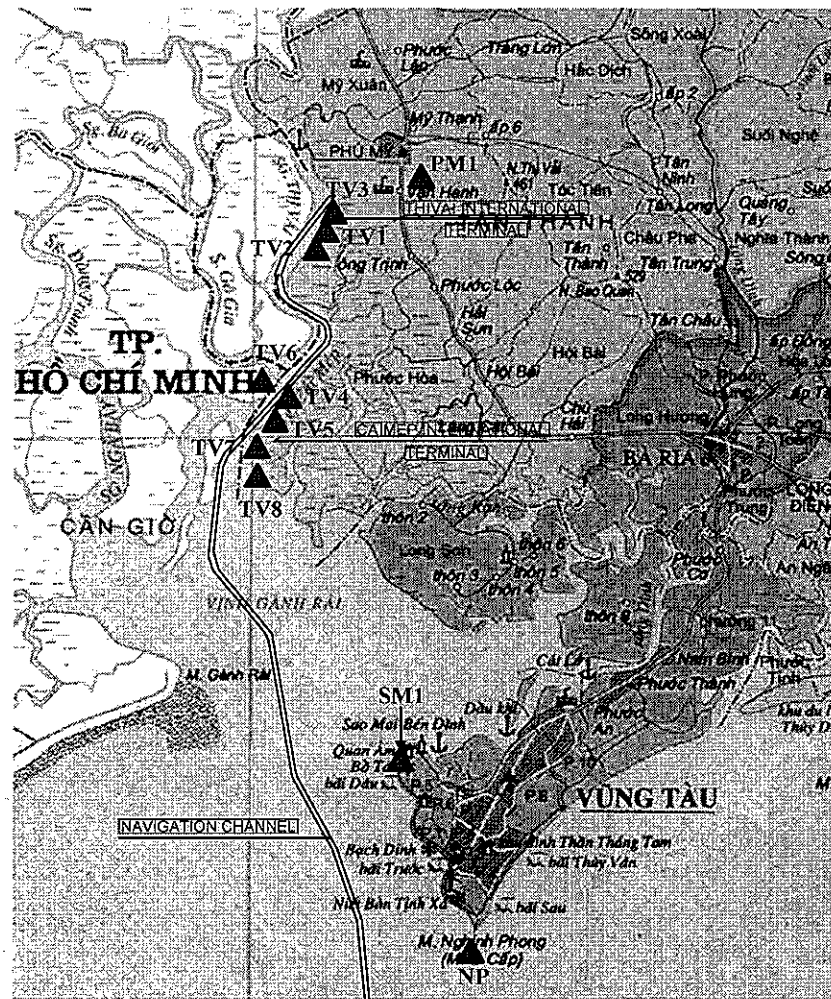
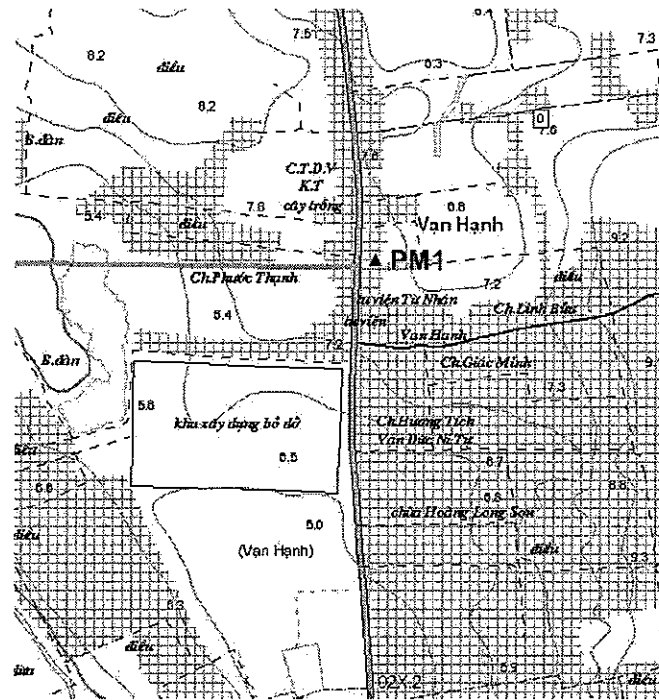


POSITION OF BENCHMARKS

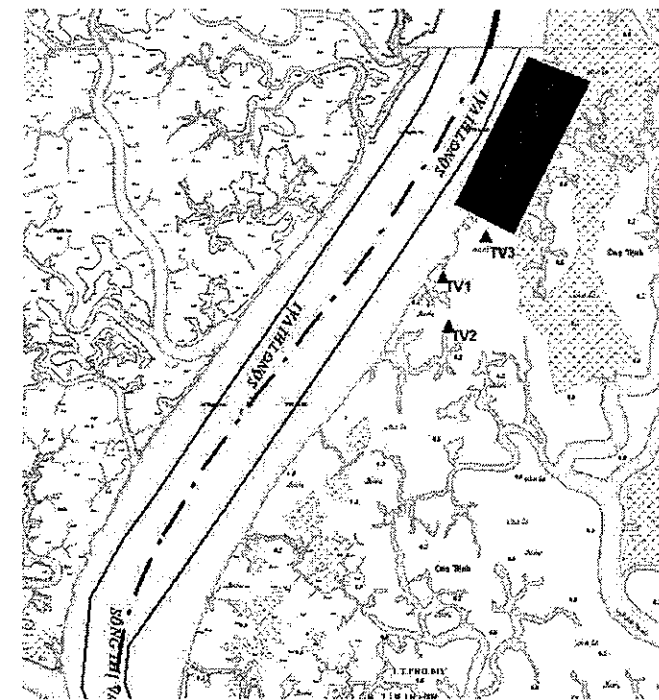


BENCHMARK: PM1



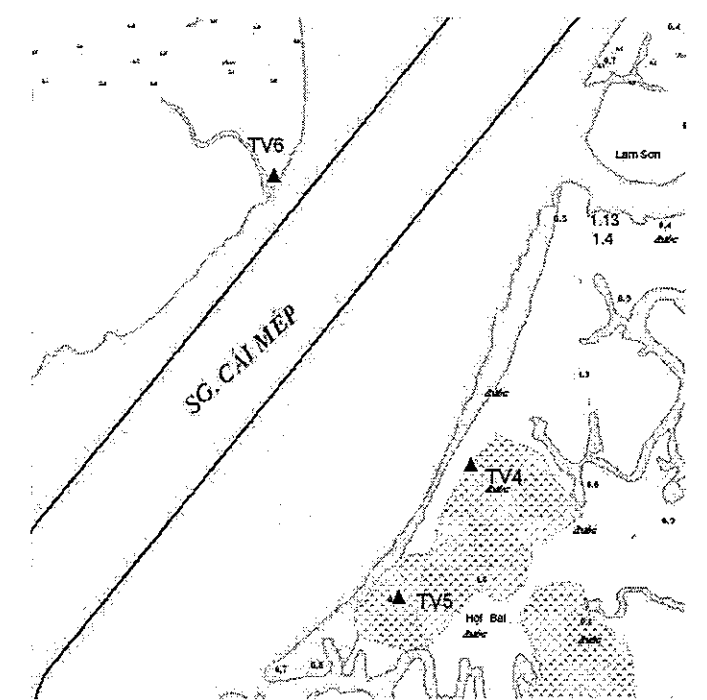
Locate in the opposite side of Phu My Industrial Zone, near National Road 51.

BENCHMARK: TV-1, TV-2, TV-3



TV3: locate next to Phu My Steel Plant Port.  
TV1: locate downstream, 250m far from TV3.  
TV2: locate downstream, 200m far from TV1.

BENCHMARK: TV-4, TV-5, TV-6

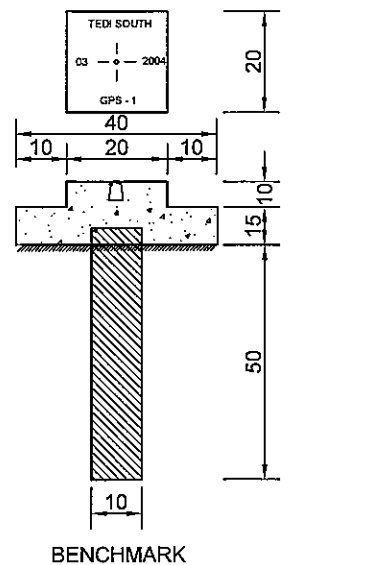


TV6: locate next a small canal.  
TV4, TV5: locate at Phuoc Hoa commune, Tan Thanh district, Ba Ria - Vung Tau Province.

SCALE 0 5 10 (km)

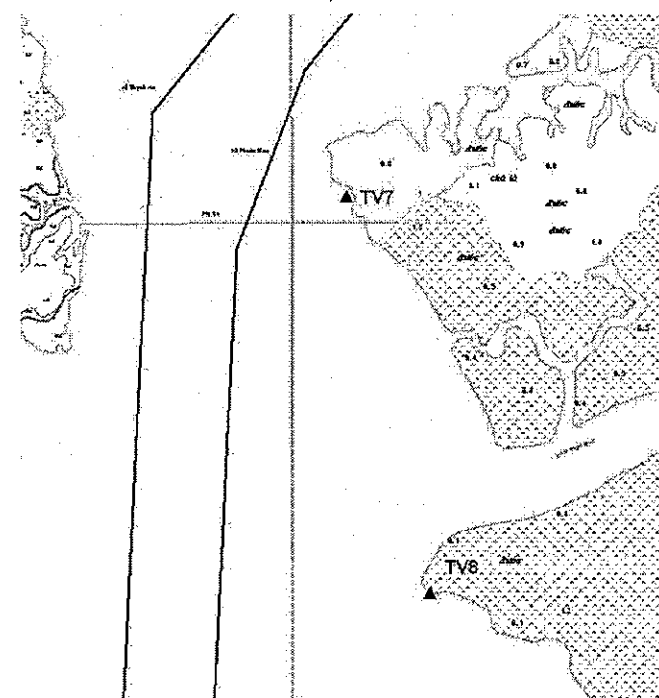
Coordinates and Elevations of Points from PM1 - NP in HN72

Points	Coordinates		Elevations	
	North(m)	East(m)	N.D.L(m)	C.D.L(m)
PM1	1,171,185.447	615,512.871	+7.253	+10.140
TV1	1,169,573.669	612,123.619	+1.421	+4.308
TV2	1,169,369.136	612,160.321	+1.244	+4.131
TV3	1,169,737.613	612,323.073	+1.387	+4.274
TV4	1,162,637.410	610,827.286	+0.899	+3.786
TV5	1,162,211.435	610,580.021	+0.857	+3.744
TV6	1,163,493.298	610,265.073	+1.276	+4.163
TV7	1,161,513.112	609,642.152	+0.684	+3.571
TV8	1,160,169.856	609,990.140	+0.630	+3.517
SM1	1,148,267.990	615,615.487	+8.862	+11.749
NP	1,141,733.116	618,652.043	+31.709	+34.596



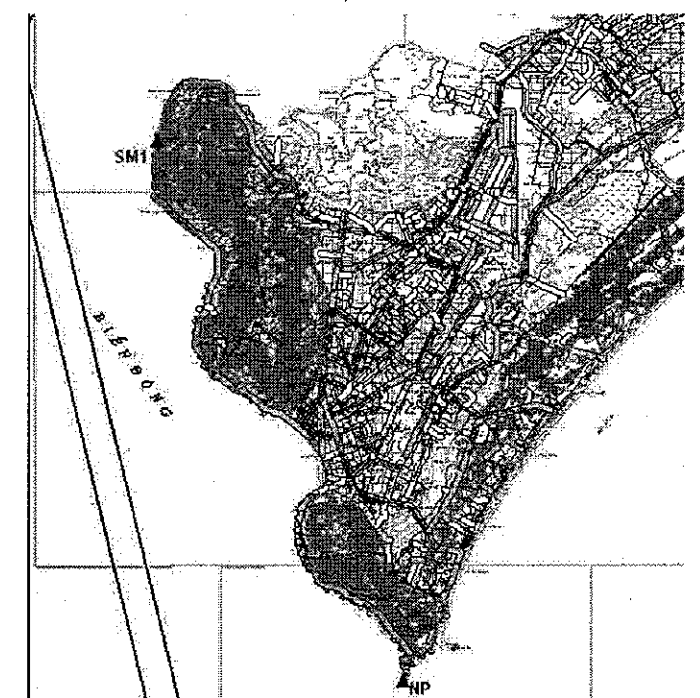
BENCHMARK  
(Concrete benchmark, dimension is 30x30x15cm)

BENCHMARK: TV-7, TV-8



TV&, TV8: locate at Phuoc Hoa commune, Tan Thanh district, Ba Ria - Vung Tau province.

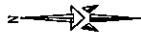
BENCHMARK: SM-1, NP



SM1: locate at Sao Mai cape, Vung Tau city.  
NP: locate at Nghinh Phong cape, Vung Tau city.

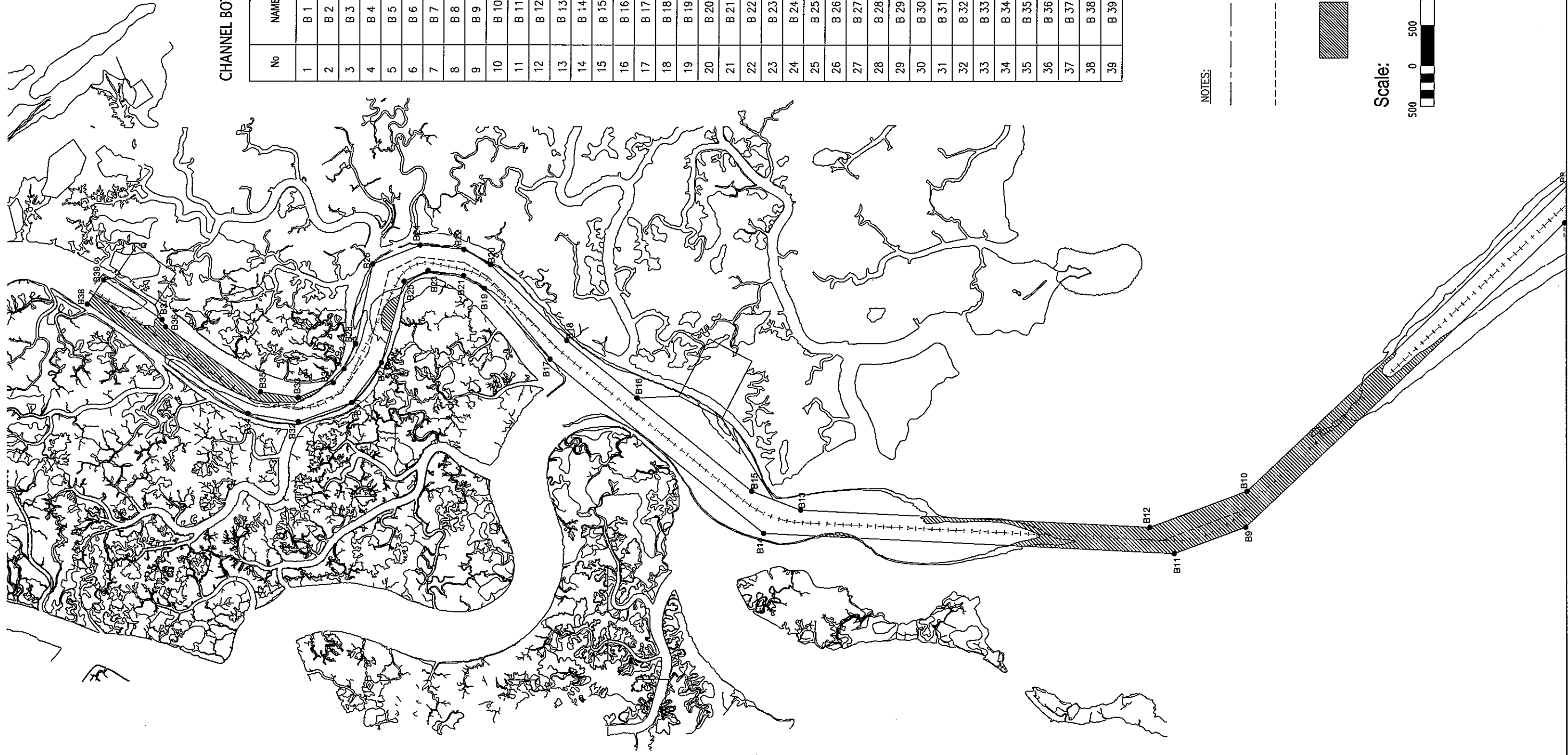
NOTE: C.D.L is applied for the Project

THE SOCIALIST REPUBLIC OF VIETNAM MINISTRY OF TRANSPORT PROJECT MANAGEMENT UNIT 85					CAI MEP - THI VAI INTERNATIONAL PORT CONSTRUCTION PROJECT		DESIGNED BY: SASAKI E DRAWN BY: NGUYEN VIET DUNG CHECKED BY: NAGAO N. APPROVED BY: NAGAI K. ISSUE DATE: 30/SEP/2005 SCALE: SCALE		SECTION: NAVIGATION CHANNEL DREDGING SUB-SECTION: GENERAL TITLE OF DRAWING: PROJECT CONTROL COORDINATES	
JICA JAPAN INTERNATIONAL COOPERATION AGENCY ASSIGNED TO: JAPAN PORT CONSULTANT (JPC) PACIFIC CONSULTANTS INTERNATIONAL (PCI) INTERNATIONAL DEVELOPMENT SYSTEM (IDS)					PACKAGE 3 NAVIGATION CHANNEL DREDGING		DWG NO: PAC3-NC-GNR-004		REV. NO	
REV NO	DATE	DESCRIPTION	BY	APP						



