

WOOFTER CONSTRUCTION & IRRIGATION

NOVEMBER 04, 2016

WISH-85148

CUSTOMER : TERRY HOCKERSMITH

LINDSAY GEN II - 90
11 TOWER - 1980.47 FT
SYSTEM 1000 GPM @ 42 PSI

P.O. NO. : 35991

SENNINGER UP3 LDN SPRAY NOZZLES
SENNINGER 10 PSI REGULATORS
NO ENDGUN
ELEVATION 15 FT UP, 0 FT DOWN

LEGAL : SECTION 15-11-32

1965 THIELEN AVENUE

COLBY, KANSAS 67701

(785)462-8653

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.

DEALER

WOOFTER CONSTRUCTION & IRRIGATION
 1965 THIELEN AVENUE
 COLBY, KANSAS 67701

IRRIGATOR

TERRY HOCKERSMITH
 SECTION 15-11-32
 35991

TOTAL TARGET GPM	1000.00	FRICTION FACTOR USED	138	SPANS	LENGTH	PIPE I.D.
TOP OF PIVOT PRESSURE	42.00	TOTAL LENGTH	1980.47	1	181.60	6.395
NO ENDGUN		NUMBER OF TOWERS	11	5	179.00	6.395
NUMBER OF OUTLETS	277	NUMBER OF SPRINKLERS	264	1	135.00	6.395
				4	179.00	6.395
SENNINGER UP3 LDN SPRAY NOZZLES - CONCAVE 24 DEEP GROOVED PADS				OH	44.87	5.369
SENNINGER PSR-2 10 PSI SERIES REGULATORS					8.00	0.824
DROPS AVERAGE 10 FT OF .75 I.D. FLEXIBLE HOSE PLUS 24 INCH SCHEDULE 40 GALVANIZED WEIGHT						
ELEVATION IS 15 FT UP AND 0 FT DOWN						

CAUTIONS AND WARNINGS

1. Inadequate crop clearance and/or structural interference may cause poor water distribution, resulting in decreased uniformity and possible streaking.
2. Over watering at beginning of system due to practical limitations on smallest nozzle sizes available and/or allowable for proper operation.
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.	DROP LENGTH
1		2.92	-	-	-	-	-	-	-	-	1
2		7.76	-	-	-	-	-	-	-	-	2
3		15.26	-	-	-	-	-	-	-	-	3
4	22.59	22.59	0.18	0.59	41.26	11.40	LD NOZ UP3 5 BEIGE	1	SPSR2-10		138
5	7.34	29.93	0.11	0.59	40.96	11.40	LD NOZ UP3 5 BEIGE	2	SPSR2-10		138
6	7.33	37.26	0.14	0.59	40.68	11.40	LD NOZ UP3 5 BEIGE	3	SPSR2-10		144
7	7.50	44.76	0.16	0.59	40.41	11.40	LD NOZ UP3 5 BEIGE	4	SPSR2-10		144
8	7.00	51.76	0.19	0.59	40.17	11.40	LD NOZ UP3 5 BEIGE	5	SPSR2-10		150
9	7.50	59.26	0.22	0.59	39.93	11.40	LD NOZ UP3 5 BEIGE	6	SPSR2-10		150
10	7.33	66.59	0.25	0.59	39.71	11.40	LD NOZ UP3 5 BEIGE	7	SPSR2-10		156
11	7.34	73.93	0.28	0.59	39.51	11.40	LD NOZ UP3 5 BEIGE	8	SPSR2-10		156
12	7.33	81.26	0.31	0.59	39.33	11.40	LD NOZ UP3 5 BEIGE	9	SPSR2-10		156
13	7.50	88.76	0.33	0.59	39.16	11.40	LD NOZ UP3 5 BEIGE	10	SPSR2-10		156
14	7.00	95.76	0.35	0.59	39.01	11.40	LD NOZ UP3 5 BEIGE	11	SPSR2-10		156
15	7.50	103.26	0.39	0.59	38.87	11.40	LD NOZ UP3 5 BEIGE	12	SPSR2-10		156
16	7.33	110.59	0.41	0.59	38.76	11.40	LD NOZ UP3 5 BEIGE	13	SPSR2-10		156
17	7.34	117.93	0.44	0.59	38.65	11.40	LD NOZ UP3 5 BEIGE	14	SPSR2-10		156
18	7.33	125.26	0.47	0.59	38.57	11.40	LD NOZ UP3 5 BEIGE	15	SPSR2-10		150
19	7.50	132.76	0.49	0.59	38.50	11.40	LD NOZ UP3 5 BEIGE	16	SPSR2-10		150
20	7.00	139.76	0.51	0.59	38.44	11.40	LD NOZ UP3 5 BEIGE	17	SPSR2-10		144
21	7.50	147.26	0.55	0.59	38.41	11.40	LD NOZ UP3 5 BEIGE	18	SPSR2-10		144
22	7.33	154.59	0.57	0.59	38.39	11.40	LD NOZ UP3 5 BEIGE	19	SPSR2-10		138
23	7.34	161.93	0.60	0.59	38.38	11.40	LD NOZ UP3 5 BEIGE	20	SPSR2-10		138
24	7.33	169.26	0.64	0.59	38.39	11.40	LD NOZ UP3 5 BEIGE	21	SPSR2-10		132
25	7.50	176.76	0.79	0.85	38.30	11.40	LD NOZ UP3 6 GOLD	22	SPSR2-10		126
TOWER 1	181.60	181.60									
26		182.59	-	-	-	-	-	-	-	-	4
27	10.00	186.76	0.82	0.85	38.09	11.40	LD NOZ UP3 6 GOLD	23	SPSR2-10		126
28	7.50	194.26	0.73	0.72	37.83	11.40	LD NOZ UP3 5.5 BEIGE	24	SPSR2-10		132
29	7.33	201.59	0.75	0.72	37.52	11.40	LD NOZ UP3 5.5 BEIGE	25	SPSR2-10		138
30	7.34	208.93	0.78	0.72	37.23	11.40	LD NOZ UP3 5.5 BEIGE	26	SPSR2-10		138
31	7.33	216.26	0.81	0.85	36.95	11.40	LD NOZ UP3 6 GOLD	27	SPSR2-10		144
32	7.50	223.76	0.82	0.85	36.68	11.40	LD NOZ UP3 6 GOLD	28	SPSR2-10		144
33	7.00	230.76	0.85	0.85	36.45	11.40	LD NOZ UP3 6 GOLD	29	SPSR2-10		150
34	7.50	238.26	0.89	0.85	36.22	11.40	LD NOZ UP3 6 GOLD	30	SPSR2-10		150
35	7.33	245.59	0.91	0.85	36.00	11.40	LD NOZ UP3 6 GOLD	31	SPSR2-10		156
36	7.34	252.93	0.94	1.00	35.81	11.40	LD NOZ UP3 6.5 GOLD	32	SPSR2-10		156
37	7.33	260.26	0.98	1.00	35.63	11.40	LD NOZ UP3 6.5 GOLD	33	SPSR2-10		156
38	7.50	267.76	0.98	1.00	35.46	11.40	LD NOZ UP3 6.5 GOLD	34	SPSR2-10		156
39	7.00	274.76	1.01	1.00	35.32	11.40	LD NOZ UP3 6.5 GOLD	35	SPSR2-10		156
40	7.50	282.26	1.06	1.00	35.19	11.40	LD NOZ UP3 6.5 GOLD	36	SPSR2-10		156
41	7.33	289.59	1.08	1.00	35.08	11.40	LD NOZ UP3 6.5 GOLD	37	SPSR2-10		156
42	7.34	296.93	1.10	1.16	34.98	11.40	LD NOZ UP3 7 LIME	38	SPSR2-10		156
43	7.33	304.26	1.14	1.16	34.90	11.40	LD NOZ UP3 7 LIME	39	SPSR2-10		150
44	7.50	311.76	1.14	1.16	34.83	11.40	LD NOZ UP3 7 LIME	40	SPSR2-10		150
45	7.00	318.76	1.17	1.16	34.79	11.40	LD NOZ UP3 7 LIME	41	SPSR2-10		144
46	7.50	326.26	1.23	1.16	34.76	11.40	LD NOZ UP3 7 LIME	42	SPSR2-10		144
47	7.33	333.59	1.24	1.16	34.74	11.40	LD NOZ UP3 7 LIME	43	SPSR2-10		138

