

表-2 調査河梁構築の選定（追加）（3/4）

番号	橋梁番号 橋梁位置	橋梁現況			神益人口 (人)	予備交通量 (台)	急性評価	橋梁基本設計		輸送路現況	治安状況	橋梁選定可否の理由	選定可否
		橋長 (m)	形式	現況				積載量 (t)	橋長 (m)				
16	06-04-03A Payua-an Bridge Km. 25 + 850 Bacolod-Murcia-D.S. Benedicto-San Carlos Bdry., Negros Occidental.	23.80	スプリングウェイ	普通	8	290	至急	3@18.0 =54.00	H形鋼行 くい基礎	普通	A	・ネグロス横断道路の橋梁で重要 ・雨期にしばしば交通不能となる ・交通量が比較的多い ・地域社会に対するインパクトが大きい	1
19	07-03-03 Cantagon Bridge Km. 27 + 350 Iron Port of Tagbilaran City, Catagbacan- Antequera Road Antequera, Bohol I	12.00	ベイリール橋	老朽橋	5	1,600	至急	2@18.0 =36.00	H形鋼行 くい基礎	普通	B	・工事が簡単 ・交通量が多い ・地域社会に対するインパクトが大きい	1
20	07-04-06 Kinabunan Bridge Km. 88 + 040 Iron Port of Tagbilaran City, Carach-Punsa Road Carman, Bohol I	12.20	ベイリール橋	老朽橋	5	1,002	高	2@18.0 =36.00	H形鋼行 くい基礎	普通	B	・同一区間内に多数の問題橋梁がある	-
25	07-14-01 Cabawan Bridge Km. 8 + 820 Tagbilaran-Cabawan Road Tagbilaran, Bohol I	10.70	木橋	普通	2	619	高	1@18.0 =18.00	H形鋼行 くい基礎	普通	B	・補修工事が優近終了	-
26	07-06-04 Camp 4 Bridge Km. 17 + 927 Talisay-Toledo Road Talisay, Cebu II	61.50	吊橋 (ベイリールタイプ)	普通	8	168	低	2@35.0 =70.00	溶接鋼行 くい基礎	良好	B	・永久橋 ・現橋状態良好	-
27	07-05-05A Graje Bridge Km. 75 + 180 Sagay-Borbon Road Borbon, Cebu II	26.60	木橋	老朽橋	5	200	高	2@17.0 =34.00	H形鋼行 くい基礎	普通	A	・同一区間内に多数の問題橋梁がある ・交通量がほとんどない	-
28	07-08-05A Tinago-Calingangan Bridge Km. 3 + 422 Tinago-Calingangan Road Buagsate City	32.30	ベイリール橋	流失	5	400	高	2@20.0 =40.00	H形鋼行 くい基礎	良好	A	・同一区間内に多数の問題橋梁がある	-

表-2 調査対象橋梁の選定（追加）（4/4）

番 号	橋梁番号 橋梁位置	橋梁現況				橋梁人口 (人)	予測交通量 (台)	急激性評価	概略基本設計		輸送路現況	治安状況	橋梁選定可否の理由	選定 可否
		橋長 (m)	形式	現況	年月 (t)				橋長 (m)	橋梁形式				
29	07-03-07A City Found Bridge Km. 6 + 246 Balugo-Vicinal Road Dumagueta City	10.00	スビルクウェイ	普通	10	30,262	300	高	1@18.0 -18.00	互形鋼桁 くい基礎	良好	A	・工事が簡単 ・交通量が多い	1
31	07-15-07A Cabinacan Bridge Km. 52 + 000 Toledo-Binauangahan Road Toledo City	14.80	鉄筋コンクリート橋	普通	5	59,240	493	高	1@18.0 -18.00	互形鋼桁 くい基礎	良好	A	・永久橋 ・現状状態良好	-
33	07-04-07A Canjilac Bridge Km. 63 + 410 Jagna-Sierra Bullones Road, Bohol II	12.00	ベイリ-橋	老朽橋	5	55,674	160	高	1@18.0 -18.00	互形鋼桁 くい基礎	普通	B	・地域社会に対するインパクトが高い ・比較的交通量が多い	1
35	07-04-11A Carced Bridge Km. 98 + 238 Candilay-Habini Road Candilay, Bohol II	37.90	ベイリ-橋	老朽橋	8	66,609	60	高	3@15.0 -45.00	互形鋼桁 くい基礎	普通	B	・工事が簡単 ・上、下部工共に老朽化が激しい	1
36	07-04-12A Tipolo Bridge Km. 132 + 326 Ubay-Tupal Wharf Road Ubay, Bohol II	23.15	木橋	老朽橋	5	91,841	60	至急	2@15.0 -30.00	互形鋼桁 くい基礎	普通	B	・工事が簡単 ・緊急性が高い	1
38	07-05-09A Playa II Bridge Km. 63 + 060 Barili-Mantayupan Road Barili, Cebu II	27.00	ベイリ-橋	老朽橋	5	47,989	128	至急	1@35.0 -35.00	格接板桁 くい基礎	良好	A	・地域社会に対するインパクトが大きい ・橋梁が老朽化（特に下部工）危険な状態 ・セブ開港場に位置し重要な橋梁	1

付 属 資 料 5

現 地 立 会 協 議 議 事 録

5-1-11



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Telex: 2523838 KATAEG J
Facsimile: 03-563-4055

Date: July 7, 1992

Gentlemen,

In connection with the Japan's Grant Aid, the Project for Constructing Bridges Along Rural Roads (Phase IV, Group 2), Katahira & Engineers International and representatives from DPWH (Central, Regional and District Offices) hereby agree on the following items for the construction of BANQUEROHAN Bridge;
05-02-04

1. The proposed centerline will be located at the downstream of the bridge.
2. The Right-of-Way Acquisition and removal of all obstructions (to be undertaken by the DPWH)
3. Location of proposed detour at existing bridge.
4. Highest Water Level, 1.00 m.
5. Location of Bore Holes Three (3) bore holes as indicated in the plan.

Attached herewith is the plan showing the above agreed items.

Names and signatures of Representatives are shown below.

DPWH Central Office

Mr. Edwin C. Matangulhan

Mr. Edwin Fortes

DPWH Regional Office

Mr. Conrado L. Afero (Regional Director, Reg. V)

Mr. Jesus L. Monreal (Region V Office)

DPWH District Office

Mr. Boalerges Relativo (Dist. Engr. Surabgan)

Katahira & Engineers International

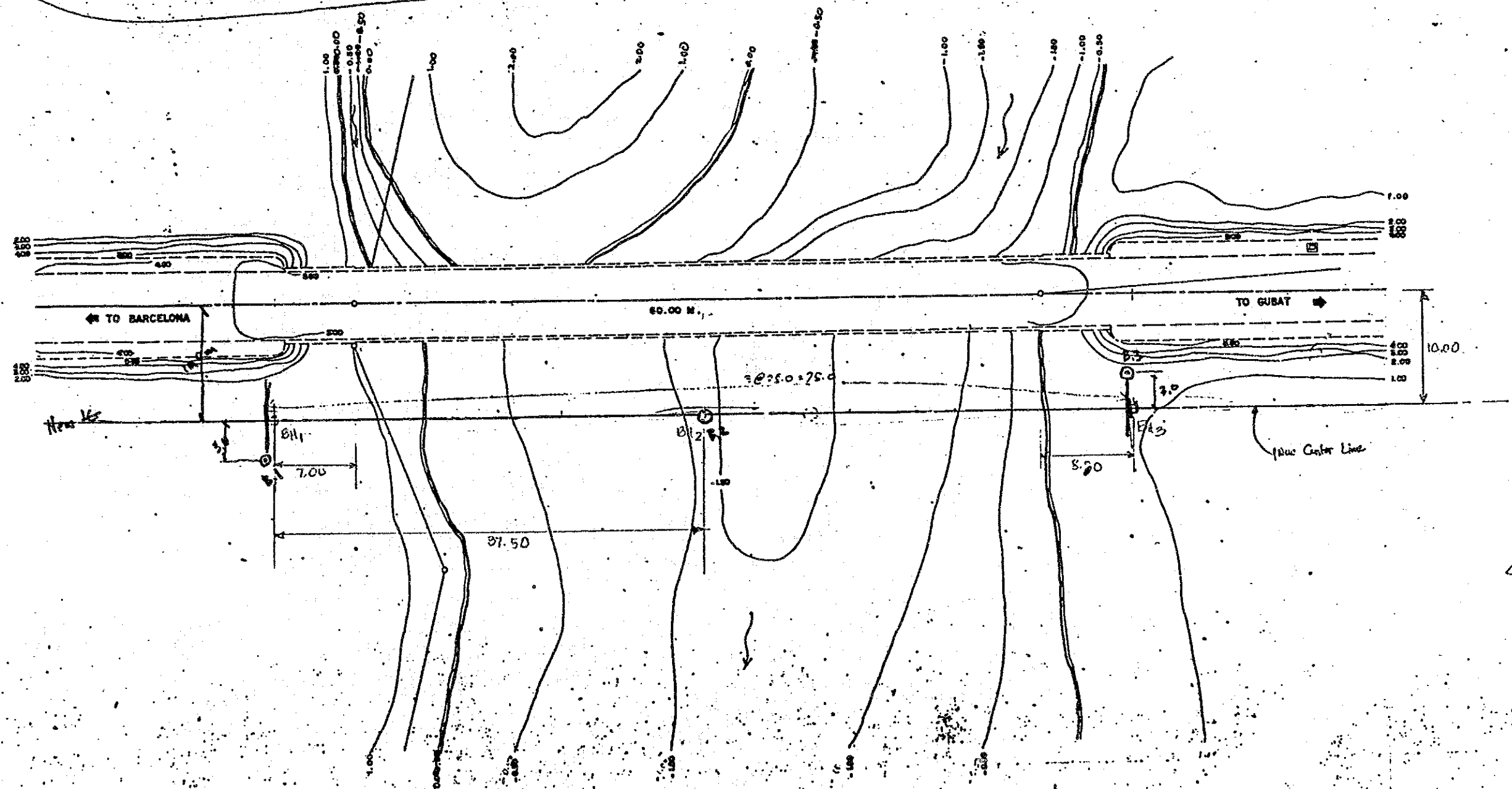
Mr. Masao Aizawa (Geotechnical Surveyor)

Mr. Kenji Sugawara (Topographic Surveyor)

- Existing bridge will be used as a d with necessary supports.
- Existing location of electric posts transferred (relocated).
- Existing clearance which is 2.0 m of water level to the concrete girder will
- Assume benchmark elevation is \downarrow ϕ \downarrow going down

NOTE:
NO PROPOSED DETOUR. USE ALTERNATE ROUTE
IROSIN - BULUSAN - BARCELONA ROAD.

GENERAL ELEVATION
SCALE 1:200



GENERAL PLAN
SCALE 1:200

DRAWINGS
ALL DIMENS
IN THE P
ALL ELEVAT

BRIDGE NO.	BANQUEROHAN BRIDGE BARCELONA, SORSOGON	SHEET NO.
03-02-04		

- Existing bridge will be used as a detour with necessary supports.
 - Existing location of electric posts should be transferred (relocated).
 - Existing clearance which is 2.0 m from highest water level to the concrete girder will be adopted.
 - Assume benchmark elevation is 4.80 m
- 4.0m going down

M. Masao Aizawa
 Mr. Masao Aizawa
 Geotechnical Surveyor (KEI)

Kenji Sugawara
 Mr. Kenji Sugawara
 Topographic Surveyor (KEI)

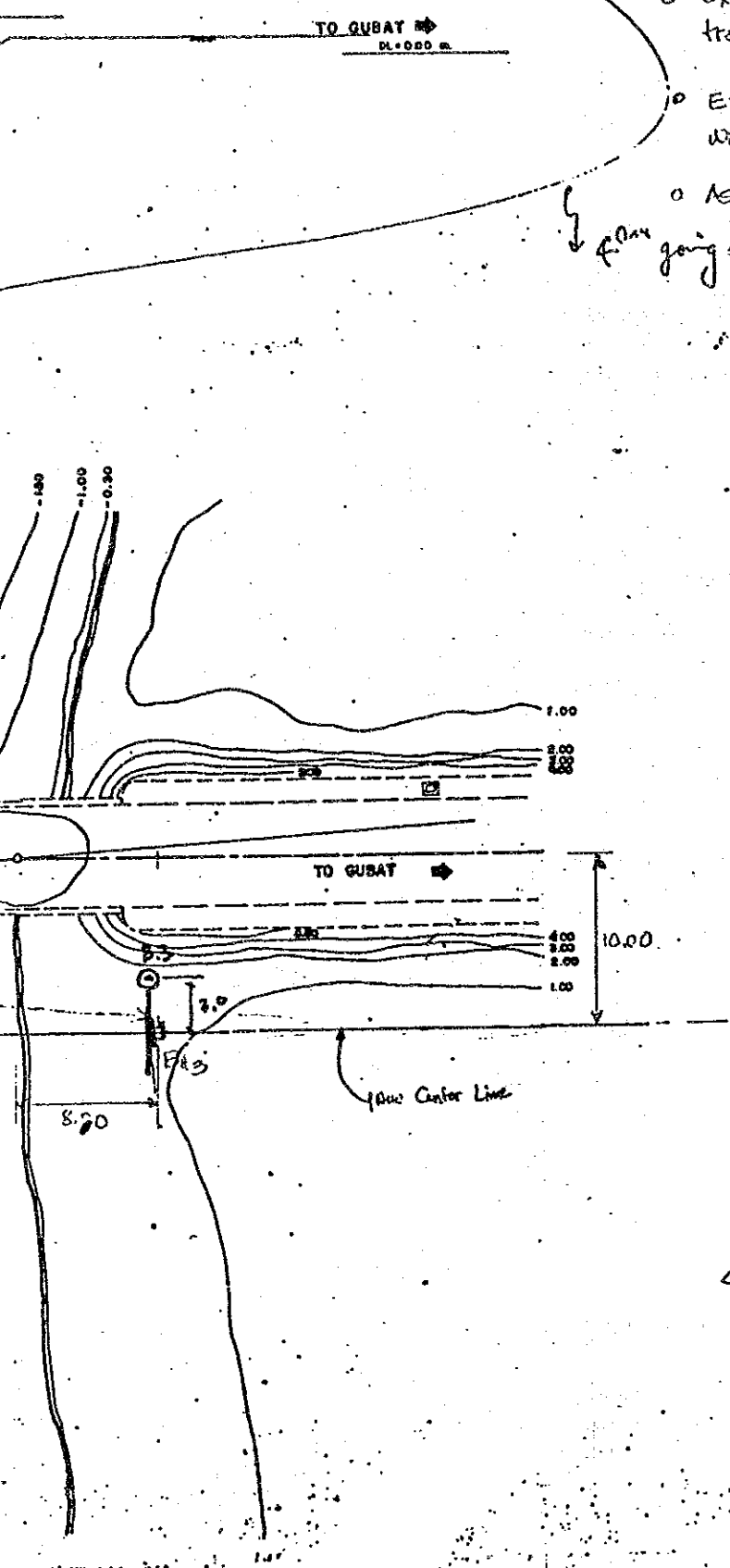
Edwin C. Matinguhán
 Mr. Edwin C. Matinguhán
 Engr. IV, DPWH Central Office (B.O.D.)

Edwin Flores
 Mr. Edwin Flores
 Engr. III, DPWH Central Office (P.S.)

Boanerges Relativo
 Mr. Boanerges Relativo
 DPWH District Engr., Sorsogon District, Reg. V

Jesus C. Montezal
 Mr. Jesus C. Montezal
 DPWH Region V Office

Conrado L. Ayera
 Mr. Conrado L. Ayera
 DPWH Region XI Director

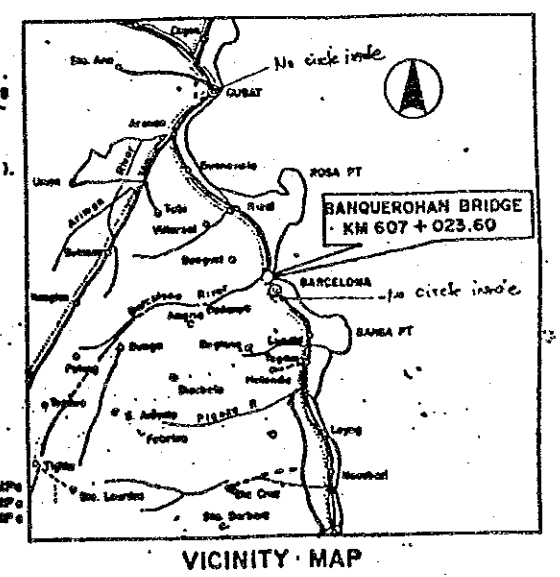


GENERAL NOTES

- LOCATION OF BRIDGE SHOULD BE DETERMINED BY THE DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS (DPWH)
- STRUCTURAL DIMENSIONS OF SUPERSTRUCTURES SHOULD NOT BE AMENDED.
- TYPES AND DIMENSIONS OF SUBSTRUCTURES SHALL BE JUSTIFIED ACCORDING TO THE DETAILED DESIGN OF SUBSTRUCTURES PREPARED BY DPWH.
- VERTICAL CLEARANCE BETWEEN THE M.F.L. AND THE BOTTOM OF THE GIRDERS OF THE SUPERSTRUCTURE SHALL BE NOT LESS THAN 1.0 METER (CARRYING NO BIG DEBRIS).
- DESIGN SPECIFICATION
AASHTO STANDARD SPECIFICATION FOR HIGHWAY BRIDGE (14th EDITION 1989).
- DESIGN LOAD

DEAD LOAD	CONCRETE	23.54 KN/m ³
	FILL MATERIALS	17.68 KN/m ³
LIVE LOAD	ROADWAY LIVE LOAD	HS 20 - 44 (MS - 18)
	SIDEWALK LIVE LOAD	2.875 KN/m ²
- TEMPERATURE CHANGE
RISE + 10°, FALL - 10°
- EARTHQUAKE LOAD
IN ACCORDANCE WITH "GUIDELINE FOR SEISMIC DESIGN OF BRIDGES".
- OTHER LOADS IN ACCORDANCE WITH 1989 AASHTO SPECIFICATION.
- MATERIALS

STEEL FOR SUPERSTRUCTURES	STEEL SHALL BE SPECIFIED BY JIS (JAPANESE INDUSTRIAL STANDARD).
CONCRETE	CONCRETE FOR PRESTRESSED CONCRETE GIRDER $f'_c = 34.5 \text{ MPa}$
	CONCRETE FOR DECK SLAB $f'_c = 20.7 \text{ MPa}$
	CONCRETE FOR SUBSTRUCTURE $f'_c = 20.7 \text{ MPa}$
- OTHERS: OTHER MATERIALS SHALL CONFORMED TO ASTM.



DRAWINGS
 ALL DIMENSIONS ARE EXPRESS IN MILLIMETER UNLESS OTHERWISE SHOWN IN THE PLANS.
 ALL ELEVATIONS ARE IN METERS.



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Date: July 9, 1992

Gentlemen,

In connection with the Japan's Grant Aid, the Project for Constructing Bridges Along Rural Roads (Phase IV, Group 2), Katahira & Engineers International and representatives from DPWH (Central, Regional and District Offices) hereby agree on the following items for the construction of HITOMA Bridge;
05-03-01

1. The proposed centerline will be located at the downstream side of the bridge.
2. The Right-of-Way Acquisition and removal of all obstructions (to be undertaken by the DPWH)
3. Location of proposed detour at existing bridge.
4. Highest Water Level, 10.11 m.
5. Location of Bore Holes Three bore holes as indicated in the plan

Attached herewith is the plan showing the above agreed items.

Names and signatures of Representatives are shown below.

DPWH Central Office

Mr. Edwin S. Matangulon (Engr. IV, R.O.P.)

Mr. Edwin Fortes (Engr. III, P.S.)

DPWH Regional Office

Mr. Roberto M. Mitra (Engr. III, R.P.Mo, Reg. V)

Ms. Soledad L. Qui-Boco (Chief Planning & Design Div.)

Mr. Domingo R. Villaseñor (Asst. Director for Services, Reg. V)

DPWH District Office

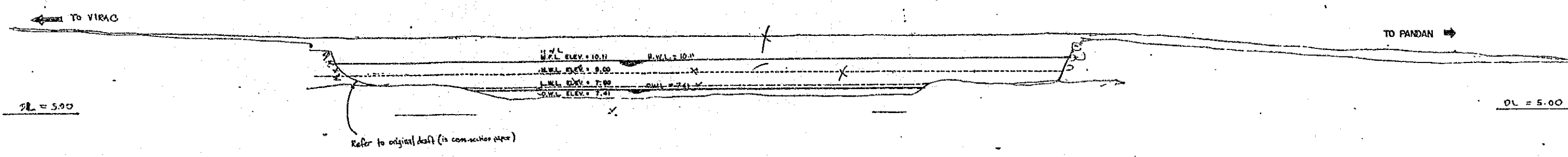
Mr. Mariano J. Saret (District Engr. Catanduanes Engr. Dist.)

Mr. Monico Genogaling (Engr. III Planning & Design Catanduanes Engr. District)

Katahira & Engineers International

Mr. Masao Aizawa (Geotechnical Surveyor)

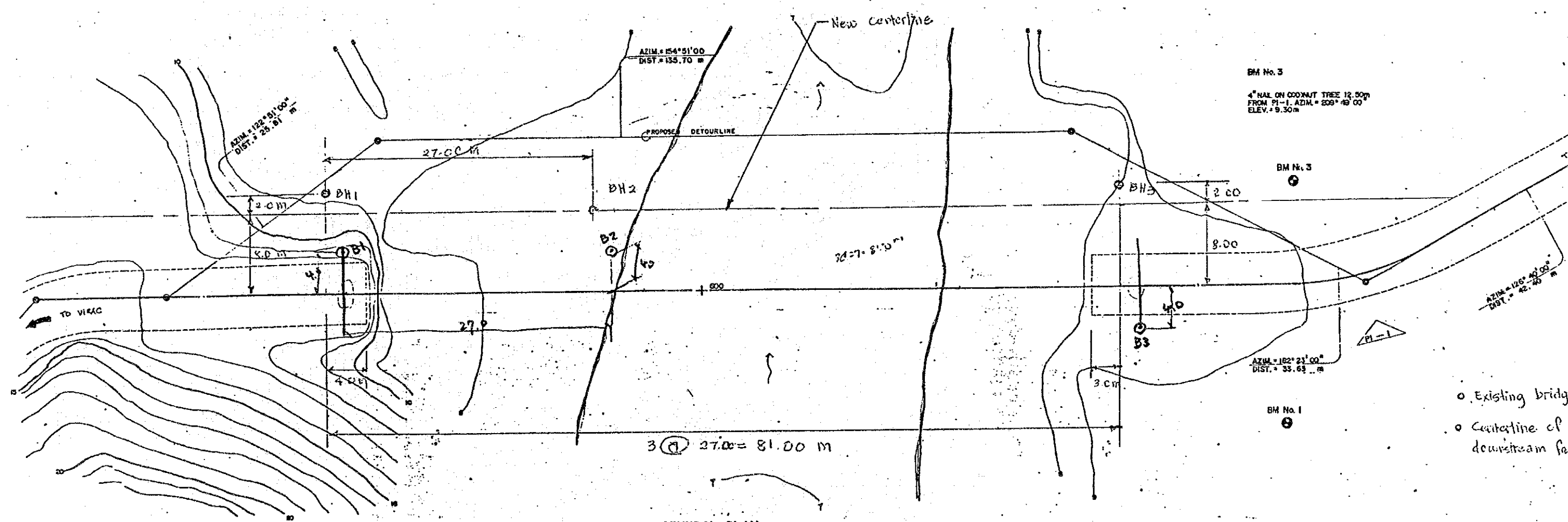
Mr. Kenji Sugayara (Topographic Surveyor)



NOTE:
SLOPE OF REVETMENTS SHALL BE DETERMINED BASED ON SOIL CONDITIONS.

LEGEND:
 ——— CENTERLINE
 - - - - - DOWNSTREAM
 - - - - - UPSTREAM

GENERAL ELEVATION
SCALE 1:200



GENERAL PLAN
SCALE 1:200

M. Masao Atzawa
Mr. Masao Atzawa
Geotechnical Surveyor (KEI)

K. Sugawara
Mr. K. Sugawara
Topographic Surveyor (KEI)

E. C. Matalguilian
Mr. Edwin C. Matalguilian
Engr. IV, DPWH Central Office (B.O.D)

E. Fortes
Mr. Edwin Fortes
Engr. IV, DPWH Central Office (P.S.)

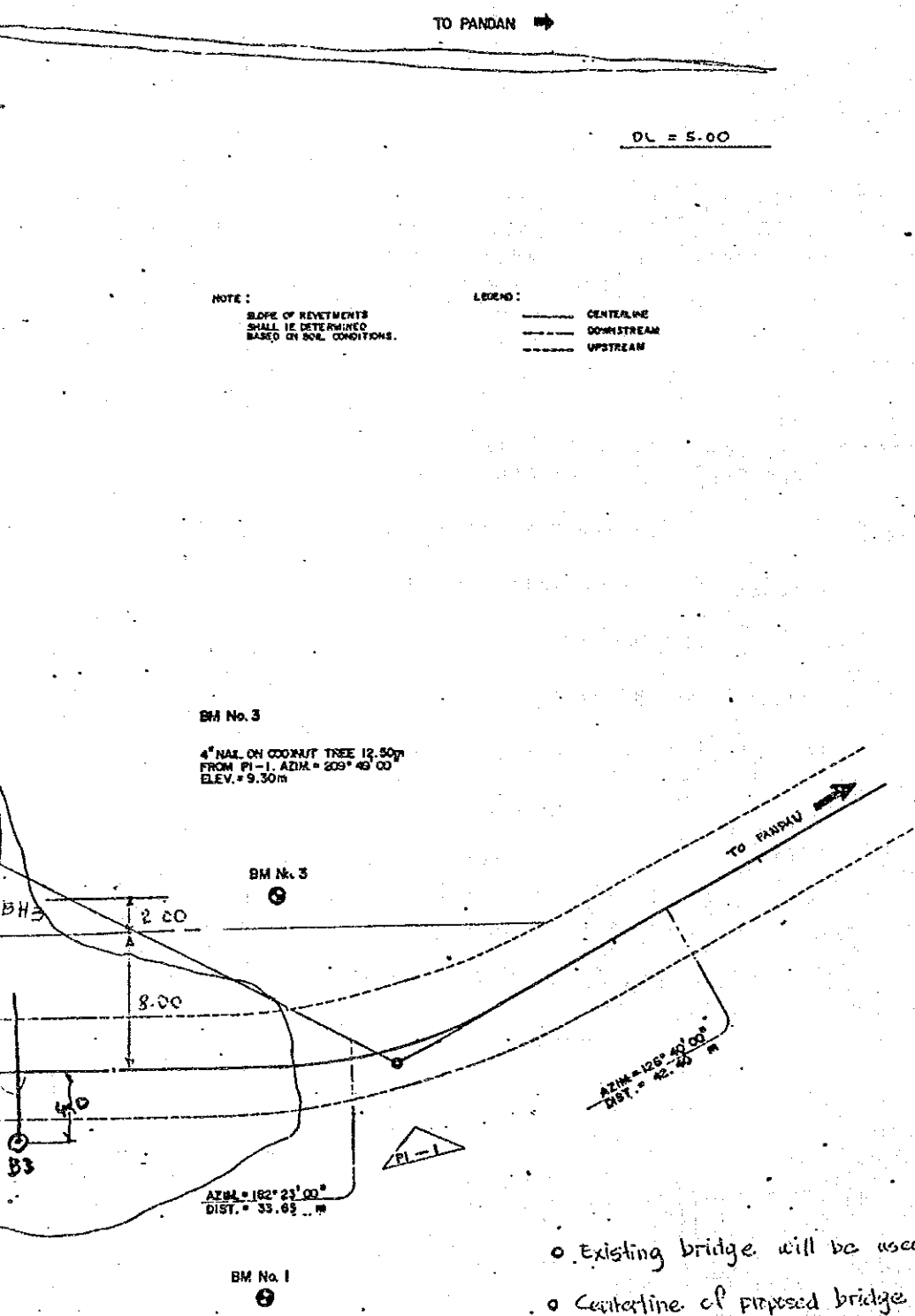
M. Genogating
Mr. M. Genogating
Engr. II, DPWH Catanduanes Engg. Dist.