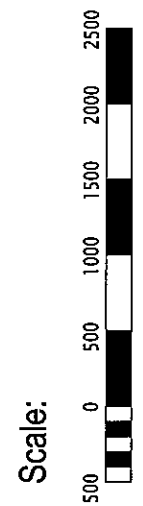
CHANNEL BOTTOM COORDINATES TABLE

No	NAME	COORDINATES (HN72)	
		EAST (M)	NORTH (M)
1	B 1	618254.292	1137759.117
2	B 2	618514.506	1137927.608
3	B 3	615254.788	1142391.507
4	B 4	615640.450	1142366.257
5	B 5	615501.877	1142688.692
6	B 6	613097.491	1151315.796
7	B 7	612840.202	1151789.125
8	B 8	613313.874	1151740.008
9	B 9	609080.463	1155755.900
10	B 10	609524.178	1155738.390
11	B 11	608751.086	1156645.030
12	B 12	609076.305	1156947.391
13	B 13	609288.431	1161267.863
14	B 14	609000.580	1161726.589
15	B 15	609521.213	1161875.683
16	B 16	610674.105	1163294.281
17	B 17	611152.751	1164374.770
18	B 18	611384.049	1164167.846
19	B 19	612030.460	1165190.939
20	B 20	612320.203	1165114.657
21	B 21	612188.214	1165446.113
22	B 22	612510.053	1165441.182
23	B 23	612248.546	1165688.878
24	B 24	612564.231	1165988.065
25	B 25	612115.775	1166190.168
26	B 26	612331.060	1166583.230
27	B 27	611110.470	1166472.177
28	B 28	611342.102	1166792.906
29	B 29	611033.456	1166935.515
30	B 30	610616.244	1166843.374
31	B 31	610862.159	1167069.742
32	B 32	610380.007	1167500.000
33	B 33	610680.486	1167500.000
34	B 34	610481.126	1168121.684
35	B 35	610749.361	1167964.354
36	B 36	611551.467	1169152.084
37	B 37	611641.381	1169195.849
38	B 38	611832.747	1170122.096
39	B 39	612130.643	1169919.961

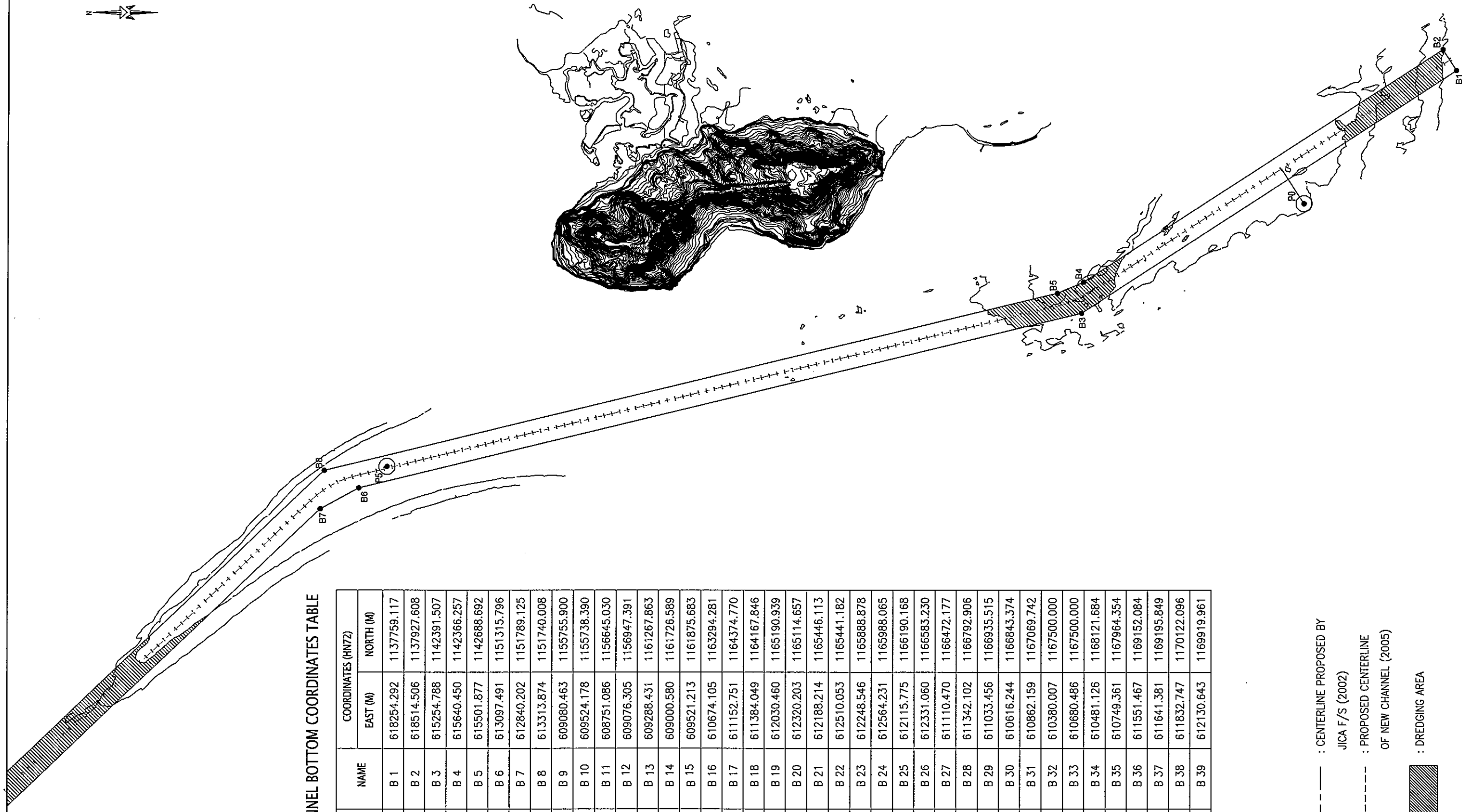
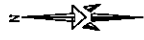


NOTES:

- : CENTERLINE PROPOSED BY JICA F/S (2002)
- : PROPOSED CENTERLINE OF NEW CHANNEL (2005)
- ▨ : DREDGING AREA



		THE SOCIALIST REPUBLIC OF VIETNAM MINISTRY OF TRANSPORT PROJECT MANAGEMENT UNIT 85		CAI MEP - THI VAI INTERNATIONAL PORT CONSTRUCTION PROJECT		DESIGNED BY: SASAKI E		SECTION: NAVIGATION CHANNEL DREDGING	
		JICA ASSIGNED TO: JAPAN PORT CONSULTANT (JPC) PACIFIC CONSULTANTS INTERNATIONAL (PCI) INTERNATIONAL DEVELOPMENT SYSTEM (IDS)		PACKAGE 3 NAVIGATION CHANNEL DREDGING		DRAWN BY: NGUYEN VIET DUNG		SUB-SECTION: GENERAL	
						CHECKED BY: NAGAI K.		TITLE OF DRAWING: PROJECT MAIN COORDINATES (1)	
REV NO		DATE		DESCRIPTION		BY		APP	
								DWG NO: PAC3-NC-GNR-005	
								REV. NO	

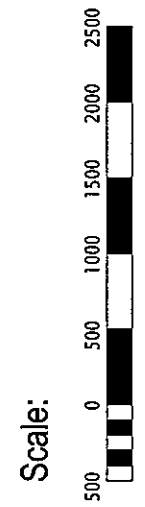


CHANNEL BOTTOM COORDINATES TABLE

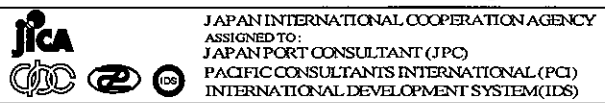
No	NAME	COORDINATES (HN72)	
		EAST (M)	NORTH (M)
1	B 1	618254.292	1137759.117
2	B 2	618514.506	1137927.608
3	B 3	615254.788	1142391.507
4	B 4	615640.450	1142366.257
5	B 5	615501.877	1142688.692
6	B 6	613097.491	1151315.796
7	B 7	612840.202	1151789.125
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10	B 10	609524.178	1155738.390
11	B 11	608751.086	1156645.030
12	B 12	609076.305	1156947.391
13	B 13	609288.431	1161267.863
14	B 14	609000.580	1161726.589
15	B 15	609521.213	1161875.683
16	B 16	610674.105	1163294.281
17	B 17	611152.751	1164374.770
18	B 18	611384.049	1164167.846
19	B 19	612030.460	1165190.939
20	B 20	612320.203	1165114.657
21	B 21	612188.214	1165446.113
22	B 22	612510.053	1165441.182
23	B 23	612248.546	1165888.878
24	B 24	612564.231	1165988.065
25	B 25	612115.775	1166190.168
26	B 26	612331.060	1166583.230
27	B 27	611110.470	1166472.177
28	B 28	611342.102	1166792.906
29	B 29	611033.456	1166935.515
30	B 30	610616.244	1166843.374
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32	B 32	610380.007	1167500.000
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34	B 34	610481.126	1168121.684
35	B 35	610749.361	1167964.354
36	B 36	611551.467	1169152.084
37	B 37	611641.381	1169195.849
38	B 38	611832.747	1170122.096
39	B 39	612130.643	1169919.961

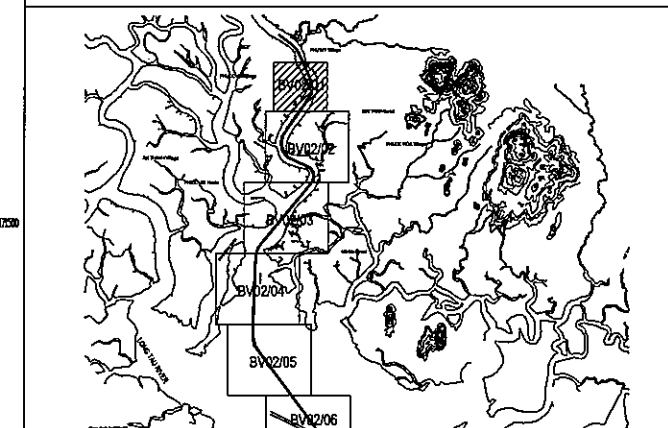
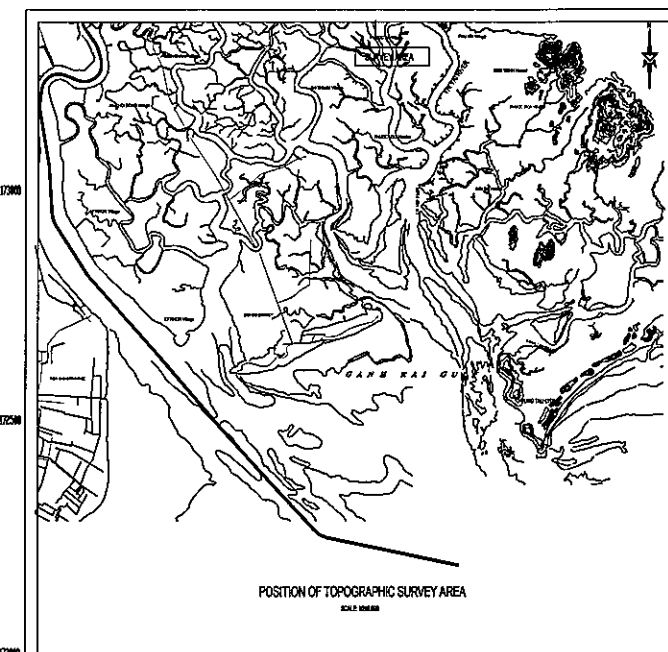
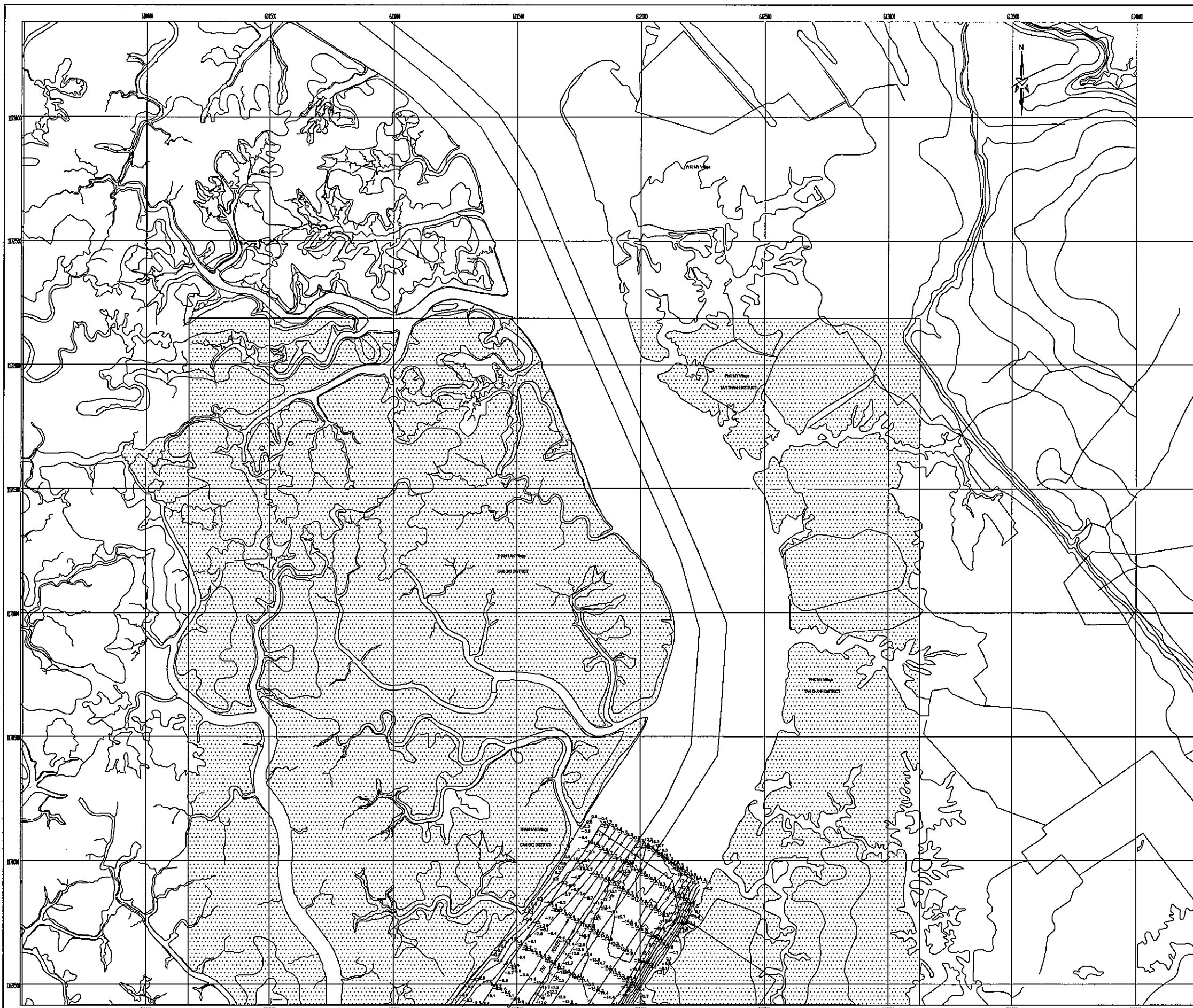
NOTES:

- - - - - : CENTERLINE PROPOSED BY JICA F/S (2002)
- - - - - : PROPOSED CENTERLINE OF NEW CHANNEL (2005)
- [Hatched Box] : DREDGING AREA



		THE SOCIALIST REPUBLIC OF VIETNAM MINISTRY OF TRANSPORT PROJECT MANAGEMENT UNIT 85		CAI MEP - THI VAI INTERNATIONAL PORT CONSTRUCTION PROJECT		DESIGNED BY: SASAKI E DRAWN BY: NGUYEN VIET DUNG CHECKED BY: NAGAO N. APPROVED BY: NAGAI K. ISSUE DATE: 30/SEP/2005 SCALE: SCALE		SECTION: NAVIGATION CHANNEL DREDGING SUB-SECTION: GENERAL TITLE OF DRAWING: PROJECT MAIN COORDINATES (2) DWG NO: PAC3-NC-GNR-006		REV. NO
REV NO	DATE	DESCRIPTION	BY	APP	PACKAGE 3 NAVIGATION CHANNEL DREDGING					



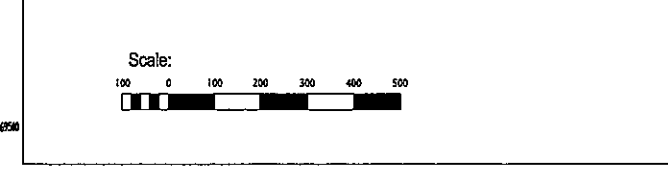


**LEGENDS**

□	THATCHED HOUSE	—	RIVER, CANAL, DITCH
□	HOUSE WITH A CORRUGATED ROOF	—	ROAD
□	HOUSE MADE OF BRICKS	—	SMALL ROAD, BORDER OF RICE FIELD
☆	PAODDA	—	FOOTPATH ROAD
⊕	CHURCH	—	BRIDGE
⊕	TOMB, CEMETERY	—	SHRIMP/POND
⊕	BLOOD HOUSE	—	FRUIT TREE, SUGAR CANE
⊕	HOSPITAL	—	TREE
⊕	TRANSFORMER STATION	—	RICE FIELD
⊕	PLANT	—	VEGETABLE GRASS
⊕	SCHOOL	—	NIPA BRUSHWOOD/MANGROVE
—	DYKE	—	ELECTRIC PILLAR
—	BOTANY BOUNDARY	—	MOORING BUOY
—	BRICK STONE WALL	—	FISHING STAKES
—	BARBED WIRE FENCE	—	BASE POINT COORDINATE, BASE POINT ELEVATION
—	RIGHT BUOY		
—	LEFT BUOY		

