

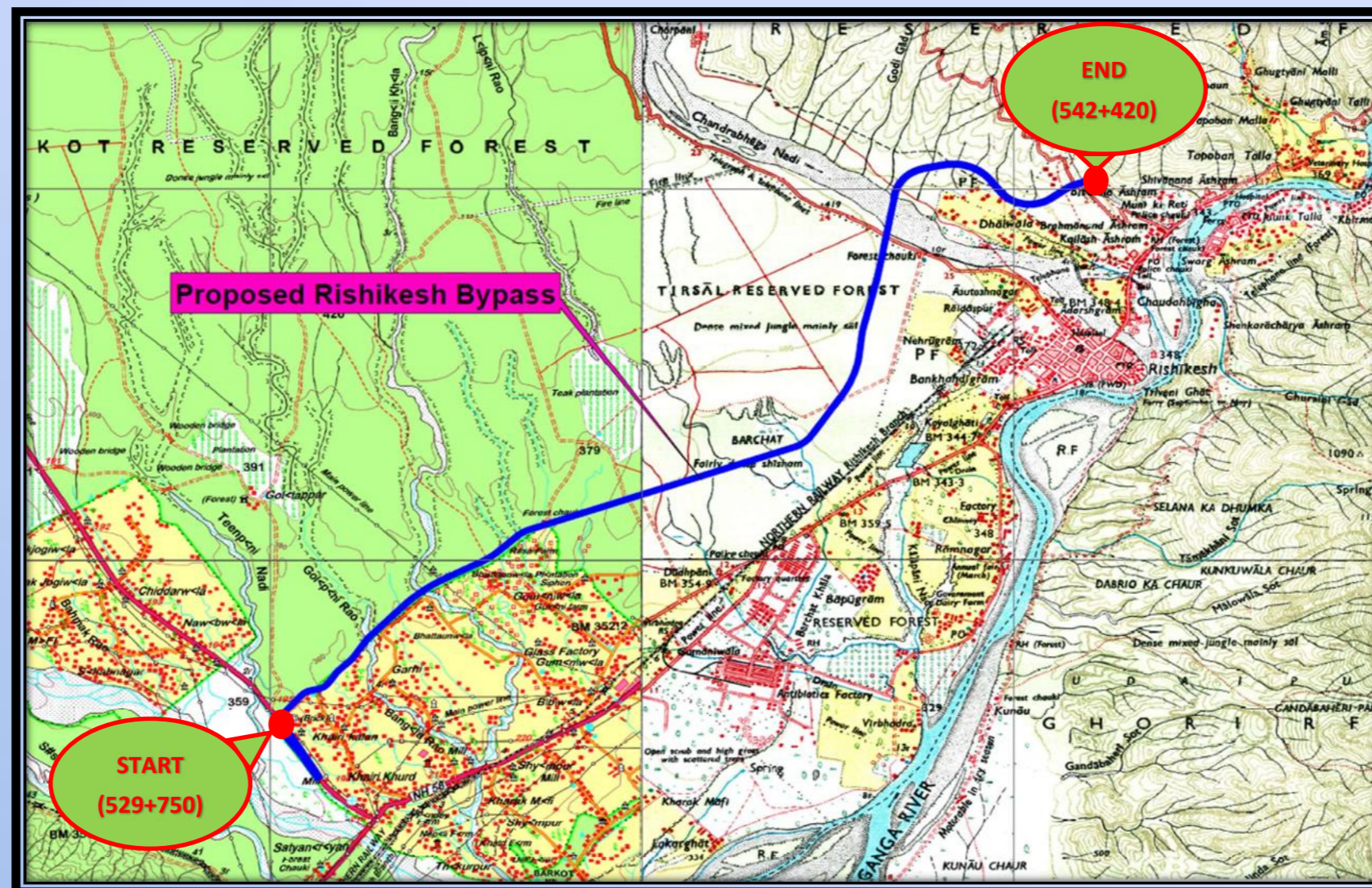


सत्यमेव जयते

सड़क परिवहन और राजमार्ग मंत्रालय MINISTRY OF ROAD TRANSPORT & HIGHWAYS

ZE

Consultancy Services for Preparation of DPR for 4 laning of Rishikesh Bypass from Design Chainage km 529+750 (Near Teenpani Flyover on NH-7) to Design Chainage km 542+420 (Near Kharasrote Bridge), passing through Bhattowala and Dhalwala Village in the State of Uttarakhand (Design Length - 12.670 Km).



DRAFT DETAILED PROJECT REPORT

**VOLUME –V A: DRAWINGS (HIGHWAYS)
(RISHIKESH BYPASS)**

AECOM

9th floor, Infinity Tower – 'C', DLF Cyber City, DLF Phase II,
Gurgaon, Haryana, India, Pin 122 002

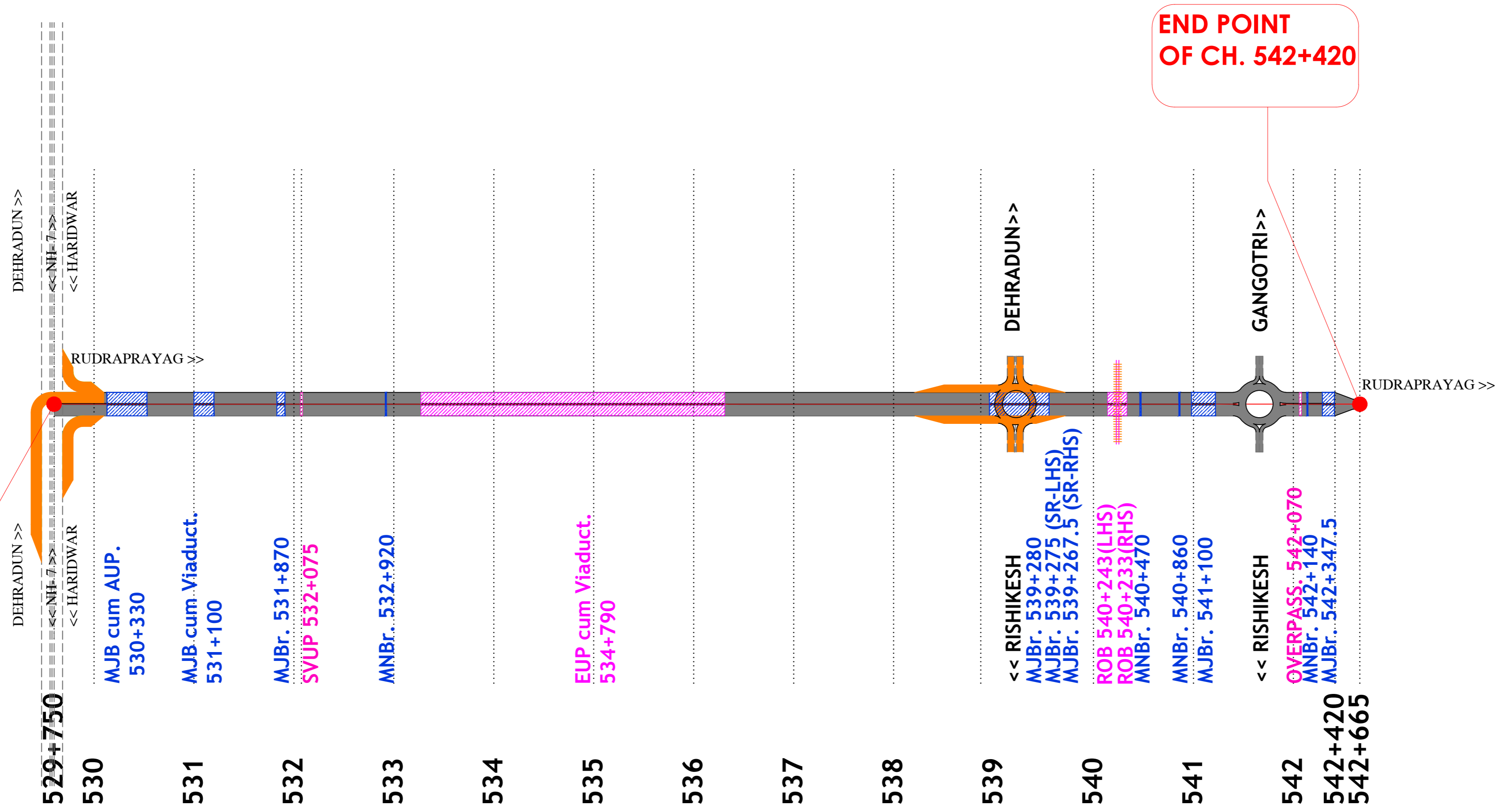
Tel. (91)124-281 6000, 4830100
Fax: (91)124-4872649

MARCH - 2026

List of Drawings

RISHIKESH BYPASS DRAWINGS LIST- PLAN & PROFILE			
S.No.	DRAWING TITLE	DRAWING NO.	SHEET
1	STRIP PLAN	AECOM/TRA-HW/60524499/SP/001	1
2	DETAIL OF DGPS PILLERS	AECOM/TRA-HW/60524499/DGPS/001	1
3	DETAIL OF BM PILLERS	AECOM/TRA-HW/60524499/BM/001	1
4	TYPICAL CROSS SECTION	AECOM/TRA-HW/60524499/TCS/001 OF 010	10
5	HORIZONTAL ALIGNMENT REPORT	AECOM/TRA-HW/60524499/HAR/001	1
6	VERTICAL ALIGNMENT REPORT	AECOM/TRA-HW/60524499/VAR/001	1
	PAN & PROFILE @1:2000 SCALE		
7	PLAN & PROFILE OF MAIN CARRIAGEWAY	AECOM/TRA-HW/60524499/P&P/001 OF 014	14
8	PLAN & PROFILE OF SLIP ROAD	AECOM/TRA-HW/60524499/SR/001	1
9	PLAN & PROFILE OF APPROCH ROAD	AECOM/TRA-HW/60524499/AR/001	1
10	PLAN & PROFILE OF RAMPS	AECOM/TRA-HW/60524499/RAMP/001	1
11	PLAN ROTARY	AECOM/TRA-HW/60524499/ROT/001 OF 002	2
	STANDARD DRAWINGS		
12	TYPICAL DETAILS OF SUPER ELEVATION	AECOM/TRA-HW/60524499/SD/001	1
13	TYPICAL DETAILS OF HORIZONTAL & VERTICAL CURVES	AECOM/TRA-HW/60524499/SD/001	1
14	TYPICAL DETAILS OF TRAFFIC SIGNS	AECOM/TRA-HW/60524499/SD/001 OF 005	5
15	TYPICAL ERECTION DETAILS OF TRAFFIC SIGNS INSTALLATION	AECOM/TRA-HW/60524499/SD/001	1
16	TYPICAL ARRANGEMENT FOR OVERHEAD GANTRY	AECOM/TRA-HW/60524499/SD/001 OF 002	2
17	TYPICAL DETAILS OF ROAD MARKING	AECOM/TRA-HW/60524499/SD/001 OF 005	5
18	TYPICAL DETAILS OF KILOMETER STON, HECTOMETER STONE	AECOM/TRA-HW/60524499/SD/001	1
19	TYPICAL DETAILS OF W-BEAM CRASH BARRIER	AECOM/TRA-HW/60524499/SD/001	1
20	TYPICAL DRAIN DETAILS FOR RURAL SECTIONS	AECOM/TRA-HW/60524499/SD/001	1
21	TYPICAL MINOR JUNCTION DETAILS	AECOM/TRA-HW/60524499/SD/001	1

STRIP PLAN



**START POINT
OF NH-7
CH. 529+750**


**END POINT
OF CH. 542+420**

LEGENDS:-

- ROB
- FLYOVER
- VUP
- LVUP
- MNB
- MAIN CARRIAGEWAY
- SLIP ROAD

			SCALE :- NOT TO SCALE	CLIENT:- MINISTRY OF ROAD TRANSPORT AND HIGHWAYS (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)	CONSULTANTS:- AECOM 9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II Gurgaon 122002, Haryana, India	PROJECT:- CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHRASROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).	DWG NO.: - AECOM/TRA-HW/60524499/SP/ 001
R2	FEB 2026	FINAL DETAILED PROJECT REPORT					TITLE: STRIP PLAN (RISHIKESH BYPASS)
R1	DEC 2025	FINAL FEASIBILITY REPORT					DATE:- FEB. 2026
R0	OCT 2025	DRAFT FEASIBILITY REPORT					PAPER:-A2
REV	DATE	DESCRIPTION OF REVISIONS					DRAWN (A) DESIGN (B) CHECKED (C) APPROVED (D)
							HS DK SB BS

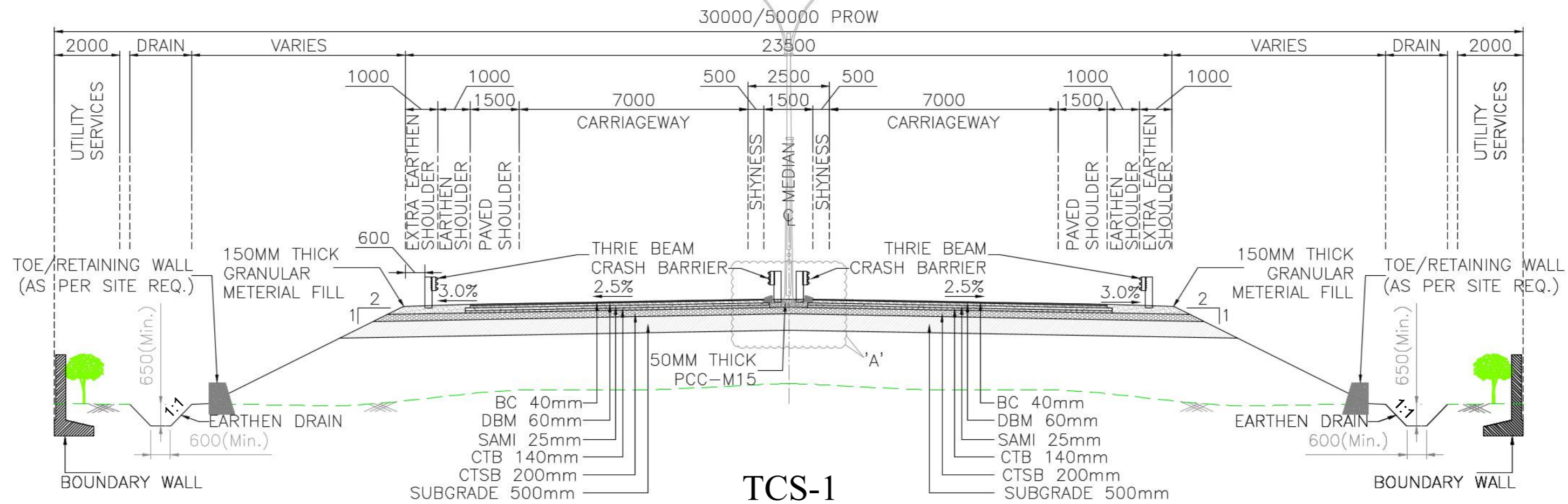
DGPS LIST RISHIKESH BYPASS				
S.N.	East(m)	North(m)	Ortho (m)	Point ID
1	231176.256	3328935.563	357.314	GPS1
2	231125.388	3329034.229	359.433	GPS1A
3	233073.768	3331143.381	367.761	GPS2
4	233146.540	3331159.077	365.676	GPS2A
5	236806.988	3332653.482	376.096	GPS3
6	236843.063	3332713.757	376.911	GPS3A
7	237835.318	3334982.397	403.239	GPS4
8	237711.967	3335057.286	401.259	GPS4A
9	239630.529	3335743.219	434.389	GPS5
10	239694.531	3335666.784	428.180	GPS5A

SCALE: - NOT TO SCALE			CLIENT:-  MINISTRY OF ROAD TRANSPORT AND HIGHWAYS (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)		CONSULTANTS:-  9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II Gurgaon 122002, Haryana, India		PROJECT:- CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHRASROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).		DWG NO.: - AECOM/TRA-HW/60524499/DGPS/ 001			
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R1	DEC 2025	FINAL FEASIBILITY REPORT			DRAWN (A)		DESIGN (B)		CHECKED (C)		APPROVED (D)	
R0	OCT 2025	DRAFT FEASIBILITY REPORT			HS		DK		SB		BS	
REV	DATE	DESCRIPTION OF REVISIONS										

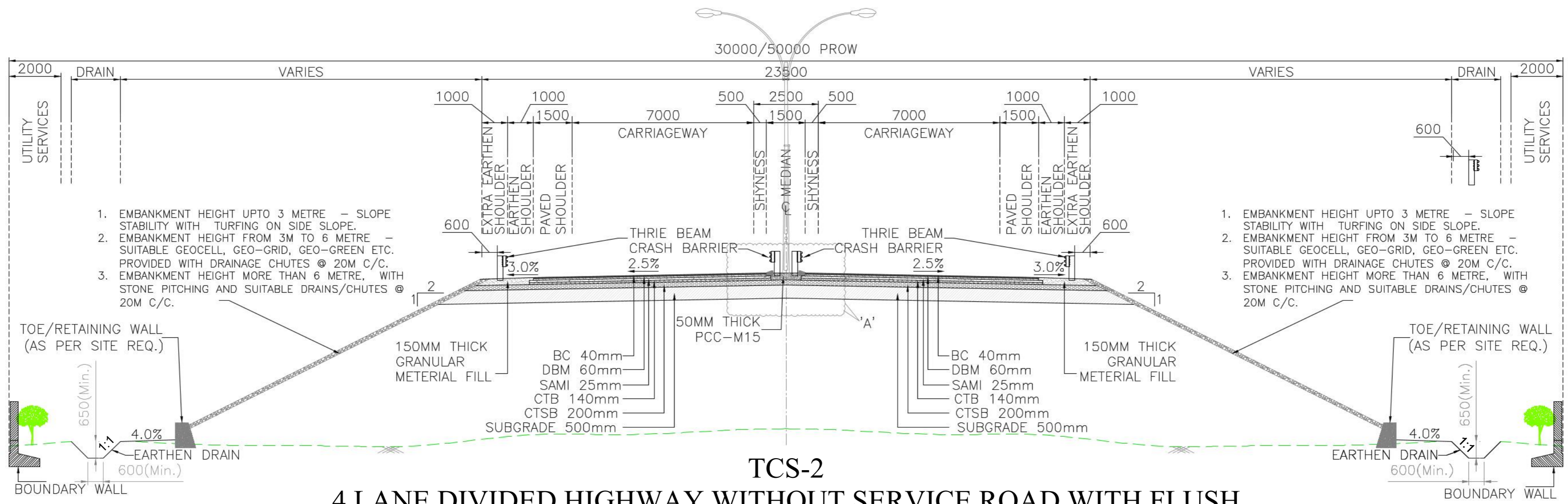
TBM LIST RISHIKESH BYPASS				
S.N.	East(m)	North(m)	Ortho (m)	Point ID
1	231377.738	3328570.333	352.290	TBM1
2	231252.809	3328800.224	354.047	TBM2
3	230979.281	3329244.259	360.633	TBM3
4	231078.260	3329461.829	365.693	TBM4
5	231263.284	3329639.791	371.473	TBM5
6	231484.648	3329732.692	366.998	TBM6
7	231664.212	3329966.665	363.926	TBM7
8	231849.014	3330100.437	363.181	TBM8
9	231949.584	3330308.079	362.657	TBM9
10	232120.528	3330503.286	365.033	TBM10
11	232318.442	3330663.658	364.213	TBM11
12	232494.541	3330829.394	367.099	TBM12
13	232707.922	3330976.232	368.362	TBM13
14	232963.667	3331098.471	367.244	TBM14
15	233332.468	3331308.030	365.478	TBM15
16	233529.777	3331460.530	367.090	TBM16
17	233760.794	3331650.474	371.182	TBM17
18	233955.571	3331709.850	372.958	TBM18
19	234205.960	3331791.441	376.650	TBM19
20	234453.968	3331853.660	376.127	TBM20
21	234692.620	3331941.721	378.790	TBM21
22	234921.845	3332029.730	379.384	TBM22
23	235399.400	3332170.242	377.567	TBM24
24	235638.500	3332253.440	376.503	TBM25
25	235887.601	3332338.476	375.788	TBM26
26	236111.781	3332413.792	374.617	TBM27
27	236389.539	3332491.293	372.920	TBM28
28	236591.551	3332566.348	373.639	TBM29
29	236982.969	3332939.874	380.942	TBM30
30	237761.143	3335554.072	393.210	TBM41
31	238879.740	3335773.361	396.841	TBM47
32	239290.180	3335533.397	423.521	TBM49
33	239835.649	3335806.002	402.546	TBM50

SCALE: -			CLIENT:-		CONSULTANTS:-		PROJECT:-		DWG NO.: - AECOM/TRA-HW/60524499/TBM/ 001							
R2	FEB 2026	FINAL DETAILED PROJECT REPORT	 MINISTRY OF ROAD TRANSPORT AND HIGHWAYS (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)		 9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II Gurgaon 122002, Haryana, India		CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHRASROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).		TITLE: TBM LIST (RISHIKESH BYPASS)		DATE:- FEB. 2026		PAPER:-A2			
R1	DEC 2025	FINAL FEASIBILITY REPORT							DRAWN (A)		DESIGN (B)		CHECKED (C)		APPROVED (D)	
R0	OCT 2025	DRAFT FEASIBILITY REPORT							HS		DK		SB		BS	
REV	DATE	DESCRIPTION OF REVISIONS														

TYPICAL CROSS SECTION




TCS-1
TYPICAL CROSS SECTION FOR 4 LANE DIVIDED HIGHWAY WITHOUT SERVICE ROAD WITH FLUSH MEDIAN FOR EMBANKMENT HEIGHT UPTO 3M
 (4-LANE ROAD WAY WIDTH AS PER CIRCULAR DATED 04/06/2024)



TCS-2
4 LANE DIVIDED HIGHWAY WITHOUT SERVICE ROAD WITH FLUSH MEDIAN FOR EMBANKMENT HEIGHT GREATER THAN 3M
 (4-LANE ROAD WAY WIDTH AS PER CIRCULAR DATED 04/06/2024)

NOTES:-

SCALE:-
AS PER SHOWN

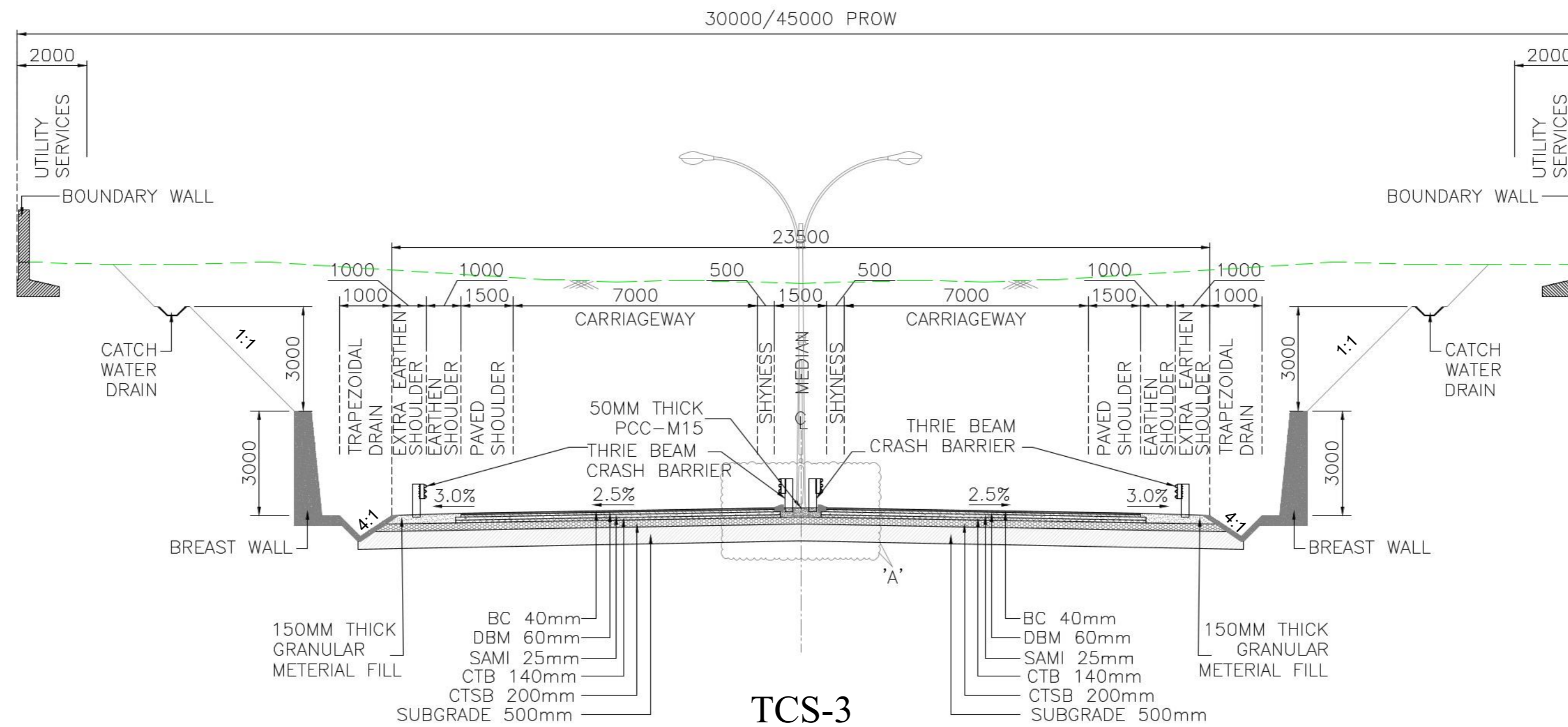
CLIENT:-

MINISTRY OF ROAD TRANSPORT AND HIGHWAYS
 (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)

CONSULTANTS:-

 9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II
 Gurgaon 122002, Haryana, India

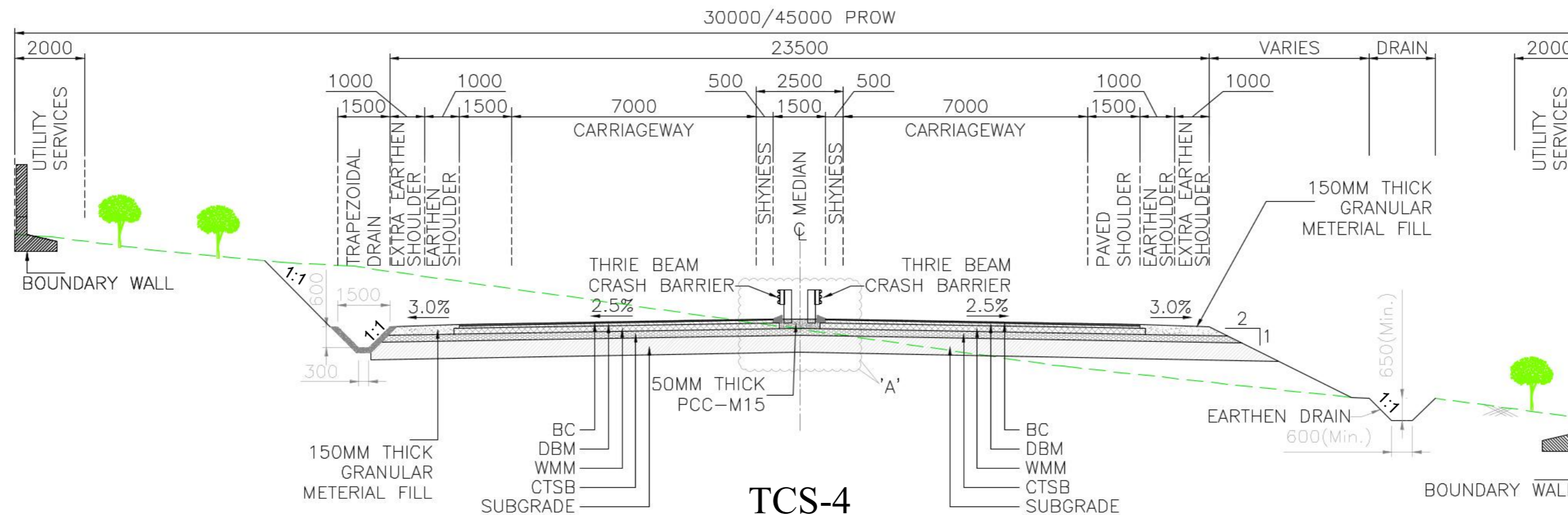
PROJECT:-
 CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHARSROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).

DWG NO.:- AECOM/TRA-HW/60524499/TCS/001
 TITLE:
TYPICAL CROSS SECTION (RISHIKESH BYPASS)
TCS -1 AND TCS-2
 DATE:- FEB. 2026
 PAPER:-A2
 DRAWN (A) DESIGN (B) CHECKED (C) APPROVED (D)
 HS DK SB BS

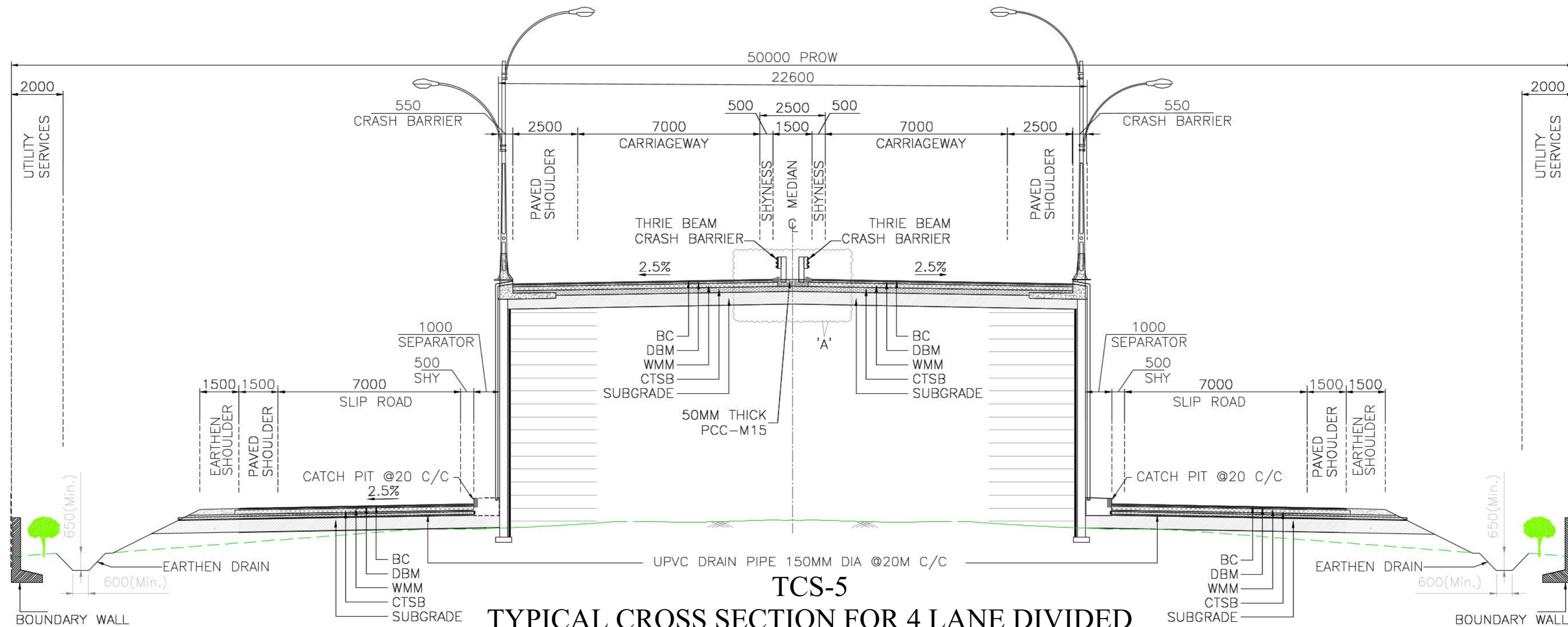


TCS-3
TYPICAL CROSS SECTION FOR 4 LANE DIVIDED HIGHWAY WITHOUT SERVICE ROAD WITH FLUSH MEDIAN FOR BOX CUTTING
 (4-LANE ROAD WAY WIDTH AS PER CIRCULAR DATED 04/06/2024)

			SCALE :- AS PER SHOWN	CLIENT:- MINISTRY OF ROAD TRANSPORT AND HIGHWAYS (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)	CONSULTANTS:- 9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II Gurgaon 122002, Haryana, India	PROJECT:- CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHARSROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).	DWG NO. :- AECOM/TRA-HW/60524499/TCS/002 TITLE: TYPICAL CROSS SECTION (RISHIKESH BYPASS) TCS -3	DATE:- FEB. 2026 DRAWN (A) DESIGN (B) CHECKED (C) APPROVED (D) HS DK SB BS	PAPER:-A2	
R2	FEB 2026	FINAL DETAILED PROJECT REPORT								
R1	DEC 2025	FINAL FEASIBILITY REPORT								
R0	OCT 2025	DRAFT FEASIBILITY REPORT								
REV	DATE	DESCRIPTION OF REVISIONS								

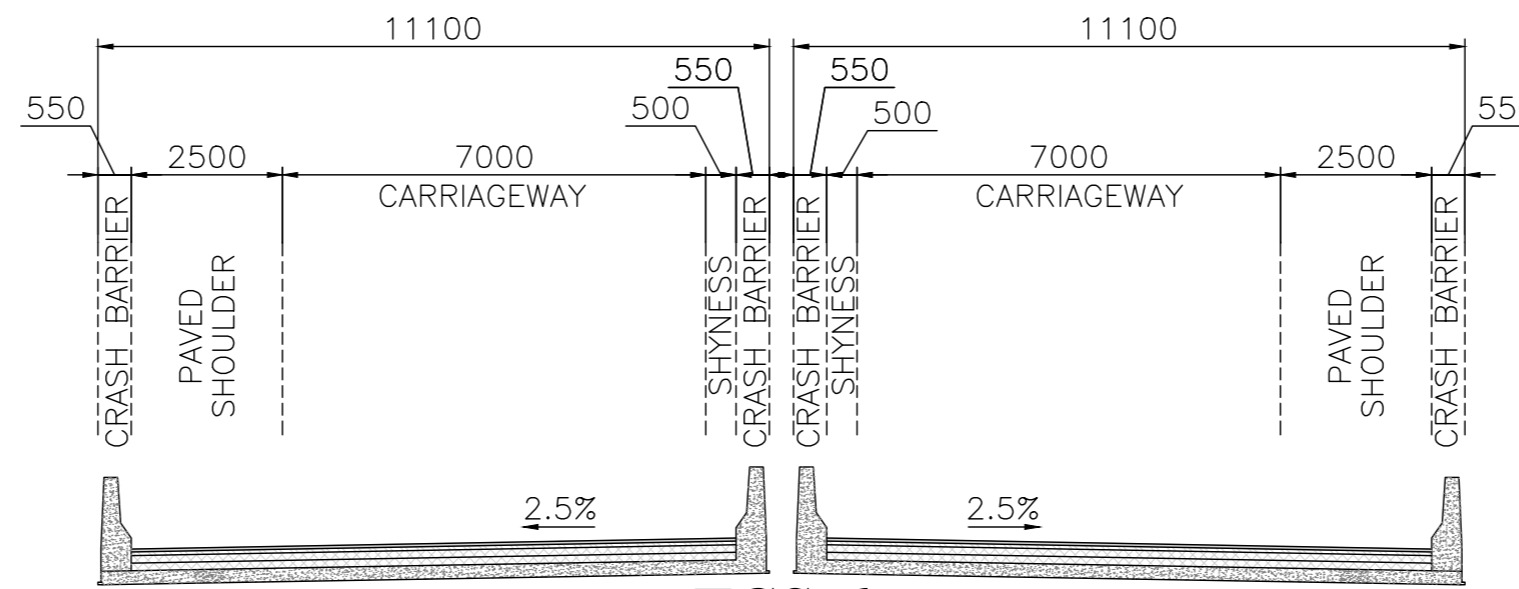


TCS-4
TYPICAL CROSS SECTION FOR 4 LANE DIVIDED HIGHWAY WITHOUT SERVICE ROAD WITH FLUSH MEDIAN FOR CUT AND FILL
 (4-LANE ROAD WAY WIDTH AS PER CIRCULAR DATED 04/06/2024)

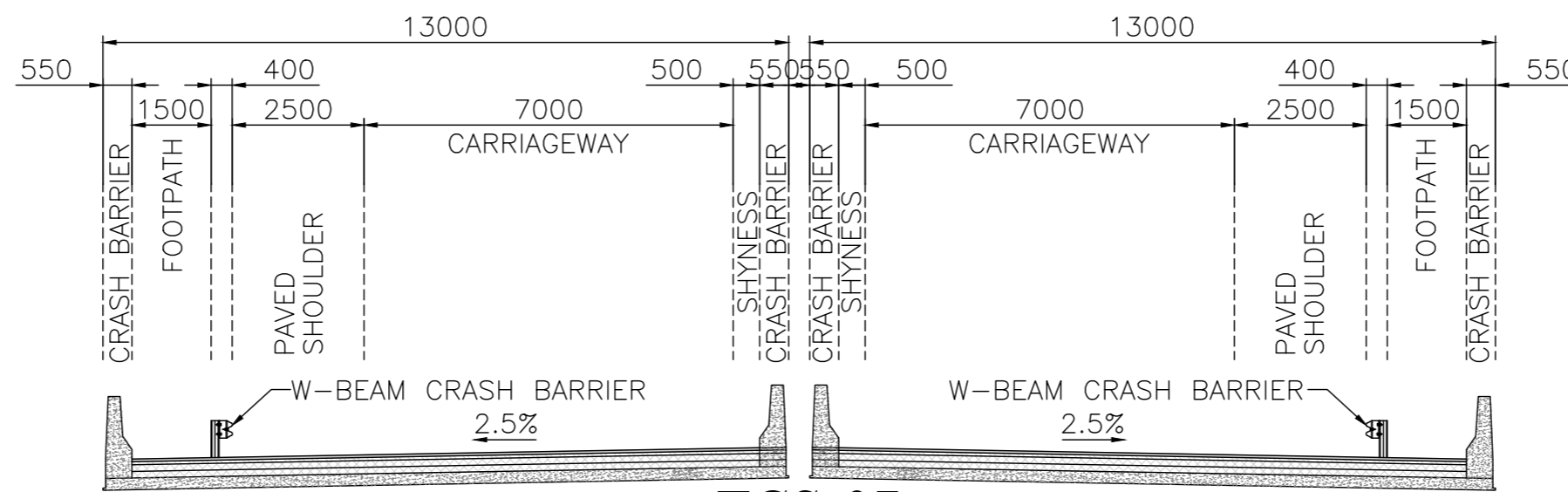


TCS-5
TYPICAL CROSS SECTION FOR 4 LANE DIVIDED HIGHWAY APPROACH WITH RE WALL AND SLIP ROAD ON BOTH SIDE
 (4-LANE ROAD WAY WIDTH AS PER CIRCULAR DATED 04/06/2024)
 (Km 529+750 to 529+970)

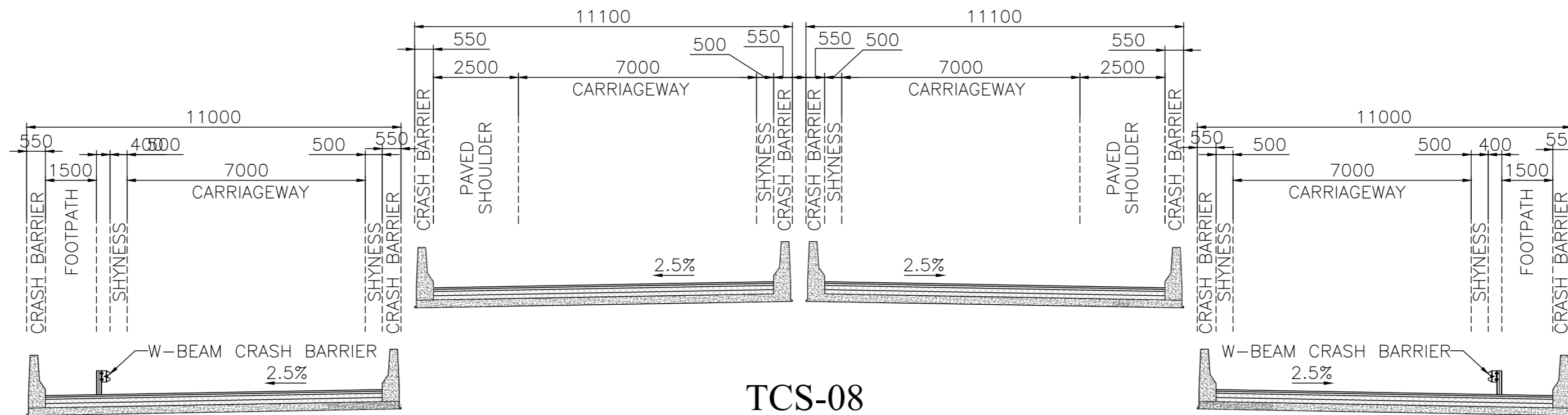
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R2	FEB 2026	FINAL DETAILED PROJECT REPORT	 MINISTRY OF ROAD TRANSPORT AND HIGHWAYS (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)	 9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II Gurgaon 122002, Haryana, India	CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHARSROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).	TITLE: TYPICAL CROSS SECTION (RISHIKESH BYPASS)		DATE: - FEB. 2026	PAPER: -A2		
R1	DEC 2025	FINAL FEASIBILITY REPORT				AS PER SHOWN		TCS - 4 AND TCS-5		DRAWN (A)	DESIGN (B)
R0	OCT 2025	DRAFT FEASIBILITY REPORT								CHECKED (C)	APPROVED (D)
REV	DATE	DESCRIPTION OF REVISIONS								HS	DK



TCS-6
TYPICAL CROSS SECTION FOR 4 LANE DIVIDED HIGHWAY
AT GRADE SEPARATED DECK LEVEL
 (4-LANE ROAD WAY WIDTH AS PER CIRCULAR DATED 04/06/2024)

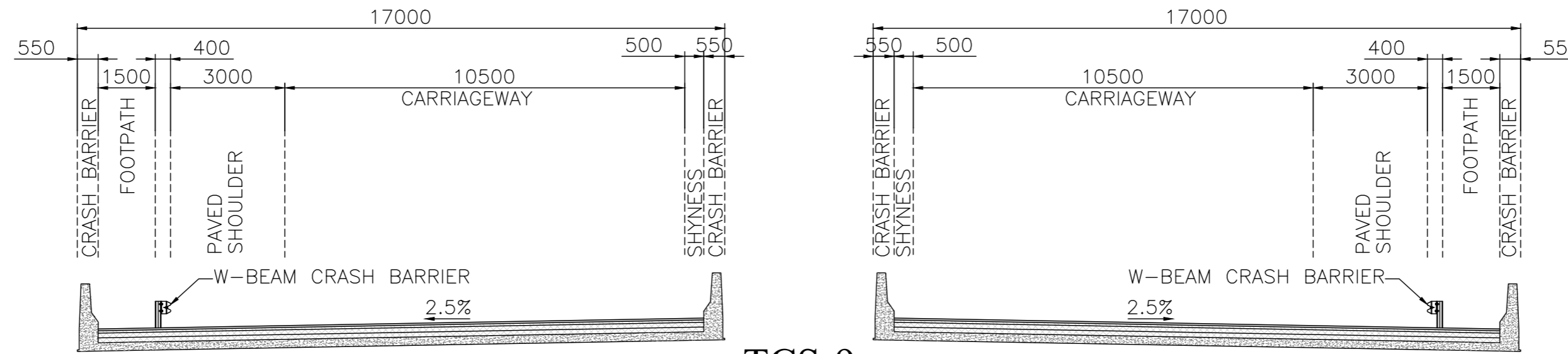


TCS-07
TYPICAL CROSS SECTION FOR 4 LANE DIVIDED HIGHWAY
AT BRIDGE DECK LEVEL WITH FOOTPATH ON BOTH SIDES
 (4-LANE ROAD WAY WIDTH AS PER CIRCULAR DATED 04/06/2024)

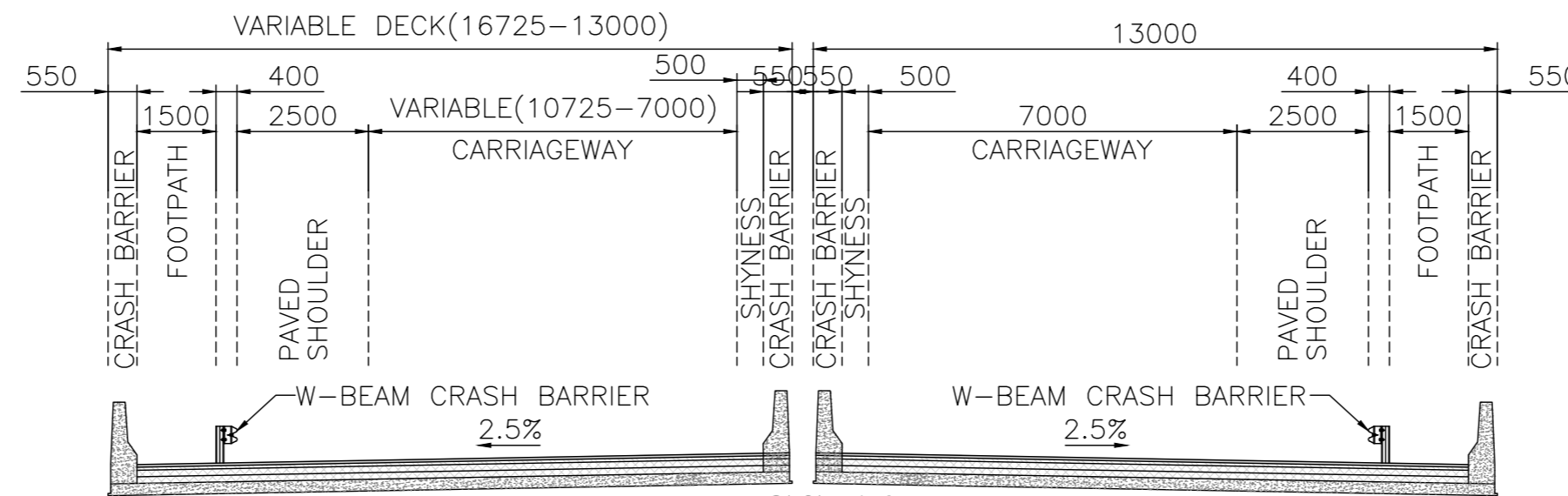


TCS-08
TYPICAL CROSS SECTION FOR 4 LANE DIVIDED HIGHWAY AT MINOR BRIDGE
DECK LEVEL WITH SERVICE ROAD BRIDGES AND FOOTPATH
 (4-LANE ROAD WAY WIDTH AS PER CIRCULAR DATED 04/06/2024)

SCALE :-			CLIENT:-			CONSULTANTS:-			PROJECT:-			DWG NO. :- AECOM/TRA-HW/60524499/TCS/004			
R2	FEB 2026	FINAL DETAILED PROJECT REPORT	AS PER SHOWN	 MINISTRY OF ROAD TRANSPORT AND HIGHWAYS (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)	 9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II Gurgaon 122002, Haryana, India	CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHRSROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).			TITLE: TYPICAL CROSS SECTION (RISHIKESH BYPASS) TCS - 6, 7 AND 8			DATE:- FEB. 2026		PAPER:-A2	
R1	DEC 2025	FINAL FEASIBILITY REPORT										DRAWN (A)	DESIGN (B)	CHECKED (C)	APPROVED (D)
R0	OCT 2025	DRAFT FEASIBILITY REPORT										HS	DK	SB	BS
REV	DATE	DESCRIPTION OF REVISIONS													

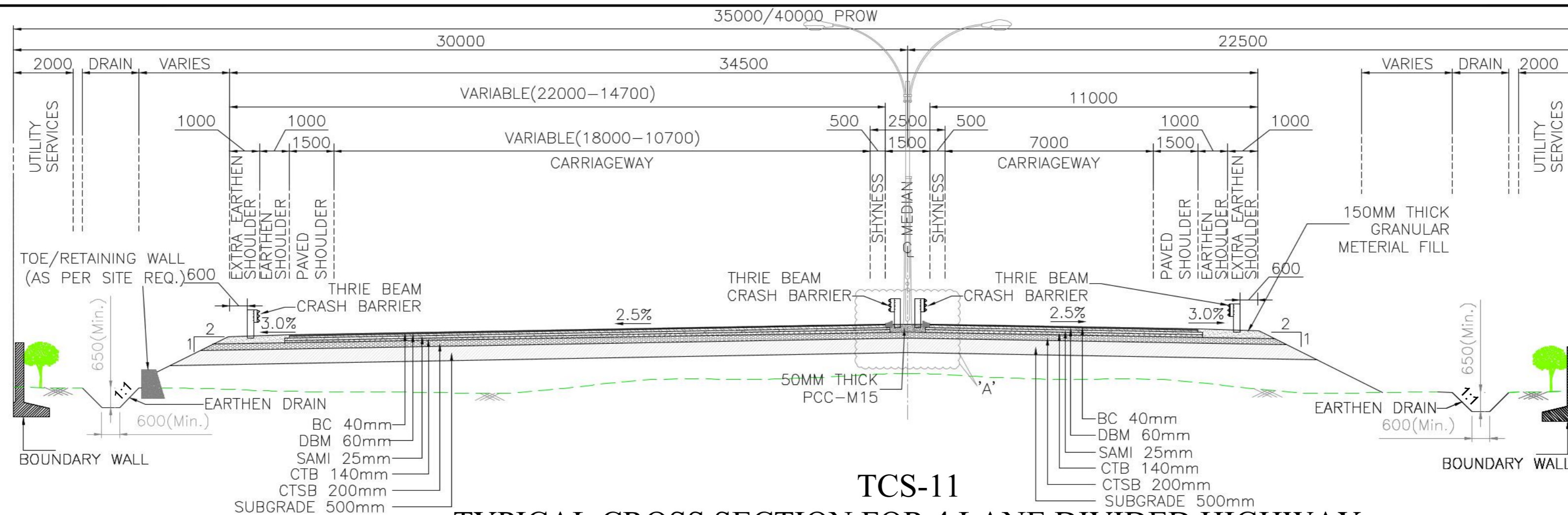


TCS-9
TYPICAL CROSS SECTION FOR 6 LANE DIVIDED HIGHWAY
AT ROB DECK LEVEL
 (AS PER RDSO)

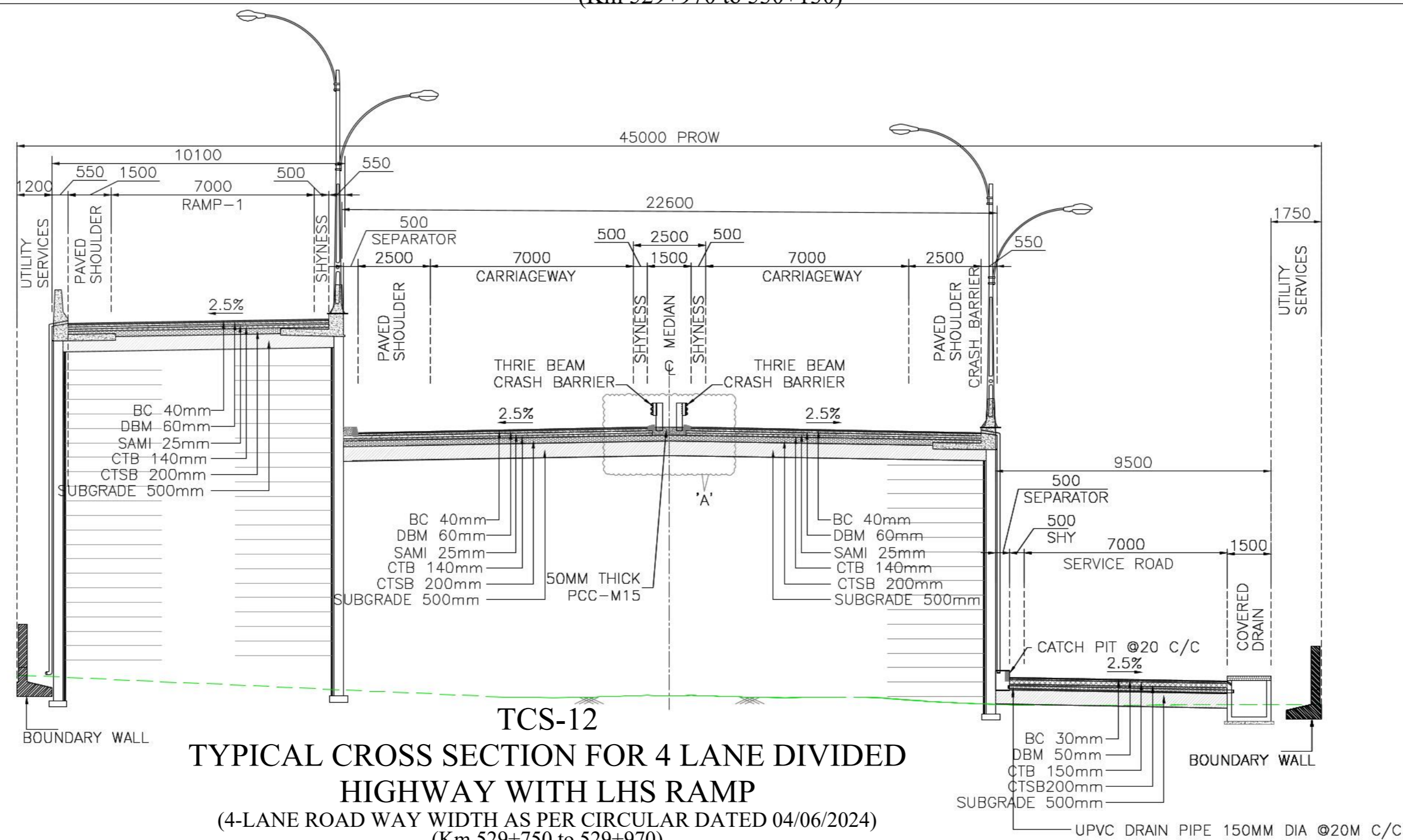


TCS-10
TYPICAL CROSS SECTION FOR 4 LANE DIVIDED HIGHWAY AT
MAJOR BRIDGE DECK LEVEL WITH VARIABLE DECK WIDTH
 (4-LANE ROAD WAY WIDTH AS PER CIRCULAR DATED 04/06/2024)

SCALE :-			CLIENT:-			CONSULTANTS:-			PROJECT:-			DWG NO. :- AECOM/TRA-HW/60524499/TCS/005			
R2	FEB 2026	FINAL DETAILED PROJECT REPORT	AS PER SHOWN	 MINISTRY OF ROAD TRANSPORT AND HIGHWAYS (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)	 9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II Gurgaon 122002, Haryana, India	CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHRSROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).			TITLE:			DATE:- FEB. 2026	PAPER:-A2		
R1	DEC 2025	FINAL FEASIBILITY REPORT							TCS - 9 AND 10			DRAWN (A)	DESIGN (B)	CHECKED (C)	APPROVED (D)
R0	OCT 2025	DRAFT FEASIBILITY REPORT							HS	DK	SB	BS			
REV	DATE	DESCRIPTION OF REVISIONS													



TCS-11
TYPICAL CROSS SECTION FOR 4 LANE DIVIDED HIGHWAY
WITH VARIABLE CARRIAGEWAY WIDTH
 (4-LANE ROAD WAY WIDTH AS PER CIRCULAR DATED 04/06/2024)
 (Km 529+970 to 530+130)



TCS-12
TYPICAL CROSS SECTION FOR 4 LANE DIVIDED
HIGHWAY WITH LHS RAMP
 (4-LANE ROAD WAY WIDTH AS PER CIRCULAR DATED 04/06/2024)
 (Km 529+750 to 529+970)

R2	FEB 2026	FINAL DETAILED PROJECT REPORT
R1	DEC 2025	FINAL FEASIBILITY REPORT
R0	OCT 2025	DRAFT FEASIBILITY REPORT
REV	DATE	DESCRIPTION OF REVISIONS

SCALE: -
AS PER SHOWN

CLIENT:-

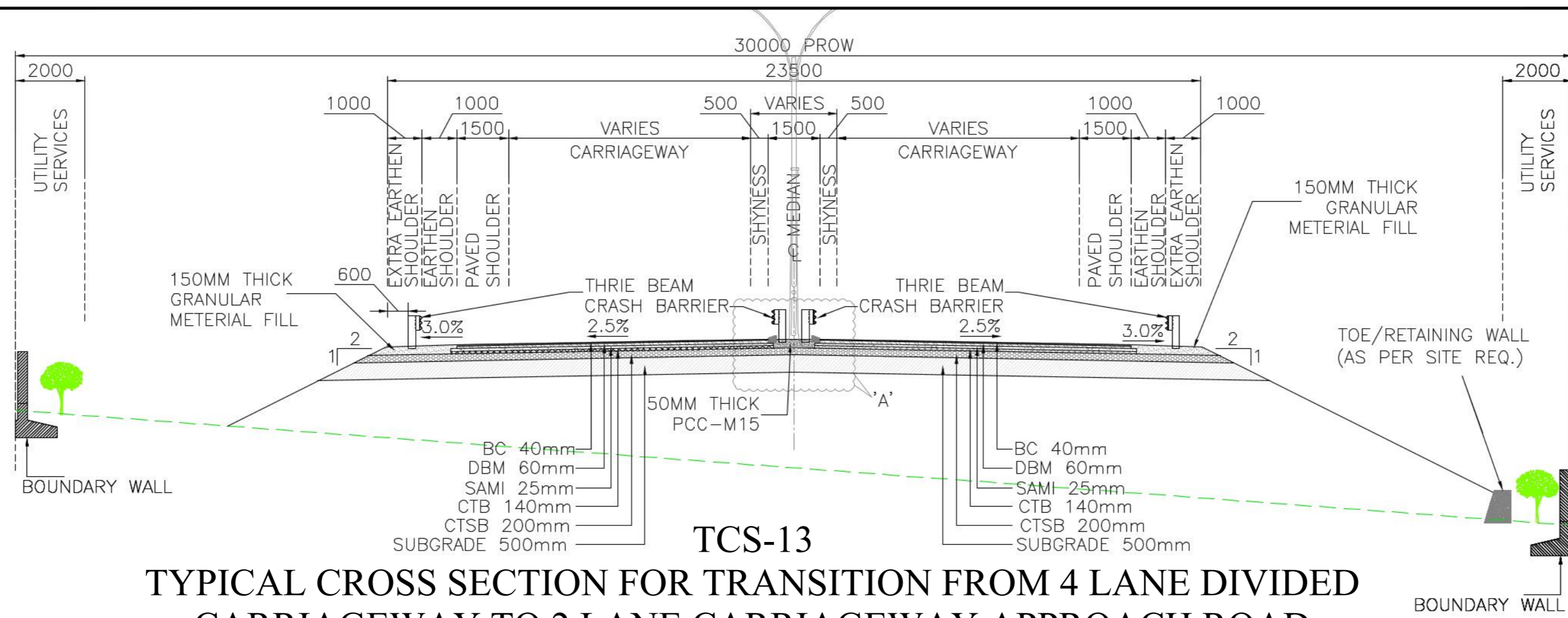
MINISTRY OF ROAD TRANSPORT AND HIGHWAYS
 (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)

CONSULTANTS:-

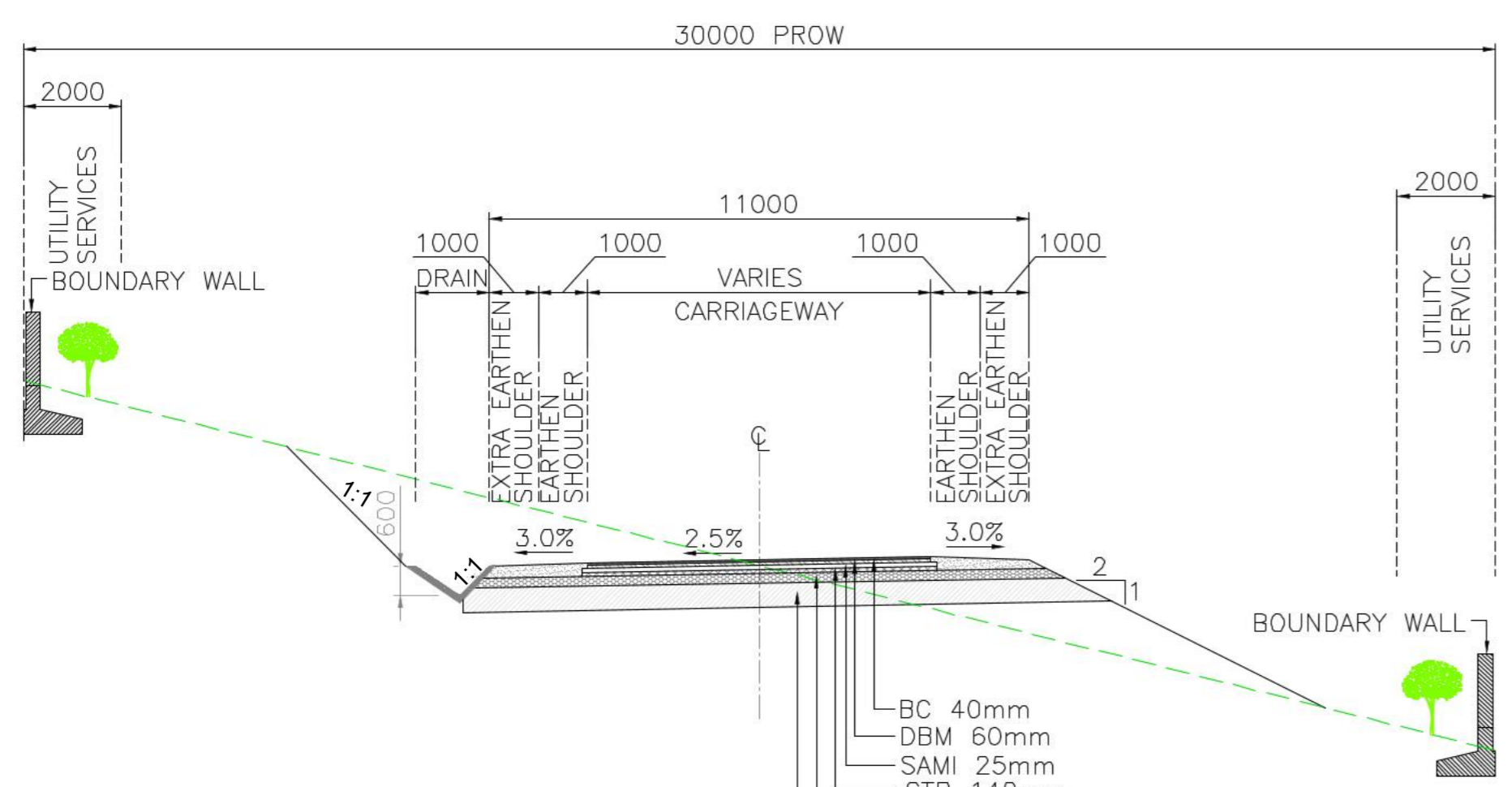
 9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II
 Gurgaon 122002, Haryana, India

PROJECT:-
 CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHARSROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).

