

| | | | | | | | |
|-------------|--------------------|-----------------------------|--------------------|------------|--|-----------|--|
| CONSULTANTS | | REPUBLIC OF THE PHILIPPINES | | SCALE | | DRWG. NO. | |
| DATE | SIGNATURE | PROJECT ENGINEER | PROJECT MANAGER | HORIZONTAL | | 6/8 | |
| 8-10-88 | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | 1" = 100' | | | |
| 8-11-88 | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | VERTICAL | | | |
| | | | | 1" = 10' | | | |



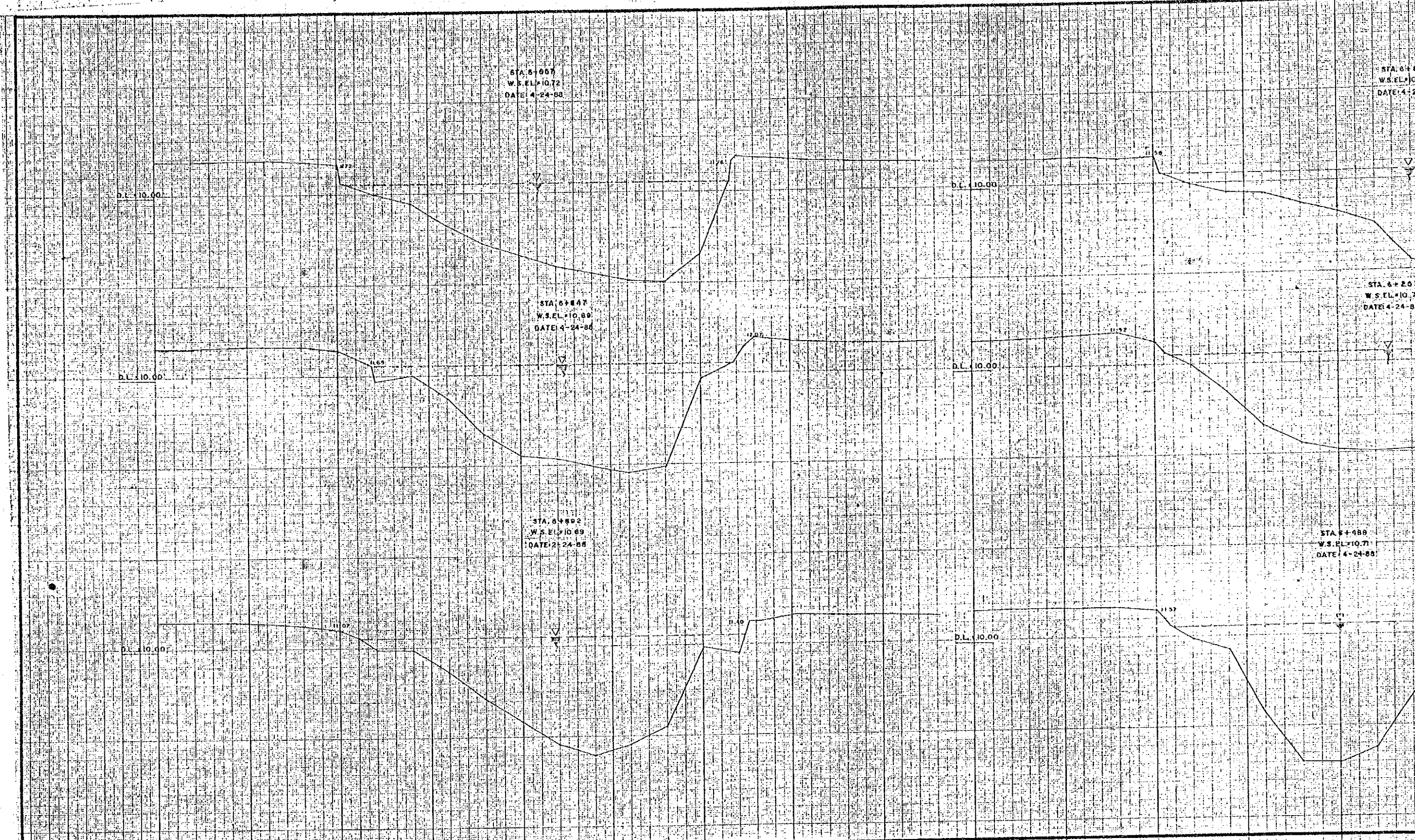
DEPARTMENT OF
PUBLICWORKS AND HIGHWAYS

DATE: 8-10-88
SIGNATURE: *[Signature]*
MONITOR: *[Signature]*
ENGINEER: *[Signature]*

