

# MONTHLY PROGRESS REPORT

November-2019



Construction of Eight lane Vadodara Kim Expressway from Km 323.00 to Km 355.00 (Sanpa to Padra section of Vadodara Mumbai Expressway) in the State of Gujarat under NHDP Phase- VI on Hybrid Annuity mode (Phase-IA- Package II)

## Concessionaire:



**IRCON INTERNATIONAL LIMITED**

(A Government of India Undertaking)

## EPC Contractor:



Every Milestone is Our Value

**PATEL INFRASTRUCTURE LIMITED**

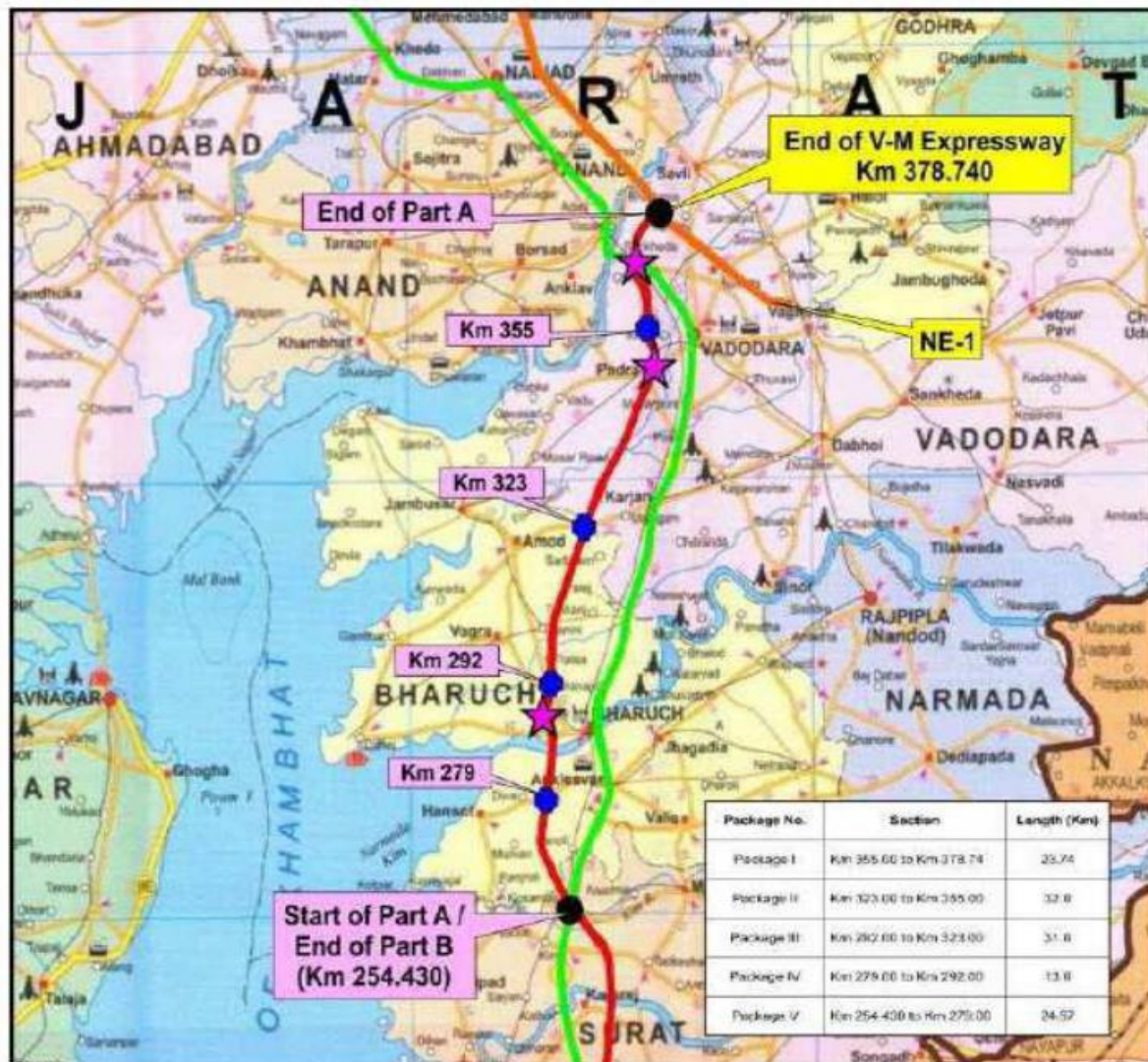
PATEL HOUSE, CHANNI, VADODARA

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## I. LOCATION PLAN & KEY PLAN

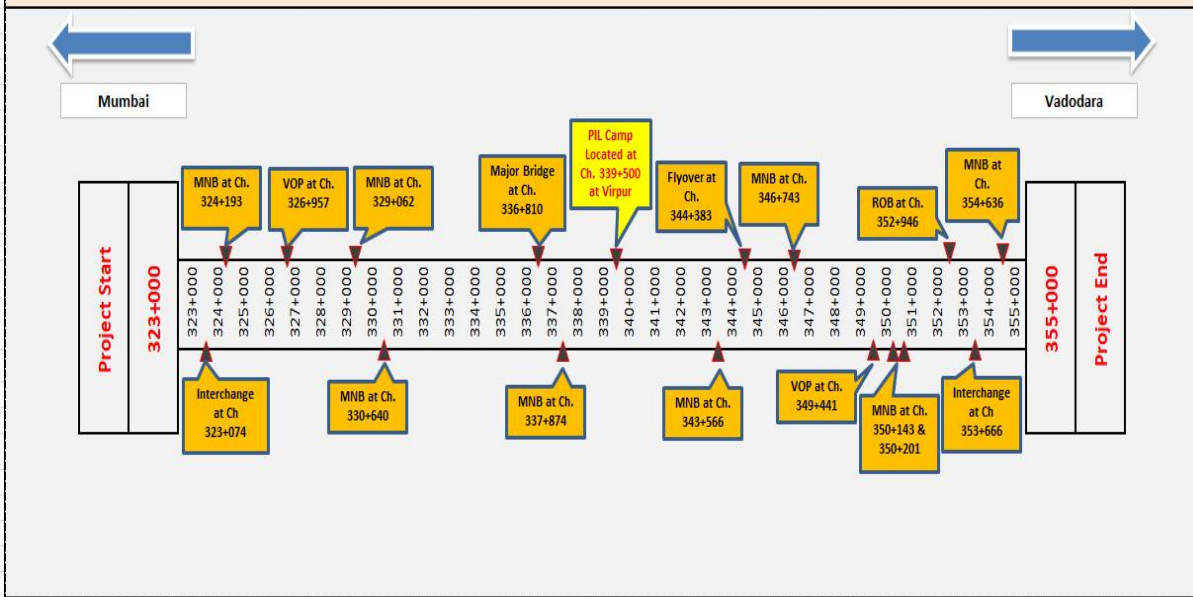
### A. Key plan of Expressway



**B. KEY PLAN OF PROJECT**



**Location Map & Key Plan of the Project**



## II. EXECUTIVE SUMMARY

### A. Project Synopsis

National Highways Authority of India (NHAI) in concession agreement with IRCON Vadodara Kim Expressway Limited (IVKEL) has undertaken the construction of new alignment 8-lane express from Sanpa to Padra from Km 323.000 to 355.000 (Length 32.00 Km) in the State of Gujarat under NHDP Phase-VI Package II. M/s Patel Infrastructure Limited (PIL) has been awarded by IVKEL for the construction of Eight Lane Vadodara Kim Expressway on EPC Mode.

The 8-lane controlled access expressway traverses through two districts viz. Karjan and Vadodara in Gujarat State. These districts are rich in industrial production. There are many industrial estates and factories both in public and private sector. The alignment starts near Sanpa at km 323+000 and passes through major villages Bodaka, Kanabha, Handod, Sambhoi, Survada, Sadad, Husepur, Amla, Sarsavani, Goriyad, Ghayaj, Darapur, Patod, Sokhada, Samiyala and it ends at Gokalpura village near Vadodara at km 355.000.

