Technical Circular T-02/23
September 21, 2023

To: All HQ Directors: Operations, Planning, Major Projects, Rehabilitation, and Maintenance
All Regional Directors
All Engineering Directors
All Ministry Traffic Engineers
All Ministry Design Engineers
All District Managers
All District Program Managers

Subject: **Median Barrier Placement on New and Existing Multi-Lane Highways with Speed 70 km/h or Greater and with Flush Median**

Purpose

This Technical Circular provides direction to install median barriers on all new and existing multi-lane highways with a posted speed limit of 70 km/h or greater and with flush median. For existing and new highways with depressed median, the need for median barrier remains unchanged.

Background

Median barrier reduces cross-over collisions significantly. According to the Federal Highway Administration (FHWA), median barriers reduce cross-over collisions by 97% on rural four-lane highways.

In 2021, *BC Road Safety Strategy 2025: A Collaborative Framework for Road Safety* was published by RoadSafetyBC. This strategy is rooted in the vision of realizing zero fatalities and serious injuries on B.C. roads. The strategy framework is focused on achievable goals that align with federal and international targets and is based on a comprehensive, Safe System approach incorporating all factors that contribute to protecting road users. This policy aligns with the strategy and Vision Zero goals (a campaign to eliminate fatal and injury collisions), as median barrier prevents cross-over collisions which are severe in nature.

Policy

Median barrier shall be installed on new multi-lane highways with a posted speed limit of 70 km/h or greater and with flush median, irrespective of traffic volume.

Median barrier shall be installed on in-service multi-lane highways with a posted speed limit of 70 km/h or greater where the existing flush median is typically 2.0 – 3.0 meters wide, irrespective of traffic volume.

Where the installation of median barrier affects minimum stopping sight distance, an engineering assessment should be undertaken to assess the risk and mitigate potential adverse effects.

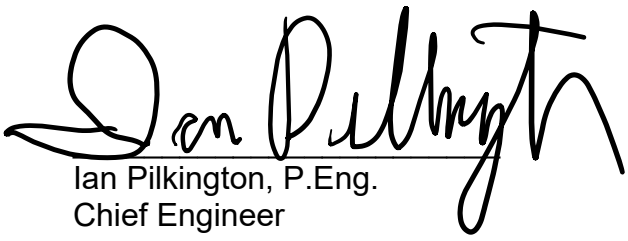
Median openings may be provided as necessary for emergency turnaround and maintenance purposes.

This policy supersedes the median barrier placement guidelines for flush median in the 2019 BC Supplement to TAC Geometric Design Guidelines, Section 630.

A prioritized list of in-service roads is attached as a guide for planning and programing purposes for median barrier installation. These installations may take some time and is depending on funding availability.

Contact:

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Ian Pilkington, P.Eng.
Chief Engineer

Attachment:

- Prioritized list of in-service roads for planning and programing purposes for median barrier installation.

