REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS & HIGHWAYS

Feasibility Study on The Rural Road Network Development Project

FINAL REPORT (Volume 22)

DRAWINGS FOR ROAD PROJECTS
IN
THE PROVINCE OF SAMAR

OCTOBER, 1990

JAPAN INTERNATIONAL COOPERATION AGENCY



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THE FEASIBILITY	STUDY	ON TI	HE RURAL	ROAD	NETWORK	DEVELOPMENT	PROJECT
	IN	THE I	REPUBLIC O	OF THE	PHILIPPIN	TES .	

CONTENTS

Drawing No.

Scale

CONTENTS

Drawing No.

Title

LOCATION MAP

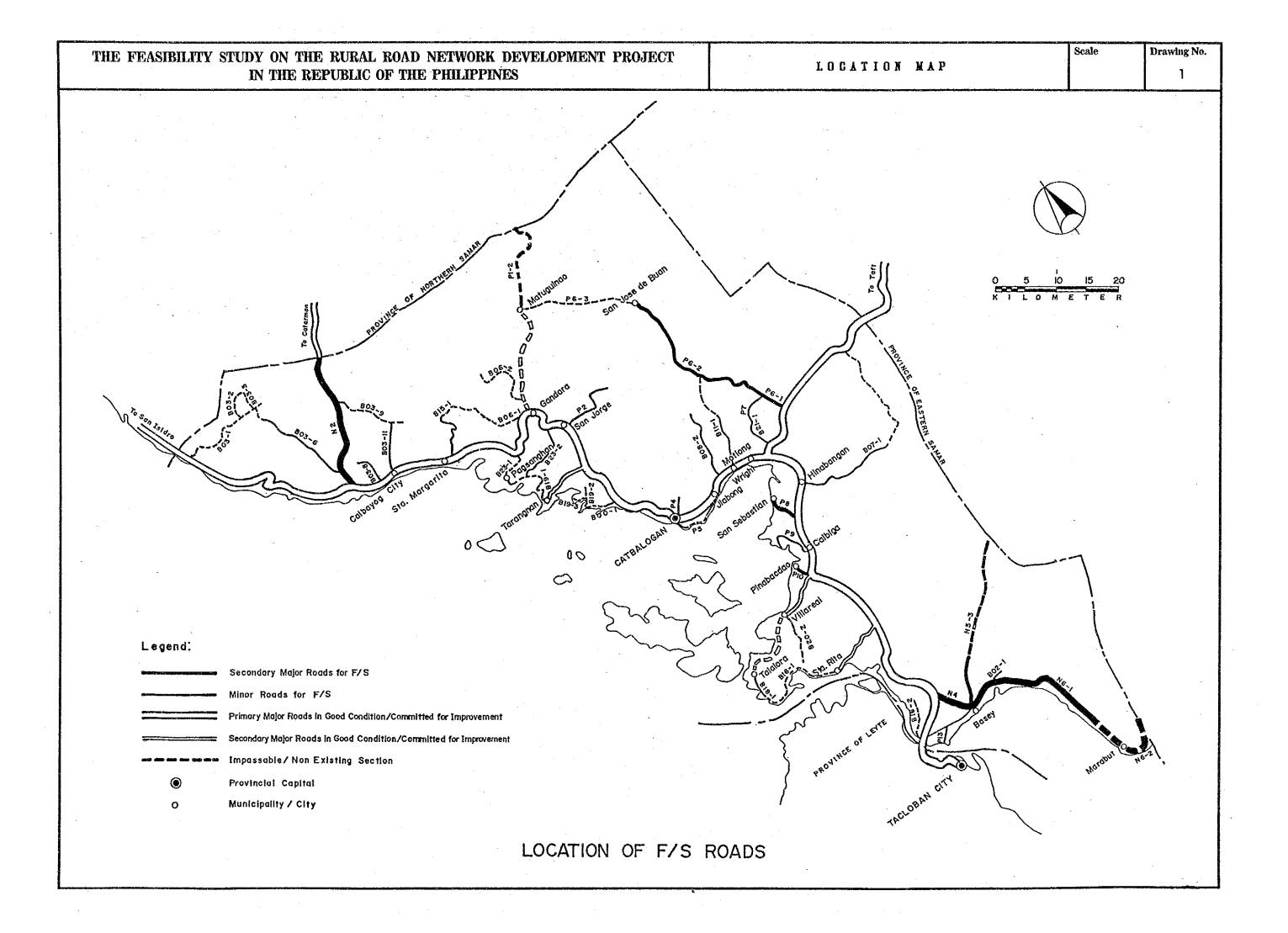
2 to 9 TYPICAL ROAD SECTIONS

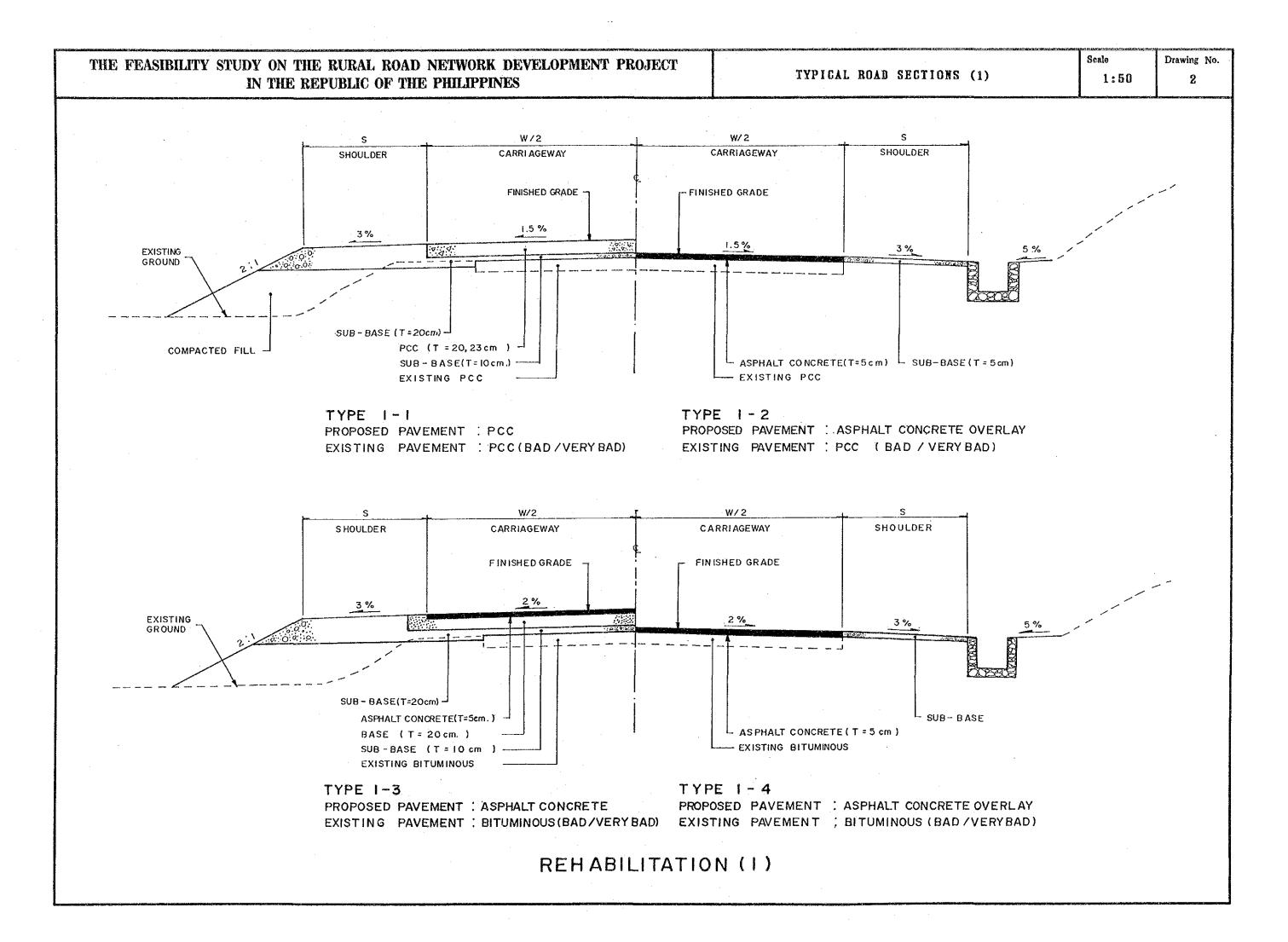
10 to 53

PRESENT CONDITION AND PROPOSED IMPROVEMENT

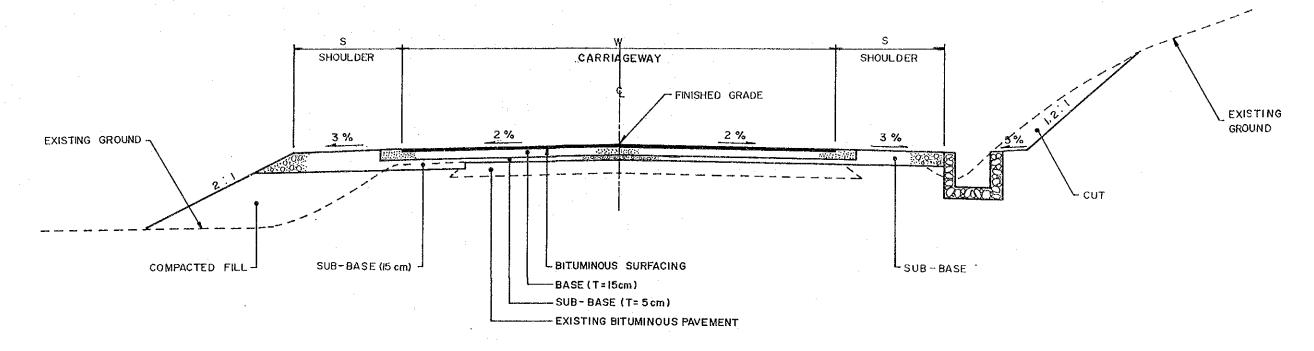
LIST OF ROADS

Road Class	Road No.	Drawing No.	Road Class	Road No.	Drawing No.	Road Class	Road No.	Drawing No.
Primary	N 2	10 & 11	·	P6 - 3	28		B 06- 2	40
Major Road	N 4	12		P7	29		B 07-1	41 8 42
	N6 - 1	13 & 14		Р9	30		B 08- 2	43
	N6 - 2	15		P13	31]	B11 - 1	44
·	N5 - 3	16 8 17		B 00- 1	32	Minor Road	B15 - 1	45 8 46
	P1 - 2	18		B 02 - 1	32		B 16 - 1	47
Secondary	P6 - 1	19	Minor Road	B 03 - 1	33		B16 - 2	48
Major Road	P6 - 2	20 8 21	Millot Rodd	B 03 - 2	34] Millor Roda	B18 - 1	49
	P8	22		B 03 - 3	34		B19 - 1	48
	P 10	23		B 03 - 6	35		819 - 2	50
	B 23- 1	24		B 03 - 8	36		B 19 - 3	50
	P2	25		B 03 - 9	37		B 20- 2	51
Minor Road	24	26		B 03 - 11	38		B21- 1	52
	P5	27		B 06 - 1	39		B 23 - 2	53.