**NOTES**

- DIMENSIONS & ELEVATIONS ARE IN [M].
- COORDINATES ARE IN HN72 SYSTEM.
- ELEVATIONS ARE IN CHART DATUM.
- CHART DATUM ELEVATION IS LOWER THAN HON DAU DATUM ELEVATION 2.887M



REV NO	DATE	DESCRIPTION	BY	APP

THE SOCIALIST REPUBLIC OF VIETNAM  
 MINISTRY OF TRANSPORT  
 PROJECT MANAGEMENT UNIT 85

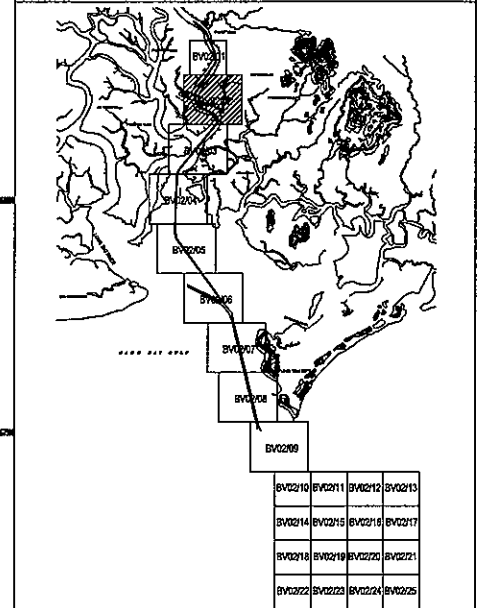
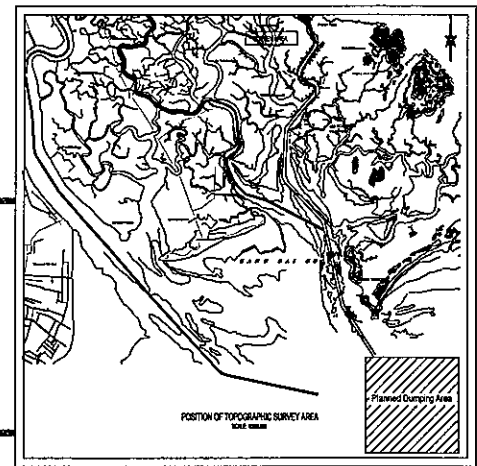
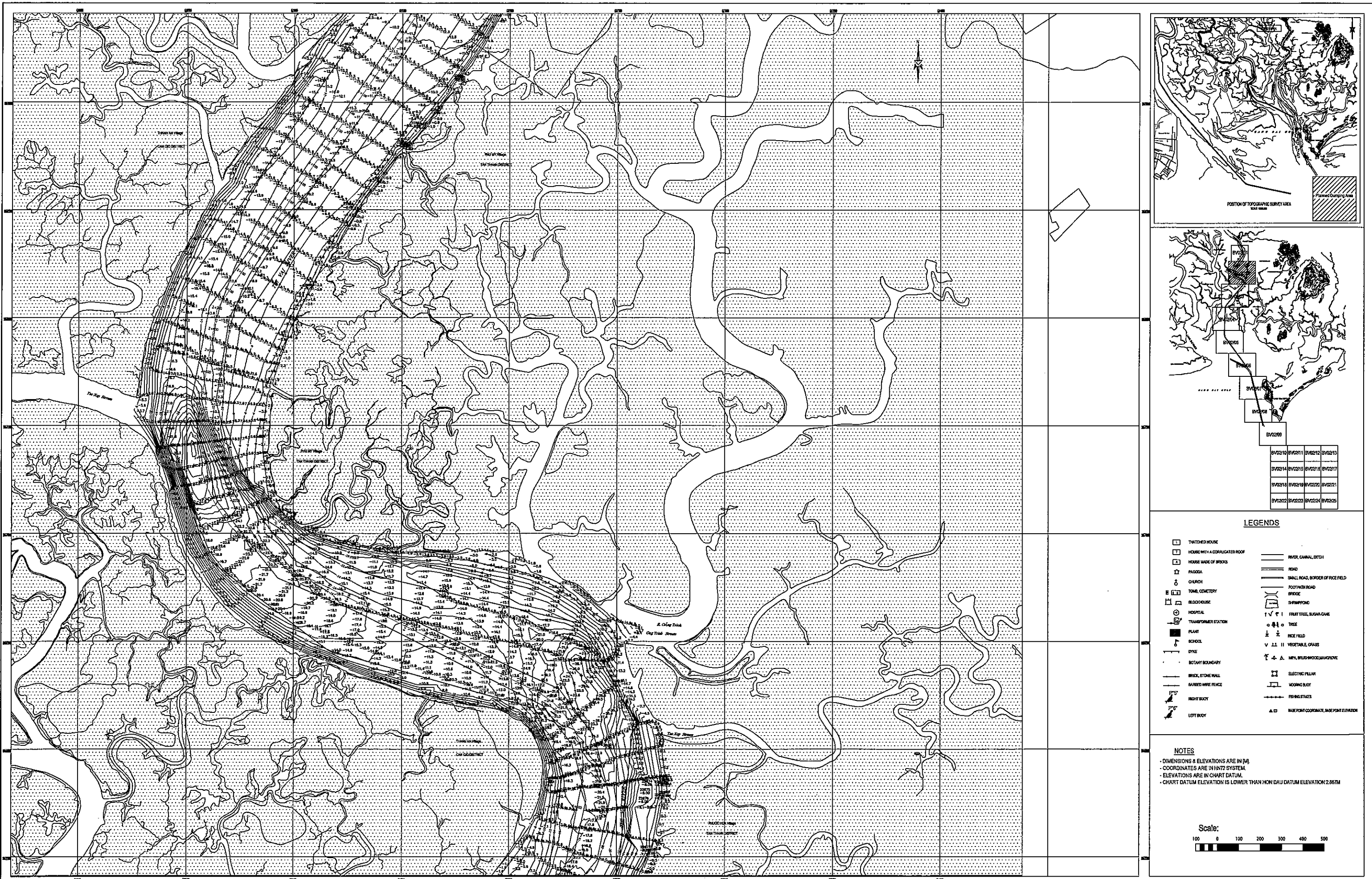
JICA  
 JAPAN INTERNATIONAL COOPERATION AGENCY  
 ASSIGNED TO:  
 JAPAN PORT CONSULTANT (JPC)  
 PACIFIC CONSULTANTS INTERNATIONAL (PCI)  
 INTERNATIONAL DEVELOPMENT SYSTEM (IDS)

CAI MEP - THI VAI INTERNATIONAL PORT  
 CONSTRUCTION PROJECT

PACKAGE 3  
 NAVIGATION CHANNEL DREDGING

DESIGNED BY: SASAKI E  
 DRAWN BY: NGUYEN VIET DUNG  
 CHECKED BY: NAGAO N.  
 APPROVED BY: NAGAI K.  
 ISSUE DATE: 30/SEP/2005  
 SCALE: SCALE

SECTION: NAVIGATION CHANNEL DREDGING  
 SUB-SECTION: SITE CONDITION  
 TITLE OF DRAWING: BATHYMETRIC PLAN (1)  
 DWG NO: PAC3-NC-STC-001  
 REV. NO



**LEGENDS**

	THATCHED HOUSE		RIVER, CANAL, DITCH
	HOUSE WITH A CORRUGATED ROOF		ROAD
	HOUSE MADE OF BRICKS		SMALL ROAD, BORDER OF RICE FIELD
	PAGODA		FOOTPATH ROAD
	CHURCH		BRIDGE
	TOMB, CEMETERY		SWAMPY
	REDOUBT HOUSE		FRUIT TREE, SUGAR-CANE
	HOSPITAL		RICE FIELD
	TRANSFORMER STATION		VEGETABLE GRASS
	PLANT		MPA, BRUSHWOOD, MANGROVE
	SCHOOL		ELECTRIC PILLAR
	DYKE		MOVABLE BOAT
	BOTANY BOUNDARY		FISHWEIR
	BRICK, STONE WALL		BASE POINT COORDINATE, BASE POINT ELEVATION
	BARBED WIRE FENCE		
	RIGHT BODY		
	LEFT BODY		

**NOTES**

- DIMENSIONS & ELEVATIONS ARE IN (M)
- COORDINATES ARE IN HNTZ SYSTEM
- ELEVATIONS ARE IN CHART DATUM
- CHART DATUM ELEVATION IS LOWER THAN HON DAU DATUM ELEVATION 2.867M

Scale:

REV NO	DATE	DESCRIPTION	BY	APP

THE SOCIALIST REPUBLIC OF VIETNAM  
 MINISTRY OF TRANSPORT  
 PROJECT MANAGEMENT UNIT 85

JICA  
 JAPAN INTERNATIONAL COOPERATION AGENCY  
 ASSIGNED TO:  
 JAPAN PORT CONSULTANT (JPC)  
 PACIFIC CONSULTANTS INTERNATIONAL (PCI)  
 INTERNATIONAL DEVELOPMENT SYSTEM (IDS)

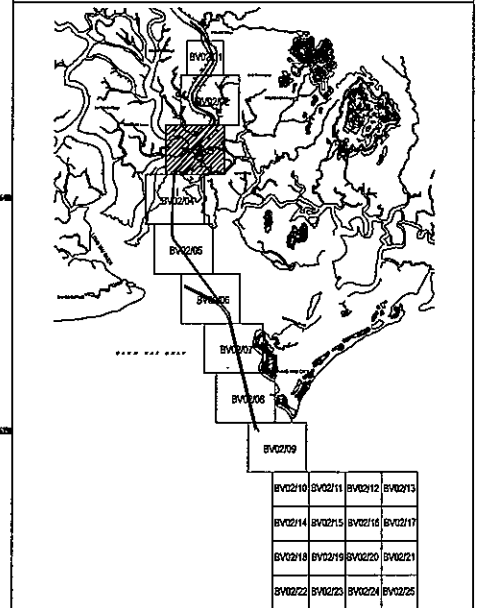
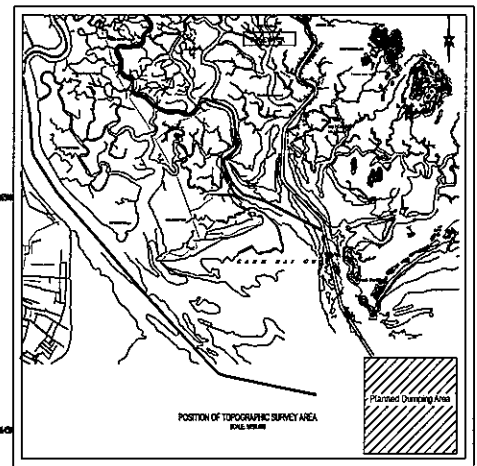
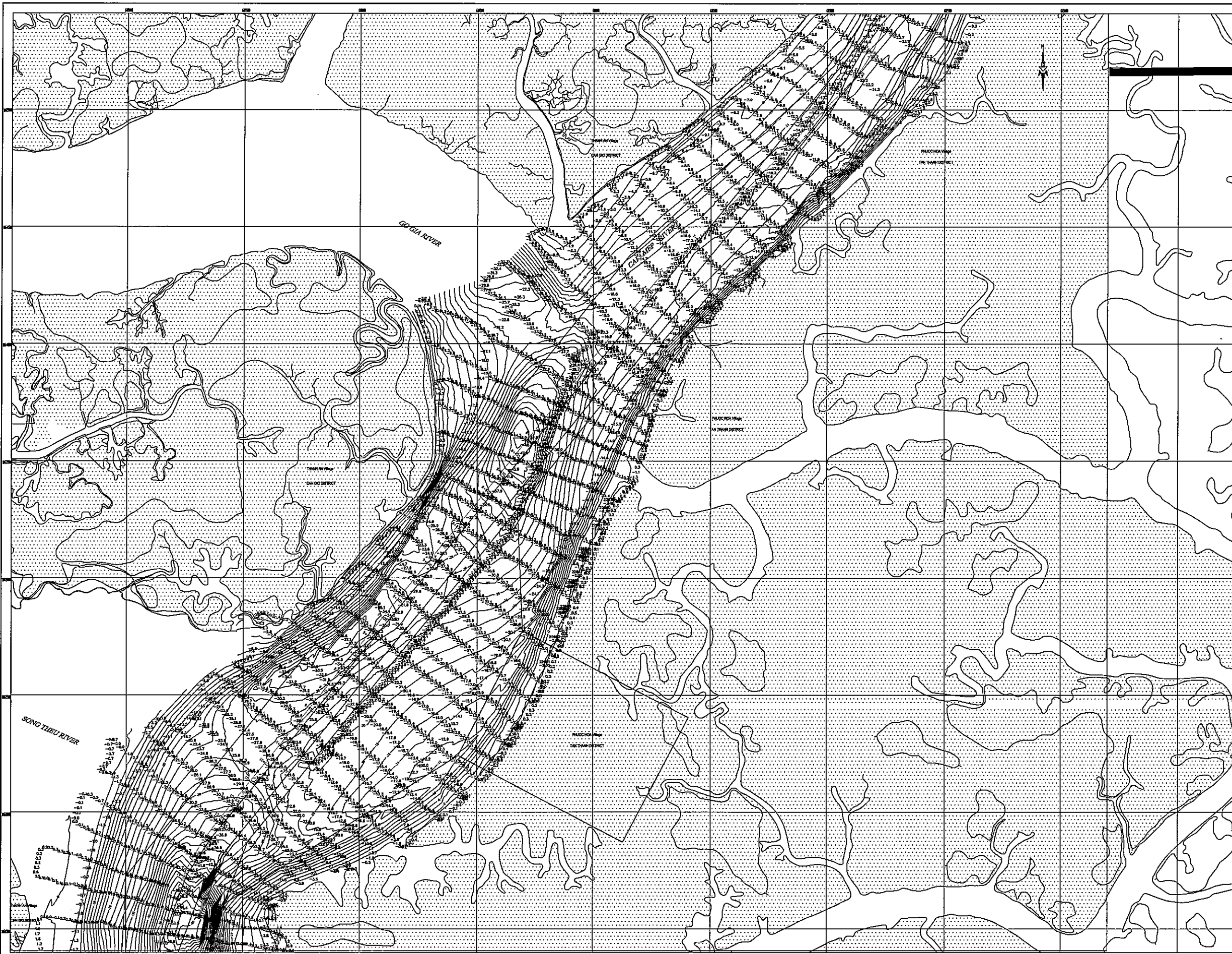
CAI MEP - THI VAI INTERNATIONAL PORT  
 CONSTRUCTION PROJECT

PACKAGE 3  
 NAVIGATION CHANNEL DREDGING

DESIGNED BY: SASAKI E  
 DRAWN BY: NGUYEN VIET DUNG  
 CHECKED BY: NAGAO N.  
 APPROVED BY: NAGAI K.  
 ISSUE DATE: 30/SEP/2005  
 SCALE: SCALE

SECTION: NAVIGATION CHANNEL DREDGING  
 SUB-SECTION: SITE CONDITION  
 TITLE OF DRAWING: BATHYMETRIC PLAN (2)

DWG NO: PAC3-NC-STC-002  
 REV. NO



**LEGENDS**

	TATCHED HOUSE		RIVER, CANAL, DITCH
	HOUSE WITH A CORRUGATED ROOF		ROAD
	HOUSE MADE OF BRICKS		SMALL ROAD, BORDER OF RICE FIELD
	PAGODA		FOOTPATH ROAD
	CHURCH		BRIDGE
	TOMB, CEMETERY		SWAMP/POND
	BLOODOUSE		FRUIT TREE, SUGAR CANE
	HOSPITAL		TREE
	TRANSFORMER STATION		RICE FIELD
	PLANT		VEGETABLE, GRASS
	SCHOOL		MPA, BANYAN WOOD MANGROVE
	DIKE		ELECTRIC PILLAR
	ROTARY BOUNDARY		WORKING BODY
	BRICK, STONE WALL		FISHING STAGES
	BARBED WIRE FENCE		BASE POINT COORDINATE, BASE POINT ELEVATION
	RIGHT BUOY		
	LEFT BUOY		

**NOTES**

- DIMENSIONS & ELEVATIONS ARE IN (M)
- COORDINATES ARE IN (WGS 84) SYSTEM.
- ELEVATIONS ARE IN CHART DATUM.
- CHART DATUM ELEVATION IS LOWER THAN HON DAU DATUM ELEVATION (2.87M)

Scale:

REV NO	DATE	DESCRIPTION	BY	APP

THE SOCIALIST REPUBLIC OF VIETNAM  
 MINISTRY OF TRANSPORT  
 PROJECT MANAGEMENT UNIT 85

JICA  
 JAPAN INTERNATIONAL COOPERATION AGENCY  
 ASSIGNED TO:  
 JAPAN PORT CONSULTANT (JPC)  
 PACIFIC CONSULTANTS INTERNATIONAL (PCI)  
 INTERNATIONAL DEVELOPMENT SYSTEM (IDS)