S. Uy-Boco
Ms. Soledad V. Uy-Boco
Chief of Planning & Design Division (Reg.V)

M. S. Sact
Mr. Mariano S. Sact
District Engr. DPWH Catanduanes Engg. District

D. R. Viloseta
Mr. Domingo R. Viloseta
DPWH Asst. Reg'l. Director for Services Reg. V Office

R. Mitra
Mr. Roberto M. Mitra
Engr. III DPWH, R.P.M.O. Reg. V



- Existing bridge will be used as detour.
- Centerline of proposed bridge is located 8.00m downstream from existing centerline of bridge.

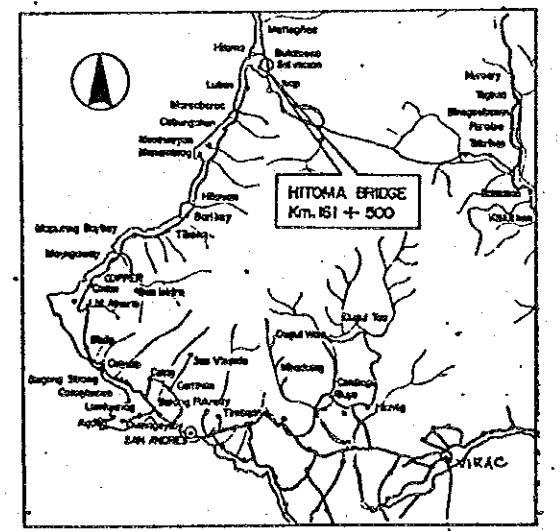
DRAWINGS
ALL DIMENSIONS ARE EXPRESS IN MILLIMETERS UNLESS OTHERWISE SHOWN IN THE PLANS. ALL ELEVATIONS ARE IN METERS.

GENERAL NOTES

- LOCATION OF BRIDGE SHOULD BE DETERMINED BY THE DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS (DPWH).
- STRUCTURAL DIMENSIONS OF SUPERSTRUCTURES SHOULD NOT BE AMENDED.
- TYPES AND DIMENSIONS OF SUBSTRUCTURES SHALL BE JUSTIFIED ACCORDING TO THE DETAILED DESIGN OF SUBSTRUCTURES PREPARED BY DPWH.
- VERTICAL CLEARANCE BETWEEN THE M.F.L. AND THE BOTTOM OF THE ORDERS OF THE SUPERSTRUCTURE SHALL BE NOT LESS THAN 1.0 METER. (CARRYING NO BR DEBRIS).
- DESIGN SPECIFICATION
AASHTO STANDARD SPECIFICATION FOR HIGHWAY BRIDGE (14th EDITION 1993)
- DESIGN LOAD

DEAD LOAD	CONCRETE	23.54 KN/m ³
	FILL MATERIALS	17.66 KN/m ³
LIVE LOAD	ROADWAY LIVE LOAD	HS 20-44 (MS 19)
	SIDEWALK LIVE LOAD	2.873 KN/m ²
TEMPERATURE CHANGE		RISE + 0° FALL - 10°
EARTHQUAKE LOAD		IN ACCORDANCE WITH "GUIDELINE FOR SEISMIC DESIGN OF BRIDGES"
OTHER LOADS		IN ACCORDANCE WITH 1989 AASHTO SPECIFICATION
- MATERIALS

STEEL FOR SUPERSTRUCTURE	STEEL SHALL BE SPECIFIED BY JIS (JAPANESE INDUSTRIAL STANDARD)
CONCRETE	CONCRETE FOR PRESTRESSED CONCRETE ORDER f' _c = 34.5 MPa CONCRETE FOR DECK SLAB f' _c = 20.7 MPa CONCRETE FOR SUBSTRUCTURE f' _c = 20.7 MPa
OTHERS	OTHER MATERIALS SHALL CONFORMED TO ASTM





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Date: July 10, 1992

Gentlemen,

In connection with the Japan's Grant Aid, the Project for Constructing Bridges Along Rural Roads (Phase IV, Group 2), Katahira & Engineers International and representatives from DPWH (Central, Regional and District Offices) hereby agree on the following items for the construction of LANANG Bridge;
05-06-04

1. The proposed centerline will be located ~~at the~~ as indicated in the plan of the bridge.
2. The Right-of-Way Acquisition and removal of all obstructions (to be undertaken by the DPWH)
3. Location of proposed detour at existing spillway.
4. Highest Water Level, 18.82 m.
5. Location of Bore Holes Three boring holes as indicated in the plan

Attached herewith is the plan showing the above agreed items.

Names and signatures of Representatives are shown below.

DPWH Central Office

Mr. Adriano Dorado (Engr. IV, B.O.P.)
Mr. Edwin Forles (Engr. III, R.O.)

DPWH Regional Office

Ms. Soledad L. Boob (Chief, Planning & Design Div)
Mr. Domingo R. Villaseñor (Asst. Regl. Director for Services, Reg. V)

DPWH District Office

Mr. Saldano, A. Legaspi (Engr. III, P.D.S. Marikina)
Mr. Vicente Aragon (Engr. II, P.D.S. Marikina)

Katahira & Engineers International

Mr. Masao Izawa (Geotechnical Surveyor)
Mr. Kenji Sugawara (Topographic Surveyor)

Note: How about H.W.L. & O.W.L.

DL = 0.00 M

GENERAL ELEVATION SCALE 1:200

DL = 0.00 M

LEGEND:

CENTERLINE

NOTE: SLOPE OF RETAINMENT SHALL BE DETERMINED

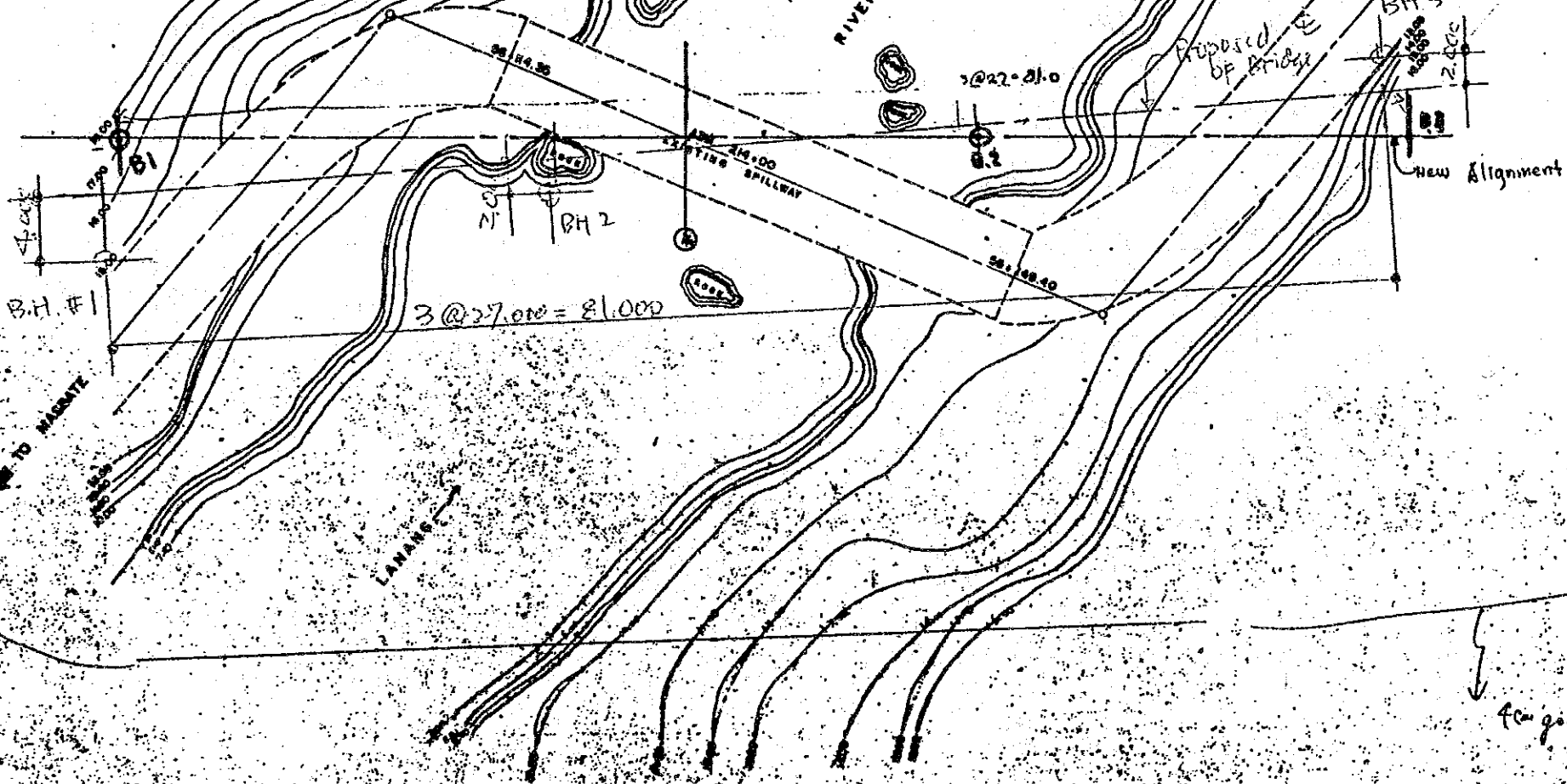
NOTE:

ALL DIMENSIONS ARE EXPRESSED IN METERS UNLESS OTHERWISE SHOWN ON THE PLAN.

ALL ELEVATIONS ARE IN METERS.

7cm down

- o Existing spillway will be used
- o Strengthening of temporary bridge site will be the responsibility of the D.P.W.H.
- o Skew angle is approximately 45 degrees

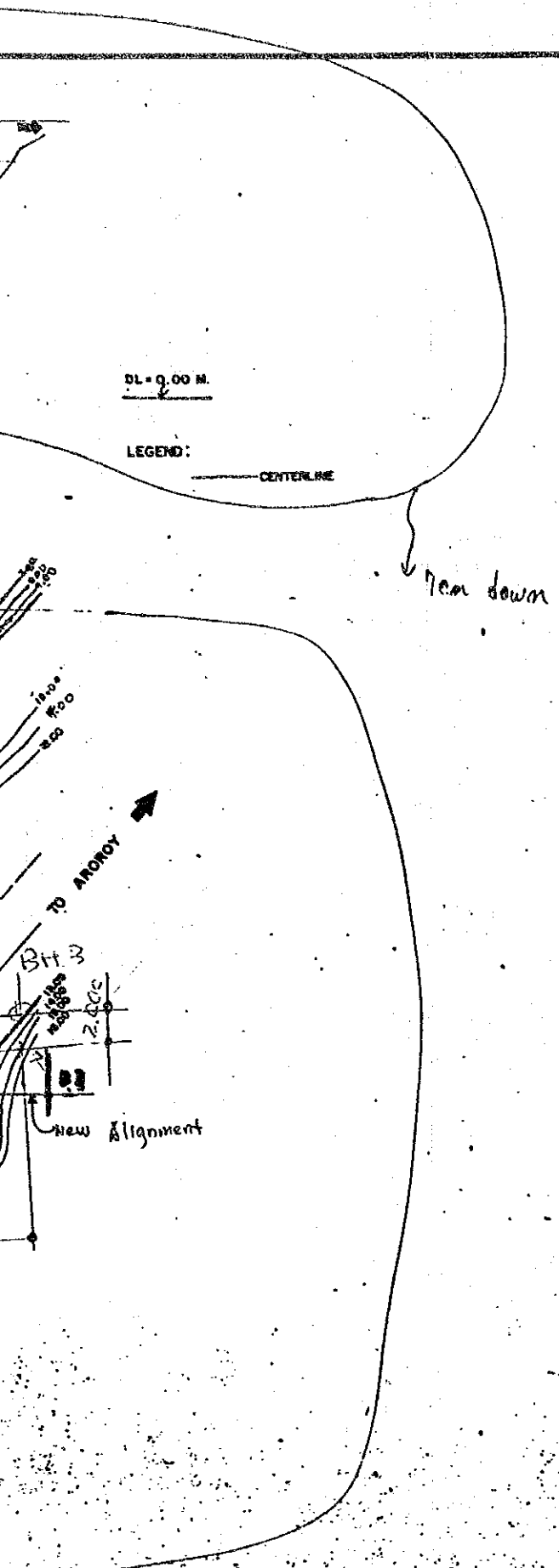


GENERAL PLAN SCALE 1:200

4cm going down

DRAWINGS:

ALL DIMENSIONS ARE EXPRESSED IN METERS UNLESS OTHERWISE SHOWN ON THE PLAN. ALL ELEVATIONS ARE IN METERS.



M. Masao Mizawa
Mr. Masao Mizawa
Geotechnical Surveyor (KEI)

M. Kenji Sugawara
Mr. Kenji Sugawara
Topographic Surveyor (KEI)

Mr. Adriano Doroy
Mr. Adriano Doroy
Engr. IV, DPWH Central Office (B.O.D.)

Mr. Edwin Fortes
Mr. Edwin Fortes
Engr. III, DPWH Central Office (P.S.)

Mr. Sabelo A. Leataspi
Mr. Sabelo A. Leataspi
Engr. III, DPWH Masbate Engg. Dist. (PDS)

Mr. Uredal A. Lubaton
Mr. Uredal A. Lubaton
Engr. II, DPWH Masbate Engg. Dist. (PDS)

Ms. Sibelad B. Uy-Poco
Ms. Sibelad B. Uy-Poco
Chief, Planning & Design Division, DPWH, Reg. V Office

Mr. Domingo R. Villaseñor
Mr. Domingo R. Villaseñor
DPWH, Asst. Regl. Director for Services, Reg. V Office

- Existing spillway will be used as detour.
- Strengthening of temporary bridges leading to bridge site will be the responsibility of the D.P.W.H.
- Skew angle is approximately 45°

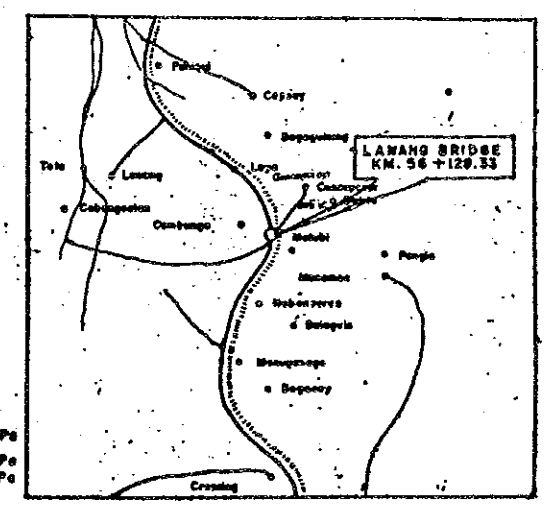
GENERAL NOTES

- LOCATION OF BRIDGE SHOULD BE DETERMINED BY THE DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS (DPWH)
- STRUCTURAL DIMENSIONS OF SUPERSTRUCTURES SHOULD NOT BE AMENDED.
- TYPES AND DIMENSIONS OF SUBSTRUCTURES SHALL BE JUSTIFIED ACCORDING TO THE DETAILED DESIGN OF SUBSTRUCTURES PREPARED BY DPWH.
- VERTICAL CLEARANCE BETWEEN THE H.P.L. AND THE BOTTOM OF THE GIRDERS OF THE SUPERSTRUCTURE SHALL BE NOT LESS THAN 1.0 METER (CARRYING NO BIG DEBRIS).
- DESIGN SPECIFICATION
AASHTO STANDARD SPECIFICATION FOR HIGHWAY BRIDGE (14TH EDITION 1989).
- DESIGN LOAD

DEAD LOAD	CONCRETE	23.54 KN/m ³
	FILL MATERIALS	17.66 KN/m ³
	CONCRETE PAVEMENT	23.04 KN/m ³

LIVE LOAD	ROADWAY LIVE LOAD	HS 20-44 (MS-18)
	SIDEWALK LIVE LOAD	2.873 KN/m ²

 TEMPERATURE CHANGE
 RISE +10°, FALL -10°
 EARTHQUAKE LOAD
 IN ACCORDANCE WITH GUIDELINE FOR SEISMIC DESIGN OF BRIDGES.
 OTHER LOADS: IN ACCORDANCE WITH 1989 AASHTO SPECIFICATION.
- MATERIALS
 STEEL FOR SUPERSTRUCTURE
 STEEL SHALL BE SPECIFIED BY JIS (JAPANESE INDUSTRIAL STANDARD).
 CONCRETE
 CONCRETE FOR PRESTRESSED CONCRETE ORDER f_c = 34.6 MPa
 CONCRETE FOR DECK SLAB f_c = 20.7 MPa
 CONCRETE FOR SUBSTRUCTURE f_c = 20.7 MPa
 OTHERS: OTHER MATERIALS SHALL COMFORMED TO ASTM.



DRAWINGS:
ALL DIMENSIONS ARE EXPRESSED IN MILLIMETERS UNLESS OTHERWISE SHOWN ON THE PLAN.
ALL ELEVATIONS ARE IN METERS.

VICINITY MAP



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Facsimile: 03-563-4055

Date: July 10, 1992

Gentlemen,

In connection with the Japan's Grant Aid, the Project for Constructing Bridges Along Rural Roads (Phase IV, Group 2), Katahira & Engineers International and representatives from DPWH (Central, Regional and District Offices) hereby agree on the following items for the construction of POTOT Bridge;
05-06-05

1. The proposed centerline will be located at the upstream side of the bridge.
2. The Right-of-Way Acquisition and removal of all obstructions (to be undertaken by the DPWH)
3. Location of proposed detour at existing bridge.
4. Highest Water Level, 18.63 m.
5. Location of Bore Holes Three boring holes as indicated in the plan.

Attached herewith is the plan showing the above agreed items.

Names and signatures of Representatives are shown below.

DPWH Central Office

Mr. Adriano Dorag (Engr. IV, P.O.D.)

Mr. Edwin Fortes (Engr. II, P.S.)

DPWH Regional Office

Ms. Soledad L. Uy-Boco (Chief of Planning & Design Div) Reg. V

Mr. Domingo R. Villaseñor (Asst. Regl. Director for Services, Reg. V)

DPWH District Office

Mr. Salcedo A. Lopez (Engr. III, Masbate Engr. Dist) P.O.S.

Mr. Vicente A. Abaton (Engr. II, Masbate Engr. Dist) P.O.S.

Katahira & Engineers International

Mr. Masao Aizawa (Geotechnical Surveyor)

Mr. Keiji Sugawara (Topographic Surveyor)

THE BASIC FOR CONSTRUCTING BRIDGE	
BRIDGE NO.	
08-06-08	

M. Masao Aizawa
Mr. Masao Aizawa
Geotechnical Surveyor (KEI)

Kenji Sugawara
Mr. Kenji Sugawara
Topographic Surveyor (KEI)

Adriano I.
Mr. Adriano I.
Engr. IV, DPWH

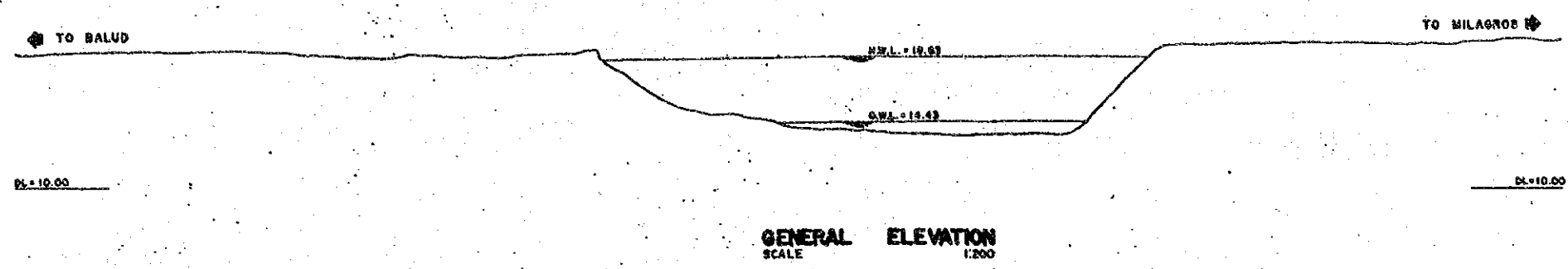
Eduin F.
Mr. Eduin F.
Engr. III, DPWH

Salcedo
Mr. Salcedo
Engr. III, DPWH

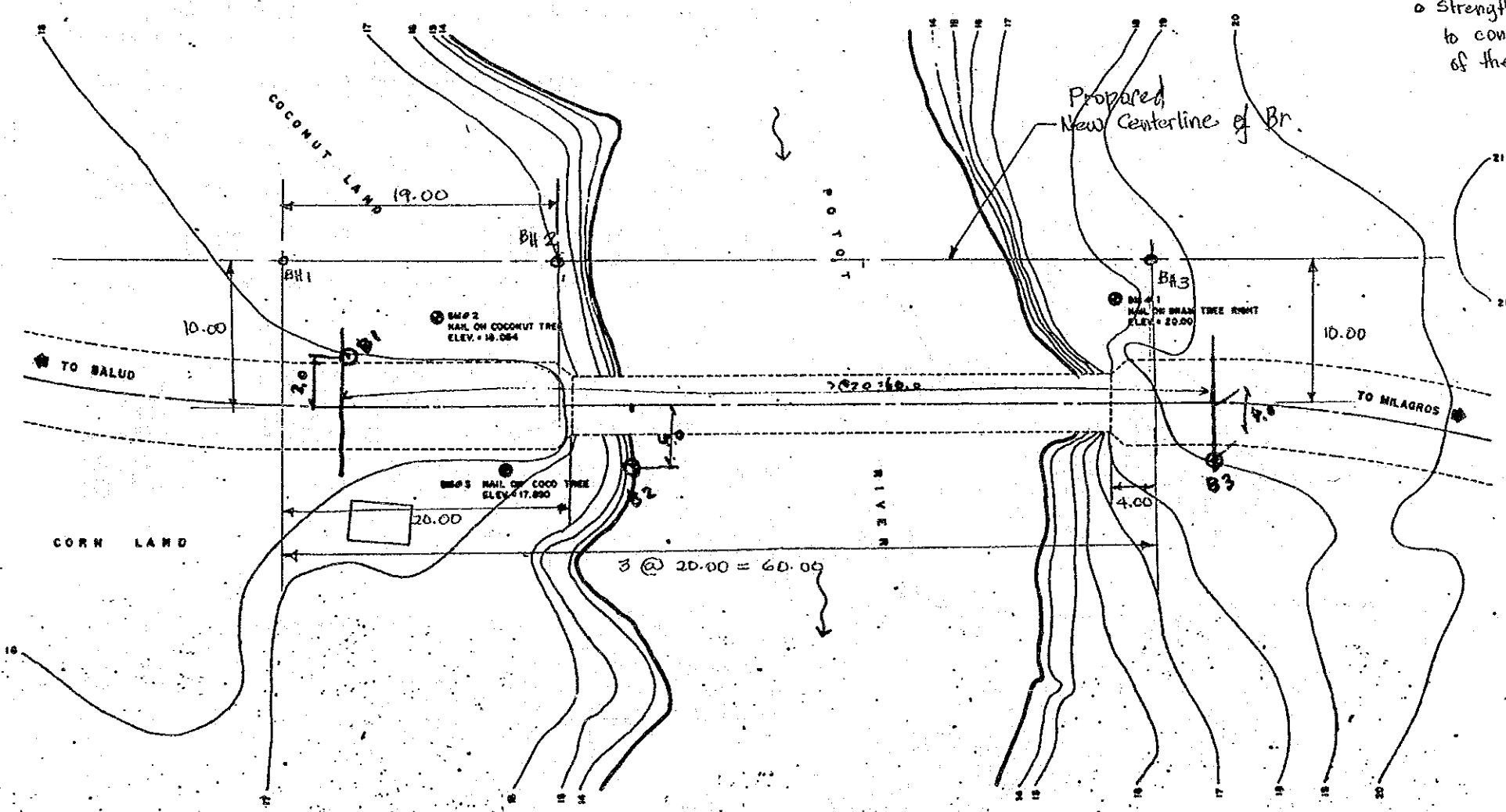
Vicente
Mr. Vicente
Engr. II, DPWH

Solodad
Ms. Solodad
Chief of Pla

Domingo F.
Mr. Domingo F.
DPWH Asst. Re



- Existing bridge will be used as the detour.
- Strengthening of temporary bridges leading to construction site will be the responsibility of the D.P.W.H.



