

PORT MUHAMMAD-BIN-QASIM PROJECT

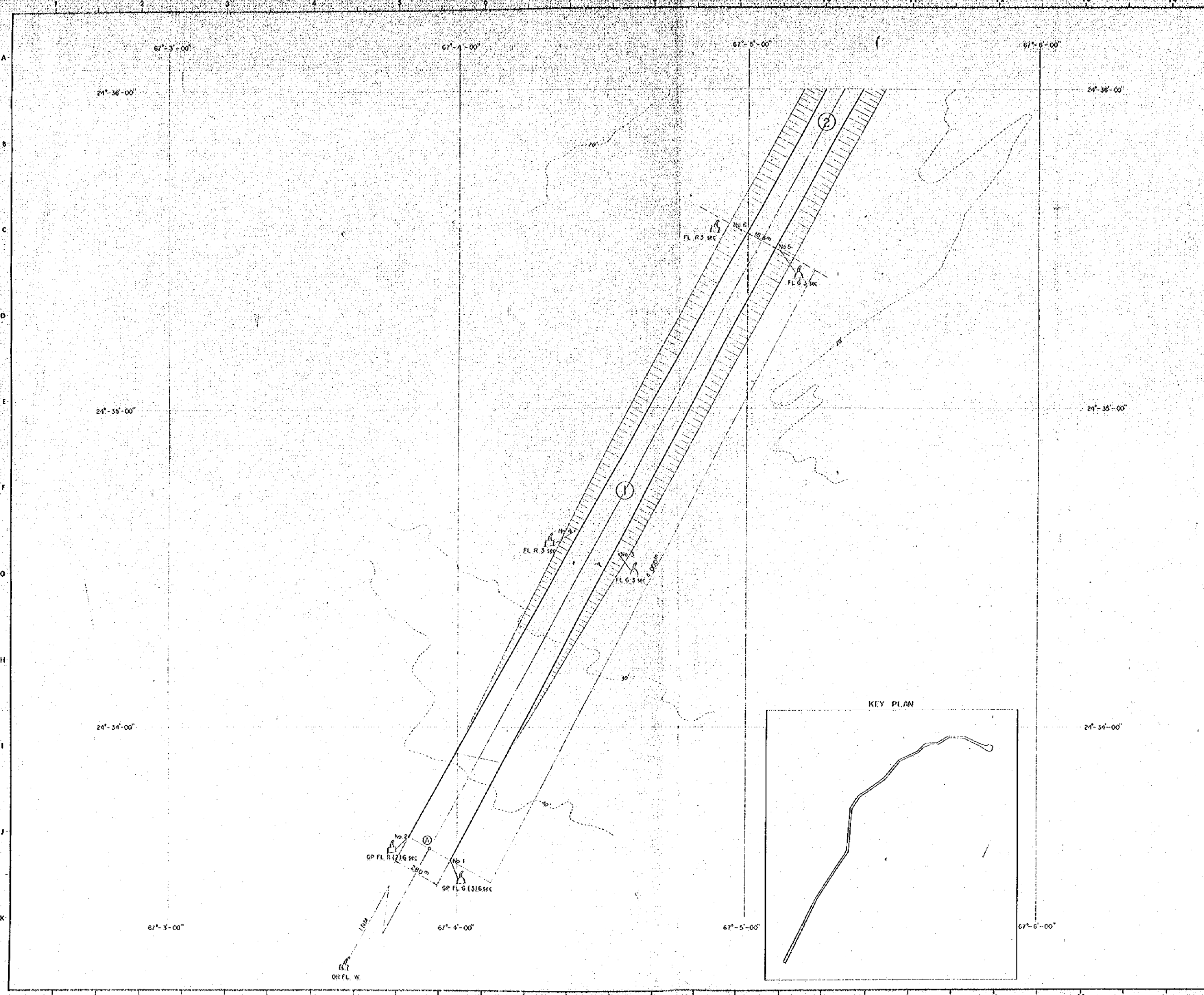
REPORT DRAWINGS

NEVIGATION AIDS

DECEMBER 1975

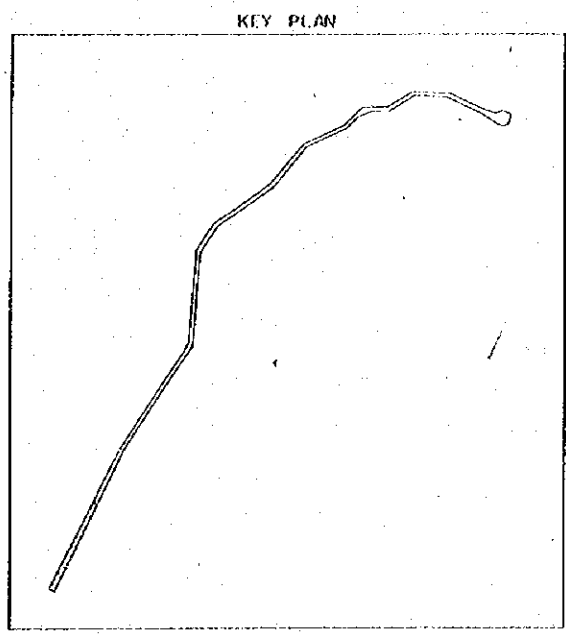
JAPAN INTERNATIONAL COOPERATION AGENCY

JR

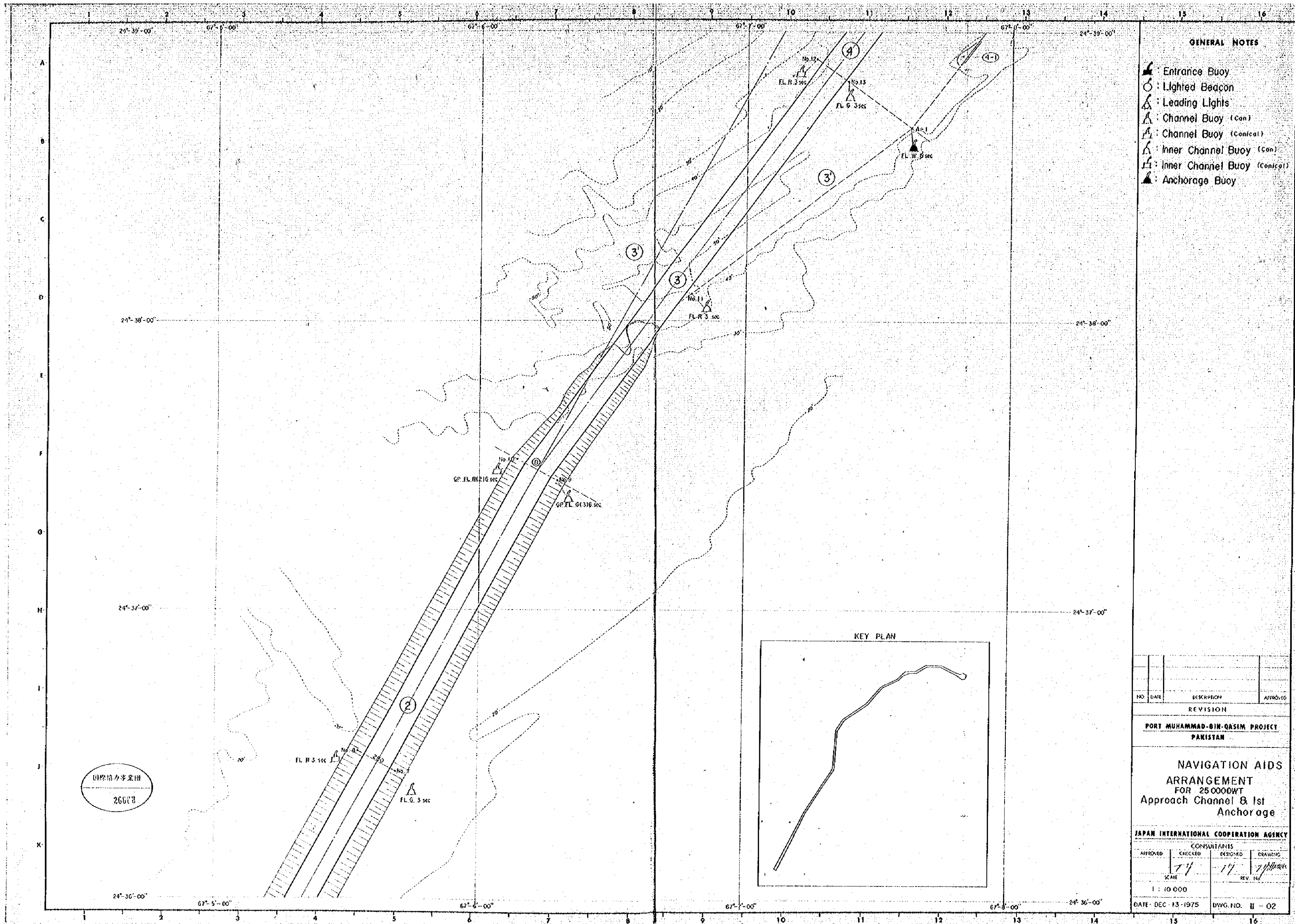


- GENERAL NOTES**
- : Entrance Buoy
 - : Lighted Beacon
 - : Leading Light
 - : Channel Buoy (Con)
 - : Channel Buoy (Conical)
 - : Inner Channel Buoy (Con)
 - : Inner Channel Buoy (Conical)

