PAPER No. 409 254—256

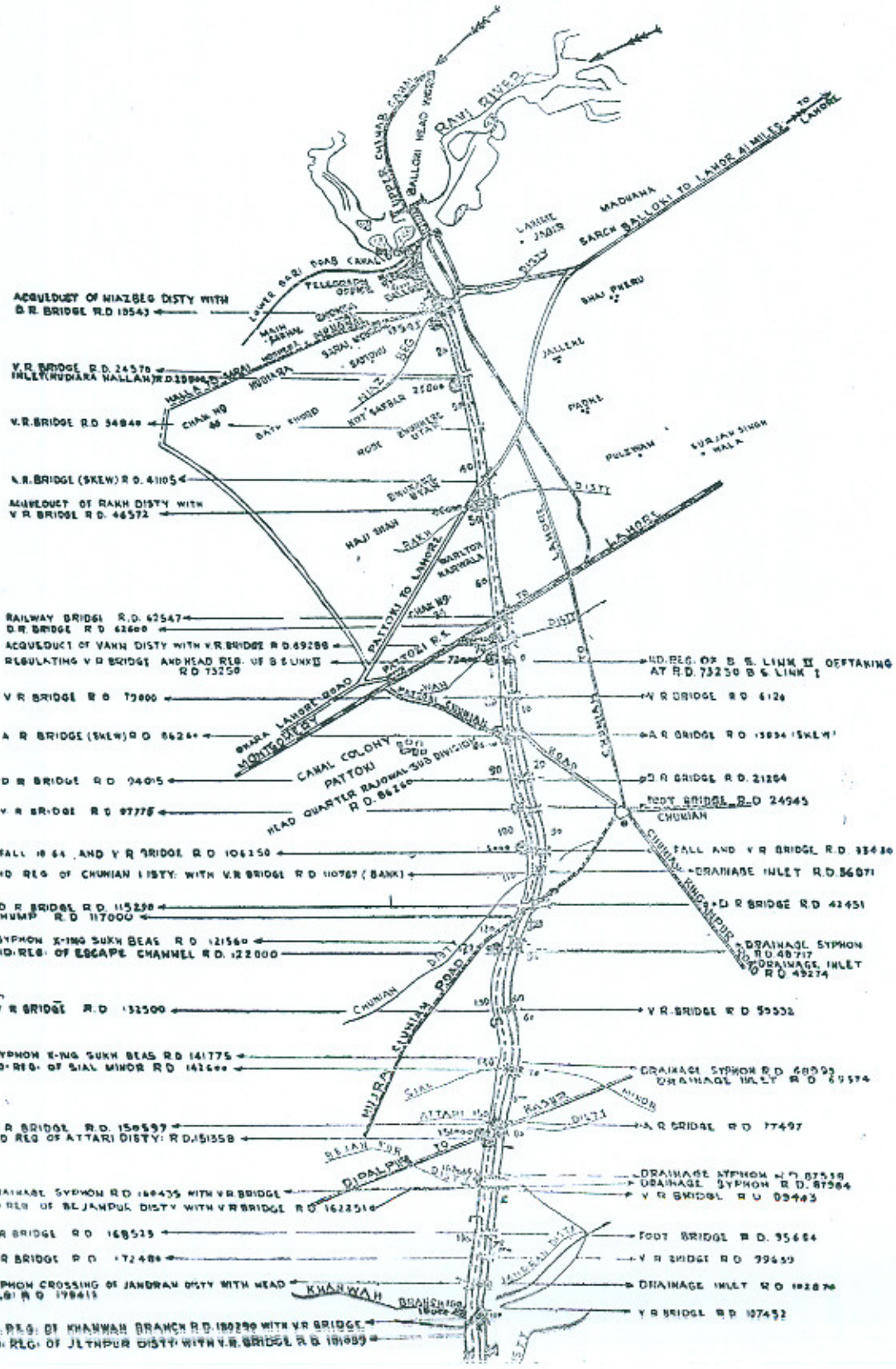
B. S. LINK DIVISION LAHORE

INDEX PLAN

OF

BALLOKI SULEIMANKI LINKS I & II.

SCALE: 1/2" = 1 MILE.



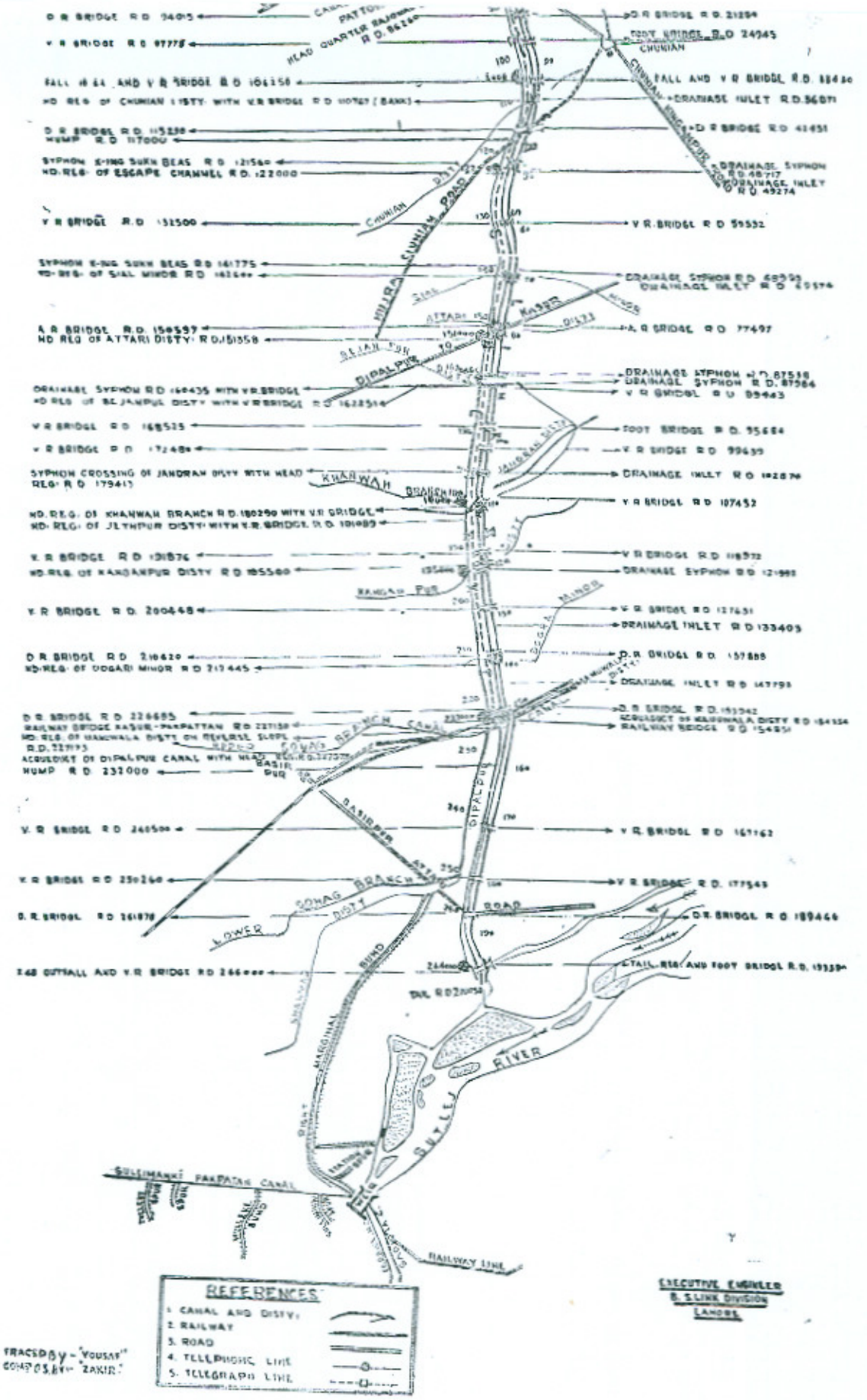


Fig. 1. Index Plan.

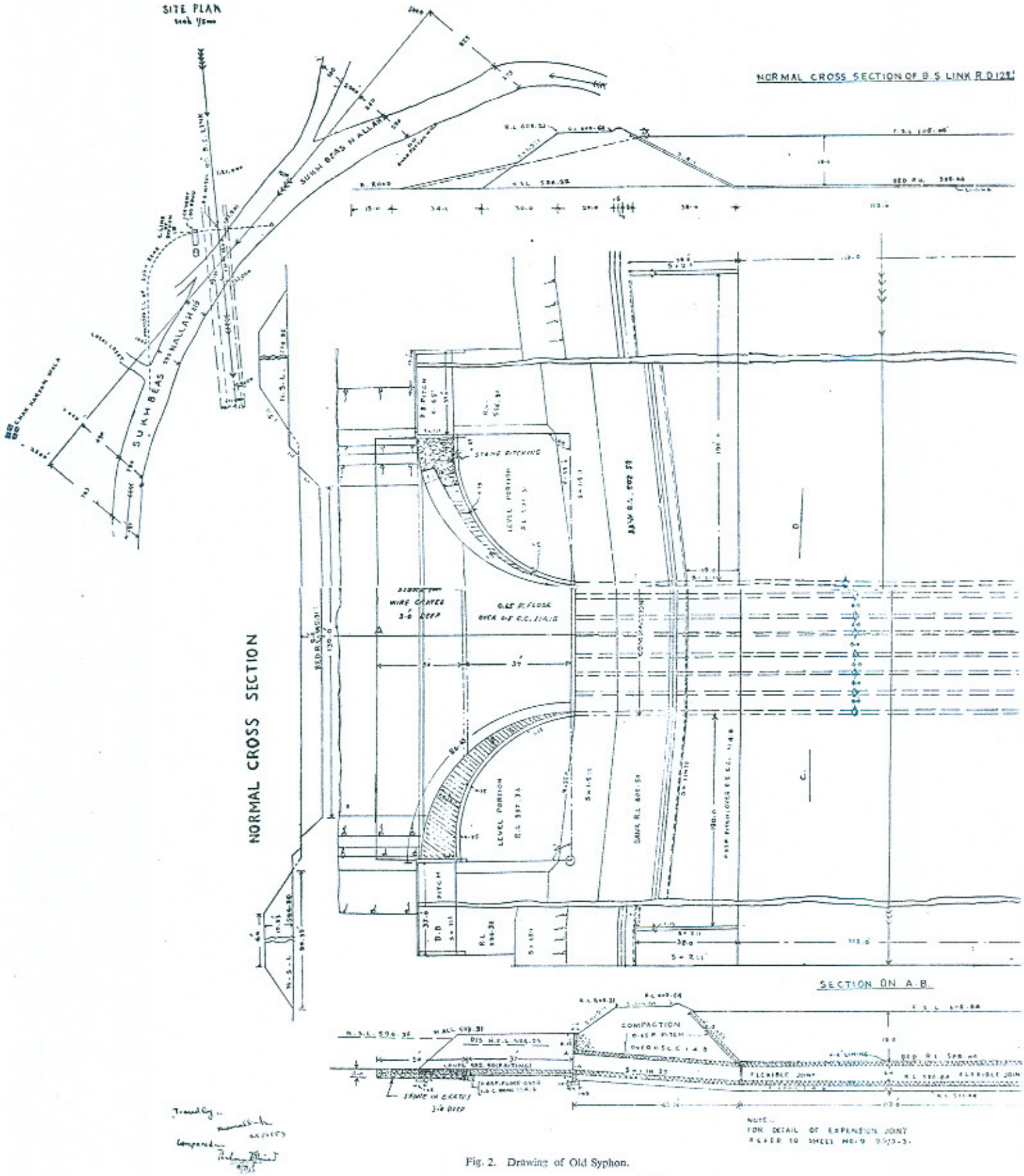
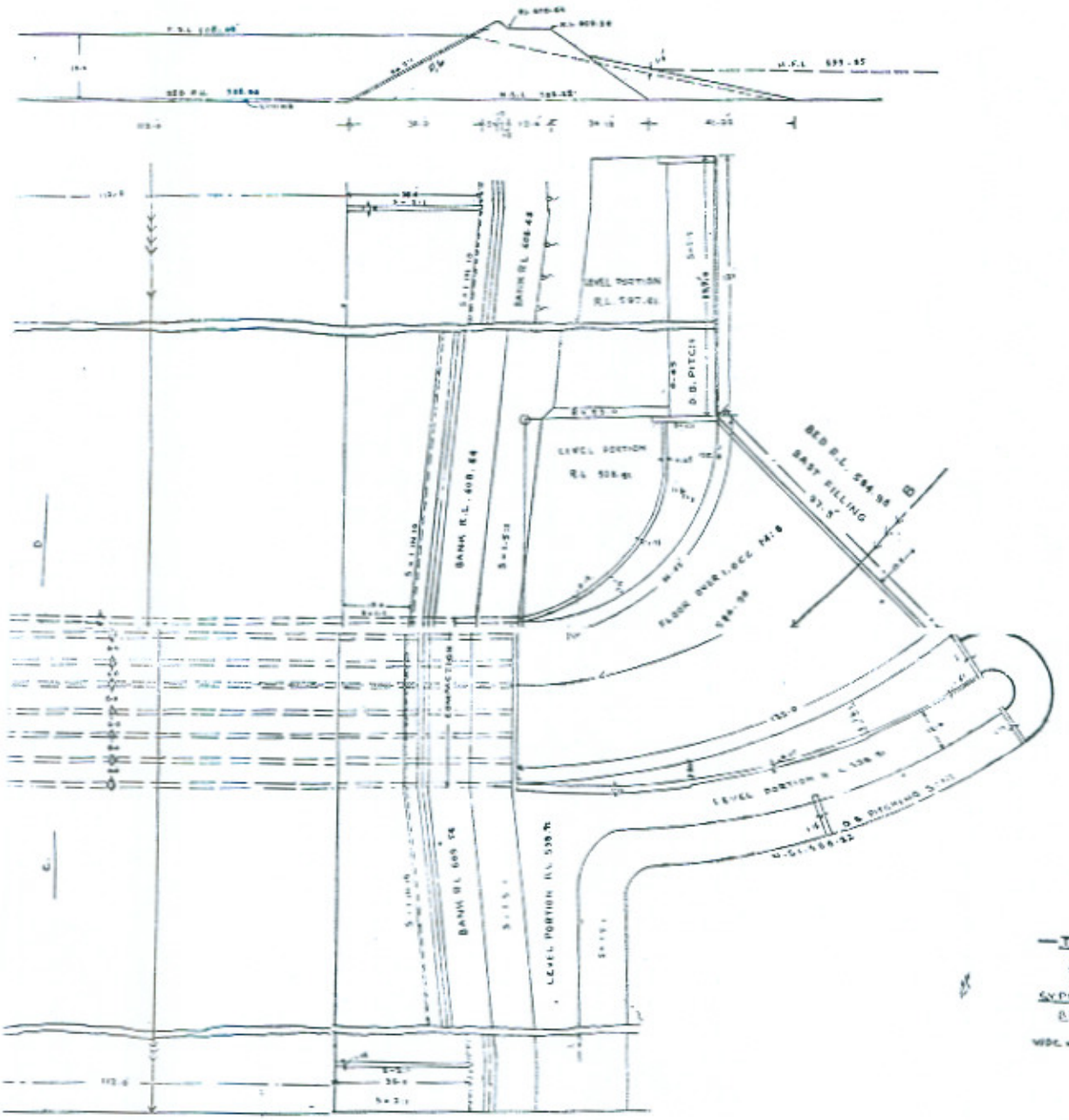


Fig. 2. Drawing of Old Syphon.

MAL CROSS SECTION OF B S LINK R.D 121560





TAHIR DIVISION C.B.D.C.

COMPLETION PLAN

OF

SYPHON FOR SUKH BEAS NALLAH

B.S LINK R.D. 121560

WORK NOT PROCEEDED WITH SINCE 1965

SECTION ON A.B.



DETAIL OF EXPANSION JOINT
AT TO SHEET NO. 9 R.D 3-3.

COUNTER-SIGNED
CHECKED RIDE LEVEL BANK NO CHK P.S

SUB DIVISIONAL OFFICER
C.B.D.C. DIVISION
(ABDUL RASHID)

EXECUTIVE ENGINEER
TAHIR DIVISION C.B.D.C.

CENTRAL DESIGNS OFFICE IRRIGATION & W.P.D. PUNJAB			
DRG. NO. B S/3-9	SHEET NO. 1	CONNECTED	
DIVISION	SUPERSEDES DRG. NO	DRG. NO	
BALLOKI SULEIMANKE LINK SYPHON FOR SUKHBEAS NALLAH B. S LINK R. D 121,560 SCALE 1"=100'			
REFERENCES	DRAWN		CHIEF ENGINEER
CASE NO 124/1952	CHECKED		DIRECTOR C.B.D.
			DESIGN ENGINEER