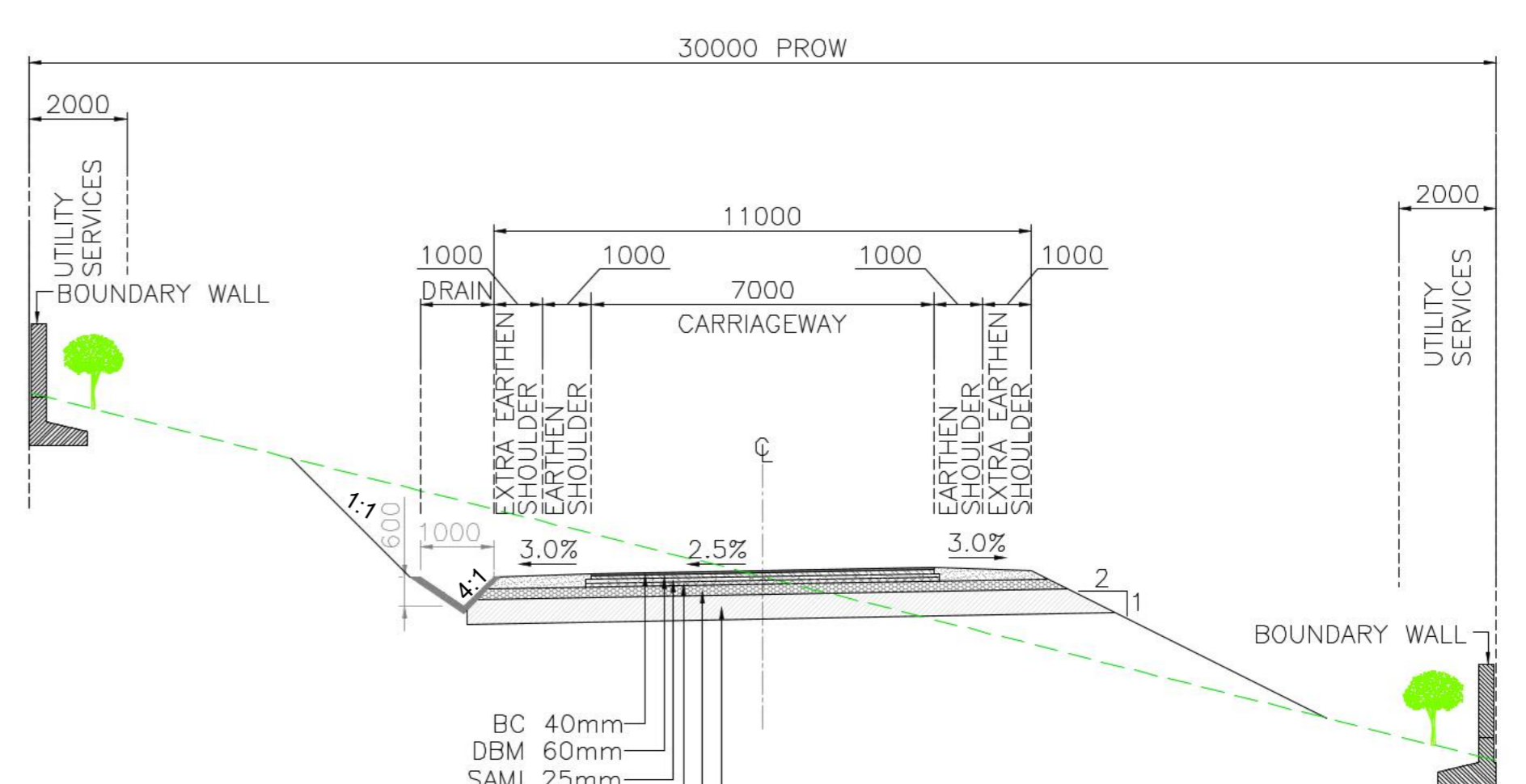
DWG NO.: - AECOM/TRA-HW/60524499/TCS/006			
TITLE: TYPICAL CROSS SECTION (RISHIKESH BYPASS) TCS - 11 AND TCS-12		DATE:- FEB. 2026	PAPER:-A2
DRAWN (A)	DESIGN (B)	CHECKED (C)	APPROVED (D)
HS	DK	SB	BS



TCS-13
TYPICAL CROSS SECTION FOR TRANSITION FROM 4 LANE DIVIDED CARRIAGEWAY TO 2 LANE CARRIAGEWAY APPROACH ROAD
 (4-LANE ROAD WAY WIDTH AS PER CIRCULAR DATED 04/06/2024)
 (Approach Road Km 542+420 to 542+450)



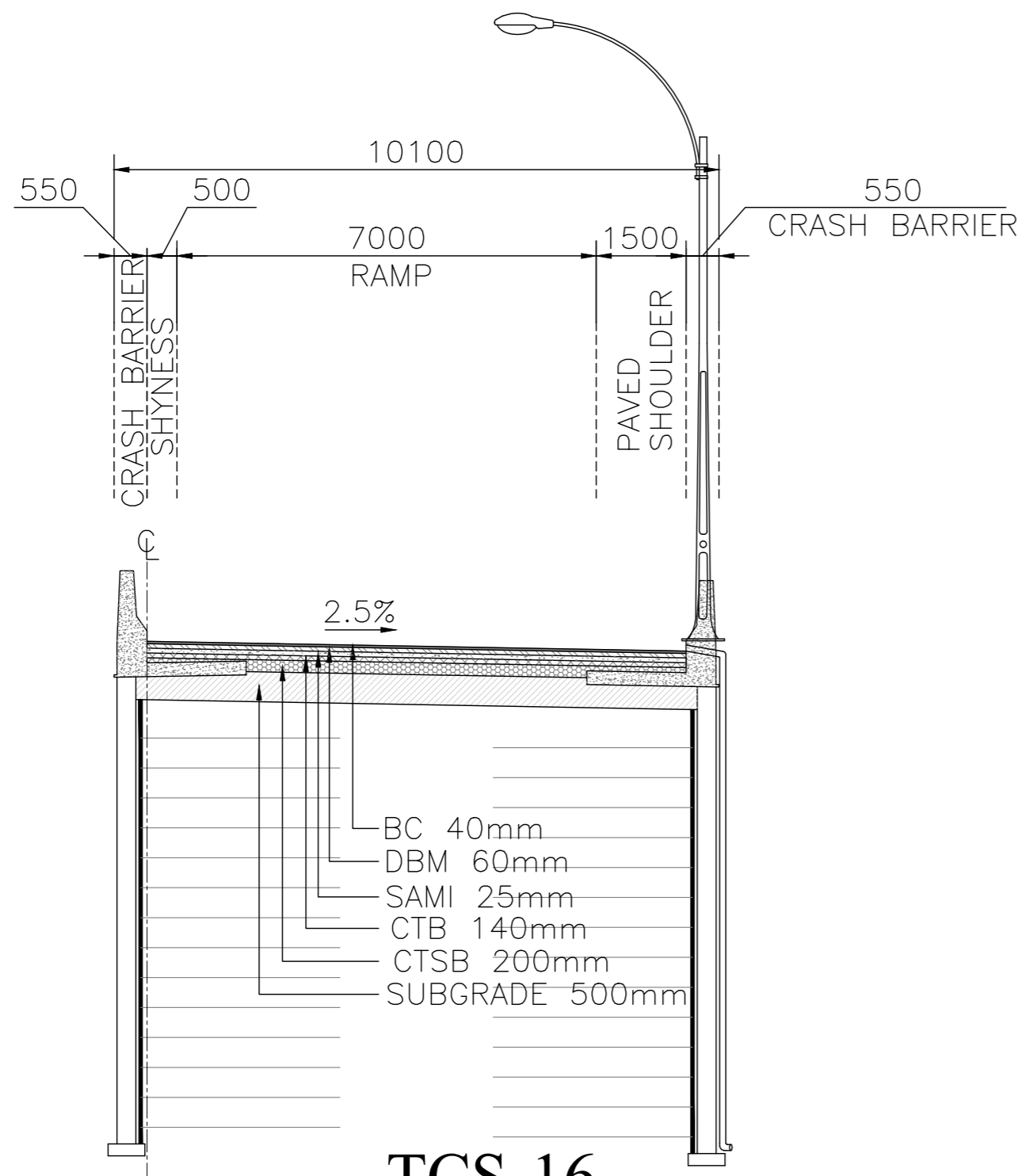
TCS-14
TYPICAL CROSS SECTION FOR VARIABLE CARRIAGEWAY WIDTH FOR APPROACH ROAD
 (4-LANE ROAD WAY WIDTH AS PER CIRCULAR DATED 04/06/2024)
 (Approach Road Km 542+450 to 542+530)



TCS-15
TYPICAL CROSS SECTION FOR 2 LANE CARRIAGEWAY WIDTH FOR APPROACH ROAD
 (4-LANE ROAD WAY WIDTH AS PER CIRCULAR DATED 04/06/2024)
 (Approach Road Km 542+530 to 542+665)

SCALE :-		CLIENT:-		CONSULTANTS:-		PROJECT:-		DWG NO. :- AECOM/TRA-HW/60524499/TCS/007			
R2	FEB 2026	FINAL DETAILED PROJECT REPORT	 MINISTRY OF ROAD TRANSPORT AND HIGHWAYS (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)	 9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II Gurgaon 122002, Haryana, India	CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHARSROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).	TITLE: TYPICAL CROSS SECTION (RISHIKESH BYPASS)		DATE:- FEB. 2026	PAPER:-A2		
R1	DEC 2025	FINAL FEASIBILITY REPORT				TCS - 13, 14 AND 15		DRAWN (A)	DESIGN (B)	CHECKED (C)	APPROVED (D)
R0	OCT 2025	DRAFT FEASIBILITY REPORT				HS	DK	SB	BS		
REV	DATE	DESCRIPTION OF REVISIONS									

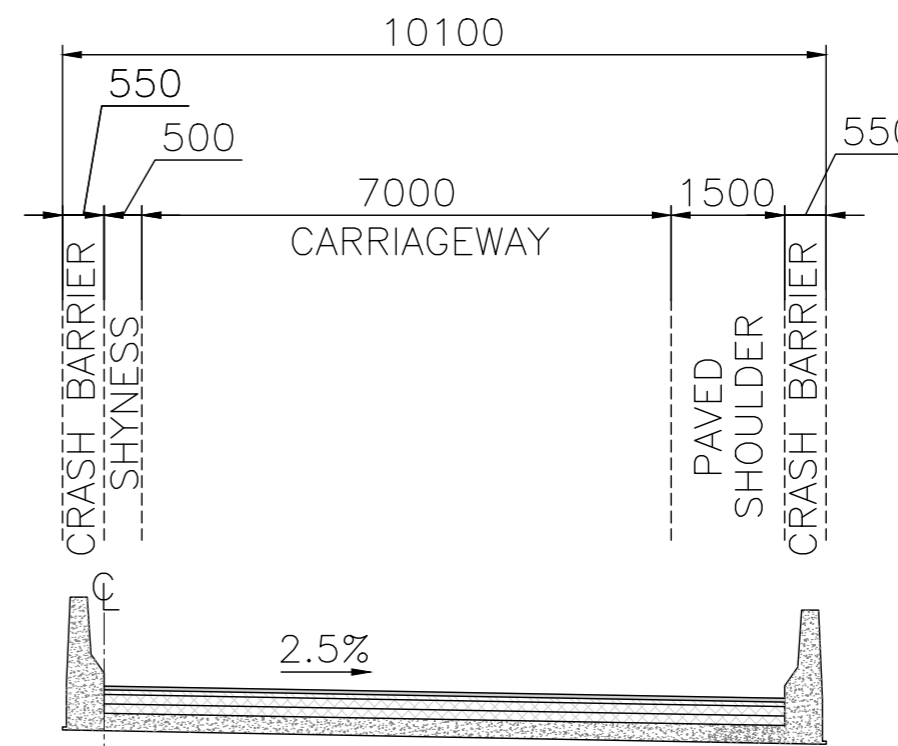
C:\Users\kumard\Desktop\New Rishikesh Bypass\Draft DPR\To Client\R1 after Month Review\6. TCS\Rishikesh-TCS-2.dwg



TCS-16

TYPICAL CROSS SECTION FOR 2 LANE RAMP WITH RE WALL

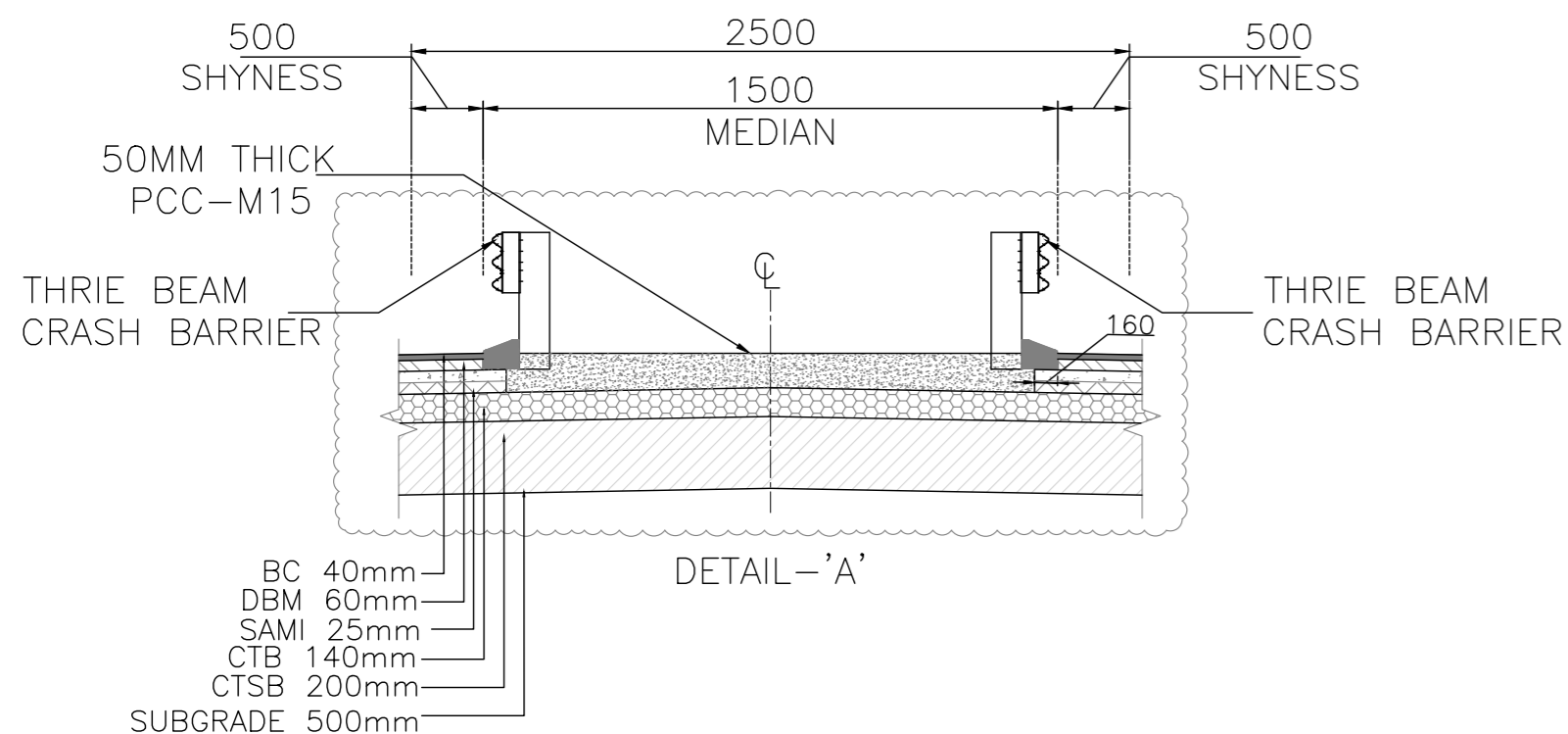
(4-LANE ROAD WAY WIDTH AS PER CIRCULAR DATED 04/06/2024)



TCS-17

TYPICAL CROSS SECTION FOR 2 LANE RAMP AT DECK LEVEL

(4-LANE ROAD WAY WIDTH AS PER CIRCULAR DATED 04/06/2024)



DETAIL - 'A'

R2	FEB 2026	FINAL DETAILED PROJECT REPORT
R1	DEC 2025	FINAL FEASIBILITY REPORT
R0	OCT 2025	DRAFT FEASIBILITY REPORT
REV	DATE	DESCRIPTION OF REVISIONS

SCALE: -
AS PER SHOWN

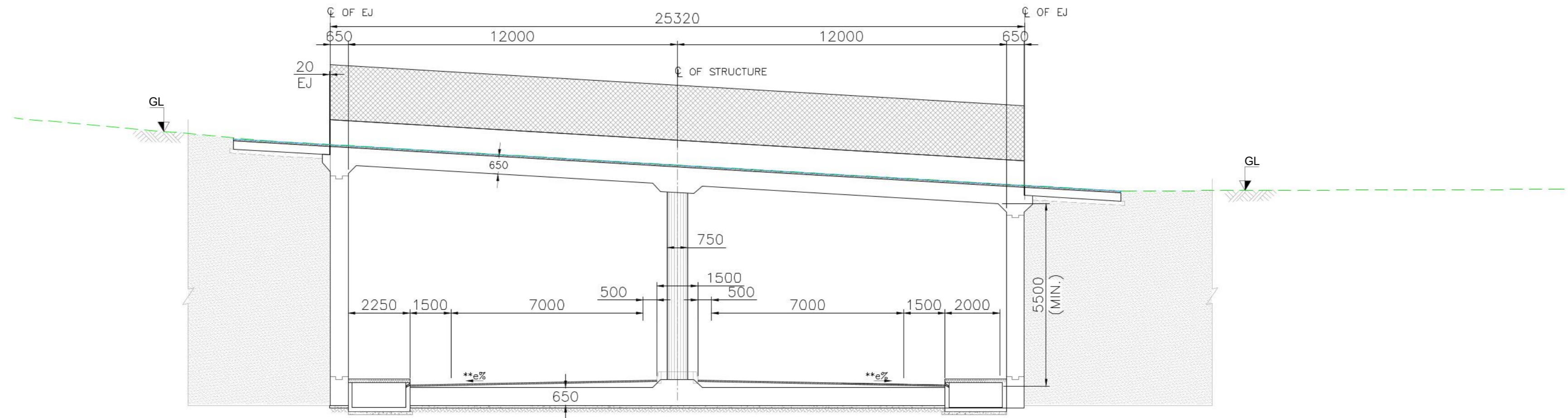
CLIENT:-

MINISTRY OF ROAD TRANSPORT AND HIGHWAYS
 (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)

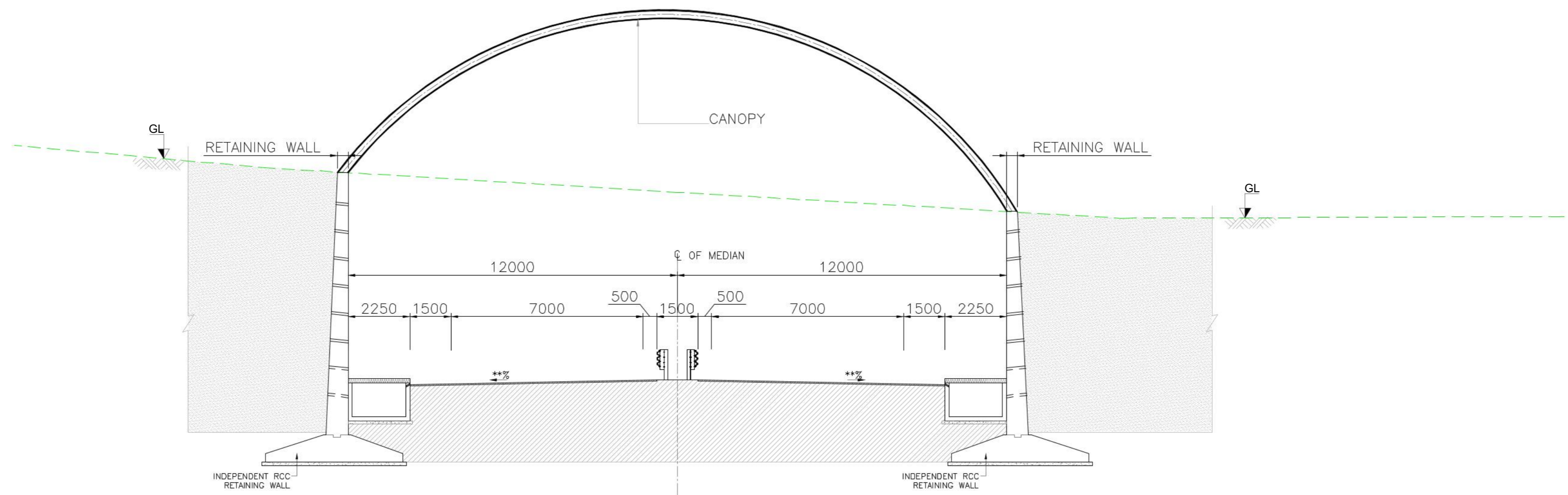
CONSULTANTS:-
AECOM
 9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II
 Gurgaon 122002, Haryana, India

PROJECT:-
 CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHARSROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).

DWG NO.: - AECOM/TRA-HW/60524499/TCS/ 008			
TITLE: TYPICAL CROSS SECTION (RISHIKESH BYPASS) TCS -16 AND 17		DATE:- FEB. 2026	PAPER:-A2
DRAWN (A)	DESIGN (B)	CHECKED (C)	APPROVED (D)
HS	DK	SB	BS



TCS-18
TYPICAL CROSS SECTION FOR 4 LANE DIVIDED
RCC BOX FOR ACES TO HERBAL PARK



TCS-19
TYPICAL CROSS SECTION FOR 4 LANE DIVIDED RCC BOX
FOR ACES TO HERBAL PARK (APPROACH)

SCALE :-			CLIENT:-			CONSULTANTS:-			PROJECT:-			DWG NO. :- AECOM/TRA-HW/60524499/TCS/ 009			
R2	FEB 2026	FINAL DETAILED PROJECT REPORT	AS PER SHOWN	 MINISTRY OF ROAD TRANSPORT AND HIGHWAYS (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)	 9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II Gurgaon 122002, Haryana, India	CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHRASROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).			TITLE:			DATE:- FEB. 2026	PAPER:-A2		
R1	DEC 2025	FINAL FEASIBILITY REPORT							TYPICAL CROSS SECTION (RISHIKESH BYPASS)			DRAWN (A)	DESIGN (B)	CHECKED (C)	APPROVED (D)
R0	OCT 2025	DRAFT FEASIBILITY REPORT							TCS -18 AND 19			HS	DK	SB	BS
REV	DATE	DESCRIPTION OF REVISIONS													

TCS SCHEDULE OF RISHIKESH BYPASS					
SI No	From	To	Length	TCS Type	Remarks
A Main carriageway					
1	529+750	529+970	220	TCS-12	4 lane divided highway approach with LHS Ramp
2	529+970	530+130	160	TCS-11	4 lane divided highway with variable carriageway width
3	530+130	530+290	160	TCS-10	4 lane divided highway at grade separated deck level with variable deck width
4	530+290	530+530	240	TCS-7	4 lane divided highway at bridge deck level with footpath on both sides
5	530+530	530+580	50	TCS-2	4 lane divided highway without service road with flush median for embankment height greater than 3m
6	530+580	530+730	150	TCS-1	4 lane divided highway without service road with flush median for embankment height upto 3m
7	530+730	530+960	230	TCS-3	4 lane divided highway without service road with flush median for Box cutting
8	530+960	531+000	40	TCS-2	4 lane divided highway without service road with flush median for embankment height greater than 3m
9	531+000	531+200	200	TCS-7	4 lane divided highway at bridge deck level with footpath on both sides
10	531+200	531+300	100	TCS-2	4 lane divided highway without service road with flush median for embankment height greater than 3m
11	531+300	531+500	200	TCS-1	4 lane divided highway without service road with flush median for embankment height upto 3m
12	531+500	531+830	330	TCS-2	4 lane divided highway without service road with flush median for embankment height greater than 3m
13	531+830	531+910	80	TCS-7	4 lane divided highway at bridge deck level with footpath on both sides
14	531+910	531+940	30	TCS-2	4 lane divided highway without service road with flush median for embankment height greater than 3m
15	531+940	532+120	180	TCS-1	4 lane divided highway without service road with flush median for embankment height upto 3m
16	532+120	532+300	180	TCS-2	4 lane divided highway without service road with flush median for embankment height greater than 3m
17	532+300	532+380	80	TCS-1	4 lane divided highway without service road with flush median for embankment height upto 3m
18	532+380	532+430	50	TCS-2	4 lane divided highway without service road with flush median for embankment height greater than 3m
19	532+430	532+570	140	TCS-1	4 lane divided highway without service road with flush median for embankment height upto 3m
20	532+570	532+600	30	TCS-2	4 lane divided highway without service road with flush median for embankment height greater than 3m
21	532+600	532+710	110	TCS-1	4 lane divided highway without service road with flush median for embankment height upto 3m
22	532+710	533+270	560	TCS-2	4 lane divided highway without service road with flush median for embankment height greater than 3m
23	533+270	536+310	3040	TCS-7	4 lane divided highway at bridge deck level with footpath on both sides
24	536+310	536+610	300	TCS-2	4 lane divided highway without service road with flush median for embankment height greater than 3m
25	536+610	537+030	420	TCS-1	4 lane divided highway without service road with flush median for embankment height upto 3m
26	537+030	537+610	580	TCS-2	4 lane divided highway without service road with flush median for embankment height greater than 3m
27	537+610	537+660	50	TCS-1	4 lane divided highway without service road with flush median for embankment height upto 3m
28	537+660	537+770	110	TCS-2	4 lane divided highway without service road with flush median for embankment height greater than 3m
29	537+770	538+500	730	TCS-1	4 lane divided highway without service road with flush median for embankment height upto 3m
30	538+500	539+000	500	TCS-5	4 lane divided highway approach with RE wall and slip lane on both sides
31	539+000	539+100	100	TCS-6	4 lane divided highway at grade separated deck level
32	539+100	539+430	330	TCS-8	4 lane divided highway at Minor bridge deck level with service road bridges and footpath
33	539+430	539+590	160	TCS-7	4 lane divided highway at bridge deck level with footpath on both sides
34	539+590	539+820	230	TCS-2	4 lane divided highway without service road with flush median for embankment height greater than 3m
35	539+820	539+950	130	TCS-1	4 lane divided highway without service road with flush median for embankment height upto 3m

TCS SCHEDULE OF RISHIKESH BYPASS					
SI No	From	To	Length	TCS Type	Remarks
A Main carriageway					
36	539+950	540+056	106	TCS-2	4 lane divided highway without service road with flush median for embankment height greater than 3m
37	540+056	540+374	318	TCS-9	4 lane divided highway at ROB deck level
38	540+374	540+470	96	TCS-1	4 lane divided highway without service road with flush median for embankment height upto 3m
39	540+470	540+560	90	TCS-3	4 lane divided highway without service road with flush median for Box cutting
40	540+560	540+640	80	TCS-1	4 lane divided highway without service road with flush median for embankment height upto 3m
41	540+640	540+840	200	TCS-3	4 lane divided highway without service road with flush median for Box cutting
42	540+840	540+890	50	TCS-4	4 lane divided highway without service road with flush median for cut and fill
43	540+890	540+950	60	TCS-3	4 lane divided highway without service road with flush median for Box cutting
44	540+950	540+980	30	TCS-4	4 lane divided highway without service road with flush median for cut and fill
45	540+980	541+220	240	TCS-7	4 lane divided highway at bridge deck level with footpath on both sides
46	541+220	541+310	90	TCS-4	4 lane divided highway without service road with flush median for cut and fill
47	541+310	541+400	90	TCS-3	4 lane divided highway without service road with flush median for Box cutting
48	541+400	541+450	50	TCS-4	4 lane divided highway without service road with flush median for cut and fill
49	541+450	541+570	120	TCS-3	4 lane divided highway without service road with flush median for Box cutting
50	541+570	541+610	40	TCS-4	4 lane divided highway without service road with flush median for cut and fill
51	541+610	541+700	90	Roundabout	Roundabout
52	541+700	541+760	60	TCS-4	4 lane divided highway without service road with flush median for cut and fill
53	541+760	541+960	200	TCS-19	4 lane divided RCC Box for access to Herbal park (Approach)
54	541+960	542+060	100	TCS-18	4 lane divided RCC Box for access to Herbal park
55	542+060	542+130	70	TCS-3	4 lane divided highway without service road with flush median for Box cutting
56	542+130	542+150	20	TCS-1	4 lane divided highway without service road with flush median for embankment height upto 3m
57	542+150	542+170	20	TCS-2	4 lane divided highway without service road with flush median for embankment height greater than 3m
58	542+170	542+270	100	TCS-3	4 lane divided highway without service road with flush median for Box cutting
59	542+270	542+285	15	TCS-4	4 lane divided highway without service road with flush median for cut and fill
60	542+285	542+410	125	TCS-7	4 lane divided highway at bridge deck level with footpath on both sides
61	542+410	542+420	10	TCS-4	4 lane divided highway without service road with flush median for cut and fill
B Approach road					
62	542+420	542+465	45	TCS-13	Transition from 4 lane divided carriageway to two lane
63	542+465	542+530	65	TCS-14	Variable carriageway width
64	542+530	542+664	134	TCS-15	2 lane carriageway width
C Trumpet Interchange A at Ch. 529+750					
65	529+970/ 0+000 Ramp-1	529+750/ 0+230 Ramp-1	230	TCS-12	Ramp1
66	0+230 ramp-1	0+864 ramp-1	634	TCS-17	Ramp1 (Structure)
67	0+864 ramp-1	1+270 ramp-1	406	TCS-16	Ramp1
68	529+750/ 0+000 Ramp-2	0+150 Ramp-2	150	TCS-16	Ramp-2
69	529+750/ 0+000 Ramp-3	0+215 Ramp-3	215	TCS-16	Ramp-3

R2	FEB 2026	FINAL DETAILED PROJECT REPORT
R1	DEC 2025	FINAL FEASIBILITY REPORT
R0	OCT 2025	DRAFT FEASIBILITY REPORT
REV	DATE	DESCRIPTION OF REVISIONS

SCALE: - AS PER SHOWN

CLIENT:-

MINISTRY OF ROAD TRANSPORT AND HIGHWAYS
 (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)

CONSULTANTS:-

 9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II
 Gurgaon 122002, Haryana, India

PROJECT:-
 CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHARSROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).

DWG NO.: - AECOM/TRA-HW/60524499/TCS/ 010
 TITLE: TYPICAL CROSS SECTION (RISHIKESH BYPASS) SCHEDULE
 DATE:- FEB. 2026 PAPER:-A2
 DRAWN (A) DESIGN (B) CHECKED (C) APPROVED (D)
 HS DK SB BS

HORIZONTAL ALIGNMENT REPORT

HORIZONTAL ALIGNMENT REPORT

HIP No.	HIP Chainage (Km)	HIP		Curve start (Km)	Curve End (Km)	Radius (m)	Spiral (m)	Total Deflection Angle			Tangent Length Ts (m)	Apex Distance Es (m)	Circular Length Lc (m)	Crossfall/Superelevation e (%)	Design Speed (Kmph)
		Easting	Northing					DD	MM	SS					
SA	529+600	230935.033	3329363.252	-	-	-	-	-	-	-	-	-	-	-	-
1	530+062	231264.681	3329687.046	529+971.449	530+152.439	800	60	08	39	55.131	90.624	2.481	60.991	5.00	100
2	530+611	231711.334	3330009.437	530+378.221	530+842.902	1200	50	19	47	58.547	234.444	18.226	364.682	3.70	100
3	531+003	231934.308	3330335.339	530+889.038	531+116.980	800	60	12	01	40.752	114.299	4.616	107.942	5.00	100
4	531+819	232526.732	3330899.360	531+523.582	532+113.422	2000	0	16	53	51.586	297.076	21.943	589.840	-2.50	100
5	532+664	233284.195	3331280.248	532+530.319	532+796.843	800	60	14	47	28.468	133.863	6.900	146.525	5.00	100
6	533+154	233653.080	3331606.458	532+992.262	533+315.025	600	80	23	10	55.704	163.150	12.944	162.763	5.00	100
7	536+420	236762.476	3332635.063	536+183.169	536+655.872	600	80	37	30	01.387	243.820	34.097	312.703	5.00	100
8	537+323	237276.610	3333391.728	537+041.447	537+604.288	1200	50	24	29	10.920	285.415	28.016	462.841	3.70	100
9	537+932	237380.061	3333996.388	537+776.794	538+087.567	3000	0	05	56	07.140	155.525	4.029	310.772	-2.50	100
10	538+893	237639.876	3334924.186	538+603.554	539+183.411	2000	0	16	36	42.109	291.977	21.200	579.858	-2.50	100
11	539+816	237623.603	3335887.658	539+591.470	540+039.806	260	80	81	10	10.536	263.574	83.706	288.336	5.00	80
12	540+851	238715.234	3336076.177	540+563.798	541+138.176	400	100	67	56	58.636	320.224	83.600	374.378	5.00	100
13	541+609	239220.502	3335262.801	541+185.800	542+031.201	400	100	106	46	14.836	589.690	272.404	645.401	5.00	100
14	542+161	239698.086	3335804.880	542+039.826	542+282.829	260	90	33	43	01.245	124.137	13.032	63.003	5.00	80
EA	542+416	239946.659	3335871.031	-	-	-	-	-	-	-	-	-	-	-	-

			SCALE: -	CLIENT:-	 MINISTRY OF ROAD TRANSPORT AND HIGHWAYS (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)	CONSULTANTS:-	 9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II Gurgaon 122002, Haryana, India	PROJECT:-	CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHRASROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).	DWG NO.:- AECOM/TRA-HW/60524499/HAR/001	TITLE:	DATE:- FEB. 2026	PAPER:-A2	
R2	FEB 2026	FINAL DETAILED PROJECT REPORT	AS PER SHOWN							HORIZONTAL ALIGNMENT REPORT (RISHIKESH BYPASS)	DRAWN (A) DESIGN (B) CHECKED (C) APPROVED (D)			
R1	DEC 2025	FINAL FEASIBILITY REPORT									HS	DK	SB	BS
R0	OCT 2025	DRAFT FEASIBILITY REPORT												
REV	DATE	DESCRIPTION OF REVISIONS												

VERTICAL ALIGNMENT REPORT

VERTICAL ALIGNMENT REPORT-MCW

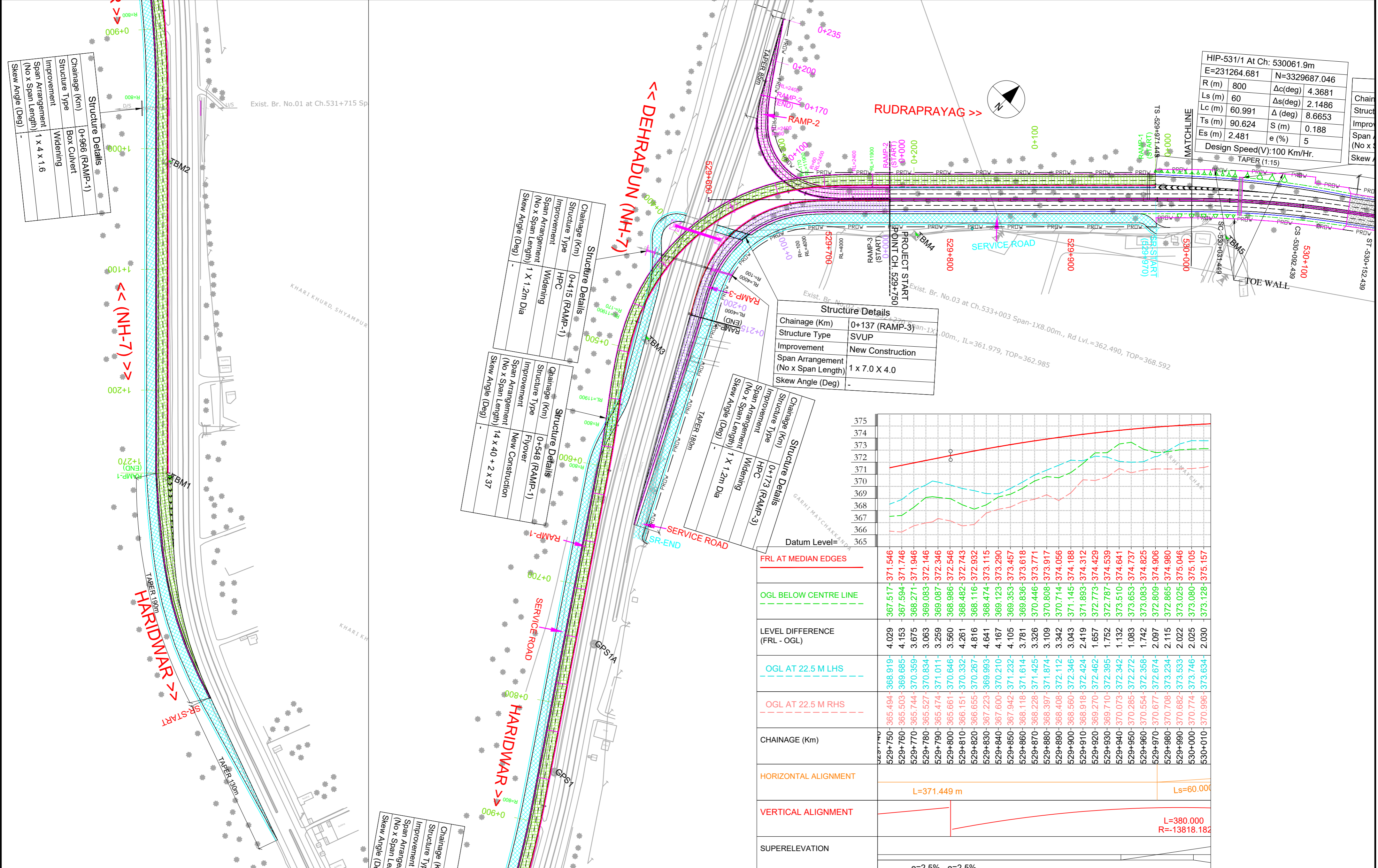
Sl. No.	VP CHAINAGE (km)	VP LEVEL (m)	VERTICAL CURVE LENGTH (m)	GRADIENT IN (%)	GRADIENT OUT (%)	K-VALUE	TYPE OF CURVE
SA	529+600.00	368.546	0	-	-	-	-
1	529+990.43	376.355	380	2.000	-0.750	138.182	Summit Curve
2	531+377.76	365.950	200	-0.750	1.000	114.286	Valley Curve
3	532+049.05	372.663	210	1.000	-0.500	140.006	Summit Curve
4	532+805.29	368.882	130	-0.500	2.500	43.334	Valley Curve
5	533+429.98	384.500	250	2.500	0.750	142.857	Summit Curve
6	534+549.28	392.894	400	0.750	-0.500	319.998	Summit Curve
7	536+630.15	382.490	130	-0.500	1.500	65.000	Valley Curve
8	536+870.30	386.092	100	1.500	1.000	200.006	Summit Curve
9	538+549.27	402.882	100	1.000	2.500	66.669	Valley Curve
10	539+079.98	416.150	675	2.500	-2.500	135.001	Summit Curve
11	539+683.25	401.068	220	-2.500	2.000	48.889	Valley Curve
12	540+470.78	416.819	250	2.000	0.500	166.667	Summit Curve
13	541+505.68	421.993	100	0.500	1.000	200.000	Valley Curve
14	542+008.18	427.018	310	1.000	-1.250	137.778	Summit Curve
EA	542+420.50	421.864	0	-	-	-	-

SCALE: -		CLIENT:-		CONSULTANTS:-		PROJECT:-		DWG NO.: - AECOM/TRA-HW/60524499/VAR/ 001			
R2	FEB 2026	FINAL DETAILED PROJECT REPORT	 MINISTRY OF ROAD TRANSPORT AND HIGHWAYS (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)	 9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II Gurgaon 122002, Haryana, India	CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHRASROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).	TITLE: VERTICAL ALIGNMENT REPORT (RISHIKESH BYPASS)		DATE:- FEB. 2026		PAPER:-A2	
R1	DEC 2025	FINAL FEASIBILITY REPORT						DRAWN (A)	DESIGN (B)	CHECKED (C)	APPROVED (D)
R0	OCT 2025	DRAFT FEASIBILITY REPORT						HS	DK	SB	BS
REV	DATE	DESCRIPTION OF REVISIONS									

**PLAN & PROFILE MCW)
DRAWINGS**

← TO HARIDWAR

TO RUDRAPRAYAG →



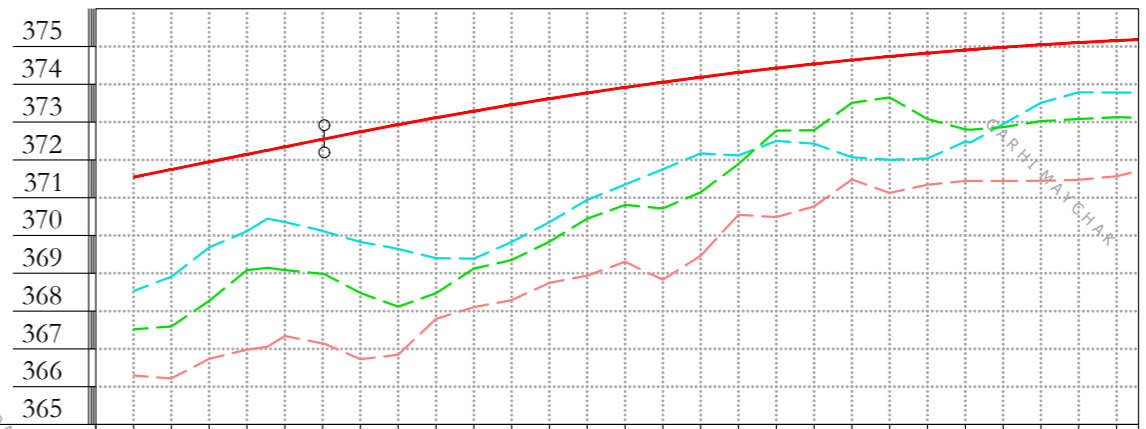
Structure Details	
Chainage (km)	0+966 (RAMP-1)
Structure Type	Box Culvert
Improvement	Widening
Span Arrangement (No x Span Length)	1 x 4 x 1.6
Skew Angle (Deg)	-

Structure Details	
Chainage (km)	0+415 (RAMP-1)
Structure Type	HPC
Improvement	Widening
Span Arrangement (No x Span Length)	1 x 1.2m Dia
Skew Angle (Deg)	-

Structure Details	
Chainage (km)	0+548 (RAMP-1)
Structure Type	Flyover
Improvement	New Construction
Span Arrangement (No x Span Length)	14 x 40 + 2 x 37
Skew Angle (Deg)	-

Structure Details	
Chainage (km)	0+173 (RAMP-3)
Structure Type	HPC
Improvement	Widening
Span Arrangement (No x Span Length)	1 x 1.2m Dia
Skew Angle (Deg)	-

Structure Details	
Chainage (km)	0+137 (RAMP-3)
Structure Type	SVUP
Improvement	New Construction
Span Arrangement (No x Span Length)	1 x 7.0 X 4.0
Skew Angle (Deg)	-



FRL AT MEDIAN EDGES	371.546	371.746	371.946	372.146	372.346	372.546	372.743	372.932	373.115	373.290	373.457	373.618	373.771	373.917	374.056	374.188	374.312	374.429	374.539	374.641	374.737	374.825	374.906	374.980	375.046	375.105	375.157	
OGL BELOW CENTRE LINE	367.517	367.594	368.271	369.083	369.987	368.986	368.482	368.116	368.474	369.123	369.353	369.836	370.446	370.808	370.714	371.145	371.893	372.773	372.429	372.787	373.510	373.653	374.737	373.083	372.809	372.655	372.504	372.346
LEVEL DIFFERENCE (FRL - OGL)	4.029	4.153	3.675	3.063	3.259	3.560	4.261	4.816	4.641	4.167	4.105	3.781	3.326	3.109	3.942	3.043	2.419	1.657	1.752	1.132	1.083	1.742	2.097	2.115	2.022	2.025	2.030	
OGL AT 22.5 M LHS	368.919	369.685	370.359	370.834	371.011	370.646	370.332	370.267	369.993	370.210	371.232	371.614	371.425	371.874	372.112	372.346	372.424	372.462	372.395	372.342	372.272	372.358	372.674	372.674	372.674	372.674	372.674	372.674
OGL AT 22.5 M RHS	365.494	365.503	365.744	365.527	365.474	365.661	366.151	366.655	367.223	367.600	367.942	368.118	368.228	368.397	368.408	368.560	368.918	369.270	369.710	370.073	370.285	370.554	370.777	370.708	370.682	370.682	370.774	370.996
CHAINAGE (Km)	529+750	529+760	529+770	529+780	529+790	529+800	529+810	529+820	529+830	529+840	529+850	529+860	529+870	529+880	529+890	529+900	529+910	529+920	529+930	529+940	529+950	529+960	529+970	529+980	529+990	530+000	530+010	
HORIZONTAL ALIGNMENT	L=371.449 m														Ls=60.000													
VERTICAL ALIGNMENT															L=380.000 R=13818.182													
SUPERELEVATION	e=2.5%														e=2.5%													

REV	DATE	DESCRIPTION OF REVISIONS
R2	FEB 2026	FINAL DETAILED PROJECT REPORT
R1	DEC 2025	FINAL FEASIBILITY REPORT
R0	OCT 2025	DRAFT FEASIBILITY REPORT

SCALE: -	HOR 1:2000	VER 1:200
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CLIENT:-

MINISTRY OF ROAD TRANSPORT AND HIGHWAYS
 (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)

CONSULTANTS:-

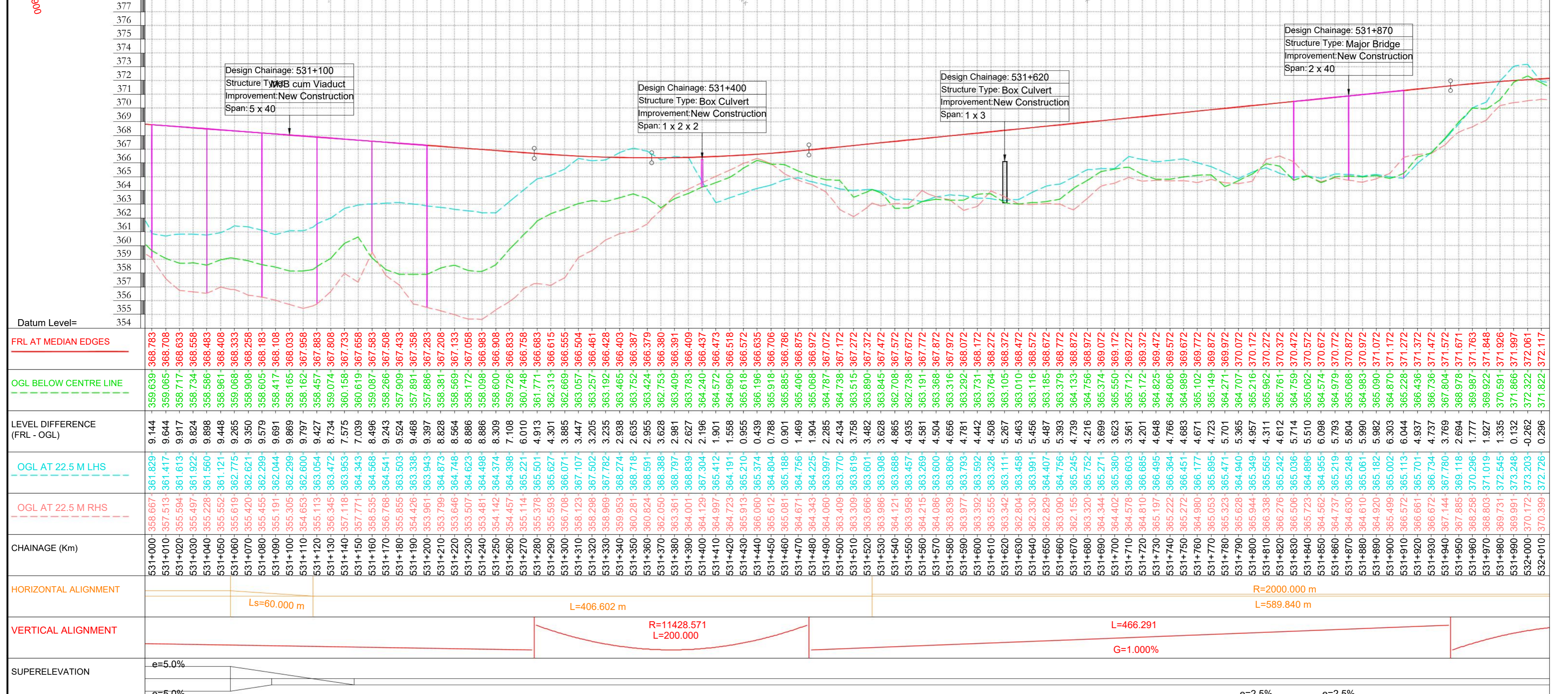
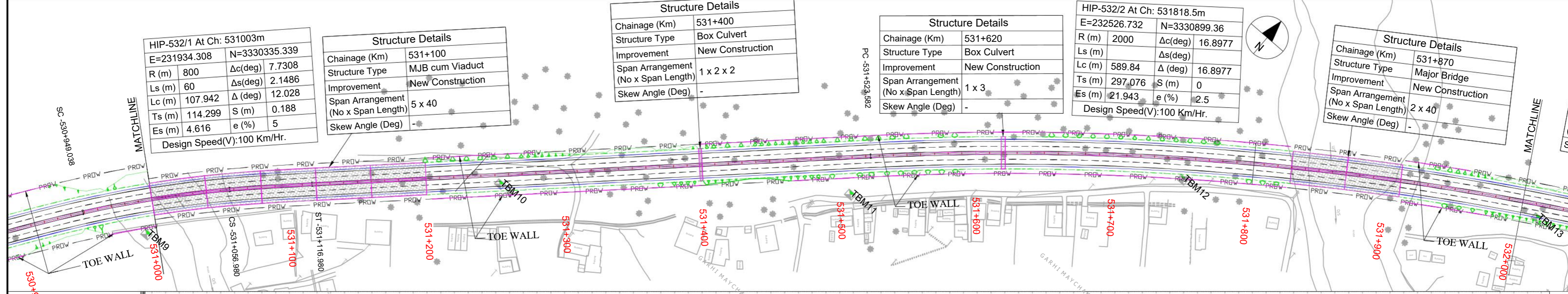
AECOM
 9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II
 Gurgaon 122002, Haryana, India

PROJECT:-
 CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHARSOTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).

DWG NO.:- AECOM/TRA-HW/60524499/P&P/001	DATE:- FEB. 2026	PAPER:- A2		
TITLE: PLAN AND PROFILE (RISHIKESH BYPASS) (CH. 529+750 TO CH. 530+000)	DRAWN (A)	DESIGN (B)	CHECKED (C)	APPROVED (D)
	HS	DK	SB	BS

← TO HARIDWAR

TO RUDRAPRAYAG →



R2 FEB 2026 FINAL DETAILED PROJECT REPORT R1 DEC 2025 FINAL FEASIBILITY REPORT R0 OCT 2025 DRAFT FEASIBILITY REPORT REV DATE DESCRIPTION OF REVISIONS		SCALE: - HOR 1:2000 VER 1:200	CLIENT:- MINISTRY OF ROAD TRANSPORT AND HIGHWAYS (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)	CONSULTANTS:- 9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II Gurgaon 122002, Haryana, India	PROJECT:- CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHARSOTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).	DWG NO.: - AECOM/TRA-HW/60524499/P&P/003 TITLE: PLAN AND PROFILE (RISHIKESH BYPASS) (CH. 531+000 TO CH. 532+000)	DATE:- FEB. 2026 DRAWN (A) DESIGN (B) CHECKED (C) APPROVED (D)	PAPER:- A2 HS DK SB BS
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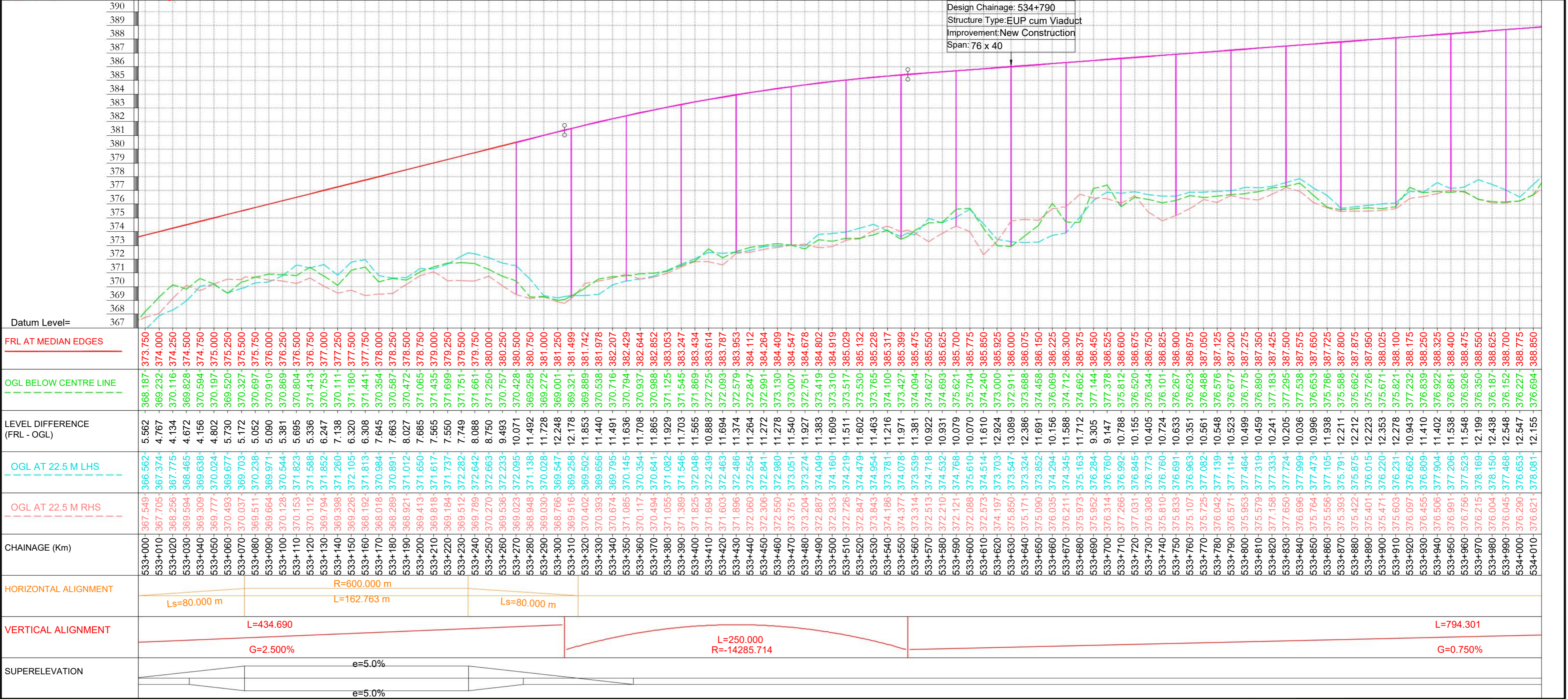
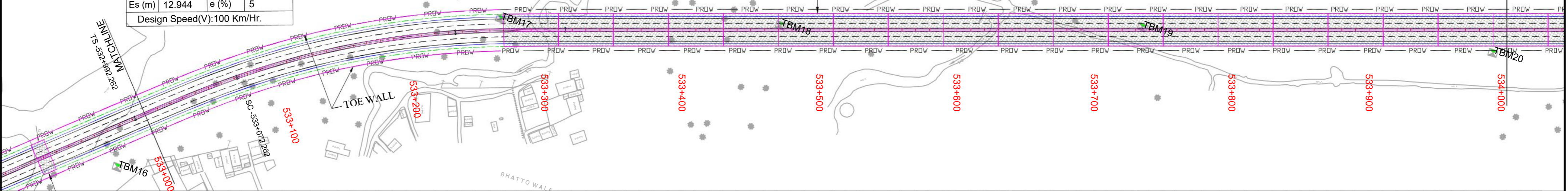
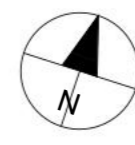
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← TO HARIDWAR

TO RUDRAPRAYAG →

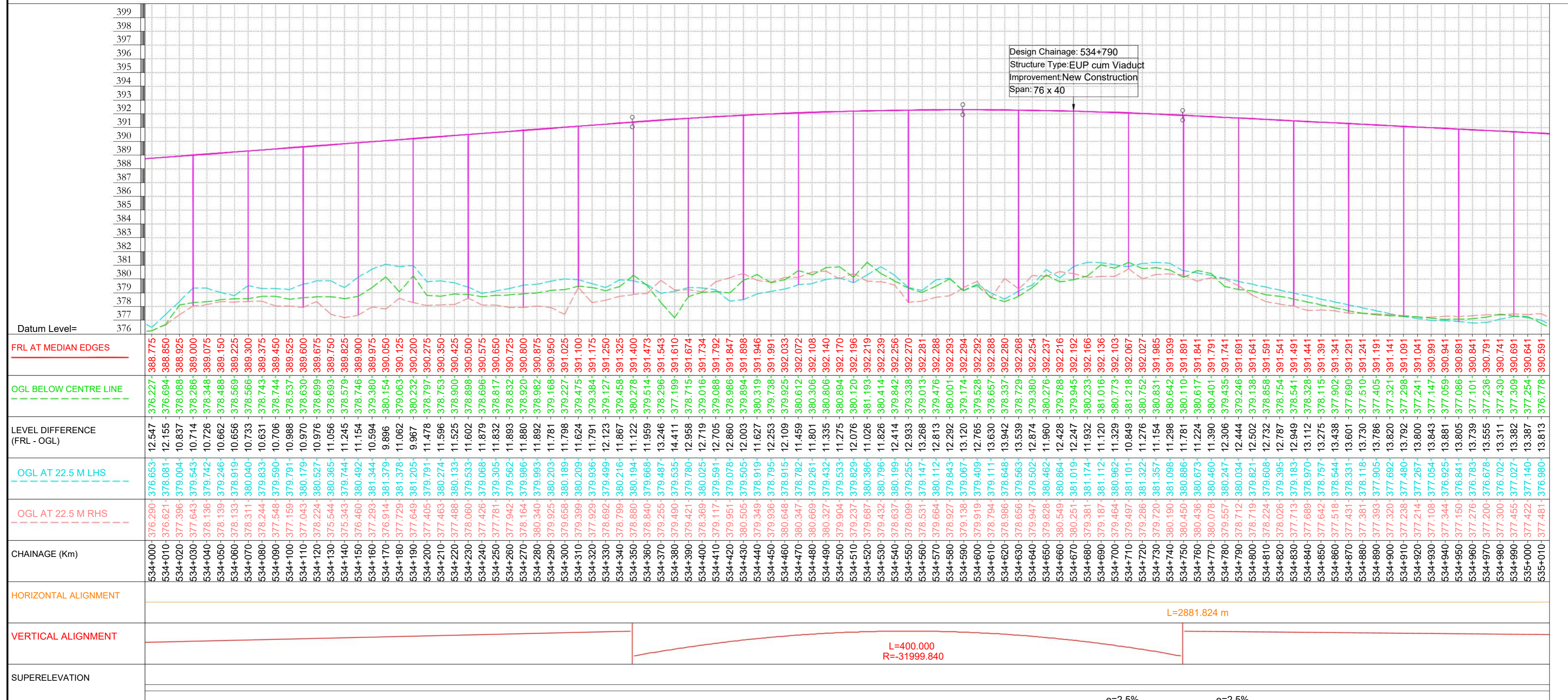
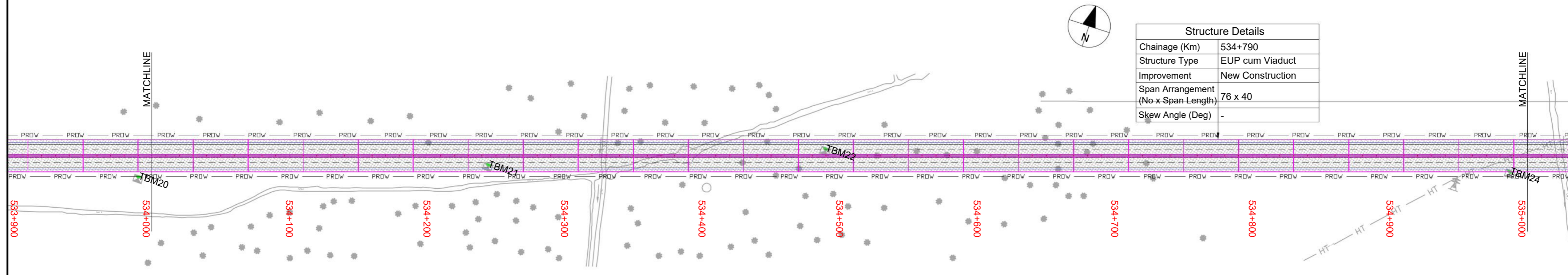
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R (m) 600	Δc(deg) 15.5427
Ls (m) 80	Δs(deg) 3.8197
Lc (m) 162.763	Δ (deg) 23.1821
Ts (m) 163.15	S (m) 0.444
Es (m) 12.944	e (%) 5
Design Speed(V):100 Km/Hr.	