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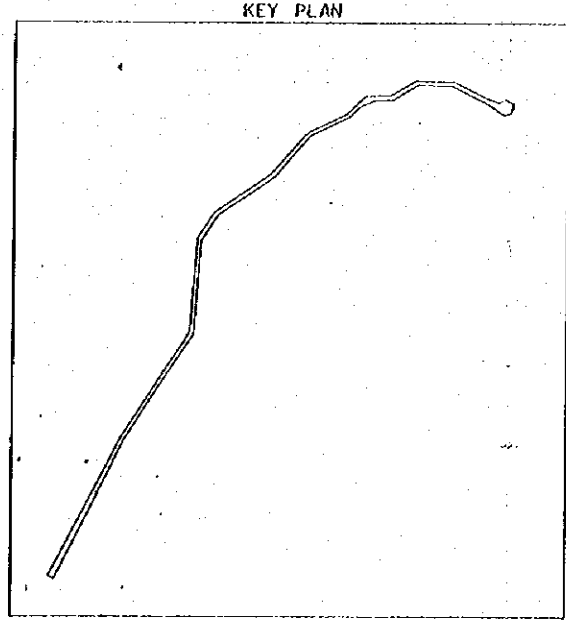


NO.	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT			
PAKISTAN			
NAVIGATION AIDS			
ARRANGEMENT			
FOR 25000DWT			
Entrance to Approach			
Channel			
JAPAN INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
SCALE		REV. No.	
1 : 10 000			
DATE DEC-13-1975	DWG. NO. II - 01		



GENERAL NOTES

- ▲ Entrance Buoy
- Lighted Beacon
- △ Leading Lights
- △ Channel Buoy (Con)
- △ Channel Buoy (Conical)
- △ Inner Channel Buoy (Con)
- △ Inner Channel Buoy (Conical)
- ▲ Anchorage Buoy



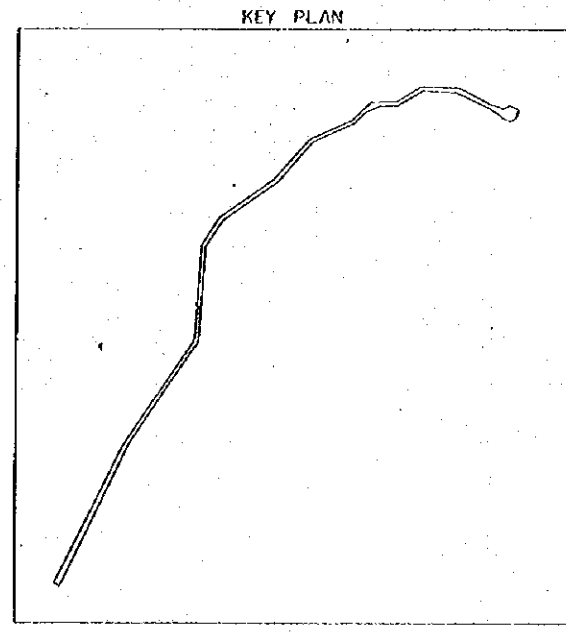
NO.	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT PAKISTAN			
NAVIGATION AIDS ARRANGEMENT FOR 25 000 DWT Approach Channel & 1st Anchorage			
JAPAN INTERNATIONAL COOPERATION AGENCY			
APPROVED	CHECKED	RESPOND	DRAWING
SCALE		REV. NO.	
1 : 10 000			
DATE: DEC 13 1975		DWG. NO. II - 02	

国際協力事業団
26073



GENERAL NOTES

- ▲ : Entrance Buoy
- : Lighted Beacon
- △ : Leading Lights
- △ : Channel Buoy (Con)
- △ : Channel Buoy (Conical)
- △ : Inner Channel Buoy (Con)
- △ : Inner Channel Buoy (Conical)
- ▲ : Anchorage Buoy



NO.	DATE	DESCRIPTION	APPROVED
REVISION			

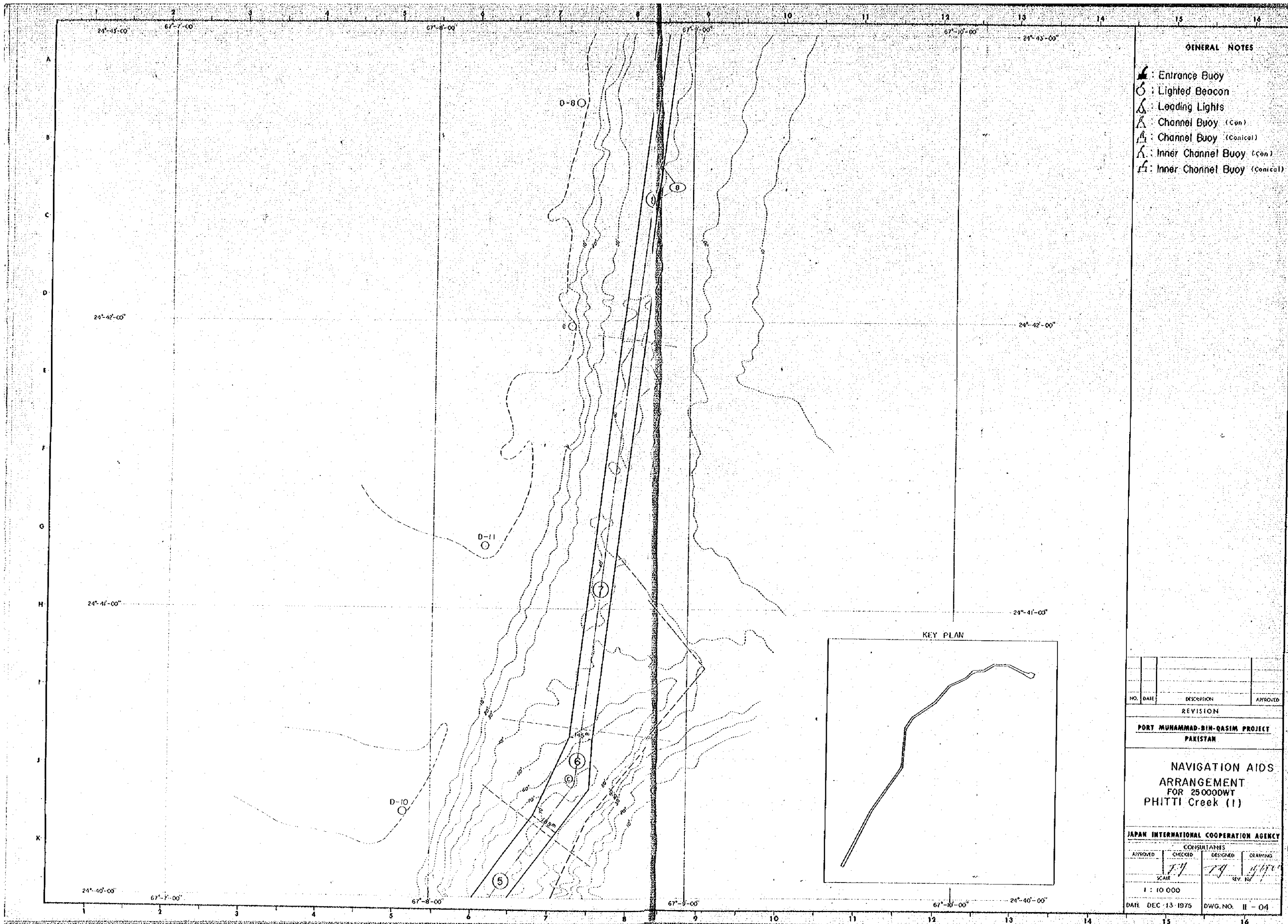
**PORT MUHAMMAD-BIN-QASIM PROJECT
PAKISTAN**

**NAVIGATION AIDS
ARRANGEMENT
FOR 25000DWT
1st Anchorage to
PHITTI Creek**

JAPAN INTERNATIONAL COOPERATION AGENCY

CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
SCALE			
1 : 10 000			

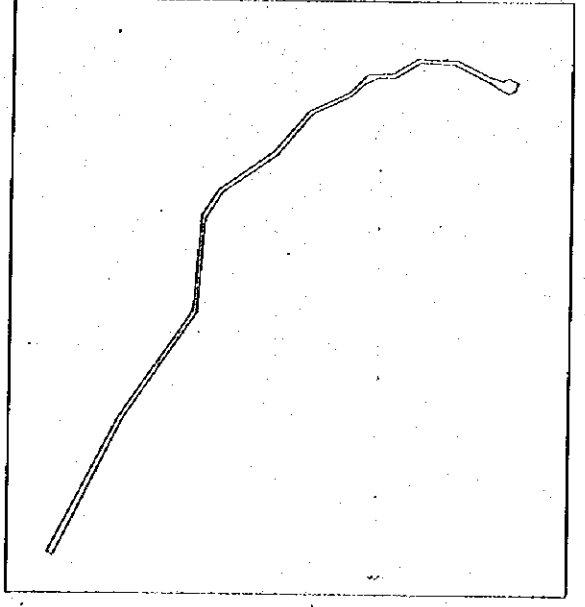
DATE DEC-13-1975 DWG. NO. II-03



GENERAL NOTES

- : Entrance Buoy
- : Lighted Beacon
- : Leading Lights
- : Channel Buoy (Con)
- : Channel Buoy (Conical)
- : Inner Channel Buoy (Con)
- : Inner Channel Buoy (Conical)

