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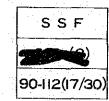
Feasibility Study on The Rural Road Network Development Project

FINAL REPORT (Volume 17)

DRAWINGS FOR ROAD PROJECTS
IN
THE PROVINCE OF NUEVA ECIJA

OCTOBER, 1990

JAPAN INTERNATIONAL COOPERATION AGENCY



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THE FEASIBILITY	STUDY	ON THE	RURAL	ROAD	NETWORK	DEVELOPMENT	PROJECT
	IN	THE RE	PURLIC	OF THE	PHILIPPIN	jes	

CONTENTS

Drawing No.

Scale

CONTENTS

Drawing No.

Title

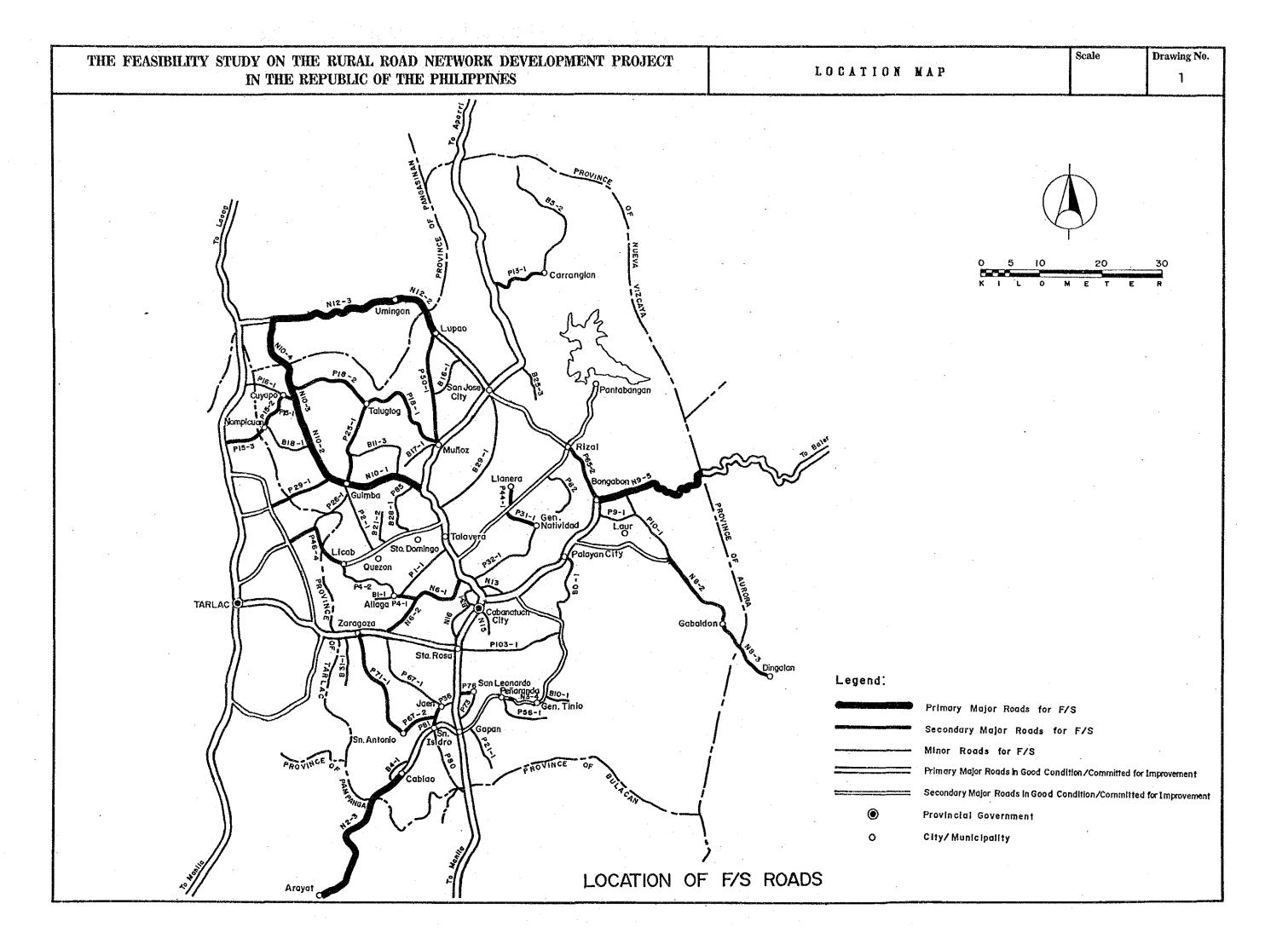
LOCATION MAP

2 to 9 TYPICAL ROAD SECTIONS

10 to 73 PRESENT CONDITION AND PROPOSED IMPROVEMENT

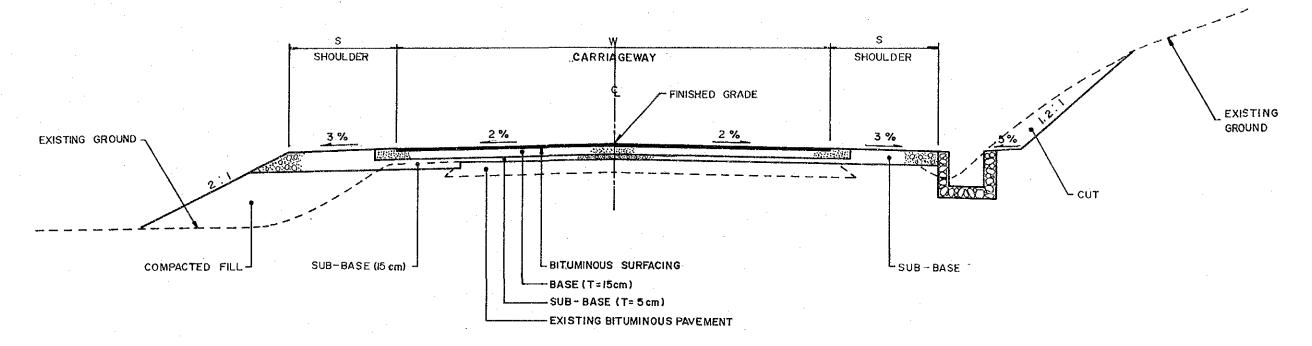
LIST OF ROADS

Road Class	Road No.	Drawing No.	Road Class	Road No.	Drawing No.	Road Class	Road No.	Drawing No.
	N2 - 3	10	· · · · · · · · · · · · · · · · · · ·	P31 - 1	34		P56 - 1	54
	N9 - 5	11 & 12		P44-1	35		P62 - 1	55
	N 10 - 1	13]	P46 - 4	36		P67-1	56
Primary	N 10 - 2	14	Secondary	P50 - 1	37		P73 - 1	57
Major Road	N 10 - 3	15	Major Road	P65 - 2	38		P80-1	58
	N 10 - 4	16		P 67 - 2	39		P85-1	59
	N 12 - 2	17		P71 - 1	40	1	P103- 1	60
	N 12 - 3	18 & 19		P76-1	41]	BO - 1	61
	N3 - 4	20		P81 - 1	41]	81 - 1	62
	N6 - 1	21		N 13 1	42]	B3 - 1	62
	N6 - 2	22		N 15 - 1	43	Minor Road	B4 - 1	63
	N8 - 2	23		N 16 - 1	44		B5 - 2	64
ļ	N8 - 3	24		P1 - 1	45		B 10 - 1	63
Secondary	P4 - 1	25		P2 - 1	46		B11 - 3	65
Major Road	P13 - 1	26	Minor Road	P4 - 2	47]. [B 16 - 1	66
	P15 - 1	27		P9 - 1	48		B 17 - 1	66
	P 15 - 2	28		P10 - 1	49		8 18 - 1	67
	P15 - 3	29		P16 - 1	50] [B21 - 2	68
	P 18 - 1	30]	P21 - 1	51	. [B25 - 3	69
]	P18 - 2	31		P26 - 1	52	[B28 - 1	70
	P 25 - 1	32		P 32 - 1	53		B29 - 1	71 8 72
	P29-1	33		P36 - 1	54		B31 1	73



Scale 1:50

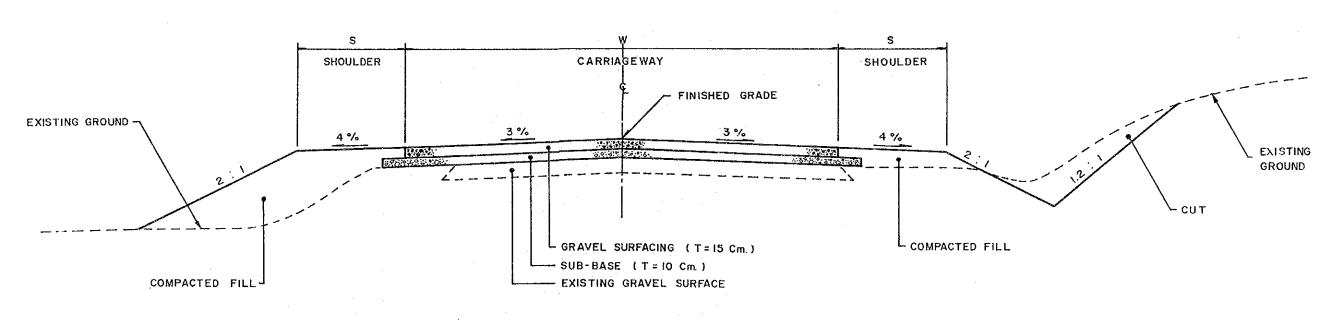
Drawing No.



TYPE 1-5

PROPOSED PAVEMENT : BITUMINOUS MACADAM/DOUBLE BITUMINOUS SURFACE TREATMENT

EXISTING PAVEMENT : BITUMINOUS (BAD/VERY BAD)



TYPE 1-6

PROPOSED PAVEMENT : GRAVEL SURFACING

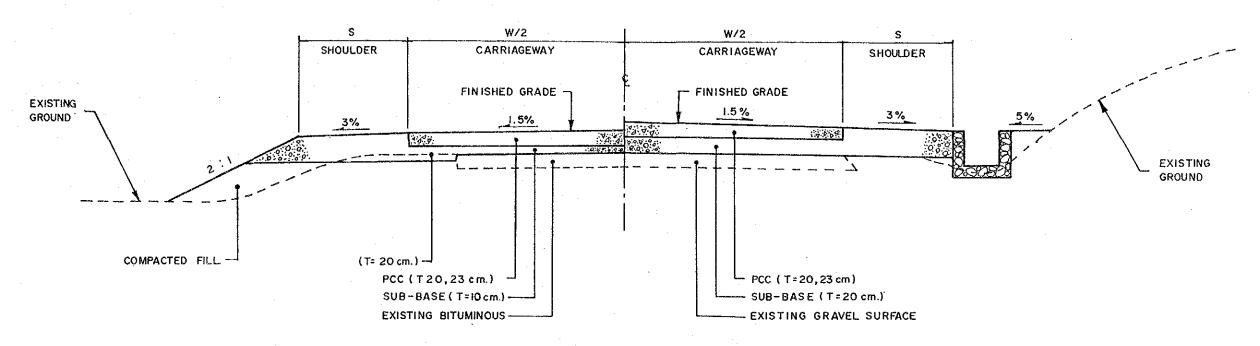
EXISTING PAVEMENT : GRAVEL SURFACING (BAD./VERY BAD)

REHABILITATION (2)

TYPICAL ROAD SECTIONS (3)

Scale 1:50

Drawing No.



