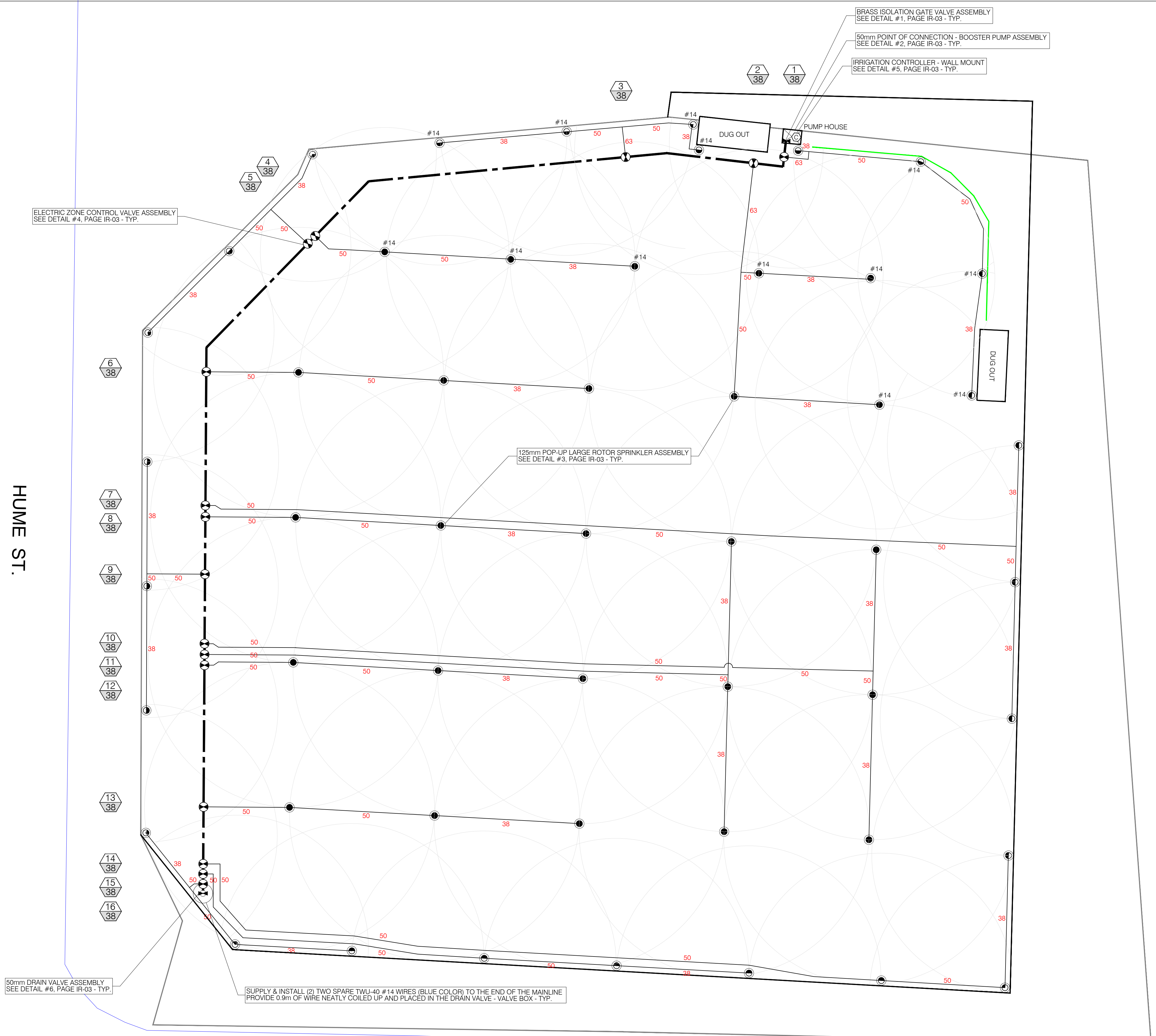
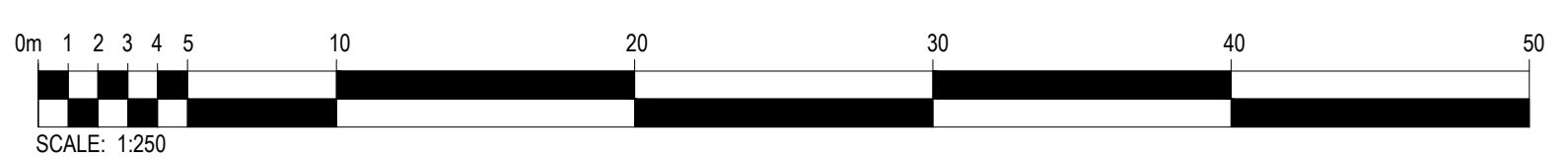


LEGEND

SYMBOL	DESCRIPTION
	RAINBIRD 8005-SAM SERIES, 125mm POP-UP ROTOR HEAD WITH RAIN CURTAIN NOZ. - #16 or Otherwise Sized per Plans
	RAINBIRD PEB SERIES PLASTIC ELECTRIC CONTROL VALVE Size per Plans - Install per detail #2, PAGE IR-03
	IRRIGATION CONT. - RAINBIRD ESP-LXME2-PRO - 24 STATION
	50mm POINT OF CONNECTION FROM BOOSTER PUMP
	TOYO 206A R&W ISOLATION GATE VALVE, Size per Pipe
	50mm DRAIN VALVE ASSEMBLY - R&W - 206A BRASS GATE
	75mm SCH40 PVC MAINLINE PIPE - SOLVENT WELD
	38mm - 63mm SCH40 PVC LATERAL PIPING - SOLVENT WELD
	SCH40 PVC SLEEVING - MIN. 100mm or 2 x TOTAL PIPE DIA.
	DB2 PVC WIRE CONDUIT - Size per Plans