KEY PLAN



NO.	DATE	DESCRIPTION	APPROVED

REVISION

PORT MUHAMMAD-BIN-QASIM PROJECT
PAKISTAN

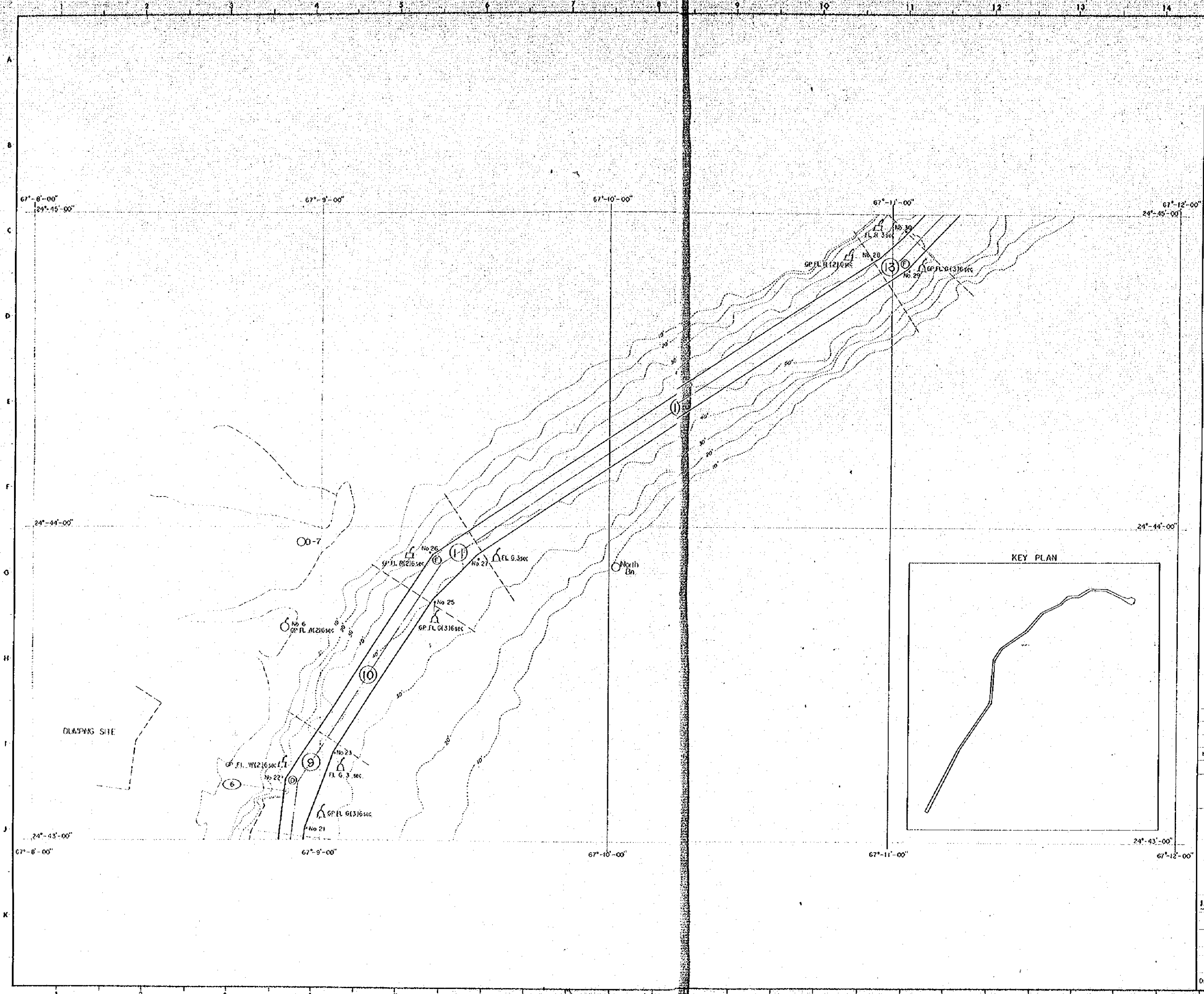
NAVIGATION AIDS
ARRANGEMENT
FOR 25000DWT
PHITTI Creek (I)

JAPAN INTERNATIONAL COOPERATION AGENCY

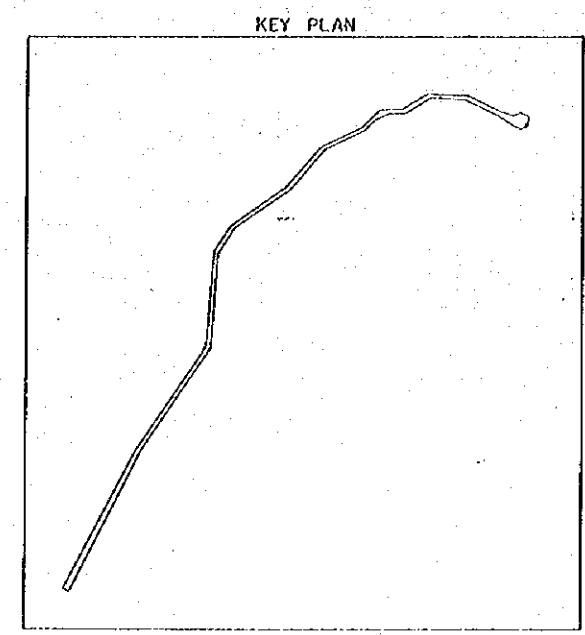
APPROVED	CHECKED	DESIGNED	DRAWING

SCALE
1 : 10 000

DATE DEC-13-1975 DWG. NO. II-04



- GENERAL NOTES**
- ⚓ : Entrance Buoy
 - ⊙ : Lighted Beacon
 - ⚓ : Leading Lights
 - ⚓ : Channel Buoy (Con)
 - ⚓ : Channel Buoy (Conical)
 - ⚓ : Inner Channel Buoy (Con)
 - ⚓ : Inner Channel Buoy (Conical)



NO.	DATE	DESCRIPTION	APPROVED
REVISION			

**PORT MUHAMMAD-BIN-QASIM PROJECT
PAKISTAN**

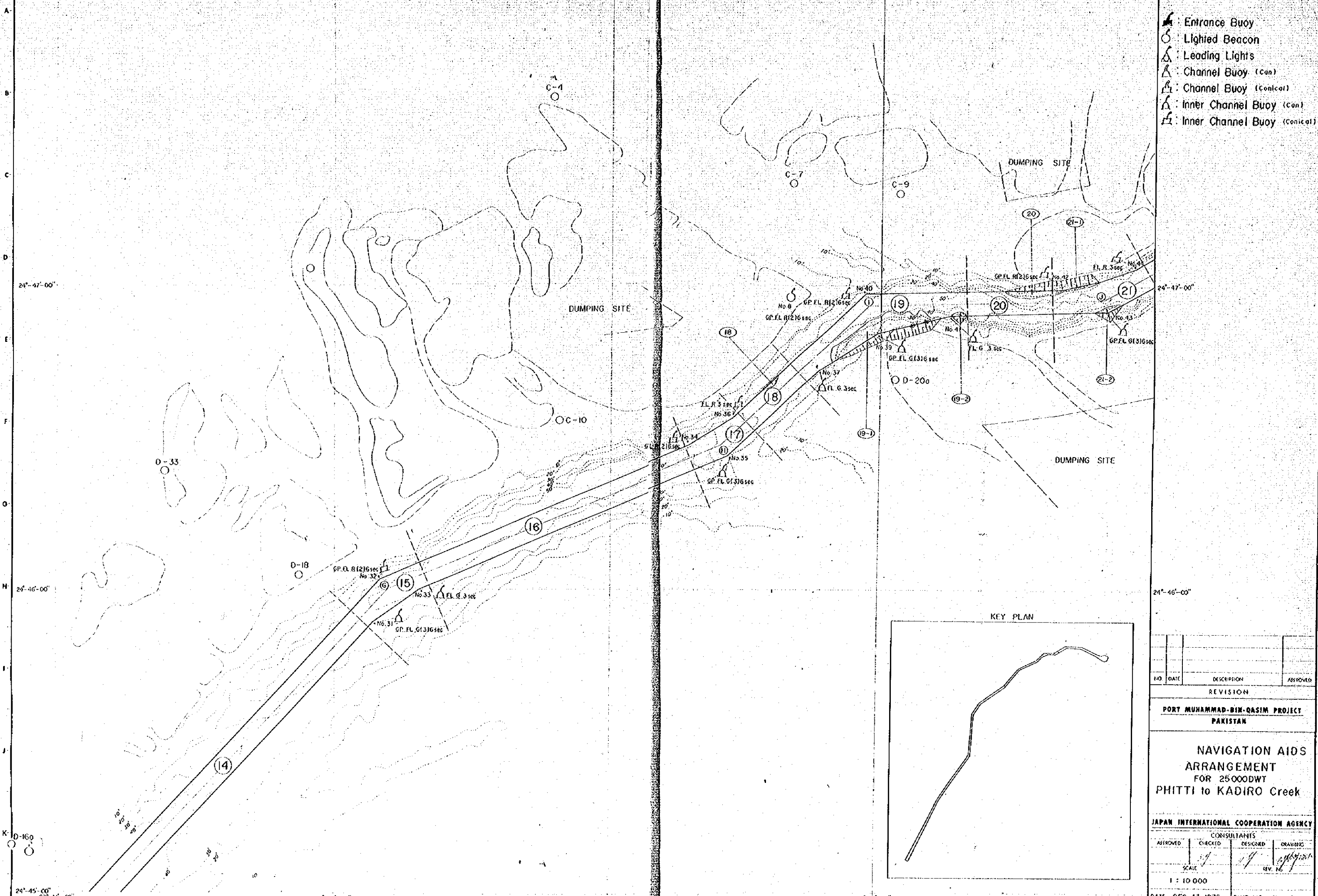
**NAVIGATION AIDS
ARRANGEMENT
FOR 25000DWT
PHITTI Creek (2)**

