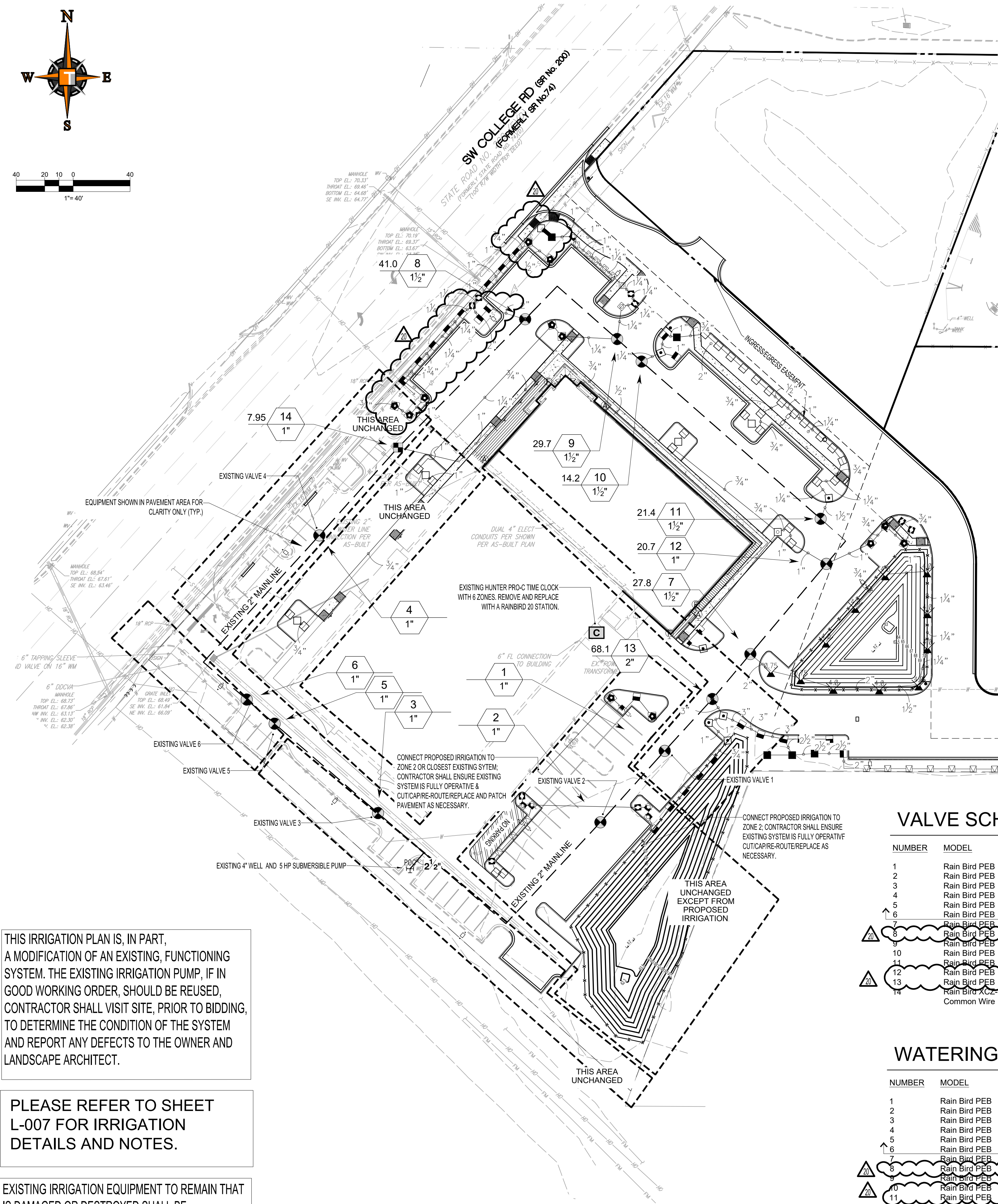




THIS IRRIGATION PLAN IS, IN PART, A MODIFICATION OF AN EXISTING, FUNCTIONING SYSTEM. THE EXISTING IRRIGATION PUMP, IF IN GOOD WORKING ORDER, SHOULD BE REUSED, CONTRACTOR SHALL VISIT SITE, PRIOR TO BIDDING, TO DETERMINE THE CONDITION OF THE SYSTEM AND REPORT ANY DEFECTS TO THE OWNER AND LANDSCAPE ARCHITECT.

