

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)



MONTHLY PROGRESS REPORT

<u>March 2019</u>

Client:

भारतीय राष्ट्रीय राजमार्ग प्राधिकरण National Highways Authority Of India (Ministry Of Shipping Road Transport & Highways Government Of India)

Concessionaire:



Contractor:



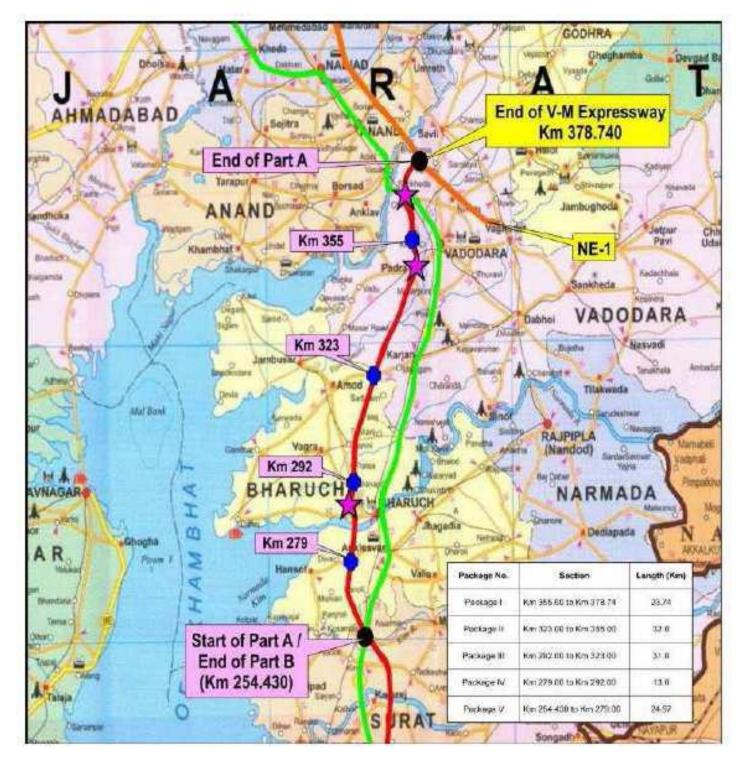
PATEL INFRASTRUCTURE LIMITED

PATEL HOUSE, CHANNI, VADODARA

Page 1 of 27



KEY PLAN OF EXPRESSWAY







KEY PLAN OF PROJECT





Executive Summary

Change is the inevitable process of nature and when one advances on the path of development it stimulates changes in environment and the life of the community. The development of roads and highways also bring changes affecting eco-systems, productivity of land, settlements, and demographic pattern and may accelerate urbanization in the areas through which it traverses. Improved and efficient road facilities help in the development of the hinterland. It is also a fact that a well developed and properly maintained road reduces the overall accident rate, air pollution, noise pollution, travel time, fuel consumption and at the same time provides a quick and safe access to the market.

The NH network contributes to about 2% of the country's road network but carries about 40% of total traffic. Road transport in India is the dominant mode of transport accounting for 65% of freight movement and 85% of passenger traffic. The production of all categories of vehicles has grown at the rate of 16% during the years between 2001-2002 and 2005-2006. Automotive industry because of its deep forward and backward linkages is a key sector of the Indian economy and is likely to act as one of the drivers of economic growth. Such spectral growth will be possible because of the strength of a huge domestic market, rapidly growing purchasing power, market-linked exchange rate and well-established market and corporate governance laws. In this context, the development of road sector has to be accelerated to match the pace of development of passenger and goods traffic.

Most of our National Highways are severely congested. Internationally a goods vehicle travels an average of 600-800 km a day until recently the average distance covered was only 250-300 km a day. Good physical connectivity is essential for sustaining the economic growth of the country. Major improvements are required in this sector to ensure level playing field for the producers and manufacturers located in different parts of the country.

Non-urban Roads in the country are classified into six categories:

- 1. Expressways
- 2. National Highways
- 3. State Highways
- 4. Major District Roads
- 5. Other District Roads
- 6. Village Roads



"The Function of expressway is to cater for movement of heavy volumes 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 or commercial concentrations, and the central business district. They are divided highways with high standards of geometrics and full or partial control of access and provided generally with grade separation at intersections. Parking, loading and unloading of goods and passengers and pedestrian traffic are not permitted on these highways."

