IRRIGATION NOTES

1. ALL IRRIGATION EQUIPMENT SHALL BE NEW, EXCEPT AS NOTED, TO CONNECT TO EXISTING SYSTEM, AND INSTALLED IN SUCH A MANNER THAT THE NEW IRRIGATION SYSTEM WILL BE COMPLETE AND EFFICIENT.
2. CONTRACTOR SHALL INSTALL ALL PIPE MATERIALS AND EQUIPMENT AS SHOWN IN THE CONSTRUCTION DETAILS AND SHALL REFER TO PROJECT SPECIFICATIONS.
3. SLEEVE ALL PRESSURE MAINLINE PIPE, LATERAL PIPE AND CONTROL WIRES UNDER ALL HARDSCAPE WALKWAYS WITH SCHEDULE 40 PVC PIPE A MIN. OF TWICE THE DIAMETER OF THE PIPE AND AT THE SPECIFIED DEPTH. IN ADDITION TO THE SLEEVES AND CONDUITS SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF SLEEVES AND CONDUITS OF SUFFICIENT SIZE UNDER ALL PAVED AREAS.
4. FLUSH AND ADJUST ALL LINES, SPRAY HEADS, ROTORS AND VALVES FOR OPTIMUM PERFORMANCE. ADJUST ALL NOZZLES TO ELIMINATE OVERSPRAY ON ADJACENT WALKS, STREETS, ETC.
5. CONTACT THE COR TO DISCUSS AND RECEIVE APPROVAL FOR ALL FIELD ADJUSTMENTS THAT WILL IMPACT THE DESIGN AND EFFICIENCY OF THE SYSTEMS. IF THE CONTRACTOR HAS NOT RECEIVED WRITTEN AUTHORIZATION TO CONDUCT FIELD ADJUSTMENTS, THEN THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REVISIONS/ADJUSTMENTS.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIM/HER SELF WITH THE SITE. THE CONTRACTOR SHALL USE EXTREME CARE WHEN EXCAVATING OR WORKING NEAR EXISTING UTILITIES AND SHALL BE RESPONSIBLE FOR ANY DAMAGE INCURRED. PRIOR TO ANY CONSTRUCTION THE CONTRACTOR SHALL CONTACT ALL APPLICABLE AGENCIES AND U.S.A. TO LOCATE ALL EXISTING UTILITIES.
7. IRRIGATION CONTRACTOR SHALL COORDINATE ALL IRRIGATION SLEEVES, MAIN LINE AND COMMUNICATION CABLE INSTALLATION PRIOR TO CONCRETE FLATWORK INSTALLATION.
8. IRRIGATION SYSTEM SHALL BE INSTALLED IN CONFORMANCE WITH ALL APPLICABLE STATE AND LOCAL CODES AND ORDINANCES, BY LICENSED CONTRACTORS AND EXPERIENCED WORKMEN. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND FEES RELATING TO HIS WORK.
9. TRENCHING IS TO BE OF SUFFICIENT DEPTH TO PROVIDE 30" OF COVER OVER IRRIGATION MAIN LINES AND CONTROL WIRE, 18" OF COVER OVER 12" POP-UP HEADS AND ROTOR HEAD LATERAL LINES, AND 12" OF COVER OVER ALL 6" POP-UP SPRAY HEAD LATERAL LINES UNLESS NOTED OTHERWISE ON THE PLANS. ALL LINES UNDER SIDEWALKS SHALL HAVE 36" OF COVER. CONTRACTOR SHALL CONTACT COR, AND VA REPRESENTATIVE, WITH ANY DISCREPANCIES.
10. INSTALL SPRINKLER HEADS 2" CLEAR OF CURBS, SIDEWALKS, PAVING, HEADERS, OR UTILITY BOXES.
11. FLUSH MAIN LINES PRIOR TO THE INSTALLATION OF REMOTE CONTROL VALVES, OR QUICK COUPLER VALVES. FLUSH LATERAL LINES PRIOR TO THE INSTALLATION OF IRRIGATION HEADS.
12. PRESSURE TEST LATERAL LINES UNDER OPERATING PRESSURE PRIOR TO BACKFILLING.
