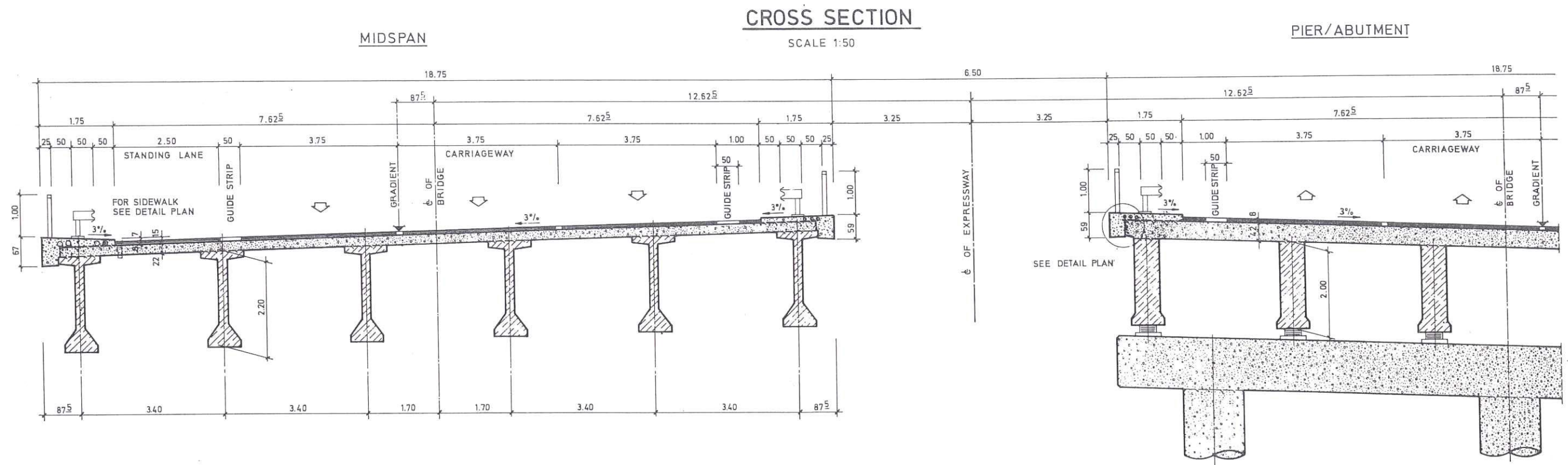
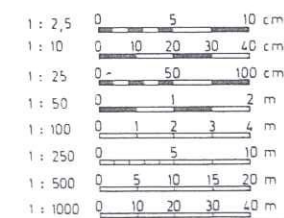
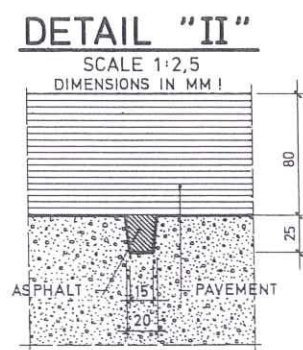
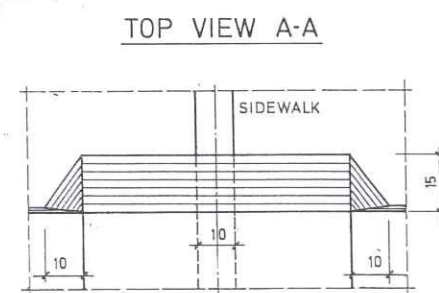
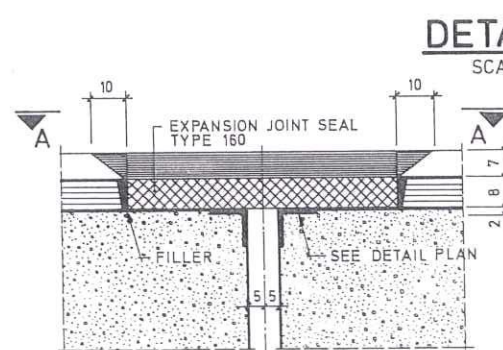
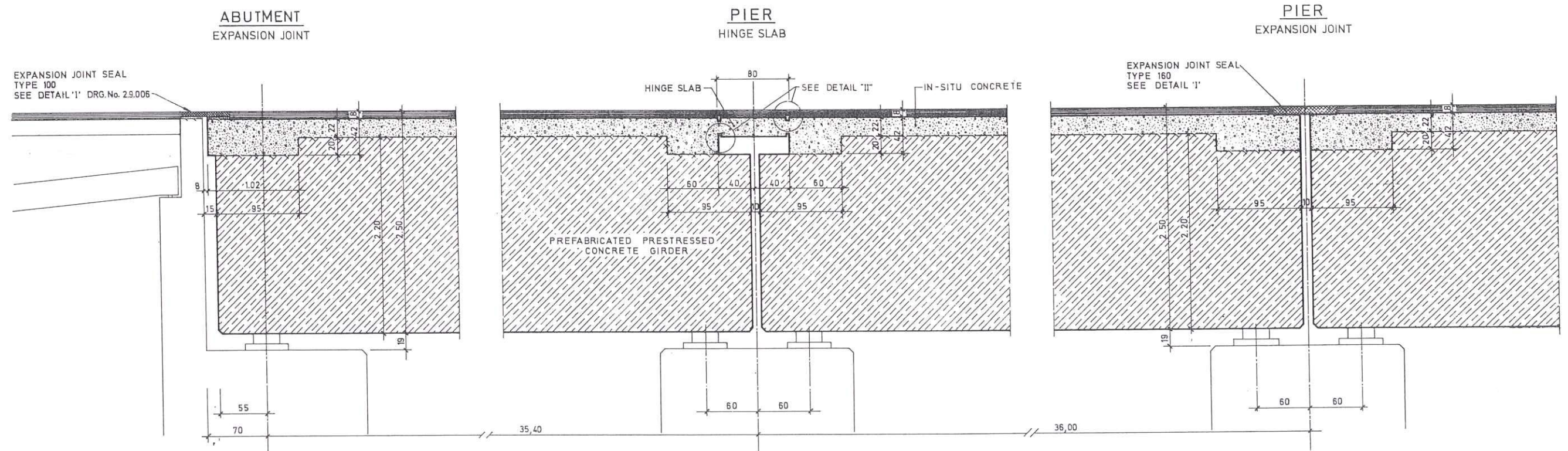


An aerial photograph of a large, multi-lane highway bridge spanning a body of water. The bridge has multiple concrete pillars supporting its structure. Several vehicles, including cars, buses, and trucks, are visible traveling across the bridge. The water below is calm, and there are some birds flying near the bridge's base. The entire image is overlaid with a semi-transparent blue filter. The word "ANNEX" is written in a bold, blue, sans-serif font, centered horizontally and partially overlapping the bridge's surface.

ANNEX



LONGITUDINAL SECTION
SCALE 1:25



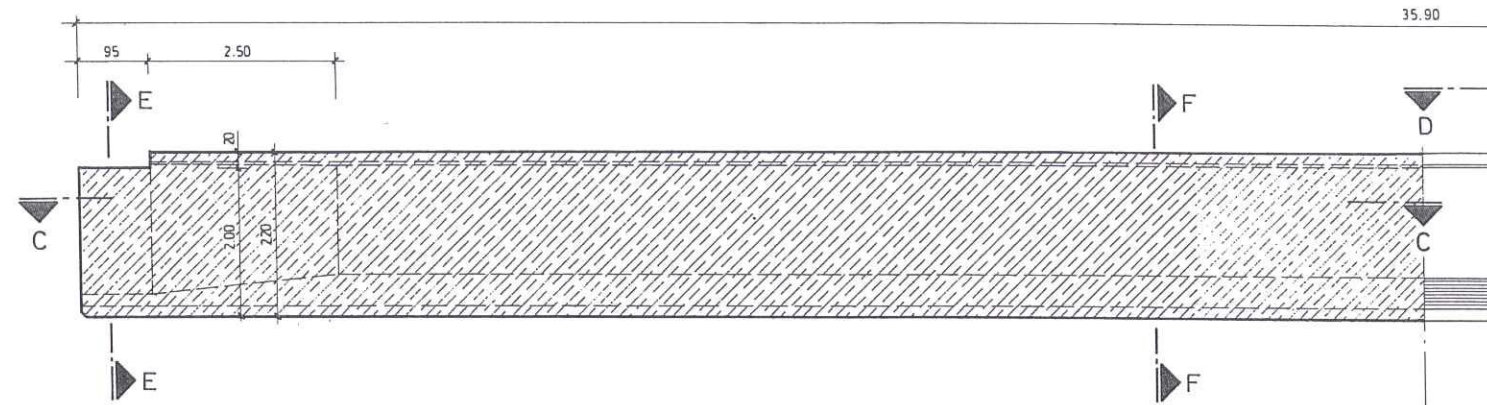
REPUBLIC OF IRAQ MINISTRY OF WORKS AND HOUSING DIRECTORATE GENERAL OF ROADS AND BRIDGES IRAQ EXPRESSWAY No ONE		CONTRACT R/9A/1976 BAGHD. WEST-HABBANIYA				
		SECTION THARTHAR CANAL BRIDGE				
CONSULTING ENGINEERS - MUNICH - W. GERMANY in association with AL-KHAZEN - CONSULTING ENGINEERS - BAGHDAD - IRAQ		DATE Dec. 76	DESIGNED R. G.	DRAWN K. E.	SCALE C. K. E.	DRG. No. 2.9.003

S.54.1

PREFABRICATED PRESTRESSED CONCRETE GIRDER

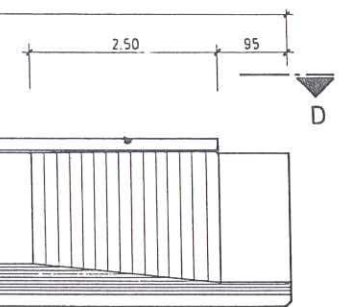
SECTION A-A

SCALE 1:50



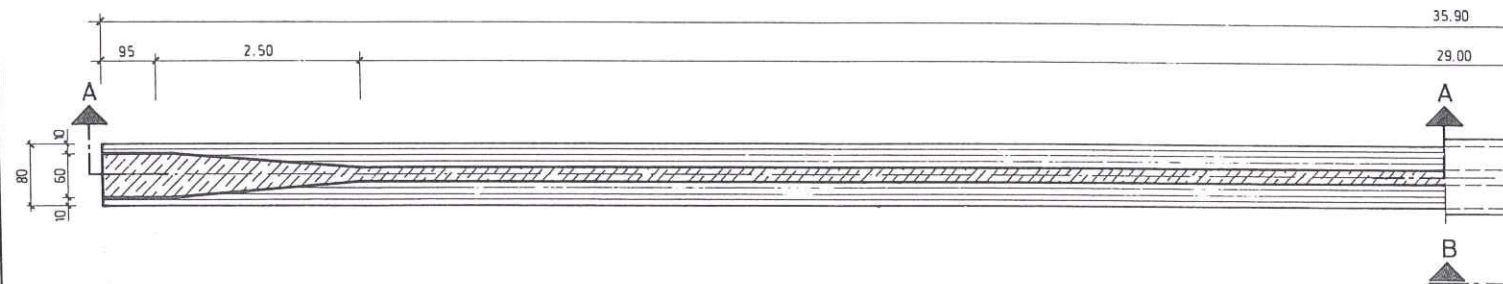
ELEVATION B-B

SCALE 1:50



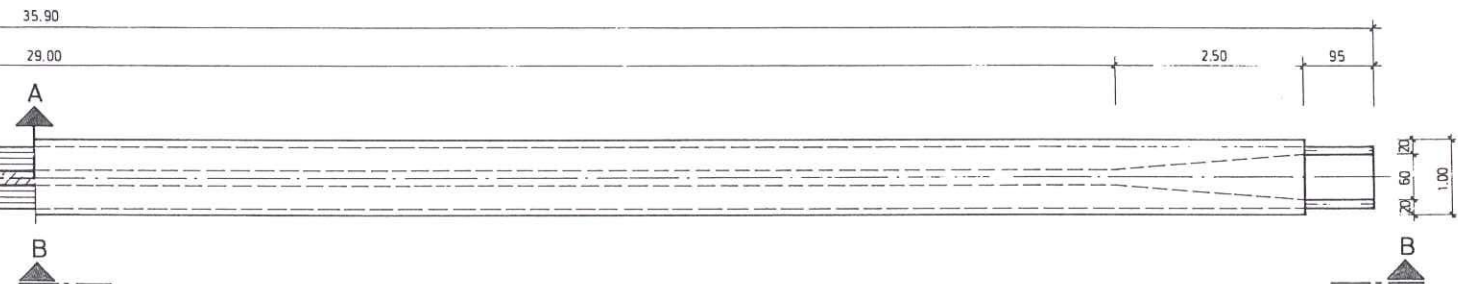
SECTION C-C

SCALE 1:50



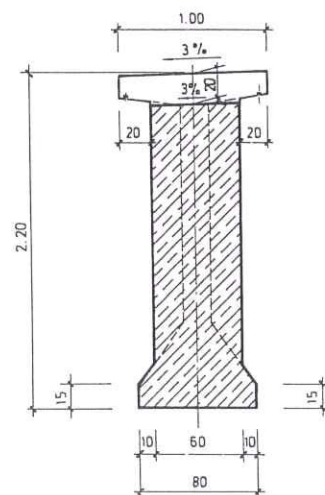
TOP VIEW D-D

SCALE 1:50



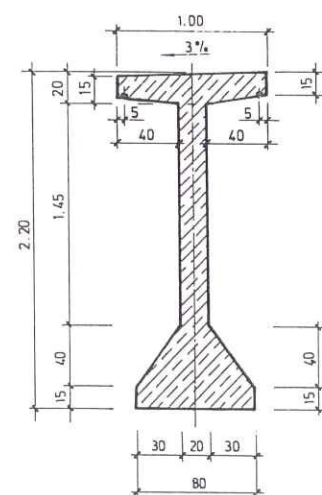
CROSS SECTION E-E

SCALE 1:25



CROSS SECTION F-F

SCALE 1:25

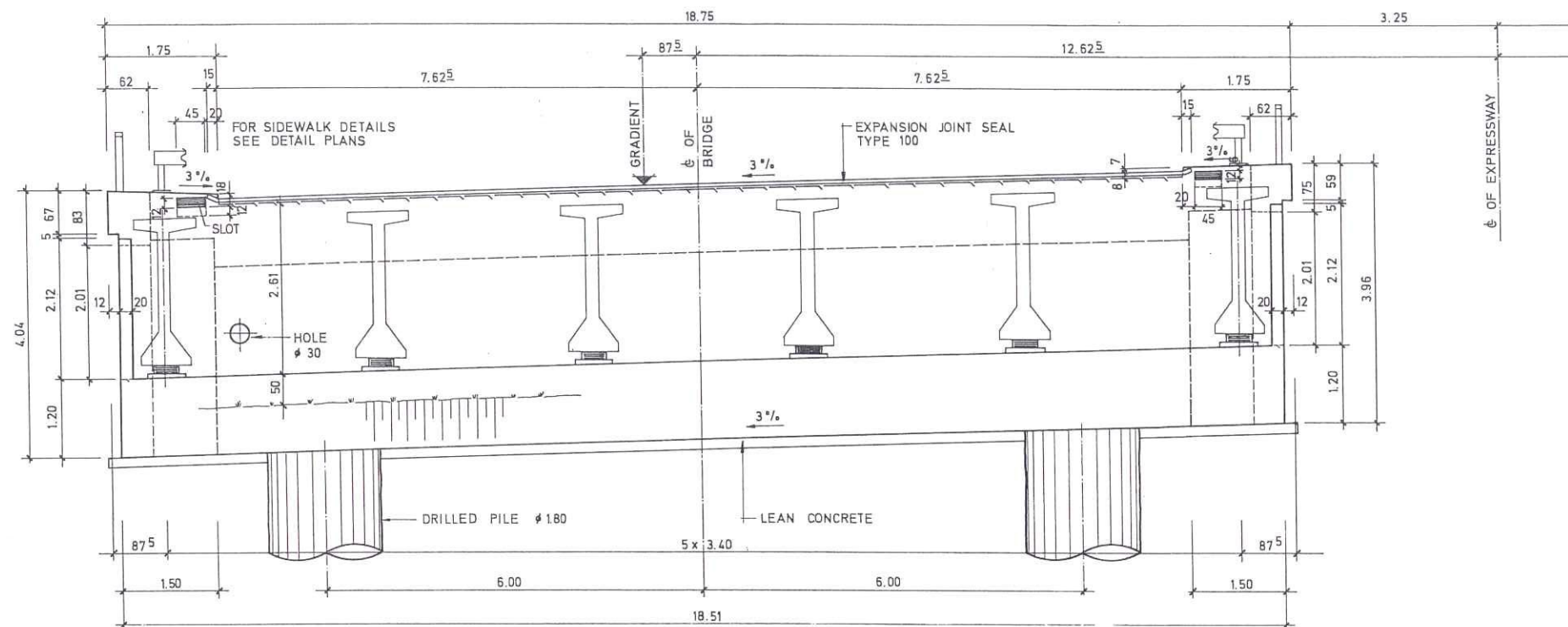


S.54.1

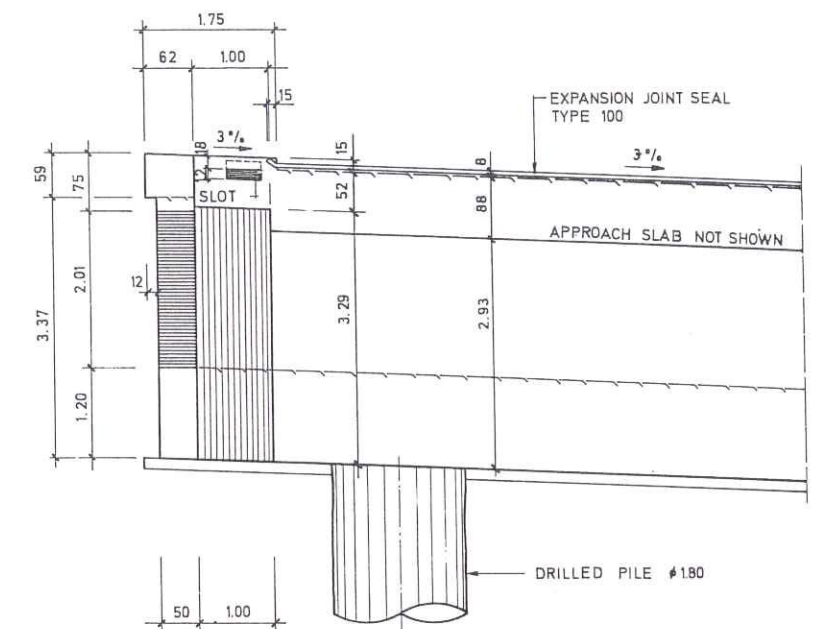
1: 2,5	0	5	10	cm
1: 10	0	10	20	cm
1: 25	0	50	100	cm
1: 50	0	1	2	m
1: 100	0	1	2	m
1: 250	0	5	10	m
1: 500	0	5	10	m
1: 1000	0	10	20	m

REPUBLIC OF IRAQ MINISTRY OF WORKS AND HOUSING DIRECTORATE GENERAL OF ROADS AND BRIDGES		CONTRACT SECTION R/9A/1976 BAGHD. WEST-HABBANIYA	
		THARTHAR CANAL BRIDGE PREFABRICATED CONCRETE GIRDER	
IRAQ EXPRESSWAY No ONE		DATE Dec.76	DESIGNED <i>te</i>
CONSULTING ENGINEERS - MUNICH - W. GERMANY in association with AL-KHAZEN - CONSULTING ENGINEERS - BAGHDAD-IRAQ		DRAWN <i>te</i>	SCALE C KET
			DRG. No 29.004