- ### GENERAL NOTES
- LOCATION OF BRIDGE SHOULD BE DETERMINED BY THE DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS (DPWH).
 - STRUCTURAL DIMENSIONS OF SUPERSTRUCTURES SHOULD NOT BE AMENDED.
 - TYPES AND DIMENSIONS OF SUBSTRUCTURES SHALL BE JUSTIFIED ACCORDING TO THE DETAILED DESIGN OF SUBSTRUCTURES PREPARED BY DPWH.
 - VERTICAL CLEARANCE BETWEEN THE M.S.L. AND THE BOTTOM OF THE GRIDERS OF THE SUPERSTRUCTURES SHALL BE NOT LESS THAN 10 METER (CARRYING NO BIG DEBRIS).
 - DEBRIS SPECIFICATION
AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGE (14th EDITION 1999).
 - DEBRIS LOAD

DEAD LOAD:	CONCRETE	23.54 KN/m ³
	FILL MATERIALS	17.86 KN/m ³
LIVE LOAD:	ROADWAY LIVE LOAD	HS 20-44 (MS-80)
	SIDEWALK LIVE LOAD	2.873 KN/m ²
 - TEMPERATURE CHANGE:
RISE +10°, FALL -10°
 - EARTHQUAKE LOAD:
IN ACCORDANCE WITH GUIDELINE FOR SEISMIC DESIGN OF BRIDGES.
 - OTHER LOADS IN ACCORDANCE WITH 1998 AASHTO SPECIFICATION.
 - MATERIALS

STEEL FOR SUPERSTRUCTURE:	STEEL SHALL BE SPECIFIED BY JIS (JAPANESE INDUSTRIAL STANDARD).
CONCRETE:	CONCRETE FOR PRESTRESSED CONCRETE GIRDER AND DECK SLAB: f _c = 54.0 MPa, f _t = 50.7 MPa
	CONCRETE FOR SUBSTRUCTURE: f _c = 20.7 MPa
OTHERS:	OTHER MATERIALS SHALL CONFORMED TO ASTM.

THE BASIC DESIGN STUDY ON THE PROJECT
FOR CONSTRUCTING BRIDGES ALONG RURAL ROADS (PHASE IV, GROUP II)

BRIDGE NO. 05-06-08	POTOT BRIDGE MILAGROS, MASBATE	SHEET NO.
------------------------	-----------------------------------	-----------

M. Masao
Mr. Masao Azawa
Geotechnical Surveyor (KEI)

Kenji Sugawara
Mr. Kenji Sugawara
Topographic Surveyor (KEI)

Adriano Doray
Mr. Adriano Doray
Engr. IV, DPWH Central Office (B.O.D.)

Edwin Fortes
Mr. Edwin Fortes
Engr. III, DPWH central office (P.S.)

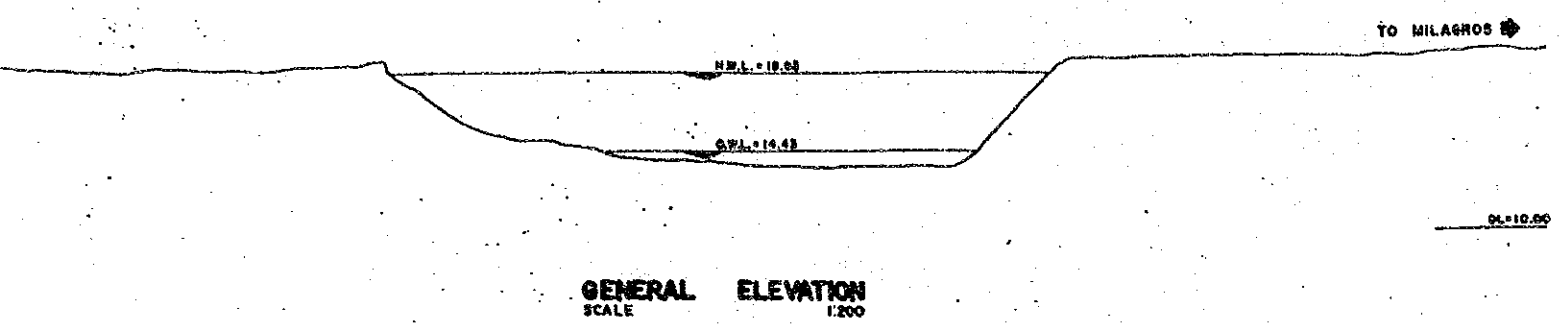
Salcedo A. Legaspi
Mr. Salcedo A. Legaspi
Engr. III, DPWH Masbate Engg. District (Planning & Design)

Vicente A. Labaton
Mr. Vicente A. Labaton
Engr. II, DPWH Masbate Engg. District (Planning & Design)

Soledad L. Uy-Boed
Ms. Soledad L. Uy-Boed
Chief of Planning & Design Div., Reg. V Office

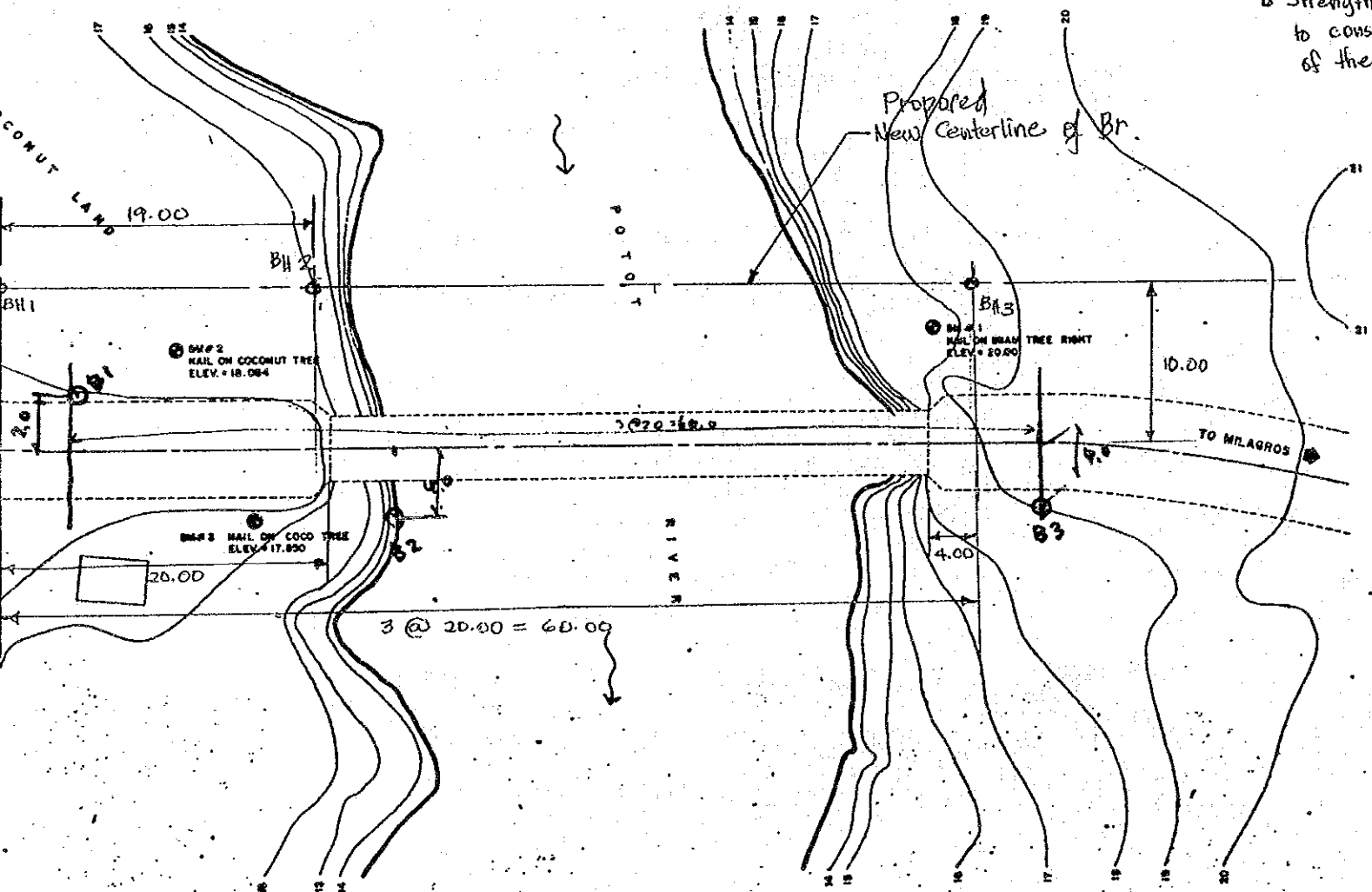
Domingo R. Villaseñor
Mr. Domingo R. Villaseñor
DPWH Asst. Reg'l. Director for Services, Reg. V Office

GENERAL ELEVATION
SCALE 1:200



- Existing bridge will be used as the detour.
- Strengthening of temporary bridges leading to construction site will be the responsibility of the D.P.W.H.

GENERAL PLAN
SCALE 1:200

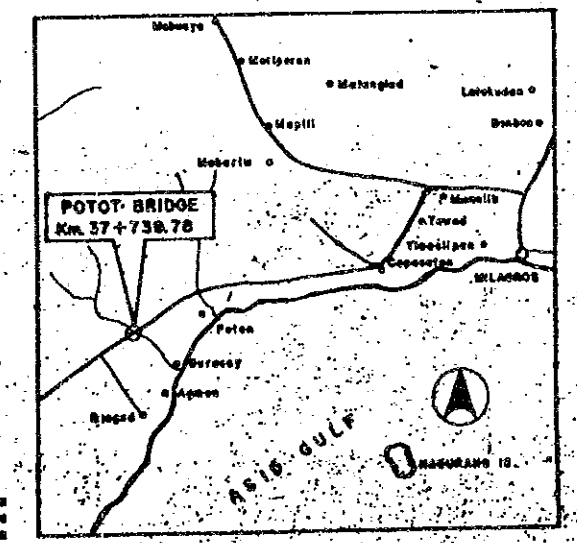


GENERAL NOTES

- LOCATION OF BRIDGE SHOULD BE DETERMINED BY THE DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS (DPWH).
- STRUCTURAL DIMENSIONS OF SUPERSTRUCTURES SHOULD NOT BE AMENDED.
- TYPES AND DIMENSIONS OF SUBSTRUCTURES SHALL BE JUSTIFIED ACCORDING TO THE DETAILED DESIGN OF SUBSTRUCTURES PREPARED BY DPWH.
- VERTICAL CLEARANCE BETWEEN THE M.F.L. AND THE BOTTOM OF THE GIRDERS OF THE SUPERSTRUCTURES SHALL BE NOT LESS THAN 10 METER (CARRYING NO BRG. DECKING).
- DESIGN SPECIFICATION
AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGE (14th EDITION 1980).
- DESIGN LOAD

DEAD LOAD	CONCRETE	23.04 KN/m ²
	FILL MATERIALS	17.88 KN/m ²
LIVE LOAD	ROADWAY LIVE LOAD	HS 20-44 (MS-10)
	SIDEWALK LIVE LOAD	2.875 KN/m ²
- TEMPERATURE CHANGE:
RISE +10°, FALL -10°
- EARTHQUAKE LOAD:
IN ACCORDANCE WITH GUIDELINE FOR SEISMIC DESIGN OF BRIDGES.
- OTHER LOADS: IN ACCORDANCE WITH 1999 AASHTO SPECIFICATION.
- MATERIALS

STEEL FOR SUPERSTRUCTURE	STEEL SHALL BE SPECIFIED BY JIS (JAPANESE INDUSTRIAL STANDARD).
CONCRETE	CONCRETE FOR PRESTRESSED CONCRETE GIRDER AND DECK SLAB: f _c ' = 34.5 MPa, f _t ' = 3.7 MPa
	CONCRETE FOR SUBSTRUCTURE: f _c ' = 20.7 MPa
OTHERS	OTHER MATERIALS SHALL CONFORMED TO ASTM.



VICINITY MAP



KATAHIRA & ENGINEERS INTERNATIONAL
TOKYO, JAPAN

5

Tsurukema Bldg, 4-2-8 Ginza
Chuo-ku, Tokyo, Japan
Cable Address: ENKATAHIRA TOKYO
Telephone: 03-583-4053
Telex: 2523838 KATAE3 J
Facsimile: 03-583-4055

Date: July 4, 1992

Gentlemen,

In connection with the Japan's Grant Aid, the Project for Constructing Bridges Along Rural Roads (Phase IV, Group 2), Katahira & Engineers International and representatives from DPWH (Central, Regional and District Offices) hereby agree on the following items for the construction of LAWIGAN Bridge;
06-06-04

1. The proposed centerline will be located at the as shown in the plan of the bridge.
2. The Right-of-Way Acquisition and removal of all obstructions (to be undertaken by the DPWH)
3. Location of proposed detour at ^{upstream} ~~downstream~~ of existing bridge
4. Highest Water Level, 3.922 m.
5. Location of Bore Holes (3) Three holes as indicated in the plan

Attached herewith is the plan showing the above agreed items.

Names and signatures of Representatives are shown below.

DPWH Central Office

Mr. Edwin Matanguihan (Engr. IV BOD)

Mr. Edwin Forbes (Engr. VII (P.S.))

DPWH Regional Office

Mr. Ernesto A. Suela (Regional Director, Region VI)

Mr. Cecil Caliguan (Engr. III, Planning & Design, Region VI)

DPWH District Office

Mr. Rudy G. Canasillo (District Engr., Iloilo 1st)

Mr. Elmer S. Sibero (Engr. III, Const. Section, Iloilo 1st)

Katahira & Engineers International

Mr. Masao Ajizawa (Geotechnical Surveyor)

Mr. Kenji Sugawara (Topographic Surveyor)

TO SAN JOAQUIN (ILOILO)

R = 0.00

Continuables lines (not broken)

H.W.L. = 5.422

INDEX = 0.000

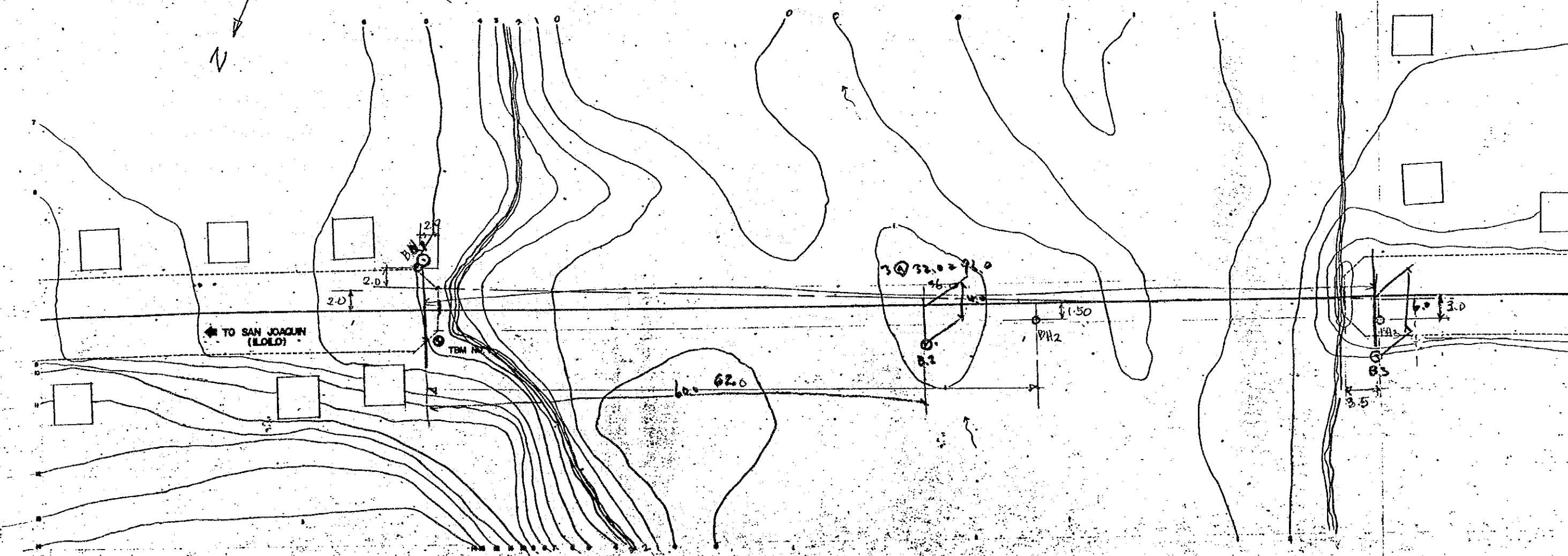
INDEX = 0.177

INDEX = 0.354

INDEX = 0.531

GENERAL ELEVATION
SCALE 1:200

N



GENERAL PLAN
SCALE 1:200

LINE 1.17
LINE 0.00
LINE 0.30

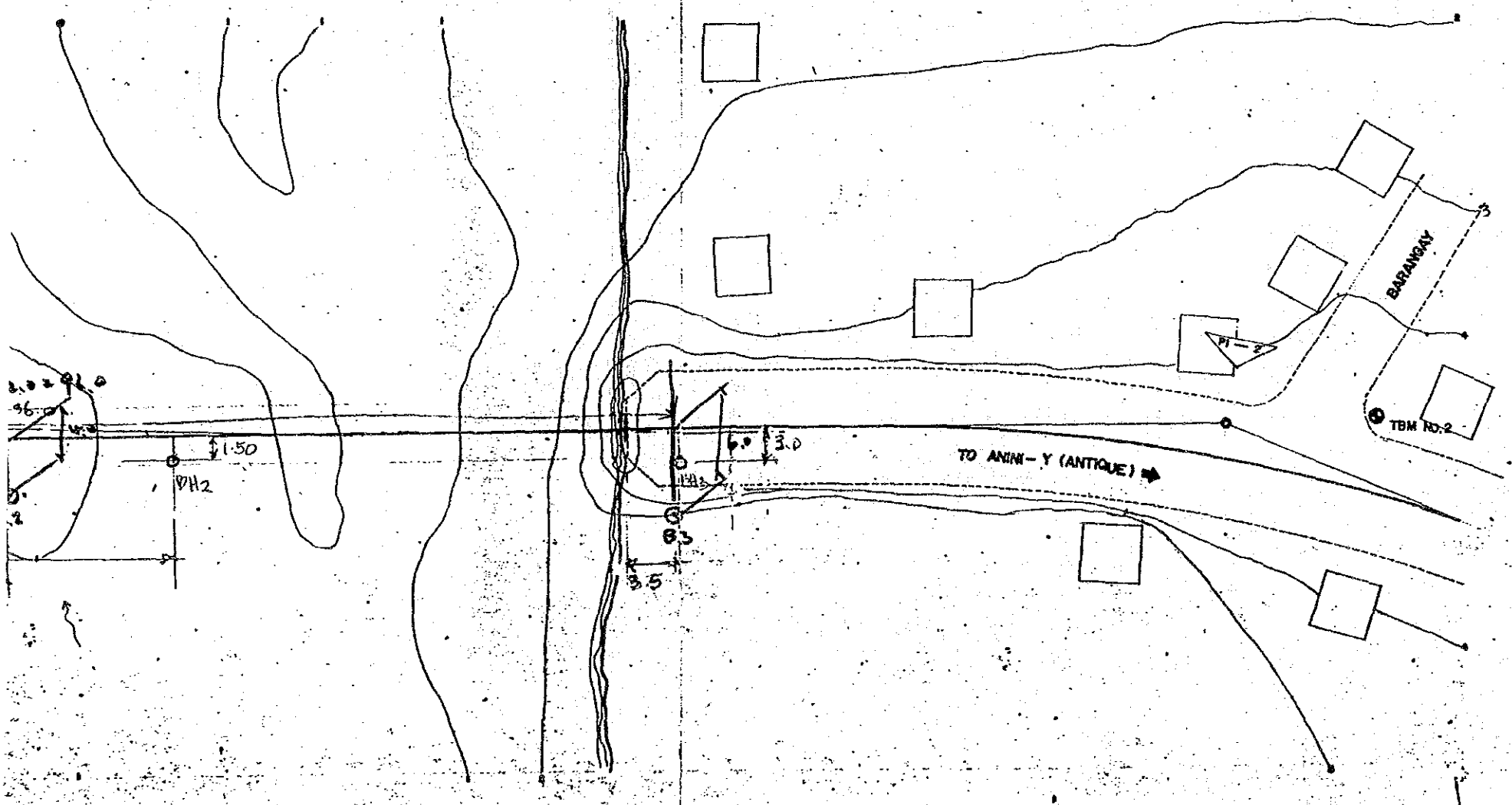
TO ANINI-Y (ANTIQUE) →

PL = 0.00

NOTE: SLOPE OF RETAINMENT SHALL BE DETERMINED BASED ON SOIL CONDITIONS.

LEGEND: ——— DOWNSTREAM
———— CENTERLINE
———— UPSTREAM

SECTION 1:200



Masao Aizawa
Mr. Masao Aizawa
Geotechnical Surveyor (KEI)

Kenji Sugawara
Mr. Kenji Sugawara
Topographic Surveyor (KEI)

Edwin Matanguihan
Mr. Edwin Matanguihan
Engr. III DPWH Central Office (Plan)

Edwin Fortes
Mr. Edwin Fortes
Engr. III DPWH Central Office (Plan)

Elmer S. Silveo
Mr. Elmer S. Silveo
Engr. III DPWH Construction Section

Rudy G. Camasillo
Mr. Rudy G. Camasillo
District Engineer, DPWH Iloilo

Cecil Caligan
Mr. Cecil Caligan
Engr. III, DPWH Regional Office

Ernesto A. Silvela
Mr. Ernesto A. Silvela
Regional Director, Region VI

GENERAL PLAN

1. LOCATION OF BRIDGE SHOULD BE DETERMINED BY THE DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS (DPWH).
2. STRUCTURAL DIMENSIONS OF SUPERSTRUCTURES SHOULD NOT BE AMENDED.
3. TYPES AND DIMENSIONS OF SUBSTRUCTURES SHALL BE JUSTIFIED ACCORDING TO THE DETAILED DESIGN OF SUBSTRUCTURES PREPARED BY DPWH.
4. VERTICAL CLEARANCE BETWEEN THE M.F.L. AND THE BOTTOM OF THE ORDERS OF THE SUPERSTRUCTURE SHALL BE NOT LESS THAN 10 METER (CARRYING NO BIG DECK).
5. DESIGN SPECIFICATION
AASHTO STANDARD SPECIFICATION FOR HIGHWAY BRIDGE (14TH EDITION 1980)
6. DESIGN LOAD

DEAD LOAD	CONCRETE	23.54 KN/m ²
	FILL MATERIALS	17.64 KN/m ²
LIVE LOAD	ROADWAY LIVE LOAD	HS 20-44 (HS-18)
	SIDEWALK LIVE LOAD	2.073 KN/m ²

TEMPERATURE CHANGE
RISE +10° FALL -10°

EARTHQUAKE LOAD
IN ACCORDANCE WITH GUIDELINE FOR SEISMIC DESIGN OF BRIDGES

OTHER LOADS: IN ACCORDANCE WITH 1995 AASHTO SPECIFICATION
7. MATERIALS

STEEL FOR SUPERSTRUCTURE
STEEL SHALL BE SPECIFIED BY JIS (JAPANESE INDUSTRIAL STANDARD)

CONCRETE
CONCRETE FOR PRESTRESSED CONCRETE UNDER 54.5 MPa
CONCRETE FOR DECK SLAB 54.5 MPa
CONCRETE FOR SUBSTRUCTURE 54.5 MPa

OTHERS
OTHER MATERIALS SHALL CONFORMED TO ASTM

DRAWINGS
ALL DIMENSIONS ARE EXPRESS IN MILLIMETER
UNLESS OTHERWISE SHOWN IN THE PLAN.
ALL ELEVATIONS ARE IN METERS.

