UTILITY NOTES

1. THE LANDSCAPE CONTRACTOR IS REQUIRED TO CONTACT THE COUNTY PUBLIC WORKS DEPARTMENT, AND ANY OTHER PUBLIC OR PRIVATE AGENCY NECESSARY FOR UTILITY LOCATION PRIOR TO ANY CONSTRUCTION.
2. THIS DRAWING IS A PART OF A COMPLETE SET OF BID DOCUMENTS, SPECIFICATIONS, ADDITIONAL DRAWINGS, AND EXHIBITS. UNDER NO CIRCUMSTANCES SHOULD THESE PLANS BE USED FOR CONSTRUCTION PURPOSES WITHOUT EXAMINING ACTUAL LOCATIONS OF UTILITIES ON SITE, AND REVIEWING ALL RELATED DOCUMENTS.
3. THE LOCATION OF THE ALL UNDERGROUND UTILITIES ARE LOCATED ON THE ENGINEERING DRAWINGS FOR THIS PROJECT. THE MOST CURRENT REVISION IS HERE IN MADE PART OF THIS DOCUMENT. UNDERGROUND UTILITIES EXIST THROUGHOUT THIS SITE AND MUST BE LOCATED PRIOR TO ANY CONSTRUCTION ACTIVITY. WHERE UNDERGROUND UTILITIES EXIST, FIELD ADJUSTMENT MAY BE NECESSARY AND MUST BE APPROVED BY A REPRESENTATIVE OF THE OWNER. NEITHER THE OWNER NOR THE LANDSCAPE ARCHITECT ASSUMES ANY RESPONSIBILITY WHATSOEVER, IN RESPECT TO THE CONTRACTORS ACCURACY IN LOCATING THE INDICATED PLANT MATERIAL, AND UNDER NO CIRCUMSTANCES SHOULD THESE PLANS BE USED WITHOUT REFERENCING THE ABOVE MENTIONED DOCUMENTS.

CONTROLLER 'A' NOTE

- ONE (1) 16 STATION CONTROLLER, SEE LEGEND.
- FIVE (5) OPEN STATIONS FOR FUTURE EXPANSION.
- STATION RUN ORDER SHALL MATCH PLANS.
- LOCATE CONTROLLER IN THE UTILITY CLOSET. VERIFY LOCATION WITH OWNER OR REPRESENTATIVE.
- 120 VAC POWER TO CONTROLLER LOCATION SHALL BE PROVIDED BY OTHERS. HOOK-UP OF CONTROLLERS TO 120 VAC SHALL BE PERFORMED BY THE LANDSCAPE CONTRACTOR.
- CONDUIT FROM INSIDE THE BUILDING TO EXTERIOR IRRIGATION SYSTEM SHALL BE PROVIDED BY OTHERS.

POINT OF CONNECTION 'A'

STATIC PRESSURE: +/- TBD SIZE OF TAP: 1"

- USE 1" TAP INTO THE DOMESTIC WATER LINE DOWNSTREAM OF THE BUILDING METER.
- 1" TYPE K COPPER SERVICE FROM THE TAP THROUGH THE IRRIGATION BACKFLOW, TO THE MASTER VALVE.
- CONTRACTOR SHALL VERIFY LOCATION OF THE EQUIPMENT, IN FIELD WITH OWNER OR OWNER'S AUTHORIZED REPRESENTATIVE AND/OR LANDSCAPE ARCHITECT.
- SEE POINT OF CONNECTION DIAGRAM, THIS SHEET, FOR THE IRRIGATION SYSTEM EQUIPMENT CONFIGURATION.
- THE IRRIGATION CONTRACTOR SHALL FIELD VERIFY THE STATIC & OPERATING WATER PRESSURE SHOWN ABOVE PRIOR TO CONSTRUCTION. IF PRESSURE IS UNKNOWN, THE CONTRACTOR MUST TEST WATER PRESSURE AND CONTACT THE LANDSCAPE ARCHITECT WITH THE RESULTS TO ENSURE SYSTEM WILL BE OPERATIONAL. SEE GENERAL IRRIGATION NOTES.
- WHEN WATER PRESSURE TO THE IRRIGATION SYSTEM EXCEEDS 100 PSI, THE IRRIGATION CONTRACTOR SHALL INSTALL A PRESSURE REDUCING / REGULATING VALVE (PRV) TO LIMIT THE WATER TO 80 PSI MAXIMUM. WHEN PRESSURE DROPS BELOW 65 PSI, THE IRRIGATION CONTRACTOR SHALL INSTALL A BOOSTER PUMP TO A MINIMUM PRESSURE OF 80 PSI.

