

ENCLOSURE B

ARKANSAS POWER AND LIGHT COMPANY

ARKANSAS NUCLEAR ONE - UNIT 1

FIRE TEST CRITERIA FOR PENETRATION SEALS

IN CONCRETE FLOORS AND WALLS

1. The barrier assemblies and penetration seals shown herein shall be tested for three-hour fire resistance in accordance with applicable portions of the (ANI) "NEL-PIA/MAERP Standard Method of Fire Tests of Cable and Pipe Penetration Fire Stops", ASTM E-119, IEEE 634 and shall include the following from NRC PF.5 recommendations



A) The seals shown shall be tested with a pressure differential of 0.04" of water with positive pressure maintained in the furnace.

B) Temperature levels of the cable insulation, cable conductor, cable tray, conduit and firestop materials shall be recorded for the unexposed side of the firestop.

2. The NRC PF.5 acceptance criteria shall be addressed in the fire test report as follows:

Acceptance criteria - the test is successful if:

A) The cable penetration firestop has withstood the fire endurance test without passage of flame or ignition of cables on the unexposed side for a period equal to the required 3 hour fire rating, and

B) The temperature levels recorded for the unexposed side are analyzed and demonstrate that the maximum temperatures are sufficiently below the cable insulation ignition temperature, and

C) The firestop remains intact and does not allow projection of water beyond the unexposed surface during the hose stream test.

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△	6-9-80	Reissued for Client Approval	HA	HA		HA	HA	HA	HA
△	5/29/80	Issued for Client Approval	HA	HA		HA	HA	HA	HA
No.	DATE	REVISIONS	BY	CHK	DESIGN SUPV.	ENGR. ARCH	PROJ ENGR	APPR.	
SCALE None		DESIGNED	DRAWN		OFFICE CHIEF		TPO CHIEF		
ORIGIN		ARKANSAS POWER & LIGHT CO. ARKANSAS NUCLEAR ONE FIRE TEST CRITERIA				JOB NO. 11406-			
ANO PROJECT						DRAWING NO.		REV.	
						FT-1		1	