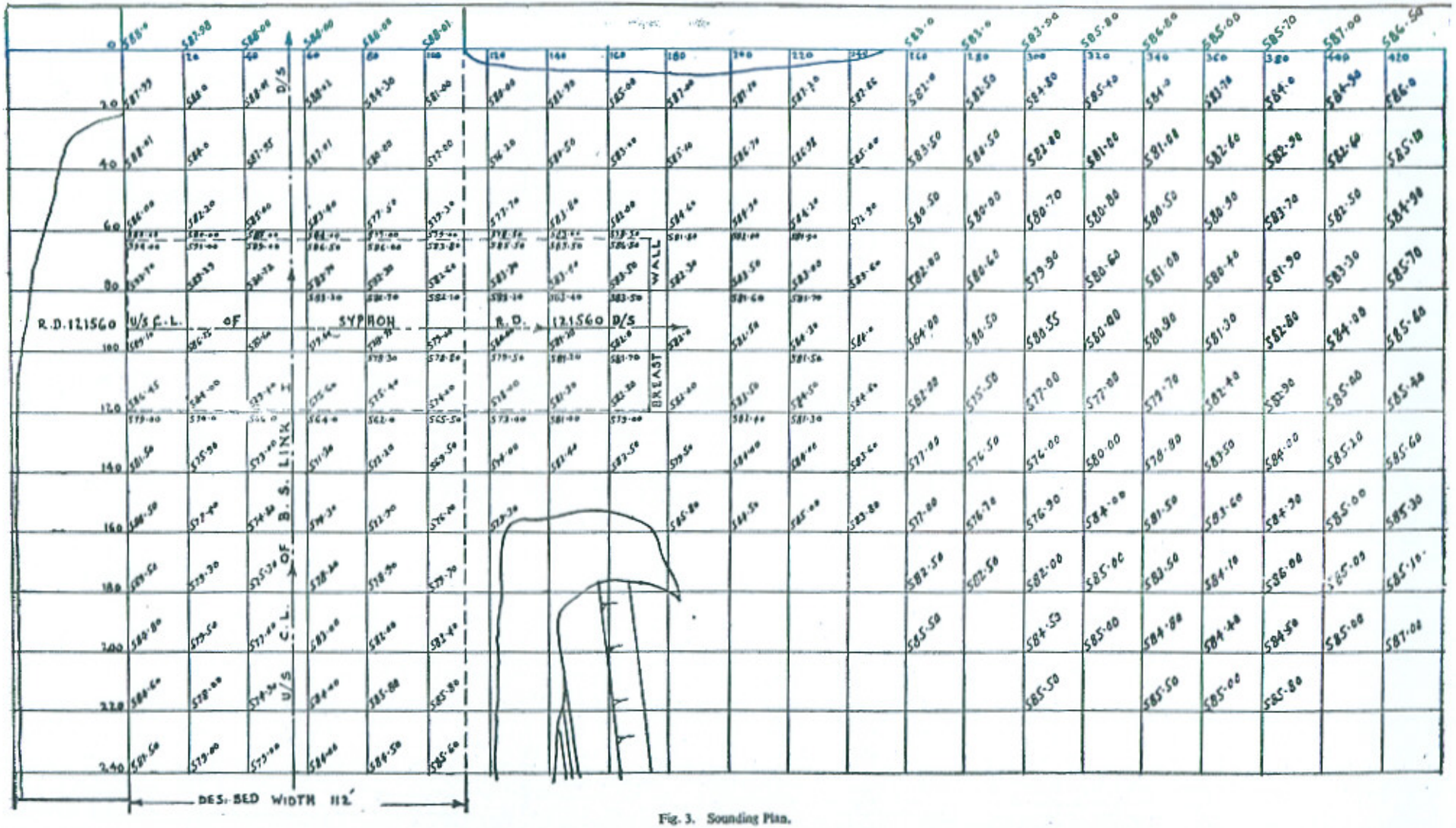
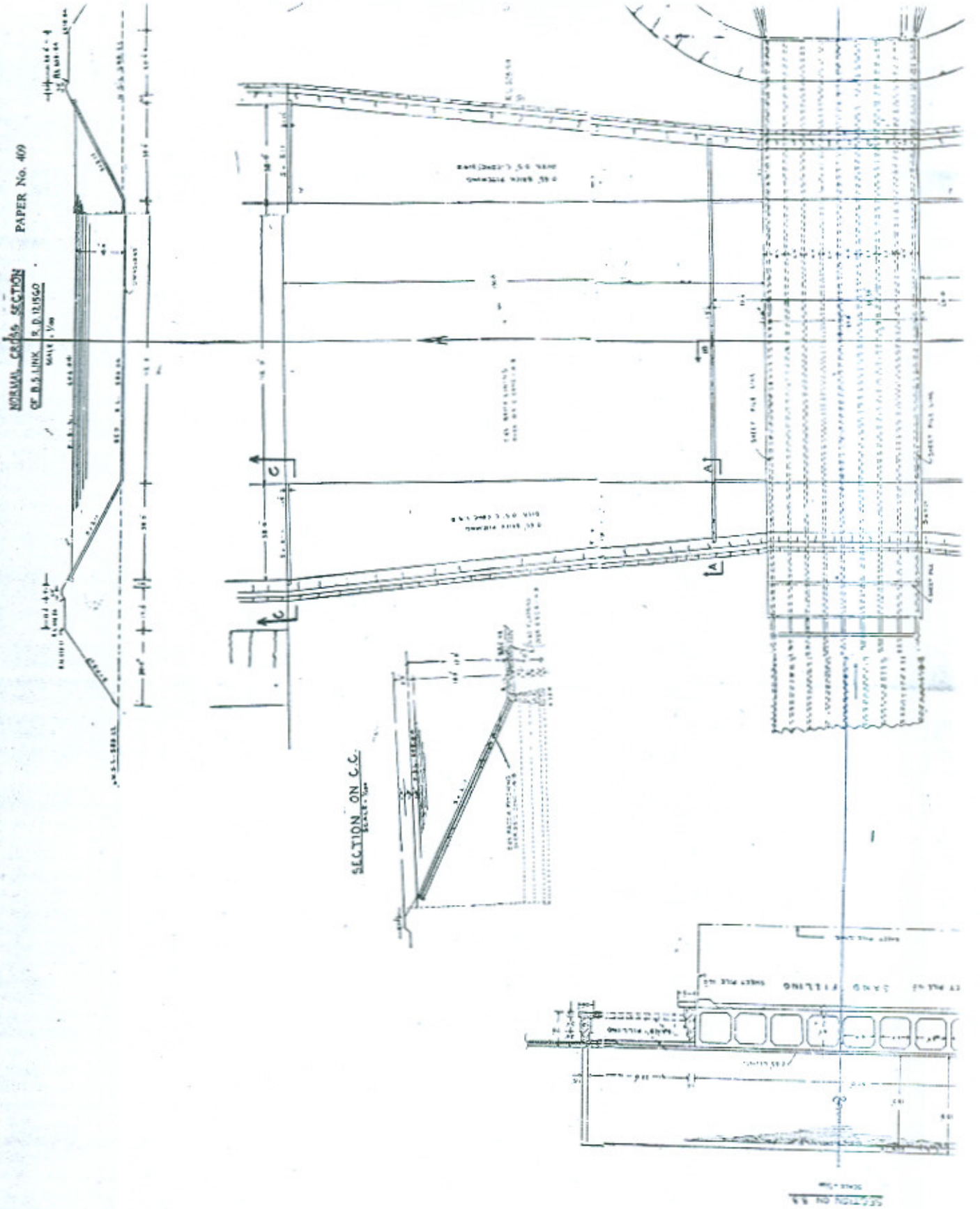
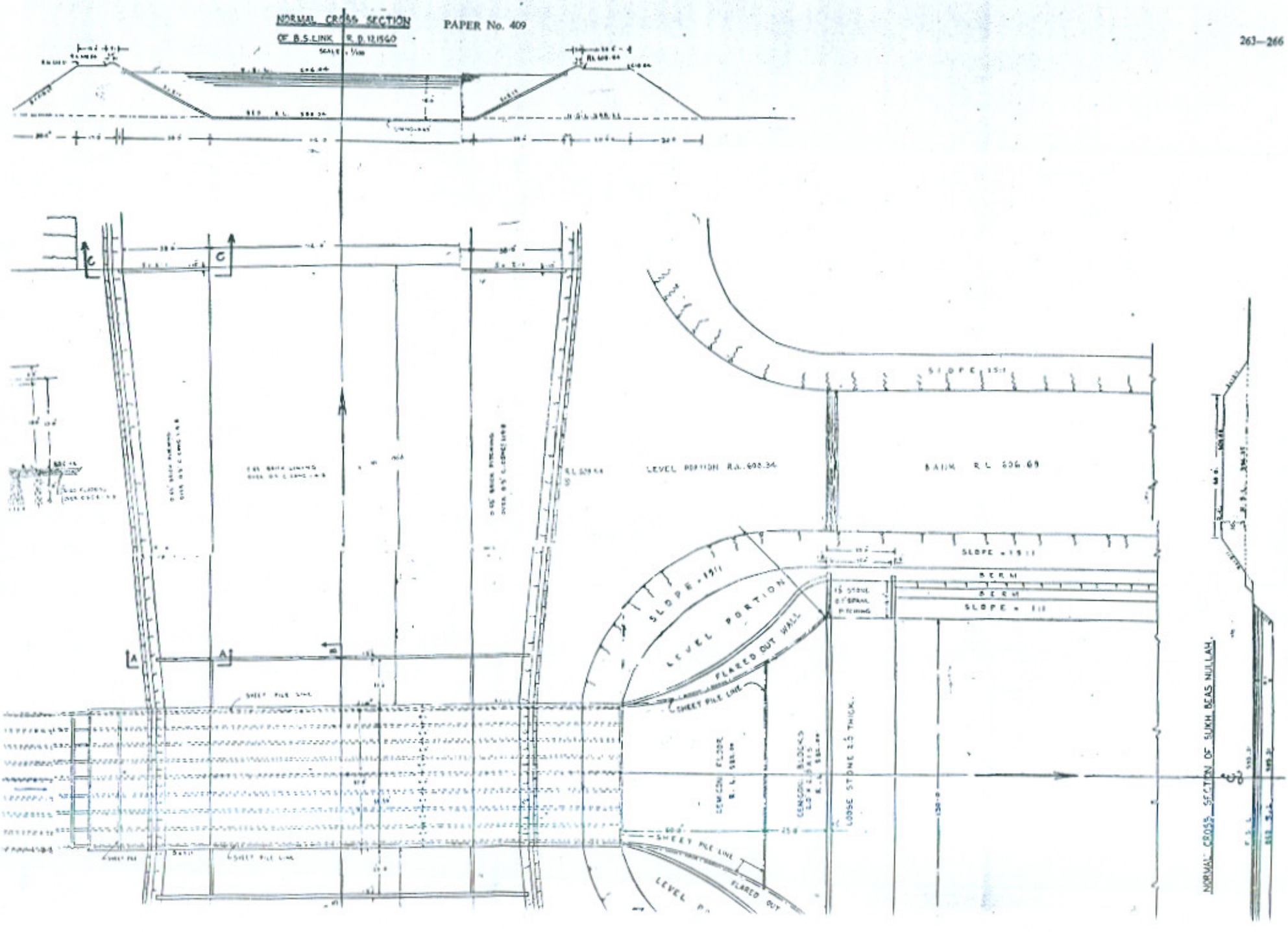


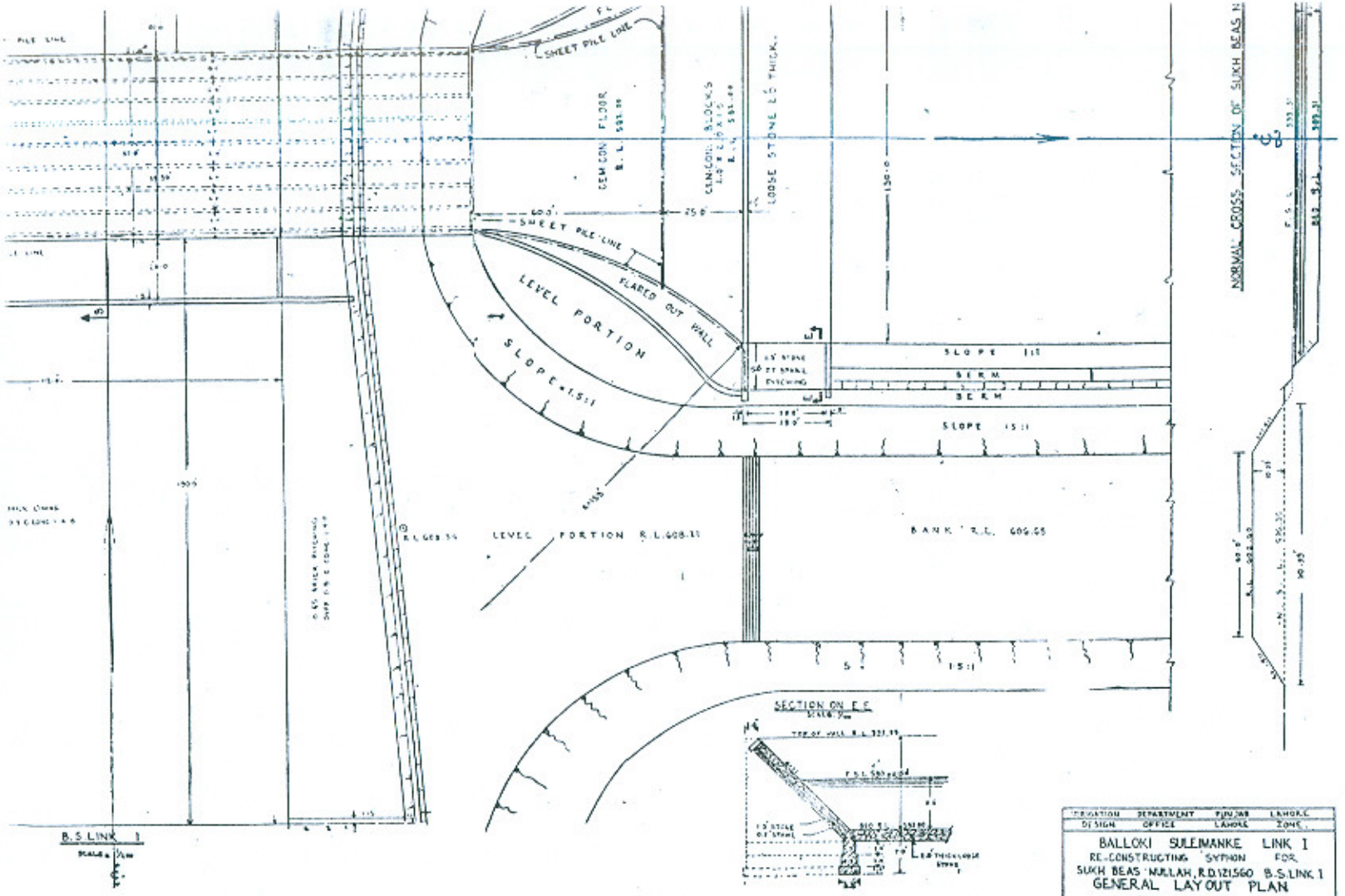
Fig. 3. Sounding Plan.

PAPER No. 409

NORMAL CROSS SECTION
OF R.S.LINK
R.D.12/560




NORMAL CROSS SECTION
OF B.S.LINK R.D.12.1960
SCALE : 1/100
LEVEL PORTION R.L. 608.34
BANK R.L. 606.69
SLOPE 1:1
SLOPE 1:1½
BERM
SLOPE 1:1
15" STONE & SPAWL PITCHING
LEVEL PORTION
FLARED OUT WALL
SHEET PILE LINE
LOOSE STONE 2.5 THICK.
CEMENT CONCRETE FLOOR R.L. 588.84
CEMENT CONCRETE BLOCKS 2.5 x 2.5 x 1.5 R.L. 586.84
SHEET PILE LINE
FLARED OUT
LEVEL P
NORMAL CROSS SECTION OF SUKH BEAS NULLAH.



IRRIGATION DEPARTMENT PUNJAB LAHORE
DESIGN OFFICE LAHORE ZONE

BALLOKI SULEIMANKE LINK 1
RE-CONSTRUCTING SYPHON FOR
SUKH BEAS NULLAH, R.D.121560 B.S.LINK 1
GENERAL LAYOUT PLAN
SCALE. AS SHOWN

DRAWN		CHIEF ENGINEER
TRACED	E.U.Z.	DRAWN BY
CHECKED		DESIGN ENGINEER
REVISED DRG'S CASE NO. 333/1970	DRG: NO: L.Z. 154	ASST. DESIGN ENGINEER SUPERVISING ENGINEER

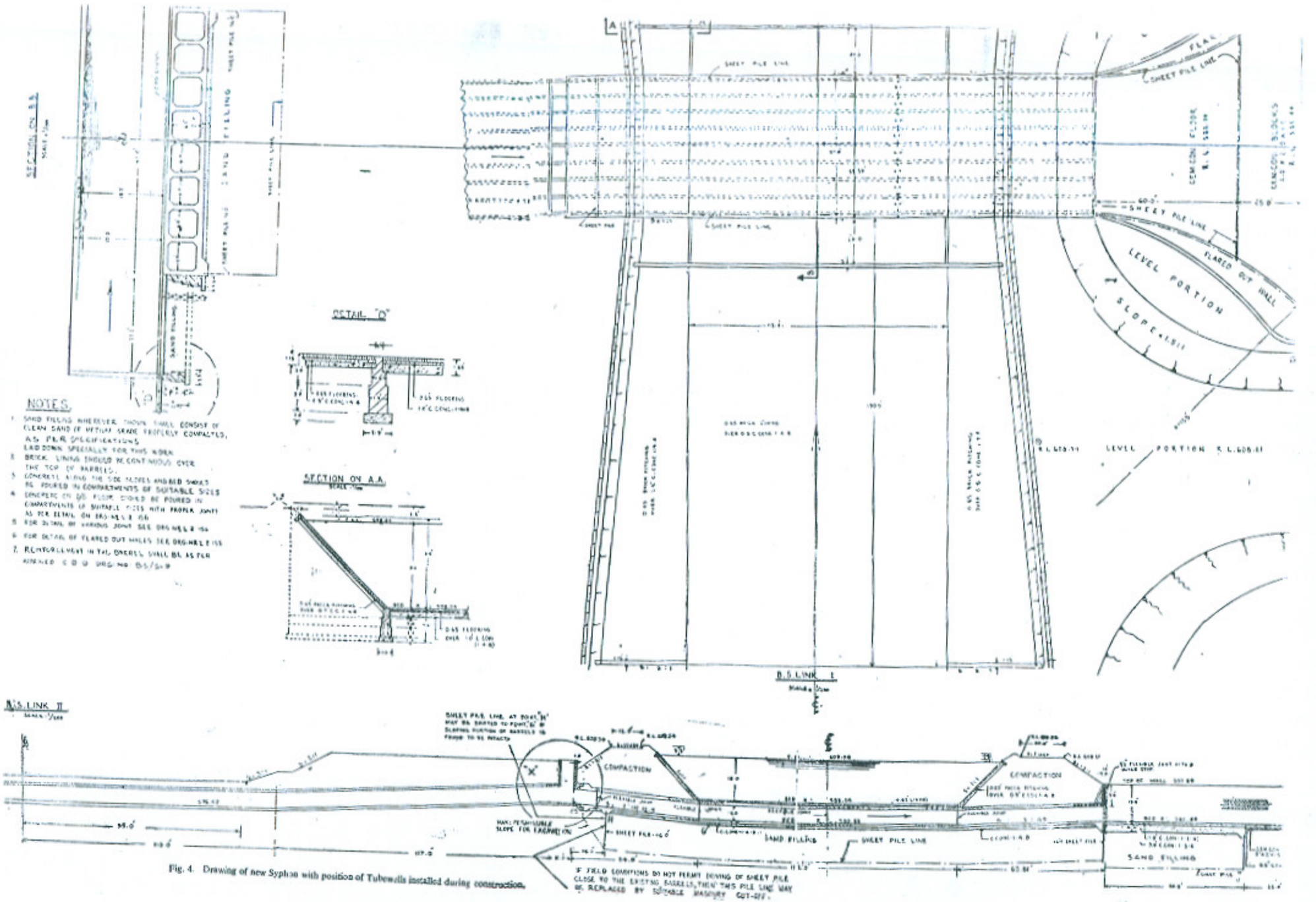
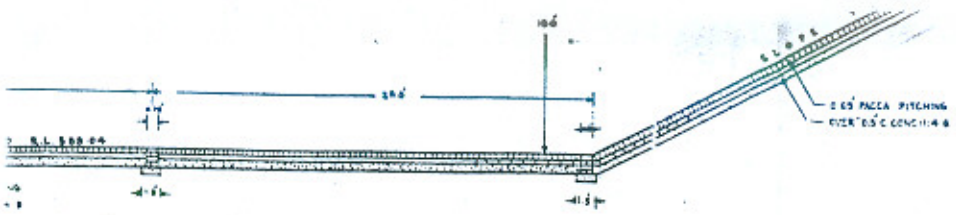
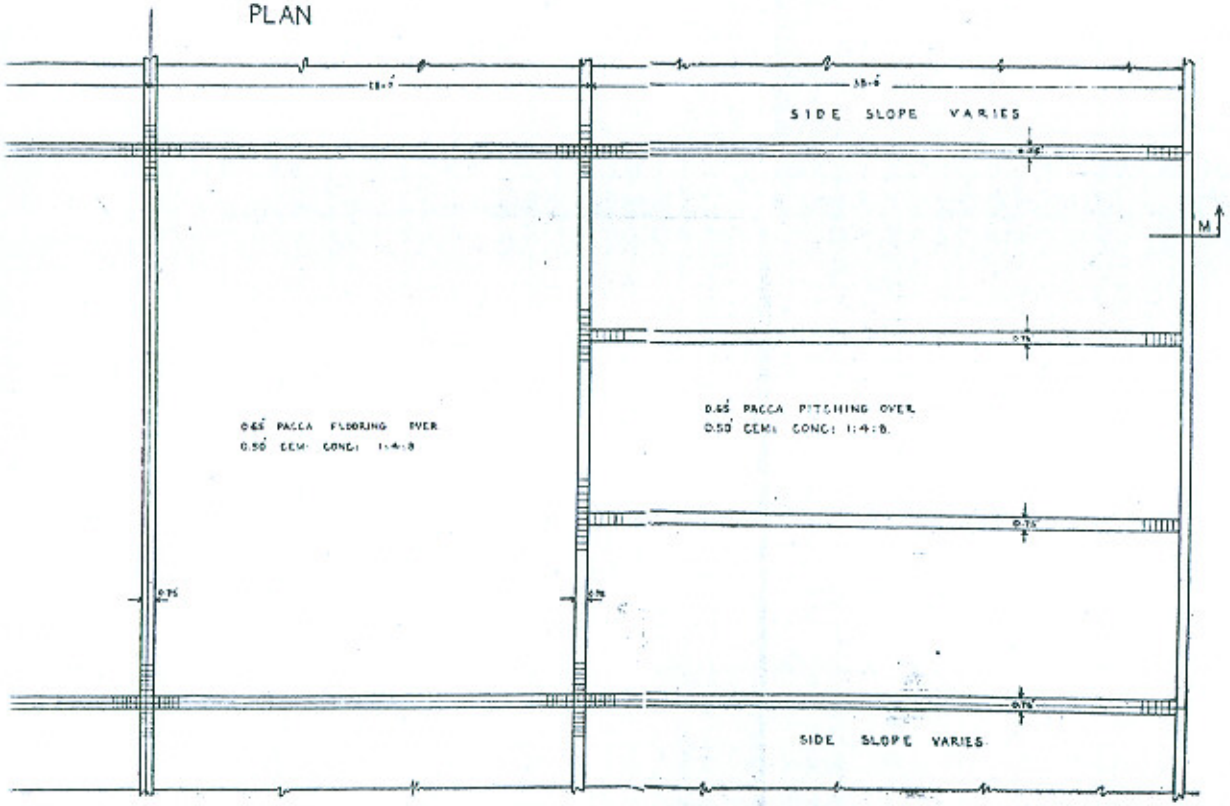


Fig. 4. Drawing of new Syphon with position of Tubewells installed during construction.



