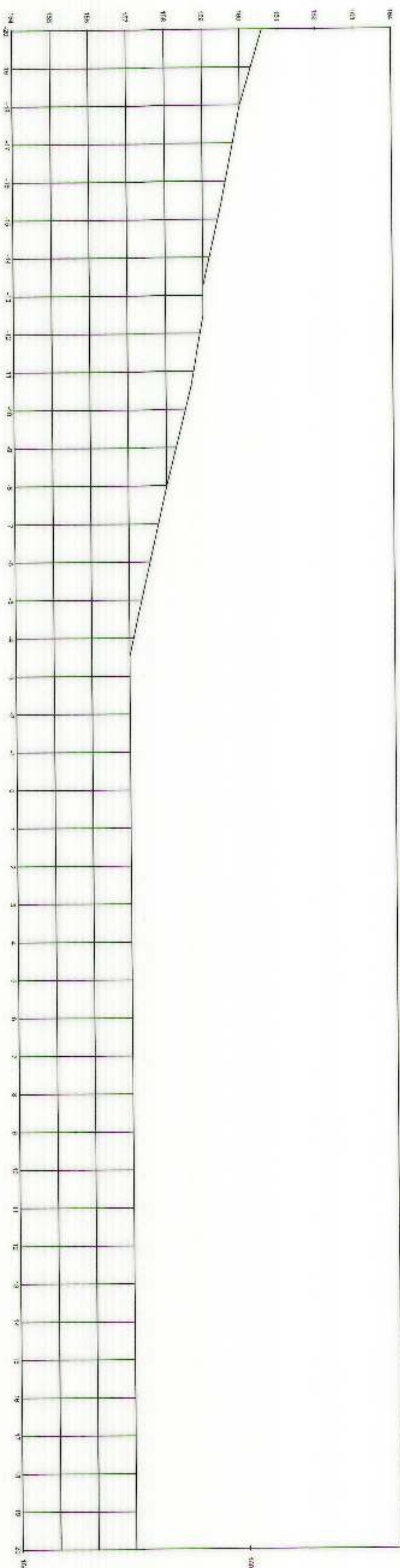
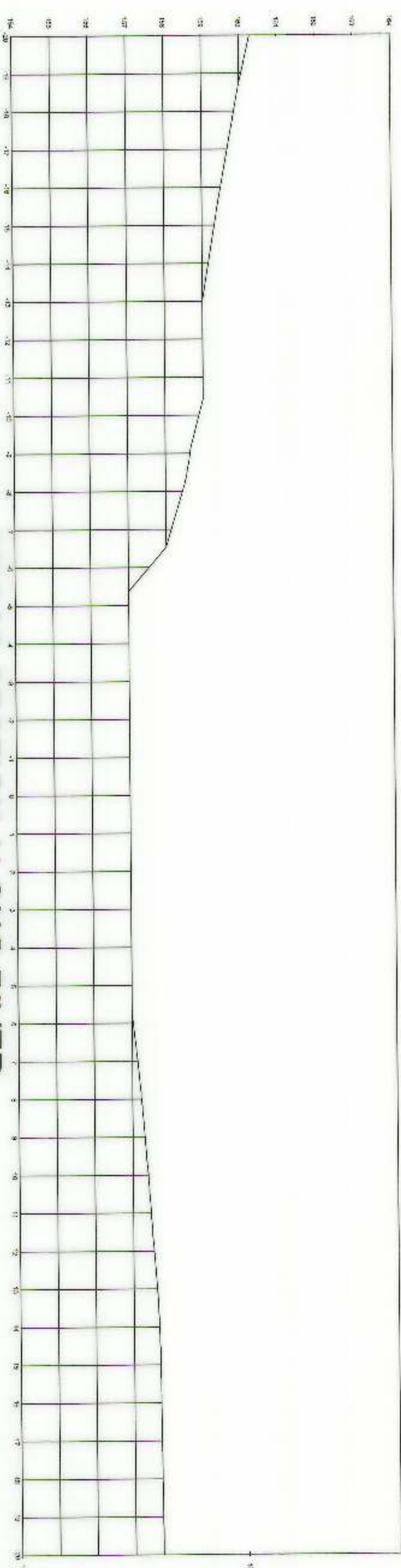


0+160.00



0+180.00



# CROSS-SECTION ALONG RIVER

01  
40  
SCALE

1:50



DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS  
REGION VII  
SOUTHERN LEYTE PROVINCIAL ENGINEERING OFFICE  
BACOLIVER, CITY

PROJECT NAME AND LOCATION

CONVERSION AND SPECIAL SUPPORT PROGRAM, BASIC  
INFRASTRUCTURE PROGRAM, 2011-2015  
LEYTE PROVINCE, SOUTHERN LEYTE PROVINCE, BACOLIVER, CITY  
CONSTRUCTION OF 210 KILOMETER, STD. 100, 1000 KILO

PROJECT NO.

