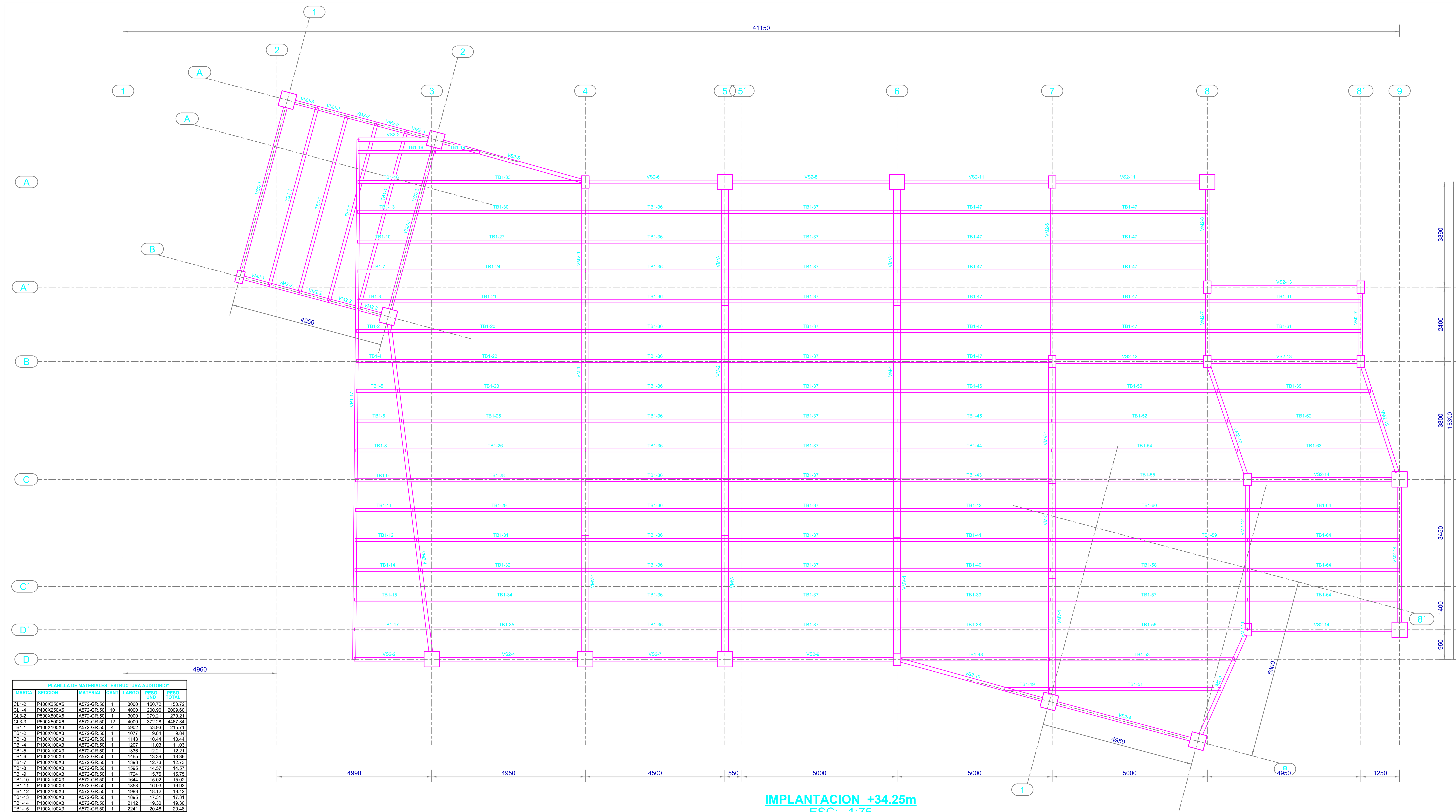


IMPLANTACION +34.25m
ESC: 1:75

PLANILLA DE MATERIALES "ESTRUCTURA AUDITORIO"						
MARCA	SECCION	MATERIAL	CANT	LARGO	PESO UND	PESO TOTAL
CL1-2	P400X250X5	A572-GR.50	1	3000	150.72	150.72
CL1-4	P400X250X5	A572-GR.50	10	4000	200.96	2009.60
CL3-2	P500X500X6	A572-GR.50	1	3000	279.21	279.21
CL3-3	P500X500X6	A572-GR.50	12	4000	372.28	4467.34
TB1-1	P100X100X3	A572-GR.50	4	5902	53.93	215.71
TB1-2	P100X100X3	A572-GR.50	1	1077	9.84	9.84
TB1-3	P100X100X3	A572-GR.50	1	1143	10.44	10.44
TB1-4	P100X100X3	A572-GR.50	1	1207	11.03	11.03
TB1-5	P100X100X3	A572-GR.50	1	1336	12.21	12.21
TB1-6	P100X100X3	A572-GR.50	1	1465	13.39	13.39
TB1-7	P100X100X3	A572-GR.50	1	1393	12.73	12.73
TB1-8	P100X100X3	A572-GR.50	1	1595	14.57	14.57
TB1-9	P100X100X3	A572-GR.50	1	1724	15.75	15.75
TB1-10	P100X100X3	A572-GR.50	1	1644	15.02	15.02
TB1-11	P100X100X3	A572-GR.50	1	1853	16.93	16.93
TB1-12	P100X100X3	A572-GR.50	1	1983	18.12	18.12
TB1-13	P100X100X3	A572-GR.50	1	1895	17.31	17.31
TB1-14	P100X100X3	A572-GR.50	1	2112	19.30	19.30
TB1-15	P100X100X3	A572-GR.50	1	2241	20.48	20.48
TB1-16	P100X100X3	A572-GR.50	1	2145	19.60	19.60
TB1-17	P100X100X3	A572-GR.50	1	2371	21.66	21.66
TB1-18	P100X100X3	A572-GR.50	1	2500	22.84	22.84
TB1-19	P100X100X3	A572-GR.50	1	1414	12.92	12.92
TB1-20	P100X100X3	A572-GR.50	1	6291	57.48	57.48
TB1-21	P100X100X3	A572-GR.50	1	6218	56.81	56.81
TB1-22	P100X100X3	A572-GR.50	1	6169	56.37	56.37
TB1-23	P100X100X3	A572-GR.50	1	6047	55.25	55.25
TB1-24	P100X100X3	A572-GR.50	1	5960	54.46	54.46
TB1-25	P100X100X3	A572-GR.50	1	5925	54.14	54.14
TB1-26	P100X100X3	A572-GR.50	1	5803	53.02	53.02
TB1-27	P100X100X3	A572-GR.50	1	5701	52.10	52.10
TB1-28	P100X100X3	A572-GR.50	1	5681	51.91	51.91
TB1-29	P100X100X3	A572-GR.50	1	5559	50.80	50.80