The expressway comprises of rigid pavement for Main Carriageway and flexible pavement for the Connecting road. The Expressway alignment runs almost parallel to existing NH 48 on west side. It includes the construction of bridges, underpasses, overpasses, ROB, Flyover, intersections, Connecting roads, culverts, related infrastructure such as Truck parking, rest areas, toll plaza, wayside amenities, and also involves the installation of Advance Traffic Management system.

The road passes through plain and rolling terrain. Land use is mostly agricultural with Black Cotton soil. The entire length of the project road falls in the state of Gujarat under Vadodara District. The Function of expressway is to cater for movement of heavy volume of motor traffic at high speeds. They connect major points of traffic generation and are intended to serve trips of medium and long length between large residential areas, industrial, commercial concentrations, and the central business districts. They are divided highways with high standards of geometric and full or partial control of access and provided generally with grade separation at intersections. Parking, loading and unloading of goods, passengers and pedestrian traffic is not permitted on these highways.

This report covers the progress for the month of November 2019. The Embankment work of the main carriageway has been continued and 22.65 Km out of 30.52 Km is in progress. The Executive summary of the reporting month of November 2019 is shown below.

Executive Summary of the Project		
Sl. No	Key Reporting Metrics	Value%/Amount
1	Cumulative Scheduled Physical Progress (%)	26.83%
2	Cumulative Achieved Physical Progress up to Current month (%)	30.3%
3	Physical progress target during current month (%)	3.23%
4	Physical progress achieved during current month (%)	4.52%
5	Cumulative scheduled financial Progress (%)	26.40%
6	Cumulative Achieved Financial Progress up to Current month (%)	17.37%
7	Financial progress target during current month (%)	2.8%
8	Financial progress achieved during current month (%)	5.52%

## III. PROJECT OVERVIEW

Construction of Eight lane Vadodara Kim Expressway from Km 323.00 to Km 355.00  
National Highway Authority of India (NHDP Phase VI)  
IRCON International Limited

Project	Construction of Eight Lane Vadodara Kim Expressway from Km 323.00 to Km 355.00 (Sanpa to Padra Section of Vadodara Mumbai Expressway) in the State of Gujarat under NHDP Phase - VI on EPC Mode (Package-II)
Authority	National Highways Authority of India
Concessionaire	IRCON Vadodara Kim Expressway Limited
EPC Contractor	IRCON International Limited
Contractor	Patel Infrastructure Limited
Independent Engineer	Aarvee Associates Architects Engineers & Consultants
Project Length	32.00 Km
Total Bid Project Cost	1465.00 Cr.
Defect liability Period	42 month
Construction Period	670 Days from the Appointed Date.
Date of LOA	26.10.2018
Date of Concession Agreement	19.11.2018
Appointed Date	31.01.2019
Schedule Date of Competition	30.11.2020

**A. Milestones as per CA:**

Sr. No.	Project Milestone	Required % of Physical & Financial Work Completion to Achieve Milestone	Date of Milestone as per CA	Proposed Date of Milestone	Financial Progress
1	Milestone - 1	20%	30/06/2019	30/09/2019	292.998
2	Milestone – 2	35%	27/12/2019	31/01/2020	512.746
3	Milestone – 3	75%	25/04/2020	31/07/2020	1098.743
4	Milestone – 4	100%	01/12/2020	01/12/2020	1464.999

## B. Details of Typical Cross section

SR. NO.	Chainage as per CA		Chainage as per P&P		TCS TYPE
	To	From	To	From	
1	323+000	323+530	323+000	323+530	TCS 4/structure
2	323+530	323+700	323+530	323+700	TCS 5
3	323+700	329+300	323+700	329+300	TCS 1
4	329+300	329+400	329+300	329+400	TCS 2
5	329+400	331+850	329+400	331+825	TCS 1
6	331+850	332+050	331+825	332+020	TCS 3
7	332+050	334+325	332+020	334+325	TCS 1
8	334+325	334+430	334+325	334+430	TCS 2
9	334+430	337+050	334+430	337+050	TCS 1
10	337+050	337+500	337+050	337+500	TCS 2
11	337+500	341+500	337+500	341+550	TCS 1
12	341+500	341+760	341+550	341+810	TCS 2
13	341+760	343+870	341+810	343+850	TCS 1
14	343+870	344+000	343+850	344+000	TCS 3
15	344+000	344+550	344+000	344+460	TCS 7/Structure
16	344+550	344+750	344+460	344+750	TCS 6
17	344+750	346+750	344+750	346+725	TCS 1
18	346+750	347+150	346+725	347+150	TCS 3
19	347+150	353+050	347+150	353+050	TCS 1
20	353+050	353+550	353+050	353+550	TCS 5
21	353+550	354+850	353+550	354+850	TCS 1
22	354+850	355+000	354+850	355+000	TCS 2

**C. Details of MCW:**

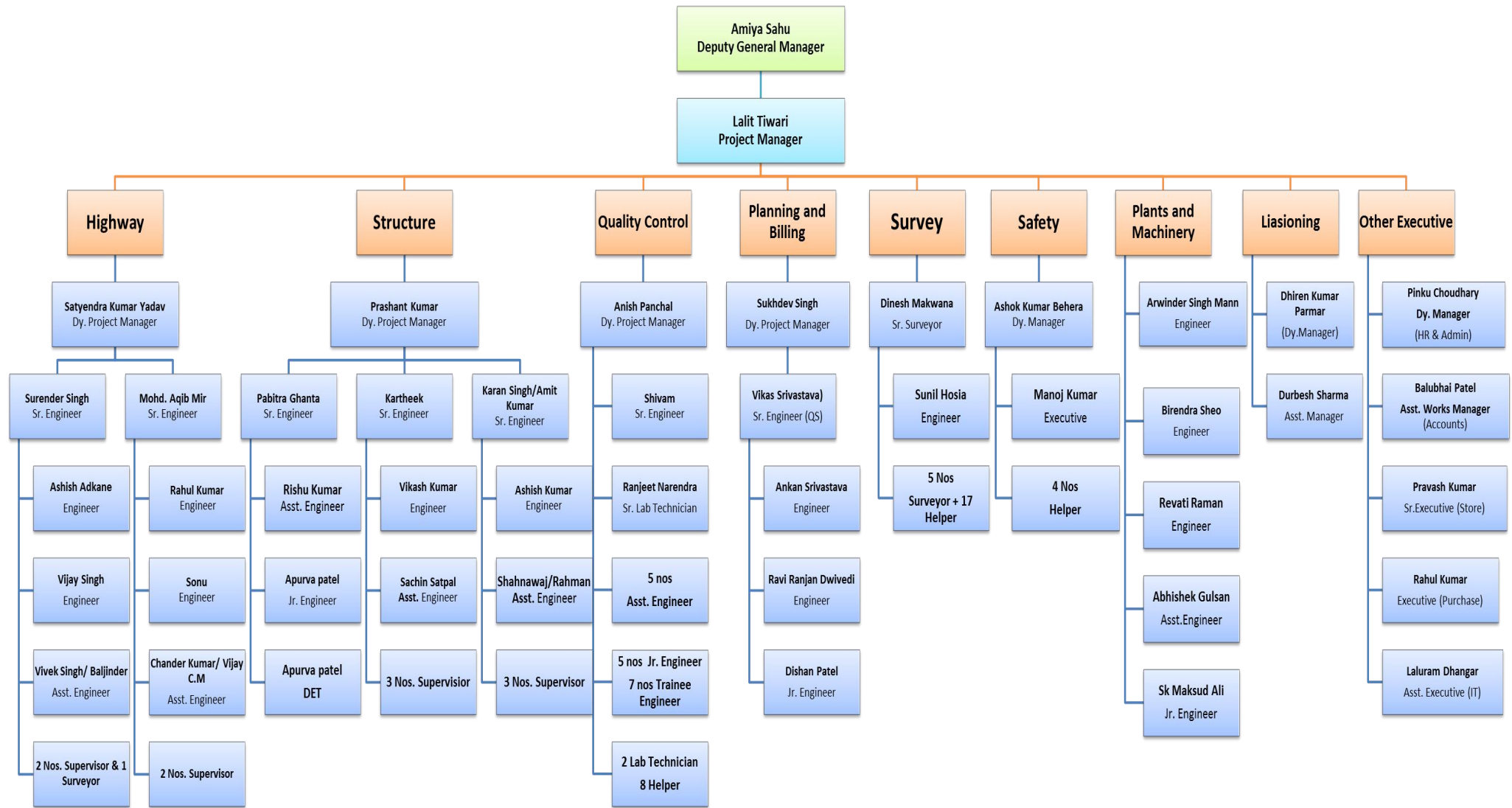
<b>Sr. No.</b>	<b>Description</b>	<b>Length (in Km)</b>
1	Embankment	30.52 Km
2	Sub grade	30.52 Km
3	G.S.B	30.52 Km
4	D.L.C	30.52 Km
5	P.Q.C	30.52 Km

