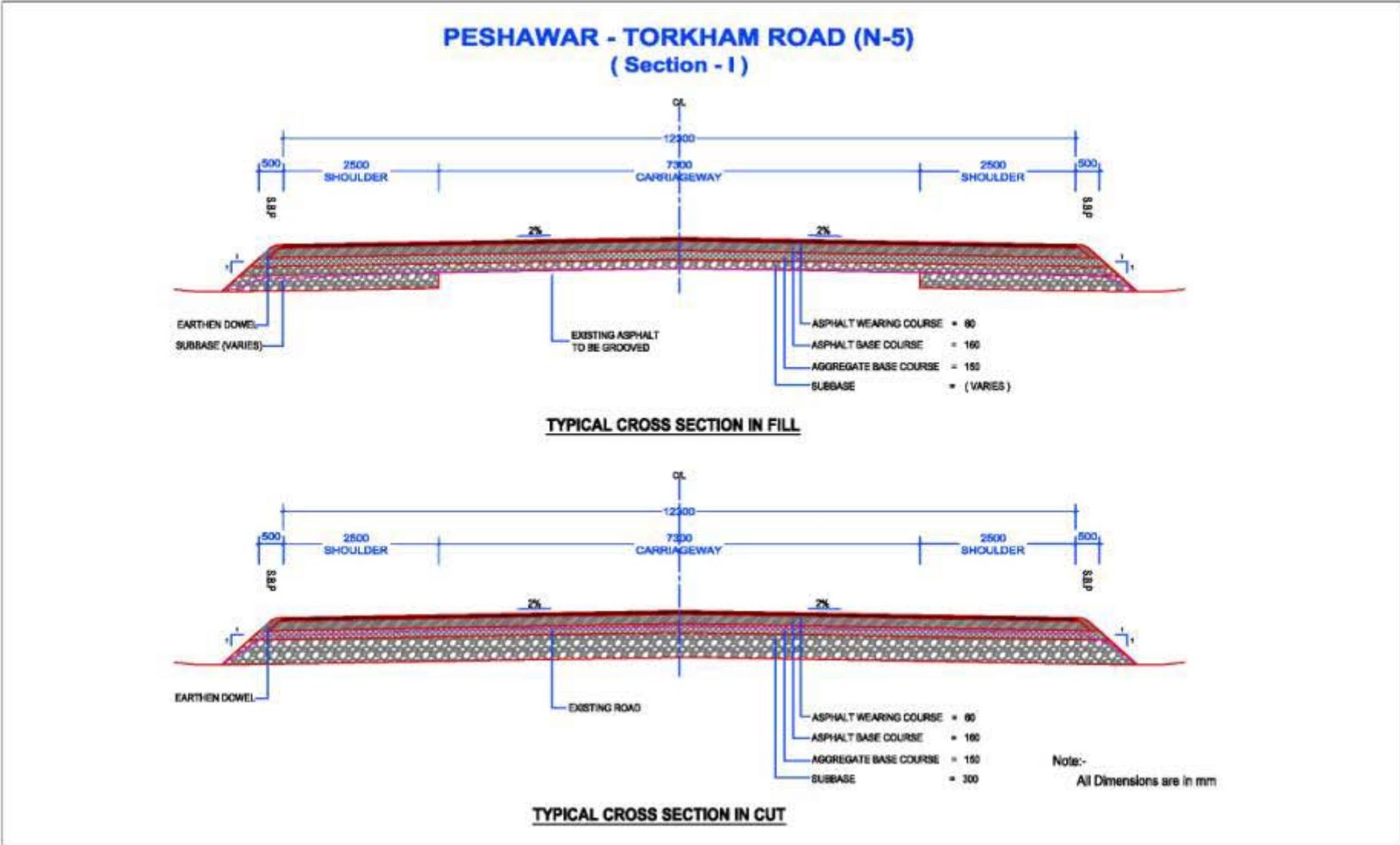


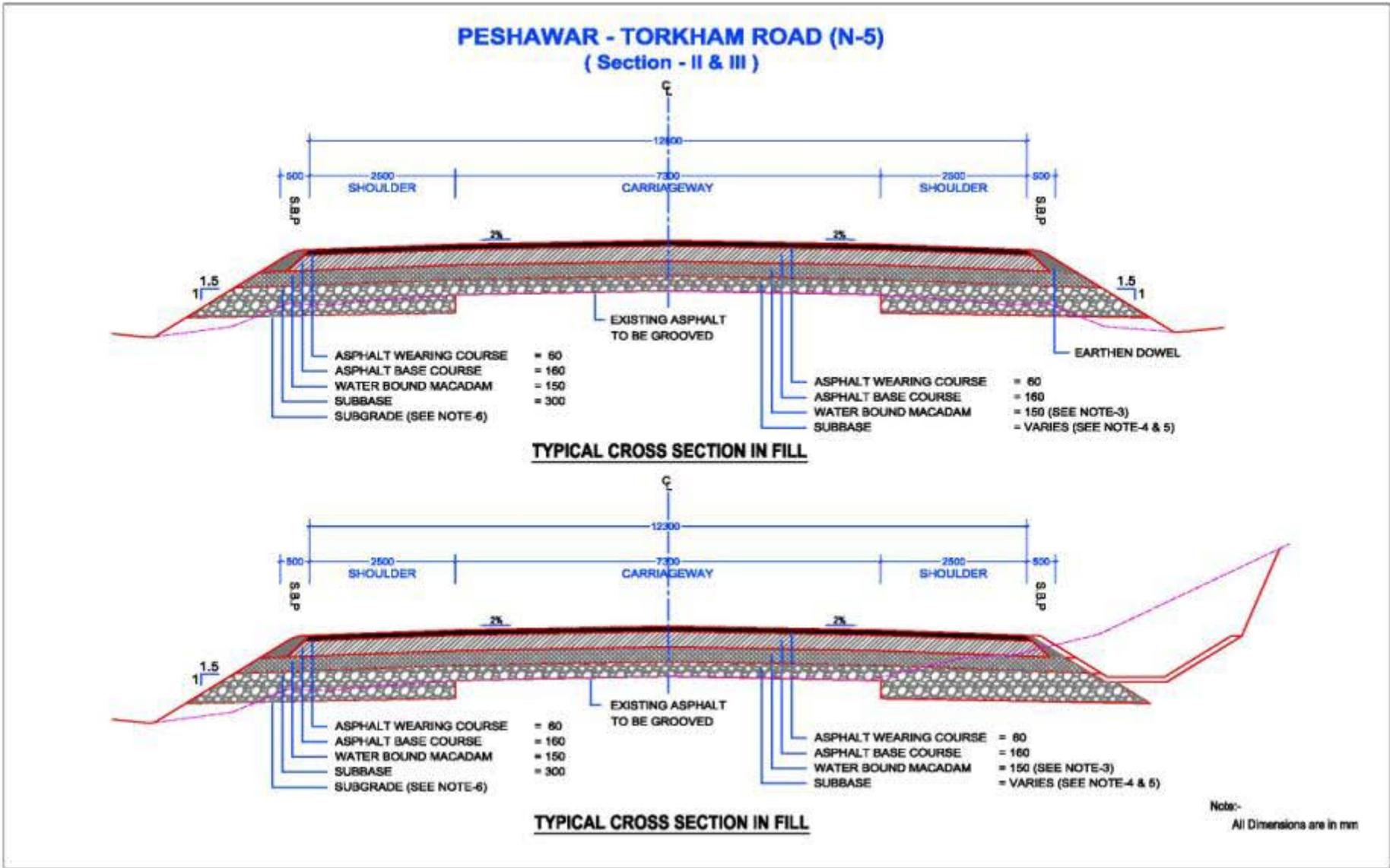


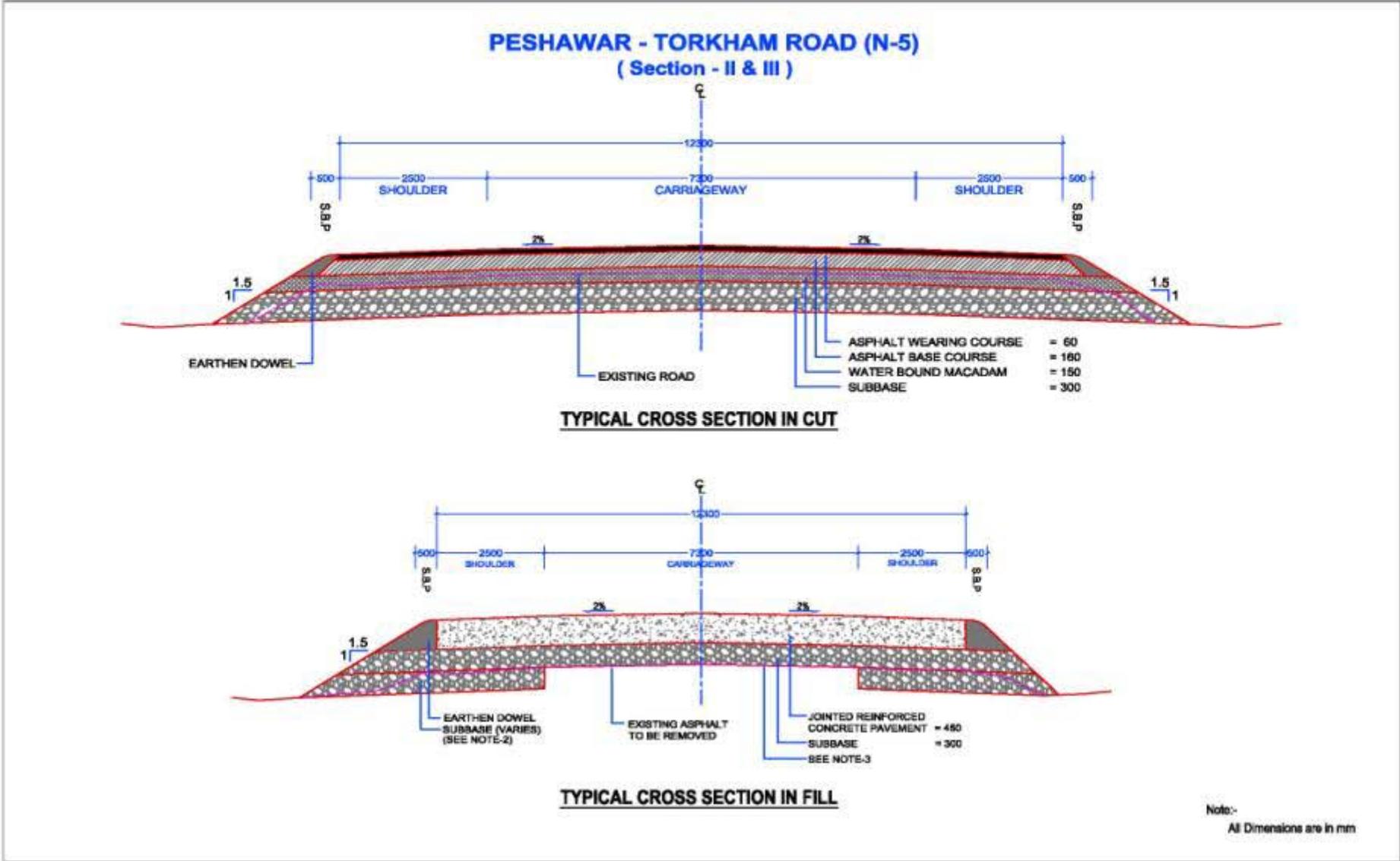




1.6 TYPICAL CROSS SECTIONS OF ROAD







M&E SERVICES & PROGRESS OF ACTIVITIES

2.1 M&E CONSULTANTS MAJOR ACTIVITIES DURING THE MONTH

During the reporting month, M&E Consultants carried out the following activities:

- Conducted Joint site visits with representatives of F W O / NESPAK at regular intervals.
- Conducted follow-up /coordination meetings/ fortnightly meetings with FWO / NESPAK reps.
- Monitoring / documentation of the construction activities on daily basis.
- M&E Consultant's senior management conducted fortnightly site visits and shared information with USAID & FWO / NESPAK reps.
- Maintained close liaison with the Contractor's field staff and shared information pertaining to material quality and construction methodology
- Reviewed / evaluated Contractor's site construction techniques and shared relevant technical standards with FWO/ NESPAK for modification/ improvement.
- Conducted independent & joint field testing of different pavement layers / backfill material, concrete & asphalt concrete works with FWO / NESPAK.
- Regularly shared M&E Consultants Material Testing Laboratory quality test results with USAID, FWO & NESPAK.
- Regularly monitored and shared issues related to detour's management along the construction zone with USAID / FWO; for example:
 - ✓ Traffic operating conditions with regard to detour geometry, surface condition, visibility and traffic safety / management.
 - ✓ Dust suppression activities, particularly during peak traffic hours.

2.2 MATTERS REQUIRING ATTENTION

2.2.1 COMPLETION OF SECTION I, II AND III

The aforementioned sections have been substantially completed and minor / ancillary works are in progress. PILs signed for these sections & 01 PIL for 02 Bridges & 02 MCC expired on December 31, 2014. However, as per para (c) of the attachment titled "Fixed Amount Reimbursement" to the respective PILs, reimbursement requests can be entertained up to three months i.e. March 31, 2015.

FWO needs to complete the remaining works on priority and the FATA secretariat needs to inform USAID with necessary supporting documentation to avoid any complication regarding payment reimbursement by USAID.

2.2.2 PROCESS OF PC-1s APPROVAL

Since project commencement in Oct 2012, 08 No: PC-1's (06 for Sec-I To VI) from KM: 0+000 To 33+000, and two PC-1's for 08 bridges plus 02 Multi cell culverts, amounting in total to PKR 6,073 Million have been approved by FATA Development Working Party (FDWP). As now the FDWP's special powers of sanctioning up to PKR 1000 Million for developmental projects has been restored, approval of the remaining 03 PC-1s needs to be expedited.

2.2.3 COMPLEXITY IN MAINTAINING TRAFFIC ON DIVERSIONS / DETOURS

Diversions / detours have been provided at intervals b/w KM: 19+400 To EoP. However, condition of the diversion tracks has been creating difficulties for the road commuters and population. Peak hour traffic congestion and its frequency are regularly escalating the problem. Even minor traffic accident on the corridor usually results in rapid disturbance to traffic movement and some time complete blockage of diversions.

In order to ensure smooth traffic movement along the corridor, minimizing traffic delays keeping dust & noise pollution to a minimum, a higher level of communication and liaison would be required throughout the work period to meet the expectations of stakeholders and commuters.

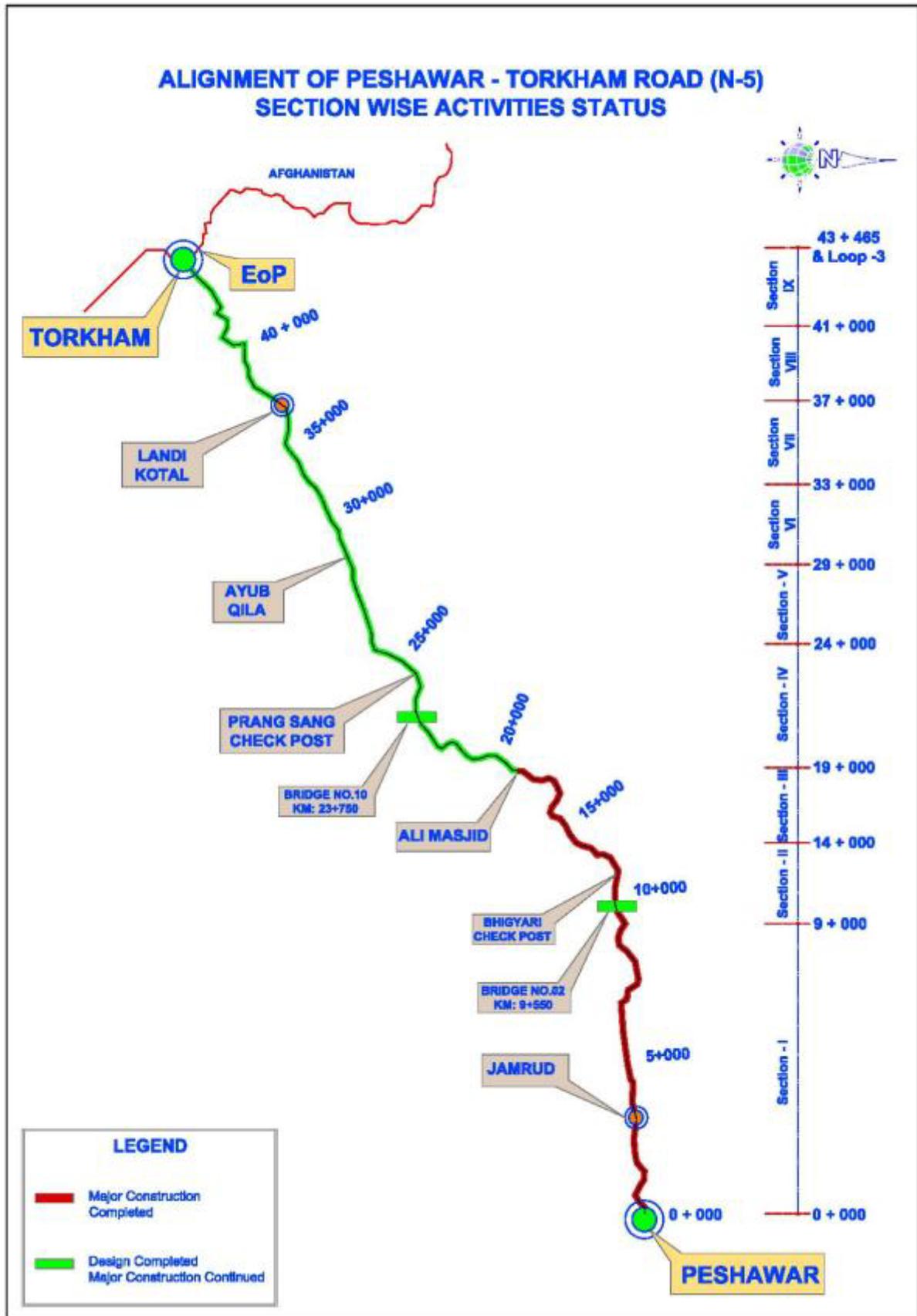
2.2.4 DELAY IN UTILITIES SHIFTING FROM CONSTRUCTION CORRIDOR

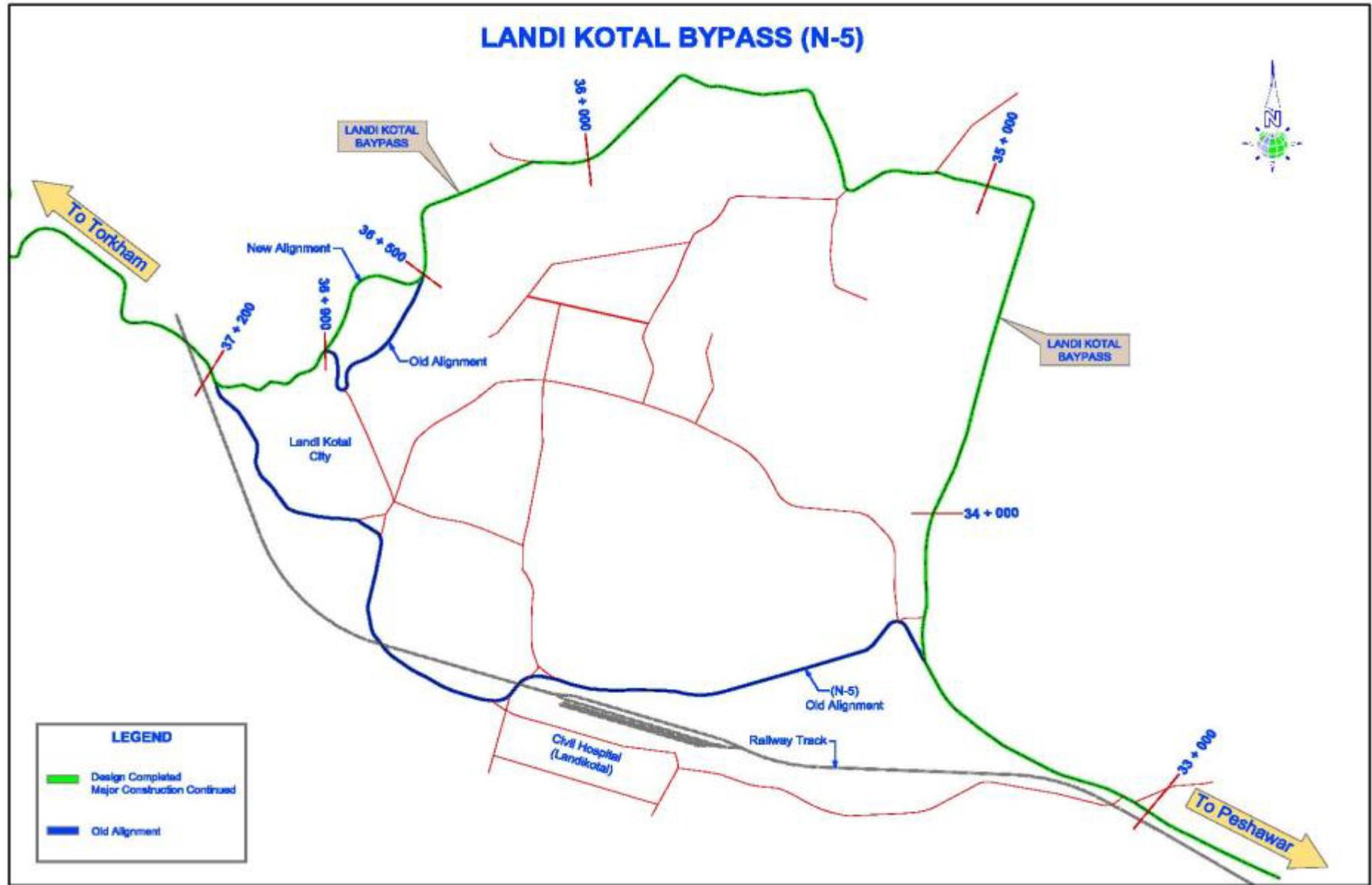
Shifting of overhead electric lines (including poles) and underground Optical Fiber Cable (OFC) got delayed despite payment by FWO to the concerned GoP departments, thereby putting a constraint on the contractor's capacity to undertake construction work in an un-interrupted and continuous manner.