TB1-30	P100X100X3	A572-GR.50	1	5443	49.74	49.74
TB1-31	P100X100X3	A572-GR.50	1	5437	49.68	49.68
TB1-32	P100X100X3	A572-GR.50	1	5316	48.57	48.57
TB1-33	P100X100X3	A572-GR.50	1	5060	46.24	46.24
TB1-34	P100X100X3	A572-GR.50	1	5194	47.46	47.46
TB1-35	P100X100X3	A572-GR.50	1	5072	46.34	46.34
TB1-36	P100X100X3	A572-GR.50	15	4500	41.12	616.77
TB1-37	P100X100X3	A572-GR.50	15	5550	50.71	760.69
TB1-38	P100X100X3	A572-GR.50	1	4929	45.04	45.04
TB1-39	P100X100X3	A572-GR.50	2	4937	45.11	90.22
TB1-40	P100X100X3	A572-GR.50	1	4945	45.18	45.18
TB1-41	P100X100X3	A572-GR.50	1	4953	45.26	45.26
TB1-42	P100X100X3	A572-GR.50	1	4961	45.33	45.33
TB1-43	P100X100X3	A572-GR.50	1	4969	45.40	45.40
TB1-44	P100X100X3	A572-GR.50	1	4976	45.47	45.47
TB1-45	P100X100X3	A572-GR.50	1	4984	45.54	45.54
TB1-46	P100X100X3	A572-GR.50	1	4992	45.62	45.62
TB1-47	P100X100X3	A572-GR.50	11	5000	45.69	502.56
TB1-48	P100X100X3	A572-GR.50	1	4796	43.82	43.82
TB1-49	P100X100X3	A572-GR.50	1	1440	13.16	13.16
TB1-50	P100X100X3	A572-GR.50	1	5330	48.71	48.71
TB1-51	P100X100X3	A572-GR.50	1	5529	50.52	50.52
TB1-52	P100X100X3	A572-GR.50	1	5667	51.78	51.78
TB1-53	P100X100X3	A572-GR.50	1	5953	54.39	54.39
TB1-54	P100X100X3	A572-GR.50	1	6004	54.86	54.86
TB1-55	P100X100X3	A572-GR.50	1	6206	56.71	56.71
TB1-56	P100X100X3	A572-GR.50	1	6371	58.21	58.21
TB1-57	P100X100X3	A572-GR.50	1	6363	58.14	58.14
TB1-58	P100X100X3	A572-GR.50	1	6355	58.07	58.07
TB1-59	P100X100X3	A572-GR.50	1	6347	58.00	58.00
TB1-60	P100X100X3	A572-GR.50	1	6339	57.93	57.93
TB1-61	P100X100X3	A572-GR.50	2	4950	45.23	90.46
TB1-62	P100X100X3	A572-GR.50	1	4925	45.00	45.00
TB1-63	P100X100X3	A572-GR.50	1	4912	44.89	44.89
TB1-64	P100X100X3	A572-GR.50	4	4900	44.77	179.09
VM-1	HI300-8-15X230	A572-GR.50	2	7470	531.27	1062.55