**D. Details of Structures:**

<b>S. No.</b>	<b>Type of Structure</b>	<b>Details</b>
1	Major Bridge	01 Nos. – (6X42.20mtr)
2	Flyover	01 Nos. – (1X22.627+1X42.065+1X22.627mtr)
3	Interchange	02 Nos. (1X16.9+1X47.2+1X16.9mtr) & (1x48.2+2x (25+25+25.788mtr)
4	ROB	01 Nos. – (2X37.20mtr)
5	Minor bridges	09 Nos.
6	Vehicular underpass	05 Nos. – (1X12mtr)
7	Light Vehicular Underpasses	08 Nos. – (1X12mtr)
8	Culverts (HP/BC)	94 Nos. (42 Nos. Pipe / 52 Nos. Box)
9	CUP	34 Nos. (1X12mtr)
10	Vehicular Overpass	02 Nos. – (2x48.221mtr, 2X41.350mtr)
<b>Total</b>		<b>157</b>



## E. ORGANIZATION CHART



**F. Details of Plant and Machinery Deployed:**

<b>Plant and Machinery Monthly Deployment Status</b>					
<b>Sl. No</b>	<b>Equipment</b>	<b>Unit</b>	<b>Avg. Planned</b>	<b>Actual</b>	<b>Remarks, If any</b>
1	Back Hoe Loader	Nos	5	20	
2	Excavator	Nos	19	37	
3	Motor Grader	Nos	19	26	
4	Vibratory Roller/Soil Compactor	Nos	19	36	
5	Wet Mix Paver	Nos	0	0	
6	Wet Mix Plant	Nos	0	1	
7	DLC Paver	Nos	0	0	
8	PQC Paver	Nos	0	0	
9	Hot Mix Plant	Nos	0	0	
10	Bitumen Paver	Nos	0	0	
11	Bitumen Sprayer	Nos	0	0	
12	Boomer	Nos	0	0	
13	Tandem Roller	Nos	0	0	
14	Pneumatic Tyre Roller	Nos	0	0	
15	Dumpers/Tippers	Nos	86	148	
16	FE Loaders/Dozer	Nos	5	10	
17	Water Tanker	Nos	19	48	
18	Compressor	Nos	0	0	
19	Concrete Batching Plant	Nos	1	8	
20	Transit Mixers	Nos	9	40	
21	Concrete Pump + Boom placer	Nos	2	3	
22	Kerb Machine	Nos	0	0	
23	Crusher - 250 MT	Nos	1	0	
24	Weigh Bridge	Nos	4	2	
25	Tractor	Nos	3	10	
26	Diesel Tanker	Nos	2	5	
27	Tempo	Nos	3	0	
28	Tower Light	Nos	4	8	
29	Hydra Crane	Nos	2	6	
30	Vibratory Rammer	Nos	2	0	
31	Dewatering Pump (Portable)	Nos	5	7	
32	Baby Roller	Nos	2	2	
33	Trailor / Platform Truck	Nos	1	6	
34	Vibrator (Needle Type)	Nos	4	12	
35	Kerb Cutter	Nos	2	0	
36	Pile Boring machines	Nos.	6	10	

**G. Details of Applicable Permits:**

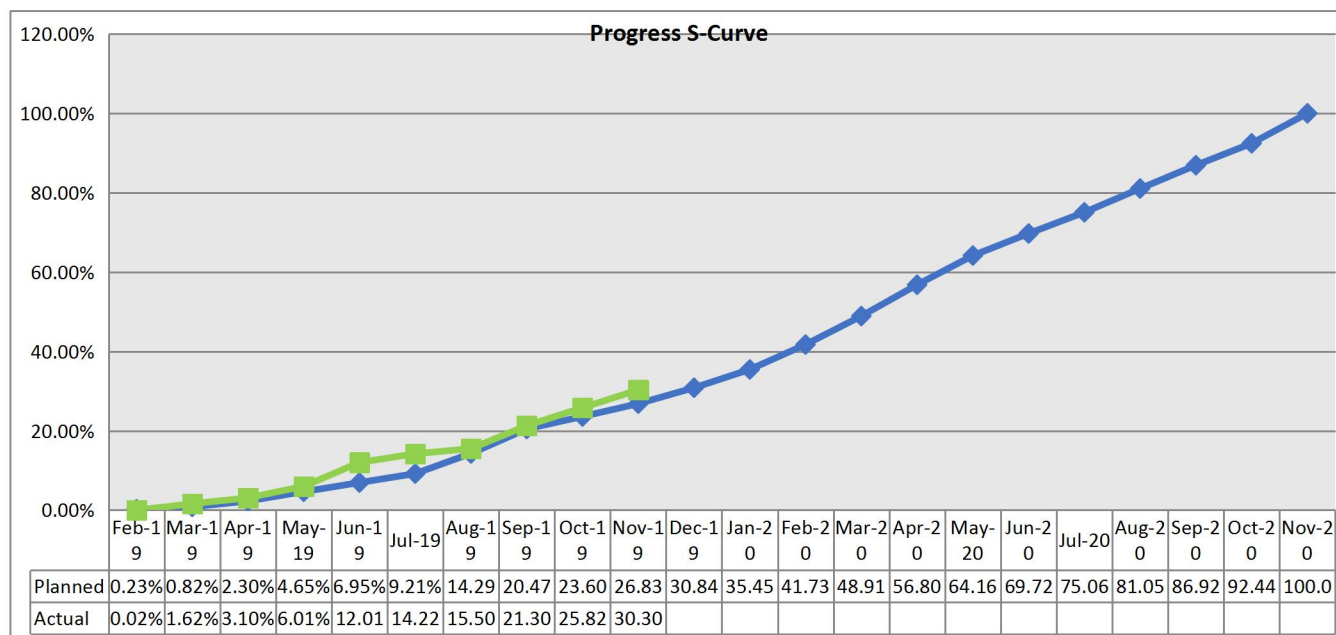
<b>Status of Applicable Permits (As per Schedule F) as on November -19</b>				
<b>Sl. No</b>	<b>Description</b>	<b>Status</b>	<b>Receiving Date</b>	<b>Remarks</b>
1	Permission of the State Government for extraction of boulders from quarry for and in respect of at least 20 (twenty) percent of the total length of the project;	Received	06.12.2018	
2	Permission of Village Panchayats and Pollution Control Board for installation of crushers;	Received	16.10.2018	
3	License for use of explosives;	Received	16.01.2017	Valid up to 31.03.2023
4	Permission of the State Government for drawing water from river/reservoir;	NA	NA	As per CGWA guidelines, for ground water extraction up to 100 cum /day NOC not required.
5	License from inspector of factories or other competent authority for setting up batching plant;	Applied		
6	Clearance of Pollution Control Board for setting up batching plant;	Received	20/04/2019	
7	Clearance of Village Panchayats and Pollution Control Board for setting up asphalt plant;	NA	NA	
8	Permission of Village Panchayats and State Government for borrow earth	Received		Submitted with relevant Borrow Area.
9	Other permits or clearances required under Applicable Laws.	NA	NA	

## IV. Project Progress

### A. Physical Progress:

The Physical percentage of the work done is calculated is based on the assigned weight-ages revised on 04.11.2019 to the overall scope of the work.

