

SCALE :
HOR. 1:2500
VER. 1:250

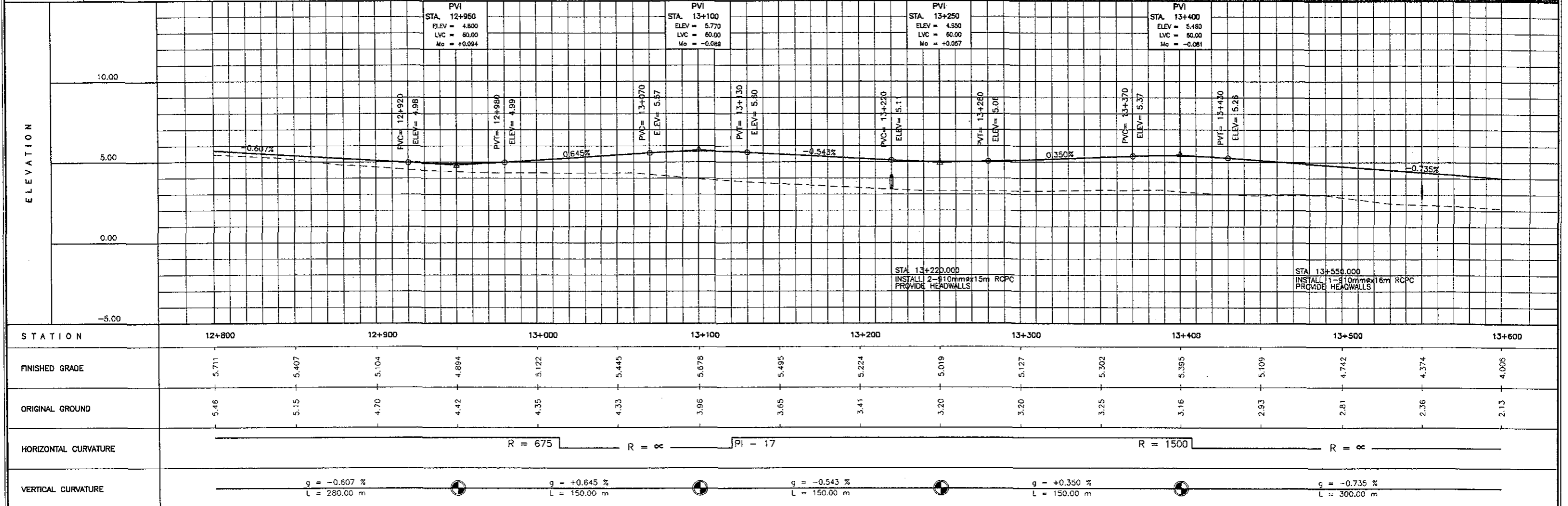
ILOILO CIRCUMFERENTIAL ROAD NO.1
PLAN AND PROFILE
STA. 12+800 - STA. 13+600

DRAWING NO.
R-17



ELEMENTS OF CURVES

PI NO.	STATION	COORDINATES		I	R	T	Lc	Es	V(kph)
		NORTHING	EASTING						
16	12+876.843	1,188,695.377	453,297.317	23° 28' 52.7"	675.00	140.29	276.63	14.42	60
17	13+263.932	1,188,417.630	453,572.560	10° 58' 10.7"	1500.00	144.03	287.18	6.90	60



ELEMENTS OF CURVES

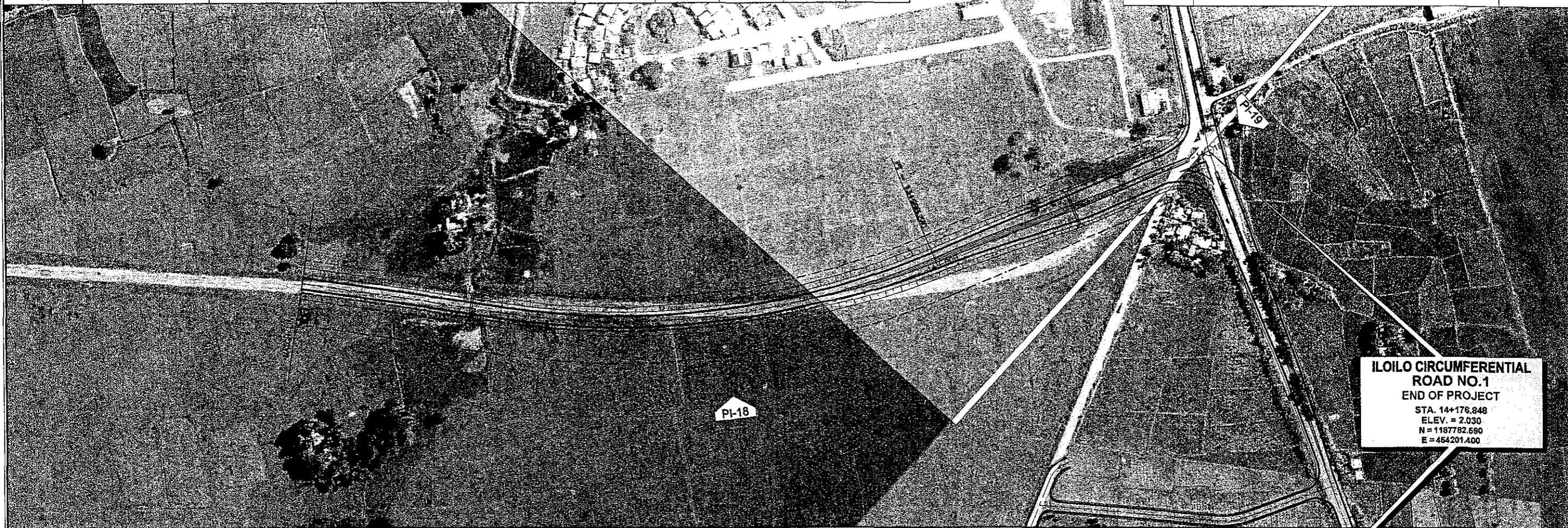
PI NO.	STATION	COORDINATES		I	R	T	Lc	Es	V(kph)
		NORTHING	EASTING						
18	13 + 864.158	1,187,917.950	453,906.700	31° 33' 32.5"	500.00	141.29	275.40	19.58	60
19	14 + 181.277	1,187,782.590	454,201.400						

