

US Army Corps
of Engineers
Huntsville Division

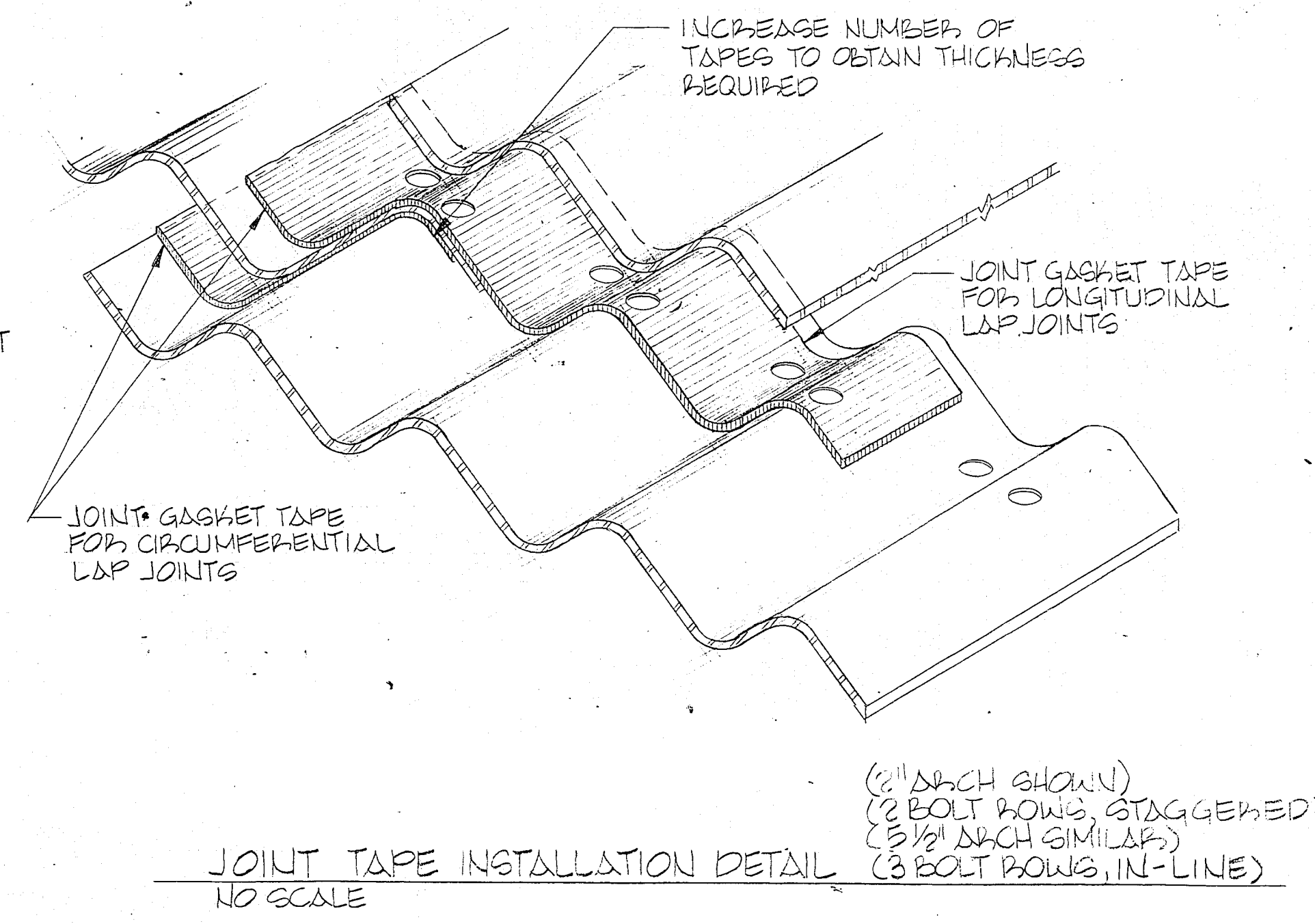
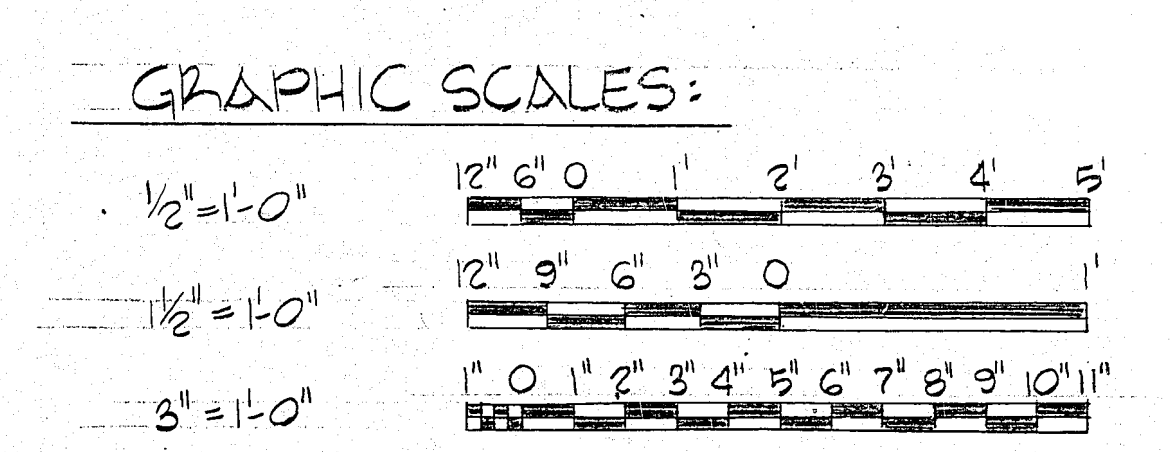
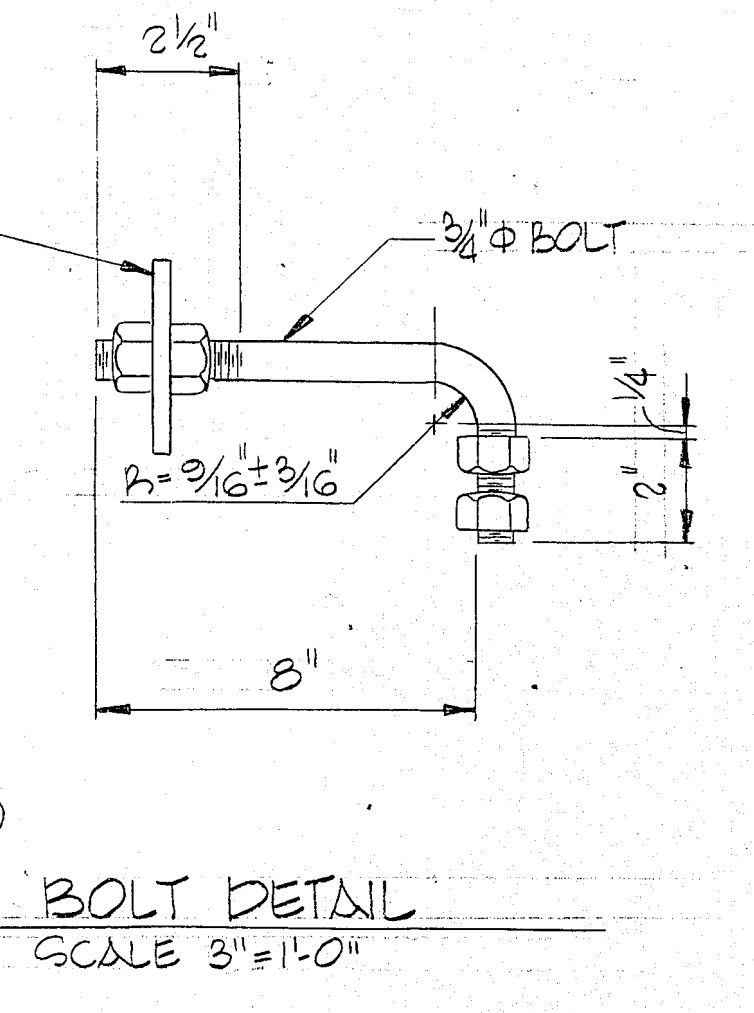
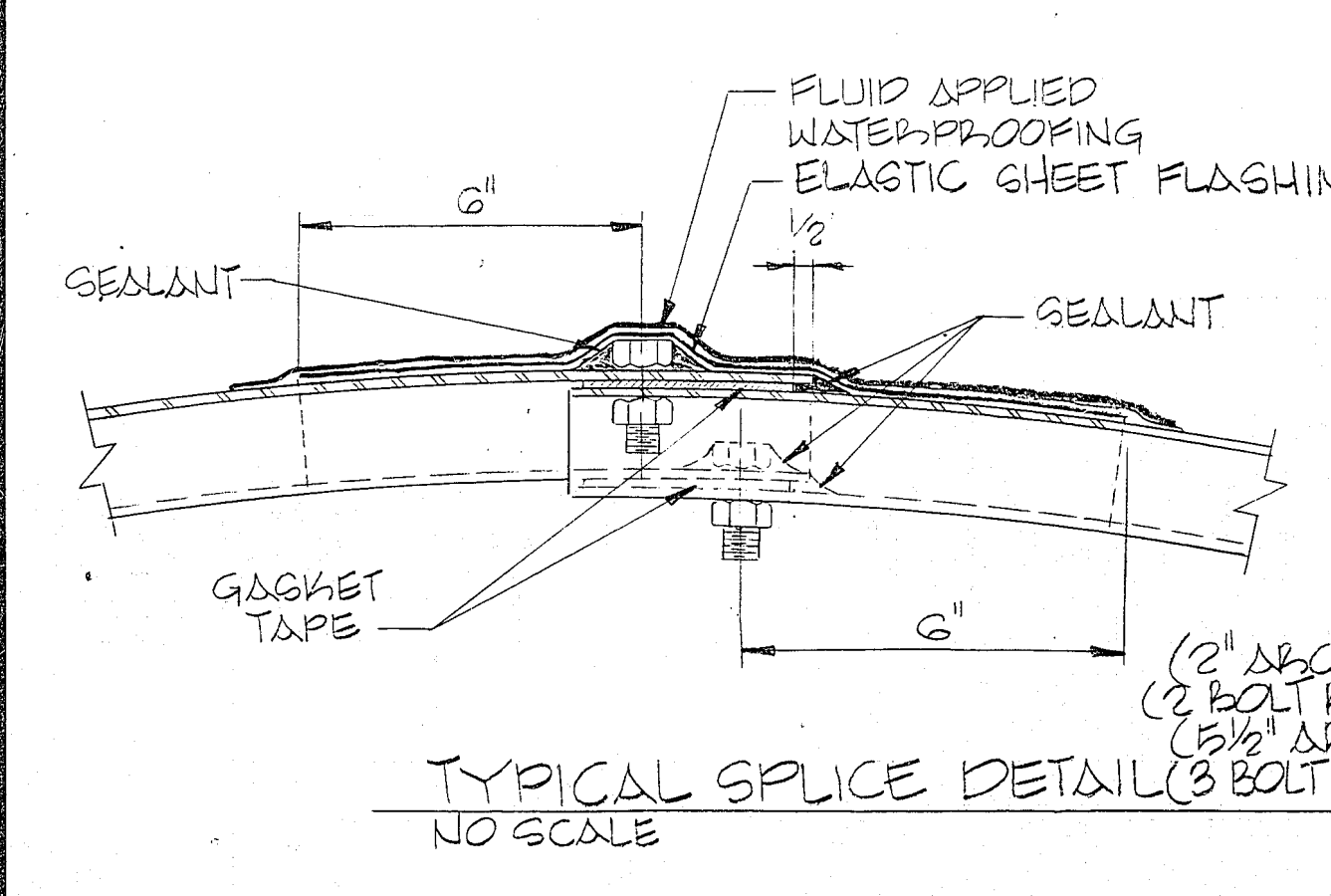