CROSS-SECTION ALONG RIVER

SUPERVISOR / SUPERINTENDING ENGINEER

ANGEL B. DOMALDO  
CHIEF ENGINEER IN CHARGE

REVIEWER

ELEANOR D. TANTOY  
ENGINEER

DESIGNED BY

DENNIS E. DRAIS  
CHIEF ENGINEER AND DESIGN DIVISION

RECOMMENDED BY

GILBERT S. SAGRO  
ASSISTANT REGIONAL DIRECTOR

APPROVED BY

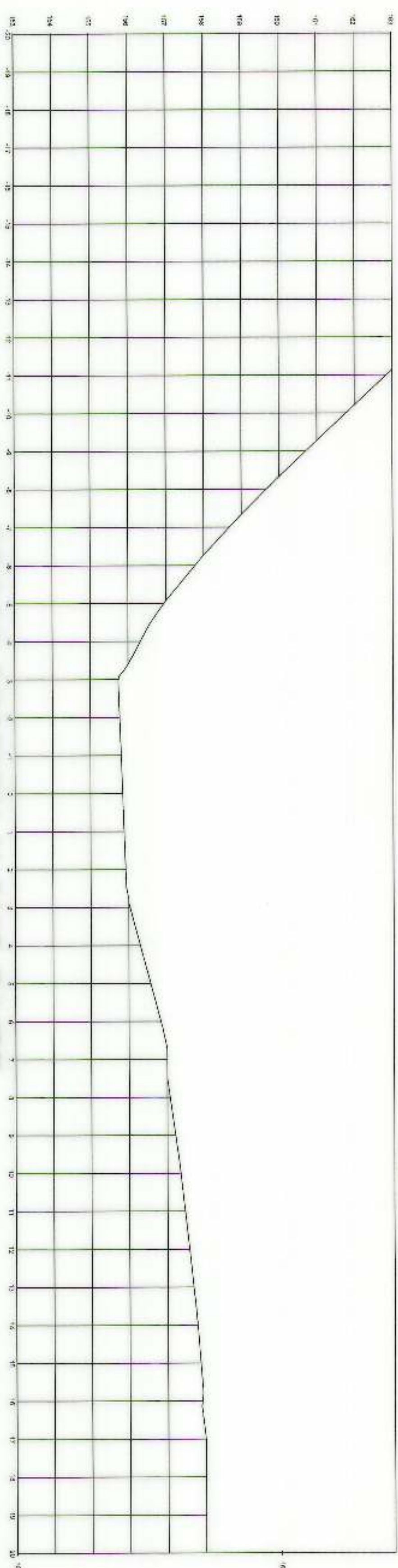
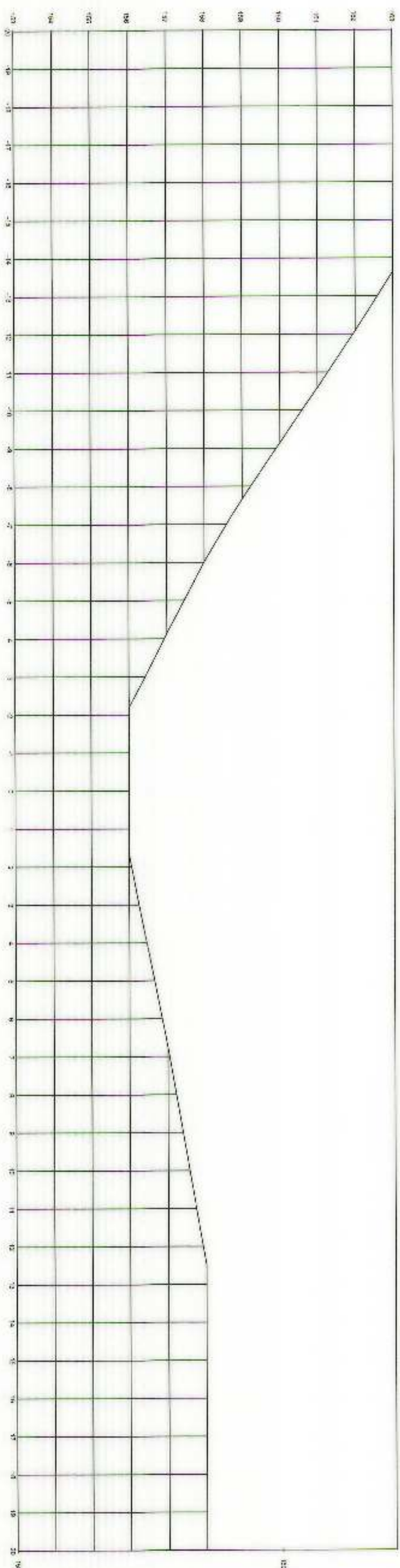
MANOLO A. ROSAS  
REGIONAL DIRECTOR

SHEET NO.

40

SHEET NO.

40  
50

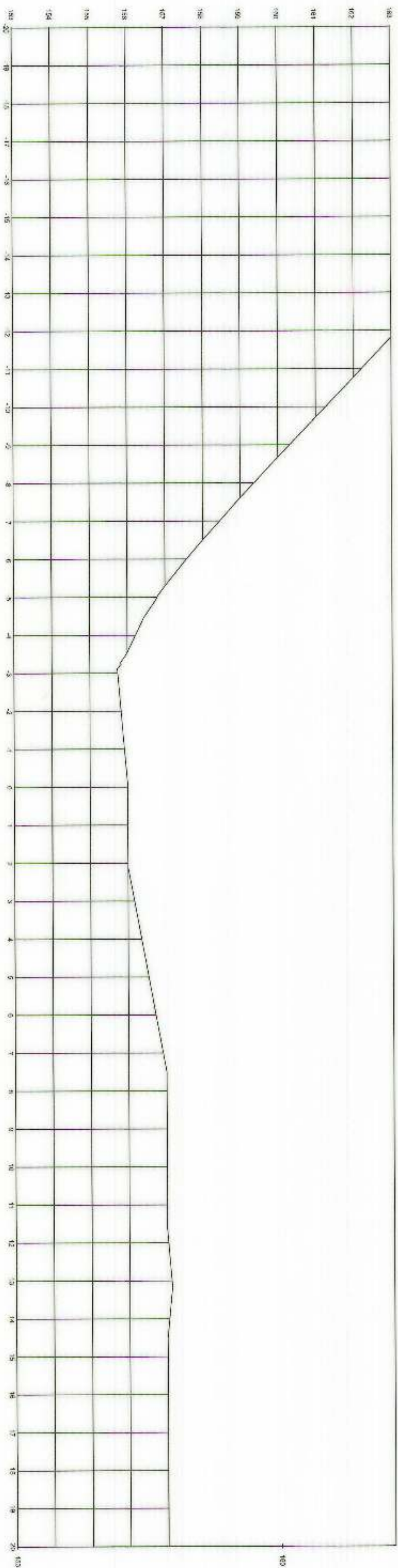


### CROSS-SECTION ALONG RIVER

01  
41  
SCALE

1.90

0+226.84



# CROSS-SECTION ALONG RIVER

01  
42  
SCALE

1:50



DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS  
REGION VIII  
SOUTHERN LEYTE 1ST DISTRICT ENGINEERING OFFICE  
BANGALAN, CITY

PROJECT NAME AND LOCATION

CONVERGENCE AND SPECIAL SUPPORT PROGRAM - SSSP  
INFRASTRUCTURE PROGRAM (IP)  
BRIDGE AND ROAD IMPROVEMENT PROJECT  
CONSTRUCTION OF 810 MTR BRIDGE, STC, WAO, MARIKINA CITY

SHEET CONTENTS

CROSS-SECTION ALONG RIVER

SUPERVISOR / ENGINEER / DESIGNER

ARIEL B. JORDAN  
ENGINEER  
CLARENCE M. ROMO  
ENGINEER

REVIEWER

ELEANOR D. TANTOY  
ENGINEER

SKETCHED

DEANIS E. ORAIS  
CHIEF / CLERK / ADMINISTRATOR

RECOMMENDED

GILBERT C. SACRO  
ASSISTANT REGIONAL DIRECTOR

APPROVED

MANOLO A. ROMAS  
REGIONAL DIRECTOR

SHEET NO.

42

SHEET NO.

