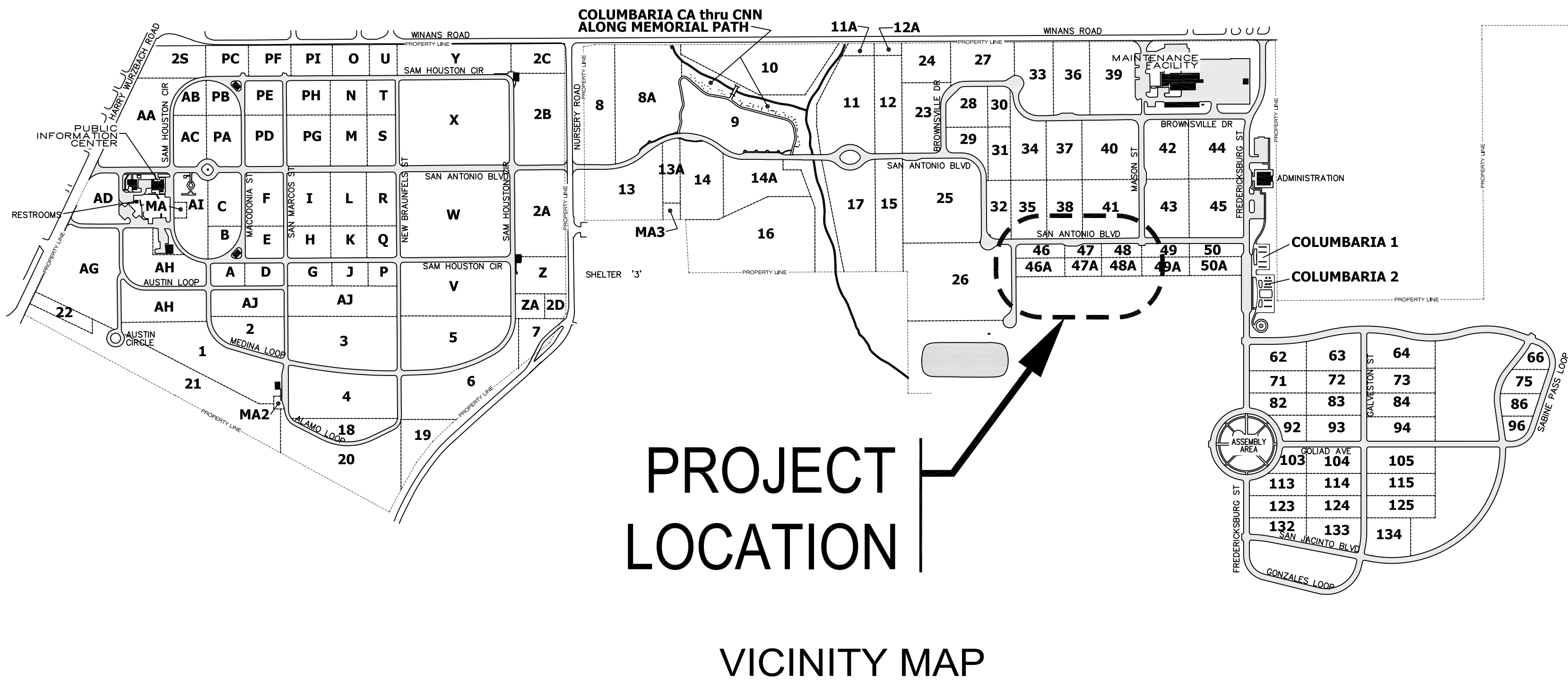
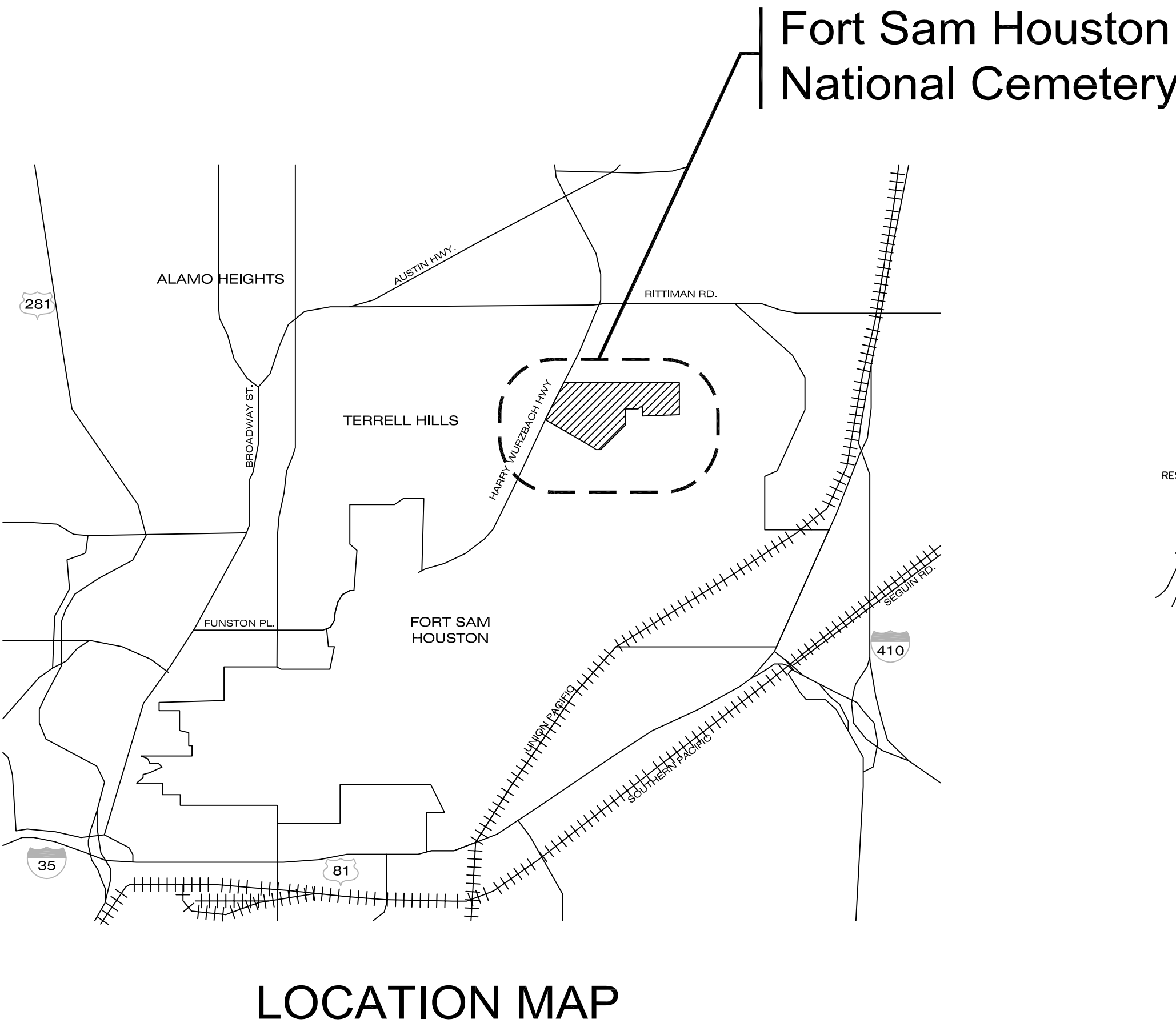