JAPAN INTERNATIONAL COOPERATION AGENCY

CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
SCALE		REV. 11	

1 : 10 000
DATE DEC-13-1975 DWG. NO. II-05

67°-11'-00" 67°-12'-00" 67°-13'-00" 67°-14'-00" 67°-15'-00" 24°-48'-00"



- GENERAL NOTES**
- Entrance Buoy
 - Lighted Beacon
 - Leading Lights
 - Channel Buoy (Con)
 - Channel Buoy (Conical)
 - Inner Channel Buoy (Con)
 - Inner Channel Buoy (Conical)

NO.	DATE	DESCRIPTION	APPROVED

REVISION
PORT MUHAMMAD-BIN-QASIM PROJECT
PAKISTAN

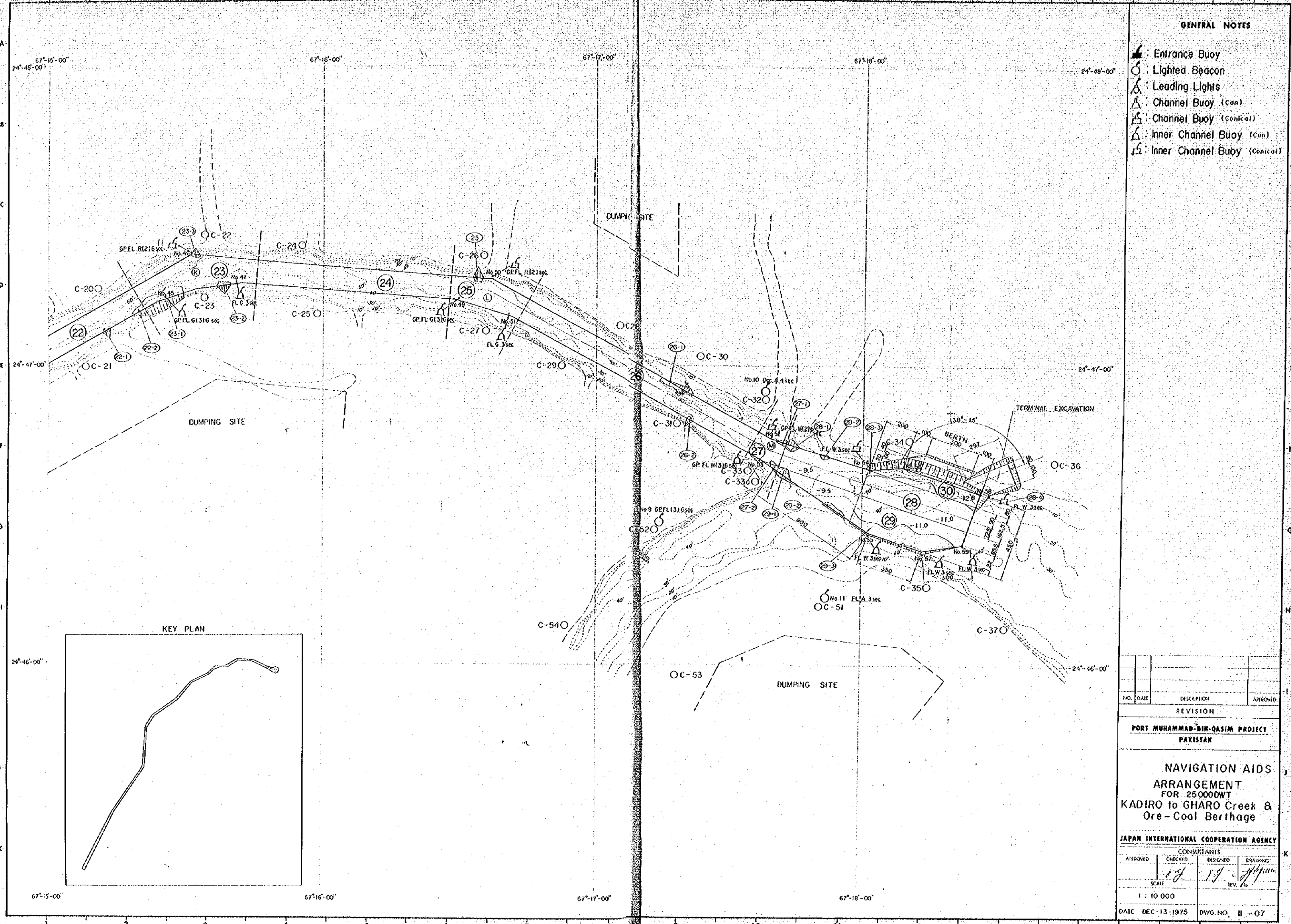
NAVIGATION AIDS
ARRANGEMENT
FOR 25000DWT
PHITTI to KADIRO Creek

JAPAN INTERNATIONAL COOPERATION AGENCY

CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
SCALE		REV. NO.	

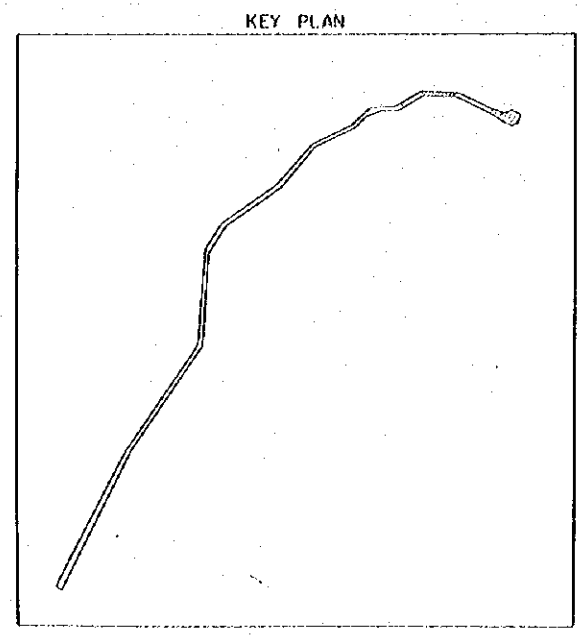
1 : 10 000
 DATE DEC-13-1975 DWG. NO. II-06

24°-45'-00" 67°-11'-00" 67°-12'-00" 67°-13'-00" 67°-14'-00" 24°-47'-00"



GENERAL NOTES

- ⚓ : Entrance Buoy
- ⊙ : Lighted Beacon
- ⚓ : Leading Lights
- ⚓ : Channel Buoy (Con)
- ⚓ : Channel Buoy (Conical)
- ⚓ : Inner Channel Buoy (Con)
- ⚓ : Inner Channel Buoy (Conical)



NO.	DATE	DESCRIPTION	APPROVED
REVISION			

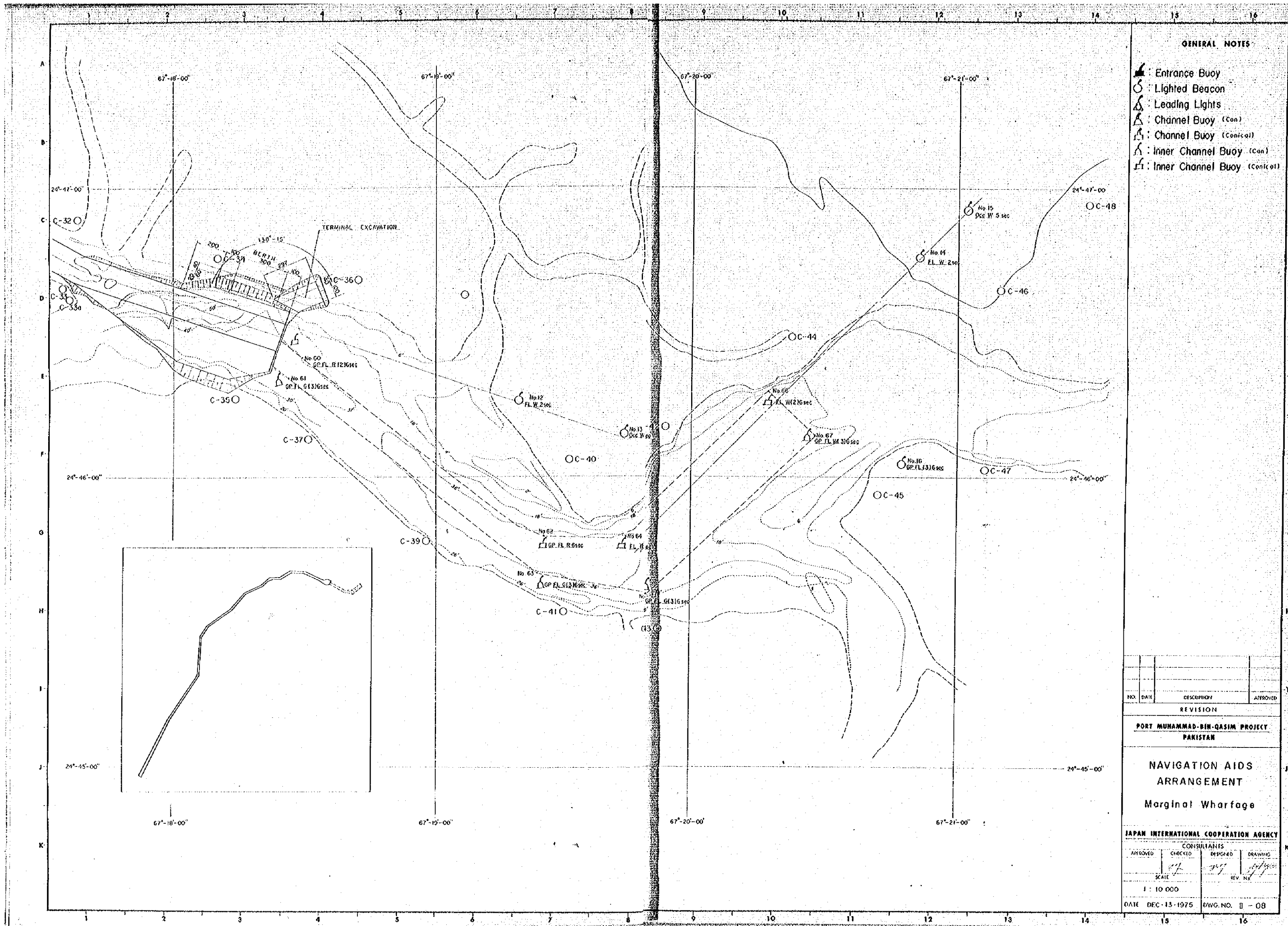
**PORT MUHAMMAD-BIN-QASIM PROJECT
PAKISTAN**

