

No. 1511

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

DEPARTMENT OF IRRIGATION AND DRAINAGE
MINISTRY OF AGRICULTURE
MALAYSIA

THE NATIONAL RIVER MOUTHS STUDY IN MALAYSIA

VOL. VII
DRAWINGS

AUGUST 1994

CTI ENGINEERING CO., LTD.

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JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

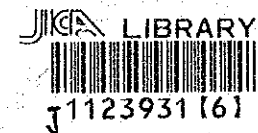
*DEPARTMENT OF IRRIGATION AND DRAINAGE
MINISTRY OF AGRICULTURE
MALAYSIA*

THE NATIONAL RIVER MOUTHS STUDY IN MALAYSIA

VOL. VII

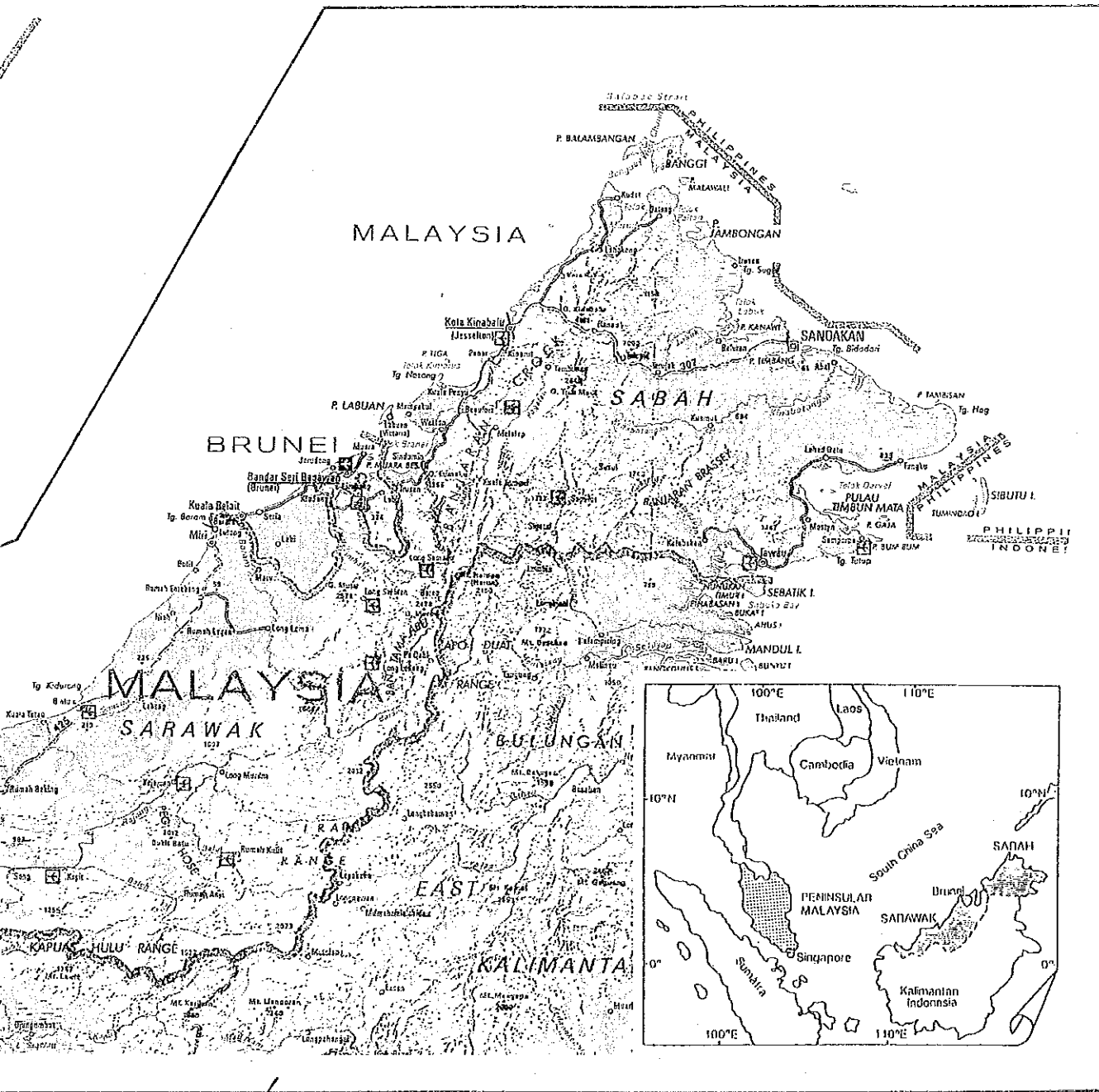
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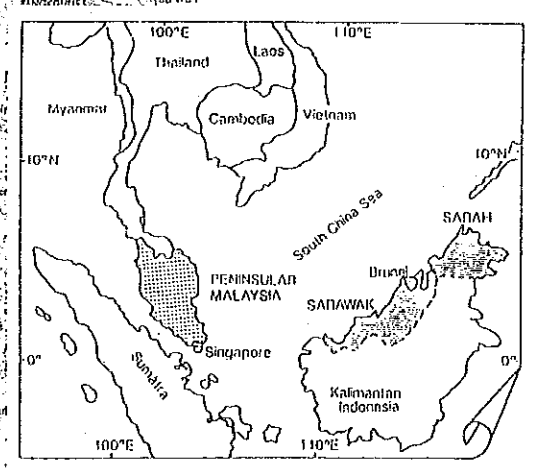
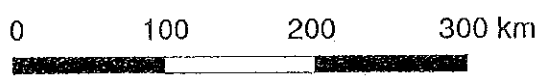


