



# PAKISTAN

## CONSTRUCTION MONITORING & EVALUATION PROGRAM (Strengthening & Improvement of Peshawar – Torkham Road, Khyber Agency)



### MONTHLY PROGRESS REPORT # 30

SEPTEMBER 2015

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## EXECUTIVE SUMMARY

Both flexible and rigid pavements of 45 km out of \*46 km length have been substantially completed and are open for traffic. The total amount reimbursed to FWO by the end of this month was US\$ 51,494,717 out of US\$ 57,987,073.

PIL wise progress is as follows:

- **PIL 01** (*Section-I km 0+000 – km 9+000*):  
100% completed, and all milestones certified with accrued expenditure of US\$ 9,978,082
- **PIL 02** (*Section-II km 9+000 – km 14+000*):  
100% completed, and all milestones certified with accrued expenditure of US\$ 9,383,484
- **PIL 03** (*Section-III km 14+000 – km 19+000*):  
100% completed, and all milestones certified with accrued expenditure of US\$ 9,512,705
- **PIL 04** (*Bridges at km9+560 & km23+750; Multi cell culverts at km11+190 & km22+925*):  
100% completed, and all milestones certified with accrued expenditure of US\$ 3,668,533
- **PIL 05** (*Section-IV km 19+000 km 21+100 & km 22+400- km 24+000 & Loop # 02; Section-V km 21+100 - 22+400 and 24+000 - 29+000; Section-VI km 29+000- 33+000; Construction of Bridges at km 18+475, km 27+000 & km 27+250; Rehabilitation of Bridges at km 2+200, km 11+560 & km 21+320*):  
Progress achieved during the reporting month was 2.35% attaining total physical progress 92% with accrued expenditure of US\$ 18,951,915 out of US\$ 25,444,269.

Construction activities in road Section-VII (km 33+000 - 37+000); Section-VIII (km 37+000-41+000) and Section-IX (km 41+000 - 43+465) & LOOP-3 were also monitored. These sections are part of an activity agreement; however, PIL for these sections has not yet been constituted.

\*Note: In Contract 46 Km is given however as per site With-out loop = Km 43.465; With Loop = Km 48.479

## **MATTERS REQUIRING ATTENTION**

### **1. Constitution of Remaining PILs**

As per activity agreement, US\$ 87,000,000 has been obligated for the PTR project. However US\$ 57,987,073 consisting of 05 PILs has been approved till reporting month. The Constitution of remaining PILs for US\$ 29,012,927 is under way. Work is monitored by AGES and reported to USAID accordingly

### **2. Incomplete Works at Bhagiari Check Post, Road Side Drains and Backfill**

Workmanship, quality issues and as-built drawings of the Bhagiari Check Post are yet to be addressed in spite of repeated requests to FWO. Moreover, proper inlets and outlet finishing details of the roadside drains have yet to be completed, and none of the Cascades for culverts given in the drawing is site-specific, a case in point is loop 3. Payment of road side drains would be deferred until backfilling on both sides of the drain is completed. There is no site specific design, nor profile drawing for the roadside drain as such in some places the invert level of drain is lower than the level of outfall; in some stretches of the road, the top level of the road side drain wall is higher than the shoulder level thus preventing the surface runoff into the drain. All the above reflects very badly on the professional abilities and performance of FWO/NESPAK.

### **3. Quality of Stone Masonry**

The Quality of Stone masonry is not up to the mark. No effort is being made to improve it.

### **4. Rigid Pavement**

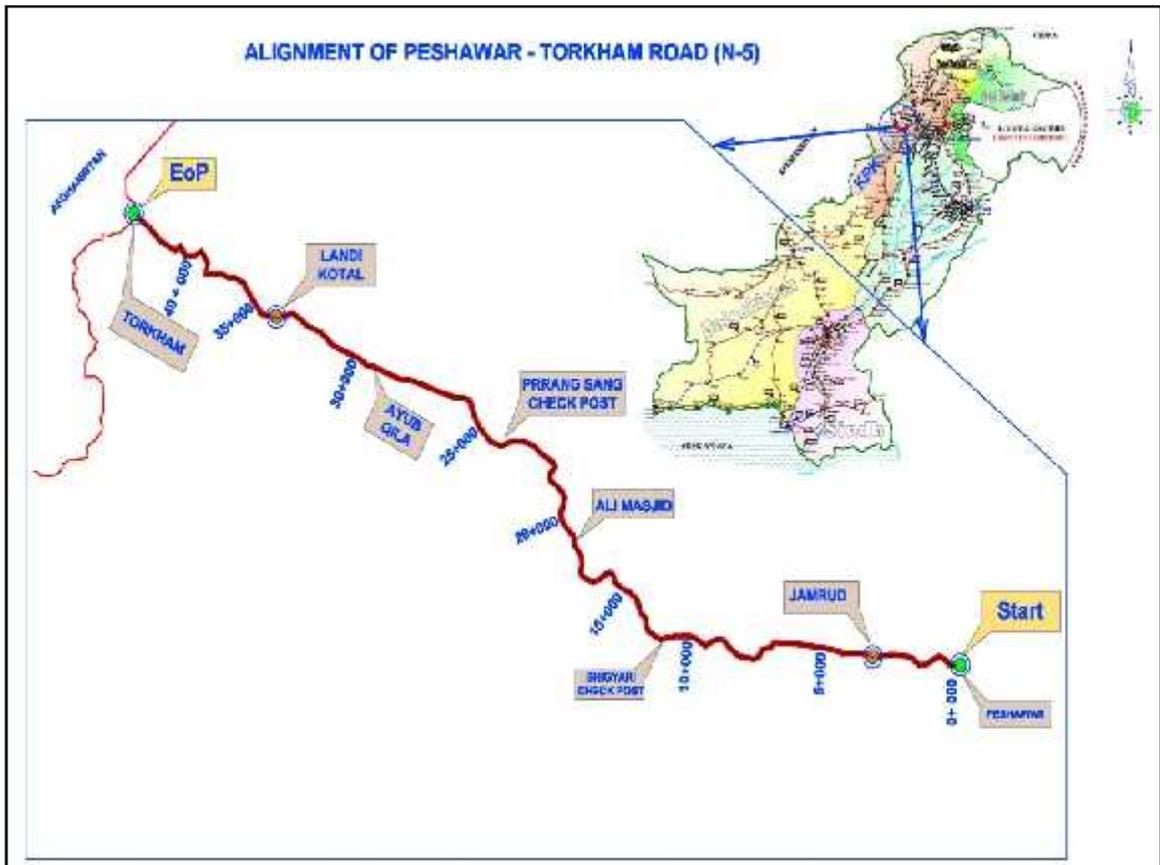
The materials for the joints sealant used in the rigid pavement are not as per specifications. If timely corrective measures are not undertaken this may delay the certifications of the rigid pavement.

### **5. Eid Holidays**

Construction activities were on halt during the last weeks of the reporting month i.e. (September 22 – 30, 2015) due to Eid holidays.

## 1. PROJECT BACKGROUND

The 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. In order to strengthen and improve Peshawar road an Activity Agreement between FATA Secretariat & US Agency of International developments was signed on September 18, 2012 obligating US\$ 67,000 Million for the project.



The project is implemented by FATA Secretariat as a project proponent through Frontier Works Organization (FWO) as EPC (Engineer, Procure, and Construct) Contractor. Being an EPC form of contract, FWO is fully responsible for the 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 by signing agreement on September 30, 2012. Construction activities by the contractor started on October 15, 2012. Initially agreed completion date of December 31, 2014, as per Article 4 of the Activity Agreement No AID-015-DOD has now been extended to December 31, 2015.

