THE DETAILED DESIGN STUDY ON THE NAIROBI BYPASS PROJECT

SHEET NO. 23

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Ngong Road Forest

Tc-35

Tc-36

BE-3

Tc-11

Scale 1:2,000
HEIGHTS IN METERS

LEGEND

- GPS Point
- Traverse Point
- Bench Mark
- 1234.5 Direct Leveling Height
- 1234.5 Spot Height
- Contours (V.I 1m)
- Outcrop (Rock)
- Building Permanent
- Building Others
- Bituminized Road
- Road
- Track
- Railway
- Bridge, Culvert
- River
- Stream
- Dam
- Pond
- Water Tank
- Power Line
- Telephone Line
- Fence Gate
- Hedge
- Stone Wall
- Dump or Mound
- Quarry Pit
- Cutting
- Embankment
- Cultivated Lands
- Orchard or Permanent C.
- Plantation
- Grassland
- Bush
- Forest
- Swamp
- Vegetation Boundary
- Planning Partition

LEGEND

- Drilling point
- Drilling point on S/F stage
- Test pit point
- Test pit point on S/F stage

HORIZONTAL DATUM: UTM ZONE 37 (CLARKE 1880 SPHD.)

VERTICAL DATUM: MEAN SEA LEVEL

AERIAL PHOTOGRAPHED BY: Japan International Cooperation Agency, December

GROUND CONTROL SURVEYED BY: December

STEREO PLOTTED BY: MARCH

CARTOGRAPHYED BY: JULY

CHECKED BY:
CHIEF ENGINEER DATE
CHIEF SUPT. ENG. DATE
SEN. SUPT. ENG. DATE
SUPT. ENGINEER DATE
PROJECT ENGINEER DATE

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DETAILED LOCATION MAP OF GEOLOGICAL SURVEY

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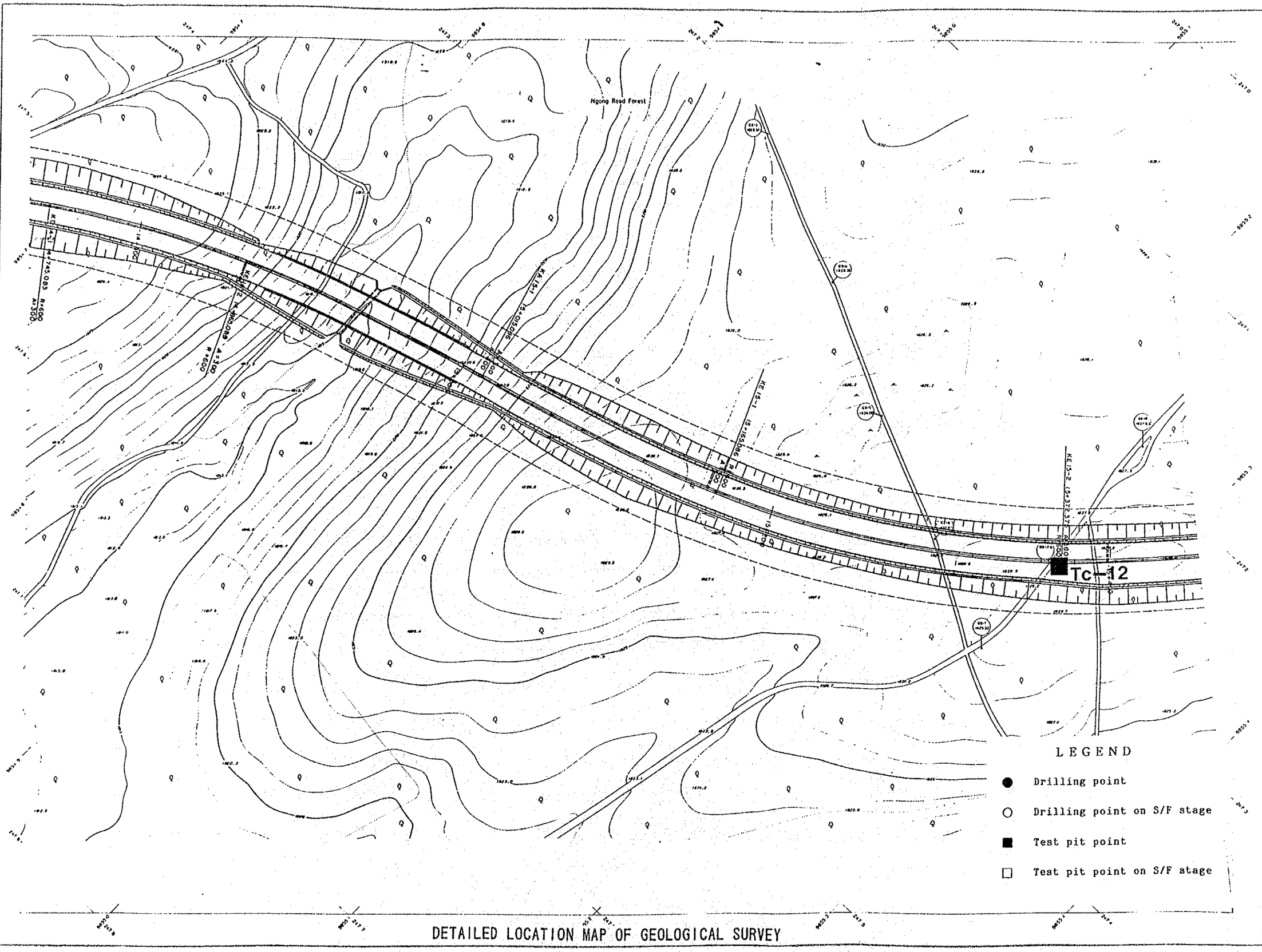

DETAILED LOCATION MAP OF GEOLOGICAL SURVEY

Scale 1 : 12,000
HEIGHTS IN METERS

LEGEND

- GPS Point
- Traverse Point
- Bench Mark
- 1234.5 Direct Leveling Heigh
- Spot Height
- Contours (V.I.1m)
- Outcrop (Rock)
- Building Permanent
- Building Others
- Bituminised Road
- Road
- Track
- Railway
- Bridge, Culvert
- River
- Stream
- Dam
- Pond
- Water Tank
- Power Line
- Telephone Line
- Fence, Gate
- Hedge
- Stone Wall
- Dump or Mound
- Quarry, Pit
- Cutting
- Embankment
- Cultivated Lands
- Orchard or Permanent C
- Plantation
- Grassland
- Bush
- Forest
- Swamp
- Vegetation Boundary
- Planting Partition

HORIZONTAL DATUM UTM ZONE 3
(CLARKE 1880 SPHE

VERTICAL DATUM MEAN SEA LEVE

AERIAL PHOTOGRAPHED BY
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Ltd.

GROUND CONTROL SURVEYED BY
Ltd.

STEREO PLOTTED BY
MARC

CARTOGRAPHED BY
D.T.

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PROJECT ENGINEE
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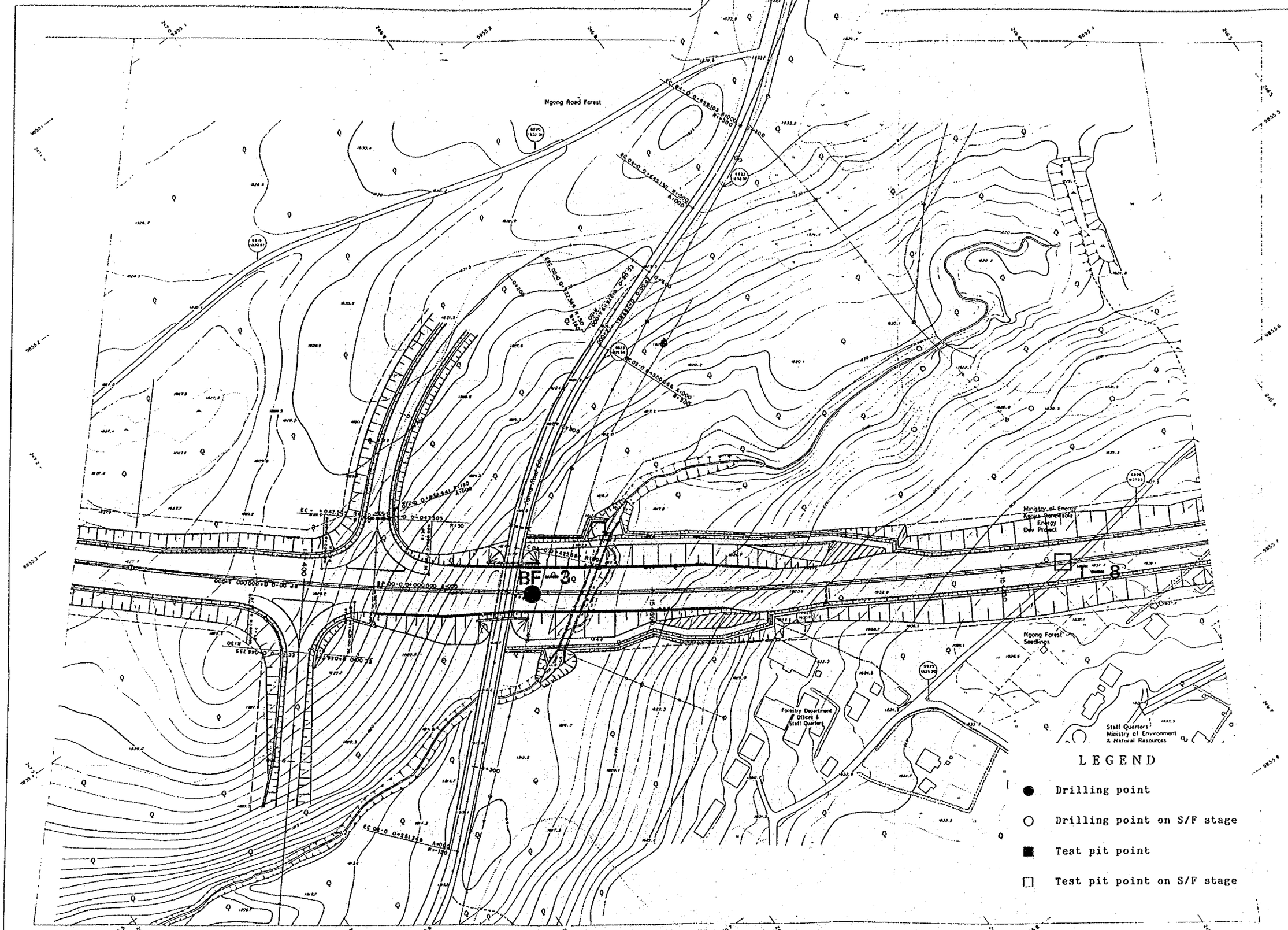

DETAILED LOCATION MAP OF GEOLOGICAL SURVEY

N

Scale 1:2,000
HEIGHTS IN METERS

LEGEND

- GPS Point
- Traverse Point
- Bench Mark
- 1234.5 Direct Leveling Height
- 1234.5 Spot Height
- Contours (C.I.1m)
- Outcrop (Rock)
- Building, Permanent
- Building, Others
- Bituminized Road
- Road
- Track
- Railway
- Bridge, Culvert
- River
- Stream
- Dam
- Pond
- Water Tank
- Power Line
- Telephone Line
- Fence, Gate
- Hedge
- Stone Wall
- Dump or Mound
- Quarry Pit
- Cutting
- Embankment
- Cultivated Lands
- Orchad or Permanent Cr
- Plantation
- Grassland
- Bush
- Forest
- Swamp
- Vegetation Boundary
- Floating Partition

HORIZONTAL DATUM UTM ZONE 37 (CLARKE 1880 SPHEROID)

VERTICAL DATUM MEAN SEA LEVEL

AERIAL PHOTOGRAPHED BY JICA (Japan International Cooperation Agency) December

GROUND CONTROL SURVEYED BY JICA December

STEREO PLOTTED BY JICA MARCH

CARTOGRAPHED BY JICA JULY

CHECKED BY:
CHIEF ENGINEER (ROAD) DATE
CHIEF SUPT. ENG. (ROAD) DATE
SEN. SUPT. ENG. (BRIDGE) DATE
SUPT. ENGINEER (BRIDGE) DATE
PROJECT ENGINEER DATE

