



1098-05	GENERAL INFORMATION																	
Sheet of	ENGINEERING NOTES AND SIGNAGE																	
Rev: 03/26/2026	SAG & TENSION WITH TABLES																	


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Creep RS	60.00	48.20	2109.50	80.30

Conductor		Weight (Lb/Ft)															0.728	Rated Breaking Strength	4,380	Ruling Span (Feet)	205												RAVEN CREEP												Eng. Use: MOT
Condition		Creep Sag & Tension																																											Temp (°F)
Temp (°F)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	194																			
Tension (lbs)	1,576	1,394	1,234	1,093	974	877	795	728	672	627	587	553	525	499	477	460	450	441	433	424	416	409	401	394	388	315																			
% Ultimate	36%	32%	28%	25%	22%	20%	18%	17%	15%	14%	13%	13%	12%	11%	11%	11%	10%	10%	10%	10%	9%	9%	9%	9%	9%	7%																			
Span (Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)																			
Ruling Span Sag	0'-11"	1'-0"	1'-2"	1'-3"	1'-5"	1'-7"	1'-9"	1'-11"	2'-1"	2'-3"	2'-5"	2'-7"	2'-8"	2'-10"	3'-0"	3'-1"	3'-2"	3'-2"	3'-3"	3'-4"	3'-5"	3'-6"	3'-6"	3'-7"	3'-8"	4'-6"																			
50	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-3"	0'-3"	0'-3"	0'-3"																			
75	0'-1"	0'-2"	0'-2"	0'-2"	0'-2"	0'-3"	0'-3"	0'-3"	0'-3"	0'-4"	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-6"	0'-6"	0'-6"	0'-6"																			
100	0'-3"	0'-3"	0'-3"	0'-4"	0'-4"	0'-5"	0'-5"	0'-6"	0'-6"	0'-6"	0'-6"	0'-7"	0'-7"	0'-8"	0'-8"	0'-8"	0'-8"	0'-9"	0'-9"	0'-9"	0'-9"	0'-10"	0'-10"	0'-10"	0'-10"	1'-1"																			
120	0'-4"	0'-4"	0'-5"	0'-5"	0'-6"	0'-7"	0'-7"	0'-8"	0'-9"	0'-9"	0'-10"	0'-10"	0'-11"	1'-0"	1'-0"	1'-1"	1'-1"	1'-1"	1'-1"	1'-1"	1'-2"	1'-2"	1'-2"	1'-3"	1'-3"	1'-6"																			
140	0'-5"	0'-6"	0'-6"	0'-7"	0'-8"	0'-9"	0'-10"	0'-11"	1'-0"	1'-1"	1'-1"	1'-1"	1'-2"	1'-3"	1'-4"	1'-5"	1'-5"	1'-6"	1'-6"	1'-6"	1'-7"	1'-7"	1'-7"	1'-8"	1'-8"	2'-1"																			
160	0'-7"	0'-7"	0'-8"	0'-9"	0'-11"	1'-0"	1'-1"	1'-2"	1'-3"	1'-4"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	1'-10"	1'-11"	1'-11"	2'-0"	2'-0"	2'-1"	2'-1"	2'-2"	2'-2"	2'-3"	2'-9"																			
180	0'-8"	0'-9"	0'-11"	1'-0"	1'-1"	1'-3"	1'-4"	1'-6"	1'-7"	1'-9"	1'-10"	2'-0"	2'-1"	2'-2"	2'-3"	2'-4"	2'-5"	2'-6"	2'-6"	2'-7"	2'-7"	2'-8"	2'-9"	2'-9"	2'-10"	3'-5"																			
200	0'-10"	1'-0"	1'-1"	1'-3"	1'-5"	1'-6"	1'-8"	1'-10"	2'-0"	2'-2"	2'-3"	2'-5"	2'-7"	2'-8"	2'-10"	2'-11"	3'-0"	3'-1"	3'-1"	3'-2"	3'-3"	3'-3"	3'-4"	3'-5"	3'-6"	4'-3"																			
210	0'-11"	1'-1"	1'-2"	1'-4"	1'-6"	1'-8"	1'-10"	2'-0"	2'-3"	2'-4"	2'-6"	2'-8"	2'-10"	3'-0"	3'-1"	3'-3"	3'-3"	3'-4"	3'-5"	3'-6"	3'-7"	3'-8"	3'-8"	3'-9"	3'-10"	4'-8"																			
220	1'-0"	1'-2"	1'-4"	1'-6"	1'-8"	1'-10"	2'-1"	2'-3"	2'-5"	2'-7"	2'-9"	2'-11"	3'-1"	3'-3"	3'-5"	3'-6"	3'-7"	3'-8"	3'-9"	3'-10"	3'-11"	4'-0"	4'-1"	4'-2"	4'-2"	5'-2"																			
230	1'-2"	1'-3"	1'-5"	1'-8"	1'-10"	2'-0"	2'-3"	2'-5"	2'-8"	2'-10"	3'-0"	3'-3"	3'-5"	3'-7"	3'-9"	3'-10"	3'-11"	4'-0"	4'-1"	4'-2"	4'-3"	4'-4"	4'-5"	4'-6"	4'-7"	5'-8"																			
240	1'-3"	1'-5"	1'-7"	1'-9"	2'-0"	2'-3"	2'-5"	2'-8"	2'-11"	3'-1"	3'-4"	3'-6"	3'-8"	3'-11"	4'-1"	4'-3"	4'-4"	4'-5"	4'-6"	4'-7"	4'-8"	4'-9"	4'-10"	4'-11"	5'-0"	6'-2"																			
250	1'-4"	1'-6"	1'-8"	1'-11"	2'-2"	2'-5"	2'-8"	2'-11"	3'-2"	3'-4"	3'-7"	3'-10"	4'-0"	4'-3"	4'-5"	4'-7"	4'-8"	4'-9"	4'-10"	5'-0"	5'-1"	5'-2"	5'-3"	5'-4"	5'-5"	6'-8"																			
260	1'-5"	1'-8"	1'-10"	2'-1"	2'-4"	2'-7"	2'-10"	3'-1"	3'-5"	3'-8"	3'-10"	4'-1"	4'-4"	4'-7"	4'-9"	4'-11"	5'-1"	5'-2"	5'-3"	5'-4"	5'-6"	5'-7"	5'-8"	5'-9"	5'-10"	7'-3"																			
270	1'-7"	1'-9"	2'-0"	2'-3"	2'-6"	2'-9"	3'-1"	3'-4"	3'-8"	3'-11"	4'-2"	4'-5"	4'-8"	4'-11"	5'-2"	5'-4"	5'-5"	5'-7"	5'-8"	5'-9"	5'-11"	6'-0"	6'-1"	6'-3"	6'-4"	7'-9"																			
280	1'-8"	1'-11"	2'-2"	2'-5"	2'-9"	3'-0"	3'-4"	3'-7"	3'-11"	4'-2"	4'-6"	4'-9"	5'-0"	5'-3"	5'-6"	5'-9"	5'-10"	6'-0"	6'-1"	6'-3"	6'-4"	6'-5"	6'-7"	6'-8"	6'-10"	8'-4"																			
290	1'-9"	2'-0"	2'-3"	2'-7"	2'-11"	3'-3"	3'-7"	3'-11"	4'-3"	4'-6"	4'-10"	5'-1"	5'-5"	5'-8"	5'-11"	6'-2"	6'-3"	6'-5"	6'-6"	6'-8"	6'-10"	6'-11"	7'-1"	7'-2"	7'-3"	9'-0"																			
300	1'-11"	2'-2"	2'-5"	2'-9"	3'-1"	3'-5"	3'-10"	4'-2"	4'-6"	4'-10"	5'-2"	5'-6"	5'-9"	6'-1"	6'-4"	6'-7"	6'-9"	6'-10"	7'-0"	7'-2"	7'-3"	7'-5"	7'-6"	7'-8"	7'-10"	9'-7"																			
310	2'-1"	2'-4"	2'-7"	2'-11"	3'-4"	3'-8"	4'-1"	4'-5"	4'-10"	5'-2"	5'-6"	5'-10"	6'-2"	6'-6"	6'-9"	7'-0"	7'-2"	7'-4"	7'-6"	7'-7"	7'-9"	7'-11"	8'-1"	8'-2"	8'-4"	10'-3"																			
320	2'-2"	2'-6"	2'-9"	3'-2"	3'-6"	3'-11"	4'-4"	4'-9"	5'-1"	5'-6"	5'-10"	6'-3"	6'-7"	6'-11"	7'-3"	7'-6"	7'-8"	7'-10"	8'-0"	8'-1"	8'-3"	8'-5"	8'-7"	8'-9"	8'-11"	10'-11"																			
330	2'-4"	2'-8"	3'-0"	3'-4"	3'-9"	4'-2"	4'-7"	5'-0"	5'-5"	5'-10"	6'-3"	6'-7"	7'-0"	7'-4"	7'-8"	8'-0"	8'-2"	8'-4"	8'-6"	8'-8"	8'-10"	9'-0"	9'-2"	9'-3"	9'-5"	11'-8"																			
340	2'-6"	2'-9"	3'-2"	3'-7"	4'-0"	4'-5"	4'-11"	5'-4"	5'-9"	6'-2"	6'-7"	7'-0"	7'-5"	7'-9"	8'-2"	8'-5"	8'-8"	8'-10"	9'-0"	9'-2"	9'-4"	9'-6"	9'-8"	9'-10"	10'-0"	12'-4"																			
350	2'-7"	2'-11"	3'-4"	3'-9"	4'-3"	4'-8"	5'-2"	5'-8"	6'-2"	6'-7"	7'-0"	7'-5"	7'-10"	8'-3"	8'-8"	8'-11"	9'-2"	9'-4"	9'-6"	9'-9"	9'-11"	10'-1"	10'-3"	10'-5"	10'-8"	13'-1"																			

1098-05	GENERAL INFORMATION																	
Sheet of	ENGINEERING NOTES AND SIGNAGE																	
Rev: 03/26/2026	3-WAVE TIME & TENSION WITH TABLES																	


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Creep RS	60.00	48.20	2109.50	80.30

Conductor		1/0 AWG Covered ACSR - Raven																Weight (Lb/Ft)		0.728		Rated Breaking Strength		4,380		Ruling Span (Feet)		205		RAVEN CREEP										Eng. Use: MOT Temp (°F)	
Condition		Creep Sag & Tension																																							
Temp (°F)		0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	194														
Tension (lbs)		1,576	1,394	1,234	1,093	974	877	795	728	672	627	587	553	525	499	477	460	450	441	433	424	416	409	401	394	388	315														
% Ultimate		36%	32%	28%	25%	22%	20%	18%	17%	15%	14%	13%	13%	12%	11%	11%	11%	10%	10%	10%	10%	9%	9%	9%	9%	9%	7%														
Span	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec														
R.S. Span																																									
3-Wave Time		3.01	3.2	3.4	3.6	3.79	3.99	4.17	4.34	4.49	4.64	4.78	4.9	5.03	5.14	5.24	5.3	5.35	5.4	5.46	5.51	5.56	5.61	5.66	5.71	6.33	2.83														
50	0.73	0.78	0.83	0.88	0.93	0.97	1.02	1.06	1.09	1.13	1.17	1.2	1.23	1.25	1.28	1.29	1.3	1.32	1.33	1.34	1.36	1.37	1.38	1.39	1.54	0.69															
75	1.1	1.17	1.24	1.32	1.39	1.46	1.52	1.59	1.64	1.7	1.75	1.79	1.84	1.88	1.92	1.94	1.96	1.98	2	2.02	2.03	2.05	2.07	2.09	2.32	1.04															
100	1.47	1.56	1.66	1.76	1.85	1.94	2.03	2.12	2.19	2.26	2.33	2.39	2.45	2.51	2.56	2.58	2.61	2.64	2.66	2.69	2.71	2.74	2.76	2.78	3.09	1.38															
120	1.76	1.87	1.99	2.11	2.22	2.33	2.44	2.54	2.63	2.71	2.8	2.87	2.94	3.01	3.07	3.1	3.13	3.16	3.2	3.23	3.25	3.28	3.31	3.34	3.71	1.66															
140	2.06	2.18	2.32	2.46	2.59	2.72	2.84	2.96	3.07	3.17	3.26	3.35	3.43	3.51	3.58	3.62	3.65	3.69	3.73	3.76	3.8	3.83	3.87	3.9	4.32	1.93															
160	2.35	2.5	2.65	2.81	2.96	3.11	3.25	3.38	3.5	3.62	3.73	3.83	3.93	4.01	4.09	4.13	4.18	4.22	4.26	4.3	4.34	4.38	4.42	4.45	4.94	2.21															
180	2.64	2.81	2.98	3.16	3.33	3.5	3.66	3.81	3.94	4.07	4.19	4.31	4.42	4.52	4.6	4.65	4.7	4.74	4.79	4.84	4.88	4.93	4.97	5.01	5.56	2.49															
200	2.94	3.12	3.32	3.51	3.7	3.89	4.06	4.23	4.38	4.52	4.66	4.79	4.91	5.02	5.11	5.17	5.22	5.27	5.33	5.38	5.42	5.47	5.52	5.57	6.18	2.76															
210	3.08	3.28	3.48	3.69	3.89	4.08	4.27	4.44	4.6	4.75	4.89	5.02	5.15	5.27	5.37	5.43	5.48	5.54	5.59	5.65	5.7	5.75	5.8	5.85	6.49	2.9															
220	3.23	3.43	3.65	3.86	4.07	4.28	4.47	4.65	4.82	4.98	5.13	5.26	5.4	5.52	5.62	5.68	5.74	5.8	5.86	5.91	5.97	6.02	6.07	6.13	6.79	3.04															
230	3.38	3.59	3.81	4.04	4.26	4.47	4.67	4.87	5.04	5.2	5.36	5.5	5.64	5.77	5.88	5.94	6	6.06	6.12	6.18	6.24	6.3	6.35	6.4	7.1	3.18															
240	3.52	3.75	3.98	4.22	4.44	4.67	4.88	5.08	5.26	5.43	5.59	5.74	5.89	6.02	6.13	6.2	6.27	6.33	6.39	6.45	6.51	6.57	6.63	6.68	7.41	3.31															
250	3.67	3.9	4.15	4.39	4.63	4.86	5.08	5.29	5.48	5.66	5.83	5.98	6.13	6.27	6.39	6.46	6.53	6.59	6.66	6.72	6.78	6.84	6.9	6.96	7.72	3.45															
260	3.82	4.06	4.31	4.57	4.81	5.06	5.28	5.5	5.69	5.88	6.06	6.22	6.38	6.52	6.65	6.72	6.79	6.85	6.92	6.99	7.05	7.12	7.18	7.24	8.03	3.59															
270	3.96	4.21	4.48	4.74	5	5.25	5.49	5.71	5.91	6.11	6.29	6.46	6.62	6.78	6.9	6.98	7.05	7.12	7.19	7.26	7.32	7.39	7.46	7.52	8.34	3.73															
280	4.11	4.37	4.64	4.92	5.18	5.44	5.69	5.92	6.13	6.33	6.53	6.7	6.87	7.03	7.16	7.23	7.31	7.38	7.46	7.53	7.6	7.66	7.73	7.8	8.65	3.87															
290	4.26	4.53	4.81	5.09	5.37	5.64	5.89	6.14	6.35	6.56	6.76	6.94	7.12	7.28	7.41	7.49	7.57	7.65	7.72	7.8	7.87	7.94	8.01	8.08	8.96	4															
300	4.41	4.68	4.98	5.27	5.55	5.83	6.1	6.35	6.57	6.79	6.99	7.18	7.36	7.53	7.67	7.75	7.83	7.91	7.99	8.07	8.14	8.21	8.29	8.36	9.27	4.14															
310	4.55	4.84	5.14	5.45	5.74	6.03	6.3	6.56	6.79	7.01	7.23	7.42	7.61	7.78	7.92	8.01	8.09	8.17	8.26	8.34	8.41	8.49	8.56	8.63	9.58	4.28															
320	4.7	4.99	5.31	5.62	5.92	6.22	6.5	6.77	7.01	7.24	7.46	7.66	7.85	8.03	8.18	8.27	8.36	8.44	8.52	8.6	8.68	8.76	8.84	8.91	9.89	4.42															
330	4.85	5.15	5.47	5.8	6.11	6.42	6.71	6.98	7.23	7.47	7.69	7.9	8.1	8.28	8.44	8.53	8.62	8.7	8.79	8.87	8.95	9.03	9.11	9.19	10.2	4.56															
340	4.99	5.31	5.64	5.97	6.29	6.61	6.91	7.19	7.45	7.69	7.93	8.14	8.34	8.53	8.69	8.79	8.88	8.97	9.06	9.14	9.22	9.31	9.39	9.47	10.51	4.7															
350	5.14	5.46	5.8	6.15	6.48	6.81	7.11	7.4	7.67	7.92	8.16	8.38	8.59	8.79	8.95	9.04	9.14	9.23	9.32	9.41	9.5	9.58	9.67	9.75	10.82	4.83															

1098-05	GENERAL INFORMATION																		
Sheet of	ENGINEERING NOTES AND SIGNAGE																		
Rev: 03/26/2026	SAG & TENSION WITH TABLES																		


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Initial RS	60.00	51.00	2232.70	85.00

Conductor	1/0 AWG Covered ACSR - Raven											Weight (Lb/Ft)	0.728	Rated Breaking Strength	4,380	Ruling Span (Feet)	220	RAVEN INITIAL												Eng. Use: MOT Temp (°F)									
Condition	Initial Sag & Tension																																						
Temp (°F)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	194													
Tension (lbs)	1,729	1,576	1,427	1,289	1,166	1,057	962	879	809	750	700	656	618	586	557	532	509	490	471	456	440	431	423	417	410	335													
% Ultimate	39%	36%	33%	29%	27%	24%	22%	20%	18%	17%	16%	15%	14%	13%	13%	12%	12%	11%	11%	10%	10%	10%	10%	10%	9%	8%													
Span (Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)													
Ruling Span Sag	0'-11"	1'-0"	1'-2"	1'-3"	1'-5"	1'-6"	1'-8"	1'-10"	2'-0"	2'-2"	2'-4"	2'-6"	2'-8"	2'-9"	2'-11"	3'-1"	3'-2"	3'-4"	3'-5"	3'-7"	3'-8"	3'-9"	3'-10"	3'-11"	4'-0"	4'-10"													
50	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-3"													
75	0'-1"	0'-1"	0'-2"	0'-2"	0'-2"	0'-2"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-4"	0'-4"	0'-4"	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-6"	0'-7"													
100	0'-2"	0'-3"	0'-3"	0'-3"	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-6"	0'-6"	0'-6"	0'-7"	0'-7"	0'-7"	0'-7"	0'-8"	0'-8"	0'-9"	0'-9"	0'-9"	0'-9"	0'-10"	0'-10"	0'-10"	1'-0"													
120	0'-3"	0'-4"	0'-4"	0'-5"	0'-5"	0'-6"	0'-6"	0'-7"	0'-7"	0'-8"	0'-8"	0'-9"	0'-9"	0'-10"	0'-10"	0'-11"	0'-11"	1'-0"	1'-0"	1'-1"	1'-1"	1'-1"	1'-2"	1'-2"	1'-2"	1'-5"													
140	0'-5"	0'-5"	0'-6"	0'-6"	0'-7"	0'-7"	0'-8"	0'-9"	0'-10"	0'-11"	0'-11"	1'-0"	1'-1"	1'-1"	1'-2"	1'-3"	1'-3"	1'-4"	1'-5"	1'-5"	1'-6"	1'-6"	1'-7"	1'-7"	1'-7"	2'-0"													
160	0'-6"	0'-7"	0'-7"	0'-8"	0'-9"	0'-10"	0'-11"	1'-0"	1'-1"	1'-2"	1'-3"	1'-4"	1'-5"	1'-6"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	1'-11"	2'-0"	2'-0"	2'-1"	2'-1"	2'-7"													
180	0'-8"	0'-8"	0'-9"	0'-10"	0'-11"	1'-0"	1'-2"	1'-3"	1'-4"	1'-5"	1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	2'-1"	2'-2"	2'-3"	2'-4"	2'-5"	2'-6"	2'-6"	2'-7"	2'-7"	2'-8"	3'-3"													
200	0'-9"	0'-10"	0'-11"	1'-0"	1'-2"	1'-3"	1'-5"	1'-6"	1'-8"	1'-9"	1'-11"	2'-1"	2'-2"	2'-3"	2'-5"	2'-6"	2'-8"	2'-9"	2'-10"	2'-11"	3'-1"	3'-1"	3'-2"	3'-3"	3'-3"	4'-0"													
210	0'-10"	0'-11"	1'-0"	1'-2"	1'-3"	1'-5"	1'-6"	1'-8"	1'-10"	2'-0"	2'-1"	2'-3"	2'-5"	2'-6"	2'-8"	2'-9"	2'-11"	3'-0"	3'-2"	3'-3"	3'-4"	3'-5"	3'-6"	3'-7"	3'-7"	4'-5"													
220	0'-11"	1'-0"	1'-2"	1'-3"	1'-5"	1'-6"	1'-8"	1'-10"	2'-0"	2'-2"	2'-4"	2'-6"	2'-8"	2'-9"	2'-11"	3'-1"	3'-2"	3'-4"	3'-5"	3'-7"	3'-8"	3'-9"	3'-10"	3'-11"	4'-0"	4'-10"													
230	1'-0"	1'-2"	1'-3"	1'-5"	1'-6"	1'-8"	1'-10"	2'-0"	2'-2"	2'-4"	2'-6"	2'-9"	2'-11"	3'-0"	3'-2"	3'-4"	3'-6"	3'-8"	3'-9"	3'-11"	4'-0"	4'-2"	4'-2"	4'-3"	4'-4"	5'-4"													
240	1'-1"	1'-3"	1'-4"	1'-6"	1'-8"	1'-10"	2'-0"	2'-2"	2'-5"	2'-7"	2'-9"	2'-11"	3'-2"	3'-4"	3'-6"	3'-8"	3'-10"	3'-11"	4'-1"	4'-3"	4'-5"	4'-6"	4'-7"	4'-8"	4'-9"	5'-9"													
250	1'-3"	1'-4"	1'-6"	1'-8"	1'-10"	2'-0"	2'-2"	2'-5"	2'-7"	2'-10"	3'-0"	3'-2"	3'-5"	3'-7"	3'-9"	3'-11"	4'-1"	4'-3"	4'-6"	4'-7"	4'-9"	4'-11"	5'-0"	5'-0"	5'-2"	6'-3"													
260	1'-4"	1'-5"	1'-7"	1'-9"	1'-11"	2'-2"	2'-4"	2'-7"	2'-10"	3'-0"	3'-3"	3'-6"	3'-8"	3'-11"	4'-1"	4'-3"	4'-6"	4'-8"	4'-10"	5'-0"	5'-2"	5'-3"	5'-4"	5'-5"	5'-6"	6'-9"													
270	1'-5"	1'-7"	1'-9"	1'-11"	2'-1"	2'-4"	2'-7"	2'-9"	3'-0"	3'-3"	3'-6"	3'-9"	4'-0"	4'-2"	4'-5"	4'-7"	4'-10"	5'-0"	5'-2"	5'-5"	5'-7"	5'-8"	5'-9"	5'-11"	6'-0"	7'-4"													
280	1'-6"	1'-8"	1'-10"	2'-0"	2'-3"	2'-6"	2'-9"	3'-0"	3'-3"	3'-6"	3'-9"	4'-0"	4'-3"	4'-6"	4'-9"	4'-11"	5'-2"	5'-5"	5'-7"	5'-9"	6'-0"	6'-1"	6'-3"	6'-4"	6'-5"	7'-10"													
290	1'-8"	1'-9"	2'-0"	2'-2"	2'-5"	2'-8"	2'-11"	3'-3"	3'-6"	3'-9"	4'-0"	4'-4"	4'-7"	4'-10"	5'-1"	5'-4"	5'-7"	5'-9"	6'-0"	6'-3"	6'-5"	6'-7"	6'-8"	6'-9"	6'-11"	8'-5"													
300	1'-9"	1'-11"	2'-1"	2'-4"	2'-7"	2'-10"	3'-2"	3'-5"	3'-9"	4'-0"	4'-4"	4'-7"	4'-11"	5'-2"	5'-5"	5'-8"	5'-11"	6'-2"	6'-5"	6'-8"	6'-10"	7'-0"	7'-2"	7'-3"	7'-5"	9'-0"													
310	1'-10"	2'-1"	2'-3"	2'-6"	2'-9"	3'-1"	3'-4"	3'-8"	4'-0"	4'-4"	4'-7"	4'-11"	5'-3"	5'-6"	5'-10"	6'-1"	6'-4"	6'-7"	6'-10"	7'-1"	7'-4"	7'-6"	7'-8"	7'-9"	7'-11"	9'-8"													
320	2'-0"	2'-2"	2'-5"	2'-8"	2'-11"	3'-3"	3'-7"	3'-11"	4'-3"	4'-7"	4'-11"	5'-3"	5'-7"	5'-11"	6'-2"	6'-6"	6'-9"	7'-0"	7'-4"	7'-7"	7'-10"	8'-0"	8'-2"	8'-3"	8'-5"	10'-3"													
330	2'-1"	2'-4"	2'-7"	2'-10"	3'-2"	3'-6"	3'-10"	4'-2"	4'-6"	4'-11"	5'-3"	5'-7"	5'-11"	6'-3"	6'-7"	6'-11"	7'-2"	7'-6"	7'-9"	8'-0"	8'-4"	8'-6"	8'-9"	8'-11"	10'-11"														
340	2'-3"	2'-6"	2'-9"	3'-0"	3'-4"	3'-8"	4'-0"	4'-5"	4'-10"	5'-2"	5'-7"	5'-11"	6'-3"	6'-8"	7'-0"	7'-4"	7'-8"	7'-11"	8'-3"	8'-6"	8'-10"	9'-0"	9'-2"	9'-4"	9'-6"	11'-7"													
350	2'-5"	2'-7"	2'-11"	3'-2"	3'-6"	3'-11"	4'-3"	4'-8"	5'-1"	5'-6"	5'-11"	6'-3"	6'-8"	7'-0"	7'-5"	7'-9"	8'-1"	8'-5"	8'-9"	9'-0"	9'-4"	9'-7"	9'-9"	9'-11"	10'-1"	12'-3"													

1098-05	GENERAL INFORMATION																	
Sheet of	ENGINEERING NOTES AND SIGNAGE																	
Rev: 03/26/2026	3-WAVE TIME & TENSION WITH TABLES																	


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Initial RS	60.00	51.00	2232.70	85.00

Conductor		1/0 AWG Covered ACSR - Raven																Weight (Lb/Ft)	0.728	Rated Breaking Strength	4,380	Ruling Span (Feet)	220		RAVEN INITIAL												Eng. Use: MOT Temp (°F)
Condition	Initial Sag & Tension	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75						80	85	90	95	100	105	110	115	120						
Temp (°F)		0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	194										
Tension (lbs)		1,729	1,576	1,427	1,289	1,166	1,057	962	879	809	750	700	656	618	586	557	532	509	490	471	456	440	431	423	417	410	335										
% Ultimate		39%	36%	33%	29%	27%	24%	22%	20%	18%	17%	16%	15%	14%	13%	13%	12%	12%	11%	11%	10%	10%	10%	10%	10%	9%	8%										
Span	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec										
R.S. Span																																					
3-Wave Time		3.04	3.19	3.36	3.53	3.71	3.89	4.07	4.24	4.4	4.56	4.71	4.85	4.98	5.11	5.23	5.34	5.45	5.56	5.65	5.75	5.81	5.86	5.91	5.96	6.59	2.9										
50		0.69	0.73	0.76	0.8	0.84	0.88	0.92	0.96	1	1.04	1.07	1.1	1.13	1.16	1.19	1.21	1.24	1.26	1.28	1.31	1.32	1.33	1.34	1.35	1.5	0.66										
75		1.04	1.09	1.15	1.2	1.26	1.33	1.39	1.45	1.5	1.55	1.6	1.65	1.7	1.74	1.78	1.82	1.86	1.89	1.93	1.96	1.98	2	2.01	2.03	2.25	0.99										
100		1.38	1.45	1.53	1.61	1.69	1.77	1.85	1.93	2	2.07	2.14	2.21	2.26	2.32	2.38	2.43	2.48	2.52	2.57	2.61	2.64	2.66	2.69	2.71	2.99	1.32										
120		1.66	1.74	1.83	1.93	2.02	2.12	2.22	2.31	2.4	2.49	2.57	2.65	2.72	2.79	2.85	2.91	2.97	3.03	3.08	3.14	3.17	3.2	3.22	3.25	3.59	1.58										
140		1.93	2.03	2.14	2.25	2.36	2.47	2.59	2.7	2.8	2.9	3	3.09	3.17	3.25	3.33	3.4	3.47	3.53	3.6	3.66	3.7	3.73	3.76	3.79	4.19	1.85										
160		2.21	2.32	2.44	2.57	2.7	2.83	2.96	3.08	3.2	3.32	3.42	3.53	3.62	3.72	3.8	3.89	3.96	4.04	4.11	4.18	4.23	4.26	4.3	4.33	4.79	2.11										
180		2.49	2.61	2.75	2.89	3.04	3.18	3.33	3.47	3.6	3.73	3.85	3.97	4.08	4.18	4.28	4.37	4.46	4.55	4.62	4.7	4.76	4.8	4.83	4.87	5.39	2.37										
200		2.76	2.9	3.05	3.21	3.37	3.53	3.7	3.86	4	4.15	4.28	4.41	4.53	4.65	4.75	4.86	4.96	5.05	5.14	5.23	5.28	5.33	5.37	5.42	5.99	2.64										
210		2.9	3.05	3.21	3.37	3.54	3.71	3.88	4.05	4.2	4.35	4.49	4.63	4.76	4.88	4.99	5.1	5.2	5.3	5.39	5.49	5.55	5.6	5.64	5.69	6.29	2.77										
220		3.04	3.19	3.36	3.53	3.71	3.89	4.07	4.24	4.4	4.56	4.71	4.85	4.98	5.11	5.23	5.34	5.45	5.56	5.65	5.75	5.81	5.86	5.91	5.96	6.59	2.9										
230		3.18	3.34	3.51	3.69	3.88	4.07	4.25	4.43	4.6	4.77	4.92	5.07	5.21	5.34	5.47	5.59	5.7	5.81	5.91	6.01	6.08	6.13	6.18	6.23	6.89	3.03										
240		3.31	3.48	3.66	3.85	4.05	4.24	4.44	4.63	4.8	4.97	5.14	5.29	5.44	5.58	5.7	5.83	5.95	6.06	6.17	6.27	6.34	6.4	6.45	6.5	7.19	3.16										
250		3.45	3.63	3.82	4.01	4.22	4.42	4.62	4.82	5	5.18	5.35	5.52	5.66	5.81	5.94	6.07	6.19	6.31	6.42	6.53	6.61	6.66	6.72	6.77	7.49	3.3										
260		3.59	3.77	3.97	4.17	4.39	4.6	4.81	5.01	5.2	5.39	5.56	5.74	5.89	6.04	6.18	6.32	6.44	6.57	6.68	6.79	6.87	6.93	6.98	7.04	7.79	3.43										
270		3.73	3.92	4.12	4.34	4.55	4.77	4.99	5.2	5.4	5.6	5.78	5.96	6.12	6.27	6.42	6.56	6.69	6.82	6.94	7.06	7.13	7.2	7.25	7.31	8.09	3.56										
280		3.87	4.06	4.27	4.5	4.72	4.95	5.18	5.4	5.6	5.8	5.99	6.18	6.34	6.5	6.66	6.8	6.94	7.07	7.19	7.32	7.4	7.46	7.52	7.58	8.39	3.69										
290		4	4.21	4.43	4.66	4.89	5.13	5.36	5.59	5.8	6.01	6.21	6.4	6.57	6.74	6.89	7.05	7.19	7.32	7.45	7.58	7.66	7.73	7.79	7.85	8.69	3.82										
300		4.14	4.35	4.58	4.82	5.06	5.3	5.55	5.78	6	6.22	6.42	6.62	6.8	6.97	7.13	7.29	7.43	7.58	7.71	7.84	7.93	8	8.06	8.13	8.99	3.95										
310		4.28	4.5	4.73	4.98	5.23	5.48	5.73	5.98	6.2	6.43	6.63	6.84	7.02	7.2	7.37	7.53	7.68	7.83	7.97	8.1	8.19	8.26	8.33	8.4	9.29	4.09										
320		4.42	4.64	4.89	5.14	5.4	5.66	5.92	6.17	6.4	6.63	6.85	7.06	7.25	7.43	7.61	7.78	7.93	8.08	8.22	8.36	8.46	8.53	8.6	8.67	9.59	4.22										
330		4.56	4.79	5.04	5.3	5.57	5.83	6.1	6.36	6.6	6.84	7.06	7.28	7.48	7.67	7.85	8.02	8.18	8.33	8.48	8.63	8.72	8.8	8.87	8.94	9.89	4.35										
340		4.7	4.93	5.19	5.46	5.73	6.01	6.29	6.55	6.81	7.05	7.28	7.5	7.7	7.9	8.08	8.26	8.43	8.59	8.74	8.89	8.99	9.06	9.14	9.21	10.19	4.48										
350		4.83	5.08	5.34	5.62	5.9	6.19	6.47	6.75	7.01	7.26	7.49	7.72	7.93	8.13	8.32	8.5	8.67	8.84	8.99	9.15	9.25	9.33	9.4	9.48	10.49	4.61										

1098-05	GENERAL INFORMATION																	
Sheet of	ENGINEERING NOTES AND SIGNAGE																	
Rev: 03/26/2026	SAG & TENSION WITH TABLES																	


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Creep RS	60.00	49.50	2168.50	82.50

Conductor	1/0 AWG Covered ACSR - Raven											Weight (Lb/Ft)	0.728	Rated Breaking Strength	4,380	Ruling Span (Feet)	220 RAVEN CREEP												Eng. Use: MOT Temp (°F)
Condition	Creep Sag & Tension																												
Temp (°F)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	194			
Tension (lbs)	1,554	1,379	1,227	1,093	981	890	814	750	696	651	612	579	551	525	503	483	473	464	455	447	439	431	423	417	410	335			
% Ultimate	35%	31%	28%	25%	22%	20%	19%	17%	16%	15%	14%	13%	13%	12%	11%	11%	11%	11%	10%	10%	10%	10%	10%	10%	9%	8%			
Span (Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)			
Ruling Span Sag	1'-1"	1'-2"	1'-4"	1'-6"	1'-8"	1'-10"	2'-0"	2'-2"	2'-4"	2'-6"	2'-8"	2'-10"	2'-11"	3'-1"	3'-3"	3'-4"	3'-5"	3'-6"	3'-7"	3'-8"	3'-9"	3'-9"	3'-10"	3'-11"	4'-0"	4'-10"			
50	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-3"			
75	0'-1"	0'-2"	0'-2"	0'-2"	0'-2"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-4"	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-6"	0'-7"			
100	0'-3"	0'-3"	0'-3"	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-6"	0'-6"	0'-7"	0'-7"	0'-7"	0'-8"	0'-8"	0'-8"	0'-8"	0'-9"	0'-9"	0'-9"	0'-9"	0'-9"	0'-9"	0'-10"	0'-10"	1'-0"			
120	0'-4"	0'-4"	0'-5"	0'-5"	0'-6"	0'-6"	0'-7"	0'-8"	0'-8"	0'-9"	0'-9"	0'-10"	0'-11"	0'-11"	1'-0"	1'-0"	1'-0"	1'-0"	1'-1"	1'-1"	1'-1"	1'-1"	1'-2"	1'-2"	1'-2"	1'-5"			
140	0'-5"	0'-6"	0'-6"	0'-7"	0'-8"	0'-9"	0'-10"	0'-11"	0'-11"	1'-0"	1'-1"	1'-2"	1'-2"	1'-3"	1'-4"	1'-4"	1'-5"	1'-5"	1'-5"	1'-6"	1'-6"	1'-6"	1'-7"	1'-7"	1'-7"	2'-0"			
160	0'-7"	0'-7"	0'-8"	0'-9"	0'-11"	1'-0"	1'-1"	1'-2"	1'-3"	1'-4"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-9"	1'-10"	1'-10"	1'-11"	1'-11"	2'-0"	2'-0"	2'-0"	2'-1"	2'-1"	2'-7"			
180	0'-8"	0'-9"	0'-11"	1'-0"	1'-1"	1'-3"	1'-4"	1'-5"	1'-7"	1'-8"	1'-9"	1'-11"	2'-0"	2'-1"	2'-2"	2'-3"	2'-4"	2'-4"	2'-5"	2'-5"	2'-6"	2'-6"	2'-7"	2'-8"	2'-8"	3'-3"			
200	0'-10"	1'-0"	1'-1"	1'-3"	1'-4"	1'-6"	1'-8"	1'-9"	1'-11"	2'-1"	2'-2"	2'-4"	2'-5"	2'-7"	2'-8"	2'-9"	2'-10"	2'-11"	2'-11"	3'-0"	3'-1"	3'-1"	3'-2"	3'-3"	3'-3"	4'-0"			
210	0'-11"	1'-1"	1'-3"	1'-4"	1'-6"	1'-8"	1'-10"	2'-0"	2'-2"	2'-3"	2'-5"	2'-7"	2'-8"	2'-10"	2'-11"	3'-1"	3'-2"	3'-2"	3'-3"	3'-4"	3'-5"	3'-5"	3'-6"	3'-7"	3'-7"	4'-5"			
220	1'-1"	1'-2"	1'-4"	1'-6"	1'-8"	1'-10"	2'-0"	2'-2"	2'-4"	2'-6"	2'-8"	2'-10"	2'-11"	3'-1"	3'-3"	3'-4"	3'-5"	3'-6"	3'-7"	3'-8"	3'-9"	3'-9"	3'-10"	3'-11"	4'-0"	4'-10"			
230	1'-2"	1'-3"	1'-5"	1'-8"	1'-10"	2'-0"	2'-2"	2'-4"	2'-7"	2'-9"	2'-11"	3'-1"	3'-3"	3'-5"	3'-6"	3'-8"	3'-9"	3'-10"	3'-11"	4'-0"	4'-1"	4'-2"	4'-2"	4'-3"	4'-4"	5'-4"			
240	1'-3"	1'-5"	1'-7"	1'-9"	2'-0"	2'-2"	2'-5"	2'-7"	2'-9"	3'-0"	3'-2"	3'-4"	3'-6"	3'-8"	3'-10"	4'-0"	4'-1"	4'-2"	4'-3"	4'-4"	4'-5"	4'-6"	4'-7"	4'-8"	4'-9"	5'-9"			
250	1'-4"	1'-6"	1'-9"	1'-11"	2'-2"	2'-4"	2'-7"	2'-10"	3'-0"	3'-3"	3'-5"	3'-8"	3'-10"	4'-0"	4'-2"	4'-4"	4'-5"	4'-6"	4'-7"	4'-8"	4'-9"	4'-11"	5'-0"	5'-0"	5'-2"	6'-3"			
260	1'-6"	1'-8"	1'-10"	2'-1"	2'-4"	2'-7"	2'-9"	3'-0"	3'-3"	3'-6"	3'-9"	3'-11"	4'-1"	4'-4"	4'-6"	4'-8"	4'-10"	4'-11"	5'-0"	5'-1"	5'-2"	5'-3"	5'-5"	5'-6"	5'-6"	6'-9"			
270	1'-7"	1'-9"	2'-0"	2'-3"	2'-6"	2'-9"	3'-0"	3'-3"	3'-6"	3'-9"	4'-0"	4'-3"	4'-5"	4'-8"	4'-10"	5'-1"	5'-2"	5'-3"	5'-5"	5'-6"	5'-7"	5'-8"	5'-9"	5'-11"	6'-0"	7'-4"			
280	1'-8"	1'-11"	2'-2"	2'-5"	2'-8"	3'-0"	3'-3"	3'-6"	3'-9"	4'-1"	4'-4"	4'-7"	4'-9"	5'-0"	5'-3"	5'-5"	5'-7"	5'-8"	5'-9"	5'-11"	6'-0"	6'-1"	6'-3"	6'-4"	6'-5"	7'-10"			
290	1'-10"	2'-1"	2'-4"	2'-7"	2'-11"	3'-2"	3'-6"	3'-9"	4'-1"	4'-4"	4'-7"	4'-11"	5'-2"	5'-5"	5'-7"	5'-10"	6'-0"	6'-1"	6'-3"	6'-4"	6'-5"	6'-7"	6'-8"	6'-9"	6'-11"	8'-5"			
300	1'-11"	2'-2"	2'-6"	2'-9"	3'-1"	3'-5"	3'-9"	4'-0"	4'-4"	4'-8"	4'-11"	5'-3"	5'-6"	5'-9"	6'-0"	6'-3"	6'-5"	6'-6"	6'-8"	6'-9"	6'-11"	7'-0"	7'-2"	7'-3"	7'-5"	9'-0"			
310	2'-1"	2'-4"	2'-8"	2'-11"	3'-3"	3'-8"	4'-0"	4'-4"	4'-8"	5'-0"	5'-3"	5'-7"	5'-10"	6'-2"	6'-5"	6'-8"	6'-10"	7'-0"	7'-1"	7'-3"	7'-4"	7'-6"	7'-8"	7'-9"	7'-11"	9'-8"			
320	2'-3"	2'-6"	2'-10"	3'-2"	3'-6"	3'-10"	4'-3"	4'-7"	4'-11"	5'-3"	5'-7"	5'-11"	6'-3"	6'-7"	6'-10"	7'-2"	7'-3"	7'-5"	7'-7"	7'-9"	7'-10"	8'-0"	8'-2"	8'-3"	8'-5"	10'-3"			
330	2'-4"	2'-8"	3'-0"	3'-4"	3'-9"	4'-6"	4'-11"	5'-3"	5'-7"	6'-0"	6'-4"	6'-9"	7'-1"	7'-5"	7'-9"	7'-7"	7'-9"	7'-11"	8'-0"	8'-2"	8'-4"	8'-6"	8'-8"	8'-9"	8'-11"	10'-11"			
340	2'-6"	2'-10"	3'-2"	3'-7"	4'-0"	4'-4"	4'-9"	5'-2"	5'-7"	6'-0"	6'-4"	6'-9"	7'-1"	7'-5"	7'-9"	8'-0"	8'-3"	8'-5"	8'-6"	8'-8"	8'-10"	9'-0"	9'-2"	9'-4"	9'-6"	11'-7"			
350	2'-8"	3'-0"	3'-4"	3'-9"	4'-2"	4'-8"	5'-1"	5'-6"	5'-11"	6'-4"	6'-9"	7'-1"	7'-6"	7'-10"	8'-2"	8'-6"	8'-9"	8'-11"	9'-1"	9'-3"	9'-5"	9'-7"	9'-9"	9'-11"	10'-1"	12'-4"			

1098-05	GENERAL INFORMATION																	
Sheet of	ENGINEERING NOTES AND SIGNAGE																	
Rev: 03/26/2026	SAG & TENSION WITH TABLES																	


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Initial RS	60.00	52.20	2286.30	87.00

