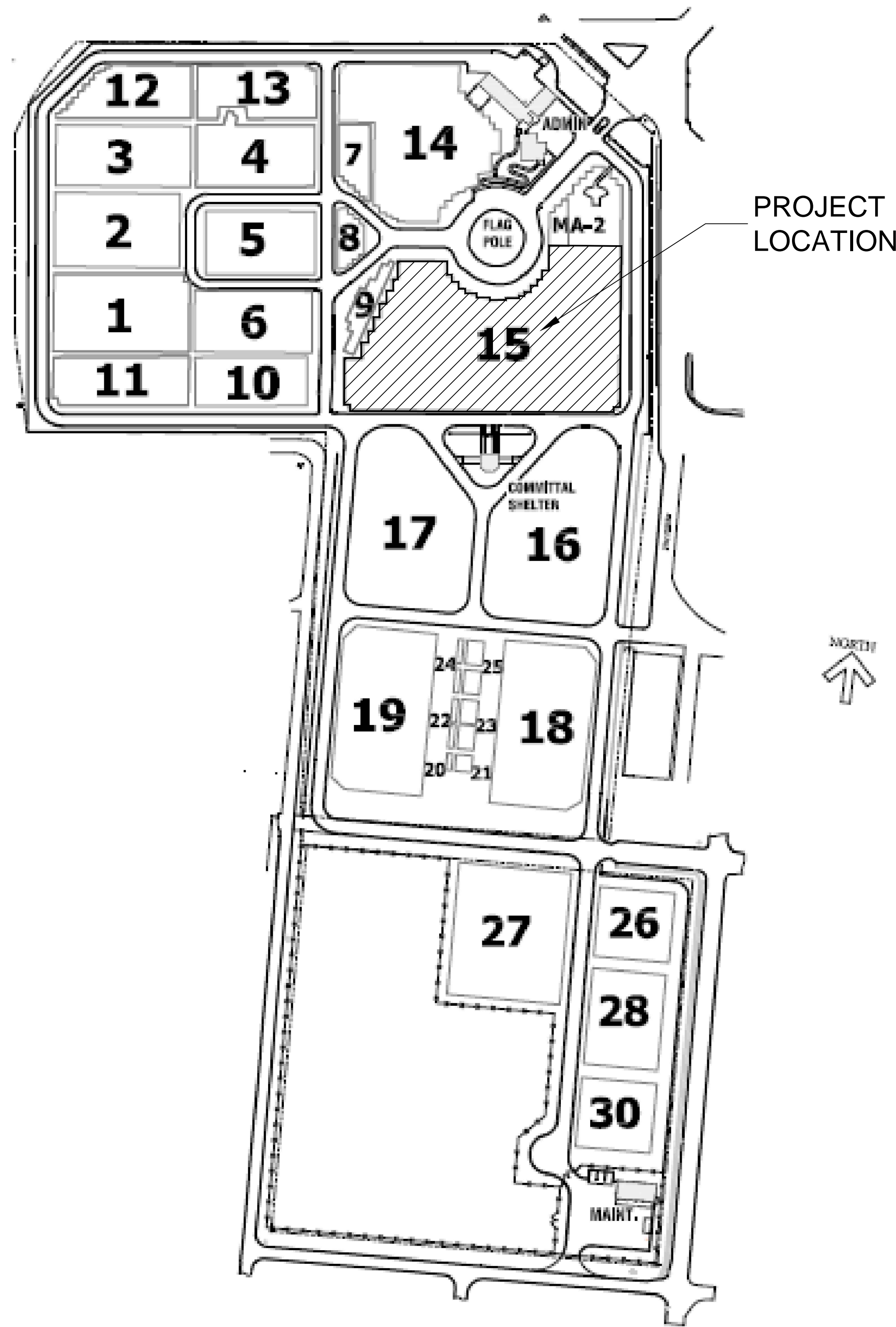
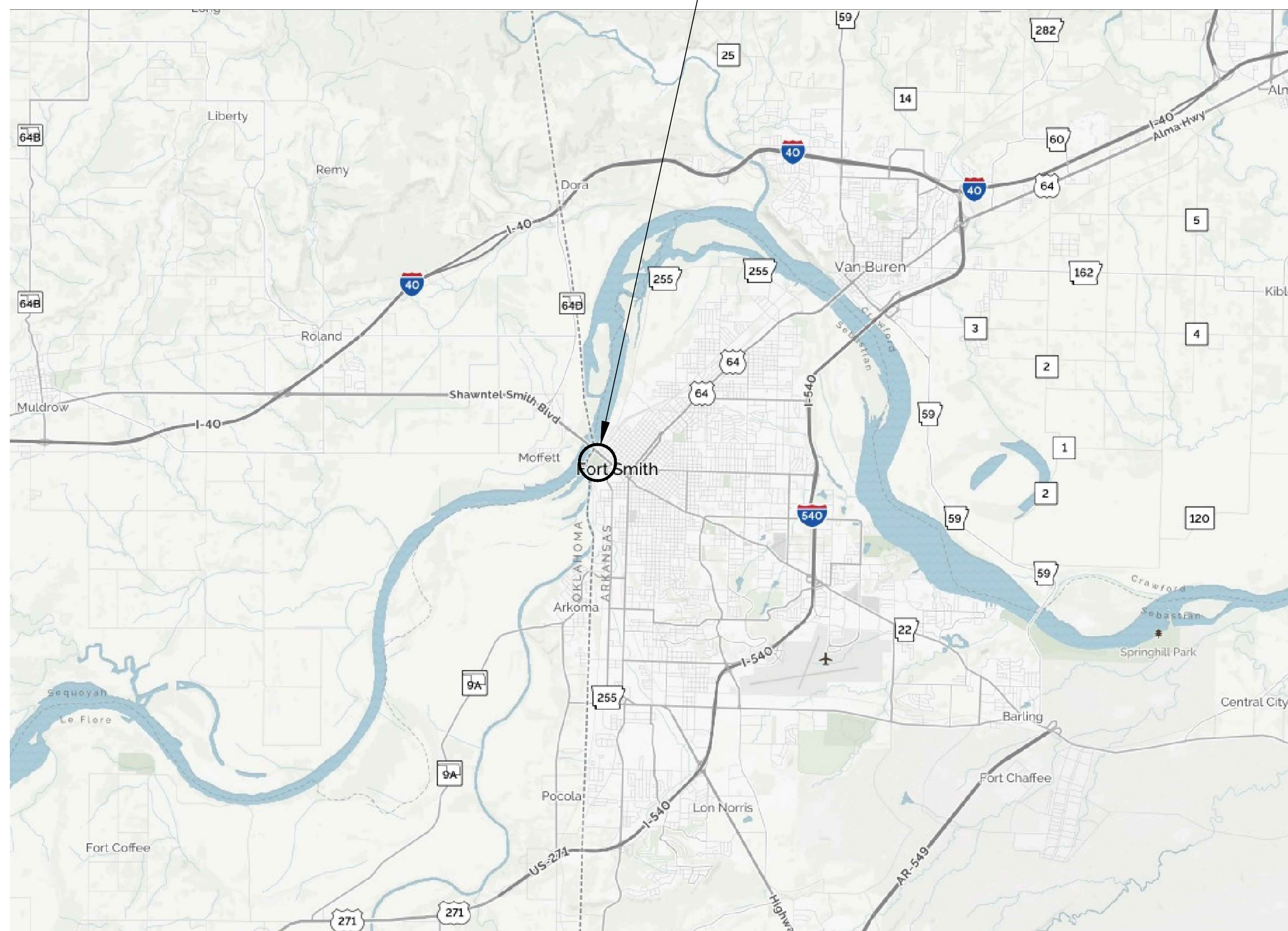