BRIDGE NO. 08-06-04	LAWGAN BRIDGE SAN JOAQUIN, ILOILO	SHEET NO.
------------------------	--------------------------------------	-----------

Mr. Masao Aizawa
Geotechnical Surveyor (KEI)

Mr. Kenji Sugawara
Topographic Surveyor (KEI)

Mr. Edwin Matanguihan
Engr. III DPWH Central Office (BOD)

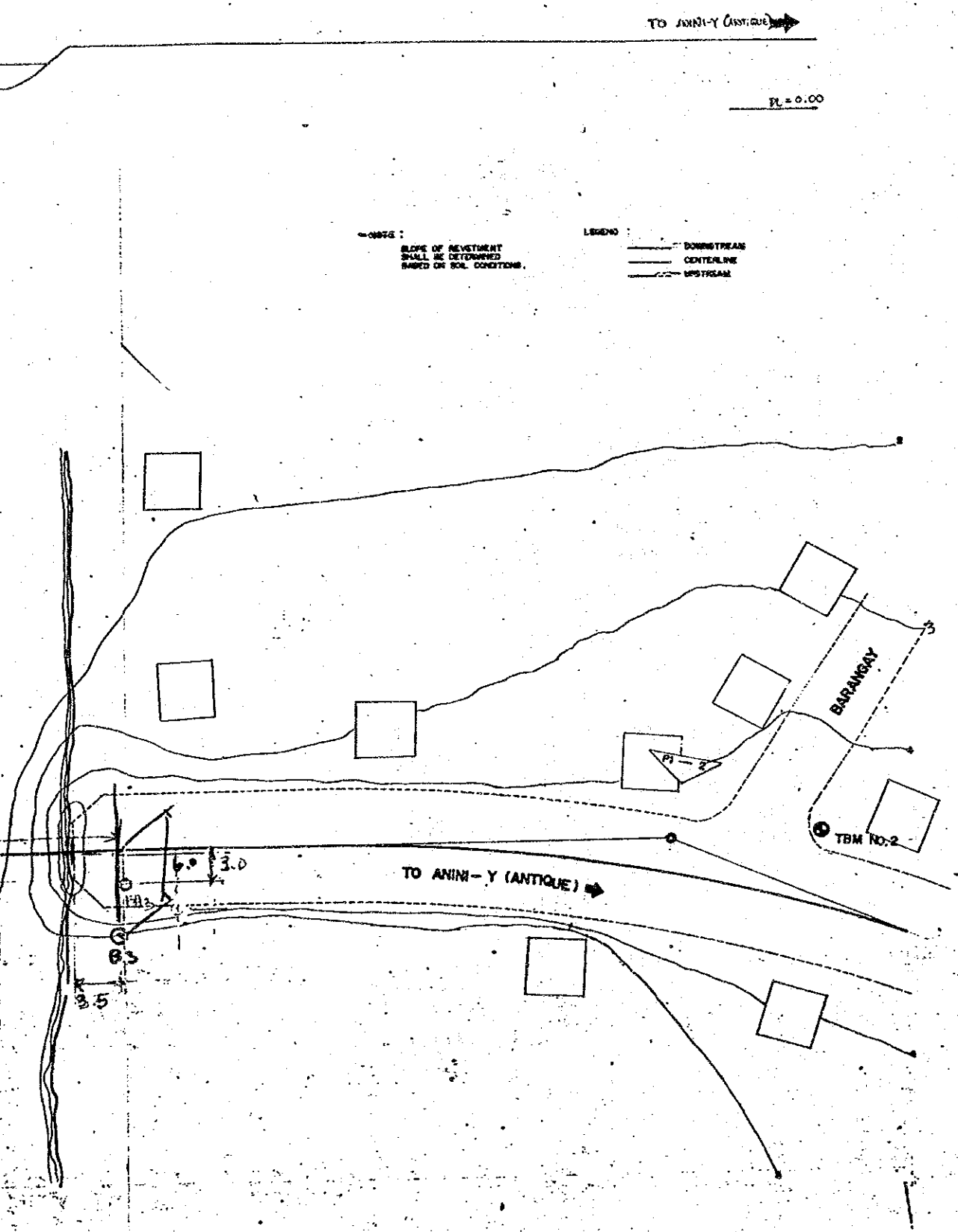
Mr. Edwin Fortes
Engr. III DPWH Central Office (Planning Service)

Mr. Elmer S. Silveo
Engr. III DPWH Construction Section, Iloilo 1st Engg. District

Mr. Rudy G. Camacho
District Engineer, DPWH Iloilo 1st Engg. District

Mr. Cecil Caligan
Engr. III, DPWH Regional Office, Reg. VI

Mr. Ernesto A. Silvela
Regional Director, Region VI



GENERAL PLAN

1. LOCATION OF BRIDGE SHOULD BE DETERMINED BY THE DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS (DPWH).
2. STRUCTURAL DIMENSIONS OF SUPERSTRUCTURES SHOULD NOT BE AMENDED.
3. TYPES AND DIMENSIONS OF SUBSTRUCTURES SHALL BE JUSTIFIED ACCORDING TO THE DETAILED DESIGN OF SUBSTRUCTURES PREPARED BY DPWH.
4. VERTICAL CLEARANCE BETWEEN THE M.P.L. AND THE BOTTOM OF THE BRIDGES (CARRYING NO BR DEBS).
5. DESIGN SPECIFICATION ASHTO STANDARD SPECIFICATION FOR HIGHWAY BRIDGES (14th EDITION 1998)
6. DESIGN LOAD

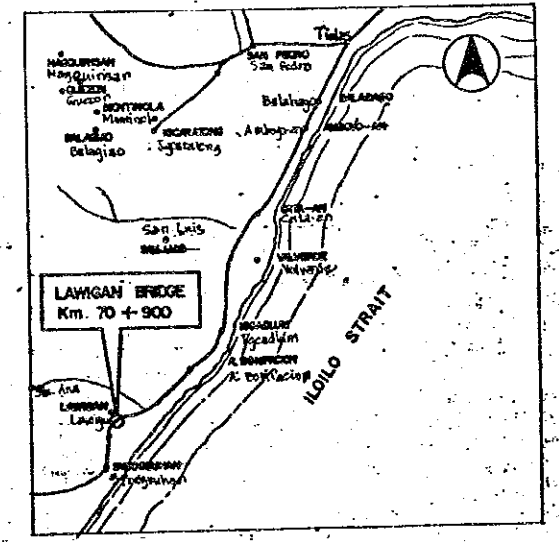
DEAD LOAD CONCRETE	23.54 KN/m ²
FILL MATERIALS	17.64 KN/m ²
LIVE LOAD ROADWAY LIVE LOAD	HS 20-44 (MS-10)
SIDEWALK LIVE LOAD	2.875 KN/m ²

TEMPERATURE CHANGE
RISE +10° FALL -10°

EARTHQUAKE LOAD
IN ACCORDANCE WITH "GUIDELINE FOR SEISMIC DESIGN OF BRIDGES"

OTHER LOADS: IN ACCORDANCE WITH 1998 ASHTO SPECIFICATION
7. MATERIALS

STEEL FOR SUPERSTRUCTURE	STEEL SHALL BE SPECIFIED BY JIS (JAPANESE INDUSTRIAL STANDARD)
CONCRETE	CONCRETE FOR PRESTRESSED CONCRETE ORDER $f_c = 34.5$ MPa CONCRETE FOR DECK SLAB $f_c = 20.7$ MPa CONCRETE FOR SUBSTRUCTURE $f_c = 20.7$ MPa
OTHERS	OTHER MATERIALS SHALL CONFORMED TO ASHTO



VICINITY MAP

DRAWINGS
ALL DIMENSIONS ARE EXPRESS IN MILLIMETER UNLESS OTHERWISE SHOWN IN THE PLAN.
ALL ELEVATIONS ARE IN METERS.



KATAHIRA & ENGINEERS INTERNATIONAL
TOKYO, JAPAN

6

Teurukama Bldg. 4-2-8 Ginza
Chuo-ku, Tokyo, Japan
Cable Address: ENKATAHIRA TOKYO
Telephone: 03-583-4053
Telex: 2523838 KATAEG J
Facsimile: 03-583-4053

Date: July 2, 1992

Gentlemen,

In connection with the Japan's Grant Aid, the Project for Constructing Bridges Along Rural Roads (Phase IV, Group 2), Katahira & Engineers International and representatives from DPWH (Central, Regional and District Offices) hereby agree on the following items for the construction of APALAN Bridge;

1. The proposed centerline will be located at the upstream (shown in the plan) of the bridge.
2. The Right-of-Way Acquisition and removal of all obstructions (to be undertaken by the DPWH)
3. Location of proposed detour Not Applicable (Existing bridge will be used).
4. Highest Water Level, 2.50 m.
5. Location of Bore Holes Two Bore Holes as shown in the plan.

Attached herewith is the plan showing the above agreed items.

Names and signatures of Representatives are shown below.

DPWH Central Office

Mr. Adriano Doron (Engr. IV, BOP)

Mr. Edwin Fortes (Engr. III, PS)

DPWH Regional Office

Mr. Basilio D. Kasaman (Reg'l. Director, Reg. VII)

Mr. Gloria Dindin (Engr. IV, Reg. VII Planning & Design)

DPWH District Office

Mr. Antonio B. Basalo (Dist. Engr., Cebu 1st)

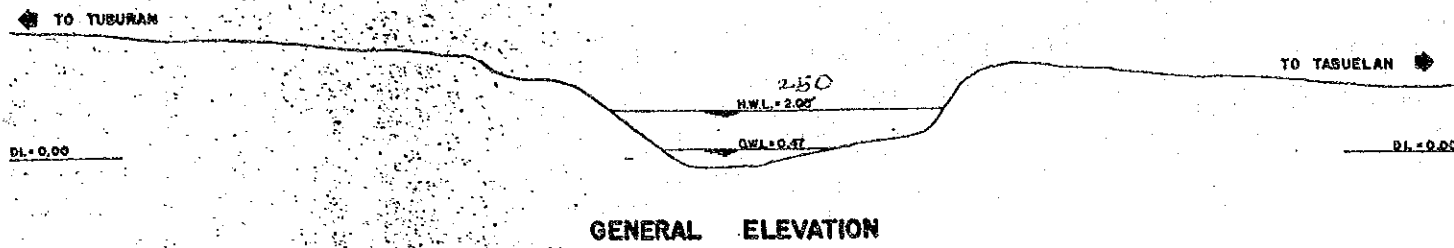
Mrs. Monica S. Rabaya (Engr. III, Cebu 1st)
Planning & Design

Katahira & Engineers International

Mr. Masao Aizawa (Geotechnical Surveyor)

Mr. Kenji Sugawara (Topographic Surveyor)

BRIDGE NO.	APALAN BRIDGE TUBURAN, CEBU	SHEET NO.
07-05-01		



GENERAL ELEVATION

Mr. Masao Aizawa
Mr. Masao Aizawa
Geotechnical Surveyor (KEI)

Kenji Sugawara
Mr. Kenji Sugawara
Topographic Surveyor (KEI)

Mr. Adriano Doroy
Mr. Adriano Doroy
Engr IV DPWH Central Office (BOD)

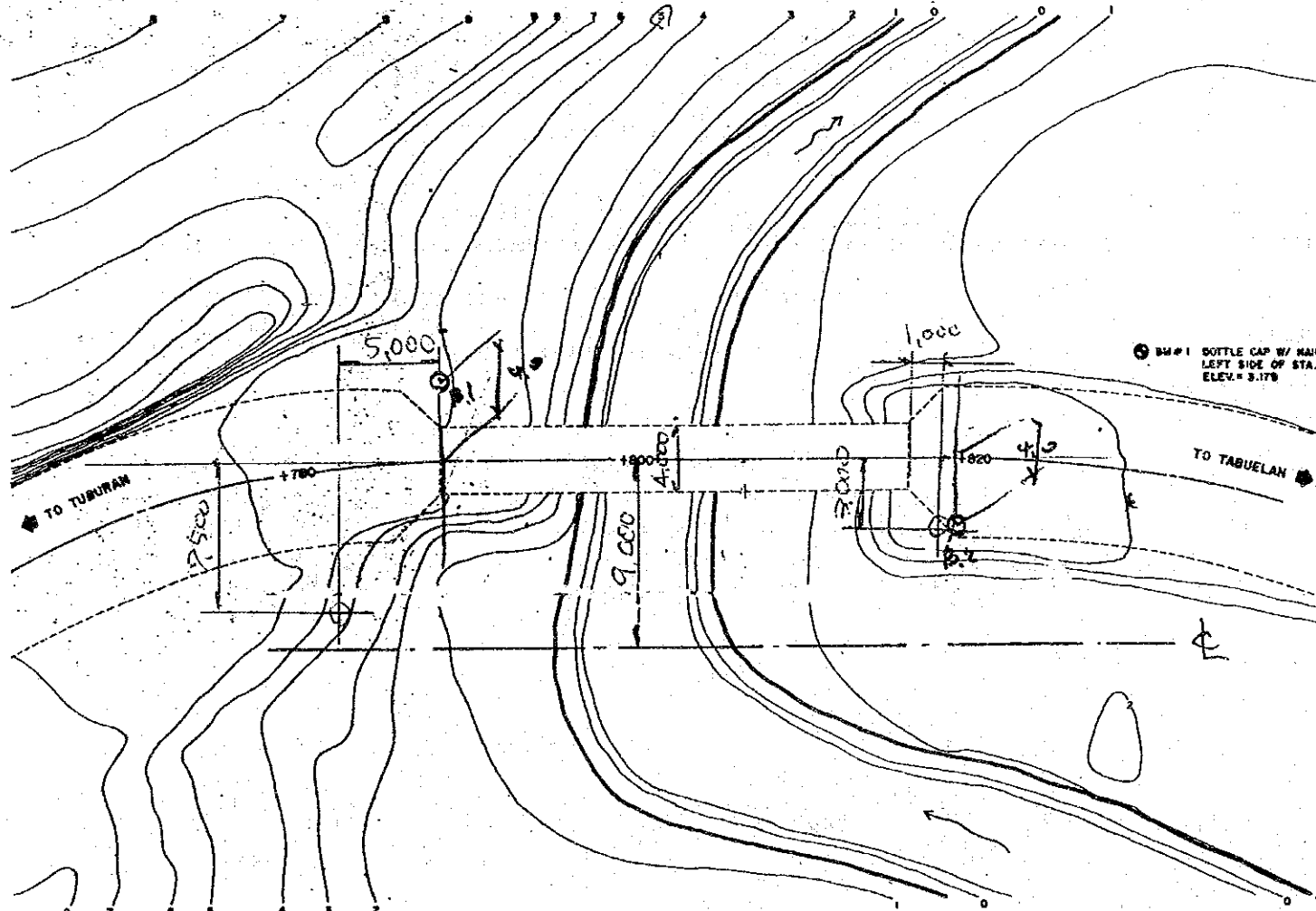
Mr. Edwin Fortes
Mr. Edwin Fortes
Engr II, DPWH Central Office (Planning Service)

Mr. Antonio Basalo
Mr. Antonio Basalo
DPWH District Engineer, Cebu 1st

Ms. Monica Rabaya
Ms. Monica Rabaya
Engr. III, DPWH Planning & Design, Cebu 1st

Ms. Gloria Dindin
Ms. Gloria Dindin
Engr. IV, DPWH Planning & Design, Reg. VII Office

Mr. Bashir J. Rasuman
Mr. Bashir J. Rasuman
Regional Director, DPWH Region VII



GENERAL PLAN

現場に架橋位置の確認
此の位置に架橋は可能
架橋位置の検討

Note: After topographic survey, clearance between the existing bridge and proposed bridge should again be investigated.

GENERAL NOTES

1. LOCATION OF BRIDGE SHOULD BE DETERMINED BY THE DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS (DPWH).
2. STRUCTURAL DIMENSIONS OF SUPERSTRUCTURES SHOULD NOT BE AMENDED.
3. TYPES AND DIMENSIONS OF SUBSTRUCTURES SHALL BE JUSTIFIED ACCORDING TO THE DETAILED DESIGN OF SUBSTRUCTURES PREPARED BY DPWH.
4. VERTICAL CLEARANCE BETWEEN THE M.F.L. AND THE BOTTOM OF THE GIRDERS OF THE SUPERSTRUCTURES SHALL BE NOT LESS THAN 10 METERS (CARRYING NO BIG DEBRIS).
5. DESIGN SPECIFICATION
AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGE (14th EDITION 1989).
6. DESIGN LOAD

DEAD LOAD:	CONCRETE	23.54 KN/m ²
	FILL MATERIALS	17.66 KN/m ²
LIVE LOAD:	ROADWAY LIVE LOAD	HS 20-44 (MS-1B)
	SIDEWALK LIVE LOAD	2.873 Kt/m ²

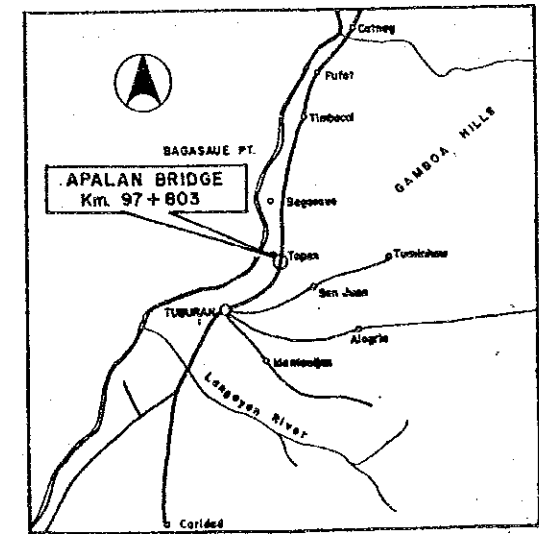
TEMPERATURE CHANGE:
RISE +10°, FALL -10°

EARTHQUAKE LOAD:
IN ACCORDANCE WITH "GUIDELINE FOR SEISMIC DESIGN OF BRIDGES"

OTHER LOADS IN ACCORDANCE WITH 1989 AASHTO SPECIFICATION.

MATERIALS
STEEL FOR SUPERSTRUCTURE:
STEEL SHALL BE SPECIFIED BY JIS (JAPANESE INDUSTRIAL STANDARD)

CONCRETE:	CONCRETE FOR PRESTRESSED CONCRETE GIRDER AND DECK SLAB	f _c = 34.5 MPa f _c = 20.7 MPa
OTHERS:	CONCRETE FOR SUBSTRUCTURE	f _c = 20.7 MPa
	OTHER MATERIALS SHALL CONFORMED TO ASTM.	



VICINITY MAP



KATAHIRA & ENGINEERS INTERNATIONAL
TOKYO, JAPAN

7

Tsurukame Bldg., 4-2-8 Ginza
Chuo-ku, Tokyo, Japan
Cable Address: ENKATAHIRA TOKYO
Telephone: 03-563-4053
Telex: 2529838 KATAEG J
Facsimile: 03-563-4055

Date: July 2, 1992

Gentlemen,

In connection with the Japan's Grant Aid, the Project for Constructing Bridges Along Rural Roads (Phase IV, Group 2), Katahira & Engineers International and representatives from DPWH (Central, Regional and District Offices) hereby agree on the following items for the construction of TAMBONGON Bridge;

07-05-05

1. The proposed centerline will be located at the downstream 11.0m from centerline of the bridge.

2. The Right-of-Way Acquisition and removal of all obstructions (to be undertaken by the DPWH)

3. Location of proposed detour at the existing bridge.

4. Highest Water Level, 3.16 m.

5. Location of Bore Holes BH1 (Tabuelon side) 13.0m Before abut. 1 4m (from Abut. 1) 3.0m L from CL BH2 (Tabuelon side) 1.70 L from CL BH3 (San Remigio side) 4.0m from Abut. 2 3.0m from CL

Attached herewith is the plan showing the above agreed items.

Names and signatures of Representatives are shown below.

DPWH Central Office

Engr. Adriano Dorado (Engr. IV, BOP)

Engr. Edwin Cortes (Engr. III, BOP)

DPWH Regional Office

Mr. Basilio D. Rasuman (Reg'l. Director, Reg. VII)

Mrs. Gloria D. Rodin (Engr. IV, Reg. VII Planning & Reg)

DPWH District Office

Mr. Anselmo Basayo (District Engr. Cebu 1st)

Mrs. Monica S. Rabala (Engr. II, Planning & Design Cebu 1st)

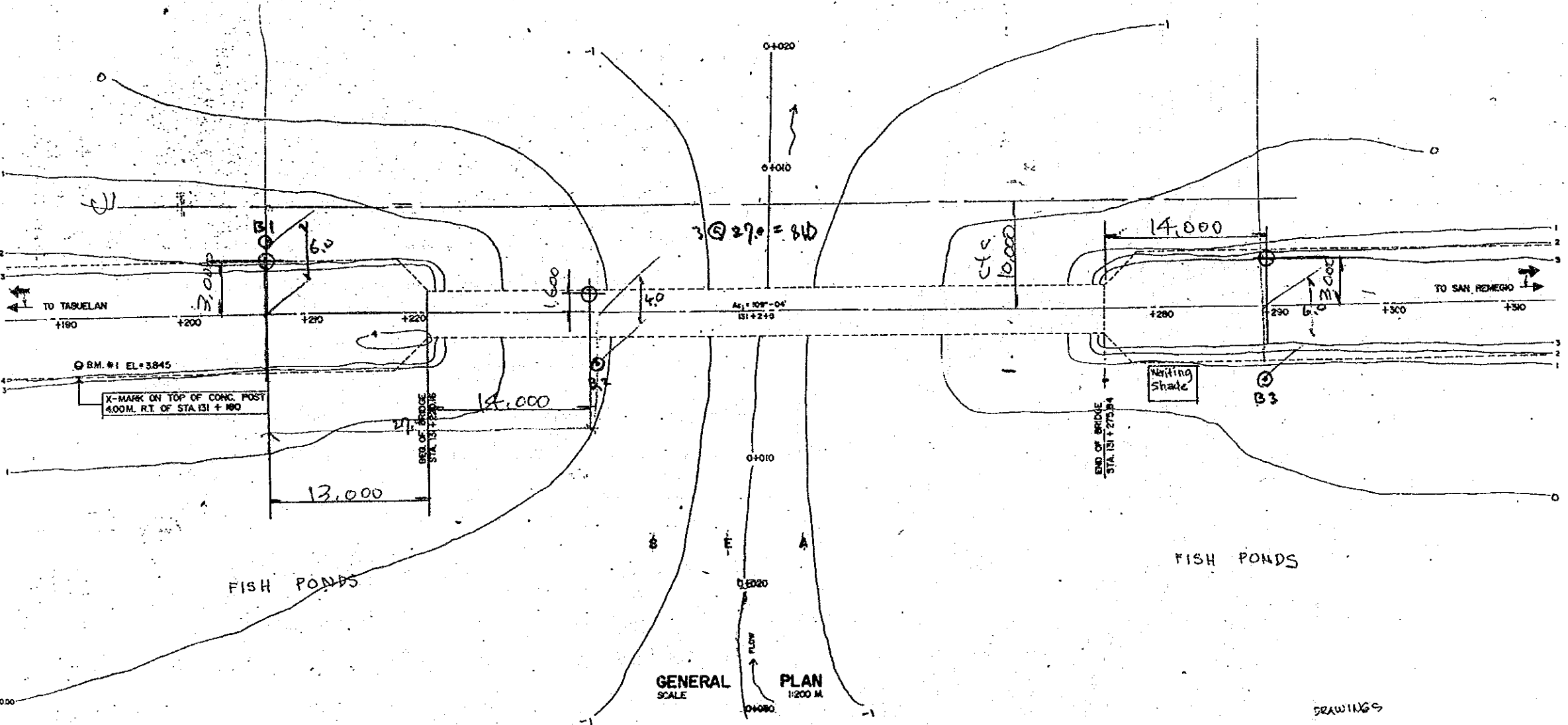
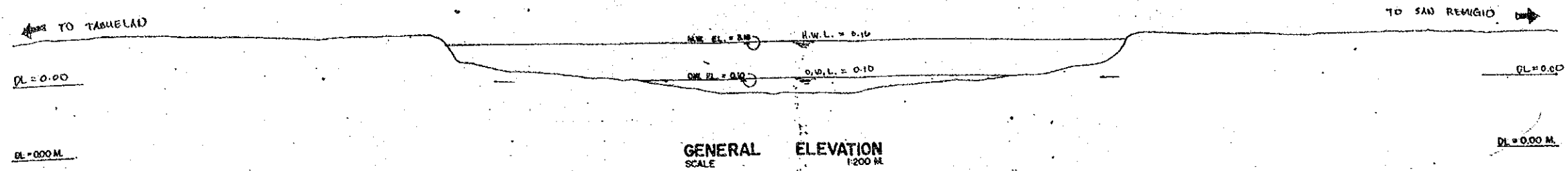
Katahira & Engineers International

Mr. Masao Aizawa (Geotechnical Surveyor)

Mr. Kenji Sugawara (Topographic Surveyor)

Masa
Mr. Masao Aizawa
Geotechnical Surveyor (KEI)

Kenji
Mr. Kenji Sugawara
Topographic Surveyor (KEI)



GENERAL NOTES

1. LOCATION OF BRIDGE SHOULD BE DETERMINED BY THE DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS (DPWH).
2. STRUCTURAL DIMENSIONS OF SUPERSTRUCTURES SHOULD NOT BE AMENDED.
3. TYPES AND DIMENSIONS OF SUBSTRUCTURES SHALL BE JUSTIFIED ACCORDING TO THE DETAILED DESIGN OF SUBSTRUCTURES PREPARED BY DPWH.
4. VERTICAL CLEARANCE BETWEEN THE M.J.L. AND THE BOTTOM OF THE GIRDERS OF THE SUPERSTRUCTURES SHALL BE NOT LESS THAN 10 METER (CARRYING NO BIG DEBRIS).
5. DESIGN SPECIFICATION
AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGE (14TH EDITION 1989).
6. DESIGN LOAD

DEAD LOAD:	CONCRETE	23.54 KN/m ³
	FILL MATERIALS	17.66 KN/m ³
LIVE LOAD:	ROADWAY LIVE LOAD	HS 20-44 (MS-18)
	SIDEWALK LIVE LOAD	2.873 KN/m ²

TEMPERATURE CHANGE:
RISE +10°, FALL -10°

EARTHQUAKE LOAD:
IN ACCORDANCE WITH "GUIDELINE FOR SEISMIC DESIGN OF BRIDGES"

OTHER LOADS: IN ACCORDANCE WITH 1989 AASHTO SPECIFICATION
7. MATERIALS

STEEL FOR SUPERSTRUCTURE:
STEEL SHALL BE SPECIFIED BY JIS (JAPANESE INDUSTRIAL STANDARD).