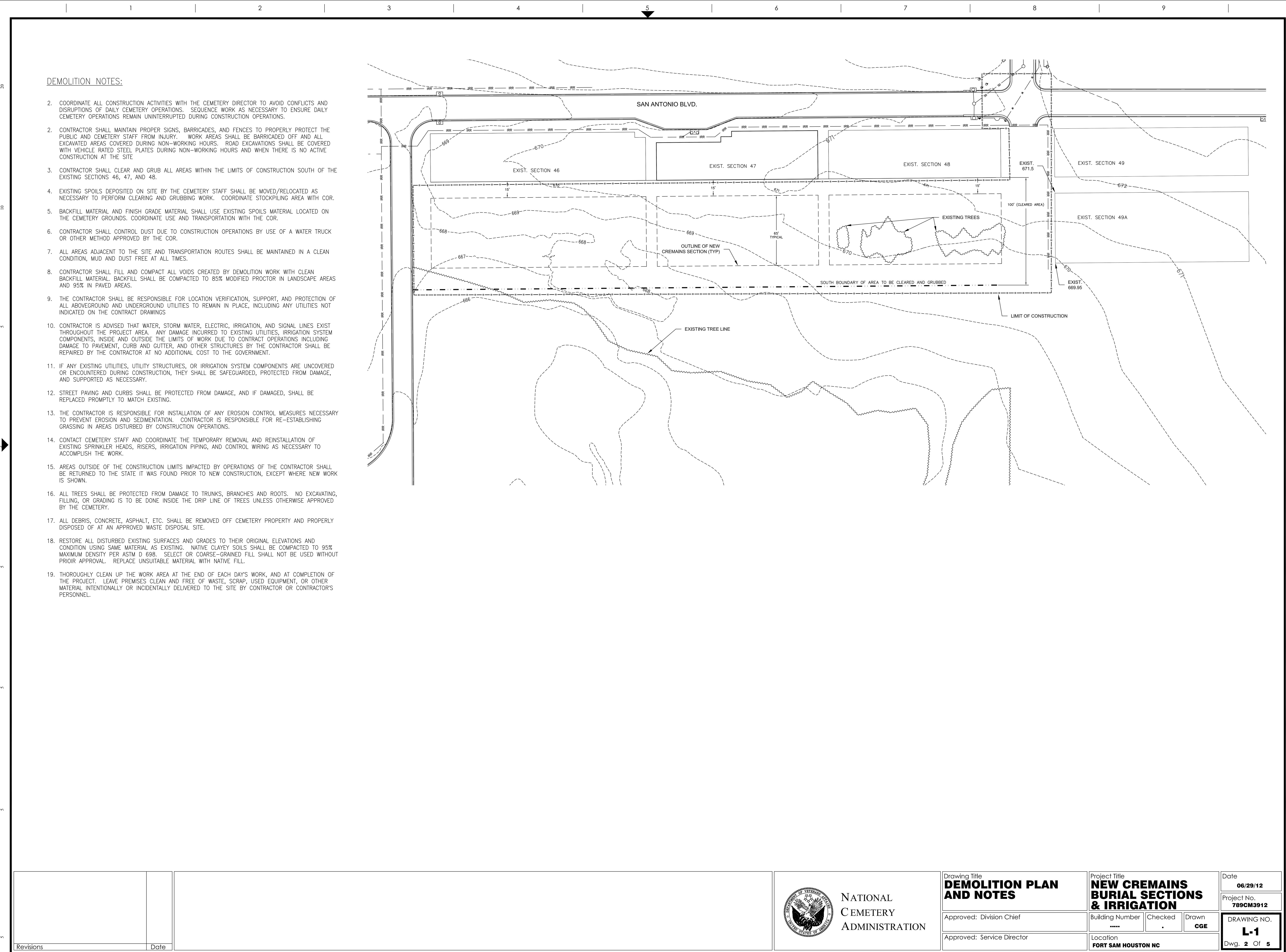
Department Of
Veterans Affairs

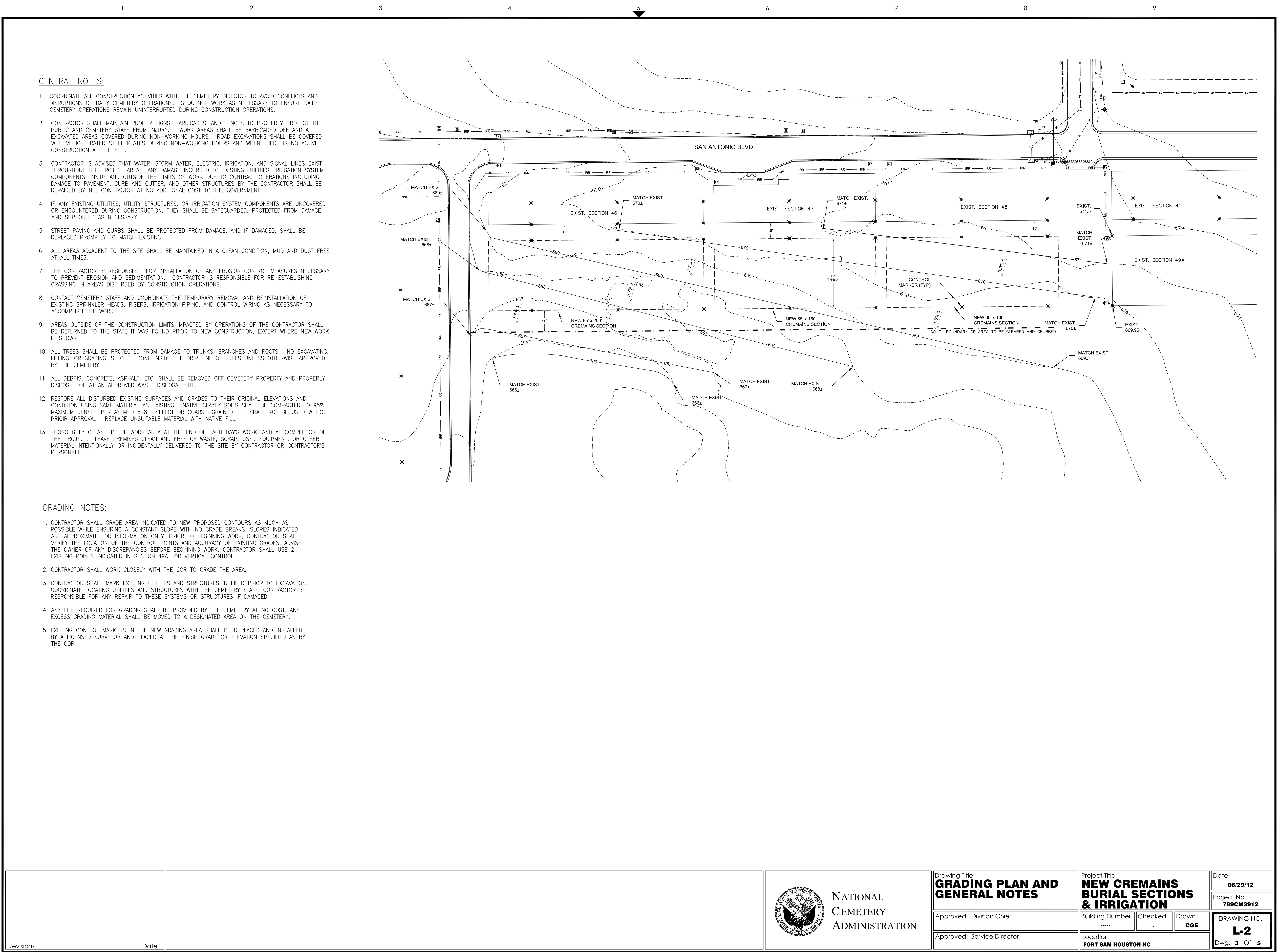
FORT SAM HOUSTON NATIONAL CEMETERY
SAN ANTONIO, TEXAS
NEW CREMAINS BURIAL SECTIONS
AND IRRIGATION