Lower Mainland District

SID	LKI Segment	Highway	Km1	Km2	Length	Latitude1	Longitude1	Latitude2	Longitude2	Region	District	Area	HwyClass2345	Fat#Clsn	Inj#Clsn	PDO#Clsn	#All Off-road Left and Head on Clsn	Potential for Safety Improvement	Rank (Provincial Wide)	Rank (District)
Seg13_06	2206	3	74.2	78.1	4	49.13139638	-120.6225647	49.1544422	-120.5870794	1	1	7	RAU4	0	4	0	4	0.552904898	5	1
Seg19_C	2724	7	9.7	11.2	1.6	49.1832697	-122.5569643	49.17950225	-122.541987	1	1	6	RAU4	0	2	1	3	0.427184845	7	2
Seg13_03	2206	3	60	65	5.1	49.06049314	-120.7629674	49.0737749	-120.7072955	1	1	7	RAU4	0	2	1	3	0.40943259	10	3
Seg11_01	2206	3	0	5	5.1	49.36084873	-121.3422655	49.33024364	-121.2927878	1	1	7	RAU4	0	0	2	2	0.205587588	16	4
Seg20	2724	7	13.7	15.5	1.9	49.17284796	-122.5065539	49.17234805	-122.4821372	1	1	6	RAU4	0	1	1	2	0.175622557	21	5
Seg12	2206	3	40.8	44.8	4.1	49.16676171	-120.9491337	49.14965477	-120.9012565	1	1	7	RAU4	0	0	1	1	0.030107852	35	6
Seg22	2724	7	25.8	27.1	1.4	49.13969995	-122.3600431	49.13372647	-122.3447057	1	1	7	RAU4	0	1	0	1	0.014940612	37	7
Seg13_01	2206	3	49.8	54.8	5.1	49.11536157	-120.8644208	49.08462048	-120.8200112	1	1	7	RAU4	0	1	0	1	0.001742586	39	8
Seg13_02	2206	3	54.9	59.9	5.1	49.08395619	-120.8190787	49.06058005	-120.7643381	1	1	7	RAU4	0	1	0	1	0.001742586	39	8
Seg11_03	2206	3	10.2	13.9	3.8	49.2913953	-121.2572918	49.26943766	-121.2196916	1	1	7	RAU4	0	0	0	0	-0.130565014	65	10
Seg11_04	2206	3	14	17.7	3.8	49.26888153	-121.2186045	49.25003047	-121.1793142	1	1	7	RAU4	0	0	0	0	-0.130565014	65	10
Seg13_05	2206	3	70.2	74.1	4	49.10677842	-120.6600871	49.13060011	-120.6232131	1	1	7	RAU4	0	0	0	0	-0.140984949	68	12
Seg11_02	2206	3	5.1	10.1	5.1	49.32950819	-121.2919856	49.29213567	-121.2580826	1	1	7	RAU4	0	0	0	0	-0.202102417	72	13
Seg13_04	2206	3	65.1	70.1	5.1	49.07406005	-120.7059896	49.10627125	-120.6612265	1	1	7	RAU4	0	0	0	0	-0.202102417	72	13
Seg21	2724	7	19.6	21.2	1.7	49.17329102	-122.4260978	49.16550901	-122.4079046	1	1	7	RAU4	0	0	0	0	-0.235968005	74	15
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Vancouver Island District

SID	LKI Segment	Highway	Km1	Km2	Length	Latitude1	Longitude1	Latitude2	Longitude2	Region	District	Area	HwyClass2345	Fat#Clsn	Inj#Clsn	PDO#Clsn	#All Off-road Left and Head on Clsn	Potential for Safety Improvement	Rank (Provincial Wide)	Rank (District)
Seg23	374	14	4.2	7.2	3.1	48.42416109	-123.5519642	48.41617355	-123.5844142	1	2	1	RAU4	0	1	1	2	0.118532378	24	1
Seg25_02	2621	019A	35.2	37.6	2.5	49.45061902	-124.7162916	49.44698786	-124.7470158	1	2	2	RAU4	0	1	0	1	0.051573249	28	2
Seg25_01	2621	019A	32.6	35.1	2.6	49.43883977	-124.6855746	49.45047835	-124.7149293	1	2	2	RAU4	0	1	0	1	0.050032144	30	3
Seg28	2320	28	25	25.3	0.4	49.9607334	-125.5292186	49.9611883	-125.5333285	1	2	3	RAU4	0	0	0	0	-0.000822178	41	4
Seg26	2622	019A	8.4	9.4	1.1	49.59430904	-124.8914552	49.60244071	-124.8973534	1	2	3	UAU4	0	0	0	0	-0.024634145	47	5
Seg27	2623	019A	26.9	28.1	1.3	49.87094	-125.1302478	49.88170695	-125.129575	1	2	3	RAU4	0	0	0	0	-0.07182513	53	6
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Rocky Mountain District