VM-2	HI300-8-15X230	A572-GR.50	1	7420	527.72	527.72
VM-3	HI300-8-15X230	A572-GR.50	1	3055	217.30	217.30
VM2-1	HI250-6-12X120	A572-GR.50	1	865	28.75	28.75
VM2-2	HI250-6-12X120	A572-GR.50	6	990	32.91	197.46
VM2-3	HI250-6-12X120	A572-GR.50	3	740	24.60	73.79
VM2-4	HI250-6-12X120	A572-GR.50	1	10638	353.75	353.75
VM2-5	HI250-6-12X120	A572-GR.50	1	5402	179.62	179.62
VM2-6	HI250-6-12X120	A572-GR.50	1	5390	179.23	179.23
VM2-7	HI250-6-12X120	A572-GR.50	2	2000	66.51	133.01
VM2-8	HI250-6-12X120	A572-GR.50	1	2940	97.76	97.76
VM2-9	HI250-6-12X120	A572-GR.50	1	3497	116.29	116.29
VM2-10	HI250-6-12X120	A572-GR.50	1	3632	120.77	120.77
VM2-11	HI250-6-12X120	A572-GR.50	1	2	0.07	0.07
VM2-12	HI250-6-12X120	A572-GR.50	1	4638	154.23	154.23
VM2-13	HI250-6-12X120	A572-GR.50	1	3558	118.30	118.30
VM2-14	HI250-6-12X120	A572-GR.50	1	4350	144.65	144.65
VMV-1	HI500-300-8-15***	A572-GR.50	8	3735	289.23	2519.87
VP1-17	HI400-4-6X100	A572-GR.50	1	16751	361.86	361.86
VS2-1	HI250-5-12X120	A572-GR.50	1	5452	171.61	171.61
VS2-2	HI250-5-12X120	A572-GR.50	2	2250	70.83	141.65
VS2-3	HI250-5-12X120	A572-GR.50	1	5402	170.04	170.04
VS2-4	HI250-5-12X120	A572-GR.50	2	4450	140.08	280.16
VS2-5	HI250-5-12X120	A572-GR.50	1	4628	145.67	145.67
VS2-6	HI250-5-12X120	A572-GR.50	1	4125	129.85	129.85
VS2-7	HI250-5-12X120	A572-GR.50	1	4000	125.91	125.91
VS2-8	HI250-5-12X120	A572-GR.50	1	5050	158.97	158.97
VS2-9	HI250-5-12X120	A572-GR.50	1	5175	162.90	162.90
VS2-10	HI250-5-12X120	A572-GR.50	1	4715	148.41	148.41
VS2-11	HI250-5-12X120	A572-GR.50	2	4625	145.59	291.18
VS2-12	HI250-5-12X120	A572-GR.50	1	4750	149.52	149.52
VS2-13	HI250-5-12X120	A572-GR.50	2	4700	147.95	295.90
VS2-14	HI250-5-12X120	A572-GR.50	2	4525	142.44	284.88
PESO TOTAL PLANILLA "ESTRUCTURA AUDITORIO"						20837.67