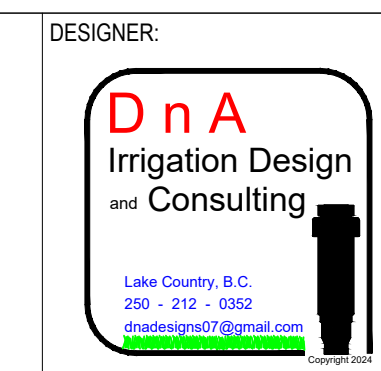
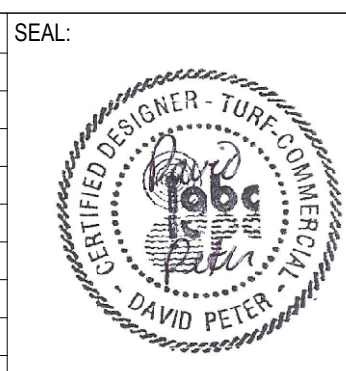
ISSUED FOR RFP



DRAWING TITLE:
The Village of Slokan - Expo Ball Park
Slocan, B.C.
 IRRIGATION SYSTEM DESIGN



REV. #	ISSUE	DATE
0	ISSUED FOR CLIENT REVIEW - 95%	AUGUST 15, 2023
1	ISSUED FOR FINAL CLIENT REVIEW - 100%	AUGUST 18, 2023
2	ISSUED FOR COSTING	AUGUST 31, 2023
3	ISSUED FOR FINAL REVIEW - 100%	OCT. 28, 2023
4	ISSUED FOR RFP COSTING	SEPT. 20, 2023
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PROJECT #: 2023-0029
 DATE: AUGUST 11, 2023
 SCALE: 1:250
 DESIGN BY: D.E.P.

DRAWING NUMBER:
IR-01
 PAGE: 1 of 3 REV. 4

IRRIGATION INSTALLATION NOTES

1. ALL IRRIGATION PRODUCTS, MATERIALS AND INSTALLATIONS ARE TO FOLLOW THE IRRIGATION INSTALLATION SPECIFICATIONS INCLUDED AS PART OF THIS IRRIGATION DESIGN, DATED AUGUST 2023 or NEWER.
2. THE IRRIGATION SYSTEM DESIGN IS BASED ON A MAXIMUM OF (120) U.S.G.P.M. & (80) PSI AVAILABLE AT THE POINT OF CONNECTION. THE CONTRACTOR IS TO VERIFY THE SAME AND NOTIFY THE OWNER'S REPRESENTATIVE IN WRITING PRIOR TO START OF WORK.
3. THE IRRIGATION SYSTEM DESIGN BASED UPON A MIN. WEEKLY REQUIREMENT OF 38mm. PEAK ET OCCURRING IN JULY/AUG OF 7.20mm.
4. PRECIPITATION RATES FOR TURF AREAS IS BASED UPON AN AVERAGE OF NOZZLE SIZES. ALWAYS USE MATCHED NOZZLES.
5. DESIGN DAILY RUN TIMES ARE BASED UPON A (4) FOUR DAY per WEEK WATERING SCHEDULE. BASED ON (1) ONE YEAR GROW IN PERIOD.
6. A MAX. WATER WINDOW OF (8) EIGHT Hrs. IS REQ'D FOR THE IRRIGATION SYSTEM AS DESIGNED. (OPERATING (2) ZONES SIMULTANEOUSLY
7. POP UP SPRINKLER SPACING IS NOT TO EXCEED 50% ACCOUNTING FOR A MINIMUM 4 MPH WIND FACTOR.
8. PIPING SHOWN IS FOR SCHEMATIC PURPOSES. MINOR ADJUSTMENTS DUE TO UNFORESEEN CIRCUMSTANCES ARE ALLOWED.
9. INSTALL ALL 24 VOLT WIRING TO A MIN. BURY DEPTH OF 450mm WITH PIPING COVER or 600mm WITHOUT PIPING COVER. BED ALL WIRE WITH 150mm OF CLEAN, ROCK FREE SAND. ALL CONTROL WIRE TO BE INDIVIDUAL TWU-40 #14 GAUGE CONDUCTORS - CONSISTENTLY ONE COLOR, EXCEPT RED, BLUE, GREEN or WHITE. ALL COMMON WIRE TO BE INDIVIDUAL TWU-40 #12 GAUGE CONDUCTORS - CONSISTENTLY WHITE COLOR ONLY - NO EXCEPTS.
10. INSTALL ALL ELECTRICAL CONDUIT AS per PLANS. USE CSA NON-METALLIC DB2 PVC CONDUIT - GREY IN COLOR. SIZES as SHOWN ON DESIGN.
11. INSTALL ALL ELECTRIC CONTROL VALVES (ECV's) WITH MINIMUM 50mm CLEARANCE AROUND THE VALVE AND BETWEEN THE VALVE AND THE VALVE BOX. ENSURE ADEQUATE (Min. 50mm) CLEARANCE BETWEEN THE BOTTOM OF THE EVC AND THE DRAIN ROCK FOR MAINTENANCE PURPOSES.
12. ALL WIRE SPLICES ARE TO BE MADE WITH 3M-DBY/R or RAINBIRD WC20 WATERPROOF WIRE CONNECTORS AND TO BE LOCATED AT AN ECV OR IN A VALVE BOX.
13. THE WIRE RUNS ARE TO BE INSTALLED WITH A Min. OF 600mm LENGTH OF WIRE COILED UP SLACK AT EVERY CHANGE OF DIRECTION, IN WIRE SPLICE BOXES AND AT ALL CONNECTIONS MADE TO VARIOUS ELECTRICALLY CONTROLLED COMPONENTS.
14. ALL ROTOR SPRINKLER ARC's AND RADIUS's ARE TO BE ADJUSTED TO MINIMIZE OVER SPRAY ONTO ADJACENT HARD SURFACES.
15. ALL SPRINKLERS TO BE INSTALLED WITH SCH40 PVC TRIPLE PVC SWING JOINTS AND SCH80 PVC NIPPLES. SIZES per DETAILS, PAGE IR-03.
16. INSTALL ALL MAINLINE PIPE AT A MINIMUM OF 600mm BURY DEPTH - TOP OF PIPE. BED PIPE WITH 150mm OF CLEAN, ROCK FREE SAND.
17. INSTALL ALL LATERAL PIPING AT A MINIMUM OF 450mm BURY DEPTH - TOP OF PIPE. BED PIPE WITH 100mm OF CLEAN, ROCK FREE SAND.
18. ASSEMBLY & INSTALLATION OF ALL IRRIGATION COMPONENTS ARE TO FOLLOW THE DETAILS & SPECIFICATIONS LISTED ON PAGES IR-02 & IR-03.
19. THE CONTRACTOR IS TO VERIFY THE LOCATION(S) OF ALL ON-SITE UTILITIES. RESTORATION OF DAMAGED UTILITIES SHALL BE MADE AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE CONTRACT ADMINISTRATOR and or THE OWNER'S REPRESENTATIVE.
20. THE CONTRACTOR IS TO INSTALL SLEEVING FOR IRRIGATION PIPING AND ELECTRICAL WIRING UNDER ALL WALKWAYS, DRIVEWAYS, WALLS (ROCK or BRICK). WATER LINES AND ELECTRICAL WIRES SHALL NOT SHARE THE SAME SLEEVE. MINIMUM SLEEVE TO BE 2x PIPE DIA.
21. THE CONTRACTOR MUST BE QUALIFIED TO INSTALL LARGE SCALE, COMMERCIAL IRRIGATION SYSTEMS. THE CONTRACTOR MUST HAVE A MINIMUM OF (5) FIVE YEARS INSTALLATION EXPERIENCE AND BE A MEMBER IN GOOD STANDING WITH THE IRRIGATION INDUSTRY ASSOCIATION OF B.C. (I.I.A.B.C.)
22. THE CONTRACTOR IS RESPONSIBLE FOR CHECKING AND CONFIRMING ALL DIMENSIONS or ELEVATIONS SHOWN ON DRAWINGS. WHERE ANY DISCREPANCIES OCCUR, THE CONTRACTOR SHALL INFORM THE CONTRACT ADMINISTRATOR IMMEDIATELY.

