



भारत सरकार Government of India
रेल मंत्रालय Ministry of Railways
रेलवे बोर्ड Railway Board

No. 2019/CEDO/SD/IRSOD/O/ACS-27

New Delhi, Dated 17.07.2019

Addressed to:

(As per list mentioned below)

Sub: Addendum & Corrigendum Slip (ACS) No. 27 to the Indian Railways
Schedule of Dimensions 1676 mm Gauge (BG) Revised, 2004

The Ministry of Railways (Railway Board) have decided that the following items of Schedules I of Indian Railways Schedule of Dimensions 1676 mm Gauge (BG) Revised, 2004 be amended as shown in the enclosed Addendum & Corrigendum Slip (ACS) No. 27:

I	Opening Paragraph of Chapter-I	V	Item 29 of Chapter IV (A): Rolling Stock (C&W)
II	Item 1 of Chapter II: Station Yards	VI	Item 12 of Chapter IV (C): Rolling Stock(Locomotive)
III	Item 2 of Chapter II: Station Yards	VII	Item 4 of Chapter V-A: Electric Traction 25 kV A.C. 50 Cycles
IV	Item 4, 5 & 6 of Chapter II: Station Yards		
Drawing Nos. 1A, 1A(Modified), 1B, 1C, 1D, 2, 3(FIG II)			

Enclosure: ACS No. 27 (11 pages)

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17.07.19
(प्रेम सागर गुप्ता)

कार्यकारी निदेशक (सिविल इंजी.)/रेलवे बोर्ड

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- ED Standards (Track I)/RDSO

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Addendum & Corrigendum Slip (ACS) No. 27
To
Schedule-I, Indian Railways Schedule Of Dimensions (B.G.) Revised, 2004

I. Amendment to Opening Paragraphs of Chapter-I: General

{At Page 4 of IRSOD subsequently revised vide ACS No. 25}

Opening Paragraphs shall be read as under:

The DIMENSIONS given in this Schedule-I have been classified under two heads namely for 'Existing works' and for 'New works'. Existing works means the works which were existing before issue of this Schedule of Dimensions (2004) and would help the field engineers to provide the information about previous dimensions followed at one place.

New works would include altogether new constructions, additions of new lines, new structures, gauge conversion and doubling. However, it does not include the works of alteration such as shifting of points and crossings, extension of siding, extension of loop line, alteration in building etc.

The dimensions, except for existing works, are to be observed on all 1676 mm gauge on Indian Railways for execution of new works. Provided that infringement to any provision of IRSOD Chapter I, II, III, V, VA & VB of Schedule I can be condoned by the Commissioner; provided further that infringement beyond the limits prescribed in Schedule II, if any, or wherever specific mentions appear in Schedule I, sanction for condonation shall be obtained from Railway Board through Commissioner/Chief Commissioner of Railway Safety.

[See Diagram Nos. 1A, 1A (Modified), IB, 1C and 1D]

Note:

- (1) Items 8 and 10 are applicable only to structures outside station yards. All other items are of general applicability.

For running EMU and other 3660mm Stock on existing works, clearances prescribed in items 13 of Chapter I "Tunnels, Through and Semi Through Girder Bridges" shall also be required for all structures governed by items 1, 7, 8 and 12 of this chapter and not only for tunnels, through and semi through girder bridges.

II. Amendment to Item 1, Schedule-I, Chapter II: Station Yards

{At Page 10 of IRSOD subsequently revised vide ACS No. 26}

Item I shall be read as under:

1.	Minimum distance centre to centre on straight tracks	
	(i) For existing works	4265mm
	(ii) For new works/addition to existing works	5300mm

Note:

- (a) See Appendix for extra clearance required on curves.
(b) ** deleted
(c) In case new OHE masts/Signal posts are required to be provided in between tracks under unavoidable circumstances, the clearance maintained in 1(ii) above shall be increased by equal to the width of such provisions/ structures/ foundations, as the case may be.
(d) For "New Works/additions to existing works" in existing yard such as conversion of existing loop lines into main line etc, if the stipulation mentioned in 1(ii) and Note (c) above are not

likely to be achieved due to field constraints, then minimum horizontal distance from center of track to any structure, as mentioned in Note (c) of Para 11(B) of Chapter-II, IRSOD-2004 shall be ensured.

- (e) In completely new yard or portion of existing yard, where "New Work" is being done independent of the existing yard, stipulation under 1(ii) above shall be ensured.
- (f) In case of tunnels, ROBs, flyovers, through & semi-through girder bridges, where centre to centre distance lesser than 5300mm has been provided, lesser centre to centre distance can be provided on approaches also up to adequate distance to facilitate gradual increase in centre to centre distance up to 5300mm.

III. Amendment to Item 2, Chapter II: Station Yards

{At Page 10 of IRSOD subsequently revised vide ACS No. 17}

Item 2 shall be read as under:

Maximum (Steepest) gradient in station yards, unless special safety devices are adopted and/or special rules enforced to prevent accidents in accordance with approved special instructions.