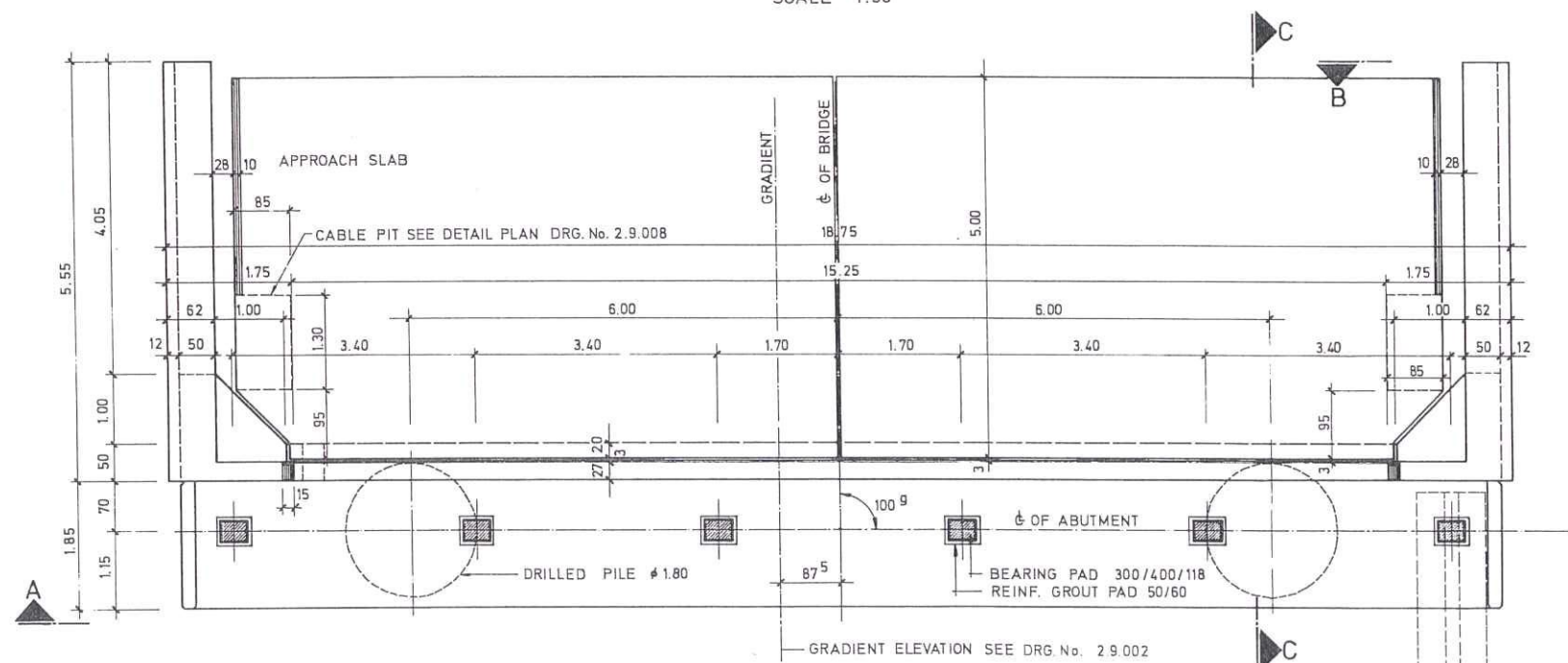
SCALE 1:50



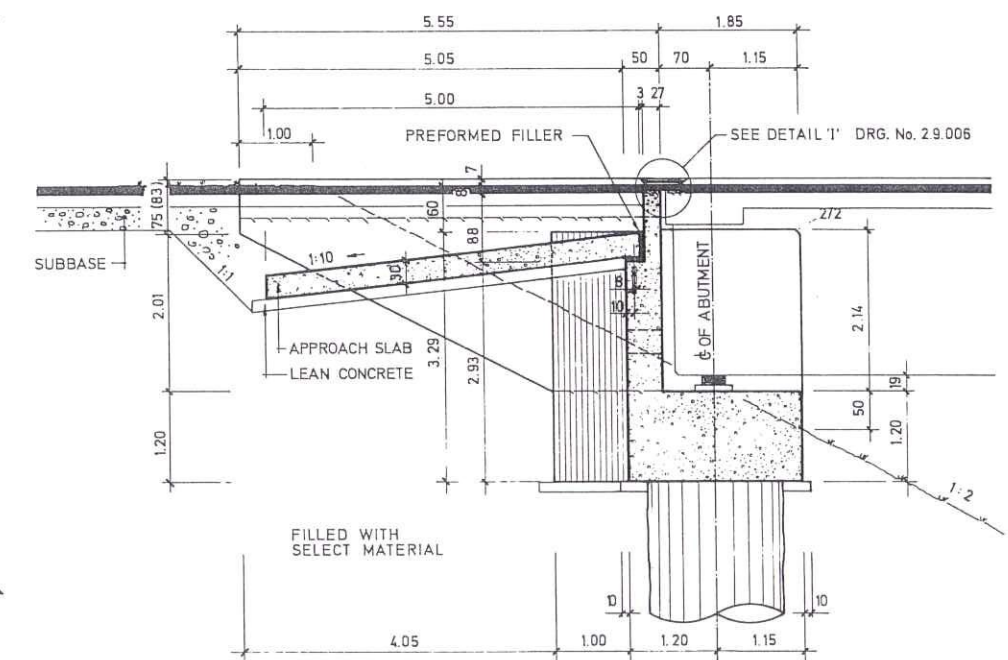
SCALE 1:50



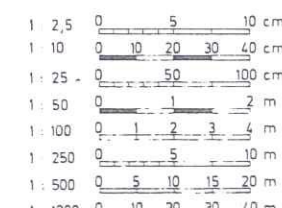
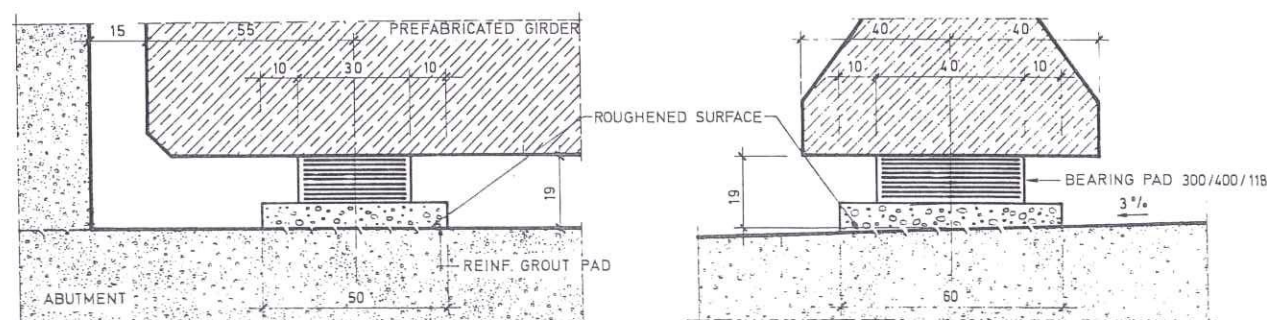
SCALE 1:50



SCALE 1:50



DETAIL OF BEARING



REPUBLIC OF IRAQ
MINISTRY OF WORKS AND HOUSING
DIRECTORATE GENERAL OF ROADS AND BRIDGES

IRAQ EXPRESSWAY No ONE

CONTRACT SECTION
T HARTHAR
CANAL BRIDGE

Y	DATE	DESIGNED	DRAWN	SCALE	DRG. No
	Dec 75	ECO	te	C SET	29 005

S.54.1

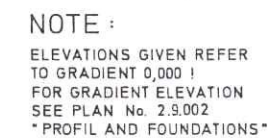
SCALE 1:50



SCALE 1:50



SCALE 1:50



SCALE 1:10

Technical drawing of a column base showing dimensions and components. The drawing includes a cross-section of the column and its base. The column has a top width of 40 and a bottom width of 40. The base consists of a BEARING PAD (300/400/118) and a REINFORCED GROUT PAD. The height of the column is 19. The overall width of the base is 60. The drawing is labeled with dimensions and component names.

SCALE 1:10

[illegible]

1 : 2,5 0 — 5 — 10 cm
1 : 10 0 — 10 — 20 — 30 — 40 cm
1 : 25 0 — 50 — 100 cm
1 : 50 0 — 1 — 2 m
1 : 100 0 — 1 — 2 — 3 — 4 m
1 : 250 0 — 5 — 10 m
1 : 500 0 — 5 — 10 — 15 — 20 m
1 : 1000 0 — 10 — 20 — 30 — 40 m

IRAQ EXPRESSWAY No ONE

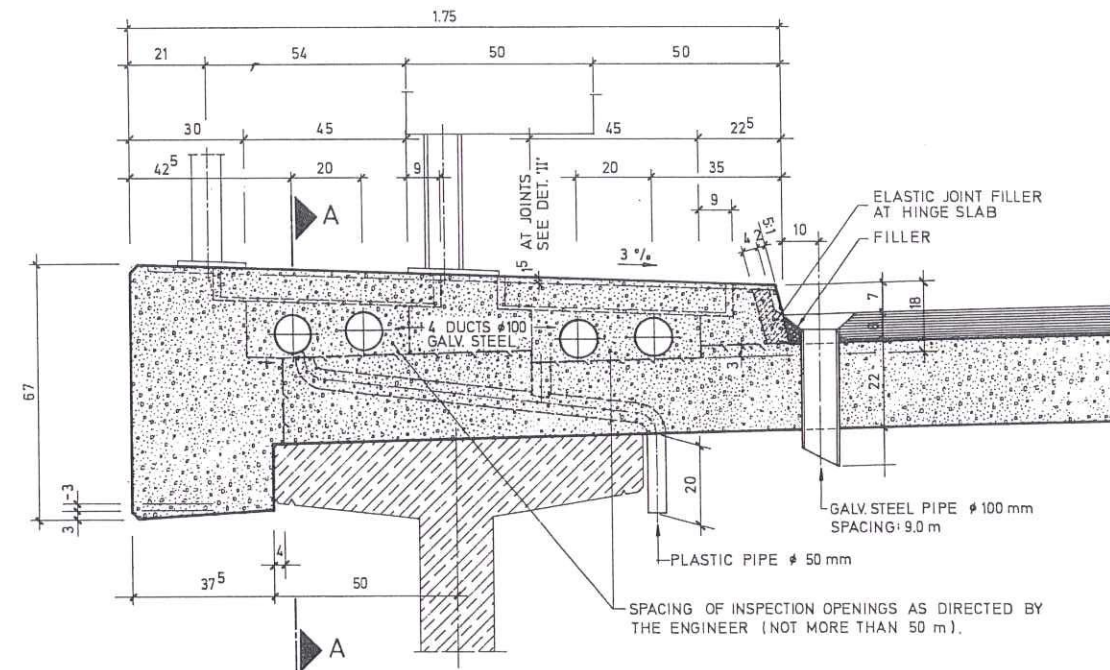
DORSCH CONSULT

CONSULTING ENGINEERS · MUNICH · W. GERMANY
in association with
AL-KHAZEN · CONSULTING ENGINEERS · BAGHDAD · IRAQ

CONTRACT SECTION R/9A/1976
 THARTHAR CANAL BRIDGE BAGHD. WEST-HABBANIYA
PIER

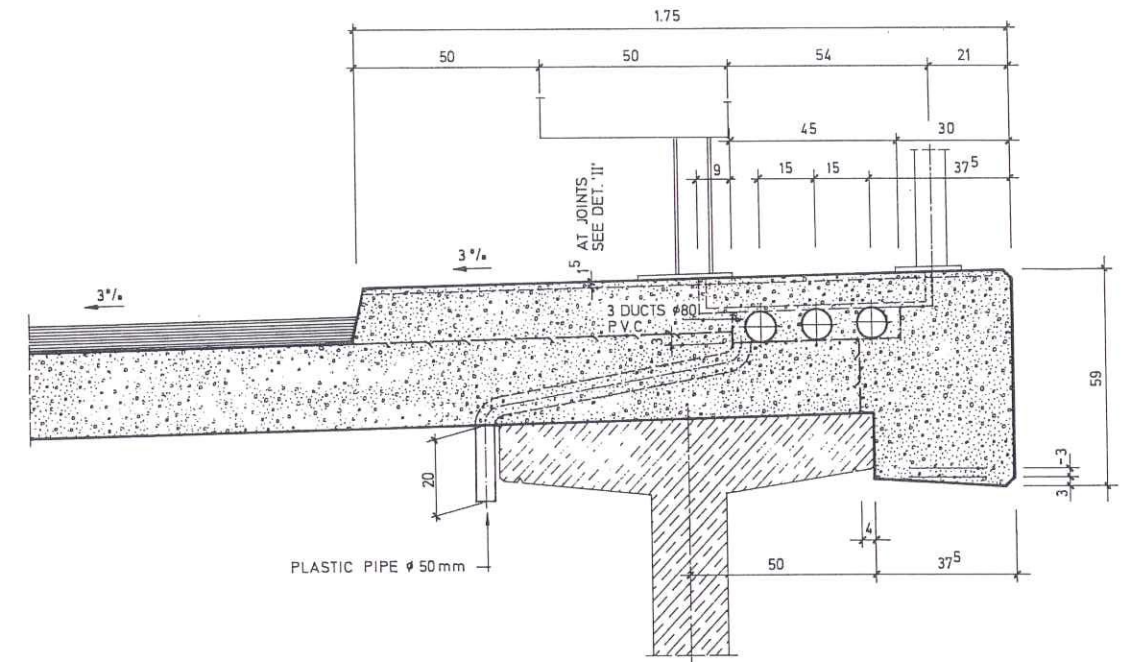
DATE	DESIGNED	DRAWN	SCALE	DRG. No
Dec. 76	<i>Geo</i>	<i>Ke</i>	C 1:2	2.9.006

SECTION SIDEWALK (LEFT SIDE)
SCALE 1:10



LEFT BRIDGE IN DIRECTION OF STATIONING

SECTION SIDEWALK (RIGHT SIDE)
SCALE 1:10

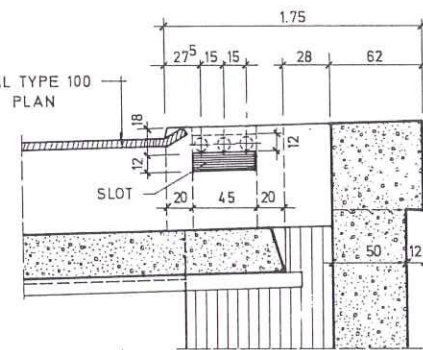
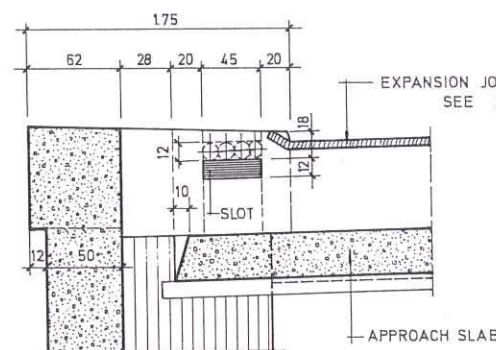


DETAIL SECTIONS
SCALE 1:25

ABUTMENT (LEFT SIDE)

ABUTMENT (RIGHT SIDE)

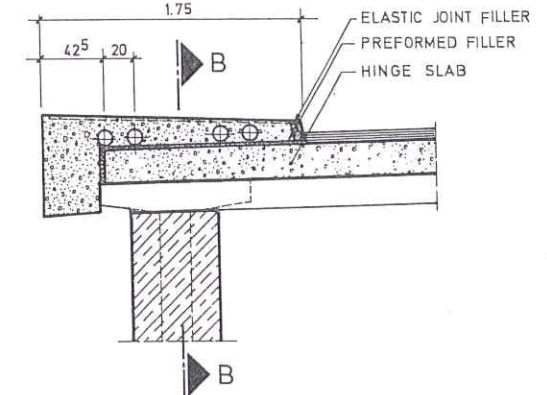
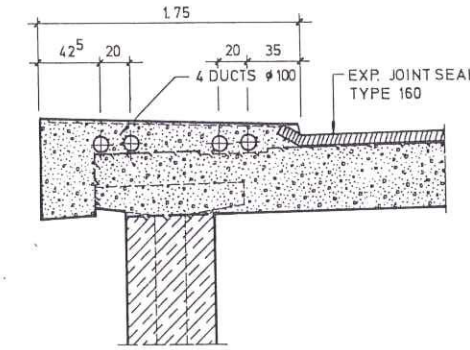
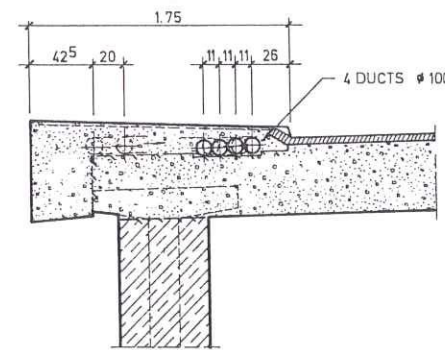
FOR FURTHER DETAILS AND SECTIONS SEE
DETAILPLAN DRG. No. 2.9.008



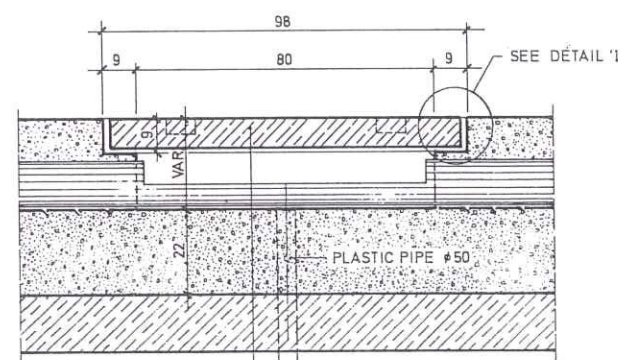
EXPANSION JOINT (ABUTM.)

EXPANSION JOINT (PIER)

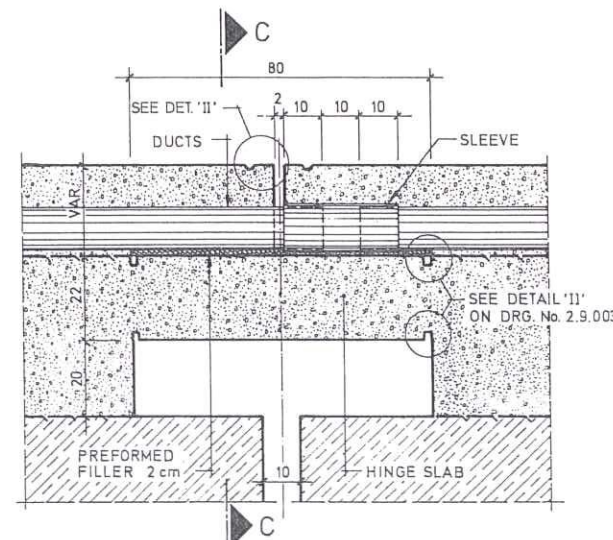
HINGE SLAB (SECTION C-C)