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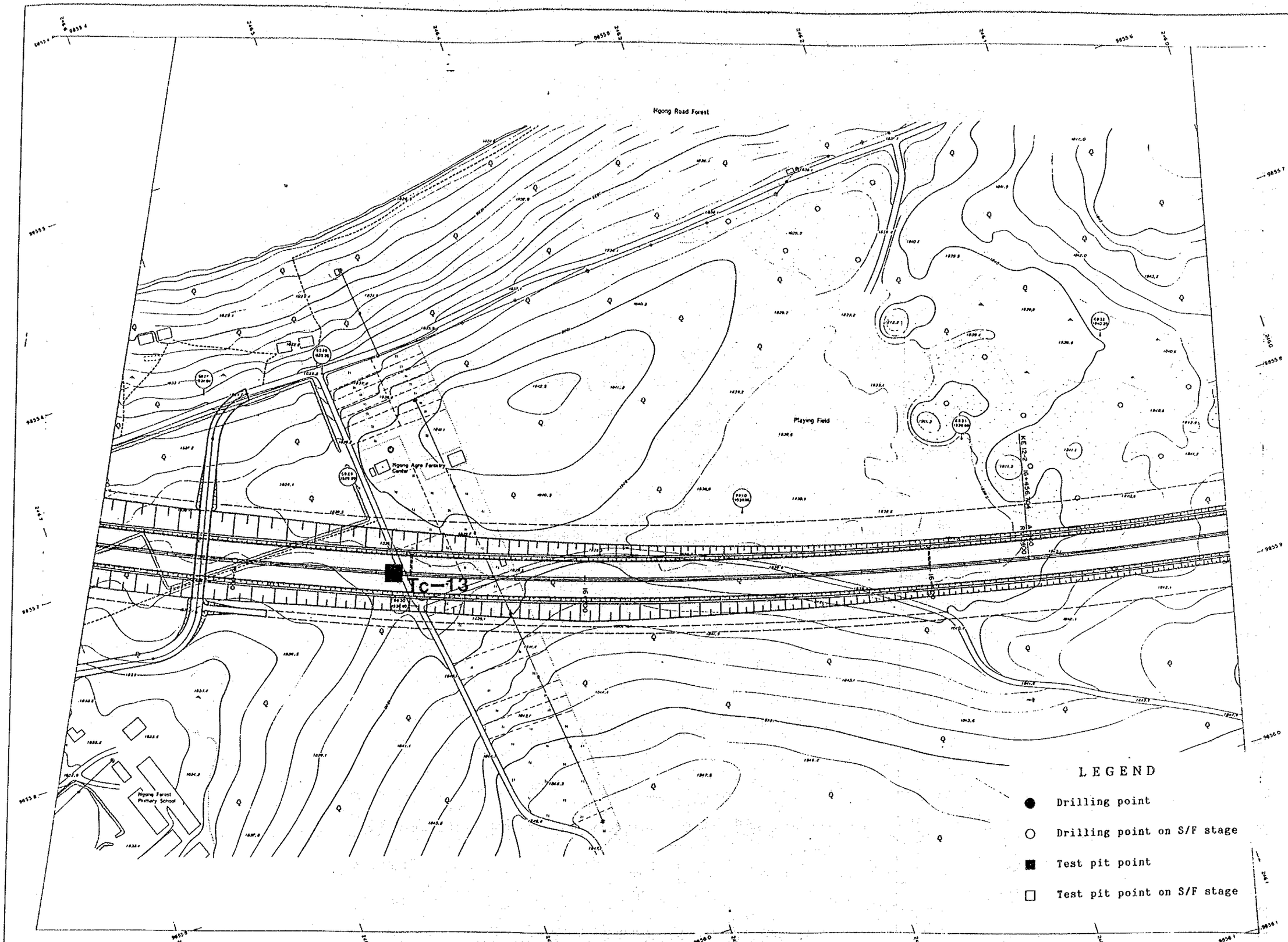

DETAILED LOCATION MAP OF GEOLOGICAL SURVEY

N

Scale 1:2,000
HEIGHTS IN METERS

LEGEND

- GPS Point
- Traverse Point
- Bench Mark
- Direct Leveling Height
- Spot Height
- Contours (V.I 1m)
- Outcrop (Rock)
- Building, Permanent
- Building, Others
- Bituminised Road
- Road
- Track
- Railway
- Bridge, Culvert
- River
- Stream
- Dam
- Pond
- Water Tank
- Power Line
- Telephone Line
- Fence, Gate
- Hedge
- Stone Wall
- Dump or Mound
- Quarry, Pit
- Cutting
- Embankment
- Cultivated Lands
- Orchard or Permanent Cr
- Plantation
- Grassland
- Bush
- Forest
- Swamp
- Vegetation Boundary
- Planting Partition

HORIZONTAL DATUM UTM ZONE 3
(CLARKE 1880 SPHERO

VERTICAL DATUM MEAN SEA LEVEL

AERIAL PHOTOGRAPHYED BY JI
Japan International Cooperation Age
December

GROUND CONTROL SURVEYED BY JI
December

STEREO PLOTTED BY JI
MARCH

CARTOGRAPHYED BY JI
JULY

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PROJECT ENGINEER
DATE

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Ngong Road Forest

Tc-14

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LEGEND

- Drilling point
- Drilling point on S/F stage
- Test pit point
- Test pit point on S/F stage

DETAILED LOCATION MAP OF GEOLOGICAL SURVEY

Scale 1:2,000
HEIGHTS IN METERS

LEGEND

- GPS Point
- Traverse Point
- Bench Mark
- Direct Leveling Brs.
- Spot Height
- Contours (C.I. 1m)
- Outcrop (Rock)
- Building Permanent
- Building Others
- Bituminised Road
- Road
- Track
- Railway
- Bridge, Culvert
- River
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- Telephone Line
- Fence, Gate
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- Dump or Mound
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- Cutting
- Embankment
- Cultivated Lands
- Orchard or Permanent
- Plantation
- Grassland
- Bush
- Forest
- Swamp
- Vegetation Boundary
- Planting Partition

HORIZONTAL DATUM: UTM ZONE (CLARKE 1880 SPH)

VERTICAL DATUM: MEAN SEA LE

AERIAL PHOTOGRAPHED BY: Japan International Cooperation

GROUND CONTROL SURVEYED BY:

STEREO PLOTTED BY:

CARTOGRAPHED BY:

CHECKED BY: CHIEF ENGINEER DATE / ; CHIEF SUPT. ENG. DATE / ; SEN. SUPT. ENG. DATE / ; SUPT. ENGINEER DATE / ; PROJECT ENGINEER DATE /

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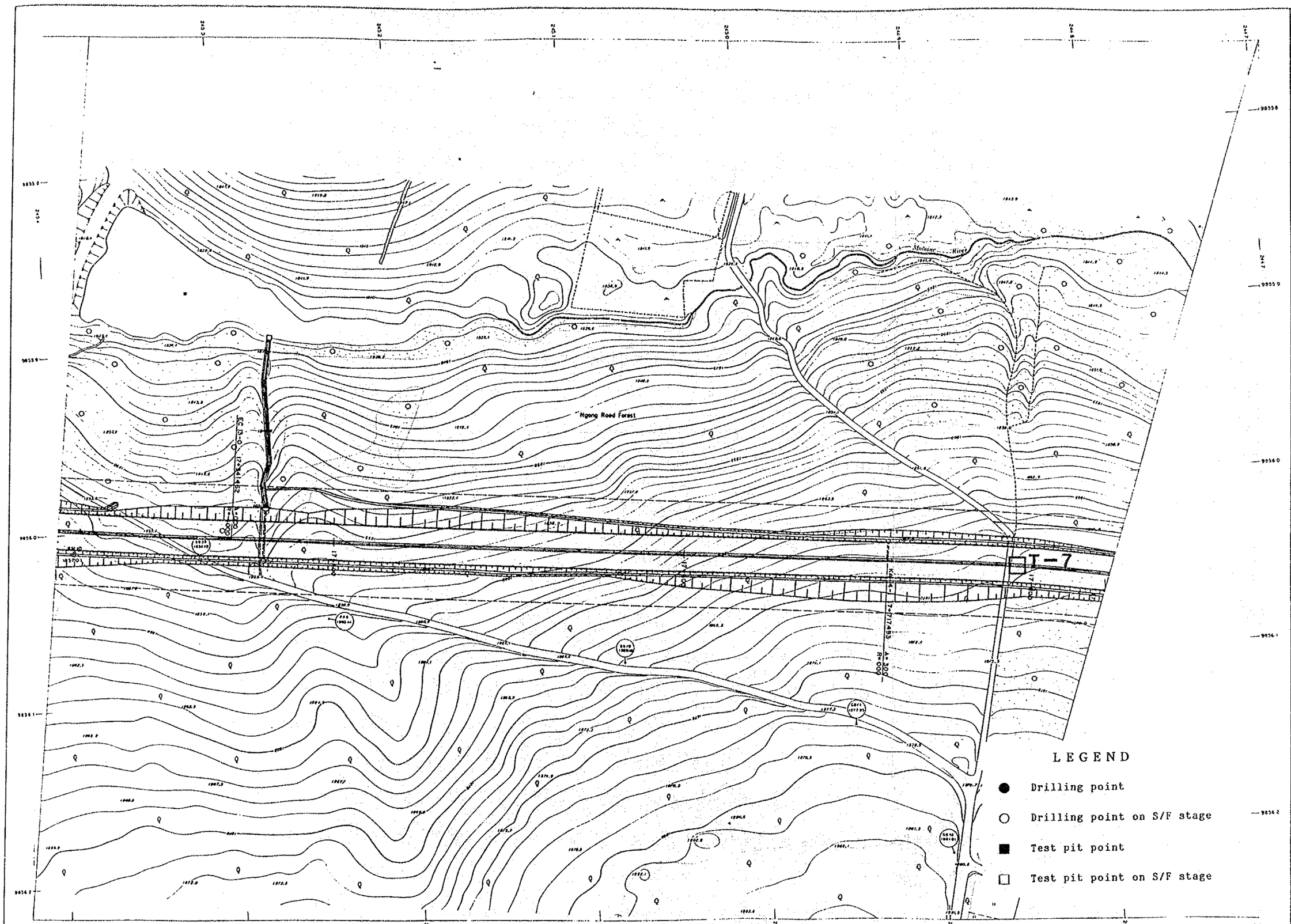

DETAILED LOCATION MAP OF GEOLOGICAL SURVEY

N

Scale 1:7,000
HEIGHTS IN METERS

LEGEND

- GPS Point
- Traverse Point
- Bench Mark
- Direct Leveling Height
- Spot Height
- Contours (V. Int.)
- Outcrop (Rock)
- Building, Permanent
- Building, Others
- Bituminized Road
- Road
- Track
- Railway
- Bridge, Culvert
- River
- Stream
- Dam
- Pond
- Water Tank
- Power Line
- Telephone Line
- Fence, Gate
- Hedge
- Stone Wall
- Dump or Mound
- Quarry Pit
- Cutting
- Embankment
- Cultivated Lands
- Orchard or Permanent C
- Plantation
- Grassland
- Bush
- Forest
- Swamp
- Vegetation Boundary
- Planting Partition

