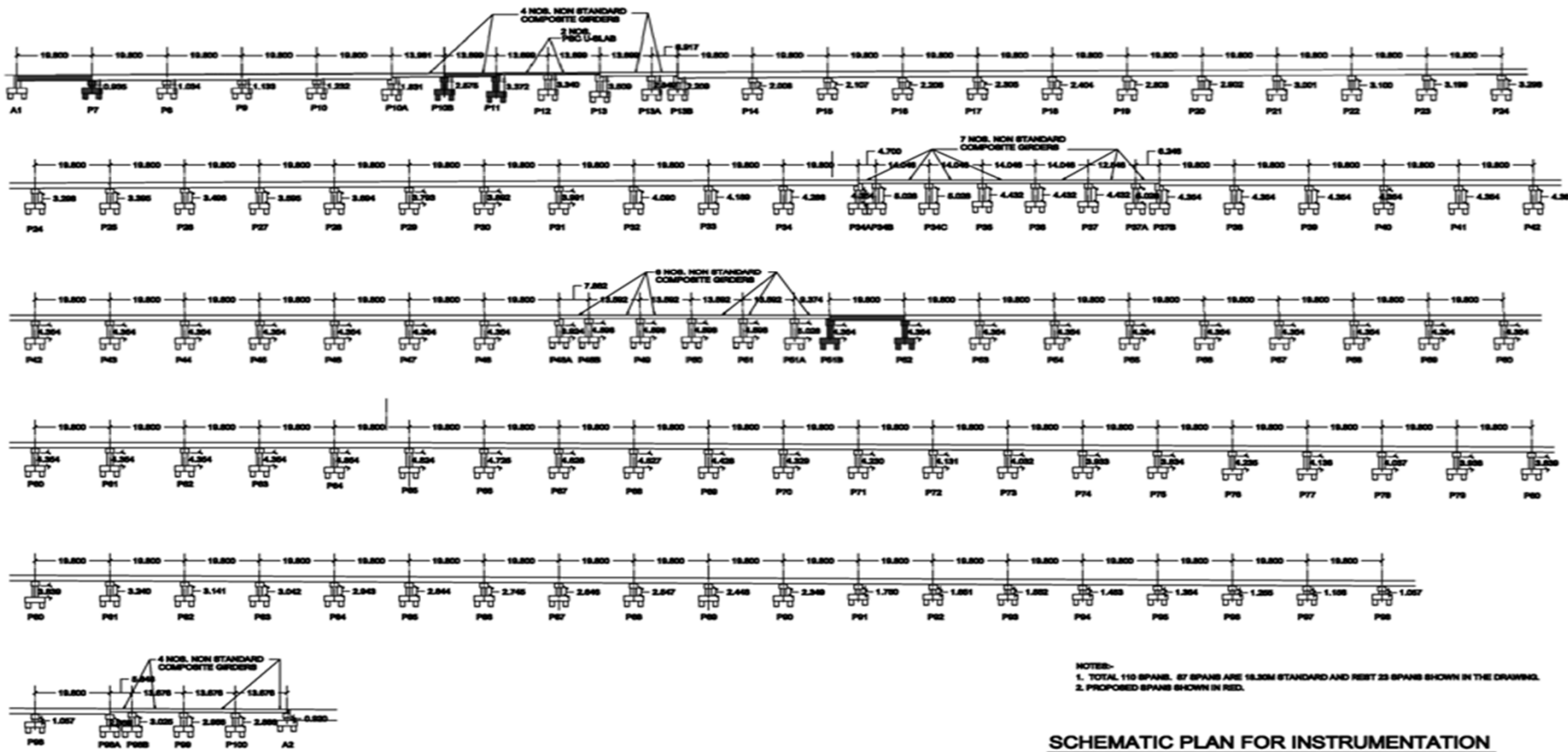
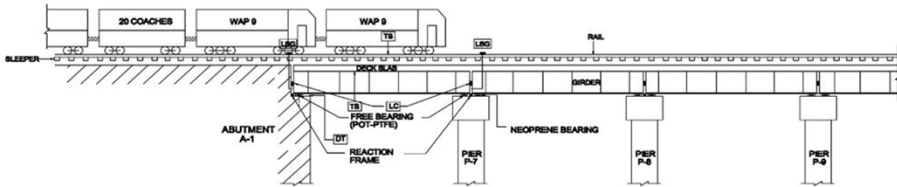
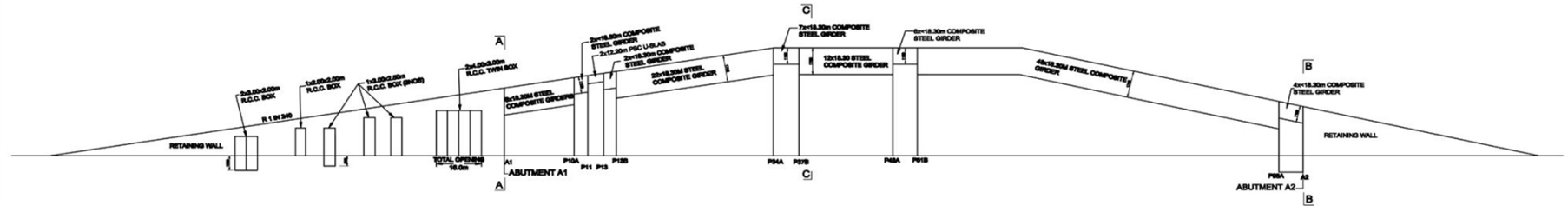