IRRIGATION DISCLAIMER

1. IRRIGATION DESIGN IS NOT AN EXACT SCIENCE. IT IS BASED ON THEORIES, ASSUMPTIONS, AND/OR INFORMATION PROVIDED BY CIVIL MODELS/UTILITIES/MUNICIPALITIES ENTITIES AND THUS DIAGRAMMATIC IN NATURE.
2. CONTRACTOR SHALL INSTALL MAINLINES ±12" FROM PAVEMENT EDGE IN PLANTING AREAS. ALL PIPING, VALVES, AND OTHER EQUIPMENT SHOWN WITHIN PAVED AREAS OR OUT OF PROPERTY BOUNDARIES ARE FOR DESIGN CLARIFICATION ONLY, AND SHALL BE INSTALLED IN PLANTING AREAS WITHIN THE PROPERTY LINES OR LIMITS AS INDICATED ON THESE PLANS.
3. THE IRRIGATION CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL ABOVE-GRADE AND VISIBLE IRRIGATION EQUIPMENT (CONTROLLERS, BACKFLOW PREVENTERS, METER PITS, ETC.) WITH THE OWNER'S AUTHORIZED REPRESENTATIVE AND / OR LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. THE INSTALLATION OF THESE ITEMS SHALL BE INTEGRATED WITHIN DESIGNATED LANDSCAPE AREAS. FAILURE TO LOCATE THIS EQUIPMENT IN AN APPROVED LOCATION MAY RESULT IN THE IRRIGATION CONTRACTOR BEING REQUIRED TO MOVE SUCH ITEMS AT HIS OWN COST.
4. THE IRRIGATION SYSTEM DESIGN IS BASED ON THE MINIMUM OPERATING PRESSURE AND THE MAXIMUM FLOW DEMAND SHOWN ON THE DRAWINGS. THE IRRIGATION CONTRACTOR SHALL FIELD VERIFY THE STATIC & OPERATING WATER PRESSURE PRIOR TO CONSTRUCTION OF ANY COMPONENT OF THE IRRIGATION SYSTEM. AFTER FIELD VERIFICATION, THE IRRIGATION CONTRACTOR SHALL NOTIFY THE OWNER, OWNER'S REPRESENTATIVE, LANDSCAPE ARCHITECT, & IRRIGATION DESIGNER OF THE PRESSURE READING FOR THE TAP.
5. ALL PRESSURIZED MAINLINES, VALVES, DRIP, AND ROTOR AND SPRAY HEADS SHALL BE INSTALLED A MINIMUM OF 5' AWAY FROM ANY BUILDING FOUNDATION. ADDITIONAL REQUIREMENTS MAY BE LISTED IN THE GEOTECHNICAL REPORT REGARDING IRRIGATION NEAR BUILDING FOUNDATIONS. CONTRACTOR IS RESPONSIBLE TO ABIDE BY THE 5' MINIMUM DISTANCE AND/OR THE GEOTECHNICAL REPORT REQUIREMENTS. IF THIS EQUIPMENT IS SHOWN WITHIN THE 5' OFFSET ON THESE PLANS, IT IS FOR THE PURPOSE OF GRAPHIC CLARITY ONLY.
6. REFER TO SHEET IR1.2 FOR IRRIGATION DETAILS AND SHEET IR1.3 IRRIGATION NOTES.

