

Appendices

Appendix-1.1
(Reference: Paragraph-1.7 & 2.1; Page-04 & 08)

Details of Projects as on 31 March 2023

Sl. No.	Name of Project	Envisaged objectives	Area	Date of Sanction	Sanctioned financial outlay (₹ in crore)	Name of Implementing Agency	Date of contract/MoU	Scheduled date of completion	Actual Date of completion	Expenditure as March 2023 (₹ in crore)	Status/Date of Hand over
1	Doon Command and Control Centre (DICCC) including Bandwidth for DICCC Project	To establish a collaborative framework where input from different functional departments such as Transport, Police, Meteorology, Traffic etc. can be assimilated and analysed on a single platform.	Pan City	08.03.2019	307.83	DSCL	22.07.2019	21.05.2020	15.03.2022	302.68	No
2	Integrated Office Complex Building	To centralize district-level offices for enhanced citizen convenience.	ABD area	16.07.2019	204.46	CPWD	01.10.2019	01.11.2021	Under progress	18.85	No
3	Smart Roads	Smart Road was conceived as a combination of appropriate road infrastructure and supporting IT components that would assist all road users including vehicle users, pedestrians, cyclists, and differently abled persons to move comfortably.	ABD area	08.03.2019	190.54	B&R and PWD	12.07.2019	01.07.2021	Under progress	119.29	No
4	City Investments to Innovate, Integrate and Sustain (CITIIS)	The project proposes to refocus towards specific interventions around schools.	Pan City	18.06.2022	58.50	PWD	November 2022	August 2023	Under progress	1.16	No
5	Electric Buses	To introduce a new public transport system to minimize pollution and give fillip to the overall program of using eco-friendly energy for transport.	Pan City	24.06.2019	41.56	DSCL	04.03.2020	03.09.2020	04.12.2022	41.57	No
6	Water supply Augmentation and Smart Meters	To replace and reorganize the water supply pipelines and install smart meters in Zone-4B of the ABD area to prevent water misuse.	ABD area	16.07.2019	32.59	DSCL	16.12.2019	16.12.2020	Under progress	24.25	No
7	Integrated Sewerage Work	To replace the main sewer network that had outlived its design period, including connectivity up to the outfall point.	ABD area	26.09.2019	28.41	B&R and UJN	10.12.2019	01.12.2020	Under progress	9.14	No
8	Smart Water Management (SCADA)	To cater the issue related to water loss, erratic distribution of water from storage reservoirs and inefficient electric motors, pumping machinery and other equipment.	Pan City	16.07.2019	53.40	DSCL	18.09.2020	17.09.2021	31.03.2023	19.13	No

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Sl. No.	Name of Project	Envisaged objectives	Area	Date of Sanction	Sanctioned financial outlay (₹ in crore)	Name of Implementing Agency	Date of contract/MoU	Scheduled date of completion	Actual Date of completion	Expenditure as March 2023 (₹ in crore)	Status/Date of Hand over
9	Smart Waste Vehicle	Procurement of Smart Vehicles and Smart Bins for collection of door-to-door waste.	Pan City	24.06.2019	21.28	NND & UJS	-	-		12.82	Yes May 2023
10	Rejuvenation of Parade Ground	To transform fragmented spaces into a pedestrian and dynamic transformational Zone.	ABD area	16.07.2019	20.87	DSCL and PWD	30.10.2019	30.10.2020	07.02.2023	9.73	No
11	Integrated Drainage Work	To ensure systematic and integrated drainage system and avoid flooding in ABD area.	ABD area	26.09.2019	16.27	B&R and Irrigation Department	10.12.2019	01.12.2020	Under progress	8.82	No
12	Pedestrianisation of <i>Paltan Bazaar</i>	To enhance a 1.2 km, stretch from Clock Tower (Ghanta Ghar) to Darshani Gate. Within this, 476 meters were designated for development as a pedestrian walkway with a road section of 2.5m pedestrian on both sides and 5m central spine for golf cart and limited time vehicular movement. The central 5m carriageway is designed for restricted vehicular movement, with interlocked paver block surface. The footpath of average 2.5m width on both sides maintains the same level with the road surface.	ABD area	16.07.2019	13.10	DSCL	10.12.2019	10.12.2020	10.12.2022	7.09	No
13	Modern Doon Library	To enrich the learning outcomes of students/users through diverse techniques i.e., use e-content & interactive techniques etc.	ABD area	01.10.2019	12.33	UPN	20.09.2019	15.03.2021	31.01.2023	5.75	Yes January 2023
14	Smart School	To provide schools with smart facilities like Virtual Classes / Learning Management System, Digital content /e-library etc.	ABD area	08.03.2019	6.05	DSCL	30.05.2019	29.02.2020	01.11.2020	5.91	No
15	Facade rejuvenation of <i>Platan Bazar</i>	To give a symmetrical look by regularizing the building facade and proper signage system based on local design elements.	ABD area	15.06.2022	4.79	DSCL	14.11.2022	13.05.2023	Under Progress	1.35	No
16	Water ATM	To provide safe and potable drinking water in adequate quantity and within minimum distance to all at all time and to bring about an improvement in the general quality of life in the ABD area.	Pan City	19.11.2018	1.98	DSCL	20.02.2019	19.08.2019	23.09.2021	--	No