## 1.1 Scope of Work

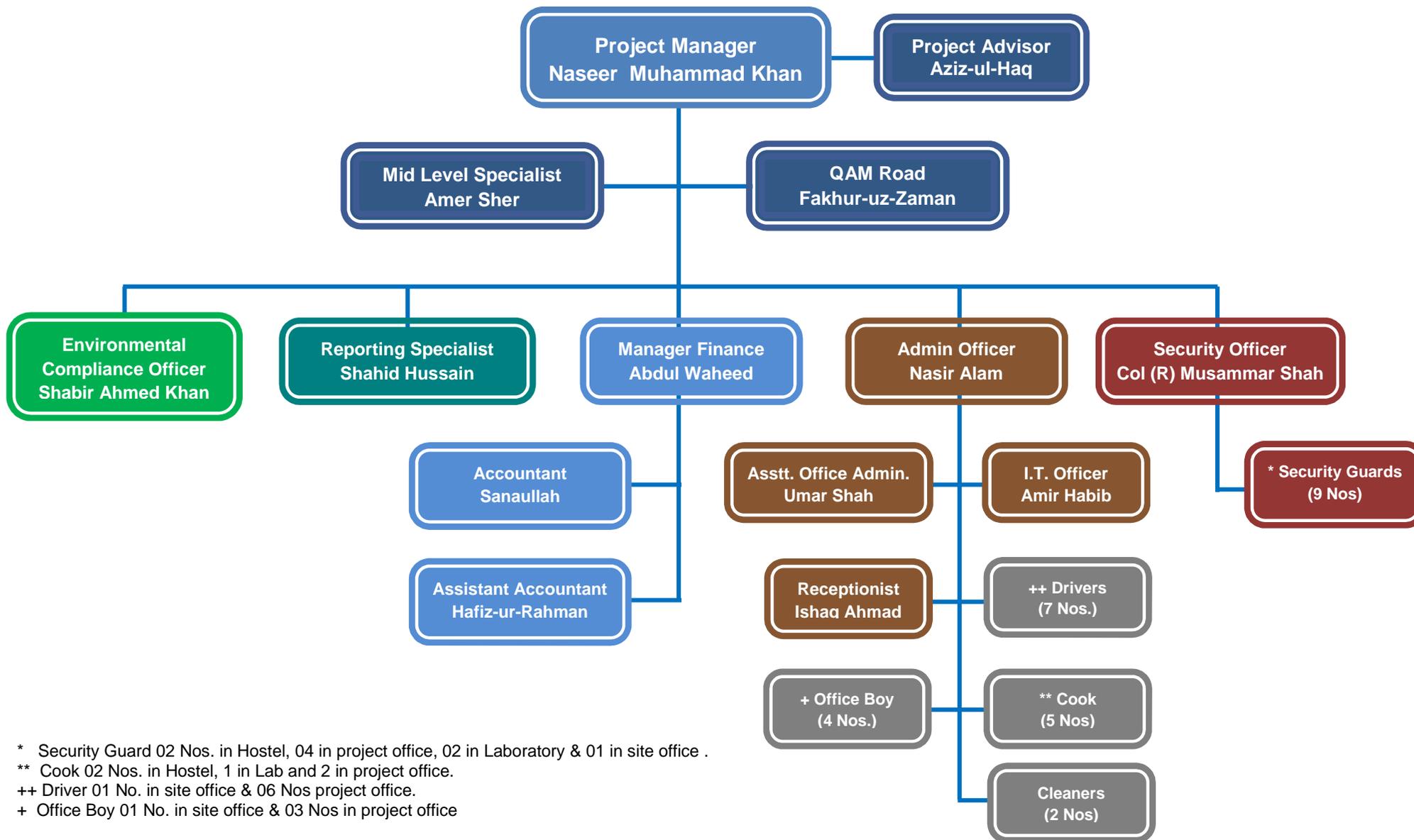
As per activity agreement the 46 km Peshawar – Torkham road has been split into multiple sections for designing / construction purposes. PIL wise detail is given in the table below:

PIL No	Components	Allocated Amount US\$	PIL Signing Date	PIL Expiry Date
PIL 01	a) Section-I (km 0+000 - km 9+000)	9,978,082	Jan 10, 2013	Dec 31, 2014
PIL 02	a) Section-II (km 9+000 - km 14+000)	9,383,484	Dec 18, 2013	Dec 31, 2014
PIL 03	a) Section-III (km 14+000 - km 19+000)	9,512,705	Feb 04, 2014	Dec 31, 2014
PIL 04	a) Construction of Bridge at km 9+560 b) Construction of Bridge at km 23+750 c) Multi cell Culvert at km 11+190 d) Multi cell Culvert km 22+925	3,668,533	Jan 27, 2014	Dec 31, 2014
PIL 05	a) Section-IV (km 19+000 – km 21+100 & km 22+400 – km 24+000 & Loop # 02) b) Section-V (km 21+100 - km 22+400 & km 24+000 – km 29+000) c) Section-VI (km 29+000 – km 33+000) d) Construction of Bridge at km 18+475 e) Construction of Bridge at km 27+000 f) Construction of Bridge at km 27+250 g) Repair of Bridge at km 2+200 h) Repair of Bridge at km 11+560 i) Repair of Bridge at km 21+320	25,444,269	April 06, 2015	Dec 31, 2015
PILs to be Constituted	a) Section-VII (km 33+000 – km 37+000) b) Section-VIII (km 37+000 - km 41+000) c) Section-IX (km 41+000 – km 43+465 & Loop3)	-	-	-

## 1.2 Mobilization of Staff

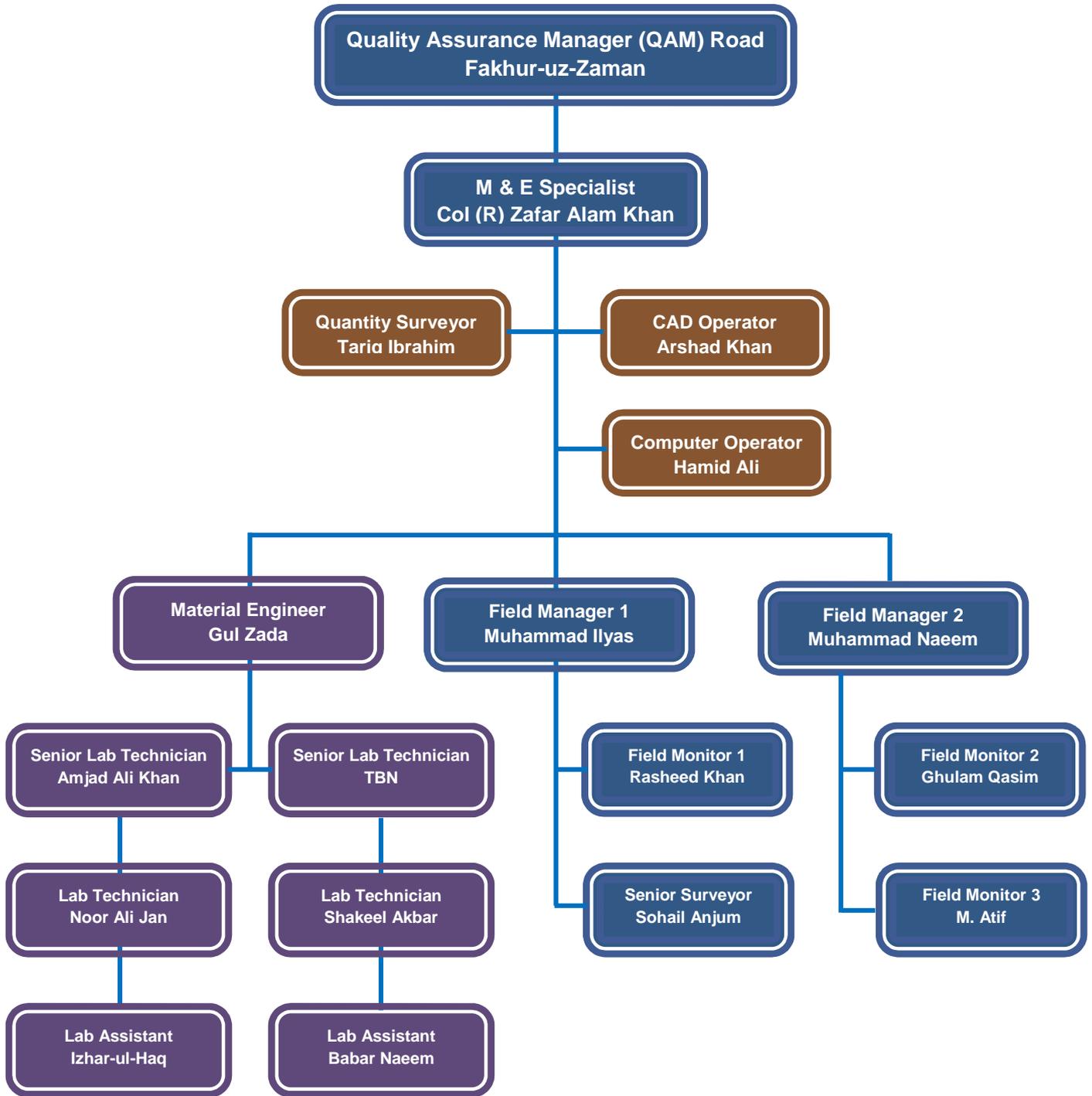
The following members of the team were mobilized as various activities of the project progressed. Other staff members will be mobilized according to the demands of work load.