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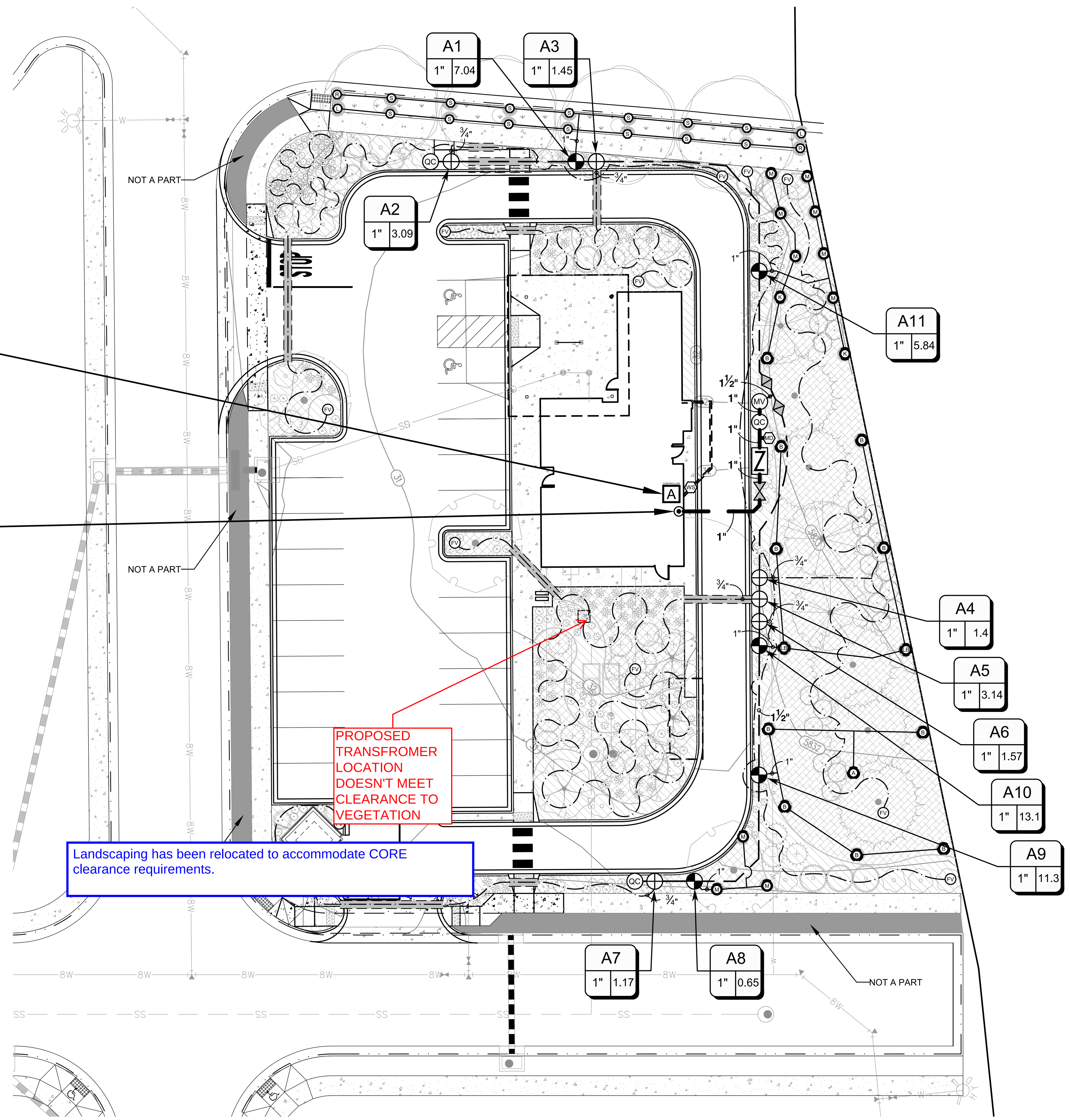
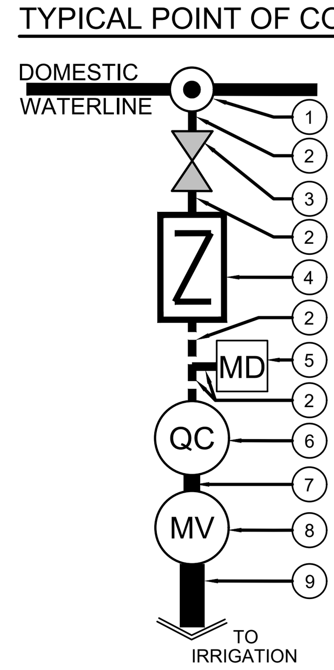


