



**IRRIGATION NOTES:**

- 1). THE INFORMATION ON THIS SHEET IS INCOMPLETE UNLESS ACCOMPANIED BY THE CORRESPONDING SPECIFICATION SECTION(S) AND/OR DETAILS DEVELOPED FOR THIS PROJECT.
- 2). ALL BOUNDARIES, EASEMENTS, UTILITIES, AND LEGAL ENCUMBRANCES TO BE CONFIRMED WITH GENERAL CONTRACTOR AND/OR OWNER PRIOR TO BEGINNING WORK. IN NO WAY IS THIS PLAN TO BE INTERPRETED TO EXCEED THE LEGAL BOUNDARIES OF THE OWNER'S REAL PROPERTY. CONTRACTOR SHALL INSPECT THE SITE AND VERIFY CONDITIONS AND DIMENSIONS OF THE SITE PRIOR TO COMMENCING CONSTRUCTION. THIS DRAWING DOES NOT CONSTITUTE A LEGAL SURVEY.
- 3). CONTRACTOR SHALL INSTALL THIS PLAN TO COMPLY WITH ALL APPLICABLE CITY, COUNTY, STATE, AND FEDERAL CODES AND ORDINANCES.
- 4). CONTRACTOR SHALL VERIFY LOCATION OF ALL UTILITIES ABOVE AND BELOW GRADE PRIOR TO BEGINNING AND WORK. UTILIZE THE LOCATION "CALL BEFORE YOU DIG" UTILITY LOCATION SERVICE 2 DAYS PRIOR TO PERFORMING ANY WORK. 1-800-424-5555.
- 5). IRRIGATION SYSTEM MATERIALS ARE OFTEN SHOWN OUTSIDE OF LANDSCAPE AREAS. LOCATE ALL VALVE BOXES NEXT TO CURBS, PAVED SURFACES, OR IN PLANTING BEDS WHERE POSSIBLE. DO NOT LOCATE VALVES OR VALVE BOXES IN THE BOTTOM OF DRAINAGE SWALES. INSTALL VALVES BOXES PARALLEL TO ANY ADJACENT VALVE BOXES.
- 6). THE IRRIGATION SYSTEM DESIGN IS BASED ON 65 LBS. OF STATIC PRESSURE AS THE SOURCE. ALL SPRAY HEADS ARE TO BE OPERATED AT 30 LBS. OF WORKING PRESSURE AND AT 50 G.P.M. ALL GEAR DRIVEN HEADS ARE TO BE OPERATED AT 50 LBS. OF WORKING PRESSURE AND AT 50 G.P.M. CONTRACTOR TO VERIFY WORKING P.S.I. AT MAXIMUM OPERATING FLOW PRIOR TO CONSTRUCTION. NOTIFY OWNER'S REPRESENTATIVE OF ANY DEFICIENCIES PRIOR TO BEGINNING WORK.
- 7). SLEEVING SHALL BE PROVIDED UNDER ALL HARD SURFACES AND SHALL BE 4" CLASS 200 PVC FOR ALL PIPING UP TO 2". PIPE LARGER THAN 2" SHALL BE SLEEVED WITH A SLEEVE TWICE THE SIZE OF THE INTERIOR PIPE. PROVIDE A SEPARATE 2" SLEEVE UNDER ALL HARD SURFACES FOR IRRIGATION WIRING.
- 8). THE POINT-OF-CONNECTION (WATER METER/THREADED STUB-OUT/METER VAULT) SHALL BE PROVIDED BY THE GENERAL CONTRACTOR OR OWNER.
- 9). CONNECT TO THE SUPPLIED IRRIGATION STUB WITH AN APPROVED BACKFLOW DEVICE/FILTER.
- 10). SUPPLY THE IRRIGATION CONTROLLER AS SPECIFIED AND LOCATE THE IRRIGATION CONTROLLER AS SHOWN ON PLANS. COORDINATE THE LOCATION AND INSTALLATION OF CONTROLLER(S) WITH OWNER.
- 11). THE INSIDE OF CONTROLLER TO BE LABELED IN ACCORDANCE WITH ZONE SEQUENCING AND AREA OF COVERAGE.
- 12). INSTALL SINGLE STRAND #14 WIRE FOR IRRIGATION CONTROL WIRING. COMMON WIRE SHALL BE WHITE, CONTROL WIRE SHALL BE RED. PROVIDE (1) ADDITIONAL COMMON WIRE AND (1) CONTROL WIRE THROUGH EACH VALVE WITH A MINIMUM 36" COIL TAPED INSIDE THE VALVE BOX.
- 13). CONTROL WIRES SHALL BE BUNDLED TOGETHER AND WRAPPED WITH ELECTRICAL TAPE AT INTERVALS OF NO MORE THAN 10 FEET.
- 14). ALL WIRE SPLICES SHALL OCCUR ONLY IN VALVE OR JUNCTION BOXES AND SHALL BE MADE WATERPROOF BY USING UL APPROVED WIRE CONNECTORS AND SEALANT.
- 15). ALL PIPES ARE TO BE INSTALLED TO THE FOLLOWING MINIMUM DEPTHS: SLEEVE - 24" / MAIN LINE - 18" / LATERALS - 12".
- 16). CAST-IN-PLACE CONCRETE THRUST BLOCKING SHALL BE REQUIRED ON PIPE 3" OR LARGER.
- 17). ALL LATERAL PIPING IS TO BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING PIPE SIZING REQUIREMENTS: 0-9 GPM = 3/4"; 10-17 GPM = 1"; 18-28 GPM = 1-1/4"; 29-36 GPM = 1-1/2"; 37-56 GPM = 2"; AND 57-82 GPM = 2-1/2".
- 18). BACKFILL PIPE USING ONLY CLEAN, NON-ROCKY MATERIAL. IMPORT CLEAN FILL AS NECESSARY.
- 19). ALL ISOLATION VALVES ARE TO BE INSTALLED UTILIZING UNIONS AND NIPPLES, AND INSTALLED WITHIN A CARSON 10" PIT BOX WITH LID. (1 VALVE PER BOX)
- 20). ALL AUTOMATIC VALVES ARE TO BE INSTALLED UTILIZING BOTTOM INLET. INSTALLED USING (1) UNION AND (1) MALE ADAPTER, AND INSTALLED WITHIN A CARSON "STANDARD BOX" WITH LID. (LIMIT OF 3 VALVES PER BOX)
- 21). VALVES ARE TO BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING VALVE SIZE FLOW REQUIREMENTS: 0-18 GPM = 1" ACV; 19-48 GPM = 1-1/2" ACV; AND 49-60 GPM = 2" ACV.
- 22). ALL HEADS ARE TO BE INSTALLED TO FINISH GRADE UTILIZING A FLEX-PIPE ASSEMBLY [(1) MARLEX ELL, (2) SBE ELL, AND 18" OF SWING PIPE)]. FINAL ADJUSTMENT FOR ALL HEADS ARE TO ACCOMMODATE TYPICAL WIND PATTERNS AND MINIMIZE OVER SPRAY OUT OF THE LANDSCAPE AREA.
- 23). LOCATE HEADS NO CLOSER THAN 3" OFF HARD SURFACES AND NO CLOSER THAN 12" FROM ALL BUILDING WALLS.
- 24). CONTRACTOR TO USE 4" POP-UP HEADS FOR ALL TURF AREAS AND 6" POP-UP HEADS FOR ALL SHRUB AREAS.
- 25). CONTRACTOR TO ADJUST IRRIGATION HEADS AS NECESSARY PRIOR TO SUBSTANTIAL COMPLETION AND AGAIN AT FINAL COMPLETION.
- 26). COORDINATE THE INSTALLATION OF THE IRRIGATION SYSTEM WITH ALL OTHER TRADES.
- 27). CONTRACTOR TO COORDINATE IRRIGATION EQUIPMENT WITH LANDSCAPE MATERIALS TO AVOID CONFLICTS. SEE SHEET(S) L1 THROUGH L4.
- 28). UPON COMPLETION OF THE IRRIGATION SYSTEM, THE CONTRACTOR SHALL PROVIDE THE OWNERS REPRESENTATIVE WITH A COMPLETE SYSTEM ORIENTATION, VISUAL INSPECTION OF FIXTURES, AUTOMATIC OPERATION, AND COVERAGE. DEMONSTRATE THE CONTROL OPERATION BY CYCLING THROUGH EACH ZONE FOR 1 TO 3 MINUTES PER ZONE. NOTIFY THE OWNER'S REPRESENTATIVE AT LEAST 48 HOURS IN ADVANCE AND PERFORM THE OPERATIONAL TEST IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE FOR APPROVAL. THE CONTRACTOR WILL ALSO PROVIDE THE OWNER WITH A LEGIBLE RECORD DRAWING OF ALL FINAL PIPE ROUTING, VALVE LOCATIONS, AND ZONING.
- 29). THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE A WORKING IRRIGATION SYSTEM. THE LANDSCAPE DESIGNER DOES NOT ACCEPT ANY LIABILITY REGARDING THE DESIGN OR INSTALLATION OF THIS SYSTEM.
- 30). ALL WORK COMPLETED SHALL BE GUARANTEED FOR (1) YEAR FROM THE DATE OF THE FINAL ACCEPTANCE.