### Organization Chart for CMEP Office, Peshawar



\* Security Guard 02 Nos. in Hostel, 04 in project office, 02 in Laboratory & 01 in site office .  
 \*\* Cook 02 Nos. in Hostel, 1 in Lab and 2 in project office.  
 ++ Driver 01 No. in site office & 06 Nos project office.  
 + Office Boy 01 No. in site office & 03 Nos in project office

### Organization Chart for Road Component of CMEP Project



## 2. PHYSICAL PROGRESS (PIL 05)

### 2.1 Section-IV (Km 19+000 to Km 21+100 & Km 22+400 to Km 24+000 & Loop # 02)

Sr No.	Section IV (Km 19+000 to Km 21+100 & Km 22+400 to Km 24+000 & Loop # 02)	Total No of Milestones	Till Previous Month		Current Month		Total	
			No of Milestones Achieved	Percentage Completed	No of Milestones Achieved	Percentage Completed	No of Milestones Achieved	Percentage Completed
1	Earth work	10.32	10.32	100%	-	-	10.32	100%
2	Sub base & base course							
a	Granular sub base	10.32	10.32	100%	-	-	10.32	100%
b	Water bound macadam	7.08	7.08	100%	-	-	7.08	100%
c	Asphaltic base course	7.08	7.08	100%	-	-	7.08	100%
3	Surface courses and pavement							
a	Asphaltic concrete for wearing course & allied activities	7.08	7.08	100%	-	-	7.08	100%
b	Rigid pavement (Half Pavement Width)	6.48	6.48	100%	-	-	6.48	100%
4a-i	Retaining wall (RW-2) Total L = 4025 m							
a	Retaining wall : H= 1.00 m ; L= 500m	2.00	2.00	100%	-	-	2.00	100%
b	Retaining wall : H= 1.5 m ; L= 900m	3.00	2.33	78%	0.08	2%	2.41	80%
c	Retaining wall : H= 3.0 m ; L= 50m	1.00	1.00	100%	-	-	1.00	100%
d	Retaining wall : H= 3.5 m ; L= 575m	5.75	3.08	54%	0.41	7%	3.49	61%
e	Retaining wall : H= 4.0 m ; L= 875m	8.75	6.29	72%	0.00	0%	6.29	72%
f	Retaining wall : H= 5.0 m ; L= 125m	1.00	1.00	100%	-	-	1.00	100%
g	Retaining wall : H= 6.0 m ; L= 750m	15.00	14.30	95%	0.00	0%	14.30	95%
h	Retaining wall: H= 8.0 m ; L= 250m	5.00	5.00	100%	-	-	5.00	100%
4a-ii	Breast wall - 325m	3.25	1.96	60%	0.92	28%	2.88	88 %
4b-i	Construction of New culverts-Flexible pavement							
i	1 x 2 x 2.5	1.00	1.00	100%	-	-	1.00	100%
ii	1 x 2 x 2.5 (20 deg skew)	2.00	2.00	100%	-	-	2.00	100%
iii	1 x 2 x 2.5 (20 deg skew) - loop # 2	2.00	2.00	100%	-	-	2.00	100%
4b-ii	Construction of New culverts (replacement of old) -Flexible pavement							
i	2 x 3 x 2.5	1.00	1.00	100%	-	-	1.00	100%
ii	2 x 3 x 2.0	1.00	0.95	95%	0.00	0%	0.95	95%
iii	1 x 2 x 3 - loop # 2	1.00	1.00	100%	-	-	1.00	100%
iv	1 x 2 x 3 (15 deg skew) - loop # 2	1.00	1.00	100%	-	-	1.00	100%
v	1 x 2 x 2.5 - loop # 2	1.00	1.00	100%	-	-	1.00	100%
4b-iii	Construction of new culverts (replacement of old) rigid pavement 1 x 2 x 2.5 - loop # 2, 1 x 2 x 3 loop #2, Service ducts	1.00	1.00	100%	-	-	1.00	100%
5a	Drainage & erosion works ( road side drain)							
i	Drain type D-1 covered (150 m)	1.00	0.24	24%	0.00	0%	0.24	24%
ii	Drain type D-1a uncovered (400 m)	1.00	1.00	100%	-	-	1.00	100%
iii	Drain type D-2 covered (225 m)	1.00	0.77	77%	0.00	0%	0.77	77%
iv	Drain type D-2a uncovered (200 m)	1.00	0.55	55%	0.00	0%	0.55	55%
v	Drain type D-4 (700 m)	2.00	1.67	84%	0.33	16 %	2.00	100%
vi	Drain type D-3 (3511 m)	7.02	5.97	85%	0.66	9 %	6.63	94%
5b	Road protection works : Metal guard rail (50m) , Barrier (200m)	1.00	0.75	75%	0.00	0%	0.75	75%
6	Ancillary works(traffic road signs, pavement marking / studs & km posts)	1.00	0.25	25%	0.15	15%	0.40	40%
7	Diversion	5.16	5.16	100%	-	-	5.16	100%
<b>TOTAL</b>		<b>124.30</b>	<b>112.64</b>	<b>94%</b>	<b>2.55</b>	<b>2%</b>	<b>115.19</b>	<b>96%</b>

## 2.2 Section-V (Km 21+100 - 22+400 & 24+000- 29+000)

Sr No.	Section V ( Km 21+100 - 22+400 & 24+000- 29+000)	No of Milestones	Till Previous Month		Current Month		Total	
			No of Milestones Achieved	Percentage Completed	No of Milestones Achieved	Percentage Completed	No of Milestones Achieved	Percentage Completed
1	Earth work	12.600	12.60	100%	-	-	12.60	100%
2	Sub base & base course				-	-		
a	Granular sub base	12.600	12.60	100%	-	-	12.60	100%
b	Water bound macadam	10.472	10.47	100%	-	-	10.47	100%
c	Asphaltic base course	10.472	10.47	100%	-	-	10.47	100%
3	Surface courses and pavement				-	-		
a	Asphaltic concrete for wearing course & allied activities	10.472	10.47	100%	-	-	10.47	100%
b	Rigid pavement (Half Pavement Width)	2.900	2.90	100%	-	-	2.90	100%
4a-i	Retaining wall (RW-2) Total L = 3375 m							
a	Retaining wall : H= 1.00 m ; L= 925m	3.083	3.08	100%	-	-	3.08	100%
b	Retaining wall : H= 2.5 m ; L= 350m	2.000	2.00	100%	-	-	2.00	100%
c	Retaining wall : H= 3.0 m ; L= 925m	3.083	2.70	88%	0.00	0%	2.70	88%
d	Retaining wall : H= 3.5 m ; L= 300m	2.000	1.83	92%	0.17	8%	2.00	100%
e	Retaining wall : H= 4.0 m ; L= 350m	2.000	2.00	100%	-	-	2.00	100%
f	Retaining wall : H= 4.5 m ; L= 50m	1.000	1.00	100%	-	-	1.00	100%
g	Retaining wall : H= 5.0 m ; L= 50m	1.000	1.00	100%	-	-	1.00	100%
h	Retaining wall: H= 6.0 m ; L= 325m	3.250	3.25	100%	-	-	3.25	100%
i	Retaining wall: H= 7.0 m ; L= 100m	1.000	0.70	70%	0.00	0%	0.70	70%
j	Parapet walls : L = 925 m	5.000	3.00	60%	0.00	0%	3.00	60%
k	Retaining wall (PCC): H= 3.0 m; L= 400m	3.000	0.00	0%	1.85	62%	1.85	62%
4a-ii	Breast wall - 455m				-	-		
a	Breast wall (RW-3) H=2.0 m , L=55 m	1.000	1.00	100%	-	-	1.00	100%
b	Breast wall (RW-3) H=3.0 m , L= 400 m	2.000	1.73	87%	0.27	13%	2.00	100%
4b-i	Construction of New culverts-Flexible pavement				-	-		
i	1 x 2 x 2.5	1.000	1.00	100%	-	-	1.00	100%
ii	1 x 3 x 2.5	1.000	1.00	100%	-	-	1.00	100%
4b-ii	Construction of New culverts (replacement of old) -Flexible pavement				-	-		
i	1x 2 x 2.5 (20 deg skew)	3.000	3.00	100%	-	-	3.00	100%
ii	1 x 3 x 2	2.000	2.00	100%	-	-	2.00	100%
iii	1 x 3 x 2.5	1.000	1.00	100%	-	-	1.00	100%
iv	3 x 3 x 4 (20 deg skew)	1.000	0.00	0%	0.00	0%	0.00	0%
v	2 x 3 x 3 (20 deg skew)	1.000	0.95	95%	0.00	0%	0.95	95%
vi	2 x 3 x 2.5 (45 deg skew)	1.000	1.00	100%	-	-	1.00	100%
vii	3 x 3 x 2.5 (20 deg skew)	1.000	1.00	100%	-	-	1.00	100%
viii	1 x 3 x 4 (25 deg skew)	1.000	1.00	100%	-	-	1.00	100%
ix	Service ducts (17 Nos)	17.000	17.00	100%	-	-	17.00	100%
4b-iii	Construction of causeways L = 234.00 m	1.000	0.55	55%	0.20	20%	0.75	75%
5a	Drainage & erosion works (road side drain)				-	-		
i	Drain type D-1 covered (800 m)	4.000	1.88	47%	0.15	3%	2.03	50%
ii	Drain type D-1a uncovered (1600 m)	4.000	3.88	97%	0.03	1%	3.91	98%
iii	Drain type D-2 covered (1225 m)	3.063	1.25	41%	0.46	15%	1.71	56%
iv	Drain type D-2a uncovered (2240 m)	4.978	4.98	100%	-	-	4.98	100%
v	Drain type D-4 (475 m)	1.000	0.84	84%	0.07	6%	0.91	90%
vi	Drain type D-3 (225 m)	1.000	1.00	100%	-	-	1.00	100%
6	Ancillary works(traffic road signs, pavement marking / studs & km posts)				-	-		
i	Traffic signs / Km Posts	1.000	0.00	0%	0.10	10%	0.10	10%
ii	Pavement Markings / Studs	1.000	0.65	65%	0.10	10%	0.75	75%
7	Diversion	6.300	6.30	100%	-	-	6.30	100%
<b>TOTAL</b>		<b>146.273</b>	<b>133.09</b>	<b>92%</b>	<b>3.39</b>	<b>2%</b>	<b>136.48</b>	<b>94%</b>

