

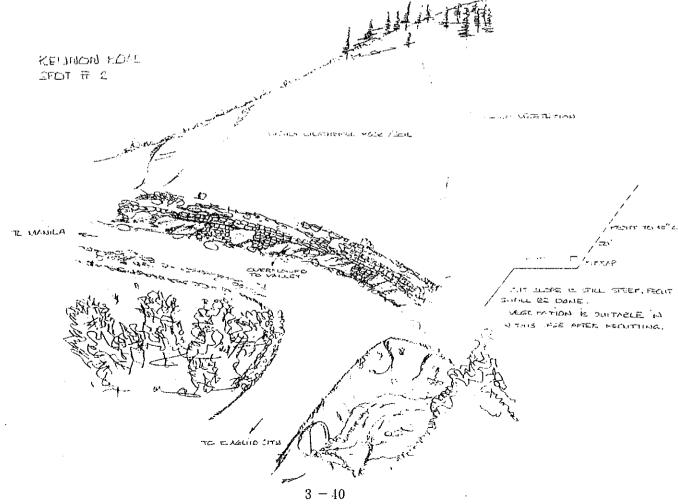
NAME OF ROAD : KENNON ROAD
TYPE OF FAILURE : CUT SLOPE FAILURE
LOCATION : KM 241.5

Form-1: CUT SLOPE DAMAGE INSPECTION SHEET

			Name of Province BENGUET					
Road NO.	ļ	0221	Name of Road KENNON ROAD					
Spot NO.	<u></u>	02	Location of Spot Z叫.00					
Classification of Road			MN National Road (2) Provincial Road					
NO. of Lanes	s & R	oadway Width	(1)1-Lane 4272-Lane (3) -Lane Total Width: 940					
Surface Type & Pavement Width			(1)PCC (2)AC (3)Gravel (4)Earth Pave. Width: 6:10					
Terrain	,		(1)Flat (2)Rolling (3) ountainous					
	1	Type of Slope	M)Cut Slope (2)Natural Slope (3)(
	2	Kind of Failure	(1) Gulley (2) Erosion (3) Land Slide (1) Rock/Debris Fall					
Evidence	3	Size of Failure	(1) Width: 300.0 m (2) Height: 8-20.0 m (3) Number: 3					
of Failure	4	Date Occured	AUGUST / / 19 92					
	5	Traffic Magnitude Inter-	(4) Full Width (2) Half Width (3) Shoulder (4) No Influence					
	6	Countermeasure	MStructure(RIPRAP) (2) Removal of Stide Material					
	7	Height	(1)10m ((2)10~30m (3)30~50m (4)50m >					
Existing	8	Gradient	(1)45' ((2)45' ~60' (3)60') (4)0verhang					
Slope Condition	9	Berm	Winone (2)Existing Number() (3)Width(
	10	Protection	(3)Structure(
	11	ilardness	Willard rock (2)Soft Rock (3)(
	12	Withering Condition	(1)Fresh (2)Slightly Ø)Highly Ø)Nearly Withered Withered Soil					
Scolo Rock	13	Direction of Strata	(1) Inclined to Mountain (2) Inclined to Slope (3) Not Clea					
Condi	14	Condition of Crack	(1) Fine Crack (2) Clear (3) Open (4) Clay into Crack					
tion	15	Thickness	√1) 1m ⟨ (2)1~5m (3)5~10m (4)10~20m (5)20m ⟩					
Scil	16	Compactness	(1) Tight (2) Slightly Loose (3) Loose					
	17	Degree of Saturation	Willry Wet (3)Seepage (4)Spring					
Scather Condition	18	Surface Water Concentration	(1)None Anicw (3)High					
	19	Drainage Facilities	(1)Existing() WNothing					
	20	Impact to Traffic	Willow (2) Medium (3) High					
Engineer- ing	21	Cause of Damage	(1)Concentration of Surface Water (2)Seepage/Spring (3)Steeper than Nermal Slope (4)(
Judgement	22	Countermeasure	RIPRAP, ROCKNET, RECUTTING					
	23	Detour Road	(2) Available					



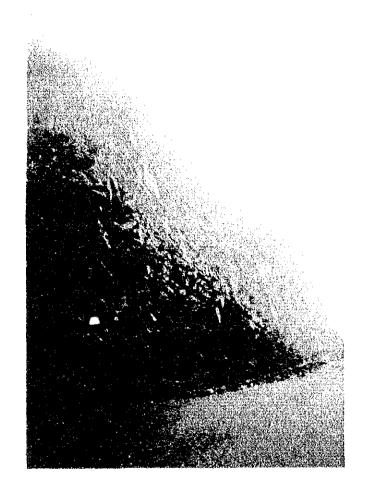
NAME OF ROAD : KENNON ROAD
TYPE OF FAILURE : CUT SLOPE FAILURE
LOCATION : KM 241 0



Form-1: CUT SLOPE DAMAGE INSPECTION SHEET

				Name of Province RENGUET					
Road S	0.		0221	Name of Road KENNON RCAD					
Spot X	0.		43	Location of Spot 240.10					
				(2) Provincial Road					
NO. of Lanes & Roadway Width			oadway Width	(1)1-Lane (272-Lane (3) - Lane Total Width: 7:10					
Surface Type & Pavement Width			Pavement Width	(1)PCC LZ)AC (3)Gravel (4)Earth Pave. Width: 6:10					
Terrain				(1)Flat (2)Rolling (3)Hountainous					
		1	Type of Slope	(X)Cut Slope (2)Natural Slope (3)()					
Evidence		2	Kind of Pailure	(1)Gulley (2)Erosion (3)Land Slide (4)Rock/Debris Fall					
		3	Size of Failure	(1)Width: 10-D m (2)Height: δ.δ m (3)Number:					
of Failur	1	4.	Date Occured	AUGUST / 1992					
railure		5	Traffic Magnitude Inter- ruption Duration	(X)Full Width (2) llalf Width (3) Shoulder (4) No Influence (1) 1 day ((2) 1~7 days (3) 7 days >					
			Countermeasure	(1)Structure() (2)Removal of Siide Materials					
<u></u>		 7	Height	(2) 10m ((2) 10~30m (3) 30~50m (4) 50m)					
Existi	ng	8	Gradient	(1)±5' < (2)45' ~60' (3)60' > (4)9verhang					
Slone Condition		9	Berm	(Y) None (2) Existing Number() (3) Width()					
		10	Protection	(A)None (2)Vegetation (3)Structure()					
		11	Hardness	M) Hard rock (2) Soft Rock (3) ()					
		12	Withering Condition	(1)Fresh (2)Slightly (3)Highly (4)Nearly Withered Withered Soil					
Geolo(gical	Rock	13	Direction of Strata	(1)Inclined to Mountain & Inclined to Slope (3)Not Clear					
Condi		14	Condition of Crack	(1) Fine Crack (2) Clear (3) Open (4) Clas into Crack					
tion		15	Thickness	(1) lm ((2)1~5m (3)5~10m (4)10~20m (5)20m >					
	Soll	16	Compactness	(1) Tight (2) Slightly Loose (3) Loose					
		17	Degree of Saturation	(1)Dry (2)Wot (3)Scepage (4)Spring					
Weathe Condi	r tion	18	Surface Water Concentration	(!)None 42)Low (3)High					
٠		19	Drainage Facilities	(1)Existing() (2)Nothing					
		20	Impact to Traffic	(i)Low (2)Medium &)High					
Engineer-		21	Cause of Damage	(1)Concentration of Surface Water (2)Seepage/Spring ### Steeper than Normal Slope (4)(
tng Judgem		22	Countermeasure	RECUTTING					
		23	Detour Road	(2)Available					
Date o		TOP (SOIL & O.I'm under	EPT / 1992 Inspector NAGAMI / JAKE					



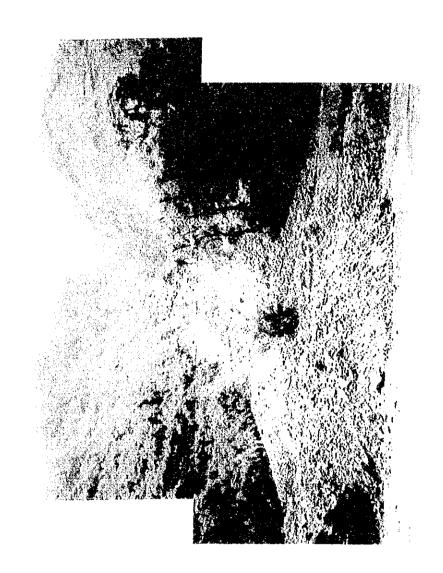


NAME OF ROAD : KENNON ROAD
TYPE OF FAILURE : CUT SLOPE FAILURE
LOCATION : KM 240.1

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Form-3: DEBRIS FLOW INSPECTION SHEET

