

TEETER IRRIGATION

AUGUST 09, 2019

WISH-93195

CUSTOMER : BRENT WOODS

VALLEY 8000 - 30
8 TOWER - 1309.64 FT
SYSTEM 400 GPM @ 11 PSI

P.O. NO. : INV081911

NELSON D3000 SPRAY NOZZLES
NELSON 10 & 6 PSI REGULATORS
NO ENDGUN
ELEVATION 2 FT UP, 2 FT DOWN

LEGAL : SW 1/4 1-31-31

1310 ONTARIO STREET

PLAINS, KANSAS 67869

(620)563-7557

WARRANTY

WATER APPLICATION UNIFORMITY OBTAINED WITH THIS SYSTEM CAN BE ADVERSELY AFFECTED BY MANY VARIABLES INCLUDING THE IMPROPER MAKEUP OR INSTALLATION OF THE SPRINKLER OR SPRAY NOZZLE PACKAGE, OBSTRUCTED NOZZLES, MAINTAINING INCORRECT PIVOT PRESSURE, UNFAVORABLE CLIMATIC CONDITIONS, TIGHT AND/OR SLOPING SOILS, IMPROPER END GUN ARC SETTINGS, ERRATIC AND IMPROPER OPERATING SPEED OF THE SYSTEM, POOR QUALITY OF WATER WITH ABRASIVES, CORROSIVES, AND/OR SOLIDS WHICH CAN CAUSE PLUGGING AND JAMMING, AS WELL AS INHERENT VARIABLES IN THE MANY COMPONENTS COMPRISING THE SYSTEM. THEREFORE WESTERN IRRIGATION SUPPLY HOUSE, INC., MAKES NO WARRANTY AS TO THE UNIFORMITY OF COVERAGE OBTAINED FROM THIS WATER APPLICATION PRINTOUT OTHER THAN ITS MATHEMATICAL ACCURACY.

IT IS THE RESPONSIBILITY OF THE END USER TO DETERMINE IF ANY INCOMPATIBILITY EXISTS BETWEEN THE WATER DISTRIBUTION DEVICES AND THE CROP, THE SOIL, AND THE PHYSICAL STRUCTURE OF THE MECHANICAL MOVE SYSTEM. WESTERN IRRIGATION SUPPLY HOUSE, INC., THEREFORE, DISCLAIMS ANY LIABILITY FOR DAMAGES DUE TO FAILURE OF THE SYSTEM TO PERFORM AS CONTEMPLATED.

FIGURES PRESENTED ON THIS COMPUTER PRINTOUT ARE BASED ON THE FOLLOWING:

1. DATA FURNISHED TO WESTERN IRRIGATION SUPPLY HOUSE, INC., ON PIPE LENGTH, DIAMETER, SURFACE FINISH, OUTLET SPACINGS, WATER FLOW, PIVOT PRESSURE AND ALL OTHER APPLICABLE INFORMATION.
2. THERE IS 100% WATER APPLICATION EFFICIENCY (ZERO WIND VELOCITY AND NO EVAPORATION).
3. PIVOT PRESSURE IS MEASURED ON THE MAIN HORIZONTAL DISTRIBUTION PIPE JUST AFTER THE LAST ELBOW.
4. MAIN PIPE PRESSURE IS CALCULATED AS IF THE PIVOT IS ALWAYS ON LEVEL GROUND.
5. SPRINKLER OR SPRAY NOZZLE BASE PRESSURE MAY BE LESS THAN MAIN LINE PIPE PRESSURE DUE TO THE USE OF PRESSURE REGULATORS. WHERE DROP PIPES ARE USED THE STATIC HEAD IS ADDED TO AND FRICTION LOSS IS SUBTRACTED FROM THE MAIN LINE PIPE PRESSURE TO DETERMINE INLET PSI. REGULATORS ARE CONSIDERED MOUNTED AT THE SAME HEIGHT AS THE SPRINKLING DEVICE UNLESS NOTED.

<u>DEALER</u>			<u>IRRIGATOR</u>			
TEETER IRRIGATION			BRENT WOODS			
1310 ONTARIO STREET			SW 1/4 1-31-31			
PLAINS, KANSAS 67869			INV081911			
TOTAL TARGET GPM	400.00	FRICTION FACTOR USED	140	SPANS	LENGTH	PIPE I.D.
TOP OF PIVOT PRESSURE	11.00	TOTAL LENGTH	1309.64	1	160.85	6.415
NO ENDGUN		NUMBER OF TOWERS	8	6	160.11	6.415
NUMBER OF OUTLETS	509	NUMBER OF SPRINKLERS	256	1	159.85	6.415
				OH	18.28	6.415
NELSON D3000 SPRAY NOZZLES - CONCAVE BLUE 36 DEEP GROOVE PLATES					10.00	2.06
NELSON BLUE TOP INTEGRAL 10 & 6 PSI SERIES REGULATORS						
DROPS AVERAGE 12.5 FT OF .75 I.D. FLEXIBLE HOSE WITH 24 INCH SLIP POLYWEIGHT®						
ELEVATION IS 2 FT UP AND 2 FT DOWN						

CAUTIONS AND WARNINGS

1. Over watering at beginning of system due to practical limitations on smallest nozzle sizes available and/or allowable for proper operation.
2. When using spray nozzles with five foot ground clearance or less, nozzle should travel between crop rows and spacing should not exceed 80 inches.
3. This system designed for minimum pressure. Failure to deliver indicated pressure at the top of pivot point will adversely affect regulator and/or sprinkler/spray performance. Elevations, pipe sizes and type of drop pipe must be as shown.