TYPE 2-1

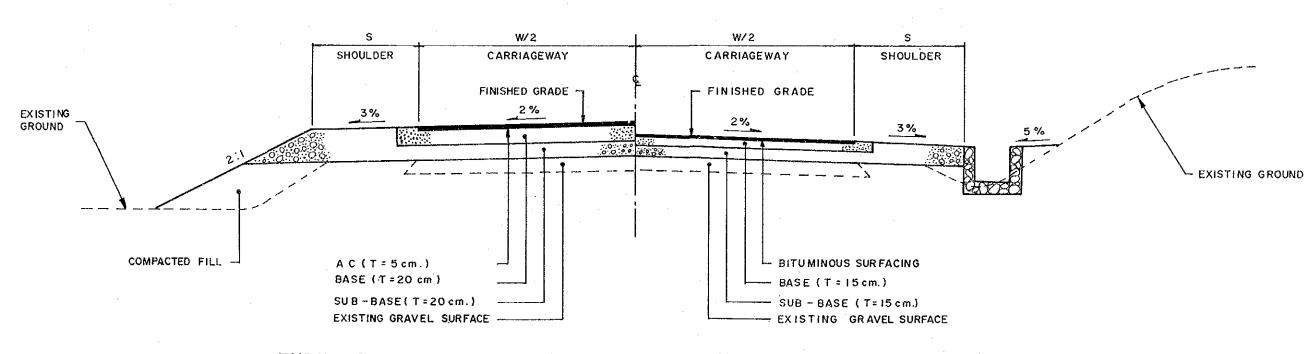
PROPOSED PAVEMENT : PCC

EXISTING PAVEMENT : BITUMINOUS (BAD/VERY BAD)

TYPE 2-2

PROPOSED PAVEMENT : PCC

EXISTING PAVEMENT : GRAVEL SURFACING (BAD/ VERY BAD)



TYPE 2-3

PROPOSED PAVEMENT : ASPHALT CONCRETE

EXISTING PAVEMENT : GRAVEL SURFACING

(BAD/VERY BAD)

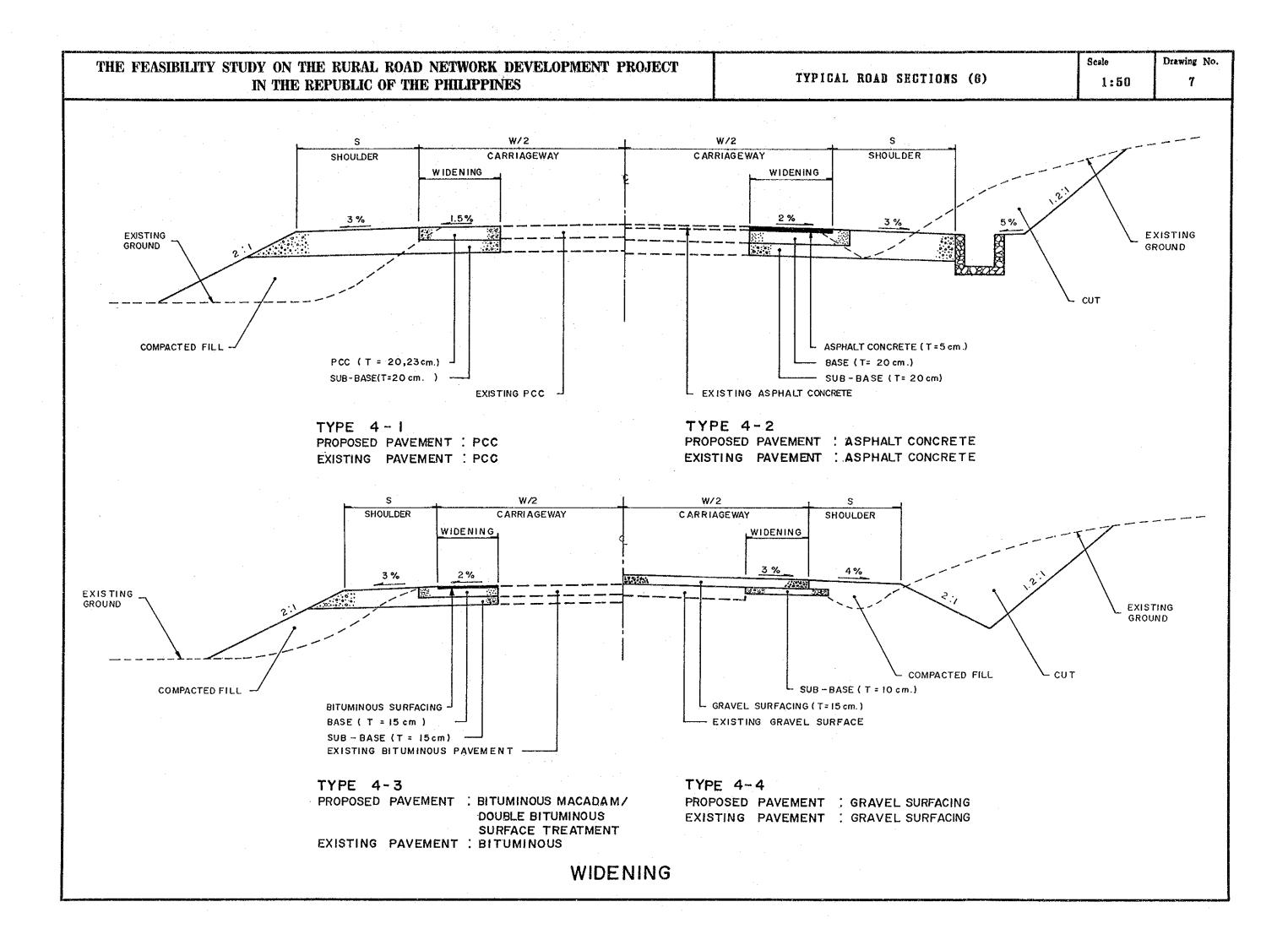
TYPE 2-4

PROPOSED PAVEMENT : BITUMINOUS MACADAM / DOUBLE BITUMINOUS

SURFACE TREATMENT

EXISTING PAVEMENT : GRAVEL SURFACING (BAD / VERY BAD)

IMPROVEMENT-I (I)

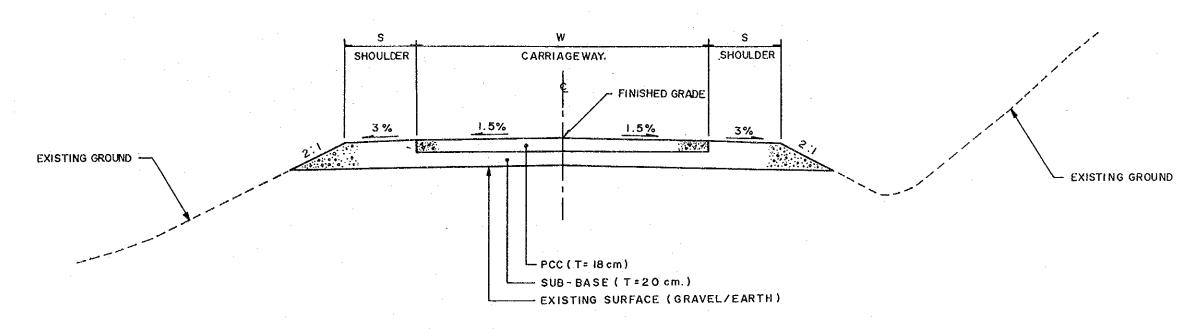


TYPICAL ROAD SECTIONS (8)

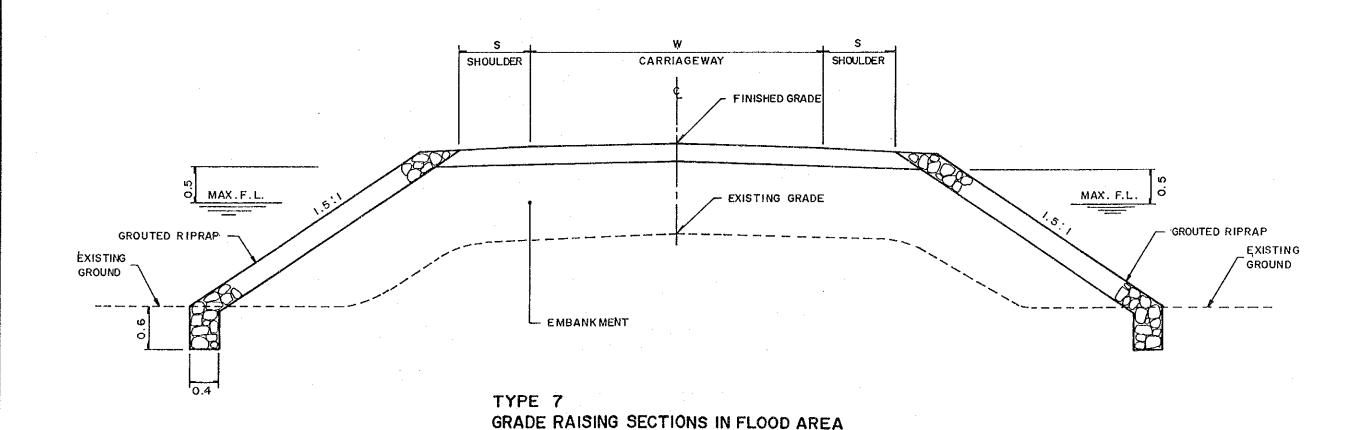
Scale 1:50

Drawing No.

8



TYPE 6
PCC PAVEMENT FOR STEEP GRADIENT SECTIONS



PRESENT CONDITION AND PROPOSED IMPROVEMENT

Scale

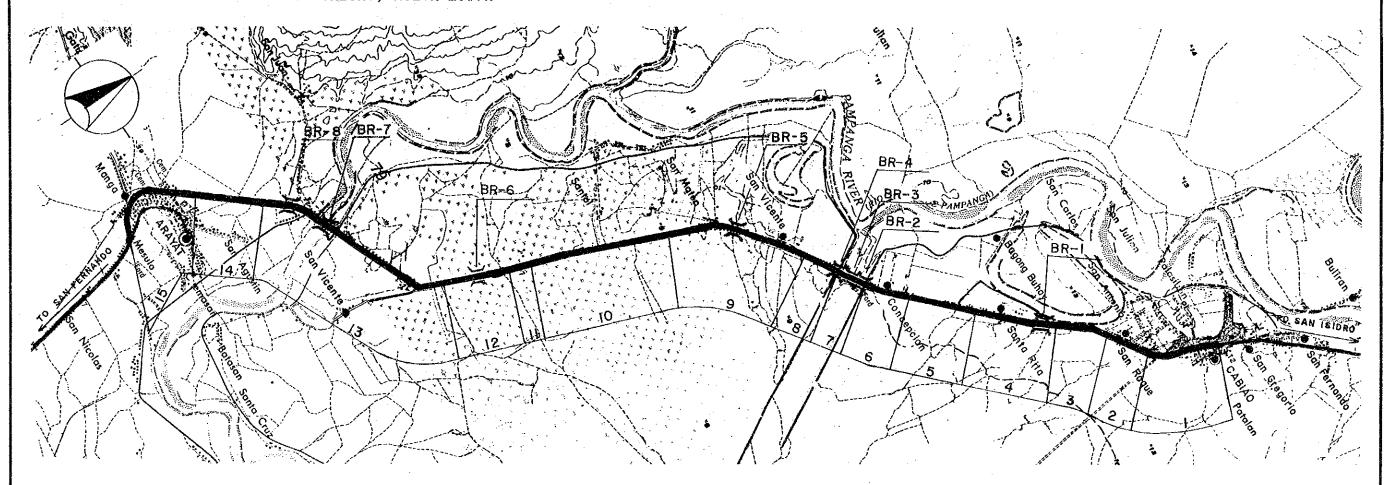
Drawing No.