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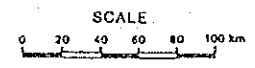
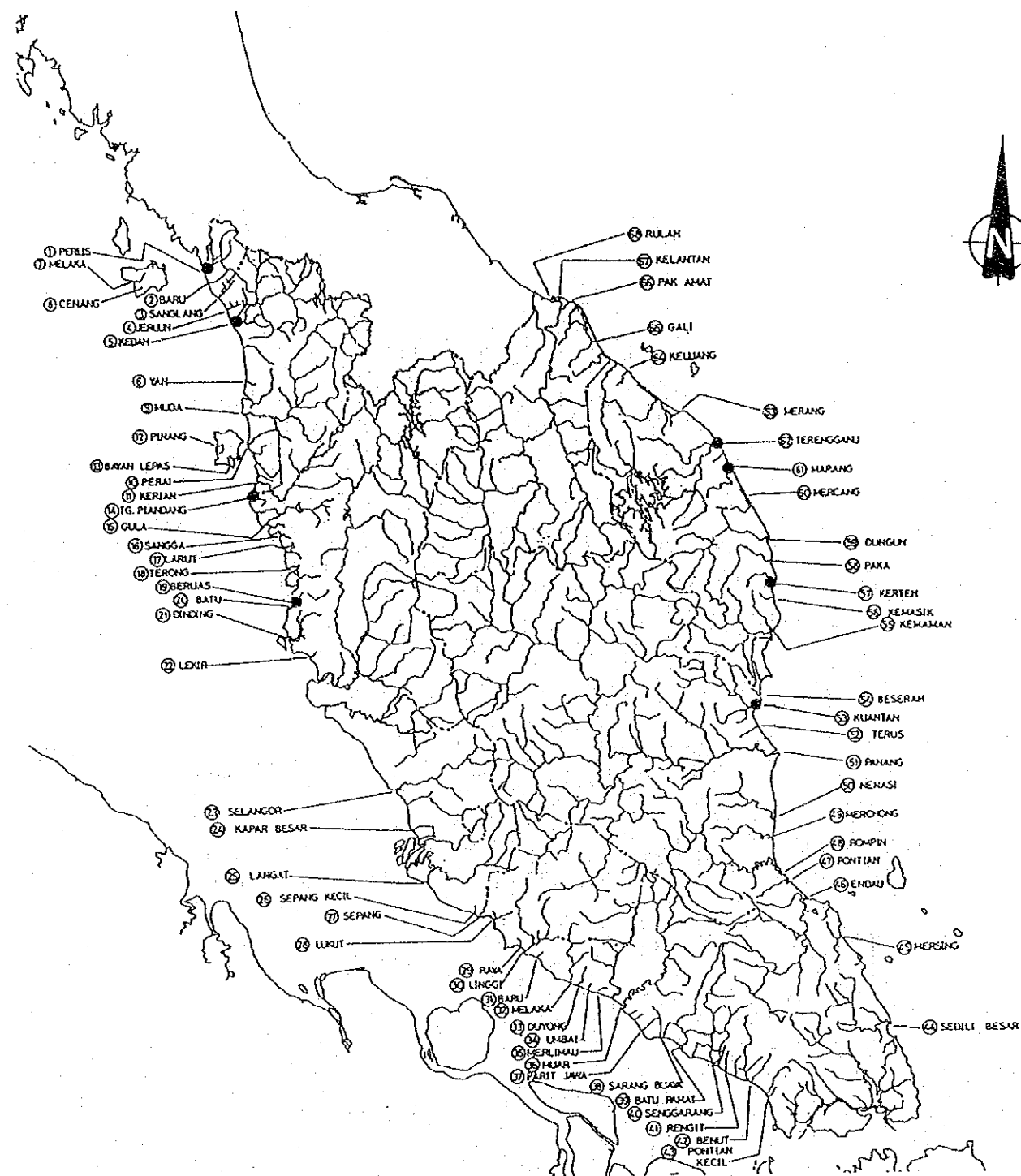
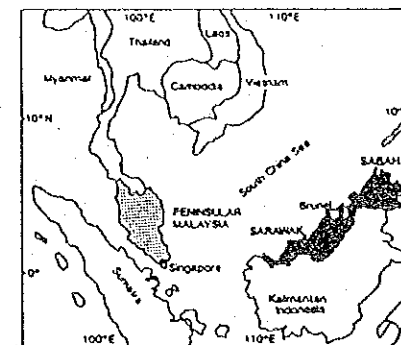
GENERAL MAP MALAYSIA