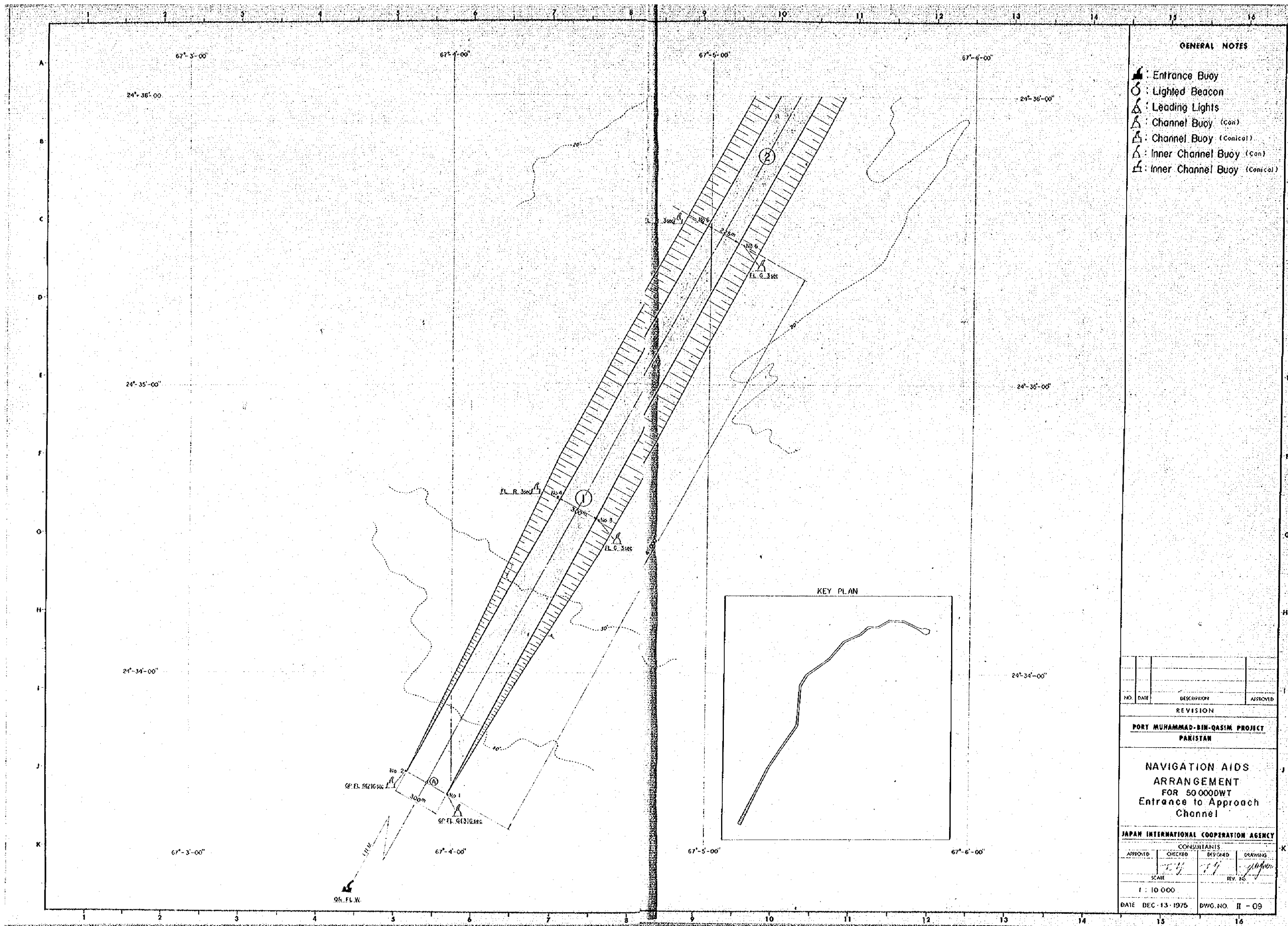
**NAVIGATION AIDS
ARRANGEMENT
FOR 250000WT
KADIRO to GHARO Creek &
Ore-Cool Berthage**

JAPAN INTERNATIONAL COOPERATION AGENCY

CONSULTANTS			
ASSIGNED	CHECKED	DESIGNED	DRAWING
SCALE			
1 : 10 000			

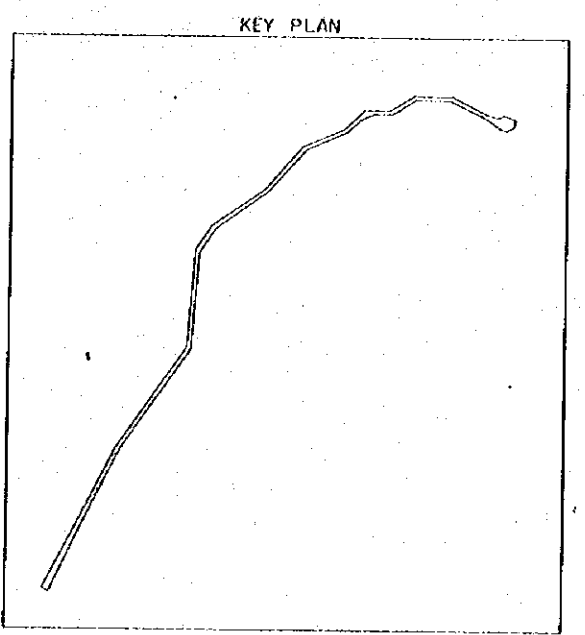
DATE DEC-13-1975 DWG. NO. II-07



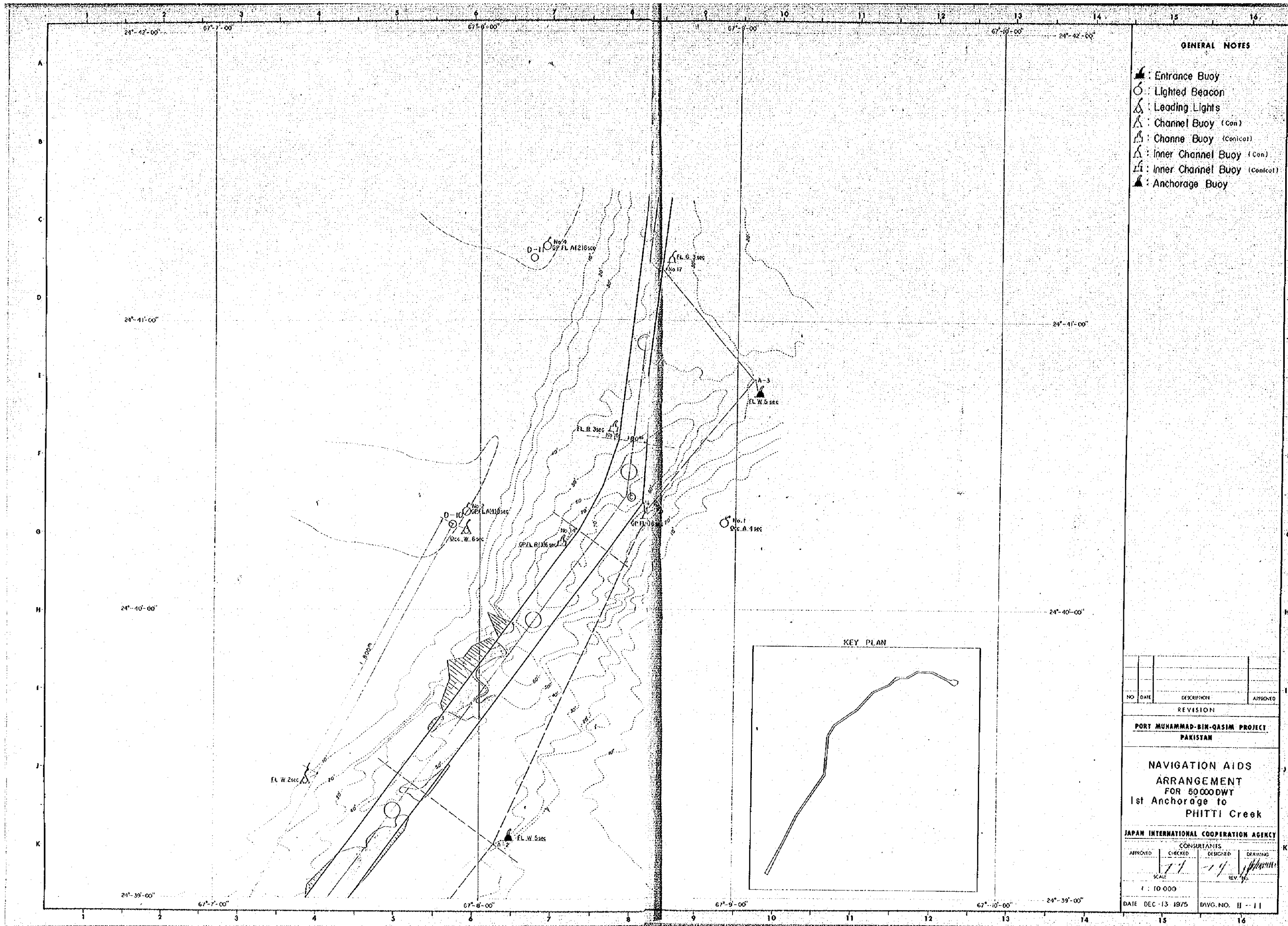




- GENERAL NOTES**
- Entrance Buoy
 - Lighted Beacon
 - Leading Light
 - Channel Buoy (Con)
 - Channel Buoy (Conical)
 - Inner Channel Buoy (Con)
 - Inner Channel Buoy (Conical)
 - Anchorage Buoy



