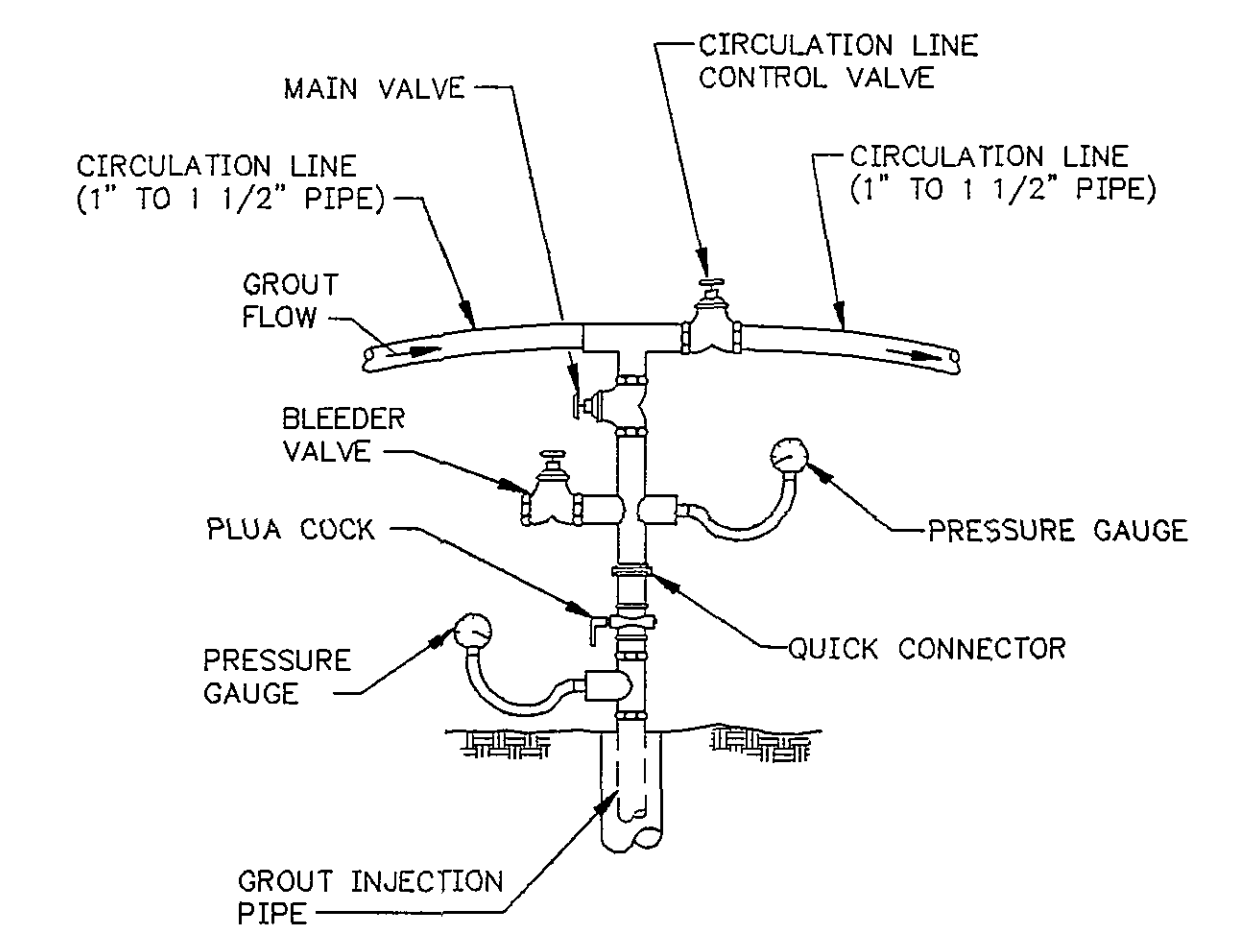
