

GOVERNMENT OF INDIA MINISTRY OF RAILWAYS (RAILWAY BOARD)

No.2004/Sig/A/WR/1

New Delhi dt.20.07.07

C.S.T.E., All Indian Railways C.S.T.E., CORE/Allahabad

Sr. ED (Signal)/RDSO/Lucknow

Sub: Cable laying practices in ducts and pipes.

Ref: Railway Board letter of even number dated 5-1-2005.

While examining the unsafe/unusual failure of Point at Virar RRI in June 2004 on Western Railway, one of the recommendation approved by Board (ML) was that, cables in station yard must be protected by laying in RCC duct/DWC HDPE pipes/RCC split pipes to prevent damage due to construction work or trespassing. Accordingly, views of RDSO,s were sought and based on their recommendations, Railways were advised vide letter referred above, to submit their remarks on laying cables in DWC pipes vis-à-vis RCC duct.

The issue of cable laying practices in ducts and pipes was deliberated in CSTEs Conference held in May, 2006 and accordingly a Working Group was formed to study and standardize the cable laying practices with following terms of references:-

- Study practices adopted on WR, CR and SR for cable laying in large yards and sub-urban sections.
- b) Suggest improved methods of cable laying in ducts and pipes including RCC ducts for ensuring full protection against damage and assessing the cost effectiveness.
- c) Draw out requirement specifications.

The response of the Railways to the above mentioned letter, report of the Committee (report No.SS-117/2007) along with remarks of Sr. ED (Signal)/ RDSO on the report, have been examined in Board's office. The Committee's report and Sr. ED (Signal)/ RDSO,s comments on the report, have been approved for adoption subject to the following:

i) Main signaling cable in <u>large yards</u> including sub-urban sections should be laid in <u>RCC ducts/DWC</u> pipes/split pipes.

ii) Tail cables shall be laid through DWC HDPE pipes (ISI mark) of suitable sizes with non flame and anti rodent properties and coupling should be with utmost degree of protection, so as to avoid ingress of water and dust and buried in trenches at a depth of not less than 1000 mm from ground level.

RDSO need to examine for feasibility of issuing the recommended/ approved list of suppliers of DWC pipes so as to ensure quality.

Encl: RDSO's report No.SS-117/2007 and comments Of Sr. ED (Signal)/RDSO thereon.

-Sd-(Arun Saksena) Exe. Dir (Signal) Railway Board