HORIZONTAL DATUM: UTM ZONE 3
CLARKE 1880 SPHD

VERTICAL DATUM: MEAN SEA LEVEL

AERIAL PHOTOGRAPHED BY
Japan International Cooperation Ag
December

GROUND CONTROL SURVEYED BY
December

STEREO PLOTTED BY
MARCH

CARTOGRAPHYED BY
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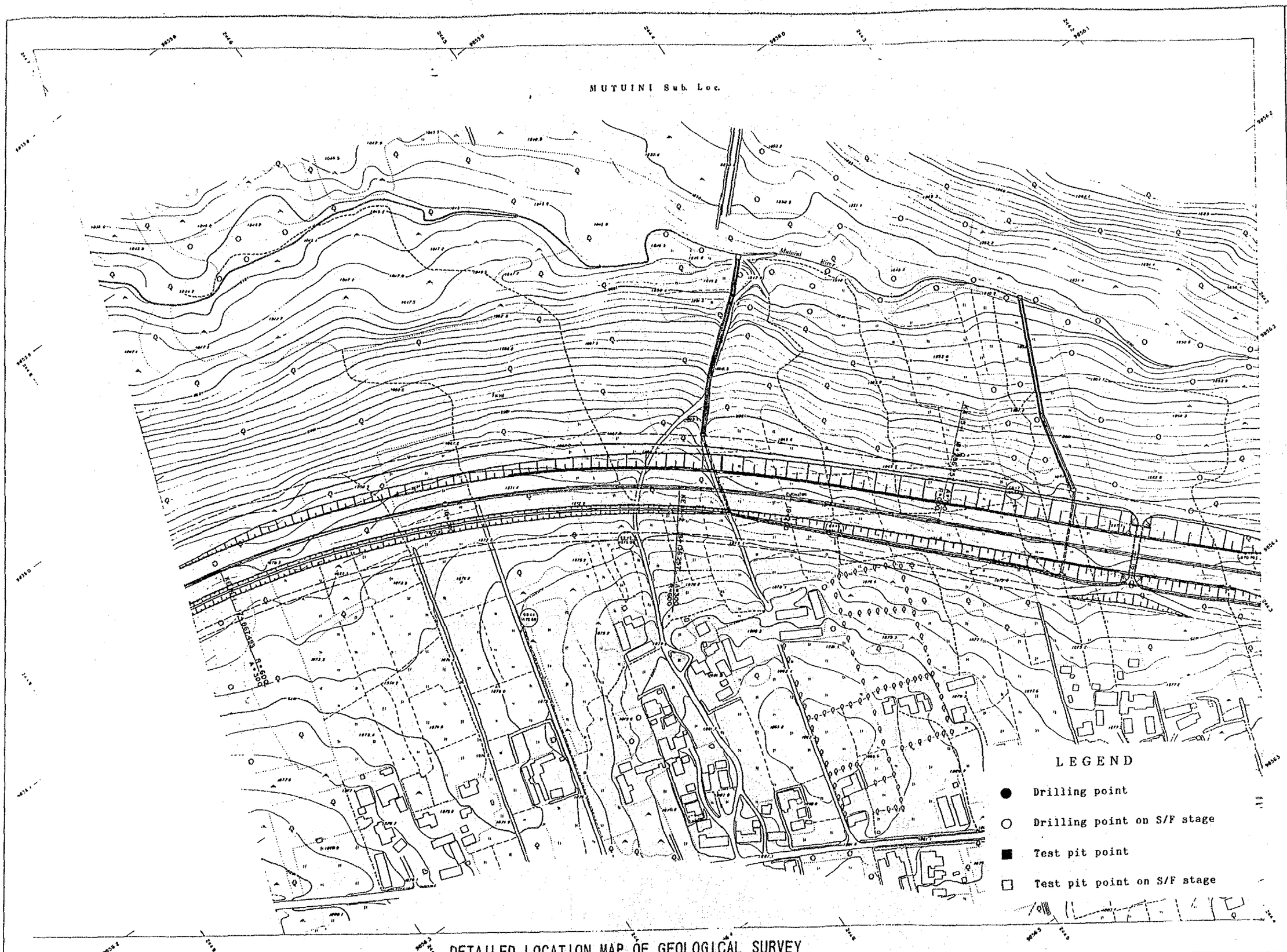

DETAILED LOCATION MAP OF GEOLOGICAL SURVEY

Scale 1:2,000
HEIGHTS IN METERS

LEGEND

- GPS Point
- Traverse Point
- Bench Mark
- 1234.5 Direct Leveling Height
- Spot Height
- Contours (V.I.1m)
- Outcrop (Rock)
- Building, Permanent
- Building, Others
- Bituminised Road
- Road
- Track
- Railway
- Bridge, Culvert
- River
- Stream
- Dam
- Pond
- Water Tank
- Power Line
- Telephone Line
- Fence, Gate
- Hedge
- Stone Wall
- Dump or Mound
- Quarry Pit
- Cutting
- Embankment
- Cultivated Lands
- Orchad or Permanent Cr
- Plantation
- Grassland
- Bush
- Forest
- Swamp
- Vegetation Boundary
- Planting Partition

HORIZONTAL DATUM: UTM ZONE 3
(CLARKE 1880 SPHD)

VERTICAL DATUM: MEAN SEA LEVEL

AERIAL PHOTOGRAPHED BY: [illegible]
(Japan International Cooperation Age
December

GROUND CONTROL SURVEYED BY: [illegible]
December

STEREO PLOTTED BY: [illegible]
MARCH

CARTOGRAPHED BY: [illegible]
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CHECKED BY
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DATE
CHIEF SUPT. ENG. [illegible]
DATE
SEN. SUPT. ENG. [illegible]
DATE
SUPT. ENGINEER [illegible]
DATE
PROJECT ENGINEER
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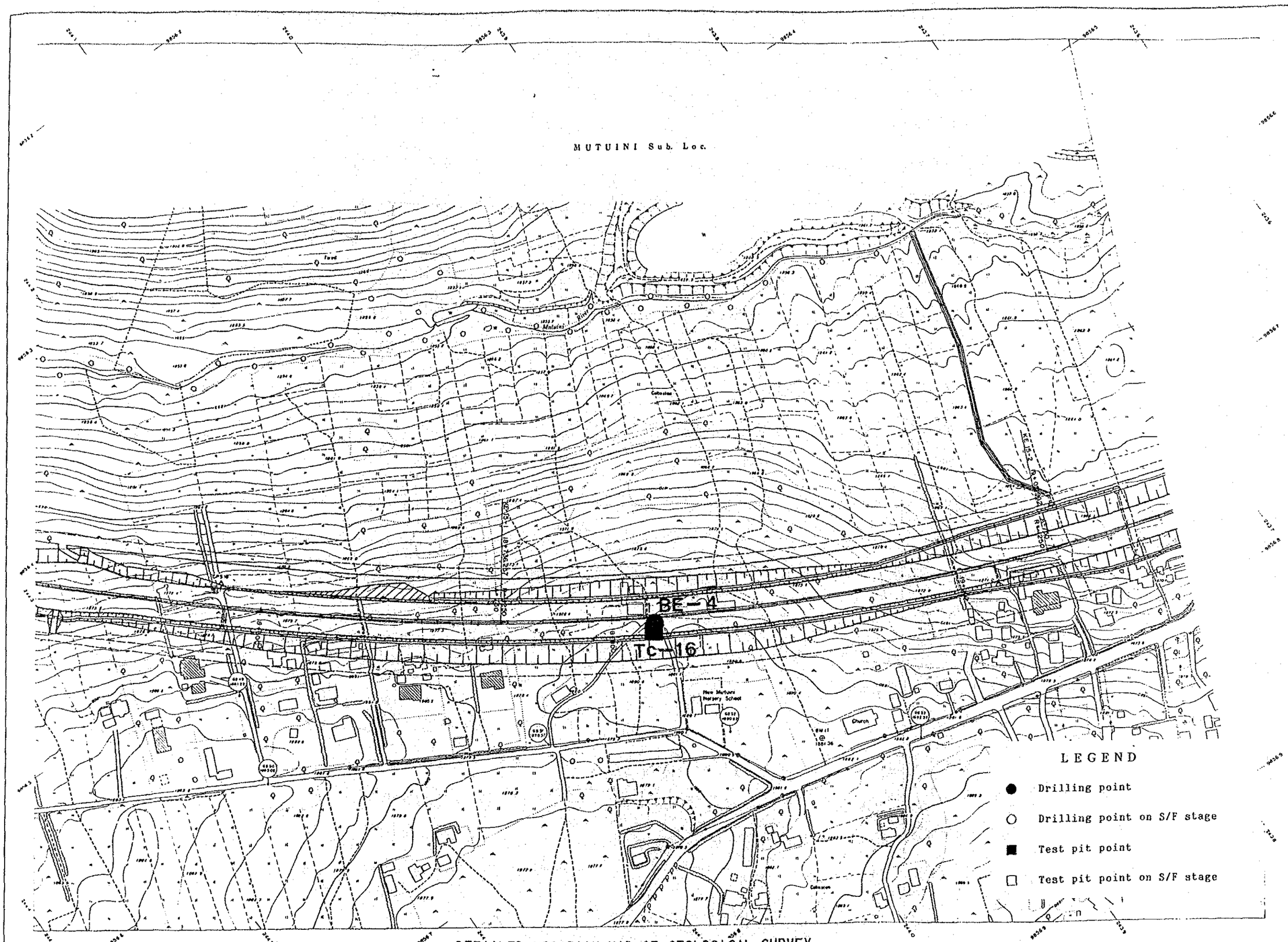

DETAILED LOCATION MAP OF GEOLOGICAL SURVEY

N

Scale 1:2,000
HEIGHTS IN METERS

LEGEND

- GPS Point
- Traverse Point
- Bench Mark
- 1234.5 Direct Leveling Height
- 1233.5 Spot Height
- Contours (V.I.1m)
- Outcrop (Rock)
- Building Permanent
- Building Others
- Bituminised Road
- Road
- Track
- Railway
- Bridge, Culvert
- River
- Stream
- Dam
- Pond
- Water Tank
- Power Line
- Telephone Line
- Fence, Gate
- Hedge
- Stone Wall
- Dump or Mound
- Quarry, Pit
- Cutting
- Embankment
- Cultivated Lands
- Orchad or Permanent Cr
- Plantation
- Grassland
- Bush
- Forest
- Swamp
- Vegetation Boundary
- Planting Partition

HORIZONTAL DATUM UTM ZONE 37 CLARKE 1880 SPHEROID

VERTICAL DATUM MEAN SEA LEVEL

AERIAL PHOTOGRAPHED BY Japan International Cooperation Agency December

GROUND CONTROL SURVEYED BY December

STEREO PLOTTED BY MARCH

CARTOGRAPHED BY JULY

CHECKED BY
CHIEF ENGINEER DATE
CHIEF SUPT. ENG. DATE
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PROJECT ENGINEER DATE

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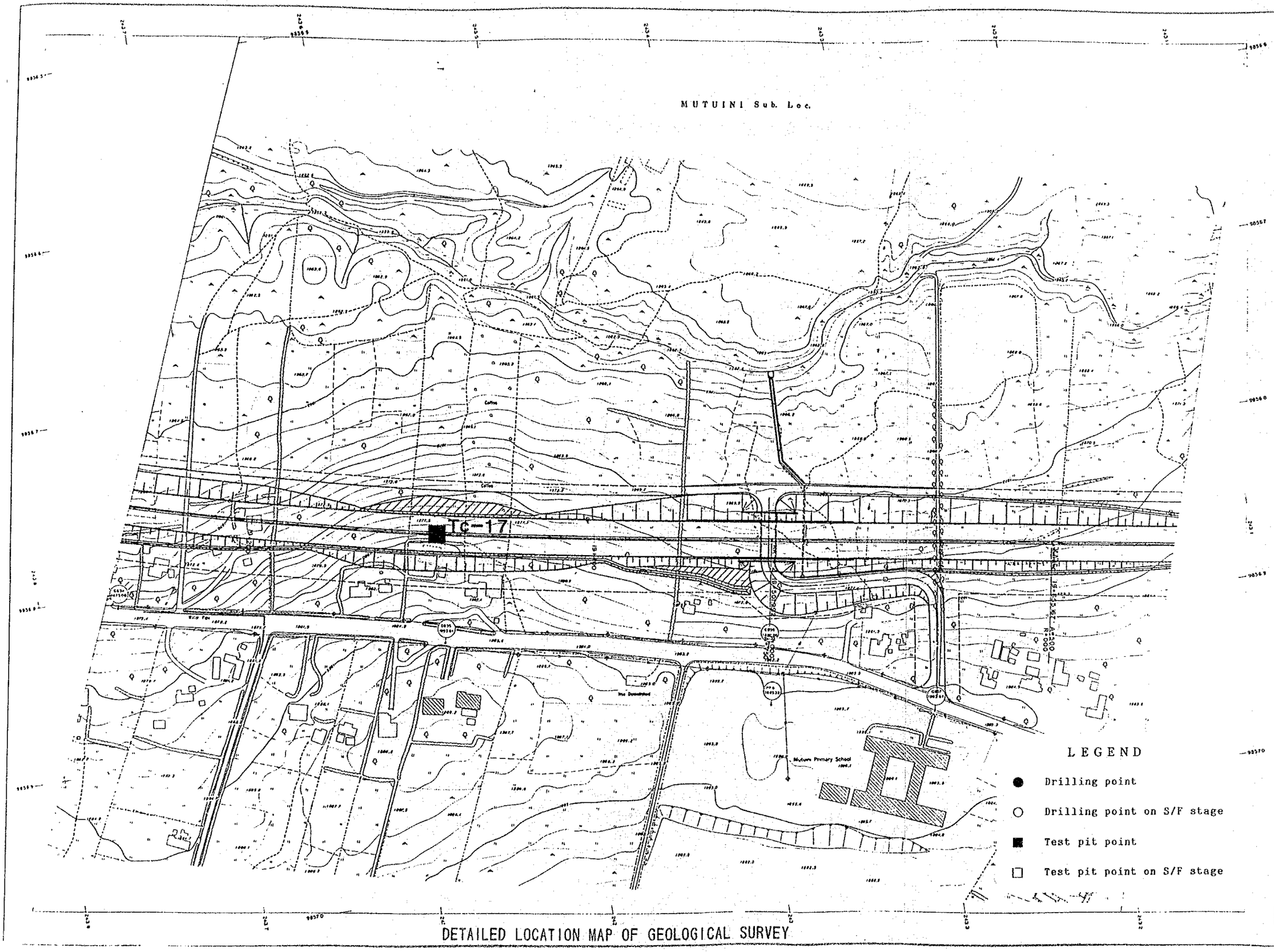