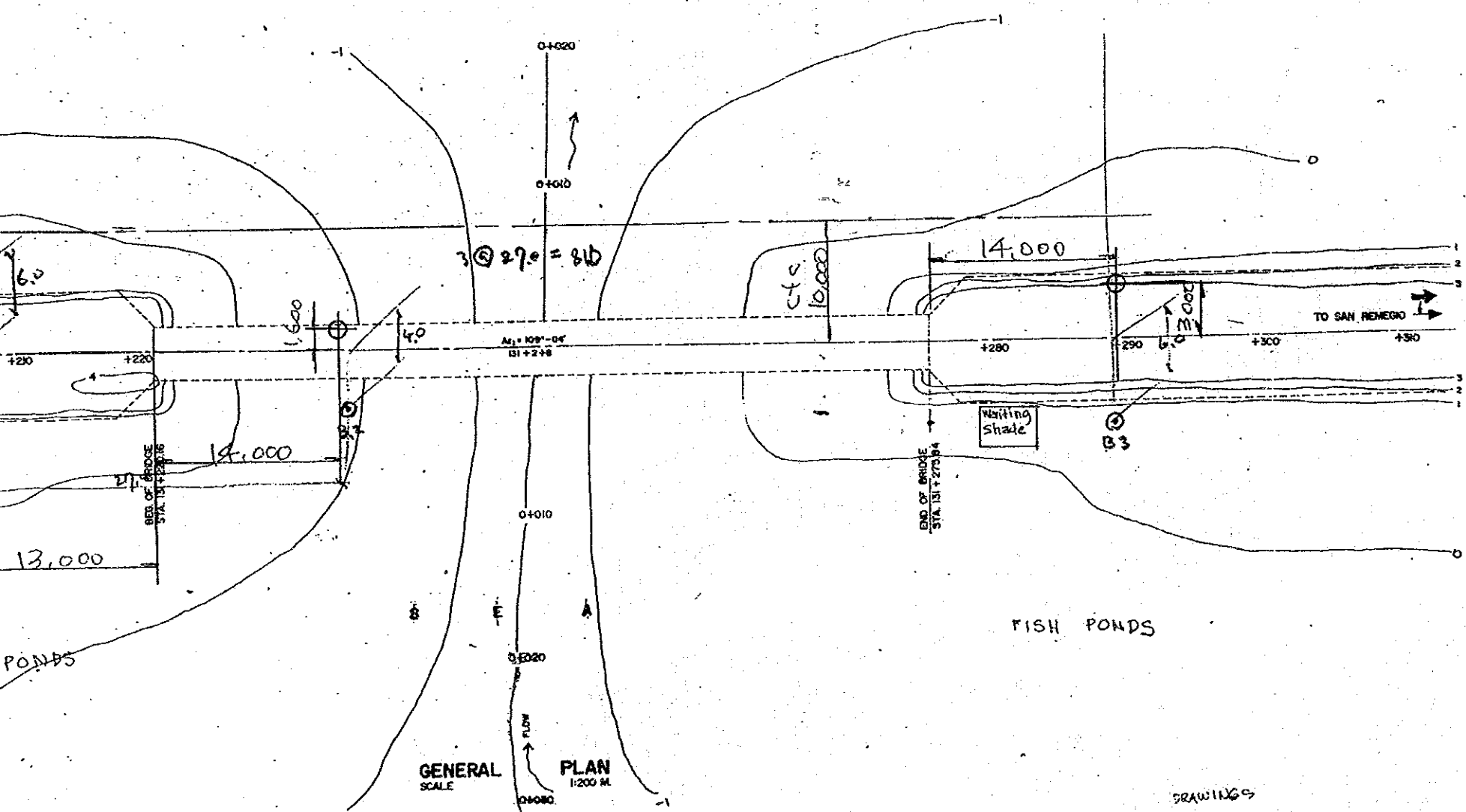
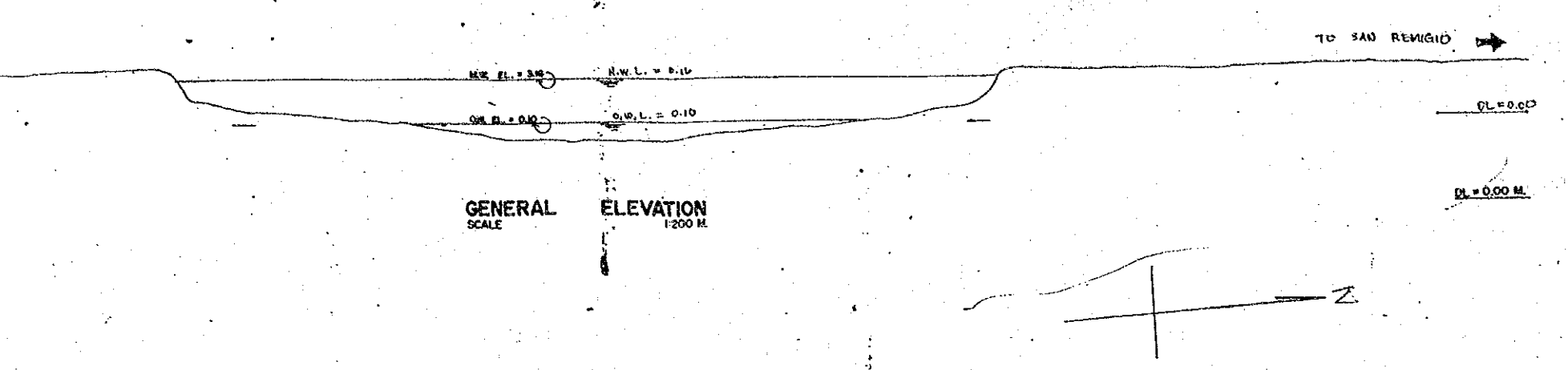
CONCRETE:
CONCRETE FOR PRESTRESSED CONCRETE GIRDER AND DECK SLAB. $f'_c = 34.5 \text{ MPa}$

CONCRETE FOR SUBSTRUCTURE $f'_c = 20.7 \text{ MPa}$

OTHERS: OTHER MATERIALS SHALL CONFORMED TO ASTM.

DRAWINGS

BRIDGE NO. 07-05-05	TAMBONGON BRIDGE SAN REMIGIO, CEBU	SHEET NO. 7
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M. Masao Aizawa
Mr. Masao Aizawa
Geotechnical Surveyor (KEI)

Kenji Sugawara
Mr. Kenji Sugawara
Topographic Surveyor (KEI)

Adriano Doroy
Mr. Adriano Doroy
Engr. IV DPWH Central Office (BOD)

Edwin Fortes
Mr. Edwin Fortes
Engr. III DPWH Central Office (Planning Service)

Antonio Basilio
Mr. Antonio Basilio
DPWH District Engineer, Cebu 1st

Monica Rabaya
Ms. Monica Rabaya
Engr. III, DPWH Planning & Design, Cebu 1st

Gloria Dindin
Ms. Gloria Dindin
Engr. IV, DPWH Planning & Design, Reg. VII Office

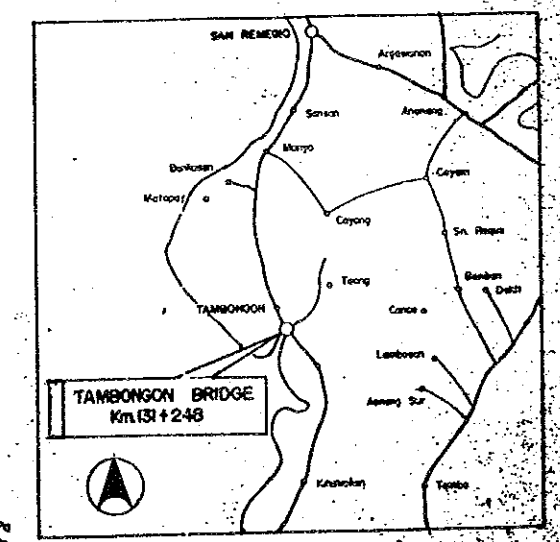
Bashir D. Rasuman
Mr. Bashir D. Rasuman
Regional Director, DPWH Region VII

GENERAL NOTES

1. LOCATION OF BRIDGE SHOULD BE DETERMINED BY THE DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS (DPWH).
2. STRUCTURAL DIMENSIONS OF SUPERSTRUCTURES SHOULD NOT BE AMENDED.
3. TYPES AND DIMENSIONS OF SUBSTRUCTURES SHALL BE JUSTIFIED ACCORDING TO THE DETAILED DESIGN OF SUBSTRUCTURES PREPARED BY DPWH.
4. VERTICAL CLEARANCE BETWEEN THE M.U.L. AND THE BOTTOM OF THE GRIDERS OF THE SUPERSTRUCTURES SHALL BE NOT LESS THAN 1.0 METER (CARRYING NO BIG DEBRIS).
5. DESIGN SPECIFICATION
AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGE (LATEST EDITION 1989).
6. DESIGN LOAD

DEAD LOAD:	CONCRETE	23.54 KN/m ³
	FILL MATERIALS	17.66 KN/m ³
LIVE LOAD:	ROADWAY LIVE LOAD	HS 20-44 (MS-181)
	SIDEWALK LIVE LOAD	2.873 KN/m ²
7. MATERIALS

STEEL FOR SUPERSTRUCTURE:	STEEL SHALL BE SPECIFIED BY JIS (JAPANESE INDUSTRIAL STANDARD).
CONCRETE:	CONCRETE FOR PRESTRESSED CONCRETE GIRDER AND DECK SLAB. $f'_c = 34.5$ MPa
	CONCRETE FOR SUBSTRUCTURE. $f'_c = 20.7$ MPa
OTHERS:	OTHER MATERIALS SHALL CONFORMED TO ASTM.





KATAHIRA & ENGINEERS INTERNATIONAL
TOKYO, JAPAN

8

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Chuo-ku, Tokyo, Japan
Cable Address: ENKATAHIRA TOKYO
Telephone: 03-583-4053
Telex: 2523838 KATAEJ J
Facsimile: 03-583-4055

Date: July 3, 1992

Gentlemen,

In connection with the Japan's Grant Aid, the Project for Constructing Bridges Along Rural Roads (Phase IV, Group 2), Katahira & Engineers International and representatives from DPWH (Central, Regional and District Offices) hereby agree on the following items for the construction of MOTON Bridge;

1. The proposed centerline will be located at the 2.0 downstream of existing of the bridge.
2. The Right-of-Way Acquisition and removal of all obstructions (to be undertaken by the DPWH)
3. Location of proposed detour at downstream.
4. Highest Water Level, 21.20 m.
5. Location of Bore Holes as shown in the plans (4 holes)

Attached herewith is the plan showing the above agreed items.

Names and signatures of Representatives are shown below.

DPWH Central Office

Mr. Adriano Doroy (Engr. IV, ROD)

Mr. Edwin Fortes (Engr. III, PS)

DPWH Regional Office

Mr. Basilio P. Rasuman (Regl. Director, Reg. VII)

Ms. Gloria Dindin (Engr. IV, Reg. VII, Planning & Design)

DPWH District Office

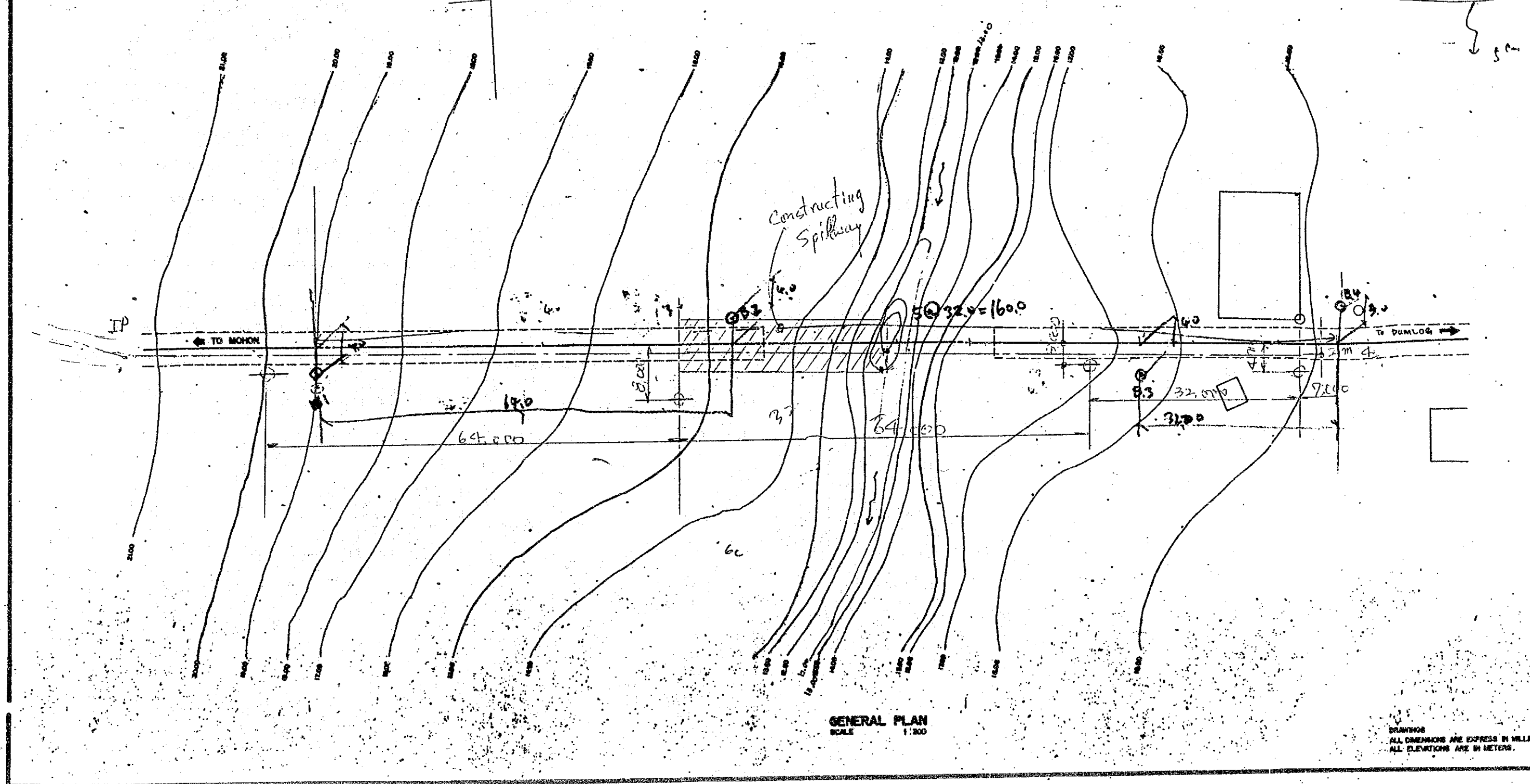
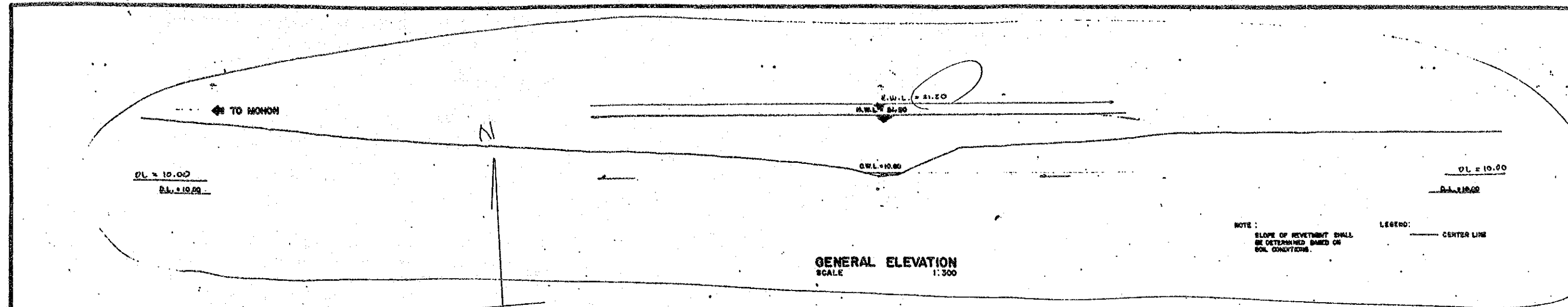
Mr. Wilfredo A. Ordesta (Dist. Engr., Cebu 2nd)

Ms. Estela Abellana (Engr. III, Planning & Design, Cebu 2nd)

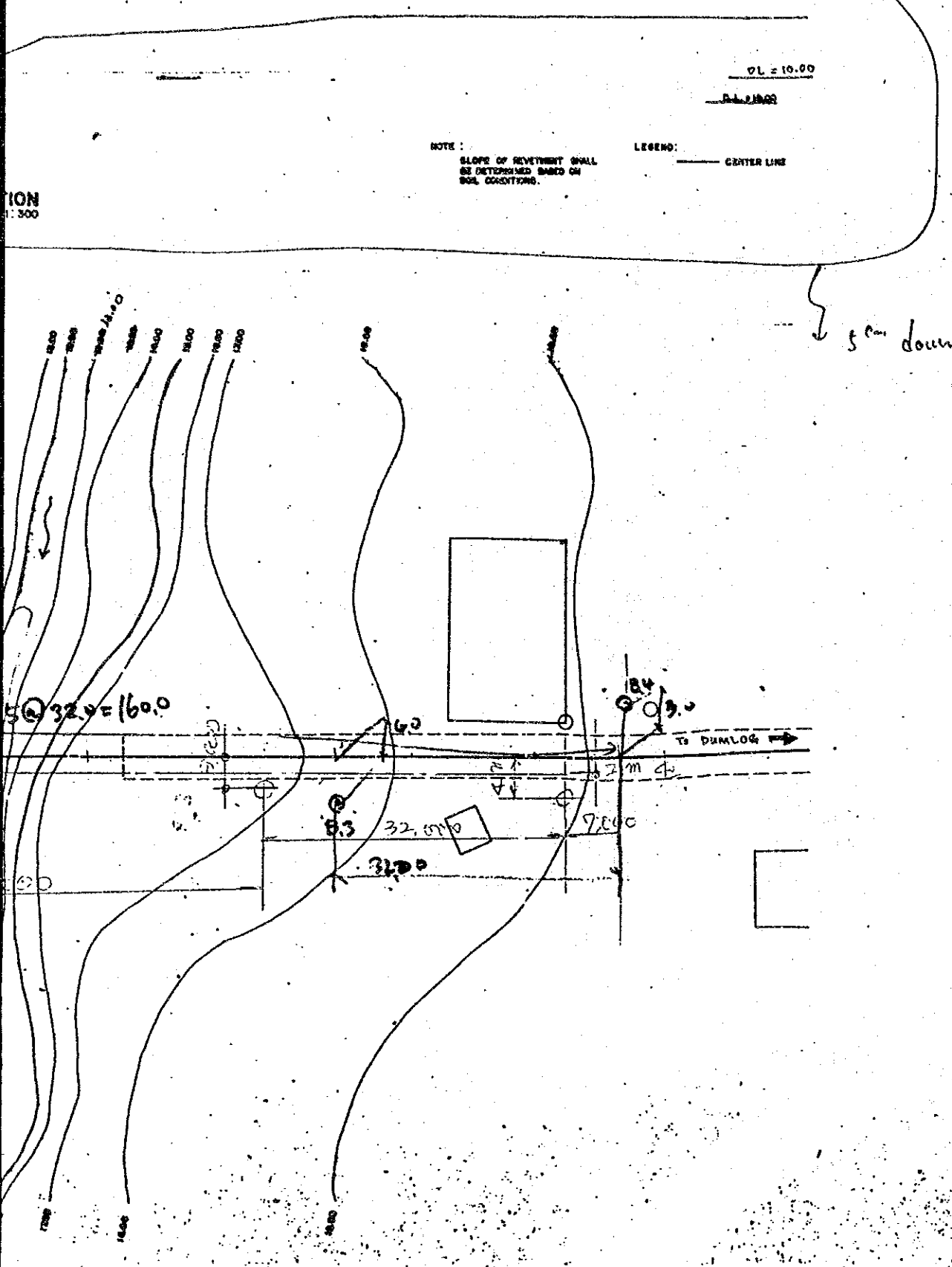
Katahira & Engineers International

Mr. Masao Aizawa (Geotechnical Surveyor)

Mr. Kenji Sugawara (Topographic Surveyor)



BRIDGE NO.	MOMON BRIDGE TALISAY, CEBU	SHEET NO.
07-08-07		



Masao Aizawa
Mr. Masao Aizawa
Geotechnical Surveyor (KEI)

Kenji Sugawara
Mr. Kenji Sugawara
Topographic Surveyor (KEI)

Adriano Doroy
Mr. Adriano Doroy
Engr. IV, DPWH Central Office (BOD)

Edwin Fortes
Mr. Edwin Fortes
Engr. III DPWH Central Office (Planning Service)

Wilfredo A. Ordesa
Mr. Wilfredo A. Ordesa 1/3
DPWH District Engineer, Cebu and

Estela Abellana
Ms. Estela Abellana
Engr. III, DPWH Planning & Design, Cebu 2nd

Gloria Dincin
Ms. Gloria Dincin
Engr. IV, DPWH Planning & Design, Reg. VII Office

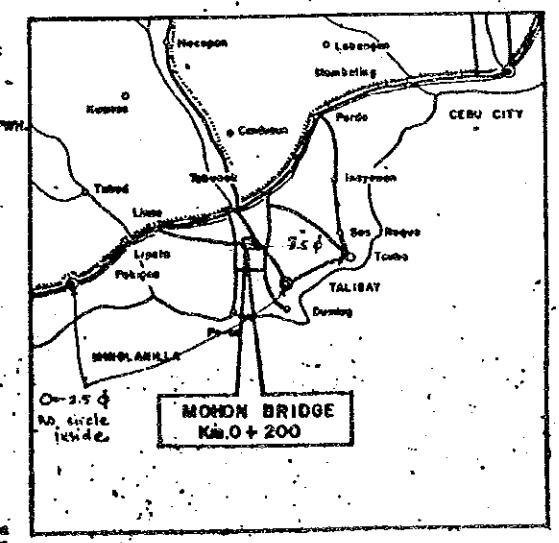
D. Rasuman
Mr. D. Rasuman
Regional Director, DPWH Region VII

GENERAL NOTES

1. LOCATION OF BRIDGE SHOULD BE DETERMINED BY THE DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS (DPWH).
2. STRUCTURAL DIMENSIONS OF SUPERSTRUCTURES SHOULD NOT BE AMENDED.
3. TYPES AND DIMENSIONS OF SUBSTRUCTURES SHALL BE JUSTIFIED, ACCORDING TO THE DETAILED DESIGN OF SUBSTRUCTURES PREPARED BY DPWH.
4. VERTICAL CLEARANCE BETWEEN THE M.F.L. AND THE BOTTOM OF THE GIRDERS OF THE SUPERSTRUCTURES SHALL BE NOT LESS THAN 1.0 METER (CARRYING NO BIG DEBRIS).
5. DESIGN SPECIFICATION: AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGE (14th EDITION 1989).
6. DESIGN LOAD

DEAD LOAD: CONCRETE	23.64 KN/m ³
FILL MATERIALS	17.66 KN/m ³
LIVE LOAD: ROADWAY LIVE LOAD HS 20-44 (MS-18)	
SIDEWALK LIVE LOAD	2.873 KN/m ²
TEMPERATURE CHANGE:	
RISE + 10°	FALL -10°
EARTHQUAKE LOAD:	IN ACCORDANCE WITH "GUIDELINE FOR SEISMIC DESIGN OF BRIDGES"
OTHER LOADS:	IN ACCORDANCE WITH 1989 AASHTO SPECIFICATION
7. MATERIALS

STEEL FOR SUPERSTRUCTURE:	STEEL SHALL BE SPECIFIED BY JIS (JAPANESE INDUSTRIAL STANDARD).
CONCRETE:	CONCRETE FOR PRESTRESSED CONCRETE GIRDER $f'_c = 24.5 \text{ MPa}$ AND DECK SLAB $f'_c = 20.7 \text{ MPa}$ CONCRETE FOR SUBSTRUCTURE $f'_c = 20.7 \text{ MPa}$
OTHERS:	OTHER MATERIALS SHALL CONFORM TO ASTM.



VICINITY MAP

DRAWINGS
ALL DIMENSIONS ARE EXPRESS IN MILLIMETER UNLESS OTHERWISE SHOWN IN THE PLAN.
ALL ELEVATIONS ARE IN METERS.



KATAHIRA & ENGINEERS INTERNATIONAL

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Chuo-ku, Tokyo, Japan
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Telephone: 03-583-4053
Telex: 2523838 KATAEG J
Facsimile: 03-583-4055

Date: July 2, 1992

Gentlemen,

In connection with the Japan's Grant Aid, the Project for Constructing Bridges Along Rural Roads (Phase IV, Group 2), Katahira & Engineers International and representatives from DPWH (Central, Regional and District Offices) hereby agree on the following items for the construction of ALIMANGO Bridge;

07-15-06A

1. The proposed centerline will be located at the downstream (as per plan) of the bridge.
2. The Right-of-Way Acquisition and removal of all obstructions (to be undertaken by the DPWH)
3. Location of proposed detour if possible at downstream if not, the road will be closed upon commencement.
4. Highest Water Level, 142.548 m.
5. Location of Bore Holes two bore holes^{as} shown in the plan.

Attached herewith is the plan showing the above agreed items.

Names and signatures of Representatives are shown below.

DPWH Central Office

Mr. Adriano D. Borja (Engr. IV, BOD)

Mr. Edwin Fortes (Engr. III, PS)

DPWH Regional Office

Mr. Basilio D. Rosuman (Reg'l. Director, Reg. VII)

Mrs. Gloria Andino (Engr. IV, Reg. VII Planning & Design)

DPWH District Office

Mrs. Filipina D. Oyo (OIC Toledo City Engineering Office)

Engr. Ciraco Salazar (Engr. II Toledo City Engg. Office)

Katahira & Engineers International

Mr. Masao Aizawa (Geotechnical Surveyor)

Mr. Kenji Sugawara (Topographic Surveyor)

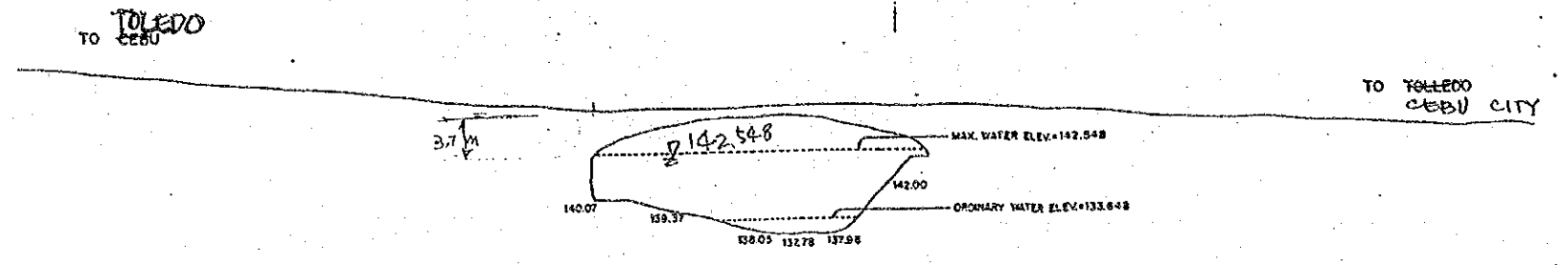
Note: Detour road no need for the road will be closed to traffic upon commencement of construction

Note: Detour Road no need for the road will be closed to traffic upon commencement of construction.