- (i) For New Works & Alteration to Existing Works-
 - (a) Recommended : 1 in 1200(0.083%)
 - (b) Maximum (Steepest) : 1 in 400 (0.25%)
- (ii) For Existing Works : 1 in 400 (0.25%)

Note:

- (a) Recommended dimension is generally the good practice, the adoption of which will lead to desirable uniformity on Indian Railways; but it is not to be treated as standards, a departure from which requires sanction.
- (b) In case, it is not possible to provide recommended gradient of 1 in 1200 (0.083%) in yard even after making efforts to provide grades as flat as possible, reasons for deviation from recommended gradient and upto the specified maximum (steepest) gradient of 1 in 400 (0.25%) shall be recorded by the Zonal Railway.
- (c) No station yard shall be constructed nor shall any siding join a passenger line on a grade steeper than 1 in 100 (0.10%), except where it is unavoidable and then also only with the previous sanction of Railway board, obtained through the Commissioner of Railway Safety, when adequate arrangements are made to prevent accident.
- (d) The powers of condonation for gradient steeper than the specified standard maximum gradient of 1 in 400 (0.25%) shall be as under:

(i)	Existing Yard:	
	Steeper than 1 in 400 (0.25%) and upto 1 in 100 (0.10%)	Commissioner of Railway Safety
	Steeper than 1 in 100 (0.10%)	Railway Board through Chief Commissioner of Railway Safety
(ii)	For New Yard in New Line Projects:	
	Steeper than 1 in 400 (0.25%) and upto 1 in 260 (0.38%)	Commissioner of Railway Safety
	Steeper than 1 in 260 (0.38%)	Railway Board through Chief Commissioner of Railway Safety

- (e) For above purpose, a station yard means –
- (i) On single line to a distance of 50 meters beyond Stock Rail joint of outermost points at either end of the station.
 - (ii) On double line where 2 aspect signaling is provided, from Home signal to a distance of 50 meters beyond Stock Rail joint of outermost points at the trailing end, or where there are no loops, to last stop signal of each line.
 - (iii) On double line where multiple aspect signaling is provided to a distance of 50 meters beyond Stock Rail Joint of outermost points at either end of the station or where there are no loops, from Block Section Limit Board to last stop signal of each line.
- (f) There must be no change of grades within 30 m of any points or crossings.
- (g) In case of 'New Lines' projects, the above provisions shall also apply to Flag station, Halt station, or class 'C' station (*where there is no station section as defined in IR General Rules, 1976*). This is to keep provision for conversion of Flag, Halt, or class 'C' station into class 'A' or 'B' station in future.
- (h) For other than 'New Lines' projects, the above provisions shall **not** be applicable for Flag station, Halt station, or class 'C' station.

IV. Amendment to Item 4, 5 & 6, Chapter II: Station Yards
 {At Page 12 of IRSOD subsequently revised vide ACS No. 22}

Item 4, 5 & 6 shall be read as under:

4. Height above rail level for high passenger platforms	840mm maximum 760mm minimum
5. Maximum height above rail level for medium level passenger platform	455 mm
6. Maximum height above rail level for goods platforms (except horse and end loading platforms)	1065 mm

Note: For Items 4, 5 and 6

- (a) Platforms may be flush with rail level.
- (b) The ends of all platforms (except end loading platforms) must be ramped to a slope of 1 in 6 for a width of not less than 1 m from the face of the platform wall, the rest can either be ramped to the same slope or fenced.
- (c) The height of platforms serving canted track should be measured vertically from the face to a plane passing through the top of both the rails.
- (d) End loading platforms and platforms on sidings used exclusively for horse loading may be raised to a height of 1295mm above rail level.
- (e) Signal wires or supports for signal wires may be allowed underneath the platform coping.
- (f) The length of a passenger platform should be not less than the length of the longest passenger train excluding the engine, booked to stop at the platform.
- (g) No passenger platform in case of new line, would be constructed on a curve having radius less than 875 m.
- (h) In case of construction of a new platform on the existing line addition/alteration to existing platforms or in gauge conversion/doubling works, where either the new platform(s) are to be constructed or the old being dismantled and reconstructed, efforts

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should be made to ease out the existing curves having radii less than 875 m. However, for these works, having platform located/to be located on curves with radii less than 875 m, no condonation of CRS/Board would be necessary.

- (i) For item 4: the height of Mumbai suburban passenger platform and Pune suburban passenger platform may be in range of 840mm-900mm for reducing gap between bottom of sole bar of EMU coach & platform floor and shall be applicable for operation of EMU stocks having height of bottom of sole bar above rail level not less than 1039mm above rail level in fully loaded condition. The height of platform more than 840mm shall be permitted by General Manager, after ensuring maintenance condition of track and maintenance condition of rolling stock as under:
- (i) Improvement in maintenance practices and monitoring condition of spring during trip inspection of EMU rakes.
 - (ii) Improvement in track maintenance on platform lines to the standards specified in Para 607(2) of IRPWM.
 - (iii) Improved monitoring and corrective action to control sinkage of vertical level of track.
 - (iv) In case, a new design EMU stock different from the existing stock is to be introduced on suburban section, running trial over increased height suburban platforms shall be required before clearing the stock for passenger operation.

