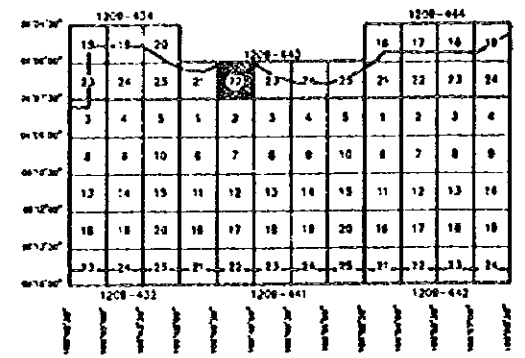


SCALE 1 : 5 000



LEGEND

- △ Existing Triangulation Point
- GPS Point
- Existing Bench Mark
- Spot Height
- ~ River
- ▭ Concrete Building (more than 4m floor)
- ▭ House
- ⊕ Mosque
- ⊕ Church
- ⊕ Hospital
- ⊕ School
- ⊕ Government Office
- ~ Pond
- - - Path
- ≡ Bridge
- ⋯ Railway
- ⊕ Station
- Electric Power Line
- ▨ Cutting and Embankment
- ▨ Swamp
- ⊕ Muslim graves
- ⊕ Christian cemetery
- ⊕ Chinese graves
- ▨ Paddy field
- ▨ Boundary of Vegetation
- ∇ Field
- Forest
- ∇ Grass
- Water hole
- Pond, lake
- ~ Sand
- ~ Land Slide



X, Y : Based UTM Zone 48  
 H : Mean sea level (TTG)

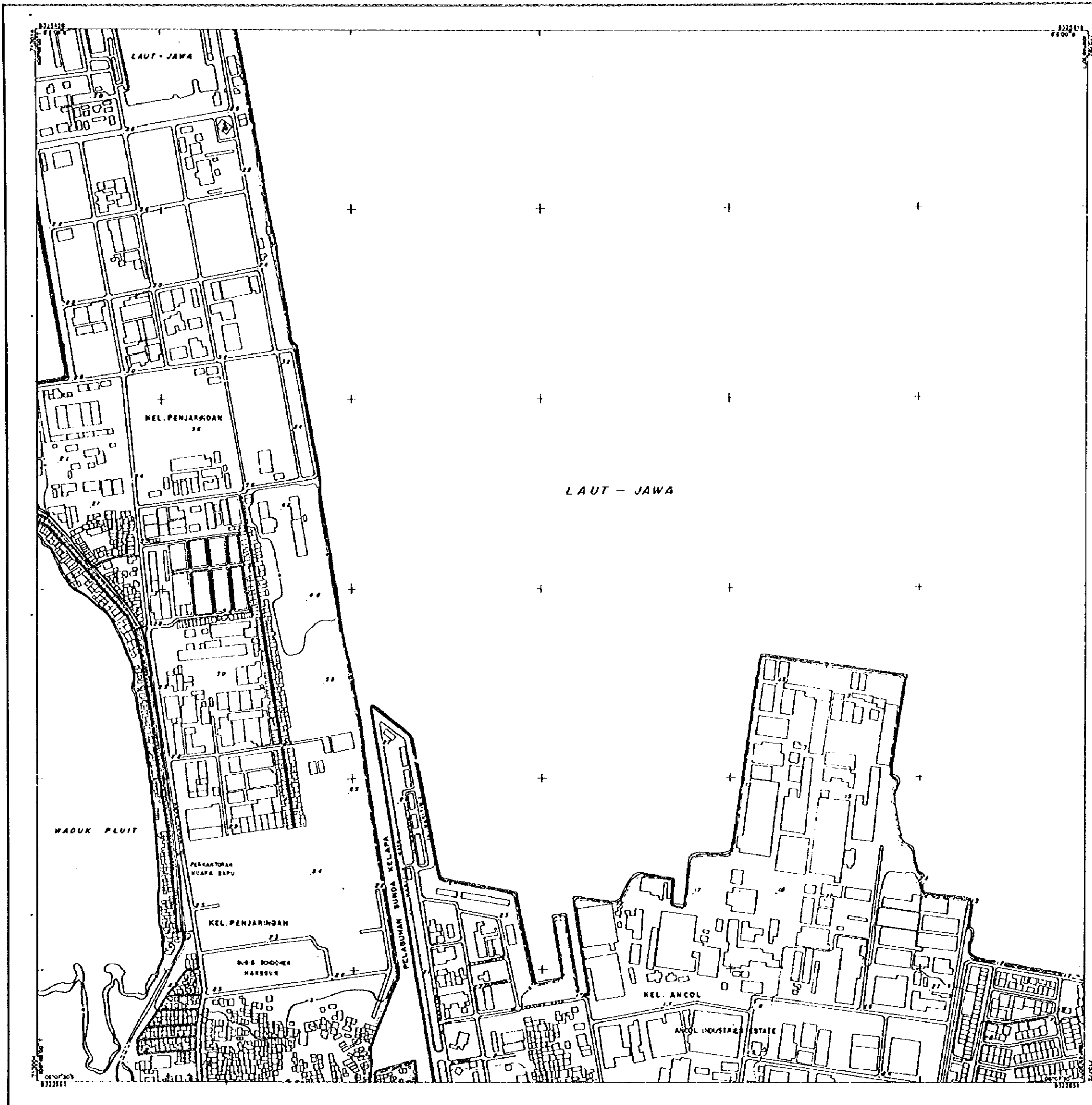
Index contour : 10 meter  
 Main contour : 2 meter  
 Supplemental contour : 1 meter  
 Aerial photography : 1 : 20 000  
 May 1994

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 DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT  
 CIKUMPUNG OSADANE RIVER BASIN DEVELOPMENT PROJECT  
 THE STUDY ON COMPREHENSIVE RIVER WATER MANAGEMENT PLAN IN JABOTABEK

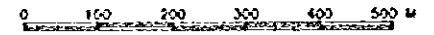
Drawing Title : **TOPOGRAPHIC MAP**

|            |             |      |
|------------|-------------|------|
| Checked by | Approved by | Date |
| Signature  | Signature   | 1994 |
| Date       | Date        | Date |

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 PE. ATLAS DELTASATYA

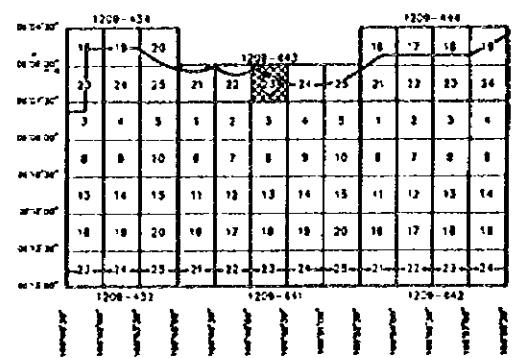


SCALE 1 : 5 000



LEGEND

- △ Existing Triangulation Point
- ⊙ GPS Point
- ⊠ Existing Bench Mark
- Spot Height
- ~ River
- ▭ Concrete Building (more than 4x4m)
- ▭ House
- ⚡ Mosque
- ⛪ Church
- ⚪ Hospital
- ⚪ School
- ⚪ Government Office
- Road
- - - Path
- ≡≡≡ Bridge
- ⋯⋯⋯ Railway
- ⚪ Station
- +— Electric Power Line
- ▨ Cutting and Embankment
- ⊖ Swamp
- ⊖ Moslem graves
- ⊖ Christian cemetery
- ⊖ Chinese graves
- ⊖ Paddy field
- ⊖ Boundary of Vegetation
- ⊖ Field
- ⊖ Forest
- ⊖ Grass
- ⊖ Water hole
- ⊖ Pond, lake
- ⊖ Sand
- ⊖ Lona Side



X, Y : Base of UTM Zone 48  
 H : Mean sea level (T.G.I)

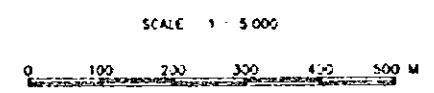
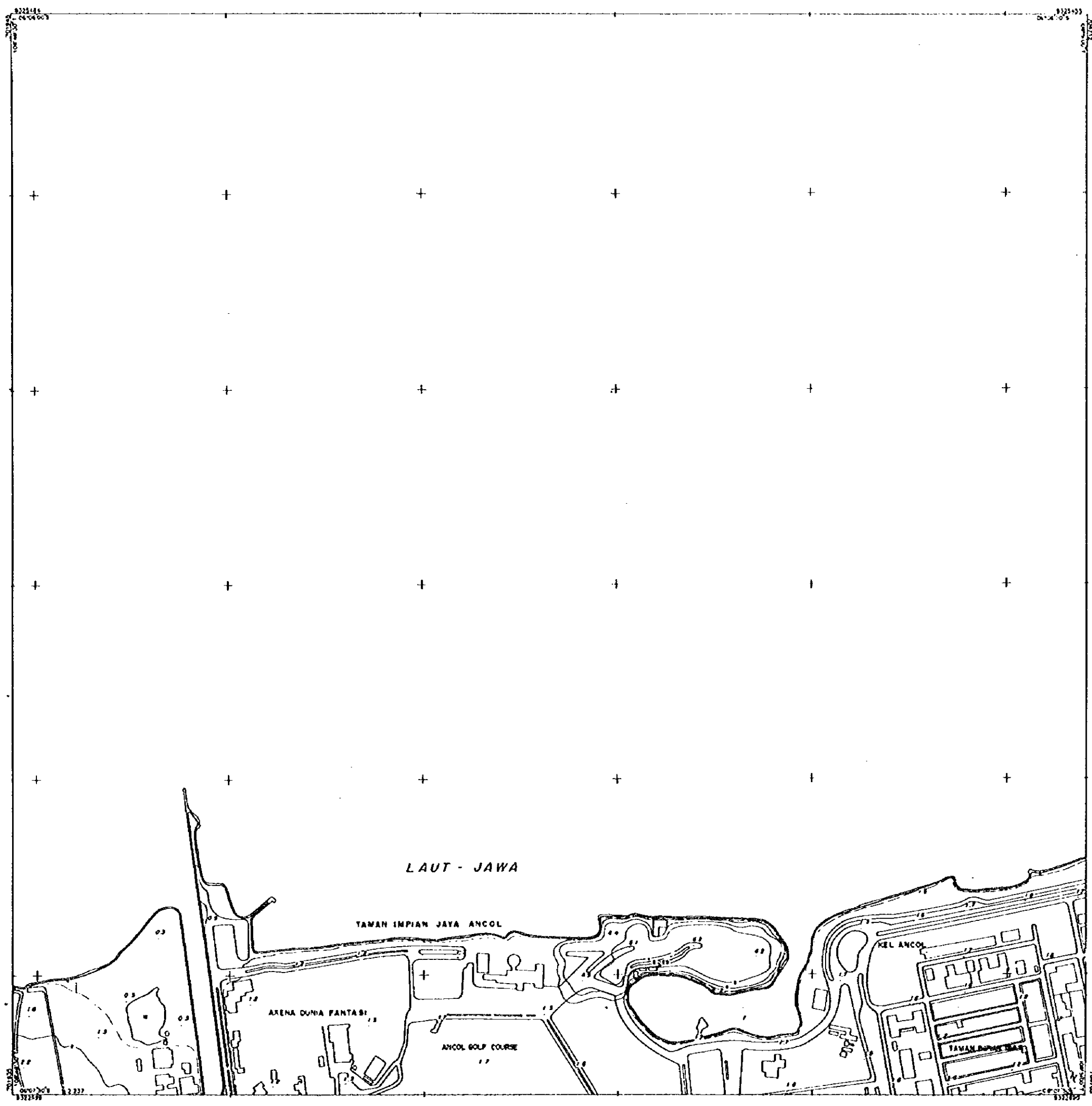
Index contour : 10 meter  
 Main contour : 2 meter  
 Supplemental contour : 1 meter  
 Aerial photography : 1 : 20 000  
 May 1994

**MINISTRY OF PUBLIC WORKS**  
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 CILIMUNG CIGADANE RIVER BASIN DEVELOPMENT PROJECT  
 THE STUDY ON COMPREHENSIVE RIVER WATER MANAGEMENT PLAN IN JABOTABEK