SCALE

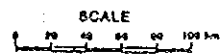
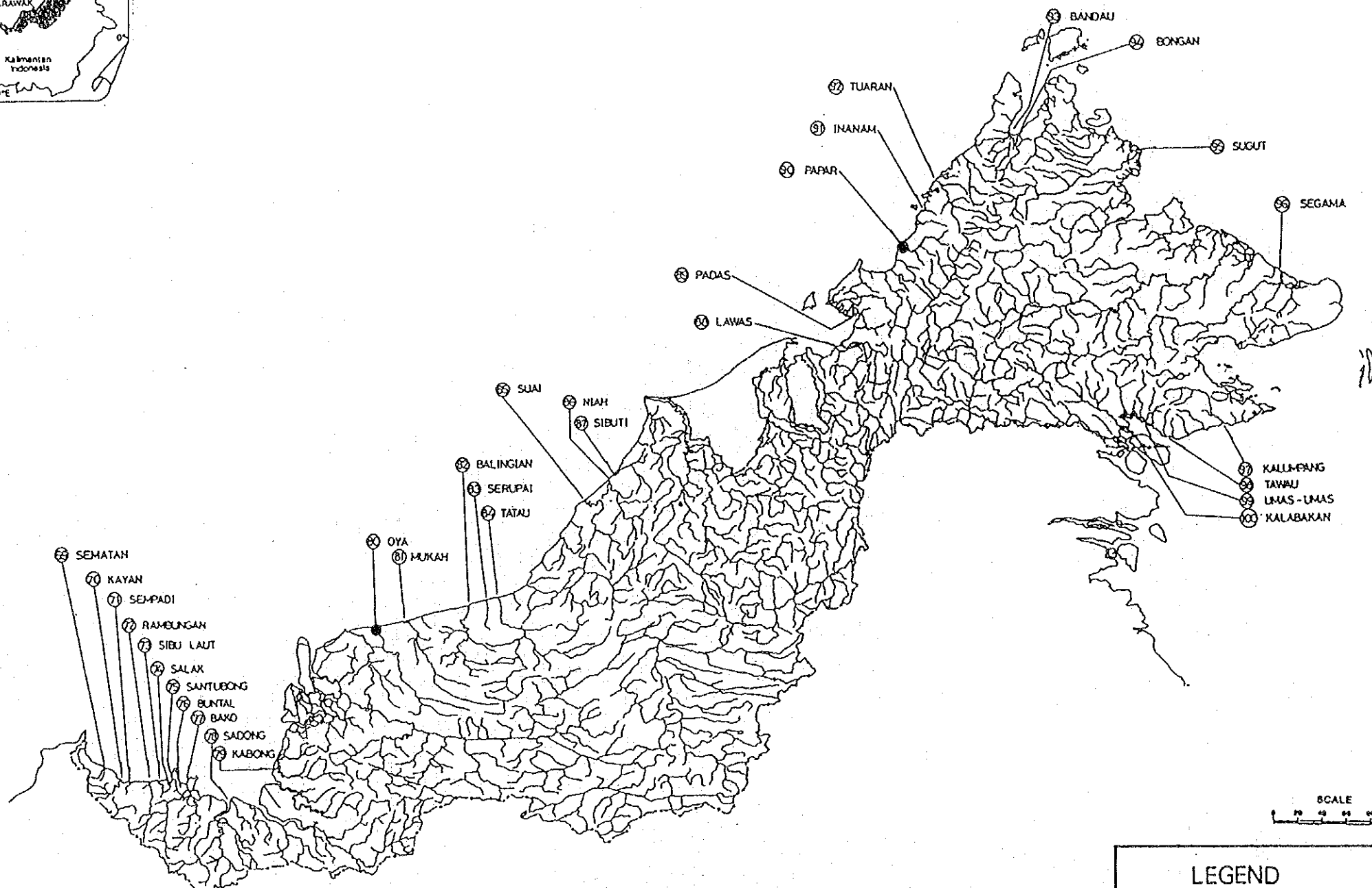
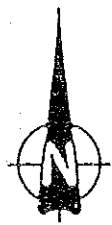
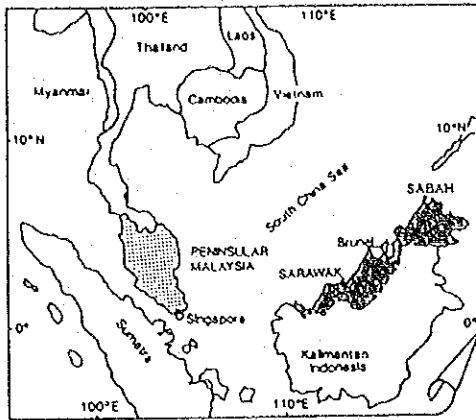


LOCATION MAP (PENINSULAR MALAYSIA)



| LEGEND | |
|--------|----------------------------|
| —+— | International Boundary |
| —++— | State Boundary |
| • | Representative River mouth |

LOCATION MAP (SABAH AND SARAWAK)



| LEGEND | |
|--------|----------------------------|
| —+— | International Boundary |
| -++- | State Boundary |
| • | Representative River mouth |