The physical percentage achieved is 30.3% as on 30<sup>th</sup> November 2019.



Given below is the summary of status of the works executed as on 30<sup>th</sup> November 2019.

### B. Highway Progress:

Sr. No.	Item	Unit	Scope of work	Completed	Work in Progress	Balance work
1	C & G	Km	30.52	26.2	1.6	2.72
2	Embankment	Km	30.52	11.6	9.3	9.62
3	Sub grade	Km	30.52	2.0	3.5	25.02
4	GSB	Km	30.52	0	0	30.52
5	DLC	Km	30.52	0	0	30.52
6	PQC	Km	30.52	0	0	30.52

Refer **Annexure 1:** Calculation of Physical Progress and **Annexure -3:** Strip Plan showing progress of Expressway for details.

### C. Structure Progress:

SR. No	Type Of Structure	Total No. of Structure as per CA	Completed Structure	No of Work in progress of structure	Structure To be Taken.	Remarks
1	HPC	42	35	7	0	1.) Pipe laid in 80 (m) length
2	BOX Culvert	52	8	27	17	1.) 31 nos Raft Completed and 26 Nos Wall 1st lift Completed, and At location 8 Slab Completed
3	Flyover	1	0	1	0	1.) At Location 344+360 Test pile Done. Total Pile completed. 4 Pile cap completed
4	ROB	1	0	0	1	Not Started
5	MJB	1	0	1	0	1.) At Location 336+835, Pile work in progress
6	MNB	9	0	9	0	Pile work completed. Substructure is in progress.
8	Interchange	2	0	2	0	1.) At location 324+074, Pile and Pile cap completed. Substructure work in progress. 2.) At location 353+666, Pile cap and substructure work in progress.
9	VOP	2	0	2	0	1.) At Location 349+441, Pile work completed. 2.) At Location 326+957, Pile work completed
10	LVUP	8	0	8	0	1.) Substructure and Superstructure work is in progress.
11	VUP	5	0	5	0	1.) Substructure and Superstructure work is in progress.
12	P/CUP	34	0	34	0	1.) Foundation of 33 nos. Completed and 18 nos Wall 2nd lift Completed.
<b>Total</b>		<b>157</b>	<b>43</b>	<b>96</b>	<b>18</b>	

1	Utility Duct	61	52	2	7	1) Utility duct in 75m Length Completed
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Refer **Annexure 1:** Calculation of Physical Progress and **Annexure -3:** Strip Plan showing progress of Expressway for details.

## V. Status of Land Acquisition

- Total land for which compensation was paid by NHAI/CALA as on 31<sup>st</sup> October 2019 is **96.875%** i.e. **31 Km.** out of total 32km.
- Length of various utilities(hindrances) falling in the clear length of 31 km is **5.390 Km**

Details of above utilities and their affected length of road are given below.

<b>Details of Hindrances</b>	<b>Hindered Length in meter</b>	<b>Remarks</b>
Total Hindered length due to Electrical Utilities	2310	Annexure 3A
Total Hindered length due to water pipeline etc.	255	Annexure 3B
Total Hindered length due to Structures such as house, shelters etc.	185	Annexure 3C
Total Hindered Area due to Disputed Land	1780	Annexure 3D
Total Hindered length due to Gas lines	820	Annexure 3E
Total Hindered length due to Religious Structures	40	Annexure 3F
<b>Grand Total</b>	<b>5,390</b>	

- Net unencumbered/Unhindered length of road = **31.00 – 5.390 = 25.610 km. i.e. 82.61%**.
- Action taken by M/s. PIL: We are continuously corresponding with Concessionaire and related Authorities for shifting of utilities and Land acquisition Issues.

## VI. UTILITY SHIFTING

### Status of Utilities in Package II of Vadodara Kim Expressway

30<sup>th</sup> November 2019

Date		
Utilities	Nos.	Status
MGVCL	-	<p>Out of 44 estimates, 39 are now approved by SE/MGVCL and sent to NHAI. NHAI further sent the same to IE on 10.08.2019 for verification &amp; comments, if any. IE vide letter dated 31 Aug.2019 raised some observations which are complied. IE vide letter dated 4 Nov.2019 recommended 39 Estimates to PIU, Bharuch for approval.</p> <p>Our of pending 5 estimates, CE has approved 4 estimates and 1 is still pending. On the approval of balance 1 estimate, all 5 estimates shall be sent to PIU, Bharuch by MGVCL.</p>
GETCO	8	<p>Revised Estimate sent to PIU Bharuch which is then forwarded to IE for review. IE has given observations for some additional documents. In All compliances are done and sent by GETCO to PIU Bharuch on 02.10.2019 which is then forwarded to IE for review. It is under review with IE at present.</p>
PGCIL	1	<p>PGCIL sent the Estimate to PIU, Surat. As informed by PGCIL, a request letter from NHAI needs to be sent to PGCIL for submission of additional documents like duly signed copies of SOR, Joint site inspection report, Check list etc.</p> <p>On insistance of PGCIL, site inspection re-done on 07.09.2019 jointly with PGCIL, IE and Concessionaire and repoprt signed by all. All compliances as per NHAI circular 2017 are done by PGCIL and sent to PIU Bharuch on 18.10.2019 which is then forwarded to IE for review. It is currently with IE for review.</p>
TORRENT	1	<p>IE vide letter dated 16.08.2019, reviewed the estimates submitted by GWSSB &amp; forwarded by NHAI, PIU Bharuch and recommended to PIU Bharuch for approval.</p> <p>PIU Bharuch vide letter dated 04.10.2019 raised some observations on the estimates to GWSSB for further compliance which is being pursued with GWSSB authorities.</p>
GWSSB	4	<p>Final estimate duly verified by IE is lying at PIU, Bharuch for further action.</p> <p>PIU needs to issue letter to GWSSB if any further compliance is to be done by GWSSB.</p>
ONGC	10	<p>After conducting survey of lines by ONGC nominated committee on 07.08.2019, a meeting was held on 09.08.2019 at their Ankleshwar office for some clarification.</p> <p>Discussed the matter of getting " work permission" from ONGC with their GM Sh. Rao on 17.09.2019 and came to know that because of ONGC well which is coming at a distance of 10 mtr from our ROW as against 50 mtr as desired by ONGC, the matter has been referred to Ministry of Petroleum for further guidance.</p>
GAIL	3	<p>As per asdvise of PIU/NHAI, Concessionaire has sent a request letter along with GADs of affected structures to PIU/NHAI for further intimation to GAIL Authorities regarding the construction of these affected structures.</p> <p>PIU Bharuch also sent duly signed GADs of affected structures to GAIL. As desired by GAIL DGM Sh. Soni, a presentation giving details of pipelines and proposed structures along with their coordinates has been sent to GAIL. Site visit by GAIL representatives done. GAIL has issued two letters to PIU Bharuch for Sarswani and interchange at Padra respectively. Reply from PIOUS Bharuch to GAIL is awaited.</p>
GSPL	2	<p>After necessary insurance add-on cover regarding special contingency liability as per the requirement of GSPL, an agreements is signed between GSPL &amp; PIU, Bharuch. Final "no objection" is likely to be obtained in 3-4 days.</p>

## VII. STATUS OF DESIGN & DRAWING

Sr.No	Type of Structure	Total scope (Nos)	Nos. of structures Submitted to IE	Nos. of structures Approved by IE	Nos. of structures Balance to be reviewed by IE	Chainage	Submitted to IE/IRCON on	Comments from IE/IRCON on	Compliance given on
1	Interchange	2	2	1	1	323+075	PIL/HO/VKE2/IRCON/577/2019 Dt. 13.08.2019	M.O.M. dated 23.09.19 to 26.09.19	Via mail to IE HO designer dated 12.10.2019
						353+666	PIL/HO/VKP2/IRCON/580/2019 dt. 17.08.2019	M.O.M. dated 23.09.19 to 26.09.19	Via mail to IE HO designer dated 08.10.2019
2	Major Bridge	1	1	0	1	336+830	Submitted to IE-HO By SES by mail of dt. 19.06.2019	IRCON/3019/VKE/PAT EL/847 dt. 24.09.2019	-
3	VOP	2	2	0	2	326+957	PIL/HO/VKP2/IRCON/604/2019 Dt. 28.08.2019	-	-
						349+441	PIL/HO/VKP2/IRCON/183/2019 dt. 20.03.2019	IRCON/3019/VKE/PAT EL/370 dt. 03.05.2019	PIL/HO/VKP2/IRCON/638/2019 Dt. 04.10.2019
4	Minor Bridge	9	9	4	5	324+193	-	IRCON/3019/VKE/PAT EL/761 dt. 23.08.2019	
						329+062	Submitted to IE-Ho By SES by mail of dt. 25.05.2019	IE Letter no. 459 - 31.05.2019 & IRCON letter no. 489 dt. 11.06.2019	PIL/HO/VKE2/IRCON/495/2019 Dt. 01.07.2019