Need of Project

The Mumbai–Ahmedabad Corridor in the western part of the country is one of the important transport corridors of the country. On one side of this corridor is Mumbai which is the financial capital of the country and on the other side is Vadodara, an important commercial and business city. There are many industrial centers on this route. Industries like, textile industry, gems and jewelries, petrochemical & fertilizer and other industrial Executive Summary Draft Environmental Impact Assessment Report Es - 4 complexes have been established along this corridor. This corridor also serves SEZ areas and ports. Development works of these corridors like improvement of National Highways, construction of expressways, construction of dedicated railway freight corridors, modernization of airports located along this corridor have been taken up. The project road lies within the proposed Delhi Mumbai Industrial corridor which is being planned as hub of industrial and urban activity.

NH-8 is of great significance for transportation in this corridor starting from the country's administrative capital of Delhi to financial capital of Mumbai. Present condition and steps taken to develop it speed and safety are as follows:

• The Vehicle Damage Factor (VDF) as assessed on NH8 section for 2 axle vehicles varies from 2.04 to 5.86 whereas VDF for 6 axle vehicles were in the range of 19.48 to 25.69.

• The average journey speed on Mumbai-Vadodara section of NH 8 was found to be in the range of 50-60 km/hr(major part of the section) to 80-90 km/hr. whereas a National Highway is designed for the speed of 100km/hr.

• NH8 is carrying traffic in the range of 50,000 to 80,000 PCU per day. It has been developed as 8lane recently but many of the sections are reaching nearly the capacity volume (LOS E) of 8 lane NH (120,000 PCU) in the year 2015 itself.

Even with Eight laning or further widening, segregation of long distance and local and / or slow traffic is hard to achieve. Further since it's a National Highway (not access controlled) and passes through many settlements land availability and displacement of people would be a major concern.



Benefits of the Project

The project will have multiple benefits. Some of the benefits are given below:

• Fast and safe connectivity resulting in savings in fuel, travel time and total transportation cost to society

- Employment opportunity to people
- Development of local industry, agriculture and handicrafts
- Development of tourism and pilgrimage
- Quick Transportation of processing and marketing of perishable agricultural produce
- Increased Road Safety
- Reduction in pollution due to less emission as there will be free flow of traffic.

• Better approach to Medical & Educational services and quick transportation of perishable goods like fruits, vegetables and dairy products

• Improved quality of life of the area etc.

Category of Project

The Proposed Project is green field expressway and falls in Column no 3 of S. No 7 (b) of the schedule of EIA Notification 2006 and subsequent amendments thereof, Hence categorized as category A and requires Prior Environment Clearance from Ministry of Environment and Forest New Delhi.

Environmental Impact Assessment

Environment Impact Assessment is a formal process for identifying the likely effects of projects on the components of Valued Eco System and acts as a planning tool that is now generally accepted as an integral component of sound decision-making. The Development of Vadodara Mumbai Expressway (Phase-I) from Km 104+700 (Km 390+864 of NH-8) to Km 378+722 (Km 80 of NE-1) in the State of Gujarat, Maharashtra and Union Territory of Dadra & Nagar Haveli Draft Environmental Impact Assessment Report Es - 5 objective of EIA is to foresee and address potential environmental problems/concerns at an early stage of project planning and design. EIA/EMP should assist planners and government authorities in the decision making process by identifying the key impacts / issues and formulating mitigation measures.



PROJECT SUMMARY

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)
Owner/Client	National Highways Authority of India
Concessionaire	IRCON Vadodara Kim Expressway Limited
Independent Engineer	Aarvee Associates Architects Engineers & Consultants Private Limited
Project Length (In Km)	32.00 Km
Total Project Cost	1465.00 Cr.
Concession Period	15 Years
Construction Period	670 Days from the Appointed Date.
Date of Signing of Concession Agreement	19 th November 2018
Appointed Date	31 th January 2019



Concessionaire has declared 31.01.2019 as the appointed date for the project. 81% of the land measuring to Km 32.00 has been handed over by the Authority. 19% of land is balance due to presence of structures, Non Disbursement of Compensation of Land and other land related issues.

VADODARA – KIM EXPRESSWAY

SANPA TO PADRA (Km. 323.000 to 335.000) Pkg_II

- 1. Permission for cutting of trees under process.
- 2. Electrical Utilities estimate approval under progress.
- 3. Water Pipelines have been identified and estimate submitted for approval.
- 4. HT line have been identified and submitted to concerned Department for preparation of estimate.