TYPICAL POINT OF CONNECTION SCHEMATIC DIAGRAM



1. IRRIGATION POINT OF CONNECTION. TAP INTO THE DOMESTIC WATERLINE DOWNSTREAM OF THE BUILDING METER.
2. 1" K COPPER WATER SERVICE PIPE
3. 1" GATE VALVE
4. 1" BACKFLOW DEVICE
5. MANUAL DRAIN VALVE, SEE SHEET IR1.2 DETAIL 10
6. 1" QUICK COUPLER
7. 1" PVC LINE, CLASS 200 PIPE
8. 1" MASTER VALVE
9. 1-1/2" MAINLINE, CLASS 200 PIPE

WINTERIZATION PROCEDURES:
TURN OFF SYSTEM AT THE GATE VALVE DOWNSTREAM OF THE IRRIGATION METER. OPEN ONE CONTROL VALVE TO RELIEVE PRESSURE SLOWLY OPEN BLOW OUT VALVE. REPEAT PROCEDURE FOR ALL BLOW OUT VALVES ALONG IRRIGATION MAINLINE.

VALVE SCHEDULE

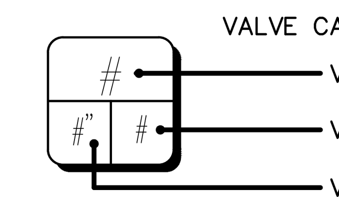
NUMBER	MODEL	SIZE	TYPE	GPM
A1	HUNTER ICV-G-FS	1"	TURF ROTARY	7.04
A2	HUNTER ICZ-101-25-LF	1"	AREA FOR DRIP EMITTERS	3.09
A3	HUNTER ICZ-101-25-LF	1"	AREA FOR DRIP EMITTERS	1.45
A4	HUNTER ICZ-101-25-LF	1"	AREA FOR DRIP EMITTERS	1.4
A5	HUNTER ICZ-101-25-LF	1"	AREA FOR DRIP EMITTERS	3.14
A6	HUNTER ICZ-101-25-LF	1"	AREA FOR DRIP EMITTERS	1.57
A7	HUNTER ICZ-101-25-LF	1"	AREA FOR DRIP EMITTERS	1.17
A8	HUNTER ICV-G-FS	1"	TURF ROTARY	0.65
A9	HUNTER ICV-G-FS	1"	TURF ROTARY	11.28
A10	HUNTER ICV-G-FS	1"	TURF ROTARY	13.09
A11	HUNTER ICV-G-FS	1"	TURF ROTARY	5.84

CAUTION
UTILITIES EXIST WITHIN CONSTRUCTION LIMITS. CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING THEIR LOCATION PRIOR TO CONSTRUCTION.