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.	DROP LENGTH
48	7.34	340.93	1.27	1.35	34.74	11.40	LD NOZ UP3 7.5 LIME	44	SPSR2-10		138
49	7.33	348.26	1.31	1.35	34.76	11.40	LD NOZ UP3 7.5 LIME	45	SPSR2-10		132
50	7.50	355.76	1.58	1.53	34.67	11.40	LD NOZ UP3 8 LAVENDER	46	SPSR2-10		126
TOWER 2	179.00	360.60									
51		361.59	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	5
52	10.00	365.76	1.62	1.53	34.48	11.40	LD NOZ UP3 8 LAVENDER	47	SPSR2-10		126
53	7.50	373.26	1.40	1.35	34.23	11.40	LD NOZ UP3 7.5 LIME	48	SPSR2-10		132
54	7.33	380.59	1.41	1.35	33.92	11.40	LD NOZ UP3 7.5 LIME	49	SPSR2-10		138
55	7.34	387.93	1.44	1.53	33.63	11.40	LD NOZ UP3 8 LAVENDER	50	SPSR2-10		138
56	7.33	395.26	1.48	1.53	33.36	11.40	LD NOZ UP3 8 LAVENDER	51	SPSR2-10		144
57	7.50	402.76	1.48	1.53	33.11	11.40	LD NOZ UP3 8 LAVENDER	52	SPSR2-10		144
58	7.00	409.76	1.51	1.53	32.88	11.40	LD NOZ UP3 8 LAVENDER	53	SPSR2-10		150
59	7.50	417.26	1.57	1.53	32.65	11.40	LD NOZ UP3 8 LAVENDER	54	SPSR2-10		150
60	7.33	424.59	1.58	1.53	32.45	11.40	LD NOZ UP3 8 LAVENDER	55	SPSR2-10		156
61	7.34	431.93	1.60	1.53	32.26	11.40	LD NOZ UP3 8 LAVENDER	56	SPSR2-10		156
62	7.33	439.26	1.65	1.73	32.09	11.40	LD NOZ UP3 8.5 LAVENDER	57	SPSR2-10		156
63	7.50	446.76	1.64	1.73	31.93	11.40	LD NOZ UP3 8.5 LAVENDER	58	SPSR2-10		156
64	7.00	453.76	1.67	1.73	31.80	11.40	LD NOZ UP3 8.5 LAVENDER	59	SPSR2-10		156
65	7.50	461.26	1.73	1.73	31.68	11.40	LD NOZ UP3 8.5 LAVENDER	60	SPSR2-10		156
66	7.33	468.59	1.74	1.73	31.58	11.40	LD NOZ UP3 8.5 LAVENDER	61	SPSR2-10		156
67	7.34	475.93	1.77	1.73	31.49	11.40	LD NOZ UP3 8.5 LAVENDER	62	SPSR2-10		156
68	7.33	483.26	1.82	1.73	31.42	11.40	LD NOZ UP3 8.5 LAVENDER	63	SPSR2-10		150
69	7.50	490.76	1.80	1.73	31.36	11.40	LD NOZ UP3 8.5 LAVENDER	64	SPSR2-10		150
70	7.00	497.76	1.83	1.73	31.33	11.40	LD NOZ UP3 8.5 LAVENDER	65	SPSR2-10		144
71	7.50	505.26	1.90	1.93	31.31	11.40	LD NOZ UP3 9 GREY	66	SPSR2-10		144
72	7.33	512.59	1.90	1.93	31.30	11.40	LD NOZ UP3 9 GREY	67	SPSR2-10		138
73	7.34	519.93	1.93	1.93	31.31	11.40	LD NOZ UP3 9 GREY	68	SPSR2-10		138
74	7.33	527.26	1.98	1.93	31.34	11.40	LD NOZ UP3 9 GREY	69	SPSR2-10		132
75	7.50	534.76	2.37	2.39	31.27	11.36	LD NOZ UP3 10 TURQUOISE	70	SPSR2-10		126
TOWER 3	179.00	539.60									
76		540.59	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	6
77	10.00	544.76	2.41	2.39	31.08	11.36	LD NOZ UP3 10 TURQUOISE	71	SPSR2-10		126
78	7.50	552.26	2.07	2.16	30.84	11.38	LD NOZ UP3 9.5 GREY	72	SPSR2-10		132
79	7.33	559.59	2.08	2.16	30.55	11.38	LD NOZ UP3 9.5 GREY	73	SPSR2-10		138
80	7.34	566.93	2.11	2.16	30.28	11.38	LD NOZ UP3 9.5 GREY	74	SPSR2-10		138
81	7.33	574.26	2.16	2.16	30.02	11.38	LD NOZ UP3 9.5 GREY	75	SPSR2-10		144
82	7.50	581.76	2.14	2.16	29.77	11.38	LD NOZ UP3 9.5 GREY	76	SPSR2-10		144
83	7.00	588.76	2.16	2.16	29.56	11.38	LD NOZ UP3 9.5 GREY	77	SPSR2-10		150
84	7.50	596.26	2.24	2.16	29.34	11.38	LD NOZ UP3 9.5 GREY	78	SPSR2-10		150
85	7.33	603.59	2.24	2.16	29.15	11.38	LD NOZ UP3 9.5 GREY	79	SPSR2-10		156
86	7.34	610.93	2.27	2.16	28.98	11.38	LD NOZ UP3 9.5 GREY	80	SPSR2-10		156
87	7.33	618.26	2.32	2.39	28.82	11.36	LD NOZ UP3 10 TURQUOISE	81	SPSR2-10		156
88	7.50	625.76	2.30	2.39	28.68	11.36	LD NOZ UP3 10 TURQUOISE	82	SPSR2-10		156
89	7.00	632.76	2.32	2.39	28.56	11.36	LD NOZ UP3 10 TURQUOISE	83	SPSR2-10		156
90	7.50	640.26	2.40	2.39	28.45	11.36	LD NOZ UP3 10 TURQUOISE	84	SPSR2-10		156
91	7.33	647.59	2.41	2.39	28.36	11.36	LD NOZ UP3 10 TURQUOISE	85	SPSR2-10		156
92	7.34	654.93	2.43	2.39	28.28	11.36	LD NOZ UP3 10 TURQUOISE	86	SPSR2-10		156
93	7.33	662.26	2.49	2.39	28.22	11.36	LD NOZ UP3 10 TURQUOISE	87	SPSR2-10		150

