



**The Government of the People's Republic of Bangladesh
Roads and Highways Department (RHD)**

**Checklist for Geometric & Pavement Structural Design Approval
For
Road ID & Name :**

Checklist Authorized by

**Road Design & Standard Division and Road Safety Division
Road Design & Safety Circle
Technical Services Wing
Sarak Bhavan, Tejgaon, Dhaka**

Checklist Filled by

**Road Division :
Road Circle :
Road Zone :
Date :**

TRAFFIC DATA INFORMATION (FORMAT-C1)

Road ID & Name :	0														
Road Division :	-	Road Circle :	-	Zone :	-										

BASE TRAFFIC :

i.a) If traffic data is missing in RHD RMMS Data Base , then source from local Road Division's traffic survey

Chainage of Data collecting Point : _____ Location Name : _____

Sl. No.	Survey Date	Heavy Truck	Medi. Truck	Small Truck	Large Bus	Medi. Bus	Micro Bus	Utility Jeep	Car	Auto Rickshaw	Motor Cycle	Bi-Cycle	Cycle Rickshaw	Cart	Total AADT
1															0
2															0
3															0
4															0
5															0
6															0
7															0
Average Traffic =		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	###	#DIV/0!

i.b) If having Traffic Data in RHD RMMS Database :

RMMS Link No. of the Road:	Heavy Truck	Medi. Truck	Small Truck	Large Bus	Medi. Bus	Micro Bus	Utility Jeep	Car	Auto Rickshaw	Motor Cycle	Bi-Cycle	Cycle Rickshaw	Cart	Total AADT
														0

TRAFFIC FORECASTING :

ii.a) Diverted Traffic-1 (adding data in this table one diversion comes towards this road)

Link ID & Name from where diverted :	Heavy Truck	Medi. Truck	Small Truck	Large Bus	Medi. Bus	Micro Bus	Utility Jeep	Car	Auto Rickshaw	Motor Cycle	Bi-Cycle	Cycle Rickshaw	Cart	Total AADT
Vehicle Type														
Link Traffic														0
Probable % of traffic to be Diverted-1														
Diverted Traffic -1	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ii.b) Diverted Traffic-2 (adding more data in this table, if more than one diversion comes towards this road)

Link ID & Name from where diverted :	Heavy Truck	Medi. Truck	Small Truck	Large Bus	Medi. Bus	Micro Bus	Utility Jeep	Car	Auto Rickshaw	Motor Cycle	Bi-Cycle	Cycle Rickshaw	Cart	Total AADT
Vehicle Type														
Link Traffic														0
Probable % of traffic to be Diverted-1														
Diverted Traffic -2	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ii.c) Diverted Traffic-3 (adding more data in this table, if more than two diversion comes towards this road)

Link ID & Name from where diverted :	Heavy Truck	Medi. Truck	Small Truck	Large Bus	Medi. Bus	Micro Bus	Utility Jeep	Car	Auto Rickshaw	Motor Cycle	Bi-Cycle	Cycle Rickshaw	Cart	Total AADT
Vehicle Type														
Link Traffic														0
Probable % of traffic to be Diverted-1														
Diverted Traffic -3	0	0	0	0	0	0	0	0	0	0	0	0	0	0

iii) Generated Traffic based on Base Traffic in RMMS Database or Surveyed: (Taken some % of Base Traffic)

Vehicle Type	Heavy Truck	Medi. Truck	Small Truck	Large Bus	Medi. Bus	Micro Bus	Utility Jeep	Car	Auto Rickshaw	Motor Cycle	Bi-Cycle	Cycle Rickshaw	Cart	Total AADT
Considered Traffic	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	###	#DIV/0!
Probable % of traffic to be generated	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Generated Traffic on Base Traffic	#DIV/0!	#####	#####	#####	#####	#####	#####	#####	#DIV/0!	#####	#####	#DIV/0!	###	#DIV/0!

TRAFFIC CONSIDERED FOR GEOMETRIC & PAVEMENT LAYER THICKNESS DESIGN AT BASE YEAR :

Vehicle Type	Heavy Truck	Medi. Truck	Small Truck	Large Bus	Medi. Bus	Micro Bus	Utility Jeep	Car	Auto Rickshaw	Motor Cycle	Bi-Cycle	Cycle Rickshaw	Cart	Total AADT
Base Traffic (i.a) or (i.b)	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	###	#DIV/0!
Diverted Traffic -1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Traffic -2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Traffic -3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Generated Traffic based on RMMS traffic or surveyed	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	###	#DIV/0!
Total Traffic in Base Year =	#DIV/0!	#####	#####	#####	#####	#####	#####	#####	#DIV/0!	#####	#####	#DIV/0!	###	#DIV/0!