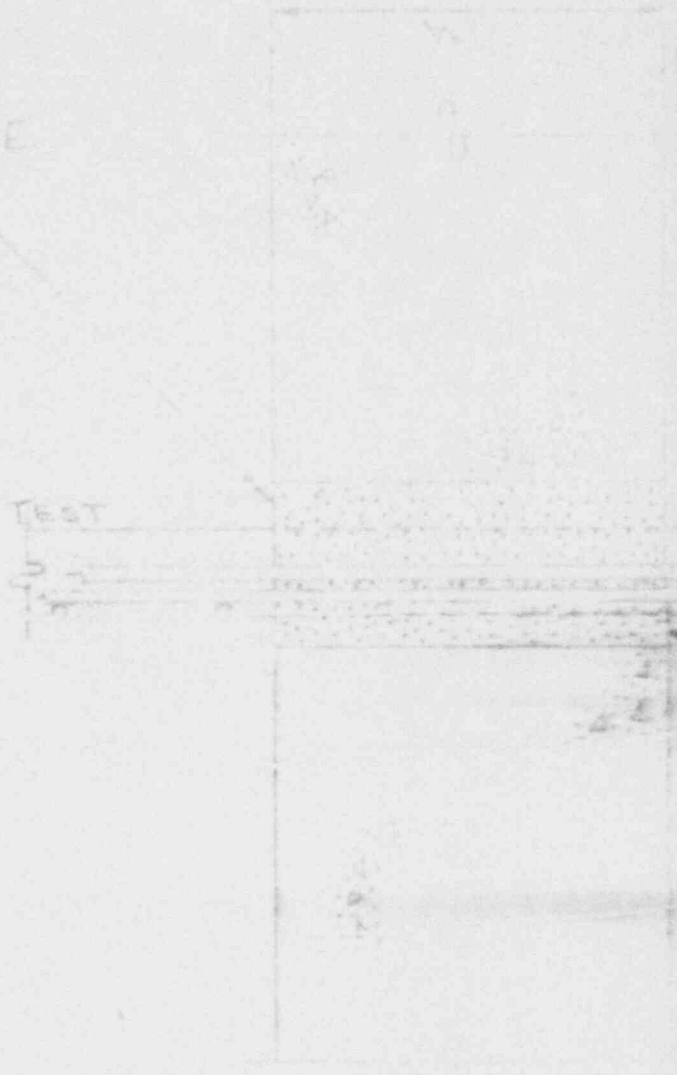
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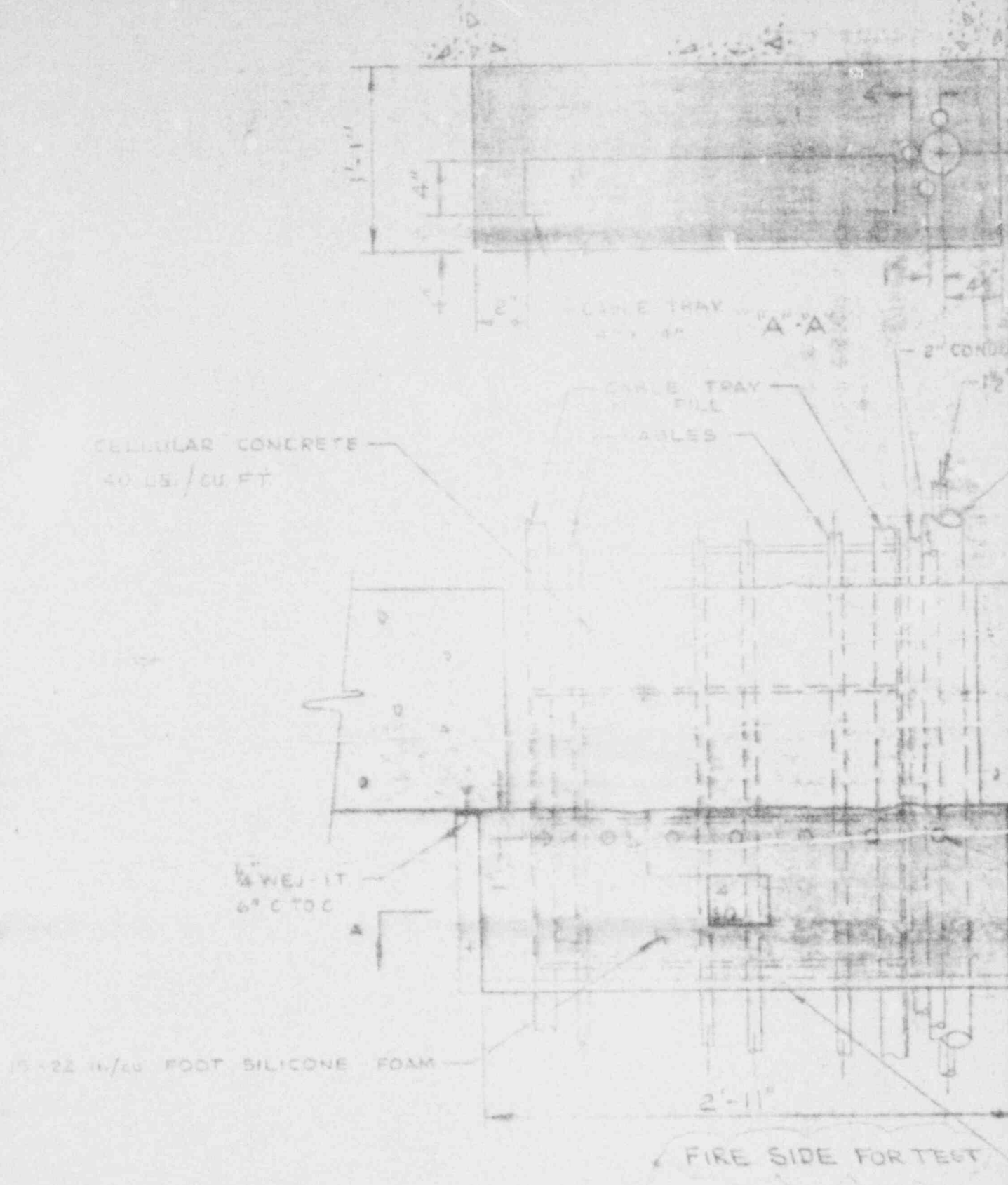
CELLULAR CONCRETE
40 LB./CUFT.