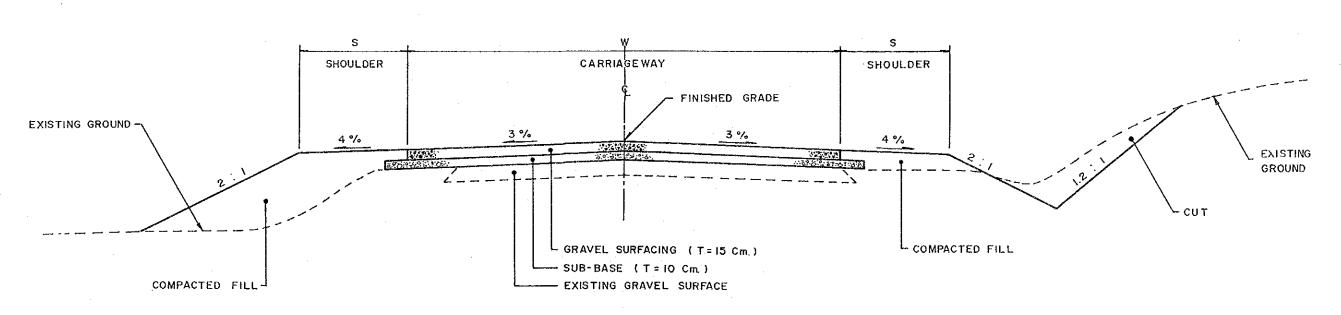
Scale 1:50 Drawing No.



TYPE 1-5

PROPOSED PAVEMENT : BITUMINOUS MACADAM/DOUBLE BITUMINOUS SURFACE TREATMENT

EXISTING PAVEMENT : BITUMINOUS (BAD/VERY BAD)



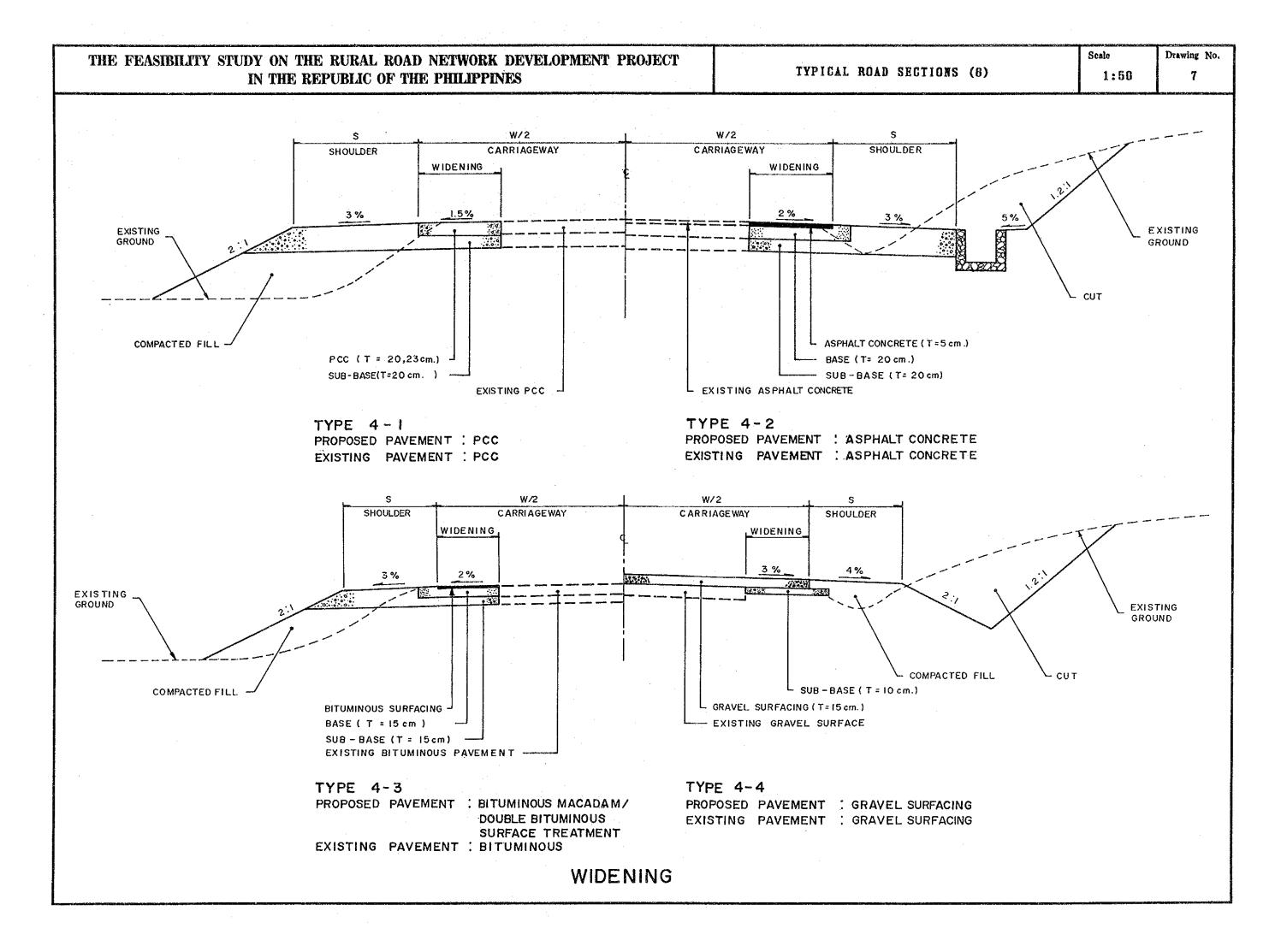
TYPE 1-6

PROPOSED PAVEMENT : GRAVEL SURFACING

EXISTING PAVEMENT : GRAVEL SURFACING (BAD./VERY BAD)

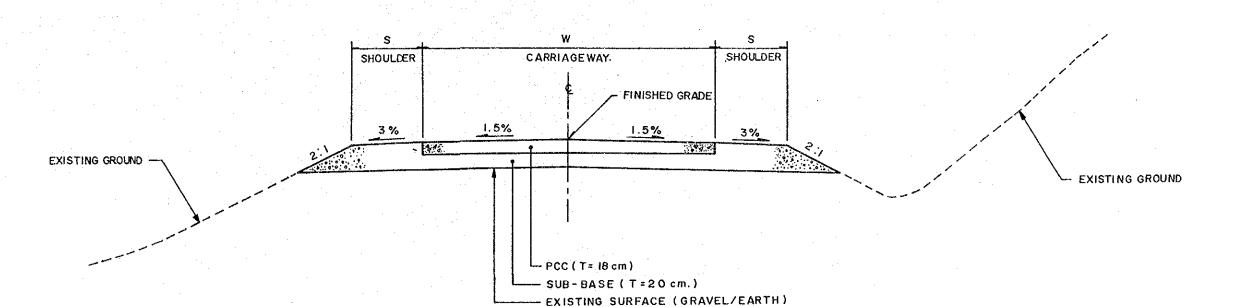
REHABILITATION (2)

Drawing No.

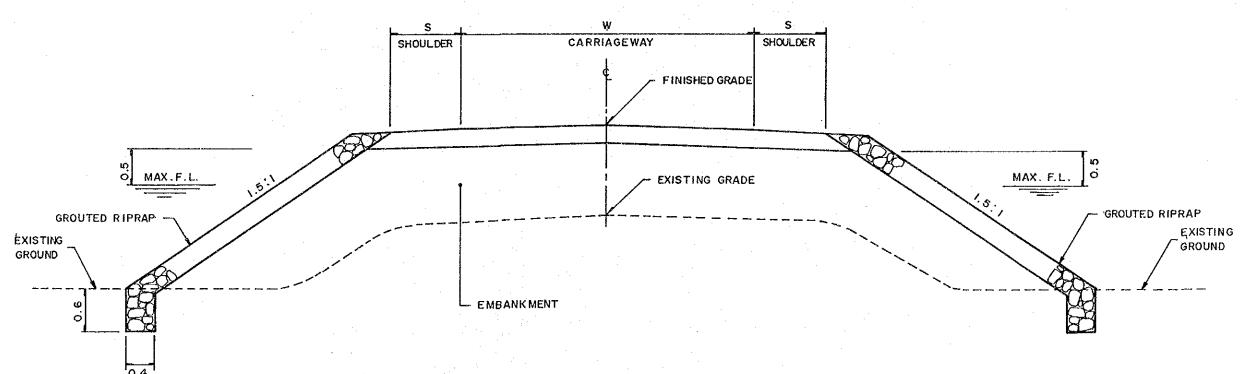


Seale 1:50

Drawing No.