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						330+63 0	PIL/HO/VKP2/IRCON/330/2019 Dt. 11.05.2019	IE Letter no. 450 - 27.05.2019 & IRCON letter no. 423 dt. 22.05.2019	PIL/HO/VKE2/IRCON/ 676/2019 Dt. 06.11.2019
						337+87 4	Submitted to IE-Ho By SES by mail of dt. 25.05.2019	IE letter no. 459 dt. 31.05.2019 & IRCON letter no. 489 dt. 11.06.2019	PIL/HO/VKE2/IRCON/ 495/2019 Dt. 01.07.2019
						343+50 0	PIL/HO/VKP2/IRCON/322/2019 Dt. 09.05.2019	IRCON/3019/VKE/PAT EL/490 dt. 11.06.2019 , IE letter no. 460 - 31.05.2019	PIL/HO/VKE2/IRCON/ 671/2019 Dt. 05.11.2019
						346+74 3	R1 -PIL/HO/VKE2/IRCON/563/2019 Dt. 07.08.2019	-	
						350+14 3	PIL/HO/VKP2/IRCON/324/2019 Dt. 09.05.2019	IRCON/3019/VKE/PAT EL/495 dt. 11.06.2019, IE letter no. 482 - 06.06.2019	
						350+20 1	PIL/HO/VKE2/IRCON/229/2019 Dt. 04.04.2019	IRCON/3019/VKE/PAT EL/493 dt. 11.06.2019 , IE letter no. 479 - 06.06.2019	
						354+63 6	PIL/HO/VKP2/IE/562/2019 Dt. 07.08.2019	M.O.M. dated 23.09.19 to 26.09.19	Via mail to IE HO designer dated 10.10.2019
5	Flyover	1	1	0	1	344+36 0	PIL/HO/VKE2/IRCON/593/2019 Dt. 23.08.2019 & 597 Dt. 26.08.2019	M.O.M. dated 23.09.19 to 26.09.19	-
6	ROB	1	1	0	1	352+94 5	PIL/HO/VKP2/IRCON/520/2019 Dt. 15.07.2019 & PIL/HO/VKP2/IRCON/579/2019 Dt. 17.08.2019	-	-

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National Highway Authority of India (NHDP Phase VI)  
IRCON International Limited

7	VUP	5	5	5	0	330+40 2	PIL/HO/VKE2/IRCON/533/2019 Dt. 20.07.2019	IRCON/3019/VKE/PAT EL/853 dt. 27.09.2019 for bar No. 16	-
						331+82 2	PIL/HO/VKE2/IRCON/501/2019 Dt. 02.07.2019	Ircon letter no. 497 dt. 11.06.2019	PIL/HO/VKE2/IRCON/50 1/2019 Dt. 02.07.2019
						335+40 2	Submitted to IE-Ho By SES by mail of dt. 28.05.2019	-	-
						341+82 6	PIL/HO/VKE2/IRCON/501/2019 Dt. 02.07.2019	Ircon letter no. 497 dt. 11.06.2019	PIL/HO/VKE2/IRCON/50 9/2019 Dt. 10.07.2019
						351+28 4	PIL/HO/VKE2/IRCON/501/2019 Dt. 02.07.2019	Ircon letter no. 497 dt. 11.06.2019	PIL/HO/VKE2/IRCON/50 1/2019 Dt. 02.07.2019
8	LVUP	8	8	2	6	-	4 nos. submitted by mail on dt. 26.05.2019, 2 nos. submitted by letter no. 519 dt. 12.07.2019, 2 nos. (High Skew angle) submitted by letter dated 15.03.2019	2 nos. Approved by IRCON Letter no. 758 dt. 23.08.2019	-
9	PUP/CU P	34	34	30	4	-	26 nos. submitted by letter no. 381 dated 28.05.2019, 4 nos. submitted by Mail on date 29.05.2019, 3 nos. by mail dt 26.05.2019, 1 nos. by mail dt. 28.05.2019	26 Nos. (IE letter no. 471 dt. 01.06.2019, IRCON letter no. 492 dt. 11.06.2019), 4 Nos. (IE letter no. 470 dt. 01.06.2019, IRCON letter no. 491 dt. 11.06.2019)	-

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10	Box Culvert	52	48	20	28	-	20 nos. bt letter no. 371 dt. 24.05.2019, 4 nos. by mail dt. 01.06.2019, 4 nos. by mai dt. 15.05.2019, 1 nos. by mail dt. 16.05.2019, 9 nos. by mail dt. 28.05.2019, 3 nos. by mail dt. 29.05.2019, 7 nos. by mail dt. 31.05.2019	20 nos. approved in M.O.M - 14.05.2019 to 17.05.2019	-
11	Pipe Culvert	42	42	42	0	-	42 Nos. Submitted by PIL/HO/VKE2/IRCON/362/2019 Dt. 24.05.2019	42 nos. IRCON/3019/VKE/PAT EL/476 dt. 06.06.2019	42 Nos. Submitted by PIL/HO/VKE2/IRCON/49 9/2019 Dt. 02.07.2019
	<b>Total =</b>	<b>157</b>	<b>153</b>	<b>104</b>	<b>49</b>				

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## VIII. Weather report for the month of November'19

S. No.	DATE	TEMPRATURE (°C)		HUMIDITY (%)		RAINFALL (mm)	CUMMULATIVE RAINFALL (mm)	WEATHER
		Min.	Max.	Min.	Max.			
1	1-Nov-19	24.10	32.40	47.00	89.00		-	Sunny
2	2-Nov-19	27.20	28.90	79.00	95.00		-	Cloudy
3	3-Nov-19	27.10	31.70	57.00	99.00		-	Both Cloudy & Sunny
4	4-Nov-19	26.80	32.70	54.00	87.00		-	Sunny
5	5-Nov-19	26.20	32.00	55.00	88.00		-	Sunny
6	6-Nov-19	27.80	32.10	79.00	88.00		-	Sunny
7	7-Nov-19	25.80	32.10	54.00	88.00	6.00	6.00	Cloudy
8	8-Nov-19	25.50	32.50	61.00	94.00		6.00	Both Cloudy & Sunny
9	9-Nov-19	26.10	32.00	62.00	87.00		6.00	Cloudy
10	10-Nov-19	27.70	31.90	59.00	86.00		6.00	Sunny
11	11-Nov-19	23.60	31.90	58.00	89.00		6.00	Sunny
12	12-Nov-19	24.10	32.30	54.00	89.00		6.00	Sunny
13	13-Nov-19	24.20	31.30	54.00	82.00		6.00	Sunny
14	14-Nov-19	22.20	31.30	50.00	82.00		6.00	Sunny
15	15-Nov-19	22.20	31.30	49.00	82.00		6.00	Sunny
16	16-Nov-19	23.40	32.60	64.00	89.00		6.00	Sunny
17	17-Nov-19	23.20	31.40	43.00	76.00		6.00	Sunny
18	18-Nov-19	21.90	30.90	39.00	77.00		6.00	Sunny
19	19-Nov-19	21.80	29.30	44.00	71.00		6.00	Sunny
20	20-Nov-19	21.90	29.10	42.00	75.00		6.00	Sunny
21	21-Nov-19	21.70	29.40	44.00	74.00		6.00	Sunny
22	22-Nov-19	21.10	30.20	49.00	78.00		6.00	Sunny
23	23-Nov-19	21.80	28.60	43.00	77.00		6.00	Sunny
24	24-Nov-19	21.10	31.00	46.00	78.00		6.00	Sunny
25	25-Nov-19	21.10	31.00	46.00	78.00		6.00	Sunny
26	26-Nov-19	21.20	31.00	47.00	78.00		6.00	Sunny
27	27-Nov-19	21.10	31.20	42.00	79.00		6.00	Sunny
28	28-Nov-19	21.20	31.40	46.00	84.00		6.00	Sunny
29	29-Nov-19	22.80	30.80	46.00	86.00		6.00	Sunny
30	30-Nov-19	22.70	30.90	52.00	94.00		6.00	Sunny
Cumulative Rainfall Till Date							<b>2,380.40</b>	<b>mm</b>