THE NATIONAL RIVER MOUTHS STUDY
IN MALAYSIA

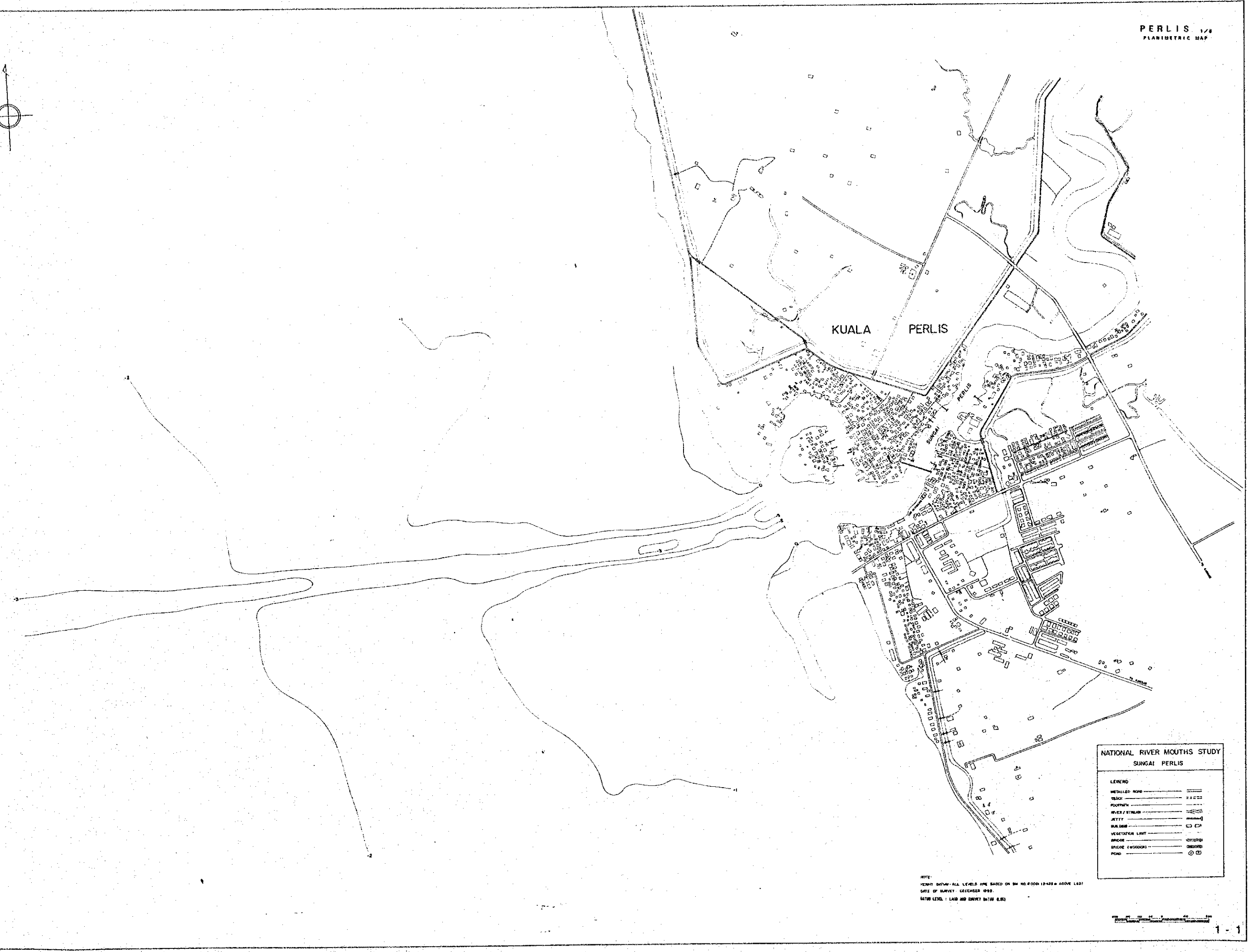
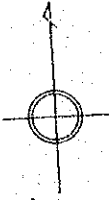
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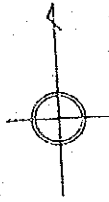


**NATIONAL RIVER MOUTHS STUDY
 SUNGAI PERLIS**

| LEGEND | |
|------------------|-------|
| METALLED ROAD | ————— |
| ROAD | ————— |
| FOOTPATH | ————— |
| RIVER / STREAM | ~~~~~ |
| JETTY | ——— |
| RAILWAY | ——— |
| VEGETATION LIGHT | ——— |
| BRIDGE | ——— |
| SHADE (WOODS) | ——— |
| POND | ○ |

NOTE:
 HEIGHT SHOWN: ALL LEVELS ARE BASED ON BM NO. 2008 (1942) ABOVE LEAD
 DATE OF SURVEY: DECEMBER 1992
 DATUM LEVEL: LAM AND BENTAY DATUM 1983





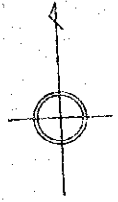
KUALA PERLIS

NATIONAL RIVER MOUTHS STUDY
SUNGAI PERLIS

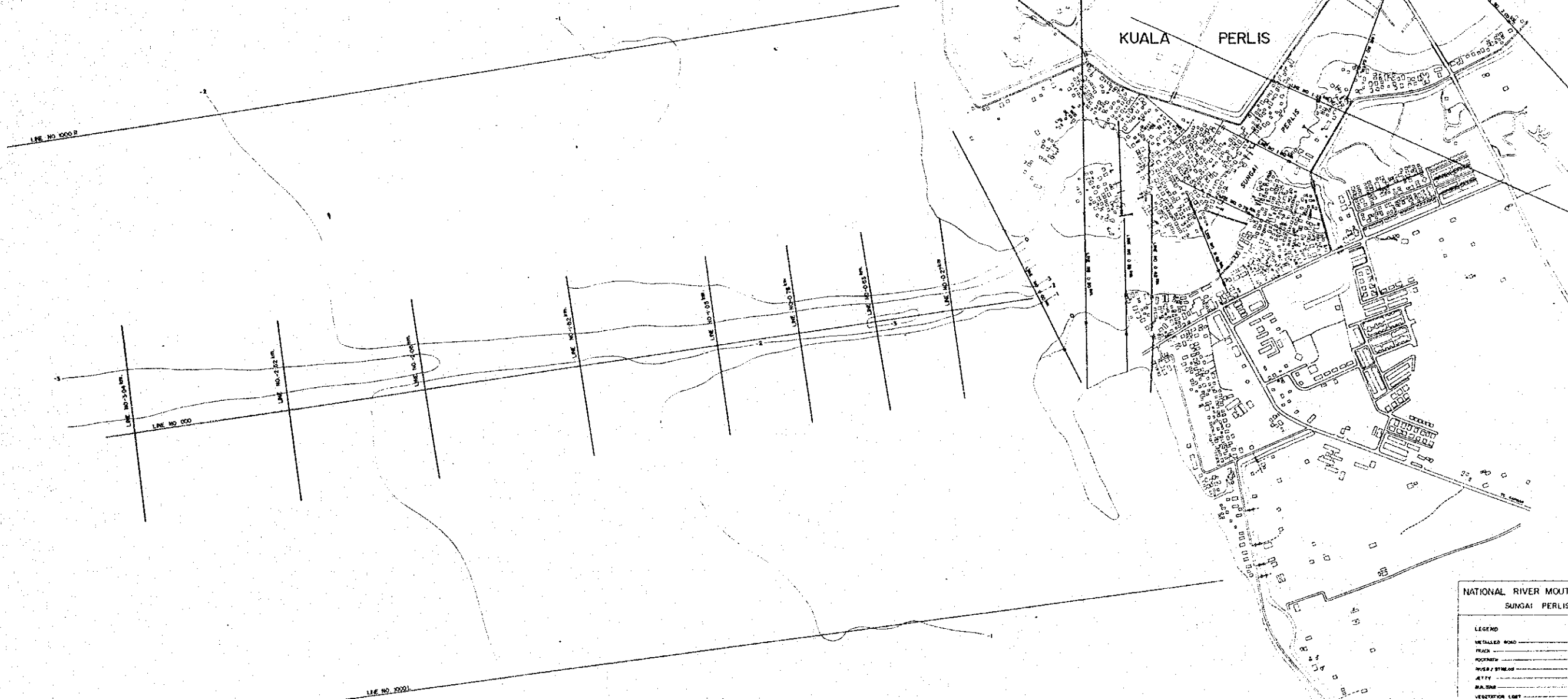
| LEGEND | |
|-----------------|--|
| WELLER BOD | |
| PADE | |
| FOOTW | |
| WEE / STRE | |
| JETT | |
| PALOM | |
| VENTYOR LEB | |
| BRIDGE | |
| BRIDGE (WOODEN) | |
| POND | |