CAI MEP - THI VAI INTERNATIONAL PORT  
 CONSTRUCTION PROJECT

PACKAGE 3  
 NAVIGATION CHANNEL DREDGING

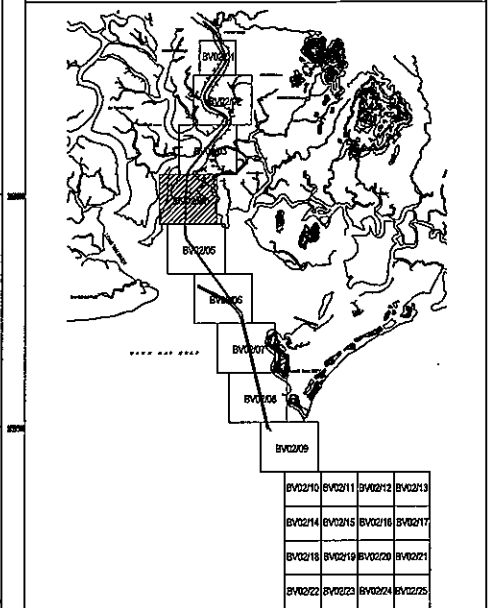
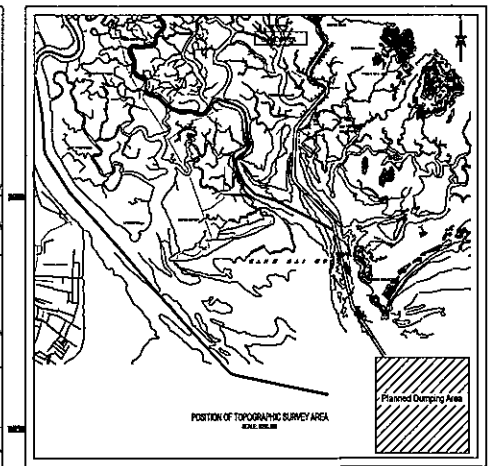
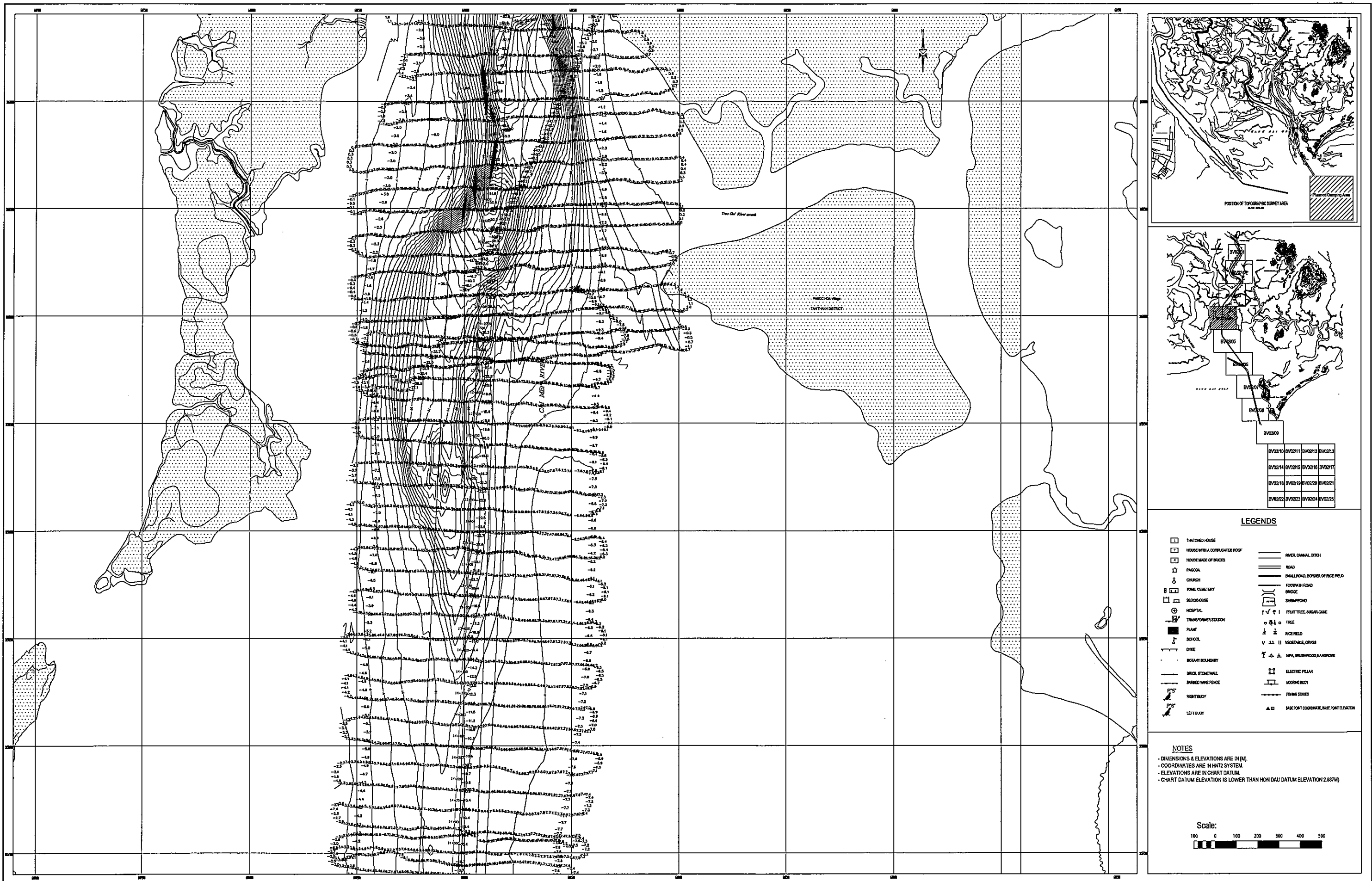
DESIGNED BY: SASAKI E  
 DRAWN BY: NGUYEN VIET DUNG  
 CHECKED BY: NAGAO N.  
 APPROVED BY: NAGAI K.  
 ISSUE DATE: 30/SEP/2005  
 SCALE: SCALE

SECTION:  
 SUB-SECTION:  
 TITLE OF DRAWING:  
 DWG NO:

NAVIGATION CHANNEL DREDGING  
 SITE CONDITION  
 BATHYMETRIC PLAN (3)

PAC3-NC-STC-003

REV. NO



**LEGENDS**

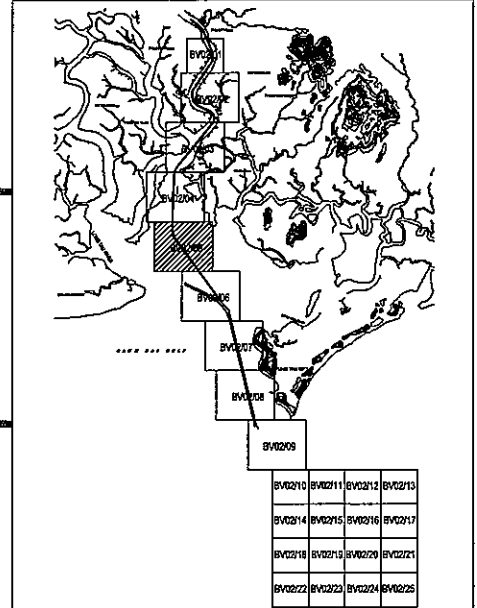
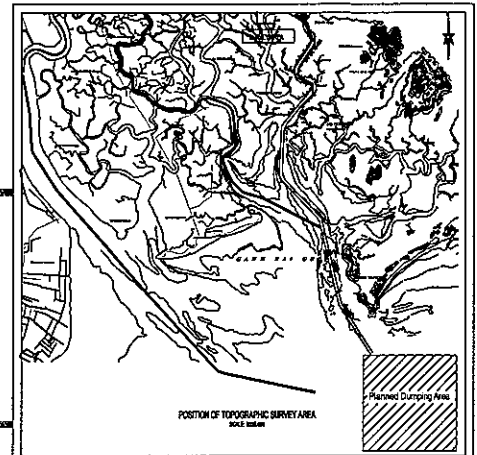
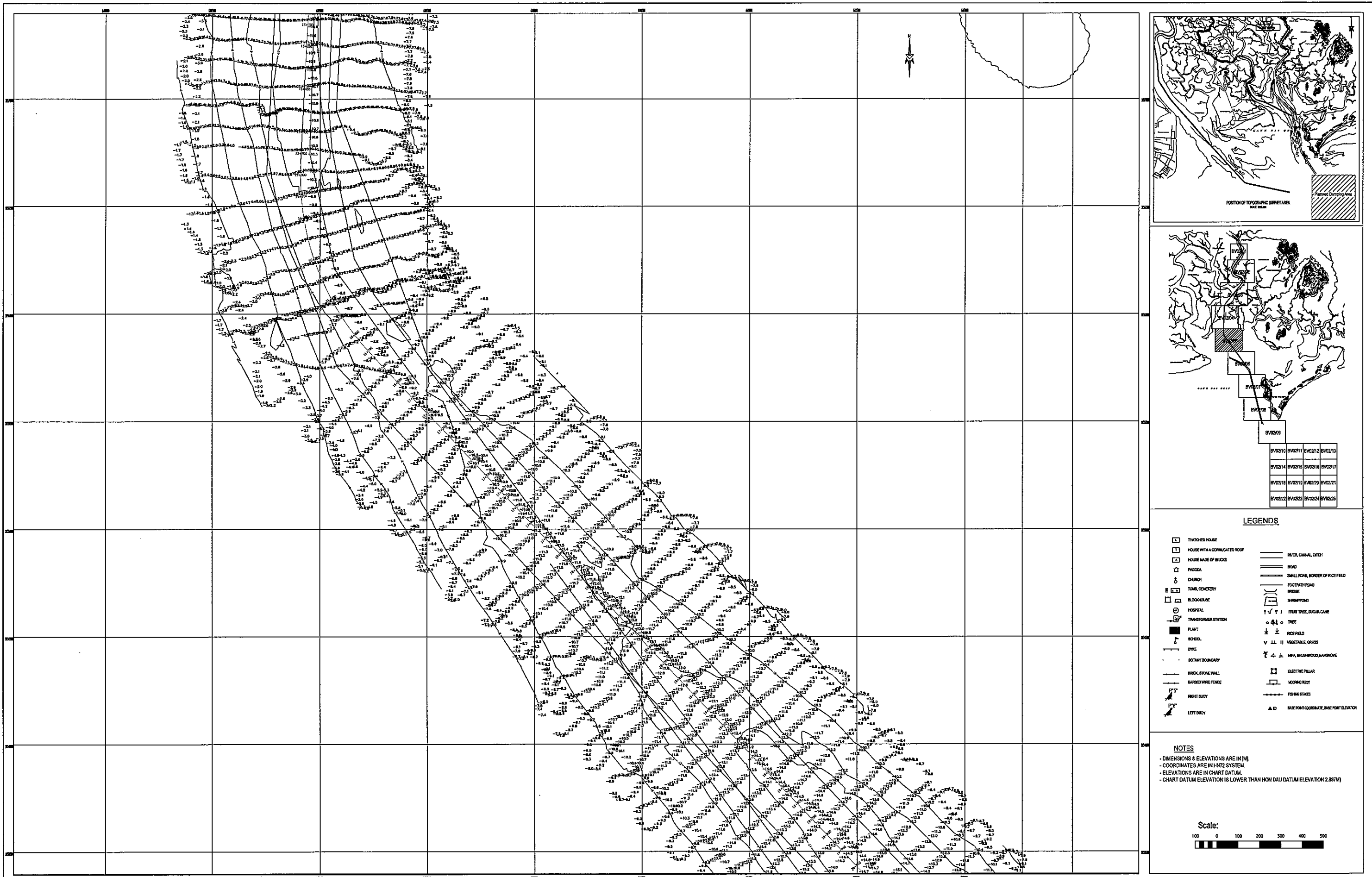
	THATCHED HOUSE		RIVER, CANAL, DITCH
	HOUSE WITH A CORRUGATED ROOF		ROAD
	HOUSE MADE OF BRICKS		SMALL ROAD, BORDER OF RICE FIELD
	PAGODA		FOOTPATH ROAD
	CHURCH		BRIDGE
	TOMB, CEMETERY		SWAMPY AREA
	BLOODHOUSE		FRUIT TREE, SUGAR CANE
	HOSPITAL		TREE
	TRANSFORMER STATION		RICE FIELD
	PLANT		VEGETABLE, GRASS
	SCHOOL		NPL, BRUSHWOOD MANGROVE
	DYKE		ELECTRIC Pylon
	BOUNDARY		MOORING BUOY
	BRICK, STONE WALL		FISHING LINES
	BARBED WIRE FENCE		BASE POINT COORDINATE, BASE POINT ELEVATION
	RIGHT BUOY		
	LEFT BUOY		

**NOTES**

- DIMENSIONS & ELEVATIONS ARE IN (M).
- COORDINATES ARE IN HNTZ SYSTEM.
- ELEVATIONS ARE IN CHART DATUM.
- CHART DATUM ELEVATION IS LOWER THAN HON DAU DATUM ELEVATION (2.887M).

Scale:

THE SOCIALIST REPUBLIC OF VIETNAM MINISTRY OF TRANSPORT PROJECT MANAGEMENT UNIT 85					CAI MEP - THI VAI INTERNATIONAL PORT CONSTRUCTION PROJECT					DESIGNED BY: SASAKI E DRAWN BY: NGUYEN VIET DUNG CHECKED BY: NAGAO N. APPROVED BY: NAGAI K. ISSUE DATE: 30/SEP/2005 SCALE: SCALE					SECTION: SUB-SECTION: TITLE OF DRAWING: DWG NO: NAVIGATION CHANNEL DREDGING SITE CONDITION BATHYMETRIC PLAN(4)					REV. NO				
JICA JAPAN INTERNATIONAL COOPERATION AGENCY ASSIGNED TO: JAPAN PORT CONSULTANT (JPC) PACIFIC CONSULTANTS INTERNATIONAL (PCI) INTERNATIONAL DEVELOPMENT SYSTEM (IDS)					PACKAGE 3 NAVIGATION CHANNEL DREDGING					PAC3-NC-STC-004					REV. NO									
REV NO	DATE	DESCRIPTION	BY	APP																				

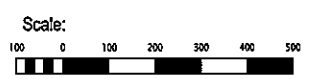


**LEGENDS**

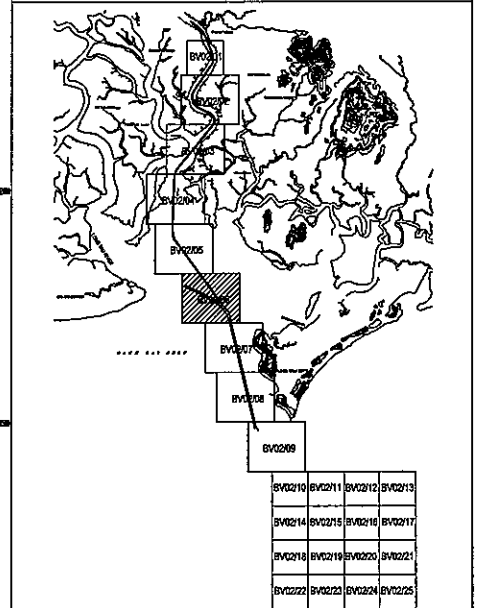
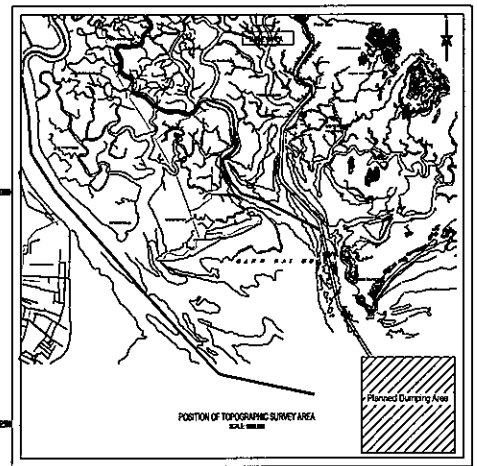
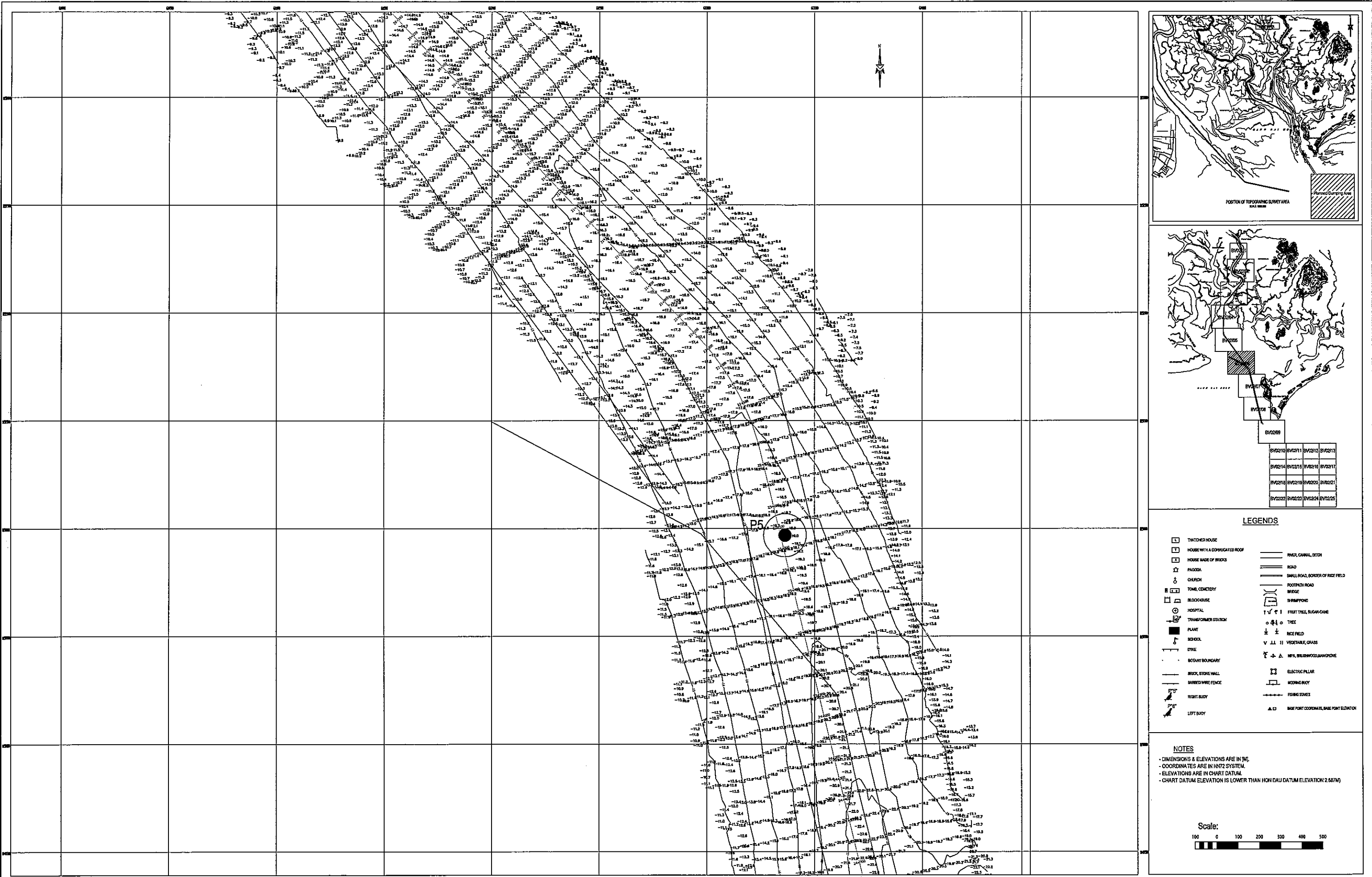
- |  |                            |  |   |
|--|----------------------------|--|---|
|  | THATCHED HOUSE             |  | RIVER, CANAL, DITCH                         |
|  | HOUSE WITH CORRUGATED ROOF |  | ROAD  |
|  | HOUSE MADE OF BRICKS       |  | SHALLOW ROAD, BORDER OF RICE FIELD          |
|  | PAGODA                     |  | FOOTPATH ROAD                               |
|  | DITCH                      |  | BRIDGE                                      |
|  | TOMB, CEMETERY             |  | SWAMPY POND                                 |
|  | BLOODHOUSE                 |  | FRUIT TREE, BUSH, CANE                      |
|  | HOSPITAL                   |  | TREE  |
|  | TRANSFORMER STATION        |  | RICE FIELD                                  |
|  | PLANT                      |  | VEGETABLE, GRASS                            |
|  | SCHOOL                     |  | MPA, BUSHWOOD, MANGROVE                     |
|  | DIKE                       |  | ELECTRIC PILLAR                             |
|  | BOTANY BOUNDARY            |  | MASONRY BAY                                 |
|  | BRICK, STONE WALL          |  | FISHING STAKES                              |
|  | BARBED WIRE FENCE          |  | BASE POINT COORDINATE, BASE POINT ELEVATION |
|  | RIGHT BUOY                 |  |   |
|  | LEFT BUOY                  |  |   |