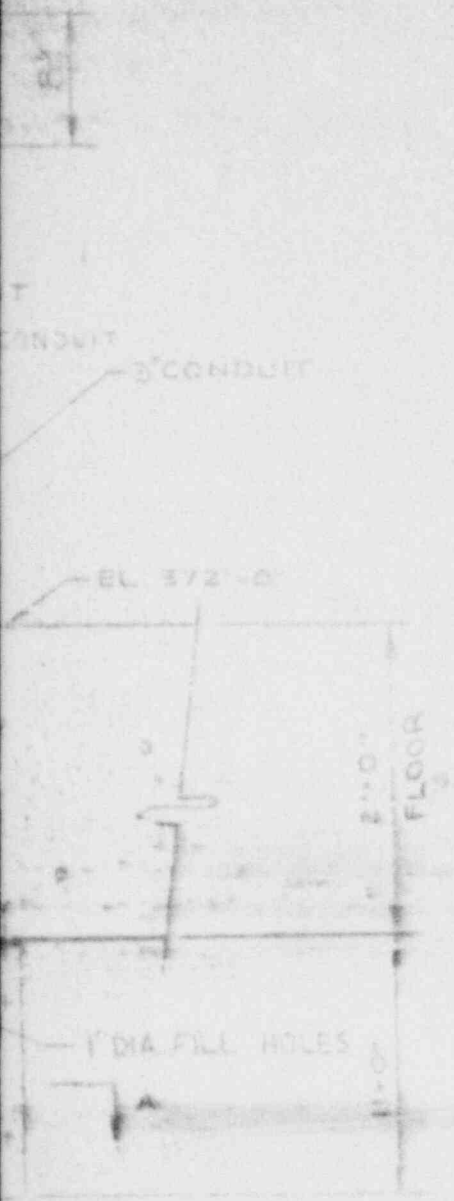
FIRE SIDE FOR TEST

2" CONCRETE SLAB



This drawing and the notes on the plan of SCATTER. They are to be used as a guide only and not as a contract. The contractor shall be responsible for the interpretation of the drawing and the notes.