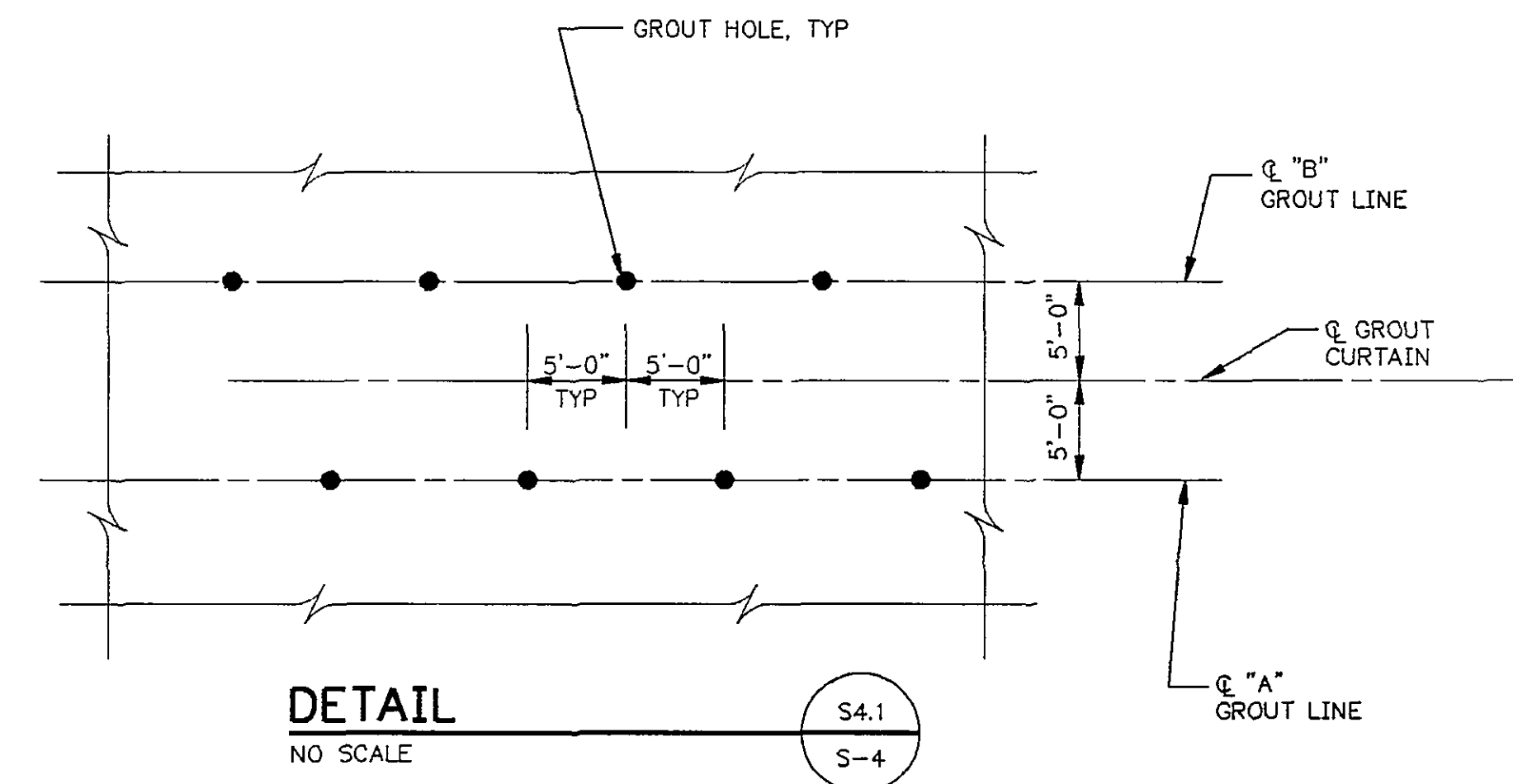