SI No Utility Length/No. **Present Status** 1 Electric Line 4.198 Km Under estimation 2 Water Pipe Line 0.290 Km Under estimation 3 Permanent Structure 0.650 Km In progress 4 **Religious Structure** 0.040 Km In progress 5 Gas Pipe Line 0.820 Km Under estimation 6 Trees 0.528 Km In progress 7 Land Acquisition 6.400 Km Payment Balance

Details of length are as below: -



Project Overview

TCS DETAILS

SR. NO.	Chainag	ge (Km)	Length	TCS TYPE
	То	From	— (Km)	
1	323+000	323+530	0.530	TCS 4/structure
2	323+530	323+700	0.170	TCS 5
3	323+700	329+300	5.600	TCS 1
4	329+300	329+400	0.100	TCS 2
5	329+400	331+850	2.450	TCS 1
6	331+850	332+050	0.200	TCS 3
7	332+050	334+325	2.275	TCS 1
8	334+325	334+430	0.105	TCS 2
9	334+430	337+050	2.620	TCS 1
10	337+050	337+500	0.450	TCS 2
11	337+500	341+500	4.000	TCS 1
12	341+500	341+760	0.260	TCS 2
13	341+760	343+870	2.110	TCS 1
14	343+870	344+000	0.130	TCS 3
15	344+000	344+550	0.550	TCS 7/Structure
16	344+550	344+750	0.200	TCS 6
17	344+750	346+750	2.000	TCS 1
18	346+750	347+150	0.400	TCS 3
19	347+150	353+050	5.900	TCS 1
20	353+050	353+550	0.500	TCS 5
21	353+550	354+850	1.300	TCS 1
22	354+850	355+000	0.150	TCS 2



Structures

S. No.	Feature	Description
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+2(25.0+25.0+25.788)mtr]
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)



SANPA TO PADRA (Km. 323.000 to 335.000) Pkg_II

Project Milestones

Project Milestone	Condition	Time Line	Financial Progress
I	Commenced construction of Project and achieved 20% of Physical Progress	150 th Day from Appointed date	293.00 Cr.
11	Commenced construction of Project and achieved 35% of Physical Progress	330 th Day from Appointed date	512.75 Cr.
	Commenced construction of III Project and achieved 75% of Physical Progress		1098.75 Cr.
IV Completion Of the Project 100% of Physical Progress		670 th Day from Appointed date	1465.00 Cr.

Summary of Current Month's Progress (March 2019)

Highway Progress:

Sr. No.	ltem	Unit	Scope of work	Completed / Work in progress	Balance work
1	C & G	Km	32.00	7.00	23.00
2	Earthwork	Km	32.00	6.00	26.00
3	GSB	Km	32.00	0.00	32.00
4	DLC	Km	32.00	0.00	32.00
5	PQC	Km	32.00	0.00	32.00



Structure Progress:

SI. No.	Structure Details:-	Unit	Scope	Completed	Work Started	Yet to be Work Started
1	Major Bridge	Nos	1	0	0	1
2	CUP	Nos	34	0	3	31
3	Minor Bridge	Nos	9	0	0	9
4	Box Culvert	Nos	52	0	5	47
5	Pipe Culvert	Nos	42	0	20	22
6	Vehicular Underpass	Nos	5	0	0	5
7	Light Vehicular Underpass	Nos	8	0	0	8
8	Flyover	Nos	1	0	0	1
9	ROB	Nos	1	0	0	1
10	Interchange	Nos	2	0	1	1
11	Vehicular Overpass	Km	2	0	1	1