OUTLET NO.	LAST OUTLET	DISTANCE TO PIVOT	GPM NEED	GPM DEL.	PIPE PSI	NOZZLE PSI	SPRINKLER LABEL AND NOZZLE SIZE							SPRK NO.	REG SIZE	PLUG NO.
1		5.40	-	-	-	-	-	-	-	-	-	-	-	-	-	1
2		14.40	-	-	-	-	-	-	-	-	-	-	-	-	-	2
3	23.40	23.40	0.18	0.47	10.60	11.35	D3000	9	LT	BL/BEIGE				1	NNB10LF	
4	9.00	32.40	0.14	0.47	10.42	11.35	D3000	9	LT	BL/BEIGE				2	NNB10LF	
5	9.00	41.40	0.13	0.47	10.27	11.35	D3000	9	LT	BL/BEIGE				3	NNB10LF	
6	4.54	45.94	0.10	0.47	10.20	11.35	D3000	9	LT	BL/BEIGE				4	NNB10LF	
7		48.44	-	-	-	-	-	-	-	-	-	-	-	-	-	3
8	5.00	50.94	0.12	0.47	10.13	11.35	D3000	9	LT	BL/BEIGE				5	NNB10LF	
9		53.44	-	-	-	-	-	-	-	-	-	-	-	-	-	4
10	5.00	55.94	0.13	0.47	10.07	11.35	D3000	9	LT	BL/BEIGE				6	NNB10LF	
11		58.44	-	-	-	-	-	-	-	-	-	-	-	-	-	5
12	5.00	60.94	0.14	0.47	10.02	11.35	D3000	9	LT	BL/BEIGE				7	NNB10LF	
13		63.44	-	-	-	-	-	-	-	-	-	-	-	-	-	6
14	5.00	65.94	0.15	0.47	9.97	11.35	D3000	9	LT	BL/BEIGE				8	NNB10LF	
15		68.44	-	-	-	-	-	-	-	-	-	-	-	-	-	7
16	5.00	70.94	0.16	0.47	9.94	11.35	D3000	9	LT	BL/BEIGE				9	NNB10LF	
17		73.44	-	-	-	-	-	-	-	-	-	-	-	-	-	8
18	5.00	75.94	0.17	0.47	9.91	11.35	D3000	9	LT	BL/BEIGE				10	NNB10LF	
19		78.44	-	-	-	-	-	-	-	-	-	-	-	-	-	9
20	4.95	80.89	0.18	0.47	9.89	11.35	D3000	9	LT	BL/BEIGE				11	NNB10LF	
21		83.34	-	-	-	-	-	-	-	-	-	-	-	-	-	10
22	4.95	85.84	0.20	0.47	9.88	11.35	D3000	9	LT	BL/BEIGE				12	NNB10LF	
23		88.34	-	-	-	-	-	-	-	-	-	-	-	-	-	11
24	5.00	90.84	0.21	0.47	9.87	11.35	D3000	9	LT	BL/BEIGE				13	NNB10LF	
25		93.34	-	-	-	-	-	-	-	-	-	-	-	-	-	12
26	5.00	95.84	0.22	0.47	9.87	11.35	D3000	9	LT	BL/BEIGE				14	NNB10LF	
27		98.34	-	-	-	-	-	-	-	-	-	-	-	-	-	13
28	5.00	100.84	0.23	0.47	9.88	11.35	D3000	9	LT	BL/BEIGE				15	NNB10LF	
29		103.34	-	-	-	-	-	-	-	-	-	-	-	-	-	14
30	5.00	105.84	0.24	0.47	9.90	11.35	D3000	9	LT	BL/BEIGE				16	NNB10LF	
31		108.34	-	-	-	-	-	-	-	-	-	-	-	-	-	15
32	5.00	110.84	0.25	0.47	9.93	11.35	D3000	9	LT	BL/BEIGE				17	NNB10LF	
33		113.34	-	-	-	-	-	-	-	-	-	-	-	-	-	16
34	5.00	115.84	0.27	0.47	9.96	11.35	D3000	9	LT	BL/BEIGE				18	NNB10LF	
35		118.34	-	-	-	-	-	-	-	-	-	-	-	-	-	17
36	5.00	120.84	0.28	0.47	10.01	11.35	D3000	9	LT	BL/BEIGE				19	NNB10LF	
37		123.34	-	-	-	-	-	-	-	-	-	-	-	-	-	18
38	5.00	125.84	0.29	0.47	10.06	11.35	D3000	9	LT	BL/BEIGE				20	NNB10LF	
39		128.34	-	-	-	-	-	-	-	-	-	-	-	-	-	19
40	5.00	130.84	0.30	0.47	10.11	11.35	D3000	9	LT	BL/BEIGE				21	NNB10LF	
41		133.34	-	-	-	-	-	-	-	-	-	-	-	-	-	20
42	5.00	135.84	0.31	0.47	10.18	11.35	D3000	9	LT	BL/BEIGE				22	NNB10LF	
43		138.34	-	-	-	-	-	-	-	-	-	-	-	-	-	21
44	5.00	140.84	0.32	0.47	10.25	11.35	D3000	9	LT	BL/BEIGE				23	NNB10LF	
45		143.34	-	-	-	-	-	-	-	-	-	-	-	-	-	22
46	5.00	145.84	0.33	0.47	10.33	11.35	D3000	9	LT	BL/BEIGE				24	NNB10LF	
47		148.34	-	-	-	-	-	-	-	-	-	-	-	-	-	23
48	5.00	150.84	0.34	0.47	10.42	11.35	D3000	9	LT	BL/BEIGE				25	NNB10LF	

OUTLET NO.	LAST OUTLET	DISTANCE TO PIVOT	GPM NEED	GPM DEL.	PIPE PSI	NOZZLE PSI	SPRINKLER LABEL AND NOZZLE SIZE				SPRK NO.	REG SIZE	PLUG NO.
96	5.00	270.95	0.62	0.65	9.37	6.89	D3000	12	GOLD		49	NNB06LF	48
97		273.45	-	-	-	-	-	-	-	-	-	-	
98	5.00	275.95	0.63	0.65	9.41	6.89	D3000	12	GOLD		50	NNB06LF	49
99		278.45	-	-	-	-	-	-	-	-	-	-	
100	5.00	280.95	0.64	0.65	9.45	6.89	D3000	12	GOLD		51	NNB06LF	
101		283.45	-	-	-	-	-	-	-	-	-	-	50
102	5.00	285.95	0.65	0.65	9.50	6.88	D3000	12	GOLD		52	NNB06LF	
103		288.45	-	-	-	-	-	-	-	-	-	-	51
104	5.00	290.95	0.67	0.65	9.56	6.89	D3000	12	GOLD		53	NNB06LF	
105		293.45	-	-	-	-	-	-	-	-	-	-	52
106	5.00	295.95	0.68	0.65	9.63	6.89	D3000	12	GOLD		54	NNB06LF	
107		298.45	-	-	-	-	-	-	-	-	-	-	53
108	5.00	300.95	0.69	0.65	9.71	6.88	D3000	12	GOLD		55	NNB06LF	
109		303.45	-	-	-	-	-	-	-	-	-	-	54
110	5.00	305.95	0.70	0.65	9.79	6.89	D3000	12	GOLD		56	NNB06LF	
111		308.45	-	-	-	-	-	-	-	-	-	-	55
112	5.00	310.95	0.71	0.76	9.88	6.86	D3000	13	GOLD/LIME		57	NNB06LF	
113		313.45	-	-	-	-	-	-	-	-	-	-	56
114	5.00	315.95	0.74	0.76	9.89	6.86	D3000	13	GOLD/LIME		58	NNB06LF	
115		318.45	-	-	-	-	-	-	-	-	-	-	57
TOWER 2	160.11	320.96											
116	5.21	321.16	0.75	0.76	9.87	6.86	D3000	13	GOLD/LIME		59	NNB06LF	
117		323.66	-	-	-	-	-	-	-	-	-	-	58
118	5.00	326.16	0.75	0.76	9.86	6.86	D3000	13	GOLD/LIME		60	NNB06LF	
119		328.66	-	-	-	-	-	-	-	-	-	-	59
120	5.00	331.16	0.76	0.76	9.77	6.86	D3000	13	GOLD/LIME		61	NNB06LF	
121		333.66	-	-	-	-	-	-	-	-	-	-	60
122	5.00	336.16	0.77	0.76	9.65	6.86	D3000	13	GOLD/LIME		62	NNB06LF	
123		338.66	-	-	-	-	-	-	-	-	-	-	61
124	5.00	341.16	0.78	0.76	9.54	6.86	D3000	13	GOLD/LIME		63	NNB06LF	
125		343.66	-	-	-	-	-	-	-	-	-	-	62
126	5.00	346.16	0.79	0.76	9.44	6.86	D3000	13	GOLD/LIME		64	NNB06LF	
127		348.66	-	-	-	-	-	-	-	-	-	-	63
128	5.00	351.16	0.80	0.76	9.34	6.86	D3000	13	GOLD/LIME		65	NNB06LF	
129		353.66	-	-	-	-	-	-	-	-	-	-	64
130	5.00	356.16	0.81	0.76	9.25	6.86	D3000	13	GOLD/LIME		66	NNB06LF	
131		358.66	-	-	-	-	-	-	-	-	-	-	65
132	5.00	361.16	0.83	0.88	9.17	6.84	D3000	14	LIME		67	NNB06LF	
133		363.66	-	-	-	-	-	-	-	-	-	-	66
134	5.00	366.16	0.84	0.88	9.10	6.84	D3000	14	LIME		68	NNB06LF	
135		368.66	-	-	-	-	-	-	-	-	-	-	67
136	5.00	371.16	0.85	0.88	9.03	6.84	D3000	14	LIME		69	NNB06LF	
137		373.66	-	-	-	-	-	-	-	-	-	-	68
138	5.00	376.16	0.86	0.88	8.98	6.84	D3000	14	LIME		70	NNB06LF	
139		378.66	-	-	-	-	-	-	-	-	-	-	69
140	5.00	381.16	0.87	0.88	8.93	6.84	D3000	14	LIME		71	NNB06LF	
141		383.66	-	-	-	-	-	-	-	-	-	-	70
142	5.00	386.16	0.88	0.88	8.89	6.84	D3000	14	LIME		72	NNB06LF	