2.2.5 ENVIRONMENTAL COMPLIANCE

FWO needs to focus more on environmental compliance measures due to inherited site specific conditions such as live traffic corridor, heavy traffic, hilly terrain, and residential and commercial areas along the road.

2.3 SECTION WISE ACTIVITIES STATUS



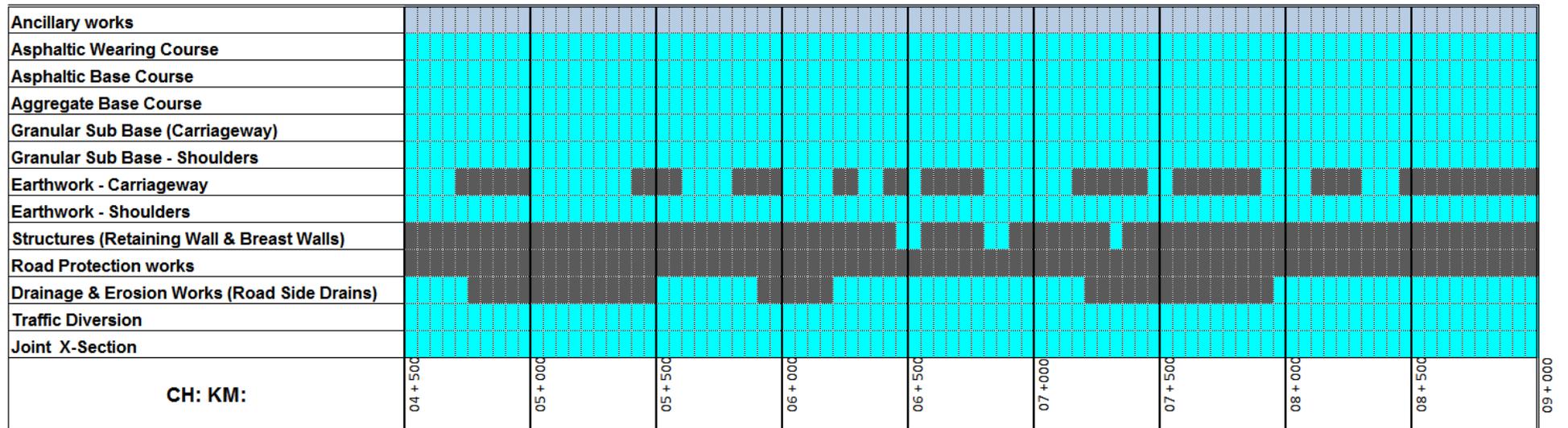
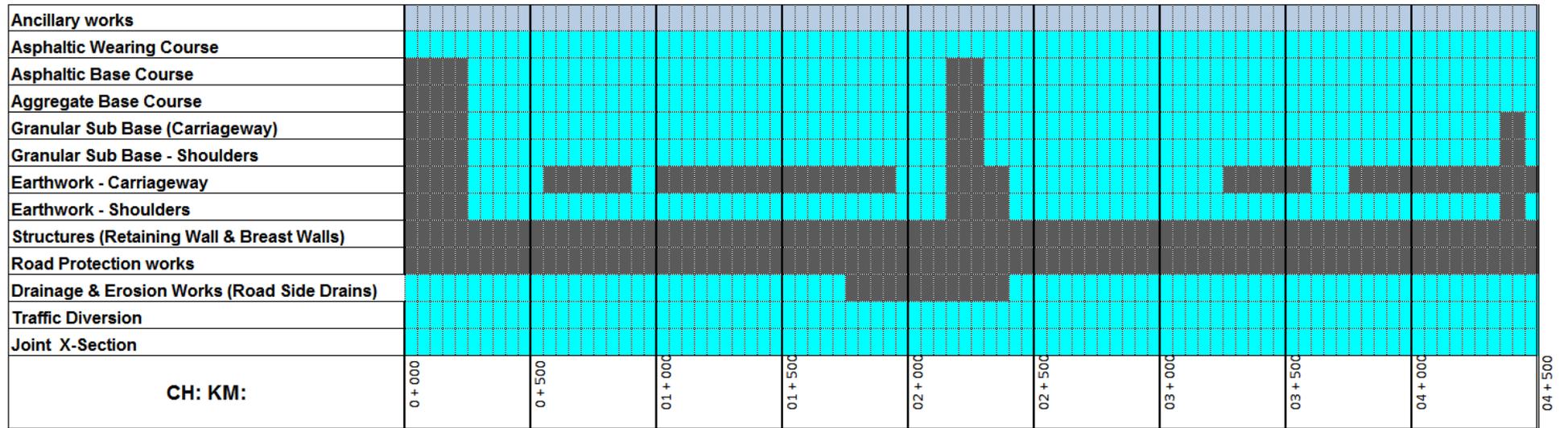


CIVIL WORKS SECTION-I

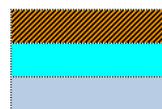
3.1 CUMULATIVE MILESTONE WISE PROGRESS STATUS (SECTION-I)

BILL NO	DESCRIPTION	MILESTONE UNIT	NUMBER OF MILESTONES	AMOUNT AS PER MILESTONE (US \$)	TOTAL AMOUNT (US \$)	PROGRESS UPTO PREVIOUS MONTH			PROGRESS IN THE REPORTING MONTH			MILESTONE WISE COMULATIVE PROGRESS		
						MILESTONE ACHIEVED	AMOUNT (US \$)	PROGRESS %	MILESTONE ACHIEVED	AMOUNT (US \$)	PROGRESS %	MILESTONE ACHIEVED	AMOUNT (US \$)	PROGRESS %
1	EARTH WORK	KM	9	6,339.85	57,058.85	9.00	57,059	100.00	-	-	-	9.00	57,058.85	100.00
2	SUB BASE AND BASE COURSE													
i	GRANULAR SUB BASE	KM	9	111,763.61	1,005,872.49	9.00	1,005,872	100.00	-	-	-	9.00	1,005,872.49	100.00
ii	AGGREGATE BASE COURSE	KM	9	73,611.56	662,504.04	9.00	662,504	100.00	-	-	-	9.00	662,504.04	100.00
iii	ASPHALTIC BASE COURSE	KM	9	416,608.69	3,749,478.21	9.00	3,749,478	100.00	-	-	-	9.00	3,749,478.21	100.00
3	SURFACE COURSES AND PAVEMENT	KM	9	213,785.71	1,924,071.39	9.00	1,924,071	100.00	-	-	-	9.00	1,924,071.39	100.00
4a	STRUCTURES (RETAINING WALL/BREAST WALL)	JOB	1	38,812.31	38,812.31	1.00	38,812	100.00	-	-	-	1.00	38,812.31	100.00
4b	STRUCTURES (CULVERTS)													
I	WIDENING AND REPAIR OF EXISTING CULVERTS AT RD 1+290 & 5+692	NUMBER	2	10,657.55	21,315.10	2.00	21,315.10	100.00				2.00	21,315.10	100.00
II	CONSTRUCTION OF NEW CULVERTS (No. of Span x Span Width x Height)													
	1 x 2 x 1.5	NUMBER	7	19,268.30	134,878.10	7.00	134,878.10	100.00	-	-	-	7.00	134,878.10	100.00
	1 x 3 x 1.5	NUMBER	3	25,204.07	75,612.21	3.00	75,612.21	100.00	-	-	-	3.00	75,612.21	100.00
	2 x 3 x 1.5	NUMBER	2	40,950.75	81,901.50	2.00	81,901.50	100.00	-	-	-	2.00	81,901.50	100.00
	3 x 3 x 1.5	NUMBER	1	54,597.59	54,597.59	1.00	54,597.59	100.00	-	-	-	1.00	54,597.59	100.00
	5 x 3 x 1.5	NUMBER	1	75,007.57	75,007.57	1.00	75,007.57	100.00	-	-	-	1.00	75,007.57	100.00
5a	DRAINAGE & EROSION WORKS (ROAD SIDE DRAIN)													
i	DRAIN TYPE D-1 & D-2 (COVERED)	KM	5.5	249,002.78	1,369,515.29	5.00	1,245,013.90	90.91	0.005	1,245.01	0.09	5.01	1,246,258.91	91.00
ii	DRAIN TYPE D-1a & D-2a (UNCOVERED)	KM	3	110,128.52	330,385.56	3.00	330,385.56	100.00	-	-	-	3.00	330,385.56	100.00
iii	DRAIN TYPE D-3 (Converted to D-2 type)	KM	1.5	135,439.74	203,159.61	1.50	203,159.61	100.00	-	-	-	1.50	203,159.61	100.00
5b	ROAD PROTECTION WORKS (100 M)	JOB	1	11,047.54	11,047.54	1.00	11,047.54	100.00	-	-	-	1.00	11,047.54	100.00
6	ANCILLARY WORKS COMPLETE IN ALL RESPECT	JOB	1	54,375.49	54,375.49	0.93	50,569.21	93.00	0.07	3,806.28	7.00	1.00	54,375.49	100.00
7	DIVERSION	KM	9	12,978.72	116,808.48	9.00	116,808.48	100.00	-	-	-	9.00	116,808.48	100.00
8	PLANTATION OF TREES (450 Nos)	KM	9	1,297.87	11,680.83	4.5	5,840.42	50.00	-	-	-	4.5	5,840.42	50.00
	TOTAL PROJECT COST (SECTION-I)				9,978,082		9,843,934	98.66		5,051.30	0.05		9,848,985	98.71

3.2 PHYSICAL PROGRESS STATUS (SECTION-I)



LEGEND



WORKS COMPLETED IN JAN 2015
 WORKS COMPLETED IN PREVIOUS MONTHS
 PARTIAL COMPLETION



SINGLE LANE TRAFFIC MAINTAINED
 ITEM NOT REQUIRED

3.3 CULVERTS PHYSICAL PROGRESS STATUS (SECTION-I)

RCC Railing	Deleted - Replaced with Pipe Culvert Extension	Culvert shifted to Section-III														
Roll Pointing																
RCC Slab Cast in situ																
Flooring/Cut-off wall/ Rip rap																
Back Filling																
Bed plate/Curtain wall																
Stone Masonry (Wing Walls)																
Stone Masonry (Abutments/ Pier)																
Lean Concrete																
Structural Excavation																
Dismantling of Existing Structure																
Size of Culvert (No. of Span*Width*Height)					1*2*1.5	1*2*1.5	1*3*1.5		1*2*1.5	1*3*1.5	1*2*1.5	3*3*1.5	2*3*1.5	5*3*1.5	1*2*1.5	1*2*1.5
Activity																
KM	1+230	2+611	3+081	4+480	4+590	5+202	5+354	5+905	6+050	6+191	6+501	6+648	6+883	7+384		



ACTIVITIES COMPLETED IN PREVIOUS MONTHS



ACTIVITIES NOT REQUIRED

CIVIL WORKS SECTION-II

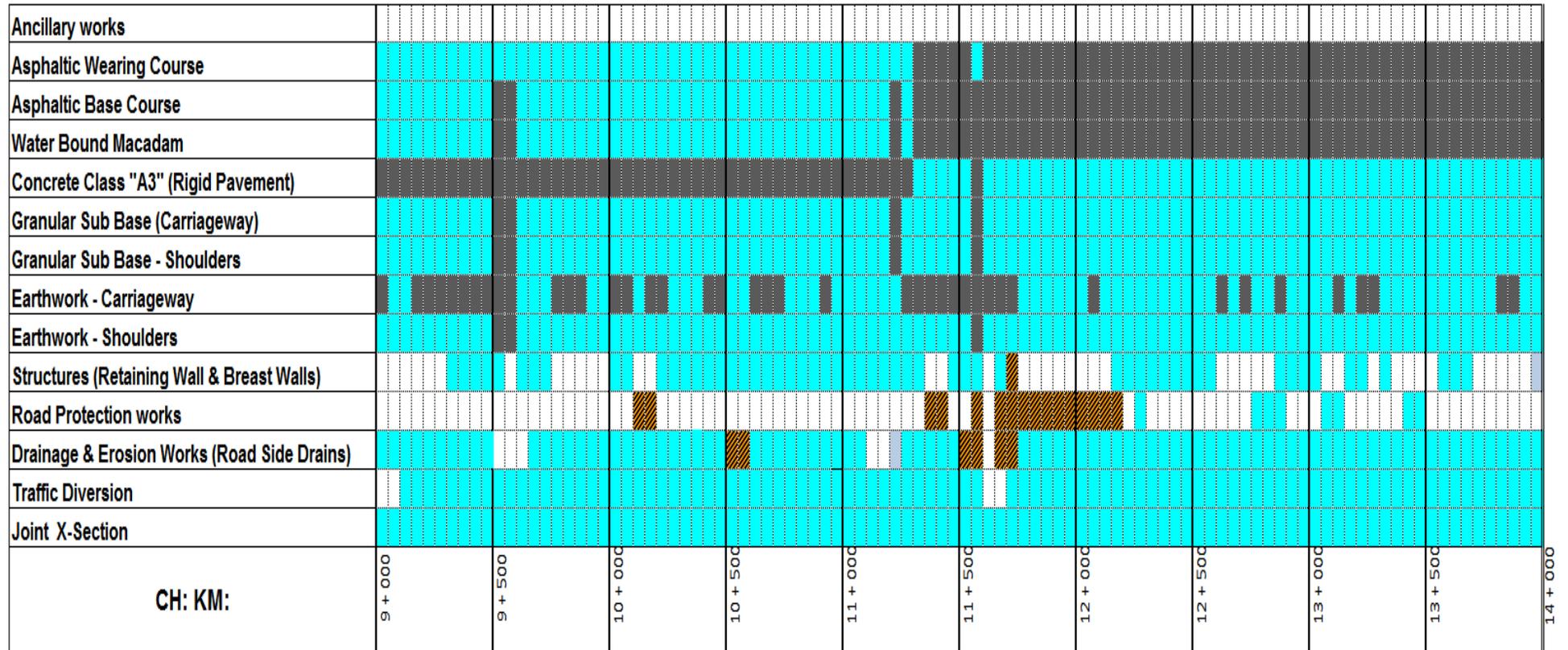
4.1 CUMULATIVE MILESTONE WISE PROGRESS STATUS (SECTION – II)

BILL NO	DESCRIPTION OF BILL	MILESTONE UNIT	NUMBER OF MILESTONES	AMOUNT AS PER MILESTONE (US \$)	TOTAL AMOUNT (US \$)	PROGRESS UPTO PREVIOUS MONTH			PROGRESS IN THE REPORTING MONTH			MILESTONE WISE COMULATIVE PROGRESS		
						MILESTONE ACHIEVED	AMOUNT (US \$)	PROGRESS %	MILESTONE ACHIEVED	AMOUNT (US \$)	PROGRESS %	MILESTONE ACHIEVED	AMOUNT (US \$)	PROGRESS %
1	EARTH WORK (INCLUDING EARTHEN DOWELS)	500 m	10	101,245	1,012,450	10.00	1,012,450	100.00	0.00	-	-	10.00	1,012,450	100.00
2	SUB BASE AND BASE COURSE													
a	GRANULAR SUB BASE	500 m	10	27,073	270,730	10.00	270,730	100.00	0.00	-	-	10.00	270,730	100.00
b	WATER BOUND MACADAM	500 m	4.6	28,702	132,029	4.60	132,029	100.00	0.00	-	-	4.60	132,029	100.00
c	ASPHALTIC BASE COURSE	500 m	4.6	221,168	1,017,373	4.60	1,017,373	100.00	0.00	-	-	4.60	1,017,373	100.00
3	SURFACE COURSES AND PAVEMENT													
a	ASPHALTIC CONCRETE FOR WEARING COURSE AND ALLIED ACTIVITIES	500 m	4.6	104,708	481,657	4.60	481,657	100.00	0.00	-	-	4.60	481,657	100.00
b	RIGID PAVEMENT (6.15 m Width Lane of 500 m)	500 m	10.8	262,510	2,835,108	10.80	2,835,108	100.00	0.00	-	-	10.80	2,835,108	100.00
4a	STRUCTURES (RETAINING WALL /BREAST WALL)													
4a - i	RETAINING WALL - 1975 M	100 m	19.75	70,864	1,399,564	19.36	1,371,927	98.03	0.00	-	-	19.36	1,371,927	98.03
4a - ii	BREAST WALL - 325 M	100 m	3.25	28,169	91,549	3.19	89,858	98.15	0.00	-	-	3.19	89,858	98.15
4b	STRUCTURES (CULVERTS)													
	CONSTRUCTION OF NEW CULVERTS (No. of Span x Span Width x Height)													
	1 x 2 x 2.5 (15 skew, Flexible Pavement)	No	2	33,373	66,746	2.000	66,746	100.00	0.000	-	-	2.000	66,746	100.00
	1 x 2 x 2.5 (22 m long, Flexible Pavement)	No	1	49,109	49,109	1.00	49,109	100.00	0.00	-	-	1.00	49,109	100.00
	1 x 2 x 3 (Flexible Pavement)	No	2	43,350	86,700	2.00	86,700	100.00	0.00	-	-	2.00	86,700	100.00
	1 x 2 x 3 (Rigid Pavement)	No	0	-	-	-	-	-	-	-	-	-	-	-
	1 x 2 x 3 (15° skew)	No	1	44,585	44,585	1.00	44,585	100.00	0.00	-	-	1.00	44,585	100.00
	1 x 2 x 3 (30° skew)	No	1	48,068	48,068	1.00	48,068	100.00	0.00	-	-	1.00	48,068	100.00

CUMULATIVE MILESTONE WISE PROGRESS STATUS (SECTION – II)

BILL NO	DESCRIPTION OF BILL	MILESTONE UNIT	NUMBER OF MILESTONES	AMOUNT AS PER MILESTONE (US \$)	TOTAL AMOUNT (US \$)	PROGRESS UPTO PREVIOUS MONTH			PROGRESS IN THIS MONTH			MILESTONE WISE COMULATIVE PROGRESS		
						MILESTONE ACHIEVED	AMOUNT (US \$)	PROGRESS %	MILESTONE ACHIEVED	AMOUNT (US \$)	PROGRESS %	MILESTONE ACHIEVED	AMOUNT (US \$)	PROGRESS %
	CONSTRUCTION OF NEW CULVERTS (REPLACEMENT OF OLD) (No. of Span x Span Width x Height)													
	1 x 2 x 2.5 (Rigid Pavement)	No	3	33,083	99,249	3.00	99,249	100.00	0.00	-	-	3.00	99,249	100.00
	1 x 2 x 2.5 (30° skew)(Flexible Pavement)	No	1	36,376	36,376	1.00	36,376	100.00	0.00	-	-	1.00	36,376	100.00
	1 x 3 x 4.0	No	1	76,130	76,130	1.00	76,130	100.00	0.00	-	-	1.00	76,130	100.00
	1 x 2 x 4 (22 m length)	No	1	89,408	89,408	1.00	89,408	100.00	0.00	-	-	1.00	89,408	100.00
	1 x 2 x 4.5 (22 m length)	No	1	105,875	105,875	1.00	105,875	100.00	0.00	-	-	1.00	105,875	100.00
	1 x 2 x 4.5 (15° skew)	No	1	83,564	83,564	1.00	83,564	100.00	0.00	-	-	1.00	83,564	100.00
	1 x 3 x 2.5 (15° skew)	No	1	38,000	38,000	1.00	38,000	100.00	0.00	-	-	1.00	38,000	100.00
	1 x 3 x 4.5 (15° skew)	No	1	88,589	88,589	1.00	88,589	100.00	0.00	-	-	1.00	88,589	100.00
	Service Ducts	No	23	2,666	61,318	23.00	61,318	100.00	0.00	-	-	23.00	61,318	100.00
5a	DRAINAGE & EROSION WORKS (ROAD SIDE DRAIN)													
i	DRAIN TYPE D-1 (COVERED) - (0.8 KM)	JOB	1	161,945	161,945	0.38	60,729	37.50	0.63	101,215.41	62.50	1.00	161,945	100.00
ii	DRAIN TYPE D-4 (0.875 KM)	JOB	1	232,586	232,586	0.66	152,809	65.70	0.34	79,777.00	34.30	1.00	232,586	100.00
iii	DRAIN TYPE D-3a (3.725 KM)	KM	3.725	34,924	130,092	3.10	108,264	83.22	0.37	12,921.89	9.93	3.47	121,186	93.15
5b	ROAD PROTECTION WORKS (75 M)	JOB	1	404,279	404,279	0.48	194,054	48.00	0.02	8,085.58	2.00	0.5	202,140	50.00
6	ANCILLARY WORKS COMPLETE IN ALL RESPECTS	JOB	1	70,050	70,050	-	-	-	-	-	-	-	-	-
7	DIVERSION	KM	5	30,579	152,895	5.00	152,895.00	100.00	0.00	-	-	5.00	152,895.00	100.00
8	MISCELLANEOUS (Relocation of utilities and plantation)	JOB	1	17,460	17,460	-	-	-	0.5	8,730.13	50.00	0.5	8,730.13	50.00
	TOTAL				9,383,484		8,853,601	94.35		210,730	2.25		9,064,331	96.60