13. IRRIGATION CONTROL WIRE SHALL BE NO. 14-1 AWG UF (UL) APPROVED FOR DIRECT BURIAL. WIRE COLORS FOR THIS PHASE OF THE WORK SHALL BE AS FOLLOWS: COMMON WIRE - WHITE, PILOT WIRES - RED, ALL SPARE WIRES - YELLOW.
14. THE IRRIGATION SYSTEM IS DRAWN DIAGRAMMATICALLY. ALL PIPING, VALVES, ETC. SHOWN WITHIN PAVED AREAS ARE FOR CLARITY ONLY. INSTALL ALL EQUIPMENT IN PLANTING AREAS. SLEEVE UNDER PAVING.
15. DO NOT WILLFULLY INSTALL THE IRRIGATION SYSTEM AS DIAGRAMMATICALLY SHOWN WHEN IT IS OBVIOUS IN THE FIELD THAT OBSTRUCTIONS, OR DIFFERENCES IN SITE DIMENSIONS EXIST THAT MIGHT NOT HAVE BEEN FORESEEN IN THE ENGINEERING. THE COR SHALL BE GIVEN WRITTEN NOTICE THAT SUCH CONDITIONS EXIST. IF NO SUCH NOTIFICATION IS GIVEN, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS AND REPAIR WORK THAT MAY BE DEEMED NECESSARY.
16. DRAINAGE OF IRRIGATION WATER THROUGH ANY SPRINKLER HEADS (LOW HEAD DRAINAGE) WILL NOT BE ALLOWED. THE CONTRACTOR SHALL INSTALL BUILT IN CHECK VALVES AS REQUIRED FOR ANY SPRINKLER HEAD SHOWING SIGNS OF DRAINAGE AFTER THE IRRIGATION SYSTEM HAS OPERATED FROM AN ON TO OFF POSITION. THIS INCLUDES SPRAY HEADS AND ROTORS HEADS. THE INSTALLATION OF HEADS WITH INTEGRAL CHECK VALVE FEATURE SHALL BE INCLUDED IN THE BID PRICE WITHOUT ADDITIONAL COST TO THE OWNER.
17. INSTALL QUICK COUPLER VALVES WITHIN A 10" ROUND PLASTIC VALVE BOX WITH BOLT-DOWN LID. TOP OF QCV SHALL BE 2" BELOW RIM OF BOX.
18. ALL WIRE SPLICES ARE TO BE MADE WITHIN A VALVE BOX. SPLICES ARE TO BE MADE WITH A WIRE NUT TYPE CONNECTOR AND INSTALLED WITHIN A 3-M DBY SEALING PACK.
19. REMOTE CONTROL VALVE BOXES ARE TO BE INSTALLED 1/2" ABOVE FINISH GRADE IN SHRUB AND GROUNDCOVER AREAS AND FLUSH WITH GRADE IN ROADWAYS AND LAWN AREAS. ALIGN VALVE BOXES WITH ADJACENT PAVEMENT EDGES, ARCHITECTURAL FEATURES, OR ADJACENT VALVE BOXES, AS APPLICABLE FOR A NEAT APPEARANCE. VALVE BOXES ARE TO CONFORM WITH FINISH GRADES (NOT NECESSARILY LEVEL). MULTIPLE BOXES IN ONE LOCATION SHALL BE ALIGNED AND SQUARE TO EACH OTHER WHEN INSTALLED. SIZE VALVE BOXES TO ACCOMMODATE VALVE ASSEMBLY INCLUDING UNIONS, BALL VALVE AND REMOTE CONTROL VALVE.
20. OPERATE IRRIGATION CONTROLLER WITHIN THE TWELVE HOUR WATERING WINDOW WHICH SHALL BE DURING THE HOURS OF 7:00 P.M. TO 7:00 A.M. COORDINATE SATELLITE SCHEDULING WITH CEMETERY FOREMAN.
21. ALL REMOTE CONTROL VALVES SHALL HAVE A PERMANENT VALVE TAG (AS MANUFACTURED BY 'T. CHRISTY' OR APPROVED EQUAL) ATTACHED TO THE VALVE INDICATING THE CONTROLLER STATION NUMBER.
22. THE CONTRACTOR SHALL INSTALL EIGHT (8) SPARE WIRES PLUS COMMON STARTING FROM THE CONTROLLER AT THE ADMINISTRATION BUILDING, LOOPED TO EACH VALVE BOX AND TO BOTH ENDS OF THE MAIN LINE, WITHOUT SPLICES. THESE SPARE WIRES SHALL BE YELLOW IN COLOR.