Drawing Title : **TOPOGRAPHIC MAP**

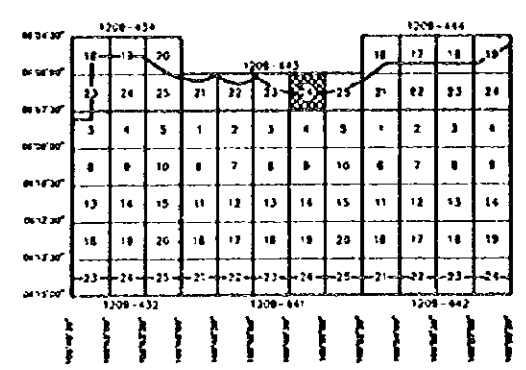
|            |             |                     |
|------------|-------------|---------------------|
| Checked by | Approved by | Field Survey No. 04 |
| Supervisor | 1. Ind      | Survei No. 05 10    |
| Signature  | 1. A. '76   | 1. A. '76           |
| Date       | 1. 2. '76   | 1. 2. '76           |

**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
**PL. ARAB DELTASATYA**



LEGENO

- |   |                          |
|---|--------------------------|
| △ Existing Triangulation Point          | ⊠ Station                |
| ⊙ O.P.S. Point                          | ⊕ Electric Power line    |
| ⊠ Existing Bench Mark                   | ▨ Cutting and Embankment |
| • Spot height                           | ⊞ Swamp                  |
| ⊞ River                                 | ⊞ Moslem graves          |
| ⊞ Concrete Building (more than 4 floor) | ⊞ Christian cemetery     |
| ⊞ House                                 | ⊞ Chinese graves         |
| ⊞ Mosque                                | ⊞ Paddy field            |
| ⊞ Church                                | ⊞ Boundary of Vegetation |
| ⊞ Hospital                              | ⊞ Field                  |
| ⊞ School                                | ⊞ Forest                 |
| ⊞ Government Office                     | ⊞ Grass                  |
| ⊞ Pond                                  | ⊞ Water hole             |
| ⊞ Path                                  | ⊞ Pond, lake             |
| ⊞ Bridge                                | ⊞ Sand                   |
| ⊞ Railway                               | ⊞ Land Slide             |



X, Y : Basal UTM Zone 48  
 M : TTG 177

Index contour : 10 meter  
 Main contour : 2 meter  
 Supplemental contour : 1 meter  
 Aerial photography : 1 : 20 000  
 May 1994

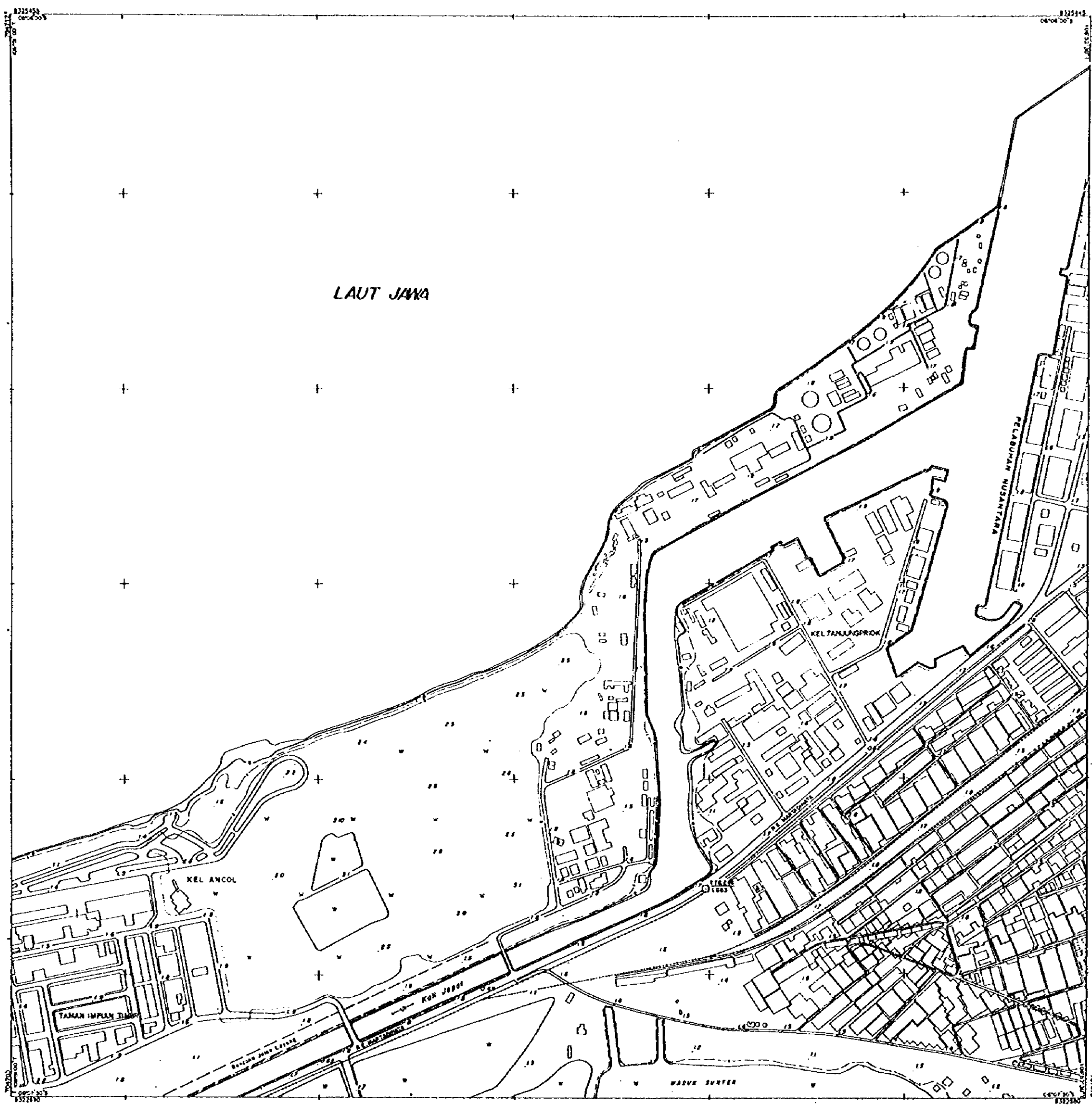
MINISTRY OF PUBLIC WORKS  
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 CILWANG CIBADANE RIVER BASIN DEVELOPMENT PROJECT

THE STUDY ON COMPREHENSIVE RIVER WATER MANAGEMENT PLAN IN JABOTABEK

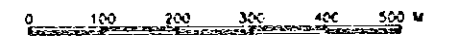
Drawing Title : **TOPOGRAPHIC MAP**

|            |             |                    |
|------------|-------------|--------------------|
| Checked by | Approved by | Field Survey 28 01 |
| Sumarto    | L. Suharna  | Aerial 21 05 10    |
| Signature  | Signature   | Aerial 28 05 10    |
| Date       | Date        | Field Survey 28 01 |

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 PT. ATLAS DELTASATYA  
 Sheet No. 1208-443



SCALE 1 : 5 000



LEGEND

- △ Existing Triangulation Point
- GPS Point
- Existing Bench Mark
- Spot height
- ~ River
- ▭ Concrete Building (more than 4 m high)
- ▭ House
- ⚡ Mosque
- ⛪ Church
- ⚪ Hospital
- ⚪ School
- ⚪ Government Office
- ~ Pond
- - - Path
- ≡ Bridge
- ≡≡ Railway
- ⚪ Station
- ⚡ Electric Power Line
- ▨ Cutting and Embankment
- ▨ Swamp
- ⚪ Modern graves
- ⚪ Christian cemetery
- ⚪ Chinese graves
- ⚪ Paddy field
- ▨ Boundary of Vegetation
- ∇ Field
- ⚪ Forest
- ∇ Grass
- ⚪ Water hole
- ⚪ Pond, lake
- ⚪ Sand
- ⚪ Landslide

|          |          |     |     |     |     |          |     |     |     |     |
|----------|----------|-----|-----|-----|-----|----------|-----|-----|-----|-----|
|          | 1228-434 |     |     |     |     | 1228-435 |     |     |     |     |
| 1228-434 | 19       | 20  | 21  | 22  | 23  | 24       | 25  | 26  | 27  | 28  |
| 1228-435 | 29       | 30  | 31  | 32  | 33  | 34       | 35  | 36  | 37  | 38  |
| 1228-436 | 39       | 40  | 41  | 42  | 43  | 44       | 45  | 46  | 47  | 48  |
| 1228-437 | 49       | 50  | 51  | 52  | 53  | 54       | 55  | 56  | 57  | 58  |
| 1228-438 | 59       | 60  | 61  | 62  | 63  | 64       | 65  | 66  | 67  | 68  |
| 1228-439 | 69       | 70  | 71  | 72  | 73  | 74       | 75  | 76  | 77  | 78  |
| 1228-440 | 79       | 80  | 81  | 82  | 83  | 84       | 85  | 86  | 87  | 88  |
| 1228-441 | 89       | 90  | 91  | 92  | 93  | 94       | 95  | 96  | 97  | 98  |
| 1228-442 | 99       | 100 | 101 | 102 | 103 | 104      | 105 | 106 | 107 | 108 |
|          | 1228-432 |     |     |     |     | 1228-433 |     |     |     |     |

X, Y : Bessel UTM Zone 48  
H : Mean sea level (TIG)

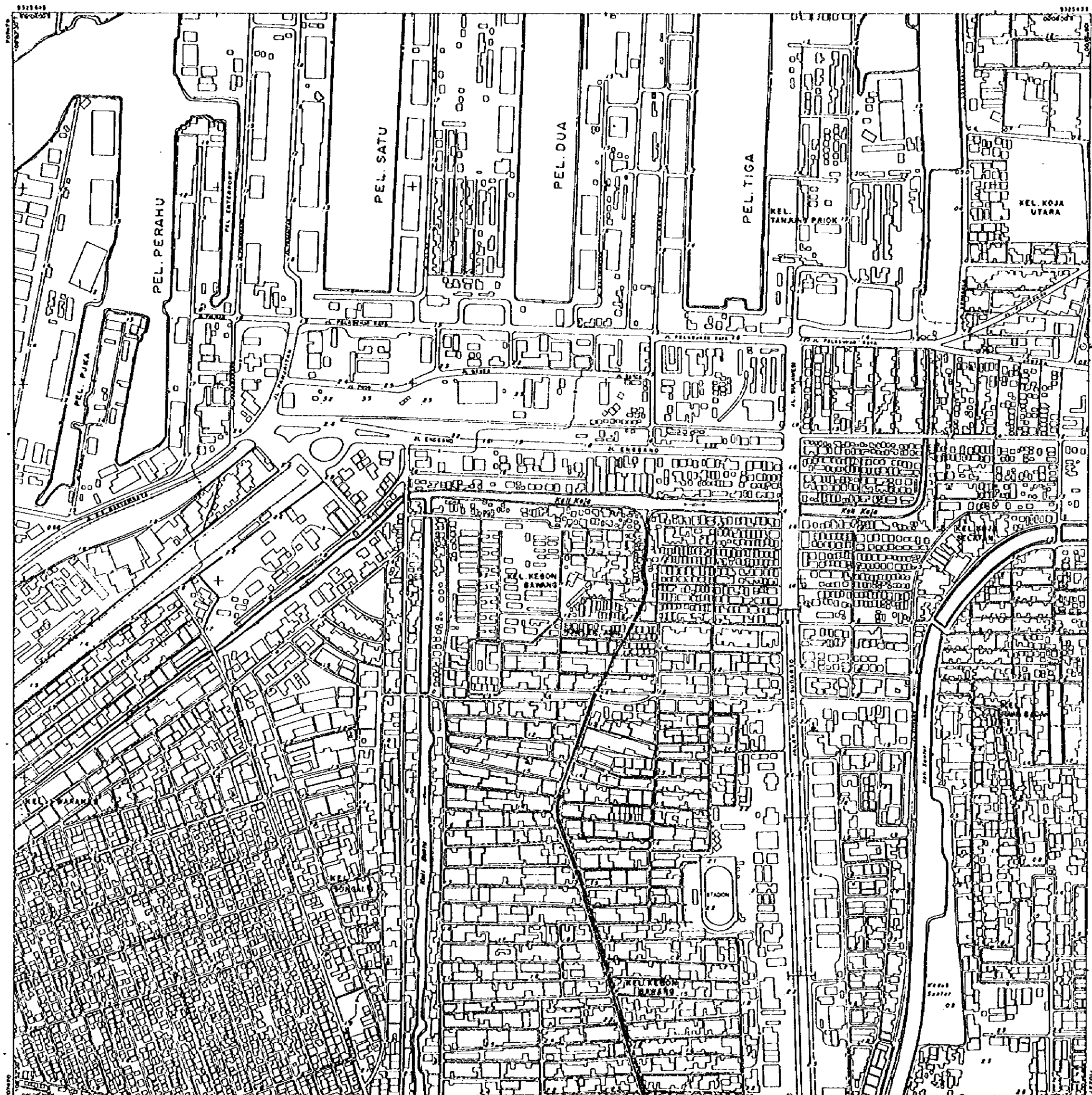
Index contour : 10 meter  
Main contour : 2 meter  
Supplemental contour : 1 meter  
Aerial photography : 1 : 20 000 May 1994