4.2 PAVEMENT CONSTRUCTION PHYSICAL PROGRESS STATUS (SECTION – II)



LEGEND



4.3 CULVERTS PHYSICAL PROGRESS STATUS (SECTION-II)

RCC Railing	U/S side																	
	D/S side																	
Roll Pointing	Abt No1																	
	Abt No2																	
Flooring/Cut-off wall/ Riprap	B/W Abts																	
RCC Slab cast insitu																		
Bed plate/Curtain wall	Abt No1																	
	Abt No2																	
Back filling	Abt No1																	
	Abt No2																	
	B/W Abts																	
Stone Masonry (Wing Walls)	U/S side																	
	D/S side																	
Stone Masonry (Abutments/ Pier)	Abt No1																	
	Abt No2																	
Lean Concrete	Abt No1																	
	Abt No2																	
Structural Excavation	Abt No1																	
	Abt No2																	
Dismantling of Existing Structure																		
Pavement Type	Rigid/Flex	Flexible	Flexible	Flexible	Flexible	Flexible	Flexible	Flexible	Rigid	Rigid	Rigid	Rigid	Rigid	Rigid		Rigid	Rigid	Rigid
Construction Sequence (FW/HW)		FW	FW	FW	FW	FW	FW	FW	FW	HW	HW	FW	FW	FW	FW	FW	FW	FW
Size of Culvert (No. of Span*Width*Height)		1*2*3	1*2*2.5 (22M)	1*2*4.5 (22M)	1*3*4 (22M)	1*2*2.5	1*2*3	1*2*2.5	1*2*2.5	1*2*3	1*2*2.5	1*3*4.5	1*2*2.5	1*3*2.5	1*2*4.5	1*2*4	1*2*3	1*2*2.5
KM as per site		10+050	10+502	10+562	10+602	10+788		10+961	11+372	11+691	11+841	12+178	12+337	12+460	12+975	13+212	13+333	13+565
KM as per Drawing		10+025	10+500	10+571	10+615	10+790 (skew)	10+850	10+965 (skew)	11+375	11+690 (skew)	11+840	12+200 (skew)	12+336 (skew)	12+460 (skew)	12+975 (skew)	13+215	13+325 (skew)	13+650



ACTIVITIES COMPLETED IN JAN 2015

ACTIVITIES COMPLETED IN PREVIOUS MONTHS



ACTIVITIES NOT REQUIRED

ACTIVITIES IN PROGRESS

CIVIL WORKS SECTION-III

5.1 CUMULATIVE MILESTONE WISE PROGRESS STATUS (SECTION - III)

BILL NO	DESCRIPTION OF BILL	MILESTONE UNIT	NUMBER OF MILESTONES	AMOUNT AS PER MILESTONE (US \$)	TOTAL AMOUNT (US \$)	PROGRESS UPTO PREVIOUS MONTH			PROGRESS IN THE REPORTING MONTH			MILESTONE WISE COMULATIVE PROGRESS		
						MILESTONE ACHIEVED	AMOUNT (US \$)	PROGRESS %	MILESTONE ACHIEVED	AMOUNT (US \$)	PROGRESS %	MILESTONE ACHIEVED	AMOUNT (US \$)	PROGRESS %
1	EARTH WORK	500m	10	104,451.00	1,044,510.00	10	1,044,510.00	100	-	-	-	10	1,044,510.00	100.00
2	SUB BASE AND BASE COURSE													
a	GRANULAR SUB BASE	500m	11.80	39,882.00	470,607.60	11.8	470,607.60	100.00	-	-	-	11.8	470,607.60	100.00
b	WATER BOUND MACADAM	500m	4.70	28,023.00	131,708.10	4.7	131,708.10	100.00	-	-	-	4.7	131,708.10	100.00
c	ASPHALTIC BASE COURSE	500m	4.70	212,362.00	998,101.40	4.7	998,101.40	100.00	-	-	-	4.7	998,101.40	100.00
d	EARTHEN DOWEL	JOB	1.00	24,249.00	24,249.00	1	24,249.00	100.00	-	-	-	1	24,249.00	100.00
3	SURFACE COURSES AND PAVEMENT													
a	ASPHALTIC CONCRETE FOR WEARING COURSE AND ALLIED ACTIVITIES	500m	4.70	101,000.00	474,700.00	4.7	474,700.00	100.00	-	-	-	4.7	474,700.00	100.00
b	RIGID PAVEMENT (HALF PAVEMENT WIDTH)	500m	14.30	216,504.00	3,096,007.20	14	3,031,056.00	97.90	0.3	64,951.20	2.10	14.3	3,096,007.20	100.00
4a	STRUCTURES (RETAINING WALL /BREAST WALL)													
4a - i	RETAINING WALL (RW-2) - TOTAL L = 2780 M													
a	RETAINING WALL (RW-2): H= 1.5 M , L= 475 M	100M	4.75	9,353.00	44,426.75	4.56	42,649.68	96.00	0.19	1,777.07	4.00	4.75	44,426.75	100.00
b	RETAINING WALL (RW-2): H= 2.0 M ; L= 100 M	JOB	1.00	13,980.00	13,980.00	-	-	-	1.00	13,980.00	100.00	1.00	13,980.00	100.00
c	RETAINING WALL (RW-2): H= 2.5 M ; L= 1075 M	100M	10.75	19,044.00	204,723.00	10.75	204,723.00	100.00	-	-	-	10.75	204,723.00	100.00
d	RETAINING WALL (RW-2): H= 3.0 M ; L= 150 M	JOB	1.00	37,862.00	37,862.00	0.83	31,425.46	83.00	0.17	6,436.54	17.00	1.00	37,862.00	100.00
e	RETAINING WALL (RW-2): H= 4.0 M ; L= 105 M	JOB	1.00	44,200.00	44,200.00	1.00	44,200.00	100.00	-	-	-	1.00	44,200.00	100.00
f	RETAINING WALL (RW-2): H= 6.0 M , L= 600 M	100M	6.00	93,510.00	581,060.00	4.50	420,795.00	75.00	1.50	140,265.00	25.00	6.00	581,060.00	100.00
g	RETAINING WALL (RW-2): H= 7.0 M , L= 175 M	100M	1.75	124,511.00	217,894.25	-	-	-	0.42	52,294.62	24.00	0.42	52,294.62	24.00
h	RETAINING WALL (RW-2): H= 8.0 M ; L= 100 M	100M	1.00	164,173.00	164,173.00	0.75	123,129.75	75.00	-	-	-	0.75	123,129.75	75.00
4a - ii	BREAST WALL - 225 M	100M	2.25	34,037.00	76,583.25	1.72	58,543.64	76.44	0.03	1,191.30	1.56	1.755	59,734.94	78.00

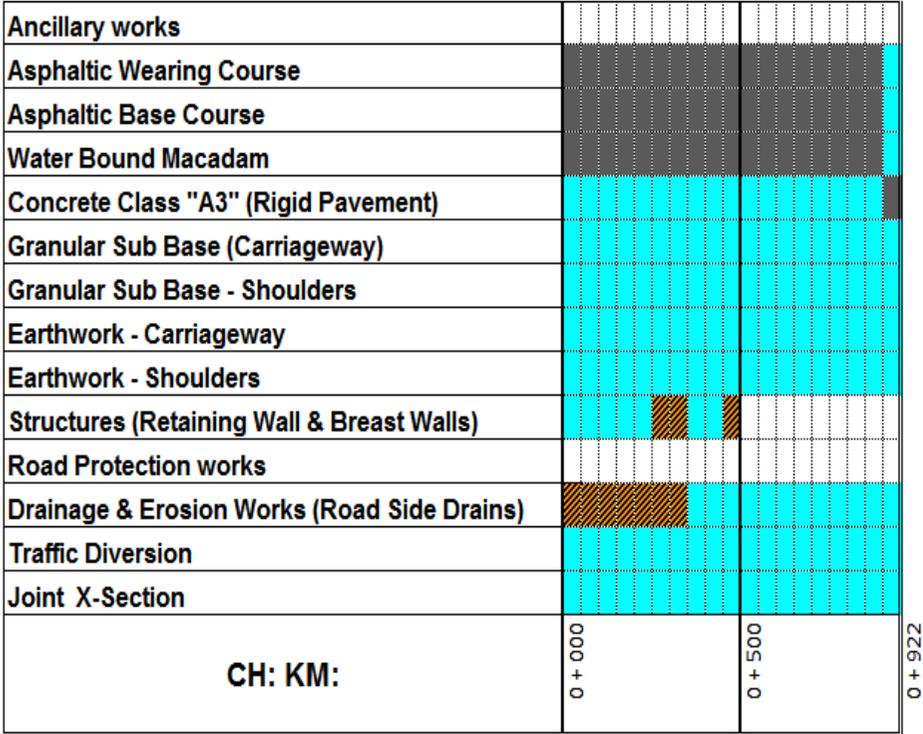
CUMULATIVE MILESTONE WISE PROGRESS STATUS (SECTION – III)

BILL NO	DESCRIPTION OF BILL	MILESTONE UNIT	NUMBER OF MILESTONES	AMOUNT AS PER MILESTONE (US \$)	TOTAL AMOUNT (US \$)	PROGRESS UPTO PREVIOUS MONTH			PROGRESS IN THIS MONTH			MILESTONE WISE COMULATIVE PROGRESS		
						MILESTONE ACHIEVED	AMOUNT (US \$)	PROGRESS %	MILESTONE ACHIEVED	AMOUNT (US \$)	PROGRESS %	MILESTONE ACHIEVED	AMOUNT (US \$)	PROGRESS %
4b	STRUCTURES (CULVERTS)													
NS	CONSTRUCTION OF NEW CULVERTS (No. of Span x Span Width x Height)													
	1 x 2 x 2.5 (Flexible Pavement)	No	1	33,442.00	33,442.00	1.00	33,442.00	100.00	-	-	-	1.00	33,442.00	100.00
	1 x 2 x 3 (Flexible Pavement)	No	1	44,315.00	44,315.00	1.00	44,315.00	100.00	-	-	-	1.00	44,315.00	100.00
	1 x 2 x 4.5 (Flexible Pavement)	No	1	83,501.00	83,501.00	1.00	83,501.00	100.00	-	-	-	1.00	83,501.00	100.00
	1 x 2 x 3 (Loop-1 Rigid Pavement)	No	2	40,667.00	81,334.00	2.00	81,334.00	100.00	-	-	-	2	81,334.00	100.00
	2 x 2 x 3 (Loop-1 Rigid Pavement)	No	1	52,479.00	52,479.00	0.9	47,231.10	90.00	0.1	5,247.90	10.00	1	52,479.00	100.00
NS	CONSTRUCTION OF NEW CULVERTS(REPLACEMENT OF OLD) (No. of Span x Span Width x Height)													
	1 x 2 x 2	No	1	27,031.00	27,031.00	1.00	27,031.00	100.00	-	-	-	1.00	27,031.00	100.00
	1 x 2 x 2.5	No	2	33,821.00	67,242.00	2	67,242.00	100.00	-	-	-	2.00	67,242.00	100.00
	1 x 2 x 2.5 (Rigid Pavement)	No	2	33,818.00	67,636.00	2	67,636.00	100.00	-	-	-	2.00	67,636.00	100.00
	1 x 2 x 2.5(15° skew)	No	1	34,445.00	34,445.00	1.00	34,445.00	100.00	-	-	-	1.00	34,445.00	100.00
	1 x 2 x 2.5(30° skew)	No	1	37,186.00	37,186.00	1.00	37,186.00	100.00	-	-	-	1.00	37,186.00	100.00
	1 x 2 x 3 (15° skew)	No	1	45,559.00	45,559.00	1	45,559.00	100.00	-	-	-	1.00	45,559.00	100.00
	1 x 2 x 3 (30° skew)	No	1	49,119.00	49,119.00	1	49,119.00	100.00	-	-	-	1.00	49,119.00	100.00
	1 x 2 x 2.5 (Loop-1)	No	3	30,901.00	92,703.00	3	92,703.00	100.00	-	-	-	3.00	92,703.00	100.00
	2 x 2 x 2.5	No	1	39,933.00	39,933.00	0.91	36,339.03	91.00	-	-	-	0.91	36,339.03	91.00
	Service Ducts	No	6	2,725.00	16,350.00	6.00	16,350.00	100.00	-	-	-	6.00	16,350.00	100.00
5a	DRAINAGE & EROSION WORKS (ROAD SIDE DRAIN)													
i	DRAIN TYPE D-3a (7.0 KM)	500m	14	18,007.00	252,098.00	11.75	211,582.25	83.93	1.69	30431.83	12.07	13.44	242014.08	96.00
ii	DRAIN TYPE D-3b (0.225 KM)	JOB	1	16,610.00	16,610.00	0.44	7,308.40	44.00	0.34	5647.40	34.00	0.78	12955.80	78.00
5b	ROAD PROTECTION WORKS													
i	STONE PITCHING (100M)	JOB	1	5,416.00	5,416.00	-	-	-	-	-	-	0.4	-	40.00
ii	METAL GUARD RAIL (475M)	JOB	1	40,008.00	40,008.00	-	-	-	-	-	-	-	-	0.00
iii	BARRIER (150M)	JOB	1	45,775.00	45,775.00	1	45,775.00	100.00	-	-	-	1	45,775.00	100.00

CUMULATIVE MILESTONE WISE PROGRESS STATUS (SECTION – III)

BILL NO	DESCRIPTION OF BILL	MILESTONE UNIT	NUMBER OF MILESTONES	AMOUNT AS PER MILESTONE (US \$)	TOTAL AMOUNT (US \$)	PROGRESS UPTO PREVIOUS MONTH			PROGRESS IN THIS MONTH			MILESTONE WISE COMULATIVE PROGRESS		
						MILESTONE ACHIEVED	AMOUNT (US \$)	PROGRESS %	MILESTONE ACHIEVED	AMOUNT (US \$)	PROGRESS %	MILESTONE ACHIEVED	AMOUNT (US \$)	PROGRESS %
6	ANCILLARY WORKS (TRAFFIC ROAD SIGNS, PAVEMENT MARKING / STUDS & KM POSTS)													
i	TRAFFIC SIGNS / KM POSTS	JOB	1	18,894.00	18,894.00	-	-	-	-	-	-	-	-	-
ii	PAVEMENT MARKINGS / STUDS	JOB	1	50,871.00	50,871.00	-	-	-	-	-	-	-	-	-
7	DIVERSION	KM	5	31,259.00	156,295.00	5	156,295.00	100.00	-	-	-	5	156,295.00	100.00
8	MISCELLANEOUS													
a	PLANTATION OF TREES (450 NOS)	JOB	1	10,514.00	10,514.00	-	-	-	0.5	5,257.00	50.00	0.5	5,257.00	50.00
b	SHIFTING OF UTILITIES (OPTIC FIBRE UPTO KM 19)					-	-	-	-	-	-	-	-	-
i	SHIFTING OF O.F.C FROM KM. 04 TO KM. 09	JOB	1	58,744.00	58,744.00	1	58,744.00	100.00	-	-	-	1	58,744.00	100.00
ii	SHIFTING OF O.F.C FROM KM: 09 TO KM: 14	JOB	1	58,744.00	58,744.00	1	58,745.00	100.00	-	-	-	1	58,744.00	100.00
iii	SHIFTING OF O.F.C FROM KM: 14 TO KM: 19	JOB	1	58,744.00	58,744.00	-	-	-	0.5	29,372.00	50.00	0.5	58,744.00	50.00
c	RELOCATION OF ELECTRIC POLES (UPTO KM 30)													
i	RELOCATION OF 45 NO OF ELECTRIC POLES (KM. 09 TO KM.26)	JOB	1	57,708.00	57,708.00	1	57,708.00	100.00	-	-	-	1	57,708.00	100.00
ii	RELOCATION OF 45 NO OF ELECTRIC POLES (KM: 26 TO KM:32+325)	JOB	1	57,708.00	57,708.00	-	-	-	0.49	28,276.92	49.00	0.49	28,276.92	49.00
iii	RELOCATION OF 45 NO OF ELECTRIC POLES (KM.32+325 TO KM. 35+010)	JOB	1	57,708.00	57,708.00	-	-	-	-	-	-	-	-	-
d	RELOCATION OF FC CHECK POSTS & RELOCATION OF SHOP AT KM 14+100													
i	RELOCATION OF FC CHECK POSTS BLOCK - 1 (454 SQ-M)	JOB	1	80,620.00	80,620.00	-	-	-	0.35	28,217.00	35.00	0.35	28,217.00	35.00
ii	RELOCATION OF FC CHECK POSTS BLOCK - 2 (298 SQ-M)	JOB	1	52,918.00	52,918.00	1	52,918.00	100.00	-	-	-	1	52,918.00	100.00
iii	RELOCATION OF FC CHECK POSTS BLOCK - 3 (298 SQ-M)	JOB	1	52,918.00	52,918.00	-	-	-	-	-	-	-	-	0.00
iv	RELOCATION OF SHOP AT KM 14+100 (20 SQ-M)	JOB	1	3,552.00	3,552.00	-	-	-	0.6	2,131.20	60.00	0.6	2,131.20	60.00
	TOTAL				9,512,705.55		8,512,907	89.49		415,477	4.37		8,957,755	94.17

PAVEMENT CONSTRUCTION PHYSICAL PROGRESS STATUS (Loop-I)



LEGEND



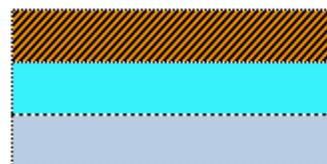
BRIDGES

6.1 BRIDGE (KM: 09+560) CUMULATIVE MILESTONE WISE PROGRESS STATUS

S No	Description	Unit Cost (\$)	Progress upto Previous Month			Progress in this Month			Cumulative Progress		
			Milestone Value	Milestone Cost (\$)	Progress %	Milestone Value	Milestone Cost (\$)	Progress %	Milestone Value	Milestone Cost (\$)	Progress %
1	Pile Load Test	19,330	1	19,330	100	-	-	-	1	19,330	100
	Construction of Piles	290,674	1	290,674	100	-	-	-	1	290,674	100
2	Pile Caps	108,538	1	108,538	100	-	-	-	1	108,538	100
	Abut walls, wing walls, pier shafts & transoms	169,925	1	169,925	100	-	-	-	1	169,925	100
3	Girders	242,915	1	242,915	100	-	-	-	1	242,915	100
	Launching of Girders	15,169	1	15,169	100	-	-	-	1	15,169	100
4	Deck Slabs ,Diaphragms, Barrier & Railing	277,403	1.00	277,403	100	-	-	-	1	277,403	100
5	Surface course & Pavement	14,400	1.00	14,400	100	-	-	-	1	14,400	100
	Structural Excavation and Backfill	19,361	1.00	19,361	100	-	-	-	1	19,361	100
	Approach Slabs	14,152	1.00	14,152	100	-	-	-	1	14,152	100
	Drainage & Erosion works including 45.30M Stone Masonry Retaining Walls & Gabion protection works	52,425	0.50	26,213	50	0.14	7,340	14	0.64	33,552	64
	Ancillary Works including (i) 02 Number Road Sign Category -3a. (ii) 195M Pavement marking in Reflective TP Paint for Lines of 15 cm width (iii) 26 number Reflectorized pavement Studs Raised Profile Type - (Double)	1,673		-	-	-	-	-	-	-	-
		1,225,965		1,198,080	97.73		7,340	1		1,205,419	98.32

