FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360AB-01-00M	2001	38	42

Boring Log Legend

UNIFIED SOIL CLASSIFICATION SYSTEM (USCS)

MAJOR DIVISIONS			USCS	TYPICAL DESCRIPTIONS
COARSE-GRAINED SOILS	GRAVELS	CLEAN GRAVELS	GW	WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
	MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	LESS THAN 5% FINES	GP	POORLY-GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
		GRAVELS WITH FINES	GM	SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES
		MORE THAN 12% FINES	GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES
	SANDS	CLEAN SANDS	SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
MORE THAN 50% OF MATERIAL RETAINED ON NO. 200 SIEVE		LESS THAN 5% FINES	SP	POORLY-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
	50% OR MORE OF COARSE FRACTION PASSING THROUGH NO. 4 SIEVE	SANDS WITH FINES	SM	SILTY SANDS, SAND-SILT MIXTURES
		MORE THAN 12% FINES	SC	CLAYEY SANDS, SAND-CLAY MIXTURES
FINE-GRAINED SOILS	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50	ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
			CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
			OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
50% OR MORE OF MATERIAL PASSING THROUGH NO. 200 SIEVE	SILTS AND CLAYS	LIQUID LIMIT 50 OR MORE	MH	INORGANIC SILT, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
			CH	INORGANIC CLAYS OF HIGH PLASTICITY
			OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS			PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

LEGEND

	2-INCH O.D. STANDARD PENETRATION TEST	LL	LIQUID LIMIT
	3-INCH O.D. MODIFIED CALIFORNIA SAMPLE	PI	PLASTICITY INDEX
S	SHELBY TUBE SAMPLE	TV	TORVANE SHEAR (tsf)
G	GRAB SAMPLE	PEN	POCKET PENETROMETER (tsf)
	CORE SAMPLE	▽	WATER LEVEL OBSERVED IN BORING

GEOTECHNICAL NOTES

1. A geotechnical engineering report entitled "Geotechnical Engineering Exploration, Route 360 Hana Highway, Repairs and Maintenance at Various Locations, Hana, Maui, Hawaii" dated April 11, 2001 has been prepared by Geolabs, Inc. A copy of the report is on file at the office of the engineer for review by the contractor.
2. For boring locations, see Sheets 12-14.
3. The information presented in the logs of borings depict the subsurface conditions encountered at that specified location and at the time of the field exploration only. Variations of subsoil conditions from those depicted in the logs of borings may occur between and beyond the borings.
4. The penetration resistance shown on the logs of borings indicate the number of blows required for the specific sampler type used. The blow counts may need to be factored to obtain the Standard Penetration Test (SPT) blow counts.
5. The data given is for general information only. Bidders shall examine the site and the boring data and draw their own conclusions therefrom as to the character of materials to be encountered. The engineer will not assume responsibility for variations of subsoil quality or conditions other than at the boring locations shown and at the time the borings were taken.

ROBIN M. LIN
LICENSED PROFESSIONAL ENGINEER
No. 8436-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

GEOLABS, INC.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

BORING LOGS

HANA HIGHWAY
REPAIRS AND MAINTENANCE
PROJECT NO. 360AB-01-00M

Scale: NTS Date: March, 2001

SHEET No. 1 OF 5 SHEETS

ORIGINAL PLAN | SURVEY PLOTTED BY | DRAWN BY | TRACED BY | DESIGNED BY | QUANTITIES BY | CHECKED BY | DATE | NOTE BOOK | No.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360AB-01-00M	2001	39	42

GEOLABS, INC.
Geotechnical Engineering

ROUTE 360 HANA HIGHWAY
REPAIRS & MAINTENANCE AT VAR. LOCATIONS
HANA, MAUI, HAWAII

Log of Boring 1

Other Tests	Moisture Content (%)	Dry Unit Weight (pcf)	Core Recovery (%)	RQD (%)	Penetration Resistance (blows/foot)	Pocket Pen. (tsf)	Depth (feet)	Sample	Graphic	USCS	Approximate Ground Surface Elevation: / Description
	29	82			20/.5'		0			GW	6-INCH ASPHALT CONCRETE
	24	83			Ref.					ML	SILTY BASALT GRAVEL AND SAND (base course)
	25				25						Brown mottled orange SANDY SILT with traces of highly weathered basalt gravel, stiff, moist (fill)
					6/.5'		5				
	40	78			+20/.4'						grades to soft
					Ref.						
					10						
	64				4		10				
	50	76			20		15				grades to medium stiff to stiff
	61				6		20				grades to soft to medium stiff
	48	73			48		25				grades to very stiff
	49				24		30				
	59	66			16		35				grades to medium stiff to stiff
											Brown mottled orange SANDY SILT with traces of highly weathered basalt gravel, stiff, moist (fill)
	45				28		40				grades to very stiff
	33	87			83		45				grades to grayish brown, with traces of highly to extremely weathered basalt gravel
	52				32		50				Boring terminated at 50 feet
							55				