PLAN



IRRIGATION DESIGN	DEPARTMENT OFFICE	PUNJAB LAHORE	LAHORE ZONE.
BALLOKI SULEIMANKE LINK I RE-CONSTRUCTING SYPHON FOR SUKH BEAS NULLAH, R.D. 121,560 B.S. LINK. BRICK LINING AND JOINT DETAILS SCALE: 1/50			
DRAWN	Salah S.S.I.	CHIEF ENGINEER	
TRACED	S.U. Zaqar	SUPERINTENDING ENGINEER	
CHECKED	H.O. C.D.	S.E. G.B. CANAL CIRCLE	
REFERENCES CASE NO 337/1370	DRG: NO. L.Z. 156	DESIGN ENGINEER	
		ASSTT. DESIGN ENGINEER	
		SUPERSEDED DRG. NO.	

Fig. 5. Brick Lining & Joint detail.

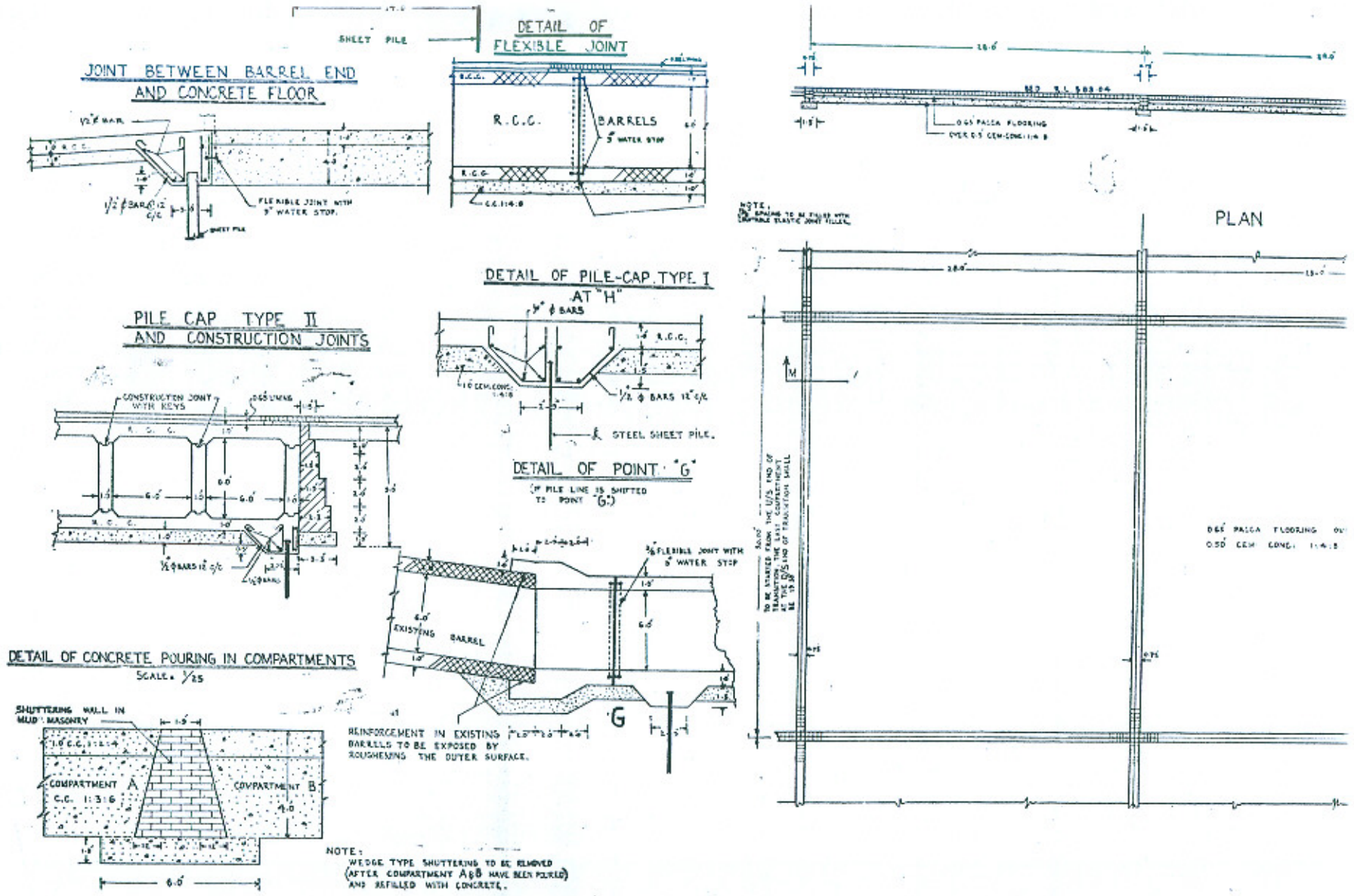
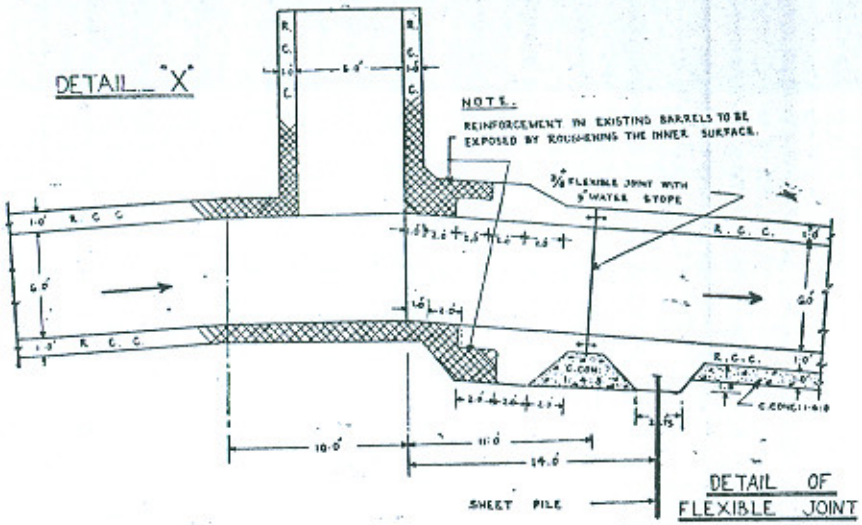
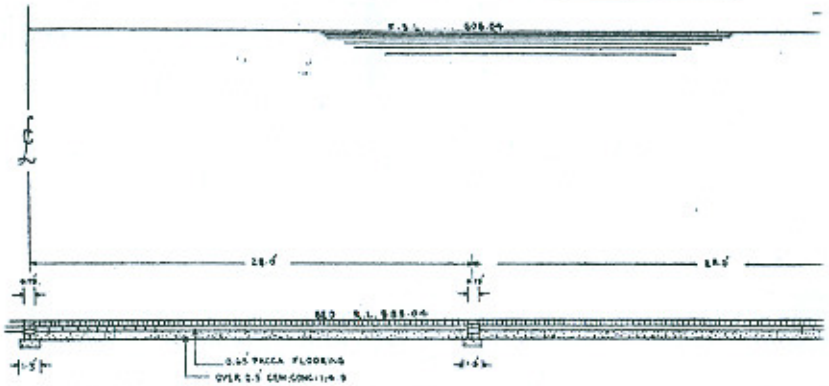


Fig. 5. Brick Lining & Joint d

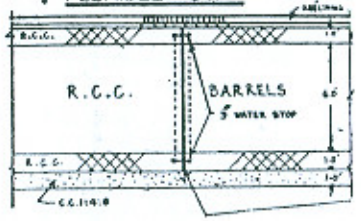
DETAIL "X"



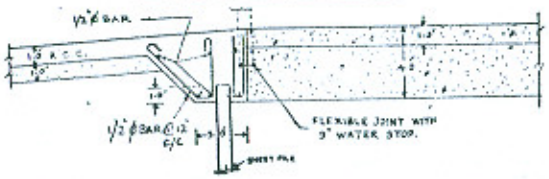
DETAIL OF BRICK LINING AT M.M.



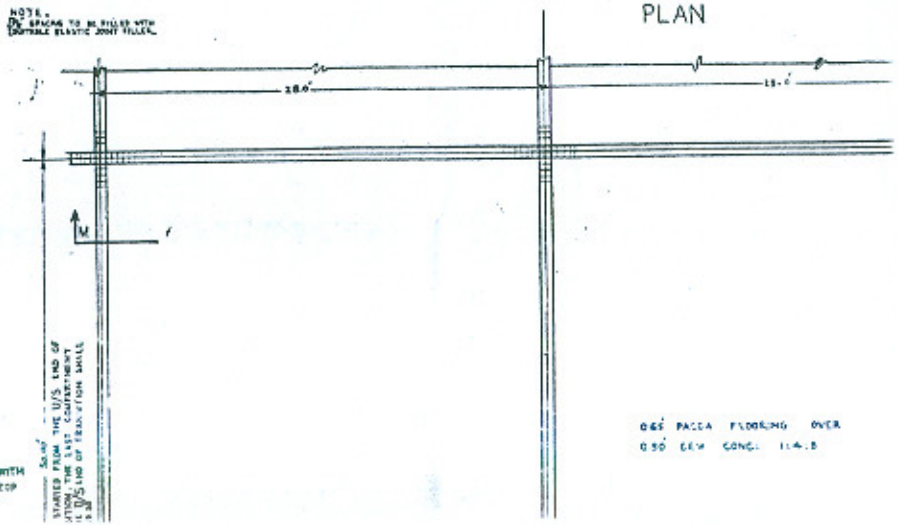
DETAIL OF FLEXIBLE JOINT



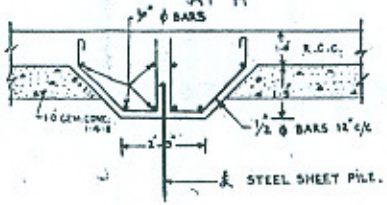
JOINT BETWEEN BARREL END AND CONCRETE FLOOR



PLAN



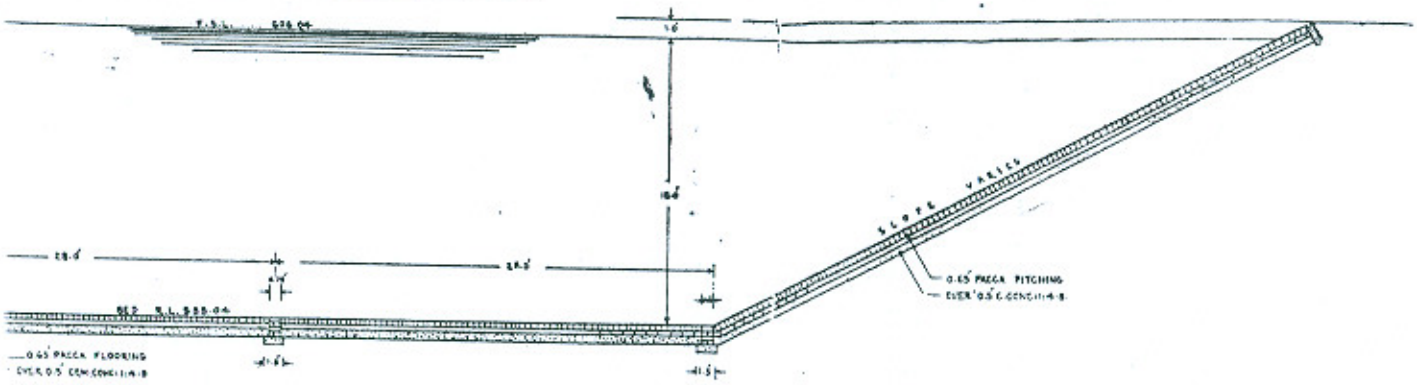
DETAIL OF PILE-CAP TYPE I AT "H"



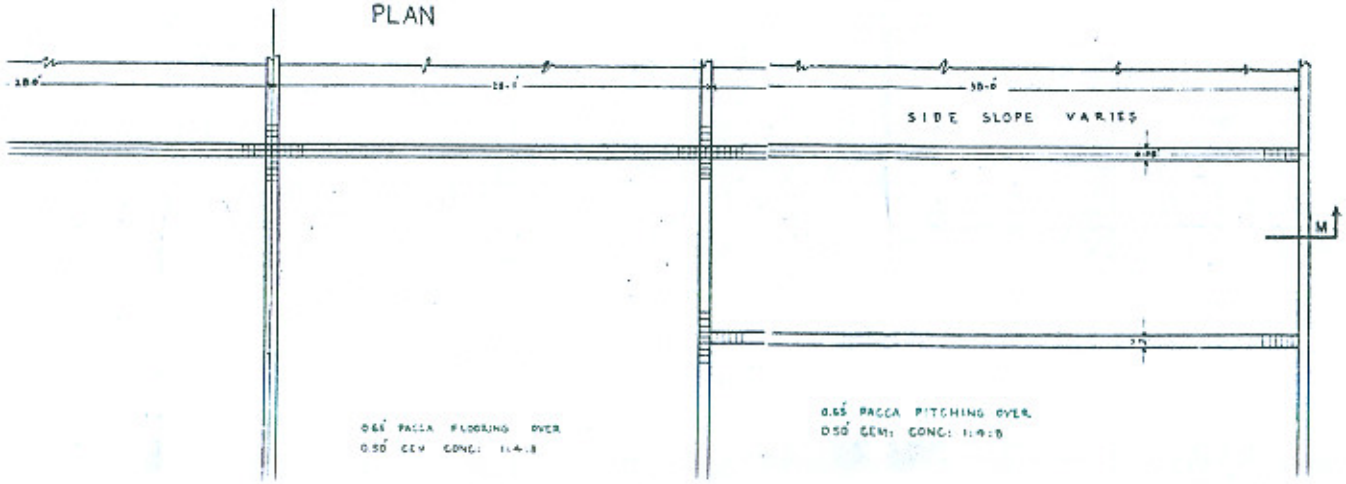
PILE CAP TYPE II AND CONSTRUCTION JOINTS

DETAIL OF POINT "G"
(IF PILE LINE IS SHIFTED TO POINT 'G')

DETAIL OF BRICK LINING AT M.M.