Conductor	1/0 AWG Covered ACSR - Raven											Weight (Lb/Ft)	0.728	Rated Breaking Strength	4,380	Ruling Span (Feet)	235												RAVEN INITIAL		Eng. Use: MOT Temp (°F)
	Condition	Initial Sag & Tension																													
Temp (°F)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	194					
Tension (lbs)	1,590	1,448	1,314	1,194	1,088	994	912	845	785	735	690	651	619	589	563	540	519	501	484	468	454	443	436	430	423	350					
% Ultimate	36%	33%	30%	27%	25%	23%	21%	19%	18%	17%	16%	15%	14%	13%	13%	12%	12%	11%	11%	11%	10%	10%	10%	10%	10%	8%					
Span (Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)					
Ruling Span Sag	1'-2"	1'-3"	1'-5"	1'-7"	1'-9"	1'-10"	2'-0"	2'-2"	2'-4"	2'-6"	2'-8"	2'-10"	3'-0"	3'-2"	3'-3"	3'-5"	3'-7"	3'-9"	3'-10"	4'-0"	4'-1"	4'-2"	4'-3"	4'-4"	4'-5"	5'-4"					
50	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-3"					
75	0'-1"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-4"	0'-4"	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-6"					
100	0'-3"	0'-3"	0'-3"	0'-3"	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-6"	0'-6"	0'-6"	0'-7"	0'-7"	0'-7"	0'-7"	0'-8"	0'-8"	0'-8"	0'-9"	0'-9"	0'-9"	0'-9"	0'-9"	0'-9"	1'-0"					
120	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-6"	0'-6"	0'-7"	0'-7"	0'-8"	0'-8"	0'-8"	0'-9"	0'-9"	0'-10"	0'-10"	0'-11"	1'-0"	1'-0"	1'-0"	1'-1"	1'-1"	1'-1"	1'-2"	1'-2"	1'-5"					
140	0'-5"	0'-5"	0'-6"	0'-7"	0'-7"	0'-8"	0'-9"	0'-9"	0'-10"	0'-11"	0'-11"	1'-0"	1'-1"	1'-1"	1'-2"	1'-3"	1'-3"	1'-4"	1'-4"	1'-5"	1'-5"	1'-6"	1'-6"	1'-6"	1'-7"	1'-11"					
160	0'-6"	0'-7"	0'-8"	0'-9"	0'-9"	0'-10"	0'-11"	1'-0"	1'-1"	1'-2"	1'-3"	1'-4"	1'-5"	1'-6"	1'-6"	1'-7"	1'-8"	1'-9"	1'-9"	1'-10"	1'-11"	1'-11"	2'-0"	2'-0"	2'-0"	2'-6"					
180	0'-8"	0'-9"	0'-10"	0'-11"	1'-0"	1'-1"	1'-2"	1'-3"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	2'-0"	2'-1"	2'-2"	2'-3"	2'-4"	2'-5"	2'-6"	2'-6"	2'-6"	2'-7"	3'-1"					
200	0'-10"	0'-11"	1'-0"	1'-2"	1'-3"	1'-4"	1'-6"	1'-7"	1'-9"	1'-10"	1'-11"	2'-1"	2'-2"	2'-3"	2'-5"	2'-6"	2'-7"	2'-8"	2'-9"	2'-10"	3'-0"	3'-0"	3'-1"	3'-2"	3'-2"	3'-10"					
210	0'-11"	1'-0"	1'-2"	1'-3"	1'-4"	1'-6"	1'-8"	1'-9"	1'-11"	2'-0"	2'-2"	2'-3"	2'-5"	2'-6"	2'-8"	2'-9"	2'-10"	3'-0"	3'-1"	3'-2"	3'-3"	3'-4"	3'-5"	3'-5"	3'-6"	4'-3"					
220	1'-0"	1'-1"	1'-3"	1'-4"	1'-6"	1'-8"	1'-9"	1'-11"	2'-1"	2'-3"	2'-4"	2'-6"	2'-8"	2'-9"	2'-11"	3'-0"	3'-2"	3'-3"	3'-4"	3'-6"	3'-7"	3'-8"	3'-9"	3'-9"	3'-10"	4'-8"					
230	1'-1"	1'-3"	1'-4"	1'-6"	1'-8"	1'-9"	1'-11"	2'-1"	2'-3"	2'-5"	2'-7"	2'-9"	2'-10"	3'-0"	3'-2"	3'-3"	3'-5"	3'-7"	3'-8"	3'-10"	3'-11"	4'-0"	4'-1"	4'-2"	4'-2"	5'-1"					
240	1'-3"	1'-4"	1'-6"	1'-7"	1'-9"	1'-11"	2'-1"	2'-3"	2'-6"	2'-8"	2'-10"	3'-0"	3'-2"	3'-3"	3'-5"	3'-7"	3'-9"	3'-10"	4'-0"	4'-2"	4'-3"	4'-4"	4'-5"	4'-6"	4'-7"	5'-6"					
250	1'-4"	1'-5"	1'-7"	1'-9"	1'-11"	2'-1"	2'-4"	2'-6"	2'-8"	2'-10"	3'-0"	3'-3"	3'-5"	3'-7"	3'-9"	3'-11"	4'-1"	4'-2"	4'-4"	4'-6"	4'-8"	4'-9"	4'-10"	4'-11"	5'-0"	6'-0"					
260	1'-5"	1'-7"	1'-9"	1'-11"	2'-1"	2'-3"	2'-6"	2'-8"	2'-11"	3'-1"	3'-3"	3'-6"	3'-8"	3'-10"	4'-0"	4'-3"	4'-5"	4'-6"	4'-8"	4'-10"	5'-0"	5'-2"	5'-3"	5'-4"	5'-4"	6'-6"					
270	1'-6"	1'-8"	1'-10"	2'-1"	2'-3"	2'-6"	2'-8"	2'-11"	3'-1"	3'-4"	3'-7"	3'-9"	4'-0"	4'-2"	4'-4"	4'-6"	4'-9"	4'-11"	5'-1"	5'-3"	5'-5"	5'-6"	5'-7"	5'-9"	5'-9"	7'-0"					
280	1'-8"	1'-10"	2'-0"	2'-3"	2'-5"	2'-8"	2'-11"	3'-1"	3'-4"	3'-7"	3'-10"	4'-0"	4'-3"	4'-6"	4'-8"	4'-11"	5'-1"	5'-3"	5'-5"	5'-8"	5'-10"	5'-11"	6'-0"	6'-2"	6'-3"	7'-6"					
290	1'-9"	1'-11"	2'-2"	2'-4"	2'-7"	2'-10"	3'-1"	3'-4"	3'-7"	3'-10"	4'-1"	4'-4"	4'-7"	4'-10"	5'-0"	5'-3"	5'-5"	5'-8"	5'-10"	6'-0"	6'-3"	6'-5"	6'-6"	6'-7"	6'-8"	8'-1"					
300	1'-11"	2'-1"	2'-4"	2'-6"	2'-9"	3'-0"	3'-4"	3'-7"	3'-10"	4'-1"	4'-5"	4'-8"	4'-11"	5'-2"	5'-4"	5'-7"	5'-10"	6'-0"	6'-3"	6'-6"	6'-8"	6'-10"	6'-11"	7'-1"	7'-2"	8'-8"					
310	2'-0"	2'-3"	2'-6"	2'-9"	3'-0"	3'-3"	3'-6"	3'-10"	4'-1"	4'-5"	4'-8"	5'-0"	5'-3"	5'-6"	5'-9"	6'-0"	6'-3"	6'-5"	6'-8"	6'-11"	7'-1"	7'-3"	7'-5"	7'-6"	7'-8"	9'-3"					
320	2'-2"	2'-5"	2'-9"	2'-11"	3'-2"	3'-6"	3'-9"	4'-1"	4'-5"	4'-8"	5'-0"	5'-3"	5'-7"	5'-10"	6'-1"	6'-4"	6'-8"	6'-11"	7'-1"	7'-4"	7'-7"	7'-9"	7'-11"	8'-0"	8'-2"	9'-10"					
330	2'-4"	2'-6"	2'-9"	3'-1"	3'-4"	4'-0"	4'-4"	4'-8"	5'-0"	5'-4"	5'-7"	5'-11"	6'-3"	6'-6"	6'-9"	7'-1"	7'-4"	7'-7"	7'-10"	8'-1"	8'-3"	8'-5"	8'-6"	8'-8"	10'-6"						
340	2'-5"	2'-8"	3'-0"	3'-3"	3'-7"	3'-11"	4'-3"	4'-7"	4'-11"	5'-3"	5'-8"	6'-0"	6'-3"	6'-7"	6'-11"	7'-2"	7'-6"	7'-9"	8'-0"	8'-4"	8'-7"	8'-9"	8'-11"	9'-1"	9'-2"	11'-1"					
350	2'-7"	2'-10"	3'-2"	3'-5"	3'-9"	4'-2"	4'-6"	4'-10"	5'-3"	5'-7"	6'-0"	6'-4"	6'-8"	7'-0"	7'-4"	7'-8"	7'-11"	8'-3"	8'-6"	8'-10"	9'-1"	9'-3"	9'-5"	9'-7"	9'-9"	11'-9"					

1098-05	GENERAL INFORMATION																	
Sheet of	ENGINEERING NOTES AND SIGNAGE																	
Rev: 03/26/2026	3-WAVE TIME & TENSION WITH TABLES																	


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Initial RS	60.00	52.20	2286.30	87.00

Conductor		1/0 AWG Covered ACSR - Raven														Weight (Lb/Ft)		0.728		Rated Breaking Strength		4,380		Ruling Span (Feet)		235		RAVEN INITIAL										Eng. Use: MOT Temp (°F)	
Condition		Initial Sag & Tension																																					
Temp (°F)		0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120		194											
Tension (lbs)		1,590	1,448	1,314	1,194	1,088	994	912	845	785	735	690	651	619	589	563	540	519	501	484	468	454	443	436	430	423		350											
% Ultimate		36%	33%	30%	27%	25%	23%	21%	19%	18%	17%	16%	15%	14%	13%	13%	12%	12%	11%	11%	11%	10%	10%	10%	10%	10%		8%											
Span	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec		Sec											
R.S. Span																																							
3-Wave Time	3.39	3.55	3.73	3.91	4.09	4.27	4.43	4.6	4.75	4.9	5.05	5.18	5.31	5.43	5.54	5.66	5.76	5.86	5.96	6.05	6.12	6.17	6.22	6.26	6.89		3.23												
50	0.72	0.76	0.79	0.83	0.87	0.91	0.94	0.98	1.01	1.04	1.07	1.1	1.13	1.15	1.18	1.2	1.23	1.25	1.27	1.29	1.3	1.31	1.32	1.33	1.47		0.69												
75	1.08	1.13	1.19	1.25	1.3	1.36	1.41	1.47	1.52	1.57	1.61	1.65	1.69	1.73	1.77	1.8	1.84	1.87	1.9	1.93	1.95	1.97	1.98	2	2.2		1.03												
100	1.44	1.51	1.59	1.66	1.74	1.82	1.89	1.96	2.02	2.09	2.15	2.2	2.26	2.31	2.36	2.41	2.45	2.49	2.53	2.57	2.6	2.62	2.65	2.67	2.93		1.37												
120	1.73	1.81	1.9	1.99	2.09	2.18	2.26	2.35	2.43	2.5	2.58	2.64	2.71	2.77	2.83	2.89	2.94	2.99	3.04	3.09	3.12	3.15	3.17	3.2	3.52		1.65												
140	2.02	2.12	2.22	2.33	2.43	2.54	2.64	2.74	2.83	2.92	3.01	3.08	3.16	3.23	3.3	3.37	3.43	3.49	3.55	3.6	3.65	3.67	3.7	3.73	4.1		1.92												
160	2.31	2.42	2.54	2.66	2.78	2.9	3.02	3.13	3.24	3.34	3.44	3.53	3.61	3.7	3.77	3.85	3.92	3.99	4.06	4.12	4.17	4.2	4.23	4.26	4.69		2.2												
180	2.59	2.72	2.86	2.99	3.13	3.27	3.4	3.52	3.64	3.76	3.87	3.97	4.07	4.16	4.25	4.33	4.41	4.49	4.56	4.63	4.69	4.73	4.76	4.8	5.28		2.47												
200	2.88	3.02	3.17	3.32	3.48	3.63	3.77	3.91	4.05	4.17	4.3	4.41	4.52	4.62	4.72	4.81	4.9	4.99	5.07	5.15	5.21	5.25	5.29	5.33	5.86		2.75												
210	3.03	3.18	3.33	3.49	3.65	3.81	3.96	4.11	4.25	4.38	4.51	4.63	4.74	4.85	4.95	5.05	5.15	5.24	5.32	5.41	5.47	5.51	5.56	5.6	6.16		2.89												
220	3.17	3.33	3.49	3.66	3.83	3.99	4.15	4.3	4.45	4.59	4.73	4.85	4.97	5.08	5.19	5.29	5.39	5.48	5.58	5.66	5.73	5.78	5.82	5.86	6.45		3.02												
230	3.31	3.48	3.65	3.82	4	4.18	4.34	4.5	4.65	4.8	4.94	5.07	5.2	5.31	5.43	5.54	5.64	5.73	5.83	5.92	5.99	6.04	6.09	6.13	6.74		3.16												
240	3.46	3.63	3.81	3.99	4.17	4.36	4.53	4.7	4.86	5.01	5.16	5.29	5.42	5.54	5.66	5.78	5.88	5.98	6.08	6.18	6.25	6.3	6.35	6.4	7.04		3.3												
250	3.6	3.78	3.97	4.16	4.35	4.54	4.72	4.89	5.06	5.22	5.37	5.51	5.65	5.77	5.9	6.02	6.13	6.23	6.34	6.44	6.51	6.56	6.61	6.66	7.33		3.44												
260	3.75	3.93	4.13	4.32	4.52	4.72	4.9	5.09	5.26	5.43	5.58	5.73	5.87	6.01	6.13	6.26	6.37	6.48	6.59	6.69	6.77	6.83	6.88	6.93	7.62		3.57												
270	3.89	4.08	4.28	4.49	4.69	4.9	5.09	5.28	5.46	5.64	5.8	5.95	6.1	6.24	6.37	6.5	6.62	6.73	6.85	6.95	7.03	7.09	7.14	7.2	7.92		3.71												
280	4.03	4.24	4.44	4.65	4.87	5.08	5.28	5.48	5.66	5.84	6.01	6.17	6.33	6.47	6.61	6.74	6.86	6.98	7.1	7.21	7.29	7.35	7.41	7.46	8.21		3.85												
290	4.18	4.39	4.6	4.82	5.04	5.27	5.47	5.67	5.87	6.05	6.23	6.39	6.55	6.7	6.84	6.98	7.11	7.23	7.35	7.47	7.55	7.61	7.67	7.73	8.5		3.99												
300	4.32	4.54	4.76	4.99	5.22	5.45	5.66	5.87	6.07	6.26	6.44	6.61	6.78	6.93	7.08	7.22	7.35	7.48	7.61	7.72	7.81	7.88	7.94	8	8.8		4.12												
310	4.47	4.69	4.92	5.15	5.39	5.63	5.85	6.07	6.27	6.47	6.66	6.83	7	7.16	7.31	7.46	7.6	7.73	7.86	7.98	8.08	8.14	8.2	8.27	9.09		4.26												
320	4.61	4.84	5.08	5.32	5.56	5.81	6.04	6.26	6.47	6.68	6.87	7.05	7.23	7.39	7.55	7.7	7.84	7.98	8.11	8.24	8.34	8.4	8.47	8.53	9.38		4.4												
330	4.75	4.99	5.24	5.48	5.74	5.99	6.23	6.46	6.68	6.89	7.09	7.27	7.46	7.62	7.79	7.94	8.09	8.23	8.37	8.5	8.6	8.67	8.73	8.8	9.68		4.54												
340	4.9	5.14	5.4	5.65	5.91	6.17	6.41	6.65	6.88	7.1	7.3	7.49	7.68	7.85	8.02	8.18	8.33	8.48	8.62	8.75	8.86	8.93	9	9.07	9.97		4.67												
350	5.04	5.29	5.55	5.82	6.09	6.35	6.6	6.85	7.08	7.31	7.52	7.71	7.91	8.09	8.26	8.42	8.58	8.73	8.88	9.01	9.12	9.19	9.26	9.33	10.27		4.81												

1098-05	GENERAL INFORMATION																
Sheet of	ENGINEERING NOTES AND SIGNAGE																
Rev: 03/26/2026	SAG & TENSION WITH TABLES																


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Creep RS	60.00	50.80	2225.00	84.70

Conductor	1/0 AWG Covered ACSR - Raven																Weight (Lb/Ft)	0.728	Rated Breaking Strength	4,380	Ruling Span (Feet)	235	RAVEN CREEP												Eng. Use: MOT
Condition	Creep Sag & Tension																												Temp (°F)						
Temp (°F)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	194									
Tension (lbs)	1,410	1,257	1,127	1,019	928	851	786	732	687	647	614	583	557	534	513	494	484	475	467	459	451	443	436	430	423	350									
% Ultimate	32%	29%	26%	23%	21%	19%	18%	17%	16%	15%	14%	13%	13%	12%	12%	11%	11%	11%	11%	10%	10%	10%	10%	10%	10%	8%									
Span (Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)									
Ruling Span Sag	1'-4"	1'-6"	1'-8"	1'-10"	2'-0"	2'-2"	2'-4"	2'-6"	2'-8"	2'-10"	3'-0"	3'-2"	3'-4"	3'-6"	3'-7"	3'-9"	3'-10"	3'-11"	4'-0"	4'-1"	4'-1"	4'-2"	4'-3"	4'-4"	4'-5"	5'-4"									
50	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-3"									
75	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-4"	0'-4"	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-6"									
100	0'-3"	0'-3"	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-6"	0'-6"	0'-6"	0'-7"	0'-7"	0'-7"	0'-7"	0'-8"	0'-8"	0'-8"	0'-8"	0'-9"	0'-9"	0'-9"	0'-9"	0'-9"	0'-9"	0'-9"	1'-0"									
120	0'-4"	0'-5"	0'-5"	0'-6"	0'-6"	0'-7"	0'-7"	0'-8"	0'-8"	0'-9"	0'-9"	0'-10"	0'-10"	0'-11"	0'-11"	1'-0"	1'-0"	1'-0"	1'-0"	1'-1"	1'-1"	1'-1"	1'-1"	1'-2"	1'-2"	1'-5"									
140	0'-6"	0'-6"	0'-7"	0'-8"	0'-9"	0'-9"	0'-10"	0'-11"	1'-0"	1'-0"	1'-1"	1'-2"	1'-2"	1'-3"	1'-3"	1'-4"	1'-4"	1'-5"	1'-5"	1'-5"	1'-6"	1'-6"	1'-6"	1'-6"	1'-7"	1'-11"									
160	0'-7"	0'-8"	0'-9"	0'-10"	0'-11"	1'-0"	1'-1"	1'-2"	1'-3"	1'-4"	1'-5"	1'-6"	1'-6"	1'-7"	1'-8"	1'-9"	1'-9"	1'-10"	1'-10"	1'-11"	1'-11"	1'-11"	2'-0"	2'-0"	2'-0"	2'-6"									
180	0'-9"	0'-10"	1'-0"	1'-1"	1'-2"	1'-3"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	2'-0"	2'-1"	2'-2"	2'-3"	2'-3"	2'-4"	2'-4"	2'-5"	2'-6"	2'-6"	2'-6"	2'-7"	3'-1"									
200	0'-11"	1'-1"	1'-2"	1'-4"	1'-5"	1'-7"	1'-9"	1'-10"	2'-0"	2'-1"	2'-2"	2'-4"	2'-5"	2'-6"	2'-7"	2'-9"	2'-9"	2'-10"	2'-11"	2'-11"	3'-0"	3'-0"	3'-1"	3'-2"	3'-2"	3'-10"									
210	1'-1"	1'-2"	1'-4"	1'-5"	1'-7"	1'-9"	1'-11"	2'-0"	2'-2"	2'-3"	2'-5"	2'-6"	2'-8"	2'-9"	2'-11"	3'-0"	3'-1"	3'-1"	3'-2"	3'-3"	3'-3"	3'-4"	3'-5"	3'-5"	3'-6"	4'-3"									
220	1'-2"	1'-3"	1'-5"	1'-7"	1'-9"	1'-11"	2'-1"	2'-3"	2'-4"	2'-6"	2'-8"	2'-9"	2'-11"	3'-1"	3'-2"	3'-3"	3'-4"	3'-5"	3'-6"	3'-7"	3'-7"	3'-8"	3'-9"	3'-9"	3'-10"	4'-8"									
230	1'-3"	1'-5"	1'-7"	1'-9"	1'-11"	2'-1"	2'-3"	2'-5"	2'-7"	2'-9"	2'-11"	3'-1"	3'-2"	3'-4"	3'-6"	3'-7"	3'-8"	3'-9"	3'-10"	3'-11"	3'-11"	4'-0"	4'-1"	4'-2"	4'-2"	5'-1"									
240	1'-4"	1'-6"	1'-9"	1'-11"	2'-1"	2'-3"	2'-6"	2'-8"	2'-10"	3'-0"	3'-2"	3'-4"	3'-6"	3'-8"	3'-9"	3'-11"	4'-0"	4'-1"	4'-2"	4'-3"	4'-4"	4'-4"	4'-5"	4'-6"	4'-7"	5'-6"									
250	1'-6"	1'-8"	1'-10"	2'-1"	2'-3"	2'-6"	2'-8"	2'-10"	3'-1"	3'-3"	3'-5"	3'-7"	3'-9"	3'-11"	4'-1"	4'-3"	4'-4"	4'-5"	4'-6"	4'-7"	4'-8"	4'-9"	4'-10"	4'-11"	5'-0"	6'-0"									
260	1'-7"	1'-10"	2'-0"	2'-3"	2'-5"	2'-8"	2'-11"	3'-1"	3'-4"	3'-6"	3'-8"	3'-11"	4'-1"	4'-3"	4'-5"	4'-7"	4'-8"	4'-9"	4'-10"	5'-0"	5'-0"	5'-2"	5'-3"	5'-4"	5'-4"	6'-6"									
270	1'-9"	1'-11"	2'-2"	2'-5"	2'-8"	2'-11"	3'-1"	3'-4"	3'-7"	3'-9"	4'-0"	4'-2"	4'-5"	4'-7"	4'-9"	5'-0"	5'-1"	5'-2"	5'-3"	5'-4"	5'-5"	5'-6"	5'-7"	5'-9"	5'-9"	7'-0"									
280	1'-10"	2'-1"	2'-4"	2'-7"	2'-10"	3'-1"	3'-4"	3'-7"	3'-10"	4'-1"	4'-3"	4'-6"	4'-9"	4'-11"	5'-2"	5'-4"	5'-5"	5'-7"	5'-8"	5'-9"	5'-10"	5'-11"	6'-0"	6'-2"	6'-3"	7'-6"									
290	2'-0"	2'-3"	2'-6"	2'-9"	3'-1"	3'-4"	3'-7"	3'-10"	4'-1"	4'-4"	4'-7"	4'-10"	5'-1"	5'-3"	5'-6"	5'-9"	5'-10"	5'-11"	6'-1"	6'-2"	6'-3"	6'-5"	6'-6"	6'-7"	6'-8"	8'-1"									
300	2'-2"	2'-5"	2'-8"	3'-0"	3'-3"	3'-7"	3'-10"	4'-2"	4'-5"	4'-8"	4'-11"	5'-2"	5'-5"	5'-8"	5'-11"	6'-1"	6'-3"	6'-4"	6'-6"	6'-7"	6'-9"	6'-10"	6'-11"	7'-1"	7'-2"	8'-8"									
310	2'-3"	2'-7"	2'-10"	3'-2"	3'-6"	3'-9"	4'-1"	4'-5"	4'-8"	5'-0"	5'-3"	5'-6"	5'-10"	6'-1"	6'-4"	6'-6"	6'-8"	6'-10"	6'-11"	7'-1"	7'-2"	7'-3"	7'-5"	7'-6"	7'-8"	9'-3"									
320	2'-5"	2'-9"	3'-1"	3'-5"	3'-9"	4'-0"	4'-5"	4'-8"	5'-0"	5'-4"	5'-7"	5'-11"	6'-2"	6'-5"	6'-9"	7'-0"	7'-1"	7'-3"	7'-5"	7'-6"	7'-8"	7'-9"	7'-11"	8'-0"	8'-2"	9'-10"									
330	2'-7"	2'-11"	3'-3"	3'-7"	3'-11"	4'-4"	4'-8"	5'-0"	5'-4"	5'-8"	6'-0"	6'-3"	6'-7"	6'-10"	7'-2"	7'-5"	7'-7"	7'-9"	7'-10"	8'-0"	8'-2"	8'-3"	8'-5"	8'-6"	8'-8"	10'-6"									
340	2'-9"	3'-1"	3'-5"	3'-10"	4'-2"	4'-7"	4'-11"	5'-4"	5'-8"	6'-0"	6'-4"	6'-8"	7'-0"	7'-3"	7'-7"	7'-10"	8'-0"	8'-2"	8'-4"	8'-6"	8'-8"	8'-9"	8'-11"	9'-1"	9'-2"	11'-1"									
350	2'-11"	3'-3"	3'-8"	4'-0"	4'-5"	4'-10"	5'-3"	5'-8"	6'-0"	6'-4"	6'-9"	7'-1"	7'-5"	7'-9"	8'-0"	8'-4"	8'-6"	8'-8"	8'-10"	9'-0"	9'-2"	9'-3"	9'-5"	9'-7"	9'-9"	11'-9"									

1098-05	GENERAL INFORMATION																		
Sheet of	ENGINEERING NOTES AND SIGNAGE																		
Rev: 03/26/2026	3-WAVE TIME & TENSION WITH TABLES																		


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Creep RS	60.00	50.80	2225.00	84.70

Conductor		Weight (Lb/Ft)																	0.728	Rated Breaking Strength	4,380	Ruling Span (Feet)	235		RAVEN CREEP												Eng. Use: MOT Temp (°F)									
Condition		Creep Sag & Tension																																												
Temp (°F)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	194																				
Tension (lbs)	1,410	1,257	1,127	1,019	928	851	786	732	687	647	614	583	557	534	513	494	484	475	467	459	451	443	436	430	423	350																				
% Ultimate	32%	29%	26%	23%	21%	19%	18%	17%	16%	15%	14%	13%	13%	12%	12%	11%	11%	11%	11%	10%	10%	10%	10%	10%	10%	8%																				
Span	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec																				
R.S. Span																																														
3-Wave Time	3.63	3.84	4.04	4.23	4.42	4.6	4.76	4.92	5.06	5.2	5.33	5.46	5.58	5.69	5.8	5.86	5.91	5.97	6.02	6.07	6.12	6.17	6.22	6.26	6.89	3.43																				
50	0.77	0.82	0.86	0.9	0.94	0.98	1.01	1.05	1.08	1.11	1.13	1.16	1.19	1.21	1.23	1.25	1.26	1.27	1.28	1.29	1.3	1.31	1.32	1.33	1.47	0.73																				
75	1.16	1.22	1.29	1.35	1.41	1.47	1.52	1.57	1.62	1.66	1.7	1.74	1.78	1.82	1.85	1.87	1.89	1.9	1.92	1.94	1.95	1.97	1.98	2	2.2	1.1																				
100	1.55	1.63	1.72	1.8	1.88	1.96	2.03	2.09	2.15	2.21	2.27	2.32	2.37	2.42	2.47	2.49	2.52	2.54	2.56	2.58	2.6	2.62	2.65	2.67	2.93	1.46																				
120	1.86	1.96	2.06	2.16	2.25	2.35	2.43	2.51	2.59	2.66	2.72	2.79	2.85	2.9	2.96	2.99	3.02	3.05	3.07	3.1	3.12	3.15	3.17	3.2	3.52	1.75																				
140	2.16	2.29	2.4	2.52	2.63	2.74	2.84	2.93	3.02	3.1	3.18	3.25	3.32	3.39	3.45	3.49	3.52	3.55	3.58	3.62	3.65	3.67	3.7	3.73	4.1	2.04																				
160	2.47	2.61	2.75	2.88	3.01	3.13	3.24	3.35	3.45	3.54	3.63	3.72	3.8	3.87	3.95	3.99	4.02	4.06	4.1	4.13	4.17	4.2	4.23	4.26	4.69	2.34																				
180	2.78	2.94	3.09	3.24	3.38	3.52	3.65	3.77	3.88	3.98	4.09	4.18	4.27	4.36	4.44	4.49	4.53	4.57	4.61	4.65	4.69	4.73	4.76	4.8	5.28	2.63																				
200	3.09	3.27	3.43	3.6	3.76	3.91	4.05	4.18	4.31	4.43	4.54	4.65	4.75	4.84	4.93	4.99	5.03	5.08	5.12	5.17	5.21	5.25	5.29	5.33	5.86	2.92																				
210	3.25	3.43	3.61	3.78	3.95	4.11	4.26	4.39	4.52	4.65	4.77	4.88	4.98	5.08	5.18	5.24	5.28	5.33	5.38	5.42	5.47	5.51	5.56	5.6	6.16	3.07																				
220	3.4	3.59	3.78	3.96	4.13	4.3	4.46	4.6	4.74	4.87	4.99	5.11	5.22	5.33	5.43	5.48	5.53	5.58	5.63	5.68	5.73	5.78	5.82	5.86	6.45	3.21																				
230	3.56	3.76	3.95	4.14	4.32	4.5	4.66	4.81	4.96	5.09	5.22	5.34	5.46	5.57	5.67	5.73	5.79	5.84	5.89	5.94	5.99	6.04	6.09	6.13	6.74	3.36																				
240	3.71	3.92	4.12	4.32	4.51	4.69	4.86	5.02	5.17	5.31	5.45	5.58	5.69	5.81	5.92	5.98	6.04	6.09	6.15	6.2	6.25	6.3	6.35	6.4	7.04	3.5																				
250	3.87	4.08	4.29	4.5	4.7	4.89	5.07	5.23	5.39	5.53	5.67	5.81	5.93	6.05	6.17	6.23	6.29	6.35	6.4	6.46	6.51	6.56	6.61	6.66	7.33	3.65																				
260	4.02	4.25	4.46	4.68	4.89	5.08	5.27	5.44	5.6	5.75	5.9	6.04	6.17	6.29	6.41	6.48	6.54	6.6	6.66	6.72	6.77	6.83	6.88	6.93	7.62	3.8																				
270	4.17	4.41	4.64	4.86	5.07	5.28	5.47	5.65	5.82	5.98	6.13	6.27	6.41	6.54	6.66	6.73	6.79	6.85	6.91	6.97	7.03	7.09	7.14	7.2	7.92	3.94																				
280	4.33	4.57	4.81	5.04	5.26	5.48	5.67	5.86	6.03	6.2	6.36	6.51	6.64	6.78	6.91	6.98	7.04	7.11	7.17	7.23	7.29	7.35	7.41	7.46	8.21	4.09																				
290	4.48	4.74	4.98	5.22	5.45	5.67	5.88	6.07	6.25	6.42	6.58	6.74	6.88	7.02	7.15	7.23	7.3	7.36	7.43	7.49	7.55	7.61	7.67	7.73	8.51	4.23																				
300	4.64	4.9	5.15	5.4	5.64	5.87	6.08	6.28	6.46	6.64	6.81	6.97	7.12	7.26	7.4	7.48	7.55	7.62	7.68	7.75	7.81	7.88	7.94	8	8.8	4.38																				
310	4.79	5.06	5.32	5.58	5.82	6.06	6.28	6.49	6.68	6.86	7.04	7.2	7.36	7.51	7.65	7.73	7.8	7.87	7.94	8.01	8.08	8.14	8.2	8.27	9.09	4.53																				
320	4.95	5.23	5.5	5.76	6.01	6.26	6.49	6.69	6.9	7.08	7.26	7.44	7.59	7.75	7.89	7.98	8.05	8.12	8.2	8.27	8.34	8.4	8.47	8.53	9.39	4.67																				
330	5.1	5.39	5.67	5.94	6.2	6.45	6.69	6.9	7.11	7.3	7.49	7.67	7.83	7.99	8.14	8.23	8.3	8.38	8.45	8.53	8.6	8.67	8.73	8.8	9.68	4.82																				
340	5.26	5.55	5.84	6.12	6.39	6.65	6.89	7.11	7.33	7.53	7.72	7.9	8.07	8.23	8.39	8.48	8.55	8.63	8.71	8.78	8.86	8.93	9	9.07	9.97	4.96																				
350	5.41	5.72	6.01	6.3	6.58	6.84	7.09	7.32	7.54	7.75	7.95	8.13	8.31	8.48	8.64	8.73	8.81	8.89	8.96	9.04	9.12	9.19	9.26	9.33	10.27	5.11																				

1098-05	GENERAL INFORMATION																	
Sheet of	ENGINEERING NOTES AND SIGNAGE																	
Rev: 03/26/2026	SAG & TENSION WITH TABLES																	


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Initial RS	60.00	53.40	2339.80	89.00

Conductor	1/0 AWG Covered ACSR - Raven																	Weight (Lb/Ft)	0.728	Rated Breaking Strength	4,380	Ruling Span (Feet)	250	RAVEN INITIAL												Eng. Use: MOT Temp (°F)	
Condition	Initial Sag & Tension																																				
Temp (°F)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	194											
Tension (lbs)	1,681	1,533	1,403	1,277	1,169	1,069	984	911	847	792	744	703	666	635	606	581	559	538	519	503	487	473	465	458	451	373											
% Ultimate	38%	35%	32%	29%	27%	24%	22%	21%	19%	18%	17%	16%	15%	14%	14%	13%	13%	12%	12%	11%	11%	11%	11%	10%	10%	9%											
Span (Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)											
Ruling Span Sag	1'-3"	1'-4"	1'-6"	1'-8"	1'-10"	2'-0"	2'-2"	2'-4"	2'-6"	2'-8"	2'-10"	3'-0"	3'-2"	3'-4"	3'-6"	3'-7"	3'-9"	3'-11"	4'-0"	4'-2"	4'-4"	4'-5"	4'-6"	4'-7"	4'-8"	5'-8"											
50	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-3"											
75	0'-1"	0'-1"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-4"	0'-4"	0'-4"	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-6"											
100	0'-2"	0'-3"	0'-3"	0'-3"	0'-3"	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-6"	0'-6"	0'-7"	0'-7"	0'-7"	0'-7"	0'-7"	0'-7"	0'-8"	0'-8"	0'-8"	0'-9"	0'-9"	0'-9"	0'-11"											
120	0'-3"	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-6"	0'-6"	0'-7"	0'-7"	0'-8"	0'-8"	0'-9"	0'-9"	0'-10"	0'-10"	0'-10"	0'-11"	0'-11"	1'-0"	1'-0"	1'-0"	1'-1"	1'-1"	1'-1"	1'-4"											
140	0'-5"	0'-5"	0'-6"	0'-6"	0'-7"	0'-7"	0'-8"	0'-9"	0'-9"	0'-10"	0'-11"	0'-11"	1'-0"	1'-0"	1'-1"	1'-2"	1'-2"	1'-3"	1'-3"	1'-4"	1'-4"	1'-5"	1'-5"	1'-5"	1'-6"	1'-9"											
160	0'-6"	0'-7"	0'-7"	0'-8"	0'-9"	0'-10"	0'-10"	0'-11"	1'-0"	1'-1"	1'-2"	1'-3"	1'-3"	1'-4"	1'-5"	1'-6"	1'-6"	1'-7"	1'-8"	1'-9"	1'-9"	1'-10"	1'-10"	1'-11"	1'-11"	2'-4"											
180	0'-8"	0'-9"	0'-9"	0'-10"	0'-11"	1'-0"	1'-1"	1'-2"	1'-3"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	1'-10"	1'-11"	2'-0"	2'-1"	2'-2"	2'-3"	2'-4"	2'-4"	2'-5"	2'-5"	2'-11"											
200	0'-10"	0'-11"	1'-0"	1'-1"	1'-2"	1'-3"	1'-4"	1'-6"	1'-7"	1'-8"	1'-10"	1'-11"	2'-0"	2'-1"	2'-3"	2'-4"	2'-5"	2'-6"	2'-7"	2'-8"	2'-9"	2'-10"	2'-11"	2'-11"	3'-0"	3'-7"											
210	0'-11"	1'-0"	1'-1"	1'-2"	1'-3"	1'-5"	1'-6"	1'-8"	1'-9"	1'-10"	2'-0"	2'-1"	2'-3"	2'-4"	2'-5"	2'-7"	2'-8"	2'-9"	2'-10"	2'-11"	3'-0"	3'-2"	3'-2"	3'-3"	3'-3"	4'-0"											
220	1'-0"	1'-1"	1'-2"	1'-3"	1'-5"	1'-6"	1'-8"	1'-9"	1'-11"	2'-1"	2'-2"	2'-4"	2'-5"	2'-7"	2'-8"	2'-10"	2'-11"	3'-0"	3'-2"	3'-3"	3'-4"	3'-5"	3'-6"	3'-7"	3'-7"	4'-4"											
230	1'-1"	1'-2"	1'-3"	1'-5"	1'-6"	1'-8"	1'-10"	1'-11"	2'-1"	2'-3"	2'-5"	2'-6"	2'-8"	2'-10"	2'-11"	3'-1"	3'-2"	3'-4"	3'-5"	3'-6"	3'-8"	3'-9"	3'-10"	3'-11"	3'-11"	4'-9"											
240	1'-2"	1'-3"	1'-5"	1'-6"	1'-8"	1'-10"	2'-0"	2'-1"	2'-3"	2'-5"	2'-7"	2'-9"	2'-11"	3'-1"	3'-2"	3'-4"	3'-6"	3'-7"	3'-9"	3'-10"	4'-0"	4'-1"	4'-2"	4'-3"	4'-3"	5'-2"											
250	1'-3"	1'-4"	1'-6"	1'-8"	1'-10"	2'-0"	2'-2"	2'-4"	2'-6"	2'-8"	2'-10"	3'-0"	3'-2"	3'-4"	3'-6"	3'-7"	3'-9"	3'-11"	4'-0"	4'-2"	4'-4"	4'-5"	4'-6"	4'-7"	4'-8"	5'-8"											
260	1'-4"	1'-6"	1'-7"	1'-9"	1'-11"	2'-2"	2'-4"	2'-6"	2'-8"	2'-10"	3'-1"	3'-3"	3'-5"	3'-7"	3'-9"	3'-11"	4'-1"	4'-3"	4'-4"	4'-6"	4'-8"	4'-10"	4'-11"	5'-0"	5'-0"	6'-1"											
270	1'-6"	1'-7"	1'-9"	1'-11"	2'-1"	2'-3"	2'-6"	2'-8"	2'-11"	3'-1"	3'-3"	3'-6"	3'-8"	3'-10"	4'-0"	4'-3"	4'-5"	4'-7"	4'-9"	4'-10"	5'-0"	5'-2"	5'-3"	5'-4"	5'-5"	6'-7"											
280	1'-7"	1'-9"	1'-11"	2'-1"	2'-3"	2'-6"	2'-8"	2'-11"	3'-1"	3'-4"	3'-6"	3'-9"	3'-11"	4'-2"	4'-4"	4'-6"	4'-9"	4'-11"	5'-1"	5'-3"	5'-5"	5'-7"	5'-9"	5'-10"	5'-10"	7'-1"											
290	1'-8"	1'-10"	2'-0"	2'-3"	2'-5"	2'-8"	2'-10"	3'-1"	3'-4"	3'-7"	3'-10"	4'-0"	4'-3"	4'-5"	4'-8"	4'-10"	5'-1"	5'-3"	5'-5"	5'-7"	5'-10"	6'-0"	6'-1"	6'-2"	6'-3"	7'-7"											
300	1'-10"	2'-0"	2'-2"	2'-4"	2'-7"	2'-10"	3'-1"	3'-4"	3'-7"	3'-10"	4'-1"	4'-4"	4'-6"	4'-9"	5'-0"	5'-2"	5'-5"	5'-7"	5'-10"	6'-0"	6'-3"	6'-5"	6'-8"	6'-8"	6'-8"	8'-1"											
310	1'-11"	2'-1"	2'-4"	2'-6"	2'-9"	3'-0"	3'-3"	3'-7"	3'-10"	4'-1"	4'-4"	4'-7"	4'-10"	5'-1"	5'-4"	5'-7"	5'-9"	6'-0"	6'-3"	6'-5"	6'-8"	6'-10"	6'-11"	7'-1"	7'-2"	8'-8"											
320	2'-1"	2'-3"	2'-5"	2'-8"	2'-11"	3'-3"	3'-6"	3'-9"	4'-1"	4'-4"	4'-8"	4'-11"	5'-2"	5'-5"	5'-8"	5'-11"	6'-2"	6'-5"	6'-8"	6'-10"	7'-1"	7'-3"	7'-5"	7'-6"	7'-8"	9'-3"											
330	2'-2"	2'-5"	2'-7"	2'-10"	3'-2"	3'-5"	3'-9"	4'-0"	4'-4"	4'-7"	4'-11"	5'-3"	5'-6"	5'-9"	6'-0"	6'-4"	6'-7"	6'-10"	7'-1"	7'-3"	7'-6"	7'-9"	7'-10"	8'-0"	8'-1"	9'-10"											
340	2'-4"	2'-6"	2'-9"	3'-0"	3'-4"	3'-8"	3'-11"	4'-3"	4'-7"	4'-11"	5'-3"	5'-6"	5'-10"	6'-1"	6'-5"	6'-8"	7'-0"	7'-3"	7'-6"	7'-9"	8'-0"	8'-3"	8'-4"	8'-6"	8'-7"	10'-5"											
350	2'-5"	2'-8"	2'-11"	3'-3"	3'-6"	3'-10"	4'-2"	4'-6"	4'-10"	5'-2"	5'-6"	5'-10"	6'-2"	6'-6"	6'-9"	7'-1"	7'-4"	7'-8"	7'-11"	8'-2"	8'-5"	8'-9"	8'-10"	9'-0"	9'-2"	11'-0"											

1098-05	GENERAL INFORMATION																	
Sheet of	ENGINEERING NOTES AND SIGNAGE																	
Rev: 03/26/2026	3-WAVE TIME & TENSION WITH TABLES																	


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Initial RS	60.00	53.40	2339.80	89.00

Conductor		1/0 AWG Covered ACSR - Raven														Weight (Lb/Ft)		0.728		Rated Breaking Strength		4,380		Ruling Span (Feet)		250		RAVEN INITIAL						Eng. Use: MOT Temp (°F)	
Condition		Initial Sag & Tension																																	
Temp (°F)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	194									
Tension (lbs)	1,681	1,533	1,403	1,277	1,169	1,069	984	911	847	792	744	703	666	635	606	581	559	538	519	503	487	473	465	458	451	373									
% Ultimate	38%	35%	32%	29%	27%	24%	22%	21%	19%	18%	17%	16%	15%	14%	14%	13%	13%	12%	12%	11%	11%	11%	11%	10%	10%	9%									
Span	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec									
R.S. Span	3.5	3.66	3.84	4.01	4.19	4.37	4.54	4.71	4.87	5.02	5.17	5.31	5.44	5.57	5.69	5.8	5.91	6.01	6.11	6.21	6.3	6.35	6.4	6.45	7.09	3.34									
3-Wave Time	50	0.7	0.73	0.77	0.8	0.84	0.87	0.91	0.94	0.97	1	1.03	1.06	1.09	1.11	1.14	1.16	1.18	1.2	1.22	1.24	1.26	1.27	1.28	1.29	1.42	0.67								
75	1.05	1.1	1.15	1.2	1.26	1.31	1.36	1.41	1.46	1.51	1.55	1.59	1.63	1.67	1.71	1.74	1.77	1.8	1.83	1.86	1.89	1.91	1.92	1.94	2.13	1									
100	1.4	1.46	1.53	1.6	1.68	1.75	1.82	1.88	1.95	2.01	2.07	2.12	2.18	2.23	2.27	2.32	2.36	2.41	2.44	2.48	2.52	2.54	2.56	2.58	2.84	1.34									
120	1.68	1.76	1.84	1.92	2.01	2.1	2.18	2.26	2.34	2.41	2.48	2.55	2.61	2.67	2.73	2.78	2.84	2.89	2.93	2.98	3.02	3.05	3.07	3.1	3.4	1.6									
140	1.96	2.05	2.15	2.24	2.35	2.45	2.54	2.64	2.73	2.81	2.9	2.97	3.05	3.12	3.18	3.25	3.31	3.37	3.42	3.48	3.53	3.56	3.59	3.61	3.97	1.87									
160	2.24	2.34	2.45	2.57	2.68	2.8	2.91	3.01	3.12	3.22	3.31	3.4	3.48	3.56	3.64	3.71	3.78	3.85	3.91	3.97	4.03	4.07	4.1	4.13	4.54	2.14									
180	2.52	2.63	2.76	2.89	3.02	3.15	3.27	3.39	3.51	3.62	3.72	3.82	3.92	4.01	4.09	4.17	4.25	4.33	4.4	4.47	4.54	4.57	4.61	4.64	5.11	2.41									
200	2.8	2.93	3.07	3.21	3.35	3.5	3.63	3.77	3.9	4.02	4.14	4.25	4.35	4.45	4.55	4.64	4.73	4.81	4.89	4.97	5.04	5.08	5.12	5.16	5.67	2.67									
210	2.94	3.07	3.22	3.37	3.52	3.67	3.81	3.96	4.09	4.22	4.34	4.46	4.57	4.68	4.78	4.87	4.96	5.05	5.13	5.22	5.29	5.34	5.38	5.42	5.96	2.81									
220	3.08	3.22	3.38	3.53	3.69	3.84	4	4.14	4.29	4.42	4.55	4.67	4.79	4.9	5	5.1	5.2	5.29	5.38	5.46	5.55	5.59	5.64	5.68	6.24	2.94									
230	3.22	3.37	3.53	3.69	3.86	4.02	4.18	4.33	4.48	4.62	4.76	4.88	5	5.12	5.23	5.33	5.43	5.53	5.62	5.71	5.8	5.85	5.89	5.94	6.53	3.08									
240	3.36	3.51	3.68	3.85	4.02	4.19	4.36	4.52	4.68	4.82	4.96	5.1	5.22	5.34	5.46	5.57	5.67	5.77	5.87	5.96	6.05	6.1	6.15	6.19	6.81	3.21									
250	3.5	3.66	3.84	4.01	4.19	4.37	4.54	4.71	4.87	5.02	5.17	5.31	5.44	5.57	5.69	5.8	5.91	6.01	6.11	6.21	6.3	6.35	6.4	6.45	7.09	3.34									
260	3.64	3.81	3.99	4.17	4.36	4.54	4.72	4.9	5.07	5.23	5.38	5.52	5.66	5.79	5.91	6.03	6.14	6.26	6.36	6.46	6.55	6.61	6.66	6.71	7.38	3.48									
270	3.78	3.95	4.14	4.33	4.53	4.72	4.9	5.09	5.26	5.43	5.58	5.73	5.88	6.01	6.14	6.26	6.38	6.5	6.6	6.71	6.81	6.86	6.92	6.97	7.66	3.61									
280	3.92	4.1	4.3	4.49	4.7	4.89	5.09	5.28	5.46	5.63	5.79	5.95	6.09	6.24	6.37	6.5	6.62	6.74	6.85	6.96	7.06	7.12	7.17	7.23	7.95	3.74									
290	4.06	4.24	4.45	4.65	4.86	5.07	5.27	5.46	5.65	5.83	6	6.16	6.31	6.46	6.6	6.73	6.85	6.98	7.09	7.2	7.31	7.37	7.43	7.48	8.23	3.88									
300	4.2	4.39	4.6	4.81	5.03	5.24	5.45	5.65	5.85	6.03	6.21	6.37	6.53	6.68	6.82	6.96	7.09	7.22	7.34	7.45	7.56	7.63	7.69	7.74	8.51	4.01									
310	4.34	4.54	4.76	4.97	5.2	5.42	5.63	5.84	6.04	6.23	6.41	6.58	6.75	6.9	7.05	7.19	7.33	7.46	7.58	7.7	7.82	7.88	7.94	8	8.8	4.15									
320	4.48	4.68	4.91	5.13	5.37	5.59	5.81	6.03	6.24	6.43	6.62	6.8	6.96	7.13	7.28	7.42	7.56	7.7	7.83	7.95	8.07	8.13	8.2	8.26	9.08	4.28									
330	4.62	4.83	5.06	5.29	5.53	5.77	5.99	6.22	6.43	6.63	6.83	7.01	7.18	7.35	7.51	7.66	7.8	7.94	8.07	8.2	8.32	8.39	8.46	8.52	9.37	4.41									
340	4.76	4.98	5.22	5.45	5.7	5.94	6.18	6.41	6.63	6.83	7.03	7.22	7.4	7.57	7.73	7.89	8.04	8.18	8.32	8.45	8.57	8.64	8.71	8.78	9.65	4.55									
350	4.9	5.12	5.37	5.61	5.87	6.12	6.36	6.59	6.82	7.03	7.24	7.43	7.62	7.8	7.96	8.12	8.27	8.42	8.56	8.7	8.82	8.9	8.97	9.03	9.94	4.68									

1098-05	GENERAL INFORMATION																			
Sheet of	ENGINEERING NOTES AND SIGNAGE																			
Rev: 03/26/2026	SAG & TENSION WITH TABLES																			


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Creep RS	60.00	52.00	2278.30	86.70