NO.	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT PAKISTAN			
NAVIGATION AIDS ARRANGEMENT FOR 50000DWT Approach Channel & 1st Anchorage			
JAPAN INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
SCALE		REV. NO.	
1 : 10 000			
DATE DEC-13-1975		DVG. NO. II - 10	



GENERAL NOTES

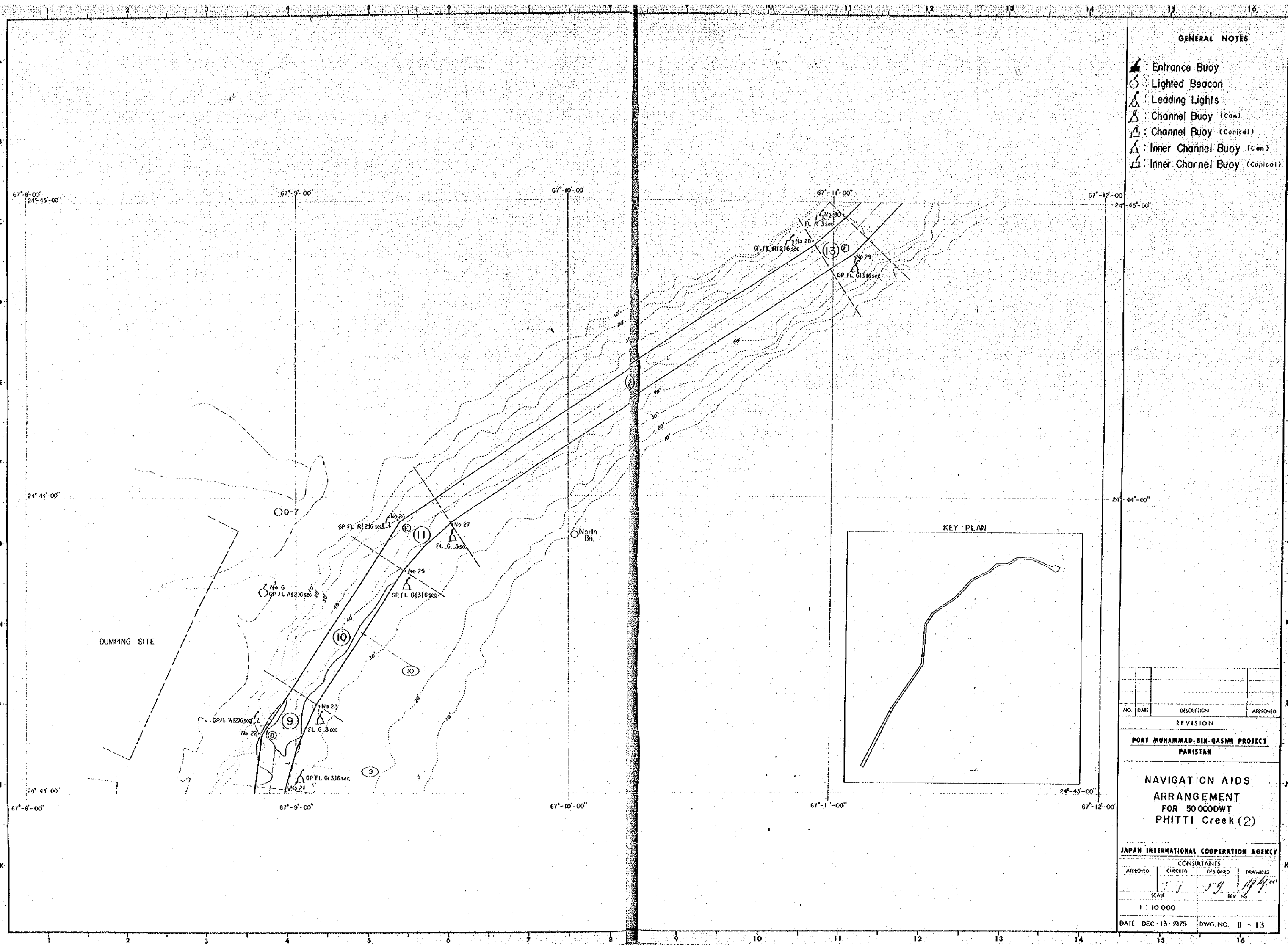
- ▲ : Entrance Buoy
- : Lighted Beacon
- ⊙ : Leading Lights
- △ : Channel Buoy (Con)
- △ : Channe Buoy (Conical)
- △ : Inner Channel Buoy (Con)
- △ : Inner Channel Buoy (Conical)
- ▲ : Anchorage Buoy

NO	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT			
PAKISTAN			
NAVIGATION AIDS			
ARRANGEMENT			
FOR 50000DWT			
1st Anchorage to			
PHITTI Creek			
JAPAN INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
SCALE			
1 : 10 000			
DATE DEC-13 1975		DIVG. NO. II - 11	



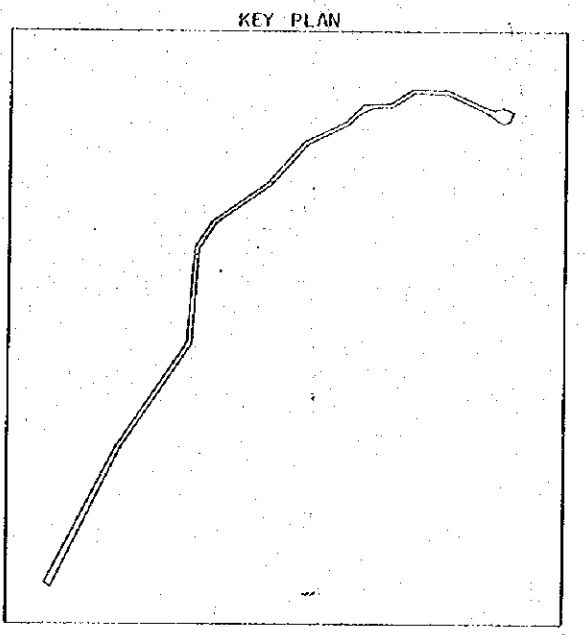
- GENERAL NOTES**
- ▲: Entrance Buoy
 - : Lighted Beacon
 - △: Leading Lights
 - △: Channel Buoy (Can)
 - △: Channel Buoy (Conical)
 - △: Inner Channel Buoy (Can)
 - △: Inner Channel Buoy (Conical)

NO.	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT PAKISTAN			
NAVIGATION AIDS ARRANGEMENT FOR 50000DWT PHITTI Creek (1)			
JAPAN INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
SCALE		REV. NO.	
1 : 10 000			
DATE DEC-13-1975		DWG. NO. II-12	



GENERAL NOTES

- : Entrance Buoy
- : Lighted Beacon
- : Leading Lights
- : Channel Buoy (Can)
- : Channel Buoy (Conical)
- : Inner Channel Buoy (Can)
- : Inner Channel Buoy (Conical)