42  
50

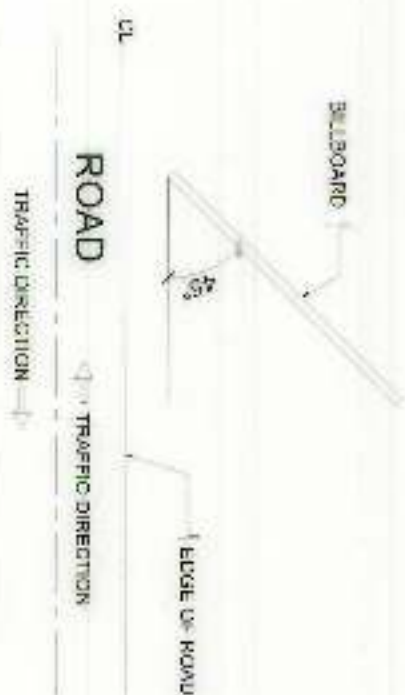


Government Center Candahua, Palo,  
Leyle

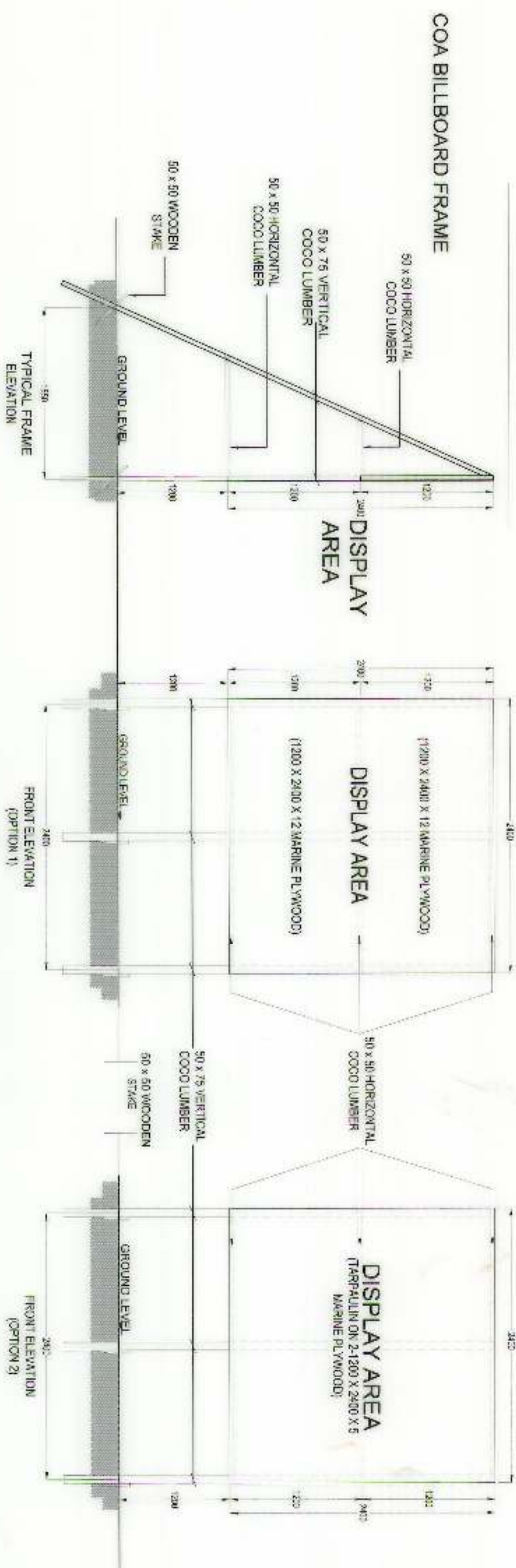
Cost : \_\_\_\_\_  
Fund Source/s : \_\_\_\_\_

**NOTE:**

INSTALLATION OF COA BILLBOARD SHALL CONFORM WITH COMMISSION ON AUDIT CIRCULAR NO. 2013-004, DATED JANUARY 30, 2013, SUBJECT: INFORMATION AND PUBLICITY ON PROGRAM/PROJECTS/ACTIVITIES OF GOVERNMENT AGENCIES



COA STANDARD PROJECT BILLBOARD



## COA BILLBOARD FRAME

(NOT TO SCALE. ALL DIMENSIONS ARE IN MILLIMETERS)



8'



NOTICE TO THE PUBLIC



This is to inform that (name of proponent) has been issued with **Certificate of Non-Coverage (CNC)** No.                      by the **DENR-Environmental Management Bureau R8** for the (name of project) Located at (project location). Issued on                     .

4'

 **NOTICE TO THE PUBLIC** 

This is to inform that (name of proponent) has been issued with **Certificate of Non-Coverage (CNC)** No.                      by the **DENR-Environmental Management Bureau R8** for the (name of project) Located at (project location). Issued on                     .

**NOTE:**  
INSTALLATION OF BILLBOARD SHALL CONFORM WITH  
DEPARTMENT ORDER NO. 11, SERIES OF 2022, REVISED  
GUIDELINE ON THE INSTALLATION PROJECT BILLBOARDS



Republic of the Philippines  
 DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS  
**REGIONAL OFFICE VIII**  
 SOUTHERN LEYTE 1ST DISTRICT ENGINEERING OFFICE  
 Brgy. Ibarra, Maasin City, Southern Leyte

