

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

MINISTRY OF COMMUNICATIONS  
THE GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

THE STUDY  
ON  
CONSTRUCTION OF THE BRIDGE OVER THE RIVER RUPSA  
IN KHULNA  
(Phase 2)

FINAL REPORT  
VOLUME III : DRAWINGS

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MARCH 2000

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**THE STUDY  
ON  
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IN KHULNA  
(Phase 2)**

**FINAL REPORT  
VOLUME III : DRAWINGS**

**MARCH 2000**

**PACIFIC CONSULTANTS INTERNATIONAL  
JAPAN OVERSEAS CONSULTANTS**

1998-1999

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## DRAWING SCHEDULE

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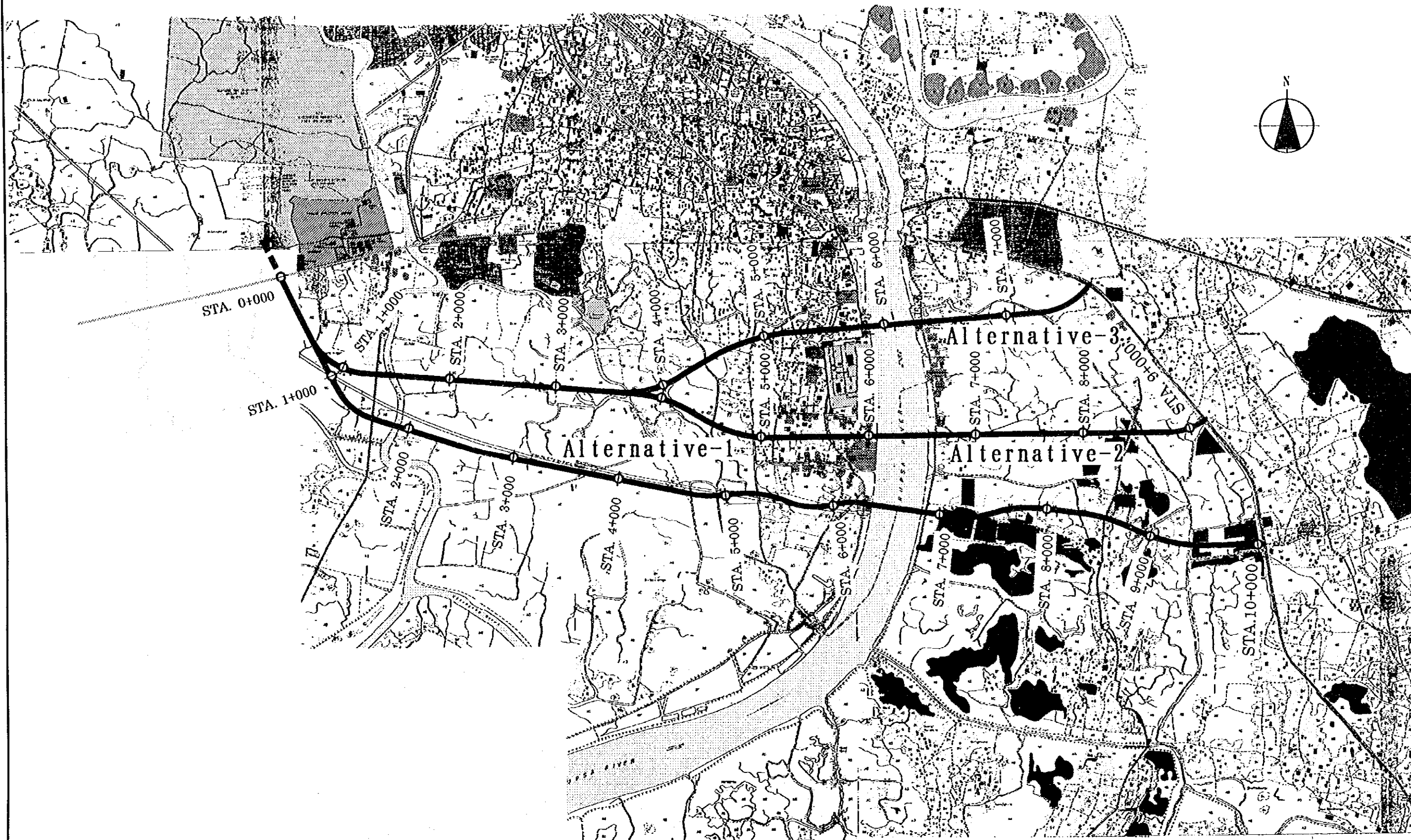
**A. ROAD**

THE STUDY ON CONSTRUCTION OF THE BRIDGE  
OVER THE RIVER RUPSA IN KHULNA(PHASE 2)

LOCATION MAP

SHEET  
NO.

A01



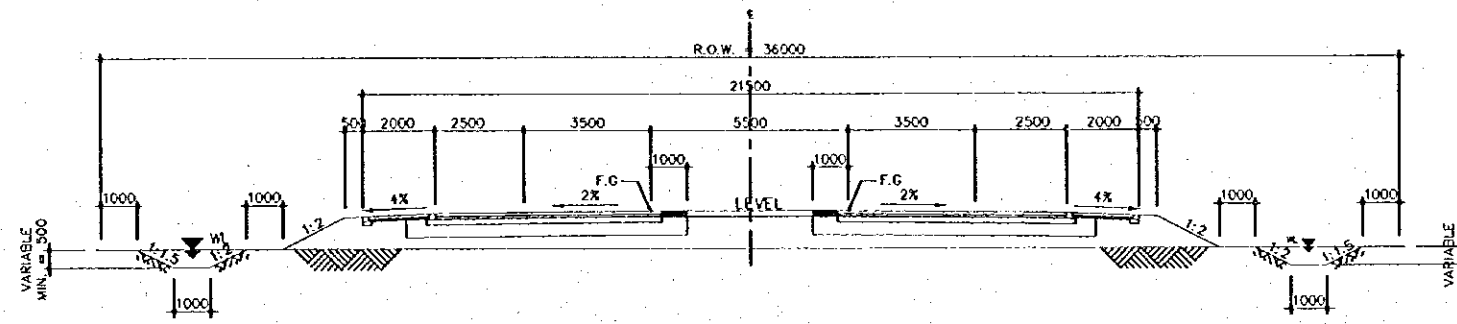


THE STUDY ON CONSTRUCTION OF THE BRIDGE  
OVER THE RIVER RUPSA IN KHULNA (PHASE 2)

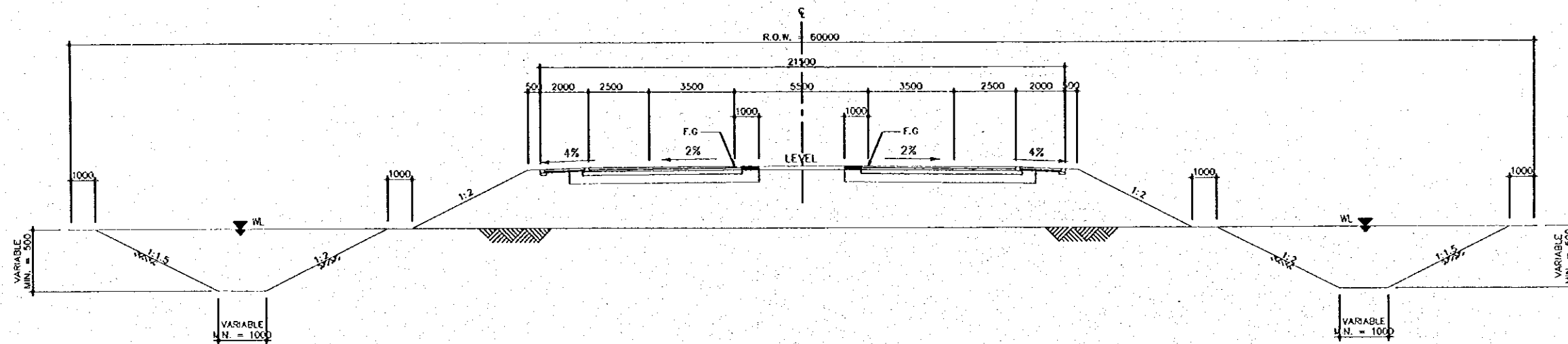
RIGHT-OF-WAY

SHEET  
NO.

A-02



1 RIGHT-OF-WAY (36m)  
SCALE 1:100



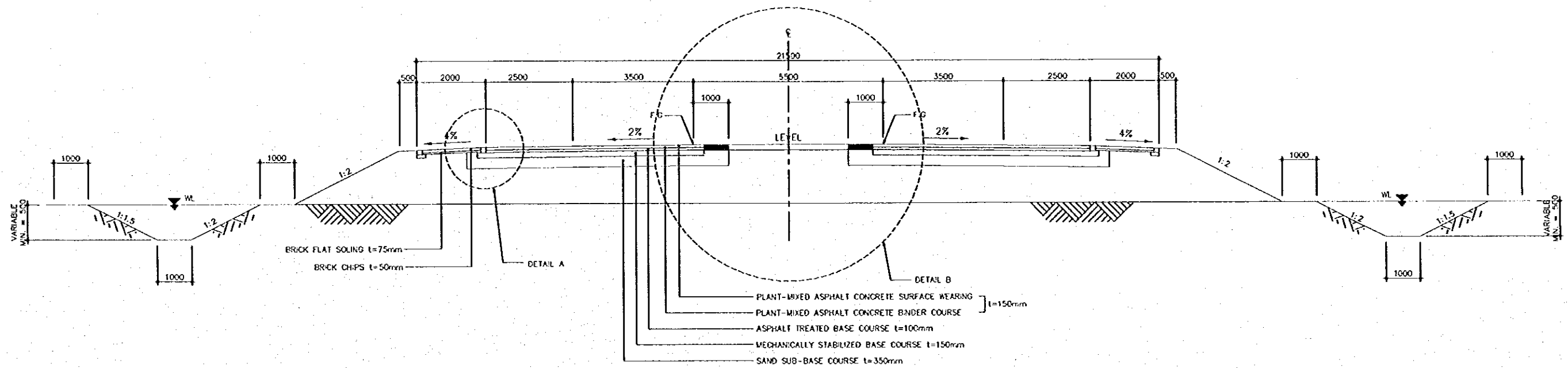
2 RIGHT-OF-WAY (60m)  
SCALE 1:100

THE STUDY ON CONSTRUCTION OF THE BRIDGE  
OVER THE RIVER RUPSA IN KHULNA (PHASE 2)

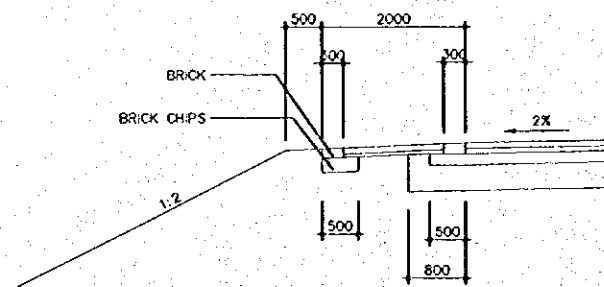
TYPICAL CROSS SECTION (Embankment)

SHEET  
NO.

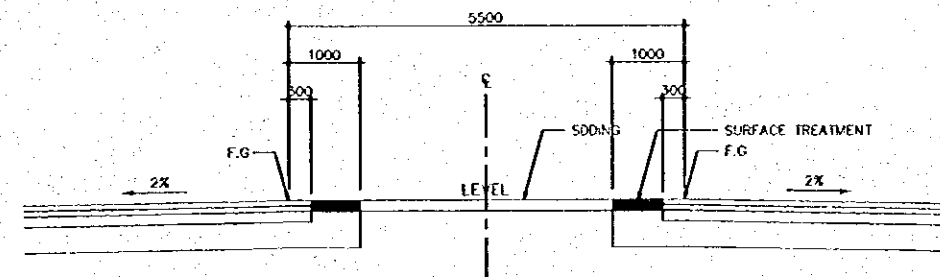
A-03



1 TYPICAL CROSS SECTION  
A-03 SCALE 1:60



2 DETAIL A  
A-03 SCALE 1:50



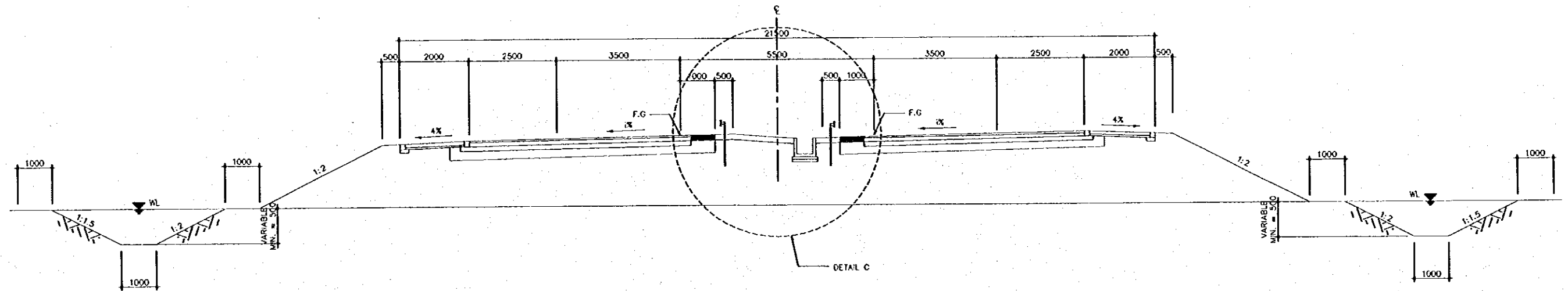
3 DETAIL B  
A-03 SCALE 1:50

THE STUDY ON CONSTRUCTION OF THE BRIDGE  
OVER THE RIVER RUPSA IN KHULNA (PHASE 2)

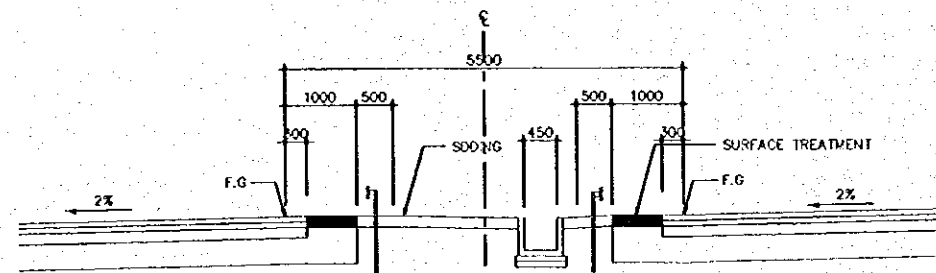
TYPICAL CROSS SECTION (Embankment)

SHEET  
NO.