THE STUDY ON ROAD NETWORK IMPROVEMENT
FOR DEVELOPMENT OF REGIONAL GROWTH CENTERS

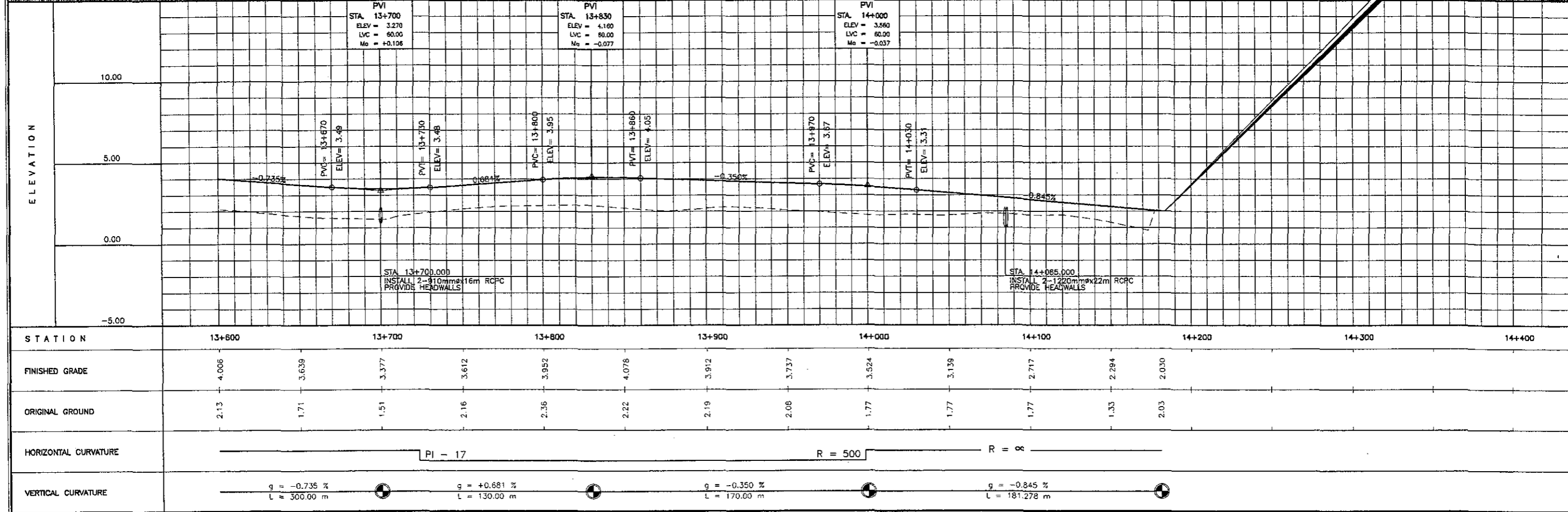
SCALE :
HOR. 1:2500
VER. 1:250

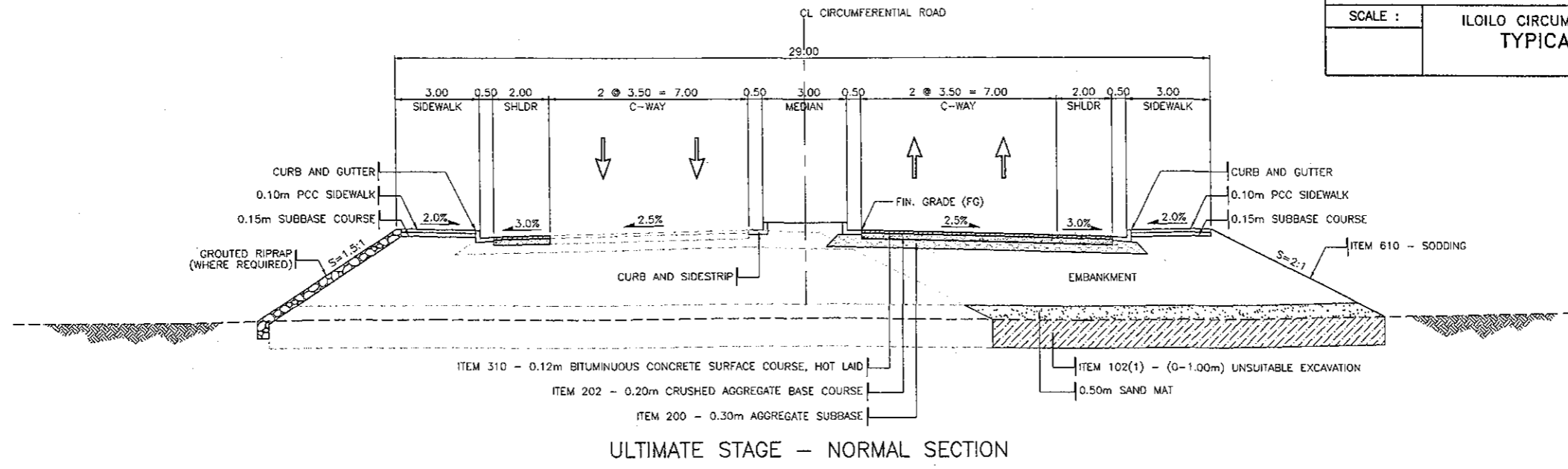
ILOILO CIRCUMFERENTIAL ROAD NO.1
PLAN AND PROFILE
STA. 13+600 - STA. 14+184.017

DRAWING NO.
R-18

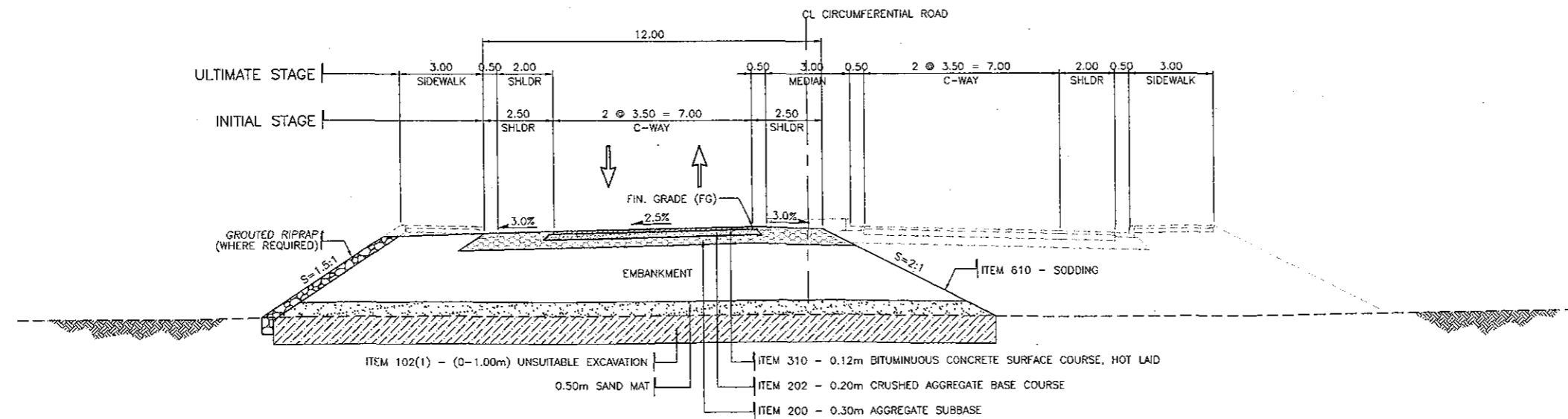


ILOILO CIRCUMFERENTIAL ROAD NO.1
END OF PROJECT
STA. 14+176.848
ELEV. = 2.030
N = 1187782.590
E = 454201.400

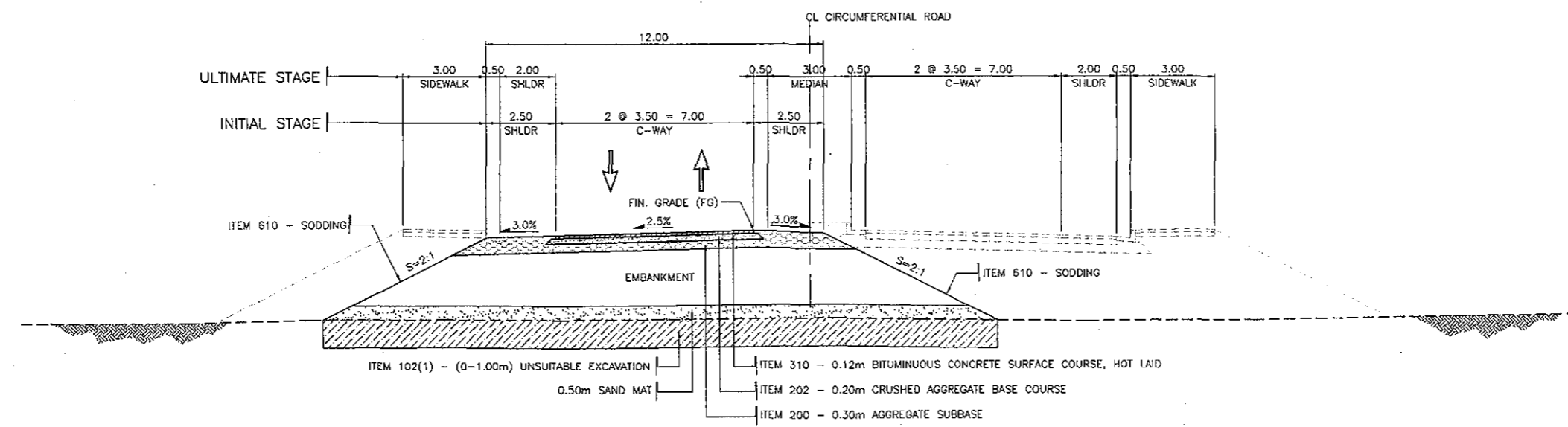




ULTIMATE STAGE - NORMAL SECTION

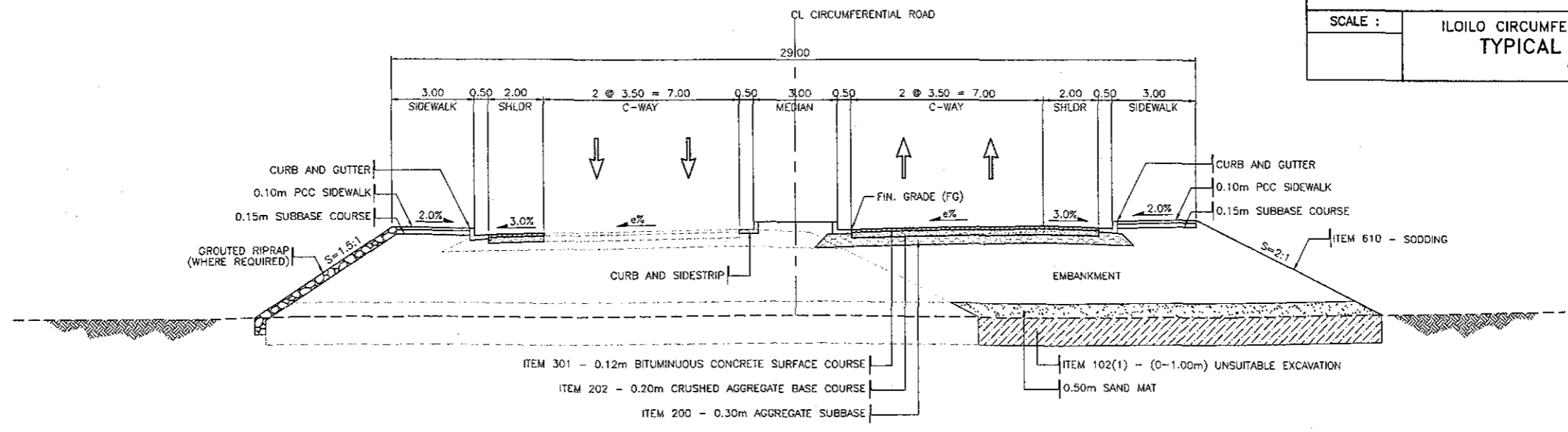


INITIAL STAGE - NORMAL SECTION WITH RIPRAP

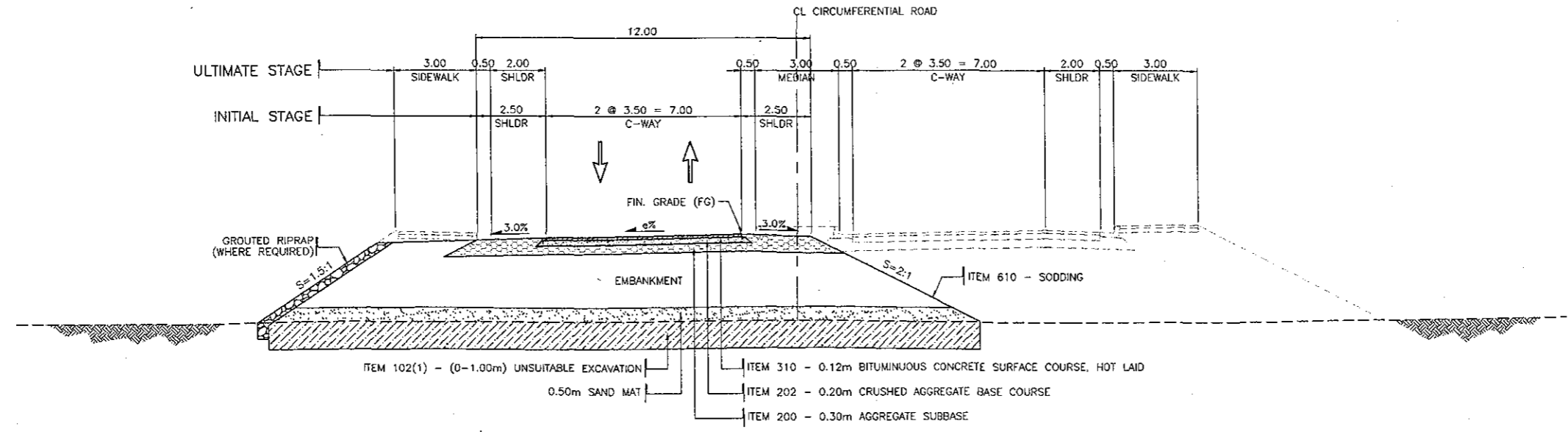


INITIAL STAGE - NORMAL SECTION

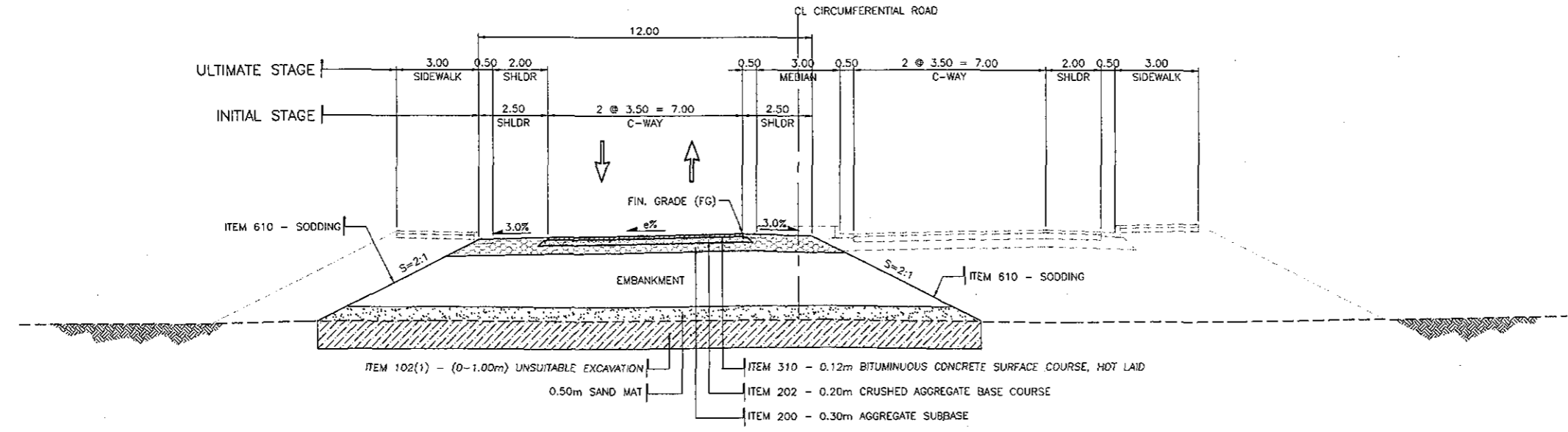
TYPICAL ROAD SECTIONS



ULTIMATE STAGE - SUPERELEVATED SECTION



INITIAL STAGE - SUPERELEVATED SECTION WITH RIPRAP



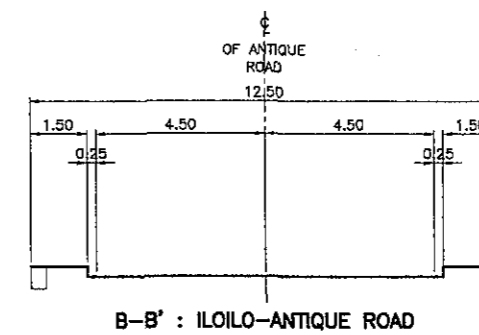
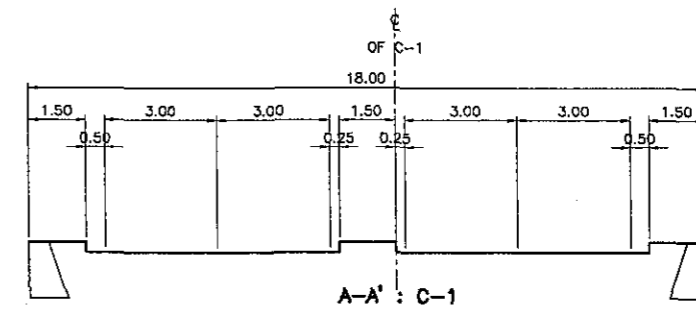
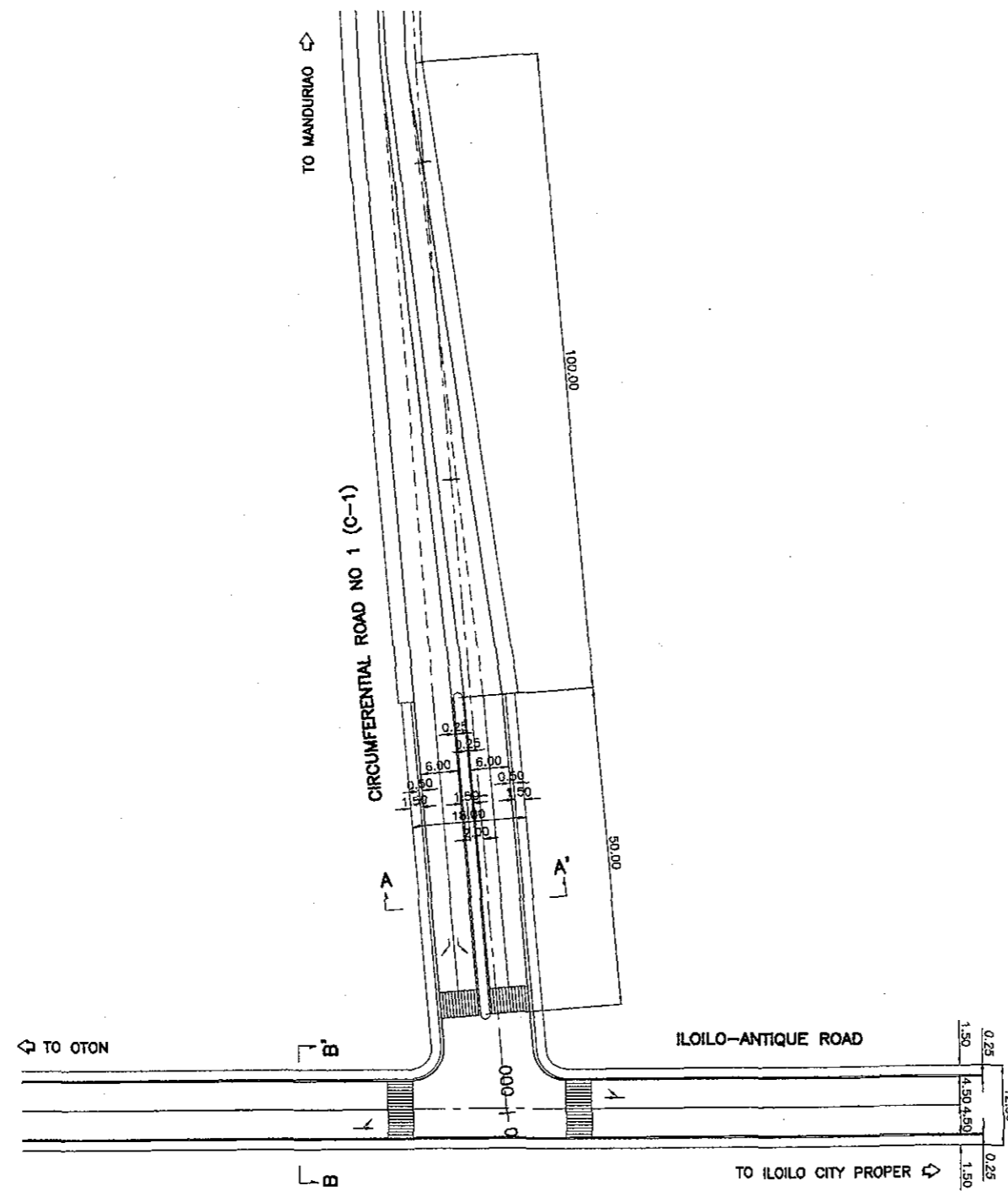
INITIAL STAGE - SUPERELEVATED SECTION