PURPOSE: TREE CUTTING FOR THE PROJECT \_\_\_\_\_

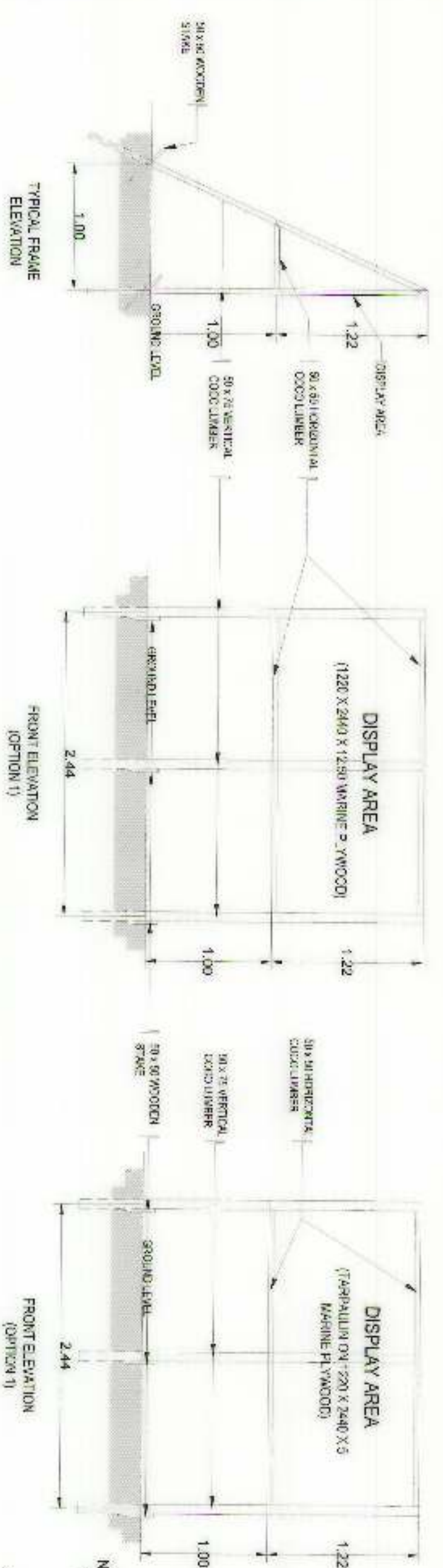
NO. OF TREES TO BE CUT: \_\_\_\_\_

DENR-SPECIAL TREE CUTTING PERMIT NO.: \_\_\_\_\_

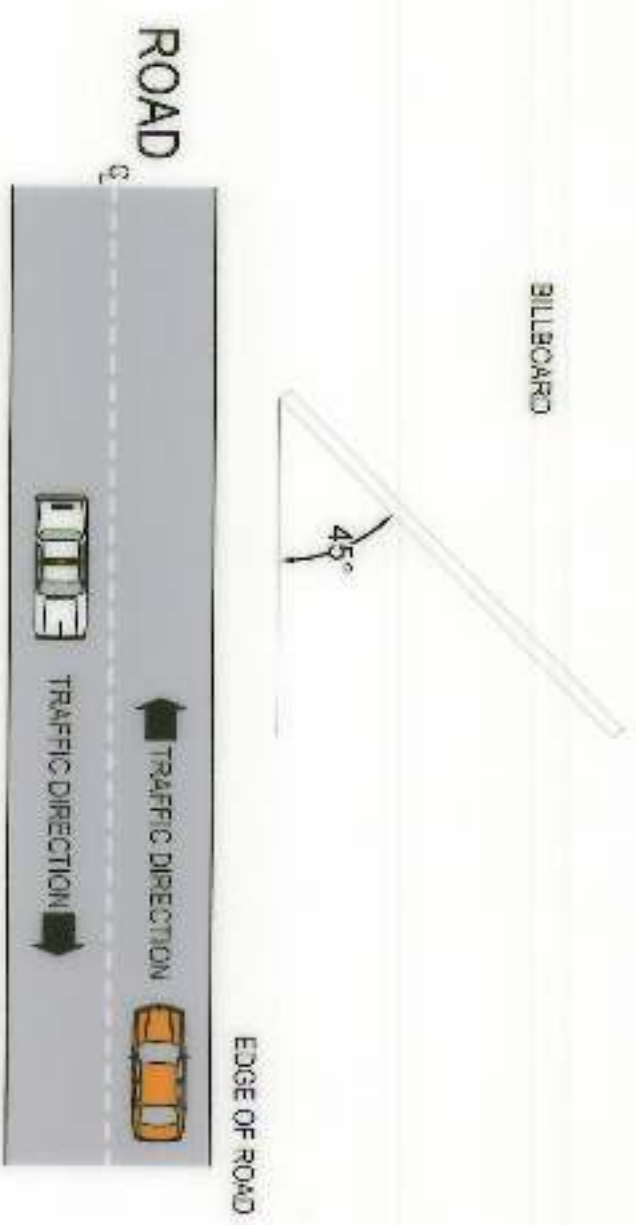
DATE ISSUED: \_\_\_\_\_

EXPIRY DATE: \_\_\_\_\_

**SPECIAL TREE CUTTING PERMIT STANDARD PROJECT BILLBOARD (4' x 8')**



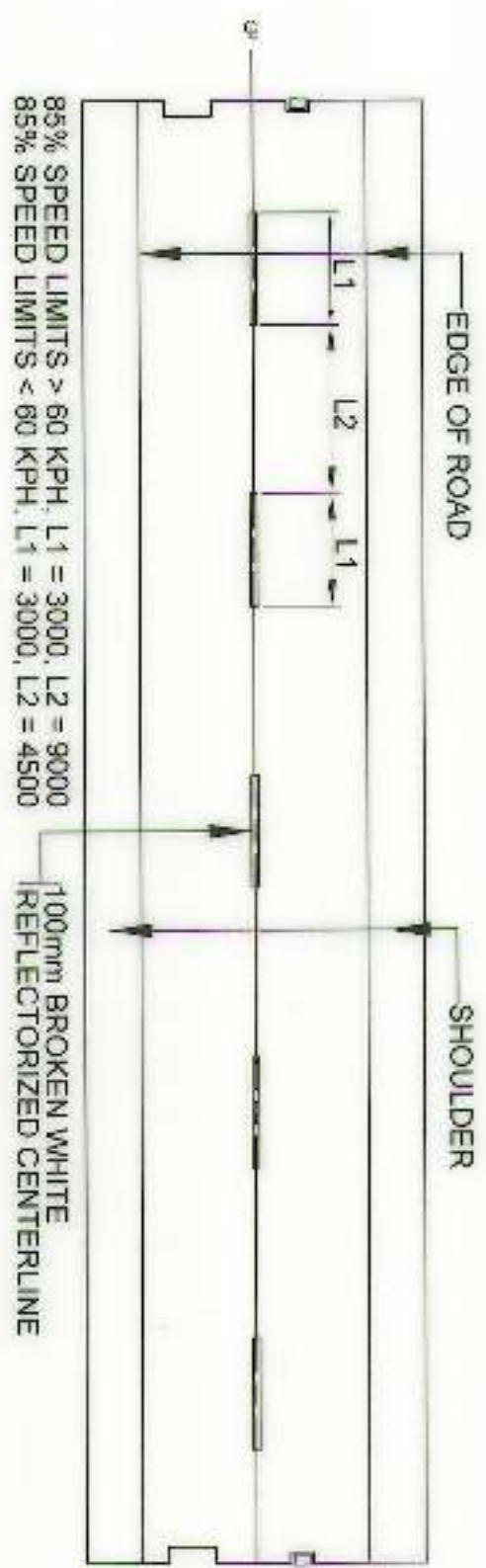
**BILLBOARD FRAME**  
(NOT TO SCALE, ALL DIMENSIONS ARE IN METERS)