ASSUMED NEWLY GENERATED TRAFFIC CONSIDERED AFTER COMPLETION YEAR

Vehicle Type	Heavy Truck	Medi. Truck	Small Truck	Large Bus	Medi. Bus	Micro Bus	Utility Jeep	Car	Auto Rickshaw	Motor Cycle	Bi-Cycle	Cycle Rickshaw	Cart	Total AADT
Considered Newly Generated Traffic after completion of the pavement work														0

Name & Sign. :
 Sub-Assistant Engineer, RHD
 Road Sub-Division,

Name & Sign. :
 Sub-Divisional Engineer, RHD
 Road Sub-Division,

Name & Sign. :
 Executive Engineer, RHD
 Road Division,

*Use additional page(s) for more data

LONG SECTION INFORMATION OF THE ROAD FOR PAVEMENT DESIGN (FORMAT-C2)

Name & ID of the Road :		0	
Road Division :	-	Circle :	-
Source of Data :			
Location Chainage :	To	=	0.000 Km
HFL R.L. =		BMRL =	

Note : As per GDSM(Revised)2005, Clause-4.10, the bottom level of the pavement(sub-base) will have a freeboard of 1.0m from HFL

Road Chainage	Pavement Top R.L. (m)	Thickness of Pavement Layers								R.L. of bottom level of Pavement (sub-base)	Up/Down From HFL ("+" means Up, "-" means Down)	
		Bituminus Surfacing (mm)	Aggr. Base Type-I (mm)	Aggr. Base Type-II (mm)	WBM (mm)	Sub-Base (mm)	ISG (mm)	Others (mm)	Total Layer Thickness (mm)		12	13
1	2	3	4	5	6	7	8	9	10	11	12	13
000+000									0 mm	0.000 m	0.000 m	Raising Req.
000+100									0 mm	0.000 m	0.000 m	Raising Req.
000+200									0 mm	0.000 m	0.000 m	Raising Req.
000+300									0 mm	0.000 m	0.000 m	Raising Req.
000+400									0 mm	0.000 m	0.000 m	Raising Req.
000+500									0 mm	0.000 m	0.000 m	Raising Req.
000+600									0 mm	0.000 m	0.000 m	Raising Req.
000+700									0 mm	0.000 m	0.000 m	Raising Req.
000+800									0 mm	0.000 m	0.000 m	Raising Req.
000+900									0 mm	0.000 m	0.000 m	Raising Req.
001+000									0 mm	0.000 m	0.000 m	Raising Req.
001+100									0 mm	0.000 m	0.000 m	Raising Req.
001+200									0 mm	0.000 m	0.000 m	Raising Req.
001+300									0 mm	0.000 m	0.000 m	Raising Req.
001+400									0 mm	0.000 m	0.000 m	Raising Req.
001+500									0 mm	0.000 m	0.000 m	Raising Req.
001+600									0 mm	0.000 m	0.000 m	Raising Req.
001+700									0 mm	0.000 m	0.000 m	Raising Req.
001+800									0 mm	0.000 m	0.000 m	Raising Req.
001+900									0 mm	0.000 m	0.000 m	Raising Req.
002+000									0 mm	0.000 m	0.000 m	Raising Req.
002+100									0 mm	0.000 m	0.000 m	Raising Req.
002+200									0 mm	0.000 m	0.000 m	Raising Req.
002+300									0 mm	0.000 m	0.000 m	Raising Req.
002+400									0 mm	0.000 m	0.000 m	Raising Req.
002+500									0 mm	0.000 m	0.000 m	Raising Req.
002+600									0 mm	0.000 m	0.000 m	Raising Req.
002+700									0 mm	0.000 m	0.000 m	Raising Req.
002+800									0 mm	0.000 m	0.000 m	Raising Req.
002+900									0 mm	0.000 m	0.000 m	Raising Req.
003+000									0 mm	0.000 m	0.000 m	Raising Req.
003+100									0 mm	0.000 m	0.000 m	Raising Req.
003+200									0 mm	0.000 m	0.000 m	Raising Req.
003+300									0 mm	0.000 m	0.000 m	Raising Req.
003+400									0 mm	0.000 m	0.000 m	Raising Req.
003+500									0 mm	0.000 m	0.000 m	Raising Req.
003+600									0 mm	0.000 m	0.000 m	Raising Req.
003+700									0 mm	0.000 m	0.000 m	Raising Req.
003+800									0 mm	0.000 m	0.000 m	Raising Req.
003+900									0 mm	0.000 m	0.000 m	Raising Req.
004+000									0 mm	0.000 m	0.000 m	Raising Req.
004+100									0 mm	0.000 m	0.000 m	Raising Req.
004+200									0 mm	0.000 m	0.000 m	Raising Req.
004+300									0 mm	0.000 m	0.000 m	Raising Req.
004+400									0 mm	0.000 m	0.000 m	Raising Req.