SANPA TO PADRA (Km. 323.000 to 335.000) Pkg_II

DRAWING STATUS

1	Plan & Profile					
RO	323.000 to 336.000	PIL-19, dated - 12.01.2019	IRCON-57, dated - 17.01.2019			
R1	323.000 to 355.000	PIL-47, dated - 28.01.2019	IRCON-192, dated - 15.03.2019	IRCON-75, dated - 30.01.2019	IE-168, Dated - 07.03.2019	
2	Traffic and Pavement Design					
RO	Traffic and Pavement Design	PIL-55, dated - 31.01.2019	IRCON-115, dated - 18.02.2019			
R1	Traffic and Pavement Design	PIL-42, dated - 31.01.2019	IRCON-139, dated - 23.02.2019			Axle Load (Excel)
3	Retaining/Toe Wall					
RO	323.000 to 336.000 (D&D)	PIL-70, dated - 02.02.2019	IRCON-164, dated - 02.03.2019	IRCON-93, dated - 05.02.2019	IE-141, Dated - 01.03.2019	
4	Pipe Culvert					
RO	GAD Pipe Culvert (ALL)	PIL-892, dated - 15.12.2018	IRCON-70, dated - 25.01.2019			
RO	343.994, 344.768 (GAD)	PIL-085, dated - 06.02.2019	IRCON-165, dated - 02.03.2019	IRCON-95, dated - 07.02.2019	IE-136, Dated - 28.02.2019	2 Nos Drawing
RO	330.068, 331.118, 331.719, 332.294, 333.119, 334.168, 334.719 (GAD)	PIL-101, dated - 14.02.2019				7 Nos Drawing
R1	Pipe Culvert Drawing 323.000 to 355.000 (42 Nos)	PIL-190, dated - 25.03.2019				42 Nos Drawing
5	Box Culvert					
	GAD Box Culvert (ALL)	PIL-892, dated - 15.12.2018	IRCON-70, dated - 25.01.2019			
RO	324.236, 324.254, 324.987, 326.292, 326.848, 330.242, 330.853, 333.661, 335.074, 335.664	PIL-036, dated - 24.01.2019	IRCON-193, dated - 15.03.2019	IRCON-75, dated - 30.01.2019	IE-166, Dated - 07.03.2019	10 Nos Drawing



	CAD					
	GAD					
	339.352, 339.700, 339.848,					24 No.
	339.941, 342.620, 345.474,					24 Nos
	345.966, 346.800, 347.468,	PIL-054, dated -	IRCON-164,	IRCON-93,	IE-141,	Drawing
RO	347.900, 349.220, 349.809,	30.01.2019	dated -	dated -	Dated -	with
	351.009, 351.265, 324.236,		02.03.2019	05.02.2019	01.03.2019	STAAD File
	324.254, 324.987, 326.292,					(24.02.19)
	326.848, 330.242, 330.853,					
	333.661, 335.074, 335.664					
	Design Report					
	339.352, 339.700, 339.848,					
	339.941, 342.620, 345.474,				15 4 40	
D 0	345.966, 346.800, 347.468,	PIL-071, dated -	IRCON-167,	IRCON-81,	IE-140,	
RO	347.900, 349.220, 349.809,	02.02.2019	dated -	dated -	Dated -	
	351.009, 351.265, 324.236,		02.03.2019	01.02.2019	01.03.2019	
	324.254, 324.987, 326.292,					
	326.848, 330.242, 330.853,					
	333.661, 335.074, 335.664					
	GAD & Reinforcement &					
	Design Report	DII 171 datad				
R1	324.236, 324.254, 324.987,	PIL-171, dated -				
	326.292, 326.848, 330.242,	16.03.2019				
	330.853, 342.620, 345.474,					
	345.966, 346.800, 349.220 GAD & Reinforcement &					
	Design Report					
	339.352, 339.700, 339.848,					
	339.941, 342.620, 345.474,					
	345.966, 346.800, 347.468,	PIL-118, dated -				24 Nos
R1	347.900, 349.220, 349.809,	27.02.2019				Drawing
	351.009, 351.265, 324.236,	27.02.2019				Diawing
	324.254, 324.987, 326.292,					
	326.848, 330.242, 330.853,					
	333.661, 335.074, 335.664					
	Fly Wing Wall Design &	PIL-118, dated -				
RO	Drawing	27.02.2019				
6	CUP/PUP					
			IRCON-70,			
	GAD Underpass (ALL)	PIL-892, dated -	dated -			
		15.12.2018	25.01.2019			
	GAD & Reinforcement &					
	Design Report					
	324.900, 326.381, 327.575,					
RO	328.175, 328.856, 329.725,	PIL-119, dated -				
	331.425, 332.640, 333.351,	27.02.2019				
	333.786, 334.330, 334.868,					
	335.955, 336.355, 338.455,					
L		1	1	1	1	