## 2.3 Section-VI (Km 29+000 - 33+000)

Sr No	Section VI (Km 29+000 – 33+000)	No of Milestones	Till Previous Month		Current Month		Total	
			No of Milestones Achieved	Percentage Completed	No of Milestones Achieved	Percentage Completed	No of Milestones Achieved	Percentage Completed
1	Earth work	8.000	8.00	100%	-	-	8.00	100%
2	Sub base & base course							
a	Granular sub base	8.000	8.00	100%	-	-	8.00	100%
b	Water bound macadam	6.030	6.03	100%	-	-	6.03	100%
c	Asphaltic base course	6.030	6.03	100%	-	-	6.03	100%
d	Earthen dowel	1.000	0.90	90%	0.10	10%	1.00	100%
3	Surface courses and pavement							
a	Asphaltic concrete for wearing course & allied activities	6.030	6.03	100%	-	-	6.03	100%
b	Rigid pavement (Half Pavement Width)	2.880	2.88	100%	-	-	2.88	100%
4a	Retaining wall (RW-2) Total L = 1175 m				-	-		
a	Retaining wall : H= 2.5 m ; L= 275m	2.750	2.09	76%	0.00	0%	2.09	76%
b	Retaining wall : H= 3.0 m ; L= 450m	4.500	3.47	77%	0.58	13%	4.05	90%
c	Retaining wall : H= 3.5 m ; L= 100m	1.000	0.00	0%	1.00	100%	1.00	100%
d	Retaining wall : H= 4.0 m ; L= 100m	1.000	1.00	100%	-	-	1.00	100%
e	Retaining wall : H= 4.5 m ; L= 250m	2.500	2.50	100%	-	-	2.50	100%
4b-i	Construction of New culverts-Flexible pavement 1 x 2 x 3.5 (40 deg skew)	1.000	1.00	100%	-	-	1.00	100%
4b-ii	Construction of New culverts (replacement of existing) -Flexible pavement							
i	1x 2 x 4.5 (20 deg skew)	1.000	1.00	100%	-	-	1.00	100%
ii	1 x 2 x 3 (25 deg skew)	1.000	1.00	100%	-	-	1.00	100%
iii	2 x 3 x 5 (25 deg skew)	1.000	1.00	100%	-	-	1.00	100%
4b-iii	Construction of New culverts on W&S road							
i	1 x 2 x 2 (14.70 m length)	2.000	0.00	0%	0.00	0%	0.00	0%
ii	1 x 2 x 2 (12.00 m length)	1.000	0.00	0%	0.20	20%	0.20	20%
iii	Service ducts	13.000	13.00	100%	-	-	13.00	100%
4c	Construction of causeways L = 265.00 m	1.000	0.50	50%	0.20	20%	0.70	70%
5a	Drainage & erosion works ( road side drain)							
i	Drain type D-1 covered (625 m)	1.250	0.92	73%	0.05	4%	0.97	77%
ii	Drain type D-1a uncovered (2400 m)	4.800	4.80	100%	-	-	4.80	100%
iii	Drain type D-2 covered (450 m)	1.000	0.59	59%	0.02	2%	0.61	61%
iv	Drain type D-2a uncovered (1225 m)	2.450	2.45	100%	-	-	2.45	100%
v	Drain type D-4 (525 m)	1.000	0.29	29%	0.41	41%	0.70	70%
vi	Drain type D-3 (100 m)	1.000	0.50	50%	0.50	50%	1.00	100%
vii	Drain type D-3 (225 m) W&S Road	1.000	0.00	0%	-	-	0.00	0%
5b	Road Protection works							
i	Stone Pitching (350 m) W&S Road	1.000	0.00	0%	-	-	0.00	0%
ii	Gabion (300m)	1.000	0.00	0%	-	-	0.00	0%
6	Ancillary works(traffic road signs, pavement marking / studs & km posts)							
i	Traffic signs / Km Posts	1.000	0.00	0%	0.10	10%	0.10	10%
ii	Pavement Markings / Studs	1.000	0.50	50%	0.25	25%	0.75	75%
7	Diversion	4.000	4.00	100%	-	-	4.00	100%
8a	Monuments & Weigh Station							
i	Weight Station (2Nos)	1.000	0.30	30%	0.00	0%	0.30	30%
ii	Monuments (01 Nos)	1.000	1.00	100%	-	-	1.00	100%
8b	Relocation of Buildings							
i	Relocation of Boundary walls	1.000	0.80	80%	0.00	0%	0.80	80%
ii	Relocation of Buildings	1.000	0.67	67%	0.08	8%	0.75	75%
8c	Relocation of MES Water Supply line (Km 30+700 to 33+850)	1.000	1.00	100%	-	-	1.00	100%
<b>TOTAL</b>		<b>96.220</b>	<b>82.25</b>	<b>84%</b>	<b>3.48</b>	<b>3%</b>	<b>85.73</b>	<b>87%</b>

## 2.4 Bridge at Km 18+475

Sr No	Bridge at Km 18+475	No of Milestones	Till Previous Month		Current Month		Total	
			No of Milestones Achieved	Percentage Completed	No of Milestones Achieved	Percentage Completed	No of Milestones Achieved	Percentage Completed
1	Raft foundation , cut off wall , abut wall , abutment seal & wing wall							
a	Raft foundation , cut off wall	1.0	1.00	100%	-	-	1.00	100%
b	Granular sub base	1.0	1.00	100%	-	-	1.00	100%
2	Construction of Deck Slab	1.0	1.00	100%	-	-	1.00	100%
3	Dismantling, Structural Excavation, Backfilling , Drainage & Erosion , Rigid pavement & Ancillary works							
a	Dismantling,	1.0	1.00	100%	-	-	1.00	100%
b	Structural Excavation, Backfilling ,	1.0	1.00	100%	-	-	1.00	100%
c	Drainage & Erosion , Rigid pavement & Ancillary works	1.0	1.00	100%	-	-	1.00	100%
d	Ancillary works	1.0	0.00	0%	0.00	0%	0.00	0%
<b>TOTAL</b>		<b>7.0</b>	<b>6.00</b>	<b>99.6%</b>	<b>0.00</b>	<b>0%</b>	<b>6.00</b>	<b>99.6%</b>