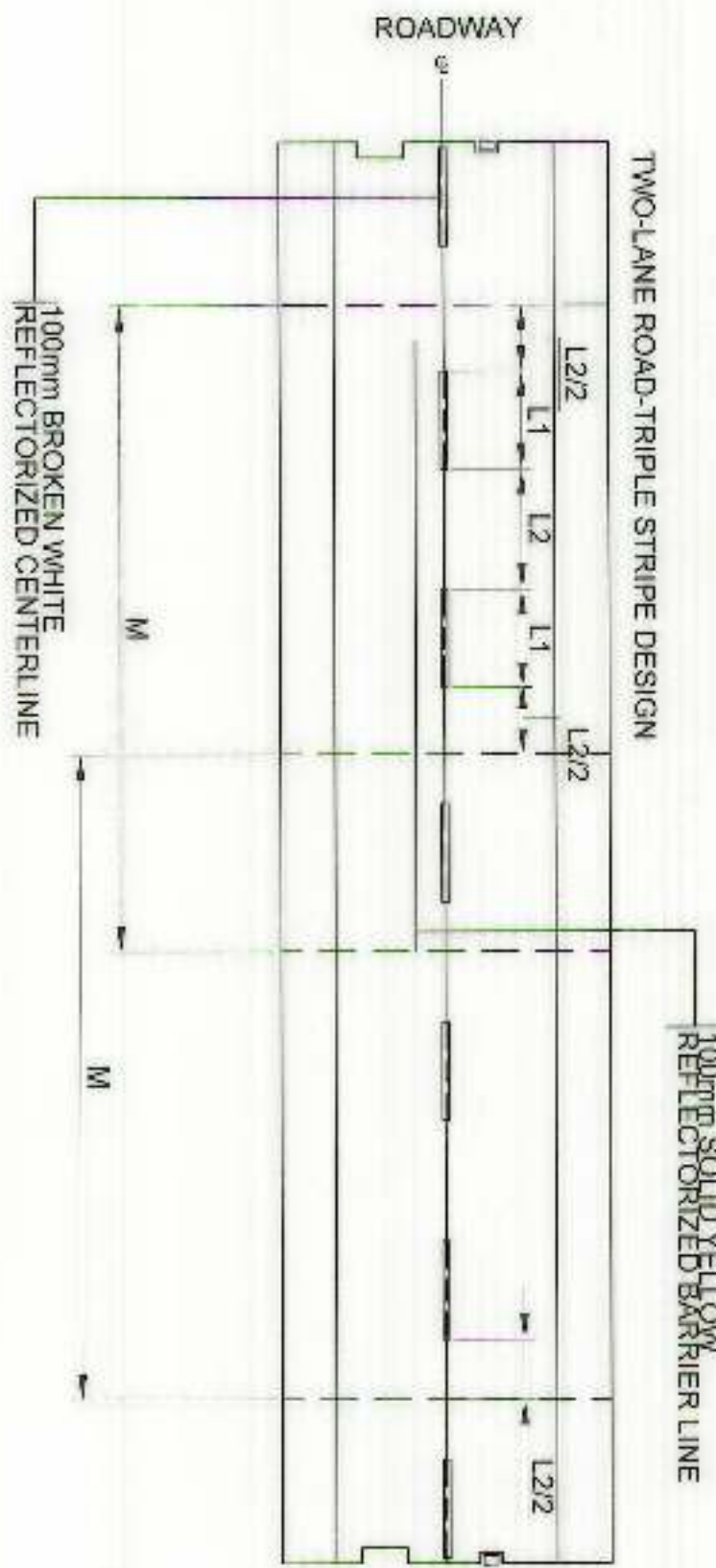
- NOTE:**
1. THE NEW BILLBOARD DESIGN LAYOUT, DIMENSION AND LETTER SIZES ON WHITE BACKGROUND, AS SHOWN ON THE ATTACHED DRAWING, SHALL BE DEPICTED ON A STANDARD BILLBOARD MEASURING 1220mm X 2440mm (4ft. X 8ft.), USING 12.50mm (1/2 inch) THICK MARINE PLYWOOD OR TAIRPAULIN OF THE SAME SIZE POSTED ON 50mm (2 inch) MARINE PLYWOOD.
  2. ALL EXISTING BILLBOARDS OF ON-GOING PROJECTS SHALL BE REPLACED WITH NEW ONE ADOPTING THE ABOVE GUIDELINES.
  3. FOR EACH BUILDING PROJECT, THE BILLBOARD SHALL BE INSTALLED IN FRONT OF THE PROJECT SITE.
  4. FOR EACH ROAD/BRIDGE/FLOOD CONTROL PROJECT, TWO BILLBOARDS SHALL BE INSTALLED, ONE AT THE BEGINNING AND ONE AT THE END OF THE PROJECT.
  5. FOR ROAD PROJECTS WITH LENGTH OF 10 KILOMETER INTERVAL OR MORE, ADDITIONAL BILLBOARD SHALL ALSO BE INSTALLED AT EVERY 5-KILOMETER INTERVAL.
  6. NAME(S) AND/OR PICTURE(S) OF ANY PERSONAGES SHOULD NOT APPEAR IN THE BILLBOARD.
  7. NO OTHER BILLBOARDS SHALL BE ALLOWED TO BE INSTALLED 100 METERS BEFORE AND 100 METERS AFTER ALL DPWH PROJECTS AND IN-BETWEEN THE PROJECT LIMITS OR WITHIN THE ROAD RIGHT-OF-WAY.
  8. DPWH CONTRACTORS SHALL NOT BE ALLOWED TO PLACE NAMES OF POLITICIANS OR CARRY POLITICAL BILLBOARD ON THEIR EQUIPMENT.

|                                                                                                                                                   |                                                                                                                                                                                                                                           |                                                                                     |                                                                                                                                |                                                                             |                                                                                                |                                                                                          |                                                                                 |                                   |                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|-----------------------------------|-----------------------------------|
| <p>DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS<br/>         SOUTHERN LEYTE 1ST DISTRICT ENGINEERING OFFICE<br/>         Brgy. Ibarra, Maasin City</p> | <p>PROJECT NAME AND LOCATION:<br/>         COMMENCEMENT AND SPECIAL SUPPORT PROGRAM - BASIC INFRASTRUCTURE PROGRAM AND LEASING TO MAINTAIN/REPAIR PUBLIC INFRASTRUCTURES CONSTRUCTION OF 870.000 PROPOSED, STA. 100+00 TO STA. 100+00</p> | <p>SHEET CONTENTS:<br/>         DETAIL OF SPECIAL TREE CUTTING PERMIT BILLBOARD</p> | <p>DESIGNED BY:<br/>         ARNEL B. MALINGO<br/>         ENGINEER<br/>         CLARENCE M. ROMO<br/>         ENGINEER II</p> | <p>REVIEWED BY:<br/>         ELEANOR D. TANTOY<br/>         ENGINEER II</p> | <p>SUBMITTED BY:<br/>         DENNIS E. ORAIS<br/>         CLERK IN CHARGE OF THE DIVISION</p> | <p>RECEIVED BY:<br/>         GIDEON O. SACRO<br/>         ASST. DIR. REGIONAL OFFICE</p> | <p>APPROVED BY:<br/>         MANOLO A. ROJAS<br/>         REGIONAL DIRECTOR</p> | <p>SHEET NO.:<br/>         46</p> | <p>SHEET NO.:<br/>         46</p> |
|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|-----------------------------------|-----------------------------------|