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	DETAIL
L S R (LST SST RST)	HUNTER MP STRIP PROS-06-PRS40-CV TURF ROTATOR, 6IN. POP-UP WITH FACTORY INSTALLED CHECK VALVE, PRESSURE REGULATED TO 40 PSI, MP ROTATOR NOZZLE ON PRS40 BODY. LST=IVORY LEFT STRIP, SST=BROWN SIDE STRIP, RST=COPPER RIGHT STRIP.	DETAIL 1 SHEET IR1.2
M L O	HUNTER MP1000 PROS-12-PRS40-CV TURF ROTATOR, 12IN. POP-UP WITH CHECK VALVE, PRESSURE REGULATED TO 40 PSI, MP ROTATOR NOZZLE ON PRS40 BODY. M=MAROON ADJ ARC 90 TO 210, L=LIGHT BLUE 210 TO 270 ARC, O=OLIVE 360 ARC.	DETAIL 1 SHEET IR1.2
K G R	HUNTER MP2000 PROS-12-PRS40-CV TURF ROTATOR, 12IN. POP-UP WITH FACTORY INSTALLED CHECK VALVE, PRESSURE REGULATED TO 40 PSI, MP ROTATOR NOZZLE ON PRS40 BODY. K=BLACK ADJ ARC 90-210, G=GREEN ADJ ARC 210-270, R=RED 360 ARC.	DETAIL 1 SHEET IR1.2
B Y A	HUNTER MP3000 PROS-12-PRS40-CV TURF ROTATOR, 12IN. POP-UP WITH FACTORY INSTALLED CHECK VALVE, PRESSURE REGULATED TO 40 PSI, MP ROTATOR NOZZLE ON PRS40 BODY. B=BLUE ADJ ARC 90-210, Y=YELLOW ADJ ARC 210-270, A=GRAY 360 ARC.	DETAIL 1 SHEET IR1.2
LB	HUNTER MP3500 PROS-12-PRS40-CV TURF ROTATOR, 12IN. POP-UP WITH FACTORY INSTALLED CHECK VALVE, PRESSURE REGULATED TO 40 PSI, MP ROTATOR NOZZLE ON PRS40 BODY. LB=LIGHT BROWN ADJUSTABLE ARC, 90-210.	DETAIL 1 SHEET IR1.2
SYMBOL	**MANUFACTURER/MODEL/DESCRIPTION**	**DETAIL**
	HUNTER ICZ-101-25-LF 1" DRIP CONTROL ZONE KIT. 1IN. ICV GLOBE VALVE WITH 1IN. HY100 FILTER SYSTEM. PRESSURE REGULATION: 25 PSI. FLOW RANGE: .5 GPM - 15 GPM. 150 MESH STAINLESS STEEL SCREEN.	DETAIL 2 SHEET IR1.2
FV	NIBCO 4660-T 3/4" SCHEDULE 40 MANUAL FLUSH VALVE. CONNECT TO DRIP POLYTUBING FOR WINTERIZATION/BLOWOUT.	DETAIL 3 SHEET IR1.2
	AREA TO RECEIVE DRIP EMITTERS HUNTER HE-B POINT SOURCE DRIP EMITTER WITH SELF PIERCING BARB. COLOR CODED EMITTERS FOR FLOW RATES OF 0.5 GPH, 1.0 GPH, 2.0 GPH, 4.0 GPH, AND 6.0 GPH. CAN BE INSERTED INTO 1/2IN. AND 3/4IN. TUBING AND HAVE PRESSURE COMPENSATING FROM 15 PSI-50 PSI. OPTIONAL DIFFUSER CAP (HE) AVAILABLE. EMITTER SCHEDULE: - 1 GALLON AND SMALLER: 1, HEB-10-B EMITTER PER PLANT (1 GPH TOTAL) - 5 GALLON: 2, HEB-10-B EMITTERS PER PLANT (2 GPH TOTAL) - 1" TO 2-1/2" CALIPER TREES: 4, HEB-10-B EMITTERS PER PLANT (4 GPH TOTAL) - 3" TO 4" CALIPER TREES: 6, HEB-10-B EMITTERS PER PLANT (6 GPH TOTAL)	DETAIL 4 SHEET IR1.2
SYMBOL	**MANUFACTURER/MODEL/DESCRIPTION**	**DETAIL**
	HUNTER ICV-G-FS 1" 1IN., 1-1/2IN., 2IN., AND 3IN. PLASTIC ELECTRIC REMOTE CONTROL VALVES, GLOBE CONFIGURATION, WITH NPT THREADED INLET/OUTLET, FOR COMMERCIAL/MUNICIPAL USE. WITH FILTER SENTRY.	DETAIL 5 SHEET IR1.2