Structure Details	
Chainage (Km)	534+790
Structure Type	EUP cum Viaduct
Improvement	New Construction
Span Arrangement (No x Span Length)	76 x 40
Skew Angle (Deg)	-



← TO HARIDWAR

TO RUDRAPRAYAG →

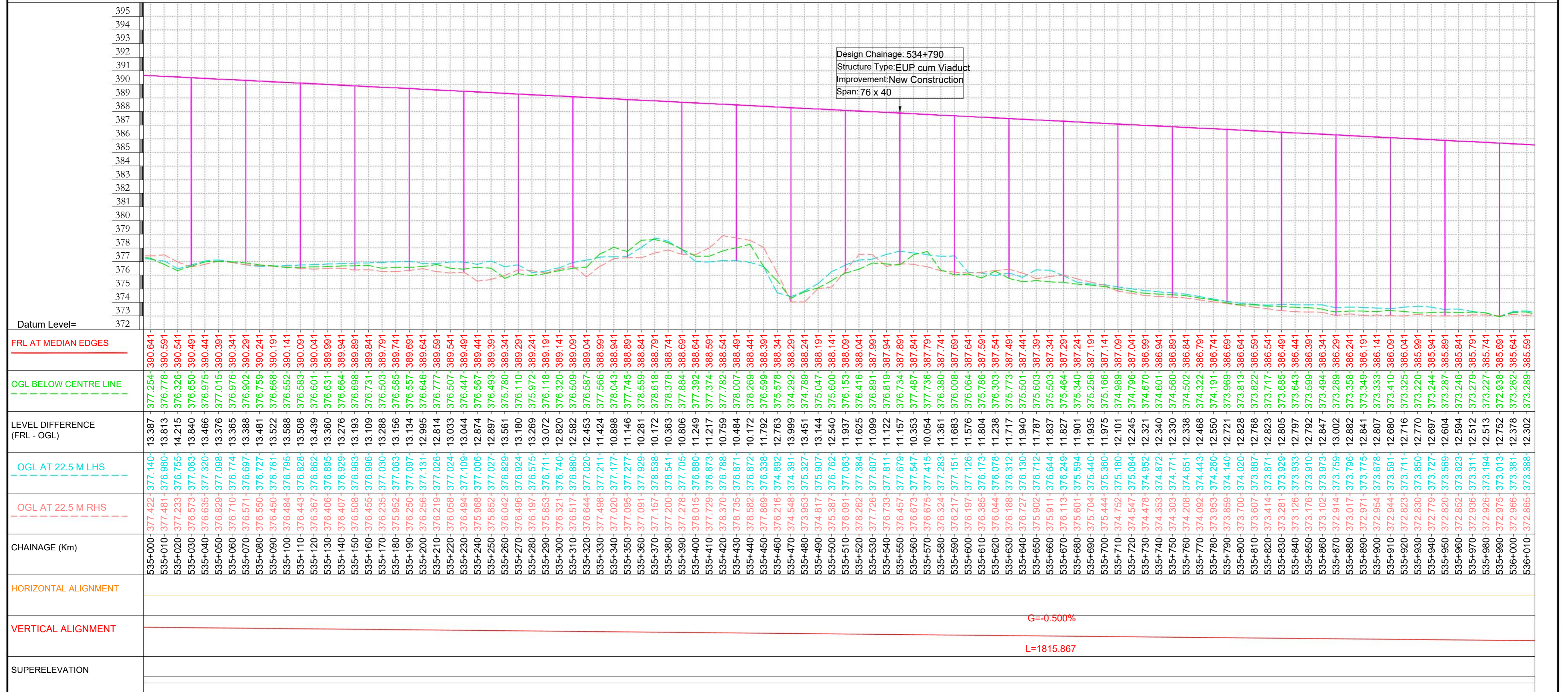
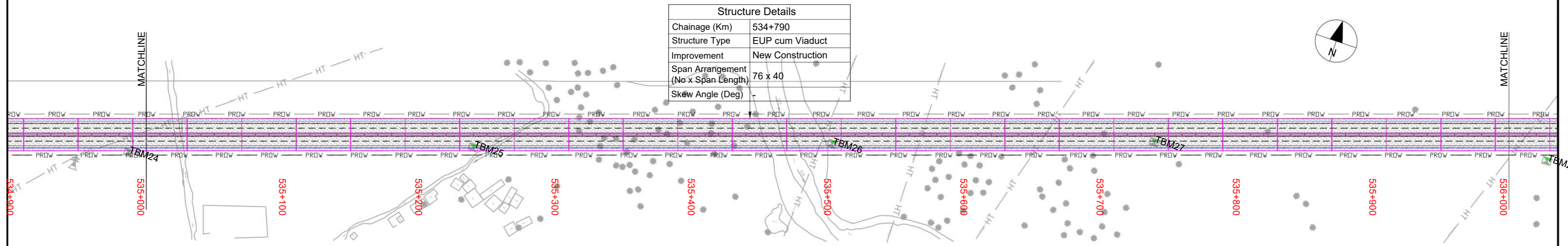


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R2	FEB 2026	FINAL DETAILED PROJECT REPORT															
R1	DEC 2025	FINAL FEASIBILITY REPORT															
R0	OCT 2025	DRAFT FEASIBILITY REPORT															
REV	DATE	DESCRIPTION OF REVISIONS															
				DATE:- FEB. 2026 PAPER:- A2													
				DRAWN (A) DESIGN (B) CHECKED (C) APPROVED (D)													
				HS DK SB BS													

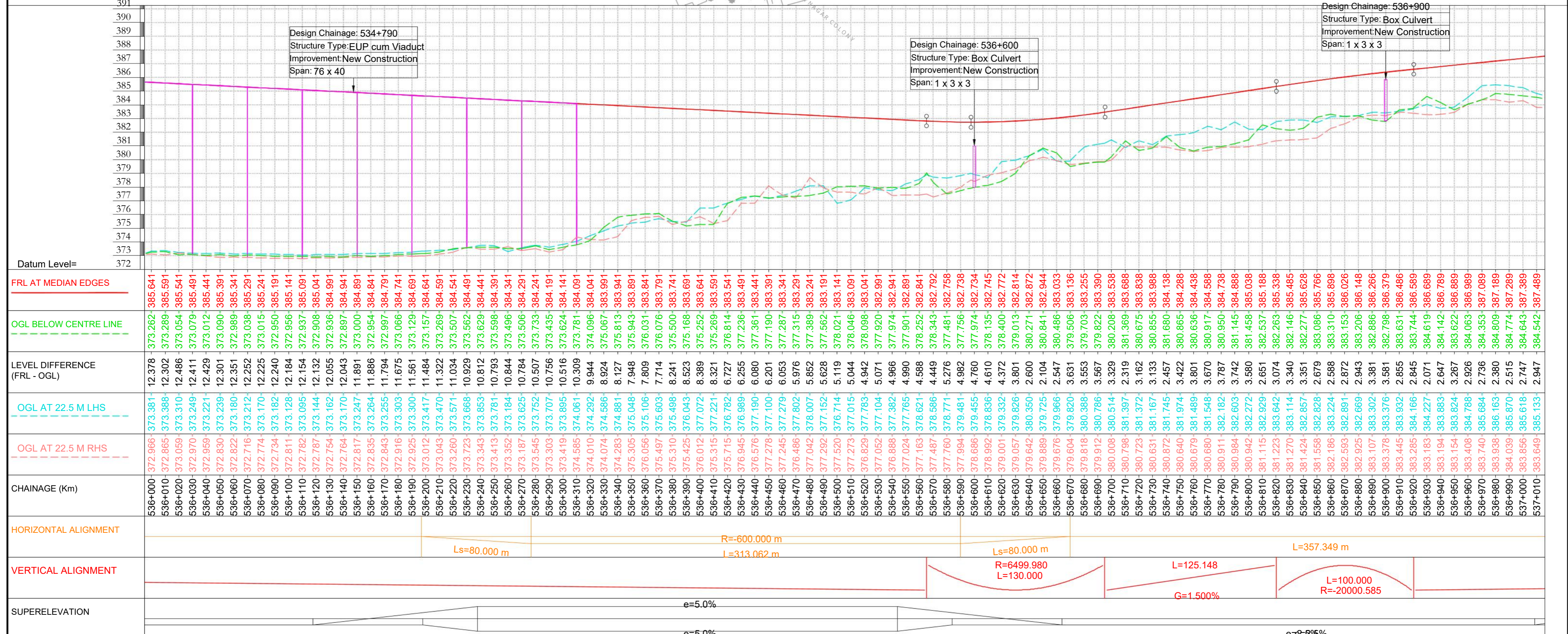
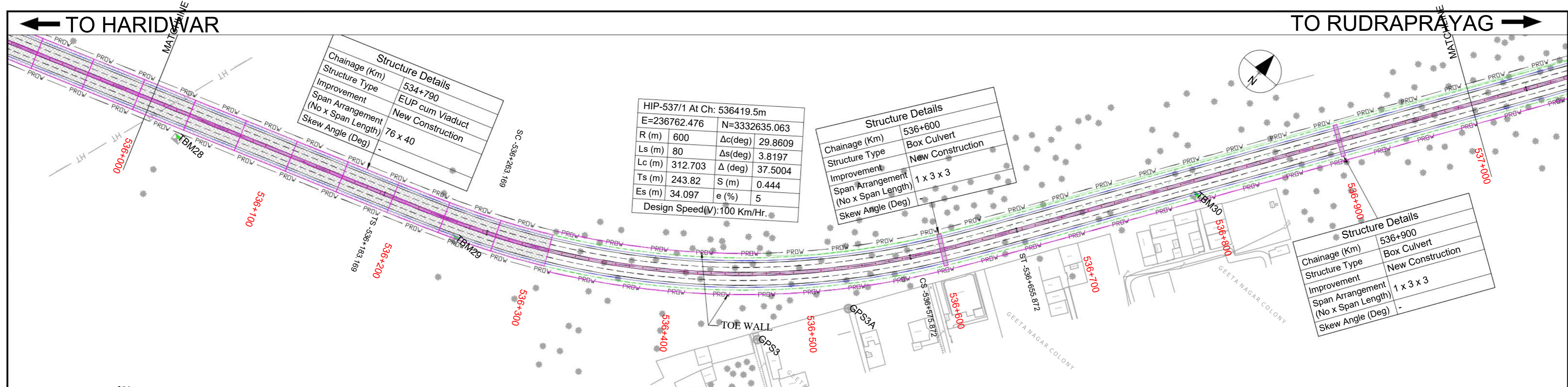
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← TO HARIDWAR

TO RUDRAPRAYAG →



<p>R2 FEB 2026 FINAL DETAILED PROJECT REPORT</p> <p>R1 DEC 2025 FINAL FEASIBILITY REPORT</p> <p>R0 OCT 2025 DRAFT FEASIBILITY REPORT</p> <p>REV DATE DESCRIPTION OF REVISIONS</p>		<p>SCALE: -</p> <p>HOR 1:2000</p> <p>VER 1:200</p>	<p>CLIENT:-</p> <p>MINISTRY OF ROAD TRANSPORT AND HIGHWAYS</p> <p>(TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)</p>	<p>CONSULTANTS:-</p> <p>AECOM</p> <p>9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II Gurgaon 122002, Haryana, India</p>	<p>PROJECT:-</p> <p>CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHARSROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).</p>	<p>DWG NO.:- AECOM/TRA-HW/60524499/P&P/007</p> <p>TITLE: PLAN AND PROFILE (RISHIKESH BYPASS) (CH. 535+000 TO CH. 536+000)</p> <p>DATE:- FEB. 2026</p> <p>PAPER:- A2</p> <p>DRAWN (A) DESIGN (B) CHECKED (C) APPROVED (D)</p> <p>HS DK SB BS</p>
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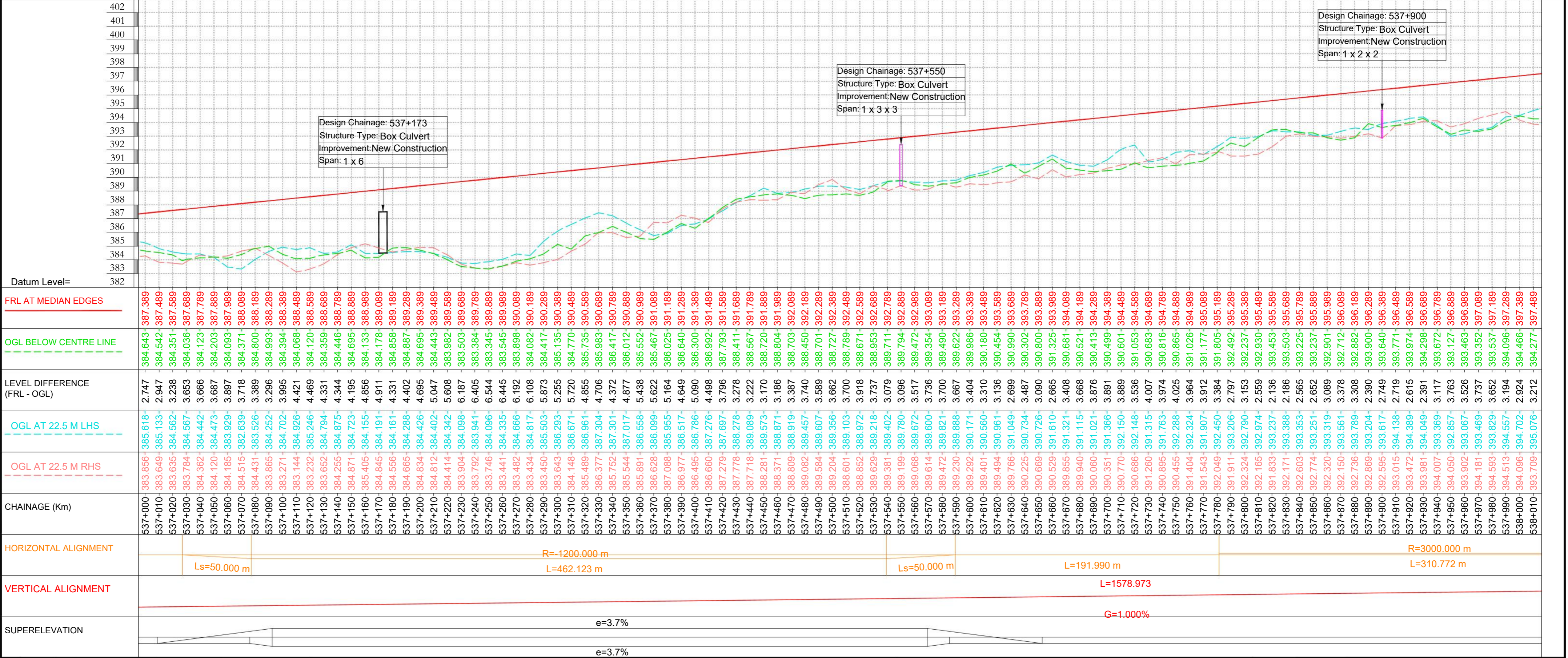
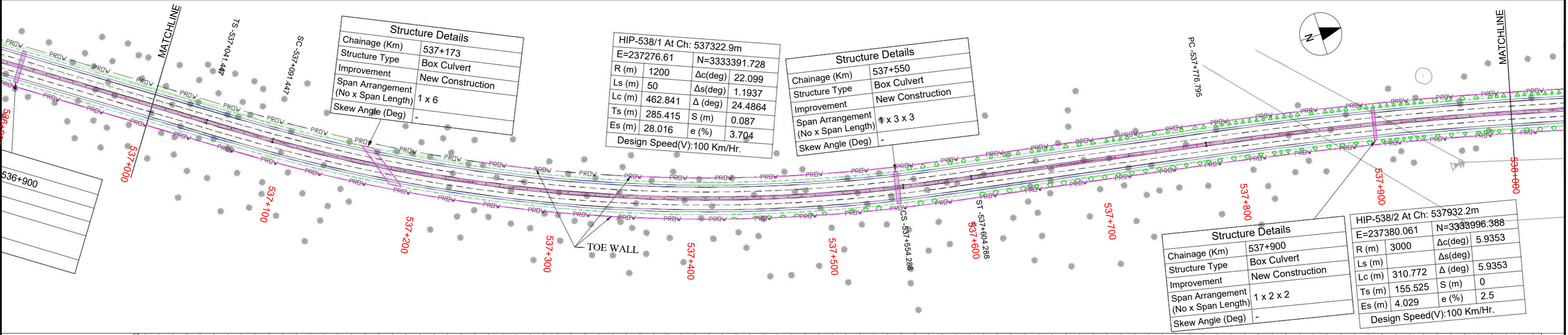


R2 FEB 2026 FINAL DETAILED PROJECT REPORT R1 DEC 2025 FINAL FEASIBILITY REPORT R0 OCT 2025 DRAFT FEASIBILITY REPORT REV DATE DESCRIPTION OF REVISIONS		SCALE: - HOR 1:2000 VER 1:200	CLIENT:- MINISTRY OF ROAD TRANSPORT AND HIGHWAYS (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)	CONSULTANTS:- 9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II Gurgaon 122002, Haryana, India	PROJECT:- CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHARSOTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).	DWG NO.: - AECOM/TRA-HW/60524499/P&P/008 TITLE: PLAN AND PROFILE (RISHIKESH BYPASS) (CH. 536+000 TO CH. 537+000)	DATE:- FEB. 2026 PAPER:- A2 DRAWN (A) DESIGN (B) CHECKED (C) APPROVED (D)
						HS DK SB BS	

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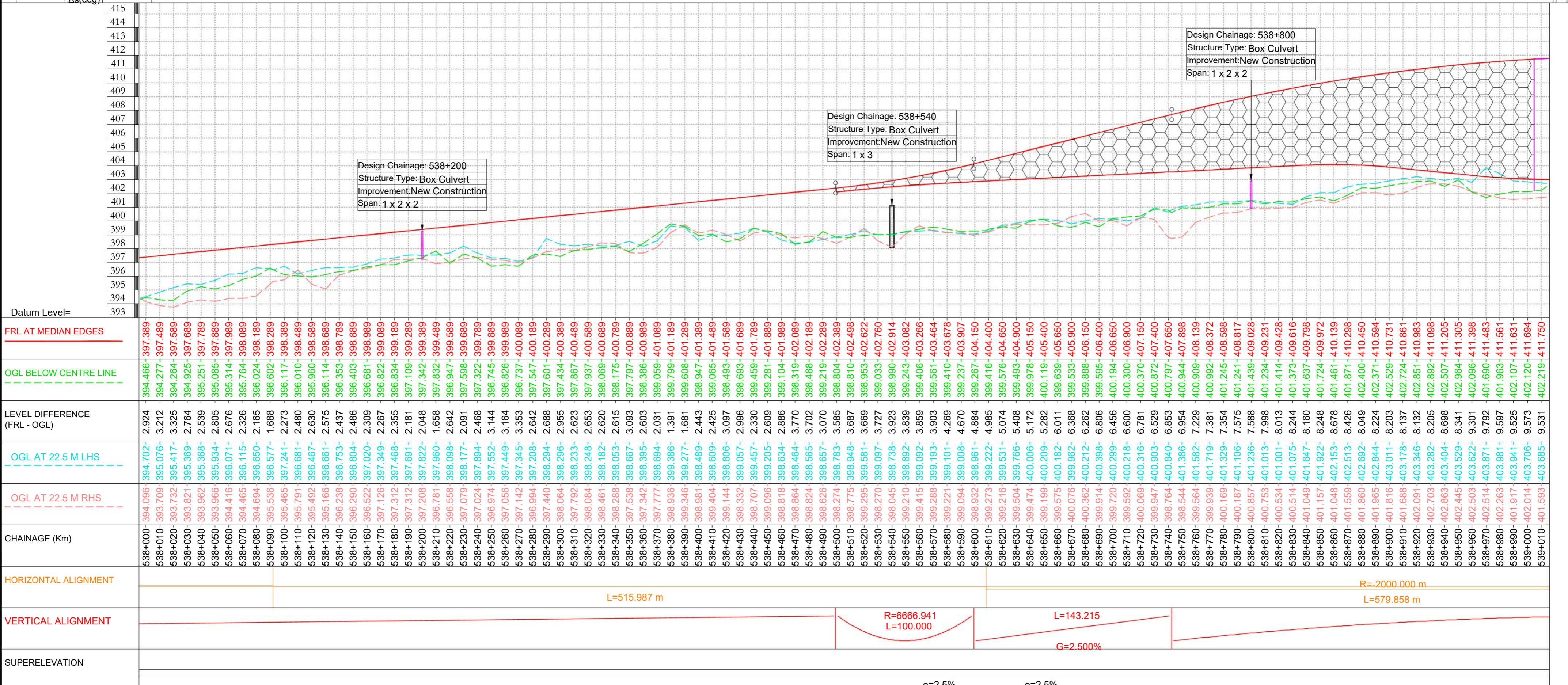
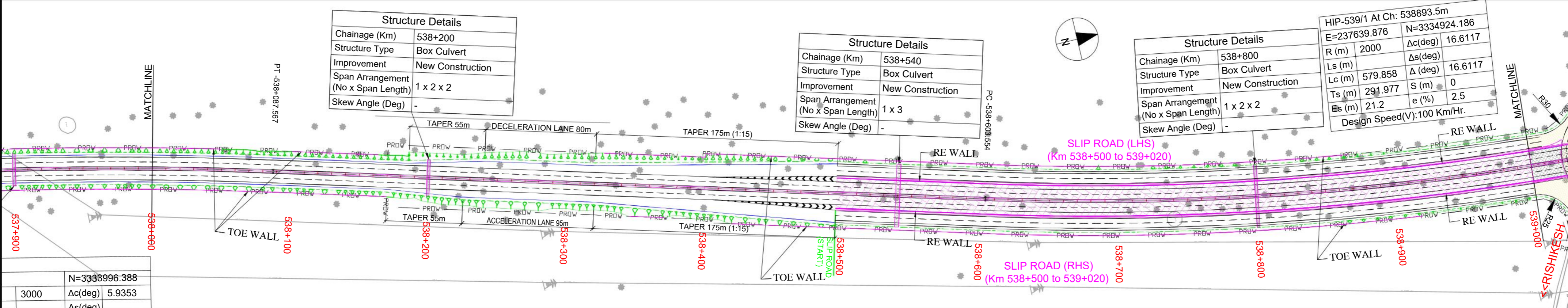
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TO RUDRAPRAYAG →



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R2	FEB 2026	FINAL DETAILED PROJECT REPORT																	
R1	DEC 2025	FINAL FEASIBILITY REPORT																	
R0	OCT 2025	DRAFT FEASIBILITY REPORT																	
REV	DATE	DESCRIPTION OF REVISIONS																	

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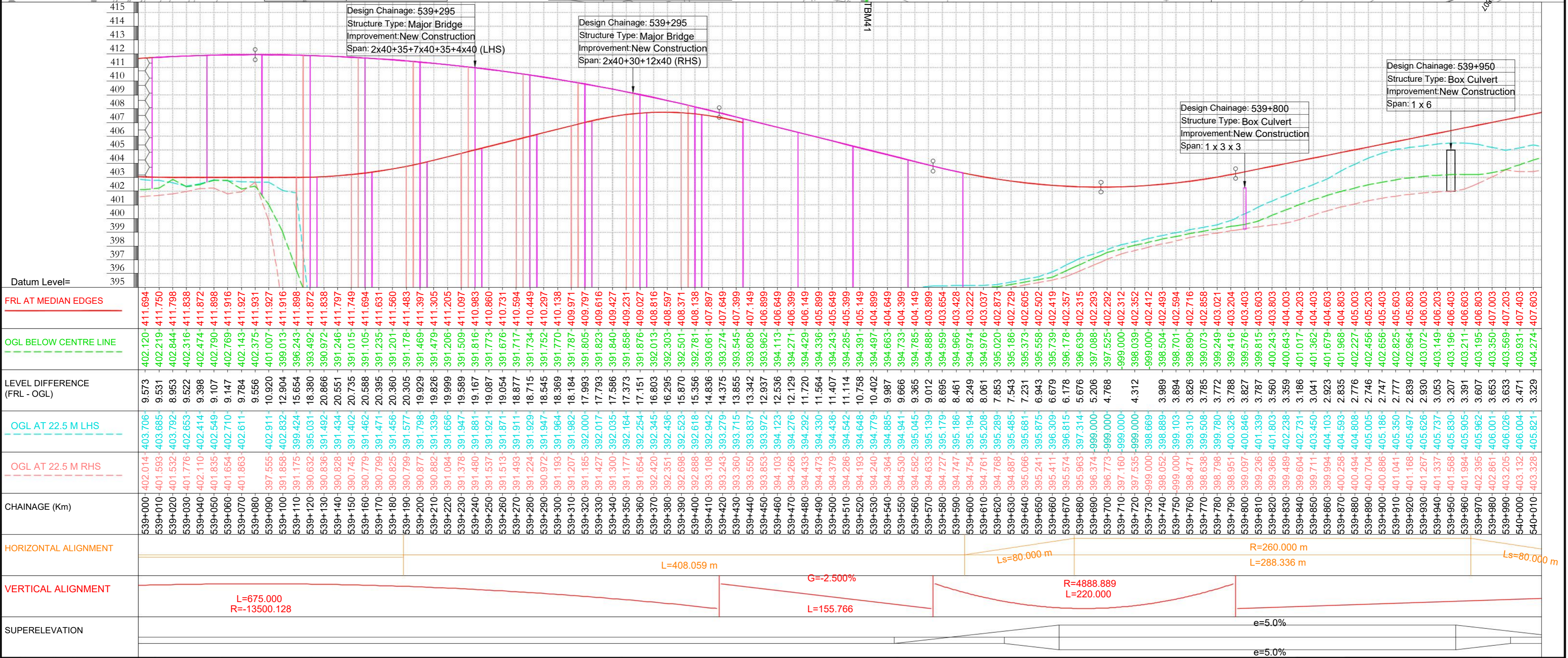
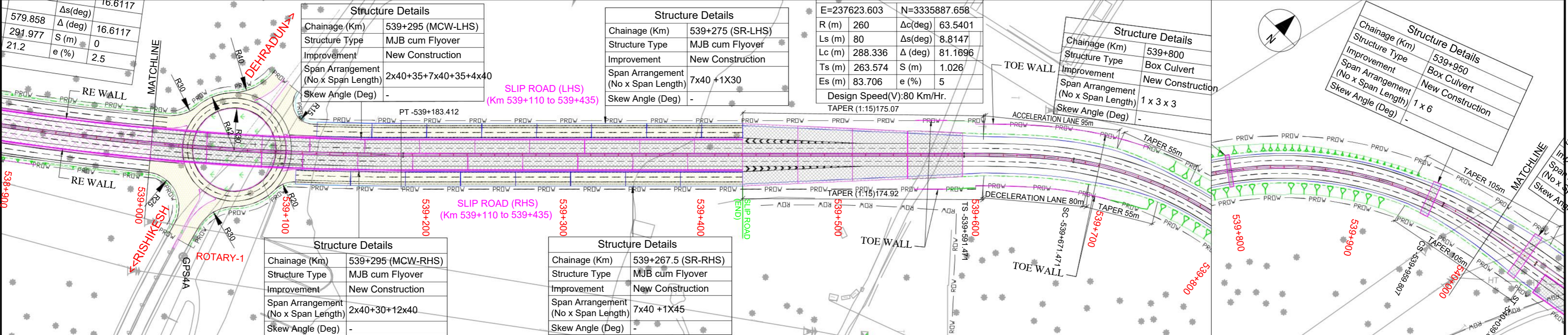


<p>SCALE: -</p> <p>HOR 1:2000 VER 1:200</p>		<p>CLIENT:-</p> <p>MINISTRY OF ROAD TRANSPORT AND HIGHWAYS (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)</p>		<p>CONSULTANTS:-</p> <p>9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II Gurgaon 122002, Haryana, India</p>		<p>PROJECT:-</p> <p>CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANE OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHARSOTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).</p>		<p>DWG NO.:- AECOM/TRA-HW/60524499/P&P/010</p> <p>TITLE: PLAN AND PROFILE (RISHIKESH BYPASS) (CH. 538+000 TO CH. 539+000)</p>		<p>DATE:- FEB. 2026 PAPER:- A2</p> <p>DRAWN (A) DESIGN (B) CHECKED (C) APPROVED (D)</p> <p>HS DK SB BS</p>	
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TO RUDRAPRAYAG →

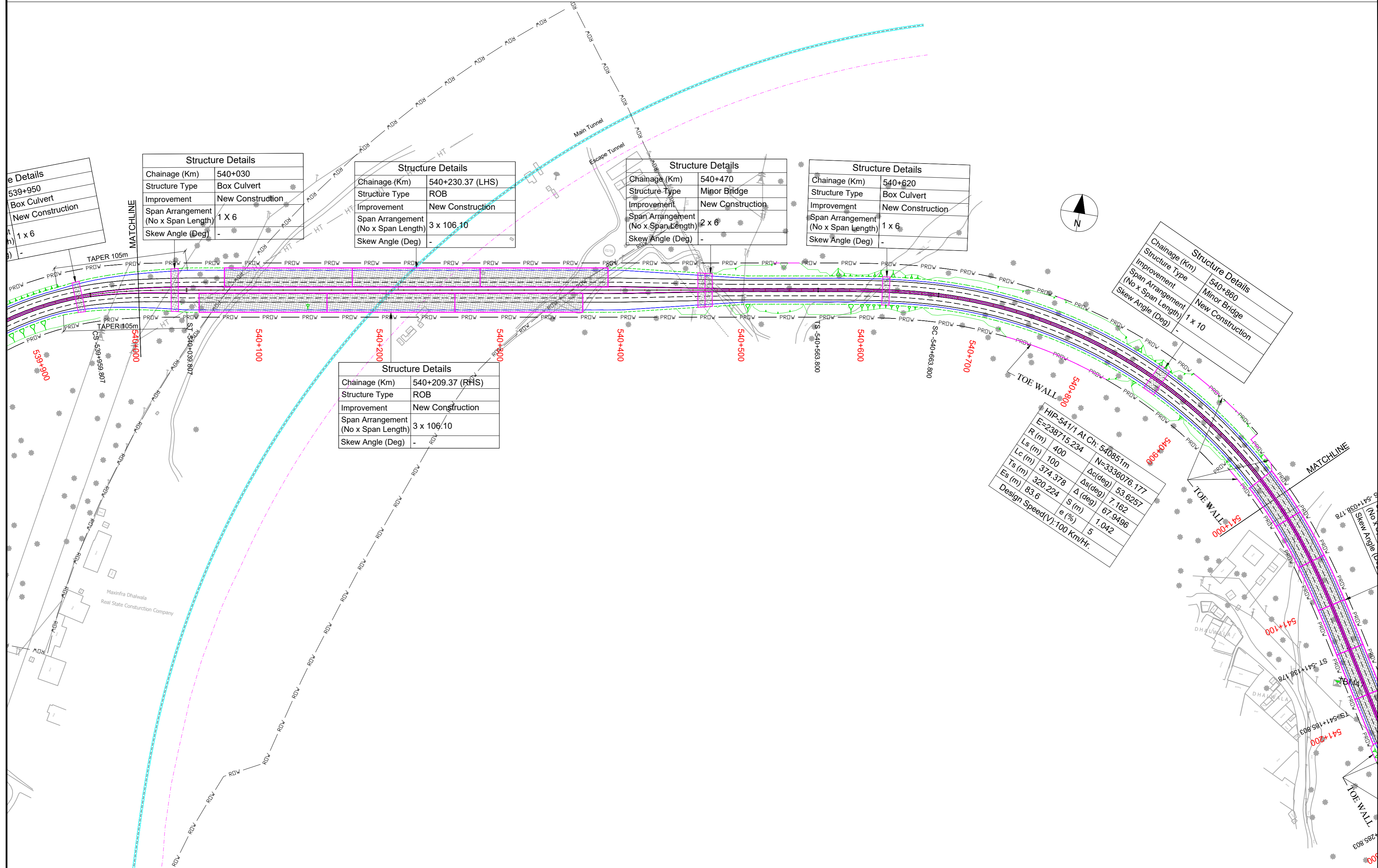


<p>SCALE: -</p> <p>HOR 1:2000 VER 1:200</p>		<p>CLIENT:-</p> <p>MINISTRY OF ROAD TRANSPORT AND HIGHWAYS (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)</p>		<p>CONSULTANTS:-</p> <p>9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II Gurgaon 122002, Haryana, India</p>		<p>PROJECT:-</p> <p>CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANEING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHARSOTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).</p>		<p>DWG NO.:- AECOM/TRA-HW/60524499/P&P/011</p> <p>TITLE: PLAN AND PROFILE (RISHIKESH BYPASS) (CH. 539+000 TO CH. 540+000)</p>		<p>DATE:- FEB. 2026 PAPER:- A2</p> <p>DRAWN (A) DESIGN (B) CHECKED (C) APPROVED (D)</p>	
R2	FEB 2026	FINAL DETAILED PROJECT REPORT						HS	DK	SB	BS
R1	DEC 2025	FINAL FEASIBILITY REPORT									
R0	OCT 2025	DRAFT FEASIBILITY REPORT									
REV	DATE	DESCRIPTION OF REVISIONS									

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← TO HARIDWAR

TO RUDRAPRAYAG →



Structure Details	
Chainage (Km)	539+950
Structure Type	Box Culvert
Improvement	New Construction
Span Arrangement (No x Span Length)	1 x 6
Skew Angle (Deg)	-

Structure Details	
Chainage (Km)	540+030
Structure Type	Box Culvert
Improvement	New Construction
Span Arrangement (No x Span Length)	1 X 6
Skew Angle (Deg)	-

Structure Details	
Chainage (Km)	540+230.37 (LHS)
Structure Type	ROB
Improvement	New Construction
Span Arrangement (No x Span Length)	3 x 106.10
Skew Angle (Deg)	-

Structure Details	
Chainage (Km)	540+470
Structure Type	Minor Bridge
Improvement	New Construction
Span Arrangement (No x Span Length)	2 x 6
Skew Angle (Deg)	-

Structure Details	
Chainage (Km)	540+620
Structure Type	Box Culvert
Improvement	New Construction
Span Arrangement (No x Span Length)	1 x 6
Skew Angle (Deg)	-

Structure Details	
Chainage (Km)	540+860
Structure Type	Minor Bridge
Improvement	New Construction
Span Arrangement (No x Span Length)	1 x 10
Skew Angle (Deg)	-

Structure Details	
Chainage (Km)	540+209.37 (RHS)
Structure Type	ROB
Improvement	New Construction
Span Arrangement (No x Span Length)	3 x 106.10
Skew Angle (Deg)	-

HIP-541/1 At Ch: 540851m	
E=238715.234	N=3336076.177
R (m)	400
Ls (m)	100
Lc (m)	374.378
Ts (m)	320.224
Es (m)	83.6
Design Speed(V):	100 Km/Hr.
Δc(deg)	53.6257
Δs(deg)	7.162
S (m)	67.9496
e (%)	5

R2	FEB 2026	FINAL DETAILED PROJECT REPORT
R1	DEC 2025	FINAL FEASIBILITY REPORT
R0	OCT 2025	DRAFT FEASIBILITY REPORT
REV	DATE	DESCRIPTION OF REVISIONS

SCALE :-
HOR 1:2000
VER 1:200

CLIENT:-

MINISTRY OF ROAD TRANSPORT AND HIGHWAYS
 (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)

CONSULTANTS:-

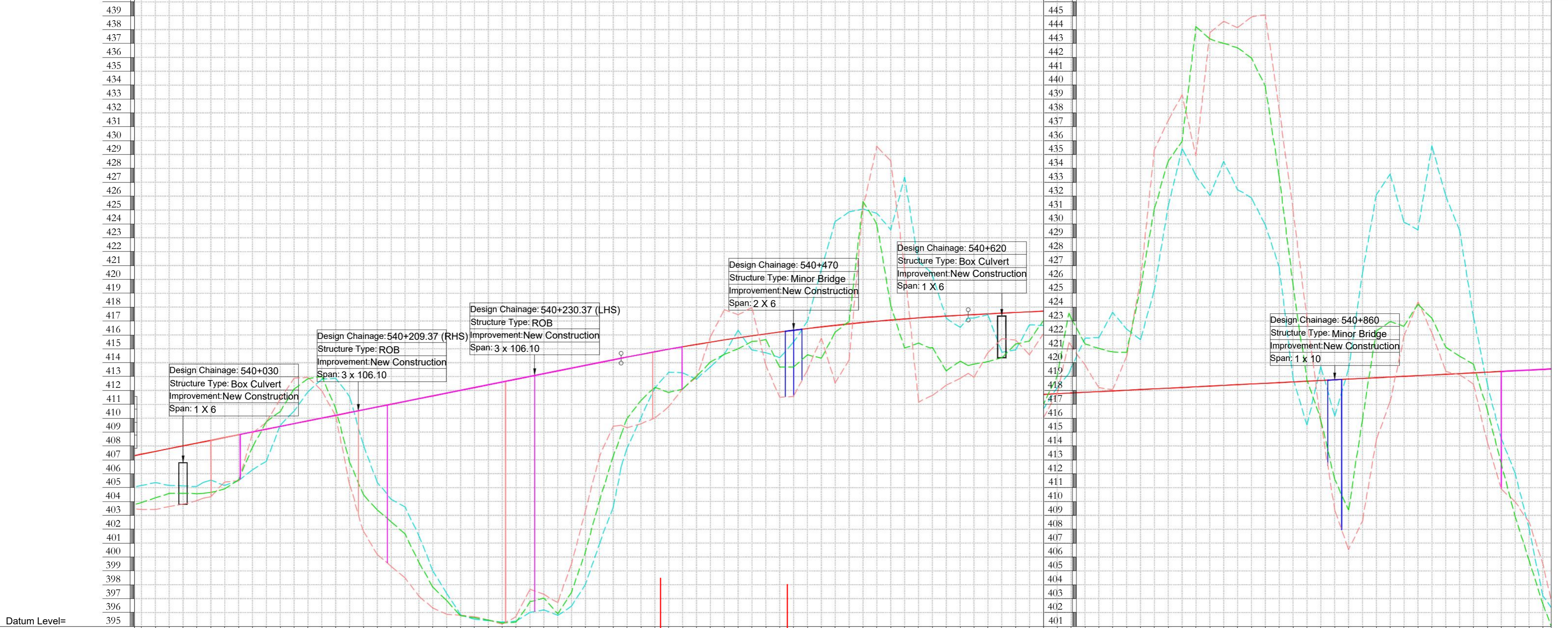
 9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II
 Gurgaon 122002, Haryana, India

PROJECT:-
 CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHARSOTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).

DWG NO. :- AECOM/TRA-HW/60524499/P&P/012A
TITLE: PLAN AND PROFILE (RISHIKESH BYPASS) (CH. 540+000 TO CH. 541+000)
DATE:- FEB. 2026
PAPER:- A2
DRAWN (A) DESIGN (B) CHECKED (C) APPROVED (D)
HS DK SB BS

← TO HARIDWAR

TO RUDRAPRAYAG →



Datum Level=	395
FRL AT MEDIAN EDGES	407.403
OGL BELOW CENTRE LINE	403.931
LEVEL DIFFERENCE (FRL - OGL)	3.471
OGL AT 22.5 M LHS	406.004
OGL AT 22.5 M RHS	403.132
CHAINAGE (Km)	540+000
HORIZONTAL ALIGNMENT	L=523.993 m
VERTICAL ALIGNMENT	L=552.528, L=250.000, R=16666.666
SUPERELEVATION	e=2.5%:5%, e=5.0%

R2	FEB 2026	FINAL DETAILED PROJECT REPORT
R1	DEC 2025	FINAL FEASIBILITY REPORT
R0	OCT 2025	DRAFT FEASIBILITY REPORT
REV	DATE	DESCRIPTION OF REVISIONS

SCALE: -
HOR 1:2000
VER 1:200

CLIENT:-

MINISTRY OF ROAD TRANSPORT AND HIGHWAYS
(TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)

CONSULTANTS:-

AECOM
9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II
Gurgaon 122002, Haryana, India

PROJECT:-
CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHARSROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).

DWG NO.: - AECOM/TRA-HW/60524499/P&P/012B	
TITLE: PLAN AND PROFILE (RISHIKESH BYPASS) (CH. 540+000 TO CH. 541+000)	DATE:- FEB. 2026
PAPER:- A2	DRAWN (A) DESIGN (B) CHECKED (C) APPROVED (D)
HS	DK SB BS



Structure Details	
Chainage (Km)	541+100
Structure Type	MJB cum Viaduct
Improvement	New Construction
Span Arrangement (No x Span Length)	6 x 40
Skew Angle (Deg)	-

Structure Details	
Chainage (Km)	541+430
Structure Type	Box Culvert
Improvement	New Construction
Span Arrangement (No x Span Length)	1 x 6
Skew Angle (Deg)	-

Structure Details	
Chainage (Km)	541+580
Structure Type	Box Culvert
Improvement	New Construction
Span Arrangement (No x Span Length)	1 x 6
Skew Angle (Deg)	-

Structure Details	
Chainage (Km)	541+930
Structure Type	Box Culvert
Improvement	New Construction
Span Arrangement (No x Span Length)	1 x 6
Skew Angle (Deg)	-

HIP-543/1 At Ch: 542161.3m	N=3335804.88
E=239698.086	Δc(deg) 13.8839
R (m) 260	Δs(deg) 9.9166
Ls (m) 90	Δ (deg) 33.717
Lc (m) 63.003	S (m) 1.298
Ts (m) 124.137	e (%) 5
Es (m) 13.032	Design Speed(V):80 Km/Hr.

HIP-542/1 At Ch: 541608.5m	
E=239220.502	N=3335262.801
R (m) 400	Δc(deg) 92.4468
Ls (m) 100	Δs(deg) 7.162
Lc (m) 645.401	Δ (deg) 106.7708
Ts (m) 589.69	S (m) 1.042
Es (m) 272.404	e (%) 5
Design Speed(V):100 Km/Hr.	

REV	DATE	DESCRIPTION OF REVISIONS
R2	FEB 2026	FINAL DETAILED PROJECT REPORT
R1	DEC 2025	FINAL FEASIBILITY REPORT
R0	OCT 2025	DRAFT FEASIBILITY REPORT

SCALE :-	
HOR	VER
1:2000	1:200

CLIENT:-

MINISTRY OF ROAD TRANSPORT AND HIGHWAYS
 (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)

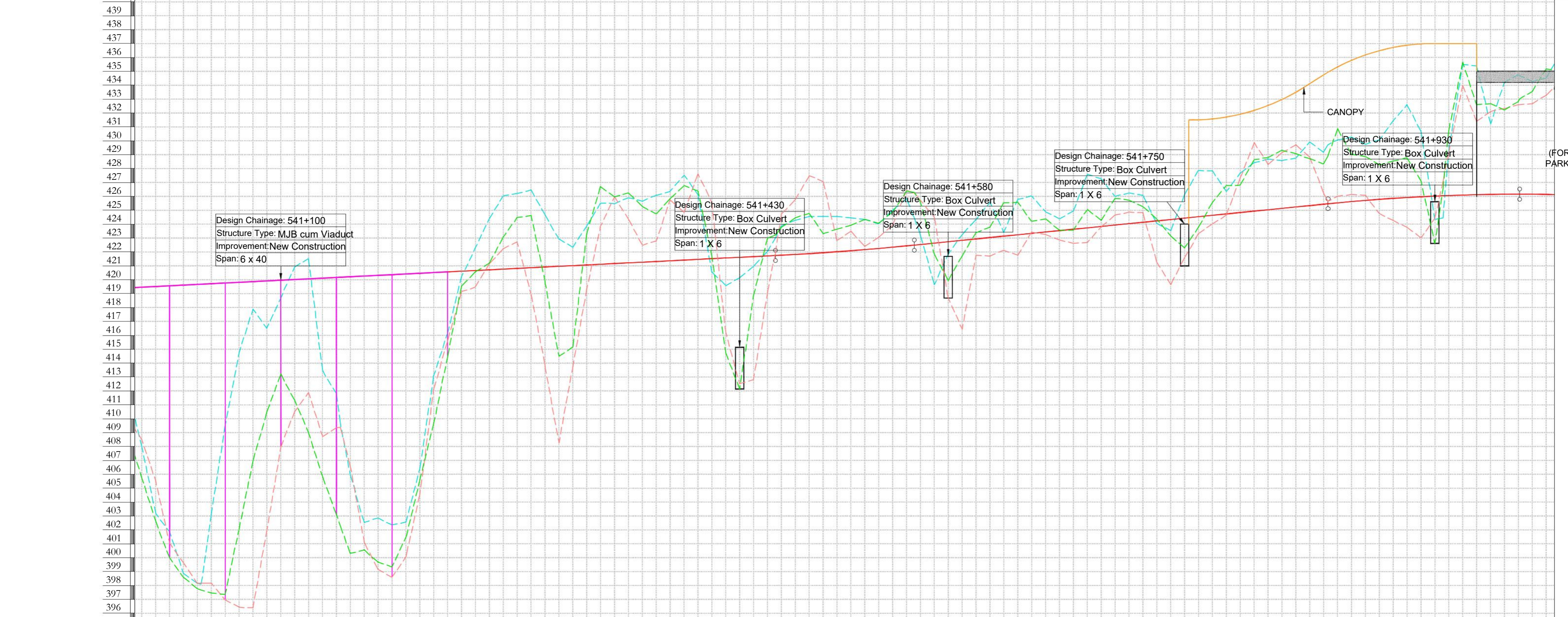
CONSULTANTS:-
AECOM
 9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II
 Gurgaon 122002, Haryana, India

PROJECT:-
 CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHARSROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).

DWG NO. :- AECOM/TRA-HW/60524499/P&P/013A		DATE :- FEB. 2026	PAPER :- A2								
TITLE: PLAN AND PROFILE (RISHIKESH BYPASS) (CH. 541+000 TO CH. 542+000)		<table border="1"> <tr> <td>DRAWN (A)</td> <td>DESIGN (B)</td> <td>CHECKED (C)</td> <td>APPROVED (D)</td> </tr> <tr> <td>HS</td> <td>DK</td> <td>SB</td> <td>BS</td> </tr> </table>	DRAWN (A)	DESIGN (B)	CHECKED (C)	APPROVED (D)	HS	DK	SB	BS	
DRAWN (A)	DESIGN (B)	CHECKED (C)	APPROVED (D)								
HS	DK	SB	BS								

← TO HARIDWAR

TO RUDRAPRAYAG →

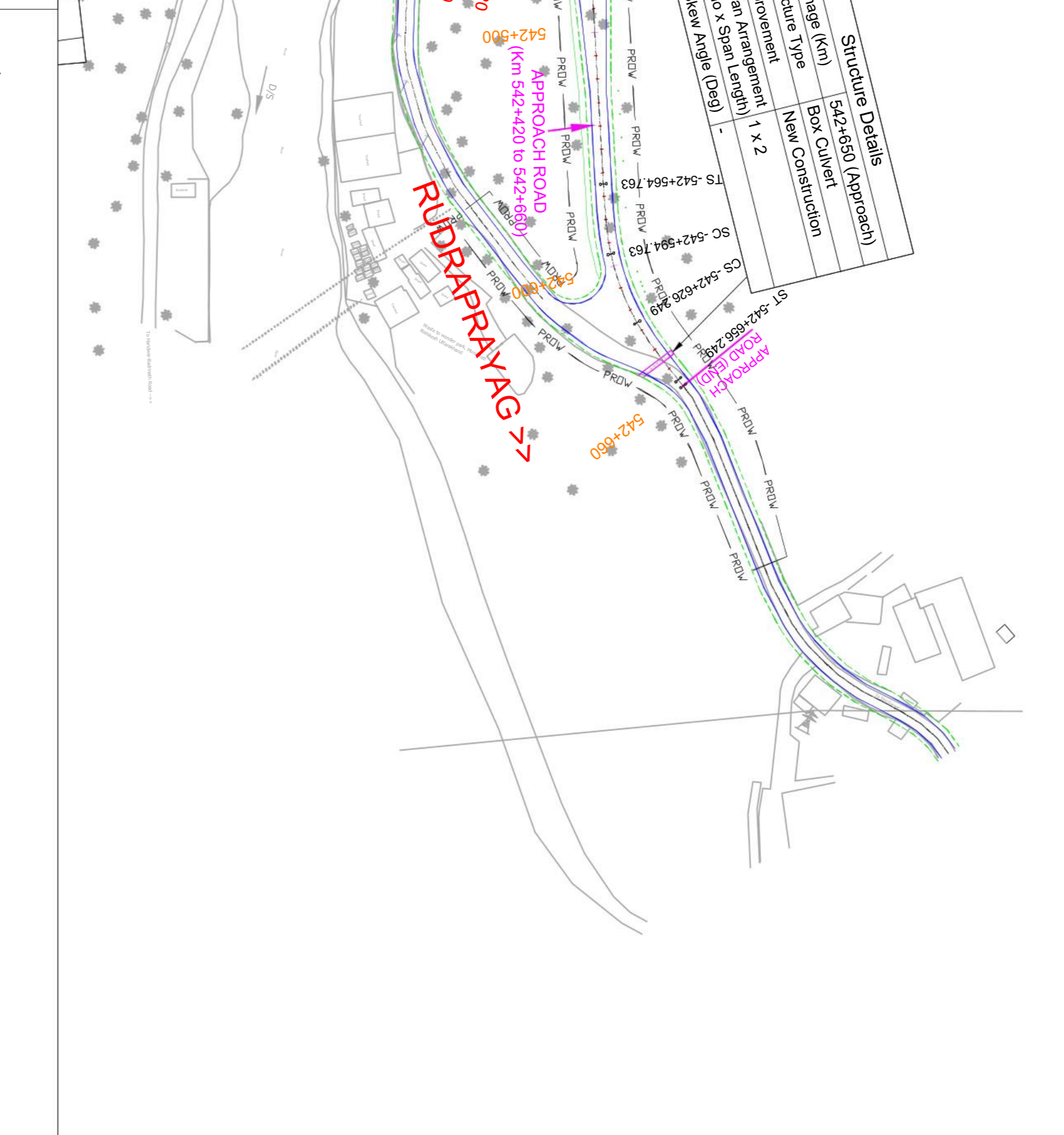
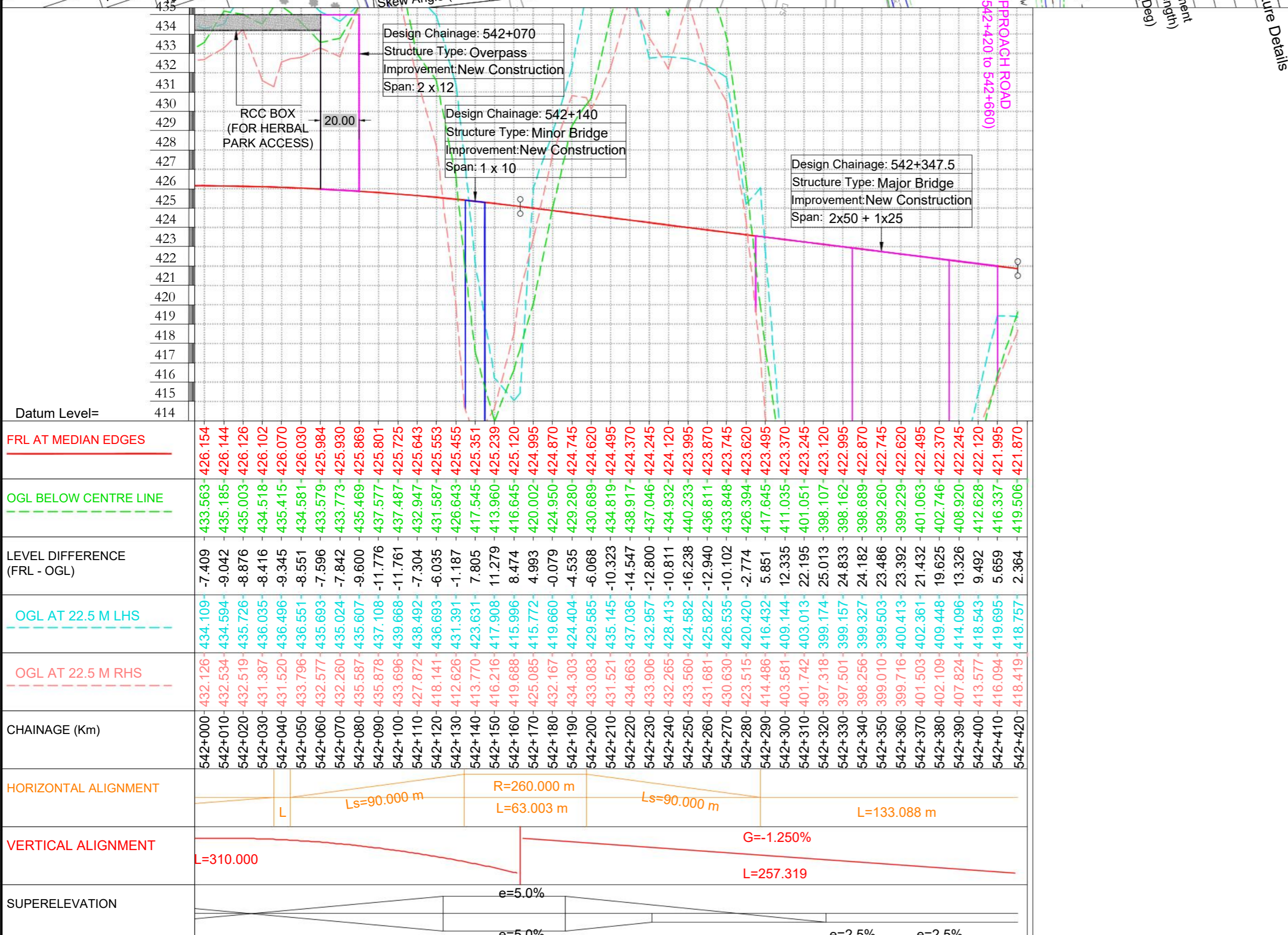
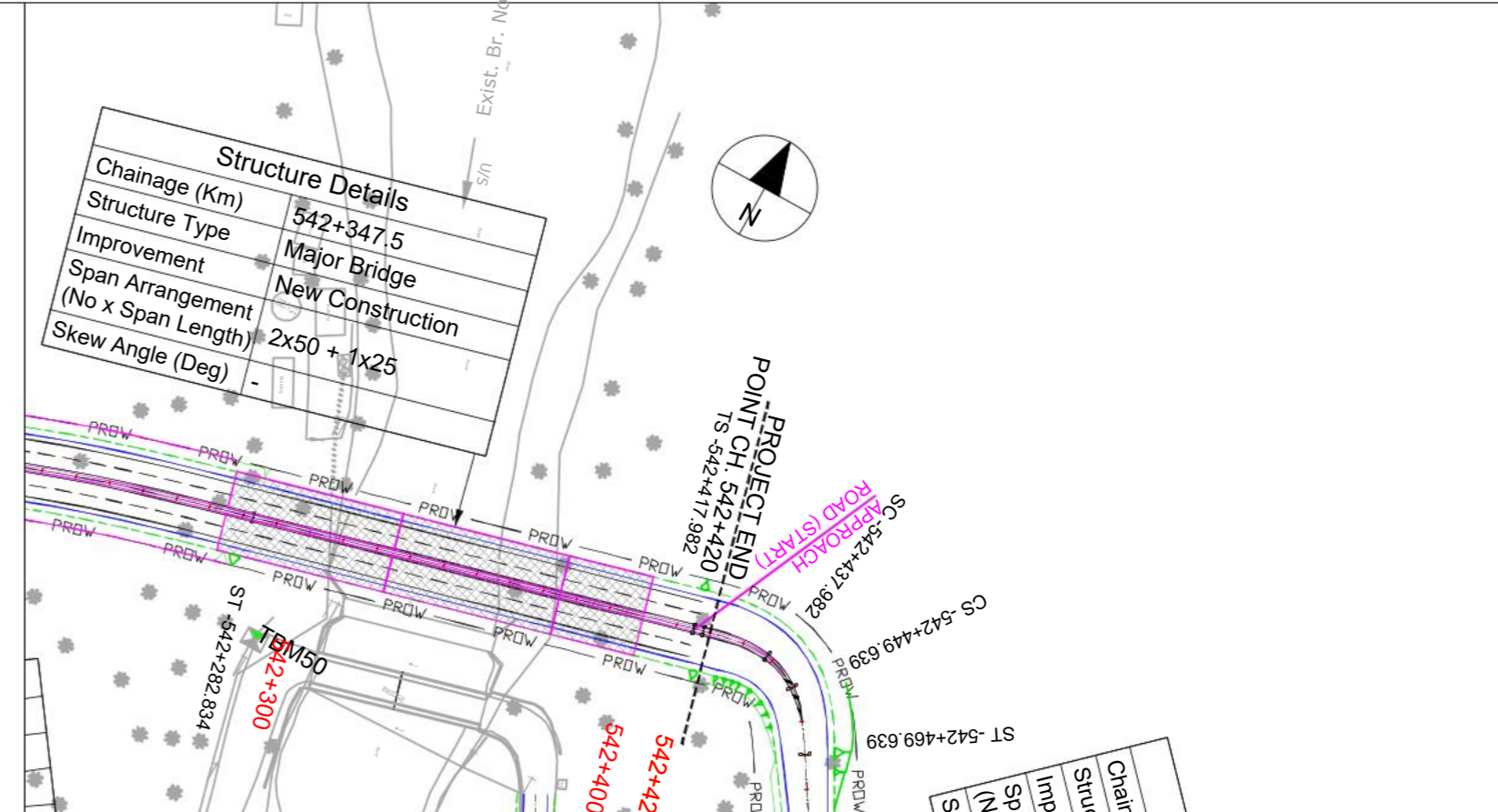
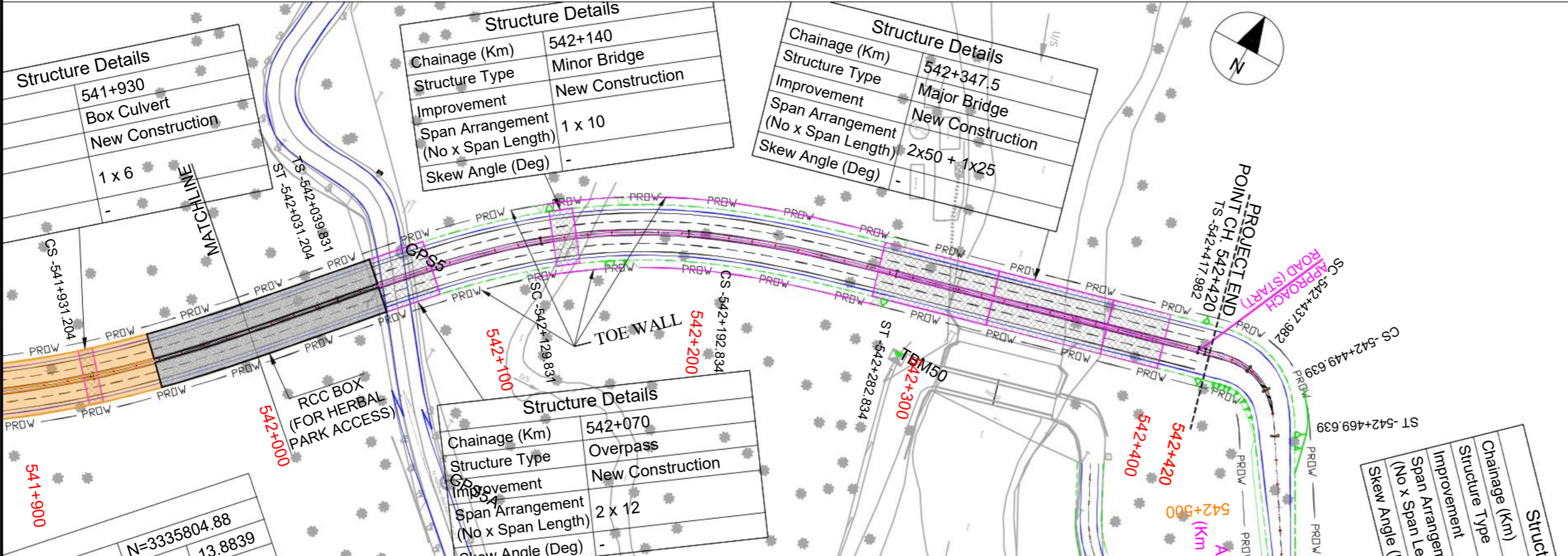


Datum Level=	395
FRL AT MEDIAN EDGES	419.465
OGL BELOW CENTRE LINE	405.766
LEVEL DIFFERENCE (FRL - OGL)	13.699
OGL AT 22.5 M LHS	407.111
OGL AT 22.5 M RHS	409.166
CHAINAGE (Km)	541+000
HORIZONTAL ALIGNMENT	Horizontal curves with Ls=100,000 m and L=47.625 m.
VERTICAL ALIGNMENT	Vertical curves with L=859.906, R=19999.992, L=100.000, L=297.497, and L=310.000.
SUPERELEVATION	Superelevation rates of G=0.500%, e=5.0%, and G=1.000%.