TYPICAL ROAD SECTIONS

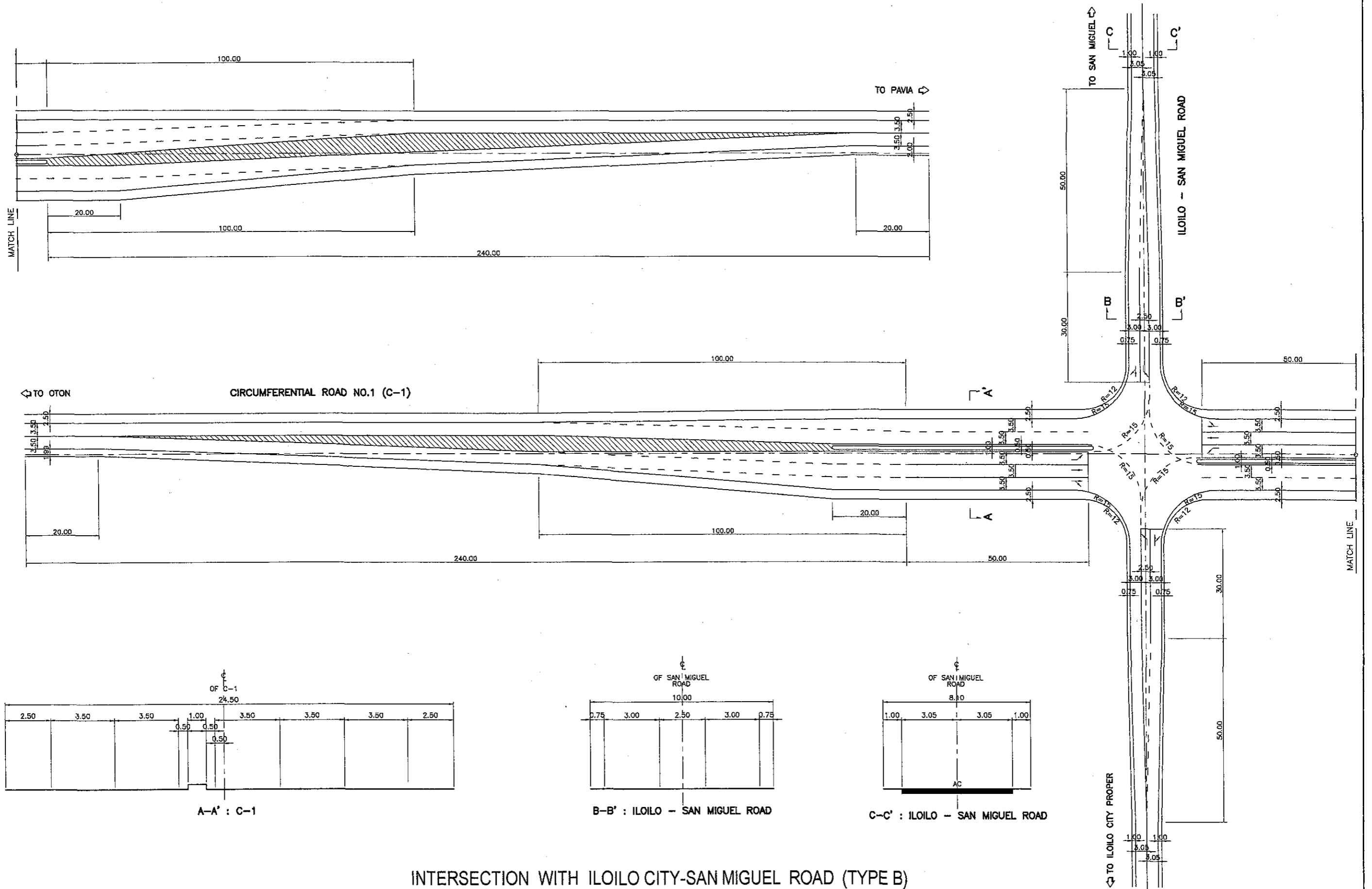
SCALE :
PLAN. 1:1000
SECTION. 1:200

ILOILO CIRCUMFERENTIAL ROAD NO. 1 (C-1)
INTERSECTION WITH ILOILO-ANTIQUE ROAD
STA. 0+000.00

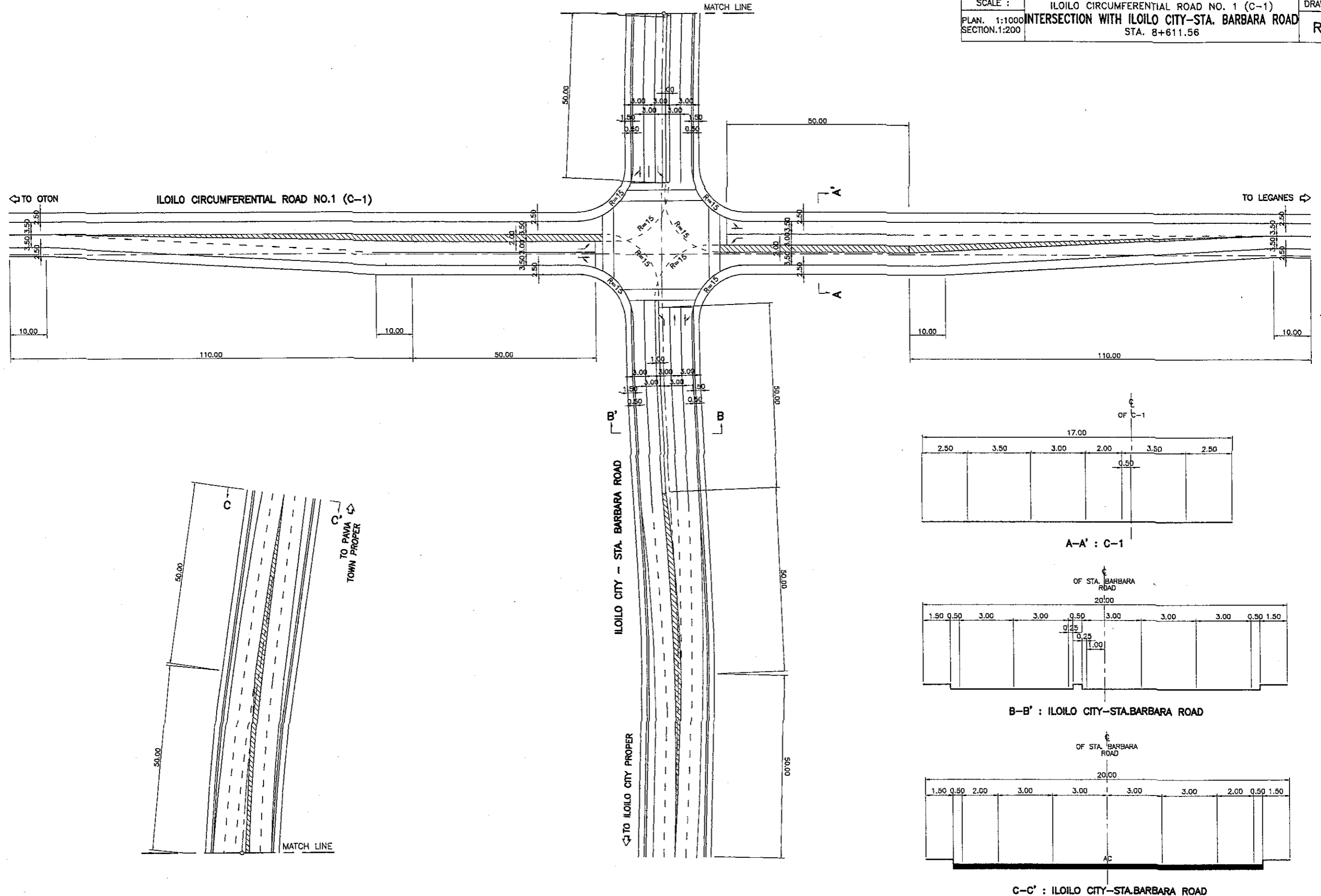
DRAWING NO.
R-21



INTERSECTION WITH ILOILO-ANTIQUE ROAD (TYPE A)
STA. 0+000, BEG. OF C-1



INTERSECTION WITH ILOILO CITY-SAN MIGUEL ROAD (TYPE B)
STA. 5+921.00

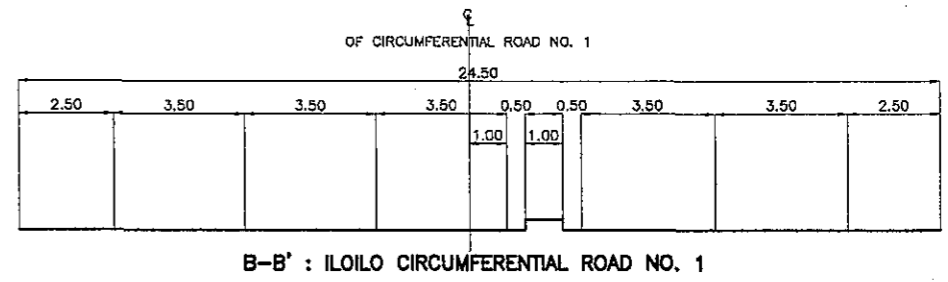
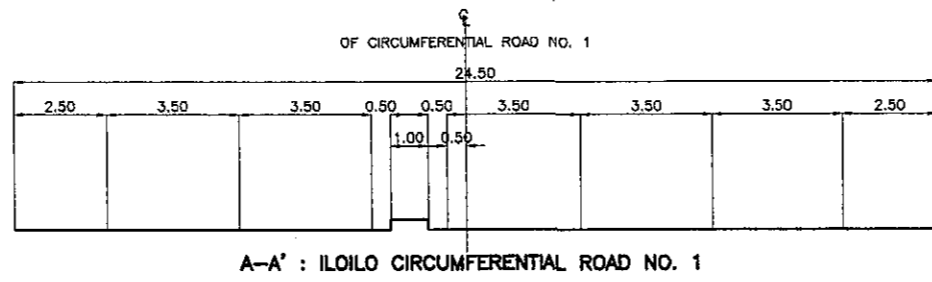
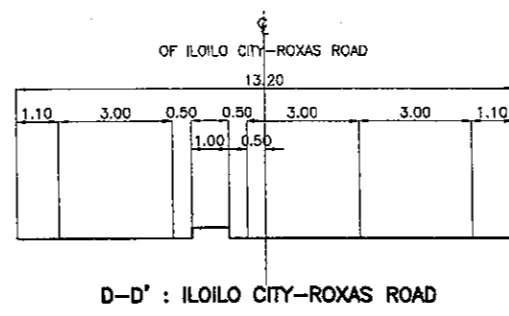
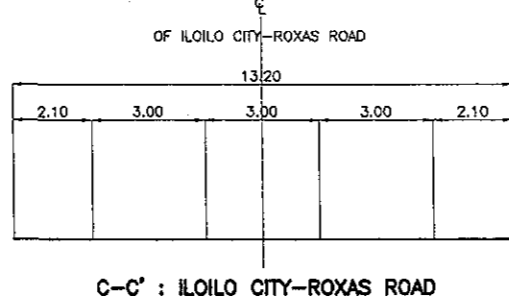


