

- TREE PROTECTION REQUIREMENTS**
1. PREPARATION: ALL TREES SHALL BE THOROUGHLY WATERED TWO WEEKS PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.
 2. PROTECTION ZONE: WITHIN 10 FEET OF A TREE TRUNK, OR WITHIN THE OUTER EXTENT OF THE TREE CANOPY DRIPLINE, OR WITHIN TREE PROTECTION FENCE AREA AS SHOWN ON PLANS, WHICHEVER IS GREATER.
 - a. MARK PROTECTION ZONES OUTSIDE OF FENCES WITH TEMPORARY PAINT PRIOR TO STARTING CONSTRUCTION IN THAT AREA.
 4. NO MATERIALS, EQUIPMENT, OR TOOLS ARE TO BE STORED WITHIN PROTECTION ZONES, INCLUDING SOIL PILES, PIPE, ETC.
 5. BEFORE OPERATING VEHICLES OR EXCAVATING WITHIN PROTECTION ZONES PROVIDE THE FOLLOWING:
 - a. TREE PROTECTION FENCE: AS SHOWN ON PLANS.
 - b. ROOT ZONE PROTECTION: CONSTRUCTION VEHICLES AND EQUIPMENT SHALL NOT DRIVE OVER EXPOSED TURF OR SOIL WITHIN THE PROTECTION ZONE. USE CONSTRUCTION MATTING.
 - a.a. USE ONLY TURF-TIRED VEHICLES, NO TRACKED VEHICLES ALLOWED.
 - b.b. FOR ONE-TIME TRAFFIC, PROVIDE 1-INCH THICK PLYWOOD CONSTRUCTION MATTING TO PROTECT SOIL FROM COMPACTION AND RUTTING.
 - b.c. IF VEHICLES WILL DRIVE OVER AN AREA MORE THAN ONCE, PROVIDE HEAVY CONSTRUCTION MATTING CONSISTING OF THE FOLLOWING: GEOTEXTILE FABRIC WITH 8-INCH THICKNESS OF COARSELY SHREDDED WOOD CHIPS ON TOP.
 - c. TRUNK PROTECTION - FOR TREES OVER 12 INCH CALIPER: PROTECT THE TRUNK OF THE TREE FROM ACCIDENTAL MECHANICAL DAMAGE WHEN OPERATING EQUIPMENT BY ATTACHING SCRAP LUMBER TO THE TRUNK WITH NYLON WEBBING STRAPS. DO NOT USE NAILS OR BOLTS.
 6. WHEN EXCAVATING IN PROTECTION ZONES:
 - a. EXPOSE ROOTS WITHOUT DAMAGING THEM BY USING A SUPERSONIC AIR TOOL OR BY HAND METHODS TO 12" DEPTH. NOTIFY COR IF ROOTS OVER 1" DIAMETER ARE ENCOUNTERED.
 - b. PROTECT EXPOSED ROOTS BY IMMEDIATELY WRAPPING WITH WET BURLAP AND KEEP MOIST. DO NOT LEAVE THE TRENCH OPEN FOR LONGER THAN 4 HOURS, QUICKLY REPLACE THE SOIL AND SOAK WITH WATER TO PACK.
 - c. IF POSSIBLE, LEAVE ROOTS IN PLACE, OR RELOCATE. USE HAND METHODS IF NECESSARY.
 - d. DO NOT CUT ROOTS LARGER THAN 1 INCH DIAMETER WITHOUT APPROVAL FROM CO/COR. CUT SMALLER ROOTS THAT CANNOT BE RELOCATED AND THAT INTERFERE WITH CONSTRUCTION WITH SHARP PRUNING INSTRUMENTS; DO NOT BREAK OR CHOP.
 7. MAINTENANCE AND RESTORATION:
 - a. WATER TREES THOROUGHLY IMMEDIATELY AFTER ANY EXCAVATION OR VEHICLE TRAFFIC AND EVERY 2 WEEKS THEREAFTER IN DRY WEATHER, UNTIL IRRIGATION SYSTEM IS FULLY FUNCTIONAL.
 - b. PERFORM VERTICAL MULCHING WHEREVER CONSTRUCTION MATTING WAS USED. DRILL 2 INCH DIAMETER HOLES 12 INCHES DEEP USING A POWER AUGER. START BEYOND THE TREE'S STRUCTURAL ROOT PLATE AND DRILL ON A 18 X18 INCH GRID WITHIN THE CRITICAL ROOT ZONE. IF LARGE WOODY ROOTS ARE ENCOUNTERED, AVOID ROOT DAMAGE BY SLIGHTLY MOVING THE DRILL HOLE. BACKFILL THE HOLES WITH COMPOST OR COMPOSTED MULCH.
 - c. RESTORE TURF TO ORIGINAL CONDITION WITH SOD.
 8. PENALTY FOR NONCOMPLIANCE WITH TREE PROTECTION REQUIREMENTS: \$500 PER INCIDENT. IF ADDITIONAL IF VIOLATIONS OCCUR THE COR MAY REQUIRE THE CONTRACTOR TO HIRE A LICENSED ARBORIST TO OBSERVE WORK IN PROTECTION ZONES AND MAKE RECOMMENDATIONS AT NO ADDITIONAL EXPENSE TO THE GOVERNMENT.
 9. CONTRACTOR IS RESPONSIBLE FOR KEEPING LAWN MOWED INSIDE TREE PROTECTION FENCE IF LEFT IN PLACE FOR MORE THAN ONE WEEK.