PLAN



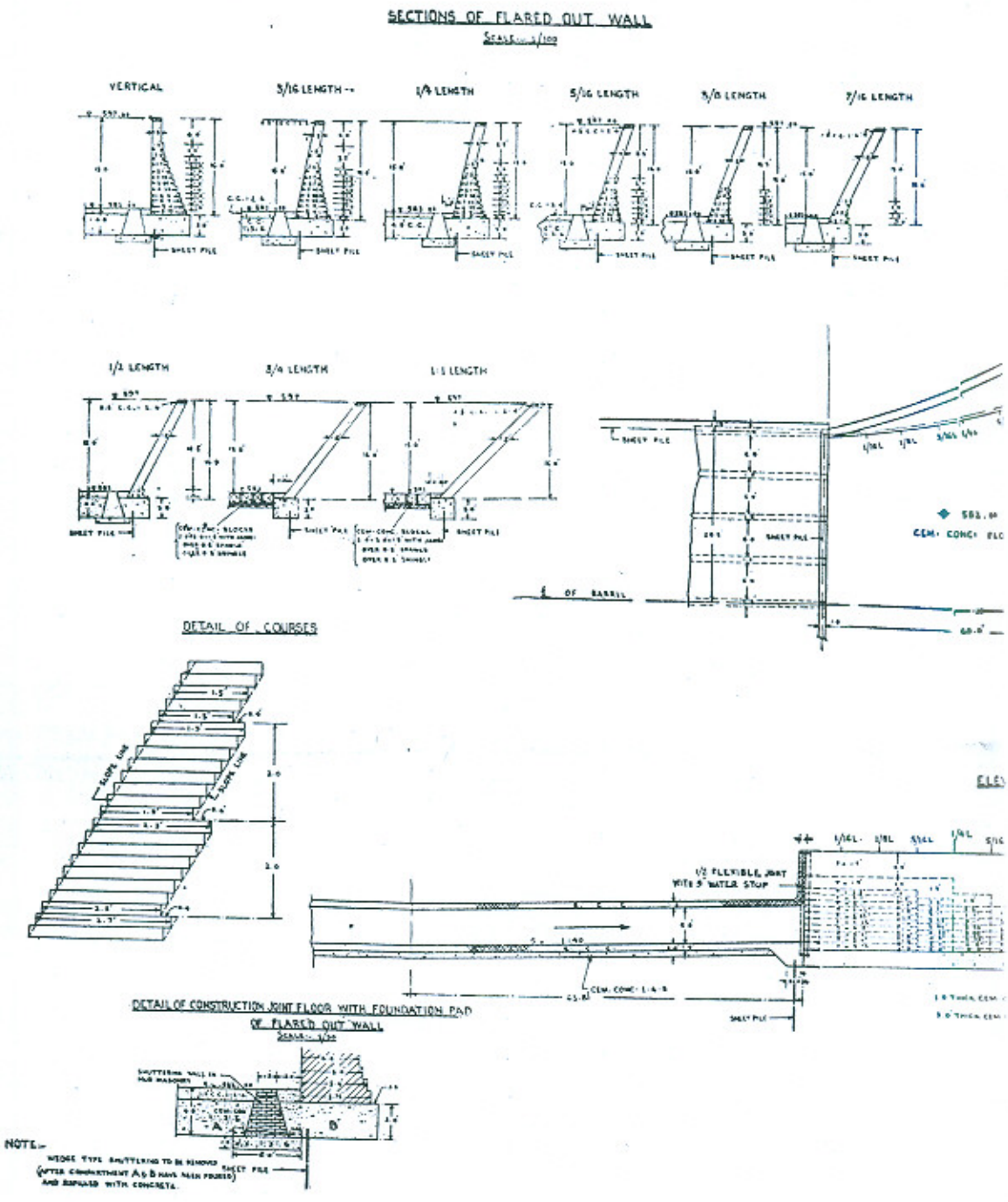
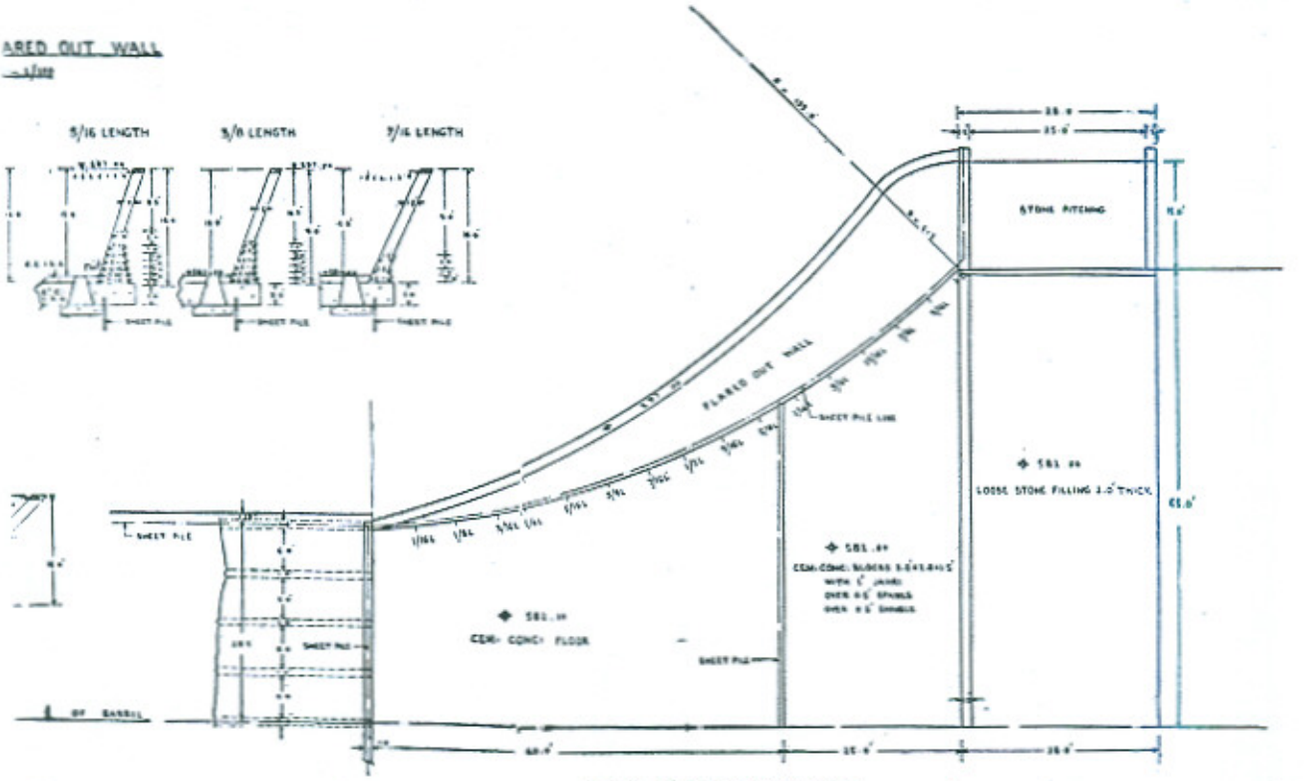

SECTIONS OF FLARED OUT WALL
VERTICAL
3/16 LENGTH
1/4 LENGTH
5/16 LENGTH
3/8 LENGTH
7/16 LENGTH
1/2 LENGTH
3/4 LENGTH
1/1 LENGTH
SHEET PILE
DETAIL OF COURSES
SLOPE LINE
DETAIL OF CONSTRUCTION JOINT FLOOR WITH FOUNDATION PAD
OF FLARED OUT WALL
NOTE:-

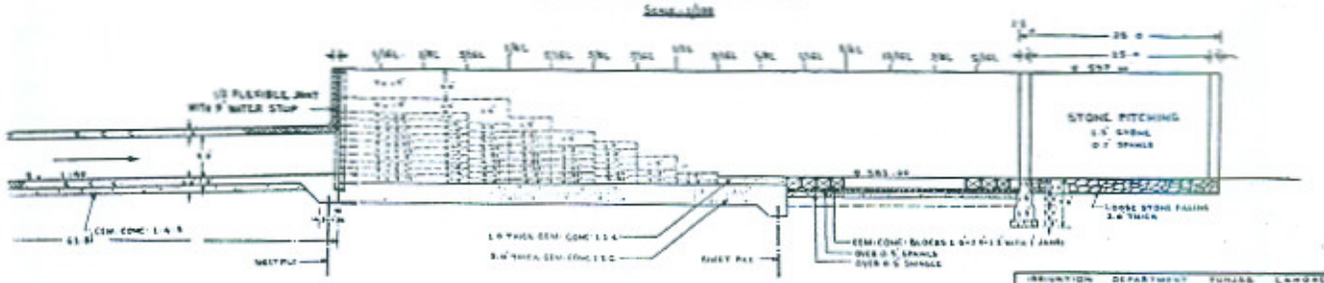
Fig. 6

ARED OUT WALL



PLAN OF FLARED OUT WALL

ELEVATION OF FLARED OUT WALL



IRRIGATION DEPARTMENT PUNJAB, LAHORE	
DESIGN OFFICE LAHORE ZONE	
BALLOKI SULEIMANKE LINK I	
RE-CONSTRUCTING SYPHON FOR SUKHERA NALLAH	
R. S. LINK AT R. D. 131.560	
SHOWING DETAIL OF FLARED OUT WALL	
DRAWN BY	CHIEF ENGINEER
TRACED BY	
CHECKED	DESIGN ENGINEER
REFERENCES CARE NO 337/1970	DRG: NO L. Z. 155

Fig. 6

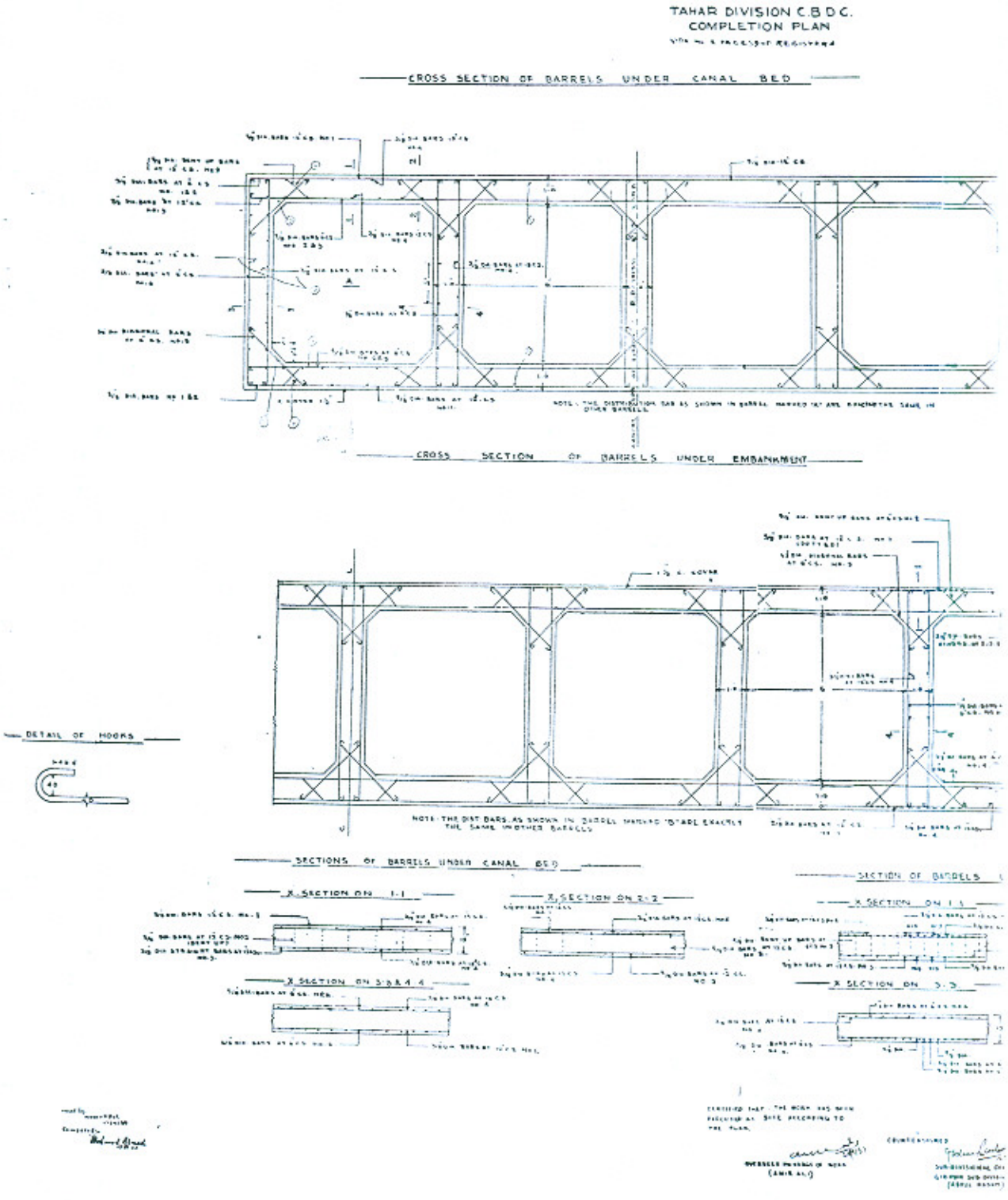


Fig. 7. Detail of Reinforcement in Barrels.

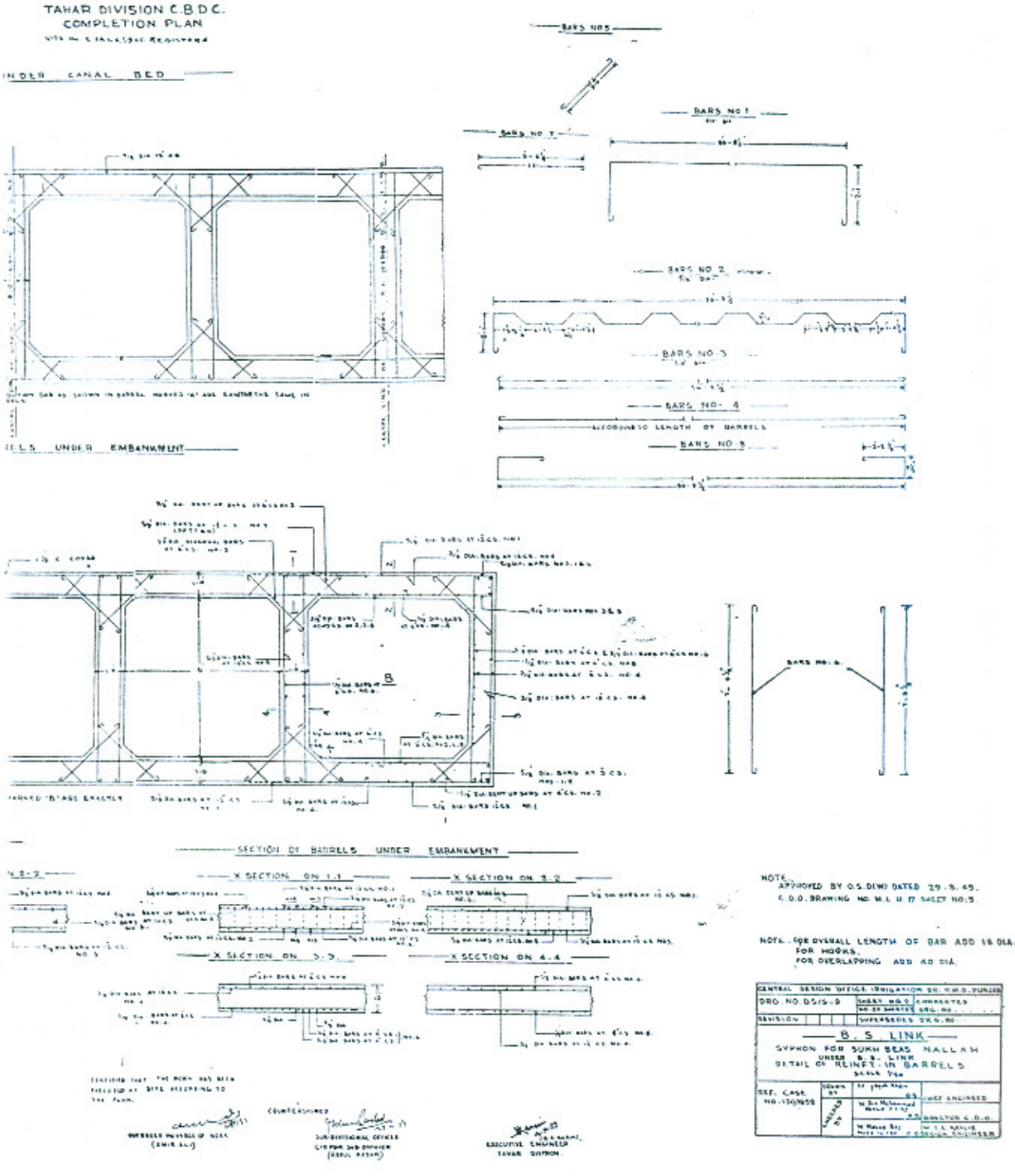


Fig. 7. Detail of Reinforcement in Barrels.

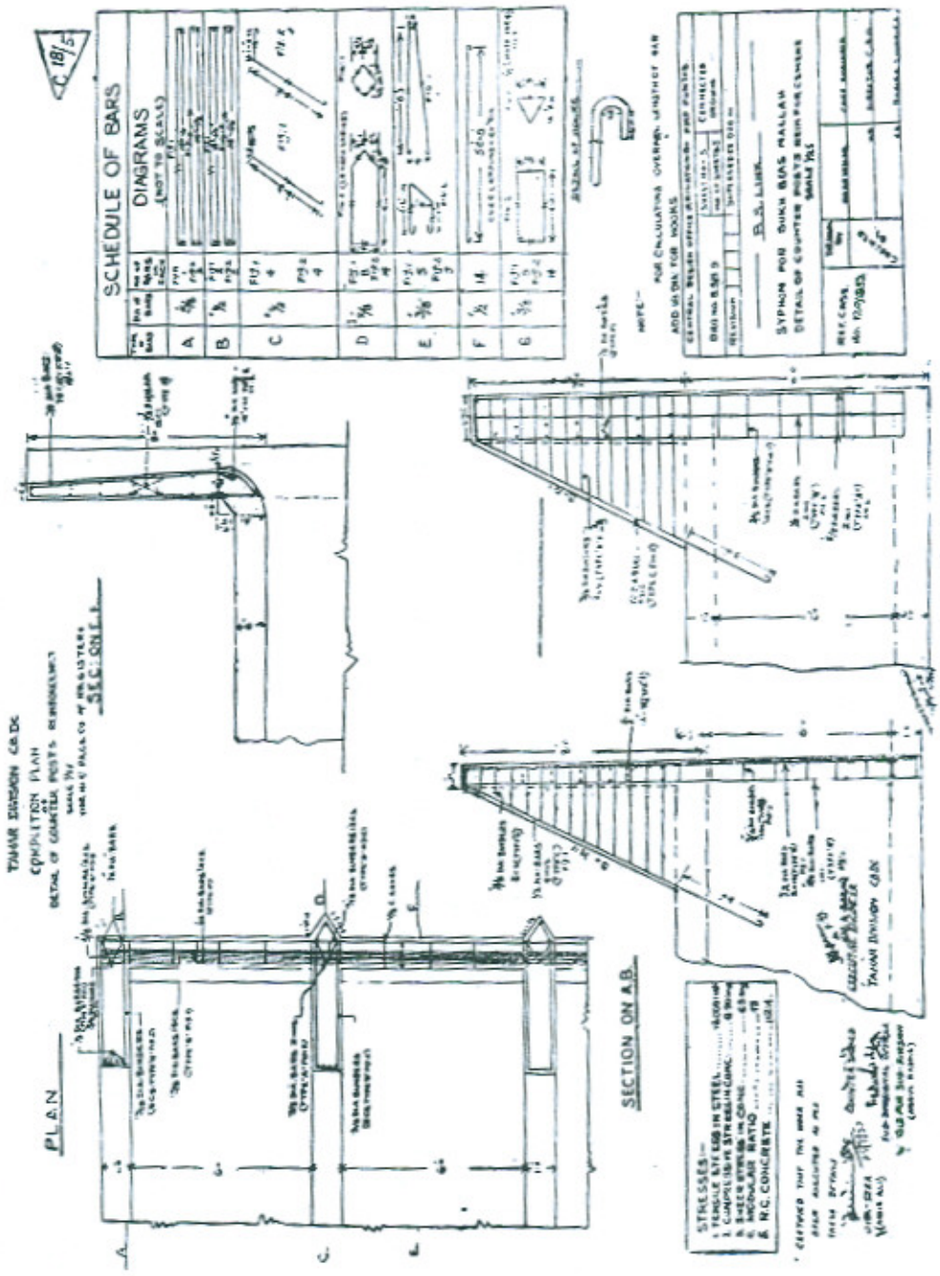
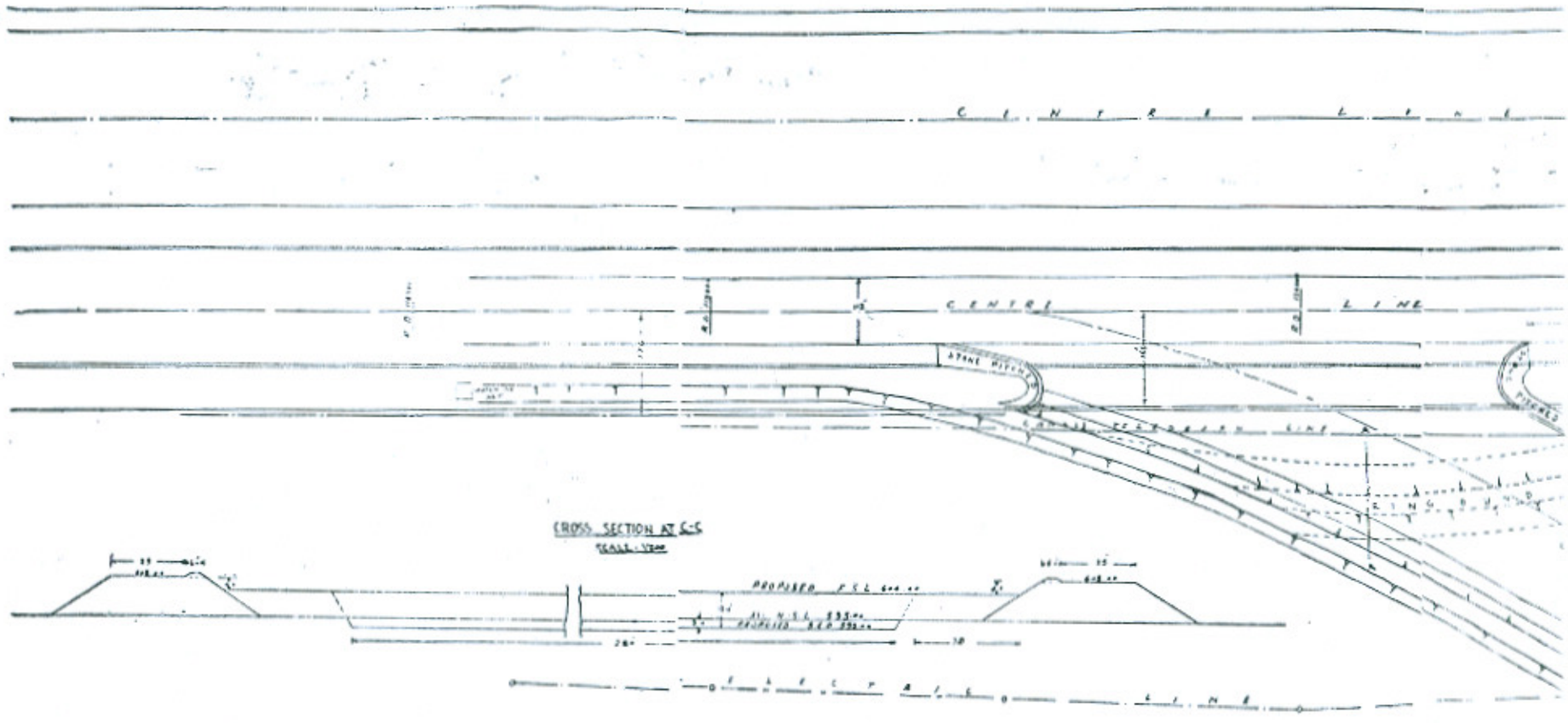


Fig. 8.—Detail of Counter Post Reinforcement.