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DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT  
CIBUNING CIBADANE RIVER BASIN DEVELOPMENT PROJECT  
THE STUDY ON COMPREHENSIVE RIVER WATER MANAGEMENT PLAN IN JABOTABEK

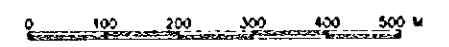
Drawing Title: **TOPOGRAPHIC MAP**

|            |            |             |                     |
|------------|------------|-------------|---------------------|
| Drawn by   | Checked by | Approved by | Field Survey No. 00 |
| Supervisor | Supervisor | Supervisor  | Aerial No. 00 10    |
| Date       | Date       | Date        | Field Survey No. 00 |

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
PE. ARAS DELTASATYA  
Sheet No. 109-442

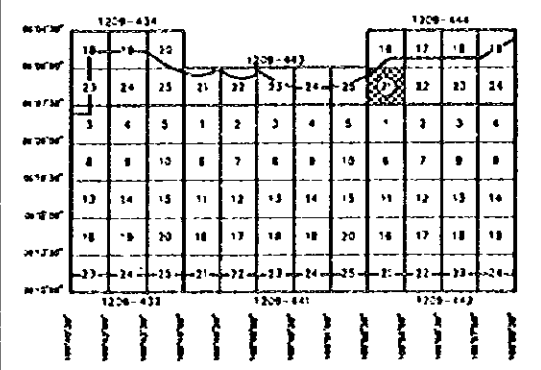


SCALE 1 : 5 000



LEGEND

- △ Existing Triangulation Point
- ⊙ GPS Point
- ⊠ Existing Bench Mark
- Spot Height
- River
- ▭ Concrete Building (more than 4m floor)
- House
- ⊕ Mosque
- ⊕ Church
- ⊕ Hospital
- ⊕ School
- ⊕ Government Office
- Road
- Path
- Bridge
- Railway
- ⊕ Station
- Electric Power Line
- Cutting and Embankment
- Swamp
- Modern graves
- Christian cemetery
- Chinese graves
- Paddy field
- Boundary of Vegetation
- Field
- Forest
- Grass
- Water hole
- Pond, lake
- Sand
- Land Slide



X, Y : Base UTM Zone 48  
 H : Mean sea level (TTG)

Index contour : 10 meter  
 Main contour : 2 meter  
 Supplemental contour : 1 meter  
 Aerial photography : 1:20 000 May 1994

**MINISTRY OF PUBLIC WORKS**  
 DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT  
 CILIKUNG CIGADANE RIVER BASIN DEVELOPMENT PROJECT

THE STUDY ON COMPREHENSIVE RIVER WATER MANAGEMENT PLAN IN JASOTABEK

Drawing Title : **TOPOGRAPHIC MAP**

|          |            |             |                     |
|----------|------------|-------------|---------------------|
| Drawn by | Checked by | Approved by | Field Survey 78-80  |
| Surabaya | S. Satrio  | L. Satrio   | April 78-79         |
| Surabaya | S. Satrio  | S. Satrio   | July 79-80          |
| Date     | 20-7-76    | 20-7-76     | Field drawing 78-80 |

**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
 PT. ARAS CIGADANE





SCALE 1 : 5 000



LEGEND

- △ Existing Triangulation Point
- GPS Point
- Existing Bench Mark
- Spot Height
- ~ River
- ▭ Concrete Building (max. 4m floor)
- ▭ House
- ⊕ Mosque
- ⊕ Church
- ⊕ Hospital
- ⊕ School
- ⊕ Government Office
- Road
- - - Path
- ≡ Bridge
- ≡≡≡ Railway
- ⊕ Station
- Electric Power Line
- ▨ Cutting and Embankment
- ▨ Swamp
- ~ Mosaic grass
- ⊕ Christian cemetery
- ⊕ Chinese graves
- ⊕ Paddy field
- Boundary of Vegetation
- ∇ Field
- ∇ Forest
- ∇ Grass
- Water hole
- Pond, lake
- Sand
- ~ Land Slide

|          |     |     |     |     |          |     |     |     |     |          |     |     |     |    |  |  |  |  |  |
|----------|-----|-----|-----|-----|----------|-----|-----|-----|-----|----------|-----|-----|-----|----|--|--|--|--|--|
| 1208-434 |     |     |     |     |          |     |     |     |     | 1208-444 |     |     |     |    |  |  |  |  |  |
| 16       | 17  | 18  | 19  | 20  | 1208-443 |     |     |     |     | 16       | 17  | 18  | 19  | 20 |  |  |  |  |  |
| 21       | 22  | 23  | 24  | 25  | 26       | 27  | 28  | 29  | 30  | 31       | 32  | 33  | 34  |    |  |  |  |  |  |
| 35       | 36  | 37  | 38  | 39  | 40       | 41  | 42  | 43  | 44  | 45       | 46  | 47  | 48  |    |  |  |  |  |  |
| 49       | 50  | 51  | 52  | 53  | 54       | 55  | 56  | 57  | 58  | 59       | 60  | 61  | 62  |    |  |  |  |  |  |
| 63       | 64  | 65  | 66  | 67  | 68       | 69  | 70  | 71  | 72  | 73       | 74  | 75  | 76  |    |  |  |  |  |  |
| 77       | 78  | 79  | 80  | 81  | 82       | 83  | 84  | 85  | 86  | 87       | 88  | 89  | 90  |    |  |  |  |  |  |
| 91       | 92  | 93  | 94  | 95  | 96       | 97  | 98  | 99  | 100 | 101      | 102 | 103 | 104 |    |  |  |  |  |  |
| 105      | 106 | 107 | 108 | 109 | 110      | 111 | 112 | 113 | 114 | 115      | 116 | 117 | 118 |    |  |  |  |  |  |
| 119      | 120 | 121 | 122 | 123 | 124      | 125 | 126 | 127 | 128 | 129      | 130 | 131 | 132 |    |  |  |  |  |  |
| 133      | 134 | 135 | 136 | 137 | 138      | 139 | 140 | 141 | 142 | 143      | 144 | 145 | 146 |    |  |  |  |  |  |
| 147      | 148 | 149 | 150 | 151 | 152      | 153 | 154 | 155 | 156 | 157      | 158 | 159 | 160 |    |  |  |  |  |  |
| 161      | 162 | 163 | 164 | 165 | 166      | 167 | 168 | 169 | 170 | 171      | 172 | 173 | 174 |    |  |  |  |  |  |
| 175      | 176 | 177 | 178 | 179 | 180      | 181 | 182 | 183 | 184 | 185      | 186 | 187 | 188 |    |  |  |  |  |  |
| 189      | 190 | 191 | 192 | 193 | 194      | 195 | 196 | 197 | 198 | 199      | 200 | 201 | 202 |    |  |  |  |  |  |
| 203      | 204 | 205 | 206 | 207 | 208      | 209 | 210 | 211 | 212 | 213      | 214 | 215 | 216 |    |  |  |  |  |  |
| 217      | 218 | 219 | 220 | 221 | 222      | 223 | 224 | 225 | 226 | 227      | 228 | 229 | 230 |    |  |  |  |  |  |
| 231      | 232 | 233 | 234 | 235 | 236      | 237 | 238 | 239 | 240 | 241      | 242 | 243 | 244 |    |  |  |  |  |  |
| 245      | 246 | 247 | 248 | 249 | 250      | 251 | 252 | 253 | 254 | 255      | 256 | 257 | 258 |    |  |  |  |  |  |
| 259      | 260 | 261 | 262 | 263 | 264      | 265 | 266 | 267 | 268 | 269      | 270 | 271 | 272 |    |  |  |  |  |  |
| 273      | 274 | 275 | 276 | 277 | 278      | 279 | 280 | 281 | 282 | 283      | 284 | 285 | 286 |    |  |  |  |  |  |
| 287      | 288 | 289 | 290 | 291 | 292      | 293 | 294 | 295 | 296 | 297      | 298 | 299 | 300 |    |  |  |  |  |  |

X, Y : Base of UTM Zone 48  
H : Mean sea level (TTO)

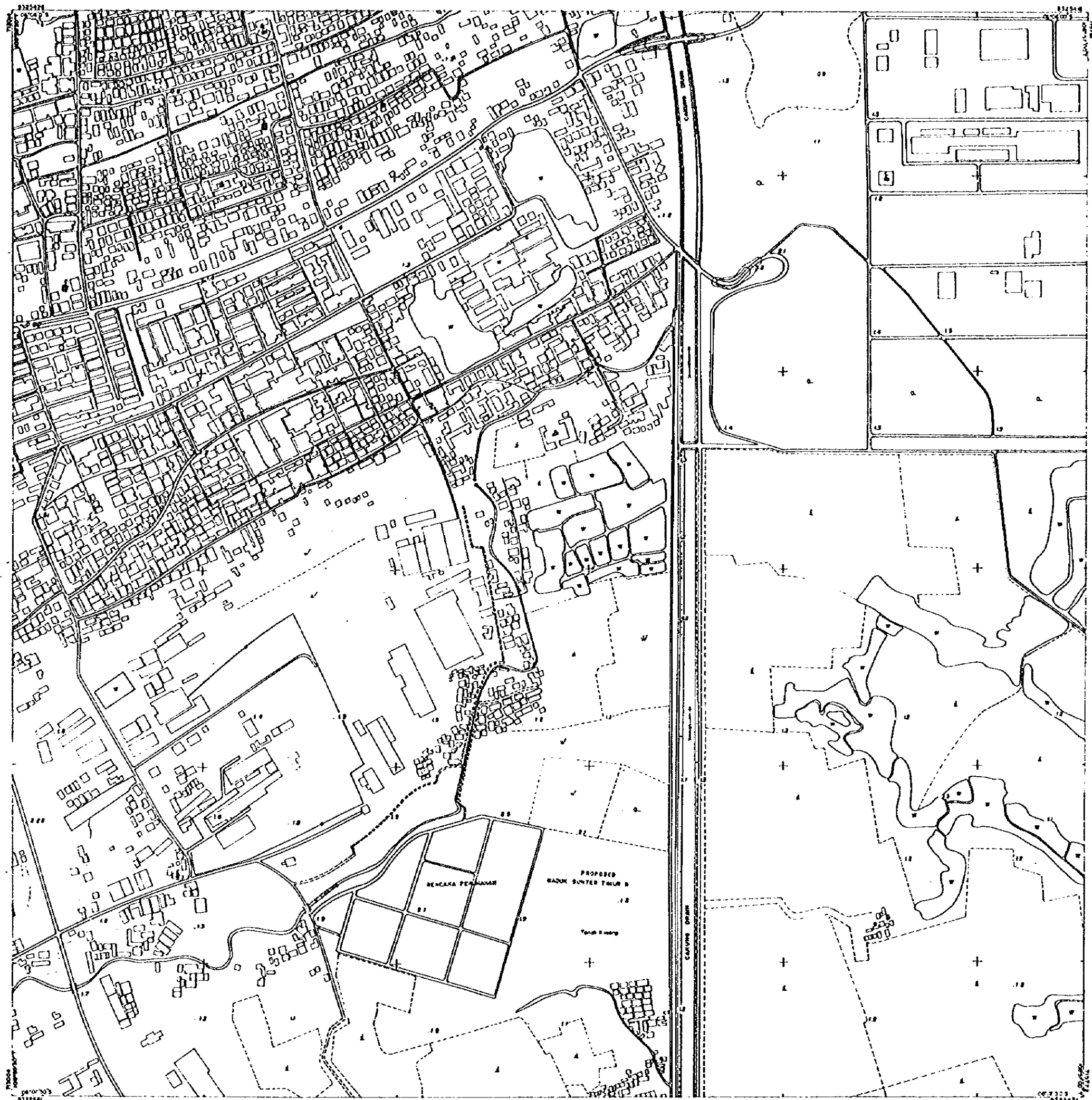
Index contour : 10 meter  
Main contour : 2 meter  
Supplemental contour : 1 meter  
Aerial photography : 1 : 20 000  
May 1994