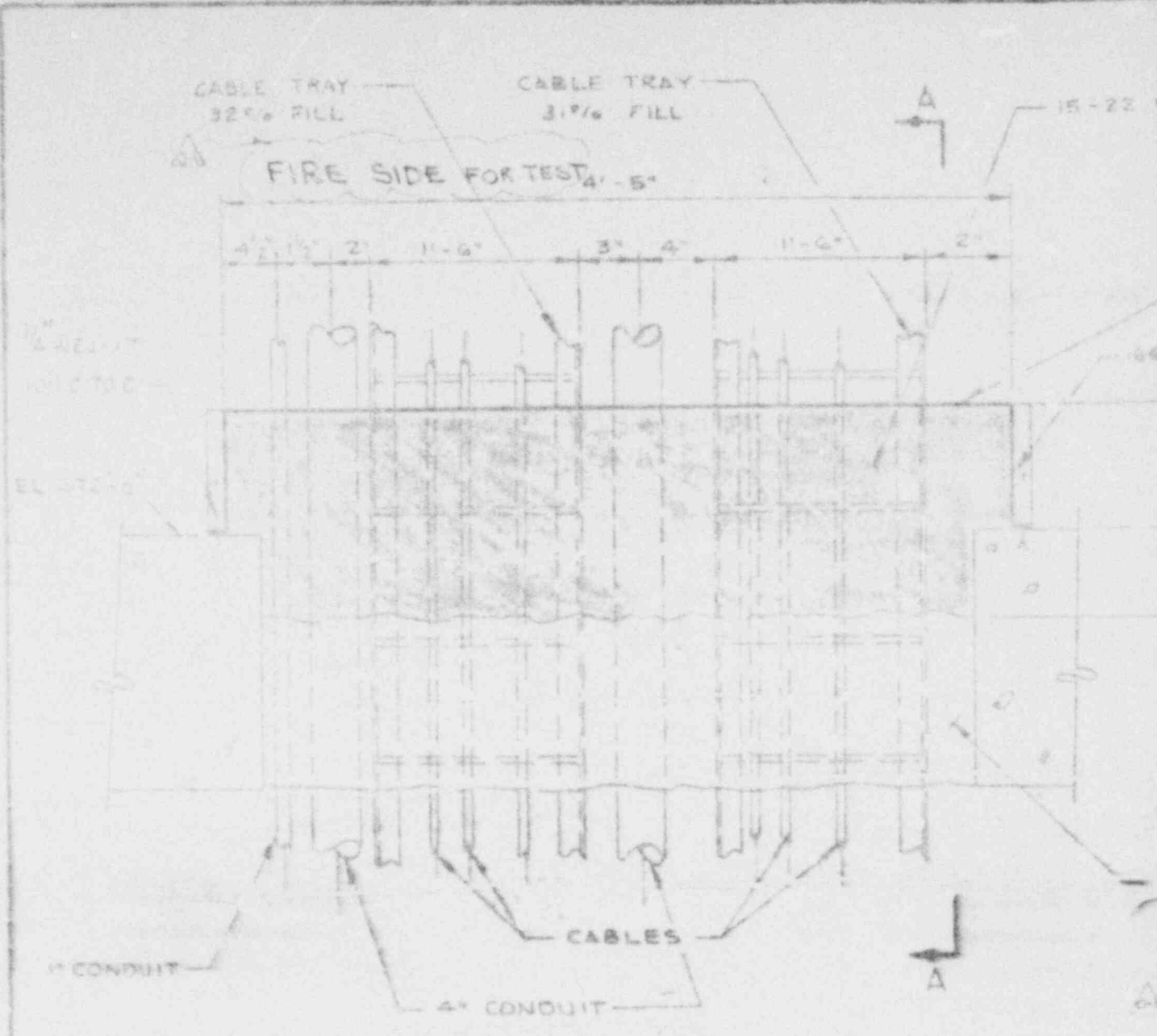




SHEET METAL BOX
14 STAGE

△									
△	BY	REV							
△	BY	AS BUILT							
NO	DATE	REVISIONS							
REFERENCE		DESIGNED							
BECHTEL									
SAN FRANCISCO									
ARKANSAS POWER & LIGHT COMPANY									
ARKANSAS NUCLEAR ONE									
UNIT 1									
FIRE SEAL DETAIL									
PENETRATION #0037 RM97									
		6600							

