

# H-M of a Long Span Bridge



Case Study<sub>1</sub>

# Field Studies at CBB



**Rock Climbing Gear**



**Sensor Installation at Tower**

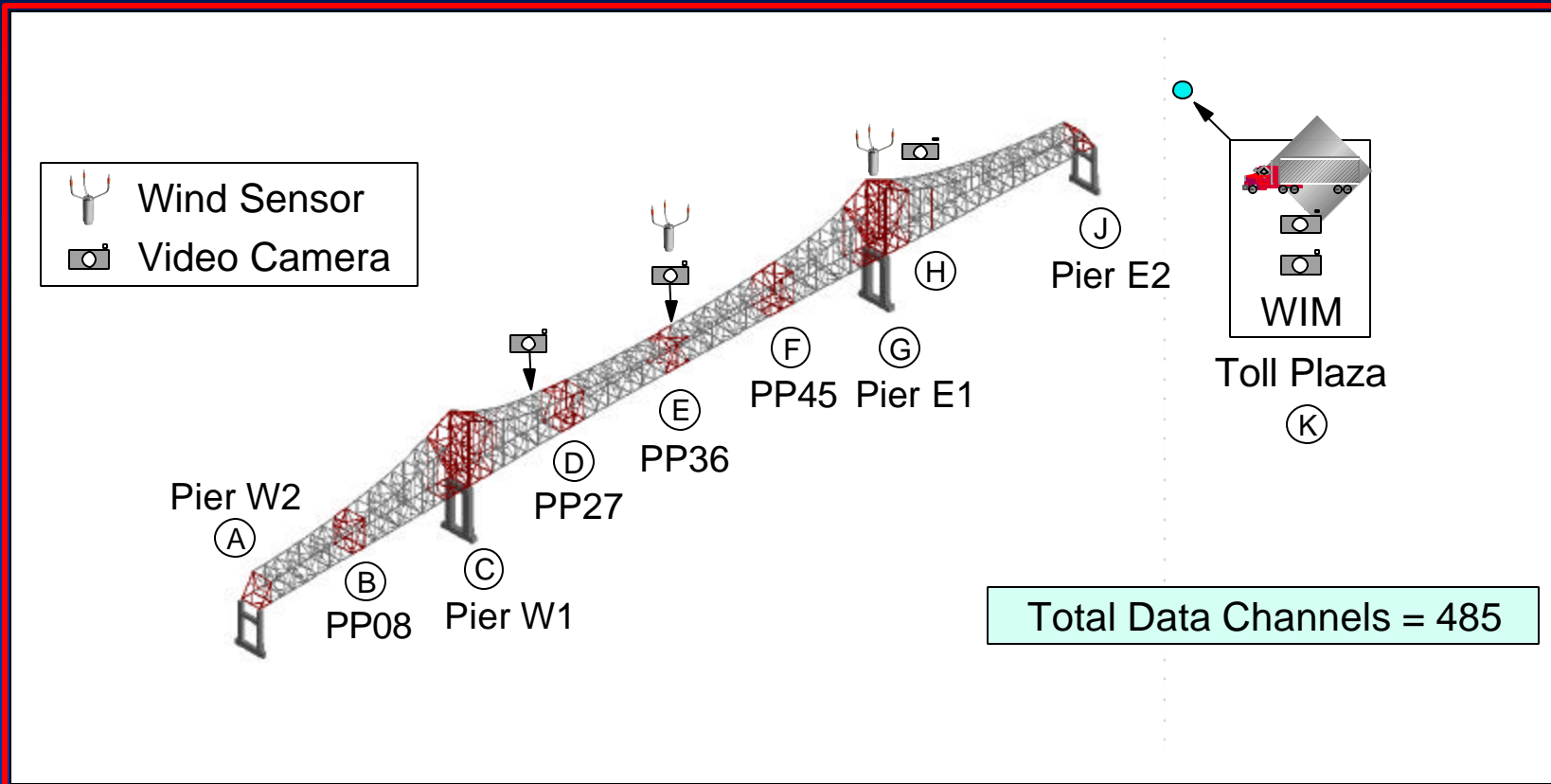


**Data Acq. During Damper Testing**



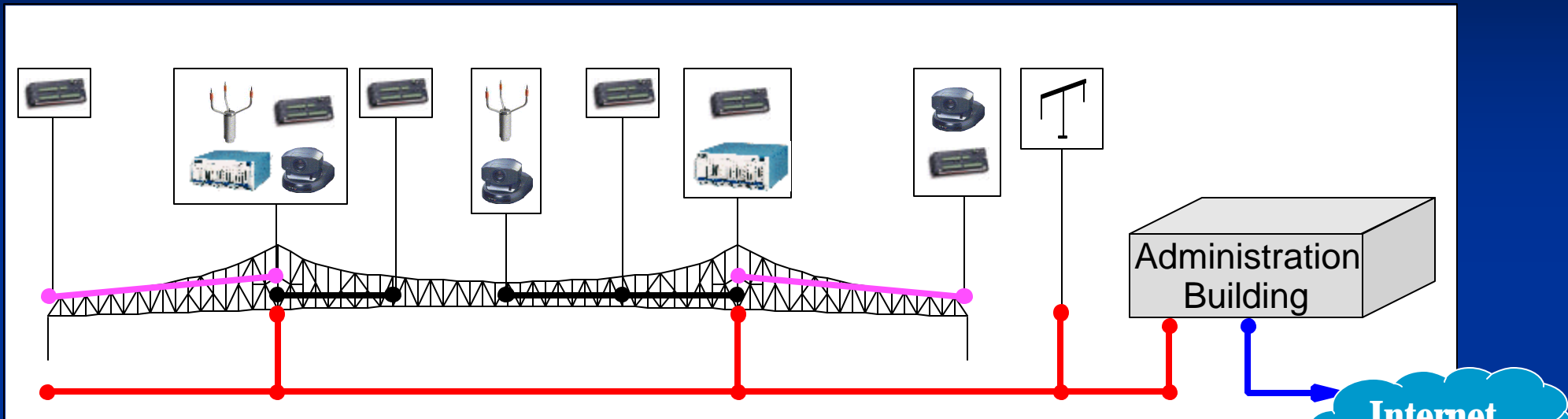
**Preparation of the Pier Cabinet for DAQ**






# CBB Instrumentation Map for the Phenomena to be Measured







PHENOMENA	MEASURAND	SENSOR	QTY	LOCATIONS
Traffic	Image	Video Camera	4	D, E, J
	Speed & Weight	WIM System	2 Lanes	K
Weather	Air Temperature Relative Humidity Solar Radiation	Weather Station	1	G
	Wind Speed & Dir.	Ultrasonic Wind	4	E, G
Bridge Responses	Live Load Strains	Q.B. Strain Gage	56	C, D, E, F
	Environ. Strains	V.W. Strain Gage	148	A, C, D, E, F, J
	Temperature	Thermistor	201	A, C, D, E, F, G, J
	Displacements	V.W. Crackmeter	17	A, D, F, J
	Tilts	V.W. Tiltmeter	36	A, C, D, F, G, J
	Accelerations	Cap. Accelerometer	16	B, D, F, H