SID	LKI Segment	Highway	Km1	Km2	Length	Latitude1	Longitude1	Latitude2	Longitude2	Region	District	Area	HwyClass2345	Fat#Clsn	Inj#Clsn	PDO#Clsn	#All Off-road Left and Head on Clsn	Potential for Safety Improvement	Rank (Provincial Wide)	Rank (District)
Seg5	1818	1	29.2	30.4	1.3	51.48487129	-117.1881473	51.48634514	-117.1716749	2	3	12	RED4	0	1	0	1	0.050898563	29	1
Seg3	1812	1	59.5	60.9	1.5	50.97061663	-118.3551883	50.97162517	-118.335564	2	3	12	RAU4	0	0	0	0	-0.073312316	55	2
Seg4	1814	1	15.6	17.6	2.1	51.03172271	-118.0234143	51.03875139	-117.9975549	2	3	12	RAU4	0	0	0	0	-0.11953207	62	3
					4.9															

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Okanagon Shuswap District

SID	LKI Segment	Highway	Km1	Km2	Length	Latitude1	Longitude1	Latitude2	Longitude2	Region	District	Area	HwyClass2345	Fat#Clsn	Inj#Clsn	PDO#Clsn	#All Off-road Left and Head on Clsn	Potential for Safety Improvement	Rank (Provincial Wide)	Rank (District)
Seg47_02	1214	97	19.2	23	3.9	49.53515167	-119.6237822	49.56542653	-119.6329594	2	5	8	RAU4	0	1	4	5	1.016822529	2	1
Seg49_01	1214	97	31.3	35.7	4.5	49.62417541	-119.6829092	49.65923798	-119.7007575	2	5	8	RAU4	0	2	2	4	0.66497812	4	2
Seg48_C	1214	97	23.2	28.1	5	49.5670042	-119.6316452	49.56874579	-119.6310041	2	5	8	RAU4	0	1	3	4	0.551055968	6	3
Seg57_02	1225	097A	5.1	8.9	3.9	50.38332282	-119.2283336	50.41127306	-119.2001545	2	5	13	RAU4	0	2	1	3	0.383070474	11	4
Seg15	2210	3	60.4	63.6	3.3	49.2135577	-119.9037202	49.2046503	-119.8654693	2	5	8	RAU4	0	1	2	3	0.361278101	12	5
Seg57_03	1225	097A	9	12.7	3.8	50.41197855	-119.1992809	50.44181053	-119.182755	2	5	13	RAU4	0	1	1	2	0.078057834	25	6
Seg45	1212	97	29.3	30.5	1.3	49.25141728	-119.525987	49.26132787	-119.5221089	2	5	8	RAU4	0	0	1	1	0.056762942	26	7
Seg44	1212	97	6.7	8.1	1.5	49.07834304	-119.5373961	49.08774191	-119.5500537	2	5	8	RAU4	0	1	0	1	0.05236612	27	8
Seg14_02	2210	3	54.3	57.6	3.4	49.23081604	-119.9797327	49.22052126	-119.9396867	2	5	8	RAU4	0	0	1	1	0.040217852	33	9
Seg14_01	2210	3	50.8	54.2	3.5	49.2529359	-120.0118706	49.23138722	-119.9807913	2	5	8	RAU4	0	0	1	1	0.038022052	34	10
Seg50	1214	97	40.6	42.1	1.6	49.69484934	-119.738858	49.70618519	-119.7500861	2	5	8	RAU4	0	0	1	1	0.017112405	36	11
Seg18	1972	6	21.4	23.3	2	50.24136774	-119.2294067	50.2506689	-119.2510433	2	5	13	RAU4	0	0	1	1	-0.013503302	44	12
Seg58	1225	097A	13.7	14	0.4	50.45003452	-119.1791022	50.45141006	-119.1754606	2	5	13	RAU4	0	0	0	0	-0.015787364	45	13
Seg54	1228	97	77.8	78.5	0.8	50.63380467	-119.9377786	50.63591755	-119.9470686	2	5	13	RAU4	0	0	0	0	-0.01793732	46	14
Seg7	2078	1	81.7	85.3	3.7	50.70217139	-119.274994	50.71019815	-119.2296091	2	5	13	UAU4	0	2	0	2	-0.075366413	56	15
Seg56	1228	97	41.2	43.8	2.7	50.4778142	-119.631224	50.46805524	-119.6640774	2	5	13	RAU2	0	0	0	0	-0.118046677	61	16
Seg46	1214	97	8.7	12.7	4.1	49.45286696	-119.5975084	49.48601711	-119.6057478	2	5	8	RAU4	0	0	2	2	-0.135914455	67	17
Seg55	1228	97	13	16.4	3.5	50.41787999	-119.3320968	50.43956958	-119.3639414	2	5	13	RAU4	0	0	0	0	-0.173919471	69	18
Seg52	1221	97	17	19.6	2.7	50.02971602	-119.4041388	50.05208567	-119.4120829	2	5	8	UAU4	0	0	1	1	-0.341843413	82	19
Seg49_02	1214	97	35.8	40.1	4.4	49.66001794	-119.7014452	49.69135447	-119.7345047	2	5	8	RAU4	1	0	0	1	-0.378474944	83	20
Seg53	1226	97	6.5	8.4	2	50.31047898	-119.248663	50.327191	-119.2432832	2	5	13	RAU4	0	0	0	0	-0.425882069	86	21
Seg57_01	1225	097A	0	5	5.1	50.34022571	-119.2434652	50.38253417	-119.2290083	2	5	13	RAU4	0	1	0	1	-0.447145818	87	22
Seg51	1221	97	13.4	15.8	2.5	49.99793611	-119.4037228	50.01917835	-119.4054631	2	5	8	RAU4	0	0	0	0	-0.627653573	89	23
Seg47_01	1214	97	15.2	19.1	4	49.50055876	-119.6173221	49.53445141	-119.6229159	2	5	8	RAU4	0	0	0	0	-0.801269252	91	24
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Thompson Nocola District

