REPUBLIC OF THE PHILIPPINES

# MINISTRY OF PUBLIC HIGHWAYS

MANILA

BEST AVAILABLE DOCUMENT

# BICOL RIVER BASIN DEVELOPMENT PROJECTS SECONDARY & FEEDER ROADS

CAMARINES SUR

PACKAGE II

# MONTHLY CONSTRUCTION REPORT

RECEIVED
NOV 13 1980

SEPTEMBER, 1980

INTEGRATED PHILCONSULT INC.
CONSULTING ENGINEERS
PHILIPPINES

BEST AVAILABLE DOCUMENT

TABLE OF CONTENTS

MINALABAC-ANTIPOLO-HUBO ROAD PROJECT
Sub-Project No. 4


Figure I, Location Plan (For 4 Projects)
Progress Report . . . . . 1 - 14
Weather Report . . . . . 15
Employment Generation Survey (SS3) . . . . . 16
Contractor's Staff (Annex "A") G. Reyes Const.Inc. 17 - 18
Employment Generation Survey (SS3) . . . . . 19
Contractor's Staff (Polytrade Const., Inc. . . . . 20 - 21
Contractor's List of Heavy Equipment . . . . . 22
Contractor's List of Laboratory Equipment (Annex "C")23 - 24
Schedule of Work (Annex "D")
Manpower of Schedule, Consultants' Staff for
Construction & Supervision (Annex "E")


PILI-MATAOROC ROAD PROJECT
Sub-Project No. 5


Progress Report . . . . . 1 - 25
Weather Report . . . . . 26
Employment Generation Survey (SS3) . . . . . 27
Contractor's Staff (Annex "A"). . . . . 28 - 29
Contractor's List of Heavy Equipment (Annex "B") . 30
Contractor's List of Laboratory Equipment
(Annex "C") . . . . . 31 - 32
Schedule of Work (Annex "D") . . . . . .
Manpower of Schedule, Consultants Staff for Construction
& Supervision (Annex "E")


PALISTINA-SAN ANTONIO-MINALABAC PROJECT
Sub-Project No. 6


Progress Report . . . . . 1- 6
Weather Report . . . . . 7
Employment Generation Survey (SS3) . . . . . 8
Contractor's Staff (Annex "A") . . . . . 9-10
Contractor's List of Heavy Equipment. . . . . 11
Contractor's List of Laboratory Equipment . . . . 12
Schedule of Work (Annex "D")
Manpower Schedule, Consultants Staff for Construction
& Supervision (Annex "E")


NAGA*CAROLINA ROAD PROJECT
Sub-Project No. 10


Progress Report . . . . . 1-3
Weather Report . . . . . 4
Employment Generation Survey (SS3) . . . . . 5
Contractor's Staff (Annex A) . . . . . 6-8
Contractor's List of Heavy Equipment (Annex B) 9
Contractor's List of Lab. Equipment (Annex C) . . 10
Schedule of Work (Annex D) . . . . . .
Manpower Schedule Consultants Staff for Construction &
Supervision (Annex"E")

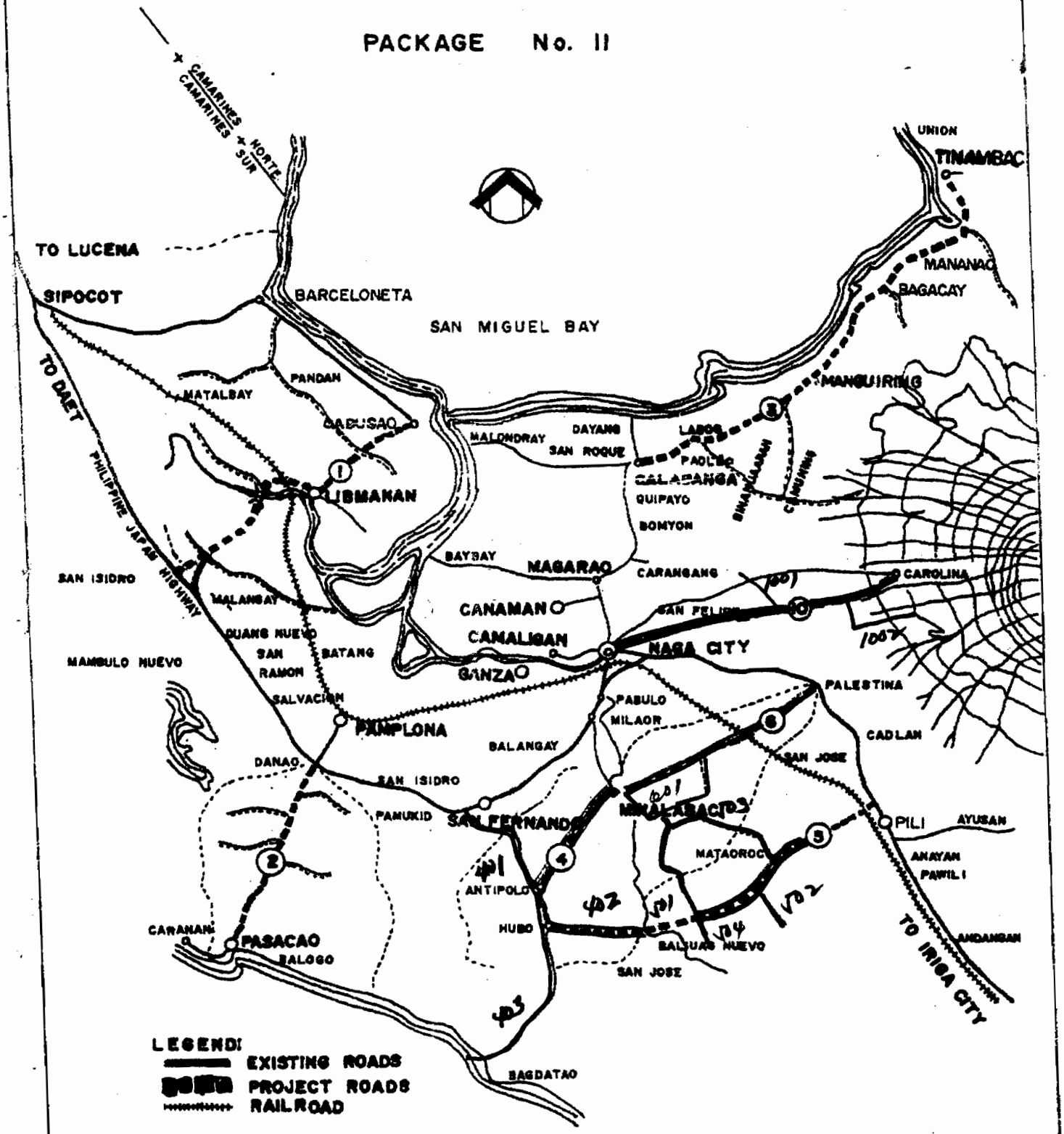

RECEIVED NOV 13 1980 NAGA

FIGURE 1

# BICOL RIVER BASIN DEVELOPMENT PROJECT

## SECONDARY AND FEEDER ROADS
## CAMARINES SUR

### PACKAGE No. II




LOCATION PLAN

Bicol River Basin Development Project

Secondary and Feeder Roads

PACKAGE II

MINALABAC-ANTIPOLO-HUBO ROAD PROJECT
Sub-Project No. 4

Monthly Construction Report
No. 20

Prepared by:

JUSTINIANO A. TORRALBA
Sr. Matls. Engineer/Res. Engr.

Submitted:

AMADO E. BANDELARIA
Deputy Project Manager

PROGRESS REPORT NO. 20
September, 1980

PROJECT: MINALABAC-ANTIPOLO-HUBO ROAD PROJECT
SUB-PROJECT NO. 4
Under Contract by: Polytrade Construction, Co., Inc.

1. GENERAL

This project consists of the construction of:

a. Minalabac-Antipolo-Hubo secondary road, from the beginning of the project at the municipality of Minalabac, Sta. 0+000, to the barrio of, Hubo, Minalabac, Camarines Sur, the end of the project at Sta. 8+838.94, or a length of 8.83894 kilometers.

b. Antipolo-Lupi-San Fernando feeder road no. 401, Sta 0 + 008 to Sta. 5 + 136.53, or a length of 5.12853.

c. Hubo-Baliwag Nuevo feeder road no. 402, Sta. 0 + 002.00 to Sta. 2 + 620.44 or a length of 2.61844 kms.

d. Hubo-Balgolatao feeder road no. 403 Sta. 0 + 000 to Sta. 7 + 661.74, or a length of 7.661 kms.

The total length of the project is 24.24765 kms.

2. WORK PROGRESS

Secondary Road

Preparation of base (Item 200) prior to asphalting is being done this month. Due to intermittent rains, however, progress is quite slow although deliveries of materials continue. Crashed materials are taken from the Cararayan quarry of the contractor.

Asphalt paving is expected to be started early next month when weather shows improvement.

Work on feeder roads is concentrated on Hubo-Bagolatao Road. spreading of Item 108 is now in progress and Bagolatao is almost reached with Item 108 pavement.

The feeder road at Antipolo-Lupi was subjected to intermittent rains and was still hardly passable in some sections. As soon as the road dries up, it will be reshaped and paved with Item 108 to make it in all-weather condition.

Work on San Fernando Timber Trestle was temporarily stopped as the contractor is still delivering their bridge materials at site, after the test pile and two other piles were driven. Six more concrete piles are to be delivered and the crane and Delmag hammer were withdrawn and to be sent back when all materials are ready.

The delivery of materials is expected to be completed next month and work on said bridge will resume also next month.

SURVEY WORKS:

Profile levelling, cross-sectionings and placing of blue-tops were undertaken by the survey team of the contractor (Polytrade) on the secondary portion of the Minalabac-Antipolo-Hubo Road. Added to this are continous checking of horizontal alignments follwed by placing of stationings per 25 m length.

With regards to the three feeder roads (401, 402, & 403), the sub-contractor also undertook the same survey works most especially on the Hubo-Bagolatao road section were there remain still some portions to be cut.

General Percentage of Work Accomplished - - - - - - - - 91.63995%

1. Minalabac-Antipolo-Hubo Secondary Road - - 57.03%
2. Fr. 401 -Antipolo-Lupi-San Fernando - - - 11.92%
3. Fr. 402 -Hubo-Baliwag Road - - - - - - - - - 8.2%
4. Fr. 403 - Hubo-Bagolatao - - - - - - - - - - 14.49

T o t a l - - - - - - - - - 91.63995%

Percent Time Elapsed - - - - - - - - - - - - - 77.9%

Note: Above percentage of work accomplished and time elapsed were based on the revised Bar Schedule with tentative expiry date of March 15, 1981.

A. Secondary Road

(1) Minalabac-Antipolo-Hubo Road, Sta. 0+000 to Sta. 8+838.94

Subgrade - - - - - - - - - - - - - 8.830 kms.

Subbase - - - - - - - - - - - - - 7.20 kms.

Base Course - - - - - - - - - - 3.08 kms.

Pavement - - - - - - - - - - - - - 1.40 kms.

Accomplished to date - - - - - 92.38%

B. Feeder Roads

(1) Antipolo-Lupi-San Fernando (FR 401)
Sta. 0 + 000 to Sta. 5 + 136.53

Subgrade - - - - - - - - - - - - - - - 5.118 kms.

Subbase - - - - - - - - - - - - - - - 3.881 kms.

Accomplished to date - - - - - - - - 85.00%

(2) Hubo-Baliwag (Fr. 402), Sta. 0 + 000 to Sta. 2 + 620.44

Subgrade - - - - - - - - - - - - - - - 2.604 kms.

Subbase - - - - - - - - - - - - - - - .861 kms.

Accomplished to date - - - - - - - - 87.31%

(3) Hubo-Bagolatao Road (Fr. 403), Sta. 0 + 000 to Sta. 7+661.74

Subgrade - - - - - - - - - - - - - - - 7.648 kms.

Subbase - - - - - - - - - - - - - - - 4.235 kms.

Accomplished to date - - - - - - - - 84.53%

SECONDARY ROADS (Accomplished during the month)

Item 107 - Common Borrow Material
Sta. 0 + 300 - Sta. 0 + 790

Item 108 - Subbase Material

Activities on this Item for the month were purely corrections on the following stations:

Sta. 1 + 400 - Sta. 2 + 200

Sta. 5 + 800 - Sta. 6 + 800

Item 200 - Gravel Base Course

Crushing and hauling of (Item 200), base course from Sta. 2 + 700 to Sta. 2 + 925.

Item 302 - Medium Curing-Cut back Asphalt, Grade MC-1 for Bit. Prime Coat.

Delivery to the project - - - - 31 Metric Tons

Used for 1.5 kms. - - - - - - - - 8.7 " "

Available for use - - - - - - - - 22.3 metric tons

(No additional for this month).

Item 314-3 85-100 penetration asphalt cement for BST (Hot Asphalt Type)

First delivery to the project - - 17.4 metric tons

Used for 1.5 kms. - - - - - - - - - 17.4 metric tons

2nd delivery to the project - - - 10.4 metric tons

Item 405-A - Concrete Structures

Bridges:

Balogo bridge - completed including approaches, and opened to traffic.

Mat[illegible] - Complete including approaches, and also opened for traffic.

Box culvert

single barrel - Sta. 6 + 461.30 - completed 1 -2.40 x 1.80

Double barrel - Sta. 6 + 923.80- completed 2 - 1.80 x 2.10

Item 413 - RCP/Head walls

Sta. 0 + [illegible] - 36"Ø - 8 pcs. installed while from Sta. 0 + 975 to Sta. [illegible] 936 (End of the secondary road), all scheduled RCP lines in [illegible] additionals have been completely installed with constructed headwalls.

FEEDER ROADS

#401 - Antipolo-San Fernando Road

Pile driving of precast piles for the Timber Trestle Bridge.

# 402 - Hubo Baliwag Road

Stockpiling and hauling of subbase from sta. 0 + 000 - Sta. 0 + 500 full width.

#403 - Hubo-Bagolatao Road

Stockpiling and hauling of (108) subbase on the following stations:

Sta. 0 + 000 - Sta. 1 + 500

Sta. 7 + 050 - Sta. 7 + 550

NOTE:

The contractor and the feeder sub-contractor made the necessary maintenance particularly at feeder #401 (Antipolo-Lupi-San Fernando Road) and the approaches of Balogo bridge located at the secondary roads.

## SUMMARY OF PHYSICAL ACCOMPLISHMENT AS OF SEPTEMBER 25, 1980

a. Roads

| | Secondary Road | Feeder Roads |
|---|---|---|
| Sub-grade | 8.830 kms. | 15.37 kms. |
| Subbase | 7.20 kms. | 9.31000 kms. |
| Base | 3.03 kms. | None |
| Pavement | 8,540 sq. m. (Asphalt Item 314) | None |

*The surfacing of feeder roads will be the the subbase itself, Item 108.

b. Bridges

| | |
|---|---|
| Sub-structure | Abutment on Reinforced concrete Pile Bent & Center pier on concrete Bearing Piles. |
| Super-structure | 37.60 lin.m. |

STATUS OF TESTS

As of September, 1980

Project: Sub-Project No. 4, Package II, Secondary, Minalabac Cam. Sur

| MATERIALS | Total Estimated quantities | No. of tests required | NO. OF TESTS On file | Balance |
|---|---|---|---|---|
| 105: Roadway & Drainage Excav. | 15,500 cu.m | D-52<br>C,G & P-11 | D-52<br>C,G, & P-11 | None |
| 106: Excav. for | 700 cu.m. | D - 3<br>C,G, & P-1 | D - 3<br>C,G,& P-1 | None<br>None |
| 107: Common borrow | 102,450cu.m. | D-342<br>C,G, P-69 | D-318<br>C,G,P-69 | D-24<br>None |
| 108: Agg. Subbase Course | 25,700cu.m. | C - 19<br>D,G,& P-86 | C - 17<br>D,G,P-71 | C - 2<br>D,G,P-15 |
| 110: Foundation Fil | 50,000cu.m. | D - 1<br>C,G, P*1 | D - 1<br>C,G, P-1 | None<br>None |
| 200: Agg. Base Coat | 7,500 cu.m. | D-50<br>Abrasion-1<br>Q - 1 | D-21<br>Abrasion-1<br>Q-1 | D-29<br>None |
| 302: Medium curing Cut-back Asphalt Grade MC Bit. Prime Coat | 51 MT | Q - 5 | Q-3 | None |
| 314-3: 85-100 pen. cement for BST Hot Asphalt Ty. | 102 M.T. | Q - 10 | Q - 5 | Q - 5 |
| 402-2.5: Pre-cast Conc.Piles | 396 L.M. | PTC - 1 | PTC - 1 | None |
| 405: Conc. class "A | 38 cu.m. | #6 | # 6 | None |
| Cement | 4,831 Bags | Q-3 or PTC | Q - 3 | None |
| Fine Aggregate | 294 cu.m. | Q -1,G-4 | Q-1, G-4 | None |
| coarse Aggregate | 376 cu.m. | Q-1, G-6 | Q-1, G-6 | None |
| Water | | Cert | Cert | None |
| 406: Reinforcing | 25,765 kgs | Q-1 ea.size | Q -1 ea.size | None |
| 413: Reinf. Conc. Pipes | | | | |
| 0.60"Ø | 276 L.M. | IR - 11 | IR -11 | None |
| 0.90"Ø | 96 L.M. | IR - 4 | IR - 4 | None |
| 1.20"Ø | 55 L.M. | IR-3 | IR-3 | None |
| Reinf. Steel | | Q-1 ea. size | Q-1 ea.size | None |
| 500: Grouted Riprap | 190 cu.m. | IR | IR | None |
| 510: ROW Marker | 154 ea. | IR | None | IR |

STATUS OF TESTS
As of September, 1980

Sub-Project No., Package II - Antipolo-Lupi-San Fernando, Feeder #401, Minal bac, Camarines Sur

| MATERIALS | Total estimated quatities | Minimum No. of tests required | No. of Test: On file | No. of Test: Balance |
|---|---|---|---|---|
| 105: Roadway & Drainage | 13,700 cu.m | D - 46<br>C,G, P-10 | D - 50<br>C,G, P-24 | None<br>None |
| 106: Excav. for structure | 530 cu.m | C,G, P - 1 | D - 1 | D - 1 |
| 107: Borrow | 21,020cu.m | D - 70<br>C,G,P - 14 | D - 59<br>C,G, P - 17 | D - 11<br>None |
| 108: Aggregate Subbase | 7,200cu.m. | D - 48<br>C,G, P-24 | D - 25<br>C,G, P- | D - 21<br>C,G, P-14 |
| 110: Foundation Fill | 40 cu.m. | D - 1<br>C,G, P-1 | | D - 1<br>C,G,P-1 |
| 401: Timber Tretle | 4 span | IR | | IR#1 |
| 402-2.5: Pre-cast con , Piles | 168 cm. | #1 or PTC | PTC - 1 | None |
| 402-2.5a: Conc.test p | 1 ea. | #1 or PTC-1 | PTC - 1 | None |
| 413: Reinf.Conc. Pipe | | | | |
| 0.60" Ø | 6 LM. | # 1,IR-1 | # 1 | IR - 1 |
| 0.90" Ø | 16 LM | # 1, IR-3 | # 1 | IR - 3 |
| 1.20" Ø | 57 LM. | # 1, IR-8 | # 1 | IR - 8 |
| Reinf. Steel | | Q-1 ea. size | Q-1 ea.size | |
| 510: ROW Markers | 166 ea. | IR | | |

STATUS OF TESTS
As of September, 1980

Project: Sub-Project No. 4 — Hubo-Baliwag Road, Km. 0 + 000 to Km. 2 + 620, Feeder Road No. 402, Minalabac Camarines Sur

| MATERIA | Total Estimated quantities | Minimum NO. of tests required | NO. OF TESTS On File | Balance |
|---|---|---|---|---|
| 106: Excavation | 200 cu.m. | D - 1 &C,G,& P-1 | | D - 1 C,G,P-1 |
| 107: Borrow | 23,690 cu.m. | D - 79 C.G. P - 16 | D - 72 C,G, P-16 | D - 7 None |
| 108: Agg. Subbas | 3,180 cu.m. | D - 21 C,G, & P-11 | D - 10 C,G, P-2 | D - 1 C,G, p |
| 110: Foundation F | 20 cu.m. | D - 1 C,G, P-1 | | D - 1 C,G, P |
| 413: Reinforced Concrete Pip | | | | |
| 0.60" Ø | 36 LM | #1, IR -2 | #1 | IR - 2 |
| 0.90" Ø | 32 LM | #2, IR -4 | #2 | IR - 4 |
| 510: ROW Markers | 60 Ea. | IR - 1 | | IR - 1 |

Hubo-Bagolatao, Km. + 000 - Km. 7 + 664, Fr. Road No. 403

| | | | | |
|---|---|---|---|---|
| 105: Roadway and Drainage Exca | 74,720 cu.m. | D - 249 C,G, P #50 | D - 249 C,G, P-40 | None C,G, P-5 |
| 106: Excavation structures | 570 cu.m. | D - 2 C,G, P -1 | | |
| 108: Aggregate base | 9,350 cu.m. | D - 62 C,G,P-31 | D - 10 C,G,P-5 | D - 52 C,G,P-26 |
| 110: Foundation | 35 cu.m. | D -1 C,G, P -1 | | |
| 413: Reinforced Pipes | | | | |
| o.60"Ø | 32 LM | IR - 2 | #2-IR | None |
| 0.90"Ø | 150 LM | IR - 6 | #3 | #3 |
| 1.20"Ø | 130 LM | IR - 6 | #3 | #3 |
| Rod | | Q-1 ea.size | Q-1 ea.size | None |
| 510: ROW Ma | | IR | | IR |

COMPRESSIVE STRENGTH (Secondary Road)

| Date Sampled | Part of Structures Represented | Compressive strength for 28 days | REMARKS |
|---|---|---|---|
| 1-18-79 | RCP .60 Ø | 3440 | Satisfactory |
| -do- | -do- | 2870 | Failed |
| -do- | -do- | 3070 | Satisfactory |
| 1-22-79 | RCP .90 Ø | 3232 | -do- |
| -do- | -do- | 3241 | -do- |
| -do- | -do- | 2561 | Failed |
| 2-3-79 | RCP .90 Ø | 3077 | Satisfactory |
| -do- | -do- | 3672 | -do- |
| -do- | -do- | 3345 | -do- |
| 2-12-79 | RCP .60 Ø | 4161 | Satisfactory |
| -do- | -do- | 3675 | -do- |
| -do- | -do- | 3444 | -do- |
| 2-21-79 | RCP .60 Ø | 3907 | -do- |
| -do- | -do- | 3703 | -do- |
| -do- | -do- | 3553 | -do- |
| 3-11-79 | RCP .60 Ø | 2674 | Failed |
| -do- | -do- | 3001 | Sarisfactory |
| -do- | -do- | 3271 | -do- |
| 7-4-79 | RCBC Bottom Slab | 4260 | Passed |
| -do- | -do- | 3078 | -do- |
| 7-9-79 | RCBC Sidewall | 3078 | -do- |
| -do- | -do- | 2494 | Failed * |
| -do- | -do- | 3016 | Passed |
| -do- | -do- | 4882 | Passed |
| 7-16-79 | Top Slab | 3187 | Passed |
| -do- | -do- | 2783 | Failed * |
| -do- | Center wall | 3825 | Passed |
| -do- | -do- | 2581 | Failed * |
| 8-31-79 | RCBC Sidewall | 3895 | Passed |
| -do- | -do- | 4447 | Passed |
| 9-1-79 | -do- | 3838 | Passed |
| -do- | -do- | 4097 | Passed |
| 9-22-79 | RCBC Top Slab | 3195 | Passed |
| -do- | -do- | 3135 | Passed |
| 10-18-79 | Sidewall | 2480 | Failed * |
| -do- | -do- | 2534 | Failed * |
| -do- | -do- | 3141 | Passed |
| 10-25-80 | RCBC Top Slab | 3281 | Passed |
| -do- | -do- | 2729 | Faield * |
| -do- | -do- | 3576 | Passed |
| 11-8-79 | RCP 1.20 Ø | 2421 | Failed * |
| 11-10-79 | -do- | 2922 | Failed * |
| 11-21-79 | -do- | 2309 | Failed * |
| 11-26-79 | RCP .90 Ø | 3055 | Passed |
| -do- | -do- | 2340 | Failed * |
| 11-28-79 | -do- | 3506 | Passed |
| -do- | -do- | 3397 | Passed |
| 11-21-79 | RCBC Wingwall | 3506 | Passed |

| | | | |
|---|---|---|---|
| 11-21-79 | RCBC Wingwall | 4089 | Passed |
| 11-26-79 | RCBC Apron | 2822 | Failed * |
| -do- | -do- | 2962 | Failed * |
| 11-28-79 | RCBC Wingwall | 2630 | Passed |
| -do- | -do- | 3840 | Passed |
| 4-14-80 | Pier, Balogo Bridge | 3801 | Passed compressive |
| -do- | -do- | 3677 | strength req. |
| -do- | -do- | 1842 | -do- |
| 3-25-80 | Coping, Abut. A | 3094 | -do- |
| -do- | -do- | 3172 | -do- |
| 3-31-80 | Coping, Abut B | 3545 | -do- |
| -do- | -do- | 2814 | -do- |
| 3-27-80 | Backwall, Abut A | 2387 | Failure * |
| -do- | -do- | 1943 | Failure * |
| -do- | -do- | 2457 | Failure * |
| 4-21-80 | Coping Abut.B,Mata Br. | 2806 | Failure * |
| -do- | -do- | 2612 | |
| -do- | -do- | 3055 | |
| 4-22-80 | Backwall, Abut B,MataBr. | 2783 | Passed compressive |
| -do- | -do- | 3055 | strength req. |
| -do- | -do- | 3358 | -do- |
| 5-3-80 | Girder, Balogo Bridge | 3529 | -do- |
| -do- | -do- | 2861 | -do- |
| -do- | -do- | 3327 | -do- |

Compressive Strength (Feeder Road Nos. 401,402,403)

| Date Sampled | Part of structures represented | Compressive strength for 28 days | Remarks |
|---|---|---|---|
| 7-16-79 | RCP 36"Ø | 4664 | Passed |
| -do- | -do- | 4567 | Passed |
| 8-17-79 | RCP 24"Ø | 2736 | Failed * |
| -do- | -do- | 2994 | Failed * |
| 8-18-79 | RCP 36" Ø | 3763 | Passed |
| -do- | -do- | 4555 | Passed |
| 8-3-79 | RCP 48" Ø | 4781 | Passed |
| -do- | -do- | 4224 | Passed |

* Necessary corrections/adjustments have been made to obtain the required compressive strength.

**Secondary Roads**

RCP INSTALLED with Size

| Station | Size | No. of pcs. | R C P | Headwall |
|---|---|---|---|---|
| 1 + 710.52 | 48"Ø | 18 | Installed | Constructed |
| 1 + 475.00 | 36"Ø | 18 | Installed | --do-- |
| 1 + 875.00 | 36"Ø | 17 | --do-- | --do-- |
| 2 + 143.82 | 24"Ø | 18 | --do-- | --do-- |
| 2 + 652.12 | 24"Ø | 13 | --do-- | --do-- |
| 2 + 852.72 | [illegible]"Ø | 15 | --do-- | --do-- |
| 2 + 900.00 | [illegible]"Ø | 14 | --do-- | --do-- |
| 3 + 111.44 | [illegible]"Ø | 15 | --do-- | --do-- |
| 3 + 389.45 | [illegible]"Ø | 12 | --do-- | --do-- |
| 3 + 325.00 | [illegible]"Ø | 12 | --do-- | --do-- |
| 3 + 787.00 | [illegible]"Ø | 13 | --do-- | --do-- |
| 3 + 910.52 | [illegible]"Ø | 14 | --do-- | --do-- |
| 4 + 144.13 | [illegible]"Ø | 13 | --do-- | --do-- |
| 4 + 369.02 | [illegible]"Ø | 13 | --do-- | --do-- |
| 4 + 854.15 | [illegible]"Ø | 13 | --do-- | --do-- |
| 4 + 925.00 | [illegible]"Ø | 15 | --do-- | --do-- |
| 5 + 183.15 | [illegible]"Ø | 12 | --do-- | --do-- |
| 6 + 225.00 | [illegible]"Ø | 16 | --do-- | --do-- |
| 6 + 425.00 | [illegible]"Ø | 15 | --do-- | --do-- |
| 6 + 677.00 | [illegible]"Ø | 15 | --do-- | --do-- |
| 6 + 755.30 | [illegible]"Ø | 16 | --do-- | --do-- |
| 7 + 250.00 | [illegible]"Ø | 18 | --do-- | --do-- |
| 8 + 055.00 | [illegible]"Ø | 14 | --do-- | --do-- |
| 8 + 066.00 | [illegible]"Ø | 15 | --do-- | --do-- |
| 8 + 072.30 | [illegible]"Ø | 15 | --do-- | --do-- |
| 8 + 222.00 | [illegible]"Ø | 13 | --do-- | --do-- |
| 8 + 459.00 | [illegible]"Ø | 12 | --do-- | --do-- |
| 8 + 650.00 | 4"Ø | 14 | --do-- | --do-- |

SAN FERNANDO TIMBER TRESTLE BRIDGE
Sta. 5+076.575, Feeder Road #401

| | | 1 | 2 | 3 |
|---|---|---|---|---|
| Pile No. & Location: | No. 1, Pier 2 | X | # | # |
| Time started : | 10:20 AM, September 5, 1980 | | | |
| Time Finished : | 10:45 AM, September 5, 1980 | | | |

| Ground Elev. Tip of Pile (Meter) | Depth of Pile in Ground (M) | No. of blows | Penetration meter | Average penetration (S) per blow (S) | SAFE BEARING Power U.S. Tons |
|---|---|---|---|---|---|
| El. 2.09 | 1.00 | - | - | - | - |
| 1.34 | 2.75 | 14 | 0.75 | 5.36 | 9.67 |
| 0.34 | 3.75 | 30 | 1.00 | 3.33 | 14.77 |
| -0.66 | 3.75 | 80 | 1.00 | 1.25 | 32.17 |
| -1.66 | 4.75 | 135 | 1.00 | 0.74 | 45.26 |
| -2.06 | 4.75 | 225 | 0.40 | 0.0017 | 110.00 |

Pile Driving Equipment Used: DELMAG M-23; W = 5,000 Kg.

Formula:

$$\text{Bearing Power, P, U.S. Tons} = \frac{6.56\ WH}{\frac{S}{2.54} + 0.1\frac{(X)}{(W)}}$$

where P = Safe bearing power in KILOGRAMS

W = Weight in KILOGRAM, of striking parts of hammer

H = Height of fall in METERS

S = The average pemetration in CENTIMETERS PER BLOW for the last twenty (20) blows.

X = Weight, in KILOGRAMS of the pile plus the weight of any cap used on the pile during driving.

RECOMMENDED PAY LENGTH = 12 Lin. meter

Prepared by:

(SGD.) EDUARDO C. FORTALEZA
Engineer Inspector-Bridge

Submitted by:

(SGD.) JUSTINIANO A. TORRALBA
Sr. Matls. Engr./Res. Eng.