**HERITAGE  
PROFESSIONAL  
LANDSCAPE, INC.**

2816 W. 27th Avenue  
Kennewick, Wa. 99336  
Phone (509) 586-0744 / Fax (509) 586-1754  
www.heritagepros.com

*Heritage by Design...*  
CONSULTANT:

**PORT OF KENNEWICK-  
CEDARS PARKING**  
355 CLOVER ISLAND DRIVE - KENNEWICK, WA

DRAWN BY:	APPROVED BY:
SKC	HR
SCALE:	DATE:
1" = 10'	9-29-10
JOB NUMBER:	
PORT OF KENNEWICK - CEDARS	
REVISIONS:	
Δ 10-27-10	Δ 7-7-11
Δ 12-21-10	Δ 7-11-11
Δ 1-3-11	
Δ 1-20-11	
Δ 5-10-11	
Δ 6-28-11	
SHEET NAME:	

**IRRIGATION  
PLAN**

SHEET #:  
**12**

THIS PLAN IS THE SOLE PROPERTY OF HERITAGE PROFESSIONAL LANDSCAPE, INC. (HPLC) ANY UNAUTHORIZED USE OR REPRODUCTION IS PROHIBITED. HPLC SHALL NOT BE RESPONSIBLE FOR ANY INSTALLATION AND/OR MAINTENANCE OF ANY PART OR WHOLE OF THESE PLANS BY ANY INDIVIDUAL OR COMPANY OTHER THAN HPLC.