Conductor	1/0 AWG Covered ACSR - Raven																								Eng. Use: MOT	
	Creep Sag & Tension																									
Condition	Creep Sag & Tension																								Temp (°F)	
Temp (°F)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115		120
Tension (lbs)	1,490	1,338	1,208	1,092	995	913	846	786	738	695	659	626	598	573	550	530	516	506	497	489	481	473	465	458	451	373
% Ultimate	34%	31%	28%	25%	23%	21%	19%	18%	17%	16%	15%	14%	14%	13%	13%	12%	12%	12%	11%	11%	11%	11%	11%	10%	10%	9%
Span (Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)
Ruling Span Sag	1'-5"	1'-7"	1'-9"	1'-11"	2'-1"	2'-4"	2'-6"	2'-8"	2'-10"	3'-0"	3'-2"	3'-4"	3'-6"	3'-8"	3'-10"	4'-0"	4'-1"	4'-2"	4'-3"	4'-4"	4'-4"	4'-5"	4'-6"	4'-7"	4'-8"	5'-8"
50	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-3"
75	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-4"	0'-4"	0'-4"	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-6"
100	0'-3"	0'-3"	0'-3"	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-6"	0'-6"	0'-6"	0'-6"	0'-7"	0'-7"	0'-7"	0'-8"	0'-8"	0'-8"	0'-8"	0'-8"	0'-8"	0'-9"	0'-9"	0'-9"	0'-11"
120	0'-4"	0'-4"	0'-5"	0'-5"	0'-6"	0'-6"	0'-7"	0'-7"	0'-7"	0'-8"	0'-8"	0'-9"	0'-9"	0'-10"	0'-10"	0'-11"	0'-11"	0'-11"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-1"	1'-1"	1'-4"
140	0'-5"	0'-6"	0'-7"	0'-7"	0'-8"	0'-9"	0'-9"	0'-10"	0'-11"	0'-11"	1'-0"	1'-1"	1'-1"	1'-2"	1'-2"	1'-3"	1'-3"	1'-4"	1'-4"	1'-4"	1'-4"	1'-4"	1'-5"	1'-5"	1'-5"	1'-9"
160	0'-7"	0'-8"	0'-9"	0'-9"	0'-10"	0'-11"	1'-0"	1'-1"	1'-2"	1'-3"	1'-4"	1'-4"	1'-5"	1'-6"	1'-7"	1'-7"	1'-8"	1'-8"	1'-9"	1'-9"	1'-9"	1'-10"	1'-10"	1'-11"	1'-11"	2'-4"
180	0'-9"	0'-10"	0'-11"	1'-0"	1'-1"	1'-2"	1'-3"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	2'-0"	2'-1"	2'-1"	2'-2"	2'-2"	2'-3"	2'-3"	2'-4"	2'-4"	2'-5"	2'-5"	2'-11"
200	0'-11"	1'-0"	1'-1"	1'-3"	1'-4"	1'-6"	1'-7"	1'-9"	1'-10"	1'-11"	2'-0"	2'-2"	2'-3"	2'-4"	2'-5"	2'-6"	2'-7"	2'-8"	2'-8"	2'-9"	2'-10"	2'-10"	2'-11"	2'-11"	3'-0"	3'-7"
210	1'-0"	1'-1"	1'-3"	1'-4"	1'-6"	1'-7"	1'-9"	1'-11"	2'-0"	2'-2"	2'-3"	2'-4"	2'-6"	2'-7"	2'-8"	2'-10"	2'-10"	2'-11"	3'-0"	3'-0"	3'-1"	3'-2"	3'-2"	3'-3"	3'-3"	4'-0"
220	1'-1"	1'-3"	1'-4"	1'-6"	1'-8"	1'-9"	1'-11"	2'-1"	2'-2"	2'-4"	2'-6"	2'-7"	2'-9"	2'-10"	3'-0"	3'-1"	3'-2"	3'-3"	3'-3"	3'-4"	3'-5"	3'-5"	3'-6"	3'-7"	3'-7"	4'-4"
230	1'-2"	1'-4"	1'-6"	1'-8"	1'-9"	1'-11"	2'-1"	2'-3"	2'-5"	2'-7"	2'-8"	2'-10"	3'-0"	3'-1"	3'-3"	3'-4"	3'-5"	3'-6"	3'-7"	3'-8"	3'-8"	3'-9"	3'-10"	3'-11"	3'-11"	4'-9"
240	1'-4"	1'-5"	1'-7"	1'-9"	1'-11"	2'-1"	2'-3"	2'-6"	2'-7"	2'-9"	2'-11"	3'-1"	3'-3"	3'-5"	3'-6"	3'-8"	3'-9"	3'-10"	3'-11"	4'-0"	4'-0"	4'-1"	4'-2"	4'-3"	4'-3"	5'-2"
250	1'-5"	1'-7"	1'-9"	1'-11"	2'-1"	2'-4"	2'-6"	2'-8"	2'-10"	3'-0"	3'-2"	3'-4"	3'-6"	3'-8"	3'-10"	4'-0"	4'-1"	4'-2"	4'-3"	4'-4"	4'-4"	4'-5"	4'-6"	4'-7"	4'-8"	5'-8"
260	1'-6"	1'-8"	1'-11"	2'-1"	2'-3"	2'-6"	2'-8"	2'-11"	3'-1"	3'-3"	3'-5"	3'-8"	3'-10"	4'-0"	4'-2"	4'-3"	4'-5"	4'-6"	4'-7"	4'-8"	4'-9"	4'-10"	4'-11"	5'-0"	5'-0"	6'-1"
270	1'-8"	1'-10"	2'-0"	2'-3"	2'-6"	2'-8"	2'-11"	3'-1"	3'-4"	3'-6"	3'-9"	3'-11"	4'-1"	4'-3"	4'-6"	4'-8"	4'-9"	4'-10"	4'-11"	5'-0"	5'-1"	5'-2"	5'-3"	5'-4"	5'-5"	6'-7"
280	1'-9"	2'-0"	2'-2"	2'-5"	2'-8"	2'-11"	3'-1"	3'-4"	3'-7"	3'-9"	4'-0"	4'-3"	4'-5"	4'-7"	4'-9"	5'-0"	5'-1"	5'-3"	5'-4"	5'-5"	5'-6"	5'-7"	5'-8"	5'-9"	5'-10"	7'-1"
290	1'-11"	2'-1"	2'-4"	2'-7"	2'-10"	3'-1"	3'-4"	3'-7"	3'-10"	4'-1"	4'-3"	4'-6"	4'-9"	4'-11"	5'-2"	5'-4"	5'-6"	5'-7"	5'-8"	5'-9"	5'-11"	6'-0"	6'-1"	6'-2"	6'-3"	7'-7"
300	2'-0"	2'-3"	2'-6"	2'-9"	3'-0"	3'-4"	3'-7"	3'-10"	4'-1"	4'-4"	4'-7"	4'-10"	5'-1"	5'-3"	5'-6"	5'-9"	5'-10"	6'-0"	6'-1"	6'-2"	6'-3"	6'-5"	6'-6"	6'-7"	6'-8"	8'-1"
310	2'-2"	2'-5"	2'-8"	3'-0"	3'-3"	3'-6"	3'-10"	4'-1"	4'-5"	4'-8"	4'-11"	5'-2"	5'-5"	5'-8"	5'-10"	6'-1"	6'-3"	6'-5"	6'-6"	6'-7"	6'-9"	6'-10"	6'-11"	7'-1"	7'-2"	8'-8"
320	2'-4"	2'-7"	2'-10"	3'-2"	3'-6"	3'-9"	4'-1"	4'-5"	4'-8"	4'-11"	5'-3"	5'-6"	5'-9"	6'-0"	6'-3"	6'-6"	6'-8"	6'-10"	6'-11"	7'-0"	7'-2"	7'-3"	7'-5"	7'-6"	7'-8"	9'-3"
330	2'-6"	2'-9"	3'-0"	3'-4"	4'-0"	4'-4"	4'-8"	5'-0"	5'-3"	5'-7"	5'-10"	6'-2"	6'-5"	6'-8"	6'-11"	7'-1"	7'-3"	7'-4"	7'-6"	7'-7"	7'-9"	7'-10"	7'-0"	8'-0"	8'-1"	9'-10"
340	2'-7"	2'-11"	3'-3"	3'-7"	3'-11"	4'-3"	4'-7"	4'-11"	5'-3"	5'-7"	5'-11"	6'-3"	6'-6"	6'-9"	7'-1"	7'-4"	7'-6"	7'-8"	7'-10"	7'-11"	8'-1"	8'-3"	8'-4"	8'-6"	8'-7"	10'-5"
350	2'-9"	3'-1"	3'-5"	3'-9"	4'-2"	4'-6"	4'-10"	5'-3"	5'-7"	5'-11"	6'-3"	6'-7"	6'-11"	7'-2"	7'-6"	7'-9"	8'-0"	8'-2"	8'-3"	8'-5"	8'-7"	8'-9"	8'-10"	9'-0"	9'-2"	11'-0"

1098-05	GENERAL INFORMATION																		
Sheet of	ENGINEERING NOTES AND SIGNAGE																		
Rev: 03/26/2026	3-WAVE TIME & TENSION WITH TABLES																		


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Creep RS	60.00	52.00	2278.30	86.70

Conductor	1/0 AWG Covered ACSR - Raven																										Eng. Use: MOT
	Creep Sag & Tension																										
Condition	RAVEN CREEP																										Temp (°F)
Temp (°F)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	194	
Tension (lbs)	1,490	1,338	1,208	1,092	995	913	846	786	738	695	659	626	598	573	550	530	516	506	497	489	481	473	465	458	451	373	
% Ultimate	34%	31%	28%	25%	23%	21%	19%	18%	17%	16%	15%	14%	14%	13%	13%	12%	12%	12%	11%	11%	11%	11%	11%	10%	10%	9%	
Span	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	
R.S. Span	3.75	3.94	4.15	4.34	4.53	4.71	4.89	5.05	5.2	5.34	5.48	5.61	5.73	5.85	5.96	6.04	6.09	6.15	6.2	6.25	6.3	6.35	6.4	6.45	7.1	3.55	
3-Wave Time	50	0.75	0.79	0.83	0.87	0.91	0.94	0.98	1.01	1.04	1.07	1.1	1.12	1.15	1.17	1.19	1.21	1.22	1.23	1.24	1.25	1.26	1.27	1.28	1.29	1.42	0.71
	75	1.12	1.18	1.24	1.3	1.36	1.41	1.47	1.51	1.56	1.6	1.64	1.68	1.72	1.75	1.79	1.81	1.83	1.84	1.86	1.88	1.89	1.91	1.92	1.94	2.13	1.07
	100	1.5	1.58	1.66	1.74	1.81	1.88	1.95	2.02	2.08	2.14	2.19	2.24	2.29	2.34	2.38	2.41	2.44	2.46	2.48	2.5	2.52	2.54	2.56	2.58	2.84	1.42
	120	1.8	1.89	1.99	2.09	2.18	2.26	2.35	2.42	2.5	2.56	2.63	2.69	2.75	2.81	2.86	2.9	2.92	2.95	2.98	3	3.03	3.05	3.07	3.1	3.41	1.7
	140	2.1	2.21	2.32	2.43	2.54	2.64	2.74	2.83	2.91	2.99	3.07	3.14	3.21	3.27	3.33	3.38	3.41	3.44	3.47	3.5	3.53	3.56	3.59	3.61	3.97	1.99
	160	2.4	2.52	2.65	2.78	2.9	3.02	3.13	3.23	3.33	3.42	3.51	3.59	3.66	3.74	3.81	3.86	3.9	3.93	3.97	4	4.03	4.07	4.1	4.13	4.54	2.27
	180	2.7	2.84	2.99	3.13	3.27	3.39	3.52	3.63	3.74	3.84	3.94	4.04	4.12	4.21	4.29	4.35	4.39	4.43	4.46	4.5	4.54	4.57	4.61	4.64	5.11	2.56
	200	3	3.16	3.32	3.48	3.63	3.77	3.91	4.04	4.16	4.27	4.38	4.49	4.58	4.68	4.76	4.83	4.87	4.92	4.96	5	5.04	5.08	5.12	5.16	5.68	2.84
	210	3.15	3.31	3.48	3.65	3.81	3.96	4.11	4.24	4.37	4.49	4.6	4.71	4.81	4.91	5	5.07	5.12	5.16	5.21	5.25	5.3	5.34	5.38	5.42	5.96	2.98
	220	3.3	3.47	3.65	3.82	3.99	4.15	4.3	4.44	4.58	4.7	4.82	4.93	5.04	5.14	5.24	5.31	5.36	5.41	5.46	5.5	5.55	5.59	5.64	5.68	6.24	3.12
	230	3.45	3.63	3.82	4	4.17	4.33	4.5	4.64	4.78	4.91	5.04	5.16	5.27	5.38	5.48	5.55	5.6	5.65	5.7	5.75	5.8	5.85	5.89	5.94	6.53	3.27
	240	3.6	3.79	3.98	4.17	4.35	4.52	4.69	4.84	4.99	5.13	5.26	5.38	5.5	5.61	5.72	5.79	5.85	5.9	5.95	6	6.05	6.1	6.15	6.19	6.81	3.41
	250	3.75	3.94	4.15	4.34	4.53	4.71	4.89	5.05	5.2	5.34	5.48	5.61	5.73	5.85	5.96	6.04	6.09	6.15	6.2	6.25	6.3	6.35	6.4	6.45	7.1	3.55
	260	3.9	4.1	4.31	4.52	4.72	4.9	5.08	5.25	5.41	5.55	5.7	5.83	5.96	6.08	6.19	6.28	6.34	6.39	6.45	6.5	6.56	6.61	6.66	6.71	7.38	3.69
	270	4.05	4.26	4.48	4.69	4.9	5.09	5.28	5.45	5.62	5.77	5.92	6.06	6.19	6.31	6.43	6.52	6.58	6.64	6.7	6.75	6.81	6.86	6.92	6.97	7.66	3.83
	280	4.2	4.42	4.64	4.87	5.08	5.28	5.47	5.65	5.82	5.98	6.14	6.28	6.41	6.55	6.67	6.76	6.82	6.88	6.94	7	7.06	7.12	7.17	7.23	7.95	3.98
	290	4.35	4.57	4.81	5.04	5.26	5.47	5.67	5.85	6.03	6.19	6.36	6.5	6.64	6.78	6.91	7	7.07	7.13	7.19	7.25	7.31	7.37	7.43	7.48	8.23	4.12
	300	4.5	4.73	4.98	5.21	5.44	5.65	5.87	6.06	6.24	6.41	6.57	6.73	6.87	7.01	7.15	7.24	7.31	7.38	7.44	7.5	7.57	7.63	7.69	7.74	8.52	4.26
	310	4.65	4.89	5.14	5.39	5.62	5.84	6.06	6.26	6.45	6.62	6.79	6.95	7.1	7.25	7.39	7.48	7.56	7.62	7.69	7.75	7.82	7.88	7.94	8	8.8	4.4
	320	4.8	5.05	5.31	5.56	5.8	6.03	6.26	6.46	6.66	6.84	7.01	7.18	7.33	7.48	7.62	7.73	7.8	7.87	7.94	8	8.07	8.13	8.2	8.26	9.09	4.54
	330	4.95	5.21	5.47	5.73	5.99	6.22	6.45	6.66	6.87	7.05	7.23	7.4	7.56	7.72	7.86	7.97	8.04	8.11	8.19	8.25	8.32	8.39	8.46	8.52	9.37	4.69
	340	5.1	5.36	5.64	5.91	6.17	6.41	6.65	6.86	7.07	7.26	7.45	7.63	7.79	7.95	8.1	8.21	8.29	8.36	8.43	8.5	8.58	8.64	8.71	8.78	9.65	4.83
	350	5.25	5.52	5.81	6.08	6.35	6.6	6.84	7.07	7.28	7.48	7.67	7.85	8.02	8.18	8.34	8.45	8.53	8.61	8.68	8.75	8.83	8.9	8.97	9.03	9.94	4.97

1098-05	GENERAL INFORMATION																	
Sheet of	ENGINEERING NOTES AND SIGNAGE																	
Rev: 03/26/2026	SAG & TENSION WITH TABLES																	


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Initial RS	60.00	32.70	5097.20	54.50

Conductor	795 AWG Covered AAC - Arbutus											Weight (Lb/Ft)	1.292	Rated Breaking Strength	15,600	Ruling Span (Feet)	145	ARBUS INITIAL												Eng. Use: MOT Temp (°F)
Condition	Initial Sag & Tension																							188						
Temp (°F)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	188				
Tension (lbs)	5,473	5,261	5,052	4,838	4,627	4,412	4,194	3,979	3,766	3,550	3,337	3,133	2,929	2,736	2,550	2,378	2,217	2,065	1,931	1,810	1,699	1,602	1,515	1,436	1,368	867				
% Ultimate	35%	34%	32%	31%	30%	28%	27%	26%	24%	23%	21%	20%	19%	18%	16%	15%	14%	13%	12%	12%	11%	10%	10%	9%	9%	6%				
Span (Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)				
Ruling Span Sag	0'-6"	0'-6"	0'-6"	0'-7"	0'-7"	0'-7"	0'-8"	0'-8"	0'-9"	0'-9"	0'-10"	0'-11"	0'-11"	1'-0"	1'-1"	1'-2"	1'-3"	1'-4"	1'-5"	1'-6"	1'-7"	1'-9"	1'-10"	1'-11"	2'-0"	3'-2"				
50	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-3"	0'-3"	0'-3"	0'-5"				
75	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-6"	0'-6"	0'-6"	0'-6"	0'-10"				
100	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-4"	0'-4"	0'-4"	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-6"	0'-6"	0'-6"	0'-7"	0'-7"	0'-8"	0'-8"	0'-9"	0'-9"	0'-11"	1'-0"	1'-6"				
120	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-5"	0'-6"	0'-6"	0'-6"	0'-7"	0'-7"	0'-8"	0'-8"	0'-9"	0'-9"	0'-10"	0'-11"	1'-0"	1'-0"	1'-1"	1'-2"	1'-3"	1'-4"	1'-5"	2'-2"				
140	0'-6"	0'-6"	0'-6"	0'-6"	0'-7"	0'-7"	0'-7"	0'-8"	0'-8"	0'-9"	0'-9"	0'-10"	0'-10"	0'-11"	1'-0"	1'-1"	1'-2"	1'-3"	1'-4"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	3'-0"				
160	0'-7"	0'-8"	0'-8"	0'-8"	0'-9"	0'-9"	0'-10"	0'-10"	0'-11"	0'-11"	1'-0"	1'-1"	1'-2"	1'-3"	1'-4"	1'-5"	1'-6"	1'-7"	1'-9"	1'-10"	2'-0"	2'-1"	2'-3"	2'-4"	2'-5"	3'-10"				
180	0'-9"	0'-10"	0'-10"	0'-11"	0'-11"	1'-0"	1'-0"	1'-1"	1'-1"	1'-2"	1'-3"	1'-4"	1'-5"	1'-7"	1'-8"	1'-9"	1'-11"	2'-1"	2'-2"	2'-4"	2'-6"	2'-8"	2'-10"	2'-11"	3'-1"	4'-11"				
200	1'-0"	1'-0"	1'-0"	1'-1"	1'-2"	1'-2"	1'-3"	1'-4"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-11"	2'-1"	2'-2"	2'-4"	2'-6"	2'-9"	2'-11"	3'-1"	3'-3"	3'-5"	3'-8"	3'-10"	6'-0"				
210	1'-1"	1'-1"	1'-2"	1'-2"	1'-3"	1'-4"	1'-4"	1'-5"	1'-6"	1'-7"	1'-9"	1'-10"	2'-0"	2'-1"	2'-3"	2'-5"	2'-7"	2'-9"	3'-0"	3'-2"	3'-5"	3'-7"	3'-10"	4'-0"	4'-3"	6'-8"				
220	1'-2"	1'-2"	1'-3"	1'-4"	1'-4"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-11"	2'-0"	2'-2"	2'-4"	2'-6"	2'-8"	2'-10"	3'-1"	3'-3"	3'-6"	3'-9"	3'-11"	4'-2"	4'-5"	4'-8"	7'-4"				
230	1'-3"	1'-4"	1'-4"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	2'-1"	2'-3"	2'-4"	2'-6"	2'-9"	2'-11"	3'-1"	3'-4"	3'-7"	3'-10"	4'-1"	4'-4"	4'-7"	4'-10"	5'-1"	8'-0"				
240	1'-5"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	2'-0"	2'-2"	2'-3"	2'-5"	2'-7"	2'-9"	3'-0"	3'-2"	3'-5"	3'-8"	3'-11"	4'-2"	4'-5"	4'-9"	5'-0"	5'-3"	5'-6"	8'-9"				
250	1'-6"	1'-7"	1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	2'-1"	2'-2"	2'-4"	2'-5"	2'-7"	2'-10"	3'-0"	3'-3"	3'-5"	3'-8"	4'-0"	4'-3"	4'-6"	4'-10"	5'-1"	5'-5"	5'-8"	6'-0"	9'-5"				
260	1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	2'-0"	2'-1"	2'-3"	2'-4"	2'-6"	2'-8"	2'-10"	3'-0"	3'-3"	3'-6"	3'-9"	4'-0"	4'-3"	4'-7"	4'-11"	5'-3"	5'-6"	5'-10"	6'-2"	6'-6"	10'-3"				
270	1'-9"	1'-10"	1'-11"	2'-0"	2'-1"	2'-2"	2'-3"	2'-5"	2'-6"	2'-8"	2'-10"	3'-1"	3'-3"	3'-6"	3'-9"	4'-0"	4'-4"	4'-8"	4'-11"	5'-3"	5'-8"	6'-0"	6'-4"	6'-8"	7'-0"	11'-0"				
280	1'-10"	1'-11"	2'-0"	2'-1"	2'-3"	2'-4"	2'-5"	2'-7"	2'-9"	2'-11"	3'-1"	3'-3"	3'-6"	3'-9"	4'-0"	4'-4"	4'-8"	5'-0"	5'-4"	5'-8"	6'-1"	6'-5"	6'-9"	7'-2"	7'-6"	11'-10"				
290	2'-0"	2'-1"	2'-2"	2'-3"	2'-5"	2'-6"	2'-8"	2'-9"	2'-11"	3'-1"	3'-4"	3'-6"	3'-9"	4'-0"	4'-4"	4'-8"	5'-0"	5'-4"	5'-9"	6'-1"	6'-6"	6'-11"	7'-3"	7'-8"	8'-1"	12'-9"				
300	2'-2"	2'-3"	2'-4"	2'-5"	2'-7"	2'-8"	2'-10"	3'-0"	3'-2"	3'-4"	3'-6"	3'-9"	4'-0"	4'-4"	4'-8"	5'-0"	5'-4"	5'-9"	6'-1"	6'-6"	6'-11"	7'-4"	7'-9"	8'-3"	8'-8"	13'-7"				
310	2'-4"	2'-5"	2'-6"	2'-7"	2'-9"	2'-10"	3'-0"	3'-2"	3'-4"	3'-7"	3'-9"	4'-0"	4'-4"	4'-7"	4'-11"	5'-3"	5'-8"	6'-1"	6'-6"	7'-0"	7'-5"	7'-10"	8'-4"	8'-9"	9'-3"	14'-6"				
320	2'-5"	2'-7"	2'-8"	2'-9"	2'-11"	3'-0"	3'-2"	3'-4"	3'-7"	3'-9"	4'-0"	4'-3"	4'-7"	4'-11"	5'-3"	5'-8"	6'-1"	6'-6"	6'-11"	7'-5"	7'-11"	8'-4"	8'-10"	9'-4"	9'-10"	15'-6"				
330	2'-7"	2'-9"	2'-10"	2'-11"	3'-1"	3'-3"	3'-5"	3'-7"	3'-9"	4'-0"	4'-3"	4'-7"	4'-10"	5'-3"	5'-7"	6'-0"	6'-5"	6'-11"	7'-5"	7'-11"	8'-5"	8'-11"	9'-5"	9'-11"	10'-5"	16'-6"				
340	2'-9"	2'-11"	3'-0"	3'-2"	3'-3"	3'-5"	3'-7"	3'-10"	4'-0"	4'-3"	4'-6"	4'-10"	5'-2"	5'-6"	5'-11"	6'-4"	6'-10"	7'-4"	7'-10"	8'-4"	8'-11"	9'-5"	10'-0"	10'-7"	11'-1"	17'-6"				
350	2'-11"	3'-1"	3'-2"	3'-4"	3'-6"	3'-8"	3'-10"	4'-0"	4'-3"	4'-6"	4'-10"	5'-2"	5'-6"	5'-11"	6'-4"	6'-9"	7'-3"	7'-9"	8'-4"	8'-11"	9'-6"	10'-0"	10'-7"	11'-2"	11'-9"	18'-7"				

1098-05	GENERAL INFORMATION																		
Sheet of	ENGINEERING NOTES AND SIGNAGE																		
Rev: 03/26/2026	3-WAVE TIME & TENSION WITH TABLES																		


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Initial RS	60.00	32.70	5097.20	54.50

Conductor		795 AWG Covered AAC - Arbutus																		Weight (Lb/Ft)	1.292	Rated Breaking Strength	15,600	Ruling Span (Feet)	145	ARBUS INITIAL												Eng. Use: MOT Temp (°F)
Condition	Initial Sag & Tension	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85							90	95	100	105	110	115	120						
Temp (°F)		0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120												
Tension (lbs)		5,473	5,261	5,052	4,838	4,627	4,412	4,194	3,979	3,766	3,550	3,337	3,133	2,929	2,736	2,550	2,378	2,217	2,065	1,931	1,810	1,699	1,602	1,515	1,436	1,368												
% Ultimate		35%	34%	32%	31%	30%	28%	27%	26%	24%	23%	21%	20%	19%	18%	16%	15%	14%	13%	12%	12%	11%	10%	10%	9%	9%												
Span	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec												
R.S. Span																																						
3-Wave Time		2.16	2.21	2.25	2.31	2.36	2.42	2.49	2.56	2.63	2.71	2.8	2.9	3	3.11	3.22	3.33	3.45	3.57	3.69	3.8	3.92	4.03	4.14	4.24	5.33												
50		0.75	0.76	0.78	0.79	0.81	0.83	0.86	0.88	0.91	0.94	0.97	1	1.03	1.07	1.11	1.15	1.19	1.23	1.27	1.31	1.35	1.39	1.43	1.46	1.84												
75		1.12	1.14	1.17	1.19	1.22	1.25	1.29	1.32	1.36	1.4	1.45	1.5	1.55	1.61	1.66	1.72	1.78	1.85	1.91	1.97	2.03	2.08	2.14	2.19	2.75												
100		1.49	1.52	1.55	1.59	1.63	1.67	1.71	1.76	1.82	1.87	1.93	2	2.07	2.14	2.22	2.3	2.38	2.46	2.54	2.62	2.7	2.78	2.85	2.92	3.67												
120		1.79	1.83	1.87	1.91	1.95	2	2.06	2.11	2.18	2.25	2.32	2.4	2.48	2.57	2.66	2.76	2.86	2.95	3.05	3.15	3.24	3.33	3.42	3.51	4.41												
140		2.09	2.13	2.18	2.23	2.28	2.34	2.4	2.47	2.54	2.62	2.71	2.8	2.89	3	3.11	3.22	3.33	3.45	3.56	3.67	3.78	3.89	4	4.09	5.14												
160		2.39	2.43	2.49	2.54	2.6	2.67	2.74	2.82	2.9	3	3.09	3.2	3.31	3.43	3.55	3.68	3.81	3.94	4.07	4.2	4.32	4.45	4.57	4.68	5.88												
180		2.68	2.74	2.8	2.86	2.93	3.01	3.09	3.17	3.27	3.37	3.48	3.6	3.72	3.86	3.99	4.13	4.28	4.43	4.58	4.72	4.86	5	5.14	5.26	6.61												
200		2.98	3.04	3.11	3.18	3.26	3.34	3.43	3.52	3.63	3.74	3.86	4	4.14	4.28	4.44	4.59	4.76	4.92	5.08	5.25	5.4	5.56	5.71	5.85	7.35												
210		3.13	3.2	3.26	3.34	3.42	3.51	3.6	3.7	3.81	3.93	4.06	4.2	4.34	4.5	4.66	4.82	5	5.17	5.34	5.51	5.67	5.84	5.99	6.14	7.72												
220		3.28	3.35	3.42	3.5	3.58	3.67	3.77	3.88	3.99	4.12	4.25	4.4	4.55	4.71	4.88	5.05	5.24	5.41	5.59	5.77	5.95	6.11	6.28	6.43	8.09												
230		3.43	3.5	3.58	3.66	3.74	3.84	3.94	4.05	4.17	4.31	4.44	4.6	4.76	4.93	5.1	5.28	5.47	5.66	5.85	6.04	6.22	6.39	6.56	6.73	8.45												
240		3.58	3.65	3.73	3.82	3.91	4.01	4.12	4.24	4.36	4.5	4.64	4.8	4.97	5.15	5.33	5.52	5.72	5.91	6.11	6.3	6.49	6.68	6.85	7.03	8.82												
250		3.73	3.81	3.89	3.98	4.08	4.18	4.29	4.41	4.54	4.69	4.84	5	5.18	5.36	5.55	5.75	5.96	6.16	6.36	6.57	6.76	6.96	7.14	7.32	9.19												
260		3.88	3.96	4.04	4.14	4.24	4.34	4.46	4.59	4.72	4.87	5.03	5.2	5.38	5.58	5.77	5.98	6.19	6.4	6.62	6.83	7.03	7.23	7.43	7.62	9.56												
270		4.03	4.11	4.2	4.3	4.4	4.51	4.63	4.77	4.91	5.06	5.22	5.4	5.59	5.79	5.99	6.21	6.43	6.65	6.87	7.09	7.3	7.51	7.71	7.91	9.93												
280		4.18	4.26	4.36	4.45	4.56	4.68	4.8	4.94	5.09	5.25	5.42	5.6	5.8	6.01	6.22	6.44	6.67	6.9	7.13	7.36	7.57	7.79	8	8.2	10.3												
290		4.33	4.42	4.51	4.61	4.73	4.85	4.98	5.12	5.27	5.43	5.61	5.8	6	6.22	6.44	6.67	6.91	7.14	7.38	7.62	7.84	8.07	8.28	8.49	10.67												
300		4.48	4.57	4.67	4.77	4.89	5.01	5.15	5.3	5.45	5.62	5.8	6	6.21	6.43	6.66	6.9	7.15	7.39	7.63	7.88	8.11	8.35	8.57	8.79	11.04												
310		4.62	4.72	4.82	4.93	5.05	5.18	5.32	5.47	5.63	5.81	6	6.2	6.42	6.65	6.88	7.13	7.39	7.64	7.89	8.14	8.38	8.63	8.86	9.08	11.4												
320		4.77	4.87	4.98	5.09	5.22	5.35	5.49	5.65	5.81	6	6.19	6.4	6.62	6.86	7.1	7.36	7.62	7.88	8.14	8.41	8.65	8.91	9.14	9.37	11.77												
330		4.92	5.02	5.13	5.25	5.38	5.51	5.66	5.83	6	6.18	6.38	6.6	6.83	7.08	7.33	7.59	7.86	8.13	8.4	8.67	8.93	9.18	9.43	9.67	12.14												
340		5.07	5.18	5.29	5.41	5.54	5.68	5.83	6	6.18	6.37	6.58	6.8	7.04	7.29	7.55	7.82	8.1	8.38	8.65	8.93	9.2	9.46	9.71	9.96	12.51												
350		5.22	5.33	5.45	5.57	5.71	5.85	6.01	6.18	6.36	6.57	6.78	7.01	7.25	7.51	7.78	8.07	8.35	8.63	8.92	9.21	9.48	9.75	10.01	10.26	12.88												

1098-05	GENERAL INFORMATION																			
Sheet of	ENGINEERING NOTES AND SIGNAGE																			
Rev: 03/26/2026	SAG & TENSION WITH TABLES																			


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Creep RS	60.00	27.60	4299.30	45.90

Conductor	795 AWG Covered AAC - Arbutus																								Eng. Use: MOT		
	Creep Sag & Tension																										
Condition	Creep Sag & Tension																								Temp (°F)		
Temp (°F)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115		120	188
Tension (lbs)	4,696	4,394	4,099	3,804	3,526	3,264	3,011	2,774	2,553	2,353	2,174	2,015	1,872	1,746	1,639	1,544	1,459	1,384	1,318	1,259	1,205	1,159	1,116	1,077	1,042	751	
% Ultimate	30%	28%	26%	24%	23%	21%	19%	18%	16%	15%	14%	13%	12%	11%	11%	10%	9%	9%	8%	8%	8%	7%	7%	7%	7%	5%	
Span	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	
Ruling Span Sag	0'-7"	0'-8"	0'-8"	0'-9"	0'-9"	0'-10"	0'-11"	1'-0"	1'-1"	1'-2"	1'-3"	1'-4"	1'-6"	1'-7"	1'-8"	1'-9"	1'-11"	2'-0"	2'-1"	2'-2"	2'-3"	2'-4"	2'-6"	2'-7"	2'-8"	3'-8"	
50	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-4"	0'-4"	0'-5"
75	0'-2"	0'-2"	0'-2"	0'-2"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-6"	0'-6"	0'-6"	0'-7"	0'-7"	0'-7"	0'-7"	0'-8"	0'-8"	0'-9"	1'-0"	
100	0'-3"	0'-4"	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-6"	0'-6"	0'-7"	0'-7"	0'-8"	0'-8"	0'-9"	0'-10"	0'-10"	0'-11"	0'-11"	1'-0"	1'-0"	1'-1"	1'-1"	1'-2"	1'-2"	1'-3"	1'-3"	1'-9"
120	0'-5"	0'-5"	0'-6"	0'-6"	0'-6"	0'-7"	0'-8"	0'-8"	0'-9"	0'-10"	0'-10"	0'-11"	1'-0"	1'-1"	1'-2"	1'-3"	1'-3"	1'-4"	1'-5"	1'-6"	1'-7"	1'-8"	1'-8"	1'-9"	1'-10"	2'-6"	
140	0'-7"	0'-7"	0'-8"	0'-8"	0'-9"	0'-9"	0'-10"	0'-11"	1'-0"	1'-1"	1'-2"	1'-3"	1'-4"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	2'-0"	2'-2"	2'-3"	2'-4"	2'-5"	2'-6"	3'-5"	
160	0'-9"	0'-9"	0'-10"	0'-11"	0'-11"	1'-0"	1'-1"	1'-3"	1'-4"	1'-5"	1'-6"	1'-8"	1'-9"	1'-11"	2'-0"	2'-2"	2'-4"	2'-5"	2'-6"	2'-8"	2'-9"	2'-11"	3'-0"	3'-1"	3'-3"	4'-6"	
180	0'-11"	1'-0"	1'-0"	1'-1"	1'-2"	1'-4"	1'-5"	1'-6"	1'-8"	1'-10"	1'-11"	2'-1"	2'-3"	2'-5"	2'-7"	2'-9"	2'-11"	3'-1"	3'-3"	3'-4"	3'-6"	3'-8"	3'-10"	3'-11"	4'-1"	5'-8"	
200	1'-1"	1'-2"	1'-3"	1'-4"	1'-6"	1'-7"	1'-9"	1'-11"	2'-1"	2'-3"	2'-5"	2'-7"	2'-9"	3'-0"	3'-2"	3'-5"	3'-7"	3'-9"	4'-0"	4'-2"	4'-4"	4'-6"	4'-8"	4'-10"	5'-0"	7'-0"	
210	1'-3"	1'-4"	1'-5"	1'-6"	1'-8"	1'-9"	1'-11"	2'-1"	2'-3"	2'-5"	2'-8"	2'-10"	3'-1"	3'-4"	3'-6"	3'-9"	3'-11"	4'-2"	4'-5"	4'-7"	4'-9"	5'-0"	5'-2"	5'-4"	5'-6"	7'-8"	
220	1'-4"	1'-5"	1'-6"	1'-8"	1'-9"	1'-11"	2'-1"	2'-3"	2'-6"	2'-8"	2'-11"	3'-2"	3'-5"	3'-8"	3'-10"	4'-1"	4'-4"	4'-7"	4'-10"	5'-0"	5'-3"	5'-6"	5'-8"	5'-11"	6'-1"	8'-5"	
230	1'-6"	1'-7"	1'-8"	1'-10"	2'-0"	2'-1"	2'-4"	2'-6"	2'-9"	2'-11"	3'-2"	3'-5"	3'-8"	4'-0"	4'-3"	4'-6"	4'-9"	5'-0"	5'-3"	5'-6"	5'-9"	6'-0"	6'-2"	6'-5"	6'-8"	9'-3"	
240	1'-7"	1'-9"	1'-10"	2'-0"	2'-2"	2'-4"	2'-6"	2'-9"	3'-0"	3'-2"	3'-6"	3'-9"	4'-0"	4'-4"	4'-7"	4'-11"	5'-2"	5'-5"	5'-9"	6'-0"	6'-3"	6'-6"	6'-9"	7'-0"	7'-3"	10'-1"	
250	1'-9"	1'-10"	2'-0"	2'-2"	2'-4"	2'-6"	2'-9"	2'-11"	3'-3"	3'-6"	3'-9"	4'-1"	4'-4"	4'-8"	5'-0"	5'-4"	5'-7"	5'-11"	6'-3"	6'-6"	6'-9"	7'-1"	7'-4"	7'-7"	7'-10"	10'-11"	
260	1'-11"	2'-0"	2'-2"	2'-4"	2'-6"	2'-9"	2'-11"	3'-2"	3'-6"	3'-9"	4'-1"	4'-5"	4'-9"	5'-1"	5'-5"	5'-9"	6'-1"	6'-5"	6'-9"	7'-0"	7'-4"	7'-8"	7'-11"	8'-3"	8'-6"	11'-10"	
270	2'-0"	2'-2"	2'-4"	2'-6"	2'-9"	2'-11"	3'-2"	3'-5"	3'-9"	4'-1"	4'-5"	4'-9"	5'-1"	5'-6"	5'-10"	6'-2"	6'-7"	6'-11"	7'-3"	7'-7"	7'-11"	8'-3"	8'-7"	8'-10"	9'-2"	12'-9"	
280	2'-2"	2'-4"	2'-6"	2'-8"	2'-11"	3'-2"	3'-5"	3'-8"	4'-0"	4'-4"	4'-9"	5'-1"	5'-6"	5'-11"	6'-3"	6'-8"	7'-0"	7'-5"	7'-10"	8'-2"	8'-6"	8'-10"	9'-3"	9'-7"	9'-10"	13'-8"	
290	2'-4"	2'-6"	2'-8"	2'-11"	3'-1"	3'-5"	3'-8"	4'-0"	4'-4"	4'-8"	5'-1"	5'-6"	5'-11"	6'-4"	6'-9"	7'-2"	7'-7"	8'-0"	8'-4"	8'-9"	9'-2"	9'-6"	9'-11"	10'-3"	10'-7"	14'-8"	
300	2'-6"	2'-8"	2'-11"	3'-1"	3'-4"	3'-7"	3'-11"	4'-3"	4'-7"	5'-0"	5'-5"	5'-10"	6'-3"	6'-9"	7'-2"	7'-8"	8'-1"	8'-6"	8'-11"	9'-4"	9'-9"	10'-2"	10'-7"	11'-0"	11'-4"	15'-9"	
310	2'-8"	2'-10"	3'-1"	3'-4"	3'-7"	3'-10"	4'-2"	4'-6"	4'-11"	5'-4"	5'-9"	6'-3"	6'-9"	7'-3"	7'-8"	8'-2"	8'-8"	9'-1"	9'-7"	10'-0"	10'-5"	10'-10"	11'-4"	11'-8"	12'-1"	16'-10"	
320	2'-10"	3'-1"	3'-3"	3'-6"	3'-10"	4'-1"	4'-6"	4'-10"	5'-3"	5'-8"	6'-2"	6'-8"	7'-2"	7'-8"	8'-2"	8'-8"	9'-2"	9'-8"	10'-2"	10'-8"	11'-2"	11'-7"	12'-0"	12'-6"	12'-11"	17'-11"	
330	3'-0"	3'-3"	3'-6"	3'-9"	4'-1"	4'-4"	4'-9"	5'-2"	5'-7"	6'-1"	6'-7"	7'-1"	7'-7"	8'-2"	8'-9"	9'-3"	9'-9"	10'-4"	10'-10"	11'-4"	11'-10"	12'-4"	12'-10"	13'-3"	13'-9"	19'-1"	
340	3'-3"	3'-5"	3'-8"	4'-0"	4'-3"	4'-8"	5'-0"	5'-6"	5'-11"	6'-5"	7'-0"	7'-6"	8'-1"	8'-8"	9'-3"	9'-10"	10'-5"	10'-11"	11'-6"	12'-0"	12'-7"	13'-1"	13'-7"	14'-1"	14'-7"	20'-3"	
350	3'-5"	3'-8"	3'-11"	4'-3"	4'-7"	4'-11"	5'-4"	5'-10"	6'-4"	6'-10"	7'-5"	8'-0"	8'-7"	9'-3"	9'-10"	10'-5"	11'-0"	11'-7"	12'-2"	12'-9"	13'-4"	13'-10"	14'-5"	14'-11"	15'-5"	21'-5"	

1098-05	GENERAL INFORMATION																			
Sheet of	ENGINEERING NOTES AND SIGNAGE																			
Rev: 03/26/2026	3-WAVE TIME & TENSION WITH TABLES																			


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Creep RS	60.00	27.60	4299.30	45.90

Conductor		795 AWG Covered AAC - Arbutus																										Eng. Use:															
Condition		Creep Sag & Tension																										MOT															
		Weight (Lb/Ft)												1.292	Rated Breaking Strength		15,600	Ruling Span (Feet)	145												ARBUTUS CREEP												Temp (°F)
Temp (°F)		0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	188																
Tension (lbs)		4,696	4,394	4,099	3,804	3,526	3,264	3,011	2,774	2,553	2,353	2,174	2,015	1,872	1,746	1,639	1,544	1,459	1,384	1,318	1,259	1,205	1,159	1,116	1,077	1,042	751																
% Ultimate		30%	28%	26%	24%	23%	21%	19%	18%	16%	15%	14%	13%	12%	11%	11%	10%	9%	9%	8%	8%	8%	7%	7%	7%	7%	5%																
Span	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec																
R.S. Span	3-Wave Time	2.37	2.45	2.54	2.64	2.74	2.86	2.98	3.1	3.23	3.36	3.49	3.62	3.75	3.87	3.99	4.11	4.22	4.32	4.42	4.52	4.61	4.7	4.78	4.86	5.73	2.29																
50	0.82	0.84	0.88	0.91	0.95	0.99	1.03	1.07	1.11	1.16	1.2	1.25	1.29	1.34	1.38	1.42	1.45	1.49	1.52	1.56	1.59	1.62	1.65	1.68	1.97	0.79																	
75	1.22	1.27	1.31	1.37	1.42	1.48	1.54	1.61	1.67	1.74	1.81	1.87	1.94	2	2.06	2.12	2.18	2.23	2.29	2.34	2.38	2.43	2.47	2.51	2.96	1.18																	
100	1.63	1.69	1.75	1.82	1.89	1.97	2.05	2.14	2.23	2.32	2.41	2.5	2.59	2.67	2.75	2.83	2.91	2.98	3.05	3.12	3.18	3.24	3.3	3.35	3.95	1.58																	
120	1.96	2.03	2.1	2.19	2.27	2.37	2.46	2.57	2.68	2.78	2.89	3	3.11	3.21	3.3	3.4	3.49	3.58	3.66	3.74	3.81	3.89	3.95	4.02	4.74	1.89																	
140	2.28	2.36	2.45	2.55	2.65	2.76	2.87	3	3.12	3.25	3.37	3.5	3.62	3.74	3.85	3.96	4.07	4.17	4.27	4.36	4.45	4.53	4.61	4.69	5.53	2.21																	
160	2.61	2.7	2.81	2.91	3.03	3.15	3.29	3.42	3.57	3.71	3.86	4	4.14	4.27	4.4	4.53	4.65	4.77	4.88	4.98	5.08	5.18	5.27	5.36	6.32	2.52																	
180	2.94	3.04	3.16	3.28	3.41	3.55	3.7	3.85	4.01	4.18	4.34	4.5	4.66	4.81	4.96	5.1	5.23	5.36	5.49	5.61	5.72	5.83	5.93	6.03	7.11	2.84																	
200	3.26	3.38	3.51	3.64	3.79	3.94	4.11	4.28	4.46	4.64	4.82	5	5.18	5.34	5.51	5.66	5.82	5.96	6.1	6.23	6.36	6.48	6.59	6.7	7.9	3.16																	
210	3.43	3.55	3.68	3.82	3.97	4.14	4.31	4.49	4.68	4.87	5.06	5.25	5.44	5.61	5.78	5.95	6.11	6.26	6.4	6.54	6.67	6.8	6.92	7.04	8.3	3.31																	
220	3.59	3.72	3.86	4.01	4.16	4.34	4.52	4.71	4.9	5.1	5.3	5.5	5.69	5.88	6.06	6.23	6.4	6.56	6.71	6.86	6.99	7.13	7.25	7.38	8.69	3.47																	
230	3.75	3.89	4.03	4.19	4.35	4.53	4.72	4.92	5.13	5.34	5.54	5.75	5.95	6.15	6.33	6.51	6.69	6.85	7.01	7.17	7.31	7.45	7.58	7.71	9.09	3.63																	
240	3.92	4.06	4.21	4.37	4.55	4.73	4.93	5.14	5.35	5.57	5.79	6	6.22	6.42	6.61	6.8	6.98	7.16	7.32	7.48	7.63	7.78	7.92	8.05	9.49	3.79																	
250	4.08	4.23	4.39	4.56	4.74	4.93	5.14	5.36	5.58	5.8	6.03	6.25	6.47	6.69	6.89	7.09	7.27	7.46	7.63	7.79	7.95	8.1	8.25	8.39	9.88	3.95																	
260	4.24	4.39	4.56	4.74	4.93	5.13	5.34	5.57	5.8	6.03	6.27	6.5	6.73	6.96	7.16	7.37	7.57	7.75	7.93	8.1	8.27	8.43	8.58	8.72	10.28	4.11																	
270	4.41	4.56	4.74	4.92	5.12	5.33	5.55	5.79	6.02	6.27	6.52	6.75	6.99	7.22	7.44	7.65	7.86	8.05	8.24	8.42	8.59	8.75	8.91	9.06	10.67	4.26																	
280	4.57	4.73	4.91	5.1	5.3	5.52	5.76	6	6.25	6.5	6.76	7	7.25	7.49	7.71	7.94	8.15	8.35	8.54	8.73	8.9	9.08	9.24	9.4	11.07	4.42																	
290	4.73	4.9	5.09	5.29	5.49	5.72	5.96	6.21	6.47	6.73	7	7.25	7.51	7.76	7.99	8.22	8.44	8.65	8.85	9.04	9.22	9.4	9.57	9.73	11.47	4.58																	
300	4.9	5.07	5.26	5.47	5.68	5.92	6.17	6.43	6.69	6.96	7.24	7.5	7.77	8.03	8.27	8.5	8.73	8.95	9.15	9.35	9.54	9.73	9.9	10.07	11.86	4.74																	
310	5.06	5.24	5.44	5.65	5.87	6.12	6.37	6.64	6.91	7.19	7.48	7.75	8.03	8.29	8.54	8.79	9.02	9.25	9.46	9.67	9.86	10.05	10.23	10.41	12.26	4.9																	
320	5.22	5.41	5.62	5.83	6.06	6.31	6.58	6.86	7.14	7.43	7.72	8	8.29	8.56	8.82	9.07	9.31	9.55	9.76	9.98	10.18	10.38	10.56	10.74	12.66	5.05																	
330	5.39	5.58	5.79	6.02	6.25	6.51	6.78	7.07	7.36	7.66	7.96	8.25	8.55	8.83	9.09	9.35	9.6	9.84	10.07	10.29	10.5	10.7	10.89	11.08	13.06	5.21																	
340	5.55	5.75	5.97	6.2	6.44	6.71	6.99	7.29	7.58	7.89	8.21	8.5	8.81	9.1	9.37	9.64	9.9	10.14	10.38	10.6	10.82	11.03	11.22	11.41	13.45	5.37																	
350	5.72	5.92	6.14	6.38	6.64	6.91	7.2	7.51	7.81	8.13	8.45	8.76	9.07	9.36	9.65	9.93	10.19	10.45	10.69	10.92	11.14	11.35	11.56	11.75	13.85	5.53																	