1A TWO LANE PAVEMENT MARKING

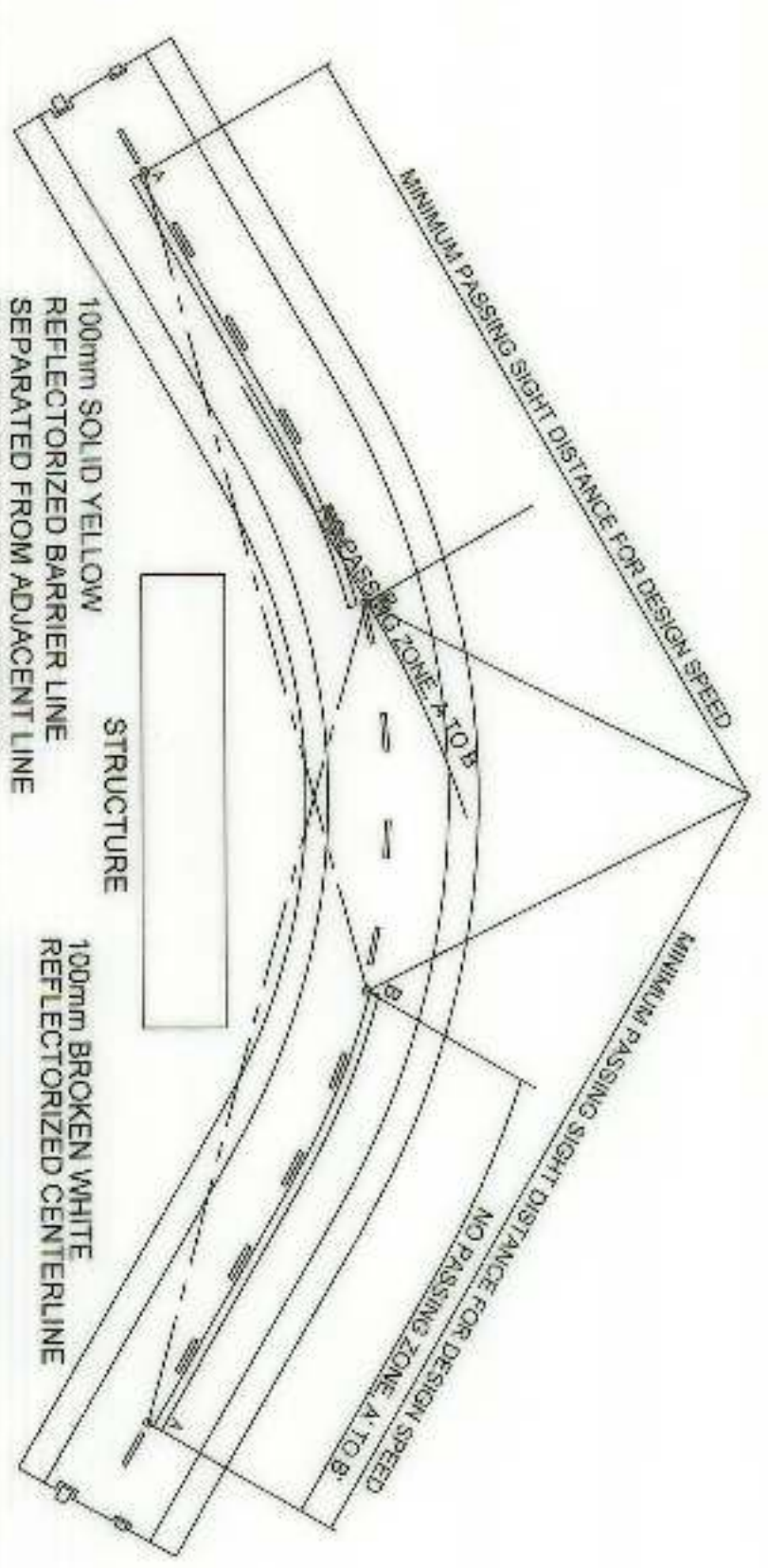


| DESIGN SPEED (KPH) | MINIMUM PASSING SIGHT DISTANCE M |
|--------------------|----------------------------------|
| 30                 | 200                              |
| 40                 | 285                              |
| 50                 | 345                              |
| 60                 | 407                              |
| 40                 | 482                              |
| 40                 | 541                              |
| 40                 | 605                              |
| 100                | 670                              |
| 110                | 728                              |
| 120                | 792                              |

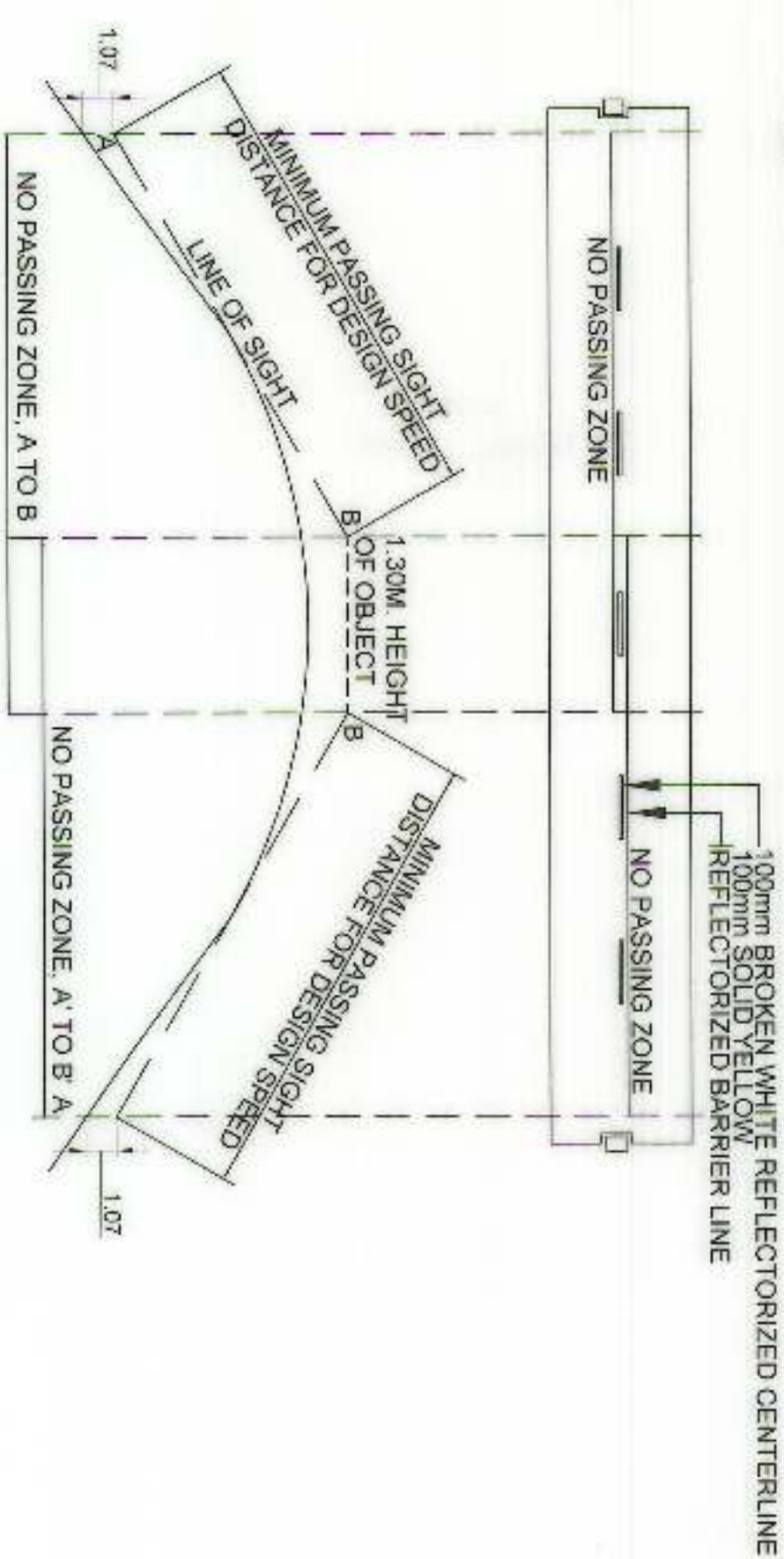
1B PAVEMENT MARKING APPLICATION OF NO PASSING ZONES  
(WHERE PASSING MUST BE PROHIBITED BECAUSE OF HAZARDOUS CONDITIONS)