# Department Of Veterans Affairs

## FORT SMITH NATIONAL CEMETERY FORT SMITH, ARKANSAS

### HEADSTONE RAISE AND REALIGN ON CONCRETE BEAM SYSTEM [FY17 NATIONAL SHRINE PROJECT]

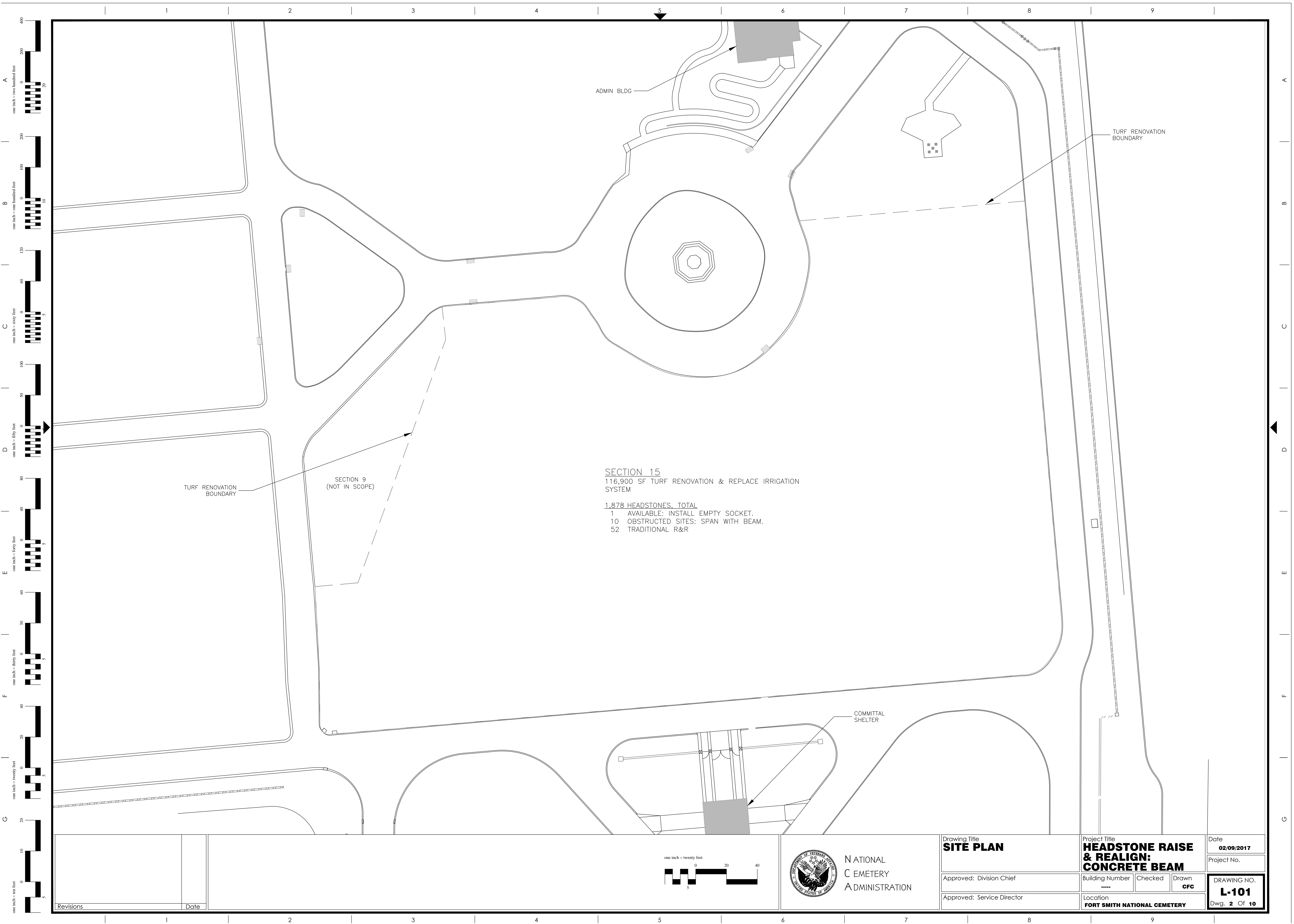


#### SHEET INDEX:

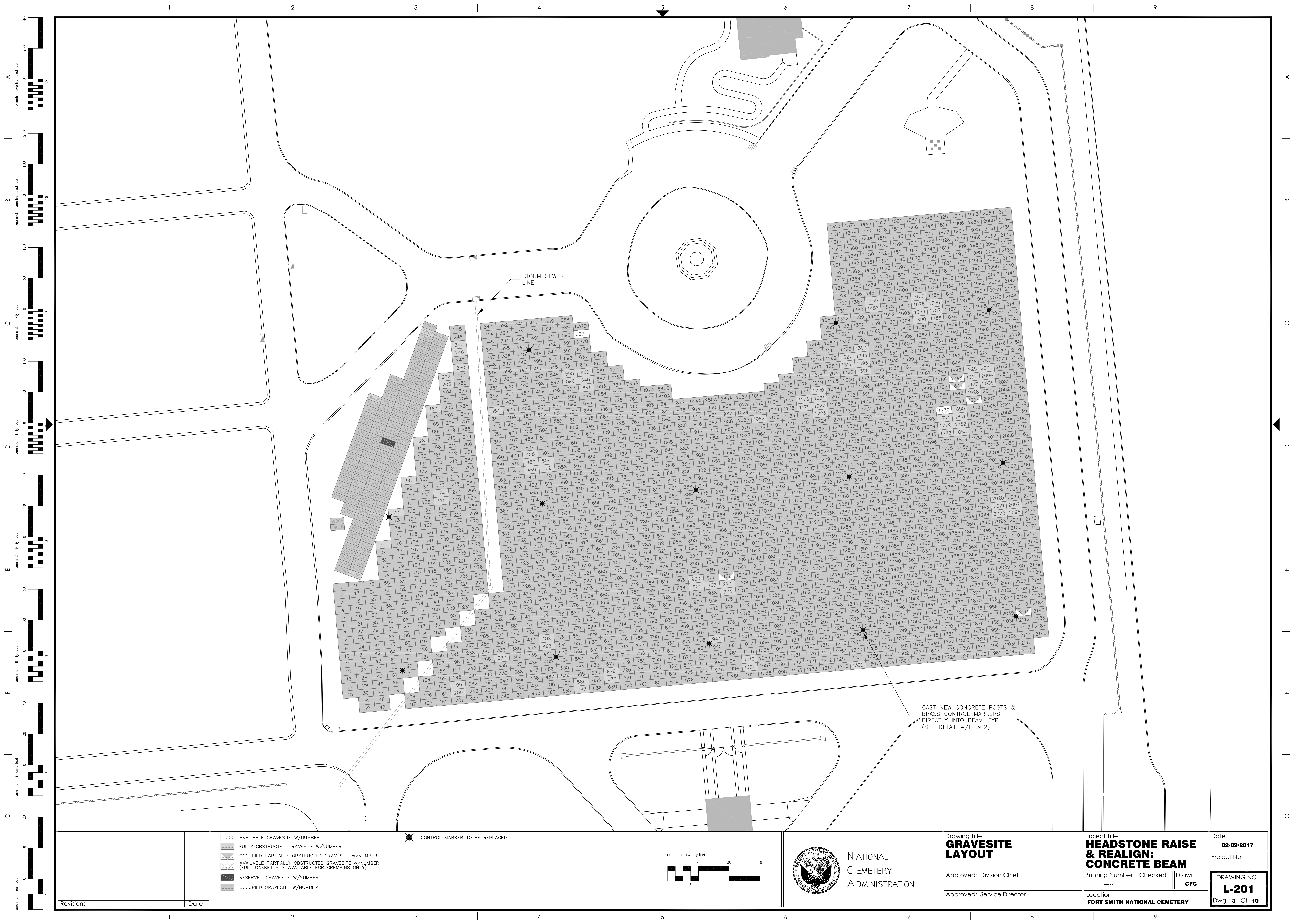
X-101	TITLE SHEET
L-101	SITE PLAN
L-201	GRAVESITE LAYOUT
L-300	CIVIL NOTES
L-301	CONCRETE BEAM LAYOUT
L-302	CIVIL DETAILS
L-303	DETAILED BEAM SECTIONS
D-101	IRRIGATION DEMO PLAN
I-101	IRRIGATION LAYOUT
I-201	IRRIGATION DETAILS

						NATIONAL CEMETERY ADMINISTRATION		Drawing Title <b>COVER SHEET &amp; SHEET INDEX</b>		Project Title <b>HEADSTONE RAISE &amp; REALIGN: CONCRETE BEAM</b>		Date <b>02/09/2017</b>	
								Approved: Division Chief		Building Number *****		Checked	
								Approved: Service Director		Location <b>FORT SMITH NATIONAL CEMETERY</b>		DRAWING NO. <b>X-101</b>	
Revisions		Date										Dwg. 1 Of 10	









Revisions	Date

- 0000

AVAILABLE GRAVESITE W/NUMBER
- 0000

FULLY OBSTRUCTED GRAVESITE W/NUMBER
- 0000

OCCUPIED PARTIALLY OBSTRUCTED GRAVESITE W/NUMBER
- 0000

AVAILABLE PARTIALLY OBSTRUCTED GRAVESITE W/NUMBER  
(FULL CASKET SITE AVAILABLE FOR REMAINS ONLY)
- 0000

RESERVED GRAVESITE W/NUMBER
- 0000

OCCUPIED GRAVESITE W/NUMBER

✖

CONTROL MARKER TO BE REPLACED

NATIONAL  
CEMETERY  
ADMINISTRATION

Drawing Title <b>GRAVESITE LAYOUT</b>		Project Title <b>HEADSTONE RAISE &amp; REALIGN: CONCRETE BEAM</b>		Date <b>02/09/2017</b>	
Approved: Division Chief		Building Number *****		Project No.	
Approved: Service Director		Checked CFC		DRAWING NO. <b>L-201</b>	
		Location <b>FORT SMITH NATIONAL CEMETERY</b>		Dwg. 3 Of 10	



1. PRIOR TO THE START OF ANY EXCAVATION, PERFORM A PROFESSIONAL LAND SURVEY OF THE OF EACH BURIAL SECTION. SUBMIT TO CONTRACTING OFFICER & COR FOR APPROVAL PRIOR TO BEGINNING ANY EXCAVATION.

3. AFTER REMOVING THE HEADSTONE, WIDEN THE HEADSTONE SOCKET 8" BY HAND DIGGING THE FRONT OF THE SOCKET INTO THE GRAVESITE FOR A TOTAL WIDTH OF 12". EXTEND THE TOTAL DEPTH OF THE WIDENED SOCKET TO 24". THOROUGHLY INSPECT THE EXCAVATED SOCKET FOR ANY CASKETED OR CREMATED REMAINS; IMMEDIATELY NOTIFY THE COR OF ANY POSITIVE IDENTIFICATION FOR RELOCATION BY CEMETERY STAFF. BEAMS SHALL ONLY BE INSTALLED ONCE THIS INSPECTION IS COMPLETE AND RESULTS ARE DOCUMENTED.

4. ALL EXCAVATED SOIL (SPOILS) SHALL BE REMOVED FROM THE GRAVESITE / SECTIONS WITHIN TWO HOURS. SOIL WHICH IS NOT REUSED DURING RENOVATION SHALL BE REMOVED FROM THE SITE AT THE CONTRACTOR'S EXPENSE.

6. NO BURNING OR INCINERATION OF RUBBISH WILL BE PERMITTED ON SITE.

8. THE CONTRACTOR SHALL ADHERE TO ALL GOVERNING REGULATIONS AND SHALL OBTAIN ALL NECESSARY PUBLIC AGENCY PERMITS. THE CONTRACTOR, BY USING THESE PLANS FOR THEIR WORK, AGREE TO HOLD HARMLESS ENGINEER, THEIR EMPLOYEES AND AGENTS AND AGAINST ANY AND ALL LIABILITY, CLAIMS, DAMAGES, AND THE COST OF DEFENSE ARISING OUT OF CONTRACTOR(S) PERFORMANCE OF THE WORK DESCRIBED HEREIN, BUT NOT INCLUDING THE SOLE NEGLIGENCE OF THE OWNER, HIS AGENTS, THE ENGINEER, HIS EMPLOYEES AND AGENTS.

10. CONSTRUCTION OPERATIONS SHALL BE CONDUCTED IN SUCH A WAY AS TO PREVENT TRACKING OF MUD OR SOIL ONTO PUBLIC THOROUGHFARES. AT THE END OF EACH DAY THE CONTRACTOR SHALL CLEAN UP ALL MUD OR SOIL WHICH HAS BEEN TRACKED ONTO PUBLIC AND CEMETERY STREETS.

12. PRIOR TO NEW WORK THE CONTRACTOR SHALL FIELD CHECK ALL DIMENSIONS AND ELEVATIONS AND VERIFY THE LOCATION AND ELEVATION OF EXISTING UTILITY LINES AND STRUCTURES WITHIN THE AREA OF WORK. DISCREPANCIES SHALL BE REPORTED TO THE COR IMMEDIATELY. ALL FIELD TILES ENCOUNTERED DURING EXCAVATION SHALL BE REPAIRED WHERE PRACTICABLE AND PROMPTLY REPORTED TO THE ENGINEER.

14. BEFORE EXCAVATING OVER OR ADJACENT TO ANY EXISTING UTILITIES, NOTIFY THE OWNER OF SUCH UTILITIES TO ENSURE THAT PROTECTIVE WORK WILL BE COORDINATED AND PERFORMED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE OWNER OF THE UTILITY INVOLVED. IF ANY EXISTING SERVICE LINES, UTILITIES AND UTILITY STRUCTURES WHICH ARE TO REMAIN IN SERVICE ARE UNCOVERED OR ENCOUNTERED DURING THIS OPERATION, THEY SHALL BE SAFEGUARDED, PROTECTED FROM DAMAGE AND SUPPORTED IF NECESSARY.