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.	DROP LENGTH
94	7.50	669.76	2.46	2.39	28.18	11.36	LD NOZ UP3 10 TURQUOISE	88	SPSR2-10		150
95	7.00	676.76	2.49	2.39	28.16	11.36	LD NOZ UP3 10 TURQUOISE	89	SPSR2-10		144
96	7.50	684.26	2.57	2.63	28.15	11.34	LD NOZ UP3 10.5 TURQUOISE	90	SPSR2-10		144
97	7.33	691.59	2.57	2.63	28.16	11.34	LD NOZ UP3 10.5 TURQUOISE	91	SPSR2-10		138
98	7.34	698.93	2.60	2.63	28.19	11.34	LD NOZ UP3 10.5 TURQUOISE	92	SPSR2-10		138
99	7.33	706.26	2.65	2.63	28.24	11.34	LD NOZ UP3 10.5 TURQUOISE	93	SPSR2-10		132
100	7.50	713.76	3.17	3.15	28.17	11.28	LD NOZ UP3 11.5 YELLOW	94	SPSR2-10		126
TOWER 4	179.00	718.60									
101		719.59	-	-	-	-	-	-	-	-	7
102	10.00	723.76	3.21	3.15	28.01	11.28	LD NOZ UP3 11.5 YELLOW	95	SPSR2-10		126
103	7.50	731.26	2.75	2.63	27.79	11.34	LD NOZ UP3 10.5 TURQUOISE	96	SPSR2-10		132
104	7.33	738.59	2.75	2.63	27.51	11.34	LD NOZ UP3 10.5 TURQUOISE	97	SPSR2-10		138
105	7.34	745.93	2.77	2.89	27.25	11.31	LD NOZ UP3 11 YELLOW	98	SPSR2-10		138
106	7.33	753.26	2.83	2.89	27.01	11.31	LD NOZ UP3 11 YELLOW	99	SPSR2-10		144
107	7.50	760.76	2.79	2.89	26.78	11.31	LD NOZ UP3 11 YELLOW	100	SPSR2-10		144
108	7.00	767.76	2.82	2.89	26.58	11.31	LD NOZ UP3 11 YELLOW	101	SPSR2-10		150
109	7.50	775.26	2.91	2.89	26.38	11.31	LD NOZ UP3 11 YELLOW	102	SPSR2-10		150
110	7.33	782.59	2.91	2.89	26.20	11.31	LD NOZ UP3 11 YELLOW	103	SPSR2-10		156
111	7.34	789.93	2.94	2.89	26.04	11.31	LD NOZ UP3 11 YELLOW	104	SPSR2-10		156
112	7.33	797.26	3.00	2.89	25.90	11.31	LD NOZ UP3 11 YELLOW	105	SPSR2-10		156
113	7.50	804.76	2.96	2.89	25.78	11.31	LD NOZ UP3 11 YELLOW	106	SPSR2-10		156
114	7.00	811.76	2.98	2.89	25.67	11.31	LD NOZ UP3 11 YELLOW	107	SPSR2-10		156
115	7.50	819.26	3.08	3.15	25.58	11.28	LD NOZ UP3 11.5 YELLOW	108	SPSR2-10		156
116	7.33	826.59	3.07	3.15	25.51	11.28	LD NOZ UP3 11.5 YELLOW	109	SPSR2-10		156
117	7.34	833.93	3.10	3.15	25.45	11.28	LD NOZ UP3 11.5 YELLOW	110	SPSR2-10		156
118	7.33	841.26	3.16	3.15	25.41	11.28	LD NOZ UP3 11.5 YELLOW	111	SPSR2-10		150
119	7.50	848.76	3.12	3.15	25.38	11.28	LD NOZ UP3 11.5 YELLOW	112	SPSR2-10		150
120	7.00	855.76	3.14	3.15	25.38	11.28	LD NOZ UP3 11.5 YELLOW	113	SPSR2-10		144
121	7.50	863.26	3.24	3.16	25.39	11.28	LD NOZ UP3 11.5 YELLOW	114	SPSR2-10		144
122	7.33	870.59	3.24	3.16	25.42	11.28	LD NOZ UP3 11.5 YELLOW	115	SPSR2-10		138
123	7.34	877.93	3.26	3.16	25.46	11.28	LD NOZ UP3 11.5 YELLOW	116	SPSR2-10		138
124	7.33	885.26	3.33	3.44	25.52	11.26	LD NOZ UP3 12 RED	117	SPSR2-10		132
125	7.50	892.76	3.96	4.03	25.48	11.20	LD NOZ UP3 13 WHITE	118	SPSR2-10		126
TOWER 5	179.00	897.60									
126		898.59	-	-	-	-	-	-	-	-	8
127	10.00	902.76	4.00	4.03	25.34	11.20	LD NOZ UP3 13 WHITE	119	SPSR2-10		126
128	7.50	910.26	3.42	3.44	25.14	11.26	LD NOZ UP3 12 RED	120	SPSR2-10		132
129	7.33	917.59	3.41	3.44	24.88	11.26	LD NOZ UP3 12 RED	121	SPSR2-10		138
130	7.34	924.93	3.44	3.44	24.64	11.26	LD NOZ UP3 12 RED	122	SPSR2-10		138
131	7.33	932.26	3.50	3.44	24.41	11.26	LD NOZ UP3 12 RED	123	SPSR2-10		144
132	7.50	939.76	3.45	3.44	24.20	11.26	LD NOZ UP3 12 RED	124	SPSR2-10		144
133	7.00	946.76	3.48	3.44	24.02	11.26	LD NOZ UP3 12 RED	125	SPSR2-10		150
134	7.50	954.26	3.59	3.73	23.84	11.23	LD NOZ UP3 12.5 RED	126	SPSR2-10		150
135	7.33	961.59	3.57	3.44	23.68	11.26	LD NOZ UP3 12 RED	127	SPSR2-10		156
136	7.34	968.93	3.60	3.73	23.54	11.23	LD NOZ UP3 12.5 RED	128	SPSR2-10		156
137	7.33	976.26	3.67	3.73	23.42	11.23	LD NOZ UP3 12.5 RED	129	SPSR2-10		156
138	7.50	983.76	3.61	3.73	23.31	11.23	LD NOZ UP3 12.5 RED	130	SPSR2-10		156
139	7.00	990.76	3.64	3.73	23.23	11.23	LD NOZ UP3 12.5 RED	131	SPSR2-10		156