	338.950, 339.687, 340.419,					
	340.855, 342.543, 343.169,					
	345.025, 345.653, 346.383,					
	347.108, 347.922, 348.978,					
	350.831, 352.317, 323.683,					
	324.410, 349.972, 352.464,					
	342.067					
	GAD & Reinforcement &					
	Design Report					
	324.900, 326.381, 327.575,					
	328.175, 328.856, 329.725,					
	331.425, 332.640, 333.351,					
	333.786, 334.330, 334.868,					
	335.955, 336.355, 338.455,	PIL-168 dated -				
R1	338.950, 339.687, 340.419,	15.03.2019				
	340.855, 342.543, 343.169,	1010012013				
	345.025, 345.653, 346.383,					
	347.108, 347.922, 348.978,					
	350.831, 352.317, 323.683,					
	324.410, 349.972, 352.464,					
	342.067					
-						
7						
	325.769, 329.380, 337.022,					
	341.600, 343.856, 348.468,	PIL-169 dated -				
R1	351.800, 354.832	15.03.2019				
	(GAD & Reinforcement					
	Drawing)					
RO	Geotechnical Investigation	PIL-184 dated -				
	Report	20.03.2019				
8	VUP					
	331.822, 341.826, 351.284,	PIL-170 dated -				
R1	(GAD & Reinforcement	15.03.2019				
	Drawing)	13.03.2013				
RO	Geotechnical Investigation	PIL-185 dated -				
	Report (5 Nos)	20.03.2019				
9	MINOR BRIDGE					
PO	Design and Drawing for Ch.	PIL-186 dated -				
RO	329.062	20.03.2019				
DO	Design and Drawing for Ch.	PIL-192 dated -				
RO	337.874	27.03.2019				
-	Design and Drawing for Ch.	PIL-193 dated -				
RO	346.743	27.03.2019				
10	VOP (349.441)					
			IRCON-166,	IRCON-147,	IE-142,	
RO	Geotechnical Investigation	PIL-115 dated -	dated -	dated -	Dated -	
	Report	26.02.2019	02.03.2019	27.02.2019	01.03.2019	
		l	02.00.2010		01.00.2010	



RO	Design & Drawing Pile Load Test	PIL-115 dated - 26.02.2019	IRCON-166, dated - 02.03.2019	IRCON-147, dated - 27.02.2019	IE-142, Dated - 01.03.2019	
R1	GAD	PIL-183 dated - 20.03.2019				
RO	Reinforcement	PIL-183 dated - 20.03.2019				
R1	Design Report	PIL-183 dated - 20.03.2019				
R1	Pile Load Test	PIL-183 dated - 20.03.2019				
R1	Design Report Pile Load Test	PIL-183 dated - 20.03.2019				
11	INTERCHANGE (353.666)					
RO	Design & Drawing Pile Load Test	PIL-191 dated - 26.03.2019				



Mobilization of Resources (Plant and Machineries)

	Plants & Machinery Mobilized Details					
S. No	Name of Machinery	TOTAL	Remarks			
1	Excavator	24				
2	Hywa/Tipper	105				
3	Soil Compactor	20				
4	Dozer	7				
5	Water Tanker	28				
6	Diesel Dispenser	3				
7	Grader	16				
8	Transit Mixer	4				
9	Concrete Batching Plant	4				
10	Weigh Bridge	1				
11	Tractor	10				
12	Tower Light	3				
13	DG Set	5				
14	Light Vehicle	15				
15	Trailer	2				