DETAILED LOCATION MAP OF GEOLOGICAL SURVEY

N

Scale 1:2,000
HEIGHTS IN METERS

LEGEND

- GPS Point
- Traverse Point
- Bench Mark
- 1234.5 Direct Leveling Height
- Spot Height
- Contours (V.I 1m)
- Outcrop (Rock)
- Building, Permanent
- Building, Others
- Bituminized Road
- Road
- Track
- Railway
- Bridge, Culvert
- River
- Stream
- Dam
- Pond
- Water Tank
- Power Line
- Telephone Line
- Fence, Gate
- Hedge
- Stone Wall
- Dump or Mound
- Quarry Pit
- Cutting
- Embankment
- Cultivated Lands
- Orchad or Permanent Cr.
- Plantation
- Grassland
- Bush
- Forest
- Swamp
- Vegetation Boundary
- Planting Partition

HORIZONTAL DATUM UTM ZONE 37 CLARKE 1880 SPHEROID

VERTICAL DATUM MEAN SEA LEVEL

AERIAL PHOTOGRAPHED BY Japan International Cooperation Agency, December

GROUND CONTROL SURVEYED BY December

STEREO PLOTTED BY MARCH

CARTOGRAPHED BY

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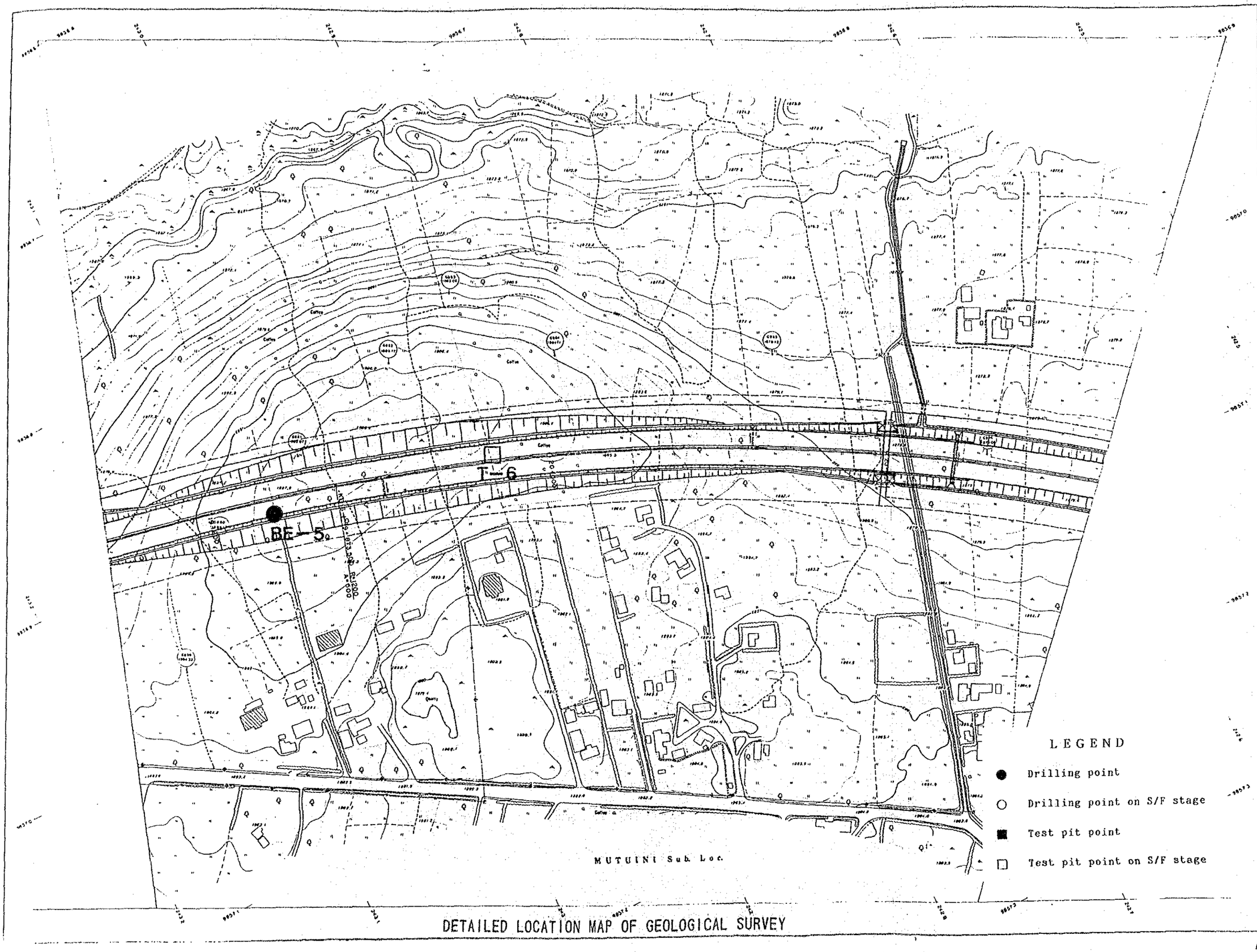

DETAILED LOCATION MAP OF GEOLOGICAL SURVEY

Scale 1:2,000
HEIGHTS IN METERS

LEGEND

- GPS Point
- Traverse Point
- Bench Mark
- Direct Leveling Height
- Spot Height
- Contours (C.I 1m)
- Outcrop (Rock)
- Building, Permanent
- Building, Others
- Bituminised Road
- Road
- Track
- Railway
- Bridge, Culvert
- River
- Stream
- Dam
- Pond
- Water Tank
- Power Line
- Telephone Line
- Fence, Gate
- Hedge
- Stone Wall
- Dump or Mound
- Quarry Pit
- Cutting
- Embankment
- Cultivated Lands
- Orchard or Permanent C
- Plantation
- Grassland
- Bush
- Forest
- Swamp
- Vegetation Boundary
- Existing Parallel

LEGEND

- Drilling point
- Drilling point on S/F stage
- Test pit point
- Test pit point on S/F stage

HORIZONTAL DATUM : UTM ZONE 37 (CLARKE 1880 SPHD.)

VERTICAL DATUM : MEAN SEA LEVEL

AERIAL PHOTOGRAPHED BY : Japan International Cooperation Agency

GROUND CONTROL SURVEYED BY : December

STEREO PLOTTED BY : MARCH

CARTOGRAPHED BY : JULY

CHECKED BY
CHIEF ENGINEER DATE
CHIEF SUPT. ENG. DATE
SEN. SUPT. ENG. DATE
SUPT. ENGINEER DATE
PROJECT ENGINEER DATE

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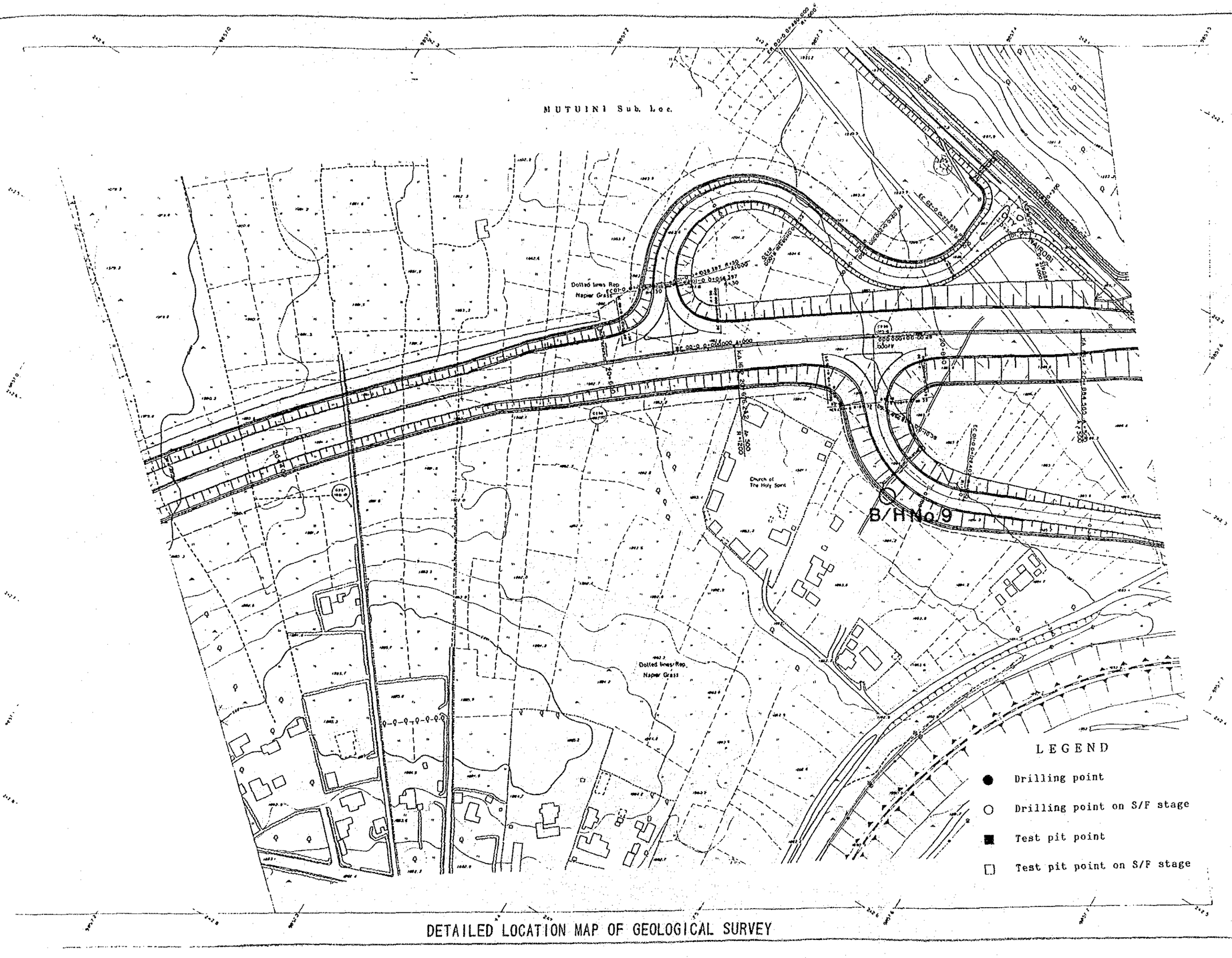