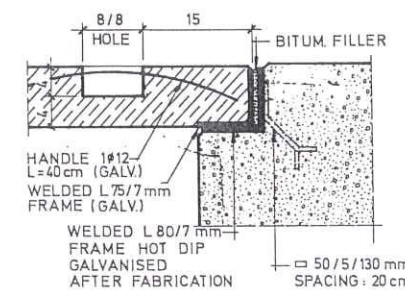
SECTION A-A
SCALE 1:10



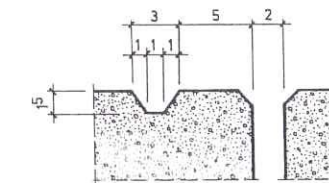
SECTION B-B
SCALE 1:10



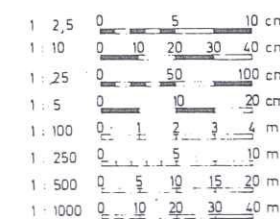
DETAIL 'I'
SCALE 1:5



DETAIL 'II'
SCALE 1:25

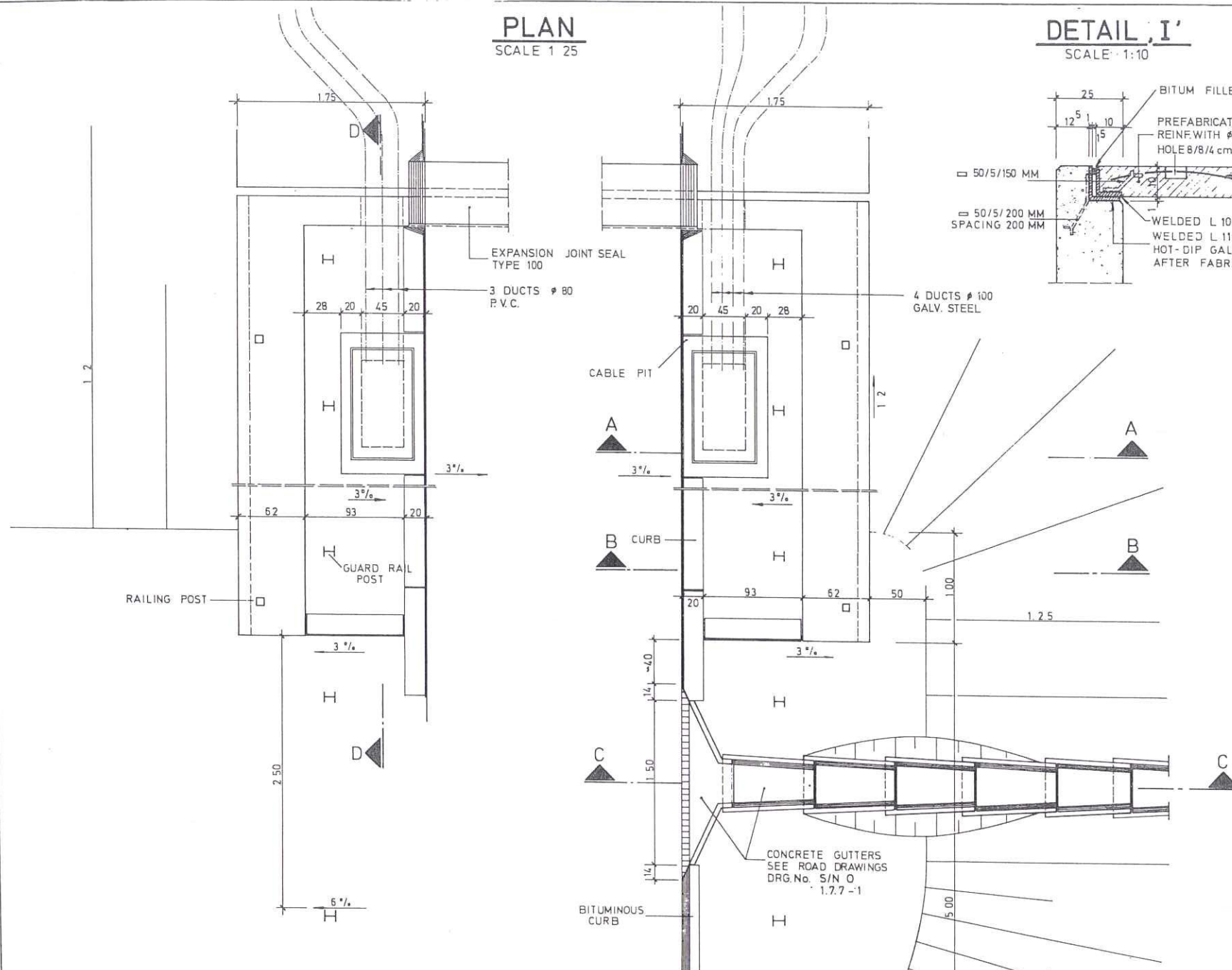


S.54.1

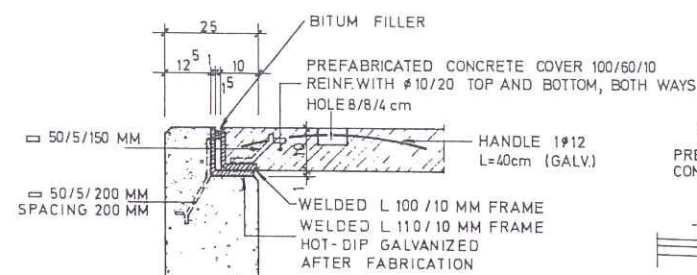


REPUBLIC OF IRAQ MINISTRY OF WORKS AND HOUSING DIRECTORATE GENERAL OF ROADS AND BRIDGES		CONTRACT SECTION THARTHAR CANAL BRIDGE		R/9A/1976 BAGHD. WEST-HABBANIYA SIDEWALK	
IRAQ EXPRESSWAY No ONE		DATE	DESIGNED	DRAWN	SCALE
CONSULTING ENGINEERS - MUNICH - W. GERMANY in association with AL-KHAZEN - CONSULTING ENGINEERS - BAGHDAD-IRAQ		Dec.76	Be	ce	C cet
DRG. No		29.007			

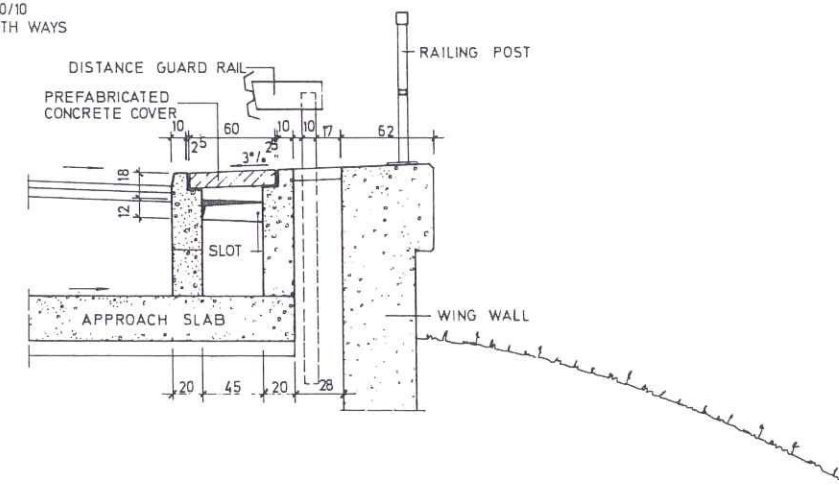
PLAN
SCALE 1:25



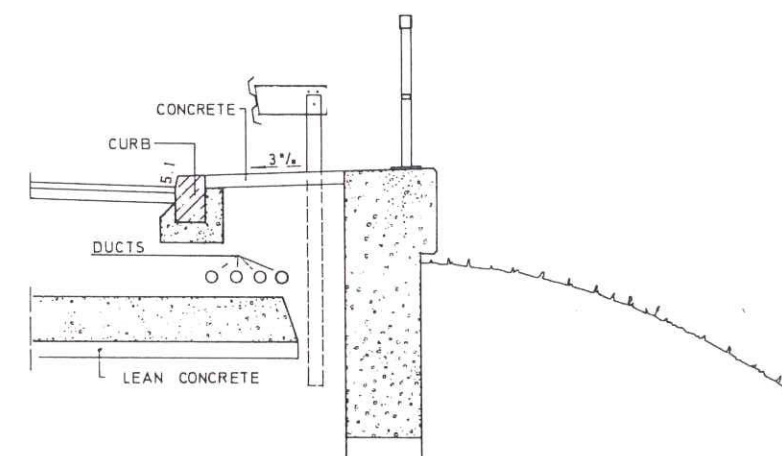
DETAIL I'
SCALE 1:10



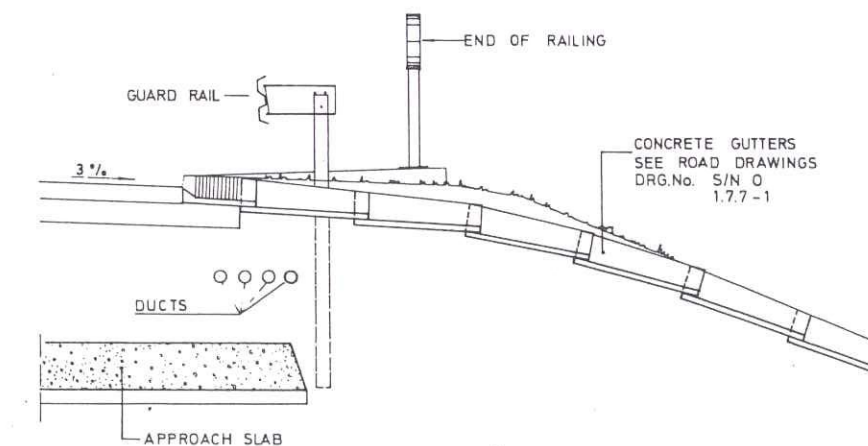
SECTION A-A
SCALE 1:25



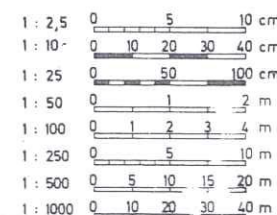
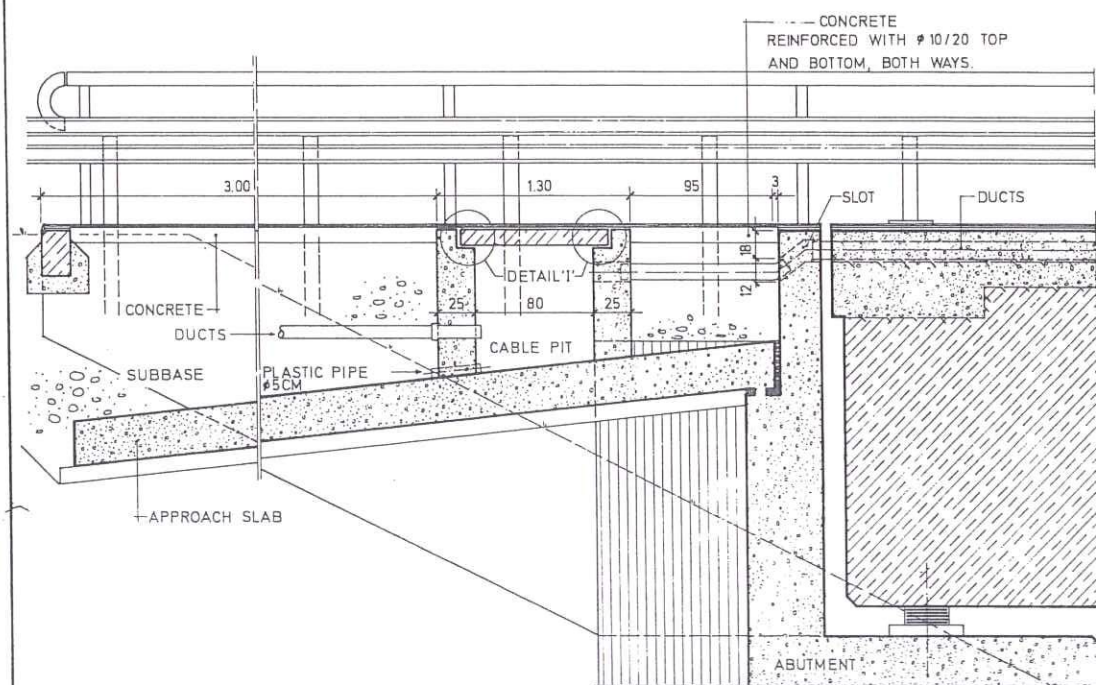
SECTION B-B
SCALE 1:25



SECTION C-C
SCALE 1:25



SECTION D-D
SCALE 1:25

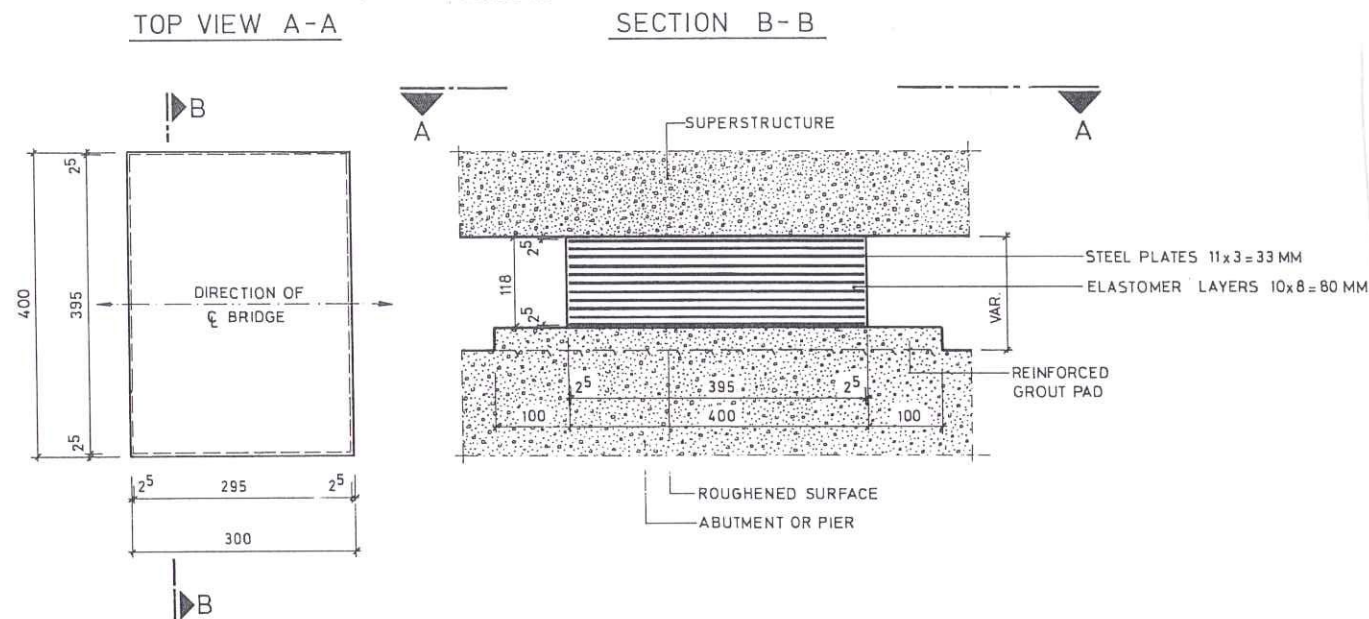


REPUBLIC OF IRAQ MINISTRY OF WORKS AND HOUSING DIRECTORATE GENERAL OF ROADS AND BRIDGES IRAQ EXPRESSWAY No ONE				CONTRACT SECTION R/9A/1976 BAGHD. WEST-HABBANIYA THARTHAR CANAL BRIDGE APPROACH EMBANKMENT	
CONSULTING ENGINEERS - MUNICH - W. GERMANY in association with AL-KHAZEN - CONSULTING ENGINEERS - BAGHDAD - IRAQ		DATE	DESIGNED	DRAWN	SCALE
DORSCH CONSULT		Dec 76	Ke	Ke	C 25
DRG. No 29.008					