SANPA TO PADRA (Km. 323.000 to 335.000) Pkg_II

Laboratory Equipment

S.No	Particulars	Material Code	Unit	Capacity	Qty	Remark
1	Digital Balance 50KG	4ST210500	NO	50 Kg./ACC.1 GM.	1	
2	Digital Balance 600 GMS	4ST811600	NO	50 Kg./ACC 0.01 GM.	1	
3	Oven (Small Size) 0 to 300 Degree	4ST400694	NO	0 to 300 C	1	
4	Hot Air Oven (Big) 300 C	4ST400695	NO	0 to 300 C	1	
5	I.S. Sieves 45 CM 125.0 mm	4ST940962	NO		1	
6	I.S. Sieves 45 CM 90.0 mm	4ST940959	NO		1	
7	I.S. Sieves 45 CM 75.0 mm	4ST940956	NO		1	
8	I.S. Sieves 45 CM 63.0 mm	4ST940953	NO		1	
9	I.S. Sieves 45 CM 53.0mm	4ST940950	NO		1	
10	I.S. Sieves 45 CM 50.0 mm	4ST940947	NO		1	
11	I.S. Sieves 45 CM 45.0 mm	4ST940944	NO		1	
12	I.S. Sieves 45 CM 40.0 mm	4ST940941	NO		1	
13	I.S. Sieves 45 CM 37.5 mm	4ST940938	NO		1	
14	I.S. Sieves 45 CM 31.5 mm	4ST940935	NO		1	
15	I.S. Sieves 45 CM 26.5 mm	4ST940932	NO		2	
16	I.S. Sieves 45 CM 25.0 mm	4ST940929	NO		1	
17	I.S. Sieves 45 CM 22.4 mm	4ST940926	NO		1	
18	I.S. Sieves 45 CM 20.0 mm	4ST940923	NO		1	
19	I.S. Sieves 45 CM 19.0 mm	4ST940920	NO		1	
20	I.S. Sieves 45 CM 16.0 mm	4ST940917	NO		1	
21	I.S. Sieves 45 CM 14.0 mm	4ST940914	NO		1	
22	I.S. Sieves 45 CM 13.2 mm	4ST940911	NO		1	
23	I.S. Sieves 45 CM 12.5 mm	4ST940908	NO		2	
24	I.S. Sieves 45 CM 11.2 mm	4ST940905	NO		1	
25	I.S. Sieves 45 CM 10.0 mm	4ST940902	NO		2	
26	I.S. Sieves 45 CM 9.5 mm	4ST940899	NO		1	
27	I.S. Sieves 45 CM 6.3 mm	4ST940896	NO		1	
28	I.S. Sieves 45 CM 5.6 mm	4ST940893	NO		1	
29	I.S. Sieves 45 CM 4.75 mm	4ST940890	NO		2	
30	I.S. Sieves 45 CM 2.36 mm	4ST940887	NO		2	
31	I.S. PAN 45 CM	4ST940736	NO		1	
32	Brass Test Sieve 20 CM 4.75 mm	4ST260475	NO		1	
33	Brass Test Sieve 20 CM 2.36 mm	4ST222600	NO		2	
34	Brass Test Sieve 20 CM 2.80 mm	4ST260280	NO		1	
35	Brass Test Sieve 20 CM 2.00 mm	4ST260200	NO		1	
36	Brass Test Sieve 20 CM 1.18 mm	4ST260118	NO		1	
37	Brass Test Sieve 20 CM 1.00 mm	4ST222450	NO		2	
38	Brass Test Sieve 20 CM 0.850 mm	4ST260075	NO		1	
39	Brass Test Sieve 20 CM 0.600 mm	4ST260060	NO		3	
40	Brass Test Sieve 20 CM 0.425 mm	4ST260042	NO		1	



S.No	Particulars	Material Code	Unit	Capacity	Qty	Remark
41	Brass Test Sieve 20 CM 0.300 mm	4ST260030	NO		2	
42	Brass Test Sieve 20 CM 0.180 mm	4ST260018	NO		1	
43	Brass Test Sieve 20 CM 0.150 mm	4ST260015	NO		2	
44	Brass Test Sieve 20 CM 0.125 mm	4ST260025	NO		1	
45	Brass Test Sieve 20 CM 0.090 mm	4ST260009	NO		1	
46	Brass Test Sieve 20 CM 0.075 mm	4ST260007	NO		2	
47	Brass Test Sieve 20 CM 0.045 mm	4ST260035	NO		1	
48	Pan Brass 20 cm	4ST940737	NO		1	
49	Hot Plate (Round)	4ST940305	NO	1500 Watt.	1	
50	Bulk Density Apparatus 30 Ltr	4ST400830	NO	30 Ltr	1	
51	Bulk Density Apparatus 10 Ltr	4ST400810	NO	10 Ltr	1	
52	Bulk Density Apparatus 3 Ltr	4ST400803	NO	3 Ltr	1	
53	Specific Gravity Basket Mesh Type	4ST940775	NO		2	
54	Pycno Meter Bottle Cap 900 mm	4ST460900	NO		2	
55	Glass Beaker 500 ml - Borosil	4ST901269	NO	500 ml	1	
56	Glass Beaker 1000 ml - Borosil	4ST901275	NO	1000 ml	1	
57	Measuring Cylinder Polypropline 25 ml	4ST418025	NO	25 ml	1	
58	Measuring Cylinder Polypropline 50 ml	4ST418050	NO	50 ml	1	
59	Measuring Cylinder Polypropline 100 ml	4ST418100	NO	100 ml	3	
60	Measuring Cylinder Polypropline 250 ml	4ST418250	NO	250 ml	1	
61	Measuring Cylinder Polypropline 500 ml	4ST418500	NO	500 ml	2	
62	Measuring Cylinder Polypropline 1000 ml	4ST419000	NO	1000 ml	1	
63	Measuring Cylinder Glass 25 ml	4ST940626	NO	25 ml	1	
64	Measuring Cylinder Glass 50 ml	4ST940627	NO	50 ml	1	
65	100 ML Glass Measuring Cylinder	4ST940632	NO	100 ml	12	
66	250 ML Glass Measuring Cylinder	4ST940630	NO	250 ml	1	
67	500 ML Glass Measuring Cylinder	4ST940625	NO	500 ml	1	
68	1000 ML Glass Measuring Cylinder	4ST940620	NO	1000 ml	1	
69	RIFFILE Sample Driver	4ST940985	NO		1	
70	GI Tray 1500X1200X50 mm	4ST415003	NO	1500X1200X50	1	
71	GI Tray 600X450X50 mm for PC/TC	4ST415011	NO	600X450X50	4	
72	GI Tray 450X300X40 mm	4ST415001	NO	450X300X40	4	
73	GI Tray 300X300X40 mm	4ST415002	NO	300X300X40	4	
74	GI Tray Circular 250 mm Dia	4ST415004	NO		8	
75	Digital Thermometer 300 Deg. C	4ST060310	NO	05 C to 300 C	4	
76	Thermometer 300 Deg. C	4ST060300	NO		2	