INTERSECTION WITH ILOILO CITY-STA. BARBARA ROAD (TYPE C)
STA. 8+611.56

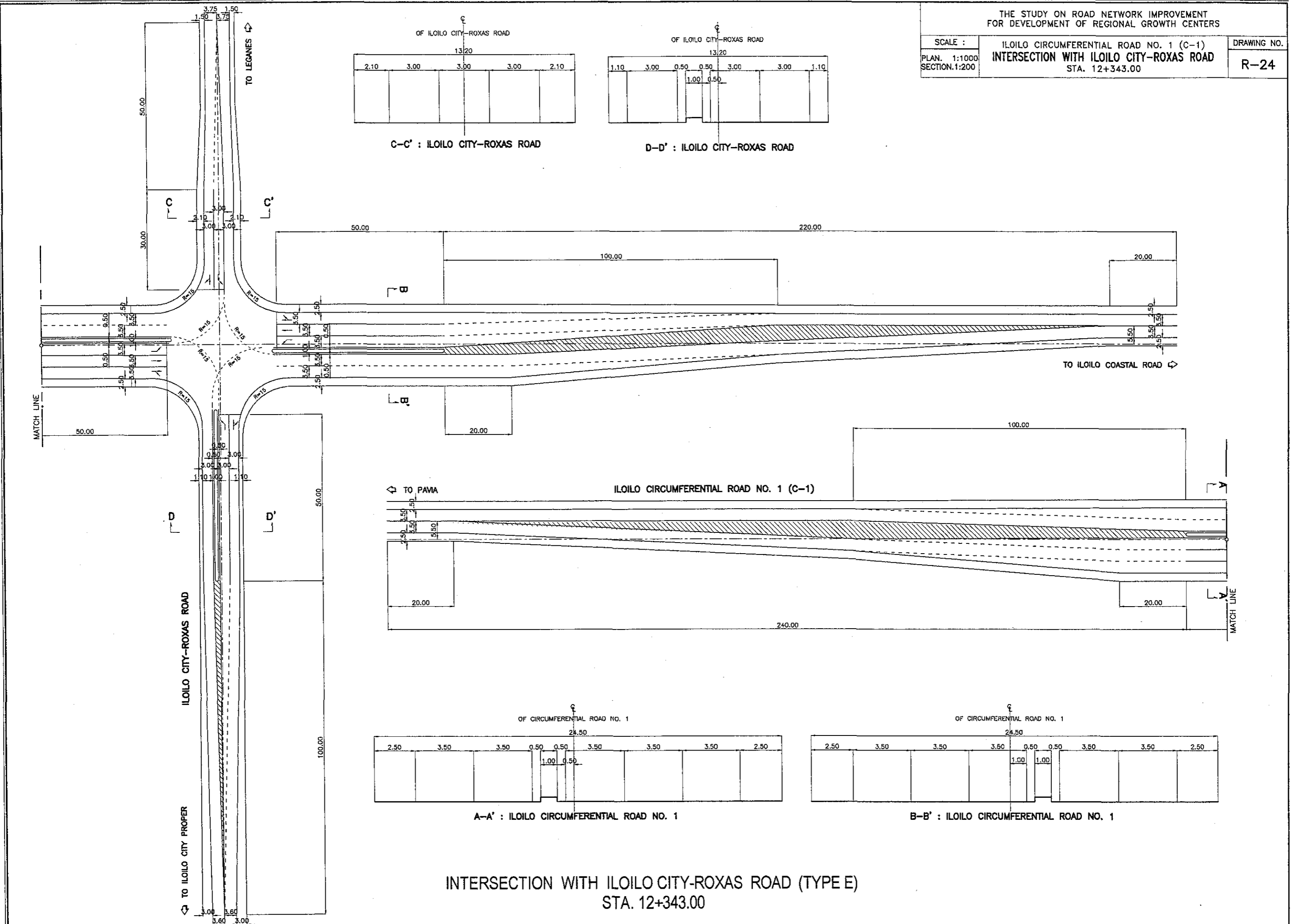
SCALE :
PLAN. 1:1000
SECTION. 1:200

ILOILO CIRCUMFERENTIAL ROAD NO. 1 (C-1)
INTERSECTION WITH ILOILO CITY-ROXAS ROAD
STA. 12+343.00

DRAWING NO.
R-24



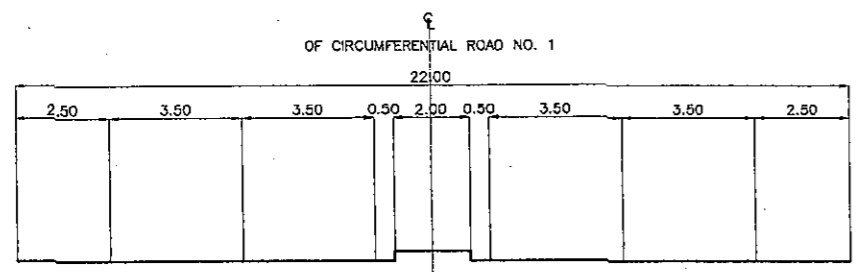
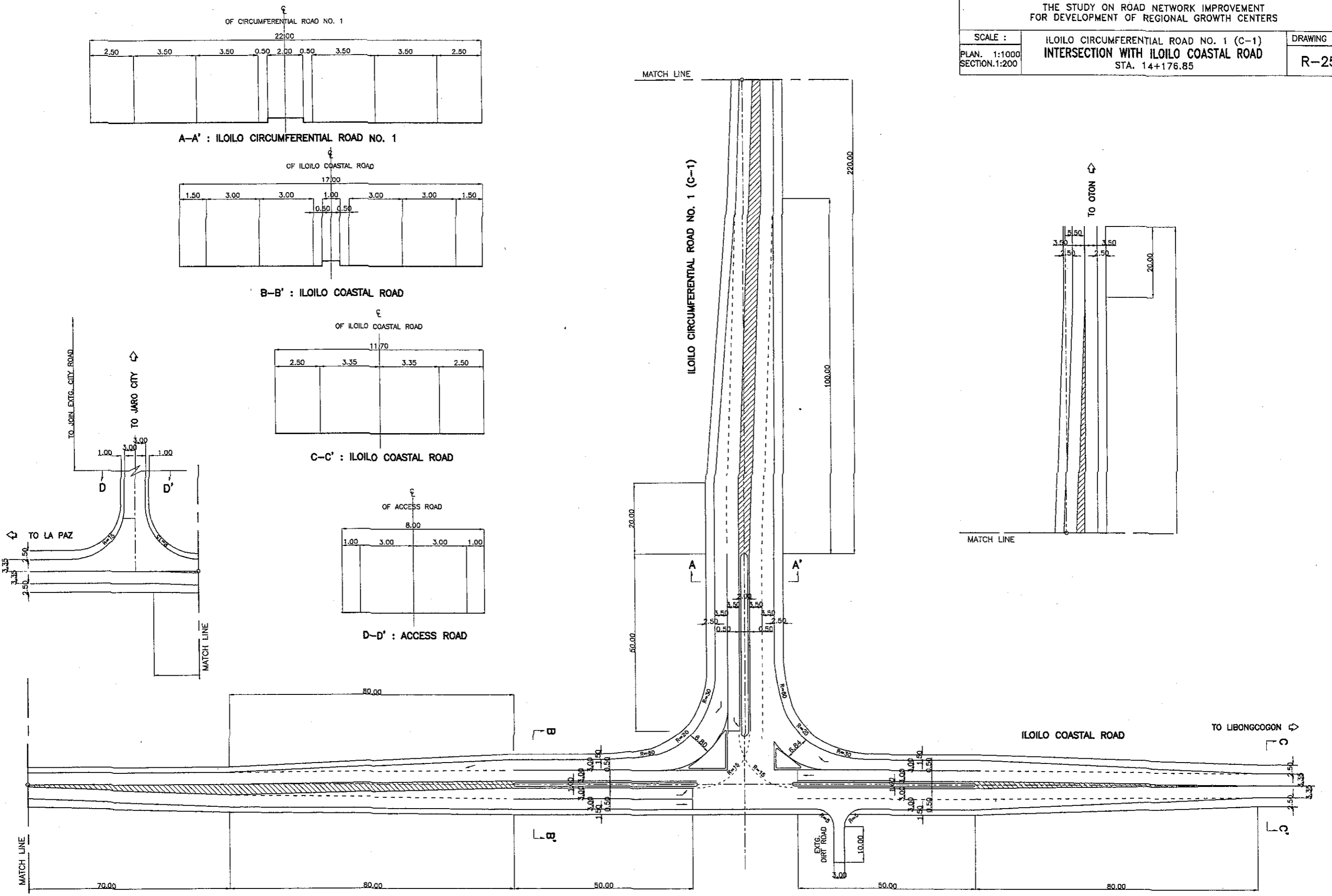
INTERSECTION WITH ILOILO CITY-ROXAS ROAD (TYPE E)
STA. 12+343.00



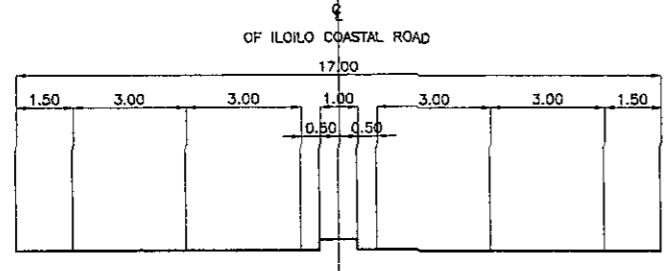
SCALE :
PLAN. 1:1000
SECTION. 1:200

ILOILO CIRCUMFERENTIAL ROAD NO. 1 (C-1)
INTERSECTION WITH ILOILO COASTAL ROAD
STA. 14+176.85

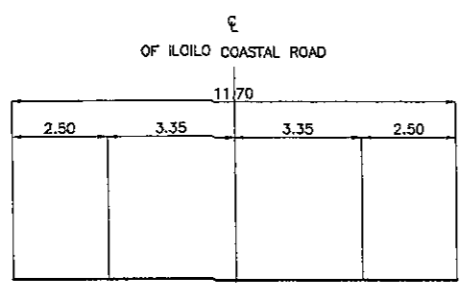
DRAWING NO.
R-25



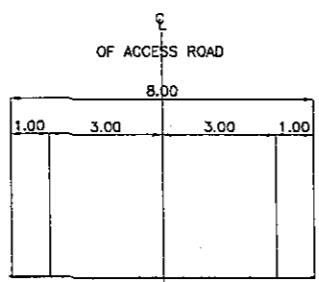
A-A' : ILOILO CIRCUMFERENTIAL ROAD NO. 1



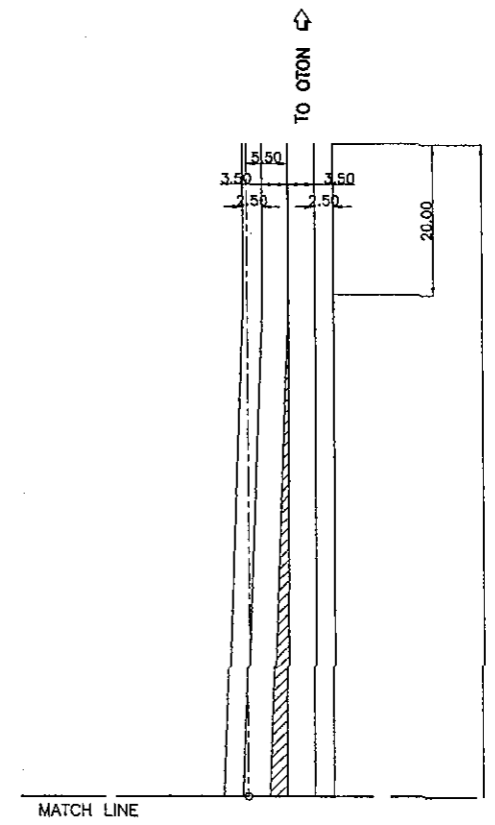
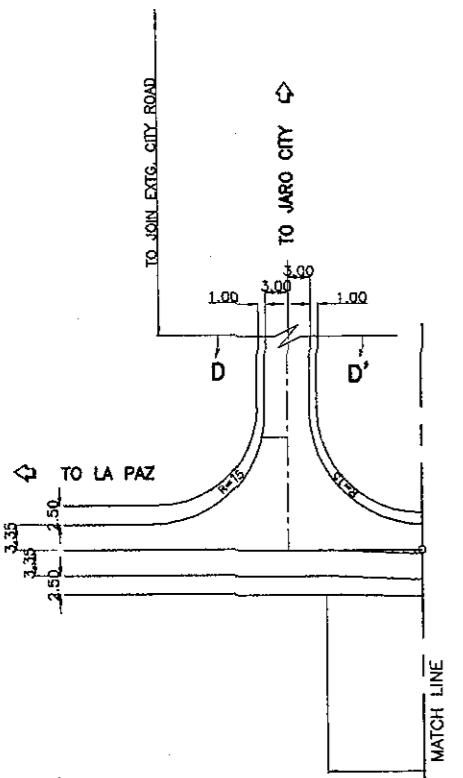
B-B' : ILOILO COASTAL ROAD



C-C' : ILOILO COASTAL ROAD



D-D' : ACCESS ROAD



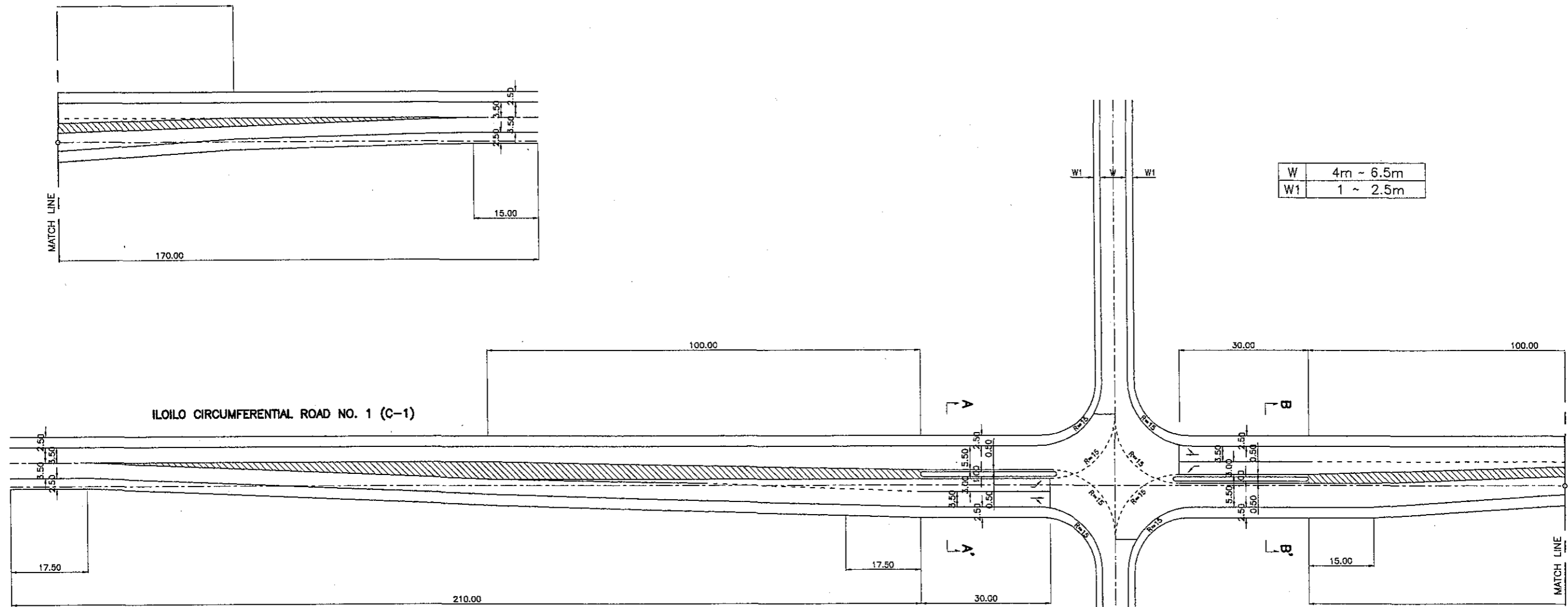
INTERSECTION WITH ILOILO COASTAL ROAD (TYPE F)
STA. 14+176.85, END. OF C-1

THE STUDY ON ROAD NETWORK IMPROVEMENT
FOR DEVELOPMENT OF REGIONAL GROWTH CENTERS

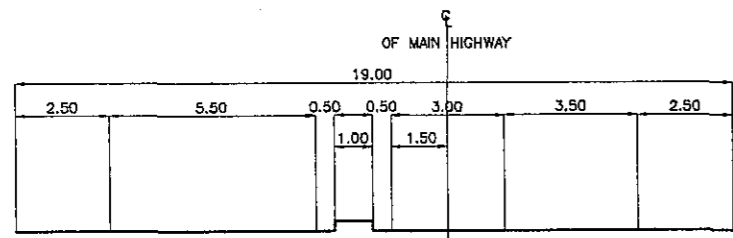
SCALE :
PLAN. 1:1000
SECTION. 1:200

ILOILO CIRCUMFERENTIAL ROAD NO. 1 (C-1)
INTRSECTION DETAILS WITH MINOR ROADS
(TYPE P)