**IX. Status of RFI**

<b><u>MONTH :- November 2019</u></b>				
<b>S. No.</b>	<b>Total RFI</b>	<b>Approved RFI</b>	<b>RFI Re-submitted after corrections suggested</b>	<b>Remarks</b>
<b><u>Highway</u></b>				
1	340	292	49	
<b><u>Structure</u></b>				
2	1256	1047	209	
<b><u>Laboratory (QA/QC)</u></b>				
3	23	22	1	
<b><u>Survey</u></b>				
4	4	4		

## X. Summary Of Tests Conducted For The Month Of November- 19

### OGL

S.No	Description of Test	No. of Test Conducted upto previous month			No. of Test Conducted during this Month				Cummulative Total			Remarks
		No.of Test Conducted	Results		No.of Test Conducted	Results		I.E. Witness	No.of Test Conducted	Results		
			Passed	Failed		Passed	Failed			Passed	Failed	
1	Proctor Test	226	226	0	0	0	0	0	226	226	0	Frequency of testing is as per specification
2	LL/PI	226	226	0	0	0	0	0	226	226	0	
3	Sand Content (GSA)	226	226	0	0	0	0	0	226	226	0	
4	Free Swell Index	226	226	0	0	0	0	0	226	226	0	
5	C.B.R	30	30	0	0	0	0	0	30	30	0	

### Shoulder

S.No	Description of Test	No. of Test Conducted upto previous month			No. of Test Conducted during this Month				Cummulative Total			Remarks
		No.of Test Conducted	Results		No.of Test Conducted	Results		I.E. Witness	No.of Test Conducted	Results		
			Passed	Failed		Passed	Failed			Passed	Failed	
1	Proctor Test	0	0	0	0	0	0	0	0	0	0	Frequency of testing is as per specification
2	LL/PI	0	0	0	0	0	0	0	0	0	0	
3	Sand Content (GSA)	0	0	0	0	0	0	0	0	0	0	
4	Free Swell Index	0	0	0	0	0	0	0	0	0	0	
5	C.B.R	0	0	0	0	0	0	0	0	0	0	

### Existing Site Sample (MCW/SR)

S.No	Description of Test	No. of Test Conducted upto previous month			No. of Test Conducted during this Month				Cummulative Total			Remarks
		No.of Test Conducted	Results		No.of Test Conducted	Results		I.E. Witness	No.of Test Conducted	Results		
			Passed	Failed		Passed	Failed			Passed	Failed	
1	Proctor Test	8	8	0	2	2	0	0	10	10	0	Frequency of testing is as per specification
2	LL/PI	0	0	0	2	2	0	0	2	2	0	
3	Sand Content (GSA)	0	0	0	2	2	0	0	2	2	0	
4	Free Swell Index	0	0	0	2	2	0	0	2	2	0	
5	C.B.R	16	14	2	2	2	0	0	18	16	2	

### Borrow Materials

S.No	Description of Test	No. of Test Conducted upto previous month			No. of Test Conducted during this Month				Cummulative Total			Remarks
		No.of Test Conducted	Results		No.of Test Conducted	Results		I.E. Witness	No.of Test Conducted	Results		
			Passed	Failed		Passed	Failed			Passed	Failed	
1	Proctor Test	2571	2571	0	166	166	0	40	2737	2737	0	Frequency of testing is as per specification
2	LL/PI	2571	2571	0	166	166	0	40	2737	2737	0	
3	Sand Content (GSA)	2571	2571	0	166	166	0	40	2737	2737	0	
4	Free Swell Index	2571	2571	0	166	166	0	40	2737	2737	0	



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5	C.B.R	503	491	12	64	48	16	15	567	539	28
6	C.B.R (Soil Blended with Sand)	6	0	6	0	0	0	0	6	0	6

### Soil Stabilization

S.No	Description of Test	No. of Test Conducted upto previous month			No. of Test Conducted during this Month				Cummulative Total			Remarks
		No.of Test Conducted	Results		No.of Test Conducted	Results		I.E. Witness	No.of Test Conducted	Results		
			Passed	Failed		Passed	Failed			Passed	Failed	
1	Proctor Test	0	0	0	0	0	0	0	0	0	0	Frequency of testing is as per specification
2	LL/PI	0	0	0	0	0	0	0	0	0	0	
3	Sand Content (GSA)	0	0	0	0	0	0	0	0	0	0	
4	Free Swell Index	0	0	0	0	0	0	0	0	0	0	
5	C.B.R	0	0	0	0	0	0	0	0	0	0	

### Granular Sub Base

S.No	Description of Test	No. of Test Conducted upto previous month			No. of Test Conducted during this Month				Cummulative Total			Remarks
		No.of Test Conducted	Results		No.of Test Conducted	Results		I.E. Witness	No.of Test Conducted	Results		
			Passed	Failed		Passed	Failed			Passed	Failed	
1	Proctor Test	8	8	0	0	0	0	0	8	8	0	Frequency of testing is as per specification
2	Gradation	175	170	5	10	10	0	3	185	180	5	
3	LL/PI	170	170	0	10	10	0	3	180	180	0	
4	10% fines Value	2	2	0	0	0	0	0	2	2	0	
5	AIV	10	10	0	0	0	0	0	10	10	0	
6	C.B.R	8	8	0	0	0	0	0	8	8	0	

### Wet Mix Macadam

S.No	Description of Test	No. of Test Conducted upto previous month			No. of Test Conducted during this Month				Cummulative Total			Remarks
		No.of Test Conducted	Results		No.of Test Conducted	Results		I.E. Witness	No.of Test Conducted	Results		
			Passed	Failed		Passed	Failed			Passed	Failed	
1	Proctor Test	0	0	0	0	0	0	0	0	0	0	Frequency of testing is as per specification
2	Gradation	0	0	0	0	0	0	0	0	0	0	
3	LL/PI	0	0	0	0	0	0	0	0	0	0	
4	A.I.V.	0	0	0	0	0	0	0	0	0	0	

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5	F.I. & E.I.	0	0	0	0	0	0	0	0	0	0
6	L.A.A.V	0	0	0	0	0	0	0	0	0	0

**Existing Site Sample(GSB/WMM)**

S.No	Description of Test	No. of Test Conducted upto previous month			No. of Test Conducted during this Month				Cummulative Total			Remarks
		No.of Test Conducted	Results		No.of Test Conducted	Results		I.E. Witness	No.of Test Conducted	Results		
			Passed	Failed		Passed	Failed			Passed	Failed	
1	Proctor Test	0	0	0	0	0	0	0	0	0	0	Frequency of testing is as per specification
2	Gradation	0	0	0	0	0	0	0	0	0	0	
3	LL/PI	0	0	0	0	0	0	0	0	0	0	
4	A.I.V.	0	0	0	0	0	0	0	0	0	0	
5	F.I. & E.I.	0	0	0	0	0	0	0	0	0	0	
6	10% fines Value	0	0	0	0	0	0	0	0	0	0	
7	Water Absorption	0	0	0	0	0	0	0	0	0	0	
8	L.A.A.V	0	0	0	0	0	0	0	0	0	0	
9	CBR	0	0	0	0	0	0	0	0	0	0	