IRRIGATION SCHEDULE & ZONE DATA

The Village of Slokan - Expo Ball Park							BASED ON PEAK ET DEMANDS FOR JULY/AUGUST ET = 7.2mm/DAY			
STA. #	ZONE DESCRIPTION	SPRINKLER MAKE, MODEL & TYPE	NOZZLE SIZE	ECV SIZE	DESIGN PSI	DESIGN FLOW U.S.G.P.M.	PRECIPITATION RATE in/hr	RUN DAYS	PROGRAM CYCLE	RUN TIME Minutes
1	LARGE PC ROTOR - FIELD - P/C	RAINBIRD 8005 - SAM	Per Plans	38mm	70	63.1	0.74	4	A	30
2	LARGE PC ROTOR - FIELD - F/C	RAINBIRD 8005 - SAM	Per Plans	38mm	70	63.1	0.37	4	B	30x2
3	LARGE FC ROTOR - FIELD - P/C	RAINBIRD 8005 - SAM	Per Plans	38mm	70	61.2	0.74	4	A	30
4	LARGE PC ROTOR - FIELD - F/C	RAINBIRD 8005 - SAM	Per Plans	38mm	70	45.9	0.37	4	B	30x2
5	LARGE PC ROTOR - FIELD - P/C	RAINBIRD 8005 - SAM	Per Plans	38mm	70	51.6	0.74	4	A	30
6	LARGE FC ROTOR - FIELD - F/C	RAINBIRD 8005 - SAM	Per Plans	38mm	70	51.6	0.37	4	B	30x2
7	LARGE FC ROTOR - FIELD - P/C	RAINBIRD 8005 - SAM	Per Plans	38mm	70	51.6	0.74	4	A	30
8	LARGE FC ROTOR - FIELD - F/C	RAINBIRD 8005 - SAM	Per Plans	38mm	70	51.6	0.37	4	B	30x2
9	LARGE PC ROTOR - FIELD - P/C	RAINBIRD 8005 - SAM	Per Plans	38mm	70	51.6	0.74	4	A	30
10	LARGE PC ROTOR - FIELD - F/C	RAINBIRD 8005 - SAM	Per Plans	38mm	70	51.6	0.37	4	B	30x2
11	LARGE FC ROTOR - FIELD - F/C	RAINBIRD 8005 - SAM	Per Plans	38mm	70	51.6	0.37	4	B	30x2
12	LARGE FC ROTOR - FIELD - F/C	RAINBIRD 8005 - SAM	Per Plans	38mm	70	51.6	0.37	4	B	30x2
13	LARGE PC ROTOR - FIELD - F/C	RAINBIRD 8005 - SAM	Per Plans	38mm	70	51.6	0.37	4	B	30x2
14	LARGE FC ROTOR - FIELD - P/C	RAINBIRD 8005 - SAM	Per Plans	38mm	70	51.6	0.74	4	A	30
15	LARGE PC ROTOR - FIELD - P/C	RAINBIRD 8005 - SAM	Per Plans	38mm	70	51.6	0.74	4	A	30
16	LARGE PC ROTOR - FIELD - P/C	RAINBIRD 8005 - SAM	Per Plans	38mm	40	51.6	0.74	4	A	30
									TOTAL DAILY RUN TIME per CYCLE	720 Min.