TYPE 6
PCC PAVEMENT FOR STEEP GRADIENT SECTIONS

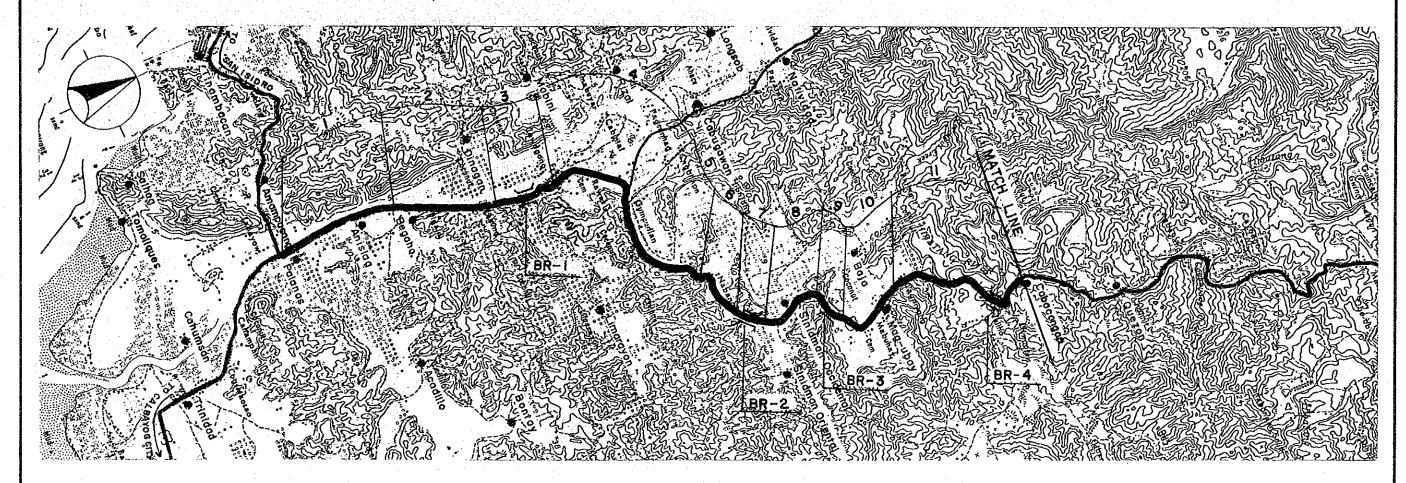


TYPE 7
GRADE RAISING SECTIONS IN FLOOD AREA

Scale 1:50,000 Drawing No. 10

Road No: N2

Road Name: LONOY JCT. - CATARMAN ROAD Location: CALBAYOG CITY, SAMAR



Road Classification	Drimer	Majon (N	ational D		· · · · · · · · · · · · · · · · · · ·		MAN 24				<u></u>
Total Length	25.2 km		ational Ro	ad)							
Sub-section No.	1	2	3	4	5	6	7	8	9	10	1
Length (km)	1.7	1.4	.8	1.5	2.0	8	.5	. 9	.5	.6	2.0
Terrain	Flat	Flat	Flat	Flat	Mt'nous	Flat	Flat			Flat	Fla
Existing Road Surface	6.0-PCC	6.0-PCC	6.0-PCC	6.0-PCC	6.0-PCC	6.0-PCC	6.0-GRV	6.0-PCC	6.0-GRV	6.0-PCC	6.0-GRY
	(Fair)	(Fair)	(Fair)	(Fair)	(Fair)	(Fair)	(Bad)	(Fair)	(Bad)	(Fair)	(Bad)
Proposed Improvement			•		•						
Improvement Type		-		· -			Impr1	Rehabil.	Impr -1	Rehabil.	Impr
Surface Type	-			-	-	-	PCC	PCC	PCC	PCC	* BMI
Carriageway Width(m)	-	_	•-		-		6.0	6.0	6.0	6.0	6.0
Shoulder Width (m)	_	-	••	-	-		2.5	2.5	2.5	2.5	2.0
Ref. Typical Section	→	-	-	₹.	-		TYPE 2-2	TYPE 1-1	TYPE 2-2	TYPE 1-1.	TYPE 2-4
Special Treatment							.*				
Flood Section Length	-	- ·	~ '	1 to 14 (14)	-	· -	500		500	600	- 800
Height		_	-	-		-	3.0	2.5	2.0	2.5	1.0
Slope Protection											
(Embank't Slop)							· -		100		-
Bridge No.	BR-1	BR-2	BR-3	BR-4							
Existing Type	Concrete	Concrete	Concrete	Concrete		*					
Length (m)	36	20	30	46							
Proposed Type	-		_	·							
Length (m)											
No. of Spans	· -	**	· - .	-	4						
											ALL DESCRIPTION OF THE PARTY OF

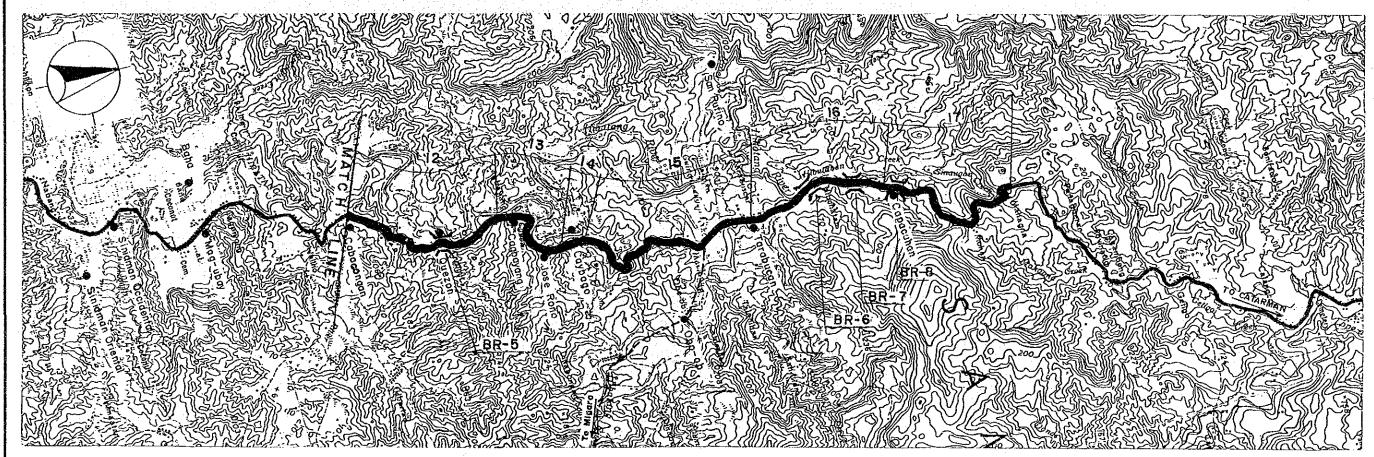
^{*} DBST can be applied instead depending on conditions of subgrade, axle load, drainage, etc.

Drawing No. 1:50,000

11

Road No: N2

Road Name: LONOY JCT. - CATARMAN ROAD Location: CALBAYOG CITY, SAMAR



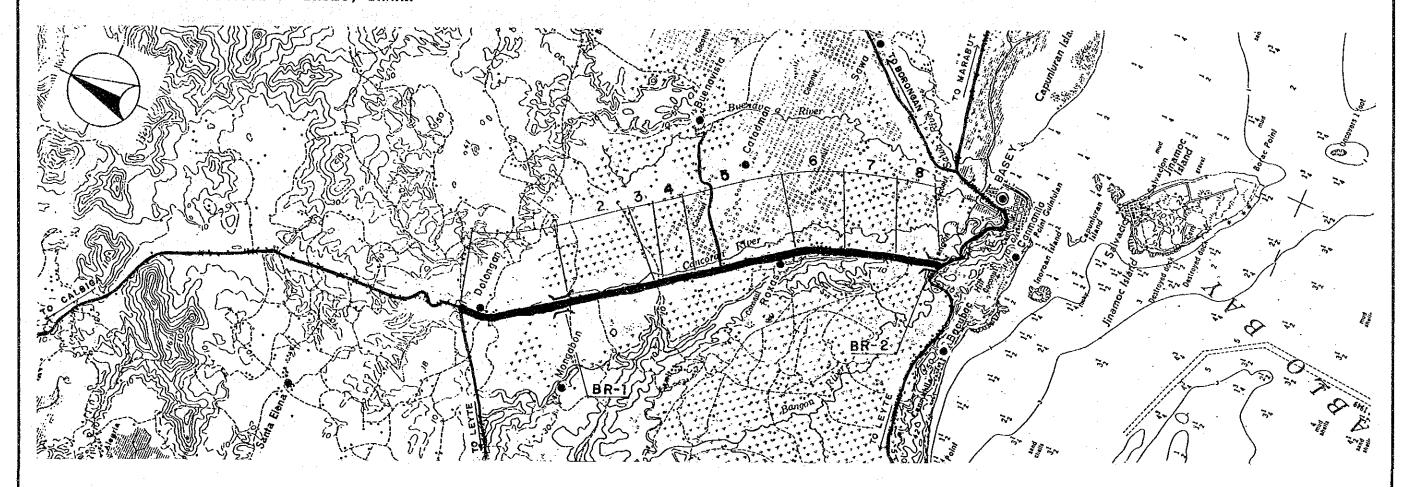
Road Classification Total Length						
Sub-section No.	12	13	14	15	16	17
Length (km) Terrain Existing Road Surface Proposed Improvement Improvement Type Surface Type Carriageway Width (m) Shoulder Width (m) Ref. Typical Section Special Treatment Flood Section Length Height Slope Protection (Embank't Slop)	6.0-GRV (Bad) Impr1 * BMP 6.0 1.0 TYPE 2-4	Rolling 6.0-GRV (Bad) Impr1 * BMP 6.0 1.5	Flat 6.0-GRV (Bad) Impr1 * BMP 6.0 2.0	(Bad) Impr1 * BMP 6.0 1.0	Flat 6.0-GRV (V.Bad) Impr1 * BMP 6.0 2.0	5.5-GRV (Bad) Impr1 * BMP 6.0 1.0
Bridge No.	BR-5	BR-6	BR-7	BR-8		
Existing Type Length (m) Proposed Type Length (m) No. of Spans	Timber 7 2cell-BC 7 2	40		Concrete 15		-

^{*} DBST can be applied instead depending on conditions of subgrade, axle load, drainage, etc.