1098-05	GENERAL INFORMATION															
Sheet of	ENGINEERING NOTES AND SIGNAGE															
Rev: 03/26/2026	SAG & TENSION WITH TABLES															


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Initial RS	60.00	32.70	5097.40	54.50

Conductor	795 AWG Covered AAC - Arbutus												Weight (Lb/Ft)	1.292	Rated Breaking Strength	15,600	Ruling Span (Feet)	160	ARBUTUS INITIAL												Eng. Use: MOT Temp (°F)
	Condition	Initial Sag & Tension																	188												
Temp (°F)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	188					
Tension (lbs)	5,415	5,208	5,002	4,788	4,576	4,367	4,154	3,943	3,730	3,525	3,318	3,120	2,932	2,749	2,572	2,407	2,257	2,118	1,992	1,875	1,771	1,678	1,595	1,518	1,450	942					
% Ultimate	35%	33%	32%	31%	29%	28%	27%	25%	24%	23%	21%	20%	19%	18%	16%	15%	14%	14%	13%	12%	11%	11%	10%	10%	9%	6%					
Span (Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)					
Ruling Span Sag	0'-7"	0'-8"	0'-8"	0'-8"	0'-9"	0'-9"	0'-10"	0'-10"	0'-11"	0'-11"	1'-0"	1'-1"	1'-2"	1'-3"	1'-4"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-11"	2'-0"	2'-1"	2'-3"	2'-4"	3'-7"					
50	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-3"	0'-3"	0'-3"	0'-4"					
75	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-4"	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-6"	0'-6"	0'-6"	0'-9"					
100	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-4"	0'-4"	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-5"	0'-6"	0'-6"	0'-6"	0'-7"	0'-7"	0'-8"	0'-8"	0'-9"	0'-10"	0'-10"	0'-11"	1'-5"					
120	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-6"	0'-6"	0'-6"	0'-7"	0'-7"	0'-8"	0'-8"	0'-9"	0'-9"	0'-10"	0'-11"	0'-11"	1'-0"	1'-1"	1'-1"	1'-2"	1'-3"	1'-4"	2'-0"					
140	0'-6"	0'-6"	0'-6"	0'-6"	0'-7"	0'-7"	0'-7"	0'-8"	0'-8"	0'-9"	0'-9"	0'-10"	0'-10"	0'-11"	1'-0"	1'-1"	1'-2"	1'-3"	1'-3"	1'-4"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	2'-9"					
160	0'-7"	0'-8"	0'-8"	0'-8"	0'-9"	0'-9"	0'-10"	0'-10"	0'-11"	0'-11"	1'-0"	1'-1"	1'-2"	1'-3"	1'-4"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-11"	2'-0"	2'-1"	2'-3"	2'-4"	3'-7"					
180	0'-9"	0'-10"	0'-10"	0'-11"	0'-11"	1'-0"	1'-0"	1'-1"	1'-2"	1'-2"	1'-3"	1'-4"	1'-5"	1'-6"	1'-8"	1'-9"	1'-11"	2'-0"	2'-2"	2'-3"	2'-5"	2'-6"	2'-8"	2'-9"	2'-11"	4'-6"					
200	1'-0"	1'-0"	1'-1"	1'-1"	1'-2"	1'-2"	1'-3"	1'-4"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-11"	2'-0"	2'-2"	2'-4"	2'-6"	2'-8"	2'-9"	2'-11"	3'-1"	3'-3"	3'-5"	3'-7"	5'-7"					
210	1'-1"	1'-1"	1'-2"	1'-2"	1'-3"	1'-4"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	2'-0"	2'-1"	2'-3"	2'-5"	2'-7"	2'-9"	2'-11"	3'-1"	3'-3"	3'-5"	3'-7"	3'-10"	4'-0"	6'-2"					
220	1'-2"	1'-3"	1'-3"	1'-4"	1'-5"	1'-5"	1'-6"	1'-7"	1'-8"	1'-10"	1'-11"	2'-0"	2'-2"	2'-4"	2'-6"	2'-8"	2'-10"	3'-0"	3'-2"	3'-5"	3'-7"	3'-9"	4'-0"	4'-2"	4'-4"	6'-9"					
230	1'-3"	1'-4"	1'-5"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	2'-0"	2'-1"	2'-3"	2'-4"	2'-6"	2'-8"	2'-10"	3'-1"	3'-3"	3'-6"	3'-8"	3'-11"	4'-1"	4'-4"	4'-7"	4'-9"	7'-4"					
240	1'-5"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	2'-0"	2'-2"	2'-3"	2'-5"	2'-7"	2'-9"	2'-11"	3'-2"	3'-4"	3'-7"	3'-10"	4'-0"	4'-3"	4'-6"	4'-9"	5'-0"	5'-2"	8'-0"					
250	1'-6"	1'-7"	1'-8"	1'-9"	1'-9"	1'-10"	2'-0"	2'-1"	2'-2"	2'-4"	2'-6"	2'-7"	2'-9"	3'-0"	3'-2"	3'-5"	3'-8"	3'-10"	4'-1"	4'-4"	4'-8"	4'-11"	5'-2"	5'-5"	5'-8"	8'-8"					
260	1'-8"	1'-8"	1'-9"	1'-10"	1'-11"	2'-0"	2'-2"	2'-3"	2'-4"	2'-6"	2'-8"	2'-10"	3'-0"	3'-3"	3'-5"	3'-8"	3'-11"	4'-2"	4'-5"	4'-9"	5'-0"	5'-3"	5'-7"	5'-10"	6'-1"	9'-5"					
270	1'-9"	1'-10"	1'-11"	2'-0"	2'-1"	2'-2"	2'-4"	2'-5"	2'-7"	2'-9"	2'-11"	3'-1"	3'-3"	3'-6"	3'-9"	4'-0"	4'-3"	4'-6"	4'-10"	5'-1"	5'-5"	5'-8"	6'-0"	6'-3"	6'-7"	10'-2"					
280	1'-11"	2'-0"	2'-1"	2'-2"	2'-3"	2'-4"	2'-6"	2'-7"	2'-9"	2'-11"	3'-1"	3'-3"	3'-6"	3'-9"	4'-0"	4'-3"	4'-7"	4'-10"	5'-2"	5'-6"	5'-10"	6'-2"	6'-5"	6'-9"	7'-1"	10'-11"					
290	2'-0"	2'-1"	2'-2"	2'-4"	2'-5"	2'-6"	2'-8"	2'-9"	2'-11"	3'-1"	3'-4"	3'-6"	3'-9"	4'-0"	4'-3"	4'-7"	4'-11"	5'-3"	5'-6"	5'-11"	6'-3"	6'-7"	6'-11"	7'-3"	7'-7"	11'-9"					
300	2'-2"	2'-3"	2'-4"	2'-6"	2'-7"	2'-8"	2'-10"	3'-0"	3'-2"	3'-4"	3'-7"	3'-9"	4'-0"	4'-3"	4'-7"	4'-11"	5'-3"	5'-7"	5'-11"	6'-3"	6'-8"	7'-0"	7'-5"	7'-9"	8'-2"	12'-6"					
310	2'-4"	2'-5"	2'-6"	2'-8"	2'-9"	2'-11"	3'-0"	3'-2"	3'-4"	3'-7"	3'-9"	4'-0"	4'-4"	4'-7"	4'-11"	5'-3"	5'-7"	5'-11"	6'-4"	6'-9"	7'-1"	7'-6"	7'-11"	8'-4"	8'-8"	13'-5"					
320	2'-6"	2'-7"	2'-8"	2'-10"	2'-11"	3'-1"	3'-3"	3'-5"	3'-7"	3'-10"	4'-0"	4'-4"	4'-7"	4'-11"	5'-3"	5'-7"	5'-11"	6'-4"	6'-9"	7'-2"	7'-7"	8'-0"	8'-5"	8'-10"	9'-3"	14'-3"					
330	2'-8"	2'-9"	2'-10"	3'-0"	3'-1"	3'-3"	3'-5"	3'-7"	3'-10"	4'-1"	4'-4"	4'-7"	4'-10"	5'-2"	5'-7"	5'-11"	6'-4"	6'-9"	7'-2"	7'-7"	8'-1"	8'-6"	9'-0"	9'-5"	9'-10"	15'-2"					
340	2'-9"	2'-11"	3'-0"	3'-2"	3'-4"	3'-6"	3'-8"	3'-10"	4'-1"	4'-4"	4'-7"	4'-10"	5'-2"	5'-6"	5'-11"	6'-4"	6'-9"	7'-2"	7'-7"	8'-1"	8'-7"	9'-0"	9'-6"	10'-0"	10'-5"	16'-1"					
350	3'-0"	3'-1"	3'-3"	3'-4"	3'-6"	3'-8"	3'-10"	4'-1"	4'-4"	4'-7"	4'-10"	5'-2"	5'-6"	5'-10"	6'-3"	6'-8"	7'-2"	7'-7"	8'-1"	8'-7"	9'-1"	9'-7"	10'-1"	10'-7"	11'-1"	17'-1"					

1098-05	GENERAL INFORMATION																	
Sheet of	ENGINEERING NOTES AND SIGNAGE																	
Rev: 03/26/2026	3-WAVE TIME & TENSION WITH TABLES																	


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Initial RS	60.00	32.70	5097.40	54.50

Conductor		795 AWG Covered AAC - Arbutus														Weight (Lb/Ft)	1.292	Rated Breaking Strength	15,600	Ruling Span (Feet)	160		ARBUS INITIAL												Eng. Use: MOT Temp (°F)
Condition	Initial Sag & Tension	0	5	10	15	20	25	30	35	40	45	50	55	60	65						70	75	80	85	90	95	100	105	110	115	120				
Temp (°F)		0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120									
Tension (lbs)		5,415	5,208	5,002	4,788	4,576	4,367	4,154	3,943	3,730	3,525	3,318	3,120	2,932	2,749	2,572	2,407	2,257	2,118	1,992	1,875	1,771	1,678	1,595	1,518	1,450									
% Ultimate		35%	33%	32%	31%	29%	28%	27%	25%	24%	23%	21%	20%	19%	18%	16%	15%	14%	14%	13%	12%	11%	11%	10%	10%	9%									
Span	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec									
R.S. Span																																			
3-Wave Time		2.4	2.45	2.5	2.56	2.62	2.68	2.76	2.83	2.91	3	3.1	3.2	3.3	3.41	3.53	3.64	3.76	3.88	4	4.11	4.22	4.33	4.44	4.54	5.64									
50		0.75	0.76	0.78	0.8	0.82	0.84	0.86	0.89	0.91	0.94	0.97	1	1.03	1.07	1.1	1.14	1.17	1.21	1.25	1.29	1.32	1.35	1.39	1.42	1.76									
75		1.12	1.15	1.17	1.2	1.23	1.26	1.29	1.33	1.37	1.41	1.45	1.5	1.55	1.6	1.65	1.71	1.76	1.82	1.87	1.93	1.98	2.03	2.08	2.13	2.64									
100		1.5	1.53	1.56	1.6	1.64	1.68	1.72	1.77	1.82	1.88	1.94	2	2.06	2.13	2.2	2.28	2.35	2.42	2.5	2.57	2.64	2.71	2.78	2.84	3.52									
120		1.8	1.83	1.88	1.92	1.96	2.01	2.07	2.12	2.19	2.25	2.32	2.4	2.48	2.56	2.65	2.73	2.82	2.91	3	3.08	3.17	3.25	3.33	3.41	4.23									
140		2.1	2.14	2.19	2.24	2.29	2.35	2.41	2.48	2.55	2.63	2.71	2.8	2.89	2.99	3.09	3.19	3.29	3.39	3.5	3.6	3.7	3.79	3.89	3.98	4.93									
160		2.4	2.45	2.5	2.56	2.62	2.68	2.76	2.83	2.91	3	3.1	3.2	3.3	3.41	3.53	3.64	3.76	3.88	4	4.11	4.22	4.33	4.44	4.54	5.64									
180		2.7	2.75	2.81	2.88	2.95	3.02	3.1	3.19	3.28	3.38	3.48	3.59	3.71	3.84	3.97	4.1	4.23	4.36	4.5	4.63	4.75	4.88	5	5.11	6.34									
200		3	3.06	3.13	3.2	3.27	3.36	3.44	3.54	3.64	3.75	3.87	3.99	4.13	4.26	4.41	4.55	4.7	4.85	5	5.14	5.28	5.42	5.55	5.68	7.05									
210		3.15	3.21	3.28	3.36	3.44	3.52	3.62	3.72	3.82	3.94	4.07	4.19	4.33	4.48	4.63	4.78	4.94	5.09	5.25	5.4	5.55	5.69	5.83	5.97	7.4									
220		3.3	3.36	3.44	3.52	3.6	3.69	3.79	3.9	4.01	4.13	4.26	4.39	4.54	4.69	4.85	5.01	5.17	5.33	5.5	5.66	5.81	5.96	6.11	6.25	7.75									
230		3.45	3.52	3.59	3.68	3.76	3.86	3.96	4.07	4.19	4.32	4.45	4.59	4.74	4.9	5.07	5.24	5.41	5.57	5.75	5.91	6.07	6.23	6.39	6.53	8.11									
240		3.6	3.67	3.75	3.84	3.93	4.03	4.14	4.25	4.38	4.51	4.65	4.8	4.96	5.12	5.3	5.47	5.65	5.83	6	6.18	6.34	6.51	6.67	6.82	8.46									
250		3.75	3.83	3.91	4	4.09	4.2	4.31	4.43	4.56	4.7	4.85	5	5.16	5.34	5.52	5.7	5.88	6.07	6.25	6.43	6.61	6.78	6.95	7.11	8.82									
260		3.9	3.98	4.07	4.16	4.26	4.37	4.48	4.61	4.74	4.89	5.04	5.2	5.37	5.55	5.74	5.93	6.12	6.31	6.5	6.69	6.87	7.05	7.22	7.39	9.17									
270		4.05	4.13	4.22	4.32	4.42	4.53	4.65	4.79	4.92	5.07	5.23	5.4	5.58	5.77	5.96	6.16	6.36	6.55	6.75	6.95	7.14	7.32	7.5	7.68	9.52									
280		4.2	4.29	4.38	4.48	4.59	4.7	4.83	4.96	5.1	5.26	5.43	5.6	5.78	5.98	6.18	6.38	6.59	6.8	7	7.21	7.4	7.59	7.78	7.96	9.88									
290		4.35	4.44	4.54	4.64	4.75	4.87	5	5.14	5.29	5.45	5.62	5.8	5.99	6.19	6.4	6.61	6.83	7.04	7.25	7.46	7.67	7.87	8.06	8.25	10.23									
300		4.5	4.59	4.69	4.8	4.91	5.04	5.17	5.32	5.47	5.64	5.81	6	6.2	6.41	6.62	6.84	7.06	7.28	7.5	7.72	7.93	8.14	8.34	8.53	10.59									
310		4.65	4.75	4.85	4.96	5.08	5.21	5.34	5.49	5.65	5.83	6.01	6.2	6.4	6.62	6.84	7.07	7.3	7.53	7.75	7.98	8.2	8.41	8.61	8.81	10.94									
320		4.8	4.9	5	5.12	5.24	5.37	5.52	5.67	5.83	6.01	6.2	6.4	6.61	6.83	7.06	7.3	7.53	7.77	8	8.24	8.46	8.68	8.89	9.1	11.29									
330		4.95	5.05	5.16	5.28	5.4	5.54	5.69	5.85	6.02	6.2	6.4	6.6	6.82	7.05	7.29	7.53	7.77	8.01	8.25	8.49	8.73	8.95	9.17	9.38	11.65									
340		5.1	5.2	5.32	5.44	5.57	5.71	5.86	6.03	6.2	6.39	6.59	6.8	7.02	7.26	7.51	7.75	8	8.26	8.5	8.75	8.99	9.22	9.45	9.67	12									
350		5.25	5.36	5.48	5.6	5.74	5.88	6.04	6.21	6.39	6.58	6.79	7.01	7.24	7.48	7.73	7.99	8.25	8.51	8.76	9.02	9.26	9.5	9.74	9.97	12.36									

1098-05	GENERAL INFORMATION																			
Sheet of	ENGINEERING NOTES AND SIGNAGE																			
Rev: 03/26/2026	SAG & TENSION WITH TABLES																			


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Creep RS	60.00	27.50	4297.60	45.90

Conductor	795 AWG Covered AAC - Arbutus																								Eng. Use: MOT		
	Creep Sag & Tension																										
Condition	Creep Sag & Tension																								Temp (°F)		
Temp (°F)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115		120	188
Tension (lbs)	4,571	4,276	3,990	3,712	3,450	3,197	2,960	2,739	2,539	2,355	2,192	2,046	1,915	1,798	1,696	1,607	1,527	1,456	1,392	1,334	1,282	1,235	1,192	1,153	1,117	817	
% Ultimate	29%	27%	26%	24%	22%	20%	19%	18%	16%	15%	14%	13%	12%	12%	11%	10%	10%	9%	9%	9%	8%	8%	8%	7%	7%	5%	
Span	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	
Ruling Span Sag	0'-9"	0'-9"	0'-10"	0'-11"	1'-0"	1'-1"	1'-2"	1'-3"	1'-4"	1'-5"	1'-6"	1'-8"	1'-9"	1'-10"	2'-0"	2'-1"	2'-2"	2'-4"	2'-5"	2'-6"	2'-7"	2'-9"	2'-10"	2'-11"	3'-0"	4'-1"	
50	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-5"
75	0'-2"	0'-2"	0'-2"	0'-2"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-6"	0'-6"	0'-6"	0'-6"	0'-6"	0'-7"	0'-7"	0'-7"	0'-7"	0'-8"	0'-8"	0'-11"
100	0'-3"	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-6"	0'-6"	0'-7"	0'-7"	0'-8"	0'-8"	0'-9"	0'-10"	0'-10"	0'-11"	0'-11"	0'-11"	0'-11"	1'-0"	1'-0"	1'-1"	1'-1"	1'-2"	1'-2"	1'-7"
120	0'-5"	0'-5"	0'-6"	0'-6"	0'-7"	0'-7"	0'-8"	0'-8"	0'-9"	0'-10"	0'-10"	0'-11"	1'-0"	1'-1"	1'-1"	1'-2"	1'-3"	1'-3"	1'-4"	1'-5"	1'-6"	1'-6"	1'-7"	1'-8"	1'-8"	2'-4"	
140	0'-7"	0'-7"	0'-8"	0'-8"	0'-9"	0'-10"	0'-10"	0'-11"	1'-0"	1'-1"	1'-2"	1'-3"	1'-4"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	2'-0"	2'-1"	2'-2"	2'-3"	2'-4"	3'-2"	
160	0'-9"	0'-9"	0'-10"	0'-11"	1'-0"	1'-1"	1'-2"	1'-3"	1'-4"	1'-5"	1'-6"	1'-8"	1'-9"	1'-10"	2'-0"	2'-1"	2'-2"	2'-4"	2'-5"	2'-6"	2'-7"	2'-9"	2'-10"	2'-11"	3'-0"	4'-1"	
180	0'-11"	1'-0"	1'-1"	1'-2"	1'-3"	1'-4"	1'-5"	1'-7"	1'-8"	1'-10"	1'-11"	2'-1"	2'-3"	2'-4"	2'-6"	2'-8"	2'-9"	2'-11"	3'-1"	3'-2"	3'-4"	3'-5"	3'-7"	3'-8"	3'-10"	5'-2"	
200	1'-2"	1'-3"	1'-4"	1'-5"	1'-6"	1'-8"	1'-9"	1'-11"	2'-1"	2'-3"	2'-5"	2'-7"	2'-9"	2'-11"	3'-1"	3'-3"	3'-5"	3'-7"	3'-9"	3'-11"	4'-1"	4'-3"	4'-5"	4'-8"	4'-8"	6'-5"	
210	1'-3"	1'-4"	1'-5"	1'-7"	1'-8"	1'-10"	1'-11"	2'-1"	2'-3"	2'-5"	2'-8"	2'-10"	3'-0"	3'-3"	3'-5"	3'-7"	3'-9"	4'-0"	4'-2"	4'-4"	4'-6"	4'-8"	4'-10"	5'-0"	5'-2"	7'-1"	
220	1'-5"	1'-6"	1'-7"	1'-9"	1'-10"	2'-0"	2'-2"	2'-4"	2'-6"	2'-8"	2'-11"	3'-1"	3'-4"	3'-6"	3'-9"	3'-11"	4'-2"	4'-4"	4'-7"	4'-9"	4'-11"	5'-2"	5'-4"	5'-6"	5'-8"	7'-9"	
230	1'-6"	1'-7"	1'-9"	1'-10"	2'-0"	2'-2"	2'-4"	2'-6"	2'-9"	2'-11"	3'-2"	3'-5"	3'-7"	3'-10"	4'-1"	4'-4"	4'-6"	4'-9"	5'-0"	5'-2"	5'-5"	5'-7"	5'-10"	6'-0"	6'-2"	8'-6"	
240	1'-8"	1'-9"	1'-11"	2'-0"	2'-2"	2'-4"	2'-7"	2'-9"	3'-0"	3'-2"	3'-5"	3'-8"	3'-11"	4'-2"	4'-5"	4'-8"	4'-11"	5'-2"	5'-5"	5'-8"	5'-11"	6'-1"	6'-4"	6'-6"	6'-9"	9'-3"	
250	1'-9"	1'-11"	2'-1"	2'-2"	2'-5"	2'-7"	2'-9"	3'-0"	3'-3"	3'-6"	3'-9"	4'-0"	4'-3"	4'-7"	4'-10"	5'-1"	5'-4"	5'-8"	5'-11"	6'-2"	6'-5"	6'-8"	6'-10"	7'-1"	7'-4"	10'-0"	
260	1'-11"	2'-1"	2'-3"	2'-5"	2'-7"	2'-9"	3'-0"	3'-3"	3'-6"	3'-9"	4'-0"	4'-4"	4'-7"	4'-11"	5'-3"	5'-6"	5'-10"	6'-1"	6'-4"	6'-8"	6'-11"	7'-2"	7'-5"	7'-8"	7'-11"	10'-10"	
270	2'-1"	2'-3"	2'-5"	2'-7"	2'-9"	3'-0"	3'-3"	3'-6"	3'-9"	4'-1"	4'-4"	4'-8"	5'-0"	5'-4"	5'-8"	5'-11"	6'-3"	6'-7"	6'-10"	7'-2"	7'-5"	7'-9"	8'-0"	8'-3"	8'-7"	11'-9"	
280	2'-3"	2'-5"	2'-7"	2'-9"	3'-0"	3'-3"	3'-6"	3'-9"	4'-1"	4'-4"	4'-8"	5'-0"	5'-4"	5'-8"	6'-1"	6'-5"	6'-9"	7'-1"	7'-5"	7'-8"	8'-0"	8'-4"	8'-7"	8'-11"	9'-2"	12'-7"	
290	2'-5"	2'-7"	2'-9"	3'-0"	3'-2"	3'-5"	3'-9"	4'-0"	4'-4"	4'-8"	5'-0"	5'-5"	5'-9"	6'-1"	6'-6"	6'-10"	7'-3"	7'-7"	7'-11"	8'-3"	8'-7"	8'-11"	9'-3"	9'-7"	9'-10"	13'-6"	
300	2'-7"	2'-9"	3'-0"	3'-2"	3'-5"	3'-8"	4'-0"	4'-4"	4'-8"	5'-0"	5'-5"	5'-9"	6'-2"	6'-7"	6'-11"	7'-4"	7'-9"	8'-1"	8'-6"	8'-10"	9'-2"	9'-7"	9'-11"	10'-3"	10'-7"	14'-6"	
310	2'-9"	2'-11"	3'-2"	3'-5"	3'-8"	3'-11"	4'-3"	4'-7"	5'-0"	5'-4"	5'-9"	6'-2"	6'-7"	7'-0"	7'-5"	7'-10"	8'-3"	8'-8"	9'-1"	9'-5"	9'-10"	10'-2"	10'-7"	10'-11"	11'-3"	15'-5"	
320	2'-11"	3'-2"	3'-4"	3'-7"	3'-11"	4'-2"	4'-6"	4'-11"	5'-3"	5'-8"	6'-1"	6'-7"	7'-0"	7'-5"	7'-11"	8'-4"	8'-9"	9'-3"	9'-8"	10'-1"	10'-6"	10'-10"	11'-3"	11'-8"	12'-0"	16'-6"	
330	3'-1"	3'-4"	3'-7"	3'-10"	4'-2"	4'-6"	4'-10"	5'-3"	5'-8"	6'-1"	6'-6"	7'-0"	7'-5"	7'-11"	8'-5"	8'-11"	9'-4"	9'-10"	10'-3"	10'-8"	11'-2"	11'-7"	12'-0"	12'-5"	12'-9"	17'-6"	
340	3'-4"	3'-6"	3'-10"	4'-1"	4'-5"	4'-9"	5'-1"	5'-6"	6'-0"	6'-5"	6'-11"	7'-5"	7'-11"	8'-5"	8'-11"	9'-5"	9'-11"	10'-5"	10'-11"	11'-4"	11'-10"	12'-3"	12'-9"	13'-2"	13'-7"	18'-7"	
350	3'-6"	3'-9"	4'-0"	4'-4"	4'-8"	5'-0"	5'-5"	5'-10"	6'-4"	6'-10"	7'-4"	7'-10"	8'-5"	8'-11"	9'-6"	10'-0"	10'-6"	11'-1"	11'-6"	12'-1"	12'-6"	13'-0"	13'-6"	13'-11"	14'-5"	19'-9"	

1098-05	GENERAL INFORMATION																		
Sheet of	ENGINEERING NOTES AND SIGNAGE																		
Rev: 03/26/2026	3-WAVE TIME & TENSION WITH TABLES																		


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Creep RS	60.00	27.50	4297.60	45.90

Conductor		795 AWG Covered AAC - Arbutus																										Eng. Use:					
Condition		Creep Sag & Tension																										MOT					
		Weight (Lb/Ft)												1.292	Rated Breaking Strength			15,600	Ruling Span (Feet)	160	ARBUTUS CREEP												Temp (°F)
Temp (°F)		0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	188						
Tension (lbs)		4,571	4,276	3,990	3,712	3,450	3,197	2,960	2,739	2,539	2,355	2,192	2,046	1,915	1,798	1,696	1,607	1,527	1,456	1,392	1,334	1,282	1,235	1,192	1,153	1,117	817						
% Ultimate		29%	27%	26%	24%	22%	20%	19%	18%	16%	15%	14%	13%	12%	12%	11%	10%	10%	9%	9%	9%	8%	8%	8%	7%	7%	5%						
Span	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec						
R.S. Span	3-Wave Time	2.65	2.74	2.84	2.95	3.06	3.18	3.31	3.43	3.57	3.7	3.83	3.95	4.08	4.2	4.32	4.43	4.54	4.64	4.74	4.83	4.93	5.01	5.1	5.18	6.06	2.56						
50	0.83	0.86	0.89	0.92	0.96	0.99	1.03	1.07	1.11	1.15	1.2	1.24	1.28	1.31	1.35	1.38	1.42	1.45	1.48	1.51	1.54	1.57	1.59	1.62	1.89	0.8							
75	1.24	1.28	1.33	1.38	1.43	1.49	1.55	1.61	1.67	1.73	1.79	1.85	1.91	1.97	2.02	2.08	2.13	2.17	2.22	2.27	2.31	2.35	2.39	2.43	2.84	1.2							
100	1.65	1.71	1.78	1.84	1.91	1.99	2.07	2.15	2.23	2.31	2.39	2.47	2.55	2.63	2.7	2.77	2.83	2.9	2.96	3.02	3.08	3.13	3.18	3.24	3.78	1.6							
120	1.98	2.05	2.13	2.21	2.3	2.39	2.48	2.58	2.67	2.77	2.87	2.97	3.06	3.15	3.24	3.32	3.4	3.48	3.55	3.63	3.69	3.76	3.82	3.88	4.54	1.92							
140	2.32	2.4	2.49	2.58	2.68	2.78	2.89	3	3.12	3.23	3.35	3.46	3.57	3.68	3.78	3.88	3.97	4.06	4.15	4.23	4.31	4.39	4.46	4.53	5.3	2.24							
160	2.65	2.74	2.84	2.95	3.06	3.18	3.31	3.43	3.57	3.7	3.83	3.95	4.08	4.2	4.32	4.43	4.54	4.64	4.74	4.83	4.93	5.01	5.1	5.18	6.06	2.56							
180	2.98	3.08	3.2	3.31	3.44	3.58	3.72	3.86	4.01	4.16	4.3	4.45	4.59	4.73	4.86	4.98	5.1	5.22	5.33	5.44	5.54	5.64	5.73	5.83	6.81	2.88							
200	3.31	3.42	3.55	3.68	3.83	3.98	4.13	4.29	4.46	4.62	4.78	4.94	5.1	5.25	5.4	5.54	5.67	5.8	5.92	6.04	6.16	6.27	6.37	6.47	7.57	3.2							
210	3.47	3.6	3.73	3.87	4.02	4.17	4.34	4.51	4.68	4.85	5.02	5.19	5.36	5.51	5.67	5.81	5.95	6.09	6.22	6.35	6.47	6.58	6.69	6.8	7.95	3.36							
220	3.64	3.77	3.91	4.05	4.21	4.37	4.55	4.72	4.9	5.08	5.26	5.44	5.61	5.78	5.94	6.09	6.24	6.38	6.52	6.65	6.77	6.89	7.01	7.12	8.33	3.52							
230	3.8	3.94	4.08	4.23	4.4	4.57	4.75	4.94	5.13	5.31	5.5	5.68	5.87	6.04	6.21	6.37	6.52	6.67	6.81	6.95	7.08	7.21	7.33	7.45	8.71	3.68							
240	3.97	4.11	4.26	4.43	4.59	4.77	4.96	5.16	5.35	5.55	5.74	5.94	6.12	6.31	6.48	6.65	6.81	6.96	7.11	7.26	7.39	7.52	7.65	7.77	9.09	3.84							
250	4.14	4.29	4.44	4.61	4.78	4.97	5.17	5.37	5.58	5.78	5.98	6.18	6.38	6.57	6.75	6.92	7.1	7.25	7.41	7.56	7.7	7.84	7.97	8.1	9.47	4							
260	4.31	4.46	4.62	4.8	4.98	5.17	5.38	5.59	5.8	6.01	6.22	6.43	6.63	6.83	7.02	7.2	7.38	7.54	7.71	7.86	8.01	8.15	8.29	8.42	9.85	4.16							
270	4.47	4.63	4.79	4.98	5.17	5.37	5.58	5.8	6.02	6.24	6.46	6.68	6.89	7.09	7.29	7.48	7.66	7.83	8	8.16	8.32	8.47	8.61	8.74	10.23	4.32							
280	4.64	4.8	4.97	5.16	5.36	5.57	5.79	6.02	6.24	6.47	6.7	6.93	7.14	7.36	7.56	7.76	7.95	8.12	8.3	8.47	8.63	8.78	8.93	9.07	10.61	4.48							
290	4.8	4.97	5.15	5.35	5.55	5.77	6	6.23	6.47	6.7	6.94	7.17	7.4	7.62	7.83	8.03	8.23	8.41	8.6	8.77	8.94	9.09	9.25	9.39	10.99	4.64							
300	4.97	5.14	5.33	5.53	5.74	5.97	6.2	6.45	6.69	6.94	7.18	7.42	7.65	7.88	8.1	8.31	8.52	8.7	8.89	9.07	9.24	9.41	9.57	9.72	11.37	4.8							
310	5.13	5.32	5.51	5.72	5.93	6.17	6.41	6.66	6.91	7.17	7.42	7.67	7.91	8.15	8.37	8.59	8.8	9	9.19	9.38	9.55	9.72	9.88	10.04	11.75	4.96							
320	5.3	5.49	5.68	5.9	6.12	6.37	6.62	6.88	7.14	7.4	7.66	7.92	8.16	8.41	8.64	8.86	9.08	9.29	9.49	9.68	9.86	10.04	10.2	10.37	12.13	5.13							
330	5.46	5.66	5.86	6.09	6.32	6.56	6.82	7.09	7.36	7.63	7.9	8.16	8.42	8.67	8.91	9.14	9.37	9.58	9.78	9.98	10.17	10.35	10.52	10.69	12.51	5.29							
340	5.63	5.83	6.04	6.27	6.51	6.76	7.03	7.31	7.58	7.86	8.14	8.41	8.67	8.93	9.19	9.42	9.65	9.87	10.08	10.28	10.48	10.67	10.84	11.01	12.9	5.45							
350	5.8	6	6.23	6.46	6.71	6.97	7.24	7.53	7.81	8.1	8.38	8.67	8.94	9.2	9.46	9.7	9.94	10.16	10.38	10.59	10.79	10.98	11.17	11.35	13.28	5.61							

1098-05	GENERAL INFORMATION																	
Sheet of	ENGINEERING NOTES AND SIGNAGE																	
Rev: 03/26/2026	SAG & TENSION WITH TABLES																	


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Initial RS	60.00	32.70	5097.60	54.50

Conductor	795 AWG Covered AAC - Arbutus											Weight (Lb/Ft)	1.292	Rated Breaking Strength	15,600	Ruling Span (Feet)	175	ARBUTUS INITIAL												Eng. Use: MOT Temp (°F)
	Condition	Initial Sag & Tension																188												
Temp (°F)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	188				
Tension (lbs)	5,362	5,159	4,953	4,744	4,531	4,326	4,119	3,908	3,706	3,507	3,306	3,120	2,935	2,761	2,595	2,443	2,299	2,168	2,049	1,939	1,839	1,749	1,668	1,596	1,528	1,015				
% Ultimate	34%	33%	32%	30%	29%	28%	26%	25%	24%	22%	21%	20%	19%	18%	17%	16%	15%	14%	13%	12%	12%	11%	11%	10%	10%	7%				
Span (Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)				
Ruling Span Sag	0'-9"	0'-9"	0'-10"	0'-10"	0'-11"	0'-11"	1'-0"	1'-0"	1'-1"	1'-2"	1'-3"	1'-3"	1'-4"	1'-5"	1'-6"	1'-8"	1'-9"	1'-10"	1'-10"	1'-11"	2'-1"	2'-2"	2'-3"	2'-5"	2'-6"	2'-7"	3'-11"			
50	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-3"	0'-4"				
75	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-4"	0'-4"	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-5"	0'-6"	0'-6"	0'-9"				
100	0'-3"	0'-3"	0'-3"	0'-3"	0'-4"	0'-4"	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-5"	0'-6"	0'-6"	0'-6"	0'-7"	0'-7"	0'-7"	0'-8"	0'-8"	0'-8"	0'-9"	0'-10"	0'-10"	1'-3"				
120	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-5"	0'-6"	0'-6"	0'-6"	0'-6"	0'-7"	0'-7"	0'-8"	0'-8"	0'-9"	0'-9"	0'-10"	0'-10"	0'-11"	1'-0"	1'-0"	1'-1"	1'-2"	1'-2"	1'-3"	1'-10"				
140	0'-6"	0'-6"	0'-6"	0'-6"	0'-7"	0'-7"	0'-7"	0'-8"	0'-8"	0'-9"	0'-9"	0'-10"	0'-10"	0'-11"	1'-0"	1'-1"	1'-1"	1'-2"	1'-3"	1'-4"	1'-5"	1'-6"	1'-6"	1'-7"	1'-8"	2'-6"				
160	0'-7"	0'-8"	0'-8"	0'-9"	0'-9"	0'-9"	0'-10"	0'-10"	0'-11"	0'-11"	1'-0"	1'-1"	1'-2"	1'-3"	1'-3"	1'-4"	1'-6"	1'-6"	1'-8"	1'-9"	1'-10"	1'-11"	2'-0"	2'-1"	2'-2"	3'-4"				
180	0'-9"	0'-10"	0'-10"	0'-11"	0'-11"	1'-0"	1'-0"	1'-1"	1'-2"	1'-3"	1'-3"	1'-4"	1'-5"	1'-6"	1'-8"	1'-9"	1'-10"	1'-11"	2'-1"	2'-2"	2'-4"	2'-5"	2'-6"	2'-8"	2'-9"	4'-2"				
200	1'-0"	1'-0"	1'-1"	1'-1"	1'-2"	1'-3"	1'-3"	1'-4"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-11"	2'-0"	2'-2"	2'-3"	2'-5"	2'-7"	2'-8"	2'-10"	3'-0"	3'-2"	3'-3"	3'-5"	5'-2"				
210	1'-1"	1'-1"	1'-2"	1'-3"	1'-3"	1'-4"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	2'-0"	2'-1"	2'-3"	2'-4"	2'-6"	2'-8"	2'-10"	3'-0"	3'-2"	3'-4"	3'-6"	3'-7"	3'-9"	5'-8"				
220	1'-2"	1'-3"	1'-3"	1'-4"	1'-5"	1'-6"	1'-6"	1'-7"	1'-9"	1'-10"	1'-11"	2'-0"	2'-2"	2'-3"	2'-5"	2'-7"	2'-9"	2'-11"	3'-1"	3'-3"	3'-5"	3'-7"	3'-9"	4'-0"	4'-2"	6'-3"				
230	1'-3"	1'-4"	1'-5"	1'-6"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	2'-0"	2'-1"	2'-3"	2'-4"	2'-6"	2'-8"	2'-10"	3'-0"	3'-2"	3'-5"	3'-7"	3'-9"	4'-0"	4'-2"	4'-4"	4'-6"	6'-10"				
240	1'-5"	1'-6"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	2'-0"	2'-2"	2'-3"	2'-5"	2'-7"	2'-9"	2'-11"	3'-1"	3'-3"	3'-6"	3'-8"	3'-11"	4'-1"	4'-4"	4'-6"	4'-9"	4'-11"	7'-5"				
250	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	2'-0"	2'-1"	2'-3"	2'-4"	2'-6"	2'-7"	2'-9"	3'-0"	3'-2"	3'-4"	3'-7"	3'-9"	4'-0"	4'-3"	4'-5"	4'-8"	4'-11"	5'-2"	5'-4"	8'-1"				
260	1'-8"	1'-9"	1'-9"	1'-10"	1'-11"	2'-1"	2'-2"	2'-3"	2'-5"	2'-6"	2'-8"	2'-10"	3'-0"	3'-3"	3'-5"	3'-8"	3'-10"	4'-1"	4'-4"	4'-7"	4'-10"	5'-1"	5'-4"	5'-7"	5'-10"	8'-9"				
270	1'-9"	1'-10"	1'-11"	2'-0"	2'-1"	2'-3"	2'-4"	2'-5"	2'-7"	2'-9"	2'-11"	3'-1"	3'-3"	3'-6"	3'-8"	3'-11"	4'-2"	4'-5"	4'-8"	4'-11"	5'-2"	5'-6"	5'-9"	6'-0"	6'-3"	9'-5"				
280	1'-11"	2'-0"	2'-1"	2'-2"	2'-3"	2'-4"	2'-6"	2'-8"	2'-9"	2'-11"	3'-1"	3'-3"	3'-6"	3'-9"	4'-0"	4'-3"	4'-6"	4'-9"	5'-0"	5'-4"	5'-7"	5'-10"	6'-2"	6'-5"	6'-9"	10'-1"				
290	2'-1"	2'-2"	2'-3"	2'-4"	2'-5"	2'-7"	2'-8"	2'-10"	3'-0"	3'-2"	3'-4"	3'-6"	3'-9"	4'-0"	4'-3"	4'-6"	4'-9"	5'-1"	5'-5"	5'-8"	6'-0"	6'-4"	6'-7"	6'-11"	7'-3"	10'-10"				
300	2'-2"	2'-3"	2'-5"	2'-6"	2'-7"	2'-9"	2'-10"	3'-0"	3'-2"	3'-4"	3'-7"	3'-9"	4'-0"	4'-3"	4'-7"	4'-10"	5'-2"	5'-5"	5'-9"	6'-1"	6'-5"	6'-9"	7'-1"	7'-5"	7'-9"	11'-8"				
310	2'-4"	2'-5"	2'-6"	2'-8"	2'-9"	2'-11"	3'-1"	3'-3"	3'-5"	3'-7"	3'-10"	4'-0"	4'-4"	4'-7"	4'-10"	5'-2"	5'-6"	5'-10"	6'-2"	6'-6"	6'-10"	7'-2"	7'-6"	7'-11"	8'-3"	12'-5"				
320	2'-6"	2'-7"	2'-9"	2'-10"	3'-0"	3'-1"	3'-3"	3'-5"	3'-7"	3'-10"	4'-1"	4'-4"	4'-7"	4'-10"	5'-2"	5'-6"	5'-10"	6'-2"	6'-7"	6'-11"	7'-4"	7'-8"	8'-0"	8'-5"	8'-9"	13'-3"				
330	2'-8"	2'-9"	2'-11"	3'-0"	3'-2"	3'-4"	3'-6"	3'-8"	3'-10"	4'-1"	4'-4"	4'-7"	4'-10"	5'-2"	5'-6"	5'-10"	6'-2"	6'-7"	7'-0"	7'-4"	7'-9"	8'-2"	8'-7"	8'-11"	9'-4"	14'-1"				
340	2'-10"	2'-11"	3'-1"	3'-2"	3'-4"	3'-6"	3'-8"	3'-10"	4'-1"	4'-4"	4'-7"	4'-10"	5'-2"	5'-6"	5'-10"	6'-3"	6'-7"	7'-0"	7'-5"	7'-10"	8'-3"	8'-8"	9'-1"	9'-6"	9'-11"	14'-11"				
350	3'-0"	3'-1"	3'-3"	3'-5"	3'-6"	3'-9"	3'-11"	4'-1"	4'-4"	4'-7"	4'-10"	5'-2"	5'-6"	5'-10"	6'-2"	6'-7"	7'-0"	7'-5"	7'-10"	8'-4"	8'-9"	9'-2"	9'-8"	10'-1"	10'-6"	15'-10"				

1098-05	GENERAL INFORMATION																	
Sheet of	ENGINEERING NOTES AND SIGNAGE																	
Rev: 03/26/2026	3-WAVE TIME & TENSION WITH TABLES																	


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Initial RS	60.00	32.70	5097.60	54.50