NOTE(S): 1. SCHEDULE TO BE USED FOR 1 YEAR GROW IN PERIOD - ADJUST ACCORDINGLY FOR YEAR 2 +

ISSUED FOR RFP

WIRING SPECIFICATIONS

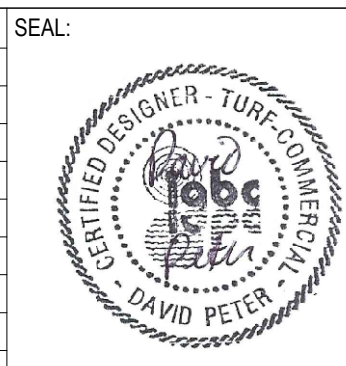
- 1a. INDIVIDUAL ZONE CONTROL WIRE: TWU-40 #14 GAUGE SINGLE CONDUCTOR - CSA APPROVED. CONSISTENTLY ONE COLOR EXCEPT RED, BLUE, GREEN or WHITE
- 1b. INDIVIDUAL ZONE COMMON WIRE: TWU-40 #12 GAUGE SINGLE CONDUCTOR - CSA APPROVED. CONSISTENTLY WHITE COLOR FROM CONTROLLER TO ALL FIELD WIRING
- 2a. MASTER VALVE / PUMP START CONTROL WIRE: TWU-40 #14 GAUGE SINGLE CONDUCTOR - CSA APPROVED. CONSISTENTLY RED COLOR FROM CONTROLLER TO MASTER VALVE / PUMP START
- 2b. MASTER VALVE / PUMP START COMMON WIRE: TWU-40 #12 GAUGE SINGLE CONDUCTOR - CSA APPROVED. CONSISTENTLY WHITE COLOR FROM CONTROLLER TO MASTER VALVE / PUMP START
3. SPARE WIRING: TWU-40 #14 GAUGE SINGLE CONDUCTOR - CSA APPROVED. CONSISTENTLY BLUE COLOR FROM CONTROLLER TO LOCATIONS SHOWN ON PLANS (Min. 2 REQUIRED)

DRAWING TITLE:
The Village of Slokan - Expo Ball Park
 Slokan, B.C.

IRRIGATION SYSTEM NOTES & ZONE DATA

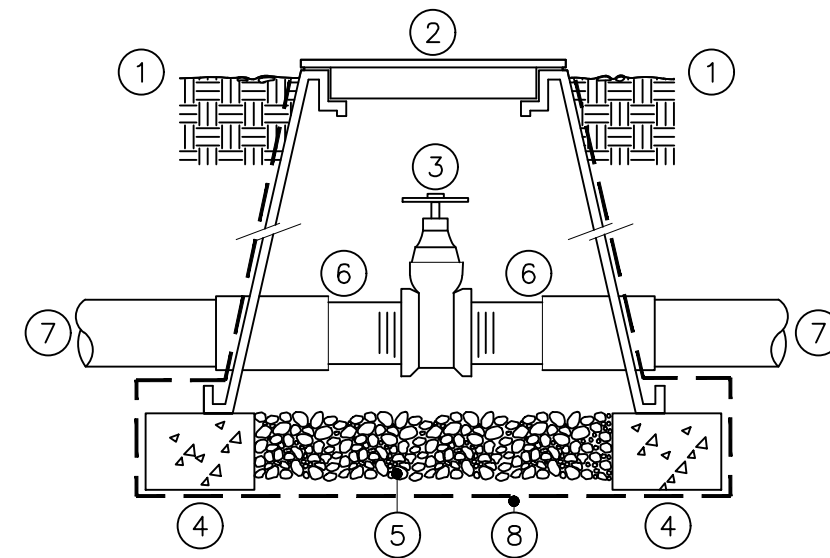


REV. #	ISSUE	DATE
0	ISSUED FOR CLIENT REVIEW - 95%	AUGUST 15, 2023
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PROJECT #: 2023-0029
 DATE: AUGUST 11, 2023
 SCALE: N.T.S.
 DESIGN BY: D.E.P.

DRAWING NUMBER:
IR-02
 PAGE: 2 of 3 REV. 4



- 1 FINISHED GRADE
- 2 CARSON-BROOKS/ND5-PRO/RB-VB 910-12B PLASTIC ROUND VALVE BOX - WITH S.S. BOLT. INSTALL EXT. AS REQ'D TO GRADE
- 3 BRASS ISOLATION GATE VALVE - SIZE per PIPE, MODEL per PLANS
- 4 CONTINUOUS BRICK SUPPORTS (Min. 3 BRICKS per BOX)
- 5 12mm MINUS PEA GRAVEL - Min. 100mm DEPTH
- 6 SCH80 PVC HALF NIPPLE with SCH80 PVC COUPLING - SIZE per PIPE
- 7 PVC MAINLINE PIPING - SIZE & TYPE per PLANS
- 8 3.5 OUNCE WOVEN LANDSCAPE FABRIC