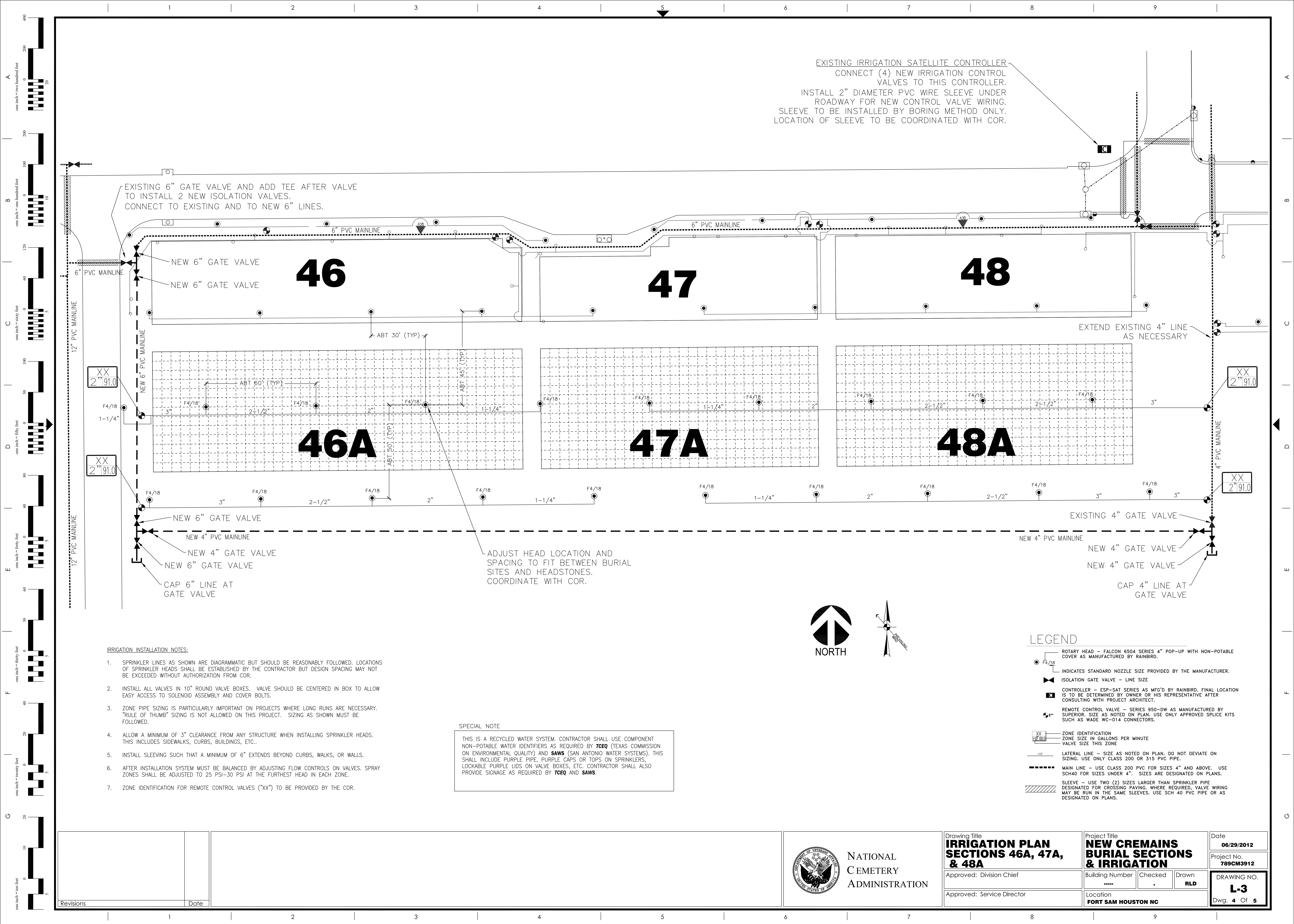
SHEET INDEX:	
X - 1	TITLE SHEET
L - 1	DEMOLITION PLAN & NOTES
L - 2	GRADING PLAN & GENERAL NOTES
L - 3	IRRIGATION PLAN - SECTIONS 46A, 47A, & 48A
L - 4	IRRIGATION DETAILS