V. Amendment to Item 29, Chapter-IV (A): Rolling Stock (Carriage or Wagon)
{At Page 21 of IRSOD}

Item 29 shall be read as under:

Maximum height above rail level for a width of 1015mm on either side of the : 4265mm
centre of unloaded vehicle

VI. Amendment to Item 12, Chapter-IV(C): Rolling Stock (Locomotive)
{At Page 25 of IRSOD}

Item 12 of shall be read as under:

Maximum height above rail level for a width of 1015mm on either side of the : 4265mm
centre of unloaded vehicle

VII. Amendment to Item 4, Chapter-V-A: Electric Traction 25kV A.C. 50 Cycles
{At Page 28 of IRSOD subsequently revised vide ACS No. 10}

Item 4 of shall be read as under:

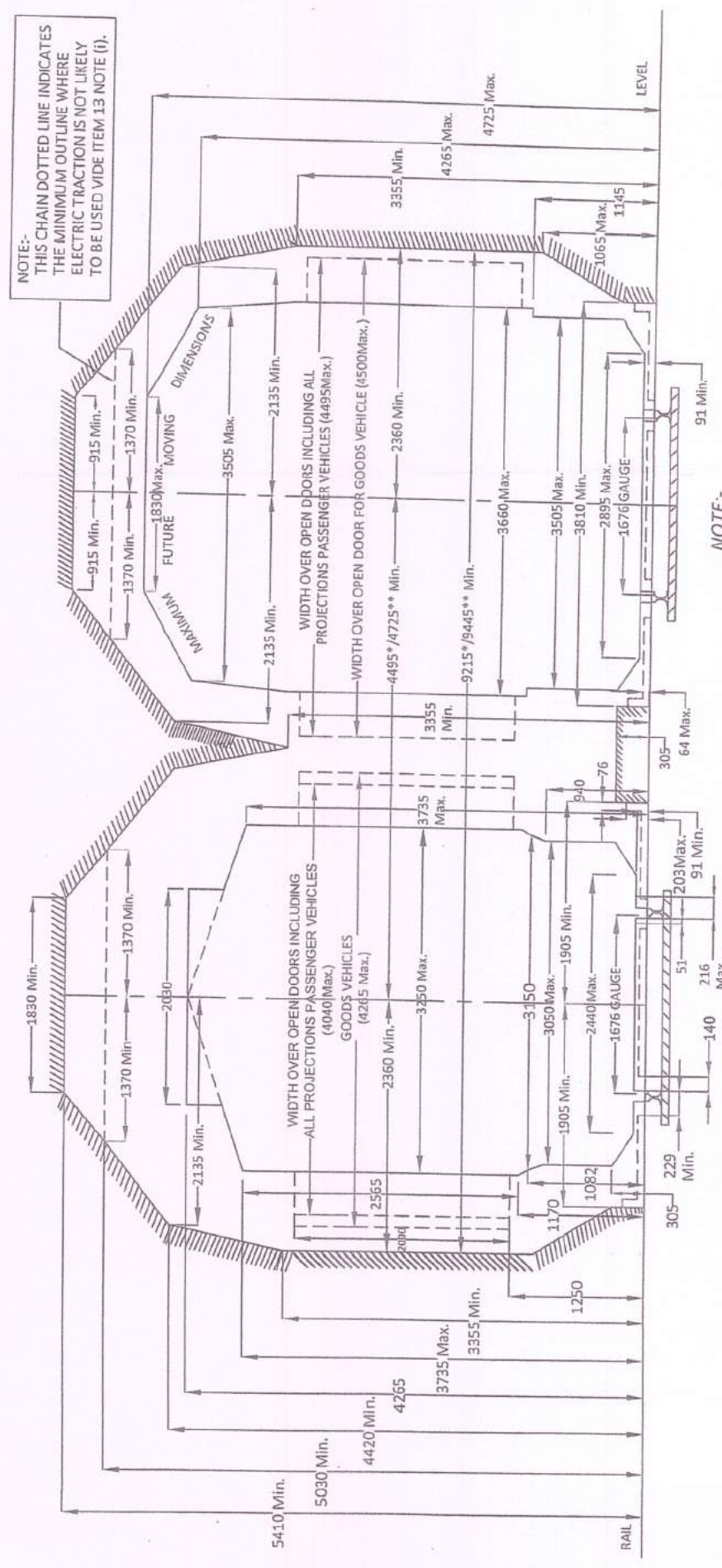
Maximum width of pantograph collector : 2030mm

Praveen Sagar
17.07.19

DIAGRAM No. 1A
1676mm GAUGE

STANDARD DIMENSIONS FOR TUNNELS & THROUGH GIRDER BRIDGES
SCHEDULE I - CHAPTER I

- NOTE:-**
- WHERE THE LINE IS ON A CURVE, THE HORIZONTAL DISTANCE OF ANY STRUCTURE FROM THE CENTRE OF ADJACENT TRACK AND THE DISTANCE BETWEEN CENTRES OF TRACKS ARE TO BE INCREASED ACCORDING TO THE APPENDIX.
 - WHEN RE-SPACING EXISTING LINES, THE MINIMUM DISTANCE CENTRE TO CENTRE OF TRACKS MAY BE REDUCED FROM 4725 TO NOT LESS THAN 4495 FOR THE PURPOSE OF AVOIDING HEAVY ALTERATIONS TO TUNNELS OR THROUGH GIRDER BRIDGES. THE 4725 DIMENSION IS TO BE ADOPTED FOR ALL NEW WORKS.