MINISTRY OF PUBLIC WORKS  
DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT  
CALUNG GUSADANE RIVER BASIN DEVELOPMENT PROJECT

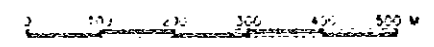
THE STUDY ON COMPREHENSIVE RIVER WATER MANAGEMENT PLAN IN JABOTABEK

TOPOGRAPHIC MAP

|   |             |              |             |               |             |                    |      |
|---|-------------|--------------|-------------|---------------|-------------|--------------------|------|
| Drawn by :                                  |             | Checked by : |             | Approved by : |             | Date Survey :      |      |
| Name  | Signature   | Name         | Signature   | Name          | Signature   | Month              | Year |
| Yusuf                                       | [Signature] | [Signature]  | [Signature] | [Signature]   | [Signature] | July               | 93   |
| Date  | 1993/07/22  | Date         | 1993/07/22  | Date          | 1993/07/22  | 1993/07/22         | 1993 |
| JICA JAPAN INTERNATIONAL COOPERATION AGENCY |             |              |             |               |             | PE. ARAB BELTASATI |      |
|   |             |              |             |               |             | Sheet No. 22       |      |



SCALE 1:5000



LEGEND

- △ Existing Triangulation Point
- ⊙ GPS Point
- ⊠ Existing Bench Mark
- Spot Height
- ~ River
- ▭ Concrete Building (more than 40 floor)
- ▭ House
- ⊞ Mosque
- ⊞ Church
- ⊞ Hospital
- ⊞ School
- ⊞ Government Office
- Road
- Path
- Bridge
- ⋯ Railway
- ⊞ Station
- Electric Power Line
- Cutting and Embankment
- ~ Swamp
- ~ Moslem graves
- ~ Christian cemetery
- ~ Chinese graves
- ~ Paddy field
- ~ Boundary of Vegetation
- ~ Field
- ~ Forest
- ~ Grass
- Water hole
- Pond, lake
- ~ Sand
- ~ Land Slide

|          |     |     |     |     |          |     |     |     |     |
|----------|-----|-----|-----|-----|----------|-----|-----|-----|-----|
| 1208-424 |     |     |     |     | 1208-444 |     |     |     |     |
| 16       | 17  | 18  | 19  | 20  | 21       | 22  | 23  | 24  | 25  |
| 26       | 27  | 28  | 29  | 30  | 31       | 32  | 33  | 34  | 35  |
| 36       | 37  | 38  | 39  | 40  | 41       | 42  | 43  | 44  | 45  |
| 46       | 47  | 48  | 49  | 50  | 51       | 52  | 53  | 54  | 55  |
| 56       | 57  | 58  | 59  | 60  | 61       | 62  | 63  | 64  | 65  |
| 66       | 67  | 68  | 69  | 70  | 71       | 72  | 73  | 74  | 75  |
| 76       | 77  | 78  | 79  | 80  | 81       | 82  | 83  | 84  | 85  |
| 86       | 87  | 88  | 89  | 90  | 91       | 92  | 93  | 94  | 95  |
| 96       | 97  | 98  | 99  | 100 | 101      | 102 | 103 | 104 | 105 |
| 106      | 107 | 108 | 109 | 110 | 111      | 112 | 113 | 114 | 115 |
| 116      | 117 | 118 | 119 | 120 | 121      | 122 | 123 | 124 | 125 |
| 126      | 127 | 128 | 129 | 130 | 131      | 132 | 133 | 134 | 135 |
| 136      | 137 | 138 | 139 | 140 | 141      | 142 | 143 | 144 | 145 |
| 146      | 147 | 148 | 149 | 150 | 151      | 152 | 153 | 154 | 155 |
| 156      | 157 | 158 | 159 | 160 | 161      | 162 | 163 | 164 | 165 |
| 166      | 167 | 168 | 169 | 170 | 171      | 172 | 173 | 174 | 175 |
| 176      | 177 | 178 | 179 | 180 | 181      | 182 | 183 | 184 | 185 |
| 186      | 187 | 188 | 189 | 190 | 191      | 192 | 193 | 194 | 195 |
| 196      | 197 | 198 | 199 | 200 | 201      | 202 | 203 | 204 | 205 |

U.T.M. Zone 48  
Mean sea level (1972)

Index contour : 10 meter  
Main contour : 2 meter  
Supplementary contour : 1 meter  
Aerial photography : 1:20,000  
May 1994

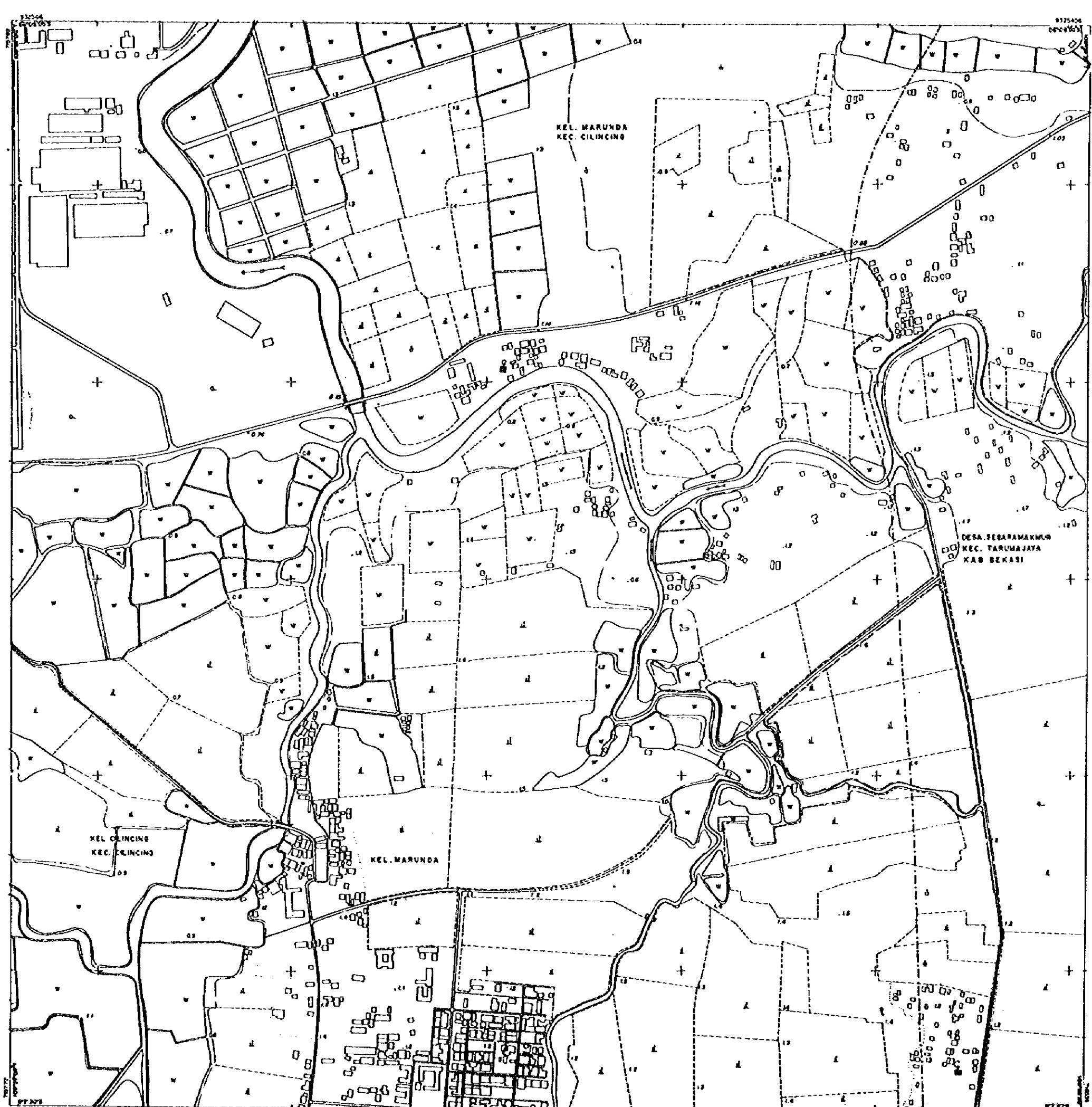
MINISTRY OF PUBLIC WORKS  
DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT  
CALUNG OSADANE RIVER BASIN DEVELOPMENT PROJECT

THE STUDY ON COMPREHENSIVE RIVER WATER MANAGEMENT PLAN IN JABOTABEK

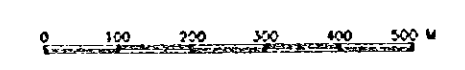
TOPOGRAPHIC MAP

|           |            |             |                    |
|-----------|------------|-------------|--------------------|
| Drawn by  | Created by | Approved by | Date Survey '93-09 |
| Signature | Signature  | Signature   | Date In '93-10     |
| Date      | Date       | Date        | Date               |

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
PE. ARAS DELASATIA



SCALE 1 : 5 000



LEGEND

- △ Existing Triangulation Point
- ⊙ GPS Point
- Existing Bench Mark
- Spot height
- ⊗ River
- ▭ Concrete Building (more than 4m<sup>2</sup>)
- ⊠ House
- ⊞ Mosque
- ⊕ Church
- ⊙ Hospital
- ⊞ School
- ⊞ Government Office
- Road
- - - Path
- ≡ Bridge
- ⋯ Railway
- ⊞ Station
- ⊞ Electric Power Line
- ▨ Cutting and Embankment
- ▨ Swamp
- ⊞ Moslem graves
- ⊞ Christian cemetery
- ⊞ Chinese graves
- ⊞ Paddy field
- ⊞ Boundary of Vegetation
- ∇ Field
- ∇ Forest
- ∇ Grass
- Water hole
- Pond, lake
- ⊞ Sand
- ⊞ Land Slide

|          |          |    |    |    |    |    |    |    |    |    |          |    |    |    |    |    |  |  |  |  |
|----------|----------|----|----|----|----|----|----|----|----|----|----------|----|----|----|----|----|--|--|--|--|
|          | 1208-434 |    |    |    |    |    |    |    |    |    | 1208-444 |    |    |    |    |    |  |  |  |  |
| 1208-434 | 15       | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25       | 26 | 27 | 28 | 29 | 30 |  |  |  |  |
| 1208-435 | 21       | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31       | 32 | 33 | 34 | 35 | 36 |  |  |  |  |
| 1208-436 | 27       | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37       | 38 | 39 | 40 | 41 | 42 |  |  |  |  |
| 1208-437 | 33       | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43       | 44 | 45 | 46 | 47 | 48 |  |  |  |  |
| 1208-438 | 39       | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49       | 50 | 51 | 52 | 53 | 54 |  |  |  |  |
| 1208-439 | 45       | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55       | 56 | 57 | 58 | 59 | 60 |  |  |  |  |
| 1208-440 | 51       | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61       | 62 | 63 | 64 | 65 | 66 |  |  |  |  |
| 1208-441 | 57       | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67       | 68 | 69 | 70 | 71 | 72 |  |  |  |  |
| 1208-442 | 63       | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73       | 74 | 75 | 76 | 77 | 78 |  |  |  |  |

X, Y : Based UTM Zone 48  
 M : Mean sea level (T70)

Index contour : 10 meter  
 Main contour : 2 meter  
 Supplemental contour : 1 meter  
 Aerial photography : May 1984

**MINISTRY OF PUBLIC WORKS**  
 DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT  
 CILINDING DASARANE RIVER BASIN DEVELOPMENT PROJECT

