ESTUDIO Y PROYECTO PARA LA CONSTRUCCIÓN DEL COMPLEJO VIAL METROPOLITANO "TLAXCALA"

PROYECTO:	**COMPLEJO VIAL TLAXCALA**	DESCRIPCIÓN:	*uu-0.25*
	PUENTE MOLINITO - TEXMELUCAN	POZO	**SPT 2**
MUESTRA:	**M-22**	FECHA:	**30-nov-17**
PROF.:	**15.20 - 15.90**	OPERADOR:	**ABJ**

H0=	9.330	*cm*
D0=	3.677	*cm*
A0=	10.617	*cm2*
σ3=	0.250	*kg/cm2*

Registrados en el ensaye		**Parámetros calculados**			
Carga	Desplazamiento	Def. unitaria axial	Área corregida	Esfuerzo desviador	Esfuerzo cortante
P *kg*	**δ** *mm*	**ε** *mm/mm*	**Ac** *cm²*	**q** *kg/cm²*	**τ** *kg/cm²*
0.000	0.000	0.000	10.617	0.000	0.000
0.702	0.127	0.001	10.631	0.066	0.033
1.229	0.254	0.003	10.646	0.115	0.058
1.755	0.381	0.004	10.660	0.165	0.082
2.223	0.508	0.005	10.675	0.208	0.104
2.691	0.670	0.007	10.694	0.252	0.126
3.218	0.790	0.008	10.708	0.300	0.150
3.627	0.900	0.010	10.720	0.338	0.169
3.978	1.016	0.011	10.734	0.371	0.185
4.388	1.143	0.012	10.749	0.408	0.204
4.797	1.270	0.014	10.763	0.446	0.223
5.324	1.397	0.015	10.778	0.494	0.247
5.850	1.524	0.016	10.793	0.542	0.271
6.201	1.651	0.018	10.808	0.574	0.287
6.669	1.778	0.019	10.823	0.616	0.308
7.137	1.905	0.020	10.838	0.659	0.329
7.488	2.032	0.022	10.853	0.690	0.345
7.664	2.159	0.023	10.868	0.705	0.353
7.956	2.310	0.025	10.886	0.731	0.365
8.249	2.432	0.026	10.901	0.757	0.378
8.483	2.564	0.027	10.917	0.777	0.389
8.775	2.696	0.029	10.933	0.803	0.401
9.068	2.831	0.030	10.949	0.828	0.414
9.243	2.964	0.032	10.965	0.843	0.421
9.536	3.097	0.033	10.981	0.868	0.434
9.770	3.230	0.035	10.998	0.888	0.444
9.945	3.363	0.036	11.014	0.903	0.451
10.121	3.496	0.037	11.030	0.918	0.459
10.296	3.629	0.039	11.047	0.932	0.466
10.413	3.762	0.040	11.063	0.941	0.471
10.530	3.895	0.042	11.080	0.950	0.475
10.647	4.028	0.043	11.096	0.960	0.480
10.764	4.161	0.045	11.113	0.969	0.484
10.881	4.294	0.046	11.129	0.978	0.489
10.998	4.428	0.047	11.146	0.987	0.493
11.115	4.561	0.049	11.163	0.996	0.498
11.291	4.694	0.050	11.179	1.010	0.505
11.408	4.827	0.052	11.196	1.019	0.509
11.466	4.960	0.053	11.213	1.023	0.511
11.525	5.093	0.055	11.230	1.026	0.513
11.583	5.226	0.056	11.247	1.030	0.515
11.642	5.359	0.057	11.264	1.034	0.517
11.700	5.492	0.059	11.281	1.037	0.519
11.759	5.625	0.060	11.298	1.041	0.520
11.817	5.758	0.062	11.315	1.044	0.522
11.876	5.891	0.063	11.332	1.048	0.524
11.934	6.024	0.065	11.350	1.051	0.526
11.993	6.157	0.066	11.367	1.055	0.528
12.051	6.290	0.067	11.384	1.059	0.529
12.110	6.423	0.069	11.402	1.062	0.531
12.168	6.556	0.070	11.419	1.066	0.533
12.227	6.689	0.072	11.437	1.069	0.535
12.285	6.822	0.073	11.455	1.073	0.536
12.227	6.955	0.075	11.472	1.066	0.533
12.168	7.088	0.076	11.490	1.059	0.530
12.110	7.221	0.077	11.508	1.052	0.526
12.051	7.354	0.079	11.525	1.046	0.523
11.993	7.487	0.080	11.543	1.039	0.519
11.934	7.620	0.082	11.561	1.032	0.516
11.876	7.753	0.083	11.579	1.026	0.513
11.817	7.886	0.085	11.597	1.019	0.509
11.759	8.019	0.086	11.615	1.012	0.506
11.700	8.152	0.087	11.633	1.006	0.503
11.583	8.286	0.089	11.652	0.994	0.497
11.466	8.419	0.090	11.670	0.983	0.491
11.349	8.552	0.092	11.688	0.971	0.485
11.115	8.685	0.093	11.707	0.949	0.475