SID	LKI Segment	Highway	Km1	Km2	Length	Latitude1	Longitude1	Latitude2	Longitude2	Region	District	Area	HwyClass2345	Fat#Clsn	Inj#Clsn	PDO#Clsn	#All Off-road Left and Head on Clsn	Potential for Safety Improvement	Rank (Provincial Wide)	Rank (District)
Seg6	2070	1	1.2	5.9	4.8	50.67669705	-120.2897175	50.67184066	-120.2262713	2	6	15	RAU4	0	1	5	6	1.373358452	1	1
Seg16	1741	5	0.7	1.6	1	50.67285788	-120.3024422	50.68048286	-120.2984912	2	6	15	RAU4	0	0	2	2	0.20679486	14	2
Seg59_01	1800	005A	0	5	5.1	49.95178478	-120.6168536	49.9955784	-120.6079397	2	6	14	RAU4	0	2	0	2	0.146346546	22	3
Seg59_03	1800	005A	10.2	15.2	5.1	50.03650247	-120.6321036	50.07338017	-120.6670158	2	6	14	RAU4	0	1	1	2	0.146346546	22	3
Seg17_03	1741	5	16.1	20.2	4.2	50.79907893	-120.3102928	50.8295517	-120.2834185	2	6	15	RAU4	0	0	1	1	-0.079188412	57	5
Seg2	938	1	69.5	72	2.6	50.66763158	-120.4898825	50.66544425	-120.4569335	2	6	15	RFU4	0	0	0	0	-0.081402592	58	6
Seg59_02	1800	005A	5.1	10.1	5.1	49.99642004	-120.6074678	50.03579175	-120.6312577	2	6	14	RAU4	0	0	1	1	-0.128474278	63	7
Seg59_04	1800	005A	15.3	19.3	4.1	50.07416475	-120.6676849	50.09792952	-120.69292	2	6	14	RAU4	0	0	0	0	-0.295450312	78	8
Seg59_05	1800	005A	19.4	23.4	4.1	50.0978607	-120.6943106	50.08961859	-120.746371	2	6	14	RAU4	0	0	0	0	-0.295450312	78	8
Seg17_04	1741	5	20.3	24.4	4.2	50.83021927	-120.2824673	50.8620416	-120.2651966	2	6	15	RAU4	0	0	0	0	-0.33237133	81	10
Seg17_02	1741	5	11	16	5.1	50.75564573	-120.3311267	50.79820266	-120.3106001	2	6	15	RAU4	0	0	1	1	-0.385991798	84	11
Seg17_01	1741	5	5.9	10.9	5.1	50.71107028	-120.3301931	50.75474984	-120.3312273	2	6	15	RAU4	0	0	0	0	-0.73743205	90	12
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Cariboo District