1: 50,000

10

Road No: N2-3

Road Name: GAPAN - SAN FERNANDO ROAD Location: CABIAO, NUEVA ECIJA



Road Classification Total Length	Primary 17.9 km	Major (Na	tional Ro	ad)									,		,
Sub-section No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Length (km) Terrain Existing Road Surface Proposed Improvement Improvement Type Surface Type Carriageway Width(m) Shoulder Width (m) Ref. Typical Section	1.0 Flat 6.1-BTM (Good) - - - -	.8 Flat 6.1-PCC (Good)	.8 Flat 6.1-PCC (Good)	1.2 Flat 6.1-PCC (Good)	1.0 Flat 6.1-PCC (Good)	.7 Flat 6.1-PCC (Good)	.4 Flat 6.1-PCC (Good)	(Bad) Rehabil. Overlay 6.1 2.0	2.2 Flat 6.1-PCC (Good)	2.1 Flat 6.1-PCC (Good)	(Bad)	6.1-PCC (V.Bad) Rehabil. PCC 6.1 2.5	3.1 Flat 6.1-PCC (Fair)	1.1 Flat 6.1-PCC (Fair)	1.6 Flat 6.1-PCC (Fair)
Bridge No.	BR-1	BR-2	BR-3	BR-4	BR-5	BR-6	BR-7	BR-8			, , , , , , , , , , , , , , , , , , ,				
Existing Type Length (m) Proposed Type Length (m) No. of Spans	RCBC 7 -	RCBC 31 - - -	RCBC 21 - - -	RCBC 7	Concrete 31	RCBC 7	Concrete 283	RCBC 7		***************************************					

PRESENT CONDITION AND PROPOSED IMPROVEMENT

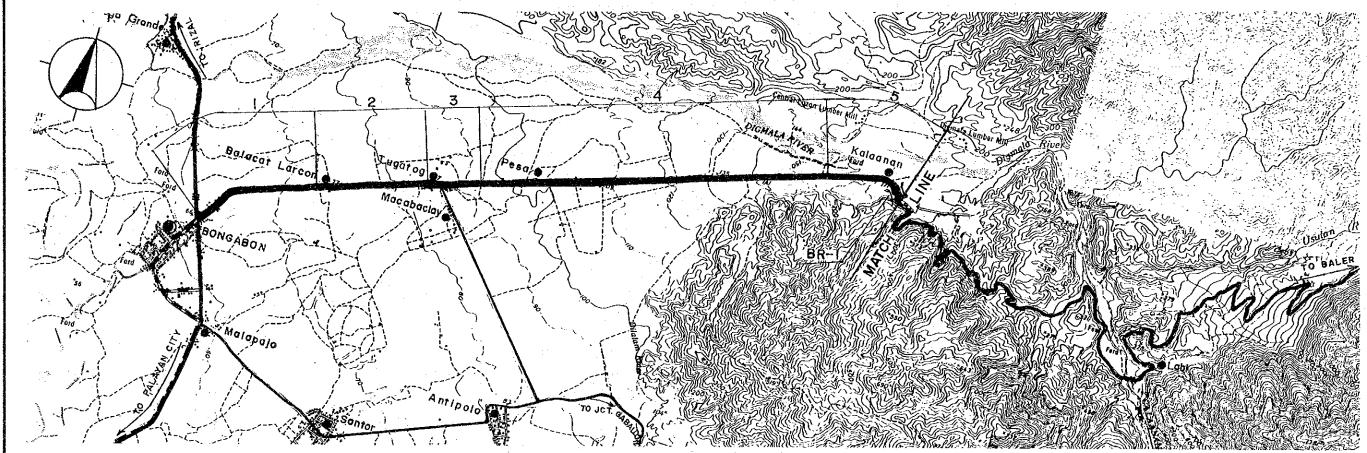
Scale 1:50,000

77

Drawing No.

Road No: N9-5

Road Name: NUEVA ECIJA - AURORA ROAD Location: BONGABON, NUEVA ECIJA



Road Classification Total Length	Primary 29.1 km	Major (N	ational R	oad)	
Sub-section No.	. 1	2	3	4	5
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	Flat 5.5-GRV (Bad) Impr1 * BMP 6.0 2.0 TYPE 2-4	5.5-GRV (Bad) Impr1 * BMP 6.0 2.0	Flat 5.5-GRV (V.Bad) Impr1 * BMP 6.0 2.0 TYPE 2-4	(V.Bad) Impr1 * BMP 6.0 2.0	Flat 5.5-GRV (V.Bad) Impr1 * BMP 6.0 2.0 TYPE 2-4
Height Slope Protection (Cut Slope) (Embank't Slop)	.3	.3	.3	. 3	.3
Bridge No.	BR-1			* ** ** ** ** ** ** ** ** **	
Existing Type Length (m) Proposed Type Length (m) No. of Spans	RCBC 5 - -		:		

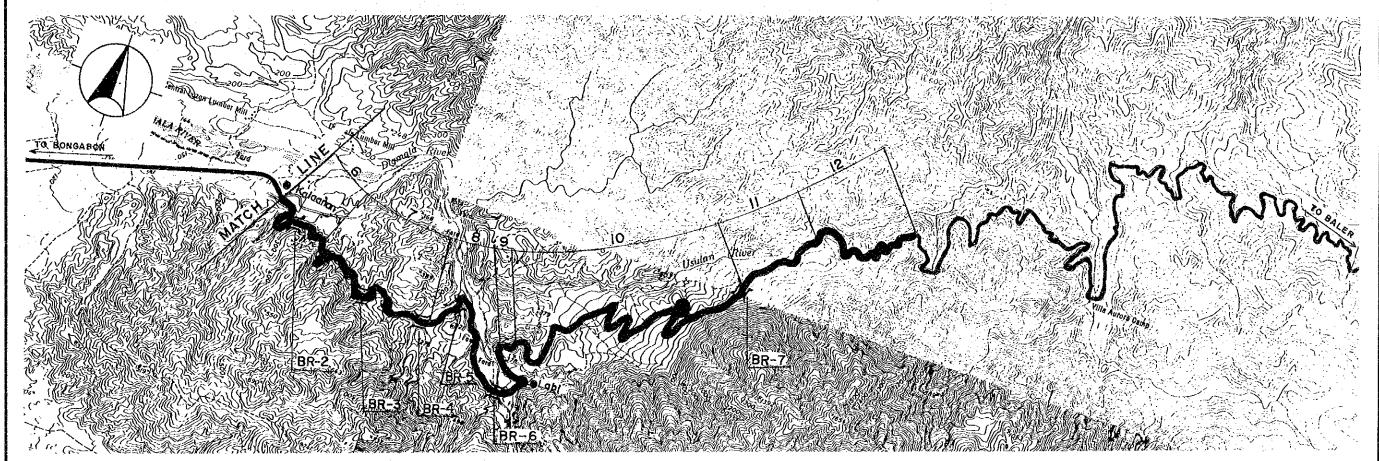
^{*} DBST can be applied instead depending on conditions of subgrade, axle load, drainage, etc.

Scale

Drawing No. 1:50,000 12

Road No: N9-5

Road Name: NUEVA ECIJA - AURORA ROAD Location: BONGABON, NUEVA ECIJA



Road Classification Total Length					ber 144 av 44 av 45 live 144 i	U.S. No. du Del Ber opt No. der NO.	m 40 44 12 27 27 12 12 2
Sub-section No.	6	7	8	9	10	11	. 12
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 (Cut Slope) (Embank't Slop)	Impr1 * BMP 6.0 1.0 TYPE 2-4	3.2-GRV (V.Bad) Impr1 * BMP 6.0 1.0	5.5-GRV (V.Bad) Impr1 * BMP 6.0 1.0	Mt'nous 5.5-GRV (V.Bad) Impr1 * BMP 6.0 1.0	4.5-GRV (V.Bad) Impr1 * BMP	Mt'nous 3.2-GRV (V.Bad) Impr1 * BMP 6.0 1.0	Mt'nous 4.5-GRV (V.Bad) Impr1 * BMF 6.0 1.0
Bridge No.	BR-2	BR-3	BR-4	BR-5	BR-6	BR-7	
Existing Type Length (m) Proposed Type Length (m) No. of Spans	15		_	82	•	Concrete 6 -	

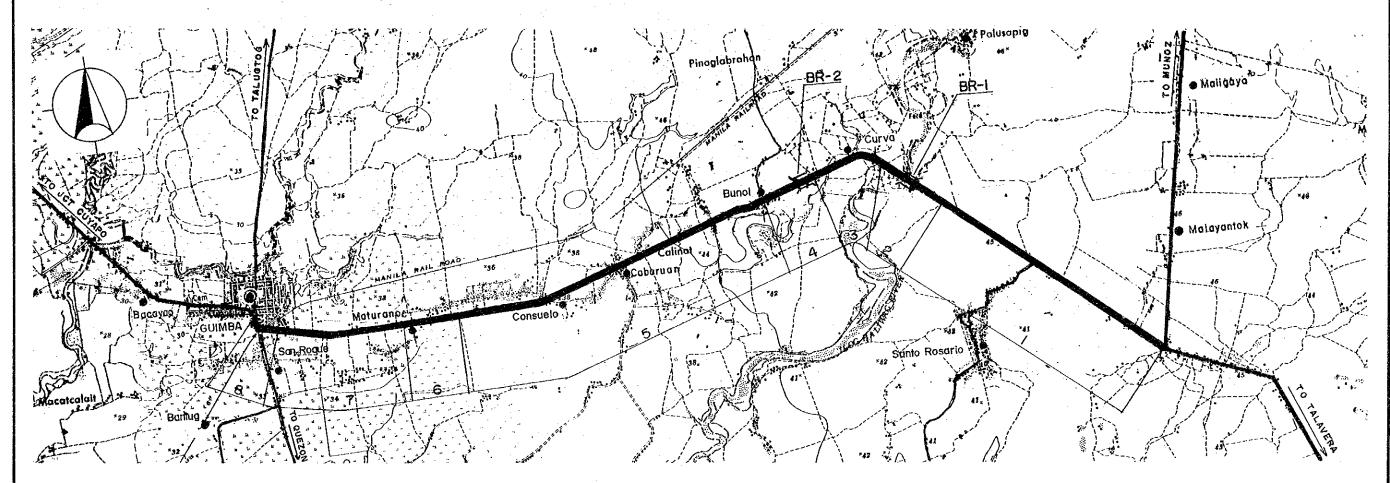
^{*} DBST can be applied instead depending on conditions of subgrade, axle load, drainage, etc.

Scale 1: 50,000 Drawing No.

Road No: N10-1

Road Name: NUEVA ECIJA - PANGASINAN ROAD

Location: GUIMBA, NUEVA ECIJA

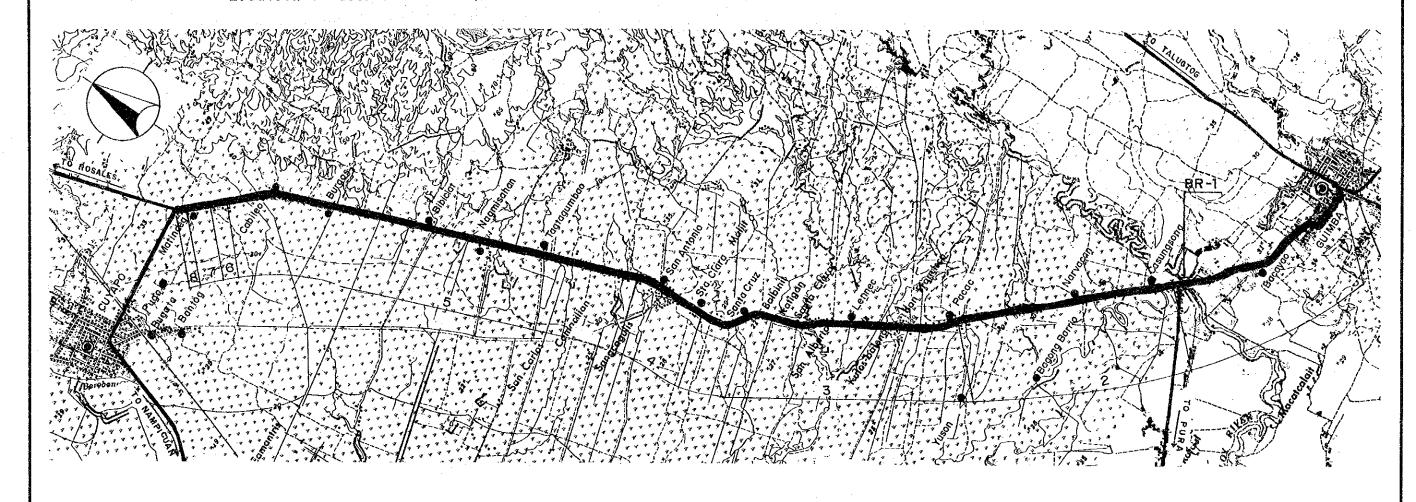


Road Classification Total Length	Primary 15.3 km	Major (Na	tional R	oad)				
Sub-section No.	1	2	3	4	. 5	6	7	8
Length (km)	3.7	1.0	1.0	. 6	5.3	.9	2.3	. 5
Terrain		Flat		Flat		Flat		Flat
Existing Road Surface	6.0-PCC	6.0-PCC	6.0-PCC	6.0-PCC			6.0-PCC	
·	(Bad)	(Bad)	(Good)	(Bad)	(Fair)	(Good)	(Fair)	(Good)
Proposed Improvement								
	Rehabil.			Rehabil.	-	-	-	_
Surface Type	PCC		-	Overlay	~	-		-
Carriageway Width(m)		6.7	· -	6.0	-		-	-
Shoulder Width (m)		2.5		2.0	-	-	-	₩.
Ref. Typical Section Special Treatment	TYPE 1-1	TYPE 1-1	-	TYPE 1-2	-	-	-	
Flood Section Length	2500	1000	· _	~	-	_	-	_
Height	.1	. 1	19		-			-
Bridge No.	BR-1	BR-2	~ ~ ~ ~ ~ ~ ~ ~ ~					EA 300 00 01 01 010 010 010 010 010
Existing Type	Steel	RCBC					~~~~~	
Length (m)	104	6						
Proposed Type		_						
Length (m)	-	~						
No. of Spans	-							

Scale 1: 50,000 Drawing No.