ESTUDIO Y PROYECTO PARA LA CONSTRUCCIÓN DEL COMPLEJO VIAL METROPOLITANO "TLAXCALA"

PROYECTO:	**COMPLEJO VIAL TLAXCALA**	DESCRIPCIÓN:	*uu-0.75*
	PUENTE MOLINITO - TEXMELUCAN	POZO	**SPT 2**
MUESTRA:	**M-22**	FECHA:	**30-nov-17**
PROF.:	**15.20 - 15.90**	OPERADOR:	**ABJ**

H0=	9.910	*cm*
D0=	3.640	*cm*
A0=	10.406	*cm2*
σ3=	0.500	*kg/cm2*

Registrados en el ensaye		**Parámetros calculados**			
Carga	Desplazamiento	Def. unitaria axial	Área corregida	Esfuerzo desviador	Esfuerzo cortante
P *kg*	**δ** *mm*	**ε** *mm/mm*	**Ac** *cm²*	**q** *kg/cm²*	**τ** *kg/cm²*
0.00	0.000	0.000	10.406	0.000	0.000
0.59	0.127	0.001	10.420	0.056	0.028
1.05	0.254	0.003	10.433	0.101	0.050
1.46	0.381	0.004	10.446	0.140	0.070
1.87	0.508	0.005	10.460	0.179	0.089
2.34	0.635	0.006	10.473	0.223	0.112
2.81	0.762	0.008	10.487	0.268	0.134
3.39	0.889	0.009	10.500	0.323	0.162
3.80	1.016	0.010	10.514	0.362	0.181
4.39	1.143	0.012	10.528	0.417	0.208
4.80	1.270	0.013	10.541	0.455	0.228
5.09	1.397	0.014	10.555	0.482	0.241
5.56	1.524	0.015	10.569	0.526	0.263
5.85	1.651	0.017	10.583	0.553	0.276
6.14	1.778	0.018	10.596	0.580	0.290
6.44	1.905	0.019	10.610	0.606	0.303
6.73	2.032	0.021	10.624	0.633	0.317
7.02	2.159	0.022	10.638	0.660	0.330
7.31	2.286	0.023	10.652	0.686	0.343
7.61	2.413	0.024	10.666	0.713	0.357
7.90	2.540	0.026	10.680	0.739	0.370
8.19	2.667	0.027	10.694	0.766	0.383
8.48	2.794	0.028	10.708	0.792	0.396
8.78	2.921	0.029	10.722	0.818	0.409
9.07	3.048	0.031	10.736	0.845	0.422
9.36	3.175	0.032	10.751	0.871	0.435
9.65	3.302	0.033	10.765	0.897	0.448
9.95	3.429	0.035	10.779	0.923	0.461
10.24	3.556	0.036	10.794	0.948	0.474
10.53	3.683	0.037	10.808	0.974	0.487
10.76	3.810	0.038	10.822	0.995	0.497
11.00	3.937	0.040	10.837	1.015	0.507
11.23	4.064	0.041	10.851	1.035	0.518
11.47	4.191	0.042	10.866	1.055	0.528
11.70	4.318	0.044	10.880	1.075	0.538
11.88	4.445	0.045	10.895	1.090	0.545
12.05	4.572	0.046	10.910	1.105	0.552
12.23	4.699	0.047	10.924	1.119	0.560
12.34	4.826	0.049	10.939	1.128	0.564
12.40	4.953	0.050	10.954	1.132	0.566
12.46	5.080	0.051	10.968	1.136	0.568
12.52	5.207	0.053	10.983	1.140	0.570
12.58	5.334	0.054	10.998	1.144	0.572
12.64	5.461	0.055	11.013	1.147	0.574
12.69	5.588	0.056	11.028	1.151	0.576
12.75	5.715	0.058	11.043	1.155	0.577
12.81	5.842	0.059	11.058	1.159	0.579
12.87	5.969	0.060	11.073	1.162	0.581
12.93	6.096	0.062	11.088	1.166	0.583
12.99	6.223	0.063	11.103	1.170	0.585
13.05	6.350	0.064	11.119	1.173	0.587
13.10	6.477	0.065	11.134	1.177	0.588
13.16	6.604	0.067	11.149	1.181	0.590
13.22	6.731	0.068	11.165	1.184	0.592
13.28	6.858	0.069	11.180	1.188	0.594
13.34	6.985	0.070	11.195	1.191	0.596
13.40	7.112	0.072	11.211	1.195	0.597
13.46	7.239	0.073	11.226	1.199	0.599
13.51	7.366	0.074	11.242	1.202	0.601
13.57	7.493	0.076	11.257	1.206	0.603
13.63	7.620	0.077	11.273	1.209	0.605
13.57	7.747	0.078	11.289	1.202	0.601
13.51	7.874	0.079	11.304	1.195	0.598
13.46	8.001	0.081	11.320	1.189	0.594
13.34	8.128	0.082	11.336	1.177	0.588
13.22	8.255	0.083	11.352	1.165	0.582
13.10	8.382	0.085	11.368	1.153	0.576
12.99	8.509	0.086	11.384	1.141	0.570
12.87	8.636	0.087	11.400	1.129	0.564