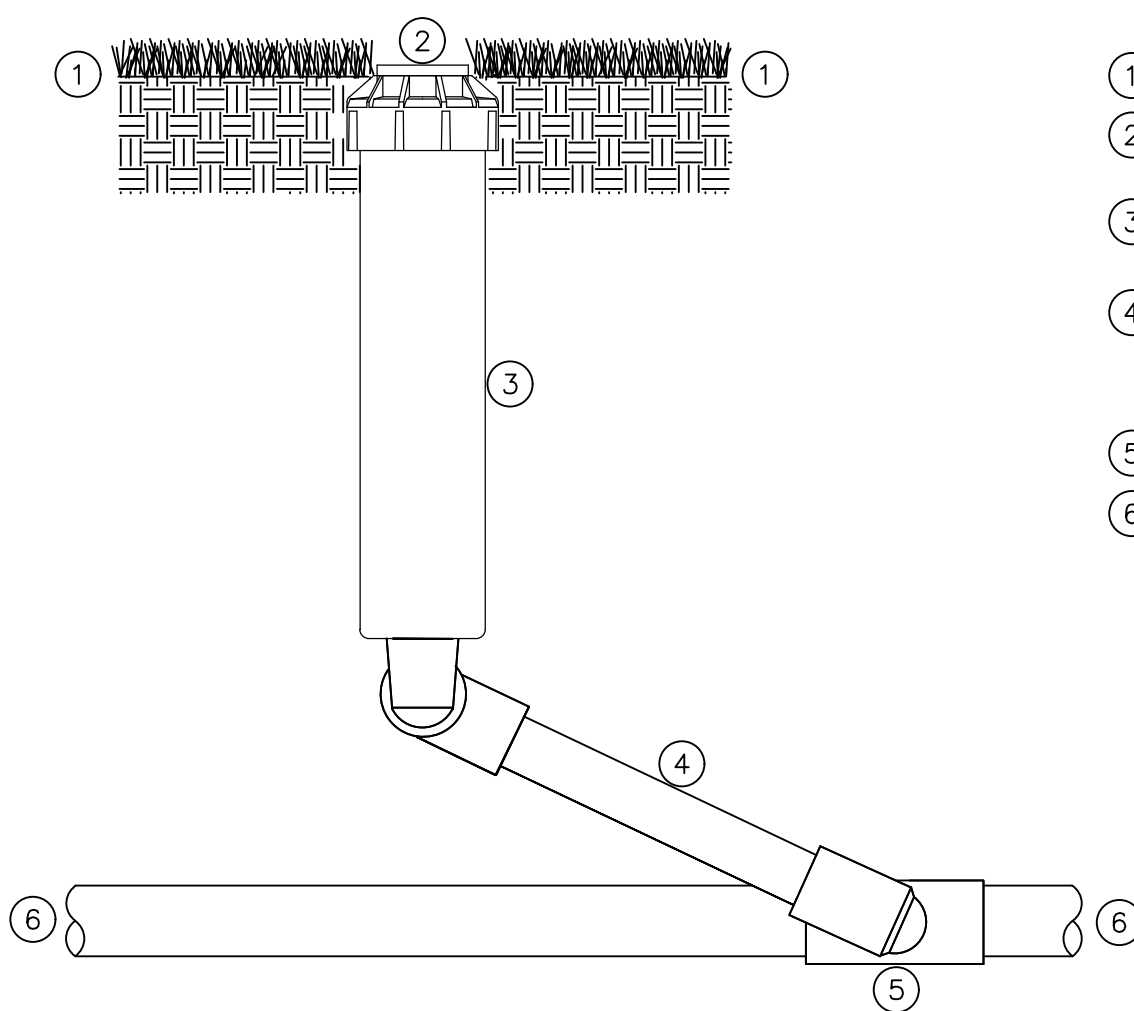
SECTION/ELEVATION

NOTES:
 SEE PLANS, LEGEND AND SPECIFICATIONS FOR ADDITIONAL INSTALLATION NOTES.

1 Brass Isolation Gate Valve
 IR-03

SCALE: N.T.S.

Point of Connection to be provided by the Village of Slocan



- 1 FINISHED GRADE
- 2 RAINBIRD RAIN CURTAIN NOZZLES - INSERTED IN RISER NOZZLES SIZE(S) per PLANS
- 3 25mm INLET x 125mm LARGE POP-UP ROTOR SPRINKLER MANUFACTURER & MODEL per PLANS
- 4 25mm PVC TRIPLE SWING JOINT ASSEMBLY - TO BE BUILT COMPLETE WITH (3) SCH40 PVC ST. 90'S AND (1) SCH80 PVC NIPPLE - Min. 300mm LONG
- 5 SCH40 PVC LATERAL TEE - REDUCED TO 25mm - FIPT
- 6 PVC LATERAL PIPING - SIZE & TYPE per PLANS

SECTION/ELEVATION

NOTES:
 SEE PLANS, LEGEND AND SPECIFICATIONS FOR ADDITIONAL INSTALLATION NOTES.

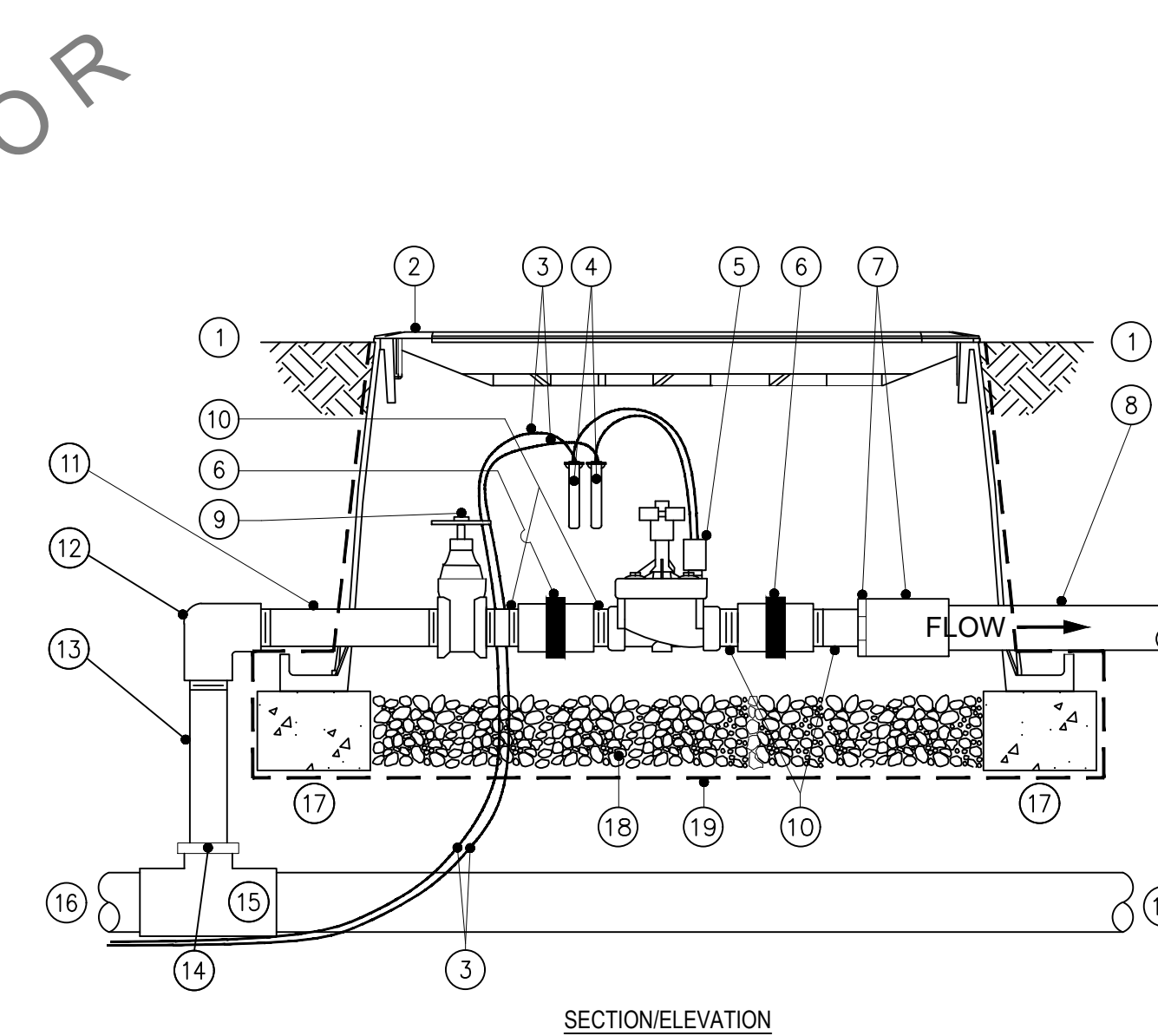
3 25mm Inlet - Large Rotor Sprinkler & Swing Joint
 IR-03