6.2 BRIDGE (KM: 09+560) PHYSICAL PROGRESS STATUS

BRIDGES	DESCRIPTION	TOTAL	COMPLETED	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	REMARKS
KM: 09+560														
BRIDGE #2 (KM: 09+560)	Piles	36	36											
	Pile Caps	4	4											
	Abutments/ Piers	4	4											
	Transom/ Abutment Seats	4	4											
	Girder Casting	15	15											
	Girder Prestressing	15	15											
	Girder Launching	15	15											
	Deck Slab / Barrier	3	3											
	Expansion Joint	4	4											
	Approach Slab	2	2											



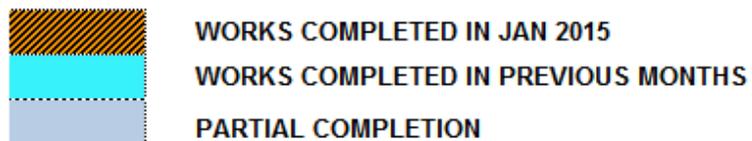
WORKS COMPLETED IN JAN 2015

WORKS COMPLETED IN PREVIOUS MONTHS

PARTIAL COMPLETION

6.3 BRIDGE (KM: 18+475) PHYSICAL PROGRESS STATUS

BRIDGES	DESCRIPTION	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	REMARKS	
		KM: 18+475											
BRIDGE #5 (KM:18+475)	Dismantling of Existing structure	[100% Completed in Previous Months]											
	Structural Excavation for Slab on Ground	[100% Completed in Previous Months]											
	Lean Concrete	[100% Completed in Previous Months]											
	Foundation Slab & cutoff wall concrete	[100% Completed in Previous Months]											
	Abutment walls construction	[100% Completed in Previous Months]											
	Abutment seat construction	[100% Completed in Previous Months]											
	Curtain wall and Approach slab seat	[100% Completed in Previous Months]											
	RCC Deck slab	[100% Completed in Previous Months]											
	Protection Works	[100% Completed in Previous Months]											
	Backfilling	[100% Completed in Jan 2015]											
	NJ Barrier	[100% Completed in Jan 2015]											
	Footpath Paving	[100% Completed in Jan 2015]											
	Bridge Railing	[100% Completed in Previous Months]											
	Approach slabs	[100% Completed in Jan 2015]											
	Ancillary Works	[100% Completed in Previous Months]											



6.4 BRIDGE (KM: 23+750) CUMULATIVE MILESTONE WISE PROGRESS STATUS

S/ No	Description	Unit Cost (\$)	Progress upto Previous Month			Progress in this Month			Cumulative Progress		
			Milestone Value	Milestone Cost (\$)	Progress %	Milestone Value	Milestone Cost (\$)	Progress %	Milestone Value	Milestone Cost (\$)	Progress %
1	Pile Load Test	19,330	1	19,330	100	-	-	-	1	19,330	100
	Construction of Piles	309,308	1	309,308	100	-	-	-	1	309,308	100
2	Pile Caps	106,579	1	106,579	100	-	-	-	1	106,579	100
	Abut walls, wing walls, pier shafts & transoms	90,180	1	90,180	100	-	-	-	1	90,180	100
3	Girders	187,363	1.0	187,363	100	-	-	-	1	187,363	100
	Launching of Girders	11,914	1.0	11,914	100	-	-	-	1	11,914	100
4	Deck Slabs ,Diaphragms, Barrier & Railing	254,785	0.9	229,307	90	-	-	-	0.9	229,307	90
5	Surface course & Pavement	13,125	-	-	-	-	-	-	-	-	-
	Structural Excavation and Backfill	57,939	0.1	5,794	10	0.8	46,351	80	0.9	52,145	90
	Approach Slabs	17,235	-	-	-	-	-	-	-	-	-
	Drainage & Erosion works including 45.30M Stone Masonry Retaining Walls & Gabion protection works	322,224	-	-	-	0.2	64,445	20	0.2	64,445	20
	Ancillary Works including (i) 02 Number Road Sign Category -3a. (ii) 195M Pavement marking in Reflective TP Paint for Lines of 15 cm width (iii) 26 number Reflectorized pavement Studs Raised Profile Type - (Double)	2,320	-	-	-	-	-	-	-	-	-
		1,392,302		959,774	68.93		110,796	7.96		1,070,570	76.89

6.5 BRIDGE (KM: 23+750) PHYSICAL PROGRESS STATUS

BRIDGES	DESCRIPTION	TOTAL	COMPLETED	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	REMARKS
KM: 23+750														
BRIDGE #10 (KM:23+750)	Piles	30	30	[100% Complete]										
	Pile Caps	3	3	[100% Complete]										
	Abutments/ Piers	3	3	[100% Complete]										
	Transom/ Abutment Seats	3	3	[100% Complete]										
	Girder Casting	10	10	[100% Complete]										
	Girder Prestressing	10	10	[100% Complete]										
	Girder Launching	10	10	[100% Complete]										
	Deck Slab / Barrier	2	2	[100% Complete]										
	Expansion Joint	3		[0% Complete]										
	Approach Slab	2		[0% Complete]										



WORKS COMPLETED IN JAN 2015

WORKS COMPLETED IN PREVIOUS MONTHS

PARTIAL COMPLETION

6.7 MCC (KM: 11+190) CUMULATIVE MILESTONE WISE PROGRESS STATUS

S No	Description	Unit Cost (\$)	Progress upto Previous Month			Progress in this Month			Cumulative Progress		
			Milestone Value	Milestone Cost (\$)	Progress %	Milestone Value	Milestone Cost (\$)	Progress %	Milestone Value	Milestone Cost (\$)	Progress %
1	Bottom Slab & Cutt-off wall	131,970	1	131,970	100	-	-	-	1	131,970	100
	Box Walls	86,096	1	86,096	100	-	-	-	1	86,096	100
2	Top Slab	150,422	1	150,422	100	-	-	-	1	150,422	100
	Wing Walls & Apron	149,336	1	149,336	100	-	-	-	1	149,336	100
3	Approach Slabs	14,537	1	14,537	100	-	-	-	1	14,537	100
	Stone Pitching 60 meter length	6,671	-	-	-	-	-	-	-	-	-
4	Surface course & Pavement	11,293	1	11,293	100	-	-	-	1	11,293	100
	Drainage & Erosion works including 51.0M stone masonry R/Walls including Gabion protection works	52,803	0.95	50,163	95	-	-	-	0.95	50,163	95
	Ancillary Works including (i) 02 Number Road Sign Category - 3a. (ii) 142M Pavement marking in Reflective TP Paint for Lines of 15 cm width (iii) 12 Number Reflectorized pavement Stud Raised Profile Type - (Double)	1,423	-	-	-	-	-	-	-	-	-
		604,551		593,817	98.22		-	-		593,817	98.22

6.8 MCC (KM: 22+925) CUMULATIVE MILESTONE WISE PROGRESS STATUS

S No	Description	Unit Cost (\$)	Progress upto Previous Month			Progress in this Month			Cumulative Progress		
			Milestone Value	Milestone Cost (\$)	Progress %	Milestone Value	Milestone Cost (\$)	Progress %	Milestone Value	Milestone Cost (\$)	Progress %
1	Bottom Slab & Cutt-off wall	113,545	1	113,545	100	-	-	-	1	113,545	100
	Box Walls	79,827	1	79,827	100	-	-	-	1	79,827	100
2	Top Slab	97,807	1	97,807	100	-	-	-	1	97,807	100
	Wing Walls & Apron	96,200	1	96,200	100	-	-	-	1	96,200	100
3	Approach Slabs	15,008	1	15,008	100	-	-	-	1	15,008	100.0
	Stone Pitching 32.80 meter length	8,231		-	-	-	-	-		-	-
4	Surface course & Pavement	8,628		-	-	1	8,628	100	1	8,628	100
	Drainage & Erosion works including 51.0M stone masonry R/Walls including Gabion protection works	25,166		-	-	0.5	12,583	50	0.5	12,583	50
	Ancillary Works including (i) 02 Number Road Sign Category - 3a. (ii) 142M Pavement marking in Reflective TP Paint for Lines of 15 cm width (iii) 12 Number Reflectorized pavement Stud Raised Profile Type - (Double)	1,303		-	-	-	-	-		-	-
		445,715		402,387	90.28		21,211	4.76		423,598	95.04

6.9 MULTICELL CULVERT PHYSICAL PROGRESS STATUS

Gabion wall Construction	U/S Side					
	D/S Side					
Retaining wall Construction	Near end					
	Far end					
RCC Railing	Near end					
	Far end					
Approach Slab Construction	Near end					
	Far end					
Backfilling	Near end					
	Far end					
RCC Top Slab	HW Near End					
	HW Far End					
RCC Wing Walls	U/S Side					
	D/S Side					
Concrete Cutoff wall & Apron Construction	U/S Side					
	D/S Side					
RCC Walls (Box only)	outer Walls					
	Inner Walls					
RCC Bottom Slab	FW					
Lean Concrete	FW					
Structural Excavation	FW					
Dismantling of Existing Structure	Causeway					
Pavement Type	Rigid/Flex	Flexible	Flexible			
Construction Sequence(FW / HW)	(FW/HW)	FW	FW			
Size of Culvert	Nos*width*Height	15*3*3 15-cell	10*3*3 10-cell			
KM as per site	KM	11+190	22+925			
KM as in Drawing	KM	11+190	22+926			

	ACTIVITIES COMPLETED IN JAN 2015
	ACTIVITIES COMPLETED IN PREVIOUS MONTHS
	ACTIVITIES NOT REQUIRED
	ACTIVITIES IN PROGRESS

MATERIAL TESTING REPORTS

7.1 SUMMARY OF FIELD DENSITY TESTS

Earthfill Field Density Tests Report.												
S.No	Date	Location / (KM)	Description	Station (KM)	MDD (g/cc)	OMC (%)	Adj.MDD (g/cc)	Field M.C (%)	Field Density	Achieved Compaction	Required Compaction	Remarks
1	10-Jan-2015	23+887 ~ 23+975 F/W	E.F.10th Layer (Zone A)	23+940 R/S	2.355	5.9	2.364	4.9	2.263	95.7	95	Pass
2	12-Jan-2015	23+775 ~ 23+826 F/W	E.F.14th Layer (Zone A)	23+826 R/S	2.355	5.9	2.358	5.1	2.275	96.5	95	Pass
Sub Grade Field Density Tests Report.												
S.No	Date	Location / (KM)	Description	Station (KM)	MDD (g/cc)	OMC (%)	Adj.MDD (g/cc)	M.C (%)	Field Density	Achieved Compaction	Required Compaction	Remarks
1	15-Jan-2015	23+887 ~ 23+950 F/S	Sub Grade 1st	23+930 L/S	2.355	5.9	2.361	4.7	2.274	96.3	95	Pass
Sub Base Field Density Tests Report.												
S.No	Date	Location / (KM)	Description	Station (KM)	MDD (g/cc)	OMC (%)	Adj.MDD (g/cc)	M.C (%)	Field Density	Achieved Compaction	Required Compaction	Remarks
1	10-Jan-2015	27+900 ~ 28+000 F/W	Sub Base Top	27+960 R/S	2.392	5.6	2.395	4.7	2.356	98.4	98	Pass
2	13-Jan-2015	23+600 ~ 23+700 F/W	Sub Base 1st	23+640	2.383	5.6	2.386	5.1	2.355	98.7	98	Pass

7.2 SUMMARY OF EARTH WORK QUALITY TESTS

<u>Sub Base Material Quality Tests for the Month of January 2015</u>																		
S.No	Location (KM)	Description	Sieves Analysis							MDD (g/cc)	OMC %	L.A %	Sand Equivalent (%)	CBR % at		Specific gravity	Plastic Index	Remarks
			2"	1"	3/8"	#4	#10	#40	#200					0.1"	0.2"			
1	34+000 ~ 35+000	Sub Base	97.3	68.3	45.6	35.7	27.5	15.9	7.8	2.364	5.5	29.2	29.2	-	78	2.774	3.7	
Specification Limits for Sub Base			100	55~85	40~70	30~60	20~50	10~30	5~15	-	-	50% Max	25% Min	50% Min		-	6 Max	
Total Nos.of Tests			1							1	1	1	1	1	1	1	1	
<u>Earthfill & Sub Grade Material Quality Tests for the Month of January 2015</u>																		
S.No	Location (KM)	Description	Sieves Analysis							MDD (g/cc)	OMC %	L.A %	Sand Equivalent (%)	CBR % at		Specific gravity	Plastic Index	Remarks
			2"	1"	3/8"	#4	#10	#40	#200					0.1"	0.2"			
1	23+500 ~ 24+000	Earthfill & Sub Grade	100	79.6	52.1	38.9	29.1	18	11.7	2.355	5.9	-	-	-	-	-	-	
Specification Limits for Sub Base			100	55~85	40~70	30~60	20~50	10~30	5~15	-	-	50% Max	25% Min	30% Min		-	10 Max	
Total Nos.of Tests			1							1	1	-	-	-	-	-	-	

7.3 WATER BOUND MACADAM QUALITY TEST REPORTS

S.No	Date	Location (KM)	Station	Sieve Analysis					MDD (g/cc)	OMC %	LA (%)	Flakiness Index	Soundness (%)	Absorption (%)	Specific gravity	Remarks
				3"	2½"	2"	1½"	3/4"								
1	1-Jan-2015	0+000 ~ 0+200 Lope #II	0+110	100	88.9	49.9	14.2	3.3	-	-	-	-	-	-	-	
2	6-Jan-2015	19+000 ~ 20+000 & Lope # II	19+260	100	91.1	44.8	8.6	2.4	2.399	4.7	27.6	5.1	-	0.65	2.786	
Specification Limits for Water Bound				100	90~100	25~75	0~15	0~5	-	-	45% Max	15% Max	12% Max		-	
Total Nos.of Tests				2					1	1	1	1	-	1	1	

7.4 ASPHALTIC BASE COURSE QUALITY TESTS REPORT

Specific Gravity A.C (Gb) 1.030					Combined Specific Gravity of Aggregate (Gsb) 2.766								Effective Specific Gravity of Aggregate (Gse) 2.810						
S. No.	Paving Date	Location / R.D	Layer No.	% A.C By Wt of Mix (Pb)	Sieves analysis							Bulk Sp. Gr. (Gmb)	Maximum Sp.Gravity (G _{mm})	% Air Voids (V _a)	VMA (%)	VFA (%)	Stability (Kg)	Los of Stability (%)	Flow (0.01") (0.25mm)
					2"	1½"	3/4"	#4	#8	#50	#200								
1	31-Dec-15	31+950 ~ 32+200 F/W	2nd Layer	3.15	100	100	57.3	26.2	17.9	5.2	2.6	2.531	2.693	6.0	11.39	47.1	1401	20.1	11.7
2	07-Jan-15	33+040 ~ 33+225 F/W	2nd Layer	3.5	100	100	68.5	34.5	24.1	6.4	3.1	2.511	2.673	6.1	12.42	51.1	1463	18.1	11.7
3	12-Jan-15	33+215 ~ 33+315 & 33+450 ~ 33+600 F/W	2nd Layer	3.7	100	100	74.7	34.6	22.5	6.9	3.1	2.514	2.651	5.2	12.51	58.5	1557	18.6	12.0
JMF LIMITS FOR ASPHALTIC BASE COURSE				3.1 ~ 3.7	100	93~100	60~74	30 ~ 38	18 ~ 26	4.3~12.3	3 ~ 5	-	-	4 ~ 8	11.5 % Min	55 ~ 65	1000 Kg Min	25% Max	8 ~ 14 at (0.01")

7.5 ASPHALTIC WEARING COURSE QUALITY TESTS REPORT

Specific Gravity A.C (Gb) 1.030				Combined Specific Gravity of Aggregate (Gsb) 2.744								Effective Specific Gravity of Aggregate (Gse) 2.785						
S. No	Paving Date	Location / R.D	% A.C By Wt of Mix Pb	Sieves analysis							Bulk Sp. Gr. (Gmb)	Maximum Sp.Gravity (G _{mm})	% Air Voids (V _a)	VMA (%)	VFA (%)	Stability (Kg)	Los of Stability (%)	Flow (0.01") (0.25mm)
				1"	3/4"	3/8"	#4	#8	#50	#200								
1	18-Jan-15	21+800 ~ 21+900 F/W	4.1	100	96.6	62.5	42.6	24.6	6.8	3.8	2.464	2.625	6.1	13.9	55.8	1573	15.6	10.0
2	19-Jan-15	21+350 ~ 21+650 F/W	4.1	100	91.6	64.9	44.4	27	8.1	4.7	2.459	2.628	6.4	14.05	54.3	1515	15.0	9.7
3	20-Jan-15	22+300 ~ 22+800 F/W	4.0	100	96.1	62.8	44.8	27.7	7.2	4.2	2.463	2.633	6.5	13.83	53.3	1644	18.3	12.5
4	21-Jan-15	22+860 ~ 23+070 F/W	4.0	100	97.8	67.4	45.1	25.9	8.5	4.7	2.456	2.616	6.1	14.08	56.5	1533	13.0	9.3
5	28-Jan-15	27+400 ~ 27+900 F/W	4.2	100	93.9	65.8	44.1	25.2	8.8	5.1	2.454	2.581	4.9	14.16	65.1	1562	15.1	10.3
JMF LIMITS FOR ASPHALTIC WEARING COURSE			3.6 ~ 4.2	100	87 ~ 99	56~70	39 ~ 47	24 ~ 32	6 ~ 14	3.9~5.9	-	-	4 ~ 7	13 % Min	65 ~ 75	1000 Kg Min	20 % Max	8 ~ 14 at (0.01")

7.6 AGGREGATE QUALITY TESTS FOR CONCRETE

S.No	Date	Location	Description	Agg. Size	Sieve Analysis								L.A %	Sand Equivalent	Specific Gravity	Soundness	Remarks					
					2"	1½"	1"	¾"	1/2"	3/8"	#4	#8										
1	8-Jan-2015	KM : 24 Crush Plant Stock Pile	For Class "A-3" Concrete	38mm Agg	100	99.5	25.5	2.8	0.7	0.6	0.1	-	-	-	-	-						
				25mm Agg	-	-	100	57.4	0.5	0.1	0.0	-	-	-	-	-	-					
				19mm Agg	-	-	-	100.0	85.0	59.7	10.6	-	-	-	-	-	-	-				
				Combined Grading	48,30 & 22 %	100	99.8	64.2	40.6	19.2	13.5	2.4	-	-	-	-	-	-				
				Specification Limits		100	95~100	-	35~70	-	10~30	0~5	-	-	-	-	-	-	-			
	15-Jan-2015	KM : 16 Crush Plant Stock Pile	For Class "A-3" Concrete	38mm Agg	100	100	45.0	1.0	0.2	0.0	0.0	-	-	-	-	-	-					
				25mm Agg	-	-	100	60.1	0.9	0.4	0.0	-	-	-	-	-	-	-				
				19mm Agg	-	-	-	100.0	88.2	42.3	0.5	-	-	-	-	-	-	-				
				Combined Grading	48,22 & 30 %	100	100	73.6	43.7	26.7	12.8	0.2	-	-	-	-	-	-	-			
				Specification Limits		100	95~100	-	35~70	-	10~30	0~5	-	-	-	-	-	-	-			
2	15-Jan-2015	KM : 16 Crush Plant Stock Pile	For Class "B" Concrete	38mm Agg	100	100	45.0	1.0	0.2	0.0	0.0	-	-	-	-	-						
				25mm Agg	-	-	100	60.1	0.9	0.4	0.0	-	-	-	-	-	-	-				
				19mm Agg	-	-	-	100.0	88.1	42.3	0.5	-	-	-	-	-	-	-				
				Combined Grading	65 , 20 & 15 %	100	100	64.3	27.7	13.5	6.4	0.1	-	-	-	-	-	-	-			
Specification Limits		95~100	-	35~70	-	10~30	-	0~5	-	-	-	-	-	-	-							
3	8-Jan-2015	KM : 24 Crusher Stock Pile	For Class "A-1" Concrete	25mm Agg	-	-	100	57.4	0.5	0.1	0.0	-	-	-	-	-						
				19mm Agg	-	-	-	100.0	85.0	59.7	10.6	-	-	-	-	-	-					
				Combined Grading	20 & 80 %	-	-	100.0	91.5	68.1	47.8	8.5	-	-	-	-	-	-				
				Specification Limits		-	-	100	90~100	-	20~55	0 ~ 10	-	-	-	-	-	-				
	15-Jan-2015	KM : 16 Crusher Stock Pile	For Class "A-1" Concrete	25mm Agg	-	-	100	60.1	0.9	0.4	0.0	-	-	-	-	-	-					
				19mm Agg	-	-	-	100.0	88.1	42.3	5.0	-	-	-	-	-	-					
				Combined Grading	20 & 80 %	-	-	100.0	92.0	70.7	33.9	4.0	-	-	-	-	-	-				
				Specification Limits		-	-	100	90~100	-	20~55	0 ~ 10	-	-	-	-	-	-				
4	15-Jan-2015	Natural Sand for Concrete			Sieves Analysis								FM	Sand Equivalent	Specific Gravity	Soundness	Remarks					
		Sample from Batching Plant Stock Pile			3/8"	#4	#8	#16	#30	#50	#100	#200						2.2	-	-	-	
		Specification Limits			100	95~100	-	45~85	-	10~30	2 ~ 10	0 ~ 3						2.3~3.1	75% Min	-	12% Max	