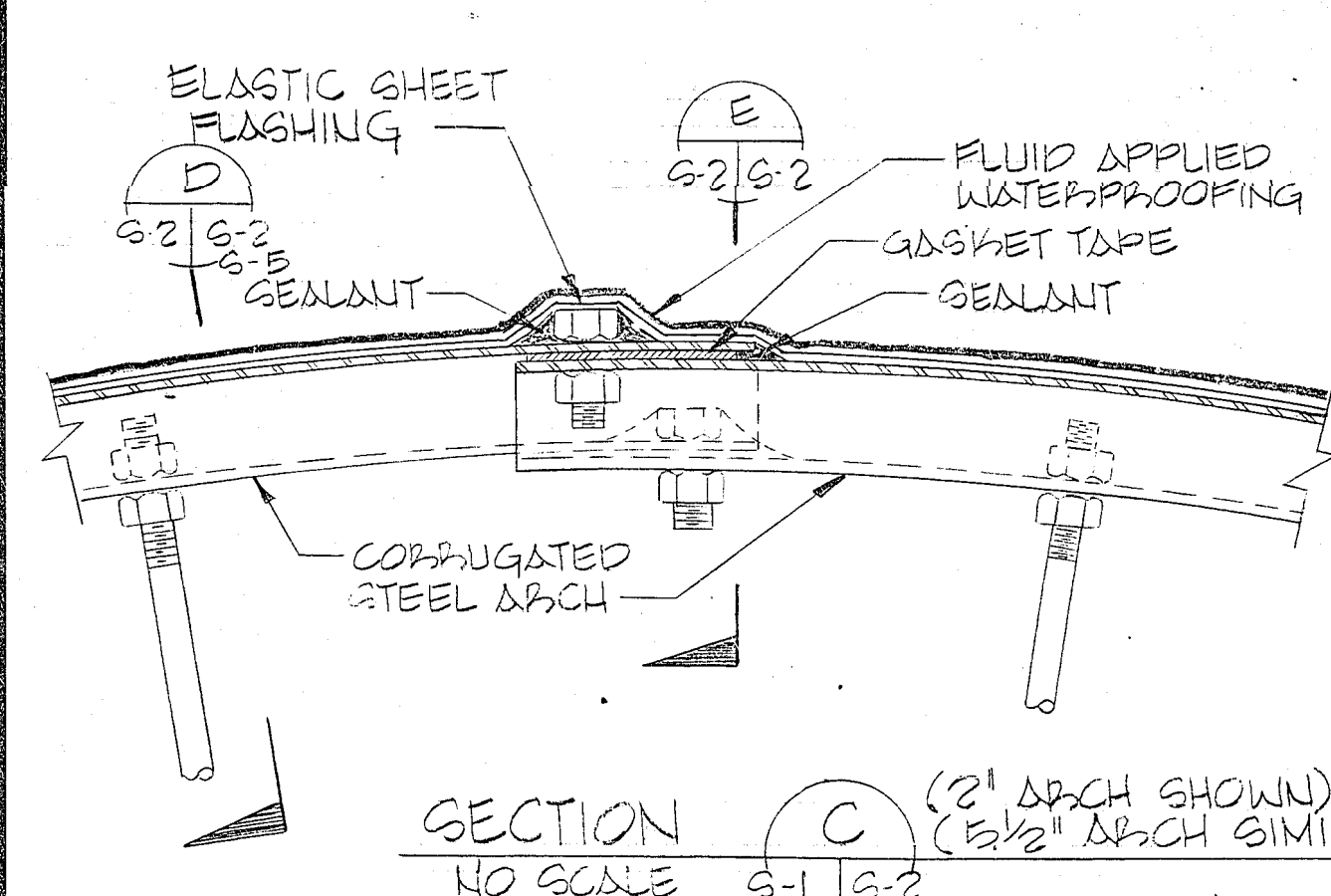
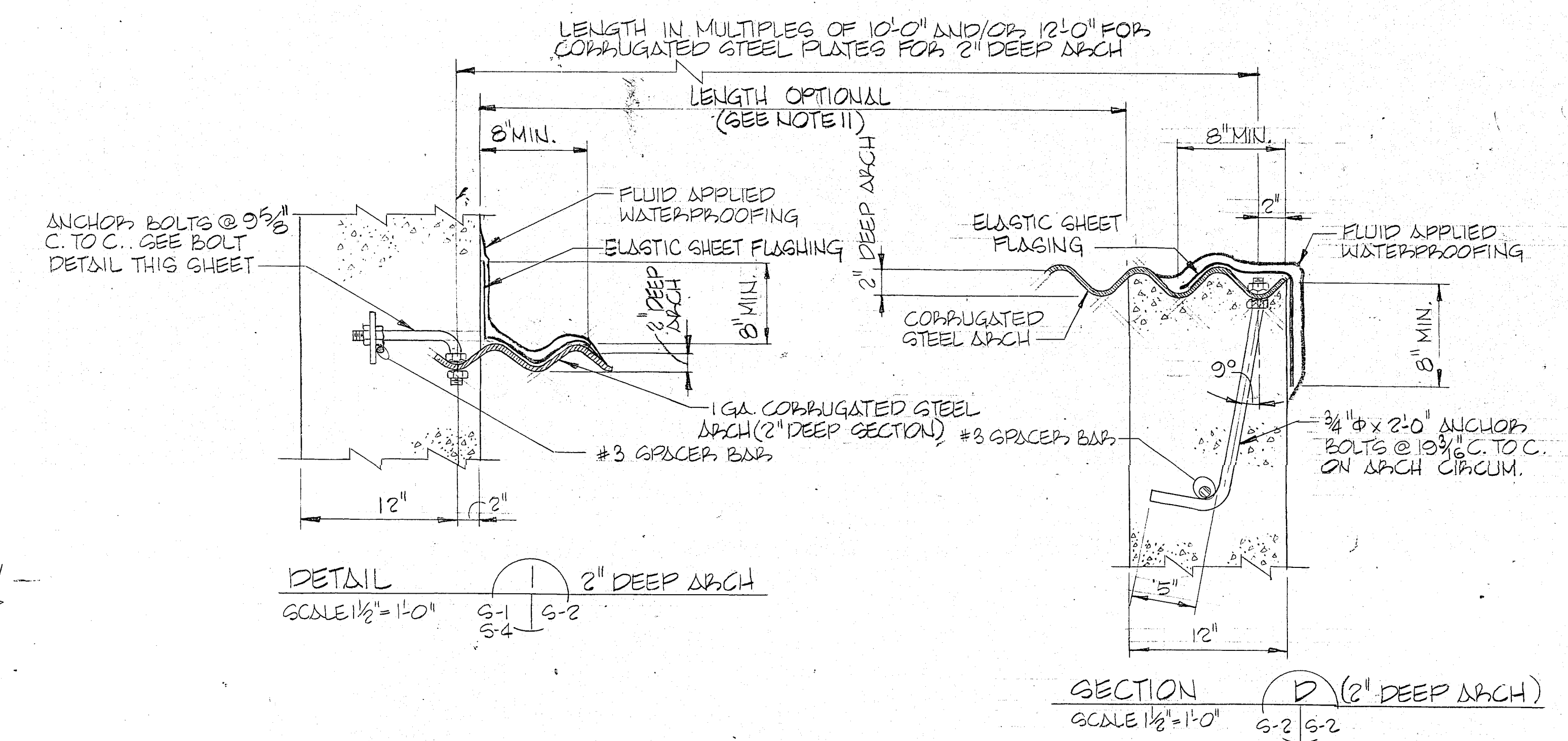
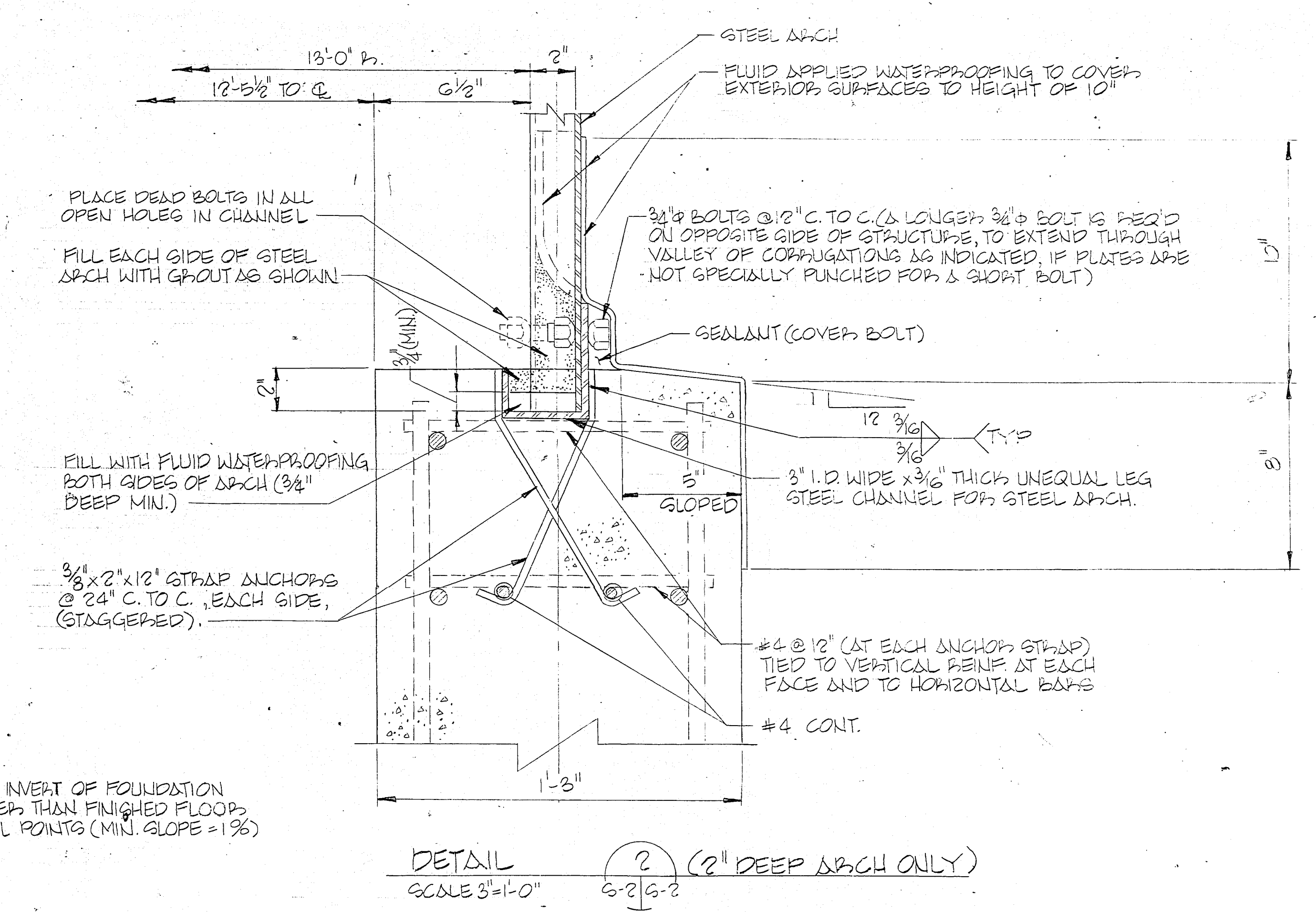
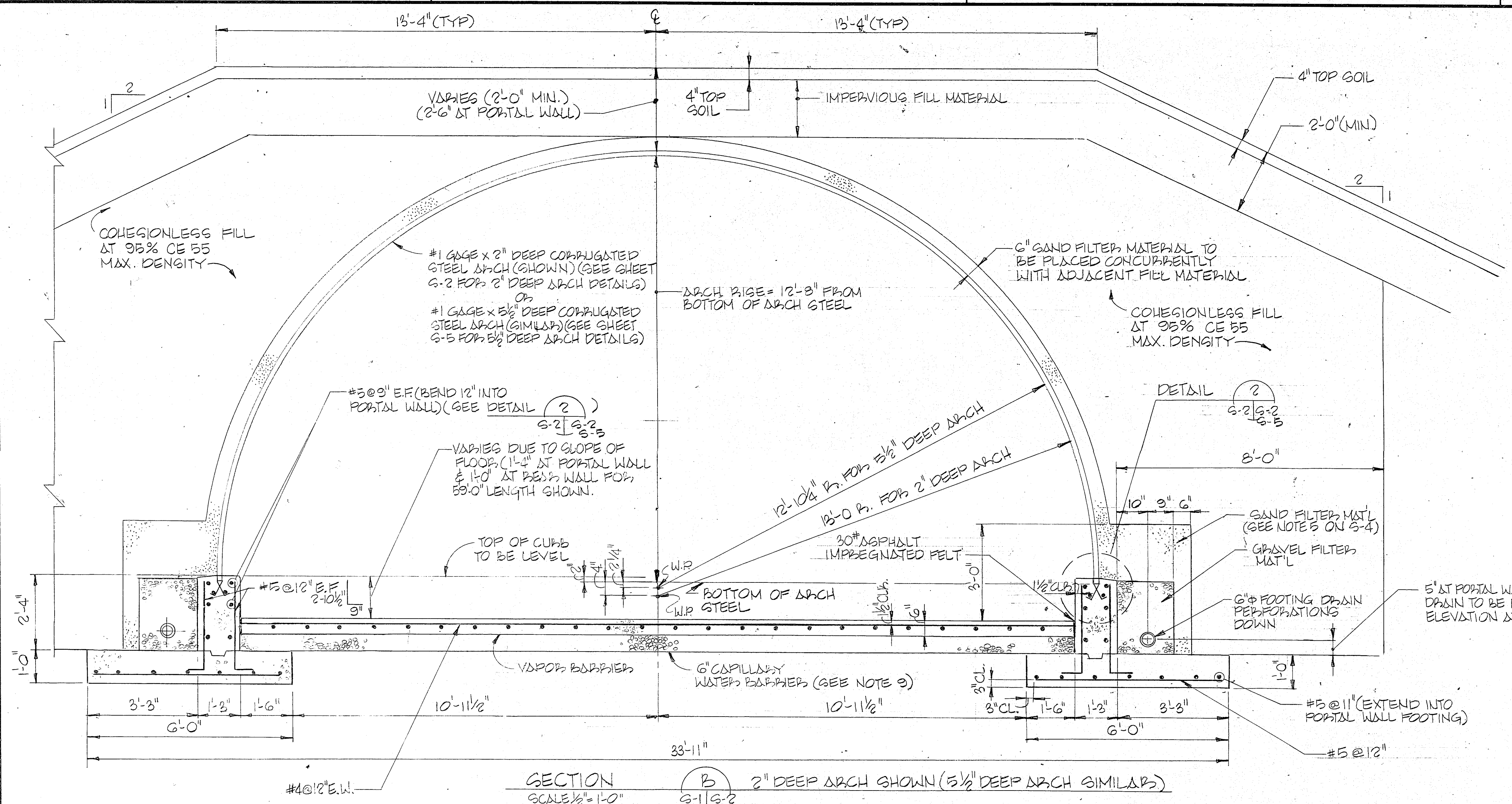
STANDARD DESIGN