OUTLET NO.	LAST OUTLET	DISTANCE TO PIVOT	GPM NEED	GPM DEL.	PIPE PSI	NOZZLE PSI	SPRINKLER LABEL AND NOZZLE SIZE				SPRK NO.	REG SIZE	PLUG NO.
238	5.00	626.17	1.43	1.44	8.89	6.71	D3000	18	GRAY		120	NNB06LF	
239		628.67	-	-	-	-	-	-	-	-	-	-	119
240	5.00	631.17	1.44	1.44	8.99	6.71	D3000	18	GRAY		121	NNB06LF	
241		633.67	-	-	-	-	-	-	-	-	-	-	120
242	5.00	636.17	1.49	1.44	9.00	6.71	D3000	18	GRAY		122	NNB06LF	
243		638.67	-	-	-	-	-	-	-	-	-	-	121
TOWER 4	160.11	641.18											
244	5.21	641.38	1.50	1.44	8.99	6.71	D3000	18	GRAY		123	NNB06LF	
245		643.88	-	-	-	-	-	-	-	-	-	-	122
246	5.00	646.38	1.48	1.44	8.98	6.71	D3000	18	GRAY		124	NNB06LF	
247		648.88	-	-	-	-	-	-	-	-	-	-	123
248	5.00	651.38	1.49	1.44	8.90	6.71	D3000	18	GRAY		125	NNB06LF	
249		653.88	-	-	-	-	-	-	-	-	-	-	124
250	5.00	656.38	1.50	1.44	8.79	6.71	D3000	18	GRAY		126	NNB06LF	
251		658.88	-	-	-	-	-	-	-	-	-	-	125
252	5.00	661.38	1.51	1.44	8.68	6.71	D3000	18	GRAY		127	NNB06LF	
253		663.88	-	-	-	-	-	-	-	-	-	-	126
254	5.00	666.38	1.53	1.44	8.58	6.71	D3000	18	GRAY		128	NNB06LF	
255		668.88	-	-	-	-	-	-	-	-	-	-	127
256	5.00	671.38	1.54	1.61	8.49	6.68	D3000	19	GRAY/TURQ		129	NNB06LF	
257		673.88	-	-	-	-	-	-	-	-	-	-	128
258	5.00	676.38	1.55	1.61	8.41	6.68	D3000	19	GRAY/TURQ		130	NNB06LF	
259		678.88	-	-	-	-	-	-	-	-	-	-	129
260	5.00	681.38	1.56	1.61	8.33	6.68	D3000	19	GRAY/TURQ		131	NNB06LF	
261		683.88	-	-	-	-	-	-	-	-	-	-	130
262	5.00	686.38	1.57	1.61	8.27	6.68	D3000	19	GRAY/TURQ		132	NNB06LF	
263		688.88	-	-	-	-	-	-	-	-	-	-	131
264	5.00	691.38	1.58	1.61	8.21	6.68	D3000	19	GRAY/TURQ		133	NNB06LF	
265		693.88	-	-	-	-	-	-	-	-	-	-	132
266	5.00	696.38	1.59	1.61	8.16	6.68	D3000	19	GRAY/TURQ		134	NNB06LF	
267		698.88	-	-	-	-	-	-	-	-	-	-	133
268	5.00	701.38	1.60	1.61	8.11	6.68	D3000	19	GRAY/TURQ		135	NNB06LF	
269		703.88	-	-	-	-	-	-	-	-	-	-	134
270	5.00	706.38	1.62	1.61	8.08	6.68	D3000	19	GRAY/TURQ		136	NNB06LF	
271		708.88	-	-	-	-	-	-	-	-	-	-	135
272	5.00	711.38	1.63	1.61	8.05	6.68	D3000	19	GRAY/TURQ		137	NNB06LF	
273		713.88	-	-	-	-	-	-	-	-	-	-	136
274	5.00	716.38	1.63	1.61	8.03	6.68	D3000	19	GRAY/TURQ		138	NNB06LF	
275		718.88	-	-	-	-	-	-	-	-	-	-	137
276	4.95	721.33	1.63	1.61	8.02	6.68	D3000	19	GRAY/TURQ		139	NNB06LF	
277		723.78	-	-	-	-	-	-	-	-	-	-	138
278	4.95	726.28	1.65	1.61	8.02	6.68	D3000	19	GRAY/TURQ		140	NNB06LF	
279		728.78	-	-	-	-	-	-	-	-	-	-	139
280	5.00	731.28	1.67	1.61	8.02	6.68	D3000	19	GRAY/TURQ		141	NNB06LF	
281		733.78	-	-	-	-	-	-	-	-	-	-	140
282	5.00	736.28	1.69	1.61	8.03	6.68	D3000	19	GRAY/TURQ		142	NNB06LF	
283		738.78	-	-	-	-	-	-	-	-	-	-	141
284	5.00	741.28	1.70	1.61	8.05	6.68	D3000	19	GRAY/TURQ		143	NNB06LF	