**NOTES**

- DIMENSIONS & ELEVATIONS ARE IN [M]
- COORDINATES ARE IN WGS 84 SYSTEM
- ELEVATIONS ARE IN CHART DATUM
- CHART DATUM ELEVATION IS LOWER THAN HON DAU DATUM ELEVATION (2.887M)



THE SOCIALIST REPUBLIC OF VIETNAM MINISTRY OF TRANSPORT PROJECT MANAGEMENT UNIT 85					CAI MEP - THI VAI INTERNATIONAL PORT CONSTRUCTION PROJECT					DESIGNED BY: SASAKI E DRAWN BY: NGUYEN VIET DUNG CHECKED BY: NAGAO N. APPROVED BY: NAGAI K. ISSUE DATE: 30/SEP/2005 SCALE: SCALE					SECTION: SUB-SECTION: TITLE OF DRAWING: DWG NO: NAVIGATION CHANNEL DREDGING SITE CONDITION BATHYMETRIC PLAN(S) PAC3-NC-STC-005					REV. NO				
JAPAN INTERNATIONAL COOPERATION AGENCY ASSIGNED TO: JAPAN PORT CONSULTANT (JPC) PACIFIC CONSULTANTS INTERNATIONAL (PCI) INTERNATIONAL DEVELOPMENT SYSTEM (IDS)					PACKAGE 3 NAVIGATION CHANNEL DREDGING																			
REV NO	DATE	DESCRIPTION	BY	APP																				



**LEGENDS**

	ATCHED HOUSE		IVER, CANAL, DITCH
	OUSE WITH A CORRUGATED ROOF		OAD
	OUSE MADE OF BRICKS		SMALL ROAD, BORDER OF RICE FIELD
	PAGODA		OOTPATH ROAD
	CHURCH		BRIDGE
	TOMB, CEMETERY		SWAMPY
	SCHOOLHOUSE		FRUIT TREES, SUGAR CANE
	HOSPITAL		TREE
	TRANSFORMER STATION		RICE FIELD
	PLANT		VEGETABLE GRASS
	SCHOOL		MPA, BRUSHWOOD, MANGROVE
	DYKE		ELECTRIC PILLAR
	BOTANICAL BOUNDARY		MARKING BUOY
	BRICK, STONE WALL		FISHING STONES
	BARBED WIRE FENCE		MAP POINT COORDINATE, SAME POINT ELEVATION
	RIGHT BUOY		
	LEFT BUOY		

**NOTES**

- DIMENSIONS & ELEVATIONS ARE IN (M).
- COORDINATES ARE IN (WGS 84) SYSTEM.
- ELEVATIONS ARE IN CHART DATUM.
- CHART DATUM ELEVATION IS LOWER THAN HOH DAU DATUM ELEVATION (2.867M)

Scale:  
100 0 100 200 300 400 500

THE SOCIALIST REPUBLIC OF VIETNAM  
MINISTRY OF TRANSPORT  
PROJECT MANAGEMENT UNIT 85

JICA  
JAPAN INTERNATIONAL COOPERATION AGENCY  
ASSIGNED TO:  
JAPAN PORT CONSULTANT (JPC)  
PACIFIC CONSULTANTS INTERNATIONAL (PCI)  
INTERNATIONAL DEVELOPMENT SYSTEM (IDS)

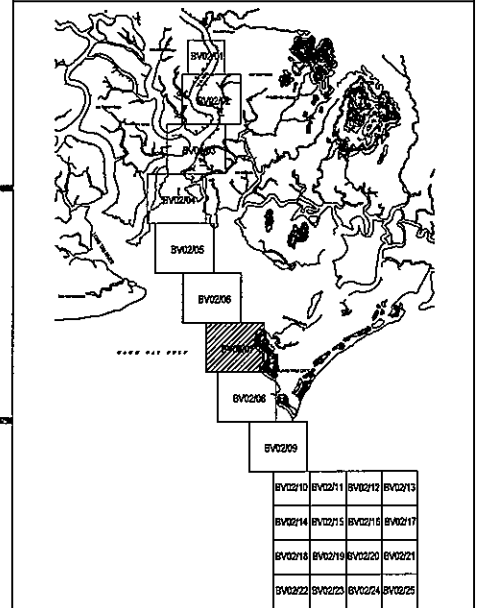
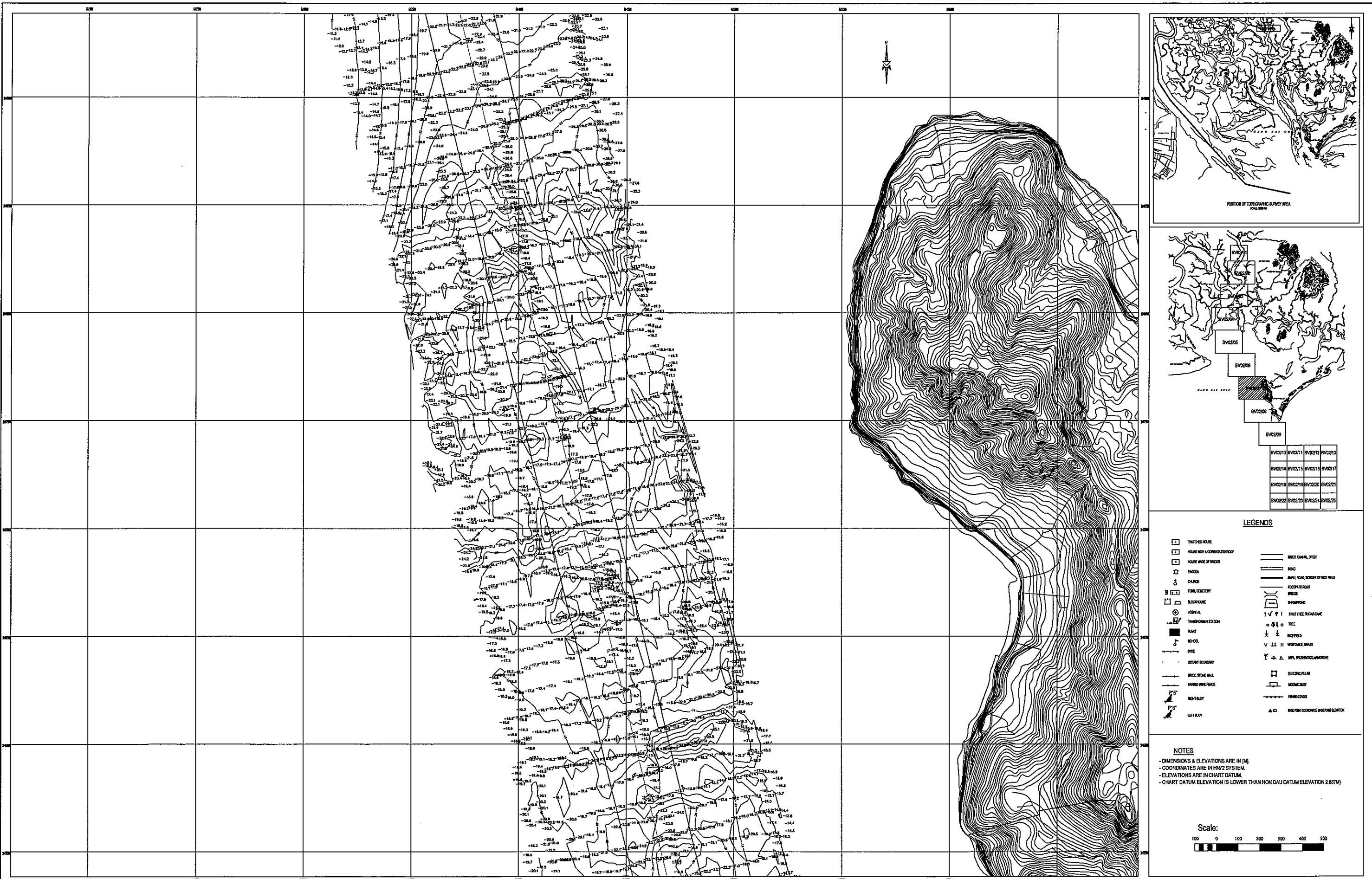
CAI MEP - THI VAI INTERNATIONAL PORT  
CONSTRUCTION PROJECT

PACKAGE 3  
NAVIGATION CHANNEL DREDGING

DESIGNED BY: SASAKI E  
DRAWN BY: NGUYEN VIET DUNG  
CHECKED BY: NAGAO N.  
APPROVED BY: NAGAI K.  
ISSUE DATE: 30/SEP/2005  
SCALE: SCALE

SECTION: NAVIGATION CHANNEL DREDGING  
SUB-SECTION: SITE CONDITION  
TITLE OF DRAWING: BATHYMETRIC PLAN(6)  
DWG NO: PAC3-NC-STC-006  
REV. NO

REV NO	DATE	DESCRIPTION	BY	APP



**LEGENDS**

	THATCHED HOUSE		RIVER CHANNEL
	HOUSE WITH CORRUGATED ROOF		ROAD
	HOUSE WITH TILES		SHALLOW RIDGE OF RICE FIELD
	PADDY		FOOTPATH ROAD
	CHURCH		BRIDGE
	TOMB CEMETERY		SWAMPY POND
	BLDG/STORE		FRUIT TREE
	HOSPITAL		TREE
	TRANSFORMER STATION		RICE FIELD
	PLANT		VEGETABLE GARDEN
	POND		IRON MINE
	DIKE		IRON MINE (SMALL)
	BOUNDARY		ELECTRIC PYLON
	BRICK STONE WALL		BAMBOO FENCE
	BAMBOO FENCE		IRON MINE (LARGE)
	ROAD		IRON MINE (VERY LARGE)
	LEFT BANK		

**NOTES**

- DIMENSIONS & ELEVATIONS ARE IN [M]
- COORDINATES ARE IN UTM SYSTEM
- ELEVATIONS ARE IN CHART DATUM
- CHART DATUM ELEVATION IS LOWER THAN HON DAU DATUM ELEVATION (2.887M)

Scale:

THE SOCIALIST REPUBLIC OF VIETNAM  
 MINISTRY OF TRANSPORT  
 PROJECT MANAGEMENT UNIT 85

JAPAN INTERNATIONAL COOPERATION AGENCY  
 ASSIGNED TO:  
 JAPAN PORT CONSULTANT (JPC)  
 PACIFIC CONSULTANTS INTERNATIONAL (PCI)  
 INTERNATIONAL DEVELOPMENT SYSTEM (IDS)

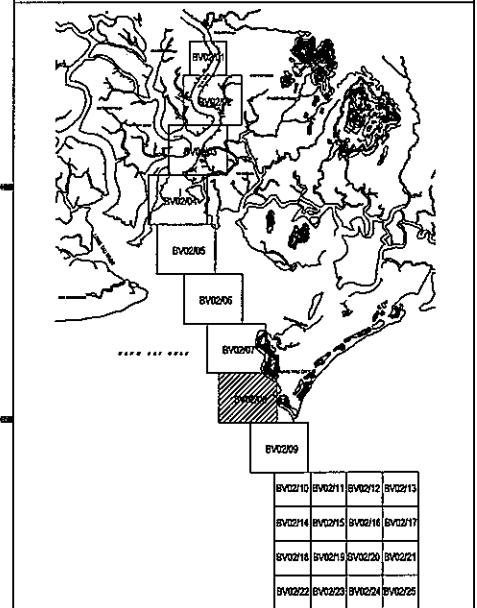
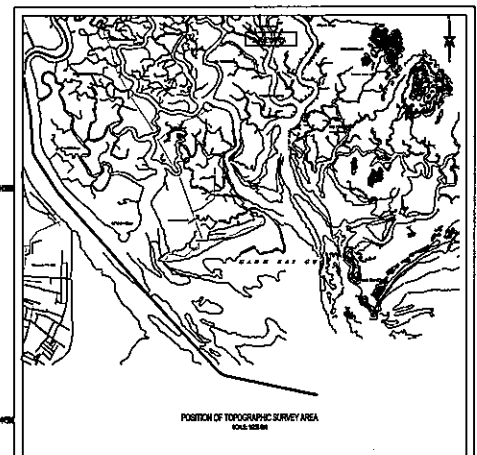
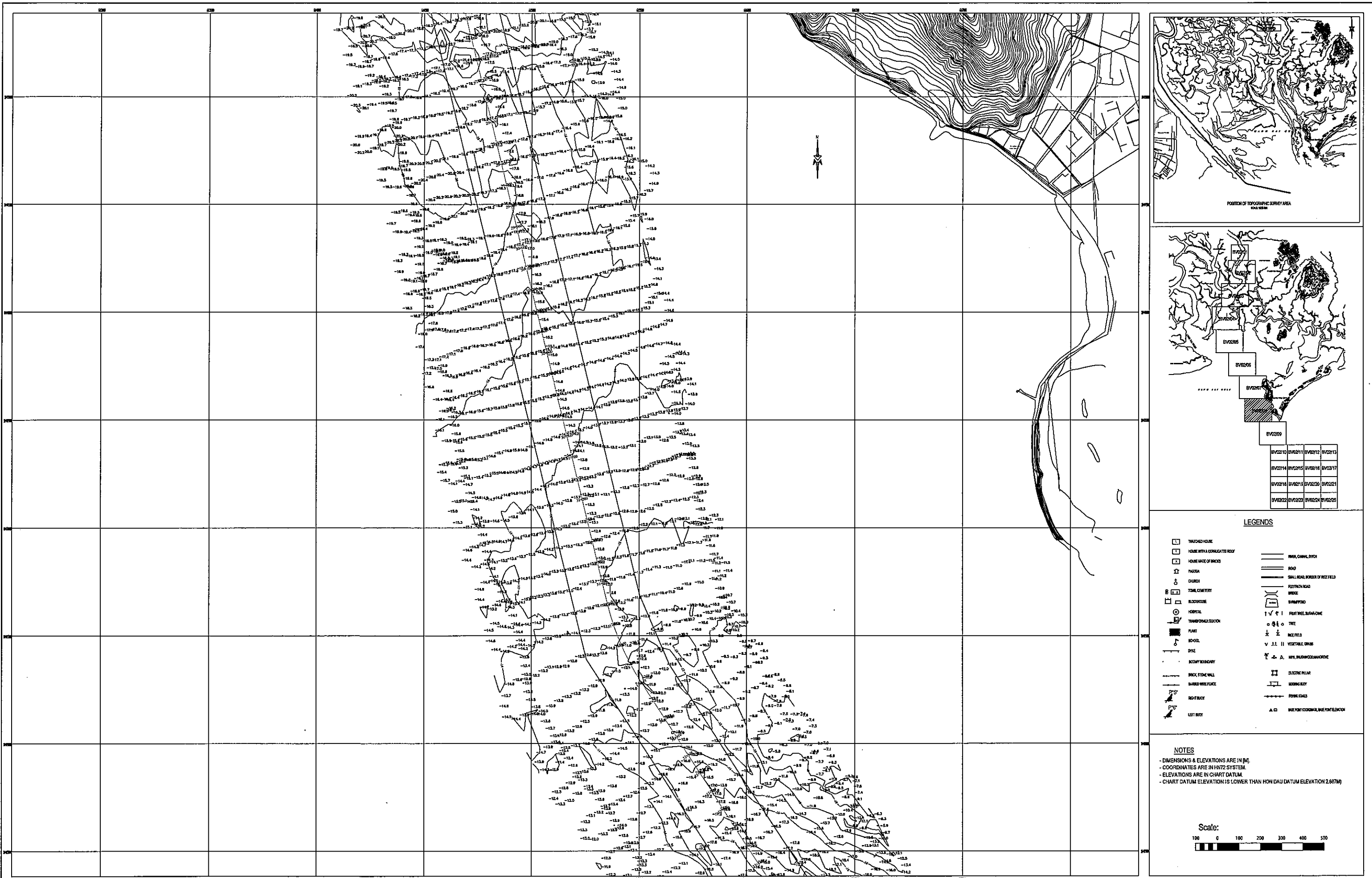
CAI MEP - THI VAI INTERNATIONAL PORT  
 CONSTRUCTION PROJECT