Scale 1:50,000 Drawing No. 12

Road No: N4

Road Name: DOLONGAN - BASEY ROAD Location: BASEY, SAMAR



Road Classification Total Length	Primary 6.8 km	Major (N	ational R	oad)		·		
Sub-section No.	1	2	3	4	5	6	7	8
Length (km) Terrain Existing Road Surface Proposed Improvement Improvement Type Surface Type Carriageway Width (m) Shoulder Width (m) Ref. Typical Section	2.0	Flat 4.0-GRV (Bad) Impr1 * BMP 6.0 2.0	Flat 4.0-GRV (Bad) Impr1 * BMP 6.0 2.0	Impr1 * BMP 6.0 2.0	Flat 4.0-GRV (Bad) Impr1 * BMP 6.0 2.0	Flat 4.0-GRV (Bad) Impr1 * BMP 6.0 2.0	Flat 4.0-GRV (Bad) Impr1 * BMP 6.0	4.0-GRV (Bad) Impr1 * BMP 6.0 2.0
Bridge No.	BR-1	BR-2						
Existing Type Length (m) Proposed Type Length (m) No. of Spans	Timber 6 2cell-BC 6 2	Timber 24 2Lane-Br 24		·		,		

^{*} DBST can be applied instead depending on conditions of subgrade, axle load, drainage, etc.

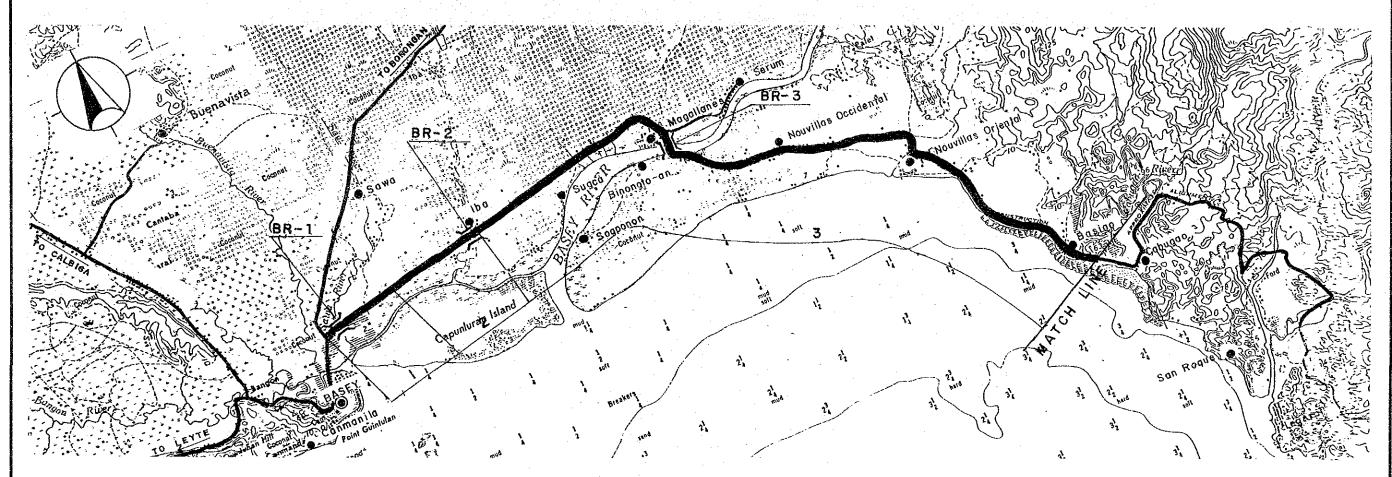
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Drawing No.

13

Road No: N6-1

Road Name: BASEY - MARABUT ROAD Location: BASEY & MARABUT, SAMAR



Road Classification Total Length	Primary Major (National Road) 37.1 km
Sub-section No.	1 2 3
Length (km) Terrain Existing Road Surface Proposed Improvement Improvement Type Surface Type Carriageway Width(m) Shoulder Width (m)	1.2 1.3 9.6 Flat Flat Flat 5.5-GRV 5.5-GRV 3.2-GRV (Bad) (Bad) (V.Bad) Impr1 Impr1 Impr1 * BMP * BMP * BMP 6.0 6.0 6.0 2.0 2.0 2.0
Ref. Typical Section Bridge No.	
Existing Type Length (m) Proposed Type Length (m) No. of Spans	BR-1 BR-2 BR-3 Bailey Concrete Ford-Cr. 16 23 - 2Lane-Br - 2Lane-Br 16 - 146

^{*} DBST can be applied instead depending on conditions of subgrade, axle load, drainage, etc.

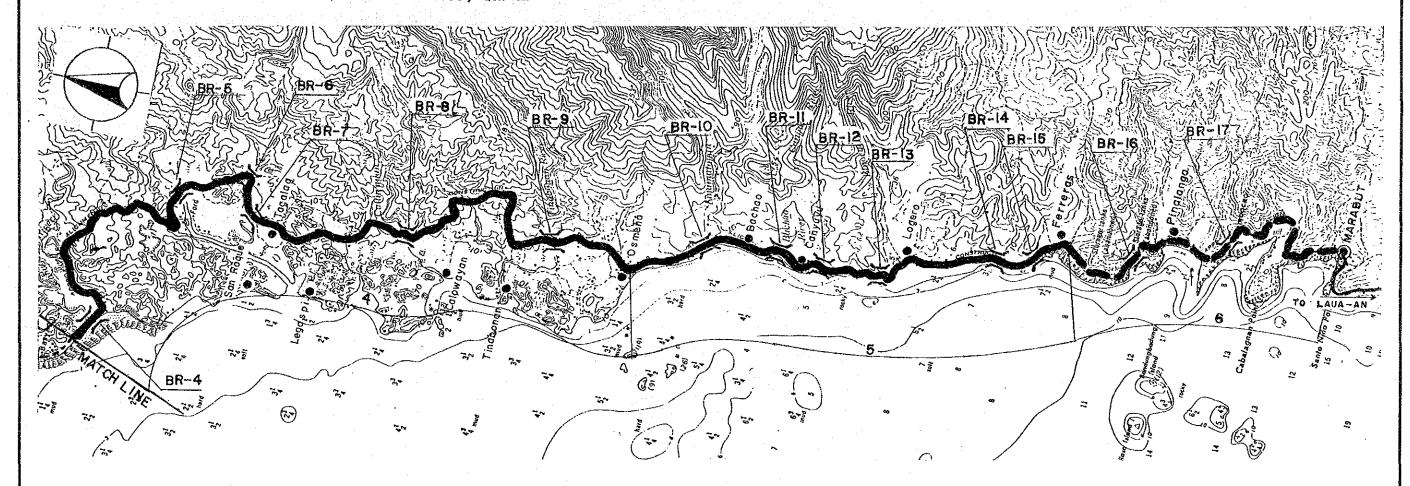
Drawing No.

14

1:50,000

Road No: N6-1

Road Name: BASEY - MARABUT ROAD Location: BASEY & MARABUT, SAMAR



Road Classification Total Length														
Sub-section No.	4	5	6	~~~~	The first day was don't ble for the									
Length (km) Terrain Existing Road Surface Proposed Improvement Improvement Type Surface Type Carriageway Width(m) Shoulder Width (m) Ref. Typical Section	1.5	Rolling 4.5-GRV (Fair) Impr2 * BMP 6.0 1.5	Rolling Non Ex- isting New Con. * BMP 6.0 1.5											
Bridge No.	BR-4	BR-5	BR-6	BR-7	BR-8	BR-9	BR-10	BR-11	BR-12	BR-13	BR-14	BR-15	BR-16	BR-1
Existing Type Length (m) Proposed Type Length (m) No. of Spans	Bailey 49 2Lane-Br 49 2	140	Ford-Cr. 2Lane-Br 48 2	2Lane-Br		-	42	Timber 30 2Lane-Br 30 2	30	60 2Lane-Br	18	30	Ford-Cr. 2Lane-Br 30	2Lane-Br

^{*} DBST can be applied instead depending on conditions of subgrade, axle load, drainage, etc.