A-04



1 TYPICAL CROSS SECTION (SUPERELEVATED)  
A-04 SCALE 1:60



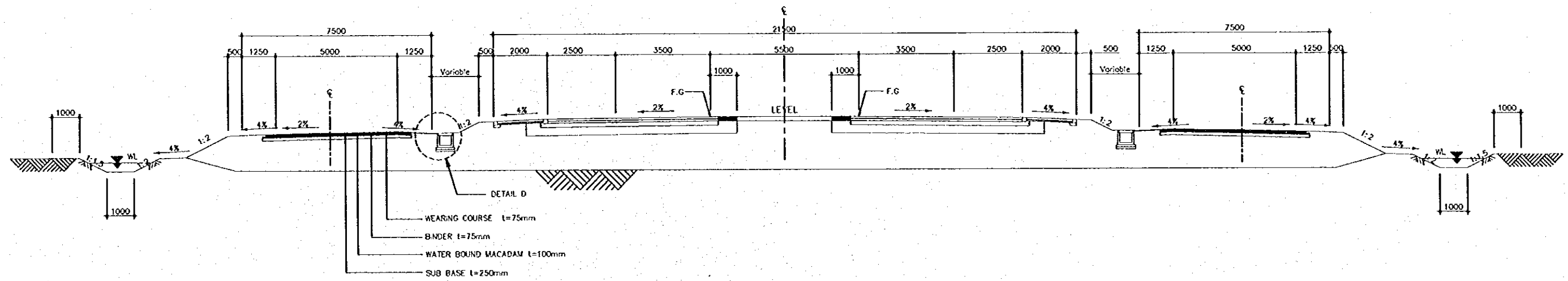
2 DETAIL C  
A-04 SCALE 1:50

THE STUDY ON CONSTRUCTION OF THE BRIDGE  
OVER THE RIVER RUPSA IN KHULNA (PHASE 2)

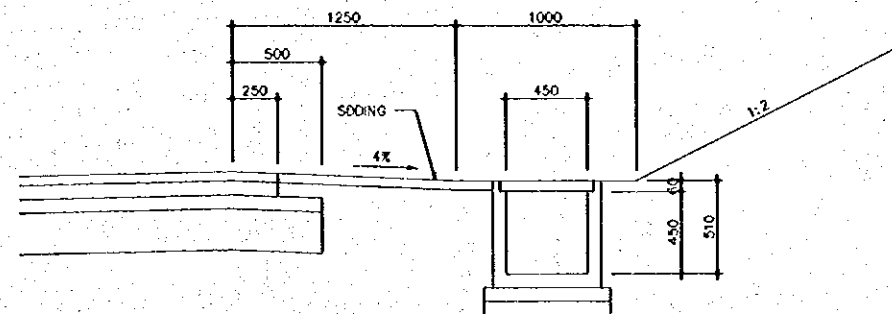
TYPICAL CROSS SECTION (Access Road)

SHEET  
NO.

A-05



1 TYPICAL CROSS SECTION WITH ACCESS ROAD  
A-05 SCALE 1:75



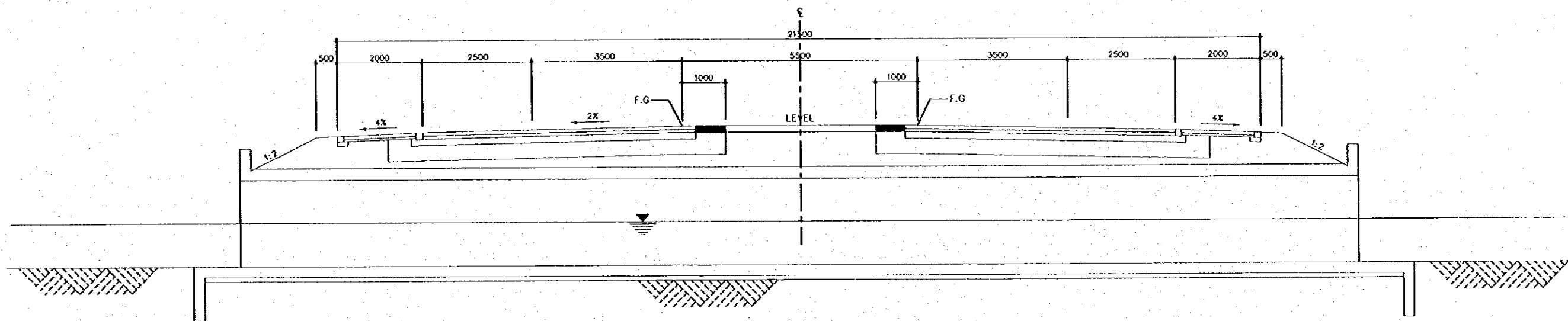
2 DETAIL D  
A-05 SCALE 1:20

THE STUDY ON CONSTRUCTION OF THE BRIDGE  
OVER THE RIVER RUPSA IN KHULNA (PHASE 2)

TYPICAL CROSS SECTION (Box Culvert)

SHEET  
NO.

A-06



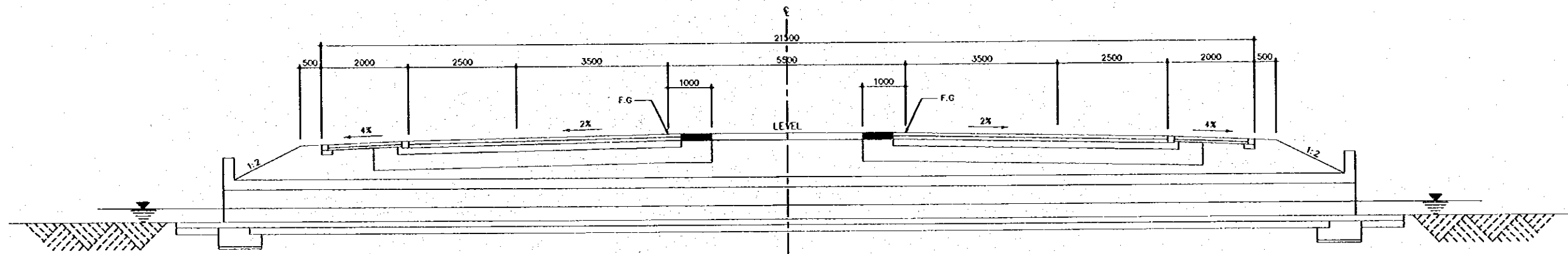
1 TYPICAL CROSS SECTION (BOX CULVERT)  
A-06 SCALE 1:50

THE STUDY ON CONSTRUCTION OF THE BRIDGE  
OVER THE RIVER RUPSA IN KHULNA (PHASE 2)

TYPICAL CROSS SECTION (Pipe Culvert)

SHEET  
NO.

A-07



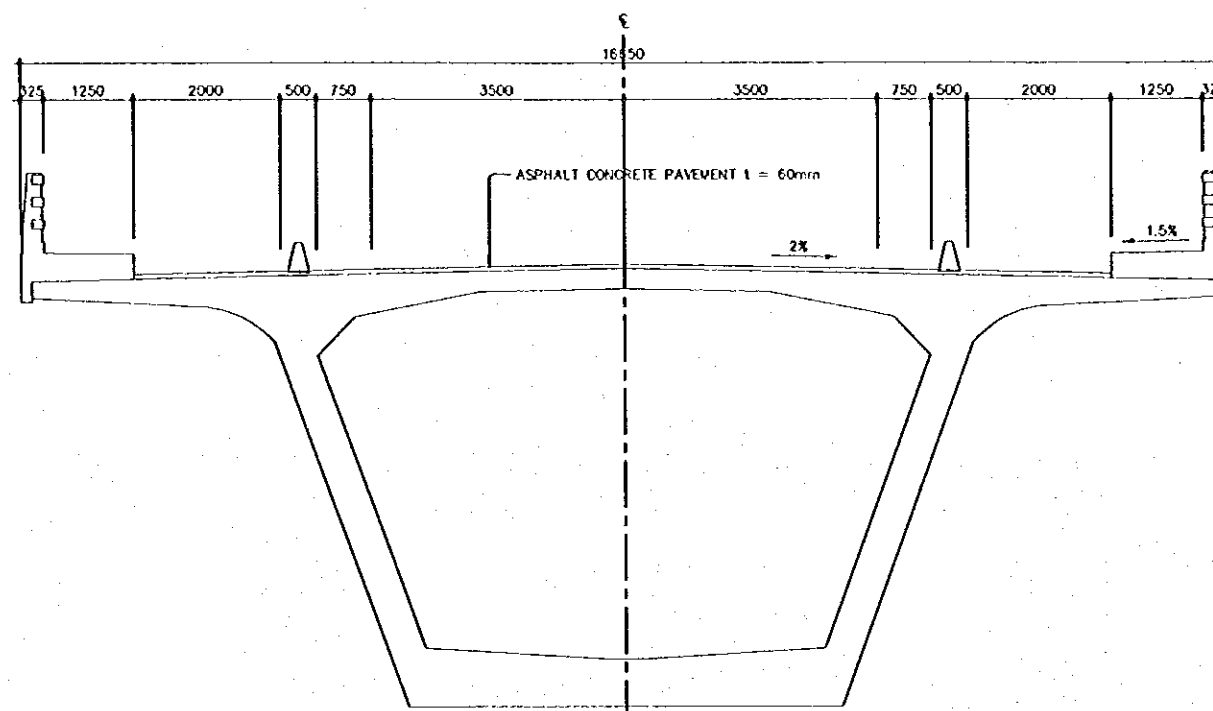
1 TYPICAL CROSS SECTION (PIPE CULVERT)  
A-07 SCALE 1:50

THE STUDY ON CONSTRUCTION OF THE BRIDGE  
OVER THE RUPSA IN KHULNA (PHASE 2)

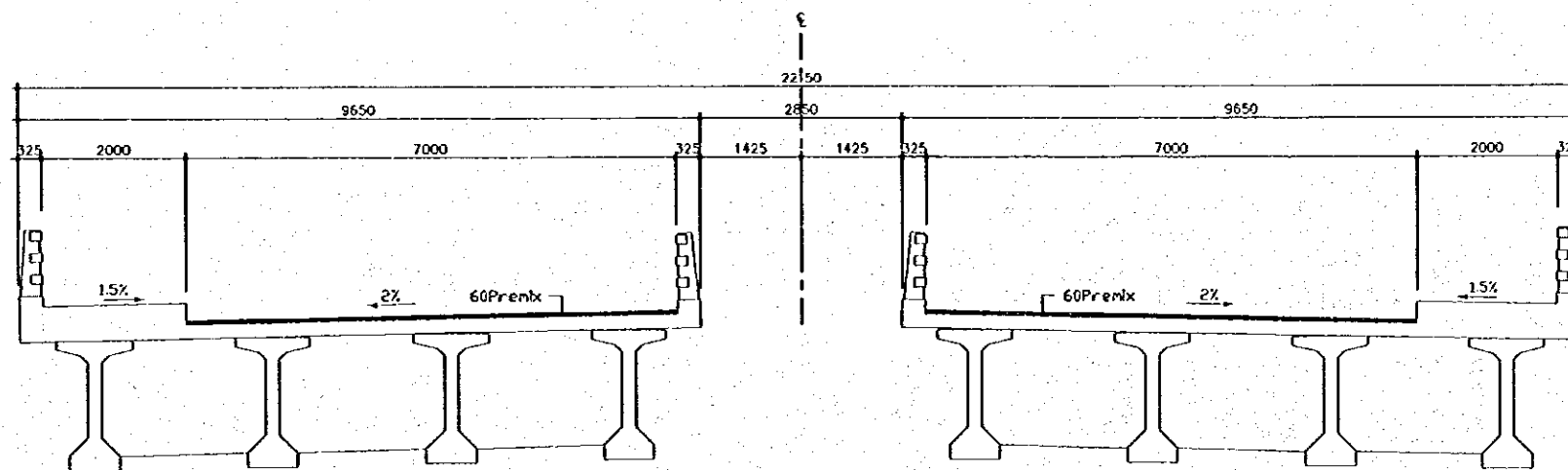
TYPICAL CROSS SECTION  
(Rupsa Bridge and Canal Bridge)

SHEET  
NO.