PACKAGE 3  
 NAVIGATION CHANNEL DREDGING

DESIGNED BY: SASAKI E  
 DRAWN BY: NGUYEN VIET DUNG  
 CHECKED BY: NAGAO N.  
 APPROVED BY: NAGAI K.  
 ISSUE DATE: 30/SEP/2005  
 SCALE: SCALE

SECTION: NAVIGATION CHANNEL DREDGING  
 SUB-SECTION: SITE CONDITION  
 TITLE OF DRAWING: BATHYMETRIC PLAN(7)  
 DWG NO: PAC3-NC-STC-007  
 REV. NO

REV NO	DATE	DESCRIPTION	BY	APP



**LEGENDS**

[Symbol] TRAP HOUSE	[Symbol] IRON CANAL DITCH
[Symbol] HOUSE WITH CORRUGATED ROOF	[Symbol] ROAD
[Symbol] HOUSE MADE OF BRICKS	[Symbol] SHALLOW BORDER OF RICE FIELD
[Symbol] PAVILION	[Symbol] FOOTPATH ROAD
[Symbol] CHURCH	[Symbol] BRIDGE
[Symbol] TOMB CEMETERY	[Symbol] SWAMPY SOIL
[Symbol] BUCKHOUSE	[Symbol] FIRST TIEE SUGAR CANE
[Symbol] HOSPITAL	[Symbol] TREE
[Symbol] TRANSFORMER STATION	[Symbol] RICE FIELD
[Symbol] PLANT	[Symbol] VEGETABLE GARDEN
[Symbol] SCHOOL	[Symbol] WPA PALMWOOD SWAMPY SOIL
[Symbol] DISE	[Symbol] ELECTRIC PILLAR
[Symbol] BOUNDARY	[Symbol] BOUNDARY
[Symbol] BRICK STONE WALL	[Symbol] FISH FIELDS
[Symbol] BARBED WIRE FENCE	[Symbol] BATHYMETRIC PLAN
[Symbol] ROAD	[Symbol] A.D. BATHYMETRIC PLAN
[Symbol] LEFT BAY	

**NOTES**

- DIMENSIONS & ELEVATIONS ARE IN (M).
- COORDINATES ARE IN HNTZ SYSTEM.
- ELEVATIONS ARE IN CHART DATUM.
- CHART DATUM ELEVATION IS LOWER THAN HON DAU DATUM ELEVATION 2.867(M)

Scale:  
100 0 100 200 300 400 500

THE SOCIALIST REPUBLIC OF VIETNAM  
MINISTRY OF TRANSPORT  
PROJECT MANAGEMENT UNIT 85

JAPAN INTERNATIONAL COOPERATION AGENCY  
ASSIGNED TO:  
JAPAN PORT CONSULTANT (JPC)  
PACIFIC CONSULTANTS INTERNATIONAL (PCI)  
INTERNATIONAL DEVELOPMENT SYSTEM (IDS)

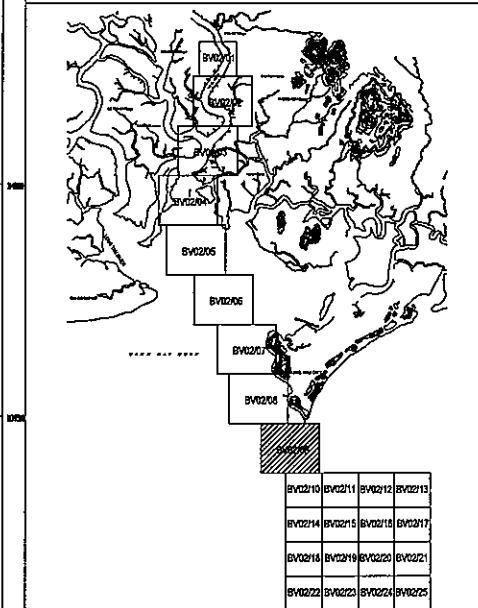
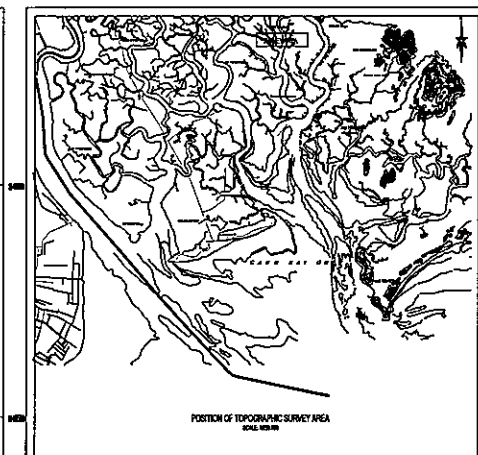
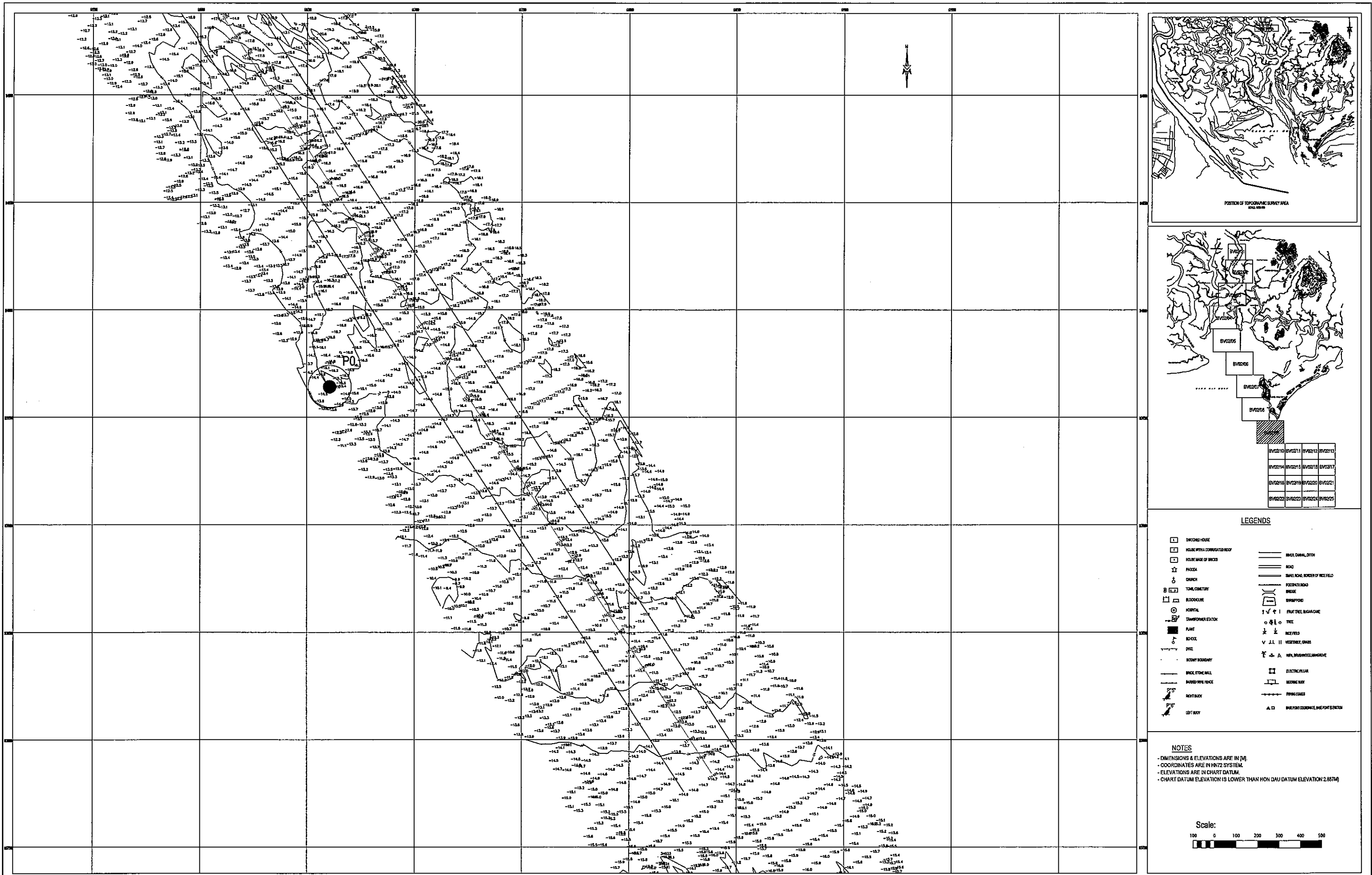
CAI MEP - THI VAI INTERNATIONAL PORT  
CONSTRUCTION PROJECT

PACKAGE 3  
NAVIGATION CHANNEL DREDGING

DESIGNED BY: SASAKI E  
DRAWN BY: NGUYEN VIET DUNG  
CHECKED BY: NAGAO N.  
APPROVED BY: NAGAI K.  
ISSUE DATE: 30/SEP/2005  
SCALE: SCALE

SECTION: NAVIGATION CHANNEL DREDGING  
SUB-SECTION: SITE CONDITION  
TITLE OF DRAWING: BATHYMETRIC PLAN(8)  
DWG NO: PAC3-NC-STC-008  
REV. NO

REV NO	DATE	DESCRIPTION	BY	APP



**LEGENDS**

	DWIVED-HOUSE		RIVER CHANNEL
	HOUSE WITH CORRUGATED ROOF		ROAD
	HOUSE MADE OF BRICKS		SUPER RICE BORDER OF RICE FIELD
	PADDY		FOOTPATH ROAD
	CHURCH		BRIDGE
	CANAL		SWAMPY AREA
	ROAD CENTER LINE		FRUIT TREE PLANTATION
	BLOODSTONE		TREE
	HORIZONTAL		RICE FIELD
	TRANSFORMER STATION		VEGETABLE GARDEN
	PLANT		MANGROVE WOODLAND
	POND		ELECTRIC PILLAR
	RAILWAY ROAD		MANGROVE FOREST
	BRICK STONE WALL		PADDY FIELD
	BAMBOO FENCE		MANGROVE FOREST
	POND BODY		MANGROVE FOREST
	POND BODY		MANGROVE FOREST
	POND BODY		MANGROVE FOREST

**NOTES**

- DIMENSIONS & ELEVATIONS ARE IN (M)
- COORDINATES ARE IN (N72) SYSTEM
- ELEVATIONS ARE IN CHART DATUM
- CHART DATUM ELEVATION IS LOWER THAN HON DAU DATUM ELEVATION 2.857M

Scale:  
100 0 100 200 300 400 500

REV NO	DATE	DESCRIPTION	BY	APP

THE SOCIALIST REPUBLIC OF VIETNAM  
 MINISTRY OF TRANSPORT  
 PROJECT MANAGEMENT UNIT 85

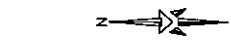
JICA  
 JAPAN INTERNATIONAL COOPERATION AGENCY  
 ASSIGNED TO:  
 JAPAN PORT CONSULTANT (JPC)  
 PACIFIC CONSULTANTS INTERNATIONAL (PCI)  
 INTERNATIONAL DEVELOPMENT SYSTEM (IDS)

CAI MEP - THI VAI INTERNATIONAL PORT  
 CONSTRUCTION PROJECT

PACKAGE 3  
 NAVIGATION CHANNEL DREDGING

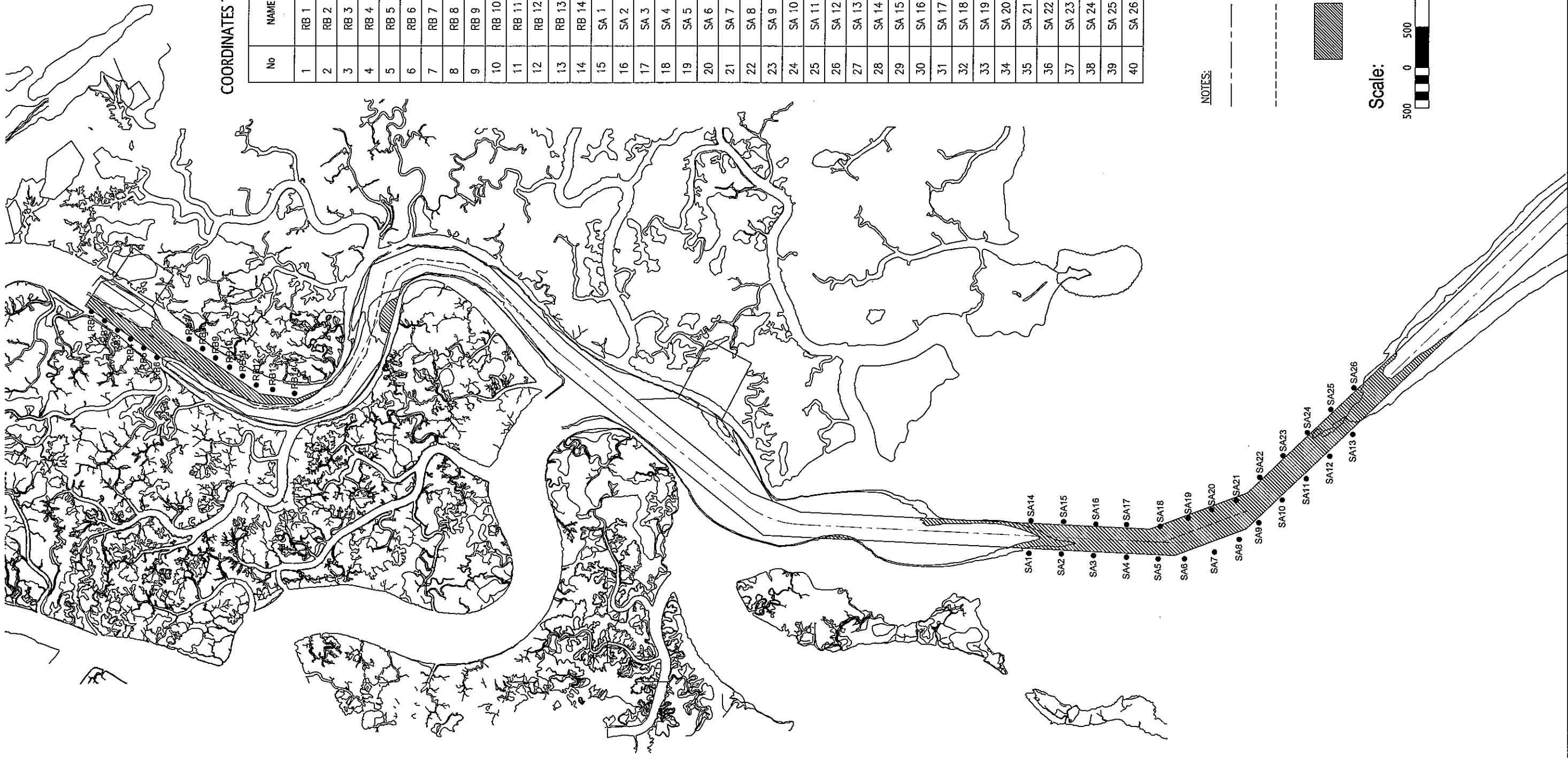
DESIGNED BY: SASAKI E  
 DRAWN BY: NGUYEN VIET DUNG  
 CHECKED BY: NAGAI K  
 APPROVED BY: NAGAI K  
 ISSUE DATE: 30/SEP/2005  
 SCALE: SCALE

SECTION: NAVIGATION CHANNEL DREDGING  
 SUB-SECTION: SITE CONDITION  
 TITLE OF DRAWING: BATHYMETRIC PLAN(9)  
 DWG NO: PAC3-NC-STC-009  
 REV. NO

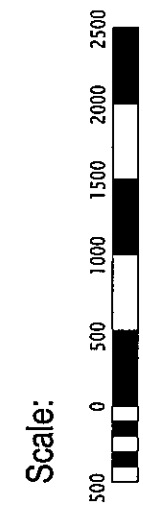


COORDINATES TABLE OF BOREHOLES LOCATION

No	NAME	COORDINATES (HN72)	
		EAST (M)	NORTH (M)
1	RB 1	611763.000	1170045.000
2	RB 2	611650.000	1169880.000
3	RB 3	611532.000	1169719.000
4	RB 4	611425.000	1169555.000
5	RB 5	611313.000	1169390.000
6	RB 6	611197.000	1169225.000
7	RB 7	611423.000	1168830.000
8	RB 8	611304.000	1168663.000
9	RB 9	611190.000	1168504.000
10	RB 10	611076.000	1168333.000
11	RB 11	610967.000	1168173.000
12	RB 12	610855.000	1168003.000
13	RB 13	610800.000	1167802.000
14	RB 14	610751.000	1167529.000
15	SA 1	608777.000	1158443.000
16	SA 2	608770.000	1158042.000
17	SA 3	608750.000	1157644.000
18	SA 4	608730.000	1157237.000
19	SA 5	608709.000	1156846.000
20	SA 6	608710.000	1156520.000
21	SA 7	608794.000	1156150.000
22	SA 8	608949.000	1155844.000
23	SA 9	609156.000	1155600.000
24	SA 10	609436.000	1155310.000
25	SA 11	609700.000	1155015.000
26	SA 12	609977.000	1154727.000
27	SA 13	610247.000	1154443.000
28	SA 14	609180.000	1158417.000
29	SA 15	609170.000	1158013.000
30	SA 16	609140.000	1157614.000
31	SA 17	609132.000	1157236.000
32	SA 18	609110.000	1156820.000
33	SA 19	609211.000	1156475.000
34	SA 20	609315.000	1156183.000
35	SA 21	609433.000	1155880.000
36	SA 22	609717.000	1155590.000
37	SA 23	609984.000	1155300.000
38	SA 24	610270.000	1155002.000
39	SA 25	610555.000	1154714.000
40	SA 26	610823.000	1154430.000