SID	LKI Segment	Highway	Km1	Km2	Length	Latitude1	Longitude1	Latitude2	Longitude2	Region	District	Area	HwyClass2345	Fat#Clsn	Inj#Clsn	PDO#Clsn	#All Off-road Left and Head on Clsn	Potential for Safety Improvement	Rank (Provincial Wide)	Rank (District)
Seg38	1146	97	114	117	3.1	52.97211835	-122.4407773	52.98616492	-122.4716865	2	7	18	UAU4	0	1	3	4	0.696905458	3	1
Seg31_04	1131	97	89.4	94.4	5.1	51.45838029	-121.3700542	51.50308227	-121.3703419	2	7	16	RAU4	0	1	2	3	0.42120502	8	2
Seg36	1146	97	80.8	82.7	2	52.68697308	-122.4508853	52.70377079	-122.4556541	2	7	18	RAU4	0	3	0	3	0.274203712	13	3
Seg34	1141	97	72	74.2	2.3	52.08663843	-121.9211862	52.10485803	-121.9284039	2	7	17	RAU4	0	0	2	2	0.205898367	15	4
Seg31_07	1131	97	102	105	2.7	51.57105516	-121.3430668	51.58753255	-121.3164793	2	7	16	RAU4	0	1	1	2	0.202074629	18	5
Seg31_06	1131	97	99.6	102	2.8	51.54931922	-121.3623926	51.57039911	-121.3440516	2	7	16	RAU4	0	0	1	1	0.047733033	31	6
Seg35_01	1141	97	75.5	77.3	1.9	52.11490836	-121.9362055	52.11653621	-121.9603018	2	7	17	RAU4	0	0	1	1	0.047619733	32	7
Seg35_03	1141	97	80.3	83	2.8	52.11540046	-121.9993644	52.11904219	-122.0372675	2	7	17	RAU2	0	0	1	1	0.012339198	38	8
Seg31_01	1131	97	74.1	79.1	5.1	51.32627663	-121.385873	51.3690476	-121.3657444	2	7	16	RAU4	0	1	0	1	-0.024957564	48	9
Seg31_05	1131	97	94.5	99.5	5.1	51.50397931	-121.370298	51.5484429	-121.3627031	2	7	16	RAU4	0	1	0	1	-0.024957564	48	9
Seg29	1131	97	25.2	26.8	1.7	50.98226149	-121.5098378	50.99202626	-121.5257373	2	7	16	RAU4	0	0	0	0	-0.047355788	51	11
Seg30	1131	97	59.6	61.5	2	51.22747399	-121.5081108	51.24067551	-121.4908732	2	7	16	RAU4	0	0	0	0	-0.060877587	52	12
Seg1	934	1	13.3	15.6	2.4	50.50795532	-121.286317	50.52674923	-121.2855411	2	7	16	RAU4	0	0	0	0	-0.073101131	54	13
Seg33	1141	97	63.6	65.5	2	52.01861464	-121.877906	52.03201256	-121.8950511	2	7	17	RAU4	0	0	0	0	-0.113866019	60	14
Seg39_01	1151	97	77.2	80.2	3.1	53.59935707	-122.663747	53.62617696	-122.6635891	2	7	18	RAU4	0	0	0	0	-0.128762867	64	15
Seg35_02	1141	97	77.4	80.2	2.9	52.11636183	-121.9617345	52.11488033	-121.9981732	2	7	17	RAU2	0	0	0	0	-0.192125351	70	16
Seg32	1141	97	40.1	43.3	3.3	51.8672835	-121.658091	51.8897725	-121.6836544	2	7	16	RAU4	0	0	0	0	-0.239320198	75	17
Seg31_02	1131	97	79.2	84.2	5.1	51.36984332	-121.3650796	51.41251774	-121.377218	2	7	16	RAU4	0	0	0	0	-0.248038856	76	18
Seg31_03	1131	97	84.3	89.3	5.1	51.41335056	-121.3777531	51.45748841	-121.3702149	2	7	16	RAU4	0	0	0	0	-0.248038856	76	18
Seg37	1146	97	106	110	5	52.89997605	-122.4344303	52.94200129	-122.4481514	2	7	18	RAU4	0	0	0	0	-0.409682572	85	20
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Peace District