NOTE
 HEIGHT DATUM ALL LEVELS ARE BASED ON P.M. 100 WHICH IS 45.00 ABOVE L.S.D.
 DATE OF SURVEY DECEMBER 1957
 WATER LEVEL : LOW (25 NOVEMBER 1958)





KUALA PERLIS



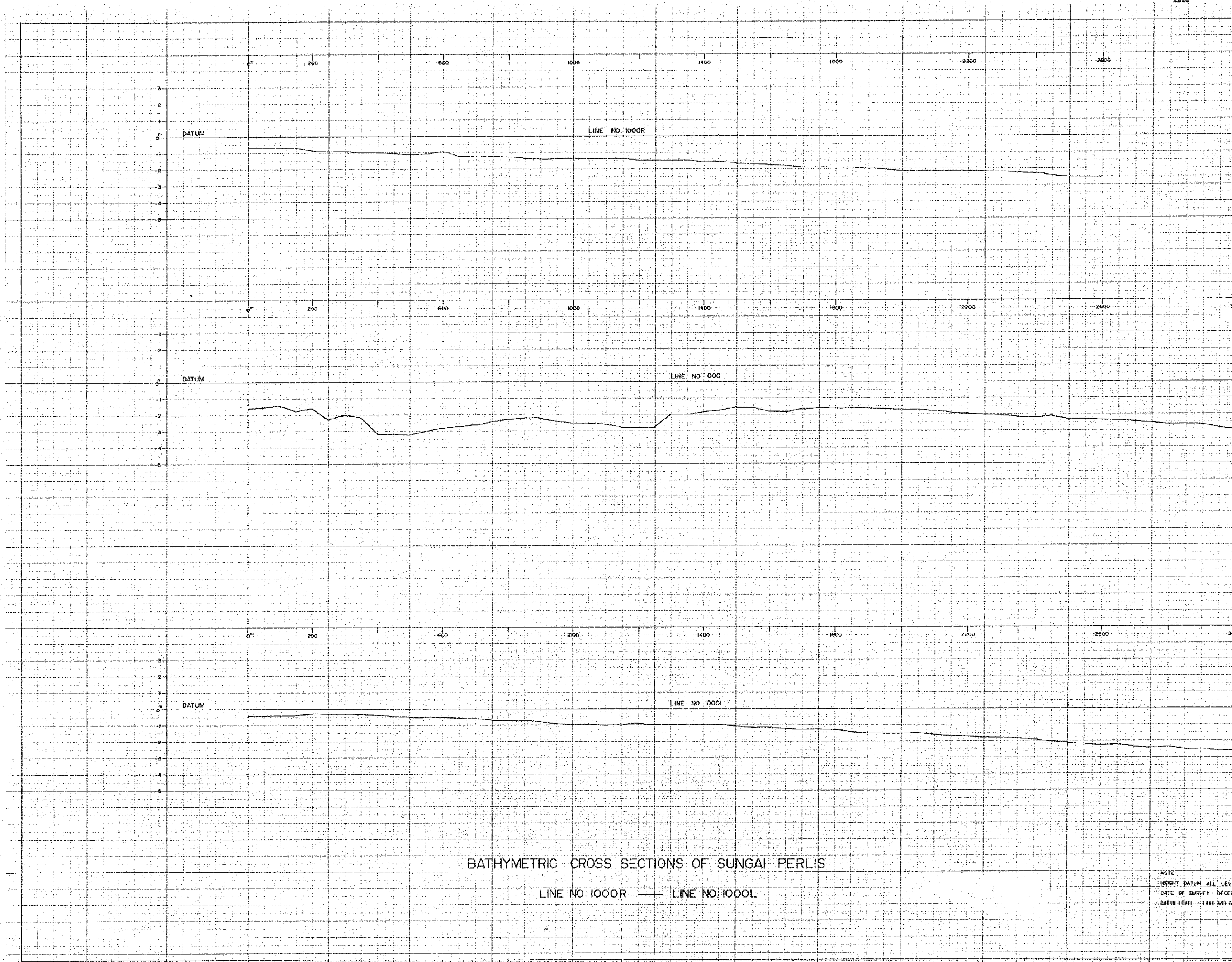
NATIONAL RIVER MOUTHS STUDY
 SUNGAI PERLIS

LEGEND

| | |
|------------------|---------|
| METALLED ROAD | ————— |
| TRAIL | ----- |
| FOOTPATH | |
| RIVER / STREAM | ~~~~~ |
| JETTY | |
| RAILROAD | —+—+—+— |
| VEGETATION LIMIT | ----- |
| AREA | □ |
| OFFICE / HOUSE | ○ |
| POND | ⊙ |