PLEASE REFER TO SHEET L-007 FOR IRRIGATION DETAILS AND NOTES.

EXISTING IRRIGATION EQUIPMENT TO REMAIN THAT IS DAMAGED OR DESTROYED SHALL BE REPLACED BY CONTRACTOR AS REQUIRED, UNLESS OTHERWISE NOTED

CRITICAL ANALYSIS

Generated: 2023-07-14 12:18
P.O.C. NUMBER: 01
Water Source Information: 4" Existing well, existing 5 HP submersible pump.

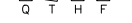
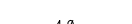
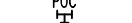
FLOW AVAILABLE
Custom Max Flow: 35 GPM
Flow Available: 35 GPM

PRESSURE AVAILABLE
Static Pressure at POC: 55 PSI
Pressure Available: 55 PSI

DESIGN ANALYSIS
Maximum Station Flow: 68.14 GPM
Flow Available at POC: 35 GPM
Residual Flow Available: -33.14 GPM

Critical Station:
Design Pressure: 13 PSI
Friction Loss: 30.02 PSI
Fittings Loss: 0.31 PSI
Elevation Loss: 0 PSI
Loss through Valve: 4.58 PSI
Pressure Req. at Critical Station: 37.9 PSI
Loss for Fittings: 0.49 PSI
Loss for Main Line: 4.9 PSI
Loss for POC to Valve Elevation: 0 PSI
Loss for Backflow: 0 PSI
Critical Station Pressure at POC: 43.3 PSI
Pressure Available: 55 PSI
Residual Pressure Available: 11.7 PSI

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI		
	Rain Bird 1800-PRS 15 Strip Series	26	30		
	Turf Spray 6" pop-up with pressure regulator.				
	Rain Bird 1800-PRS 8 Series MPR	5	30		
	Turf Spray 6" pop-up with pressure regulator.				
	Rain Bird 1800-PRS 10 Series MPR	5	30		
	Turf Spray 6" pop-up with pressure regulator.				
	Rain Bird 1800-PRS 12 Series MPR	32	30		
	Turf Spray 6" pop-up with pressure regulator.				
	Rain Bird 1800-PRS 15 Series MPR	35	30		
	Turf Spray 6" pop-up with pressure regulator.				
	Rain Bird 1800-PRS ADJ	31	30		
	Turf Spray 6" pop-up with pressure regulator.				
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI	GPM	RADIUS
	Rain Bird 3500-S 0.75	2	25	0.54	15'
	Shrub Rotor, adjustable and full circle				
	Rain Bird 3500-S 4.0	9	25	2.97	31'
	Shrub Rotor, adjustable and full circle				
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY			
	Rain Bird XCZ-100-PRF-BF	1			
	Drip Control Kit, 1" (30mm) DV valve, 1" (25mm) pressure regulating back flush filter.				
	Rain Bird MDCCAP	3			
	Dripline Flush Valve cap in compression fitting coupler.				
	Rain Bird AR Valve Kit	3			
	1" AR Relief Valve kit with 6" drip valve box.				
	Area to Receive Dripline				
	Netscape TL06V-16 (14)				
	Landscape Dripline with 0.6gph emitters at 18". (2.2 lph @ 0.65 m) with check valve, pressure compensation, 1/4" Trai min. to 50psi max. (1 to 3.5 bar). Dripline laterals spaced at 18" (0.46 m) apart, with emitters offset for triangular pattern.	1,691 s.f.			
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY			
	Rain Bird PEB	13			
	Electric Remote Control Valve				
	Rain Bird ESP/LX/MXE with (D1) ESPLX/MXM12	1			
	20 Station Commercial Controller. Mounted on a Plastic Wall Mount. Without flow sensing.				
	Point of Connection	1			
	4" Existing well, existing 5 HP submersible pump.				
	Irrigation Lateral Line: PVC Class 160 SDR 26	3,227 l.f.			
	Irrigation Mainline: PVC Class 200 SDR 21	1,289 l.f.			

VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	GPM	HEADS	PIPE	WIRE	DESIGN PSI	FRICTION LOSS	PSI	PSI @ POC	PRECIP
1	Rain Bird PEB	1"					141.1					Unknown
2	Rain Bird PEB	1"					208.6					Unknown
3	Rain Bird PEB	1"					424.7					Unknown
4	Rain Bird PEB	1"	EXISTING TO REMAIN				707.5					Unknown
5	Rain Bird PEB	1"					520.7					Unknown
6	Rain Bird PEB	1"					546.6					Unknown
7	Rain Bird PEB	1-1/2"	Shrub Rotor	27.84	14	344.7	36.4	25	2.93	31.6	32.7	0.48 in/h
8	Rain Bird PEB	1-1/2"	Turf Spray	41.03	17	250.7	59.1	30	2.15	35.7	38.0	0.97 in/h
9	Rain Bird PEB	1-1/2"	Turf Spray	29.07	20	458.6	306.6	30	3.23	36.8	38.0	0.95 in/h
10	Rain Bird PEB	1-1/2"	Turf Spray	14.17	8	112.6	477.2	30	1.34	35.2	35.5	0.92 in/h
11	Rain Bird PEB	1-1/2"	Turf Spray	21.39	15	202.5	300.8	30	2.32	36.2	36.9	0.94 in/h
12	Rain Bird PEB	1"	Turf Spray	20.68	14	374.5	265.2	30	2.52	35.6	36.3	0.91 in/h
13	Rain Bird PEB	2"	Turf Spray	68.14	42	661.5	141.1	30	3.33	37.9	43.3	1.15 in/h
14	Rain Bird XCZ-100-PRF-BF	1"	Area for Dripline	7.95		447.6	715.9	40	2.24	42.2	42.4	0.45 in/h
	Common Wire						1,289					

WATERING SCHEDULE

NUMBER	MODEL	TYPE	PRECIP	IN/WEEK	MIN./WEEK	GAL./WEEK	GAL./DAY
1	Rain Bird PEB		Unknown	1			
2	Rain Bird PEB		Unknown	1			
3	Rain Bird PEB		Unknown	1			
4	Rain Bird PEB		Unknown	1			
5	Rain Bird PEB		Unknown	1			
6	Rain Bird PEB		Unknown	1			
7	Rain Bird PEB	Shrub Rotor	0.48 in/h	1	125	3,476	
8	Rain Bird PEB	Turf Spray	0.97 in/h	1	63	2,595	
9	Rain Bird PEB	Turf Spray	0.95 in/h	1	63	2,595	
10	Rain Bird PEB	Turf Spray	0.92 in/h	1	68	935.1	
11	Rain Bird PEB	Turf Spray	0.94 in/h	1	65	1,391	
12	Rain Bird PEB	Turf Spray	0.91 in/h	1	62	2,470	
13	Rain Bird PEB	Turf Spray	1.15 in/h	1	53	3,611	
14	Rain Bird XCZ-100-PRF-BF	Area for Dripline	0.45 in/h	1	133	1,057	
	TOTALS:				636	16,340	

THOMAS
ENGINEERING GROUP

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JUPITER, FL 33468
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REV	DATE	COMMENT	BY
11	06/16/22	REV SURVIMD COMM. DATED 2/16/22	CTD
12	06/28/22	CHANGE BULLETIN #2	CTD
13	08/16/22	REV CONTROL STR PER ERP COMMENTS	CTB
14	09/14/22	CHANGE BULLETIN #4	CTD
15	10/18/22	CHANGE BULLETIN #5	CTD
16	11/22/22	CHANGE BULLETIN #6 (REVISED)	CTD
17	12/15/22	REV PER CITY COMM. DATED 12/14/22	CTD
18	12/27/22	REV PER RFI #39 - #41	CTD
19	01/25/23	CHANGE BULLETIN #7	CTD
20	06/29/23	CHANGE BULLETIN #11	CTD

811

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6/29/2023

PROJECT No.: FT200034
DRAWN BY: AAM
CHECKED BY: EMM
DATE: 03/17/2021
SCALE: AS NOTED
CAD ID: FT200034 - IRRIGATION PLAN

PROJECT:
ROOMS TO GO
S.W. COLLEGE ROAD
S.E. 27th AVE
FOR
PERIMETER
DEVELOPMENT, LLC

2800 & 2832 COLLEGE ROAD
CITY OF OCALA
MARION COUNTY, FLORIDA

THOMAS
ENGINEERING GROUP

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REGISTERED LANDSCAPE ARCHITECT
MICHAEL D. GROSSWORTH
LA 6666871
FLORIDA
REGISTERED LANDSCAPE ARCHITECT
FLORIDA LICENSE NO. 6666871

SHEET TITLE:
IRRIGATION PLAN
SHEET NUMBER:
L-006
OF