SECCIONES TUBULARAES

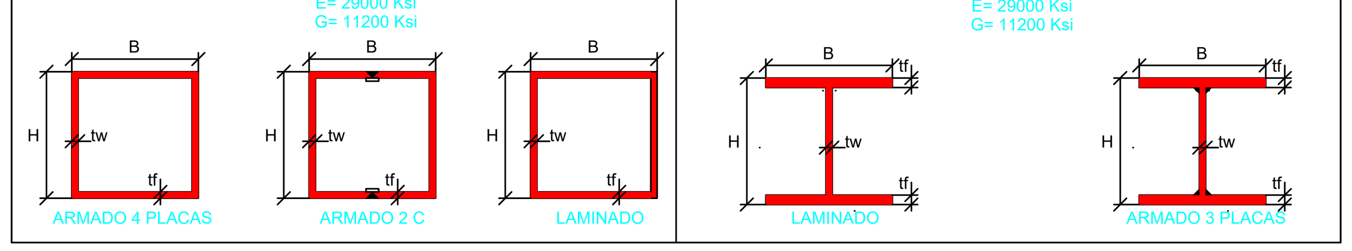
MARCA	SECCION	MATERIAL	PESO H(mm) x kg/m	H (mm)	B (mm)	tw (mm)	tf (mm)
CL1	P400X250X5	A572-GR.50	400 X 50.24	400	250	5.00	5.00
CL3	P500X500X6	A572-GR.50	500 X 93.07	500	500	6.00	6.00
TB1	P100X100X3	A572-GR.50	100 X 9.14	100	100	3.00	3.00

ACERO: ASTM-A572; GRADO 50 — Fy= 50 Ksi, Fu= 65 Ksi, E= 29000 Ksi, E= 29000 Ksi, G= 11200 Ksi

SECCIONES TIPO "I"