OUTLET NO.	LAST OUTLET	DISTANCE TO PIVOT	GPM NEED	GPM DEL.	PIPE PSI	NOZZLE PSI	SPRINKLER LABEL AND NOZZLE SIZE				SPRK NO.	REG SIZE	PLUG NO.
332	5.00	861.49	1.97	1.93	7.86	6.61	D3000	21	TURQ/YEL		167	NNB06LF	
333		863.99	-	-	-	-	-	-	-	-	-	-	166
334	5.00	866.49	1.98	1.93	7.82	6.61	D3000	21	TURQ/YEL		168	NNB06LF	
335		868.99	-	-	-	-	-	-	-	-	-	-	167
336	5.00	871.49	1.99	1.93	7.80	6.61	D3000	21	TURQ/YEL		169	NNB06LF	
337		873.99	-	-	-	-	-	-	-	-	-	-	168
338	5.00	876.49	1.99	1.93	7.78	6.61	D3000	21	TURQ/YEL		170	NNB06LF	
339		878.99	-	-	-	-	-	-	-	-	-	-	169
340	4.95	881.44	2.00	1.93	7.77	6.61	D3000	21	TURQ/YEL		171	NNB06LF	
341		883.89	-	-	-	-	-	-	-	-	-	-	170
342	4.95	886.39	2.02	1.93	7.77	6.61	D3000	21	TURQ/YEL		172	NNB06LF	
343		888.89	-	-	-	-	-	-	-	-	-	-	171
344	5.00	891.39	2.04	2.14	7.78	6.58	D3000	22	YELLOW		173	NNB06LF	
345		893.89	-	-	-	-	-	-	-	-	-	-	172
346	5.00	896.39	2.05	2.14	7.80	6.58	D3000	22	YELLOW		174	NNB06LF	
347		898.89	-	-	-	-	-	-	-	-	-	-	173
348	5.00	901.39	2.06	2.14	7.82	6.58	D3000	22	YELLOW		175	NNB06LF	
349		903.89	-	-	-	-	-	-	-	-	-	-	174
350	5.00	906.39	2.07	2.14	7.85	6.58	D3000	22	YELLOW		176	NNB06LF	
351		908.89	-	-	-	-	-	-	-	-	-	-	175
352	5.00	911.39	2.08	2.14	7.89	6.58	D3000	22	YELLOW		177	NNB06LF	
353		913.89	-	-	-	-	-	-	-	-	-	-	176
354	5.00	916.39	2.09	2.14	7.94	6.58	D3000	22	YELLOW		178	NNB06LF	
355		918.89	-	-	-	-	-	-	-	-	-	-	177
356	5.00	921.39	2.11	2.14	7.99	6.58	D3000	22	YELLOW		179	NNB06LF	
357		923.89	-	-	-	-	-	-	-	-	-	-	178
358	5.00	926.39	2.12	2.14	8.05	6.58	D3000	22	YELLOW		180	NNB06LF	
359		928.89	-	-	-	-	-	-	-	-	-	-	179
360	5.00	931.39	2.13	2.14	8.12	6.58	D3000	22	YELLOW		181	NNB06LF	
361		933.89	-	-	-	-	-	-	-	-	-	-	180
362	5.00	936.39	2.14	2.14	8.20	6.58	D3000	22	YELLOW		182	NNB06LF	
363		938.89	-	-	-	-	-	-	-	-	-	-	181
364	5.00	941.39	2.15	2.14	8.29	6.58	D3000	22	YELLOW		183	NNB06LF	
365		943.89	-	-	-	-	-	-	-	-	-	-	182
366	5.00	946.39	2.16	2.14	8.38	6.58	D3000	22	YELLOW		184	NNB06LF	
367		948.89	-	-	-	-	-	-	-	-	-	-	183
368	5.00	951.39	2.17	2.14	8.49	6.58	D3000	22	YELLOW		185	NNB06LF	
369		953.89	-	-	-	-	-	-	-	-	-	-	184
370	5.00	956.39	2.23	2.32	8.51	6.55	D3000	23	YEL/RED		186	NNB06LF	
371		958.89	-	-	-	-	-	-	-	-	-	-	185
TOWER 6	160.11	961.40											
372	5.21	961.60	2.24	2.32	8.50	6.56	D3000	23	YEL/RED		187	NNB06LF	
373		964.10	-	-	-	-	-	-	-	-	-	-	186
374	5.00	966.60	2.21	2.14	8.50	6.58	D3000	22	YELLOW		188	NNB06LF	
375		969.10	-	-	-	-	-	-	-	-	-	-	187
376	5.00	971.60	2.22	2.14	8.43	6.58	D3000	22	YELLOW		189	NNB06LF	
377		974.10	-	-	-	-	-	-	-	-	-	-	188
378	5.00	976.60	2.23	2.32	8.32	6.56	D3000	23	YEL/RED		190	NNB06LF	

OUTLET NO.	LAST OUTLET	DISTANCE TO PIVOT	GPM NEED	GPM DEL.	PIPE PSI	NOZZLE PSI	SPRINKLER LABEL AND NOZZLE SIZE						SPRK NO.	REG SIZE	PLUG NO.
379		979.10	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	189
380	5.00	981.60	2.24	2.32	8.22	6.55	D3000	23	YEL/RED				191	NNB06LF	
381		984.10	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	190
382	5.00	986.60	2.25	2.32	8.13	6.56	D3000	23	YEL/RED				192	NNB06LF	
383		989.10	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	191
384	5.00	991.60	2.26	2.32	8.04	6.55	D3000	23	YEL/RED				193	NNB06LF	
385		994.10	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	192
386	5.00	996.60	2.27	2.32	7.97	6.56	D3000	23	YEL/RED				194	NNB06LF	
387		999.10	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	193
388	5.00	1001.60	2.28	2.32	7.90	6.56	D3000	23	YEL/RED				195	NNB06LF	
389		1004.10	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	194
390	5.00	1006.60	2.30	2.32	7.84	6.56	D3000	23	YEL/RED				196	NNB06LF	
391		1009.10	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	195
392	5.00	1011.60	2.31	2.32	7.79	6.55	D3000	23	YEL/RED				197	NNB06LF	
393		1014.10	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	196
394	5.00	1016.60	2.32	2.32	7.74	6.56	D3000	23	YEL/RED				198	NNB06LF	
395		1019.10	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	197
396	5.00	1021.60	2.33	2.32	7.70	6.56	D3000	23	YEL/RED				199	NNB06LF	
397		1024.10	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	198
398	5.00	1026.60	2.34	2.32	7.67	6.56	D3000	23	YEL/RED				200	NNB06LF	
399		1029.10	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	199
400	5.00	1031.60	2.35	2.32	7.65	6.56	D3000	23	YEL/RED				201	NNB06LF	
401		1034.10	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	200
402	5.00	1036.60	2.35	2.32	7.64	6.56	D3000	23	YEL/RED				202	NNB06LF	
403		1039.10	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	201
404	4.95	1041.55	2.35	2.32	7.63	6.56	D3000	23	YEL/RED				203	NNB06LF	
405		1044.00	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	202
406	4.95	1046.50	2.38	2.32	7.64	6.56	D3000	23	YEL/RED				204	NNB06LF	
407		1049.00	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	203
408	5.00	1051.50	2.40	2.32	7.65	6.56	D3000	23	YEL/RED				205	NNB06LF	
409		1054.00	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	204
410	5.00	1056.50	2.41	2.32	7.67	6.56	D3000	23	YEL/RED				206	NNB06LF	
411		1059.00	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	205
412	5.00	1061.50	2.43	2.32	7.69	6.56	D3000	23	YEL/RED				207	NNB06LF	
413		1064.00	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	206
414	5.00	1066.50	2.44	2.54	7.73	6.53	D3000	24	RED				208	NNB06LF	
415		1069.00	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	207
416	5.00	1071.50	2.45	2.54	7.77	6.53	D3000	24	RED				209	NNB06LF	
417		1074.00	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	208
418	5.00	1076.50	2.46	2.54	7.82	6.53	D3000	24	RED				210	NNB06LF	
419		1079.00	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	209
420	5.00	1081.50	2.47	2.54	7.88	6.53	D3000	24	RED				211	NNB06LF	
421		1084.00	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	210
422	5.00	1086.50	2.48	2.54	7.94	6.53	D3000	24	RED				212	NNB06LF	
423		1089.00	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	211
424	5.00	1091.50	2.49	2.54	8.01	6.53	D3000	24	RED				213	NNB06LF	
425		1094.00	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	212
426	5.00	1096.50	2.50	2.54	8.10	6.53	D3000	24	RED				214	NNB06LF	