DETAILED LOCATION MAP OF GEOLOGICAL SURVEY

Scale 1:2,000
HEIGHTS IN METERS

LEGEND

- GPS Point
- Traverse Point
- Bench Mark
- Direct Leveling Height
- Spot Height
- Contours (V.I. 1m)
- Outcrop (Rock)
- Building Permanent
- Building Others
- Bituminised Road
- Road
- Track
- Railway
- Bridge, Culvert
- River
- Stream
- Dam
- Pond
- Water Tank
- Power Line
- Telephone Line
- Fence, Gate
- Hedge
- Stone Wall
- Dump or Mound
- Quarry, Pit
- Cutting
- Embankment
- Cultivated Lands
- Orchard or Permanent C
- Plantation
- Grassland
- Reed
- Forest
- Swamp
- Vegetation Boundary
- Planing Partition

HORIZONTAL DATUM: ARC 1 TM ZONE 37 (CLARKE 1880 SPHD)

VERTICAL DATUM: MEAN SEA LEVEL

AERIAL PHOTOGRAPHED BY: Japan International Cooperation Agency, December

GROUND CONTROL SURVEYED BY: December

STEREO PLOTTED BY: MARUBENI

CARTOGRAPHED BY: JICA

CHECKED BY: CHIEF ENGINEER DATE; CHIEF SUPT. ENG. DATE; SEN. SUPT. ENG. DATE; SUPT. ENGINEER DATE; PROJECT ENGINEER DATE

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Scale 1:2,000
HEIGHTS IN METERS

Dagoretti Forest

B/H No.9

B/H No.6

BE-6

TC-18

CITY OF NAIROBI

KIAMBU DISTRICT

KIAMBU ROAD

LEGEND

- Drilling point
- Drilling point on S/F stage
- Test pit point
- Test pit point on S/F stage

LEGEND

- GPS Point
- Traverse Point
- Bench Mark
- Direct Leveling Height
- Spot Height
- Contours (V.I.1m)
- Outcrop (Rock)
- Building Permanent
- Building Others
- Bituminised Road
- Road
- Track
- Railway
- Bridge, Culvert
- River
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- Water Tank
- Power Line
- Telephone Line
- Fence, Gate
- Hedge
- Stone Wall
- Dump or Mound
- Quarry Pit
- Cutting
- Embankment
- Cultivated Lands
- Orchard or Permanent Crop
- Plantation
- Grassland
- Bush
- Forest
- Swamp
- Vegetation Boundary
- Planting Partition

HORIZONTAL DATUM UTM ZONE 37 (CLARKE 1880 SPHEROID)

VERTICAL DATUM MEAN SEA LEVEL

AERIAL PHOTOGRAPHYED BY JICA (Japan International Cooperation Agency) December 19

GROUND CONTROL SURVEYED BY JICA December 19

STEREO PLOTTED BY JICA MARCH 19

CARTOGRAPHYED BY JICA JULY 19

CHECKED BY
CHIEF ENGINEER (KENYA) DATE
CHIEF SUPT ENG (DESIGN) DATE
SEN SUPT ENG (DESIGN) DATE
SUPT ENGINEER (DESIGN) DATE
PROJECT ENGINEER DATE

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THE DETAILED DESIGN STUDY ON THE NAIROBI BYPASS PROJECT

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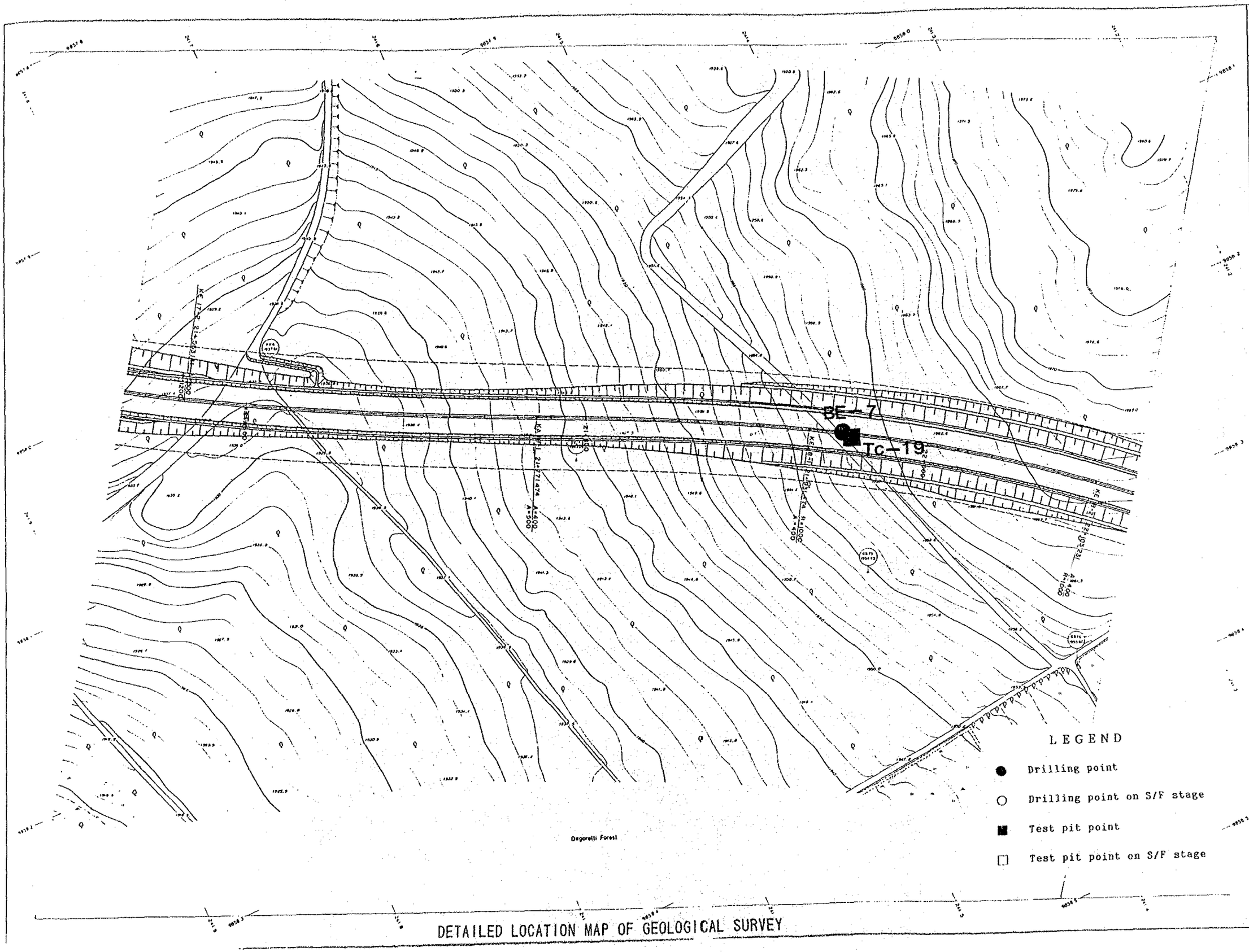

LEGEND

- Drilling point
- Drilling point on S/F stage
- Test pit point
- Test pit point on S/F stage

Scale 1:7,000
HEIGHTS IN METERS

LEGEND

- GPS Point
- Traverse Point
- Bench Mark
- Direct Leveling Height
- Spot Height
- Contours (V.E.1m)
- Outcrop (Rock)
- Building Permanent
- Building Others
- Bituminized Road
- Road
- Track
- Railway
- Bridge, Culvert
- River
- Stream
- Dam
- Pond
- Water Tank
- Power Line
- Telephone Line
- Fence Gate
- Hedge
- Stone Wall
- Dump or Mound
- Quarry Pit
- Cutting
- Embankment
- Cultivated Lands
- Orchard or Permanent C
- Plantation
- Grassland
- Bush
- Forest
- Swamp
- Vegetation Boundary
- Planting Partition

HORIZONTAL DATUM: U.T.M. ZONE 3
(CLARKE 1880 SPHE

VERTICAL DATUM: MEAN SEA LEVEL

AERIAL PHOTOGRAPHED BY: Ja
(Japan International Cooperation Ag
December

GROUND CONTROL SURVEYED BY: J
December

STEREO PLOTTED BY: Ja
MARCH

CARTOGRAPHED BY: J
JULY

CHIEF ENGINEER
DATE

CHIEF SUPT. ENG.
DATE

CHECKED BY: SEN. SUPT. ENG.
DATE

SUPT. ENGINEER
DATE

PROJECT ENGINEER
DATE

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DETAILED LOCATION MAP OF GEOLOGICAL SURVEY

THE DETAILED DESIGN STUDY ON THE NAIROBI BYPASS PROJECT

SHEET NO. 36

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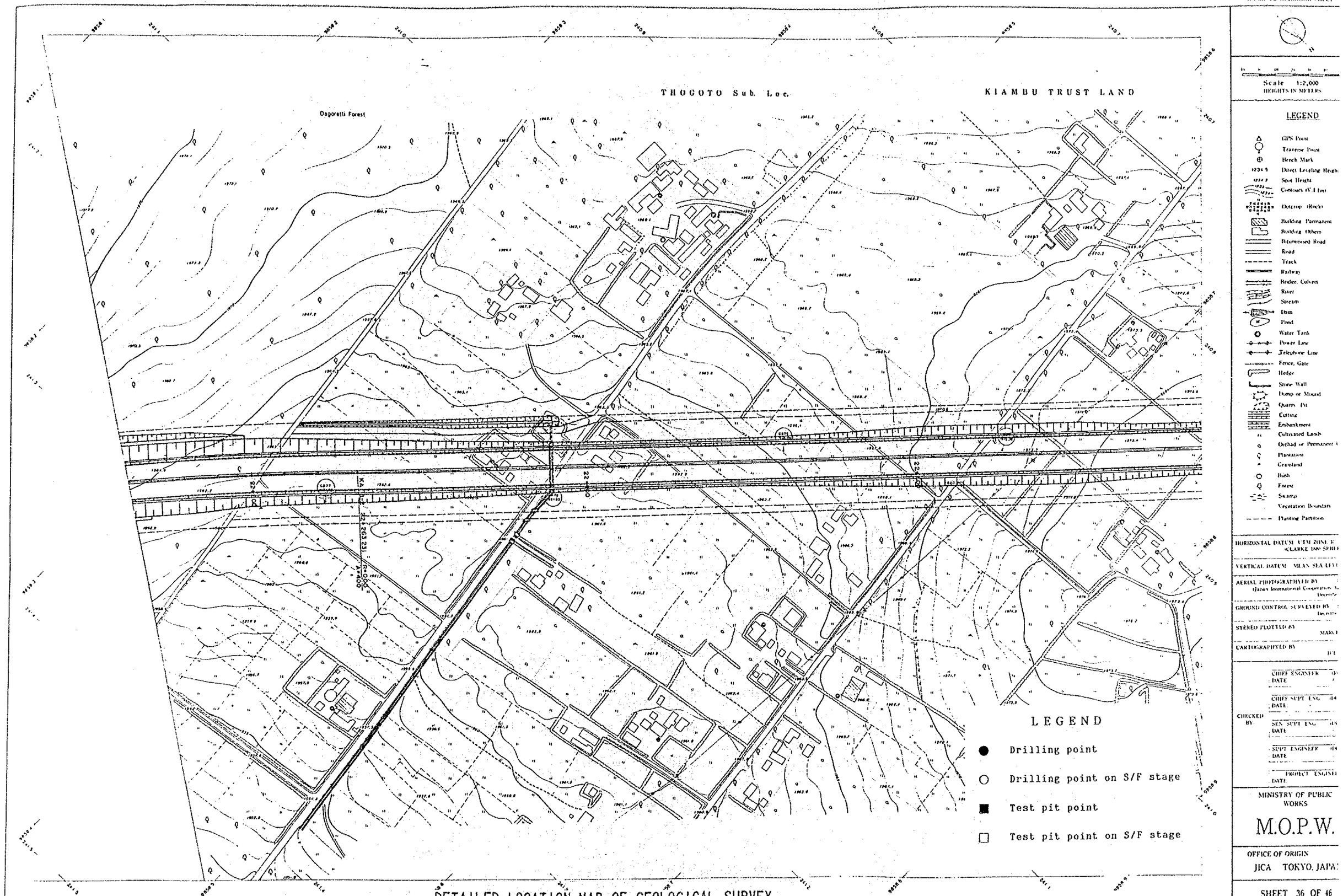

