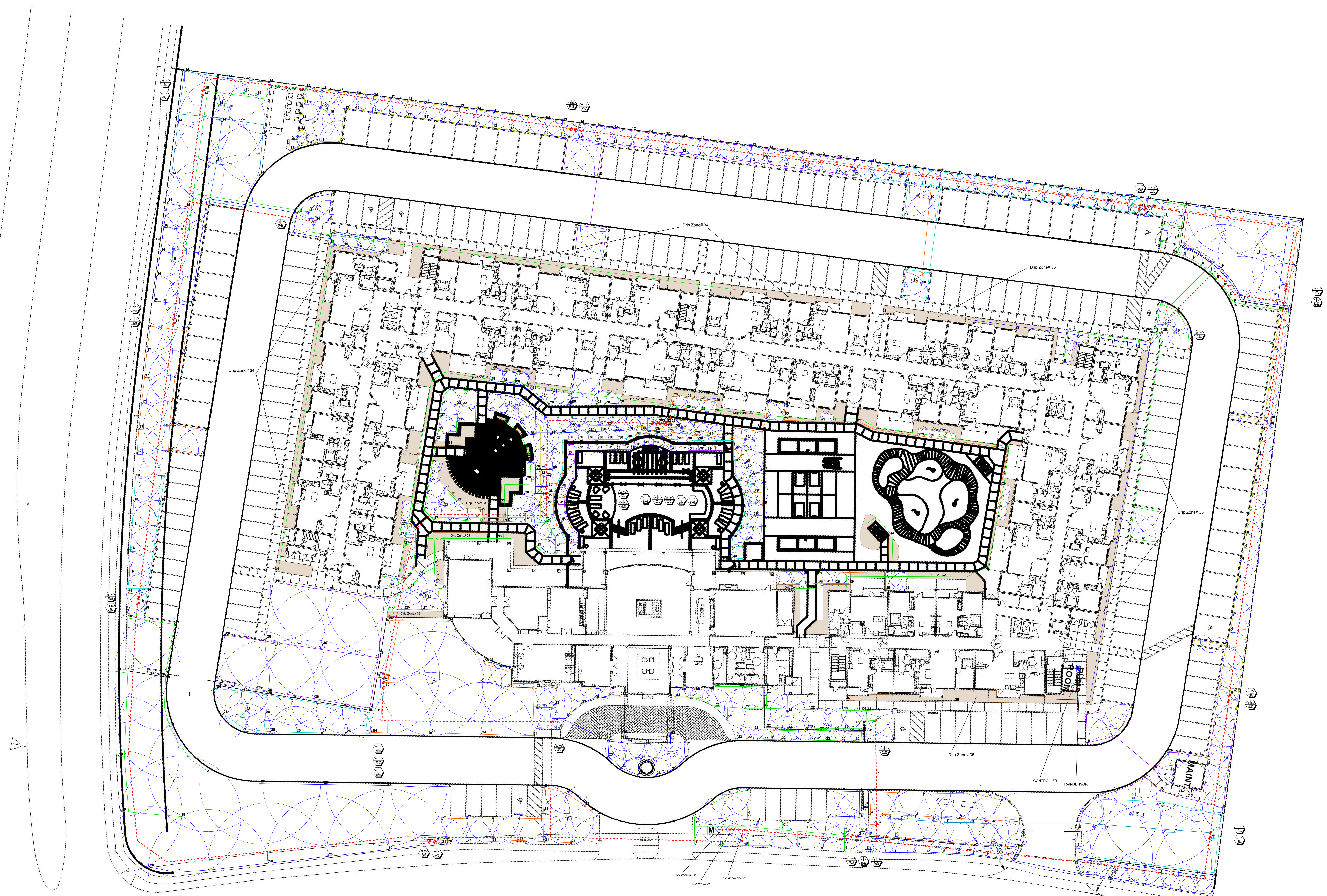

Irrigation

Quantity	Symbol	Description	Part Number	Pressure	Flow	Radius
Sprinklers						
30		Hunter PGP-2.0 Blue - PGP-ADJ	2	45 psi	2 gpm	34 ft
5		Hunter PGP-2.5 Blue - PGP-ADJ	2.5	45 psi	2.5 gpm	35 ft
30		Hunter PGP-4.0 Blue - PGP-ADJ	4	45 psi	4 gpm	40 ft
6		Hunter PGP-8.0 Blue - PGP-ADJ	8	45 psi	8 gpm	44 ft
2		Rain Bird 10F - 1804	10F	30 psi	1.58 gpm	10 ft
154		Rain Bird 10H - 1804	10H	30 psi	0.79 gpm	10 ft
32		Rain Bird 10Q - 1804	10Q	30 psi	0.39 gpm	10 ft
13		Rain Bird 10-VAN 180 - 1804	10-VAN	30 psi	1.45 gpm	10 ft
5		Rain Bird 10-VAN 90 - 1804	10-VAN	30 psi	0.75 gpm	10 ft
5		Rain Bird 12F - 1804	12F	30 psi	2.6 gpm	12 ft
44		Rain Bird 12H - 1804	12H	30 psi	1.3 gpm	12 ft
37		Rain Bird 12Q - 1804	12Q	30 psi	0.65 gpm	12 ft
1		Rain Bird 12TQ - 1804	12TQ	30 psi	1.95 gpm	12 ft
6		Rain Bird 12-VAN 180 - 1804	12-VAN	30 psi	1.3 gpm	12 ft
80		Rain Bird 1404	1404	30 psi	1 gpm	0 ft
5		Rain Bird 15F - 1804	15F	30 psi	3.7 gpm	15 ft
63		Rain Bird 15H - 1804	15H	30 psi	1.85 gpm	15 ft
48		Rain Bird 15Q - 1804	15Q	30 psi	0.92 gpm	15 ft
11		Rain Bird 15-VAN 180 - 1804	15-VAN	30 psi	1.85 gpm	15 ft