Conductor		795 AWG Covered AAC - Arbutus														Weight (Lb/Ft)	1.292	Rated Breaking Strength	15,600	Ruling Span (Feet)	175		ARBUS INITIAL												Eng. Use: MOT Temp (°F)
Condition	Initial Sag & Tension	0	5	10	15	20	25	30	35	40	45	50	55	60	65						70	75	80	85	90	95	100	105	110	115	120				
Temp (°F)		0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120									
Tension (lbs)		5,362	5,159	4,953	4,744	4,531	4,326	4,119	3,908	3,706	3,507	3,306	3,120	2,935	2,761	2,595	2,443	2,299	2,168	2,049	1,939	1,839	1,749	1,668	1,596	1,528									
% Ultimate		34%	33%	32%	30%	29%	28%	26%	25%	24%	22%	21%	20%	19%	18%	17%	16%	15%	14%	13%	12%	12%	11%	11%	10%	10%									
Span	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec									
R.S. Span																																			
3-Wave Time		2.63	2.69	2.75	2.81	2.88	2.95	3.03	3.11	3.2	3.29	3.39	3.49	3.6	3.72	3.83	3.95	4.06	4.18	4.3	4.41	4.53	4.63	4.74	4.84	5.94									
50		0.75	0.77	0.79	0.8	0.82	0.84	0.86	0.89	0.91	0.94	0.97	1	1.03	1.06	1.09	1.13	1.16	1.19	1.23	1.26	1.29	1.32	1.35	1.38	1.7									
75		1.13	1.15	1.18	1.2	1.23	1.26	1.3	1.33	1.37	1.41	1.45	1.5	1.54	1.59	1.64	1.69	1.74	1.79	1.84	1.89	1.94	1.99	2.03	2.08	2.55									
100		1.51	1.54	1.57	1.61	1.64	1.69	1.73	1.78	1.83	1.88	1.94	2	2.06	2.12	2.19	2.26	2.32	2.39	2.46	2.52	2.59	2.65	2.71	2.77	3.4									
120		1.81	1.84	1.88	1.93	1.97	2.02	2.08	2.13	2.19	2.26	2.32	2.4	2.47	2.55	2.63	2.71	2.79	2.87	2.95	3.03	3.1	3.18	3.25	3.32	4.07									
140		2.11	2.15	2.2	2.25	2.3	2.36	2.42	2.49	2.56	2.63	2.71	2.79	2.88	2.97	3.06	3.16	3.25	3.34	3.44	3.53	3.62	3.71	3.79	3.87	4.75									
160		2.41	2.46	2.51	2.57	2.63	2.7	2.77	2.84	2.92	3.01	3.1	3.19	3.29	3.4	3.5	3.61	3.72	3.82	3.93	4.04	4.14	4.24	4.33	4.43	5.43									
180		2.71	2.77	2.83	2.89	2.96	3.03	3.11	3.2	3.29	3.39	3.49	3.59	3.7	3.82	3.94	4.06	4.18	4.3	4.42	4.54	4.65	4.77	4.87	4.98	6.11									
200		3.01	3.07	3.14	3.21	3.29	3.37	3.46	3.55	3.65	3.76	3.87	3.99	4.12	4.25	4.38	4.51	4.65	4.78	4.91	5.04	5.17	5.3	5.42	5.53	6.79									
210		3.16	3.23	3.3	3.37	3.45	3.54	3.63	3.73	3.83	3.95	4.07	4.19	4.32	4.46	4.6	4.74	4.88	5.02	5.16	5.3	5.43	5.56	5.69	5.81	7.13									
220		3.31	3.38	3.45	3.53	3.62	3.71	3.81	3.91	4.02	4.14	4.26	4.39	4.53	4.67	4.81	4.96	5.11	5.26	5.4	5.55	5.69	5.83	5.96	6.09	7.47									
230		3.46	3.53	3.61	3.7	3.78	3.88	3.98	4.09	4.2	4.33	4.45	4.59	4.73	4.88	5.03	5.19	5.34	5.5	5.65	5.8	5.95	6.09	6.23	6.37	7.81									
240		3.62	3.69	3.77	3.86	3.95	4.05	4.16	4.27	4.39	4.52	4.65	4.8	4.95	5.1	5.26	5.42	5.58	5.74	5.9	6.06	6.21	6.36	6.51	6.65	8.16									
250		3.77	3.85	3.93	4.02	4.11	4.22	4.33	4.44	4.57	4.71	4.85	5	5.15	5.31	5.48	5.64	5.81	5.98	6.15	6.31	6.47	6.62	6.78	6.92	8.5									
260		3.92	4	4.09	4.18	4.28	4.39	4.5	4.62	4.76	4.9	5.04	5.2	5.36	5.53	5.7	5.87	6.04	6.22	6.39	6.57	6.73	6.89	7.05	7.2	8.84									
270		4.07	4.15	4.24	4.34	4.44	4.56	4.67	4.8	4.94	5.08	5.23	5.4	5.56	5.74	5.92	6.09	6.28	6.46	6.64	6.82	6.99	7.15	7.32	7.48	9.18									
280		4.22	4.31	4.4	4.5	4.61	4.73	4.85	4.98	5.12	5.27	5.43	5.6	5.77	5.95	6.14	6.32	6.51	6.7	6.88	7.07	7.25	7.42	7.59	7.75	9.52									
290		4.37	4.46	4.56	4.66	4.77	4.89	5.02	5.16	5.31	5.46	5.62	5.8	5.98	6.17	6.35	6.55	6.74	6.94	7.13	7.32	7.5	7.68	7.86	8.03	9.86									
300		4.52	4.62	4.72	4.82	4.94	5.06	5.19	5.33	5.49	5.65	5.81	6	6.18	6.38	6.57	6.77	6.97	7.18	7.38	7.58	7.76	7.95	8.13	8.31	10.2									
310		4.67	4.77	4.87	4.98	5.1	5.23	5.37	5.51	5.67	5.84	6.01	6.2	6.39	6.59	6.79	7	7.21	7.42	7.62	7.83	8.02	8.21	8.41	8.59	10.54									
320		4.82	4.92	5.03	5.14	5.27	5.4	5.54	5.69	5.85	6.03	6.2	6.4	6.59	6.8	7.01	7.22	7.44	7.66	7.87	8.08	8.28	8.48	8.68	8.86	10.88									
330		4.97	5.08	5.19	5.31	5.43	5.57	5.71	5.87	6.04	6.21	6.4	6.6	6.8	7.02	7.23	7.45	7.67	7.9	8.11	8.33	8.54	8.75	8.95	9.14	11.22									
340		5.12	5.23	5.35	5.47	5.59	5.74	5.89	6.05	6.22	6.4	6.59	6.8	7.01	7.23	7.45	7.68	7.9	8.14	8.36	8.59	8.8	9.01	9.22	9.42	11.56									
350		5.28	5.39	5.51	5.63	5.77	5.91	6.06	6.23	6.41	6.6	6.79	7	7.22	7.45	7.68	7.91	8.15	8.39	8.61	8.85	9.07	9.29	9.5	9.7	11.91									

1098-05	GENERAL INFORMATION																			
Sheet of	ENGINEERING NOTES AND SIGNAGE																			
Rev: 03/26/2026	SAG & TENSION WITH TABLES																			


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Creep RS	60.00	27.50	4292.60	45.90

Conductor		795 AWG Covered AAC - Arbutus																								Eng. Use:	
Condition		Creep Sag & Tension																								MOT	
Temp (°F)		0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120																								Temp (°F)	
Tension (lbs)		4,448 4,162 3,892 3,630 3,376 3,139 2,919 2,719 2,535 2,364 2,213 2,079 1,957 1,851 1,754 1,669 1,593 1,524 1,462 1,406 1,354 1,308 1,265 1,225 1,190																								881	
% Ultimate		29% 27% 25% 23% 22% 20% 19% 17% 16% 15% 14% 13% 13% 12% 11% 11% 10% 10% 9% 9% 9% 8% 8% 8% 8%																								6%	
Span (Ft-In)		0'-11" 1'-0" 1'-0" 1'-1" 1'-2" 1'-3" 1'-4" 1'-6" 1'-7" 1'-8" 1'-10" 1'-11" 2'-1" 2'-2" 2'-3" 2'-5" 2'-6" 2'-8" 2'-9" 2'-10" 3'-0" 3'-1" 3'-2" 3'-3" 3'-4" 4'-7"																									
Ruling Span Sag		0'-11" 1'-0" 1'-0" 1'-1" 1'-2" 1'-3" 1'-4" 1'-6" 1'-7" 1'-8" 1'-10" 1'-11" 2'-1" 2'-2" 2'-3" 2'-5" 2'-6" 2'-8" 2'-9" 2'-10" 3'-0" 3'-1" 3'-2" 3'-3" 3'-4" 4'-7"																									
50	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-4"	
75	0'-2"	0'-2"	0'-2"	0'-2"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-4"	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-5"	0'-6"	0'-6"	0'-6"	0'-6"	0'-7"	0'-7"	0'-7"	0'-7"	0'-10"	
100	0'-3"	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-6"	0'-6"	0'-7"	0'-7"	0'-7"	0'-8"	0'-8"	0'-9"	0'-10"	0'-10"	0'-11"	0'-11"	0'-11"	0'-11"	1'-0"	1'-0"	1'-0"	1'-1"	1'-6"	
120	0'-5"	0'-5"	0'-6"	0'-6"	0'-7"	0'-7"	0'-8"	0'-8"	0'-9"	0'-10"	0'-10"	0'-11"	1'-0"	1'-0"	1'-1"	1'-2"	1'-2"	1'-3"	1'-3"	1'-4"	1'-5"	1'-5"	1'-6"	1'-6"	1'-7"	2'-2"	
140	0'-7"	0'-7"	0'-8"	0'-9"	0'-9"	0'-10"	0'-11"	0'-11"	1'-0"	1'-1"	1'-2"	1'-3"	1'-4"	1'-5"	1'-6"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	2'-0"	2'-0"	2'-1"	2'-2"	2'-11"	
160	0'-9"	0'-10"	0'-10"	0'-11"	1'-0"	1'-1"	1'-2"	1'-3"	1'-4"	1'-5"	1'-6"	1'-7"	1'-9"	1'-10"	1'-11"	2'-0"	2'-1"	2'-2"	2'-3"	2'-5"	2'-6"	2'-7"	2'-8"	2'-9"	2'-10"	3'-10"	
180	0'-11"	1'-0"	1'-1"	1'-2"	1'-3"	1'-4"	1'-5"	1'-7"	1'-8"	1'-9"	1'-11"	2'-0"	2'-2"	2'-3"	2'-5"	2'-6"	2'-8"	2'-9"	2'-11"	3'-0"	3'-2"	3'-3"	3'-4"	3'-6"	3'-7"	4'-10"	
200	1'-2"	1'-3"	1'-4"	1'-5"	1'-7"	1'-8"	1'-9"	1'-11"	2'-1"	2'-3"	2'-4"	2'-6"	2'-8"	2'-10"	3'-0"	3'-2"	3'-3"	3'-5"	3'-7"	3'-9"	3'-10"	4'-0"	4'-2"	4'-3"	4'-5"	5'-11"	
210	1'-4"	1'-5"	1'-6"	1'-7"	1'-9"	1'-10"	2'-0"	2'-1"	2'-3"	2'-5"	2'-7"	2'-9"	2'-11"	3'-1"	3'-3"	3'-6"	3'-7"	3'-9"	3'-11"	4'-1"	4'-3"	4'-5"	4'-7"	4'-9"	4'-10"	6'-7"	
220	1'-5"	1'-6"	1'-8"	1'-9"	1'-10"	2'-0"	2'-2"	2'-4"	2'-6"	2'-8"	2'-10"	3'-1"	3'-3"	3'-5"	3'-7"	3'-9"	4'-0"	4'-2"	4'-4"	4'-6"	4'-8"	4'-10"	5'-0"	5'-2"	5'-4"	7'-2"	
230	1'-7"	1'-8"	1'-9"	1'-11"	2'-1"	2'-2"	2'-4"	2'-6"	2'-9"	2'-11"	3'-2"	3'-4"	3'-6"	3'-9"	3'-11"	4'-2"	4'-4"	4'-6"	4'-9"	4'-11"	5'-1"	5'-3"	5'-6"	5'-8"	5'-10"	7'-10"	
240	1'-8"	1'-10"	1'-11"	2'-1"	2'-3"	2'-5"	2'-7"	2'-9"	3'-0"	3'-2"	3'-5"	3'-8"	3'-10"	4'-1"	4'-4"	4'-6"	4'-9"	4'-11"	5'-2"	5'-4"	5'-7"	5'-9"	6'-0"	6'-2"	6'-4"	8'-7"	
250	1'-10"	2'-0"	2'-1"	2'-3"	2'-5"	2'-7"	2'-10"	3'-0"	3'-3"	3'-6"	3'-8"	3'-11"	4'-2"	4'-5"	4'-8"	4'-11"	5'-2"	5'-4"	5'-7"	5'-10"	6'-1"	6'-3"	6'-6"	6'-8"	6'-11"	9'-4"	
260	2'-0"	2'-2"	2'-3"	2'-5"	2'-7"	2'-10"	3'-0"	3'-3"	3'-6"	3'-9"	4'-0"	4'-3"	4'-6"	4'-9"	5'-1"	5'-4"	5'-7"	5'-10"	6'-1"	6'-4"	6'-6"	6'-9"	7'-0"	7'-3"	7'-5"	10'-1"	
270	2'-2"	2'-3"	2'-5"	2'-8"	2'-10"	3'-0"	3'-3"	3'-6"	3'-9"	4'-0"	4'-4"	4'-7"	4'-11"	5'-2"	5'-5"	5'-9"	6'-0"	6'-3"	6'-6"	6'-9"	7'-1"	7'-4"	7'-7"	7'-9"	8'-0"	10'-10"	
280	2'-4"	2'-6"	2'-8"	2'-10"	3'-0"	3'-3"	3'-6"	3'-9"	4'-1"	4'-4"	4'-8"	4'-11"	5'-3"	5'-7"	5'-10"	6'-2"	6'-5"	6'-9"	7'-0"	7'-4"	7'-7"	7'-10"	8'-1"	8'-5"	8'-8"	11'-8"	
290	2'-6"	2'-8"	2'-10"	3'-0"	3'-3"	3'-6"	3'-9"	4'-1"	4'-4"	4'-8"	5'-0"	5'-4"	5'-8"	5'-11"	6'-3"	6'-7"	6'-11"	7'-3"	7'-6"	7'-10"	8'-2"	8'-5"	8'-9"	9'-0"	9'-3"	12'-6"	
300	2'-8"	2'-10"	3'-0"	3'-3"	3'-6"	3'-9"	4'-0"	4'-4"	4'-8"	5'-0"	5'-4"	5'-8"	6'-0"	6'-4"	6'-9"	7'-1"	7'-5"	7'-9"	8'-1"	8'-5"	8'-9"	9'-0"	9'-4"	9'-7"	9'-11"	13'-5"	
310	2'-10"	3'-0"	3'-3"	3'-6"	3'-9"	4'-0"	4'-4"	4'-8"	5'-0"	5'-4"	5'-8"	6'-1"	6'-5"	6'-10"	7'-2"	7'-6"	7'-11"	8'-3"	8'-7"	9'-0"	9'-4"	9'-8"	10'-0"	10'-3"	10'-7"	14'-4"	
320	3'-0"	3'-3"	3'-5"	3'-8"	4'-0"	4'-3"	4'-7"	4'-11"	5'-4"	5'-8"	6'-1"	6'-5"	6'-10"	7'-3"	7'-8"	8'-0"	8'-5"	8'-10"	9'-2"	9'-7"	9'-11"	10'-3"	10'-7"	10'-11"	11'-3"	15'-3"	
330	3'-3"	3'-5"	3'-8"	3'-11"	4'-3"	4'-7"	4'-11"	5'-3"	5'-8"	6'-0"	6'-5"	6'-10"	7'-3"	7'-9"	8'-2"	8'-7"	9'-0"	9'-4"	9'-9"	10'-2"	10'-7"	10'-11"	11'-3"	11'-8"	12'-0"	16'-3"	
340	3'-5"	3'-8"	3'-11"	4'-2"	4'-6"	4'-10"	5'-2"	5'-7"	6'-0"	6'-5"	6'-10"	7'-3"	7'-9"	8'-2"	8'-8"	9'-1"	9'-6"	9'-11"	10'-4"	10'-9"	11'-2"	11'-7"	12'-0"	12'-4"	12'-9"	17'-3"	
350	3'-7"	3'-10"	4'-2"	4'-5"	4'-9"	5'-1"	5'-6"	5'-11"	6'-4"	6'-9"	7'-3"	7'-9"	8'-3"	8'-8"	9'-2"	9'-8"	10'-1"	10'-7"	11'-0"	11'-5"	11'-10"	12'-3"	12'-8"	13'-1"	13'-6"	18'-3"	

1098-05	GENERAL INFORMATION																			
Sheet of	ENGINEERING NOTES AND SIGNAGE																			
Rev: 03/26/2026	3-WAVE TIME & TENSION WITH TABLES																			


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Creep RS	60.00	27.50	4292.60	45.90

Conductor		795 AWG Covered AAC - Arbutus																										Eng. Use:				
Condition		Creep Sag & Tension																										MOT				
		Weight (Lb/Ft)												1.292	Rated Breaking Strength		15,600	Ruling Span (Feet)	175	ARBUTUS CREEP												Temp (°F)
Temp (°F)		0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	188					
Tension (lbs)		4,448	4,162	3,892	3,630	3,376	3,139	2,919	2,719	2,535	2,364	2,213	2,079	1,957	1,851	1,754	1,669	1,593	1,524	1,462	1,406	1,354	1,308	1,265	1,225	1,190	881					
% Ultimate		29%	27%	25%	23%	22%	20%	19%	17%	16%	15%	14%	13%	13%	12%	11%	11%	10%	10%	9%	9%	9%	8%	8%	8%	8%	6%					
Span	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec					
R.S. Span	3-Wave Time	2.93	3.03	3.14	3.26	3.38	3.5	3.63	3.76	3.89	4.02	4.15	4.28	4.4	4.52	4.63	4.74	4.85	4.95	5.05	5.14	5.23	5.32	5.41	5.49	6.38	2.84					
50	0.84	0.87	0.9	0.93	0.97	1	1.04	1.07	1.11	1.15	1.19	1.22	1.26	1.29	1.32	1.35	1.39	1.41	1.44	1.47	1.5	1.52	1.54	1.57	1.82	0.81						
75	1.26	1.3	1.35	1.4	1.45	1.5	1.56	1.61	1.67	1.72	1.78	1.83	1.89	1.94	1.99	2.03	2.08	2.12	2.16	2.2	2.24	2.28	2.32	2.35	2.73	1.22						
100	1.68	1.73	1.79	1.86	1.93	2	2.07	2.15	2.22	2.3	2.37	2.44	2.51	2.58	2.65	2.71	2.77	2.83	2.88	2.94	2.99	3.04	3.09	3.14	3.64	1.62						
120	2.01	2.08	2.15	2.23	2.32	2.4	2.49	2.58	2.67	2.76	2.85	2.93	3.02	3.1	3.18	3.25	3.32	3.39	3.46	3.53	3.59	3.65	3.71	3.76	4.37	1.95						
140	2.35	2.43	2.51	2.61	2.7	2.8	2.9	3.01	3.11	3.22	3.32	3.42	3.52	3.62	3.71	3.79	3.88	3.96	4.04	4.12	4.19	4.26	4.33	4.39	5.1	2.27						
160	2.68	2.77	2.87	2.98	3.09	3.2	3.32	3.44	3.56	3.68	3.8	3.91	4.02	4.13	4.24	4.34	4.43	4.53	4.62	4.7	4.79	4.87	4.94	5.02	5.83	2.59						
180	3.02	3.12	3.23	3.35	3.47	3.6	3.73	3.87	4	4.14	4.27	4.4	4.52	4.65	4.77	4.88	4.99	5.09	5.19	5.29	5.38	5.47	5.56	5.64	6.56	2.92						
200	3.35	3.47	3.59	3.72	3.86	4	4.15	4.3	4.45	4.6	4.74	4.89	5.03	5.16	5.29	5.42	5.54	5.66	5.77	5.88	5.98	6.08	6.18	6.27	7.29	3.24						
210	3.52	3.64	3.77	3.91	4.05	4.2	4.36	4.51	4.67	4.83	4.98	5.13	5.28	5.42	5.56	5.69	5.82	5.94	6.06	6.17	6.28	6.39	6.49	6.59	7.66	3.41						
220	3.69	3.81	3.95	4.09	4.25	4.4	4.56	4.73	4.89	5.06	5.22	5.38	5.53	5.68	5.82	5.96	6.1	6.22	6.35	6.47	6.58	6.69	6.8	6.9	8.02	3.57						
230	3.86	3.99	4.13	4.28	4.44	4.6	4.77	4.94	5.12	5.29	5.46	5.62	5.78	5.94	6.09	6.23	6.37	6.51	6.64	6.76	6.88	7	7.11	7.21	8.39	3.73						
240	4.03	4.16	4.31	4.47	4.64	4.81	4.98	5.16	5.34	5.52	5.7	5.87	6.04	6.2	6.36	6.51	6.65	6.79	6.93	7.06	7.18	7.3	7.42	7.53	8.76	3.89						
250	4.19	4.34	4.49	4.66	4.83	5.01	5.19	5.38	5.56	5.75	5.93	6.12	6.29	6.46	6.62	6.78	6.93	7.08	7.22	7.36	7.48	7.61	7.73	7.85	9.12	4.06						
260	4.36	4.51	4.67	4.84	5.02	5.21	5.4	5.59	5.79	5.98	6.17	6.36	6.54	6.72	6.89	7.05	7.21	7.36	7.51	7.65	7.78	7.91	8.04	8.16	9.49	4.22						
270	4.53	4.68	4.85	5.03	5.22	5.41	5.61	5.81	6.01	6.21	6.41	6.6	6.79	6.98	7.15	7.32	7.49	7.64	7.8	7.94	8.08	8.22	8.35	8.48	9.85	4.38						
280	4.7	4.86	5.03	5.22	5.41	5.61	5.81	6.02	6.23	6.44	6.65	6.85	7.05	7.24	7.42	7.59	7.76	7.93	8.08	8.24	8.38	8.52	8.66	8.79	10.22	4.54						
290	4.87	5.03	5.21	5.4	5.6	5.81	6.02	6.24	6.45	6.67	6.88	7.09	7.3	7.49	7.68	7.87	8.04	8.21	8.37	8.53	8.68	8.83	8.97	9.1	10.58	4.71						
300	5.03	5.2	5.39	5.59	5.8	6.01	6.23	6.45	6.68	6.9	7.12	7.34	7.55	7.75	7.95	8.14	8.32	8.49	8.66	8.83	8.98	9.13	9.28	9.42	10.95	4.87						
310	5.2	5.38	5.57	5.77	5.99	6.21	6.44	6.67	6.9	7.13	7.36	7.58	7.8	8.01	8.21	8.41	8.6	8.78	8.95	9.12	9.28	9.44	9.59	9.73	11.32	5.03						
320	5.37	5.55	5.75	5.96	6.18	6.41	6.64	6.88	7.12	7.36	7.59	7.83	8.05	8.27	8.48	8.68	8.87	9.06	9.24	9.42	9.58	9.74	9.9	10.05	11.68	5.19						
330	5.54	5.73	5.93	6.15	6.38	6.61	6.85	7.1	7.34	7.59	7.83	8.07	8.31	8.53	8.74	8.95	9.15	9.34	9.53	9.71	9.88	10.05	10.21	10.36	12.05	5.35						
340	5.7	5.9	6.11	6.33	6.57	6.81	7.06	7.31	7.57	7.82	8.07	8.32	8.56	8.79	9.01	9.22	9.43	9.63	9.82	10.01	10.18	10.35	10.51	10.68	12.41	5.52						
350	5.87	6.08	6.3	6.52	6.77	7.02	7.27	7.53	7.79	8.06	8.31	8.57	8.81	9.05	9.28	9.5	9.72	9.92	10.11	10.31	10.49	10.66	10.83	10.99	12.78	5.68						

1098-05	GENERAL INFORMATION																
Sheet of	ENGINEERING NOTES AND SIGNAGE																
Rev: 03/26/2026	SAG & TENSION WITH TABLES																


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Initial RS	60.00	32.70	5097.90	54.50

Conductor	795 AWG Covered AAC - Arbutus												Weight (Lb/Ft)	1.292	Rated Breaking Strength	15,600	Ruling Span (Feet)	190	ARBUTUS INITIAL												Eng. Use: MOT Temp (°F)
Condition	Initial Sag & Tension																								188						
Temp (°F)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	188					
Tension (lbs)	5,282	5,078	4,876	4,671	4,463	4,263	4,060	3,854	3,658	3,464	3,278	3,095	2,926	2,761	2,604	2,459	2,326	2,204	2,092	1,988	1,893	1,809	1,732	1,661	1,595	1,083					
% Ultimate	34%	33%	31%	30%	29%	27%	26%	25%	23%	22%	21%	20%	19%	18%	17%	16%	15%	14%	13%	13%	12%	12%	11%	11%	10%	7%					
Span (Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)					
Ruling Span Sag	0'-11"	0'-11"	1'-0"	1'-0"	1'-1"	1'-1"	1'-2"	1'-3"	1'-3"	1'-4"	1'-5"	1'-6"	1'-7"	1'-9"	1'-10"	1'-11"	2'-0"	2'-2"	2'-3"	2'-5"	2'-6"	2'-7"	2'-9"	2'-10"	3'-0"	4'-4"					
50	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-4"					
75	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-4"	0'-4"	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-5"	0'-6"	0'-8"					
100	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-4"	0'-4"	0'-4"	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-6"	0'-6"	0'-6"	0'-7"	0'-7"	0'-7"	0'-8"	0'-8"	0'-8"	0'-8"	0'-9"	1'-3"					
120	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-5"	0'-6"	0'-6"	0'-6"	0'-6"	0'-6"	0'-7"	0'-7"	0'-8"	0'-8"	0'-9"	0'-9"	0'-10"	0'-10"	0'-11"	0'-11"	1'-0"	1'-0"	1'-1"	1'-2"	1'-9"					
140	0'-6"	0'-6"	0'-6"	0'-7"	0'-7"	0'-7"	0'-8"	0'-8"	0'-8"	0'-8"	0'-9"	0'-9"	0'-10"	0'-11"	0'-11"	1'-0"	1'-0"	1'-1"	1'-2"	1'-3"	1'-3"	1'-4"	1'-5"	1'-6"	1'-6"	2'-4"					
160	0'-8"	0'-8"	0'-8"	0'-9"	0'-9"	0'-9"	0'-10"	0'-10"	0'-11"	1'-0"	1'-0"	1'-1"	1'-2"	1'-3"	1'-3"	1'-4"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	2'-0"	2'-1"	3'-1"					
180	0'-10"	0'-10"	0'-10"	0'-11"	0'-11"	1'-0"	1'-0"	1'-1"	1'-2"	1'-3"	1'-3"	1'-4"	1'-5"	1'-6"	1'-8"	1'-9"	1'-10"	1'-11"	2'-0"	2'-2"	2'-3"	2'-4"	2'-5"	2'-7"	2'-8"	3'-11"					
200	1'-0"	1'-0"	1'-1"	1'-1"	1'-2"	1'-3"	1'-3"	1'-4"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-11"	2'-0"	2'-2"	2'-3"	2'-4"	2'-6"	2'-8"	2'-9"	2'-11"	3'-0"	3'-2"	3'-3"	4'-10"					
210	1'-1"	1'-2"	1'-2"	1'-3"	1'-3"	1'-4"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	2'-0"	2'-1"	2'-3"	2'-4"	2'-6"	2'-7"	2'-9"	2'-11"	3'-1"	3'-2"	3'-4"	3'-6"	3'-7"	5'-4"					
220	1'-2"	1'-3"	1'-4"	1'-4"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	2'-1"	2'-2"	2'-3"	2'-5"	2'-7"	2'-9"	2'-10"	3'-0"	3'-2"	3'-4"	3'-6"	3'-8"	3'-10"	4'-0"	5'-10"					
230	1'-4"	1'-4"	1'-5"	1'-6"	1'-7"	1'-7"	1'-8"	1'-9"	1'-11"	2'-0"	2'-1"	2'-3"	2'-4"	2'-6"	2'-8"	2'-10"	3'-0"	3'-2"	3'-4"	3'-6"	3'-8"	3'-10"	4'-0"	4'-2"	4'-4"	6'-5"					
240	1'-5"	1'-6"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	2'-1"	2'-2"	2'-4"	2'-5"	2'-7"	2'-9"	2'-11"	3'-1"	3'-3"	3'-5"	3'-7"	3'-9"	4'-0"	4'-2"	4'-4"	4'-6"	4'-9"	7'-0"					
250	1'-7"	1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	2'-0"	2'-1"	2'-3"	2'-4"	2'-6"	2'-8"	2'-10"	3'-0"	3'-2"	3'-4"	3'-6"	3'-9"	3'-11"	4'-1"	4'-4"	4'-6"	4'-9"	4'-11"	5'-2"	7'-7"					
260	1'-8"	1'-9"	1'-10"	1'-11"	2'-0"	2'-2"	2'-3"	2'-5"	2'-7"	2'-8"	2'-10"	3'-0"	3'-3"	3'-5"	3'-7"	3'-10"	4'-0"	4'-3"	4'-5"	4'-8"	4'-11"	5'-1"	5'-4"	5'-7"	6'-2"	8'-2"					
270	1'-10"	1'-11"	2'-0"	2'-0"	2'-2"	2'-3"	2'-4"	2'-6"	2'-7"	2'-9"	2'-11"	3'-1"	3'-3"	3'-6"	3'-8"	3'-11"	4'-1"	4'-4"	4'-7"	4'-10"	5'-0"	5'-3"	5'-6"	5'-9"	6'-0"	8'-10"					
280	1'-11"	2'-0"	2'-1"	2'-2"	2'-4"	2'-5"	2'-6"	2'-8"	2'-10"	3'-0"	3'-2"	3'-4"	3'-6"	3'-9"	3'-11"	4'-2"	4'-5"	4'-8"	4'-11"	5'-2"	5'-5"	5'-8"	5'-11"	6'-2"	6'-5"	9'-6"					
290	2'-1"	2'-2"	2'-3"	2'-4"	2'-6"	2'-7"	2'-9"	2'-10"	3'-0"	3'-2"	3'-4"	3'-7"	3'-9"	4'-0"	4'-3"	4'-6"	4'-9"	5'-0"	5'-3"	5'-6"	5'-10"	6'-1"	6'-4"	6'-8"	6'-11"	10'-2"					
300	2'-3"	2'-4"	2'-5"	2'-6"	2'-8"	2'-9"	2'-11"	3'-1"	3'-3"	3'-5"	3'-7"	3'-10"	4'-0"	4'-3"	4'-6"	4'-9"	5'-1"	5'-4"	5'-8"	5'-11"	6'-3"	6'-6"	6'-10"	7'-1"	7'-5"	10'-11"					
310	2'-5"	2'-6"	2'-7"	2'-8"	2'-10"	2'-11"	3'-1"	3'-3"	3'-5"	3'-8"	3'-10"	4'-1"	4'-4"	4'-7"	4'-10"	5'-1"	5'-5"	5'-8"	6'-0"	6'-4"	6'-8"	6'-11"	7'-3"	7'-7"	7'-11"	11'-8"					
320	2'-6"	2'-8"	2'-9"	2'-10"	3'-0"	3'-2"	3'-4"	3'-6"	3'-8"	3'-10"	4'-1"	4'-4"	4'-7"	4'-10"	5'-2"	5'-5"	5'-9"	6'-1"	6'-5"	6'-9"	7'-1"	7'-5"	7'-9"	8'-1"	8'-5"	12'-5"					
330	2'-8"	2'-10"	2'-11"	3'-1"	3'-2"	3'-4"	3'-6"	3'-8"	3'-11"	4'-1"	4'-4"	4'-7"	4'-10"	5'-2"	5'-6"	5'-9"	6'-2"	6'-6"	6'-10"	7'-2"	7'-6"	7'-11"	8'-3"	8'-7"	8'-11"	13'-2"					
340	2'-10"	3'-0"	3'-1"	3'-3"	3'-5"	3'-7"	3'-9"	3'-11"	4'-2"	4'-4"	4'-7"	4'-11"	5'-2"	5'-6"	5'-10"	6'-2"	6'-6"	6'-10"	7'-3"	7'-7"	8'-0"	8'-4"	8'-9"	9'-1"	9'-6"	14'-0"					
350	3'-0"	3'-2"	3'-3"	3'-5"	3'-7"	3'-9"	3'-11"	4'-2"	4'-5"	4'-7"	4'-11"	5'-2"	5'-6"	5'-10"	6'-2"	6'-6"	6'-11"	7'-3"	7'-8"	8'-1"	8'-6"	8'-10"	9'-3"	9'-8"	10'-1"	14'-10"					

1098-05	GENERAL INFORMATION																	
Sheet of	ENGINEERING NOTES AND SIGNAGE																	
Rev: 03/26/2026	3-WAVE TIME & TENSION WITH TABLES																	


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Initial RS	60.00	32.70	5097.90	54.50

Conductor		795 AWG Covered AAC - Arbutus														Weight (Lb/Ft)	1.292	Rated Breaking Strength	15,600	Ruling Span (Feet)	190		ARBUS INITIAL												Eng. Use: MOT Temp (°F)
Condition		Initial Sag & Tension																																	
Temp (°F)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	188									
Tension (lbs)	5,282	5,078	4,876	4,671	4,463	4,263	4,060	3,854	3,658	3,464	3,278	3,095	2,926	2,761	2,604	2,459	2,326	2,204	2,092	1,988	1,893	1,809	1,732	1,661	1,595	1,083									
% Ultimate	34%	33%	31%	30%	29%	27%	26%	25%	23%	22%	21%	20%	19%	18%	17%	16%	15%	14%	13%	13%	12%	12%	11%	11%	10%	7%									
Span	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec									
R.S. Span	2.88	2.94	3.01	3.08	3.15	3.22	3.31	3.4	3.49	3.59	3.69	3.8	3.91	4.03	4.14	4.26	4.38	4.49	4.61	4.72	4.83	4.94	5.04	5.15	6.25	2.83									
3-Wave Time	50	75	100	120	140	160	180	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350												
0.76	0.77	0.79	0.81	0.83	0.85	0.87	0.89	0.92	0.94	0.97	1	1.03	1.06	1.09	1.12	1.15	1.18	1.21	1.24	1.27	1.3	1.33	1.35	1.64	0.74										
1.14	1.16	1.19	1.21	1.24	1.27	1.31	1.34	1.38	1.42	1.46	1.5	1.54	1.59	1.64	1.68	1.73	1.77	1.82	1.86	1.91	1.95	1.99	2.03	2.46	1.12										
1.52	1.55	1.58	1.62	1.66	1.7	1.74	1.79	1.84	1.89	1.94	2	2.06	2.12	2.18	2.24	2.3	2.36	2.43	2.49	2.54	2.6	2.65	2.71	3.29	1.49										
1.82	1.86	1.9	1.94	1.99	2.04	2.09	2.15	2.2	2.27	2.33	2.4	2.47	2.54	2.62	2.69	2.76	2.84	2.91	2.98	3.05	3.12	3.18	3.25	3.94	1.79										
2.12	2.17	2.22	2.27	2.32	2.38	2.44	2.5	2.57	2.64	2.72	2.8	2.88	2.97	3.05	3.14	3.22	3.31	3.4	3.48	3.56	3.64	3.72	3.79	4.6	2.08										
2.43	2.48	2.53	2.59	2.65	2.72	2.79	2.86	2.94	3.02	3.11	3.2	3.29	3.39	3.49	3.59	3.69	3.78	3.88	3.98	4.07	4.16	4.25	4.33	5.26	2.38										
2.73	2.79	2.85	2.91	2.98	3.06	3.14	3.22	3.31	3.4	3.5	3.6	3.7	3.81	3.93	4.04	4.15	4.26	4.37	4.47	4.58	4.68	4.78	4.87	5.92	2.68										
3.04	3.1	3.16	3.24	3.31	3.39	3.48	3.58	3.67	3.78	3.89	4	4.12	4.24	4.36	4.49	4.61	4.73	4.85	4.97	5.09	5.2	5.31	5.42	6.57	2.98										
3.19	3.25	3.32	3.4	3.48	3.56	3.66	3.76	3.86	3.97	4.08	4.2	4.32	4.45	4.58	4.71	4.84	4.97	5.09	5.22	5.34	5.46	5.57	5.69	6.9	3.12										
3.34	3.41	3.48	3.56	3.64	3.73	3.83	3.93	4.04	4.16	4.28	4.4	4.53	4.66	4.8	4.93	5.07	5.2	5.34	5.47	5.59	5.72	5.84	5.96	7.23	3.27										
3.49	3.56	3.64	3.72	3.81	3.9	4.01	4.11	4.23	4.34	4.47	4.6	4.73	4.87	5.02	5.16	5.3	5.44	5.58	5.72	5.85	5.98	6.1	6.23	7.56	3.42										
3.64	3.72	3.8	3.89	3.98	4.07	4.18	4.29	4.41	4.53	4.67	4.8	4.94	5.09	5.23	5.38	5.53	5.67	5.82	5.97	6.1	6.24	6.37	6.5	7.89	3.57										
3.79	3.87	3.96	4.05	4.14	4.25	4.36	4.47	4.59	4.72	4.86	5	5.15	5.3	5.45	5.61	5.76	5.92	6.07	6.22	6.36	6.5	6.64	6.77	8.22	3.72										
3.95	4.03	4.11	4.21	4.31	4.42	4.53	4.65	4.78	4.91	5.05	5.2	5.35	5.51	5.67	5.83	5.99	6.15	6.31	6.46	6.61	6.76	6.9	7.04	8.55	3.87										
4.1	4.18	4.27	4.37	4.48	4.59	4.7	4.83	4.96	5.1	5.25	5.4	5.56	5.73	5.89	6.06	6.22	6.39	6.55	6.71	6.87	7.02	7.17	7.31	8.88	4.02										
4.25	4.34	4.43	4.53	4.64	4.76	4.88	5.01	5.14	5.29	5.44	5.6	5.77	5.94	6.11	6.28	6.45	6.63	6.8	6.96	7.12	7.28	7.44	7.58	9.21	4.17										
4.4	4.49	4.59	4.69	4.81	4.93	5.05	5.19	5.33	5.48	5.64	5.8	5.97	6.15	6.33	6.5	6.68	6.86	7.04	7.21	7.38	7.54	7.7	7.86	9.54	4.32										
4.55	4.65	4.75	4.86	4.97	5.1	5.23	5.36	5.51	5.67	5.83	6	6.18	6.36	6.54	6.73	6.91	7.1	7.28	7.46	7.63	7.8	7.97	8.13	9.87	4.46										
4.7	4.8	4.91	5.02	5.14	5.27	5.4	5.54	5.7	5.86	6.03	6.2	6.38	6.57	6.76	6.95	7.14	7.34	7.52	7.71	7.88	8.06	8.23	8.4	10.2	4.61										
4.86	4.96	5.06	5.18	5.3	5.44	5.57	5.72	5.88	6.05	6.22	6.4	6.59	6.79	6.98	7.18	7.37	7.57	7.77	7.96	8.14	8.32	8.5	8.67	10.53	4.76										
5.01	5.11	5.22	5.34	5.47	5.61	5.75	5.9	6.06	6.24	6.42	6.6	6.8	7	7.2	7.4	7.6	7.81	8.01	8.21	8.39	8.58	8.77	8.94	10.86	4.91										
5.16	5.27	5.38	5.5	5.64	5.78	5.92	6.08	6.25	6.43	6.61	6.8	7	7.21	7.42	7.63	7.83	8.05	8.25	8.45	8.65	8.84	9.03	9.21	11.19	5.06										
5.31	5.42	5.54	5.67	5.8	5.95	6.1	6.26	6.43	6.62	6.8	7	7.21	7.42	7.63	7.85	8.06	8.28	8.5	8.7	8.9	9.1	9.3	9.48	11.52	5.21										

1098-05	GENERAL INFORMATION																		
Sheet of	ENGINEERING NOTES AND SIGNAGE																		
Rev: 03/26/2026	SAG & TENSION WITH TABLES																		


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Creep RS	60.00	27.50	4292.40	45.90

Conductor	795 AWG Covered AAC - Arbutus																								Eng. Use: MOT	
	Creep Sag & Tension																									
Condition	Creep Sag & Tension																								Temp (°F)	
Temp (°F)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115		120
Tension (lbs)	4,310	4,040	3,778	3,533	3,296	3,080	2,875	2,692	2,520	2,366	2,227	2,105	1,992	1,892	1,801	1,720	1,648	1,584	1,523	1,468	1,418	1,372	1,331	1,292	1,256	942
% Ultimate	28%	26%	24%	23%	21%	20%	18%	17%	16%	15%	14%	13%	13%	12%	12%	11%	11%	10%	10%	9%	9%	9%	9%	8%	8%	6%
Span	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)
Ruling Span Sag	1'-1"	1'-2"	1'-3"	1'-4"	1'-5"	1'-6"	1'-8"	1'-9"	1'-10"	2'-0"	2'-1"	2'-3"	2'-4"	2'-6"	2'-7"	2'-9"	2'-10"	3'-0"	3'-1"	3'-3"	3'-4"	3'-5"	3'-7"	3'-8"	3'-9"	5'-0"
50	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-4"
75	0'-2"	0'-2"	0'-2"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-4"	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-5"	0'-6"	0'-6"	0'-6"	0'-6"	0'-6"	0'-7"	0'-7"	0'-7"	0'-9"
100	0'-4"	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-6"	0'-6"	0'-7"	0'-7"	0'-7"	0'-8"	0'-8"	0'-9"	0'-9"	0'-10"	0'-10"	0'-11"	0'-11"	0'-11"	0'-11"	0'-11"	0'-11"	0'-11"	1'-5"
120	0'-5"	0'-6"	0'-6"	0'-6"	0'-7"	0'-7"	0'-8"	0'-8"	0'-9"	0'-10"	0'-10"	0'-11"	0'-11"	1'-0"	1'-1"	1'-1"	1'-2"	1'-2"	1'-3"	1'-3"	1'-4"	1'-4"	1'-5"	1'-6"	1'-6"	2'-0"
140	0'-7"	0'-8"	0'-8"	0'-9"	0'-9"	0'-10"	0'-11"	0'-11"	1'-0"	1'-1"	1'-2"	1'-3"	1'-3"	1'-4"	1'-5"	1'-6"	1'-7"	1'-7"	1'-8"	1'-9"	1'-10"	1'-10"	1'-11"	2'-0"	2'-0"	2'-9"
160	0'-9"	0'-10"	0'-11"	0'-11"	1'-0"	1'-1"	1'-2"	1'-3"	1'-4"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	2'-0"	2'-1"	2'-2"	2'-3"	2'-4"	2'-5"	2'-6"	2'-7"	2'-8"	3'-7"
180	1'-0"	1'-1"	1'-1"	1'-2"	1'-3"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-11"	2'-0"	2'-2"	2'-3"	2'-4"	2'-6"	2'-7"	2'-8"	2'-9"	2'-11"	3'-0"	3'-1"	3'-2"	3'-3"	3'-5"	4'-6"
200	1'-3"	1'-3"	1'-5"	1'-6"	1'-7"	1'-8"	1'-10"	1'-11"	2'-1"	2'-3"	2'-4"	2'-6"	2'-8"	2'-9"	2'-11"	3'-0"	3'-2"	3'-4"	3'-5"	3'-7"	3'-8"	3'-10"	3'-11"	4'-1"	4'-2"	5'-7"
210	1'-4"	1'-5"	1'-6"	1'-8"	1'-9"	1'-10"	2'-0"	2'-2"	2'-3"	2'-5"	2'-7"	2'-9"	2'-11"	3'-1"	3'-2"	3'-4"	3'-6"	3'-8"	3'-9"	3'-11"	4'-1"	4'-2"	4'-4"	4'-6"	4'-7"	6'-2"
220	1'-6"	1'-7"	1'-8"	1'-9"	1'-11"	2'-1"	2'-2"	2'-4"	2'-6"	2'-8"	2'-10"	3'-0"	3'-2"	3'-4"	3'-6"	3'-8"	3'-10"	4'-0"	4'-2"	4'-4"	4'-6"	4'-7"	4'-9"	4'-11"	5'-0"	6'-9"
230	1'-7"	1'-9"	1'-10"	2'-0"	2'-1"	2'-3"	2'-5"	2'-7"	2'-9"	2'-11"	3'-1"	3'-3"	3'-6"	3'-8"	3'-10"	4'-0"	4'-2"	4'-4"	4'-6"	4'-9"	4'-11"	5'-0"	5'-2"	5'-4"	5'-6"	7'-4"
240	1'-9"	1'-10"	2'-0"	2'-2"	2'-3"	2'-5"	2'-7"	2'-10"	3'-0"	3'-2"	3'-5"	3'-7"	3'-9"	4'-0"	4'-2"	4'-5"	4'-7"	4'-9"	4'-11"	5'-2"	5'-4"	5'-6"	5'-8"	5'-10"	6'-0"	8'-0"
250	1'-11"	2'-0"	2'-2"	2'-4"	2'-6"	2'-8"	2'-10"	3'-0"	3'-3"	3'-6"	3'-8"	3'-11"	4'-1"	4'-4"	4'-6"	4'-9"	5'-0"	5'-2"	5'-4"	5'-7"	5'-9"	6'-0"	6'-2"	6'-4"	6'-6"	8'-8"
260	2'-1"	2'-2"	2'-4"	2'-6"	2'-8"	2'-10"	3'-1"	3'-3"	3'-6"	3'-9"	4'-0"	4'-3"	4'-5"	4'-8"	4'-11"	5'-2"	5'-4"	5'-7"	5'-10"	6'-0"	6'-3"	6'-5"	6'-8"	6'-10"	7'-1"	9'-5"
270	2'-3"	2'-4"	2'-6"	2'-8"	2'-11"	3'-1"	3'-4"	3'-7"	3'-9"	4'-0"	4'-3"	4'-6"	4'-9"	5'-0"	5'-3"	5'-6"	5'-9"	6'-0"	6'-3"	6'-6"	6'-9"	6'-11"	7'-2"	7'-5"	7'-7"	10'-2"
280	2'-5"	2'-6"	2'-9"	2'-11"	3'-1"	3'-4"	3'-7"	3'-10"	4'-1"	4'-4"	4'-7"	4'-11"	5'-2"	5'-5"	5'-8"	6'-0"	6'-3"	6'-6"	6'-9"	7'-0"	7'-3"	7'-6"	7'-9"	7'-11"	8'-2"	10'-11"
290	2'-7"	2'-9"	2'-11"	3'-1"	3'-4"	3'-7"	3'-10"	4'-1"	4'-4"	4'-8"	4'-11"	5'-3"	5'-6"	5'-10"	6'-1"	6'-5"	6'-8"	7'-0"	7'-3"	7'-6"	7'-9"	8'-0"	8'-3"	8'-6"	8'-9"	11'-8"
300	2'-9"	2'-11"	3'-1"	3'-4"	3'-7"	3'-10"	4'-1"	4'-5"	4'-8"	5'-0"	5'-3"	5'-7"	5'-11"	6'-3"	6'-6"	6'-10"	7'-2"	7'-5"	7'-9"	8'-0"	8'-4"	8'-7"	8'-10"	9'-1"	9'-5"	12'-6"
310	2'-11"	3'-1"	3'-4"	3'-7"	3'-10"	4'-1"	4'-4"	4'-8"	5'-0"	5'-4"	5'-8"	6'-0"	6'-4"	6'-8"	7'-0"	7'-4"	7'-8"	7'-11"	8'-3"	8'-7"	8'-10"	9'-2"	9'-5"	9'-9"	10'-0"	13'-5"
320	3'-1"	3'-4"	3'-6"	3'-9"	4'-1"	4'-4"	4'-8"	5'-0"	5'-4"	5'-8"	6'-0"	6'-5"	6'-9"	7'-1"	7'-5"	7'-9"	8'-2"	8'-6"	8'-10"	9'-2"	9'-5"	9'-9"	10'-1"	10'-5"	10'-8"	14'-3"
330	3'-4"	3'-6"	3'-9"	4'-0"	4'-4"	4'-8"	4'-11"	5'-4"	5'-8"	6'-0"	6'-5"	6'-9"	7'-2"	7'-6"	7'-11"	8'-3"	8'-8"	9'-0"	9'-4"	9'-9"	10'-1"	10'-5"	10'-9"	11'-0"	11'-4"	15'-2"
340	3'-6"	3'-9"	4'-0"	4'-3"	4'-7"	4'-11"	5'-3"	5'-8"	6'-0"	6'-5"	6'-9"	7'-2"	7'-7"	8'-0"	8'-5"	8'-9"	9'-2"	9'-7"	9'-11"	10'-4"	10'-8"	11'-0"	11'-5"	11'-9"	12'-1"	16'-1"
350	3'-9"	4'-0"	4'-3"	4'-6"	4'-10"	5'-3"	5'-7"	6'-0"	6'-4"	6'-9"	7'-2"	7'-8"	8'-1"	8'-6"	8'-11"	9'-4"	9'-9"	10'-2"	10'-6"	10'-11"	11'-4"	11'-8"	12'-1"	12'-5"	12'-9"	17'-1"