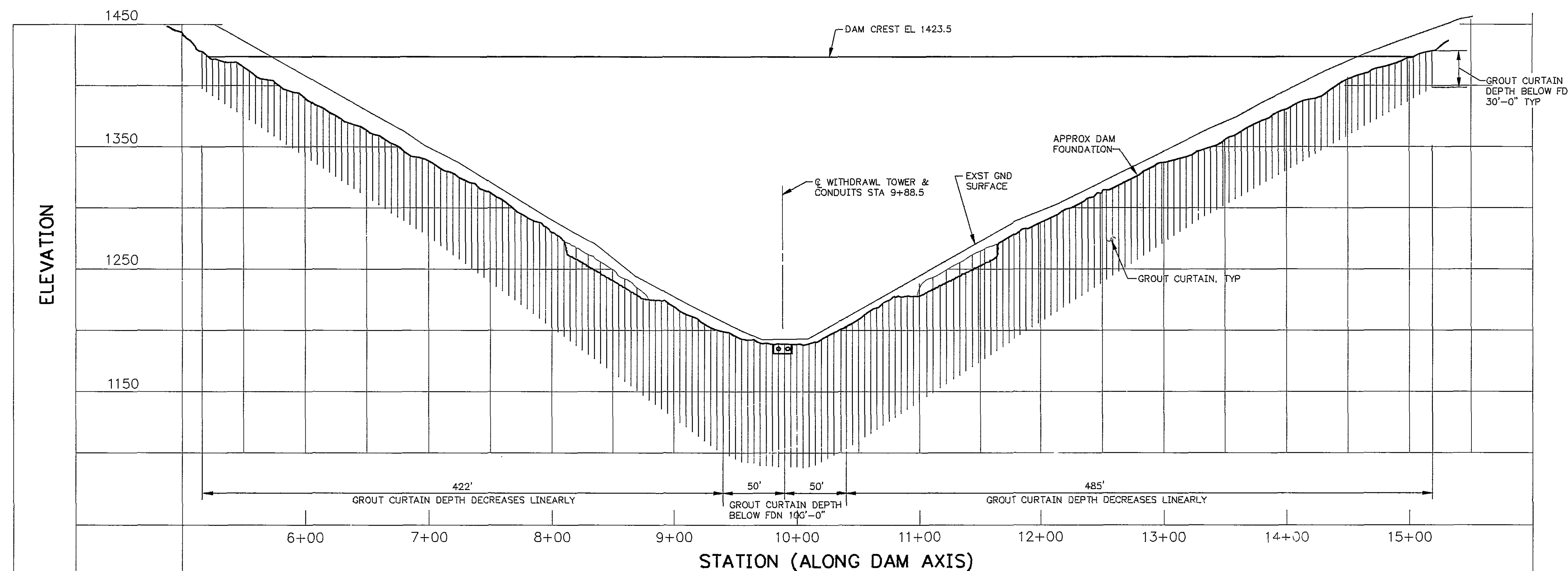