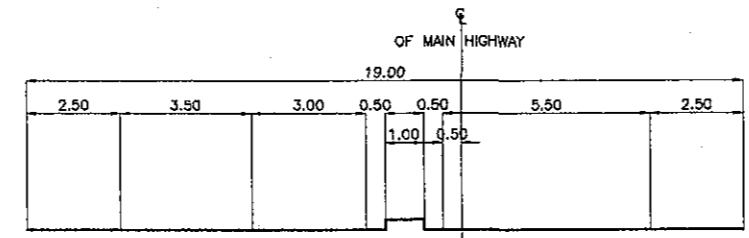
DRAWING NO.
R-26



W	4m ~ 6.5m
W1	1 ~ 2.5m



A-A' : MAIN HIGHWAY



B-B' : MAIN HIGHWAY

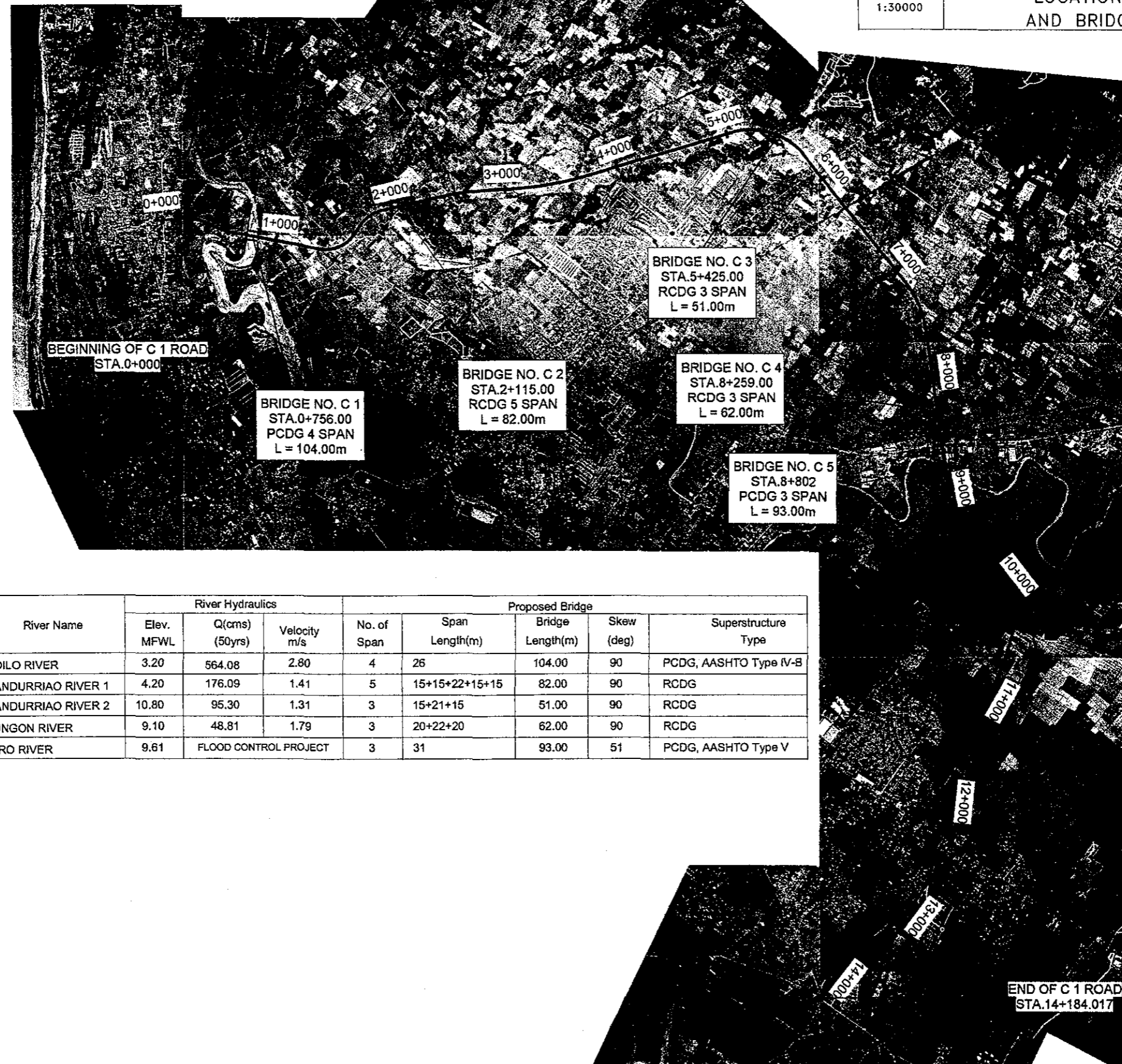
INTERSECTION DETAILS WITH MINOR ROADS (TYPE P)

THE STUDY ON ROAD NETWORK IMPROVEMENT
FOR DEVELOPMENT OF REGIONAL GROWTH CENTERS

SCALE :
1:30000

ILOILO CIRCUMFERENTIAL ROAD NO. 1
LOCATION PLAN
AND BRIDGE LIST

DRAWING NO.
B-1

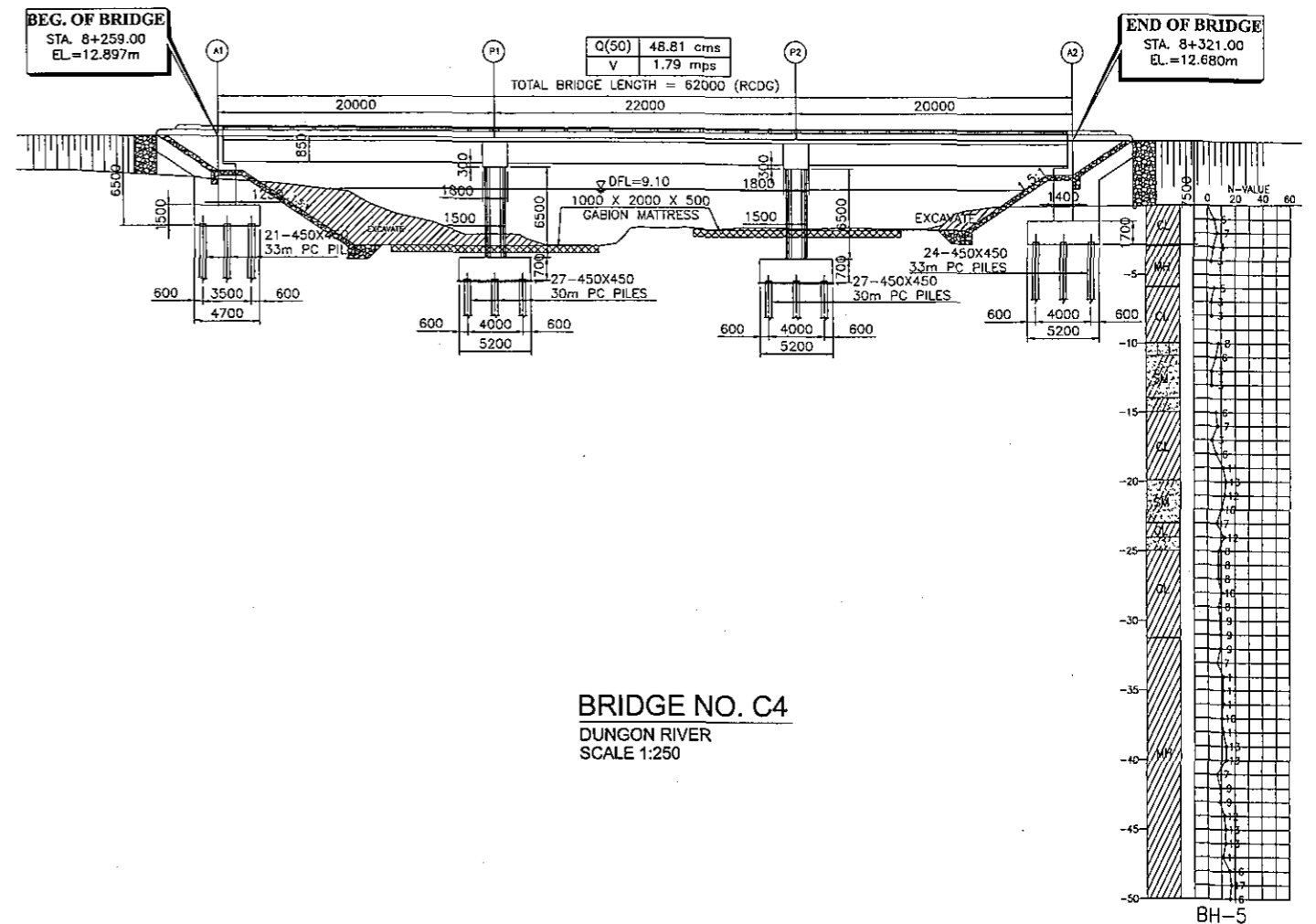
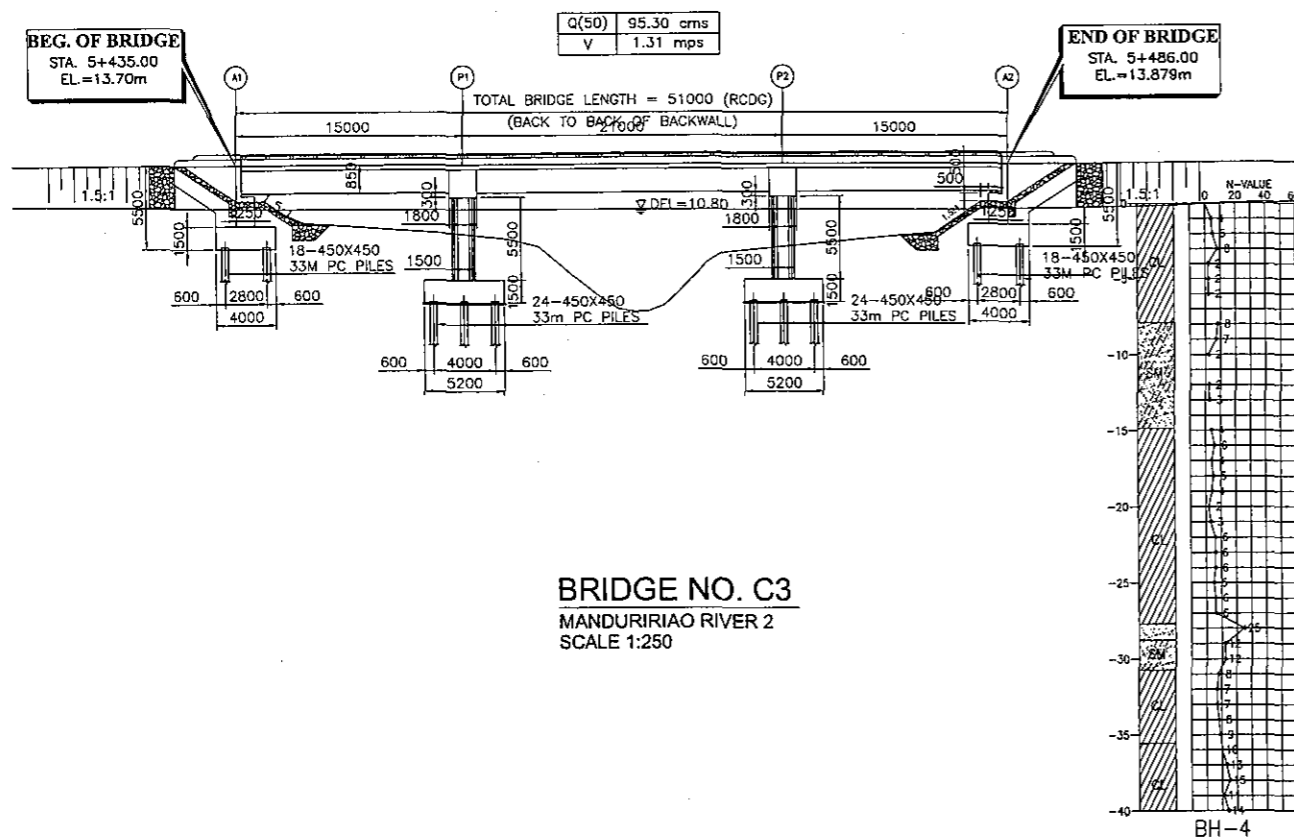
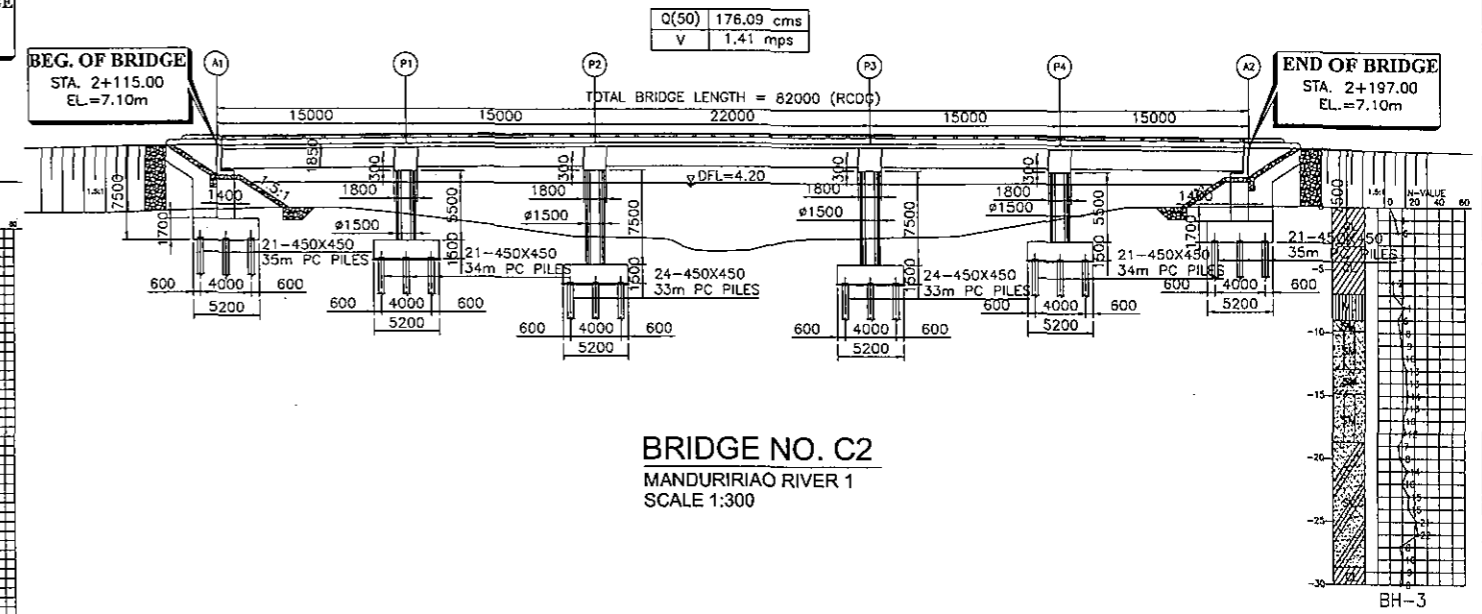
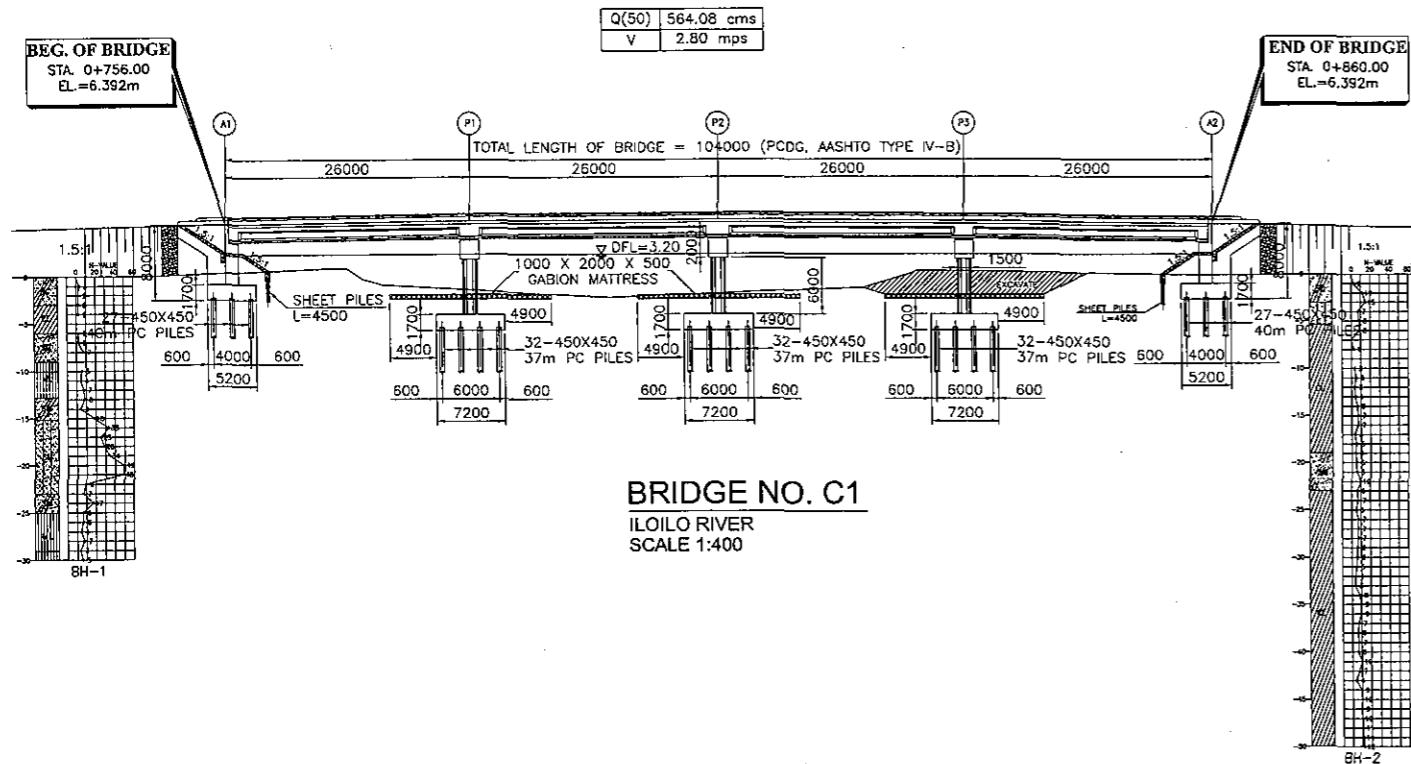