R2 FEB 2026 FINAL DETAILED PROJECT REPORT R1 DEC 2025 FINAL FEASIBILITY REPORT R0 OCT 2025 DRAFT FEASIBILITY REPORT REV DATE DESCRIPTION OF REVISIONS	SCALE: - HOR 1:2000 VER 1:200	CLIENT:- MINISTRY OF ROAD TRANSPORT AND HIGHWAYS (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)	CONSULTANTS:- 9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II Gurgaon 122002, Haryana, India	PROJECT:- CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHARSROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).	DWG NO.: - AECOM/TRA-HW/60524499/P&P/0138 TITLE: PLAN AND PROFILE (RISHIKESH BYPASS) (CH. 541+000 TO CH. 542+000)	DATE:- FEB. 2026 PAPER:- A2 DRAWN (A) DESIGN (B) CHECKED (C) APPROVED (D)
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← TO HARIDWAR

TO RUDRAPRAYAG →



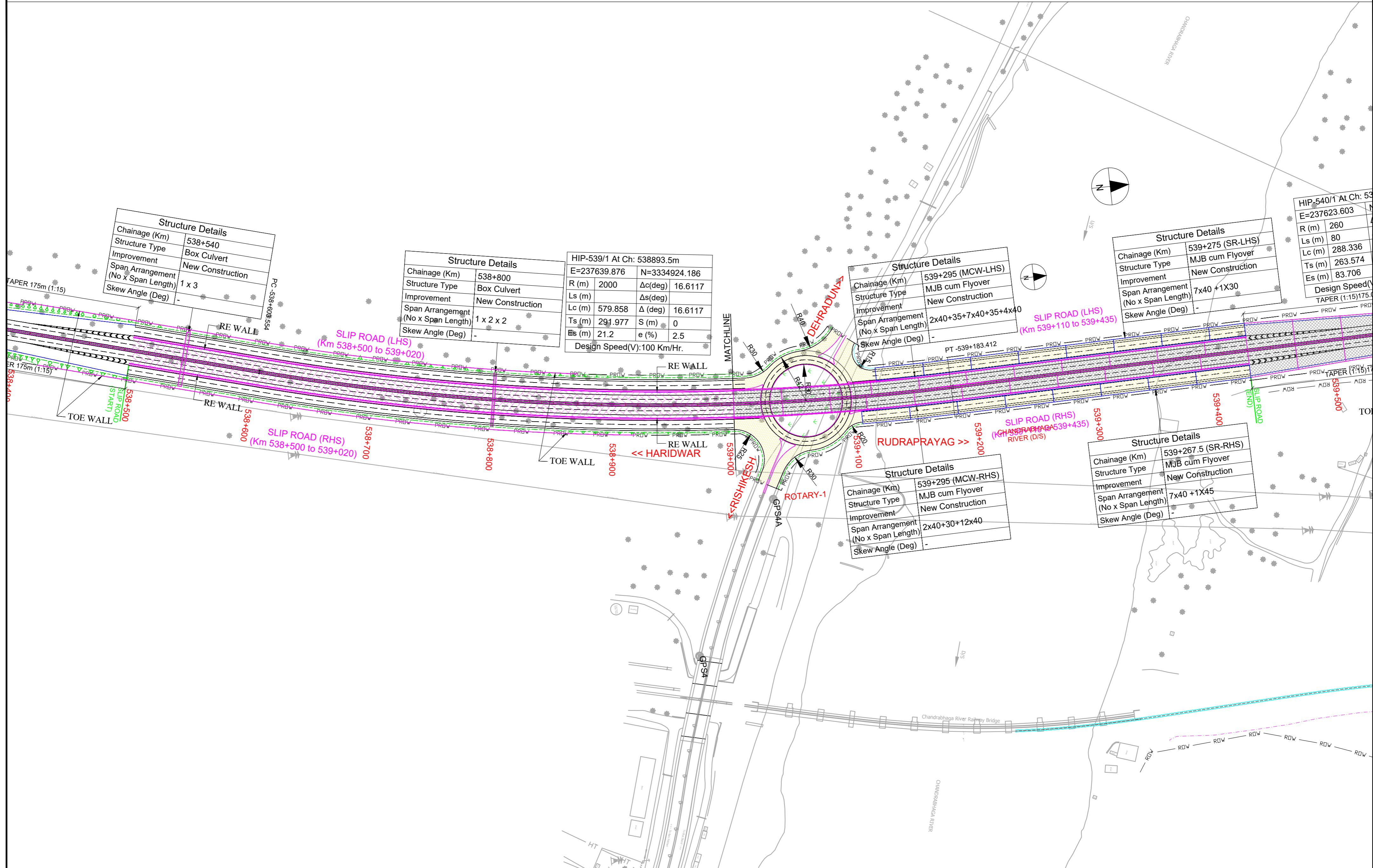
<p>R2 FEB 2026 FINAL DETAILED PROJECT REPORT</p> <p>R1 DEC 2025 FINAL FEASIBILITY REPORT</p> <p>R0 OCT 2025 DRAFT FEASIBILITY REPORT</p> <p>REV DATE DESCRIPTION OF REVISIONS</p>		<p>SCALE: -</p> <p>HOR 1:2000</p> <p>VER 1:200</p>	<p>CLIENT:-</p> <p>MINISTRY OF ROAD TRANSPORT AND HIGHWAYS</p> <p>(TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)</p>	<p>CONSULTANTS:-</p> <p>AECOM</p> <p>9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II Gurgaon 122002, Haryana India</p>	<p>PROJECT:-</p> <p>CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHARSOTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).</p>	<p>DWG NO.:- AECOM/TRA-HW/60524499/P&P/014</p> <p>TITLE: PLAN AND PROFILE (RISHIKESH BYPASS) (CH. 542+000 TO CH. 542+420)</p> <p>DATE:- FEB. 2026</p> <p>PAPER:- A2</p>
		<p>DRWN (A) DESIGN (B) CHECKED (C) APPROVED (D)</p>				<p>HS DK SB BS</p>

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**SLIP ROAD, RAMPS &
APPROCH ROAD
PLAN & PROFILE DRAWINGS**

← TO HARIDWAR

TO RUDRAPRAYAG →



Structure Details	
Chainage (Km)	538+540
Structure Type	Box Culvert
Improvement	New Construction
Span Arrangement (No x Span Length)	1 x 3
Skew Angle (Deg)	-

Structure Details	
Chainage (Km)	538+800
Structure Type	Box Culvert
Improvement	New Construction
Span Arrangement (No x Span Length)	1 x 2 x 2
Skew Angle (Deg)	-

HIP-539/1 At Ch: 538893.5m	
E=237639.876	N=3334924.186
R (m)	2000 Δc(deg) 16.6117
Ls (m)	Δs(deg) 16.6117
Lc (m)	Δ (deg) 16.6117
Ts (m)	S (m) 0
Es (m)	e (%) 2.5
Design Speed(V): 100 Km/Hr.	

Structure Details	
Chainage (Km)	539+295 (MCW-LHS)
Structure Type	MJB cum Flyover
Improvement	New Construction
Span Arrangement (No x Span Length)	2x40+35+7x40+35+4x40
Skew Angle (Deg)	-

Structure Details	
Chainage (Km)	539+275 (SR-LHS)
Structure Type	MJB cum Flyover
Improvement	New Construction
Span Arrangement (No x Span Length)	7x40 +1X30
Skew Angle (Deg)	-

HIP-540/1 At Ch: 539020.0m	
E=237623.603	N=3334924.186
R (m)	260
Ls (m)	80
Lc (m)	288.336
Ts (m)	263.574
Es (m)	83.706
Design Speed(V): 100 Km/Hr.	

Structure Details	
Chainage (Km)	539+267.5 (SR-RHS)
Structure Type	MJB cum Flyover
Improvement	New Construction
Span Arrangement (No x Span Length)	7x40 +1X45
Skew Angle (Deg)	-

Structure Details	
Chainage (Km)	539+295 (MCW-RHS)
Structure Type	MJB cum Flyover
Improvement	New Construction
Span Arrangement (No x Span Length)	2x40+30+12x40
Skew Angle (Deg)	-

REV	DATE	DESCRIPTION OF REVISIONS
R2	FEB 2026	FINAL DETAILED PROJECT REPORT
R1	DEC 2025	FINAL FEASIBILITY REPORT
R0	OCT 2025	DRAFT FEASIBILITY REPORT

SCALE :-	HOR 1:2000	VER 1:200
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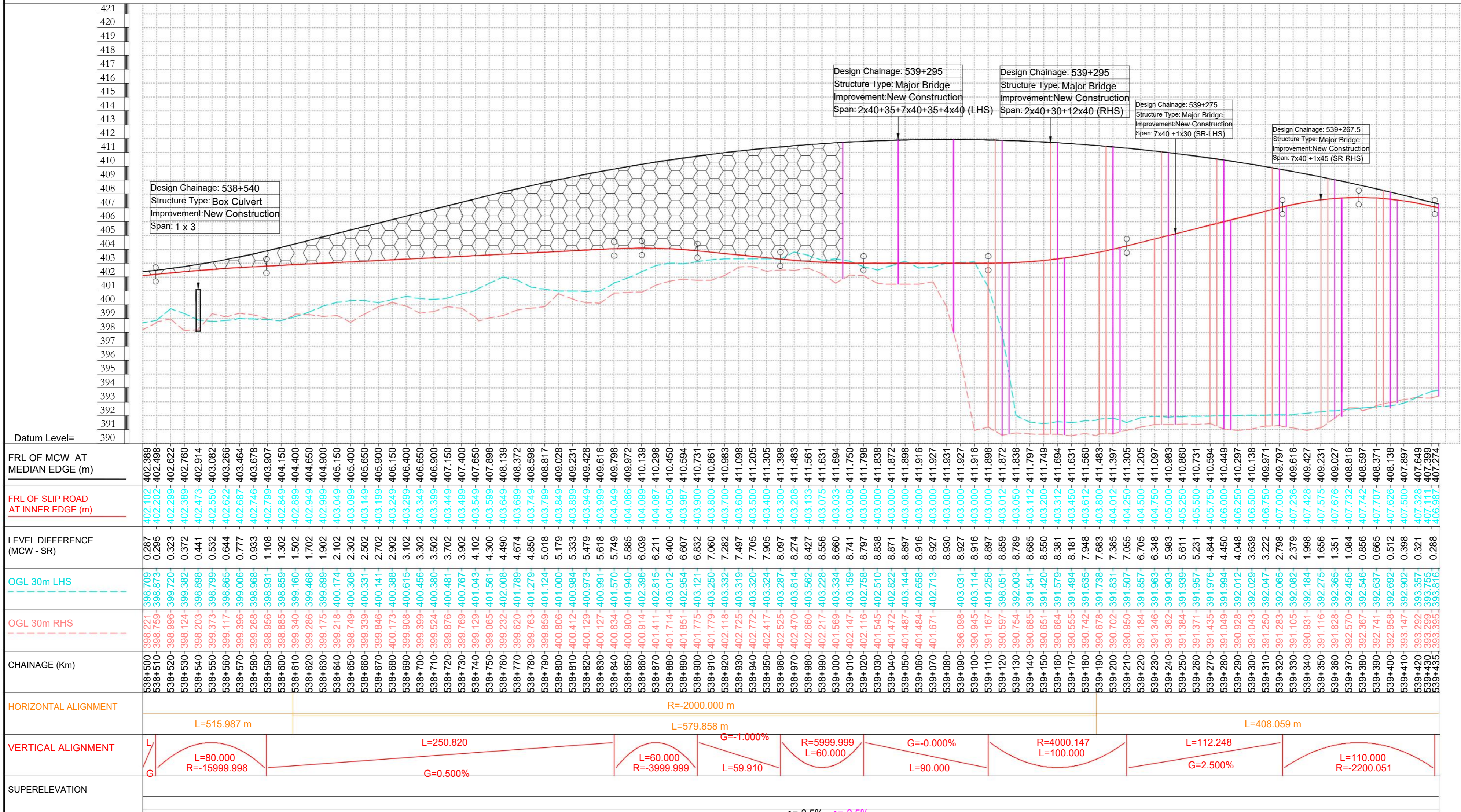
CLIENT:-

MINISTRY OF ROAD TRANSPORT AND HIGHWAYS
 (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)

CONSULTANTS:-
AECOM
 9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II
 Gurgaon 122002, Haryana, India

PROJECT:-
 CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHRASROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).

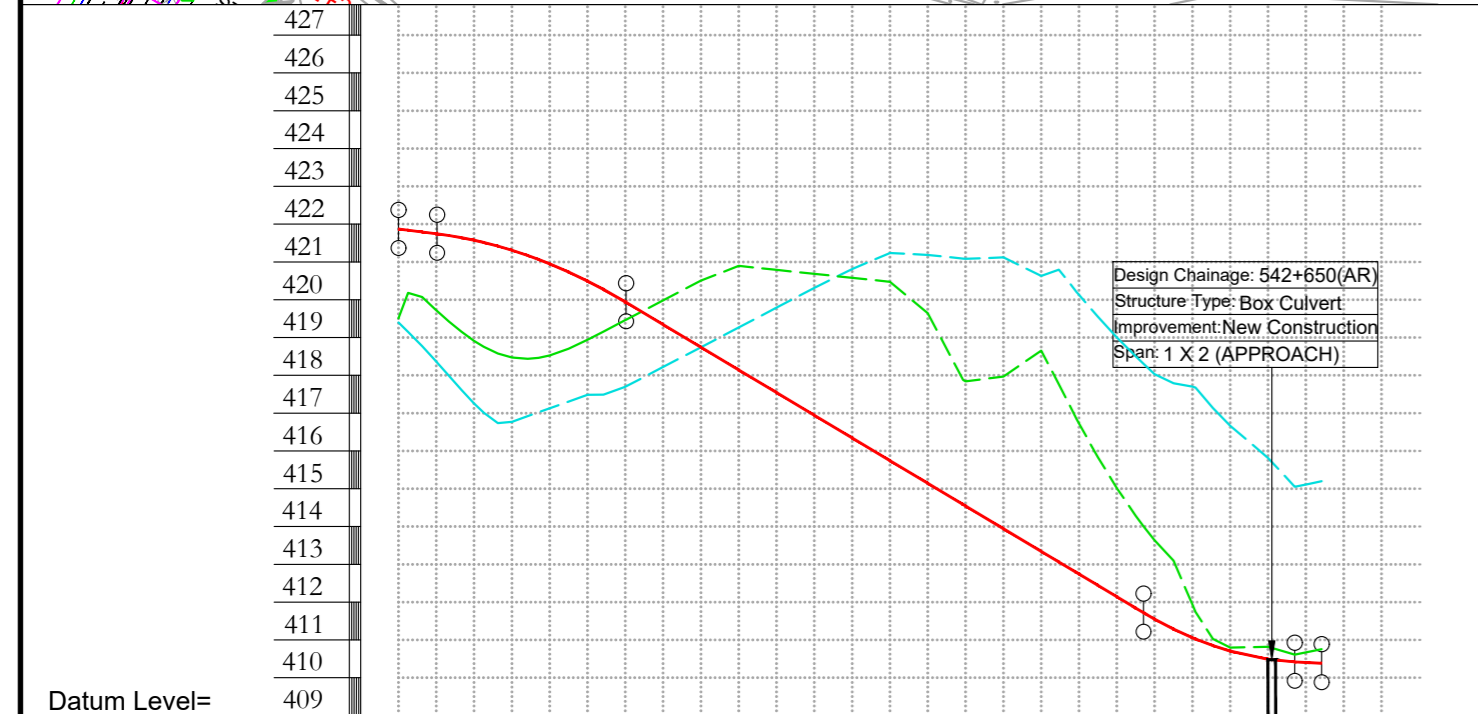
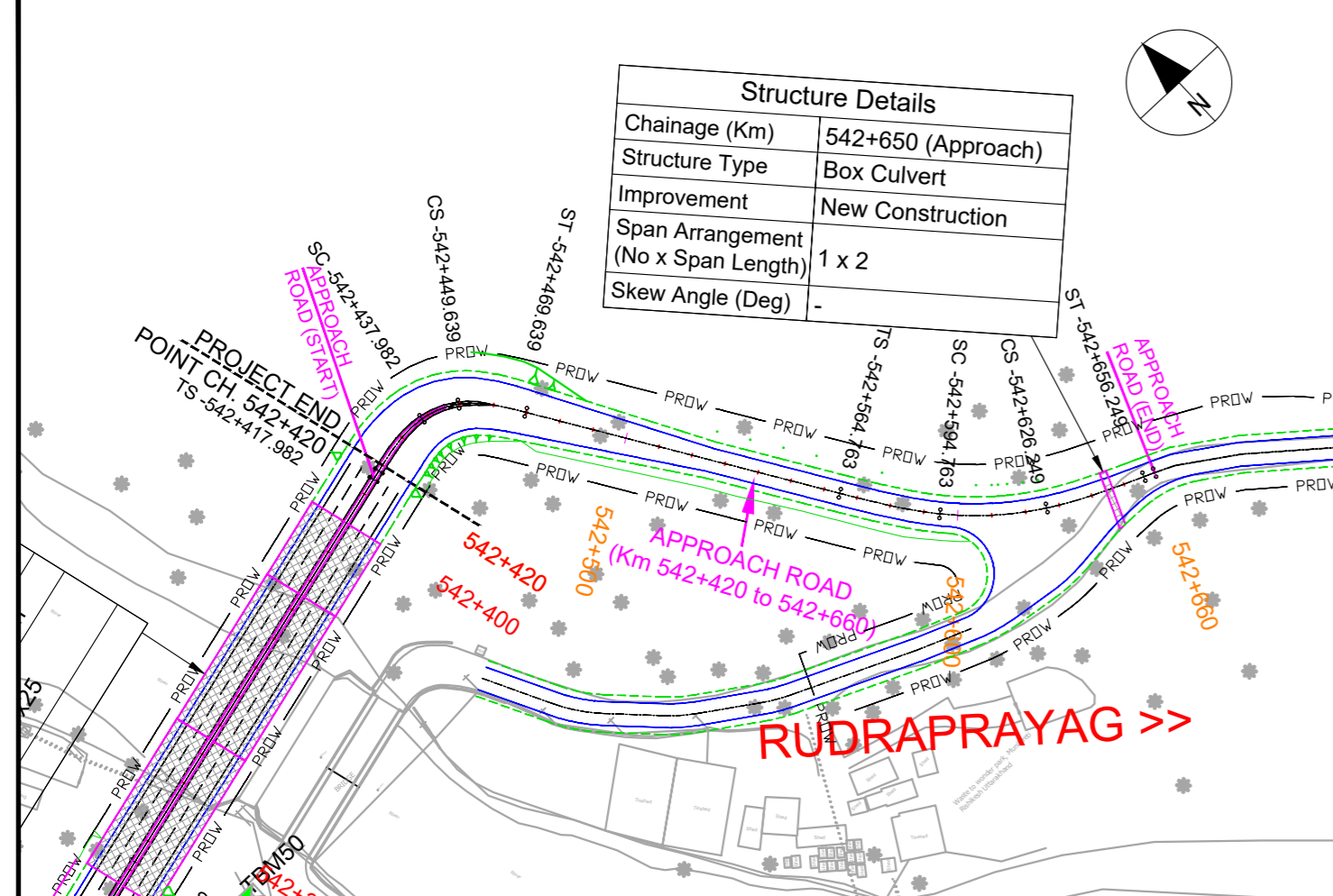
DWG NO. :- AECOM/TRA-HW/60524499/SR/001A	DATE :- FEB. 2026	PAPER :- A2
TITLE: PLAN AND PROFILE SLIP ROAD (RISHIKESH BYPASS) (CH. 538+500 TO CH. 539+435)	DRAWN (A) DESIGN (B) CHECKED (C) APPROVED (D)	
	HS DK SB BS	



SCALE: -		CLIENT:-		CONSULTANTS:-		PROJECT:-		DWG NO.:- AECOM/TRA-HW/60524499/SR/001B					
R2	FEB 2026	FINAL DETAILED PROJECT REPORT	 MINISTRY OF ROAD TRANSPORT AND HIGHWAYS (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)		AECOM 9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II Gurgaon 122002, Haryana, India		CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHARSROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).		TITLE: PLAN AND PROFILE SLIP ROAD (RISHIKESH BYPASS) (CH. 538+500 TO CH. 539+435)				
R1	DEC 2025	FINAL FEASIBILITY REPORT							DATE:- FEB. 2026		PAPER:- A2		
R0	OCT 2025	DRAFT FEASIBILITY REPORT							DRAWN (A)		DESIGN (B)		
REV	DATE	DESCRIPTION OF REVISIONS							CHECKED (C)		APPROVED (D)		
		HOR 1:2000		VER 1:200		HS		DK		SB		BS	

← TO HARIDWAR

TO RUDRAPRAYAG →



FRL AT CENTER LINE	421.870 421.745 421.574 421.309 420.948 420.493 419.942 418.742 418.142 417.543 416.943 416.343 415.743 415.143 414.543 413.943 413.343 412.743 412.143 411.549 411.058 410.704 410.488 410.403 410.382
OGL BELOW CENTRE LINE	419.506 419.721 418.910 418.472 418.528 418.939 419.460 420.507 420.895 420.790 420.685 420.314 420.814 420.579 420.474 419.642 419.843 415.143 417.843 421.081 421.121 417.966 413.943 418.655 413.343 416.727 412.743 415.018 412.143 413.638 411.549 411.935 411.058 410.798 410.815 410.817 410.488 410.669 410.403 410.756 410.382
LEVEL DIFFERENCE (MCW - SR)	2.364 2.024 2.665 2.886 2.420 1.553 0.483 -0.641 -1.764 -2.753 -3.248 -3.742 -4.237 -4.732 -4.900 -3.300 -4.024 -5.312 -3.984 -2.875 -2.089 -0.878 -0.095 -0.330 -0.265
OGL 15m LHS	419.396 418.366 417.258 416.770 417.483 417.697 418.220 418.743 419.267 419.790 420.314 420.814 421.237 421.186 421.081 421.121 420.631 420.129 419.006 418.033 418.033 417.701 416.665 415.815 415.110 415.197
OGL 15m RHS	418.553 420.370 420.370 420.373 420.402 420.394 420.289 420.183 420.079 419.995 420.029 415.625 414.637 414.064 413.578 413.972 410.989 409.514 408.495 406.821 404.540 403.503 403.216 403.083
CHAINAGE (M)	542+420 542+430 542+440 542+450 542+460 542+470 542+480 542+490 542+500 542+510 542+520 542+530 542+540 542+550 542+560 542+570 542+580 542+590 542+600 542+610 542+620 542+630 542+640 542+650 542+660 542+665
HORIZONTAL ALIGNMENT	L, R, L, L=95.124 m, L, L=31.486 m, L
VERTICAL ALIGNMENT	G, L=50.000, R=-1052.685, L=136.873, G=-6.000%, R=727.380, L=40.000, G
SUPERELEVATION	e=+2.5%, e=-2.5%

R2	FEB 2026	FINAL DETAILED PROJECT REPORT
R1	DEC 2025	FINAL FEASIBILITY REPORT
R0	OCT 2025	DRAFT FEASIBILITY REPORT
REV	DATE	DESCRIPTION OF REVISIONS

SCALE :-	HOR 1:2000	VER 1:200
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CLIENT:-

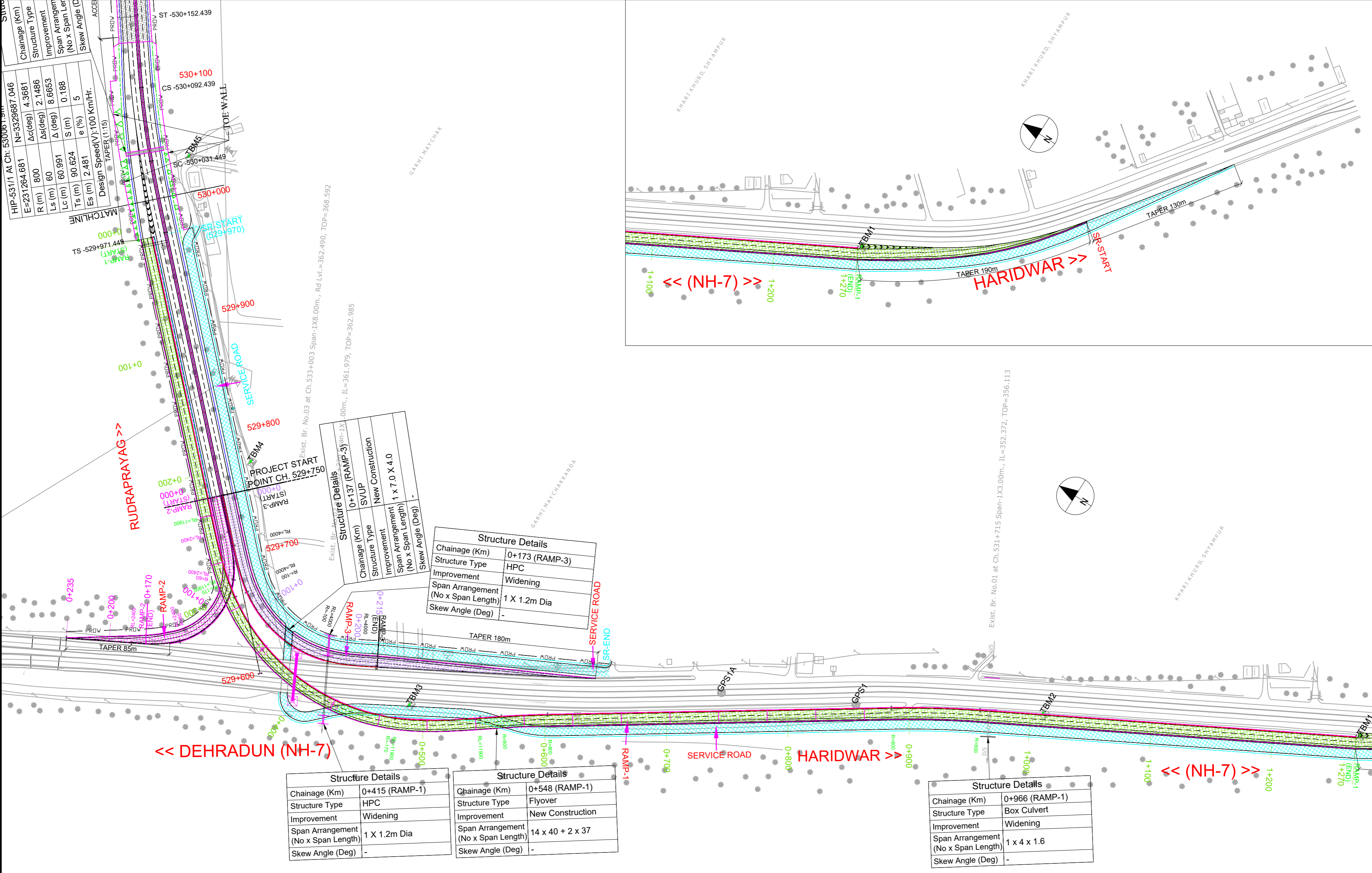
MINISTRY OF ROAD TRANSPORT AND HIGHWAYS
(TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)

CONSULTANTS:-

AECOM
9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II
Gurgaon 122002, Haryana, India

PROJECT:-
CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHARSROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).

DWG NO. :- AECOM/TRA-HW/60524499/AR/001	DATE:- FEB. 2026	PAPER:-A2
TITLE: PLAN AND PROFILE APPROACH ROAD (RISHIKESH BYPASS) (CH.542+420 TO CH. 542+665)	DRAWN (A) DESIGN (B) CHECKED (C) APPROVED (D)	HS DK SB BS



R2	FEB 2026	FINAL DETAILED PROJECT REPORT
R1	DEC 2025	FINAL FEASIBILITY REPORT
R0	OCT 2025	DRAFT FEASIBILITY REPORT
REV	DATE	DESCRIPTION OF REVISIONS

SCALE: -

HOR	VER
1:2000	1:200

CLIENT:-

MINISTRY OF ROAD TRANSPORT AND HIGHWAYS
(TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)

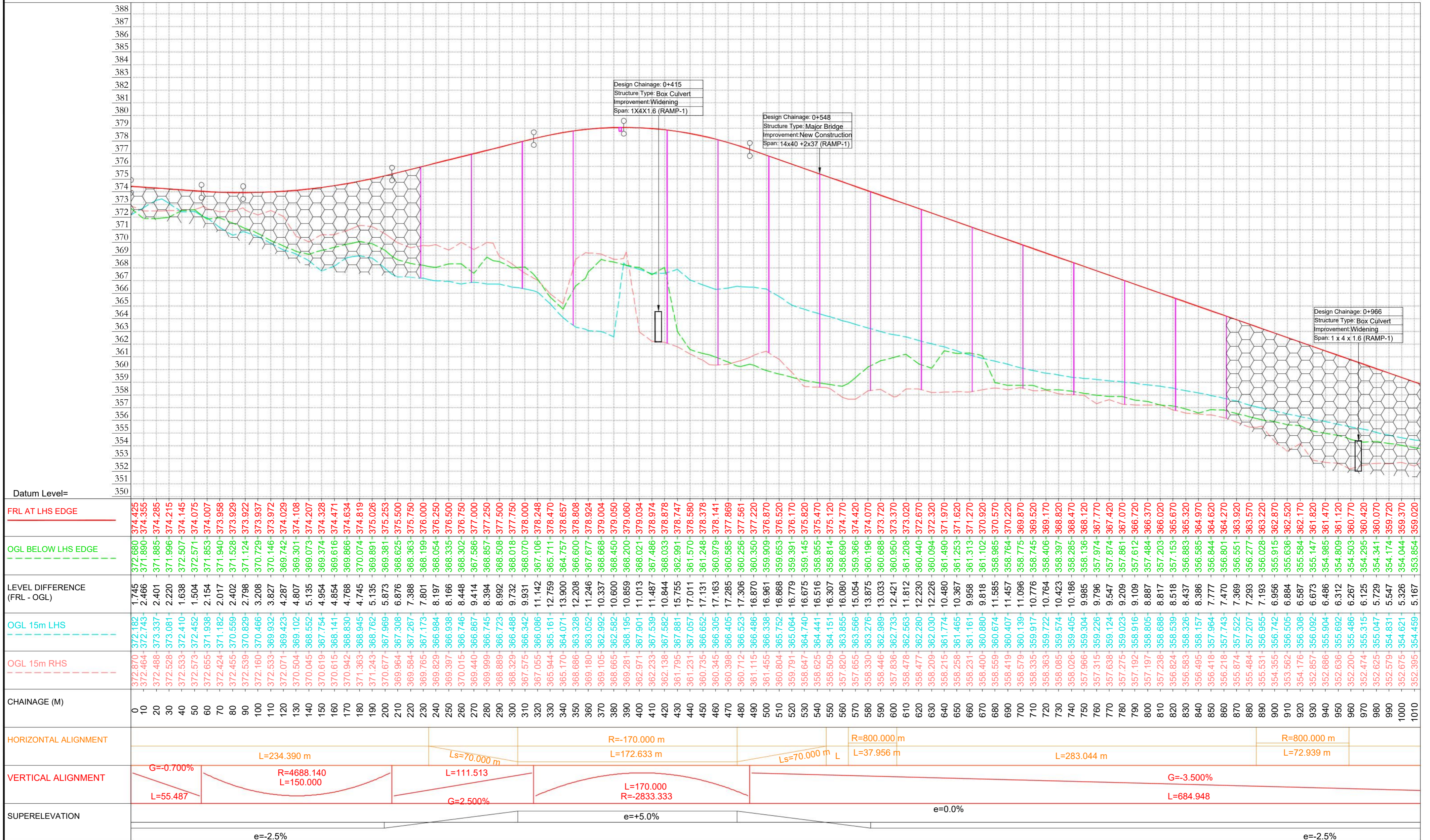
CONSULTANTS:-

AECOM
9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II
Gurgaon 122002, Haryana, India

PROJECT:-
CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHARSROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).

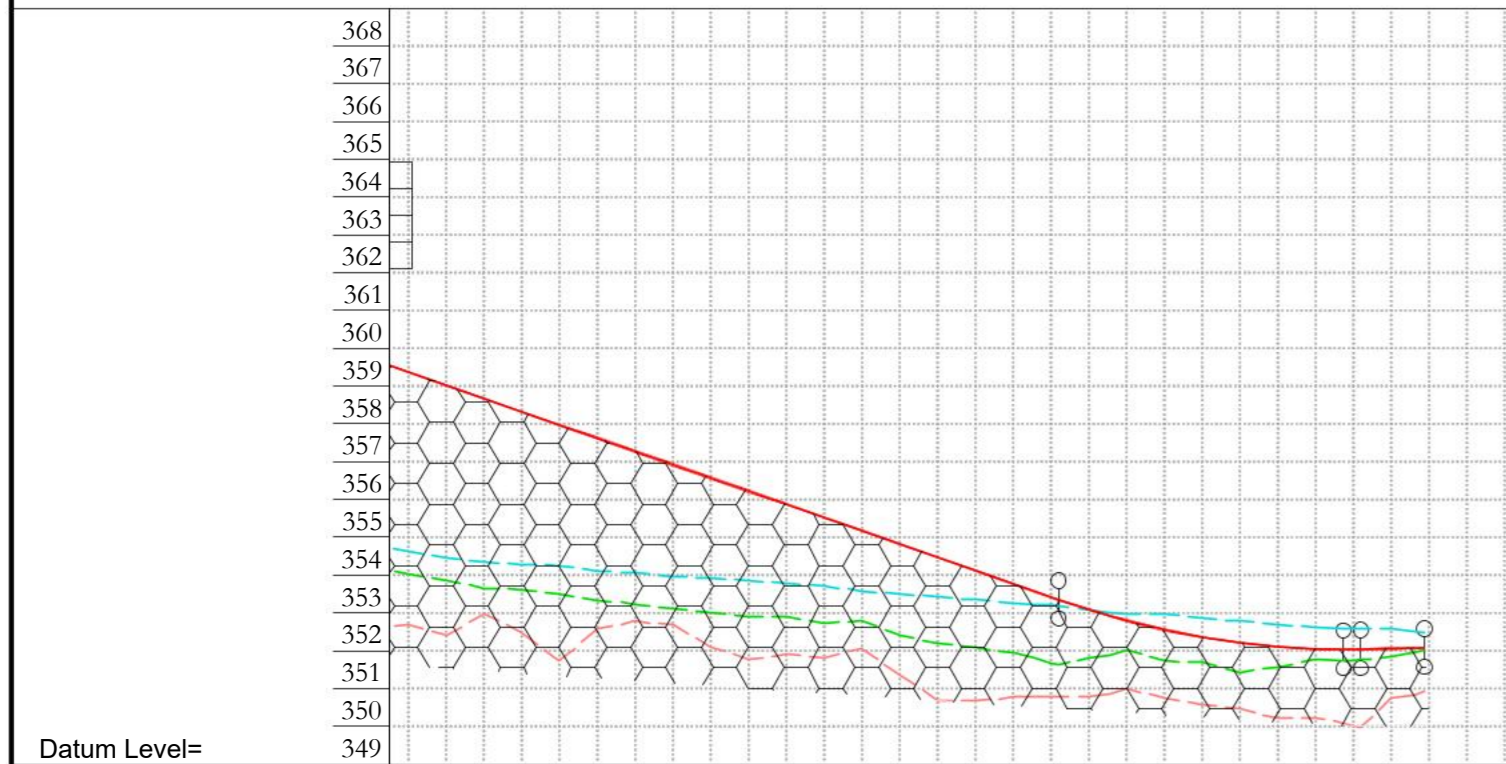
DWG NO.: - AECOM/TRA-HW/60524499/RAMP/001

TITLE:	PLAN AND PROFILE RAMP-1,2 AND 3 (RISHIKESH BYPASS)	DATE:- FEB. 2026	PAPER:-A2
DRAWN (A)	DESIGN (B)	CHECKED (C)	APPROVED (D)
HS	DK	SB	BS



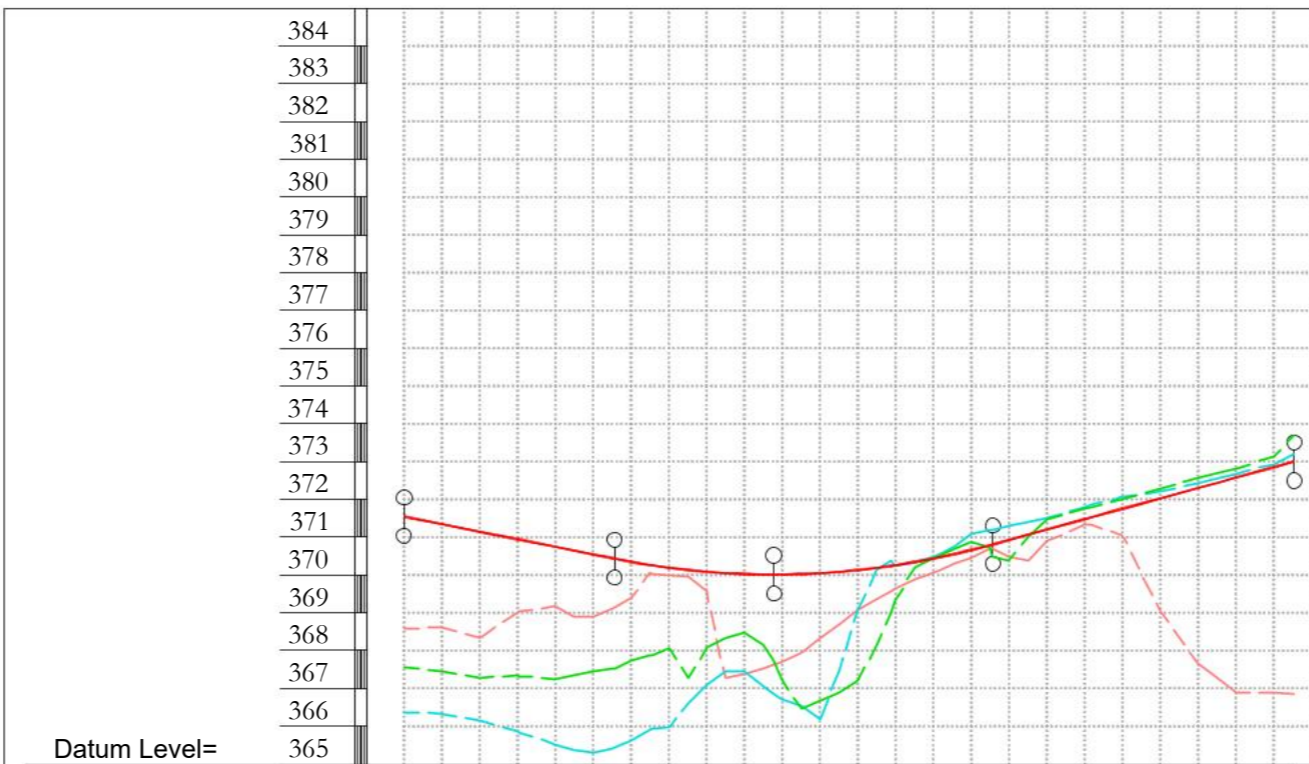
PROFILE RAMP-1

R2 FEB 2026 FINAL DETAILED PROJECT REPORT R1 DEC 2025 FINAL FEASIBILITY REPORT R0 OCT 2025 DRAFT FEASIBILITY REPORT REV DATE DESCRIPTION OF REVISIONS		SCALE: - HOR 1:2000 VER 1:200	CLIENT:- MINISTRY OF ROAD TRANSPORT AND HIGHWAYS (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)	CONSULTANTS:- 9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II Gurgaon 122002, Haryana, India	PROJECT:- CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHARSROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).	DWG NO.: - AECOM/TRA-HW/60524499/RAMP/002 TITLE: PLAN AND PROFILE RAMP-1,2 AND 3 (RISHIKESH BYPASS) DATE:- FEB. 2026 PAPER:-A2 DRAWN (A) DESIGN (B) CHECKED (C) APPROVED (D)
						HS DK SB BS



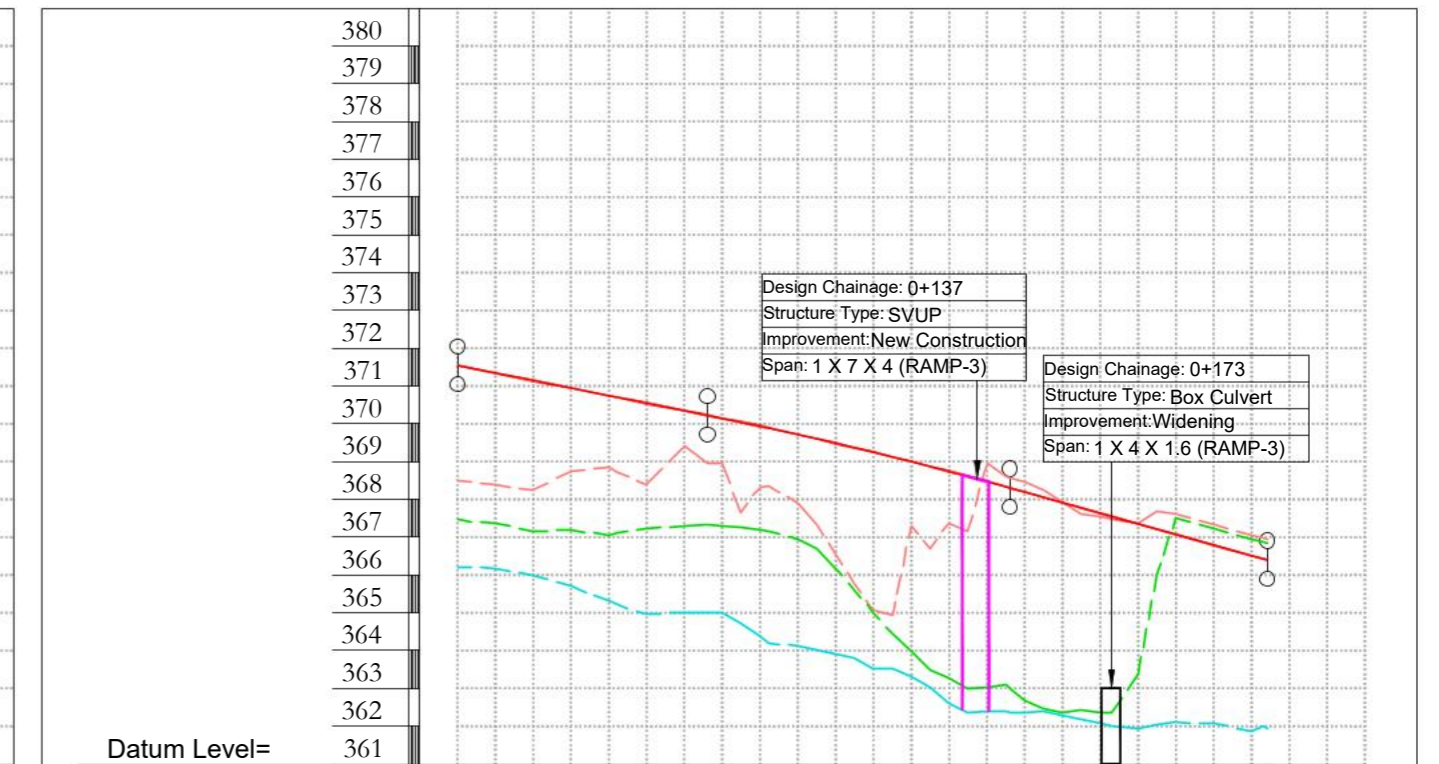
Datum Level=	349
FRL AT LHS EDGE	359.370
OGL BELOW LHS EDGE	354.044
LEVEL DIFFERENCE (FRL - OGL)	5.326
OGL 15m LHS	354.621
OGL 15m RHS	352.675
CHAINAGE (M)	1000
HORIZONTAL ALIGNMENT	L=310.304 m
VERTICAL ALIGNMENT	R=2155.280 L=80.000
SUPERELEVATION	

PROFILE RAMP-1



Datum Level=	365
FRL AT LHS EDGE	371.546
OGL BELOW LHS EDGE	367.575
LEVEL DIFFERENCE (FRL - OGL)	3.972
OGL 15m LHS	366.374
OGL 15m RHS	368.570
CHAINAGE (M)	0
HORIZONTAL ALIGNMENT	L=30.325 m, Ls=40.000 m, R=60.000 m, L=71.338 m, Ls=40.000 m, L=53.749 m
VERTICAL ALIGNMENT	G=-2.000%, L=55.678, R=2105.209, L=100.000, L=79.734, G=2.750%
SUPERELEVATION	e=-2.5%, e=-5.0%, e=-2.5%

PROFILE RAMP-2



Datum Level=	361
FRL AT RHS EDGE	371.546
OGL BELOW RHS EDGE	367.460
LEVEL DIFFERENCE (FRL - OGL)	4.086
OGL 15m LHS	366.219
OGL 15m RHS	368.492
CHAINAGE (M)	0
HORIZONTAL ALIGNMENT	L=42.469 m, Ls=40.000 m, R=-100.000 m, L=90.576 m, Ls=40.000 m
VERTICAL ALIGNMENT	G=-2.000%, L=66.041, L=80.000, R=-10000.000, L=68.043, G=-2.800%
SUPERELEVATION	e=-2.5%, e=-5.0%, e=-2.5%

PROFILE RAMP-3

R2	FEB 2026	FINAL DETAILED PROJECT REPORT
R1	DEC 2025	FINAL FEASIBILITY REPORT
R0	OCT 2025	DRAFT FEASIBILITY REPORT
REV	DATE	DESCRIPTION OF REVISIONS

SCALE :-	HOR 1:2000	VER 1:200
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CLIENT:-

MINISTRY OF ROAD TRANSPORT AND HIGHWAYS
 (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)

CONSULTANTS:-

 9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II
 Gurgaon 122002, Haryana, India

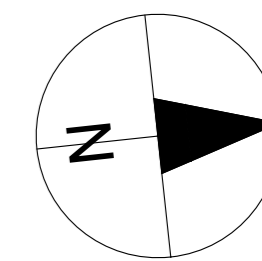
PROJECT:-
 CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHARSROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).

DWG NO. :- AECOM/TRA-HW/60524499/RAMP/003
 TITLE: **PLAN AND PROFILE RAMP-1,2 AND 3 (RISHIKESH BYPASS)**
 DATE:- FEB. 2026
 PAPER:- A2
 DRAWN (A) DESIGN (B) CHECKED (C) APPROVED (D)
 HS DK SB BS

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← TO HARIDWAR

TO RUDRAPRAYAG →



Structure Details	
Chainage (Km)	539+295 (MCW-LHS)
Structure Type	MJB cum Flyover
Improvement	New Construction
Span Arrangement (No x Span Length)	2x40+35+7x40+35+4x40
Skew Angle (Deg)	-

PT -539+183.412

RE WALL

RE WALL
<< HARIDWAR

DEHRADUN >

RUDRAPRAYAG >>

CHANDRABHAGA RIVER (D/S)

Structure Details	
Chainage (Km)	539+295 (MCW-RHS)
Structure Type	MJB cum Flyover
Improvement	New Construction
Span Arrangement (No x Span Length)	2x40+30+12x40
Skew Angle (Deg)	-

538+900

539+000

539+100

539+200

REV	DATE	DESCRIPTION OF REVISIONS
R2	FEB 2026	FINAL DETAILED PROJECT REPORT
R1	DEC 2025	FINAL FEASIBILITY REPORT
R0	OCT 2025	DRAFT FEASIBILITY REPORT

SCALE: -
NTS.

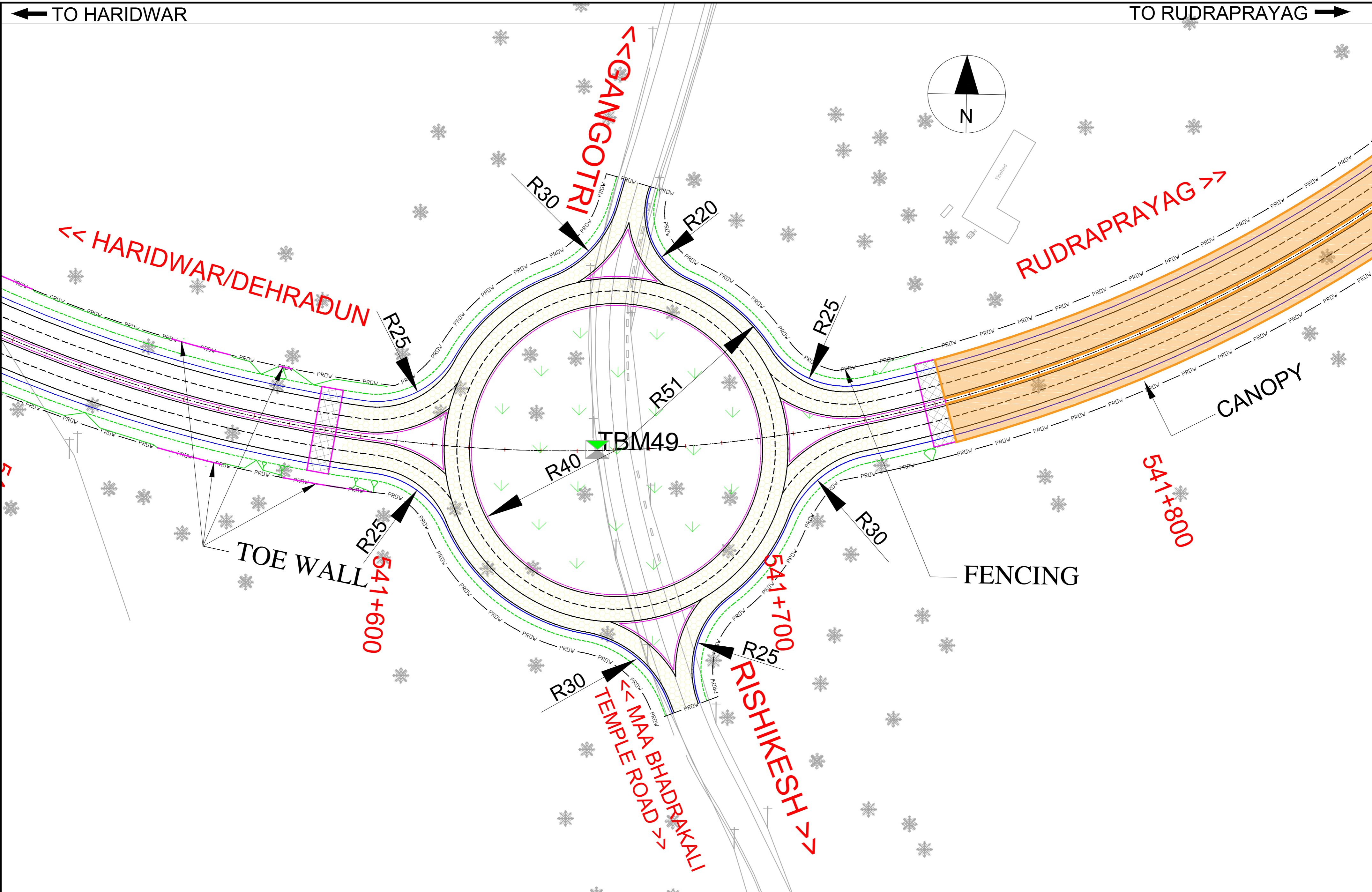
CLIENT:-

MINISTRY OF ROAD TRANSPORT AND HIGHWAYS
 (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)

CONSULTANTS:-
AECOM
 9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II
 Gurgaon 122002, Haryana, India

PROJECT:-
 CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHRSROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).

DWG NO.: - AECOM/TRA-HW/60524499/ROT/01		DATE:- FEB. 2026	PAPER:-A2
TITLE: PLAN OF ROUNDABOUT-1 ACROSS RISHIKESH -DEHRADUN AIRPORT LINK ROAD		DRAWN (A)	DESIGN (B)
HS	DK	CHECKED (C)	APPROVED (D)
		SB	BS



REV	DATE	DESCRIPTION OF REVISIONS
R2	FEB 2026	FINAL DETAILED PROJECT REPORT
R1	DEC 2025	FINAL FEASIBILITY REPORT
R0	OCT 2025	DRAFT FEASIBILITY REPORT

SCALE : -
NTS.

CLIENT:-

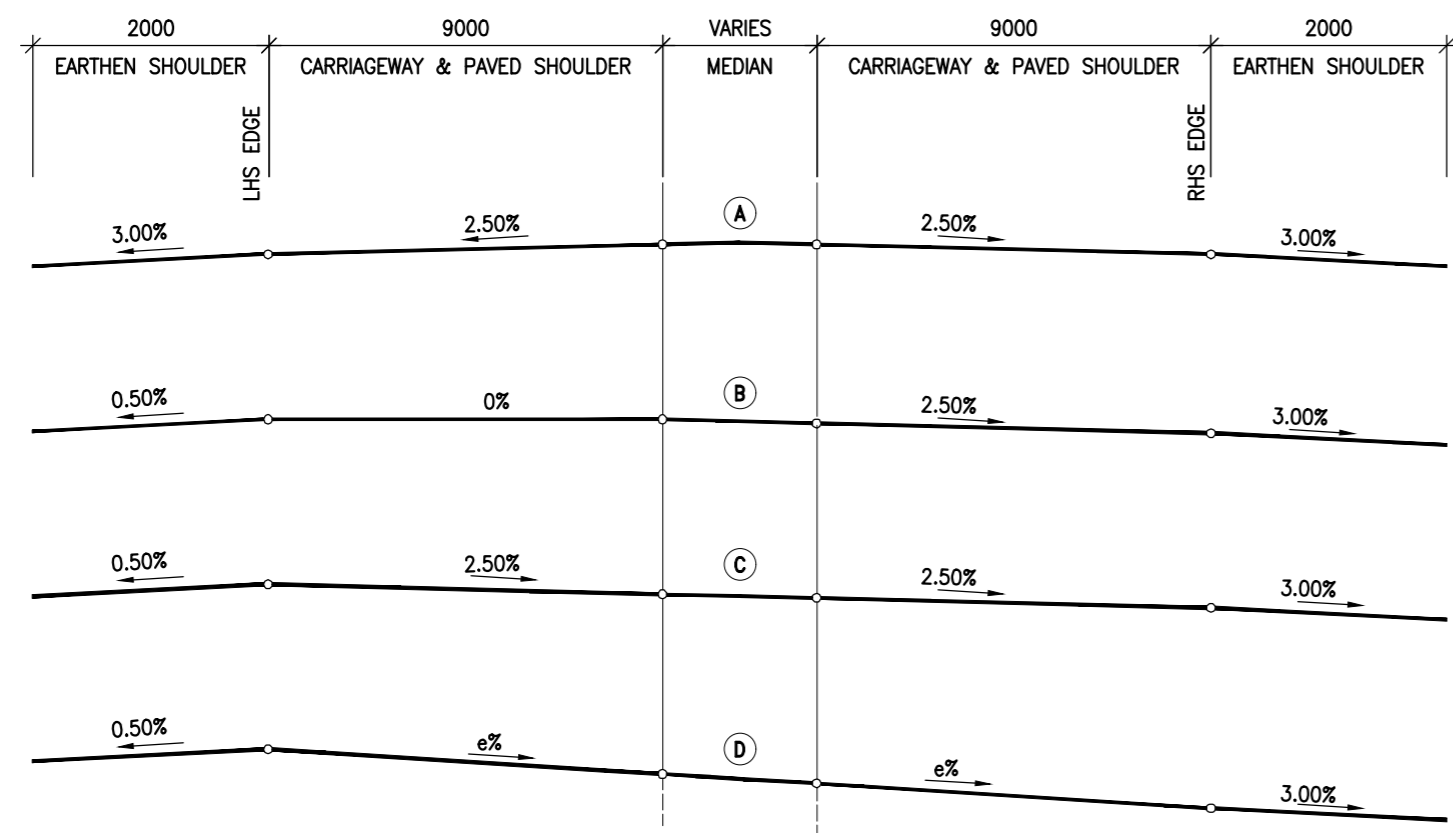
MINISTRY OF ROAD TRANSPORT AND HIGHWAYS
 (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)

CONSULTANTS:-
AECOM
 9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II
 Gurgaon 122002, Haryana, India

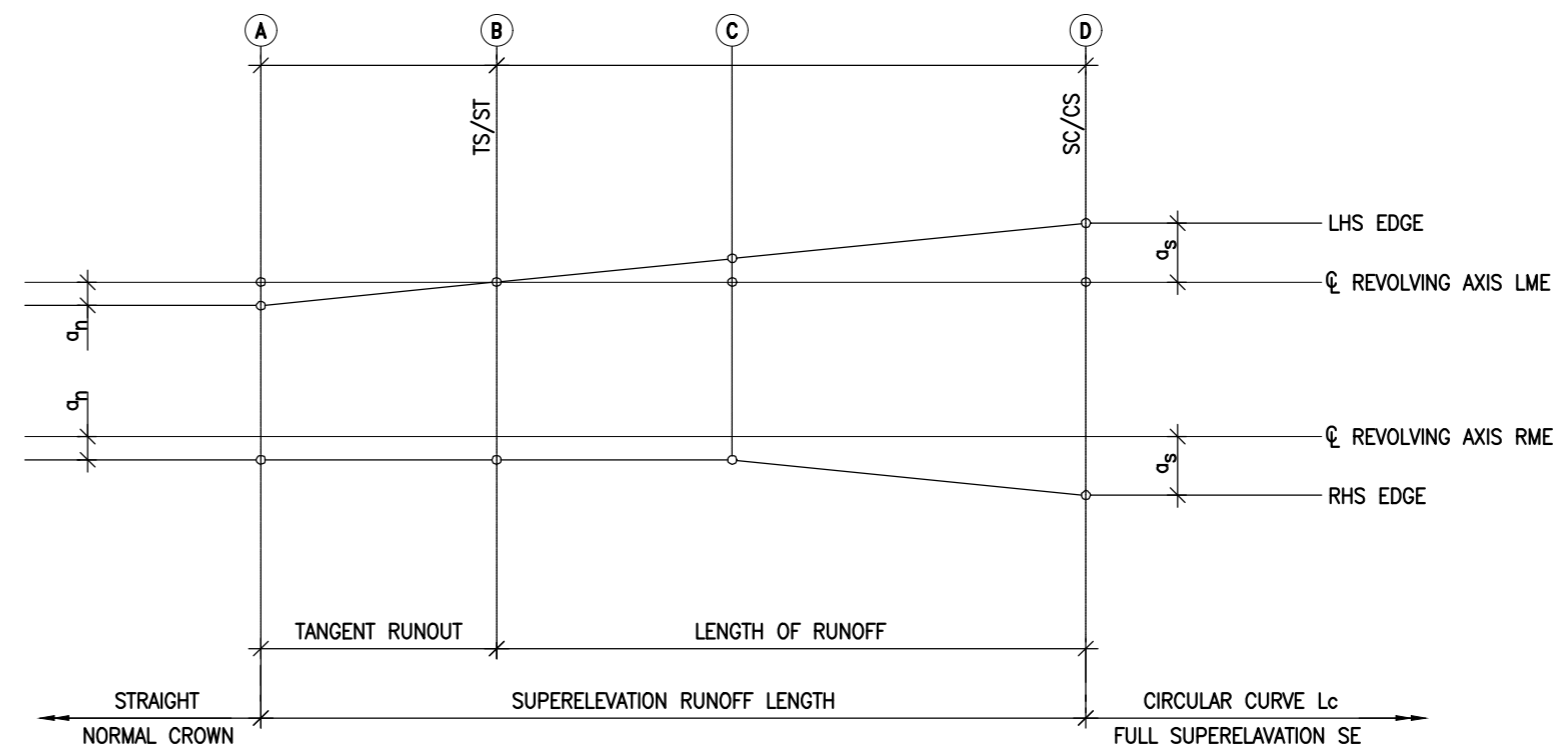
PROJECT:-
 CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHARSROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).