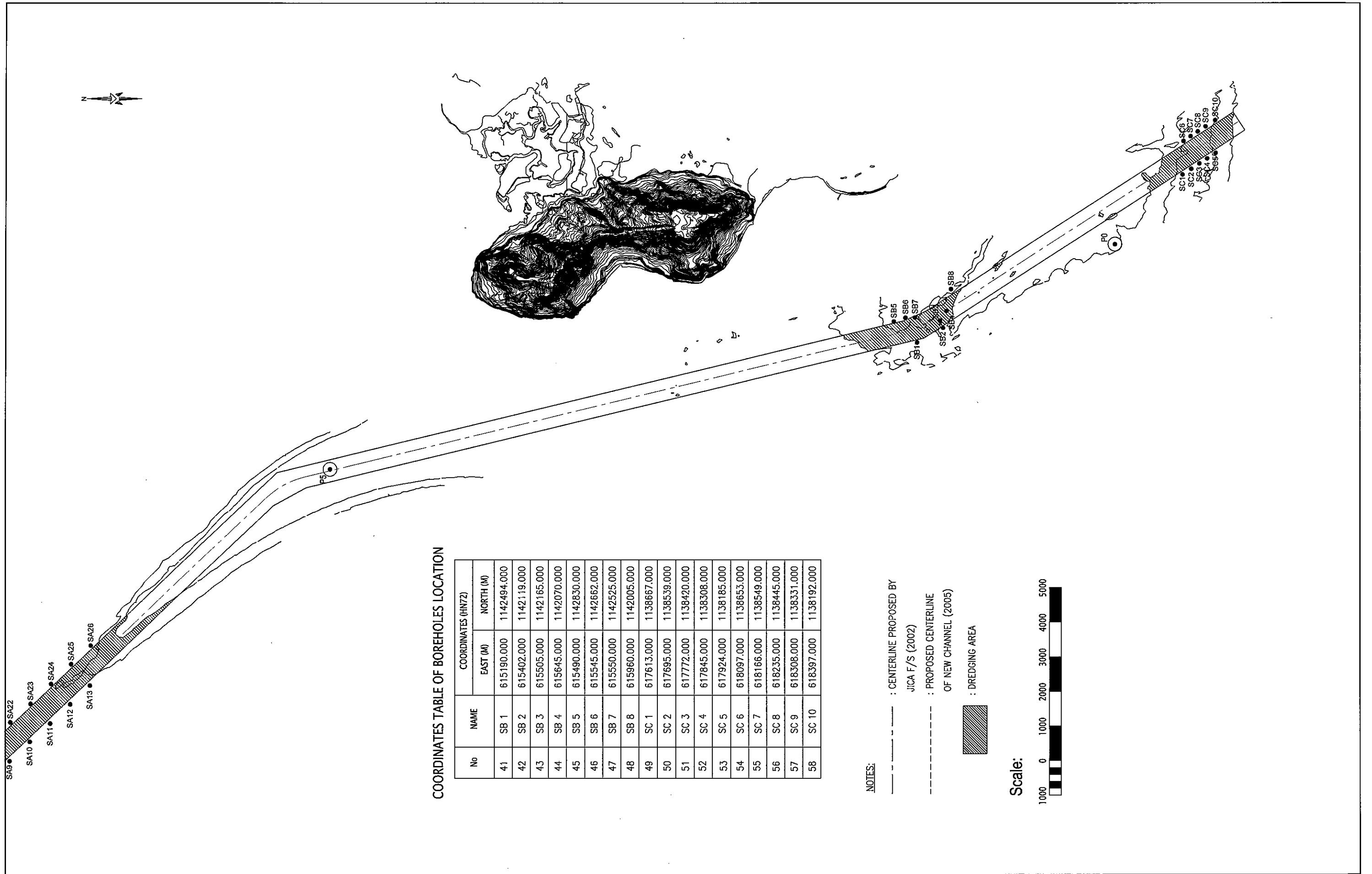


NOTES:  
 - - - : CENTERLINE PROPOSED BY JICA F/S (2002)  
 - - - : PROPOSED CENTERLINE OF NEW CHANNEL (2005)  
 [Hatched Area] : DREDGING AREA



		THE SOCIALIST REPUBLIC OF VIETNAM MINISTRY OF TRANSPORT PROJECT MANAGEMENT UNIT 85		CAI MEP - THI VAI INTERNATIONAL PORT CONSTRUCTION PROJECT		DESIGNED BY: SASAKI E DRAWN BY: NGUYEN VIET DUNG CHECKED BY: NAGAO N. APPROVED BY: NAGAI K. ISSUE DATE: 30/SEP/2005 SCALE: SCALE		SECTION: NAVIGATION CHANNEL DREDGING SUB-SECTION: SITE CONDITIONS TITLE OF DRAWING: SOIL CONDITION-BOREHOLE LOCATION (1) DWG NO: PAC3-NC-STC -010		REV. NO
REV NO	DATE	DESCRIPTION	BY	APP	PACKAGE 3 NAVIGATION CHANNEL DREDGING					

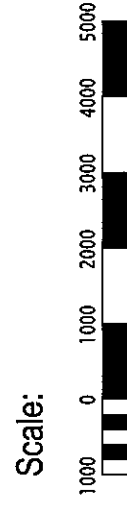
JICA  
 JAPAN INTERNATIONAL COOPERATION AGENCY  
 ASSIGNED TO:  
 JAPAN PORT CONSULTANT (JPC)  
 PACIFIC CONSULTANTS INTERNATIONAL (PCI)  
 INTERNATIONAL DEVELOPMENT SYSTEM (IDS)



COORDINATES TABLE OF BOREHOLES LOCATION

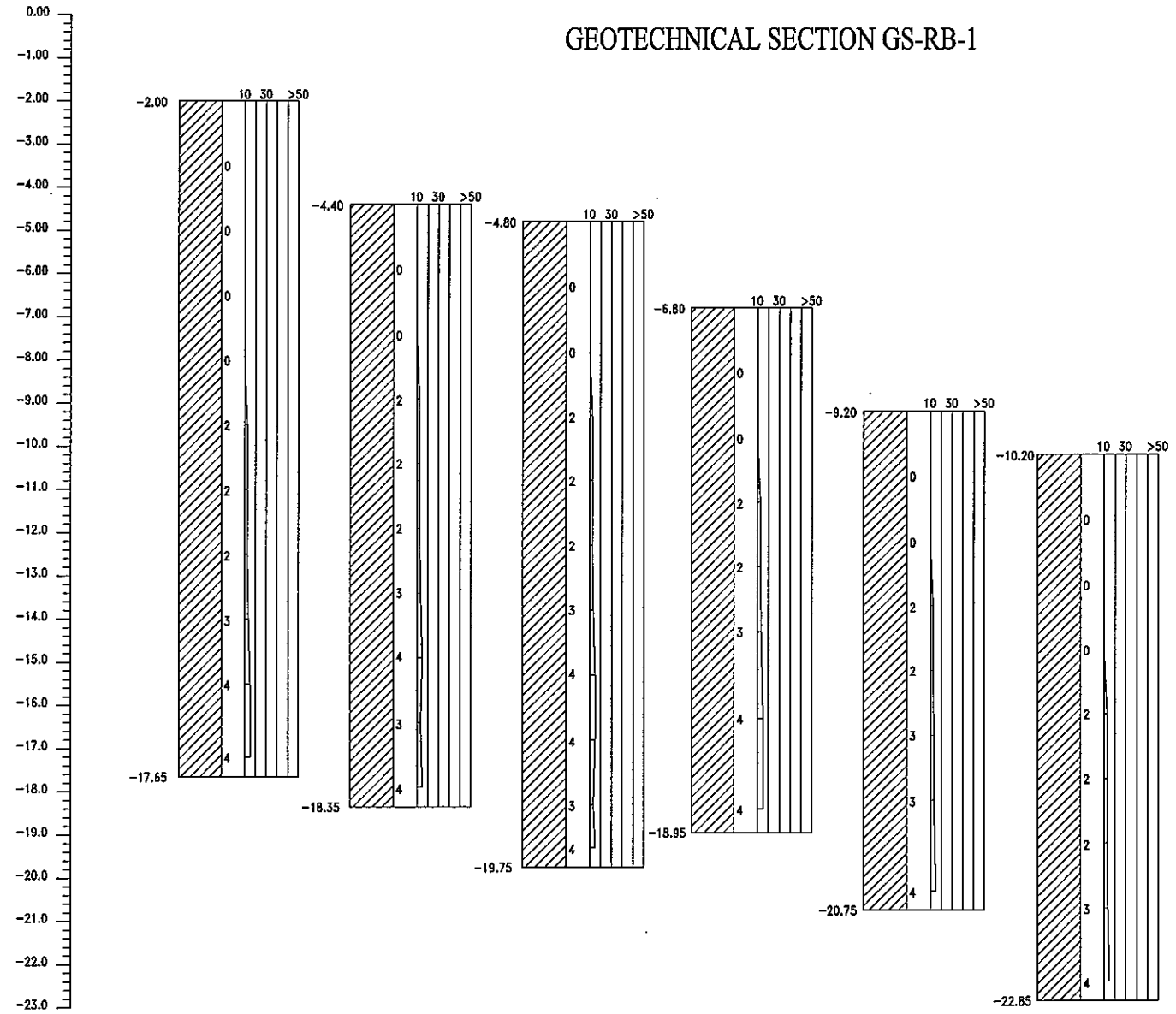
No	NAME	COORDINATES (HN72)	
		EAST (M)	NORTH (M)
41	SB 1	615190.000	1142494.000
42	SB 2	615402.000	1142119.000
43	SB 3	615505.000	1142165.000
44	SB 4	615645.000	1142070.000
45	SB 5	615490.000	1142830.000
46	SB 6	615545.000	1142662.000
47	SB 7	615550.000	1142525.000
48	SB 8	615960.000	1142005.000
49	SC 1	617613.000	1138667.000
50	SC 2	617695.000	1138539.000
51	SC 3	617772.000	1138420.000
52	SC 4	617845.000	1138308.000
53	SC 5	617924.000	1138185.000
54	SC 6	618097.000	1138653.000
55	SC 7	618166.000	1138549.000
56	SC 8	618235.000	1138445.000
57	SC 9	618308.000	1138331.000
58	SC 10	618397.000	1138192.000

NOTES:  
 - - - - - : CENTERLINE PROPOSED BY JICA F/S (2002)  
 - - - - - : PROPOSED CENTERLINE OF NEW CHANNEL (2005)  
 [Hatched Area] : DREDGING AREA



		THE SOCIALIST REPUBLIC OF VIETNAM MINISTRY OF TRANSPORT PROJECT MANAGEMENT UNIT 85		CAI MEP - THI VAI INTERNATIONAL PORT CONSTRUCTION PROJECT		DESIGNED BY: SASAKI E DRAWN BY: NGUYEN VIET DUNG CHECKED BY: NAGAO N. APPROVED BY: NAGAI K. ISSUE DATE: 30/SEP/2005 SCALE: SCALE		SECTION: NAVIGATION CHANNEL DREDGING SUB-SECTION: SITE CONDITIONS TITLE OF DRAWING: SITE CONDITION-BOREHOLE LOCATION (2) DWG NO: PAC3-NC-STC -011 REV. NO	
REV NO	DATE	DESCRIPTION	BY	APP	PACKAGE 3 NAVIGATION CHANNEL DREDGING				

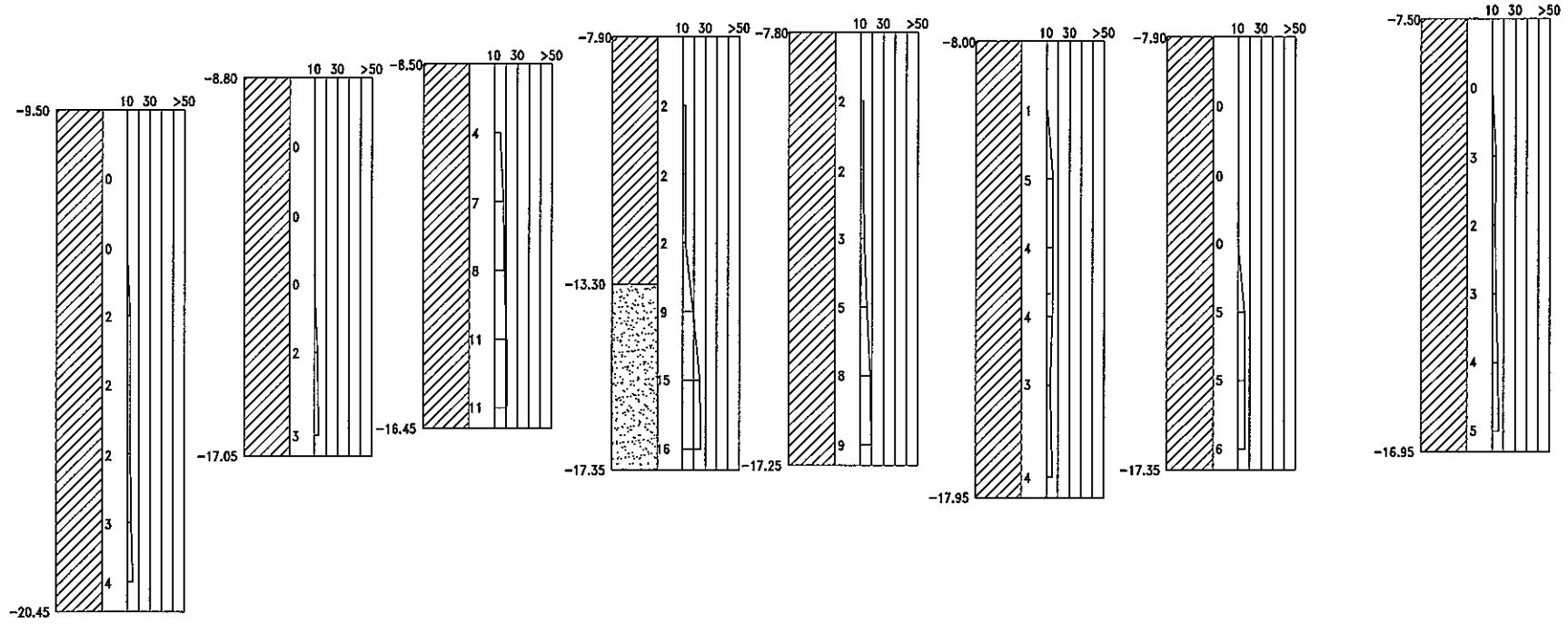
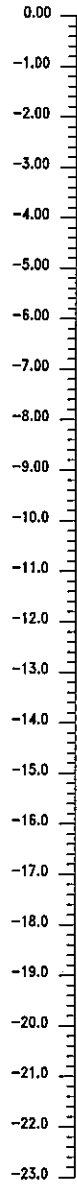
### GEOTECHNICAL SECTION GS-RB-1



ELEVATION (M)	-2.00	-4.40	-4.80	-6.80	-9.20	-10.20
BOREHOLE No.	RB-1	RB-2	RB-3	RB-4	RB-5	RB-6
DISTANCE (M)	209.0	199.61	195.82	199.42	201.70	