				Name of Provin	ce	BENGUE:	T	· · · · · · · · · · · · · · · · · · ·	
Road NO.		0221		Name of Road		KENNO		.D	
Spot NO.		04		Location of Sp	ot	239.8	0		
Classificat	ion	of Road	· · · · · · · · · · · · · · · · · · ·	⊀National Ro	ad	(2)	Provin	cial Road	
NO. of Lanes	: & F	loadway Wid	lth	(1)1-lane (2)	2-lan	e (3)	-Lane	Total Widt	h: 8.00
Surface Typ	e &	Pavement W	'idth	(1) PCC (2) AC	(3)G	ravel (4)	Earth	Pave. Widt	
Terrain				(1)Flat	(2)R	olling	(3) No	untainous	
Evidence	1	Size of D	amage	(1)Width(3	30.0)	(2)Le	ngth(40.0)
of Flow	2	Date Occured			/		/ 19		**********
			Magnitude	(1) Full Width	(2) h	aif Width	(3)Sh	oulder (4)	No Influenc
	3	Interrup tion	Duration	(1) 1 day <	(2X	1~7 days	(3) 7	days >	· · · · · · · · · · · · · · · · · · ·
	4	Avarage G	radient	(1)20' ((2)2	0'~30'		(3)30.>	
Existing	5		asin	(X)50,000m2 ((2)5	0,000~200), 000m2	(3)200,0	00m2 >
Flow Condition	6	Deposit o	n Riverbed	(1)None	(2)R	are	(3) Nb	undant (4)	Overflow
	7	Deposit M	aterial	(1)Clay (2)Sa	ınd ,	(3)Gravel	(1) Co	bble (5)	Boulder
	8	Vegetatio	n	Covering Rate	of Ba	re Land or	Thin	Forest:(1)5	0%> (2)50%
	9	Impact to	Traffic	(1)Low	(2)M	edium	(XIIIi	gh	
Engineer-	10	Cause of	Damage	WATER CONCE	NTRATI	ION /STE	EP SLO	PE	······································
ing Judgement	11	Counterme	asure				·	······································	
	12	Detour Ro	ad	√1)None			(2) Av	ailable	
PIPALP, BUT	HEAL CERTIFICATION OF THE PARTY	William Co.	1 Della	COLUMN STATES		ROCK ROCK		TO UNINE	250
SFET N	₩ 	4/	<u> </u>	/ 1000		\ \	- , 		7,,,,,
Date of Ins	pect	Ion 6	2 / SEP	T / 1992		Inspe	etor	MAGAMI	/JAKE

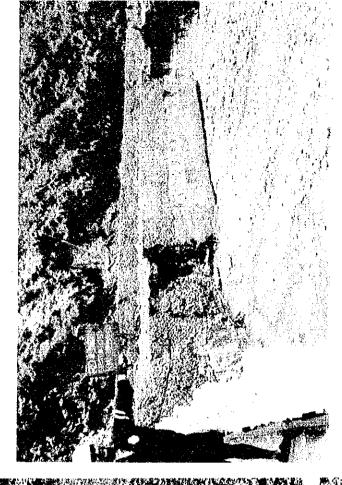




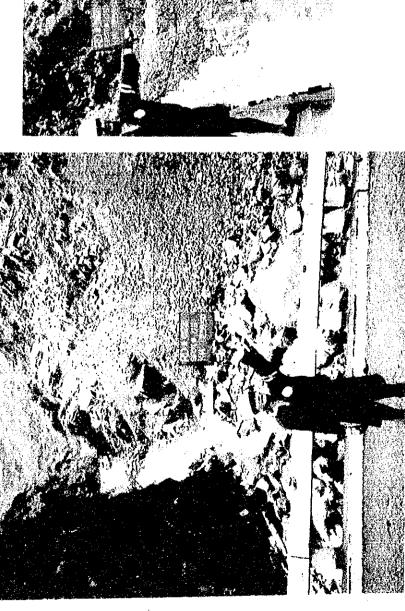


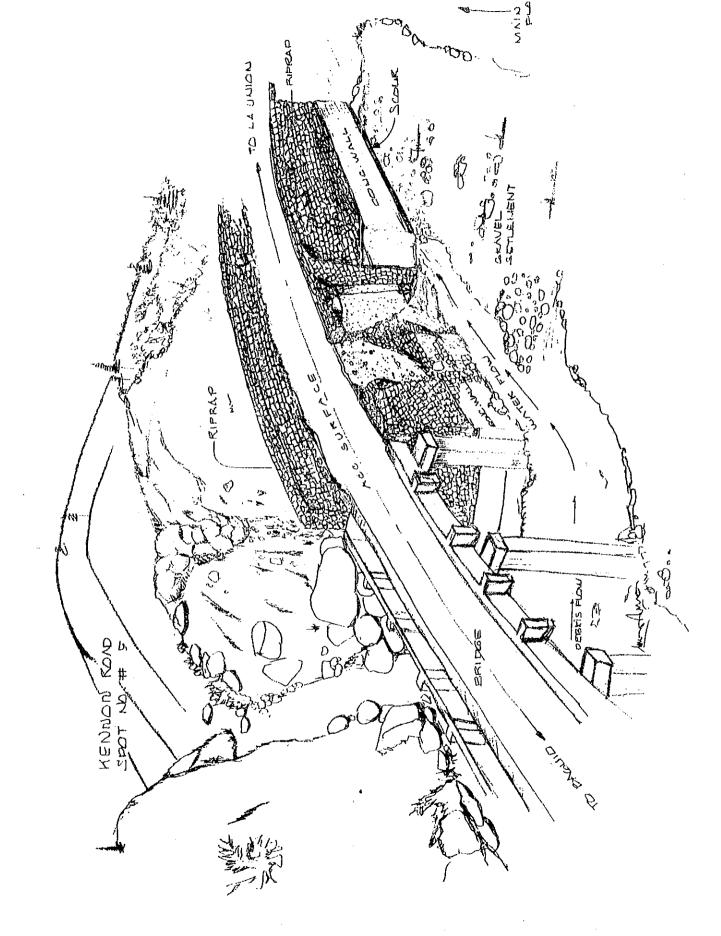
Form-4: ROAD DAMAGE INSPECTION SHEET

				F							
Maghaniya (golda da jara da cada / Massalla da Sana la da Sana		and the second s	······································		of Provin	ce	BEN	GUET	····		
Road NO.		0221		Name o	of Road		大門子	ICH ROAD			
Spot NO. C5			Locat	ion of Sp	ot	23	8 - 50				
Classification of Road				(1)Na	tional Ro	ad		(2)Pro	vincial	Road	,
NO. of Lanes	& R	loadway Wid	th	(1)1-	ane (2)	2-Lan	e (3)	-Lane	Total	Width:	गन्०
Surface Typ	e &	Pavement W	idth	(XY) PC	(2)AC	(3).G	ravel	(4)Earth	Pave.	Width:	6.10
General	1	Terrain		(1)F1	nt	(2)R	olling	(3) Mou	ntainou	s	
Informat-	2	Cross-sec	tion	(X) Cu	t _.		ill (he		_[8]	(3)F1a	t
1011	3	Roadbed M	aterial		ained		ravel		· · · · · · · · · · · · · · · · · · ·	(4)(<u> </u>
	4	Type of D	amage	(1)F16 (3)Sec	ooding Ro ouring of	adbed Shou	lder	(2)F1o (4)Sco	oding/M uring o	uddy Si f Roadt	irface ed
Evidence of	5	Length of	Damage	<u>5</u> ,	O m.		33				
Damage	6	Date Occu	red		TZVƏUA	/		/ 1992	<u> </u>		
	7	Traffic Interrup	Magnitud	le (1)Fu	11 Width	(2)H	alf Wid	dth (3)Sho	ulder	(4)No	Influence
:		tion	Duration	(1) 1	day ((2)	1∼7 da	ays (3) 7	days >		
	8	Counterme	asure								· · · · · · · · · · · · · · · · · · ·
Existing Drainage	9	Drainage	Faciliti <i>e</i>	es (1)Ex	isting			(2) Not	hing		
Condition	10	Drainage	Condition	PCC	R						
	11	Impact to	Traffic	(1)Lo	Κ'	r(5) W	edium	(3)llig	h	<u> </u>	· · · · · · · · · · · · · · · · · · ·
Engineer- ing	12	Cause of	Damage	(1) Cor (3) De	ncentrati	on of River	Surfact bed	ce Water (4)Flood	(2) Sna (5) (king of	River
Judgement	13	Counterme	asure	RE	TAINING	WALL					
	14	Detour Ro	ad	(LY) Noi	ne ·				(2) Ava	ilable	
A - A A											
Data of Inc		<u> </u>	aguio (/ 199	2		nspector	NAG	4 201 /	JAKE
Date of Ins	hac (ion or	<u> </u>	SEPT	/ 177	<u>u</u>		ishec (0)	MAG	4 n.d \	シャトロ





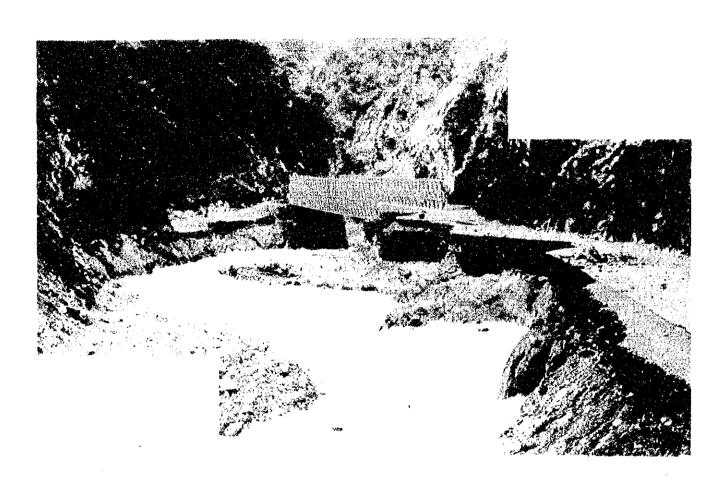




Form-4: ROAD DAMAGE INSPECTION SHEET

			Name of Province	BENG	LIET			
Road NO.]	0221	Name of Road		CN ROA	.t		
Spot NO.	[]	06	Location of Spot		5.50			
Classificat	l ion		(A) National Road	1		vincial	Road	
·		Coadway Width	(1)1-Lane (2)2-Lan	e (3)		Total		7.10
		Pavement Width	(1) PCC (2) AC (3) C		·			6.10
our race. Cyp	1	Terrain	(1)Flat (2)F	· 		L		6.10
General Informat-	$\frac{1}{2}$	Cross-section			tht:		(3)F1at	·
ion	3	Roadbed Material	<u> </u>		(3) Com		(4) (·
	4	Type of Damage	(1)Flooding Roadbed (4)Ground Subsidence		eposit o			Scouring
Evidence	5	Length of Damage		,6 ())(-
of Damage	6	Date Occured	500.00 m AV6UST/		/ 199	 2	······································	
namage	0	Traffic Magnitude	Wifull Width (2)	late Mid+			(4) % 0	nfluence
	7	Interrup	(1) 1 day ((2)				(4)100	mi idence
		tion Duration		.,		days /		
D 1 1 1	8	Countermeasure	GROUTED RIPRAP	Cuo Mois		b.l.,		· · · · · · · · · · · · · · · · · · ·
Existing Drainage	9	Drainage Facilities	(1)Existing		(2) Not	ning		
Condition	10	Drainage Condition	NO INFLUENCE		40.111			
	11	Impact to Traffic			(2) Hig			
Engineer- ing	12	Cause of Damage	(1:Concentration of (3)Deposit of River	Surface bed (4	e Water DF1ood	(2) Sna (5) (king of	River
Judgement	13	Countermeasure	CONCRETE WALL		 -	···		
	14	Detour Road	(X) None			(2) Ava	ilable	
Sketch		Steep slepe	arcimus of y	lation / 3	ech		ring of snak by by	a (11)
		nbankment Fresh Base			Road wasc	Camp 6	, now ,	
Date of Ins	pect	ion 02 / 3	SEPT / 1992	las	spector	<u> </u>	GAMI	/JAKE