## 2.5 Bridge at Km 27+000

Sr No	Bridge at Km 27+000	No of Milestones	Till Previous Month		Current Month		Total	
			No of Milestones Achieved	Percentage Completed	No of Milestones Achieved	Percentage Completed	No of Milestones Achieved	Percentage Completed
1	Construction of Piles	1.0	1.00	100%	-	-	1.00	100%
2	Pile caps , abutment walls, Pier Shaft , Wing walls & Transom							
a	Pile caps	1.0	1.00	100%	-	-	1.00	100%
b	Abutment walls, Pier Shaft , Wing walls & Transom	1.0	1.00	100%	-	-	1.00	100%
3	Casting & Launching of precast panels				-	-		
a	Construction of Pre-cast panels	1.0	1.00	100%	-	-	1.00	100%
b	Launching of Pre-cast Panels	1.0	1.00	100%	-	-	1.00	100%
4	Construction of Deck Slab	1.0	1.00	100%	-	-	1.00	100%
5	Structural Excavation, Dismantling Backfilling , Earth work, surface course & pavement , drainage & Erosion & Ancillary works							
a	Excavate surplus common material , Dismantling of structures	1.0	0.15	15%	0.35	35%	0.50	50%
b	Surface course & pavement	1.0	1.00	100%	-	-	1.00	100%
c	Structures excavation & back fill	1.0	1.00	100%	-	-	1.00	100%
d	Approach slabs	1.0	1.00	100%	-	-	1.00	100%
e	Drainage & Erosion works	1.0	0.60	60%	-	-	0.60	60%
f	Ancillary works	1.0	0.00	0%	0.50	50%	0.00	0%
<b>TOTAL</b>		<b>12.0</b>	<b>9.75</b>	<b>84%</b>	<b>0.85</b>	<b>3%</b>	<b>10.60</b>	<b>87%</b>

## 2.6 Bridge at Km 27+250

Sr No	Bridge at Km 27+250	No of Milestones	Till Previous Month		Current Month		Total	
			No of Milestones Achieved	Percentage Completed	No of Milestones Achieved	Percentage Completed	No of Milestones Achieved	Percentage Completed
1	Pile load test & Construction of Piles							
a	Pile load test	1.0	1.00	100%	-	-	1.00	100%
b	Construction of Piles	1.0	1.00	100%	-	-	1.00	100%
2	Pile caps , abutment walls, Pier Shaft , Wing walls & Transom							
a	Pile caps	1.0	1.00	100%	-	-	1.00	100%
b	Abutment walls, Pier Shaft , Wing walls & Transom	1.0	1.00	100%	-	-	1.00	100%
3	Casting & Launching of precast panels							
a	Construction of Pre-cast panels	1.0	1.00	100%	-	-	1.00	100%
b	Launching of Pre-cast Panels	1.0	1.00	100%	-	-	1.00	100%
4	Construction of Deck Slab	1.0	0.77	77%	0.23	23%	1.00	100%
5	Structural Excavation, Dismantling Backfilling , Earth work , surface course & pavement , drainage & Erosion & Ancillary works							
a	Excavate surplus common material, Dismantling of structures	1.0	0.25	25%	0.25	25%	0.50	50%
b	Surface course & pavement	1.0	1.00	100%	-	-	1.00	100%
c	Structures excavation & back fill	1.0	1.00	100%	-	-	1.00	100%
d	Approach slabs	1.0	1.00	100%	-	-	1.00	100%
e	Drainage & Erosion works	1.0	0.60	60%	0.15	15%	0.75	75%
f	Ancillary works	1.0	0.00	0%	0.20	20%	0.20	20%
<b>TOTAL</b>		<b>13.0</b>	<b>10.62</b>	<b>89%</b>	<b>0.83</b>	<b>5%</b>	<b>11.45</b>	<b>94%</b>

## 2.7 Bridge at Km 2+200

Sr No.	Bridge at Km 2+200	No of Milestones	Till Previous Month		Current Month		Total	
			No of Milestones Achieved	Percentage Completed	No of Milestones Achieved	Percentage Completed	No of Milestones Achieved	Percentage Completed
1	Dismantling of Existing Expansion joint , concreting of new expansion joint & Installation of New Expansion joint							
a	Dismantling of Existing Expansion joint	1.0	0.00	0%	-	-	1.00	100%
b	Concreting of new expansion joint	1.0	0.00	0%	-	-	1.00	100%
c	Installation of New Expansion joint	1.0	0.00	0%	-	-	1.00	100%
<b>TOTAL</b>		<b>3.0</b>	<b>0.00</b>	<b>0%</b>	<b>-</b>	<b>-</b>	<b>3.00</b>	<b>100%</b>

## 2.8 Bridge at Km 11+560

Sr No	Bridge at Km 11+560	No of Milestones	Till Previous Month		Current Month		Total	
			No of Milestones Achieved	Percentage Accomplished	No of Milestones Achieved	Percentage Accomplished	No of Milestones Achieved	Percentage Accomplished
1	Dismantling of Existing Expansion joint , concreting of new expansion joint & Installation of New Expansion joint	1.0	1.00	100%	-	-	1.00	100%
2	Construction of PCC Protection wall & Random Rubble masonry wall	1.0	0.00	0%	0.00	0%	0.00	0%
<b>TOTAL</b>		<b>2.0</b>	<b>1.00</b>	<b>36%</b>	<b>0.00</b>	<b>0%</b>	<b>1.00</b>	<b>36%</b>

## 2.9 Bridge at Km 21+320

Sr No	Bridge at Km 21+320	No of Milestones	Till Previous Month		Current Month		Total	
			No of Milestones Achieved	Percentage Completed	No of Milestones Achieved	Percentage Completed	No of Milestones Achieved	Percentage Completed
1	Roll Pointing	1.0	0.00	0%	0.00	0%	0.00	0%
2	Dismantling of existing railing , Construction of new steel railing as per dwg , poly urethane paint on existing steel girders	1.0	0.00	0%	0.00	0%	0.00	0%
3	Pressure grouting of existing abutments	1.0	0.00		0.00	0%	0.00	0%
4	Scarification of existing road pavement , surface course & pavement, drainage & erosion works , Ancillary works							
a	Scarification of existing road pavement	1.0	0.00	0%	0.00	0%	0.00	0%
b	surface course & pavement	1.0	0.00	0%	0.00	0%	0.00	0%
c	drainage & erosion works	1.0	0.00	0%	0.00	0%	0.00	0%
d	Ancillary works	1.0	0.00	0%	0.00	0%	0.00	0%
<b>TOTAL</b>		<b>7.0</b>	<b>0.00</b>	<b>0%</b>	<b>0.00</b>	<b>0%</b>	<b>0.00</b>	<b>0%</b>

## 2.10 Forecasted Completion PIL 05

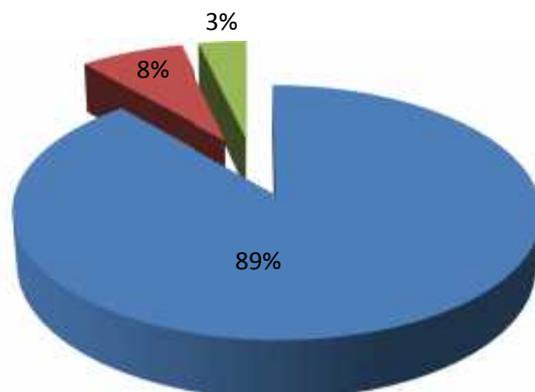
\*The following table shows the forecasted completion of in progress activities.

	Remaining Works	Year 2015					
		Jul	Aug	Sep	Oct	Nov	Dec
<b>PIL 05</b>	Section –IV (19+000 to Km 21+100 & 22+400 to 24+000 & Loop # 02)						
	Section –V ( Km 21+100 - 22+400 and 24+000 - 29+000)						
	Section –VI ( Km 29+000- 33+000)						
	Construction of Bridge at Km 18+475						
	Construction of Bridge at Km 27+000						
	Construction of Bridge at Km 27+250						
	Rehabilitation works at Bridge at Km 11 + 560						
	Rehabilitation works at Bridge at Km 21+320						

\***Note:** FWO has not provided the construction schedule; the above table is based on assumptions keeping the current progress, weather condition and construction sequence of sub activities.

### 3. FINANCIAL PROGRESS (BUDGET / ACCRUED / ACCRUALS)

The following pie chart shows the percentage of accrued expenditure and accruals against approved PILs Cost (US\$ 57,987,073).