Road No: N10-2

Road Name: NUEVA ECIJA - PANGASINAN ROAD Location: GUIMBA & CUYAPO, NUEVA ECIJA



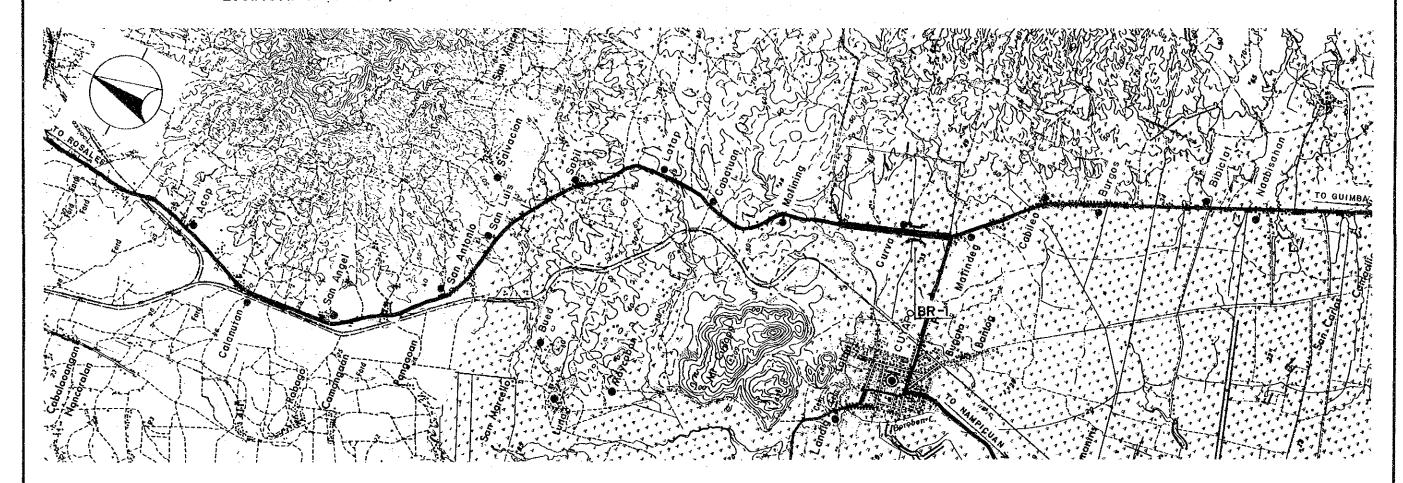
Road Classification Total Length	Primary 18.3 km	Major (N	ational R	oad)				
Sub-section No.	1	2	3	4	5	6	7	8
Length (km) Terrain Existing Road Surface Proposed Improvement Improvement Type Surface Type Carriageway Width(m) Shoulder Width (m) Ref. Typical Section		3.0 Flat 6.0-PCC (Good)	Flat 6.0-GRV (Fair) Impr2 PCC 6.7 2.5	6.0-PCC (V.Bad) Rehabil. PCC 6.7 2.5	Flat 6.0-GRV (Fair) Impr2 PCC 6.7 2.5	Flat 6.0-PCC (Bad) Rehabil.	Flat 6.0-GRV (Fair) Impr2 PCC 6.7 2.5	Flat 6.0-PCC (Bad) Rehabil. PCC 6.7 2.5
Bridge No.	BR-1				7 COT SUT SUT SEE SUS CES 425 SUS C			
Existing Type Length (m) Proposed Type Length (m) No. of Spans	Timber 10 2Lane-Br 30 2			et fan fan fan fan en en ac me en en		no ma ac- es say use que sa sa sa		

PRESENT CONDITION AND PROPOSED IMPROVEMENT

Scale 1:50,000 Drawing No. 15

Road No: N10-3

Road Name: NUEVA ECIJA - PANGASINAN ROAD Location: CUYAPO, NUEVA ECIJA

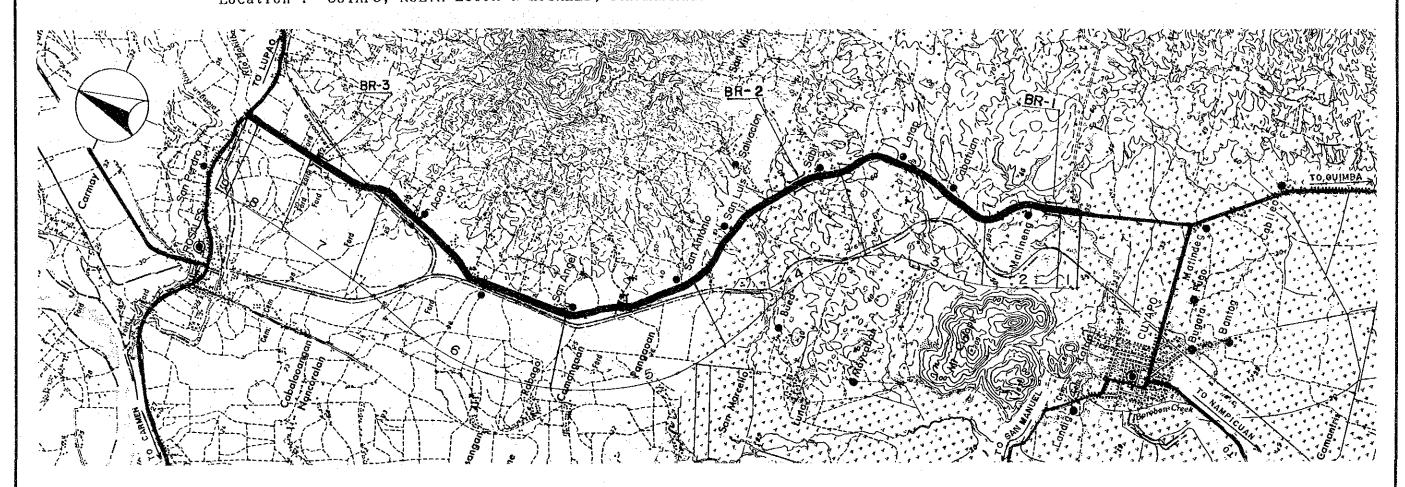


Road Classification Total Length	Primary Major Road (National Road) 1.6 km
Sub-section No.	1
Length (km) Terrain Existing Road Surface Proposed Improvement Improvement Type Surface Type Carriageway Width (m) Shoulder Width (m) Ref. Typical Section	1.6 Flat 6.0-BTM (Good) - - - - -
Bridge No.	BR-1
Existing Type Length (m) Proposed Type Length (m) No. of Spans	Timber 12 2Lane-Br 12 1

Scale 1:50,000 Drawing No. 16

Road No: NiO-4

Road Name: NUEVA ECIJA - PANGASINAN ROAD Location: CUYAPO, NUEVA ECIJA & ROSALES, PANGASINAN



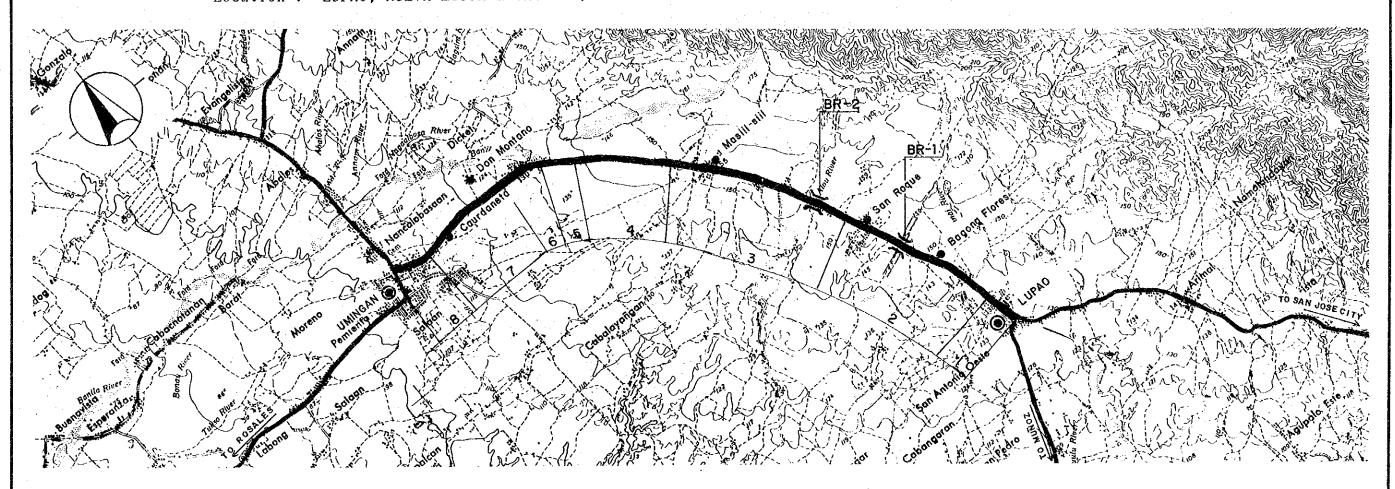
Road Classification Total Length	Primary 14.4 km		ational R	oad)					
Sub-section No.	1	2	3	4	5	6	7	8	9
Length (km)	. 3	and the second second second		A CONTRACTOR OF THE PARTY OF TH	1.7		1.4		. 2
Terrain	Flat				Flat		Flat		Flat
Existing Road Surface	6.0-BTM			6.0-GRV					6.0-BTM
	(Good)	(Good)	(Bad)	(Bad)	(Fair)	(Bad)	(Good)	(Fair)	(Good)
Proposed Improvement									
Improvement Type	, . -	-		Impr1	-	Impr1	-	Impr2	-
Surface Type	. ~	-	PCC		-	PCC	-	PCC	-
Carriageway Width(m)		-	6.7	6.7		6.7	_	6.7	
Shoulder Width (m)	-	-	1.5			2.5		2.5	-
Ref. Typical Section	·		TYPE 2-2	TYPE 2-2	-	TYPE 2-2	_	TYPE 3-2	
Bridge No.	BR-1	BR-2	BR~3						
Existing Type	Concrete	Concrete	Concrete						
Length (m)	12	12	20						
Proposed Type	_	-						·	
Length (m)	-		-		•				•
No. of Spans	-	-	· -	•					