CROSS SECTION
HAPINDAN RIVER
STA 4+800 - STA 4+816

Masterpiece
Printed in Japan

Masterpiece
Printed in Japan
A-6-7



ACRE SURVEYING & DEVELOPMENT

| CONSULTANTS | | |
|-------------|--------------------|--|
| DATE | SIGNATURE | |
| 2-16-88 | <i>[Signature]</i> | |
| 3-14-88 | <i>[Signature]</i> | |

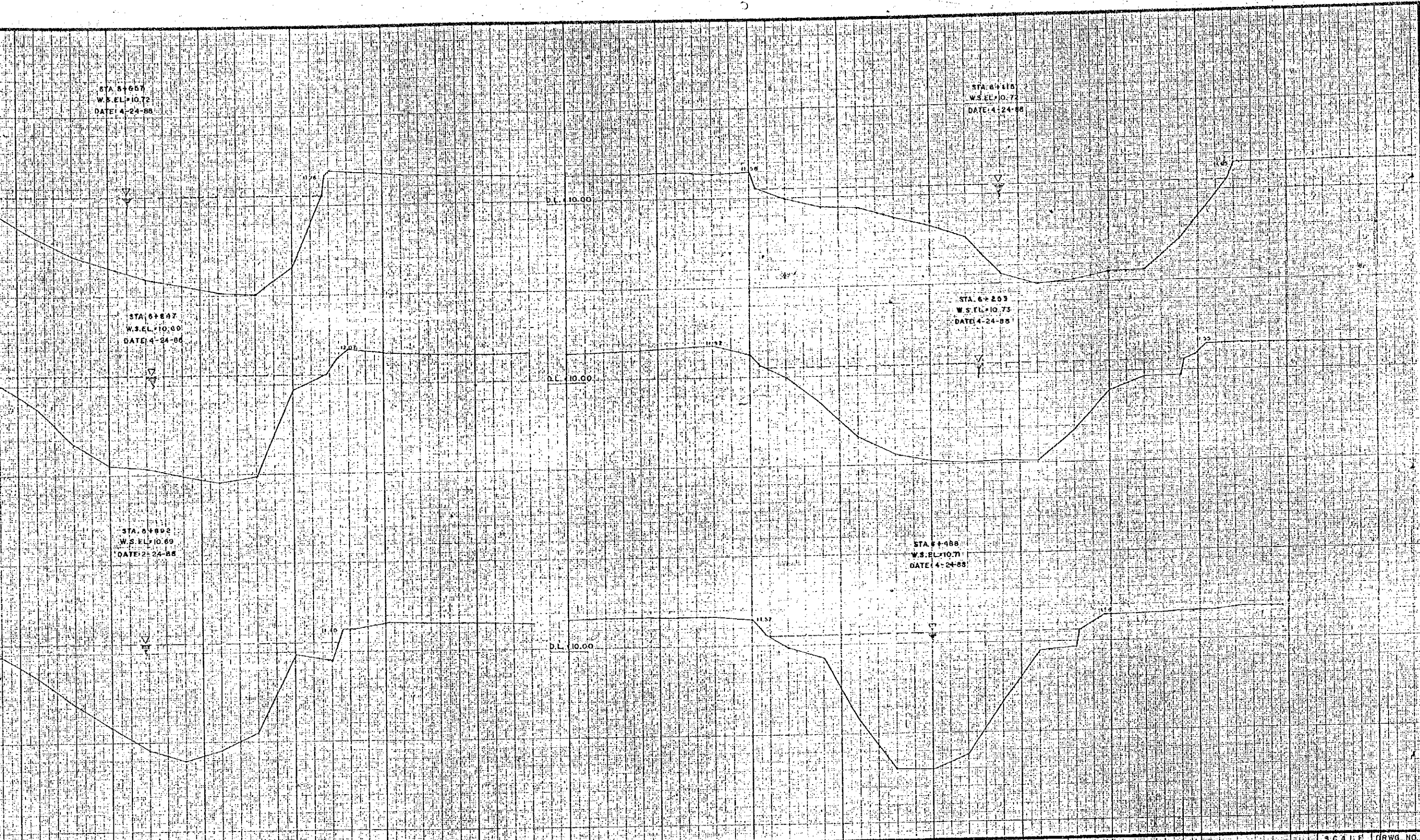


REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF
PUBLIC WORKS AND HIGHWAYS

| DATE | SIGNATURE |
|------|--------------------|
| | <i>[Signature]</i> |
| | <i>[Signature]</i> |