NOTE
 HEIGHT DATUM: ALL LEVELS ARE BASED ON BM 108004 12.122M ABOVE MSL.
 DATE OF SURVEY: DECEMBER 1992
 DATUM LEVEL: LAM AND SURVEY DATUM 0153





BATHYMETRIC CROSS SECTIONS OF SUNGAI PERLIS

LINE NO. 1000R — LINE NO. 1000L

NOTE
 HEIGHT DATUM ALL LEV
 DATE OF SURVEY: DECE
 DATUM LEVEL: LEAN AND 6

DATUM

LINE NO. 1000R

DATUM

LINE NO. 000

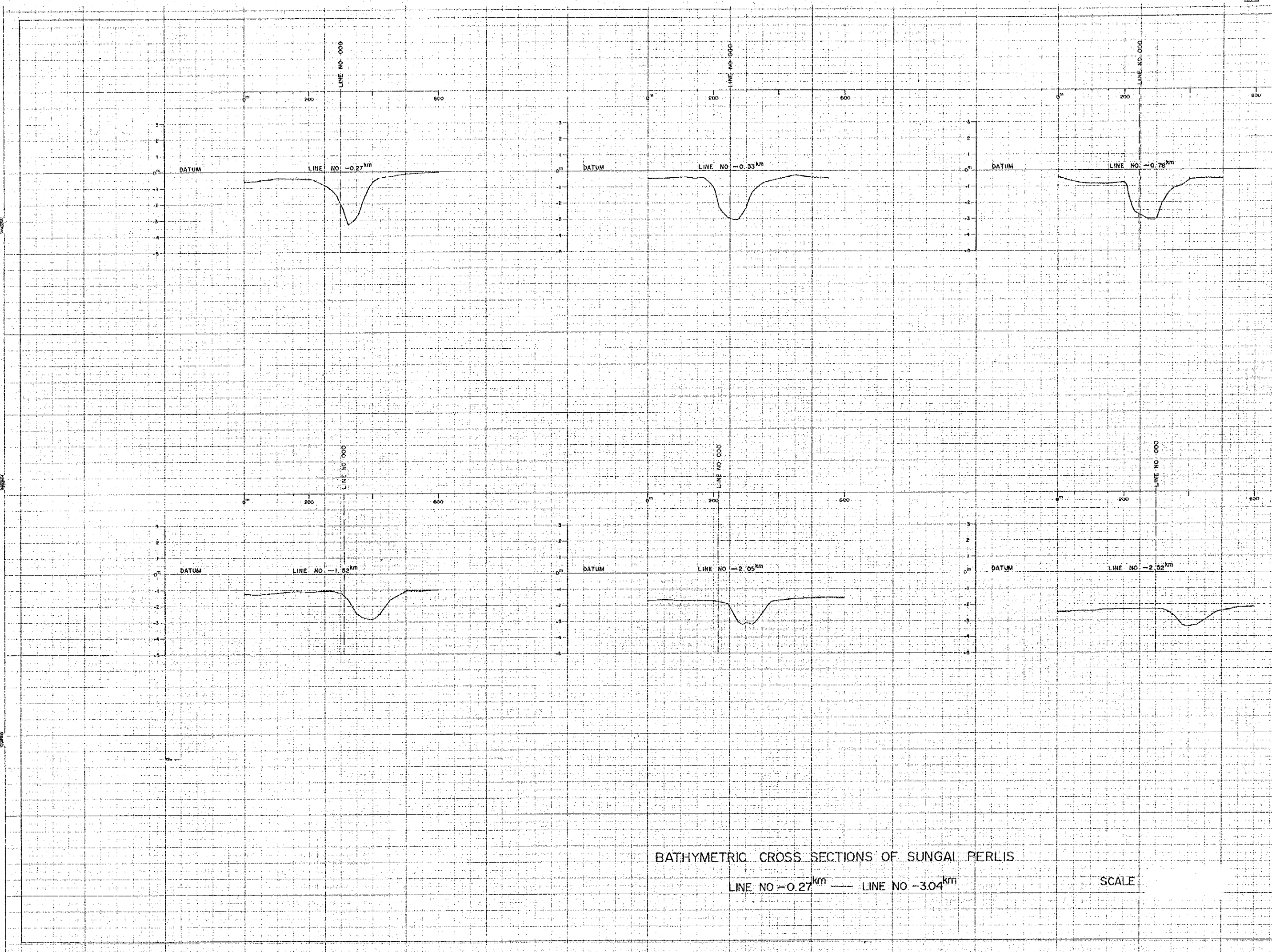
DATUM

LINE NO. 1000L

BATHYMETRIC CROSS SECTIONS OF SUNGAI PERLIS

LINE NO. 1000R — LINE NO. 1000L

NOTE
HEIGHT DATUM: ALL LEVELS ARE BASED ON BM NO R0091 (2.432m ABOVE LSL)
DATE OF SURVEY: DECEMBER 1992
DATUM LEVEL: (LAND AND CONVEY-DATUM: 100)