WEATHER REPORT
As of Sept.25,'80

Project: Minalabac-Antipolo-Hubo, Package II

| Date-1980 | | Weather | Remarks | Time Extension Recommended |
|---|---|---|---|---|
| Aug. | 26 | Intermittent rain | Unworkable | One (1) day |
| | 27 | Cloudy to int. rain | Unworkable | One (1) day |
| | 28 | Cloudy but ground wet | Unworkable | One (1) day |
| | 29 | Cloudy to heavy rain | Unworkable | One (1) day |
| | 30 | Cloudy to int. rain | Unworkable | One (1) day |
| | 31 | Cloudy but ground wet | Unworkable | One (1) day |
| Sept. | 1 | Fair to int. rain | Unworkable | One (1) day |
| | 2 | Int. rain to cloudy | Unworkable | One (1) day |
| | 3 | Cloudy to Int. rain | Unworkable | One (1) day |
| | 4 | Ground still saturated | Unworkable | One (1) day |
| | 5 | Rainy | Unworkable | One (1) day |
| | 6 | Rainy | Unworkable | One (1) day |
| | 7 | Cloudy but ground still wet | Unworkable | One (1) day |
| | 8 | Fair (Work resumed) | Workable | None |
| | 9 | Fair to cloudy | Workable | None |
| | 10 | Cloudy w/ PM rain | Workable | None |
| | 11 | Cloudy | Workable | None |
| | 12 | Rainy | Unworkable | One (1) day |
| | 13 | Cloudy to heavy rain | Unworkable | One (1) day |
| | 14 | Cloudy ground still muddy | Unworkable | One (1) day |
| | 15 | Fair to cloudy(work resumed) | Workable | None |
| | 16 | Fair to cloudy | Workable | None |
| | 17 | Cloudy | Workable | None |
| | 18 | Rainy (work suspended) | Unworkable | One (1) day |
| | 19 | Cloudy to rainy | Unworkable | One (1) day |
| | 20 | Cloudy to fair | Unworkable | One (1) day |
| | 21 | Fair (Work resumed) | Workable | None |
| | 22 | Fair to cloudy | Workable | None |
| | 23 | Fair | Workable | None |
| | 24 | Fair to cloudy | Workable | None |
| | 25 | Fair | Workable | None |

TOTAL EXTENSION OF TIME RECOMMENDED THIS MONTH - - - 19 days
TOTAL EXTENSION OF TIME RECOMMENDED PREVIOUSLY - - -124 days
GRAND TOTAL OF TIME EXTENSION RECOMMENDED - - -143 days

BICOL RIVER BASIN DEVELOPMENT PROGRAM OFFICE
San Jose, Pili, Camarines Sur

EMPLOYMENT GENERATION SURVEY (SS3)

NAME OF CONTRACTOR Genaro G. Reyes Construction, Inc.

FOR THE MONTH OF September, 1980

| | ADMINISTRATIVE/ FINANCE | ENGINEERING/ TECHNICAL | SKILLED | UNSKILLED |
|---|---|---|---|---|
| MANILA-BASED 1/ | | 10 | 13 | 3 |
| LOCAL-HIRED 2/ | | 2 | 4 | 17 |
| SUB-CONTRACTORS 3/ | | | | |
| T O T A L | | 12 | 17 | 20 |

1/ Includes permanent employees

2/ Employees residing within the Basin Area

3/ Local Hired only

Submitted by:

(SGD) ANTONIO BANZON
Project Engineer

/ched

GENARO G. REYES CONSTRUCTION, COMPANY
Minalabac, Camarines Sur

## LIST OF PERSONNEL

| Name | Postion | Qualification |
|---|---|---|
| 1. Antonio Banzon | Project Manager | Civil Engineer |
| 2. Rogelio Gonzales | Project Engineer | Civil Engineer |
| 3. Maximo Mendoza | Foreman | Experienced |
| 4. Marcos Galban | Foreman | -do- |
| 5. Armando Bidania | Instrument Man | -do- |
| 6. Bong Bidania | Survey Aide | -do- |
| 7. Dominador Sabato | Survey Aide | -do- |
| 8. Danilo Nicolas | Survey Aide | -do- |
| 9. Orlando Dacuzan | Survey Aide | -do- |
| 10. Jolito Cambe | Survey Aide | -do- |
| 11. Domingo Voluntad | Timekeeper | -do- |
| 12. Pedro Suyat | Overseer | -do- |
| 13. Agustin Perena | Motorpool Guard | -do- |
| 14. Luciano Lavandero | Guard | -do- |
| 15. Francisco Magante | Guard | -do- |
| 16. Andres Rodeno | Guard | -do- |
| 17. Vicente Armellas | Guard | -do- |
| 18. Leonardo Valentin | Grader Operator | -do- |
| 19. Ruben Macapagal | Bulldozer Operator | -do- |

| | | |
|---|---|---|
| 20. Baltazar Pansito | Payloader Operator | Experience |
| 21. Reynaldo Arcinas | Bulldozer Operator | -do- |
| 22. Mario Reyes | Dump Truck Driver | -do- |
| 23. Reynaldo Castro | Dump Truck driver | -do- |
| 24. Ruben Jacobe | Dump truck Driver & Wooble operator | -do- |
| 25. Sixto Simon | Dump truck driver | -do- |
| 26. Ricardo Macapagal | Bulldozer Operator | -do- |
| 27. Juan Cambe | Bulldozer Operator | -do- |
| 28. Fernando Alcalada | Mechanic | -do- |
| 29. Leonardo Sabado | Helper medhanic | -do- |
| 30. Box dela Cruz | Helper Mechanic | -do- |

BICOL RIVER BASIN DEVELOPMENT PROGRAM OFFICE
San Jose, Pili, Camarines Sur

EMPLOYMENT GENERATION SURVEY ( SS3)

NAME OF CONTRACTOR POLYTRADE CONSTRUCTION, INC.

FOR THE MONTH OF September, 1980

| | ADMINISTRATIVE/ FINANCE | ENGINEERING/ TECHNICAL | SKILLED | UNSKILLED |
|---|---|---|---|---|
| MANILA-BASED 1/ | 2 | 2 | 4 | |
| LOCAL-HIRED 2/ | 9 | 5 | 26 | 13 |
| SUB-CONTRACTORS 3/ | | | | |
| T O T A L | 11 | 11 | 30 | 13 |

1/ Includes permanent employees

2/ Employees residing within the Basin Area

3/ Local Hired only

SUBMITTED BY:

(SGD) MILAGROS A. NORBERTO
Project Engineer

Minalabac-Antipolo-Hubo Road Project

/ched

POLYTRADE CONSTRUCTION, INC.
Minalabac, Camarines Sur

LIST OF PERSONNEL
As of September, 1980

I. TECHNICAL STAFF

| N A M E | POSITION | QUALIFICATION |
|---|---|---|
| Perez, Teodoro | Project Manager | Civil Engineer |
| Norberto, Milagros | Project Engineer | --do- |
| Espeso, Leonardo | Project Supervisor | --do- |
| Sauco, Rego | Shop & Equipt, Supervisor | Experienced |
| Parillas, Zacarias | Const. Foreman | --do- |
| Porteria, Juanito | Bridge Foreman | --do- |
| Rojano, Silvestre | Lab. Technician | --do- |

II. ADMINISTRATIVE STAFF

| | | |
|---|---|---|
| [illegible] | Admin. Officer | B S B A |
| Reyes, Efren | Comptroller | Experienced |
| Sauco, Delfin | Misc. Service | --do- |
| Polvoriza, Armando | Warehouseman | --do- |
| Tolledo, Armi | Payroll Clerk | B S B A |
| Buenaventura, Godofred | L In[illegible] | Experienced |
| Tragante, Frisco | Watchman | --do- |
| Pellosis, Eduardo | --do- | --do- |
| Asis, Leoncio de | --do- | --do- |
| [illegible], Pedro Jr. | --do- | --do- |
| Aguila, Celestino | Field Checker | --do- |

## III. MECHANICAL DEPARTMENT

| | | |
|---|---|---|
| Luna, Freddie | Mechanic | Experienced |
| Caisip, Rogelio | Mechanic | -do- |
| Torsar, Francisco | Tireman | -do- |
| Dinlas, Cedillo | Electrician | -do- |

## IV. SURVEY & LAB. TEAM

| | | |
|---|---|---|
| Torre, Bayani dela | Chainman | -do- |
| Eballar, Luis | Survey Aide | -do- |
| Bislumbre, Carlos | Survey Aide | -do- |
| Leon, Luis de | Lab. Aide | -do- |

## V. DRIVERS

| | | |
|---|---|---|
| Adao, Numeriano | DT - Driver | -do- |
| Julo, Norberto | DT - Driver | -do- |
| Palmas, Ricardo | DT - Driver | -do- |
| Balonzo, Rodeli | DT - Driver | -do- |
| Bernal, Carlos | Service Driver | -do- |

## VI. HEAVY EQUIPMENT

| | | |
|---|---|---|
| Francisco, Graciano | Loader Operator | -do- |
| Villavecencio, Virgilio | BD Operator | -do- |
| Lozano, Teotimo | Grader Operator | -do- |
| Delorino, Edgardo | Dynapac Operator | -do- |
| Balonzo, Jolico | BD Operator | -do- |
| Hernandez, Teodoro | Helper | -do- |

## HEAVY EQUIPMENTS

As of September, 1980

**Secondary Roads:**

A. Bulldozer
   1 unit D - H (Komatsu) w/ 2 rippers

b. Dump Trucks:
   2 Ford (6-Wheelers)
   2 Isuzu (10-Wheelers)
   1 Isuzu (6-Wheelers)

c. Rollers:
   Vibratory Compactor, Dynapac (Self-propelled)

d. Loader:
   2 Isuzu Loader (JH-60, w/ Kimco body)

e. Grader:
   1 unit Caterpillar

f. Water Truck:
   1 unit w/ truck tractor

Additional this month:

   1 Tandem Roller
   1 Pheumatic Roller
   1 Asphalt Distributor

**Feeder Road Nos. 40[illegible], 402, & 403**

A. Bulldozer
   2 units Caterpillar (D-8)
   1 unit Komatsu D-80A w/ ripper)

b. Dump Trucks
   5 units Isuzu ([illegible] wheelers)
   1 unit Tandem Wheel Roller

c. Roller:
   1 unit self-propelled Pheumatic roller
   1 unit 3-wheel Tandem roller

d. Loader:
   2 units Caterpillar

e. Grader:
   2 units Caterpillar

f. Water Truck:
   1 unit on top of 6-wheel truck

## LIST OF OFFICE EQUIPMENT

| | | |
|---|---|---|
| Typewriter 19" Carriage (ADLER) | 1 | ea. |
| Wooden Office Desk | 3 | pcs. |
| Simple wooden chair | 5 | pcs. |
| Typing Table | 1 | pc. |
| Drafting table | 1 | pc. |

## LIST OF LABORATORY EQUIPMENT

| | | |
|---|---|---|
| 8 -- inch [illegible]ass Mesh 4" | 1 | pc. |
| 8 -- inch [illegible] ss Mesh 3" | 1 | pc. |
| 8 -- inch [illegible] ss Mesh 2" | 1 | pc. |
| 8 -- inch [illegible] ss Mesh 1½" | 1 | pc. |
| 8 -- inch [illegible] ss Mesh 3/4" | 1 | pc. |
| 8 -- inch [illegible] ss Mesh 3/8" | 1 | pc. |
| 8 -- inch [illegible]ass Mesh No. 8 | 1 | pc. |
| 8 -- inch [illegible]s Mesh No. 10 | 1 | pc. |
| 8 -- inch [illegible]ass Mesh No. 16 | 1 | pc. |
| 8 -- inch [illegible]s Mesh No. 30 | 1 | pc. |
| 8 -- inch [illegible]s Mesh No. 40 | 1 | pc. |
| 8 -- inch [illegible] ss Mesh No. 50 | 1 | pc. |
| 8 -- inch [illegible]ass Mesh No. 60 | 1 | pc. |
| 8 -- inch [illegible]ass Mesh No. 100 | 1 | pc. |
| 8 -- inch [illegible]ass Mesh No. 200 | 1 | pc. |
| Sample S[illegible]tter 2½ Chute width | 1 | set |
| Sample s[illegible]itter 1½ Chite width | 1 | set |
| Heavy d[illegible] solution balance 20kg. [illegible]ouse M-1119D | 1 | set |
| Triple [illegible]am balance 0.1 sea | 1 | set |
| Volume[illegible]c Flash 500 ml. | 1 | set |
| Liquid [illegible]imit Device/grooving tool | 1 | set |
| Plast[illegible] limit | 1 | set |
| Cent[illegible] balance 0.01 sea | 1 | set |

| | | |
|---|---|---|
| Rectangular pan 4" x 4" x 10" | 1 | pc. |
| Square Pan 24" x 24" | 1 | pc. |
| Modified Compaction Mold 1/13.33 | 1 | pc. |
| Modified Compaction Mold 10 lbs. | 1 | pc. |
| Modified Compaction Hammer 5.5 lbs. | 1 | pc. |
| Wash Bottle 1000 ml. | 1 | pc. |
| Field Density Set | 1 | pc. |
| Yeild Bucket | 1 | pc. |
| Oven, Electric Memmert #760190 | 1 | unit |
| Harvard Trip Balance Ohause | 1 | set |
| 8 - inch Brass Sieve No. 4 | 1 | unit |
| Spring Balance 12 kilos Cap. | 1 | unit |
| Compaction Mold 1/30 cu.ft. | 1 | set |
| Frying Pan 18" x 18" | 6 | pcs. |
| Wire Basket | 1 | pc. |
| Cylinder Mold | 2 | pcs. |
| 8 - inch SieveBrass Pan | 1 | pc. |
| 8 - inch Pan Brass Cover w/ring | 1 | pc. |
| Slump Cone w/ Tampering Rod | 1 | pc. |
| Work Table, 1.20 x 2.40 m. | 1 | ea. |
| Simple wooden Chair | 5 | pcs. |
| Corenter / G.I. sink | 1 | set |
| Wooden Filing Cabinet | 1 | ea. |
| Stapler | 1 | ea. |
| Puncher | 1 | ea. |

Note:

These laboratory equipments are now available at the project as per check and audit made by Engr. Sanares, Chief Quality Control Section, PMO, and representative of Auditors Office on March 23 & 26, 1979 respectively.

| ITEM NO | DESCRIPTION | ESTI SCHEDU |
|---|---|---|
| 1·60·2 | Provide and Maintain Office and Laboratory for the Engineer | 0.3 |
| 1·60·3 | Provide one(1) Unit Four Wheel Drive for the Engineer. | 0.5 |
| 1·60·4 | Provide one(1) Unit Utility Vehicle for the Engineer | 0.24 |
| 1·60·5 | Laboratory and Office Equipment for Engr. (as listed) | 0.5 |
| 100 | Clearing and Grubbing | 0.9 |
| 103-1(Fr.401) | Removal of Bridge | 0.01 |
| 105(Sec.) | Roadway and Drainage Excavation | 2.3 |
| 105(Fed.401,402) | Roadway and Drainage Excavation | 2.219 |
| 105(Fed.403) | Roadway and Drainage Excavation | 9.193 |
| 105-4 | Excavation of Unsuitable Materials | — |
| 106(Sec.) | Excavation for Structures | 0.147 |
| 106(Fr.401,402,403) | Excavation for Structures | 0.2 9 |
| 107(Sec) | Borrow | 30.8 |
| 107(Fed.401,402) | Borrow | 10.7 7 |
| 108(Sec) | Aggregate Sub-base | 12.0 |
| 108(Fed.401,402,403) | Aggregate Sub-base | 8.193 |
| 110 | Foundation | 0.05 |
| 111 | Overhaul(300m. Free haul) | 0.0 0 |
| 200 | Aggregate Base Course | 3.6 4 |
| 302 | Medium Curing Cut-Back Asphalt, Grade MC-1 for Bit. Prime Coat | 0.9 |
| 314-1 | Aggregate Material for B.S.T. (Hot Asphalt Type) | 0.5 |
| 314-3 | 85-100 Penetration Asphalt Cement for B.S.T. (Hot Asphalt Type) | 1.8 2 |
| 401(Fed.401) | Timber(Detour) Trestle(Superstructure only on Concrete Pile Bent) | 0.3 |
| 402-2.5 | Precast Concrete Piles | 2.1 |
| 402-2.5a | Concrete Test Piles (Furnish and Drive) | 0.4 |
| 403 | Concrete Railings | 0.0 |
| 405 | Concrete Class "A"(Miscellaneous) | 2.5 |
| 405-1 | Concrete Class "A"(Bridge) | 0.9 7 |
| 405-1(Fed.401) | Concrete Class "A"(Bridge) | 0.0 |
| 406(Sec.) | Reinforcing Steel | 1.3 |
| 406(Fed.401,402,403) | Reinforcing Steel | 0.2 |
| 413-1(Sec) | 0.30 M. Ø Reinforce Concrete Pipe | 0.0 |
| 413-1(Fed.401) | 0.30 M. Ø Reinforced Concrete Pipe | 0.0 |
| 413-2 | 0.60 M. Ø Reinforced Concrete Pipe | 0.9 |
| 413-3(Sec) | 0.90 M. Ø Reinforced Concrete Pipe | 0.4 |
| 413-3(Fr.401,402,403) | 0.90 M. Ø Reinforced Concrete Pipe | 1.3 |
| 413-4 | 1.20 M. Ø Reinforced Concrete Pipe | 2.6 |
| 500 | Riprap and Grouted | 0.2 |
| 510 | Right-of-Way Markers | 0.3 |
| | TOTAL | 100.0 |
| | | MONTH |
| | | CUMUL |

FEB. 7, 1979
START OF CONTRACT
TIME

26

| ESTIMATED % WEIGHT | | | QUANTITY | UNIT COST | AMOUNT | FEE |
|---|---|---|---|---|---|---|
| SCHEDULED | ACCOMPLISHED PROJECT | ACCOMPLISHED ITEM | | | | |
| 0.33221 | 0.36711 | 76.92% | 18 Mos. | 2,400 | 43,200.00 | |
| 0.55369 | .55369 | 100% | | Lump Sum | 72,000.00 | |
| 0.24608 | .24608 | 100% | | Lump Sum | 32,000.00 | |
| 0.55369 | .55369 | 100% | | Lump Sum | 72,000.00 | |
| 0.96205 | .96205 | 100% | 27.8 Ha. | 4,500.00 | 125,100.00 | |
| 0.01961 | .01961 | 100% | 1 Each | 2,550.00 | 2,550.00 | |
| 2.38397 | 2.38397 | 100% | 15,500 Cu. M. | 20.00 | 310,000.00 | |
| 2.21948 | 2.41968 | 109.02% | 15,190 Cu. M. | 19.00 | 288,610.00 | |
| 9.19385 | 9.52207 | 103.57% | 74,720 Cu. M. | 16.00 | 1,195,520.00 | |
| | | | | | | |
| 0.14762 | 0.14762 | 100% | 770 Cu M. | 24.93 | 19,196.10 | |
| 0.21994 | 0.17934 | 81.54% | 1,300 Cu. M. | 22.00 | 28,600.00 | |
| 30.88699 | 30.33298 | 98.2[illegible] | 125,520 Cu.M. | 32.00 | 4,016,640.00 | |
| 10.72753 | 11.41000 | 106.36% | 44,710 Cu.M. | 31.20 | 1,394,952.00 | |
| 12.06058 | 11.15000 | 92.49% | 27,782 Cu.M. | 56.45 | 1,568,293.90 | |
| 8.19335 | 6.55468 | 80% | 19,730 Cu.M. | 54.00 | 1,065,420.00 | |
| 0.05575 | 0.050370 | 90.35% | 145 Cu.M. | 50.00 | 7,250.00 | |
| 0.05087 | 0.05087 | 100% | 22,050 Sta.M. | 0.30 | 6,615.00 | |
| 3.60480 | 1.92244 | 53.33% | 7,500 Cu M | 62.50 | 468,750.00 | |
| 0.94128 | 0.5[illegible]366 | 58.82% | 51 M.T. | 2,400.00 | 122,400.00 | |
| 0.53831 | 0.32288 | 60% | 700 Cu.M. | 100.00 | 70,000.00 | |
| 1.88257 | 1.10723 | 58.82% | 102 M.T. | 2,400.00 | 244,800.00 | |
| 0.38913 | | | 4 SPANS | 12,000.00 | 48,000.00 | |
| 2.16219 | 1.57250 | 72.73% | 396 L.M. | 710.00 | 281,160.00 | |
| 0.41527 | 0.41527 | 100% | 4 Each | 13,500.00 | 54,000.00 | |
| 0.08270 | 0.08270 | 1[illegible]% | 71.70 L.M. | 150.00 | 10,755.00 | |
| 2.58415 | 1.19387 | 46.[illegible]% | 487 Cu.M. | 690.00 | 336,030.00 | |
| 0.97773 | 0.97773 | [illegible] | 163 Cu.M. | 780.00 | 127,140.00 | |
| 0.0[illegible]99 | | | 14 Cu.M. | 743.00 | 10,402.00 | |
| 1.34734 | 1.34734 | 100% | 25,765 Kgs | 6.80 | 175,202.00 | |
| 0.20940 | | | 3,890 Kgs | 7.00 | 27,230.00 | |
| 0.07568 | | | 29 L.M. | 160.00 | 4,640.00 | |
| 0.00645 | 0.00645 | 1[illegible] | 6 L.M. | 140.00 | 840.00 | |
| 0.96043 | 0.90473 | 94.20% | 362 L.M. | 345.00 | 124,890.00 | |
| 0.45777 | 0.70091 | 153.13% | 96 L.M. | 620.00 | 59,520.00 | |
| 1.35571 | 1.17540 | 86.7[illegible] | 289 L.M. | 610.00 | 176,290.00 | |
| 2.62814 | 2.23229 | 85.1[illegible] | 379 L.M. | 900.00 | 341,100.00 | |
| 0.21917 | 0.16437 | 75% | 190 Cu.M. | 150.00 | 28,500.00 | |
| 0.33738 | 0.05617 | 16.6[illegible] | 914 L.M. | 48.00 | 43,872.00 | |
| 00.00% | 91.63995[illegible] | [illegible] | | | ₱13,003,468.00 | |

| | |
|---|---|
| MONTHLY ACCOMPLISHMENT | 181,000.72 |
| CUMULATIVE TOTAL AMOUNT | |

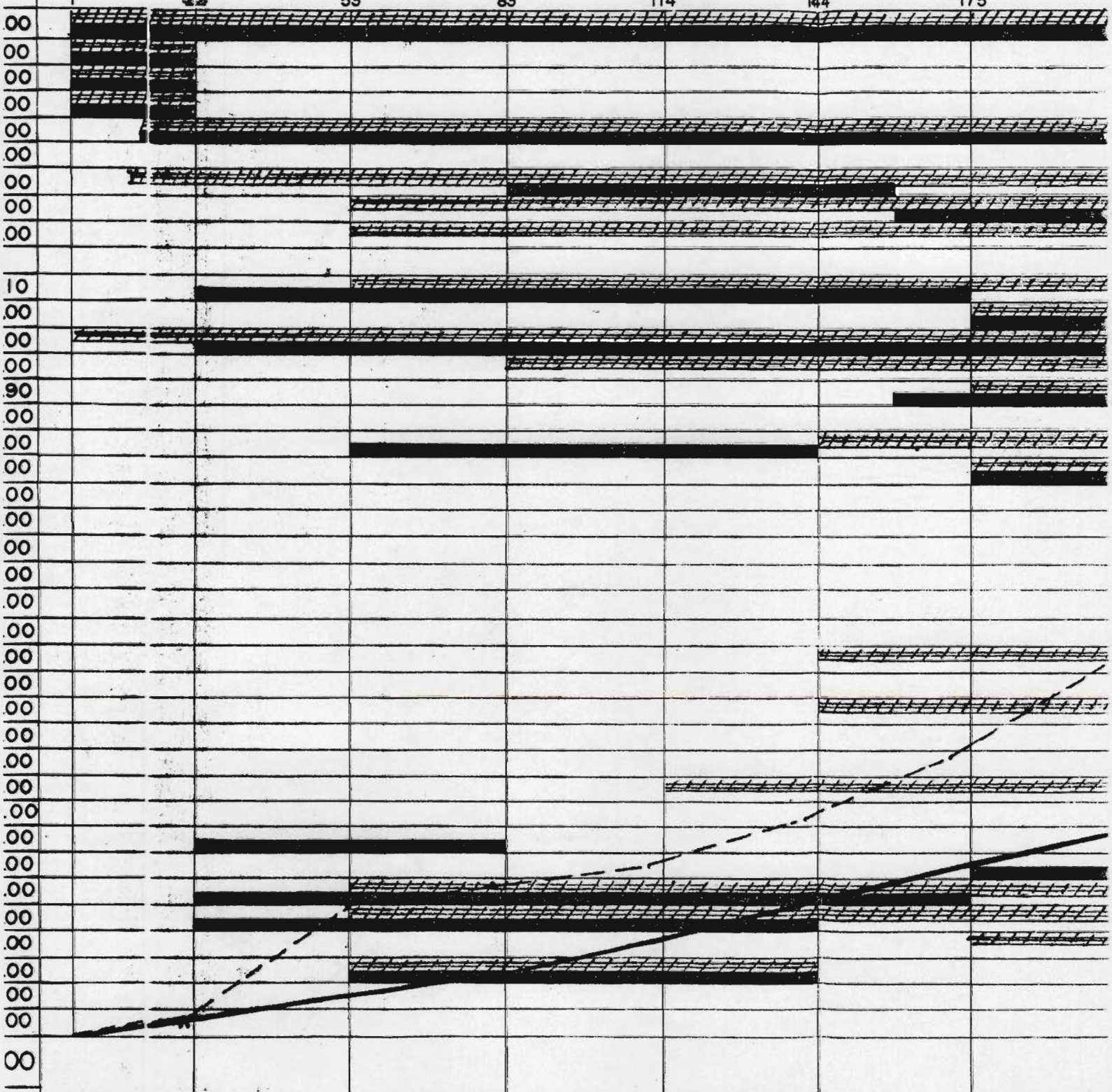
# REVISED BAR SCHEDULE OF WOR

## MINALABAC - AN

979
CONTRACT
ME

27

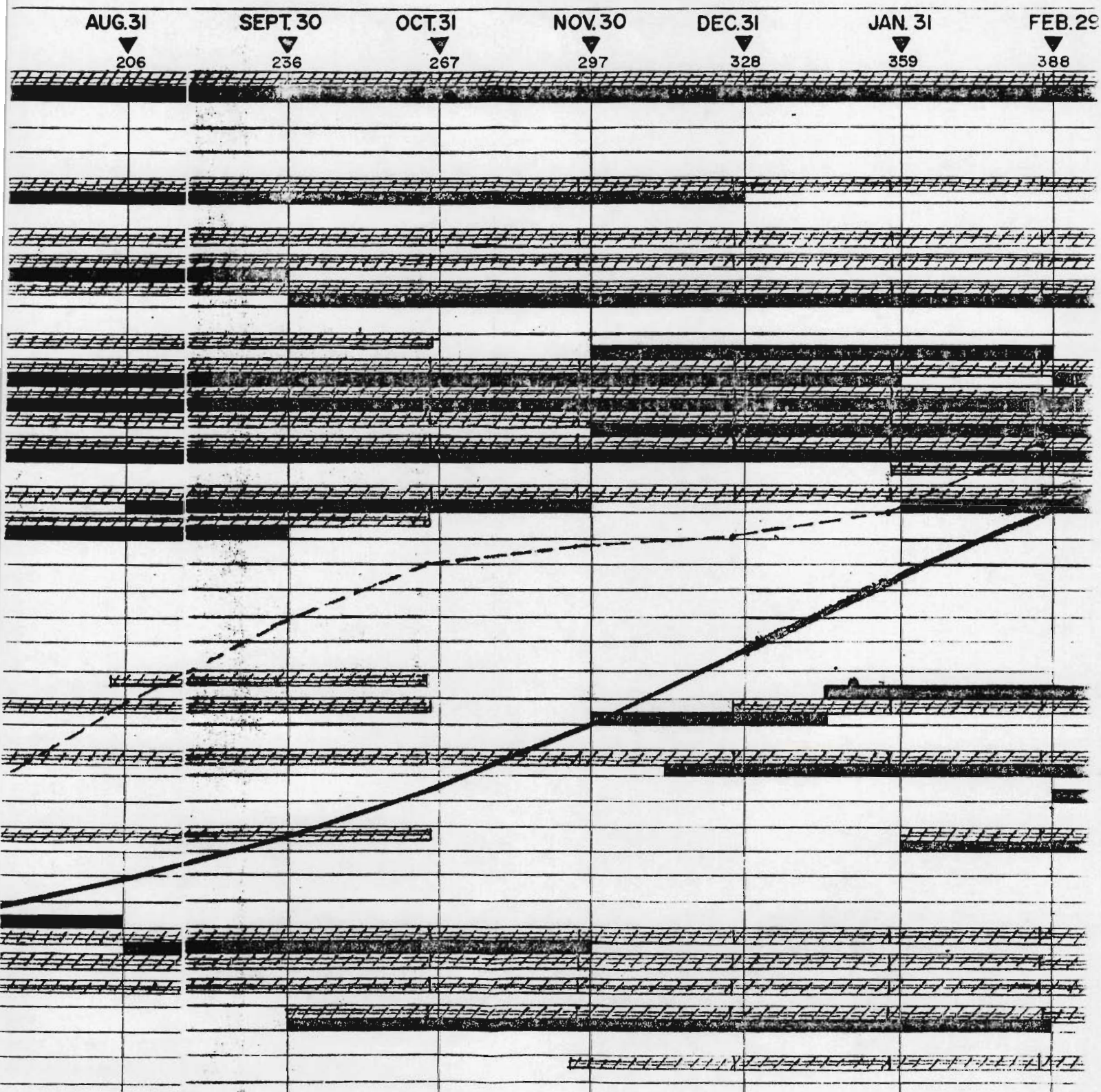
| FEB. 28 | MAR. 31 | APR. 30 | MAY 31 | JUN. 30 | JUL. 31 | AU |
|---|---|---|---|---|---|---|
| 22 | 53 | 83 | 114 | 144 | 175 | |



| | | | | | | |
|---|---|---|---|---|---|---|
| 181,000.72 | 299,106.12 | 337,731.12 | 459,411.11 | 459,411.11 | 466,973.69 | 519,090.3 |
| | 480,106.84 | 817,837.96 | 1,277,249.07 | 1,736,660.18 | 2,203,633.87 | 2,722,724.2 |