Date Started:	December 20, 2000	Water Level: ▽	7 ft. 12/20/00 HRS 4.4 ft. 12/20/00 HRS
Date Completed:	December 20, 2000		
Logged By:	E. Shinsato	Drill Rig:	MOBILE B-53
Total Depth:	50 feet	Drilling Method:	4" Auger
Work Order:	4554-00	Driving Energy:	140 lb. wt., 30 in. drop

GEOLABS, INC.
Geotechnical Engineering

ROUTE 360 HANA HIGHWAY
REPAIRS & MAINTENANCE AT VAR. LOCATIONS
HANA, MAUI, HAWAII

Log of Boring 2

Other Tests	Moisture Content (%)	Dry Unit Weight (pcf)	Core Recovery (%)	RQD (%)	Penetration Resistance (blows/foot)	Pocket Pen. (tsf)	Depth (feet)	Sample	Graphic	USCS	Approximate Ground Surface Elevation: / Description
	33	83			46		0			GW	2-INCH ASPHALT CONCRETE
										GM	SILTY BASALT GRAVEL (base course)
					30/.2'						Grayish brown SILTY BASALT GRAVEL with some basalt sand, and traces of moderately weathered cobbles, dense, damp
					Ref.		5				
					25/.0'						Grayish brown BASALT, hard (basalt formation)
					Ref.						
											Boring terminated at 7 feet
							10				
							15				
							20				

Date Started:	December 11, 2000	Water Level: ▽	Not Encountered
Date Completed:	December 11, 2000		
Logged By:	E. Shinsato	Drill Rig:	MOBILE B-53
Total Depth:	7 feet	Drilling Method:	4" Auger
Work Order:	4554-00	Driving Energy:	140 lb. wt., 30 in. drop

GEOLABS, INC.
Geotechnical Engineering

ROUTE 360 HANA HIGHWAY
REPAIRS & MAINTENANCE AT VAR. LOCATIONS
HANA, MAUI, HAWAII

Log of Boring 3

Other Tests	Moisture Content (%)	Dry Unit Weight (pcf)	Core Recovery (%)	RQD (%)	Penetration Resistance (blows/foot)	Pocket Pen. (tsf)	Depth (feet)	Sample	Graphic	USCS	Approximate Ground Surface Elevation: / Description
							0			GM	2-INCH ASPHALT CONCRETE
	26				31					SW-SM	Grayish brown SILTY BASALT GRAVEL (base course)
	25				3						Brown SILTY BASALT SAND with traces of highly weathered cobbles, medium dense, very moist (water seepage at 1.5')
	40	73			11		5				
										MH	Grayish brown with white mottling BASALT, highly to extremely weathered, soft, breaks down to clayey silt (saprolite)
	20				7		10				
											Boring terminated at 11.5 feet
							15				
							20				

Date Started:	December 11, 2000	Water Level: ▽	Not Encountered
Date Completed:	December 11, 2000		
Logged By:	E. Shinsato	Drill Rig:	MOBILE B-53
Total Depth:	11.5 feet	Drilling Method:	4" Auger
Work Order:	4554-00	Driving Energy:	140 lb. wt., 30 in. drop

SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY
DATE
ORIGINAL PLAN
NOTE BOOK
No.