NOTE:-
 * - For existing works
 ** - For new works or alteration to existing works

from Sogam
 17.07.19

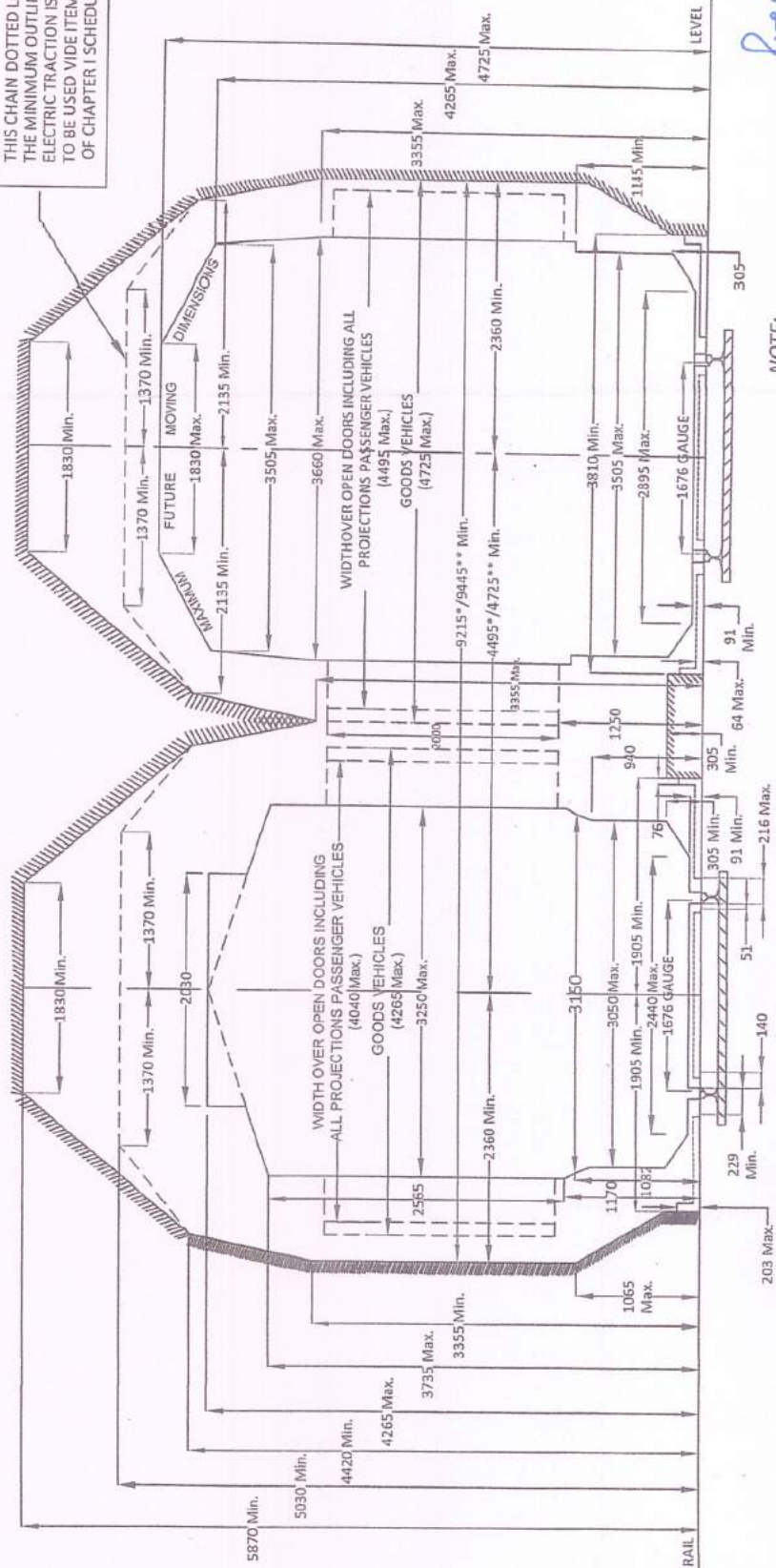
*mpb/s
 25/5/15*

DIAGRAM No. 1A (MODIFIED)
1676 mm GAUGE

STANDARD DIMENSIONS FOR TUNNELS & THROUGH GIRDER BRIDGES
TO SUIT 25 k.V. A.C. TRACTION SCHEDULE I CHAPTER I

NOTE:- THE DISTANCES SPECIFIED APPLY ONLY IN CASE OF STRAIGHT TRACKS. ON CURVES, THE HORIZONTAL DISTANCE SHOULD BE INCREASED BY AN AMOUNT 'D' TO ALLOW FOR THE LEAN DUE TO SUPER-ELEVATION CALCULATED BY THE FOLLOWING FORMULA, WHERE 'H' IS THE HEIGHT OF THE CONTACT WIRE, 'S' THE SUPER-ELEVATION AND 'G' THE GAUGE OF THE TRACK, ALL DIMENSIONS BEING IN METRES $D = H \times S / G$