1		Rain Bird 15-VAN 90 - 1804	15-VAN	30 psi	0.92 gpm	15 ft
8		Rain Bird 18-VAN 90 - 1804	18-VAN	30 psi	1.33 gpm	18 ft
126		Rain Bird 6-VAN 180 - 1804	6-VAN	30 psi	0.6 gpm	6 ft
48		Rain Bird 6-VAN 90 - 1804	6-VAN	30 psi	0.37 gpm	6 ft
90		Rain Bird 8H - 1804	8H	30 psi	0.52 gpm	8 ft
48		Rain Bird 8Q - 1804	8Q	30 psi	0.26 gpm	8 ft
Meters/Pumps						
1	M	2 inch meter				
Backflow Devices						
1	PVB	Febco 765 - 2"	765 - 2"			
Control Valves						
11		Hunter ICV-101G-FS	ICV-101G-FS			
21		Hunter ICV-151G-FS	ICV-151G-FS			
1	MV	Hunter ICV-201G	ICV-201G			
2		Rain Bird XCZ-100-PRB-COM	XCZ-PRB-100-COM			
1		Rain Bird XCZ-PRB-150-COM	XCZ-PRB-150-COM			
Irrigation Accessories						
1	C	Hunter IC-3600-PP	IC-3600-PP			
1		Hunter MINI-CLIK	MINI-CLIK			
1		Nibco 2" isolation valve				
Lateral Line Pipe						
1735 ft		Class 315 1/2"				
2266 ft		Class 200 3/4"				
3093 ft		Class 200 1"				
1808 ft		Class 200 1 1/4"				
1777 ft		Class 200 1 1/2"				
1984 ft		Class 200 2"				
Mainline Pipe						
2842 ft		Schedule 40 2"	0			
Drip Tubing						
5464 ft		Rain Bird XFS-06-18	XFS-06-18			