S.54.1

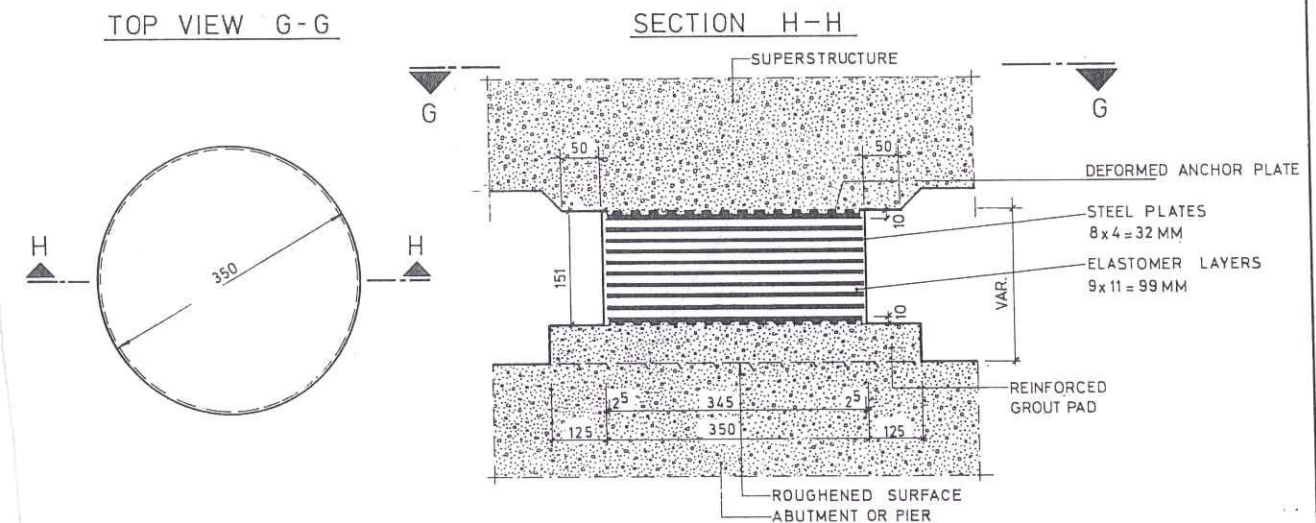
TYPE 400x300/118

SCALE 1:5



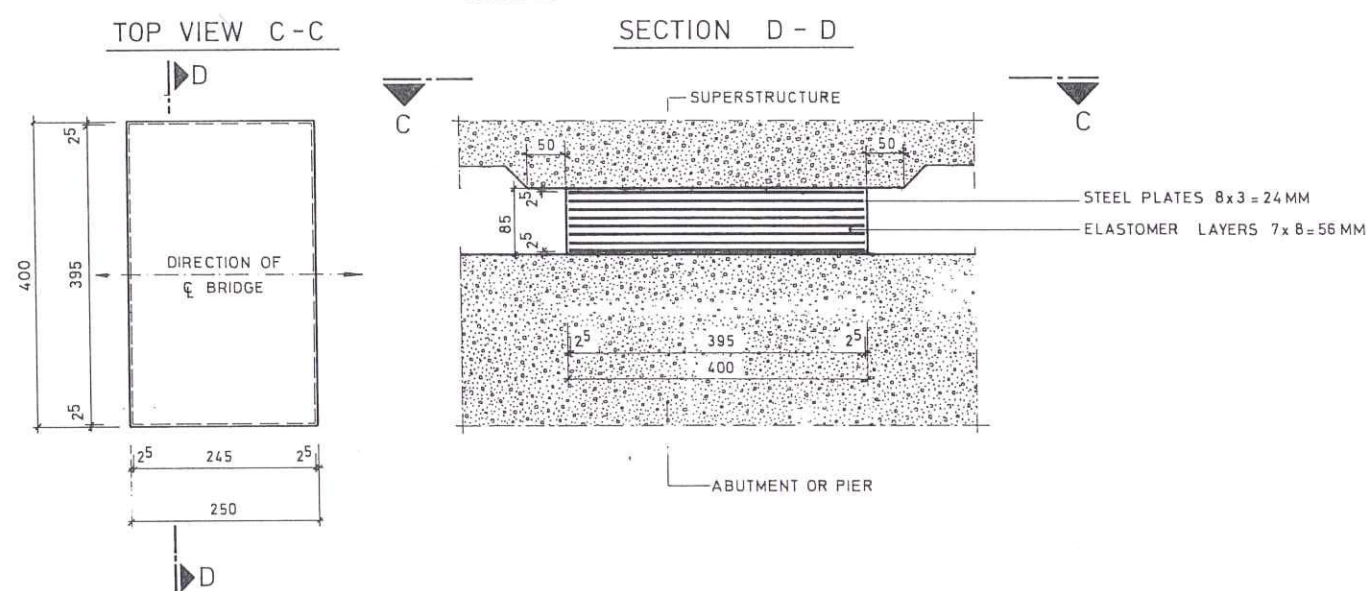
TYPE ϕ 350/151

SCALE 1:5



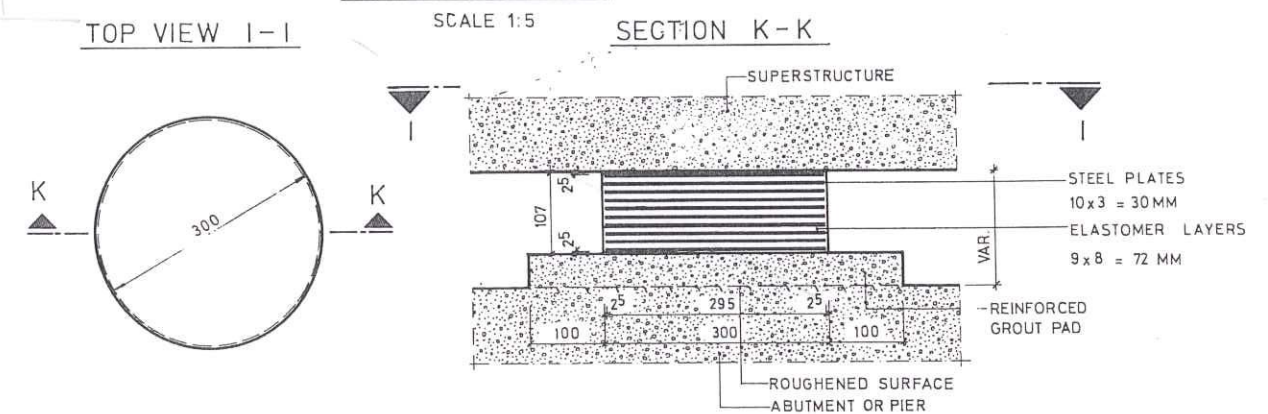
TYPE 400x250/85

SCALE 1:5



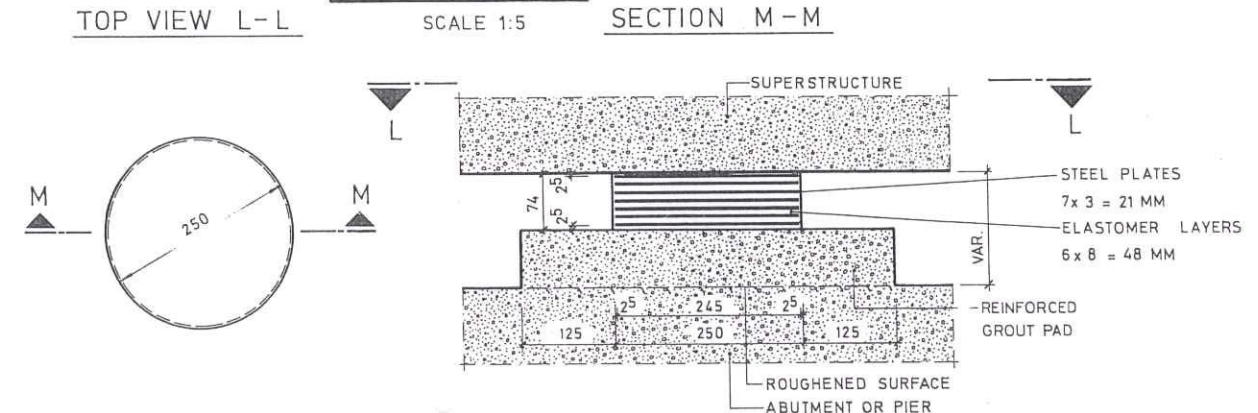
TYPE ϕ 300/107

SCALE 1:5



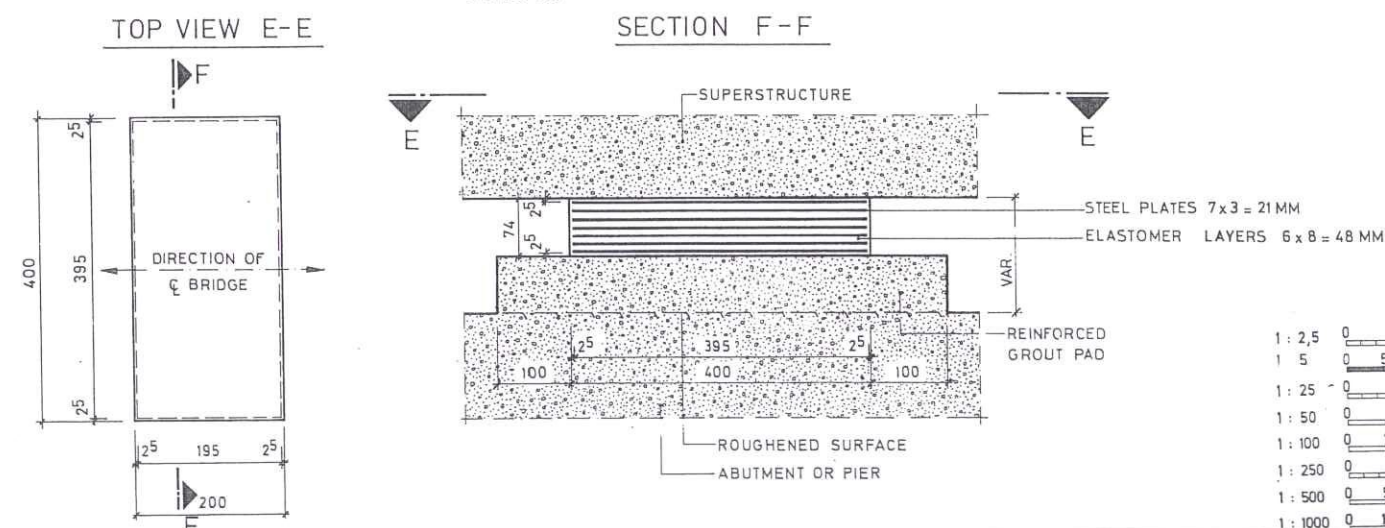
TYPE ϕ 250/74

SCALE 1:5

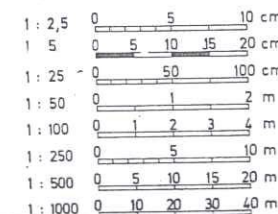


TYPE 400x200/74

SCALE 1:5



ALL DIMENSIONS IN MM !



REPUBLIC OF IRAQ
MINISTRY OF WORKS AND HOUSING
DIRECTORATE GENERAL OF ROADS AND BRIDGES
IRAQ EXPRESSWAY No ONE
 CONSULTING ENGINEERS - MUNICH - W. GERMANY
 in association with
 AL-KHAZEN - CONSULTING ENGINEERS - BAGHDAD - IRAQ

CONTRACT		R/9A/1976	
SECTION		BAGHD. WEST-HABBANIYA	
THARTHAR		ELASTOMERIC REINFORCED	
CANAL BRIDGE BEARINGS			
DATE	DESIGNED	DRAWN	SCALE
Dec. 76	Li	te	C. KER
DRG. No	29.009		

S.54.1

MAX. ALLOWABLE MOVEMENT = ± 25 MM

PLAN OF ONE ELEMENT

SCALE 1:20

Technical drawing of a composite wall section. The drawing shows two layers of concrete with a bonded interface. The dimensions are as follows:

- Top layer thicknesses: 10, 20, 50, 50, 20, 10
- Overall width: 2000 (inner), 2010 (outer)
- Height: 87
- Note: BONDED ACCORDING TO MANUFACTURER'S SPECIFICATIONS!

- ① = SEALANT AS PROVIDED BY EXP. JOINT SEAL MANUFACTURER AND APPROVED BY ENGINEER'S REPRESENTATIVE.
- ② = BITUMINOUS FILLER AS APPROVED BY ENGINEER'S REPRESENTATIVE.
- ③ = EPOXY-BONDED STUD ANCHOR BOLTS (16 MM DIAM.)

 OR = STEEL

SCALE 1:10

1. ALL DIMENSIONS IN MM.
2. ALL MATERIALS SHALL STRICTLY COMPLY WITH MANUFACTURER'S SPECIFICATIONS.

SCALE 1:20

Technical drawing of a composite wall section showing a cross-section of a wall with a central vertical joint. The wall is 53 units high. The top edge has a profile with dimensions 10, 20, 50, 50, and 20. The bottom edge has a profile with dimensions 10, 2000, 2000, and 10. The total width is 2010. A note points to the top edge: "BONDED ACCORDING TO MANUFACTURER'S SPECIFICATIONS!"

EXP. JOINT SEAL		TYPE 50	TYPE 70	TYPE 100	EXP. JOINT			EXP. JOINT			EXP. JOINT			REMARKS
TYPE OF BRIDGE	SEAL	50	70	100	TYPE OF BRIDGE	TYPE 50	TYPE 70	TYPE 100	TYPE OF BRIDGE	TYPE 50	TYPE 70	TYPE 100		
UP	T = 10° C	233	/	486									T = AVG. TEMPERATURE OF SUPER - STRUCTURE AT INSTALLATION.	
	T = 20° C	230	/	480										
	T = 30° C	227	/	474										
OF	T = 10° C	238	/											
	T = 20° C	235	/											
	T = 30° C	232	/											
OF (ALT.)	T = 10° C	/	/	484										
	T = 20° C	/	/	480										
	T = 30° C	/	/	476										

MAX. ALLOWABLE MOVEMENT = ± 50 MM

PLAN OF ONE ELEMENT

SCALE 1:20

Technical drawing of a composite wall section. The drawing shows a cross-section of a wall with a concrete base and a composite material layer. The composite material layer has a wavy profile. Dimensions are given in mm: 10, 20, 50, 50, 20, 10 for the top profile; 10, 2000, 2000, 10 for the bottom profile. A note points to the composite material: "BONDED ACCORDING TO MANUFACTURER'S SPECIFICATIONS!".

SCALE 1:10

1 : 2	0	4	8	cm		
1 : 10	0	10	20	30	40	cm
1 : 20	0	40	80	cm		
1 : 50	0	1	2	m		
1 : 100	0	1	2	3	4	m
1 : 250	0	5	10	m		
1 : 500	0	5	10	15	20	m
1 : 1000	0	10	20	30	40	m

REPUBLIC OF IRAQ
MINISTRY OF WORKS AND HOUSING
 DIRECTORATE GENERAL OF ROADS AND BRIDGES

IRAQ EXPRESSWAY No ONE


 DORSCH CONSULT

CONSULTING ENGINEERS · MUNICH · W. GERMANY
 in association with
AL-KHAZEN · CONSULTING ENGINEERS · BAGHDAD · IRAQ

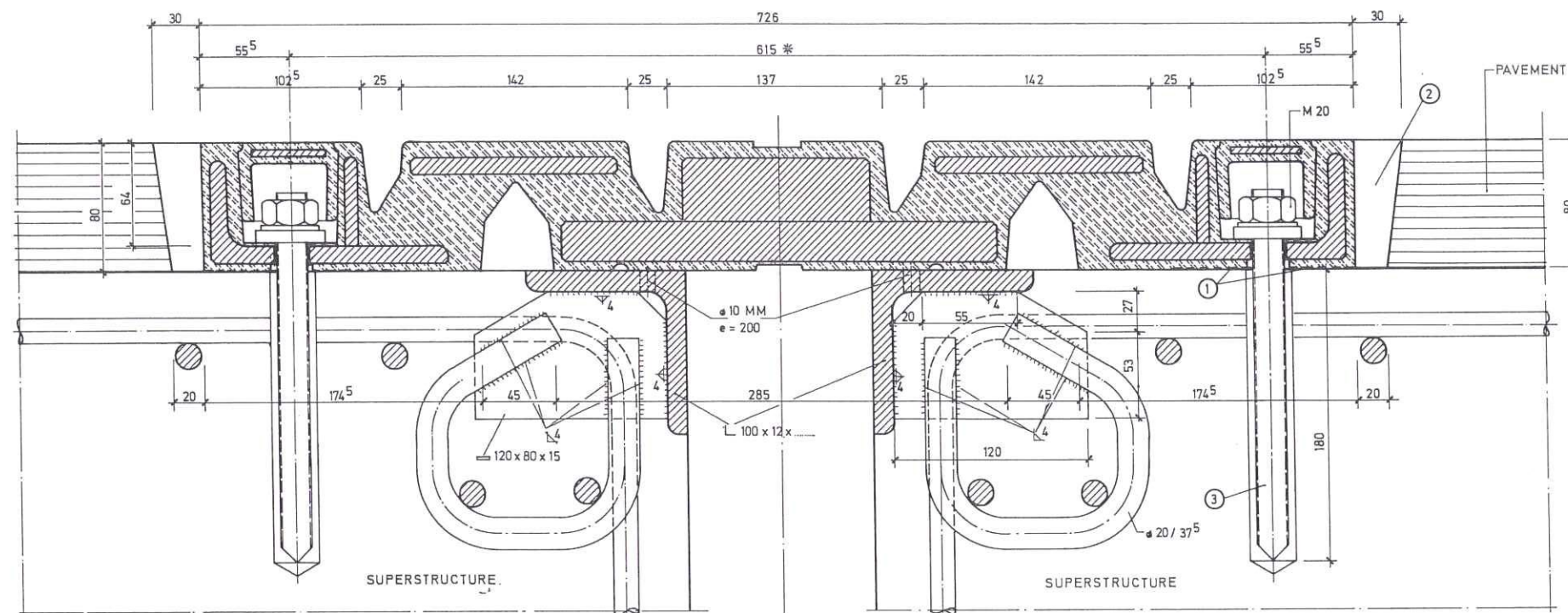
CONTRACT SECTION		R/9A/1976 BAGHD. WEST - HABBANIYA			
THARTHAR CANAL BRIDGE		EXPANSION JOINT SEALS TYPES 50/70/100			
DATE	DESIGNED	DRAWN		SCALE	DRG. No
Dec. 76	<i>Li</i>	<i>Ke</i>	C KET		2.9.010

S.54.1

EXPANSION JOINT SEAL TYPE 160

MAX. ALLOWABLE MOVEMENT = ± 80 MM

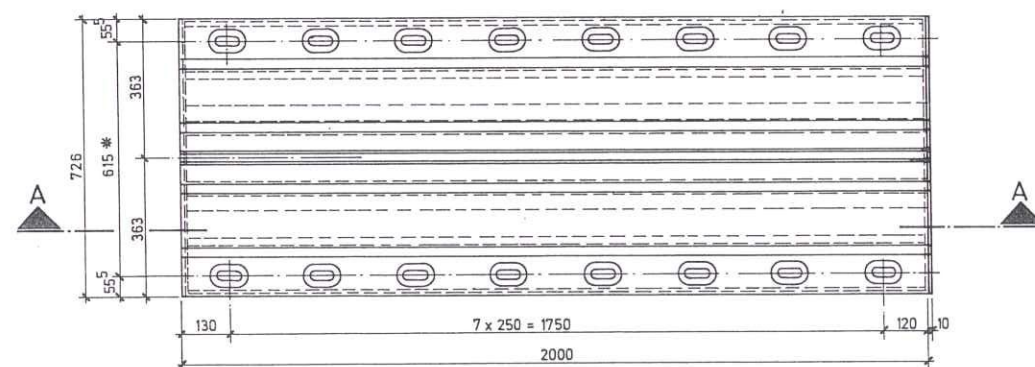
CROSS SECTION SCALE 1:2



* DIMENSIONS SHOWN ARE FOR FABRICATION ONLY! FOR DIMENSIONS AT INSTALLATION SEE TABLE!

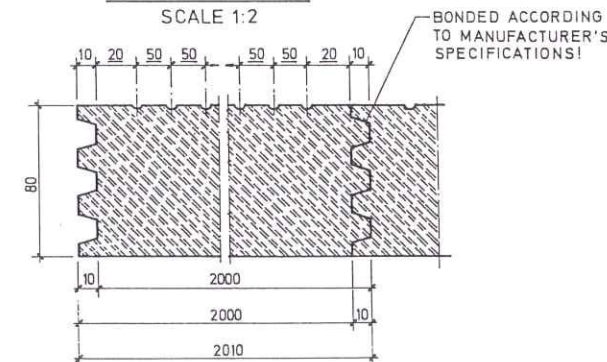
PLAN OF ONE ELEMENT

SCALE 1:10



SECTION A-A

SCALE 1:2



LEGEND:

- ① = SEALANT AS PROVIDED BY EXPANSION JOINT SEAL MANUFACTURER AND APPROVED BY ENGINEER'S REPRESENTATIVE.
- ② = BITUMINOUS FILLER AS APPROVED BY ENGINEER'S REPRESENTATIVE.
- ③ = EPOXY-BONDED STUD ANCHOR BOLTS (20 MM DIAM.)

NEOPRENE
STEEL

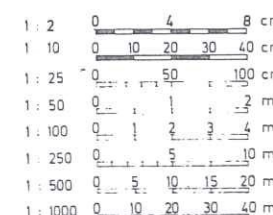
NOTES:

- 1. ALL DIMENSIONS IN MM.
- 2. ALL MATERIALS SHALL STRICTLY COMPLY WITH MANUFACTURER'S SPECIFICATIONS.

REQUIRED SPACING OF ANCHOR BOLTS AT INSTALLATION

EXP. JOINT TYPE OF BRIDGE	TYPE 100	TYPE 160	REMARKS
T = 10°C	503	603	T = AVG. TEMPERATURE OF SUPERSTRUCTURE AT INSTALLATION!
T = 20°C	500	590	
T = 30°C	497	580	

S.54.1

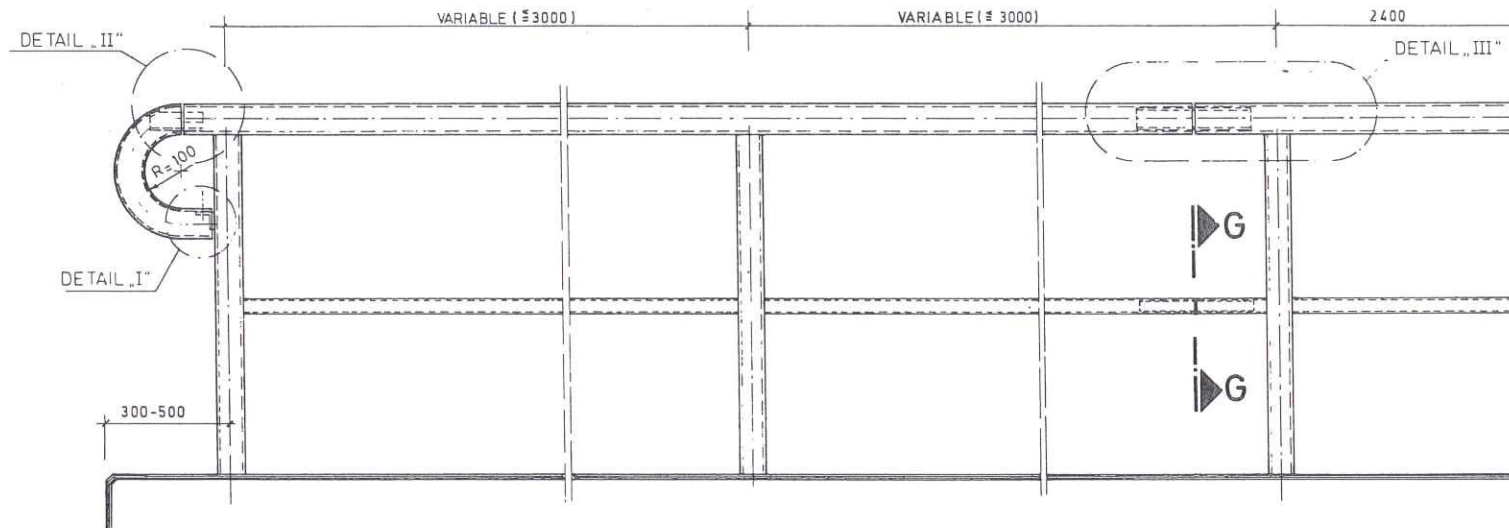
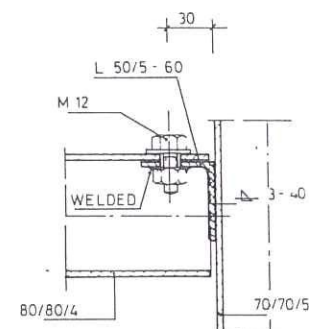


REPUBLIC OF IRAQ MINISTRY OF WORKS AND HOUSING DIRECTORATE GENERAL OF ROADS AND BRIDGES		CONTRACT SECTION R/9A/1976 BAGHD.WEST-HABBANIYA	
IRAQ EXPRESSWAY No ONE		THARTHAR CANAL BRIDGE EXPANSION JOINT SEAL TYPE 160	
DATE	DESIGNED	DRAWN	SCALE
Dec.76	Li	Ke	C. cer
DRG. No			29.011