NOTE:- THIS CHAIN DOTTED LINE INDICATES THE MINIMUM OUTLINE WHERE ELECTRIC TRACTION IS NOT LIKELY TO BE USED VIDE ITEM 1.3 NOTE (i) OF CHAPTER I SCHEDULE I.



NOTE:-
 * - For existing works
 ** - For new works or alteration to existing works

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NOTE:- ALL DIMENSIONS ARE IN MILLIMETRES EXCEPT WHERE OTHERWISE SHOWN.

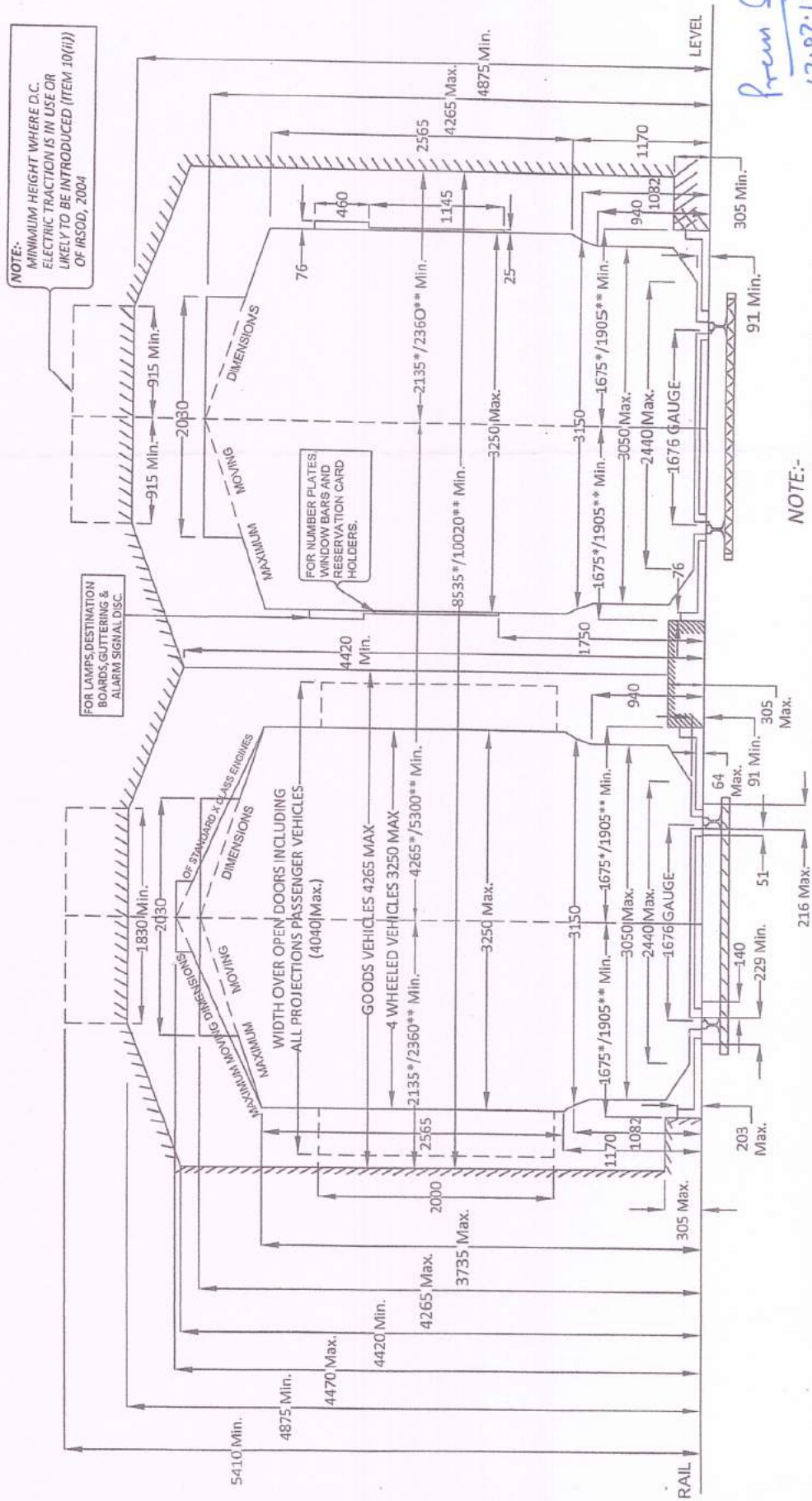
m/s. basisc

STANDARD DIMENSIONS OUT OF STATIONS SCHEDULE I - CHAPTER I

DIAGRAM N^o. 1B 1676 mm GAUGE

NOTE:-

WHERE THE LINE IS ON A CURVE, THE HORIZONTAL DISTANCE OF ANY STRUCTURE FROM THE CENTRE OF ADJACENT TRACK AND THE DISTANCE BETWEEN CENTRES OF TRACKS ARE TO BE INCREASED ACCORDING TO THE APPENDIX.