STANDARD PAVEMENT MARKING



1C METHOD OF LOCATING AND DETERMINING THE LIMIT OF NO - PASSING ZONES ON HORIZONTAL CURVES



1D METHOD OF LOCATING AND DETERMINING THE LIMIT OF NO - PASSING ZONES ON VERTICAL CURVES



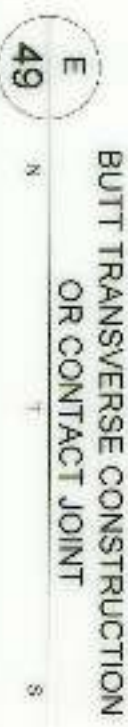
81728



**LONGITUDINAL CONSTRUCTION JOINT**  
( TO BE USED FOR ONE LANE CONSTRUCTION )



**CONTRACTION JOINT SECTION**  
**STEEL BASKET FOR SETTING DOWELS**



**BUTT TRANSVERSE CONSTRUCTION  
OR CONTACT JOINT**



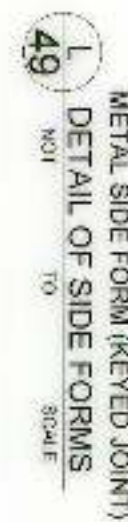
D DOWELLED EXPN. JOINT DETAIL



H CONSTRUCTION JOINT  
49 (TO BE USED FOR WIDENING EXISTING  
CONCRETE PAVEMENT)



1 LONGITUDINAL CONST'N. JT.  
49 ( TO BE USED FOR CONNECTIONS WITH EXISTING  
CONCRETE PAVEMENT AND NEW PAVEMENT )



49 L  
METAL SIDE FORM (KEYED JOINT)  
DETAIL OF SIDE FORMS  
NOT TO SCALE



1L  
49

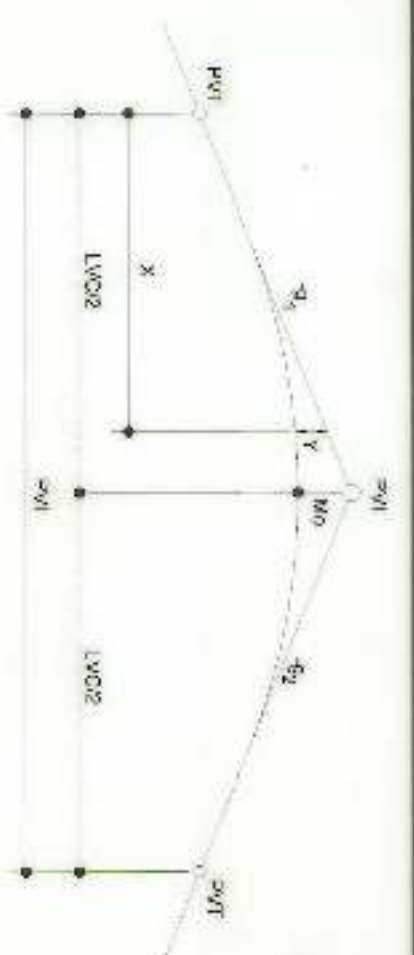
METAL DOWEL CAP DETAIL

NOT TO SCALE

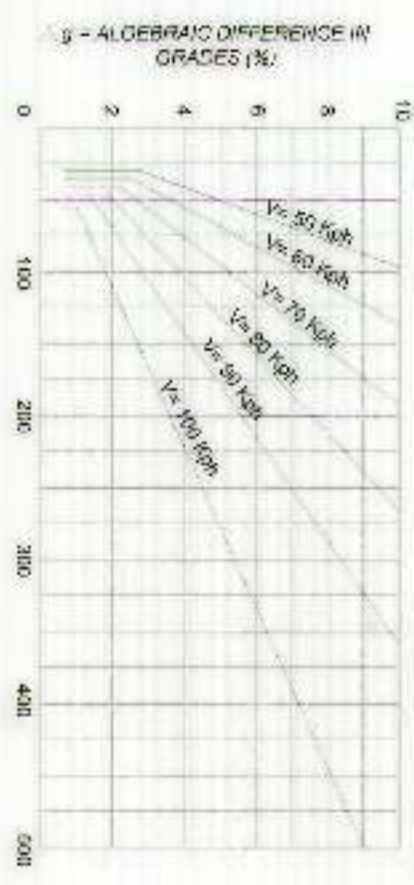
Based on AASHTO Guide for the Design of Pavement Structures 1993

TABLE FOR SPACING OF DOWEL BARS ( $L=600\text{mm}$ )

Based on AASHTO Guide for the Design of Pavement Structures 1993

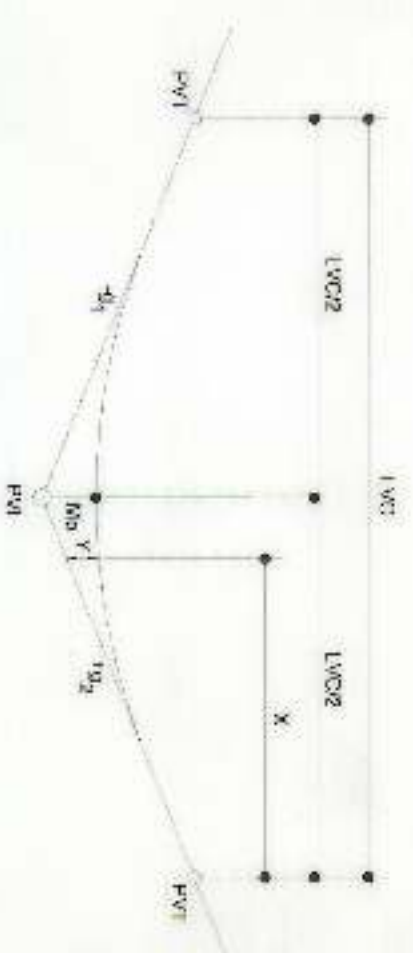


SYMMETRICAL VERTICAL PARABOLIC CURVES (CREST)