OUTLET NO.	LAST OUTLET	DISTANCE TO PIVOT	GPM NEED	GPM DEL.	PIPE PSI	NOZZLE PSI	SPRINKLER LABEL AND NOZZLE SIZE										SPRK NO.	REG SIZE	PLUG NO.
427		1099.00	- - - -	- - -	- - -	- - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	213		
428	5.00	1101.50	2.51	2.54	8.19	6.53	D3000	24	RED	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	215	NNB06LF		
429		1104.00	- - - -	- - -	- - -	- - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	214	
430	5.00	1106.50	2.52	2.54	8.28	6.53	D3000	24	RED	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	216	NNB06LF		
431		1109.00	- - - -	- - -	- - -	- - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	215	
432	5.00	1111.50	2.53	2.54	8.39	6.53	D3000	24	RED	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	217	NNB06LF		
433		1114.00	- - - -	- - -	- - -	- - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	216	
434	5.00	1116.50	2.59	2.54	8.41	6.53	D3000	24	RED	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	218	NNB06LF		
435		1119.00	- - - -	- - -	- - -	- - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	217	
TOWER 7	160.11	1121.51																	
436	5.21	1121.71	2.61	2.54	8.41	6.53	D3000	24	RED	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	219	NNB06LF		
437		1124.21	- - - -	- - -	- - -	- - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	218	
438	5.00	1126.71	2.57	2.54	8.41	6.53	D3000	24	RED	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	220	NNB06LF		
439		1129.21	- - - -	- - -	- - -	- - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	219	
440	5.00	1131.71	2.58	2.54	8.34	6.53	D3000	24	RED	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	221	NNB06LF		
441		1134.21	- - - -	- - -	- - -	- - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	220	
442	5.00	1136.71	2.59	2.54	8.24	6.53	D3000	24	RED	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	222	NNB06LF		
443		1139.21	- - - -	- - -	- - -	- - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	221	
444	5.00	1141.71	2.60	2.54	8.14	6.53	D3000	24	RED	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	223	NNB06LF		
445		1144.21	- - - -	- - -	- - -	- - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	222	
446	5.00	1146.71	2.62	2.54	8.05	6.53	D3000	24	RED	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	224	NNB06LF		
447		1149.21	- - - -	- - -	- - -	- - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	223	
448	5.00	1151.71	2.63	2.54	7.97	6.53	D3000	24	RED	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	225	NNB06LF		
449		1154.21	- - - -	- - -	- - -	- - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	224	
450	5.00	1156.71	2.64	2.54	7.89	6.53	D3000	24	RED	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	226	NNB06LF		
451		1159.21	- - - -	- - -	- - -	- - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	225	
452	5.00	1161.71	2.66	2.75	7.83	6.50	D3000	25	RED/WHITE	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	227	NNB06LF		
453		1164.21	- - - -	- - -	- - -	- - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	226	
454	5.00	1166.71	2.67	2.75	7.77	6.50	D3000	25	RED/WHITE	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	228	NNB06LF		
455		1169.21	- - - -	- - -	- - -	- - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	227	
456	5.00	1171.71	2.68	2.75	7.72	6.50	D3000	25	RED/WHITE	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	229	NNB06LF		
457		1174.21	- - - -	- - -	- - -	- - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	228	
458	5.00	1176.71	2.69	2.75	7.68	6.50	D3000	25	RED/WHITE	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	230	NNB06LF		
459		1179.21	- - - -	- - -	- - -	- - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	229	
460	5.00	1181.71	2.69	2.75	7.64	6.50	D3000	25	RED/WHITE	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	231	NNB06LF		
461		1184.21	- - - -	- - -	- - -	- - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	230	
462	5.00	1186.71	2.70	2.75	7.61	6.50	D3000	25	RED/WHITE	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	232	NNB06LF		
463		1189.21	- - - -	- - -	- - -	- - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	231	
464	5.00	1191.71	2.71	2.75	7.60	6.50	D3000	25	RED/WHITE	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	233	NNB06LF		
465		1194.21	- - - -	- - -	- - -	- - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	232	
466	5.00	1196.71	2.71	2.75	7.59	6.50	D3000	25	RED/WHITE	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	234	NNB06LF		
467		1199.21	- - - -	- - -	- - -	- - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	233	
468	4.95	1201.66	2.71	2.75	7.58	6.50	D3000	25	RED/WHITE	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	235	NNB06LF		
469		1204.11	- - - -	- - -	- - -	- - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	234	
470	4.95	1206.61	2.73	2.75	7.59	6.50	D3000	25	RED/WHITE	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	236	NNB06LF		
471		1209.11	- - - -	- - -	- - -	- - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	235	
472	5.00	1211.61	2.75	2.75	7.60	6.50	D3000	25	RED/WHITE	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	237	NNB06LF		
473		1214.11	- - - -	- - -	- - -	- - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	236	

OUTLET NO.	LAST OUTLET	DISTANCE TO PIVOT	GPM NEED	GPM DEL.	PIPE PSI	NOZZLE PSI	SPRINKLER LABEL AND NOZZLE SIZE			SPRK NO.	REG SIZE	PLUG NO.
474	5.00	1216.61	2.77	2.75	7.62	6.50	D3000	25	RED/WHITE	238	NNB06LF	
475		1219.11	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	237
476	5.00	1221.61	2.78	2.75	7.65	6.50	D3000	25	RED/WHITE	239	NNB06LF	
477		1224.11	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	238
478	5.00	1226.61	2.79	2.75	7.69	6.50	D3000	25	RED/WHITE	240	NNB06LF	
479		1229.11	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	239
480	5.00	1231.61	2.80	2.75	7.73	6.50	D3000	25	RED/WHITE	241	NNB06LF	
481		1234.11	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	240
482	5.00	1236.61	2.82	2.75	7.78	6.50	D3000	25	RED/WHITE	242	NNB06LF	
483		1239.11	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	241
484	5.00	1241.61	2.84	2.75	7.84	6.50	D3000	25	RED/WHITE	243	NNB06LF	
485		1244.11	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	242
486	5.00	1246.61	2.85	2.75	7.91	6.50	D3000	25	RED/WHITE	244	NNB06LF	
487		1249.11	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	243
488	5.00	1251.61	2.87	2.98	7.99	6.47	D3000	26	WHITE	245	NNB06LF	
489		1254.11	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	244
490	5.00	1256.61	2.87	2.98	8.07	6.47	D3000	26	WHITE	246	NNB06LF	
491		1259.11	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	245
492	5.00	1261.61	2.88	2.98	8.16	6.47	D3000	26	WHITE	247	NNB06LF	
493		1264.11	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	246
494	5.00	1266.61	2.88	2.98	8.26	6.47	D3000	26	WHITE	248	NNB06LF	
495		1269.11	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	247
496	5.00	1271.61	2.88	2.98	8.37	6.47	D3000	26	WHITE	249	NNB06LF	
497		1274.11	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	248
498	5.00	1276.61	2.86	2.75	8.39	6.50	D3000	25	RED/WHITE	250	NNB06LF	
499		1279.11	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	249
TOWER 8	159.85	1281.36										
500	4.95	1281.56	2.89	2.98	8.39	6.47	D3000	26	WHITE	251	NNB06LF	
501		1284.06	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	250
502	5.00	1286.56	2.90	2.98	8.39	6.47	D3000	26	WHITE	252	NNB06LF	
503		1289.06	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	251
504	5.00	1291.56	2.89	2.98	8.39	6.47	D3000	26	WHITE	253	NNB06LF	
505		1294.06	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	252
506	5.00	1296.56	3.77	3.69	8.39	6.38	D3000	29	BLUE/DK BRN	254	NNB06LF	
507		1299.64	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -	253
PIPE ID CHANGES FROM 6.415 TO 2.060												
508	8.08	1304.64	3.83	3.94	8.39	6.35	D3000	30	DK BROWN	255	NNB06LF	
509	5.00	1309.64	3.72	3.69	8.38	6.38	D3000	29	BLUE/DK BRN	256	NNB06LF	
OVERHANG	28.28	1309.64										