Revisions		Date	Drawing Title COVER SHEET & SHEET INDEX		Project Title NEW CREMAINS BURIAL SECTIONS & IRRIGATION	Date 06/29/2012
Approved: Division Chief			Approved: Service Director		Building Number *****	Checked .
Approved: Service Director			Location FORT SAM HOUSTON NC		Drawn RLD	Drawing No. X-1
Dwgs. 1 Of 6						







EXISTING IRRIGATION SATELLITE CONTROLLER
CONNECT (4) NEW IRRIGATION CONTROL
VALVES TO THIS CONTROLLER.
INSTALL 2" DIAMETER PVC WIRE SLEEVE UNDER
ROADWAY FOR NEW CONTROL VALVE WIRING.
SLEEVE TO BE INSTALLED BY BORING METHOD ONLY.
LOCATION OF SLEEVE TO BE COORDINATED WITH COR.

EXISTING 6" GATE VALVE AND ADD TEE AFTER VALVE
TO INSTALL 2 NEW ISOLATION VALVES.
CONNECT TO EXISTING AND TO NEW 6" LINES.

EXTEND EXISTING 4" LINE
AS NECESSARY

ADJUST HEAD LOCATION AND
SPACING TO FIT BETWEEN BURIAL
SITES AND HEADSTONES.
COORDINATE WITH COR.

IRRIGATION INSTALLATION NOTES:


- SPRINKLER LINES AS SHOWN ARE DIAGRAMMATIC BUT SHOULD BE REASONABLY FOLLOWED. LOCATIONS OF SPRINKLER HEADS SHALL BE ESTABLISHED BY THE CONTRACTOR BUT DESIGN SPACING MAY NOT BE EXCEEDED WITHOUT AUTHORIZATION FROM COR.
- INSTALL ALL VALVES IN 10" ROUND VALVE BOXES. VALVE SHOULD BE CENTERED IN BOX TO ALLOW EASY ACCESS TO SOLENOID ASSEMBLY AND COVER BOLTS.
- ZONE PIPE SIZING IS PARTICULARLY IMPORTANT ON PROJECTS WHERE LONG RUNS ARE NECESSARY. "RULE OF THUMB" SIZING IS NOT ALLOWED ON THIS PROJECT. SIZING AS SHOWN MUST BE FOLLOWED.
- ALLOW A MINIMUM OF 3" CLEARANCE FROM ANY STRUCTURE WHEN INSTALLING SPRINKLER HEADS. THIS INCLUDES SIDEWALKS, CURBS, BUILDINGS, ETC..
- INSTALL SLEEVING SUCH THAT A MINIMUM OF 6" EXTENDS BEYOND CURBS, WALKS, OR WALLS.
- AFTER INSTALLATION SYSTEM MUST BE BALANCED BY ADJUSTING FLOW CONTROLS ON VALVES. SPRAY ZONES SHALL BE ADJUSTED TO 25 PSI-30 PSI AT THE FURTHEST HEAD IN EACH ZONE.
- ZONE IDENTIFICATION FOR REMOTE CONTROL VALVES ("XX") TO BE PROVIDED BY THE COR.

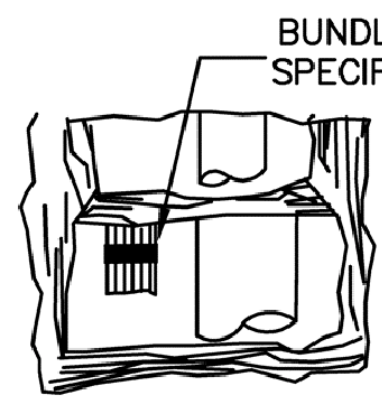
SPECIAL NOTE

THIS IS A RECYCLED WATER SYSTEM. CONTRACTOR SHALL USE COMPONENT NON-POTABLE WATER IDENTIFIERS AS REQUIRED BY **TCEQ** (TEXAS COMMISSION ON ENVIRONMENTAL QUALITY) AND **SAWS** (SAN ANTONIO WATER SYSTEMS). THIS SHALL INCLUDE PURPLE PIPE, PURPLE CAPS OR TOPS ON SPRINKLERS, LOCKABLE PURPLE LIDS ON VALVE BOXES, ETC. CONTRACTOR SHALL ALSO PROVIDE SIGNAGE AS REQUIRED BY **TCEQ** AND **SAWS**.