MAGAZINE, STEEL, SEMICIRCULAR-ARCH,
EARTH - COVERED

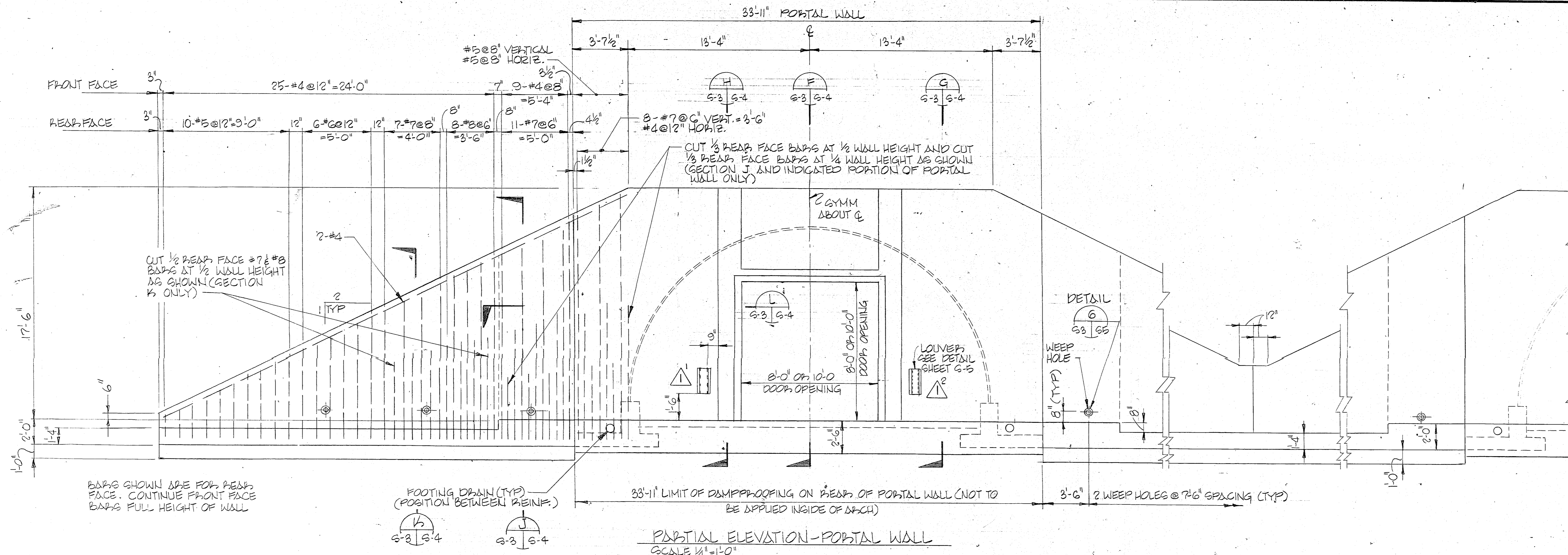
DRAWING INDEX

SHT.REF. NO.	DESIGN FILE NO	REVISIONS		
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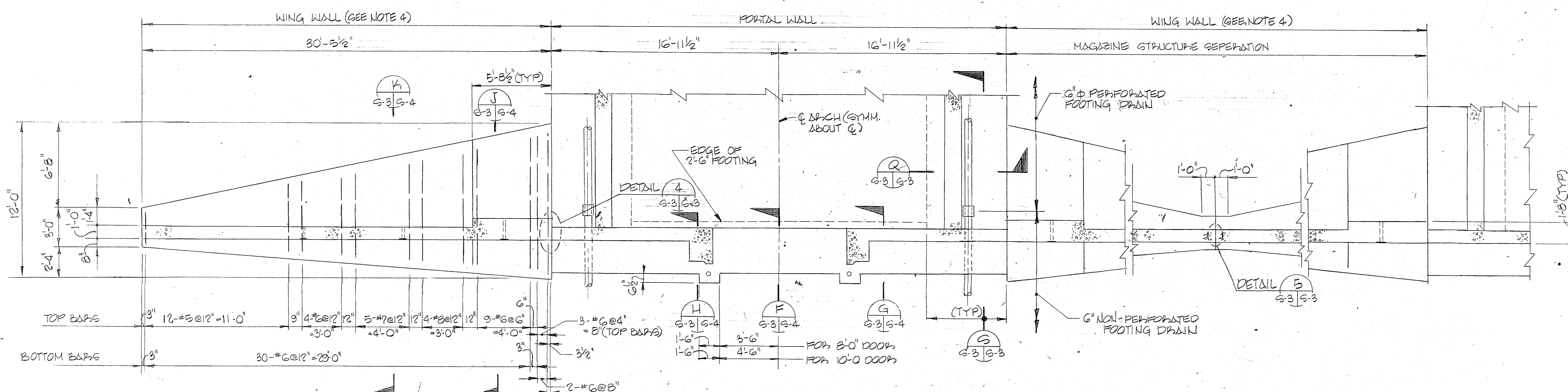
Approved Functional Adequacy					
Title:	Date :				
Prepared by					
Principal, A/E Firm	Date :				
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Reviewed by :					
Chief, Value Engineering	Date :				
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Chief, CS Branch	Date :				
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Chief, ME Branch	Date :				
Reviewed by :					
Approved by :	Date :				
Chief, Engineering Division	Date :				
Site adapt A/E :		U. S. ARMY ENGINEER DIVISION, HUNTSVILLE CORPS OF ENGINEERS HUNTSVILLE, ALABAMA			
Dwn. by :		MAGAZINE, STEEL SEMICIRCULAR-ARCH, EARTH-COVERED			
Ckd. by :		DRAWING INDEX			
Reviewed by :		Date :		Sheet reference number :	Design file no. :
Approved by :		Date :		number :	30085
Chief, Engineering Division		Date :		Rev.	
		Drawing code :		G-1	Sheet 1 of 11
		STD 421-80-01			



Symbol	Description	Date Approved
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U.S. ARMY ENGINEER DIVISION, HUNTSVILLE CORPS OF ENGINEERS HUNTSVILLE, ALABAMA		
Site adapt A/E :		
MAGAZINE, STEEL		
SEMICIRCULAR-ARCH, EARTH-COVERED		
Dwn. by :	Ckd. by :	2" DEEP STEEL ARCH SECTIONS AND DETAILS
Reviewed by :	Date :	Sheet reference number :
Approved by :	Drawing code :	S-2
Design file no. :		30087
Sheet 3 of 11		Rev.

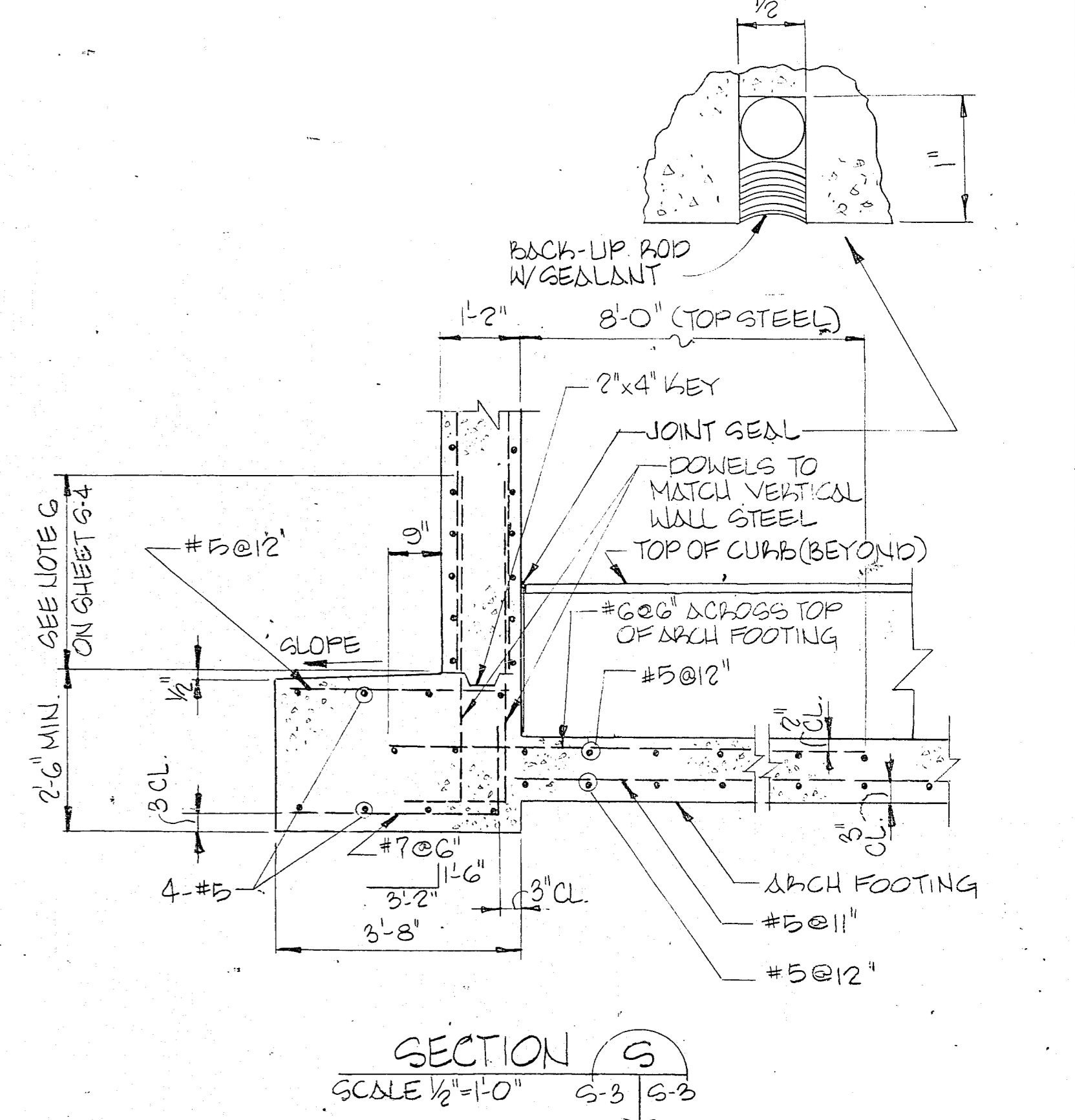


PARTIAL ELEVATION - PORTAL WALL
SCALE 1/4"=1'-0"

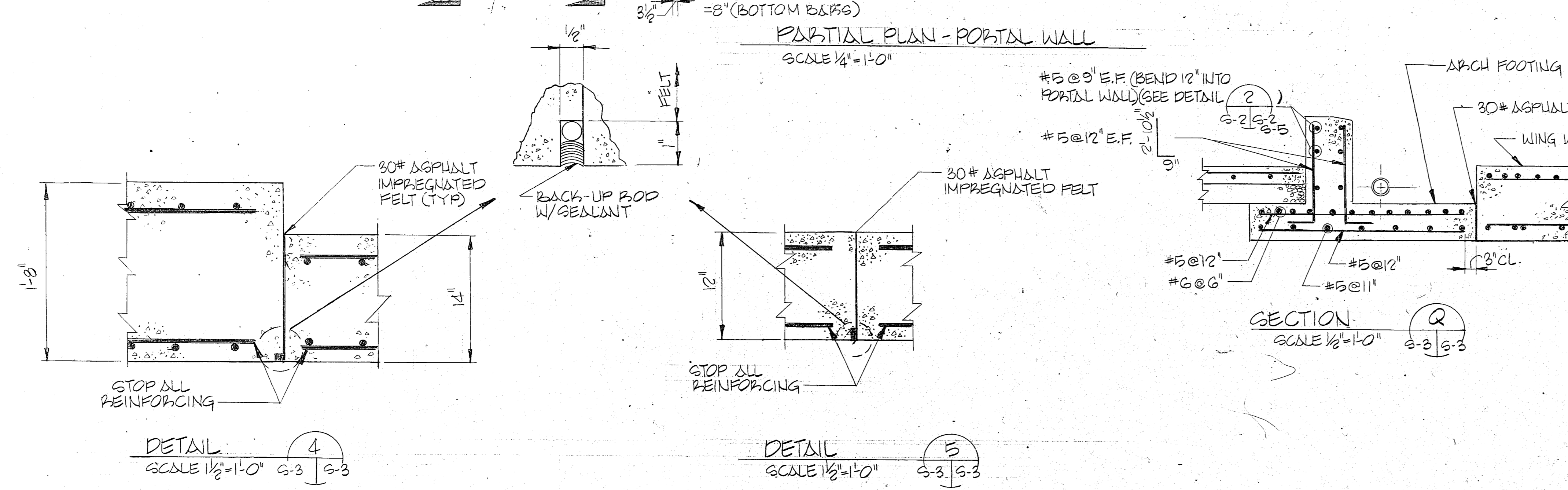


PARTIAL PLAN - PORTAL WALL
SCALE 1/4"=1'-0"