TOTAL GPM = 400.87

GPA = 3.23

MINIMUM RECOMMENDED REGULATOR INLET PRESSURE IS 15.00 PSI

WITH GRADUATED ELEVATION OF 2.00 FT THE INLET PRESSURE IS 15.08 PSI FOR SPRINKLER 25

THIS POSITION IS THE CLOSEST TO THE MINIMUM RECOMMENDED INLET PRESSURE

HYDRAULICS SUMMARY

TOWER NUMBER	ACRES UNDER SPAN	GPM NEED	ACTUAL GPM	PERCENT DEVIATION	GPM PER ACRE	AVERAGE	AVERAGE IN. DELIVERED		
						IN. PER HR DELIVERED UNDER SPAN	FOR REVOLUTION TIME		
							36 HR	48 HR	60 HR
1	1.87	6.03	12.36	105%	6.62	0.015	0.53	0.70	0.88
2	5.56	17.99	17.61	-2%	3.16	0.007	0.25	0.34	0.42
3	9.26	29.95	29.17	-3%	3.15	0.007	0.25	0.33	0.42
4	12.96	41.90	41.08	-2%	3.17	0.007	0.25	0.34	0.42
5	16.66	53.86	52.88	-2%	3.17	0.007	0.25	0.34	0.42
6	20.35	65.82	64.75	-2%	3.18	0.007	0.25	0.34	0.42
7	24.05	77.78	76.46	-2%	3.18	0.007	0.25	0.34	0.42
8	27.70	89.58	87.67	-2%	3.16	0.007	0.25	0.34	0.42
OVERHANG	5.28	17.09	18.89	11%	3.57	0.008	0.28	0.38	0.47
TOTAL	123.70	400.00	400.87		3.24				

SUMMARY OF SPRINKLERS

30 D3000 9 LT BL/BEIGE
8 D3000 10 BEIGE
8 D3000 11 BEIGE/GOLD
10 D3000 12 GOLD
10 D3000 13 GOLD/LIME
11 D3000 14 LIME
12 D3000 15 LIME/LAV
12 D3000 16 LAVENDER
13 D3000 17 LAV/GRAY
14 D3000 18 GRAY
15 D3000 19 GRAY/TURQ
12 D3000 20 TURQUOISE
17 D3000 21 TURQ/YEL
15 D3000 22 YELLOW
20 D3000 23 YEL/RED
19 D3000 24 RED
19 D3000 25 RED/WHITE
8 D3000 26 WHITE
2 D3000 29 BLUE/DK BRN
1 D3000 30 DK BROWN

253 PLUGS

SUMMARY OF REGULATORS

26 NNB10LF
230 NNB06LF

TOTAL OF 256 REGULATORS

NOZZLE POSITION CHART

D3000 9 LT BL/BEIGE	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30
D3000 10 BEIGE	31, 32, 33, 34, 35, 36, 37, 38
D3000 11 BEIGE/GOLD	39, 40, 41, 42, 43, 44, 45, 46
D3000 12 GOLD	47, 48, 49, 50, 51, 52, 53, 54, 55, 56
D3000 13 GOLD/LIME	57, 58, 59, 60, 61, 62, 63, 64, 65, 66
D3000 14 LIME	67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77
D3000 15 LIME/LAV	78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89
D3000 16 LAVENDER	90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101
D3000 17 LAV/GRAY	102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114
D3000 18 GRAY	115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128
D3000 19 GRAY/TURQ	129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143
D3000 20 TURQUOISE	144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 156, 157
D3000 21 TURQ/YEL	154, 155, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172
D3000 22 YELLOW	173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 188, 189
D3000 23 YEL/RED	186, 187, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207
D3000 24 RED	208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226
D3000 25 RED/WHITE	227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 250
D3000 26 WHITE	245, 246, 247, 248, 249, 251, 252, 253
D3000 29 BLUE/DK BRN	254, 256
D3000 30 DK BROWN	255

PRECIPITATION CHART FOR FULL CIRCLE

WISH-93195

AUGUST 09, 2019

DEALER - TEETER IRRIGATION

IRRIGATOR - BRENT WOODS

FIELD NO - SW 1/4 1-31-31

TOTAL LENGTH PIPE = 1309.64 SYSTEM PRESSURE = 11 PSI
GPM UNDER PIPE = 400.87 TOTAL GPM = 400.87
ACRES UNDER PIPE = 123.70
RANGE OF ENDGUN = .00 RUN FOR MINIMUM PRESSURE
GPM OF ENDGUN = .00
ACRES UNDER ENDGUN = .00

MOTOR SIZE (HP) = .6
LOADED MOTOR RPM = 1800
CENTER GEAR BOX RATIO = 53
WHEEL GEAR BOX RATIO = 52
TIRE SIZE = 11.2 X 38
LAST TOWER SPEED (FPM) = 9.39

PRECIPITATION BASED

% TIMER BASED

PRECIPITATION INCHES	% TIMER SETTING	TIME HOURS	% TIMER SETTING	PRECIPITATION INCHES	TIME HOURS
.10	100.00	14.29 - 857(min)	100.00	.10	14.29 - 857(min)
.20	51.16	27.93	90.00	.11	15.88
.25	40.93	34.91	80.00	.13	17.86
.30	34.11	41.90	70.00	.15	20.41
.40	25.58	55.86	60.00	.17	23.82
.50	20.46	69.83	50.00	.20	28.58
.60	17.05	83.79	45.00	.23	31.76
.70	14.62	97.76	40.00	.26	35.73
.75	13.64	104.74	35.00	.29	40.83
.80	12.79	111.72	30.00	.34	47.63
.90	11.37	125.69	25.00	.41	57.16
1.00	10.23	139.66	20.00	.51	71.45
1.25	8.19	174.57	15.00	.68	95.27
1.50	6.82	209.48	10.00	1.02	142.90
1.75	5.85	244.40	5.00	2.05	285.80

CAUTION: The relationship between precipitation rate, timer setting, and hours per revolution provided above are theoretical numbers based on the data list at the top of the page. Actual precipitation rates may vary due to the following field and machine conditions: wind drift; evaporation; tire slippage, tire loaded radius; drive train efficiency; elevation changes; soil type. Due to these varying field and machine conditions the above chart should be used as a guide only.