7.7 AGGREGATE QUALITY TESTS FOR ASPHALTIC WEARING COURSE

GRADATION CHART										L.A %	Sand Equivalent	Specific Gravity	Soundness	Remarks			
SIEVE SIZE		1"	3/4"	1/2"	3/8"	# 4	# 8	# 50	# 200								
1	9-Jan-2015	MATERIAL USED		PERCENT PASSING													
		1" Down Aggregate Passing (%)		100.0	84.4	6.4	2.1	1.7	0.0	0.0	0.0	-	-	2.773	-	Hot Bin Sample	
		3/4" Down Aggregate Passing (%)		100.0	100.0	98.6	88.5	23.3	0.9	0.1	0.0			2.757			
		#4 Sieve Down Aggregate Passing (%)		100.0	100.0	100.0	100.0	98.9	66.0	26.1	18.5			2.637			
		COMBINED GRADATION (BLEND)															
		MATERIAL USED		%USED	PERCENT PASSING												
		1" Down Aggregate		31	31.0	26.2	2.0	0.7	0.5	0.0	0.0	0.0					
		3/4" Down Aggregate		34	34.0	34.0	33.5	30.1	7.9	0.3	0.0	0.0					
		#4 Sieve Down (Stone dust)		35	35.0	35.0	35.0	35.0	34.6	23.1	9.1	6.5					
COMBINED GRADATION			100.0	95.2	70.5	65.7	43.1	23.4	9.2	6.5							
2	13-Jan-2015	MATERIAL USED		PERCENT PASSING													
		1" Down Aggregate Passing (%)		100.0	90.6	10.4	2.3	1.6	0.0	0.0	0.0	-	-		-	Hot Bin Sample	
		3/4" Down Aggregate Passing (%)		100.0	100.0	97.3	82.2	21.3	0.8	0.1	0.0						
		#4 Sieve Down Aggregate Passing (%)		100.0	100.0	100.0	100.0	99.6	71.8	17.9	8.2						
		COMBINED GRADATION (BLEND)															
		MATERIAL USED		%USED	PERCENT PASSING												
		1" Down Aggregate		31	31.0	28.1	3.2	0.7	0.5	0.0	0.0	0.0					
		3/4" Down Aggregate		34	34.0	34.0	33.1	27.9	7.2	0.3	0.0	0.0					
		#4 Sieve Down (Stone dust)		35	35.0	35.0	35.0	35.0	34.9	25.1	6.3	2.9					
COMBINED GRADATION			100.0	97.1	71.3	63.7	42.6	25.4	6.3	2.9							
SPECIFIED LIMITS			100	90~100	-	56~70	35~50	23~35	5~12	2~8							
JMF LIMITS			100	87.2~100	-	55.6~69.6	39.4~47.4	23.6~31.6	5.8~13.1	3.9~5.9							

7.8 SUMMARY OF CONCRETE COMPRESSIVE STRENGTH

Description	Casting date	Testing date	Age/Days	Load in (KN)	Length (cm)	Dia (cm)	Area (cm ²)	Load in Kg	Strength (Kg/cm ²)			Remarks
									Achieved	Average	Required	
Concrete Class "A-3" Girder # 54,55 Bridge# 12 (27+350)	4-Dec-2014	1-Jan-2015	28 Days	680	30.48	15.24	182.4	69340	380.2	390.4	280	OK
				726	30.48			74030	405.9			
				689	30.48			70257	385.2			
Concrete Class "A-3" Deck Slab of Bridge Bridge# 10 (23+750)	7-Dec-2014	4-Jan-2015	28 Days	561	30.48	15.24	182.4	57205	313.6	309.2	245	OK
				556	30.48			56695	310.8			
				542	30.48			55268	303.0			
Concrete Class "A-1" Jurssy Barior at KM:18+850 ~ 18+870 L/S	8-Dec-2014	5-Jan-2015	28 Days	491	30.48	15.24	182.4	50067	274.5	271.3	210	OK
				488	30.48			49761	272.8			
				477	30.48			48640	266.7			
Concrete Class "A-3" Girder # 56,57 Bridge# 12 (27+350)	8-Dec-2014	5-Jan-2015	28 Days	680	30.48	15.24	182.4	69340	380.2	381.6	280	OK
				696	30.48			70971	389.1			
				672	30.48			68524	375.7			
Concrete Class "A-3" Rigid Pavement 0+580.0 ~ 0+613.5 R/S 0+514.5 ~ 0+531.0 R/S Lope # II	29-Dec-2014	5-Jan-2015	7 Days	484	30.48	15.24	182.4	49353	270.6	266.1	210	OK
				488	30.48			49761	272.8			
				456	30.48			46498	254.9			
Concrete Class "A-1" Top Slab of Culvert at KM : 27+993	9-Dec-2014	6-Jan-2015	28 Days	591	30.48	15.24	182.4	60264	330.4	320.7	210	OK
				570	30.48			58123	318.7			
				560	30.48			57103	313.1			
Concrete Class "A-1" RCC Culvert Abutment Wall at KM: 18+505 (Box Culvert)	10-Dec-2014	7-Jan-2015	28 Days	518	30.48	15.24	182.4	52820	289.6	286.6	210	OK
				524	30.48			53432	292.9			
				496	30.48			50577	277.3			

SUMMARY OF CONCRETE COMPRESSIVE STRENGTH

Description	Casting date	Testing date	Age/Days	Load in (KN)	Length (cm)	Dia (cm)	Area (cm ²)	Load in Kg	Strength (Kg/cm ²)			Remarks
									Achieved	Average	Required	
Concrete Class "A-3" Girder # 60,61 Bridge# 12 (27+350)	10-Dec-2014	7-Jan-2015	28 Days	652	30.48	15.24	182.4	66484	364.5	347.9	280	OK
				597	30.48			60876	333.8			
				618	30.48			63017	345.5			
Concrete Class "A-1" New Jurssy Barior at KM:18+325 ~ 18+383 L/S	16-Dec-2014	13-Jan-2015	28 Days	476	30.48	15.24	182.4	48538	266.1	264.6	210	OK
				488	30.48			49761	272.8			
				456	30.48			46498	254.9			
Concrete Class "A-1" Bed Plat of Culvert KM: 31+030	18-Dec-2014	15-Jan-2014	28 Days	460	30.48	15.24	182.4	46906	257.2	254.0	210	OK
				440	30.48			44867	246.0			
				463	30.48			47212	258.8			
Concrete Class "A-3" Rigid Pavement 26+710.4 ~ 26+733.2 L/S 0+910.5 ~ 0+936 R/S Lope # 2	13-Jan-2015	20-Jan-2015	7 Days	484	30.48	15.24	182.4	49353	270.6	259.0	210	OK
				452	30.48			46090	252.7			
				454	30.48			46294	253.8			
Concrete Class "A-3" Rigid Pavement 0+580.0 ~ 0+613.5 R/S 0+514.5 ~ 0+531.0 R/S Lope # II	29-Dec-2014	26-Jan-2015	28 Days	623	30.48	15.24	182.4	63527	348.3	345.3	280	OK
				629	30.48			64139	351.6			
				601	30.48			61284	336.0			
Concrete Class "A-3" Rigid Pavement	19-Jan-2015	26-Jan-2015	7 Days	456	30.48	15.24	182.4	46498	254.9	262.4	210	OK
				481	30.48			49048	268.9			
				471	30.48			48028	263.3			
Concrete Class "A-3" Pile #	21-Jan-2015	28-Jan-2015	7 Days	434	30.48	15.24	182.4	44255	242.6	249.3	210	OK
				456	30.48			46498	254.9			
				448	30.48			45683	250.5			
Concrete Class "A-3" Rigid Pavement	21-Jan-2015	28-Jan-2015	7 Days	469	30.48	15.24	182.4	47824	262.2	245.8	210	OK
				397	30.48			40482	221.9			
				453	30.48			46192	253.2			

7.9 SUMMARY OF ASPHALTIC BASE COURSE CORE COMPACTION 1ST LAYER

S. No	CORE NO.	DATE	COVERED AREA	STATION	OFFSET FROM C/L	WT. IN AIR(g)	WT. IN WATER(g)	SSD. WT (g)	VOLUME (cc)	DENSITY (g/cc)	LAB.DENSITY (GMB)	ACHIEVED COMPACTION	REQUIRED COMPACTION	REMARKS
1	C-1	5-Jan-2015	21+580 ~ 21680	21+610	1.0m L/S	1345	805	1354	549	2.450	2.517	97.3	97	OK
2	C-2			21+560	5.0m R/S	1405	842	1412	570	2.465	2.517	97.9	97	OK
3	C-3		21+680 ~ 21+720	21+710	3.8m L/S	1296	775	1302.8	527.8	2.455	2.517	97.6	97	OK
1	C-1		22+840 ~ 22+920	22+860	1.2m L/S	1380	825	1390	565	2.442	2.519	97.0	97	OK
2	C-2			22+900	5.8m R/S	1375	822	1384	562	2.447	2.519	97.1	97	OK
3	C-3		22+953 ~ 23+000	22+970	1.0m L/S	1304	783	1315	532	2.451	2.519	97.3	97	OK
1	C-1		27+715 ~ 27+800	27+730	5.0m R/S	1320	790	1335	545	2.422	2.505	96.7	97	OK
2	C-2			27+790	1.1m L/S	1305	780	1316	536	2.435	2.505	97.2	97	OK
3	C-3		28+410 ~ 28+480	28+450	2.5m R/S	1350	809	1362	553	2.441	2.505	97.5	97	OK
1	C-1		30+475 ~ 30+575	30+500	1.6m L/S	1298	783	1314	531	2.444	2.508	97.5	97	OK
2	C-2			30+550	5.3m R/S	1320	793	1332	539	2.449	2.508	97.6	97	OK
3	C-3		30+575 ~ 30+650	30+600	2.0m L/S	1401	843	1413	570	2.458	2.508	98.0	97	OK
4	C-4			30+640	5.5m R/S	1335	801	1346	545	2.450	2.508	97.7	97	OK
1	C-1		31+950 ~ 32+050	31+970	1.4m L/S	1275	764	1282	518	2.461	2.531	97.2	97	OK
2	C-2			32+025	5.0m R/S	1280	768	1288	520	2.462	2.531	97.3	97	OK
3	C-3		32+050 ~ 32+150	32+075	0.5m L/S	1365	820	1375	555	2.459	2.531	97.2	97	OK
4	C-4			32+130	5.6m R/S	1270	760	1277	517	2.456	2.531	97.1	97	OK
5	C-5		32+150 ~ 32+175	32+165	1.0m L/S	1336	810	1349	539	2.479	2.531	97.9	97	OK

SUMMARY OF ASPHALTIC BASE COURSE CORE COMPACTION 1ST LAYER

S. No	CORE NO.	DATE	COVERED AREA	STATION	OFFSET FROM C/L	WT. IN AIR(g)	WT. IN WATER(g)	SSD. WT (g)	VOLUME (cc)	DENSITY (g/cc)	LAB.DENSITY (GMB)	ACHIEVED COMPACTION	REQUIRED COMPACTION	REMARKS	
1	C-1	12-Jan-2015	33+220 ~ 33+320	33+230	5.3m L/S	1121.5	679.8	1131	451.2	2.486	2.518	98.7	97	OK	
2	C-2			33+275	2.5m R/S	696.6	420.8	701	280.2	2.486	2.518	98.7	97	OK	
3	C-3		33+320 ~ 33+420	33+335	5.5m L/S	1118.2	668.4	1124	455.6	2.454	2.518	97.5	97	OK	
4	C-4			33+380	1.0m R/S	1592.2	946.6	1597.3	650.7	2.447	2.518	97.2	97	OK	
1	C-1		33+220 ~ 33+120	33+210	1.2m R/S	1354.4	806.7	1361.7	555	2.440	2.511	97.2	97	OK	
2	C-2			33+150	5.3m L/S	1311.3	796.2	1323.4	527.2	2.487	2.511	99.1	97	OK	
3	C-3		33+120 ~ 33+020	33+075	1.0m R/S	1500.4	900.2	1508.9	608.7	2.465	2.511	98.2	97	OK	
4	C-4			33+025	5.5m L/S	1036.4	616.8	1041.2	424.4	2.442	2.511	97.3	97	OK	
5	C-5		33+020 ~ 32+920	33+980	1.5m R/S	1460.6	874.6	1469	594.4	2.457	2.511	97.9	97	OK	
6	C-6			33+930	4.0m L/S	1319	791.4	1327	535.6	2.463	2.511	98.1	97	OK	
7	C-7		32+920 ~ 32+825	33+880	2.3m R/S	1383	821	1388.4	567.4	2.437	2.511	97.1	97	OK	
8	C-8			33+845	5.7m L/S	1380.8	826.1	1388.2	562.1	2.457	2.511	97.8	97	OK	
1	C-1		14-Jan-2015	33+420 ~ 33+520	33+445	2.1m L/S	1415.4	843.7	1421.7	578	2.449	2.514	97.4	97	OK
2	C-2				33+488	5.7m R/S	1477.7	885.2	1483.9	598.7	2.468	2.514	98.2	97	OK
3	C-3			33+520 ~ 33+600	33+540	1.3m L/S	1404.7	839.2	1410	570.8	2.461	2.514	97.9	97	OK
4	C-4				33+570	5.0m R/S	1467.8	869	1471.1	602.1	2.438	2.514	97.0	97	OK

7.10 SUMMARY OF ASPHALTIC BASE COURSE CORE COMPACTION 2ND LAYER

S. No	CORE NO.	DATE	COVERED AREA	STATION	OFFSET FROM C/L	WT. IN AIR (g)	WT. IN WATER(g)	SSD. WT (g)	VOLUME (cc)	DENSITY (g/cc)	LAB.DENSITY (GMB)	ACHIEVED COMPACTION	REQUIRED COMPACTION	REMARKS
1	C-1	5-Jan-2015	21+580 ~ 21680	21+610	1.0m L/S	1340	802	1347	545	2.459	2.523	97.5	97	OK
2	C-2			21+560	5.0m R/S	1410	842	1416	574	2.456	2.523	97.4	97	OK
3	C-3		21+680 ~ 21+720	21+710	3.8m L/S	1369	819	1377	558	2.453	2.523	97.2	97	OK
1	C-1		22+840 ~ 22+920	22+860	1.2m L/S	1400	845	1414	569	2.460	2.524	97.5	97	OK
2	C-2			22+900	5.8m R/S	1380	829	1391	562	2.456	2.524	97.3	97	OK
3	C-3		22+953 ~ 23+000	22+970	1.0m L/S	1320	801	1334	533	2.477	2.524	98.1	97	OK
1	C-1		27+715 ~ 27+800	27+730	5.0m R/S	1320	790	1330	540	2.444	2.505	97.6	97	OK
2	C-2			27+790	1.1m L/S	1305	780	1314	534	2.444	2.505	97.6	97	OK
3	C-3		28+410 ~ 28+480	28+450	2.5m R/S	1350	809	1359	550	2.455	2.521	97.4	97	OK
1	C-1		30+475 ~ 30+575	30+500	1.6m L/S	1320	798	1334	536	2.463	2.508	98.2	97	OK
2	C-2			30+550	5.3m R/S	1335	805	1348	543	2.459	2.508	98.0	97	OK
3	C-3		30+575 ~ 30+650	30+600	2.0m L/S	1390	842	1406	564	2.465	2.508	98.3	97	OK
4	C-4			30+640	5.5m R/S	1310	792	1325	533	2.458	2.508	98.0	97	OK
1	C-1		31+950 ~ 32+050	31+970	1.4m L/S	1298	778	1306	528	2.458	2.531	97.1	97	OK
2	C-2			32+025	5.0m R/S	1335	799	1342	543	2.459	2.531	97.1	97	OK
3	C-3		32+050 ~ 32+150	32+075	0.5m L/S	1370	825	1381	556	2.464	2.531	97.4	97	OK
4	C-4			32+130	5.6m R/S	1290	783	1306	523	2.467	2.531	97.5	97	OK
5	C-5		32+150 ~ 32+175	32+165	1.0m L/S	1340	810	1354	544	2.463	2.531	97.3	97	OK

SUMMARY OF ASPHALTIC BASE COURSE CORE COMPACTION 2nd LAYER

S. No	CORE NO.	DATE	COVERED AREA	STATION	OFFSET FROM C/L	WT. IN AIR (g)	WT. IN WATER(g)	SSD. WT (g)	VOLUME (cc)	DENSITY (g/cc)	LAB.DENSITY (GMB)	ACHIEVED COMPACTION	REQUIRED COMPACTION	REMARKS
1	C-1	12-Jan-2015	33+220 ~ 33+120	33+210	1.2m R/S	1401.3	835.9	1405.2	569.3	2.461	2.511	98.0	97	OK
2	C-2			33+150	5.3m L/S	1251	751.3	1256.2	504.9	2.478	2.511	98.7	97	OK
3	C-3		33+120 ~ 33+020	33+075	1.0m R/S	1483.3	879.9	1486.4	606.5	2.446	2.511	97.4	97	OK
4	C-4			33+025	5.5m L/S	1446	860.3	1450.6	590.3	2.450	2.511	97.6	97	OK
5	C-5		33+020 ~ 32+920	33+980	1.5m R/S	1050	624	1053.1	429.1	2.447	2.511	97.5	97	OK
6	C-6			33+930	4.0m L/S	1282.3	764.8	1286.9	522.1	2.456	2.511	97.8	97	OK
7	C-7		32+920 ~ 32+825	33+880	2.3m R/S	1176.6	705.5	1179.1	473.6	2.484	2.511	98.9	97	OK
8	C-8			33+845	5.7m L/S	1303.5	780.1	1309.2	529.1	2.464	2.511	98.1	97	OK
1	C-1	14-Jan-2015	33+220 ~ 33+320	33+235	2.5m L/S	1530.2	911.2	1538.7	627.5	2.439	2.514	97.0	97	OK
2	C-2			33+280	4.0m R/S	1228.3	729.1	1232.1	503	2.442	2.514	97.1	97	OK
3	C-3		33+320 ~ 33+420	33+350	1.0m L/S	1334.1	793.1	1337.3	544.2	2.451	2.514	97.5	97	OK
4	C-4			33+380	4.8m R/S	1270.3	760.6	1275.7	515.1	2.466	2.514	98.1	97	OK
5	C-5		33+420 ~ 33+520	33+445	2.1m L/S	1243.6	743.6	1249.9	506.3	2.456	2.514	97.7	97	OK
6	C-6			33+488	5.7m R/S	1289.8	774.4	1292.7	518.3	2.489	2.514	99.0	97	OK
7	C-7		33+520 ~ 33+600	33+540	1.3m L/S	1355.8	808.6	1362	553.4	2.450	2.514	97.5	97	OK
8	C-8			33+570	5.0m R/S	1109.2	665.1	1112.1	447	2.481	2.514	98.7	97	OK

7.11 SUMMARY OF ASPHALTIC WEARING COURSE CORE COMPACTION

S.No	CORE NO.	Date	COVERED AREA	STATION	OFFSET FROM C/L	WT. IN AIR (g)	WT. IN WATER (g)	SSD WEIGHT (g)	VOLUME (cc)	DENSITY (g/cc)	LAB.DENSITY (GMB)	ACHIEVED COMPACTION	REQUIRED COMPACTION	REMARKS
1	C-1	14-01-15	25+650 ~ 25+750	25+670	1.2m L/S	1108.3	648.9	1112.8	463.9	2.389	2.455	97.3	97	
2	C-2			25+725	2.0m R/S	912.2	537	916	379	2.407	2.455	98.0	97	
3	C-3		25+750 ~ 25+850	25+775	2.5m L/S	920.5	539.2	925.6	386.4	2.382	2.455	97.0	97	
4	C-4			25+815	1.9m R/S	861.7	504	865	361	2.387	2.455	97.2	97	
5	C-5		25+850 ~ 25+950	25+882	4.2m L/S	837.7	493.6	842.4	348.8	2.402	2.455	97.8	97	
6	C-6			25+930	1.5m R/S	860.9	505.5	866.9	361.4	2.382	2.455	97.0	97	
7	C-7		25+950 ~ 26+050	25+990	1.9m L/S	1064.3	620.4	1067	446.6	2.383	2.455	97.1	97	
8	C-8			26+025	5.8m R/S	968.7	572.3	975.6	403.3	2.402	2.455	97.8	97	
9	C-9		26+050 ~ 26+150	26+075	5.6m L/S	882.1	517	887.2	370.2	2.383	2.455	97.1	97	
10	C-10			26+120	2.2m R/S	905	531.5	910.3	378.8	2.389	2.455	97.3	97	
11	C-11		26+150 ~ 26+241	26+170	5.2m L/S	936.8	549.1	942.2	393.1	2.383	2.455	97.1	97	
12	C-12			2+220	3.0m R/S	896.4	524.9	900.9	376.0	2.384	2.455	97.1	97	