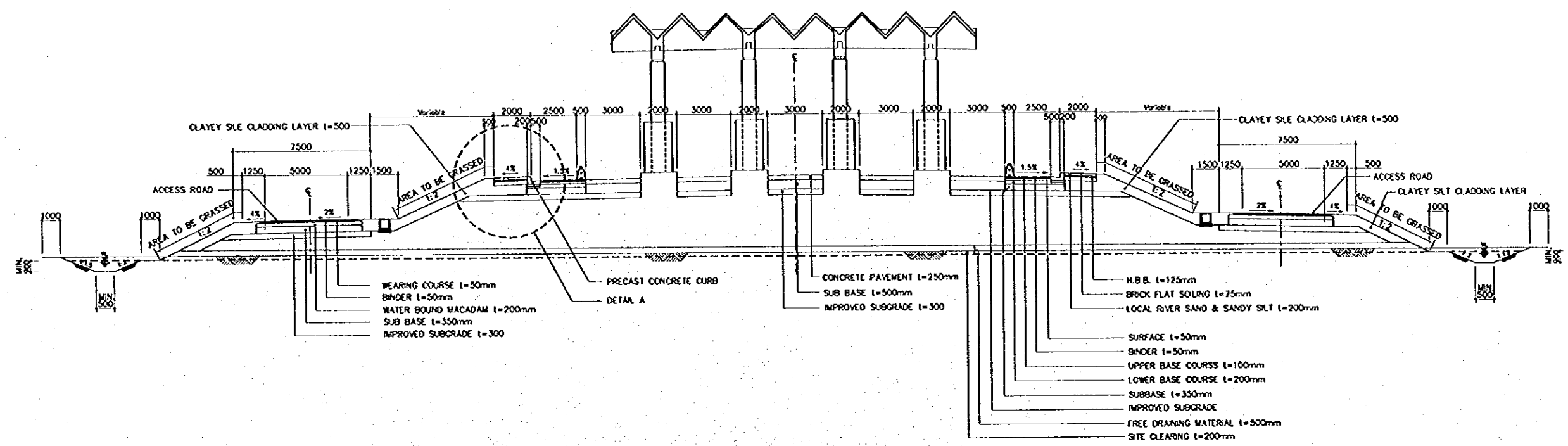
A-08



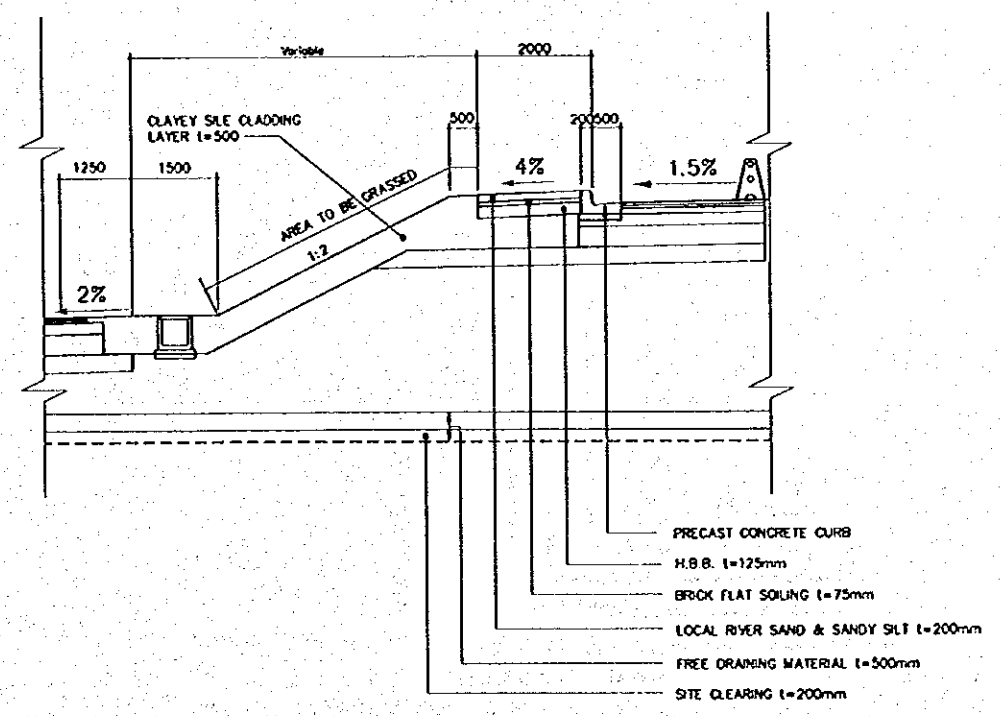
1 RUPSA BRIDGE  
SCALE 1:50



2 CANAL BRIDGE  
SCALE 1:50



1 TYPICAL CROSS SECTION (TOLL GATE)  
SCALE 1:250



2 DETAIL A  
SCALE 1:100

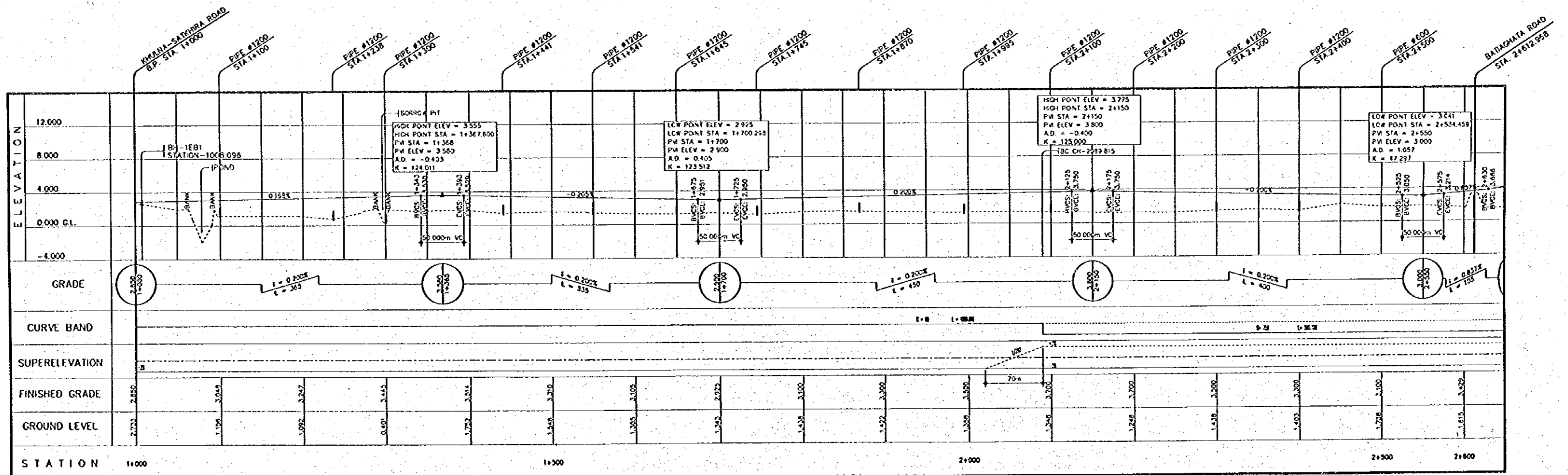
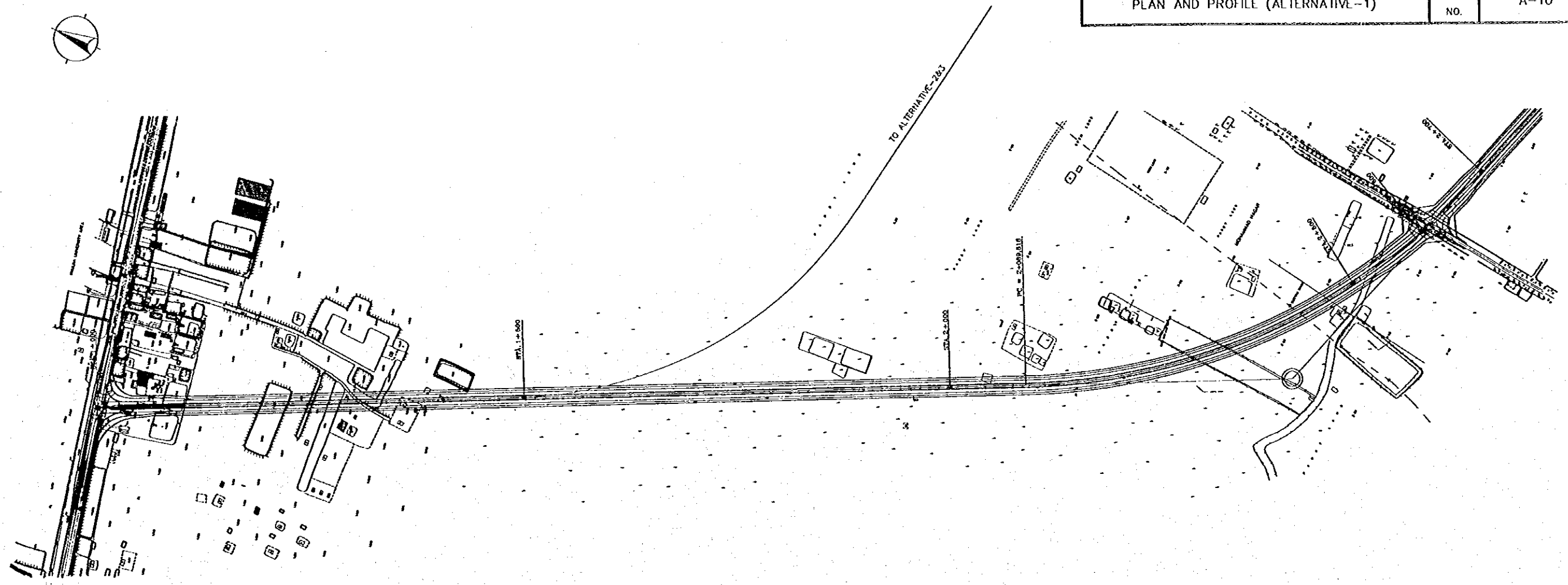


THE STUDY ON CONSTRUCTION OF THE BRIDGE  
OVER THE RIVER OF RUPSA IN KHULNA (PHASE 2)

PLAN AND PROFILE (ALTERNATIVE-1)

SHEET  
NO.

A-10

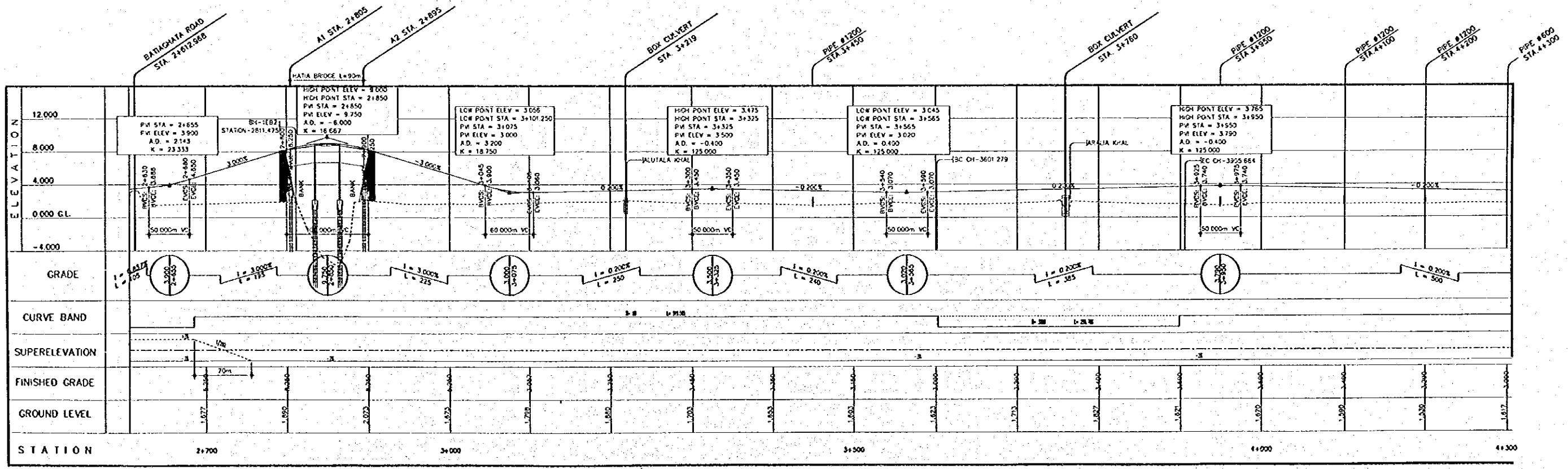
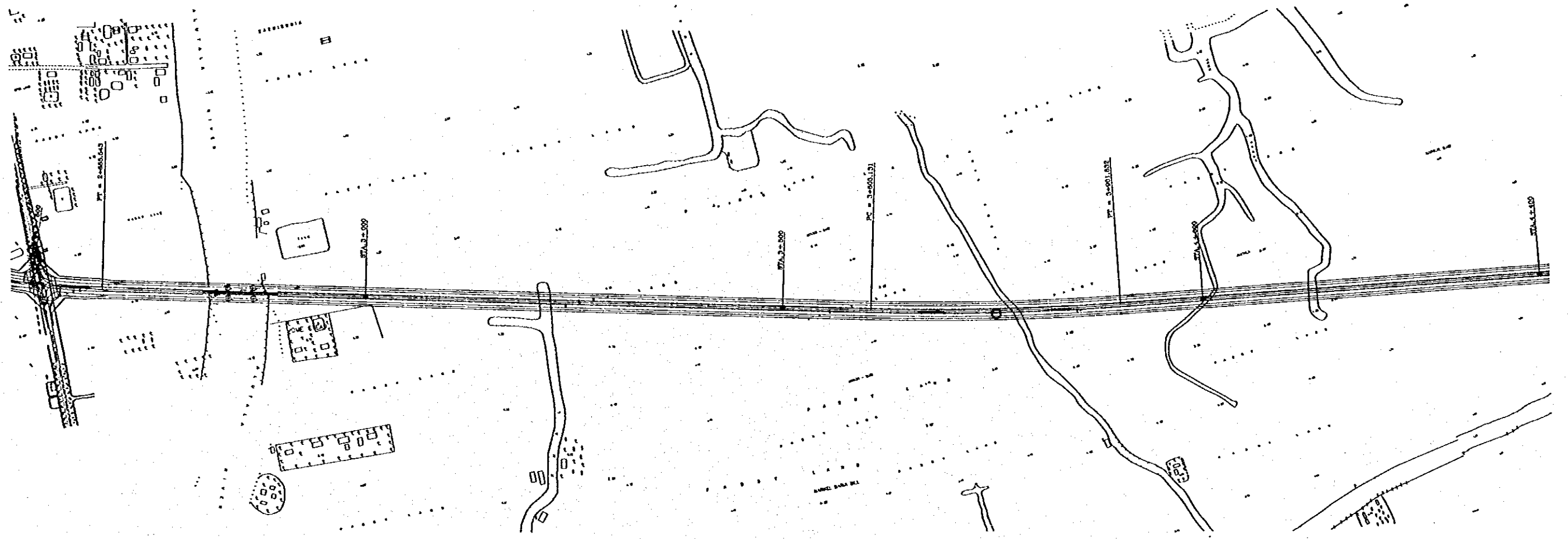


THE STUDY ON CONSTRUCTION OF THE BRIDGE  
OVER THE RIVER OF RUPSA IN KHULNA (PHASE 2)

PLAN AND PROFILE (ALTERNATIVE-1)

SHEET  
NO.

A-11

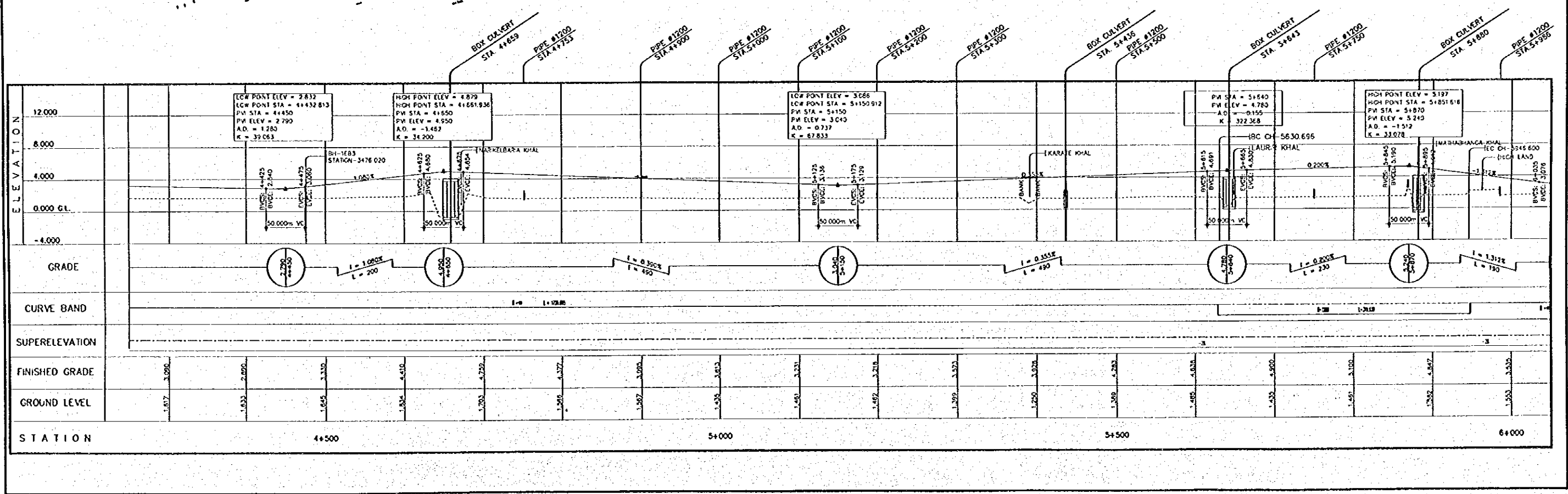
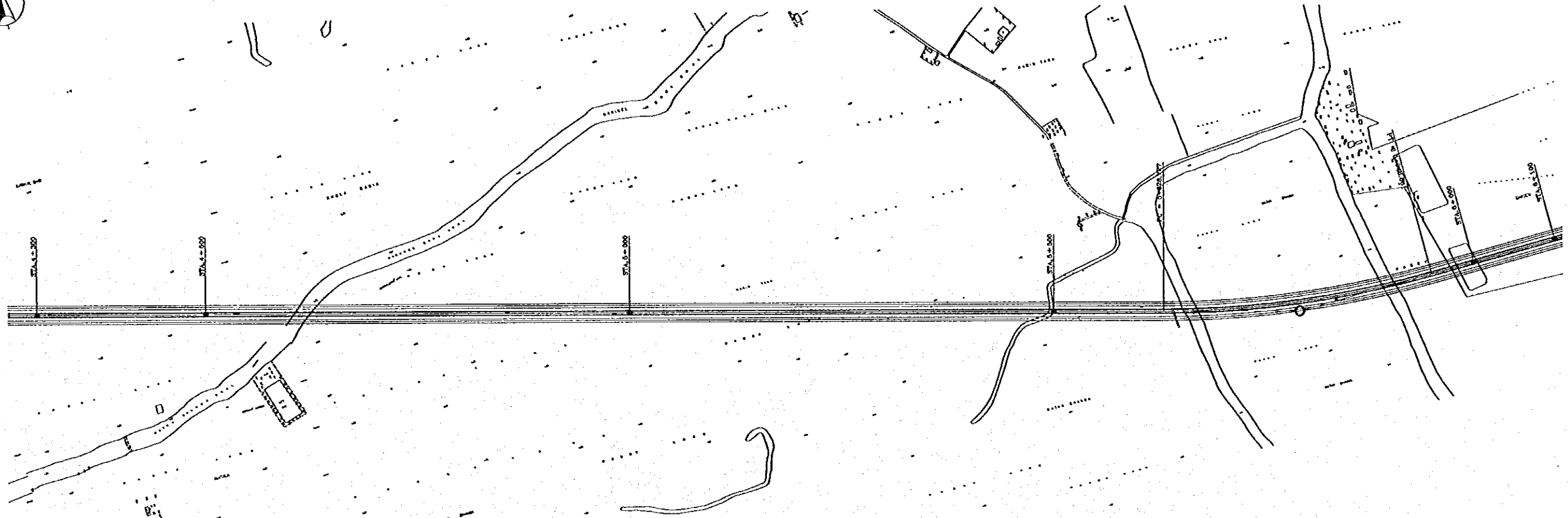


THE STUDY ON CONSTRUCTION OF THE BRIDGE  
OVER THE RIVER OF RUPSA IN KHULNA (PHASE 2)

PLAN AND PROFILE (ALTERNATIVE-1)

SHEET  
NO.