PRESENT CONDITION AND PROPOSED IMPROVEMENT

1:50,000

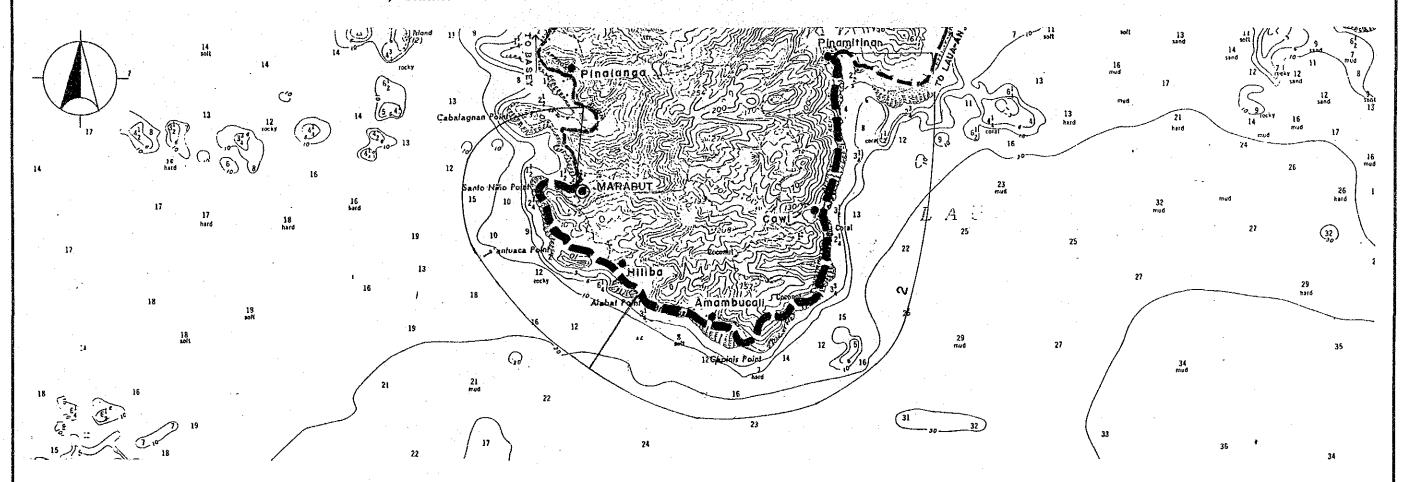
Scale

15

Drawing No.

Road No: N6-2

Road Name: MARABUT - E.S. BOUNDARY ROAD Location: MARABUT, SAMAR



Road Classification Total Length	Primary Major Road (National Road) 13.3 km
Sub-section No.	1 2
Length (km) Terrain Existing Road Surface Proposed Improvement	4.0 9.3 Rolling Mt'nous Non Ex- Non Ex- isting isting
Improvement Type Surface Type Carriageway Width(m) Shoulder Width (m) Ref. Typical Section	

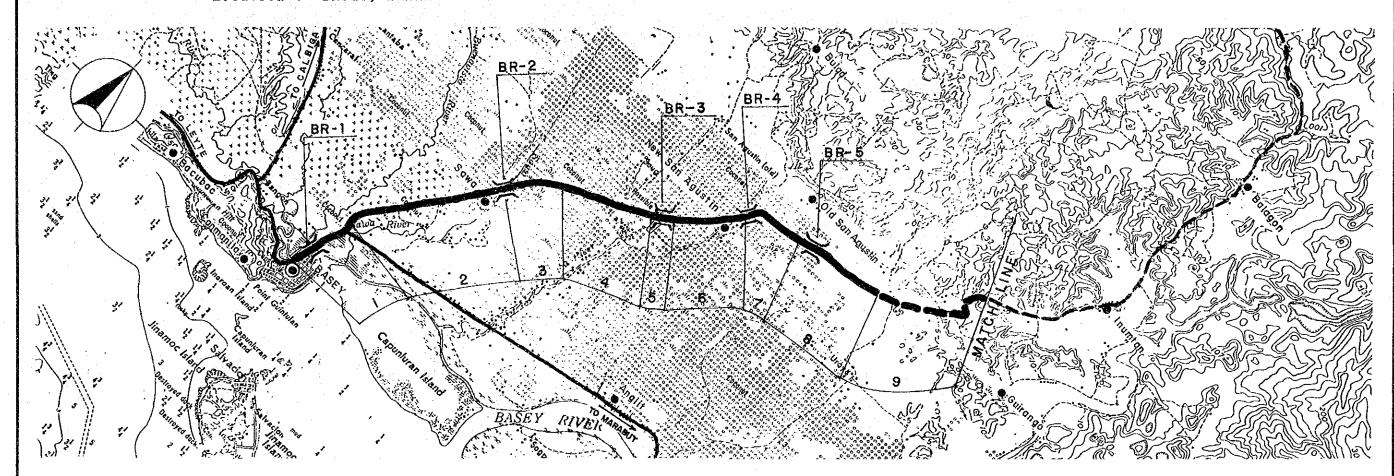
^{*} DBST can be applied instead depending on conditions of subgrade, axle load, drainage, etc.

Drawing No. 16

1:50,000

Road No: N5-3

Road Name: SAN JUANICO - BASEY - E.S. BOUNDARY ROAD Location: BASEY, SAMAR



Road Classification Total Length	Seconda 30.2 km		(National	Road)				p.y. and two cop case was were set don	
Sub-section No.	1	2	3	4	5	6	7	8	9
Length (km) Terrain Existing Road Surface Proposed Improvement Improvement Type Surface Type Carriageway Width(m) Shoulder Width (m) Ref. Typical Section	Flat 6.0-GRV (Bad) Rehabil. Gravel 6.0	Rehabil. Gravel 6.0 1.0	Flat 6.0-GRV (Bad) Rehabil. Gravel 6.0 1.0	Flat 6.0-GRV (Bad) Rehabil. Gravel 6.0 1.0	Flat 6.0-GRV (Bad) Rehabil. Gravel 6.0 1.0	Flat 6.0-GRV (Bad) Rehabil. Gravel 6.0 1.0	Flat 6.0-GRV (Bad) Rehabil. Gravel 6.0 1.0	Flat 6.0-EAR (Bad) Impr1 Gravel	Flat Non Ex- isting New Con. Gravel 6.0
Bridge No.	BR-1	BR-2	BR-3	BR-4	BR-5				
Existing Type Length (m) Proposed Type Length (m) No. of Spans	Concrete 89	Concrete 13		Concrete 18					

PRESENT CONDITION AND PROPOSED IMPROVEMENT

Scale

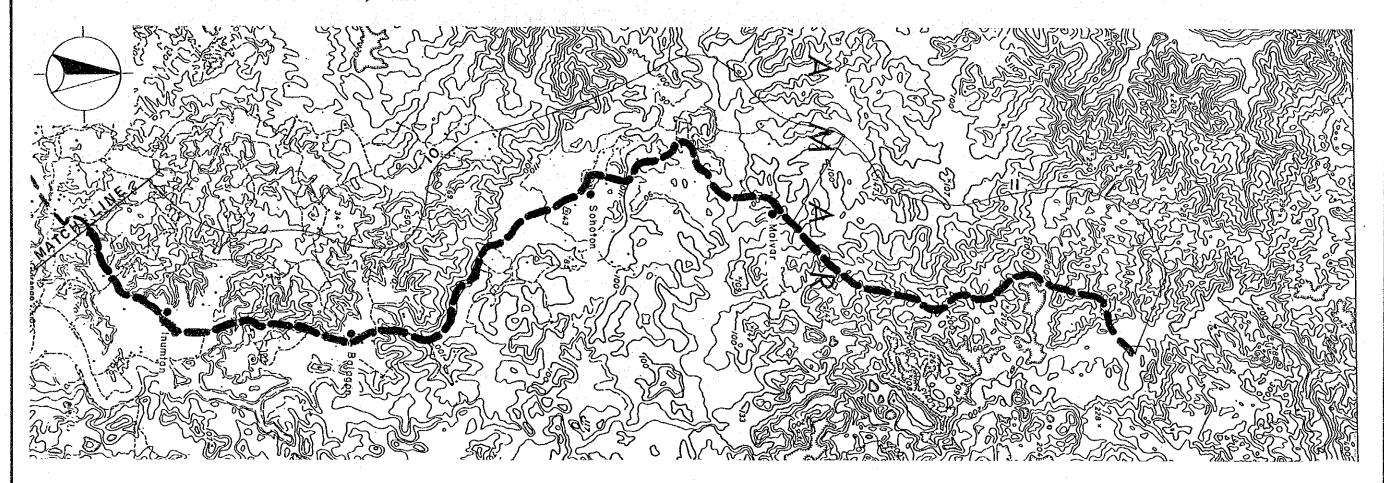
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17

Drawing No.

Road No: N5-3

Road Name: SAN JUANICO - BASEY - E.S. BOUNDARY ROAD Location: BASEY, SAMAR



Road Classification Total Length	
Sub-section No.	10 11
Length (km) Terrain Existing Road Surface Proposed Improvement Improvement Type Surface Type Carriageway Width(m) Shoulder Width (m) Ref. Typical Section	13.0 6.2 Rolling Mt'nous Non Ex- isting isting New Con. New Con. Gravel Gravel 6.0 6.0 .5 .5 TYPE 5-4 TYPE 5-4
Bridge No.	~
Existing Type Length (m) Proposed Type Length (m) No. of Spans	

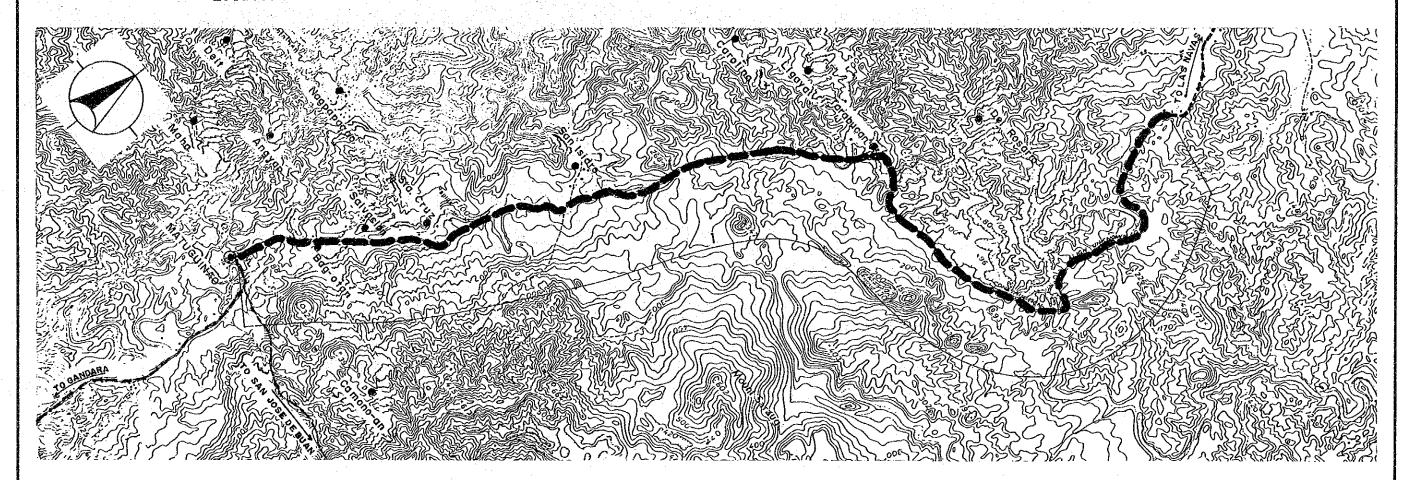
PRESENT CONDITION AND PROPOSED IMPROVEMENT

Scale 1:50,000 Drawing No.