Name & Sign.	Name & Sign.	Name & Sign.	Name & Sign.
Surveyor	Sub-Assistant Engineer, RHD	Sub-Divisional Engineer, RHD	Executive Engineer, RHD
Road Division,	Road Sub-Division,	Road Sub-Division,	Road Division,

Note : HFL R.L. [as per GDSM(Revised)2005, clause-4.10, to be calculated for a 30 Years Return Period based on hydrological data and cross-checked with the recorded HFL in the locality can be obtained from RHD Operational Divisions and respective offices of Water Development Board.], and the bottom level of the pavement(sub-base) will have a freeboard of 1.0m from HFL.
BMRL is the Permanent marks on an outer wall of the Division Offices or Other Govt. building within the division etc

FORMAT-G1 (Data & Information sheet for Road Geometry Design)

Road ID & Name : 0			
Road Division :	-	Road Circle :	-
ACE Office Memo. No. :	-	Date :	1/0/1900
Location Chainage :	000+000	To 000+000 =	0.000 Km

A) Horizontal Alignment & Bus Bay Design Informations

Sl. No.	Description	Existing	Proposed	Remarks
1	Number of horizontal curvature in the alignment	:		
2	Radius of horizontal curvature (Please use separate table for each horizontal curvature)			
	at chainage	Radius	:	
	at chainage	Radius	:	
	at chainage	Radius	:	
	at chainage	Radius	:	
3	Is there any safety concern along the curve? [Pick <input type="checkbox"/> Yes / <input type="checkbox"/> No from drop down]	:		
4	If Yes, please provide reason.	:		
5	Number of pedestrian crossings	:		
6	Number of bus stops/bus bays	:		
7	Distance of intersections (signalized/unsignalized) from the			
8	Area available at the proposed location [Pick <input type="checkbox"/> Yes / <input type="checkbox"/> No from drop down]			
9	Justification of selecting such location			
10	Number of parking/rest area facilities	:		

B) Vertical Alignment / Gradient Informations

Sl. No.	Description	Existing	Proposed	Remarks
1	Number of vertical curve	:		
2	Gradient details (Please use separate table for where gradient changes)			
	at chainage	gradient %	:	
	at chainage	gradient %	:	
	at chainage	gradient %	:	
	at chainage	gradient %	:	
3	Number of Bridges	:		
4	Number of Culverts	:		
5	Number of Overpasses	:		
6	Number of Railway Overpasses	:		
7	Is there any safety concern on these structures or vertical curves? [Pick <input type="checkbox"/> Yes / <input type="checkbox"/> No from drop down]	:		
8	If Yes, please provide reason.	:		
1) Attach AutoCAD file of detailed topography drawing of existing alignment (Mandatory field)				

1. Please ensure that detailed drawing (layout) of topographic map showing well demarcated existing alignment and proposed alignment in single map is attached with the design request in pdf and .dwg (AutoCAD) format.
2. Please ensure that locations of curves/bus bays/pedestrian crossings/parking facilities/rest areas are shown in the layout plan

Name & Sign. : _____
 Sub-Assistant Engineer, RHD
 Road Sub-Division,

Name & Sign. : _____
 Sub-Divisional Engineer, RHD
 Road Sub-Division,

Name & Sign. : _____
 Executive Engineer, RHD
 Road Division,

FORMAT-G1 (Data & Information sheet for Road Geometry Design)

C) Informations for Intersection / Junction Design

Sl. No.	Description	Existing	Proposed	Remarks
1	Number of existing intersections/junctions (Please use separate table for each intersection/junction) :			
2	Type of road forming the intersection/junction (mention the number in information column) <input type="checkbox"/> National to National <input type="checkbox"/> National to Regional <input type="checkbox"/> National to Zila <input type="checkbox"/> Regional to Regional <input type="checkbox"/> Regional to Zila <input type="checkbox"/> Zila to Zila	:	:	
3	Type of intersection/junction <input type="checkbox"/> Round About <input type="checkbox"/> Crossroad <input type="checkbox"/> T-junction <input type="checkbox"/> Y-junction	:	:	

Please provide the following required information/documents/maps-

1. Attach softcopy (.dwg file) of AutoCAD drawing (to the scale) of the intersection up to 500 meters of the road on all sides from the proposed intersection.
2. Please ensure that detailed Topographic Survey is shown in the drawing.
3. Please ensure that approved Right of Way (ROW) is illustrated in the drawing.
4. Cross-section of the approved pavement design.
5. Names and numbers of the side roads (along with the name of the controlling organization)
6. AADT data of all the roads connected to the intersection
7. Still photographs of the intersection (2 photographs of each leg of the intersection)
8. Other information such as, future expansion, adjacent schools, hospitals, growth centers, mosques, bus stops, accident data etc.

[1] Mandatory information

 Name & Sign. :
 Sub-Assistant Engineer, RHD
 Road Sub-Division,

 Name & Sign. :
 Sub-Divisional Engineer, RHD
 Road Sub-Division,

 Name & Sign. :
 Executive Engineer, RHD
 Road Division,

**Use additional page(s) for more data*