DWG NO.: - AECOM/TRA-HW/60524499/ROT/02			
TITLE: PLAN OF ROUNDABOUT-2 ACROSS MAA BHADRAKALI TEMPLE ROAD		DATE:- FEB. 2026	PAPER:-A2
DRAWN (A)	DESIGN (B)	CHECKED (C)	APPROVED (D)
HS	DK	SB	BS

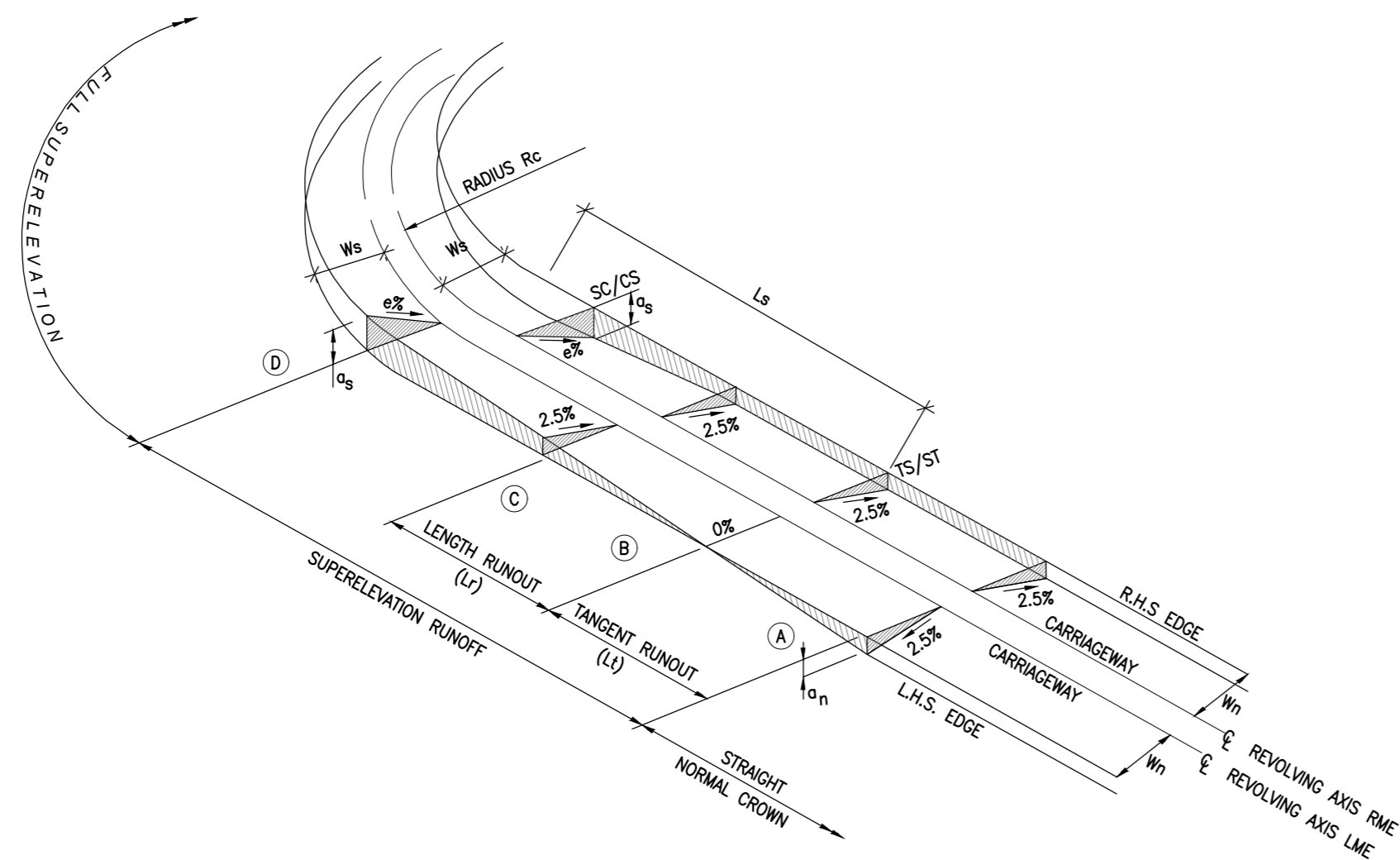
STANDARD DRAWINGS



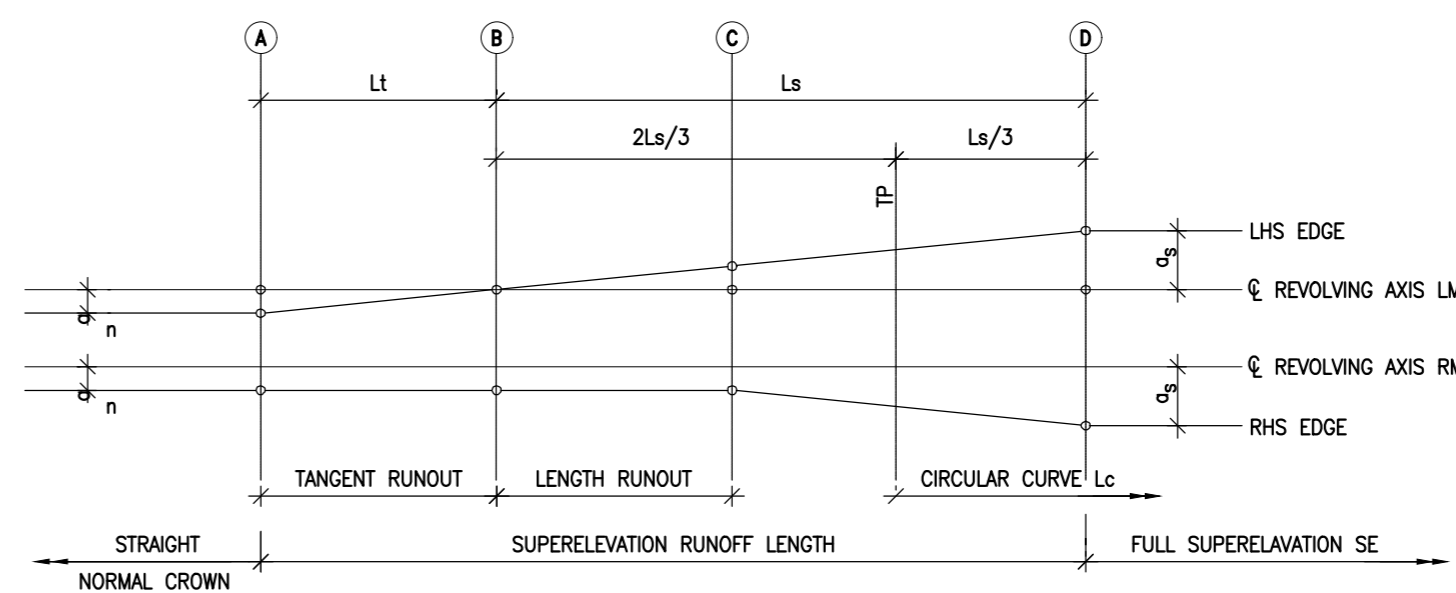
SHOULDER TREATMENT FOR CURVE



SUPERELEVATION FOR CURVE WITH SPIRAL



SUPERELEVATION FOR CURVE



SUPERELEVATION FOR CURVE WITHOUT SPIRAL

LEGEND:

- Ls = LENGTH OF SPIRAL (m) AS SHOWN IN SETTING OUT DETAILS AND PLAN AND PROFILE DRAWING
- e = CARRIAGEWAY CROSS FALL GRADIENT (%) AT FULL SUPEARELEVATION AS SHOWN IN PLAN AND PROFILE DRAWING
- Wn = CARRIAGEWAY WIDTH (m) AT (A)
- Ws = CARRIAGEWAY WIDTH (m) AT (D)
- an = NORMAL CAMBER
- as = SUPER ELEVATED CAMBER
- TP = TANGENT POINT
- Rc = RADIUS OF CIRCULAR CURVES
- RME = RIGHT MEDIAN EDGE
- LME = LEFT MEDIAN EDGE
- RHS = RIGHT HAND SIDE
- LHS = LEFT HAND SIDE
- SC/CS = START OF CIRCULAR CURVE
- TS/ST = START OF TRANSITION / SPIRAL CURVE

R2	FEB 2026	FINAL DETAILED PROJECT REPORT
R1	DEC 2025	FINAL FEASIBILITY REPORT
R0	OCT 2025	DRAFT FEASIBILITY REPORT
REV	DATE	DESCRIPTION OF REVISIONS

SCALE: -
AS PER SHOWN

CLIENT:-

MINISTRY OF ROAD TRANSPORT AND HIGHWAYS
 (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)

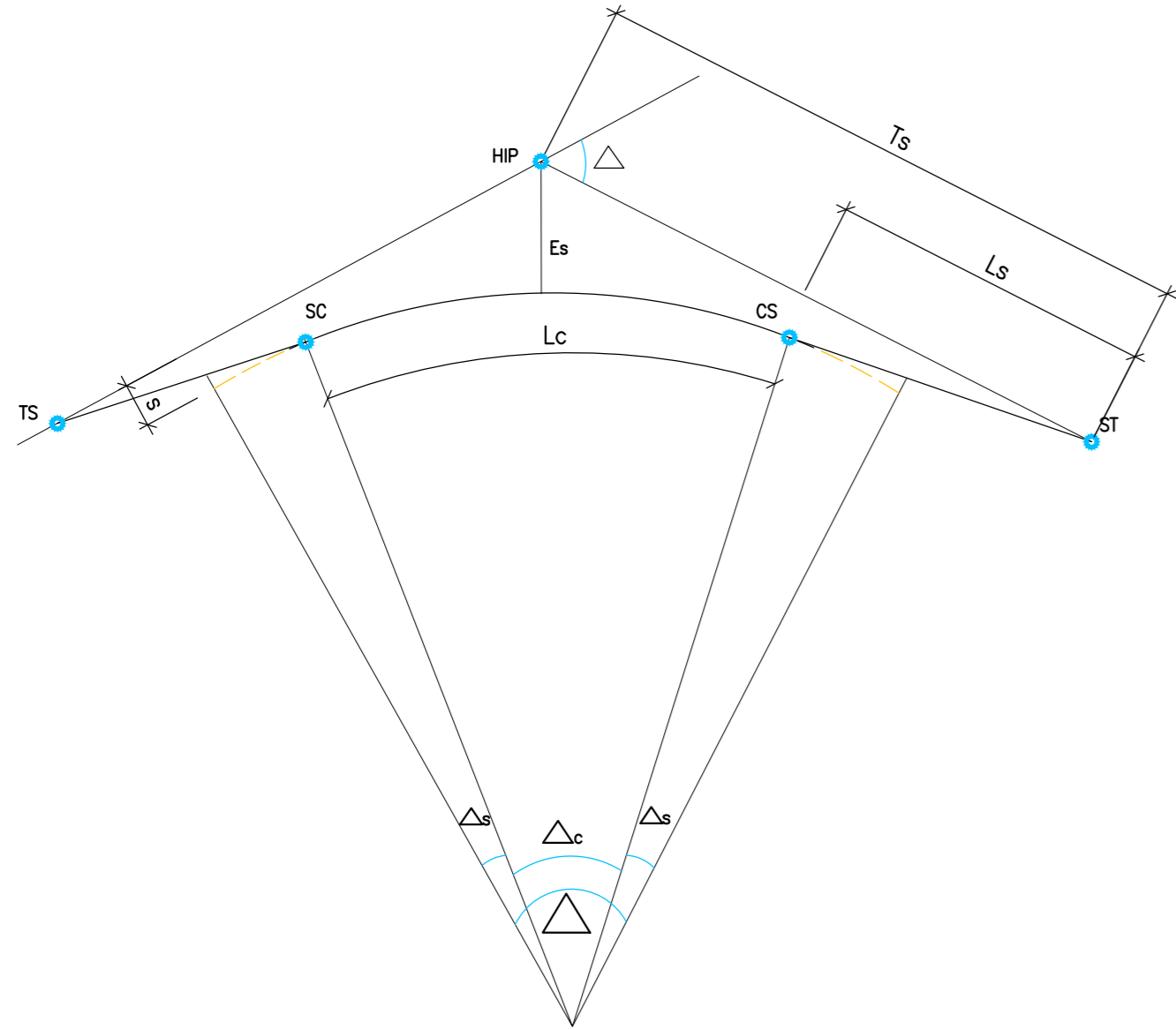
CONSULTANTS:-

 9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II
 Gurgaon 122002, Haryana, India

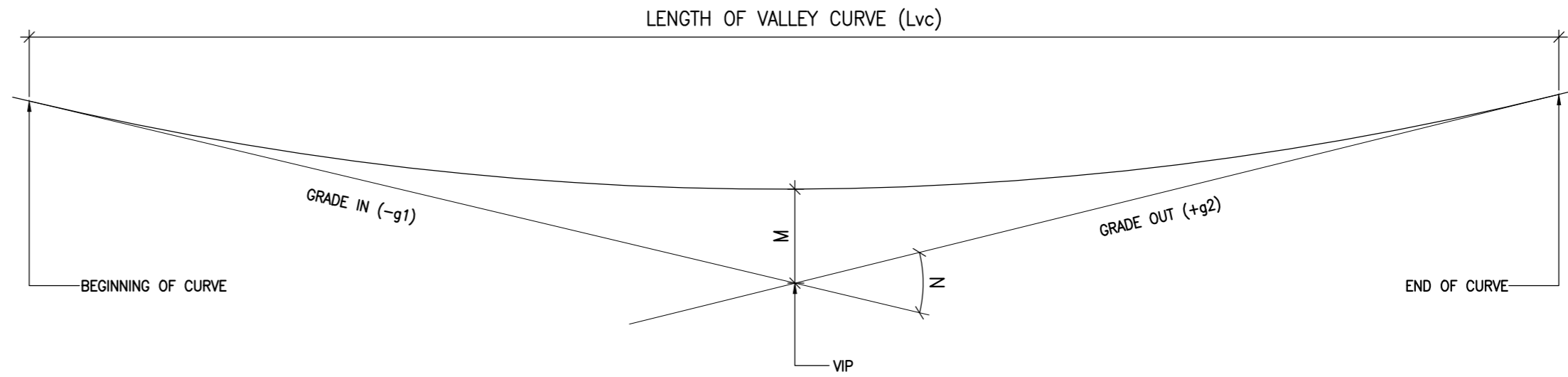
PROJECT:-
 CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHRASROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).

DWG NO.: - AECOM/TRA-HW/60524499/SD/001			
TITLE: STANDARD DRAWINGS TYPICAL DETAILS OF SUPER ELEVATION	DATE:- FEB. 2026	PAPER:-A2	
DRAWN (A)	DESIGN (B)	CHECKED (C)	APPROVED (D)
HS	DK	SB	BS

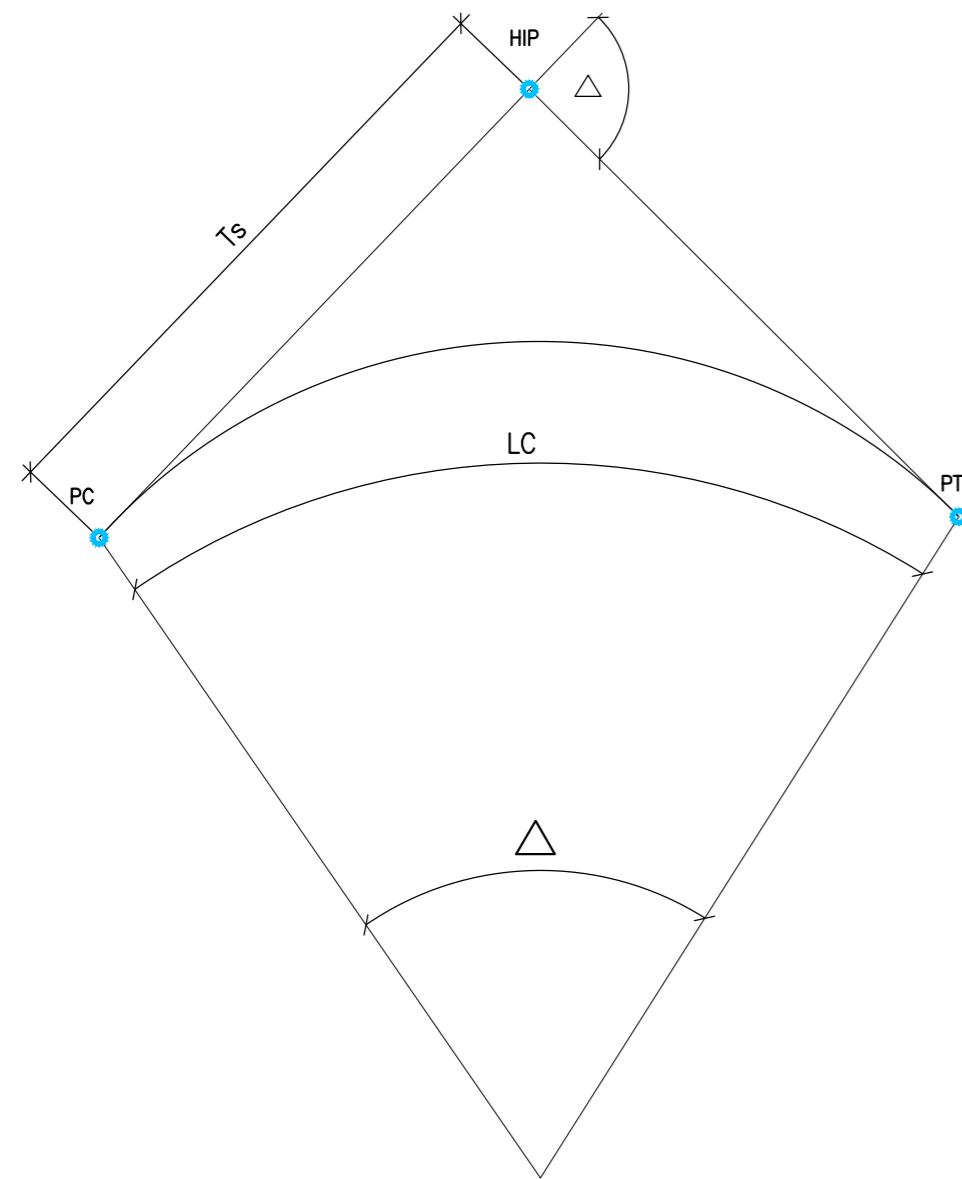
ELEMENTS OF HORIZONTAL CURVE



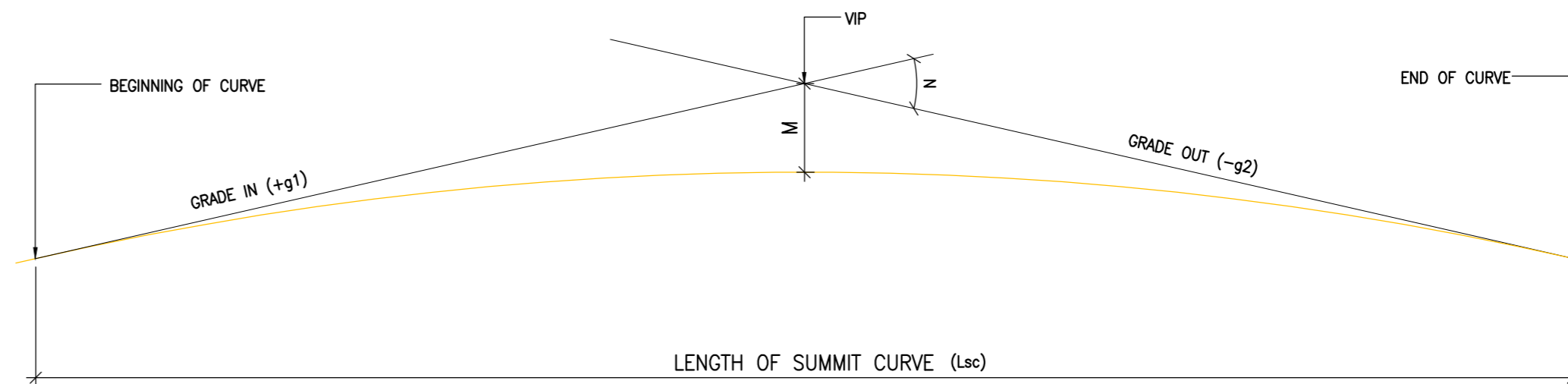
ELEMENTS OF VERTICAL CURVE



CIRCULAR CURVE WITH TRANSITION



VALLEY CURVE



CIRCULAR CURVE WITHOUT TRANSITION

SUMMIT CURVE

LEGEND:

- TS - TANGENT TO SPIRAL
- SC - SPIRAL TO CURVE
- CS - CURVE TO SPIRAL
- ST - SPIRAL TO TANGENT
- PC - POINT OF CURVATURE
- PT - POINT OF TANGENT
- Ls - LENGTH OF TRANSITION
- Lc - LENGTH OF HORIZONTAL CURVE
- Ts - TANGENT DISTANCE
- Δs - DEVIATION ANGLE OF TRANSITION CURVE
- Δc - DEVIATION ANGLE OF CIRCULAR CURVE
- Δ - TOTAL DEVIATION ANGLE
- Es - APEX DISTANCE
- S - SHIFT
- HIP - HORIZONTAL INTERSECTION POINT
- VIP - VERTICAL INTERSECTION POINT
- M - MID ORDINATE
- N - ALGEBRIC DIFFERENCE IN GRADE (%)

R2	FEB 2026	FINAL DETAILED PROJECT REPORT
R1	DEC 2025	FINAL FEASIBILITY REPORT
R0	OCT 2025	DRAFT FEASIBILITY REPORT
REV	DATE	DESCRIPTION OF REVISIONS

SCALE :-
AS PER SHOWN

CLIENT:-

MINISTRY OF ROAD TRANSPORT AND HIGHWAYS
(TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)

CONSULTANTS:-

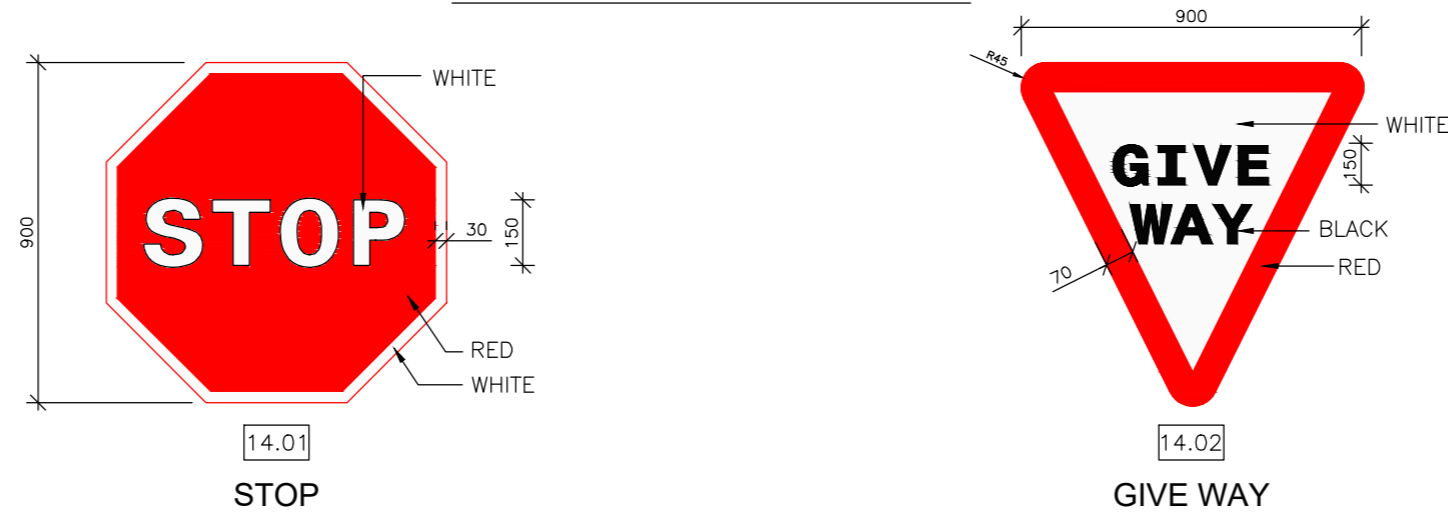
AECOM
9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II
Gurgaon 122002, Haryana, India

PROJECT:-
CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHRASROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).

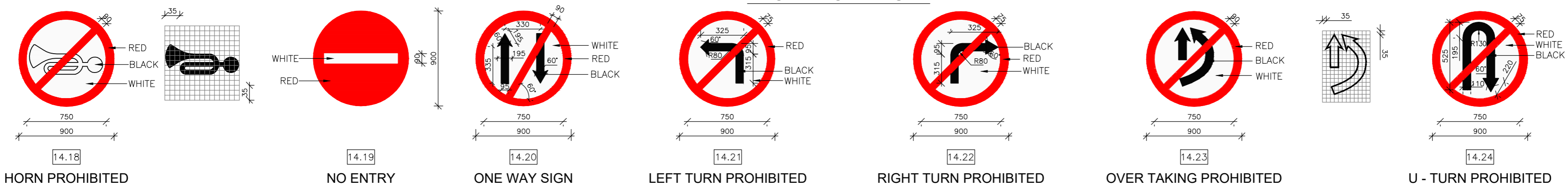
DWG NO.: - AECOM/TRA-HW/60524499/SD/002

TITLE: STANDARD DRAWINGS TYPICAL DETAILS OF HORIZONTAL & VERTICAL CURVES		DATE:- FEB. 2026	PAPER:-A2
DRAWN (A)	DESIGN (B)	CHECKED (C)	APPROVED (D)
HS	DK	SB	BS

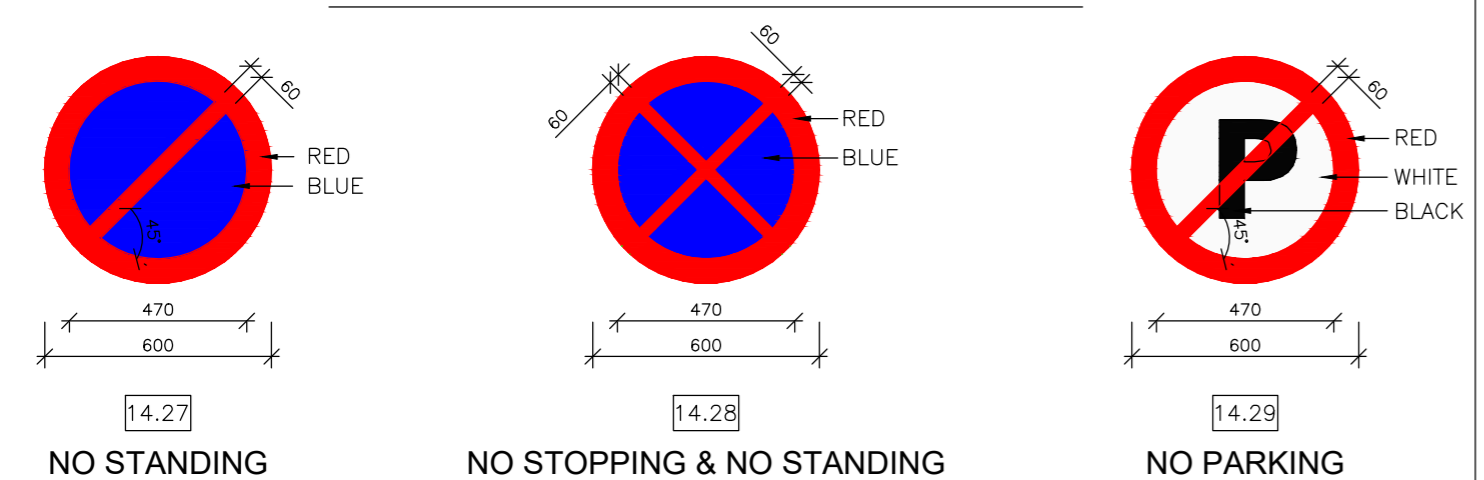
STOP & GIVE WAY SIGNS



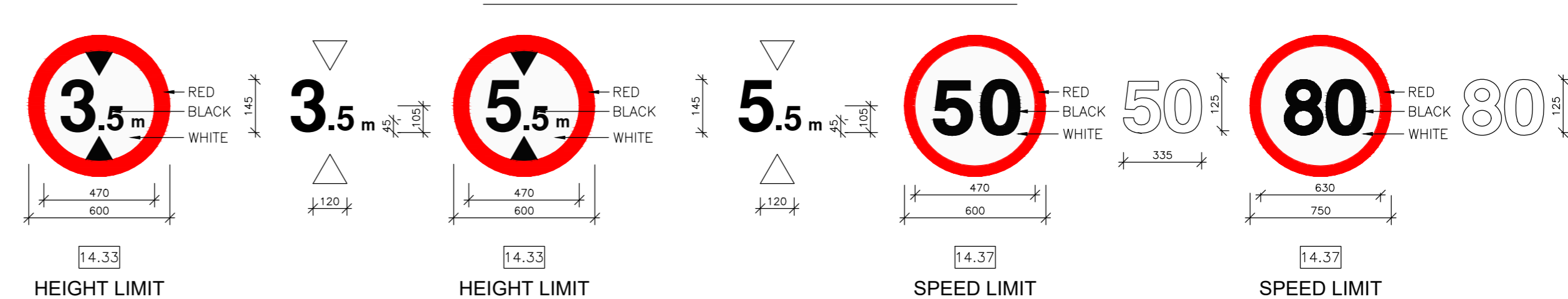
PROHIBITORY SIGNS



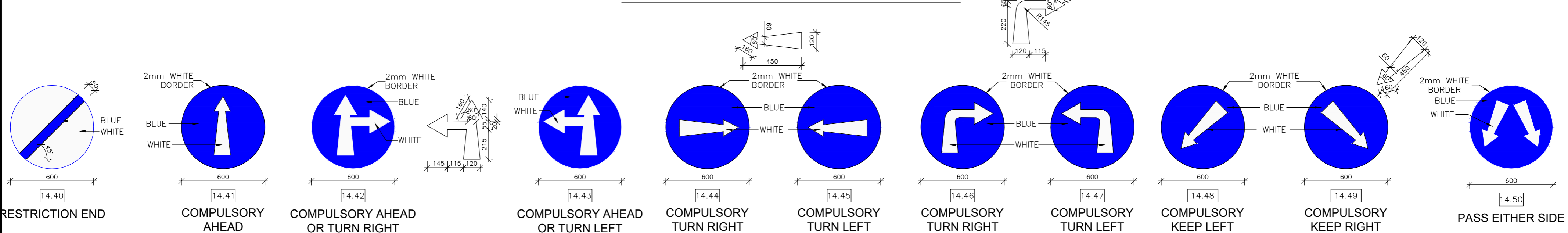
NO PARKING & NO STOPPING SIGNS



SPEED LIMIT & VEHICLE CONTROL SIGNS



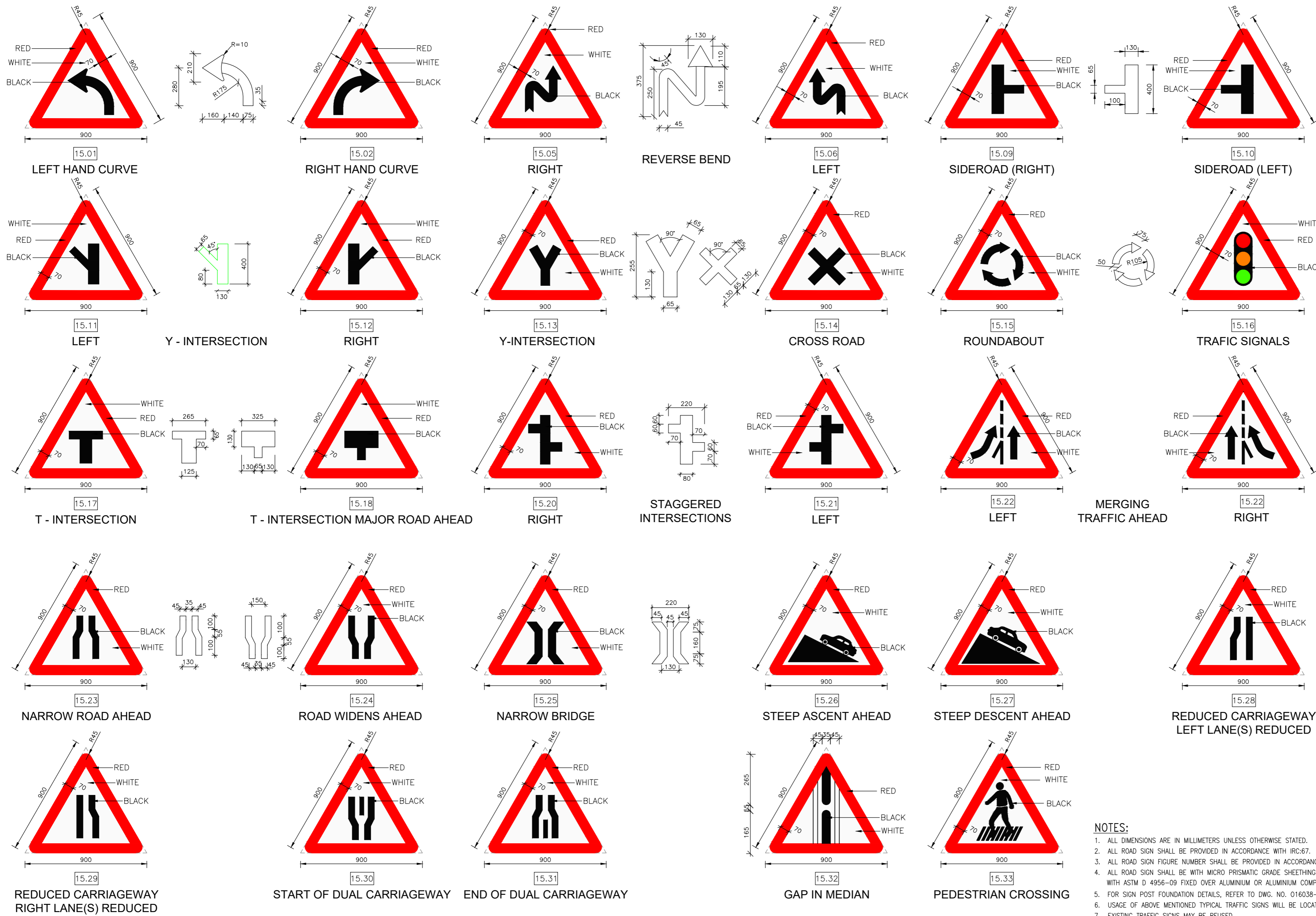
RESTRICTION ENDS & COMPULSORY SIGNS



NOTES:

- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED.
- ALL ROAD SIGN SHALL BE PROVIDED IN ACCORDANCE WITH IRC:67.
- ALL ROAD SIGN FIGURE NUMBER SHALL BE PROVIDED IN ACCORDANCE WITH IRC:67.
- ALL ROAD SIGN SHALL BE WITH MICRO PRISMATIC GRADE SHEETING OF CLASS C (TYPE VIII , IX & XI) IN ACCORDANCE WITH ASTM D 4956-09 FIXED OVER ALUMINIUM OR ALUMINIUM COMPOSITE MATERIAL AS PER IRC:67 & MORTH SPECIFICATIONS.
- DETAILED DIMENSIONS OF SIGNS & SYMBOLS FOR NORMAL SIZED SIGN (900mm) REQUIRED FOR NH/SH (81-100kmph) AS STATED IN IRC:67 ARE PRESENTED IN THE DRAWING. SYMBOL DETAILS SHOWN IN DRAWING FOR 600mm SIZE PLATE SHOULD BE PROPORTIONATELY ENLARGED AS PER CLAUSE 14.1 OF IRC:67.
- FOR SIGN POST FOUNDATION DETAILS, REFER TO DWG. SIGN BOARD ERECTION DRAWING
- USAGE OF ABOVE MENTIONED TYPICAL TRAFFIC SIGNS WILL BE LOCATION SPECIFIC AND SITE CONDITIONS.
- EXISTING TRAFFIC SIGNS MAY BE REUSED.

SCALE :- AS PER SHOWN		CLIENT:- MINISTRY OF ROAD TRANSPORT AND HIGHWAYS (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)		CONSULTANTS:- AECOM 9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II Gurgaon 122002, Haryana, India		PROJECT:- CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHARSROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).		DWG NO. :- AECOM/TRA-HW/60524499/SD/003				
R2	FEB 2026	FINAL DETAILED PROJECT REPORT					TITLE: STANDARD DRAWINGS		DATE:- FEB. 2026	PAPER:-A2		
R1	DEC 2025	FINAL FEASIBILITY REPORT					TYPICAL DETAILS OF TRAFFIC SIGNS (MANDATORY SIGNS)		DRAWN (A)	DESIGN (B)	CHECKED (C)	APPROVED (D)
R0	OCT 2025	DRAFT FEASIBILITY REPORT							HS	DK	SB	BS
REV	DATE	DESCRIPTION OF REVISIONS										



- NOTES:**
1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED.
 2. ALL ROAD SIGN SHALL BE PROVIDED IN ACCORDANCE WITH IRC:67.
 3. ALL ROAD SIGN FIGURE NUMBER SHALL BE PROVIDED IN ACCORDANCE WITH IRC:67.
 4. ALL ROAD SIGN SHALL BE WITH MICRO PRISMATIC GRADE SHEETING OF CLASS C (TYPE VIII, IX & XI) IN ACCORDANCE WITH ASTM D 4956-09 FIXED OVER ALUMINIUM OR ALUMINIUM COMPOSITE MATERIAL AS PER IRC:67 & MORTH SPECIFICATIONS.
 5. FOR SIGN POST FOUNDATION DETAILS, REFER TO DWG. NO. 016038-C-RP-RD-MS-0009.
 6. USAGE OF ABOVE MENTIONED TYPICAL TRAFFIC SIGNS WILL BE LOCATION SPECIFIC AND SITE CONDITIONS.
 7. EXISTING TRAFFIC SIGNS MAY BE REUSED.

R2	FEB 2026	FINAL DETAILED PROJECT REPORT
R1	DEC 2025	FINAL FEASIBILITY REPORT
R0	OCT 2025	DRAFT FEASIBILITY REPORT
REV	DATE	DESCRIPTION OF REVISIONS

SCALE:-	AS PER SHOWN
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CLIENT:-



MINISTRY OF ROAD TRANSPORT AND HIGHWAYS
(TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)

CONSULTANTS:-

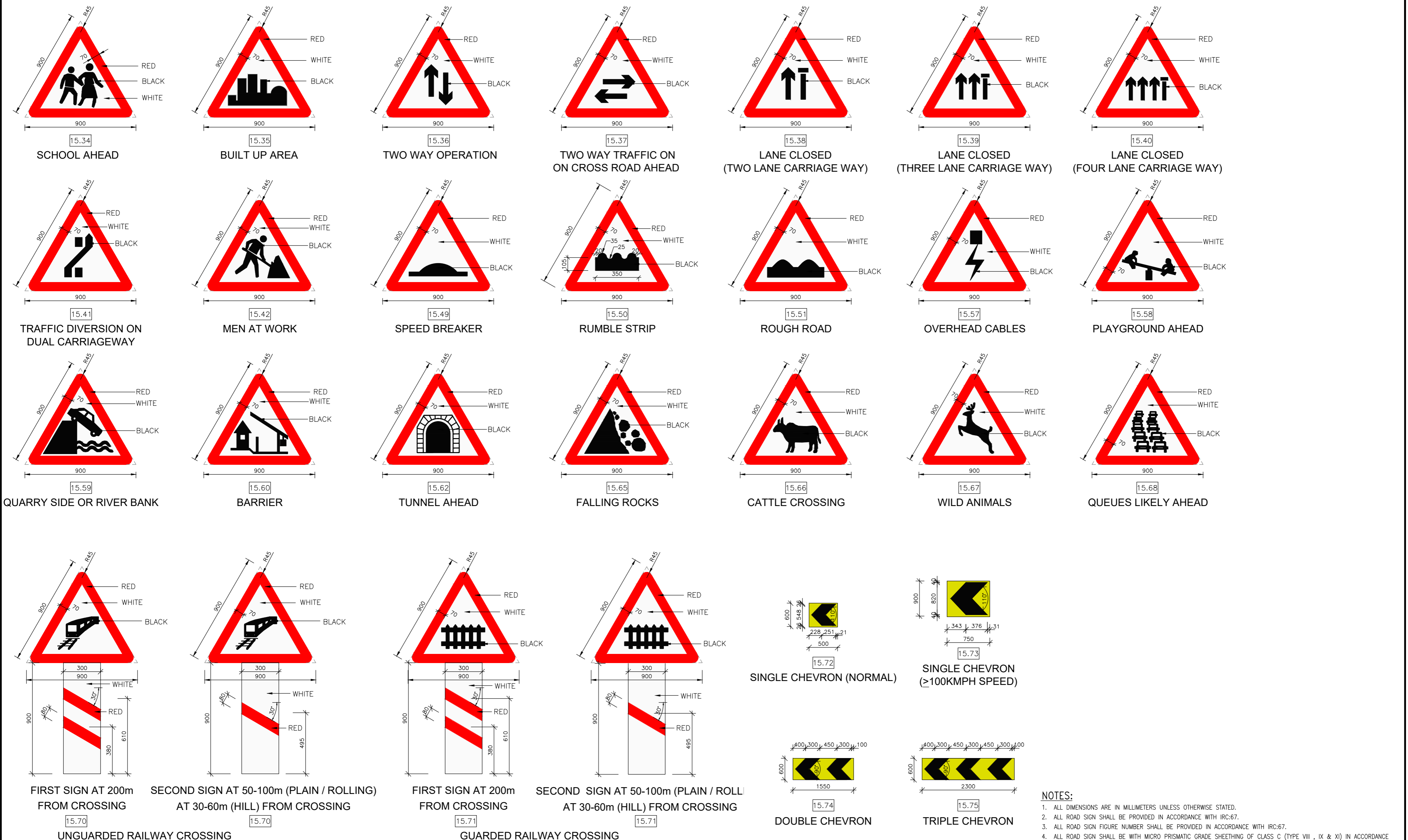
AECOM

9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II
Gurgaon 122002, Haryana, India

PROJECT:-

CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHARSROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).

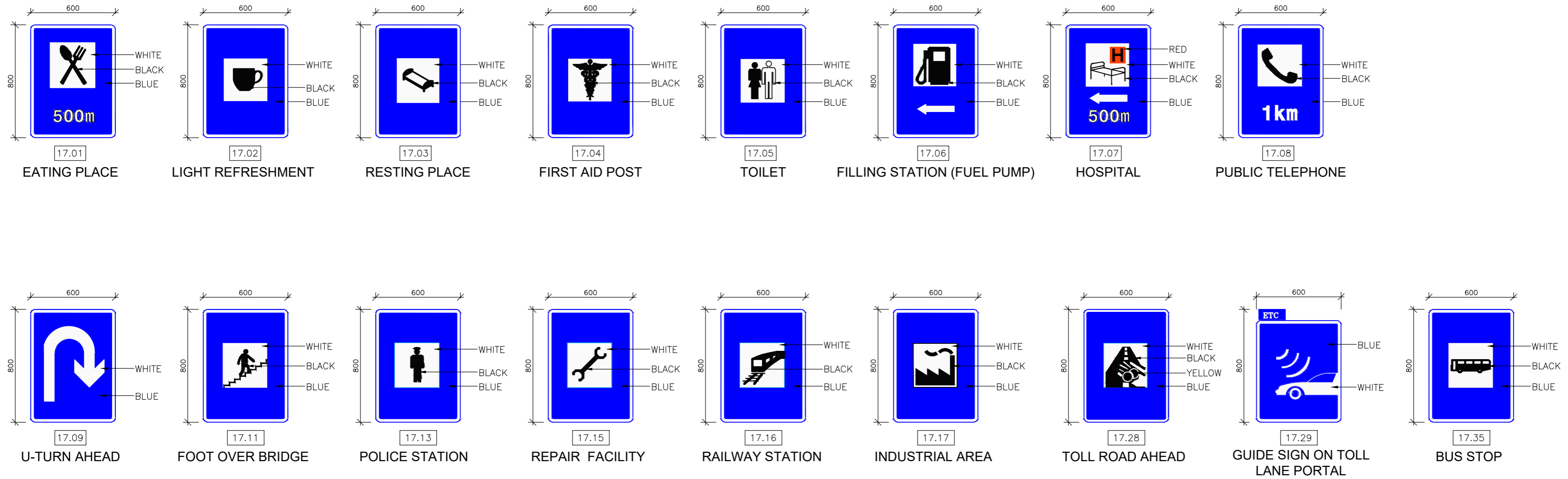
DWG NO.:- AECOM/TRA-HW/60524499/SD/004	
TITLE: STANDARD DRAWINGS TYPICAL DETAILS OF TRAFFIC SIGNS (WARNING/CAUTIONARY SIGNS)	DATE:- FEB. 2026
PAPER:-A2	
DRAWN (A)	DESIGN (B)
CHECKED (C)	APPROVED (D)
HS	DK
SB	BS



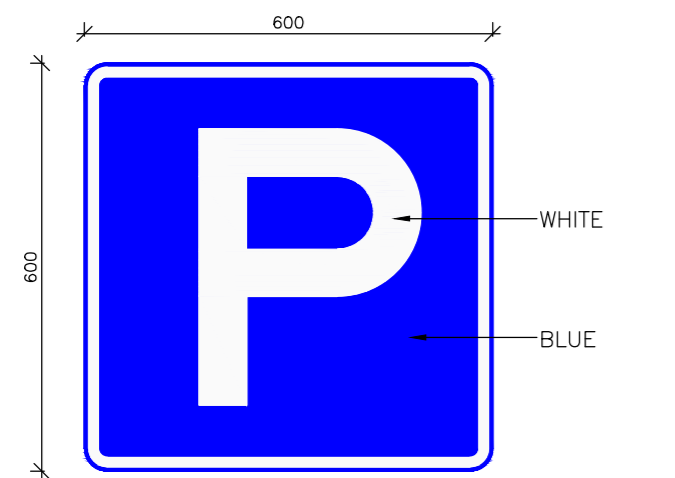
- NOTES:**
1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED.
 2. ALL ROAD SIGN SHALL BE PROVIDED IN ACCORDANCE WITH IRC:67.
 3. ALL ROAD SIGN FIGURE NUMBER SHALL BE PROVIDED IN ACCORDANCE WITH IRC:67.
 4. ALL ROAD SIGN SHALL BE WITH MICRO PRISMATIC GRADE SHEETING OF CLASS C (TYPE VIII , IX & XI) IN ACCORDANCE WITH ASTM D 4956-09 FIXED OVER ALUMINIUM OR ALUMINIUM COMPOSITE MATERIAL AS PER IRC:67 & MORTH SPECIFICATIONS
 5. FOR SIGN POST FOUNDATION DETAILS, REFER ERECTION SIGN POST ERECTION DRAWING.
 6. USAGE OF ABOVE MENTIONED TYPICAL TRAFFIC SIGNS WILL BE LOCATION SPECIFIC AND SITE CONDITIONS.
 7. EXISTING TRAFFIC SIGNS MAY BE REUSED.

R2 FEB 2026 FINAL DETAILED PROJECT REPORT		SCALE :- AS PER SHOWN	CLIENT:- MINISTRY OF ROAD TRANSPORT AND HIGHWAYS (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)		CONSULTANTS:- AECOM 9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II Gurgaon 122002, Haryana, India	PROJECT:- CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHRASROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).	DWG NO. :- AECOM/TRA-HW/60524499/SD/005					
R1	DEC 2025		PVR PSK BGP MSR				TITLE: STANDARD DRAWINGS TYPICAL DETAILS OF TRAFFIC SIGNS (WARNING/CAUTIONARY SIGNS)	DATE:- FEB. 2026	PAPER:-A2			
R0	OCT 2025						DRWN (A)	DESIGN (B)	CHECKED (C)	APPROVED (D)		
REV	DATE		DESCRIPTION OF REVISIONS				HS	DK	SB	BS		

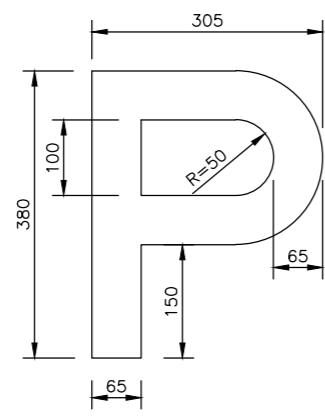
FACILITY INFORMATION SIGNS



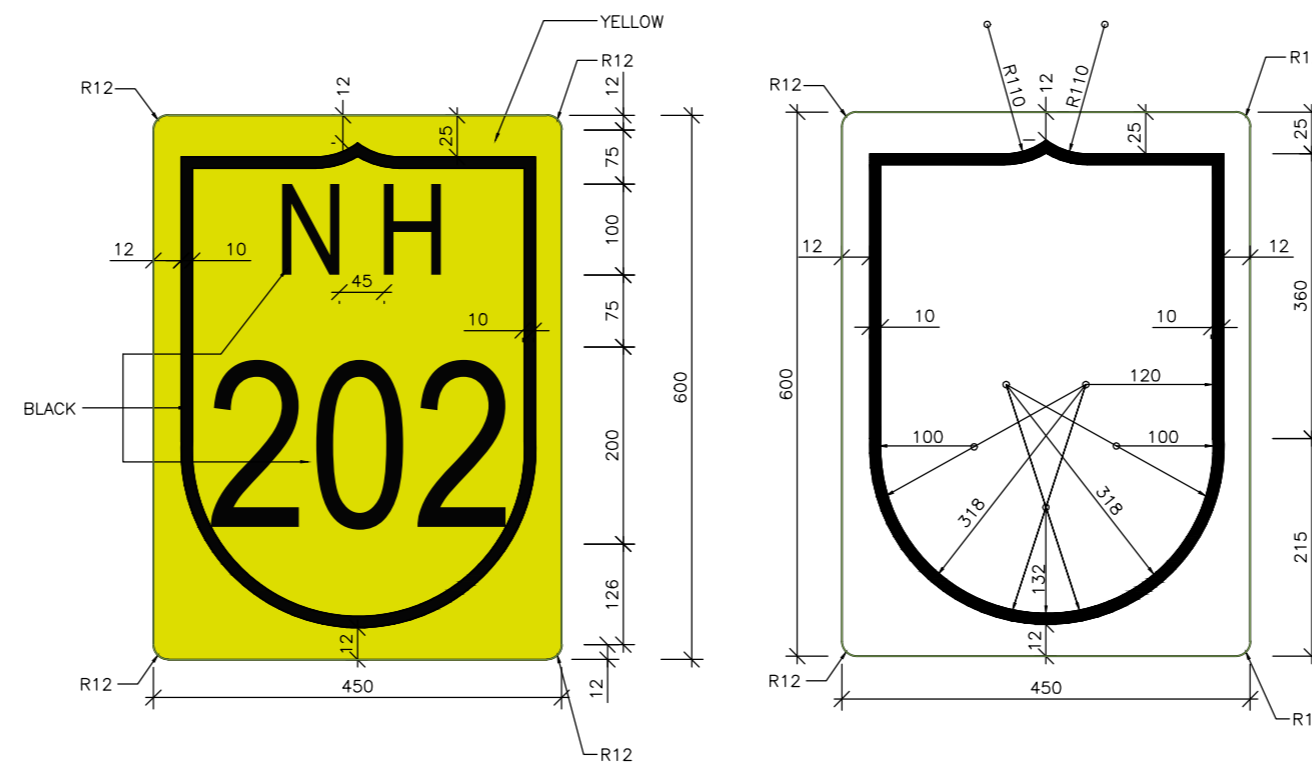
PARKING SIGN



18.01
PARKING



ROUTE MARKER SIGN



20.02
NATIONAL HIGHWAY
ROUTE MARKER SIGN

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED.
2. ALL ROAD SIGN SHALL BE PROVIDED IN ACCORDANCE WITH IRC:67.
3. ALL ROAD SIGN FIGURE NUMBER SHALL BE PROVIDED IN ACCORDANCE WITH IRC:67.
4. ALL ROAD SIGN SHALL BE WITH MICRO PRISMATIC GRADE SHEETING OF CLASS C (TYPE VIII , IX & XI) IN ACCORDANCE WITH ASTM D 4956-09 FIXED OVER ALUMINIUM OR ALUMINIUM COMPOSITE MATERIAL AS PER IRC:67 & MORTH SPECIFICATIONS.
5. USAGE OF ABOVE MENTIONED TYPICAL TRAFFIC SIGNS WILL BE LOCATION SPECIFIC AND SITE CONDITIONS.
6. EXISTING TRAFFIC SIGNS MAY BE REUSED.

R2	FEB 2026	FINAL DETAILED PROJECT REPORT
R1	DEC 2025	FINAL FEASIBILITY REPORT
R0	OCT 2025	DRAFT FEASIBILITY REPORT
REV	DATE	DESCRIPTION OF REVISIONS

SCALE :-	AS PER SHOWN
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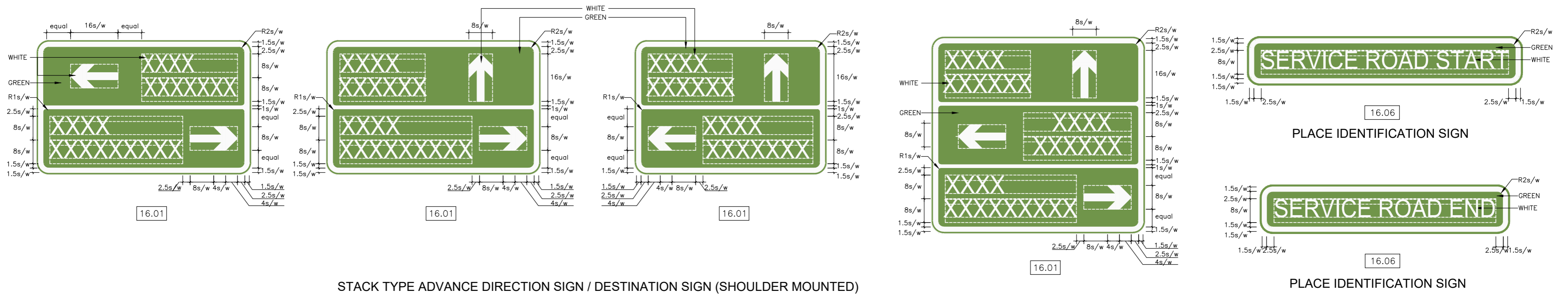
CLIENT:-	 MINISTRY OF ROAD TRANSPORT AND HIGHWAYS (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)
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CONSULTANTS:-	AECOM 9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II Gurgaon 122002, Haryana, India
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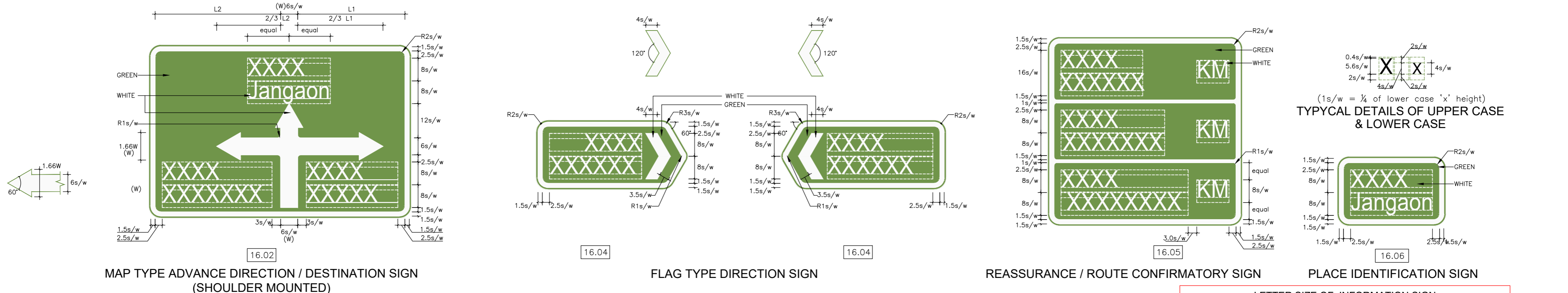
PROJECT:-	CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHARSROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).
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DWG NO. :-	AECOM/TRA-HW/60524499/SD/006		
TITLE:	STANDARD DRAWINGS TYPICAL DETAILS OF TRAFFIC SIGNS (INFORMATORY SIGNS)		
DATE:-	FEB. 2026		
PAPER:-	A2		
DRAWN (A)	DESIGN (B)	CHECKED (C)	APPROVED (D)
HS	DK	SB	BS

DIRECTION & PLACE IDENTIFICATION SIGNS



STACK TYPE ADVANCE DIRECTION SIGN / DESTINATION SIGN (SHOULDER MOUNTED)

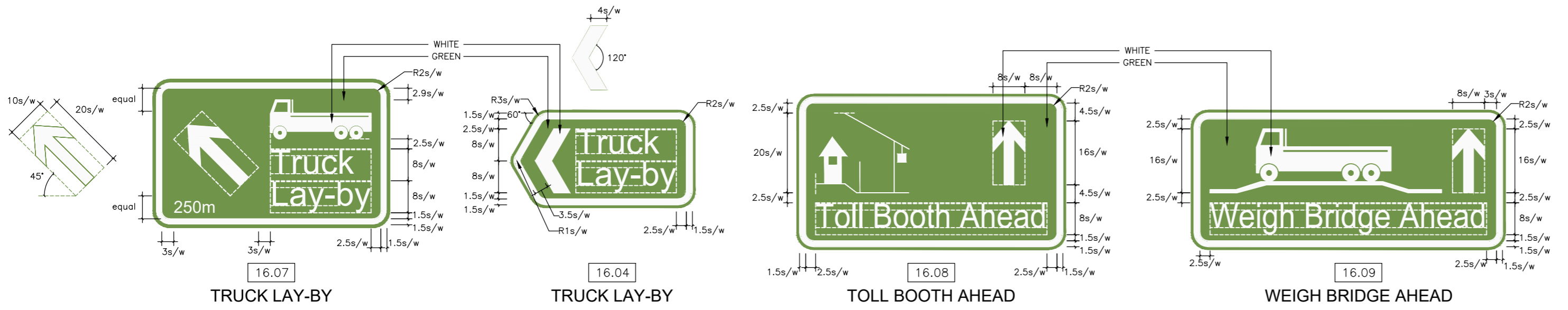


MAP TYPE ADVANCE DIRECTION / DESTINATION SIGN (SHOULDER MOUNTED)

FLAG TYPE DIRECTION SIGN

REASSURANCE / ROUTE CONFIRMATORY SIGN

PLACE IDENTIFICATION SIGN



TRUCK LAY-BY

TRUCK LAY-BY

TOLL BOOTH AHEAD

WEIGH BRIDGE AHEAD

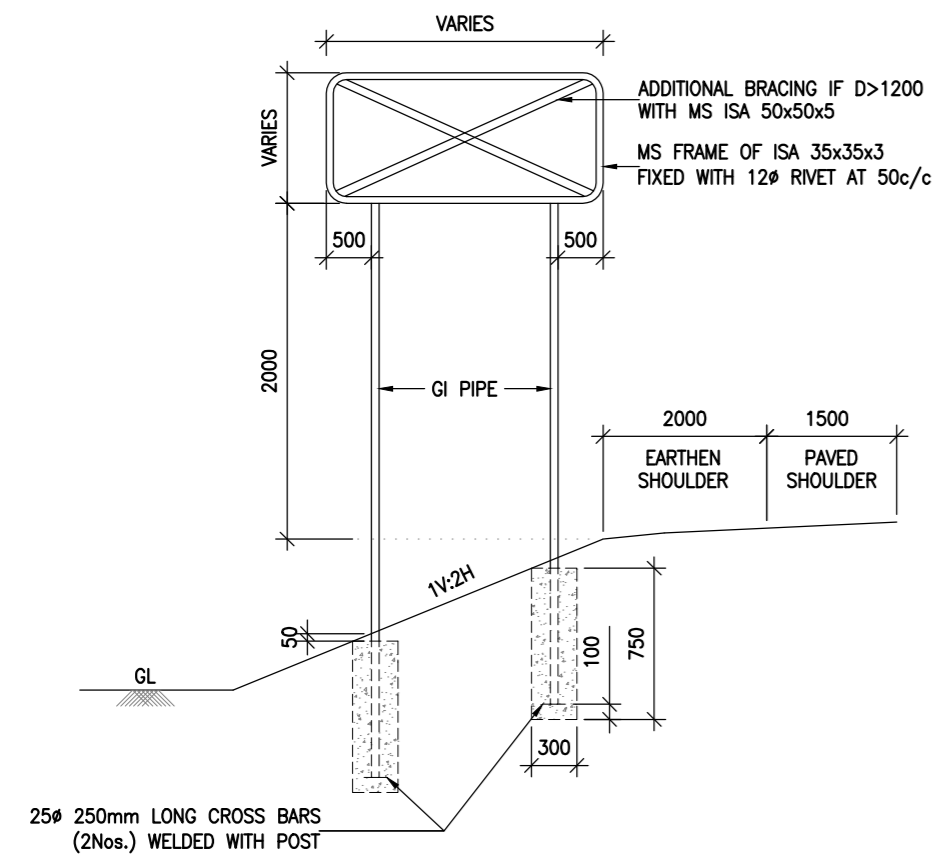
DESIGN SPEED	LETTER SIZE OF INFORMATION SIGN			
	ADVANCE DIRECTION SIGN (SHOULDER MOUNTED)		FLAG TYPE DIRECTION SIGNS, REASSURANCE SIGN, PLACE IDENTIFICATION SIGNS	
	"X" HEIGHT (mm) LOWER CASE	"X" HEIGHT (mm) UPPER CASE	"X" HEIGHT (mm) LOWER CASE	"X" HEIGHT (mm) UPPER CASE
31-50 Km/hr	100 (75)	140 (105)	75 (60)	105 (84)
51-65 Km/hr	125 (100)	175 (140)	100 (75)	140 (105)
66-80 Km/hr	150 (125)	210 (175)	125 (100)	175 (140)
81-100 Km/hr	200 (150)	280 (210)	150 (125)	210 (175)

THE VALUES IN BRACKETS ARE THE MINIMUM VALUES TO BE ADOPTED WHEN THERE IS SITE /SPACE CONSTRAINTS

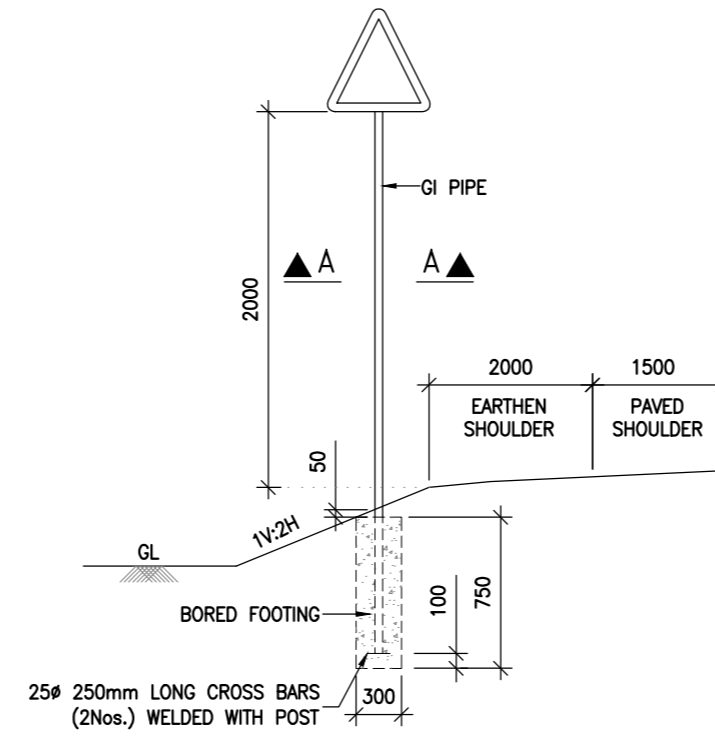
NOTES:

- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED.
- ALL ROAD SIGN SHALL BE PROVIDED IN ACCORDANCE WITH IRC:67.
- ALL ROAD SIGN FIGURE NUMBER SHALL BE PROVIDED IN ACCORDANCE WITH IRC:67.
- ALL ROAD SIGN SHALL BE WITH MICRO PRISMATIC GRADE SHEETING OF CLASS C (TYPE VIII, IX & XI) IN ACCORDANCE WITH ASTM D 4956-09 FIXED OVER ALUMINIUM OR ALUMINIUM COMPOSITE MATERIAL AS PER IRC:67 & MORTH SPECIFICATIONS.
- NAME OF PLACES SHALL BE WRITTEN BOTH ENGLISH (TRANSPORT MEDIUM FONT TYPE) & HINDI (HINDI 7 FONT TYPE) LANGUAGE. THE ARROWS SHALL BE OF TRANSPORT MEDIUM FONT.
- FOR SIGN POST FOUNDATION DETAILS, REFER TO SIGN POST ERECTION DWG.
- XXXX IN HINDI LANGUAGE.
- USAGE OF ABOVE MENTIONED TYPICAL TRAFFIC SIGNS WILL BE LOCATION SPECIFIC AND SITE CONDITIONS.
- EXISTING TRAFFIC SIGNS MAY BE REUSED.