SCALE: N.T.S.

2 50mm Point of Connection - Booster Pump Detail
 IR-03

NOTES:
 SEE PLANS, LEGEND AND SPECIFICATIONS FOR ADDITIONAL INSTALLATION NOTES.

SCALE: N.T.S.



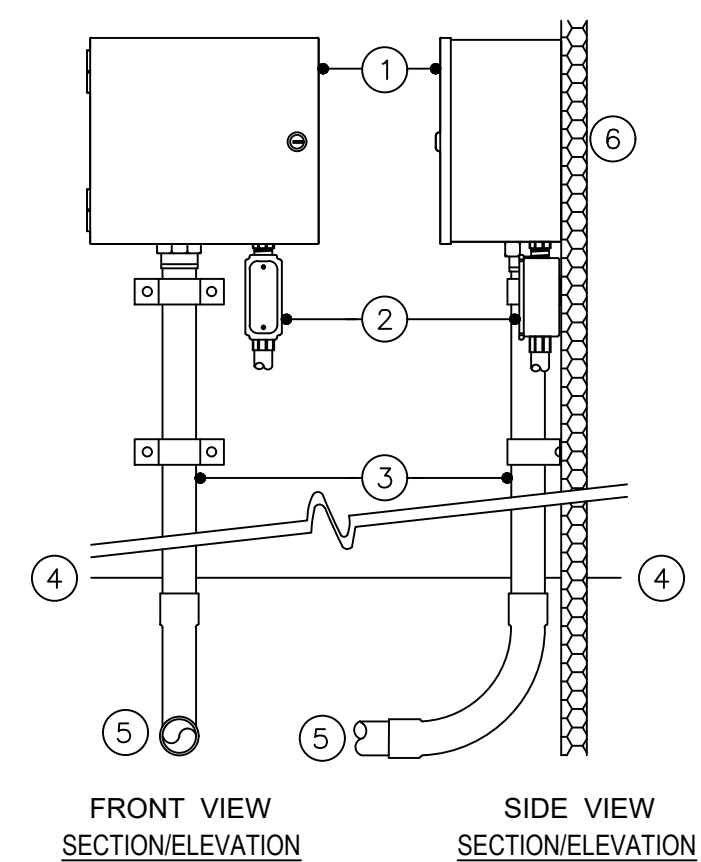
- 1 FINISH GRADE
- 2 CARSON-BROOKS/ND5-PRO/RB-VB PLASTIC VALVE BOX WITH LOCKABLE LID 1320B-12 (Max. (2) 38mm ECV'S or (1) 50mm EVC WITH LOCKABLE LID AND SS STEEL BOLT SET TO GRADE
- 3 TWU-40 #14 GAUGE ZONE CONTROL WIRE, CONSISTENTLY ONE COLOR EXCEPT RED, BLUE, GREEN or WHITE TWU-40 #12 GAUGE ZONE COMMON WIRE, CONSISTENTLY WHITE COLOR - NO EXCEPTIONS
- 4 3M-DBY/R or RAINBIRD WC20 WATER PROOF CONNECTIONS - NO EXCEPTIONS
- 5 REMOTE 24V. ELECTRIC CONTROL VALVE WITH 24V. AC SOLENOID - MODEL & SIZE per PLANS
- 6 SCH80 PVC UNION - THREADED - SIZE per ELECTRIC VALVE
- 7 50mm/63mm SCH80 PVC COUPLING & RED, BUSHING TO LATERAL PIPE SIZE
- 8 PVC LATERAL PIPE TO IRRIGATION ZONE - TYPE & SIZE per PLANS
- 9 BRASS ISOLATION GATE VALVE - MODEL R&W 206A - SIZE per ELEC. VALVE
- 10 75mm LONG SCH80 PVC NIPPLE x 2 - SIZE per ELEC. VALVE
- 11 200mm LONG SCH80 PVC NIPPLE - SIZE per ELEC. VALVE
- 12 SCH80 PVC THREADED 90 DEGREE ELBOW - SIZE per ELEC. VALVE
- 13 200mm LONG SCH80 PVC NIPPLE - SIZE per ELEC. VALVE
- 14 75mm x 38mm/50mm SCH40 PVC REDUCER TO FEMALE THREAD - TO ACCEPT THREADED NIPPLE
- 15 75mm SCH40 PVC TEE/ELBOW - SOLVENT WELD TO 38mm/50mm REDUCER per PLANS
- 16 PVC MAINLINE PIPE - SIZE & TYPE per PLANS
- 17 CONTINUOUS BRICK SUPPORTS - (MIN. 4 BRICKS per VALVE BOX)
- 18 12mm MINUS PEA GRAVEL - Min. 100mm DEPTH
- 19 3.5 OUNCE WOVEN LANDSCAPE FABRIC

SECTION/ELEVATION

NOTES:
 SEE PLANS, LEGEND AND SPECIFICATIONS FOR ADDITIONAL INSTALLATION NOTES.