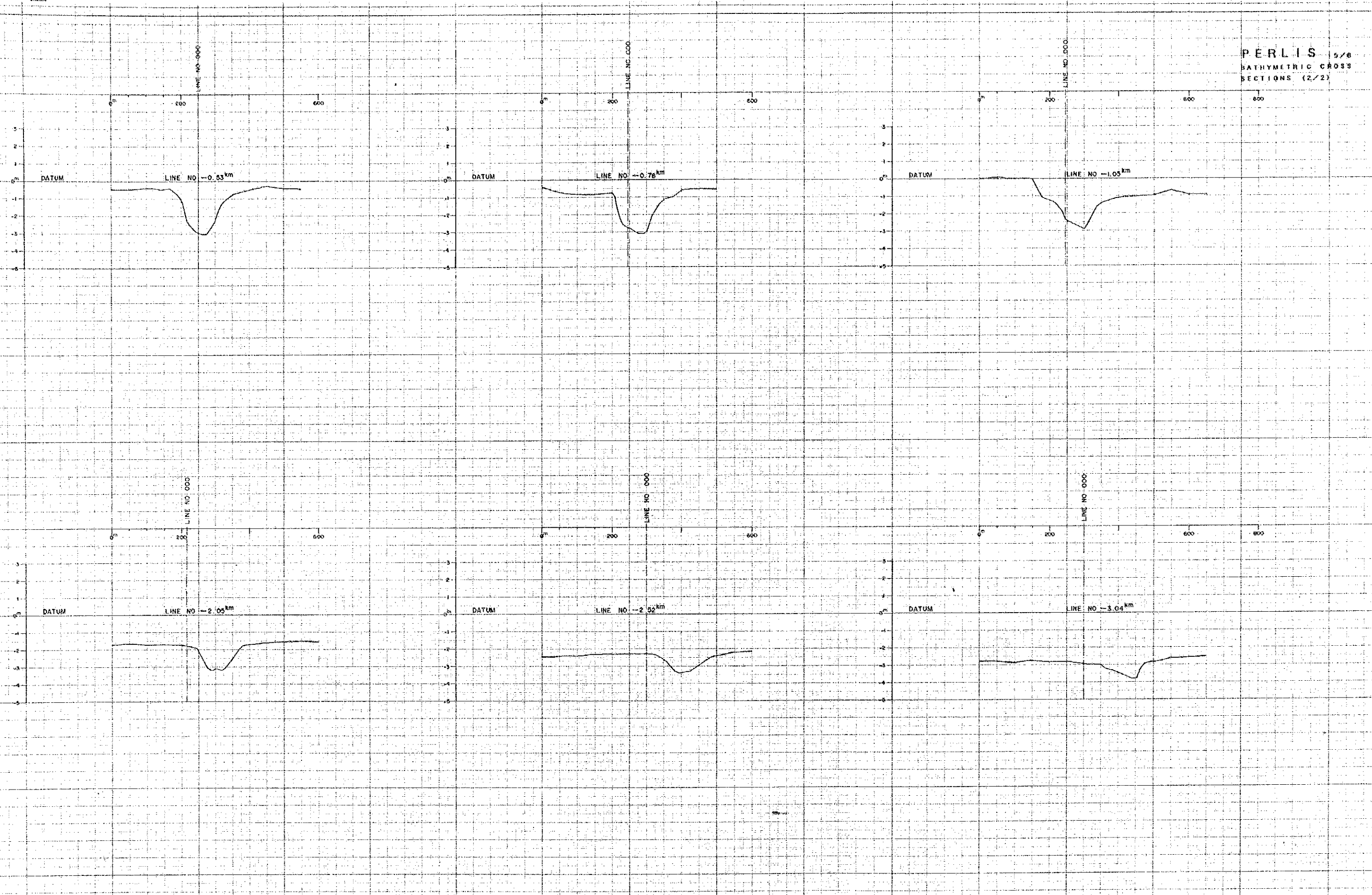


BATHYMETRIC CROSS SECTIONS OF SUNGAI PERLIS

LINE NO -0.27^{km} — LINE NO -3.04^{km}

SCALE

PERLIS 1578
 BATHYMETRIC CROSS
 SECTIONS (2/2)