**THE STUDY ON COMPREHENSIVE RIVER WATER MANAGEMENT PLAN IN JABOTABEK**

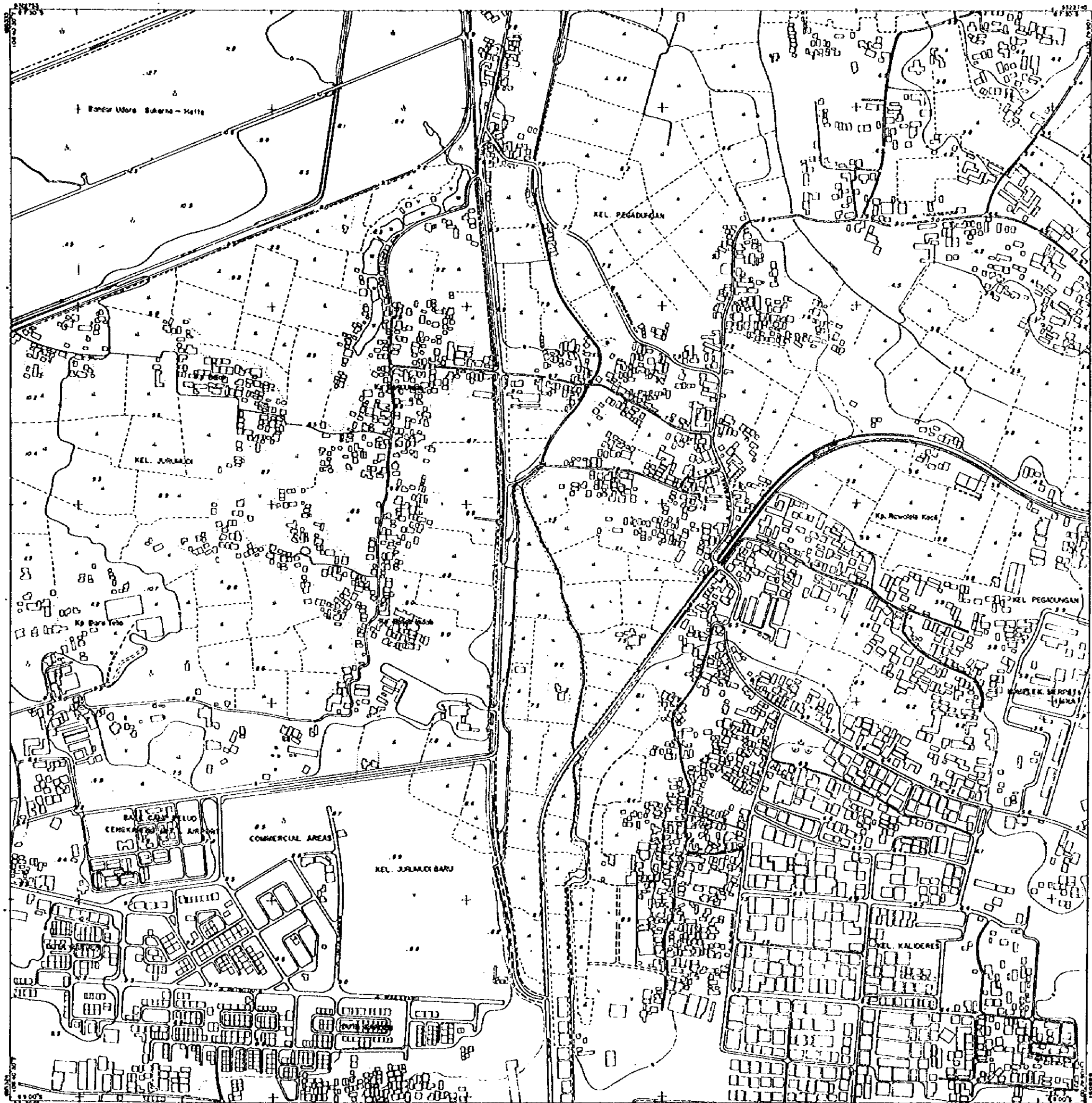
Drawing Title : **TOPOGRAPHIC MAP**

|               |               |                    |
|---------------|---------------|--------------------|
| Checked by    | Approved by   | Field Party No. 00 |
| Signature     | Signature     | Date 04.05.10      |
| Date 20.04.10 | Date 20.04.10 | Date 20.04.10      |

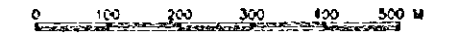
**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY

PE. ATLAS BELIABATYA



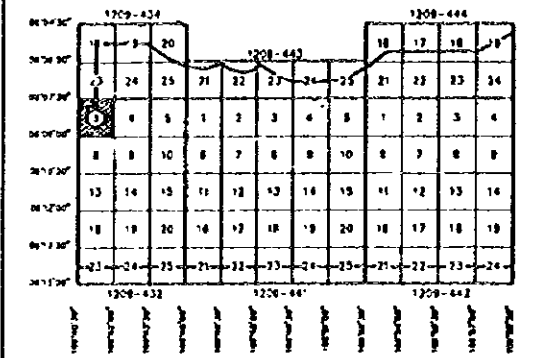


SCALE 1 : 5 000



LEGEND

- △ Existing Triangulation Point
- GPS Point
- Existing Bench Mark
- Spot Height
- ~ River
- ▭ Concrete Building (More than 4 floor)
- ▭ House
- ⊕ Mosque
- ⊕ Church
- ⊕ Hospital
- ⊕ School
- ⊕ Government Office
- Flood
- Path
- ≡ Bridge
- ⋯ Railway
- ⊕ Station
- Electric Power Line
- ▭ Cutting and Embankment
- ▭ Swamp
- ⊕ Mason grave
- ⊕ Christian cemetery
- ⊕ Chinese grave
- ▭ Paddy field
- Boundary of Vegetation
- ∇ Field
- ⊕ Forest
- ∇ Grass
- ⊕ Water hole
- ⊕ Pond, lake
- ⊕ Sand
- ⊕ Land Slide



X, Y Based UTM Zone 48  
Msn sea level (TTG)

Main contour : 10 meter  
 Supplemental contour : 2 meter  
 Aerial Photography : 1:10000  
 October 1994

**MINISTRY OF PUBLIC WORKS**  
 DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT  
 OLUKUNG DASANE RIVER BASIN DEVELOPMENT PROJECT

THE STUDY ON COMPREHENSIVE RIVER WATER MANAGEMENT PLAN IN JABOTABEK

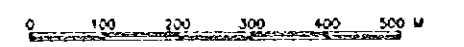
Drawing No: **TOPOGRAPHIC MAP**

|           |                |            |                |             |                |      |      |
|-----------|----------------|------------|----------------|-------------|----------------|------|------|
| Drawn by  | Sumardi        | Checked by | 1. Ird         | Approved by | P. Anas        | Date | 1994 |
| Signature | <i>Sumardi</i> | Signature  | <i>P. Anas</i> | Signature   | <i>P. Anas</i> | Date | 1994 |
| Date      | 1994           | Date       | 1994           | Date        | 1994           | Date | 1994 |

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 P. ANAS GOLTASATYA



SCALE : 1 : 5 000



LEGEND

- △ Existing Triangulation Point
- ⊙ GPS Point
- ⊠ Existing Bench Mark
- Spot Height
- ~ River
- ▭ Concrete Building (more than 6m high)
- House
- ⊕ Mosque
- ⊕ Church
- ⊕ Hospital
- ⊕ School
- ⊕ Government Office
- Road
- - - Path
- ≡ Bridge
- ⋯ Railway
- ⊕ Station
- Electric Power Line
- ▨ Cutting and Embankment
- ⊖ Swamp
- ~ Motion grass
- ⊕ Christian cemetery
- ~ Chinese grass
- ⊕ Paddy field
- ⊕ Boundary of Vegetation
- ∇ Field
- Forest
- W Grass
- Water hole
- ∪ Pond, lake
- ~ Sand
- ~ Land Slide

|       |          |    |          |    |          |          |    |    |    |    |
|-------|----------|----|----------|----|----------|----------|----|----|----|----|
|       | 1208-434 |    |          |    |          | 1208-444 |    |    |    |    |
| NORTH | 18       | 19 | 20       |    |          | 18       | 17 | 16 | 15 |    |
|       | 23       | 24 | 25       | 21 | 22       | 23       | 24 | 25 | 21 | 22 |
|       | 3        | 4  | 5        | 1  | 2        | 3        | 4  | 5  | 1  | 2  |
|       | 8        | 9  | 10       | 6  | 7        | 8        | 9  | 10 | 6  | 7  |
|       | 13       | 14 | 15       | 11 | 12       | 13       | 14 | 15 | 11 | 12 |
|       | 18       | 19 | 20       | 16 | 17       | 18       | 19 | 20 | 16 | 17 |
|       | 23       | 24 | 25       | 21 | 22       | 23       | 24 | 25 | 21 | 22 |
|       | 1208-432 |    | 1208-441 |    | 1208-442 |          |    |    |    |    |

X, Y : Based UTM Zone 48  
H : Mean sea level (TTG)

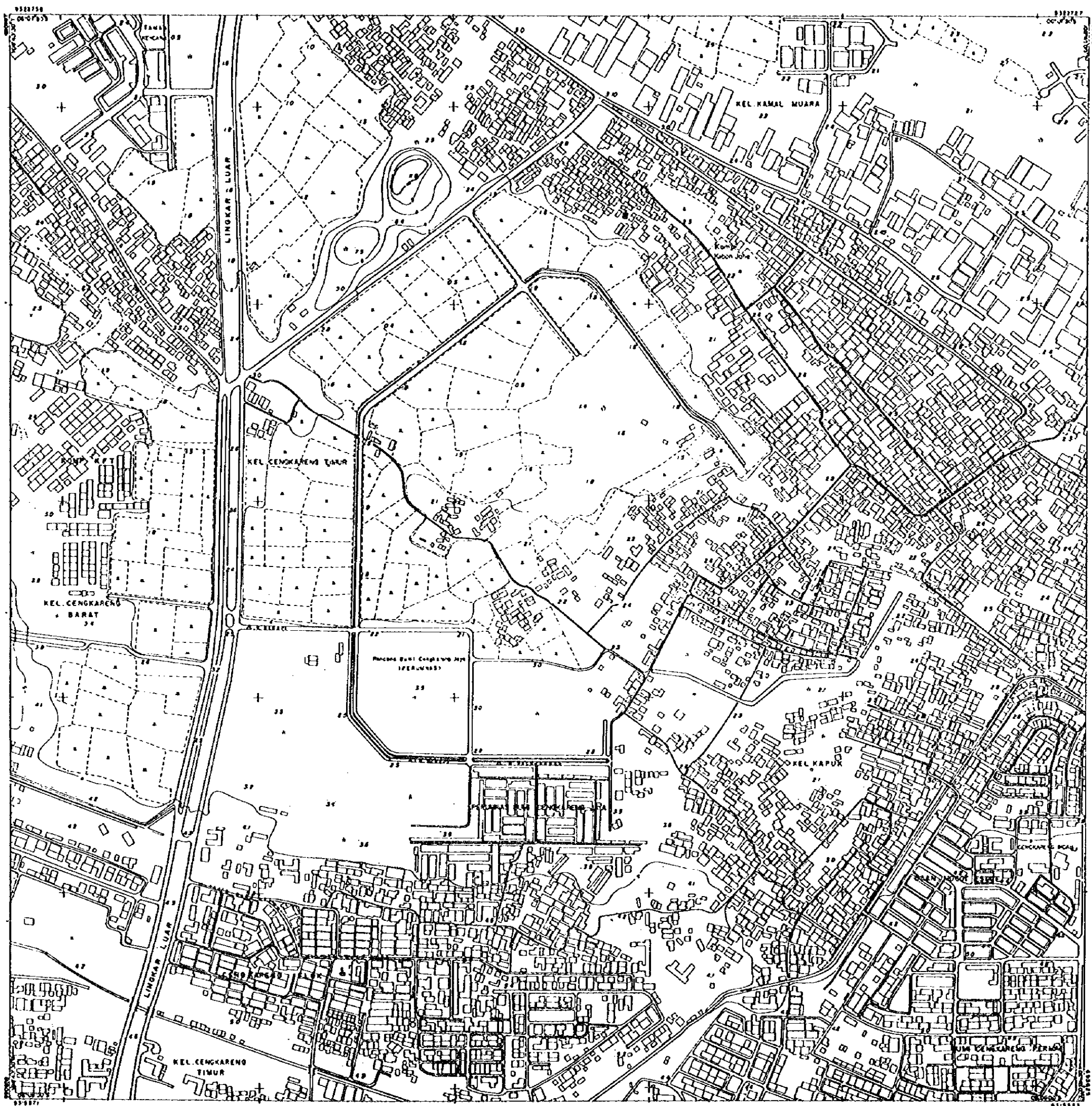
Index contour : 10 meter  
Main contour : 2 meter  
Supplemental contour : 1 meter  
Aerial photography : 1 : 20 000  
May 1994