SCALE: N.T.S.

4 24 Volt Electric Zone Control Valve Assembly
 IR-03



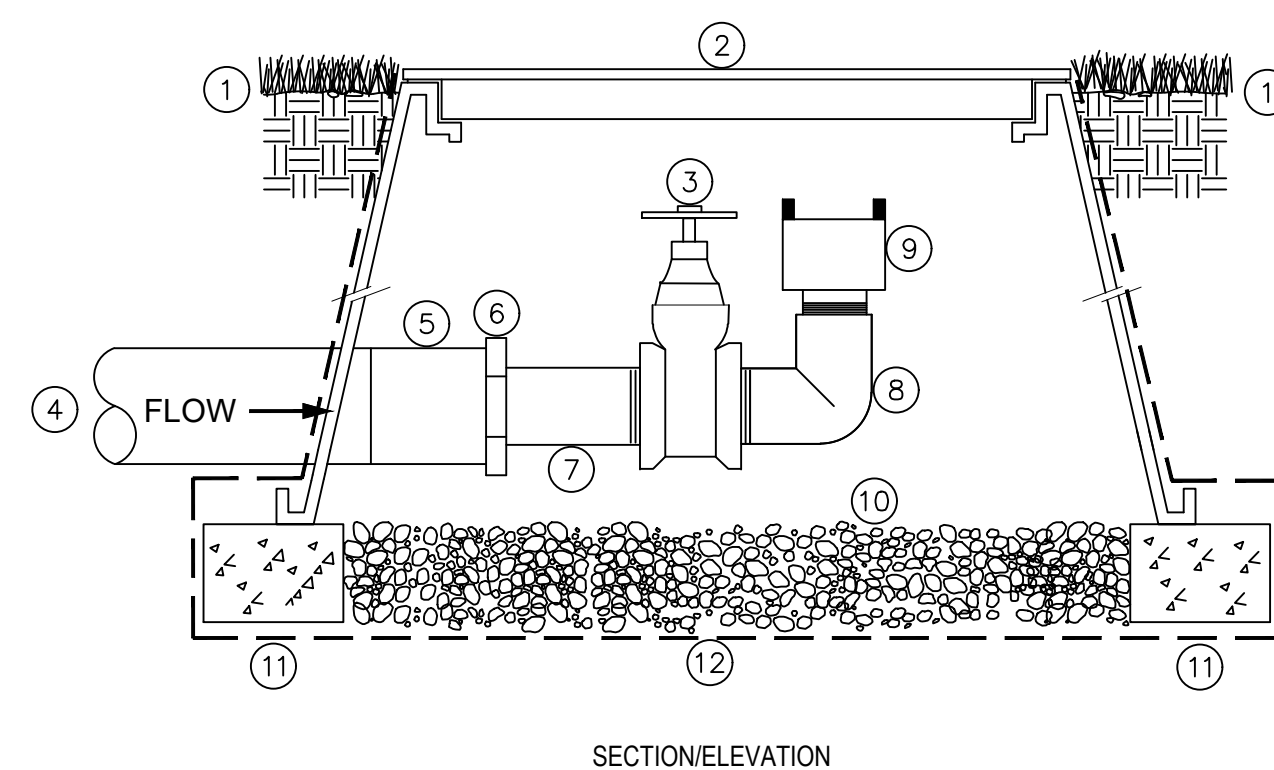
- 1 IRRIGATION CONTROLLER - TYPE & MODEL per LEGEND CONTROLLER TO BE GROUNDED AS per FACTORY SPECIFICATIONS CONTRACTOR TO FOLLOW LOCAL/PROVINCIAL ELECTRICAL CODES
- 2 25mm DB2-PVC CONDUIT FOR 120 VOLT ELECTRICAL POWER SUPPLY CONTRACTOR TO FOLLOW LOCAL/PROVINCIAL ELECTRICAL CODES PROVIDE A 15 AMP CIRCUIT. CLAMP CONDUITS TO WALL AS REQUIRED.
- 3 50mm DB2-PVC CONDUIT FOR ELECTRICAL 24V. FIELD WIRING EXTEND CONDUIT THROUGH EXTERIOR WALL OF BUILDING TO THE MASTER VALVE - VALVE BOX LOCATION - CLAMP AS REQUIRED
- 4 FINISHED FLOOR SURFACE
- 5 DB2-PVC SWEEP ELBOWS - SIZES as REQUIRED
- 6 19mm D-GRADE PLYWOOD BACKING - 1.2m X 1.2m

FRONT VIEW SECTION/ELEVATION
 SIDE VIEW SECTION/ELEVATION

NOTES:
 SEE PLANS, LEGEND AND SPECIFICATIONS FOR ADDITIONAL INSTALLATION NOTES.

5 Wall Mount Controller Assembly
 IR-03

SCALE: N.T.S.