NOTE: GALLERY NOT SHOWN FOR CLARITY.
GROUTING PLAN
 SCALE: 1"=50'



GROUT STANDPIPE FITTING DETAIL
 NO SCALE



SECTION AT C GROUT CURTAIN
 SCALE: 1"=50'

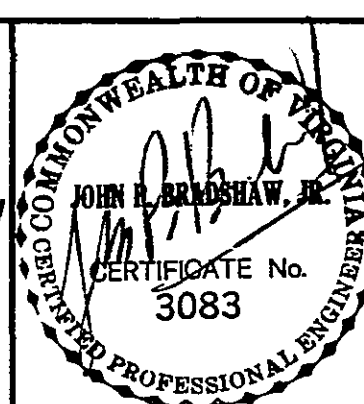
GROUTING NOTES:

1. ALL GROUT HOLES SHALL BE DRILLED VERTICAL.
2. ALL GROUT HOLES SHALL BE 3-INCH DIAMETER HOLES.
3. THE NUMBER, LOCATION, SPACING AND DEPTH OF GROUT HOLES MAY BE ALTERED IN THE FIELD BY THE ENGINEER TO SUIT ACTUAL CONDITIONS.
4. GROUTING OF ANY SECTION SHALL PROCEED FROM THE LOWEST AREA ON THE FOUNDATION TO PROGRESSIVELY HIGHER AREAS.
5. "A" LINE INCLUDING ANY SPLIT HOLES SHALL BE GROUTED FIRST FOLLOWED BY "B" LINE HOLES.
6. MULTIPLE HOLE GROUTING, CONSISTING OF ONE PUMP FEEDING MORE THAN ONE STANDPIPE FITTING OR ONE STANDPIPE FITTING FEEDING MORE THAN ONE HOLE IS PROHIBITED, EXCEPT AS PROVIDED IN THE SPECIFICATIONS FOR TREATING INTERCONNECTED HOLES.
7. ACTUAL LOCATION OF DAM FOUNDATION WILL VARY FROM LINES SHOWN. APPROXIMATE DAM FOUNDATION SHOWN IN ELEVATION IS AN ESTIMATE OF THE AVERAGE ELEVATIONS ANTICIPATED. CONTRACTOR SHALL ANTICIPATE THAT ACTUAL FIRM ROCK SURFACE APPROVED AS SUITABLE FOUNDATION FOR GROUTING WILL BE EXTREMELY IRREGULAR WITH MAJOR PROTRUSIONS, DEPRESSIONS, VERTICAL FACES, LEDGES, STEEP INCLINES AND OTHER FEATURES THAT WILL AFFECT DRILLING AND GROUTING OPERATIONS.
8. IF GROUTING UNDER CONDUITS IS CONDUCTED AFTER CONDUIT INSTALLATION, TWO HOLES (ONE IN EA LINE) SHALL BE DRILLED MIDWAY BETWEEN CONDUITS.
9. EXPLORATORY TEST HOLES SHALL BE DRILLED WITH NO DOUBLE TUBE EQUIPMENT OF SWIVEL DESIGN.

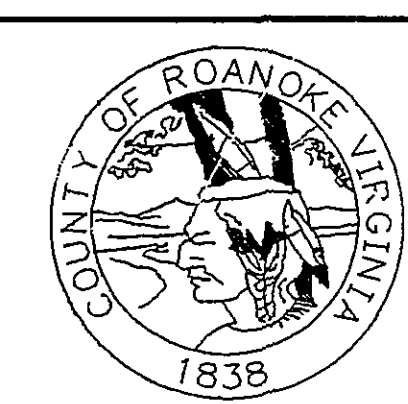
RECORD DRAWINGS
 THESE DRAWINGS RECORDED ON THE BASIS OF INFORMATION FURNISHED BY THE CONTRACTOR OR SPECIFICALLY KNOWN TO HMM. NO OTHER REPRESENTATIONS ARE MADE OR IMPLIED.
 Date: 6-5-95



DESIGNED: KA, RWF, JY DATE: 4 AUG 91
 DRAWN: DAB DATE: 4 AUG 91
 CHECKED: ANP DATE: 4 AUG 91
 APPROVED: EA DATE: 4 AUG 91
 ISSUED: APB DATE: 8/21/91



REVISIONS			
DATE	BY	DESCRIPTION	DATE
8-15-94	EA	PER CONTR RECORD DWG	
2-24-95	JBH	ISSUED TO VA. DAM SAFETY	
3-31-97	RWF	RECORD DRAWING	



SPRING HOLLOW RESERVOIR
ROANOKE COUNTY, VIRGINIA
 HAYES, SEAY, MATTERN & MATTERN, INC.
 ARCHITECTS - ENGINEERS - PLANNERS
 ROANOKE, VIRGINIA

STRUCTURAL DAM FOUNDATION GROUTING PLAN, ELEVATION AND DETAILS				
SCALE	DATE	COMM	SHEET	DWG
AS NOTED	8/4/91	4194E	S-4	33