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Printed in Japan



STA. 6+657
W.S. EL. 10.72
DATE: 4-24-88

STA. 6+610
W.S. EL. 10.72
DATE: 4-24-88

STA. 6+647
W.S. EL. 10.69
DATE: 4-24-88

STA. 6+203
W.S. EL. 10.73
DATE: 4-24-88

STA. 6+892
W.S. EL. 10.69
DATE: 2-24-88

STA. 6+486
W.S. EL. 10.71
DATE: 4-24-88

D.L. 10.00

D.L. 10.00

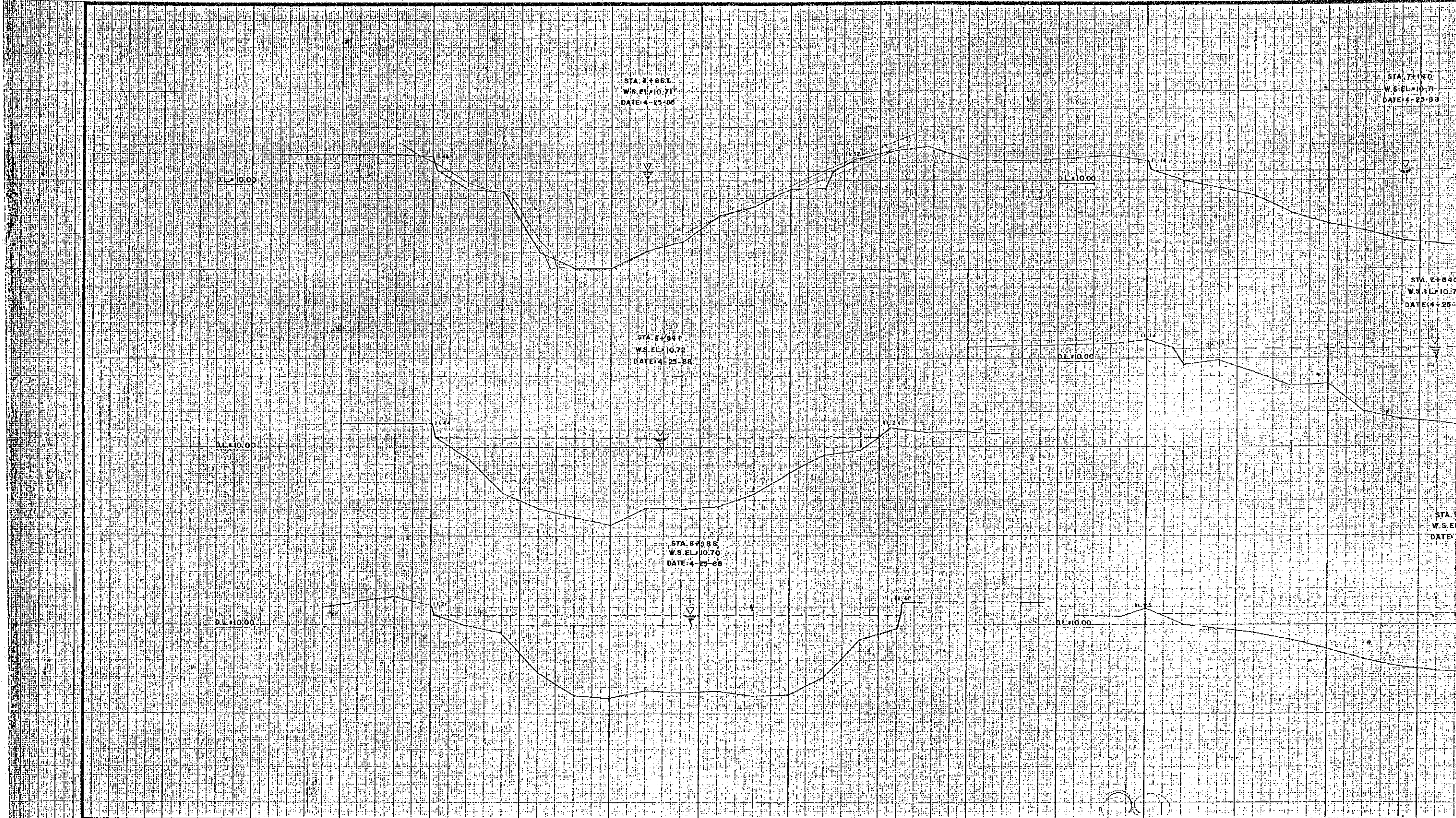
D.L. 10.00

| | | | | | | | |
|------|--|---|--|---------------------|--|-------------------------|--|
| DATE | | SIGNATURE | | SCALE | | DRWG. NO. | |
| 1988 | | NONITO P. ESANO PROJECT ENGINEER | | HORIZONTAL 1:500 | | 678 | |
| 1988 | | EDGARDO MANALO PROJECT MANAGER | | VERTICAL 1:100 | | | |
| 1988 | | | | GROSS SECTION | | | |
| | | DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS | | HAPINDAY RIVER | | STA. 6+607 - STA. 6+480 | |

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Printed in Japan

Masterpiece
Printed in Japan

A-6-B



**ACRE SURVEYING
& DEVELOPMENT**

| CONSULTANTS | | |
|-----------------|---------|--------------------|
| | DATE | SIGNATURE |
| SURVEYED BY | 8-14-88 | <i>[Signature]</i> |
| CHECKED BY | 8-14-88 | <i>[Signature]</i> |
| PROJECT MANAGER | 8-14-88 | <i>[Signature]</i> |