- NOTES:
1. IN FROST AREAS PROVIDE NONFROST SUSCEPTIBLE MATERIAL UNDER HEADWALL FOOTING TO FULL DEPTH OF FROST PENETRATION, OR LOCATE BOTTOM OF FOOTING BELOW FROST PENETRATION DEPTH.
 2. IF, AS A RESULT OF THE FOUNDATION INVESTIGATION OR LOCAL FROST CONDITIONS, IT IS DETERMINED THAT ANY OF ALL WALL FOOTINGS MUST BE LOWERED, THE APPROPRIATE WALL AND FOOTING DESIGNS MUST BE CHECKED AND ADJUSTED AS REQUIRED TO SUIT THESE CONDITIONS.
 3. FOOTINGS ARE SIZED FOR A SOIL BEARING VALUE OF 3000 P.S.F. FOOTINGS MUST BE REDESIGNED IF THE SOILS INVESTIGATION DOES NOT CONFIRM THIS MINIMUM BEARING CAPACITY.
 4. ALTERNATE MATERIALS AND/OR SYSTEMS MAY BE SUBMITTED FOR ACCEPTANCE AS A SUBSTITUTE FOR Poured-IN-Place CONCRETE WALLS, PROVIDED THEY ARE SHOWN TO BE STRUCTURALLY ADEQUATE AND COST EFFECTIVE. ANY ALTERNATE MATERIAL/SYSTEMS MUST BE SUBMITTED TO THE CONTRACTING OFFICER FOR APPROVAL PRIOR TO CONSTRUCTION.

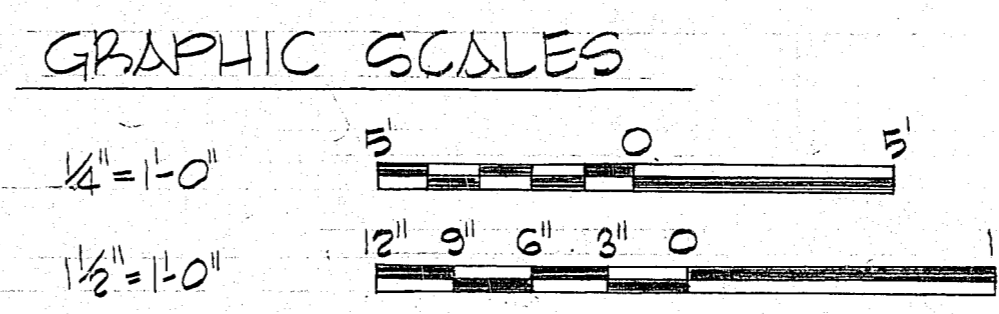


SECTION G
SCALE 1/2"=1'-0"

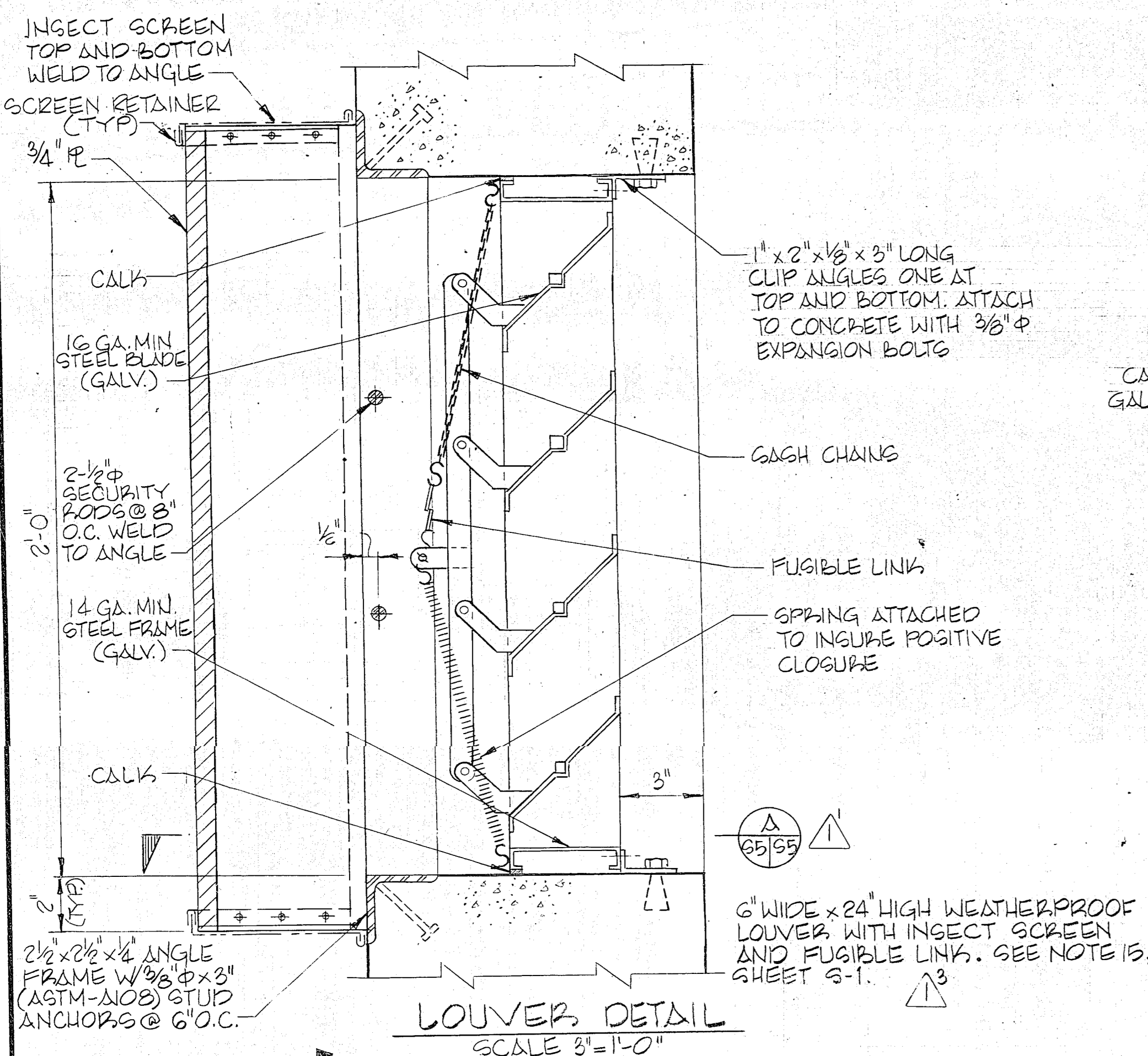


DETAIL 4
SCALE 1 1/2"=1'-0"

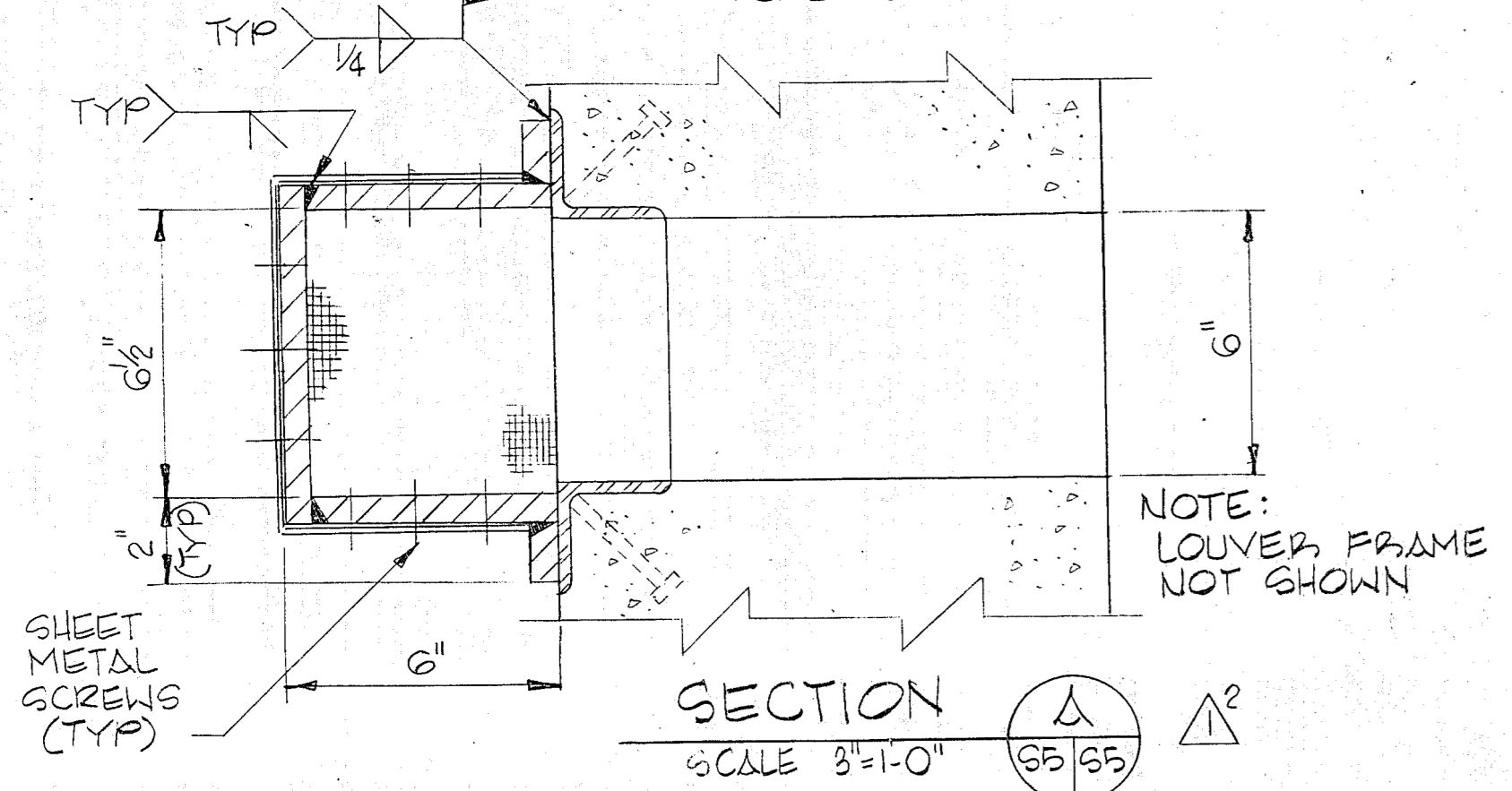
DETAIL 5
SCALE 1 1/2"=1'-0"