Bridge No.	Station		River Name	River Hydraulics			Proposed Bridge				
	Beg	End		Elev. MFWL	Q(cms) (50yrs)	Velocity m/s	No. of Span	Span Length(m)	Bridge Length(m)	Skew (deg)	Superstructure Type
C-1	Sta. 0+756	Sta. 0+860	ILOILO RIVER	3.20	564.08	2.80	4	26	104.00	90	PCDG, AASHTO Type IV-B
C-2	Sta. 2+115	Sta. 2+197	MANDURRIAO RIVER 1	4.20	176.09	1.41	5	15+15+22+15+15	82.00	90	RCDG
C-3	Sta. 5+435	Sta. 5+486	MANDURRIAO RIVER 2	10.80	95.30	1.31	3	15+21+15	51.00	90	RCDG
C-4	Sta. 8+259	Sta. 8+321	DUNGON RIVER	9.10	48.81	1.79	3	20+22+20	62.00	90	RCDG
C-5	Sta. 8+800	Sta. 8+893	JARO RIVER	9.61	FLOOD CONTROL PROJECT		3	31	93.00	51	PCDG, AASHTO Type V

SCALE :
AS SHOWN

ILOILO CIRCUMFERENTIAL ROAD NO. 1
BRIDGE ELEVATIONS, C1 TO C4

DRAWING NO.
E-2

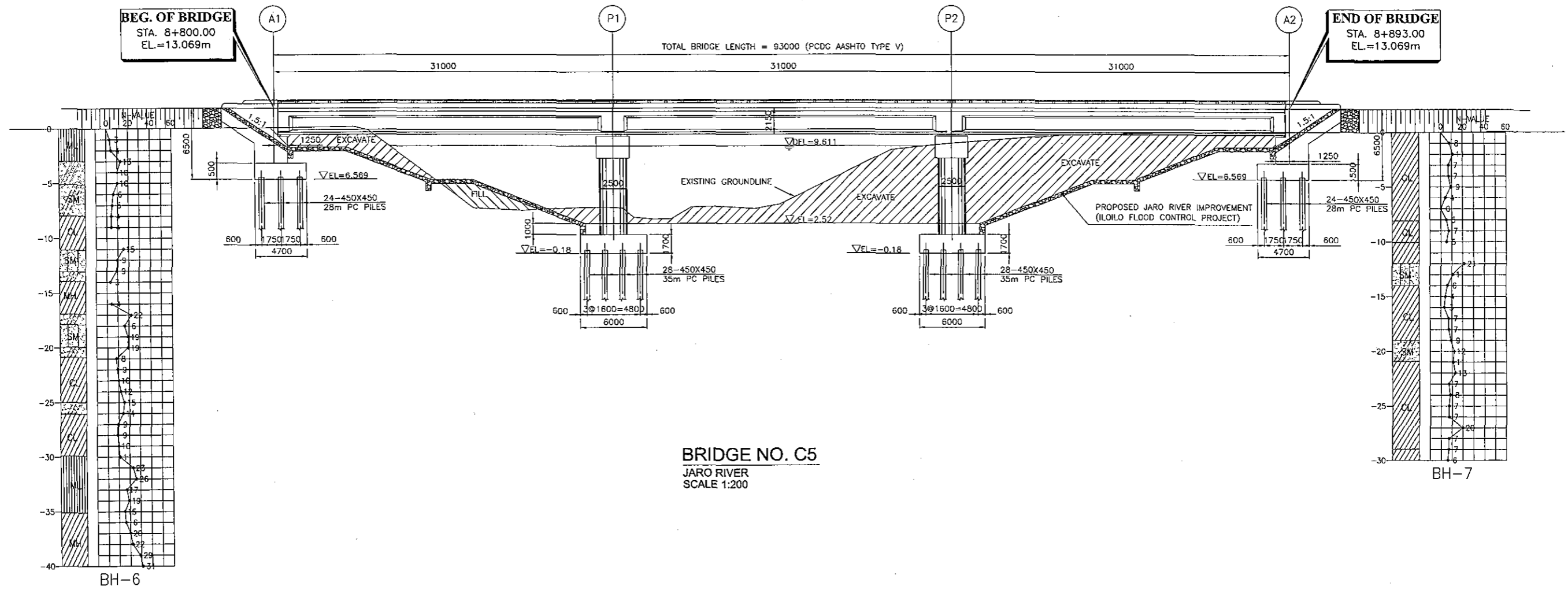


SCALE :
AS SHOWN

ILOILO CIRCUMFERENTIAL ROAD NO. 1
BRIDGE ELEVATION, C5

DRAWING NO.
B-3

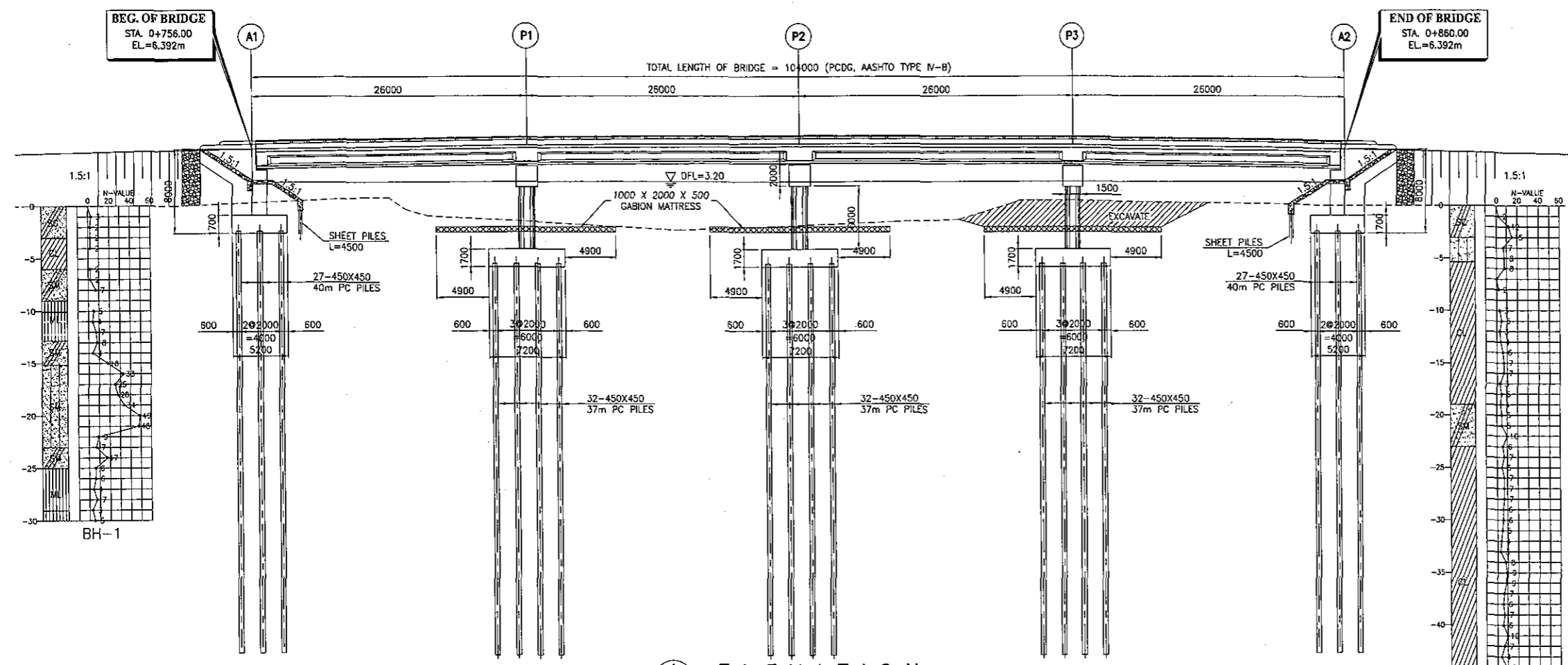
Q(50)	1400.00 cms
V	2.59 mps



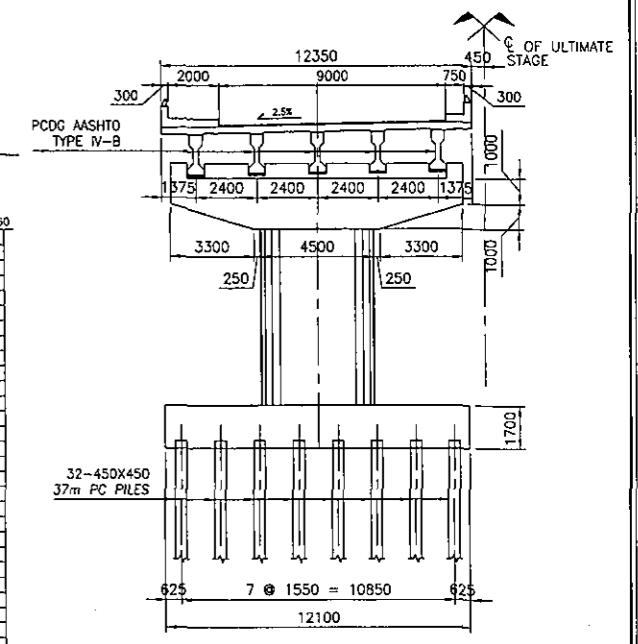
THE STUDY ON ROAD NETWORK IMPROVEMENT
FOR DEVELOPMENT OF REGIONAL GROWTH CENTERS