16. AREAS OUTSIDE THE CONSTRUCTION LIMIT LINE IMPACTED BY OPERATIONS OF THE CONTRACTOR SHALL BE RETURNED TO THE STATE IT WAS FOUND PRIOR TO NEW CONSTRUCTION, EXCEPT WHERE NEW WORK IS SHOWN.

18. CONTRACTOR SHALL ADJUST GRADES TO PROVIDE SMOOTH VERTICAL CURVES THROUGH HIGH AND LOW POINTS WITHIN THE CONFINES OF THE TURF RENOVATION AREA. PROVIDE UNIFORM SLOPES BETWEEN NEW AND EXISTING GRADES. AVOID RIDGES AND DEPRESSIONS.

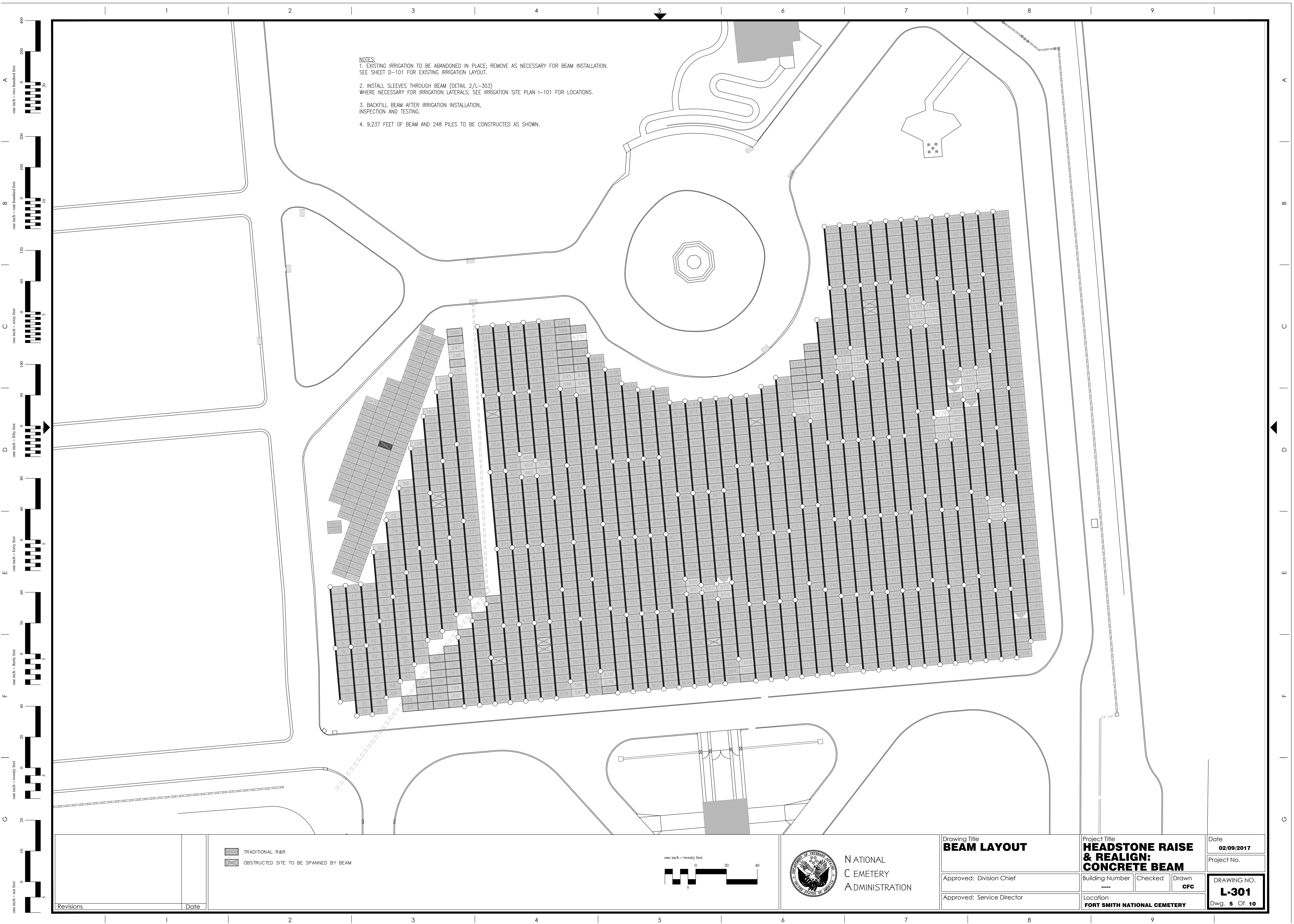
20. CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT INJURY TO ALL PLANT MATERIALS DURING DIGGING, HANDLING, PLANTING, AND MAINTENANCE OPERATIONS.

21. PHYSICAL LIMITS OF TURF WORK: NEW SOD TO BE INSTALLED TO THE FULL EXTENT OF THE SECTION OR PART THEREOF, UP TO THE BOUNDARY LIMITS AS DEFINED BY THE CURB LINES, TREE OR GARDEN EDGE, FENCE, PROPERTY LINE, OR MID-WAY BETWEEN TWO SECTIONS. SEE SPECIFICATIONS FOR GRADING, SOIL PREPARATION AND PLACING OF SOD.

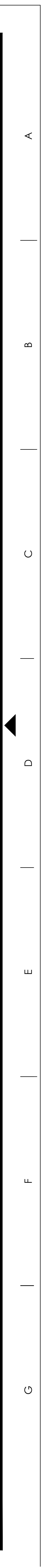
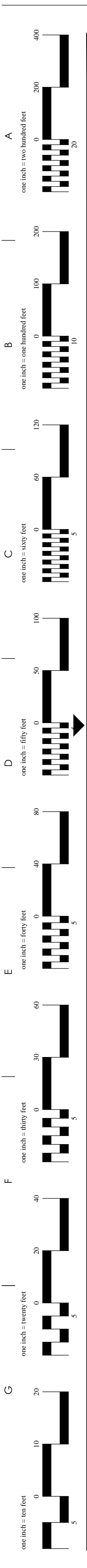
23. A TYPICAL "HEADSTONE SUPPORT ROW" INCLUDES THE HEADSTONE SUPPORT BEAM, CONCRETE PILES, THE ASSOCIATED GRAVESITES THAT PARTICULAR HEADSTONE FOOTING SUPPORTS AND THE AREA OUT TO THE TURF BOUNDARY LIMITS OF THAT PARTICULAR HEADSTONE SUPPORT ROW. SEE GRAVESITE DETAIL 1/L-303

		 NATIONAL CEMETERY ADMINISTRATION	Drawing Title <b>CIVIL NOTES</b>	Project Title <b>HEADSTONE RAISE &amp; REALIGN: CONCRETE BEAM</b>	Date <b>02/09/2017</b>	
			Approved: Division Chief	Building Number ----	Checked <input type="checkbox"/>	Drawn <b>CFC</b>
			Approved: Service Director	Location <b>FORT SMITH NATIONAL CEMETERY</b>		
			Revisions			Date



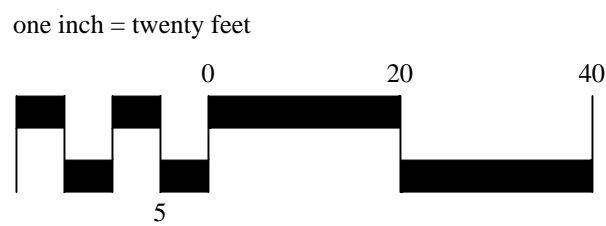


NOTES:  
1. EXISTING IRRIGATION TO BE ABANDONED IN PLACE; REMOVE AS NECESSARY FOR BEAM INSTALLATION. SEE SHEET D-101 FOR EXISTING IRRIGATION LAYOUT.  
2. INSTALL SLEEVES THROUGH BEAM (DETAIL 2/L-303) WHERE NECESSARY FOR IRRIGATION LATERALS; SEE IRRIGATION SITE PLAN I-101 FOR LOCATIONS.  
3. BACKFILL BEAM AFTER IRRIGATION INSTALLATION, INSPECTION AND TESTING.  
4. 9,237 FEET OF BEAM AND 248 PILES TO BE CONSTRUCTED AS SHOWN.