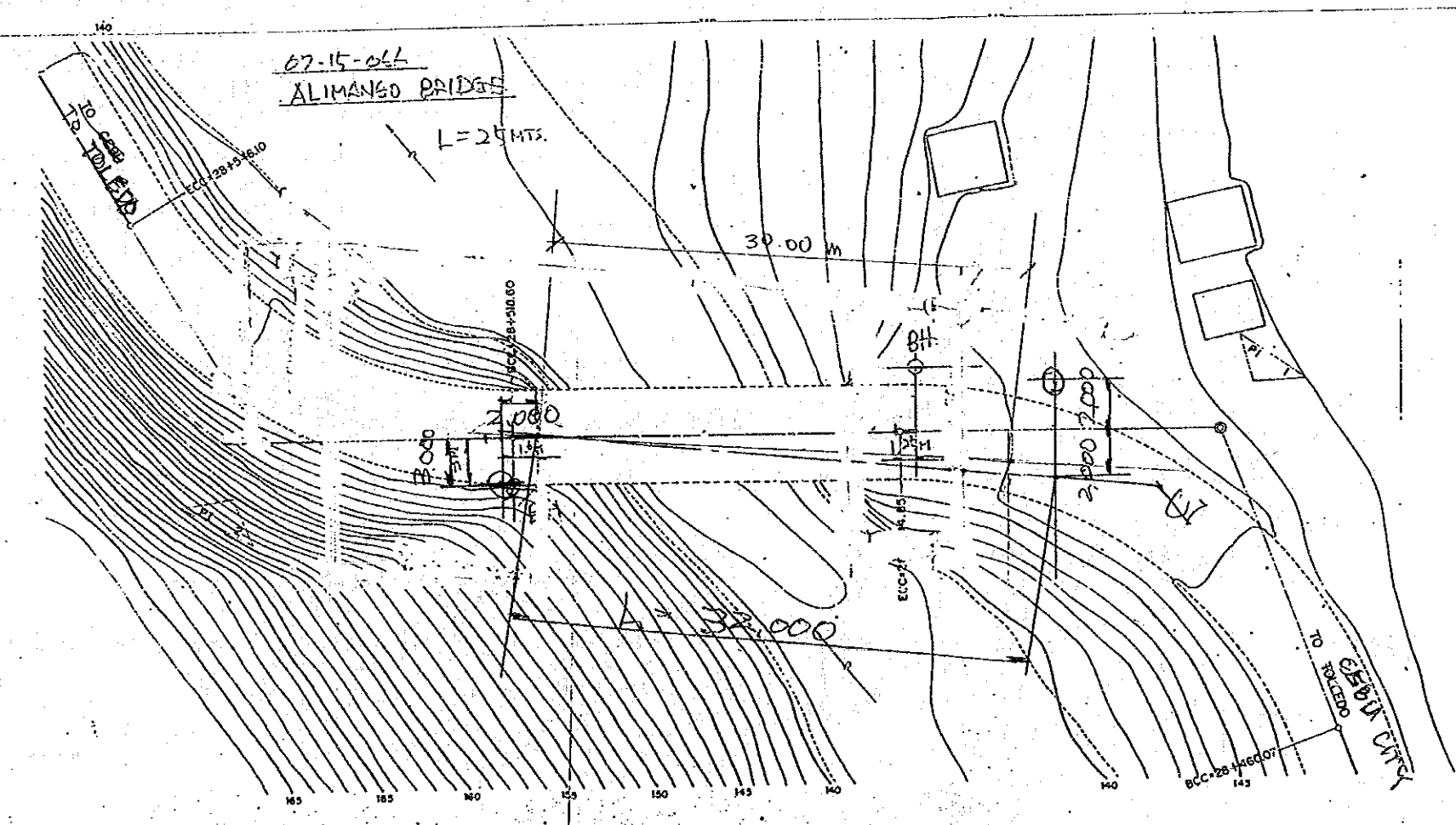
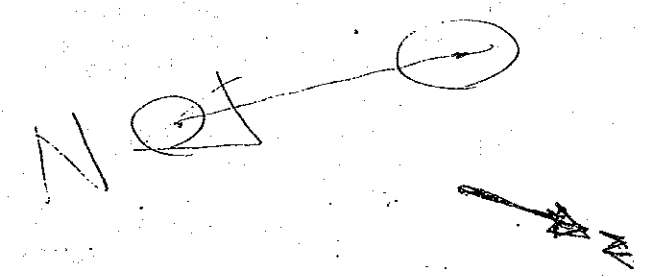
THE BASH
FOR CONSTRUCTING BRID

BRIDGE NO.
07-15-06A

Mr. Adrian
Engr. IV, DPWH Centre
Mr. Edwin
Engr. III DPWH Centre



GENERAL ELEVATION
SCALE: 1:200 MTS



GENERAL PLAN
SCALE: 1:200 MTS

Mr. Masao Aizawa
Geotechnical Surveyor (REL)

Kenji Sugawara
Mr. Kenji Sugawara
Topographic Surveyor (REL)

Ms. Filipina
(OIC Toledo)

Engr. Cif
Engr. II

Ms. Gloria
Engr. IV

Mr. Bajar
DPWH Regional

GENERAL NOTES

1. LOCATION OF BRIDGE SHOULD BE DETERMINED BY THE DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS (DPWH).
2. STRUCTURAL DIMENSIONS OF SUPERSTRUCTURES SHOULD NOT BE AMENDED.
3. TYPES AND DIMENSIONS OF SUBSTRUCTURES SHALL BE JUSTIFIED ACCORDING TO THE DETAILED DESIGN OF SUBSTRUCTURES PREPARED BY DPWH.
4. VERTICAL CLEARANCE BETWEEN THE N.F.L. AND THE BOTTOM OF THE SPANNS OF THE SUPERSTRUCTURE SHALL BE NOT LESS THAN 1.0 METER (CARRYING NO BIG DEBRIS).
5. DESIGN SPECIFICATION
AASHTO STANDARD SPECIFICATION FOR HIGHWAY BRIDGE (14th EDITION 1989)
6. DESIGN LOAD

DEAD LOAD	CONCRETE	23.54 KN/m ³
	FILL MATERIALS	17.66 KN/m ³
LIVE LOAD	ROADWAY LIVE LOAD	HS 20-44 (MS-18)
	SIDEWALK LIVE LOAD	2.673 KN/m ²
TEMPERATURE CHANGE		RISE + 10° FALL - 10°
EARTHQUAKE LOAD		IN ACCORDANCE WITH "GUIDELINE FOR SEISMIC DESIGN OF BRIDGES"
OTHER LOADS		IN ACCORDANCE WITH 1989 AASHTO SPECIFICATION
7. MATERIALS
STEEL FOR SUPERSTRUCTURE
STEEL SHALL BE SPECIFIED BY JIS (JAPANESE INDUSTRIAL STANDARD)
CONCRETE
CONCRETE FOR PRESTRESSED CONCRETE GIRDER (f_c' 34.5 MPa)
CONCRETE FOR DECK SLAB (f_c' 20.7 MPa)
CONCRETE FOR SUBSTRUCTURE (f_c' 20.7 MPa)
OTHERS
OTHER MATERIALS SHALL CONFORMED TO ASTM

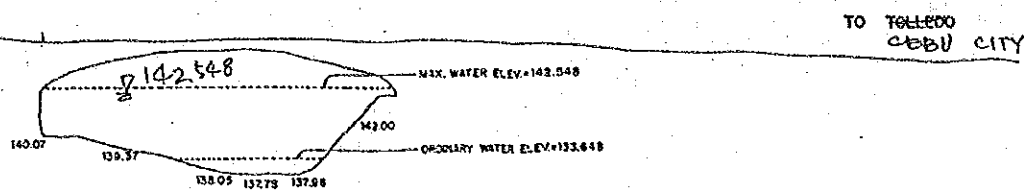
Note: Detour Road no need for the road will be closed to traffic upon commencement of construction.

THE BASIC DESIGN STUDY ON THE PROJECT FOR CONSTRUCTING BRIDGES ALONG RURAL ROADS (PHASE IV, GROUP)

BRIDGE NO.	ALIMANGO BRIDGE TOLEDO CITY	SHEET NO.
07-15-06A		

Mr. Adriano Doroy
Engr. IV, DPWH Central Office (BOD)

Mr. Edwin Fortes
Engr. II DPWH Central Office (Planning Service)



GENERAL ELEVATION
SCALE: 1:200 MTS

Ms. Filipinas D. Oyao
(ORC Toledo City Engineering Office)

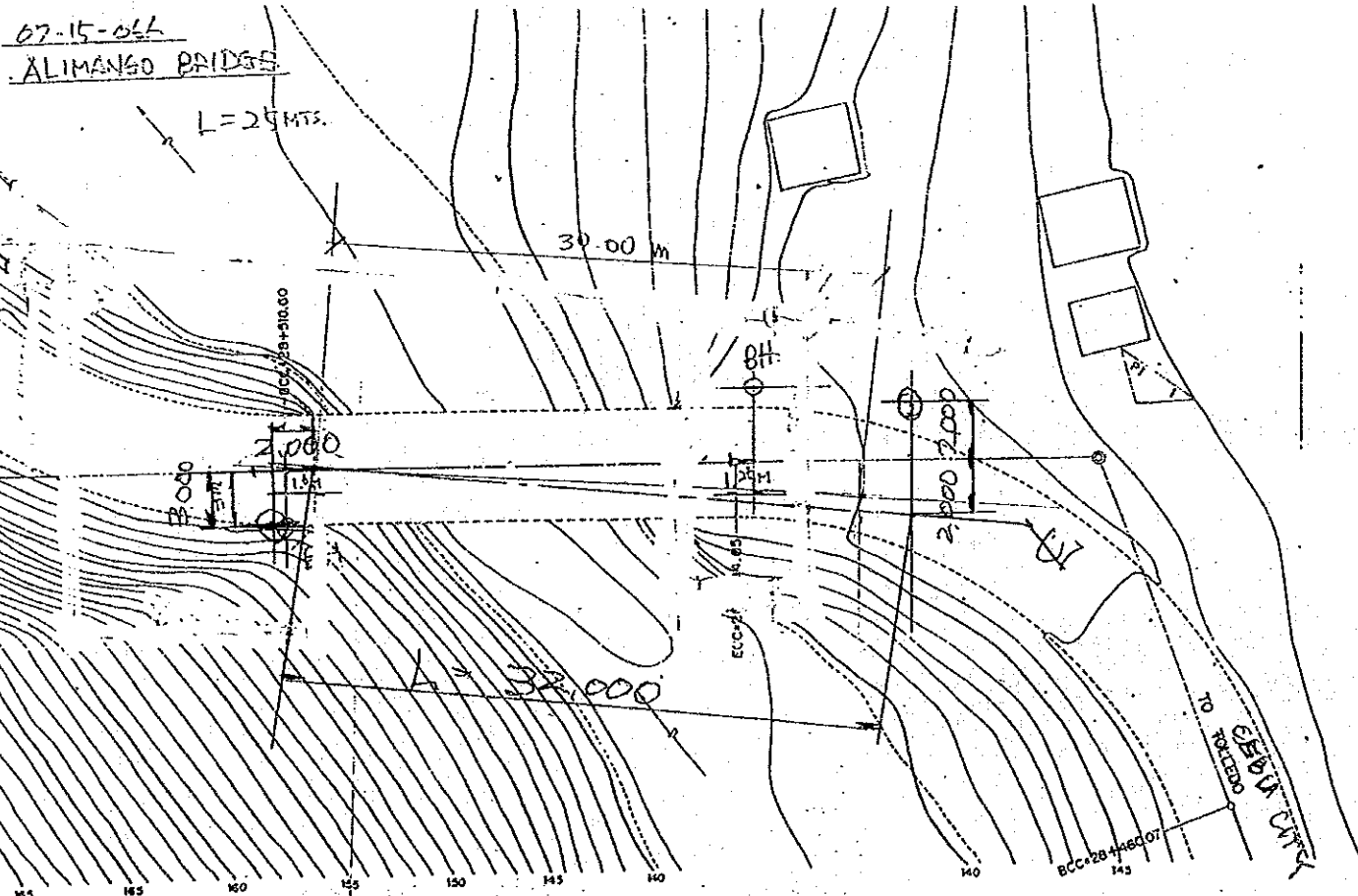
Engr. Ciracido A. Salazar, Jr.
Engr. II (Toledo Engg. Office)

Mr. Masao Aizawa
Geotechnical Surveyor (KEI)

Mr. Kenji Sugawara
Topographic Surveyor (KEI)

Ms. Gloria Dindin
Engr. IV (Region VII, Planning & Design)

Mr. Basim D. Rasulman
DPWH Regional Director (Region VII)



GENERAL PLAN
SCALE: 1:200 MTS

GENERAL NOTES

- LOCATION OF BRIDGE SHOULD BE DETERMINED BY THE DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS (DPWH).
- STRUCTURAL DIMENSIONS OF SUPERSTRUCTURES SHOULD NOT BE AMENDED.
- TYPES AND DIMENSIONS OF SUBSTRUCTURES SHALL BE JUSTIFIED ACCORDING TO THE DETAILED DESIGN OF SUBSTRUCTURES PREPARED BY DPWH.
- VERTICAL CLEARANCE BETWEEN THE M.F.L. AND THE BOTTOM OF THE GIRDERS OF THE SUPERSTRUCTURE SHALL BE NOT LESS THAN 1.0 METER (CARRYING NO BIG DEBUS).
- DESIGN SPECIFICATION
AASHTO STANDARD SPECIFICATION FOR HIGHWAY BRIDGE (14TH EDITION 1989)
- DESIGN LOAD

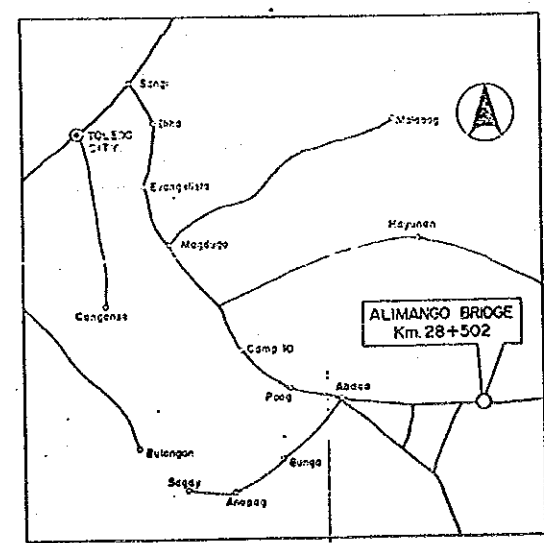
DEAD LOAD	CONCRETE	23.54 KN/m ³
	FILL MATERIALS	17.66 KN/m ³
LIVE LOAD	ROADWAY LIVE LOAD	HS 20-44 (MS-18)
	SIDEWALK LIVE LOAD	2.673 KN/m ²

TEMPERATURE CHANGE
RISE + 10° FALL - 10°

EARTHQUAKE LOAD
IN ACCORDANCE WITH "GUIDELINE FOR SEISMIC DESIGN OF BRIDGES"

OTHER LOADS: IN ACCORDANCE WITH 1989 AASHTO SPECIFICATION
- MATERIALS

STEEL FOR SUPERSTRUCTURE	STEEL SHALL BE SPECIFIED BY JIS (JAPANESE INDUSTRIAL STANDARD)
CONCRETE	CONCRETE FOR PRESTRESSED CONCRETE GIRDER 16' 34.5MPa CONCRETE FOR DECK SLAB 16' 20.7 MPa CONCRETE FOR SUBSTRUCTURE 16' 20.7 MPa
OTHERS	OTHER MATERIALS SHALL CONFORMED TO ASTM



VICINITY MAP



KATAHIRA & ENGINEERS INTERNATIONAL
TOKYO, JAPAN

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Chuo-ku, Tokyo, Japan
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Telephone: 03-583-4053
Telex: 2523838 KATAEG J
Facsimile: 03-583-4055

Date: July 5, 1992

Gentlemen,

In connection with the Japan's Grant Aid, the Project for Constructing Bridges Along Rural Roads (Phase IV, Group 2), Katahira & Engineers International and representatives from DPWH (Central, Regional and District Offices) hereby agree on the following items for the construction of ANAS Bridge;
08-01-01

1. The proposed centerline will be located at the existing centerline of the bridge.
2. The Right-of-Way Acquisition and removal of all obstructions (to be undertaken by the DPWH)
3. Location of proposed detour Fording at upstream.
4. Highest Water Level, 50.20 m.
5. Location of Bore Holes Three (3) Bore Holes as indicated in the plan

Attached herewith is the plan showing the above agreed items.

Names and signatures of Representatives are shown below.

DPWH Central Office

Mr. Edwin C. Matanguihan (Engr. IV, BOP)

Mr. Edwin Forbes (Engr. IV, P.S.)

DPWH Regional Office

Mr. Cesar E. LUMADUG (Asst. Div. Chief, Reg. VIII)

RENIS V. PABLANA JR. (ENGR. 7 CHIEF, PDD) Reg. VII

DPWH District Office

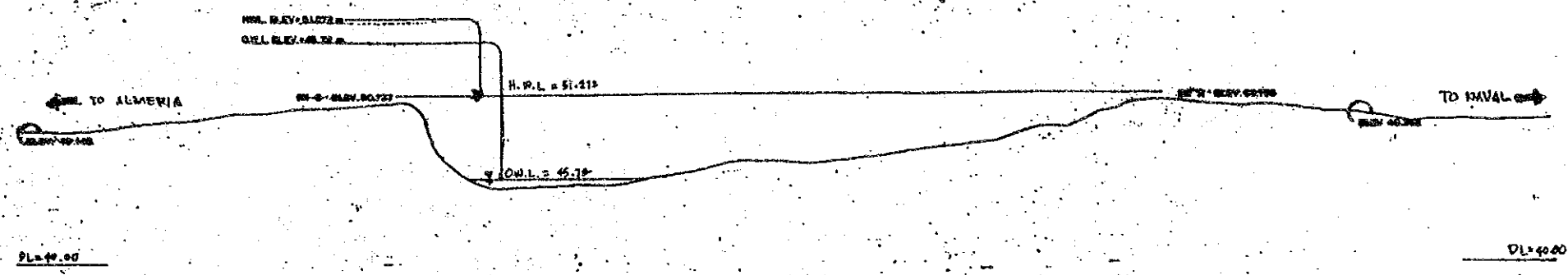
Mr. Romulo D. Mejia (Asst. DE, Biliiran District)

Katahira & Engineers International

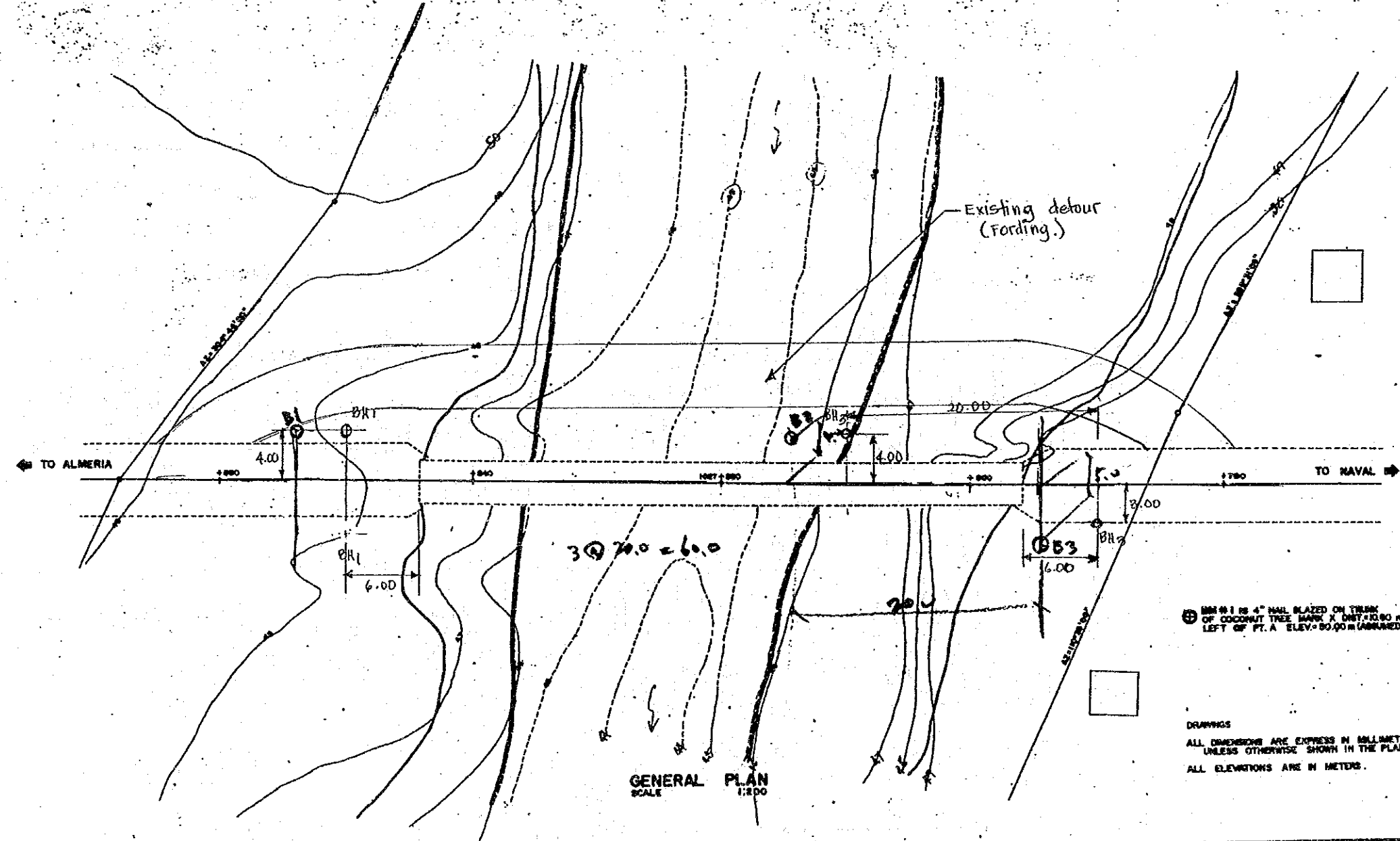
Mr. Masao Aizawa (Geotechnical Surveyor)

Mr. Kenji Sugawara (Topographic Surveyor)

河川改修工事計画図



GENERAL ELEVATION
SCALE 1:200



GENERAL PLAN
SCALE 1:500

Masao Aizawa
Mr. Masao Aizawa
Geotechnical Surveyor (KEI)

Kenji Sugawara
Mr. Kenji Sugawara
Topographic Surveyor (KEI)

- Presently used detour (fording) which is located at the upstream side of the existing bridge will be utilized.
- Proposed centerline of new bridge coincided with the centerline of existing bridge.

GENERAL NOTES

- LOCATION OF BRIDGE SHOULD BE DETERMINED BY THE DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS (DPWH).
- STRUCTURAL DIMENSIONS OF SUPERSTRUCTURES SHOULD NOT BE AMENDED.
- TYPES AND DIMENSIONS OF SUPERSTRUCTURES SHALL BE JUSTIFIED ACCORDING TO THE DETAILED DESIGN OF SUBSTRUCTURES PREPARED BY DPWH.
- VERTICAL CLEARANCE BETWEEN THE M.F.L. AND THE BOTTOM OF THE GIRDERS OF THE SUPERSTRUCTURE SHALL BE NOT LESS THAN 1.0 METER (CARRYING NO BIG BEAMS).
- DESIGN SPECIFICATION ASHTO STANDARD SPECIFICATION FOR HIGHWAY BRIDGE (11th EDITION 1998)
- DESIGN LOAD

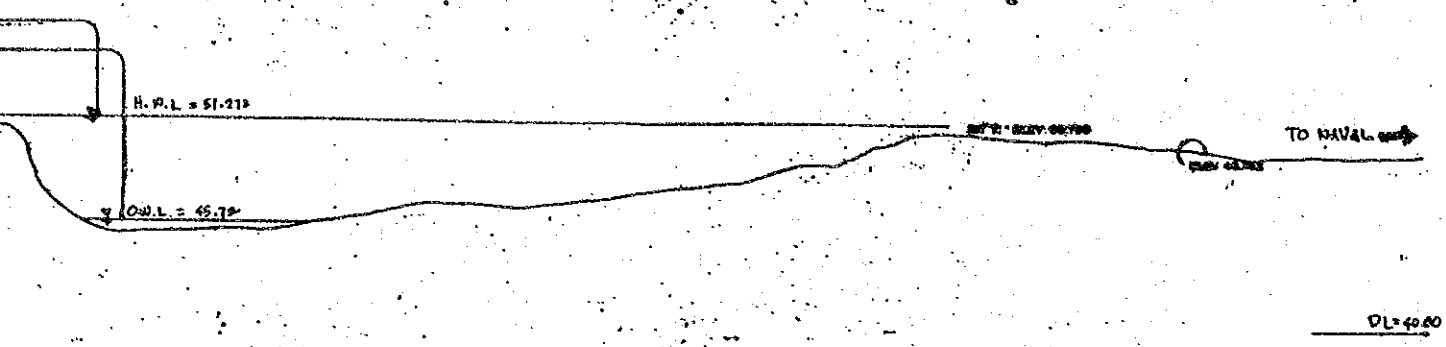
DEAD LOAD	CONCRETE	23.54 KN/m ³
	FILL MATERIALS	17.08 KN/m ³
LIVE LOAD	ROADWAY LIVE LOAD	NS 20-44 (MS-8)
	BIENNIAL LIVE LOAD	2.873 KN/m ²
- TEMPERATURE CHANGE
RISE +10° FALL -10°
- EARTHQUAKE LOAD
IN ACCORDANCE WITH "GUIDELINE FOR SEISMIC DESIGN OF BRIDGES"
- OTHER LOADS IN ACCORDANCE WITH 1998 ASHTO SPECIFICATION
- MATERIALS

STEEL FOR SUPERSTRUCTURE	STEEL SHALL BE SPECIFIED BY JIS (JAPANESE INDUSTRIAL STANDARD)
CONCRETE	CONCRETE FOR PRESTRESSED CONCRETE UNDER 10° = 34.5 MPa
	CONCRETE FOR DECK SLAB 10° = 30.7 MPa
	CONCRETE FOR SUBSTRUCTURE 10° = 30.7 MPa
OTHERS	OTHER MATERIALS SHALL CONFORM TO ASHTO

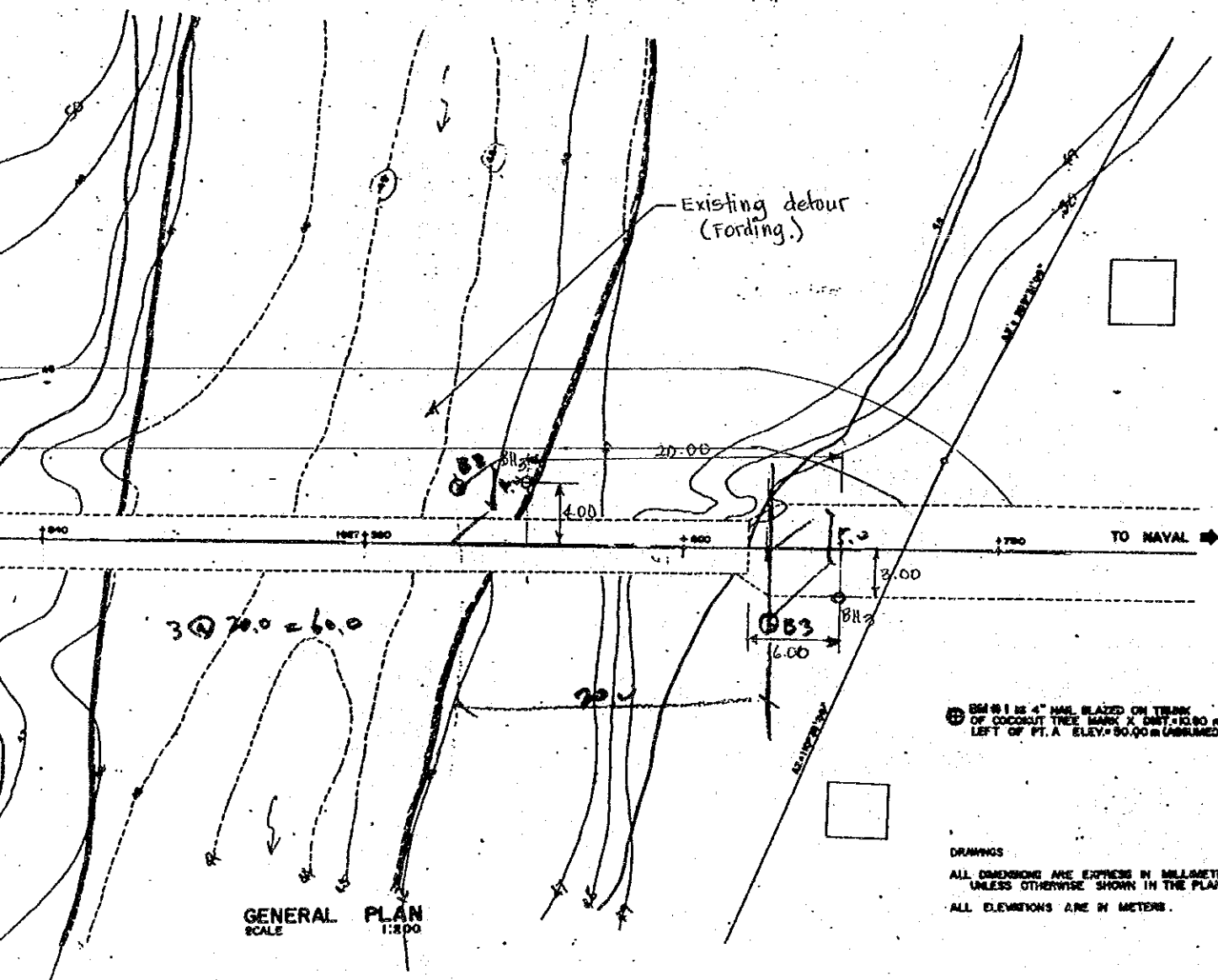
BR #1 IS 4" NAIL BLAZED ON TRUNK OF COCONUT TREE MARK A DIST. 10.00 m LEFT OF P.T. A. ELEV. 50.00 m (ASSUMED)

DRAWINGS
ALL DIMENSIONS ARE EXPRESS IN MILLIMETERS UNLESS OTHERWISE SHOWN IN THE PLANS.
ALL ELEVATIONS ARE IN METERS.