NO.	DATE	DESCRIPTION	APPROVED

REVISION

PORT MUHAMMAD-BIN-QASIM PROJECT
PAKISTAN

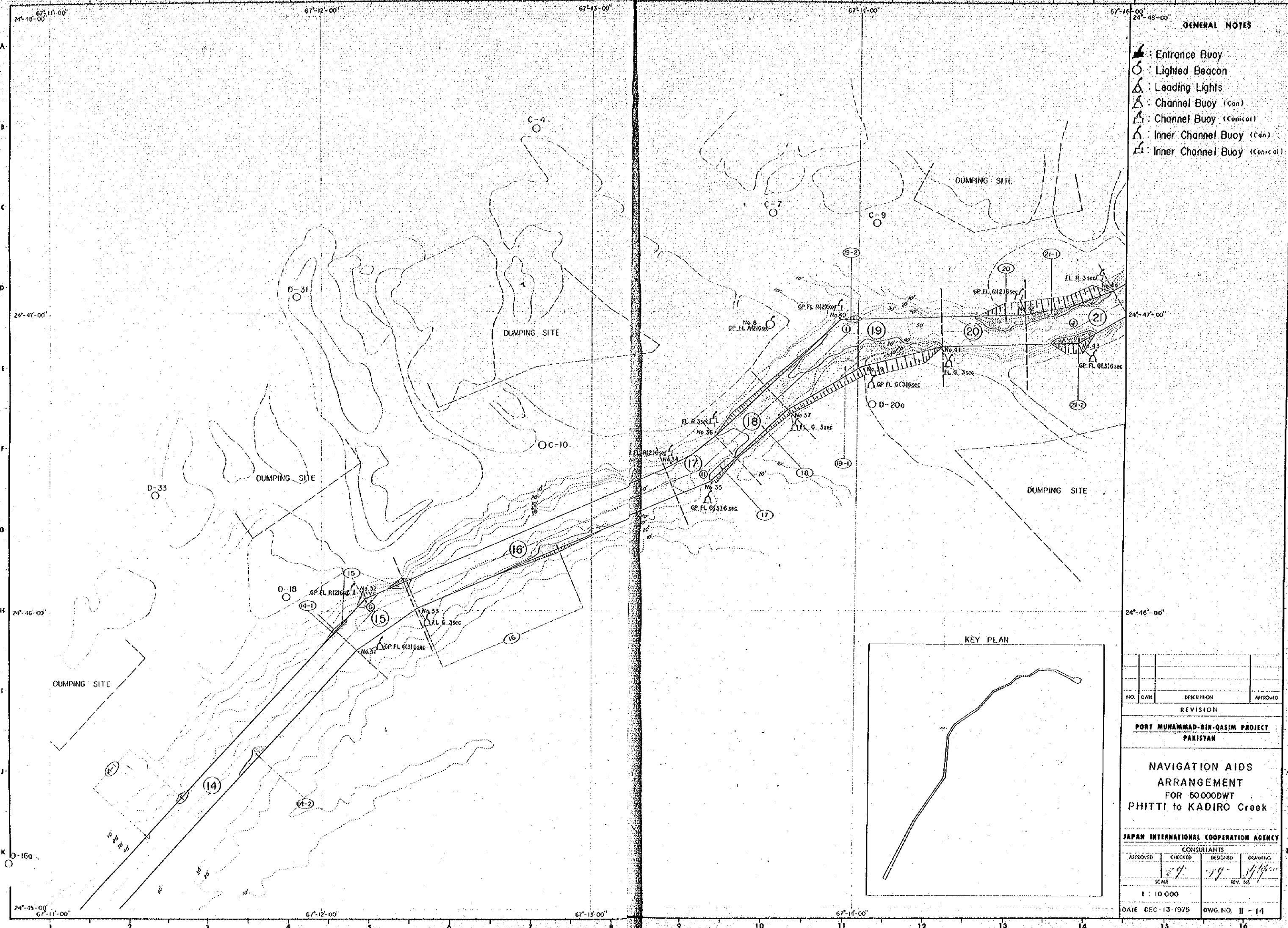
NAVIGATION AIDS
ARRANGEMENT
FOR 50000DWT
PHITTI Creek (2)

JAPAN INTERNATIONAL COOPERATION AGENCY

CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING

SCALE 1 : 10 000

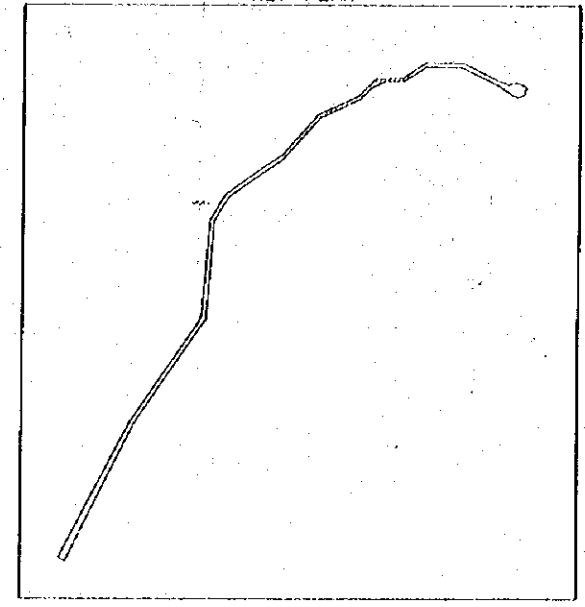
DATE DEC-13-1975 DWG. NO. II-13



GENERAL NOTES

- ▲ : Entrance Buoy
- : Lighted Beacon
- △ : Leading Lights
- △ : Channel Buoy (Can)
- △ : Channel Buoy (Conical)
- △ : Inner Channel Buoy (Can)
- △ : Inner Channel Buoy (Conical)

KEY PLAN



NO.	DATE	DESCRIPTION	APPROVED
REVISION			

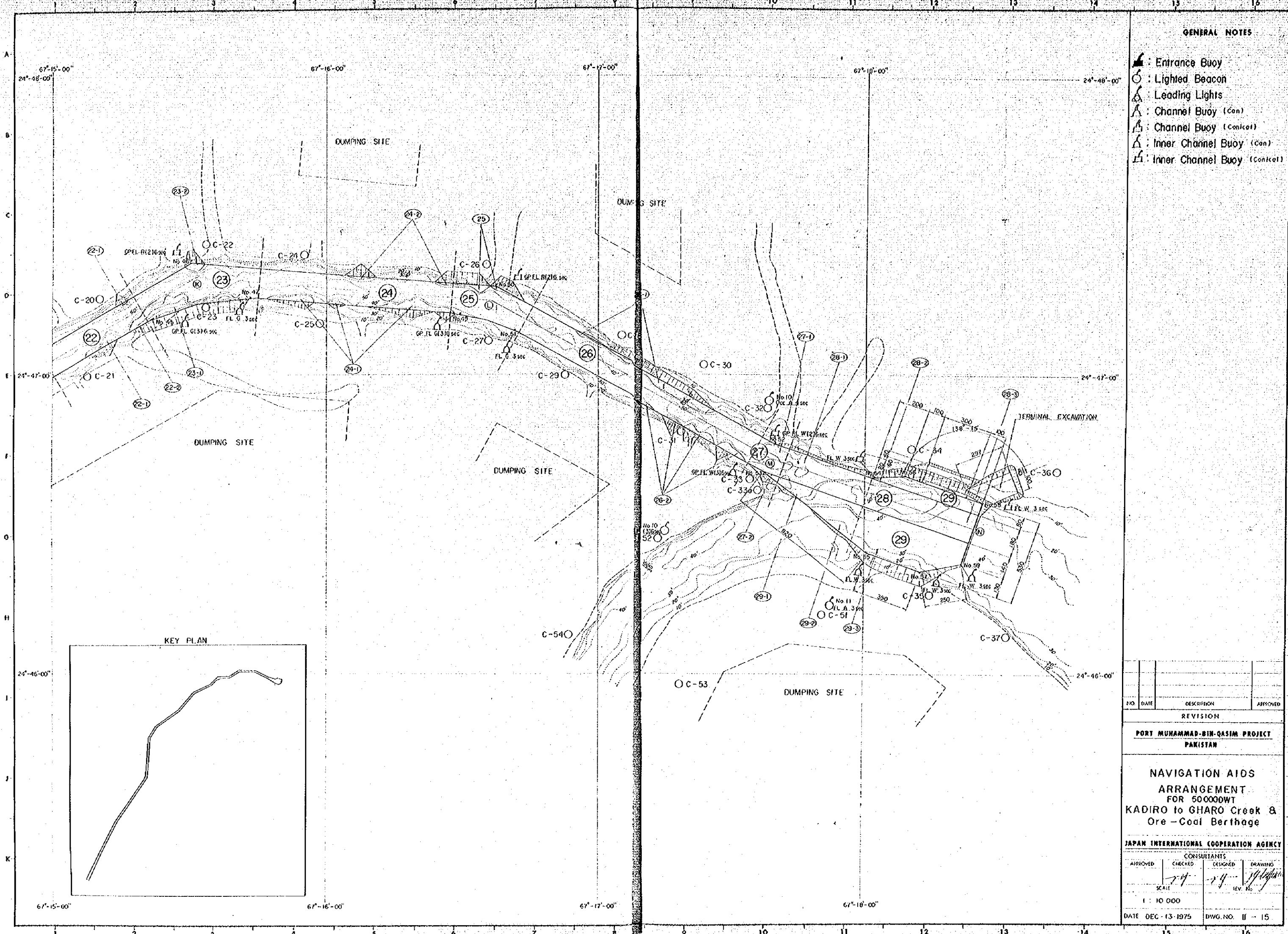
**PORT MUHAMMAD-BIN-QASIM PROJECT
PAKISTAN**

**NAVIGATION AIDS
ARRANGEMENT
FOR 50000DWT
PHITTI to KADIRO Creek**

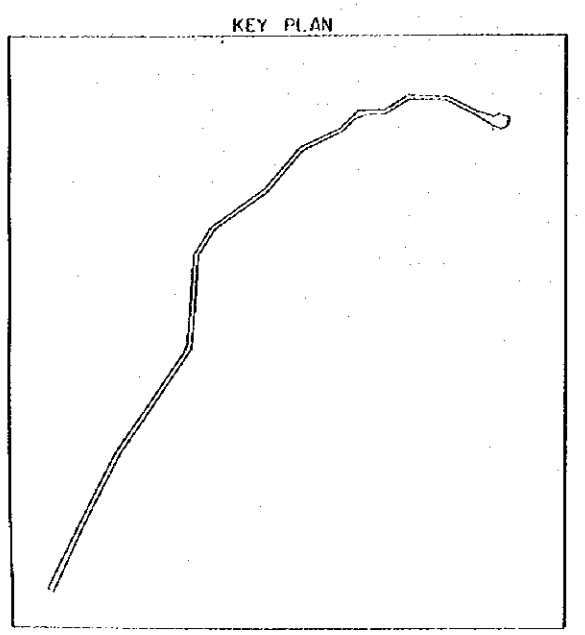
JAPAN INTERNATIONAL COOPERATION AGENCY

CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
SCALE		REV. NO.	