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.	DROP LENGTH
140	7.50	998.26	3.75	3.73	23.15	11.23	LD NOZ UP3 12.5 RED	132	SPSR2-10		156
141	7.33	1005.59	3.74	3.73	23.10	11.23	LD NOZ UP3 12.5 RED	133	SPSR2-10		156
142	7.34	1012.93	3.76	3.73	23.06	11.23	LD NOZ UP3 12.5 RED	134	SPSR2-10		156
143	7.33	1020.26	3.83	3.73	23.04	11.23	LD NOZ UP3 12.5 RED	135	SPSR2-10		150
144	7.50	1027.76	3.77	3.73	23.04	11.23	LD NOZ UP3 12.5 RED	136	SPSR2-10		150
145	7.00	1034.76	3.80	3.73	23.05	11.23	LD NOZ UP3 12.5 RED	137	SPSR2-10		144
146	7.50	1042.26	3.92	4.03	23.08	11.20	LD NOZ UP3 13 WHITE	138	SPSR2-10		144
147	7.33	1049.59	3.90	4.03	23.13	11.20	LD NOZ UP3 13 WHITE	139	SPSR2-10		138
148	7.34	1056.93	3.93	4.03	23.19	11.20	LD NOZ UP3 13 WHITE	140	SPSR2-10		138
149	7.33	1064.26	4.00	4.03	23.27	11.20	LD NOZ UP3 13 WHITE	141	SPSR2-10		132
150	7.50	1071.76	4.00	4.03	23.27	11.20	LD NOZ UP3 13 WHITE	142	SPSR2-10		126
TOWER 6	179.00	1076.60									
151		1077.59	-	-	-	-	-	-	-	-	9
152	10.00	1081.76	4.79	4.66	23.14	11.13	LD NOZ UP3 14 BLUE	143	SPSR2-10		126
153	7.50	1089.26	4.09	4.03	22.89	11.20	LD NOZ UP3 13 WHITE	144	SPSR2-10		132
154	7.33	1096.59	4.07	4.03	22.65	11.20	LD NOZ UP3 13 WHITE	145	SPSR2-10		138
155	7.34	1103.93	4.10	4.03	22.43	11.20	LD NOZ UP3 13 WHITE	146	SPSR2-10		138
156	7.33	1111.26	4.18	4.03	22.24	11.20	LD NOZ UP3 13 WHITE	147	SPSR2-10		144
157	7.50	1118.76	4.11	4.03	22.07	11.20	LD NOZ UP3 13 WHITE	148	SPSR2-10		144
158	7.00	1125.76	4.14	4.03	21.93	11.20	LD NOZ UP3 13 WHITE	149	SPSR2-10		150
159	7.50	1133.26	4.26	4.34	21.81	11.17	LD NOZ UP3 13.5 WHITE	150	SPSR2-10		150
160	7.33	1140.59	4.24	4.34	21.72	11.17	LD NOZ UP3 13.5 WHITE	151	SPSR2-10		150
161	7.34	1147.93	4.27	4.34	21.65	11.17	LD NOZ UP3 13.5 WHITE	152	SPSR2-10		150
162	7.33	1155.26	4.34	4.34	21.60	11.17	LD NOZ UP3 13.5 WHITE	153	SPSR2-10		150
163	7.50	1162.76	4.27	4.34	21.58	11.17	LD NOZ UP3 13.5 WHITE	154	SPSR2-10		150
164	7.00	1169.76	4.30	4.34	21.58	11.17	LD NOZ UP3 13.5 WHITE	155	SPSR2-10		144
165	7.50	1177.26	4.42	4.34	21.61	11.17	LD NOZ UP3 13.5 WHITE	156	SPSR2-10		144
166	7.33	1184.59	4.40	4.34	21.66	11.17	LD NOZ UP3 13.5 WHITE	157	SPSR2-10		138
167	7.34	1191.93	4.43	4.34	21.74	11.17	LD NOZ UP3 13.5 WHITE	158	SPSR2-10		138
168	7.33	1199.26	4.51	4.66	21.84	11.13	LD NOZ UP3 14 BLUE	159	SPSR2-10		132
169	7.50	1206.76	5.35	5.34	21.90	11.04	LD NOZ UP3 15 DK BROWN	160	SPSR2-10		126
TOWER 7	135.00	1211.60									
170		1212.59	-	-	-	-	-	-	-	-	10
171	10.00	1216.76	5.39	5.34	21.81	11.04	LD NOZ UP3 15 DK BROWN	161	SPSR2-10		126
172	7.50	1224.26	4.60	4.66	21.64	11.13	LD NOZ UP3 14 BLUE	162	SPSR2-10		132
173	7.33	1231.59	4.58	4.66	21.42	11.13	LD NOZ UP3 14 BLUE	163	SPSR2-10		138
174	7.34	1238.93	4.60	4.66	21.21	11.13	LD NOZ UP3 14 BLUE	164	SPSR2-10		138
175	7.33	1246.26	4.68	4.66	21.03	11.13	LD NOZ UP3 14 BLUE	165	SPSR2-10		144
176	7.50	1253.76	4.60	4.66	20.85	11.13	LD NOZ UP3 14 BLUE	166	SPSR2-10		144
177	7.00	1260.76	4.63	4.66	20.70	11.13	LD NOZ UP3 14 BLUE	167	SPSR2-10		150
178	7.50	1268.26	4.76	4.66	20.56	11.13	LD NOZ UP3 14 BLUE	168	SPSR2-10		150
179	7.33	1275.59	4.74	4.66	20.44	11.13	LD NOZ UP3 14 BLUE	169	SPSR2-10		156
180	7.34	1282.93	4.77	4.66	20.34	11.13	LD NOZ UP3 14 BLUE	170	SPSR2-10		156
181	7.33	1290.26	4.85	4.99	20.25	11.10	LD NOZ UP3 14.5 BLUE	171	SPSR2-10		156
182	7.50	1297.76	4.77	4.66	20.18	11.13	LD NOZ UP3 14 BLUE	172	SPSR2-10		156
183	7.00	1304.76	4.79	4.66	20.13	11.13	LD NOZ UP3 14 BLUE	173	SPSR2-10		156
184	7.50	1312.26	4.93	4.99	20.10	11.10	LD NOZ UP3 14.5 BLUE	174	SPSR2-10		156
185	7.33	1319.59	4.91	4.99	20.08	11.10	LD NOZ UP3 14.5 BLUE	175	SPSR2-10		156

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.	DROP LENGTH
186	7.34	1326.93	4.93	4.99	20.08	11.10	LD NOZ UP3 14.5 BLUE	176	SPSR2-10		156
187	7.33	1334.26	5.01	4.99	20.09	11.10	LD NOZ UP3 14.5 BLUE	177	SPSR2-10		150
188	7.50	1341.76	4.93	4.99	20.13	11.10	LD NOZ UP3 14.5 BLUE	178	SPSR2-10		150
189	7.00	1348.76	4.95	4.99	20.17	11.10	LD NOZ UP3 14.5 BLUE	179	SPSR2-10		144
190	7.50	1356.26	5.09	4.99	20.24	11.10	LD NOZ UP3 14.5 BLUE	180	SPSR2-10		144
191	7.33	1363.59	5.07	4.99	20.33	11.10	LD NOZ UP3 14.5 BLUE	181	SPSR2-10		138
192	7.34	1370.93	5.10	4.99	20.43	11.10	LD NOZ UP3 14.5 BLUE	182	SPSR2-10		138
193	7.33	1378.26	5.18	5.34	20.55	11.04	LD NOZ UP3 15 DK BROWN	183	SPSR2-10		132
194	7.50	1385.76	6.15	6.04	20.56	10.91	LD NOZ UP3 16 ORANGE	184	SPSR2-10		126
TOWER 8	179.00	1390.60									
195		1391.59	-	-	-	-	-	-	-	-	11
196	10.00	1395.76	6.19	6.04	20.50	10.91	LD NOZ UP3 16 ORANGE	185	SPSR2-10		126
197	7.50	1403.26	5.27	5.34	20.35	11.04	LD NOZ UP3 15 DK BROWN	186	SPSR2-10		132
198	7.33	1410.59	5.24	5.34	20.15	11.04	LD NOZ UP3 15 DK BROWN	187	SPSR2-10		138
199	7.34	1417.93	5.27	5.34	19.97	11.04	LD NOZ UP3 15 DK BROWN	188	SPSR2-10		138
200	7.33	1425.26	5.36	5.34	19.80	11.04	LD NOZ UP3 15 DK BROWN	189	SPSR2-10		144
201	7.50	1432.76	5.26	5.34	19.64	11.04	LD NOZ UP3 15 DK BROWN	190	SPSR2-10		144
202	7.00	1439.76	5.29	5.34	19.52	11.04	LD NOZ UP3 15 DK BROWN	191	SPSR2-10		150
203	7.50	1447.26	5.44	5.34	19.40	11.04	LD NOZ UP3 15 DK BROWN	192	SPSR2-10		150
204	7.33	1454.59	5.41	5.34	19.30	11.04	LD NOZ UP3 15 DK BROWN	193	SPSR2-10		156
205	7.34	1461.93	5.43	5.34	19.21	11.04	LD NOZ UP3 15 DK BROWN	194	SPSR2-10		156
206	7.33	1469.26	5.52	5.68	19.15	10.98	LD NOZ UP3 15.5 DK BROWN	195	SPSR2-10		156
207	7.50	1476.76	5.42	5.34	19.10	11.04	LD NOZ UP3 15 DK BROWN	196	SPSR2-10		156
208	7.00	1483.76	5.45	5.34	19.07	11.04	LD NOZ UP3 15 DK BROWN	197	SPSR2-10		156
209	7.50	1491.26	5.61	5.68	19.05	10.98	LD NOZ UP3 15.5 DK BROWN	198	SPSR2-10		156
210	7.33	1498.59	5.57	5.68	19.05	10.98	LD NOZ UP3 15.5 DK BROWN	199	SPSR2-10		156
211	7.34	1505.93	5.60	5.68	19.07	10.98	LD NOZ UP3 15.5 DK BROWN	200	SPSR2-10		156
212	7.33	1513.26	5.68	5.68	19.11	10.98	LD NOZ UP3 15.5 DK BROWN	201	SPSR2-10		150
213	7.50	1520.76	5.59	5.68	19.16	10.98	LD NOZ UP3 15.5 DK BROWN	202	SPSR2-10		150
214	7.00	1527.76	5.61	5.68	19.23	10.98	LD NOZ UP3 15.5 DK BROWN	203	SPSR2-10		144
215	7.50	1535.26	5.77	5.68	19.32	10.98	LD NOZ UP3 15.5 DK BROWN	204	SPSR2-10		144
216	7.33	1542.59	5.73	5.68	19.42	10.98	LD NOZ UP3 15.5 DK BROWN	205	SPSR2-10		138
217	7.34	1549.93	5.76	5.68	19.54	10.98	LD NOZ UP3 15.5 DK BROWN	206	SPSR2-10		138
218	7.33	1557.26	5.85	5.68	19.68	10.98	LD NOZ UP3 15.5 DK BROWN	207	SPSR2-10		132
219	7.50	1564.76	6.94	6.78	19.71	10.78	LD NOZ UP3 17 DK GREEN	208	SPSR2-10		126
TOWER 9	179.00	1569.60									
220		1570.59	-	-	-	-	-	-	-	-	12
221	10.00	1574.76	6.99	7.16	19.68	10.71	LD NOZ UP3 17.5 DK GREEN	209	SPSR2-10		126
222	7.50	1582.26	5.95	6.04	19.55	10.91	LD NOZ UP3 16 ORANGE	210	SPSR2-10		132
223	7.33	1589.59	5.91	6.04	19.37	10.91	LD NOZ UP3 16 ORANGE	211	SPSR2-10		138
224	7.34	1596.93	5.93	6.04	19.20	10.91	LD NOZ UP3 16 ORANGE	212	SPSR2-10		138
225	7.33	1604.26	6.02	6.04	19.05	10.91	LD NOZ UP3 16 ORANGE	213	SPSR2-10		144
226	7.50	1611.76	5.92	6.04	18.92	10.91	LD NOZ UP3 16 ORANGE	214	SPSR2-10		144
227	7.00	1618.76	5.94	6.04	18.81	10.91	LD NOZ UP3 16 ORANGE	215	SPSR2-10		150
228	7.50	1626.26	6.10	6.04	18.71	10.91	LD NOZ UP3 16 ORANGE	216	SPSR2-10		150
229	7.33	1633.59	6.07	6.04	18.62	10.91	LD NOZ UP3 16 ORANGE	217	SPSR2-10		156
230	7.34	1640.93	6.09	6.04	18.56	10.91	LD NOZ UP3 16 ORANGE	218	SPSR2-10		156
231	7.33	1648.26	6.19	6.04	18.51	10.91	LD NOZ UP3 16 ORANGE	219	SPSR2-10		156