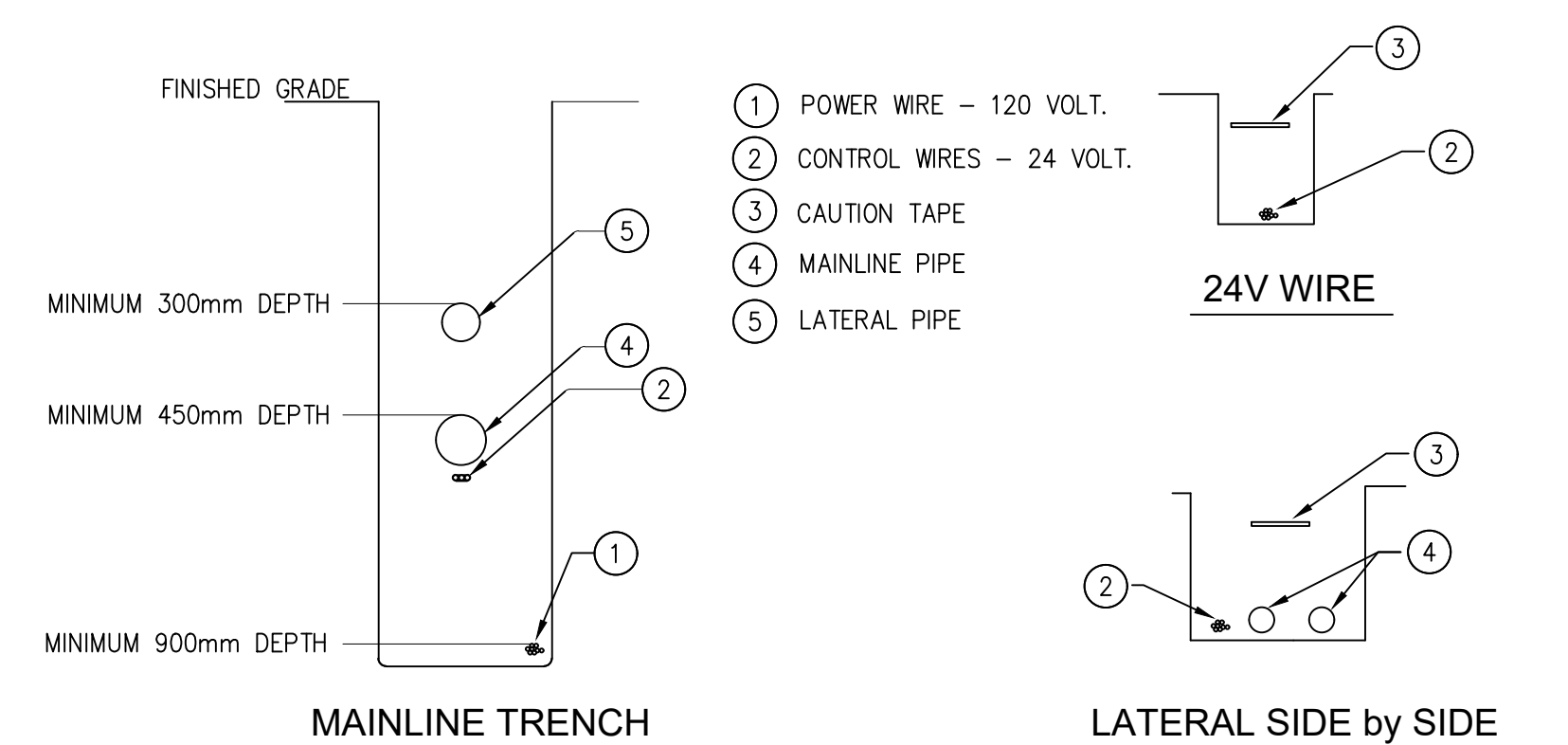
- 1 FINISHED GRADE
- 2 CARSON-BROOKS/ND5-PRO/RB-VB 1419-12B PLASTIC STANDARD REC. VALVE BOX. WITH S.S. BOLT. INSTALL EXT. AS REQ'D TO GRADE
- 3 50mm BRASS ISOLATION GATE VALVE - MODEL R&W 206A
- 4 PVC MAINLINE PIPE - SIZE & TYPE per PLANS
- 5 75mm SCH80 PVC COUPLING - SOLVENT WELD
- 6 75mm x 50mm SCH80 PVC REDUCING BUSHING - SLIP
- 7 50mm x 150mm LONG SCH80 HALF NIPPLE
- 8 50mm BRASS ST. 90 ELBOW
- 9 50mm CAM-LOCK FITTING or FORESTRY COUPLER - STAINLESS STEEL
- 10 12mm MINUS PEA GRAVEL - Min. 100mm DEPTH
- 11 CONTINUOUS BRICK SUPPORTS (Min. 4 BRICKS per BOX)
- 12 3.5 OUNCE WOVEN LANDSCAPE FABRIC

SECTION/ELEVATION

NOTES:
 SEE PLANS, LEGEND AND SPECIFICATIONS FOR ADDITIONAL INSTALLATION NOTES.

6 50mm Brass Drain Valve Assembly
 IR-03

SCALE: N.T.S.



FINISHED GRADE

MINIMUM 300mm DEPTH

MINIMUM 450mm DEPTH

MINIMUM 900mm DEPTH

- 1 POWER WIRE - 120 VOLT.
- 2 CONTROL WIRES - 24 VOLT.
- 3 CAUTION TAPE
- 4 MAINLINE PIPE
- 5 LATERAL PIPE

24V WIRE

MAINLINE TRENCH

LATERAL SIDE by SIDE

7 Pipe Depth & Trench Details
 IR-03

SCALE: N.T.S.

DRAWING TITLE:
**The Village of Slocan - Expo Ball Park
 Slocan, B.C.**

IRRIGATION SYSTEM INSTALLATION DETAILS

OWNER:

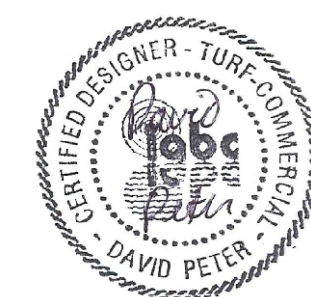


CONSULTANT:



REV. #	ISSUE	DATE
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SEAL:



DESIGNER:



PROJECT #: 2023-0029

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SCALE: N.T.S.

DESIGN BY: D.E.P.

DRAWING NUMBER:

IR-03

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