A-12

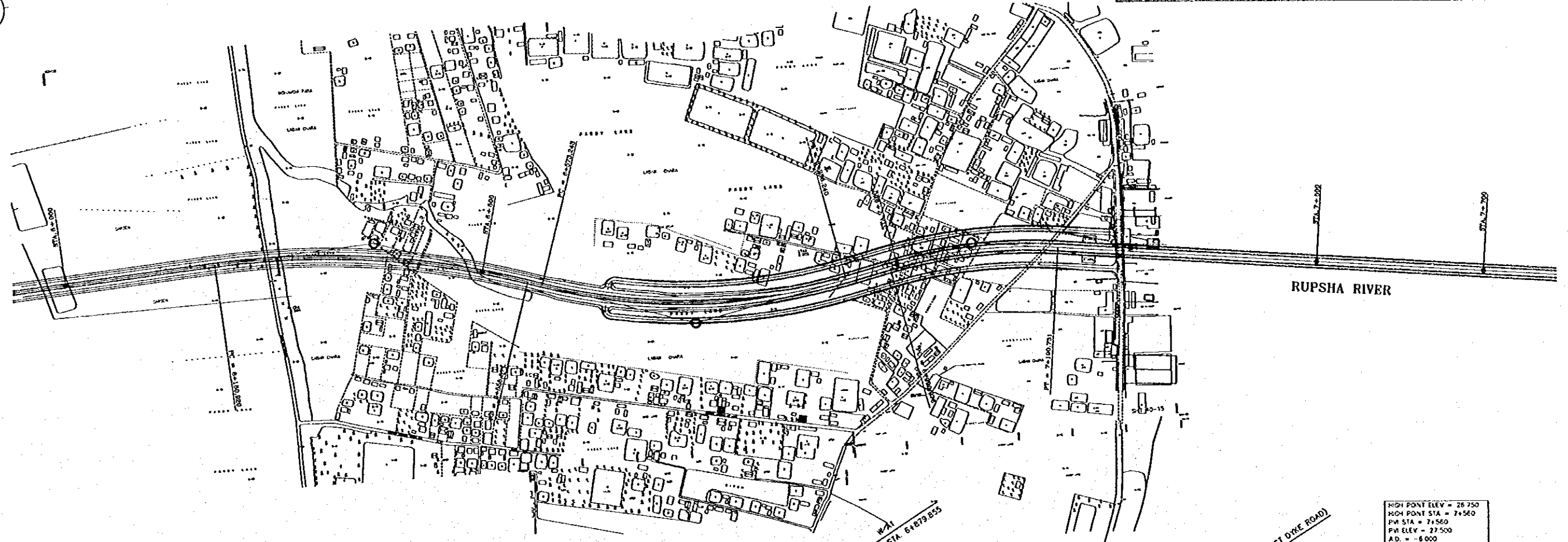


THE STUDY ON CONSTRUCTION OF THE BRIDGE  
OVER THE RUPSHA RIVER IN KHULNA (PHASE 2)

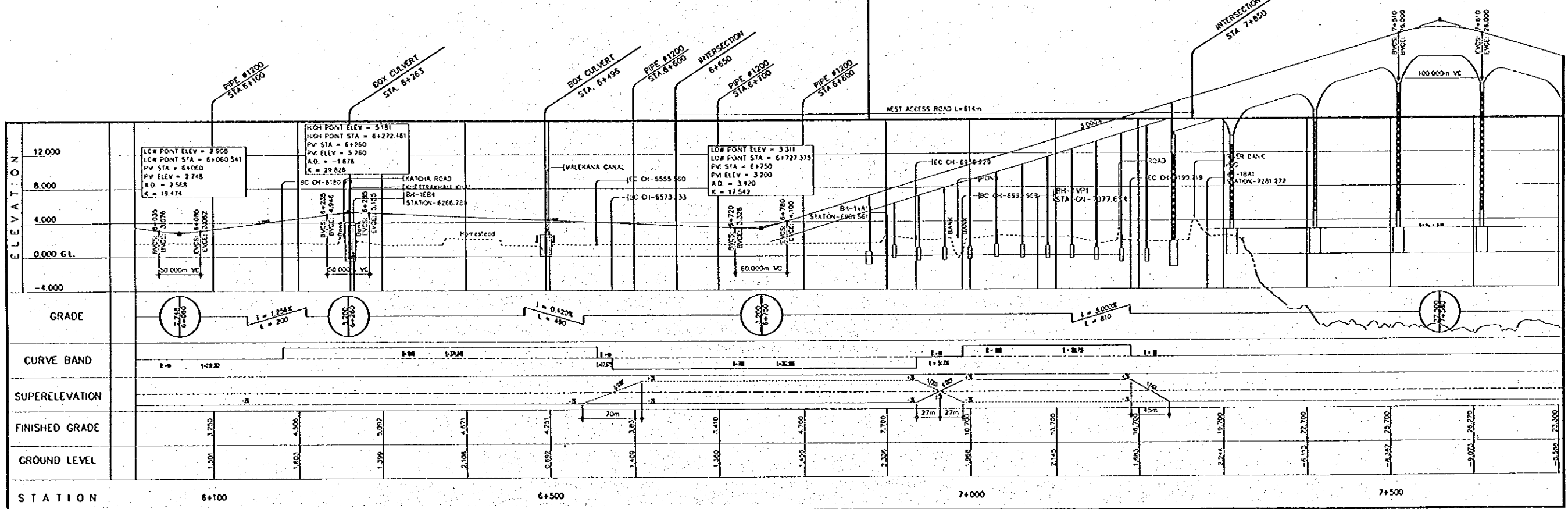
PLAN AND PROFILE (ALTERNATIVE-1)

SHEET  
NO.

A-13



HIGH POINT ELEV = 26.750  
HIGH POINT STA = 74560  
PVI STA = 74560  
PVI ELEV = 27.500  
A.D. = -6.000  
K = 15.687

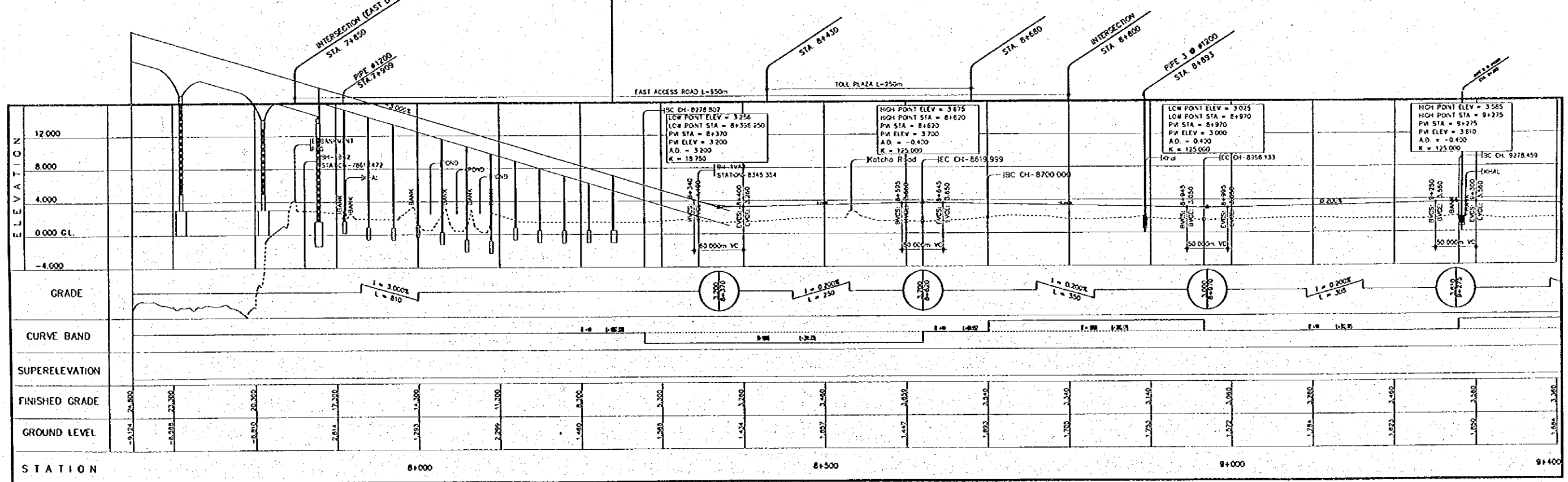
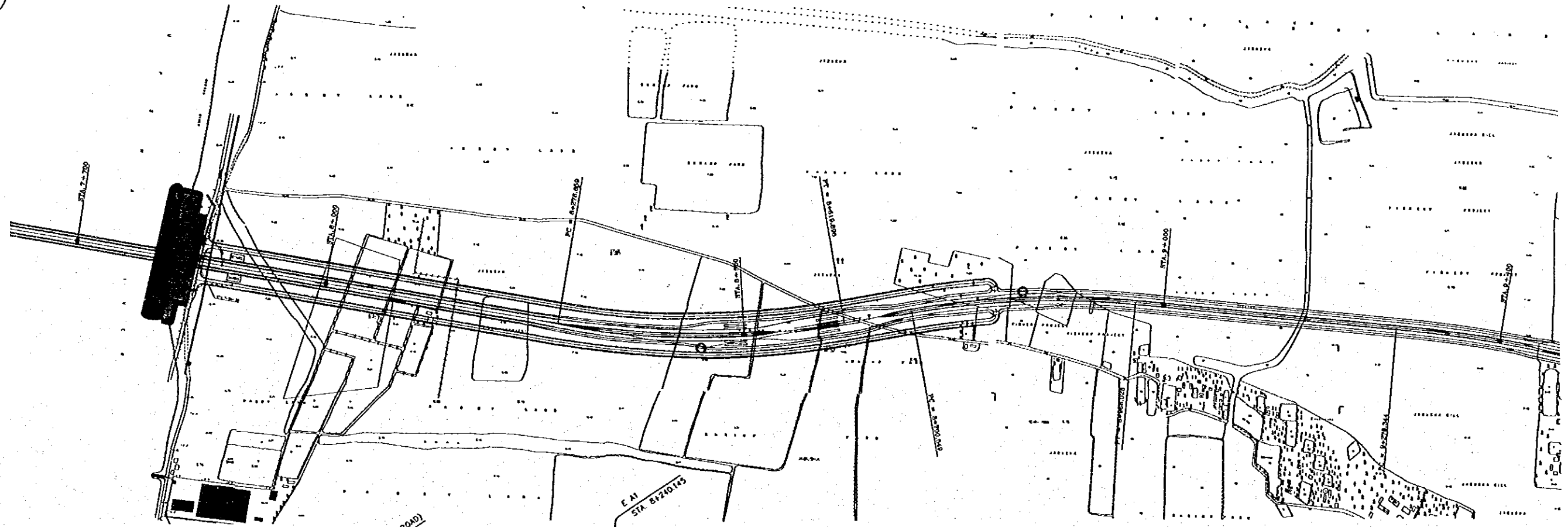


THE STUDY ON CONSTRUCTION OF THE BRIDGE  
OVER THE RIVER OF RUPSA IN KHULNA (PHASE 2)

PLAN AND PROFILE (ALTERNATIVE-1)

SHEET  
NO.