ROBIN M. LIM
LICENSED PROFESSIONAL ENGINEER
No. 8436-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

GEOLABS, INC.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

BORING LOGS

HANA HIGHWAY
REPAIRS AND MAINTENANCE
PROJECT NO. 360AB-01-00M

Scale: NTS Date: March, 2001

SHEET No. 2 OF 5 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360AB-01-00M	2001	40	42

GEOLABS, INC.
Geotechnical Engineering

ROUTE 360 HANA HIGHWAY
REPAIRS & MAINTENANCE AT VAR. LOCATIONS
HANA, MAUI, HAWAII

Log of Boring 4

Other Tests	Moisture Content (%)	Dry Unit Weight (pcf)	Core Recovery (%)	RQD (%)	Penetration Resistance (blows/foot)	Pocket Pen. (tsf)	Depth (feet)	Sample	Graphic	USCS	Approximate Ground Surface Elevation: / Description
							0			GW	6-INCH ASPHALT CONCRETE
	23	95			59/.5' Ref.					SM	SILTY BASALT GRAVEL AND SAND (base course)
											Grayish brown SILTY BASALT SAND with some basalt cobbles and gravel
			100	100			5				Gray BASALT, slightly fractured, slightly
			100	97							weathered, hard (basalt formation)
							10				
			80	43							grades to severely to closely fractured, moderately weathered
							15				
			70	65							grades to closely fractured, slightly weathered
							20				
			17							SM	Gray BASALT, severely fractured, extremely weathered, soft, breaks down to silty sand (saprolite)
							25				
	53				13						
			21								
							30				
	65				14						
			21								
							35				
	31		53	30	50/.3' Ref.						Gray BASALT, severely fractured, extremely weathered, soft, breaks down to silty sand (saprolite)
											grades to moderately weathered, medium hard
							40				
	48				25						grades to extremely weathered, soft
			31								
							45				
	51				36						
			90	79							Brownish gray VOCANIC BRECCIA, closely fractured, highly weathered, medium hard (volcanic breccia)
							50				Boring terminated at 51 feet
							55				

Date Started:	December 19, 2000	Water Level: ▽	Not Encountered
Date Completed:	December 19, 2000		
Logged By:	E. Shinsato	Drill Rig:	MOBILE B-53
Total Depth:	51 feet	Drilling Method:	4" Auger & HQ Coring
Work Order:	4554-00	Driving Energy:	140 lb. wt., 30 in. drop

GEOLABS, INC.
Geotechnical Engineering

ROUTE 360 HANA HIGHWAY
REPAIRS & MAINTENANCE AT VAR. LOCATIONS
HANA, MAUI, HAWAII

Log of Boring 5

Other Tests	Moisture Content (%)	Dry Unit Weight (pcf)	Core Recovery (%)	RQD (%)	Penetration Resistance (blows/foot)	Pocket Pen. (tsf)	Depth (feet)	Sample	Graphic	USCS	Approximate Ground Surface Elevation: / Description
							0			GW	6-INCH ASPHALT CONCRETE
	51	64			19					CL	SILTY BASALT GRAVEL AND SAND (base course)
	61				13						Brown SILTY CLAY with traces of extremely weathered basalt gravel and sand, medium stiff to
	68	59			39		5			SM	stiff, moist
											Gray with white mottling BASALT, extremely weathered, soft, breaks down to silty sand (saprolite)
	31				76		10				
							15				
	20				50/.3' Ref.						
							20				
	62	57			49						
							25				
	39				29/.5' +30/.2' Ref.						grades to grayish brown
							30				
	42				75						
							35				
	46				35/.5' +30/.2' Ref.						Gray with white mottling BASALT, extremely weathered, soft, breaks down to silty sand (saprolite)
							40				
	50				72						
							45				
	63				50/.3' Ref.						
							50				Boring terminated at 50.8 feet
	56				50/.3' Ref.		55				

Date Started:	December 18, 2000	Water Level: ▽	Not Encountered
Date Completed:	December 18, 2000		
Logged By:	E. Shinsato	Drill Rig:	MOBILE B-53
Total Depth:	50.8 feet	Drilling Method:	4" Auger
Work Order:	4554-00	Driving Energy:	140 lb. wt., 30 in. drop

ROBIN M. LIM
LICENSED PROFESSIONAL ENGINEER
No. 8436-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

GEOLABS, INC.