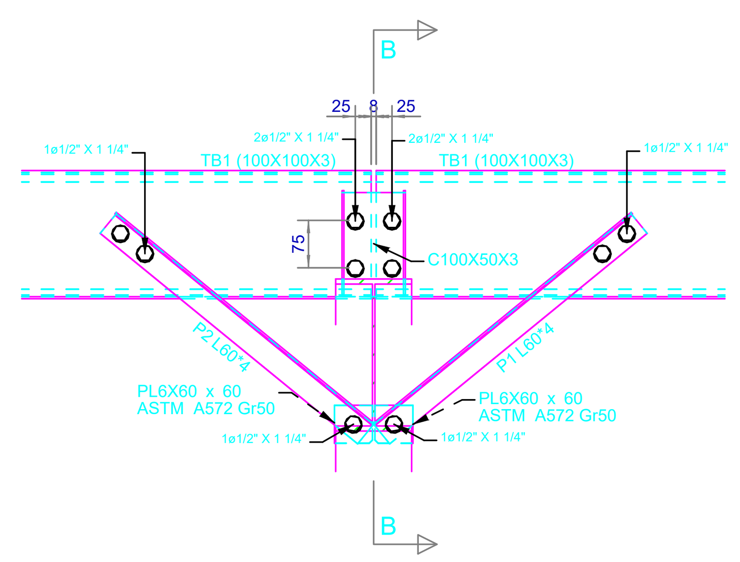
MARCA	SECCION	MATERIAL	PESO H(mm) x kg/m	H (mm)	B (mm)	tw (mm)	tf (mm)
VM	HI300-8-15X230	A572-GR.50	300 X 71.12	300	230	15.00	8.00
VM2	HI250-6-12X120	A572-GR.50	250 X 33.25	250	120	12.00	6.00
VMV	HI500-300-8-15***	A572-GR.50	500 300 X 77.44	500 300	230	15.00	8.00
VP1	HI400-4-6X100	A572-GR.50	400 X 21.60	400	100	6.00	4.00
VS2	HI250-5-12X120	A572-GR.50	250 X 31.48	250	120	12.00	5.00

ACERO: ASTM-A572; GRADO 50 — Fy= 50 Ksi, Fu= 65 Ksi, E= 29000 Ksi, E= 29000 Ksi, G= 11200 Ksi

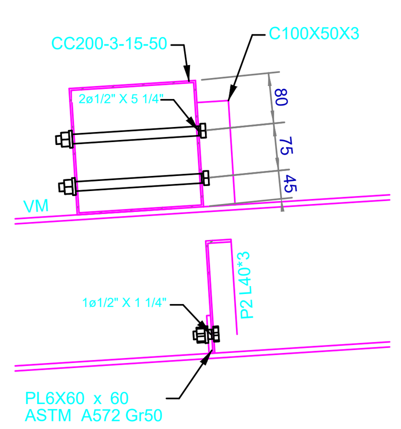


UBICACION DE COLUMNAS									
MARCA	SECCION	MATERIAL	UBICACION	LARGO	MARCA	SECCION	MATERIAL	UBICACION	LARGO
CL1-2	P400X250X5	A572-GR.50	1-2/A´-A	3.000	CL1-4	P400X250X5	A572-GR.50	4/A	4.000
CL1-4	P400X250X5	A572-GR.50	6/D	4.000	CL1-4	P400X250X5	A572-GR.50	7/A	4.000
CL1-4	P400X250X5	A572-GR.50	7/B	4.000	CL1-4	P400X250X5	A572-GR.50	8-8´/C	4.000
CL1-4	P400X250X5	A572-GR.50	8-8´/D´	4.000	CL1-4	P400X250X5	A572-GR.50	8/A´	4.000
CL1-4	P400X250X5	A572-GR.50	8/B	4.000	CL1-4	P400X250X5	A572-GR.50	8´/A´	4.000
CL1-4	P400X250X5	A572-GR.50	8´/B	4.000	CL3-2	P500X500X6	A572-GR.50	1/A	3.000
CL3-3	P500X500X6	A572-GR.50	2-3/B-A´	4.000	CL3-3	P500X500X6	A572-GR.50	2/8	4.000
CL3-3	P500X500X6	A572-GR.50	3/A>	4.000	CL3-3	P500X500X6	A572-GR.50	3/D	4.000
CL3-3	P500X500X6	A572-GR.50	4/D	4.000	CL3-3	P500X500X6	A572-GR.50	5/A	4.000
CL3-3	P500X500X6	A572-GR.50	5/D	4.000	CL3-3	P500X500X6	A572-GR.50	6/A	4.000
CL3-3	P500X500X6	A572-GR.50	7/<D	4.000	CL3-3	P500X500X6	A572-GR.50	8/A	4.000
CL3-3	P500X500X6	A572-GR.50	9/C	4.000	CL3-3	P500X500X6	A572-GR.50	9/D´	4.000