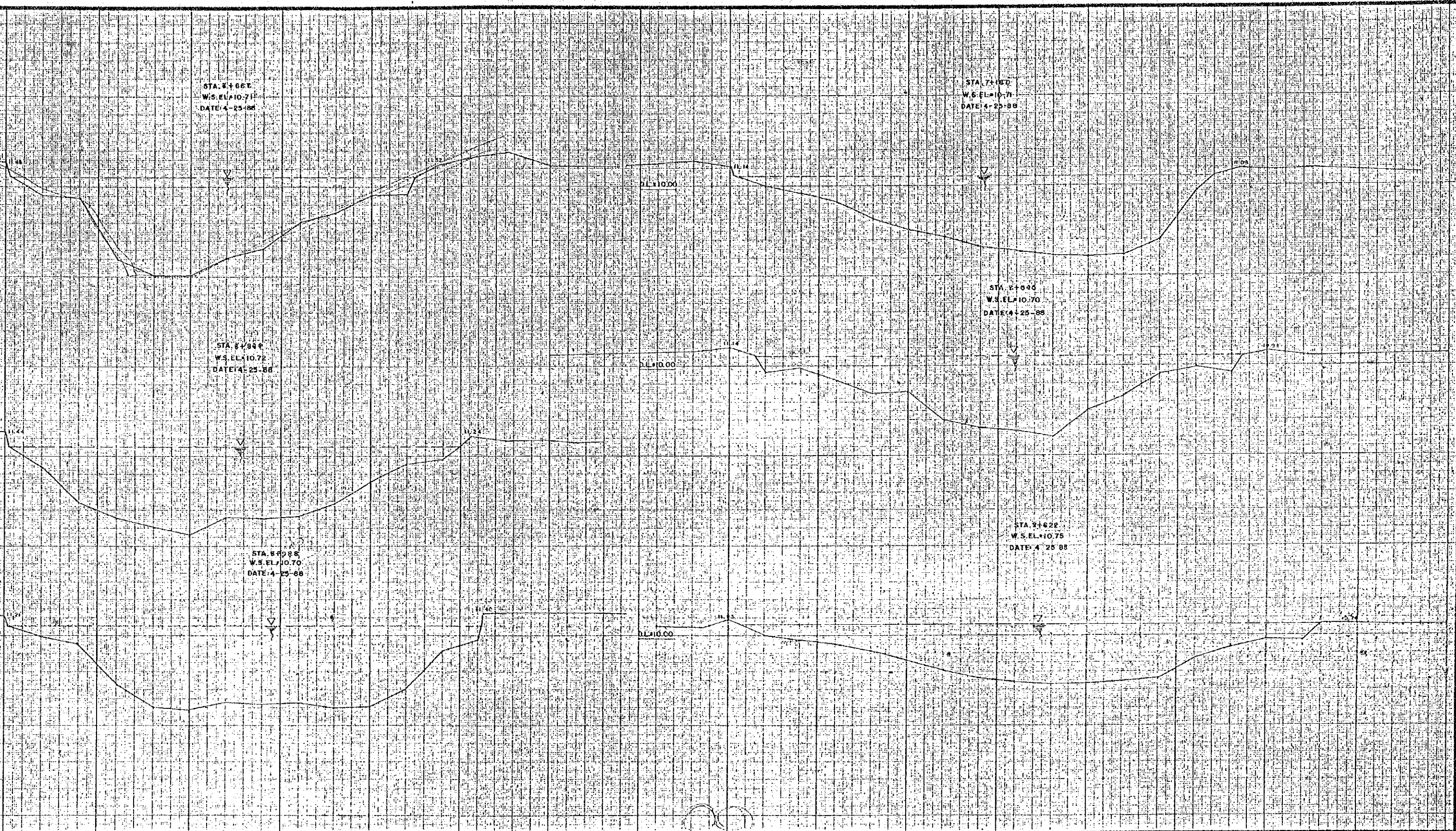


REPUBLIC OF THE PHILIPPINES
**DEPARTMENT OF
PUBLICWORKS AND HIGHWAYS**

| | DATE | SIGNATURE |
|------------------|------|--------------------|
| PROJECT ENGINEER | | <i>[Signature]</i> |
| PROJECT MANAGER | | <i>[Signature]</i> |