A-14

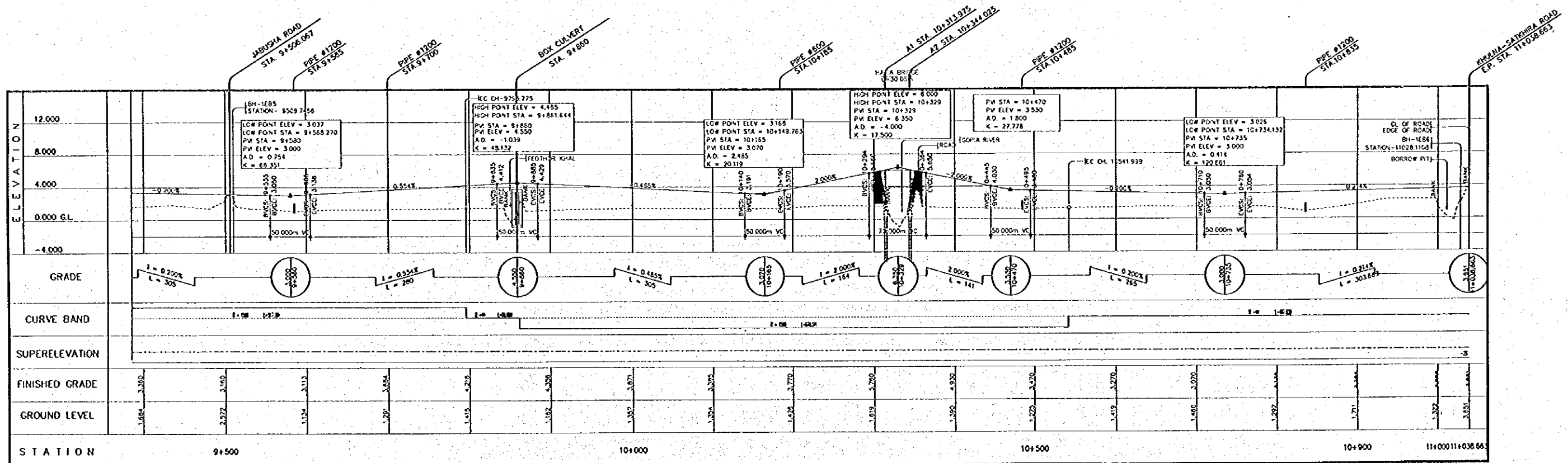
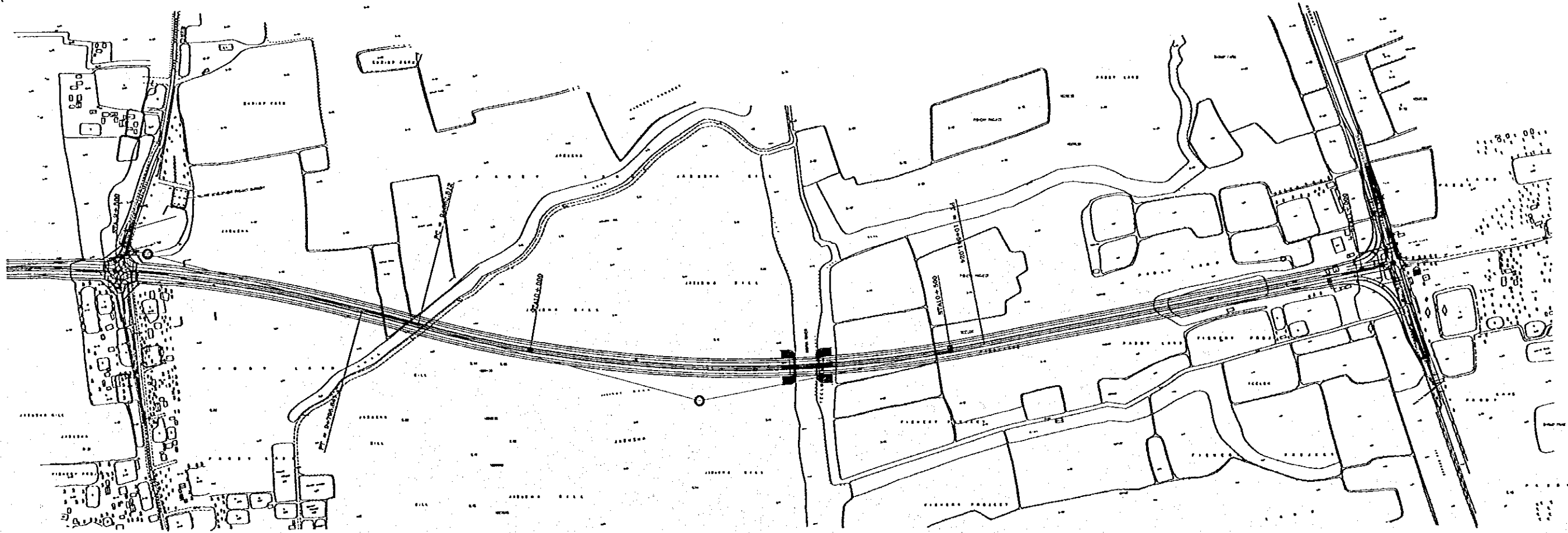


THE STUDY ON CONSTRUCTION OF THE BRIDGE  
OVER THE RIVER OF RUPSA IN KHULNA (PHASE 2)

PLAN AND PROFILE (ALTERNATIVE-1)

SHEET  
NO.

A-15

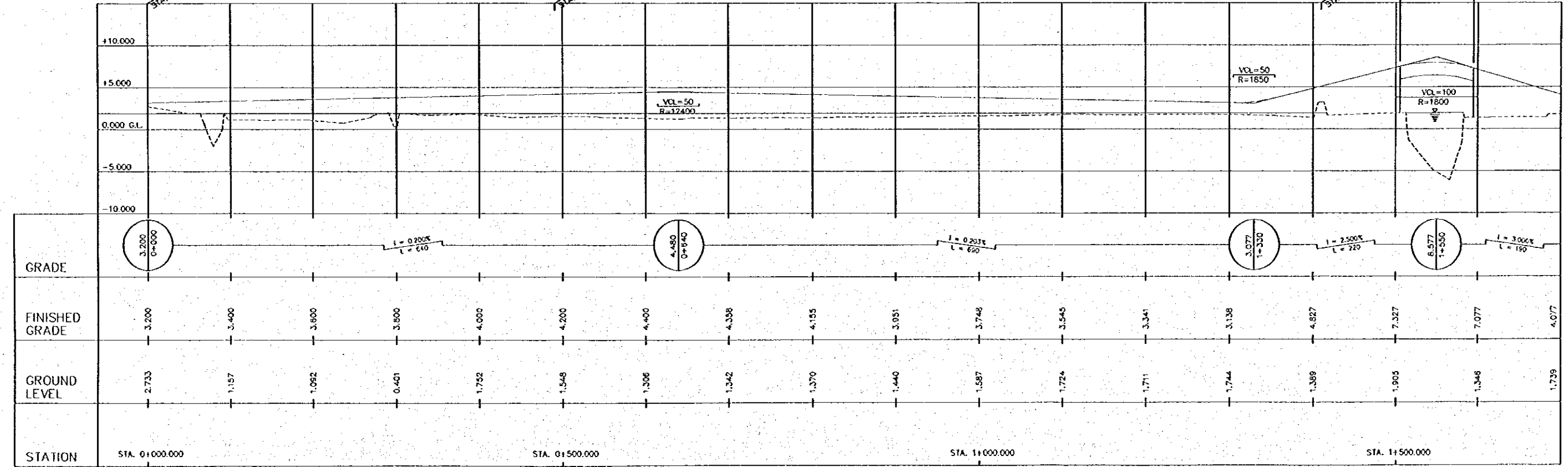
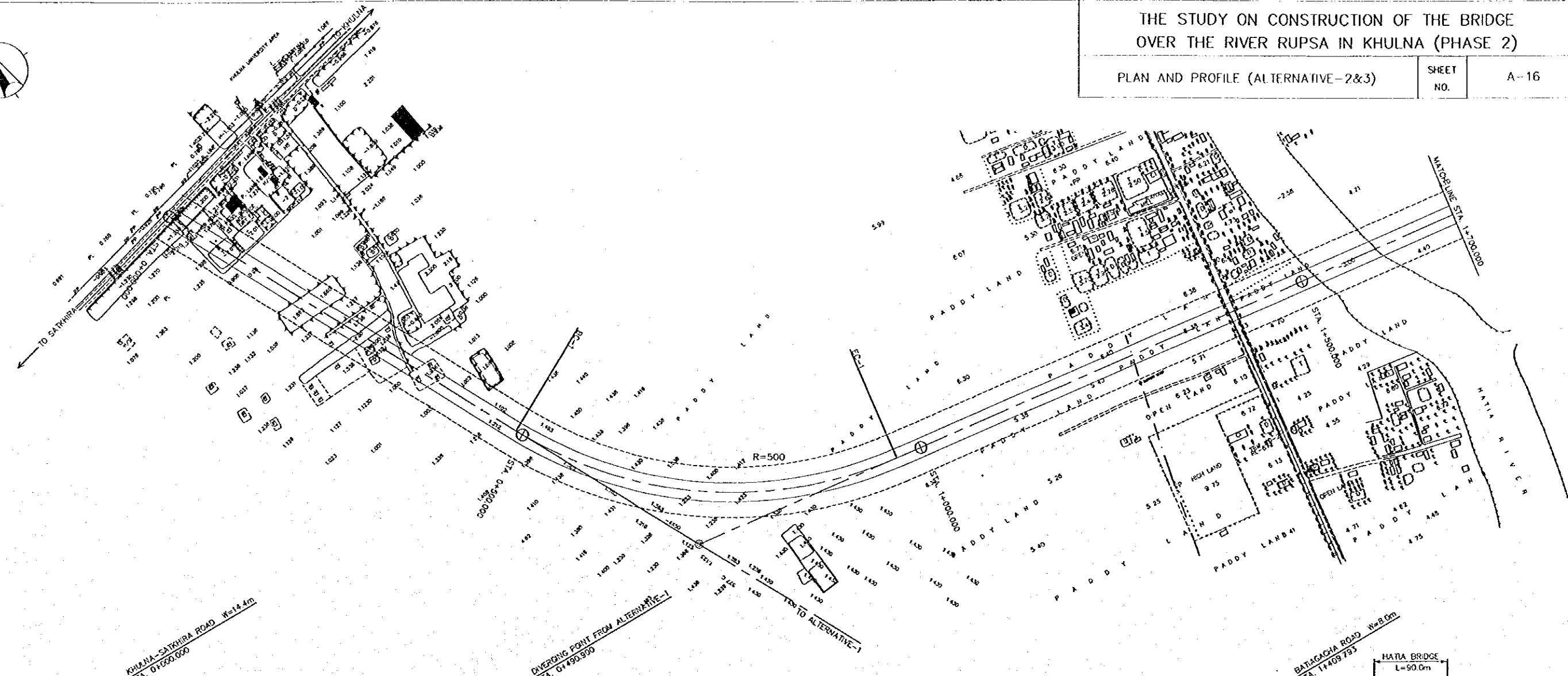


THE STUDY ON CONSTRUCTION OF THE BRIDGE  
OVER THE RIVER RUPSA IN KHULNA (PHASE 2)

PLAN AND PROFILE (ALTERNATIVE-2&3)

SHEET  
NO.

A-16

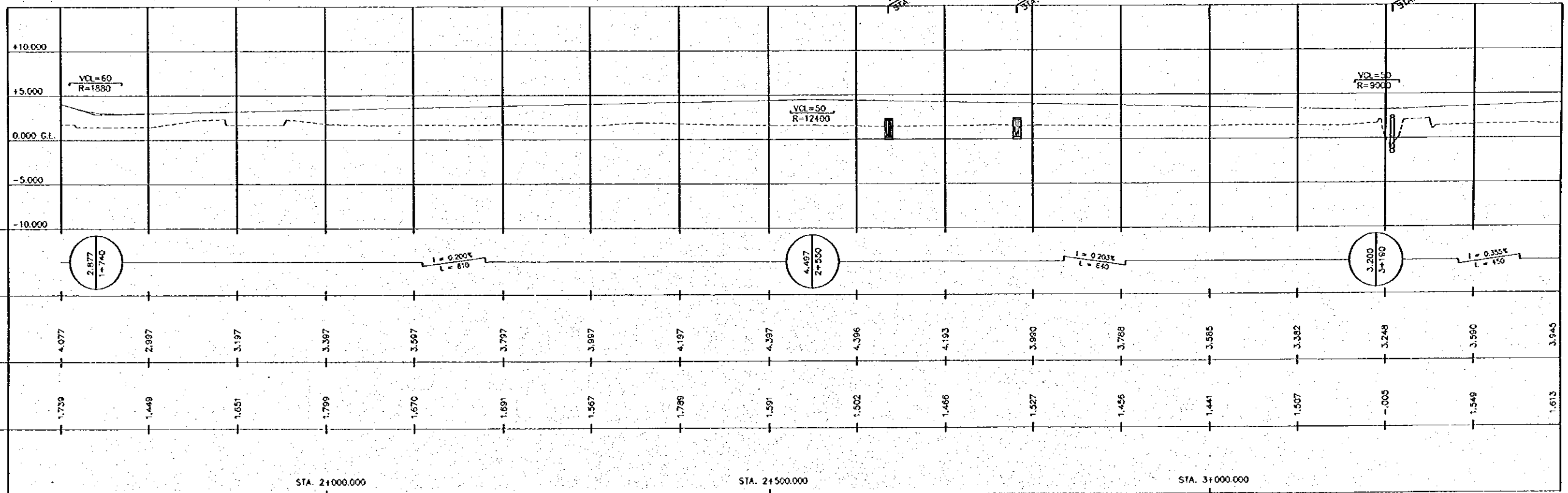
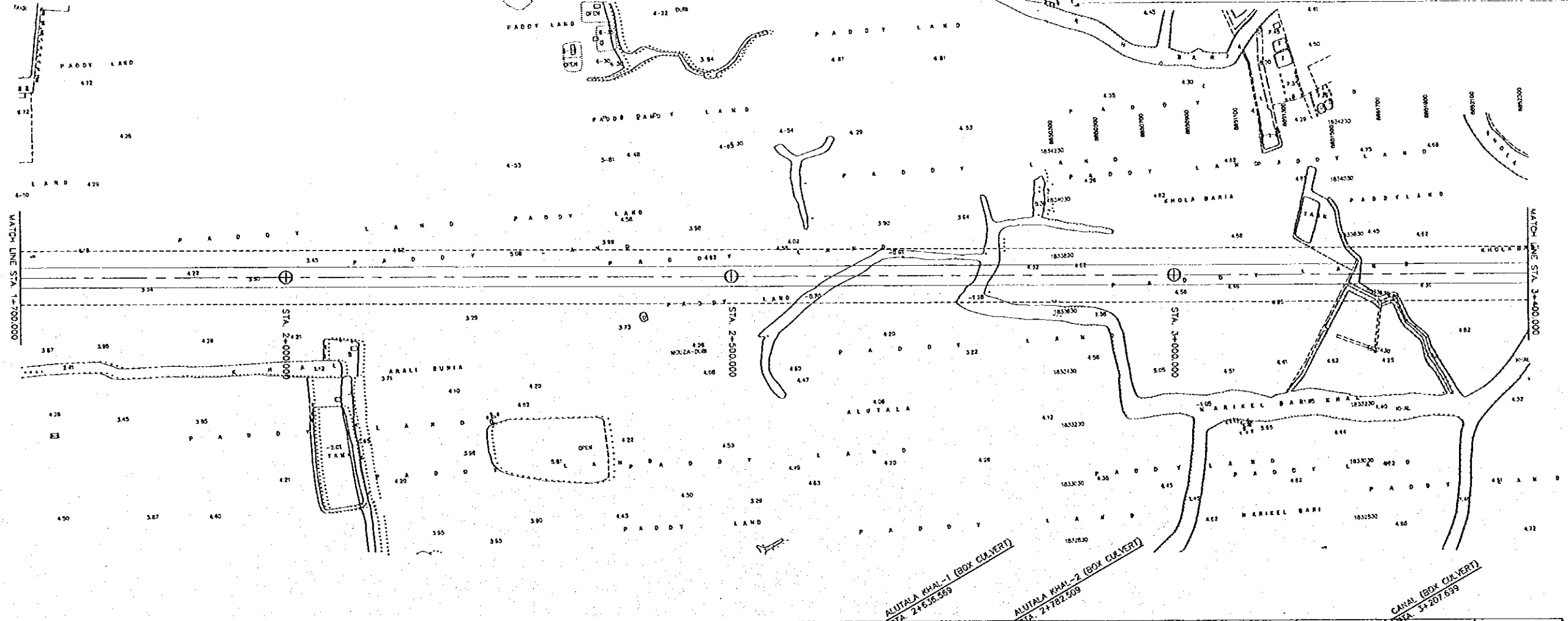
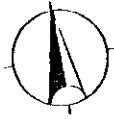


THE STUDY ON CONSTRUCTION OF THE BRIDGE  
OVER THE RIVER RUPSA IN KHULNA (PHASE 2)

PLAN AND PROFILE (ALTERNATIVE-2&3)

SHEET  
NO.