Sl. No.	Name of Project	Envisaged objectives	Area	Date of Sanction	Sanctioned financial outlay (₹ in crore)	Name of Implementing Agency	Date of contract/ MoU	Scheduled date of completion	Actual Date of completion	Expenditure as March 2023 (₹ in crore)	Status/Date of Hand over
17	Smart Toilet	To meet the sanitation and cleanliness requirement at public places in Dehradun.	Pan City	19.11.2018	1.73	DACL	07.03.2019	06.09.2019	03.09.2022	1.74	No
18	Creche Building	To address children's rights to nutrition, health, care, learning, play, and protection while parents are engaged, and to instil confidence in mothers about their children's safety and well-being.	ABD area	16.07.2019	0.90	PWD	22.07.2021	23.04.2022	04.01.2023	0.88	Yes January 2023
19	Digitization of Collectorate and CDO Office	To procure computers, printers, and scanners for implementation of e-office in the Collectorate and Tehsil offices.	ABD area	08.09.2020	0.61	Collectorate	21.09.2020	21.10.2020	26.10.2020	0.56	Yes
20	Monumental Flag	To foster a sense of national pride, unity, and patriotism among citizens.	ABD area	13.07.2020	0.10	DACL	19.05.2020	19.08.2020	19.12.2020	0.09	No
21	Smart Poles on PPP ¹ mode	To provide multiple services in the city e.g., Wi-Fi, Smart Warm LED luminaries, CCTV camera, Telecom Services and environmental sensors through Smart Poles.	Pan City	19.08.2019	Not Applicable	PPP	14.01.2020	13.01.2021	Under progress	Not Applicable	No
22	Citizen Engagement/ Outreach Project	To provide Citizen engagement in Dehradun through virtual interaction, dialogues and discussion.	ABD area	13.07.2020	1.00	DACL	-	-	-	0.58	-

¹ The project was planned to be executed as PPP project; hence, no cost was sanctioned for it.

Appendix-2.1

(Reference: Paragraph-2.3, 2.4.2, 2.4.5.1, 2.4.6, 2.4.8, 2.4.9; Page 10, 17, 21, 22, 25, 26)

Project wise detail of Smart components

Sl. No.	Name of Project	Proposed components under the project	Status of execution as of December 2023	Remarks
1	Doon Integrated Command and Control Centre	Traffic lights	Installed	Operational availability of end devices (except surveillance cameras) ranged from 28 to 73 per cent
		Surveillance Cameras	Installed	
		Red Light Violation Detection	Installed	
		Automatic Number Plate Reader	Installed	
		Smart traffic sensors (A & B)	Installed	
		Speed Violation Detection (SVD)	Installed	
		Variable Message Display boards	Installed	
		Emergency Call Box (ECB)	Installed	
		Public Announcement System	Installed	
		Environmental sensors	Installed	
2	Electric Bus	Eco-friendly energy for transport	Enabled	Functional
3	Rejuvenation of Parade Ground	Rainwater harvesting	Executed	Functional
4	Smart Water Management (SCADA)	Flow Meter	Installed	Functional
		Pressure Transmitters	Installed	Functional
		Automated Chlorinators	Installed	Functional
		Valve Actuators	Installed	Functional
		Quality Monitors	Installed	Functional
		Level Sensors	Installed	Functional
		Coin Operated Water Dispensing System	Executed	Functional
6	Smart Waste Vehicle	Sewer cum Jetting Machine	Executed	Functional
		Jetting Garbing and Rodding Machine	Executed	Functional
		Super Sucker Machine with dump tank	Executed	Functional
		Drain Cleaning Machine,	Executed	Functional
		Road Sweeping Machine	Executed	Functional
		e-carts	Executed	Non-functional
7	Modern Doon Library	e-content	Not Installed	
		Intelligence Door	Not Installed	
		Wi-fi	Installed	Functional
		CCTV	Installed	Functional
		RFID tags/system	Installed	Partially functional
		Anti-theft check	Installed	Functional
		Computer	Installed	Functional
		Smart screen	Installed	Functional