ORIGINAL PLAN
SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DESIGNED BY
NOTE BOOK
QUANTITIES BY
CHECKED BY
DATE
No.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

BORING LOGS

HANA HIGHWAY
REPAIRS AND MAINTENANCE
PROJECT NO. 360AB-01-00M

Scale: NTS Date: March, 2001

SHEET No. 3 OF 5 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360AB-01-00M	2001	41	42

GEOLABS, INC.
Geotechnical Engineering

ROUTE 360 HANA HIGHWAY
REPAIRS & MAINTENANCE AT VAR. LOCATIONS
HANA, MAUI, HAWAII

Log of Boring 6

Other Tests	Moisture Content (%)	Dry Unit Weight (pcf)	Core Recovery (%)	RQD (%)	Penetration Resistance (blows/foot)	Pocket Pen. (tsf)	Depth (feet)	Sample	Graphic	USCS	Approximate Ground Surface Elevation: / Description
							0			GW	4-INCH ASPHALT CONCRETE
	46	65			25/.2'					SM	SILTY BASALT GRAVEL AND SAND (base course)
					Ref.						Reddish gray-brown SILTY BASALT SAND with gravel, loose to medium dense, moist
					19		5				
			100	100	50/.3'						Gray VESICULAR BASALT, closely fractured,
			90	90	Ref.						moderately weathered, medium hard (basalt formation)
							10				
			92	75							
							15				grades with reddish highly weathered, severely fractured seams
			100	100							grades back to gray, moderately weathered, severely fractured, medium hard
							20				
			100	97							
							25				grades with some reddish brown, highly weathered seams
			100	100							
							30				
			97	97							grades to severely fractured
							35				
			92	92							Gray VESICULAR BASALT, closely fractured, moderately weathered, medium hard (basalt formation)
											grades to closely fractured
							40				
			85	85							
							45				Boring terminated at 45 feet
							50				
							55				

Date Started:	December 15, 2000	Water Level: ▽	Not Encountered
Date Completed:	December 15, 2000		
Logged By:	E. Shinsato	Drill Rig:	MOBILE B-53
Total Depth:	45 feet	Drilling Method:	4" Auger & HQ Coring
Work Order:	4554-00	Driving Energy:	140 lb. wt., 30 in. drop

GEOLABS, INC.
Geotechnical Engineering

ROUTE 360 HANA HIGHWAY
REPAIRS & MAINTENANCE AT VAR. LOCATIONS
HANA, MAUI, HAWAII

Log of Boring 7

Other Tests	Moisture Content (%)	Dry Unit Weight (pcf)	Core Recovery (%)	RQD (%)	Penetration Resistance (blows/foot)	Pocket Pen. (tsf)	Depth (feet)	Sample	Graphic	USCS	Approximate Ground Surface Elevation: / Description
							0			GW	3-INCH ASPHALT CONCRETE
	52	62			9					CL	SILTY BASALT GRAVEL AND SAND (base course)
	59				3						Brown with orange mottling SILTY CLAY with highly to extremely weathered basalt gravel and
	52	61			16		5			GM	sand, soft, very moist
											Brown with orange mottling SILTY BASALT GRAVEL AND SAND medium dense, very moist (saprolite)
	50				25		10				grades to medium dense
	24	93			50		15				
	42				37		20				
	41	73			40/.3' Ref.		25			ML	Grayish brown BASALT, severely fractured, highly weathered, soft, breaks down to sandy silt (saprolite)
	28				50/.3' Ref.		30			SM	Reddish gray-brown BASALT, extremely weathered, break down to silty sand (saprolite)
	16				30/.2' Ref.		35				Reddish brown BASALT, extremely weathered, breaks down to silty sand (saprolite)
					56/.3' Ref.		40				
					50/.2' Ref.		45				grades to moderately weathered basalt, medium hard
											Boring terminated at 47 feet
							50				
							55				

Date Started:	December 14, 2000	Water Level: ▽	Not Encountered
Date Completed:	December 14, 2000		
Logged By:	E. Shinsato	Drill Rig:	MOBILE B-53
Total Depth:	47 feet	Drilling Method:	4" Auger
Work Order:	4554-00	Driving Energy:	140 lb. wt., 30 in. drop

ORIGINAL PLAN
SURVEY PLOTTED BY / DRAWN BY / TRACED BY / DESIGNED BY / QUANTITIES BY / CHECKED BY / NOTE BOOK / DATE / No.