NAME OF ROAD : KENNON ROAD TYPE OF FAILURE : SCOURING LOCATION : KM 235.5



Form-4 : ROAD DAMAGE INSPECTION SHEET

·			Name of Province BENGUET
Road NO.		0221	Name of Road KEMNON ROAD
Spot NO.		<i>C</i> 7	Location of Spot 218.10
Classificat	ion	of Road	W)National Road (2)Provincial Road
NO. of Lanes	& R	oadway Width	(1)1-Lane (2)2-Lane (3) -Lane Total Width: 7-10
Surface Typ	е &	Pavement Width	GYPCC (2)AC (3)Gravel (4)Earth Pave. Width: GOD
General	1	Terrain	(1)Flat (2)Rolling & Mountainous
Informat-	2	Cross-section	(2)Fill(height: a) (3)Flat
1011	3	Roadbed Material	(1)Grained (2)Gravel (3)Common (4)(RCULDER)
	4	Type of Damage	(4)Flooding Roadbed (2)Deposit on Surface (3)Scouring (4)Ground Subsidence (5)(RMER OVERFLOW
Evidence of	5	Length of Damage	30.0 m HEIGHT = 1.0 m
Damage	6	Date Occured	SEPT / 04 / 19 92
	7	Traffic Magnitude Interrup tion Duration	(1) 1 day ((2) 1~7 days (3) 7 days >
	8	Countermeasure	LOW RETAINING WALL
Existing	9	Drainage Facilities	(1)Existing (2)Nothing
Drainage Condition	10	Drainage Condition	
	11	Impact to Traffic	(1)Low (2)Medium 43)High
Engineer- ing	12	Cause of Damage	(1)Concentration of Surface Water (2)Snaking of River (3)Deposit of Riverbed (4)Flood (5)(CYERFLCW)
Judgement	13	Countermeasure	UPGRADE 2.0M HIGHER THAN THE ROAD A RETAINING WAI
j	14	Detour Road	₹1)None (2)Available
Sketch		TO PE UPGRADED PC	RITION = 100.0 M
·		en e	
Date of Ins	pect	ion 05 / S	EPT / 1992 Inspector NAGAMI / JAKE

Form-2: EMBANKMENT SLOPE DAMAGE INSPECTION SHEET:

		V-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1		Name of Provi	nce	35	HGUE	-T		
Road NO.		0222		Name of Road		MAR	cos	HIGHWAY		
Spot NO.		01		Location of S	pot	27	4.40			
Classifica	tion	of Road		(W) National R	oad		(2)Pro	vincial Road		
NO. of Lanes	s & R	oadway Wic	lth	(1)1-Lane (2	72-Lan	e (3)	-Lane	Total Width:	8.70	0
Surface Type & Pavement Width			(4) PCC (2) AC	(3)G	ravel (1)Earth	Pave. Width:	6.70)	
Terrain			(1)Flat	(2)R	olling	(3) Mountainous	3		
	1	Type of S	lope	(X) Embankment	(2) N	aturà'l	(3)Bridge Appr	oach	
	2	Kind of 1	ailure	(1) Gulley (2	Terosi	on (3)S	lide (4)()
	3	Location		(1) Inside of	Curve	(2)Adjac	ent to R	iver/Sea (3)[Bridge Ag	ρp.
Evidence	4	Size of F	ailure	(1)Width: 20	O m	(2)Heigh	t:3~ <u>s</u>	π (3)Number	-: 1	
of Failure	5	Date Occi	ıred	SEPT	/	05	/ 199	2	•	
		Traffic	Magnitude	(X)Full Width	(2)Ha	lf Width	(3)Sho	ulder (4)No	Influenc	ce
	6	Inter- ruption	Duration	(1) 1 day <	(2) 1	\sim 7 days	(3) 7	days >		
	7	Counterme	easure	(1)Only Fill	(2)Ri	prap	(3)Str	ucture()
	8	Height		(1)5m <	(2)5^	~10m	43/10m	>		
	9	Gradient		(1)30* <	(2)30	·~45	(3)15	>		
Existing	10	Berm		(X)None (2)Ex	isting	Number	^() (3)Width()
Slope Condition	11	Protectio	on	(1)None (2)Ve	getati	on (3) Ki	orap (4)	Structure()
	12	Compactne	ess	(1)Tight	(2)\$1	ightly Lo	ose	(2)Loose		
	13	Surface I	ater Condition	(1)None	(2)Lo	W		(3) lligh		-
	14	Drainage	Facilities	(1)Existing(-) (2)Nothing	g	
	15	Impact to	Traffic	(1)Low	(2)Me	dium		Willigh		
Engineer-	16	Cause of	Damage	V1)Concentrat (3)Steeper th	ion of an Nor	Surface mal Slope	Water (e (4)(2)Leakage fro	om Draina	age)
Judgement	17	Counterme	easure	IMPROVE I	DRAIN	AGE SY	STEM	GROUTED R	IPRAP	
	18	Detour Ro	oad	WYNone				(2)Availal	ole	

⁻ TYPICAL DAMAGE OF WATER CONCENTRATION.

-									
] [ate of	Inspection	05	/	SEPT	/ 1992	Inspector	NAGAMI	/ JAKE
L	···							A	THE RESERVE THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN THE PERSON

⁻ VERTICAL DRAINAGE OF EMBAUKMENT SHOULD BE DONE.





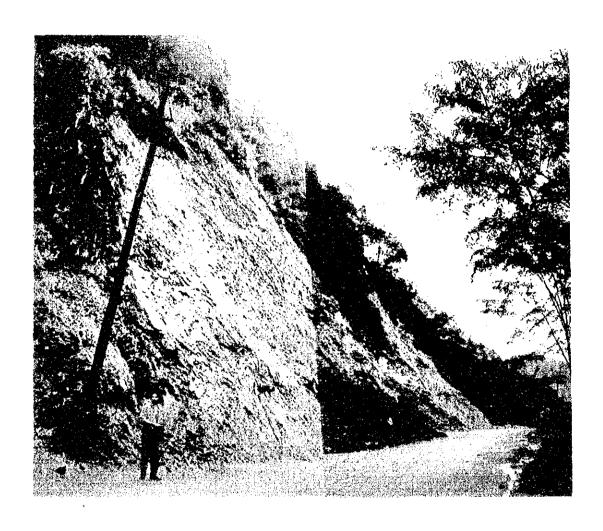
NAME OF ROAD : MARCOS HIGHWAY
TYPE OF FAILURE : ROAD DAMAGE BY EROSION
LOCATION : KM 274.4



Form-1: CUT SLOPE DAMAGE INSPECTION SHEET

				Name of Province BENGUET					
Road N	ΰ.		0723 <u>A</u>	Name of Road NAGUILIAN ROAD					
Spot N	i0.		01	Location of Spot 287.50					
Classification of Road			of Road	MNational Road (2)Provincial Road					
NO. of Lanes & Roadway Width			oadway Width	(1)1-Lane (272-Lane (3) -Lane Total Width: 7.70					
Surface Type & Pavement Width			Pavement Width	(1)PCC (2)AC (3)Gravel (4)Earth Pave. Width: 6.10					
Terrain				(1)Flat (2)Rolling (37 Sountainous					
		1	Type of Slope	GATCut Slope (2)Natural Slope (3)(
Evidence		2	Kind of Failure	(1)Gulley (2)Erosion (3)Land Slide (4)Rock/Debris Fall					
		3	Size of Failure	(1) Width: 30.0 m (2) Height: 10.0 m (3) Number: 1					
of Sailur		4	Date Occured	AUGUST / 1942					
. at ture		5	Traffic Magnitude	(1)Full Width (2)Half Width (3)Shoulder (4)No Influence					
			ruption Duration	(H) 1 day ((2) 1~7 days (3) 7 days)					
		6	Countermeasure	(1)Structure() (2)Removal of Slide Materials					
		7	Height	(1)10m < \$2710~30m (3)30~50m (4)50m >					
Existing Slope Condition		8	Gradient	(1)45' ((2)45' ~60' (3)60') (1)0verhang					
		9	Berm	(2) Existing Number() (3) Width()					
		10	Protection	(3)Structure()					
		11	Hardness	(1) Hard rock (2) Soft Rock (3) (
r> 1 -	0	12	Withering Condition	(1)Fresh (2)Slightly (3)Nightly (4)Nearly Withered Soil					
Geolo gleal	коск	13	Direction of Strata	(1) Inclined to Mountain 42) Inclined to Slope (3) Net Clos:					
Condi		14	Condition of Crack	(1)Fine Crack (2)Clear (3)Open (4)Clay into Crack					
tion	Soil	15	Thickness	(A) 1m < (2)1∼5m (3)5∼10m (4)10∼20m (5)20m >					
	2011	16	Compactness	(1) Tight (2) Slightly Loose & (3) Loose					
··		17	Degree of Saturation	(1)Dry (2)Wet (3)Seepage (4)Spring					
Cathe Condi	r tion	18	Surface Water Concentration	√1) None (2) Low (3) High					
		19	Drainage Facilities	(1)Existing() &Z)Nothing					
		20	Impact to Traffic	(1)Low (2) Medium (3) High					
Engineer- ing Judgement		21	Cause of Damage	(1)Concentration of Surface Water (2)Seepage/Spring (3)Steeper than Normal Slope (4)(WITHERING					
		22	Countermeasure	RETAINING WALL AND SHOTCRETE					
	ĺ	23.	Detour Road	₹1)None (2)Available					
	ЭТОИ		. 13 - not so fine but						
ate o	f Ins	pect	ion 01 /	SEPT / 1992 Inspector NAGAMI /JAKE					