# WORK AS OF AUGUST 8, 1980 1st REVISION OF ANTIPOLO – HUBO ROAD

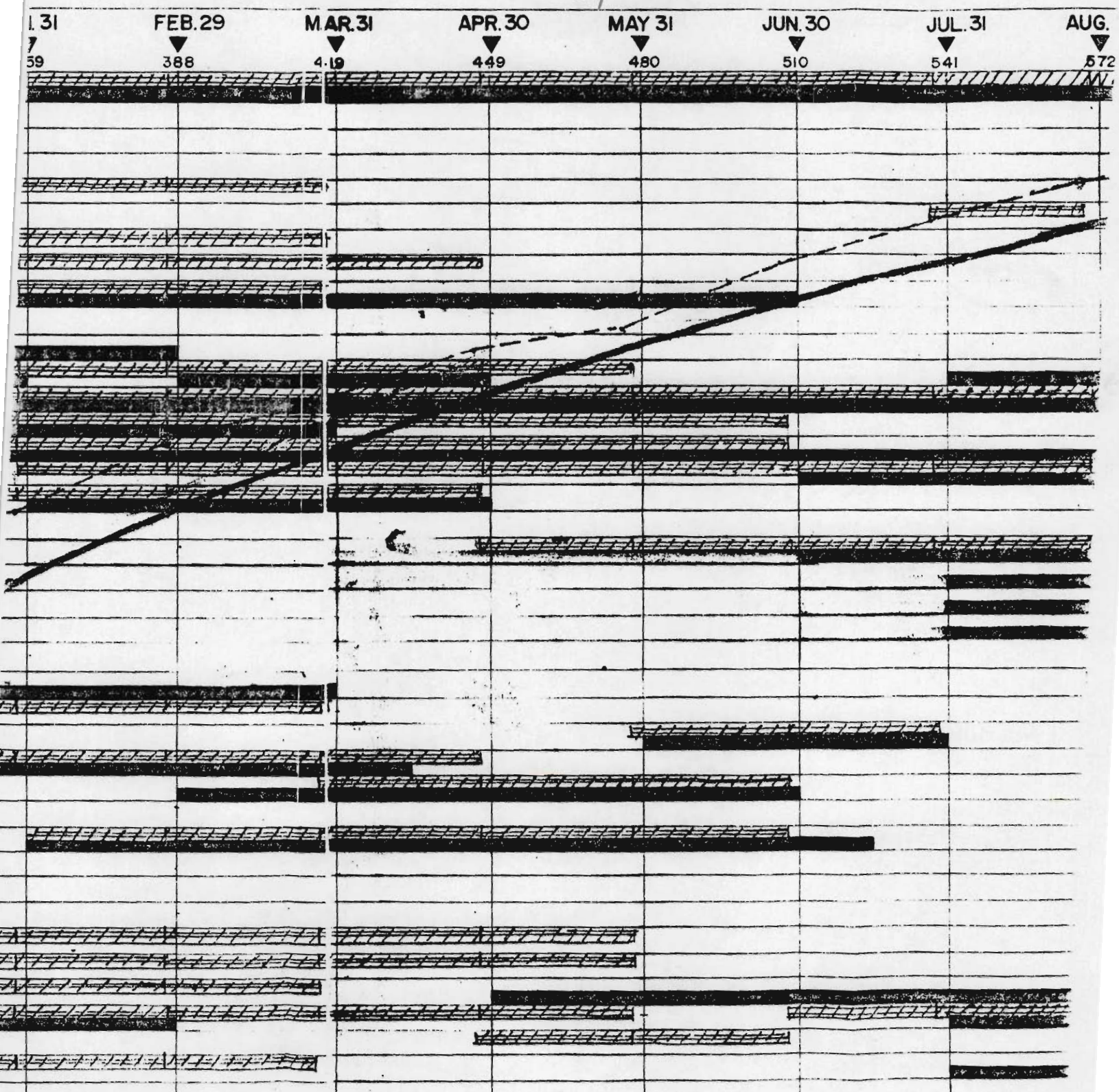
28




| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 519,090.36 | 341,986.45 | 340,836.27 | 340,836.27 | 578,915.13 | 1,103,305.12 | 1,143,584.34 | 1,1 |
| 722,724.23 | 3,06 | 4,710.68 | 3,405,546.95 | 3,746,383.22 | 4,325,298.35 | 5,428,603.47 | 6,572,187.81 | 7,7 |

EVISION

29




| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2 | 1,143,584.34 | 1,177,181.39 | 720,282.53 | 727,635.61 | 733,013.11 | 605,581.96 | 543,149. |
| 47 | 6,572,187.81 | 7,749,369.20 | 8,469,651.73 | 9,197,287.34 | 9,930,300.45 | 10,535,882.41 | 11,079,03 |

PREVIOUS ACCOMPLISHMENT

PROGRESS THIS REPORT

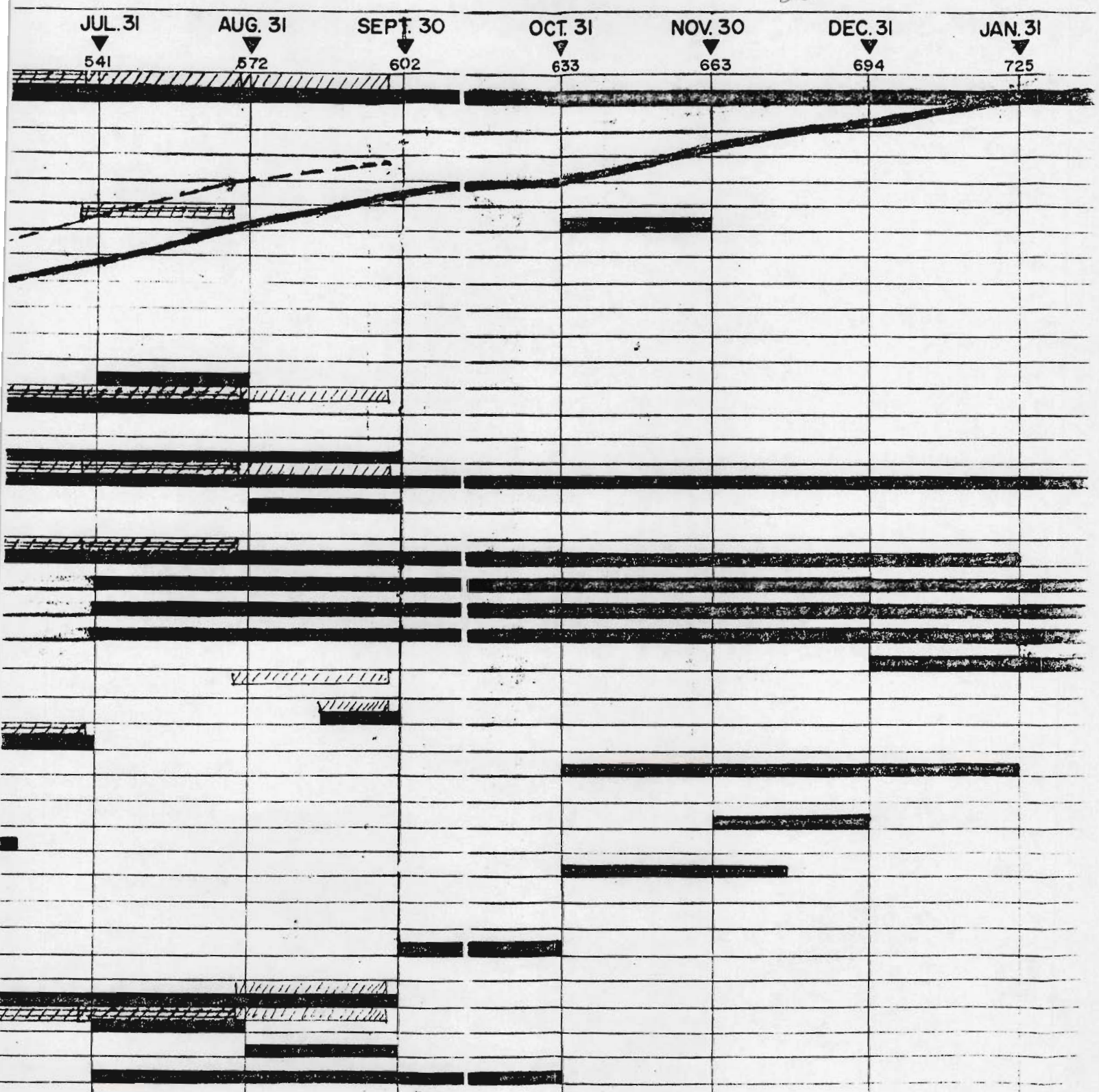
SCHEDULED WORK

SCHEDULED ACCOMPLISHMENT

ACTUAL ACCOMPLISHMENT

MARCH 15, 1981
END OF CONTRACT

30




| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ,581.96 | 543,149.79 | 443,680.15 | 285,[illegible]666.62 | 325,872.23 | 324,647.90 | 329,169.23 | 214. |
| 5,882.41 | 11,079,032.20 | 11,522,712.35 | 11,806,377.97 | 12,134,250.20 | 12,458,898.10 | 12,788,067.33 | 13,00 |

)MPLISHMENT

; REPORT

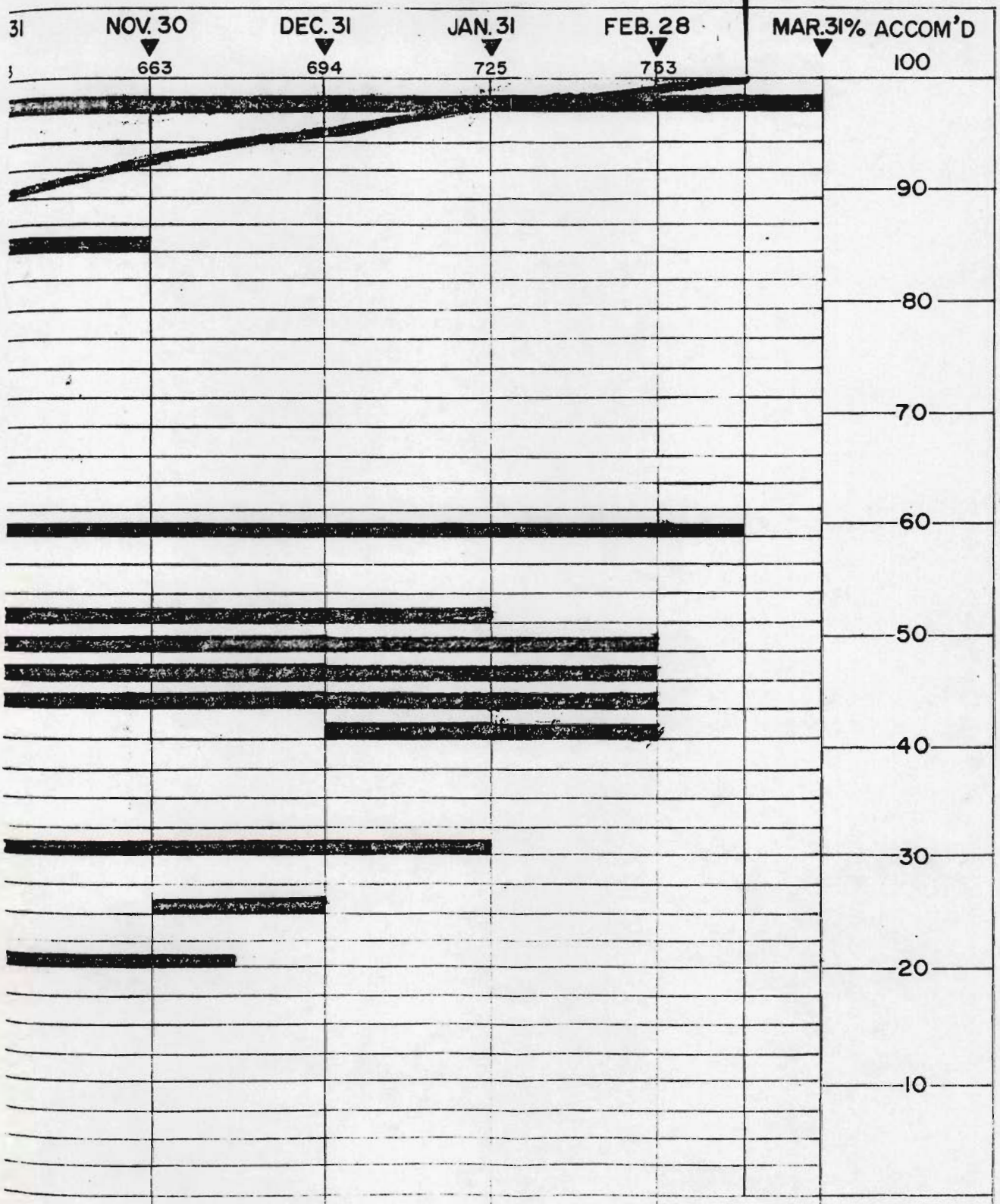
)RK

COMPLISHMENT

IPLISHMENT

MARCH 15, 1981
END OF CONTRACT TIME

31




| | | | | |
|---|---|---|---|---|
| 325,872.23 | 324,647.90 | 329,169.23 | 214,200.67 | 1,200 |
| 12,134,250.20 | 12,458,898.10 | 12,788,067.33 | 13,002,268.00 | 13,003,468.00 |

# BICOL RIVER BASIN DEVELOPMENT F

## (ROAD COMPONENTS)

## MANPOWER SCHEDULE OF CONSULTANT'S STAFF FOR CONST

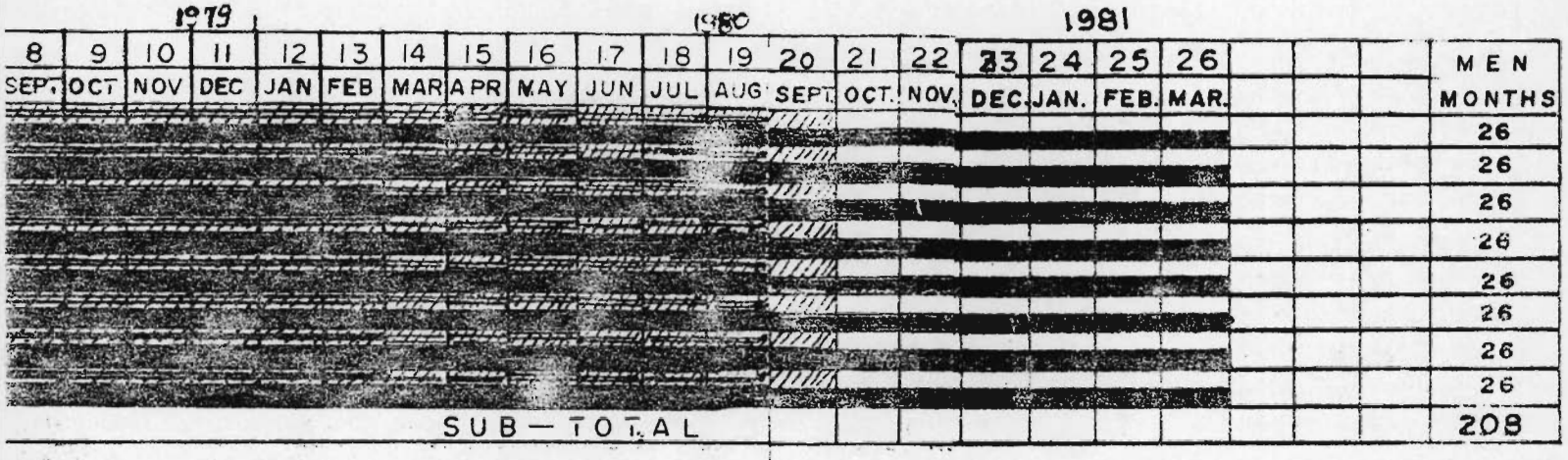
## PACKAGE II

| NAMES | POSITION | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEPT | OC |
| A. E. BANDELARIA | DEPUTY PROJ. MGR. | | | | | | | | | | | |
| L. D. MAYOR | SR. HWY. ENGR. / R.E. | | | | | | | | | | | |
| F. G. OBUSAN | SR. BR. ENGR. / R.E | | | | | | | | | | | |
| M. D. LACSAMANA | SR. LOC. ENGR. / R. E. | | | | | | | | | | | |
| J. A. TORRALBA | SR. MATL'S ENGR./R.E. | | | | | | | | | | | |
| F. C. ROSALES | ADM. OFFICER | | | | | | | | | | | |
| L. P. JOSE | CLERK TYPIST | | | | | | | | | | | |
| T. S. SABABAN | MES'R JANITOR | | | | | | | | | | | |
| | | | | | | | | | | | | |
| **SUB-PROJECT NO. 4, MINALABAC-ANTIPOLO-** | | | | | | | | | | | | |
| J. A. TORRALBA | SR. MATL'S ENGR/R.E. | | | | | (INCLUDED | | | | | IN | |
| V. E. PARIS | ENGR. INSP. (HWY) | | | | | | | | | | | |
| E.C. FORTALEZA | ENGR. INSP. (BRIDGE) | | | | | | | | | | | |
| C.C. ORTIZ | MATL. ENGR. | | | | | | | | | | | |
| A. E. BANDELARIA | SURVEYOR/DRAFTSMAN | | | | | | | | | | | |
| A. M. ABOGA | LAB. TECHNICIAN | | | | | | | | | | | |
| M.L. SANTIANO | CLERK / TYPIST | | | | | | | | | | | |
| S. EABUTAP | JANITOR / MESSENGER | | | | | | | | | | | |
| R. M. ABANTE | LABORER | | | | | | | | | | | |
| | | | | | | | | | | | | |

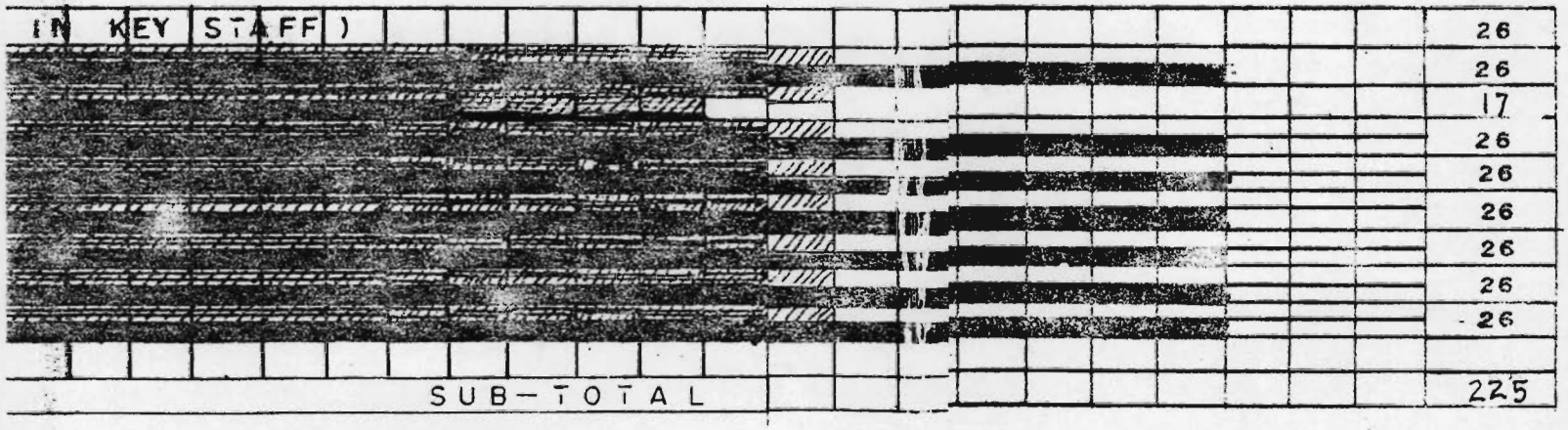
1920

JT PROJECT

ONSTRUCTION SUPERVISION




LO—HUBO ROAD



Bicol River Basin Development Project

Secondary and Feeder Roads

PACKAGE II

Pili-Mataoroc Road Project

MONTHLY CONSTRUCTION REPORT

Prepared by:

FRANCISCO G. OBUSAN
Sr. Bridge Engr./Res.Engr.

Submitted by:

AMADO E. BANDELARIA
Deputy Project Manager

PROGRESS REPORT NO. 25

September, 1980

PROJECT: PILI-MATACROC ROAD PROJECT (Secondary and Feeder Roads)
SUB*PROJECT NO. 5

1. GENERAL

This project consist of the construction of the following:

1) Secondary Road - 8.988 kms., from sta. 0+000 to sta 9+144.70. This road begins from the end of the 2 km. concrete road intersecting with the Manila South Road at about ½ km from Pili, going to Naga. Its end is at Baliwag Viejo, Minalabac Camarines Sur, a barrio dependent on water transportation via Bicol River before this project came to reality. As per plan, the entire Secondary Road shall be asphlated with 6.10 meters wide pavement. Drainage structures consist of RCP's of different sizes at different stations, one (1) span 10M RCDG at sta 3+398.71 and 4 - 0.80 x 0.80 M RCBC's.

2. Mataoroc-Manapao*Baliwag. Feeder Road 501 - 7.135 kms., from sta 0+003.05 to sta 7+246.63. The beginning of the project is at sta 1+950 of the Secondary Road and ends at the end of same Secondary Road. A gravel road surface 4.00M wide with 1.00M shoulders is to be done which traverses mostly ricefields. This Feeder road has the most number of drainage structures which consist of RCP's of different sizes at different stations, two-three span. One (1) single span and one-17 span timber trestle bridges.

3. Sagrada - San Isidro, Feeder Road 502 - 2.056 kms., from sta 0+029.05 to sta 2+084.96 with its beginning at sta 3+572 of the Secondary Road and end at barrio San Isidro, Bula, Camarines Sur, joining with another road project. A gravel road surface 4.00M wide with 1.00M shoulder is to be done which traverses ricefields. This feeder road has five lines of RCP's, 1 - 0.80 x 0.80 M RCBC and 1-3 span timber trestle bridge.

4. Manapao-Malitbog, Feeder Road 503 - 1.518 kms., from sta 0+077.04 to sta 1+594.75 with its beginning at sta 3+884 of Feeder Road 501 and is the only road that dies not join with another road project although its end is adjacent to one. A gravel road surface 4.00M wide with 1.00M shoulders is to be constructed which passes through ricefields. Drainage structures consist of RCP's of different sizes at different stations and 1-0.80 x 0.80M and 2.10 RCBC's.

5. San Jose - San Ramon, Feeder Road 504 - 1.961 kms., from sta 0+114.09 to sta 1+998.27 with its beginning at sta 6+710 at the Secondary Road and ends at barrio San Ramon, Bula, Camarines Sur, joining with another Road Project. A gravel road surface 4.00M wide with 1.00M shoulders is to be constructed which also passes through ricefields, drainage structures consist of RCP's at different sizes at different stations, 1-0.80 x 0.80 RCBC and 1-2 span timber trestle bridge.

## II. PROGRESS

Overall progress this month is slow. The only activity is in the construction of 2-1.80 x 2.10 x 13.50 M RCBC at Feeder Road No. 503. Work accomplished to date is 92.63135% with a time elapsed of 88.10916%

| R O A D | % Accomplished to Date |
|---|---|
| 1. Secondary Road . . . . . | 45.27% |
| 2. Mataoroc-Manapao-Baliwag, FR 501 . . . . | 31.55% |
| 3. Sagrada-San Isidro, FR 502 . . . . . | 5.94% |
| 4. Manapao-Malitbog, FR 503 . . . . . | 5.11% |
| 5. San-Jose-San Ramon, FR 504 . . . . . | 4.75% |

## I. GENERAL (Secondary & Feeder Roads

The following are included in this Report; List of Contractor's Personnel (Annex A), List of Construction Equipment (Annex "B"), List of Laboratory and Office Equipment (Annex C), Employment Generation Survey, Weather Report, Manpower or List of Personnel of the Engineer (Consultants) and Location Map of the Project.

II. a ROADS, BRIDGES AND DRAINAGE STRUCTURES
(Secondary Road)

Construction Survey

No activity during the month.

Earthwork

No activity during the month.

Subbase and Base

No activity during the month.

Surfacing

No activity during the month.

Structures

No activity during the month.

Physical Accomplishment as of August 25, 1980

a. Roads

Subgrade-[illegible].928 Km

Subbase -[illegible].200 Km

Base -5.365 Km

Surfacing - none

Bridges

Sub-structures- 10 LM RC

Abut on RC piles

Superstructure - 1 span
10 LM RCDG

Drainage and Erosion Works

The following pipes have been installed as of

September 25, 1980.

| SIZE Ø | RCP INSTALLED (L.M.) Prev.Mo. | This Mo. | Total | Remarks |
|---|---|---|---|---|
| 0.30 | 104.40 | - | 104.40 | |
| 0.46 | 114.00 | - | 114.00 | |
| 0.61 | 62,40 | - | 62.40 | |
| 0.91 | 214.80 | - | 214.80 | |
| 1.20 | 90.00 | - | 90.0 | |

| STATION | NUMBER | SIZE | LENGTH |
|---|---|---|---|
| 0 + 552.00 | 5 | 0.30 M | 6.00 M |
| 1 + 013.37 | 12 | 0.30 M | 14.40 M |
| 1 + 376.30 | 10 | 0.30 M | 12.00 M |
| 7 + 0.10.00 | 11 | 0.30 M | 13.20 M |
| 7 + 525.00 | 11 | 0.30 M | 13.20 M |
| 8 + 210.00 | 11 | 0.30 M | 13.20 M |
| 8 + 812.00 | 13 | 0.30 M | 15.60 M |
| 8 + 955.25 | 14 | 0.30 M | 16.80 M |
| Total | 87 | | 104.40 M |

| STATION | NUMBER | SIZE | LENGTH |
|---|---|---|---|
| 2 + 912.00 | 10 | 0.46M | 12.00M |
| 4 + 535.00 | 10 | 0.46M | 12.00M |
| 4 + 825.00 | 10 | 0.46M | 12.00M |
| 6 + 100.00 | 9 | 0.46M | 10.80M |
| 6 + 315. | 11 | 0.46M | 13.20M |
| 7 + 275.00 | 11 | 0.46M | 13.20M |
| 7 + 407.00 | 11 | 0.46M | 13.20M |
| 7 + 850.00 | 12 | 0.46M | 14.40M |
| 8 + 010.00 | 11 | 0.46M | 13.20M |
| Total | 95 | | 114.00M |

| | | | |
|---|---|---|---|
| 0 + 100.00 | 10 | 0.61M | 12.00M |
| 0 + 300.00 | 10 | 0.61M | 12.00M |
| 1 + 625.00 | 10 | 0.61M | 12.00M |
| 3 + 100.00 | 10 | 0.61M | 12.00M |
| 3 + 525.00 | 12 | 0.61M | 14.40M |
| Total | 52 | | 62.40M |

| | | | |
|---|---|---|---|
| 0 + 750.00 | 10 | 0.91M | 12.00M |
| 1 + 107.39 | 10 | 0.91M | 12.00M |
| 1 + 236.70 | 10 | 0.91M | 12.00M |
| 1 + 993.10 | 8 | 0.91M | 9.60 |
| 2 + 103.42 | 10 | 0.91M | 12.00M |
| 2 + 358.52 | 10 | 0.91M | 12.00M |
| 4 + 700.00 | 10 | 0.91M | 12.00M |
| 5 + 175.00 | 14 | 0.91M | 16.80M |
| 5 + 350.00 2@ | 12 | 0.91M 2@ | 14.40M |
| 5 + 425.00 | 10 | 0.91M | 12.00M |
| 6 + 950.00 | 11 | 0.91M | 13.20M |
| 7 + 475.00 | 14 | 0.91M | 16.80M |
| 8 + 475.00 2@ | 13 | 0.91M 2@ | 15.60M |
| 7 + 710.00 | 12 | 0.91M | 14.40M |
| Total | 179 | | 214.80M |

| | | | |
|---|---|---|---|
| 2 + 760.00 | 12 | 1.20M | 14.40M |
| 5 + 000.00 | 11 | 1.20M | 13.20M |
| 6 + 625.00 2@ | 14 | 1.20M 2 @ | 16.80M |
| 9 + 000.00 2@ | 12 | 1.20M 2@ | 14.40M |

6. Materials Testing and Control

| ITEM No. | KIND OF TESTS | No. of Tests Prev. Mo. | This Mo. | Total |
|---|---|---|---|---|
| 105-a | Grading | 7 | - | 7 |
| | PL & LL | 7 | - | 7 |
| | Compaction | 7 | - | 7 |
| | F. Density | - | - | - |
| 105-b | Grading | 2 | - | 2 |
| | PL & LL | 2 | - | 2 |
| 106 | Grading | 1 | - | 1 |
| | PL & LL | 1 | - | 1 |
| | Compaction | 1 | - | 1 |
| | F. Density | 1 | - | 1 |
| 107 | Grading | 100 | - | 100 |
| | PL & LL | 100 | - | 100 |
| | Compaction | 100 | - | 100 |
| | F. Density | 783 | - | 783 |
| 110 | PL & LL | 1 | - | 1 |
| | Grading | 1 | - | 1 |
| 200 | PL & LL | 23 | | 23 |
| | Grading | 23 | | 23 |
| | Compaction | 23 | | 23 |
| | F. Density | 27 | | 27 |
| | Sp. Gravity | 1 | - | 1 |
| 108 | Grading | 92 | - | 92 |
| | PL & LL | 92 | - | 92 |
| | Compaction | 92 | - | 92 |
| | F. Density | 252 | - | 252 |

| | | | | |
|---|---|---|---|---|
| 402-2.5 (F.A.) | Grading | 4 | - | 4 |
| | Sp. Gravity | 1 | - | 1 |
| | Unit Wt. | 1 | - | 1 |
| 402-2.5 | Grading | 4 | - | 4 |
| | Sp. Gravity | 1 | - | 1 |
| | Unit Wt. | 1 | - | 1 |
| 405 - A | Design Mix | 2 | - | 2 |
| 405-2.3 (C.A.) | Grading | 2 | - | 2 |
| 405-2.2 (F.A.) | Grading | 2 | - | 2 |
| 405-C | Design Mix | 2 | - | 2 |
| 413 (F.A.) | Grading | 4 | - | 4 |
| | Sp. Gravity | 1 | - | 1 |
| | Unit Wt. | 1 | - | 1 |
| 413 (C.A.) | Grading | 5 | - | 5 |
| | Sp. Gravity | 1 | - | 1 |
| | Unit Wt. | 1 | - | 1 |

| DATE | LOCATION OF STRUCTURE | RESULT AFTER 28 days | Remarks |
|---|---|---|---|
| 11-4-78 | 12" Ø R C P | 3060 | Passed |
| -do- | -do- | 3450 | -do- |
| -do- | -do- | 3520 | -do- |
| 11-12-78 | 18" Ø R C P | 3145 | -do- |
| -do- | -do- | 3415 | -do- |
| 11-18-78 | 36" Ø R C P | 2871 | Failure |
| -do- | -do- | 3020 | Passed |
| -do- | -do- | 3350 | Passed |
| 11- 24-78 | R.C. Test Pile RCDG SAGRADA BRIDGE | 3560 | Passed |
| -do- | -do- | 3630 | Passed |
| -do- | R.C. Test Pile, RCDG mataoroc-manapao bridge | 3680 | Passed |
| -do- | -do- | 3840 | Passed |
| -do- | -do- | 3920 | Passed |
| 11-25-78 | 24" Ø R C P | 3090 | Passed |
| -do- | -do- | 3138 | -do- |
| 11-28-78 | 36" Ø R C P | 3111 | Passed |
| -do- | -do- | 3334 | -do- |
| 12-16-78 | 48" Ø R C P | 3377 | -do- |
| -do- | -do- | 3397 | -do- |
| -do- | -do- | 3425 | -do- |
| 12-18-78 | 18" Ø R C P | 2970 | Failure |
| -do- | -do- | 3340 | Passed |
| -do- | -do- | 3481 | Passed |
| 12-19-78 | 36" Ø R C P | 2614 | Failure |
| -do- | -do- | 3160 | Passed |
| -do- | -do- | 3457 | Passed |
| 12-20-78 | 48" Ø R C P | 3410 | Passed |
| -do- | -do- | 3465 | Passed |
| -do- | -do- | 4020 | Passed |
| 2-12-79 | 36" Ø R C P | 3195 | -do- |
| -do- | -do- | 3332 | -do- |
| -do- | -do- | 3411 | -do- |
| 2-15-79 | 48" Ø R C P | 3000 | -do- |
| -do- | -do- | 3040 | -do- |
| -do- | -do- | 3087 | -do- |
| 2-16-79 | 12" Ø R C P | 3010 | -do- |
| -do- | -do- | 3444 | -do- |
| -do- | -do- | 3516 | -do- |
| 3-13-79 | RCP, RCDG, SAGRADA BRIDGE | 3562 | -do- |
| -do- | -do- | 3843 | -do- |
| -do- | -do- | 4108 | -do- |