PRESENT CONDITION AND PROPOSED IMPROVEMENT

Scale 1:50,000 Drawing No. 17

Road No: N12-2

Road Name: SAN JOSE - PANGASINAN ROAD Location: LUPAO, NUEVA ECIJA & UMINGAN, PANGASINAN



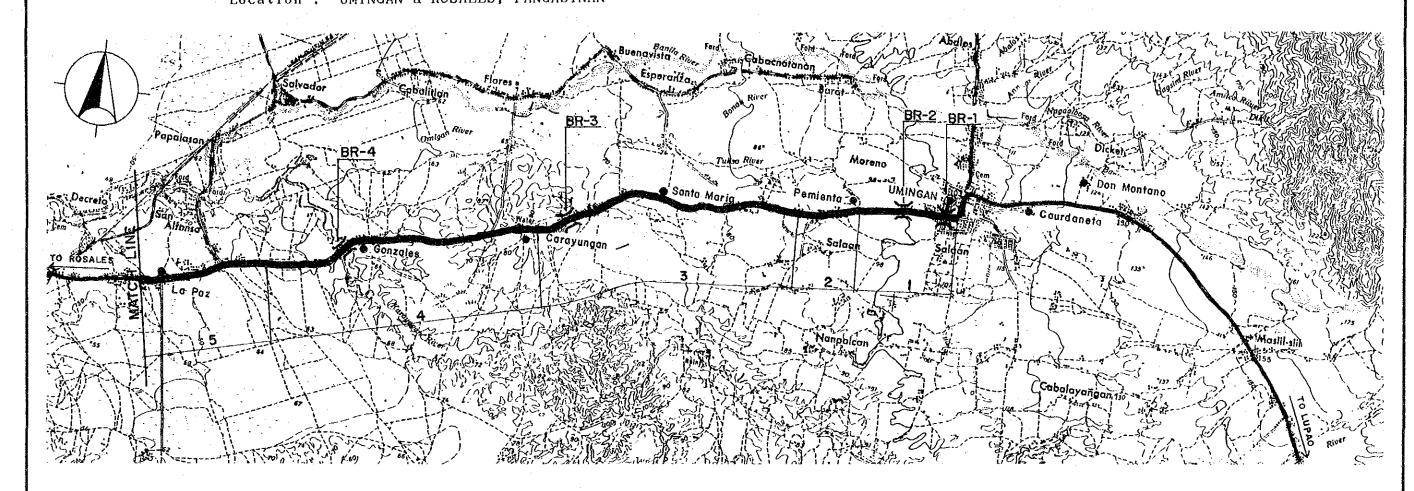
						and the second	والمراجع والم والمراجع والمراجع والمراجع والمراجع والمراجع والمراجع والمراج	
Road Classification Total Length	Primary 10.0 km	Major (Na	tional R	ad)				
Sub-section No.	.1	2	3	4	5	6	7	8
Length (km) Terrain Existing Road Surface Proposed Improvement Improvement Type Surface Type Carriageway Width (m) Shoulder Width (m) Ref. Typical Section	(Good) - - - -	2.3 Flat 6.0-PCC (Fair)	Flat 6.0-BTM	Flat 6.0-BTM (Bad) Rehabil. AC 6.7 2.0	6.7	Flat 6.0-BTM (Fair)	Flat 6.0-BTM	.6 Flat 6.0-BTM (Fair) - - - -
Bridge No.	BR-1	BR-2						
Existing Type Length (m) Proposed Type Length (m) No. of Spans	Concrete 28	Concrete 12 - -						

Scale 1: 50,000

Drawing No.

Road No: N12-3

Road Name: SAN JOSE - PANGASINAN ROAD Location: UMINGAN & ROSALES, PANGASINAN



Road Classification Total Length	Primary 23.1 km	Major (N	ational R	oad)	
Sub-section No.	1	2	3	4	5
Length (km) Terrain Existing Road Surface	Flat 6.0-BTM	Flat	Flat 6.0-BTM	Rolling 6.0-BTM	1.8 Rolling 6.0-BTM (V.Bad)
Proposed Improvement Improvement Type Surface Type Carriageway Width(m) Shoulder Width (m) Ref. Typical Section	-	-	Rehabil. AC 6.7 2.0	Rehabil. AC 6.7 1.5 TYPE 1-3	Rehabil. AC 6.7 1.5
Bridge No.	BR-1	BR-2	BR-3	BR-4	***************************************
Existing Type Length (m) Proposed Type Length (m) No. of Spans	Concrete 11	Concrete 10	Steel 45 -		in the CD Did have dead NAV CATE and SAV

PRESENT CONDITION AND PROPOSED IMPROVEMENT

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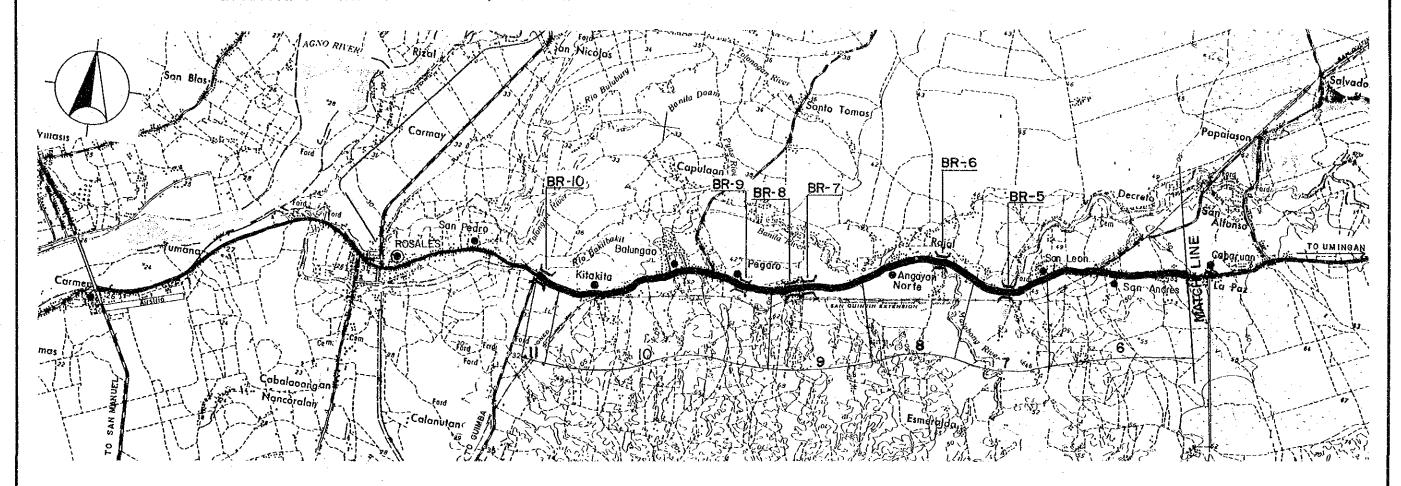
Scale

Drawing No.

Road No: N12-3

Road Name: SAN JOSE - PANGASINAN ROAD

Location: UMINGAN & ROSALES, PANGASINAN



Road Classification Total Length			co			
Sub-section No.	6	. 7	8	9	10	11
Length (km) Terrain Existing Road Surface Proposed Improvement Improvement Type Surface Type Carriageway Width(m) Shoulder Width (m) Ref. Typical Section	2.1 Flat 6.0-BTM (Bad) Rehabil. AC 6.7 2.0	1.1 Flat 6.0-BTM	Flat 6.0-BTM (Fair)	2.0 Flat 6.0-BTM (V.Bad) Rehabil. AC 6.7 2.0 TYPE 1-3	Flat 6.0-PCC (Good) - -	Flat 6.0-BTM
Bridge No.	BR-5	BR-6	BR-7	BR-8	BR-9	BR-10
Existing Type Length (m) Proposed Type Length (m) No. of Spans	Steel Cor 35 - -	icrete Con 16 -	crete Co	ncrete Con 32 - - -	crete Con	22 - - -

PRESENT CONDITION AND PROPOSED IMPROVEMENT

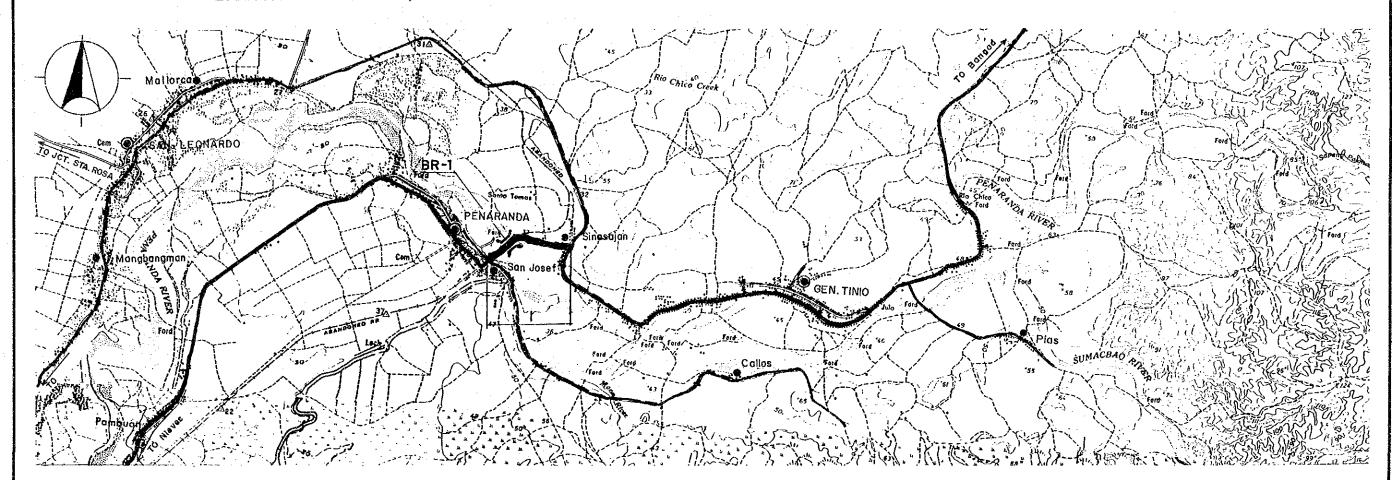
1:50,000

Scale

Drawing No. 20

Road No: N3-4

Road Name: GAPAN - PENARANDA - FORT MAGSAYSAY ROAD Location: PENARANDA, NUEVA ECIJA



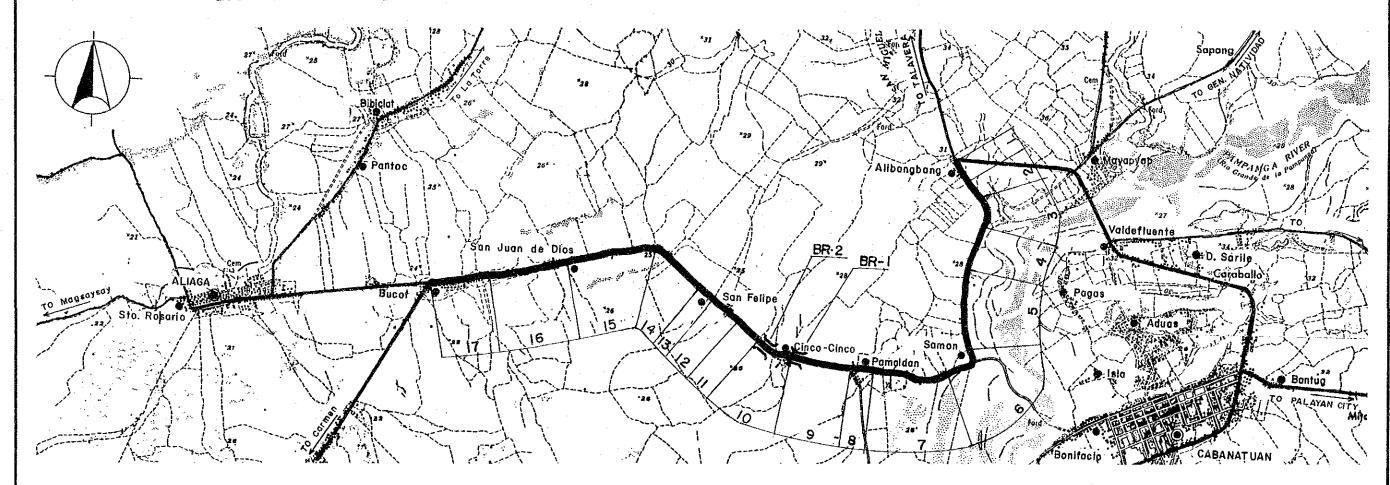
Road Classification Total Length	Second'y Major Rd (National Road) .7 km
Sub-section No.	1
Length (km) Terrain Existing Road Surface Proposed Improvement Improvement Type Surface Type Carriageway Width(m) Shoulder Width (m) Ref. Typical Section	.7 Flat. 3.2-GRV (Bad) Impr1 PCC 6.0 2.5 TYPE 2-2
Bridge No.	BR-1
Existing Type Length (m) Proposed Type Length (m) No. of Spans	Steel 300 2Lane-Br 300 12

