

## HWD Rodeo Area Subgrade Vane Shears - Lift 1

Station	Offset, ft.	Vane Shear Readings			Avg. V.S. Reading	Actual Avg. V.S. Reading	CBR	Avg. CBR
		1	2	3				
820	-6	78	80	88	82	164	10.1	10.5
	CL	94	90	90	91	183	12.1	
	6	80	80	74	78	156	9.3	
840	-6	74	78	74	75	151	8.7	9.2
	CL	88	74	80	81	161	9.8	
	6	74	80	78	77	155	9.1	
860	-6	78	84	84	82	164	10.1	9.4
	CL	74	78	78	77	153	9.0	
	6	74	80	78	77	155	9.1	
880	-6	88	88	92	89	179	11.7	10.4
	CL	84	84	84	84	168	10.5	
	6	78	80	74	77	155	9.1	
900	-6	88	90	94	91	181	12.0	10.2
	CL	74	78	78	77	153	9.0	
	6	78	80	80	79	159	9.5	
920	-6	78	78	78	78	156	9.3	8.5
	CL	74	74	70	73	145	8.2	
	6	68	72	74	71	143	8.0	

### CBR Locations

840	1	88	74	80	81	161	9.8	10.2
	2	80	88	84	84	168	10.5	
	3	88	80	80	83	165	10.2	
900	1	78	80	84	81	161	9.8	10.1
	2	84	88	80	84	168	10.5	
	3	78	84	84	82	164	10.1	

## HWD Rodeo Area Subgrade Vane Shears - Lift 2

Station	Offset, ft.	Vane Shear Readings			Avg. V.S. Reading	Actual Avg. V.S. Reading	CBR	Avg. CBR
		1	2	3				
830	-6	82	82	76	80	160	9.7	8.9
	CL	74	76	80	77	153	9.0	
	6	72	70	74	72	144	8.1	
845	-6	76	70	72	73	145	8.2	7.7
	CL	74	68	70	71	141	7.8	
	6	68	66	66	67	133	7.1	
860	-6	74	74	70	73	145	8.2	7.5
	CL	70	68	64	67	135	7.2	
	6	66	62	70	66	132	7.0	
875	-6	68	64	64	65	131	6.9	7.1
	CL	74	70	70	71	143	8.0	
	6	60	60	68	63	125	6.4	
890	-6	60	70	64	65	129	6.8	8.0
	CL	74	74	76	75	149	8.6	
	6	74	74	74	74	148	8.5	
905	-6	70	68	76	71	143	8.0	7.7
	CL	70	76	76	74	148	8.5	
	6	66	60	64	63	127	6.5	
920	-6	76	74	74	75	149	8.6	9.0
	CL	80	80	84	81	163	10.0	
	6	76	70	76	74	148	8.5	

### CBR Locations

855	1	72	76	72	73	147	8.4	8.2
	2	70	72	66	69	139	7.6	
	3	74	74	76	75	149	8.6	
895	1	72	76	70	73	145	8.2	8.7
	2	84	76	78	79	159	9.5	
	3	72	76	72	73	147	8.4	

### HWD Rodeo Area Subgrade Vane Shears - Lift 4

Station	Offset, ft.	Vane Shear Readings			Avg. V.S. Reading	Actual Avg. V.S. Reading	CBR	Avg. CBR
		1	2	3				
825	-6	90	112	86	96	192	13.2	11.4
	CL	58	110	96	88	176	11.4	
	6	106	64	70	80	160	9.7	
835	-6	102	84	104	97	193	13.3	11.8
	CL	92	90	76	86	172	10.9	
	6	78	80	104	87	175	11.2	
850	-6	94	80	86	87	173	11.1	11.9
	CL	98	102	94	98	196	13.7	
	6	94	80	86	87	173	11.1	
865	-6	90	82	90	87	175	11.2	11.8
	CL	88	100	100	96	192	13.2	
	6	80	88	90	86	172	10.9	
880	-6	72	72	68	71	141	7.8	9.0
	CL	70	78	82	77	153	9.0	
	6	80	82	84	82	164	10.1	
895	-6	82	70	74	75	151	8.7	8.4
	CL	78	84	72	78	156	9.3	
	6	56	70	74	67	133	7.1	
910	-6	58	68	68	65	129	6.8	7.0
	CL	70	64	68	67	135	7.2	
	6	70	68	62	67	133	7.1	
925	-6	78	76	76	77	153	9.0	8.7
	CL	80	68	78	75	151	8.7	
	6	64	76	80	73	147	8.4	

### CBR Locations

855	1	68	56	64	63	125	6.4	8.7
	2	64	82	64	70	140	7.7	
	3	98	96	80	91	183	12.1	
895	1	62	74	78	71	143	8.0	7.7
	2	76	64	68	69	139	7.6	
	3	58	72	76	69	137	7.5	

### HWD Rodeo Area Subgrade Vane Shears - Lift 5

Station	Offset, ft.	Vane Shear Readings			Avg. V.S. Reading	Actual Avg. V.S. Reading	CBR	Avg. CBR
		1	2	3				
825	-6	64	88	70	74	148	8.5	8.5
	CL	78	76	78	77	155	9.1	
	6	64	82	64	70	140	7.7	
840	-6	80	64	68	71	141	7.8	7.9
	CL	66	66	68	67	133	7.1	
	6	62	92	74	76	152	8.9	
855	-6	70	52	72	65	129	6.8	6.6
	CL	78	64	68	70	140	7.7	
	6	56	52	62	57	113	5.4	
870	-6	74	76	80	77	153	9.0	7.8
	CL	72	58	70	67	133	7.1	
	6	62	72	68	67	135	7.2	
885	-6	62	60	58	60	120	5.9	7.8
	CL	68	90	76	78	156	9.3	
	6	78	80	60	73	145	8.2	
900	-6	76	58	62	65	131	6.9	8.0
	CL	76	90	62	76	152	8.9	
	6	74	66	78	73	145	8.2	
915	-6	54	84	72	70	140	7.7	6.8
	CL	72	70	56	66	132	7.0	
	6	56	56	62	58	116	5.6	