TEETER IRRIGATION

1310 ONTARIO STREET
PLAINS, KANSAS 67869

AUGUST 09, 2019
WISH-93195
BRENT WOODS
SW 1/4 1-31-31
400 GPM @ 11 PSI

VALLEY 8000 - 30
NELSON D3000 SPRAY NOZZLES
NELSON 10 & 6 PSI REGULATORS
.75 I.D. FLEXIBLE HOSE
NO ENDGUN

Rotation time at 100% = 14.29 Hours Or 857 minutes

Installation Chart

Page 1

Out #	Drop Len	Sprk #	Noz Size	Reg	Out #	Drop Len	Sprk #	Noz Size	Reg	Out #	Drop Len	Sprk #	Noz Size	Reg	Out #	Drop Len	Sprk #	Noz Size	Reg	Out #	Drop Len	Sprk #	Noz Size	Reg	
1	PLUG				9		31	10	6LF	4	PLUG				64	PLUG				59		120	18	6LF	
2					10	PLUG				5		61	13	6LF	TOWER 3				60	PLUG		121	18	6LF	
3		1	9	10LF	11		32	10	6LF	6	PLUG		62	13		6LF	1	91	16	6LF	61				
4		2	9	10LF	12	PLUG				7		62	13	6LF		2	PLUG		62	PLUG		122	18	6LF	
5	3	9	10LF	13		33	10	6LF	8	PLUG		63	13	6LF		3	92	16	6LF	63					
6		4	9	10LF	14	PLUG				9		63	13	6LF	4	PLUG			TOWER 4						
7	PLUG				15		34	10	6LF	10	PLUG		64	13	6LF	5	93	16		6LF	1	123	18	6LF	
8		5	9	10LF	16	PLUG				11		64	13	6LF	6	PLUG		64		PLUG					
9	PLUG				17		35	10	6LF	12	PLUG		65	13	6LF	7	94	16		6LF	2	PLUG		124	18
10		6	9	10LF	18	PLUG				13		65	13	6LF	8	PLUG		65	PLUG		125	18	6LF		
11	PLUG				19		36	10	6LF	14	PLUG		66	13	6LF	9	95	16	6LF	3	PLUG		126	18	6LF
12		7	9	10LF	20	PLUG				15		66	13	6LF	10	PLUG		66	PLUG		127	18	6LF		
13	PLUG				21		37	10	6LF	16	PLUG		67	14	6LF	11	96	16	6LF	4	PLUG		128	18	6LF
14		8	9	10LF	22	PLUG				17		67	14	6LF	12	PLUG		67	PLUG		129	19	6LF		
15	PLUG				23		38	10	6LF	18	PLUG		68	14	6LF	13	97	16	6LF	5	PLUG		130	19	6LF
16		9	9	10LF	24	PLUG				19		68	14	6LF	14	PLUG		68	PLUG		131	19	6LF		
17	PLUG				25		39	11	6LF	20	PLUG		69	14	6LF	15	98	16	6LF	6	PLUG		132	19	6LF
18		10	9	10LF	26	PLUG				21		69	14	6LF	16	PLUG		69	PLUG		133	19	6LF		
19	PLUG				27		40	11	6LF	22	PLUG		70	14	6LF	17	99	16	6LF	7	PLUG		134	19	6LF
20		11	9	10LF	28	PLUG				23		70	14	6LF	18	PLUG		70	PLUG		135	19	6LF		
21	PLUG				29		41	11	6LF	24	PLUG		71	14	6LF	19	100	16	6LF	8	PLUG		136	19	6LF
22		12	9	10LF	30	PLUG				25		71	14	6LF	20	PLUG		71	PLUG		137	19	6LF		
23	PLUG				31		42	11	6LF	26	PLUG		72	14	6LF	21	101	16	6LF	9	PLUG		138	19	6LF
24		13	9	10LF	32	PLUG				27		72	14	6LF	22	PLUG		72	PLUG		139	19	6LF		
25	PLUG				33		43	11	6LF	28	PLUG		73	14	6LF	23	102	17	6LF	10	PLUG		140	19	6LF
26		14	9	10LF	34	PLUG				29		73	14	6LF	24	PLUG		73	PLUG		141	19	6LF		
27	PLUG				35		44	11	6LF	30	PLUG		74	14	6LF	25	103	17	6LF	11	PLUG		142	19	6LF
28		15	9	10LF	36	PLUG				31		74	14	6LF	26	PLUG		74	PLUG		143	19	6LF		
29	PLUG				37		45	11	6LF	32	PLUG		75	14	6LF	27	104	17	6LF	12	PLUG		144	20	6LF
30		16	9	10LF	38	PLUG				33		75	14	6LF	28	PLUG		75	PLUG		145	20	6LF		
31	PLUG				39		46	11	6LF	34	PLUG		76	14	6LF	29	105	17	6LF	13	PLUG		146	20	6LF
32		17	9	10LF	40	PLUG				35		76	14	6LF	30	PLUG		76	PLUG		147	20	6LF		
33	PLUG				41		47	12	6LF	36	PLUG		77	14	6LF	31	106	17	6LF	14	PLUG		148	20	6LF
34		18	9	10LF	42	PLUG				37		77	14	6LF	32	PLUG		77	PLUG		149	20	6LF		
35	PLUG				43		48	12	6LF	38	PLUG		78	15	6LF	33	107	17	6LF	15	PLUG		149	20	6LF
36		19	9	10LF	44	PLUG				39		78	15	6LF	34	PLUG		78	PLUG						
37	PLUG				45		49	12	6LF	40	PLUG		79	15	6LF	35	108	17	6LF	16	PLUG				
38		20	9	10LF	46	PLUG				41		79	15	6LF	36	PLUG		79	PLUG						
39	PLUG				47		50	12	6LF	42	PLUG		80	15	6LF	37	109	17	6LF	17	PLUG				
40		21	9	10LF	48	PLUG				43		80	15	6LF	38	PLUG		80	PLUG						
41	PLUG				49		51	12	6LF	44	PLUG		81	15	6LF	39	110	17	6LF	18	PLUG				
42		22	9	10LF	50	PLUG				45		81	15	6LF	40	PLUG		81	PLUG						
43	PLUG				51		52	12	6LF	46	PLUG		82	15	6LF	41	111	17	6LF	19	PLUG				
44		23	9	10LF	52	PLUG				47		82	15	6LF	42	PLUG		82	PLUG						
45	PLUG				53		53	12	6LF	48	PLUG		83	15	6LF	43	112	17	6LF	20	PLUG				
46		24	9	10LF	54	PLUG				49		83	15	6LF	44	PLUG		83	PLUG						
47	PLUG				55		54	12	6LF	50	PLUG		84	15	6LF	45	113	17	6LF	21	PLUG				
48		25	9	10LF	56	PLUG				51		84	15	6LF	46	PLUG		84	PLUG						
49	PLUG				57		55	12	6LF	52	PLUG		85	15	6LF	47	114	17	6LF	22	PLUG				
50		26	9	10LF	58	PLUG				53		85	15	6LF	48	PLUG		85	PLUG						
51	PLUG				59		56	12	6LF	54	PLUG		86	15	6LF	49	115	18	6LF	23	PLUG				
TOWER 1					60	PLUG				55		86	15	6LF	50	PLUG		86	PLUG						
		27	9	6LF	61		57	13	6LF	56	PLUG		87	15	6LF	51	116	18	6LF	24	PLUG				
	PLUG				62	PLUG				57		87	15	6LF	52	PLUG		87	PLUG						
		28	9	6LF	63		58	13	6LF	58	PLUG		88	15	6LF	53	117	18	6LF	25	PLUG				
2	PLUG				64	PLUG				59		88	15	6LF	54	PLUG		88	PLUG						
3					TOWER 2					60	PLUG				55				50	PLUG					
4	PLUG										61					56				51	PLUG				
5		29	9	6LF							62	PLUG		89	15	6LF	57	118	18	6LF	26	PLUG			
6	PLUG										63					58				52	PLUG				
7		30	9	6LF	1	PLUG				61	PLUG		90	16	6LF	56	119	18	6LF	27	PLUG				
8	PLUG				2		60	13	6LF	62					57				53	PLUG					