Revisions	Date

- TRADITIONAL R&R
- OBSTRUCTED SITE TO BE SPANNED BY BEAM



NATIONAL  
CEMETERY  
ADMINISTRATION

Drawing Title  
**BEAM LAYOUT**

Approved: Division Chief

Approved: Service Director

Project Title  
**HEADSTONE RAISE  
& REALIGN:  
CONCRETE BEAM**

Building Number  
\*\*\*\*\*

Checked

Drawn  
**CFC**

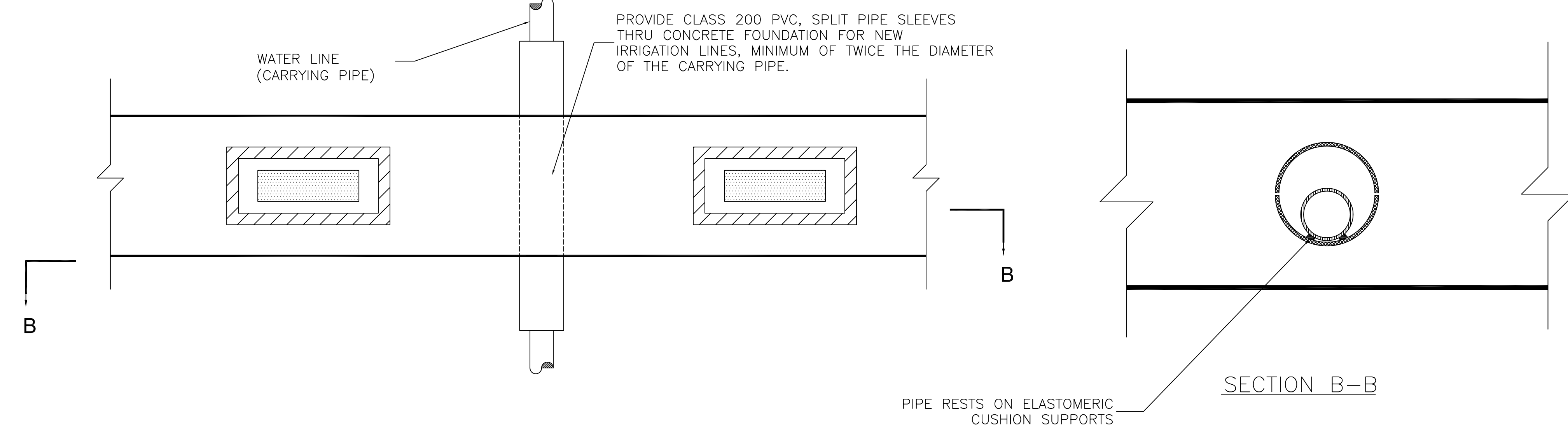
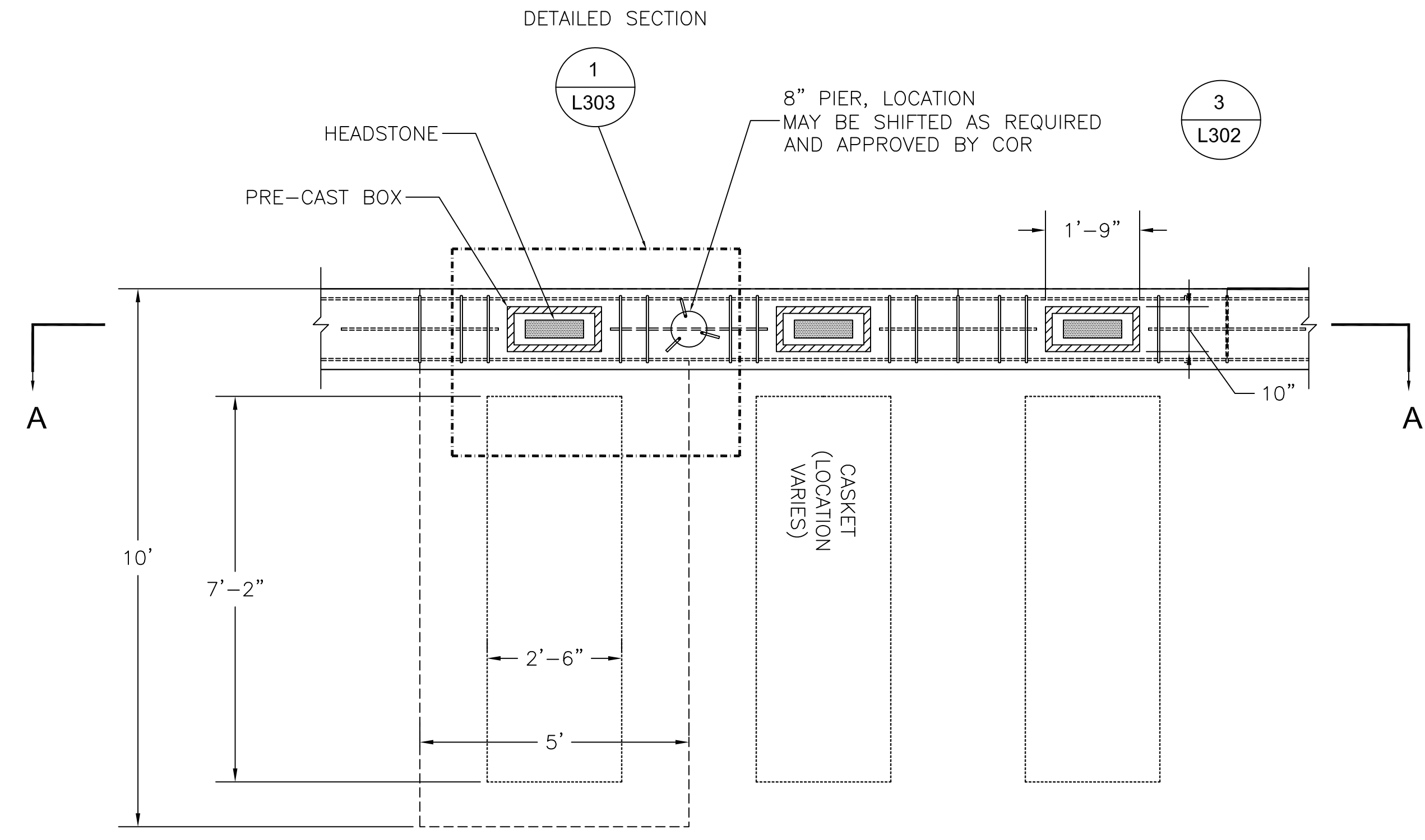
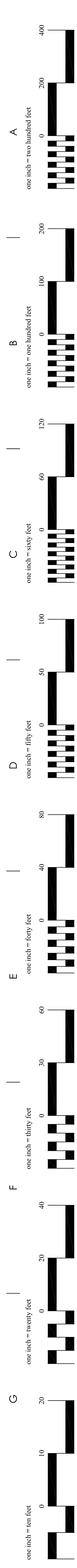
Location  
**FORT SMITH NATIONAL CEMETERY**

Date  
**02/09/2017**

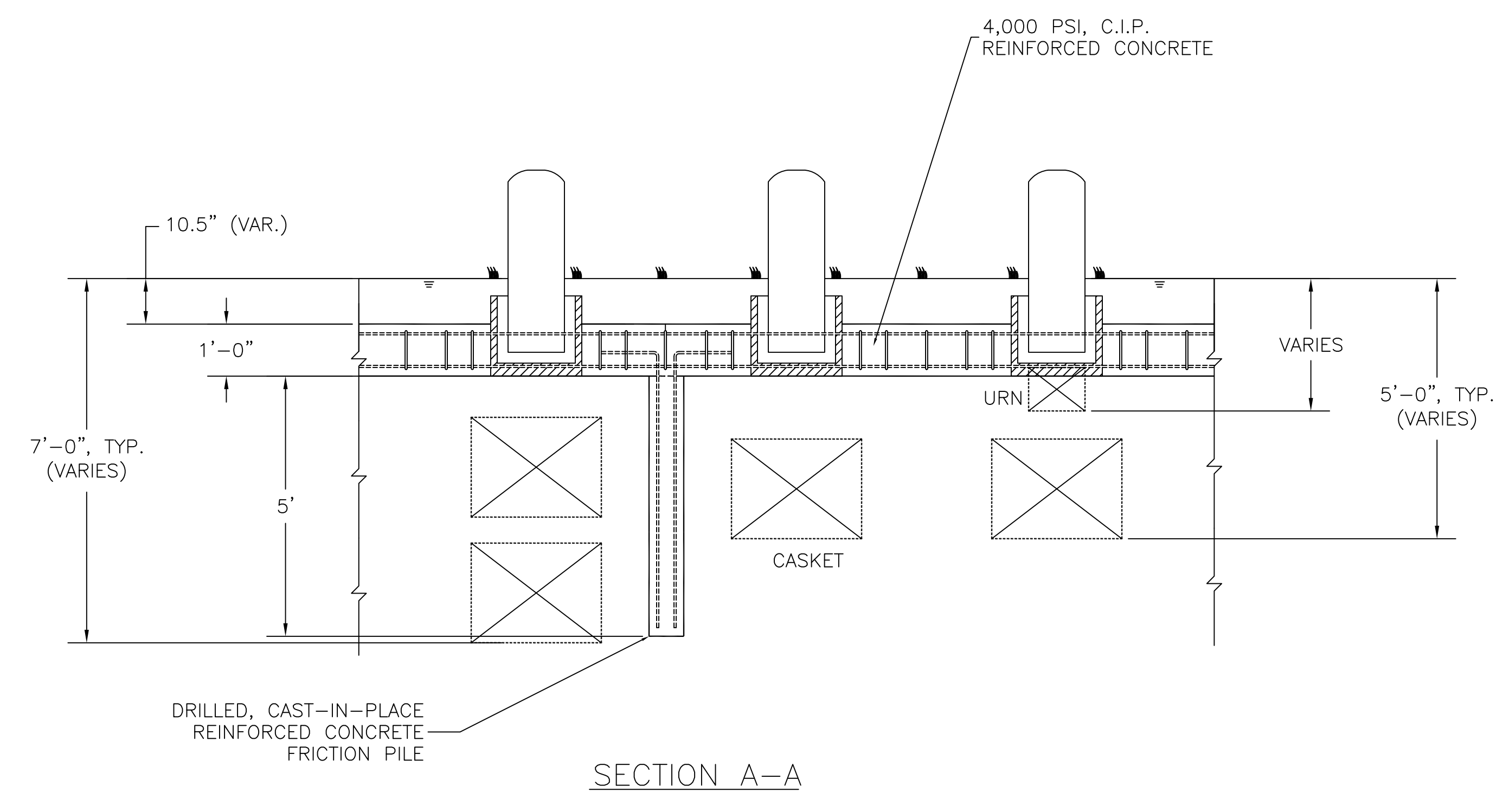
Project No.