DETAILED LOCATION MAP OF GEOLOGICAL SURVEY

THE DETAILED DESIGN STUDY ON THE NAIROBI BYPASS PROJECT

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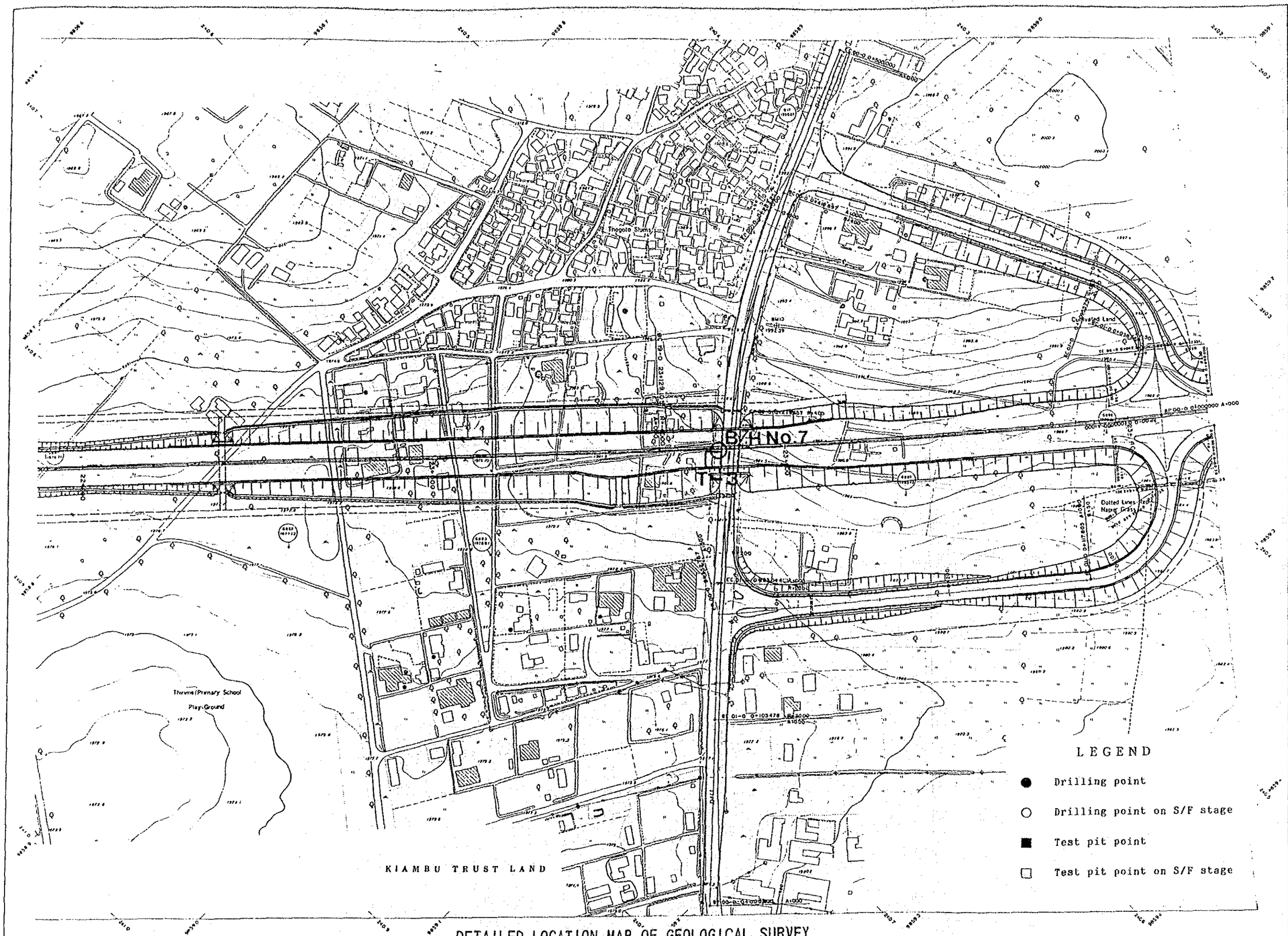

DETAILED LOCATION MAP OF GEOLOGICAL SURVEY

Scale 1:2,000
HEIGHTS IN METERS

LEGEND

- GPS Point
- Traverse Point
- Bench Mark
- Direct Leveling Heig
- Spot Height
- Contours (V.I.1m
- Outcrop (Rock)
- Building Permanent
- Building Others
- Bitumenised Road
- Road
- Track
- Railway
- Bridge, Culvert
- River
- Stream
- Dam
- Pond
- Water Tank
- Power Line
- Telephone Line
- Fence, Gate
- Hedge
- Stone Wall
- Dump or Mound
- Quarry Pit
- Cutting
- Embankment
- Cultivated Lands
- Orchard or Permanent C
- Plantation
- Grassland
- Bush
- Forest
- Swamp
- Vegetation Boundary
- Planting Partition

HORIZONTAL DATUM: U.T.M. ZONE 37 (CLARKE 1880 SPHD)

VERTICAL DATUM: MEAN SEA LEVEL

AERIAL PHOTOGRAPHED BY: (Japan International Cooperation Ag) December

GROUND CONTROL SURVEYED BY: December

STEREO PLOTTED BY: MARCH

CARTOGRAPHED BY: JULY

CHECKED BY
CHIEF ENGINEER DATE
CHIEF SUPT. ENG. DATE
EX. SUPT. ENG. DATE
SUPT. ENGINEER DATE
PROJECT ENGINEER DATE

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THE DETAILED DESIGN STUDY ON THE NAIROBI BYPASS PROJECT

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Scale 1:2,000
HEIGHTS IN METERS

Thogoto College Staff Quarters
Nagutura Primary School
Thogoto Teachers College
Thogoto Playing Field
Cultivated Land
Thogoto Teachers College Land
EC 69 Q 22+652 R=1,000
Dotted Lines Rep. Napier Grass
College Sewage Works
Under Construction
Pcea Farm
Dotted Lines Rep. Napier Grass
KIAMBU TRUST LAND

LEGEND

- GPS Point
- Traverse Point
- Bench Mark
- 1234.5 Direct Leveling Height
- Spot Height
- Contours (C.I.1m)
- Outcrop (Rock)
- Building: Permanent
- Building: Others
- Bituminised Road
- Road
- Track
- Railway
- Bridge, Culvert
- River
- Stream
- Dam
- Pond
- Water Tank
- Power Line
- Telephone Line
- Fence Gate
- Hedge
- Stone Wall
- Bump or Mound
- Quarry, Pit
- Cutting
- Embankment
- Cultivated Lands
- Orchard or Permanent C
- Plantation
- Grassland
- Bush
- Forest
- Swamp
- Vegetation Boundary
- Planting Partition

LEGEND

- Drilling point
- Drilling point on S/F stage
- Test pit point
- Test pit point on S/F stage

HORIZONTAL DATUM: UTM ZONE 37 (CLARKE 1880 SPHD.)

VERTICAL DATUM: MEAN SEA LEVEL

AERIAL PHOTOGRAPHED BY: Japan International Cooperation Agency, December

GROUND CONTROL SURVEYED BY: December

STEREO PLOTTED BY: MARCH

CARTOGRAPHYED BY: JULY

CHECKED BY:
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- CHIEF SUPT. ENG. DATE
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DETAILED LOCATION MAP OF GEOLOGICAL SURVEY

THE DETAILED DESIGN STUDY ON THE NAIROBI BYPASS PROJECT

SHEET NO. 39

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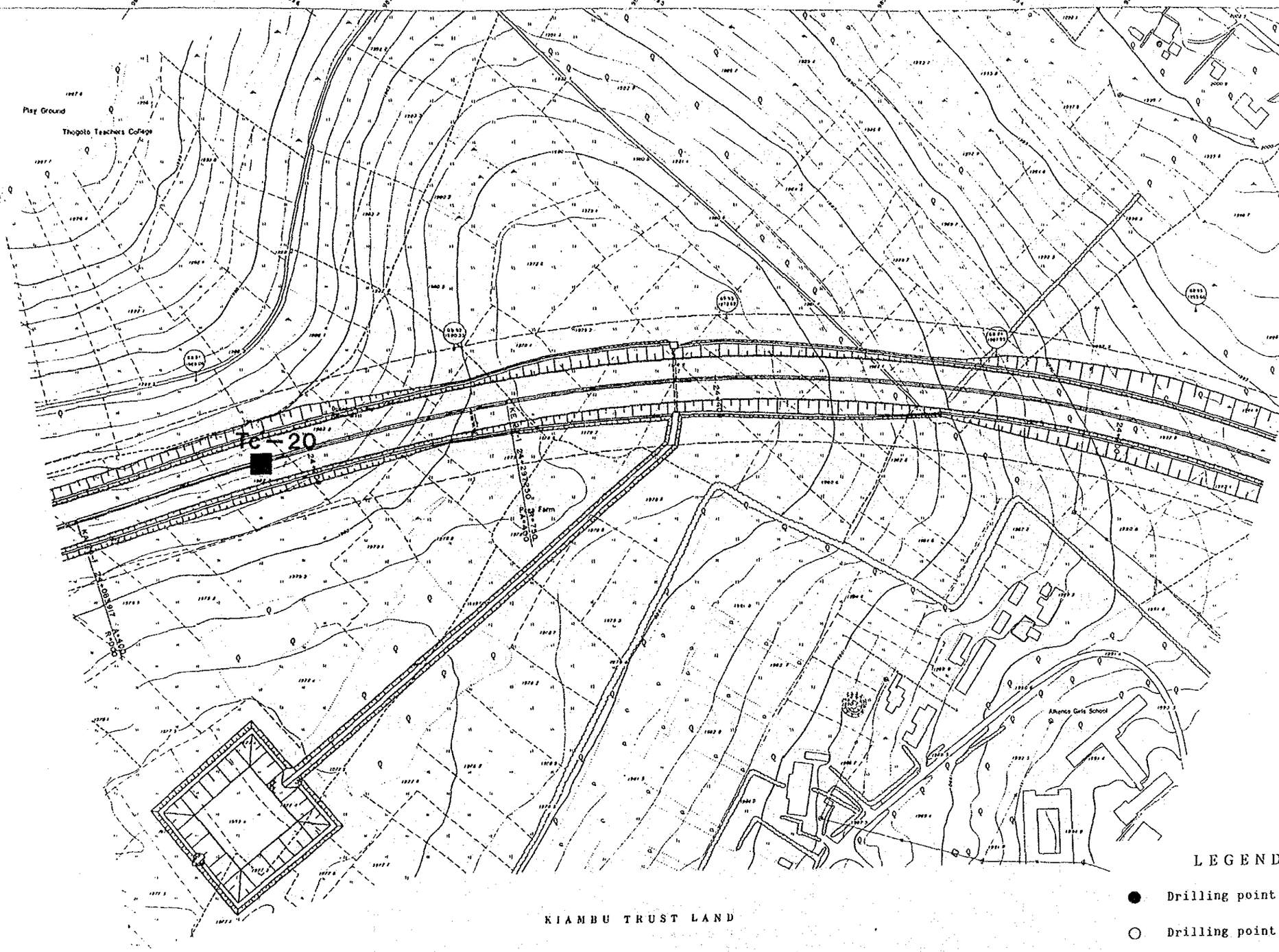

LEGEND

- Drilling point
- Drilling point on S/F stage
- Test pit point
- Test pit point on S/F stage

DETAILED LOCATION MAP OF GEOLOGICAL SURVEY

Scale 1:2,000
HEIGHTS IN METERS

LEGEND

- GPS Point
- Traverse Point
- Bench Mark
- Direct Leveling Height
- Spot Height
- Contours (V. Int.)
- Outcrop (Rock)
- Building: Permanent
- Building: Others
- Bituminised Road
- Road
- Track
- Railway
- Bridge, Culvert
- River
- Stream
- Dam
- Pond
- Water Tank
- Power Line
- Telephone Line
- Fence, Gate
- Hedge
- Stone Wall
- Dump or Mound
- Quarry Pit
- Cutting
- Embankment
- Cultivated Lands
- Orchad or Permanent C
- Plantation
- Grassland
- Bush
- Forest
- Swamp
- Vegetation Boundary
- Phonetic Partition