SUMMARY OF ASPHALTIC WEARING COURSE CORE COMPACTION (RE-CORING)

S.No	CORE NO.	DATE	COVERED AREA	STATION	OFFSET FROM C/L	WT. IN AIR (g)	WT. IN WATER	SSD WEIGHT	VOLUME (cc)	DENSITY (g/cc)	LAB.DENSITY (GMB)	ACHIEVED COMPACTION	REQUIRED COMPACTION	REMARKS
1	C-1	14-Jan-2015	24+500 ~ 24+600	24+537	2.5m L/S	978.6	579.5	983.4	403.9	2.423	2.477	97.8	97	OK
2	C-2			24+588	5.2m R/S	1012.2	598.4	1016.7	418.3	2.420	2.477	97.7	97	OK
3	C-3		24+600 ~ 24+700	24+634	1.5m L/S	1055.7	623.5	1061	437.5	2.413	2.477	97.4	97	OK
4	C-4			24+672	5.8m R/S	880	524.7	884.2	359.5	2.448	2.477	98.8	97	OK
5	C-5		24+750 ~ 24+800	24+779	5.0m R/S	1098.3	648	1104.7	456.7	2.405	2.477	97.1	97	OK
6	C-6		24+800 ~ 24+900	24+825	2.3m L/S	1026.8	603.5	1031	427.5	2.402	2.477	97.0	97	OK
7	C-7			24+871	5.8m R/S	1040.1	616.3	1045.6	429.3	2.423	2.477	97.8	97	OK
8	C-8		24+900 ~ 24+950	24+928	1.5m L/S	1076.3	638.7	1081.9	443.2	2.428	2.477	98.0	97	OK
1	C-1	28-Jan-2015	21+125 ~ 21+225	21+135	1.5m L/S	950	568	962	394	2.411	2.459	98.1	97	OK
2	C-2			21+210	4.2m R/S	1238	732	1244	512	2.418	2.459	98.3	97	OK
3	C-3		21+225 ~ 21+325	21+245	2.5m L/S	1056	628	1065	437	2.416	2.459	98.3	97	OK
4	C-4			21+290	1.5m R/S	850	505	856	351	2.422	2.459	98.5	97	OK
5	C-5		21+325 ~ 21+425	21+355	5.3m L/S	872	521	885	364	2.396	2.459	97.4	97	OK
6	C-6			21+415	4.8m R/S	1105	656	1116	460	2.402	2.459	97.7	97	OK
7	C-7		21+425 ~ 21+525	21+440	3.0m L/S	964	579	978	399.0	2.416	2.459	98.3	97	OK
8	C-8			21+500	5.6m R/S	1072	630	1076	446	2.404	2.459	97.7	97	OK
9	C-9		21+525 ~ 21+625	21+535	2.0m L/S	882	528	892	364	2.423	2.459	98.5	97	OK
10	C-10			21+615	5.1m R/S	967	571	976	405	2.388	2.459	97.1	97	OK
11	C-11		21+625 ~ 21+725	21+650	3.0m L/S	855	506	859	353	2.422	2.459	98.5	97	OK
12	C-12			21+695	4.5m R/S	1115	655	1122	467.0	2.388	2.459	97.1	97	OK
13	C-13		21+725 ~ 21+825	21+765	1.2m R/S	900	536	907	371	2.426	2.459	98.7	97	OK
14	C-14			21+805	5.3m L/S	1178	697	1187	490.0	2.404	2.464	97.6	97	OK
15	C-15		21+825 ~ 21+925	21+870	2.0m R/S	982	578	989	411	2.389	2.464	97.0	97	OK
16	C-16			21+900	4.9m L/S	1048	617	1053	436	2.404	2.464	97.6	97	OK
17	C-17		21+925 ~ 22+025	21+960	1.8m R/S	1073	631	1077	446	2.406	2.464	97.6	97	OK
18	C-18			21+995	4.8m L/S	1226	722	1233	511	2.399	2.464	97.4	97	OK
19	C-19		22+025 ~ 22+075	22+050	3.1m R/S	1199	710	1204	494.0	2.427	2.464	98.5	97	OK

7.12 SUMMARY OF CORE THICKNESS OF ASPHALTIC BASE COURSE 1ST LAYER

S.No	CORE NO.	TESTING DATE	COVER AREA	STATION	OFF SET FROM C/L	CORES THICKNESS (cm)				Average Thickness (cm)	Required Thickness (cm)	REMARKS	
						1	2	3	4				
1	T-1	5-Jan-2015	21+580 ~ 21680	21+610	5.4m L/S	16.1	15.8	16.0	16.0	16.0	16.0	OK	
2	T-2			21+560	1.4m R/S	15.8	15.4	16.0	15.6	15.7	16.0	OK	
3	T-3		21+680 ~ 21+720	21+710	2.4m L/S	15.6	15.8	15.4	15.9	15.7	16.0	OK	
1	T-1		22+840 ~ 22+920	22+860	5.5m L/S	8.1	8.2	8.2	8.1	8.2	8.0	OK	
2	T-2			22+900	0.9m R/S	7.8	8.0	8.0	7.8	7.9	8.0	OK	
3	T-3		22+953 ~ 23+000	22+970	5.4m L/S	7.9	8.0	7.9	7.8	7.9	8.0	OK	
1	T-1		27+715 ~ 27+800	27+730	0.5m R/S	8.0	8.2	8.1	7.9	8.1	8.0	OK	
2	T-2			27+790	4.8m L/S	8.1	8.2	8.0	8.0	8.1	8.0	OK	
3	T-3		28+410 ~ 28+480	28+450	2.0m R/S	7.9	8.1	8.1	8.0	8.0	8.0	OK	
1	T-1		30+475 ~ 30+575	30+500	4.9m L/S	8.2	8.0	7.9	8.1	8.1	8.0	OK	
2	T-2			30+550	1.8m R/S	8.2	8.2	8.1	8.3	8.2	8.0	OK	
3	T-3			30+575 ~ 30+650	30+600	4.6m L/S	8.3	8.4	8.2	8.1	8.3	8.0	OK
4	T-4				30+640	1.0m R/S	7.9	8.0	8.1	7.9	8.0	8.0	OK
1	T-1		31+950 ~ 32+050	31+970	1.4m L/S	8.2	8.0	8.1	7.9	8.1	8.0	Ok	
2	T-2			32+025	5.0m R/S	8.4	8.1	8.2	8.3	8.3	8.0	OK	
3	T-3		32+050 ~ 32+150	32+075	0.5m L/S	7.9	8.1	8.0	8.2	8.1	8.0	Ok	
4	T-4	32+130		5.6m R/S	7.8	8.1	8.2	8.0	8.0	8.0	Ok		
5	T-5	32+150 ~ 32+175	32+165	1.0m L/S	8.1	8.2	8.0	8.1	8.1	8.0	OK		
1	T-1	12-Jan-2015	33+220 ~ 33+320	33+230	2.0m L/S	8.2	8.5	7.9	8.4	8.3	8.0	OK	
2	T-2			33+275	6.0m R/S	4.8	5.2	5.1	4.7	5.0	8.0	OK	
3	T-3		33+320 ~ 33+420	33+335	1.5m L/S	7.7	7.6	8.1	7.8	7.8	8.0	OK	
4	T-4			33+380	4.0m R/S	9.9	10.5	10.2	10.4	10.3	8.0	OK	
1	T-1		33+220 ~ 33+120	33+210	4.5m R/S	16.2	16.7	16.9	16.5	16.6	16.0	OK	
2	T-2			33+150	3.2m L/S	16.0	16.3	16.4	15.9	16.2	16.0	OK	
3	T-3		33+120 ~ 33+020	33+075	4.0m R/S	15.7	16.3	16.4	16.0	16.1	16.0	OK	
4	T-4			33+025	2.5m L/S	15.5	15.8	15.9	15.5	15.7	16.0	OK	
5	T-5	33+020 ~ 32+920	33+980	4.8m R/S	16.0	15.6	15.9	15.6	15.8	16.0	OK		
6	T-6		33+930	2.1m L/S	16.2	15.9	15.8	16.1	16.0	16.0	OK		
7	T-7	32+920 ~ 32+825	33+880	5.0m R/S	16.4	15.9	16.4	16.7	16.4	16.0	Ok		
8	T-8		33+845	2.4m L/S	15.7	16.2	16.2	16.1	16.1	16.0	OK		
1	T-1	14-Jan-2015	33+420 ~ 33+520	33+445	5.2m L/S	8.3	7.6	8.4	8.3	8.2	8.0	OK	
2	T-2			33+488	3.2m R/S	8.8	8.3	8.4	8.4	8.5	8.0	OK	
3	T-3		33+520 ~ 33+600	33+540	4.9m L/S	7.8	7.6	8.1	8.3	8.0	8.0	OK	
4	T-4			33+570	2.2m R/S	8.1	8.4	8.4	8.1	8.3	8.0	OK	

7.13 SUMMARY OF CORE THICKNESS OF ASPHALTIC BASE COURSE 2nd LAYER

S.No	CORE NO.	DATE	COVER AREA	STATION	OFF SET FROM C/L	CORES THICKNESS (cm)				Average Thickness (cm)	Required Thickness (cm)	REMARKS	
						1	2	3	4				
1	T-1	5-Jan-2015	21+580 ~ 21680	21+610	5.4m L/S	16.1	15.8	16.0	16.0	16.0	16.0	OK	
2	T-2			21+560	1.4m R/S	15.8	15.4	16.0	15.6	15.7	16.0	OK	
3	T-3		21+680 ~ 21+720	21+710	2.4m L/S	15.6	15.8	15.4	15.9	15.7	16.0	OK	
1	T-1		22+840 ~ 22+920	22+860	5.5m L/S	8.0	8.3	8.1	8.1	8.1	8.0	OK	
2	T-2			22+900	0.9m R/S	8.1	8.2	8.3	8.2	8.2	8.0	OK	
3	T-3		22+953 ~ 23+000	22+970	5.4m L/S	8.0	8.1	7.9	8.0	8.0	8.0	OK	
1	T-1		27+715 ~ 27+800	27+730	0.5m R/S	8.4	8.3	8.2	8.1	8.3	8.0	OK	
2	T-2			27+790	4.8m L/S	8.2	8.1	8.2	8.1	8.2	8.0	Ok	
3	T-3		28+410 ~ 28+480	28+450	2.0m R/S	8.0	7.9	8.2	8.1	8.1	8.0	Ok	
1	T-1		30+475 ~ 30+575	30+500	4.9m L/S	7.9	7.8	7.8	8.1	7.9	8.0	OK	
2	T-2			30+550	1.8m R/S	8.0	8.0	8.1	8.0	8.0	8.0	OK	
3	T-3		30+575 ~ 30+650	30+600	4.6m L/S	8.1	8.0	8.1	8.1	8.1	8.0	OK	
4	T-4			30+640	1.0m R/S	8.1	7.9	8.0	8.0	8.0	8.0	Ok	
1	T-1		31+950 ~ 32+050	31+970	1.4m L/S	8.2	8.0	8.1	7.9	8.1	8.0	OK	
2	T-2			32+025	5.0m R/S	8.4	8.1	8.2	8.3	8.3	8.0	OK	
3	T-3		32+050 ~ 32+150	32+075	0.5m L/S	7.9	8.1	8.0	8.2	8.1	8.0	OK	
4	T-4			32+130	5.6m R/S	7.8	8.1	8.2	8.0	8.0	8.0	OK	
5	T-5		32+150 ~ 32+175	32+165	1.0m L/S	8.1	8.2	8.0	8.1	8.1	8.0	OK	
1	T-1		12-Jan-2015	33+220 ~ 33+120	33+210	4.5m R/S	16.2	16.7	16.9	16.5	16.6	16.0	OK
2	T-2				33+150	3.2m L/S	16.0	16.3	16.4	15.9	16.2	16.0	OK
3	T-3	33+120 ~ 33+020		33+075	4.0m R/S	15.7	16.3	16.4	16.0	16.1	16.0	OK	
4	T-4			33+025	2.5m L/S	15.5	15.8	15.9	15.5	15.7	16.0	OK	
5	T-5	33+020 ~ 32+920		33+980	4.8m R/S	16.0	15.6	15.9	15.6	15.8	16.0	OK	
6	T-6			33+930	2.1m L/S	16.2	15.9	15.8	16.1	16.0	16.0	OK	
7	T-7	32+920 ~ 32+825		33+880	5.0m R/S	16.4	15.9	16.4	16.7	16.4	16.0	OK	
8	T-8			33+845	2.4m L/S	15.7	16.2	16.2	16.1	16.1	16.0	OK	
1	T-1	14-Jan-2015	33+220 ~ 33+320	33+235	4.2m L/S	8.4	8.1	8.0	8.1	8.2	8.0	OK	
2	T-2			33+280	2.7m R/S	16.3	16.5	16.1	16.0	16.2	16.0	OK	
3	T-3		33+320 ~ 33+420	33+350	3.9m L/S	8.2	8.4	8.4	8.2	8.3	8.0	OK	
4	T-4			33+380	1.4m R/S	7.7	8.2	8.1	8.1	8.0	8.0	OK	
5	T-5		33+420 ~ 33+520	33+445	5.2m L/S	8.0	8.5	8.3	8.3	8.3	8.0	OK	
6	T-6			33+488	3.2m R/S	8.3	8.6	8.2	8.2	8.3	8.0	OK	
7	T-7		33+520 ~ 33+600	33+540	4.9m L/S	7.9	7.8	8.3	8.2	8.1	8.0	OK	
8	T-8			33+570	2.2m R/S	8.5	8.2	8.6	8.6	8.5	8.0	OK	

7.14 SUMMARY OF CORE THICKNESS OF ASPHALTIC WEARING COURSE

S.No	CORE NO.	Date	COVER AREA	STATION	OFF SET FROM C/L	CORES THICKNESS (cm)				Average Thickness (cm)	Required Thickness (cm)	REMARKS
						1	2	3	4			
1	T-1	14-Jan-2015	25+650 ~ 25+750	25+670	4.5m L/S	6.4	6.2	6.3	6.2	6.3	6.0	OK
2	T-2			25+725	6.0m R/S	5.9	5.8	6.1	6.2	6.0	6.0	OK
3	T-3		25+750 ~ 25+850	25+775	5.8m L/S	6.0	6.2	6.1	6.1	6.1	6.0	OK
4	T-4			25+815	5.5m R/S	6.0	5.8	5.9	6	5.9	6.0	OK
5	T-5		25+850 ~ 25+950	25+882	3.3m L/S	5.7	5.6	5.8	5.9	5.8	6.0	OK
6	T-6			25+930	5.5m R/S	6.2	5.9	6.0	5.9	6.0	6.0	OK
7	T-7		25+950 ~ 26+050	25+990	6.0m L/S	6.0	6.0	6.1	5.8	6.0	6.0	OK
8	T-8			26+025	3.0m R/S	6.5	6.3	6.5	6.3	6.4	6.0	OK
9	T-9		26+050 ~ 26+150	26+075	1.7m L/S	5.8	6.1	5.8	6.2	6.0	6.0	OK
10	T-10			26+120	4.6m R/S	6.1	6.2	6	6	6.1	6.0	OK
11	T-11		26+150 ~ 26+241	26+170	3.0m L/S	6.2	5.8	5.9	5.9	6.0	6.0	OK
12	T-12			2+220	5.0m R/S	6.3	6.4	6.1	6.1	6.2	6.0	OK
1	T-1	28-Jan-2015	21+125 ~ 21+225	21+135	4.8m L/S	6.2	6.1	6.0	6.0	6.1	6.0	OK
2	T-2			21+210	2.0m R/S	5.8	5.9	6.0	5.7	5.9	6.0	OK
3	T-3		21+225 ~ 21+325	21+245	5.3m L/S	5.8	5.9	6.0	6.0	5.9	6.0	OK
4	T-4			21+290	2.0m R/S	5.8	5.8	5.7	5.9	5.8	6.0	OK
5	T-5		21+325 ~ 21+425	21+355	5.5m L/S	6.2	6.1	6.2	6.0	6.1	6.0	OK
6	T-6			21+415	2.5m R/S	5.7	5.8	5.9	5.8	5.8	6.0	OK
7	T-7		21+425 ~ 21+525	21+440	4.8m L/S	6.6	6.5	6.4	6.6	6.5	6.0	OK
8	T-8			21+500	1.2m R/S	6.2	6.1	6.0	6.1	6.1	6.0	OK
9	T-9		21+525 ~ 21+625	21+535	5.6m L/S	6.2	6.3	6.2	6.1	6.2	6.0	OK
10	T-10			21+615	1.7m R/S	5.8	5.9	5.8	5.7	5.8	6.0	OK
11	T-11		21+625 ~ 21+725	21+650	4.8m L/S	6.2	6.0	6.0	6.1	6.1	6.0	OK
12	T-12			21+695	3.0m R/S	6.9	6.8	6.8	6.8	6.8	6.0	OK
13	T-13		21+725 ~ 21+825	21+765	4.0m R/S	6.0	6.0	6.0	6	6.0	6.0	OK
14	T-14			21+805	4.9m L/S	6.6	6.5	6.5	6.6	6.6	6.0	OK
15	T-15		21+825 ~ 21+925	21+870	3.3m R/S	6.2	6.1	6.2	6.1	6.2	6.0	OK
16	T-16			21+900	4.8m L/S	6.2	6.1	6.2	6.1	6.2	6.0	OK
17	T-17		21+925 ~ 22+025	21+960	2.8m R/S	6.9	6.8	6.8	6.8	6.8	6.0	OK
18	T-18			21+995	5.2m L/S	7.0	6.8	6.8	6.8	6.9	6.0	OK
19	T-19		22+025 ~ 22+075	22+050	1.6m R/S	6.5	6.4	6.3	6.2	6.4	6.0	OK

ENVIRONMENTAL COMPLIANCE MONITORING

Environmental Compliance Officer: Shabir Ahmad Khan

Field Monitor (Social): Jamil Khan

Road Section under Construction:

- Section – I (0+000 to KM; 9+000)
- Section – II (KM: 9+000 to 14+000)
- Section – III (KM: 14+000 to 19+000 & Loop-I)
- Section – IV (KM: 19+000 to 21+100, KM: 22+400 to KM; 24+000 & Loop-II)
- Section – V (KM; 21+100 to KM: 22+400 & KM: 24+000 to 29+000)
- Section – VI (KM: 29+000 to 33+00)
- Section – VII (KM: 33+000 to KM: 37+000)
- Section – VIII (KM: 37+000 to KM: 41+000)
- Section – IX (KM: 41+000 to KM: 43+465 & Loop-III)

Persons Consulted at Site:

1. Mr. Mian Tilal, Site Engineer, FWO
2. Mr. Azam Khan, Site Surveyor, FWO
3. Mr. Farooq Khan, Site Sub-Engineer, FWO
4. Mr. Inayatullah, Site Surveyor, FWO
5. Mr. Mohammad Ali, Site Inspector, NESPAK
6. Mr. Tariq Massod, Site Commander, FWO

Work Status:

- Work in progress.
- Work Stopped
- Work Completed

Quality of Environment Compliance:

- Good
- Satisfactory
- Not Satisfactory

Issues at site:

- Proper traffic sign boards were found missing along the road.
- Road blocking at different places from KM 28 to KM 43 are often, even some time in many hours, due to construction activities or mismanagement.

- Though water sprinkled on road to control dust pollution but the problem still remains at few work places along the road.
- FWO staff was found hesitant while sharing their EHS plan with AGES Socio-Environmental team at FWO camp.
- Record concerning workers illness and treatment was found missing both at FWO camp and work places at site.
- While working at sites workers were found without using PPE's (Personal protective equipments).
- Risk assessment report not present at work site.
- Work sites are devoid of the EHS arrangements, such as first aid boxes and ambulance services are still not provided to the workers at site.
- Though promised in the previous meeting with FWO at their camp, the EHS inspectors or Environmental Specialist still not deployed at site.
- Extraction/removal of newly planted plants along the road, due to careless and no further work in this respect.

Environmental Monitoring Check List for the Site

S. #	Activity	Mitigation Measures	Monitoring indicators	Observations
Construction Phase				
1	Use of heavy equipments	<ul style="list-style-type: none"> a. Set protocols for vehicle Maintenance. b. Check fuel level, deliveries, and use. c. Check pipes and joints for leaks. d. Tight & check generators cables and fuel lines. e. Prevent over filling of main storage and vehicles tanks. f. Avoid parking of heavy equipments under trees to prevent soil compaction and damage to the roots of the trees. 	Soil contaminations, stability and erosion	During site visit, It was observed that heavy and light machinery was maintained properly at FWO camp. Also noticing that all the vehicles, machinery and equipments are used and parked properly at work places. Therefore, there was no damage to the trees roots prevented the soil compaction at site.
2	Flood protection	<ul style="list-style-type: none"> a. Culverts construction to control flood damages and provide safety to embankments. b. Take measures to protect road along the river side. c. Construction of retaining walls. d. Provide new causeways for smooth flow to flood water during rainy seasons. 	Road protection and Safety	To protect road from flood water and provide a smooth flow to sewage disposal, safety measures, such as construction of side drains, culverts and retaining walls in sections IV, V, VI & VII are in progress. (Please refer to photos # 07, 12 and 14).
3	Handling and transportation of hazardous waste	<ul style="list-style-type: none"> a. Prevent dumping of hazardous materials near villages and water bodies. b. Burn waste oil which is not reusable. c. Recyclable material should not contain heavy metals that are inflammable, investigate and use less toxic alternative products. d. Prohibit use of waste oil for cooking purposes. 	Soil Contamination and Safety	During site visit, there was found no hazardous material along the road site; therefore, no action as such is further required.