S.No	Particulars	Material Code	Unit	Capacity	Qty	Remark
77	Scoop Big	3GC190065	NO		3	
78	Scoop Small	3GC190065	NO		3	
79	Steel Spoon	3GC015897	NO		3	
80	Standard Sand Zone I	4ST440211	KG		2	
81	Standard Sand Zone II	4ST440221	KG		2	
82	Standard Sand Zone III	4ST440231	KG		2	
83	Vicat Apparatus	4ST400135	NO		2	
84	Cement Testing Travel 8"	4ST940990	Pair		2	
85	Procter Rammer 4.89 Kg	4ST432489	NO		4	
86	Procter Mould Small	4ST422012	NO	100 mm Dia	2	
87	CBR Moulds 150 mm Dia -175mm HT	4ST023000	NO		36	
88	CBR Spacer Disk	4ST901328	NO		2	
89	CBR Surcharge Slotted Hole Weight 2.5 Kg.	4ST940326	NO	2.5 Kg.	36	
90	CBR Surcharge Central Hole Weight 5 Kg.	4ST940325	NO	5.0 Kg.	18	
91	Tripod Stands for Holding Dail Gauge	4ST901335	NO		6	
92	Casagrande Liquid Limit Apparatus	4ST406005	NO		1	
93	Liquid Limit Cone Penetrometer	4ST438035	NO		1	
94	Sand Pouring Cylinder 150 mm Dia	4ST940741	NO	150 mm Dia	2	
95	Sand Pouring Cylinder 100 mm Dia	4ST940740	NO	100 mm Dia	2	
96	Gas Stove - 1.5 ft. X 3 ft.	3CG050019	NO		1	
97	Slump Test Apparatus	4ST399995	NO		4	
98	Proving Ring 30KN	4ST901331	NO	30 KN	1	
99	Proving Ring 25KN	4ST901330	NO	25 KN	1	
100	Rubber Hammer (Mallet)	4ST003065	NO	2 KG	3	
101	Standard Weight Box	4ST280000	NO		1	
102	Flexural Testing Machine	2NC110210	NO		1	
103	Vibrating Hammer for DLC	4ST405705	NO		1	
104	Dropper Bottle 1 Ltr (Plastic)	4ST940645	NO		1	
105	Aluminium Container 50*50 mm	4ST438067	NO	50 mm Dia	25	
106	Aluminium Container 75*75 mm	4ST438068	NO	75 mm Dia	25	
107	Rapid Moisture Meter	4ST490000	NO		3	
108	Glass Beaker 100 ml - Borosil	4ST901263	NO		10	