CROSS SECTION AT C-C
SCALE: 1/200

CROSS SECTION AT A-A
SCALE: 1/200

CROSS SECTION AT B-B
SCALE: 1/200

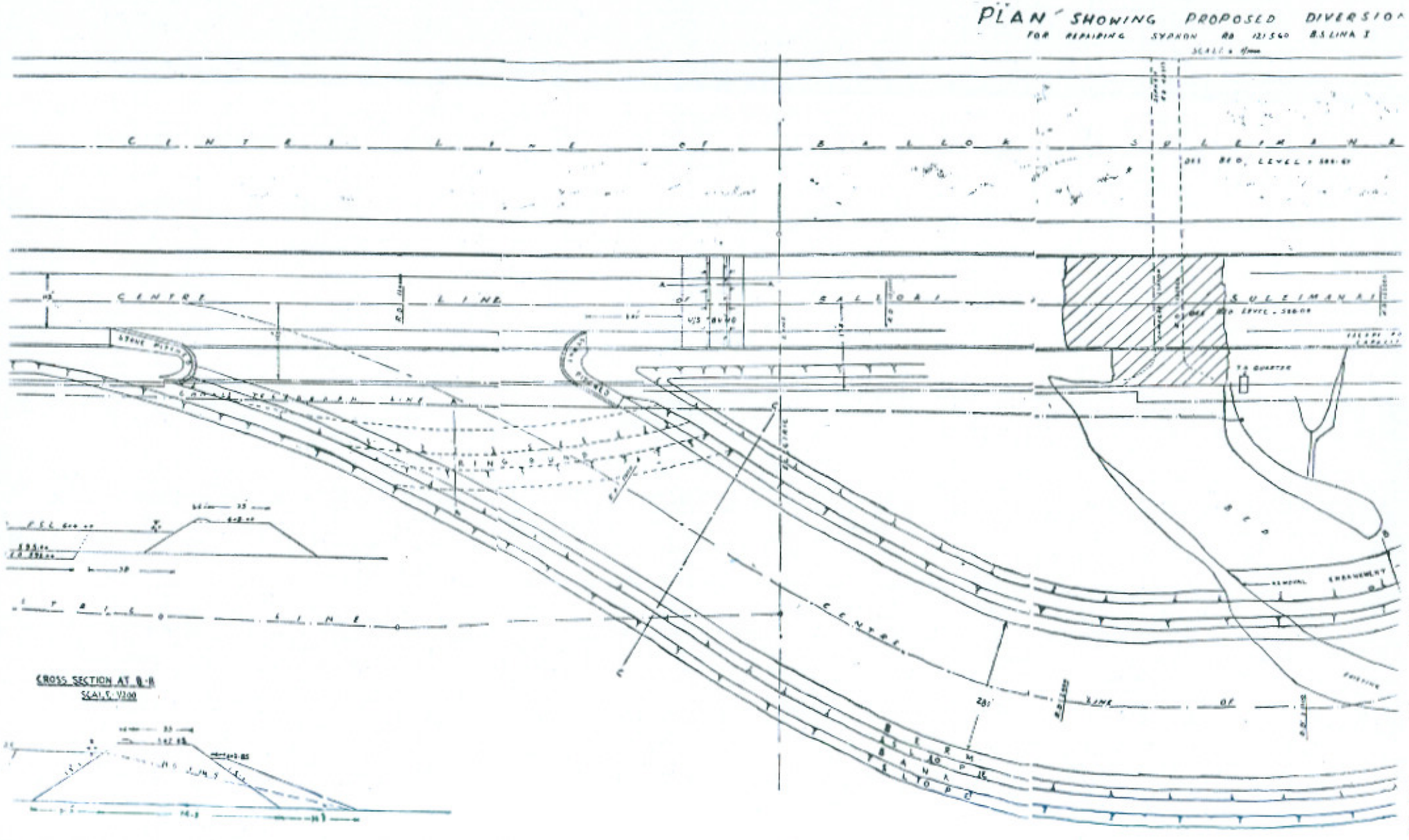
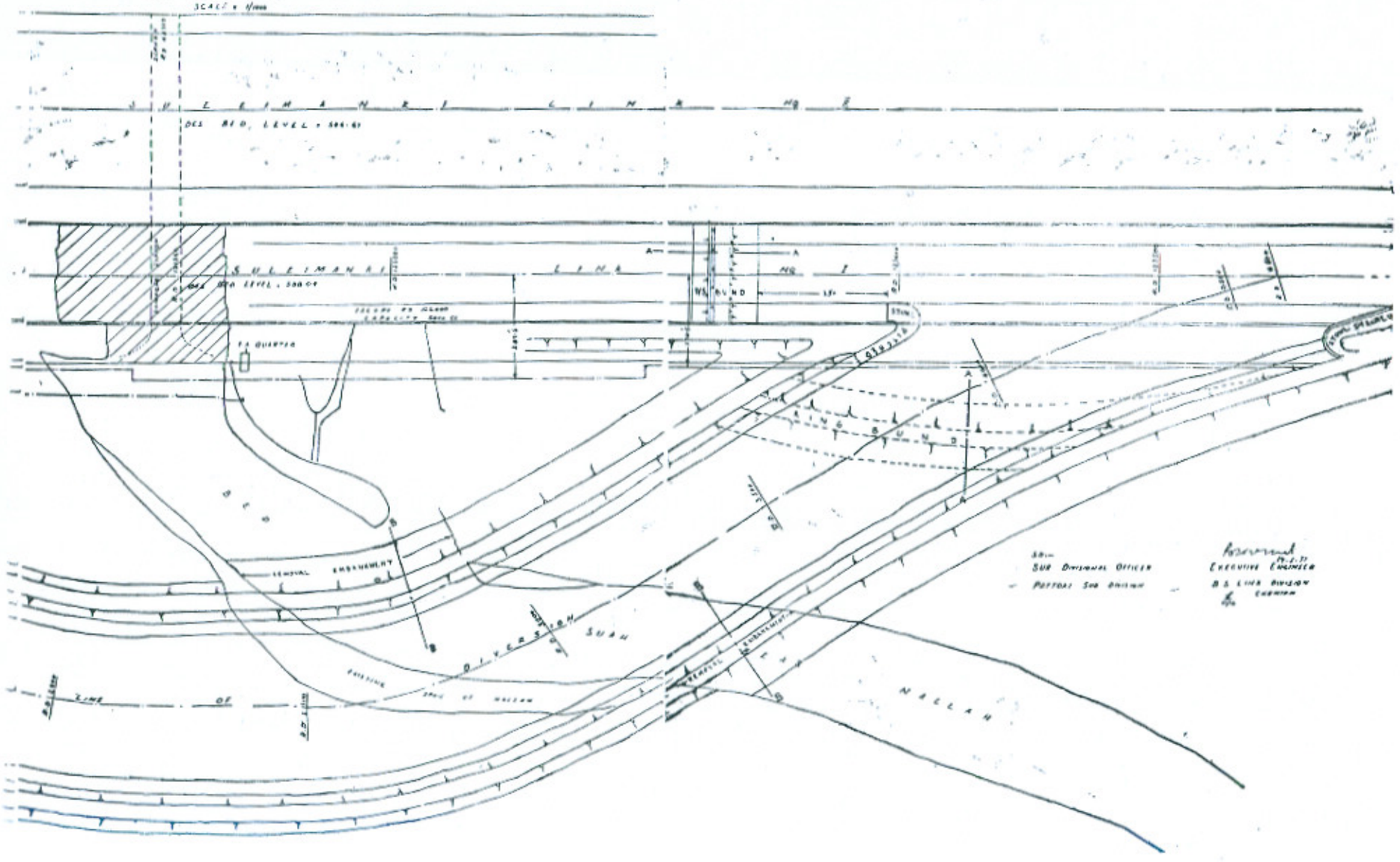


Fig. 9. Diversion Plan.

N " SHOWING PROPOSED DIVERSION
FOR REPAIRING SYPHON AB 121560 B.S.LINK I



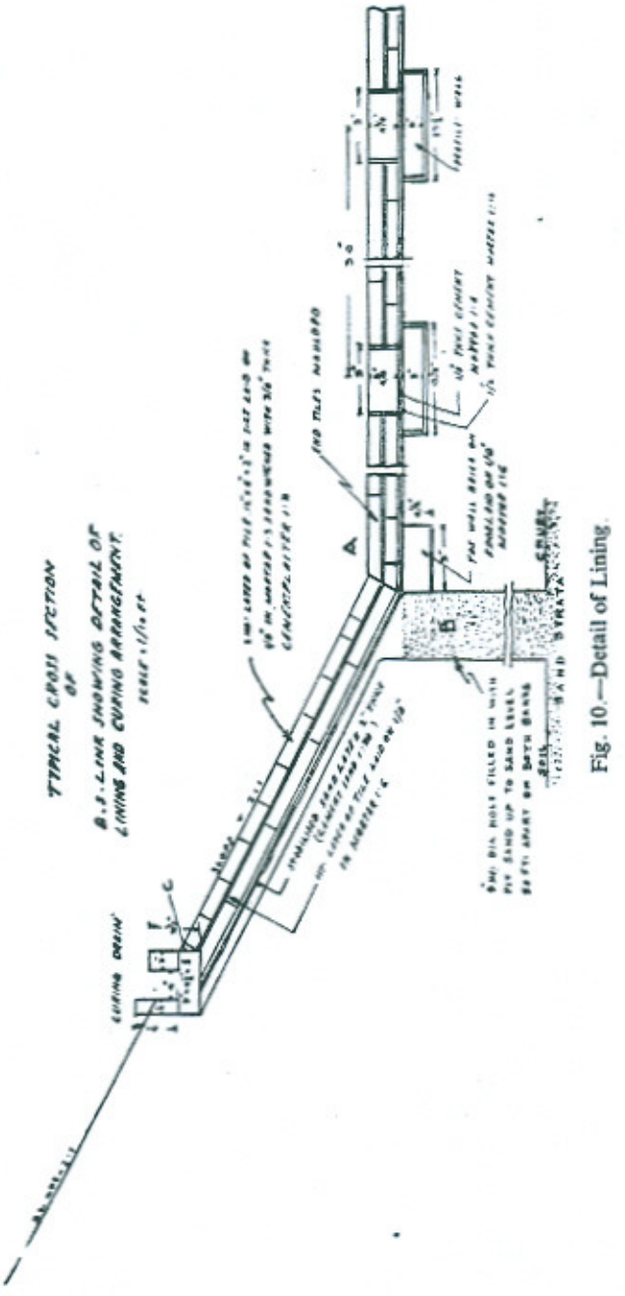


Fig. 10.—Detail of Lining.

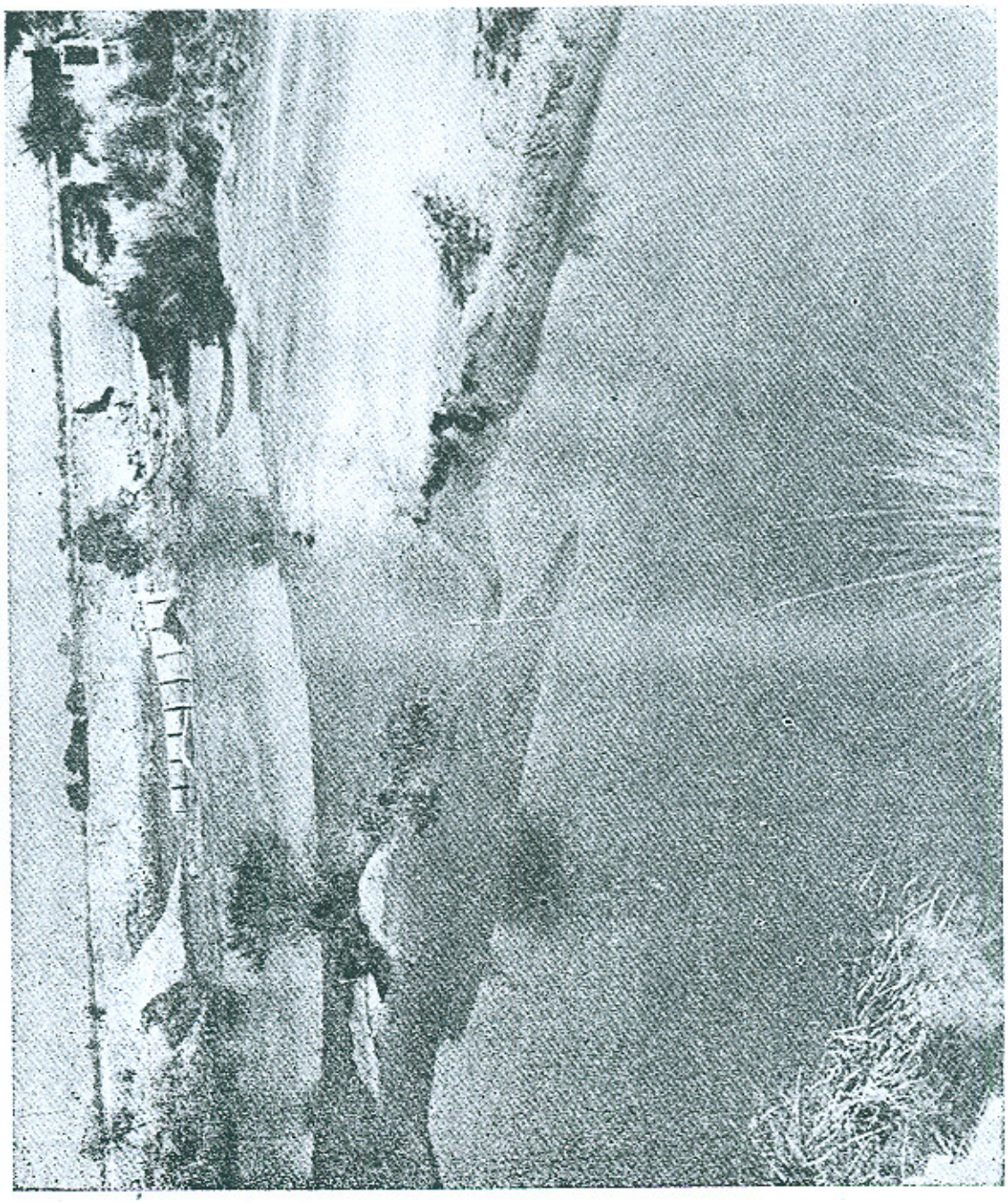


Plate 1. Syphon in Damaged State (view from D/S Torrent Portion)