Sl. No.	Name of Project	Proposed components under the project	Status of execution as of December 2023	Remarks
8	Smart toilet	Bio-Metric Attendance System	Installed	Non-functional for want of license key
		Sensor based Taps	Executed	Partially functional
		Auto flush urinals system	Executed	Partially functional
		LED indications	Not- executed	
		Voice Guidance	Not- executed	
		Display boards	Not- executed	
		GPRS Connectivity	Not- executed	
9	Water supply Augmentation and Smart Meters	Electrical Inverter	Not- executed	
		Roof top solar	Not- executed	
10	Smart Poles on PPP mode	Replacement of Rising Mains & Distribution Mains and installation of Tube-well	Executed	
		Installation of Smart Meter	Partially Installed	Work under progress
		Wi-fi	Not Installed	
		Warm LED Street light	Not Installed	
		IP based PTZ Camera (CCTV)	Not Installed	
		Environmental Monitoring Sensors	Not Installed	
		Digital Billboard	Not Installed	
		Telecom services	Partially	
		Interactive boards	Installed	
		Computer lab	Installed	
11	Smart School	Projectors	Installed	
		e-Content	Installed	
		CCTVs	Installed	
		Biometric Attendance	Installed	
		Uniform cross section of Carriageway	Deficiently executed	
		Dedicated pedestrian pathway	Deficiently executed	
		Electric vehicles charging stations	Not executed	Non-functional due to lack of funds and other required facilities
		Pedestrian crossing in tabletop type crossing	Not executed	
		Smart LED lighting with sensors	Not executed	
		Designated parking lots with sensors	Not executed	
Smart Bus Stop	Completed			
Multi utility Duct/Duct Bank	Completed			
CCTV camera				
Demarcated School bus/Van Parking				
Bollards				
12	Smart Roads			
13	City Investments to Innovate, Integrate and Sustain (CITIIS)			
		Under progress	Work under progress	

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Sl. No.	Name of Project	Proposed components under the project	Status of execution as of December 2023	Remarks
14	Pedestrianisation of <i>Paltan Bazaar</i>	Speed calming measures	Not Executed as per provision	
		Pathway and pavements		
		Multi utility Duct		
		2.5-meter pedestrian on both sides and 5-meter central spine for golf cart and limited time vehicular movement		
		Retractable hydraulic bollards		
		Benches		
		E-Card with charging stations		
		Kiosk garden		
		Horticulture work		
		Modular FRP Toilets		
15	Integrated Office Complex Green Building	CCTV cameras	Not Installed	
		Smart poles	Not Installed	
		Environmentally sustainable building	Work under progress	
16	Digitization of Collectorate and CDO Office	Computer	Installed	
		Printer	Installed	
		Scanner	Installed	
17	Façade rejuvenation of Platan Bazar	Regularisation of Buildings Façade and proper Signage System based on local design elements.	Executed	
18	Integrated Drainage Work	Establishment of Systematic and Integrated Drainage System	Under progress	
19	Integrated Sewerage Work	Replacement of Main Sewer Network and Connectivity up to the outfall point situated outside the ABD area	Under progress	
20	Citizen Engagement/ Outreach Project	Citizen engagement in Dehradun through virtual interaction, dialogues and discussion	Carried out	
		Activity cum Lunch/Meal Area	Provided	
		Play Area	Provided	
		Study Room	Provided	
		Sleeping Room	Provided	
21	Creche Building	Day-care/Creche office	Provided	
		Kitchen	Provided	
		Installation of 30.5-meter-tall Monumental National Flag	Installed	
22	Monumental Flag	Installation of 30.5-meter-tall Monumental National Flag		

Appendix-2.2
(Reference: Paragraph-2.4.1; Page 11)