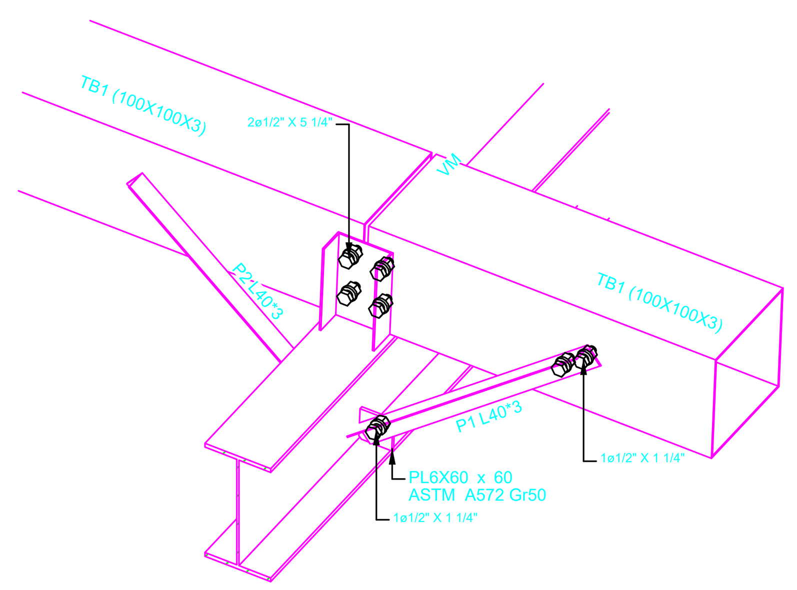
DETALLE DE ARRIOSTRAMIENTO DE PANDEO LATERAL DE VIGAs PRINCIPALES VM EN AUDITORIO



CORTE: A
ESC: 1:10



CORTE: B
ESC: 1:10



ISOMETRIA 3D
ESC: 1:10

NOTA: Se colocarán refuerzos de arriostramiento de pandeo lateral a cada 0.4L (L=luz libre) de las vigas principales VM

Ubicación:

Ubicación en el Plano:

Observaciones:

Hugo Andrés Sánchez Velasco
INGENIERO CIVIL

Unach
UNIVERSIDAD NACIONAL DE CHIMBORAZO
en movimiento

Proyecto: "CONSULTORÍA PARA LA CONSTRUCCIÓN DEL AUDITORIO DE CIENCIAS POLÍTICAS Y ADMINISTRATIVAS, AÑO 2022"

Cálculo y Diseño Estructural:

Firmado electrónicamente por: HERNAN ALBERTO COLOMA PERALTA
Ing. Hernan Colo
C.I.: 172429458
R.M.: 8849
REG. SENESCYT: 6201133640

Firmado electrónicamente por: HUGO ANDRES SANCHEZ VELASCO
Ing. Hugo A. Sanchez V.
DIRECTOR DEL PROYECTO

Firmado electrónicamente por: MELIDA JOHANA ATI CUTIUPALA
Ing. Mélida Ati
FISCALIZADORA DEL PROYECTO

Ing. Oscar Paredes
ADMINISTRADOR DEL PROYECTO

Contiene: ESTRUCTURA METÁLICA - REFORZAMIENTO UNACH

Escala: INDICADAS

Diseño: INGENIERO ESTRUCTURAL: COLOMA HERNAN
C.I.: 1724294580
REG. SENESCYT: 6201133640

Cantón: RIOBAMBA

Parroquia: LIZARZABURU

Lámina: 06 / 09

Fecha: 19/08/2022

Dirección: AV. ANTONIO JOSE DE SUCRE KM 1 1/2 VIA A GUANO

Uso Principal: ESPACIO PÚBLICO / AUDITORIO

Nº de predio: 6010300600105600000000