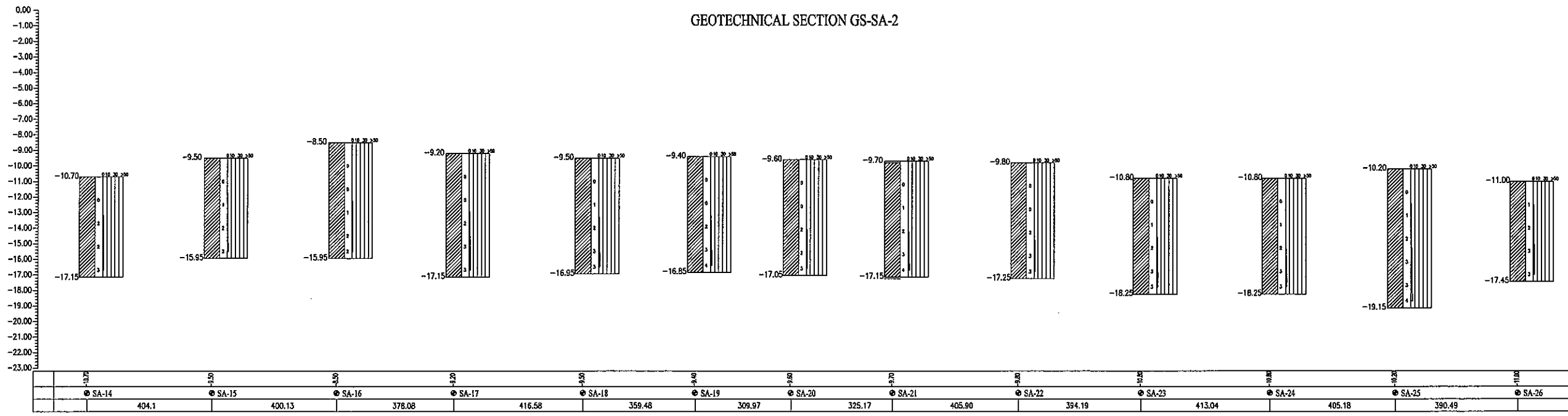
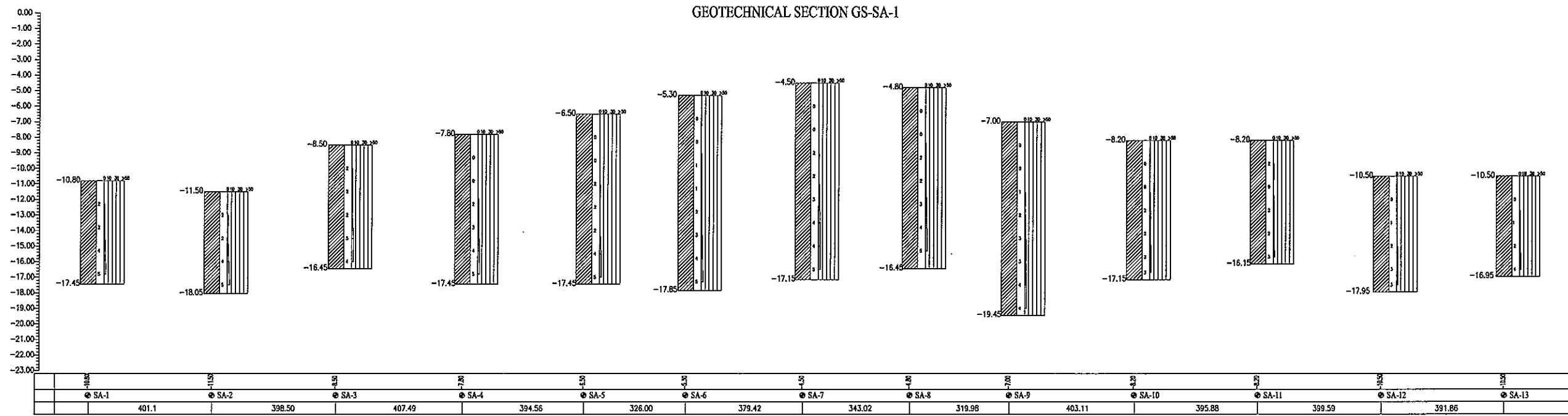
	THE SOCIALIST REPUBLIC OF VIETNAM MINISTRY OF TRANSPORT PROJECT MANAGEMENT UNIT 85	CAI MEP - THI VAI INTERNATIONAL PORT CONSTRUCTION PROJECT  PACKAGE 3 NAVIGATION CHANNEL DREDGING	DESIGNED BY: SASAKI E DRAWN BY: NGUYEN VIET DUNG CHECKED BY: NAGAO N. APPROVED BY: NAGAI K. ISSUE DATE: 30/SEP/2005 SCALE: SCALE	SECTION: NAVIGATION CHANNEL DREDGING SUB-SECTION: SITE CONDITIONS TITLE OF DRAWING: SOIL CONDITION - GEOLOGICAL SECTIONS (1) DWG NO: PAC3-NC-STC -012 REV. NO
	JAPAN INTERNATIONAL COOPERATION AGENCY ASSIGNED TO: JAPAN PORT CONSULTANT (JPC) PACIFIC CONSULTANTS INTERNATIONAL (PCI) INTERNATIONAL DEVELOPMENT SYSTEM (IDS)			
REV NO	DATE	DESCRIPTION	BY	APP

GEOTECHNICAL SECTION GS-RB-2



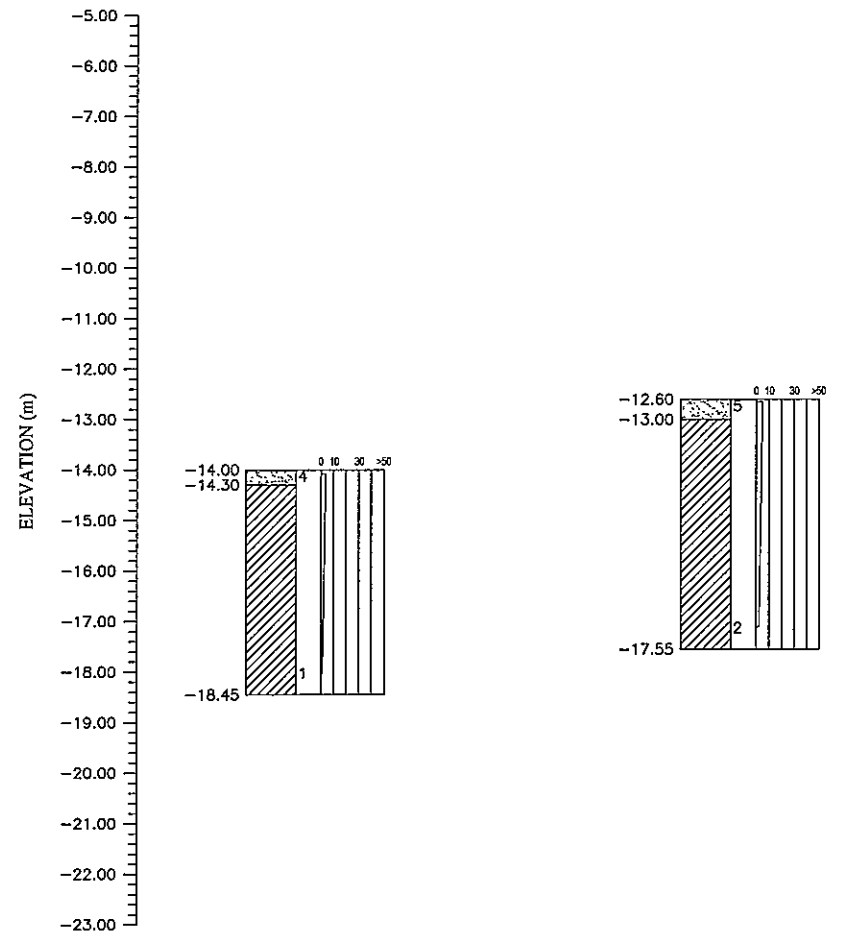
ELEVATION (M)	-9.50	-8.80	-8.50	-7.90	-7.80	-8.00	-7.90	-7.50
BOREHOLE No.	RB-7	RB-8	RB-9	RB-10	RB-11	RB-12	RB-13	RB-14
DISTANCE (M)	205.1	195.65	205.52	193.60	203.58	208.39	277.36	

THE SOCIALIST REPUBLIC OF VIETNAM MINISTRY OF TRANSPORT PROJECT MANAGEMENT UNIT 85				CAI MEP - THI VAI INTERNATIONAL PORT CONSTRUCTION PROJECT		DESIGNED BY: SASAKI E DRAWN BY: NGUYEN VIET DUNG CHECKED BY: NAGAO N. APPROVED BY: NAGAI K. ISSUE DATE: 30/SEP/2005 SCALE: SCALE		SECTION: NAVIGATION CHANNEL DREDGING SUB-SECTION: SITE CONDITIONS TITLE OF DRAWING: SOIL CONDITION - GEOLOGICAL SECTIONS (2) DWG NO: PAC3-NC-STC-013	
JAPAN INTERNATIONAL COOPERATION AGENCY ASSIGNED TO: JAPAN PORT CONSULTANT (JPC) PACIFIC CONSULTANTS INTERNATIONAL (PCI) INTERNATIONAL DEVELOPMENT SYSTEM (IDS)				PACKAGE 3 NAVIGATION CHANNEL DREDGING				REV. NO	
REV NO	DATE	DESCRIPTION	BY	APP					



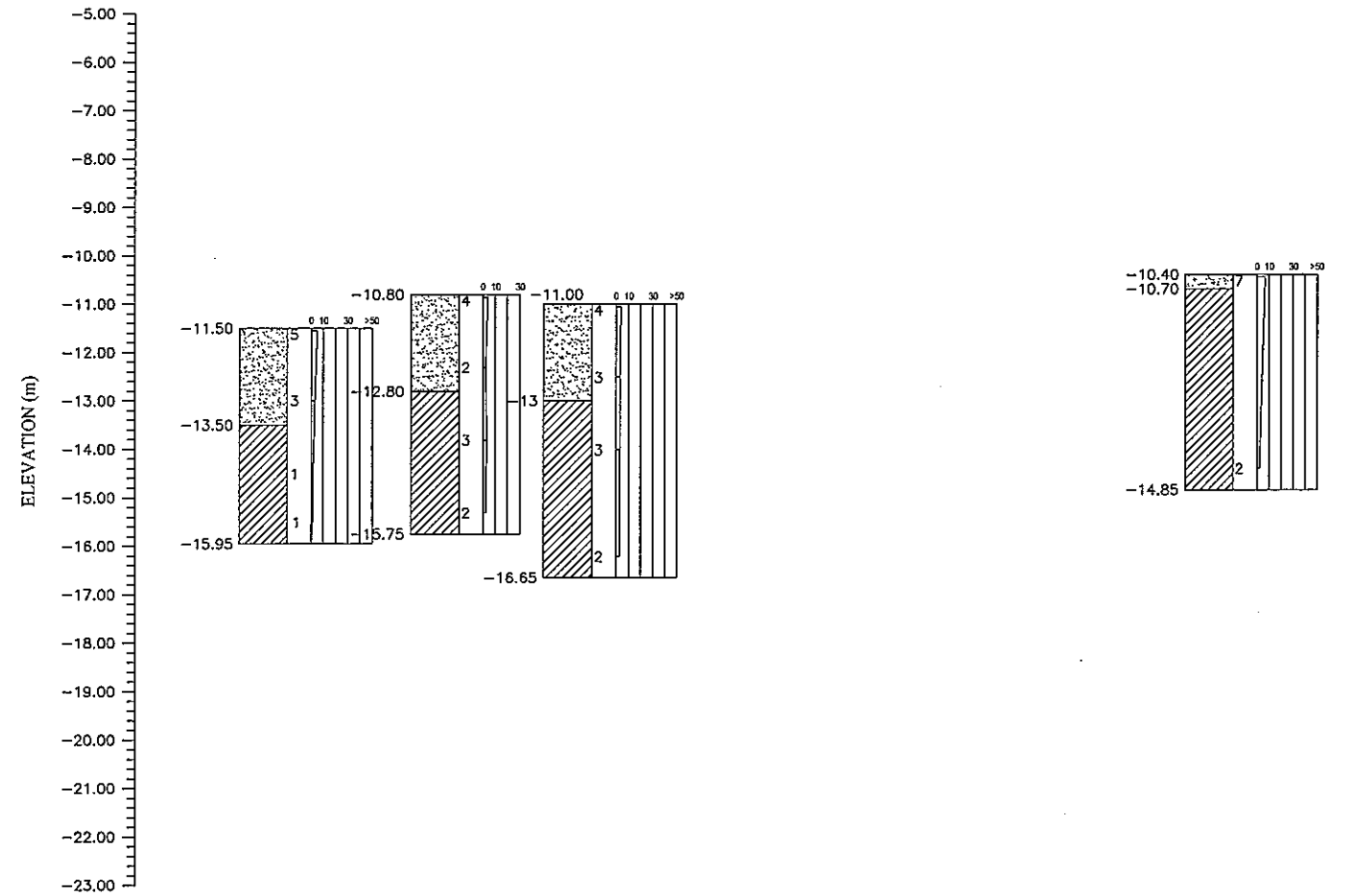
THE SOCIALIST REPUBLIC OF VIETNAM MINISTRY OF TRANSPORT PROJECT MANAGEMENT UNIT 85					CAI MEP - THI VAI INTERNATIONAL PORT CONSTRUCTION PROJECT					DESIGNED BY: SASAKI E DRAWN BY: NGUYEN VIET DUNG CHECKED BY: NAGAO N. APPROVED BY: NAGAI K. ISSUE DATE: 30/SEP/2005 SCALE: SCALE		SECTION: NAVIGATION CHANNEL DREDGING SUB-SECTION: SITE CONDITIONS TITLE OF DRAWING: SOIL CONDITION - GEOLOGICAL SECTIONS (3)	
JAPAN INTERNATIONAL COOPERATION AGENCY ASSIGNED TO: JAPAN PORT CONSULTANT (JPC) PACIFIC CONSULTANTS INTERNATIONAL (PCI) INTERNATIONAL DEVELOPMENT SYSTEM (IDS)					PACKAGE 3 NAVIGATION CHANNEL DREDGING					DWG NO: PAC3-NC-STC -014		REV. NO	
REV NO	DATE	DESCRIPTION	BY	APP									

GEOTECHNICAL SECTION GS-SB-1



ELEVATION (m)	-14.00	-14.30	-17.55	-12.60
BOREHOLE No.	⊕ SB1			⊕ SB2
DISTANCE (m)		430.8		

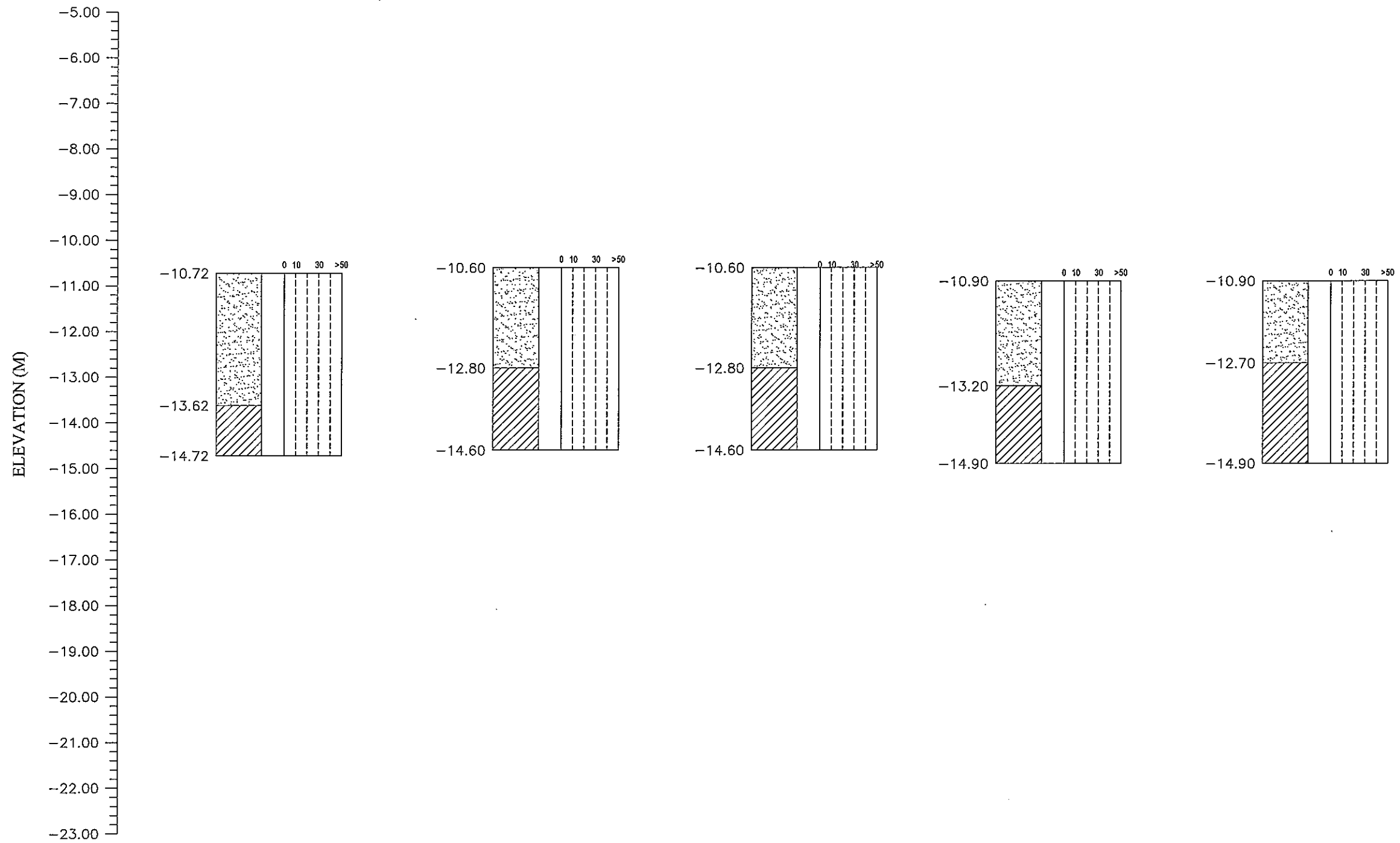
GEOTECHNICAL SECTION GS-SB-2



ELEVATION (m)	-11.50	-10.80	-11.00	-10.40
BOREHOLE No.	⊕ SB5	⊕ SB6	⊕ SB7	⊕ SB8
DISTANCE (m)	176.8	137.09	662.19	

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					JAPAN INTERNATIONAL COOPERATION AGENCY ASSIGNED TO: JAPAN PORT CONSULTANT (JPC) PACIFIC CONSULTANTS INTERNATIONAL (PCI) INTERNATIONAL DEVELOPMENT SYSTEM (IDS)		PACKAGE 3 NAVIGATION CHANNEL DREDGING					
REV NO	DATE	DESCRIPTION	BY	APP								

# GEOTECHNICAL SECTION GS-SC-1



ELEVATION (m)	-10.70	-10.60	-10.60	-10.90	-10.90
BOREHOLE No.	⊕ SC1	⊕ SC2	⊕ SC3	⊕ SC4	⊕ SC5
DISTANCE (m)	152.0	141.74	133.69	146.18	

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JAPAN INTERNATIONAL COOPERATION AGENCY ASSIGNED TO: JAPAN PORT CONSULTANT (JPC) PACIFIC CONSULTANTS INTERNATIONAL (PCI) INTERNATIONAL DEVELOPMENT SYSTEM (IDS)					PACKAGE 3 NAVIGATION CHANNEL DREDGING					DWG NO: PAC3-NC-STC -016 REV. NO	
REV NO	DATE	DESCRIPTION	BY	APP							