18

Road No: P1-2

Road Name: MATUGUINAO - N.S. BOUNDARY ROAD Location: MATUGUINAO, SAMAR



Road Classification	Second'y Major Rd (Provincial Road)
Total Length	18.0 km
Sub-section No.	1
Length (km)	18.0
Terrain	Rolling
Existing Road Surface	Non Ex- isting
Proposed Improvement	isting.
Improvement Type	New Con.
Surface Type	Gravel
Carriageway Width(m)	6.0
Shoulder Width (m)	.5
Ref. Typical Section	TYPE 5-4

PRESENT CONDITION AND PROPOSED IMPROVEMENT

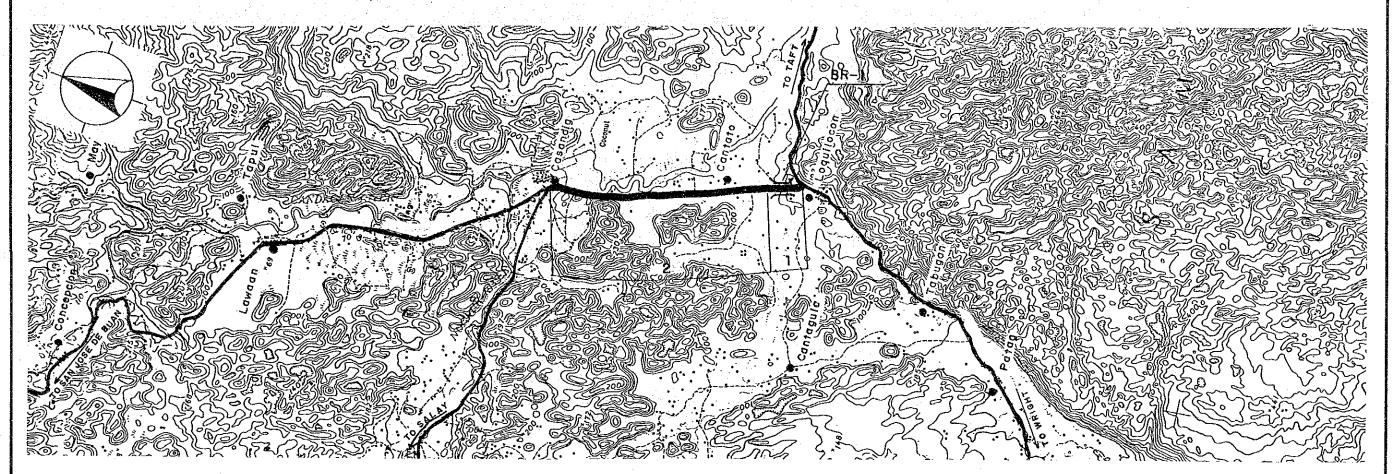
Scale

Drawing No. 1:50,000

19

Road No: P6-1

Road Name: LOKILOKON - CASANDIG ROAD Location: WRIGHT, SAMAR



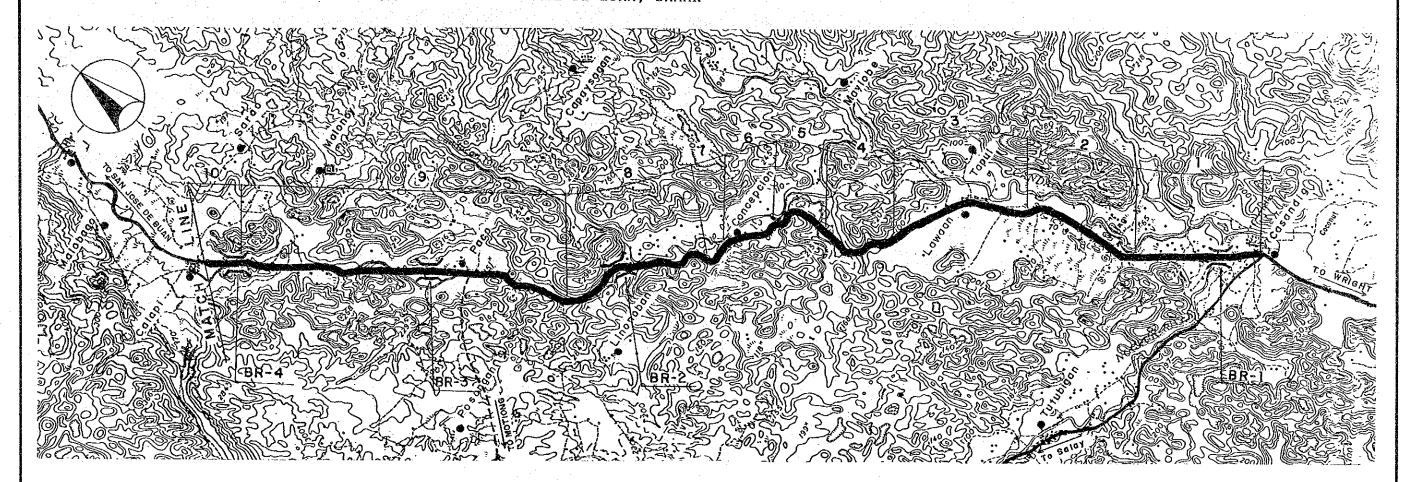
and the same of	
Road Classification	Second'y Major Rd (Provincial Road)
Total Length	3.9 km
Sub-section No.	1 2
Length (km)	.5 3.4
Terrain	Flat Flat
Existing Road Surface	4.0-GRV 4.5-GRV
	(Bad) (Y.Bad)
Proposed Improvement	
Improvement Type	Rehabil. Rehabil.
Surface Type	Gravel Gravel
Carriageway Width(m)	6.0 6.0
Shoulder Width (m)	1.0 1.0
Ref. Typical Section	TYPE 1-6 TYPE 1-6
Special Treatment	
Flood Section Length	500 -
Height	1.0 -
Bridge No.	BR-1
Existing Type	Concrete
Length (m)	43
Proposed Type	2Lane-Br
Length (m)	43
No. of Spans	2
No. 01 Spans	<u> </u>

PRESENT CONDITION AND PROPOSED IMPROVEMENT

Scale 1:50,000 Drawing No. 20

Road No: P6-2

Road Name: CASANDIG - SAN JOSE DE BUAN ROAD Location: WRIGHT, MOTIONG & SAN JOSE DE BUAN, SAMAR



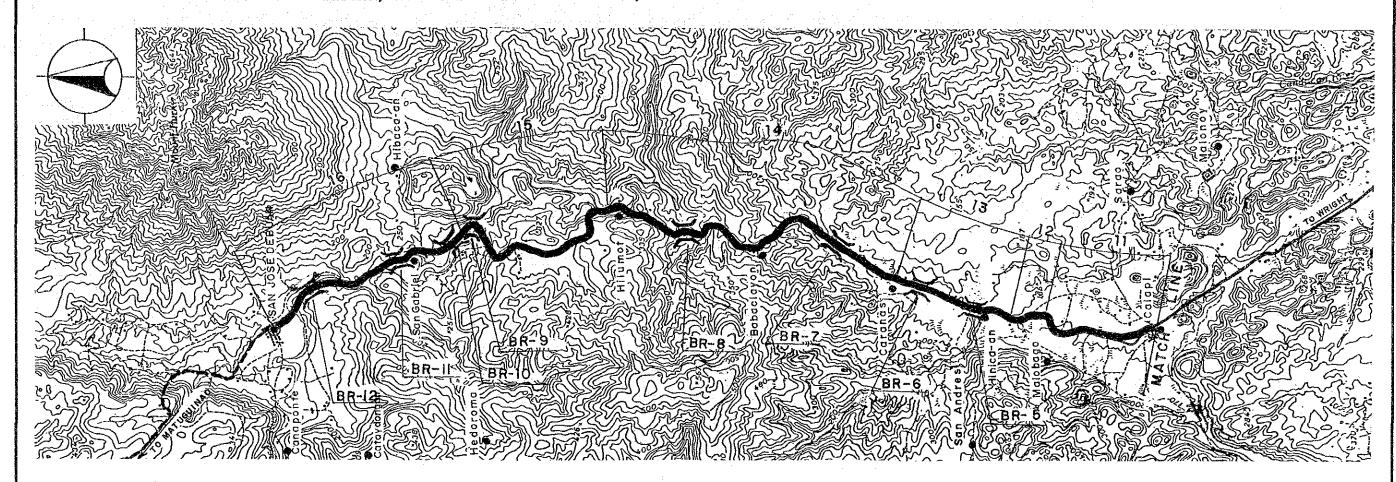
Road Classification Total Length	Seconda 32.8 km	ry Major	(Provinci	al Road)						
Sub-section No.	1	2	3	4	5	6	7	8	9	10
Length (km) Terrain Existing Road Surface Proposed Improvement Improvement Type Surface Type Carriageway Width (m) Shoulder Width (m) Ref. Typical Section Special Treatment Steep Section Length	Rehabil. Gravel 6.0 1.0 TYPE 1-6	Rolling 4.0-GRV (V.Bad) Rehabil. Gravel 6.0	Flat 4.5-GRV (V.Bad) Rehabil. Gravel 6.0	4.0-GRV (V.Bad) Rehabil. Gravel 6.0	Rolling 4.0-GRV (V.Bad) Rehabil. Gravel 6.0	Flat 4.0-GRV (V.Bad) Rehabil. Gravel 6.0	4.0-GRV (V.Bad) Rehabil. Gravel 6.0	Mt'nous 4.0-GRV (V.Bad) Rehabil. Gravel 6.0	Flat 4.0-GRV (V.Bad) Rehabil. Gravel 6.0	Rolling 4.0-GRV (V.Bad) Rehabil. Gravel 6.0
Bridge No.	BR-1	BR-2	BR-3	BR-4		BR-6	BR-7	BR-8	BR-9	BR-10
Existing Type Length (m) Proposed Type Length (m) No. of Spans	Bailey 26 2Lane-Br 26 1	Bailey 18 2Lane-Br 18	Bailey 7 2cell-BC 7 2	18				· **** •• •• •• •• •• • • • • • • • • •	· · · · · · · · · · · · · · · · · · ·	