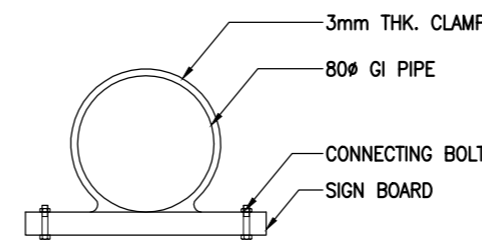
SCALE :- AS PER SHOWN		CLIENT :- MINISTRY OF ROAD TRANSPORT AND HIGHWAYS (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)		CONSULTANTS :- AECOM 9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II Gurgaon 122002, Haryana		PROJECT :- CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHARSROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).		DWG NO. :- AECOM/TRA-HW/60524499/SD/007	
R2	FEB 2026	FINAL DETAILED PROJECT REPORT							TITLE: STANDARD DRAWINGS
R1	DEC 2025	FINAL FEASIBILITY REPORT							DATE: - FEB. 2026
R0	OCT 2025	DRAFT FEASIBILITY REPORT							PAPER: - A2
REV	DATE	DESCRIPTION OF REVISIONS							DRAWN (A) DESIGN (B) CHECKED (C) APPROVED (D)
									HS DK SB BS



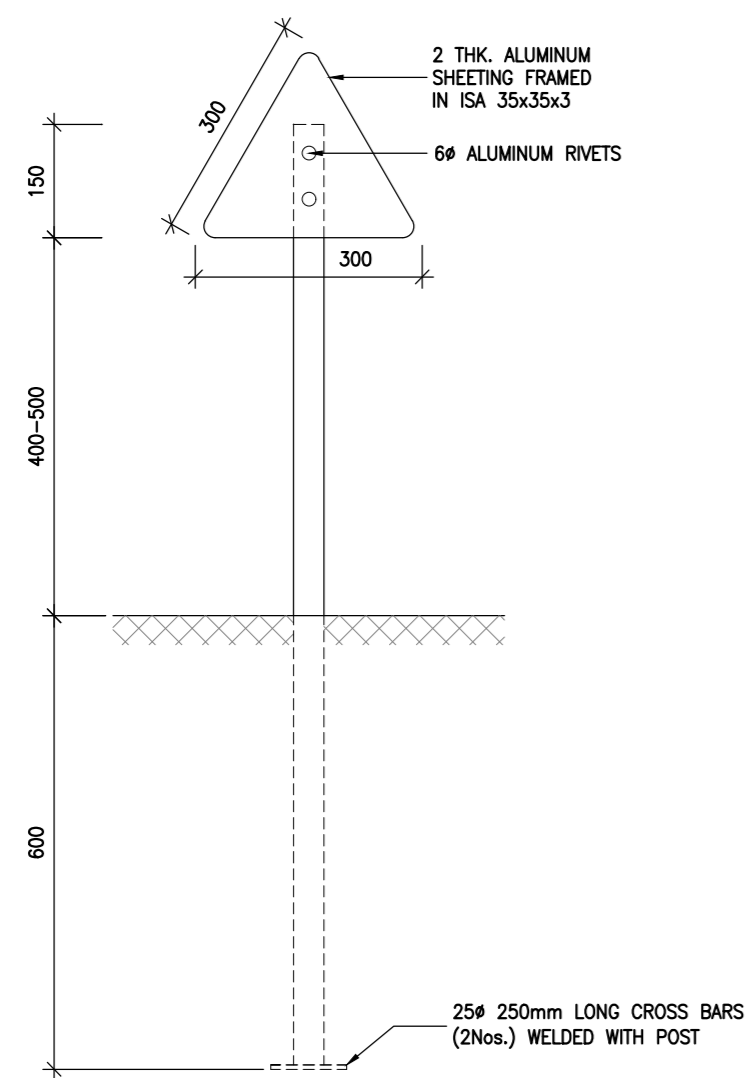
SIGN ON TWO SUPPORTS



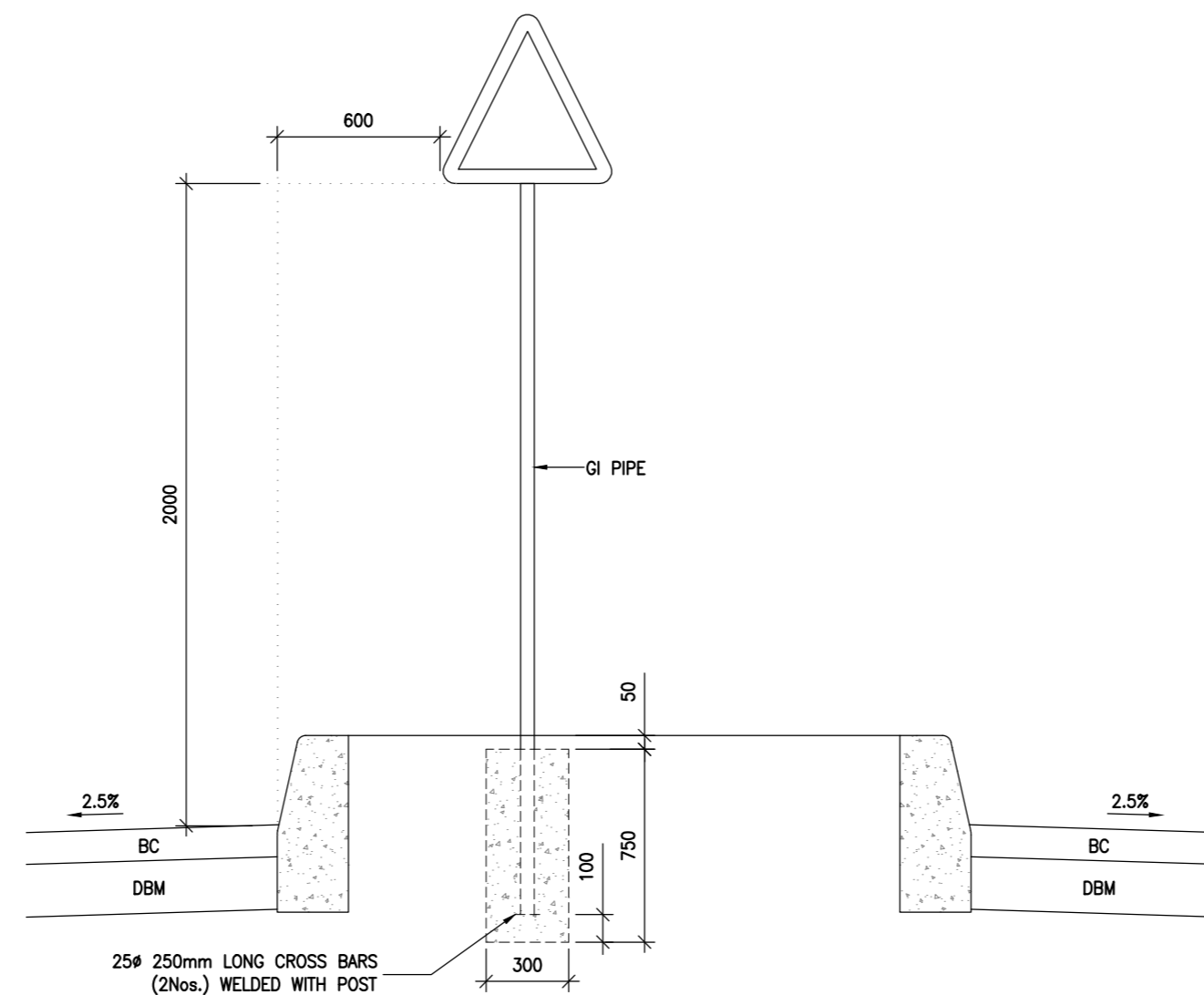
SIGN ON SINGLE POST



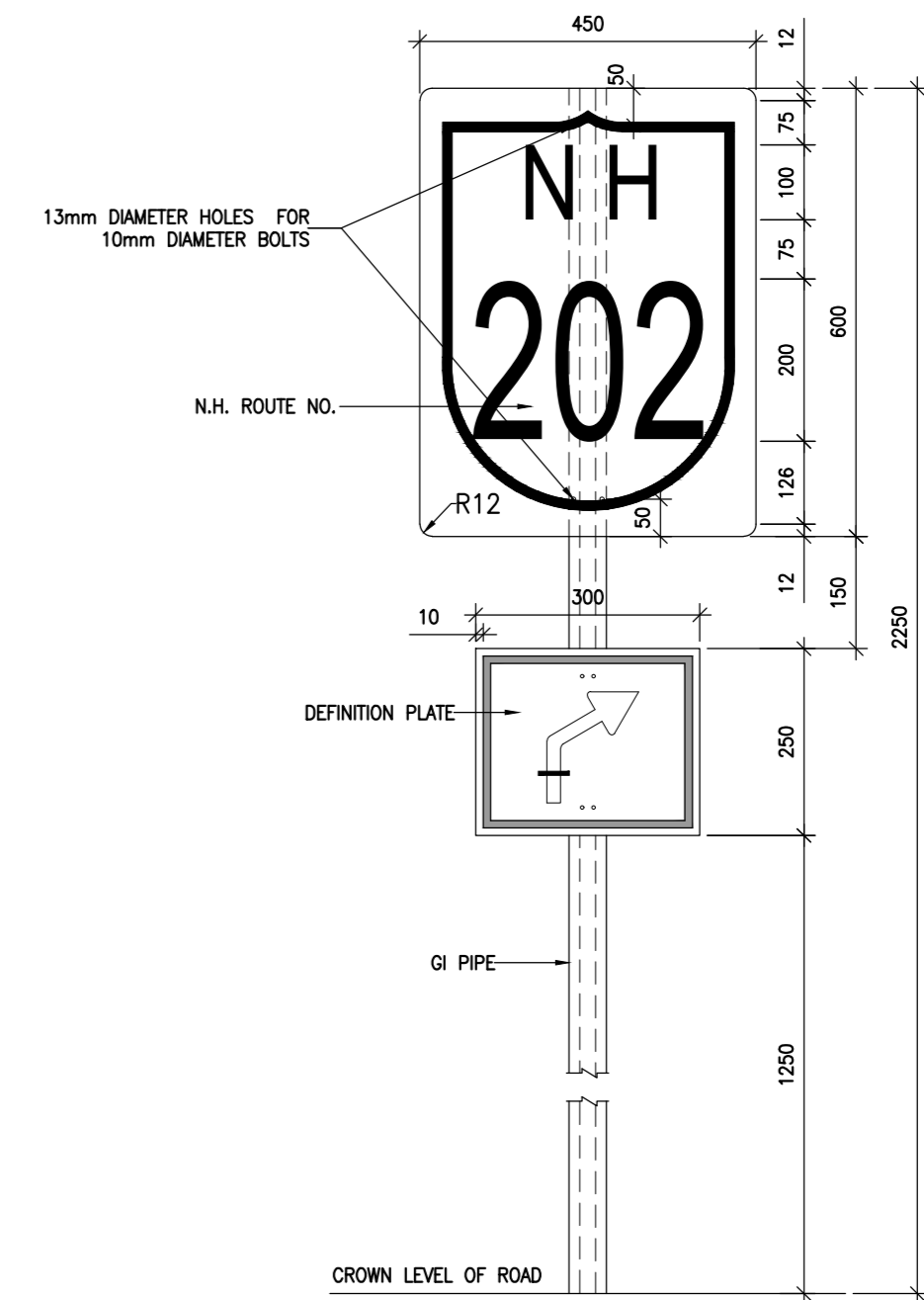
SECTION A-A



ASSEMBLY AND ERECTION ARRANGEMENT FOR CLUSTER OF RED REFLECTORS/OBJECT MARKER



SIGN DETAILS ON KERBED SECTION

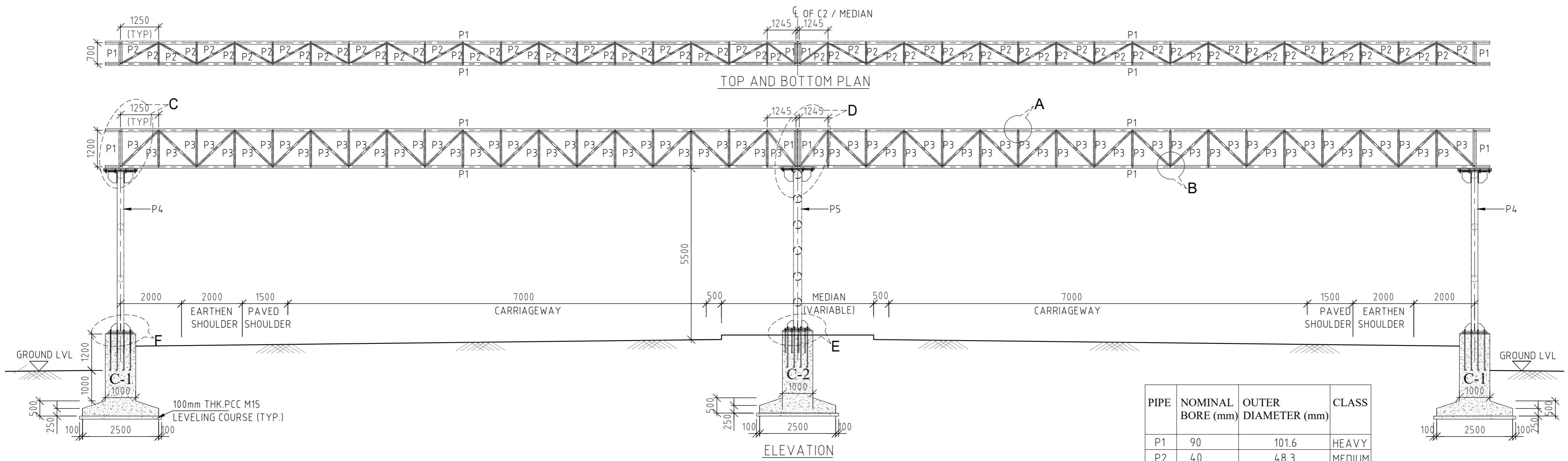


ASSEMBLY OF ROUTE MARKER SIGN
ARRANGEMENT FOR ERECTION OF
NATIONAL HIGHWAY ROUTE MARKER SIGN

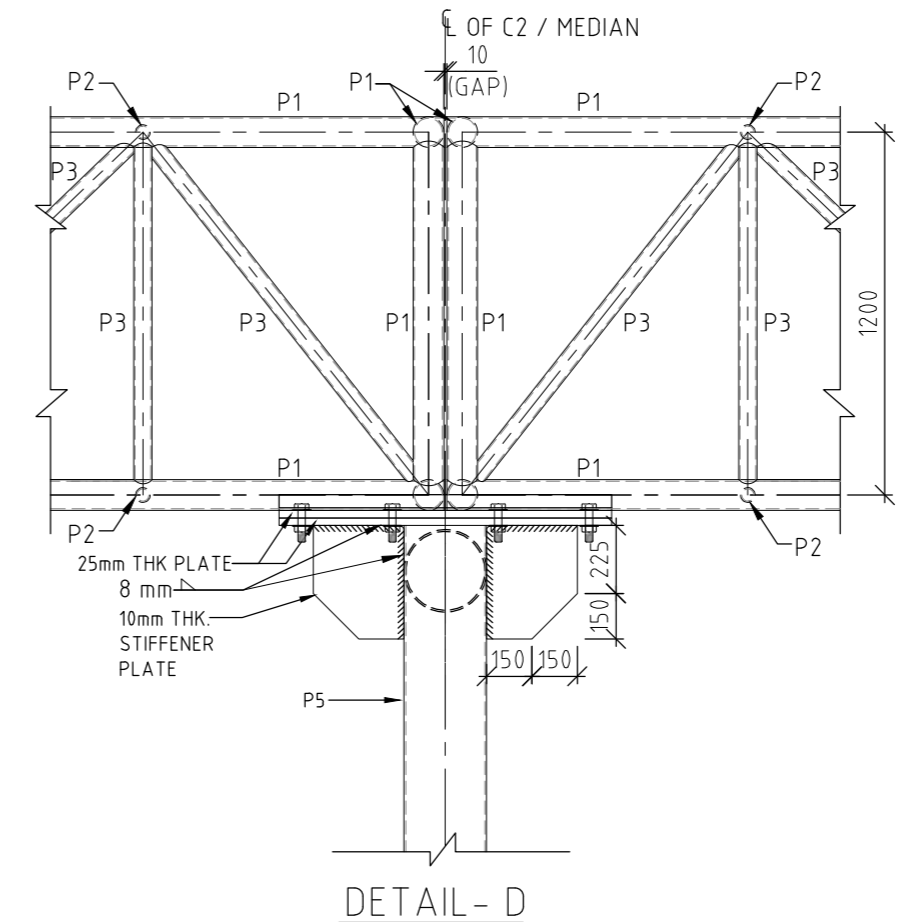
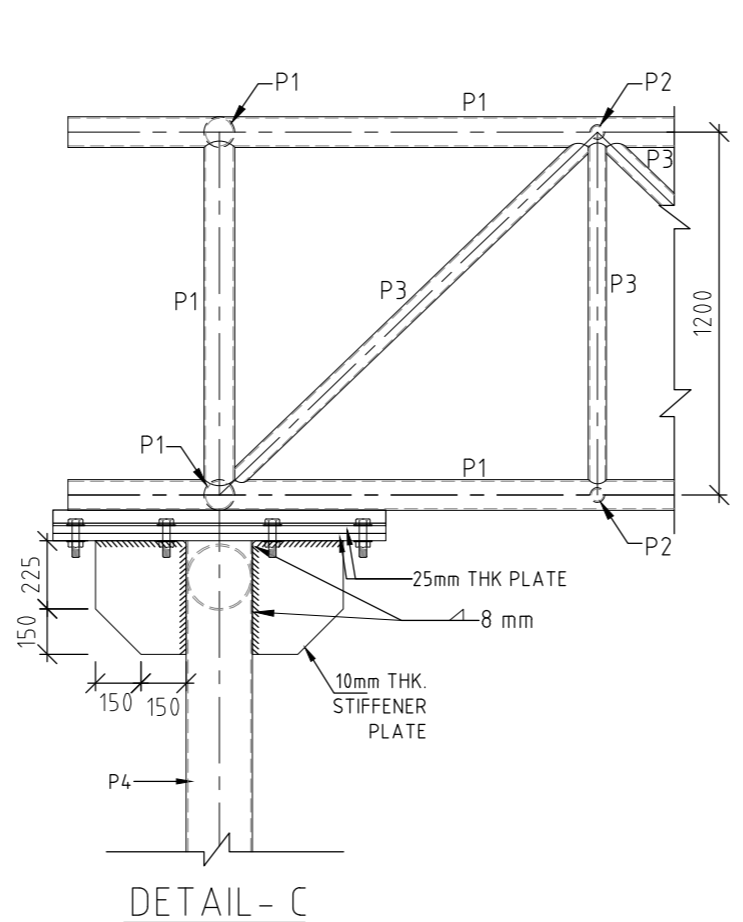
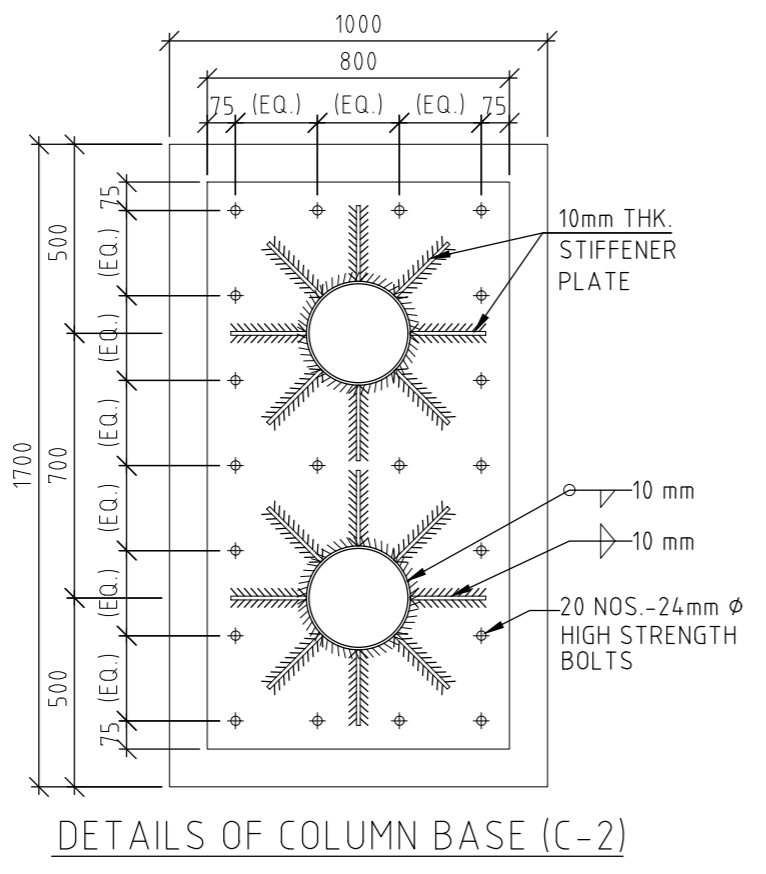
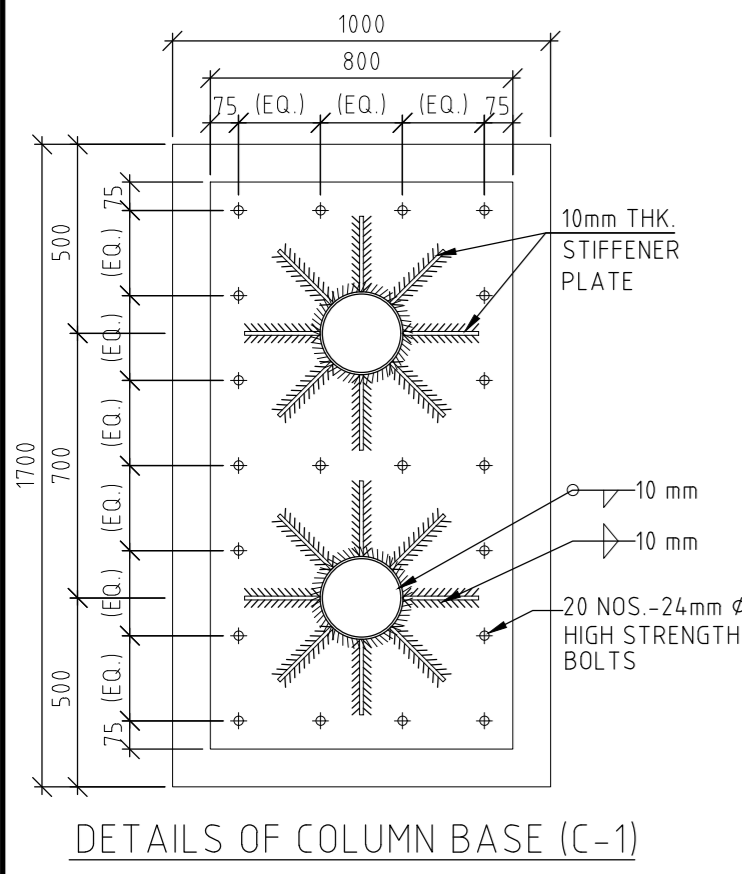
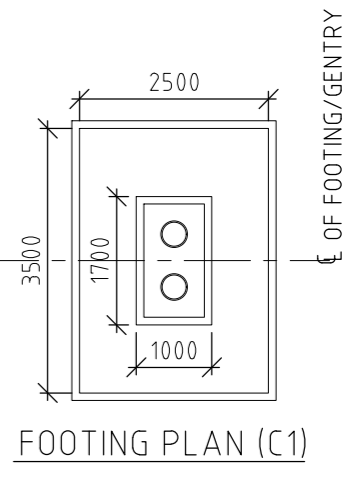
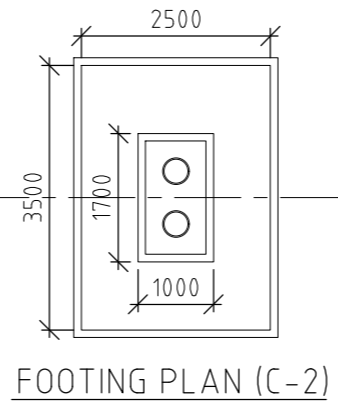
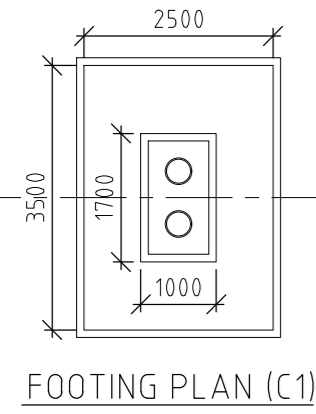
NOTES:

1. ALL THE DIMENSIONS ARE IN MM UNLESS OTHERWISE MENTIONED.
2. ALL FOUNDATIONS SHALL BE IN PCC M15.
3. NO SIGN, SIGNAL OR ANY OTHER DEVICE ERECTED FOR TRAFFIC CONTROL, TRAFFIC GUIDANCE AND/OR TRAFFIC INFORMATION SHALL OBSCURE ANY OTHER TRAFFIC SIGN. FURTHER, THE SIGNS AND SIGNALS SHALL NOT CARRY ANY ADVERTISEMENT.
4. THE PEDESTAL SUPPORTING THE GANTRY OR CANTILEVER STRUCTURE OF THE OVERHEAD SIGNS SHALL BE FLUSHED AT THE GROUND LEVEL AND IN NO CASE SHALL PROTRUDE MORE THAN 150 MM ABOVE GROUND LEVEL.
5. SITING OF SIGNS SHALL BE AS PER IRC: 67.
6. THE DETAILING OF NATIONAL HIGHWAY ROUTE MARKER SIGN AS PER IRC:2 1968.
7. IN NO CASE THERE SHOULD BE MORE THAN THREE SIGNS DISPLAYED AT ONE LOCATION, INCLUDING REGULATORY OR WARNING SIGNS, EITHER ON THE OVERHEAD STRUCTURE OR ITS SUPPORT.
8. SIGNS WITH AN AREA UPTO 0.9M² SHALL BE MOUNTED ON A SINGLE POST AND FOR GREATER AREA, TWO OR MORE SUPPORTS SHALL BE PROVIDED.
9. THE SIGNS SHALL BE FIXED TO GALVANIZED IRON (GI) PIPE POST CONFORMING TO IS: 1239 BY BOLTS AND WASHER OF SUITABLE SIZE. AFTER THE NUTS HAVE BEEN TIGHTED, THE TAILS OF THE BOLTS SHALL BE FURRED OVER WITH A HAMMER TO PREVENT REMOVAL.
10. HIGH STRENGTHEN BOLTS SHALL CONFORM TO IS: 1367 WHEREAS PRECISION BOLTS, NUTS, ETC. SHALL CONFORM TO IS: 1364.
11. ALUMINUM SHEETS SHALL BE OF SMOOTH, HARD AND CORROSION RESISTANT ALUMINUM ALLOY CONFORMING TO IS: 736 - MATERIAL DESIGNATION 24345 OR 1900.
12. NO. OF BOLTS AND NUTS FOR CONNECTING SIGN POST AND SIGN BOARD VARY ACCORDING TO THE SIZE OF THE BOARD.
13. CLAMPS WELDED WITH THE PIPE WHEREVER REQUIRED.

SCALE: - AS PER SHOWN			CLIENT:-  MINISTRY OF ROAD TRANSPORT AND HIGHWAYS (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)		CONSULTANTS:-  9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II Gurgaon 122002, Haryana, India		PROJECT:- CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHARSROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).		DWG NO.: - AECOM/TRA-HW/60524499/SD/008																																	
R2	FEB 2026	FINAL DETAILED PROJECT REPORT	<table border="1"> <tr> <td colspan="2">TITLE: STANDARD DRAWINGS TYPICAL ERECTION DETAILS OF TRAFFIC SIGNS INSTALLATION</td> <td colspan="2">DATE:- FEB. 2026</td> <td colspan="2">PAPER:-A2</td> </tr> <tr> <td>DRAWN (A)</td> <td>DESIGN (B)</td> <td>CHECKED (C)</td> <td colspan="3">APPROVED (D)</td> </tr> <tr> <td>HS</td> <td>DK</td> <td>SB</td> <td colspan="3">BS</td> </tr> </table>		TITLE: STANDARD DRAWINGS TYPICAL ERECTION DETAILS OF TRAFFIC SIGNS INSTALLATION		DATE:- FEB. 2026		PAPER:-A2		DRAWN (A)	DESIGN (B)	CHECKED (C)	APPROVED (D)			HS	DK	SB	BS			<table border="1"> <tr> <td colspan="2">TITLE: STANDARD DRAWINGS TYPICAL ERECTION DETAILS OF TRAFFIC SIGNS INSTALLATION</td> <td colspan="2">DATE:- FEB. 2026</td> <td colspan="2">PAPER:-A2</td> </tr> <tr> <td>DRAWN (A)</td> <td>DESIGN (B)</td> <td>CHECKED (C)</td> <td colspan="3">APPROVED (D)</td> </tr> <tr> <td>HS</td> <td>DK</td> <td>SB</td> <td colspan="3">BS</td> </tr> </table>		TITLE: STANDARD DRAWINGS TYPICAL ERECTION DETAILS OF TRAFFIC SIGNS INSTALLATION		DATE:- FEB. 2026		PAPER:-A2		DRAWN (A)	DESIGN (B)	CHECKED (C)	APPROVED (D)			HS	DK	SB	BS		
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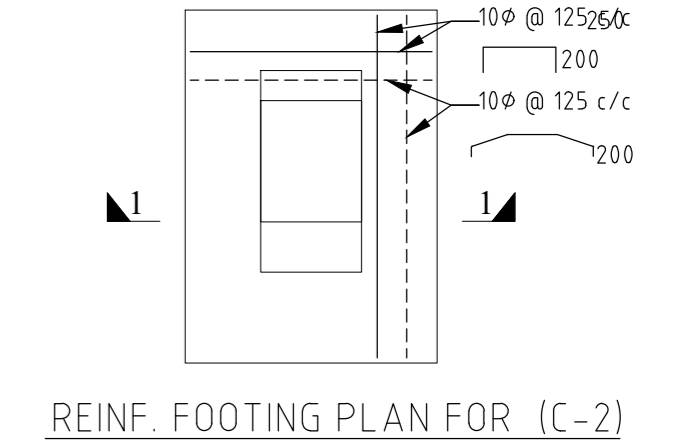
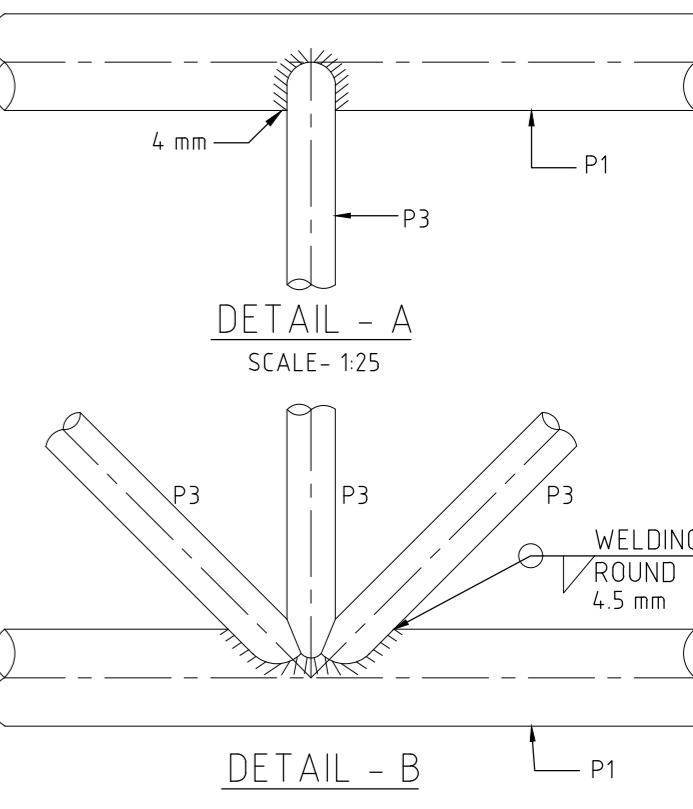
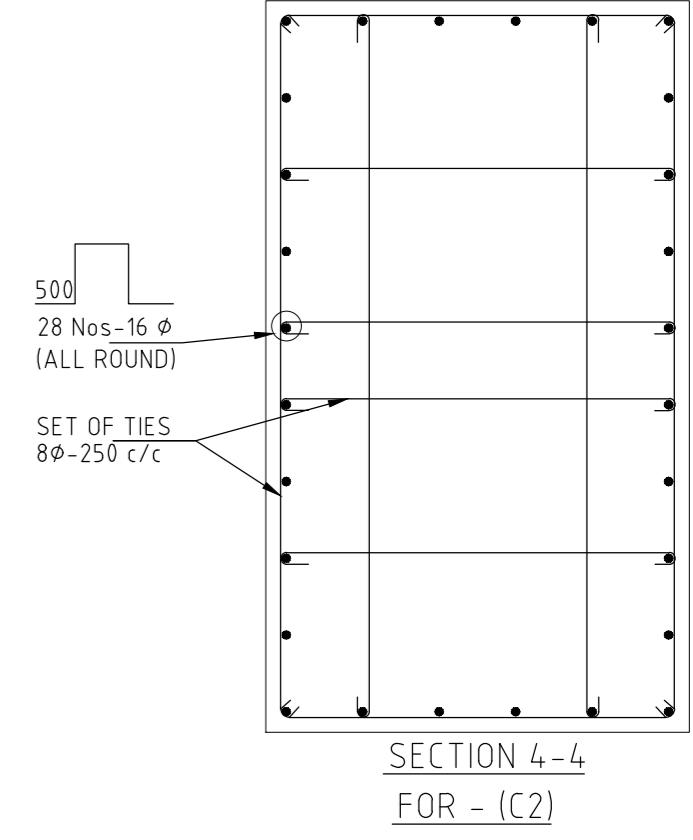
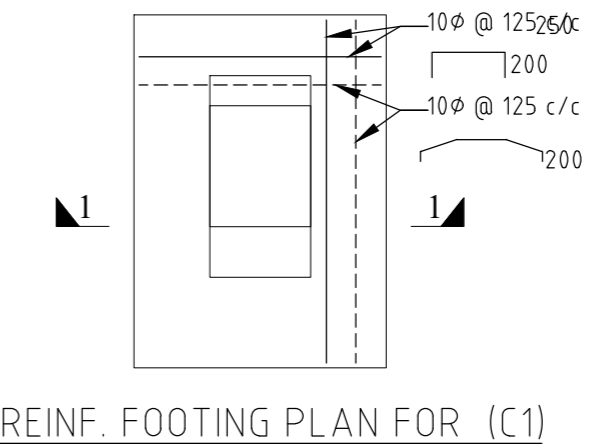
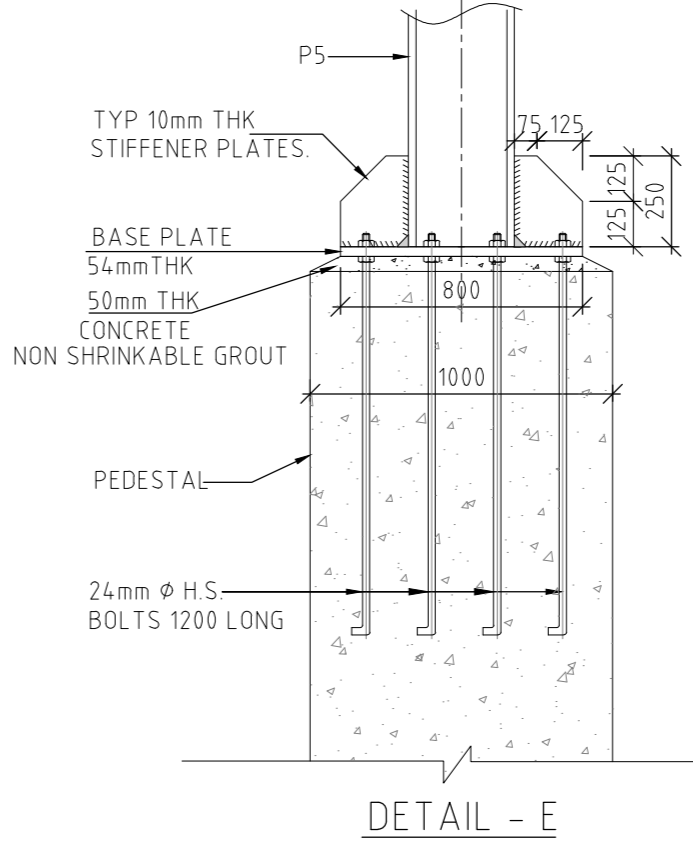
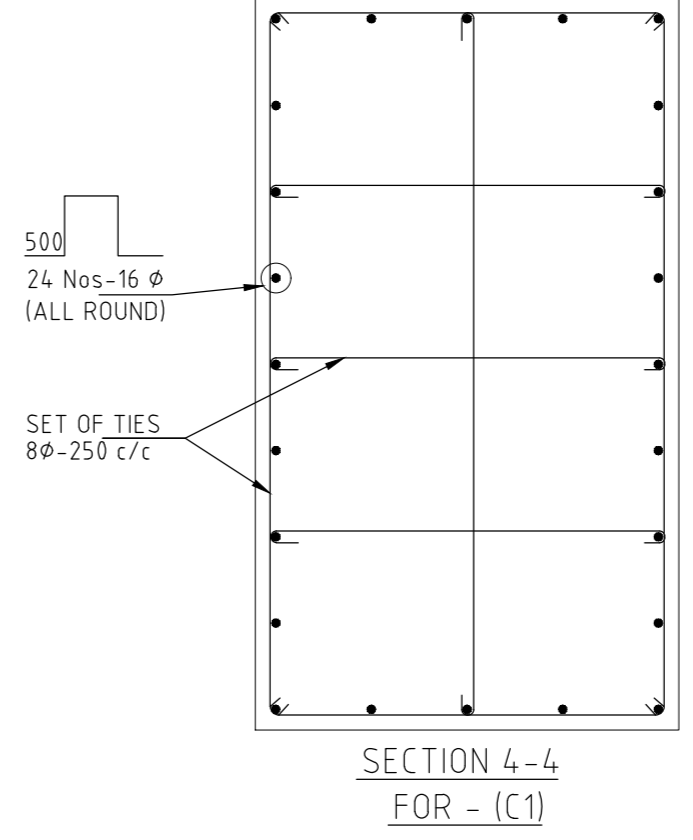
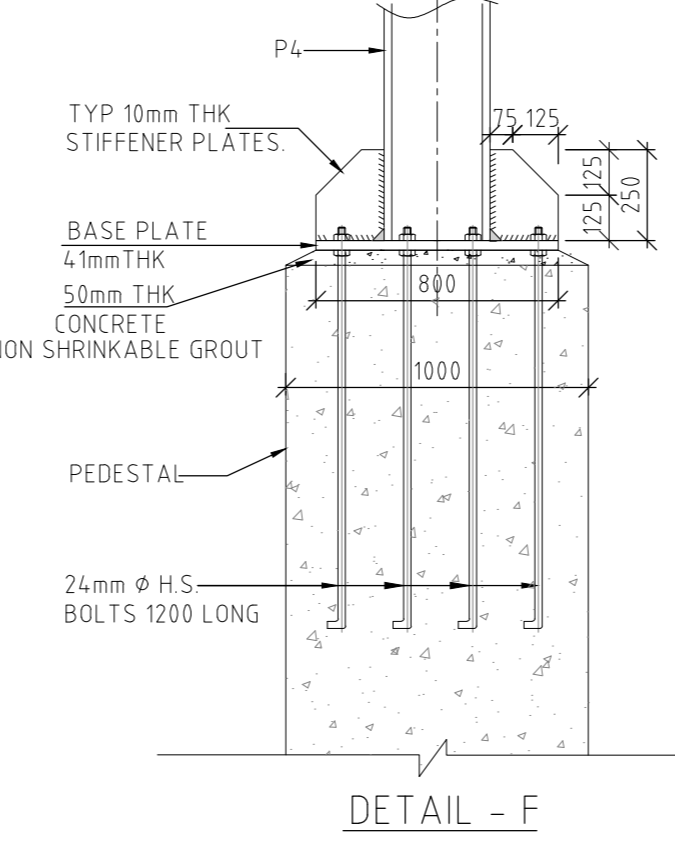
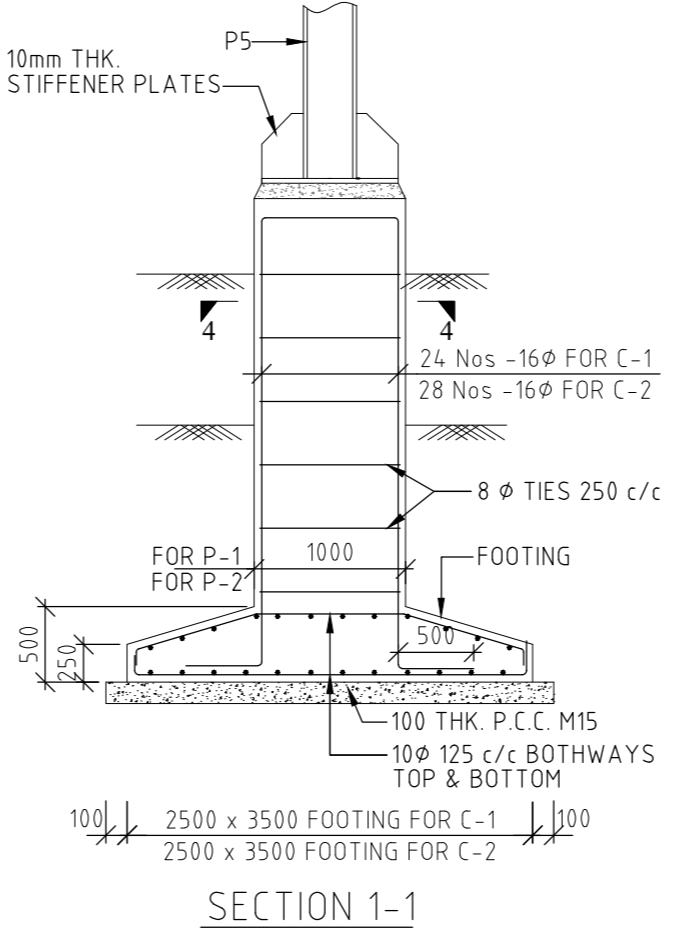
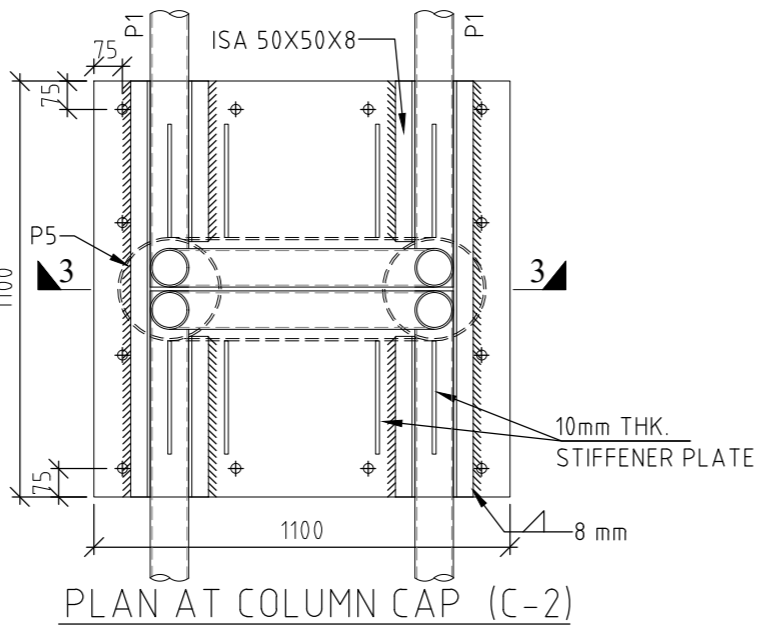
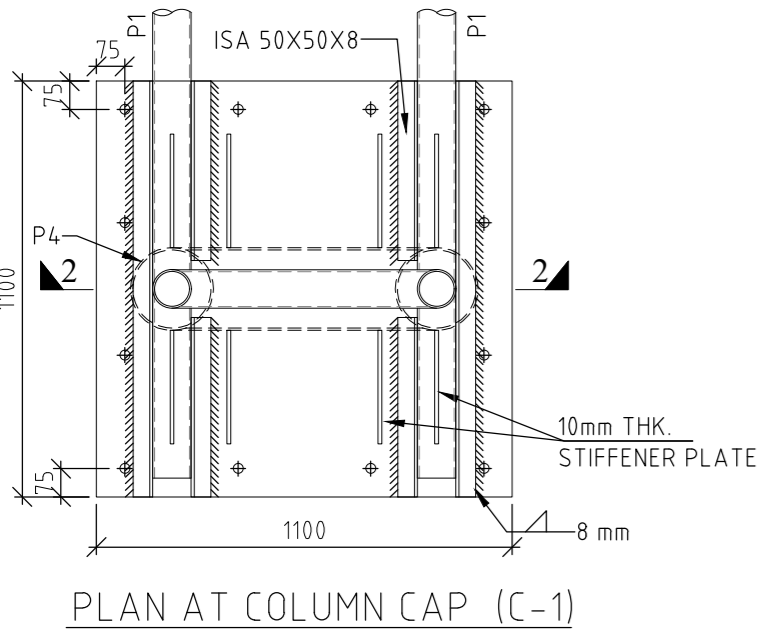
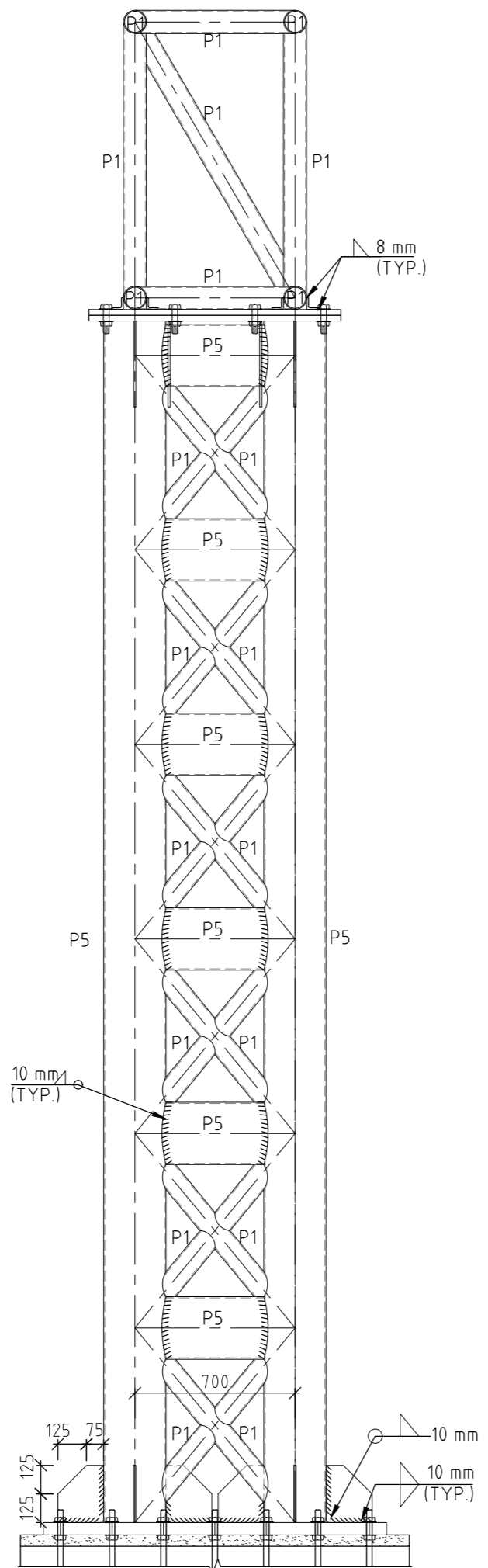
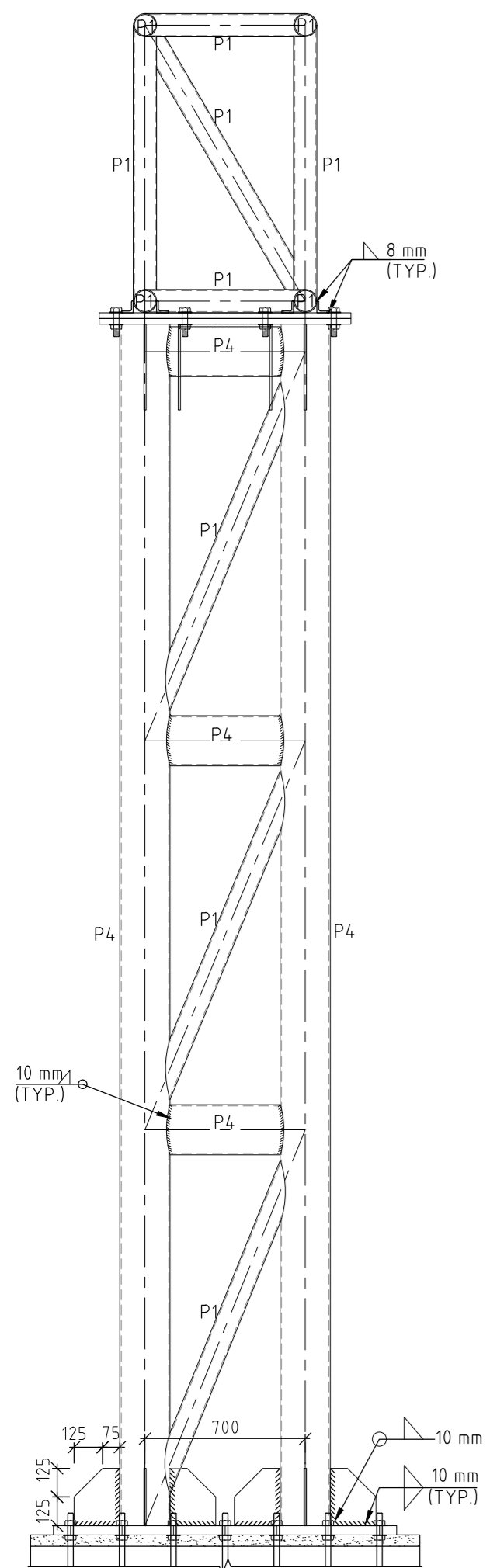


PIPE	NOMINAL BORE (mm)	OUTER DIAMETER (mm)	CLASS
P1	90	101.6	HEAVY
P2	40	48.3	MEDIUM
P3	50	60.3	MEDIUM
P4	200	219.1	HEAVY
P5	250	273.0	HEAVY



- NOTES :**
- ALL THE DIMENSIONS ARE IN MILLIMETER UNLESS SPECIFIED.
 - SAFE BEARING CAPACITY HAS BEEN TAKEN AS 25 TONS/Sqm.
 - THE CONCRETE GRADE SHALL BE M-25.
 - GRADE OF REINFORCEMENT SHALL BE Fe-500 CONFORMING TO IS-1786.
 - CLEAR COVER TO THE OUTER MOST STEEL SHALL BE
i) PEDESTAL - 40mm ii) FOUNDATION - 50mm.
 - STEEL TUBE SHALL CONFORM TO GRADE Yst 240.
 - STEEL TUBE USED SHALL BE CONFORMING TO IS-1161-1998.
 - TUBLER MEMBERS SHALL HAVE ANNULAR CUT HEAD SMOOTH
 - FINISHED SO AS TO HAVE PROPER SEAT OVER THE SUPPORTING TUBE.
 - ELECTRODE USED SHALL CONFORM RELEVANT I.S. SPECIFICATIONS AND THE CHEMICAL COMPOSITION OF ELECTRODE AND THE TUBE SHOULD MATCH.
 - SLAG SHALL BE REMOVED BEFORE MEASURING THE DIMENSIONS OF FILLET WELD.
 - WELDING SHALL BE DONE BY ARC WELDING.
 - 4mm SIZE WELD SHALL BE MADE WITH A SINGLE PASS.
 - WELD SHALL BE DONE ALL ROUND ON THE CONTACT LENGTH OF MEMBERS.
 - HIGH STRENGTH BOLTS SHALL BE OF GRADE 8.8 CONFORMING TO IS-4000-1992.
 - DIA. OF HOLES IN MS PLATED SHALL BE MACHINE MADE FOR 24mm ϕ BOLTS, BOLT HOLE SHALL BE 25.5 mm.
 - SIZE OF LETTERS AND COLOUR OF PAINT SHALL CONFORM.
i) IRC - 67 ii) IRC - 30.
 - SHADE OF ANTICORROSIVE PAINT FOR PIPES SHALL BE DECIDED ENGINEER INCHARGE.
 - RETRO - REFLECTIVE SHEETING SHALL BE AS PER MORTH & H SPECIFICATIONS SECTIONS SECTION 800.
 - THE PEDESTAL SUPPORTING THE GANTRY OR CANTILEVER STRUCTURE OF THE OVERHEAD SIGNS SHALL BE FLUSHED AT THE GROUND LEVEL AND IN NO CASE SHALL PROTRUDE MORE THAN 150mm ABOVE GROUND LEVEL.
 - IN NO CASE THERE SHOULD BE MORE THAN THREE SIGNS DISPLAYED AT ANY ONE LOCATION INCLUDING REGULATORY OR WARNING SIGNS EITHER ON THE OVERHEAD STRUCTURE OR ON ITS SUPPORTS AS PER MORTH.