# CBB Instrumentation LAN



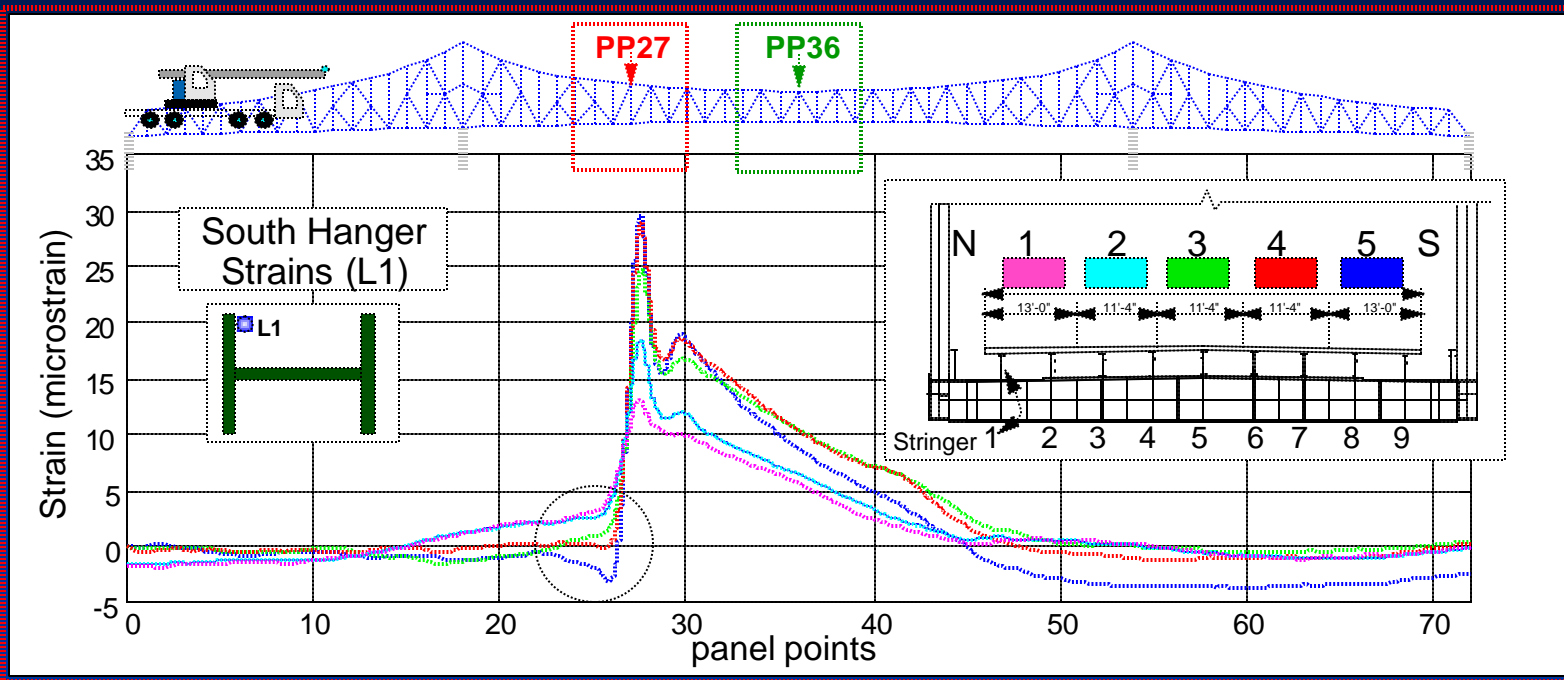
-  Campbell CR10X
-  Optim MEGADAC
-  Handar 555C
-  Sony EVI
-  Weigh-In-Motion

-  Fiber LAN
-  Internet (T1)
-  Short Haul Modem
-  Direct Copper

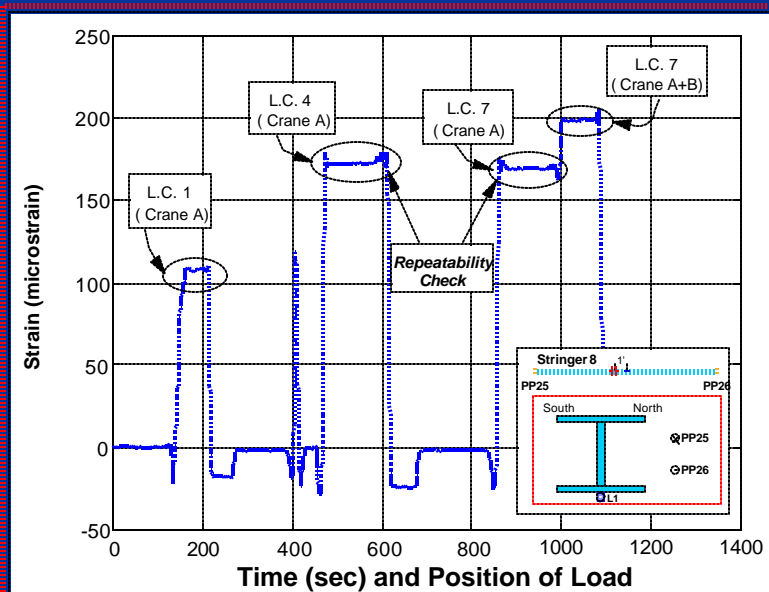
**Administration Building**

- Bridge Module (LabVIEW)
- Data Server Module (LabVIEW)

# Static and Crawl Speed Load Test



Crawl Speed Test Data for Influence Line Generation



Static Test Data For Stringer b/w PP25-PP26