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.	DROP LENGTH
232		7.50	1655.76	6.08	6.04	18.48	10.91 LD NOZ UP3 16 ORANGE	220	SPSR2-10		156
233		7.00	1662.76	6.11	6.04	18.47	10.91 LD NOZ UP3 16 ORANGE	221	SPSR2-10		156
234		7.50	1670.26	6.28	6.40	18.47	10.85 LD NOZ UP3 16.5 ORANGE	222	SPSR2-10		156
235		7.33	1677.59	6.23	6.40	18.49	10.85 LD NOZ UP3 16.5 ORANGE	223	SPSR2-10		156
236		7.34	1684.93	6.26	6.40	18.52	10.85 LD NOZ UP3 16.5 ORANGE	224	SPSR2-10		156
237		7.33	1692.26	6.35	6.41	18.58	10.85 LD NOZ UP3 16.5 ORANGE	225	SPSR2-10		150
238		7.50	1699.76	6.23	6.40	18.65	10.85 LD NOZ UP3 16.5 ORANGE	226	SPSR2-10		150
239		7.00	1706.76	6.26	6.40	18.73	10.85 LD NOZ UP3 16.5 ORANGE	227	SPSR2-10		144
240		7.50	1714.26	6.42	6.41	18.84	10.85 LD NOZ UP3 16.5 ORANGE	228	SPSR2-10		144
241		7.33	1721.59	6.38	6.41	18.95	10.85 LD NOZ UP3 16.5 ORANGE	229	SPSR2-10		138
242		7.34	1728.93	6.41	6.41	19.09	10.85 LD NOZ UP3 16.5 ORANGE	230	SPSR2-10		138
243		7.33	1736.26	6.50	6.41	19.25	10.85 LD NOZ UP3 16.5 ORANGE	231	SPSR2-10		132
244		7.50	1743.76	7.71	7.55	19.29	10.64 LD NOZ UP3 18 PURPLE	232	SPSR2-10		126
TOWER 10		179.00	1748.60								
245			1749.59	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	13
246		10.00	1753.76	7.76	7.95	19.28	10.57 LD NOZ UP3 18.5 PURPLE	233	SPSR2-10		126
247		7.50	1761.26	6.60	6.78	19.17	10.78 LD NOZ UP3 17 DK GREEN	234	SPSR2-10		132
248		7.33	1768.59	6.55	6.41	19.00	10.85 LD NOZ UP3 16.5 ORANGE	235	SPSR2-10		138
249		7.34	1775.93	6.58	6.41	18.85	10.85 LD NOZ UP3 16.5 ORANGE	236	SPSR2-10		138
250		7.33	1783.26	6.69	6.78	18.71	10.78 LD NOZ UP3 17 DK GREEN	237	SPSR2-10		144
251		7.50	1790.76	6.56	6.41	18.59	10.85 LD NOZ UP3 16.5 ORANGE	238	SPSR2-10		144
252		7.00	1797.76	6.60	6.78	18.50	10.78 LD NOZ UP3 17 DK GREEN	239	SPSR2-10		150
253		7.50	1805.26	6.77	6.78	18.41	10.78 LD NOZ UP3 17 DK GREEN	240	SPSR2-10		150
254		7.33	1812.59	6.72	6.78	18.34	10.78 LD NOZ UP3 17 DK GREEN	241	SPSR2-10		156
255		7.34	1819.93	6.74	6.78	18.29	10.78 LD NOZ UP3 17 DK GREEN	242	SPSR2-10		156
256		7.33	1827.26	6.84	6.78	18.26	10.78 LD NOZ UP3 17 DK GREEN	243	SPSR2-10		156
257		7.50	1834.76	6.72	6.78	18.24	10.78 LD NOZ UP3 17 DK GREEN	244	SPSR2-10		156
258		7.00	1841.76	6.74	6.78	18.23	10.78 LD NOZ UP3 17 DK GREEN	245	SPSR2-10		156
259		7.50	1849.26	6.92	6.78	18.25	10.78 LD NOZ UP3 17 DK GREEN	246	SPSR2-10		156
260		7.33	1856.59	6.88	6.78	18.28	10.78 LD NOZ UP3 17 DK GREEN	247	SPSR2-10		156
261		7.34	1863.93	6.92	6.78	18.33	10.78 LD NOZ UP3 17 DK GREEN	248	SPSR2-10		156
262		7.33	1871.26	7.03	7.16	18.39	10.71 LD NOZ UP3 17.5 DK GREEN	249	SPSR2-10		150
263		7.50	1878.76	6.89	6.78	18.47	10.78 LD NOZ UP3 17 DK GREEN	250	SPSR2-10		150
264		7.00	1885.76	6.93	6.78	18.57	10.78 LD NOZ UP3 17 DK GREEN	251	SPSR2-10		144
265		7.50	1893.26	7.12	7.16	18.68	10.71 LD NOZ UP3 17.5 DK GREEN	252	SPSR2-10		144
266		7.33	1900.59	7.07	7.16	18.81	10.71 LD NOZ UP3 17.5 DK GREEN	253	SPSR2-10		138
267		7.34	1907.93	7.09	7.16	18.96	10.71 LD NOZ UP3 17.5 DK GREEN	254	SPSR2-10		138
268		7.33	1915.26	7.19	7.16	19.12	10.71 LD NOZ UP3 17.5 DK GREEN	255	SPSR2-10		132
269		7.50	1922.76	8.13	7.95	19.18	10.57 LD NOZ UP3 18.5 PURPLE	256	SPSR2-10		126
TOWER 11		179.00	1927.60								
							PIPE ID CHANGES FROM 6.395 TO 5.369				
270		9.21	1931.97	8.20	8.35	19.14	10.50 LD NOZ UP3 19 BLACK	257	SPSR2-10		126
271		7.50	1939.47	7.28	7.16	19.08	10.71 LD NOZ UP3 17.5 DK GREEN	258	SPSR2-10		126
272		7.33	1946.80	7.25	7.16	19.03	10.71 LD NOZ UP3 17.5 DK GREEN	259	SPSR2-10		132
273		7.34	1954.14	7.30	7.16	18.97	10.71 LD NOZ UP3 17.5 DK GREEN	260	SPSR2-10		132
274		7.33	1961.47	7.45	7.55	18.91	10.64 LD NOZ UP3 18 PURPLE	261	SPSR2-10		132
275		7.50	1968.97	7.51	7.55	18.85	10.64 LD NOZ UP3 18 PURPLE	262	SPSR2-10		138
							PIPE ID CHANGES FROM 5.369 TO 0.824				