**MINISTRY OF PUBLIC WORKS**  
DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT  
GILWANG OSADANE RIVER BASIN DEVELOPMENT PROJECT

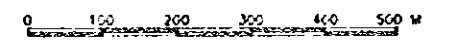
THE STUDY ON COMPREHENSIVE RIVER WATER MANAGEMENT PLAN IN JABOTABEK

Drawing Title : **TOPOGRAPHIC MAP**

|   |           |                    |           |                       |
|---|-----------|--------------------|-----------|-----------------------|
| Drawn by                                    |           | Approved by        |           | Field Survey '93 '94  |
| Name  | Signature | Name               | Signature | Aerial '93 '94        |
| Date  | 1/2/94    | Date               | 1/2/94    | Field Drawing '93 '94 |
| JICA JAPAN INTERNATIONAL COOPERATION AGENCY |           | PT. ATAS DELBATIYA |           | Sheet No. 208-432 04  |



SCALE 1 : 5 000



LEGEND

- |   |                          |
|---|--------------------------|
| △ Existing Triangulation Point            | ⊙ Station                |
| ⊙ GPS Point                               | ⊕ Electric Power Line    |
| ⊠ Existing Bench Mark                     | ▨ Cutting and Embankment |
| • Spot height                             | ⊞ Swamp                  |
| ⊞ River                                   | ⊞ Mosaic grass           |
| ⊞ Concrete Building (more than 4th floor) | ⊞ Christian cemetery     |
| ⊞ House                                   | ⊞ Chinese graves         |
| ⊞ Mosque                                  | ⊞ Paddy field            |
| ⊞ Church                                  | ⊞ Boundary of Vegetation |
| ⊞ Hospital                                | ⊞ Field                  |
| ⊞ School                                  | ⊞ Forest                 |
| ⊞ Government Office                       | ⊞ Grass                  |
| ⊞ Road                                    | ⊞ Water T-Stop           |
| ⊞ Path                                    | ⊞ Pond, lake             |
| ⊞ Bridge                                  | ⊞ Sand                   |
| ⊞ Railway                                 | ⊞ Land Slide             |

|           |          |    |    |    |          |    |    |    |
|-----------|----------|----|----|----|----------|----|----|----|
|           | 1208-434 |    |    |    | 1208-444 |    |    |    |
| N 04' 30" | 18       | 19 | 20 |    | 18       | 19 | 20 | 21 |
| N 04' 30" | 22       | 23 | 24 | 25 | 22       | 23 | 24 | 25 |
| N 04' 30" | 26       | 27 | 28 | 29 | 26       | 27 | 28 | 29 |
| N 04' 30" | 33       | 34 | 35 | 36 | 33       | 34 | 35 | 36 |
| N 04' 30" | 40       | 41 | 42 | 43 | 40       | 41 | 42 | 43 |
| N 04' 30" | 47       | 48 | 49 | 50 | 47       | 48 | 49 | 50 |
| N 04' 30" | 54       | 55 | 56 | 57 | 54       | 55 | 56 | 57 |
|           | 1208-432 |    |    |    | 1208-442 |    |    |    |

X, Y : Basal UTM Zona 48  
Mean sea level (TTC)

index contour : 10 meter  
 Main contour : 2 meter  
 Supplementary contour : 1 meter  
 Aerial photography : 1:20,000 May 1994

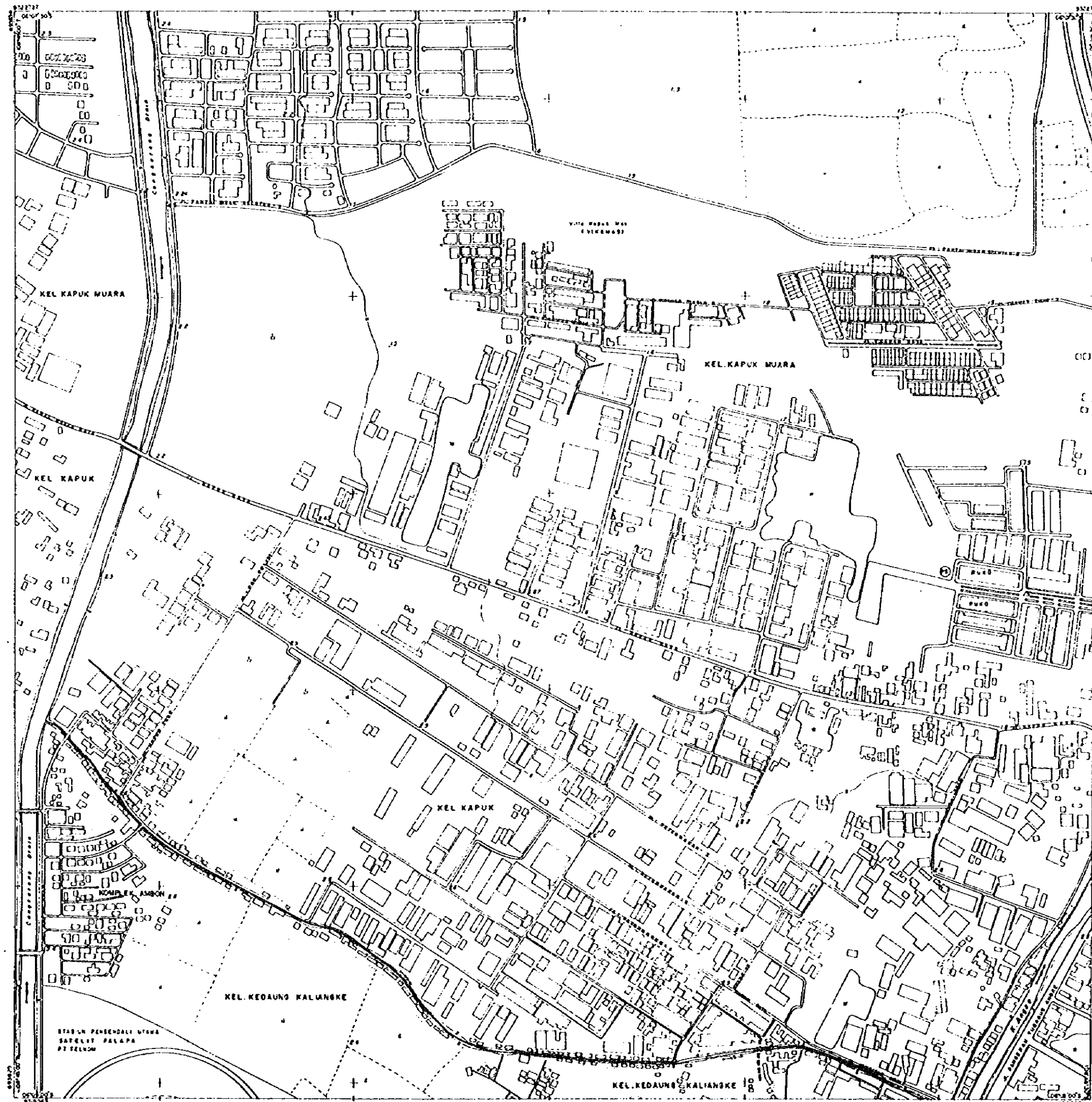
**MINISTRY OF PUBLIC WORKS**  
 DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT  
 CILIBUNG DASAHINE RIVER BASIN DEVELOPMENT PROJECT

THE STUDY ON COMPREHENSIVE RIVER WATER MANAGEMENT PLAN IN JABOTABEK

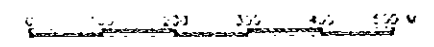
Drawn by: **TOPOGRAPHIC MAP**

|  |                               |  |
|--|-------------------------------|--|
| Checked by   | Approved by                   | Field Survey No. 01                    |
| Signature: <i>[Signature]</i>                      | Signature: <i>[Signature]</i> | Sheet No. 01 of 10                     |
| Date: 1-2-94                                       | Date: 1-2-94                  | Scale: 1:20,000                        |
| <b>JICA</b> JAPAN INTERNATIONAL COOPERATION AGENCY |                               | <b>PT. ATAS</b> POLYASATYA 1208-432 01 |



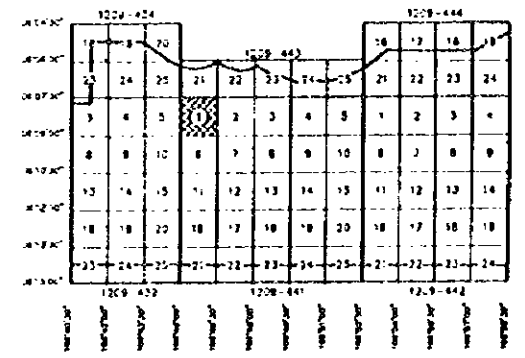


SCALE 1:5000



LEGEND

- △ Existing Triangulation Point
- GPS Point
- Existing Bench Mark
- Spot Height
- ~ River
- ▭ Concrete Basing more than 4m foot
- ▭ House
- ▭ Mosque
- ▭ Church
- ▭ Hospital
- ▭ School
- ▭ Government Office
- ▭ Road
- ▭ Path
- ▭ Bridge
- ▭ Railway
- ▭ Station
- ▭ Electric Power Line
- ▭ Cutting and Embankment
- ▭ Swamp
- ▭ Mice on grass
- ▭ Christian cemetery
- ▭ Chinese graves
- ▭ Paddy field
- ▭ Boundary of Vegetation
- ▭ Field
- ▭ Forest
- ▭ Grass
- ▭ Water Lake
- ▭ Pond Lake
- ▭ Sand
- ▭ Land Slide



K. 1 Base of UTM Zone 48  
Mean sea level (MSL)

Index contour 10 meter  
Main contour 2 meter  
Supplemental contour 1 meter  
Aerial photography 1:20,000  
May 1974