QC	HUNTER HQ-44LRC 1" QUICK COUPLER VALVE, YELLOW RUBBER LOCKING COVER, RED BRASS AND STAINLESS STEEL, WITH 1IN. NPT INLET, 2-PIECE BODY.	DETAIL 6 SHEET IR1.2
	NIBCO 4660-S SCHEDULE 40 MANUAL BALL VALVE, SAME SIZE AS MAINLINE PIPE DIAMETER AT VALVE LOCATION. SIZE RANGE - 3/4" - 3"	DETAIL 7 SHEET IR1.2
	NIBCO T-113-K CLASS 125 BRONZE GATE SHUT OFF VALVE WITH CROSS HANDLE, SAME SIZE AS MAINLINE PIPE DIAMETER AT VALVE LOCATION. SIZE RANGE - 1/4IN. - 3IN.	DETAIL 8 SHEET IR1.2
MV	HUNTER IBV-FS 1" 1IN., 1-1/2IN., 2IN., AND 3IN. BRASS ELECTRIC MASTER VALVE, GLOBE CONFIGURATION, WITH NPT THREADED INLET/OUTLET, FOR COMMERCIAL/MUNICIPAL USE. WITH FILTER SENTRY FACTORY INSTALLED OPTION.	DETAIL 9 SHEET IR1.2
MD	1" NIBCO T-113-K CLASS 125 BRONZE MANUAL DRAIN VALVE WITH CROSS HANDLE	DETAIL 10 SHEET IR1.2
	FEBCO 825Y 1" REDUCED PRESSURE BACKFLOW PREVENTER	DETAIL 11 SHEET IR1.2
CONTROLLER A	HUNTER I2C-1600-PL 16 STATION OUTDOOR MODULAR CONTROLLER. WITH ONE ICM-800 MODULE. COMMERCIAL USE. PLASTIC CABINET.	DETAIL 12 SHEET IR1.2
WS	HUNTER WSS WIRELESS SOLAR, RAIN FREEZE SENSOR WITH OUTDOOR INTERFACE, CONNECTS TO HUNTER PCC, PRO-C, AND I-CORE CONTROLLERS, INSTALL AS NOTED. INCLUDES 10 YEAR LITHIUM BATTERY AND RUBBER MODULE COVER, AND GUTTER MOUNT BRACKET.	DETAIL 13 SHEET IR1.2
	POINT OF CONNECTION 1" USE 1" TAP INTO DOMESTIC WATERLINE DOWNSTREAM OF THE BUILDING METER.	N/A
	IRRIGATION LATERAL LINE: CLASS 200 PVC SIZE: 1" UNLESS OTHERWISE NOTED ON PLAN	DETAIL 14 SHEET IR1.3
	IRRIGATION LATERAL LINE: POLYETHYLENE PIPE SDR-7 SIZE: 3/4"	DETAIL 14 SHEET IR1.3
	IRRIGATION SERVICE LINE: TYPE K COPPER PIPE SIZE: 1"	DETAIL 14 SHEET IR1.3
	IRRIGATION MAINLINE: CLASS 200 PVC SIZE: 1-1/2" UNLESS OTHERWISE NOTED ON PLAN	DETAIL 14 SHEET IR1.3
	PIPE SLEEVE: SHCEDULE 40 PVC SIZE: DOUBLE THE SIZE OF INSERTED PIPE	DETAIL 14 SHEET IR1.3
	WIRESLEEVE: SCHEDULE 40 PVC SIZE: 1"	DETAIL 14 SHEET IR1.3

VALVE CALLOUT



WIRING/SLEEVING NOTES

IN ADDITION TO PROVIDING SLEEVES FOR ALL PIPING UNDER ROADWAYS AND WALKWAYS, PROVIDE AND INSTALL SCH. 40 PVC SLEEVES FOR ALL CONTROLLER WIRES OCCURRING UNDER ALL ROADWAYS AND WALKWAYS. SLEEVES FOR CONTROLLER WIRES SHALL BE 2" DIA. AND CONTAIN NO MORE THAN 25 WIRES.

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PLAZA STREET PARNERS
CIVIL CONSTRUCTION DRAWINGS
PARKER COLORADO

#	Date	Issue / Description	Init.

Project No:	PSP000001
Drawn By:	JRC
Checked By:	SMB
Date:	08/15/2022

IRRIGATION PLAN

IR1.1