ESTUDIO Y PROYECTO PARA LA CONSTRUCCIÓN DEL COMPLEJO VIAL METROPOLITANO "TLAXCALA"

PROYECTO:	**COMPLEJO VIAL TLAXCALA**	DESCRIPCIÓN:	*uu-1.0*
	PUENTE MOLINITO - TEXMELUCAN	POZO	**SPT 2**
MUESTRA:	**M-22**	FECHA:	**30-nov-17**
PROF.:	**15.20 - 15.90**	OPERADOR:	**ABJ**

H0=	9.250	*cm*
D0=	3.720	*cm*
A0=	10.869	*cm2*
σ3=	0.750	*kg/cm2*

Registrados en el ensaye		**Parámetros calculados**			
Carga	Desplazamiento	Def. unitaria axial	Área corregida	Esfuerzo desviador	Esfuerzo cortante
P	**δ**	**ε**	**Ac**	**q**	**τ**
kg	*mm*	*mm/mm*	*cm²*	*kg/cm²*	*kg/cm²*
0.00	0.000	0.000	10.869	0.000	0.000
0.67	0.127	0.001	10.884	0.061	0.031
1.20	0.254	0.003	10.899	0.110	0.055
1.66	0.381	0.004	10.914	0.153	0.076
2.13	0.508	0.005	10.929	0.195	0.097
2.66	0.635	0.007	10.944	0.243	0.122
3.20	0.762	0.008	10.959	0.292	0.146
3.86	0.889	0.010	10.974	0.352	0.176
4.33	1.016	0.011	10.989	0.394	0.197
4.99	1.143	0.012	11.005	0.454	0.227
5.46	1.270	0.014	11.020	0.495	0.248
5.79	1.397	0.015	11.035	0.525	0.262
6.32	1.524	0.016	11.051	0.572	0.286
6.66	1.651	0.018	11.066	0.602	0.301
6.99	1.778	0.019	11.082	0.631	0.315
7.32	1.905	0.021	11.097	0.660	0.330
7.66	2.032	0.022	11.113	0.689	0.344
7.99	2.159	0.023	11.128	0.718	0.359
8.32	2.286	0.025	11.144	0.747	0.373
8.66	2.413	0.026	11.160	0.776	0.388
8.99	2.540	0.027	11.176	0.804	0.402
9.32	2.667	0.029	11.191	0.833	0.416
9.65	2.794	0.030	11.207	0.861	0.431
9.99	2.921	0.032	11.223	0.890	0.445
10.32	3.048	0.033	11.239	0.918	0.459
10.65	3.175	0.034	11.255	0.946	0.473
10.99	3.302	0.036	11.271	0.975	0.487
11.32	3.429	0.037	11.287	1.003	0.501
11.65	3.556	0.038	11.303	1.031	0.515
11.98	3.683	0.040	11.319	1.059	0.529
12.25	3.810	0.041	11.336	1.081	0.540
12.52	3.937	0.043	11.352	1.103	0.551
12.78	4.064	0.044	11.368	1.124	0.562
13.05	4.191	0.045	11.384	1.146	0.573
13.32	4.318	0.047	11.401	1.168	0.584
13.52	4.445	0.048	11.417	1.184	0.592