Appendix A

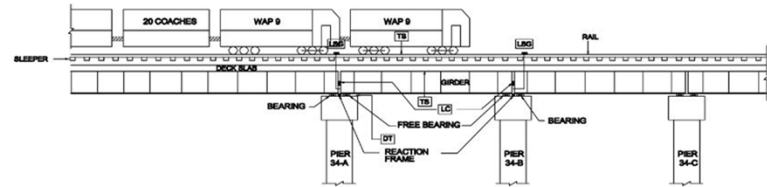


**SCHMATIC PLAN FOR INSTRUMENTATION
FOR ELEVATED TRACK AT ROHTAK**

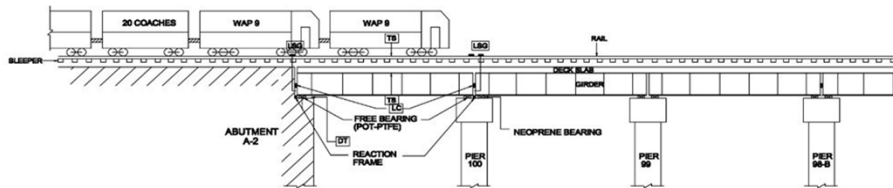
Figure 1: Instrumentation Scheme



LONGITUDINAL SECTION AT A-A



LONGITUDINAL SECTION AT C-C



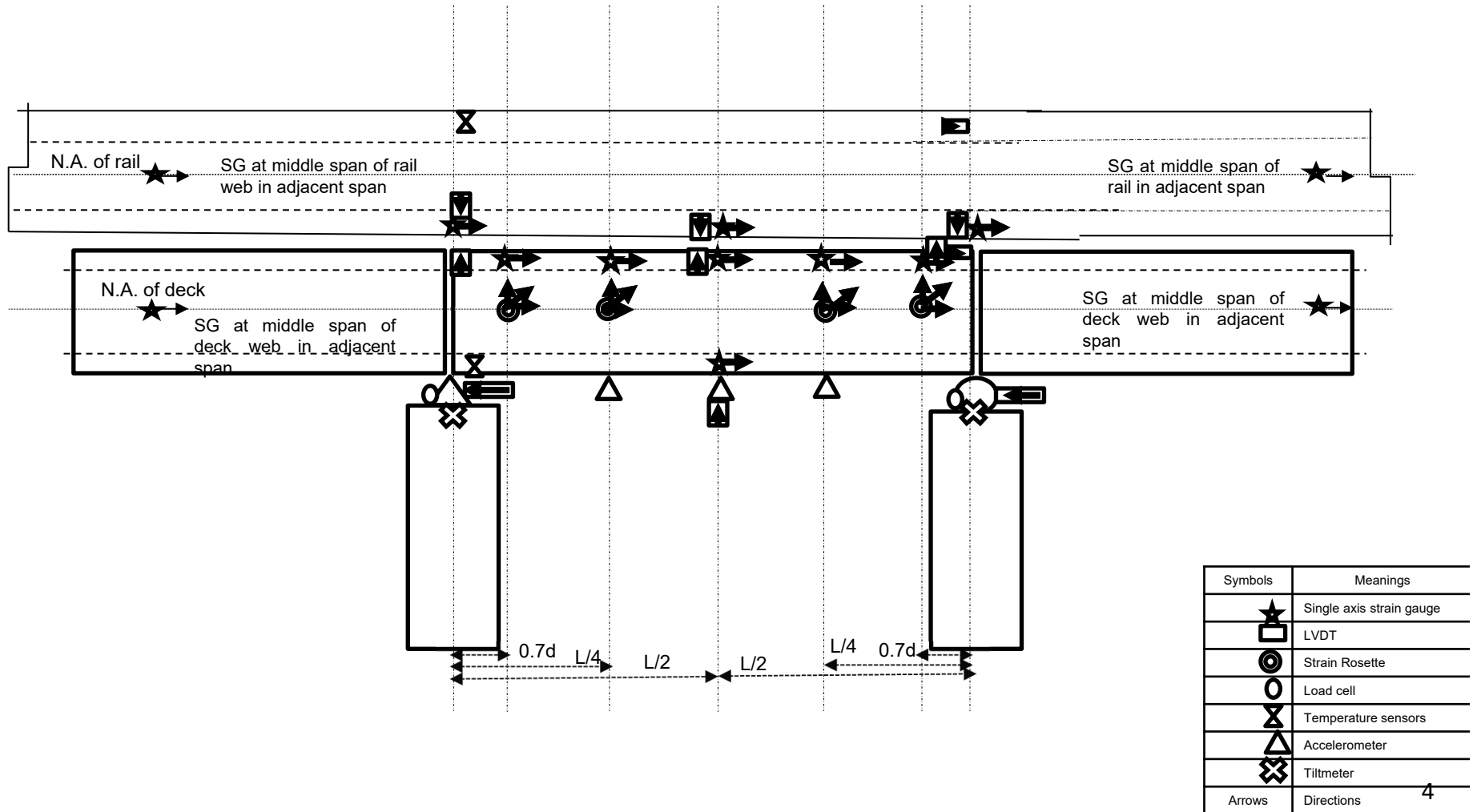
LONGITUDINAL SECTION AT B-B

ABBREVIATIONS
 LSG = LONG. STRAIN GAUGE
 TS = TEMPERATURE SENSOR
 LC = LOAD CELL
 DT = DISP. TRANSDUCER

NOTES:-

1. ON ONE TYPICAL SPAN ON STRAIGHT AND ABUTMENT EACH (A1 & A2) NEOPRENE BEARING WILL BE REPLACED BY FREE BEARINGS
2. LOAD COMING ON GIRDERS WILL BE TRANSFERRED BY REACTION FRAME TO BE SUITABLY FABRICATED DURING TEST RUN.
3. TRACTIVE EFFORT TEST RUN : 3 NOS.
4. BREAKING FORCE TEST RUN : 2 NOS.
5. SPEED TEST RUN : MAXIMUM POTENTIAL : 2 RUN.
75 KM/PH : 2 RUN.
6. ALL ABOVE TEST RUNS ARE FOR EACH DIRECTION.

Typical Instruments



Summary of No. of Sensors

Sensor Name	No. of Sensor
Load Cells	12
LVDT	36
Tiltmeter	6
Strain Gauge & Rosette	66
Accelerometer	24
Anemometer	3
RTD sensors	12
CCTV Camera	4
Data Acquisition Systems and power supply	As many necessary
Server	1