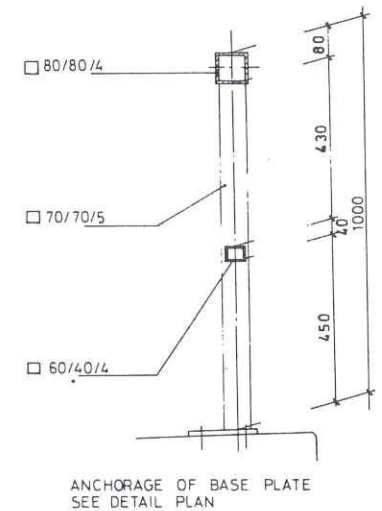
ELEVATION RAILING

SCALE 1:10

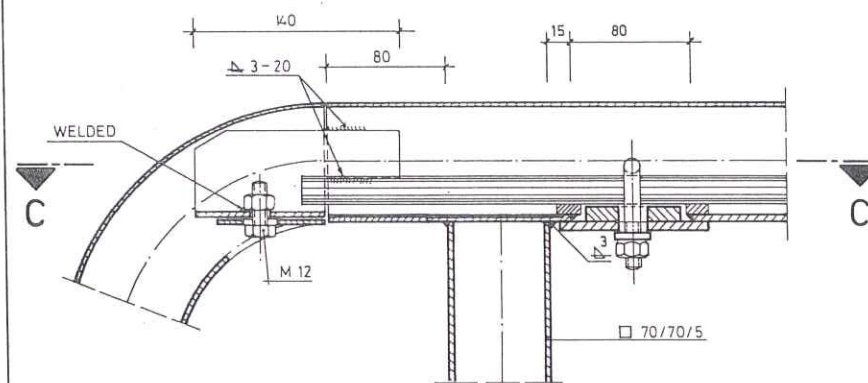
DETAIL „I“
SCALE 1:2,5



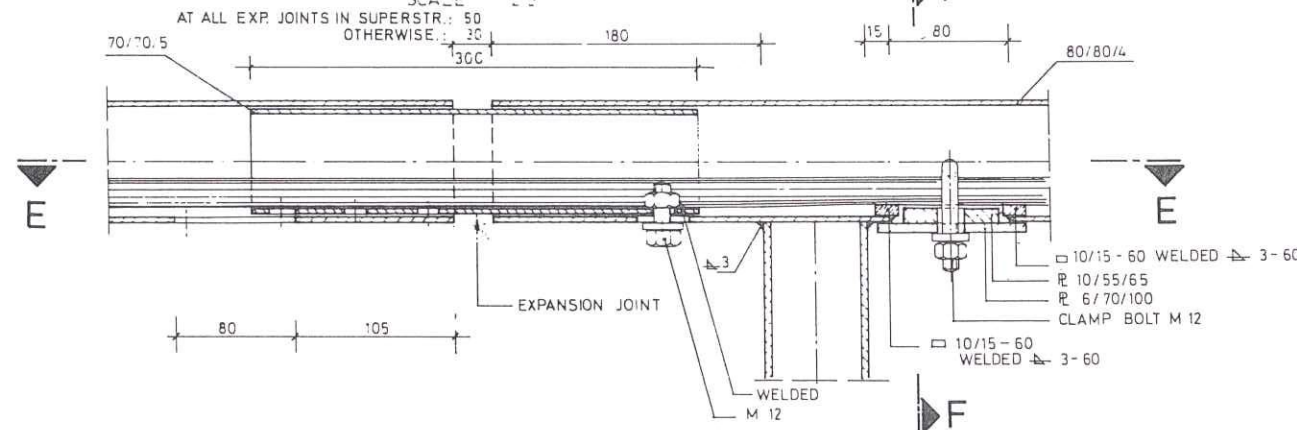
SECTION A-A
SCALE 1:10



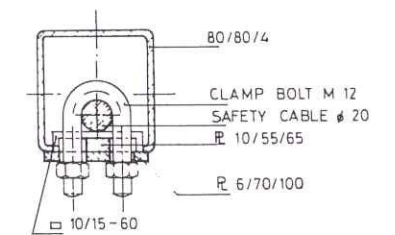
DETAIL „II“
SECTION B-B
SCALE 1:2,5



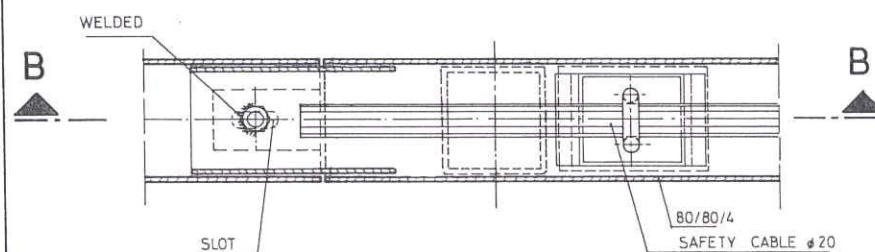
DETAIL „III“
SECTION D-D
SCALE 1:2,5



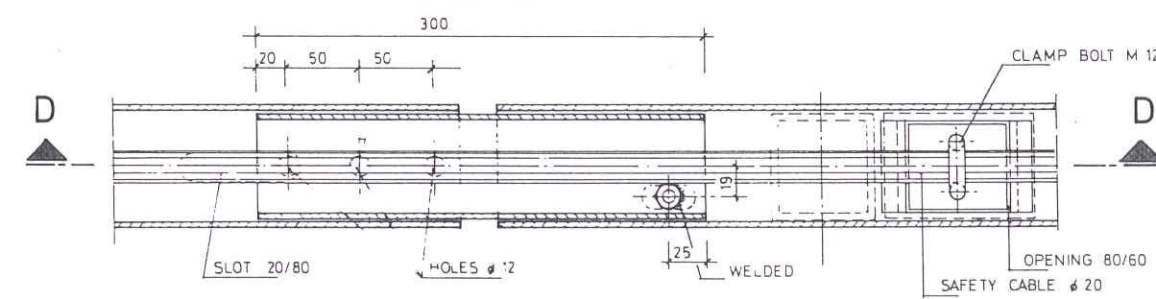
SECTION F-F
SCALE 1:2,5



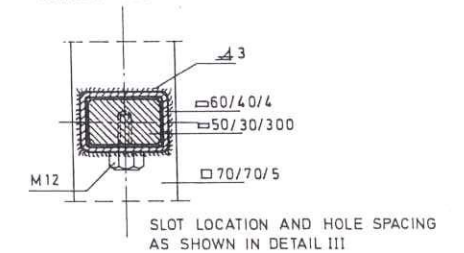
SECTION C-C
SCALE 1:2,5



SECTION E-E
SCALE 1:2,5



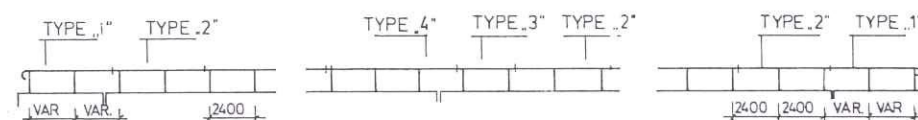
SECTION G-G
SCALE 1:2,5



NOTE:
RAILING FRAME TYPES SHALL BE COMBINED SUCH THAT A RAILING EXPANSION JOINT WITH GAP WIDTH 50MM IS PROVIDED IN ALL RAILING SECTIONS SPANNING SUPERSTRUCTURE EXPANSION JOINTS.

ALL DIMENSIONS IN MM

LOCATION OF EXPANSION JOINTS



1 : 2,5	0	5	10	cm		
1 : 10	0	10	20	30	40	cm
1 : 25	0	50	100	cm		
1 : 50	0	1	2	m		
1 : 100	0	1	2	3	4	m
1 : 250	0	5	10	15	20	m
1 : 500	0	5	10	15	20	m
1 : 1000	0	10	20	30	40	m

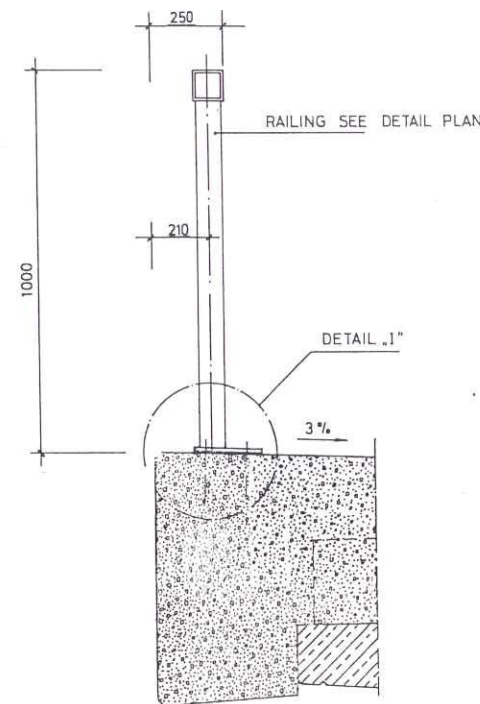
REPUBLIC OF IRAQ MINISTRY OF WORKS AND HOUSING DIRECTORATE GENERAL OF ROADS AND BRIDGES		CONTRACT R/9A/1976 SECTION BAGHD.WEST-HABBANIYA THARTHAR RAILING CANAL BRIDGE	
IRAQ EXPRESSWAY No ONE		DATE Dec. 76 DESIGNED <i>Indur</i> DRAWN <i>te</i> SCALE C 1:10 DRG. No 2.3.012	
CONSULTING ENGINEERS - MUNICH - W. GERMANY in association with AL-KHAZEN - CONSULTING ENGINEERS - BAGHDAD-IRAQ			

S.54.1

ANCHORAGE RAILING POST

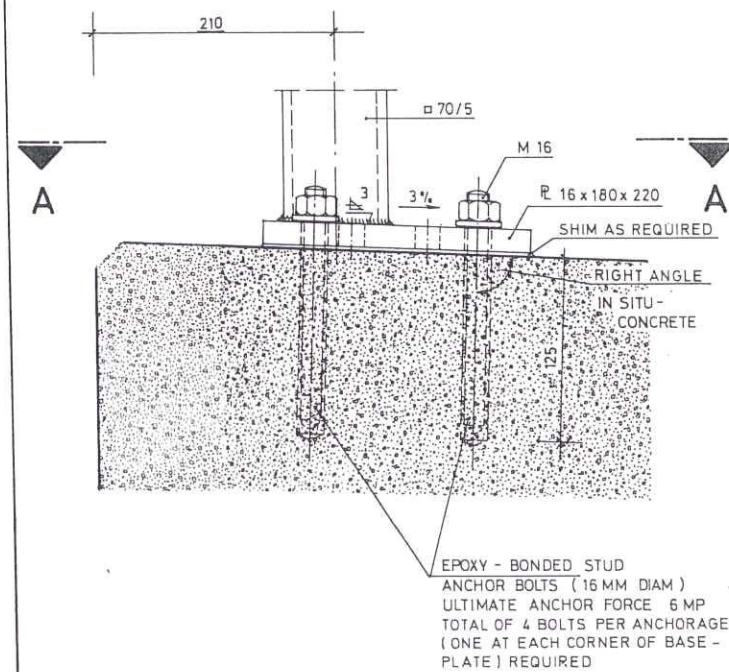
CROSS - SECTION

SCALE 1:10



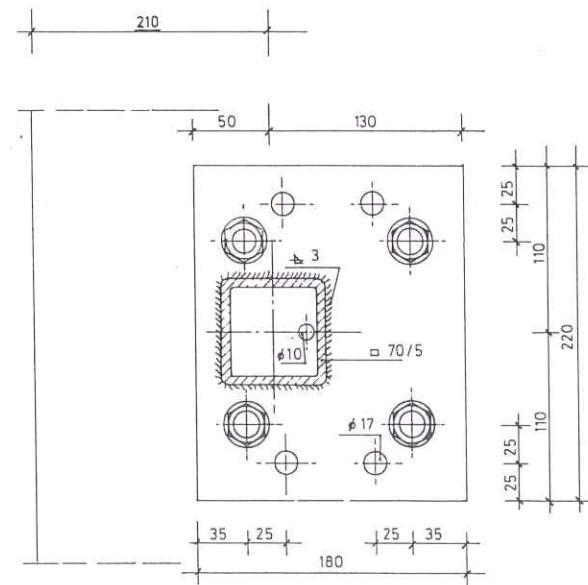
DETAIL „I”

SCALE 1:2,5



SECTION A - A

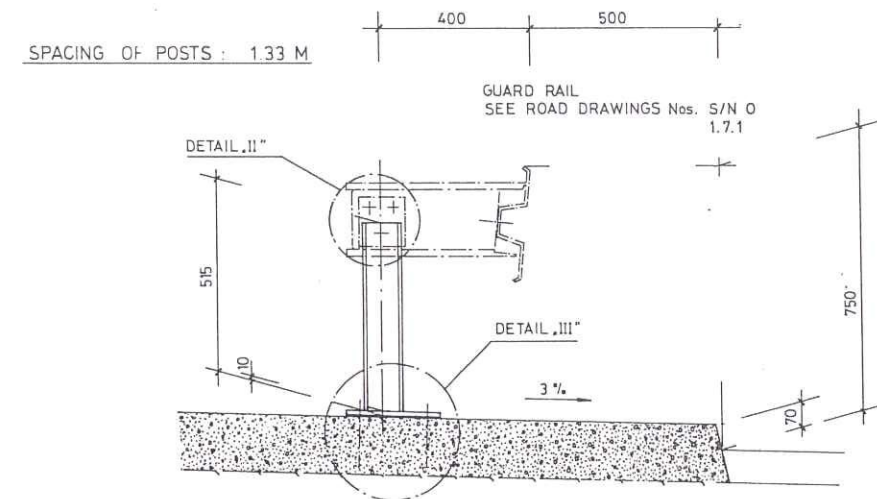
SCALE 1:2,5



ANCHORAGE GUARD RAIL POST

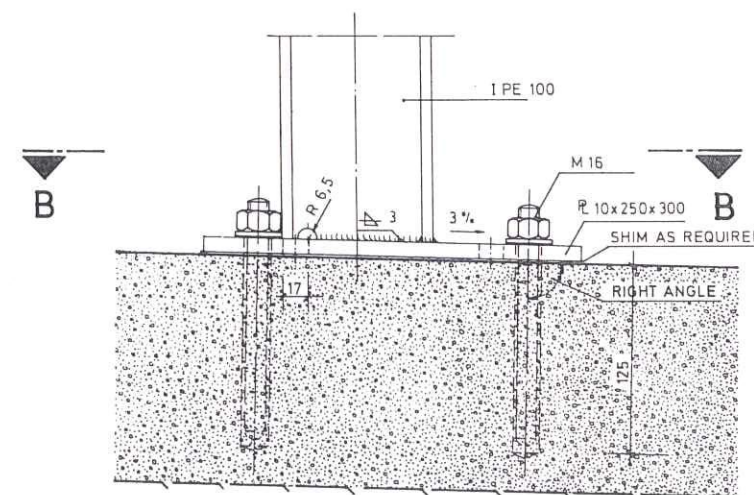
CROSS SECTION

SCALE 1:10



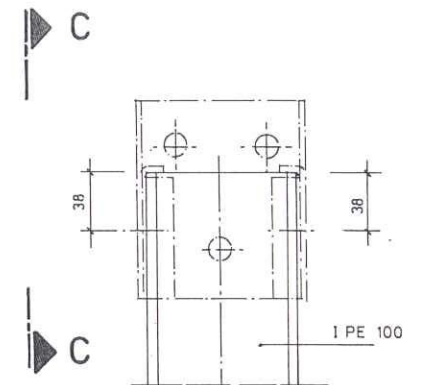
DETAIL „III”

SCALE 1:2,5



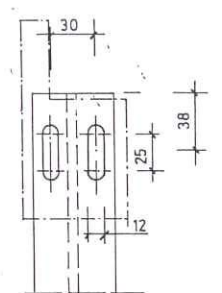
DETAIL „II”

SCALE 1:2,5



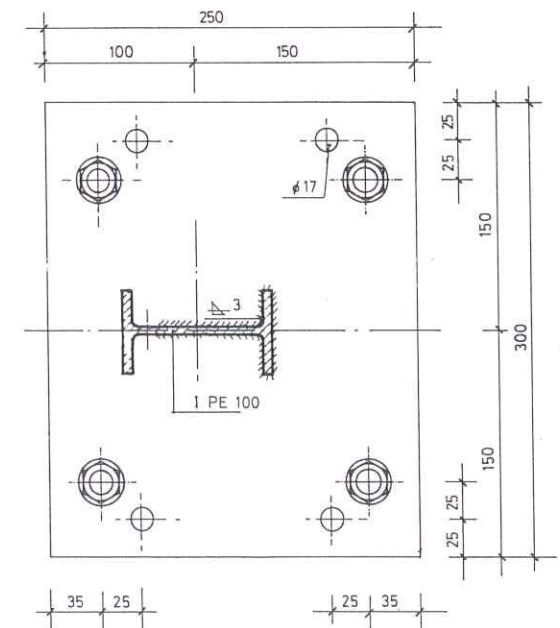
ELEVATION C - C

SCALE 1:2,5



SECTION B - B

SCALE 1:2,5

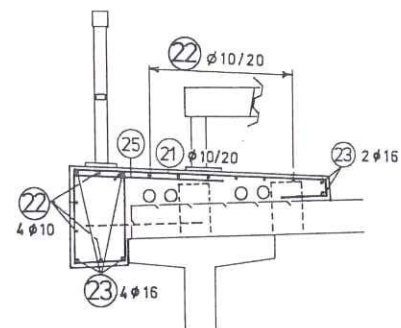


S.54.1

1:2,5	0 5 10 cm
1:10	0 10 20 30 40 cm
1:25	0 10 20 30 40 cm
1:50	0 1 2 3 4 m
1:100	0 1 2 3 4 m
1:250	0 5 10 15 20 m
1:500	0 5 10 15 20 m
1:1000	0 10 20 30 40 m

REPUBLIC OF IRAQ MINISTRY OF WORKS AND HOUSING DIRECTORATE GENERAL OF ROADS AND BRIDGES		CONTRACT R/9A/1976 SECTION BAGHD.WEST-HABBANIYA THARTHAR ANCHORAGE RAILING POST CANAL BRIDGE AND GUARD RAIL POST				
IRAQ EXPRESSWAY No ONE						
 DORSCH CONSULT CONSULTING ENGINEERS · MUNICH · W. GERMANY in association with AL-KHAZEN · CONSULTING ENGINEERS · BAGHDAD-IRAQ		DATE	DESIGNED	DRAWN	SCALE	DRG. No
		Dec.76	4	Re	C CER	2.9.013

SCALE 1:25



Structural drawing of a bridge deck slab showing reinforcement details. The drawing includes a plan view of the deck slab with various reinforcement bars (numbered 1 through 13) and their specifications (e.g., 14/30, 12/30, 10/20). Dimensions are provided for various sections, including 1.60, 2.00, 1.60, 3.5 CL, 2.5 CL, 30, 45, 20, and 20. The drawing also shows a cross-section of the deck slab with reinforcement bars and dimensions. The text "DECKSLAB" is visible at the bottom left.