Sprinkler Zone Data

Zone #	Total Area	Total Flow	Precip Rate
1	2103.41 Sq/Ft	30.16 gpm	1.38 in/hr
2	2313.82 Sq/Ft	27.38 gpm	1.14 in/hr
3	2553.33 Sq/Ft	36.06 gpm	1.36 in/hr
4	2564.96 Sq/Ft	18 gpm	0.68 in/hr
5	2585.72 Sq/Ft	33.16 gpm	1.23 in/hr
6	2332.02 Sq/Ft	30.57 gpm	1.26 in/hr
7	37.47 Sq/Ft	12 gpm	30.84 in/hr
8	1688.38 Sq/Ft	25.98 gpm	1.48 in/hr
9	2651 Sq/Ft	34 gpm	1.24 in/hr
10	49.96 Sq/Ft	16 gpm	30.84 in/hr
11	2486.46 Sq/Ft	36.64 gpm	1.42 in/hr
12	2493.74 Sq/Ft	35.86 gpm	1.38 in/hr
13	2058.95 Sq/Ft	30.46 gpm	1.42 in/hr
14	3966 Sq/Ft	44 gpm	1.07 in/hr
15	31.22 Sq/Ft	10 gpm	30.84 in/hr
16	2587.72 Sq/Ft	31.21 gpm	1.16 in/hr
17	2215.23 Sq/Ft	25.88 gpm	1.13 in/hr
18	1436.94 Sq/Ft	21.58 gpm	1.45 in/hr
19	6830.28 Sq/Ft	36 gpm	0.51 in/hr
20	7113.71 Sq/Ft	34.5 gpm	0.47 in/hr
21	1810.17 Sq/Ft	27.55 gpm	1.47 in/hr
22	2205.31 Sq/Ft	39.27 gpm	1.71 in/hr
23	1623.2 Sq/Ft	32.96 gpm	1.96 in/hr
24	4720 Sq/Ft	34 gpm	0.69 in/hr
25	1767.55 Sq/Ft	28.31 gpm	1.54 in/hr
26	5064.26 Sq/Ft	40 gpm	0.76 in/hr
27	2401.83 Sq/Ft	32.16 gpm	1.29 in/hr
28	2228.67 Sq/Ft	29.96 gpm	1.29 in/hr
29	2114.29 Sq/Ft	30.25 gpm	1.38 in/hr
30	1531.77 Sq/Ft	23.1 gpm	1.45 in/hr
31	1102.36 Sq/Ft	19.16 gpm	1.67 in/hr
32	62.45 Sq/Ft	20 gpm	30.84 in/hr

Drip Zone Data

Zone #	Total Area	Total Flow	Precip Rate
33	3911.9 Sq/Ft	1033.2 gph	0.42 in/hr
34	2288.56 Sq/Ft	607.8 gph	0.43 in/hr
35	1934.13 Sq/Ft	511.8 gph	0.42 in/hr

Water Source #1	
Meter Size	2 inch meter
Static Pressure	65 psi
Elevation Change	0 ft

Service Line Information	
Pipe Category	Poly 160
Pipe Size	Poly 160 2"
Length	0 ft
Velocity	5 fps

Recommendations	
Maximum Recommended Flow	52.29 gpm
Available Working Pressure	58.5 psi

The maximum velocity of the PVC water piping will not exceed 5 linear feet per second.
Plans and instruction manuals will be kept on site during the installation of the system.
Proposed watering schedule will be programmed into controller.
There will be a permanent sticker on controller.
Wiring used to connect controller is U.L. approved.
Irrigation in Texas is regulated by the Texas Commission on Environmental Quality (TCEQ) (MC-178),
PO Box 13087, Austin, Texas 78711-3087.
TCEQ's website is:
www.tceq.state.tx.us.
Backflow preventer will need to be tested yearly.

0 15 30 60
1" = 30'

TEXAS Irrigation Design & Lighting
281 341-0499

STATE OF TEXAS
CASEY L. REIMANN
14897
LICENSED IRRIGATOR

SHEET DESCRIPTION:
IRRIGATION DESIGN

Casey Reimann
01/18/2020

PROJECT:
IVY POINT APARTMENTS
RICHMOND, TX

REVISIONS:
None

DATE:
01/17/2020

JOB NUMBER:
D1-01172020

DRAWN BY:
CASEY REIMANN

CHECKED BY:
GW

SCALE:
1" = 30'

SHEET:
LI.0