NOTE:-

* - For existing works

** - For new works or alteration to existing works

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17.07.19

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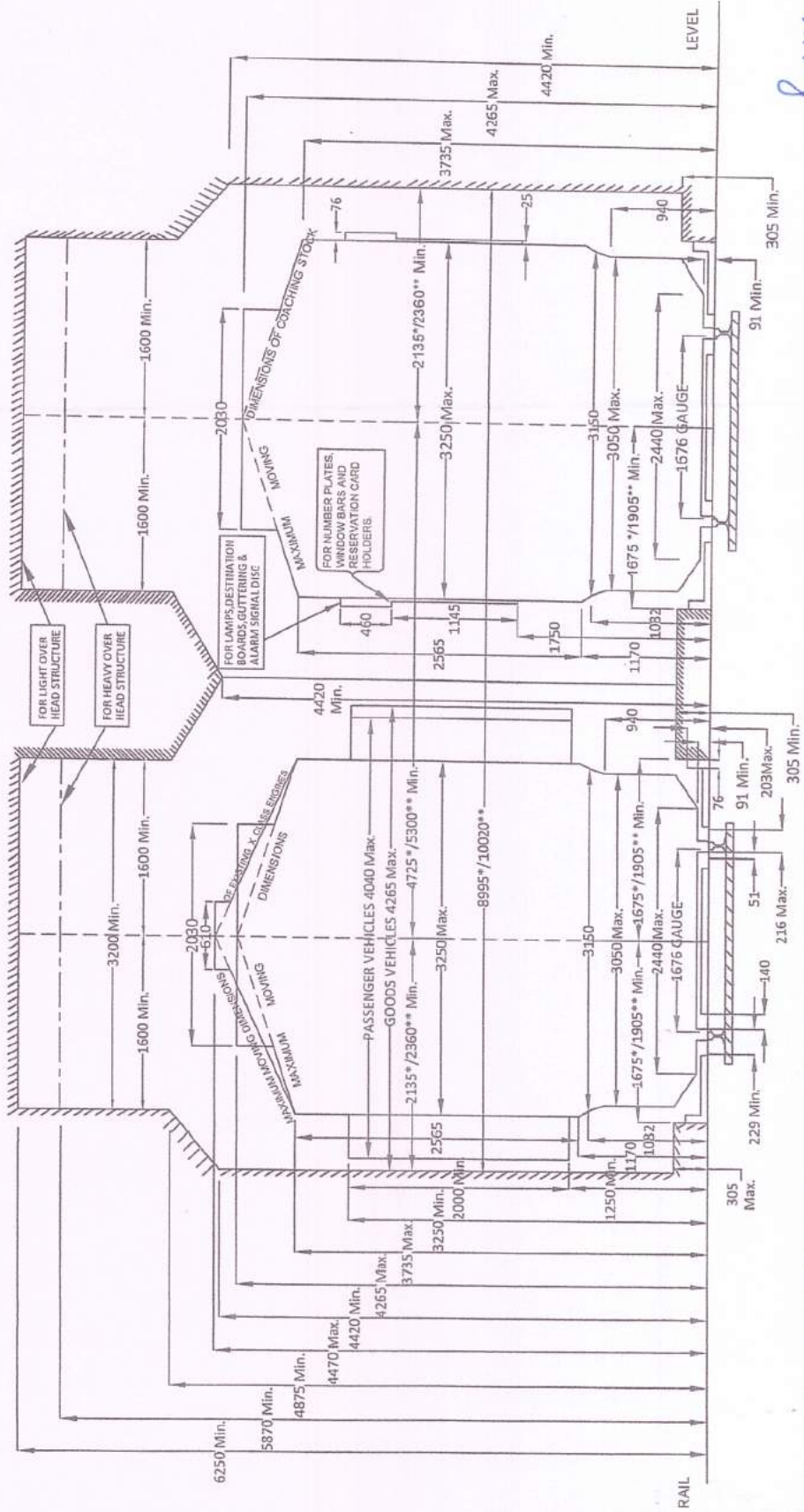
NOTE:- ALL DIMENSIONS ARE IN MILLIMETRES EXCEPT WHERE OTHERWISE SHOWN.