DRAWING NO.  
**L-301**

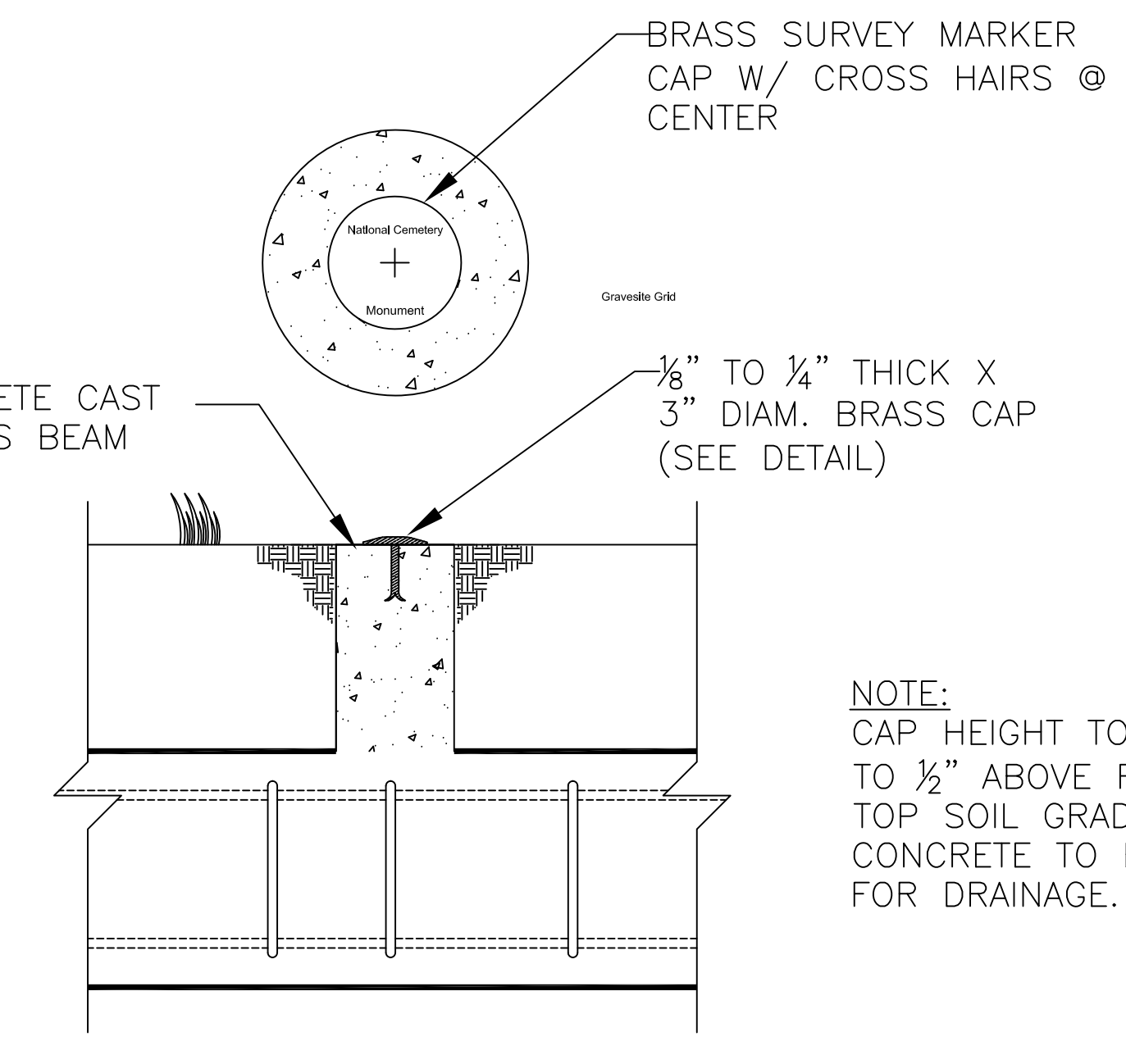
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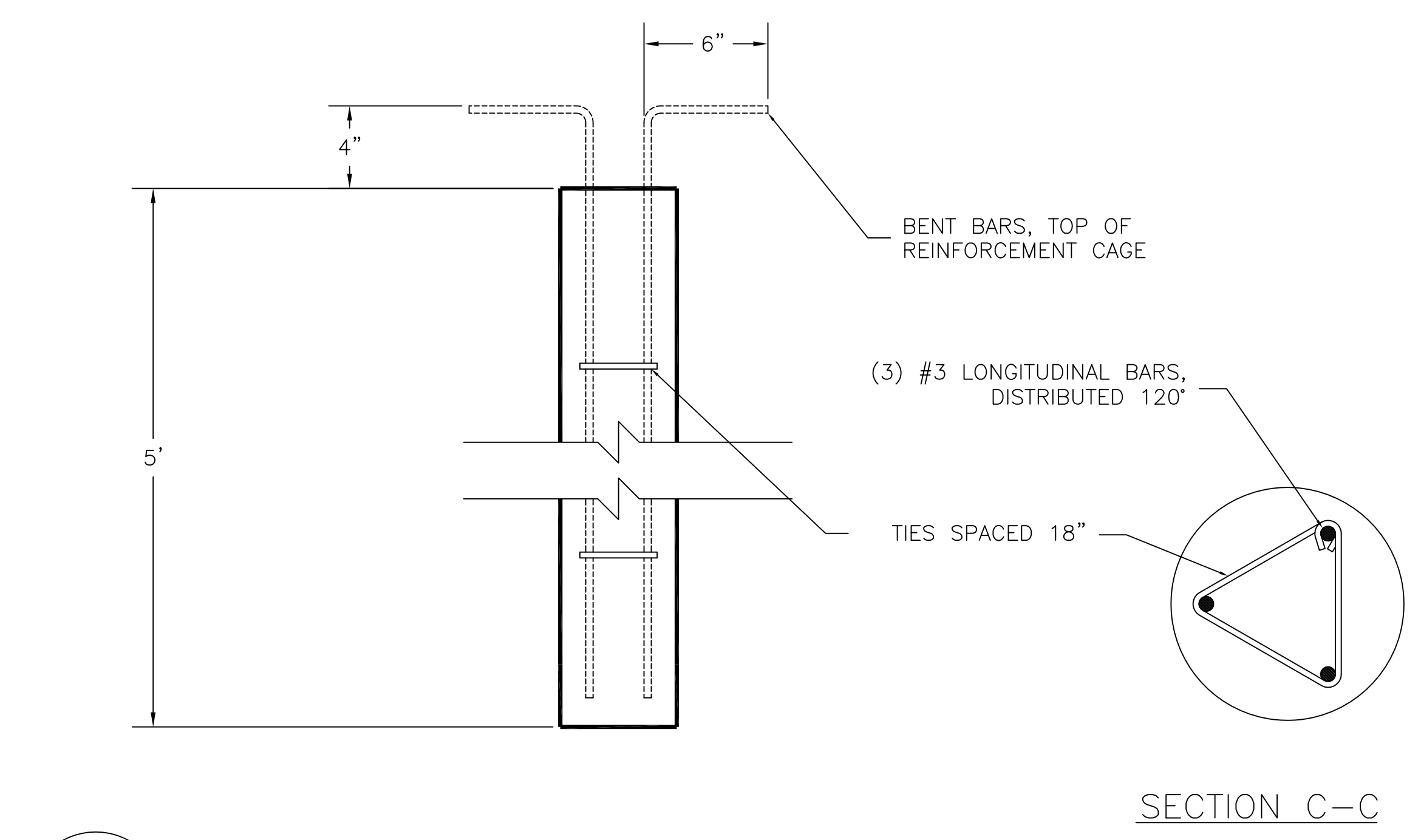
2 THRU-BEAM PIPE SLEEVE  
(NTS)



1 HEADSTONE SUPPORT BEAM  
(NTS)



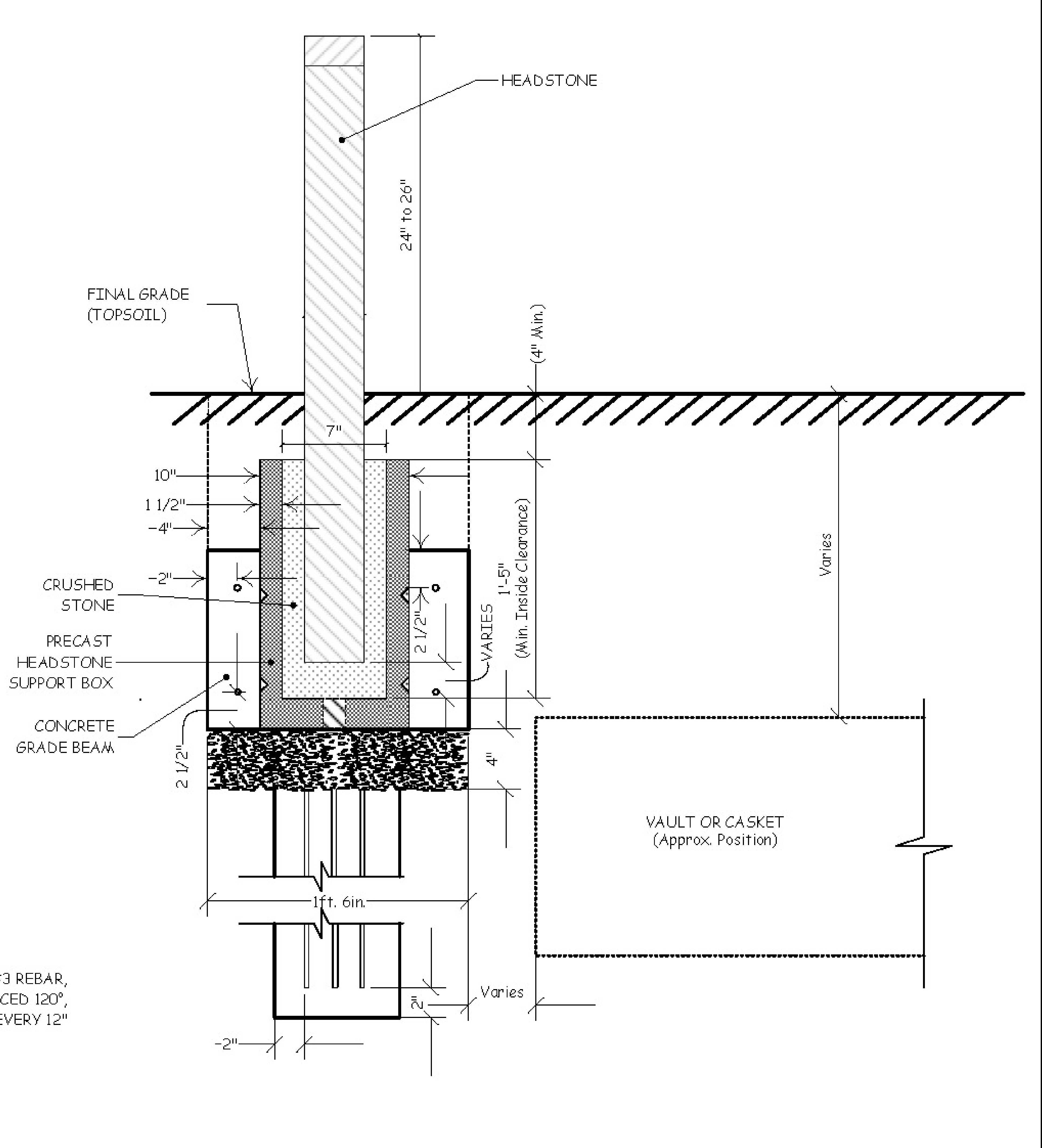
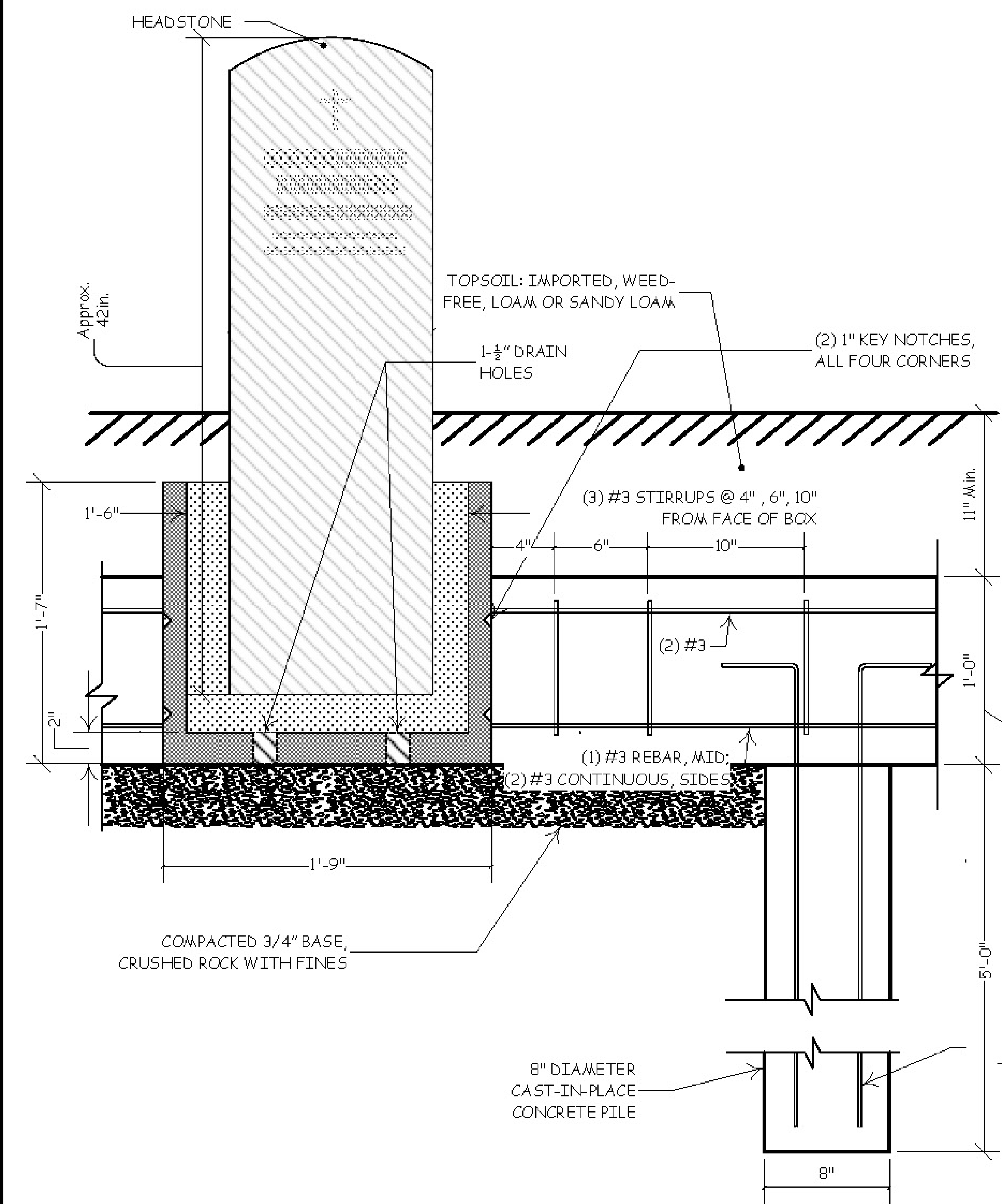
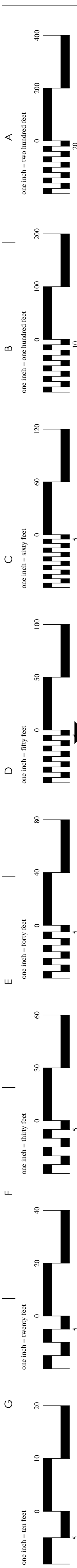
4 CONTROL MARKER IN BEAM  
(NTS)