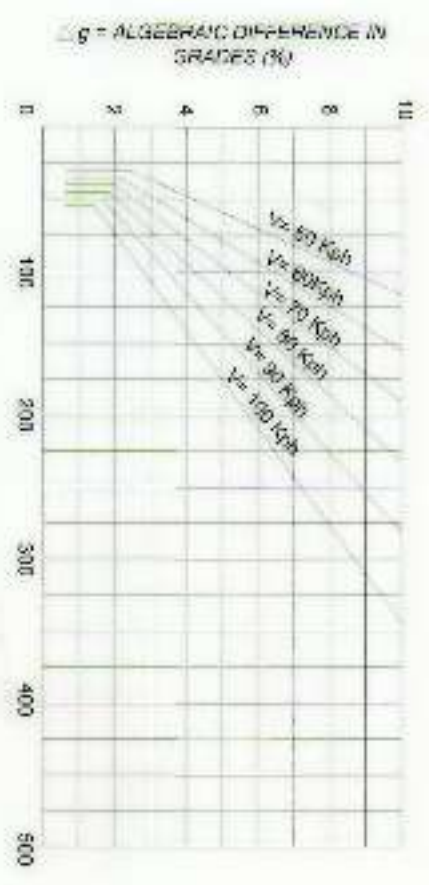


MINIMUM LENGTH OF VERTICAL CURVE (METERS)

DESIGN CONTROL FOR VERTICAL CURVES (CREST)



SYMMETRICAL VERTICAL PARABOLIC CURVES (SAG)



MINIMUM LENGTH OF VERTICAL CURVE (METERS)

IN ANY VERTICAL PARABOLIC CURVE:

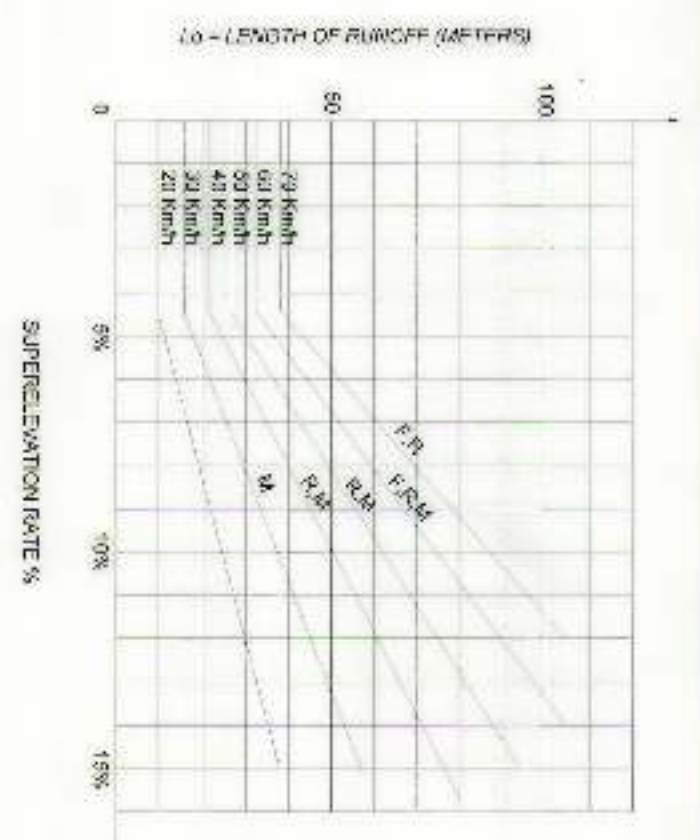
- $M_0 = \frac{(g_1 + g_2)(LVC)}{800}$
- $M_0 = \frac{1}{2}(\text{ELEV. PVI} + \text{ELEV. PVT}) - \text{ELEV. PVI}$
- $Y = 4 \cdot ab$

LEGEND:

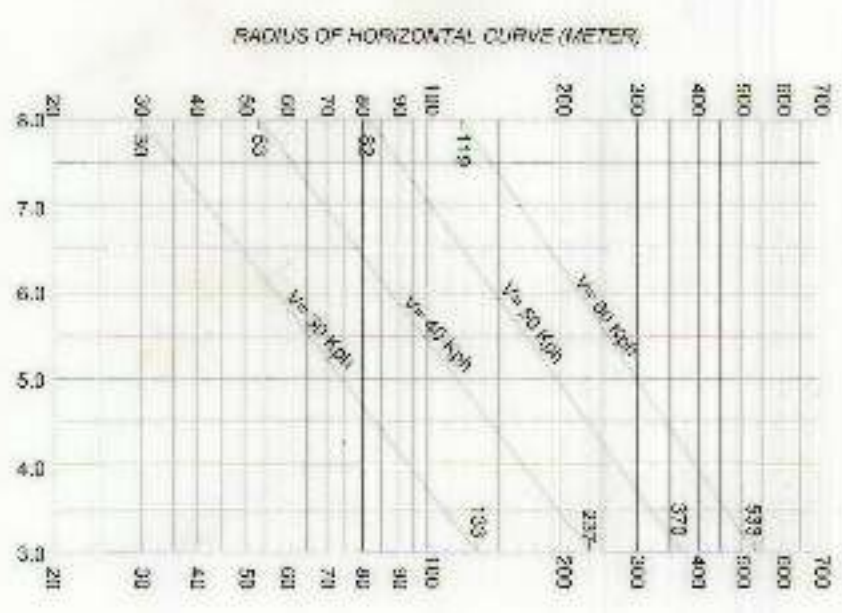
- PVI - POINT OF VERTICAL INTERSECTION
- PVC - POINT OF VERTICAL CURVATURE
- PVT - POINT OF VERTICAL TANGENCY
- LVC - LENGTH OF VERTICAL CURVES - METER
- $M_0$  - RIL METER PER HOUR
- $g_1, g_2$  - GRADE RATES PERCENT
- X - DISTANCE FROM PVC OR PVT TO ANY POINT ON CURVE - METERS
- Y - VERTICAL OFFSET AT DISTANCE X - METERS

NOTES:

- GRADES ASCENDING FORWARD ARE POSITIVE. GRADES DESCENDING FORWARD ARE NEGATIVE.
- NO VERTICAL CURVE IS REQUIRED WHEN THE ALGEBRAIC DIFFERENCE IN GRADE IS 0.5% OR LESS.



SUPERELEVATION RUNOFF CHART



LEGEND:

- F - FLAT
- R - ROLLING
- M - MOUNTAINOUS
- V - DESIGN SPEED
- KPH - KILOMETER PER HOUR

DESIGN SUPERELEVATION RATES



DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS  
SOUTHERN LEYTE DISTRICT OFFICE  
BAYBAY, SOUTHERN LEYTE

CONFORMANCE AND SPECIAL SUPPORT PROGRAM - BASIC  
APPROPRIATE PROGRAM UNIT  
LEADERS TO MAINTAIN PUBLIC SAFETY AND QUALITY  
CONSTRUCTION OF 200, 400, 600, 800, 1000 CITY

APPROVED:   
ELEANOR D. TANTOY  
ENGINEER

DESIGNED:   
DEANISSE ORAS  
CIVIL ENGINEER

CHECKED:   
GILBERT D. SANCHEZ  
CIVIL ENGINEER

RECOMMENDED:   
MANOLO A. ROJAS  
PROJECT DIRECTOR

50  
50