Total expenditure incurred on DICCC project

Sl. No.	Description	2019-20	2020-21	2021-22	2022-23	2023-24 (Upto 12/2023)	Total Amount
1	CAPEX (M/s HPE)	62.96	81.30	76.66	0.00	2.20	223.12
2	OPEX (M/s HPE)	0.00	0.00	0.00	4.56	10.11	14.67
	Total	62.96	81.30	76.66	4.56	12.31	237.79
Other expenses related to DICCC project							
3	M/s HPE Manpower-DICCC	0.00	0.00	0.34	0.00	0.00	0.34
4	Electricity	0.00	0.23	0.36	0.66	0.28	1.53
5	Telephone	0.00	0.01	0.01	0.02	0.02	0.06
6	Bandwidth (BSNL)	0.00	0.00	5.62	8.28	2.86	16.76
7	Third Party Auditor (M/s Bharat Electronics)	0.00	0.00	1.73	0.00	0.23	1.96
8	Zebra Crossing Line	0.00	0.00	0.00	0.02	0.00	0.02
	Total	0.00	0.24	8.06	8.98	3.39	20.67
	Grand Total	62.96	81.54	84.72	13.54	15.70	258.46

Source: Information provided by DSCL.

Appendix-2.3

(Reference: Paragraph-2.4.1.7; Page 16)

Cost estimate for dismantling and re-installation of IT Equipment at 16 traffic junctions of Smart Road

(Amount in ₹)

Sl. No.	Locations	Estimation for Removal	Estimation for Re-installation
1	Survey Chowk	97,687	13,85,750
2	Nanys Bakery	33,375	6,39,625
3	Dwarika Chowk	29,500	6,90,375
4	Yamuna Colony	11,875	4,28,125
5	Bahal Chowk	0	4,45,125
6	Araghar Chowk	33,812	8,41,875
7	Globe Chowk	0	3,33,375
8	Near CMI Chowk	42,125	6,70,187
9	Race Course Chowk	20,000	2,10,500
10	City Heart Centre, EC Road	40,250	3,01,000
11	Dilaram Chowk	10,875	1,89,437
12	Chakrata Road Tagore Villa	18,750	66,375
13	Mohini Road Cut EC Road	19,000	68,125
14	Bindal Chowk	0	1,97,375
15	Kishan Nagar Chowk	0	84,375
16	Clock Tower	0	1,20,250
Total		3,57,249	66,71,874
Grand Total		70,29,123	

Appendix-2.4
(Reference: Paragraph-2.4.4; Page 19)

Average occupancy in e-buses on each trip during the month of July 2023

Name of Route	Number of Trip	Fare	Revenue earned during the month	Revenue earned each day	Revenue earned in each trip	Occupancy in each trip (Number of passenger)
ISBT-Airport	38	200	6,37,325	20,558.87	541.02	2.71 (3)
ISBT-Rajpur	68	30 ²	8,42,085	27,164.03	399.47	13.32 (13)
ISBT-Sahstradhara	46	35 ³	6,39,430	20,626.77	448.41	12.81 (13)
ISBT-Raipur Maldevta	49	50 ⁴	9,27,510	29,919.68	610.61	12.21 (12)
ISBT-Sahaspur (Langha Road)	46	50	9,39,705	30,313.06	658.98	13.18 (13)

Appendix-2.5
(Reference: Paragraph -2.4.5.2; Page 21)

Details of unused material under Smart Road Project

Sl. No.	Items	Handed over to PIU, PWD		Utilized Quantity		Balance Quantity	
		Quantity	Cost (in ₹)	Quantity	Cost (in ₹)	Quantity	Cost (in ₹)
1	2	3	4	5	6 (4/3*5)	7(3-5)	8(4/3*7)
1	Manhole Section	91	45,09,581	4	1,98,223	87	43,11,358
2	1 M Load bearing Section	111	38,94,818	27	9,47,388	84	29,47,430
3	1.60 M Non load bearing Section	585	2,60,49,545	20	8,90,583	565	2,51,58,962
Total cost of remaining items							
							3,24,17,750

² Fare is based on the operative km 13 to km 17.

³ Fare is based on the operative km 17 to km 21.

⁴ Fare is based on the operative km 30 to km 35.