700 200 100 50 20 10 5



GENERAL ELEVATION SCALE 1:200



GENERAL PLAN SCALE 1:500

Mr. Masao Aizawa
Mr. Masao Aizawa
Geotechnical Surveyor (KEI)

Mr. Kenji Sugawara
Mr. Kenji Sugawara
Topographic Surveyor (KEI)

Mr. Edwin C. Matangahan
Mr. Edwin C. Matangahan
Engr. IV, Bureau of Design, Central Office

Mr. Edwin Fortes
Mr. Edwin Fortes
Engr. III, Planning Service, Central Office

Mr. Reynaldo D. Mejia
Mr. Reynaldo D. Mejia
Assistant District Engr. (Biliran Dist.) Reg. VIII

Chief, Division of PPD (Reg. VIII)
Chief, Division of PPD (Reg. VIII)

Chief, PPD (Region VIII)
Chief, PPD (Region VIII)

- Presently used detour (fording) which is located at the upstream side of the existing bridge will be utilized.
- Proposed centerline of new bridge coincided with the centerline of existing bridge.

GENERAL NOTES

- LOCATION OF BRIDGE SHOULD BE DETERMINED BY THE DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS (DPWH).
- STRUCTURAL DIMENSIONS OF SUPERSTRUCTURES SHOULD NOT BE AMENDED.
- TYPES AND DIMENSIONS OF SUBSTRUCTURES SHALL BE JUSTIFIED ACCORDING TO THE DETAILED DESIGN OF SUBSTRUCTURES PREPARED BY DPWH.
- VERTICAL CLEARANCE BETWEEN THE M.F.L. AND THE BOTTOM OF THE GIRDERS OF THE SUPERSTRUCTURE SHALL BE NOT LESS THAN 1.0 METER (SCAFFOLDING NO. 818 (SBR-18)).
- DESIGN SPECIFICATION
AASHTO STANDARD SPECIFICATION FOR HIGHWAY BRIDGE (1985 EDITION 1988)
- DESIGN LOAD

DEAD LOAD	CONCRETE	23.84 KN/m ³
	FILL MATERIALS	17.00 KN/m ³
LINE LOAD	ROADWAY LINE LOAD	HS 20-44 (MS-88)
	SUBPAVEMENT LINE LOAD	2.873 KN/m ²

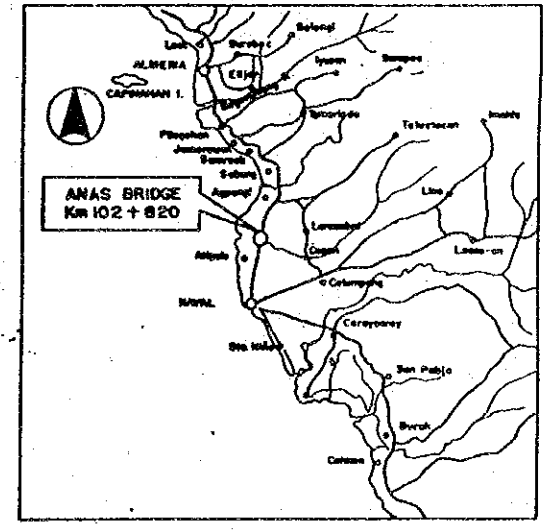
TEMPERATURE CHANGE
RISE +10° FALL -10°

EARTHQUAKE LOAD
IN ACCORDANCE WITH "GUIDELINE FOR SEISMIC DESIGN OF BRIDGES"
- OTHER LOADS IN ACCORDANCE WITH 1988 AASHTO SPECIFICATION
- MATERIALS

STEEL FOR SUPERSTRUCTURE	STEEL SHALL BE SPECIFIED BY JIS (JAPANESE INDUSTRIAL STANDARD)	
CONCRETE	CONCRETE FOR PRESTRESSED CONCRETE	ORDER $f_c = 34.0$ MPa
	CONCRETE FOR DECK SLAB	$f_c = 20.7$ MPa
	CONCRETE FOR SUBSTRUCTURE	$f_c = 20.7$ MPa
OTHERS	OTHER MATERIALS SHALL CONFORMED TO ASTM	

BM #1 IS 4" NAIL BLAZED ON TRUNK OF COCONUT TREE MARK X DIST. 10.80 m. LEFT OF PT. A ELEV. = 90.00 m (ASSUMED)

DRAWINGS
ALL DIMENSIONS ARE EXPRESSED IN MILLIMETERS UNLESS OTHERWISE SHOWN IN THE PLANS.
ALL ELEVATIONS ARE IN METERS.



VICINITY MAP



KATAHIRA & ENGINEERS INTERNATIONAL
TOKYO, JAPAN



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Chuo-ku, Tokyo, Japan
Cable Address: ENKATAHIRA TOKYO
Telephone: 03-563-4033
Telex: 2523838 KATAEB J
Facsimile: 03-563-4035

Date: July 5, 1992

Gentlemen,

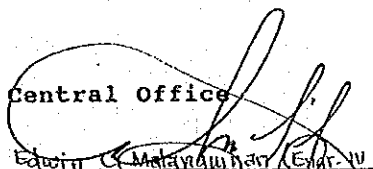
In connection with the Japan's Grant Aid, the Project for Constructing Bridges Along Rural Roads (Phase IV, Group 2), Katahira & Engineers International and representatives from DPWH (Central, Regional and District Offices) hereby agree on the following items for the construction of ELIZABETH Bridge;

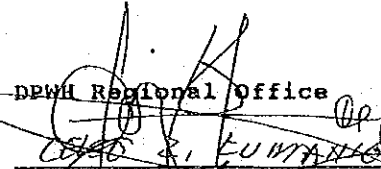
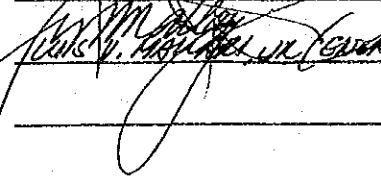
08-03-04

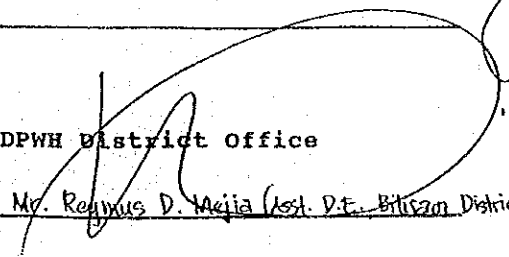
1. The proposed centerline will be located at the downstream of the bridge.
2. The Right-of-Way Acquisition and removal of all obstructions (to be undertaken by the DPWH)
3. Location of proposed detour existing bridge.
4. Highest Water Level, 51.40 m.
5. Location of Bore Holes Three (3) bore holes as indicated in the plan.

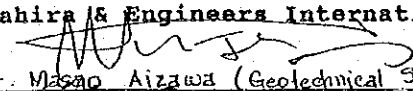
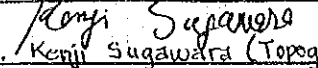
Attached herewith is the plan showing the above agreed items.

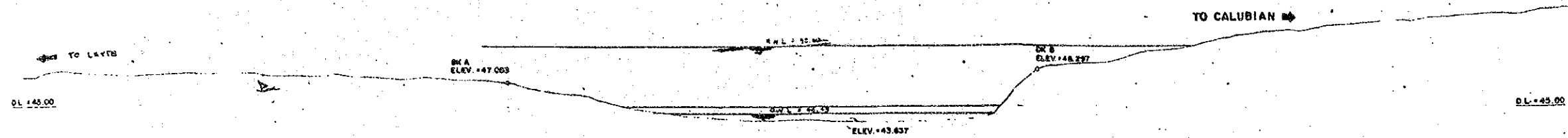
Names and signatures of Representatives are shown below.

DPWH Central Office

 Mr. Edwin Fortes (Eng. III (P.S.))
 Mr. Edwin Fortes (Eng. III (P.S.))

DPWH Regional Office

 Asst. Div. Chief, Reg. VII

 Asst. Div. Chief, Reg. VII

DPWH District Office

 Mr. Reginald D. Mejia (Asst. D.E. - Biliran District)

Katahira & Engineers International

 Mr. Masao Aizawa (Geotechnical Surveyor)

 Mr. Kenji Sugawara (Topographic Surveyor)

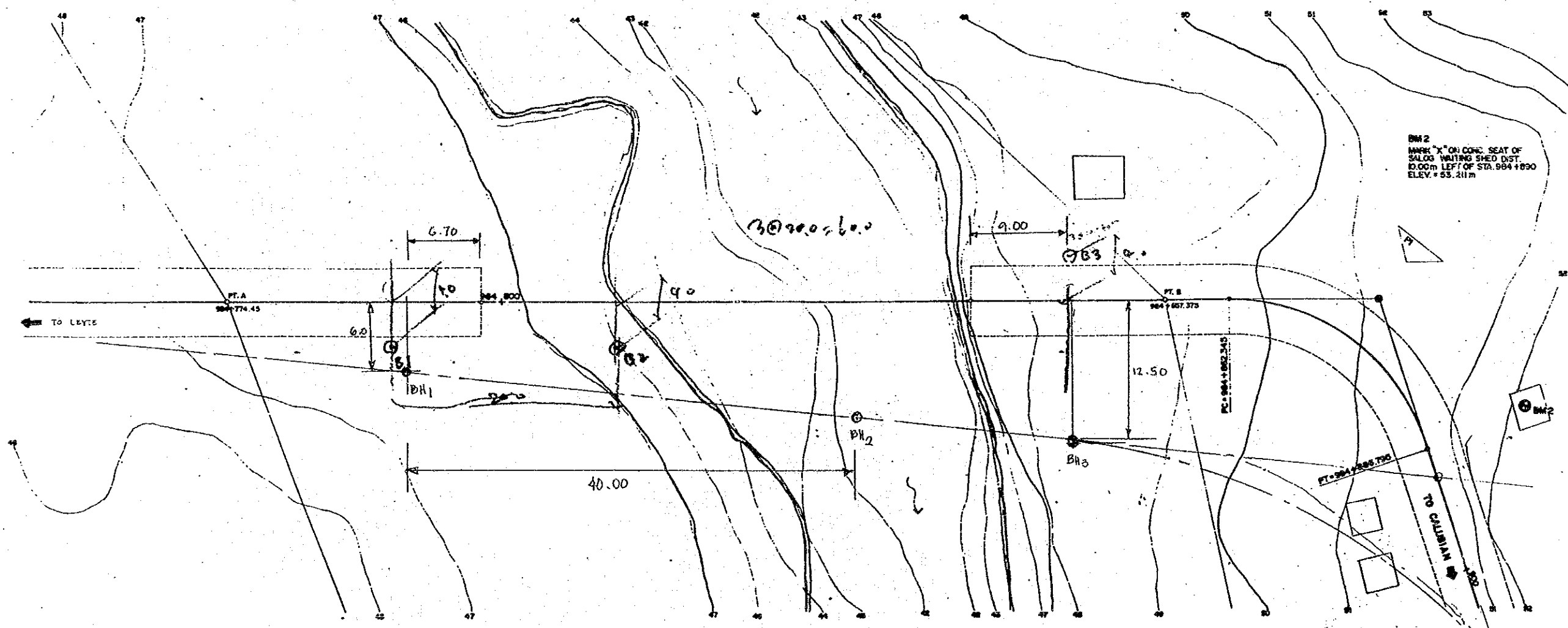


GENERAL ELEVATION
SCALE 1:200

Mr. Masao Kizawa
Geotechnical Surveyor (KEI)

Kenji Sugawara
Topographic Surveyor (KEI)

- Existing bridge will serve as the detour with necessary supports.
- Affected house and electric posts must be relocated and thus survey for properties should be conducted as early as possible.



GENERAL PLAN
SCALE 1:200

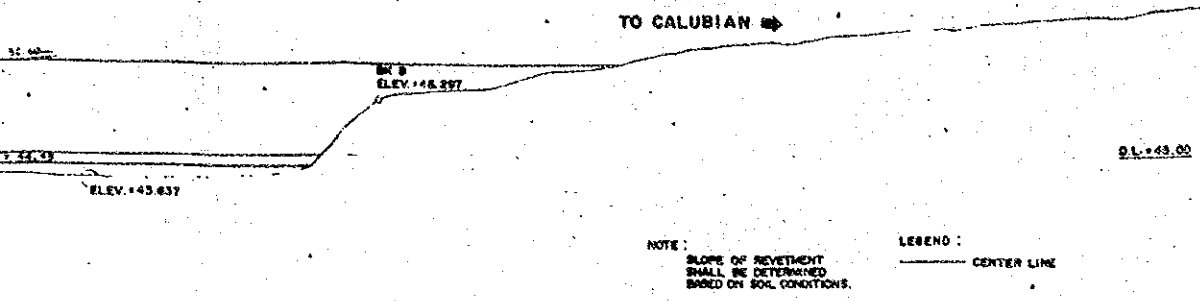
DRAWINGS
ALL DIMENSIONS ARE EXPRESS IN MILLIMETER UNLESS OTHERWISE SHOWN IN THE PLANS.
ALL ELEVATIONS ARE IN METER.

GENERAL NOTES

- LOCATION OF BRIDGE SHOULD BE DETERMINED BY PUBLIC WORKS AND HIGHWAYS (DPWH).
- STRUCTURAL DIMENSIONS OF SUPERSTRUCTURE SHALL BE DETERMINED BY THE ARCHITECT.
- TYPES AND DIMENSIONS OF SUPERSTRUCTURE SHALL BE DETERMINED BY THE ARCHITECT.
- VERTICAL CLEARANCE BETWEEN THE M.F.L. OF THE SUPERSTRUCTURE SHALL BE NOT LESS THAN 4.50m (CARRYING NO BIG DEBRIS).
- DESIGN SPECIFICATION SHALL BE IN ACCORDANCE WITH AASHTO STANDARD SPECIFICATION FOR BRIDGES.
- DESIGN LOAD
 - DEAD LOAD CONCRETE
 - FILL MATERIALS
 - LIVE LOAD ROADWAY LIVE LOAD
 - SIDEWALK LIVE LOAD
 - TEMPERATURE CHANGE RISE +10° FALL -10°
 - EARTHQUAKE LOAD IN ACCORDANCE WITH CODE OF BRIDGES
 - OTHER LOADS IN ACCORDANCE WITH CODE OF BRIDGES
- MATERIALS
 - STEEL FOR SUPERSTRUCTURE SHALL BE SPECIFIED IN ACCORDANCE WITH INDUSTRIAL STANDARD
 - CONCRETE FOR PIER SHALL BE PRESTRESSING CONCRETE FOR DECK SHALL BE CONCRETE FOR SUBSTRUCTURE SHALL BE CONCRETE FOR SUBSTRUCTURE
 - OTHERS OTHER MATERIALS SHALL BE SPECIFIED IN ACCORDANCE WITH INDUSTRIAL STANDARD

THE BASIC DESIGN ON THE PROJECT
FOR CONSTRUCTING BRIDGES ALONG RURAL ROADS (PHASE IV, GROUP 2)

BRIDGE NO.	ELIZABETH BRIDGE	NO.
08-03-04	LEYTE, LEYTE	



Mr. Masao Aizawa
Geotechnical Surveyor (KEI)

Kenji Supanera
Mr. Kenji Sugawara
Topographic Surveyor (KEI)

Mr. Edwin C. Matangahan
Engr. IV Bureau of Design, Central Office.

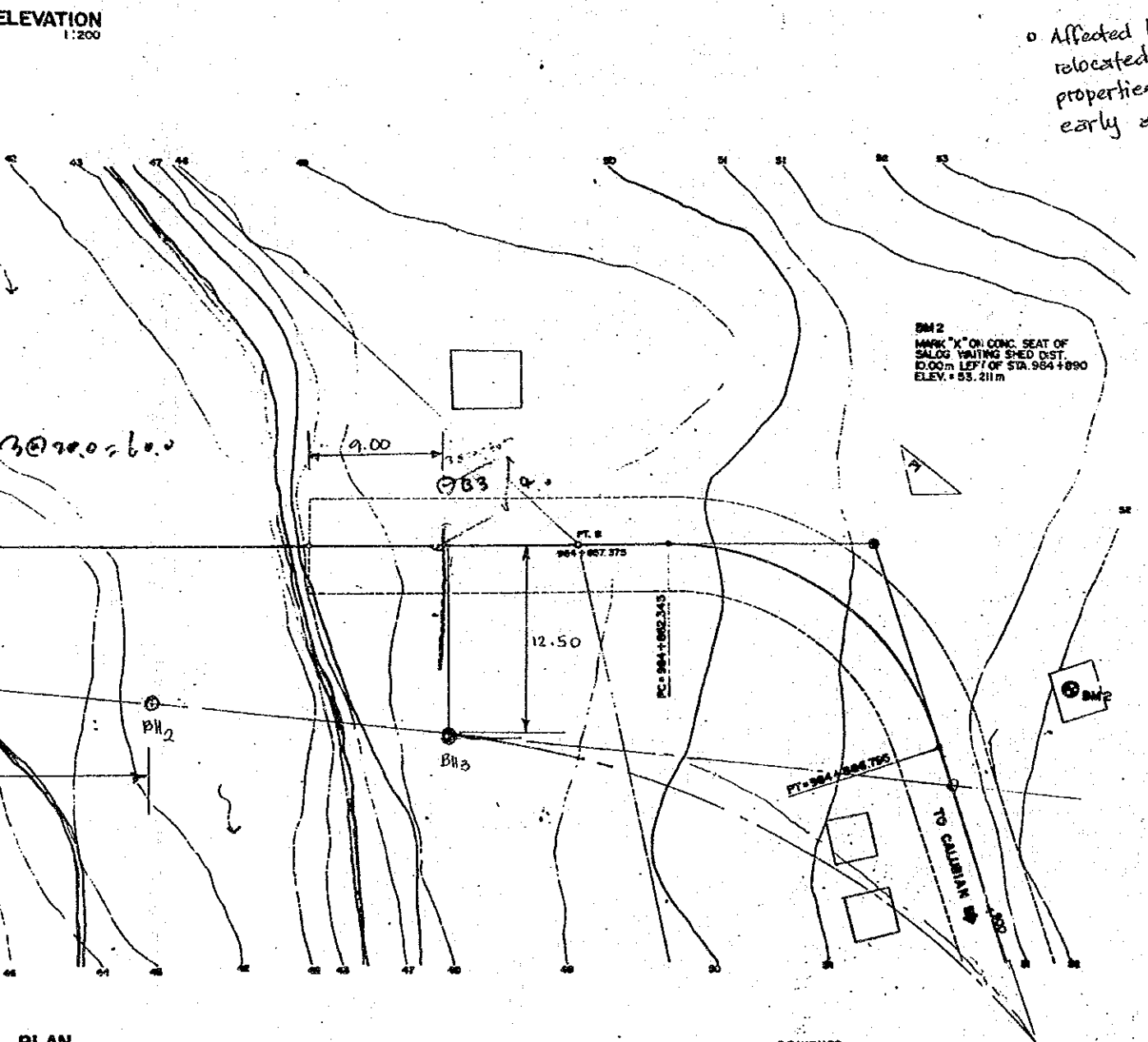
Mr. Edwin Fortes
Eng III, Planning Service, Central Office.

- Existing bridge will serve as the detour with necessary supports.
- Affected house and electric posts must be relocated and thus survey for properties should be conducted as early as possible.

Mr. Reynold D. Mejia
Assistant District Engr., Biliran District, Region VIII

CELESTO L. LUMANTOG
Asst. District Engr. (Reg. VIII)

LOUIS V. MARIANO, JR.
ENGINEER I
CHIEF PDD (Reg. VIII)

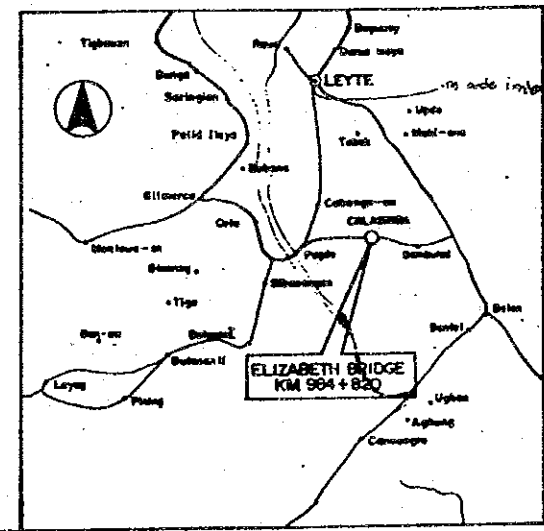


GENERAL NOTES

- LOCATION OF BRIDGE SHOULD BE DETERMINED BY THE DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS (DPWH).
- STRUCTURAL DIMENSIONS OF SUPERSTRUCTURES SHOULD NOT BE AMENDED.
- TYPES AND DIMENSIONS OF SUBSTRUCTURES SHALL BE JUSTIFIED ACCORDING TO THE DETAILED DESIGN OF SUBSTRUCTURES PREPARED BY DPWH.
- VERTICAL CLEARANCE BETWEEN THE M.F.L. AND THE BOTTOM OF THE GIRDERS OF THE SUPERSTRUCTURE SHALL BE NOT LESS THAN 1.0 METER (CARRYING NO BIG DEBRIS).
- DESIGN SPECIFICATION AASHTO STANDARD SPECIFICATION FOR HIGHWAY BRIDGE (14th EDITION 1989)
- DESIGN LOAD

DEAD LOAD	CONCRETE	23.54 KN/m ³
	FILL MATERIALS	17.06 KN/m ³
LIVE LOAD	ROADWAY LIVE LOAD	HS 20-44 (MS-16)
	SIDEWALK LIVE LOAD	2.873 KN/m ²
TEMPERATURE CHANGE		RISE + 10° FALL - 10°
EARTHQUAKE LOAD		IN ACCORDANCE WITH "GUIDELINE FOR SEISMIC DESIGN OF BRIDGES"
OTHER LOADS		IN ACCORDANCE WITH 1989 AASHTO SPECIFICATION
- MATERIALS

STEEL FOR SUPERSTRUCTURE		STEEL SHALL BE SPECIFIED BY JIS (JAPANESE INDUSTRIAL STANDARD)
CONCRETE	CONCRETE FOR PRESTRESSED CONCRETE GIRDER	f _c = 34.5 MPa
	CONCRETE FOR DECK SLAB	f _c = 20.7 MPa
	CONCRETE FOR SUBSTRUCTURE	f _c = 20.7 MPa
OTHERS		OTHER MATERIALS SHALL CONFORMED TO ASTM