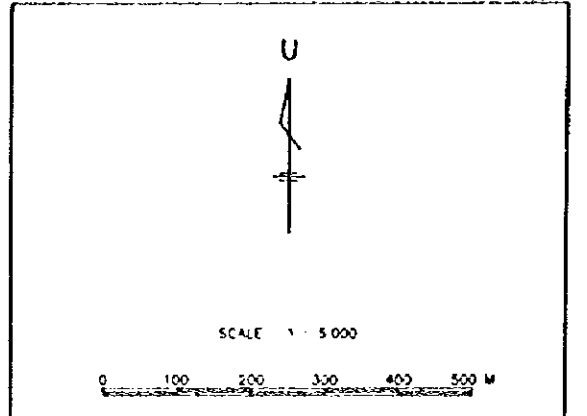
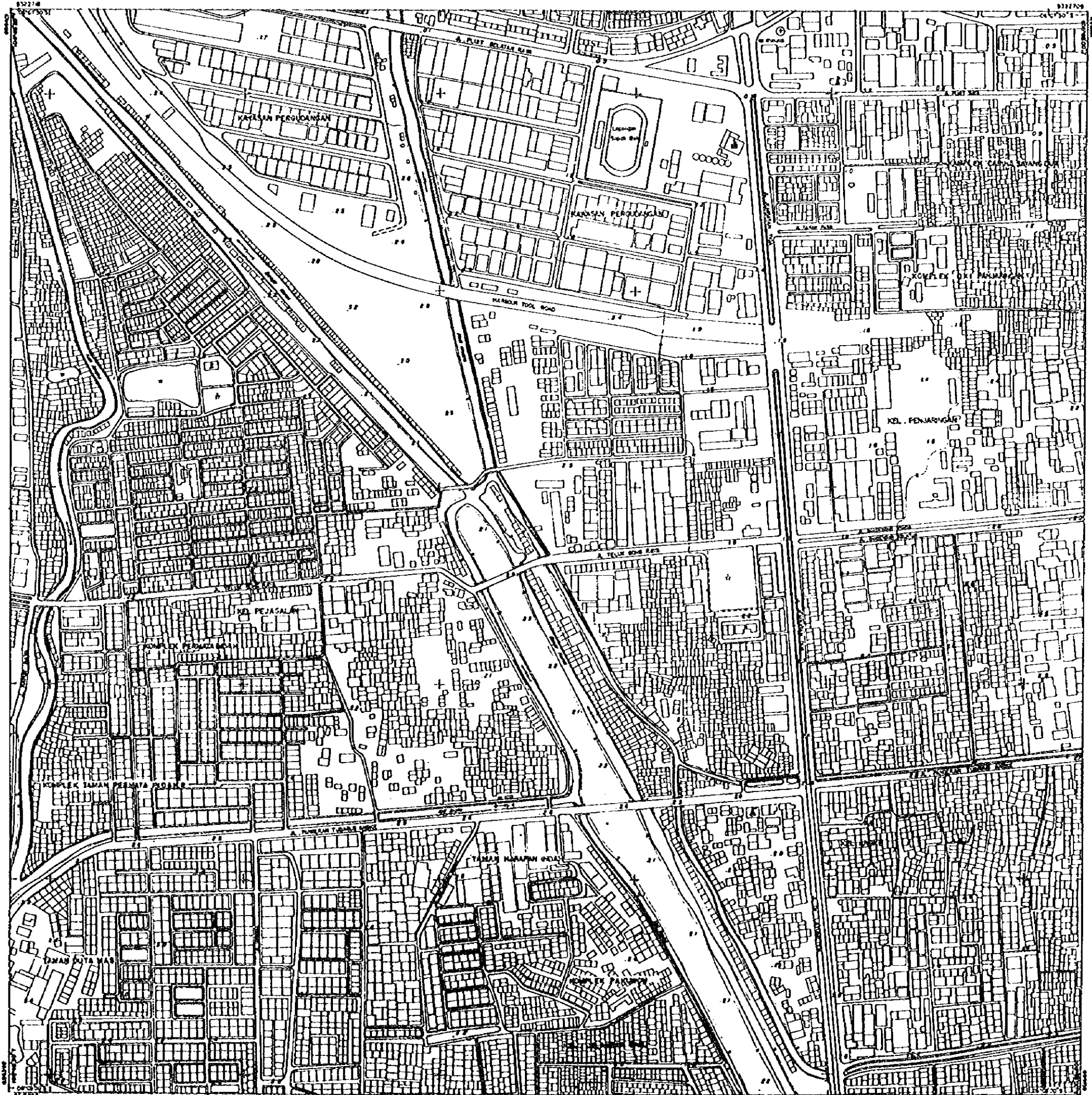
**MINISTRY OF PUBLIC WORKS**  
 DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT  
 CIBUNUNG CIGADANE RIVER BASIN DEVELOPMENT PROJECT  
 THE STUDY ON COMPREHENSIVE RIVER WATER MANAGEMENT PLAN IN JABOTABEK

Drawing Title: **TOPOGRAPHIC MAP**

|             |            |             |      |
|-------------|------------|-------------|------|
| Drawn by    | Checked by | Approved by | Date |
| Surveyed by | Checked by | Approved by | Date |

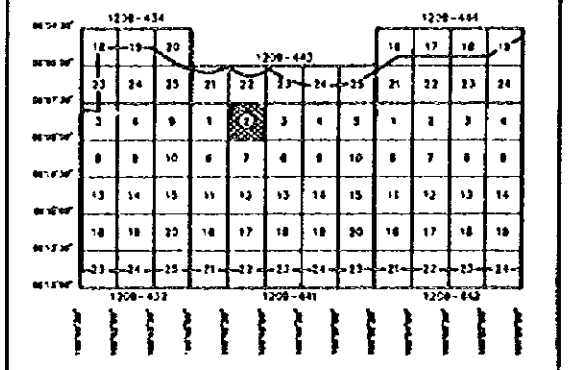
JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 PT. ARAS DELTASATYA





LEGEND

|                                   |                        |
|-----------------------------------|------------------------|
| Existing Triangulation Point      | Station                |
| GPS Point                         | Electric Power Line    |
| Existing Bench Mark               | Cutting and Embankment |
| Spot Height                       | Swamp                  |
| River                             | Mason grass            |
| Concrete Building (masonry floor) | Christian cemetery     |
| House                             | Chinese grass          |
| Mosque                            | Paddy field            |
| Church                            | Boundary of Vegetation |
| Hospital                          | Field                  |
| School                            | Forest                 |
| Government Office                 | Grass                  |
| Road                              | Water hole             |
| Path                              | Pond, lake             |
| Bridge                            | Sand                   |
| Railway                           | Land Slide             |



X, Y : Bessel UTM Zone 48  
 M : Mean sea level (MSL)

Index contour : 10 meter  
 Main contour : 2 meter  
 Supplemental contour : 1 meter  
 Aerial photography : 1:20,000  
 May 1994

**MINISTRY OF PUBLIC WORKS**  
 DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT  
 CALANG ORODANE RIVER BASIN DEVELOPMENT PROJECT

**THE STUDY ON COMPREHENSIVE RIVER WATER  
 MANAGEMENT PLAN IN JABOTABEK**

Drawing No : **TOPOGRAPHIC MAP**

|            |           |             |           |                     |      |
|------------|-----------|-------------|-----------|---------------------|------|
| Checked by |           | Approved by |           | Field Survey No. 08 |      |
| Name       | Signature | Name        | Signature | Date                | Date |
|            |           |             |           |                     |      |

JICA JAPAN INTERNATIONAL COOPERATION AGENCY      P.T. ANAS DELTASATIYA



SCALE 1 : 5 000



LEGEND

- △ Existing Triangulation Point
- ⊙ GPS Point
- ⊕ Existing Bench Mark
- Spot height
- ⚡ River
- ▭ Concrete Building (more than 4 floor)
- House
- ⚑ Mosque
- ⛪ Church
- ⚪ Hospital
- ⚪ School
- ⚪ Government Office
- Road
- - - Path
- ≡ Bridge
- ⚡ Railway
- ⚪ Station
- ⚡ Electric Power Line
- ▨ Cutting and Embankment
- ⚪ Swamp
- ⚪ Moslem graves
- ⚪ Christian cemetery
- ⚪ Chinese graves
- ⚪ Paddy field
- ⚪ Boundary of Vegetation
- ⚪ Field
- ⚪ Forest
- ⚪ Grass
- ⚪ Water hole
- ⚪ Pond, lake
- ⚪ Sand
- ⚪ Landslide

|          |    |    |          |    |    |    |    |    |    |          |    |    |    |    |    |    |   |   |   |   |
|----------|----|----|----------|----|----|----|----|----|----|----------|----|----|----|----|----|----|---|---|---|---|
| 1208-434 |    |    |          |    |    |    |    |    |    | 1208-444 |    |    |    |    |    |    |   |   |   |   |
| 18       | 19 | 20 | 1208-434 |    |    |    |    |    |    |          |    |    | 16 | 17 | 18 | 19 |   |   |   |   |
| 23       | 24 | 25 | 21       | 22 | 23 | 24 | 25 | 21 | 22 | 23       | 24 | 21 | 22 | 23 | 24 |    |   |   |   |   |
| 5        | 6  | 5  | 1        | 2  | 3  | 4  | 5  | 6  | 7  | 8        | 9  | 10 | 11 | 12 | 13 | 14 |   |   |   |   |
| 8        | 9  | 12 | 8        | 7  | 6  | 5  | 4  | 3  | 2  | 1        | 2  | 3  | 4  | 5  | 6  | 7  | 8 | 9 |   |   |
| 13       | 14 | 15 | 11       | 12 | 13 | 14 | 15 | 11 | 12 | 13       | 14 | 11 | 12 | 13 | 14 |    |   |   |   |   |
| 18       | 19 | 20 | 18       | 17 | 16 | 15 | 14 | 13 | 12 | 11       | 10 | 9  | 8  | 7  | 6  | 5  | 4 | 3 | 2 | 1 |
| 23       | 24 | 25 | 21       | 22 | 23 | 24 | 25 | 21 | 22 | 23       | 24 | 21 | 22 | 23 | 24 |    |   |   |   |   |
| 1208-432 |    |    |          |    |    |    |    |    |    | 1208-442 |    |    |    |    |    |    |   |   |   |   |

X, Y : Base of UTM Zone 48  
N : Mean sea level (TTG)

Index contour : 10 meter  
Main contour : 2 meter  
Supplemental contour : 1 meter  
Aerial photography : 1 : 20 000  
May 1994

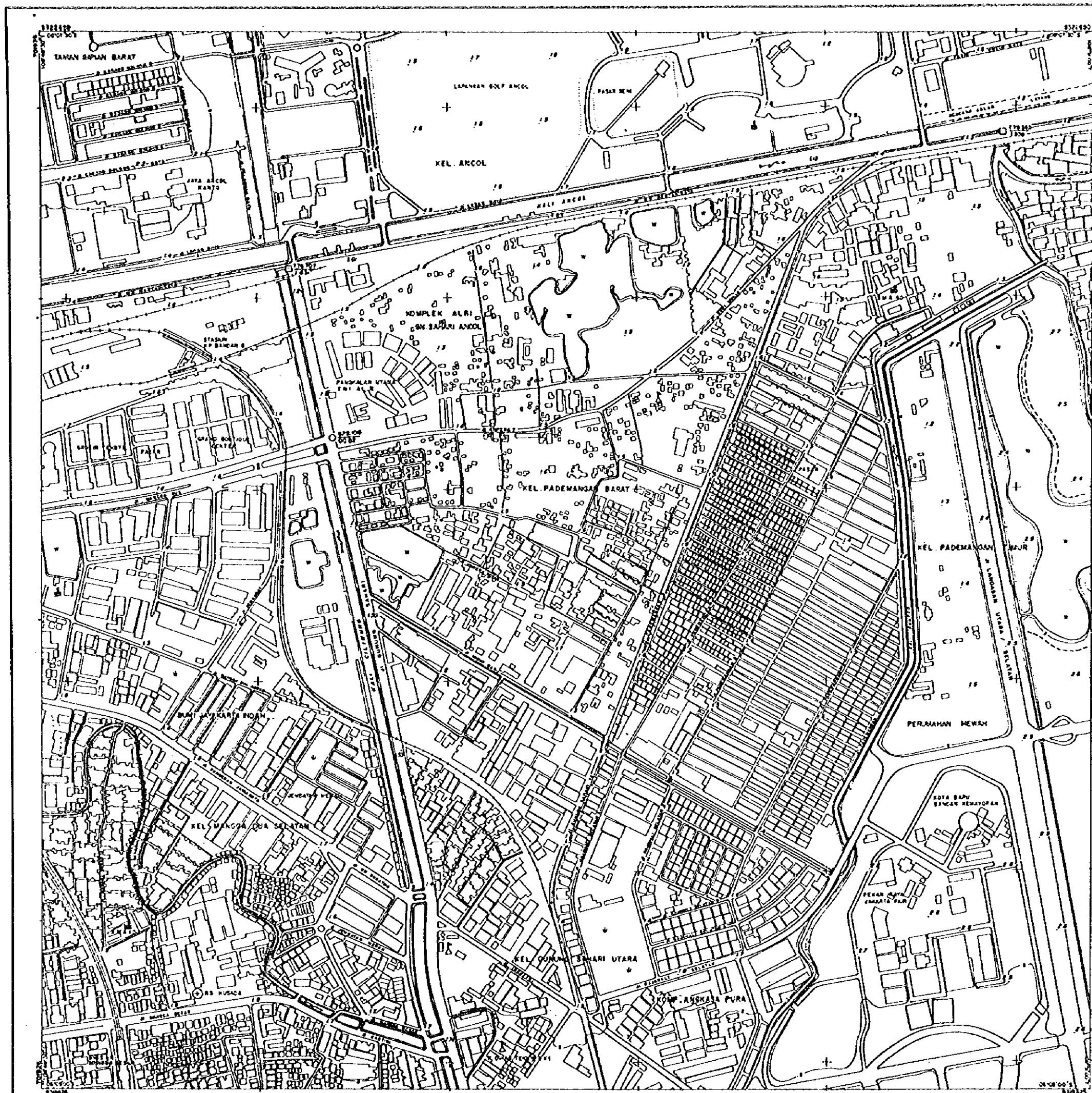
**MINISTRY OF PUBLIC WORKS**  
DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT  
CULUNG OSADANE RIVER BASIN DEVELOPMENT PROJECT  
THE STUDY ON COMPREHENSIVE RIVER WATER  
MANAGEMENT PLAN IN JABOTABEK