Appendix-3.1
(Reference: Paragraph-3.2.1; Page 45)

Details of overhead hindrances in the alignment of Smart Road

Sl. No.	Hindrances	Name of line Departments	Number of Utilities			
			Rajpur Road	Chakrata Road	EC Road	Haridwar Road
1	Electric Pole	UPCL	84	138	191	63
2	Hoarding & Bus Shelter	Nagar Nigam	30	39	14	0
3	Trees	Forest	44	27	30	15
4	Transformer	UPCL	25	16	20	10
Total			183	220	255	88

Appendix-3.2
(Reference: Paragraph-3.3; Page 46)

Details of imposition of penalty

Sl. No.	Name of Project	Time Overrun as on December, 2023 (months)	Provision of penalty	Status of penalty imposed
1	Smart Road	30	Yes	Not imposed as DSCL failed to provide hindrance free work front to B&R.
2	CITIIS	21	Yes	Not imposed
3	Electric buses	26	Yes	Not imposed
4	Water Supply Augmentation and Smart Metering	36	Yes	Not imposed
5	Rejuvenation of Parade Ground	38	Yes	Partially imposed ⁵
6	Modern Doon Library	19	Yes	Imposed but not recovered
7	Pedestrianisation of <i>Paltan Bazaar</i>	24	Yes	Imposed but partially recovered
8	Water ATM	24	Yes	Not imposed

⁵ A penalty was imposed for the delay in executing the work only; however, the penalty for the value of the incomplete work was not enforced, as detailed in Case Study-1.

Appendix-3.3
(Reference: Paragraph-3.5; Page 49)

Details of cost escalation under Smart Road Project

Sl. No	Description of Work / Item(s)	Units	Quantity as per old DPR for all four roads ⁶	Unit rate as per old DPR	Unit rate as per new DPR	Difference in rates	Quantity as per new DPR for all four roads	(Amount in ₹)		
								3	4	5
Footpath & KC Drain										
1	Plain cement concrete 1:3:6 nominal mix in foundation with crushed stone aggregate 40 mm nominal size mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days.	Cum	41.00	4,109.50	5,036.70	927.20	2,722.67		25,24,459.62	
2	Providing and laying tactile tile (for vision impaired persons as per standards) of size 300 x 300 x 9.8 mm having with water absorption less than 0.5% and conforming to IS:15622 of approved make in all colours and shades in for outdoor floors such as footpath, court yard, multi modals location etc., laid on 20mm thick base of cement mortar 1:4 (1 cement: 4 coarse sand) in all shapes & patterns including grouting	Sqm	12,073.00	1,450.45	1,933.75	483.30	4,042.20		19,53,595.26	
Pavement Work										
3	Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub- base / base course on well-prepared surface and compacting with vibratory roller to achieve the desired density.	Cum	10,522.00	2,593.10	3,203.10	610.00	9,036.90		55,12,509.00	
4	Providing and applying primer coat with bitumen emulsion on prepared surface of granular Base including clearing of road	Sqm	1,03,944.00	22.80	32.30	9.50	71,460.85		6,78,878.08	

⁶ Rajpur Road, Haridwar Road, EC Road and Chakrata Road.

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Sl. No	Description of Work / Item(s)	Units	Quantity as per old DPR for all four roads ⁶	Unit rate as per old DPR	Unit rate as per new DPR	Difference in rates	Quantity as per new DPR for all four roads	Cost escalation
	surface and spraying primer at the rate of 0.60 kg/sqm using mechanical means.							
5	Providing and laying dense bituminous macadam with 100-120 TPH batch type HMP producing an average output of 75 tonnes per hour using crushed aggregates of specified grading, premixed with bituminous binder @ 4.0 to 4.5% by weight of total mix of mix and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRTH specification clause No. 507 complete in all respects. Grading I (40 mm nominal size)	Cum	10,395.00	7,241.20	9,688.50	2,447.30	7,789.55	1,90,63,365.72
6	Providing and applying tack coat with bitumen emulsion using emulsion pressure distributor at the rate of 0.20 kg per sqm on the prepared bituminous/granular surface cleaned with mechanical broom.	Sqm	1,31,576.00	8.00	10.70	2.70	2,41,050.98	6,50,837.65
7	Providing and laying bituminous concrete with 100-120 TPH batch type hot mix plant producing an average output of 75 tonnes per hour using crushed aggregates of specified grading, premixed with bituminous binder @ 5.4 to 5.6 per cent of mix and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 509 complete in all respects. Grading-II	Cum	4,747.00	8,283.40	11,254.90	2,971.50	5,350.08	1,58,97,762.72
Junction Improvement, Road Painting & Road Signages								
8	Providing and laying 25 mm thick mastic asphalt wearing course with paving grade bitumen meeting the requirements given in table 500-29, prepared by using mastic cooker and laid to required level and slope after cleaning the surface, including	Sqm	37,109.00	501.30	688.00	186.70	20,850.00	38,92,695.00