[illegible]

CROSS SECTION ZONE B

SCALE 1:25

50

26 #8/15 AT JOINTS

2.00

26 #8/15

15 #14/20

13 #12/60

10 #12/100 BOTH WAYS

14 #14/20

15 #14/20

9 #10/20

20 2#14

16 #16/30

18 #16/30

17 #14/30

18 #16/30

3.5 CL

2.5 CL

14 #14/20

15 #14/20

17 #14/30

19 #14/30

12 #12/20

30

16 #16/30

17 #14/30

19 #14/30

30

18 #16/30

19 #14/30

45

20

20

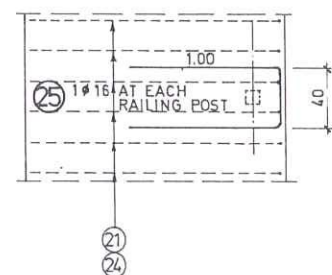
20

20

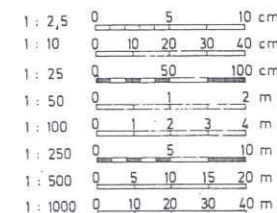
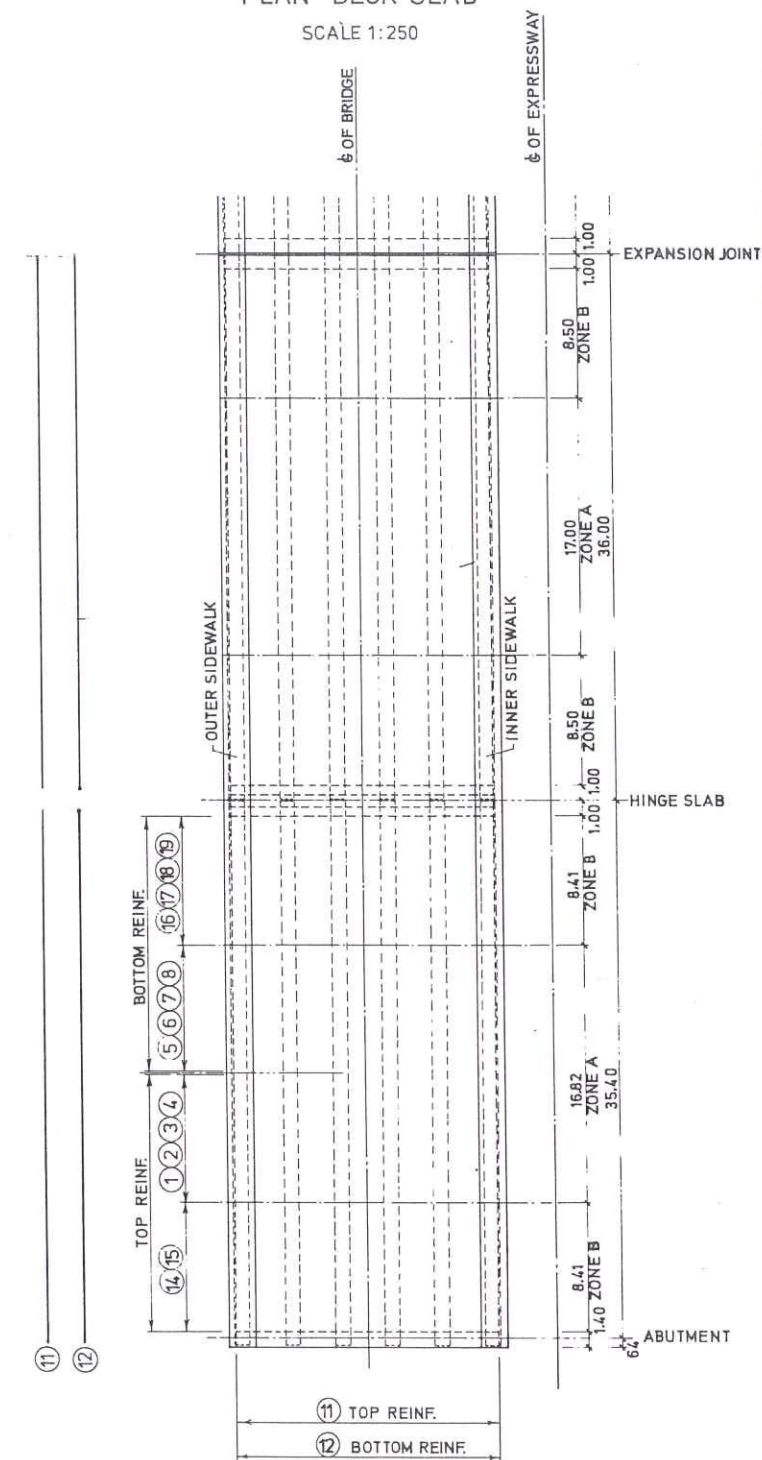
9 #10/20

13 #12/60

10 #12/100 BOTH WAYS



SCALE 1:250



REPUBLIC OF IRAQ
MINISTRY OF WORKS AND HOUSING
DIRECTORATE GENERAL OF ROADS AND BRIDGES

IRAQ EXPRESSWAY No ONE



DORSCH CONSULTING

CONTRACT SECTION

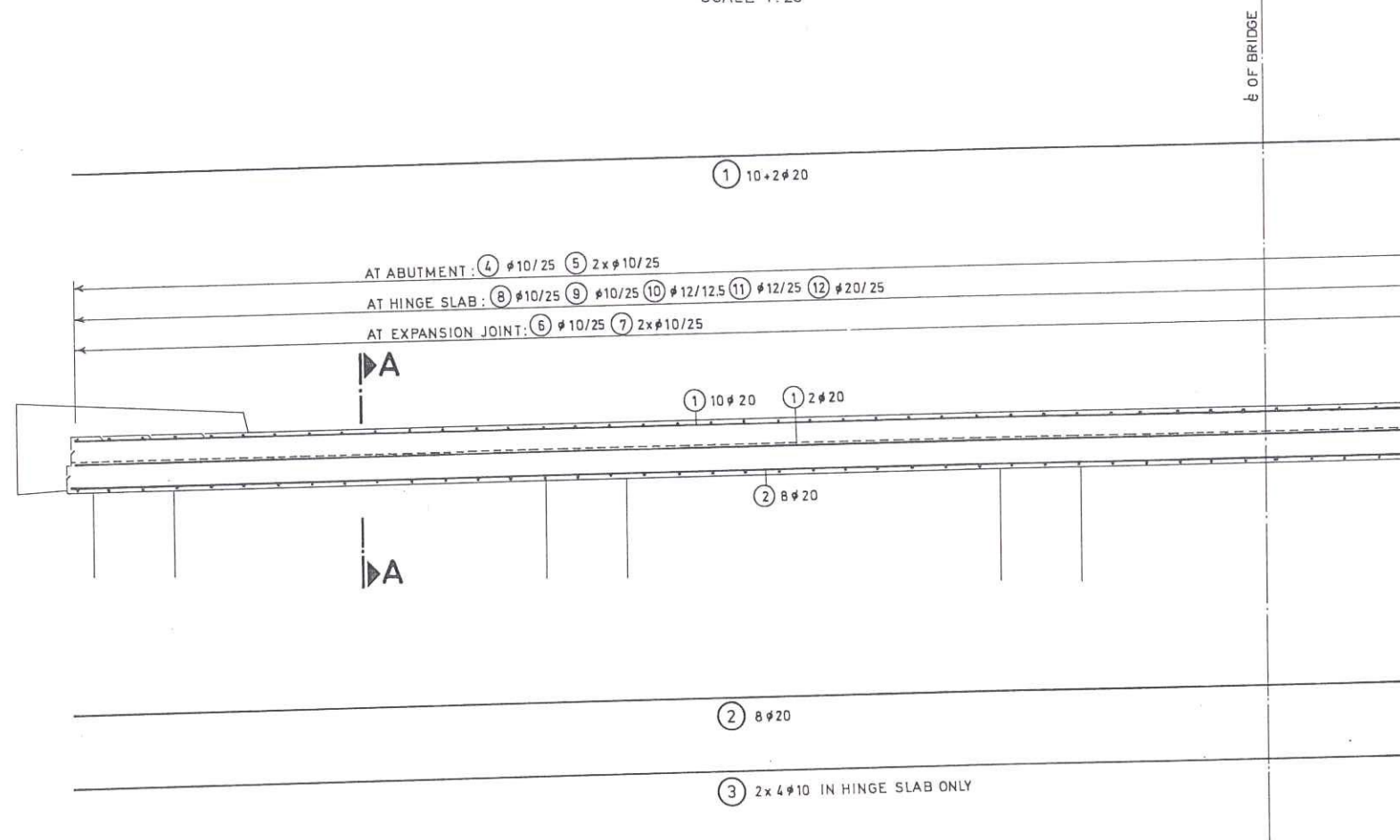
R/9A / 1976
BAGHD. WEST - HABBANIYA
SUPERSTRUCTURE
REINFORCEMENT PART 1

DATE	DESIGNED	DRAWN	SCALE	DRG. No
Dec 76	<i>Libro</i>	<i>HC</i>	C KET	29.020

S.54.1

CROSS SECTION AT END OF BEAM AT ABUTMENT; HINGE SLAB; EXPANSION JOINT

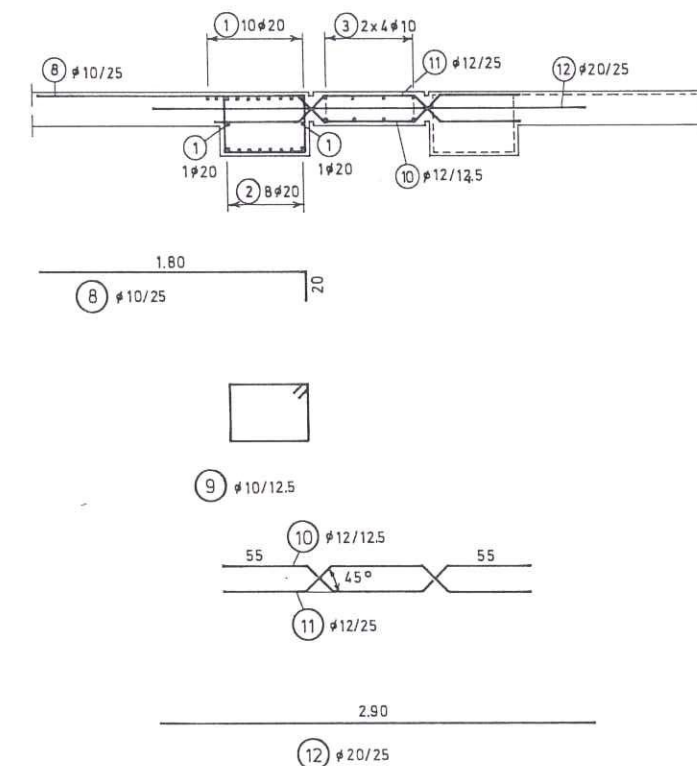
SCALE 1:25



LONG. SECTION A-A

SCALE 1:25

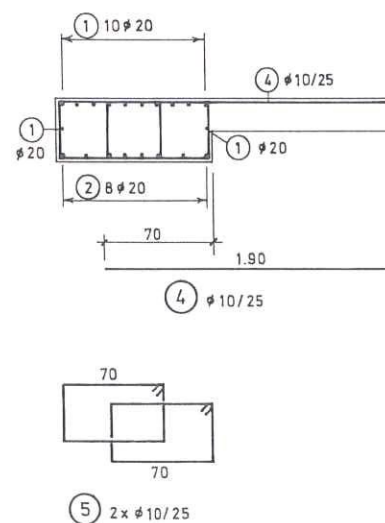
AT HINGE SLAB



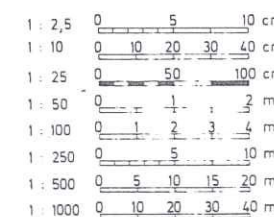
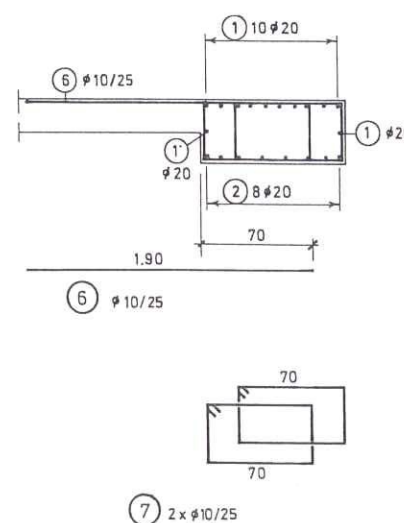
LONG. SECTIONS A-A

SCALE 1:25

AT ABUTMENT



AT EXPANSION JOINT



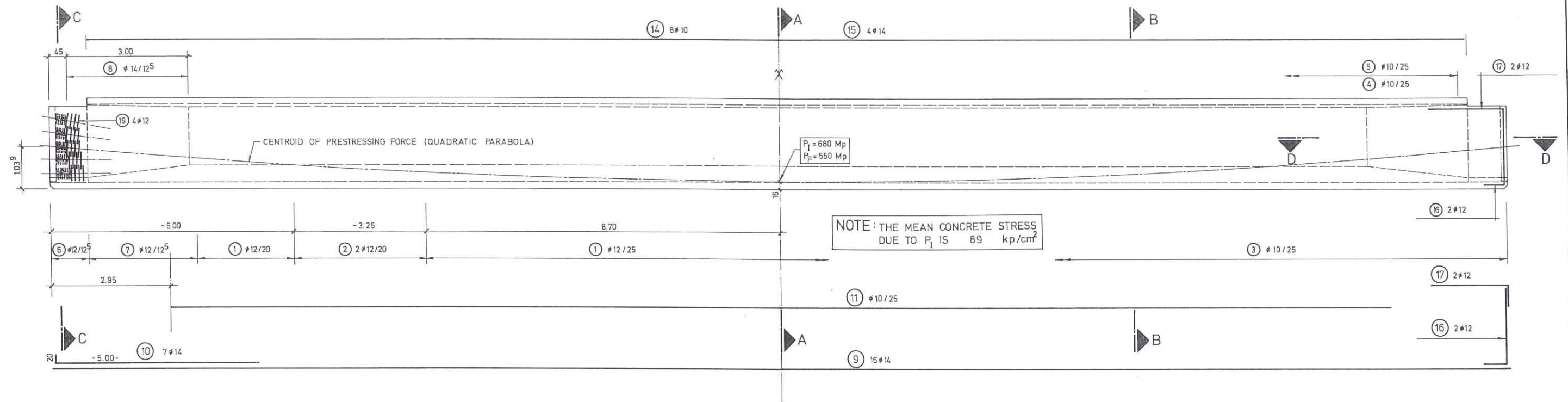
REPUBLIC OF IRAQ
MINISTRY OF WORKS AND HOUSING
DIRECTORATE GENERAL OF ROADS AND BRIDGES
IRAQ EXPRESSWAY No ONE
CONSULTING ENGINEERS - MÜNICH - W. GERMANY
in association with
AL-KHAZEN - CONSULTING ENGINEERS - BAGHDAD-IRAQ

CONTRACT SECTION
R/9A / 1976
BAGHD.WEST HABBANIYA
SUPERSTRUCTURE REINFORCEMENT PART 2
THARTHAR CANAL BRIDGE
DATE 75
DESIGNED
DRAWN
SCALE
DRG. No 2.9.021

S.54.1

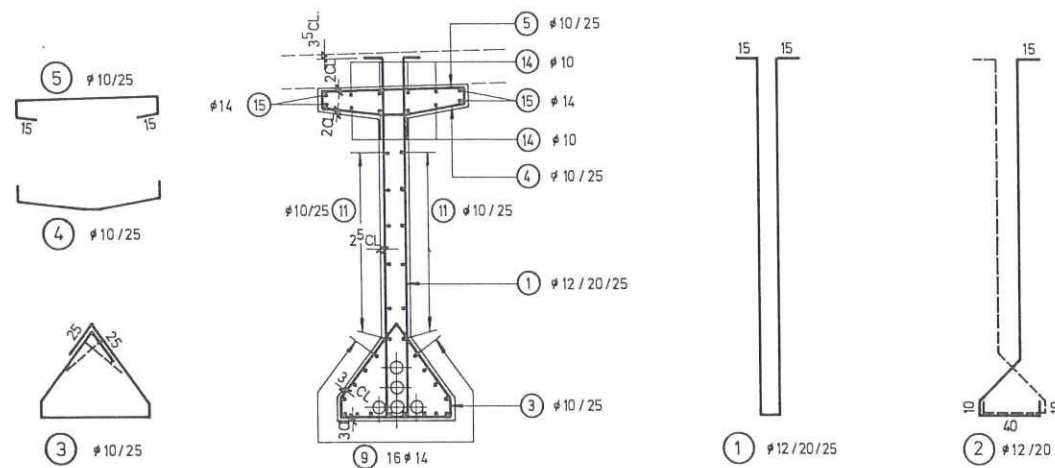
LONGITUDINAL SECTION

SCALE 1:50



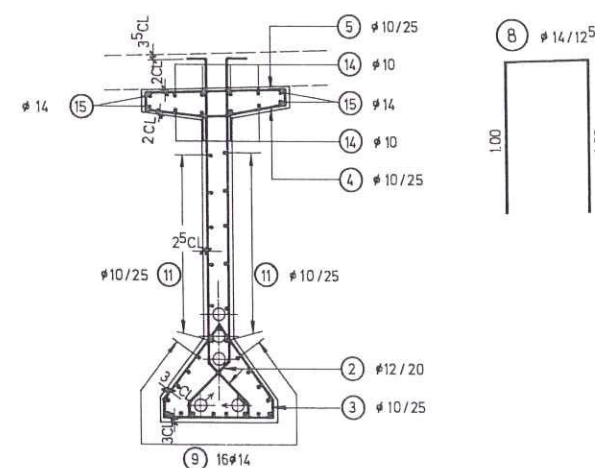
SECTION A-A

SCALE 1:25



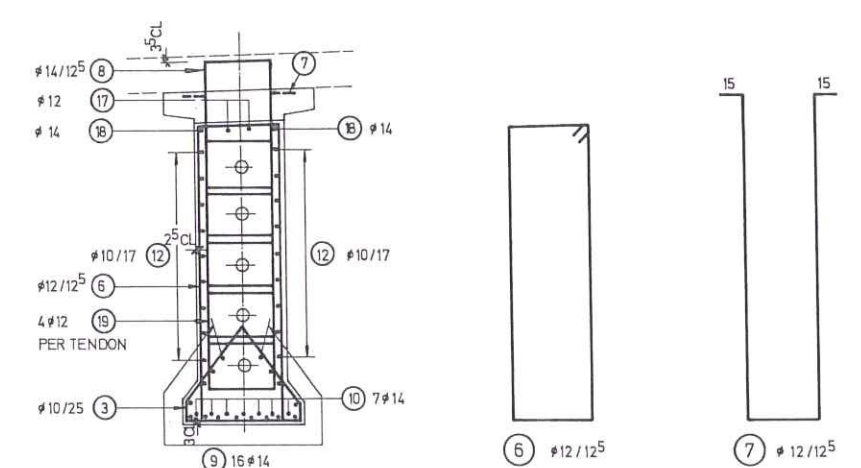
SECTION B-B

SCALE 1:25



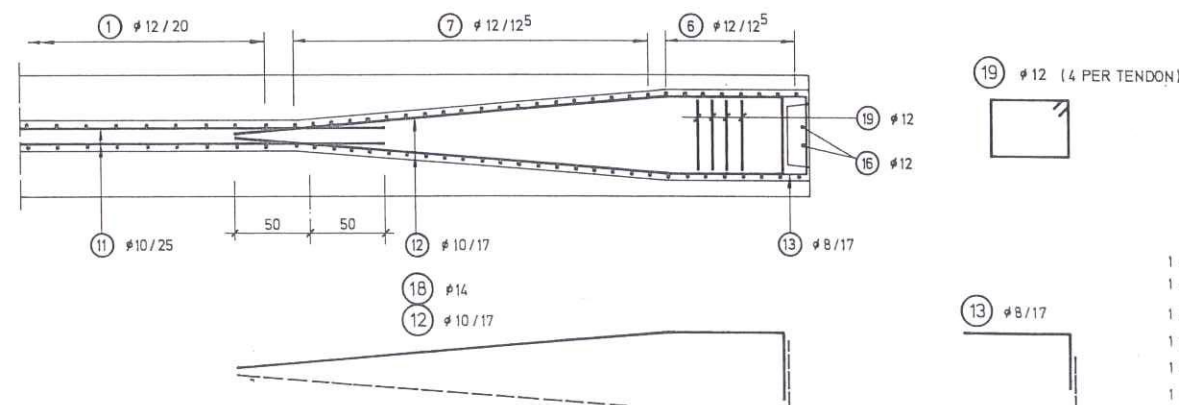
SECTION C-C

SCALE 1:25



SECTION D-D

SCALE 1:25



NOTES:

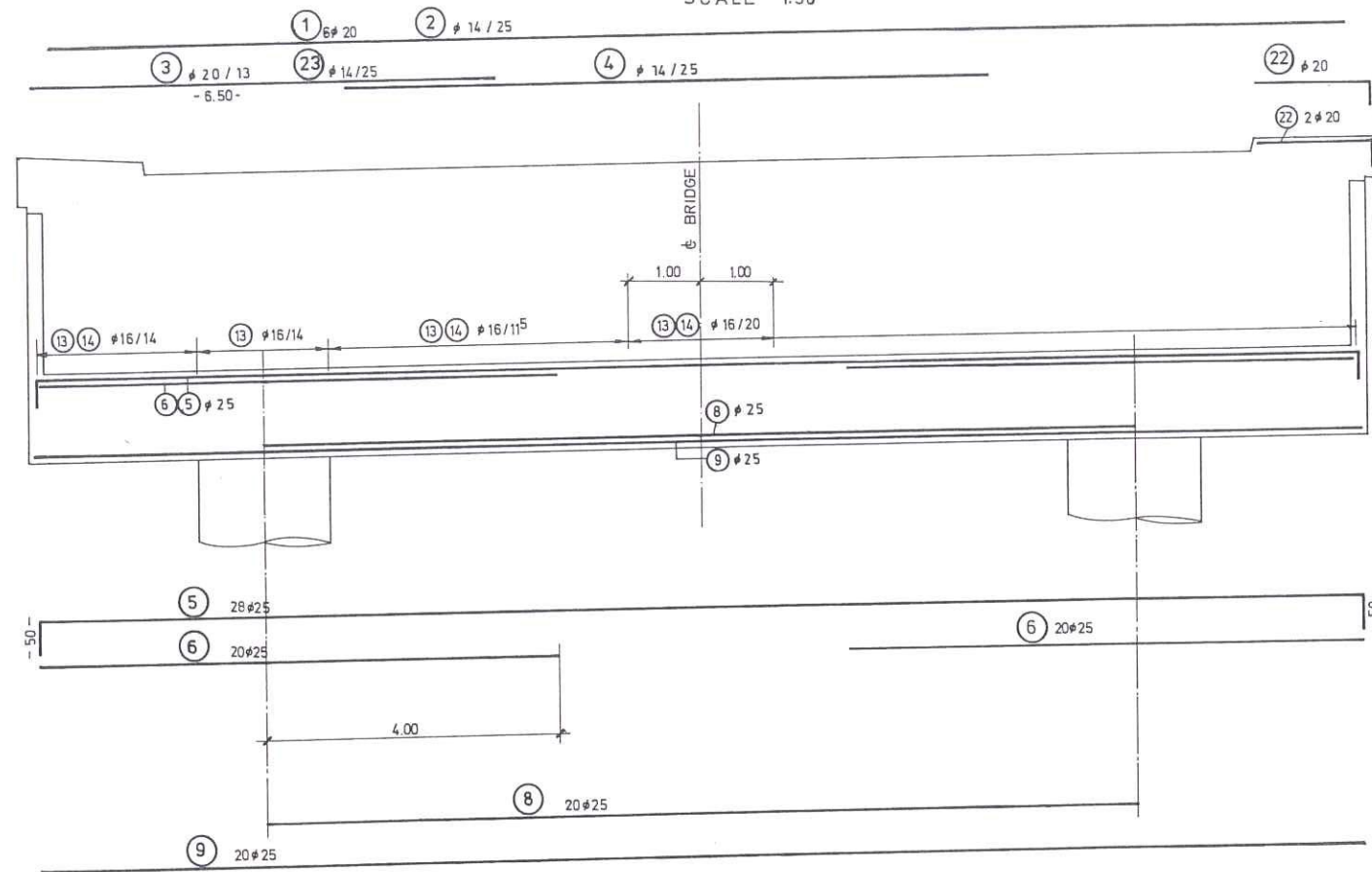
- IN ORDER TO REDUCE LOSSES OF PRESTRESS DUE TO CREEP AND SHRINKAGE EFFECTS THE GIRDERS SHALL BE STRESSED IN TWO STAGES AS FOLLOWS:
1ST STAGE: 30% OF TOTAL PRESTRESSING AFTER CONCRETE HAS ATTAINED A CUBE STRENGTH OF 320 Kp/sqcm .
2ND STAGE: 100% OF TOTAL PRESTRESSING 3 MONTHS AFTER CONCRETING WHEN NORMAL CEMENT (CLASS 350 L ACC. TO DIN 1164) IS USED, OR 2 MONTHS AFTER CONCRETING WHEN HIGH EARLY STRENGTH CEMENT (CLASS 350F ACC. TO DIN 1164) IS USED.
- THE DECK SLAB SHALL BE PLACED NOT LATER THAN 6 MONTHS AFTER CONCRETING OF THE GIRDERS.