NAME OF ROAD : NAGUILIAN ROAD
TYPE OF FAILURE : CUT SLOPE FAILURE
LOCATION : KM 287.5

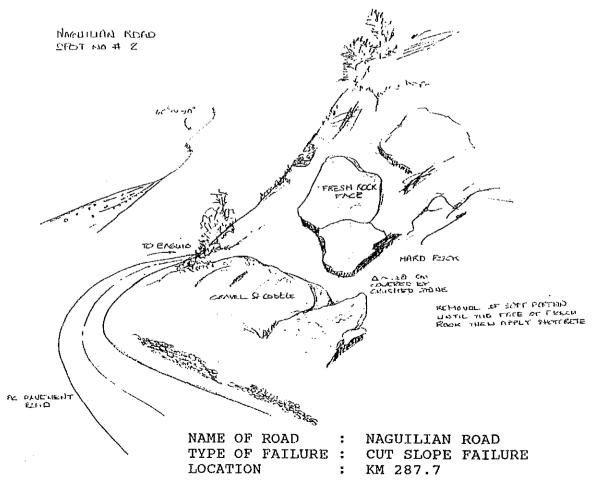
Form-1: CUT SLOPE DAMAGE INSPECTION SHEET

				Name of Province	BENGUET					
Road N	:0.		0223 A	Name of Road	NAGUILIAN ROAD					
Spot N			022	Location of Spot	287.70					
	, '	ion	of Road	₩XXational Road	La					
NO. of Lanes & Roadway Width			oadway Width	I	e (3) -Lane Total Width: 10.00					
			Pavement Width		ravel (4) Earth Pave. Width: 6:10					
Terrai					lling & Mountainous					
		1	Type of Slope	Cut Slope (2)Na	tural Slope (3)()					
		2	Kind of Failure	(1) Gulley (2) Brosion (3) Land Slide (4) Rock/Bebris Fall						
Evidence of Failure		3	Size of Failure	(1)Width: 50.0 m	(2) Height: 15.0 m (3) Number:					
		4]	Date Occured	/	? / 19					
			Traffic Magnitude	(1)Full Width (2)Ha	If Width (3)Shoulder WiNo Influence					
		5	Inter- ruption Duration	(1) 1 day ((2) 1	\sim 7 days (3) 7 days >					
		6	Countermeasure	(1)Structure(NOTH	ING) (2)Removal of Slide Materials					
		7	lleight	(1)10m < \(\sqrt{27}10\)	~30m (3)30~50m (4/50m >					
Existing		8	Gradient	(1)45' ((2)45	'~60' (3)60') (4)Overbang					
Slope Condition	9	Berm	√None (2)Existi	ng Number() (3)Width()						
		10	Protection	√None (2)Vegeta	tion (3)Structure()					
		11	Hardness	Willard rock (2)So	ft Bock (3)()					
		12	Withering Condition	(X) Fresh (Z) Si	ightly (3) Highly (4) Yearly thered Withered Soil					
Geolo gioal	Rock	13	Direction of Strata	(1) Inclined to Moun	tain WInclined to Slope (3)Not Clear					
Condi		14	Condition of Crack	(1) Fine Crack (2)	Clear (3)Open (4)Clay into Crack					
tion	c	15	Thickness	(i) 1m < (2)1~5m	(3)5~10m (4)10~20m (5)20m >					
	Soil	16	Compactness	(1)Tight (2)S1	ightly Loose (3)Leose					
		17	Degree of Saturation	√) Dry (2) We	t (3)Secpage (4)S, ring					
Weathe Condi	r tion	18	Surface Water Concentration	√ None (2)Lo	w (3)High					
		19	Drainage Facilities	(1)Existing() Æ)Nothing					
		20	Impact to Traffic	WLow (2) Me	dium (3)High					
Engineer- ing Judgement		21	Cause of Damage	(1)Concentration of (3)Steeper than Nor	Surface Water (2)Seopage/Spring mal Slope (14)(QUARRYING)					
		22	Countermeasure	RECUTTING (TO	DP PORTION)					
		23	Detour Road	A)None	(2) Available					
Si	EE st	E Tch	1: WICE SHOULDER	FOR MOUNTAIN SIDE						
			BORROW PIT OF G	RAVEL / CRASHED STONE						
Date o	f Ins	pect	ion 01 / S	EPT / 1992	Inspector NAGAMI /JAKE					









3 - 55

Form-1: CUT SLOPE DAMAGE INSPECTION SHEET

					Name of Pro	ovince	PE!	IGUET			
Road N	'0 .	 	0223 A		Name of Ro	ad	NA	NAGUILIAN ROAD			
Spot N	Ю.		03		Location of	f Spot	292.90				
Classi	ficat	ion	of Road		(X) Nationa	l Road			vincial	Road	
\0. of	Lanes	& R	oadway Wic	lth	(1)1-Lane	1212-Lar	ie (3)	-Lane	Total	Width:	8,10
Surfac	e Typ	e &	Pavement N	'idth	(1)PCC 🐙	λC (3)(ravel	(4)Earth	Pave.	Width:	6.10
Terrai	n				(1)Flat	(2)Rc	olling	. \	(3) Youn	tainous	
		1	Type of S	lope	WCut Slop	oe (2)Na	tural	Slope	(3)(•
		2	Kind of F	ailure	(1)Gulley	(2)Erosio	n (3)	Land Slide	(4)Ro	ck/Debr	is Fall
Deci don		3	Size of F	ailure	(1)Width: 2	25,0 m	(2)llei	ght: 8.0	m (3)8	umber:	
Eviden of Failur		4	Date Occu	red		/	?	/ <u>19</u>		·.	
rariui	e	5	Traffic Inter-	Magnitude	(1)Full Wic	ith (2)Ha	lf Wid	th (3)Sho	ulder	(NO II	nfluence
		יכ		Duration	(1) 1 day	(2) 1	.∼7 da	ys (3) 7	days >		
		6	Countermeasure		√1)Structu	re(RE- <i>C</i> U	TTING) (2)Rem	oval of	Slide!	lateria
		7	lleight		JH 10m (.	(2)10)∼30a	(3)30≎	~50m	(4)50ա	>
Existi Slope	ng	8	Gradient		JX)45° <	(2)45	·~60·	(3)60°	>	(4)0ver1	nang
Condit	ion	9	Berm		(X) None	(2)Existi	ng Num	ber() (3)Width(
		10	Protectio	n	(X) None	(2)Vegeta	tion	(3)Str	ucture(
	11	llardness		(1)llard roo	ck (2) Sc	oft Roc	k (3)(
01.			Withering	Condition	(1)Fresh	(2)SI Wi	ightly thered	L3) Hig Vit	hly hered	A) Sear Soil	l y
Geolo gical	иоск	13	Direction	of Strata	(1)Inclined	i to Moun	tain .	紀)Incline	d to SI	ope (3):	Not-Clea
Condi		14	Condition	of Crack	(1)Fine Cra	ack (2)	Clear	(3)Open	√4)Cla	y into (Crack
tion	Cail	15	Thickness	Thickness		(X) 1m ((2)1~5m (3)5~10m (4)10~20m (5)20m >					
	Soil I	16	Compactness		(1) Tight (2) Slightly Loose (2) Locse				ose		
		17	Degree of	Saturation	(1)Dry	(Z) #e	et	(3)See	page	(4)Sp	ring
Weathe Condi	r tion	18	Surface Water Concentration		(1)None	Æ) Lo)W	(3)Hig	h		· · · · · · · · · · · · · · · · · · ·
		19	Drainage	Facilities	(1)Existing	ζ() <i>(2</i>)Not	hing		
		20	Impact to	Traffic	STILOW.	(2)Me	edium	(3)Hig	h		
Engine	er-	21	Cause of	Damage	(1)Concenti (3)Steeper	ration of than Ner	Surfa mal Si	ce Water ope 1/4)((2)Secr STPATA	age/Spr ANGLED	ing >70
ing Judgem	ient	22	Countermeasure		RECUTT	ING /V	EGETA	TICH			
	İ	23	Detour Road		√A) None			(2) Ava	ilable		
	of Ins)1 / s	EPT /		· · · · · · · · · · · · · · · · · · ·	nspector	HAG		AKE