SID	LKI Segment	Highway	Km1	Km2	Length	Latitude1	Longitude1	Latitude2	Longitude2	Region	District	Area	HwyClass2345	Fat#Clsn	Inj#Clsn	PDO#Clsn	#All Off-road Left and Head on Clsn	Potential for Safety Improvement	Rank (Provincial Wide)	Rank (District)
Seg10_01	4022	2	30.2	33.2	3.1	55.73767922	-120.1442879	55.73769404	-120.1922738	3	8	21	RAU4	0	1	2	3	0.418072794	9	1
Seg9	4022	2	0	4.5	4.6	55.48518215	-120.0303391	55.52217202	-120.0568726	3	8	21	RAU4	0	2	0	2	0.202558764	17	2
Seg43_02	1203	97	5.3	8.6	3.4	56.26218599	-120.9201873	56.27970526	-120.962978	3	8	22	RAU4	0	1	1	2	0.188354334	20	3
Seg8	4021	2	1.5	2	0.6	55.48379544	-120.023265	55.48517752	-120.0303245	3	8	21	RAU4	0	0	0	0	-0.00968977	42	4
Seg10_03	4022	2	33.9	34.2	0.4	55.73770325	-120.2034698	55.73769893	-120.2082683	3	8	21	RAU4	0	0	0	0	-0.009901018	43	5
Seg42	1200	97	50.8	52.8	2.1	56.11740517	-120.6520484	56.13168691	-120.6709516	3	8	21	RAU4	0	0	0	0	-0.091606563	59	6
Seg41	1200	97	38.4	41.8	3.5	56.01557861	-120.6325457	56.04580304	-120.6358889	3	8	21	RAU4	0	0	0	0	-0.196787723	71	7
Seg43_01	1203	97	1.8	5.2	3.5	56.24562376	-120.872192	56.26171144	-120.9188163	3	8	22	RAU4	0	0	0	0	-0.471855593	88	8
					21.2															

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SID	LKI Segment	Highway	Km1	Km2	Length	Latitude1	Longitude1	Latitude2	Longitude2	Region	District	Area	HwyClass2345	Fat#Clsn	Inj#Clsn	PDO#Clsn	#All Off-road Left and Head on Clsn	Potential for Safety Improvement	Rank (Provincial Wide)	Rank (District)
Seg40	1157	97	7.9	9.2	1.4	53.95254956	-122.763951	53.96386807	-122.7676295	3	9	19	UAU4	0	2	0	2	0.194257604	19	1
Seg39_02	1151	97	80.3	81.2	1	53.6270746	-122.6636214	53.63515148	-122.6636359	3	9	19	RAU4	0	0	0	0	-0.042296752	50	2
Seg24	1573	16	6	9.3	3.4	53.90522879	-122.715465	53.90849822	-122.6667842	3	9	19	UEU4	0	0	0	0	-0.31406921	80	3
					5.8															

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