PRESENT CONDITION AND PROPOSED IMPROVEMENT

Scale 1:50,000 Drawing No. 21

Road No: N6-1

Road Name: CABANATUAN - BUCOT - CARMEN ROAD Location: ALIAGA, NUEVA ECIJA

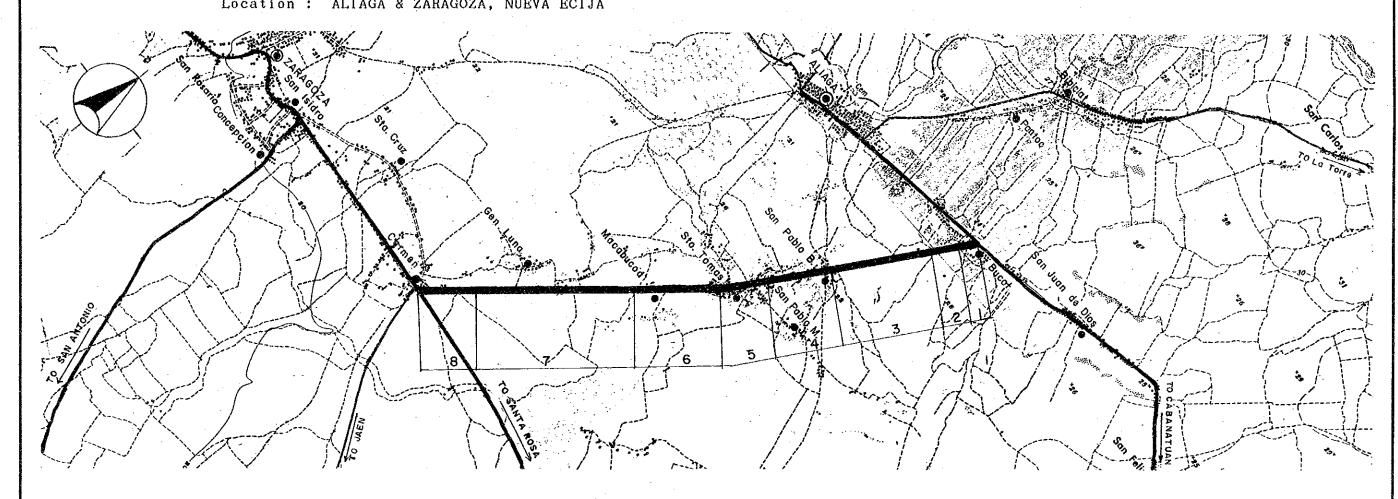


Road Classification Total Length	Secondar 11.9 km	y Major (National	Road)					·								
Sub-section No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Length (km)	. 4	, 3	.3	.7	1.2	. 6	1,1	. 3	1.0	. 4	. 4	.5	.3	.9	1.3	1.3	, 9
Terrain	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat	Flat
Existing Road Surface	6.1-PCC (Good)	6.1-PCC (Good)	6.0-GRV (Fair)	6.1-PCC (Good)		6.0-GRV (Bad)	5.5-GRV (Bad)	6.0-GRV (Bad)	6.0-GRV (Bad)	6.0-GRV (Bad)	5.8-BTM (Bad)	6.1-PCC (Good)	6.1-PCC (Good)	6.1-PCC (Good)	6.1-PCC (Bad)	6.1-PCC (Fair)	6.1-PCC (Fair)
Proposed Improvement					•						•						
Improvement Type	-	-	Impr2		lmpr1	Impr1	Impr1	Impr1	Impr1	Impr1	Rehabil.	_	-		Rehabil.		-
Surface Type	- .	-	- AC	<u>-</u>	AC	AC	AC	AC	AC .	- AC	AC	-	_		Overlay	-	-
Carriageway Width(m)	-	-	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	-	-	_	6.1	-	-
Shoulder Width (m)		· -	2.0	-	2.0	2.0	2.0	2.0	2.0	2.0	2.0	_	-	~ `	2.0	-	_
Ref. Typical Section Special Treatment	-	-	TYPE 3-3	••	TYPE 2-3	TYPE 2-3	TYPE 2-3	TYPE 2~3	TÝPE. 2-3	TYPE 2-3	TYPE 1-3	-	-		TYPE 1-2	ę	
Flood Section Length	-	-	300	_	1200	600	1100	300			-	-	-		-	-	-
Height	_		1.2	~,	1.2	1.2	1.2	1.2		-	-			-	-	- ,	
Bridge No.	BR-1	BR-2							*** THE THE THE BEC WIN ON MC AND					**			
Existing Type Length (m)	Concrete 24	Concrete 17										~ ~ ~ ~ ~ ~ ~ <u>~</u>		· · · · · · · · · · · · · · · · · · ·			
Proposed Type	2Lane-Br																
Length (m) No. of Spans	20 1	15 1															

Scale 1: 50,000 Drawing No. 22

Road No: N6-2

Road Name: CABANATUAN - BUCOT - CARMEN ROAD Location: ALIAGA & ZARAGOZA, NUEVA ECIJA



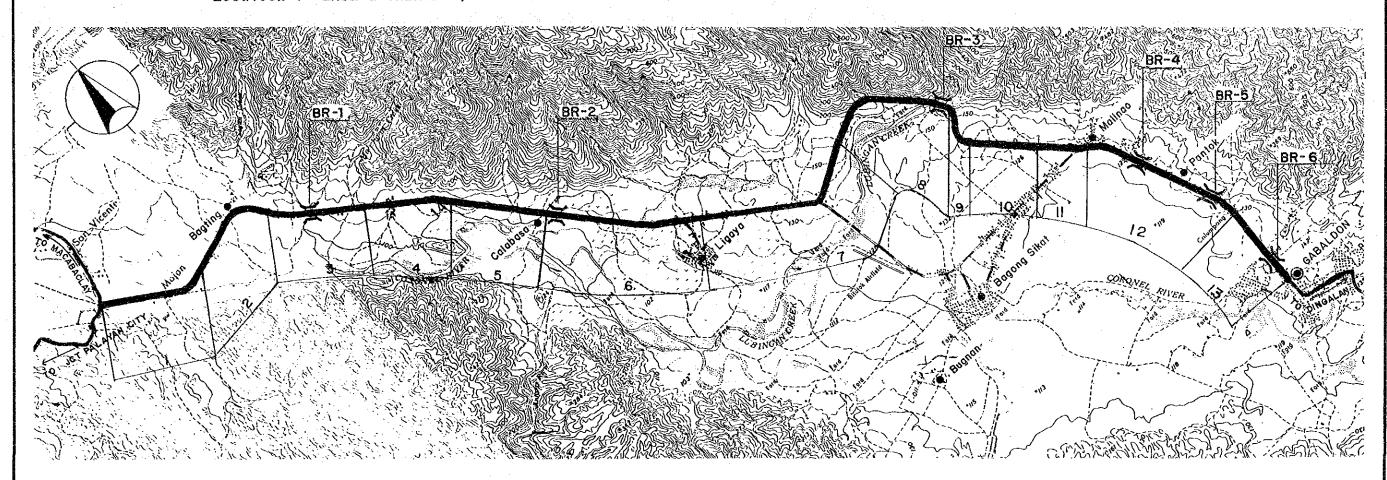
Road Classification Total Length	Secondar 8.1 km		(National	Road)				
Sub-section No.	1	2	3	4	5	6	7	8
Length (km)	.3	. 4	1.5	. 9	. 8	1.1	2.4	,7
Terrain	Flat	Flat	Flat		Flat	Flat	Flat	Flat
Existing Road Surface	6.1-PCC	6.0-GRV	5.5-GRV	5.5-GRV	5.5-GRV	6.1-PCC	6.1-PCC	5.5-GRV
	(Good)	(Bad)	(Bad)	(Bad)	(V.Bad)	(Fair)	(Fair)	(Bad)
Proposed Improvement						•		
Improvement Type	, -	Impr1	Impr1	Impr1	Impr1	_	-	Impr1
Surface Type	-	AC	AC	- AC	AC	-		AC
Carriageway Width(m)	- .	6.0	6.0	6.0	6.0	-		6.0
Shoulder Width (m)	_	2.0	2.0	2.0	2.0	-	-	2.0
Ref. Typical Section	_ `		TYPE 2-3	TYPE 2-3	TYPE 2-3	-	_	TYPE 2-3
Special Treatment								
Flood Section Length	· •	400	1500	900	800	_	_	700
Height		. 5	. 5	. 2	. 2	****	-	. 2

PRESENT CONDITION AND PROPOSED IMPROVEMENT

Scale 1:50,000 Drawing No. 23

Road No: N8-2

Road Name: TABLANG - GABALDON - DINGALAN ROAD Location: LAUR & GABALDON, NUEVA ECIJA



Road Classification Total Length	Seconda 19.8 km		(National	Road)									
Sub-section No.	1	2	3	4	5	6	7	8.	9	10	11	12	13
Length (km)	1.7	1.4	1.4	1.2	1.4	2.2	2.9	1.6	. 8	1.0	.7	2.3	1.2
Terrain	Flat	Rolling	Rolling	Rolling	Rolling	Flat	Flat	Rolling	Flat	Flat	Flat	Rolling	Flat
Existing Road Surface	4.5-GRV	4.5-GRV	4.5-GRV	4.5-GRV	4.5-GRV	4.5-GRV	4.5-GRV	4.5-GRV	4.5-GRV	4.5-GRV	4.5-GRV	4.5-GRV	4.5-GRV
	(Bad)	(V.Bad)	(V.Bad)	(Y.Bad)	(V.Bad)	(V.Bad)	(V.Bad)	(Bad)	(Bad)	(Bad)	(Bad)	(Bad)	(Bad)
Proposed Improvement			$C_{ij} = \{i,j,k\}$			1 .		_		_			
Improvement Type	Impr1	Impr1		Impr1			Impr1				_		Impr1
Surface Type	AC	AC	AC	AC	AC	AC	AC.	AC	AC	AC	AC	AC	AC
Carriageway Width(m)	5.0	6.0	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Shoulder Width (m)	2.0	1.5	1.5	1.5	1.5	2.0	2.0	1.5	2.0	2.0	2.0	1.5	2.0
Ref. Typical Section	TYPE 2-3	TYPE 2-3	TYPE 2-3	TYPE 2-3	TYPE 2-3	TYPE 2-3	TYPE 2-3	TYPE 2-3	TYPE 2-3	TYPE 2-3	TYPE 2-3	TYPE 2-3	TYPE 2-3
Special Treatment													
Flood Section Length		-			-	2100	-	-	-	-	-		-
Height	.3	-	-	-		. 5	-	-	-	_	-	-	•
Slope Protection													
(Cut Slope)	-	300	100	300	100		••	-	**	-	-	_	
(Embank't Slop)	-	80	40	80	40	-				-			
Bridge No.	BR-1	BR-2	BR-3	BR-4	BR-5	BR-6							
Existing Type	Timber	Bailey	Concrete	Timber	Timber	Timber							
Length (m)	20	12	153	10	6	27							
Proposed Type	2Lane-Br	2Lane-Br		2Lane-Br	2Lane-Br	2Lane-Br							
Length (m)	20	15		10	10	30							
No. of Spans	1	1	_	1	1	2							