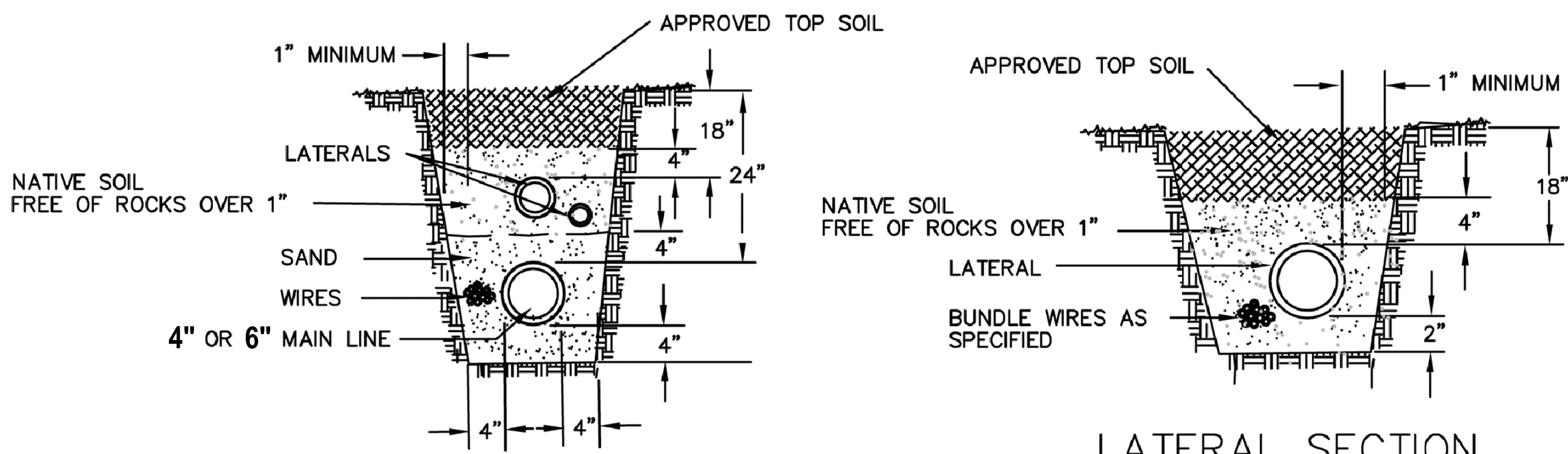
LEGEND

- ROTARY HEAD - FALCON 6504 SERIES 4" POP-UP WITH NON-POTABLE COVER AS MANUFACTURED BY RAINBIRD.
- INDICATES STANDARD NOZZLE SIZE PROVIDED BY THE MANUFACTURER.
- ISOLATION GATE VALVE - LINE SIZE
- CONTROLLER - ESP-SAT SERIES AS MFG'D BY RAINBIRD. FINAL LOCATION IS TO BE DETERMINED BY OWNER OR HIS REPRESENTATIVE AFTER CONSULTING WITH PROJECT ARCHITECT.
- REMOTE CONTROL VALVE - SERIES 950-DW AS MANUFACTURED BY SUPERIOR. SIZE AS NOTED ON PLAN. USE ONLY APPROVED SPLICE KITS SUCH AS WADE WC-014 CONNECTORS.
- ZONE IDENTIFICATION
ZONE SIZE IN GALLONS PER MINUTE
VALVE SIZE THIS ZONE
- LATERAL LINE - SIZE AS NOTED ON PLAN. DO NOT DEVIATE ON SIZING. USE ONLY CLASS 200 OR 315 PVC PIPE.
- MAIN LINE - USE CLASS 200 PVC FOR SIZES 4" AND ABOVE. USE SCH40 FOR SIZES UNDER 4". SIZES ARE DESIGNATED ON PLANS.
- SLEEVE - USE TWO (2) SIZES LARGER THAN SPRINKLER PIPE DESIGNATED FOR CROSSING PAVING. WHERE REQUIRED, VALVE WIRING MAY BE RUN IN THE SAME SLEEVES. USE SCH 40 PVC PIPE OR AS DESIGNATED ON PLANS.

		 <div>NATIONAL CEMETERY ADMINISTRATION</div>	Drawing Title IRRIGATION PLAN SECTIONS 46A, 47A, & 48A		Project Title NEW CREMAINS BURIAL SECTIONS & IRRIGATION		Date 06/29/2012	
			Approved: Division Chief	Building Number ----	Checked .	Drawn RLD	Project No. 789CM3912	
			Approved: Service Director	Location FORT SAM HOUSTON NC				<div>DRAWING NO. L-3</div> Dwg. 4 Of 5
Revisions								
Date								

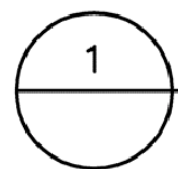


PLAN



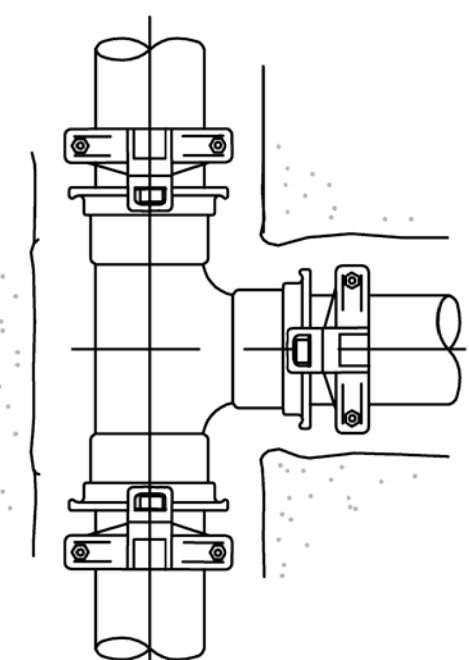
FEEDER MAIN & LATERAL SECTION

LATERAL SECTION

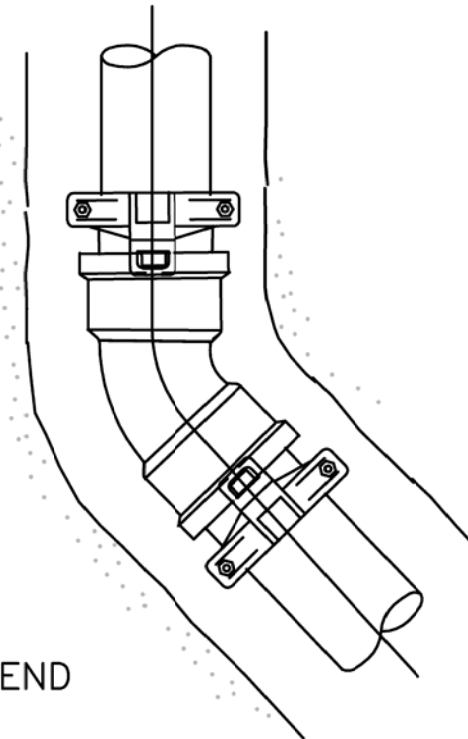


TYPICAL TRENCH DETAILS

SCALE: N.T.S.