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15-22 10

CABLES

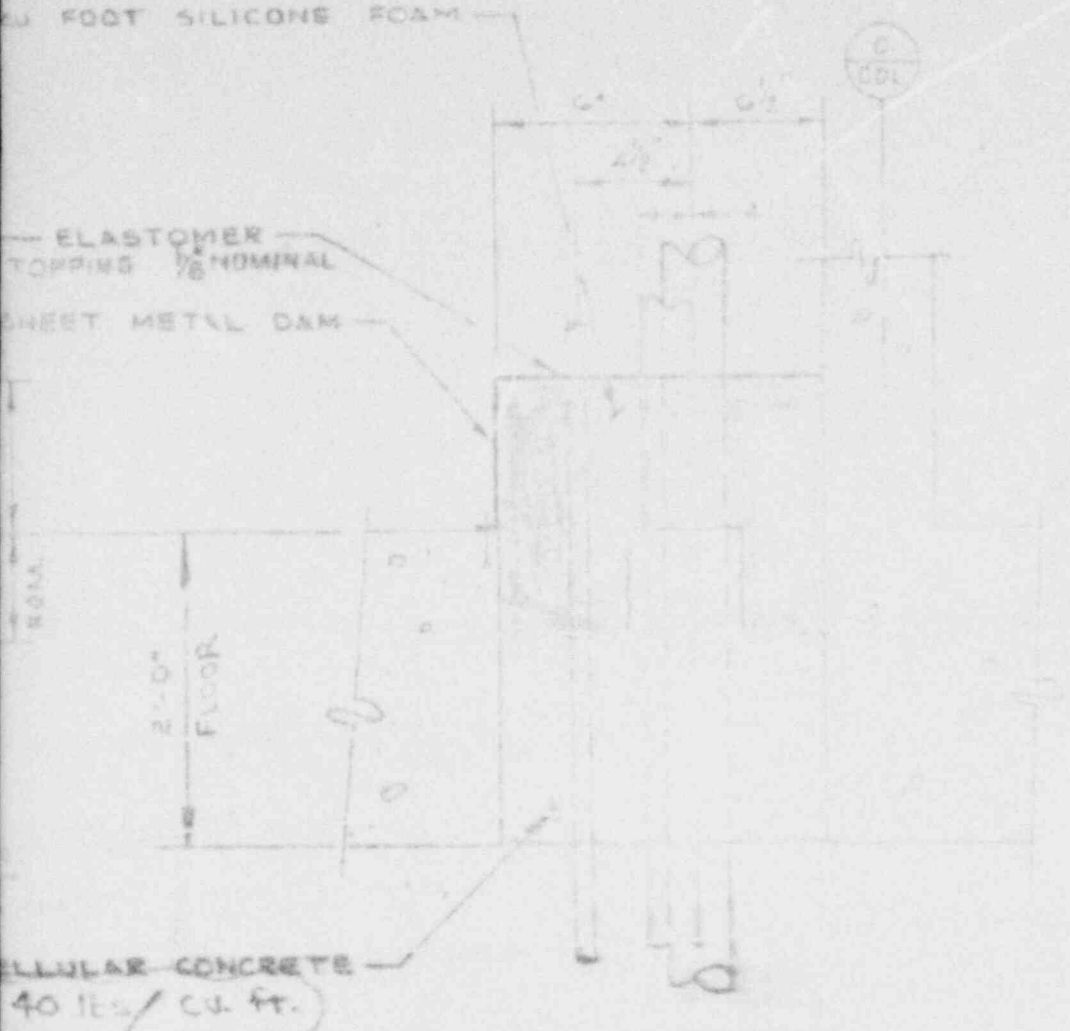
1" CONDUIT

4" CONDUIT

2 1/2" FOOT SILICONE FOAM

ELASTOMER
TOPPING 1/8" NOMINAL
SHEET METAL DAM

CELLULAR CONCRETE
40 LB. / CU. FT.



"A-A"

NO.	DATE	REVISION	BY
SCALE			

BECHTEL
SAN FRANCISCO

ARKANSAS POWER & LIGHT COMPANY
ARKANSAS NUCLEAR UNIT
UNIT 1

PENETRATION #0040-KM-97
TYPE SEAL DETAIL



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REV. 6-10-67

CONDUIT, TYPICAL OF 14
IN SIZES 1 1/2" - 4" DIA.

CABLES (NOTE 1)

DAMMING INSIDE CONDUIT
CERA-FIBER

14 GAUGE SHEET METAL BOX 4 1/2" X 2 1/4" X 1 1/2"
WITH 10 - 4" SLOTS

FIRE SIDE FOR TEST

15-22 LB./cu. FT. SILICONE
ENTIRE BOX FILLED

NOTE 1. THE CABLES...

BECHTEL	
SAN FRANCISCO	
ARKANSAS POWER & LIGHT COMPANY	
ATLANTA, GEORGIA	
1944	
PENNSYLVANIA	
1945	