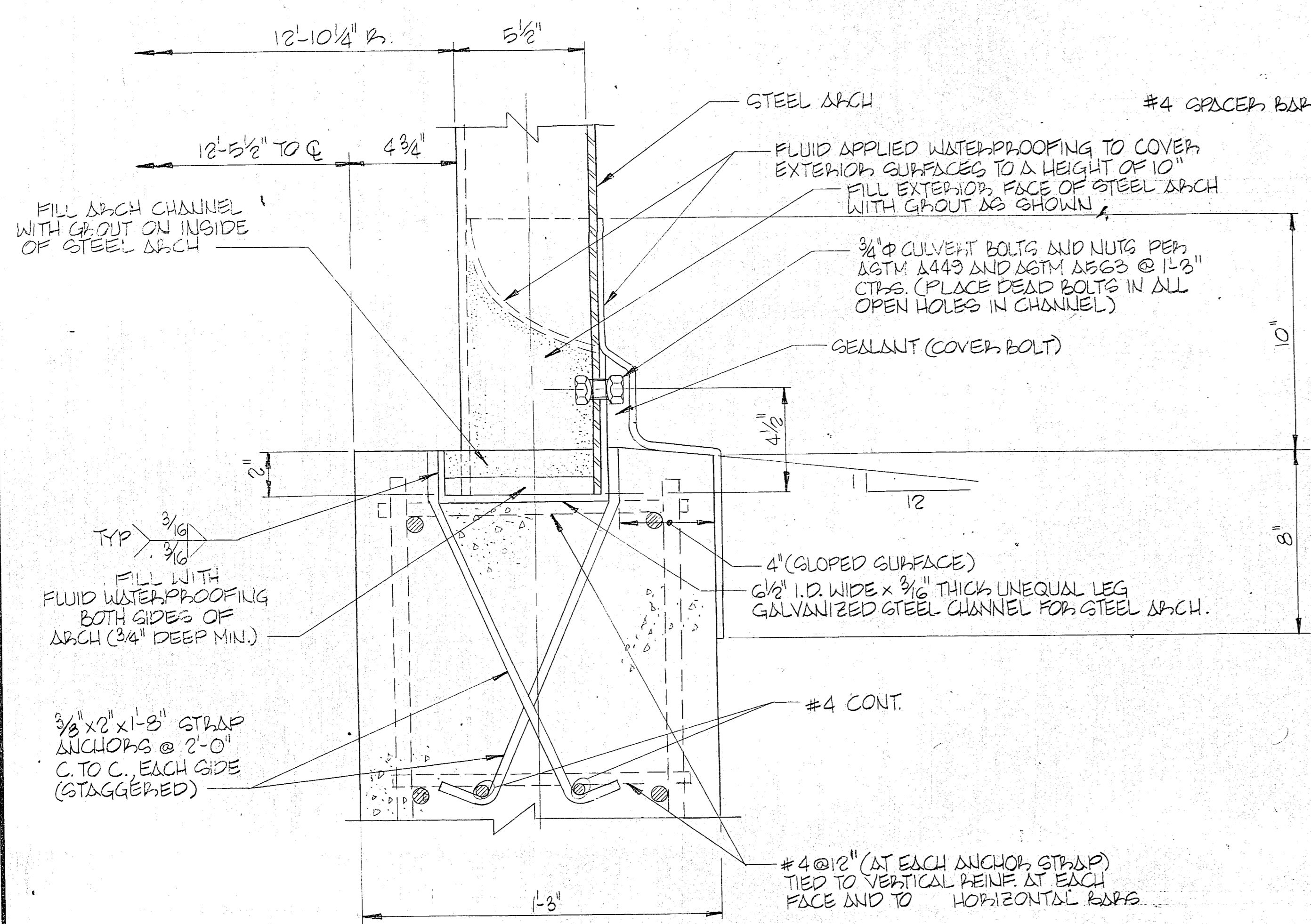
GENERAL REVISIONS			8 JUN 80
Symbol	Description	Date Approved	
Revisions			
U. S. ARMY ENGINEER DIVISION, HUNTSVILLE CORPS OF ENGINEERS HUNTSVILLE, ALABAMA			
Site adapt A/E :		MAGAZINE, STEEL SEMICIRCULAR-ARCH, EARTH-COVERED	
PORTAL WALL-PLAN, ELEVATION & SECTIONS			
Dwn. by : RDP	Ckd. by : CMB	Date :	Design file no. : 30088
Reviewed by : Paul H. Williams	Sheet reference number :	Rev.	
Approved by : Russell K. ...	Drawing code : STD 421-80-01	S-3	Sheet 4 of 11



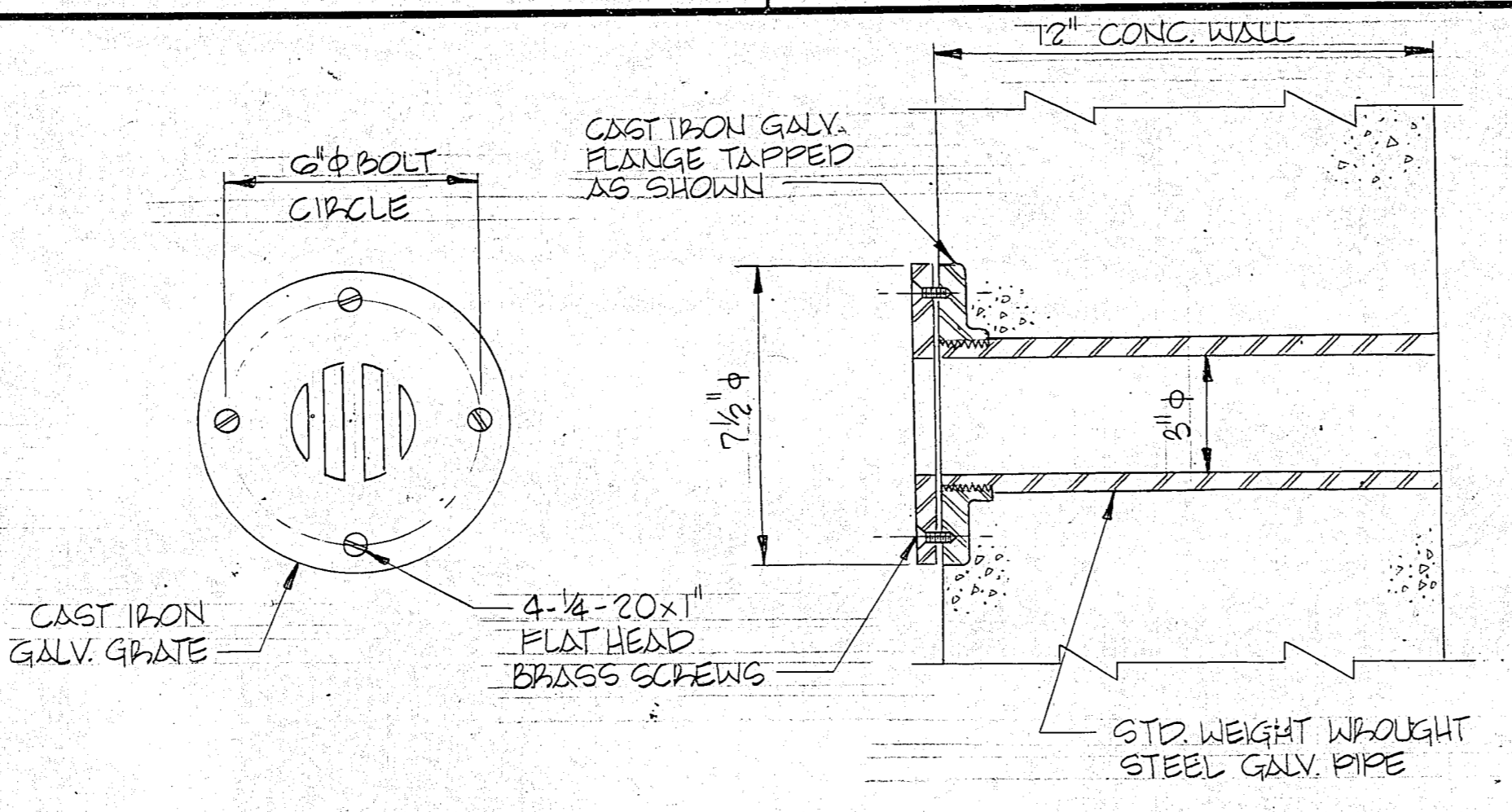
LOUVER DETAIL SCALE 3"=1'-0"



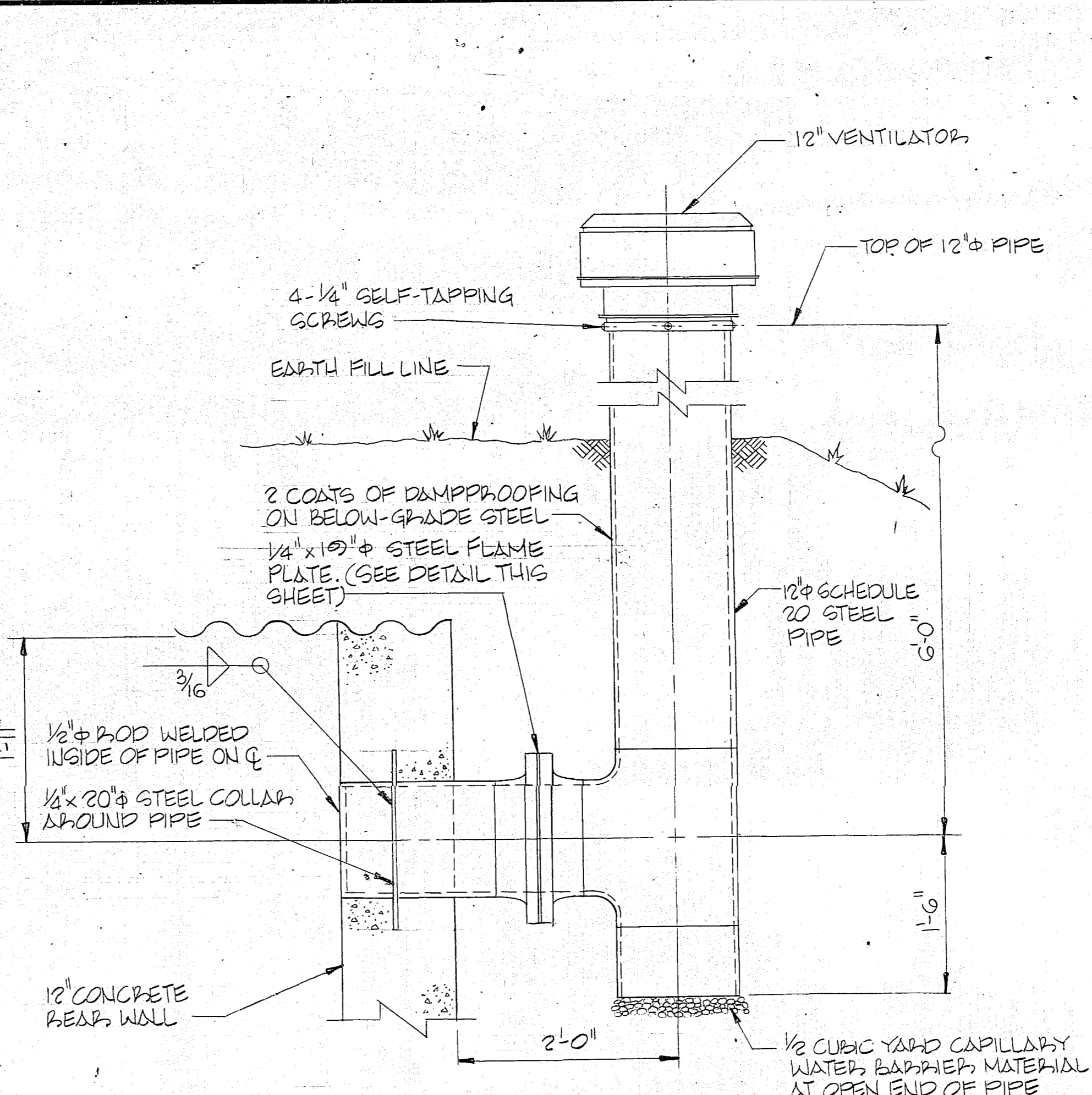
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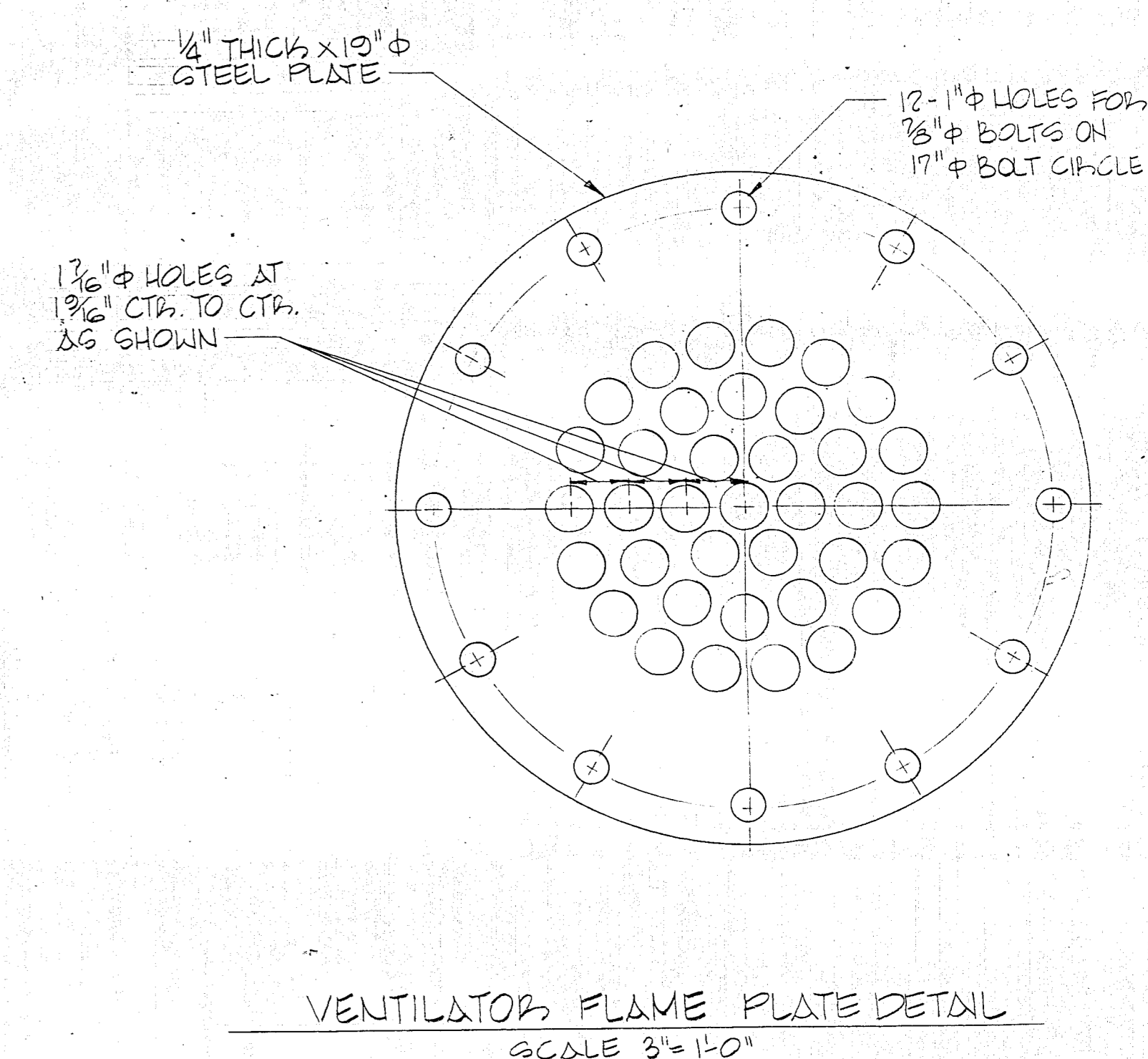
DETAIL 2 SCALE 3"=1'-0"