<p>4</p>	<p>Handling of solid Waste</p>	<ul style="list-style-type: none"> a. Site manager should feel responsible for collection and disposal of solid waste. b. Provide Training to the site personnel in waste management and its handling procedures. c. Separation of chemical waste for special handling. d. Record the amount of waste, generated recycled and reused. e. Proper storage and well managed site practices will minimize the damage to potentially contaminate construction materials. f. Store general refuse in enclosed bins to control its further mixing with construction materials. g. Engage a reputable waste collection firm for waste collection and removal of general refuse at site. 	<p>Toxicity, Soil Contamination and Pollution</p>	<p>During site visit, it was observed that the segregation plan for the handling and disposal of solid waste was missing at site area. FWO staff was strictly suggested to comply with solid waste management plan to prevent the contamination of construction materials. So far the arrangements, to handle the construction materials at main storage were satisfactory, but found mostly insufficient at work places. It was advised to the FWO subcontractors to observe the protocols compliance about the health and labor safety issues. Further, also advised to the subcontractors to provide bins for the handling of solid waste, especially during retaining walls and culverts construction at sites (Please refer to photos # 07, 12 and 14).</p>
<p>5</p>	<p>Construction crews, camps & Accommodation</p>	<ul style="list-style-type: none"> a. Check quality and maintenance of accommodations for site crew. b. Avoid cutting of vegetation as much as possible. c. Provide sanitation, such as pit latrines to the site crew on temporary basis. d. Use of local labor. e. Screening test for potentially affected HIV and tuberculosis viruses' site crews. f. Provide education and enforced guidelines to local inhabitants. g. Set guidelines to prohibit poaching and plants collection. h. Provide an adequate and good quality of food to the work force. i. Drinking water should meet WHO standards, and clearly demarcated from 	<p>Ground water pollution and conflicts with locals.</p>	<p>During site visit, it was found that the FWO camp was renovated and properly maintained in order to provide basic facilities to the construction crew, such as washrooms, kitchen, TV lounge, café shop, dining hall etc. (Please refer to photo # 02) The quality of food provided to the FWO labor force was good and found sufficiently enough. Other facilities, such as health hygiene were also found satisfactory.</p>

		<p>water for construction purposes.</p> <p>j. Prohibit domestic pets / livestock to enter into the site.</p>		
6	<p>Material handling, use, and storage</p>	<p>a. Securing of construction materials will ensure a safe passage between destinations for transport system. Loaded vehicles shall be properly covered to prevent spillage, and contractor should be held responsible to clear them off.</p> <p>b. Transfer and deposit construction materials directly to the site for use. Avoid stockpiles to create less visual impacts. Leftover of any foreign materials at site should clearly be off, and the project area should also be properly reinstated affected by any construction activity.</p> <p>c. Avoid spray of any bitumen products on vegetation outside the road area.</p> <p>d. Avoid concrete mixing on ground.</p> <p>e. Use of wet gravel at site.</p> <p>f. Avoid direct fall of drainage water into sensitive areas.</p> <p>g. Control all runoff from batching plants so that cement do not contaminate water, and if any, it should be collected, stored and disposed of at a designated site.</p> <p>h. Collect and deliver empty cement bags to recycling plants.</p> <p>i. Storage of contaminated water should not allow to over flow, and will be protected from rain water.</p>	<p>Dust pollution</p>	<p>FWO labor force was suggested to provide safe passages to dumpers for carrying construction materials from main storage to work places. Also suggested that the construction material should properly be loaded and secured to prevent the material spillage and minimize the stockpiles visual impacts. The compliance of the proper placement and handling of building materials was also missing, especially during retaining walls and culvert construction at site (Please refer to photos # 07, 12 and 14)</p>

7	<p>Materials extraction, Quarrying & logging</p>	<ul style="list-style-type: none"> a. Identify environment friendly materials within budget. b. Use materials from local road cuts first, only if it produces an aggregate of materials for stabilizing surfaces and filling embankments. c. Project area should be properly restored and treated with erosion control measures once materials removed at site. d. Develop logging, quarrying and borrowing plans, and also take into account its accumulative effects. e. Take photos at site before the start of excavation, so that restoration can match the original site as much as possible. Also make sure that site quarries and gravel pits are invisible to travelers on road. f. Adhere and monitor the plans to minimize side impacts due to extraction activities. Try to modify the plans as much as required. g. Restore and sustain the site area once the extraction activity is over. h. Install drainage structures to direct the water away from pits. i. Implement safety protocols to minimize the risks occurring due to collapse of quarry walls, rocks falling, debris, or any other accidental falls from clefts. j. Discuss the use of retaining walls pits and water ponds with local community as an option used for crops, grazing of cattle, or similar use. 	<p>Change in landscape & Creation of water ponds.</p>	<p>During the site visits, there was a general negligence about the compliance of environmental issues at site. FWO construction crew was hesitant to share their health and safety plans with AGES Socio-environmental monitoring team. Therefore, strictly advised to the FWO labor force to comply with the H& S protocols to avoid risk during construction activities, if any at site. Moreover, A proper maintenance at quarry areas is also required once the producing of construction materials accomplished (Please refer to photos # 03, 05, 08 & 09).</p>
8	<p>Site clearing & leveling</p>	<ul style="list-style-type: none"> a. Minimize disturbance to local flora during construction activities as much as possible. b. Minimize the amount of clearance of small areas for active work once at a time. c. Avoid use of herbicides. Any such use should 	<p>Loss of vegetation, soil erosion, stability, water pollution, health of workers</p>	<p>During the site visit, no impact on vegetation was found as most of the project area is rugged, and of hilly nature. However, excavation activities for the road widening continued at the shoulders of the existing road (Please refer to photo # 17).</p>

		<p>follow health and safety procedures to protect people and the environment.</p> <ul style="list-style-type: none"> d. Limit for herbicides use should specified by the manufacturers. e. Clear the project area without destroying plants and turfs, and take measures to preserve and replant where ever is possible. f. Remove Vegetation during dry periods only, and preserve soil top surface if required re spreading. While if it is removed during wet periods, don't disturb soil just before the actual start of construction. g. Use of erosion control measures such as hay bales. h. Replant and re –vegetate the local flora on immediate basis once removed the equipment from site. 	<p>and local community.</p>	<p>Moreover, plantation on emergency basis along Peshawar-Torkham road is also needed. In this regard, some plants species in the Environment Management Plan have been identified for plantation in the project area.</p> <p>It was strongly recommended to the FWO contractor to coordinate with forest department in this regard immediately. There was no use of herbicides in the project area. Appropriate measures were taken for the conservation of soil in the project area due to the rocky and hilly nature of soil consisting of sand, silt and gravels.</p>
<p>9</p>	<p>Excavation , cutting , and filling</p>	<ul style="list-style-type: none"> a. Cover Piles with plastic sheets, prevent run off with hay bales, or use similar measures. b. Fencing around excavation activities. c. Investigate shallow over excavation and alternatives. d. Construction crews and supervisors must aware of the historic burials, socio-cultural and religious objects. And, if recovered should properly be guarded to avoid any destruction. e. Ensure that excavation is accompanied by a well-engineered drainage system. f. Don't fill the flow line of a watershed. In arid areas, even the occasional rains may create a strong flow of water in channels. g. Adopt best engineering practices, for example, don't use the soil alone, first lay a bed of rock and then gravel it. h. Balance cuts and fills, wherever is possible to minimize the earth work movement. 	<p>Soil erosion, stability and surface water contamination</p>	<p>The excavation process for the widening of road, culverts and retaining walls construction continues in section IV, V, VI, VII, and VIII at site respectively. While the protocols compliance about labor safety and environmental issues is generally missing in the above sections.</p> <p>Loop III (KM:39+500 to 39+550), (KM: 0+100 to KM: 0+125), (KM: 0+775 to KM: 1+100), (KM: 1+200 to KM: 1+250) Rocks excavation for the road widening continued, while there was no compliance regarding the labor safety & personal protective measures at above reaches(Please refer to photos # 05 & 17).</p> <p>During site visit, it was also recommended to the subcontractors to cover and fence all the culverts construction properly at work places. A proper drainage system for the smooth flow of water fall during excavations is also needed at site. Sprinkling of water and proper dumping of</p>

		<ul style="list-style-type: none"> i. Water sprinkling to avoid dust solution on road temporarily used for traffic. 		excavated materials are also required to avoid dust pollution at site (Please refer to photos # 13, 17& 18).
10	Traffic Control and management	<ul style="list-style-type: none"> a. Need for practical efforts in order to control and accommodate traffic along the road as far as much as possible. b. Provide sign boards in order to give directions, and guide drivers about diversions. c. Provide proper traffic management training to the contractor staff at the site before the construction activities take place. d. Avoid as much as possible temporary by passes during land clearing at site. e. Maximum speed limit at project site for heavy machinery should not exceed 20Km/hr. f. Try to keep the road partly closed to provide all time maximum safe passage to the vehicles/pedestrians g. Try to conduct work when traffic volume is low h. Organize a proper schedule in order to deliver sand trucks at the time of less traffic. 	Health and Safety of workers & local population	<p>Traffic flows with diversions along the existing road. Despite the arrangements for diversions, proper traffic signboards for traffic control management are missing at site. Especially, the protection sign boards missing at quarry areas have put the lives of people and traffic management further at risk in the project area. Therefore, FWO contractors are strongly suggested:</p> <p>Install temporary traffic sign boards with reflective materials to maximize drivers' visibility at night.</p> <p>Construction of speed breakers to specify maximum speed limit for heavy machinery at site. The maximum speed limit should not exceed 20Km/hr.</p> <p>Road blocking is common at different places from KM 28 to KM 43, due to road construction or mismanagement.</p>
11	Blasting	<ul style="list-style-type: none"> a. Allow minimum blasting as much as possible at site. b. Take Safety measures to provide protection to workers and locals from injuries due to falling of rocks and avalanches. c. Provide protective equipments to the workforce on individual basis. 	Noise pollution and occupational safety	<p>Currently, rock excavation for road widening in sections IV, VII, VIII & IX is in progress. The protocols compliance of the labor safety during excavations activities is generally missing at site. Therefore, FWO is advised to provide PPEs (personal protective equipments) to workers to ensure labor safety at site (Please refer to photos # 04, 05, 10, 11, 12 and 17).</p>
12	Sources of building materials	<ul style="list-style-type: none"> a. Develop logging, quarrying and borrowing plans to provide cumulative effects of environmental compliance at site. b. Adherence to plans and monitoring over impacts of extraction activities at site. Try to modify these plans as much as required. 	Damages to the aquatic, terrestrial ecosystems erosion, siltation, and	<p>Health & Safety plan and monitoring of other safety measures during extraction activities were found missing at quarry sites. Therefore, FWO should require developing logging, quarrying and borrowing plans for the compliance of labor safety and environmental issues at site.</p>

		<ul style="list-style-type: none"> c. Fill in quarries and pits before the abandoning of the construction activity. d. Control runoff into pits. 	vector-borne diseases	
13	Dust Pollution	<ul style="list-style-type: none"> a. Water spraying. b. Covering of Trucks with tarpaulins. 	Nuisance to the public, undermining the quality of air and water due to contamination	During this site visit, water was sprayed regularly on road, while the problem of dust pollution still continues at some places (Please refer to photos # 13 and 18).
14	Borrow Areas	These impacts of borrow areas can be reversed if a diligent restoration process is placed by the contractor as well as approved by the Highway Division.	Rugged landscape, its interference with the local aesthetics; posing of danger to livestock and local community children; holding of stagnant water and taking up of agricultural land.	No activities about borrow areas were seen at site. However, borrow areas still to be identified, if required.
15	Damages to the existing infrastructure	<ul style="list-style-type: none"> a. Locate different locations of existing infrastructure on both sides of road. b. Avoid damages to locations of water pipes and electricity pylons etc. 	Facilities to the locals	During site visit, it was advised to the FWO authorities to take care of the infrastructure facilities and avoid damages to water pipes and electricity pylons etc. especially during culverts construction at site. It was also suggested to the workers to inform FWO/ NESPAK / WAPDA/PTCL departments before the excavation activities started at site.
16	Health & Safety of the workers	<ul style="list-style-type: none"> a. Prepare and implement a Health and Safety Plan at site. b. Exclude public from site area. 	Workers and public at risk due to accidents at	During the site visit, it was observed that the compliance about the Health and Safety protocols was generally followed at camp, while neglected at

		<ul style="list-style-type: none"> c. Ensure that workers use Personal Protective Equipments. d. Provide Health & Safety Training (including HIV/AIDS transmission process) to all personnel; e. Follow documented procedures for all activities at site; f. Keep reports and records of accidents. 	site	<p>work site. In this regard, FWO officials were advised to observe the protocols compliance concerning the labor safety, preparing of H&S plan and keeping records about accidents, illness and treatments of workers etc. Moreover, training of H&S protocols compliance to the workers is also very important to ensure labor safety and good health at site. Also, health facilities, such as ambulance services, first aid etc. should be provided to the workers at site. PPEs (Personal protective equipments) for the safety of labor were also missing at project site (Please refer to photos # 04, 05, 10, 11, 12 and 17). All the construction activities, such as retaining walls, culverts construction and building materials extracted at quarry areas should comply the above mentioned guidelines at site (Please refer photos # 03, 05 and 09).</p>
17	Local Employment	Contractor should hire at least 50% of local workforce at project site.	Economic benefits to the local people	Majority of the FWO workforce are regular employees. Local labor is also hired when needed at site.
18	Others concerns like Resettlement etc.	<ul style="list-style-type: none"> a. Resettlement, if any. b. Provide pedestrians and road access to local people. c. Avoid social disturbances over Infrastructure damages, such as telephone cables, sewerage, water supply schemes etc. d. Avoid Social Conflicts with locals. 	Resettlement & Social management	<p>Due to the road construction on the existing corridor, the relocation or resettlement issues in the project area are generally missing. The infrastructure facilities, such as sewerage, telephone cables and electricity lines etc. should properly be cared, protected, and remain undisturbed at project site. During site visit, some social conflicts with locals were also noticed over the issues of damages to the existing infrastructure at site.</p>
Operation and Maintenance of newly constructed road				
19	Road	a. Monitor and Maintain cleanliness of drainage	Road	

	maintenance	<p>structures, channels, ditches and culverts.</p> <p>b. Fill mud and pot holes with a good quality of gravels, and also remove trees and wooden limbs lying down on road.</p> <p>c. Use water from retention ponds and basins settled for road maintenance.</p>	Maintenance	The construction work in sections –I, II & III of the Peshawar-Torkham road has mostly been completed
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20	Use and maintenance of equipments	<p>Install concrete pads, drains and oil/water for vehicles maintenance.</p> <p>Areas separation, where equipments, vehicles are maintained and fueled on regular basis.</p>	Water and soil pollution	No compliance was shown at site. The required protocol may properly be addressed.
21	Accidents due to hazardous materials	<p>a. In case of a spill, concerned department should be consulted on emergency basis.</p> <p>b. Need for establishing of an administrative department which will administer and monitor the road accidents occurring due to hazardous substances</p>	Cases of accidents	No compliance was shown at site. The required protocol may properly be addressed.
22	Vehicles management	<p>a. Prohibit vehicles to travel on road which promote noise pollution.</p> <p>b. Proper education about noise and air pollution to locals, and how to keep the road clean.</p>	Visual inspection	No compliance was shown at site. The required protocol may properly be addressed.
23	Other Concerns like road side plantation etc	<p>a. Road side plantation, as per budget allocation in the environmental cost</p>	Visual inspection	The plantation has been done two months before by FWO at KM 8 to 10 and thereafter no plantation work has been seen at any site, even the previous plantation has also been removed due to careless.

APPENDICES

9.1 IPC'S SUMMARY TABLE

S.No	SECTION	PIL AMOUNT (US\$)	AMOUNT CERTIFIED (US\$)	REMAINING AMOUNT (US\$)	CERTIFIED (%)
1	I	9,978,081	9,787,524	190,557	98.09
2	II	9,383,484	8,376,636	1,006,848	89.27
3	III	9,512,705	8,031,134	1,481,571	84.43
4	02 Bridges & 02 MCC	3,668,533	2,753,830	914,703	75.07
TOTAL		32,542,803	28,949,124	3,593,679	88.96

9.2 CONTRACTOR IPC's (SECTION-I)

IPC No:	TOTAL PIL AMOUNT		AMOUNT CLAIMED		DATE OF SUBMISSION BY CONTRACTOR TO FATA	DATE OF SUBMISSION BY FATA TO USAID	DATE OF CERTIFICATION BY M&E CONSULTANTS	AMOUNT CERTIFIED BY M&E CONSULTANTS	
	US \$	EQUIVALENT PKR	US \$	EQUIVALENT PKR				US \$	EQUIVALENT PKR
1	9,978,081	937,939,614	1,444,442	135,777,548	23-May-13	28-May-13	28-Jun-13	597,641	56,178,279
2			2,494,227	234,453,311	28-Jun-13	02-Jul-13	26-Jul-13	2,494,227	234,457,311
3			2,382,898	223,992,366	26-Jul-13	31-Jul-13	29-Aug-13	2,268,345	213,224,394
4			1,738,259	163,396,356	03-Sep-13	11-Sep-13	25-Sep-13	1,096,902	103,108,788
5			699,562	65,758,791	30-Sep-13	03-Oct-13	23-Oct-13	680,293	63,947,570
6			1,287,568	121,031,406	02-Dec-13	02-Dec-13	17-Dec-13	886,305	83,312,672
7			467,684	43,962,288	26-Dec-13	26-Dec-13	30-Dec-13	19,268	1,811,220
8			1,055,814	99,246,516	04-Mar-13	07-Mar-14	03-Apr-14	168,209	15,811,658
9			1,316,284	123,730,696	12-May-14	14-May-14	30-May-14	1,113,124	104,633,660
10			653,768	61,454,158	16-Dec-14	24-Dec-14	25-Dec-14	463,210	43,541,733
UP-TO DATE CERTIFIED AMOUNT								9,787,524	920,027,285

Conversion Rate 1 US \$ = 94 PKR

9.3 CONTRACTOR IPC's (SECTION-II)

	TOTAL PIL AMOUNT		AMOUNT CLAIMED		DATE OF SUBMISSION BY CONTRACTOR TO FATA	DATE OF SUBMISSION BY FATA TO USAID	DATE OF CERTIFICATION BY M&E CONSULTANTS	AMOUNT CERTIFIED BY M&E CONSULTANTS	
	US \$	EQUIVALENT PKR	US \$	EQUIVALENT PKR				US \$	EQUIVALENT PKR
1	9,383,484	985,265,820	1,159,388	121,735,792	26-Dec-13	26-Dec-13	31-Dec-13	661,911	69,500,655
2			1,791,571	188,114,955	18-Mar-14	20-Mar-14	03-Apr-14	666,175	69,948,380
3			2,541,722	266,880,810	12-May-14	14-May-14	30-May-14	2,541,722	266,880,797
4			2,347,005	246,435,540	23-Jul-14	23-Jul-14	09-Aug-14	2,347,005	246,435,540
5			791,415	83,098,567	25-Sep-14	29-Sep-14	30-Sep-14	791,415	83,098,567
6			1,231,421	129,299,241	13-Nov-14	14-Nov-14	21-Nov-14	1,057,893	111,078,752
7			1,317,363	138,323,131	16-Dec-14	24-Dec-14	25-Dec-14	310,515	32,604,069
UP-TO DATE CERTIFIED AMOUNT								8,376,636	879,546,760

Conversion Rate 1 US \$ = 105 PKR

9.4 CONTRACTOR IPC's (SECTION-III)

IPC No:	TOTAL PIL AMOUNT		AMOUNT CLAIMED		DATE OF SUBMISSION BY CONTRACTOR TO FATA	DATE OF SUBMISSION BY FATA TO USAID	DATE OF CERTIFICATION BY M&E CONSULTANTS	AMOUNT CERTIFIED BY M&E CONSULTANTS	
	US \$	EQUIVALENT PKR	US \$	EQUIVALENT PKR				US \$	EQUIVALENT PKR
1	9,512,705	989,321,320	2,203,603	229,174,712	26/12/2013	12-Mar-14	03-Apr-14	727,789	75,690,056
2			3,552,378	369,447,312	12-May-14	14-May-14	30-May-14	3,320,510	345,333,040
3			538,542	56,008,352	23-Jul-14	23-Jul-14	09-Aug-14	306,674	31,894,080
4			2,238,193	232,772,072	25-Sep-14	29-Sep-14	30-Sep-14	2,006,325	208,657,800
5			1,622,701	168,760,925	13-Nov-14	14-Nov-14	21-Nov-14	1,216,964	126,564,256
6			1,934,444	201,182,145	16-Dec-14	24-Dec-14	25-Dec-14	452,872	47,098,688
UP-TO DATE CERTIFIED AMOUNT								8,031,134	835,237,920

Conversion Rate 1 US \$ = 104 PKR

9.5 CONTRACTOR IPC's (02 BRIDGES & 02 MC CULVERTS)

IPC No:	TOTAL PIL AMOUNT		AMOUNT CLAIMED		DATE OF SUBMISSION BY CONTRACTOR TO FATA	DATE OF SUBMISSION BY FATA TO USAID	DATE OF CERTIFICATION BY M&E CONSULTANTS	AMOUNT CERTIFIED BY M&E CONSULTANTS	
	US \$	EQUIVALENT PKR	US \$	EQUIVALENT PKR				US \$	EQUIVALENT PKR
1	3,668,533	348,510,635	2,157,972	205,007,331	11-Aug-14	20-Aug-14	30-Sep-14	1,276,624	121,279,253
2			1,550,949	147,340,126	13-Nov-14	14-Nov-14	21-Nov-14	1,167,202	110,884,236
3			1,224,707	116,347,196	16-Dec-14	24-Dec-14	25-Dec-14	310,004	29,450,337
UP-TO DATE CERTIFIED AMOUNT								2,753,830	261,613,826

Conversion Rate 1 US \$ = 95 PKR

9.6 RECORD OF COORDINATION MEETINGS / JOINT SITE VISITS

Date	Meeting	Participants	Venue
09 Jan'15	Co-ordination Meeting	M&E Consultants, FWO, NESPAK	CRE office, Jamrud, Khyber Agency
20 Jan'15	Co-ordination Meeting	M&E Consultants, FWO, NESPAK	CRE office, Jamrud, Khyber Agency
27 Jan'15	Site Visit	M&E Consultants Senior Staff	Sec- I To IV - PTR
29 Jan'15	Site Visit	USAID & M&E Consultants	Sec- I To VII - PTR

9.7 MOBILIZATION OF M&E STAFF

The following members of the M&E Team were mobilized as various activities of the project progressed. Other staff members will be mobilized according to demand of work load.