| DATE | Location of STRUCTURE | Beat after 28 days | Remarks |
|---|---|---|---|
| 3/13/79 | 24" Ø RCP | 3,[illegible] | Passed |
| -do- | -do- | 3,252 | -do- |
| -do- | -do- | 2,814 | Failure |
| 3/20/79 | 36" Ø RCP | 3,462 | Passed |
| -do- | -do- | 3,149 | Passed |
| -do- | -do- | 3,432 | Passed |
| 3/23/79 | 48" Ø RCP | 2,979 | Failure |
| -do- | -do- | 3,318 | Passed |
| -do- | -do- | 3,410 | Passed |
| 4/2/79 | 18" Ø RCP | 3,065(15days) | Passed |
| -do- | -do- | 3,243 -do- | -do- |
| -do- | -do- | 3,255 -do- | -do- |
| 5/5/79 | 36" Ø RCP | 3,106(12days) | Satisfactory) |
| -do- | -do- | 3,420 -do- | Satisfactory |
| -do- | -do- | 3,516 -do- | -do- |
| 5/7/79 | 48" Ø RCP | 3,296(30days) | -do- |
| -do- | -do- | 2,748 -do- | Failure |
| 5/9/79 | 18" Ø RCP | 3,623(31days) | Satisfactory |
| 5/12/79 | 36" Ø RCP | 2,830 | Failure |
| -do- | -do- | 2,655 | -do- |
| -do- | -do- | 2,604 | -do- |
| 5/17/79 | 36" Ø RCP | 2,892(23 days) | Satisfactory |
| -do- | -do- | 2,970Ave.2936 | Satisfactory |
| -do- | -do- | 2,946 | -do- |
| 5/19/79 | 12" Ø RCP | 3,202(21days) | Passed |
| -do- | -do- | 2,989 3028 | Compressive |
| -do- | -do- | 2,892 | strength requirement |
| 6/7/79 | Abutment "A" Sagrada Br. | 3,382(32days) | Passed compressive |
| -do- | -do- | 3,125 Ave.3,389 | Strength requirement |
| -do- | -do- | 3,661 | |
| 6/23/79 | Abutment A&B Sagrada Br. | 3,358(20days) | |
| -do- | Backwall & Wingwall | 2,799 Ave.3,182 | -do- |
| -do- | -do- | 3,389 | |
| 7/10/79 | 36" Ø RCP | 2,799 Ave.3,431 | -do- |
| -do- | -do- | 4,245 | |
| -do- | -do- | 3,167 | |
| 7/12/79 | 48" Ø RCP | 3,856(18days) | |
| -do- | -do- | 3,452 Ave.3,825 | -do- |
| -do- | -do- | 4,167 | |
| 7/18/79 | 18" Ø RCP | 2,892(14days) | Satisfactory |
| -do- | -do- | 2,923Ave.2,853 | for 23 days |
| -do- | -do- | 2,744 | |

| | | | |
|---|---|---|---|
| 8-4-79<br>-do-<br>-do- | Item 405<br>Sagrada Bridge<br>(Girders) | 3,415 | Passed compressive<br>Strength requirement |
| 8-4-79<br>-do- | Test Pile FR #501<br>TTr Br. Sta. 0+218<br>0+224<br>-do- | 3,260 | Passed compressive<br>Strength requirement |
| 8-6-79<br>-do-<br>-do- | Test Pile FR#501<br>TTr Br. Sta. 1+367-1+385<br>-do- | 2,565 | Failure |
| 8-10-79<br>-do-<br>-do- | Item 405<br>Sagrada Bridge<br>(Slab) | 3,295 | Passed compressive<br>Strength requirement |
| 8-21-79<br>-do-<br>-do- | Sagrada Bridge<br>Railing<br>-do- | 3,439 | Passed compressive<br>Strength requirement |
| 8-25-79<br>-do-<br>-do- | Test Pile for TbTe<br>sta.1+880 FR 502<br>-do- | 3,478 | -do- |
| 8-28-79<br>-do-<br>-do- | RCBC, Sta. 4+000<br>-do- | 3,322 | -do- |
| 9-1-79<br>-do-<br>-do- | Test Pile for TbTe<br>sta. 1+433 FR 504<br>-do- | 3,485 (55 days) | -do- |
| 9-28-79<br>-do-<br>-do- | RCP, 0.91 M Ø<br>-do-<br>-do- | 3,156 (27 days) | -do- |
| 10-12-79<br>-do-<br>-do- | RCP, 0.30 M Ø<br>-do-<br>-do- | 3,195 (13 days) | -do- |
| 10-12-79 | RCP, 0.61 M Ø | 3,247 (13 days) | -do- |

| | | | |
|---|---|---|---|
| 10-15-79 | RCP, 0.61 M Ø | | |
| -do- | -do- | 3,021 (days) | Satisfactory |
| -do- | -do- | | |
| 10-16-79 | RCP, 0.30 M Ø | 3,060 (9days) | Satisfactory |
| -do- | -do- | | |
| 11-7-79 | RCP, 1.20 M Ø | 3,250 (15days) | Passed compressive strength requirement |
| -do- | -do- | | |
| 11-10-79 | RCP, 0.46 M Ø | 3,174 (12 days) | -do- |
| -do- | -do- | | -do- |
| -do- | -do- | | |
| 11-11-79 | RCP, 1.20 M Ø | | |
| -do- | -do- | 3,212 (11 days) | -do- |
| -do- | -do- | | |
| 11-15-79 | RCBC km. + 417.50 | 3,107 (19days) | Passed comperessive strength requirement |
| -do- | F.D 504 San Jose-San Ramon | | |
| -do- | -do- | | |
| 11-22-79 | Headwall, Km. 6+ 950 | 2,838 (12days) | Passed compressive strength requirement for 28 days |
| 11-23-79 | Headwall, Km.9 + 400 | 2,910 (11 days) | -do- |
| -do- | Secondary Road | | |
| -do- | -do- | | |
| 12-6-79 | RCBC Km. 5 + 975 | 3,133 (36days) | Passed compressive strength recuirement |
| -do- | Secondary Road | | |
| -do- | -do- | | |
| 12/10-79 | RCBC, km. 6+ 200 | 3,154 (32days) | Passed compressive strength rquirement |
| -do- | Secondary Road | | |
| -do- | -do- | | |
| 12-11-79 | 18" Ø R C P | 3,488 (31days) | -do- |
| -do- | -do- | | |
| -do- | -do- | | |
| 12-12-79 | 48" Ø R C P | 3,418 (30 days) | -do- |
| -do- | -do- | | |
| -do- | -do- | | |
| 1-7-80 | Bearing Piles | 3,268 (32 days) | |
| -do- | -do- | | |
| -do- | -do- | | |
| 1-9-80 | 48" Ø R C P | 3,366 (30 days) | |
| -do- | -do- | | |
| -do- | -do- | | |

| | | | |
|---|---|---|---|
| 2/3/80<br>-do-<br>-do- | Bearing pile, Km.1+404-442<br>FDR # 504 | Ave.3,369 (33days) | Passed compressive strength requirement |
| 3/3/80<br>-do-<br>-do- | Capping #2-3, Km.1+871-889<br>FDR # 502 | Ave.3,200 (30days) | -do- |
| 3/4/80<br>-do-<br>-do- | Capping #1-4, Km.1+871-889<br>FDR#502 | Ave.3,161 (29 days) | -do- |
| 3/5/80<br>-do- | Headwall, Km.1+993.10<br>Secondary Road | Ave.3,261 (28 days) | -do- |
| 3/5/80 | Wingwall, Km.4+000<br>Secondary Road | 3,226 (28 days) | -do- |
| 3/7/80 | Headwall Km. 0+650<br>FDR # 501 | 3,164 (26 days) | -do- |
| 3/7/80<br>-do- | Headwall, Km. 0+348<br>FDR # 501 | 3,172 (26 days) | -do- |
| 3/20/80<br>-do-<br>-do- | 12" Ø RCP<br>-do-<br>-do- | Ave.3,208 (13 days) | -do- |
| 2/25/80<br>-do-<br>-do- | Capping #1,2,4, Km.1+424<br>FDR # 504 | Ave.3,299 (23 days) | -do- |
| 3/28/80<br>-do-<br>-do- | Capping #3, Km.1+424<br>FDR # 504 | Ave.3,208 (20 days) | -do- |
| 3/28/80<br>-do-<br>-do- | Headwalls Km. 3+150<br>FDR # 501 | Ave.3,321 (20 days) | -do- |
| 3/31/80<br>-do-<br>-do- | TEST PILE, Km.6+147.00<br>FDR #501, HALEIWA SIDE | Ave.3,190 (17 days) | -do- |
| 4/1/80<br>-do- | TEST PILE, Km.6+045.00<br>FDR #501, MAKAPAO SIDE | Ave.3,210 (16 days) | -do- |

| | | | |
|---|---|---|---|
| 4/12/80 | Bearing Pile, Km.1+367.00 | | Passed compressive |
| -do- | Fr. 501 | Ave.3249 (34 days) | Strength requirement |
| -do- | | | |
| 4/15/80 | 0.61m. Ø RCP | Ave.3332 ( 31 days) | -do- |
| -do- | | | |
| -do- | | | |
| 4/17/80 | HW, KM.4+750.00 | 3,203 (29 days) | -do- |
| | FR. | | |
| 4/23/80 | HW, KM.2+257.00 | Ave.3,057 (23 days) | -do- |
| -do- | FR 501 | | |
| -do- | | | |
| 4/26/80 | Capping, Km 0+224.00 | Ave.3,146 (20 days) | -do- |
| -do- | FR 501 | | |
| -do- | | | |
| 5/1/80 | Headwall, Km 0+750 | | |
| -do- | FR 503 | Ave.3,011 (15 days) | -do- |
| -do- | FR 503 | | |
| 5/3/80 | Headwall, Km 0+500 | Ave.3,068 (13 days) | -do- |
| -do- | FR 503 | | |
| -do- | | | |
| 5/8/80 | Bearing Pile, Km0+084.00 | Ave.3,399 | -do- |
| | FR 501 | (33days) | |
| -do- | -do- | -do- | |
| -do- | -do- | -do- | -do- |
| 5/10/80 | Pile Cap. Km.1+367.00 | Ave.3,791 | |
| | FR 501 | (31 days) | -do- |
| -do- | -do- | -do- | -do- |
| -do- | -do- | -do- | -do- |
| 5/16/80 | Headwall Km5+500.00 | Ave.3099 | -do- |
| | FR 501 | (25 days) | |
| -do- | -do- | -do- | -do- |
| -do- | -do- | -do- | -do- |

<u>Additional this month</u>

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| RCBC | 1 | 6/10/80 | FR #504,sta.0+301 | 8/18/80 | 69 | 3,623 | Ave. Passed compresive |
| | 2 | -do- | -do- | -do- | 69 | 3,747 | 3,6415 strenth re- |
| | | | | | | | quirement |
| | 3 | -do- | -do- | -do- | 69 | 3,553 | (22091 psi 28 days) |
| RCBC | 1 | 6/4/80 | FR.#502 sta0+493 | 8/18/80 | 65 | 3,480 | |
| | 2 | -do- | -do- | -do- | 65 | 3,522 | 3,488 Passed com- |
| | | | | | | | pressive |
| | 3 | -do- | -do- | -do- | 65 | 3,459 | strength re- |
| | | | | | | | quirement |
| P.C | 1 | 7/11/80 | Pile Bent 3&4 FR. | 5/18/80 | 38 | 3,249 | |
| | 2 | -do- | #501-sta6+045- | -do- | 38 | 3,397 | 3,314 -do- |
| | | | 6+147 | | | | |
| | 3 | -do- | -do- | -do- | 38 | 3,296 | -do- |
| P.C. | 1 | 7/17/80 | Pile Bent, FR#501 | 8/18/80 | 32 | 3,312 | |
| | 2 | -do- | sta6+045-6+147 | -do- | 32 | 3,133 | 3,224 -do- |
| | 3 | -do- | -do- | -do- | 32 | 3,226 | |

II. b ROADS, BRIDGES AND DRAINAGE STRUCTURES

(Mataoroc-Manapao-Baliwag, Feeder Road 501)

Construction Survey

No activity during the month.

Earthwork

No activity during the month.

Subbase

No activity during the month.

Structures

NO ACTIVITY DURING THE MONTH.

Physical Accomplishment as of August 25, 1980

a. Roads

subgrade - 6.790

subbase - 4.900

base

surfacing

b. Bridges

substructure - 24 span

6 LM TbTe bridge on RC Abut.

superstructure - 9 span

6 LM TbTe br. on RC Abut.

Drainage & Erosion Works

The following pipes have been installed as of August 25, 1980

| SIZE | RCP Installed (LM) 'Pref.Mo. | 'This Mo. | 'Total' | Remarks |
|---|---|---|---|---|
| 0.30 | 54.00 | - | 54.00 | |
| 0.46 | 98.40 | - | 98.40 | |
| 0.61 | 9.60 | - | 9.60 | |
| 0.91 | 54.00 | - | 54.00 | |
| 1.20 | 219.60 | - | 219.60 | |

| STATION | NUMBER | SIZE | LENGTH |
|---|---|---|---|
| 1 + 727.00 | 8 | 0.30 M | 9.60 meters |
| 2 + 147.00 | 6 | 0.30 M | 7.20 " |
| 2 + 587.00 | 6 | 0.30 M | 7.20 " |
| 2 + 656.00 | 6 | 0.30 M | 7.20 " |
| 2 + 800.00 | 6 | 0.30 M | 7.20 " |
| 4 + 495.00 | 13 | 0.30 M | 15.60 " |
| T O T A L | 45 | | 54.00 meters |
| 1 + 775.00 | 8 | 0.46 M | 9.60 " |
| 3 + 749.50 | 4 | 0.46 M | 4.80 " |
| 3 + 908.00 | 9 | 0.46 M | 10.80 " |
| 4 + 140.00 | 9 | 0.46 M | 10.80 " |
| 5 + 754.00 | 9 | 0.46 M | 10.80 " |
| 6 + 320.00 | 13 | 0.46 M | 15.60 " |
| 6 + 473.00 | 11 | 0.46 M | 13.20 " |
| 7 + 034.00 | 10 | 0.46 M | 12.00 " |
| 7 + 163.00 | 9 | 0.46 M | 10.80 " |
| T O T A L | 82 | | 98.40 " |
| 2 + 013.00 | 8 | 0.61 M | 9.60 meters |
| 0 + 650.00 | 9 | 0.91 M | 10.80 " |
| 1 + 550.00 | 10 | 0.91 M | 12.00 " |
| 3 + 150.00 | 9 | 0.91 M | 10.80 " |
| 3 + 034.00 | 9 | 0.91 M | 10.80 " |
| 4 + 750.00 | 8 | 0.91 M | 9.60 " |
| T O T A L | 45 | | 54.00 meters |
| 0 + 840.00 | 11 | 1.20 M | 13.20 " |
| 1 + 114.50 2@ | 14 | 1.20 M 2@ | 16.80 " |
| 2 + 257.00 | 10 | 1.20 M | 12.00 " |
| 2 + 440.00 2@ | 12 | 1.20 M 2@ | 14.40 " |
| 5 + 500.00 | 9 | 1.20 M | 10.80 " |
| 5 + 703.20 | 10 | 1.20 M | 12.00 " |
| 5 + 821.40 | 10 | 1.20 M | 12.00 " |
| 6 + 000.00 | 9 | 1.20 M | 10.80 " |
| 6 + 718.00 | 9 | 1.20 M | 10.80 " |
| 6 + 800.00 | 10 | 1.20 M | 12.00 " |
| 7 + 050.00 | 10 | 1.20 M | 12.00 " |
| 6 + 200.00 | 10 | 1.20 M | 12.00 " |
| 6 + 410.00 | 11 | 1.20 M | 12.00 " |
| 6 + 588.00 2@ | 11 | 1.20 M 2@ | 13.20 " |
| T O T A L | 183 | | 219.60 meters |

Materials Testing and Control

| ITEM | KIND OF TEST | NUMBER OF TEST Prev. No. | This No. | Total | REMARKS |
|---|---|---|---|---|---|
| 107 | Grading | 53 | - | 53 | |
| | PL & LL | 53 | - | 53 | |
| | Compaction | 53 | - | 53 | |
| | F. Density | 249 | - | 249 | |
| 105 | Grading | 1 | - | 1 | |
| | PL & LL | 1 | - | 1 | |
| | Compaction | 1 | - | 1 | |
| | F. Density | 4 | - | 4 | |
| 105-b | Grading | 4 | - | 4 | |
| | PL & LL | 4 | - | 4 | |
| 108 | Grading | 16 | - | 16 | |
| | PL & LL | 16 | - | 16 | |
| | Compaction | 16 | - | 16 | |
| | F. Density | 51 | - | 51 | |
| 402-2.2 | Grading | 2 | - | 2 | |
| 402-2.3 | Grading | | - | | |
| | Design Mix | [illegible] | - | [illegible] | |
| 405-2.2 | Grading | - | 2 | 2 | |
| 405-2.3 | Grading | - | 2 | 2 | |

## II. c ROADS, BRIDGES AND DRAINAGE STRUCTURES

(Sagrada-San Isidro, Feeder Road No. 502)

### Construction Survey

No activity during the month.

### Earthwork

No activity during the month.

### Subbase and Base

No activity during the month.

### Structures

Construct substructure of timber trestle bridge at

sta 1+880.

### Physical Accomplishment

| a. Roads | Bridges |
|---|---|
| subgrade - 2.037 | substructure - 3 span |
| subbase - 1.800 | 6 LM TbTe bridge on RC Abutment |
| base | supersturcture - 3 span 6 LM TbTe bridge on RC Abut. |
| surfacing | |

### Drainage & Erosion Works

The following pipes have been installed as of August 25, 1980

| SIZE | RCP INSTALLED (LM) Prev. Mo. | This Mo. | T o t a l |
|---|---|---|---|
| 0.46 | 9.60 | - | 9.60 |
| 0.61 | 21.60 | - | 21.60 |
| 1.20 | 9.60 | - | 9.60 |

| STATION | NUMBER | SIZE | LENGTH |
|---|---|---|---|
| 0 + 616.00 | 6 | 0.46 M | 9.60 M |
| 0 + 950.00 | 10 | 0.61 M | 12.00 M |
| 1 + 146.00 | 8 | 0.61 M | 9.60 M |
| Total | 18 | | 21.60 M |
| 1 + 563.00 [illegible] | 8 | 1.20 M | 9.60 M |

Materials Testing and Control

| ITEM NO. | KIND OF TEST | Number of Test Prev. Mo. | This Mo. | Total |
|---|---|---|---|---|
| 105-B | Grading | 1 | - | 1 |
| | LL & PL | 1 | - | 1 |
| 107 | Grading | 12 | - | 12 |
| | LL & PL | 12 | - | 12 |
| | Compaction | 12 | - | 12 |
| | P. Density | 110 | - | 110 |
| 405-2.2 (FA) | Grading | 2 | - | 2 |
| 504-2.3 (CA) | Grading | 2 | - | 2 |
| 405 cl. "C" | Design Mix | 2 | - | 2 |
| 402-2.5 | Test File Report | 1 | - | 1 |
| 108 | Grading | 2 | - | 2 |
| | LL & PL | 2 | - | 2 |
| | Compaction | 6 | | 6 |

## II. d ROADS, BRIDGES AND DRAINAGE STRUCTURES
(Manapao-Malitbog, Feeder Road No.503)

### Construction Survey

No activity during the month.

### Earthwork

Excavate for the 2-180 x 2.10 RCBC at sta 0+160

### Subbase

No activity during the month.

### Structures

Construct 2-1.80 x 2.10 x 13.50M RCBC at sta 0+160

### Physical Accomplishment

a. Roads
- Subgrade - 1.493
- Subbase - 0.898
- Base
- Surfacing

b. Bridges
- Substructure
- Superstructure

### Drainage and Erosion Works

The following pipes have been installed as of September 25, 1980.

| SIZE | RCP Installed (LM) Prev.Mo. | This Mo. | Total |
|---|---|---|---|
| 0.46 | 24.00 | - | 24.00 |
| 0.61 | 32.40 | - | 32.40 |
| 0.91 | 10.80 | - | 10.80 |
| 1.20 | 21.60 | - | 21.60 |

| STATION | NUMBER | SIZE | LENGTH |
|---|---|---|---|
| 0 + 500.00 | 9 | 0.61M | 10.80M |
| 0 + 775.00 | 9 | 0.61M | 10.80M |
| 0 + 552.00 | 9 | 0.61M | 10.80M |
| Total | 27 | | 32.40M |
| 0 + 246.00 | 10 | 0.46M | 12.00M |
| 0 + 343.00 | 10 | 0.46M | 12.00M |
| Total | 20 | | 24.00M |
| 0 + 050.00 | 9 | 0.91M | 10.80M |
| 0 + 927.00 | 9 | 1.20M | 10.80M |
| 0 + 106.00 | 9 | 1.20 M | 10.80M |
| Total | 18 | | 21.60M |

Materials Testing and Control

| ITEM NO. | KIND OF ITEM | KIND OF TEST Prev.Mo. | This Mo. | Total |
|---|---|---|---|---|
| 107 | Grading | 12 | - | 12 |
| | PI Ø LL | 12 | - | 12 |
| | Compaction | 12 | - | 12 |
| | F. Density | 42 | - | 42 |
| 105-B | Grading | 2 | - | 2 |
| | LL & PL | 2 | - | 2 |
| 108 | Grading | 5 | - | 5 |
| | PL & LL | 5 | - | 5 |
| | Compaction | 5 | - | 5 |
| | F. Density | 15 | - | 15 |

## II. e ROADS, BRIDGES AND DRAINAGE STRUCTURES

(San Jose-San Ramon, Feeder Road No. 504)

Construction Survey

No activity during the month.

Earthwork

No activity during the month.

Subbase & Base

No activity during the month.

Structures

No activity during the month.

Physical Accomplishment

| a. Roads | Bridge |
|---|---|
| Subgrade - 1.943 | Substructure - 3 span |
| Subbase - 1.940 | 6 LM TbTe bridge on RC Abut |

Drainage & Erosion Works

The following pipes have been installed as of August 25, 1980.

## Drainage and Erosion Works

The following pipes have been installed as of September 25, 1980

| SIZE' | R C P INSTALLED Prev.Mo. | ' This Mo.' | T o t a l |
|---|---|---|---|
| 0.60 | 21.60 | -- | 21.60 |
| 0.90 | 21.60 | - | 21.60 |
| 1.20 | 9.60 | - | 9.60 |

| STATION | NUMBER | SIZE | LENGTH |
|---|---|---|---|
| 0 + 752.00 | 8 | 0.61M | 9.60M |
| 0 + 860.00 | 10 | 0.61M | 12.60M |
| Total | 18 | | 21,60M |
| 0 + 000.00 | 10 | 0.91M | 12.00M |
| 0 + 550.00 | 8 | 0.91M | 9.60M |
| Total | 18 | | 21.60M |
| 0 + 325.00 | 8 | 1.20M | 9.60M |

Materials Testing and Control

| ITEM NO. | KIND OF TESTS | NO. OF TESTS Prev.Mo. | This Mo. | Total |
|---|---|---|---|---|
| 105-A | Grading | 6 | - | 6 |
| | PL & LL | 6 | - | 6 |
| | Compaction | 6 | - | 6 |
| | F. Density | 32 | - | 32 |
| 107 | Grading | 4 | - | 4 |
| | PL & LL | 4 | - | 4 |
| | Compaction | 4 | - | 4 |
| | F. Density | 21 | - | 21 |
| 108 | Grading | 9 | - | 9 |
| | PL & LL | 9 | - | 9 |
| | Compaction | 9 | - | 9 |
| | F. Density | 23 | - | 23 |
| 402-2.2 (FA) | Grading | 2 | - | 2 |
| 405-2.2 (CA) | Grading | 2 | - | 2 |
| 405 - C | Design Mix | 1 | - | 1 |

III. SUMMARY OF PHYSICAL ACCOMPLISHMENT TO DATE

| a. Roads | Secondary Road | Feeder Roads |
|---|---|---|
| Sub-grade | 8.988 km. | 12.263 km. |
| Subbase | 8.200 km. | 9.538 km. |
| Base | 5.365 km | none |
| Surfacing | none | none |
| b. Bridges | | |
| Substructure | 10 LM R.C. | 130 L.M. R.C. |
| Superstructure | 10 LM RCDG | 72 L.M. TbTe |

Comments and Recommendation

Construction of the 2-1.80 x 2.10 x 13.50 M RCBC at sta. 0 + 160 of Feeder Road 503 was the only activity during the month. The unfavorable weather prevailing in the locality contributed to the delay.

Work on aggregate subbase, structures and asphalting will be continued when the weather permits.

WEATHER REPORT

PROJECT: PILI-MATAOROC ROAD PROJECT

Sub-Project No. 5

| Date 1980 | Weather | Remarks | Time Extension Recommended |
|---|---|---|---|
| Aug. 26 | Intermittent rain | Unworkable | One (1) day |
| 27 | Rainy | Unworkable | One (1) day |
| 28 | Cloudy AM, rainy PM | Unworkable | One (1) day |
| 29 | Intermittent rain | Unworkable | One (1) day |
| 30 | Rainy AM, intermittent rain PM | Unworkable | One (1) day |
| 31 | Rainy | Unworkable | One (1) day |
| Sept. 1 | Rainy | Unworkable | One (1) day |
| 2 | Intermittent rain | Unworkable | One (1) day |
| 3 | Rainy AM, cloudy PM | Unworkable | One (1) day |
| 4 | Fair | Worakable | none |
| 5 | Fair | Workable | none |
| 6 | Fair | Workable | none |
| 7 | Rainy | Unworkable | One (1) day |
| 8 | Intermittent rain | Unworkable | One (1) day |
| 9 | Intermittent rain | Unworkable | One (1) day |
| 10 | Intermittent rain AM, rainy PM | Unworkable | One (1) day |
| 11 | Intermittent rain AM, rainy PM | Unworkable | One (1) day |
| 12 | Fair to cloudy | Workable | none |
| 13 | Fair | Workable | none |
| 14 | Rainy | Unworkable | One (1) day |
| 15 | Rainy (typhoon undeng) | Unworkable | One (1) day |
| 16 | Cloudy w/ occasional rain, ground wet | Unworkable | One (1) day |
| 17 | Rainy | Unworkable | One (1) day |
| 18 | Rainy AM, cloudy PM | Unworkable | One (1) day |
| 19 | Fair | Workable | none |
| 20 | Fair | Workable | none |
| 21 | Fair | Workable | none |
| 22 | Fair AM, rainy late PM | Worakble | none |
| 23 | Cloudy AM, rainy PM | Unworkable | One (1) day |
| 24 | Cloudy AM, rainy PM | Unworkable | One (1) day |
| 25 | Fair | Workable | none |

**********

Total Extension of Time Recommended this month -- 21 days

Total Extension of Time Recommended Previously - 281 "

Grand Total to date - - - - - - - - - - - - - - - - - 302 "

Date of effectivity of contract - - - - September 18, 1978

BICOL RIVER BASIN DEVELOPMENT PROGRAM OFFICE
San Jose, Pili, Camarines Sur

EMPLOYMENT GENERATION SURVEY (SS3)

Name of Contractor A.B. AGUINALDO CONST. INC.

For the month of September 1980

| | Administrative Finance | Eng'g. Technical | Skilled | Unskilled |
|---|---|---|---|---|
| Manila -- Based 1/ | 2 | 1 | 4 | 0 |
| Local -- Hired 2/ | 2 | 5 | 12 | 0 |
| Sub-Contractors 3/ | 0 | 0 | 0 | 0 |
| Total | 4 | 6 | 16 | 0 |

1/ Includes permanent employees

2/ Employees residing w/in the Basin Area

3/ Local hired only

Submitted by:

EMILIO G. ANGELES
Project Engineer

pure*

A. B. AGUINALDO CONSTRUCTION, INC.
Pili-Mataoroc Road Project
Sub-Project No.5, Package II, BRBDP
Tagbong, Pili, Camarines Sur

LIST OF PERSONNEL
As of September 1980

| Name | Position | Qualification |
|---|---|---|
| **I. TECHNICAL STAFF** | | |
| 1. Ramon Bautista | Project Manager | Civil Engineer |
| 2. Emilio Angeles | Project Engineer | -do- |
| 3. Emiliano Galvez | Mechanical Engineer | Mechanical Engineer |
| 4. Eduardo Lopez | CE Aide | Experienced |
| 5. Antonio Alapan | Const. Foreman | -do- |
| **II. Administrative Staff** | | |
| 1. Remegio Espada | Adm. Officer | A.B. Graduate |
| 2. Rossana Espada | Clerk/Typist | Experienced |
| 3. Mario Yulip | Courier | -do- |
| 4. Antonio Lapastora | Materials Chekcer | -do- |
| **III Mechanical Department** | | |
| 1. George Magsalang | Shop Supervisor | Experienced |
| 2. Quirico Marjolino, Jr. | Mechanic | -do- |
| 3. Victor Sandagon | Batteryman | -do- |
| 4. Wenceslao Belano | Tireman | -do- |
| 5. Meclhor Serrano | Fuel Tender | -do- |
| **IV DRIVERS** | | |
| 1. Benjamin Obrero | D.T. Driver | Experienced |
| 2. Roden Jayco | Service Driver | -do- |
| 3. Flor Barra | -do- | -do- |

## V. SURVEY TEAM

| | | |
|---|---|---|
| 1. Pedro Collada | Instrument Man | Experienced |
| 2. Santos Temporal | Chainman | -do- |
| 3. Pedro Olivares | Survey Aide | -do- |

## VI. LABORATORY

| | | |
|---|---|---|
| 1. Santiago Nacario | Laboratory | Experienced |
| 3. Pedro Preconcillo | -do- | -do- |

## VII. HEAVY EQUIPMENT OPERATORS

| | | |
|---|---|---|
| 1. Virgilio Tosposo | Crusher Operator | Experienced |
| 2. Quintin Elemos | Crane Operator | -do- |
| 3. Lemeul Moreno | Bulldozer Operator | -dO- |
| 4. Pedro Custerio | Dynapac Operator | -do- |
| 5. Jose Harochoc | Grader Operator | -do- |

## VIII. BRIDGE GANG

| | | |
|---|---|---|
| 1. Romulo Villaluz | Riggerman | Experienced |
| 2. Armando Asma | -do- | -do- |
| 3. Onopre Fernandez | Carpenter/Mason | -do- |
| 4. Gaudencio Larcena | -do- | -do- |
| 5. Juan Paldo | -do- | -do- |
| 6. Primitivo Elemos | -do- | -do- |
| 7. Domingo Junio | -do- | -do- |
| 8. Jose Babila | -do- | -do- |
| 9. Inocencio Almonte | Laborer | -do- |
| 10. Vicente Calongui | -do- | -do- |
| 11. Resirrecion Beria | -do- | -do- |
| 12. Ramon Adores | -do- | -do- |
| 13. Ernesto Bata | -do- | -do- |
| 14. Salvador Dawal | -do- | -do- |

Annex "B"

A. B. AGUINALDO CONSTRUCTION, INC.
Pili-Mataoroc Road Project
Sub-Project No. 5
Pili-Camarines Sur

LIST OF EQUIPMENTS
As of September 1980

1 unit - Bulldozer D7 Caterpillar

1 unit - Payloader, 950 Caterpillar

1 unit - 32 - Ton Truck Mounted Crane

1 unit - Road Grader, Caterpillar

1 unit - Kobe - 25 Pile Hammer

1 unit - Welding Machine, Continental

1 unit - Self-propelled vibro compactor, Dynapac CA-25

1 unit - Generator, 3 KW, Yammar Diesel Engine driven

1 unit - ½ HP Goulds Water pump, 4 HP Kholer engine driven

1 unit - 1 Bagger-Concrete Mixer

1 unit - Bar Cutter

1 unit - 1½ Ton Drop Hammer

3 units - Toyota Hi-Lux (Service Vehicle)