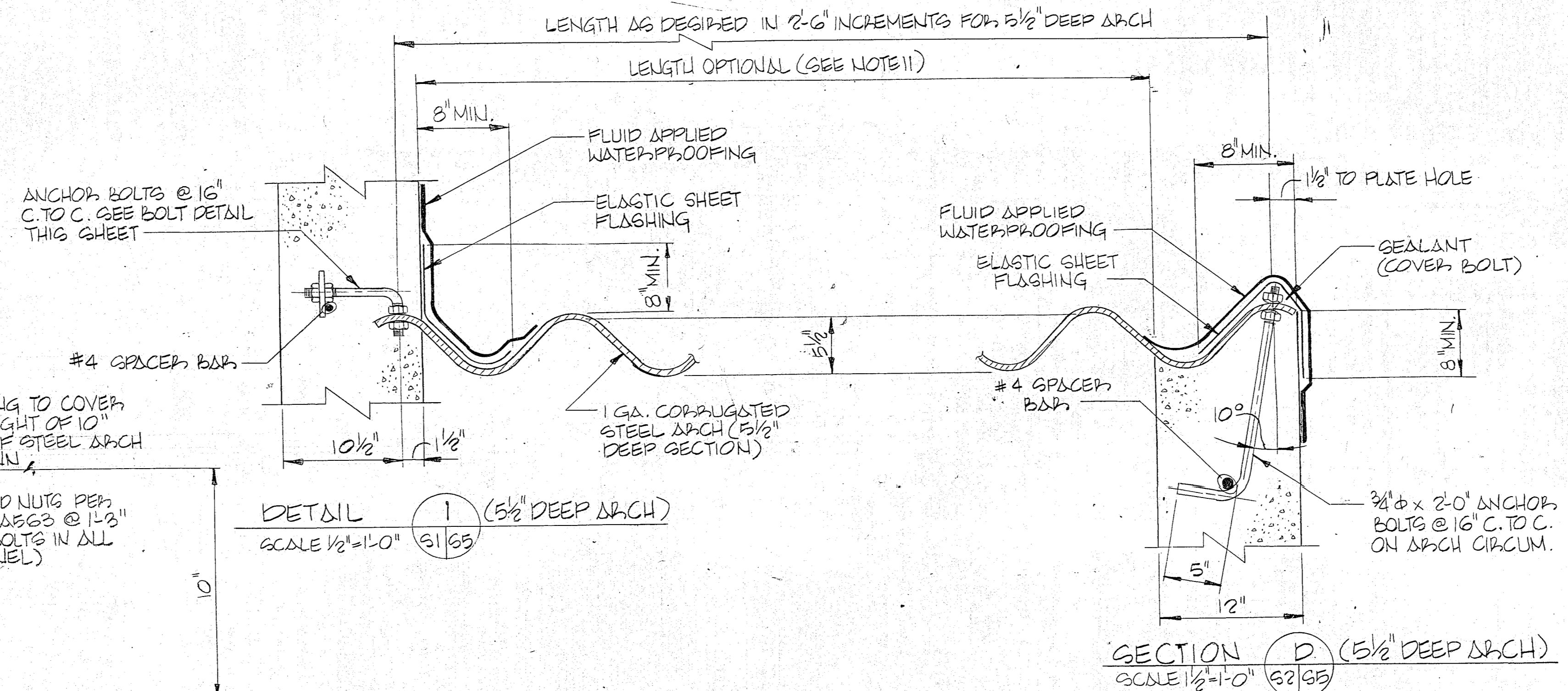
DETAIL 6 SCALE 3"=1'-0"



DETAIL 3 VENTILATOR SCALE 1"=1'-0"

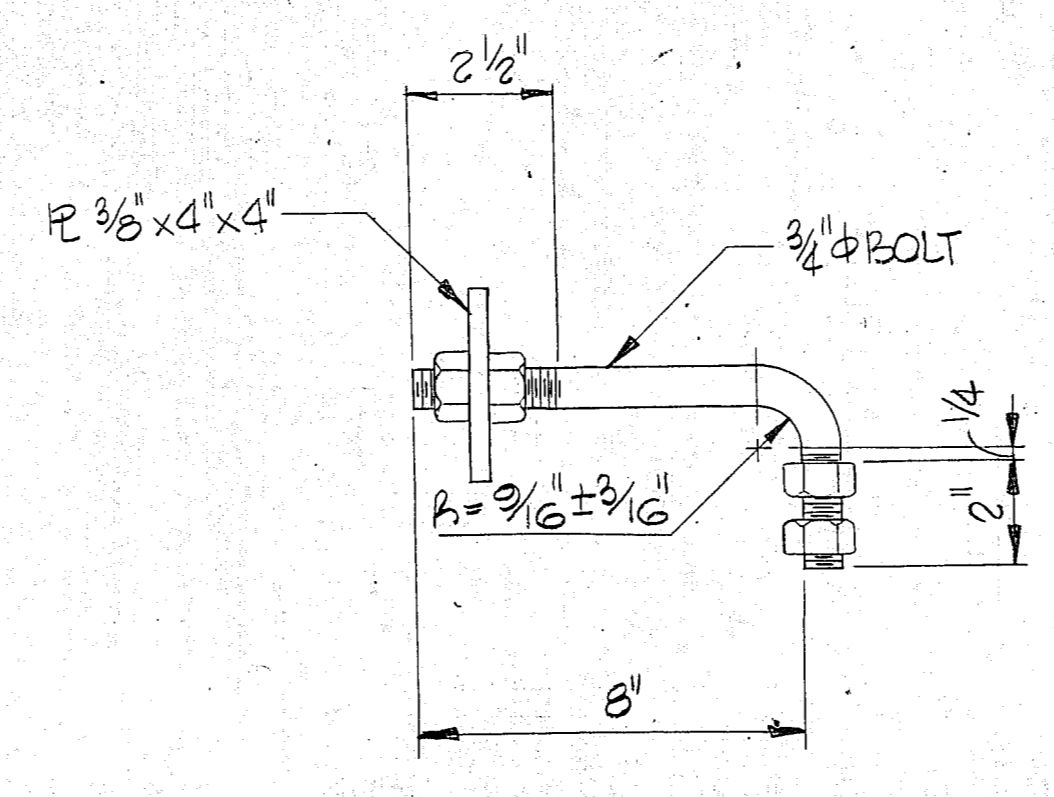


VENTILATOR FLANGE PLATE DETAIL SCALE 3"=1'-0"



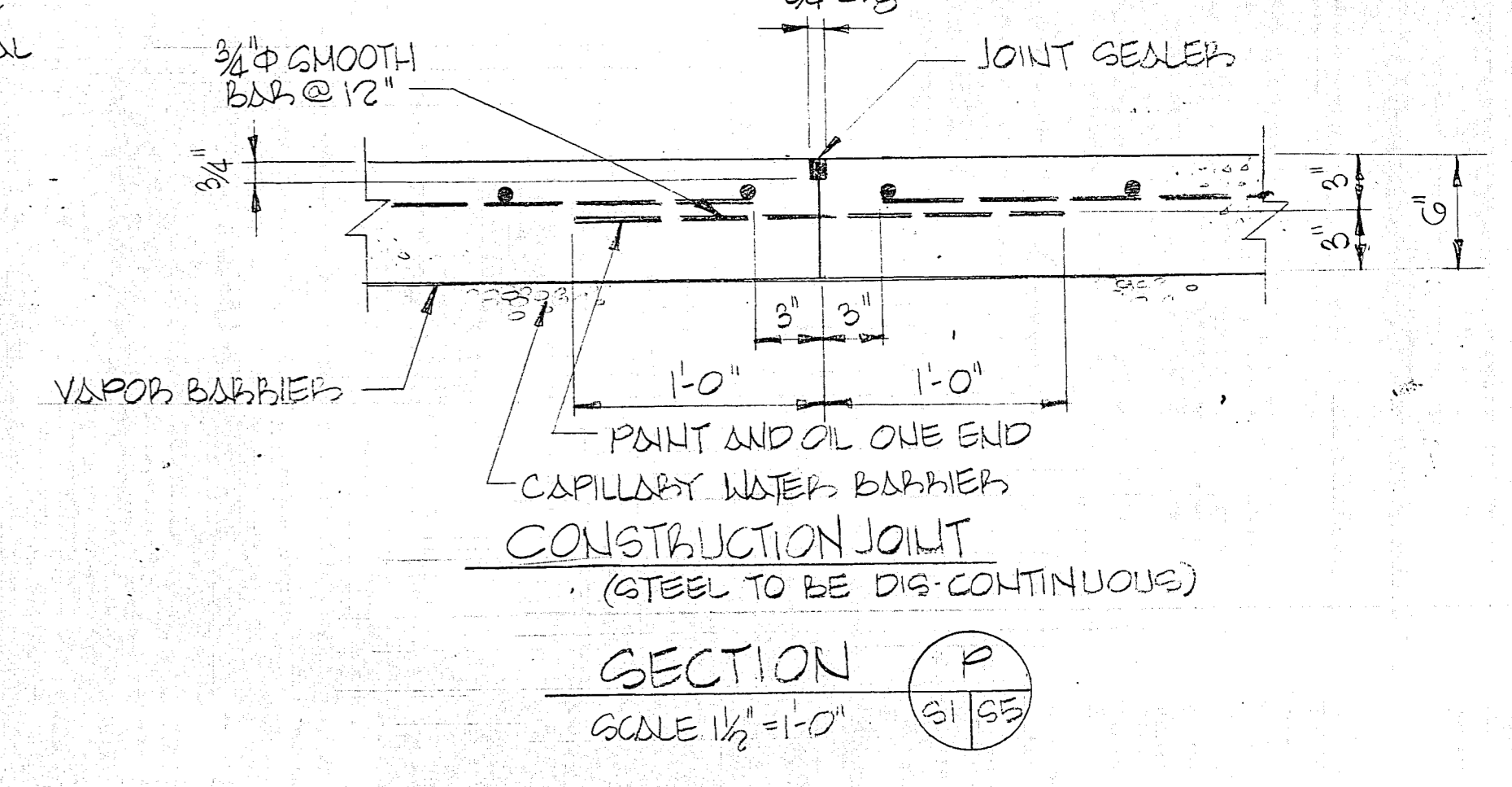
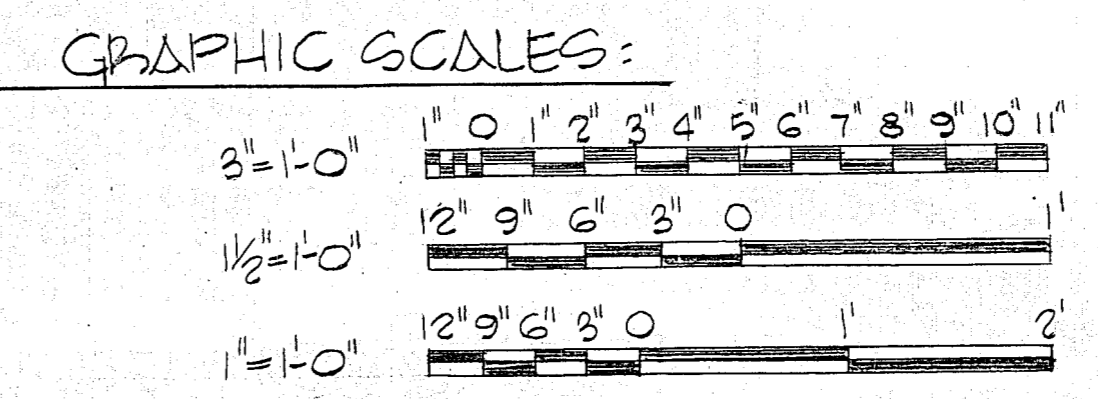
DETAIL 1 (5 1/2" DEEP ARCH) SCALE 1 1/2"=1'-0"