#### CBR Locations

840	1	62	58	66	62	124	6.3	7.5
	2	86	70	62	73	145	8.2	
	3	72	68	76	72	144	8.1	
900	1	54	70	72	65	131	6.9	6.7
	2	68	70	68	69	137	7.5	
	3	50	62	64	59	117	5.7	

### HWD Rodeo Area Subgrade Vane Shears - Lift 6

Station	Offset, ft.	Vane Shear Readings			Avg. V.S. Reading	Actual Avg. V.S. Reading	CBR	Avg. CBR
		1	2	3				
820	-6	88	88	80	85	171	10.8	10.4
	CL	86	74	74	78	156	9.3	
	6	90	90	82	87	175	11.2	
835	-6	80	82	80	81	161	9.8	9.7
	CL	68	74	74	72	144	8.1	
	6	88	90	82	87	173	11.1	
850	-6	90	90	82	87	175	11.2	9.7
	CL	84	80	68	77	155	9.1	
	6	76	74	76	75	151	8.7	
865	-6	74	82	74	77	153	9.0	8.6
	CL	76	72	78	75	151	8.7	
	6	68	78	68	71	143	8.0	
880	-6	82	76	72	77	153	9.0	8.3
	CL	62	74	66	67	135	7.2	
	6	80	72	72	75	149	8.6	
895	-6	74	78	78	77	153	9.0	7.8
	CL	62	64	70	65	131	6.9	
	6	70	68	68	69	137	7.5	
910	-6	84	84	78	82	164	10.1	9.7
	CL	80	76	84	80	160	9.7	
	6	84	72	78	78	156	9.3	
920	-6	76	70	80	75	151	8.7	9.5
	CL	74	80	72	75	151	8.7	
	6	90	86	84	87	173	11.1	

### CBR Locations

840	1	64	66	68	66	132	7.0	8.0
	2	80	70	82	77	155	9.1	
	3	64	78	70	71	141	7.8	
900	1	70	74	68	71	141	7.8	8.0
	2	74	70	76	73	147	8.4	
	3	66	78	68	71	141	7.8	

## HWD Rodeo Area Subgrade Vane Shears - Lift 7

Station	Offset, ft.	Vane Shear Readings			Avg. V.S. Reading	Actual Avg. V.S. Reading	CBR	Avg. CBR
		1	2	3				
810	-6	66	92	58	72	144	8.1	7.9
	CL	68	64	66	66	132	7.0	
	6	70	88	68	75	151	8.7	
840	-6	80	64	82	75	151	8.7	9.1
	CL	80	62	84	75	151	8.7	
	6	94	68	80	81	161	9.8	
855	-6	100	82	92	91	183	12.1	10.9
	CL	62	98	92	84	168	10.5	
	6	88	90	66	81	163	10.0	
870	-6	94	80	72	82	164	10.1	10.5
	CL	88	68	82	79	159	9.5	
	6	92	92	88	91	181	12.0	
885	-6	58	88	90	79	157	9.4	8.5
	CL	80	68	74	74	148	8.5	
	6	64	74	70	69	139	7.6	
900	-6	72	82	62	72	144	8.1	8.7
	CL	82	82	74	79	159	9.5	
	6	82	62	76	73	147	8.4	
915	-6	76	86	66	76	152	8.9	9.5
	CL	86	90	86	87	175	11.2	
	6	76	68	78	74	148	8.5	
930	-6	70	68	84	74	148	8.5	9.8
	CL	74	76	82	77	155	9.1	
	6	94	86	90	90	180	11.8	

### CBR Locations

840	1	78	74	58	70	140	7.7	6.8
	2	60	66	50	59	117	5.7	
	3	58	66	72	65	131	6.9	
900	1	66	60	56	61	121	6.1	7.6
	2	72	70	60	67	135	7.2	
	3	84	72	80	79	157	9.4	

### HWD Rodeo Area Subgrade Vane Shears - Top of Flexible Surface

Station	Offset, ft.	Vane Shear Readings			Avg. V.S. Reading	Actual Avg. V.S. Reading	CBR	Avg. CBR
		1	2	3				
890	-6	82	74	62	73	145	8.2	7.8
	CL	58	74	72	68	136	7.4	
	6	78	66	66	70	140	7.7	
900	-6	80	60	80	73	147	8.4	7.9
	CL	80	72	66	73	145	8.2	
	6	72	64	64	67	133	7.1	
910	-6	74	68	70	71	141	7.8	7.9
	CL	72	72	68	71	141	7.8	
	6	78	64	74	72	144	8.1	
920	-6	66	70	68	68	136	7.4	8.5
	CL	88	72	100	87	173	11.1	
	6	66	60	74	67	133	7.1	

#### CBR Locations

885	1	78	68	72	73	145	8.2	9.6
	2	78	82	78	79	159	9.5	
	3	86	88	84	86	172	10.9	
905	1	74	76	80	77	153	9.0	9.1
	2	72	76	82	77	153	9.0	
	3	80	74	78	77	155	9.1	