### Concrete Works

S.No	Description of Test	No. of Test Conducted upto previous month			No. of Test Conducted during this Month				Cummulative Total			Remarks
		No.of Test Conducted	Results		No.of Test Conducted	Results		I.E. Witness	No.of Test Conducted	Results		
			Passed	Failed		Passed	Failed			Passed	Failed	
A.	Compressive Strength of concrete cubes											Frequency of testing is as per specification
1	Concrete (Grouting)											
	7 days	0	0	0	0	0	0	0	0	0	0	
2	M-15 Concrete											
	7 Days	0	0	0	0	0	0	0	0	0	0	
	28 days	0	0	0	0	0	0	0	0	0	0	
3	M-20 Concrete											
	7 Days	441	441	0	78	78	0	16	519	519	0	
	28 days	1026	1026	0	53	53	0	12	1079	1079	0	
4	M-25 Concrete											
	7 Days	0	0	0	0	0	0	0	0	0	0	
	28 days	0	0	0	0	0	0	0	0	0	0	
5	M-30 Concrete											

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	7 Days	142	142	0	24	24	0	5	166	166	0
	28 days	379	379	0	80	80	0	24	459	459	0
6	M-35 (Pile)										
	7 Days	687	687	0	95	95	0	19	782	782	0
	28 days	3194	3194	0	936	936	0	187	4130	4130	0
	M-35 (RCC)										
	7 Days	290	290	0	113	113	0	23	403	403	0
	28 days	1124	1124	0	392	392	0	79	1516	1516	0
	M-35 (RE)										
	7 Days	63	63	0	26	26	0	6	89	89	0
	28 days	180	180	0	76	76	0	16	256	256	0
7	M-40 Concrete										
	7 Days	0	0	0	0	0	0	0	0	0	0
	28 days	0	0	0	0	0	0	0	0	0	0
8	M-45 Concrete										
	7 Days	0	0	0	0	0	0	0	0	0	0
	28 days	0	0	0	0	0	0	0	0	0	0
9	M-50 Concrete										
	7 Days	0	0	0	0	0	0	0	0	0	0

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	28 Days	0	0	0	0	0	0	0	0	0	0
10	End Block(GP2)	0	0	0	0	0	0	0	0	0	0
11	DLC Concrete										
	07 days	0	0	0	0	0	0	0	0	0	0
12	PQC (M-40)										
	7 Days	0	0	0	0	0	0	0	0	0	0
	28 days	0	0	0	0	0	0	0	0	0	0
	Beam	0	0	0	0	0	0	0	0	0	0
a)	D.L.C. (Combined Gradation)	4	4	0	0	0	0	0	4	4	0
b)	Coarse Aggregate Gradation	214	213	1	30	30	0	10	244	243	1
c)	Fine Aggregate Gradation	213	213	0	30	30	0	10	243	243	0
d)	Flakiness Index	187	187	0	15	15	0	5	202	202	0
e)	Impact Test	186	186	0	15	15	0	5	201	201	0
f)	Specific Gravity	18	18	0	0	0	0	0	18	18	0
g)	Water Absorption	18	18	0	0	0	0	0	18	18	0
B.	Testing of stone										
a)	Petrographical Examination	3	3	0	0	0	0	0	3	3	0
b)	Alkali Agg Reactivity	4	4	0	0	0	0	0	4	4	0
c)	Chloride Content	4	4	0	0	0	0	0	4	4	0

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d)	Sulphate Content	4	4	0	0	0	0	0	4	4	0
e)	Del material Content	4	4	0	0	0	0	0	4	4	0
f)	Sp. Gr & Water Absorption	4	4	0	0	0	0	0	4	4	0

### Cement Testing

(i) OPC-43 Grade

S.No	Description of Test	No. of Test Conducted upto previous month			No. of Test Conducted during this Month				Cummulative Total			Remarks
		No.of Test Conducted	Results		No.of Test Conducted	Results		I.E. Witness	No.of Test Conducted	Results		
			Passed	Failed		Passed	Failed			Passed	Failed	
1	Consistency	3	3	0	2	2	0	0	5	5	0	Frequency of testing is as per specification
2	Initial & Final Setting Time	3	3	0	2	2	0	0	5	5	0	
3	Fineness	3	3	0	2	2	0	0	5	5	0	
4	Specific Gravity	0	0	0	0	0	0	0	0	0	0	
5	3 days Comp. Strength	3	3	0	2	2	0	0	5	5	0	
6	7 days Comp. Strength	3	3	0	2	2	0	0	5	5	0	
7	28 days Comp. Strength	3	3	0	0	0	0	0	3	3	0	

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(ii) OPC-53 Grade

S.No	Description of Test	No. of Test Conducted upto previous month			No. of Test Conducted during this Month				Cummulative Total			Remarks
		No.of Test Conducted	Results		No.of Test Conducted	Results		I.E. Witness	No.of Test Conducted	Results		
			Passed	Failed		Passed	Failed			Passed	Failed	
1	Consistency	58	58	0	14	14	0	5	72	72	0	Frequency of testing is as per specification
2	Initial & Final Setting Time	58	58	0	14	14	0	5	72	72	0	
3	Fineness	58	58	0	14	14	0	5	72	72	0	
4	Specific Gravity	0	0	0	0	0	0	0	0	0	0	
5	3 days Comp. Strength	68	68	0	13	13	0	0	81	81	0	
6	7 days Comp. Strength	63	63	0	12	12	0	0	75	75	0	
7	28 days Comp. Strength	43	43	0	18	18	0	0	61	61	0	

**Bitumen Testing**

(i) VG 40

S.No	Description of Test	No. of Test Conducted upto previous month			No. of Test Conducted during this Month				Cummulative Total			Remarks
		No.of Test Conducted	Results		No.of Test Conducted	Results		I.E. Witness	No.of Test Conducted	Results		
			Passed	Failed		Passed	Failed			Passed	Failed	



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1	Sp. Gravity	0	0	0	0	0	0	0	0	0	0	Frequency of testing is as per specification
2	Penetration	0	0	0	0	0	0	0	0	0	0	
3	Softening Point	0	0	0	0	0	0	0	0	0	0	
4	Ductility	0	0	0	0	0	0	0	0	0	0	
5	Viscosity	0	0	0	0	0	0	0	0	0	0	

(ii) VG 30

S.No	Description of Test	No. of Test Conducted upto previous month			No. of Test Conducted during this Month				Cummulative Total			Remarks
		No.of Test Conducted	Results		No.of Test Conducted	Results		I.E. Witness	No.of Test Conducted	Results		
			Passed	Failed		Passed	Failed			Passed	Failed	
1	Sp. Gravity	0	0	0	0	0	0	0	0	0	0	Frequency of testing is as per specification
2	Penetration	0	0	0	0	0	0	0	0	0	0	
3	Softening Point	0	0	0	0	0	0	0	0	0	0	
4	Ductility	0	0	0	0	0	0	0	0	0	0	
5	Viscosity	0	0	0	0	0	0	0	0	0	0	

### Emulsion Testing

(i) Emulsion (RS-1)

S.No	Description of Test	No. of Test Conducted upto previous month			No. of Test Conducted during this Month				Cummulative Total			Remarks
		No.of Test Conducted	Results		No.of Test Conducted	Results		I.E. Witness	No.of Test Conducted	Results		
			Passed	Failed		Passed	Failed			Passed	Failed	
1	Penetration	0	0	0	0	0	0	0	0	0	0	
2	Ductility	0	0	0	0	0	0	0	0	0	0	
3	Viscosity	0	0	0	0	0	0	0	0	0	0	

(ii) Emulsion (SS-2)

S.No	Description of Test	No. of Test Conducted upto previous month			No. of Test Conducted during this Month				Cummulative Total			Remarks
		No.of Test Conducted	Results		No.of Test Conducted	Results		I.E. Witness	No.of Test Conducted	Results		
			Passed	Failed		Passed	Failed			Passed	Failed	
1	Penetration	0	0	0	0	0	0	0	0	0	0	
2	Ductility	0	0	0	0	0	0	0	0	0	0	
3	Viscosity	0	0	0	0	0	0	0	0	0	0	