SECTION D (5 1/2" DEEP ARCH) SCALE 1 1/2"=1'-0"



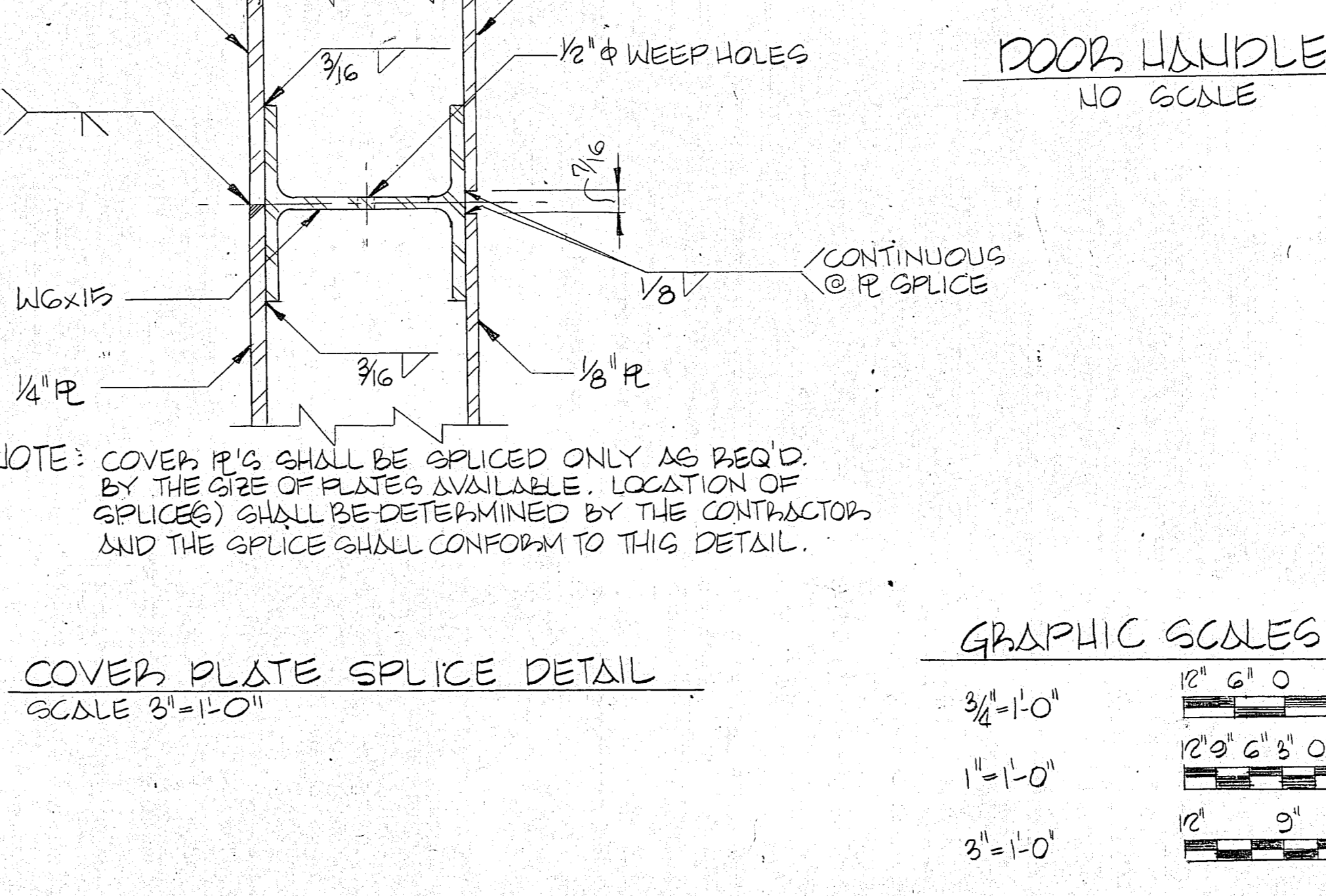
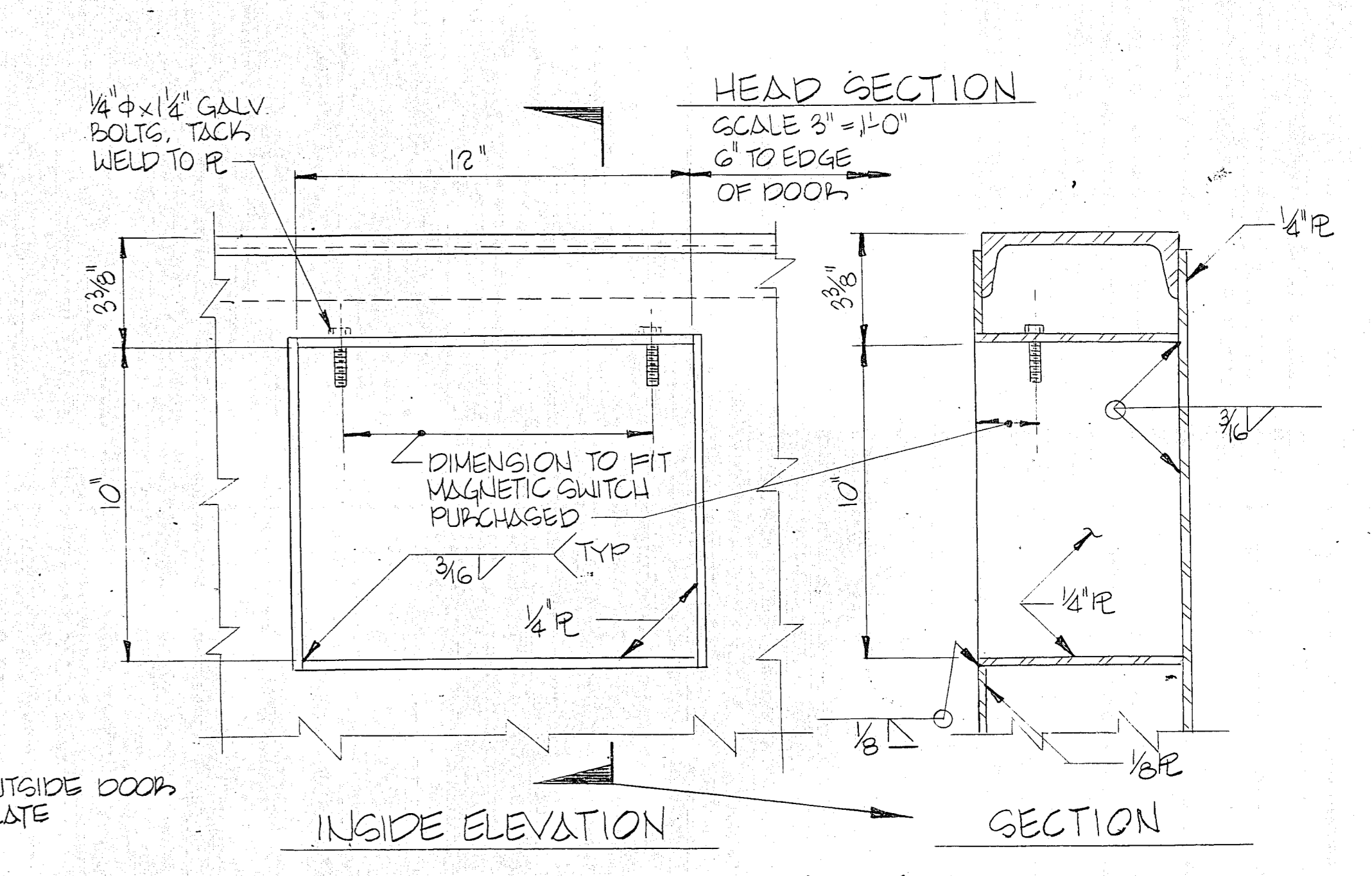
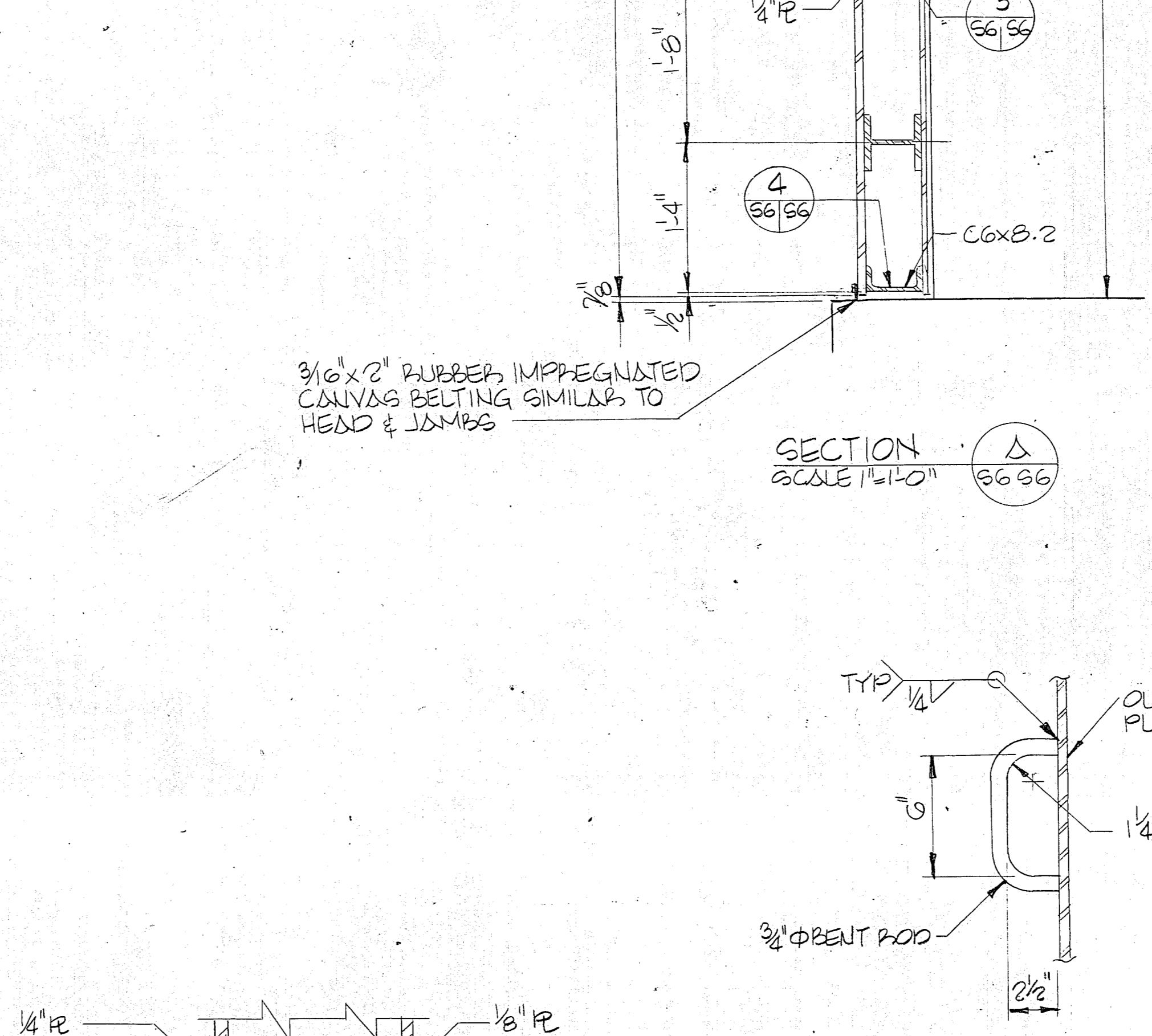
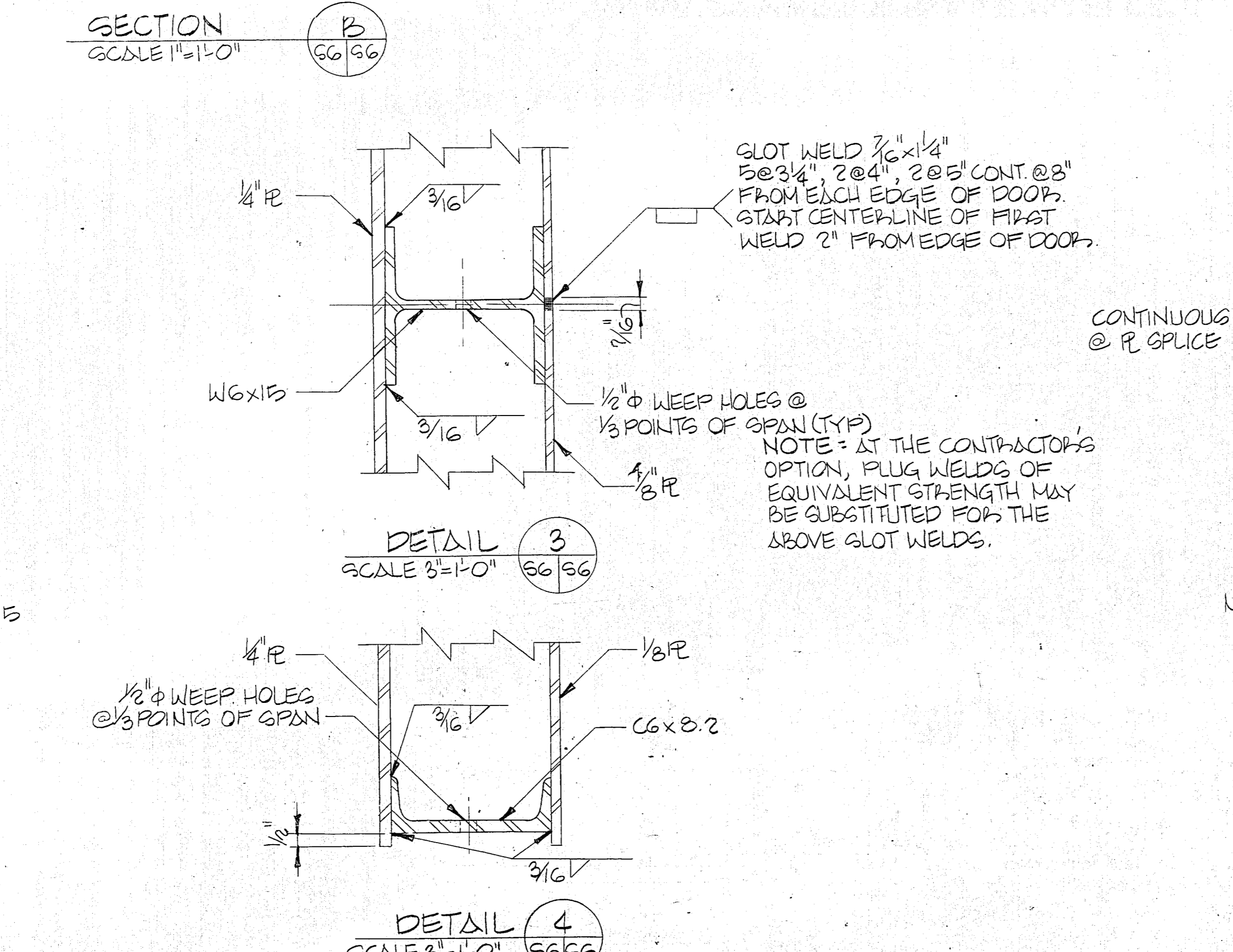
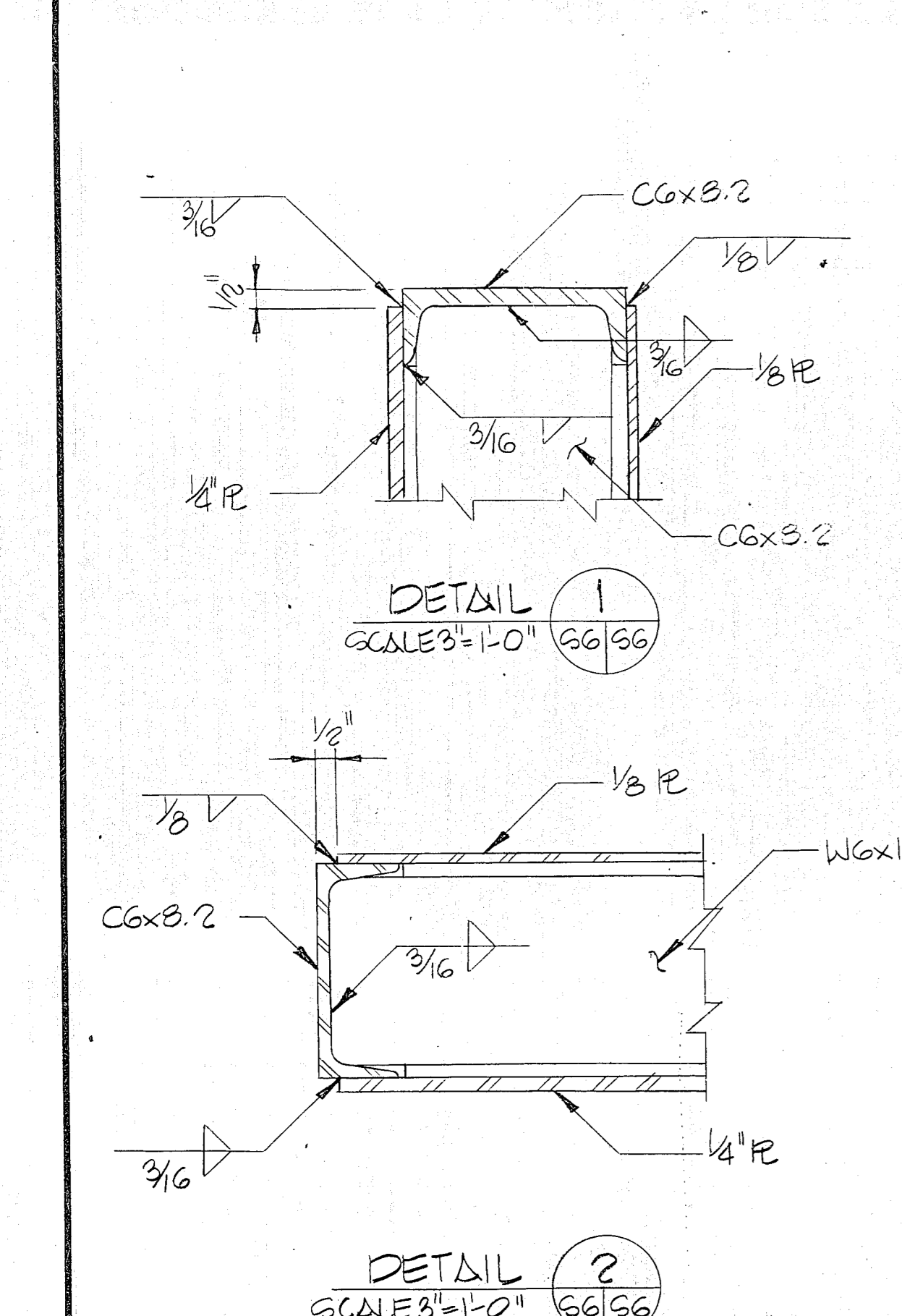
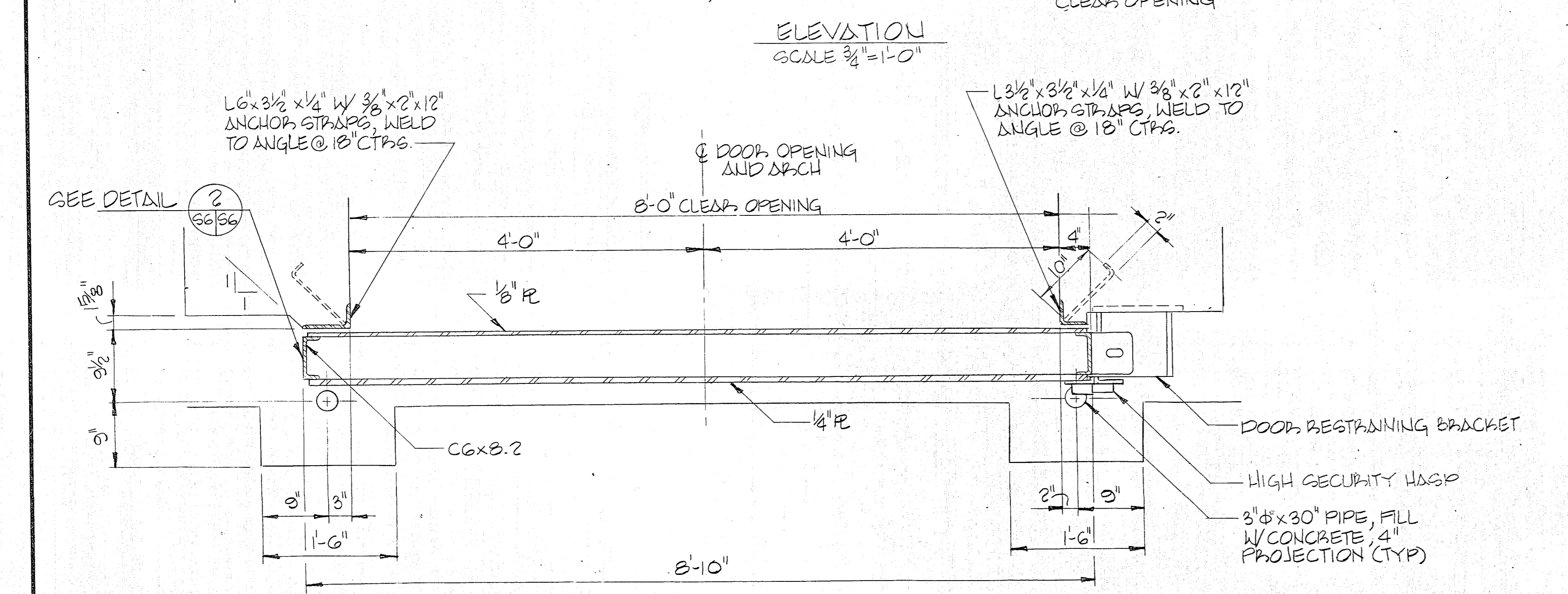
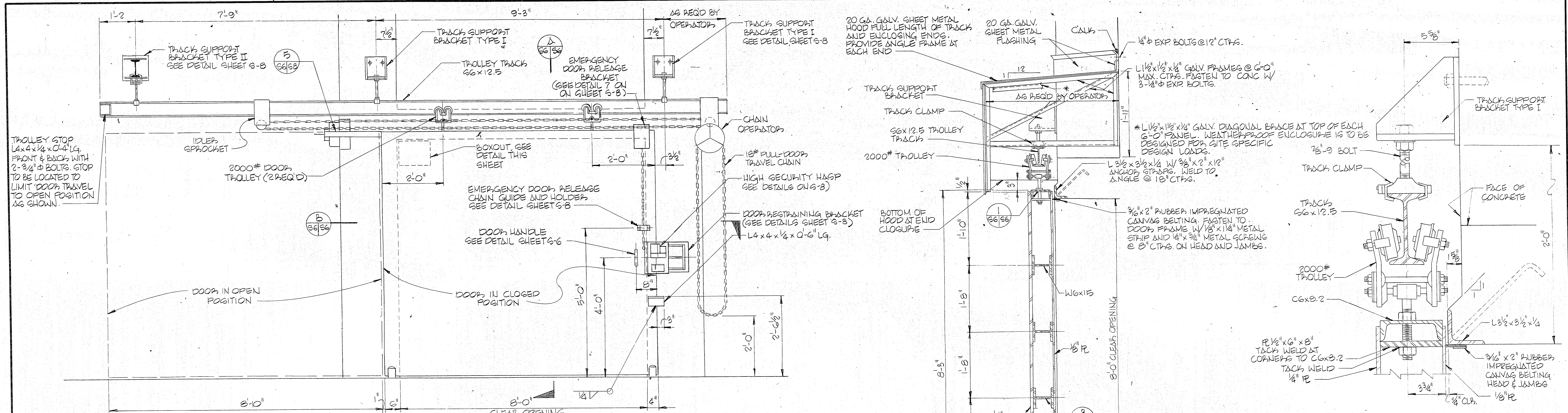
BOLT DETAIL SCALE 3"=1'-0"