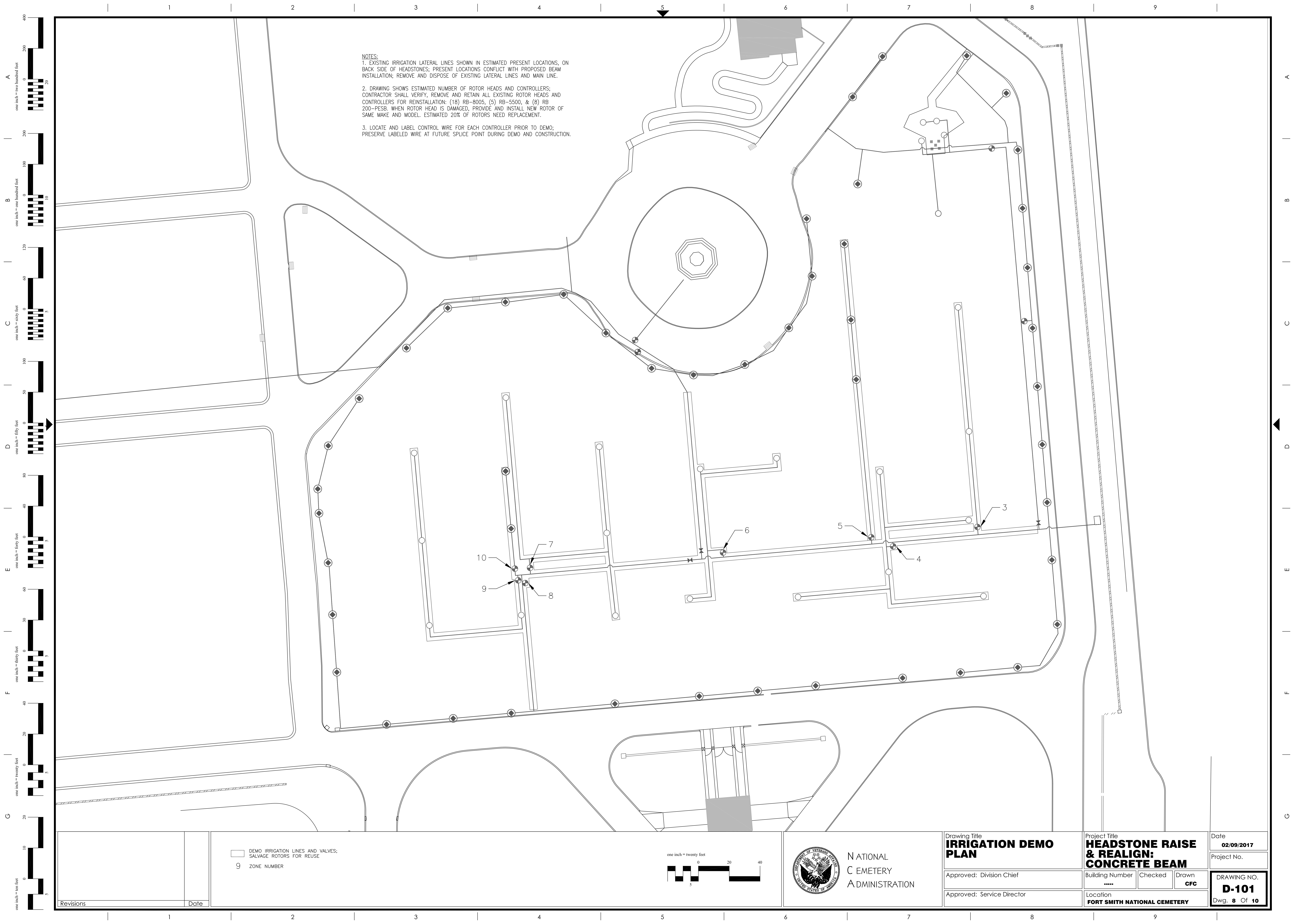


3 PILE REINFORCEMENT DETAIL  
(NTS)

Revisions		Date	NATIONAL CEMETERY ADMINISTRATION			Drawing Title <b>CIVIL DETAILS</b>		Project Title <b>HEADSTONE RAISE &amp; REALIGN: CONCRETE BEAM</b>		Date <b>02/09/2017</b>
Approved: Division Chief			Building Number ****			Checked CFC		Project No.		
Approved: Service Director			Location <b>FORT SMITH NATIONAL CEMETERY</b>			DRAWING NO. <b>L-302</b>		Dwg. 6 Of 10		







NOTES:

1. EXISTING IRRIGATION LATERAL LINES SHOWN IN ESTIMATED PRESENT LOCATIONS, ON BACK SIDE OF HEADSTONES; PRESENT LOCATIONS CONFLICT WITH PROPOSED BEAM INSTALLATION; REMOVE AND DISPOSE OF EXISTING LATERAL LINES AND MAIN LINE.

2. DRAWING SHOWS ESTIMATED NUMBER OF ROTOR HEADS AND CONTROLLERS; CONTRACTOR SHALL VERIFY, REMOVE AND RETAIN ALL EXISTING ROTOR HEADS AND CONTROLLERS FOR REINSTALLATION: (18) RB-8005, (5) RB-5500, & (8) RB 200-PESB. WHEN ROTOR HEAD IS DAMAGED, PROVIDE AND INSTALL NEW ROTOR OF SAME MAKE AND MODEL. ESTIMATED 20% OF ROTORS NEED REPLACEMENT.

3. LOCATE AND LABEL CONTROL WIRE FOR EACH CONTROLLER PRIOR TO DEMO; PRESERVE LABELED WIRE AT FUTURE SPLICE POINT DURING DEMO AND CONSTRUCTION.