STANDARD DIMENSIONS OUT OF STATIONS

TO SUIT 25 KV. A.C. TRACTION
SCHEDULE I - CHAPTER I

DIAGRAM No. 1C
1676 mm GAUGE

NOTE:- THE DISTANCES SPECIFIED, APPLY ONLY IN CASE OF STRAIGHT TRACK. ON CURVES, THE HORIZONTAL DISTANCE SHOULD BE INCREASED BY AN AMOUNT 'D' TO ALLOW FOR THE LEAN DUE TO SUPER-ELEVATION CALCULATED BY THE FOLLOWING FORMULA, WHERE 'H' IS THE HEIGHT OF THE CONTACT WIRE, 'S' THE SUPERELEVATION AND 'G' THE GAUGE OF THE TRACK, ALL DIMENSIONS BEING IN METRES $D = \frac{H \times S}{G}$



NOTE:- ALL DIMENSIONS ARE IN MILLIMETRES EXCEPT WHERE OTHERWISE SHOWN.

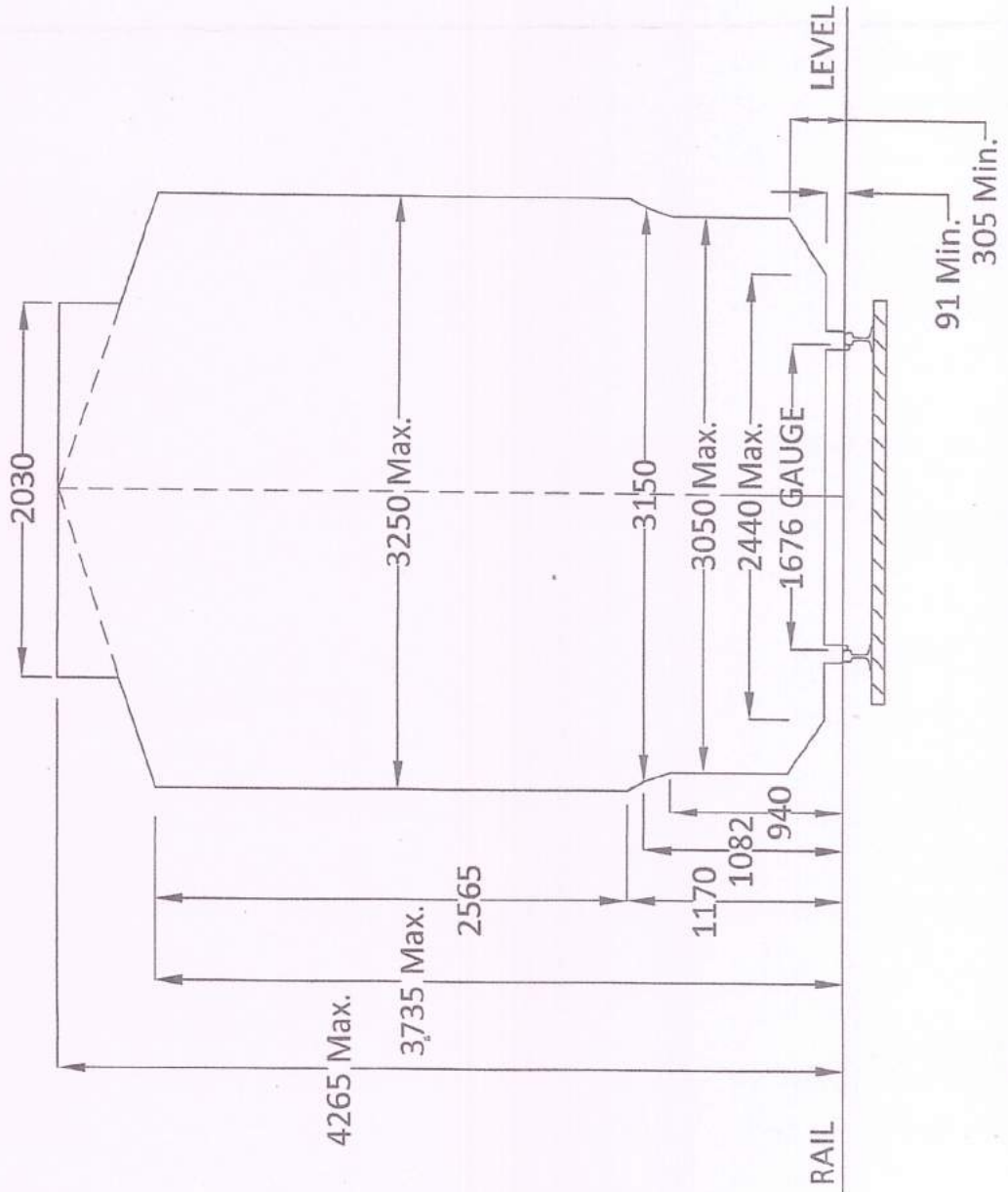
NOTE:-
* - For existing works
** - For new works or alteration to existing works

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17.07.19

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BDS/SL

DIAGRAM No. 1D
(EDO/T-2202)
1676mm GAUGE

MAXIMUM MOVING DIMENSIONS



NOTE:- ALL DIMENSIONS ARE IN MILLIMETRES EXCEPT WHERE OTHERWISE SHOWN.