SCALE :	ILOILO CIRCUMFERENTIAL ROAD NO.1 BRIDGE NO. C1 (ILOILO RIVER) STA. 0+756.00	DRAWING NO.
AS SHOWN	GENERAL PLAN, ELEVATIONS AND SECTIONS	B-4

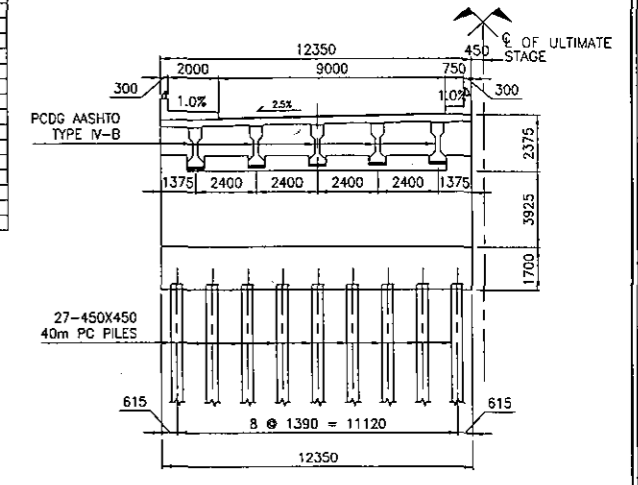
Q(50) 564.08 cms
V 2.80 mps



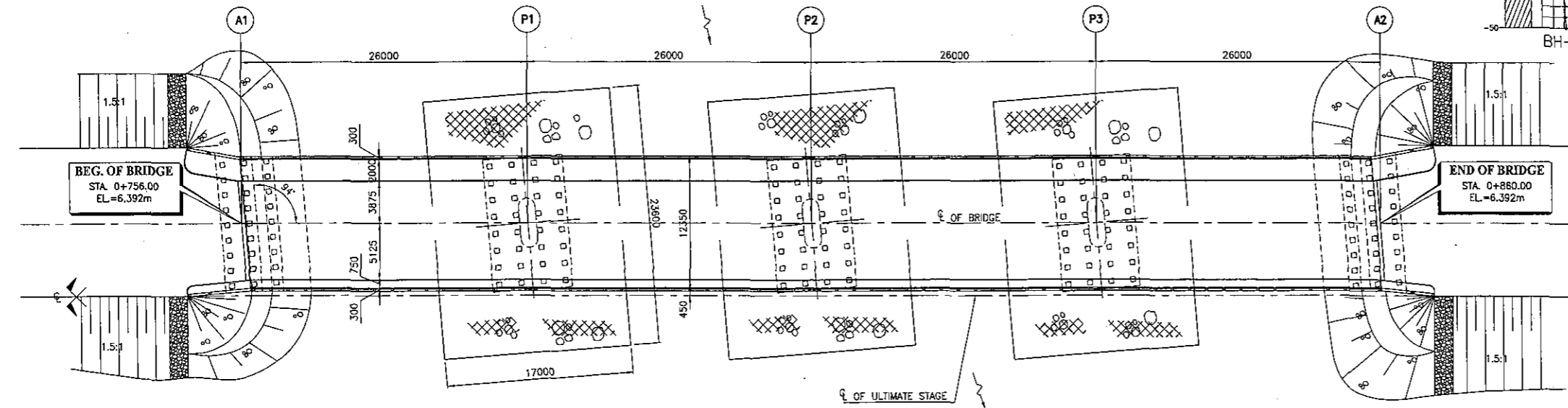
1 ELEVATION
SCALE 1:250



3 SECTION @ PIER
SCALE 1:150



4 SECTION @ ABUTMENT
SCALE 1:150



2 PLAN
SCALE 1:250

SUMMARY OF ESTIMATED QUANTITIES

ITEM No.	DESCRIPTION	UNIT	QUANTITY
103(2)b	BRIDGE EXCAVATION, COMMON, BELOW OWL	m ³	1,838.00
104(1)c	SELECTED BORROW FOR BACKFILLING	m ³	619.00
311(2)	PCC PAVEMENT (REINFORCED) FOR APPROACH SLAB, t = 300mm	m ²	90.00
400(4)	PRECAST CONCRETE PILES (450x450), FURNISHED and DRIVEN	m ²	5,521.00
400(15)	TEST PILES (450x450) FURNISHED and DRIVEN	m	201.00
400(19)	PILE SHOES for 450x450 PILES	ea	150.00
401	CONCRETE RAILINGS	m	208.00

404(2)	REINFORCING STEEL, GRADE 60 (fy = 415MPa)	kg	225,228.00
405(1)	STRUCTURAL CONCRETE CLASS "A1" FOR SUBSTRUCTURE (fc' = 24MPa)	m ³	784.00
405(2)	STRUCTURAL CONCRETE CLASS "A2" FOR SUPERSTRUCTURE (fc' = 24MPa)	m ³	412.00
405(6)	STRUCTURAL CONCRETE "LEAN CONCRETE" (fc' = 17MPa)	m ³	65.00
406(1)d	PRESTRESSED CONCRETE GIRDER, AASHTO TYPE IV-B, L = 26m	ea	20.00
407(1)b	ELASTOMERIC BEARING PAD, 550 x 350 x 60(DURO 60)	ea	10.00
407(2)a	EXPANSION JOINT, MULTIPLEX M80 (± 30mm MOVEMENT)	m	18.00
407(4)	METAL DRAIN (ø150mm G.I. DRAIN PIPE)	m	32.00
504	GROUTED RIPRAP SLOPE PROTECTION	m ³	10.00
510	RUBBLE CONCRETE SLOPE PROTECTION, t = 350mm	m ³	160.00

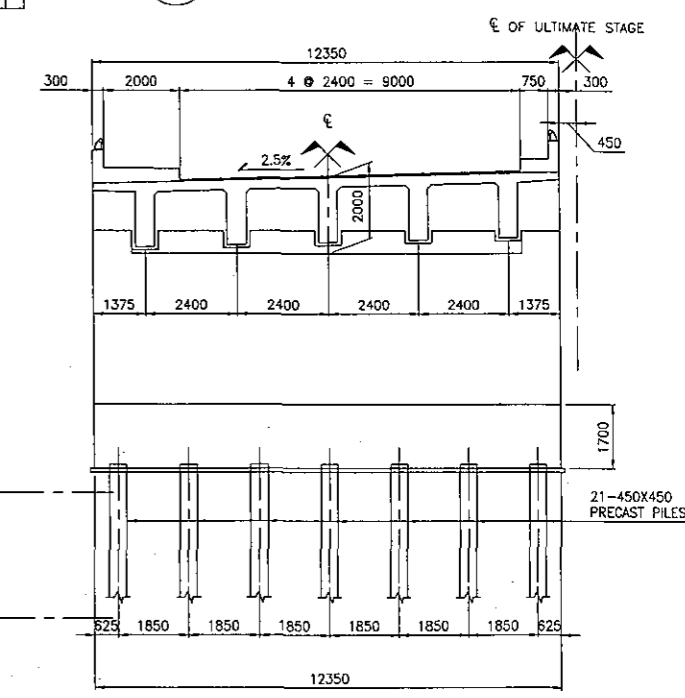
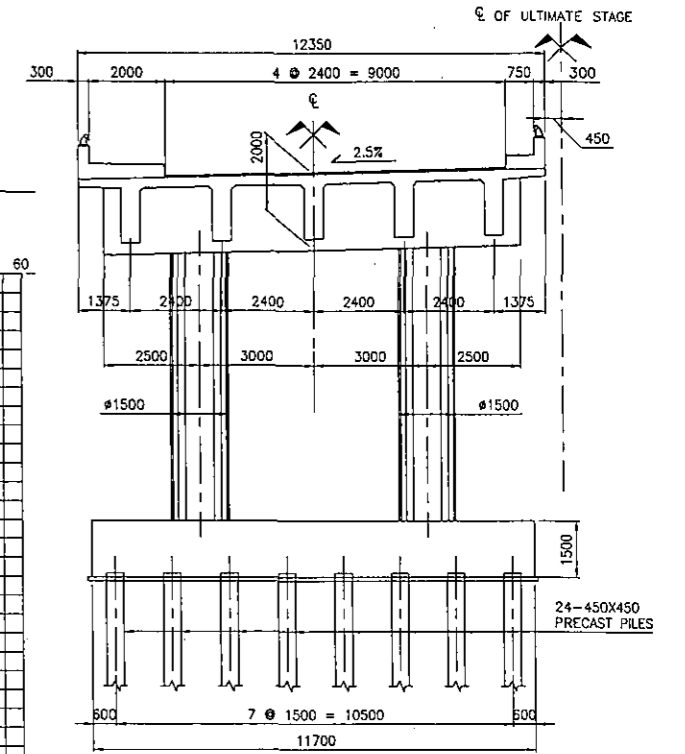
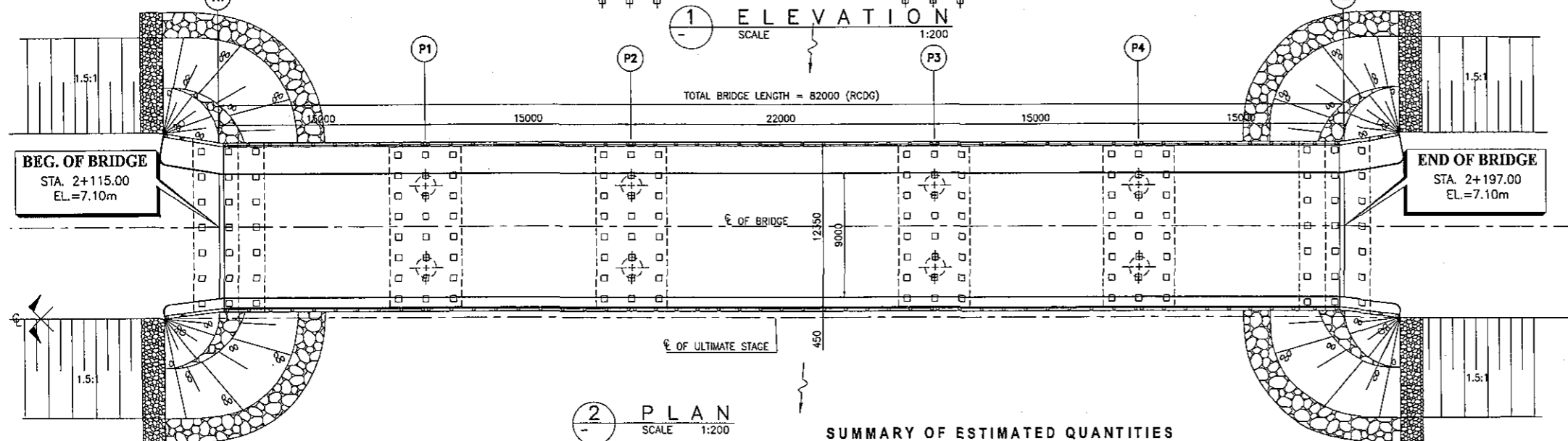
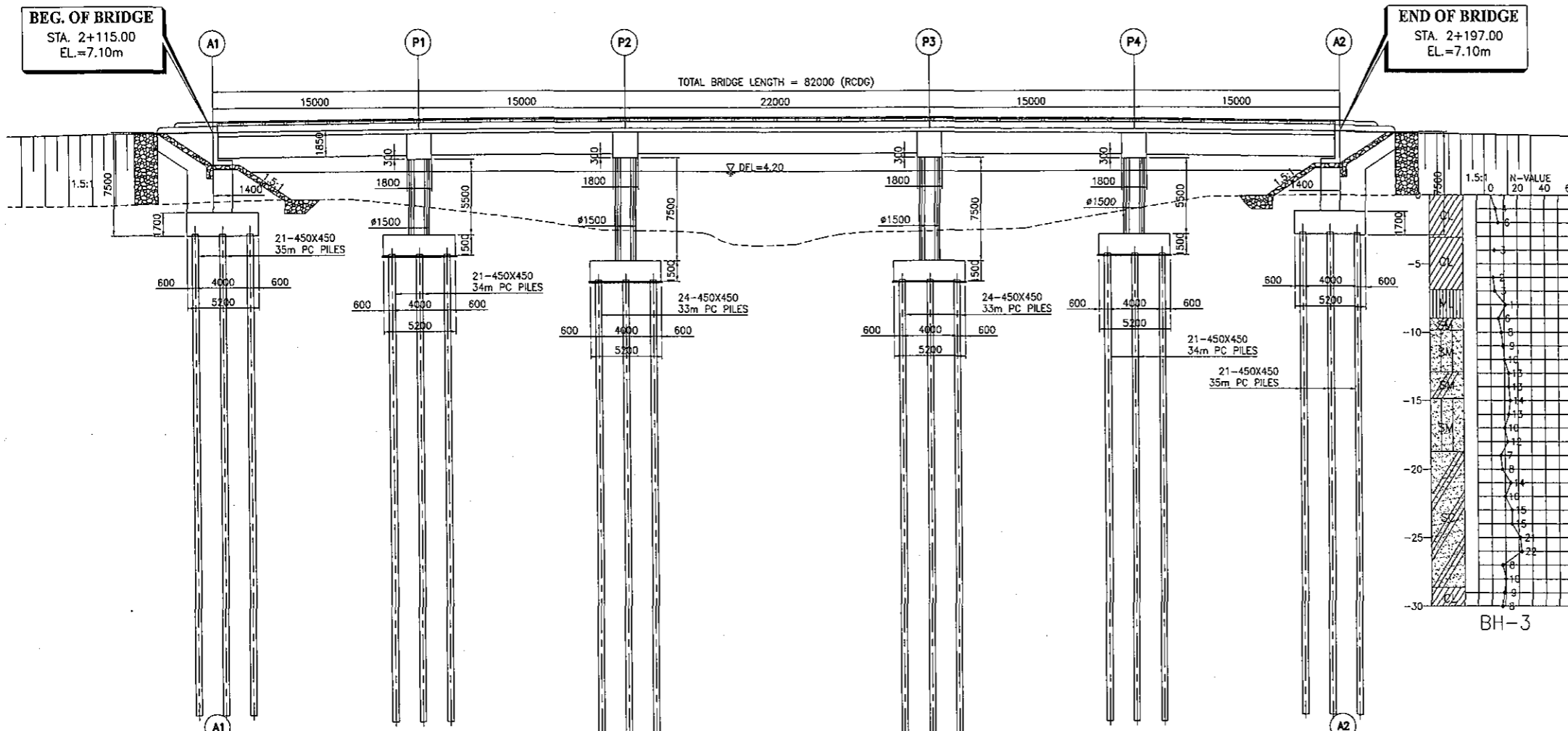
THE STUDY ON ROAD NETWORK IMPROVEMENT
FOR DEVELOPMENT OF REGIONAL GROWTH CENTERS