Masterpiece
Limited Liability Corporation

Masterpiece
Limited Liability Corporation



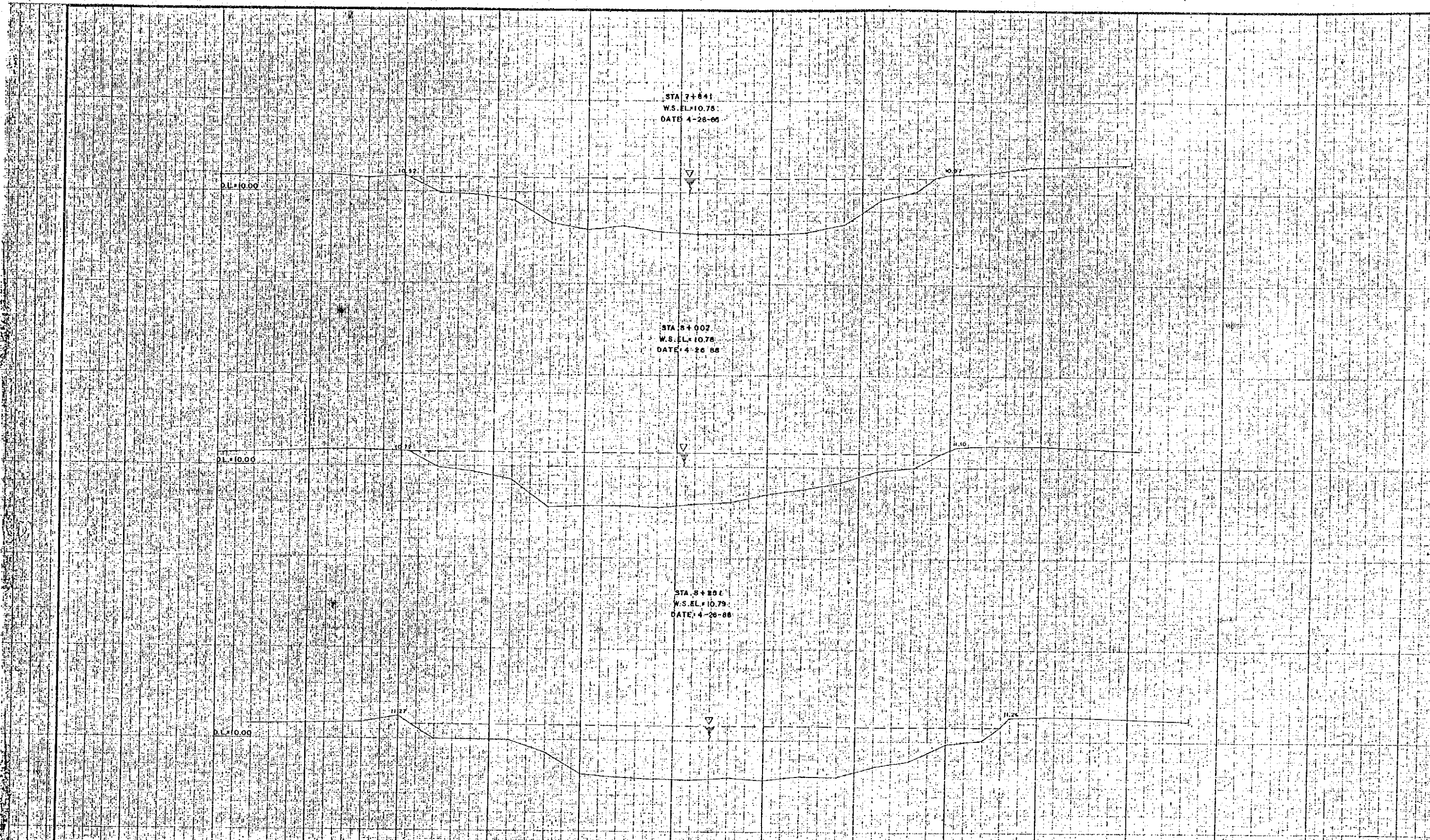
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|--|--|-------------------------------------|--|----------------------------|--|--|--|---|--|---|--|
| CONSULTANTS | | REPUBLIC OF THE PHILIPPINES | | DATE | | SIGNATURE | | SCALE | | DRWG. NO. | |
| DEPARTMENT OF PUBLICWORKS AND HIGHWAYS | | PROJECT ENGINEER PROJECT MANAGER | | DATE 2/10/88 8/14/88 | | SIGNATURE MONTE P. PANDAY ENGR. REG. NO. 10110 | | HORIZONTAL 1"=100' VERTICAL 1"=10' | | CROSS SECTION NAPINDAN RIVER STA. 8+682 - STA. 9+220 7/8 | |

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Printed in Japan

A-6-9

Masterpiece
Printed in Japan



STA 7+841
 W.S. EL. 10.75
 DATE 4-26-88

STA 8+002
 W.S. EL. 10.78
 DATE 4-26-88

STA 8+204
 W.S. EL. 10.79
 DATE 4-26-88



ACRE SURVEYING
 & DEVELOPMENT

| CONSULTANTS | | |
|-----------------|------------|--------------------|
| | DATE | SIGNATURE |
| SURVEYED BY | Jul 26, 88 | <i>[Signature]</i> |
| CHECKED BY | 8-6-88 | <i>[Signature]</i> |
| PROJECT MANAGER | 8-14-88 | <i>[Signature]</i> |



REPUBLIC OF THE PHILIPPINES
 DEPARTMENT OF
 PUBLIC WORKS AND HIGHWAYS

| REPUBLIC OF THE PHILIPPINES | |
|-----------------------------|--------------------|
| | DATE - SIGNATURE |
| PROJECT ENGINEER | <i>[Signature]</i> |
| PROJECT MANAGER | <i>[Signature]</i> |