NOTE:
SEE SHEET S-2 FOR "JOINT TAPE INSTALLATION DETAIL" AND "TYPICAL GRUCE DETAIL" FOR 5 1/2" DEEP ARCH.



SECTION P SCALE 1 1/2"=1'-0"

GENERAL REVISIONS		BOUN90 A-7
Symbol	Description	Date Approved
U.S. ARMY ENGINEER DIVISION, HUNTSVILLE CORPS OF ENGINEERS HUNTSVILLE, ALABAMA		
Site adapt A/E:	MAGAZINE, STEEL SEMICIRCULAR-ARCH, EARTH-COVERED	
MISC. DETAILS & 5 1/2" DEEP ARCH SECTIONS AND DETAILS		
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Reviewed by: Carl A. Williams	Date:	Sheet reference number:
Approved by: Harold R. Ryan	Drawing code: STD 421-80-01	S-5
		Design file no.: 30090
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		Sheet 6 of 11



Symbol	Description	Date	Approved
U. S. ARMY ENGINEER DIVISION, HUNTSVILLE CORPS OF ENGINEERS HUNTSVILLE, ALABAMA			
Site adapt A/E:		MAGAZINE, STEEL SEMICIRCULAR-ARCH, EARTH-COVERED	
Dwn. by: RDP		8'-0" BLAST DOOR	
Ckd. by: CMB		Date:	Sheet reference number: 30091
Reviewed by: Paul H. Williams		Drawing code: STD 421-80-01	Design file no.: 30091
Approved by: [Signature]		Sheet reference number: S-6	Rev.:
		Sheet 7 of 11	