1098-05	GENERAL INFORMATION																		
Sheet of	ENGINEERING NOTES AND SIGNAGE																		
Rev: 03/26/2026	3-WAVE TIME & TENSION WITH TABLES																		


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Creep RS	60.00	27.50	4292.40	45.90

Conductor		795 AWG Covered AAC - Arbutus																										Eng. Use:															
Condition		Creep Sag & Tension																										MOT															
		Weight (Lb/Ft)												1.292	Rated Breaking Strength		15,600	Ruling Span (Feet)	190												ARBUTUS CREEP												Temp (°F)
Temp (°F)		0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	188																
Tension (lbs)		4,310	4,040	3,778	3,533	3,296	3,080	2,875	2,692	2,520	2,366	2,227	2,105	1,992	1,892	1,801	1,720	1,648	1,584	1,523	1,468	1,418	1,372	1,331	1,292	1,256	942																
% Ultimate		28%	26%	24%	23%	21%	20%	18%	17%	16%	15%	14%	13%	13%	12%	12%	11%	11%	10%	10%	9%	9%	9%	9%	8%	8%	6%																
Span	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec																
R.S. Span	3-Wave Time	3.23	3.34	3.46	3.58	3.7	3.83	3.96	4.09	4.22	4.35	4.48	4.6	4.72	4.84	4.95	5.06	5.16	5.27	5.36	5.46	5.55	5.63	5.72	5.8	6.7	3.13																
50	0.85	0.88	0.91	0.94	0.97	1.01	1.04	1.08	1.11	1.15	1.18	1.21	1.24	1.27	1.3	1.33	1.36	1.39	1.41	1.44	1.46	1.48	1.5	1.53	1.76	0.82																	
75	1.28	1.32	1.36	1.41	1.46	1.51	1.56	1.62	1.67	1.72	1.77	1.82	1.86	1.91	1.96	2	2.04	2.08	2.12	2.15	2.19	2.22	2.26	2.29	2.64	1.24																	
100	1.7	1.76	1.82	1.88	1.95	2.02	2.08	2.15	2.22	2.29	2.36	2.42	2.49	2.55	2.61	2.66	2.72	2.77	2.82	2.87	2.92	2.96	3.01	3.05	3.52	1.65																	
120	2.04	2.11	2.18	2.26	2.34	2.42	2.5	2.58	2.67	2.75	2.83	2.91	2.98	3.06	3.13	3.2	3.26	3.33	3.39	3.45	3.5	3.56	3.61	3.66	4.23	1.98																	
140	2.38	2.46	2.55	2.64	2.73	2.82	2.92	3.02	3.11	3.21	3.3	3.39	3.48	3.57	3.65	3.73	3.8	3.88	3.95	4.02	4.09	4.15	4.21	4.27	4.93	2.31																	
160	2.72	2.81	2.91	3.01	3.12	3.23	3.34	3.45	3.56	3.67	3.77	3.88	3.98	4.08	4.17	4.26	4.35	4.43	4.52	4.6	4.67	4.74	4.81	4.88	5.64	2.64																	
180	3.06	3.17	3.27	3.39	3.51	3.63	3.75	3.88	4	4.12	4.24	4.36	4.48	4.59	4.69	4.8	4.89	4.99	5.08	5.17	5.26	5.34	5.42	5.49	6.35	2.97																	
200	3.4	3.52	3.64	3.77	3.9	4.03	4.17	4.31	4.45	4.58	4.71	4.85	4.97	5.1	5.22	5.33	5.44	5.54	5.65	5.74	5.84	5.93	6.02	6.11	7.05	3.29																	
210	3.57	3.69	3.82	3.96	4.09	4.24	4.38	4.52	4.67	4.81	4.95	5.09	5.22	5.35	5.48	5.6	5.71	5.82	5.93	6.03	6.13	6.23	6.32	6.41	7.4	3.46																	
220	3.74	3.87	4	4.14	4.29	4.44	4.59	4.74	4.89	5.04	5.19	5.33	5.47	5.61	5.74	5.86	5.98	6.1	6.21	6.32	6.42	6.52	6.62	6.72	7.76	3.62																	
230	3.91	4.05	4.18	4.33	4.48	4.64	4.79	4.95	5.11	5.27	5.42	5.57	5.72	5.86	6	6.13	6.25	6.37	6.49	6.61	6.72	6.82	6.92	7.02	8.11	3.79																	
240	4.08	4.22	4.37	4.52	4.68	4.84	5	5.17	5.34	5.5	5.66	5.82	5.97	6.12	6.26	6.4	6.52	6.65	6.78	6.89	7.01	7.12	7.22	7.33	8.46	3.95																	
250	4.25	4.4	4.55	4.71	4.88	5.04	5.22	5.39	5.56	5.73	5.9	6.06	6.22	6.37	6.52	6.66	6.8	6.93	7.06	7.18	7.3	7.41	7.52	7.63	8.82	4.12																	
260	4.42	4.57	4.73	4.9	5.07	5.24	5.42	5.6	5.78	5.96	6.13	6.3	6.47	6.63	6.78	6.93	7.07	7.21	7.34	7.47	7.59	7.71	7.83	7.94	9.17	4.28																	
270	4.59	4.75	4.91	5.09	5.27	5.45	5.63	5.82	6	6.19	6.37	6.54	6.72	6.88	7.04	7.19	7.34	7.48	7.62	7.76	7.88	8.01	8.13	8.24	9.52	4.45																	
280	4.76	4.93	5.09	5.27	5.46	5.65	5.84	6.03	6.23	6.42	6.61	6.79	6.97	7.14	7.3	7.46	7.62	7.76	7.91	8.04	8.18	8.3	8.43	8.55	9.88	4.61																	
290	4.93	5.1	5.28	5.46	5.66	5.85	6.05	6.25	6.45	6.65	6.84	7.03	7.22	7.39	7.56	7.73	7.89	8.04	8.19	8.33	8.47	8.6	8.73	8.86	10.23	4.78																	
300	5.1	5.28	5.46	5.65	5.85	6.05	6.26	6.46	6.67	6.88	7.08	7.27	7.46	7.65	7.82	7.99	8.16	8.32	8.47	8.62	8.76	8.9	9.03	9.16	10.58	4.94																	
310	5.27	5.45	5.64	5.84	6.05	6.25	6.47	6.68	6.89	7.11	7.32	7.51	7.71	7.9	8.09	8.26	8.43	8.59	8.75	8.91	9.05	9.2	9.33	9.47	10.94	5.11																	
320	5.44	5.63	5.82	6.03	6.24	6.45	6.68	6.89	7.12	7.33	7.55	7.76	7.96	8.16	8.35	8.53	8.71	8.87	9.04	9.19	9.35	9.49	9.63	9.77	11.29	5.27																	
330	5.61	5.81	6	6.22	6.44	6.66	6.88	7.11	7.34	7.56	7.79	8	8.21	8.41	8.61	8.8	8.98	9.15	9.32	9.48	9.64	9.79	9.94	10.08	11.65	5.44																	
340	5.79	5.98	6.19	6.41	6.63	6.86	7.09	7.33	7.56	7.79	8.02	8.24	8.46	8.67	8.87	9.06	9.25	9.43	9.6	9.77	9.93	10.09	10.24	10.39	12	5.6																	
350	5.96	6.16	6.37	6.59	6.83	7.06	7.3	7.54	7.78	8.02	8.26	8.48	8.71	8.92	9.13	9.33	9.52	9.7	9.88	10.06	10.22	10.38	10.54	10.69	12.35	5.77																	

1098-05	GENERAL INFORMATION																
Sheet of	ENGINEERING NOTES AND SIGNAGE																
Rev: 03/26/2026	SAG & TENSION WITH TABLES																


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Initial RS	60.00	32.70	5098.10	54.50

Conductor	795 AWG Covered AAC - Arbutus											Weight (Lb/Ft)	1.292	Rated Breaking Strength	15,600	Ruling Span (Feet)	205		ARBUTUS INITIAL												Eng. Use: MOT Temp (°F)
	Condition	Initial Sag & Tension																													
Temp (°F)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	188					
Tension (lbs)	5,217	5,012	4,815	4,614	4,411	4,210	4,013	3,818	3,627	3,440	3,262	3,088	2,926	2,767	2,624	2,488	2,362	2,244	2,139	2,040	1,950	1,870	1,795	1,726	1,662	1,149					
% Ultimate	33%	32%	31%	30%	28%	27%	26%	24%	23%	22%	21%	20%	19%	18%	17%	16%	15%	14%	14%	13%	12%	12%	12%	11%	11%	7%					
Span (Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)					
Ruling Span Sag	1'-1"	1'-1"	1'-2"	1'-2"	1'-3"	1'-4"	1'-4"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-11"	2'-0"	2'-1"	2'-3"	2'-4"	2'-5"	2'-7"	2'-8"	2'-10"	2'-11"	3'-1"	3'-2"	3'-4"	4'-9"					
50	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-3"					
75	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-4"	0'-4"	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-8"					
100	0'-3"	0'-3"	0'-3"	0'-3"	0'-4"	0'-4"	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-6"	0'-6"	0'-6"	0'-7"	0'-7"	0'-7"	0'-8"	0'-8"	0'-8"	0'-8"	0'-9"	1'-2"					
120	0'-4"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-6"	0'-6"	0'-6"	0'-7"	0'-7"	0'-7"	0'-8"	0'-8"	0'-9"	0'-9"	0'-10"	0'-10"	0'-11"	0'-11"	1'-0"	1'-0"	1'-1"	1'-1"	1'-2"	1'-8"					
140	0'-6"	0'-6"	0'-6"	0'-7"	0'-7"	0'-7"	0'-8"	0'-8"	0'-9"	0'-9"	0'-9"	0'-10"	0'-11"	0'-11"	1'-0"	1'-0"	1'-1"	1'-2"	1'-2"	1'-3"	1'-4"	1'-4"	1'-5"	1'-6"	1'-6"	2'-3"					
160	0'-8"	0'-8"	0'-8"	0'-9"	0'-9"	0'-9"	0'-10"	0'-11"	0'-11"	1'-0"	1'-0"	1'-1"	1'-2"	1'-3"	1'-3"	1'-4"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-9"	1'-10"	1'-11"	2'-0"	2'-11"					
180	0'-10"	0'-10"	0'-11"	0'-11"	1'-0"	1'-0"	1'-1"	1'-1"	1'-2"	1'-3"	1'-4"	1'-4"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-11"	2'-0"	2'-1"	2'-2"	2'-3"	2'-4"	2'-6"	2'-7"	3'-8"					
200	1'-0"	1'-0"	1'-1"	1'-2"	1'-2"	1'-3"	1'-4"	1'-4"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-11"	2'-0"	2'-1"	2'-3"	2'-4"	2'-5"	2'-7"	2'-8"	2'-10"	2'-11"	3'-0"	3'-2"	4'-7"					
210	1'-1"	1'-2"	1'-2"	1'-3"	1'-4"	1'-4"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	2'-0"	2'-1"	2'-2"	2'-4"	2'-5"	2'-7"	2'-8"	2'-10"	3'-0"	3'-1"	3'-3"	3'-4"	3'-6"	5'-0"					
220	1'-3"	1'-3"	1'-4"	1'-4"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	2'-1"	2'-2"	2'-3"	2'-5"	2'-6"	2'-8"	2'-10"	3'-0"	3'-1"	3'-3"	3'-5"	3'-6"	3'-8"	3'-10"	5'-6"					
230	1'-4"	1'-5"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	2'-0"	2'-1"	2'-3"	2'-4"	2'-6"	2'-8"	2'-9"	2'-11"	3'-1"	3'-3"	3'-5"	3'-7"	3'-8"	3'-10"	4'-0"	4'-2"	6'-0"					
240	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-9"	1'-11"	2'-0"	2'-1"	2'-2"	2'-4"	2'-5"	2'-7"	2'-9"	2'-10"	3'-0"	3'-2"	3'-4"	3'-6"	3'-8"	3'-10"	4'-0"	4'-2"	4'-4"	4'-6"	6'-7"					
250	1'-7"	1'-8"	1'-8"	1'-9"	1'-10"	1'-11"	2'-0"	2'-2"	2'-3"	2'-5"	2'-6"	2'-8"	2'-9"	2'-11"	3'-1"	3'-3"	3'-6"	3'-8"	3'-10"	4'-0"	4'-2"	4'-4"	4'-7"	4'-9"	4'-11"	7'-1"					
260	1'-8"	1'-9"	1'-10"	1'-11"	2'-0"	2'-1"	2'-3"	2'-4"	2'-5"	2'-7"	2'-9"	2'-10"	3'-0"	3'-2"	3'-5"	3'-7"	3'-9"	3'-11"	4'-2"	4'-4"	4'-6"	4'-9"	4'-11"	5'-2"	5'-4"	7'-8"					
270	1'-10"	1'-11"	2'-0"	2'-1"	2'-2"	2'-3"	2'-5"	2'-6"	2'-8"	2'-9"	2'-11"	3'-1"	3'-3"	3'-5"	3'-8"	3'-10"	4'-1"	4'-3"	4'-6"	4'-8"	4'-11"	5'-1"	5'-4"	5'-6"	5'-9"	8'-4"					
280	2'-0"	2'-1"	2'-2"	2'-3"	2'-4"	2'-5"	2'-7"	2'-8"	2'-10"	3'-0"	3'-2"	3'-4"	3'-6"	3'-9"	3'-11"	4'-2"	4'-4"	4'-7"	4'-10"	5'-0"	5'-3"	5'-6"	5'-9"	6'-0"	6'-2"	8'-11"					
290	2'-1"	2'-2"	2'-3"	2'-5"	2'-6"	2'-7"	2'-9"	2'-11"	3'-0"	3'-2"	3'-5"	3'-7"	3'-9"	4'-0"	4'-2"	4'-5"	4'-8"	4'-11"	5'-2"	5'-5"	5'-8"	5'-11"	6'-2"	6'-5"	6'-8"	9'-7"					
300	2'-3"	2'-4"	2'-5"	2'-7"	2'-8"	2'-10"	2'-11"	3'-1"	3'-3"	3'-5"	3'-7"	3'-10"	4'-0"	4'-3"	4'-6"	4'-9"	5'-0"	5'-3"	5'-6"	5'-9"	6'-1"	6'-4"	6'-7"	6'-10"	7'-1"	10'-3"					
310	2'-5"	2'-6"	2'-7"	2'-9"	2'-10"	3'-0"	3'-2"	3'-4"	3'-6"	3'-8"	3'-10"	4'-1"	4'-4"	4'-7"	4'-10"	5'-1"	5'-4"	5'-7"	5'-11"	6'-2"	6'-6"	6'-9"	7'-0"	7'-4"	7'-7"	11'-0"					
320	2'-7"	2'-8"	2'-9"	2'-11"	3'-0"	3'-2"	3'-4"	3'-6"	3'-8"	3'-11"	4'-1"	4'-4"	4'-7"	4'-10"	5'-1"	5'-5"	5'-8"	6'-0"	6'-3"	6'-7"	6'-11"	7'-2"	7'-6"	7'-9"	8'-1"	11'-8"					
330	2'-9"	2'-10"	3'-0"	3'-1"	3'-3"	3'-5"	3'-7"	3'-9"	3'-11"	4'-2"	4'-5"	4'-7"	4'-11"	5'-2"	5'-5"	5'-9"	6'-1"	6'-4"	6'-8"	7'-0"	7'-4"	7'-8"	8'-0"	8'-3"	8'-7"	12'-5"					
340	2'-11"	3'-0"	3'-2"	3'-3"	3'-5"	3'-7"	3'-9"	4'-0"	4'-2"	4'-5"	4'-8"	4'-11"	5'-2"	5'-6"	5'-9"	6'-1"	6'-5"	6'-9"	7'-1"	7'-5"	7'-9"	8'-1"	8'-5"	8'-9"	9'-1"	13'-2"					
350	3'-1"	3'-2"	3'-4"	3'-6"	3'-8"	3'-10"	4'-0"	4'-3"	4'-5"	4'-8"	4'-11"	5'-2"	5'-6"	5'-10"	6'-1"	6'-6"	6'-10"	7'-2"	7'-6"	7'-10"	8'-3"	8'-7"	8'-11"	9'-4"	9'-8"	14'-0"					

1098-05	GENERAL INFORMATION																	
Sheet of	ENGINEERING NOTES AND SIGNAGE																	
Rev: 03/26/2026	3-WAVE TIME & TENSION WITH TABLES																	


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Initial RS	60.00	32.70	5098.10	54.50

Conductor		795 AWG Covered AAC - Arbutus																	Weight (Lb/Ft)	1.292	Rated Breaking Strength	15,600	Ruling Span (Feet)	205		ARBUS INITIAL												Eng. Use: MOT Temp (°F)
Condition	Initial Sag & Tension	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80						85	90	95	100	105	110	115	120							
Temp (°F)		0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	188											
Tension (lbs)		5,217	5,012	4,815	4,614	4,411	4,210	4,013	3,818	3,627	3,440	3,262	3,088	2,926	2,767	2,624	2,488	2,362	2,244	2,139	2,040	1,950	1,870	1,795	1,726	1,662	1,149											
% Ultimate		33%	32%	31%	30%	28%	27%	26%	24%	23%	22%	21%	20%	19%	18%	17%	16%	15%	14%	14%	13%	12%	12%	12%	11%	11%	7%											
Span	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec											
R.S. Span		3.13	3.2	3.26	3.34	3.42	3.5	3.59	3.68	3.78	3.88	3.99	4.1	4.21	4.33	4.44	4.56	4.68	4.79	4.91	5.02	5.13	5.23	5.34	5.44	6.54	3.07											
3-Wave Time		0.76	0.78	0.8	0.81	0.83	0.85	0.88	0.9	0.92	0.95	0.97	1	1.03	1.06	1.08	1.11	1.14	1.17	1.2	1.22	1.25	1.28	1.3	1.33	1.59	0.75											
75		1.15	1.17	1.19	1.22	1.25	1.28	1.31	1.35	1.38	1.42	1.46	1.5	1.54	1.58	1.63	1.67	1.71	1.75	1.8	1.84	1.88	1.91	1.95	1.99	2.39	1.12											
100		1.53	1.56	1.59	1.63	1.67	1.71	1.75	1.8	1.84	1.89	1.95	2	2.06	2.11	2.17	2.23	2.28	2.34	2.39	2.45	2.5	2.55	2.6	2.65	3.19	1.5											
120		1.83	1.87	1.91	1.95	2	2.05	2.1	2.15	2.21	2.27	2.34	2.4	2.47	2.53	2.6	2.67	2.74	2.81	2.87	2.94	3	3.06	3.12	3.18	3.83	1.8											
140		2.14	2.18	2.23	2.28	2.33	2.39	2.45	2.51	2.58	2.65	2.72	2.8	2.88	2.96	3.04	3.12	3.2	3.27	3.35	3.43	3.5	3.57	3.64	3.71	4.47	2.1											
160		2.44	2.49	2.55	2.61	2.67	2.73	2.8	2.87	2.95	3.03	3.11	3.2	3.29	3.38	3.47	3.56	3.65	3.74	3.83	3.92	4	4.08	4.17	4.24	5.1	2.4											
180		2.75	2.81	2.87	2.93	3	3.07	3.15	3.23	3.32	3.41	3.5	3.6	3.7	3.8	3.9	4.01	4.11	4.21	4.31	4.41	4.5	4.6	4.69	4.78	5.74	2.69											
200		3.06	3.12	3.18	3.26	3.33	3.41	3.5	3.59	3.69	3.79	3.89	4	4.11	4.22	4.34	4.45	4.57	4.68	4.79	4.9	5	5.11	5.21	5.31	6.38	2.99											
210		3.21	3.27	3.34	3.42	3.5	3.59	3.68	3.77	3.87	3.98	4.09	4.2	4.32	4.43	4.55	4.67	4.79	4.91	5.03	5.14	5.25	5.36	5.47	5.57	6.7	3.14											
220		3.36	3.43	3.5	3.58	3.67	3.76	3.85	3.95	4.06	4.17	4.28	4.4	4.52	4.65	4.77	4.9	5.02	5.14	5.27	5.39	5.5	5.62	5.73	5.84	7.02	3.29											
230		3.51	3.58	3.66	3.75	3.83	3.93	4.03	4.13	4.24	4.36	4.48	4.6	4.73	4.86	4.99	5.12	5.25	5.38	5.51	5.63	5.75	5.87	5.99	6.1	7.34	3.44											
240		3.67	3.74	3.82	3.91	4	4.1	4.2	4.31	4.43	4.54	4.67	4.8	4.93	5.07	5.2	5.34	5.48	5.61	5.75	5.88	6	6.13	6.25	6.37	7.66	3.59											
250		3.82	3.9	3.98	4.07	4.17	4.27	4.38	4.49	4.61	4.73	4.87	5	5.14	5.28	5.42	5.56	5.71	5.85	5.99	6.12	6.25	6.38	6.51	6.63	7.98	3.74											
260		3.97	4.06	4.14	4.24	4.34	4.45	4.56	4.68	4.8	4.93	5.06	5.2	5.35	5.5	5.64	5.79	5.94	6.09	6.23	6.37	6.51	6.65	6.78	6.9	8.3	3.9											
270		4.13	4.21	4.3	4.4	4.51	4.62	4.73	4.86	4.98	5.12	5.26	5.4	5.56	5.71	5.86	6.02	6.17	6.32	6.47	6.62	6.76	6.9	7.04	7.17	8.62	4.05											
280		4.28	4.37	4.46	4.57	4.67	4.79	4.91	5.04	5.17	5.31	5.45	5.6	5.76	5.92	6.08	6.24	6.4	6.56	6.71	6.86	7.01	7.16	7.3	7.43	8.94	4.2											
290		4.43	4.53	4.62	4.73	4.84	4.96	5.08	5.22	5.35	5.5	5.65	5.81	5.97	6.13	6.3	6.46	6.63	6.79	6.95	7.11	7.26	7.41	7.56	7.7	9.26	4.35											
300		4.59	4.68	4.78	4.89	5.01	5.13	5.26	5.4	5.54	5.69	5.84	6.01	6.18	6.34	6.51	6.69	6.85	7.02	7.19	7.36	7.51	7.67	7.82	7.97	9.58	4.5											
310		4.74	4.84	4.94	5.05	5.17	5.3	5.43	5.58	5.72	5.88	6.04	6.21	6.38	6.55	6.73	6.91	7.08	7.26	7.43	7.6	7.76	7.92	8.08	8.23	9.9	4.65											
320		4.89	4.99	5.1	5.22	5.34	5.47	5.61	5.76	5.91	6.07	6.23	6.41	6.59	6.77	6.95	7.13	7.31	7.49	7.67	7.85	8.01	8.18	8.34	8.5	10.22	4.8											
330		5.04	5.15	5.26	5.38	5.51	5.64	5.78	5.94	6.09	6.26	6.43	6.61	6.79	6.98	7.16	7.36	7.54	7.73	7.91	8.09	8.26	8.44	8.6	8.76	10.54	4.95											
340		5.2	5.31	5.42	5.54	5.67	5.81	5.96	6.12	6.28	6.45	6.62	6.81	7	7.19	7.38	7.58	7.77	7.96	8.15	8.34	8.51	8.69	8.86	9.03	10.86	5.1											
350		5.35	5.46	5.58	5.71	5.84	5.98	6.14	6.3	6.46	6.64	6.82	7.01	7.2	7.4	7.6	7.8	8	8.2	8.39	8.58	8.76	8.95	9.12	9.29	11.18	5.25											

1098-05	GENERAL INFORMATION																		
Sheet of	ENGINEERING NOTES AND SIGNAGE																		
Rev: 03/26/2026	SAG & TENSION WITH TABLES																		


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Creep RS	60.00	27.50	4297.70	45.90

Conductor	795 AWG Covered AAC - Arbutus																								Eng. Use: MOT	
	Creep Sag & Tension																									
Condition	Creep Sag & Tension																								Temp (°F)	
Temp (°F)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115		120
Tension (lbs)	4,192	3,938	3,693	3,456	3,239	3,035	2,847	2,676	2,521	2,379	2,249	2,135	2,029	1,936	1,851	1,775	1,704	1,642	1,584	1,531	1,482	1,437	1,395	1,357	1,321	1,001
% Ultimate	27%	25%	24%	22%	21%	19%	18%	17%	16%	15%	14%	14%	13%	12%	12%	11%	11%	11%	10%	10%	9%	9%	9%	9%	8%	6%
Span (Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)
Ruling Span Sag	1'-4"	1'-5"	1'-6"	1'-7"	1'-8"	1'-10"	1'-11"	2'-1"	2'-2"	2'-4"	2'-5"	2'-7"	2'-9"	2'-10"	3'-0"	3'-1"	3'-3"	3'-4"	3'-6"	3'-7"	3'-9"	3'-10"	3'-11"	4'-1"	4'-2"	5'-6"
50	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-4"
75	0'-2"	0'-2"	0'-2"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-4"	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-6"	0'-6"	0'-6"	0'-6"	0'-6"	0'-6"	0'-6"	0'-7"
100	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-5"	0'-6"	0'-6"	0'-7"	0'-7"	0'-7"	0'-7"	0'-8"	0'-8"	0'-9"	0'-9"	0'-10"	0'-10"	0'-10"	0'-11"	0'-11"	0'-11"	0'-11"	0'-11"	1'-4"
120	0'-5"	0'-6"	0'-6"	0'-6"	0'-7"	0'-7"	0'-8"	0'-8"	0'-9"	0'-9"	0'-10"	0'-11"	0'-11"	1'-0"	1'-0"	1'-1"	1'-1"	1'-2"	1'-2"	1'-3"	1'-3"	1'-4"	1'-4"	1'-5"	1'-5"	1'-11"
140	0'-7"	0'-8"	0'-8"	0'-9"	0'-9"	0'-10"	0'-11"	1'-0"	1'-0"	1'-1"	1'-2"	1'-2"	1'-3"	1'-4"	1'-5"	1'-5"	1'-6"	1'-7"	1'-7"	1'-8"	1'-9"	1'-9"	1'-10"	1'-11"	1'-11"	2'-7"
160	0'-10"	0'-10"	0'-11"	1'-0"	1'-0"	1'-1"	1'-2"	1'-3"	1'-4"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	2'-0"	2'-0"	2'-1"	2'-2"	2'-3"	2'-4"	2'-5"	2'-6"	2'-6"	3'-4"
180	1'-0"	1'-1"	1'-2"	1'-3"	1'-4"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-11"	2'-0"	2'-1"	2'-2"	2'-3"	2'-5"	2'-6"	2'-7"	2'-8"	2'-9"	2'-10"	2'-11"	3'-0"	3'-1"	3'-3"	4'-3"
200	1'-3"	1'-4"	1'-5"	1'-6"	1'-7"	1'-9"	1'-10"	1'-11"	2'-1"	2'-2"	2'-4"	2'-5"	2'-7"	2'-8"	2'-10"	2'-11"	3'-1"	3'-2"	3'-4"	3'-5"	3'-6"	3'-8"	3'-9"	3'-10"	4'-0"	5'-3"
210	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-11"	2'-0"	2'-2"	2'-3"	2'-5"	2'-7"	2'-8"	2'-10"	3'-0"	3'-1"	3'-3"	3'-5"	3'-6"	3'-8"	3'-9"	3'-11"	4'-0"	4'-2"	4'-3"	4'-4"	5'-9"
220	1'-6"	1'-7"	1'-9"	1'-10"	1'-11"	2'-1"	2'-3"	2'-4"	2'-6"	2'-8"	2'-10"	3'-0"	3'-1"	3'-3"	3'-5"	3'-7"	3'-9"	3'-10"	4'-0"	4'-2"	4'-3"	4'-5"	4'-6"	4'-8"	4'-9"	6'-4"
230	1'-8"	1'-9"	1'-10"	2'-0"	2'-2"	2'-3"	2'-5"	2'-7"	2'-9"	2'-11"	3'-1"	3'-3"	3'-5"	3'-7"	3'-9"	3'-11"	4'-1"	4'-3"	4'-4"	4'-6"	4'-8"	4'-10"	5'-0"	5'-1"	5'-3"	6'-11"
240	1'-10"	1'-11"	2'-0"	2'-2"	2'-4"	2'-6"	2'-8"	2'-10"	3'-0"	3'-2"	3'-4"	3'-6"	3'-9"	3'-11"	4'-1"	4'-3"	4'-5"	4'-7"	4'-9"	4'-11"	5'-1"	5'-3"	5'-5"	5'-7"	5'-9"	7'-6"
250	1'-11"	2'-1"	2'-3"	2'-4"	2'-6"	2'-8"	2'-10"	3'-1"	3'-3"	3'-5"	3'-8"	3'-10"	4'-0"	4'-3"	4'-5"	4'-7"	4'-10"	5'-0"	5'-2"	5'-4"	5'-6"	5'-8"	5'-10"	6'-0"	6'-2"	8'-2"
260	2'-1"	2'-3"	2'-5"	2'-7"	2'-9"	2'-11"	3'-1"	3'-4"	3'-6"	3'-9"	3'-11"	4'-2"	4'-4"	4'-7"	4'-9"	5'-0"	5'-2"	5'-5"	5'-7"	5'-10"	6'-0"	6'-2"	6'-4"	6'-6"	6'-8"	8'-10"
270	2'-3"	2'-5"	2'-7"	2'-9"	2'-11"	3'-2"	3'-4"	3'-7"	3'-9"	4'-0"	4'-3"	4'-6"	4'-9"	4'-11"	5'-2"	5'-5"	5'-7"	5'-10"	6'-0"	6'-3"	6'-5"	6'-8"	6'-10"	7'-0"	7'-3"	9'-6"
280	2'-5"	2'-7"	2'-9"	3'-0"	3'-2"	3'-5"	3'-7"	3'-10"	4'-1"	4'-4"	4'-7"	4'-10"	5'-1"	5'-4"	5'-7"	5'-9"	6'-0"	6'-3"	6'-6"	6'-9"	6'-11"	7'-2"	7'-4"	7'-7"	7'-9"	10'-3"
290	2'-8"	2'-10"	3'-0"	3'-2"	3'-5"	3'-8"	3'-10"	4'-1"	4'-5"	4'-8"	4'-11"	5'-2"	5'-5"	5'-8"	5'-11"	6'-3"	6'-6"	6'-9"	6'-11"	7'-2"	7'-5"	7'-8"	7'-11"	8'-1"	8'-4"	11'-0"
300	2'-10"	3'-0"	3'-2"	3'-5"	3'-8"	3'-11"	4'-2"	4'-5"	4'-8"	5'-0"	5'-3"	5'-6"	5'-10"	6'-1"	6'-4"	6'-8"	6'-11"	7'-2"	7'-5"	7'-9"	7'-11"	8'-3"	8'-5"	8'-8"	8'-11"	11'-9"
310	3'-0"	3'-2"	3'-5"	3'-8"	3'-11"	4'-2"	4'-5"	4'-9"	5'-0"	5'-3"	5'-7"	5'-11"	6'-2"	6'-6"	6'-10"	7'-1"	7'-5"	7'-8"	7'-11"	8'-3"	8'-6"	8'-9"	9'-0"	9'-3"	9'-6"	12'-7"
320	3'-2"	3'-5"	3'-8"	3'-11"	4'-2"	4'-5"	4'-9"	5'-0"	5'-4"	5'-8"	6'-0"	6'-3"	6'-7"	6'-11"	7'-3"	7'-7"	7'-10"	8'-2"	8'-6"	8'-9"	9'-1"	9'-4"	9'-7"	9'-11"	10'-2"	13'-5"
330	3'-5"	3'-8"	3'-10"	4'-1"	4'-5"	4'-8"	5'-0"	5'-4"	5'-8"	6'-0"	6'-4"	6'-8"	7'-0"	7'-4"	7'-9"	8'-0"	8'-4"	8'-8"	9'-0"	9'-4"	9'-8"	9'-11"	10'-3"	10'-6"	10'-10"	14'-3"
340	3'-7"	3'-10"	4'-1"	4'-5"	4'-8"	5'-0"	5'-4"	5'-8"	6'-0"	6'-4"	6'-9"	7'-1"	7'-6"	7'-10"	8'-2"	8'-6"	8'-11"	9'-3"	9'-7"	9'-11"	10'-3"	10'-7"	10'-10"	11'-2"	11'-6"	15'-2"
350	3'-10"	4'-1"	4'-4"	4'-8"	5'-0"	5'-3"	5'-8"	6'-0"	6'-4"	6'-9"	7'-2"	7'-6"	7'-11"	8'-3"	8'-8"	9'-1"	9'-5"	9'-9"	10'-2"	10'-6"	10'-10"	11'-2"	11'-6"	11'-10"	12'-2"	16'-1"

1098-05	GENERAL INFORMATION																		
Sheet of	ENGINEERING NOTES AND SIGNAGE																		
Rev: 03/26/2026	3-WAVE TIME & TENSION WITH TABLES																		


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Creep RS	60.00	27.50	4297.70	45.90

Conductor		795 AWG Covered AAC - Arbutus																									Eng. Use:		
Condition		Creep Sag & Tension																									MOT		
		Weight (Lb/Ft)										1.292	Rated Breaking Strength		15,600	Ruling Span (Feet)	205		ARBUSUS CREEP										Temp (°F)
Temp (°F)		0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	188		
Tension (lbs)		4,192	3,938	3,693	3,456	3,239	3,035	2,847	2,676	2,521	2,379	2,249	2,135	2,029	1,936	1,851	1,775	1,704	1,642	1,584	1,531	1,482	1,437	1,395	1,357	1,321	1,001		
% Ultimate		27%	25%	24%	22%	21%	19%	18%	17%	16%	15%	14%	14%	13%	12%	12%	11%	11%	11%	10%	10%	9%	9%	9%	9%	8%	6%		
Span	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec		
R.S. Span	3-Wave Time	3.53	3.65	3.77	3.9	4.02	4.15	4.29	4.42	4.55	4.68	4.8	4.92	5.04	5.15	5.26	5.37	5.47	5.57	5.67	5.76	5.85	5.94	6.02	6.1	7.01	3.42		
50	0.86	0.89	0.92	0.95	0.98	1.01	1.05	1.08	1.11	1.14	1.17	1.2	1.23	1.26	1.28	1.31	1.33	1.36	1.38	1.4	1.43	1.45	1.47	1.49	1.71	0.84			
75	1.29	1.33	1.38	1.43	1.47	1.52	1.57	1.62	1.66	1.71	1.76	1.8	1.84	1.89	1.93	1.96	2	2.04	2.07	2.11	2.14	2.17	2.2	2.23	2.56	1.25			
100	1.72	1.78	1.84	1.9	1.96	2.03	2.09	2.15	2.22	2.28	2.34	2.4	2.46	2.51	2.57	2.62	2.67	2.72	2.76	2.81	2.85	2.9	2.94	2.98	3.42	1.67			
120	2.07	2.14	2.21	2.28	2.36	2.43	2.51	2.58	2.66	2.74	2.81	2.88	2.95	3.02	3.08	3.14	3.2	3.26	3.32	3.37	3.42	3.47	3.52	3.57	4.1	2			
140	2.41	2.49	2.58	2.66	2.75	2.84	2.93	3.02	3.1	3.19	3.28	3.36	3.44	3.52	3.59	3.67	3.74	3.8	3.87	3.93	3.99	4.05	4.11	4.17	4.79	2.34			
160	2.76	2.85	2.94	3.04	3.14	3.24	3.34	3.45	3.55	3.65	3.75	3.84	3.93	4.02	4.11	4.19	4.27	4.35	4.42	4.5	4.57	4.63	4.7	4.76	5.47	2.67			
180	3.1	3.2	3.31	3.42	3.53	3.65	3.76	3.88	3.99	4.11	4.21	4.32	4.42	4.52	4.62	4.72	4.8	4.89	4.98	5.06	5.14	5.21	5.29	5.36	6.15	3.01			
200	3.45	3.56	3.68	3.8	3.93	4.05	4.18	4.31	4.43	4.56	4.68	4.8	4.92	5.03	5.13	5.24	5.34	5.44	5.53	5.62	5.71	5.79	5.87	5.95	6.84	3.34			
210	3.62	3.74	3.86	3.99	4.12	4.26	4.39	4.52	4.66	4.79	4.92	5.04	5.16	5.28	5.39	5.5	5.61	5.71	5.81	5.9	5.99	6.08	6.17	6.25	7.18	3.51			
220	3.79	3.92	4.05	4.18	4.32	4.46	4.6	4.74	4.88	5.02	5.15	5.28	5.41	5.53	5.65	5.76	5.87	5.98	6.08	6.18	6.28	6.37	6.46	6.55	7.52	3.67			
230	3.96	4.09	4.23	4.37	4.52	4.66	4.81	4.95	5.1	5.25	5.38	5.52	5.65	5.78	5.91	6.03	6.14	6.25	6.36	6.46	6.56	6.66	6.76	6.85	7.86	3.84			
240	4.14	4.27	4.42	4.56	4.71	4.86	5.02	5.17	5.32	5.47	5.62	5.76	5.9	6.03	6.16	6.29	6.41	6.52	6.64	6.74	6.85	6.95	7.05	7.14	8.21	4.01			
250	4.31	4.45	4.6	4.75	4.91	5.07	5.23	5.38	5.54	5.7	5.85	6	6.15	6.28	6.42	6.55	6.67	6.8	6.91	7.03	7.13	7.24	7.34	7.44	8.55	4.18			
260	4.49	4.63	4.79	4.95	5.11	5.28	5.44	5.61	5.77	5.93	6.09	6.25	6.4	6.54	6.68	6.82	6.95	7.07	7.19	7.31	7.43	7.53	7.64	7.74	8.89	4.34			
270	4.66	4.81	4.97	5.14	5.31	5.48	5.65	5.82	5.99	6.16	6.33	6.49	6.64	6.79	6.94	7.08	7.21	7.34	7.47	7.59	7.71	7.82	7.93	8.04	9.24	4.51			
280	4.83	4.99	5.15	5.33	5.5	5.68	5.86	6.04	6.21	6.39	6.56	6.73	6.89	7.05	7.2	7.34	7.48	7.61	7.75	7.87	8	8.11	8.23	8.34	9.58	4.68			
290	5	5.17	5.34	5.52	5.7	5.89	6.07	6.26	6.44	6.62	6.79	6.97	7.13	7.3	7.45	7.6	7.75	7.89	8.02	8.15	8.28	8.4	8.52	8.64	9.92	4.85			
300	5.18	5.35	5.52	5.71	5.9	6.09	6.28	6.47	6.66	6.85	7.03	7.21	7.38	7.55	7.71	7.86	8.01	8.16	8.3	8.44	8.57	8.69	8.82	8.94	10.27	5.01			
310	5.35	5.53	5.71	5.9	6.09	6.29	6.49	6.69	6.88	7.08	7.26	7.45	7.63	7.8	7.97	8.13	8.28	8.43	8.58	8.72	8.86	8.98	9.11	9.23	10.61	5.18			
320	5.52	5.7	5.89	6.09	6.29	6.49	6.7	6.9	7.1	7.3	7.5	7.69	7.87	8.05	8.22	8.39	8.55	8.7	8.86	9	9.14	9.27	9.41	9.53	10.95	5.35			
330	5.7	5.88	6.07	6.28	6.49	6.7	6.91	7.12	7.32	7.53	7.73	7.93	8.12	8.3	8.48	8.65	8.82	8.98	9.13	9.28	9.43	9.56	9.7	9.83	11.29	5.51			
340	5.87	6.06	6.26	6.47	6.68	6.9	7.12	7.33	7.55	7.76	7.97	8.17	8.37	8.56	8.74	8.91	9.08	9.25	9.41	9.56	9.71	9.85	9.99	10.13	11.64	5.68			
350	6.04	6.24	6.44	6.66	6.88	7.1	7.33	7.55	7.77	7.99	8.2	8.41	8.61	8.81	9	9.18	9.35	9.52	9.69	9.84	10	10.14	10.29	10.43	11.98	5.85			

1098-05	GENERAL INFORMATION															
Sheet of	ENGINEERING NOTES AND SIGNAGE															
Rev: 03/26/2026	SAG & TENSION WITH TABLES															


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Initial RS	60.00	32.70	5098.40	54.50

Conductor		Weight (Lb/Ft)															1.292	Rated Breaking Strength	15,600	Ruling Span (Feet)	220												ARBUTUS INITIAL												Eng. Use: MOT Temp (°F)
Condition		Initial Sag & Tension																			220												ARBUTUS INITIAL												
Temp (°F)		0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	188																		
Tension (lbs)		5,142	4,946	4,742	4,547	4,348	4,158	3,966	3,776	3,591	3,415	3,243	3,079	2,925	2,777	2,640	2,511	2,391	2,284	2,182	2,090	2,004	1,924	1,852	1,785	1,725	1,214																		
% Ultimate		33%	32%	30%	29%	28%	27%	25%	24%	23%	22%	21%	20%	19%	18%	17%	16%	15%	15%	14%	13%	13%	12%	12%	11%	11%	8%																		
Span	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)																		
Ruling Span Sag		1'-3"	1'-3"	1'-4"	1'-5"	1'-6"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	2'-1"	2'-2"	2'-3"	2'-5"	2'-6"	2'-8"	2'-9"	2'-11"	3'-0"	3'-2"	3'-3"	3'-5"	3'-7"	3'-8"	5'-3"																		
50	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-3"																		
75	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-4"	0'-4"	0'-4"	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-5"	0'-7"																		
100	0'-3"	0'-3"	0'-3"	0'-3"	0'-4"	0'-4"	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-5"	0'-6"	0'-6"	0'-6"	0'-7"	0'-7"	0'-7"	0'-7"	0'-7"	0'-8"	0'-8"	0'-8"	0'-8"	0'-9"	1'-1"																		
120	0'-4"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-6"	0'-6"	0'-6"	0'-7"	0'-7"	0'-7"	0'-8"	0'-8"	0'-9"	0'-9"	0'-9"	0'-10"	0'-10"	0'-11"	0'-11"	1'-0"	1'-0"	1'-1"	1'-1"	1'-7"	1'-7"																		
140	0'-6"	0'-6"	0'-6"	0'-7"	0'-7"	0'-7"	0'-8"	0'-8"	0'-9"	0'-9"	0'-9"	0'-10"	0'-11"	0'-11"	1'-0"	1'-0"	1'-1"	1'-1"	1'-2"	1'-3"	1'-3"	1'-4"	1'-5"	1'-5"	1'-6"	2'-1"	2'-1"																		
160	0'-8"	0'-8"	0'-9"	0'-9"	0'-9"	0'-10"	0'-10"	0'-11"	0'-11"	1'-0"	1'-0"	1'-1"	1'-2"	1'-3"	1'-3"	1'-4"	1'-5"	1'-6"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	1'-11"	2'-9"	2'-9"																		
180	0'-10"	0'-10"	0'-11"	0'-11"	1'-0"	1'-0"	1'-1"	1'-1"	1'-2"	1'-3"	1'-4"	1'-5"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	2'-0"	2'-1"	2'-2"	2'-3"	2'-4"	2'-6"	3'-6"	3'-6"																		
200	1'-0"	1'-1"	1'-1"	1'-2"	1'-2"	1'-3"	1'-4"	1'-5"	1'-6"	1'-6"	1'-7"	1'-8"	1'-9"	1'-11"	2'-0"	2'-1"	2'-2"	2'-3"	2'-5"	2'-6"	2'-7"	2'-9"	2'-10"	2'-11"	3'-0"	4'-4"	4'-4"																		
210	1'-1"	1'-2"	1'-3"	1'-3"	1'-4"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	2'-0"	2'-1"	2'-2"	2'-4"	2'-5"	2'-6"	2'-8"	2'-9"	2'-11"	3'-0"	3'-1"	3'-3"	3'-4"	3'-4"	4'-9"	4'-9"																		
220	1'-3"	1'-3"	1'-4"	1'-5"	1'-6"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	2'-1"	2'-2"	2'-3"	2'-5"	2'-6"	2'-8"	2'-9"	2'-11"	3'-0"	3'-2"	3'-3"	3'-5"	3'-7"	3'-8"	5'-3"	5'-3"																		
230	1'-4"	1'-5"	1'-6"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	2'-0"	2'-2"	2'-3"	2'-4"	2'-6"	2'-7"	2'-9"	2'-11"	3'-0"	3'-2"	3'-4"	3'-5"	3'-7"	3'-9"	3'-11"	4'-0"	5'-8"	5'-8"																		
240	1'-6"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	2'-0"	2'-1"	2'-3"	2'-4"	2'-5"	2'-7"	2'-9"	2'-10"	3'-0"	3'-2"	3'-4"	3'-5"	3'-7"	3'-9"	3'-11"	4'-1"	4'-3"	4'-4"	6'-3"	6'-3"																		
250	1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	2'-0"	2'-1"	2'-2"	2'-3"	2'-5"	2'-6"	2'-8"	2'-9"	2'-11"	3'-1"	3'-3"	3'-5"	3'-7"	3'-9"	3'-11"	4'-1"	4'-3"	4'-5"	4'-7"	4'-9"	6'-9"	6'-9"																		
260	1'-9"	1'-9"	1'-10"	1'-11"	2'-0"	2'-2"	2'-3"	2'-4"	2'-6"	2'-7"	2'-9"	2'-10"	3'-0"	3'-2"	3'-4"	3'-6"	3'-8"	3'-10"	4'-1"	4'-3"	4'-5"	4'-7"	4'-9"	4'-11"	5'-2"	7'-3"	7'-3"																		
270	1'-10"	1'-11"	2'-0"	2'-1"	2'-2"	2'-4"	2'-5"	2'-6"	2'-8"	2'-10"	2'-11"	3'-1"	3'-3"	3'-5"	3'-7"	3'-10"	4'-0"	4'-2"	4'-5"	4'-7"	4'-9"	5'-0"	5'-2"	5'-4"	5'-6"	7'-10"	7'-10"																		
280	2'-0"	2'-1"	2'-2"	2'-3"	2'-4"	2'-6"	2'-7"	2'-9"	2'-10"	3'-0"	3'-2"	3'-4"	3'-6"	3'-8"	3'-11"	4'-1"	4'-3"	4'-6"	4'-9"	4'-11"	5'-2"	5'-4"	5'-6"	5'-9"	6'-0"	8'-6"	8'-6"																		
290	2'-2"	2'-3"	2'-4"	2'-5"	2'-6"	2'-8"	2'-9"	2'-11"	3'-1"	3'-3"	3'-5"	3'-7"	3'-9"	4'-0"	4'-2"	4'-5"	4'-7"	4'-10"	5'-1"	5'-3"	5'-6"	5'-9"	5'-11"	6'-2"	6'-5"	9'-1"	9'-1"																		
300	2'-3"	2'-5"	2'-6"	2'-7"	2'-9"	2'-10"	3'-0"	3'-2"	3'-3"	3'-6"	3'-8"	3'-10"	4'-0"	4'-3"	4'-6"	4'-8"	4'-11"	5'-2"	5'-5"	5'-8"	5'-11"	6'-2"	6'-4"	6'-7"	6'-10"	9'-9"	9'-9"																		
310	2'-5"	2'-7"	2'-8"	2'-9"	2'-11"	3'-0"	3'-2"	3'-4"	3'-6"	3'-8"	3'-11"	4'-1"	4'-4"	4'-6"	4'-9"	5'-0"	5'-3"	5'-6"	5'-9"	6'-0"	6'-3"	6'-7"	6'-9"	7'-1"	7'-4"	10'-5"	10'-5"																		
320	2'-7"	2'-9"	2'-10"	2'-11"	3'-1"	3'-3"	3'-5"	3'-7"	3'-9"	3'-11"	4'-2"	4'-4"	4'-7"	4'-10"	5'-1"	5'-4"	5'-7"	5'-11"	6'-2"	6'-5"	6'-8"	7'-0"	7'-3"	7'-6"	7'-9"	11'-1"	11'-1"																		
330	2'-9"	2'-11"	3'-0"	3'-2"	3'-3"	3'-5"	3'-7"	3'-9"	4'-0"	4'-2"	4'-5"	4'-8"	4'-11"	5'-2"	5'-5"	5'-8"	6'-0"	6'-3"	6'-6"	6'-10"	7'-1"	7'-5"	7'-8"	8'-0"	8'-3"	11'-9"	11'-9"																		
340	2'-11"	3'-1"	3'-2"	3'-4"	3'-6"	3'-8"	3'-10"	4'-0"	4'-3"	4'-5"	4'-8"	4'-11"	5'-2"	5'-6"	5'-9"	6'-0"	6'-4"	6'-8"	6'-11"	7'-3"	7'-7"	7'-11"	8'-2"	8'-6"	8'-9"	12'-6"	12'-6"																		
350	3'-1"	3'-3"	3'-5"	3'-6"	3'-8"	3'-10"	4'-1"	4'-3"	4'-6"	4'-8"	4'-11"	5'-3"	5'-6"	5'-9"	6'-1"	6'-5"	6'-9"	7'-0"	7'-4"	7'-8"	8'-0"	8'-4"	8'-8"	9'-0"	9'-4"	13'-3"	13'-3"																		