REVISION 1

08/24/2015

Revisions

Date

CONSULTANTS:

KCI
TECHNOLOGIES

Aqua
Engineering
Innovative
Water Solutions

CID

M.T.R.
LANDSCAPE ARCHITECTS

Drawing Title

IRRIGATION PLAN

Approved Project Director

Project Title

Culpeper National Cemetery
Pre Placed Crypt Conversions At
Section 4

Location

East Chandler Street, Culpeper, VA 22701

Project Number

839-CM3-027

Building Number

-

Drawing Number

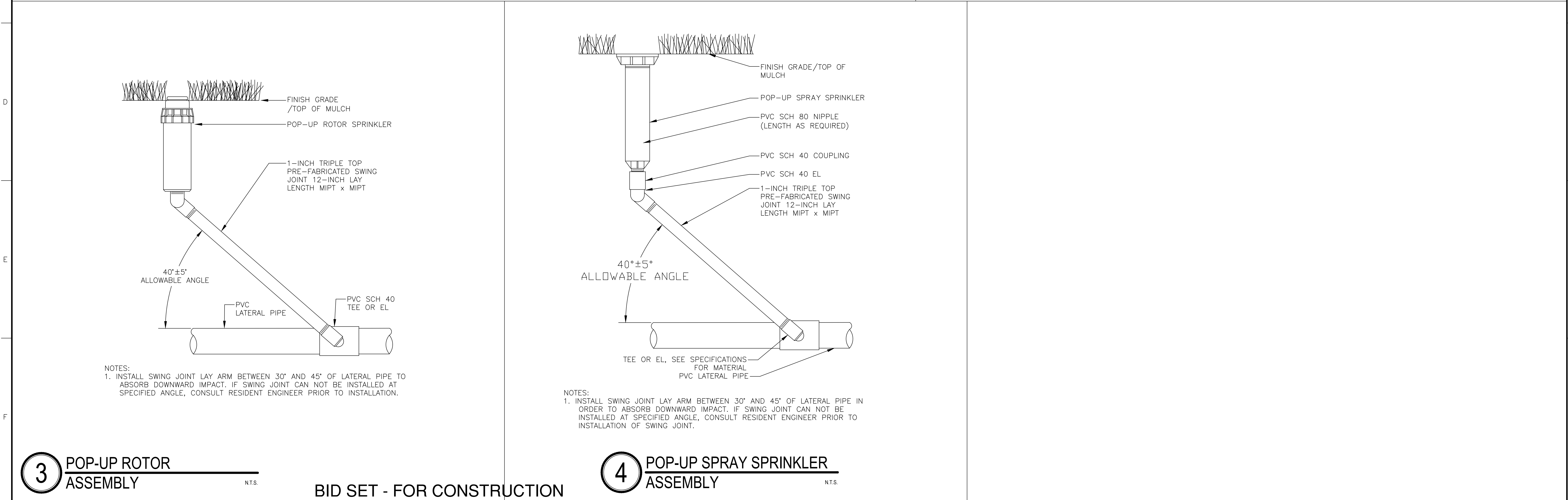
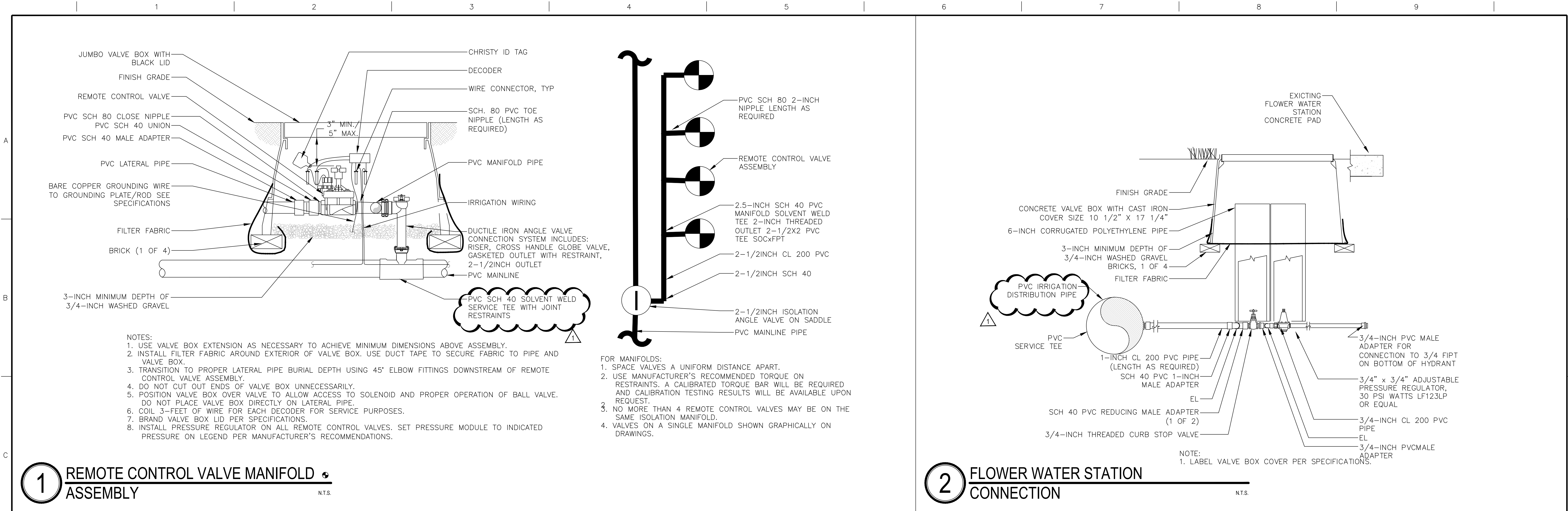
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Dwg. 18 of 23

NATIONAL CEMETERY
ADMINISTRATION
OFFICE OF DESIGN
AND CONSTRUCTION

VA FORM 08-6231

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BID SET - FOR CONSTRUCTION

		CONSULTANTS:		LANDSCAPE ARCHITECT:		Drawing Title		Project Title		Project Number		NATIONAL CEMETERY					
		 ENGINEERS PLANNERS SCIENTISTS CONSTRUCTION MANAGERS 936 RIDGEBROOK ROAD SPARKS, MD 21152 PHONE: (410) 316-7800 FAX: (410) 316-7868 WWW.KCI.COM		 Aqua Engineering Inc. Innovative Water Solutions 375 E. Homestead Road, Building 2-202 Fort Collins, CO 80526-3196 970.228.9969 office 970.228.3655 fax www.aquaengineering.com		 JOHN D. LEONARD CID PROFESSIONAL IRRIGATION DESIGNER 46102		 M·T·R LANDSCAPE ARCHITECTS 101 Bellevue Road Pittsburgh, PA 15229 (412) 931-6455		IRRIGATION DETAILS		Culpeper National Cemetery Pre Placed Crypt Conversions At Section 4		839-CM3-027		ADMINISTRATION	
						Approved Project Director		Location		Drawing Number		OFFICE OF DESIGN AND CONSTRUCTION					
								East Chandler Street, Culpeper, VA 22701		IR-3.0							
								Date		Checked		Drawn		Dwg. 20 of 23			
								JULY 20, 2015		RWB		JDL					
 1 REVISION 1 Revisions:		08/24/2015 Date												 Department of Veterans Affairs			