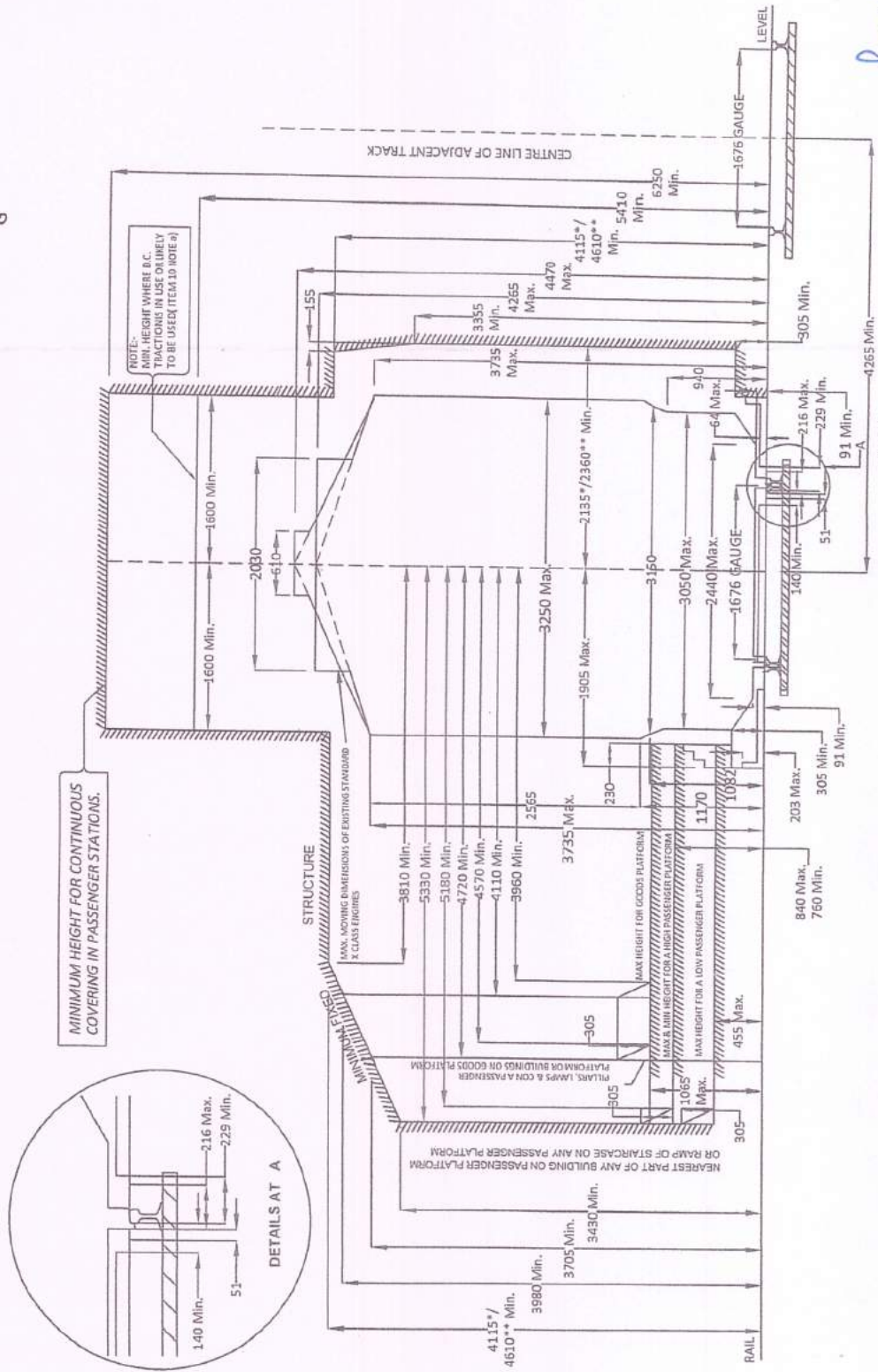
Pravin Sagant
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DIAGRAM NO. 2
1676 mm GAUGE

STANDARD DIMENSIONS IN STATIONS
TO SUIT 25 kV.A.C. TRACTION SCHEDULE I-CHAPTER II

NOTE:- THE DISTANCES SPECIFIED, APPLY ONLY IN CASE OF STRAIGHT TRACK. ON CURVES, THE HORIZONTAL DISTANCE SHOULD BE INCREASED BY AN AMOUNT 'D' TO ALLOW FOR THE LEAN DUE TO SUPER-ELEVATION CALCULATED BY THE FOLLOWING FORMULA, WHERE 'H' IS THE HEIGHT OF THE CONTACT WIRE, 'S' THE SUPER-ELEVATION AND 'G' THE GAUGE OF THE TRACK, ALL DIMENSIONS BEING IN METRES $D = \frac{H \times S}{G}$



NOTE:-
* - For existing works
** - For new works or alteration to existing works

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