- Accrued Expenditure ( Amount Certified ) \$ 51,494,717
- Accruals ( Work Done Amount not Certified) \$ 4,437,284
- Balance Work against Total approved PILs cost \$ 2,055,070

#### Details of Accruals and Accrued Expenditure

Sr No	PIL	Sub - Projects		Sub-Project Cost	PIL Cost	Till Previous Month		Current Month		Total		Balance	
		Road	Bridges			Accrued Expenditure	Accruals	Accrued Expenditure	Accruals	Accrued Expenditure	Accruals		
1	PIL 01	Sec I	-	\$9,978,081	\$9,978,082	\$9,978,082	-	-	-	\$9,978,082	-	-	
2	PIL 02	Sec II	-	\$9,383,483	\$9,383,484	\$9,383,484	-	-	-	\$9,383,484	-	-	
3	PIL 03	Sec III	-	\$9,512,705	\$9,512,705	\$9,512,705	-	-	-	\$9,512,705	-	-	
4	PIL 04	-	at Km 9+560	\$1,225,965	\$3,668,533	\$1,225,965	-	-	-	\$1,225,965	-	-	
		-	at Km 23+750	\$1,392,302		\$1,392,302	-	-	-	\$1,392,302	-	-	
		-	at Km 11+190	\$604,551		\$604,551	-	-	-	\$604,551	-	-	
		-	at Km 22+925	\$445,715		\$445,715	-	-	-	\$445,715	-	-	
5	PIL 05	Sec IV	-	\$7,663,172	\$25,444,269	\$5,267,130	\$1,945,510	\$929,720	\$107,659	\$6,196,850	\$1,123,450	\$342,872	
		Sec V	-	\$8,580,296		\$5,418,888	\$2,479,414	\$1,040,628	\$174,278	\$6,459,516	\$1,613,064	\$507,716	
		Sec VI	-	\$6,551,308		\$3,941,360	\$1,532,950	\$430,703	\$211,291	\$4,372,063	\$1,313,538	\$865,707	
		-	at Km 18+475	\$218,068		\$184,034	\$33,083	\$0	\$0	\$184,034	\$33,083	\$951	
		-	at Km 27+000	\$1,111,838		\$666,996	\$264,769	\$90,033	\$41,517	\$757,029	\$216,252	\$138,557	
		-	at Km 27+250	\$1,073,617		\$739,750	\$211,321	\$136,150	\$62,726	\$875,900	\$137,897	\$59,820	
		-	at Km 2+200	\$68,944		-	\$68,944	\$68,944	\$0	\$0	\$68,944	\$0	\$0
		-	at Km 11+560	\$105,296		-	\$37,579	\$37,579	\$0	\$0	\$37,579	\$0	\$67,717
		-	at Km 21+320	\$71,730		-	\$0	\$0	\$0	\$0	\$0	\$0	\$71,730
<b>Total</b>				<b>\$57,987,073</b>	<b>\$48,760,960</b>	<b>\$6,373,190</b>	<b>\$2,733,757</b>	<b>\$576,718</b>	<b>\$51,494,717</b>	<b>\$4,437,284</b>	<b>\$2,055,070</b>		

## 4. M&E ACTIVITIES DURING THE REPORTING PERIOD

### 4.1 Field Inspections

During the reporting month, the following frequency of field inspections by AGES technical staff was carried out:

- Project Manager = 02
- Quality Assurance Manager = 02
- M & E Specialist = 10
- Field Managers = 10
- Environmental compliance officer = 03
- Field Monitors = 25
- Material Engineer / Laboratory Staff = 17

### 4.2 Construction Activities Monitored

Sr	Activity	Unit	During the reporting Month						Completed till Previous Month	Completed in reporting month	Total Completed
			Sec 04	Sec 05	Sec 06	Sec 07	Sec 08	Sec 09			
1	Asphaltic Concrete Wearing Course	Km	-	-	-	0.600	-	-	30.513	0.600	31.113
2	Asphaltic Concrete Base Course	Km	-	-	-	-	-	-	31.163	0.000	31.163
3	Water Bound Macadam	Km	-	-	-	-	-	-	30.258	0.000	30.258
4	Rigid Pavement	Km	-	-	-	-	0.750	0.050	16.153	0.775	16.928
5	Granular Sub base	Km	-	-	-	-	0.200	-	47.189	0.200	47.389
6	Earth Work	Km	-	-	-	-	0.250	-	47.189	0.250	47.439
7	Culverts	Nos	-	-	-	-	4.0	-	120.0	4.0	124.0
8	Retaining Walls	Km	0.065	0.025	0.158	0.083	0.152	0.450	15.858	0.933	16.791
9	Breast Wall	Km	0.092	0.054	-	0.235	-	-	1.147	0.381	1.528
10	Drains	Km	0.445	0.258	0.298	1.351	0.300	0.300	40.424	2.925	43.376
11	Utility Ducts	Nos	-	-	-	-	-	-	79.00	0.00	79.00
12	Cause ways	Nos	-	-	-	-	-	1.00	10.00	1.00	11.00
13	Metal Guard Rail	Km	-	-	-	-	-	-	2.789	0.00	2.789
14	Diversion	Km	-	-	-	-	-	-	43.661	0.00	43.661

### 4.3 Field Observations & Follow up

Sr. #	Findings	Follow up	Status
1	Drains type D-3 thickness issue	Email : April 15 , 2015 Meeting : Aug 24 , 2015	Revised Drawings would be shared by FWO
2	Substandard works in Retaining and Breast Walls	Emails : May 20, 2015 June 24, 2015 July 01, 2015 July 27 , 2015 Sep 03, 2015 Sep 15 , 2015  Meetings : July 07 , 2015 Aug 24 , 2015	Rectification in progress however No improvement observed
3	Improper backfilling at newly constructed retaining walls, breast walls, culverts, RCC Drains	Emails : May 28, 2015 June 17, 2015 Aug 11, 2015	Rectification in progress
4	Damages caused to pavements & retaining walls , culverts by rain	Email : July 27, 2015 July 30 ,2015 Aug 17, 2015 Meeting : Aug 24, 2015	Rectification in progress
5	Sub standard works at KM 10+500 (Baghiari Check Post).	Emails : May 28 , 2015 July 30, 2015 Oct 02, 2015	Rectification in progress
6	Sub standard repair of flexible pavement defective portion km 33+750 & KM 21+320 ( Placing concrete over flexible pavement)	Meeting: Aug 24, 2015	Proper repairs pending
7	Heavy dust observed due to construction, creating severe environmental hazard.	Email : April 15, 2015 May 22, 2015 June 04 , 2015 Sep 10, 2015 Sep 16, 2015	Rectification in progress
8	Rigid pavement panels at Km 40+244, 40+359 , 40 +392, constructed in sheer violation (Dowels missing /not aligned at expansion joints)	Email : Sep 08, 2015 Sep 18 , 2015	Rectification pending
9	Sub base laid on freshly concreted Culvert Slabs at Km 40+363, Loop III Km 2+259	Email : Sep 08, 2015 Sep 10, 2015	Rectification pending

### 4.4 Meetings

Conducted follow-up /coordination meetings with USAID, FWO / NESPAK reps.

Date	Participants	Venue
Sep 09, 2015	USAID, AGES, FWO, NESPAK	FWO Office, Jamrud, Khyber Agency

#### 4.5 Laboratory Tests

The following table shows the frequency of laboratory tests conducted during the reporting month.

Sr. No.	Test	No of Tests conducted								
		Independent			Jointly			Total		
		Total	Fail	Pass	Total	Fail	Pass	Tests	Fail	Pass
1	Asphaltic concrete wearing course quality test	14	0	14	-	-	-	14	0	14
2	Asphaltic concrete wearing course compaction test	-	-	-	44	0	44	44	0	44
3	Asphaltic concrete wearing course cores thickness test	-	-	-	44	0	44	44	0	44
4	Asphaltic concrete base course cores compaction test	-	-	-	30	0	30	30	0	30
5	Asphaltic concrete base course cores thickens test	-	-	-	30	0	30	30	0	30
6	Sub base material field density test (FDT)	-	-	-	3	0	3	3	0	3
7	Aggregate Quality Test for concrete	3	0	3	-	-	-	3	0	3
8	Concrete compressive strength test	14	0	14	-	-	-	14	0	14
<b>Total</b>		<b>31</b>	<b>0</b>	<b>31</b>	<b>151</b>	<b>0</b>	<b>151</b>	<b>182</b>	<b>0</b>	<b>182</b>

#### 5. ENVIRONMENTAL COMPLIANCE

The Environmental Monitoring Report is attached as **Annex-I**.

#### 6. SECURITY SITUATION

The security situation report is attached as **Annex-II**.