Masterpiece
 Printed in 1988

Masterpiece
 Printed in 1988

STA 7+841
 W.S. EL. 10.78
 DATE 4-26-88

STA 8+007
 W.S. EL. 10.78
 DATE 4-26-88

STA 8+251
 W.S. EL. 10.79
 DATE 4-26-88

| | | | | | | | | | | | |
|-------------|--------------------|-----------------------------|-----------------|------|--------------------|-----------------|--|----------------|-------|-----------------------|--|
| CONSULTANTS | | REPUBLIC OF THE PHILIPPINES | | DATE | | SIGNATURE | | SCALE | | DRWG NO. | |
| DATE | SIGNATURE | PROJECT ENGINEER | PROJECT MANAGER | DATE | SIGNATURE | NONITO F. BALDO | | HORIZONTAL | 1:800 | 8/8 | |
| 8-10-88 | <i>[Signature]</i> | | | | <i>[Signature]</i> | ETIENNE AWALO | | VERTICAL | 1:100 | | |
| 8-14-89 | <i>[Signature]</i> | | | | | | | CROSS SECTION | | | |
| | | | | | | | | NAPINDAN RIVER | | STA 7+841 - STA 8+251 | |

DEPARTMENT OF
 PUBLICWORKS AND HIGHWAYS

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Masterpiece
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A-6-10 Masterpiece
 Printed in Japan

A-7 MALABON-NAVOTAS RIVER

INDEX MAP (1 SHEET)

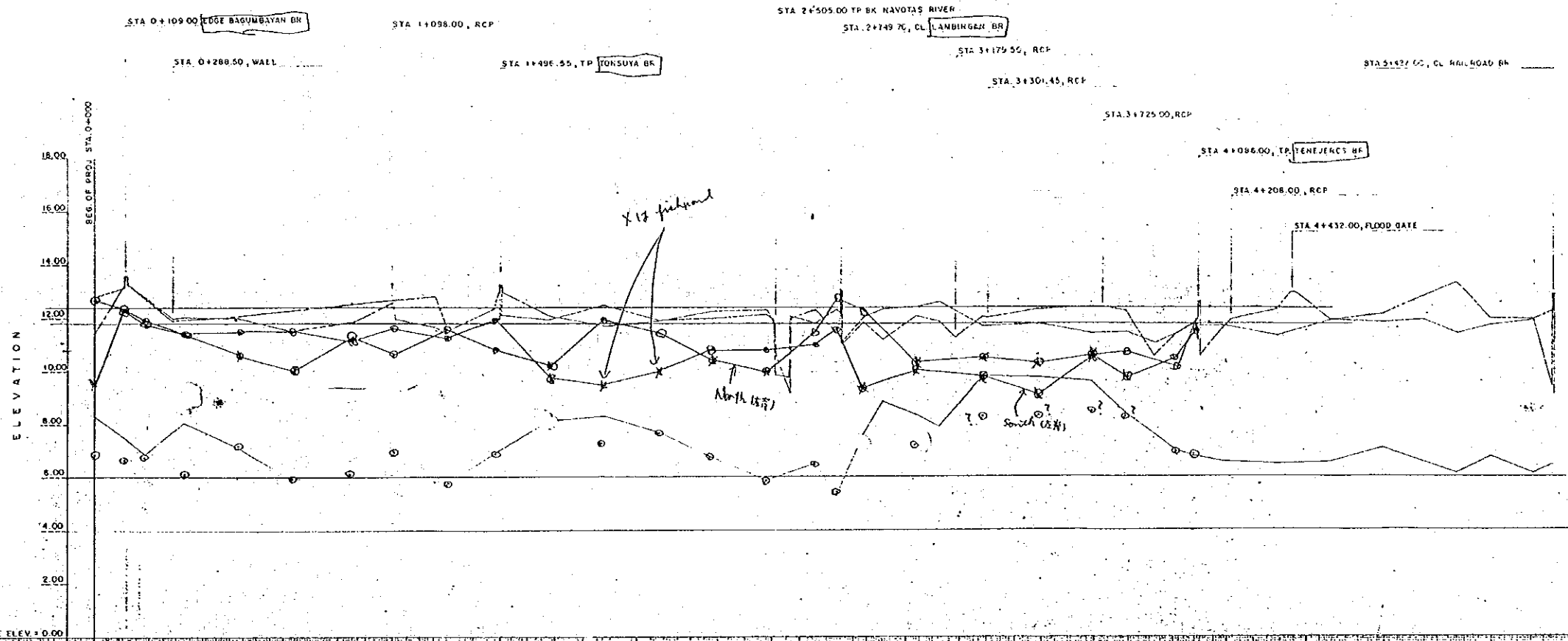
LONGITUDINAL PROFILE (2 SHEET)