PROJECT MANAGER OFFICE – STAFF DEPLOYMENT

S. No	Name	Designation	
1	Aziz-ul-Haq	Project Manager	ROAD COMPONENT
2	Nasir-ul-Mulk	Project Advisor	
3	Abdul Hakim	Senior Technical Specialist	
4	Shabir Ahmad Khan	Environmental Compliance Officer	
5	Muhammad Khurshid	Mid-Level Specialist	
6	Amjad Saeed	Mid-Level Specialist	
7	TBN	Reporting Specialist	
8	Saqib Maqbool	Junior Engineer	
9	Arshad Khan	CAD Operator	
10	Sohail Anjum	Senior Surveyor	
11	Abdul Waheed	Manager Admin/Finance	
12	Amir Habib	IT Officer	
13	Muhammad Bilal	Assistant Accountant	
14	TBN	Computer Operator	
15	Jamil Khan	Field Monitor Social	OTHER CONSTRUCTION COMPONENTS
16	Anwar Dad	Quantity Surveyor	
17	Waqar ul Mulk	Junior Architect	
18	TBN	Senior Surveyor	
19	Muhammad Waqas	Survey Assistant	
20	Muhammad Ayaz	Survey Assistant	
21	TBN	Survey Assistant	
22	Sana Ullah	Accountant	
23	Ihsan Ali	Assistant Office Administrator	
24	TBN	Computer Operator	

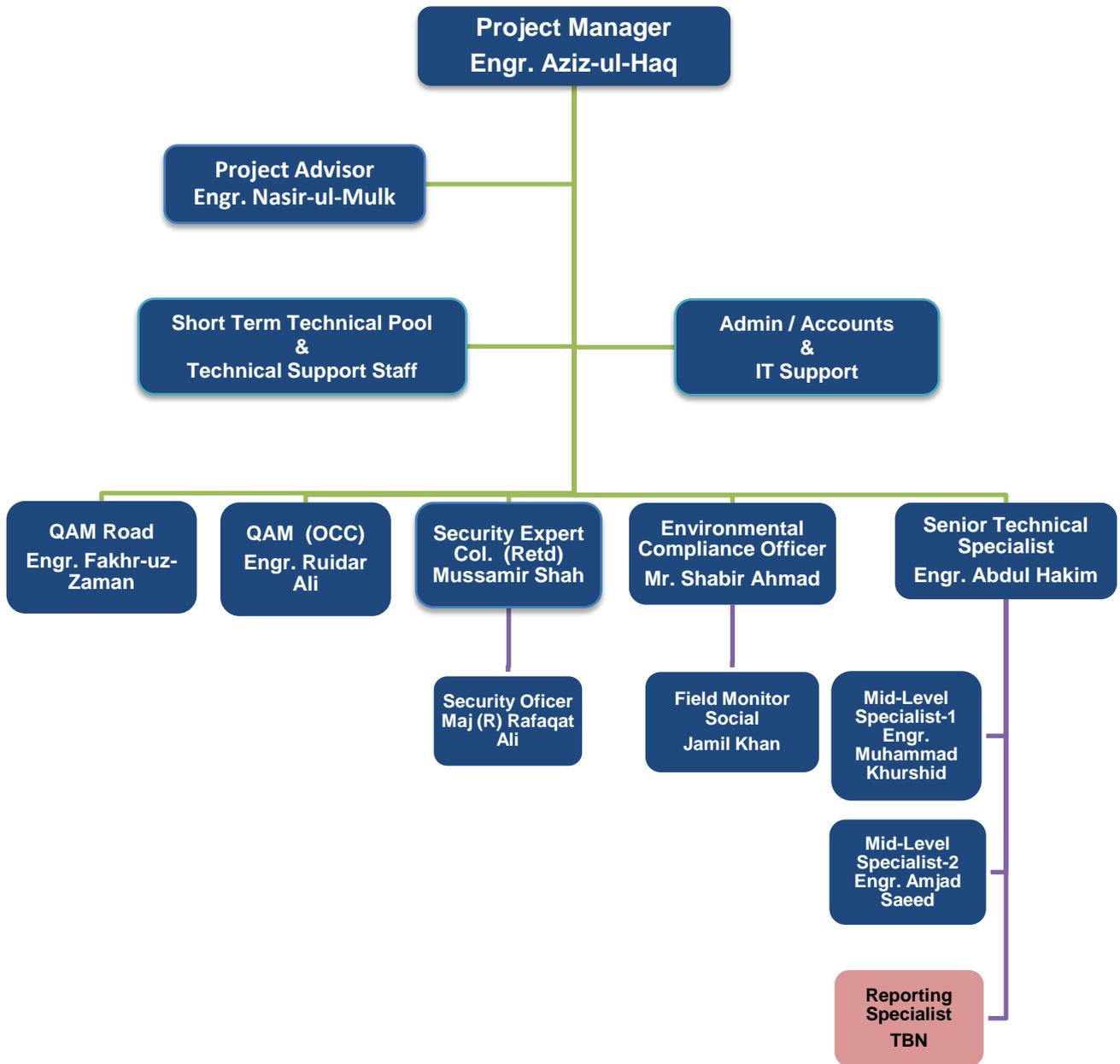
QAM OFFICE (ROAD COMPONENT)

S. No.	Name	Designation
1	Fakhr-uz-Zaman	Quality Assurance Manager (Road)
2	Col. (Rtd) Zafar Alam Khan	M&E Specialist Road
3	Muhammad Ilyas	Field Manager M&E
4	Muhammad Naeem	Field Manager M&E
5	Muhammad Ibrar <small>Resigned 15-1-2015</small>	Office Engineer
6	Rasheed Khan	Field Monitor Road
7	Muhammad Sher	Field Monitor Road
8	Ghulam Qasim Khan	Field Monitor Road
9	Atif-ul-Haq	Field Monitor Road
10	Tariq Ibrahim Khan	Quantity Surveyor
11	Asad Khan	CAD Operator
12	Major (Rtd.) Razaqat Ali	Security Officer
13	Ihsan Ullah	Accountant
14	Hafiz-ur-Rehman	Assistant Accountant
15	Nasir Alam	Admin Officer
16	Umar Shah	Assistant Office Admin
17	Hamid Ali	Computer Operator

LABORATORY STAFF (ROAD COMPONENT)

S. No.	Name	Designation
1	Gul Zada	Material Engineer
2	Amjad Ali Khan	Senior Lab. Technician
3	Khan Umar	Senior Lab. Technician
4	Shakeel Akbar	Lab. Technician
5	Noor Ali Jan	Lab. Technician
6	Izhar-ul-Haq	Assistant Lab. Technician
7	Babar Naeem	Assistant Lab. Technician

ORGANIZATION CHART FOR CMEP OFFICE, PESHAWAR



LEGEND:

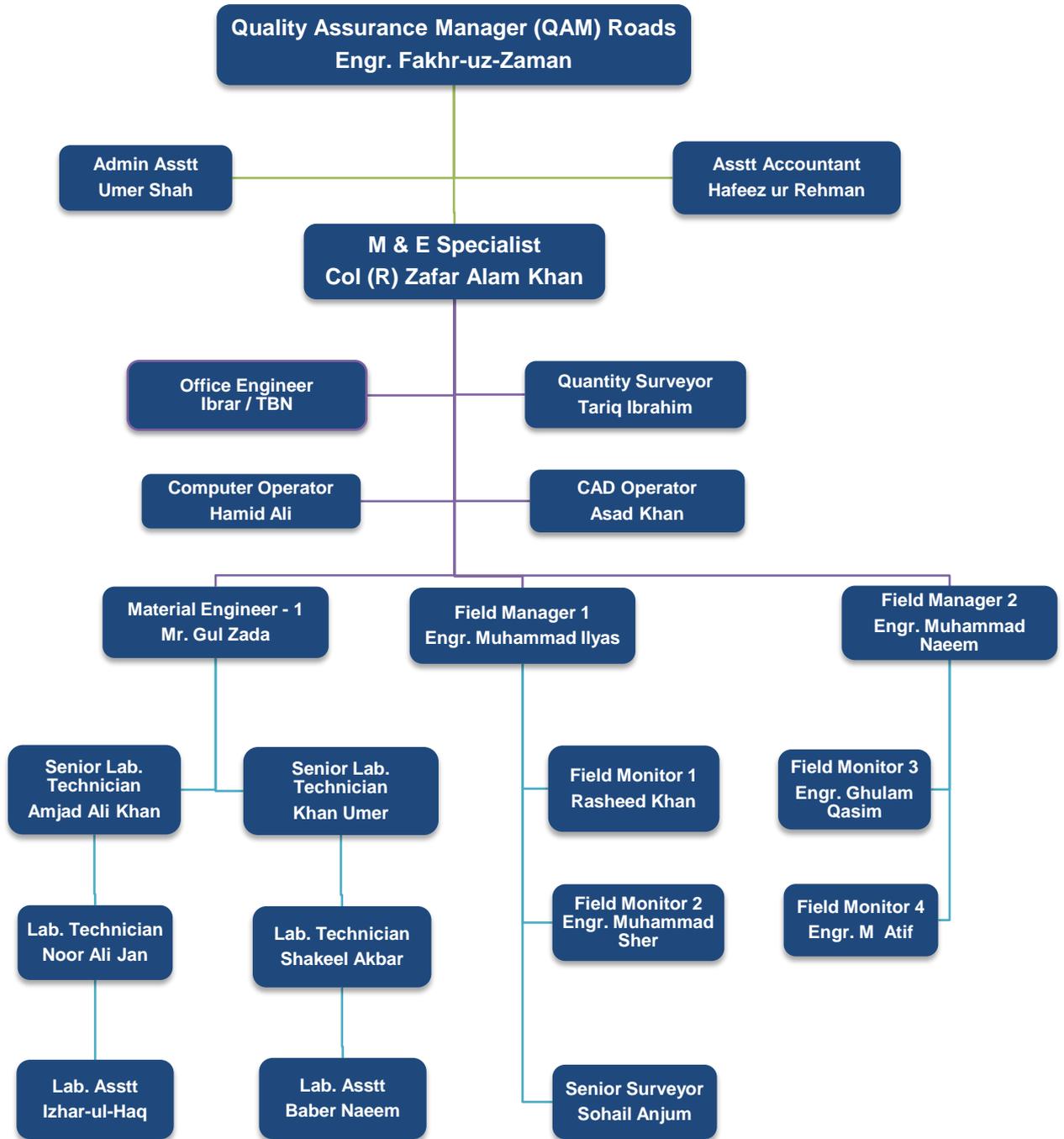


Mobilized



To be mobilized

ORGANIZATION CHART FOR ROAD COMPONENT OF CMEP PROJECT



LEGEND:



Mobilized



To be mobilized with expansion of work

PROJECT PHOTOGRAPHS

PAVEMENTS



Km 21+600~22+090: Compaction of ACWC in progress



KM 23+070~23+525 HW LHS: ACWC laying & compaction in progress



KM 24+025~24+438 HW LHS: ACWC laying & compaction in progress



KM 32+825~33+025 HW LHS: ACBC 1st layer laying & compaction in progress



KM 18+475.8~18+499.10 HW LHS: Rigid pavement concrete casted



KM 0+646.5~0+679.5 HW LHS: Rigid pavement concrete placing & finishing in progress.



KM 18+508~18+522 HW RHS: Concrete placing of rigid pavement & Approach slab is in progress.



KM 26+733.2~26+756 HW RHS: Concrete surface tiny texturing for rigid pavement is in progress



KM 1+100~1+200 FW LOOP-II: Sub base top leveling & grading in progress



KM 27+925~28+000 FW: WBM Base spreading of screened material is in progress

STRUCTURES

BRIDGES



Bridge at KM 9+560 DS: Pedestrian railing completed.



Bridge at KM 18+475: NJ Barrier concrete casted.



Bridge at KM 23+850: NJ Barrier finishing is in progress



Bridge at KM 27+000: Pile boring work in progress.



Bridge at KM 27+250: Concrete placing of Abutment wall (3rd lift) for Abutment-II in progress.

RETAINING WALLS



KM 13+225~13+275 LHS: Breast wall stone masonry in progress



KM 16+925~16+975 LHS: Retaining wall stone masonry in progress



KM 28+125~28+200 RHS: Retaining wall stone masonry in progress



KM 34+000~34+100 RHS: Retaining wall stone masonry in progress

CULVERTS



Culvert at KM 11+190: U/s side gabion work completed



Culvert at KM 31+030: Top slab & NJ Barrier completed



Culvert at KM 31+162: Top slab concrete casted



Culvert at KM 41+517: Structural excavation is in progress

DRAINS



KM 0+475~0+500 RHS LOOP-I: Drain type D3A concrete placing in progress



KM 12+000~12+078 LHS: Drain type D4 concrete placing in progress



KM 24+575~24+625 LHS: RCC Drain wall formwork fixing in progress



KM 24+700~24+800 LHS: RCC Drain formwork fixing for wall is in progress

ROADWAY EXCAVATION



KM 0+600~0+650 RHS LOOP-III: Hill cutting in progress



KM 0+850~1+025 RHS LOOP-III: Hill cutting in progress

USAID REP VISIT



Site visit by Mr.Jalil PM USAID with M& E Consultants To bridge at KM 9+560



Site visit by Mr.Jalil PM USAID with M& E Consultants To bridge at KM 27+000

MISCELLANEOUS



KM 18+930~18+980 LHS: Grouted stone pitching in progress.



KM 11+700~11+900 RHS: Guard Rail installation completed



KM 10+550 RHS: Rear view of security check post building at bhigvari check post



KM 10+550 RHS: Front view of security check post building; Brick masonry in progress.

FIELD / LAB TESTING



KM 33+400: Jointly Coring of ABC



Jointly Testing of AWC at FWO Lab



KM 33+100: Sampling of ABC for Testing



Km 24: Sampling of Aggregate

ENVIRONMENTAL MONITORING



(Photo #1) View of vehicles stand at FWO Camp.



(Photo #2) Inside view of the Dining Hall at FWO camp.



(Photo #3) KM: 16+100 FWO Crush plant near Shagai Fort needs proper placement of construction materials & H& S protocols compliance



(Photo #4) KM: 18+450. During rigid pavement construction labor needs Compliance of safety protocols and labor safeguards



(Photo #5) KM: 18+475 Drilling and blasting for the excavation of construction material & road widening needs safety measures and protection sign boards.



(Photo #6) KM: 20+400 Traffic diversions needs traffic control management and traffic blockade avoidance.



(Photo #7) KM: 24+650 Side drain construction needs safety protocols compliance.



(Photo #8) KM: 24+ 300 View of Generators maintained properly at FWO Crush Plant near quarry area.



(Photo #9) KM: 24+ 300 Quarry area needs H&S protocols compliance and proper placement of construction materials.



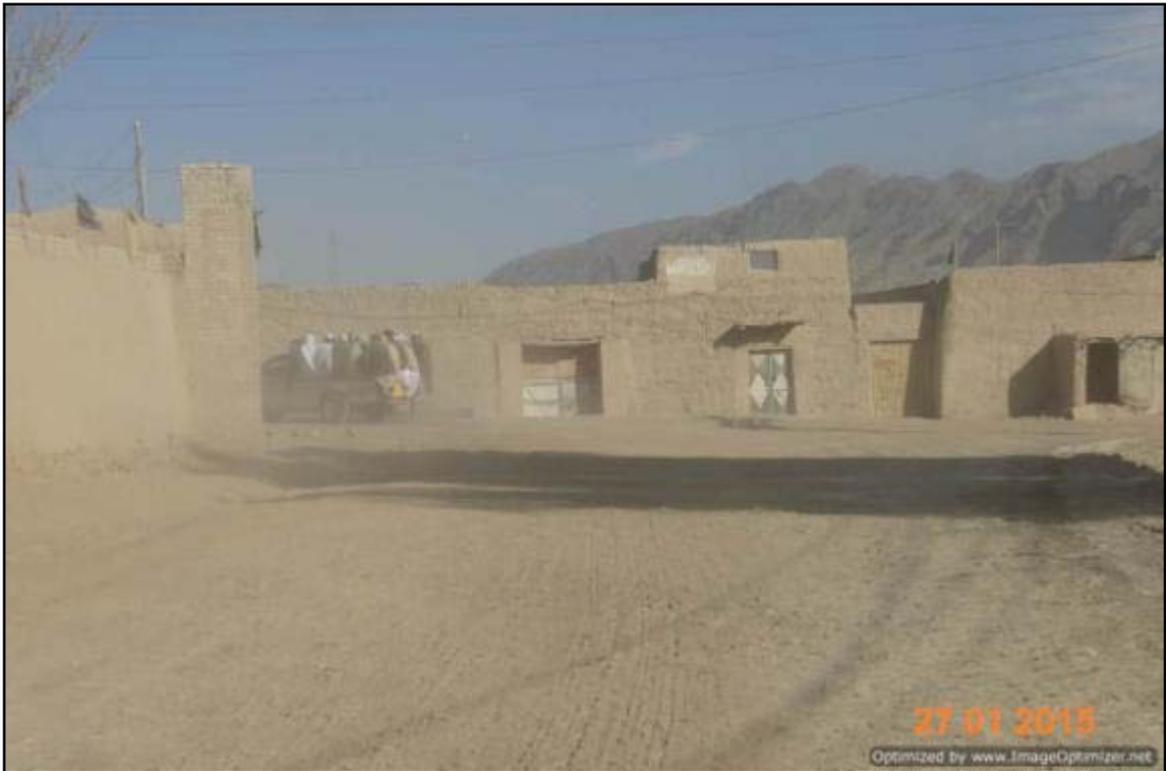
(Photo #10) KM: 27+ 000 Bridge construction needs Health and Safety measures & Labor safeguards.



(Photo #11) KM: 27+ 250 Bridge construction needs Health and Safety measures & labor safeguards.



(Photo #12) KM: 28+150 Retaining wall construction needs health & safety measures & labor safeguards.



(Photo #13) KM: 34+500 Dust pollution needs sprinkling of water.



(Photo #14) KM: 35+750 Require the road maintenance and work place safety during culvert construction to ensure traffic management and avoid traffic blockade



(Photo #15) KM: 35+800 Require the mud removal to avoid traffic blockade due to rain in the project area



(Photo #16) KM: 38+150 Require the road maintenance to avoid traffic blockade due to rain in the project area



(Photo #17) KM: 0+125 LOOP-III; Hill cutting continues, which needs labor safeguards and H&S protocols compliance.



(Photo #18) KM: 40+250 Dust pollution needs sprinkling of water.