NAME OF ROAD : NAGUILIAN ROAD
TYPE OF FAILURE : CUT SLOPE FAILURE
LOCATION : KM 292.9

Form-1: CUT SLOPE DAMAGE INSPECTION SHEET

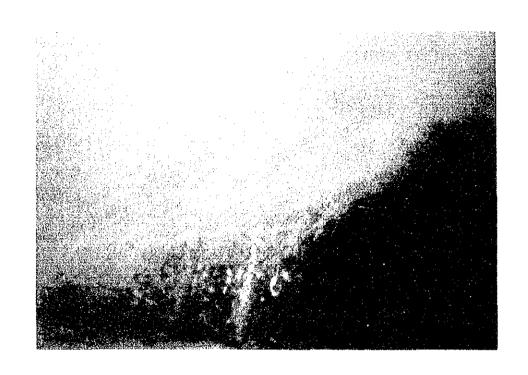
				Name of Province	BENGUET				
Road N	0.		0223 A	Name of Road	NAGUILIAN ROAD				
Spot N	0.		04	Location of Spot	294.00				
Classi	ficat	ion	of Road	CMNational Road	(2)Provincial Road				
NO. of	Lanes	& R	oadway Width	(1)1-Lane (2)2-Lane	(3) -Lane Total Width: 7.10				
Surfac	е Тур	e &	Pavement Width	(1)PCC (2)AC (3)Gra	avel (4)Earth Pave. Nidth: 640				
Terrai	n			(1)Flat (2)Rol	ling (3) Mountainous				
		1	Type of Slope	WCut Slope (2)Nati	ural Slope (3)()				
		2	Kind of Failure	(1)Gulley (2)Erosion	(3)Land Slide (4)Rock/Debris Fall				
Dutalon		3	Size of Failure	(1) Width: 30.0 m (2	2)Height: Zo.o m (3)Number:				
Eviden of Failur		4	Date Occured	AUGUST /	/ 19 92				
rattar	C	5	Traffic Magnitude Inter- ruption Duration	· · · · · · · · · · · · · · · · · · ·	f Width (3)Shoulder (4)No Influence ~7 days (3) 7 days >				
		6	Countermeasure	(1)Structure() (2) Removal of Slide Materials				
		7	Height	(1)10m (,(2)10~	~30m (3)30~50m (4)50m >				
Existi	ng	8	Gradient	· · · · · · · · · · · · · · · · · · ·	\sim 60' (3)60'> (4)0verhang				
Slope Condition	9	Berm	(2)Existing	g Number() (3)Width()					
	10	Protection	(2) Vegetat	ion (3)Structure()					
		11	llardness	(1) lard rock (2) Sof	t Rock (3)(
		12	Withering Condition		ghtly (3)Highly (4)Nearly ZOYERED hered Withered Soil ROCK				
Geole gleal	коск	13	Direction of Strata	(1) Inclined to Mounta	ain 🗷)Inclined to Slope (3)Not Clear				
Condi		14	Condition of Crack	1) Fine Crack (2) Clear (3) Open (4) Clay into Crack					
tion	C. : 1	15	Thickness	(3) 5~10m (4) 10~20m (5) 20m >					
	Soj 1	16	Compactness	(1) Tight (2) Slightly Loose (3) Loose					
		17	Degree of Saturation	(1)Dry (2)Wet	(4)Spring				
Weathe Condi		18	Surface Water Concentration	(1) None (2) Low	(2) High				
		19	Drainage Facilities	(1)Existing() X2)Nothing				
		20	Impact to Traffic	(1)Low (2)Med	iom AMigh				
Engine		21	Cause of Damage	(Y)Concentration of (3)Steeper than Normal	Surface Water 42)Seepago/Spring al Slope (4)(SLIDING PLANE)				
	ing Judgement		Countermeasure						
		23	Detour Road	W None	(2) Available				
		THE	E OF CUT SLOPE AND STRAT, PORTION WHICH CCVERED SLOPE OF EMBANKMENT	soft rocks are slided	AND APPEARED FRESH ROCK AS CUT SLOPE				
Date o	f Ins	pect	ion 01 /	SEPT / 1992	Inspector HAGAMI /JAKE				



Form-1: CUT SLOPE DAMAGE INSPECTION SHEET

Road NO. 0224 Name of Road J	Diama Balleria					
	BAGUIO - BONTOC					
Spot NO. Ol Location of Spot	264.30					
Classification of Road Winational Road	(2)Provincial Road					
NO. of Lanes & Roadway Width (1)1-Lane (2)2-Lane	(3) -Lane Total Width: 8.70					
Surface Type & Pavement Width (1)PCC (2)AC (3)Grave	el (4)Earth Pave. Width: 6.70					
Terrain (1)Flat (2)Rolli	ng V27Mountainous					
1 Type of Slope (2) Natura						
2 Kind of Failure (1)Gulley (2)Erosion	(3)Land Slide (4)Rock/Debris Fall					
Evidence 3 Size of Failure (1) Width: 20.0 m (2)	Height: 20.0m (3)Number: 1					
of 4 Date Occured / Aug	GUST / 1992					
Traffic Magnitude WYFull Width (2) Half V Inter-ruption Duration WY 1 day ((2) 1~7	Width (3) Shoulder (4) No Influence					
6 Countermeasure (1)Structure(
1 1	Om (3/30~50m (4)50m >					
	(1)45' \langle (2)45' \sim 60' (3)60' \rangle (4)0verhang					
~	Number(3) (3) Width(2~5)					
	n (3)Structure(GROUTED RIPRAP)					
11 llardness (1)llard rock (2)Soft	Rock (3)(
	tly (3)Highly (4)Nearly red Withered Soil					
Geolo Rock 13 Direction of Strata (1) Inclined to Mountain	n (2) Inclined to Slope (3) Not Clear					
	(1)Fine Crack (2)Clear (3)Open (4)Clay into Crack					
tion 15 Thickness (1) 1m ((2)1~5m &	(1) 1m ((2)1~5m (3)5~10m (4)10~20m (5)20m >					
Soil 16 Compactness (1) Tight W2) Slight	(1)Tight WZ)Slightly Loose (3)Loose					
17 Degree of Saturation (1)Dry (2)Wet	(3)Seepage (4)Spring					
Weather Condition 18 Surface Water Concentration (1)None (2)Low	(3)High					
19 Drainage Facilities (1)Existing() (2) Nothing					
20 Impact to Traffic (1)Low (2)Mediu	m (3)High					
Engineer (3) Steeper than Normal	rface Water (2)Seepage/Spring Slope (4)()					
Judgement 22 Countermeasure SEE SKETCH BELOW						
23 Detour Road (X)None	(2) Available					
2.5 r The Vegetation						
Date of Inspection 03 / SEPT / 1992	Inspector NAGAMI/JAKE					



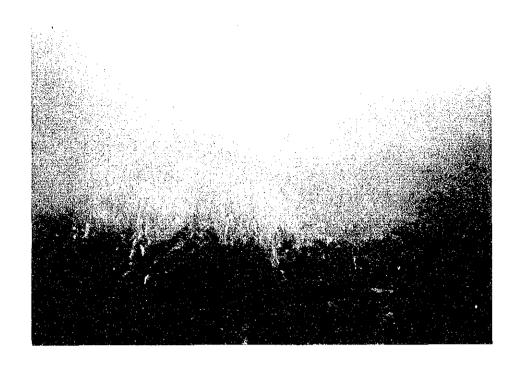


NAME OF ROAD : BAGUIO - BONTOC ROAD TYPE OF FAILURE : CUT SLOPE FAILURE LOCATION : KM 264.3

Form-3 : DEBRIS FLOW INSPECTION SHEET

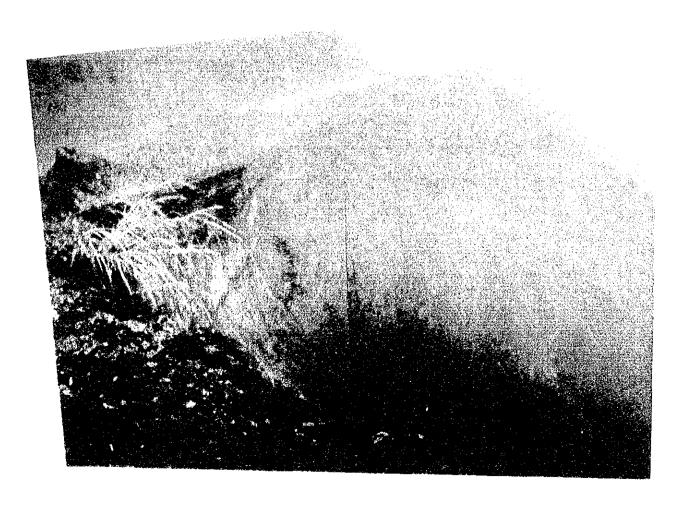
						T				
The state of the s	~···			Name of P	rovince	B	ENGUET			·
Road NO.		0224	· · · · · · · · · · · · · · · · · · ·	Name of Re	oad	182	GUIO-B	ONTO) C	
Spot NO.		02		Location of Spot 265.30						
Classificat	ion	of Road		(1) Nation		-				
NO. of Lanes	& R	oadway Wic	lth	(1)1-lanc	(2)2-1ai	ne (3)	-Lane	Total	Width:	8.70
Surface Typ	e &	Pavement N	/idth	(X)PCC ((4)Earth			6.70
Terrain				(1)Flat	(2)	Rolling	(27No	untaino	ous	
Evidence	1	Size of D	lamage	(1)Width(10.0	m) (2)Le	ngth(40.C m	>)
of Flow	S	Date Occu	ired	AUGUST / / 1992						
	3	Traffic	Magnitude	Wrull W	idth (2)	lalf Wi	dth (3)Sh	oulder	(4)No	Influence
	ر ا	Interrup tion	Duration	SX 1 day	(2)	1∼7 d	ays (3) 7	days >)	·
	4	Avarage (iradient	(1)20. <	(2)	20°~30	•	J353	30, >	۷60
Existing	5			(1)50,000	n2 < .Æ)!	50,000	~200.000m2	(3)2	200, 000m2	2 >
Flow Condition	6	Deposit o	n Riverbod	(1)None	(2)	Rare	(3) Ab	undant	(4) 0v	erflow
	7	Deposit N	laterial	(X) Clay	(2)Sand	J3)Gra	vel (4)Co	bble	(5)Bou	lder
	8	Vegetatio	าก	Covering	Rate of B	are Lan	d or Thin	Forest:	(XY50%)	(2)50%(
	9	Impact to Traffic		(1)Low	(2)	Medium	(3)IIi	gh		
Engineer- ing Judgement	10	Cause of	Damage	SUPFACE	WATER					
	11	Countermo	easure	HIGH WAL	L / VER	TICAL D	ITCH , SAE	O PAM	TYPE	
	12	Detour Ro	ad	(X)None				ailable		
		ERGUID BON CPOT NO FF	TABP HEART TO CO.	DEX LEATHERED	enecoso sist	DRIS PLONI GRAPOIENT 23	SHOUT SHOULD A	000···	autc≏	· .
Data of Ins	enect	-		PROVIDE OLO . O	00		nspector	THA C	SAMI /	JAKE
Date of Ins	spect	ion a	3 / SEP	T / 19	92	ı	nspector	HAZ	GAMI /	JAK