1 unit - 6 -Wheeler Dump Truck, Isuzu

2 units - 10 wheeler dump truck, Isuzu

1 unit - Rock crusher, primary and secondary

LIST OF LABORATORY EQUIPMENTS
As of September 1980

| | | |
|---|---|---|
| 8 - inch Brass Sieve 3" | 1 | ea. |
| 8 - -do- 2½ | -do- | -do- |
| 8 - -do- 2" | -do- | -do- |
| 8 - -do- 3/4" | -do- | -do- |
| 8 - -do- ½" | -do- | -do- |
| 8 - -do- 1/8 | -do- | -do- |
| 8 - -do- #4 | -do- | -do- |
| 8 - -do- #8 | -do- | -do- |
| 8 - -do- #10 | -do- | -do- |
| 8 - -do- #16 | -do- | -do- |
| 8 - -do- #30 | -do- | -do- |
| 8 - -do- #40 | -do- | -do- |
| 8 - -do- #50 | -do- | -do- |
| 8 - -do- #100 | -so- | -do- |
| 8 - -do- #200 | -do- | -do- |
| 8 - inch Dia, Bras Cover less ring | -do- | -do- |
| 8 - inch Dia, Brass pan | -do- | -do- |
| 8 - inch Wet washing sieve #200 | -do- | -do- |
| Sample splitter 2½" chute width | -do- | -do- |
| Sample splitter 1½ chute width | -do- | -do- |
| Heavy duty solution balance, 1 gram se, | -do- | -do- |
| Triple Beam Balance, 0.1 gram sen. | -do- | -do- |
| Micrometer Poise Balance, 0.5 gram se. | -do- | -do- |
| Drying oven | -do- | -do- |
| 2 - Burner LPG Stove w/ regulator and tank | -do- | -do- |
| Volumentric Flask, 50 ML | 5 | pcs. |
| -do- 500 ML | 3 | pcs. |
| Liquid limit Device w/ grooving tool | 2 | pcs. |
| Plastic | 2 | pcs. |
| Rectangular pan 4" x 2" x 10 | 8 | pcs. |
| Square pan 18" x 18" | 14 | pcs. |
| Moisture Cans, 3 ounces | 3 doz. | |
| Hand operated shaker | 1 set | |
| Modified Compaction Mold, 1/13.33 | 2 sets | |
| Modified Compaction Mold 1/30 | 1 set | |
| Compaction hammer 5.5 lbs. | 1 set | |
| Compaction hammer 10 lbs. | 1 set | |
| Sand Cone Apparatus and Jug | 2 sets | |
| Field density plate | 2 pcs. | |
| 4" Steel grill | 2 pcs. | |
| Rubber Mallet | 2 pcs. | |
| Sand Scoop (small) | 2 pcs. | |
| Sand scoop (big) | 2 pcs. | |

| | |
|---|---|
| Yield Buckets, 1/10 cu.ft | 2 pcs. |
| Yield Bucket $\frac{1}{2}$ cu. ft. | 1 ea. |
| Tampering rod | 1 ea. |
| Slump cone w/ base and tampering pod | 1 set |
| Heavy duty cylinder mold with base | 1 set |
| Cylinder Molds | 3 sets |
| Laboratory thermometer | 1 ea. |
| Stop watch | 1 ea. |
| Spatula | 2 pcs. |
| Field scale, 10 kilos max | 1cea. |
| Rectangular pan 4" x 4" x 10 | 2 pcs. |
| Wire basket | 1 ea. |
| Work table, 1.20 x 2.40 M | 1 ea. |
| Simple wooden chairs | 6 |
| Wooden office desks | 3 pcs. |
| Counter with G.I. sink | 1 set |
| Woo en filing cabinet | 1 ea. |

## LIST OF OFFICE EQUIPMENTS

As of September 1980

| | |
|---|---|
| Typewriter, 18" Carriage (Olympia) | 1 ea. |
| Wooden Office desk | 5 pcs. |
| Simple wooden chairs | 6 pcs. |
| Typist desks | 2 pcs. |
| Drafting table | 1 ea. |
| Drafting tool | 1 ea. |
| Wooden Filing Cabinet | 1 ea. |

| ITEM NO | DESCRIPTION | ESTIMATED SCHEDULE |
|---|---|---|
| 1·60·2 | Provide and Maintain Office and Laboratory for the Engineer | 0.3[illegible] |
| 1·60·3 | Provide one(1) Unit Four Wheel Drive for the Engineer. | 0.5[illegible] |
| 1·60·4 | Provide one(1) Unit Utility Vehicle for the Engineer | 0.2[illegible] |
| 1·60·5 | Laboratory and Office Equipment for Engr. (as listed) | 0.5[illegible] |
| 100 | Clearing and Grubbing | 0.9[illegible] |
| 103-1(Fr.401) | Removal of Bridge | 0.0[illegible] |
| 105(Sec.) | Roadway and Drainage Excavation | 2.3[illegible] |
| 105(Fed.401,402) | Roadway and Drainage Excavation | 2.2[illegible] |
| 105(Fed.403) | Roadway and Drainage Excavation | 9.1[illegible] |
| 105-4 | Excavation of Unsuitable Materials | — |
| 106(Sec.) | Excavation for Structures | 0.1[illegible] |
| 106(Fr.401,402,403) | Excavation for Structures | 0.2[illegible] |
| 107(Sec) | Borrow | 30.8[illegible] |
| 107(Fed.401,402) | Borrow | 10.7[illegible] |
| 108(Sec) | Aggregate Sub-base | 12.0[illegible] |
| 108(Fed.401,402,403) | Aggregate Sub-base | 8.1[illegible] |
| 110 | Foundation | 0.0[illegible] |
| 111 | Overhaul(300m. Free haul) | 0.0[illegible] |
| 200 | Aggregate Base Course | 3.6[illegible] |
| 302 | Medium Curing Cut-Back Asphalt, Grade MC-1 for Bit. Prime Coat | 0.9[illegible] |
| 314-1 | Aggregate Material for B.S.T. (Hot Asphalt Type) | 0.5[illegible] |
| 314-3 | 85-100 Penetration Asphalt Cement for B.S.T. (Hot Asphalt Type) | 1.8[illegible] |
| 401(Fed.401) | Timber(Detour) Trestle (Superstructure only on Concrete Pile Bent) | 0.3[illegible] |
| 402-2.5 | Precast Concrete Piles | 2.1[illegible] |
| 402-2.5a | Concrete Test Piles (Furnish and Drive) | 0.4[illegible] |
| 403 | Concrete Railings | 0.0[illegible] |
| 405 | Concrete Class "A" (Miscellaneous) | 2.5[illegible] |
| 405-1 | Concrete Class "A" (Bridge) | 0.9[illegible] |
| 405-1(Fed.401) | Concrete Class "A" (Bridge) | 0.0[illegible] |
| 406(Sec.) | Reinforcing Steel | 1.3[illegible] |
| 406(Fed.401,402,403) | Reinforcing Steel | 0.2[illegible] |
| 413-1(Sec) | 0.30 M. Ø Reinforce Concrete Pipe | 0.0[illegible] |
| 413-1(Fed.401) | 0.30 M. Ø Reinforced Concrete Pipe | 0.0[illegible] |
| 413-2 | 0.60 M. Ø Reinforced Concrete Pipe | 0.9[illegible] |
| 413-3(Sec) | 0.90 M. Ø Reinforced Concrete Pipe | 0.4[illegible] |
| 413-3(Fr.401,402,403) | 0.90 M. Ø Reinforced Concrete Pipe | 1.3[illegible] |
| 413-4 | 1.20 M. Ø Reinforced Concrete Pipe | 2.6[illegible] |
| 500 | Riprap and Grouted | 0.2[illegible] |
| 510 | Right-of-Way Markers | 0.3[illegible] |
| | TOTAL | 100.0[illegible] |



MONTH

FEB. 7, 1979
START OF CONTRACT
TIME

| ESTIMATED % WEIGHT SCHEDULED | ACCOMPLISHED PROJECT | ACCOMPLISHED ITEM | QUANTITY | UNIT COST | AMOUNT | FEB |
|---|---|---|---|---|---|---|
| 0.3[illegible]21 | 0.36711 | 76.92% | 18 Mos. | 2,400 | 43,200.00 | |
| 0.5[illegible]69 | .55369 | 100% | | Lump Sum | 72,000.00 | |
| 0.24[illegible]08 | .24[illegible]08 | 100% | | Lump Sum | 32,000.00 | |
| 0.55[illegible]69 | .55369 | 100% | | Lump Sum | 72,000.00 | |
| 0.96[illegible]05 | .96205 | 100% | 27.8 Ha. | 4,500.00 | 125,100.00 | |
| 0.01[illegible]61 | .01961 | 100% | 1 Each | 2,550.00 | 2,550.00 | |
| 2.3[illegible]97 | 2.38397 | 100% | 15,500 Cu. M. | 20.00 | 310,000.00 | |
| 2.21[illegible]48 | 2.41968 | 109.02% | 15,190 Cu. M. | 19.00 | 288,610.00 | |
| 9.1[illegible]85 | 9.52[illegible]97 | 103.57% | 74,720 Cu. M. | 16.00 | 1,195,520,00 | |
| | | | | | | |
| 0.14762 | 0.14762 | 100% | 770 Cu M. | 24.93 | 19,196,10 | |
| 0.21[illegible]94 | 0.17934 | 81.54% | 1,300 Cu M. | 22.00 | 28,600.00 | |
| 30.8[illegible]99 | 30.33298 | 98.2[illegible] | 125,520 Cu.M. | 32.00 | 4,016,640.00 | |
| 10.72753 | 11.41000 | 106.36% | 44,710 Cu.M. | 31.20 | 1,394,952.00 | |
| 12.0[illegible]58 | 11.15000 | 92.49% | 27,782 Cu.M. | 56.45 | 1,568,293.90 | |
| 8.19[illegible]35 | 6.55468 | 80% | 19,730 Cu.M. | 54.00 | 1,065,420.00 | |
| 0.05575 | 0.050370 | 90.35% | 145 Cu.M. | 50.00 | 7,250.00 | |
| 0.05087 | 0.05087 | 100% | 22,050 Sta.M. | 0.30 | 6,615.00 | |
| 3.60[illegible]80 | 1.92244 | 53.33% | 7,500 Cu M | 62.50 | 468,750.00 | |
| 0.94128 | 0.5[illegible]366 | 53.82% | 51 M.T. | 2,400.00 | 122,400.00 | |
| 0.53[illegible]31 | 0.32298 | 60% | 700 Cu.M. | 100.00 | 70,000.00 | |
| 1.8[illegible]257 | 1.1[illegible]73 | [illegible] | 102 M.T. | 2,400.00 | 244,800.00 | |
| 0.3[illegible]13 | | | 4 SPANS | 12,000.00 | 48,000.00 | |
| 2.16219 | 1.57250 | 72.73% | 396 L.M. | 710.00 | 281,160.00 | |
| 0.41[illegible]27 | 0.41527 | 100% | 4 Each | 13,500.00 | 54,000.00 | |
| 0.0[illegible]70 | 0.08270 | 1[illegible]% | 71.70 L.M. | 150.00 | 10,755.00 | |
| 2.5[illegible]15 | 1.19387 | 46.[illegible]% | 487 Cu.M. | 690.00 | 336,030.00 | |
| 0.97773 | 0.97773 | 100% | 163 Cu.M. | 780.00 | 127,140.00 | |
| 0.07[illegible]99 | | | 14 Cu.M. | 743.00 | 10,402.00 | |
| 1.3[illegible]34 | 1.34734 | 100% | 25,765 Kgs | 6.80 | 175,202.00 | |
| 0.2[illegible]40 | | | 3,890 Kgs | 7.00 | 27,230.00 | |
| 0.0[illegible]68 | | | 29 L.M. | 160.00 | 4,640.00 | |
| 0.00[illegible]45 | 0.00645 | 1[illegible] | 6 L.M. | 140.00 | 840.00 | |
| 0.9[illegible]043 | 0.90473 | 94.2[illegible] | 362 L.M. | 345.00 | 124,890.00 | |
| 0.45777 | 0.70091 | 153.13% | 96 L.M. | 620.00 | 59,520.00 | |
| 1.3[illegible]571 | 1.17540 | 86.7[illegible] | 289 L.M. | 610.00 | 176,290.00 | |
| 2.6[illegible]14 | 2.23229 | 85.1[illegible]% | 379 L.M. | 900.00 | 341,100.00 | |
| 0.2[illegible]917 | 0.16437 | 75% | 190 Cu.M. | 150.00 | 28,500.00 | |
| 0.3[illegible]38 | 0.05617 | 16.6[illegible] | 914 L.M. | 48.00 | 43,872.00 | |
| 100.00 % | 91.33995 | [illegible] | | | ₱13,003,468.00 | |

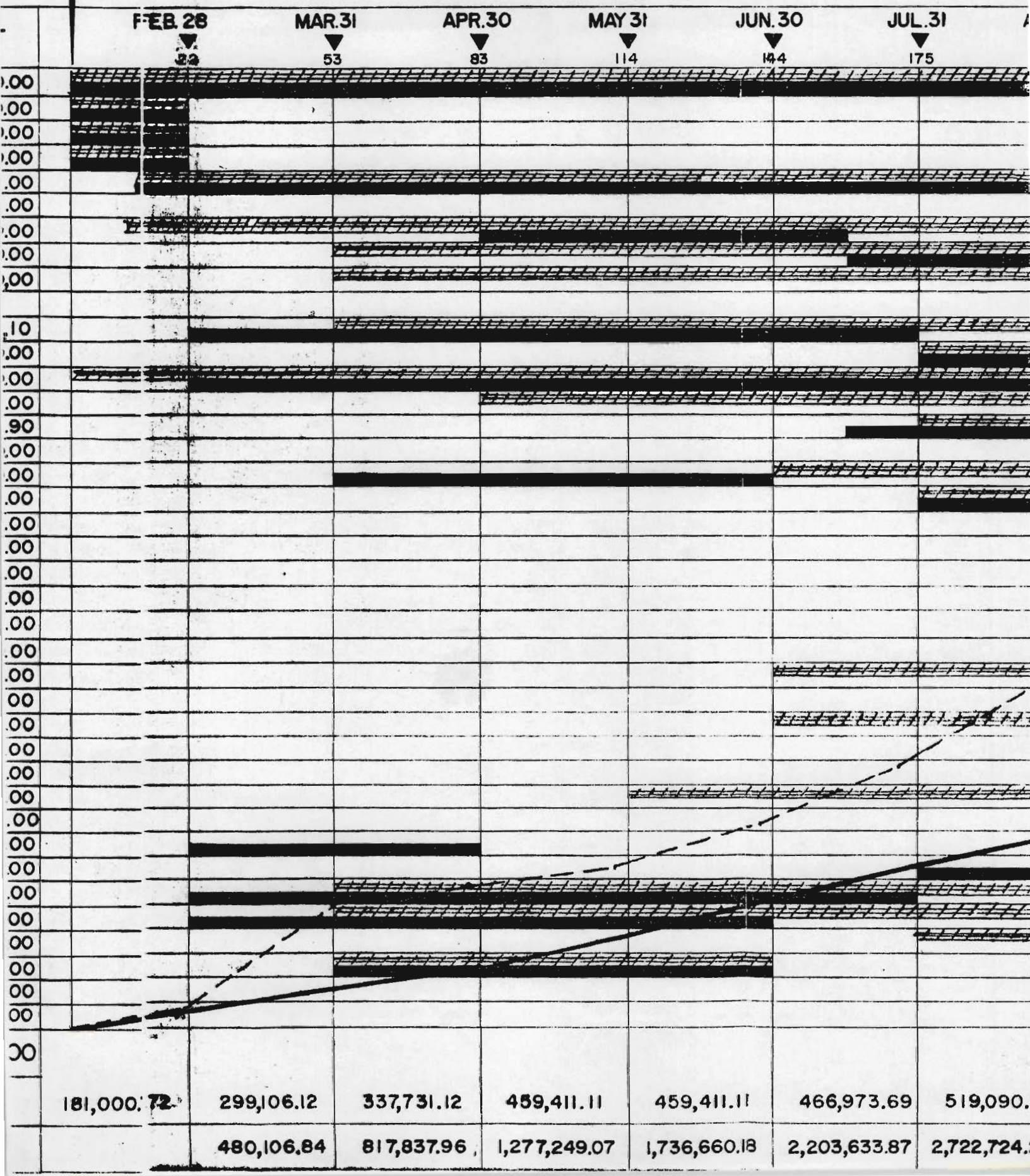
MONTHLY ACCOMPLISHMENT 34 181,000.72

CUMULATIVE TOTAL AMOUNT

# MINALABAC - AN

1979
F CONTRACT
IME

35



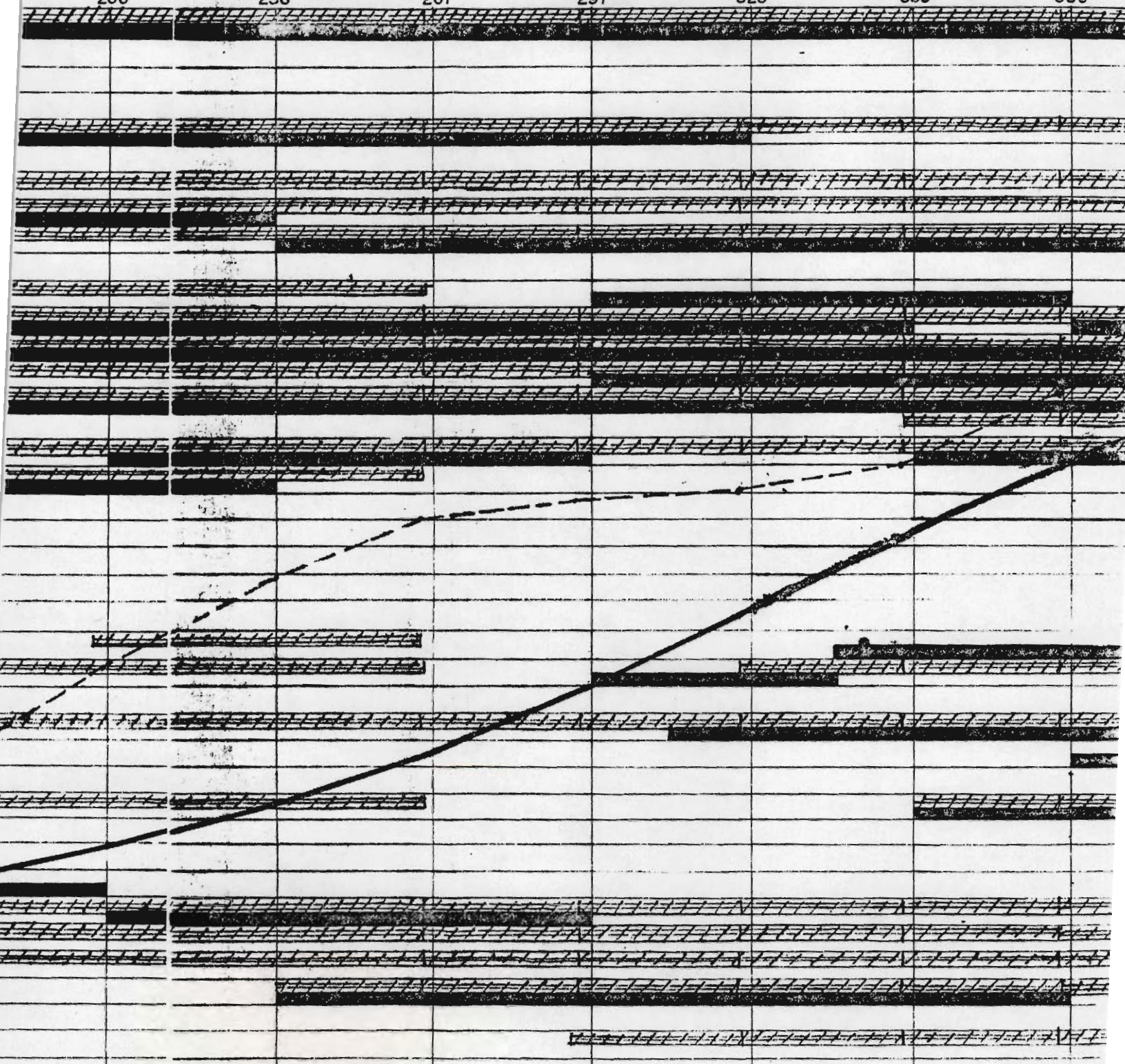

| | | | | | | |
|---|---|---|---|---|---|---|
| 181,000.72 | 299,106.12 | 337,731.12 | 459,411.11 | 459,411.11 | 466,973.69 | 519,090. |
| | 480,106.84 | 817,837.96 | 1,277,249.07 | 1,736,660.18 | 2,203,633.87 | 2,722,724. |

OF

# ANTIPOLO – HUBO ROAD

36

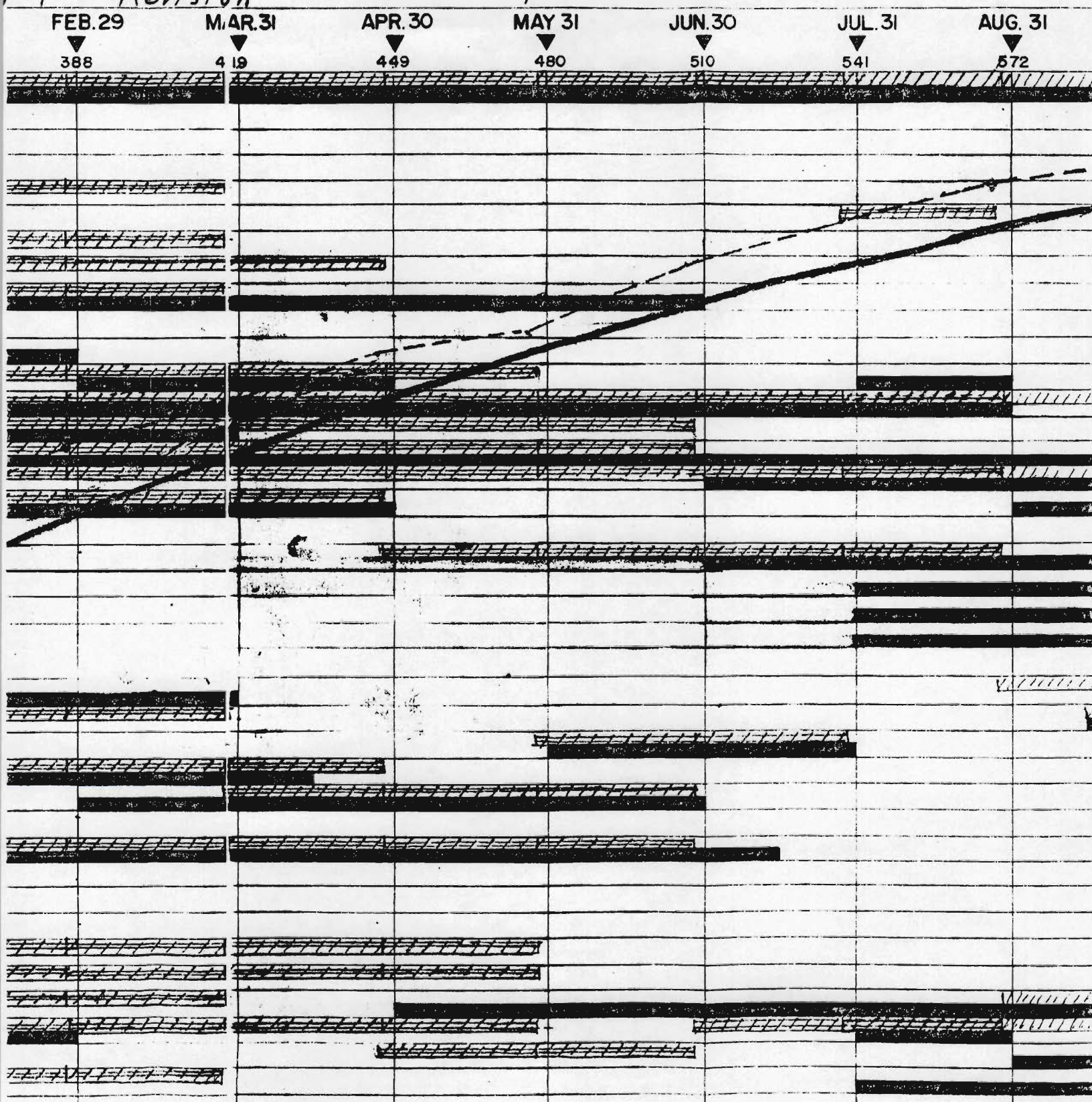
Revised Bar Schedule of Work as of August 8, 1980 1st




| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 9,090.36 | 341 | 1,986.45 | 340,836.27 | 340,836.27 | 578,915.13 | 1,103,305.12 | 1,143,584.34 | 1, |
| 22,724.23 | 3,06 | 4,710.68 | 3,405,546.95 | 3,746,383.22 | 4,325,298.35 | 5,428,603.47 | 6,572,187.81 | 7, |

1st Revision

37




| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 84.34 | 1,177,181.39 | 720,282.53 | 727,635.61 | 733,013.11 | 605,581.96 | 543,149.79 | 443,6 |
| 87.81 | 7,749,369.20 | 8,469,651.73 | 9,197,287.34 | 9,930,300.45 | 10,535,882.41 | 11,079,032.20 | 11,522,7 |

PROGRESS THIS REPORT

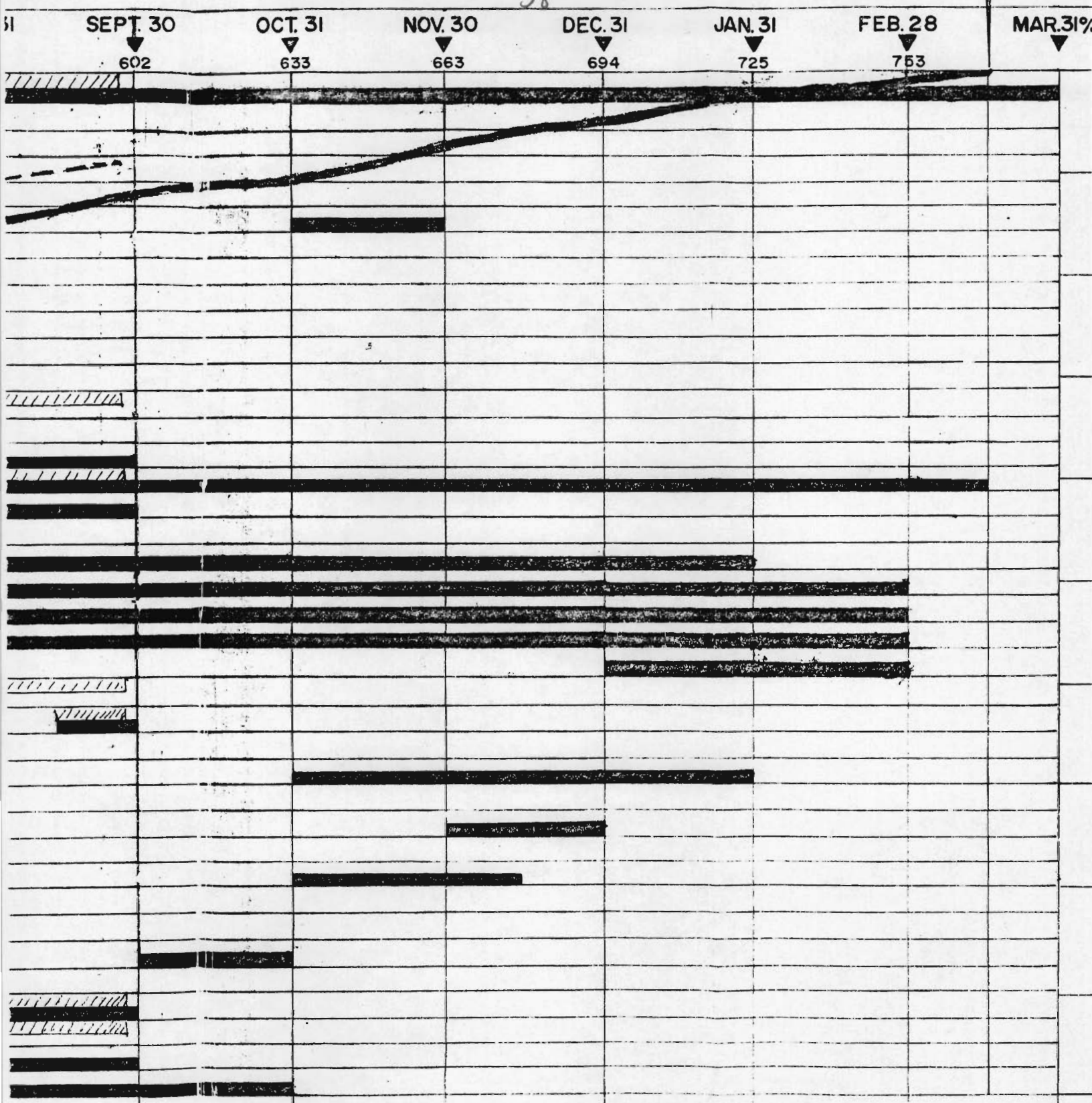
SCHEDULED WORK

SCHEDULED ACCOMPLISHMENT

ACTUAL ACCOMPLISHMENT

MARCH 15, 1981
END OF CONTRACT TIME

38




| | | | | | | |
|---|---|---|---|---|---|---|
| 443,680.15 | 285,666.62 | 325,872.23 | 324,647.90 | 329,169.23 | 214,200.67 | 1,200 |
| ,522,712.35 | 11,808,377.97 | 12,134,250.20 | 12,458,898.10 | 12,788,067.33 | 13,002,268.00 | 13,003,468.00 |

H 15, 1981
ONTRACT TIME

39

| AN. 31 | FEB. 28 | MAR. 31 | % ACCOM'D |
|---|---|---|---|
| 725 | 753 | | 100 |
| | | | 90 |
| | | | 80 |
| | | | 70 |
| | | | 60 |
| | | | 50 |
| | | | 40 |
| | | | 30 |
| | | | 20 |
| | | | 10 |

| | | |
|---|---|---|
| 5 | 214,200.67 | 1,200 |
| 3 | 13,002,268.00 | 13,003,468.00 |

# BICOL RIVER BAS
## (ROAD

MANPOWER SCHEDULE OF CONSULTA

| | | 1978 | | | | | 19 P | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | Aug. | Sept. | Oct. | Nov. | Dec | Jan. | Feb | Mar. | Apr. |
| A.E.BANDELARIA | DEPUTY PROJ.MANAGER | | | | | | | | | |
| L.D.MAYOR | SR.HIGHWAY ENG'R / R.E. | | | | | | | | | |
| F.G.OBUSAN | SR.BRIDGE ENG'R./R.E. | | | | | | | | | |
| M.D.LACSAMANA | SR.LOC.ENGINEER | | | | | | | | | |
| J.A.TORRALBA | SR.MATLS. ENG'R./R.E. | | | | | | | | | |
| F.C.ROSALES | ADMINISTRATIVE OFFICER | | | | | | | | | |
| LYDIA P. JOSE | CLERK / TYPIST | | | | | | | | | |
| T.S. SABABAN | JANITOR/MESSENGER | | | | | | | | | |
| | | | | | | | | | | |
| SUB-PROJECT No | | | | | | | | | | |
| F.G.OBUSAN | SR.BRIDGE ENG'R./R.E. | | | | | | | | | |
| M.B.DELFIN | MATERIALS ENGINEER | | | | | | | | | |
| DANILO V. FILIO | ENGINEER INSP. (HWY.) | | | | | | | | | |
| E.L.REYES | ENGINEER INSP. (BR.) | | | | | | | | | |
| A.P.ESPAÑO | SURVEYOR-DRAFTSMAN | | | | | | | | | |
| F.V. YBAROLA | LAB.TECHNICIAN | | | | | | | | | |
| P.B. ALVAREZ | CLERK-TYPIST | | | | | | | | | |
| R. CABALLERO | JANITOR / MESSENGER | | | | | | | | | |
| S.B. JEREMIAS | LABORER | | | | | | | | | |
| | | | | | | | | | | |

# R BASIN DEVELOPMENT PROJECT
## OAD COMPONENTS)

NSULTANTS STAFF FOR CONSTRUCTION SUPERVISION

19 PACKAGE II 79 1980

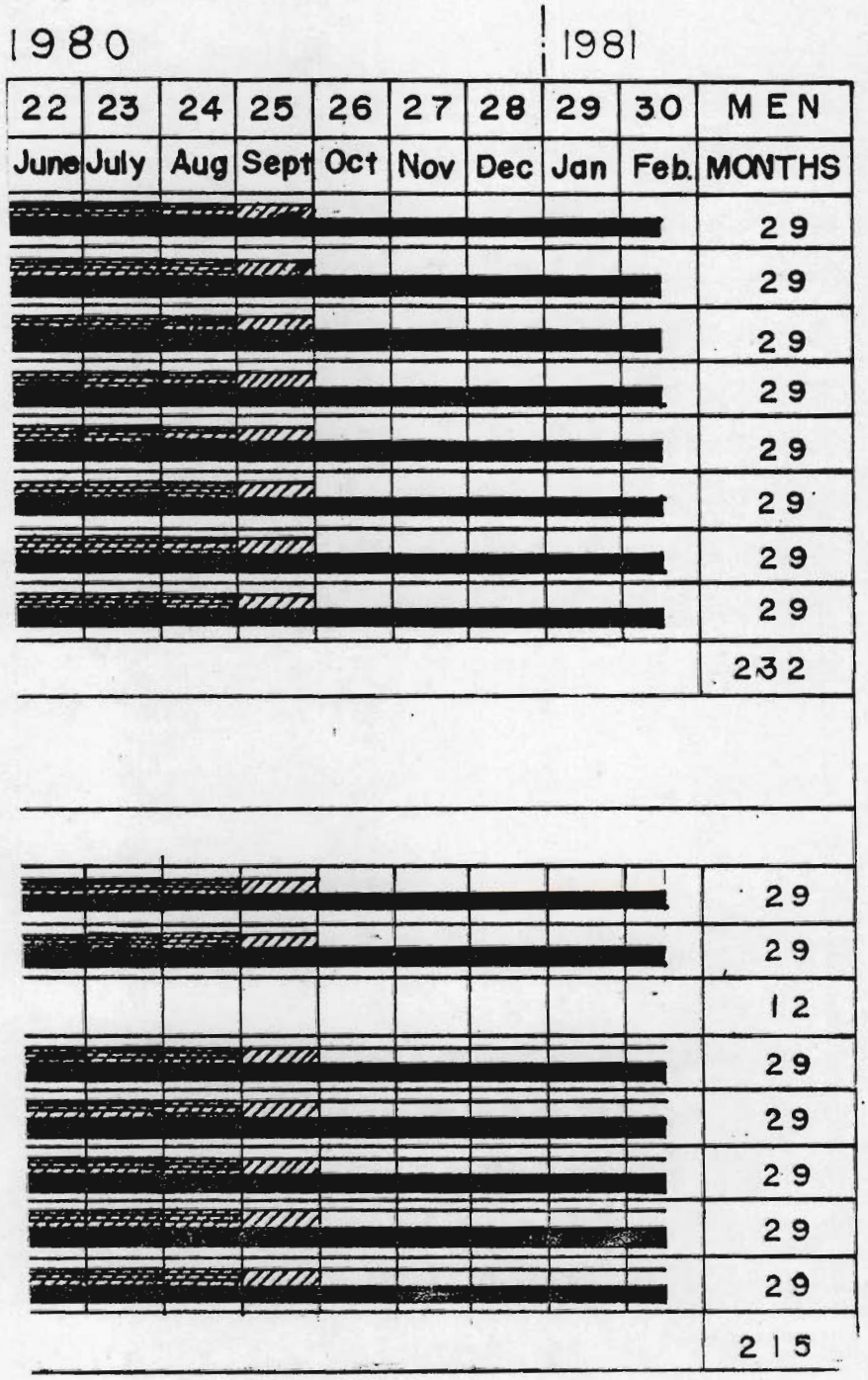
| 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mar. | Apr. | May | June | July | Aug | Sept. | Oct. | Nov. | Dec | Jan | Feb | Mar. | April | May | June | July | Aug | Sept | Oct | Nov | D |

SUB- TOTAL

CT No.5, PILI- MATAOROC ROAD

SUB- TOTAL

SION


1980
1981
22 23 24 25 26 27 28 29 30
MEN
June July Aug Sept Oct Nov Dec Jan Feb.
MONTHS
29
29
29
29
29
29
29
29
232
29
29
12
29
29
29
29
29
215

Bicol River Basin Development Project

Secondary and Feeder Roads

PACKAGE II

Palistina-San Antonio-Minalabac Road Project
Sub-Project No. 6

MONTHLY CONSTRUCTION REPORT
No. 11

Prepared by:

VICENTE B. ZANO
Resident Engineer

Submitted by:

AMADO E. BANDELARIA
Deputy Project Manager

PROGRESS REPORT
No. 11
September, 1980

I. GENERAL

Palistina - San Antonio - Minalabac (Secondary Road) Sta. 0 + 00 to Sta. 8 + 216.81.