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.	DROP LENGTH
276	7.50	1976.47	5.76	5.68	18.14	10.98	LD NOZ UP3 15.5 DK BROWN	263	SPSR2-10		138
277	4.00	1980.47	5.12	4.99	18.04	11.10	LD NOZ UP3 14.5 BLUE	264	SPSR2-10		138
OVERHANG	52.87	1980.47									

TOTAL GPM = 1000.90

GPA = 3.54

MINIMUM RECOMMENDED REGULATOR INLET PRESSURE IS 15.00 PSI

WITH GRADUATED ELEVATION OF 15.00 FT THE INLET PRESSURE IS 15.94 PSI FOR SPRINKLER 263

THIS POSITION IS THE CLOSEST TO THE MINIMUM RECOMMENDED INLET PRESSURE

HYDRAULICS SUMMARY

TOWER NUMBER	ACRES UNDER SPAN	GPM NEED	ACTUAL GPM	GPM PER ACRE	AVERAGE IN. PER HR DELIVERED UNDER SPAN	AVERAGE IN. DELIVERED FOR REVOLUTION TIME		
						36 HR	48 HR	60 HR
1	2.38	8.41	13.17	5.54	0.012	0.44	0.59	0.73
2	7.00	24.74	24.48	3.50	0.008	0.28	0.37	0.46
3	11.62	41.08	40.58	3.49	0.008	0.28	0.37	0.46
4	16.24	57.42	56.94	3.51	0.008	0.28	0.37	0.46
5	20.86	73.76	73.19	3.51	0.008	0.28	0.37	0.47
6	25.49	90.10	89.90	3.53	0.008	0.28	0.37	0.47
7	22.28	78.76	77.93	3.50	0.008	0.28	0.37	0.46
8	33.59	118.76	117.94	3.51	0.008	0.28	0.37	0.47
9	38.22	135.09	134.08	3.51	0.008	0.28	0.37	0.47
10	42.84	151.43	151.21	3.53	0.008	0.28	0.37	0.47
11	47.46	167.77	166.17	3.50	0.008	0.28	0.37	0.46
OVERHANG	14.90	52.68	55.30	3.71	0.008	0.30	0.39	0.49
TOTAL	282.88	1000.00	1000.90	3.54				

SUMMARY OF SPRINKLERS

- 21 LD NOZ UP3 5 BEIGE
- 3 LD NOZ UP3 5.5 BEIGE
- 7 LD NOZ UP3 6 GOLD
- 6 LD NOZ UP3 6.5 GOLD
- 6 LD NOZ UP3 7 LIME
- 4 LD NOZ UP3 7.5 LIME
- 9 LD NOZ UP3 8 LAVENDER
- 9 LD NOZ UP3 8.5 LAVENDER
- 4 LD NOZ UP3 9 GREY
- 9 LD NOZ UP3 9.5 GREY
- 11 LD NOZ UP3 10 TURQUOISE
- 6 LD NOZ UP3 10.5 TURQUOISE
- 10 LD NOZ UP3 11 YELLOW
- 11 LD NOZ UP3 11.5 YELLOW

SUMMARY OF DROPS

- 23 102 IN DROP
- 24 108 IN DROP
- 47 114 IN DROP
- 44 120 IN DROP
- 46 126 IN DROP
- 80 132 IN DROP
- 264 24 IN WEIGHT

SUMMARY OF REGULATORS

- 264 SPSR2-10

8 LD NOZ UP3 12 RED
11 LD NOZ UP3 12.5 RED
12 LD NOZ UP3 13 WHITE
9 LD NOZ UP3 13.5 WHITE
14 LD NOZ UP3 14 BLUE
11 LD NOZ UP3 14.5 BLUE
14 LD NOZ UP3 15 DK BROWN
12 LD NOZ UP3 15.5 DK BROWN
14 LD NOZ UP3 16 ORANGE
13 LD NOZ UP3 16.5 ORANGE
15 LD NOZ UP3 17 DK GREEN
9 LD NOZ UP3 17.5 DK GREEN
3 LD NOZ UP3 18 PURPLE
2 LD NOZ UP3 18.5 PURPLE
1 LD NOZ UP3 19 BLACK

13 PLUGS

TOTAL OF 264 DROPS
LENGTH OF HOSE: 2661.0 FT.

TOTAL OF 264 REGULATORS

NOZZLE POSITION CHART

LD NOZ UP3 5 BEIGE	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21
LD NOZ UP3 5.5 BEIGE	24, 25, 26
LD NOZ UP3 6 GOLD	22, 23, 27, 28, 29, 30, 31
LD NOZ UP3 6.5 GOLD	32, 33, 34, 35, 36, 37
LD NOZ UP3 7 LIME	38, 39, 40, 41, 42, 43
LD NOZ UP3 7.5 LIME	44, 45, 48, 49
LD NOZ UP3 8 LAVENDER	46, 47, 50, 51, 52, 53, 54, 55, 56
LD NOZ UP3 8.5 LAVENDER	57, 58, 59, 60, 61, 62, 63, 64, 65
LD NOZ UP3 9 GREY	66, 67, 68, 69
LD NOZ UP3 9.5 GREY	72, 73, 74, 75, 76, 77, 78, 79, 80
LD NOZ UP3 10 TURQUOISE	70, 71, 81, 82, 83, 84, 85, 86, 87, 88, 89
LD NOZ UP3 10.5 TURQUOISE	90, 91, 92, 93, 96, 97
LD NOZ UP3 11 YELLOW	98, 99, 100, 101, 102, 103, 104, 105, 106, 107
LD NOZ UP3 11.5 YELLOW	94, 95, 108, 109, 110, 111, 112, 113, 114, 115, 116
LD NOZ UP3 12 RED	117, 120, 121, 122, 123, 124, 125, 127
LD NOZ UP3 12.5 RED	126, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137
LD NOZ UP3 13 WHITE	118, 119, 138, 139, 140, 141, 144, 145, 146, 147, 148, 149
LD NOZ UP3 13.5 WHITE	150, 151, 152, 153, 154, 155, 156, 157, 158
LD NOZ UP3 14 BLUE	142, 143, 159, 162, 163, 164, 165, 166, 167, 168, 169, 170, 172, 173
LD NOZ UP3 14.5 BLUE	171, 174, 175, 176, 177, 178, 179, 180, 181, 182, 264
LD NOZ UP3 15 DK BROWN	160, 161, 183, 186, 187, 188, 189, 190, 191, 192, 193, 194, 196, 197
LD NOZ UP3 15.5 DK BROWN	195, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 263
LD NOZ UP3 16 ORANGE	184, 185, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221
LD NOZ UP3 16.5 ORANGE	222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 235, 236, 238
LD NOZ UP3 17 DK GREEN	208, 234, 237, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 250, 251
LD NOZ UP3 17.5 DK GREEN	209, 249, 252, 253, 254, 255, 258, 259, 260
LD NOZ UP3 18 PURPLE	232, 261, 262
LD NOZ UP3 18.5 PURPLE	233, 256
LD NOZ UP3 19 BLACK	257

PRECIPITATION CHART FOR FULL CIRCLE

WISH-85148

NOVEMBER 04, 2016

DEALER - WOOFTER CONSTRUCTION & IRRIGATION

IRRIGATOR - TERRY HOCKERSMITH
FIELD NO - SECTION 15-11-32

TOTAL LENGTH PIPE = 1980.47 SYSTEM PRESSURE = 42 PSI
 GPM UNDER PIPE = 1000.90 TOTAL GPM = 1000.90
 ACRES UNDER PIPE = 282.88
 RANGE OF ENDGUN = .00 RUN FOR MINIMUM PRESSURE
 GPM OF ENDGUN = .00
 ACRES UNDER ENDGUN = .00