SANPA TO PADRA (Km. 323.000 to 335.000) Pkg_II

STAFF LIST

Sr. NO	Employee Name	Designation	Unit	
1	Amiya Ranjan Sahu	General Manager	Technical	
2	Lalit Mohan Tiwari	Project Manager	Technical	
3	Prashant Kumar	Dy. Project Manager	Technical	
4	Manoj Kumar	Sr. Engineer	Technical	
5	Surender Singh	Sr. Engineer	Technical	
6	Mohd. Aqib Mir	Sr. Engineer	Technical	
7	Shivam Srivastava	Sr. Engineer	Technical	
8	Sukhveer Singh	Sr. Engineer	Technical	
9	Ashish Kumar	Engineer	Technical	
10	Rahul Kumar	Engineer	Technical	
11	Sooraj Kumar Bhavsar	Engineer	Technical	
12	Naresh Kumar	Engineer	Technical	
13	Sunil Hoshiar	Engineer	Technical	
14	Birendra Sheo	Engineer	Mechanical	
15	Vijay Singh	Engineer	Technical	
16	Avesh Kumar Shrivastava	Engineer	HSE	
17	Sandeep Kumar Singh	Asst. Engineer	Technical	
18	Ashutosh Pramod	Jr. Engineer	Technical	
19	Bhasurak Yadav	Jr. Engineer	Technical	
20	Patel Apurva	Jr. Engineer	Technical	
21	Dinesh Makwan	Sr. Surveyor	Technical	
22	Deep Chandra Lohumi	Sr. Surveyor	Technical	
23	Vijay Pamar	Surveyor	Technical	
24	Deepak Kumar	Surveyor	Technical	
25	Devendra Kumar	Surveyor	Technical	
26	Ranjeet Narendra	Sr. Lab Technician	Technical	
27	Harish Singh	Sr.Executive	HR & Admin	
28	Sumit Patel	Jr. Executive	HR & Admin	
29	Sonu Bhartiya	Jr. Executive	Store	
30	Vishant kumar	Jr. Executive	HR & Admin	
31	Brijesh Rai	Sr. Supervisor	Technical	
32	Bhupendra Sur	Sr. Supervisor	Technical	
33	Naresh Makwan	Supervisor	Technical	
34	Sanjay Mahida	Supervisor	Mechanical	
35	Gurmajor Singh	Supervisor (Civil)	Technical	
36	Shrawan Kumar Choudhary	Supervisor	Technical	
37	Surendra Sinh	Supervisor	Technical	
38	Md Zeyaullah	Jr.Supervisor	Mechanical	
39	Puran Singh Lakhan	Welder	Mechanical	



Sr. NO	Employee Name	Designation	Unit
40	Padhiyar Ghan	Driver	Technical
41	Jasveer Singh	Operators	Mechanical
42	Pushpraj Pate	Operators	Mechanical
43	Md Siraj	Operators	Mechanical
44	Ranjit Mahto	Operators	Mechanical
45	Chhagan Macchar	Operators	Mechanical
46	Babubhai Machhar	Operators	Mechanical
47	Gautam Gediya	Operators	Mechanical
48	Anil Jankee	Operators	Mechanical
49	Monu Ramanand	Helper	Technical
50	Manmohan sharma	Helper	Technical
51	Rajkumar	Helper	Technical
52	Md.Muktarul Hoque	Helper	Technical
53	Md. Sariful Hoque	Helper	Technical
54	Sanjay Kumar Meena	Helper	Technical
55	Md. Akbar Ali	Helper	Technical
56	Mohidur Rahaman	Helper	Technical
57	Lakshandhari	Helper	Mechanical
58	Umesh Kol	Helper	Mechanical
59	Mahesh Kumar	Helper	Technical
60	Sandeep Kumar	Helper	Technical
61	Trilok Kumar	Helper	Technical
62	Kapil	Helper	Technical
63	Kalu Ram Kharadi	Helper	Technical
64	Piyushbhai Jayantibhai Chauhan	Office Boy	HR & Admin



SANPA TO PADRA (Km. 323.000 to 335.000) Pkg_II

Project Photographs



329+600 to 329+700 CROPS REMOVING



328+300 to 328+400 BUSH CLEANING



SANPA TO PADRA (Km. 323.000 to 335.000) Pkg_II



334+400 to 334+500 SOIL DUMPING FOR EMB.



348+200 to 348+400 SOIL DUMPING FOR EMB.



SANPA TO PADRA (Km. 323.000 to 335.000) Pkg_II



334+800 to 335+000 FDD CHECKING FOR EMB.



344+400 SITE VISIT AARVEE/IRCON/PIL STAFF



SANPA TO PADRA (Km. 323.000 to 335.000) Pkg_II



350+443 HPC LAYOUTUT



334+168 HPC PCC







OGL BED PREPARATION