Plate 2. Closer View of the Breast Wall after Dewatering

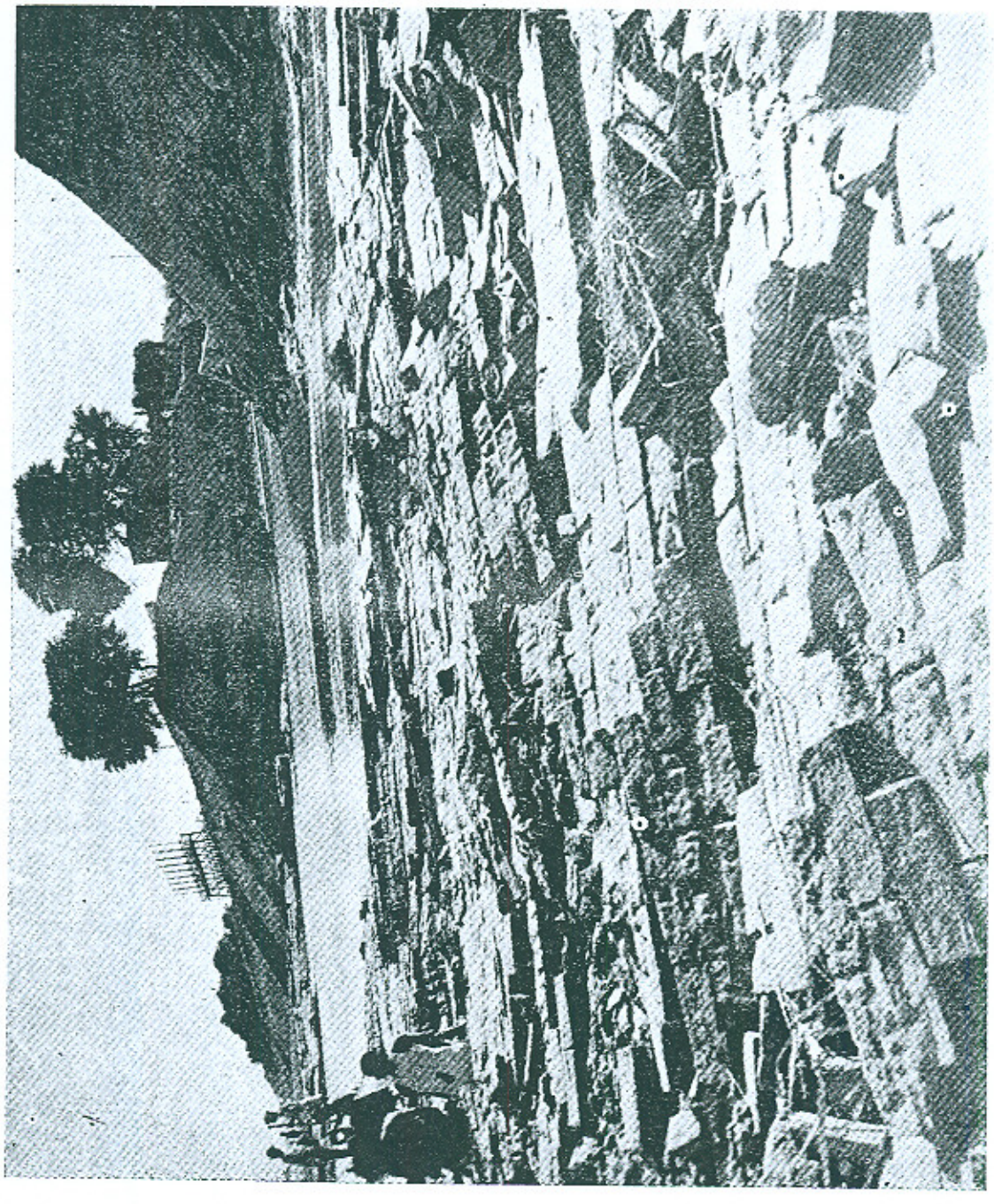


Plate 3. Condition of Damaged Lining U/S of Syphon in Bed and Slope



Plate 4. Making Banks of Diversion in Progress

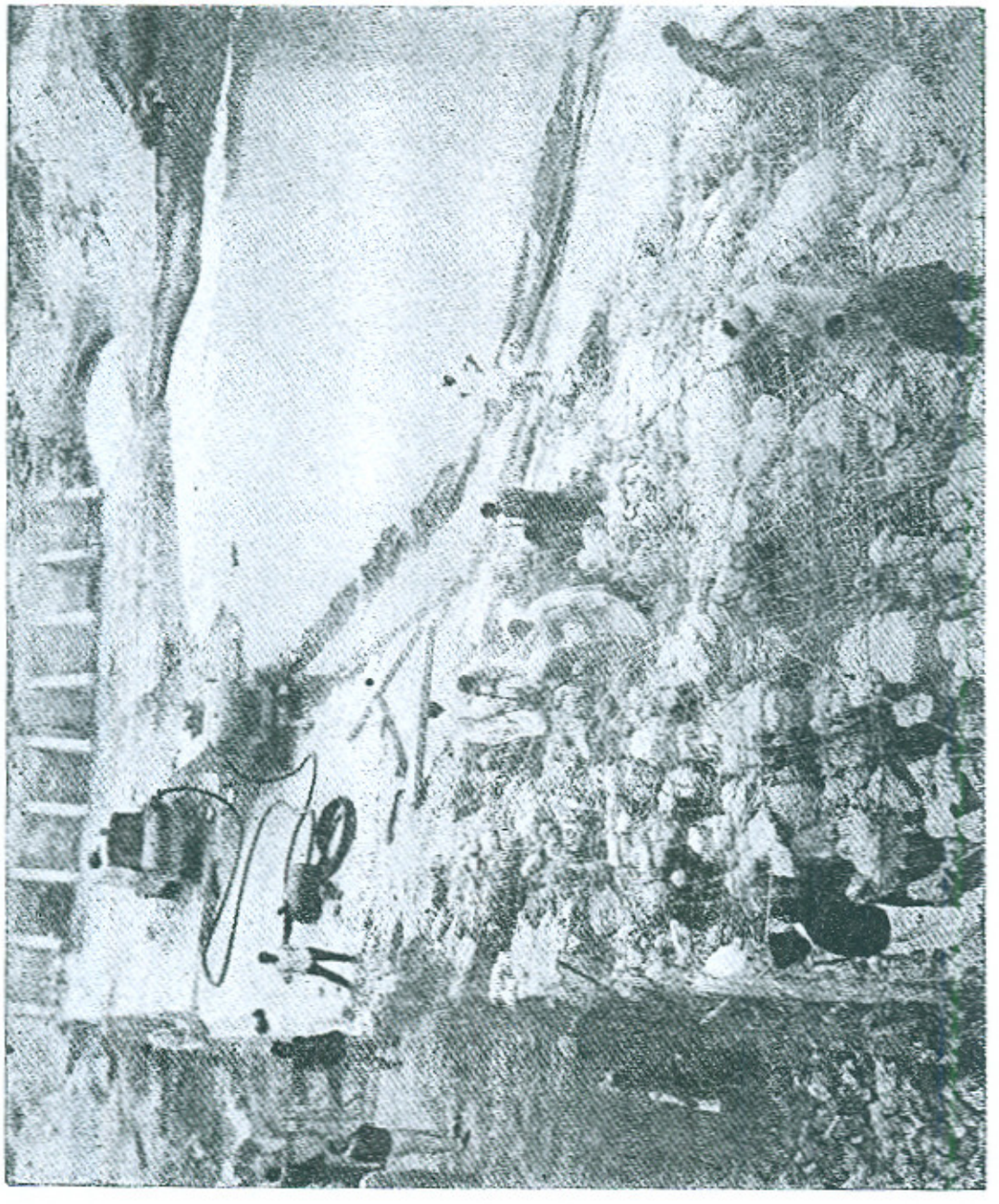


Plate 5. A View of Top of Barrels after Hammering

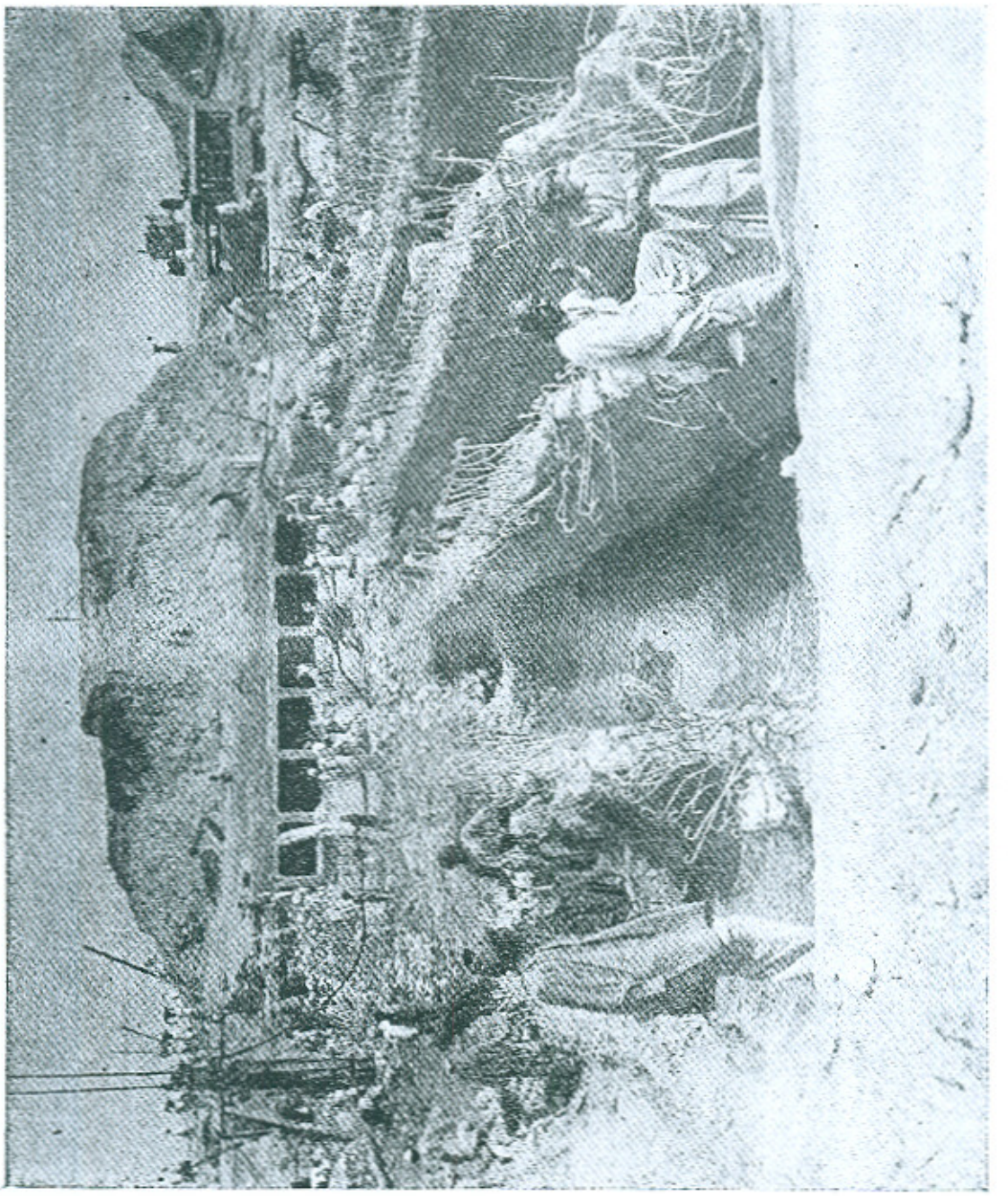


Plate 6. A View after Removal of the Barrels Top

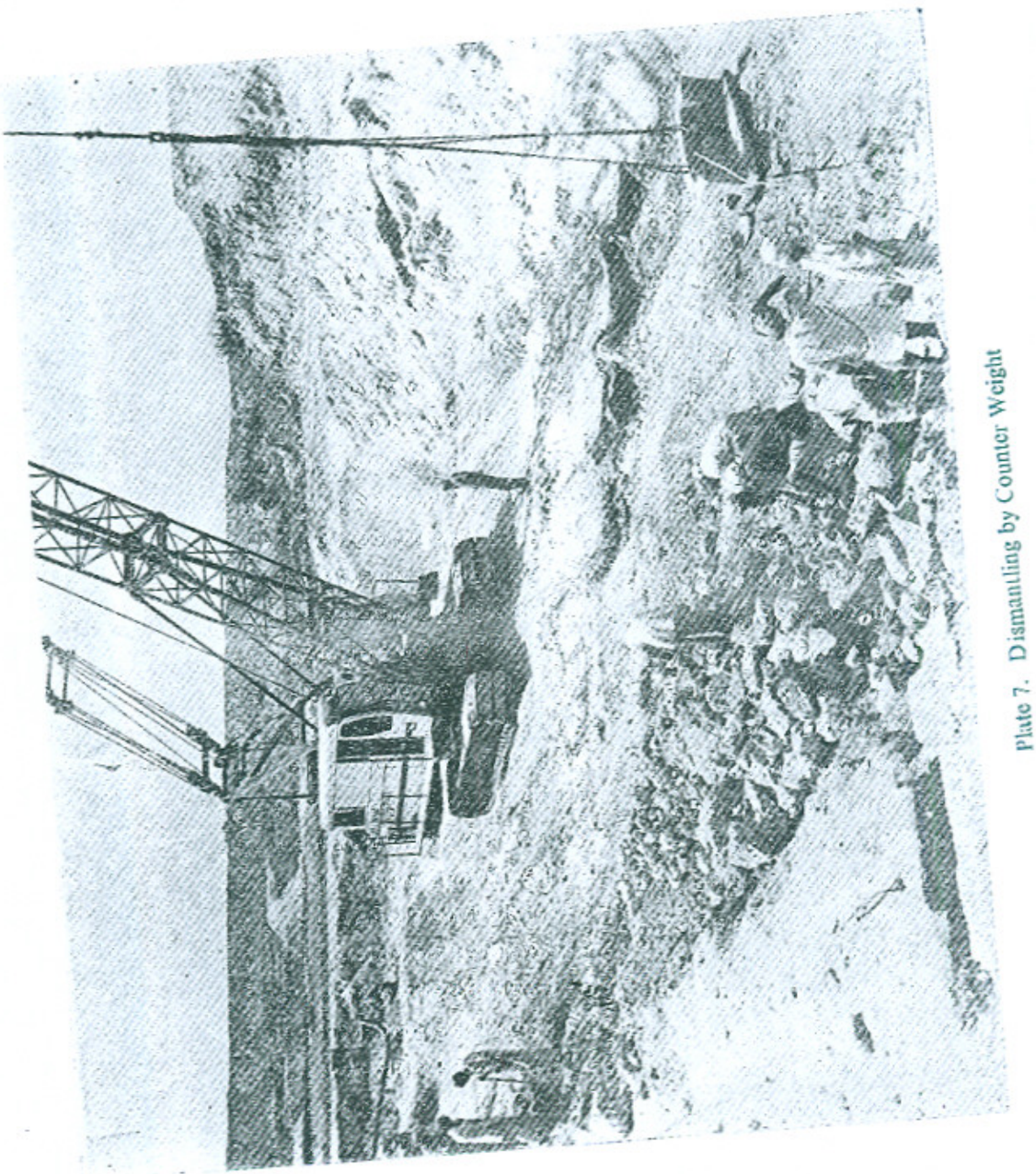


Plate 7. Dismantling by Counter Weight

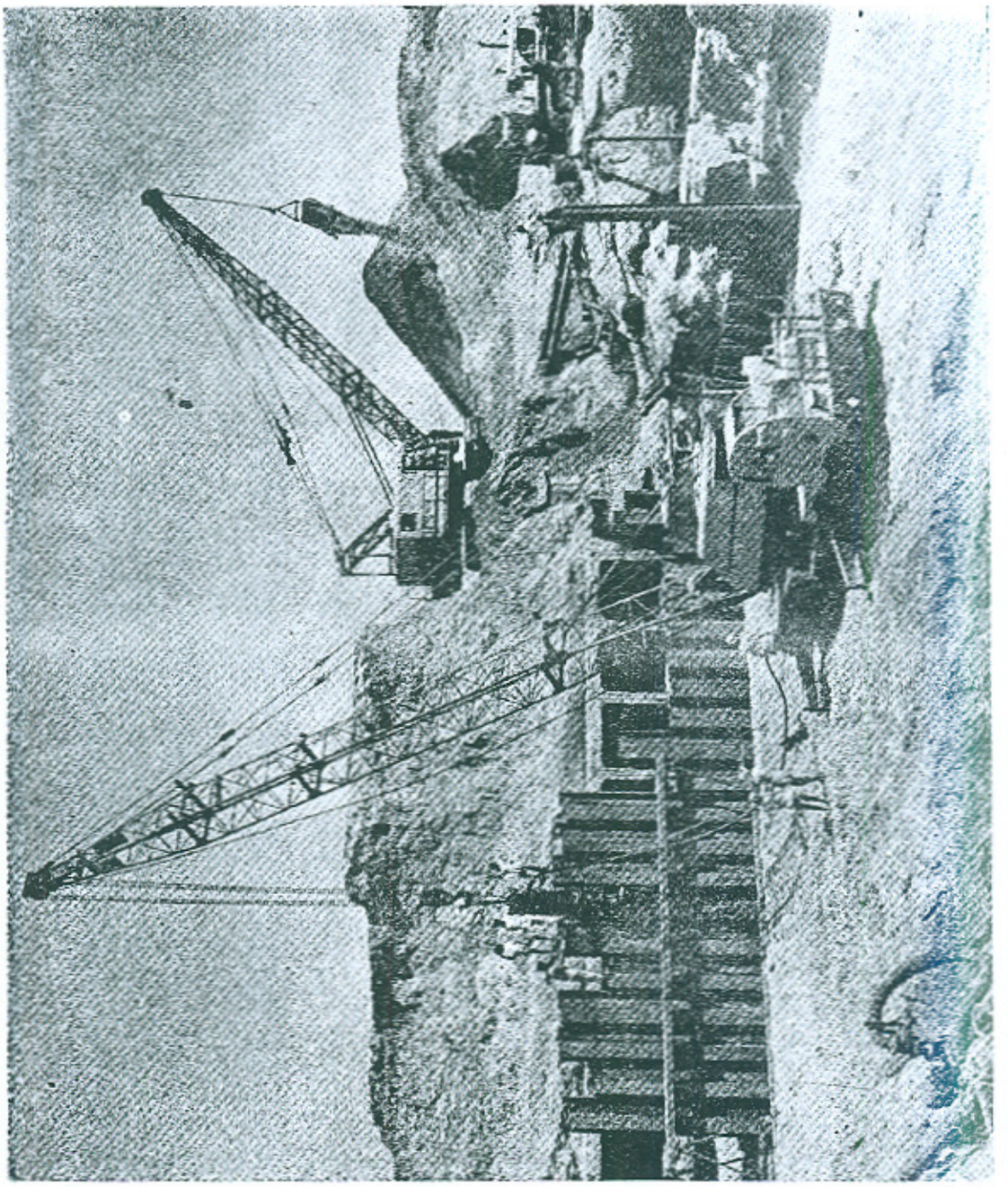


Plate 8. Sheet Pile Driving in Progress

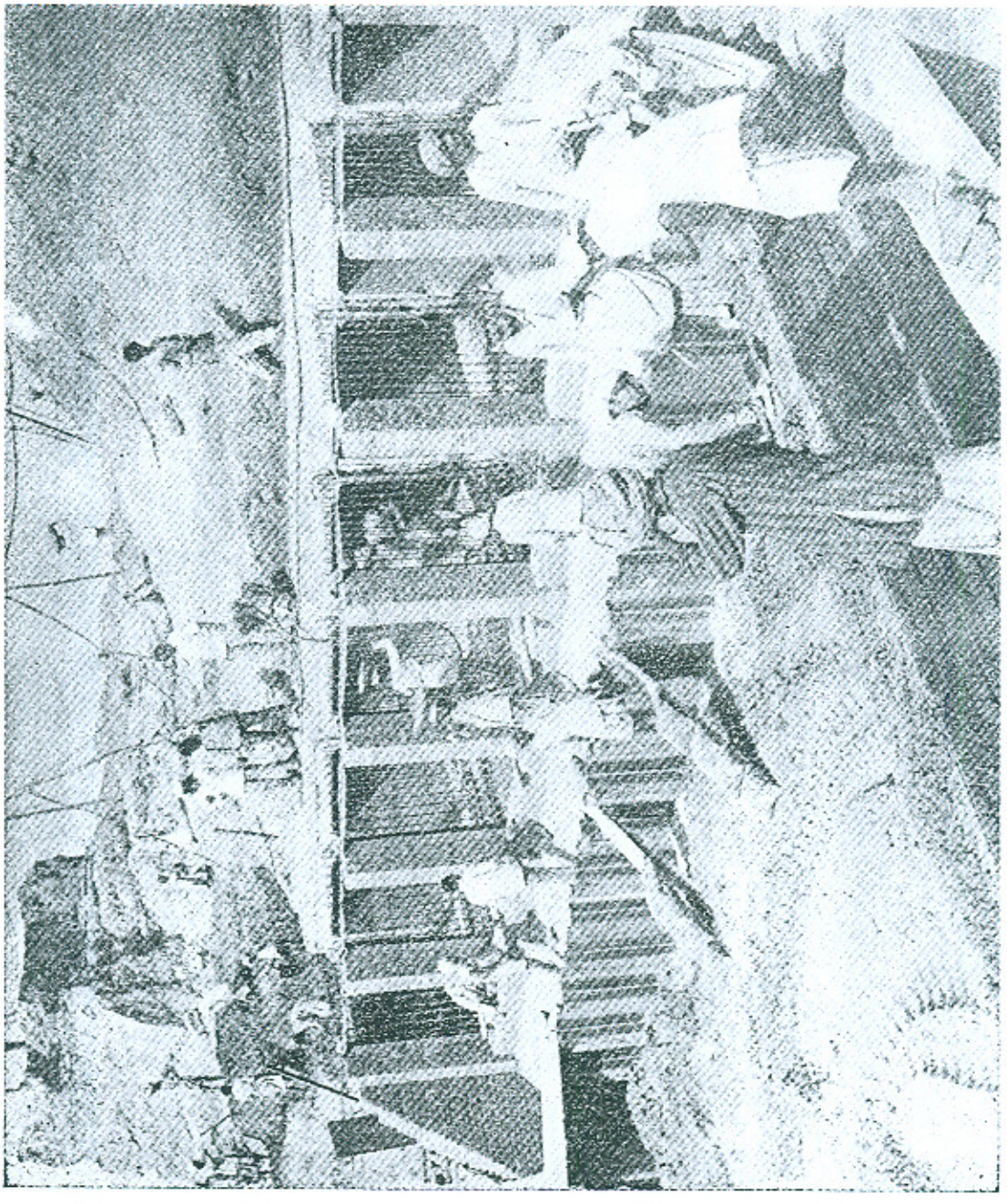


Plate 9. Showing (*i*) Concreting of Bottom Raft in between existing Barrels and the Expension Joint
(*ii*) Masonry of Shuttering Wall and sand filling in pit by Scraper
(*iii*) Sheet Piling on the u/s completed