PRESENT CONDITION AND PROPOSED IMPROVEMENT

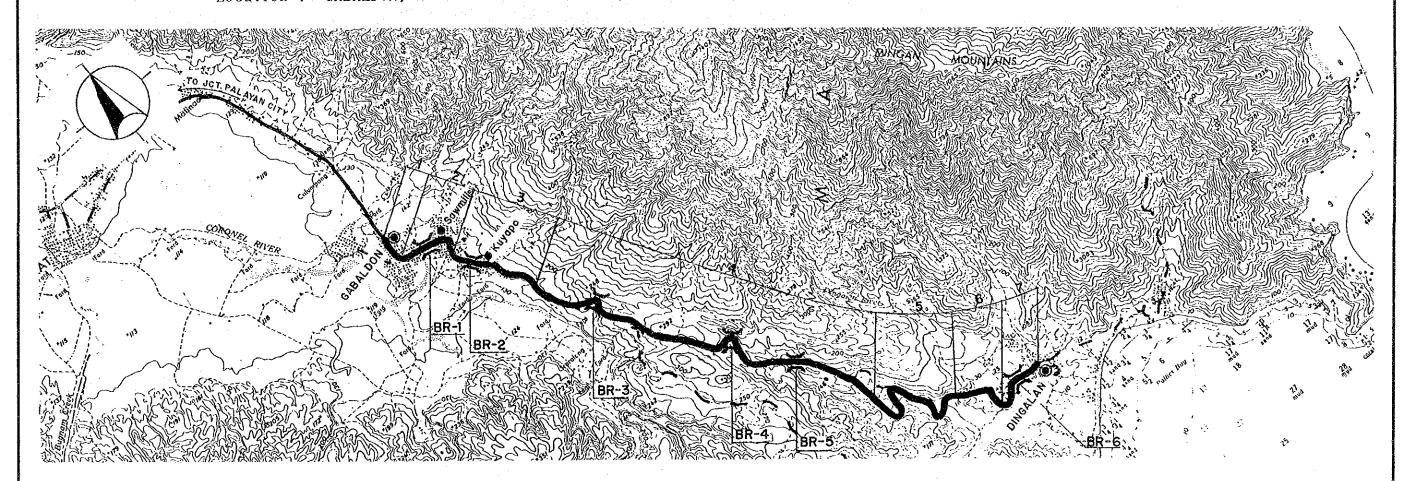
Scale

Drawing No. 24

1:50,000

Road No: N8-3

Road Name: TABLANG - GABALDON - DINGALAN ROAD Location: GABALDON, NUEVA ECIJA & DINGALAN, AURORA



Road Classification Total Length	Seconda 11.6 km	ry Major	(National	Road)			
Sub-section No.	1	2	3	4	5	6	7
Length (km) Terrain Existing Road Surface		Flat 6.0-PCC	Flat 4.5-GRV		Mt'nous 4.5-GRV	Rolling 4.5-GRV	Flat 4.5-GRV
Proposed Improvement Improvement Type Surface Type Carriageway Width(m) Shoulder Width (m) Ref. Typical Section Special Treatment Slope Protection	Rehabil. * BMP 6.0 1.5 TYPE 1-5	 	* BMP 6.0 1.5		Gravel 6.0 .5	Gravel 6.0	6.0 1.5
(Cut Slope) (Embank't Slop)			- -	50 50	20 25		
Bridge No.	BR-1	BR-2	BR-3	BR-4	BR-5	BR-6	
Existing Type Length (m) Proposed Type Length (m) No. of Spans	Concrete 41 -	21	10	Timber 3 2Lane-Br 5	25	Ford-Cr. 2Lane-Br 60 3	

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

PRESENT CONDITION AND PROPOSED IMPROVEMENT

1: 50,000

Scale

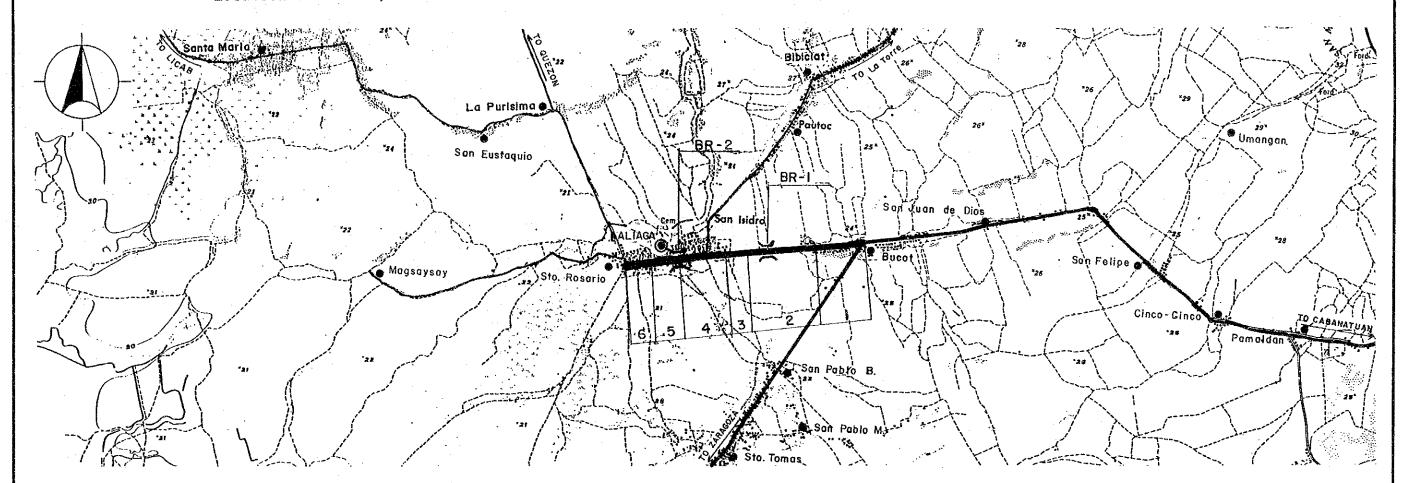
25

Drawing No.

Road No: P4-1

Road Name: ALIAGA - LICAB - VICTORIA ROAD

Location: ALIAGA, NUEVA ECIJA

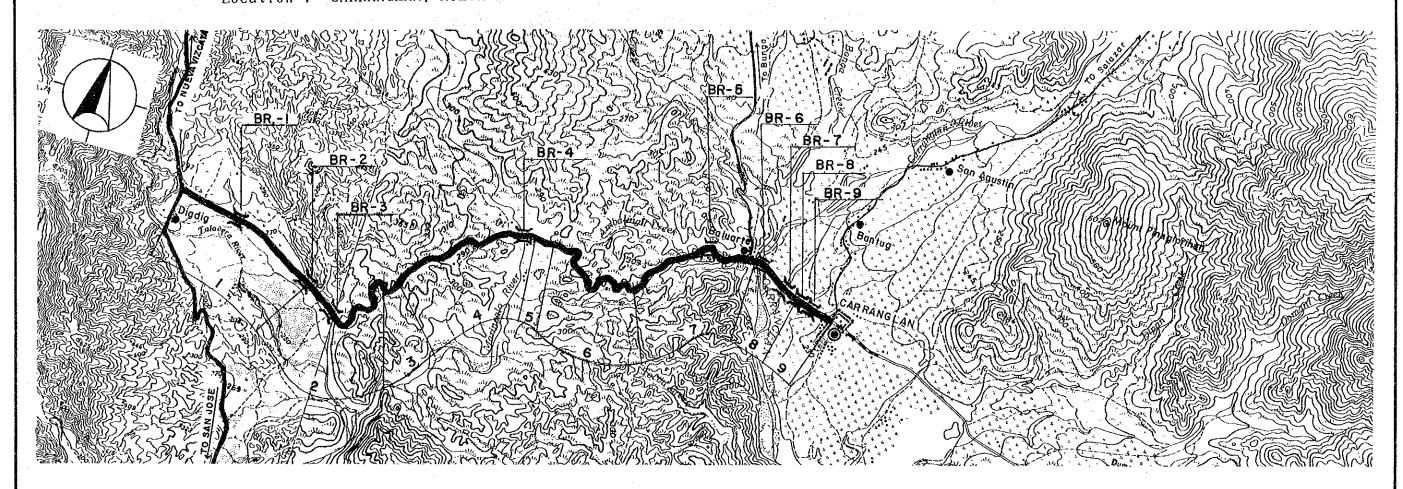


Road Classification Total Length	Seconda 3.5 km	ry Major	(Provinci	al Road)		
Sub-section No.	1	2	3	4	. 5	6
Length (km) Terrain Existing Road Surface Proposed Improvement Improvement Type Surface Type Carriageway Width (m) Shoulder Width (m) Ref. Typical Section Special Treatment Flood Section Length Height	5.5-GRV (Bad) Impr1 AC 6.0 2.0 TYPE 2-3	Flat 4.0-GRV (V.Bad) Impr1 AC 6.0 2.0 TYPE 2-3	Flat 4.0-GRV (Bad) Impr1 AC 6.0 2.0 TYPE 2-3	6.0-GRV (Bad) Impr1 AC 6.0 2.0 TYPE 2-3	Flat 6.0-GRV (Fair) Impr2 AC 6.0 2.0	Flat 5.5-GRV (Bad) Impr1 AC 6.0 2.0
Bridge No.	BR-1	BR-2				
Existing Type Length (m) Proposed Type Length (m) No. of Spans	t e	Concrete 14				

Scale 1: 50,000 Drawing No. 26

Road No: P13-1

Road Name: DIGDIG - CARRANGLAN ROAD Location: CARRANGLAN, NUEVA ECIJA



Road Classification Total Length	Seconda 12.8 km		(Provinci	al Road)					
Sub-section No.	1	2	3	4	5	6	7	8	9
Length (km)	2.3	1.9	.3	2.2	.3	2.3	2.1	.8	.6
Terrain	Flat	Rolling	Rolling	Rolling	Rolling	Rolling	Rolling	Flat	
Existing Road Surface	6.4-PCC	6.4-PCC	6.4-PCC	6.4-PCC	6.4-PCC	6.4-PCC	4.0-GRV	4.0-GRY	4.0-BTM
	(Fair)	(Fair)	(Bad)	(Fair)	(Fair)	(Fair)	(V.Bad)	(Y.Bad)	(Y.Bad)
Proposed Improvement						•	-		
Improvement Type		-	Rehabil.	· -	-		Impr1	Impr1	Rehabil.
Surface Type		÷	Overlay	**	-	-	* BMP	* BMP	* BMP
Carriageway Width(m)		-	6.4	-	-	_	6.0		6.0
Shoulder Width (m)	-	- ***	1.5			-	1.0		1.5
Ref. Typical Section			TYPE 1-2		_		TYPE 2-4	TYPE 2-4	TYPE 1-5
Bridge No.	BR-1	BR-2	BR-3	BR-4	BR-5	BR-6	BR-7	BR-8	BR-9
Existing Type	Concrete	Concrete	Concrete	Steel	RCBC	Bailey	RCBC	RCBC	RCBC
Length (m)	16	8	16	20	5	109	23	11	11
Proposed Type	2Lane-Br	2Lane-Br	2Lane-Br	2Lane-Br	-	2Lane-Br	=		=
Length (m)	16	10	17	20	-	109	-	_	
No. of Spans	1	1	1	1	-	7	-	_	-