1098-05	GENERAL INFORMATION																	
Sheet of	ENGINEERING NOTES AND SIGNAGE																	
Rev: 03/26/2026	3-WAVE TIME & TENSION WITH TABLES																	


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Initial RS	60.00	32.70	5098.40	54.50

Conductor		795 AWG Covered AAC - Arbutus																Weight (Lb/Ft)	1.292	Rated Breaking Strength	15,600	Ruling Span (Feet)	220		ARBUS INITIAL												Eng. Use: MOT Temp (°F)
Condition	Initial Sag & Tension	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75						80	85	90	95	100	105	110	115	120						
Temp (°F)		0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120											
Tension (lbs)		5,142	4,946	4,742	4,547	4,348	4,158	3,966	3,776	3,591	3,415	3,243	3,079	2,925	2,777	2,640	2,511	2,391	2,284	2,182	2,090	2,004	1,924	1,852	1,785	1,725											
% Ultimate		33%	32%	30%	29%	28%	27%	25%	24%	23%	22%	21%	20%	19%	18%	17%	16%	15%	15%	14%	13%	13%	12%	12%	11%	11%											
Span	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec											
R.S. Span																																					
3-Wave Time		3.38	3.45	3.53	3.61	3.69	3.78	3.87	3.97	4.07	4.18	4.29	4.4	4.52	4.63	4.75	4.87	4.98	5.09	5.21	5.32	5.42	5.53	5.63	5.73	6.83											
50		0.77	0.79	0.8	0.82	0.84	0.86	0.88	0.9	0.93	0.95	0.97	1	1.03	1.05	1.08	1.11	1.13	1.16	1.18	1.21	1.23	1.26	1.28	1.3	1.55											
75		1.15	1.18	1.2	1.23	1.26	1.29	1.32	1.35	1.39	1.42	1.46	1.5	1.54	1.58	1.62	1.66	1.7	1.74	1.77	1.81	1.85	1.88	1.92	1.95	2.33											
100		1.54	1.57	1.6	1.64	1.68	1.72	1.76	1.8	1.85	1.9	1.95	2	2.05	2.1	2.16	2.21	2.26	2.32	2.37	2.42	2.47	2.51	2.56	2.6	3.1											
120		1.85	1.88	1.92	1.97	2.01	2.06	2.11	2.17	2.22	2.28	2.34	2.4	2.46	2.53	2.59	2.65	2.72	2.78	2.84	2.9	2.96	3.02	3.07	3.12	3.73											
140		2.15	2.2	2.25	2.3	2.35	2.4	2.46	2.53	2.59	2.66	2.73	2.8	2.87	2.95	3.02	3.1	3.17	3.24	3.31	3.38	3.45	3.52	3.58	3.65	4.35											
160		2.46	2.51	2.57	2.62	2.68	2.75	2.82	2.89	2.96	3.04	3.12	3.2	3.28	3.37	3.45	3.54	3.62	3.7	3.79	3.87	3.95	4.02	4.1	4.17	4.97											
180		2.77	2.83	2.89	2.95	3.02	3.09	3.17	3.25	3.33	3.42	3.51	3.6	3.69	3.79	3.88	3.98	4.07	4.17	4.26	4.35	4.44	4.52	4.61	4.69	5.59											
200		3.08	3.14	3.21	3.28	3.35	3.43	3.52	3.61	3.7	3.8	3.9	4	4.1	4.21	4.32	4.42	4.53	4.63	4.73	4.83	4.93	5.03	5.12	5.21	6.21											
210		3.23	3.3	3.37	3.44	3.52	3.61	3.7	3.79	3.89	3.99	4.09	4.2	4.31	4.42	4.53	4.64	4.75	4.86	4.97	5.07	5.18	5.28	5.38	5.47	6.52											
220		3.38	3.45	3.53	3.61	3.69	3.78	3.87	3.97	4.07	4.18	4.29	4.4	4.52	4.63	4.75	4.87	4.98	5.09	5.21	5.32	5.42	5.53	5.63	5.73	6.83											
230		3.54	3.61	3.69	3.77	3.86	3.95	4.05	4.15	4.26	4.37	4.48	4.6	4.72	4.84	4.96	5.09	5.21	5.33	5.44	5.56	5.67	5.78	5.89	5.99	7.14											
240		3.69	3.77	3.85	3.94	4.03	4.12	4.22	4.33	4.44	4.56	4.68	4.8	4.93	5.05	5.18	5.31	5.43	5.56	5.68	5.8	5.92	6.03	6.14	6.25	7.45											
250		3.84	3.93	4.01	4.1	4.19	4.29	4.4	4.51	4.63	4.75	4.87	5	5.13	5.26	5.4	5.53	5.66	5.79	5.92	6.04	6.16	6.28	6.4	6.51	7.76											
260		4	4.08	4.17	4.26	4.36	4.47	4.58	4.69	4.81	4.94	5.07	5.2	5.34	5.47	5.61	5.75	5.88	6.02	6.15	6.28	6.41	6.53	6.66	6.77	8.07											
270		4.16	4.24	4.33	4.43	4.53	4.64	4.76	4.88	5	5.13	5.27	5.4	5.55	5.69	5.84	5.98	6.12	6.26	6.4	6.53	6.66	6.79	6.92	7.04	8.39											
280		4.31	4.4	4.49	4.6	4.7	4.82	4.94	5.06	5.19	5.32	5.47	5.6	5.75	5.9	6.05	6.2	6.35	6.49	6.63	6.77	6.91	7.04	7.17	7.3	8.7											
290		4.46	4.56	4.65	4.76	4.87	4.99	5.11	5.24	5.37	5.51	5.66	5.81	5.96	6.11	6.27	6.42	6.57	6.72	6.87	7.01	7.16	7.29	7.43	7.56	9.01											
300		4.62	4.71	4.81	4.92	5.04	5.16	5.29	5.42	5.56	5.7	5.86	6.01	6.16	6.32	6.48	6.64	6.8	6.95	7.11	7.26	7.4	7.54	7.68	7.82	9.32											
310		4.77	4.87	4.98	5.09	5.21	5.33	5.46	5.6	5.75	5.89	6.05	6.21	6.37	6.53	6.7	6.86	7.03	7.18	7.34	7.5	7.65	7.8	7.94	8.08	9.63											
320		4.93	5.03	5.14	5.25	5.37	5.5	5.64	5.78	5.93	6.08	6.25	6.41	6.58	6.74	6.92	7.08	7.25	7.42	7.58	7.74	7.9	8.05	8.2	8.34	9.94											
330		5.08	5.19	5.3	5.42	5.54	5.68	5.82	5.96	6.12	6.27	6.44	6.61	6.78	6.96	7.13	7.3	7.48	7.65	7.82	7.98	8.15	8.3	8.45	8.6	10.26											
340		5.23	5.34	5.46	5.58	5.71	5.85	5.99	6.14	6.3	6.46	6.64	6.81	6.99	7.17	7.35	7.53	7.71	7.88	8.06	8.22	8.39	8.55	8.71	8.87	10.57											
350		5.39	5.5	5.62	5.74	5.88	6.02	6.17	6.32	6.49	6.65	6.83	7.01	7.19	7.38	7.56	7.75	7.93	8.11	8.29	8.47	8.64	8.8	8.97	9.13	10.88											

1098-05	GENERAL INFORMATION																			
Sheet of	ENGINEERING NOTES AND SIGNAGE																			
Rev: 03/26/2026	SAG & TENSION WITH TABLES																			


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Creep RS	60.00	27.60	4309.50	46.00

Conductor	795 AWG Covered AAC - Arbutus																										Eng. Use: MOT
	Creep Sag & Tension																										
Condition	Creep Sag & Tension																										Temp (°F)
Temp (°F)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	188	
Tension (lbs)	4,084	3,838	3,601	3,389	3,185	2,997	2,822	2,663	2,520	2,390	2,272	2,163	2,065	1,976	1,898	1,823	1,757	1,696	1,640	1,588	1,540	1,497	1,456	1,417	1,382	1,059	
% Ultimate	26%	25%	23%	22%	20%	19%	18%	17%	16%	15%	15%	14%	13%	13%	12%	12%	11%	11%	11%	10%	10%	10%	9%	9%	9%	7%	
Span	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	
Ruling Span Sag	1'-7"	1'-8"	1'-9"	1'-10"	2'-0"	2'-1"	2'-3"	2'-5"	2'-6"	2'-8"	2'-9"	2'-11"	3'-1"	3'-2"	3'-4"	3'-6"	3'-7"	3'-9"	3'-10"	4'-0"	4'-1"	4'-3"	4'-4"	4'-6"	4'-7"	6'-0"	
50	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-4"	
75	0'-2"	0'-2"	0'-2"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-4"	0'-4"	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-6"	0'-6"	0'-6"	0'-6"	0'-6"	0'-6"	0'-8"	
100	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-5"	0'-6"	0'-6"	0'-7"	0'-7"	0'-7"	0'-7"	0'-8"	0'-8"	0'-9"	0'-9"	0'-9"	0'-10"	0'-10"	0'-10"	0'-10"	0'-11"	0'-11"	0'-11"	1'-3"	
120	0'-6"	0'-6"	0'-6"	0'-7"	0'-7"	0'-8"	0'-8"	0'-9"	0'-9"	0'-9"	0'-10"	0'-10"	0'-11"	0'-11"	1'-0"	1'-0"	1'-1"	1'-1"	1'-2"	1'-2"	1'-3"	1'-3"	1'-3"	1'-4"	1'-4"	1'-9"	
140	0'-8"	0'-8"	0'-9"	0'-9"	0'-10"	0'-10"	0'-11"	1'-0"	1'-0"	1'-1"	1'-2"	1'-2"	1'-3"	1'-4"	1'-4"	1'-5"	1'-6"	1'-6"	1'-7"	1'-7"	1'-8"	1'-9"	1'-9"	1'-10"	1'-10"	2'-5"	
160	0'-10"	0'-10"	0'-11"	1'-0"	1'-1"	1'-1"	1'-2"	1'-3"	1'-4"	1'-5"	1'-6"	1'-7"	1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	2'-0"	2'-0"	2'-1"	2'-2"	2'-3"	2'-4"	2'-4"	2'-5"	3'-2"	
180	1'-0"	1'-1"	1'-2"	1'-3"	1'-4"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	2'-0"	2'-1"	2'-2"	2'-3"	2'-4"	2'-5"	2'-6"	2'-7"	2'-8"	2'-9"	2'-10"	2'-11"	3'-0"	3'-1"	4'-0"	
200	1'-3"	1'-4"	1'-5"	1'-6"	1'-8"	1'-9"	1'-10"	2'-0"	2'-1"	2'-2"	2'-4"	2'-5"	2'-6"	2'-8"	2'-9"	2'-10"	3'-0"	3'-1"	3'-2"	3'-3"	3'-5"	3'-6"	3'-7"	3'-8"	3'-9"	4'-11"	
210	1'-5"	1'-6"	1'-7"	1'-8"	1'-10"	1'-11"	2'-0"	2'-2"	2'-3"	2'-5"	2'-6"	2'-8"	2'-9"	2'-11"	3'-0"	3'-2"	3'-3"	3'-5"	3'-6"	3'-8"	3'-9"	3'-10"	4'-0"	4'-1"	4'-2"	5'-5"	
220	1'-7"	1'-8"	1'-9"	1'-10"	2'-0"	2'-1"	2'-3"	2'-5"	2'-6"	2'-8"	2'-9"	2'-11"	3'-1"	3'-2"	3'-4"	3'-6"	3'-7"	3'-9"	3'-10"	4'-0"	4'-1"	4'-3"	4'-4"	4'-6"	4'-7"	6'-0"	
230	1'-8"	1'-10"	1'-11"	2'-0"	2'-2"	2'-4"	2'-5"	2'-7"	2'-9"	2'-11"	3'-0"	3'-2"	3'-4"	3'-6"	3'-8"	3'-10"	3'-11"	4'-1"	4'-3"	4'-4"	4'-6"	4'-7"	4'-9"	4'-11"	5'-0"	6'-6"	
240	1'-10"	2'-0"	2'-1"	2'-3"	2'-4"	2'-6"	2'-8"	2'-10"	3'-0"	3'-2"	3'-4"	3'-6"	3'-8"	3'-10"	4'-0"	4'-2"	4'-3"	4'-5"	4'-7"	4'-9"	4'-11"	5'-0"	5'-2"	5'-4"	5'-5"	7'-1"	
250	2'-0"	2'-2"	2'-3"	2'-5"	2'-7"	2'-9"	2'-11"	3'-1"	3'-3"	3'-5"	3'-7"	3'-9"	4'-0"	4'-2"	4'-4"	4'-6"	4'-8"	4'-10"	5'-0"	5'-2"	5'-4"	5'-6"	5'-7"	5'-9"	5'-11"	7'-9"	
260	2'-2"	2'-4"	2'-5"	2'-7"	2'-9"	2'-11"	3'-2"	3'-4"	3'-6"	3'-8"	3'-11"	4'-1"	4'-3"	4'-6"	4'-8"	4'-10"	5'-0"	5'-3"	5'-5"	5'-7"	5'-9"	5'-11"	6'-1"	6'-3"	6'-5"	8'-4"	
270	2'-4"	2'-6"	2'-8"	2'-10"	3'-0"	3'-2"	3'-5"	3'-7"	3'-9"	4'-0"	4'-3"	4'-5"	4'-7"	4'-10"	5'-0"	5'-3"	5'-5"	5'-8"	5'-10"	6'-0"	6'-2"	6'-5"	6'-7"	6'-9"	6'-11"	9'-0"	
280	2'-6"	2'-8"	2'-10"	3'-0"	3'-3"	3'-5"	3'-8"	3'-10"	4'-1"	4'-4"	4'-6"	4'-9"	5'-0"	5'-2"	5'-5"	5'-8"	5'-10"	6'-1"	6'-3"	6'-6"	6'-8"	6'-10"	7'-1"	7'-3"	7'-5"	9'-8"	
290	2'-8"	2'-11"	3'-1"	3'-3"	3'-6"	3'-8"	3'-11"	4'-2"	4'-4"	4'-7"	4'-10"	5'-1"	5'-4"	5'-7"	5'-10"	6'-0"	6'-3"	6'-6"	6'-9"	6'-11"	7'-2"	7'-4"	7'-7"	7'-9"	8'-0"	10'-5"	
300	2'-11"	3'-1"	3'-3"	3'-6"	3'-8"	3'-11"	4'-2"	4'-5"	4'-8"	4'-11"	5'-2"	5'-5"	5'-8"	6'-0"	6'-3"	6'-6"	6'-9"	6'-11"	7'-2"	7'-5"	7'-8"	7'-11"	8'-1"	8'-4"	8'-6"	11'-2"	
310	3'-1"	3'-3"	3'-6"	3'-9"	3'-11"	4'-2"	4'-6"	4'-9"	5'-0"	5'-3"	5'-7"	5'-10"	6'-1"	6'-4"	6'-8"	6'-11"	7'-2"	7'-5"	7'-8"	7'-11"	8'-2"	8'-5"	8'-8"	8'-11"	9'-1"	11'-11"	
320	3'-3"	3'-6"	3'-9"	4'-0"	4'-3"	4'-6"	4'-9"	5'-0"	5'-4"	5'-7"	5'-11"	6'-2"	6'-6"	6'-9"	7'-1"	7'-4"	7'-8"	7'-11"	8'-2"	8'-5"	8'-9"	9'-0"	9'-3"	9'-6"	9'-9"	12'-8"	
330	3'-6"	3'-9"	4'-0"	4'-3"	4'-6"	4'-9"	5'-1"	5'-4"	5'-8"	6'-0"	6'-3"	6'-7"	6'-11"	7'-3"	7'-6"	7'-10"	8'-1"	8'-5"	8'-8"	9'-0"	9'-3"	9'-6"	9'-10"	10'-1"	10'-4"	13'-6"	
340	3'-9"	3'-11"	4'-2"	4'-6"	4'-9"	5'-1"	5'-4"	5'-8"	6'-0"	6'-4"	6'-8"	7'-0"	7'-4"	7'-8"	8'-0"	8'-4"	8'-7"	8'-11"	9'-3"	9'-6"	9'-10"	10'-1"	10'-5"	10'-8"	11'-0"	14'-4"	
350	3'-11"	4'-2"	4'-6"	4'-9"	5'-0"	5'-4"	5'-8"	6'-0"	6'-4"	6'-9"	7'-1"	7'-5"	7'-9"	8'-1"	8'-6"	8'-10"	9'-2"	9'-6"	9'-9"	10'-1"	10'-5"	10'-9"	11'-0"	11'-4"	11'-7"	15'-2"	

1098-05	GENERAL INFORMATION																		
Sheet of	ENGINEERING NOTES AND SIGNAGE																		
Rev: 03/26/2026	3-WAVE TIME & TENSION WITH TABLES																		


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Creep RS	60.00	27.60	4309.50	46.00

Conductor		795 AWG Covered AAC - Arbutus																										Eng. Use:		
Condition		Creep Sag & Tension																										MOT		
		Weight (Lb/Ft)											1.292	Rated Breaking Strength		15,600	Ruling Span (Feet)	220		ARBUSUS CREEP										Temp (°F)
Temp (°F)		0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	188			
Tension (lbs)		4,084	3,838	3,601	3,389	3,185	2,997	2,822	2,663	2,520	2,390	2,272	2,163	2,065	1,976	1,898	1,823	1,757	1,696	1,640	1,588	1,540	1,497	1,456	1,417	1,382	1,059			
% Ultimate		26%	25%	23%	22%	20%	19%	18%	17%	16%	15%	15%	14%	13%	13%	12%	12%	11%	11%	11%	10%	10%	10%	9%	9%	9%	7%			
Span	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec			
R.S. Span	3-Wave Time	3.84	3.96	4.09	4.22	4.35	4.48	4.61	4.74	4.87	4.99	5.12	5.24	5.35	5.46	5.57	5.68	5.78	5.88	5.97	6.06	6.15	6.24	6.32	6.4	7.31	3.72			
50	0.87	0.9	0.93	0.96	0.99	1.02	1.05	1.08	1.11	1.13	1.16	1.19	1.22	1.24	1.27	1.29	1.31	1.34	1.36	1.38	1.4	1.42	1.44	1.45	1.66	0.85				
75	1.31	1.35	1.39	1.44	1.48	1.53	1.57	1.62	1.66	1.7	1.74	1.78	1.82	1.86	1.9	1.94	1.97	2	2.04	2.07	2.1	2.13	2.15	2.18	2.49	1.27				
100	1.75	1.8	1.86	1.92	1.98	2.04	2.1	2.15	2.21	2.27	2.33	2.38	2.43	2.48	2.53	2.58	2.63	2.67	2.71	2.76	2.8	2.83	2.87	2.91	3.32	1.69				
120	2.09	2.16	2.23	2.3	2.37	2.44	2.51	2.59	2.65	2.72	2.79	2.86	2.92	2.98	3.04	3.1	3.15	3.2	3.26	3.31	3.35	3.4	3.45	3.49	3.99	2.03				
140	2.44	2.52	2.6	2.68	2.77	2.85	2.93	3.02	3.1	3.18	3.26	3.33	3.41	3.48	3.55	3.61	3.68	3.74	3.8	3.86	3.91	3.97	4.02	4.07	4.65	2.37				
160	2.79	2.88	2.97	3.07	3.16	3.26	3.35	3.45	3.54	3.63	3.72	3.81	3.89	3.97	4.05	4.13	4.2	4.27	4.34	4.41	4.47	4.54	4.6	4.66	5.32	2.71				
180	3.14	3.24	3.34	3.45	3.56	3.66	3.77	3.88	3.98	4.08	4.19	4.28	4.38	4.47	4.56	4.64	4.73	4.81	4.89	4.96	5.03	5.1	5.17	5.24	5.98	3.05				
200	3.49	3.6	3.72	3.83	3.95	4.07	4.19	4.31	4.42	4.54	4.65	4.76	4.87	4.97	5.07	5.16	5.25	5.34	5.43	5.51	5.59	5.67	5.75	5.82	6.65	3.38				
210	3.67	3.78	3.9	4.02	4.15	4.28	4.4	4.52	4.65	4.76	4.88	5	5.11	5.21	5.32	5.42	5.51	5.61	5.7	5.79	5.87	5.95	6.03	6.11	6.98	3.55				
220	3.84	3.96	4.09	4.22	4.35	4.48	4.61	4.74	4.87	4.99	5.12	5.24	5.35	5.46	5.57	5.68	5.78	5.88	5.97	6.06	6.15	6.24	6.32	6.4	7.31	3.72				
230	4.01	4.14	4.27	4.41	4.54	4.68	4.82	4.95	5.09	5.22	5.35	5.47	5.6	5.71	5.83	5.94	6.04	6.14	6.24	6.34	6.43	6.52	6.61	6.69	7.65	3.89				
240	4.19	4.33	4.46	4.6	4.74	4.89	5.03	5.17	5.31	5.45	5.58	5.71	5.84	5.96	6.08	6.19	6.3	6.41	6.51	6.61	6.71	6.8	6.9	6.98	7.98	4.06				
250	4.36	4.51	4.64	4.79	4.94	5.09	5.24	5.39	5.53	5.67	5.81	5.95	6.08	6.21	6.33	6.45	6.57	6.68	6.79	6.89	6.99	7.09	7.18	7.28	8.31	4.23				
260	4.54	4.69	4.83	4.98	5.14	5.29	5.45	5.6	5.75	5.9	6.05	6.19	6.33	6.46	6.59	6.71	6.83	6.94	7.06	7.17	7.27	7.37	7.47	7.57	8.65	4.4				
270	4.72	4.87	5.02	5.18	5.34	5.5	5.67	5.82	5.98	6.13	6.28	6.43	6.57	6.71	6.84	6.97	7.09	7.22	7.33	7.45	7.55	7.66	7.76	7.86	8.98	4.58				
280	4.9	5.05	5.21	5.37	5.54	5.71	5.87	6.04	6.2	6.36	6.51	6.67	6.82	6.96	7.1	7.23	7.36	7.48	7.6	7.72	7.83	7.94	8.05	8.15	9.31	4.75				
290	5.07	5.23	5.4	5.56	5.73	5.91	6.08	6.26	6.42	6.59	6.75	6.9	7.06	7.21	7.35	7.49	7.62	7.75	7.88	8	8.11	8.23	8.34	8.45	9.65	4.92				
300	5.25	5.41	5.58	5.75	5.93	6.11	6.29	6.47	6.65	6.82	6.98	7.14	7.3	7.46	7.6	7.75	7.88	8.02	8.15	8.27	8.39	8.51	8.63	8.74	9.98	5.09				
310	5.42	5.59	5.77	5.95	6.13	6.32	6.5	6.69	6.87	7.04	7.21	7.38	7.55	7.71	7.86	8.01	8.15	8.28	8.42	8.55	8.67	8.8	8.91	9.03	10.31	5.26				
320	5.6	5.77	5.95	6.14	6.33	6.52	6.71	6.9	7.09	7.27	7.45	7.62	7.79	7.95	8.11	8.26	8.41	8.55	8.69	8.83	8.95	9.08	9.2	9.32	10.65	5.42				
330	5.77	5.95	6.14	6.33	6.53	6.73	6.92	7.12	7.31	7.5	7.68	7.86	8.03	8.2	8.36	8.52	8.67	8.82	8.96	9.1	9.23	9.36	9.49	9.61	10.98	5.59				
340	5.95	6.13	6.33	6.52	6.72	6.93	7.13	7.33	7.53	7.73	7.91	8.1	8.28	8.45	8.62	8.78	8.94	9.09	9.24	9.38	9.52	9.65	9.78	9.9	11.31	5.76				
350	6.12	6.31	6.51	6.71	6.92	7.13	7.34	7.55	7.75	7.95	8.14	8.33	8.52	8.7	8.87	9.04	9.2	9.35	9.51	9.65	9.8	9.93	10.07	10.2	11.65	5.93				

1098-05	GENERAL INFORMATION															
Sheet of	ENGINEERING NOTES AND SIGNAGE															
Rev: 03/26/2026	SAG & TENSION WITH TABLES															


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Initial RS	60.00	32.40	5098.70	54.50

Conductor		Weight (Lb/Ft)															1.292	Rated Breaking Strength	15,600	Ruling Span (Feet)	235												ARBUTUS INITIAL												Eng. Use: MOT Temp (°F)
Condition		Initial Sag & Tension																			235												ARBUTUS INITIAL												
Temp (°F)		0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	188																		
Tension (lbs)		5,065	4,869	4,675	4,478	4,290	4,100	3,912	3,734	3,554	3,384	3,224	3,069	2,922	2,783	2,652	2,534	2,421	2,316	2,222	2,133	2,051	1,976	1,906	1,841	1,783	1,275																		
% Ultimate		32%	31%	30%	29%	28%	26%	25%	24%	23%	22%	21%	20%	19%	18%	17%	16%	16%	15%	14%	14%	13%	13%	12%	12%	11%	8%																		
Span (Ft-In)		(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)																		
Ruling Span Sag		1'-5"	1'-6"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	2'-0"	2'-2"	2'-3"	2'-4"	2'-6"	2'-7"	2'-9"	2'-10"	3'-0"	3'-1"	3'-3"	3'-5"	3'-6"	3'-8"	3'-9"	3'-11"	4'-1"	5'-8"																		
50		0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-3"																		
75		0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-4"	0'-4"	0'-4"	0'-4"	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-7"																		
100		0'-3"	0'-3"	0'-3"	0'-3"	0'-4"	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-5"	0'-6"	0'-6"	0'-6"	0'-6"	0'-7"	0'-7"	0'-7"	0'-7"	0'-7"	0'-8"	0'-8"	0'-8"	0'-9"	1'-0"																		
120		0'-4"	0'-5"	0'-5"	0'-5"	0'-5"	0'-6"	0'-6"	0'-6"	0'-6"	0'-7"	0'-7"	0'-7"	0'-8"	0'-8"	0'-9"	0'-9"	0'-9"	0'-10"	0'-10"	0'-11"	0'-11"	0'-11"	1'-0"	1'-0"	1'-1"	1'-6"																		
140		0'-6"	0'-6"	0'-7"	0'-7"	0'-7"	0'-8"	0'-8"	0'-8"	0'-9"	0'-9"	0'-9"	0'-10"	0'-11"	0'-11"	1'-0"	1'-0"	1'-1"	1'-1"	1'-2"	1'-2"	1'-3"	1'-4"	1'-4"	1'-5"	1'-5"	2'-0"																		
160		0'-8"	0'-8"	0'-9"	0'-9"	0'-9"	0'-10"	0'-10"	0'-11"	0'-11"	1'-0"	1'-0"	1'-1"	1'-2"	1'-2"	1'-3"	1'-4"	1'-5"	1'-5"	1'-6"	1'-7"	1'-8"	1'-8"	1'-9"	1'-10"	1'-11"	2'-8"																		
180		0'-10"	0'-10"	0'-11"	0'-11"	1'-0"	1'-0"	1'-1"	1'-2"	1'-2"	1'-3"	1'-4"	1'-5"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	2'-0"	2'-1"	2'-2"	2'-3"	2'-4"	2'-5"	3'-4"																		
200		1'-0"	1'-1"	1'-1"	1'-2"	1'-3"	1'-3"	1'-4"	1'-5"	1'-6"	1'-7"	1'-7"	1'-8"	1'-9"	1'-11"	2'-0"	2'-1"	2'-2"	2'-3"	2'-4"	2'-5"	2'-7"	2'-8"	2'-9"	2'-10"	2'-11"	4'-1"																		
210		1'-2"	1'-2"	1'-3"	1'-3"	1'-4"	1'-5"	1'-6"	1'-6"	1'-7"	1'-8"	1'-9"	1'-11"	2'-0"	2'-1"	2'-2"	2'-3"	2'-5"	2'-6"	2'-7"	2'-8"	2'-10"	2'-11"	3'-0"	3'-2"	3'-3"	4'-6"																		
220		1'-3"	1'-4"	1'-4"	1'-5"	1'-6"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	2'-0"	2'-1"	2'-2"	2'-3"	2'-5"	2'-6"	2'-7"	2'-9"	2'-10"	3'-0"	3'-1"	3'-2"	3'-4"	3'-5"	3'-7"	5'-0"																		
230		1'-4"	1'-5"	1'-6"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	2'-0"	2'-2"	2'-3"	2'-4"	2'-6"	2'-7"	2'-9"	2'-10"	3'-0"	3'-1"	3'-3"	3'-4"	3'-6"	3'-8"	3'-9"	3'-11"	5'-5"																		
240		1'-6"	1'-7"	1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	2'-0"	2'-1"	2'-3"	2'-4"	2'-5"	2'-7"	2'-9"	2'-10"	3'-0"	3'-1"	3'-3"	3'-5"	3'-6"	3'-8"	3'-10"	3'-11"	4'-1"	4'-3"	5'-11"																		
250		1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	2'-0"	2'-1"	2'-2"	2'-4"	2'-5"	2'-6"	2'-8"	2'-10"	2'-11"	3'-1"	3'-3"	3'-5"	3'-6"	3'-8"	3'-10"	4'-0"	4'-2"	4'-3"	4'-5"	4'-7"	6'-5"																		
260		1'-9"	1'-10"	1'-11"	2'-0"	2'-1"	2'-2"	2'-3"	2'-4"	2'-6"	2'-7"	2'-9"	2'-11"	3'-0"	3'-2"	3'-4"	3'-6"	3'-8"	3'-10"	4'-0"	4'-2"	4'-4"	4'-6"	4'-8"	4'-10"	5'-0"	6'-11"																		
270		1'-11"	2'-0"	2'-0"	2'-2"	2'-3"	2'-4"	2'-5"	2'-7"	2'-8"	2'-10"	3'-0"	3'-1"	3'-3"	3'-5"	3'-7"	3'-9"	3'-11"	4'-1"	4'-4"	4'-6"	4'-8"	4'-10"	5'-0"	5'-2"	5'-4"	7'-6"																		
280		2'-0"	2'-1"	2'-2"	2'-3"	2'-5"	2'-6"	2'-7"	2'-9"	2'-11"	3'-0"	3'-2"	3'-4"	3'-6"	3'-8"	3'-10"	4'-1"	4'-3"	4'-5"	4'-7"	4'-10"	5'-0"	5'-2"	5'-5"	5'-7"	5'-9"	8'-1"																		
290		2'-2"	2'-3"	2'-4"	2'-6"	2'-7"	2'-8"	2'-10"	2'-11"	3'-1"	3'-3"	3'-5"	3'-7"	3'-9"	4'-0"	4'-2"	4'-4"	4'-7"	4'-9"	5'-0"	5'-2"	5'-4"	5'-7"	5'-9"	6'-0"	6'-2"	8'-8"																		
300		2'-4"	2'-5"	2'-6"	2'-8"	2'-9"	2'-10"	3'-0"	3'-2"	3'-4"	3'-6"	3'-8"	3'-10"	4'-0"	4'-3"	4'-5"	4'-8"	4'-10"	5'-1"	5'-4"	5'-6"	5'-9"	6'-0"	6'-2"	6'-5"	6'-7"	9'-3"																		
310		2'-6"	2'-7"	2'-8"	2'-10"	2'-11"	3'-1"	3'-3"	3'-4"	3'-6"	3'-9"	3'-11"	4'-1"	4'-4"	4'-6"	4'-9"	5'-0"	5'-2"	5'-5"	5'-8"	5'-11"	6'-2"	6'-4"	6'-7"	6'-10"	7'-1"	9'-10"																		
320		2'-8"	2'-9"	2'-10"	3'-0"	3'-2"	3'-3"	3'-5"	3'-7"	3'-9"	4'-0"	4'-2"	4'-4"	4'-7"	4'-10"	5'-1"	5'-3"	5'-6"	5'-9"	6'-0"	6'-3"	6'-6"	6'-9"	7'-0"	7'-3"	7'-6"	10'-6"																		
330		2'-10"	2'-11"	3'-1"	3'-2"	3'-4"	3'-6"	3'-8"	3'-10"	4'-0"	4'-3"	4'-5"	4'-8"	4'-11"	5'-1"	5'-5"	5'-8"	5'-11"	6'-2"	6'-5"	6'-8"	6'-11"	7'-3"	7'-6"	7'-9"	8'-0"	11'-2"																		
340		3'-0"	3'-1"	3'-3"	3'-5"	3'-6"	3'-8"	3'-10"	4'-1"	4'-3"	4'-6"	4'-8"	4'-11"	5'-2"	5'-5"	5'-9"	6'-0"	6'-3"	6'-6"	6'-10"	7'-1"	7'-5"	7'-8"	7'-11"	8'-3"	8'-6"	11'-11"																		
350		3'-2"	3'-3"	3'-5"	3'-7"	3'-9"	3'-11"	4'-1"	4'-4"	4'-6"	4'-9"	5'-0"	5'-3"	5'-6"	5'-9"	6'-1"	6'-4"	6'-8"	6'-11"	7'-3"	7'-6"	7'-10"	8'-1"	8'-5"	8'-9"	9'-0"	12'-7"																		

1098-05	GENERAL INFORMATION																
Sheet of	ENGINEERING NOTES AND SIGNAGE																
Rev: 03/26/2026	3-WAVE TIME & TENSION WITH TABLES																


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Initial RS	60.00	32.40	5098.70	54.50

Conductor		795 AWG Covered AAC - Arbutus												Weight (Lb/Ft)	1.292	Rated Breaking Strength	15,600	Ruling Span (Feet)	235		ARBUS INITIAL												Eng. Use: MOT Temp (°F)
Condition	Initial Sag & Tension	0	5	10	15	20	25	30	35	40	45	50	55						60	65	70	75	80	85	90	95	100	105	110	115	120		
Temp (°F)		0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120							
Tension (lbs)		5,065	4,869	4,675	4,478	4,290	4,100	3,912	3,734	3,554	3,384	3,224	3,069	2,922	2,783	2,652	2,534	2,421	2,316	2,222	2,133	2,051	1,976	1,906	1,841	1,783							
% Ultimate		32%	31%	30%	29%	28%	26%	25%	24%	23%	22%	21%	20%	19%	18%	17%	16%	16%	15%	14%	14%	13%	13%	12%	12%	11%							
Span	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec							
R.S. Span		3.64	3.72	3.8	3.88	3.97	4.06	4.16	4.26	4.37	4.48	4.59	4.7	4.82	4.93	5.05	5.17	5.28	5.39	5.5	5.61	5.72	5.82	5.92	6.02	7.12							
3-Wave Time																										3.57							
50		0.77	0.79	0.81	0.82	0.84	0.86	0.88	0.91	0.93	0.95	0.97	1	1.02	1.05	1.07	1.1	1.12	1.15	1.17	1.19	1.22	1.24	1.26	1.28	1.51							
75		1.16	1.19	1.21	1.24	1.27	1.3	1.33	1.36	1.39	1.43	1.46	1.5	1.54	1.57	1.61	1.65	1.68	1.72	1.75	1.79	1.82	1.86	1.89	1.92	2.27							
100		1.55	1.58	1.62	1.65	1.69	1.73	1.77	1.81	1.86	1.9	1.95	2	2.05	2.1	2.15	2.2	2.25	2.29	2.34	2.39	2.43	2.48	2.52	2.56	3.03							
120		1.86	1.9	1.94	1.98	2.03	2.07	2.12	2.18	2.23	2.29	2.34	2.4	2.46	2.52	2.58	2.64	2.7	2.75	2.81	2.87	2.92	2.97	3.02	3.07	3.63							
140		2.17	2.21	2.26	2.31	2.36	2.42	2.48	2.54	2.6	2.67	2.73	2.8	2.87	2.94	3.01	3.08	3.15	3.21	3.28	3.34	3.41	3.47	3.53	3.59	4.24							
160		2.48	2.53	2.59	2.64	2.7	2.77	2.83	2.9	2.97	3.05	3.12	3.2	3.28	3.36	3.44	3.52	3.6	3.67	3.75	3.82	3.89	3.96	4.03	4.1	4.85							
180		2.79	2.85	2.91	2.97	3.04	3.11	3.19	3.27	3.35	3.43	3.51	3.6	3.69	3.78	3.87	3.96	4.04	4.13	4.22	4.3	4.38	4.46	4.54	4.61	5.45							
200		3.1	3.16	3.23	3.3	3.38	3.46	3.54	3.63	3.72	3.81	3.9	4	4.1	4.2	4.3	4.4	4.49	4.59	4.68	4.78	4.87	4.95	5.04	5.12	6.06							
210		3.25	3.32	3.39	3.47	3.55	3.63	3.72	3.81	3.9	4	4.1	4.2	4.31	4.41	4.51	4.62	4.72	4.82	4.92	5.02	5.11	5.2	5.29	5.38	6.36							
220		3.41	3.48	3.56	3.63	3.72	3.8	3.89	3.99	4.09	4.19	4.29	4.4	4.51	4.62	4.73	4.84	4.94	5.05	5.15	5.25	5.35	5.45	5.55	5.64	6.66							
230		3.56	3.64	3.72	3.8	3.88	3.98	4.07	4.17	4.28	4.38	4.49	4.6	4.72	4.83	4.94	5.06	5.17	5.28	5.39	5.49	5.6	5.7	5.8	5.89	6.97							
240		3.72	3.8	3.88	3.96	4.05	4.15	4.25	4.35	4.46	4.57	4.69	4.8	4.92	5.04	5.16	5.28	5.39	5.51	5.62	5.73	5.84	5.95	6.05	6.15	7.27							
250		3.87	3.95	4.04	4.13	4.22	4.32	4.42	4.54	4.65	4.76	4.88	5	5.13	5.25	5.37	5.5	5.62	5.74	5.85	5.97	6.08	6.19	6.3	6.4	7.57							
260		4.03	4.11	4.2	4.29	4.39	4.5	4.6	4.72	4.83	4.95	5.08	5.2	5.33	5.46	5.59	5.72	5.84	5.97	6.09	6.21	6.33	6.44	6.55	6.66	7.88							
270		4.19	4.27	4.37	4.46	4.56	4.67	4.78	4.9	5.02	5.15	5.28	5.41	5.54	5.67	5.81	5.94	6.07	6.2	6.33	6.45	6.57	6.69	6.81	6.92	8.18							
280		4.34	4.43	4.53	4.63	4.73	4.85	4.96	5.08	5.21	5.34	5.47	5.61	5.74	5.88	6.02	6.16	6.3	6.43	6.56	6.69	6.82	6.94	7.06	7.18	8.49							
290		4.5	4.59	4.69	4.79	4.9	5.02	5.14	5.27	5.39	5.53	5.67	5.81	5.95	6.09	6.24	6.38	6.52	6.66	6.8	6.93	7.06	7.19	7.31	7.43	8.79							
300		4.65	4.75	4.85	4.96	5.07	5.19	5.31	5.45	5.58	5.72	5.86	6.01	6.15	6.3	6.45	6.6	6.75	6.89	7.03	7.17	7.3	7.44	7.57	7.69	9.09							
310		4.81	4.91	5.01	5.12	5.24	5.36	5.49	5.63	5.77	5.91	6.06	6.21	6.36	6.51	6.67	6.82	6.97	7.12	7.27	7.41	7.55	7.68	7.82	7.95	9.4							
320		4.96	5.06	5.17	5.29	5.41	5.54	5.67	5.81	5.95	6.1	6.25	6.41	6.56	6.72	6.88	7.04	7.2	7.35	7.5	7.65	7.79	7.93	8.07	8.2	9.7							
330		5.12	5.22	5.34	5.45	5.58	5.71	5.85	5.99	6.14	6.29	6.45	6.61	6.77	6.93	7.1	7.26	7.42	7.58	7.74	7.89	8.03	8.18	8.32	8.46	10							
340		5.27	5.38	5.5	5.62	5.75	5.88	6.02	6.17	6.32	6.48	6.64	6.81	6.97	7.14	7.31	7.48	7.65	7.81	7.97	8.13	8.28	8.43	8.58	8.72	10.31							
350		5.43	5.54	5.66	5.78	5.92	6.06	6.2	6.35	6.51	6.67	6.84	7.01	7.18	7.36	7.53	7.7	7.87	8.04	8.2	8.36	8.52	8.68	8.83	8.97	10.61							

1098-05	GENERAL INFORMATION																	
Sheet of	ENGINEERING NOTES AND SIGNAGE																	
Rev: 03/26/2026	SAG & TENSION WITH TABLES																	


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Creep RS	60.00	27.70	4319.60	46.10