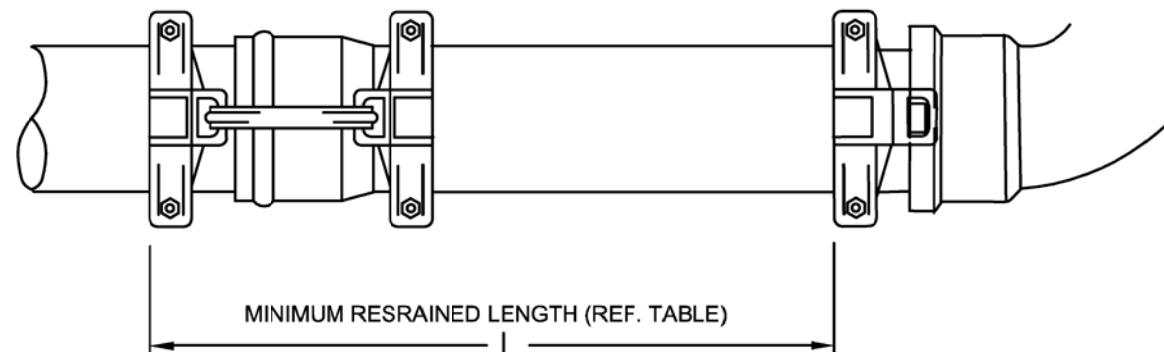


HORIZONTAL TEE
PLAN VIEW

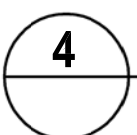


HORIZONTAL BEND
PLAN VIEW

NOTE:
FOR JOINT DEFLECTIONS LESS THAN 5 DEGREES, NO HORIZ.
OR VERTICAL THRUST RESTRAINT IS REQUIRED.



BELL-SPIGOT JOINT REQUIREMENTS



JOINT RESTRAINTS INSTALLATION DETAILS

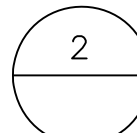
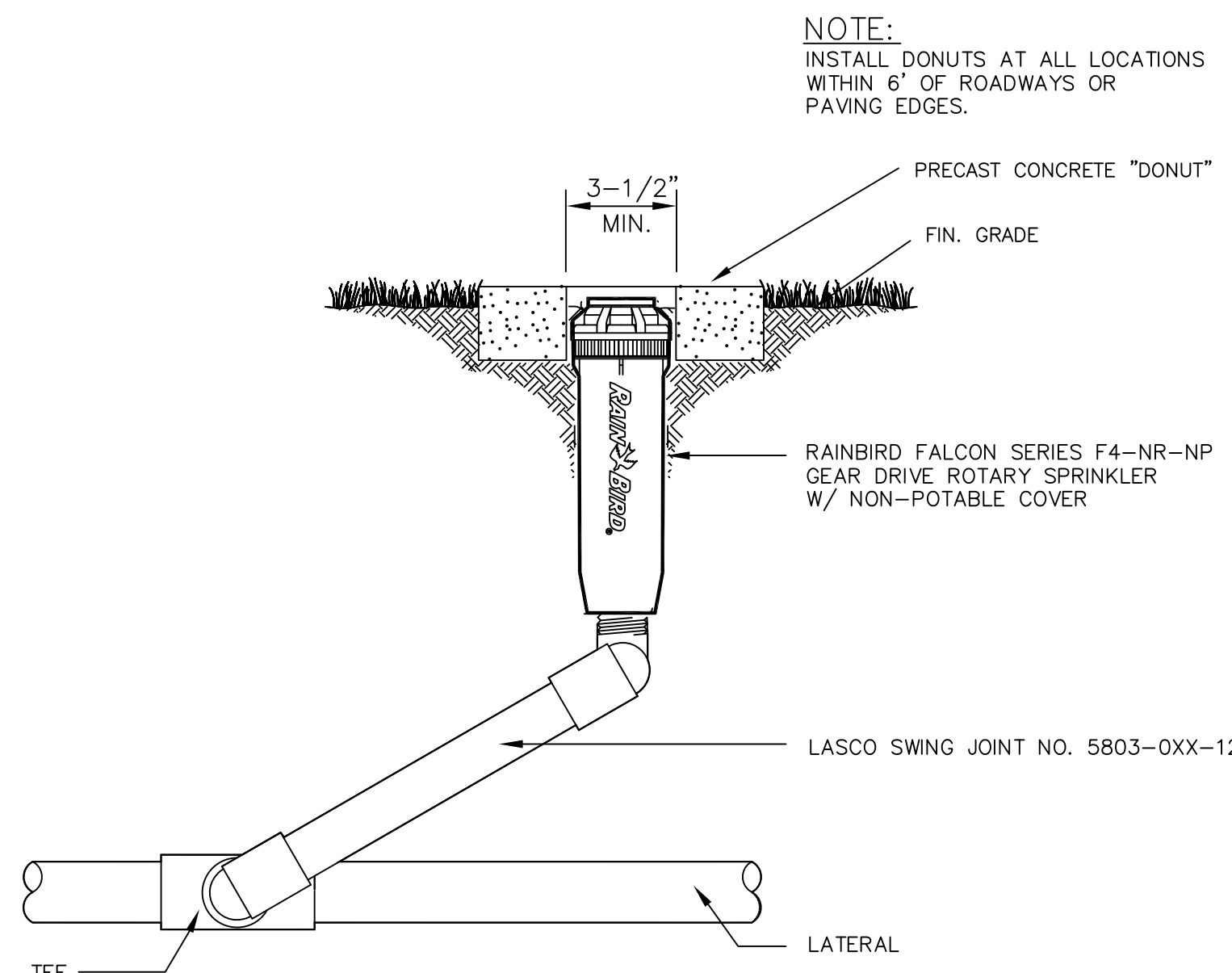
SCALE: N.T.S.