S.54.1

REPUBLIC OF IRAQ MINISTRY OF WORKS AND HOUSING DIRECTORATE GENERAL OF ROADS AND BRIDGES		CONTRACT SECTION THARTHAR CANAL BRIDGE		R/9A/1976 BAGHD.WEST-HABBANIYA PREFABRICATED GIRDER REINFORCEMENT	
IRAQ EXPRESSWAY No ONE		DATE	DESIGNED	DRAWN	SCALE
CONSULTING ENGINEERS - MUNICH - W. GERMANY In association with AL-KHAZEN - CONSULTING ENGINEERS - BAGHDAD-IRAQ		Dec. 76	Dec. 76	Dec. 76	Dec. 76
DRG. No 2.9.022					

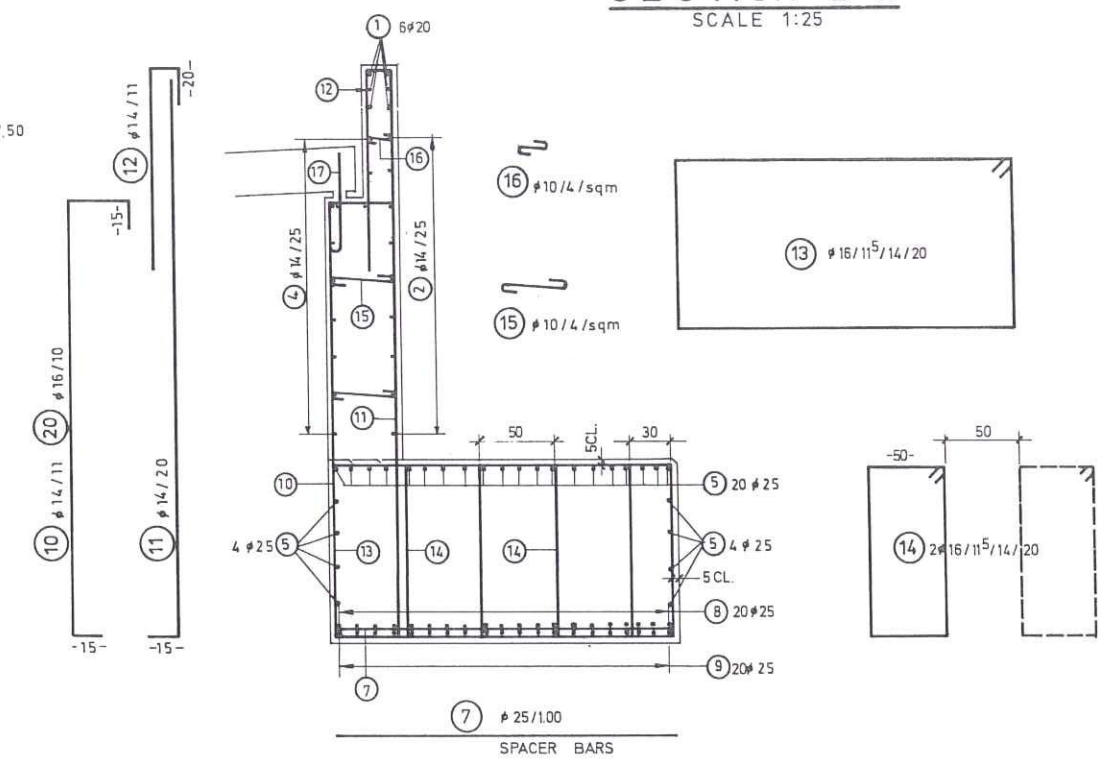
LONGITUDINAL SECTION A-A

SCALE 1:50



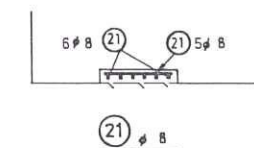
SECTION B-B

SCALE 1:25



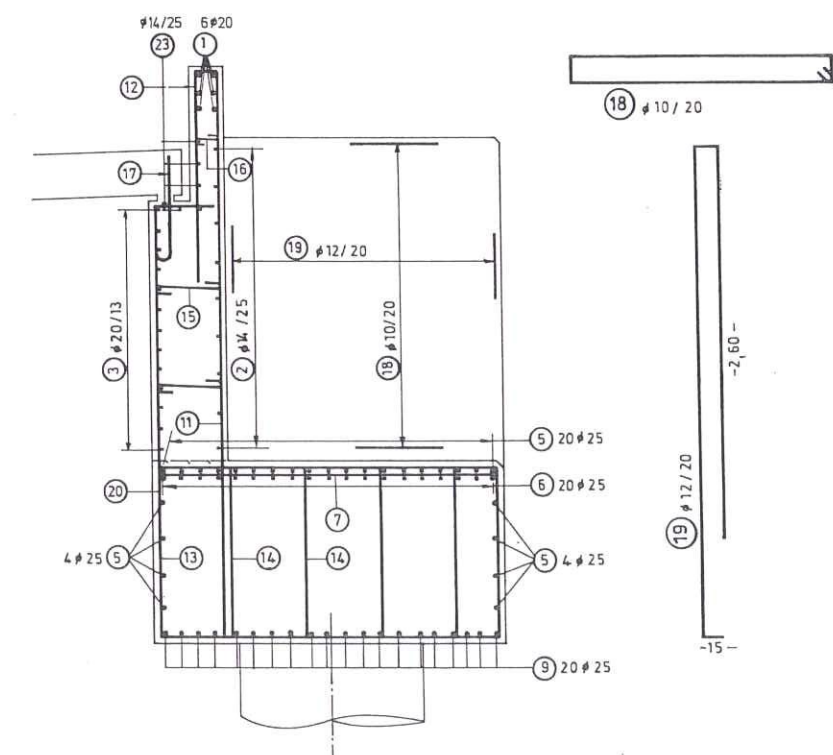
REINF. GROUT PAD

SCALE 1:25



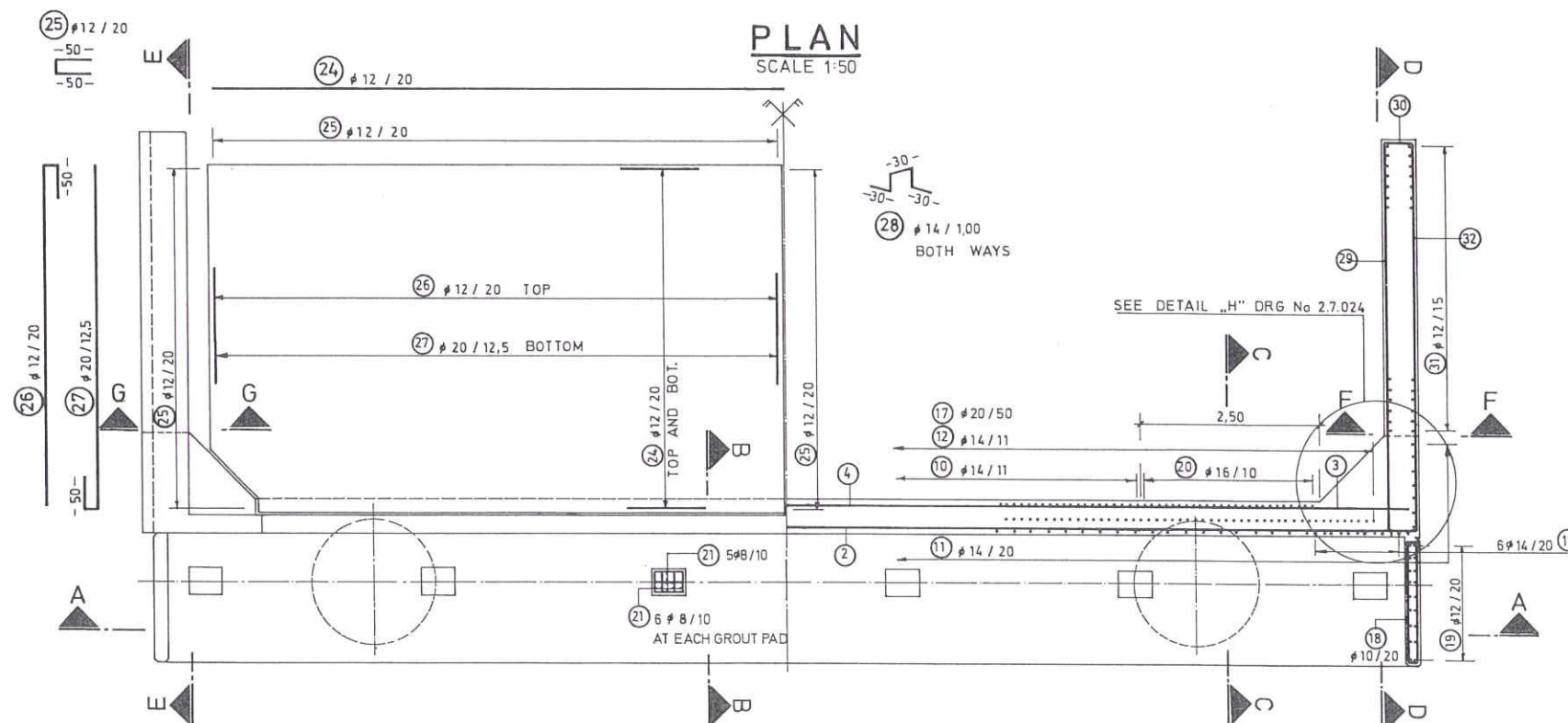
SECTION C-C

SCALE 1:25

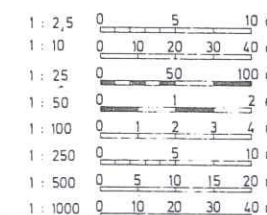


PLAN

SCALE 1:50



NOTE: THIS PLAN TO BE READ WITH DRG. NR. 2.9.024

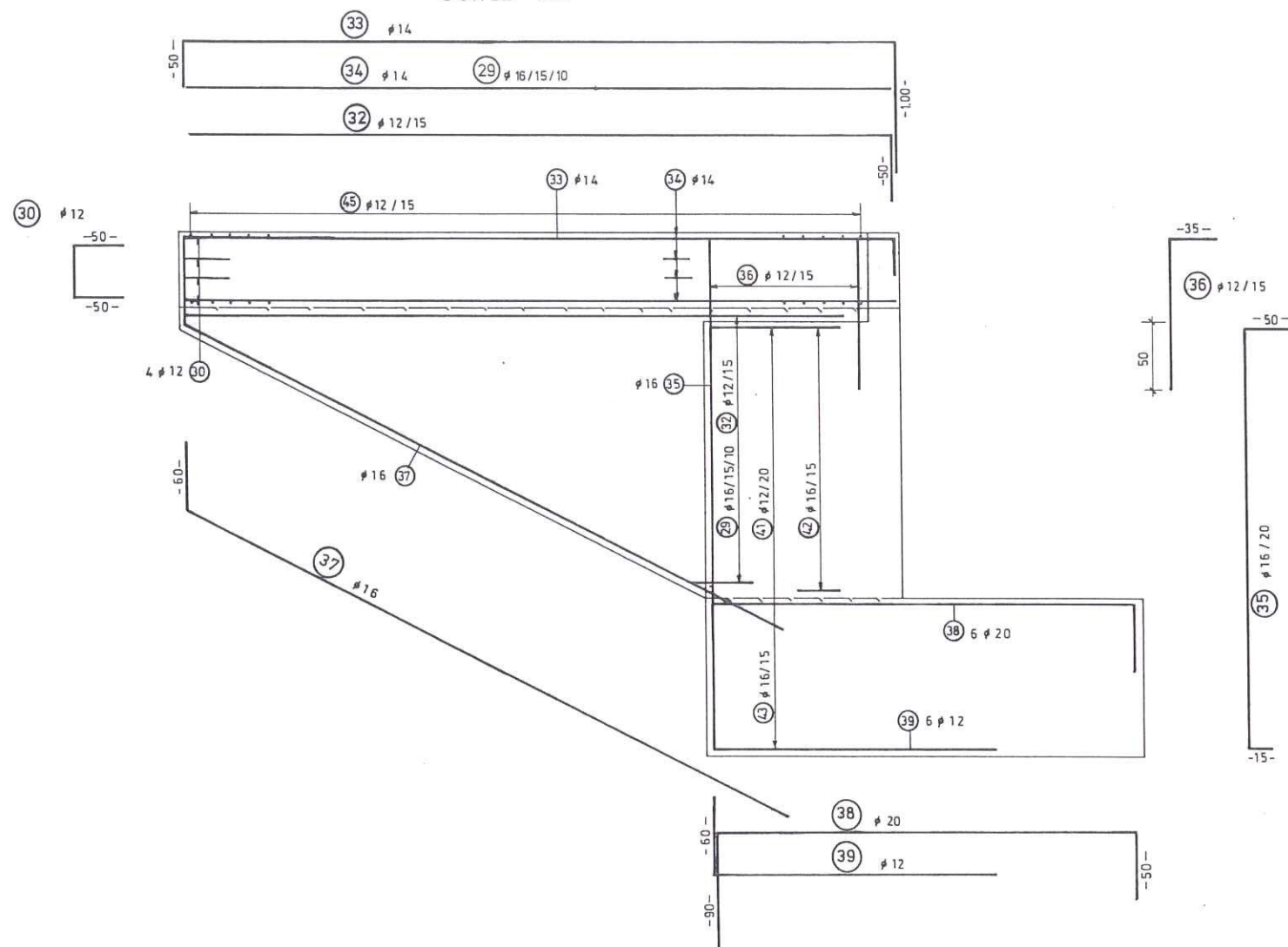


REPUBLIC OF IRAQ MINISTRY OF WORKS AND HOUSING DIRECTORATE GENERAL OF ROADS AND BRIDGES		CONTRACT SECTION THARTHAR CANAL BRIDGE		R/9A/1976 BAGHD. WEST-HABBANYA ABUTMENT REINFORCEMENT	
IRAQ EXPRESSWAY No ONE		DATE	DESIGNED	DRAWN	SCALE
CONSULTING ENGINEERS - MUNICH - W. GERMANY in association with AL-KHAZEN - CONSULTING ENGINEERS - BAGHDAD-IRAQ		Dec 76	Sho	Altiyaha	C EET
DRG. No 2.9.023					