HORIZONTAL DATUM: UTM ZONE 37 CLARKE 1880 SPHEROID

VERTICAL DATUM: MEAN SEA LEVEL

AERIAL PHOTOGRAPHED BY: JICA (Japan International Cooperation Agency)

GROUND CONTROL SURVEYED BY: JICA Engineer

STEREO PLOTTED BY: JICA MARCH

CARTOGRAPHED BY: JICA JULY

CHECKED BY:
CHIEF ENGINEER (RDO) DATE
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THE DETAILED DESIGN STUDY ON THE NAIROBI BYPASS PROJECT

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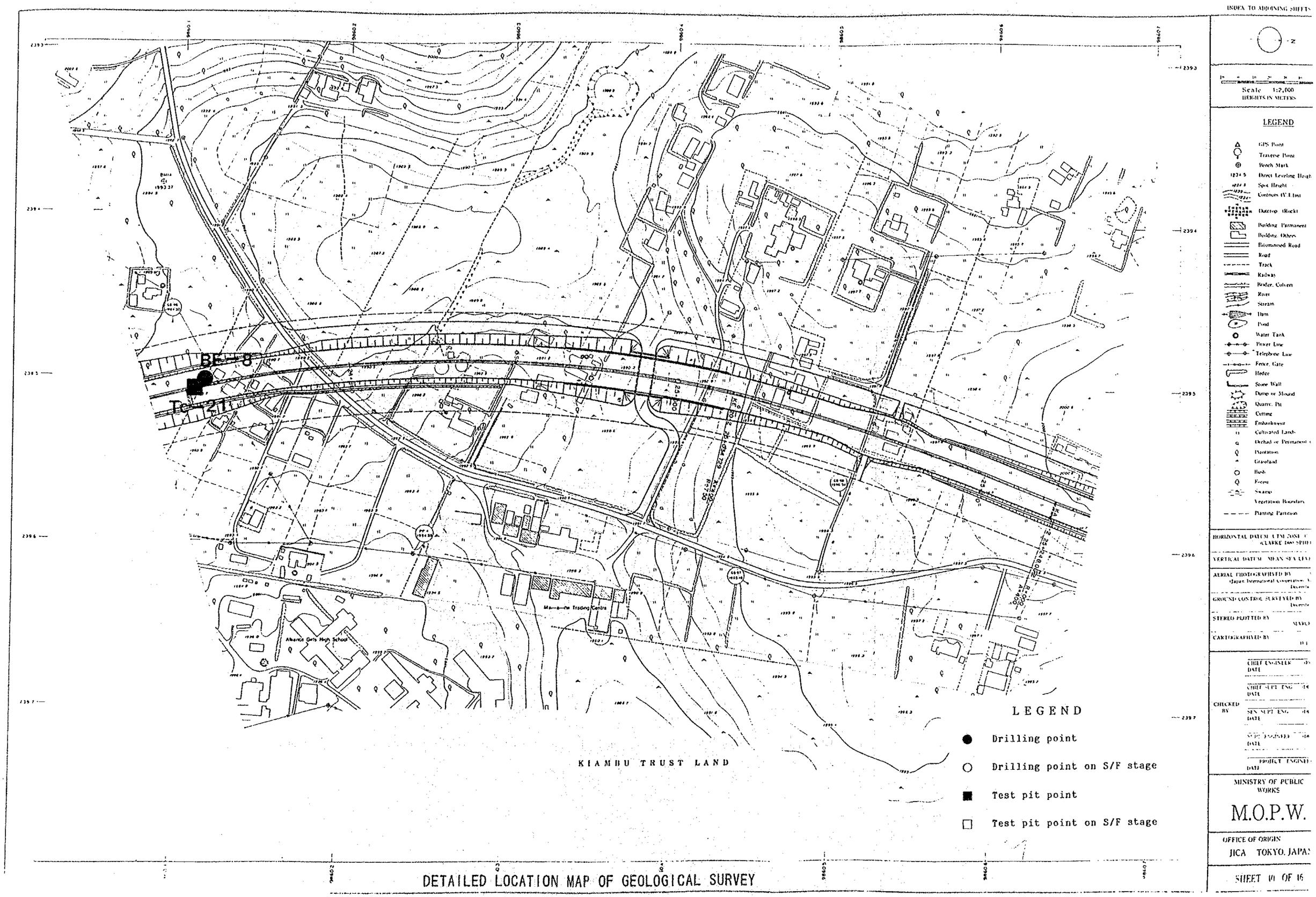

DETAILED LOCATION MAP OF GEOLOGICAL SURVEY

THE DETAILED DESIGN STUDY ON THE NAIROBI BYPASS PROJECT

SHEET NO. 41

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KIAMBU TRUST LAND

Tc-22

Tc-23

Alliance Girls School

Alliance Boys School

Alliance School

Cattle Dip

Gravel

LEGEND

- Drilling point
- Drilling point on S/F stage
- Test pit point
- Test pit point on S/F stage

DETAILED LOCATION MAP OF GEOLOGICAL SURVEY

Scale 1 : 2,000
HEIGHTS IN METERS

LEGEND

- GPS Point
- Traverse Point
- Bench Mark
- 1234.5 Direct Leveling Height
- 1234.5 Spot Height
- Contours (V.I.1m)
- Outcrop (Rock)
- Building: Permanent
- Building: Others
- Bituminised Road
- Road
- Track
- Railway
- Bridge, Culvert
- River
- Stream
- Dam
- Pond
- Water Tank
- Power Line
- Telephone Line
- Fence, Gate
- Hedge
- Stone Wall
- Dump or Mound
- Quarry, Pit
- Cutting
- Embankment
- Cultivated Land
- Orchard or Permanent C
- Plantation
- Grassland
- Bush
- Forest
- Swamp
- Vegetation Boundary
- Planting Partition

HORIZONTAL DATUM: UTM ZONE 37 CLARKE 1880 SPHD

VERTICAL DATUM: MEAN SEA LEVEL

AERIAL PHOTOGRAPHED BY: (Japan International Cooperation Agency)

GROUND CONTROL SURVEYED BY:

STEREO PLOTTED BY: MAKO

CARTOGRAPHED BY:

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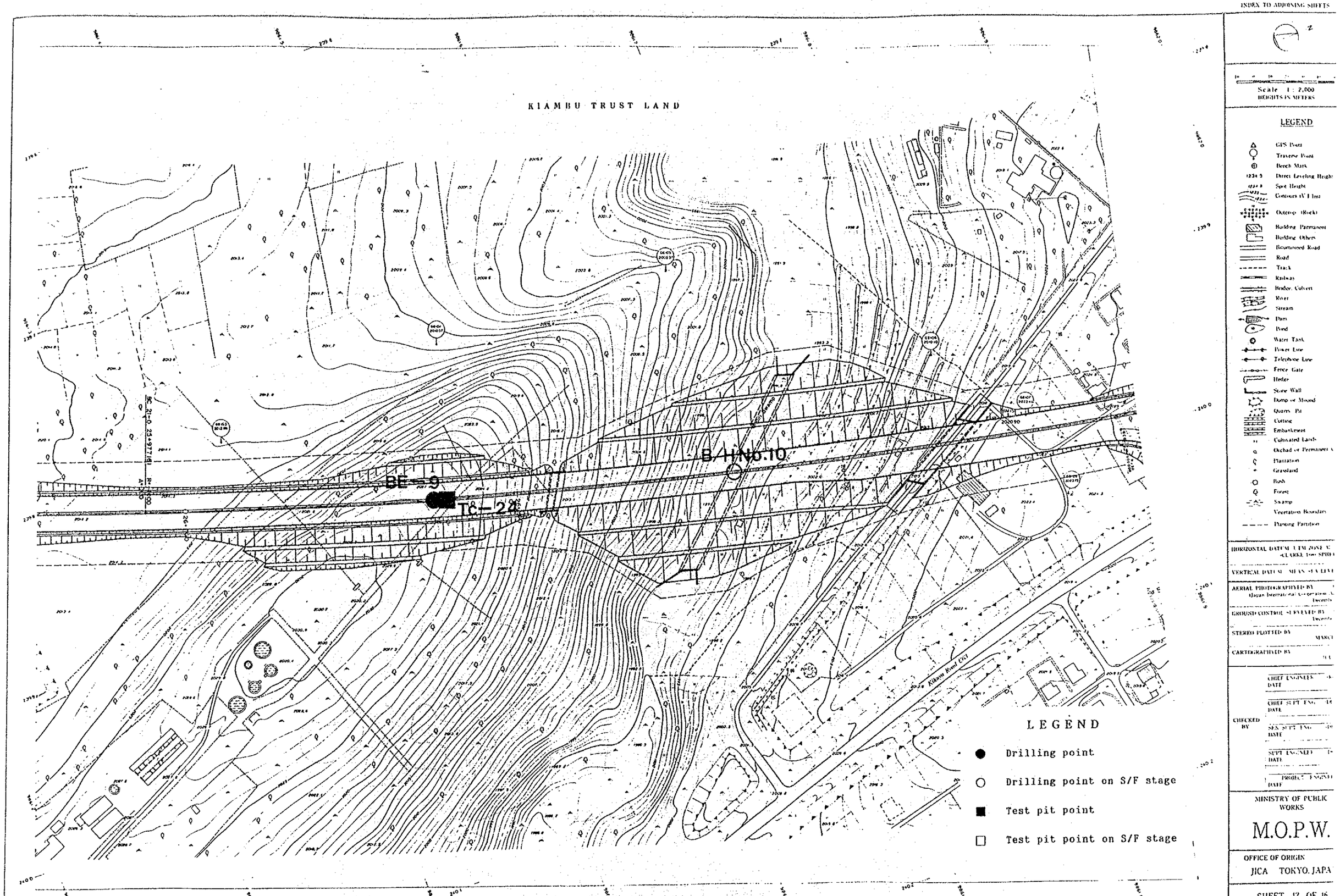

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THE DETAILED DESIGN STUDY ON THE NAIROBI BYPASS PROJECT

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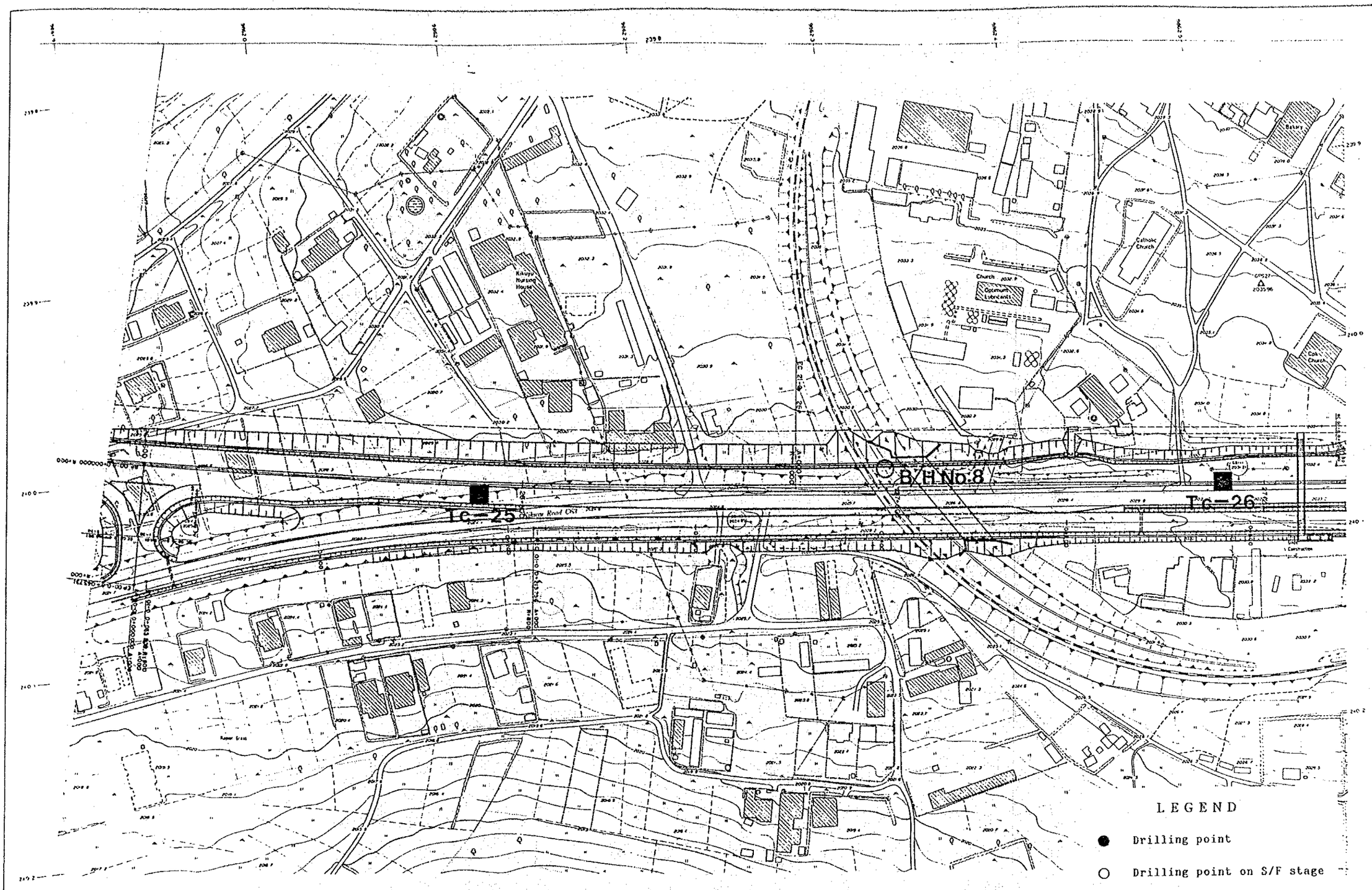