**Rate of Spread of Material**

S.No	Description of Test	No. of Test Conducted upto previous month			No. of Test Conducted during this Month				Cummulative Total			Remarks
		No.of Test Conducted	Results		No.of Test Conducted	Results		I.E. Witness	No.of Test Conducted	Results		
			Passed	Failed		Passed	Failed			Passed	Failed	
1	Prime Coat	0	0	0	0	0	0	0	0	0	0	
2	Tack Coat	0	0	0	0	0	0	0	0	0	0	
3	Cement	0	0	0	0	0	0	0	0	0	0	

**DBM (G-II) Testing (Site Sample)**

S.No	Description of Test	No. of Test Conducted upto previous month			No. of Test Conducted during this Month				Cummulative Total			Remarks
		No.of Test Conducted	Results		No.of Test Conducted	Results		I.E. Witness	No.of Test Conducted	Results		
			Passed	Failed		Passed	Failed			Passed	Failed	
1	Combined Gradation (Dry Mix)	0	0	0	0	0	0	0	0	0	0	
2	Sand Equivalent Value	0	0	0	0	0	0	0	0	0	0	
3	Binder Content of Mix	0	0	0	0	0	0	0	0	0	0	
4	Individual Gradation	0	0	0	0	0	0	0	0	0	0	
4	After Extraction Gradation	0	0	0	0	0	0	0	0	0	0	

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5	Marshal Specimen Testing (SET)	0	0	0	0	0	0	0	0	0	0
6	Maximum Sp. Gravity (Gmm) Test	0	0	0	0	0	0	0	0	0	0
7	Combined FI & EI of Aggregate	0	0	0	0	0	0	0	0	0	0
8	AIV Test	0	0	0	0	0	0	0	0	0	0
9	LAHV Testing	0	0	0	0	0	0	0	0	0	0
10	Core Density Testing	0	0	0	0	0	0	0	0	0	0

BC (G-II) Testing (Site Sample)

S.No	Description of Test	No. of Test Conducted upto previous month			No. of Test Conducted during this Month				Cummulative Total			Remarks
		No.of Test Conducted	Results		No.of Test Conducted	Results		I.E. Witness	No.of Test Conducted	Results		
			Passed	Failed		Passed	Failed			Passed	Failed	
1	Combined Gradation (Dry Mix)	0	0	0	0	0	0	0	0	0	0	
2	Sand Equivalent Value	0	0	0	0	0	0	0	0	0	0	
3	Binder Content of Mix	0	0	0	0	0	0	0	0	0	0	
4	Individual Gradation	0	0	0	0	0	0	0	0	0	0	
4	After Extraction Gradation	0	0	0	0	0	0	0	0	0	0	
5	Marshal Specimen Testing (SET)	0	0	0	0	0	0	0	0	0	0	

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6	Maximum Sp. Gravity (Gmm) Test	0	0	0	0	0	0	0	0	0	0
7	Combined FI & EI of Aggregate	0	0	0	0	0	0	0	0	0	0
8	AIV Test	0	0	0	0	0	0	0	0	0	0
9	LAHV Testing	0	0	0	0	0	0	0	0	0	0
<b>10</b>	Core Density Testing	0	0	0	0	0	0	0	0	0	0

**Design Mix/Nominal Mix**

S.No	Description of Test	No. of Test Conducted upto previous month			No. of Test Conducted during this Month				Cummulative Total			Remarks
		No. of Test Conducted	Results		No. of Test Conducted	Results		I.E. Witness	No. of Test Conducted	Results		
			Passed	Failed		Passed	Failed			Passed	Failed	
1	M-15	0	0	0	0	0	0	0	0	0	0	( 28 days Strength Achieved )
2	M-20	44	44	0	0	0	0	44	44	0	0	
3	M-20 (Kerb)	0	0	0	0	0	0	0	0	0	0	
4	M-25	0	0	0	0	0	0	0	0	0	0	
5	M-30	44	44	0	0	0	0	44	44	0	0	
6	M-35 (R.C.C.)	44	44	0	0	0	0	44	44	0	0	
7	M-35 (Piling)	44	44	0	0	0	0	44	44	0	0	
8	M-35 (RE- Block)	6	6	0	0	0	0	6	6	0	0	
9	M-40	40	40	0	0	0	0	40	40	0	0	
10	M-45	0	0	0	0	0	0	0	0	0	0	
11	M-50	0	0	0	0	0	0	0	0	0	0	
11	GP2	0	0	0	0	0	0	0	0	0	0	
12	D.L.C.	13	13	0	0	0	0	13	13	0	0	7 days

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												Strength Achieved
13	G.S.B.	2	2	0	0	0	0	0	2	2	0	
14	W.M.M.	0	0	0	0	0	0	0	0	0	0	
15	M-40 P. Q. C.	0	0	0	0	0	0	0	0	0	0	
17	DBM GRADE - II	0	0	0	0	0	0	0	0	0	0	
19	BC GRADE - II	0	0	0	0	0	0	0	0	0	0	

### Calibrations

S.No	Description of Test	No. of Test Conducted upto previous month			No. of Test Conducted during this Month				Cummulative Total			Remarks
		No.of Test Conducted	Results		No.of Test Conducted	Results		I.E. Witness	No.of Test Conducted	Results		
			Passed	Failed		Passed	Failed			Passed	Failed	
1	WMM Plant	0	0	0	0	0	0	0	0	0	0	
2	Concrete Batching Plant	14	14	0	1	1	0	1	15	15	0	
3	Hot Mix Plant	0	0	0	0	0	0	0	0	0	0	
4	Rapid Moisture Meter	12	12	0	2	2	0	0	14	14	0	
5	Sand Pouring Cylinder	26	26	0	2	2	0	0	28	28	0	
6	C.T.M.	2	2	0	1	1	0	0	3	3	0	
7	F.T.M.	1	1	0	0	0	0	0	1	1	0	
8	Weight & Balance	9	9	0	0	0	0	0	9	9	0	
9	Proving rings											
	a) 2.5 KN	1	1	0	0	0	0	0	1	1	0	

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	b) 25 KN	1	1	0	0	0	0	0	1	1	0
	c) 50 KN	1	1	0	0	0	0	0	1	1	0
	d) 100 KN	0	0	0	0	0	0	0	0	0	0
10	Hot Mix Linnhoff 320	0	0	0	0	0	0	0	0	0	0

### Field Density Test

S.No	Description of Test	No. of Test Conducted upto previous month			No. of Test Conducted during this Month				Cummulative Total			Remarks
		No.of Test Conducted	Results		No.of Test Conducted	Results		I.E. Witness	No.of Test Conducted	Results		
			Passed	Failed		Passed	Failed			Passed	Failed	
1	O.G.L.	3019	3014	5	33	33	0	10	3052	3047	5	Frequency of testing is as per specification( Set) \
2	Embankment	3631	3618	13	500	500	0	40	4131	4118	13	
3	Subgrade	232	232	0	17	17	0	0	249	249	0	
4	G.S.B	465	460	5	15	15	0	0	480	475	5	Ground Improvement
5	W.M.M	0	0	0	0	0	0	0	0	0	0	
6	D.L.C.	0	0	0	0	0	0	0	0	0	0	

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7	C.T.B.	0	0	0	0	0	0	0	0	0	0
8	BSM	0	0	0	0	0	0	0	0	0	0
9	Back filling	0	0	0	0	0	0	0	0	0	0
10	Shoulder/Median	0	0	0	0	0	0	0	0	0	0
11	Embankment (RE Wall)	0	0	0	0	0	0	0	0	0	0

**Fly Ash**

S.No	Description of Test	No. of Test Conducted upto previous month			No. of Test Conducted during this Month				Cummulative Total			Remarks
		No.of Test Conducted	Results		No.of Test Conducted	Results		I.E. Witness	No.of Test Conducted	Results		
			Passed	Failed		Passed	Failed			Passed	Failed	
1	Proctor Test	0	0	0	0	0	0	0	0	0	0	Frequency of testing is as per specification
2	LL/PI	0	0	0	0	0	0	0	0	0	0	
3	Sand Content (GSA)	0	0	0	0	0	0	0	0	0	0	