TABLE OF THRUST RESTRAINT LENGHTS (L) FOR SLIP JOINT PIPE (150psi WORKING + 50% SURGE = 225psi)								
SIZE	EBAA MODEL #	MINIMUM RESTRAINED LENGTH (FEET)						
		11'	22'	45'	90'	1D	2D	DE
4"	2000PV	2	3	7	16	11	16	36
6"	2000PV	2	5	10	23	24	32	50
8"	2000PV	3	6	12	30	26	44	66
10"	2000PV	4	7	15	36	26	45	80
12"	2000PV	4	8	17	42	36	45	94

NOTE: 1D REFERS TO REDUCTION ONE SIZE DOWN (SUCH AS 4X3, 12X10)
2D REFERS TO REDUCTION TWO SIZED DOWN (SUCH AS 4X2, 12X8)
DE IS A CAPPED END (FOR A CAP, PLUG OR A GATE VALVE).

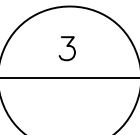
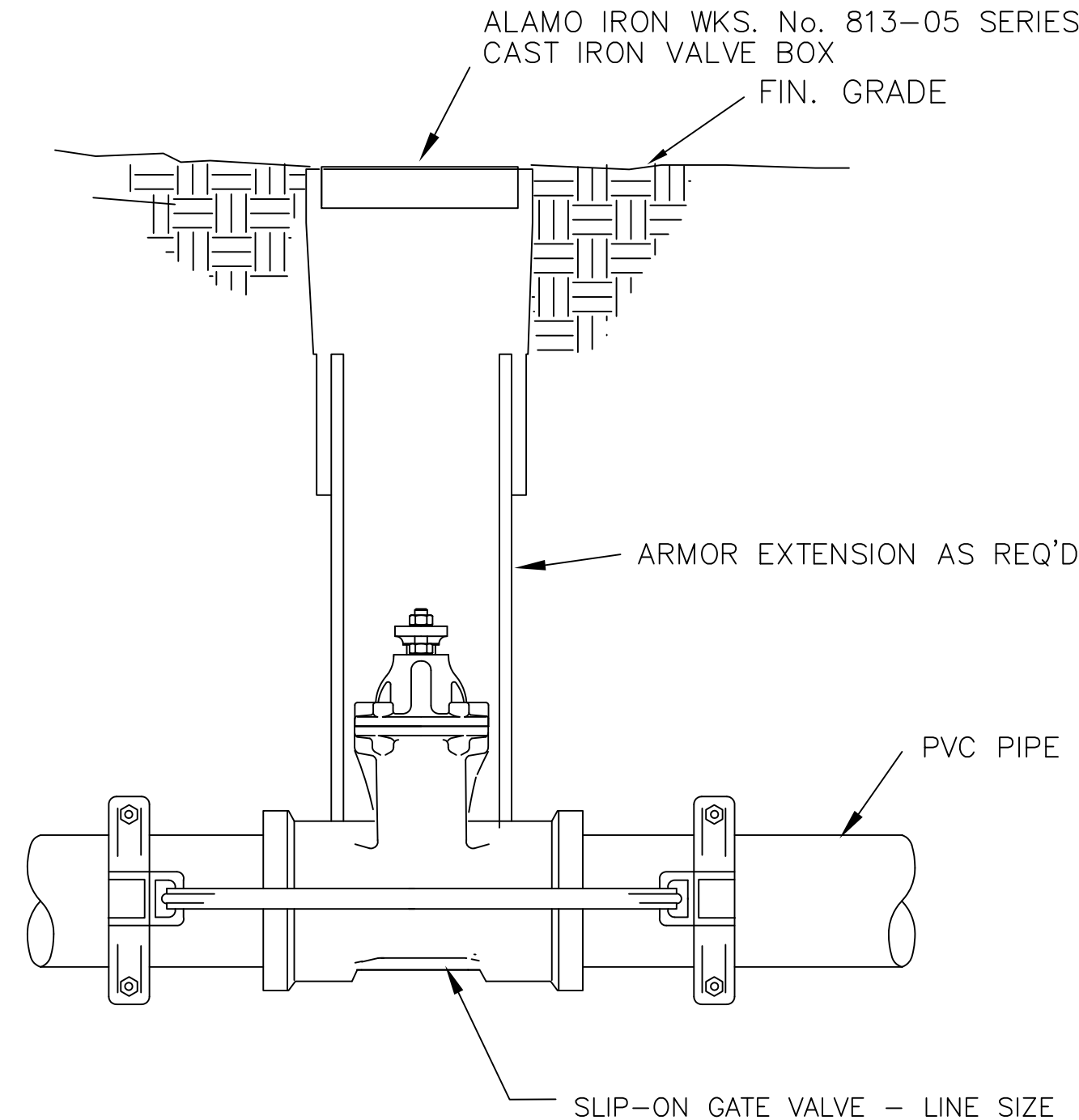
THRUST RESTRAINT NOTES:

NOTE: ALL PVC PIPE IN THIS PROJECT SHALL BE PURPLE PIPE
OR OTHER APPROVED METHOD OF IDENTIFICATION AS
NON-POTABLE WATER APPLICATION.