DEMO IRRIGATION LINES AND VALVES;  
SALVAGE ROTORS FOR REUSE

9 ZONE NUMBER

one inch = twenty feet



NATIONAL  
CEMETERY  
ADMINISTRATION

Drawing Title  
**IRRIGATION DEMO  
PLAN**

Approved: Division Chief

Approved: Service Director

Project Title  
**HEADSTONE RAISE  
& REALIGN:  
CONCRETE BEAM**

Building Number  
\*\*\*\*\*

Checked

Drawn  
**CFC**

Location  
**FORT SMITH NATIONAL CEMETERY**

Date  
**02/09/2017**

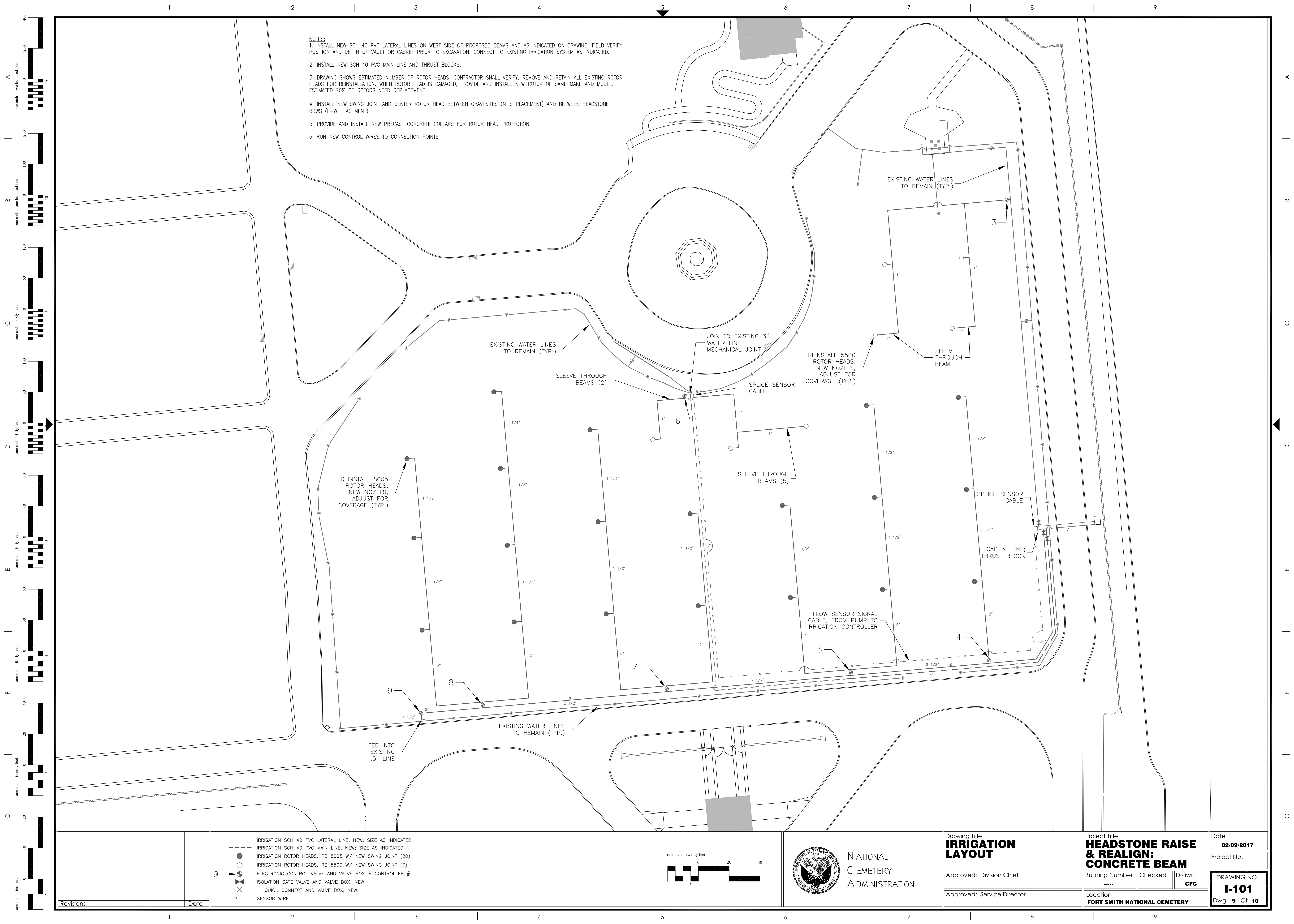
Project No.

DRAWING NO.

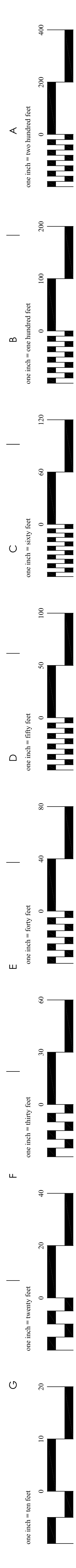
**D-101**

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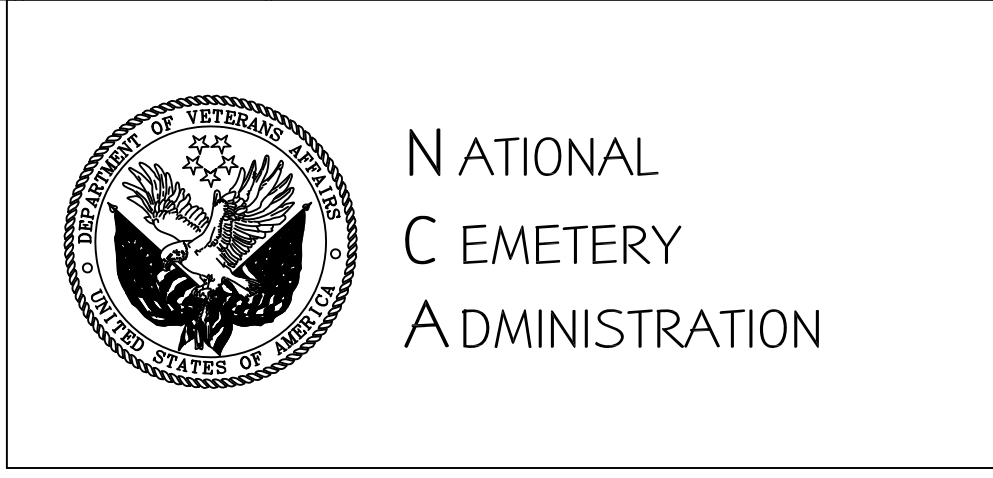
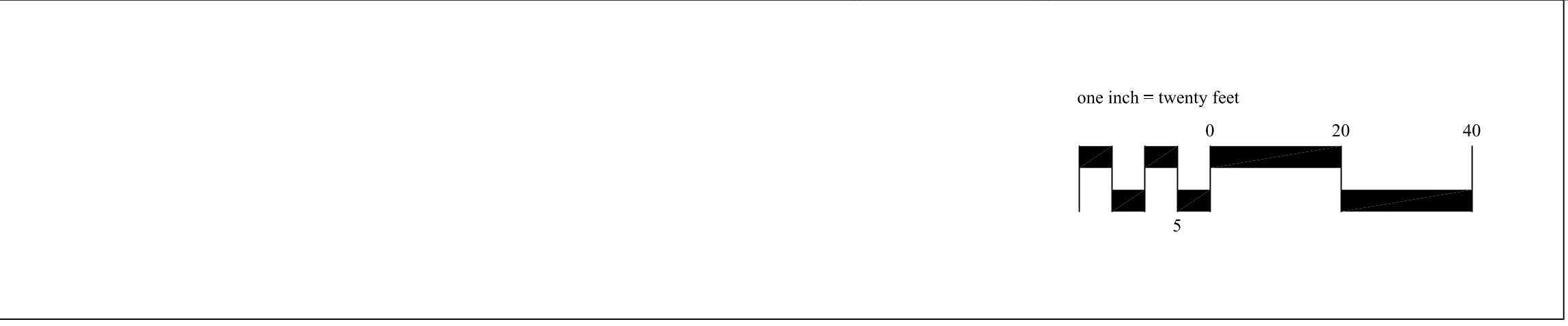


- NOTES:
1. INSTALL NEW SCH 40 PVC LATERAL LINES ON WEST SIDE OF PROPOSED BEAMS AND AS INDICATED ON DRAWING; FIELD VERIFY POSITION AND DEPTH OF VAULT OR CASKET PRIOR TO EXCAVATION. CONNECT TO EXISTING IRRIGATION SYSTEM AS INDICATED.
  2. INSTALL NEW SCH 40 PVC MAIN LINE AND THRUST BLOCKS.
  3. DRAWING SHOWS ESTIMATED NUMBER OF ROTOR HEADS; CONTRACTOR SHALL VERIFY, REMOVE AND RETAIN ALL EXISTING ROTOR HEADS FOR REINSTALLATION. WHEN ROTOR HEAD IS DAMAGED, PROVIDE AND INSTALL NEW ROTOR OF SAME MAKE AND MODEL. ESTIMATED 20% OF ROTORS NEED REPLACEMENT.
  4. INSTALL NEW SWING JOINT AND CENTER ROTOR HEAD BETWEEN GRAVESITES (N-S PLACEMENT) AND BETWEEN HEADSTONE ROWS (E-W PLACEMENT).
  5. PROVIDE AND INSTALL NEW PRECAST CONCRETE COLLARS FOR ROTOR HEAD PROTECTION.
  6. RUN NEW CONTROL WIRES TO CONNECTION POINTS



Revisions	Date

- IRRIGATION SCH 40 PVC LATERAL LINE, NEW; SIZE AS INDICATED.
- IRRIGATION SCH 40 PVC MAIN LINE, NEW; SIZE AS INDICATED.
- IRRIGATION ROTOR HEADS, RB 8005 W/ NEW SWING JOINT (20).
- IRRIGATION ROTOR HEADS, RB 5500 W/ NEW SWING JOINT (7).
- ELECTRONIC CONTROL VALVE AND VALVE BOX & CONTROLLER #
- ISOLATION GATE VALVE AND VALVE BOX, NEW.
- 1" QUICK CONNECT AND VALVE BOX, NEW.
- SENSOR WIRE

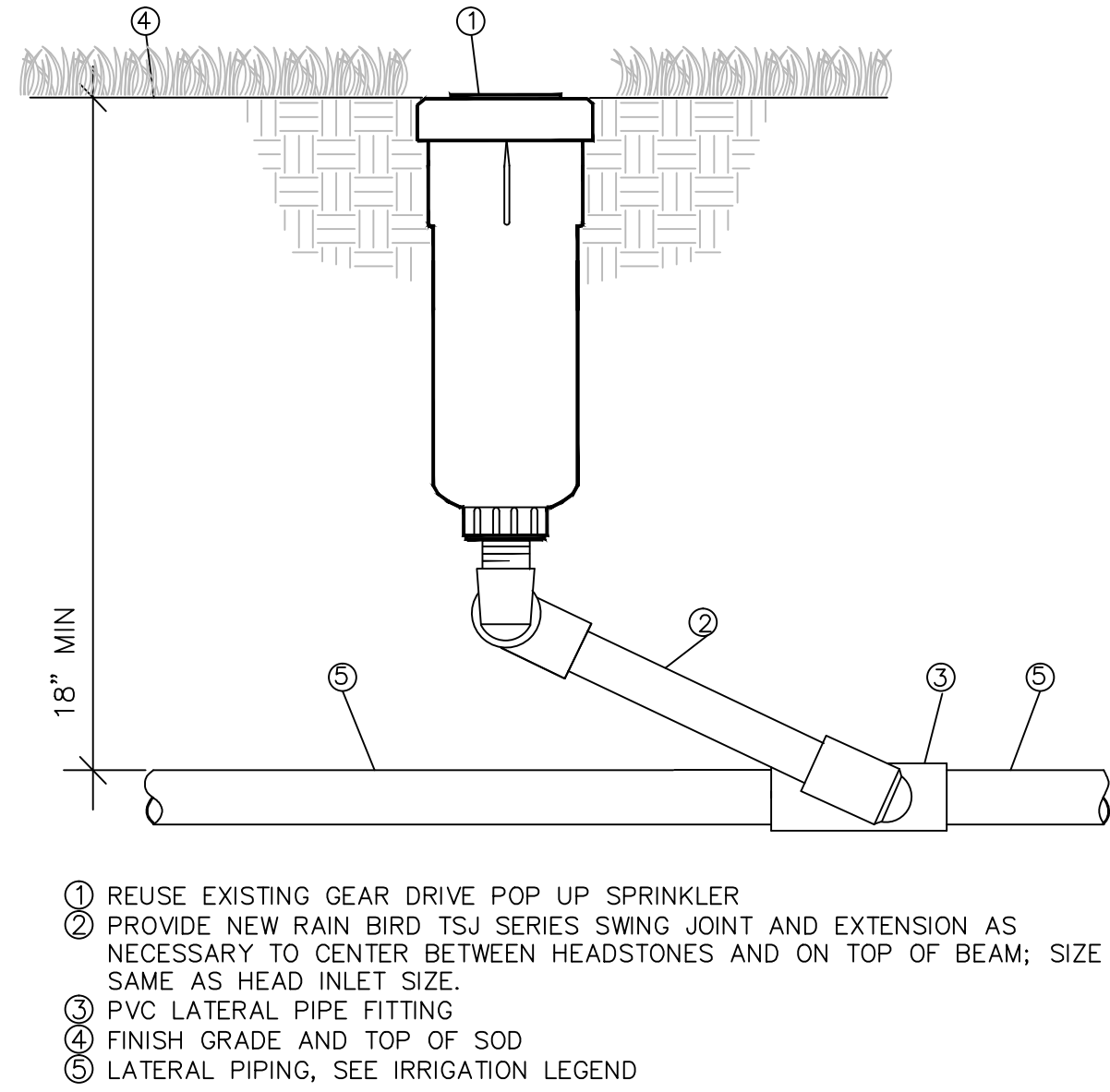
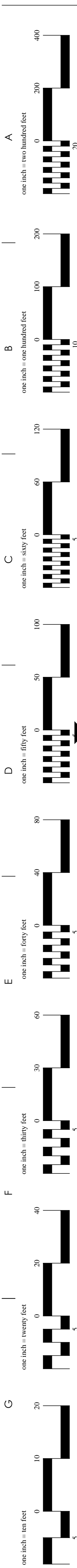