Drawing No. 21

1:50,000

Road No: P6-2

Road Name: CASANDIG - SAN JOSE DE BUAN ROAD Location: WRIGHT, MOTIONG & SAN JOSE DE BUAN, SAMAR



Road Classification Total Length								
Sub-section No.	1,1	12	13	14	15	16	= = = = = = = = = = = =	
Length (km) Terrain Existing Road Surface Proposed Improvement	Flat 4.0-GRV (V.Bad)	Rolling 4.0-GRV (V.Bad)	1.7 Flat 4.0-GRV (V.Bad)	Mt nous 4.0-GRV (V.Bad)	Rolling 3.2-GRV (V.Bad)	Mt'nous 3.2-GRV (V.Bad)		
	1.0 TYPE 1-6	Gravel 6.0 .5 TYPE 1-6	Gravel 6.0 1.0	Gravel 6.0 .5 TYPE 1-6	Gravel 6.0	Gravel 6.0 .5	l	
Bridge No.		BR-6	BR-7	BR-8	BR-9	BR-10	BR-11	BR-12
Existing Type Length (m) Proposed Type Length (m) No. of Spans	Timber 18 2Lane-Br 18	. 10	Timber 9 2Lane-Br 9 1	22 2Lane-Br	6	2Lane-Br		_

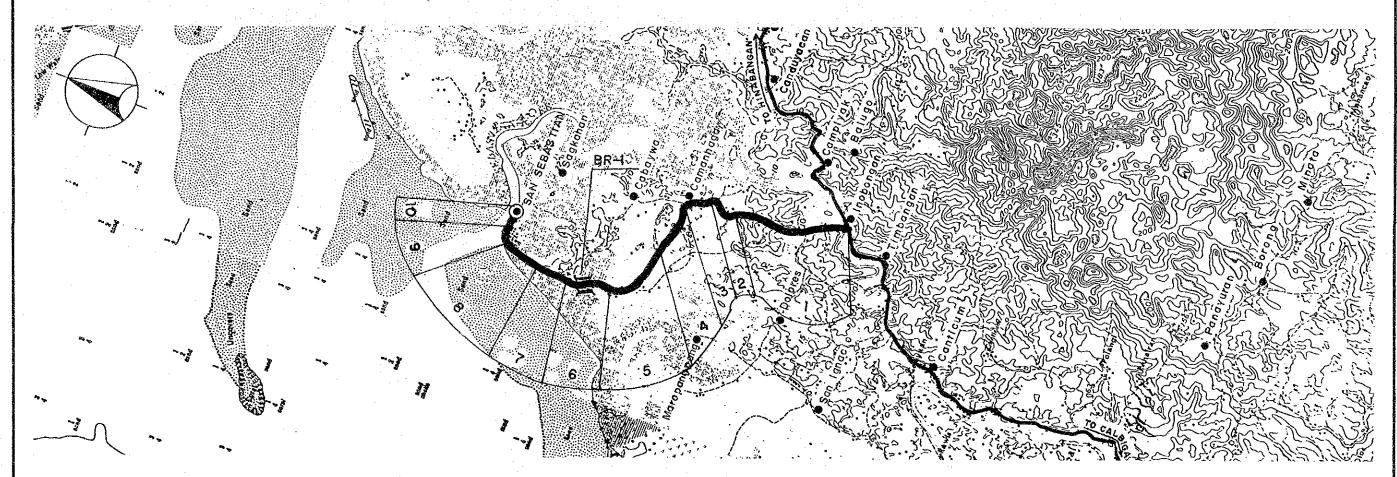
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22

Drawing No.

Road No: P8

Road Name: SAN SEBASTIAN FEEDER ROAD Location: SAN SEBASTIAN, SAMAR



Road Classification Total Length	Seconda 6.7 km	ry Major	(Provinci	al Road)					ere si u gilija	
Sub-section No.	1	2	3	4	5	6	7	8	9	10
Length (km) Terrain Existing Road Surface Proposed Improvement Improvement Type Surface Type Carriageway Width(m) Shoulder Width (m) Ref. Typical Section Special Treatment Flood Section Length Height	4.5-GRV (Bad) Rehabil. Gravel 6.0 .5 TYPE 1-6	Rolling 4.0-GRV (V.Bad) Rehabil. Gravel 6.0 .5	Rolling 4.5-GRV (V.Bad) Rehabil. Gravel 6.0	Rolling 4.5-GRV (V.Bad) Rehabil. Gravel 6.0	Flat 4.5-GRV (V.Bad) Rehabil. Gravel 6.0	Flat 4.5-GRV (V.Bad) Rehabil. Gravel 6.0	Flat 4.5-EAR (V.Bad) Impr1 Gravel 6.0	Flat 4.5-EAR (V.Bad) Impr1 Gravel 6.0	Flat 3.0-PCC (Fair) Widening PCC 6.0	.2 Flat 6.0-PCC (Fair)
Bridge No.	BR-1									
Existing Type Length (m) Proposed Type Length (m) No. of Spans	Timber 13 2Lane-Br 13				• • • • • • • • •	• • • • • • • • • • • • • • • • • • •			• ** ** ** ** ** ** ** **	***

PRESENT CONDITION AND PROPOSED IMPROVEMENT

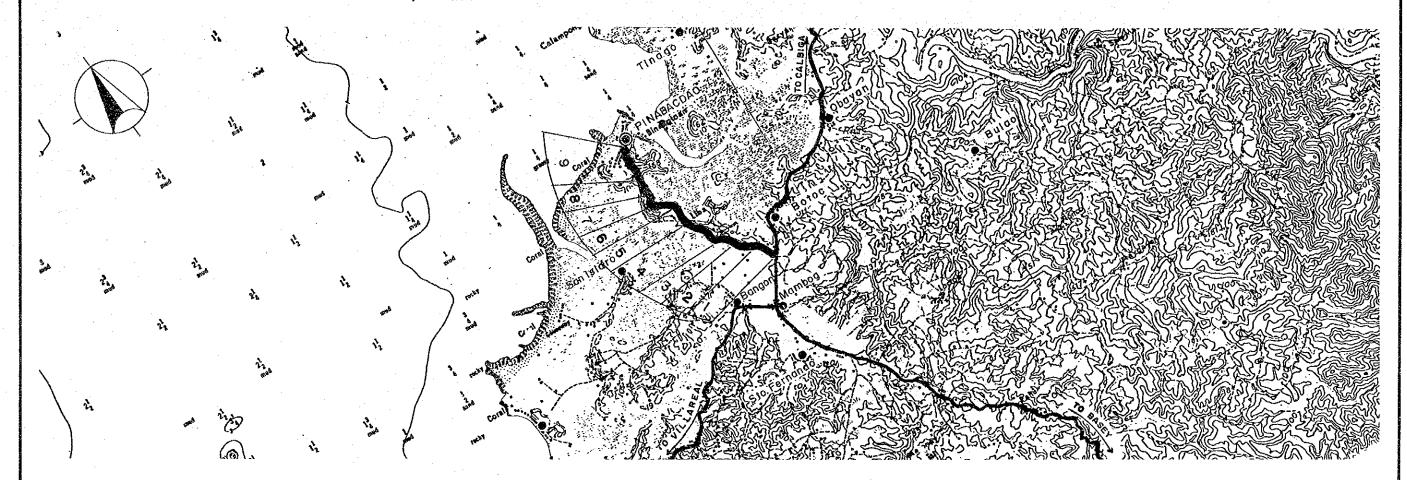
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23

Drawing No.