Sl. No	Description of Work / Item(s)	Units	Quantity as per old DPR for all four roads ⁶	Unit rate as per old DPR	Unit rate as per new DPR	Difference in rates	Quantity as per new DPR for all four roads	Cost escalation
9	providing antiskid surface with bitumen pre-coated fine-grained hard stone chipping of 13.2 mm nominal size at the rate of 0.005 cum per 10 sqm and at an approximate spacing of 10 cm centre to centre in both directions, pressed into surface when the temperature of surfaces not less than 1000 C, protruding 1 mm to 4 mm over mastic surface, all complete as per clause 515.							
10	Truss and vertical Support Providing and fixing of Standard Metal Delineator.	Tonne Nos.	20.00 13,965.00	80,163.70 512.90	96,819.20 1,225.20	16,655.50 712.30	144.00 1,200.00	23,98,392.00 8,54,760.00
Electrical Work								
11	External Lighting Feeder Pillar: Design, manufacture, supplying, fixing, testing & commissioning of outdoor wall/ floor mounted cubicle type CCMS feeder pillar of suitable size (not less than 600Wx1200Hx450D-CCMS) fabricated from 2.0 mm (14 SWG) hot dip galvanized GI sheet steel with canopy on top, double door with locking arrangement (IP-54), powder coated with epoxy paint of approved shade, duly fixed on MS angle 50 x 6 frame with 900 long legs, out of which 450 duly grouted in cement concrete+B17 1:2:4 (1 cement: 2 sand: 4 stone aggregate 20mm) and having following equipment/ accessories mounted inside the cubical panel i/c connection, inter connection with aluminum thimbles, earthing with two nos. earth studs etc complete as reqd.	Job		1,20,000	1,43,016.30	23,016.30	12.00	2,76,195.60
12	Supplying and laying of following size DWC HDPE pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and cutting, jointing etc. Direct in ground (75 cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required. 63 mm dia (OD-63 mm & ID-51 mm nominal).	Meter	5,750.00	135.00	209.00	74.00	14,251.00	10,54,574.00
Water Supply Work								
13	D.I. pipe conforming to IS:8329/2000 Providing of all materials, carting from site store to site of work, lowering into trenches with							

Sl. No	Description of Work / Item(s)	Units	Quantity as per old DPR for all four roads ⁶	Unit rate as per old DPR	Unit rate as per new DPR	Difference in rates	Quantity as per new DPR for all four roads	Cost escalation
	true to alignment, Laying & Jointing of full-length S&S Centrifugally Cast (Spun) Ductile Iron Pipes including supply of 'EPDM' rubber gaskets conforming to IS:5382-1985 with testing of pipe line complete. D.I. Pipe S&S K-7:							
	100 mm dia pipe	Meter	3,597.00	900.00	1,150.00	250.00	1,827.00	4,56,750.00
	150 mm dia pipe.	Meter	1,065.00	1,270.00	1,620.00	350.00	969.00	3,39,150.00
	250 mm dia pipe	Meter	307.00	2,170.00	2,630.00	460.00	276.00	1,26,960.00
14	Providing and laying D.I. specials of class K-12 suitable for push-on jointing as per IS: 9523-2001, Up to 600 mm dia.	Per Qtl.	71.11	14,040.00	22,620.00	8,580.00	170.34	14,61,517.20
15	Supply, fixing and installation of multijet AMR domestic water meters pre-equipped with RF based automated meter reading facility, with nuts, bolts and necessary accessories conforming to IS 779:1994 / other ISO 4064 standard with 5 years warranty. DN 15mm as per technical specification.	Nos.	828.00	5,800.00	7,200.00	1,400.00	630.00	8,82,000.00
16	Supply of all labour, material required for restoring of existing house connection which might be damage during excavation and also shifting all existing connection to new water supply system from existing water supply system complete as per unit estimate and directed by Engineer in-charge. 15 mm size water connections.	Nos.	828.00	2,501.95	3,153.20	651.25	630.00	4,10,287.50
Drainage Work								
17	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m.	Cum	13,519.00	125.25	219.65	94.40	6,146.40	5,80,220.16
18	Removal of earth By Mechanical Transport including loading, unloading and stacking up to 10 km Distance.	Cum	25,624.00	203.42	277.83	74.41	12,804.80	9,52,805.17
19	Plain cement concrete (PCC Grade M15) in open foundation completes as per drawing and technical specifications.	Cum	4,239.00	4,754.00	5,788.30	1,034.30	1,505.01	15,56,631.84
20	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced	Cum	7,360.32	6,515.95	7,997.30	1,481.35	6,193.65	91,74,963.43