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

PRESENT CONDITION AND PROPOSED IMPROVEMENT

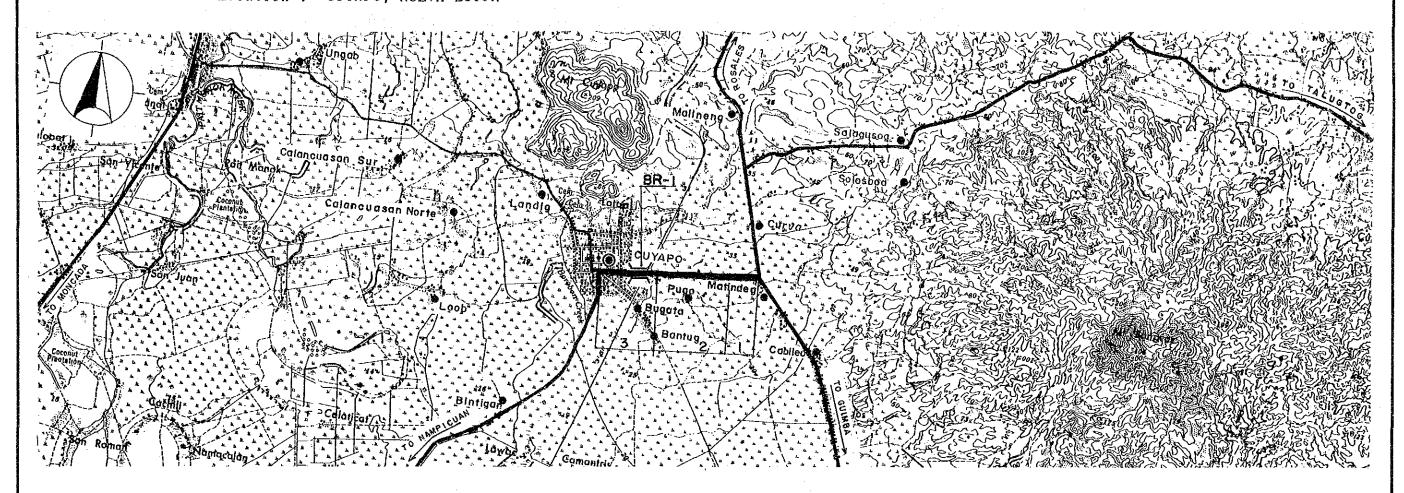
Scale

Drawing No. 1:50,000

27

Road No: P15-1

Road Name: CUYAPO - NAMPICUAN ROAD Location: CUYAPO, NUEVA ECIJA



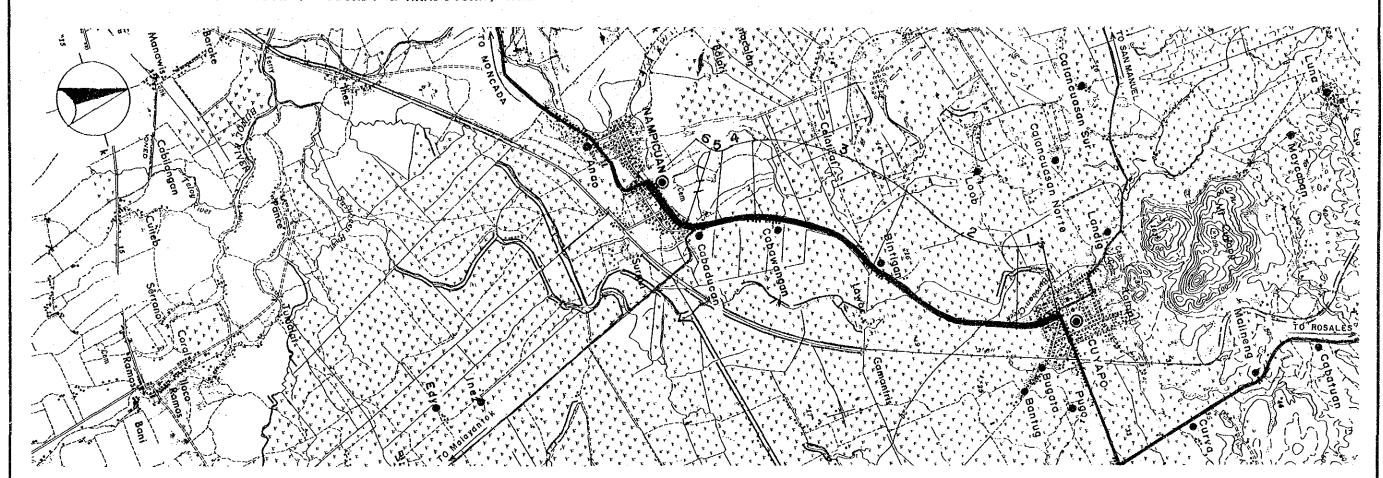
Road Classification Total Length	Second'y Major(Prov'l Road) 2.3 km
Sub-section No.	1 2 3
Length (km) Terrain Existing Road Surface Proposed Improvement Improvement Type Surface Type Carriageway Width(m) Shoulder Width (m) Ref. Typical Section	.4 1.0 .9 Flat Flat Flat 5.5-GRV 6.1-PCC 6.1-PCC (Fair) (Bad) (Bad) Impr2 Rehabil. Rehabil. AC Overlay Overlay 6.0 6.1 6.1 2.0 2.0 2.0 TYPE 3-3 TYPE 1-2 TYPE 1-2
Bridge No.	BR-1
Existing Type Length (m) Proposed Type Length (m) No. of Spans	Concrete 7 -

PRESENT CONDITION AND PROPOSED IMPROVEMENT

Scale 1:50,000 Drawing No. 28

Road · No: P15-2

Road Name: CUYAPO - NAMPICUAN ROAD Location: CUYAPO & NAMPICUAN, NUEVA ECIJA



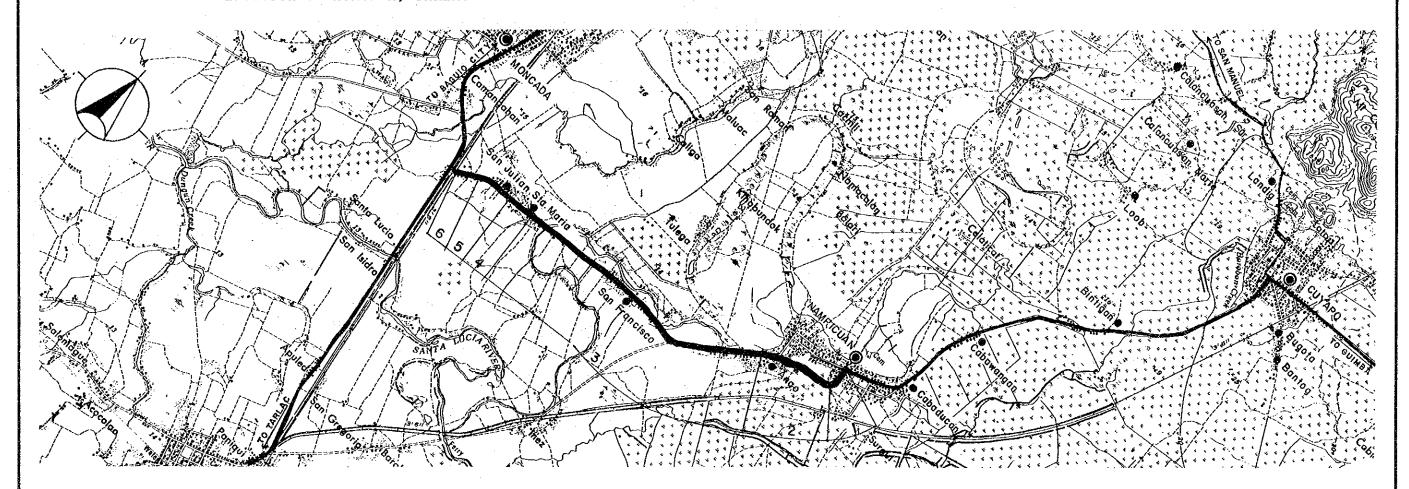
Road Classification Total Length	6.4 km		(Provincia			
Sub-section No.		2	3		5	6
Length (km)	.6	2,1	1,7	. 7	.5	.8
Terrain	Flat	Flat	Flat	Flat	Flat	Flat
Existing Road Surface	6.2-PCC	6.2-PCC	6.2-PCC	6.2-PCC	6.2-PCC	6.2-PCC
	(V.Bad)	(V.Bad)	(V.Bad)	(Fair)	(Bad)	(Fair)
Proposed Improvement						
Improvement Type	Rehabil.	Rehabil.	Rehabil.	-	Rehabil.	_
Surface Type	PCC	PÇÇ	PCC	-	Overlay	
Carriageway Width(m)	6.2	6.2	6.2		6.2	-
Shoulder Width (m)	2.5	2.5	2.5	-	2.0	_
Ref. Typical Section	TYPE 1-1	TYPE 1~1	TYPE 1-1		TYPE 1-2	***

PRESENT CONDITION AND PROPOSED IMPROVEMENT

Scale 1:50,000 Drawing No. 29

Road No: P15-3

Road Name: CUYAPO - NAMPICUAN ROAD Location: MONCADA, TARLAC



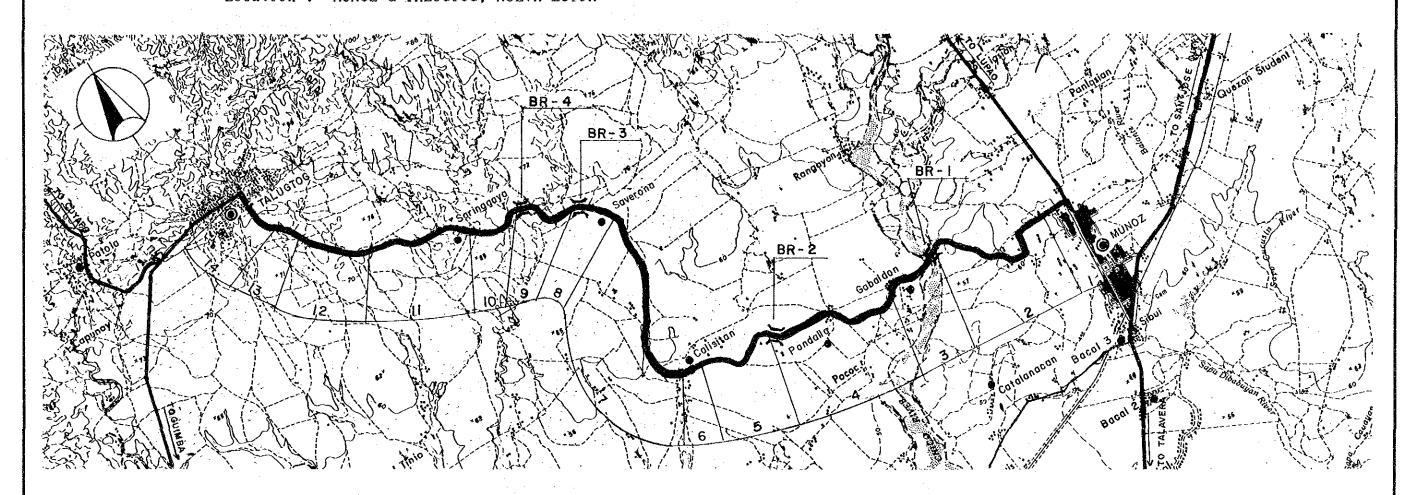
Road Classification Total Length	Secondar 7.2 km	y Major (Provinci	al Road)		
Sub-section No.	1	2	3	4	5	6
Length (km)	.3	1.1	4.3	.5	.6	. 4
Terrain	· Flat	Flat	Flat	Flat	Flat	Flat
Existing Road Surface	6.1-PCC	6.1-PCC	6.1-PCC	5.5-BTM	5.5-BTM	5.5-BTM
	(Fair)	(Fair)	(Good)	(Bad)		
Proposed Improvement						
Improvement Type	-	-		Impr1	Impr1	Impr1
Surface Type		-	-	PCC	PCC	PCC
Carriageway Width(m)	_	-	-	6.1	6.1	6.1
Shoulder Width (m)	-	-	-	2.5	2.5	2.5
Ref. Typical Section	-	-	-	TYPE 2-1	TYPE 2-1	TYPE 2-1

PRESENT CONDITION AND PROPOSED IMPROVEMENT

Scale 1: 50,000 Drawing No.

Road No: P18-1

Road Name: MUNOZ - TALUGTOG - CUYAPO ROAD Location: MUNOZ & TALUGTOG, NUEVA ECIJA



Road Classification Total Length	Seconda 15.9 km	ry Major	(Provinci	al Road)	······································									
Sub-section No.	1	2	3	4	5	6	7	8	9	10	11	12	13	 14
Length (km) Terrain Existing Road Surface Proposed Improvement Improvement Type Surface Type Carriageway Width (m) Shoulder Width (m) Ref. Typical Section Special Treatment	2.0	Flat 5.5-GRV (Bad) Impr1 AC 6.0 2.0	Flat 5.5-GRV (Bad) Impr1 AC 6.0 2.0	Flat 4.0-EAR (V.Bad) Impr1 AC 6.0 2.0	Flat 4.0-EAR (V.Bad) Impr1 AC 6.0	(V.Bad) Impr1 AC 6.0 2.0	Flat 4.0-EAR (V.Bad) Impr1 AC 6.0	4.0-EAR (V.Bad) Impr1 AC 6.0	5.5-EAR (V.Bad) Impr1 AC 6.0	Rolling 5.5-GRV (Fair) Impr2 AC 6.0	5.5-GRV (Falr) Impr2 AC 6.0	Rolling 5.5-GRV (Fair) Impr2 AC 6.0	Rolling 5.5-GRV (Bad) Impr1 AC 6.0	.8 Flat 5.5-GRV (Bad) Impr1 AC 6.0
Flood Section Length Height		2000	1000 1.0	1800	1200	300 . \$	2700 .5	700 .5	1000	-	-	-	-	-
Bridge No.	BR-1	BR-2	BR-3	BR-4		* 10 10 40 ET ET ES ES ES ES AL S	· · · · · · · · · · · · · · · · · · ·						·	
Existing Type Length (m) Proposed Type Length (m) No. of Spans	96	Concrete 13 1Lane-Br 13	19	13		. 		A 440 for the tray ray and and the tray						