Road No: P10

Road Name: PINABACDAO FEEDER ROAD Location: PINABACDAO, SAMAR



Road Classification Total Length	Secondar 3.2 km		(Provinci	al Road)					
Sub-section No.	1	2	3	. 4	5	6	7	8	9
Length (km) Terrain Existing Road Surface Proposed Improvement	.3 Rolling 5.5-GRV (Bad)	Rolling	4.5-GRV	Rolling 4.5-GRV	4.5-GRV	Rolling	Rolling	Mt'nous 4.0-GRV	.5 Relling 4.5-GRV (Bad)
Improvement Type Surface Type Carriageway Width(m) Shoulder Width (m) Ref. Typical Section	.5	Gravel 6.0 .5	Gravel 6.0 .5	Gravel 6.0 .5	Gravel 6.0	PCC 6.0 1.5	Gravel 6.0 .5	Gravel 6.0	Gravel 6.0 .5

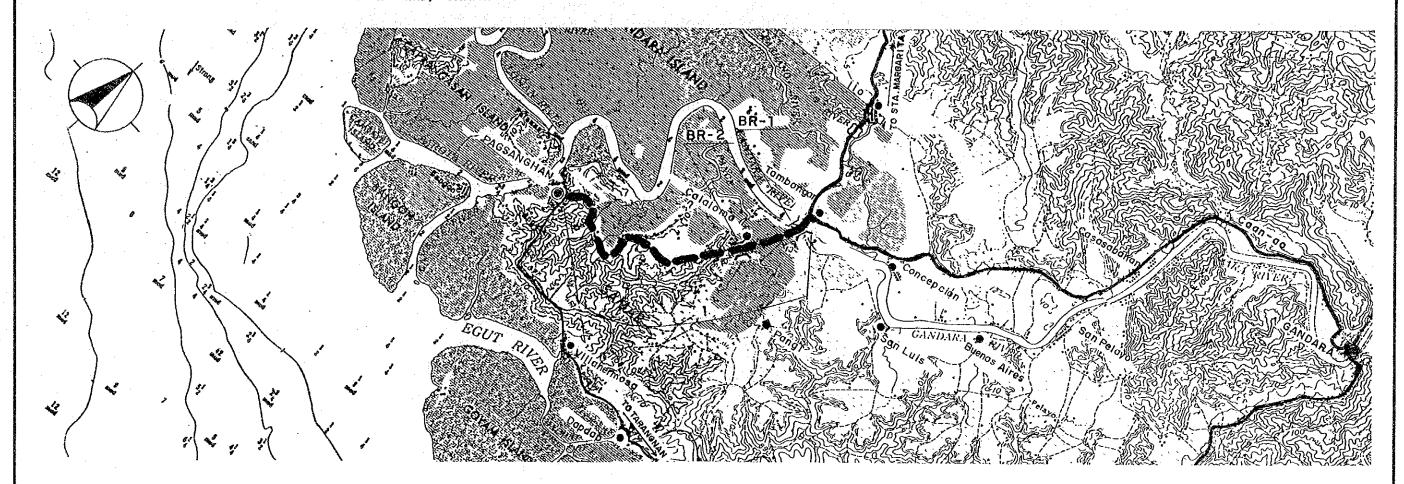
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24

Drawing No.

Road No: B23-1

Road Name: TAMBONGAN - PAGSANGHAN ROAD Location: PAGSANGHAN, SAMAR



Road Classification	Second'y Major Rd (Barangay Road)
Total Length	4.3 km
Sub-section No.	1
Length (km)	4.3
Terrain	Flat
Existing Road Surface	Non Ex- isting
Proposed Improvement	isting
Improvement Type	New Con.
Surface Type	Gravel
Carriageway Width(m)	6.0
Shoulder Width (m)	1.0
Ref. Typical Section	TYPE 5-4
Bridge No.	BR-1 BR-2
Existing Type	Ford-Cr. Ford-Cr.
Length (m)	
Proposed Type	2Lane-Br 2Lane-Br
Length (m)	120 25
No. of Spans	5 1

PRESENT CONDITION AND PROPOSED IMPROVEMENT

Scale

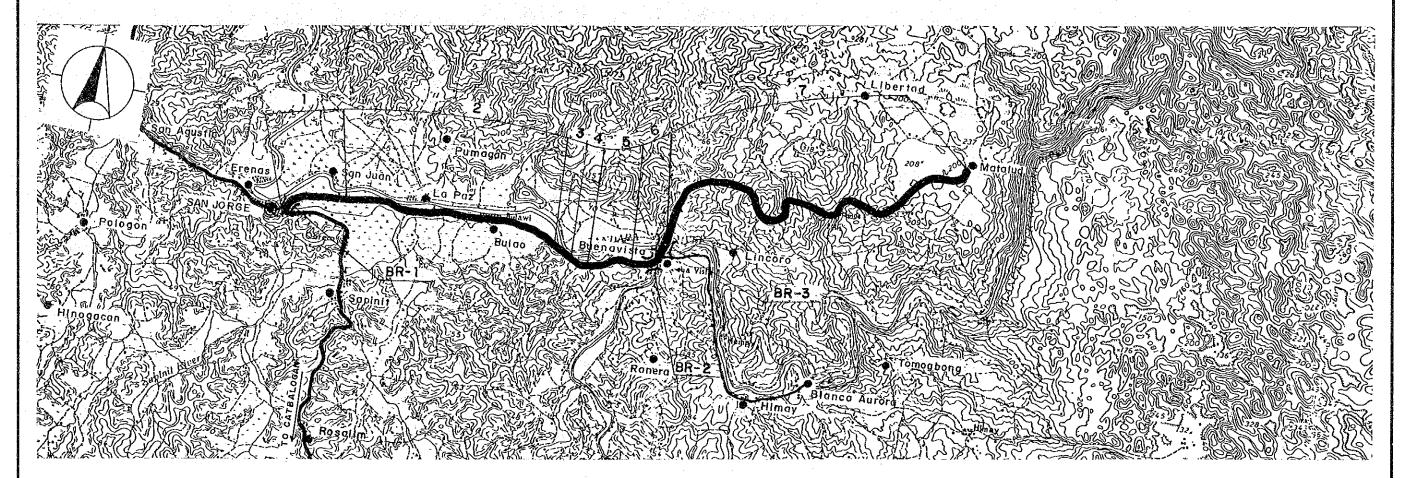
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25

Drawing No.

Road No: P2

Road Name: SAN JORGE - MATALUD ROAD Location: SAN JORGE, SAMAR



Road Classification Total Length	Minor R 13.1 km		incial Ro	ad)	· 		·
Sub-section No.	1	2	3	4	5	6	7
Length (km) Terrain Existing Road Surface Proposed Improvement Improvement Type Surface Type Carriageway Width(m) Shoulder Width (m) Ref. Typical Section Special Treatment Flood Section Length Height	Flat 6.0-PCC (Good) - - - -	6.0-GRV (Bad) Rehabil. Gravel 6.0 1.0	Rolling 6.0-GRV (Bad) Rehabil. Gravel 6.0	4.5-GRV (Bad) Rehabil. Gravel 6.0	Rolling 6.0-GRV (Bad) Rehabil.	Rolling 6.0-GRV (Bad) Rehabil. Gravel 6.0	Rolling 4.5-GRV (Impass) Rehabil. Gravel 6.0 .5 TYPE 1-6
Bridge No.	BR-1	BR-2	BR-3			> 	
Existing Type Length (m) Proposed Type Length (m) No. of Spans	Concrete 36 -	Concrete 64					

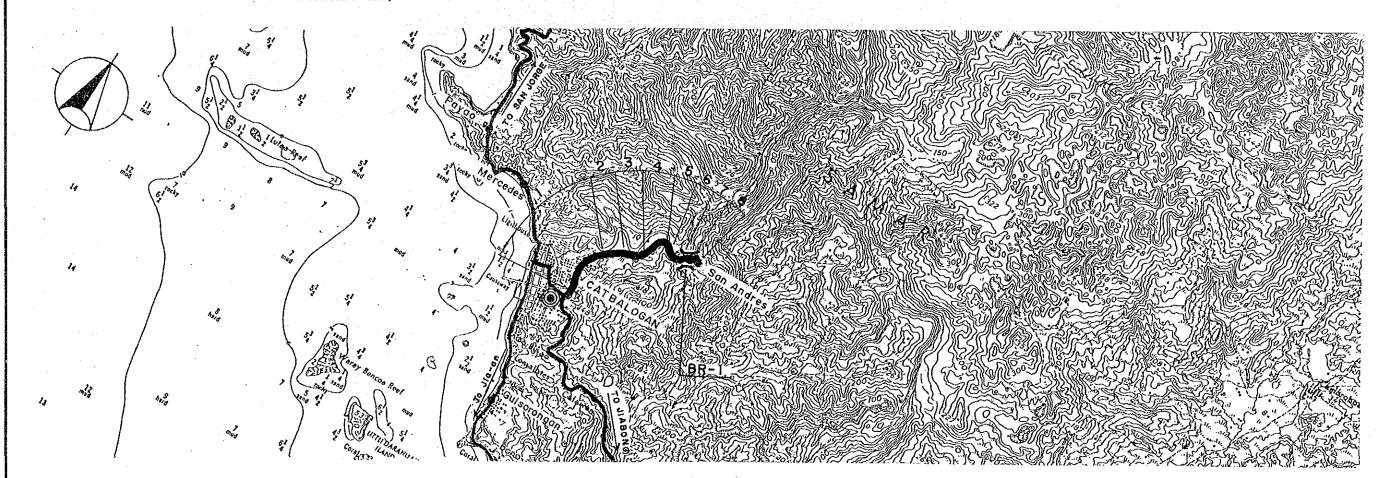
PRESENT CONDITION AND PROPOSED IMPROVEMENT

Scale 1:50,000 Drawing No.

26

Road No: P4

Road Name: CATBALOGAN - SAN ANDRES ROAD Location: CATBALOGAN, SAMAR



Road Classification Total Length	Minor Ro 2.3 km	ad (Provi	ncial Ro	ad)				
Sub-section No.	1	2	3	4	5	6	7	8
Length (km) Terrain Existing Road Surface Proposed Improvement Improvement Type Surface Type Carriageway Width(m) Shoulder Width (m) Ref. Typical Section	.7 Flat 6.1-PCC (Fair)	Flat 6.1-PCC	Flat 6.1-PCC (Good)	1.5	Mt'nous 3.0-PCC (Good) Widening PCC 6.0 1.0	4.5-GRV (Bad) Rehabil. Gravel 6.0	Flat 4.5-GRV (Bad) Rehabil. Gravel 6.0 1.0	Rolling 4.5-GRV (Bad) Rehabil. Gravel 6.0
Bridge No.	BR-1							
Existing Type Length (m) Proposed Type Length (m) No. of Spans	RCBC 9 -							