Maydaso - Taririk - Baras - Malitbog (Feeder Road) Sta. 0 + 00 to Sta. 5 + 147.54.

The project started on November 12, 1979 with a contract time of 548 calendar days thus we are expecting to finish the project by May 13, 1981. Among the four projects of Package II, under the Integrated Philconsult, Inc., Engineering consultants, the project was the last to commence.

This project under construction, consist of national Secondary road and one Feeder road. The length of the national Secondary road is 8121681 kilometers and the first 4.25 kilometers of which will be paved with Double Bituminous Surface Treatment (DBST), Item 314, the rest being gravel base surface, Item 108, together with the Feeder road which has a length of 5.14754 kilometers.

As to its location the Secondary road lies in between Naga City and Pili extending from Palistina passing through San Antonio, Maydaso and ending at Bicol River. A bridge spanning the Bicol river will enable an easy access to Minalabac town proper. The feeder road, will serve the barangays of Maydaso, Taririk,

Malitbog and Baras, thus forming a loop from Maydaso to the end of Secondary road.

The Secondary and Feeder roads has a 6.00 meters and 4.00 meters roadway respectively with shoulders at 1.00 meter on both sides.

Drainage structures on the Secondary road consist of RCP's different stations and one three span RCDG bridge (Sta. 5 + 201.7 - Sta. 5 + 232.3) over Malitbog creek. On the feeder road, drainage structures consist of RCP's, of different stations, one timber trestle of seven (7) spans over Taririk creek and another timber trestle of three (3) spans over Baras creek.

The topography of the vicinity is generally plain and the road project is traversing a large truck of cultivated riceland. The existing road within the locality just spans from Palistina up to Maydaso and were made of poor surfacing thus rendering non-passable to vehicle during rainy days.

Farm produce beyond Maydaso were transported manually and the farmers were obliged to pay a large amount just for transporting of their products.

Accomplishment during the first quarter of the year, which coincides with the first harvest season proves to be of great help to both farmers and swellers of the place. Transportation cost of farm products were greatly minimized.

It has been assured that the completion of the Palistina-San Antonio-Minalabac road project, sub-project no. 6 will make a dream become reality.

2. PROGRESS

The contractor has been immobile for the last period due to inclement weather and frequent equipment breakdowns.

| | | % Accomplished to Date |
|---|---|---|
| Palistina-Minalabac (Secondary) | - - - | 25.77 |
| Maydaso-Taririk-Baras (Feeder) | - - - | 1.69 |
| T o t al | | 27.46 % |

A. Secondary

1. Earthwork - hauling of item 107

No activity.

2. Aggregate Sub-base (Item 108)

No activity.

3. Structures

No activity.

4. Survey

No activity.

B. Feeder Road No. 601

1. Earthwork

No activity.

2. Structures

No activity.

3. Survey

No activity.

## SUMMARY OF PHYSICAL ACCOMPLISHMENT TO DATE

| | Secondary Road | Feeder Road |
|---|---|---|
| a) **Roads** | | |
| Sub-grade | 4.20 km. | none |
| Sub-base | 0.20 km. | none |
| Base | none | none |
| Asphalt Surfacing | none | none |
| b) **Bridges** | | |
| Sub-structure | none | none |
| Super-structure ( [illegible] ) | none | none |
| c) [illegible] | | |
| Reinforced Co[illegible] [illegible]pe | none | none |
| [illegible]inforded Concre[illegible] [illegible]x C[illegible]ert | none | none |

Materials Testing and Control

Tabulated herebelow are the various tests performed for the project.

Palistina-San Antonio-Minalabac Road
Secondary Road

| ITEM | KIND OF TEST | STATUS OF TEST Prev.Mo. | This Mo. | Total | Remarks |
|---|---|---|---|---|---|
| 105 | Grading | 8 | 0 | 8 | Along right of way |
| | PL & LL | 8 | 0 | 8 | " |
| | Compaction | 8 | 0 | 8 | " |
| | Field Density | 20 | 0 | 20 | " |
| 105-4 | Grading | 14 | 0 | 14 | Along right o |
| | PL & LL | 14 | 0 | 14 | " |
| | Soil Classification | 14 | 0 | 14 | " |
| | Field Density | 20 | 0 | 20 | " |
| | Grading | 0 | 1 | 1 | |
| | PL & LL | 0 | 1 | 1 | |
| | Compaction | 0 | 1 | 1 | |
| | Field Density | 0 | 1 | 1 | |
| 107 | Grading | 45 | 0 | 0 | San Juan Quarry |
| | PL & LL | 45 | 0 | 0 | " |
| | Compaction | 16 | 2 | 18 | " |
| | Soil Classification | 43 | 0 | 43 | " |
| | Field Density | 63 | 2 | 65 | " |
| 108 | Grading | 44 | 0 | 44 | San Juan Quarry |
| | PL & LL | 44 | 0 | 44 | " |
| | Compaction | 12 | 1 | 13 | " |
| | Field Density | 27 | 2 | 29 | " |

Maydaso-Taririk-Malitbog-Baras Road

| | | | | | |
|---|---|---|---|---|---|
| 105 | Grading | 2 | 0 | 2 | Along right of way |
| | PL & LL | 2 | 0 | 2 | " |
| | Compaction | 2 | 0 | 2 | " |
| | Field Density | 2 | 0 | 2 | " |
| | Soil Classification | 2 | 0 | 2 | " |
| 105-4 | Grading | 2 | 0 | 2 | Along right of way |
| | PL & LL | 2 | 0 | 2 | " |
| | Compaction | 2 | 0 | 2 | " |
| | Field Density | 2 | 0 | 2 | " |
| | Soil Classification | 2 | 0 | 2 | " |
| 107 | Grading | 17 | 0 | 17 | Maydaso Quarry |
| | PL & LL | 17 | 0 | 17 | " |
| | Compaction | 5 | 0 | 5 | " |
| | Soil Classification | 12 | 0 | 12 | " |
| | Field Density | 17 | 0 | 17 | " |

COMMENTS AND RECOMMENDATIONS

The contractor has been quite slow in their construction operation due to prevailing weather condition coupled with frequent equipment breakdowns. The contractor has been constantly advised to accelerate their operation but there seems also a financial problem thus lowering the degree of the morale of their work force.

WEATHER REPORT

As of September , 1980

PROJECT: PALISTINA-SAN ANTONIO-MINALABAC ROAD
SUB-PROJECT NO. 6

| Date 1980 | Weather | Remarks | Time Extension Recommended |
|---|---|---|---|
| Aug. 26 | Rainy | Unworkable | One (1) day |
| 27 | Rainy | Unworkable | One (1) day |
| 28 | Rainy | Unworkable | One (1) day |
| 29 | Rainy | Unworkable | One (1) day |
| 30 | Rainy | Unworkable | One (1) day |
| 31 | Rainy | Unworkable | One (1) day |
| 1 | Rainy | Unworkable | One (1) day |
| 2 | Rainy | Unworkable | One (1) day |
| 3 | Rainy | Unworkable | One (1) day |
| 4 | Rainy | Unworkable | One (1) day |
| 5 | Rainy | Unworkable | One (1) day |
| 6 | Rainy | Unworkable | One (1) day |
| 7 | Rainy | Unworkable | One (1) day |
| 8 | Cloudy to fair | Workable | None |
| 9 | Fair | Workable | None |
| 10 | Rainy | Unworkable | One (1) day |
| 11 | Rainy | Unworkable | One (1) day |
| 12 | Cloudy | Workable | None |
| 13 | Rainy | Unworkable | One (1) day |
| 14 | Rainy | Unworkable | One (1) day |
| 15 | Rainy | Unworkable | One (1) day |
| 16 | Rainy | Unworkable | One (1) day |
| 17 | Rainy | Unworkable | One (1) day |
| 18 | Cloudy | Workable | None |
| 19 | Rainy | Unworkable | One (1) day |
| 20 | Rainy | Unworkable | One (1) day |
| 21 | Rainy | Unworkable | One (1) day |
| 22 | Rainy | Unworkable | One (1) day |
| 23 | Rainy | Unworkable | One (1) day |
| 24 | Rainy | Unworkable | One (1) day |
| 25 | Cloudy | Workable | None |

TOTAL EXTENSION OF TIME RECOMMENDED THIS MONTH - - - - - - - 26 days
TOTAL EXTENSION OF TIME RECOMMENDED PREVIOUSLY - - - - - - - 75 days
GRAND TOTAL TO DATE - - - - - - - - - - - - - - - - - 101 days

DATE OF EFFECTIVITY OF CONTRACT - - - - - - - - November 12, 1979
TIME ELAPSED - - - - - - - - - - - - - - - - - 39.78%

BICOL RIVER BASIN DEVELOPMENT PROGRAM OFFICE
San Jose, Pili, Camarines Sur

EMPLOYMENT GENERATION SURVEY (SS3)

NAME OF PROJECT WORKS CONTRACTOR, INC.

FOR THE MONTH OF SEPTEMBER 25, 19 80

| | ADMINISTRATIVE FINANCE | ENGINEERING TECHNICAL | SKILLED | UNSKILLED |
|---|---|---|---|---|
| MANILA BASED 1/ | 2 | 1 | 16 | |
| LOCAL - HIRED 2/ | 1 | 3 | 2 | 10 |
| SUB-CONTRACTORS 3/ | | | | |
| T O T A L | 3 | 4 | 18 | 10 |

1/ Includes permanent employees

2/ Employees residing within the Basin Area

3/ Local Hired Only

pure*

Submitted by:

GRISENCIO H. CALALANG
Project Engineer

8

Annex "A"

PROJECT WORKS CONTRACTOR, INC.
Palistina - San Antonio - Minalabac Road
Camarines Sur

## LIST OF PERSONNEL

| NAME | POSITION | QUALIFICATION |
|---|---|---|
| | **I. TECHNICAL STAFF** | |
| 1. Crisencio H. Calalang | Project Engineer | Civil Engineer |
| 2. Julio E. Acabado | Office Engineer | CE Graduate |
| | **II. ADMINISTRATIVE STAFF** | |
| 1. Ser gia M. Mallari | Administrat ive Officer | B. S. C . |
| 2. Leonardo L. B e rnard ino | Project Accountant | B. S. C . |
| 3. Cyrel G . Cea .. | Clerk/T ypis t | Experienced |
| | **III. MECHANICAL** | |
| 1. Ernesto Portes | Chief Mechanic | Ex perienced |
| 2. Frank dela Cruz | Mechanic | -do- |
| 3. Alberto dela Cruz | Helper Mechanic | -do- |
| 4. Nestor Santos | Fuel Tender | -do- |
| | **IV. SURVEY TEAM** | |
| 1. Pastor Aguila | Instrumentman | Experienced |
| 2. Franklin Elgar | Chainman | -do- |
| 3. Winefredo Gamban | Rodman | -do- |
| 4. Lorenzo Bañaga | Survey Aide | -do- |
| | **V. LABORATORY** | |
| 1. Odelon Alwina | Laboratory Technician | Experienced |
| 2. Isagani Alvina | Laboratory Aide | -do- |
| | **VI. DRIVER AND OPERATOR** | |
| 1. Virgilio Pascual | H.E. Operator | Experienced |
| 2. Cerilo Gonzales | -do- | -do- |
| 3. Leandro de Guzman | -do- | -do- |
| 4. Rodolfo de Guzman | -do- | -do- |
| 5. Jun Bartolome | -do- | -do- |
| 6. Larry Bartolome | -do- | -do- |
| 7. Antonio Gavino | H.E. Driver | -do- |
| 8. David Sola | -do- | -do- |
| 9. Dario Cabante | -do- | -do- |
| 10. Efren Pontillas | -do- | -do- |
| 11. Bayani Bernabe | -do- | -do- |

| | | |
|---|---|---|
| 12. Henry de Lara | H.E. Driver | Experienced |
| 13. Elmer de Guzman | -do- | -do- |

VII. HIGHWAY AND STRUCTURE

| | | |
|---|---|---|
| 1. Pablito Baluyot | Foreman (Highway) | Experienced |
| 2. Greg Rosanes | Checker (Materials) | -do- |
| 3. Sonny Hernandez | -do- | -do- |
| 4. Edgardo Tosoc | Timekeeper | -do- |

PROJECT WORKS CONTRACTOR, INC.
Palestina - San Antonio - Minalabac Road
Camarines Sur

## LIST OF EQUIPMENT

2 units - Buldozer D - 7 Caterpillar

2 units - Payloader JH - 65, Michigan

2 units - Road Grader - Caterpillar ( Mechanical )
Huber Watco

2 units - Road Roller - Sakai Watanabe

1 unit - One bagger mixer

1 unit - Two bagger mixer

1 unit - M[illegible] Pile Hammer

1 unit - Cr[illegible] (25 tons) Truck Mounted

1 unit - Br[illegible] Cutter

1 unit - Wat[illegible] Truck

1 unit - 10 [illegible]eelers (FUSO)

6.units - 6 [illegible]eelers (Dump Truck)

1 unit - Toy[illegible] Tamaraw (Service)

## List of Laboratory Equipments

As of September, 1980

| DESCRIPTION | QUANTITY | UNIT |
|---|---|---|
| 8-inch Brass Sieve Size 3" | 1 | ea. |
| 8-inch Brass Sieve Size 2" | 1 | ea |
| *8-inch Brass Sieve Size 2.5" | 1 | ea. |
| 8-inch Brass Sieve Size 1.5" | 1 | ea. |
| 8-inch Brass Sieve Size 1" | 1 | ea. |
| 8-inch Brass Sieve Size ¾" | 1 | ea. |
| 8-inch Brass Sieve Size ½" | 1 | ea. |
| 8-inch Brass Sieve Size 3/8" | 1 | ea. |
| 8-inch Brass Sieve #4 | 1 | ea. |
| 8-inch Brass Sieve #10 | 1 | ea. |
| *8-inch Brass Sieve #20 | 1 | ea. |
| *8-inch Brass Sieve #30 | 1 | ea. |
| *8-inch Brass Sieve #40 | 1 | ea. |
| 8-inch Brass Sieve #50 | 1 | ea. |
| 8-inch Brass Sieve #100 | 1 | ea. |
| 8-inch Brass Sieve [illegible] | 1 | ea. |
| Sample Splitter [illegible].5 chute width | 1 | ea. |
| Heavy Duty Solution Balance, 1 gm. Sen. | 1 | set |
| Triple Beam Scale 0.1 gm. Sensitivity | 1 | set |
| Micrometer Poise Balance 0.5 gm. | 1 | set |
| Oven Circulated [illegible] | 1 | ea. |
| Sand Absorption [illegible]e and Tamper | 1 | ea. |
| Pycnometer Top and Jar | 1 | set |
| Volumetric Flask [illegible]00 ml. | 5 | ea. |
| Liquid Limit D[illegible] with Grooving Tool | 2 | set |
| Plastic Limit Set | 2 | set |
| Moisture Cans, [illegible]unces | 5 | doz. |
| Modified Compaction Mold, 1/12.33 | 1 | set |
| Proctor Compaction Mold, 1/30 | 1 | set |
| Compaction Hammer, 5.5 lbs. | 1 | set |
| Compaction Hammer 10 lbs. | 1 | set |
| Sand Density Cone w/o jar | 2 | ea. |
| Concrete Cylinder Mold | 3 | ea. |
| Slump Cone with Base and Tampering Rod | 1 | ea. |
| Yield Bucket, 10 cu. ft. | 1 | ea. |
| Yield Bucket, [illegible] cu. ft. | 1 | ea. |
| Tampering Rod | 3 | ea |
| Thermometer, [illegible]0°C | 1 | ea. |
| Gas Stove with Oven | 1 | ea. |
| Field Density Plate | 2 | ea. |
| Pan Sieve | 1 | ea. |

Note:

* - ([illegible] of schedule laboratory equipments delivered

[illegible] laboratory equipments percentage is [illegible]

| PAY ITEM | DESCRIPTION | ESTIMATED % SCHEDULED | ACC PROJ |
|---|---|---|---|
| 1.60.1 | Provide and Maitain Office and Lab. for Engineer | 1.00 | 0.611 |
| 1.60.2 | Provide one (1) Unit Utility Vihicle for Engineer | 0.66 | 0.666 |
| 1.60.4 | Lab. and Office Equipment for Engineer | 1.86 | 1.736 |
| 100 | Clearing and Grubbing | 1.22 | 0.826 |
| 103-1 | Removal of Bridge | 0.09 | |
| 103-2 | Removal of Culvert | 0.02 | |
| 105-SR | Roadway and Drainage Excavation | 2.81 | 2.592 |
| 105-FR | Roadway and Drainage Excavation | 0.53 | |
| 105-4 | Excavation of Unsuitable Materials | 2.75 | 1.712 |
| 106 | Excavation for Structure | 0.60 | |
| 107 | Borrow | 331797 | 15.120 |
| 108 | Aggregate Sub-base | 20.52 | 4.202 |
| 110 | Foundation Fill | 0.05 | |
| 200 | Aggregate Base Course | 6.46 | |
| 302 | Bit. Prime Coat Grade - MC-1 | 2.20 | |
| 314-1 | Aggregate Materials for BST | 1.26 | |
| 314-3 | Asphalt Cement 85-100 Penetration | 4.35 | |
| 401 | Timber Trestle on Concrete Pile Bents | 1.72 | |
| 402-2.5 | Precast Concrete Piles | 6.39 | |
| 402-2.5a | Concrete Test Piles | 1.08 | |
| 403 | Concrete Railings | 0.16 | |
| 405 | Concrete Class "A" (Miscellaneous) | 1.28 | |
| 405-1 | Concrete Class "A" Bridge | 2.85 | |
| 406 | Reinforcing Steel | 2.13 | |
| 413 | 0.30 M. Ø Reinforced Concrete Pipes | 0.03 | |
| 413-1 | 0.46 M. Ø Reinforced Concrete Pipes | 0.12 | |
| 413-2 | 0.60 M. Ø Reinforced Concrete Pipes | 2.45 | |
| 413-3 | 0.90 M. Ø Reinforced Concrete Pipes | 0.36 | |
| 413-4 | 1.20 M. Ø Reinforced Concrete Pipes | 0.37 | |
| 500 | Rip-rap and Grouted | 0.08 | |
| 501 | Hand Laid Rock Emb. | 0.373 | |
| 510 | Right of way Markers | 0.23 | |
| | TOTAL | | 27.4 |
| | | CASH FLOW | |
| | | CUMULATIVE | |

PALI

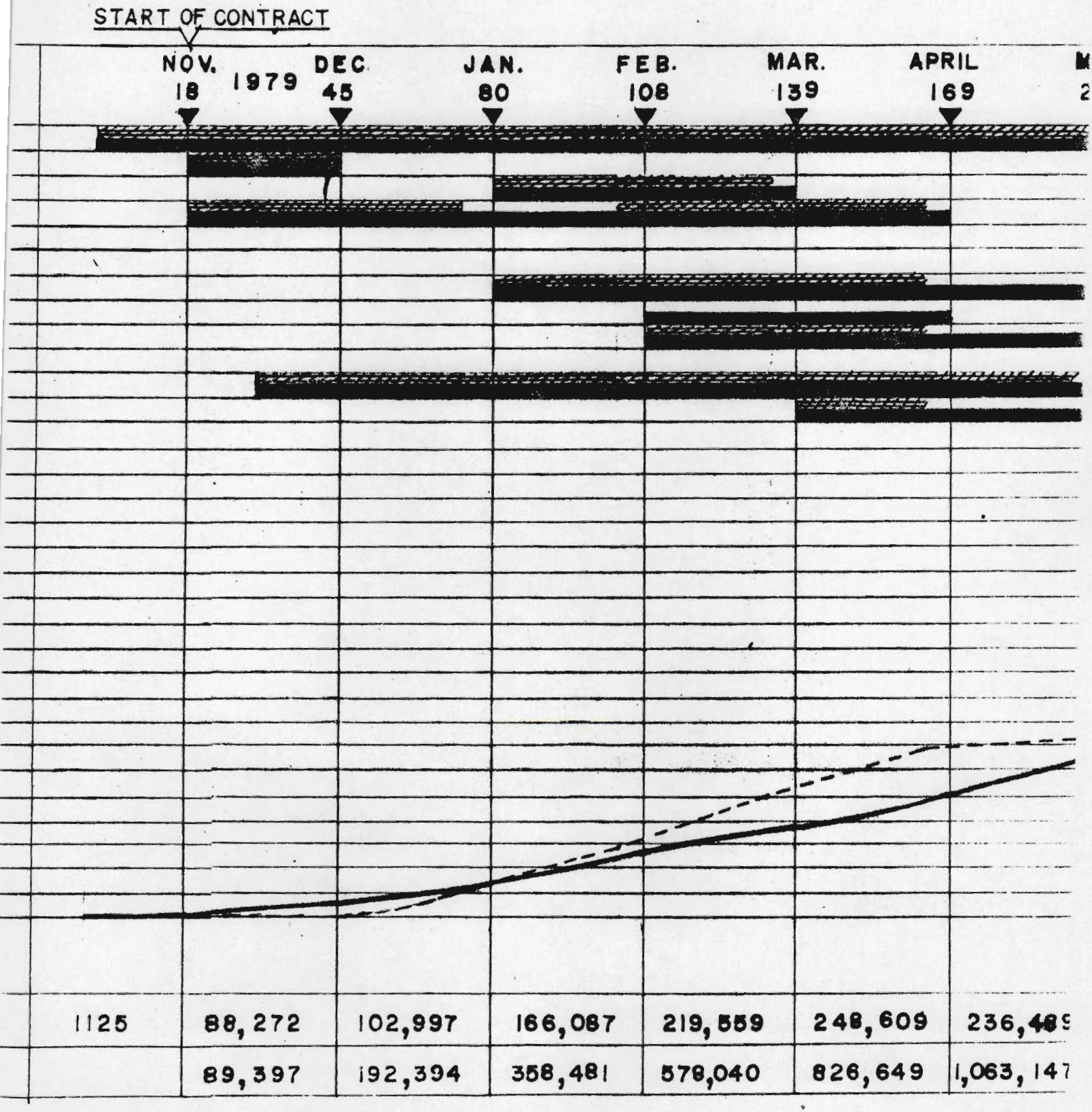
STA

| ESTIMATED % WEIGHT SCHEDULED | ACCOMPLISHED PROJECT | ACCOMPLISHED ITEM | QUANTITY | UNIT COST | AMOUNT |
|---|---|---|---|---|---|
| 1.00 | 0.6111 | 61.1111 | 18 mos. | 2,500 | 45,000.0 |
| 0.66 | 0.6666 | 100.000 | L.S. | L.S. | 30,000.0 |
| 1.86 | 1.7360 | 93.000 | L.S. | L.S. | 84,000.0 |
| 1.22 | 0.8263 | 67.309 | 17.13 Has. | 3,225.0 | 55,244.25 |
| 0.09 | | | 1 each | 4,125.0 | 4,125.0 |
| 0.02 | | | 3 each | 367 | 1,101.0 |
| 2.81 | 2.5920 | 92.176 | 11,100M³ | 11.40 | 126,540.0 |
| 0.53 | | | 1,900M³ | 12.75 | 24,225.0 |
| 2.75 | 1.7129 | 62.121 | 13,200M³ | 9.40 | 124,080.0 |
| 0.60 | | | 2,400M³ | 15 | 36,000.0 |
| 331797 | 15.120 | 44.744 | 86,400M³ | 17.60 | 1,520,640 |
| 20.52 | 4.2025 | 20.474 | 31,850M³ | 29.0 | 923,650 |
| 0.05 | | | 50M³ | 45.0 | 2,250.0 |
| 6.46 | | | 6,900M³ | 42.0 | 289,800 |
| 2.20 | | | 42 M.T. | 2,360 | 99,120 |
| 1.26 | | | 575M³ | 97.60 | 56,120 |
| 4.35 | | | 83 M.T. | 2,360 | 195,880 |
| 1.72 | | | 10 Span | 7,687 | 76,870 |
| 6.39 | | | 590 L.M. | 488 | 287,920 |
| 1.08 | | | 5 each | 9,600 | 48,000 |
| 0.16 | | | 60 L.M. | 120 | 7,200.0 |
| 1.28 | | | 100 M³ | 570 | 57,000 |
| 2.85 | | | 174.6M³ | 735 | 128,331 |
| 2.13 | | | 17,371 Kg. | 5.50 | 95,540.50 |
| 0.03 | | | 11 L.M. | 142 | 1,562.0 |
| 0.12 | | | 26 L.M. | 218 | 5,668 |
| 2.45 | | | 386 L.M. | 285 | 110,010 |
| 0.36 | | | 32 L.M. | 502 | 16,064 |
| 0.37 | | | 22 L.M. | 772 | 16,984 |
| 0.08 | | | 30 M³ | 120 | 3,600 |
| 0.373 | | | 150M³ | 112 | 16,800 |
| 0.23 | | | 294 ea. | 36 | 10,584 |
| | 27.4674 AS OF SEPTEMBER 25, 1980 | | | | |

CASH FLOW 1125

CUMULATIVE TOTAL AMOUNT

# BAR SCHEDULE OF WOR
# OF
# PALISTINA-SAN ANTONIO-MINALABAC RC

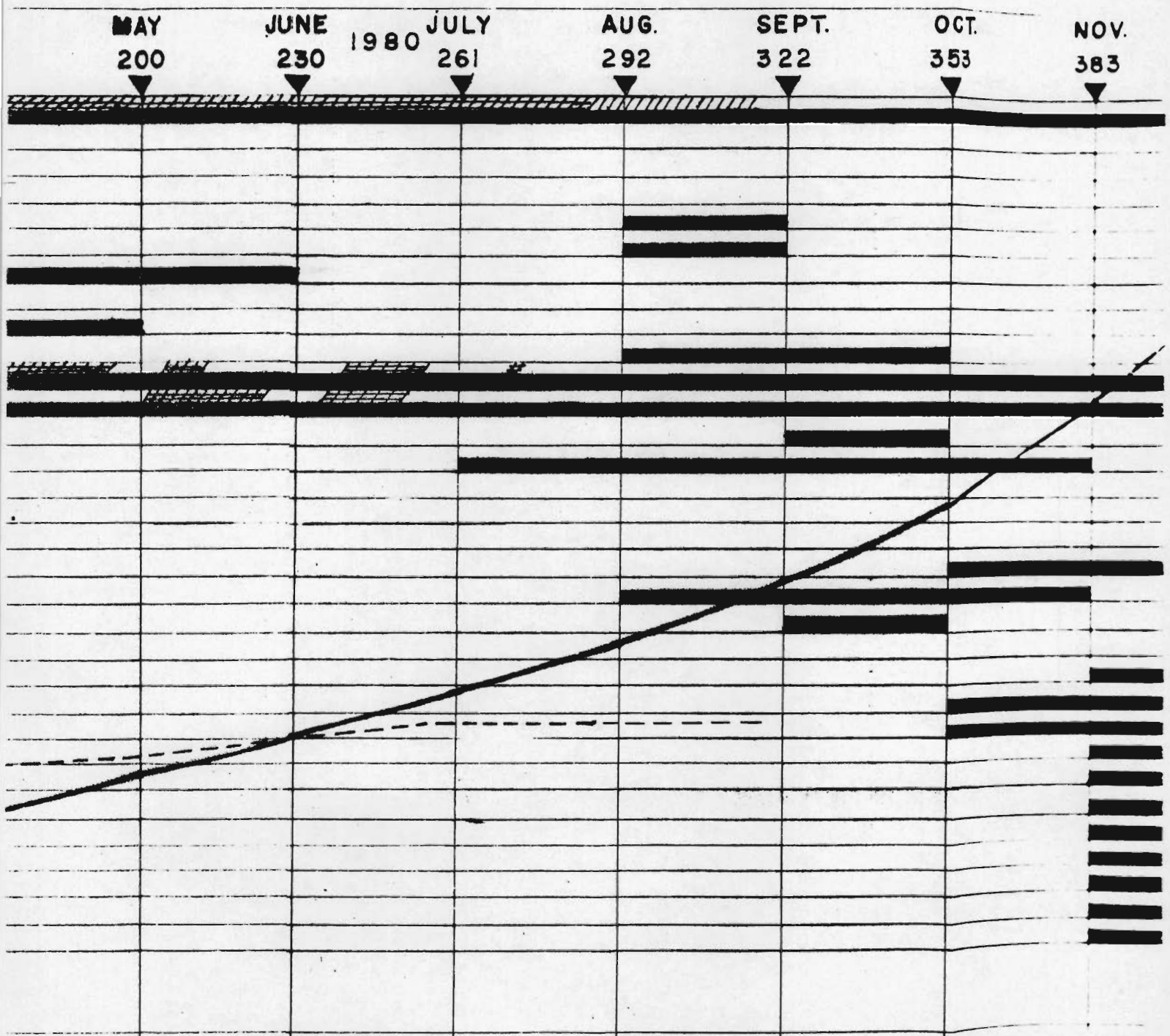


# WORK

# C ROAD SECTION

LEGEND:

PRE
PRO
SCH
SCH
ACT




| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 136,489 | 195,138 | 195,138 | 246,498 | 365,697 | 410,721 | 424,456 | 424 |
| 063,147 | 1,258,285 | 1,453,423 | 1,699,921 | 2,065,618 | 2,476,339 | 2,900,795 | 3,325 |

D:

PREVIOUS ACCOMPLISHMENT

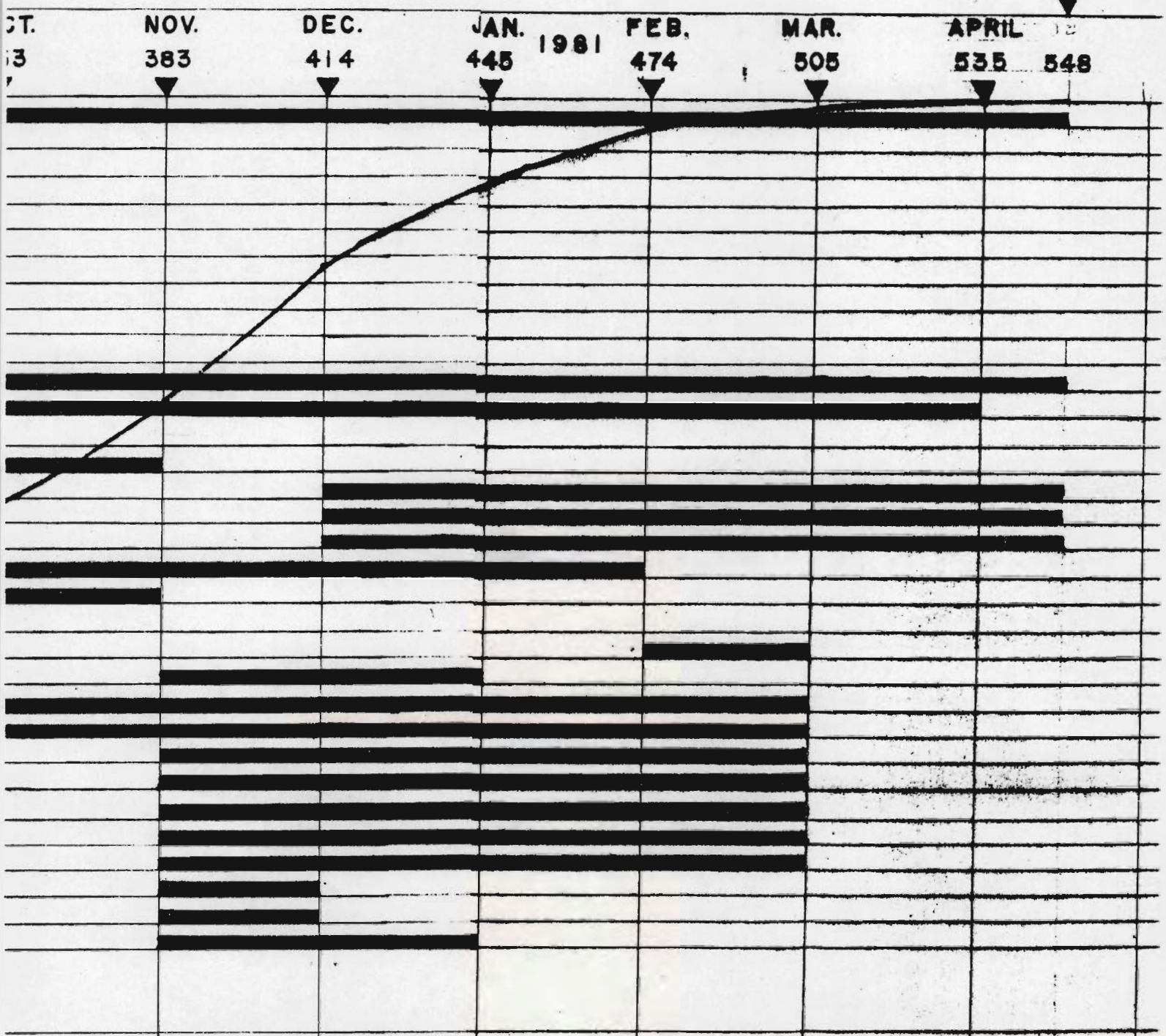
PROGRESS THIS REPORT

SCHEDULED WORK

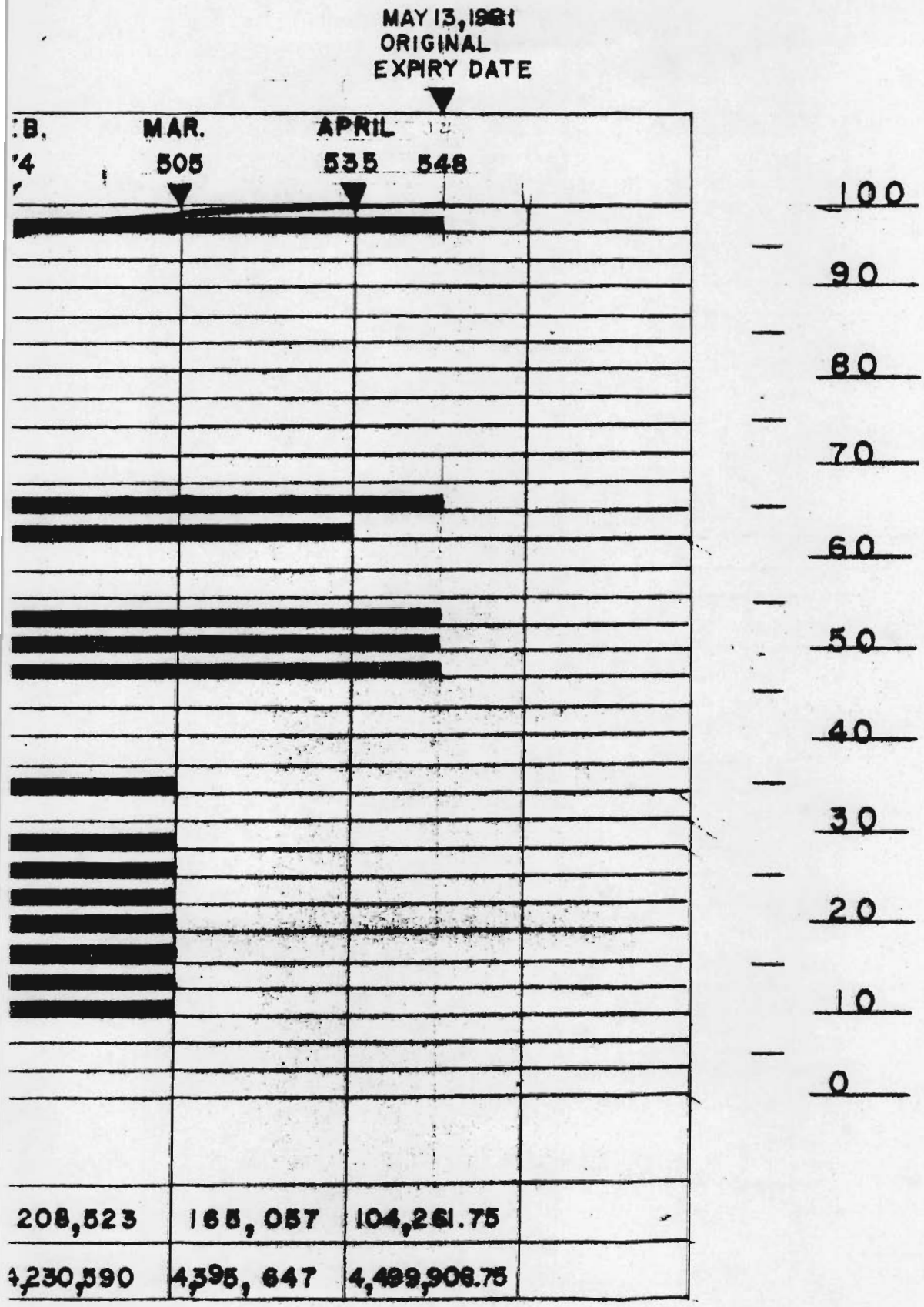
SCHEDULED ACCOMPLISHMENT

ACTUAL ACCOMPLISHMENT

MAY 13, 1981
ORIGINAL
EXPIRY DATE




| | | | | | | |
|---|---|---|---|---|---|---|
| 424,456 | 424,452 | 365,040 | 331,780 | 208,523 | 165,057 | 104,261.75 |
| ,900,795 | 3,325,247 | 3,690,287 | 4,022,067 | 4,230,590 | 4,395,647 | 4,499,908.75 |


MAY 13, 1981
ORIGINAL
EXPIRY DATE
:B.
'4
MAR.
505
APRIL
535
548
100
90
80
70
60
50
40
30
20
10
0
208,523
165,057
104,261.75
4,230,590
4,395,647
4,499,908.75

# BICOL RIVER BASIN DEVELOP
## ROAD COMPONEN

MANPOWER SCHEDULE OF CONSULTANTS STAFF FOR (

PACKAGE II

| NAMES | POSITION | 1980 1 N | 2 D | 3 J | 4 F | 5 M | 6 A | 7 M | 8 J |
|---|---|---|---|---|---|---|---|---|---|
| A. E. BANDELARIA | DEPUTY PROJ. MGR. | | | | | | | | |
| L. D. MAYOR | SR. HWY. ENGR. / R.E. | | | | | | | | |
| F. G. OBUSAN | SR. BR. ENGR. / R. E. | | | | | | | | |
| M. D. LACSAMANA | SR. LOC. ENGR. | | | | | | | | |
| J. A. TORRALBA | SR. MAT. ENGR. / R.E. | | | | | | | | |
| F. C. ROSALES | ADM. OFFICER | | | | | | | | |
| L. P. JOSE | CLERK / TYPIST | | | | | | | | |
| T. S. SABABAN | MES'R. / JANITOR | | | | | | | | |

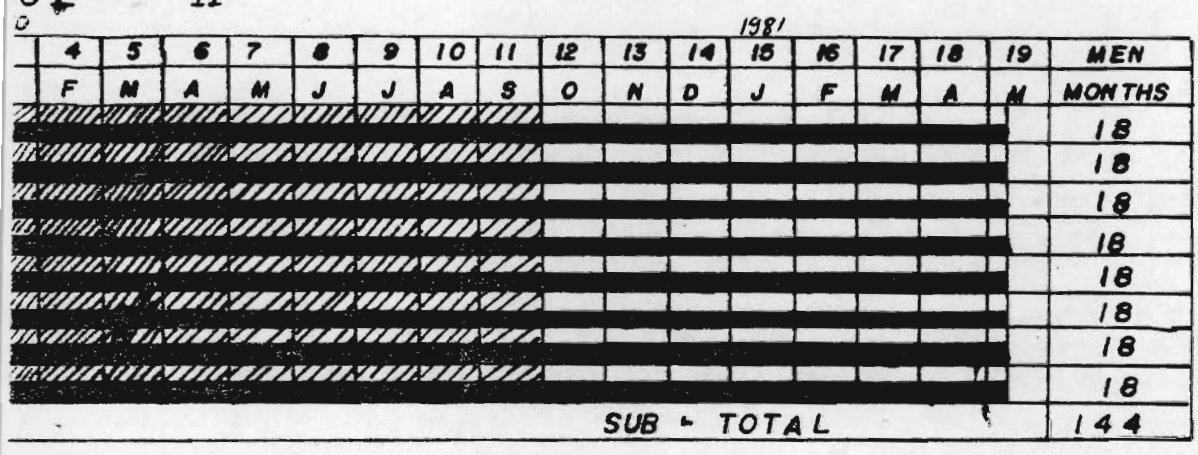
SUB - PROJ. NO. 6 PALISTINA - SN. ANTONIO - N

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| V. B. ZANO | RESIDENT ENGINEER | | | | | | | | |
| R. R. RAFER | ENGR. INSP. (HWY.) | | | | | | | | |
| R. NUNEZ | ENGR. INSP. (BRIDGE) | | | | | | | | |
| W. B. CONCEPCION | MATL'S. ENGR. | | | | | | | | |
| B. V. ACORDA | SURVEYOR / DRFTMN. | | | | | | | | |
| C. D. DELFIN | LAB. TECHNICIAN | | | | | | | | |
| V. L. DELA CRUZ | CLERK / TYPIST | | | | | | | | |
| A. B. LAUDIT | JANITOR / MESGR. | | | | | | | | |
| A. P. CONDAT | LABORER | | | | | | | | |

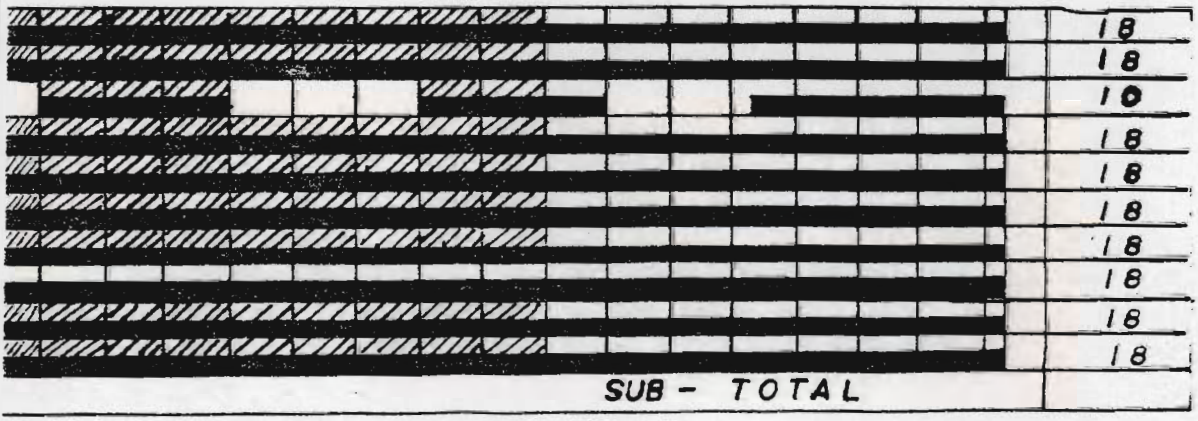
## IN DEVELOPMENT PROJECT
## COMPONENTS

TAFF FOR CONSTRUCTION SUPERVISION

GE II




SN. ANTONIO - MINALABAC ROAD



Bicol River Basin Development Project
Secondary and Feeder Roads

PACKAGE II

NAGA-CAROLINA ROAD PROJECT
Sub-Project No. 10

---

MONTHLY CONSTRUCTION REPORT
No. 27

Prepared by:

LUCIO D. MAYOR
Sr. Hwy. Engr./R.E.

Submitted by:

ALDO E. BANDELARIA
Deputy Project Manager

PROGRESS REPORT NO. 27

September, 1980

PROJECT: NAGA-CAROLINA SECONDARY & FEEDER ROADS
SUB-PROJECT NO. 10

I. GENERAL

Had the weather been a little bit cooperative, the two remaining Feeder Roads would have been completed by now. With the completion in site in only a matter of days, the next report shall be the Final one.

The period had been characterized by daily rains that made it impossible for the contractor to finish the whole works, but no damages were observed.

2. PROGRESS

The overall progress at the end of the period is 99.74 per revised schedule broken down as follows:

| | |
|---|---|
| Naga-Carolina Road (SR-10) | 76.44% (completed) |
| San-Isidro-Pacul Nursery(FR-1001) | 12.12% |
| San-Isidro-Panicuason (FR-1002) | 11.18% |
| | 99.74% |

Time elapsed from the work period, including time extensions is 99.13% per latest revised schedule.

a. Secondary Road (Km.0 + 000 to Km. 13 + 470) Completed

b. Feeder Road No. 1001 (Kw. 0 + 079 to Kw 2 + 185)

1. Earthworks
   Trimming of sied slopes & ditches.
2. Subbase
   Trimming up to finished grade.

3. Structures

Completed

4. Drainage

Completed

c) Feeder Road No. 1002 (Km.0 + 027 to Km.4 + 063)

1) Earthworks

Filling & compacting of embankment approaches to Timber Trestle Bridge

2) Subbase

Trimming up to finish grade.

3) Structures

Masonry retaining wall almost complete.

4) Drainage

Additional grouted riprap at embankment approaches nearing completion.

SUMMARY OF PHYSICAL ACCOMPLISHMENTS TO DATE

| a) ROADS | SECONDARY | FEEDER ROADS |
|---|---|---|
| Sub-grade | 13.32 Kms. | 6.14 |
| Sub-base | 13.32 " | 6.14 |
| Base | 13.33 | none |
| Surfacing | 80,371 sq.m. | none |

| b) BRIDGES | SECONDARY RD. | FEEDER ROADS |
|---|---|---|
| Substructure | 50.2 L.M. | 12.00 L.M. |
| Superstructure | 50.2 L.M. | 12.00 L.M. |

4. COMMENTS & RECOMMENDATIONS

The final completion of the whole project is just a few days away. The contractor can then request for acceptance after an inspection with satisfactory results.

In the secondary road, heavy cargo trucks loaded with coconut trunks with lengths far exceeding the truck bed and their ends dragging on the road surface, have been observed time and again. If the proper authorities cannot put a stop tothis practice, the road shall be greatly damaged and will not last long.

With time suspensions due to weather conditions totalling 15 days for the period, the new tentative completion date is September 30, 1980. The garbage trucks are again dumping their loads on the ditches, shoulders and edges of the traveled-way at the Barrio Balatas section of the Secondary Road, resulting in accumulative water due to clogging that overflows and destroys the surfacing, and eventually the whole road. The city administration shall again be informed and requested to act appropriately.

WEATHER REPORT
As of September , 1980

PROJECT: NAGA-CAROLINA ROAD PROJECT
SUB-PROJECT NO. 10

| Date | | Weather | Remarks | Time Extension Recommended |
|---|---|---|---|---|
| 1980 | | | | |
| Aug. | 26 | Rainy | Unworkable | One (1) day |
| | 27 | Rainy | Unworkable | One (1) day |
| | 28 | Rainy | Unworkable | One (1) day |
| | 29 | Rainy | Unworkable | One (1) day |
| | 30 | Rainy | Unworkable | One (1) day |
| | 31 | Rainy | Unworkable | One (1) day |
| Sept. | 1 | Rainy | Unworkable | One (1) day |
| | 2 | Rainy | Unworkable | One (L) day |
| | 3 | Rainy | Unworkable | One (1) day |
| | 4 | Fair | Workable | None |
| | 5 | Fair | Workable | None |
| | 6 | Fair | Workable | None |
| | 7 | Fair | Workable | None |
| | 8 | Rainy | Unworkable | One (1) day |
| | 9 | Rainy | Unworkable | One (1) day |
| | 10 | Fair | Workable | None |
| | 11 | Fair | Workable | None |
| | 12 | Fair | Workable | None |
| | 13 | Fair | Workable | None |
| | 14 | Fair | Workable | None |
| | 15 | Fair | Workable | None |
| | 16 | Fair | Workable | None |
| | 17 | Fair | Workable | None |
| | 18 | Rainy | Unworkable | One (1) day |
| | 19 | Cloudy | Workable | None |
| | 20 | Cloudy | Workable | None |
| | 21 | Rainy | Unworkable | One (1) day |
| | 22 | Fair | Workable | None |
| | 23 | Cloudy | Workable | None |
| | 24 | Rainy | Unworkable | One (1) day |
| | 25 | Rainy | Unworkable | One (1) day |

TOTAL EXTENSION OF TIME RECOMMENDED THIS MONTH - - - - - - 15 days
TOTAL EXTENSION OF TIME RECOMMENDED PREVIOUSLY - - - - - 115 days
GRAND TOTAL TO DATE - - - - - - - - - - - - - - - - - - - 130 days

BICOL RIVER BASIN DEVELOPMENT PROGRAM OFFICE
San Jose, Pili, Camarines Sur

EMPLOYMENT GENERATION SURVEY (SS3)

NAME OF BALM Construction Co., Inc.

FOR THE MONTH OF September 19 80

| | ADMINISTRATIVE FINANCE | ENGINEERING TECHNICAL | SKILLED | UNSKILLED |
|---|---|---|---|---|
| MANILA BASED 1/ | - | 2 | 1 | - |
| LOCAL - HIRED 2/ | 9 | 1 | 31 | 19 |
| SUB-CONTRACTORS 3/ | - | - | - | - |
| TOTAL | 9 | 3 | 32 | 19 |

1/ Includes permanent employees

2/ Employees residing within the Basin Area

3/ Local Hired Only

pure*

Submitted by:

TEODORO S. PEREZ
Project Manager

5

BALM CONSTRUCTION CO., INC.
Naga-Carolina Road Project
Naga City

LIST OF PERSONNEL
As of September, 1980

| NAME | POSITION | QUALIFICATION |
|---|---|---|
| **I. TECHNICAL STAFF** | | |
| 1. Modesto C. Buenaventura | Operations Mgr. | Experienced |
| 2. Eutropio O. Doroy | Resident Engineer | Civil Engineer |
| 3. Perpetou B. Avila | Mtls.Lab.Tech./PO | Expereinced |
| **II. ADMINISTRATIVE STAFF** | | |
| 1. Efren B. Avincula | Adm. Officer | BSC |
| 2. Fatima B. Reyes | Comptroller | -do- |
| 3. Gloria N. Felipe | Fld.Acctg. Officer | -do- |
| 4. Magno A. Tomas | Gen. Timekeeper | -do- |
| 5. Narciso S. Felipe | Warehouseman/Purchaser | -do- |
| 6 Francisco S. Felipe | Asst. Warehouseman | -do- |
| 7. Palcido Balisbis | POL Tender | -do- |
| 8. Mariano Panganiban | Compound Watchman | -do- |
| 9. Antonio Verdon | Compound Watchman | -do- |
| 10. Gregorio Nacario | -do- | -do- |
| 11. Efren San Joaquin | Field Watchman | -do- |
| 12. Ernesto Viterbo | Field Watchman | -do- |
| **III. MECHANICAL DEPARTMENT** | | |
| 1. Romeo A. Sauco | Equipment Foreman | Experienced |
| 2. Fernando Luna | Mechanic | -do- |
| 3. Jose Daruca | Mechanic | -do- |
| 4. Floro Palmarin | Mechanic/Operator | -do- |
| 5. Norberto Alambre | Mechanic helper | -do- |
| 6. Domiciano Losa | Mechanic helper | -do- |
| 7. Tito Jerusalem | Electrician | -do- |
| 8. Felixberto Pelagio | Welder | -do- |
| 9. Efren Q. Nano | Tireman | -do- |
| **IV. DRIVERS** | | |
| 1. Wilfredo Roldan | Truck Driver | Experienced |
| 2. Pedro Malapo | -do- | -do- |
| 3. Pio Macario Jr. | -do- | -do- |
| 4. Luis Santos | -do- | -do- |
| 5. Rodolfo Parro | -do- | -do- |
| 6. Eliseo Roldan | -do- | -do- |
| 7. Roman Maghirang | -do- | -do- |
| 8. Carlito Atup | Pick-up driver | -do- |

## V. HEAVY EQUIPMENT OPERATORS

| | | | |
|---|---|---|---|
| 1. | Elmer Fabricante | Grader Operator | Experienced |
| 2. | Reynaldo Villavecencio | Payloader Operator | -do- |
| 3. | Julio Ripo | Dozer Operator | -do- |
| 4. | Aniano Jesus Jr. | Road Roller Operator | -do- |
| 5. | Sancho Buendia | Road Roller Operator | -do- |
| 6. | Florentino Reoncio | Asph.Distributor Optr. | -do- |
| 7. | Gregorio Baste | Asph.Rd. Roller Optr. | -do- |
| 8. | Ricardo Buendia | Asph. Rd.Roller Optr. | -do- |

## VI. SURVEY AND LAB. TEAM

| | | | |
|---|---|---|---|
| 1. | Armando Parillas | Instrument man | Experienced |
| 2. | Carlos Bislumbre | Survey Aide | -do- |
| 3. | Rafael Parillas | -do- | -do- |
| 4. | Luis de Leon | Laboratory Aide | -do- |

## VI. MISCELLANEOUS STRUCTURE

| | | | |
|---|---|---|---|
| 1. | Jose Mariano | Gen. Const. Foreman | Experienced |
| 2. | Romeo Bongat | Const. Foreman | -do- |
| 3. | Pedro Bual | Carpenter | -do- |
| 4. | Jorge Proa | Carpenter | -do- |
| 5. | Pedro Catimbang | Laborer | -do- |
| 6. | Oscar Moreno | Laborer | -do- |
| 7. | Jovenol Albe | -do- | -do- |
| 8. | Catalino Canavera | -do- | -do- |
| 9. | Maximino Castillo | -do- | -do- |
| 10. | Carlito Caneda | -do- | -do- |
| 11. | Claudio Flores | -do- | -do- |
| 12. | Pablo Gonzales | -do- | -do- |
| 13. | Jose Garcia | -do- | -do- |
| 14. | Paterno Panganiban | -do- | -do- |
| 15. | Jose Panganiban | -do- | -do- |
| 16. | Felix Calleja Jr. | Truck helper | -do- |
| 17. | Roberto Bron | -do- | -do- |
| 18. | Santos Panganiban | -do- | -do- |
| 19. | Abraham Gonzales | -do- | -do- |
| 20. | Domingo Arbaca | -do- | -do- |
| 21. | Teofisto Alano | -do- | -do- |

## VII. BRIDGE CONST. TEAM

| | | | |
|---|---|---|---|
| 1. | Juanito Porterio | Bridge Foreman | Experienced |
| 2. | Juan Perez | Carpenter | -do- |
| 3. | Fortunato Senson | Carpenter | -do- |
| 4. | Teodulo Petrimentre | -do- | -do- |
| 5. | Jose Ptrimente | -do- | -do- |
| 6. | Roman Buena | -do- | -do- |

| | | |
|---|---|---|
| 7. Vicente Magayanes | Carpenter | Experienced |
| 8. Loreto Sabong | --do-- | --do-- |
| 9. Ronald Porteria | --do-- | --do-- |
| 10. Bernardo Antonio | Mason | --do-- |
| 11. Ramon Antonio | Laborer | --do-- |
| 12. Jaime Senson | --do-- | --do-- |
| 14. Feliciano Roble | --do-- | --do-- |

## IX. ASPHALTING TEAM

| | | |
|---|---|---|
| 1. Nestor Mariano | Laborer | Experienced |
| 2. Jose Raymundo Jr | --do-- | --do-- |
| 3. Leo Napa | --do-- | --do-- |
| 4. Pablo Hernandez | --do-- | --do-- |
| 5. Antonio Lona | --do-- | --do-- |
| 6. Jose Buena | --do-- | --do-- |
| 7. Carlos Buena Jr | --do-- | --do-- |
| 8. Salvador Abiog | --do-- | --do-- |
| 9. Reynaldo Asor | --do-- | --do-- |
| 10 Cesar Buena | --do-- | --do-- |
| 11. Saturnino Hernandez | --do-- | --do-- |
| 12. Abundio Opiana | --do-- | --do-- |
| 13. Paciano Reburia | --do-- | --do-- |
| 14. Antonio Rabuza | --do-- | --do-- |

BALM CONSTRUCTION CO., INC.
Naga-Carolina Road Project
Naga City

LIST OF EQUIPMENT
As of September, 1980

1 - unit Bulldozer; Komatsu
1 - unit Bulldozer, CAT D7
2 - units Road Grader, CAT 12 99E
2 - units Payloader, KIMCO JH -65
1 - unit Payloader, CAT 950
1 - unit Road Roller, GALION , 2 wheeled
1 - unit Sheepsfoot Roller, Single Drum
1 - unit Generator, G.M. 3.5 Power
1 - unit Welding Machine, HOBART
3 - units Vibrator, Portable
1 - unit Service Car; Ford Fiera 1600
2 - units Dump Truck; Isuzu, 10 Wheeler
1 - unit Stake Truck; IH
8 - units Dump Truck, ISUZU, 6 Wheeler
2 - units Stake Truck, TOYOTA
1 - unit Tractor Massey Ferguson, Sheepsfoot Tower
1 - unit Pile Hammer, D - 22
2 - units Bar Cutter
1 - unit Road Roller, GALION, 3 Wheelled
1 - unit Rock Crusher Complete with accessories
1 - unit Crane with Diesel Hammer

SUBMITTED BY:

(SGD.) EUTROPIO O. DOROY
Project Engineer

LIST OF LABORATORY EQUIPMENT
As of September, 1980

One - 8 - inch Brass Sieve 3"
One - 8 - inch Brass Sieve 2"
One - 8 - inch Brass Sieve 1½"
One - 8 - inch Brass Sieve 1"
One - 8 - inch Brass Sieve ½"
One - 8 - inch Brass Sieve 3/8"
One - 8 - inch Brass Sieve No. 50
One - 8 - inch Brass Sieve No. 100
One - 8 - inch Brass Sieve No. 60
Two - Triple Beam Scale 0.1 gm.
One - Micromeyer Poise Balance 5.0 KG.
One - Gas Stove with oven
Two - Bucket for Immersing Aggregates
One - Volumetric Flask, 100 ml.
Twelve - Moisture Cans
One - Compaction Hammer, 5.5 lb.
One - Sand Cone Apparatus
Three - Field Density Plates
Two - Sand Scoop
Two - Tampering Rod
One - Slump Cone
Three - Cylinder Mold
One - Beam Mold
One - Asphalt Thermometer 100-400°F
One - Stop Watch
Two - Cylinder Mold
Two - Modified Compaction Mold 1/30
One - 8 - inch Brass Sieve 3/4"
One - 8 - inch Brass Sieve No. 4
One - 8 - inch Brass Sieve No. 10
One - 8 - inch Brass Sieve No. 40
One - 8 - inch Brass Sieve No. 200
Liquid Limit Device
Plastic Limit Set
Density Sand
Graduated Cylinder 25 ml.
Basin Pan 24" x 24"
Basin Pan 18" x 18"

| ITEM | DESCRIPTION | ESTIMATED % W | |
|---|---|---|---|
| | | SCHEDULED | PROJECT |
| 1.60.1 | Force Account Work (For the Spillway) | 0.08182 | 0 |
| 1.60.3 | Provide one (1) Unit Utility for Engineer | 0.22091 | 0.22091 |
| 1.60.4 | Maintain, Operate & Repair one Unit Utility Vehicle for Eng'r. | 0.13050 | 0.13050 |
| 1.60.5 | Laboratory & Office Equipment for Engineer as listed | 0.30272 | 0.30272 |
| 100 | Clearing & Grubbing | 1.05289 | 1.05289 |
| 105(Sec.) | Roadway & Drainage Excavation | 9.56004 | 9.56004 |
| 105(Fed) | Roadway & Drainage Excavation | 4.16628 | 4.16628 |
| 105-4 | Excavation of Unsuitable Materials | 0.84941 | 0.84941 |
| 106 | Excavation for Structures | 0.19401 | 0.19401 |
| 107 | Borrow | 16.03911 | 15.91079 |
| 108 | Aggregate Sub-base | 28.33589 | 28.10920 |
| 110 | Foundation Fill | 0.04909 | 0.04909 |
| 111 | Overhaul (300M.) Freehaul | 0.22905 | 0.22905 |
| 200 | Aggregate Based Course | 11.37056 | 11.37056 |
| 302 | M.C.Cutback Asph., Gr. MC-1 for Bituminous Prime Coat | 3.41543 | 3.41543 |
| 314(1) | Aggregate Matl. for Bit.-Surface Treatment (Hot Asphalt) | 2.01599 | 2.01599 |
| 314(3) | 85-100 Penetration Asphalt Cement for B.S.T. | 6.54541 | 6.54541 |
| 401 | Timber (Detour) Trestle (Superstructure only on Conc.Pile) | 0.16363 | 0.16363 |
| 402-2.5 | Precast Concrete Piles | 3.41523 | 3.41523 |
| 402-25a | Concrete Test Piles (Furnish and Drive) | 0.36000 | 0.36000 |
| 403 | Concrete Railing | 0.10023 | 0.10023 |
| 405 | Concrete Class "A" (Miscellaneous) | 2.74294 | 2.74294 |
| 405-1 | Concrete Class "A" (Bridge) | 1.56403 | 1.56403 |
| 406 | Reinforcing Steel | 2.95600 | 2.95600 |
| 413 | 0.30MØ R.C.P. | 0.05338 | 0.05338 |
| 413-2 | 0.60 M. Ø R.C.P. | 0.37674 | 0.37674 |
| 413-3 | 0.90 M. Ø R.C.P. | 0.64227 | 0.64227 |
| 413-4 | 1.20 M. Ø R.C.P. | 2.27314 | 2.27314 |
| 500 | Riprap and Grouted | 0.31904 | 0.31904 |
| 501 | Hand-Laid Embankment | 0.01424 | 0.01424 |
| 510 | Right-of-Way Markers | 0.13146 | 0.13146 |
| | Extra Work | 0.32946 | 0.08294 |
| | | | |
| TOTAL | | 100.00 | 99.26% as |

| | |
|---|---|
| MONTHLY PERIODICAL | |
| CUMULATIVE TOTAL | |
| % TIME ELAPSED | |

JULY 15, 1978
START OF CONTRACT
TIME

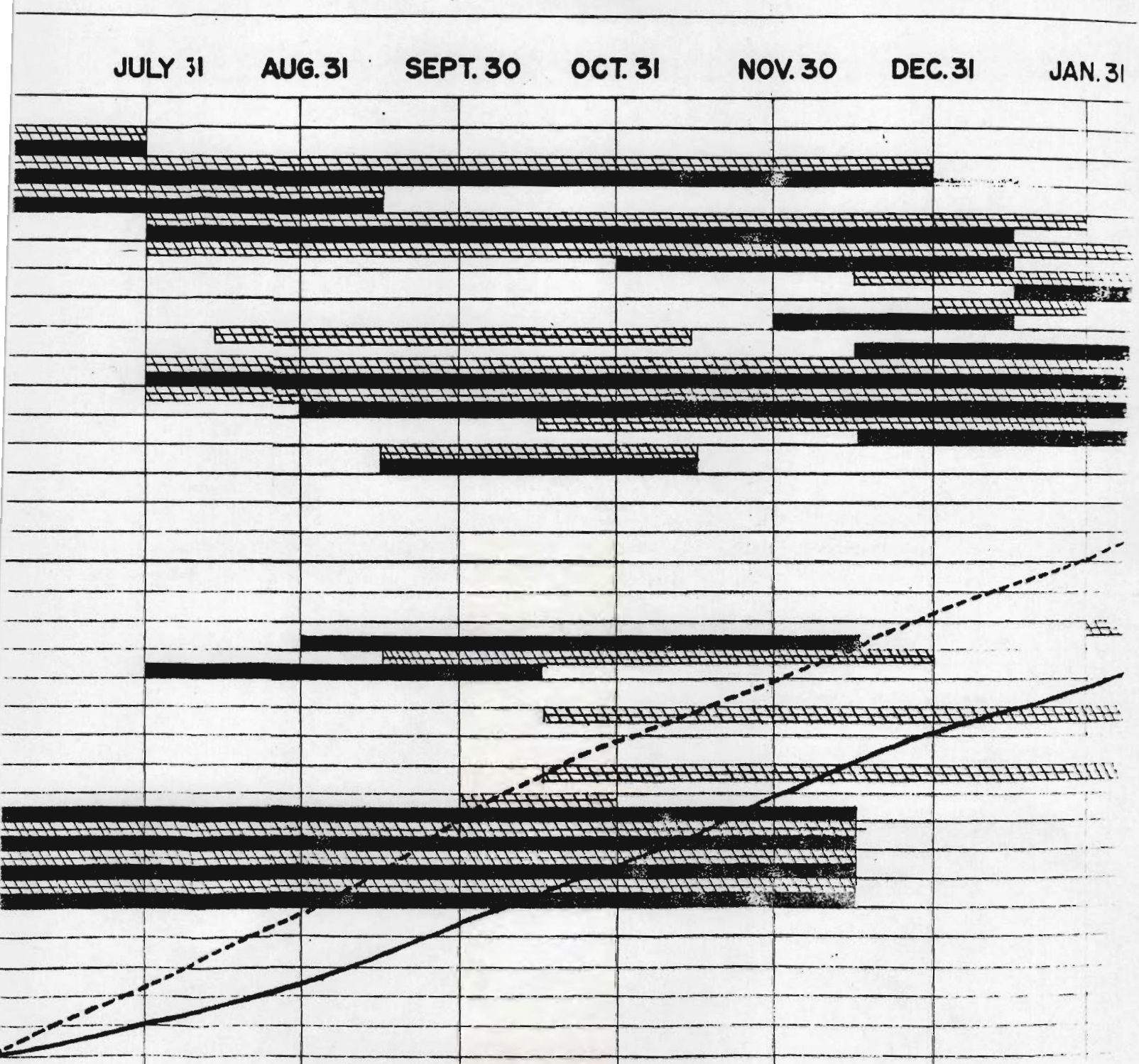
| STIMATED % WEIGHT | | | QUANTITY | UNIT COST | AMOUNT | JULY 31 | |
|---|---|---|---|---|---|---|---|
| DULED | PROJECT | ITEM | | | | | |
| 82 | 0 | 0 | | Lump Sum | 10,000.00 | | |
| 091 | 0.22091 | 100 | | Lump Sum | 27,000.00 | | |
| 050 | 0.13050 | 100 | 5.5 mos. | 2,900.00 | 15,950.00 | | |
| 272 | 0.30272 | 100 | | Lump Sum | 37,000.00 | | |
| 289 | 1.05289 | 100 | 33.6 Has. | 3,850.00 | 128,688.00 | | |
| 004 | 9.56004 | 100 | 52,280 Cu.M. | 22.35 | 1,168,458.00 | | |
| 628 | 4.16628 | 100 | 24,248 Cu.M. | 21.00 | 509,216.00 | | |
| 941 | 0.84941 | 100 | 3,460 Cu.M. | 30.00 | 103,818.00 | | |
| 401 | 0.19401 | 100 | 1,355 Cu.M. | 17.50 | 23,712.00 | | |
| 911 | 15.91079 | 99.2 | 56,010 Cu.M. | 35.00 | 1,960,350.00 | | |
| 589 | 28.10920 | 99.2 | 54,973 Cu.M. | 63.00 | 3,463,299.00 | | |
| 909 | 0.04909 | 100 | 120 Cu.M. | 50.00 | 6,000.00 | | |
| 905 | 0.22905 | 100 | 111,980 Sta.M. | 0.25 | 27,995.00 | | |
| 056 | 11.37056 | 100 | 19,438 Cu.M. | 71.50 | 1,389,745.00 | | |
| 543 | 3.41543 | 100 | 129 M.T. | 3,236.00 | 417,444.00 | | |
| 599 | 2.01599 | 100 | 1,760 Cu.M. | 140.00 | 246,400.00 | | |
| 541 | 6.54541 | 100 | 256 M.T. | 3,125.00 | 800,000.00 | | |
| 363 | 0.16363 | 100 | 2 Spans | 10,000.00 | 20,000.00 | | |
| 523 | 3.41523 | 100 | 540 L.M. | 773.00 | 417,420.00 | | |
| 000 | 0.36000 | 100 | 4 Each | 11,000.00 | 44,000.00 | | |
| 023 | 0.10023 | 100 | 98 L.M. | 125.00 | 12,250.00 | | |
| 294 | 2.74294 | 100 | 447 Cu.M. | 750.00 | 335,250.00 | | |
| 403 | 1.56403 | 100 | 236 Cu.M. | 810.00 | 191,160.00 | | |
| 560 | 2.95600 | 100 | 55,997 Kgs. | 6.45 | 361,180.65 | | |
| 5338 | 0.05338 | 100 | 45 L.M. | 145.00 | 6,525.00 | | |
| 7674 | 0.37674 | 100 | 161 L.M. | 286.00 | 46,046.00 | | |
| 4227 | 0.64227 | 100 | 157 L.M | 500.00 | 78,500.00 | | |
| 7314 | 2.27314 | 100 | 294 L.M. | 945.00 | 277,830.00 | | |
| 1904 | 0.31904 | 100 | 268 Cu.M. | 145.00 | 38,994.00 | | |
| 1424 | 0.01424 | 100 | 30 Cu.M. | 58.00 | 1,740.00 | | |
| 3146 | 0.13146 | 100 | | 39.00 | 16,068.00 | | |
| 2946 | 0.08294 | 100 | | | 40,267.37 | | |
| 00 | 99.26% as of August, 1980 | | | ₱ 12,222,307.42 | | | |
| PERIODICAL ACCOMPLISHMENT | | | | | | P 83,717.54 | 243, |
| TIVE TOTAL AMOUNT | | | | | | | 326,8 |
| ELAPSED | | | | | | 2.46% | 6. |

# REVISED BAR

1978
CONTRACT

# NAGA -

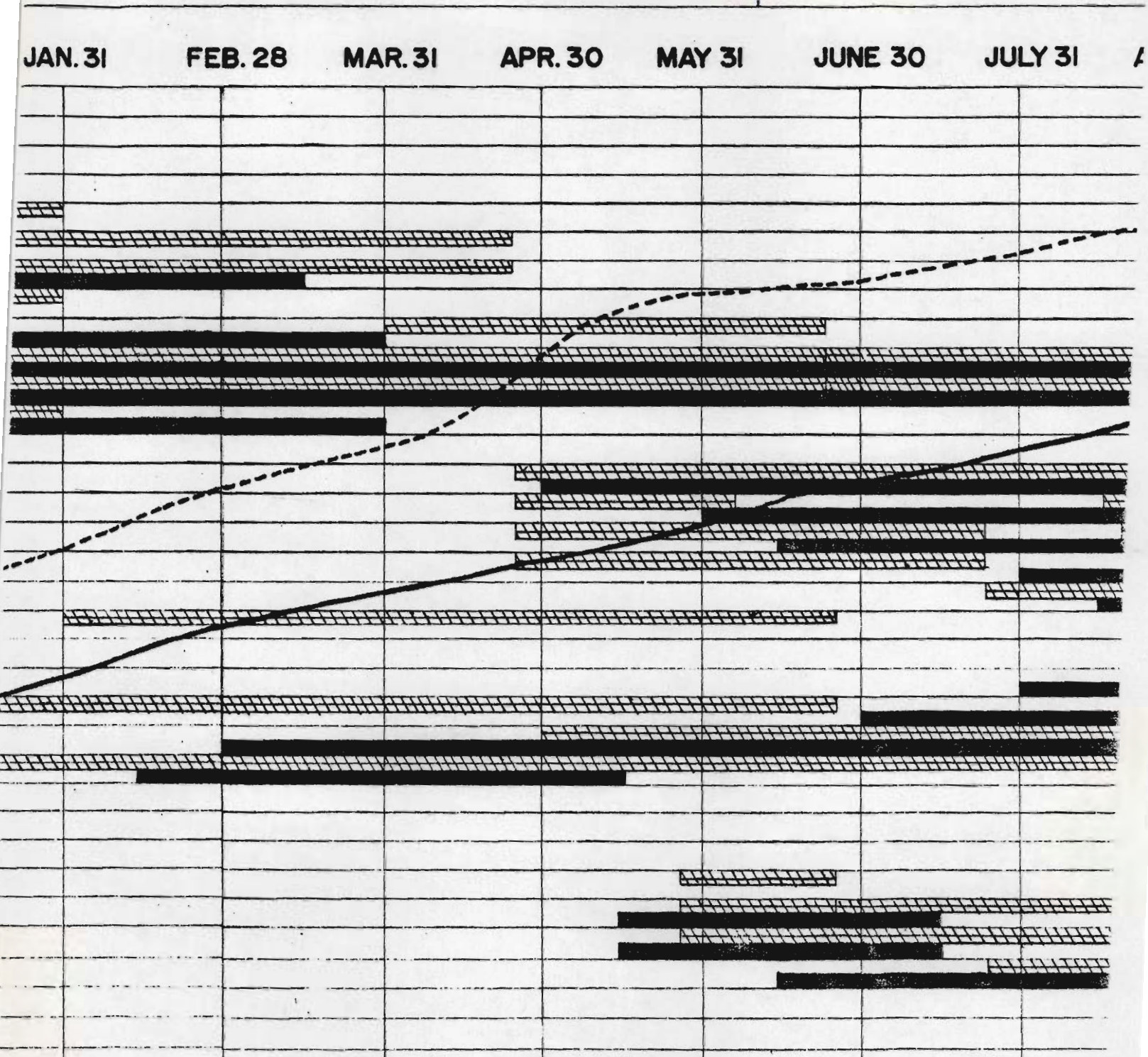
13




| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 83,717.54 | 243,111.66 | 517,089.34 | 522,904.20 | 912,144.84 | 905,560.16 | 691,694.16 | 5 |
| | 326,829.20 | 843,918.54 | 1,366,822.74 | 2,278,967.58 | 3,184,529.74 | 3,876,221.90 | 4, |
| 2.46% | 6.95 % | 11.29 % | 15.77% | 20.12% | 24.6% | 29.09% | |

# .R SCHEDULE OF WORK
# OF
# A – CAROLINA ROAD

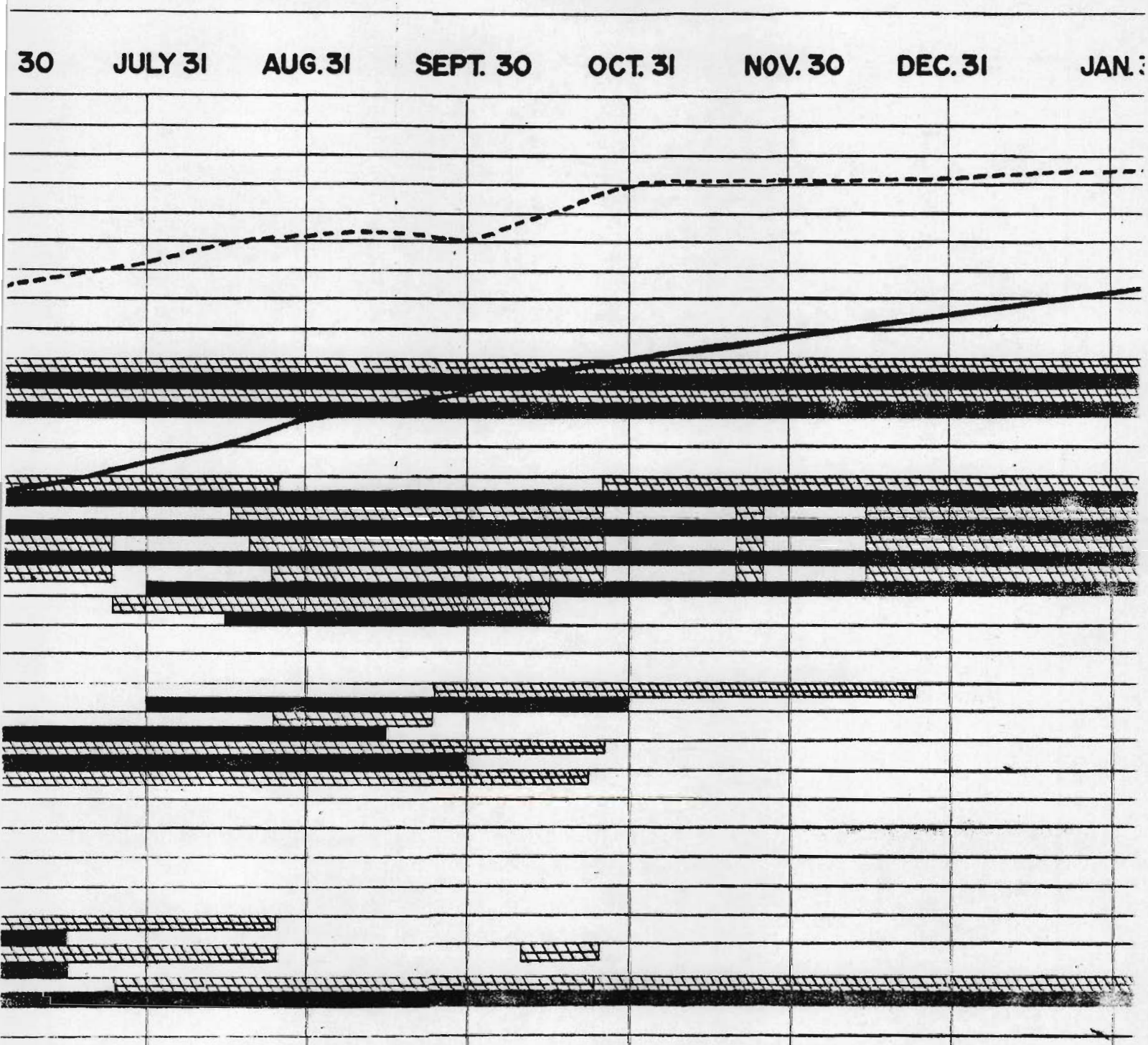
14




| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 4.16 | 549,682.99 | 560,598.86 | 408,983.59 | 478,577.61 | 440,190.14 | 575,618.17 | 678,[illegible] |
| 21.90 | 4,425,904.89 | 4,986,503.75 | 5,395,487.34 | 5,874,064.95 | 6,314,255.09 | 6,889,873.26 | 7,568,7[illegible] |
| 9% | 33.14% | 37.63% | 41.97% | 46.45% | 50.80% | 55.28% | 59.[illegible] |

ORK

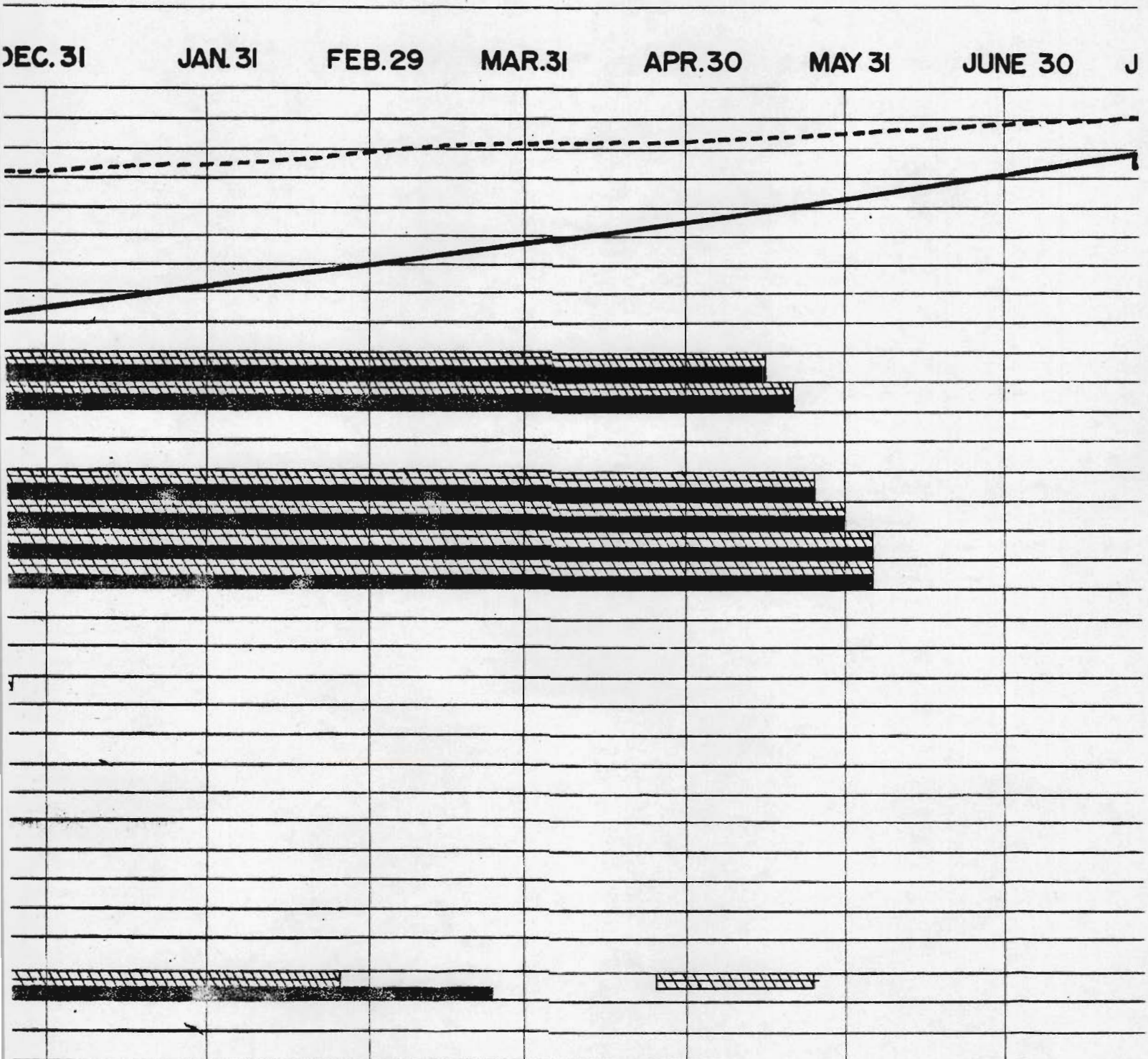
15




| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 575,618.17 | 678,841.79 | 617,159.59 | 526,090.00 | 503,927.90 | 518,049.99 | 518,049.99 | |
| 6,889,873.26 | 7,568,715.05 | 8,185,874.64 | 8,711,964.64 | 9,215,892.34 | 9,733,942.33 | 10,251,992.32 | 10 |
| 55.28% | 59.77% | 64.11% | 68.60% | 72.94% | 77.42% | 81.91% | |

REVISED C T

16




| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 9 | 518,049.99 | 501,282.70 | 474,604.02 | 388,172.52 | 281,043.91 | 18,614.82 | 218,596.00 |
| .38 | 10,251,992.32 | 10,753,275.02 | 11,227,879.04 | 11,616,051.56 | 11,897,095.47 | 11,915,710.29 | 12,134,306.2 |
| | 81.91% | 86.11% | 91.86% | 95.04% | 97.34% | 97.49% | 99.28% |

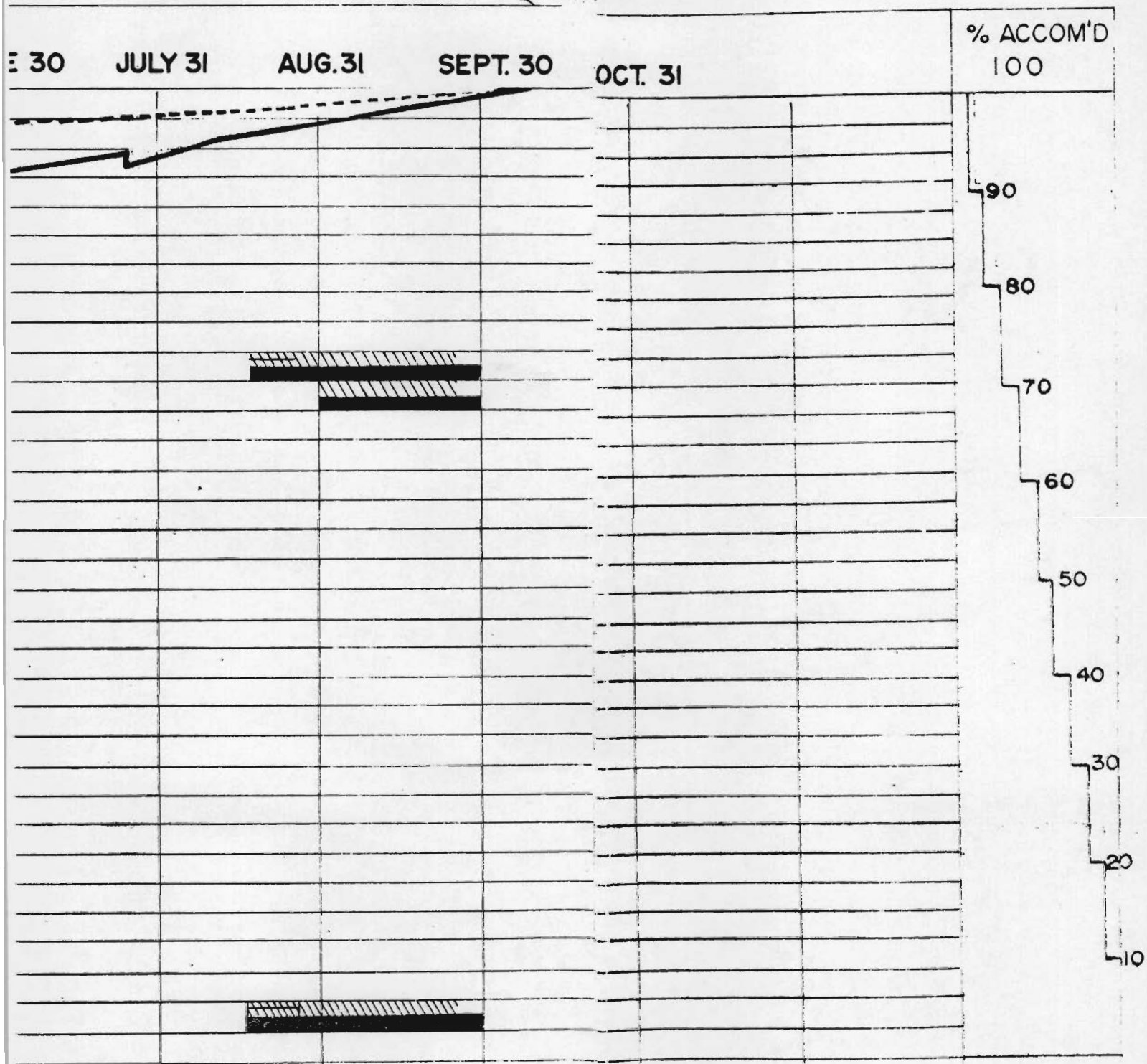
LEGEND:

- PREVIOUS ACCOMPLISHMENT
- PROGRESS THIS REPORT
- SCHEDULED WORK
- SCHEDULED ACCOMPLISHMENT
- ACTUAL ACCOMPLISHMENT

OCTOBER 10, 1980
REVISED TENTATIVE COMPLETION DATE

THIRD REVISION
REVISED AUGUST, 1980

17




| | | | |
|---|---|---|---|
| 218,596.00 | 27,134.00 | 33,875.07 | 26,992.07 |
| 2,134,306.29 | 12,161,440.29 | 12,195,315.36 | 12,222,307.43 |
| 99.28% | 99.50% | 99.78% | 100% |

# BICOL RI'

## MANPOWER SCHEDULE

1978

| NAMES | POSITION | 1 JULY | 2 AUG. | 3 SEPT. | 4 OCT. | 5 NOV. | 6 DE |
|---|---|---|---|---|---|---|---|
| A.E. BANDELARIA | DEPUTY PROJ. MANAGER | | | | | | |
| L.D. MAYOR | SR. HWY. ENG'R. R.E. | | | | | | |
| F.G. OBUSAN | SR. BR. ENG'R. R.E. | | | | | | |
| M.D. LACSAMANA | SR. LOC. ENG'R. | | | | | | |
| J.A. TORRALBA | SR. MAT'LS ENG'R. R.E. | | | | | | |
| F.C. ROSALES | ADM. OFFICER | | | | | | |
| L.P. JOSE | CLERK TYPIST | | | | | | |
| T. S. SABABAN | MES'R JANITOR | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| L.D. MAYOR | SR. HWY. ENG'R. R.E. | | | S | A | M | E A |
| B. A. BAUTISTA | MATERIALS ENG'R. | | | | | | |
| R.L. CLARIDAD | ENG'R INSP. (HWY.) | | | | | | |
| E. REYES | ENG'R. INSP. (BR.) | | | | | | |
| B. P. BAUTISTA | SURVEYOR DRAFTS'N | | | | | | |
| H. B. BELLEN | LABORATORY TECH. | | | | | | |
| E. C. CASTILLO | LABORER | | | | | | |

# BICOL RIVER BASIN DEVELOPMENT PROJECT
## (ROAD COMPONENTS)

## VER SCHEDULE OF CONSULTANTS STAFF CONSTRUCTION SUPERVI

## PACKAGE II

1978 1979

| 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SEPT. | OCT. | NOV. | DEC. | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEPT. | OCT. | NOV. | DEC. |

## SUBPROJECT NO. 10 NAGA-CAROLINA ROAD

A M E A S I N K E Y S T A F F

# OJECT

## SUPERVISION

1980

| 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | MEN MONTHS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NOV. | DEC. | JAN. | FEB. | MAR. | APR. | MAY | JUNE | JULY | AUG. | SEPT. | OCT. | NOV. | DEC. | |
| | | | | | | | | | | | | | | 27.17 |
| | | | | | | | | | | | | | | 27.17 |
| | | | | | | | | | | | | | | 27.17 |
| | | | | | | | | | | | | | | 27.17 |
| | | | | | | | | | | | | | | 27.17 |
| | | | | | | | | | | | | | | 27.17 |
| | | | | | | | | | | | | | | 27.17 |
| | | | | | | | | | | | | | | 27.17 |
| | | | | | | | | | | | | | SUB-TOTAL | 217.36 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | 25 |
| | | | | | | | | | | | | | | 27.17 |
| | | | | | | | | | | | | | | 12 |
| | | | | | | | | | | | | | | 25 |
| | | | | | | | | | | | | | | 27.17 |
| | | | | | | | | | | | | | | 27.17 |
| | | | | | | | | | | | | | SUB-TOTAL | 143.51 |

BICOL RIVER BASIN DEVELOPMENT PROGRAM OFFICE
San Jose, Pili, Camarines Sur

EMPLOYMENT GENERATION SURVEY (SS3)

NAME OF CONSULTANT INTEGRATED PHILCONSULT, INC.

FOR THE MONTH OF September 19 80

| | ADMINISTRATIVE FINANCE | ENGINEERING TECHNICAL | SKILLED | UNSKILLED |
|---|---|---|---|---|
| MANILA BASED 1/ | | 5 | | |
| LOCAL - HIRED 2/ | 5 | 18 | | 8 |
| SUB-CONTRACTORS 3/ | | | | |
| TOTAL | 5 | 23 | | 8 |

1/ Includes permanent employees

2/ Employees residing within the Basin Area

3/ Local Hired Only

pure*

Submitted by:

AMADO B. BANDELARIA
Deputy Project Manager

September 25, 1980

# C E R T I F I C A T I O N

This is to certify that this Monthly Construction, Progress Report submitted to the Ministry of Public Highways in compliance with paragraph 3.02, Article III of the contract for Engineering Services are the actual accomplishment of the respective contractors and other information included thereat are true and correct.

AMADO M. BANDELARIA
Deputy Project Manager