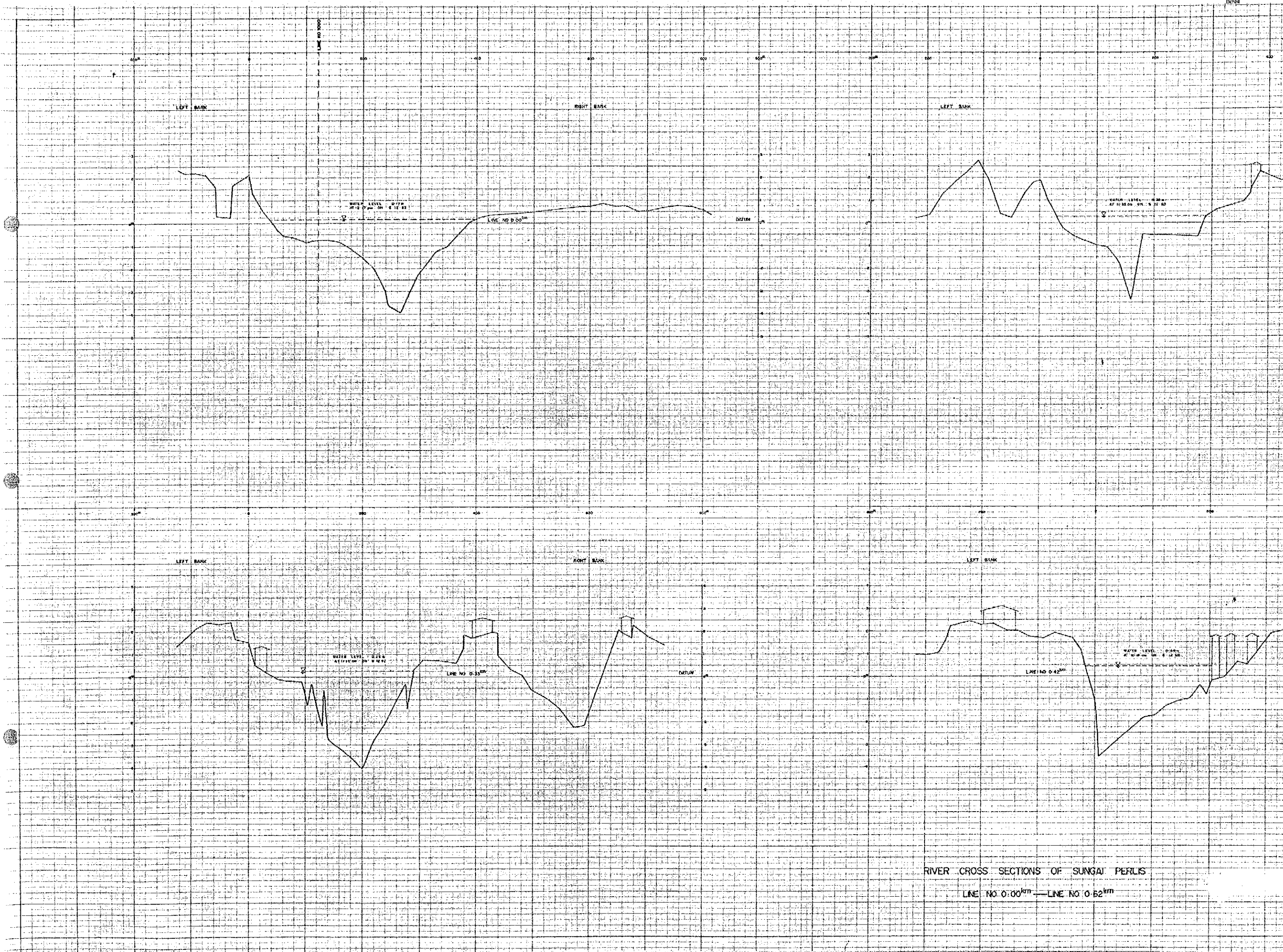


BATHYMETRIC CROSS SECTIONS OF SUNGAI PERLIS

LINE NO -0.27 km — LINE NO -3.04 km

SCALE

NOTE:
 HEIGHT DATUM: ALL LEVELS ARE BASED ON BN. NG. WOODS (2.432m ABOVE L.S.O.)
 DATE OF SURVEY: DECEMBER 1972
 DATUM LEVEL: 1.485 AND SURVEY DATUM (L.S.O.)



WATER LEVEL DATA
AT 10:30 AM ON 6/11/53

LINE NO 0.00^{km}

DATUM

WATER LEVEL DATA
AT 10:30 AM ON 6/11/53

LEFT BANK

RIGHT BANK

WATER LEVEL DATA
AT 10:30 AM ON 6/11/53

LINE NO 0.35^{km}

DATUM

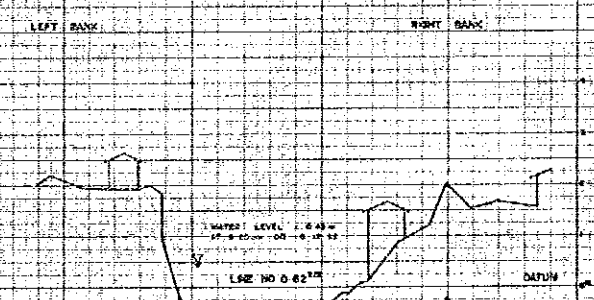
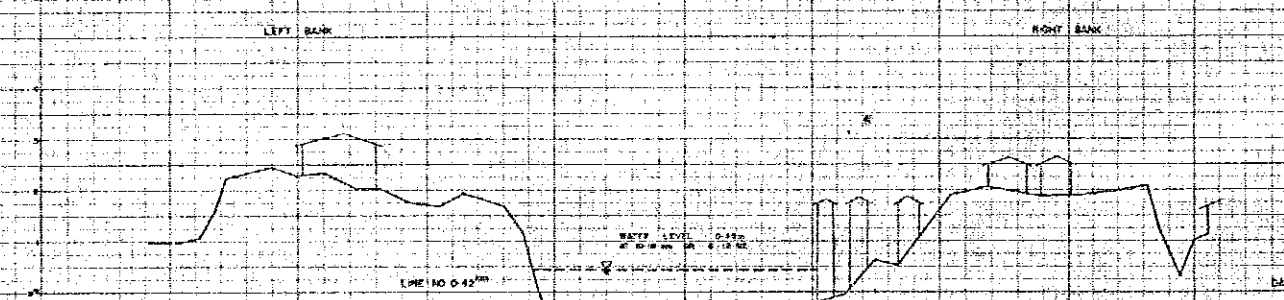
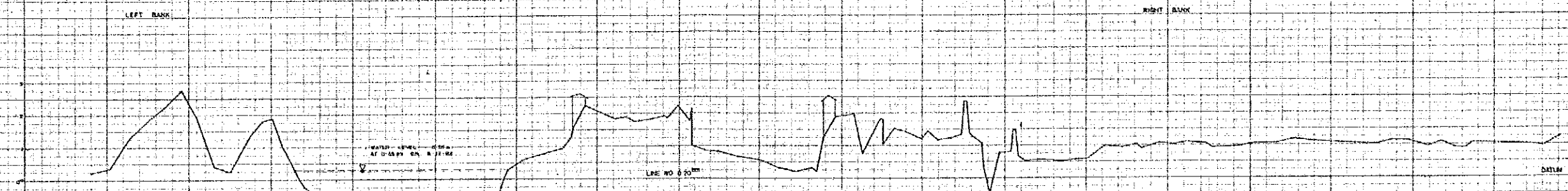
LEFT BANK

WATER LEVEL DATA
AT 10:30 AM ON 6/11/53

LINE NO 0.42^{km}

RIVER CROSS SECTIONS OF SUNGAI PERLIS

LINE NO 0.00^{km} — LINE NO 0.82^{km}



RIVER CROSS SECTIONS OF SUNGAI PERLIS

LINE NO 0+00^{km} — LINE NO 0+62^{km}

NOTE:
HEIGHT DATUM: ALL LEVELS ARE BASED ON DA 40 (SEA LEVEL) ABOVE ASL
DATE OF SURVEY: DECEMBER 1952
STATION: PERLIS - LINE NO 0+00 TO 0+62