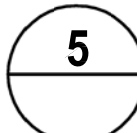
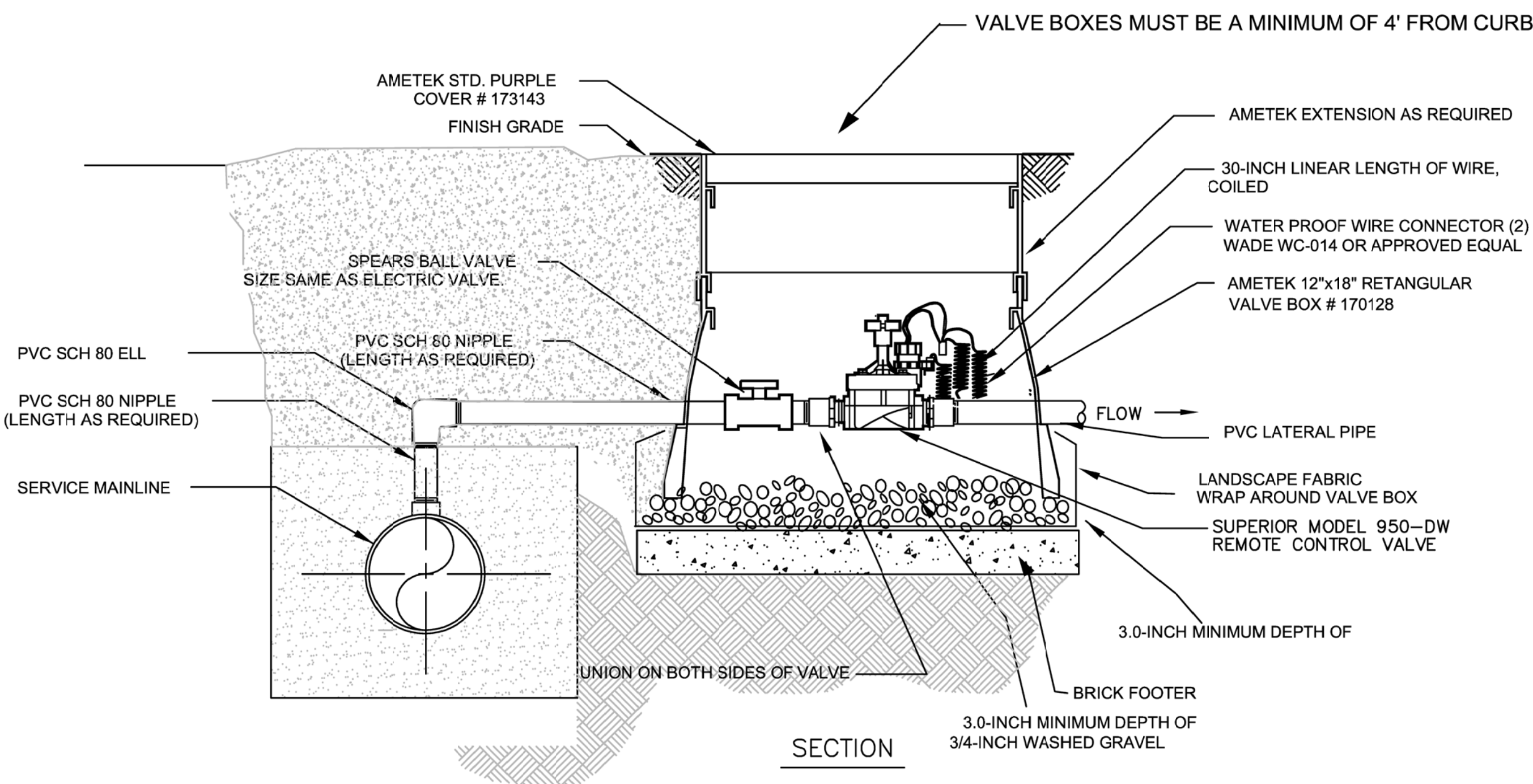
TYPICAL GEAR ROTARY TURF HEAD

SCALE: N.T.S.



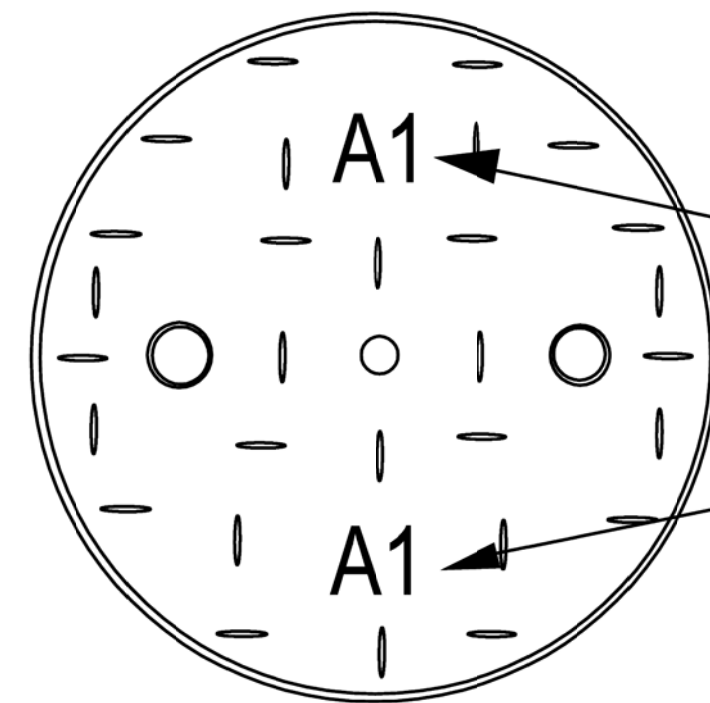
ISOLATION VALVE DETAIL

SCALE: N.T.S.

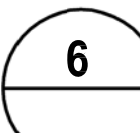


ELECTRIC VALVE INSTALLATION AT SERVICE MAINLINE

NOT TO SCALE



HOT BRAND TWO 3" HIGH, $\frac{3}{16}$ " WIDE AND $\frac{3}{16}$ "
DEEP LABELS DESIGNATING CONTROLLER
LETTER AND STATION NUMBER. USE MV
FOR MASTER VALVE. REFERENCE
SPECIFICATIONS.



HOT BRANDING VALVE BOX LID

NOT TO SCALE

Revisions	Date



NATIONAL
CEMETERY
ADMINISTRATION

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DRAWING NO. L-4		Dwg. 5 Of 5