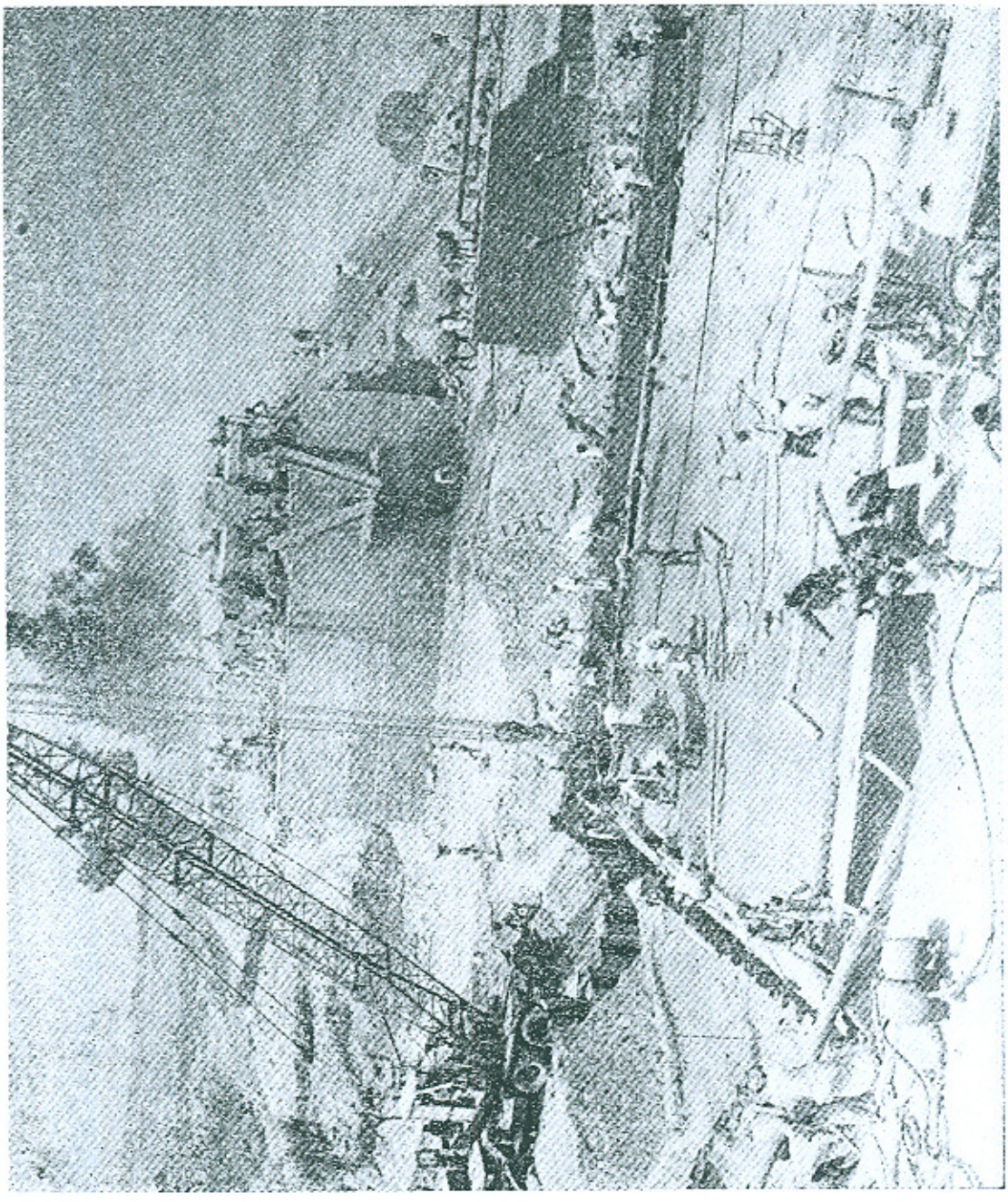


Plate 10. Blinding Layer in Progress

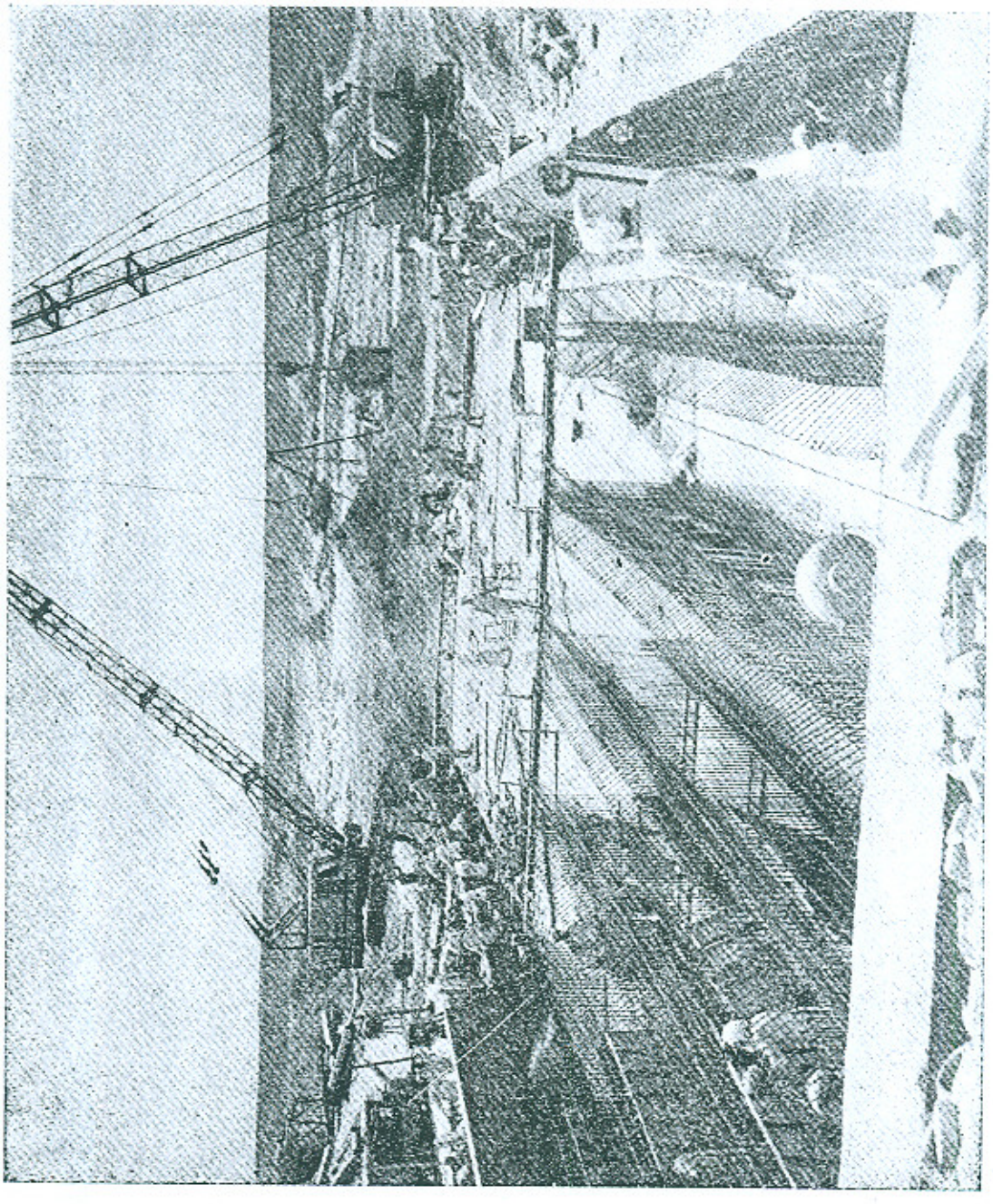


Plate 11. (*i*) Fabrication of Reinforcement and Shuttering in Progress
(*ii*) Blinding Layer in Progress