Scale 1 : 2,000
HEIGHTS IN METERS

LEGEND

- GPS Point
- Traverse Point
- Bench Mark
- Direct Leveling Height
- Spot Height
- Contours (C.I 1m)
- Outcrop (Rock)
- Building Permanent
- Building Others
- Bituminised Road
- Road
- Track
- Railway
- Bridge, Culvert
- River
- Stream
- Dam
- Pond
- Water Tank
- Power Line
- Telephone Line
- Fence, Gate
- Hedge
- Stone Wall
- Dump or Mound
- Quarry Pit
- Cutting
- Embankment
- Cultivated Lands
- Orchad or Permanent c
- Plantation
- Grassland
- Bush
- Forest
- Swamp
- Vegetation Boundary
- Planting Partition

HORIZONTAL DATUM UTM ZONE 37 CLARKE 1880 SPHD

VERTICAL DATUM MEAN SEA LEVEL

AERIAL PHOTOGRAPHED BY Japan International Cooperation A Dec

GROUND CONTROL SURVEYED BY Dec

STEREO PLOTTED BY MAY

CARTOGRAPHED BY H

CHECKED BY
CHIEF ENGINEER DATE
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SUPT ENGINEER DATE
PROJECT ENGINEER DATE

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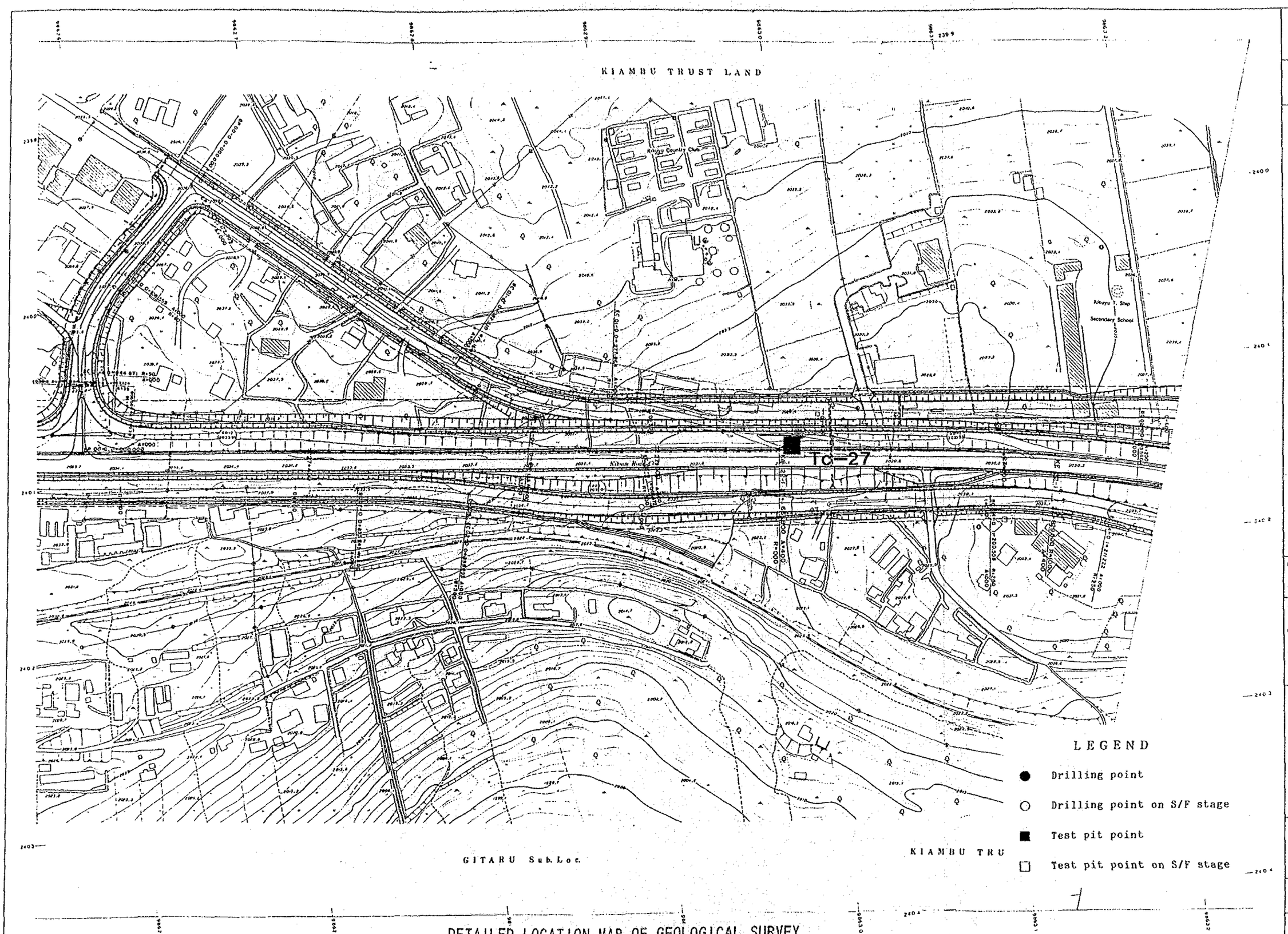

Scale 1 : 2,000
HEIGHTS IN METERS

LEGEND

- GPS Point
- Traverse Point
- Bench Mark
- Direct Leveling Height
- Spot Height
- Contours (C.I. 1m)
- Outcrop (Rock)
- Building Permanent
- Building Others
- Bituminised Road
- Road
- Track
- Railway
- Bridge, Culvert
- River
- Stream
- Dam
- Pond
- Water Tank
- Power Line
- Telephone Line
- Fence, Gate
- Hedge
- Stone Wall
- Dump or Mound
- Quarry Pit
- Cutting
- Embankment
- Cultivated Lands
- Orchard or Permanent C
- Plantation
- Grassland
- Bush
- Forest
- Swamp
- Vegetation Boundary
- Planting Partition

HORIZONTAL DATUM: UTM ZONE 37 (CLARKE 1880 SPHERE)

VERTICAL DATUM: MEAN SEA LEVEL

AERIAL PHOTOGRAPHED BY: (Japan International Cooperation Agency) December

GROUND CONTROL SURVEYED BY: December

STEREO PLOTTED BY: MARCH

CARTOGRAPHED BY: JULY

CHECKED BY

CHIEF ENGINEER DATE

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SEN. SUPT. ENG. DATE

SUPT. ENGINEER DATE

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DETAILED LOCATION MAP OF GEOLOGICAL SURVEY

THE DETAILED DESIGN STUDY ON THE NAIROBI BYPASS PROJECT

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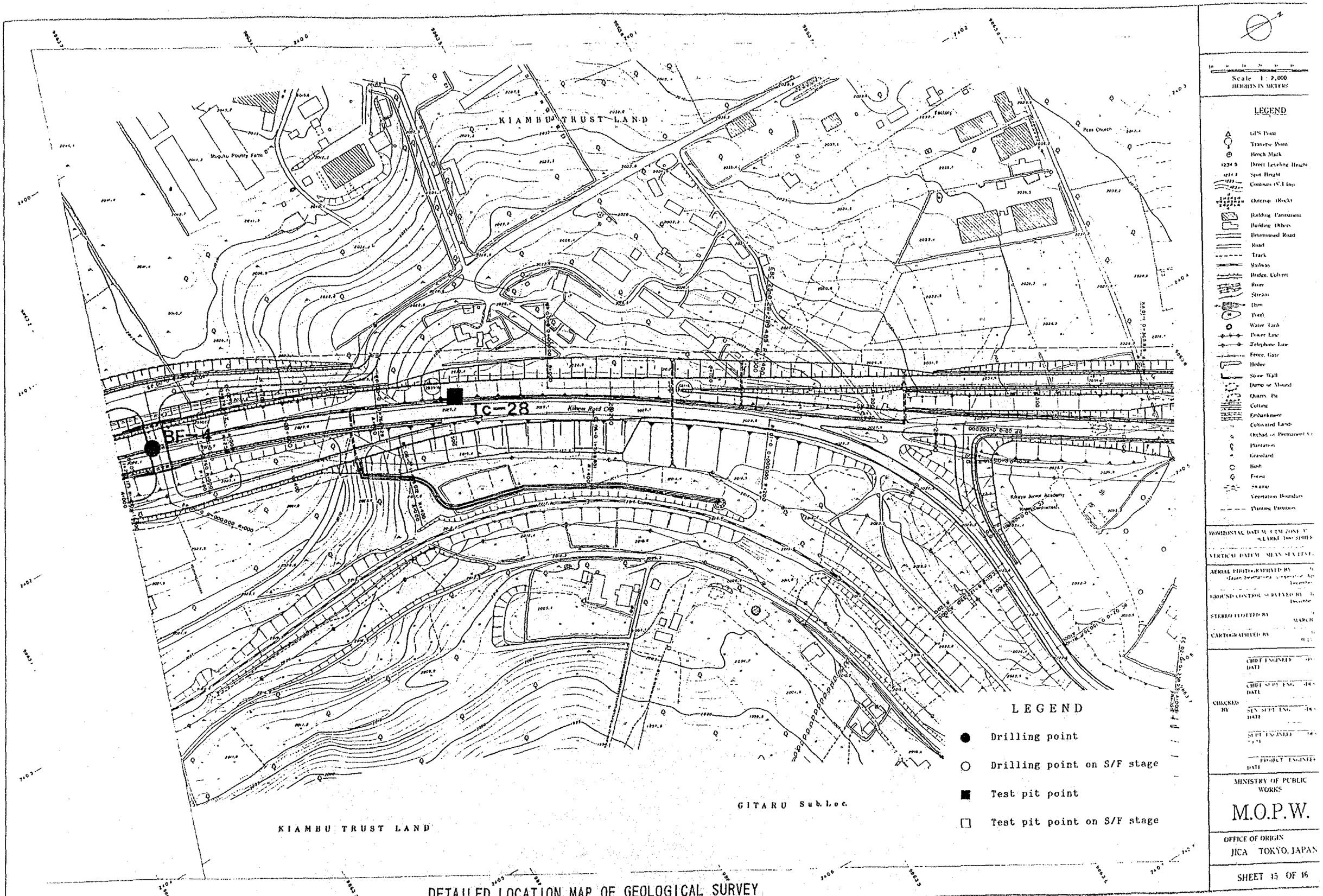

DETAILED LOCATION MAP OF GEOLOGICAL SURVEY