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NELSON D3000 SPRAY NOZZLES
NELSON 10 & 6 PSI REGULATORS
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Rotation time at 100% = 14.29 Hours Or 857 minutes

Installation Chart

Page 2

Out #	Drop Len	Sprk #	Noz Size	Reg	Out #	Drop Len	Sprk #	Noz Size	Reg	Out #	Drop Len	Sprk #	Noz Size	Reg	Out #	Drop Len	Sprk #	Noz Size	Reg
54	PLUG				49		179	22	6LF	44	PLUG				39		238	25	6LF
55					50	PLUG				45		209	24	6LF	40	PLUG			
56	PLUG	150	20	6LF	51		180	22	6LF	46	PLUG				41		239	25	6LF
57		151	20	6LF	52	PLUG				47		210	24	6LF	42	PLUG			
58	PLUG				53		181	22	6LF	48	PLUG				43		240	25	6LF
59		152	20	6LF	54	PLUG				49		211	24	6LF	44	PLUG			
60	PLUG				55		182	22	6LF	50	PLUG				45		241	25	6LF
61		153	20	6LF	56	PLUG				51		212	24	6LF	46	PLUG			
62	PLUG				57		183	22	6LF	52	PLUG				47		242	25	6LF
63		154	21	6LF	58	PLUG				53		213	24	6LF	48	PLUG			
64	PLUG				59		184	22	6LF	54	PLUG				49		243	25	6LF
	TOWER 5				60	PLUG				55		214	24	6LF	50	PLUG			
1		155	21	6LF	61		185	22	6LF	56	PLUG				51		244	25	6LF
2	PLUG				62	PLUG				57		215	24	6LF	52	PLUG			
3		156	20	6LF	63		186	23	6LF	58	PLUG				53		245	26	6LF
4	PLUG				64	PLUG				59		216	24	6LF	54	PLUG			
5		157	20	6LF		TOWER 6				60	PLUG				55		246	26	6LF
6	PLUG				1		187	23	6LF	61		217	24	6LF	56	PLUG			
7		158	21	6LF	2	PLUG				62	PLUG				57		247	26	6LF
8	PLUG				3		188	22	6LF	63		218	24	6LF	58	PLUG			
9		159	21	6LF	4	PLUG				64	PLUG				59		248	26	6LF
10	PLUG				5		189	22	6LF		TOWER 7				60	PLUG			
11		160	21	6LF	6	PLUG				1		219	24	6LF	61		249	26	6LF
12	PLUG				7		190	23	6LF	2	PLUG				62	PLUG			
13		161	21	6LF	8	PLUG				3		220	24	6LF	63		250	25	6LF
14	PLUG				9		191	23	6LF	4	PLUG				64	PLUG			
15		162	21	6LF	10	PLUG				5		221	24	6LF		TOWER 8			
16	PLUG				11		192	23	6LF	6	PLUG				1		251	26	6LF
17		163	21	6LF	12	PLUG				7		222	24	6LF	2	PLUG			
18	PLUG				13		193	23	6LF	8	PLUG				3		252	26	6LF
19		164	21	6LF	14	PLUG				9		223	24	6LF	4	PLUG			
20	PLUG				15		194	23	6LF	10	PLUG				5		253	26	6LF
21		165	21	6LF	16	PLUG				11		224	24	6LF	6	PLUG			
22	PLUG				17		195	23	6LF	12	PLUG				7		254	29	6LF
23		166	21	6LF	18	PLUG				13		225	24	6LF	8	PLUG			
24	PLUG				19		196	23	6LF	14	PLUG				9		255	30	6LF
25		167	21	6LF	20	PLUG				15		226	24	6LF	10		256	29	6LF
26	PLUG				21		197	23	6LF	16	PLUG								
27		168	21	6LF	22	PLUG				17		227	25	6LF					
28	PLUG				23		198	23	6LF	18	PLUG								
29		169	21	6LF	24	PLUG				19		228	25	6LF					
30	PLUG				25		199	23	6LF	20	PLUG								
31		170	21	6LF	26	PLUG				21		229	25	6LF					
32	PLUG				27		200	23	6LF	22	PLUG								
33		171	21	6LF	28	PLUG				23		230	25	6LF					
34	PLUG				29		201	23	6LF	24	PLUG								
35		172	21	6LF	30	PLUG				25		231	25	6LF					
36	PLUG				31		202	23	6LF	26	PLUG								
37		173	22	6LF	32	PLUG				27		232	25	6LF					
38	PLUG				33		203	23	6LF	28	PLUG								
39		174	22	6LF	34	PLUG				29		233	25	6LF					
40	PLUG				35		204	23	6LF	30	PLUG								
41		175	22	6LF	36	PLUG				31		234	25	6LF					
42	PLUG				37		205	23	6LF	32	PLUG								
43		176	22	6LF	38	PLUG				33		235	25	6LF					
44	PLUG				39		206	23	6LF	34	PLUG								
45		177	22	6LF	40	PLUG				35		236	25	6LF					
46	PLUG				41		207	23	6LF	36	PLUG								
47		178	22	6LF	42	PLUG				37		237	25	6LF					
48	PLUG				43		208	24	6LF	38	PLUG								

TEETER IRRIGATION

1310 ONTARIO STREET
PLAINS, KANSAS 67869

AUGUST 09, 2019
WISH-93195
BRENT WOODS
SW 1/4 1-31-31
400 gpm @ 11 psi

VALLEY 8000 - 30
NELSON D3000 SPRAY NOZZLES
NELSON 10 & 6 PSI REGULATORS
.75 I.D. FLEXIBLE HOSE
NO ENDGUN

Rotation time at 100% = 14.29 Hours Or 857 minutes

Nozzle Difference

Previous chart: WISH-79258 500 gpm @ 12 psi

Current chart: WISH-93195 400 gpm @ 11 psi

<u>Nozzle Type and Size</u>	<u>Difference</u>	<u>Previous WISH Printouts</u>
D3000 9 LT BL/BEIGE	4	WISH-79258 500 gpm @ 12 PSI OCTOBER 13, 2014
D3000 10 BEIGE	5	WISH-76505 600 gpm @ 14 PSI APRIL 01, 2014
D3000 11 BEIGE/GOLD	1	
D3000 12 GOLD	2	
D3000 13 GOLD/LIME	3	
D3000 14 LIME	2	
D3000 15 LIME/LAV	3	
D3000 16 LAVENDER	2	
D3000 17 LAV/GRAY	3	
D3000 18 GRAY	3	
D3000 19 GRAY/TURQ	2	
D3000 20 TURQUOISE	3	
D3000 21 TURQ/YEL	3	
D3000 22 YELLOW	2	
D3000 23 YEL/RED	6	
D3000 24 RED	4	
D3000 25 RED/WHITE	4	
D3000 30 DK BROWN	1	