NAME OF ROAD : BAGUIO - BONTOC ROAD TYPE OF FAILURE : DEBRIS FLOW

LOCATION : KM 265.3



Form-1: CUT SLOPE DAMAGE INSPECTION SHEET

			Name of Province	3 EN GUET					
Road NO.		0224	Name of Road 2	BAGUIO - BONTOC					
Spot NO.		04	Location of Spot	ion of Spot 278.40					
Classificat	ion	of Road	(1) National Road	(2)Provincial Road					
NO. of Lanes	& R	oadway Width	(1)1-Lane (2)2-Lane (3) -Lane Total Width: 8.70					
Surface Typ	e &	Pavement Width	CYPCC (2)AC (3)Gravel	(4)Earth Pave. Width: 6.70					
Terrain			(1)Flat (2)Rolling	197Mountainous					
	1	Type of Slope	(X)Cut Slope (2)Natural	Slope (3)(
	2	Kind of Failure	(1)Gulley (2)Erosion 💪	NLand Slide (4)Rock/Dehris Fall					
Ev i dence	3	Size of Failure	(1)Width: 50.0 m (2)He	eight: 30.0 m (3) Number: 1					
of Failure	4	Date Occured		/ 19					
ratiute	5	Traffic Magnitude Inter-	(1) Full Width (2) Half Wi	dth (3)Shoulder (4)No Influence					
	. 6	Countermeasure	(1)Structure() (2) Removal of Slide Materials					
	7	Height	(1)10m < (2)10~30m (2)30~50m (4)50m >						
Existing	8	Gradient	(1)45' ((2)45' ~60' (3)60') (4) Overhang						
Slope Condition	9	Berm	Whone (2)Existing Nu	umber() (3)Width()					
	10	Protection	Whone (2) Vegetation	(3)Structure(
	11	llardness	(1) Mard rock (2) Soft Ro	ock . (3).()					
C I . D I	12	Withering Condition	(Y)Fresh (2)Slightl Wither	y Whighly (4)Nearly ed Withered Soil					
Geolo Rock gical	13,	Direction of Strata	Winclined to Mountain	(2) Inclined to Slope (3) Not Clear					
Condi	14	Condition of Crack	WFine Crack (2)Clear	(3)Open (4)Clay into Crack					
tion	15	Thickness	(1) 1m < (2)1~5m (3/5~10m (4)10~20m (5)20m >						
Soil	16	Compactness	(1)Tight (2)Slight	y Loose Alloose					
	17	Degree of Saturation	(1)Dry (271Vet	(3)Seepage (4)Spring					
Weather Condition	18	Surface Water Concentration	(1)None (2)Low	Offligh					
	19	Drainage Facilities	(1)Existing() (2)Nothing						
	20	Impact to Traffic	(1)Low (2)Medium	Wilish					
Engineer-	21	Cause of Damage	(4)Concentration of Surf (3)Steeper than Normal S	Face Water (2)Seepage/Spring Slope (4)(
ing Judgement	22	Countermeasure	REMOVAL OF TOP SOI	L , RECHTTING , SHOTURETE					
	23	Detour Road	WNone	WNone (2) Available					





NAME OF ROAD : BAGUIO - BONTOC ROAD TYPE OF FAILURE : CUT SLOPE FAILURE LOCATION : KM 278.4

BAGUIO- PONTOC ROAD
SPOT NO. # 4

SOOO VEGETATION

FACE OF SOFT ROOM

FACE OF ROCK

TO CONTOC

Form-2 : EMBANKMENT SLOPE DAMAGE INSPECTION SHEET

				Name of Provinc	е	BENGUE	-		
Road NO.	(0225	B	Name of Road	B	AGUIO -	NUEVA VI	ZCAYA	
Spot NO.		. 01		Location of Spo	t	257.70			
Classificat	noi	of Road		(1) National Roa	.d	(2)Pro	vincial Road		
NO. of Lanes	& R	oadway Wid	th	(1)1-Lane (272	-Lane (3) -Lane	Total Width:	7.0	
Surface Type	e &	Pavement W	idth	(1) PCC (2) AC	(3)Gravel	(4)Earth	Pave. Width:	5.0	
Terrain				(1)Flat	(2)Rollir	g V	37Nountainous		
	1	Type of S	lope	(4) Embankment	(2) Natura	n (3)Bridge Appr	oach	
	2	Kind of F	ailure	(1) Gulley (2) E)	
	3	Location		Winside of Cu	rve (2)Ad	ljacent to R	River/Sea (3)B	ridge App.	
Evidence of	4	Size of F	ailure	(1) Width: η.ο	m (2)He	eight: 30.0	m (3)Number	: 1	
Failure	. 5	Date Occu	red	August					
	6	Traffic Inter-	Magnitude	(1)Full Width (2)Half Wi	dth (3)Sho	oulder (4)No	Influence	
		ruption	Duration	(1) 1 day (((2) $1 \sim 7$	lays (3) 7	days >		
·	7	Counterme	asure	(1)Only Fill (<u> </u>	ructure()	
	8	Height		(1)5m < (
Existing Slope	9	Gradient		(1)30° ($(2)30^{\circ} \sim 45$	5' 128/45'	>		
	10	Berm		WYNone (2)Exis	sting No	ımber() (3) Width()	
Condition	11	Protectio	n	(X) None (2) Vege	etation (3)Riprap (4)	Structure()	
	12	Compactne	ss	(1)Tight ((2)Slight	y Loose	Loose		
	13	Surface W	ater Condition	(1)None (2)Low		Willigh		
	14	Drainage Facilities		(1)Existing() V27Nothing		
	15	Impact to	Traffic	Whow (2)Medium		(3)lligh		
Engineer-	16	Cause of	Damage	Concentration of Surface Water (2)Leakage from Drainage (3)Steeper than Normal Slope (4)(
Judgement	17	Counterme	asure	IMPROVE DRAINAGE SYSTEM / RETAINING WA				WALL	
	18	Detour Ro	ad .	WNone			(2) Availab	le	
				ntration of inface water gully.					
Date of Ins	pect	ion c		SEPT / 1992		Inspector	NAGAMI /	JAKE	



NAME OF ROAD : BAGUIO - NUEVA VIZCAYA ROAD
TYPE OF FAILURE : EMBANKMENT SLOPE FAILURE
LOCATION : KM 257.7

Form-1: CUT SLOPE DAMAGE INSPECTION SHEET

				Name of Prov	ince	BENG	BENGUET				
Road NO.		0225 B		Name of Road	1	BAGU	BAGUIO - NUEVA MIZCAYA				
Spot XO.		ð2		Location of	Spot	257	257.70				
Classificat	tion	of Road		WMational	Wational Road (2)Provincial Road						
NO. of Lanes	s & R	oadway Width		(i)1-Lane (2/2 i.an	ie (3)	-Lane	Total Wi	dth:	7.0	
Surface Typ	se &	Pavement Wid	th	(1)PCC (25)	(3) C	ravel (4)Earth	Pave. Wi	dth:	5.0	
Terrain .				(1)Flat	(2) Ro	olling		(2) ounte	inous	~ 	
	1	Type of Slo) C	MCut Slope	e (2)Na	tural Slo	ppe	(3)(,)
	2	Kind of Fai	lure	(1)Gulley (2	erosio)	ın (3)Lar	nd Slide	(4) Rock	/Debri	s Fall	l
Evidence	3	Size of Fai	ture	(1)Width: 3	0.0 a	(2)Height	: 25.0	m (3) Xuu	ber:	·	
of Faiture	4	Date Occure	1	ALX	SUST/		/ 199	2		~ . ~~	
raiture	5	Traffic Ma	ignitude	WFull Widt	ih (2)Ha	lf Width	(3)Sho	ulder (4)No Tr	fluenc	ЭС
			ıration	(A) 1 day ((2) 1	∼7 days	(3) 7	days >			
	6	Countermeas	ire	(1)Structure)()	(2)Rem	oval of S	lide)	lateria	als
	7	Height		(1)10m <	JZ) 10)∼30m	(3)30≎	~50a (4)50m)		
Existing Slope	8	Gradient		(1)45' ((2)45'~60' (3)60' > (4)0verhang							
Condition	9	Berm		WNone (2	E)Existi	ng Number	•() (3)	idth()
	10	Protection		(Z) None (2)Vogeta	tion	(3)Str	seture(, va sauwv)
	11	Hardness		(1) llard rock	: (2)So	ft Rock	(3)(,
Carlo Basto	12	Withering Co	ondition	(1)Fresh	(2)SI Wi	ightly thered	(3)Alig Fit	hly (4 hered) Nearl Soil	у	
Geolo Rock Sical	13	Direction of Strata		(1)Inclined	to Moun	tain (2)	Incline	d to Slep	e (3)	ot Cle	221
Condi	14	Condition of	Crack	(1) Fine Crack (2) Clear (3) Open (4) Clay into Crack							
tion —— Soil	15	Thickness		(1) 1m < (2)1∼5m (♂)5∼10m (4)10∼20m (5)20m >							
5011	16	Compactness		(1) Tight (2) Slightly Loose (3) Loose							
	17	Degree of Sa	turation	(1)Dry	42) We	et .	(3)See	page	(4) Spi	ing	
Weather Condition	18	Surface Wate Conce	er ntration	(1) None L27Low (3) High							
	19	Drainage Fac	cilities	(1)Existing()	(2) Not	hing			
	20	Impact to Ti	raffic	(1)Lou	(2)Me	diua	(3)Hig	h			
Engineer-	21	Cause of Da	nage	U)Concentra G/Steeper t	tion of than Nor	Surface	Water e (4)((2)Scepas	ge/Spri	ng)
ing Judgement	22	Countermeasure		VEGETATIO	5H (TO)P) / CA	TCH WA	LL 			
	23	Detour Road	Detour Road		Wine (2) Available						