R2 FEB 2026 FINAL DETAILED PROJECT REPORT R1 DEC 2025 FINAL FEASIBILITY REPORT R0 OCT 2025 DRAFT FEASIBILITY REPORT REV DATE DESCRIPTION OF REVISIONS		SCALE :- AS PER SHOWN	CLIENT:- MINISTRY OF ROAD TRANSPORT AND HIGHWAYS (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)	CONSULTANTS:- AECOM 9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II Gurgaon 122002, Haryana, India	PROJECT:- CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHARSROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).	DWG NO. :- AECOM/TRA-HW/60524499/SD/009 TITLE: STANDARD DRAWINGS TYPICAL ARRANGEMENT FOR OVERHEAD GANTRY (SIMPLY SUPPORTED)	DATE:- FEB. 2026 PAPER:- A2 DRAWN (A) DESIGN (B) CHECKED (C) APPROVED (D)
						HS DK SB BS	



R2	FEB 2026	FINAL DETAILED PROJECT REPORT
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SCALE :- AS PER SHOWN

CLIENT:-

MINISTRY OF ROAD TRANSPORT AND HIGHWAYS
 (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)

CONSULTANTS:-
AECOM
 9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II
 Gurgaon 122002, Haryana, India

PROJECT:-
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TITLE: STANDARD DRAWINGS TYPICAL ARRANGEMENT FOR OVERHEAD GANTRY (SIMPLY SUPPORTED)	DATE:- FEB. 2026	PAPER:-A2	
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ROAD MARKING – ABBREVIATION

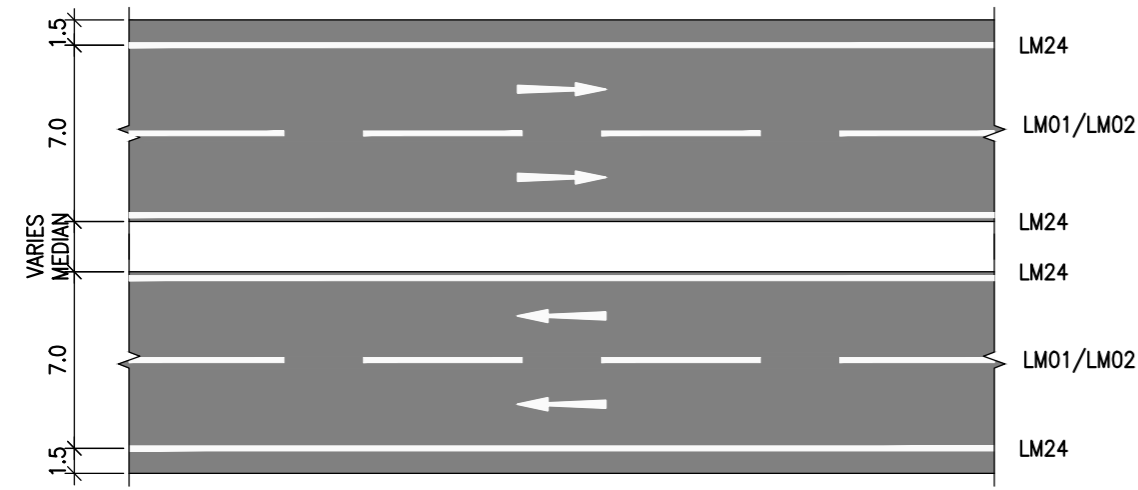
LONGITUDINAL MARKINGS (LM)						
Marking Abbreviation	Type	Length of Line Segment (mm)	Length of Gap (mm)	Width (mm)	Colour	Pattern
LM01	Broken	3000	6000	100	White	
LM02	Broken	3000	6000	150	White	
LM04	Broken	6000	3000	100	White	
LM05	Broken	6000	3000	150	White	
LM11	Broken	3000	3000	100	White	
LM12	Broken	3000	3000	150	White	
LM19	Broken	500	500	100	White	
LM23	Continuous	NA	NA	100	White	
LM24	Continuous	NA	NA	150	White	
LM25	Continuous	NA	NA	200	White	

TRANSVERSE MARKINGS (TM)						
Marking Abbreviation	Type	Length of Line Segment (mm)	Length of Gap (mm)	Width (mm)	Colour	Pattern
TM03	Continuous (Two Lines) separated by 300mm apart)	Two Solid Line		Each Solid Line of 200mm	White	
TM04	Broken	600	300	100	White	

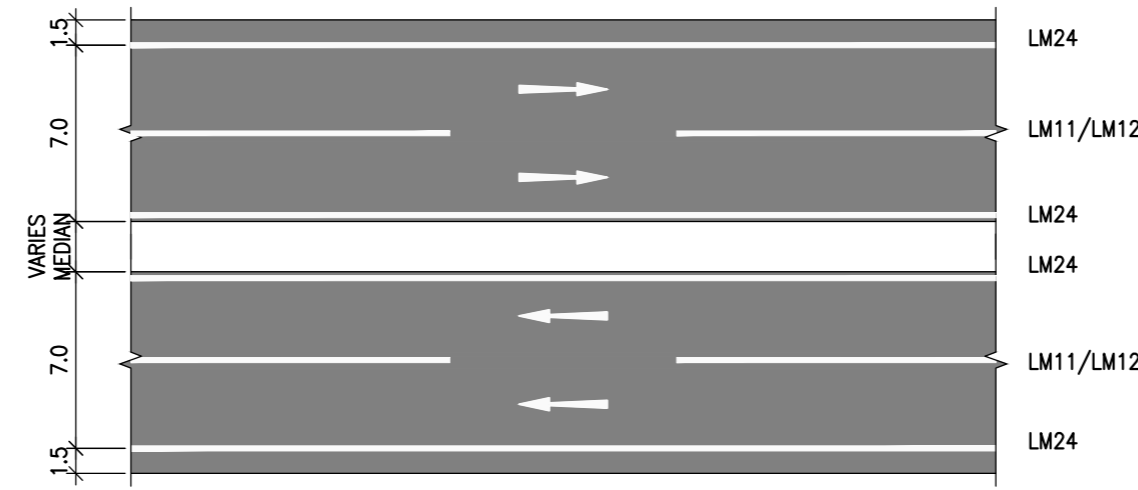
HAZARD MARKINGS (HM)						
Marking Abbreviation	Type	Width (mm)		Space (mm)	Colour	Pattern
		Longitudinal	Diagonal/Chevron			
HM07	Diagonal	150	600	2000	White	

DIRECTIONAL MARKINGS (DM)					
Marking Abbreviation	Type	Width (mm)	Height (mm)	Colour	Pattern
DM01	Direction Information "STOP"	2050	1250	White	
DM02	Direction Information "STOP"	2050	2500	White	

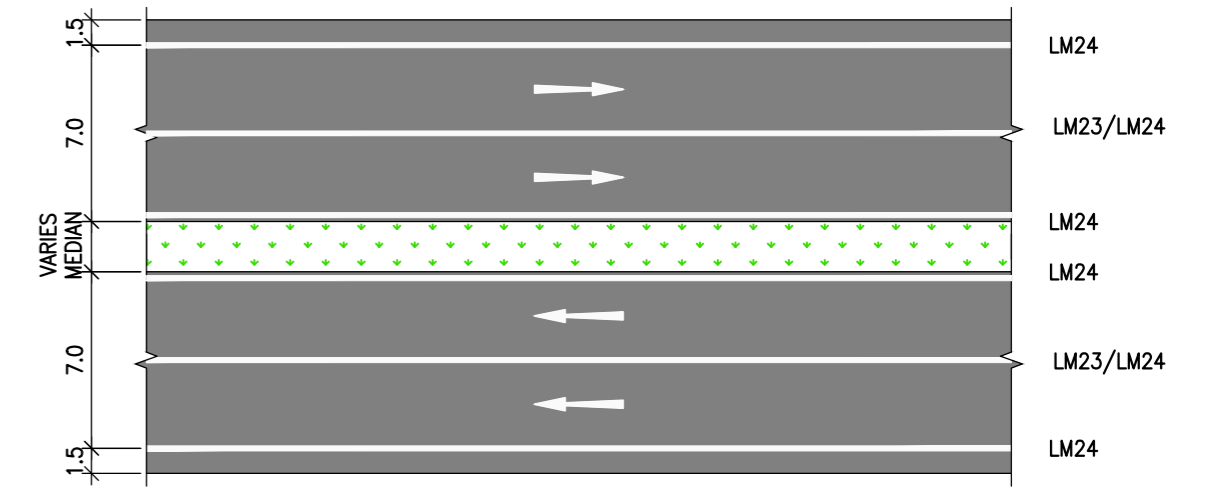
			SCALE :- AS PER SHOWN	CLIENT:- MINISTRY OF ROAD TRANSPORT AND HIGHWAYS (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI – 110 001)	CONSULTANTS:- 9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II Gurgaon 122002, Haryana, India	PROJECT:- CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHARSROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).	DWG NO. :- AECOM/TRA-HW/60524499/SD/011	TITLE: STANDARD DRAWINGS TYPICAL DETAILS OF ROAD MARKING	DATE:- FEB. 2026	PAPER:- A2
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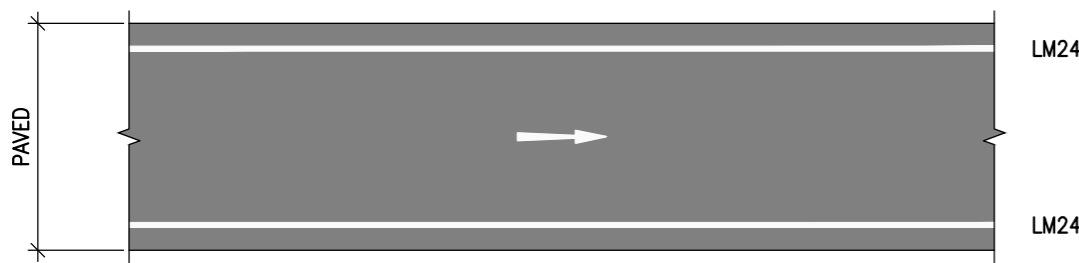
NORMAL SECTION



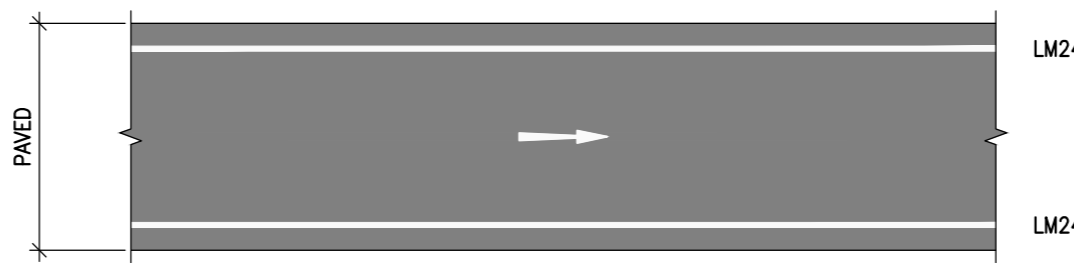
WARNING SECTION
FOUR LANE DIVIDED ROAD



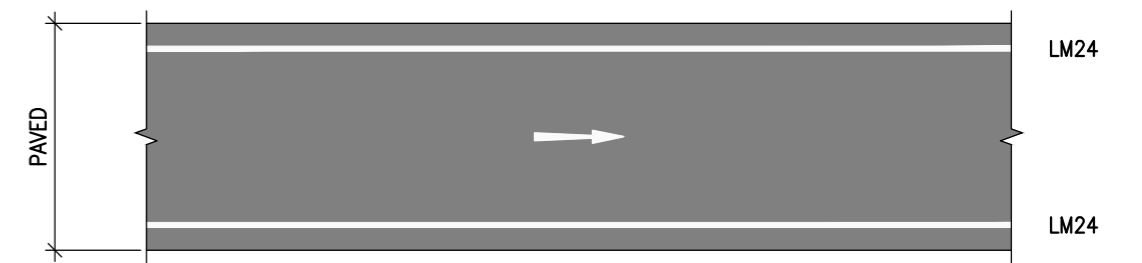
NO-OVERTAKING SECTION



NORMAL SECTION

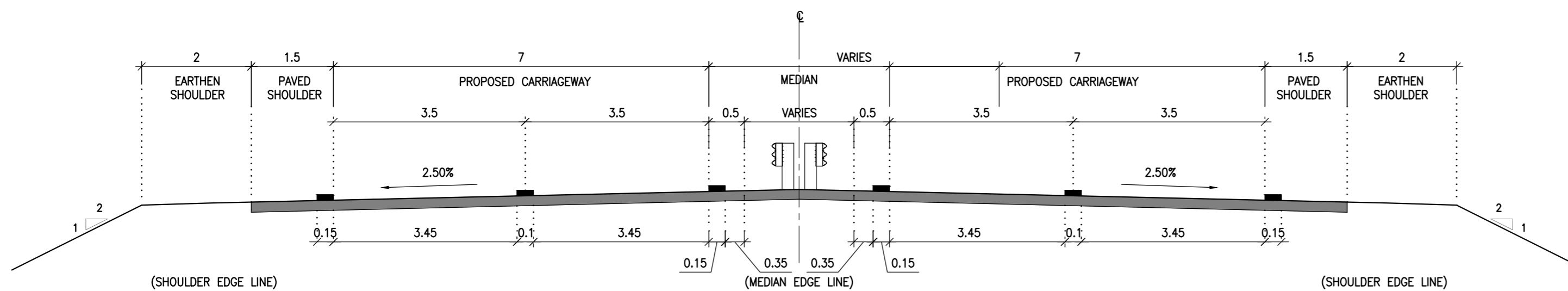


WARNING SECTION
SLIP ROAD / SERVICE ROAD



NO-OVERTAKING SECTION

LONGITUDINAL MARKING (LM)



PLACEMENT OF MARKING (CROSS SECTIONAL VIEW)

■ PAVEMENT MARKING

NOTES:

1. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE MENTIONED.
2. HOT APPLIED THERMOPLASTIC PAINT WITH GLASS BEADS CONFIRMING RELEVANT CLAUSE 803.4 OF MORTH 5TH EDITION SPECIFICATIONS SHALL BE USED AS ROAD MARKING MATERIAL.
3. IF THE CENTRE LINE IS TO BE PAINTED ON THE PAVEMENT ON THE APPROACHES TO A BRIDGE, IT SHALL BE CONTINUED OVER THE BRIDGE PROVIDED THAT THE WIDTH BETWEEN THE KERBS IS 6 M OR MORE. OTHERWISE THE CENTRE LINE MARKING ON APPROACHES SHOULD BE DISCONTINUED AT 30M TO 35M DISTANCE FROM EACH ABUTMENT OF THE BRIDGE.
4. FOR DETAILS OF ABBREVIATIONS SUCH AS LM, TM etc. PLEASE REFER DRAWING NO:016038-C-RP-RD-MS-0012 (SHEET 1 OF 5).
5. WORD MESSAGE: NUMERALS AND WORDS (IN CAPITAL LETTERS) ARE FORMED IN THE SAME MANNER AS FOR ANY WORDED SIGN, LEAVING A MINIMUM OF 0.3 M CLEAR GAP AT EITHER SIDE OF THE LANE / CARRIAGEWAY AND IN BETWEEN THE LETTERS. THE SIZE OF BASIC ALPHABETS AND NUMERALS SHALL BE AS PER ANNEXURE C OF IRC SP 35:-2015. ALL WORD MESSAGES SHALL BE IN WHITE COLOUR.
6. PAVEMENT MARKING SHALL BE DONE BY MEANS OF A SELF-PROPELLED MACHINE WHICH HAS A SATISFACTORY CUT-OFF VOLUME CAPABLE OF APPLYING BRAKES LINE AUTOMATICALLY UNLESS THERE IS SITE CONSTRAINTS.
7. WHERE ARROWS OR LETTERS ARE TO PROVIDED, THERMOPLASTIC COMPOUND MAY BE HAND SPRAYED.
8. THE KERBS IN THE MEDIANS / TRAFFIC ISLANDS SHALL BE PAINTED WITH BLACK AND WHITE STRIPES (BLACK AND YELLOW STRIPES AT HAZARDOUS LOCATIONS) USING THE PAINT CONFORMING TO IS:164.

R2	FEB 2026	FINAL DETAILED PROJECT REPORT
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SCALE :-
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CLIENT:-

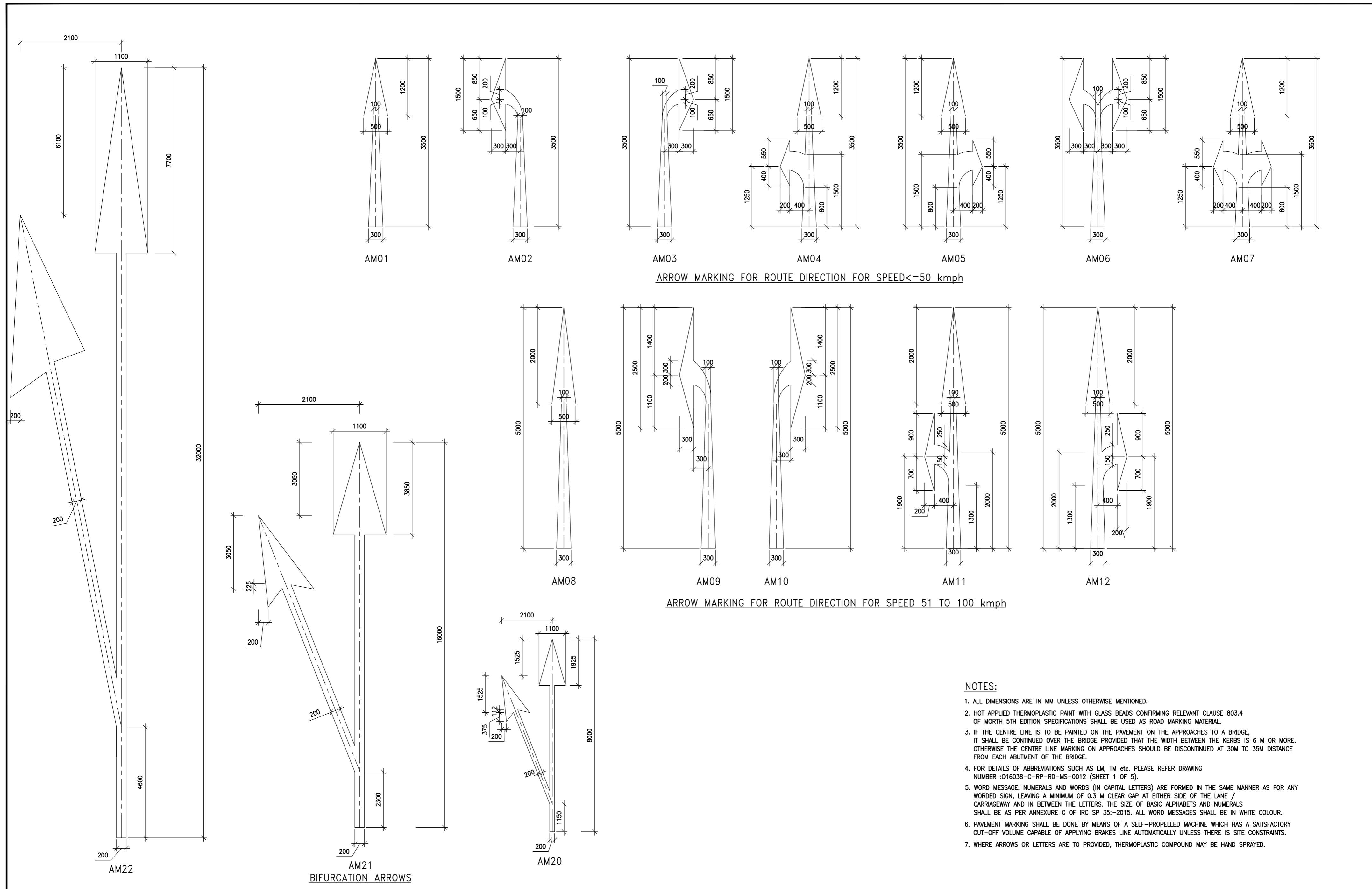
MINISTRY OF ROAD TRANSPORT AND HIGHWAYS
 (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)

CONSULTANTS:-

 9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II
 Gurgaon 122002, Haryana, India

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ARROW MARKING FOR ROUTE DIRECTION FOR SPEED <= 50 kmph

ARROW MARKING FOR ROUTE DIRECTION FOR SPEED 51 TO 100 kmph

- NOTES:**
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 2. HOT APPLIED THERMOPLASTIC PAINT WITH GLASS BEADS CONFIRMING RELEVANT CLAUSE 803.4 OF MORTH 5TH EDITION SPECIFICATIONS SHALL BE USED AS ROAD MARKING MATERIAL.
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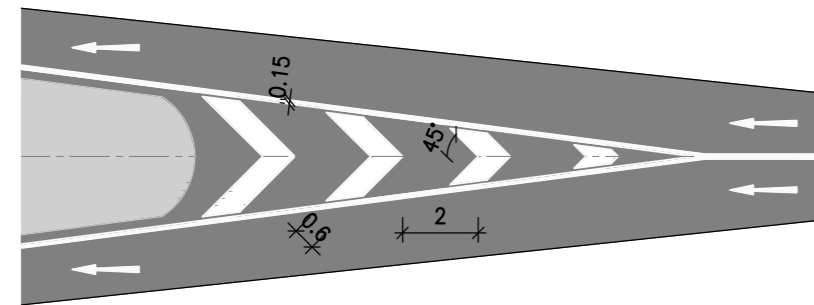
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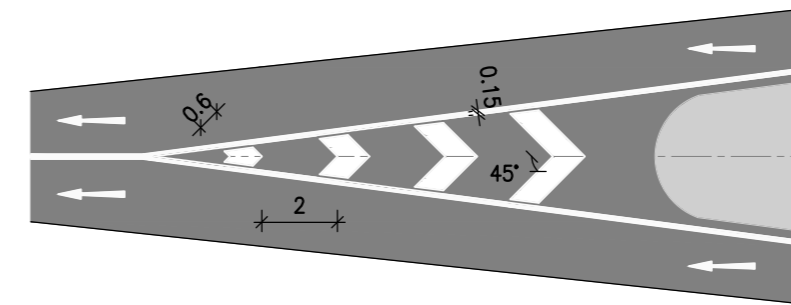
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 Gurgaon 122002, Haryana, India

PROJECT:-
 CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHARSROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).

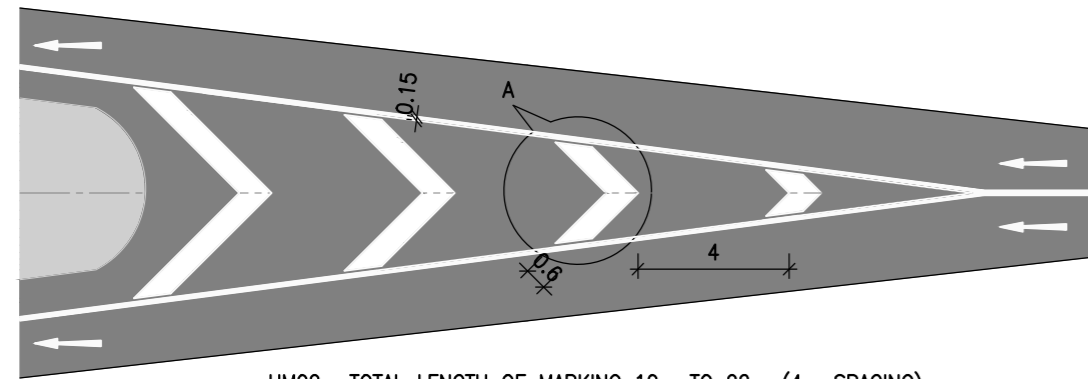
DWG NO. : - AECOM/TRA-HW/60524499/SD/013			
TITLE: STANDARD DRAWINGS TYPICAL DETAILS OF ROAD MARKING		DATE:- FEB. 2026	PAPER:-A2
DRAWN (A)	DESIGN (B)	CHECKED (C)	APPROVED (D)
HS	DK	SB	BS



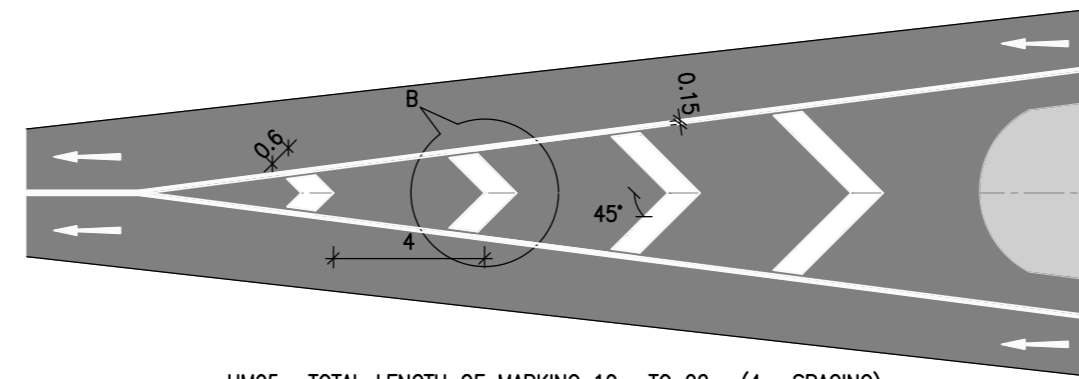
HM01- TOTAL LENGTH OF MARKING < 10m (2m SPACING)



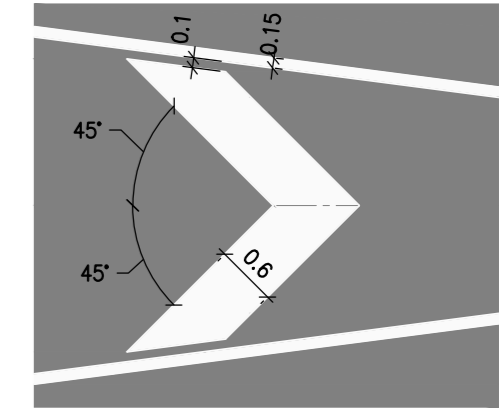
HM04- TOTAL LENGTH OF MARKING < 10m (2m SPACING)



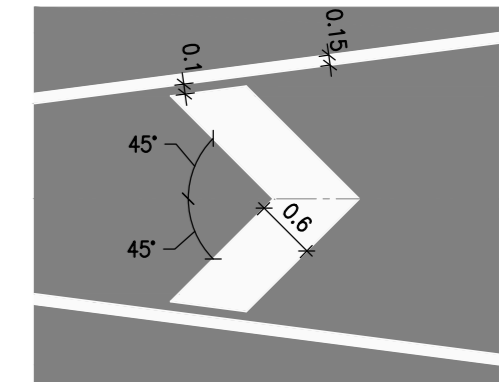
HM02- TOTAL LENGTH OF MARKING 10m TO 22m (4m SPACING)



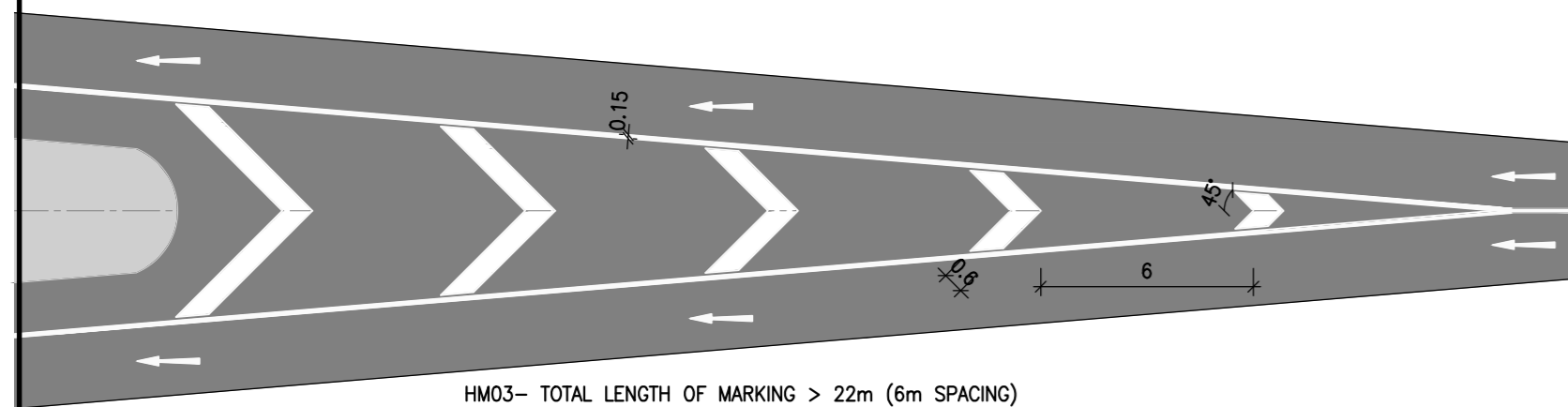
HM05- TOTAL LENGTH OF MARKING 10m TO 22m (4m SPACING)



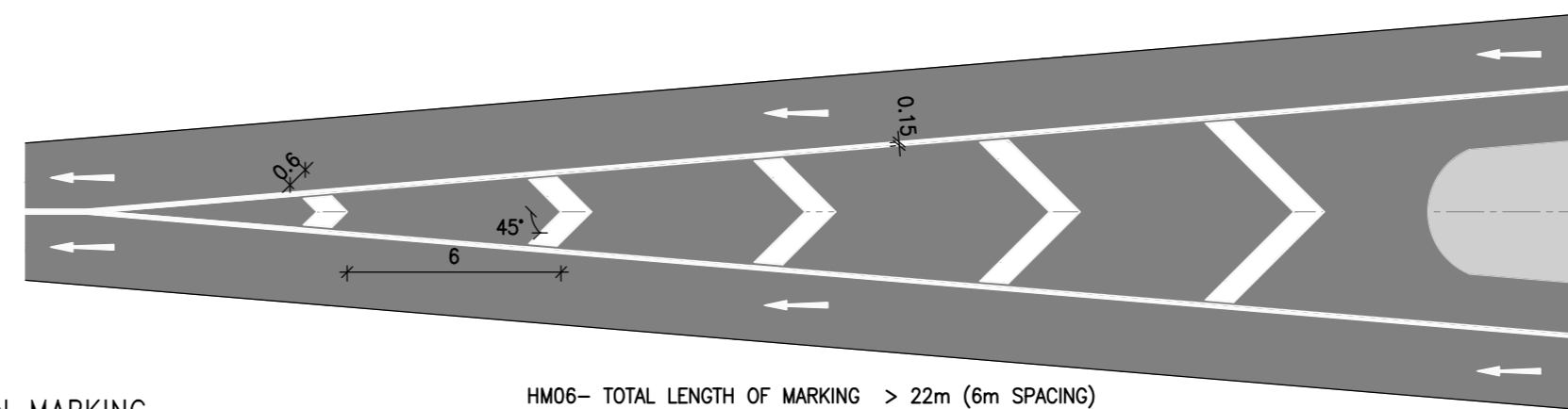
DETAIL - A



DETAIL - B

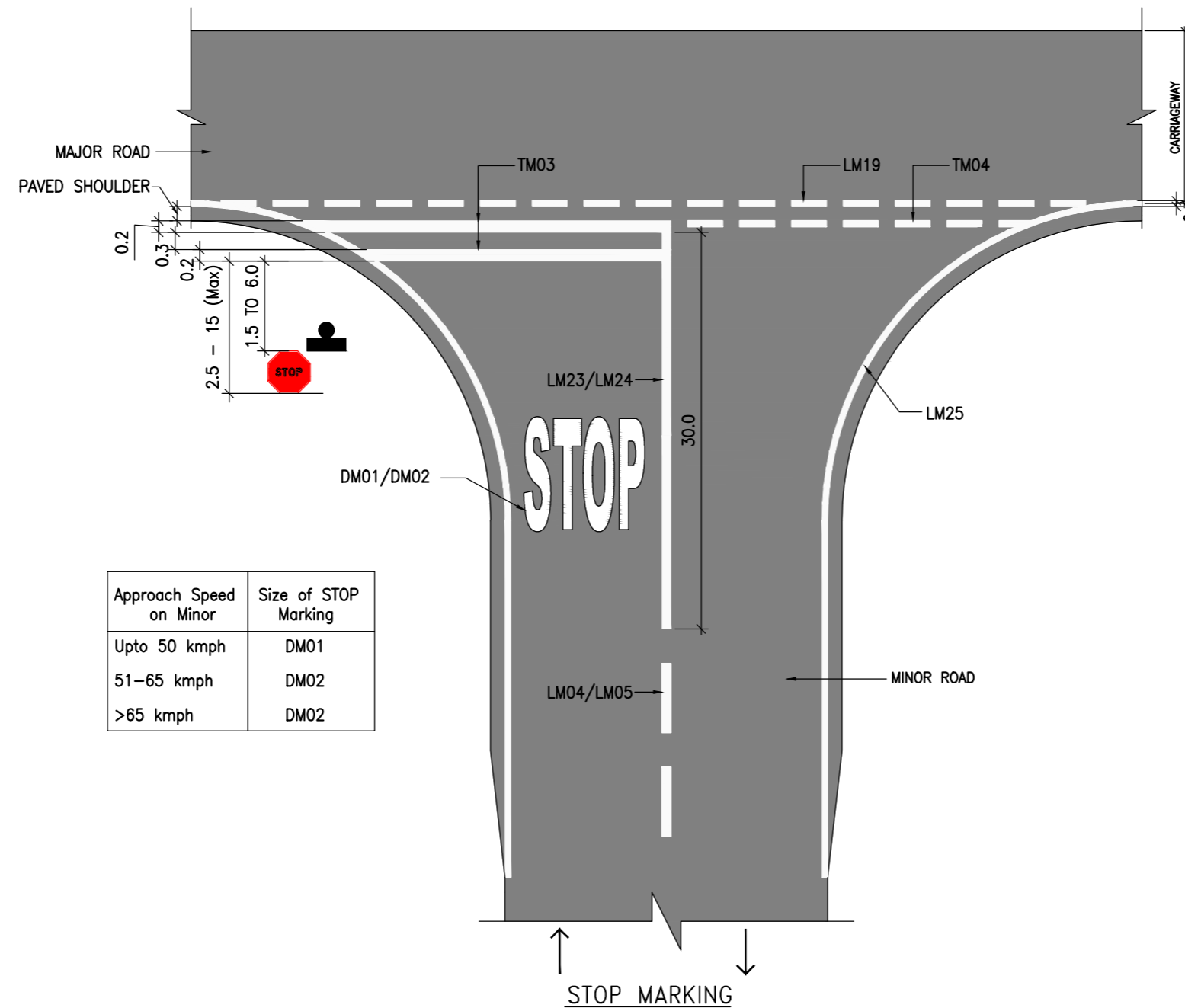


HM03- TOTAL LENGTH OF MARKING > 22m (6m SPACING)
CHEVRON MARKING (DIVERGING)



HM06- TOTAL LENGTH OF MARKING > 22m (6m SPACING)
CHEVRON MARKING (MERGING)

CHEVRON MARKING



Approach Speed on Minor	Size of STOP Marking
Upto 50 kmph	DM01
51-65 kmph	DM02
>65 kmph	DM02

NOTES:

- ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE MENTIONED.
- HOT APPLIED THERMOPLASTIC PAINT WITH GLASS BEADS CONFIRMING RELEVANT CLAUSE 803.4 OF WORTH 5TH EDITION SPECIFICATIONS SHALL BE USED AS ROAD MARKING MATERIAL.
- IF THE CENTRE LINE IS TO BE PAINTED ON THE PAVEMENT ON THE APPROACHES TO A BRIDGE, IT SHALL BE CONTINUED OVER THE BRIDGE PROVIDED THAT THE WIDTH BETWEEN THE KERBS IS 6 M OR MORE. OTHERWISE THE CENTRE LINE MARKING ON APPROACHES SHOULD BE DISCONTINUED AT 30M TO 35M DISTANCE FROM EACH ABUTMENT OF THE BRIDGE.
- FOR DETAILS OF ABBREVIATIONS SUCH AS LM, TM etc. PLEASE REFER DRAWING NUMBER :016038-C-RP-RD-MS-0012 (SHEET 1 OF 5).
- WORD MESSAGE: NUMERALS AND WORDS (IN CAPITAL LETTERS) ARE FORMED IN THE SAME MANNER AS FOR ANY WORDED SIGN, LEAVING A MINIMUM OF 0.3 M CLEAR GAP AT EITHER SIDE OF THE LANE / CARRIAGEWAY AND IN BETWEEN THE LETTERS. THE SIZE OF BASIC ALPHABETS AND NUMERALS SHALL BE AS PER ANNEXURE C OF IRC SP 35--2015. ALL WORD MESSAGES SHALL BE IN WHITE COLOUR.
- PAVEMENT MARKING SHALL BE DONE BY MEANS OF A SELF-PROPELLED MACHINE WHICH HAS A SATISFACTORY CUT-OFF VOLUME CAPABLE OF APPLYING BRAKES LINE AUTOMATICALLY UNLESS THERE IS SITE CONSTRAINTS.
- WHERE ARROWS OR LETTERS ARE TO PROVIDED, THERMOPLASTIC COMPOUND MAY BE HAND SPRAYED.
- CHEVRON MARKING:
 - * ALL LENGTHS & SPACING AS SHOWN IN THE FIGURES ARE MEASURED PARALLEL TO ROAD CENTRE LINE.
 - * WIDTH OF ALL CHEVRONS MEASURED AT RIGHT ANGLES TO THE CHEVRONS IS 600MM.
 - * MINIMUM GAP OF 100MM TO BE PROVIDED BETWEEN CONTINUOUS LINE AND CHEVRON TO FACILITATE DRAINAGE OF SURFACE RUN OFF.
 - * TOTAL LENGTH OF CHEVRON MARKING SHOWN BE SUCH THAT TO ACCOMODATE ATLEAST TWO OR THREE CHEVRONS.

REV	DATE	DESCRIPTION OF REVISIONS
R2	FEB 2026	FINAL DETAILED PROJECT REPORT
R1	DEC 2025	FINAL FEASIBILITY REPORT
R0	OCT 2025	DRAFT FEASIBILITY REPORT

SCALE: -
AS PER SHOWN

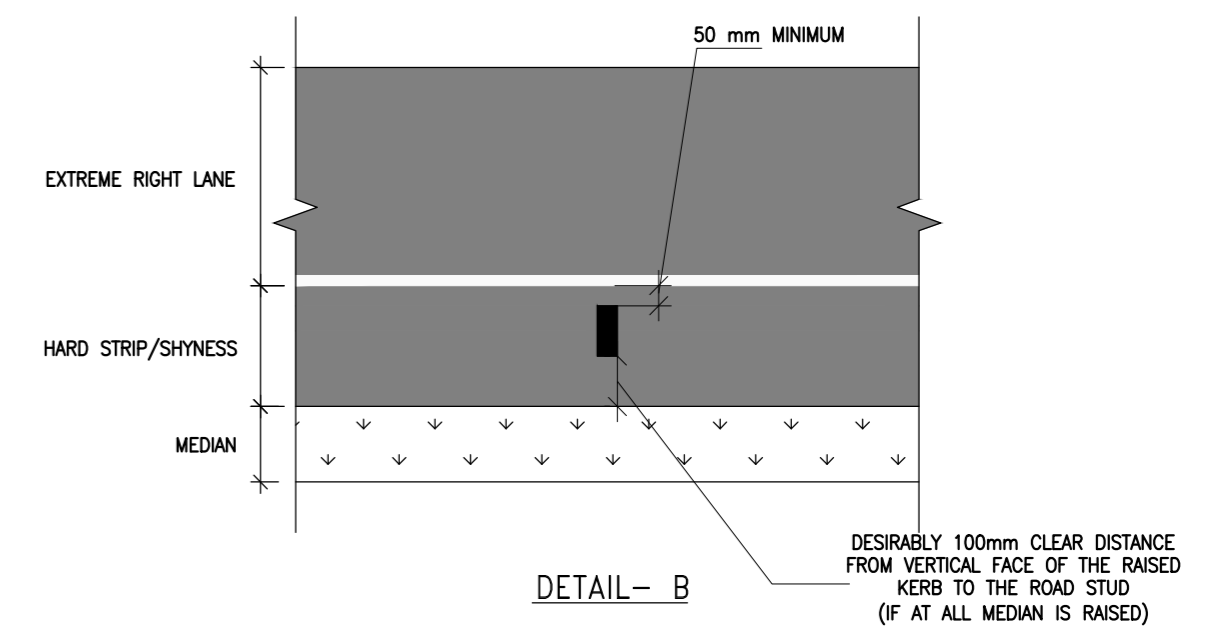
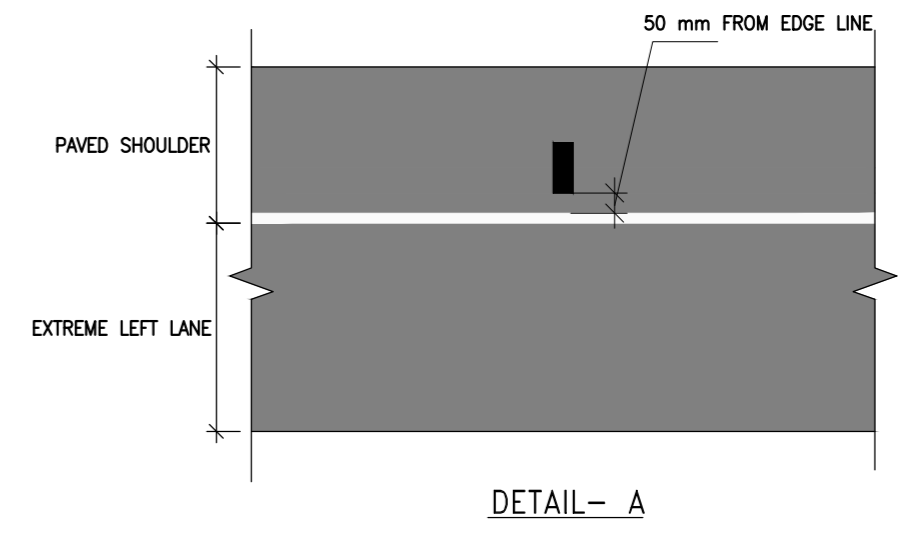
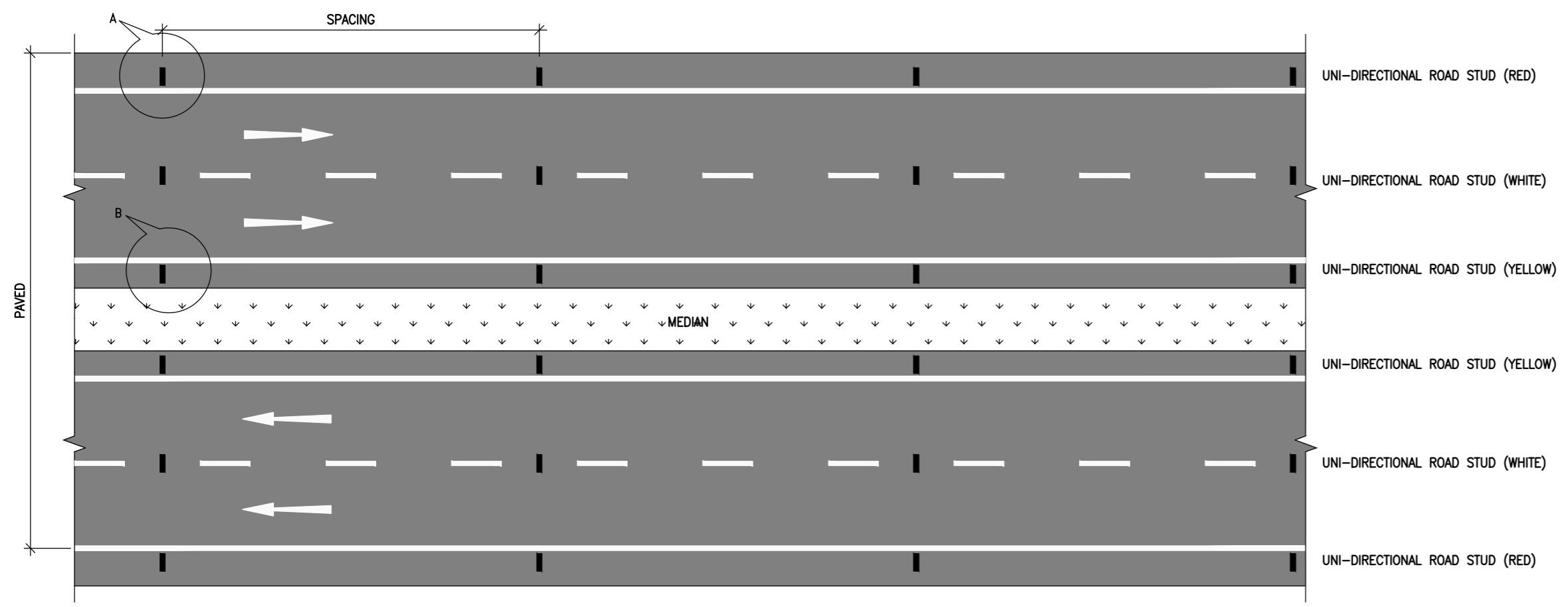
CLIENT:-

MINISTRY OF ROAD TRANSPORT AND HIGHWAYS
(TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)

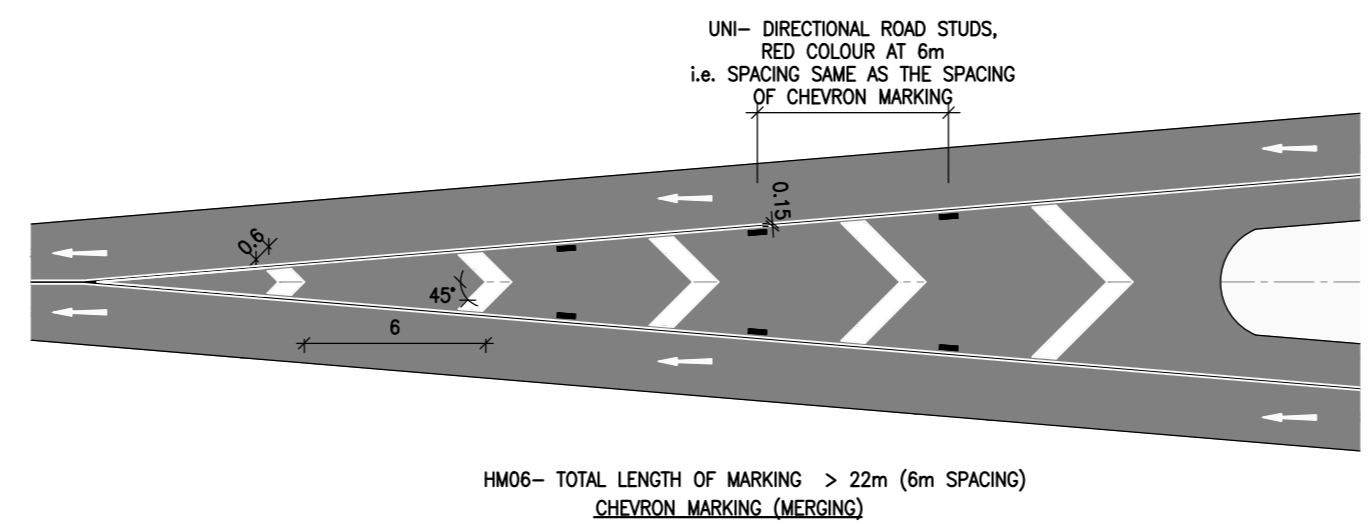
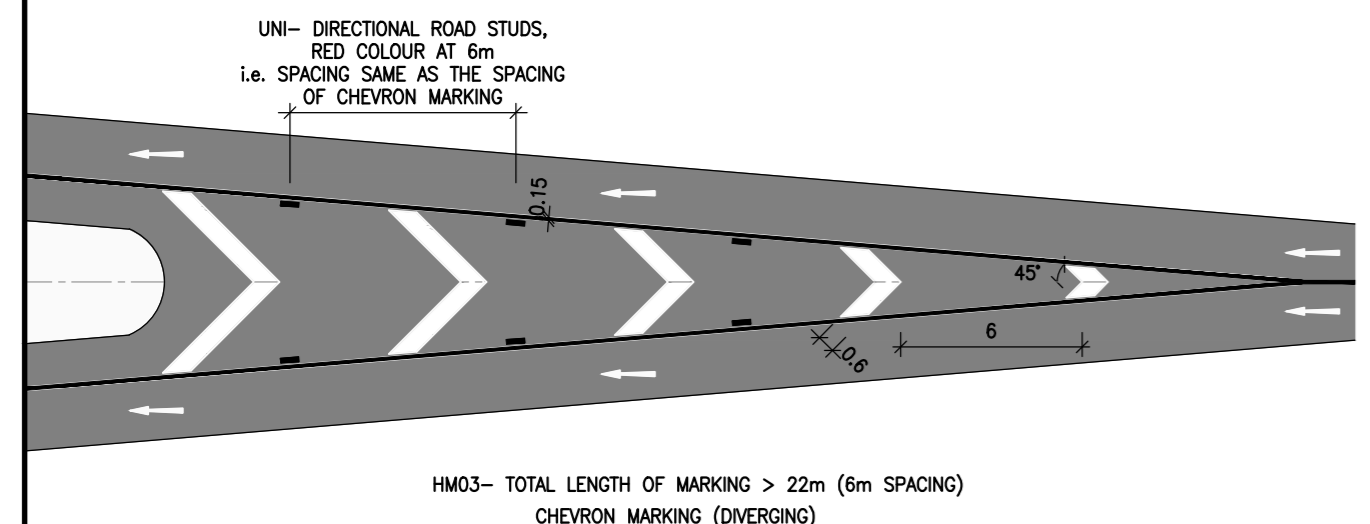
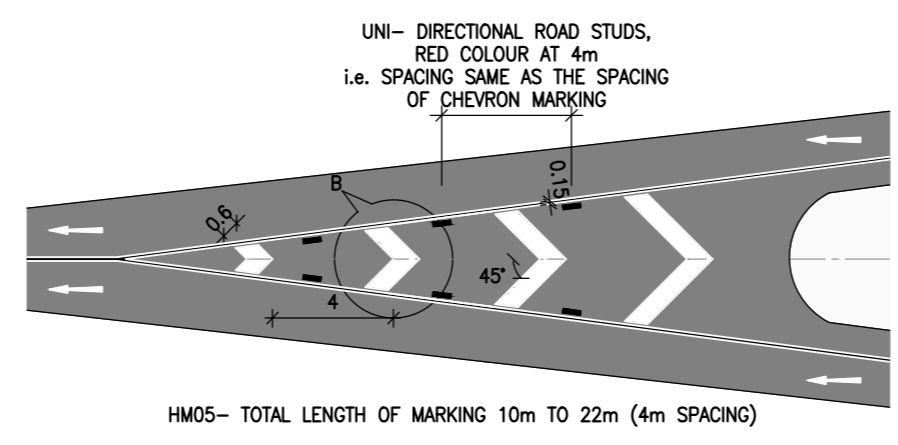
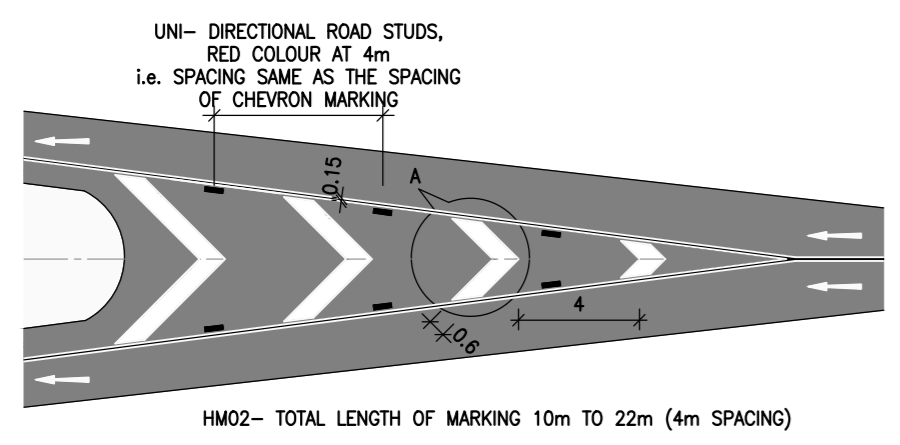
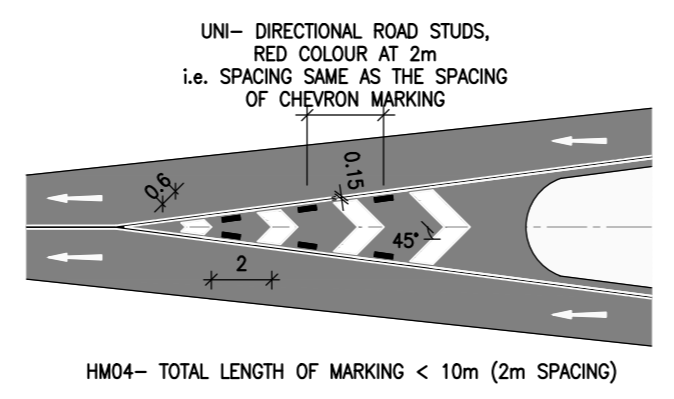
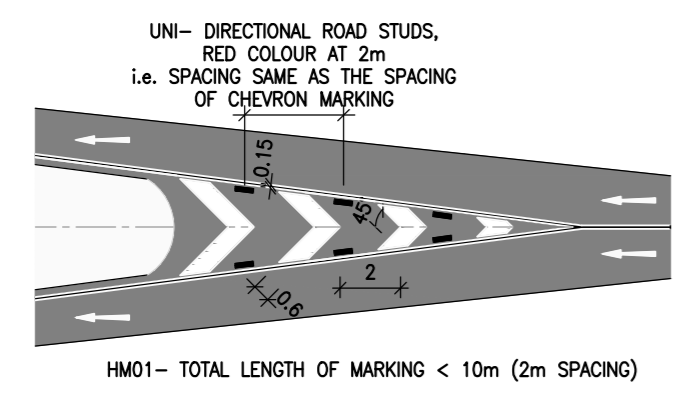
CONSULTANTS:-
AECOM
9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II
Gurgaon 122002, Haryana, India

PROJECT:-
CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHARSROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).

DWG NO.: - AECOM/TRA-HW/60524499/SD/014			
TITLE: STANDARD DRAWINGS TYPICAL DETAILS OF ROAD MARKING	DATE:- FEB. 2026	PAPER:-A2	
DRAWN (A)	DESIGN (B)	CHECKED (C)	APPROVED (D)
HS	DK	SB	BS



TYPICAL DETAILS OF UNIDIRECTIONAL ROAD STUDS / REFLECTIVE ROAD PAVEMENT MARKERS (RRPM)



ROAD STUDS FOR CHEVRON MARKING

NOTES:

- ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE MENTIONED.
- HOT APPLIED THERMOPLASTIC PAINT WITH GLASS BEADS CONFIRMING RELEVANT CLAUSE 803.4 OF MORTH 5TH EDITION SPECIFICATIONS SHALL BE USED AS ROAD MARKING MATERIAL.
- IF THE CENTRE LINE IS TO BE PAINTED ON THE PAVEMENT ON THE APPROACHES TO A BRIDGE, IT SHALL BE CONTINUED OVER THE BRIDGE PROVIDED THAT THE WIDTH BETWEEN THE KERBS IS 6 M OR MORE. OTHERWISE THE CENTRE LINE MARKING ON APPROACHES SHOULD BE DISCONTINUED AT 30M TO 35M DISTANCE FROM EACH ABUTMENT OF THE BRIDGE.
- FOR DETAILS OF ABBREVIATIONS SUCH AS LM, TM etc. PLEASE REFER DRAWING NUMBER :018038-C-RP-RD-MS-0012 (SHEET 1 OF 5).
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- PAVEMENT MARKING SHALL BE DONE BY MEANS OF A SELF-PROPELLED MACHINE WHICH HAS A SATISFACTORY CUT-OFF VOLUME CAPABLE OF APPLYING BRAKES LINE AUTOMATICALLY UNLESS THERE IS SITE CONSTRAINTS.
- WHERE ARROWS OR LETTERS ARE TO PROVIDED, THERMOPLASTIC COMPOUND MAY BE HAND SPRAYED.
- ROAD STUDS:
 - * TECHNICAL SPECIFICATION OF ROAD STUD SHALL BE AS PER CLAUSE 804 OF MORTH 5TH EDITION SPECIFICATIONS AND ASTM D 4280-04.
 - * THE STUDS WITH ANCHORAGE OR WITHOUT ANCHORAGE CAN BE BONDED TO ROAD SURFACE WITH SUITABLE EPOXY/BITUMEN ADHESIVE AS RECOMMENDED TO THE MANUFACTURER.
 - * ROAD STUDS WITH ANCHORAGE ARE PREFERABLE FOR EDGE LINES. IF AT ALL THE ROAD STUDS WITH ANCHORAGE ARE TO BE APPLIED TO ROAD MARKINGS OTHER THAN EDGE LINES, THE ANCHORAGE SHALL BE APPLIED ENSURING PROPER WORKMANSHIP SO THAT PAVEMENT STRUCTURE WILL NOT BE AFFECTED DURING INSTALLATION PROCESS. HOWEVER, THE ROAD STUDS WITH ANCHORAGES ARE NOT RECOMMENDED FOR CONCRETE ROADS.
 - * ROAD STUDS SHALL BE PROVIDED AS PER TABLE 9.1 OF IRC SP 84 : 2014, WHEREVER APPLICABLE.

R2	FEB 2026	FINAL DETAILED PROJECT REPORT
R1	DEC 2025	FINAL FEASIBILITY REPORT
R0	OCT 2025	DRAFT FEASIBILITY REPORT
REV	DATE	DESCRIPTION OF REVISIONS

SCALE: -
AS PER SHOWN

CLIENT:-

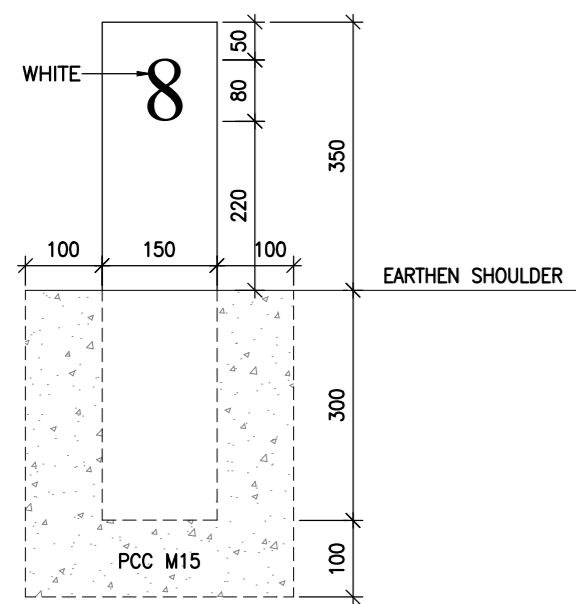
MINISTRY OF ROAD TRANSPORT AND HIGHWAYS
 (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)

CONSULTANTS:-

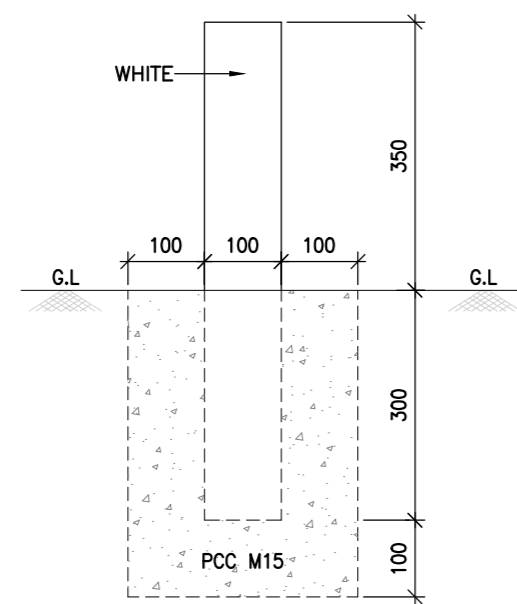
 9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II
 Gurgaon 122002, Haryana, India

PROJECT:-
 CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHRASROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).

DWG NO.: - AECOM/TRA-HW/60524499/SD/015			
TITLE: STANDARD DRAWINGS TYPICAL DETAILS OF ROAD MARKING		DATE:- FEB. 2026	PAPER:-A2
DRAWN (A)	DESIGN (B)	CHECKED (C)	APPROVED (D)
HS	DK	SB	BS

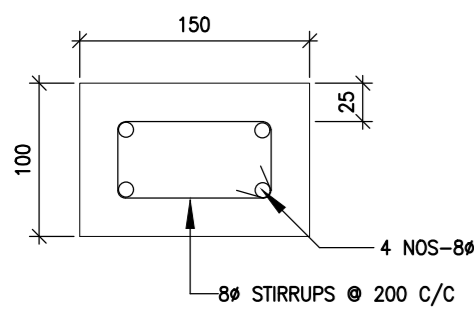


FRONT ELEVATION

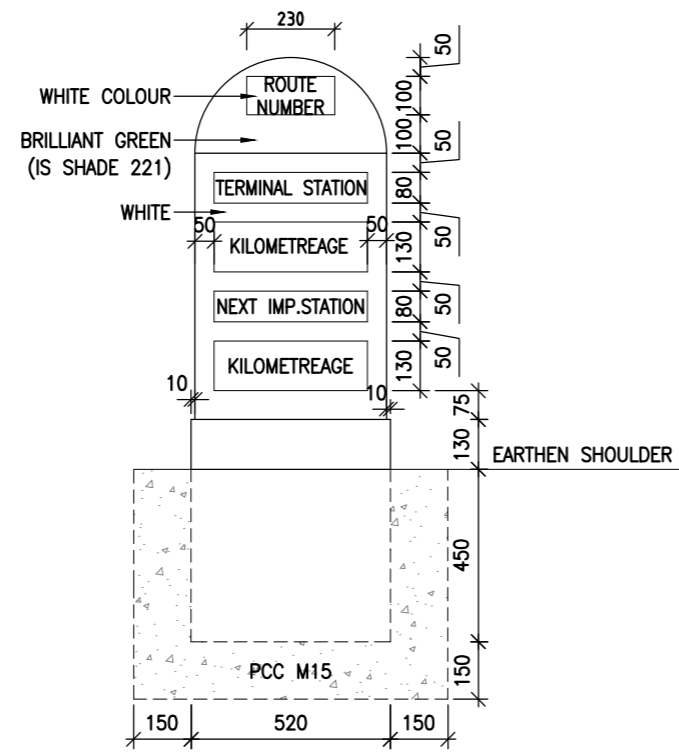


SIDE ELEVATION

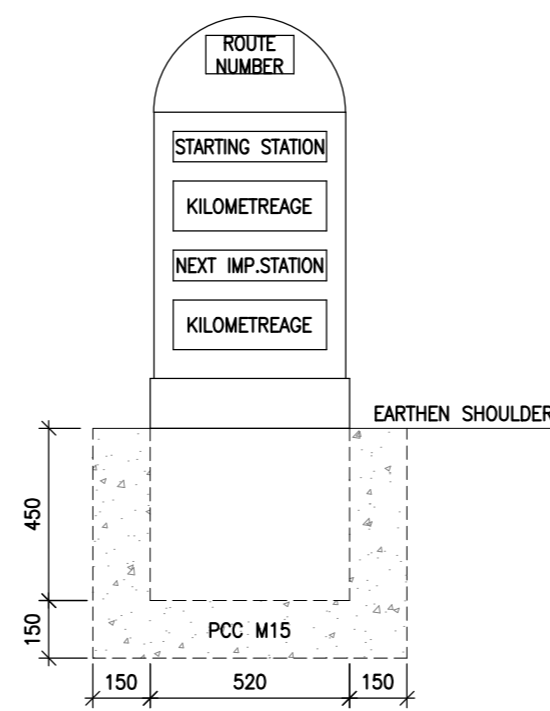
HECTOMETRE STONE



SECTION PLAN

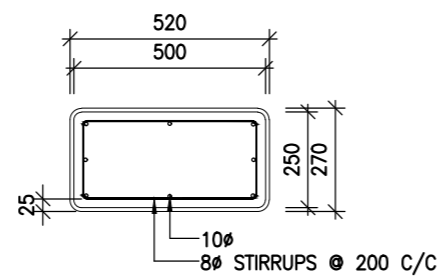


ELEVATION

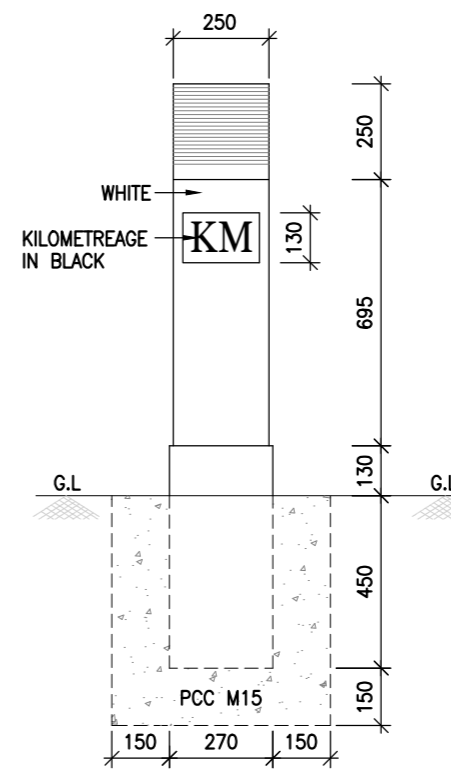


ELEVATION

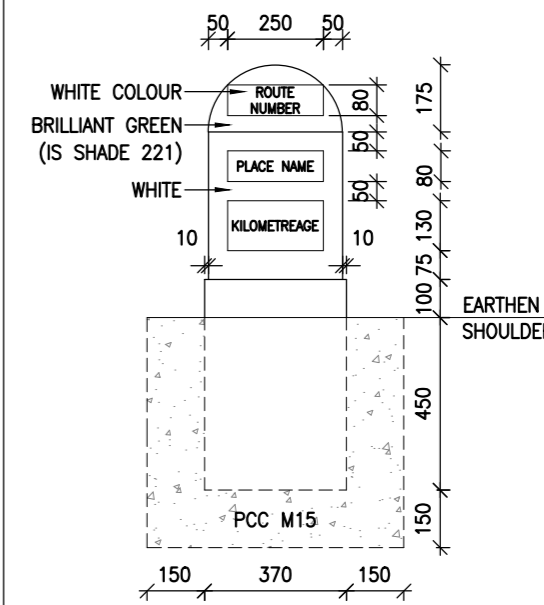
FIFTH KILOMETRE STONE



SECTIONAL PLAN

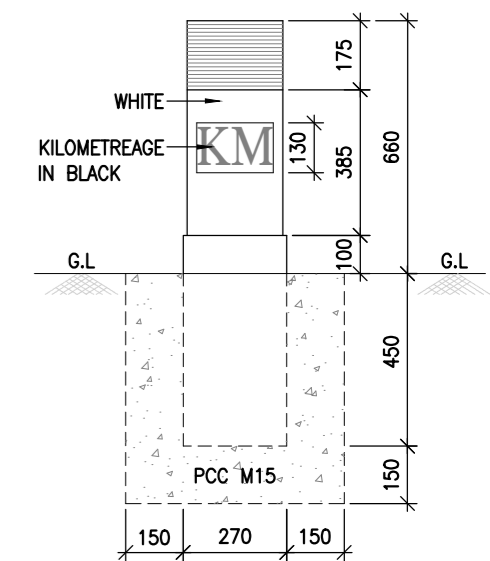


SIDE ELEVATION



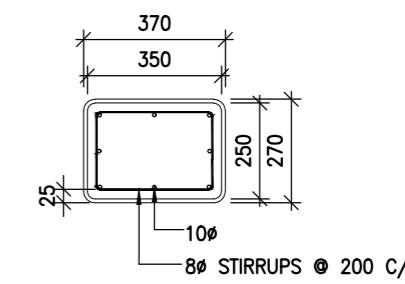
FACE-I & II

ELEVATION

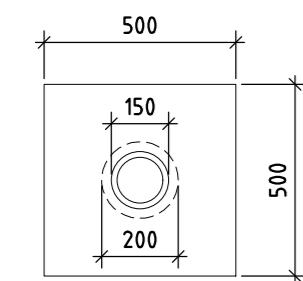


SIDE ELEVATION

KILOMETRE STONE



SECTIONAL PLAN



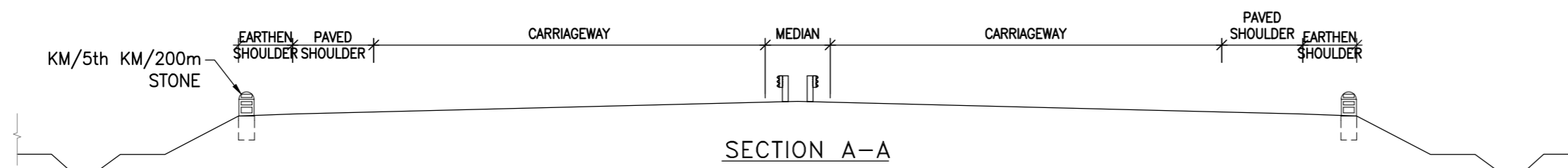
SECTIONAL PLAN

DETAILS OF BOUNDARY STONE

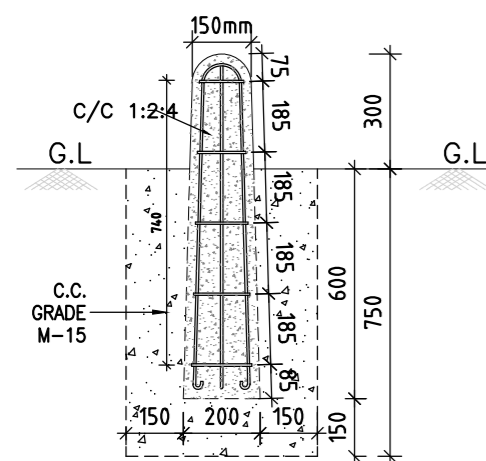
BAR BENDING SCHEDULE FOR R.C.C. BOUNDARY STONE					
S.NO	TYPE OF M.S. BAR	NO OF BARS	SHAPE OF BARS	DIA IN mm	LENGTH OF ONE BAR INCLUDING HOOKS
1.	MAIN BARS	2		6mm	1.84m
2.	TOP MOST STIRRUP	1		6mm	370mm
3.	STIRRUP (FIRST FROM TOP)	1		6mm	405mm
4.	STIRRUP (SECOND FROM TOP)	1		6mm	440mm
5.	STIRRUP (THIRD FROM TOP)	1		6mm	475mm
6.	BOTTOM MOST STIRRUP	1		6mm	810mm

NOTES:

- ALL DIMENSION ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
- KILOMETER STONE/FIFTH KILOMETER STONE/HECTOMETER STONE SHALL BE CONSTRUCTED IN RCC M20.
- FOUNDATION OF KILOMETER STONE/HECTOMETER STONE/FIFTH KILOMETER STONE SHALL BE IN PCC M15 GRADE.
- ALL NUMERALS & LETTERS SHALL BE PAINTED IN BLACK.
- SIZE OF LETTER AND NUMERAL SHALL BE AS PER IRC 8-1980.
- STEEL REINFORCEMENT SHALL BE MILD STEEL Fe250.
- BOUNDARY STONES SHALL BE PAINTED WITH CEMENT PRIMER & ENAMEL PAINT AND MARKED 'RBS' BY PAINT AND SHALL BE PLACED AT 50m INTERVAL.
- BOUNDARY STONES SHALL BE OF CEMENT CONCRETE AS PER IRC: 25.
- HECTOMETER STONE SHALL BE PAINTED IN WHITE.
- KILOMETER STONE AND FIFTH KILOMETER STONE SHALL BE PAINTED AS SHOWN IN THE DRAWING.
- STATION NAMES SHALL BE WRITTEN EITHER IN HINDI (DEVNAGRI SCRIPT) OR LOCAL LANGUAGE (LOCAL STANDARD PRACTICE FONT).
- STARTING/TERMINAL STATION NAMES SHALL BE WRITTEN IN ROMAN SCRIPT AS PER IRC: 8-1980.
- THE STONES EXCEPT BOUNDARY STONES MAY BE PLACED IN MEDIAN BASED ON SITE CONDITIONS.