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**ANNEXURE-I  
ENVIRONMENTAL MONITORING REPORT**

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## Environmental Monitoring Report

**Environmental Compliance Officer:** Shabir Ahmad Khan

### Road Section under Construction

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. Masood Ahmad Bloch Site Supervisor, FWO
2. Mr. Mudassar Shah, Site Sub-Engineer, FWO
3. Mr. Mohammad Bilal, Surveyor, FWO
4. Mr. Mohammad Waqas, HSE Inspector, FWO

Work Status	Quality of Environmental Compliance
Work in Progress	Good
Work Stopped	Satisfactory
Work Completed	Not Satisfactory

### Issues at Site

- Km 19+300 Loop III, excavated material dumped at the stream bank, may cause erosion hazard and obstruction in flow of water.
- At Construction Sites Health & Safety protocols are not followed by the labors mostly working without PPE's (Personal protective equipment's) however Health & Safety arrangements, such as first aid boxes and ambulance services are available at FWO Camp.
- At under construction road sections building, solid waste and excavated material are not properly placed.
- Heavy dust pollution observed at by pass road near Km 37 to 39, Km 41 plus and loop III.
- Road blockage observed at some places at Km 37 and onward, due to road construction or traffic control mismanagement.
- Installation of traffic sign boards with reflecting material, speed breakers etc. were found missing, especially at diversions.

### Environmental Monitoring Check List for the Site

S. #	Activity	Mitigation Measures	Monitoring indicators	Field Observations
<b>Construction Phase</b>				
1	<b>Use of heavy equipment</b>	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 overfilling 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 the site visits, it was observed that heavy and light machinery was properly maintained and parked at FWO camps.
2	<b>Flood protection</b>	a. Culvert 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 a smooth flow to flood water during rainy seasons.	Road protection and Safety	Safety measures, such as side drains, culverts and retaining walls construction in sections VII&VIII are in progress to protect road from flood water and provide a smooth flow to wastewater disposal.
3	<b>Handling and transportation of hazardous waste</b>	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 visits, no hazardous material was found along the road site; therefore, no action as such is further required.
4	<b>Handling of solid Waste</b>	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 & 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 the site.	Toxicity, Soil Contamination and Pollution	During site visits, FWO staff was strictly suggested to comply with the solid waste management protocols to prevent the contamination of construction materials. So far the arrangements, to handle the construction materials at main storage were satisfactory.  The solid waste management at sub-contractor sites was not satisfactory.

S. #	Activity	Mitigation Measures	Monitoring indicators	Field Observations
5	<b>Construction crews, camps &amp; Accommodation</b>	a. Check quality & maintenance of accommodation 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 water for construction purposes. j. Prohibit domestic pets / livestock to enter into the site.	Ground water pollution and conflicts with locals.	During site visits, 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.  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.
6	<b>Material handling, use, and storage</b>	a. Securing of construction materials will ensure a safe passage between destinations for the transport system. Loaded vehicles shall be properly covered to prevent spillage, and contractor should be held responsible to clear them off. b. Transfer and deposit construction materials directly to the site for use. Avoid stockpiles to create less visual impacts. Leftover of any foreign materials on the site should clearly be off, and the project area should also be properly reinstated, affected by any construction activity. c. Avoid spray of any bitumen products on vegetation outside the road area. d. Avoid concrete mixing on ground. e. Use of wet gravel at site. f. Avoid direct fall of drainage water into sensitive areas. 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. h. Collect and deliver empty cement bags to recycling plants. i. Storage of contaminated water should not allow to over flow, and will be protected from rain water.	Dust pollution	FWO labor force was suggested to provide safe passages to dumpers for carrying construction materials from main storage to work places. Further suggested that the construction material should be properly loaded and secured to prevent the material spillage and minimize the stockpiles visual impacts. The compliance about the proper placement and handling of building materials was not satisfactory, especially during retaining walls and culvert construction.

S. #	Activity	Mitigation Measures	Monitoring indicators	Field Observations
7	<b>Materials extraction, Quarrying &amp; logging</b>	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.	Change in landscape & Creation of water ponds.	FWO management was also advised for proper maintenance of the quarry area as well as the restoration of the original site, once the borrowing activities accomplished.
8	<b>Site clearing &amp; leveling</b>	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 follow health and safety procedures to protect people and the environment. 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	Loss of vegetation, soil erosion, stability, water pollution, health of workers and local community.	During the site visits, no impact on vegetation was found as most of the project area is rugged, and of hilly nature. No use of herbicides was found as most of the project area is barren and devoid of the greenery and plantation. Appropriate measures were taken for the conservation of soil.

S. #	Activity	Mitigation Measures	Monitoring indicators	Field Observations
		<p>removed during wet periods, don't disturb soil just before the actual start of construction.</p> <p>g. Use of erosion control measures such as hay bales.</p> <p>h. Replant and re-vegetate the local flora on immediate basis once removed the equipment from site.</p>		
9	Excavation, cutting and filling	<p>a. Cover Piles with plastic sheets, prevent run off with hay bales, or use similar measures.</p> <p>b. Fencing around excavation activities.</p> <p>c. Investigate shallow over excavation and alternatives.</p> <p>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.</p> <p>e. Ensure that excavation is accompanied by a well-engineered drainage system.</p> <p>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.</p> <p>g. Adopt best engineering practices, for example, don't use the soil alone, first lay a bed of rock and then gravel it.</p> <p>h. Balance cuts and fills, wherever is possible to minimize the earth work movement.</p> <p>i. Water sprinkling to avoid dust solution on road temporarily used for traffic.</p>	Soil erosion, stability and surface water contamination	<p>Excavation, cutting &amp; filling for the road widening, culverts and retaining walls construction in section VIII is in progress. While the protocols compliance about the Health &amp; safety and environmental issues are generally missing or insufficient.</p> <p>During site visits, it was also recommended to the subcontractors to properly cover and fence all the culverts construction at work places. A proper drainage system for the smooth flow of water fall during excavations is also needed at site. Sprinkling of water is also needed to avoid dust pollution on diversions.</p> <p>The flow line of watershed are generally filled with excavated material at many places, these may need to be removed for smooth flow of rain water.</p>
10	Traffic Control and management	<p>a. Need for practical efforts in order to control and accommodate traffic along the road as far as much as possible.</p> <p>b. Provide sign boards in order to give directions, and guide drivers about diversions.</p> <p>c. Provide proper traffic management training to the contractor staff at the site before the construction activities take place.</p> <p>d. Avoid as much as possible temporary by passes during land clearing at site.</p> <p>e. Maximum speed limit at project site for heavy machinery should not exceed 20Km/hr.</p> <p>f. Try to keep the road partly closed to provide all time maximum safe passage to the</p>	Health and Safety of workers & local population	<p><u>Traffic flows with diversions along the existing road.</u></p> <p>Road blocking has been seen at some places of section VIII and onward and at Loop III, due to road construction or mismanagement. This may need practical efforts to control and accommodate traffic.</p> <p>Despite the arrangements for diversions, proper traffic signboards for traffic control management are missing at site. Therefore, FWO contractors are strongly suggested:</p> <ul style="list-style-type: none"> <li>- Install temporary traffic sign boards with reflective materials to maximize drivers' visibility at night.</li> <li>- Construction of speed breakers to specify</li> </ul>

S. #	Activity	Mitigation Measures	Monitoring indicators	Field Observations
		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.		maximum speed limit for heavy machinery at site. The maximum speed limit should not exceed 20Km/hr.
11	<b>Blasting</b>	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	Currently, rock excavation for road widening in sections 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 equipment's) to workers to ensure labor safety at site. During the month the blasting practice was very limited.
12	<b>Sources of building materials</b>	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. c. Fill in quarries and pits before the abandoning of the construction activity. d. Control runoff into pits.	Damages to the aquatic, terrestrial ecosystems erosion, siltation, and vector-borne diseases	The environmental compliance about the quarry areas is not satisfactory at previous quarry places. Therefore, FWO is strictly advised to fill the quarries and pits once the borrowing activities accomplished.
13	<b>Dust Pollution</b>	a. Water spraying. b. Covering of Trucks with tarpaulins.	Nuisance to the public, undermining the quality of air and water due to contamination	Problem of dust pollution has been observed during the reporting month, especially Km 37 and onward and at Loop III. There were some places having dust pollution, owing to heavy commercial traffic along the corridor and nature of soil. Mitigation measures in this aspect taken were not appropriate. In this respect special attention is required to control this issue, because the dust pollution impacts directly on human health. During the month the water sprinkled at some places but not regular and covering of trucks is not in practice.
14	<b>Borrow Areas</b>	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.	The activities concerning borrow areas were mostly seen along the non-perennial flooded stream beds, where the restoration is generally made naturally after rain. However, the restoration at some places is required like land leveling etc. that has been not implemented.