NAME OF ROAD : BAGUIO - NUEVA VIZCAYA ROAD TYPE OF FAILURE : CUT SLOPE FAILURE LOCATION : KM 257.7

Form-3 : DEBRIS FLOW INSPECTION SHEET

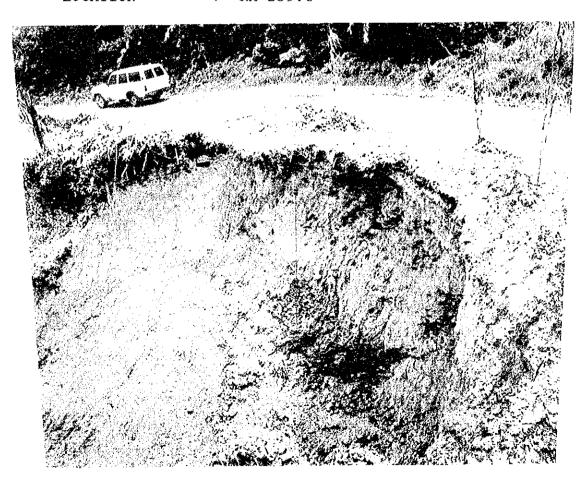
				Name of Province	BENGUET
Road NO.	<u> </u>	0232 B	مستقيم المراجعة والمعاجم والم	Name of Road	BAGUIO - NUEVA VIZCAYA
Spot NO.	 	03		Location of Spot	759.00
Classificat	ion	of Road		(1) National Road	(2)Provincial Road
NO. of Lanes	& R	loadway Wid	 Ith	(1)1-lane (2)2-lan	ne (3) -Lane Total Width: 7.0
Surface Typ	e &	Pavement W	/idth	(1)PCC (2)AC (3)C	Gravel (4) Earth Pave. Width: 5.0
Terrain				(1)Flat. (2)R	
Evidence	1	Size of D	amage) (2)Length(50.0 m)
of Flow	2	Date Occu	red	AUGUST /	/ 1992
	<u> </u>	Traffic	Magnitude	WFull Width (2)	Lif Width (3)Shoulder (4)No Influence
	3	Interrup tion	Duration	(1) 1 day ((2)	1~7 days (3) 7 days >
	4	Avarage G	radient	(2)2	20, ~30, (3) 30,)
Existing	5	Area of B	Basin	JY50,000m2 ((2)5	50,000~200,000m2 (3)200,000m2 >
Flow Condition	6	Deposit o	n Riverbed	(1)None (2)F	Rare (3)Abundant (4) Overflow
	7	Deposit M	laterial	(2) Sand	(3)Gravel (4)Cobble (5)Boulder
	8	Vegetatio	n	Covering Rate of Ba	are Land or Thin Forest:(X)50%> (2)50%
	9	Impact to Traffic		(1)Low (2)	ledium Willigh
Engineer-	10	Cause of	Damage	WATER CONCENTRA	ATICN / SOFT SOIL
ing Juagement	11	Counterme	asure	IMPROVE DRAINAGE	/ WELL PIPE HORIZONTAL
	12	Detour Ro	oad	(X) None	(2)Available
Typical Pho		od to a get alion		July 1	Paplaced 15-20% wet soil mud
		erosion			Ingreator Wilder / W.E.
Date of Ins	pect	ion O	2 / ŞE	PT / 1992	Inspector NAGAMI / JAKE





NAME OF ROAD NAME OF ROAD : BAGUIO - NUEVA VIZCAYA ROAD TYPE OF FAILURE : DEBRIS FLOW

LOCATION : KM 259.0



Form 1 : CUT SLOPE DAMAGE INSPECTION SHEET

Read NO. C225 B	GUET					
Spot NO.	JULO - NUEVA VIZCANA					
Classification of Road						
Surface Type & Pavement Width						
Terrain	-Lane Total Width: 7.0					
1 Type of Stope						
Evidence of Pailure (1) Gulley (2) Brosion (2) Hei Pailure of Pailure (1) Width: 25.0 m (2) Hei AveUST / Traffic Interruption Duration (1) Full Width (2) Half Widther, ruption Duration (1) Structure(Traffic Interruption Duration (1) Structure(Theight (1) 10m ((2) 10~30m (2) 10~30m (2) Height (1) 10m ((2) 10~30m (2) Height (1) 10m ((2) Existing Num (2) Existing Num (2) Protection (1) Structure(Rock Slope Condition (1) Hardness (1) Hardness (1) Hardness (1) Hardness (2) Soft Roce (2) Soft Roce (2) Withering Condition (1) Fresh (2) Slightly Withered (2) Withered (3) Direction of Strata (1) Inclined to Mountain (2) Hardness (2) Clear (3) Direction of Crack (1) Fine Crack (2) Clear (3) Thickness (1) 1m ((2) 1~5m (2) 5 (1) Tight (2) Slightly (2) Meather Condition (1) Dry (2) Wet (2) Wet (2) Condition (3) Drainage Facilities (1) Low (2) Medium (2) Impact to Traffic (1) Low (2) Medium (2) Cause of Damage (1) Concentration of Surface Marchan (1) Concentration of Surface (2) Cause of Damage (1) Cause of						
3 Size of Failure (1) Width: 25.0 m (2) Hei of Failure	(X)Cut Slope (2)Natural Slope (3)()					
Pailure AUGUST /	and Slide (4)Rock/Debris Fall					
Failure 4 Date Occured AVGUST / Traffic Interruption Duration 4 Date Occured AVGUST / Traffic Interruption Duration 4 Date Occured AVGUST / Bagnitude AVGUST / AVGUST / Full Width (2)Half Width (2)Half Width (2)Half Width (2)Half Width (2)Half Width (2)Half Width (2) Half Width (2) Half Width (2) Half Width (2) Increase (2) Increase (3) Increase (4) Increase (5) Increase (6) Increase (6) Increase (6) Increase (7) Incr	ght: 25.0 m (3) Number: 1					
Traffic Interruption Duration And I day (2) 1~7 da 6 Countermeasure (1) Structure(7 Height (1) 10m (22) 10~30m Existing Slope Condition 9 Berm (1) 45 (22) 45 ~60 (2) Existing Num 10 Protection (1) Hard rock (2) Existing Num 10 Protection (1) Hard rock (2) Soft Rec 11 Hardness (1) Hard rock (2) Soft Rec 12 Withering Condition (1) Presh (2) Slightly Withered 13 Direction of Strata (1) Inclined to Mountain 14 Condition of Crack (1) Fine Crack (2) Clear 15 Thickness (1) Im ((2) 1~5m (2) 5 (2) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	/ 1992					
ruption Duration & 1 day ((2) 1~7 da 6 Countermeasure (1)Structure(7 Height (1)10m (12)10~30m 8 Gradient (1)15' (12)45'~60' 9 Berm (1)None (2)Existing Num 10 Protection (1)Hard rock (2)Soft Roc 12 Withering Condition (1)Fresh (2)Slightly Withered 13 Direction of Strata (1)Inclined to Mountain Condition 14 Condition of Crack (1)Fine Crack (2)Clear 15 Thickness (1)Im (2)1~5m (2)Slightly 16 Compactness (1)Tight (2)Slightly 17 Degree of Saturation (1)Dry (2)Wet 18 Surface Water Condition 19 Drainage Facilities (1)Existing(20 Impact to Traffic (1)Concentration of Surface (1)Concentration of Surfac	th (3)Shoulder (4)No Influence					
Existing Slope Condition 9 Berm (1) 15 (22) 45 ~60 or 20 miles (2) Protection (1) 15 (22) 45 ~60 or 20 miles (2) Protection (3) Direction of Strata (3) Inclined to Mountain (4) Condition of Crack (1) Protection (2) Protection (2) Protection (3) Protection (4) Protection (4) Protection (4) Protection (4) Protection (5) Protection (6) Protection (7)	s (3) 7 days >					
Existing Slope Condition 9 Berm) £2)Removal of Slide Material					
Slope Condition 9 Berm	(3)30~50m (4)50m >					
Geological Condition Protection Hardness Condition	(3)60°) (4)0verhang					
Goolo Rock 12 Withering Condition Compactness Compactness Compactness Condition Compactness Condition Concentration Co	per() (3)%idth(
Goolo Rock gical Condition Condi	(3)Structure(
Goolo sical Rock 13 Direction of Strata (1) Inclined to Mountain	(3) (
13 Direction of Strata (1) Inclined to Mountain	(3)Highly (4)Nearly Withered Soit					
Thickness (1) 1m ((2) 1~5m \$\sqrt{35}\$ 16 Compactness (1) Tight (2) Slightly 17 Degree of Saturation (1) Dry	2) Inclined to Slape (3) Not Clea					
Soil 15 Thickness (1) 1m ((2) 1~5m 15 16 Compactness (1) Tight (2) Slightly	(3)Open (4)Clay into Crack					
16 Compactness (1)Tight (2)Slightly 17 Degree of Saturation (1)Dry (2)Wet 18 Surface Water (1)None (2)Low Concentration 19 Drainage Facilities (1)Existing(20 Impact to Traffic (1)Low (2)Medium 21 Cause of Damage (1)Concentration of Surface (2)Steeper than Normal Steeper than Normal Steeper than Normal Steeper (2)Steeper than Normal Steeper tha	(1) 1m < (2)1~5m (2)5~10m (4)10~20m (5)20m >					
Weather Condition 18 Surface Water Concentration 19 Drainage Facilities (1)Existing(20 Impact to Traffic (1)Low (2)Medium 21 Cause of Damage (1)Concentration of Surface (1)Steeper than Normal St	Loose (3)Loose					
Condition Concentration 19 Drainage Facilities (1)Existing(20 Impact to Traffic (1)Low (2)Medium 21 Cause of Damage (1)Concentration of Surfa (2)Steeper than Normal St	(3)Seepage (4)Spring					
Engineer- ing 20 Impact to Traffic (1)Low (2)Medium (1)Concentration of Surfa (1)Steeper than Normal St	(3)High					
Engineer- 21 Cause of Damage (1)Concentration of Surfa) ØNothing					
Engineer- 80 Stoeper than Normal St	奶High					
	ee Water (2)Seepage/Spring ope (4)(
	LAP					
23 Detour Road (1) None	(2) Available					
23 Detour Road (1) None	Ope (4)(