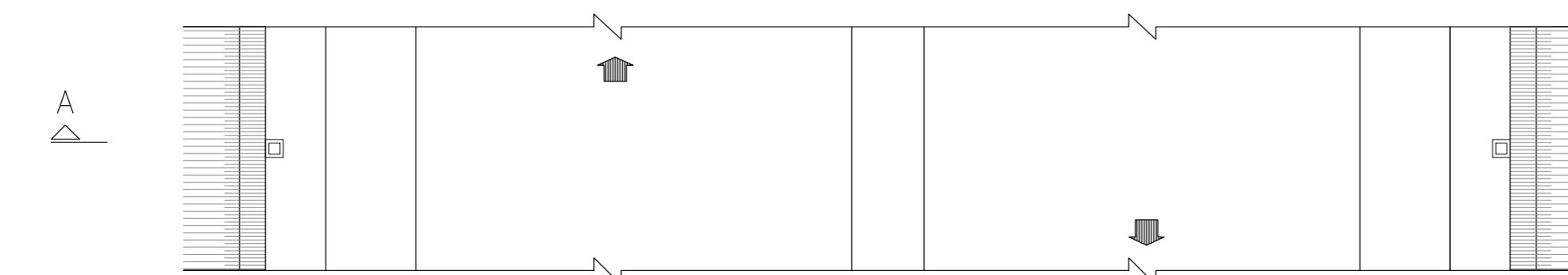
SECTION A-A



ELEVATION

RCC AS MATERIAL

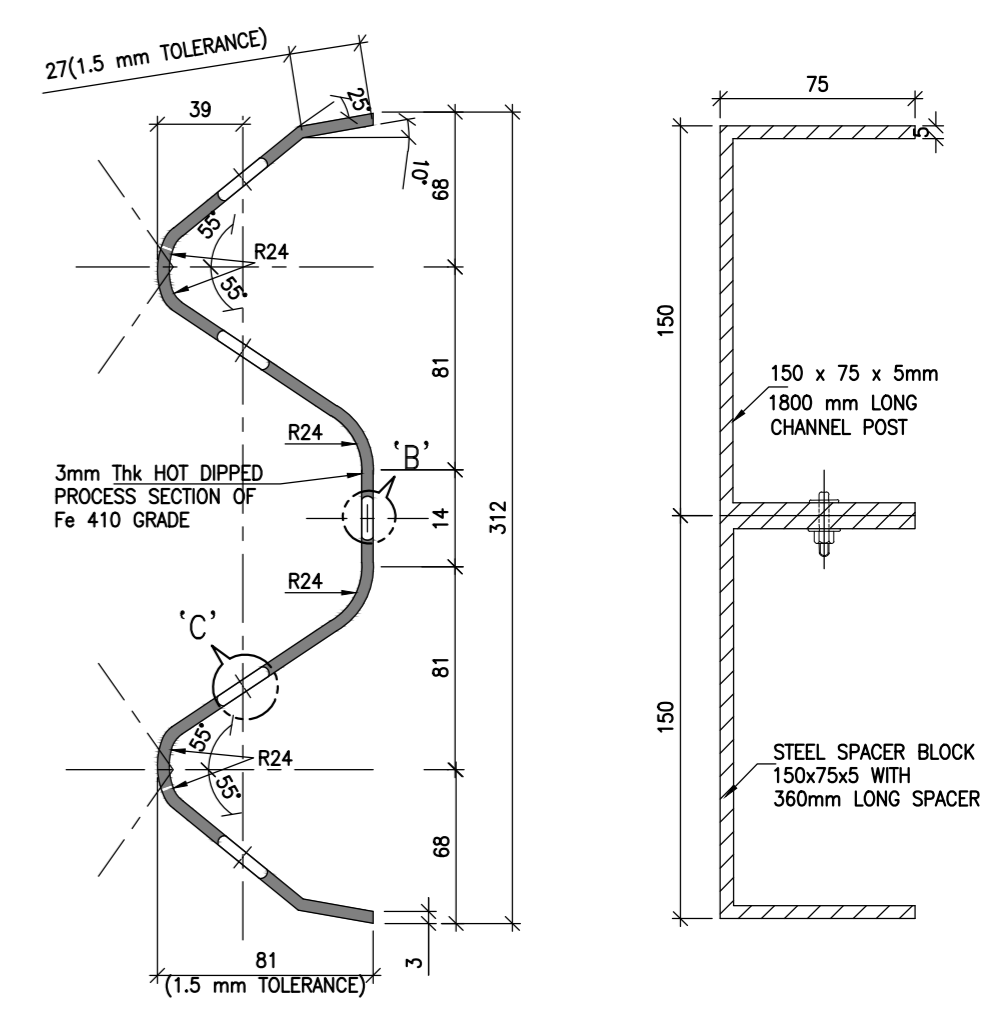
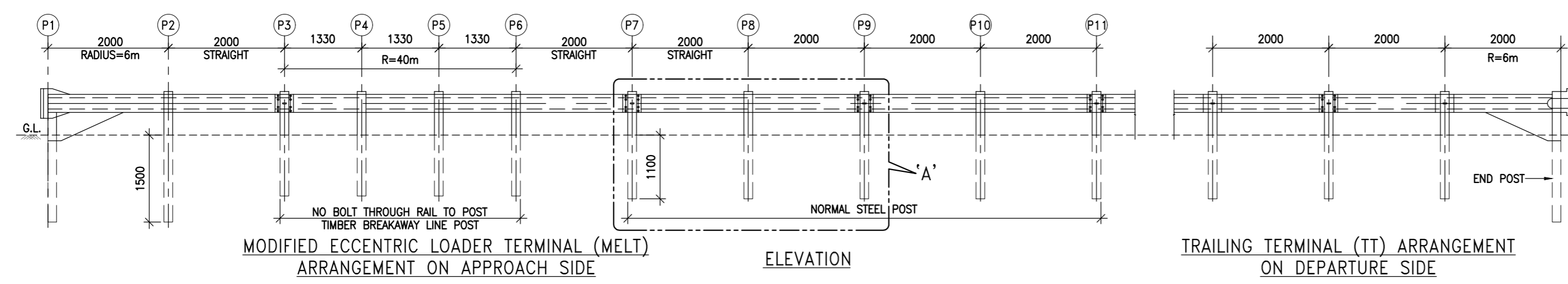
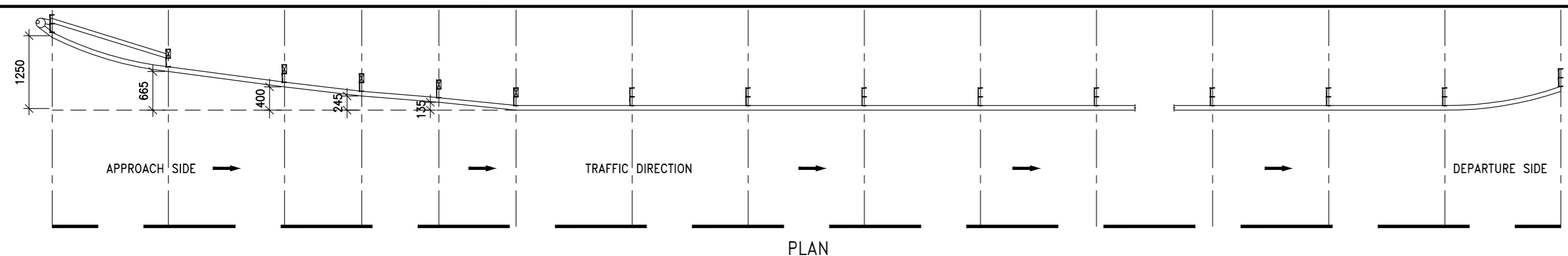
ROAD BOUNDARY STONE (RBS)



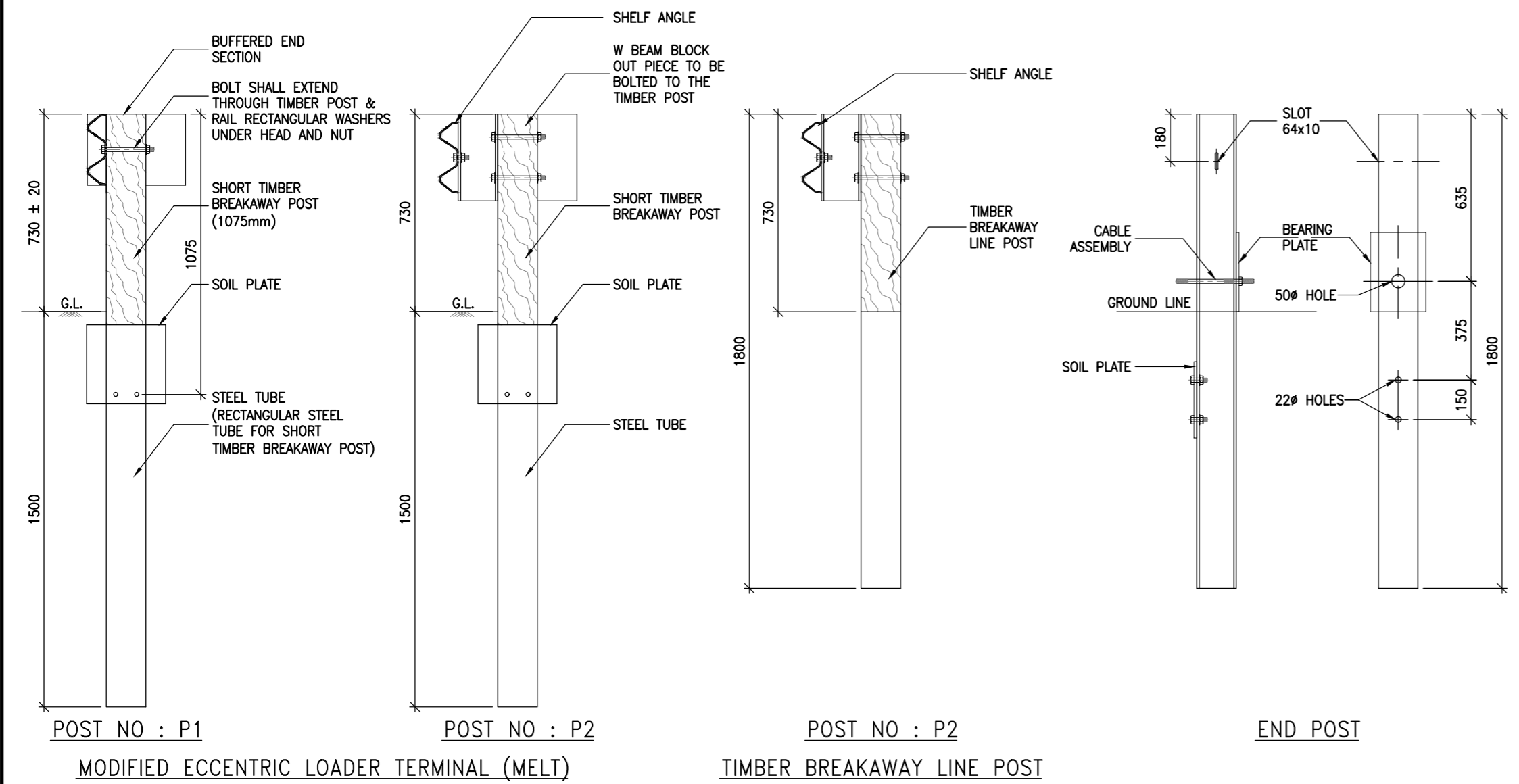
PLAN

LOCATION OF KILOMETER/5th KILOMETER & 200 METER STONE

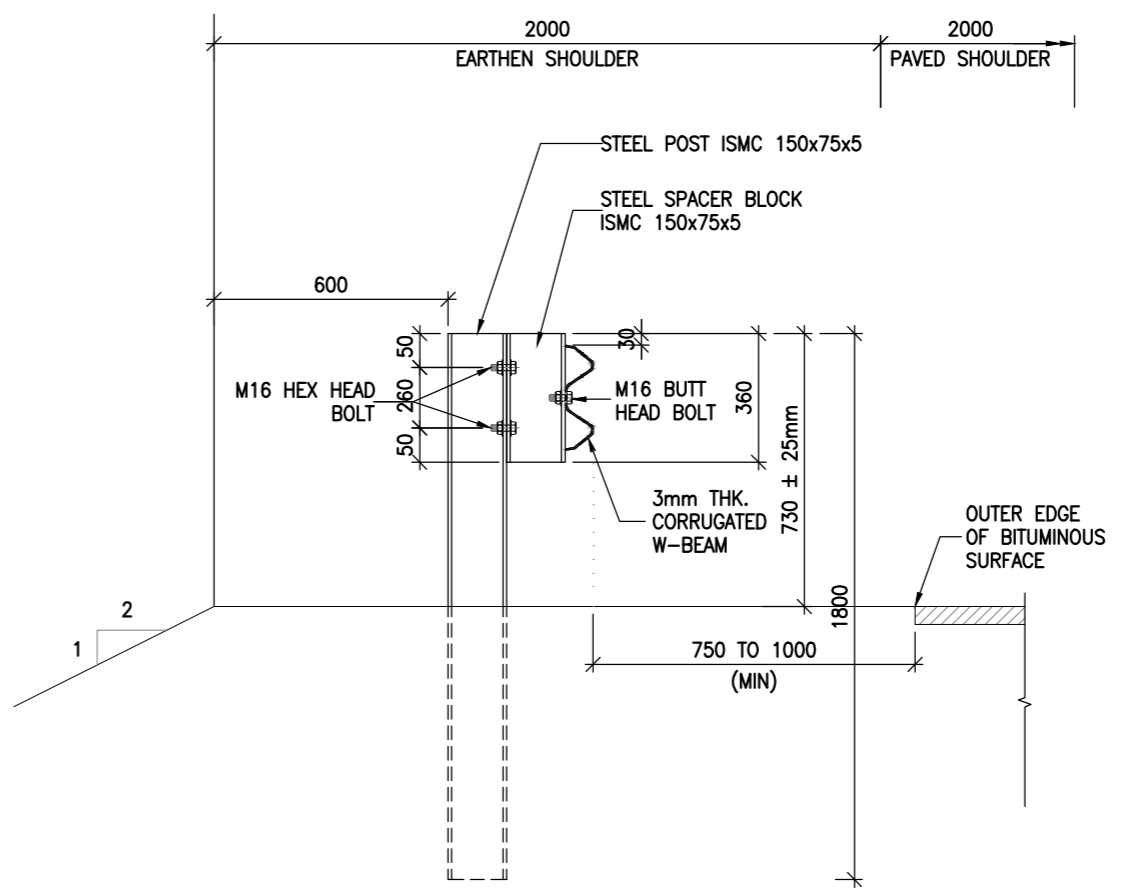
SCALE :- AS PER SHOWN		CLIENT:- MINISTRY OF ROAD TRANSPORT AND HIGHWAYS (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)		CONSULTANTS:- 9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II Gurgaon 122002, Haryana, India		PROJECT:- CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHRASROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).		DWG NO.: - AECOM/TRA-HW/60524499/SD/016	
R2	FEB 2026	FINAL DETAILED PROJECT REPORT		TITLE: STANDARD DRAWINGS		DATE:- FEB. 2026		PAPER:-A2	
R1	DEC 2025	FINAL FEASIBILITY REPORT		TYPICAL DETAILS OF KILOMETER, 5th KM STONE, 200m HECTOMETER & BOUNDRY STONE DETAILS		DRAWN (A) DESIGN (B) CHECKED (C) APPROVED (D)		HS DK SB BS	
R0	OCT 2025	DRAFT FEASIBILITY REPORT							
REV	DATE	DESCRIPTION OF REVISIONS							



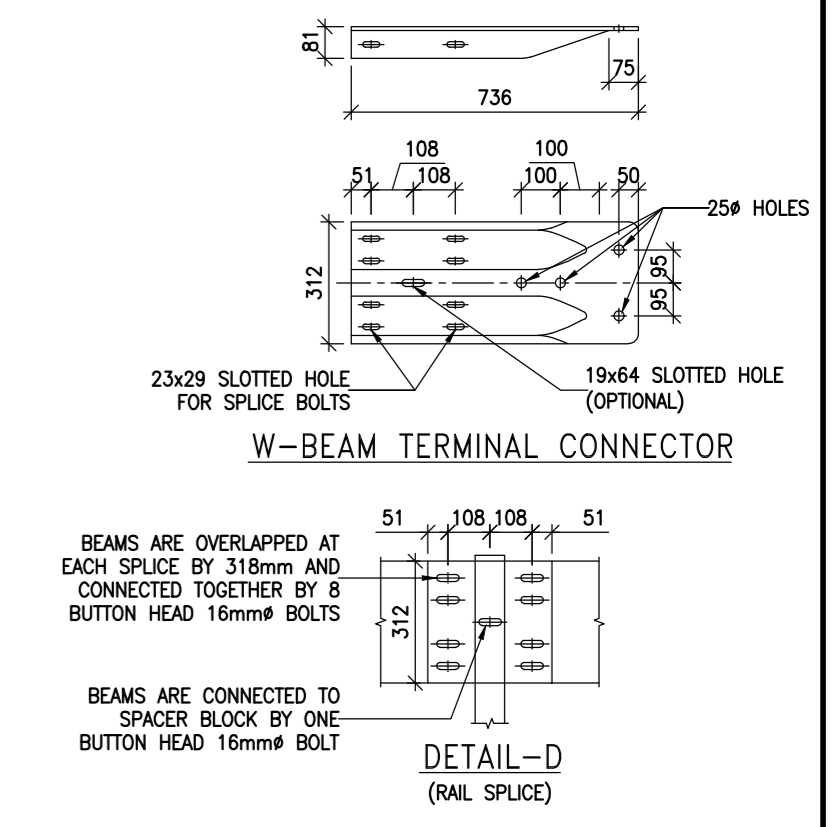
CROSS SECTION OF 'W' BEAM
SPACER AND POST



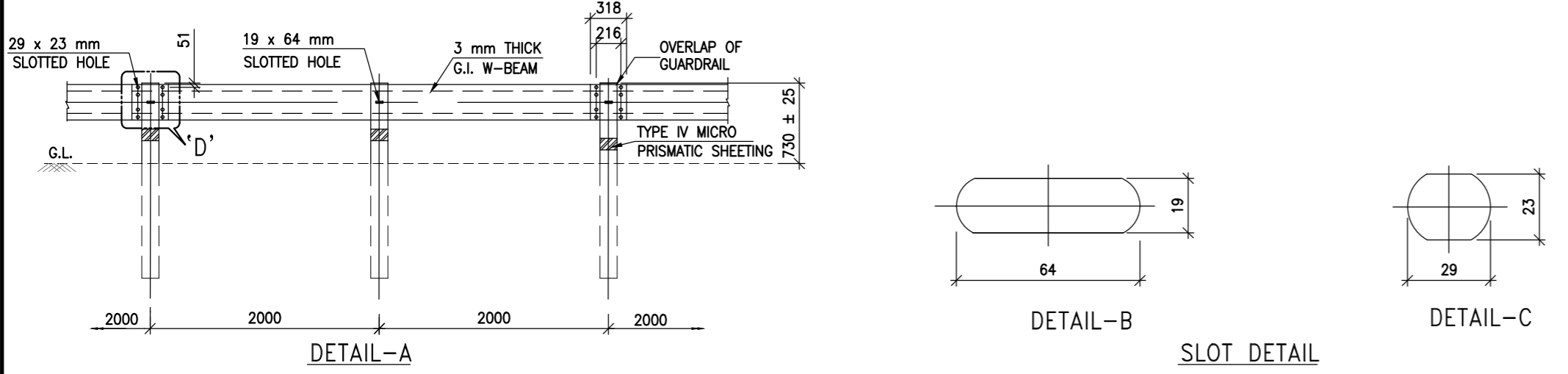
POST NO : P1
POST NO : P2
POST NO : P2
END POST



TYPICAL DETAILS OF W-BEAM SECTION ON SHOULDER / EMBANKMENT SIDE



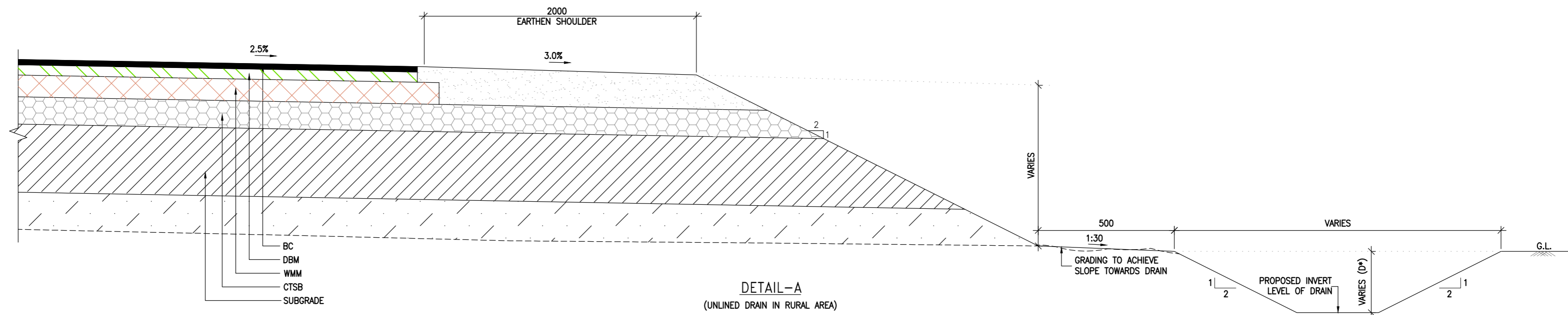
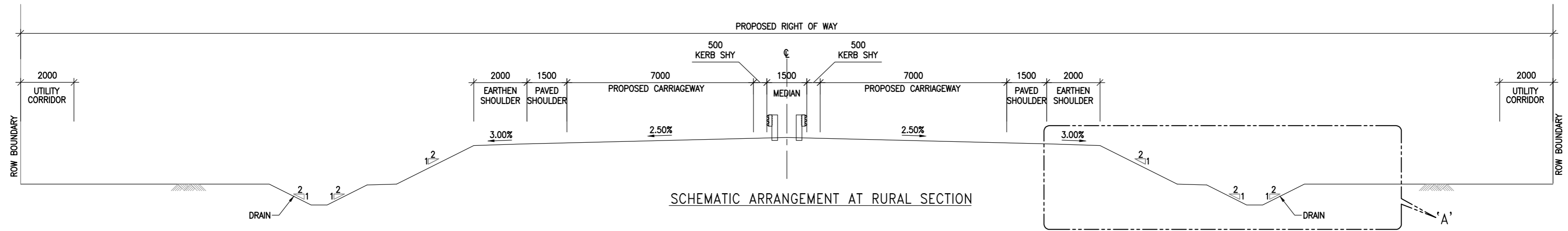
W-BEAM TERMINAL CONNECTOR
DETAIL-D (RAIL SPLICE)



DETAIL-A
DETAIL-B
SLOT DETAIL
DETAIL-C

- NOTES:**
1. ALL THE DIMENSIONS ARE IN MILLIMETER UNLESS OTHERWISE SPECIFIED.
 2. THE W-BEAM, SPACERS, POST AND FASTENERS FOR STEEL BARRIER SHALL BE GALVANIZED BY HOT DIP PROCESS (ZINC COATED, 0.55Kg PER SQUARE METER, MINIMUM SINGLE SPOT)
 3. ALL FITTINGS (BOLTS, NUTS, WASHERS) SHALL CONFORM TO THE IS:1367 AND IS:1364, ALL GALVANIZING SHALL BE DONE AFTER FABRICATION.
 4. INCASE OF HOLES DRILLING FOR ANCHOR POST SHALL BE BACK FILLED WITH SELECTED EARTH OR STABLE MATERIAL IN LAYERS NOT EXCEEDING 100mm THICKNESS AND EACH LAYER SHALL BE THOROUGHLY TAMPED AND RAMMED AS PER MORTH. POST THAT ARE DRILLED IN ROCK FOR ANCHOR POST SHALL BE BACK FILLED WITH CONCRETE AS PER MORTH.
 5. GUARDRAIL BEAM MATERIAL CONFORM TO IS:5986 GRADE Fe 410 OR EQUIVALENT.
 6. GUARDRAIL POST AND SPACER MATERIAL CONFORM TO IS:2062 GRADE A OR EQUIVALENT.
 7. ALL DIMENSIONS SUBJECT TO MANUFACTURE TOLERANCE UNLESS OTHERWISE SHOWN.
 8. THE END TREATMENT OF FASTENERS TO BE FLARED BY PNEUMATIC OPERATIONS TO ENSURE THAT BOLTS ARE NOT REMOVABLE.
 9. ARRANGEMENT GIVEN IN THIS DRAWING IS TYPICAL AND DETAILED ARRANGEMENT SHALL BE AS PER MANUFACTURER SHOP DRAWINGS.

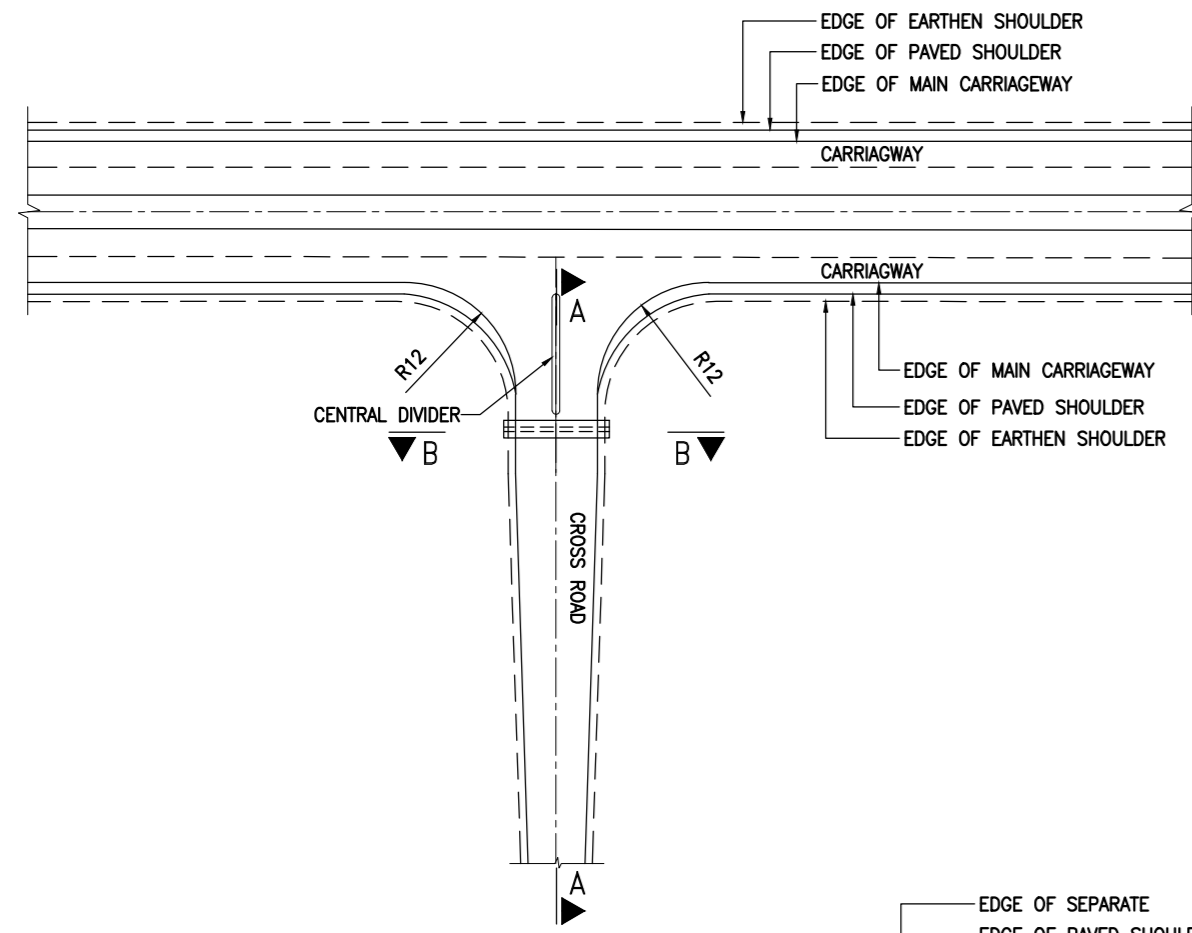
SCALE :- AS PER SHOWN		CLIENT:- MINISTRY OF ROAD TRANSPORT AND HIGHWAYS (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)	CONSULTANTS:- AECOM 9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II Gurgaon 122002, Haryana, India	PROJECT:- CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHARSROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).	DWG NO. :- AECOM/TRA-HW/60524499/SD/017
R2	FEB 2026	FINAL DETAILED PROJECT REPORT	TITLE: STANDARD DRAWINGS TYPICAL DETAILS OF W-BEAM CRASH BARRIER		
R1	DEC 2025	FINAL FEASIBILITY REPORT	DATE:- FEB. 2026	PAPER:- A2	
R0	OCT 2025	DRAFT FEASIBILITY REPORT	DRAWN (A)	DESIGN (B)	CHECKED (C)
REV	DATE	DESCRIPTION OF REVISIONS	HS	DK	SB
					BS



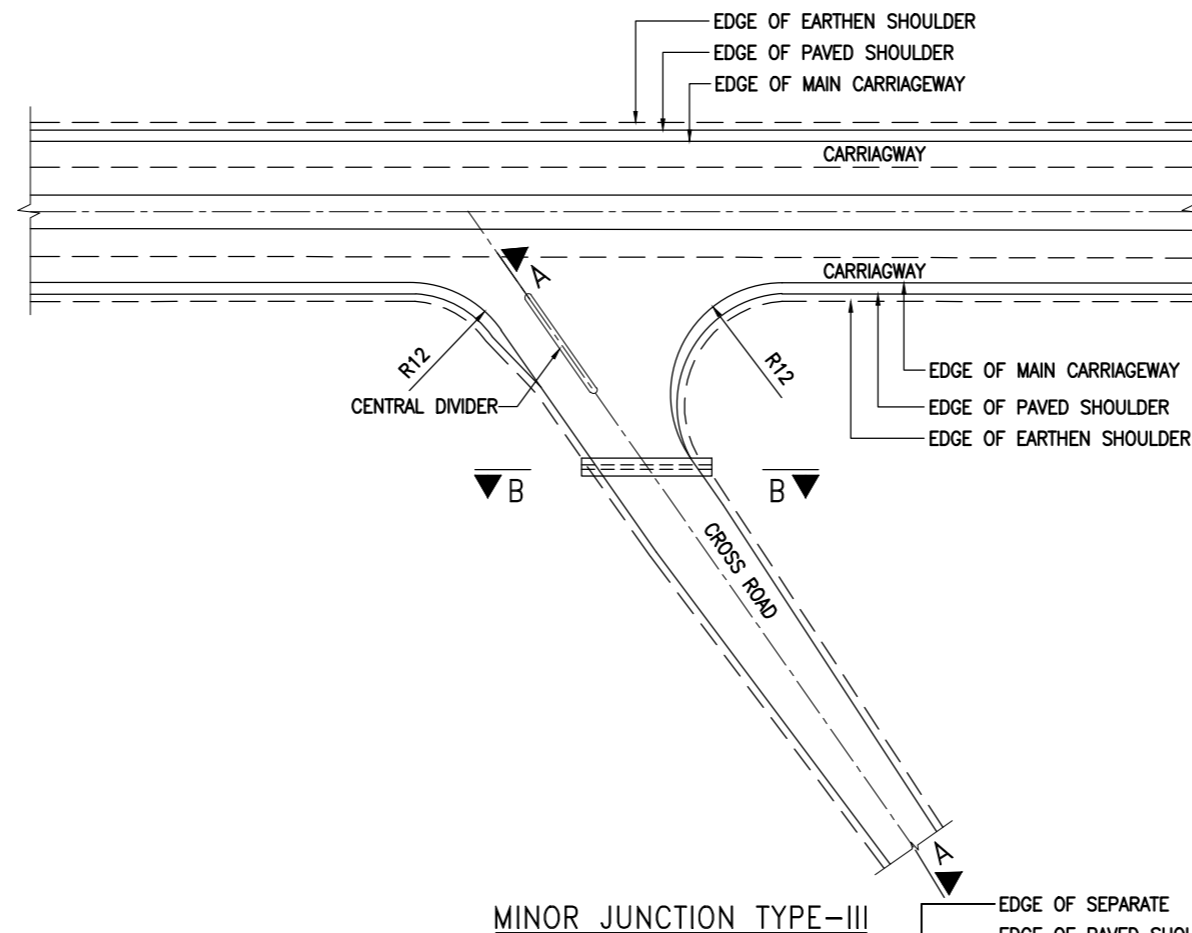
NOTES :

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED.
2. FOR DETAILS OF DRAIN WIDTH, DEPTH, LONGITUDINAL SLOPE, ETC., REFER DRAINAGE PLAN AND PROFILE DRAWING.

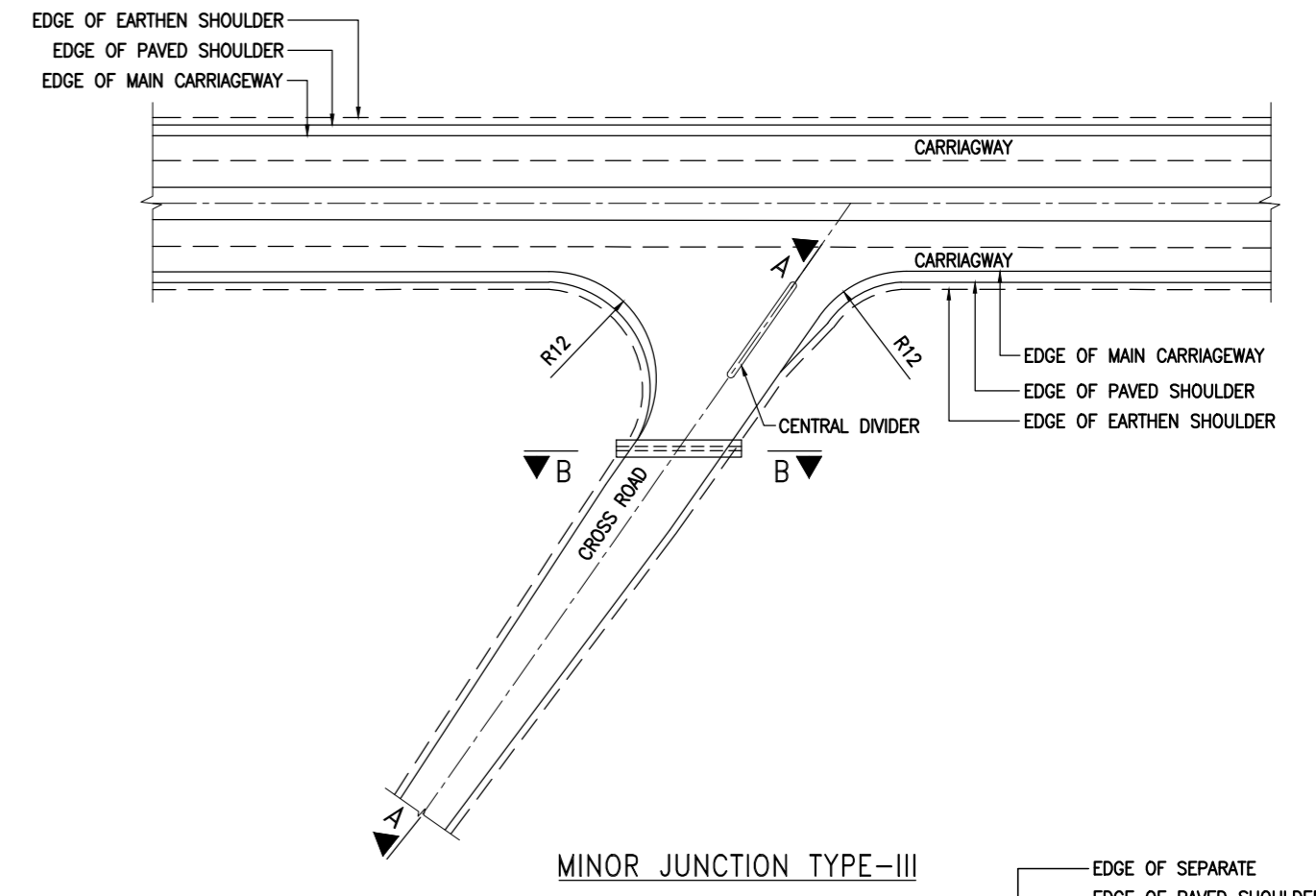
SCALE :-			CLIENT:-		CONSULTANTS:-		PROJECT:-		DWG NO. :- AECOM/TRA-HW/60524499/SD/ 018				
R2	FEB 2026	FINAL DETAILED PROJECT REPORT	AS PER SHOWN	 <p>MINISTRY OF ROAD TRANSPORT AND HIGHWAYS (TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)</p>	 <p>9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II Gurgaon 122002, Haryana, India</p>	<p>CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHRSROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).</p>		TITLE:		DATE:- FEB. 2026	PAPER:-A2		
R1	DEC 2025	FINAL FEASIBILITY REPORT						STANDARD DRAWINGS		DRAWN (A)	DESIGN (B)	CHECKED (C)	APPROVED (D)
R0	OCT 2025	DRAFT FEASIBILITY REPORT						TYPICAL DRAIN DETAILS FOR RURAL SECTIONS		HS	DK	SB	BS
REV	DATE	DESCRIPTION OF REVISIONS											



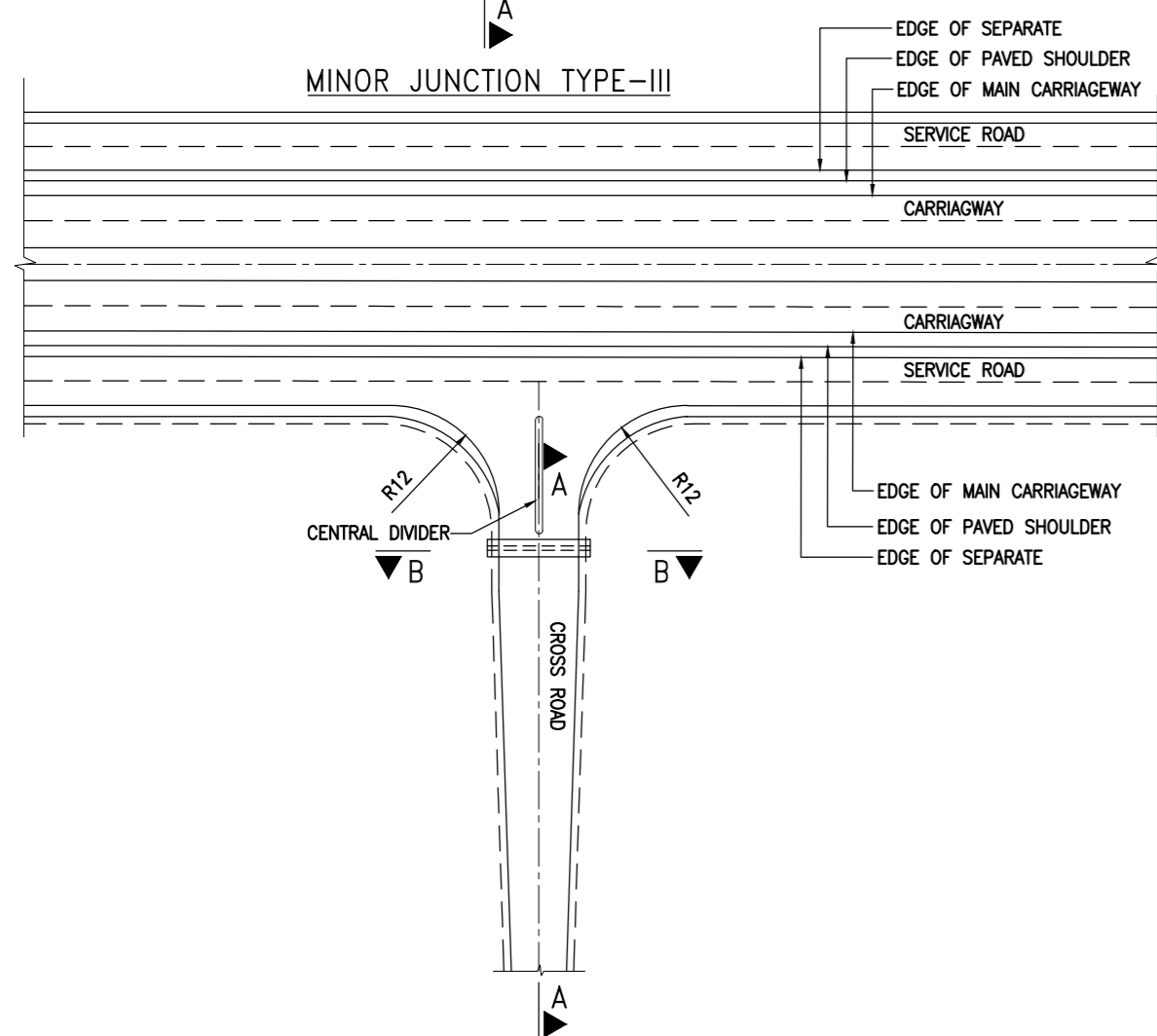
MINOR JUNCTION TYPE-III



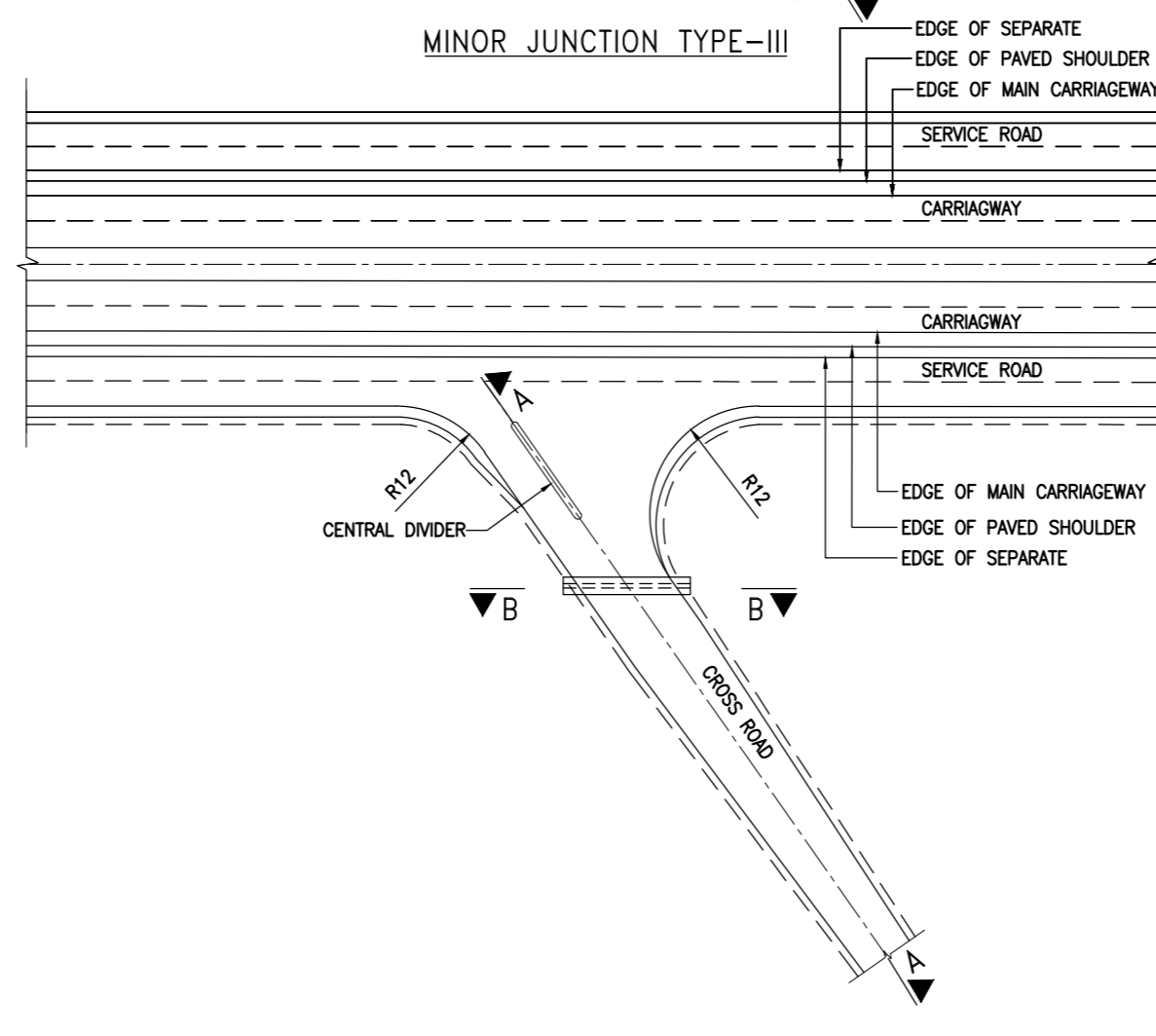
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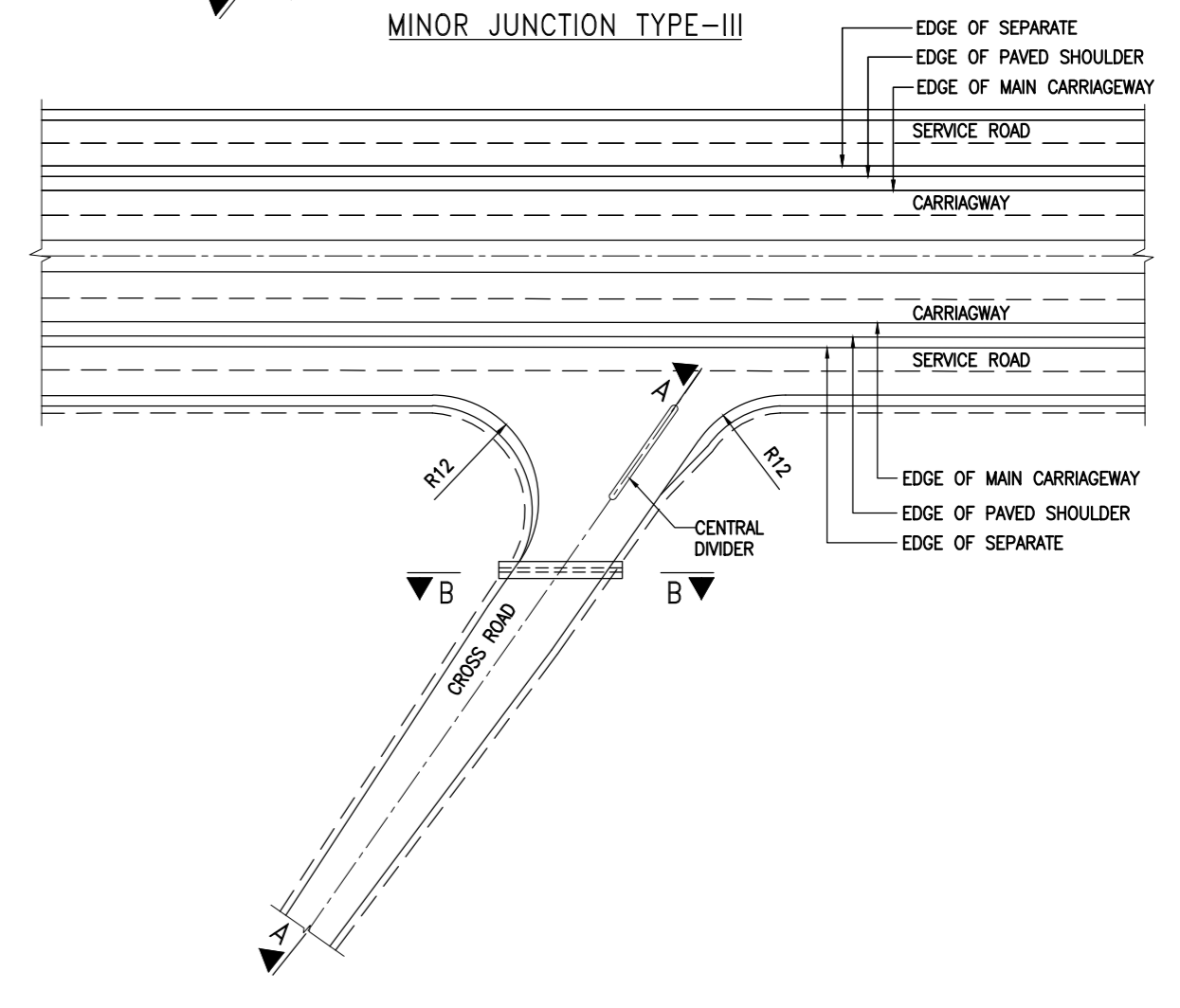
MINOR JUNCTION TYPE-III



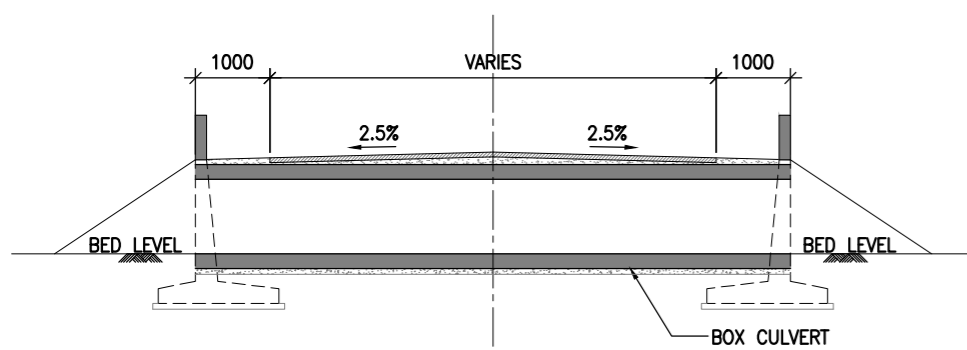
MINOR JUNCTION TYPE-III WITH SERVICE ROAD



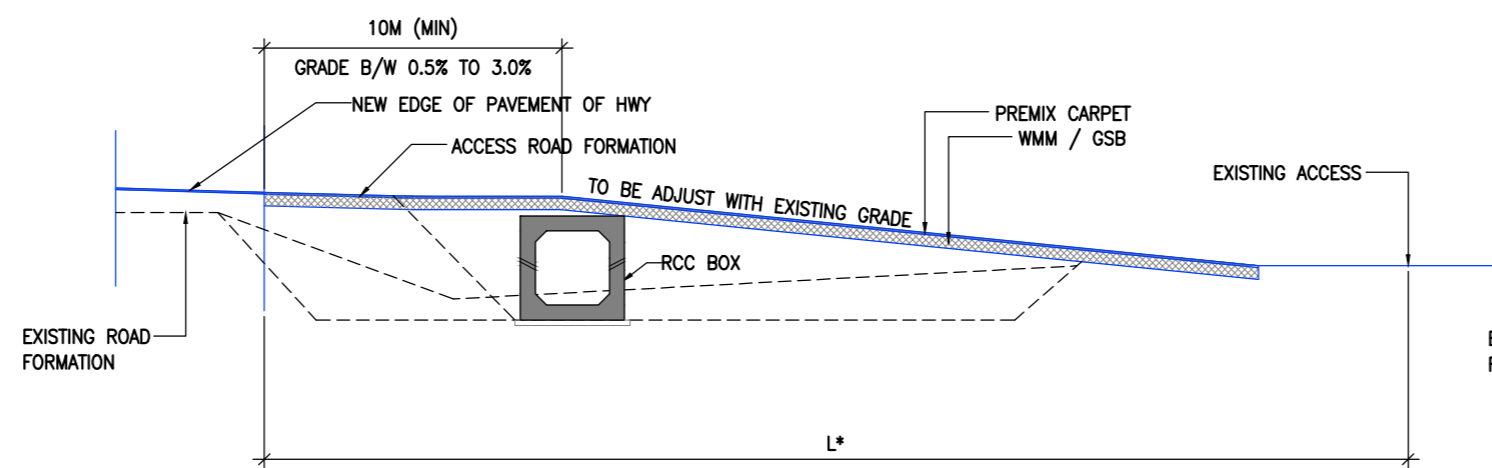
MINOR JUNCTION TYPE-III WITH SERVICE ROAD



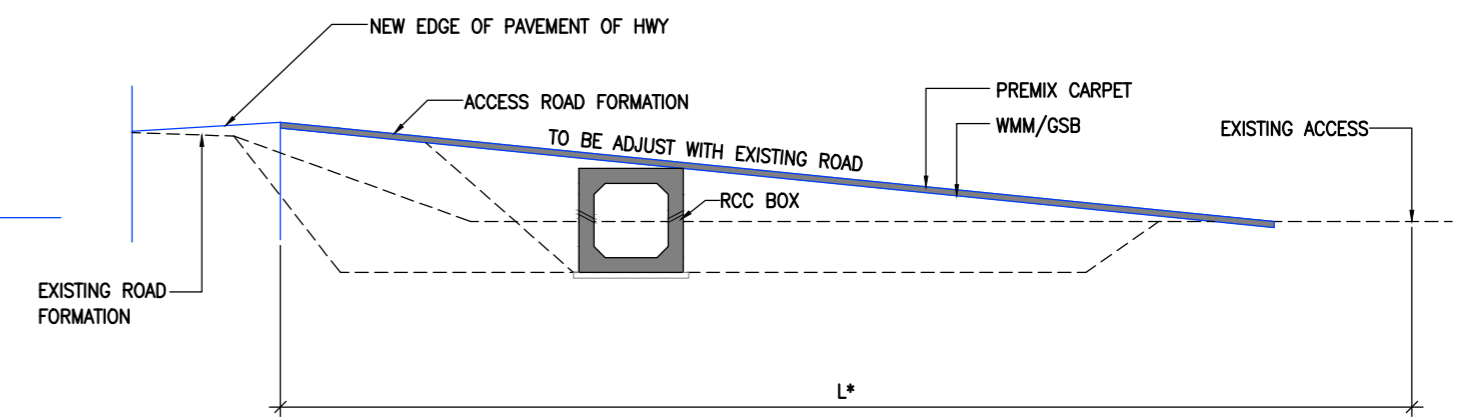
MINOR JUNCTION TYPE-III WITH SERVICE ROAD



SECTION B-B



SECTION A-A ACCESS PROFILE ON NORMAL CAMBER OF HIGHWAY



SECTION A-A ACCESS PROFILE ON SUPER ELEVATION OF HIGHWAY

NOTE:

1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE INDICATE.
2. ALL JUNCTIONS SHOULD BE IN ACCORDANCE WITH IRC:SP:41-1994 FIG. 2.7.
3. L* = LEVEL OF APPROACH DEPENDS UPON LEVEL DIFFERENCE BETWEEN MAIN CARRIAGEWAY & ACCESS ROAD.
4. FOR OTHER TYPES OF JUNCTION DETAILS, REFER JUNCTION DRAWINGS.
5. IF EXISTING CULVERT IS AVAILABLE THEN POSSIBILITY OF RETAINING THE SAME NEED TO BE STUDIED.
6. REQUIREMENT OF CULVERT ON CROSS ROAD SHALL BE AS PER DRAINAGE PLAN & PROFILE DRAWINGS.
7. FOR MORE DETAILS OF MINOR JUNCTIONS, REFER ROAD FURNITURE DRAWINGS.

R2	FEB 2026	FINAL DETAILED PROJECT REPORT
R1	DEC 2025	FINAL FEASIBILITY REPORT
R0	OCT 2025	DRAFT FEASIBILITY REPORT
REV	DATE	DESCRIPTION OF REVISIONS

SCALE :-	AS PER SHOWN
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CLIENT:-

MINISTRY OF ROAD TRANSPORT AND HIGHWAYS
(TRANSPORT BHAWAN, 1, PARLIAMENT STREET NEW DELHI - 110 001)

CONSULTANTS:-

AECOM
9th Floor, Infinity Tower C DLF Cyber City, DLF Phase II
Gurgaon 122002, Haryana, India

PROJECT:-

CONSULTANCY SERVICES FOR PREPARATION OF DPR FOR 4 LANING OF RISHIKESH BYPASS FROM KM 529+750 OF NH-7 NEAR TEENPANI FLYOVER TO KM 542+420 NEAR KHARSROTE BRIDGE, PASSING THROUGH BHATTOWALA AND DHALWALA VILLAGE IN THE STATE OF UTTARAKHAND (DESIGN LENGTH - 12.670 KM).

DWG NO.: - AECOM/TRA-HW/60524499/SD/ 019			
TITLE: STANDARD DRAWINGS TYPICAL MINOR JUNCTION DETAILS		DATE:- FEB. 2026	PAPER:-A2
DRAWN (A)	DESIGN (B)	CHECKED (C)	APPROVED (D)
HS	DK	SB	BS