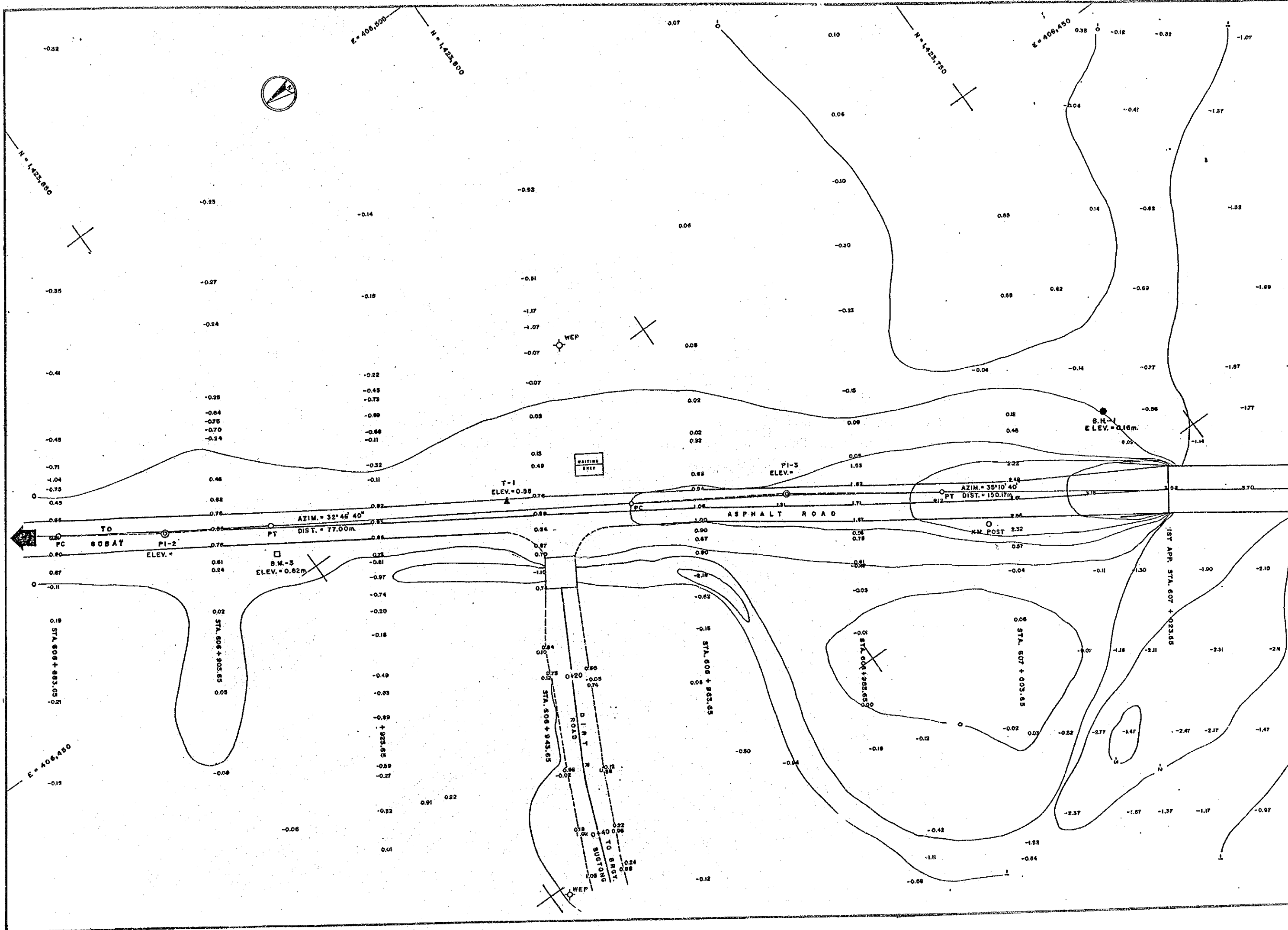
VICINITY MAP

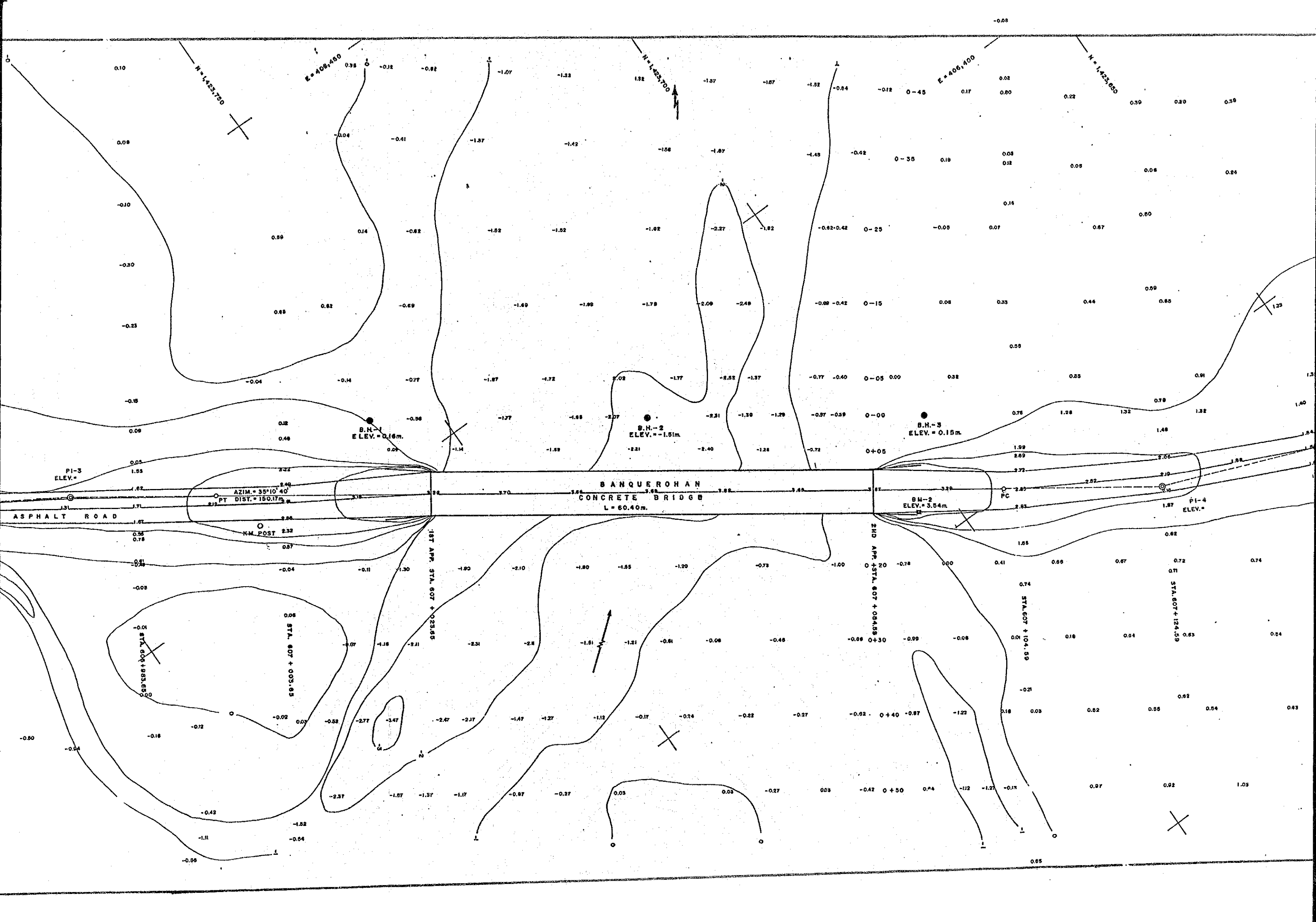
付 属 资 料 6

测 量 调 查

表1 測量成果品一覽表

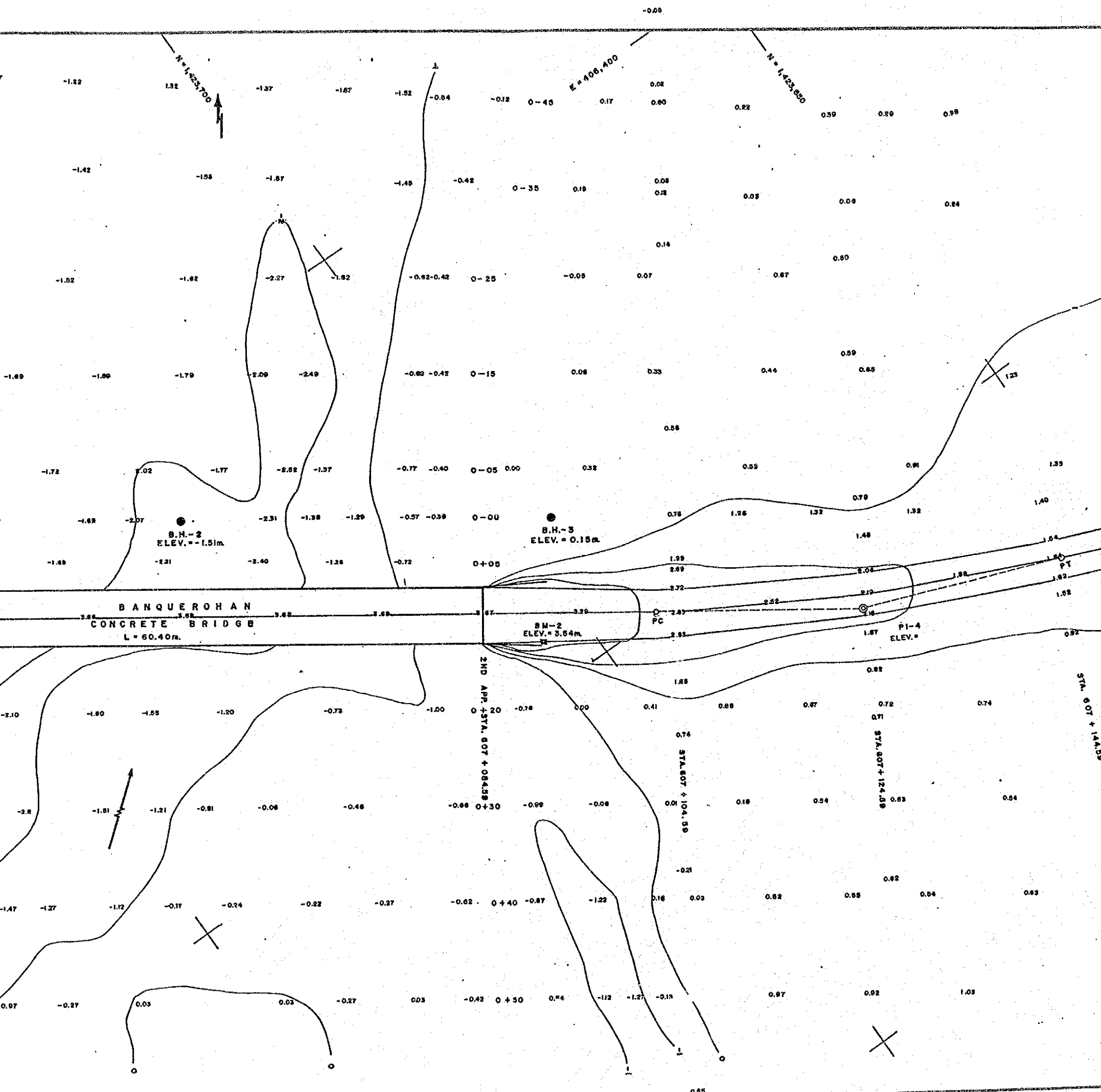
番号	橋梁番号	橋梁名	橋梁位置	中心綫測量 (m)	縱断面測量 (m)	道路横断面測量 (断面)	河川横断面測量 (断面)	標石 (箇所)	地形平面図 (枚)
1	05.02.04	Banquerohan Bridge	km. 607 + 023.60 Gubat-Barcelona-Balusuan Road Barcelona, Sorsogon	540	540	24	11	3	1
2	05.03.01	Hiloma Bridge	km. 151 + 600 Yorac-San Andres-Caramoran Pandan Road, Catanduanes	330	330	15	11	3	1
3	05.06.04	Langang Bridge	km. 56 + 129.33 From Masbate Port, Masbate-Arroyo Road Masbate	400	400	0	10	4	1
4	05.06.05	Potot Bridge	km. 37 + 739.78 From Masbate Port Masbate-Balud Road, Masbate	240	240	10	23	4	1
5	06.06.04	Lawigan Bridge	km. 70 + 900 Tiolas-Sinogbuhan Road San Joaquin, Ilocilo	345	345	13	15	3	1
6	07.05.01	Apalain Bridge	km. 97 + 803 Toledo-Tabuelan Road Cebu I	350	350	18	0	2	1
7	07.05.05	Tambongon Bridge	km. 131 + 248 Antonio de Pio Highway Cebu I	540	540	21	0	2	1
8	07.06.07	Majon Bridge	km. 0 + 200 From Tabunok Tabunok-Talisay Road, Cebu II	520	520	15	20	2	1
9	07.15.06A	Alimango Bridge	km. 63 + 000 Barilli-Mantayupan Road Barilli, Cebu II	300	300	21	0	2	1
10	08.01.01	Anas Bridge	km. 102 + 820 From Port of Ormoc City to Naval-Almeria and Circumferential Road Biliran Sub-Province	260	260	13	12	2	1
11	08.03.04	Elizabeth Bridge	km. 984 + 820 Lemon-Sambolawan-Calaguise-Calubian Road Leyte II	360	360	18	12	2	1
合 計				4,185	4,185	168	114	29	11





**BASIC DESIGN STUDY ON THE PROJECT
FOR CONSTRUCTING BRIDGES ALONG RURAL ROADS (PHASE-IV)**

BRIDGE NO.	BANQUEROHAN BRIDGE	SHEET NO.
05.02.04	KM.607 +023.65 TOPOGRAPHIC MAP	1 OF 1

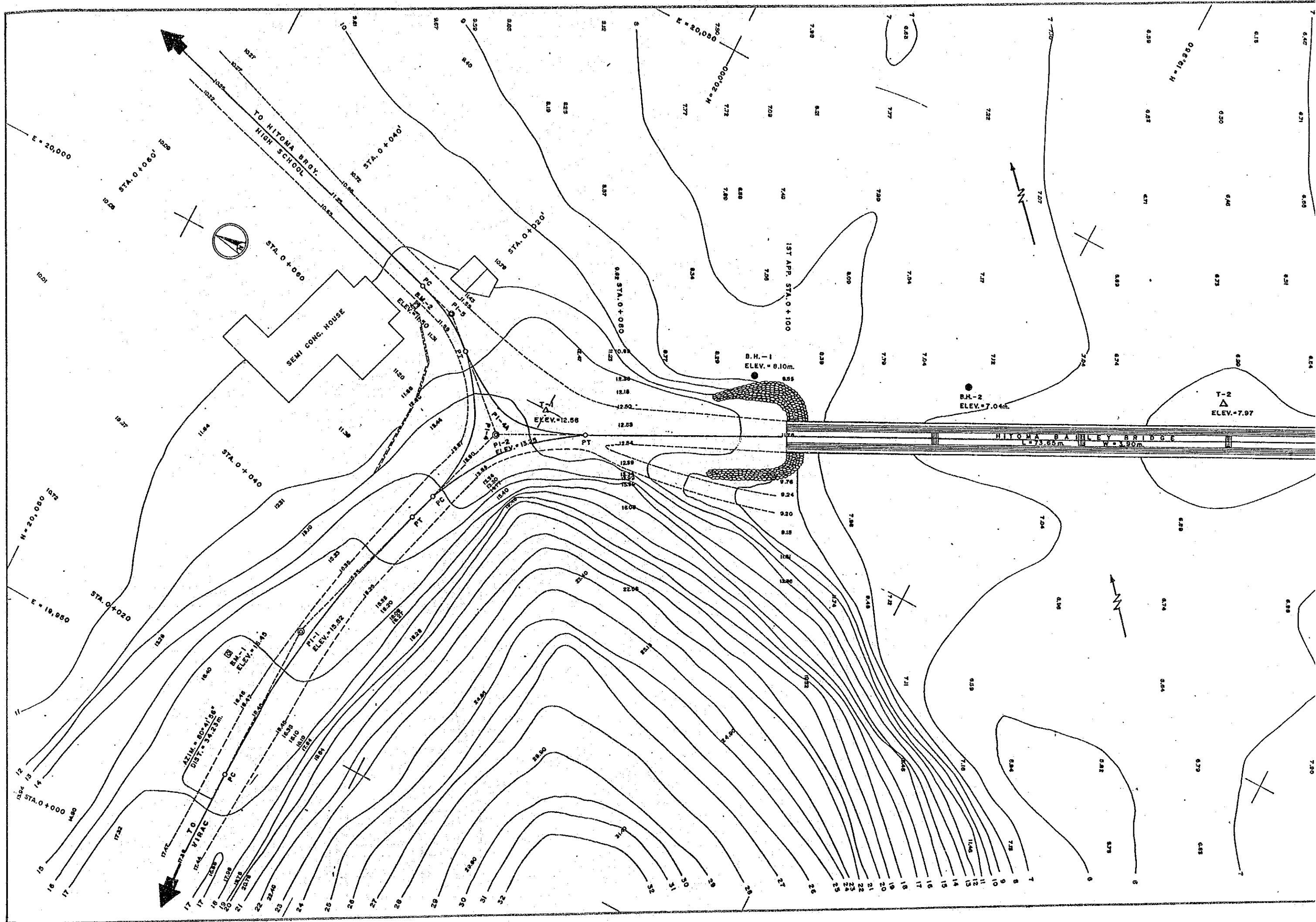


CONTROL STATION

STATION	NORTHING	EASTING	STATION	NORTHING	EASTING
BM-1	1423780.419	408399.140	BM-1	1423788.488	408407.251
BM-2	1423704.367	408384.031	BM-2	1423727.817	408388.202
BM-3	1423882.505	408454.334	BM-3	1423890.748	408364.843
PI-1	1423864.280	408333.920	PI-1	1423826.433	408442.692
PI-2	1423864.827	408481.068	PI-2	1423846.903	408551.943
PI-3	1423798.788	408420.282	1ST APP.	1423786.433	408391.788
PI-4	1423676.817	408334.088	2ND APP.	1423708.903	408368.820

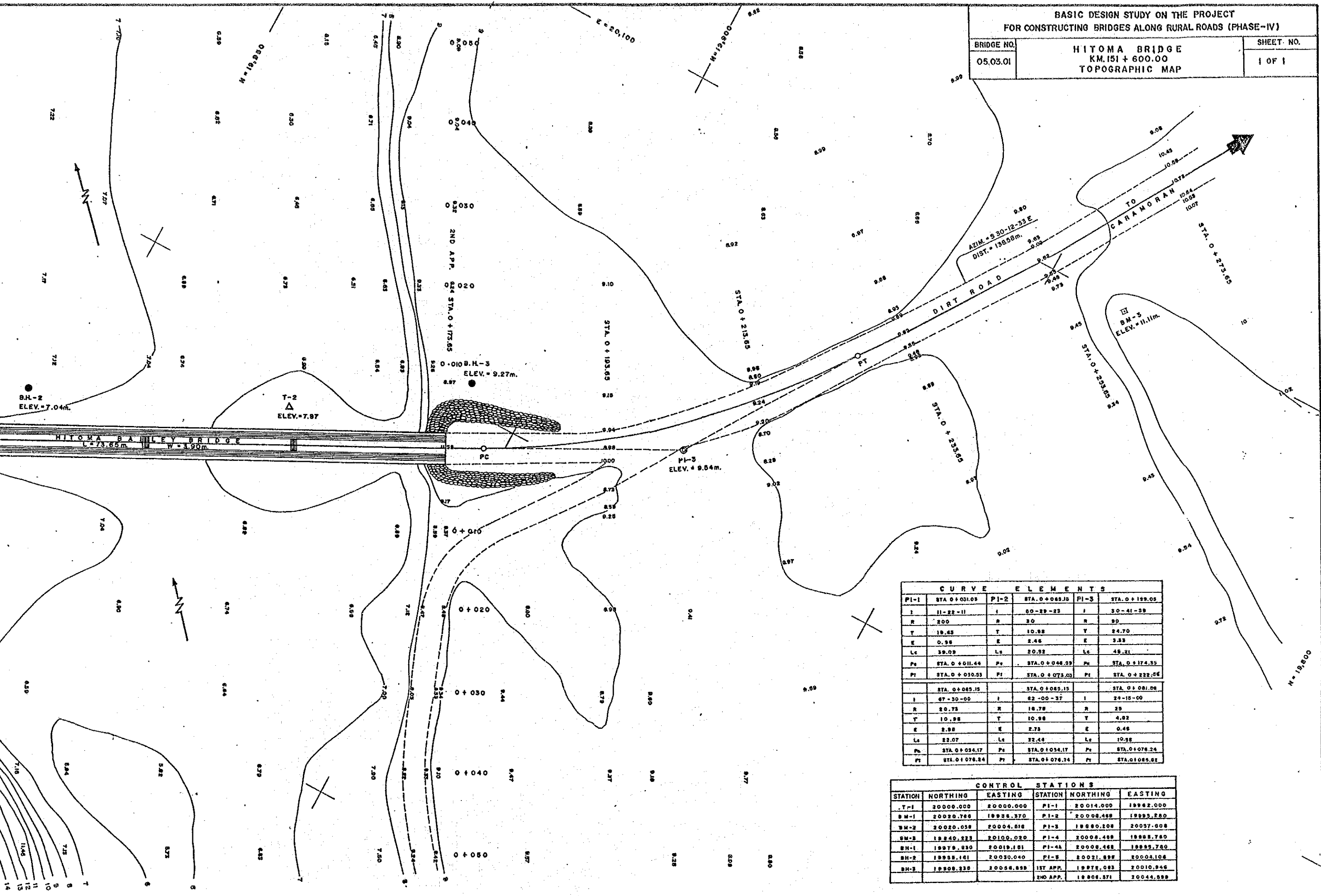
CURVE ELEMENTS

PI-1	PI-2	PI-3	PI-4
STA. 606+782.82	STA. 606+896.70	STA. 606+975.69	STA. 607+125.83
I 01-00-00	I 03-02-00	I 02-15-00	I 12-29-55
R 80	R 800	R 1000	R 800
T 47.12	T 18.25	T 19.84	T 23.20
Lc 85.70	Lc 24.47	Lc 39.27	Lc 44.21
E 12.25	E 0.18	E 0.18	E 1.23
Pc STA. 606+735.88	Pc STA. 606+893.48	Pc STA. 606+954.03	Pc STA. 607+101.65
Pt STA. 606+920.85	Pt STA. 606+809.52	Pt STA. 606+933.32	Pt STA. 607+145.88

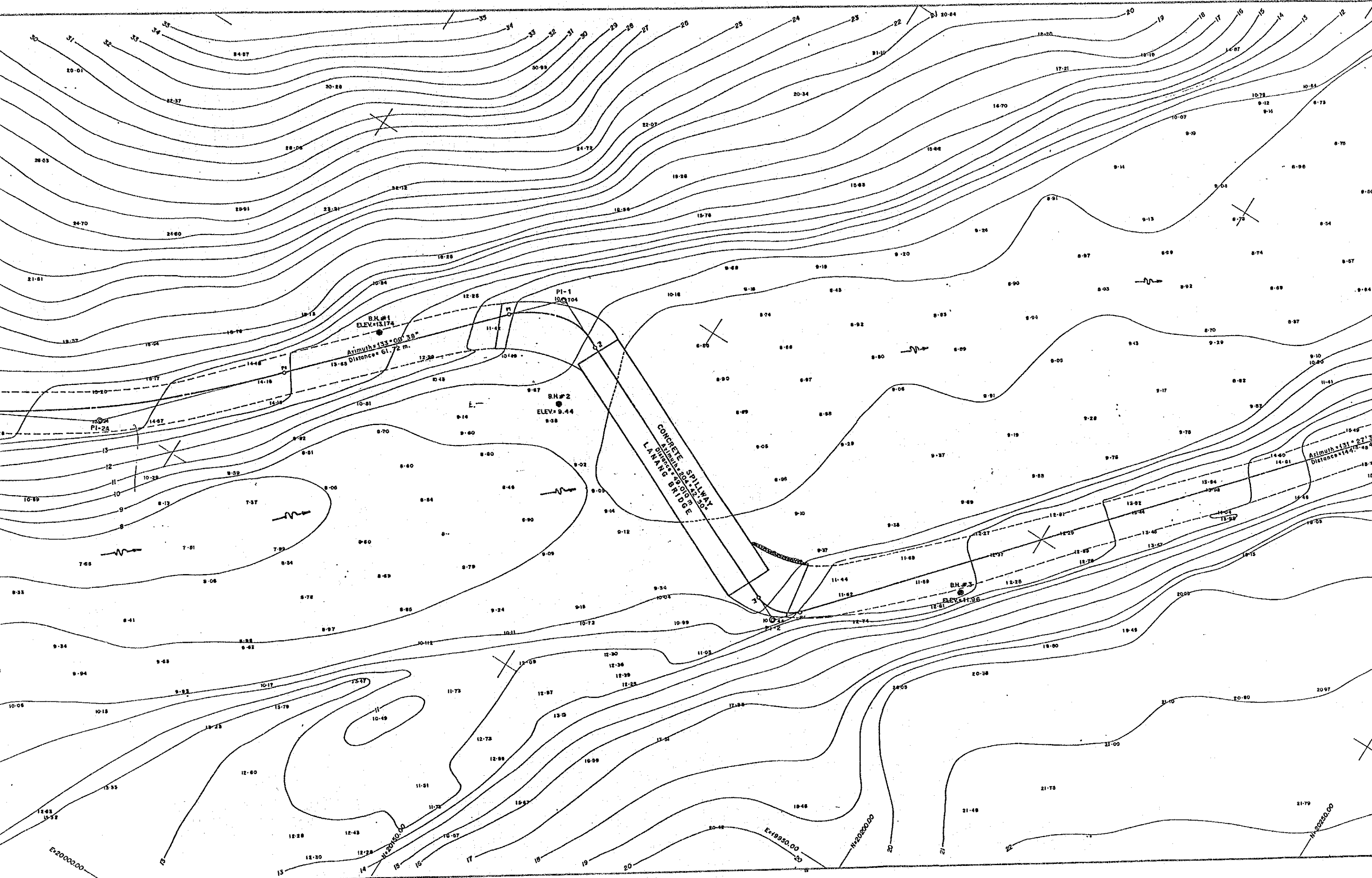


BASIC DESIGN STUDY ON THE PROJECT
FOR CONSTRUCTING BRIDGES ALONG RURAL ROADS (PHASE-IV)

BRIDGE NO. 05.03.01	HITOMA BRIDGE KM.151 + 600.00 TOPOGRAPHIC MAP	SHEET NO. 1 OF 1
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CONTROL STATIONS					
STATION	NORTHING	EASTING	STATION	NORTHING	EASTING
T-1	20000.000	20000.000	PI-1	20014.000	19982.000
B.M.-1	20020.760	19988.370	PI-2	20008.488	19993.880
B.M.-2	20020.058	20004.618	PI-3	19980.208	20057.608
B.M.-3	19940.223	20100.020	PI-4	20008.488	19988.780
B.M.-1	19979.830	20019.151	PI-4A	20008.488	19993.780
B.M.-2	19958.161	20030.040	PI-5	20021.888	20003.108
B.M.-3	19908.225	20008.888	1ST APP.	19978.088	20010.948
			2ND APP.	19908.571	20044.888



BASIC DESIGN STUDY ON THE PROJECT
FOR CONSTRUCTING BRIDGES ALONG RURAL ROADS (PHASE-IV)

BRIDGE NO.
05.06.04

LANANG BRIDGE
KM.56+129.33
TOPOGRAPHIC MAP

SHEET NO.
1 OF 1