NAME OF ROAD : BAGUIO - NUEVA VIZCAYA ROAD TYPE OF FAILURE : CUT SLOPE FAILURE LOCATION : KM 261.2

Form-3 : DEBRIS FLOW INSPECTION SHEET

				Name of Provi	nce	BENG	いミブ				
Road NO.	(0225	5	Name of Road		BAGUIO - NIZEVA VIZCAY			AYA		
Spot NO.		05		Location of S	pot	273.10					
Classificat	ion	of Road		Winational R	Wational Road (2)Provincial Road						
NO. of Lanes & Roadway Width			(1)1-lane (2)2-lan	e (3)	Lane	Total	Width:	5.0		
Surface Type & Pavement Width			(1)PCC (2)AC) (مشکا	iravel (4)	Earth	Pave.	Width:	5.0		
Terrain			(1)Flat	(1)Flat. (2)Rolling (3)Nountainous							
Evidence	1	Size of D	amage	(1)Width(10.0) m)	(2)Lei	ngth(40.0	M)
of Flow	2	2 Date Occured		/ / 19							
		Traffic	Magnitude	WFull Width	(2)	alf Width	(3)Sho	oulder	(4)No	Influe	nce
	3	Interrup tion	Duration	VX) 1 day ((2)	l∼7 days	(3) 7	days]	>	_	
	4	Avarage C	Gradient	(1)20' <	(2)2	30° ∼30°		VEY!	30 > 4	< 60°	
Existing	5	Area of Basin		(2750,000m2 <	(2)50,000m2 ((2)50,000~200,000m2 (3)200,000m2 >						
Flow Condition	6	Deposit on Riverbed		(1)None	(2)R	are	(3) Abi	undant	(4) 0	verflow	!
	7	Deposit Material		(1)Clay (2)S	and	(3)Gravel	CHT Col	ble	(5)Bo	ulder	
	8	Vegetation		Covering Rate	of Ba	re Land or	Thin I	orest.	: (17 50%	(2)5	0%(
	9	Impact to Traffic		(1)Low	(2)	ledium	(3) flis	gh			
Engineer-	10	Cause of Damage		WATER CONCENTRATION							
ing Judgement	11	Countermo	asure	VERTICAL DITCH							
	12	Detour Ro	ad	Wione		. <u></u>	(2) Ava	ailabl	e		

Typical Photo

DEPTH = 3.0 ~ 5.0 M

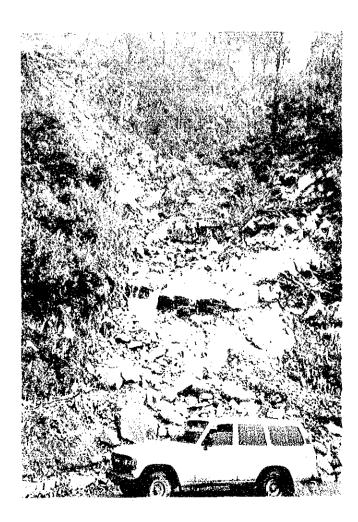
TOP PERTION IS FRESH ROCK

Date of Inspection 02 / SEPT / 1992 Inspector MAGAMI / JAKI	1	02 /	(PP / 1776	Inspector	HAGAMI/JAKE



NAME OF ROAD : BAGUIO - NUEVA VIZCAYA ROAD

TYPE OF FAILURE: DEBRIS FLOW LOCATION : KM 273.1



Form-1 : CUT SLOPE DAMAGE INSPECTION SHEET

				And the state of t				
	-		Name of Province	BENGUET				
Road NO.		0225 B	Name of Road	BAGUIO - NUEVA VIZCAYA ROAD				
Spot NO.		06	Location of Spot	273.40				
Classificat	ion	of Road	(2)Provincial Road					
NO. of Lanes	& R	oadway Width	W1-Lane (2)2-Lan	o (3) -Lane Total Width: 5.0				
Surface Typ	e &	Pavement Width	(1)PCC (2)AC (2)G	ravel (4)Earth Pave. Width: 5.0				
Terrain			(1)Flat (2)Ro	Hing (2) tourtainous				
	1	Type of Slope	ACut Slope (2)Natural Slope (3)()					
	2	Kind of Failure	(1)Gulley (2)Erosio	on WaxLand Slide (4)Rock/Debris Fall				
Svi dence	3	Size of Failure	(1)Width: 15.0 m	(2)Height: 10.0 m (3)Number:				
of Failure	.1	Date Occured	AUGUST /	/ 1992				
raffute	5	Traffic Magnitude	IJY)Full Width (2)∏a	If Width (3)Shoulder (4)No Influence				
	ا ر	ruption Duration	√√√ 1 day ⟨ (2) 1	~7 days (3) 7 days >				
	6	Countermeasure	(1)Structure() \(\mathcal{Z} \) Removal of Slide Materials					
	7	Height	(1)10m < \$2510~30m (3)30~50m (4)50m >					
Existing Slope	8	Gradient	(1)45' ((2)45' ~60' (3)50') (4) Overhang					
Condition	9	Berm	William (2) Existing Number() (3) Width()					
	10	Protection	ℋ)None (2)Vegetation (3)Structur ()					
	11	Hardness	(1)Hard rock (2)So	ft Nock (3)()				
	13	Withering Condition	(1)Fresh (2)Slightly (3)Highly (4)Nearly Withored Withered Soil					
Goolo Rock gical	13	Direction of Strata	(1) Inclined to Mountain (2) Inclined to Slope (3) Not Clear					
Çondi	11	Condition of Crack	(1) Fine Crack (2) Clear (3) Open (4) Clay isto Crack					
tion —	15	Thickness	(1) 1m < \(\(\frac{\(\alpha\)}{2}\)1~5m \((3)\)5~10m \((4)\)10~20m \((5)\)20m \>					
Soit	16	Compactness	(1)Tight (2/Slightly Loose (3)Loose					
	17	Degree of Saturation	(i)dry Wife	t (3)Seepage (4)Spring				
Weather Condition	13	Surface Water Concentration	(i)None 42)Low (3)High					
	19	Drainage Facilities	UYExisting() (2) Nothing					
	20	Impact to Traffic	(2)Me	edium ATHigh				
Engineer-	21	Cause of Damage	A()Concentration of Surface Water (2)Seepage/Spring (3)Steeper than Normal Slope (4)(
Ing Judsement	22	Countermeasure	RETAINING WALL (SIOM)					
	23	Detour Road	⟨ſ)None (2)Avaitable					
Date of Ins	peet	ion 02 /	SEPT / 1992	Inspector NAGAMI/JAKE				



NAME OF ROAD : BAGUIO - NUEVA VIZCAYA ROAD
TYPE OF FAILURE : CUT SLOPE FAILURE
LOCATION : KM 273.4

				Name of Province	KALIM	SA - AFA	4'AD		
Road NO.		052		Name of Road	·	LINGA - CAGAYAN			
Spot NO.		01		Location of Spot		475-10			
Classificat	ion.				(2) Provincial Road				
NO. of Lanes & Roadway Width			(x)1-lane (2)2-1				5.0		
Surface Typ				(1) PCC (2) AC (3)					
Terrain			(1)Flat (2)Rolling (2)Mountainous						
Evidence	1	Size of D	amage	(1) Width(€0:0	····)	
of Flow	2	Date Occu	· · · · · · · · · · · · · · · · · · ·	EVERY RAIN /					
		Traffic	Magnitude	⟨¶)Full Width (2				Influenc	
	3	Interrup tion	Duration	(1) 1 day (\(\sqrt{2}\)					
	4	Avarage G	radient	(1)20' ((2					
Existing Flow Condition	5	Area of B		(1)50,000m2 ((2)50,000~200,000m2 (3)200,000m2 >					
	6	Deposit o	n Riverbed	(1)None (2	Rare (3) Abundant (4) Overflow				
	7	Deposit M	aterial	(1) Clay (2) Sand (3) Gravel (4) Cobble 1065(5) Boulder					
	8	Vegetatio	n	Covering Rate of					
	9	Impact to	Traffic	(1)Low (2)Medium A3)High					
Engineer-	10	Cause of	Damage	KAINGIN, LOGGING SOMETIMES, EROSION					
ing Judgement	11	Counterme	asure	RE-ALIGNMENT (BRIDGE)					
	12	Detour Ro	ad	(X) None	(2) Av	ailable			
Typical Pho	to			DEPTH (NOT	LEAR)			•	
					·				
-									
					·				
						•			

/ 1992

SEPT

09

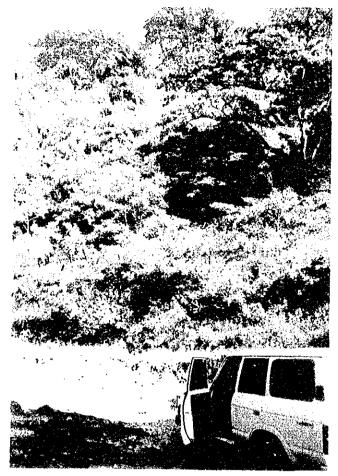
Date of Inspection

Inspector

NAGAMI

JAKE





NAME OF ROAD : KALINGA - CAGAYAN ROAD TYPE OF FAILURE : DEBRIS FLOW

LOCATION : KM 475.1