Conductor	795 AWG Covered AAC - Arbutus																								Eng. Use: MOT	
Condition	Creep Sag & Tension																								Temp (°F)	
Temp (°F)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	188
Tension (lbs)	3,970	3,741	3,525	3,325	3,137	2,961	2,803	2,656	2,522	2,400	2,290	2,191	2,100	2,017	1,940	1,870	1,806	1,747	1,693	1,643	1,596	1,553	1,513	1,475	1,440	1,115
% Ultimate	25%	24%	23%	21%	20%	19%	18%	17%	16%	15%	15%	14%	13%	13%	12%	12%	12%	11%	11%	11%	10%	10%	10%	9%	9%	7%
Span	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)
Ruling Span Sag	1'-10"	1'-11"	2'-1"	2'-2"	2'-4"	2'-5"	2'-7"	2'-9"	2'-10"	3'-0"	3'-2"	3'-4"	3'-5"	3'-7"	3'-9"	3'-10"	4'-0"	4'-2"	4'-3"	4'-5"	4'-6"	4'-8"	4'-9"	4'-11"	5'-0"	6'-6"
50	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"
75	0'-2"	0'-2"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-4"	0'-4"	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-6"	0'-6"	0'-6"	0'-6"	0'-8"
100	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-5"	0'-6"	0'-6"	0'-6"	0'-7"	0'-7"	0'-7"	0'-7"	0'-8"	0'-8"	0'-8"	0'-9"	0'-9"	0'-9"	0'-10"	0'-10"	0'-10"	0'-10"	0'-11"	0'-11"	1'-2"
120	0'-6"	0'-6"	0'-7"	0'-7"	0'-7"	0'-8"	0'-8"	0'-9"	0'-9"	0'-10"	0'-10"	0'-11"	0'-11"	1'-0"	1'-0"	1'-0"	1'-1"	1'-1"	1'-1"	1'-2"	1'-2"	1'-3"	1'-3"	1'-3"	1'-4"	1'-8"
140	0'-8"	0'-8"	0'-9"	0'-9"	0'-10"	0'-10"	0'-11"	1'-0"	1'-0"	1'-1"	1'-1"	1'-2"	1'-3"	1'-3"	1'-4"	1'-4"	1'-5"	1'-6"	1'-6"	1'-7"	1'-7"	1'-8"	1'-8"	1'-9"	1'-9"	2'-4"
160	0'-10"	0'-11"	0'-11"	1'-0"	1'-1"	1'-2"	1'-2"	1'-3"	1'-4"	1'-5"	1'-6"	1'-6"	1'-7"	1'-8"	1'-9"	1'-9"	1'-10"	1'-11"	2'-0"	2'-0"	2'-1"	2'-2"	2'-3"	2'-3"	2'-4"	3'-0"
180	1'-1"	1'-2"	1'-2"	1'-3"	1'-4"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	2'-0"	2'-1"	2'-2"	2'-3"	2'-4"	2'-5"	2'-6"	2'-7"	2'-8"	2'-9"	2'-10"	2'-10"	2'-11"	3'-10"
200	1'-4"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	2'-0"	2'-1"	2'-2"	2'-3"	2'-5"	2'-6"	2'-7"	2'-8"	2'-10"	2'-11"	3'-0"	3'-1"	3'-2"	3'-3"	3'-4"	3'-6"	3'-7"	3'-8"	4'-8"
210	1'-5"	1'-6"	1'-8"	1'-9"	1'-10"	1'-11"	2'-1"	2'-2"	2'-3"	2'-5"	2'-6"	2'-8"	2'-9"	2'-10"	3'-0"	3'-1"	3'-2"	3'-4"	3'-5"	3'-6"	3'-7"	3'-9"	3'-10"	3'-11"	4'-0"	5'-2"
220	1'-7"	1'-8"	1'-10"	1'-11"	2'-0"	2'-2"	2'-3"	2'-5"	2'-6"	2'-8"	2'-9"	2'-11"	3'-0"	3'-2"	3'-3"	3'-5"	3'-6"	3'-7"	3'-9"	3'-10"	4'-0"	4'-1"	4'-2"	4'-3"	4'-5"	5'-8"
230	1'-9"	1'-10"	2'-0"	2'-1"	2'-3"	2'-4"	2'-6"	2'-7"	2'-9"	2'-11"	3'-0"	3'-2"	3'-4"	3'-5"	3'-7"	3'-8"	3'-10"	4'-0"	4'-1"	4'-3"	4'-4"	4'-5"	4'-7"	4'-8"	4'-10"	6'-3"
240	1'-11"	2'-0"	2'-2"	2'-3"	2'-5"	2'-6"	2'-8"	2'-10"	3'-0"	3'-2"	3'-3"	3'-5"	3'-7"	3'-9"	3'-11"	4'-0"	4'-2"	4'-4"	4'-5"	4'-7"	4'-9"	4'-10"	5'-0"	5'-1"	5'-3"	6'-9"
250	2'-1"	2'-2"	2'-4"	2'-6"	2'-7"	2'-9"	2'-11"	3'-1"	3'-3"	3'-5"	3'-7"	3'-9"	3'-11"	4'-1"	4'-3"	4'-4"	4'-6"	4'-8"	4'-10"	5'-0"	5'-1"	5'-3"	5'-5"	5'-6"	5'-8"	7'-4"
260	2'-3"	2'-4"	2'-6"	2'-8"	2'-10"	3'-0"	3'-2"	3'-4"	3'-6"	3'-8"	3'-10"	4'-0"	4'-3"	4'-5"	4'-7"	4'-9"	4'-11"	5'-1"	5'-3"	5'-5"	5'-8"	5'-10"	6'-0"	6'-2"	6'-2"	7'-11"
270	2'-5"	2'-7"	2'-9"	2'-10"	3'-0"	3'-3"	3'-5"	3'-7"	3'-9"	4'-0"	4'-2"	4'-4"	4'-6"	4'-9"	4'-11"	5'-1"	5'-3"	5'-6"	5'-8"	5'-10"	6'-0"	6'-2"	6'-4"	6'-6"	6'-8"	8'-7"
280	2'-7"	2'-9"	2'-11"	3'-1"	3'-3"	3'-6"	3'-8"	3'-10"	4'-1"	4'-3"	4'-6"	4'-8"	4'-11"	5'-1"	5'-3"	5'-6"	5'-8"	5'-11"	6'-1"	6'-3"	6'-5"	6'-7"	6'-9"	7'-0"	7'-2"	9'-3"
290	2'-9"	2'-11"	3'-2"	3'-4"	3'-6"	3'-9"	3'-11"	4'-2"	4'-4"	4'-7"	4'-10"	5'-0"	5'-3"	5'-6"	5'-8"	5'-11"	6'-1"	6'-4"	6'-6"	6'-8"	6'-11"	7'-1"	7'-3"	7'-6"	7'-8"	9'-11"
300	3'-0"	3'-2"	3'-4"	3'-7"	3'-9"	4'-0"	4'-3"	4'-5"	4'-8"	4'-11"	5'-2"	5'-5"	5'-7"	5'-10"	6'-1"	6'-4"	6'-6"	6'-9"	7'-0"	7'-2"	7'-5"	7'-7"	7'-9"	8'-0"	8'-2"	10'-7"
310	3'-2"	3'-4"	3'-7"	3'-9"	4'-0"	4'-3"	4'-6"	4'-9"	5'-0"	5'-3"	5'-6"	5'-9"	6'-0"	6'-3"	6'-6"	6'-9"	7'-0"	7'-2"	7'-5"	7'-8"	7'-11"	8'-1"	8'-4"	8'-6"	8'-9"	11'-4"
320	3'-5"	3'-7"	3'-10"	4'-0"	4'-3"	4'-6"	4'-9"	5'-1"	5'-4"	5'-7"	5'-10"	6'-1"	6'-5"	6'-8"	6'-11"	7'-2"	7'-5"	7'-8"	7'-11"	8'-2"	8'-5"	8'-8"	8'-10"	9'-1"	9'-4"	12'-0"
330	3'-7"	3'-10"	4'-1"	4'-3"	4'-7"	4'-10"	5'-1"	5'-4"	5'-8"	5'-11"	6'-3"	6'-6"	6'-9"	7'-1"	7'-4"	7'-8"	7'-11"	8'-2"	8'-5"	8'-8"	8'-11"	9'-2"	9'-5"	9'-8"	9'-11"	12'-10"
340	3'-10"	4'-1"	4'-4"	4'-7"	4'-10"	5'-1"	5'-5"	5'-9"	6'-0"	6'-4"	6'-7"	6'-11"	7'-3"	7'-6"	7'-10"	8'-1"	8'-5"	8'-8"	8'-11"	9'-3"	9'-6"	9'-9"	10'-0"	10'-3"	10'-6"	13'-7"
350	4'-0"	4'-3"	4'-7"	4'-10"	5'-1"	5'-5"	5'-9"	6'-1"	6'-4"	6'-8"	7'-0"	7'-4"	7'-8"	8'-0"	8'-3"	8'-7"	8'-11"	9'-2"	9'-6"	9'-9"	10'-1"	10'-4"	10'-7"	10'-11"	11'-2"	14'-5"

1098-05	GENERAL INFORMATION																		
Sheet of	ENGINEERING NOTES AND SIGNAGE																		
Rev: 03/26/2026	3-WAVE TIME & TENSION WITH TABLES																		


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Creep RS	60.00	27.70	4319.60	46.10

Conductor		795 AWG Covered AAC - Arbutus																									Eng. Use:													
Condition		Creep Sag & Tension																									MOT													
		Weight (Lb/Ft)										1.292	Rated Breaking Strength					15,600	Ruling Span (Feet)	235										ARBUTUS CREEP										Temp (°F)
Temp (°F)		0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	188													
Tension (lbs)		3,970	3,741	3,525	3,325	3,137	2,961	2,803	2,656	2,522	2,400	2,290	2,191	2,100	2,017	1,940	1,870	1,806	1,747	1,693	1,643	1,596	1,553	1,513	1,475	1,440	1,115													
% Ultimate		25%	24%	23%	21%	20%	19%	18%	17%	16%	15%	15%	14%	13%	13%	12%	12%	12%	11%	11%	11%	10%	10%	10%	9%	9%	7%													
Span		Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec													
R.S. Span		4.16	4.28	4.41	4.54	4.67	4.8	4.93	5.06	5.19	5.31	5.43	5.55	5.66	5.77	5.88	5.98	6.08	6.18	6.27	6.36	6.45	6.54	6.62	6.7	7.62	4.03													
3-Wave Time		50	0.88	0.91	0.94	0.97	0.99	1.02	1.05	1.08	1.1	1.13	1.15	1.18	1.2	1.23	1.25	1.27	1.29	1.31	1.33	1.35	1.37	1.39	1.41	1.42	1.62	0.86												
		75	1.33	1.37	1.41	1.45	1.49	1.53	1.57	1.61	1.65	1.69	1.73	1.77	1.81	1.84	1.88	1.91	1.94	1.97	2	2.03	2.06	2.09	2.11	2.14	2.43	1.29												
		100	1.77	1.82	1.88	1.93	1.99	2.04	2.1	2.15	2.21	2.26	2.31	2.36	2.41	2.46	2.5	2.54	2.59	2.63	2.67	2.71	2.74	2.78	2.82	2.85	3.24	1.72												
		120	2.12	2.19	2.25	2.32	2.38	2.45	2.52	2.58	2.65	2.71	2.77	2.83	2.89	2.95	3	3.05	3.1	3.15	3.2	3.25	3.29	3.34	3.38	3.42	3.89	2.06												
		140	2.48	2.55	2.63	2.7	2.78	2.86	2.94	3.02	3.09	3.16	3.23	3.3	3.37	3.44	3.5	3.56	3.62	3.68	3.74	3.79	3.84	3.89	3.94	3.99	4.54	2.4												
		160	2.83	2.91	3	3.09	3.18	3.27	3.36	3.45	3.53	3.62	3.7	3.78	3.85	3.93	4	4.07	4.14	4.21	4.27	4.33	4.39	4.45	4.51	4.56	5.18	2.75												
		180	3.18	3.28	3.38	3.48	3.58	3.68	3.78	3.88	3.97	4.07	4.16	4.25	4.33	4.42	4.5	4.58	4.66	4.73	4.8	4.87	4.94	5.01	5.07	5.13	5.83	3.09												
		200	3.54	3.64	3.75	3.86	3.97	4.09	4.2	4.31	4.42	4.52	4.62	4.72	4.82	4.91	5	5.09	5.18	5.26	5.34	5.41	5.49	5.56	5.63	5.7	6.48	3.43												
		210	3.71	3.83	3.94	4.05	4.17	4.29	4.41	4.52	4.64	4.75	4.85	4.96	5.06	5.16	5.25	5.34	5.43	5.52	5.6	5.69	5.76	5.84	5.91	5.99	6.8	3.6												
		220	3.89	4.01	4.13	4.25	4.37	4.49	4.62	4.74	4.86	4.97	5.08	5.19	5.3	5.4	5.5	5.6	5.69	5.78	5.87	5.96	6.04	6.12	6.2	6.27	7.13	3.78												
		230	4.07	4.19	4.31	4.44	4.57	4.7	4.83	4.95	5.08	5.2	5.31	5.43	5.54	5.65	5.75	5.85	5.95	6.05	6.14	6.23	6.31	6.4	6.48	6.56	7.45	3.95												
		240	4.24	4.37	4.5	4.63	4.77	4.9	5.04	5.17	5.3	5.42	5.55	5.66	5.78	5.89	6	6.11	6.21	6.31	6.4	6.5	6.59	6.67	6.76	6.84	7.78	4.12												
		250	4.42	4.55	4.69	4.83	4.97	5.11	5.25	5.38	5.52	5.65	5.78	5.9	6.02	6.14	6.25	6.36	6.47	6.57	6.67	6.77	6.86	6.95	7.04	7.13	8.1	4.29												
		260	4.6	4.74	4.88	5.02	5.17	5.31	5.46	5.6	5.74	5.88	6.01	6.14	6.26	6.38	6.5	6.62	6.73	6.84	6.94	7.04	7.14	7.23	7.32	7.41	8.43	4.46												
		270	4.78	4.92	5.07	5.22	5.37	5.52	5.67	5.82	5.96	6.1	6.24	6.38	6.51	6.63	6.76	6.88	6.99	7.1	7.21	7.31	7.41	7.51	7.61	7.7	8.75	4.64												
		280	4.95	5.1	5.26	5.41	5.57	5.73	5.88	6.03	6.18	6.33	6.48	6.61	6.75	6.88	7.01	7.13	7.25	7.36	7.48	7.58	7.69	7.79	7.89	7.99	9.08	4.81												
		290	5.13	5.29	5.44	5.61	5.77	5.93	6.09	6.25	6.41	6.56	6.71	6.85	6.99	7.12	7.26	7.39	7.51	7.63	7.74	7.85	7.96	8.07	8.17	8.27	9.4	4.98												
		300	5.31	5.47	5.63	5.8	5.97	6.14	6.3	6.46	6.63	6.78	6.94	7.08	7.23	7.37	7.51	7.64	7.77	7.89	8.01	8.13	8.24	8.35	8.46	8.56	9.73	5.15												
		310	5.49	5.65	5.82	5.99	6.17	6.34	6.51	6.68	6.85	7.01	7.17	7.32	7.47	7.62	7.76	7.9	8.03	8.15	8.28	8.4	8.51	8.63	8.74	8.84	10.05	5.32												
		320	5.66	5.83	6.01	6.19	6.37	6.54	6.72	6.89	7.07	7.24	7.4	7.56	7.71	7.86	8.01	8.15	8.29	8.42	8.55	8.67	8.79	8.9	9.02	9.13	10.38	5.5												
		330	5.84	6.02	6.2	6.38	6.57	6.75	6.93	7.11	7.29	7.46	7.63	7.79	7.96	8.11	8.26	8.41	8.55	8.68	8.81	8.94	9.06	9.18	9.3	9.41	10.7	5.67												
		340	6.02	6.2	6.38	6.57	6.76	6.95	7.14	7.33	7.51	7.69	7.86	8.03	8.2	8.35	8.51	8.66	8.8	8.94	9.08	9.21	9.34	9.46	9.58	9.7	11.03	5.84												
		350	6.19	6.38	6.57	6.77	6.96	7.16	7.35	7.54	7.73	7.91	8.1	8.27	8.44	8.6	8.76	8.92	9.06	9.21	9.35	9.48	9.61	9.74	9.87	9.98	11.35	6.01												

1098-05	GENERAL INFORMATION																	
Sheet of	ENGINEERING NOTES AND SIGNAGE																	
Rev: 03/26/2026	SAG & TENSION WITH TABLES																	


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Initial RS	60.00	32.70	5099.00	54.50

Conductor	795 AWG Covered AAC - Arbutus											Weight (Lb/Ft)	1.292	Rated Breaking Strength	15,600	Ruling Span (Feet)	250	ARBUS INITIAL												Eng. Use: MOT Temp (°F)
Condition	Initial Sag & Tension																							188						
Temp (°F)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	188				
Tension (lbs)	4,983	4,791	4,602	4,415	4,226	4,047	3,865	3,692	3,524	3,359	3,206	3,060	2,922	2,789	2,668	2,556	2,450	2,349	2,258	2,176	2,097	2,025	1,957	1,895	1,837	1,334				
% Ultimate	32%	31%	29%	28%	27%	26%	25%	24%	23%	22%	21%	20%	19%	18%	17%	16%	16%	15%	14%	14%	13%	13%	13%	12%	12%	9%				
Span (Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)				
Ruling Span Sag	1'-8"	1'-9"	1'-9"	1'-10"	1'-11"	2'-0"	2'-1"	2'-3"	2'-4"	2'-5"	2'-7"	2'-8"	2'-10"	2'-11"	3'-1"	3'-2"	3'-4"	3'-6"	3'-7"	3'-9"	3'-11"	4'-0"	4'-2"	4'-4"	4'-5"	6'-2"				
50	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-3"				
75	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-4"	0'-4"	0'-4"	0'-4"	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-7"				
100	0'-3"	0'-3"	0'-3"	0'-4"	0'-4"	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-6"	0'-6"	0'-6"	0'-6"	0'-7"	0'-7"	0'-7"	0'-7"	0'-8"	0'-8"	0'-8"	0'-8"	1'-0"				
120	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-6"	0'-6"	0'-6"	0'-6"	0'-7"	0'-7"	0'-7"	0'-8"	0'-8"	0'-9"	0'-9"	0'-9"	0'-10"	0'-10"	0'-10"	0'-11"	0'-11"	1'-0"	1'-0"	1'-0"	1'-5"				
140	0'-6"	0'-6"	0'-7"	0'-7"	0'-7"	0'-8"	0'-8"	0'-8"	0'-9"	0'-9"	0'-10"	0'-10"	0'-11"	0'-11"	1'-0"	1'-0"	1'-1"	1'-1"	1'-2"	1'-2"	1'-3"	1'-3"	1'-4"	1'-4"	1'-5"	1'-11"				
160	0'-8"	0'-8"	0'-9"	0'-9"	0'-9"	0'-10"	0'-10"	0'-11"	0'-11"	1'-0"	1'-0"	1'-1"	1'-2"	1'-2"	1'-3"	1'-4"	1'-4"	1'-5"	1'-6"	1'-6"	1'-7"	1'-8"	1'-9"	1'-9"	1'-10"	2'-6"				
180	0'-10"	0'-11"	0'-11"	1'-0"	1'-0"	1'-1"	1'-1"	1'-2"	1'-2"	1'-3"	1'-4"	1'-5"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	1'-11"	2'-0"	2'-1"	2'-2"	2'-3"	2'-4"	3'-2"				
200	1'-1"	1'-1"	1'-2"	1'-2"	1'-3"	1'-3"	1'-4"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-9"	1'-11"	2'-0"	2'-1"	2'-2"	2'-3"	2'-4"	2'-5"	2'-6"	2'-7"	2'-8"	2'-9"	2'-10"	3'-11"				
210	1'-2"	1'-2"	1'-3"	1'-4"	1'-4"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	2'-1"	2'-1"	2'-2"	2'-3"	2'-4"	2'-5"	2'-7"	2'-8"	2'-9"	2'-10"	2'-11"	3'-0"	3'-2"	4'-4"				
220	1'-3"	1'-4"	1'-5"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	2'-0"	2'-1"	2'-2"	2'-3"	2'-4"	2'-6"	2'-7"	2'-8"	2'-10"	2'-11"	3'-0"	3'-2"	3'-3"	3'-4"	3'-5"	4'-9"				
230	1'-5"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-9"	1'-10"	2'-0"	2'-1"	2'-2"	2'-3"	2'-4"	2'-6"	2'-7"	2'-9"	2'-10"	2'-11"	3'-1"	3'-2"	3'-4"	3'-5"	3'-6"	3'-8"	3'-9"	5'-2"				
240	1'-6"	1'-7"	1'-8"	1'-9"	1'-9"	1'-10"	1'-11"	2'-0"	2'-2"	2'-3"	2'-4"	2'-6"	2'-7"	2'-8"	2'-10"	2'-11"	3'-1"	3'-3"	3'-4"	3'-6"	3'-7"	3'-9"	3'-10"	4'-0"	4'-1"	5'-8"				
250	1'-8"	1'-9"	1'-9"	1'-10"	1'-11"	2'-0"	2'-1"	2'-3"	2'-4"	2'-5"	2'-7"	2'-8"	2'-10"	2'-11"	3'-1"	3'-2"	3'-4"	3'-6"	3'-7"	3'-9"	3'-11"	4'-0"	4'-2"	4'-4"	4'-5"	6'-2"				
260	1'-9"	1'-10"	1'-11"	2'-0"	2'-1"	2'-2"	2'-3"	2'-5"	2'-6"	2'-8"	2'-9"	2'-11"	3'-0"	3'-2"	3'-4"	3'-6"	3'-7"	3'-9"	3'-11"	4'-1"	4'-3"	4'-4"	4'-6"	4'-8"	4'-10"	6'-8"				
270	1'-11"	2'-0"	2'-1"	2'-2"	2'-3"	2'-4"	2'-6"	2'-7"	2'-9"	2'-10"	3'-0"	3'-1"	3'-3"	3'-5"	3'-7"	3'-9"	3'-11"	4'-1"	4'-3"	4'-5"	4'-7"	4'-9"	4'-10"	5'-0"	5'-2"	7'-2"				
280	2'-1"	2'-2"	2'-3"	2'-4"	2'-5"	2'-6"	2'-8"	2'-9"	2'-11"	3'-1"	3'-2"	3'-4"	3'-6"	3'-8"	3'-10"	4'-0"	4'-2"	4'-4"	4'-6"	4'-9"	4'-11"	5'-1"	5'-3"	5'-5"	5'-7"	7'-8"				
290	2'-3"	2'-4"	2'-5"	2'-6"	2'-7"	2'-9"	2'-10"	3'-0"	3'-2"	3'-3"	3'-5"	3'-7"	3'-9"	3'-11"	4'-2"	4'-4"	4'-6"	4'-8"	4'-11"	5'-1"	5'-3"	5'-5"	5'-8"	5'-10"	6'-0"	8'-3"				
300	2'-4"	2'-6"	2'-7"	2'-8"	2'-9"	2'-11"	3'-1"	3'-2"	3'-4"	3'-6"	3'-8"	3'-10"	4'-0"	4'-3"	4'-5"	4'-7"	4'-10"	5'-0"	5'-3"	5'-5"	5'-7"	5'-10"	6'-0"	6'-3"	6'-5"	8'-10"				
310	2'-6"	2'-8"	2'-9"	2'-10"	3'-0"	3'-1"	3'-3"	3'-5"	3'-7"	3'-9"	3'-11"	4'-1"	4'-4"	4'-6"	4'-9"	4'-11"	5'-2"	5'-4"	5'-7"	5'-9"	6'-0"	6'-3"	6'-5"	6'-8"	6'-10"	9'-5"				
320	2'-8"	2'-10"	2'-11"	3'-0"	3'-2"	3'-4"	3'-6"	3'-8"	3'-10"	4'-0"	4'-2"	4'-5"	4'-7"	4'-10"	5'-0"	5'-3"	5'-6"	5'-9"	5'-11"	6'-2"	6'-5"	6'-8"	6'-10"	7'-1"	7'-4"	10'-1"				
330	2'-10"	3'-0"	3'-1"	3'-3"	3'-4"	3'-6"	3'-8"	3'-10"	4'-1"	4'-3"	4'-5"	4'-8"	4'-11"	5'-1"	5'-4"	5'-7"	5'-10"	6'-1"	6'-4"	6'-7"	6'-10"	7'-1"	7'-3"	7'-6"	7'-9"	10'-8"				
340	3'-0"	3'-2"	3'-3"	3'-5"	3'-7"	3'-9"	3'-11"	4'-1"	4'-4"	4'-6"	4'-9"	4'-11"	5'-2"	5'-5"	5'-8"	5'-11"	6'-2"	6'-5"	6'-9"	7'-0"	7'-3"	7'-6"	7'-9"	8'-0"	8'-3"	11'-4"				
350	3'-3"	3'-4"	3'-6"	3'-8"	3'-10"	4'-0"	4'-2"	4'-4"	4'-7"	4'-9"	5'-0"	5'-3"	5'-6"	5'-9"	6'-0"	6'-3"	6'-7"	6'-10"	7'-1"	7'-5"	7'-8"	7'-11"	8'-2"	8'-6"	8'-9"	12'-0"				

1098-05	GENERAL INFORMATION																	
Sheet of	ENGINEERING NOTES AND SIGNAGE																	
Rev: 03/26/2026	3-WAVE TIME & TENSION WITH TABLES																	


Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Initial RS	60.00	32.70	5099.00	54.50

Conductor		795 AWG Covered AAC - Arbutus														Weight (Lb/Ft)	1.292	Rated Breaking Strength	15,600	Ruling Span (Feet)	250		ARBUS INITIAL												Eng. Use: MOT Temp (°F)
Condition	Initial Sag & Tension	0	5	10	15	20	25	30	35	40	45	50	55	60	65						70	75	80	85	90	95	100	105	110	115	120				
Temp (°F)		0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120									
Tension (lbs)		4,983	4,791	4,602	4,415	4,226	4,047	3,865	3,692	3,524	3,359	3,206	3,060	2,922	2,789	2,668	2,556	2,450	2,349	2,258	2,176	2,097	2,025	1,957	1,895	1,837									
% Ultimate		32%	31%	29%	28%	27%	26%	25%	24%	23%	22%	21%	20%	19%	18%	17%	16%	16%	15%	14%	14%	13%	13%	13%	12%	12%									
Span	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec									
R.S. Span																																			
3-Wave Time		3.91	3.99	4.07	4.16	4.25	4.35	4.45	4.55	4.66	4.78	4.89	5	5.12	5.23	5.35	5.46	5.58	5.69	5.8	5.9	6.01	6.11	6.21	6.31	7.41									
50	0.78	0.8	0.81	0.83	0.85	0.87	0.89	0.91	0.93	0.95	0.98	1	1.02	1.05	1.07	1.09	1.11	1.14	1.16	1.18	1.2	1.22	1.24	1.26	1.48										
75	1.17	1.19	1.22	1.25	1.27	1.3	1.33	1.37	1.4	1.43	1.47	1.5	1.53	1.57	1.6	1.64	1.67	1.71	1.74	1.77	1.8	1.83	1.86	1.89	2.22										
100	1.56	1.59	1.63	1.66	1.7	1.74	1.78	1.82	1.87	1.91	1.96	2	2.05	2.09	2.14	2.18	2.23	2.28	2.32	2.36	2.4	2.44	2.48	2.52	2.96										
120	1.87	1.91	1.95	2	2.04	2.09	2.14	2.19	2.24	2.29	2.35	2.4	2.46	2.51	2.57	2.62	2.68	2.73	2.78	2.83	2.88	2.93	2.98	3.03	3.55										
140	2.19	2.23	2.28	2.33	2.38	2.44	2.49	2.55	2.61	2.67	2.74	2.8	2.87	2.93	2.99	3.06	3.12	3.19	3.25	3.31	3.36	3.42	3.48	3.53	4.15										
160	2.5	2.55	2.6	2.66	2.72	2.78	2.85	2.91	2.99	3.06	3.13	3.2	3.28	3.35	3.42	3.5	3.57	3.64	3.71	3.78	3.85	3.91	3.97	4.04	4.74										
180	2.81	2.87	2.93	2.99	3.06	3.13	3.2	3.28	3.36	3.44	3.52	3.6	3.69	3.77	3.85	3.93	4.02	4.1	4.17	4.25	4.33	4.4	4.47	4.54	5.33										
200	3.12	3.19	3.25	3.33	3.4	3.48	3.56	3.64	3.73	3.82	3.91	4	4.1	4.19	4.28	4.37	4.46	4.55	4.64	4.72	4.81	4.89	4.97	5.05	5.92										
210	3.28	3.35	3.42	3.49	3.57	3.65	3.74	3.83	3.92	4.01	4.11	4.2	4.3	4.4	4.49	4.59	4.69	4.78	4.87	4.96	5.05	5.13	5.22	5.3	6.22										
220	3.44	3.51	3.58	3.66	3.74	3.83	3.92	4.01	4.11	4.2	4.3	4.4	4.51	4.61	4.71	4.81	4.91	5.01	5.1	5.2	5.29	5.38	5.47	5.55	6.52										
230	3.59	3.67	3.74	3.83	3.91	4	4.09	4.19	4.29	4.39	4.5	4.6	4.71	4.82	4.92	5.03	5.13	5.24	5.33	5.43	5.53	5.62	5.71	5.8	6.81										
240	3.75	3.83	3.91	3.99	4.08	4.18	4.27	4.37	4.48	4.58	4.69	4.8	4.91	5.02	5.13	5.24	5.36	5.46	5.56	5.67	5.77	5.87	5.96	6.06	7.11										
250	3.91	3.99	4.07	4.16	4.25	4.35	4.45	4.55	4.66	4.78	4.89	5	5.12	5.23	5.35	5.46	5.58	5.69	5.8	5.9	6.01	6.11	6.21	6.31	7.41										
260	4.06	4.14	4.23	4.33	4.42	4.52	4.63	4.74	4.85	4.97	5.08	5.2	5.32	5.44	5.56	5.68	5.8	5.92	6.03	6.14	6.25	6.36	6.46	6.56	7.7										
270	4.22	4.3	4.39	4.49	4.59	4.7	4.81	4.92	5.04	5.16	5.28	5.4	5.53	5.65	5.78	5.9	6.03	6.15	6.26	6.38	6.49	6.6	6.71	6.81	8										
280	4.38	4.47	4.56	4.66	4.76	4.87	4.99	5.11	5.23	5.35	5.48	5.61	5.74	5.87	6	6.12	6.25	6.38	6.5	6.62	6.74	6.85	6.96	7.07	8.3										
290	4.53	4.63	4.72	4.83	4.93	5.05	5.17	5.29	5.41	5.54	5.67	5.81	5.94	6.08	6.21	6.34	6.47	6.6	6.73	6.86	6.98	7.09	7.21	7.32	8.59										
300	4.69	4.79	4.89	4.99	5.1	5.22	5.34	5.47	5.6	5.74	5.87	6.01	6.15	6.29	6.43	6.56	6.7	6.83	6.96	7.09	7.22	7.34	7.46	7.57	8.89										
310	4.85	4.95	5.05	5.16	5.27	5.4	5.52	5.65	5.79	5.93	6.06	6.21	6.35	6.49	6.64	6.78	6.92	7.06	7.19	7.33	7.46	7.58	7.71	7.83	9.19										
320	5	5.1	5.21	5.33	5.44	5.57	5.7	5.84	5.97	6.12	6.26	6.41	6.56	6.7	6.85	7	7.14	7.29	7.43	7.56	7.7	7.83	7.95	8.08	9.49										
330	5.16	5.26	5.38	5.49	5.62	5.75	5.88	6.02	6.16	6.31	6.46	6.61	6.76	6.91	7.07	7.22	7.37	7.52	7.66	7.8	7.94	8.07	8.21	8.33	9.78										
340	5.32	5.42	5.54	5.66	5.79	5.92	6.06	6.2	6.35	6.5	6.65	6.81	6.97	7.12	7.28	7.44	7.59	7.75	7.89	8.04	8.18	8.32	8.46	8.59	10.08										
350	5.47	5.58	5.7	5.83	5.96	6.09	6.23	6.38	6.54	6.69	6.85	7.01	7.17	7.33	7.5	7.66	7.82	7.97	8.12	8.27	8.42	8.56	8.7	8.84	10.38										

1098-05	GENERAL INFORMATION																		
Sheet of	ENGINEERING NOTES AND SIGNAGE																		
Rev: 03/26/2026	SAG & TENSION WITH TABLES																		

Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Creep RS	60.00	27.80	4336.30	46.30

Conductor	795 AWG Covered AAC - Arbutus																										Eng. Use: MOT
	Creep Sag & Tension																										
Condition	Creep Sag & Tension																										Temp (°F)
Temp (°F)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	188	
Tension (lbs)	3,875	3,654	3,454	3,267	3,091	2,932	2,786	2,651	2,527	2,416	2,312	2,217	2,132	2,053	1,981	1,914	1,852	1,796	1,744	1,694	1,649	1,606	1,567	1,530	1,495	1,169	
% Ultimate	25%	23%	22%	21%	20%	19%	18%	17%	16%	15%	15%	14%	14%	13%	13%	12%	12%	12%	11%	11%	11%	10%	10%	10%	10%	7%	
Span	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	(Ft-In)	
Ruling Span Sag	2'-1"	2'-3"	2'-4"	2'-6"	2'-8"	2'-9"	2'-11"	3'-1"	3'-3"	3'-5"	3'-6"	3'-8"	3'-10"	4'-0"	4'-2"	4'-3"	4'-5"	4'-7"	4'-8"	4'-10"	5'-0"	5'-1"	5'-3"	5'-4"	5'-6"	7'-0"	
50	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-1"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-2"	0'-3"	0'-3"	0'-3"	0'-3"	
75	0'-2"	0'-2"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-4"	0'-4"	0'-4"	0'-4"	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-6"	0'-6"	0'-6"	0'-6"	
100	0'-4"	0'-4"	0'-5"	0'-5"	0'-5"	0'-5"	0'-5"	0'-6"	0'-6"	0'-6"	0'-7"	0'-7"	0'-7"	0'-7"	0'-8"	0'-8"	0'-8"	0'-9"	0'-9"	0'-9"	0'-9"	0'-10"	0'-10"	0'-10"	0'-10"	1'-1"	
120	0'-6"	0'-6"	0'-7"	0'-7"	0'-7"	0'-8"	0'-8"	0'-9"	0'-9"	0'-9"	0'-10"	0'-10"	0'-11"	0'-11"	0'-11"	1'-0"	1'-0"	1'-1"	1'-1"	1'-1"	1'-1"	1'-2"	1'-2"	1'-3"	1'-3"	1'-7"	
140	0'-8"	0'-8"	0'-9"	0'-9"	0'-10"	0'-10"	0'-11"	1'-0"	1'-0"	1'-1"	1'-1"	1'-2"	1'-2"	1'-3"	1'-3"	1'-4"	1'-5"	1'-5"	1'-6"	1'-6"	1'-7"	1'-7"	1'-8"	1'-8"	1'-9"	2'-2"	
160	0'-10"	0'-11"	1'-0"	1'-0"	1'-1"	1'-2"	1'-2"	1'-3"	1'-4"	1'-5"	1'-5"	1'-6"	1'-7"	1'-8"	1'-8"	1'-9"	1'-10"	1'-10"	1'-11"	2'-0"	2'-0"	2'-1"	2'-2"	2'-2"	2'-3"	2'-10"	
180	1'-1"	1'-2"	1'-3"	1'-4"	1'-4"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	1'-11"	2'-0"	2'-1"	2'-2"	2'-3"	2'-3"	2'-4"	2'-5"	2'-6"	2'-7"	2'-8"	2'-8"	2'-9"	2'-10"	3'-8"	
200	1'-4"	1'-5"	1'-6"	1'-7"	1'-8"	1'-9"	1'-11"	2'-0"	2'-1"	2'-2"	2'-3"	2'-4"	2'-5"	2'-7"	2'-8"	2'-9"	2'-10"	2'-11"	3'-0"	3'-1"	3'-2"	3'-3"	3'-4"	3'-5"	3'-6"	4'-6"	
210	1'-6"	1'-7"	1'-8"	1'-9"	1'-10"	2'-0"	2'-1"	2'-2"	2'-3"	2'-5"	2'-6"	2'-7"	2'-8"	2'-10"	2'-11"	3'-0"	3'-1"	3'-3"	3'-4"	3'-5"	3'-6"	3'-7"	3'-8"	3'-9"	3'-10"	4'-11"	
220	1'-8"	1'-9"	1'-10"	1'-11"	2'-1"	2'-2"	2'-3"	2'-5"	2'-6"	2'-7"	2'-9"	2'-10"	3'-0"	3'-1"	3'-2"	3'-4"	3'-5"	3'-6"	3'-8"	3'-9"	3'-10"	3'-11"	4'-0"	4'-2"	4'-3"	5'-5"	
230	1'-9"	1'-11"	2'-0"	2'-1"	2'-3"	2'-4"	2'-6"	2'-7"	2'-9"	2'-10"	3'-0"	3'-1"	3'-3"	3'-4"	3'-6"	3'-7"	3'-9"	3'-10"	4'-0"	4'-1"	4'-2"	4'-4"	4'-5"	4'-6"	4'-8"	5'-11"	
240	1'-11"	2'-1"	2'-2"	2'-4"	2'-5"	2'-7"	2'-8"	2'-10"	3'-0"	3'-1"	3'-3"	3'-5"	3'-6"	3'-8"	3'-10"	3'-11"	4'-1"	4'-2"	4'-4"	4'-5"	4'-7"	4'-8"	4'-10"	4'-11"	5'-0"	6'-5"	
250	2'-1"	2'-3"	2'-4"	2'-6"	2'-8"	2'-9"	2'-11"	3'-1"	3'-3"	3'-5"	3'-6"	3'-8"	3'-10"	4'-0"	4'-2"	4'-3"	4'-5"	4'-7"	4'-8"	4'-10"	5'-0"	5'-1"	5'-3"	5'-4"	5'-6"	7'-0"	
260	2'-3"	2'-5"	2'-7"	2'-9"	2'-10"	3'-0"	3'-2"	3'-4"	3'-6"	3'-8"	3'-10"	4'-0"	4'-2"	4'-4"	4'-6"	4'-7"	4'-9"	4'-11"	5'-1"	5'-3"	5'-4"	5'-6"	5'-8"	5'-9"	5'-11"	7'-7"	
270	2'-6"	2'-7"	2'-9"	2'-11"	3'-1"	3'-3"	3'-5"	3'-7"	3'-9"	3'-11"	4'-1"	4'-4"	4'-6"	4'-8"	4'-10"	5'-0"	5'-2"	5'-4"	5'-6"	5'-8"	5'-9"	5'-11"	6'-1"	6'-3"	6'-5"	8'-2"	
280	2'-8"	2'-10"	3'-0"	3'-2"	3'-4"	3'-6"	3'-8"	3'-11"	4'-1"	4'-3"	4'-5"	4'-8"	4'-10"	5'-0"	5'-2"	5'-4"	5'-6"	5'-9"	5'-11"	6'-1"	6'-3"	6'-5"	6'-7"	6'-9"	6'-10"	8'-9"	
290	2'-10"	3'-0"	3'-2"	3'-4"	3'-7"	3'-9"	3'-11"	4'-2"	4'-4"	4'-7"	4'-9"	5'-0"	5'-2"	5'-4"	5'-7"	5'-9"	5'-11"	6'-2"	6'-4"	6'-6"	6'-8"	6'-10"	7'-0"	7'-2"	7'-4"	9'-5"	
300	3'-0"	3'-3"	3'-5"	3'-7"	3'-10"	4'-0"	4'-3"	4'-5"	4'-8"	4'-11"	5'-1"	5'-4"	5'-6"	5'-9"	5'-11"	6'-2"	6'-4"	6'-7"	6'-9"	6'-11"	7'-2"	7'-4"	7'-6"	7'-8"	7'-11"	10'-1"	
310	3'-3"	3'-5"	3'-8"	3'-10"	4'-1"	4'-3"	4'-6"	4'-9"	5'-0"	5'-3"	5'-5"	5'-8"	5'-11"	6'-2"	6'-4"	6'-7"	6'-9"	7'-0"	7'-3"	7'-5"	7'-8"	7'-10"	8'-0"	8'-3"	8'-5"	10'-9"	
320	3'-6"	3'-8"	3'-11"	4'-1"	4'-4"	4'-7"	4'-10"	5'-1"	5'-4"	5'-7"	5'-10"	6'-1"	6'-3"	6'-6"	6'-9"	7'-0"	7'-3"	7'-6"	7'-8"	7'-11"	8'-2"	8'-4"	8'-7"	8'-9"	9'-0"	11'-6"	
330	3'-8"	3'-11"	4'-4"	4'-7"	4'-10"	5'-1"	5'-5"	5'-8"	5'-11"	6'-2"	6'-5"	6'-8"	6'-11"	7'-2"	7'-5"	7'-8"	7'-11"	8'-2"	8'-5"	8'-8"	8'-11"	9'-1"	9'-4"	9'-6"	12'-3"		
340	3'-11"	4'-2"	4'-5"	4'-8"	4'-11"	5'-2"	5'-5"	5'-9"	6'-0"	6'-3"	6'-7"	6'-10"	7'-1"	7'-4"	7'-8"	7'-11"	8'-2"	8'-5"	8'-8"	8'-11"	9'-2"	9'-5"	9'-8"	9'-11"	10'-1"	13'-0"	
350	4'-2"	4'-5"	4'-8"	4'-11"	5'-2"	5'-6"	5'-9"	6'-1"	6'-4"	6'-8"	6'-11"	7'-3"	7'-6"	7'-10"	8'-1"	8'-5"	8'-8"	8'-11"	9'-2"	9'-6"	9'-9"	10'-0"	10'-3"	10'-6"	10'-9"	13'-9"	

1098-05	GENERAL INFORMATION																			
Sheet of	ENGINEERING NOTES AND SIGNAGE																			
Rev: 03/26/2026	3-WAVE TIME & TENSION WITH TABLES																			

Weather Case Description	Wind Pressure (psf)	Ice Thicknes (in)	Temp (°F)	Condition	Allowable % of Ultimate	Actual % of Ultimate	Actual Tension (lbs)	% of Allowable Capacity
NESC Medium District Loading (250B)	4.00	0.25	15.00	Creep RS	60.00	27.80	4336.30	46.30

Conductor		795 AWG Covered AAC - Arbutus																									Eng. Use:													
Condition		Creep Sag & Tension																									MOT													
		Weight (Lb/Ft)										1.292	Rated Breaking Strength					15,600	Ruling Span (Feet)	250										ARBUTUS CREEP										Temp (°F)
Temp (°F)		0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	188													
Tension (lbs)		3,875	3,654	3,454	3,267	3,091	2,932	2,786	2,651	2,527	2,416	2,312	2,217	2,132	2,053	1,981	1,914	1,852	1,796	1,744	1,694	1,649	1,606	1,567	1,530	1,495	1,169													
% Ultimate		25%	23%	22%	21%	20%	19%	18%	17%	16%	15%	15%	14%	14%	13%	13%	12%	12%	12%	11%	11%	11%	10%	10%	10%	10%	7%													
Span	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec	Sec													
R.S. Span		4.47	4.6	4.73	4.86	4.99	5.12	5.25	5.38	5.5	5.62	5.74	5.86	5.97	6.08	6.18	6.28	6.38	6.48	6.57	6.66	6.75	6.83	6.91	7	7.91	4.34													
3-Wave Time		50	0.89	0.92	0.95	0.97	1	1.02	1.05	1.07	1.1	1.12	1.15	1.17	1.19	1.21	1.24	1.26	1.28	1.29	1.31	1.33	1.35	1.37	1.38	1.4	1.58	0.87												
		75	1.34	1.38	1.42	1.46	1.5	1.54	1.57	1.61	1.65	1.69	1.72	1.76	1.79	1.82	1.85	1.88	1.91	1.94	1.97	2	2.02	2.05	2.07	2.1	2.37	1.3												
		100	1.79	1.84	1.89	1.95	2	2.05	2.1	2.15	2.2	2.25	2.3	2.34	2.39	2.43	2.47	2.51	2.55	2.59	2.63	2.66	2.7	2.73	2.76	2.8	3.16	1.74												
		120	2.15	2.21	2.27	2.33	2.4	2.46	2.52	2.58	2.64	2.7	2.76	2.81	2.86	2.92	2.97	3.02	3.06	3.11	3.15	3.2	3.24	3.28	3.32	3.36	3.8	2.08												
		140	2.5	2.58	2.65	2.72	2.8	2.87	2.94	3.01	3.08	3.15	3.22	3.28	3.34	3.4	3.46	3.52	3.57	3.63	3.68	3.73	3.78	3.83	3.87	3.92	4.43	2.43												
		160	2.86	2.94	3.03	3.11	3.2	3.28	3.36	3.44	3.52	3.6	3.67	3.75	3.82	3.89	3.95	4.02	4.08	4.14	4.2	4.26	4.32	4.37	4.42	4.48	5.06	2.78												
		180	3.22	3.31	3.41	3.5	3.59	3.69	3.78	3.87	3.96	4.05	4.13	4.22	4.3	4.37	4.45	4.52	4.59	4.66	4.73	4.79	4.86	4.92	4.98	5.04	5.7	3.13												
		200	3.58	3.68	3.78	3.89	3.99	4.1	4.2	4.3	4.4	4.5	4.59	4.68	4.77	4.86	4.94	5.03	5.1	5.18	5.26	5.33	5.4	5.47	5.53	5.6	6.33	3.47												
		210	3.76	3.86	3.97	4.08	4.19	4.3	4.41	4.52	4.62	4.72	4.82	4.92	5.01	5.1	5.19	5.28	5.36	5.44	5.52	5.59	5.67	5.74	5.81	5.88	6.65	3.65												
		220	3.94	4.05	4.16	4.28	4.39	4.51	4.62	4.73	4.84	4.95	5.05	5.15	5.25	5.35	5.44	5.53	5.61	5.7	5.78	5.86	5.94	6.01	6.08	6.16	6.96	3.82												
		230	4.11	4.23	4.35	4.47	4.59	4.71	4.83	4.95	5.06	5.17	5.28	5.39	5.49	5.59	5.69	5.78	5.87	5.96	6.04	6.13	6.21	6.29	6.36	6.44	7.28	4												
		240	4.29	4.42	4.54	4.67	4.79	4.92	5.04	5.16	5.28	5.4	5.51	5.62	5.73	5.83	5.93	6.03	6.13	6.22	6.31	6.39	6.48	6.56	6.64	6.72	7.6	4.17												
		250	4.47	4.6	4.73	4.86	4.99	5.12	5.25	5.38	5.5	5.62	5.74	5.86	5.97	6.08	6.18	6.28	6.38	6.48	6.57	6.66	6.75	6.83	6.91	7	7.91	4.34												
		260	4.65	4.78	4.92	5.06	5.19	5.33	5.46	5.59	5.72	5.85	5.97	6.09	6.21	6.32	6.43	6.53	6.64	6.73	6.83	6.93	7.02	7.11	7.19	7.28	8.23	4.52												
		270	4.83	4.97	5.11	5.25	5.39	5.53	5.67	5.81	5.94	6.07	6.2	6.32	6.44	6.56	6.67	6.79	6.89	6.99	7.1	7.19	7.29	7.38	7.47	7.56	8.55	4.69												
		280	5.01	5.15	5.3	5.45	5.59	5.74	5.89	6.03	6.17	6.3	6.43	6.56	6.69	6.81	6.92	7.04	7.15	7.26	7.36	7.46	7.56	7.65	7.75	7.84	8.86	4.87												
		290	5.19	5.34	5.49	5.64	5.79	5.94	6.1	6.24	6.39	6.53	6.66	6.8	6.92	7.05	7.17	7.29	7.41	7.52	7.62	7.73	7.83	7.93	8.02	8.12	9.18	5.04												
		300	5.37	5.52	5.68	5.84	5.99	6.15	6.31	6.46	6.61	6.75	6.89	7.03	7.16	7.29	7.42	7.54	7.66	7.77	7.89	7.99	8.1	8.2	8.3	8.4	9.5	5.22												
		310	5.55	5.71	5.87	6.03	6.19	6.35	6.52	6.67	6.83	6.98	7.12	7.26	7.4	7.54	7.67	7.8	7.92	8.03	8.15	8.26	8.37	8.47	8.58	8.68	9.82	5.39												
		320	5.73	5.89	6.06	6.23	6.39	6.56	6.73	6.89	7.05	7.2	7.35	7.5	7.64	7.78	7.91	8.05	8.17	8.29	8.41	8.53	8.64	8.75	8.86	8.96	10.13	5.56												
		330	5.91	6.08	6.25	6.42	6.59	6.77	6.94	7.1	7.27	7.43	7.58	7.74	7.88	8.02	8.16	8.3	8.43	8.55	8.68	8.79	8.91	9.02	9.13	9.24	10.45	5.74												
		340	6.09	6.26	6.44	6.62	6.79	6.97	7.15	7.32	7.49	7.65	7.81	7.97	8.12	8.27	8.41	8.55	8.68	8.81	8.94	9.06	9.18	9.3	9.41	9.52	10.77	5.92												
		350	6.26	6.44	6.63	6.81	6.99	7.18	7.36	7.53	7.71	7.88	8.04	8.21	8.36	8.51	8.66	8.8	8.94	9.07	9.2	9.33	9.45	9.57	9.68	9.8	11.08	6.09												