MOTOR SIZE (HP) = 3/4
 LOADED MOTOR RPM = 1750
 CENTER GEAR BOX RATIO = 40
 WHEEL GEAR BOX RATIO = 50
 TIRE SIZE = NFTTrax
 LAST TOWER SPEED (FPM) = 11.10

PRECIPITATION BASED**% TIMER BASED**

PRECIPITATION INCHES	% TIMER SETTING	TIME HOURS	% TIMER SETTING	PRECIPITATION INCHES	TIME HOURS
.14	100.00	18.19 - 1091(min)	100.00	.14	18.19 - 1091(min)
.20	71.10	25.58	90.00	.16	20.21
.25	56.88	31.98	80.00	.18	22.74
.30	47.40	38.37	70.00	.20	25.98
.40	35.55	51.16	60.00	.24	30.32
.50	28.44	63.95	50.00	.28	36.38
.60	23.70	76.75	45.00	.32	40.42
.70	20.31	89.54	40.00	.36	45.47
.75	18.96	95.93	35.00	.41	51.97
.80	17.78	102.33	30.00	.47	60.63
.90	15.80	115.12	25.00	.57	72.76
1.00	14.22	127.91	20.00	.71	90.95
1.25	11.38	159.89	15.00	.95	121.26
1.50	9.48	191.86	10.00	1.42	181.89
1.75	8.13	223.84	5.00	2.84	363.78

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.

WOOFTER CONSTRUCTION & IRRIGATION

1965 THIELEN AVENUE
COLBY, KANSAS 67701

NOVEMBER 04, 2016

WISH-85148

TERRY HOCKERSMITH

SECTION 15-11-32

1000 @ 42 PSI

Rotation time at 100% = 18.19 Hours Or 1091 minutes

LINDSAY GEN II - 90
SENNINGER UP3 LDN SPRAY NOZZLES
SENNINGER 10 PSI REGULATORS
.75 I.D. FLEXIBLE HOSE
NO ENDGUN

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	150	54	8	PSR210	17	156	110	11.5	PSR210	5	138	164	14	PSR210	13	156	220	16	PSR210
2	PLUG				10	156	55	8	PSR210	18	150	111	11.5	PSR210	6	144	165	14	PSR210	14	156	221	16	PSR210
3	PLUG				11	156	56	8	PSR210	19	150	112	11.5	PSR210	7	144	166	14	PSR210	15	156	222	16.5	PSR210
4	138 1	5	PSR210	12	156	57	8.5	PSR210	20	144	113	11.5	PSR210	8	150	167	14	PSR210	16	156	223	16.5	PSR210	
5	138 2	5	PSR210	13	156	58	8.5	PSR210	21	144	114	11.5	PSR210	9	150	168	14	PSR210	17	156	224	16.5	PSR210	
6	144 3	5	PSR210	14	156	59	8.5	PSR210	22	138	115	11.5	PSR210	10	156	169	14	PSR210	18	150	225	16.5	PSR210	
7	144 4	5	PSR210	15	156	60	8.5	PSR210	23	138	116	11.5	PSR210	11	156	170	14	PSR210	19	150	226	16.5	PSR210	
8	150 5	5	PSR210	16	156	61	8.5	PSR210	24	132	117	12	PSR210	12	156	171	14.5	PSR210	20	144	227	16.5	PSR210	
9	150 6	5	PSR210	17	156	62	8.5	PSR210	25	126	118	13	PSR210	13	156	172	14	PSR210	21	144	228	16.5	PSR210	
10	156 7	5	PSR210	18	150	63	8.5	PSR210						14	156	173	14	PSR210	22	138	229	16.5	PSR210	
11	156 8	5	PSR210	19	150	64	8.5	PSR210	1	PLUG				15	156	174	14.5	PSR210	23	138	230	16.5	PSR210	
12	156 9	5	PSR210	20	144	65	8.5	PSR210	2	126	119	13	PSR210	16	156	175	14.5	PSR210	24	132	231	16.5	PSR210	
13	156 10	5	PSR210	21	144	66	9	PSR210	3	132	120	12	PSR210	17	156	176	14.5	PSR210	25	126	232	18	PSR210	
14	156 11	5	PSR210	22	138	67	9	PSR210	4	138	121	12	PSR210	18	150	177	14.5	PSR210		PLUG			TOWER 10	
15	156 12	5	PSR210	23	138	68	9	PSR210	5	138	122	12	PSR210	19	150	178	14.5	PSR210	1	126	233	18.5	PSR210	
16	156 13	5	PSR210	24	132	69	9	PSR210	6	144	123	12	PSR210	20	144	179	14.5	PSR210	2	132	234	17	PSR210	
17	156 14	5	PSR210	25	126	70	10	PSR210	7	144	124	12	PSR210	21	144	180	14.5	PSR210	3	138	235	16.5	PSR210	
18	150 15	5	PSR210							8	150	125	12	PSR210	22	138	181	14.5	PSR210	4	138	236	16.5	PSR210
19	150 16	5	PSR210	1	PLUG					9	150	126	12.5	PSR210	23	138	182	14.5	PSR210	5	138	236	16.5	PSR210
20	144 17	5	PSR210	2	126	71	10	PSR210	10	156	127	12	PSR210	24	132	183	15	PSR210	6	144	237	17	PSR210	
21	144 18	5	PSR210	3	132	72	9.5	PSR210	11	156	128	12.5	PSR210	25	126	184	16	PSR210	7	144	238	16.5	PSR210	
22	138 19	5	PSR210	4	138	73	9.5	PSR210	12	156	129	12.5	PSR210		126	185	16	PSR210	8	150	239	17	PSR210	
23	138 20	5	PSR210	5	138	74	9.5	PSR210	13	156	130	12.5	PSR210	1	126	186	15	PSR210	9	150	240	17	PSR210	
24	132 21	5	PSR210	6	144	75	9.5	PSR210	14	156	131	12.5	PSR210	2	126	186	15	PSR210	11	156	241	17	PSR210	
25	126 22	6	PSR210	7	144	76	9.5	PSR210	15	156	132	12.5	PSR210	3	132	186	15	PSR210	12	156	242	17	PSR210	
1	PLUG				8	150	77	9.5	PSR210	16	156	133	12.5	PSR210	4	138	187	15	PSR210	13	156	243	17	PSR210
2	126 23	6	PSR210	10	156	79	9.5	PSR210	17	156	134	12.5	PSR210	5	138	188	15	PSR210	13	156	244	17	PSR210	
3	132 24	5.5	PSR210	11	156	80	9.5	PSR210	18	150	135	12.5	PSR210	6	144	189	15	PSR210	14	156	245	17	PSR210	
4	138 25	5.5	PSR210	12	156	81	10	PSR210	20	144	137	12.5	PSR210	8	150	191	15	PSR210	16	156	246	17	PSR210	
5	138 26	5.5	PSR210	13	156	82	10	PSR210	21	144	138	13	PSR210	9	150	192	15	PSR210	17	156	248	17	PSR210	
6	144 27	6	PSR210	14	156	83	10	PSR210	22	138	139	13	PSR210	10	156	193	15	PSR210	18	150	249	17.5	PSR210	
7	144 28	6	PSR210	15	156	84	10	PSR210	23	138	140	13	PSR210	11	156	194	15	PSR210	19	150	250	17	PSR210	
8	150 29	6	PSR210	16	156	85	10	PSR210	24	132	141	13	PSR210	12	156	195	15.5	PSR210	20	144	251	17	PSR210	
9	150 30	6	PSR210	17	156	86	10	PSR210	25	126	142	14	PSR210	13	156	196	15	PSR210	21	144	252	17.5	PSR210	
10	156 31	6	PSR210	18	150	87	10	PSR210					14	156	197	15	PSR210	22	138	253	17.5	PSR210		
11	156 32	6.5	PSR210	19	150	88	10	PSR210	1	PLUG			15	156	198	15.5	PSR210	23	138	254	17.5	PSR210		
12	156 33	6.5	PSR210	20	144	89	10	PSR210	2	126	143	14	PSR210	16	156	199	15.5	PSR210	24	132	255	17.5	PSR210	
13	156 34	6.5	PSR210	21	144	90	10.5	PSR210	3	132	144	13	PSR210	17	156	200	15.5	PSR210	25	126	256	18.5	PSR210	
14	156 35	6.5	PSR210	22	138	91	10.5	PSR210	4	138	145	13	PSR210	18	150	201	15.5	PSR210		PLUG			TOWER 11	
15	156 36	6.5	PSR210	23	138	92	10.5	PSR210	5	138	146	13	PSR210	19	150	202	15.5	PSR210	1	126	257	19	PSR210	
16	156 37	6.5	PSR210	24	132	93	10.5	PSR210	6	144	147	13	PSR210	20	144	203	15.5	PSR210	2	126	258	17.5	PSR210	
17	156 38	7	PSR210	25	126	94	11.5	PSR210	7	144	148	13	PSR210	21	144	204	15.5	PSR210	3	132	259	17.5	PSR210	
18	150 39	7	PSR210						8	150	149	13	PSR210	22	138	205	15.5	PSR210	4	132	260	17.5	PSR210	
19	150 40	7	PSR210	1	PLUG				9	150	150	13.5	PSR210	23	138	206	15.5	PSR210	5	132	261	18	PSR210	
20	144 41	7	PSR210	2	126	95	11.5	PSR210	10	150	151	13.5	PSR210	24	132	207	15.5	PSR210	6	138	262	18	PSR210	
21	144 42	7	PSR210	3	132	96	10.5	PSR210	11	150	152	13.5	PSR210	25	126	208	17	PSR210	7	138	263	15.5	PSR210	
22	138 43	7	PSR210	4	138	97	10.5	PSR210	12	150	153	13.5	PSR210		126	209	17.5	PSR210	8	138	264	14.5	PSR210	
23	138 44	7.5	PSR210	5	138	98	11	PSR210	13	150	154	13.5	PSR210	1	132	210	16	PSR210		PLUG			TOWER 9	
24	132 45	7.5	PSR210	6	144	99	11	PSR210	14	144	155	13.5	PSR210	2	138	211	16	PSR210		132	212	16	PSR210	
25	126 46	8	PSR210	7	144	100	11	PSR210	15	144	156	13.5	PSR210	4	138	212	16	PSR210		132	213	16	PSR210	
1	PLUG				8	150	101	11	PSR210	16	138	157	13.5	PSR210	5	138	212	16	PSR210		132	214	16	PSR210
2	126 47	8	PSR210	10	156	103	11	PSR210	18	132	159	14	PSR210	6	144	213	16	PSR210		132	215	16	PSR210	
3	132 48	7.5	PSR210	11	156	104	11	PSR210	19	126	160	15	PSR210	7	144	214	16	PSR210		132	216	16</		