A-17



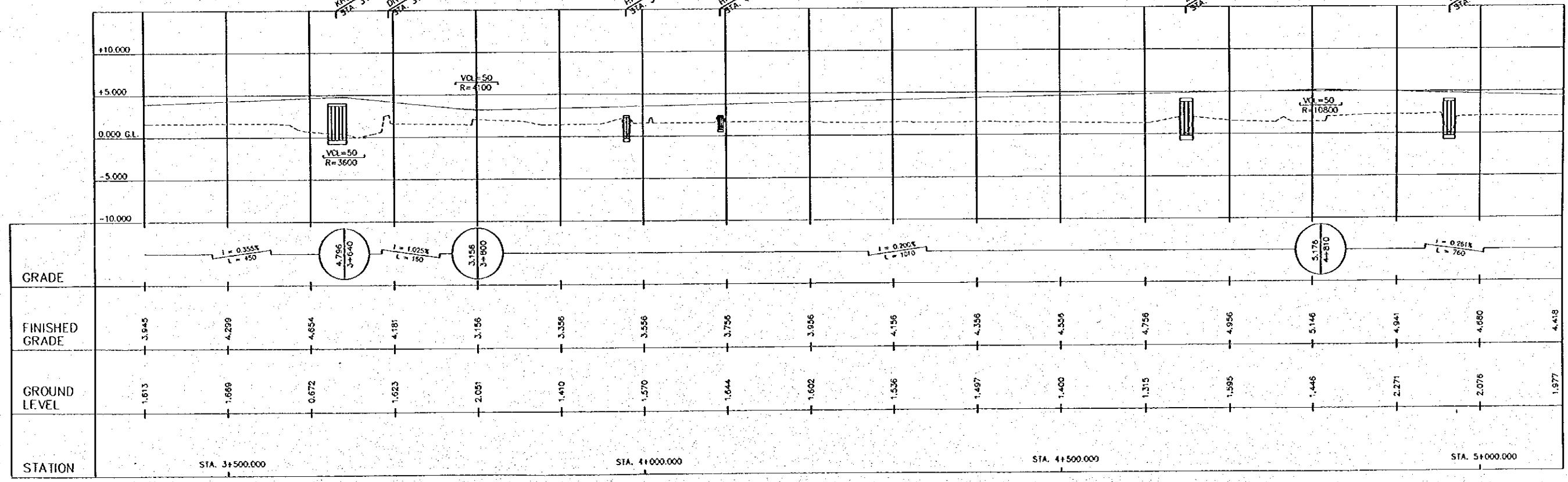
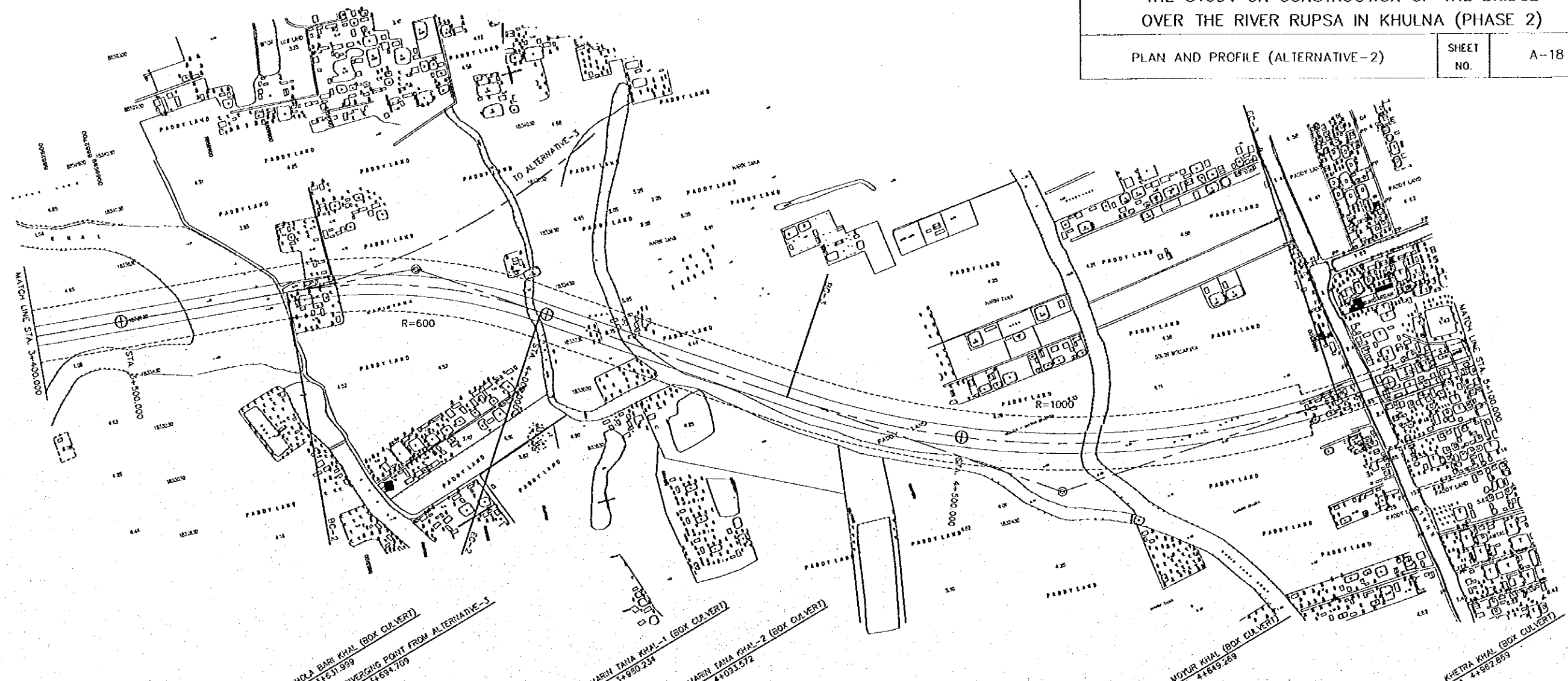


THE STUDY ON CONSTRUCTION OF THE BRIDGE  
OVER THE RIVER RUPSA IN KHULNA (PHASE 2)

PLAN AND PROFILE (ALTERNATIVE-2)

SHEET  
NO.

A-18

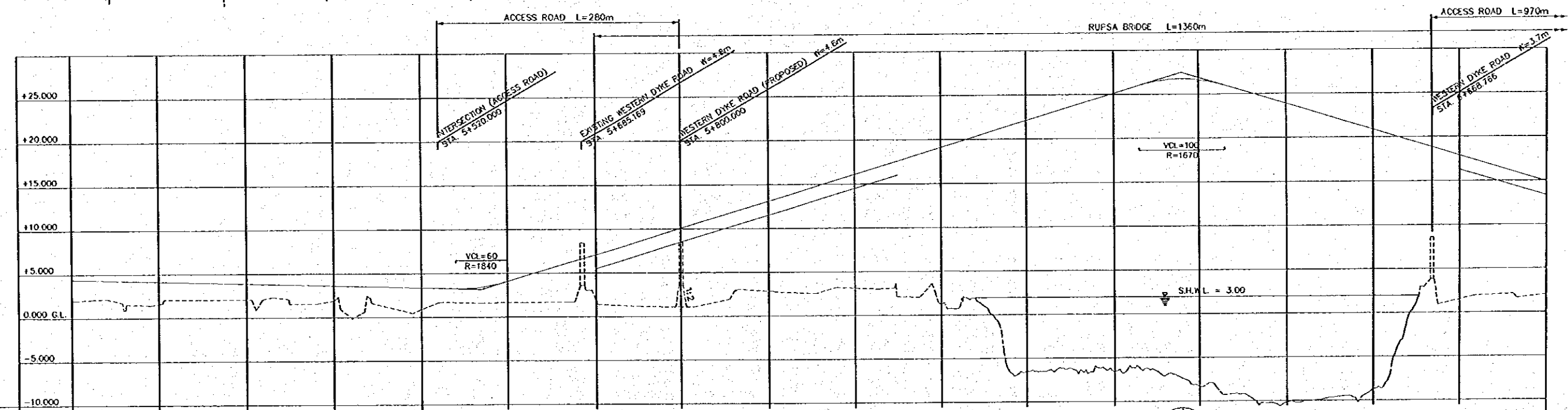
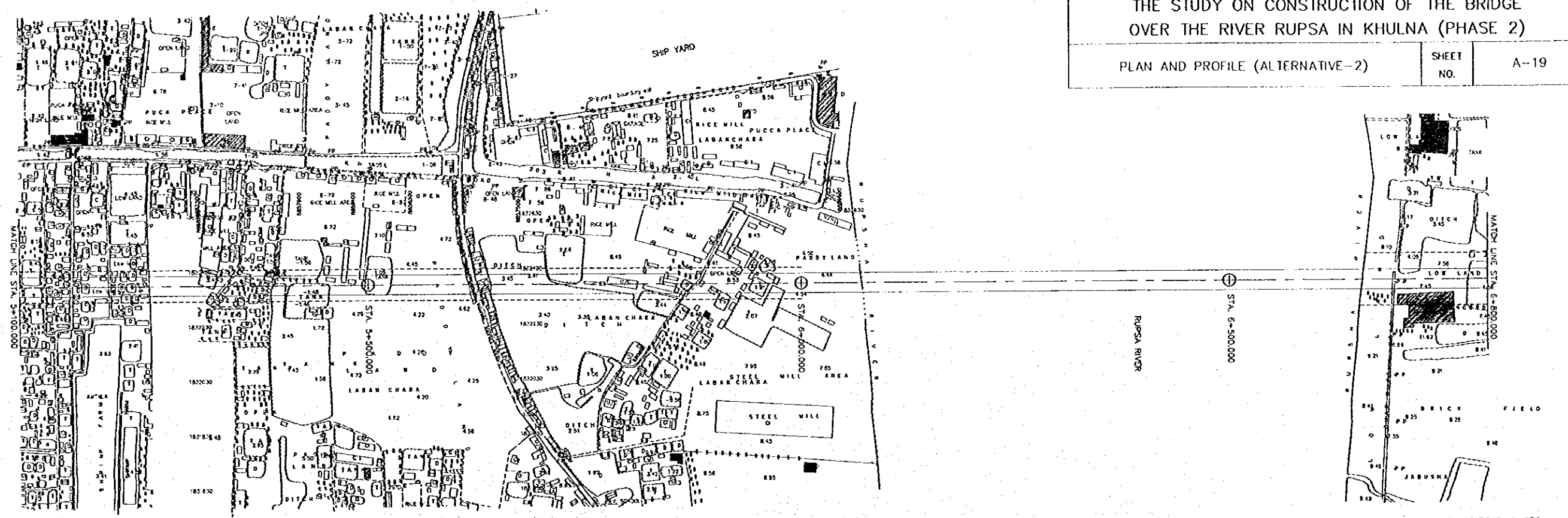


THE STUDY ON CONSTRUCTION OF THE BRIDGE  
OVER THE RIVER RUPSA IN KHULNA (PHASE 2)

PLAN AND PROFILE (ALTERNATIVE-2)

SHEET  
NO.

A-19



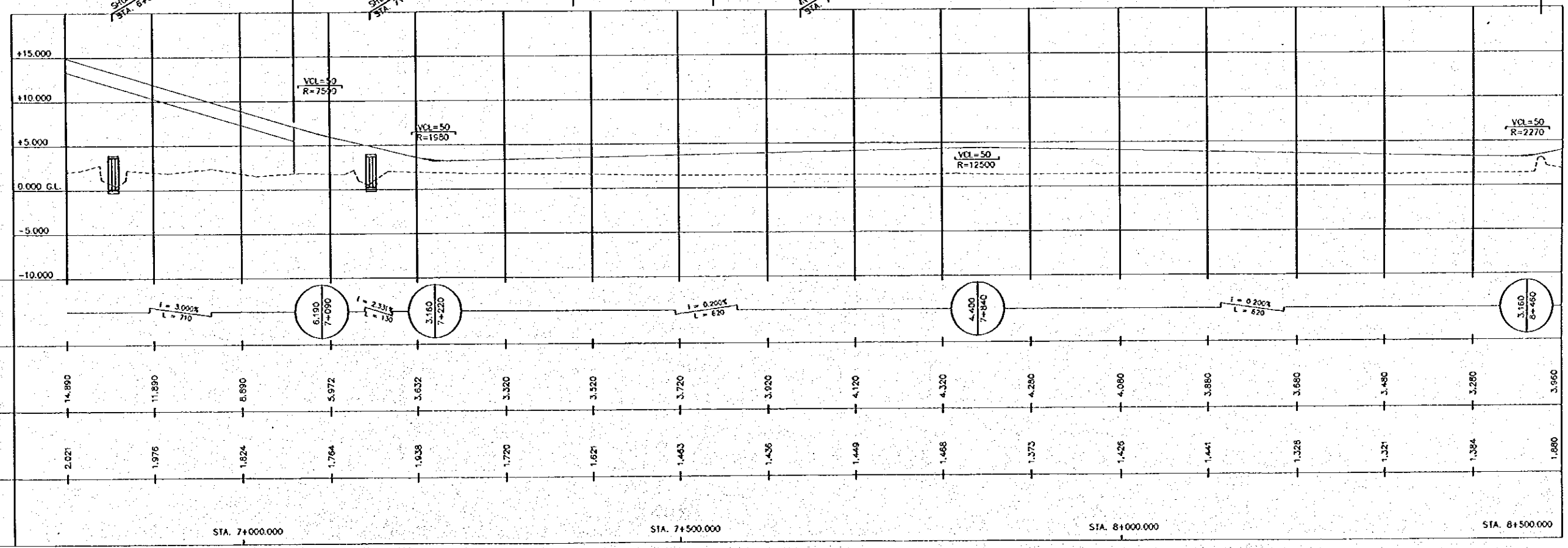
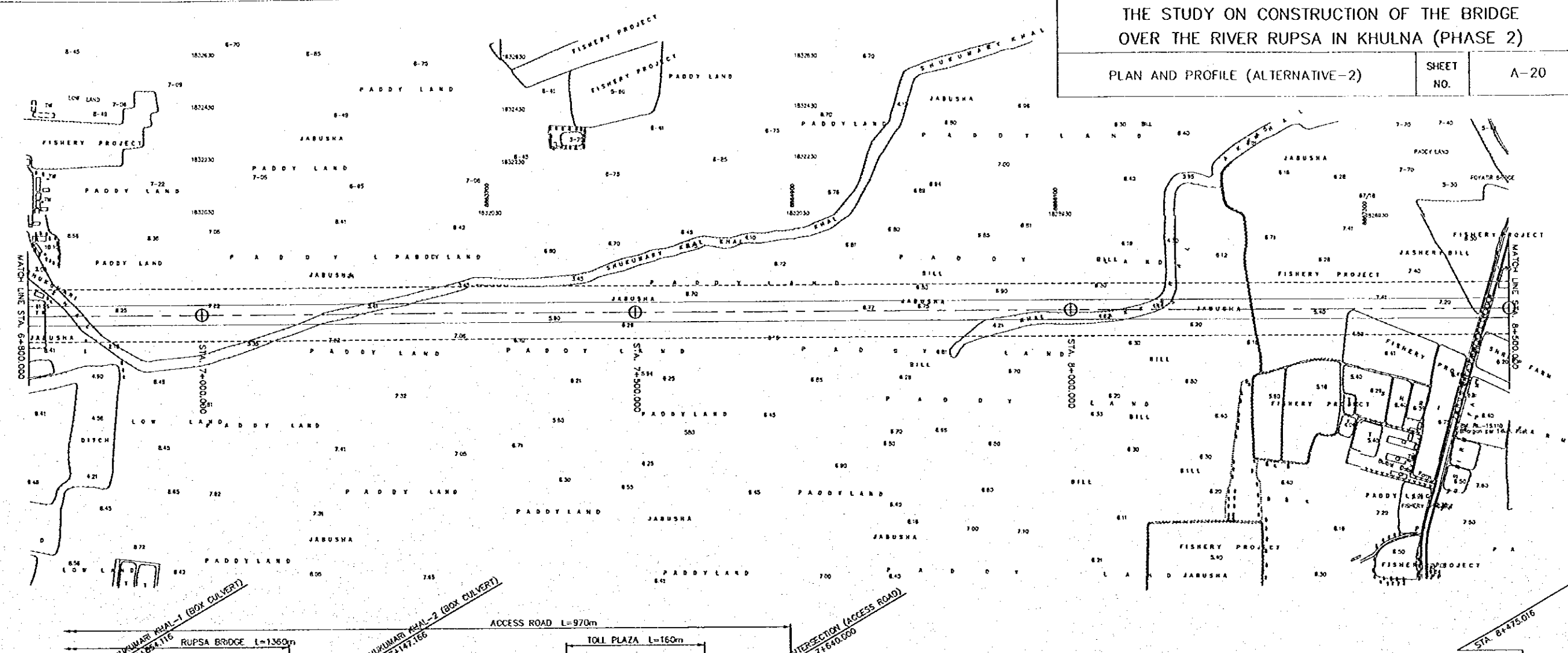
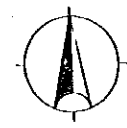
GRADE	$i = 0.251\%$ $L = 760$															$i = 3.00\%$ $L = 710$			
FINISHED GRADE	4.418	4.137	3.896	3.634	3.373	4.090	7.090	10.090	13.090	16.090	19.090	22.090	25.090	26.890	23.890	20.890	17.890	14.890	
GROUND LEVEL	1.977	1.603	2.075	1.901	0.898	1.638	1.851	1.087	2.851	3.125	1.250	-6.435	-6.521	-6.261	-10.138	-6.686	-1.525	2.021	
STATION	STA. 5+100.000					STA. 5+500.000					STA. 6+000.000					STA. 6+500.000			

THE STUDY ON CONSTRUCTION OF THE BRIDGE  
OVER THE RIVER RUPSA IN KHULNA (PHASE 2)

PLAN AND PROFILE (ALTERNATIVE-2)

SHEET  
NO.