S.54.1

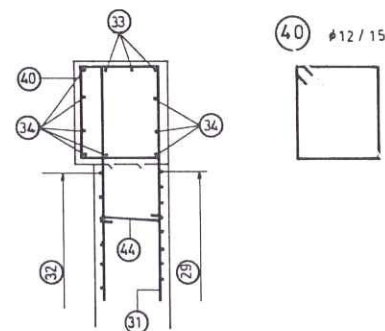
SECTION D-D

SCALE 1:25



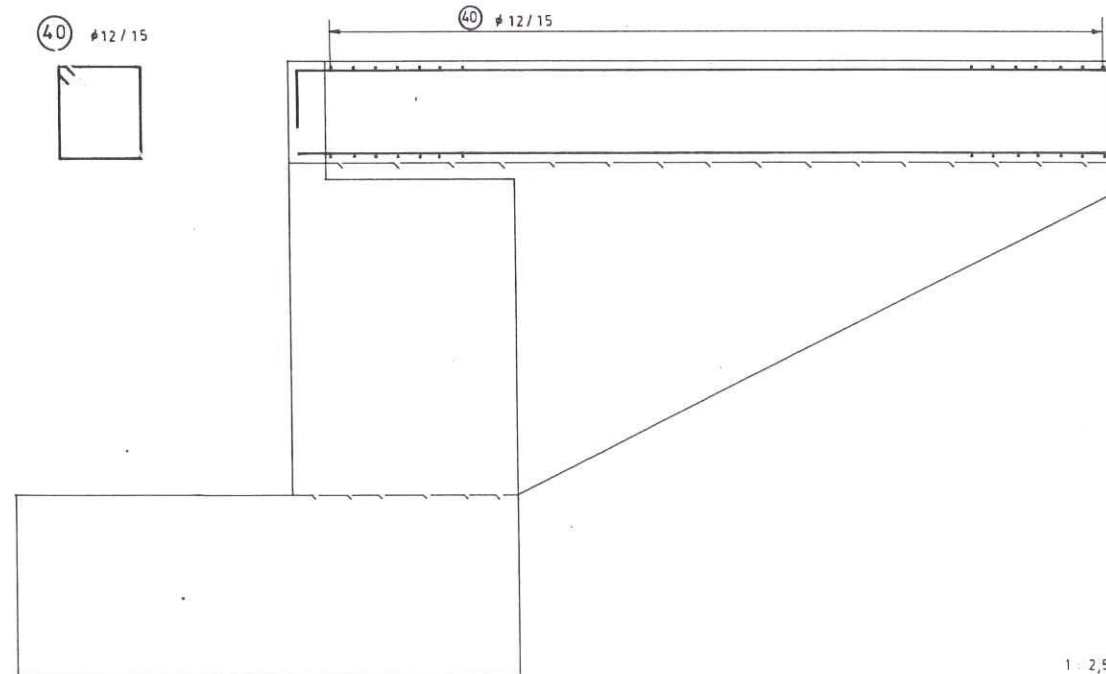
SECTION G-G

SCALE 1:25



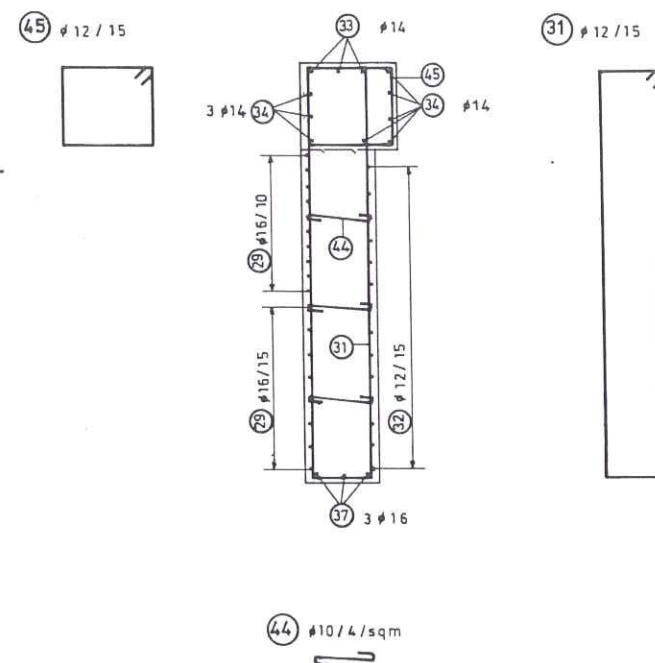
SECTION E-E

SCALE 1:25



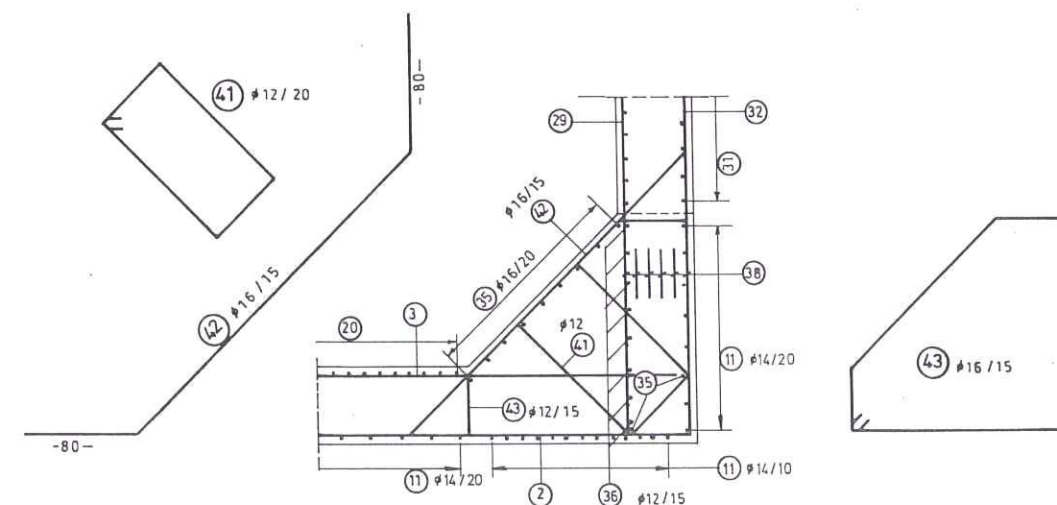
SECTION F-F

SCALE 1:25

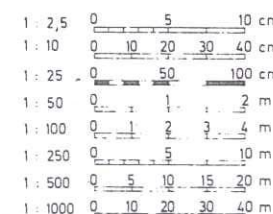


DETAIL „H“

SCALE 1:25



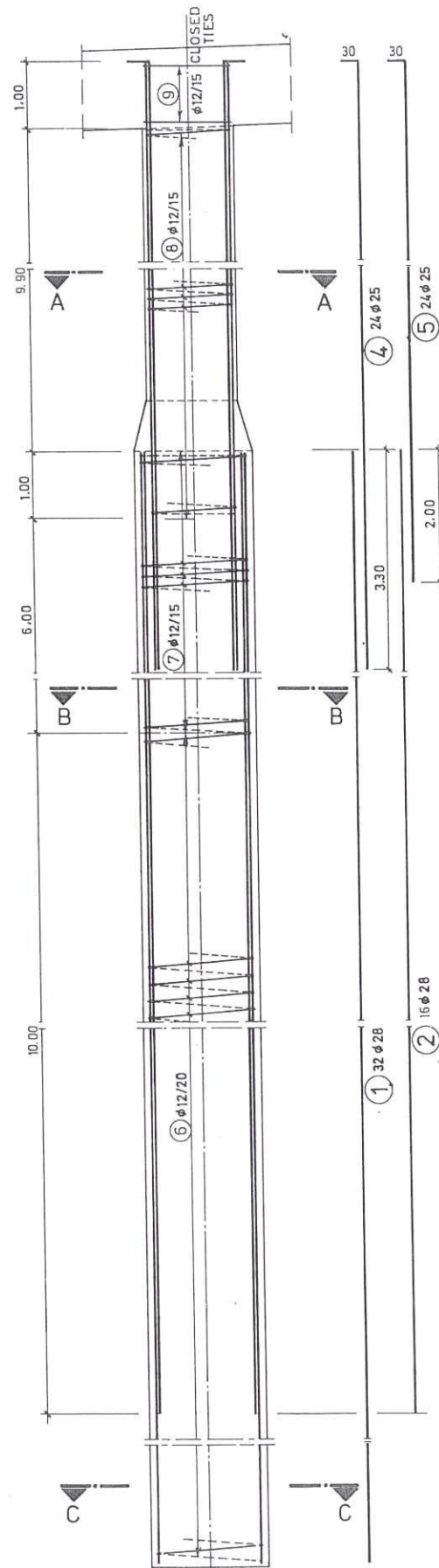
NOTE: THIS PLAN TO BE READ WITH DRG.NO. 2.9.023



REPUBLIC OF IRAQ MINISTRY OF WORKS AND HOUSING DIRECTORATE GENERAL OF ROADS AND BRIDGES IRAQ EXPRESSWAY No ONE				CONTRACT SECTION THARTHAR CANAL BRIDGE		S.54.1 R/9A/1976 BAGHD. WEST-HABBANIYA ABUTMENT REINFORCEMENT	
DORSCH CONSULT CONSULTING ENGINEERS · MUNICH · W. GERMANY in association with AL-KHAZEN · CONSULTING ENGINEERS · BAGHDAD-IRAQ		DATE Dec. 76	DESIGNED <i>[Signature]</i>	DRAWN <i>[Signature]</i>	SCALE C. KET	DRG. No 2.9.024	

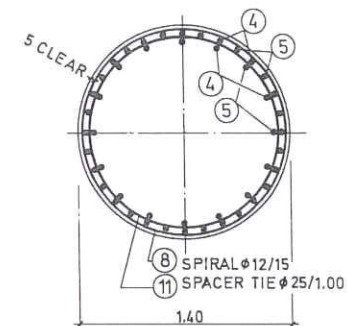
PILE AND COLUMN AT PIER

SCALE 1:50



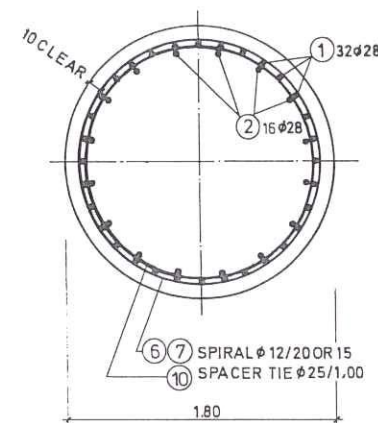
SECTION A-A

SCALE 1:25



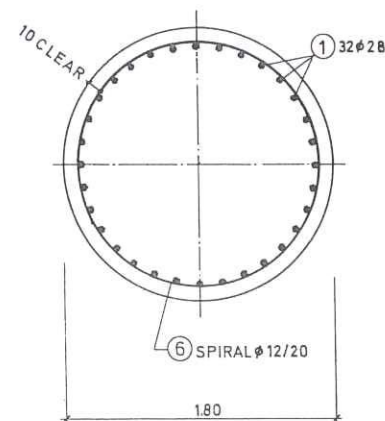
SECTION B-B

SCALE 1:25



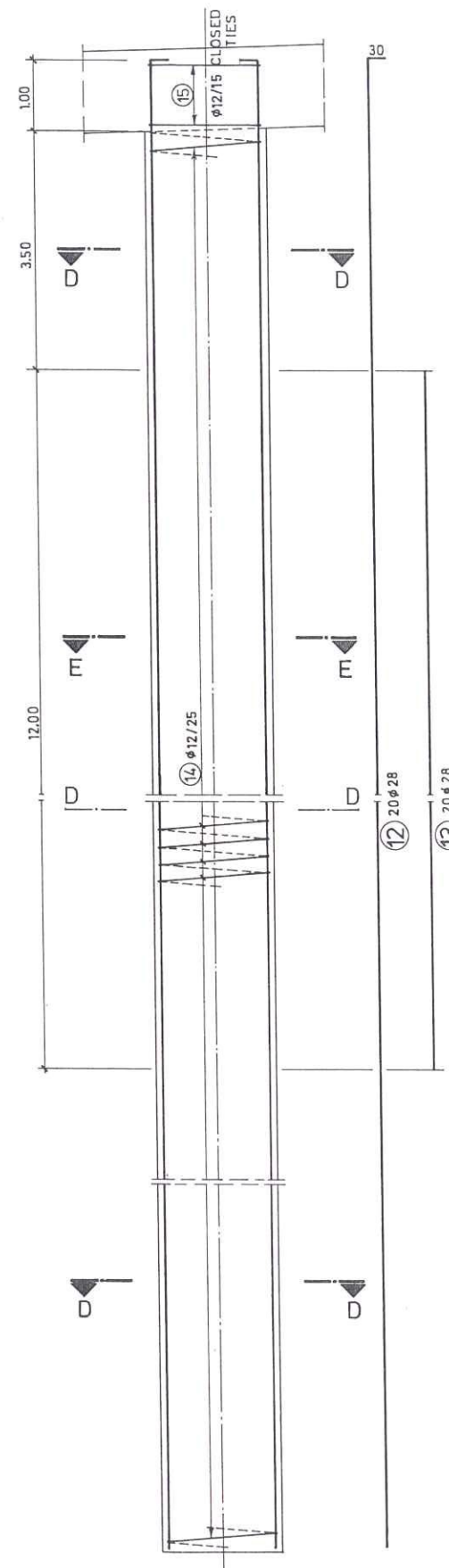
SECTION C-C

SCALE 1:25



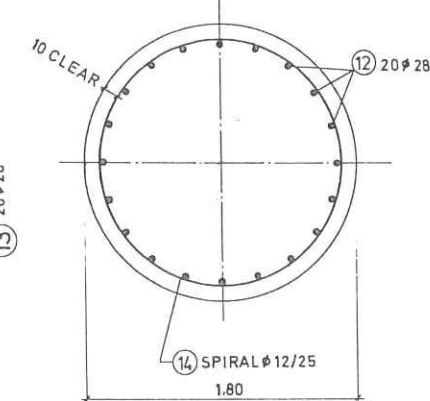
PILE AT ABUTMENT

SCALE 1:50



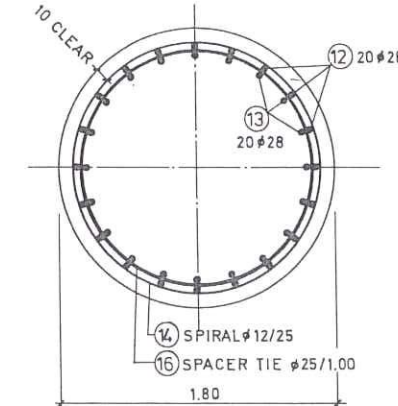
SECTION D-D

SCALE 1:25



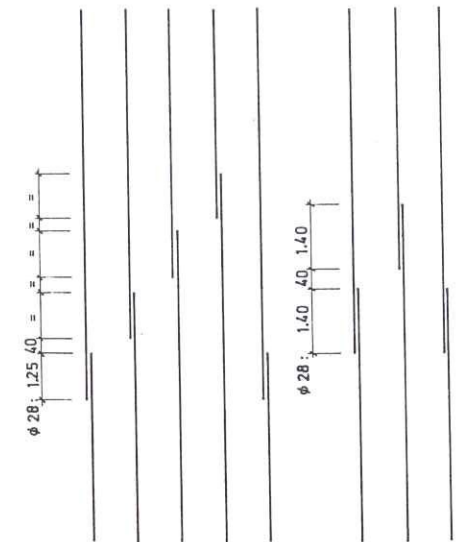
SECTION E-E

SCALE 1:25



SPLICE ARRANGEMENT AND MIN. LAP LENGTHS FOR MAIN REINF.

0-25% REINF. SPLICED AT ONE LEVEL
25-50% REINF. SPLICED AT ONE LEVEL

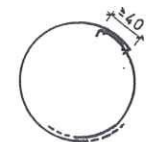


- NOT MORE THAN 50% OF THE REINF. IN A SECTION SHALL BE SPLICED AT ONE LEVEL

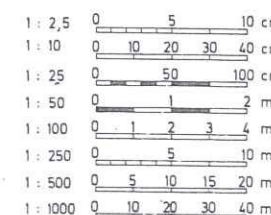
- SPLICES AT ONE LEVEL SHALL BE EVENLY DISTRIBUTED WITHIN THE SECTION

- IN LIEU OF LAP SPLICES SHOWN FULL BUTT OR LAP WELDED SPLICES OR OTHER FULL POSITIVE CONNECTIONS MAY BE USED HOWEVER ONLY UPON APPROVAL OF THE ENGINEER

SPLICE FOR SPIRALS



IN LIEU OF SPIRALS, CLOSED TIES WITH SAME SPACING AND STAGGERED SPLICES AS SHOWN MAY BE USED



REPUBLIC OF IRAQ
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DIRECTORATE GENERAL OF ROADS AND BRIDGES

IRAQ EXPRESSWAY No ONE

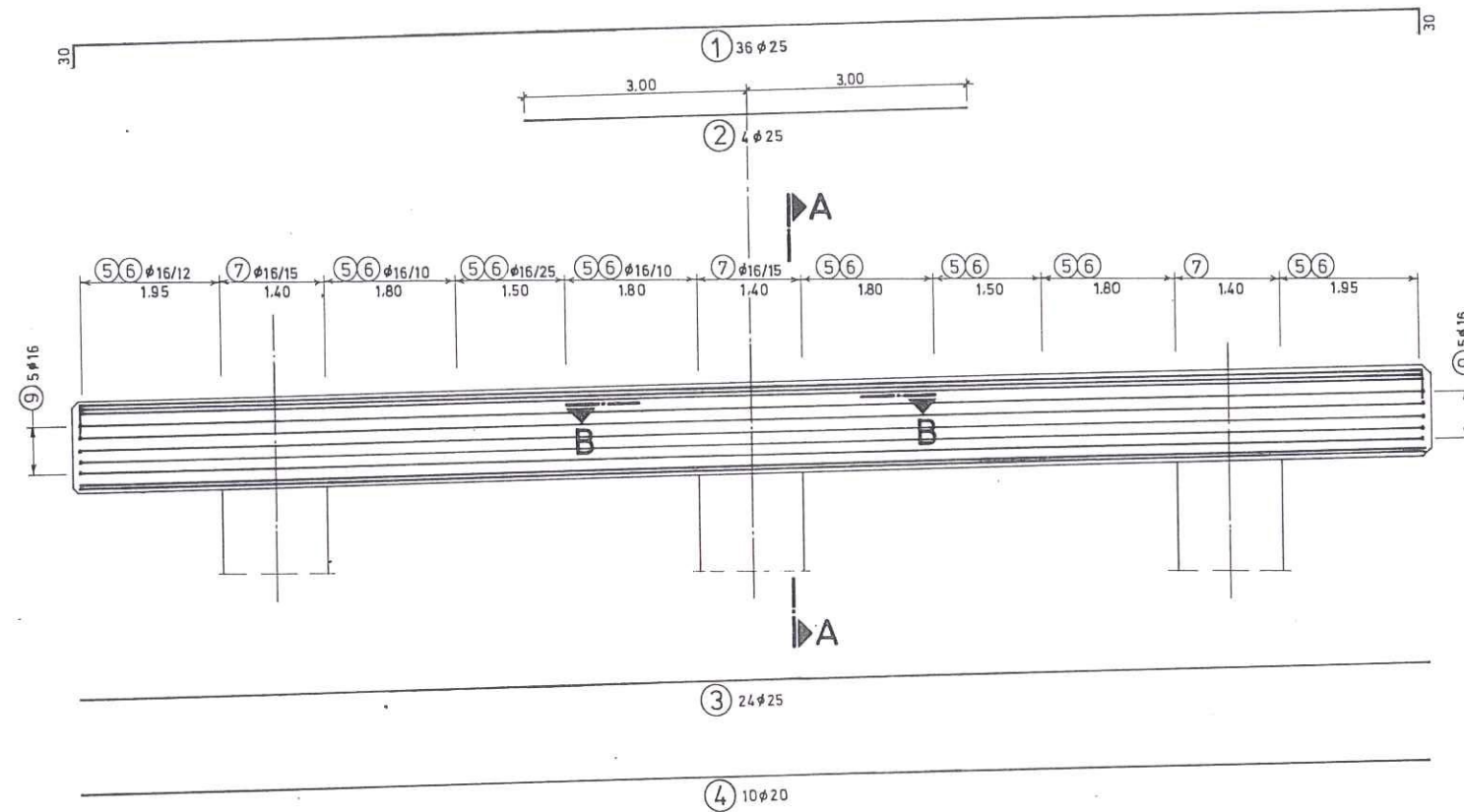
CONSULTING ENGINEERS - MUNICH - W. GERMANY
in association with
AL-KHAZEN - CONSULTING ENGINEERS - BAGHDAD - IRAQ

CONTRACT SECTION	R/9A / 1976		BAGHD. WEST-HABBANIYA	
	THARTHAR		PILES	
CANAL BRIDGE	REINFORCEMENT			
DATE	DESIGNED	DRAWN	SCALE	DRG. No
Dec. 76			C. KET	2.9.025

S.54.1

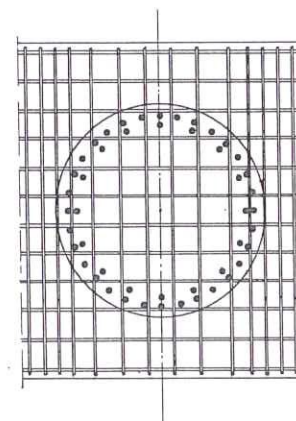
LONG. SECTION

SCALE 1:50

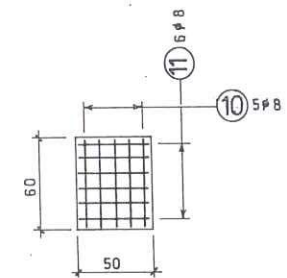


SECTION B-B

SCALE 1:25

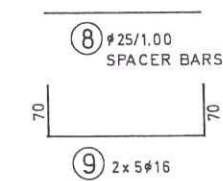
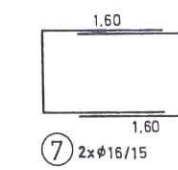
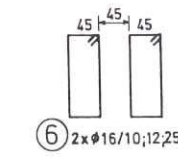
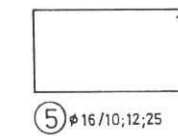
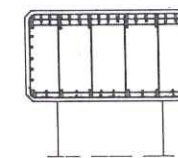


AT EACH GROUT PAD



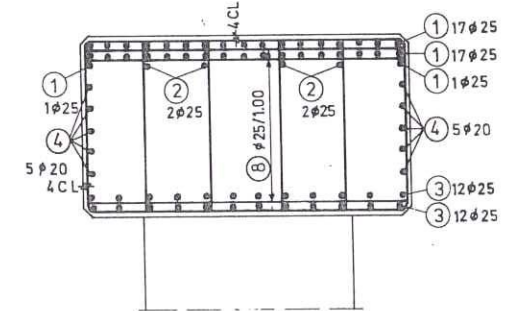
SECTION A-A

SCALE 1:50

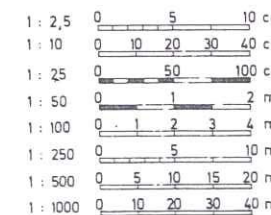


SECTION A-A

SCALE 1:25



S.54.1



REPUBLIC OF IRAQ MINISTRY OF WORKS AND HOUSING DIRECTORATE GENERAL OF ROADS AND BRIDGES		CONTRACT SECTION THARTHAR CANAL BRIDGE		R/9A / 1976 BAGHD. WEST-HABBANIYA TRANSVERSE BEAM REINFORCEMENT	
IRAQ EXPRESSWAY No ONE		DATE	DESIGNED	DRAWN	SCALE
CONSULTING ENGINEERS - MUNICH - W. GERMANY in association with AL-KHAZEN - CONSULTING ENGINEERS - BAGHDAD-IRAQ		Dec. 76	12.0	10	C. KET
DRG. No 2.9.025					



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