SCALE :
AS SHOWN

ILOILO CIRCUMFERENTIAL ROAD NO. 1
BRIDGE NO. C2 (MANDURRIAO RIVER 1)
STA. 2+115.00
GENERAL PLAN, ELEVATION AND SECTIONS

DRAWING NO.
B-5

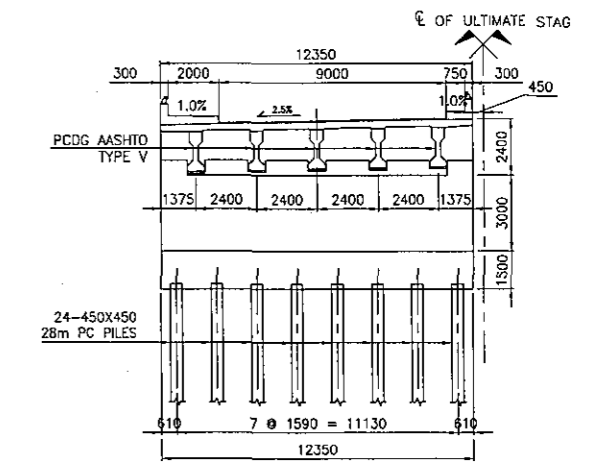
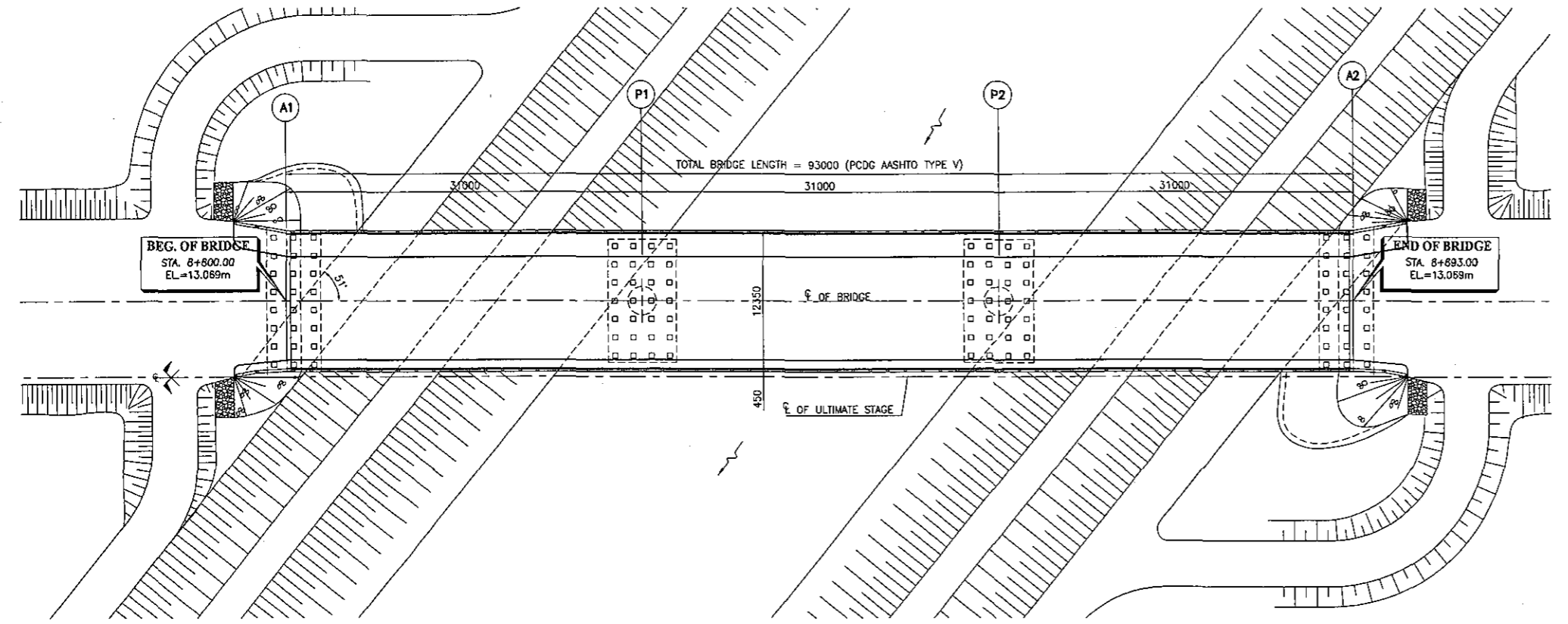
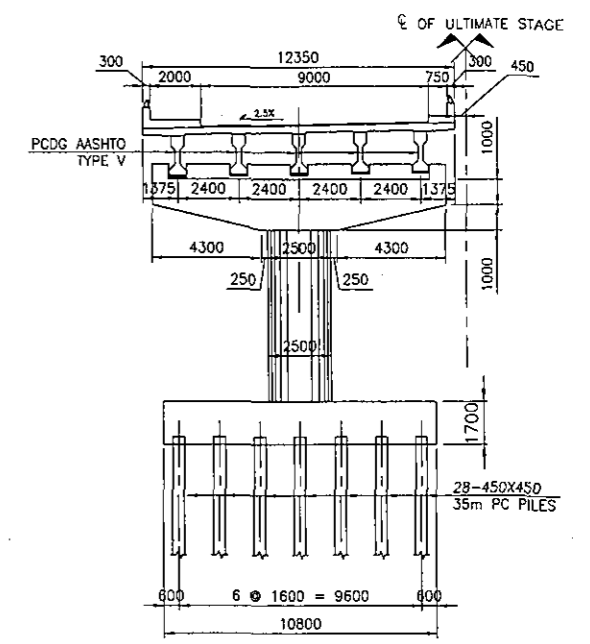
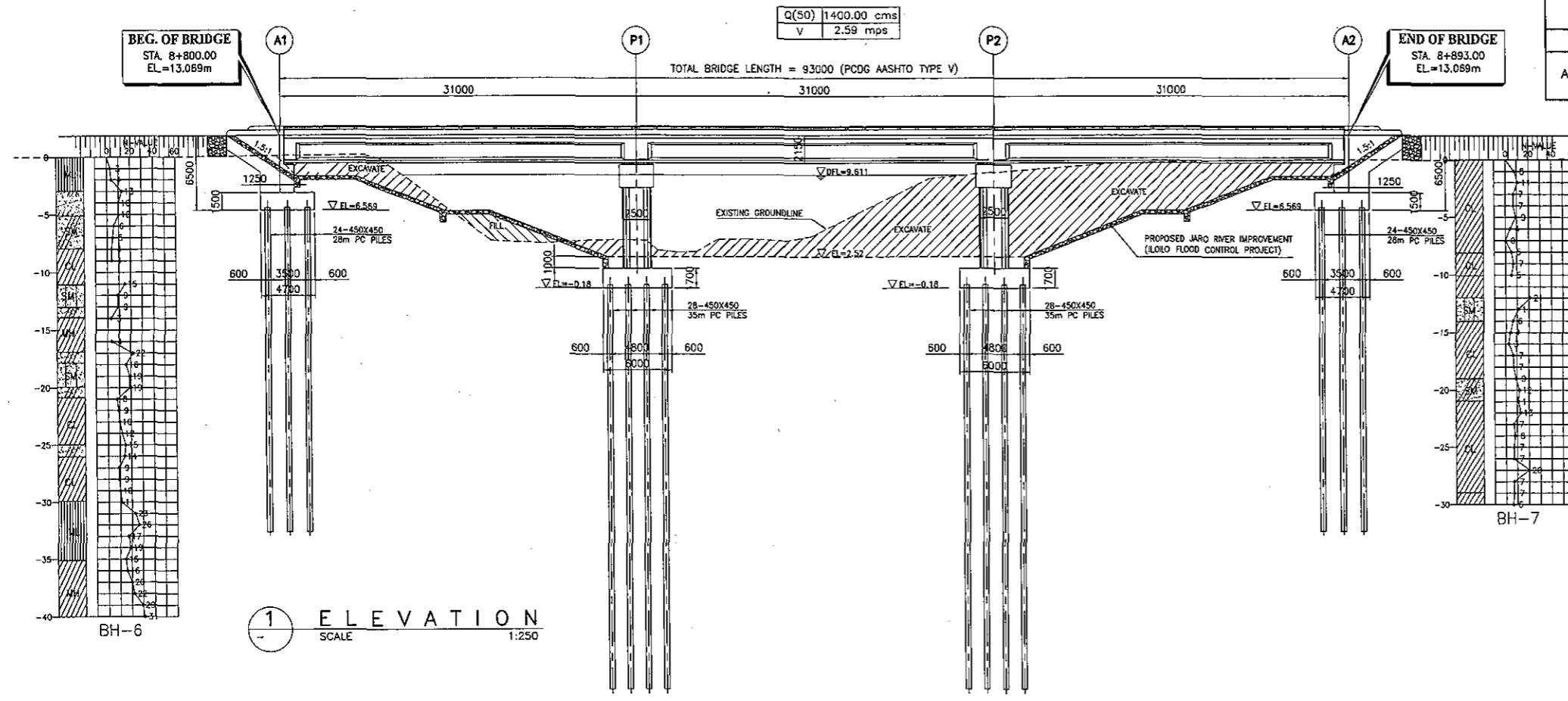
Q(50) 176.09 cms
V 1.41 mps



SUMMARY OF ESTIMATED QUANTITIES

ITEM No.	DESCRIPTION	UNIT	QUANTITY
103(2)	BRIDGE EXCAVATION, COMMON, ABOVE OWL	m ³	330.00
103(2)b	BRIDGE EXCAVATION, COMMON, BELOW OWL	m ³	1,120.00
104(1)c	SELECTED BORROW FOR BACKFILLING	m ³	300.00
311(2)	PCC PAVEMENT (REINFORCED) FOR APPROACH SLAB, t = 300mm	m ²	90.00
400(4)	PRECAST CONCRETE PILES (450x450), FURNISHED and DRIVEN	m ²	4,278.00
400(15)	TEST PILES (450x450) FURNISHED and DRIVEN	m	216.00
400(19)	PILE SHOES for 450x450 PILES	ea	132.00

401	CONCRETE RAILINGS	m	164.00
404(2)	REINFORCING STEEL, GRADE 60 (f _y = 415MPa)	kg	262,718.00
405(1)	STRUCTURAL CONCRETE CLASS "A1" FOR SUBSTRUCTURE (f _c ' = 24MPa)	m ³	730.00
405(2)	STRUCTURAL CONCRETE CLASS "A2" FOR SUPERSTRUCTURE (f _c ' = 24MPa)	m ³	618.00
405(8)	STRUCTURAL CONCRETE "LEAN CONCRETE" (f _c ' = 17MPa)	m ³	64.00
407(1)c	ELASTOMERIC BEARING PAD, 450 x 350 x 60 (DURO 60)	ea	10.00
407(2)a	EXPANSION JOINT MULTIPLEX M80 (±30mm MOVEMENT)	m	18.00
407(4)	METAL DRAIN (#150mm G.I. DRAIN PIPE)	m	24.00
507	STEEL SHEET PILE (85x400x8mm), FURNISHED AND DRIVEN	m	50.00
504	GROUTED RIPRAP SLOPE PROTECTION	m ³	11.00
510	RUBBLE CONCRETE SLOPE PROTECTION, t = 350mm	m ³	100.00



SUMMARY OF ESTIMATED QUANTITIES

ITEM No.	DESCRIPTION	UNIT	QUANTITY
103(2)	BRIDGE EXCAVATION, COMMON, ABOVE OWL	m ³	9,424.00
103(2)b	BRIDGE EXCAVATION, COMMON, BELOW OWL	m ³	1,310.60
104(1)c	SELECTED BORROW FOR BACKFILLING	m ³	575.00
311(2)	PCC PAVEMENT (REFINED) APPROACH SLAB (t=300mm)	m ²	90.00
400(4)	PRECAST CONCRETE PILES (450x450), FURNISHED and DRIVEN	m	3,178.00
400(15)	TEST PILES (450x450) FURNISHED and DRIVEN	m	134.00
400(19)	PILE SHOES for 450x450 PILES	ea	132.00
401	CONCRETE RAILINGS	m	186.00

404(2)	REINFORCING STEEL, GRADE 60 (fy = 415MPa)	kg	174,260.00
405(1)	STRUCTURAL CONCRETE CLASS "A1" FOR SUBSTRUCTURE (fc' = 24MPa)	m ³	532.00
405(2)	STRUCTURAL CONCRETE CLASS "A2" FOR SUPERSTRUCTURE (fc' = 24MPa)	m ³	351.00
405(6)	STRUCTURAL CONCRETE "LEAN CONCRETE" (fc' = 17MPa)	m ³	47.00
406(1)h	PRESTRESSED CONCRETE GIRDER, AASHTO TYPE V, L = 31m	ea	15.00
407(1)a	ELASTOMERIC BEARING PAD, 450 x 350 x 60 (DURO 60)	ea	10.00
407(2)b	EXPANSION JOINT, MULTIPLEX M100 (± 50mm MOVEMENT)	m	18.00
407(4)	METAL DRAIN (Ø150mm G.I. DRAIN PIPE)	m	24.00
504	GROUTED RIPRAP SLOPE PROTECTION	m ³	15.00
510	RUBBLE CONCRETE SLOPE PROTECTION, t = 350mm	m ³	170.00