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
1401 1402	RAIN BIRD RWS-M-B-C-P MINI ROOT WATERING SYSTEM WITH 4.0" DIAMETER X 18.0" LONG WITH LOCKING GRATE. SEMI-RIGID MESH TUBE AND RAIN BIRD 1401 0.25 GPM OR 1402 0.5 GPM BUBBLER AS INDICATED. WITH CHECK VALVE AND GRATE.	510	50
1402 1401	RAIN BIRD 1400 FLOOD BUBBLER ON 1/2" RISER 4" ABOVE GRADE, FULL CIRCLE BUBBLER, 1/2" FIPT.	32	30

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI	GPM	RADIUS
ARC 25	RAIN BIRD 5006-SAM-SS-PC,FC-MPR TURF ROTOR, 6.0" POP-UP, STAINLESS STEEL RISER, MATCHED PRECIPITATION ROTOR (MPR NOZZLE). ARC AND RADIUS AS PER SYMBOL. 25 FT=RED, 30 FT=GREEN, 35FT=BEIGE. WITH SEAL-A-MATIC CHECK VALVE.	1	45		25'
ARC 35	RAIN BIRD 5006-SAM-SS-PC,FC-MPR TURF ROTOR, 6.0" POP-UP, STAINLESS STEEL RISER, MATCHED PRECIPITATION ROTOR (MPR NOZZLE). ARC AND RADIUS AS PER SYMBOL. 25 FT=RED, 30 FT=GREEN, 35FT=BEIGE. WITH SEAL-A-MATIC CHECK VALVE.	19	45		35'
18	RAIN BIRD 8005-SS TURF ROTOR, 5.0" POP-UP, STAINLESS STEEL RISER, STANDARD NOZZLE. WITH SEAL-A-MATIC CHECK VALVE, ADJUSTABLE 50-330 ARC, AND 360 NON-REVERSING FULL-CIRCLE. 1" (26/34) NPT FEMALE THREADED INLET.	69	60	10.1	53'

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	RAIN BIRD PESB-PRS-D 1", 1-1/2", 2" PLASTIC INDUSTRIAL VALVES. LOW FLOW OPERATING CAPABILITY, GLOBE CONFIGURATION. WITH PRESSURE REGULATOR MODULE.	17
	RAIN BIRD 44-NP 1" BRASS QUICK-COUPLING VALVE, WITH CORROSION-RESISTANT STAINLESS STEEL SPRING, LOCKING NON-POTABLE PURPLE RUBBER COVER, AND 2-PIECE BODY.	14
	GATE VALVE CLASS 125 BRONZE GATE SHUT OFF VALVE , SAME SIZE AS MAINLINE PIPE DIAMETER AT VALVE LOCATION. GATE VALVES SHALL BE DUCTILE IRON RESILIENT WEDGE GATE VALVES WITH PUSH-ON ENDS AND MECHANICAL JOINT RESTRAINTS.	7
A	BLOW OFF VALVE	1
	PRESSURE REDUCING VALVE AND ISOLATION VALVE	1
	CAP FOR FUTURE USE AT MAINLINE	1
POC1	POINT OF CONNECTION - 12"X12"X8" TEE SEE DETAIL	1
	IRRIGATION LATERAL LINE: PVC SCHEDULE 40 PVC SCHEDULE 40 IRRIGATION PIPE.	7,514 L.F.
	IRRIGATION MAINLINE: PVC I.P.S. SDR 17 (250 PSI) RING-TITE PIPE	1,396 L.F.
	IRRIGATION MAINLINE: 8" PVC C900 DR 18 CLASS 235 GASKETED PVC AWWA C900 PVC PIPE.	207.5 L.F.
	PIPE SLEEVE: PVC SCHEDULE 40	75 L.F.

Valve Callout
- Valve Number
- Valve Flow
- Valve Size

	CONTROLLER COMMUNICATION CONDUIT (EMPTY)
	EXISTING MAINLINE
C	EXISTING CONTROLLER #10 - 19 STATIONS AVAILABLE
	EXISTING HEAD TO BE REMOVED
25	EXISTING HEAD TO BE MOVED OR MODIFIED

CONSTRUCTION DOCUMENTS

Revisions: | Date

CONSULTANTS:

SURVEYOR
BLAIR, CHURCH, & FLYNN
451 CLOVIS AVENUE, SUITE 200
CLOVIS, CA 93612
(559) 326-1400 PHONE

GEOTECHNICAL ENGINEER
STEVENS, FERRONE, & BAILEY
1600 WILLOW PASS COURT
CONCORD, CA 94520
(925) 688-1001 PHONE

COST ESTIMATING
SIERRA WEST GROUP, LLC
9700 BUSINESS PARK DRIVE, SUITE 102
SACRAMENTO, CA 95827
(916) 925-4000 PHONE

LICENSED LANDSCAPE ARCHITECT
REBECCA McNEIL FREEMAN
No. 4639
Signature
03/31/17
Renewal Date
Date
STATE OF CALIFORNIA

ARCHITECT/ENGINEERS:

JACOBS
Jacobs Engineering Group Inc.
Consultants in Architecture, Engineering, Planning, and the Environment
Sacramento Office
1050 20th Street, Suite 200
Sacramento, California 95811
(916) 929-3323 Fax (916) 929-1772

Drawing Title: IRRIGATION NOTES & SCHEDULE

Approved: Project Director

Project Title: SAN JOAQUIN VALLEY NATIONAL CEMETERY PRE-PLACED CRYPTS IN SECTION 21

Location: SAN JOAQUIN VALLEY NATIONAL CEMETERY SANTA NELLA, CALIFORNIA

Date: 09/28/2015 | Checked: MIS | Drawn: TT

Project Number: 913CM3012

Building Number

Drawing Number: I-1

Dwg. 22 of 25

NATIONAL CEMETERY ADMINISTRATION DESIGN AND CONSTRUCTION SERVICE

Department of Veterans Affairs

VA FORM 08-6231

\\SACFILES\Production\Projects\P1W90746 VA IDIQ SJVNC Crypts\2Drawings\000000_LDP_03-CD\22-IRRIGATION_NOTE SCHEDULE.dwg 9-23-15 08:49:13 AM mcneilfreeman