DROP CONFIGURATION CHART

NOVEMBER 04, 2016

DEALER - WOOFTER CONSTRUCTION & IRRIGATION
P.O. - 35991

IRRIGATOR - TERRY HOCKERSMITH
FIELD NO. - SECTION 15-11-32

**NOTE: DROP LENGTHS SHOWN FOR HOSE ONLY WITHOUT WEIGHTS

SPAN 1 <u>POS/LEN</u>	SPAN 2 <u>POS/LEN</u>	SPAN 3 <u>POS/LEN</u>	SPAN 4 <u>POS/LEN</u>	SPAN 5 <u>POS/LEN</u>	SPAN 6 <u>POS/LEN</u>	SPAN 7 <u>POS/LEN</u>	SPAN 8 <u>POS/LEN</u>	SPAN 9 <u>POS/LEN</u>	SPAN 10 <u>POS/LEN</u>	SPAN 11 <u>POS/LEN</u>	ENDBOOM <u>POS/LEN</u>
1 - 114	23 - 102	47 - 102	71 - 102	95 - 102	119 - 102	143 - 102	161 - 102	185 - 102	209 - 102	233 - 102	257 - 102
2 - 114	24 - 108	48 - 108	72 - 108	96 - 108	120 - 108	144 - 108	162 - 108	186 - 108	210 - 108	234 - 108	258 - 102
3 - 120	25 - 114	49 - 114	73 - 114	97 - 114	121 - 114	145 - 114	163 - 114	187 - 114	211 - 114	235 - 114	259 - 108
4 - 120	26 - 114	50 - 114	74 - 114	98 - 114	122 - 114	146 - 114	164 - 114	188 - 114	212 - 114	236 - 114	260 - 108
5 - 126	27 - 120	51 - 120	75 - 120	99 - 120	123 - 120	147 - 120	165 - 120	189 - 120	213 - 120	237 - 120	261 - 108
6 - 126	28 - 120	52 - 120	76 - 120	100 - 120	124 - 120	148 - 120	166 - 120	190 - 120	214 - 120	238 - 120	262 - 114
7 - 132	29 - 126	53 - 126	77 - 126	101 - 126	125 - 126	149 - 126	167 - 126	191 - 126	215 - 126	239 - 126	263 - 114
8 - 132	30 - 126	54 - 126	78 - 126	102 - 126	126 - 126	150 - 126	168 - 126	192 - 126	216 - 126	240 - 126	264 - 114
9 - 132	31 - 132	55 - 132	79 - 132	103 - 132	127 - 132	151 - 126	169 - 132	193 - 132	217 - 132	241 - 132	
10 - 132	32 - 132	56 - 132	80 - 132	104 - 132	128 - 132	152 - 126	170 - 132	194 - 132	218 - 132	242 - 132	
11 - 132	33 - 132	57 - 132	81 - 132	105 - 132	129 - 132	153 - 126	171 - 132	195 - 132	219 - 132	243 - 132	
12 - 132	34 - 132	58 - 132	82 - 132	106 - 132	130 - 132	154 - 126	172 - 132	196 - 132	220 - 132	244 - 132	
13 - 132	35 - 132	59 - 132	83 - 132	107 - 132	131 - 132	155 - 120	173 - 132	197 - 132	221 - 132	245 - 132	
14 - 132	36 - 132	60 - 132	84 - 132	108 - 132	132 - 132	156 - 120	174 - 132	198 - 132	222 - 132	246 - 132	
15 - 126	37 - 132	61 - 132	85 - 132	109 - 132	133 - 132	157 - 114	175 - 132	199 - 132	223 - 132	247 - 132	
16 - 126	38 - 132	62 - 132	86 - 132	110 - 132	134 - 132	158 - 114	176 - 132	200 - 132	224 - 132	248 - 132	
17 - 120	39 - 126	63 - 126	87 - 126	111 - 126	135 - 126	159 - 108	177 - 126	201 - 126	225 - 126	249 - 126	
18 - 120	40 - 126	64 - 126	88 - 126	112 - 126	136 - 126	160 - 102	178 - 126	202 - 126	226 - 126	250 - 126	
19 - 114	41 - 120	65 - 120	89 - 120	113 - 120	137 - 120		179 - 120	203 - 120	227 - 120	251 - 120	
20 - 114	42 - 120	66 - 120	90 - 120	114 - 120	138 - 120		180 - 120	204 - 120	228 - 120	252 - 120	
21 - 108	43 - 114	67 - 114	91 - 114	115 - 114	139 - 114		181 - 114	205 - 114	229 - 114	253 - 114	
22 - 102	44 - 114	68 - 114	92 - 114	116 - 114	140 - 114		182 - 114	206 - 114	230 - 114	254 - 114	
	45 - 108	69 - 108	93 - 108	117 - 108	141 - 108		183 - 108	207 - 108	231 - 108	255 - 108	
	46 - 102	70 - 102	94 - 102	118 - 102	142 - 102		184 - 102	208 - 102	232 - 102	256 - 102	

SUMMARY OF DROPS

23 - 102 IN DROP
 24 - 108 IN DROP
 47 - 114 IN DROP
 44 - 120 IN DROP
 46 - 126 IN DROP
 80 - 132 IN DROP
 264 - 24 IN WEIGHT

TOTAL OF 264 DROPS