S. #	Activity	Mitigation Measures	Monitoring indicators	Field Observations
15	<b>Damages to the existing infrastructure</b>	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	Since project commencement, FWO demonstrated utmost care of the overhead and underground infrastructure facilities and avoided damages to water pipes and electricity pylons etc. especially during culvert construction. It was also suggested to the workers to inform FWO/ NESPAK / WAPDA/PTCL departments before the excavation activities started at site.
16	<b>Health &amp; Safety of the workers</b>	a. Prepare and implement a Health and Safety Plan at site. b. Exclude public from site area. 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.	Workers and public at risk due to accidents at site	During the site visit, it was observed that the compliance about the Health and Safety protocols was generally followed at camp, while neglected at 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. are available at FWO camp and provided to the workers at site when needed. PPEs (Personal protective equipment's) for the safety of labor were missing at project site throughout the project life. The AGES team obtained the incidence reports, but in the report the compensation package was not mentioned and this requirement is still awaited.
17	<b>Local Employment</b>	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, especially with sub-contractors.
18	<b>Others concerns like Resettlement etc.</b>	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	Due to the road construction on the existing corridor, there are some minor resettlement issues in the project area. These issues were resolved in peaceful manner, providing the same construction at other places. The FWO has provided the detail of all the relocated structures. The infrastructure facilities, such as water supply lines, telephone cables and

S. #	Activity	Mitigation Measures	Monitoring indicators	Field Observations
				electricity lines etc. are identified and relocated. During site visits, few social conflicts with locals were noticed in the whole period, but resolved properly.

## ENVIRONMENTAL MONITORING



KM 24+460, flood damaged retaining wall reconstruction needs H&S protocols for labors.



Km 19+300 Loop III, excavated material dumped at the stream bank, may cause erosion hazard & obstruction in flow of water.



Km 18+500, Culvert Clearing from excavated material for Smooth Flow of water, good sign for smooth flow of water during rain.



KM 39+500, excavated material dumped at the culvert mouth, needs removal/proper placement



Km 39+ 500 Dumping of excavated material damaged/ effected the vegetation, require removal or protection the plants



At Km 41+100 dust pollution, need sprinkling of water

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**ANNEXURE-II  
SECURITY REPORT**

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## MONTHLY SECURITY REPORT

### 1. Situation Analysis

During reporting period, KP/FATA has retained its “High” risk rating. The region warrants effective security measures to ensure safety at all levels in order to implement the project task.

### 2. USAID’s Threat Assessment

As per the USAID Threat Assessment the risk level in KP & FATA remains “High”.

### 3. Update on On–Job Training of Staff

Regular briefing / cautioning on safety / security of project staff has been carried out by the security officer to remain current on situation in the area and follow the project security protocol, while on site, on move or in office to avoid any undesired risk / incident relating to safety / security.

### 4. Visit to PTR by Security Officer

The Security Officer carried out visit to the project site with concerned staff and found the environment overall conducive for task implementation.

### 5. Detail of Security Related Incidents

- Suicide attack outside APA office in Jamrud Khyber Agency: On 1<sup>st</sup> September 2015, a suicide bomb blast was carried out outside Assistant Political Agent office in Jamrud Khyber Agency resulting in four killed and 56 injured.
- Three Policemen were killed and seven injured in raid on Taliban hide - out in Peshawar. One of the attackers was killed by the Police and the rest escaped.
- Militants killed 11 Peace Committee Volunteers: On 8<sup>th</sup> September 2015, a banned militants group killed 11 kidnapped pro – govt volunteers in Khyber tribal region, who as per militants, were helping the security forces against them.
- Heavily – armed militants attacked Pakistan Air Force base Badaber in Peshawar: On 18<sup>th</sup> September 2015, killing 29 people and 10 injured. Army soldiers quickly surrounded the attackers, confining them to a small area and killing 13 of them.

### 6. Advisory

Staff CMEP - KP is advised to be very vigilant and adopt all preventive / security measures as per project security plan to ensure the personnel as well as material safety.

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**ANNEXURE-III  
PHOTOGRAPHS**

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### PAVEMENTS



KM 33+650~33+850 FW; ACWC laying & compaction in progress



KM 33+760 LHS Lkl Link; Link Road ACWC completed



KM 34+775~35+000 FW; ACWC Laying & compaction in progress



KM 35+550 RHS; Link Road ACWC compaction in progress



KM 39+475 LHS; Link road ACWC completed..



KM 42+250 LHS; Link road ACWC laying in progress



KM 38+300-38+650 HW LHS; ACBC 1st layer compaction in progress



KM 38+300-38+650 HW LHS; ACBC laying & compaction in progress



KM 38+900-39+250 FW; ACBC 2nd layer laying & compaction in progress



KM 37+450-37+500 HW LHS; Rigid pavement concrete placing in progress.



KM 2+255-2+280 HW LHS LOOP-III; Rigid pavement concrete in progress



KM 40+970-40+986.5 HW LHS; Rigid pavement concrete placing in progress



KM 2+500~2+550 HW RHS LOOP-III; Rigid pavement formwork fixing in prog on freshly laid culvert top slab



KM 38+150~38+175 HW LHS; Rigid pavement formwork fixing in progress.



KM 38+275~38+300 HW RHS; Rigid pavement formwork fixing in progress



KM 40+375~40+400 HW LHS; Rigid pavement formwork fixing in progress



KM 41+000~41+350 FW; Rigid pavement completed



KM 24+000~24+150 LHS; Eathen dowel watering & compaction in progress

## BRIDGES



Bridge at KM 17+100 RHS; Crash barrier re casted with open space in bw for visibility of upcoming vehicles in opposite direction



Bridge at KM 18+475 DS side; Gabion Protection work in progress



Bridge at KM 20+750 LHS; RCC Post & Railing for bridge is in progress



Bridge at KM 23+850 US side; clearance in progress



Bridge at KM 27+250 LHS; Expansion joint fixing is in progress



Bridge at KM 27+250 US side; Gabion protection work is in progress

## RETAINING WALLS



KM 22+750~22+820 LHS; Flood damage Ret wall Stone masonry in progress



KM 24+465 LHS; stone masonry protection wall completed



KM 26+300~26+335 LHS; Breast wall stone masonry in progress



KM 29+000~29+020 RHS; Breast wall stone masonry in progress



KM 39+925~39+950 RHS; Breast wall stone masonry in progress



KM 40+150~40+175 RHS; Breast wall stone masonry in progress

## CULVERTS



culvert 2+529 LOOP-III; curing for top slab is in progress



Culvert 33+760 Lkl Link; Approach slab concrete placing in progress



Culvert 35+149 DS side; wing wall base slab concrete in progress



culvert 35+149 DS side; Box culvert wing wall formwork fixing in progress



Culvert 38+231; Abt wall-I compaction of backfill material in progress



culvert 39+890 US side; cascade concrete placing in progress without proper fixing of formwork

## DRAINS



KM 27+050~27+100 LHS; RCC Drain wall construction in progress



KM 35+100 RHS; RCC Depressed drain formwork fixing in progress



KM 35+250~35+300 RHS; RCC Drain steel rebar fixing in progress



KM 36+450~36+475 RHS; Drain type D-1 formwork fixing for top slab in progress



KM 36+900~37+000 RHS; Drain type D-3 concrete placing in progress



KM 37+300~37+350 RHS; Drain type D-3 PCC class B concrete in progress

## CAUSEWAYS



Causeway at KM 26+267; Joint site visit by M&E consultant, NESPAK & FWO



Causeway at KM 29+038 DS side; Gabion protection works in progress



Causeway at KM 29+255 DS side; Gabion protection work is in progress



Causeway at KM 29+708 DS side; Gabion protection work in progress

### MISCELLANEOUS



KM 7+500 LHS; Weigh station Building finishing work completed in progress



KM 12+800~12+900 RHS; Sign Boards for Reverse curve & chevron fixed

## FIELD / LAB TESTS



Capping & crushing of concrete cylinders at M&E Lab (1)



Capping & crushing of concrete cylinders at M&E Lab (2)



Casting of class 'A' concrete cylinders at KM; 37 B (2)



Casting of class 'B' concrete of R. Wall coping at KM; 22+600



Coring of Asphalt at KM; 39+000 (2)



Coring of Asphalt at KM'38+300