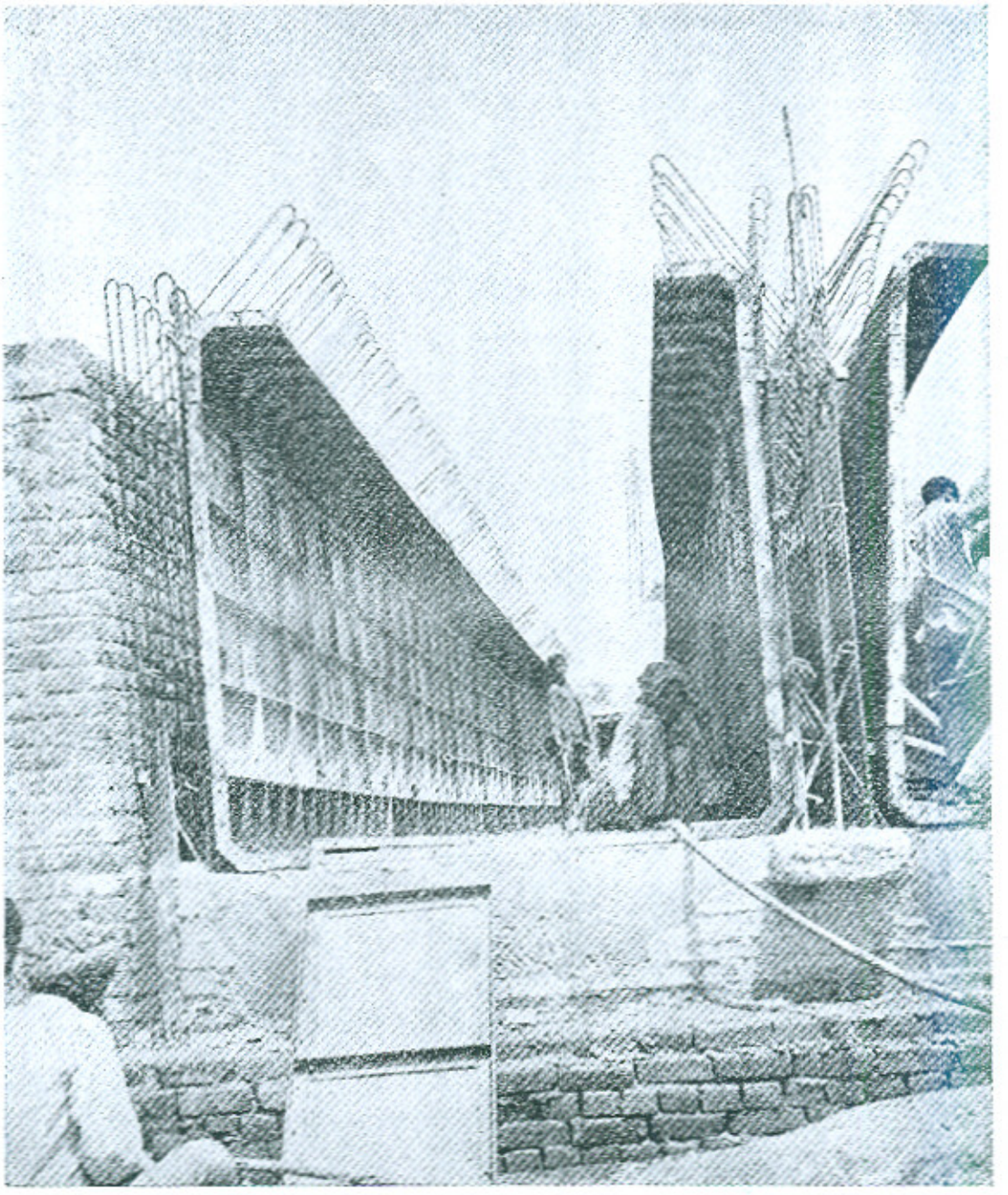


Plate 12. A Closer View of the Steel Shuttering

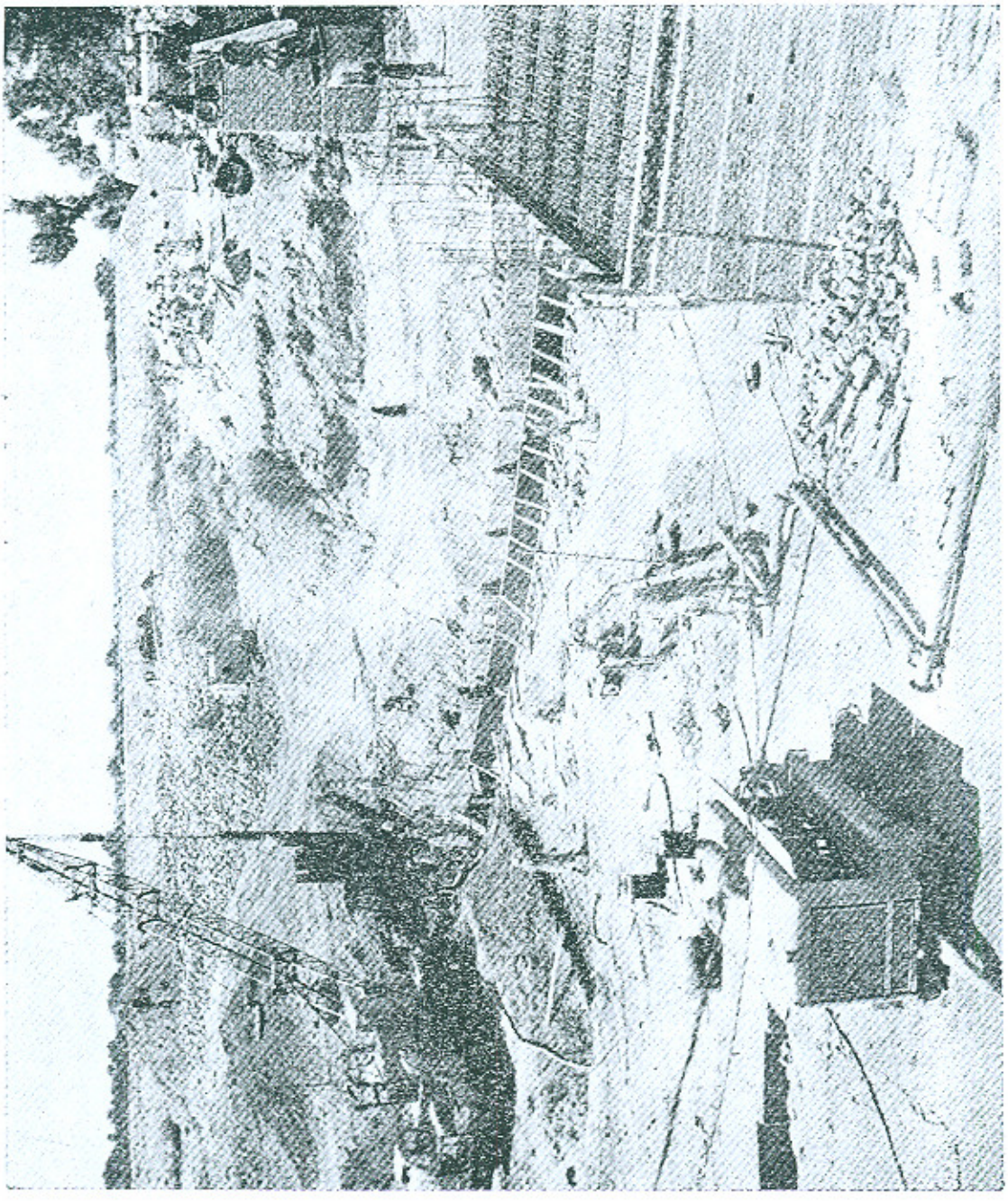


Plate 13. Top Shuttering of Key Wedge

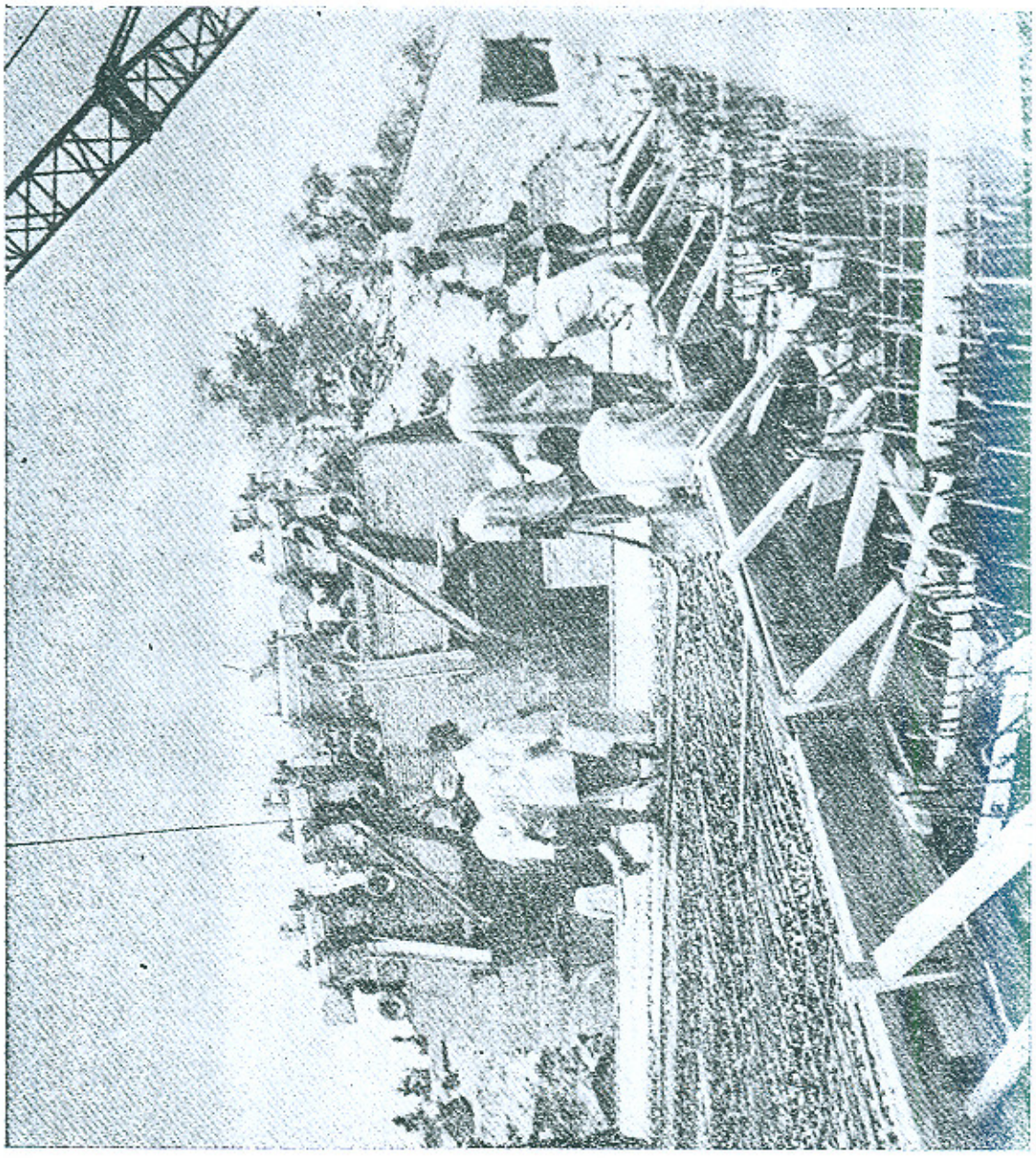


Plate 14. Showing Concreting of Barrel Top

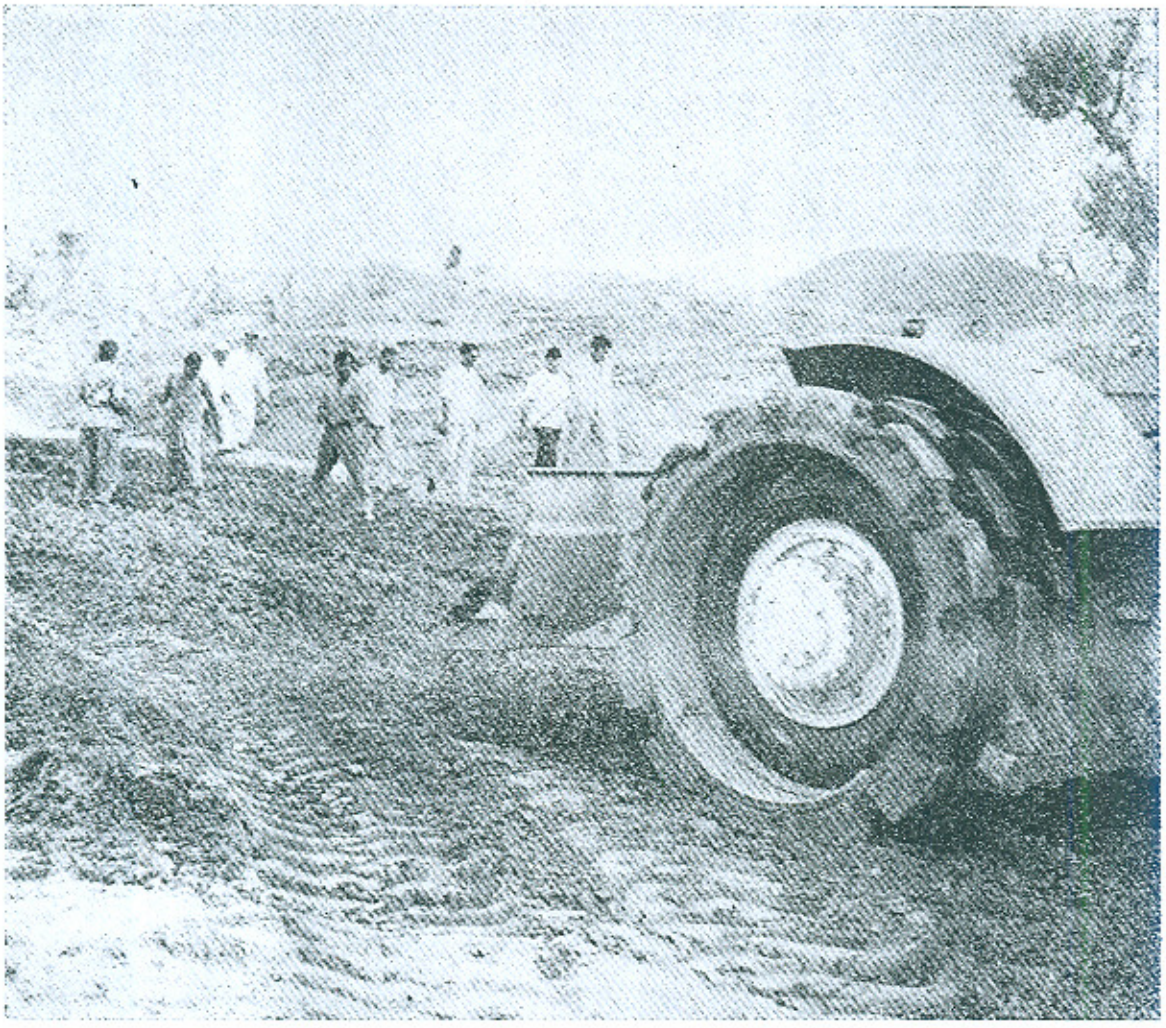


Plate 15. Compaction of Banks by Compactor

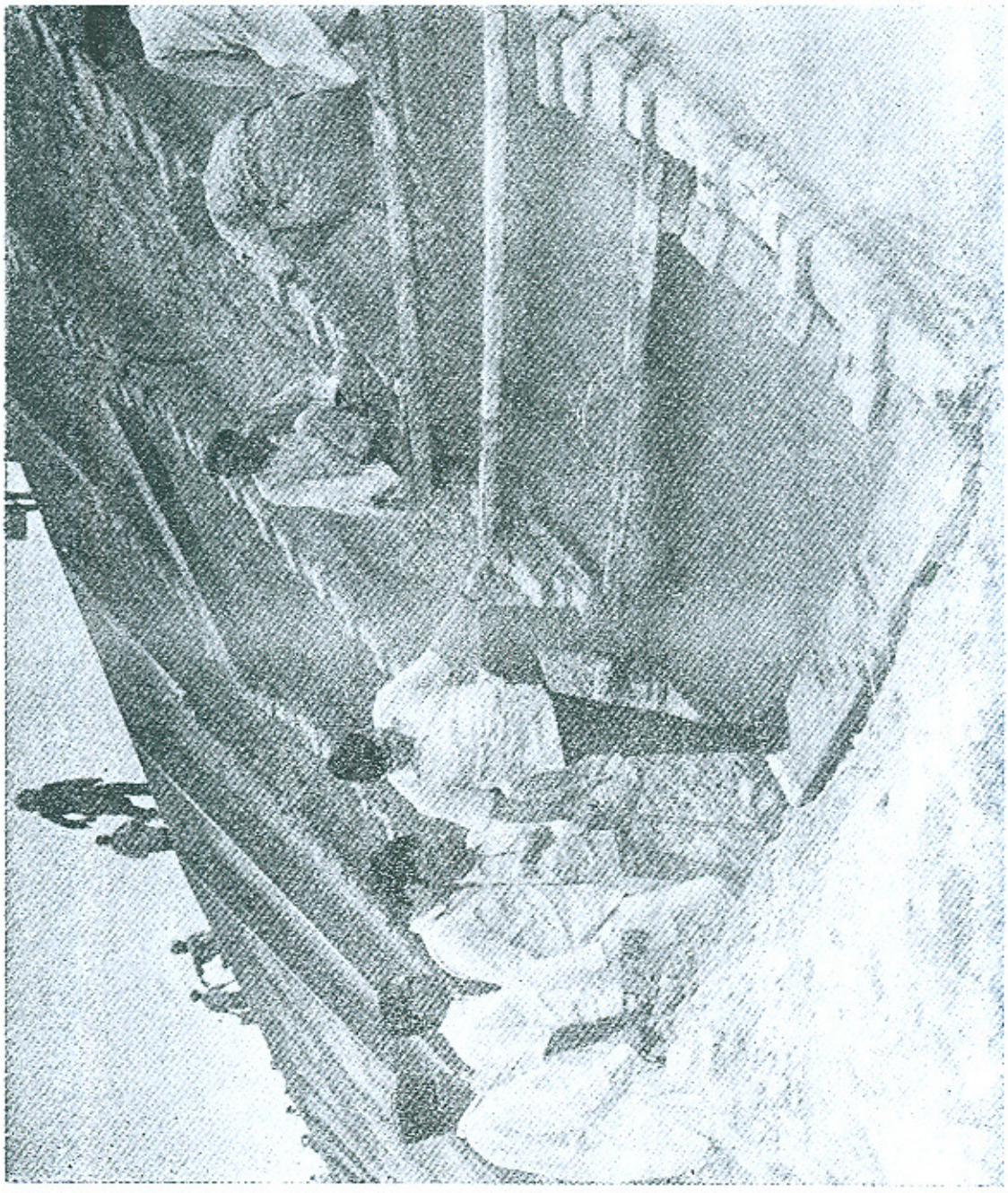


Plate 16. Brick Pitching on Slope in Progress

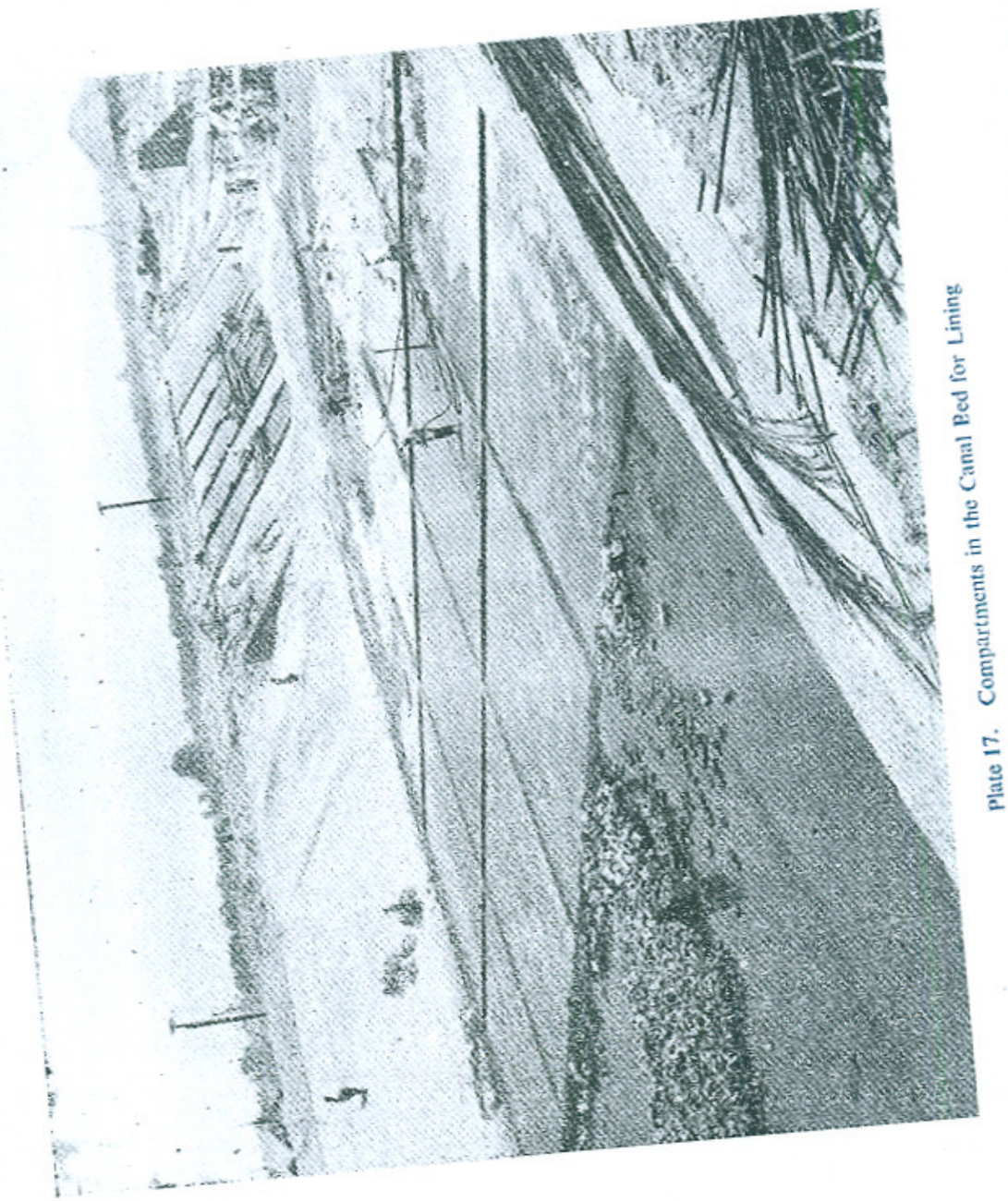


Plate 17. Compartments in the Canal Bed for Lining

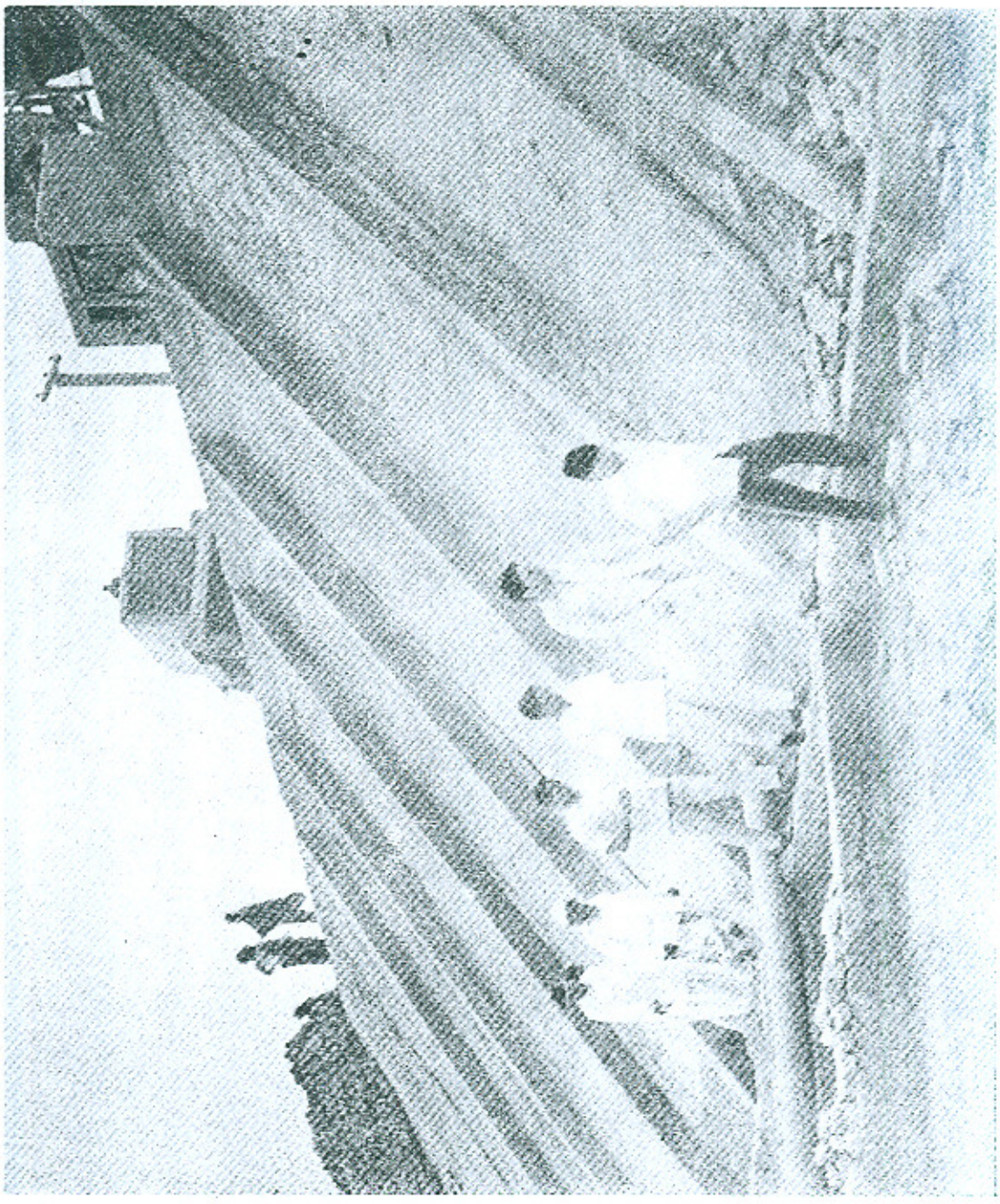


Plate 18. Profiles on Slope and Bed for Pacca Pitching Etc.

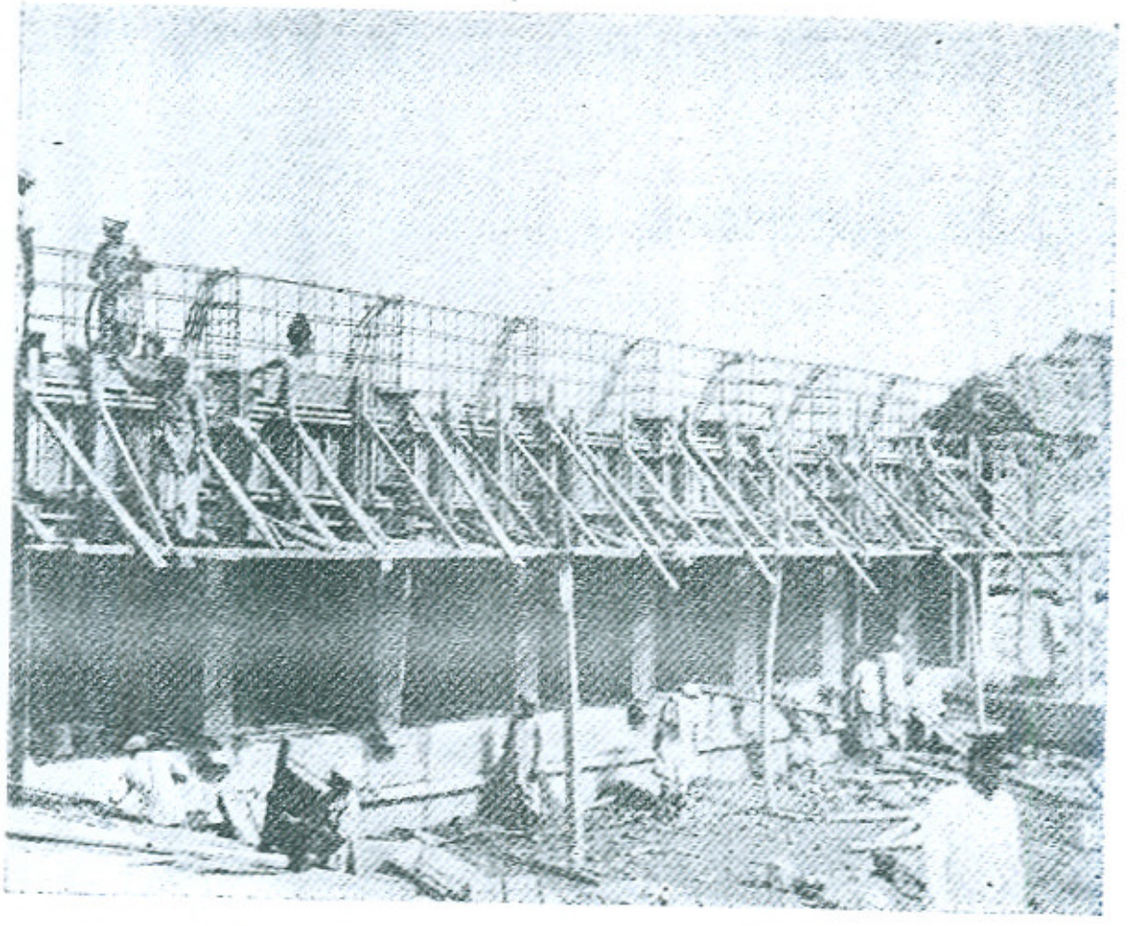


Plate 19. Showing Shuttering of Breast Wall



Plate 20. D/S Flared Out Wall in Progress