Sl. No	Description of Work / Item(s)	Units	Quantity as per old DPR for all four roads ⁶	Unit rate as per old DPR	Unit rate as per new DPR	Difference in rates	Quantity as per new DPR for all four roads	Cost escalation
	cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centring, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge.							
21	Supplying, fitting and placing un-coated HYSD bar reinforcement in foundation complete as per drawing and technical specifications.	Tonne	1,918.00	60,763.80	84,702.50	23,938.70	708.86	1,69,69,186.88
	Total							8,76,68,496.81
	Add 18% GST							1,57,80,329.43
	Grand Total							10,34,48,826.24

Appendix-4.1
(Reference: Paragraph-4.1; Page 51)

Details of release of Central share and matching share of State

Date of release of Central Share to State	Amount released by Centre	Date of Release of Central Share by State to SPV	Amount of Central share released by State to SPV	Delay in release of Central Share (in days)	Date(s) of release of matching share to SPV by State	Amount (s) of State matching share released to SPV	Delay in release of State matching share
01.09.2015	2.00	17.05.2016	0.67	252	13.02.2019	2.00	1254
-	-	23.05.2016	1.33	258	-	-	-
30.03.2018	18.00	18.05.2018	18.00	42	19.03.2018	3.00	Paid in advance
27.06.2018	2.00	13.02.2019	2.00	224	11.06.2018	15.00	66
20.08.2018	34.00	13.02.2019	34.00	170	28.03.2019	2.00	267
21.12.2018	4.00	21.05.2019	4.00	144	28.03.2019	34.00	213
31.07.2019	70.00	16.10.2019	70.00	70	01.10.2019	4.00	277
03.10.2019	66.00	11.02.2020	35.00	124	11.12.2019	70.00	126
		07.10.2020	31.00	363	12.04.2021	66.00	550
19.10.2020	5.00	11.11.2020	5.00	16	08.10.2020	3.00	Paid in advance
					11.11.2020	2.00	16
29.10.2020	46.50	04.02.2021	46.50	91	12.04.2021	12.75	158
					14.10.2021	33.75	343
27.06.2022	46.50	25.07.2022	46.50	21	06.12.2022	46.50	155
30.06.2022	2.50	25.07.2022	2.50	18	30.09.2021	2.50	Paid in advance
08.12.2022	49.00	17.01.2023	49.00	33	17.01.2023	46.00	33
					20.03.2023	3.00	95
17.02.2023	49.00	16.03.2023	46.50	20	17.05.2023	46.50	82
		15.05.2023	2.50	80	15.05.2023	2.50	80

Appendix-4.2
(Reference: Paragraph-4.5; Page 55)

Details of interest on mobilisation advance

Date	Mobilisation Advance paid	Mobilisation Advance recovered	Balance	Days	Amount of Interest
16.01.2020	3,64,00,000	0	3,64,00,000	265	26,42,739.73
07.10.2020		69,83,724	2,94,16,276	169	13,62,013.88
25.03.2021		18,41,088	2,75,75,188	114	8,61,252.45
17.07.2021		27,61,658	2,48,13,530	241	16,38,372.80
15.03.2022		21,26,385	2,26,87,145	367	22,81,145.81
17.03.2023		1,42,31,158	84,55,987	69	1,59,852.90
25.05.2023		12,18,821	72,37,166	84	1,66,553.96
17.08.2023		45,86,370	26,50,796	-	-
Total		3,37,49,204			91,11,931.53
		Recovered			10,00,000.00
		Balance to be recovered			81,11,931.53