13.72	4.572	0.049	11.434	1.200	0.600
13.91	4.699	0.051	11.450	1.215	0.608
14.05	4.826	0.052	11.467	1.225	0.613
14.11	4.953	0.054	11.484	1.229	0.615
14.18	5.080	0.055	11.500	1.233	0.617
14.25	5.207	0.056	11.517	1.237	0.619
14.31	5.334	0.058	11.534	1.241	0.621
14.38	5.461	0.059	11.551	1.245	0.623
14.45	5.588	0.060	11.567	1.249	0.624
14.51	5.715	0.062	11.584	1.253	0.626
14.58	5.842	0.063	11.601	1.257	0.628
14.65	5.969	0.065	11.618	1.261	0.630
14.71	6.096	0.066	11.635	1.265	0.632
14.78	6.223	0.067	11.653	1.268	0.634
14.85	6.350	0.069	11.670	1.272	0.636
14.91	6.477	0.070	11.687	1.276	0.638
14.98	6.604	0.071	11.704	1.280	0.640
15.05	6.731	0.073	11.722	1.284	0.642
15.11	6.858	0.074	11.739	1.287	0.644
15.18	6.985	0.076	11.756	1.291	0.646
15.25	7.112	0.077	11.774	1.295	0.647
15.31	7.239	0.078	11.791	1.299	0.649
15.38	7.366	0.080	11.809	1.302	0.651
15.45	7.493	0.081	11.827	1.306	0.653
15.51	7.620	0.082	11.844	1.310	0.655
15.45	7.747	0.084	11.862	1.302	0.651
15.38	7.874	0.085	11.880	1.295	0.647
15.31	8.001	0.086	11.898	1.287	0.644
15.18	8.128	0.088	11.916	1.274	0.637
15.05	8.255	0.089	11.934	1.261	0.630
14.91	8.382	0.091	11.952	1.248	0.624
14.78	8.509	0.092	11.970	1.235	0.617
14.65	8.636	0.093	11.988	1.222	0.611

ESTUDIO Y PROYECTO PARA LA CONSTRUCCIÓN DEL COMPLEJO VIAL METROPOLITANO "TLAXCALA"

PROYECTO:	**COMPLEJO VIAL TLAXCALA**	DESCRIPCIÓN:	**GRAFICA ESFUERZO DEFORMACIÒN**
	PUENTE MOLINITO - TEXMELUCA	POZO	**SPT 2**
MUESTRA:	**M-22**	FECHA:	**30-nov-17**
PROF.:	**15.20 - 15.90**	OPERADOR:	**ABJ**

Ensaye:	uu-0.25		**Ensaye:**	uu-0.50		**Ensaye:**	uu-0.75	
H_0=	9.330	*cm*	H_0=	9.910	*cm*	H_0=	9.250	*cm*
D_0=	3.677	*cm*	D_0=	3.640	*cm*	D_0=	3.720	*cm*
A_0=	10.617	cm^2	A_0=	10.406	cm^2	A_0=	10.869	cm^2
σ_3=	0.250	kg/cm^2	σ_3=	0.500	kg/cm^2	σ_3=	0.750	kg/cm^2
w=		%	w=		%	w=		%
Wm=	151.6	g	Wm=	157.8	g	Wm=	160.5	g
γ	1.530	g/cm^3	γ	1.530	g/cm^3	γ	1.596	g/cm^3