ROBIN M. LIM
LICENSED PROFESSIONAL ENGINEER
No. 8436-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
GEOLABS, INC.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

BORING LOGS

HANA HIGHWAY
REPAIRS AND MAINTENANCE
PROJECT NO. 360AB-01-00M

Scale: NTS Date: March, 2001

SHEET No. 4 OF 5 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360AB-01-00M	2001	42	42

GEOLABS, INC.
Geotechnical Engineering

ROUTE 360 HANA HIGHWAY
REPAIRS & MAINTENANCE AT VAR. LOCATIONS
HANA, MAUI, HAWAII

Log of Boring 8

Other Tests	Moisture Content (%)	Dry Unit Weight (pcf)	Core Recovery (%)	RQD (%)	Penetration Resistance (blows/foot)	Pocket Pen. (tsf)	Depth (feet)	Sample	Graphic	USCS	Approximate Ground Surface Elevation: / Description
							0			GW	4.5-INCH ASPHALT CONCRETE
	38	78			16	1.5				MH	SILTY BASALT GRAVEL AND COBBLES (base course)
	36				15						Grayish brown CLAYEY SILT with some highly weathered basalt gravel and sand, medium stiff to stiff, very moist (saprolite)
LL=64 PI=15	30	83			8		5				grades with multi-color mottling, with some extremely weathered gravel
	40				50/.5' Ref.		10				grades to purplish gray-brown, with white mottled areas, very stiff
					50/.0' Ref.		15			GM	Purplish gray-brown SILTY BASALT GRAVEL AND SAND medium dense, very moist (saprolite)
	32	85			58		20				
	26				32/.5' +40/.3' Ref.		25				grades to very dense
					40/.1' Ref.		30				Gray BASALT, moderately weathered, hard (basalt formation)
	100	100									
	100	87					35				grades to moderately fractured, slightly weathered
											Gray BASALT, moderately fractured, slightly weathered, hard (basalt formation)
	80	43					40				
	77	57					45				grades to severely fractured, moderately to highly weathered, medium hard
											grades back to medium weathered, hard
							50				Boring terminated at 48 feet
							55				

Date Started:	December 12, 2000	Water Level: ▽	Not Encountered
Date Completed:	December 12, 2000	Drill Rig:	MOBILE B-53
Logged By:	E. Shinsato	Drilling Method:	4" Auger & HQ Coring
Total Depth:	48 feet	Driving Energy:	140 lb. wt., 30 in. drop
Work Order:	4554-00		

GEOLABS, INC.
Geotechnical Engineering

ROUTE 360 HANA HIGHWAY
REPAIRS & MAINTENANCE AT VAR. LOCATIONS
HANA, MAUI, HAWAII

Log of Boring 9

Other Tests	Moisture Content (%)	Dry Unit Weight (pcf)	Core Recovery (%)	RQD (%)	Penetration Resistance (blows/foot)	Pocket Pen. (tsf)	Depth (feet)	Sample	Graphic	USCS	Approximate Ground Surface Elevation: / Description
	43	78			43	3	0			GW	4.5-INCH ASPHALT CONCRETE
	31				37/.5' +30/.3' Ref.					ML	SILTY BASALT GRAVEL AND SAND (base course)
LL=46 PI=0	43	75			35/.5' +50/.3' Ref.		5				Grayish brown SANDY SILT with some highly weathered basalt gravel, very stiff, moist (saprolite)
	35				85		10				
	37	79			91		15				
	48				25/.5' +50/.3' Ref.		20			GM	Grayish brown BASALT, highly to extremely weathered, soft, breaks down to silty gravel with sand (saprolite)
	26	94			36		25				grades to moderately to highly weathered
	27				50/.5' Ref.		30				grades to extremely weathered
	27	87			33/.3' Ref.		35				Grayish brown BASALT, highly weathered, soft, breaks down to silty gravel with sand (saprolite)
	29				40		40				
	23	97			50/.5' Ref.		45				grades with yellow mottled seams
	27				34/.3' Ref.		50				Boring terminated at 50.8 feet
							55				

Date Started:	December 13, 2000	Water Level: ▽	Not Encountered
Date Completed:	December 13, 2000	Drill Rig:	MOBILE B-53
Logged By:	E. Shinsato	Drilling Method:	4" Auger
Total Depth:	50.8 feet	Driving Energy:	140 lb. wt., 30 in. drop
Work Order:	4554-00		

ROBIN M. LIN
LICENSED PROFESSIONAL ENGINEER
No. 8436-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

GEOLABS, INC.

ORIGINAL PLAN
SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DESIGN BY
NOTE BOOK
DESIGNED BY
QUANTITIES BY
CHECKED BY
DATE
No.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

BORING LOGS

HANA HIGHWAY
REPAIRS AND MAINTENANCE
PROJECT NO. 360AB-01-00M

Scale: NTS Date: March, 2001

SHEET No. 5 OF 5 SHEETS