A-20



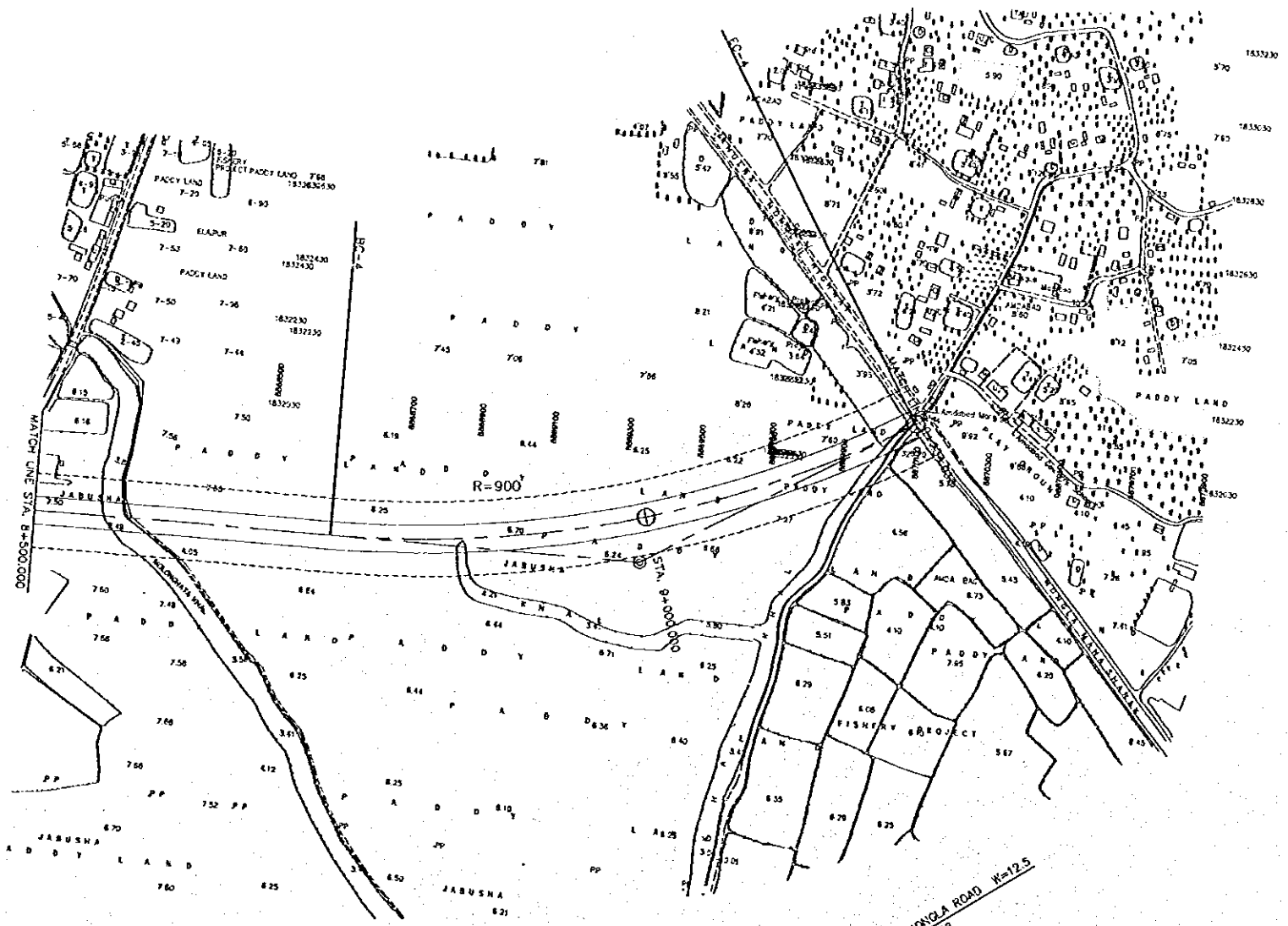


THE STUDY ON CONSTRUCTION OF THE BRIDGE  
OVER THE RIVER RUPSA IN KHULNA (PHASE 2)

PLAN AND PROFILE (ALTERNATIVE-2)

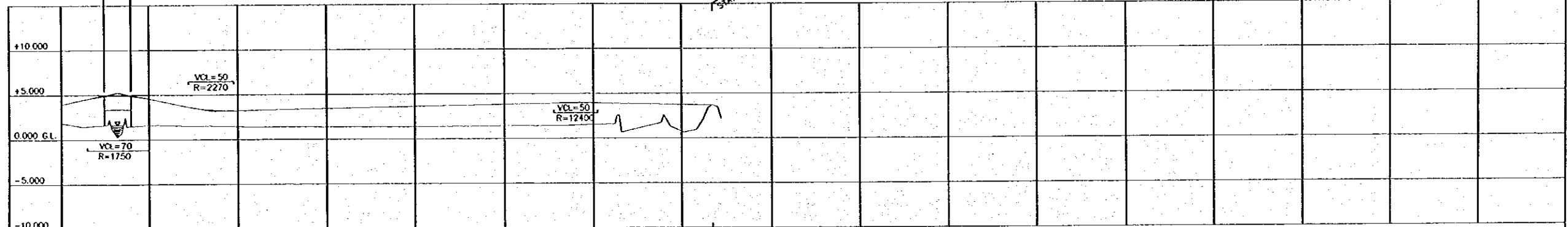
SHEET  
NO.

A-21



MOLONGHATA BRIDGE  
L=30.0m

KHULNA-MONGLA ROAD W=12.5  
STA. 9+233.838



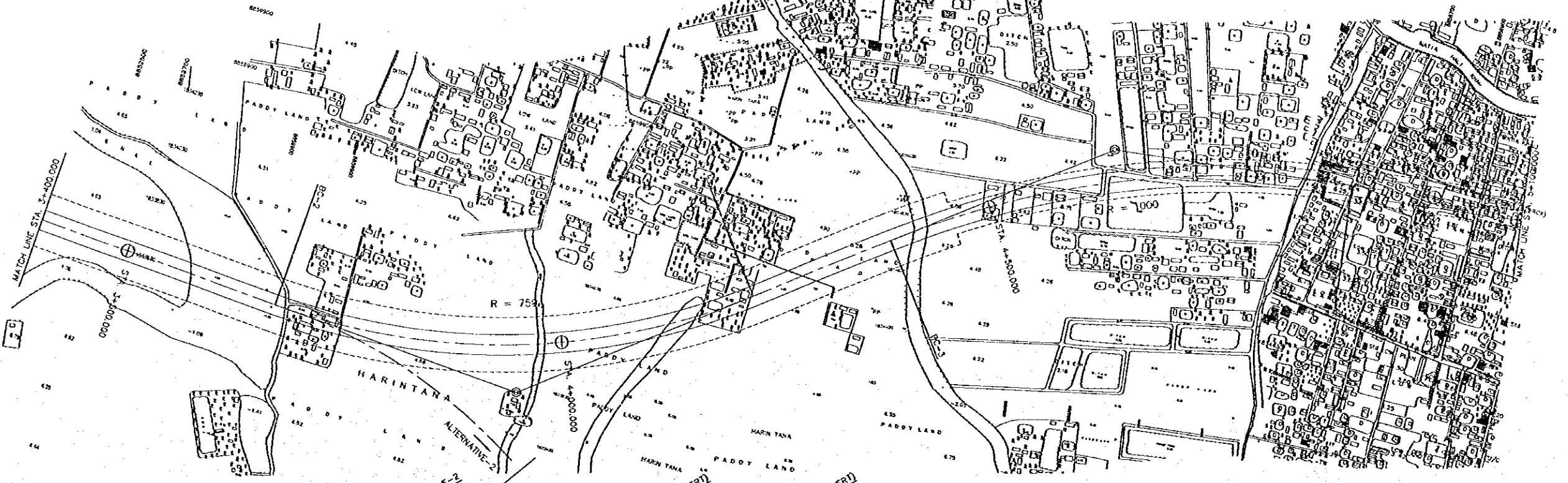
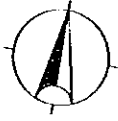
GRADE											
FINISHED GRADE	3.960	4.560	3.220	3.420	3.620	3.820	3.938	3.738	3.670		
GROUND LEVEL	1.880	1.575	1.432	1.375	1.370	1.410	1.536	0.783	3.670		
STATION	STA. 8+500.000					STA. 9+000.000					

THE STUDY ON CONSTRUCTION OF THE BRIDGE  
OVER THE RIVER RUPSA IN KHULNA (PHASE 2)

PLAN AND PROFILE (ALTERNATIVE-3)

SHEET  
NO.

A-22



YIOLA BARI KHAL (BOX CULVERT)  
STA. 3+631.939

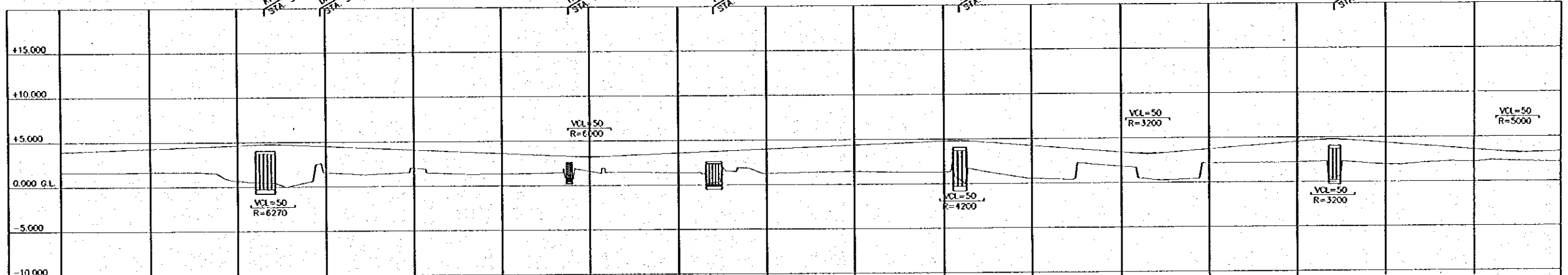
DIVERGING POINT FROM ALTERNATIVE-2  
STA. 3+634.709