CROSS SECTION (11 SHEET)



MUNDO, SAN MIGUEL, PANDACAN, STA CLARA

MALABON, NAVOTAS, ESTERO DE VITAS, DELA REINA



| STATION NO. | EXISTING ELEVATION | | PROPOSED ELEVATION | | DISTANCE | CUMULATIVE DISTANCE | RIVER BED | RIVER BED | HIGH WATER LEVEL | BANK LEVEL | RIVER BED GRADIENT |
|-------------|--------------------|------|--------------------|------|----------|---------------------|-----------|-----------|------------------|------------|--------------------|
| | RIGHT | LEFT | RIGHT | LEFT | | | | | | | |
| 0+000 | | | | | | | | | | | |
| 0+100 | | | | | | | | | | | |
| 0+200 | | | | | | | | | | | |
| 0+300 | | | | | | | | | | | |
| 0+400 | | | | | | | | | | | |
| 0+500 | | | | | | | | | | | |
| 0+600 | | | | | | | | | | | |
| 0+700 | | | | | | | | | | | |
| 0+800 | | | | | | | | | | | |
| 0+900 | | | | | | | | | | | |
| 1+000 | | | | | | | | | | | |
| 1+100 | | | | | | | | | | | |
| 1+200 | | | | | | | | | | | |
| 1+300 | | | | | | | | | | | |
| 1+400 | | | | | | | | | | | |
| 1+500 | | | | | | | | | | | |
| 1+600 | | | | | | | | | | | |
| 1+700 | | | | | | | | | | | |
| 1+800 | | | | | | | | | | | |
| 1+900 | | | | | | | | | | | |
| 2+000 | | | | | | | | | | | |
| 2+100 | | | | | | | | | | | |
| 2+200 | | | | | | | | | | | |
| 2+300 | | | | | | | | | | | |
| 2+400 | | | | | | | | | | | |
| 2+500 | | | | | | | | | | | |
| 2+600 | | | | | | | | | | | |
| 2+700 | | | | | | | | | | | |
| 2+800 | | | | | | | | | | | |
| 2+900 | | | | | | | | | | | |
| 3+000 | | | | | | | | | | | |
| 3+100 | | | | | | | | | | | |
| 3+200 | | | | | | | | | | | |
| 3+300 | | | | | | | | | | | |
| 3+400 | | | | | | | | | | | |
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| 3+700 | | | | | | | | | | | |
| 3+800 | | | | | | | | | | | |
| 3+900 | | | | | | | | | | | |
| 4+000 | | | | | | | | | | | |
| 4+100 | | | | | | | | | | | |
| 4+200 | | | | | | | | | | | |
| 4+300 | | | | | | | | | | | |
| 4+400 | | | | | | | | | | | |
| 4+500 | | | | | | | | | | | |
| 4+600 | | | | | | | | | | | |
| 4+700 | | | | | | | | | | | |
| 4+800 | | | | | | | | | | | |
| 4+900 | | | | | | | | | | | |
| 5+000 | | | | | | | | | | | |

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|---------------------------------------|-----------------|------|-----------------------------|-----------|
| ACRE SURVEYING & DEVELOPMENT | CONSULTANTS | | REPUBLIC OF THE PHILIPPINES | |
| | SURVEYED BY | DATE | SIGNATURE | |
| | CHECKED BY | DATE | SIGNATURE | |
| | PROJECT MANAGER | DATE | SIGNATURE | |
| DEPARTMENT OF PUBLIC WORKS & HIGHWAYS | | | PROJECT ENGINEER | SIGNATURE |
| | | | PROJECT MANAGER | SIGNATURE |