Drawing No : **TOPOGRAPHIC MAP**

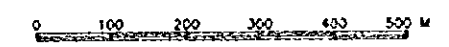
|           |            |             |      |
|-----------|------------|-------------|------|
| Name      | Checked by | Approved by | Date |
| Signature | Signature  | Signature   | Date |
| Date      | Date       | Date        | Date |

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
PT. ARAS DELTASATYA





SCALE 1 : 5000



LEGEND

- △ Existing Triangulation Point
- GPS Point
- Existing Bench Mark
- Spot height
- ~ River
- ▭ Concrete Building (more than 4m high)
- ▭ House
- ⊕ Mosque
- ⊕ Church
- ⊕ Hospital
- ⊕ School
- ⊕ Government Office
- Road
- - - Path
- Bridge
- ⋯ Railway
- ⊕ Station
- Electric Power Line
- ▭ Cutting and Embankment
- ▭ Swamp
- ⊕ Moslem graves
- ⊕ Christian cemetery
- ⊕ Chinese graves
- ▭ Paddy field
- ▭ Boundary of vegetation
- ∇ Field
- ▭ forest
- ▭ Grass
- Water hole
- Pond, lake
- ▭ Sand
- ▭ Land Slide

|              |              |
|--------------|--------------|
| 1208-434     | 1208-444     |
| 18 19 20     | 18 17 16 15  |
| 21 22 23 24  | 21 22 23 24  |
| 25 26 27 28  | 25 26 27 28  |
| 29 30 31 32  | 29 30 31 32  |
| 33 34 35 36  | 33 34 35 36  |
| 37 38 39 40  | 37 38 39 40  |
| 41 42 43 44  | 41 42 43 44  |
| 45 46 47 48  | 45 46 47 48  |
| 49 50 51 52  | 49 50 51 52  |
| 53 54 55 56  | 53 54 55 56  |
| 57 58 59 60  | 57 58 59 60  |
| 61 62 63 64  | 61 62 63 64  |
| 65 66 67 68  | 65 66 67 68  |
| 69 70 71 72  | 69 70 71 72  |
| 73 74 75 76  | 73 74 75 76  |
| 77 78 79 80  | 77 78 79 80  |
| 81 82 83 84  | 81 82 83 84  |
| 85 86 87 88  | 85 86 87 88  |
| 89 90 91 92  | 89 90 91 92  |
| 93 94 95 96  | 93 94 95 96  |
| 97 98 99 100 | 97 98 99 100 |
| 1208-432     | 1208-442     |

X, Y : Basiss UTM Zone 48  
 H : Mean sea level (TTG1)

Tree contour : 10 meter  
 Main contour : 2 meter  
 Supplement contour : 1 meter  
 Aer. of photography : 1:20,000  
 May 1994

**MINISTRY OF PUBLIC WORKS**  
 DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT  
 CILIMUNG CIGADANE RIVER BASIN DEVELOPMENT PROJECT  
 THE STUDY ON COMPREHENSIVE RIVER WATER  
 MANAGEMENT PLAN IN JABOTABEK

Drawing Title: **TOPOGRAPHIC MAP**

|            |           |             |           |                       |
|------------|-----------|-------------|-----------|-----------------------|
| Checked by |           | Approved by |           | Field Survey 90/00    |
| Name       | Signature | Name        | Signature | Date 11/10/94         |
| Date       | 31/1/94   | Date        | 31/1/94   | Date Drawing 30/01/94 |

JICA JAPAN INTERNATIONAL COOPERATION AGENCY  
 PE. ARNAS DELTASATYA



SCALE 1 : 5 000



LEGEND

- △ Existing Triangulation Point
- GPS Point
- Existing Bench Mark
- Spot height
- ~ River
- ▭ Concrete Building (non-Bank/Bank)
- ▭ House
- ▭ Mosque
- ▭ Church
- Hospital
- ▭ School
- ▭ Government Office
- ~ Pond
- ~ Path
- ~ Bridge
- ~ Railway
- Station
- ~ Electric Power Line
- ▭ Cutting and Embankment
- ~ Swamp
- ~ Muslim graves
- ~ Christian cemetery
- ~ Chinese graves
- ▭ Paddy field
- ~ Boundary of Vegetation
- ~ Field
- Forest
- ~ Grass
- ~ Water hole
- ~ Pond, lake
- ~ Sand
- ~ Land Slide

|          |          |          |          |          |          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 1228-434 | 1228-435 | 1228-436 | 1228-437 | 1228-438 | 1228-439 | 1228-440 | 1228-441 | 1228-442 | 1228-443 | 1228-444 |
| 18       | 19       | 20       | 21       | 22       | 23       | 24       | 25       | 26       | 27       | 28       |
| 23       | 24       | 25       | 26       | 27       | 28       | 29       | 30       | 31       | 32       | 33       |
| 3        | 4        | 5        | 6        | 7        | 8        | 9        | 10       | 11       | 12       | 13       |
| 8        | 9        | 10       | 11       | 12       | 13       | 14       | 15       | 16       | 17       | 18       |
| 13       | 14       | 15       | 16       | 17       | 18       | 19       | 20       | 21       | 22       | 23       |
| 18       | 19       | 20       | 21       | 22       | 23       | 24       | 25       | 26       | 27       | 28       |
| 23       | 24       | 25       | 26       | 27       | 28       | 29       | 30       | 31       | 32       | 33       |
| 1228-432 | 1228-433 | 1228-434 | 1228-435 | 1228-436 | 1228-437 | 1228-438 | 1228-439 | 1228-440 | 1228-441 | 1228-442 |

X, Y - Cassini UTM Zone 48  
H - Mean sea level (TGT)

Index contour : 10 meter  
Main contour : 2 meter  
Supplemental contour : 1 meter  
Aerial photography : 1 : 20 000  
May 1994

**MINISTRY OF PUBLIC WORKS**  
DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT  
CILIKUNG CIGADANE RIVER BASIN DEVELOPMENT PROJECT

THE STUDY ON COMPREHENSIVE RIVER WATER MANAGEMENT PLAN IN JABOTABEK

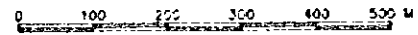
Drawing Title: **TOPOGRAPHIC MAP**

|   |           |             |           |                       |
|---|-----------|-------------|-----------|-----------------------|
| Created by                                  |           | Approved by |           | Field Survey '86-88   |
| Name  | Signature | Name        | Signature | April '84 '85 '86     |
| Signature                                   | Signature | Signature   | Signature | April '86 '88 '89     |
| Date  | Date      | Date        | Date      | Field Survey '86-88   |
| JICA JAPAN INTERNATIONAL COOPERATION AGENCY |           |             |           | Sheet No. 1228-441 DS |





SCALE 1 : 5000



LEGEND

- △ Existing Triangulation Point
- GPS Point
- Existing Bench Mark
- Spot Height
- ~ River
- ▭ Concrete Building (more than 4m high)
- ▭ House
- ⊕ Mosque
- ⊕ Church
- ⊕ Hospital
- ⊕ School
- ⊕ Government Office
- ▭ Pond
- Path
- ≡ Bridge
- ≡≡ Railway
- ⊕ Station
- Electric Power Line
- ▭ Cutting and Embankment
- ▭ Swamp
- ⊕ Muslim grave
- ⊕ Christian cemetery
- ⊕ Chinese grave
- ⊕ Paddy field
- ▭ Boundary of Vegetation
- ∇ Field
- Forest
- ∇ Grass
- Water hole
- Pond, lake
- ▭ Sand
- ▭ Land Slide

|          |          |    |    |    |    |    |    |    |    |    |          |    |    |    |    |    |    |    |    |    |    |    |
|----------|----------|----|----|----|----|----|----|----|----|----|----------|----|----|----|----|----|----|----|----|----|----|----|
|          | 1208-432 |    |    |    |    |    |    |    |    |    | 1208-442 |    |    |    |    |    |    |    |    |    |    |    |
| 1208-434 | 18       | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28       | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 1208-436 | 3        | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13       | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 |
| 1208-438 | 8        | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18       | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 1208-440 | 13       | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23       | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 1208-442 | 18       | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28       | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 1208-444 | 23       | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33       | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 |
| 1208-446 | 28       | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38       | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 |
| 1208-448 | 33       | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43       | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 |
| 1208-450 | 38       | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48       | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 |
| 1208-452 | 43       | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53       | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 |

X, Y : UTM Zone 48  
 M : Mean Sea Level (MSL)

Index contour : 10 meter  
 Main contour : 2 meter  
 Supplemental contour : 1 meter  
 Aerial photography : 1 : 20 000  
 May 1998

**MINISTRY OF PUBLIC WORKS**  
 DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT  
 CILIBUNG DASARIE RIVER BASIN DEVELOPMENT PROJECT  
 THE STUDY ON COMPREHENSIVE RIVER WATER MANAGEMENT PLAN IN JABOTABEK

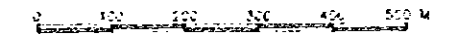
Drawn by: **TOPOGRAPHIC MAP**

|                        |                        |                    |
|------------------------|------------------------|--------------------|
| Checked by:            | Approved by:           | Field Survey 28.08 |
| Name: Sumarto          | Name: [Signature]      | Date: 14.09.18     |
| Signature: [Signature] | Signature: [Signature] | Date: 25.10        |
| Date: 20.11.98         | Date: 22.11.98         | Date: 26.11.98     |

**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
 PE. ARAB SULYATATTA

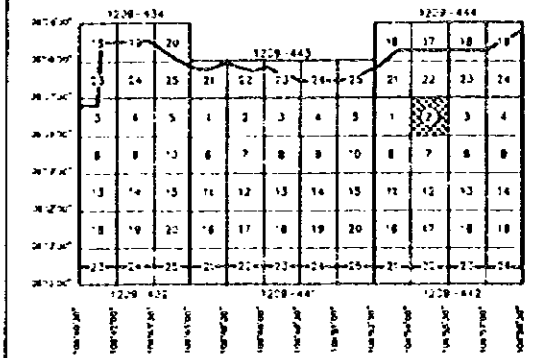


SCALE 1:5000



LEGEND

- ▲ Existing Triangulation Point
- GPS Point
- ⊙ Existing Bench Mark
- Spot Height
- ▬ River
- ▭ Concrete Bunking (more than 4m high)
- House
- ⊕ Mosque
- ⊕ Church
- ⊕ Hospital
- ⊕ School
- ⊕ Government Office
- ▬ Road
- ▬ Path
- ▬ Bridge
- ▬ Railway
- ⊕ Station
- Electric Power Line
- ▬ Cutting and Embankment
- ▭ Swamp
- ⊕ Moslem grave
- ⊕ Christian cemetery
- ⊕ Chinese grave
- ⊕ Paddy field
- ▬ Boundary of Vegetation
- ⊕ Field
- ⊕ Forest
- ⊕ Grass
- Water hole
- Pond, lake
- ⊕ Sand
- ⊕ Landslide



K.T. : Basal UTM Zone 48  
 M : Mean sea level (T.G.)

Water contour : 10 meter  
 Main contour : 2 meter  
 Supplemental contour : 1 meter  
 Aerial photography : 1:20,000 May 1994

**MINISTRY OF PUBLIC WORKS**  
 DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT  
 CILIMUNG OSADANE RIVER BASIN DEVELOPMENT PROJECT

THE STUDY ON COMPREHENSIVE RIVER WATER MANAGEMENT PLAN IN JABOTABEK

Drawing Title: **TOPOGRAPHIC MAP**

|            |             |                      |
|------------|-------------|----------------------|
| Checked by | Approved by | Date Survey '92 09   |
| Sigitas    | I. Sigitas  | Field '92 10         |
| 20-1-94    | 20-1-94     | Field Drawing '92 09 |

**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY  
**PE** PE. ATLAS DELTASATIA