HARN TANA KHAL -1 (BOX CULVERT)  
STA. 3+976.459

HARN TANA KHAL -2 (BOX CULVERT)  
STA. 4+140.309

MOYUR KHAL (BOX CULVERT)  
STA. 4+417.709

KHETRA KHAL (BOX CULVERT)  
STA. 4+841.709



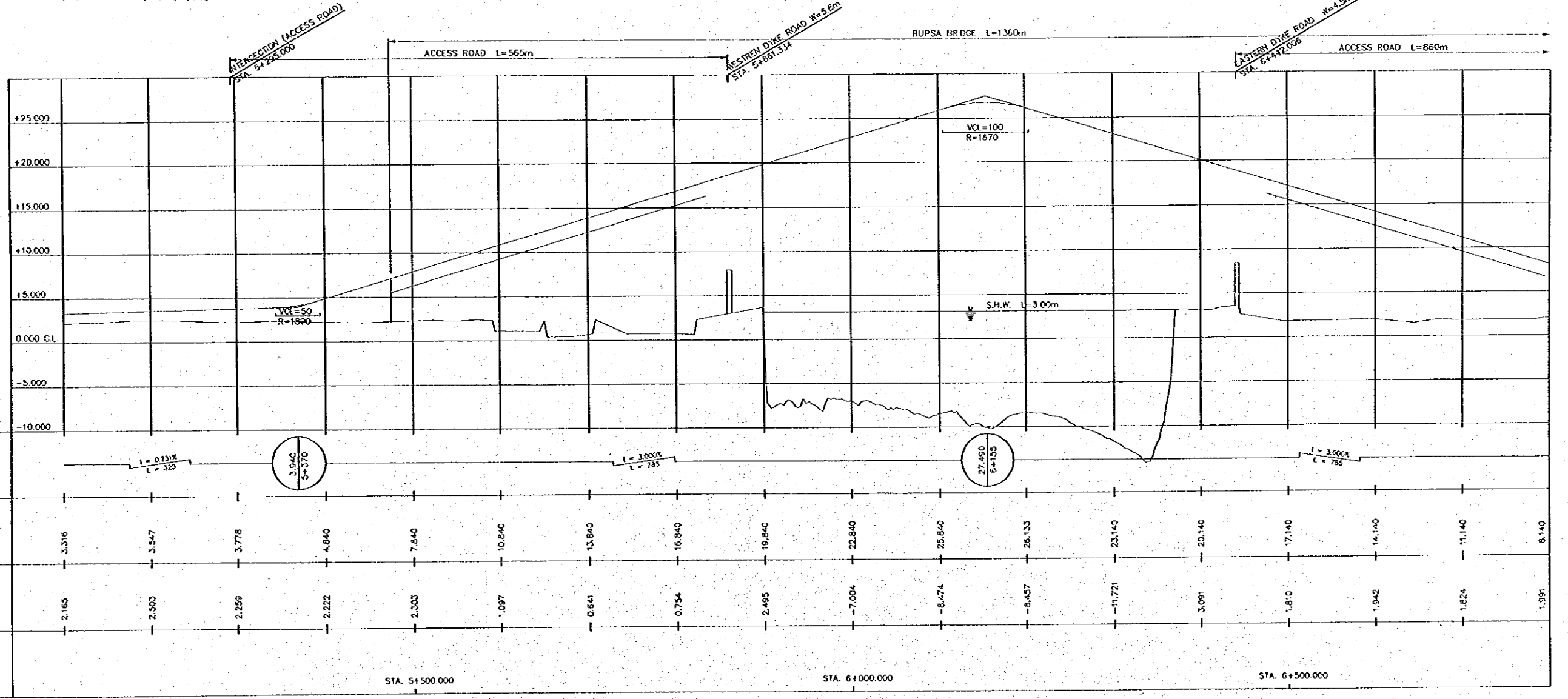
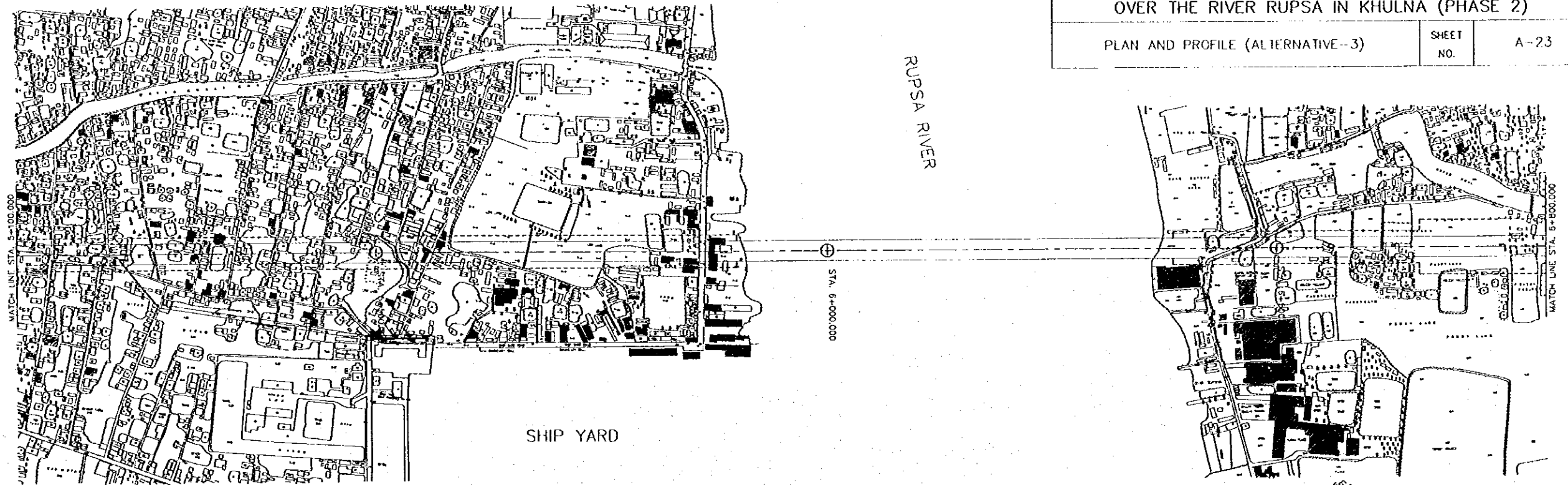
STATION	GROUND LEVEL	FINISHED GRADE	GRADE
3+500.000	1.613	3.945	$L = 0.355\%$ $L = 450$
3+600.000	1.669	4.299	$L = 0.443\%$ $L = 360$
3+700.000	0.672	4.654	$L = 0.351\%$ $L = 420$
3+800.000	1.571	4.500	$L = 0.789\%$ $L = 210$
3+900.000	2.038	4.087	$L = 0.775\%$ $L = 210$
4+000.000	1.345	3.644	$L = 0.775\%$ $L = 210$
4+100.000	1.597	3.253	$L = 0.775\%$ $L = 210$
4+200.000	1.384	3.595	$L = 0.775\%$ $L = 210$
4+300.000	1.290	3.090	$L = 0.775\%$ $L = 210$
4+400.000	1.440	4.384	$L = 0.775\%$ $L = 210$
4+500.000	1.321	4.775	$L = 0.775\%$ $L = 210$
4+600.000	0.531	4.225	$L = 0.775\%$ $L = 210$
4+700.000	1.833	3.437	$L = 0.775\%$ $L = 210$
4+800.000	2.151	3.742	$L = 0.775\%$ $L = 210$
4+900.000	2.223	4.517	$L = 0.775\%$ $L = 210$
5+000.000	1.950	4.362	$L = 0.775\%$ $L = 210$
5+100.000	2.216	3.957	$L = 0.775\%$ $L = 210$
5+200.000	2.165	3.316	$L = 0.775\%$ $L = 210$

THE STUDY ON CONSTRUCTION OF THE BRIDGE  
OVER THE RIVER RUPSA IN KHULNA (PHASE 2)

PLAN AND PROFILE (ALTERNATIVE--3)

SHEET  
NO.

A-23

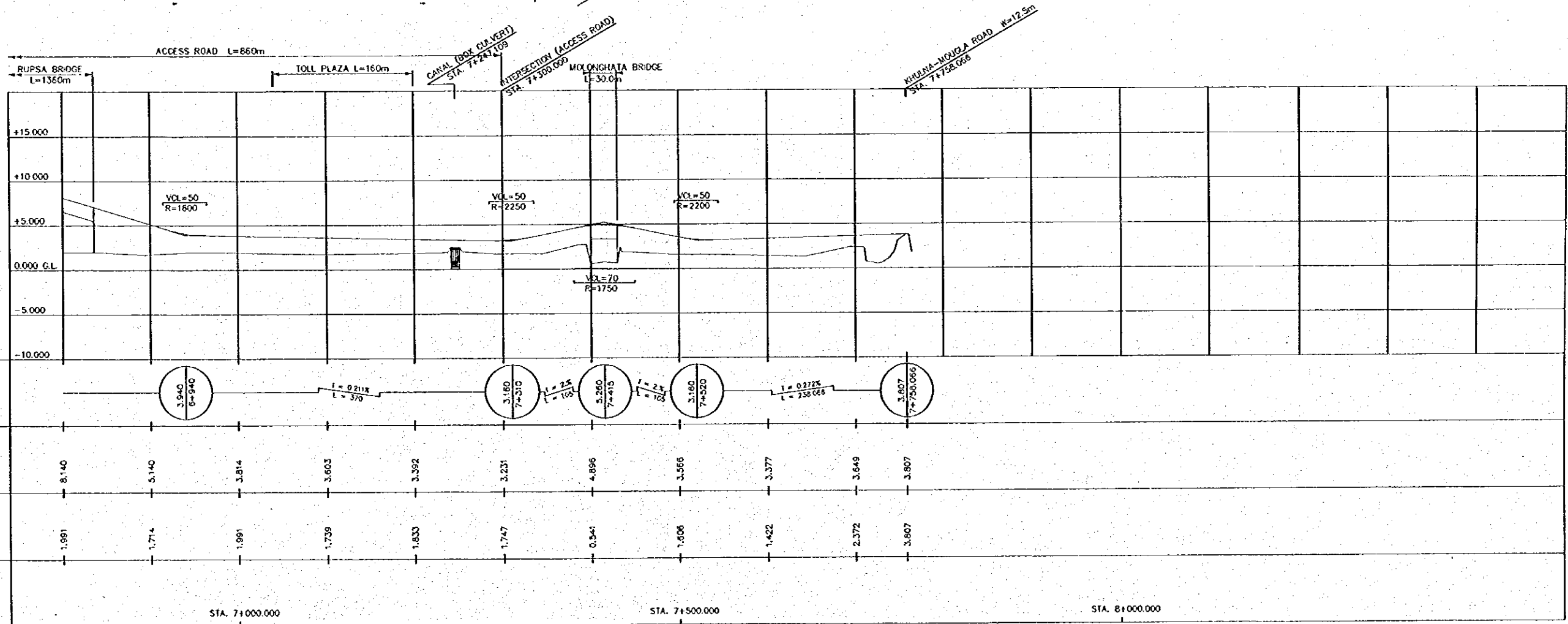
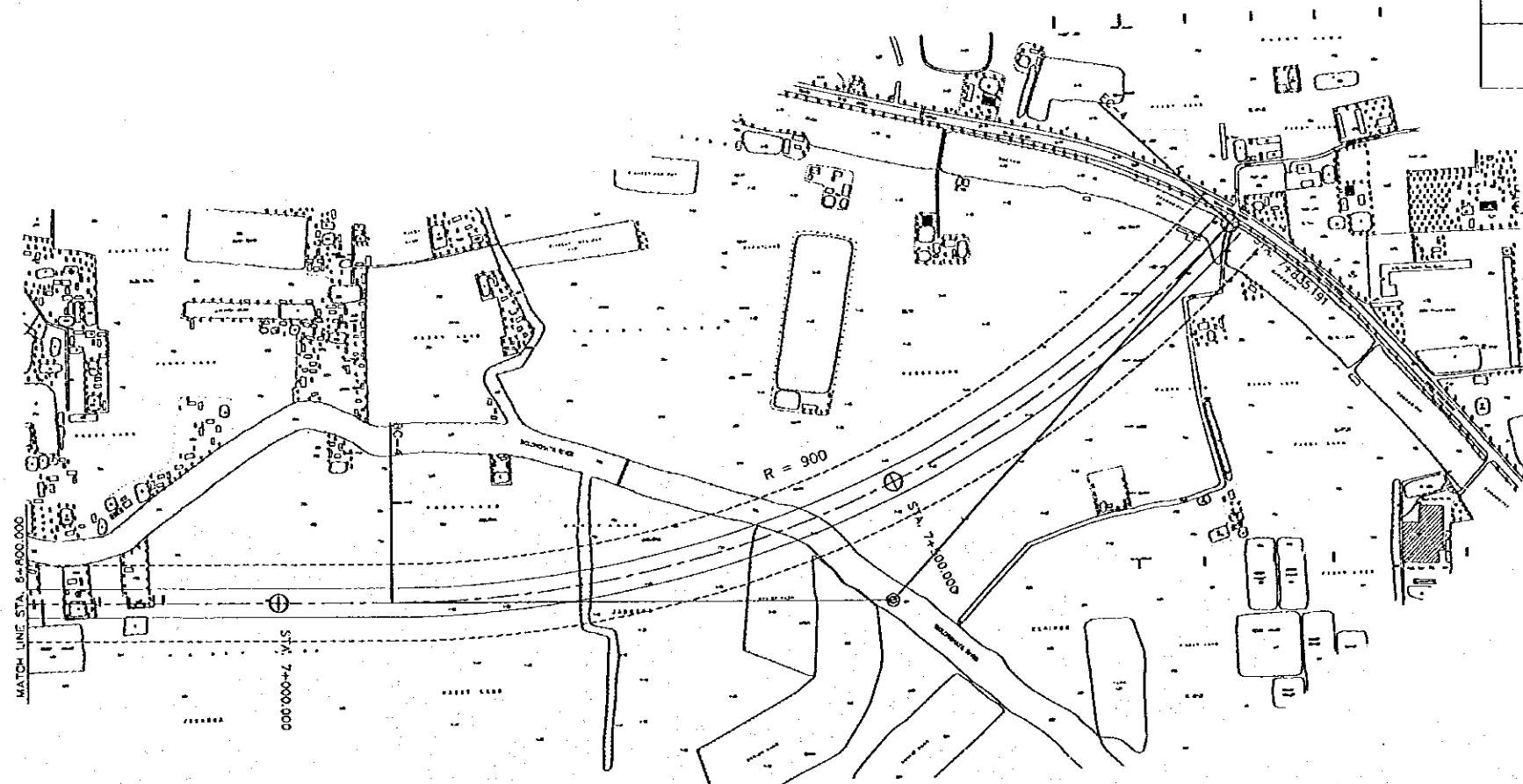


THE STUDY ON CONSTRUCTION OF THE BRIDGE  
OVER THE RIVER RUPSA IN KHULNA (PHASE 2)

PLAN AND PROFILE (ALTERNATIVE-3)

SHEET  
NO.

A-24





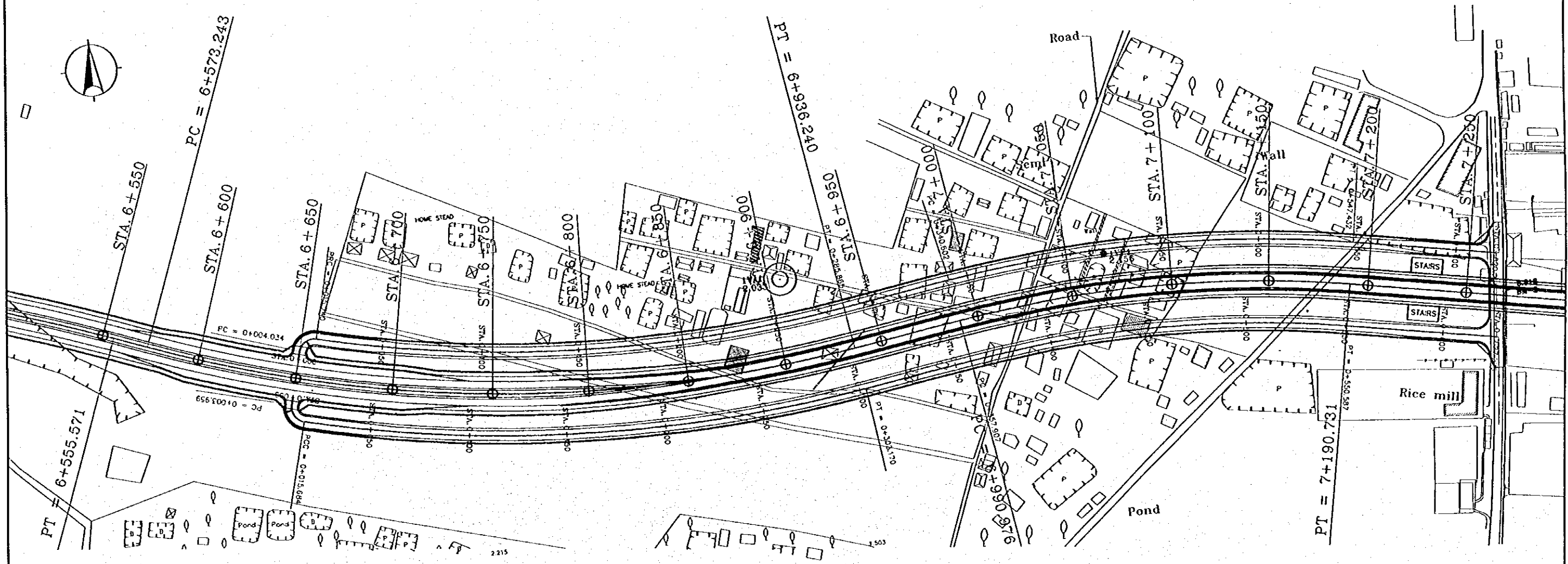


THE STUDY ON CONSTRUCTION OF THE BRIDGE  
OVER THE RIVER RUPSA IN KHULNA (PHASE 2)

INTERSECTION (Laban Chara)

SHEET  
NO.

A-26



THE STUDY ON CONSTRUCTION OF THE BRIDGE  
OVER THE RIVER RUPSA IN KHULNA (PHASE 2)

INTERSECTION (Char Rupsa)

SHEET  
NO.

A-27