Drawing Title <b>IRRIGATION LAYOUT</b>
Approved: Division Chief
Approved: Service Director

Project Title <b>HEADSTONE RAISE &amp; REALIGN: CONCRETE BEAM</b>		
Building Number *****	Checked	Drawn <b>CFC</b>
Location <b>FORT SMITH NATIONAL CEMETERY</b>		

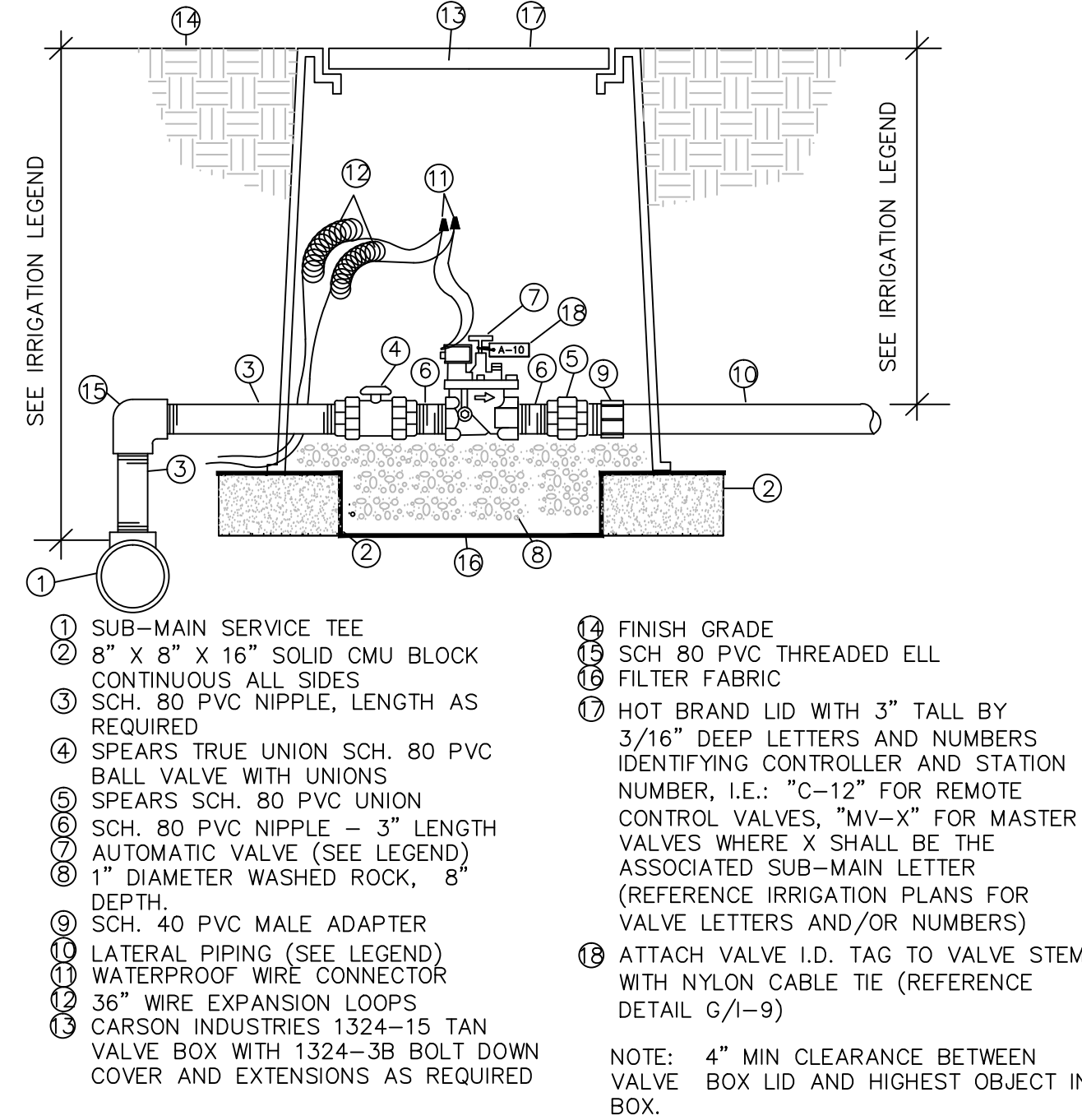
Date <b>02/09/2017</b>
Project No.
DRAWING NO. <b>I-101</b>
Dwg. 9 Of 10



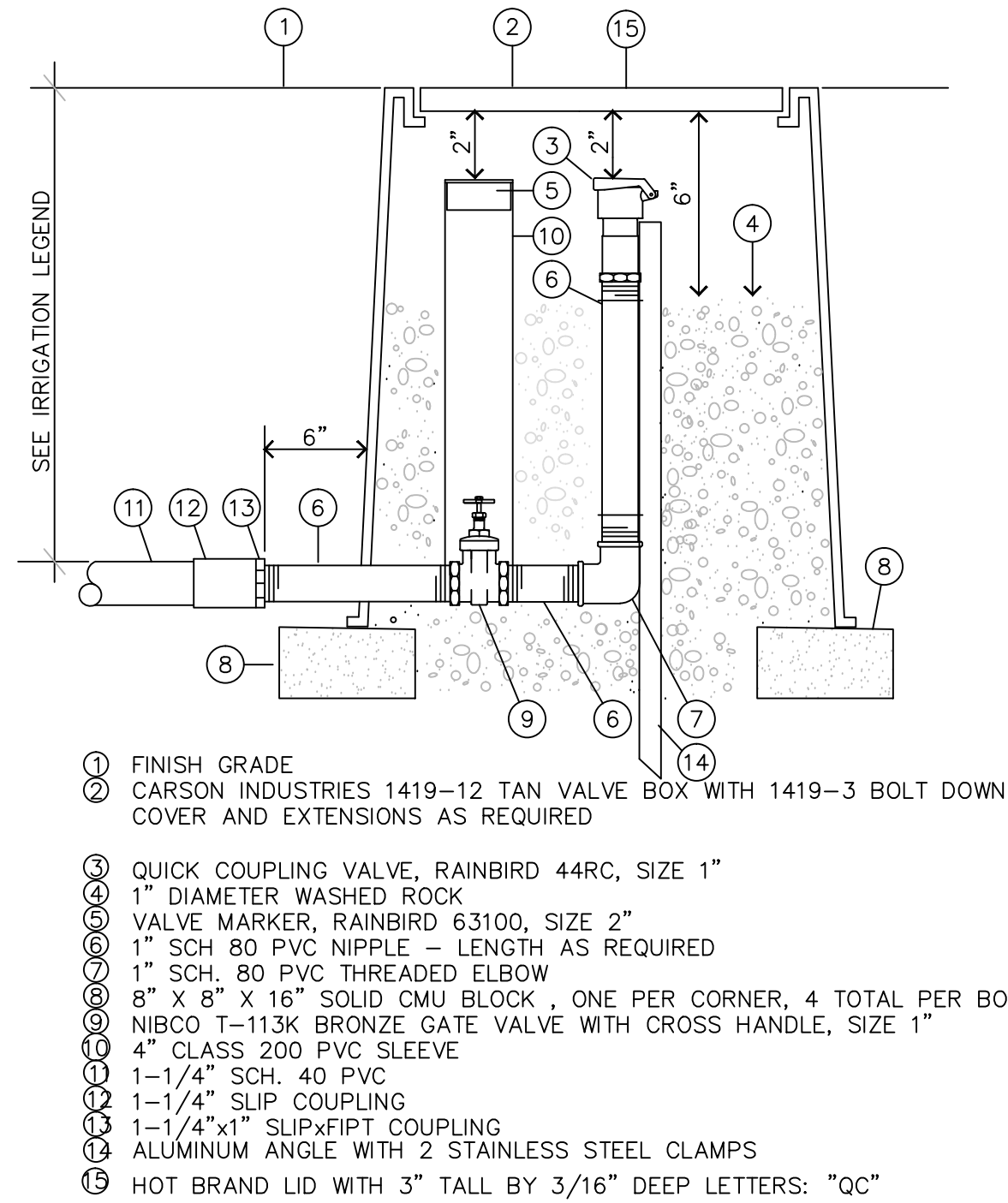


1 GEAR DRIVEN POP UP SPRINKLER ASSEMBLY  
(NTS)

NOTE: CONTRACTOR SHALL INSTALL ONE AUTOMATIC VALVE ASSEMBLY PER VALVE BOX.



2 REMOTE CONTROL VALVE ASSEMBLY  
(NTS)



3 QUICK COUPLING VALVE ASSEMBLY  
(NTS)

Revisions	Date



NATIONAL  
CEMETERY  
ADMINISTRATION

Drawing Title <b>IRRIGATION DETAILS</b>	Project Title <b>HEADSTONE RAISE &amp; REALIGN: CONCRETE BEAM</b>	Date <b>02/09/2017</b>
Approved: Division Chief	Building Number *****	Checked 
Approved: Service Director	Location <b>FORT SMITH NATIONAL CEMETERY</b>	Drawn <b>CFC</b>
Dwgs. 10 Of 10		