1 : 10 000
DATE DEC-13-1973 DWG. NO. II - 14



- GENERAL NOTES**
- ⚓ : Entrance Buoy
 - ⦿ : Lighted Beacon
 - ⚓ : Leading Lights
 - ⚓ : Channel Buoy (Can)
 - ⚓ : Channel Buoy (Conical)
 - ⚓ : Inner Channel Buoy (Can)
 - ⚓ : Inner Channel Buoy (Conical)



NO	DATE	REVISION	APPROVED

**PORT MUHAMMAD-BIN-QASIM PROJECT
PAKISTAN**

**NAVIGATION AIDS
ARRANGEMENT
FOR 500000WT
KADIRO to GHARO Creek &
Ore-Coal Berthage**

JAPAN INTERNATIONAL COOPERATION AGENCY

APPROVED	CHECKED	DESIGNED	DRAWING

SCALE: 1 : 10 000
DATE: DEC-13-1975
DWG. NO. II - 15

LIGHT-HOUSE EXTERIOR FINISH SCHEDULE

PART	MATERIAL	FINISH	REMARKS
POACH	CONCRETE	MARBLE	SLOPE 1:120 HT:100 DOOR CURB MAT
BERM			
WINDOW			
APPENTICE			
VERANDA			
EXTERNAL WALL	CONCRETE	WHITE-MARBL	
ROOF	CINDER-CONCRETE	WATER-PROOF MORTAR STEEL-TROWEL	WATER-PROOF SHEETING
ROOF DRAIN	CAST IRON LEADER		100
CONDUCTOR	HARD POLYMER		100
STAGE	CINDER-CONCRETE	WATER-PROOF MORTAR STEEL-TROWEL	WATER-PROOF SHEETING
PLANCER		WHITE-MARBL	
WATER TANK	CONCRETE	WATER-PROOF MORTAR STEEL-TROWEL	
WINDOW DOOR	STAINLESS		
COPING	CONCRETE	WATER-PROOF MORTAR STEEL-TROWEL	
LADDER			STAINLESS

LEADING-LIGHT EXTERIOR FINISH SCHEDULE

PART	MATERIAL	FINISH	REMARKS
EXT. WALL	CONCRETE	V.P.	
HAND RAIL	STAINLESS		
STAIR	CONCRETE	WATER-PROOF MORTAR STEEL-TROWEL	ROOF-HATCH (WATER-PROOF) x 2
LADDER	STAINLESS		
EXT. WALL	CONCRETE	WHITE-MARBL	
POACH			
WINDOW			
APPENTICE			
ROOF	CINDER-CONCRETE	WATER-PROOF MORTAR STEEL-TROWEL	WATER-PROOF SHEETING ROOF-HATCH (WATER-PROOF)
STAIR			
LANDING			
HAND RAIL	STAINLESS		

LIGHT-DEACON EXTERIOR FINISH SCHEDULE

PART	MATERIAL	FINISH	REMARKS
EXT. WALL	REINFORCEMENT CONCRETE	V.P.	
LADDER	STAINLESS		
STAIR	CONCRETE	MORTAR	

LIGHT-HOUSE INTERIOR FINISH SCHEDULE

R.M. NO.	ROOM-NAME	FLOOR			BASE			WAINSCOT			WALL			CEILING			REMARKS
		MAT.	FIN.	HT.	MAT.	FIN.	HT.	MAT.	FIN.	HT.	MAT.	FIN.	HT.	MAT.	FIN.	HT.	
	EXT. HALL	MORTAR	STEEL-TROWEL		MORTAR	STEEL-TROWEL	100				MORTAR	STEEL-TROWEL		LOS. CEILING	ASBESTOS BOARD	2500	COAT-HOOK
	OFFICE-RM										MORTAR	STEEL-TROWEL				2500	
	DEPT-RM										MORTAR	STEEL-TROWEL				2500	
	RECL-RM										MORTAR	STEEL-TROWEL				2500	SHOWER-EQUIPMENT WORK
	BATTERY-RM													STYROFOAM BOARD			
	STORAGE-RM																
	CHARG-RM																
	STAIRS																
	STAIR-LANDING	STEEL	FLAME-OP														HAND-RAIL: STEEL O.P. LADDER: STEEL O.P.
	WATER TANK	MORTAR	STEEL-TROWEL		MORTAR	STEEL-TROWEL	100				MORTAR	STEEL-TROWEL		LOS. CEILING	ASBESTOS BOARD		WATER-PROOF SHEETING

LEADING-LIGHT INTERIOR FINISH SCHEDULE

R.M. NO.	ROOM-NAME	FLOOR			BASE			WAINSCOT			WALL			CEILING			REMARKS
		MAT.	FIN.	HT.	MAT.	FIN.	HT.	MAT.	FIN.	HT.	MAT.	FIN.	HT.	MAT.	FIN.	HT.	
	BATTERY-RM	WATER-PROOF MORTAR	STEEL-TROWEL		WATER-PROOF MORTAR	STEEL-TROWEL	100				WATER-PROOF MORTAR	STEEL-TROWEL		WATER-PROOF MORTAR	STEEL-TROWEL		LADDER: STEEL O.P.
	BATTERY-RM																
	LADDER																
	CHARG-RM	MORTAR	STEEL-TROWEL		WATER-PROOF MORTAR	STEEL-TROWEL	100										HAND-RAIL: STEEL O.P.

LIGHT-DEACON INTERIOR FINISH SCHEDULE

R.M. NO.	ROOM-NAME	FLOOR			BASE			WAINSCOT			WALL			CEILING			REMARKS
		MAT.	FIN.	HT.	MAT.	FIN.	HT.	MAT.	FIN.	HT.	MAT.	FIN.	HT.	MAT.	FIN.	HT.	

LEADING-LIGHT INTERIOR FINISH SCHEDULE

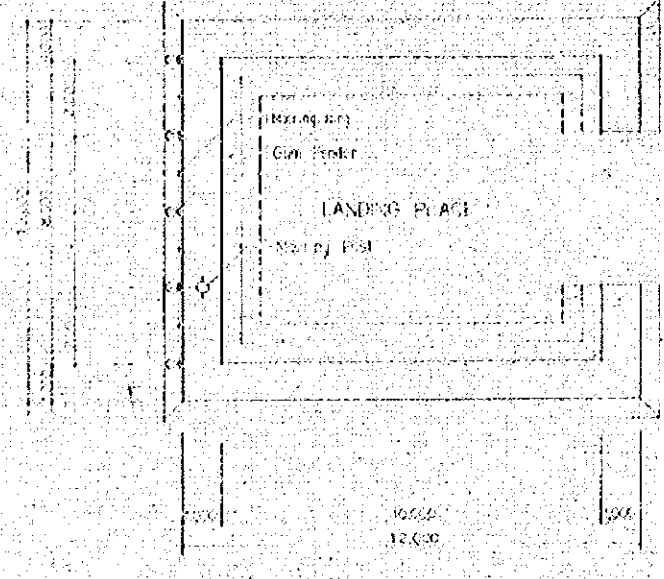
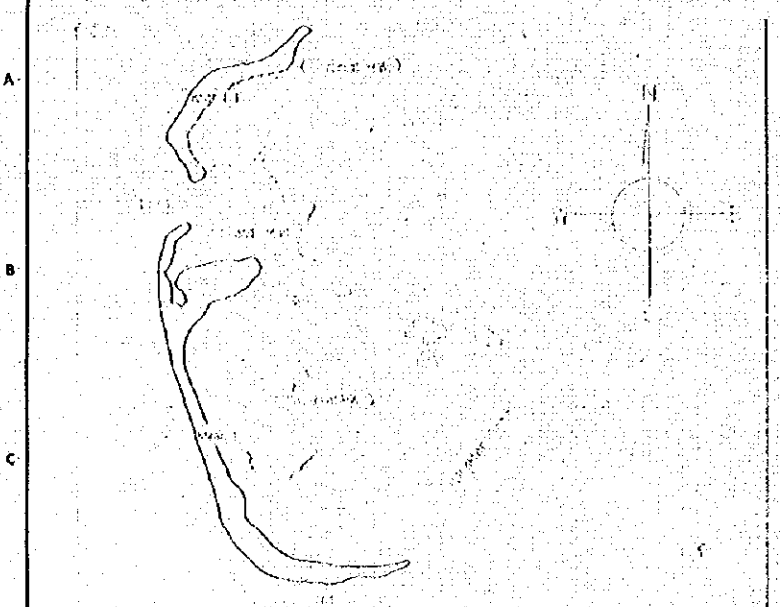
R.M. NO.	ROOM-NAME	FLOOR			BASE			WAINSCOT			WALL			CEILING			REMARKS
		MAT.	FIN.	HT.	MAT.	FIN.	HT.	MAT.	FIN.	HT.	MAT.	FIN.	HT.	MAT.	FIN.	HT.	
	BATTERY-RM	WATER-PROOF MORTAR	STEEL-TROWEL		WATER-PROOF MORTAR	STEEL-TROWEL	100				WATER-PROOF MORTAR	STEEL-TROWEL		WATER-PROOF MORTAR	STEEL-TROWEL		LADDER: STEEL O.P.
	BATTERY-RM																
	LADDER																
	CHARG-RM	MORTAR	STEEL-TROWEL		WATER-PROOF MORTAR	STEEL-TROWEL	100										HAND-RAIL: STEEL O.P.

LIGHT-DEACON INTERIOR FINISH SCHEDULE

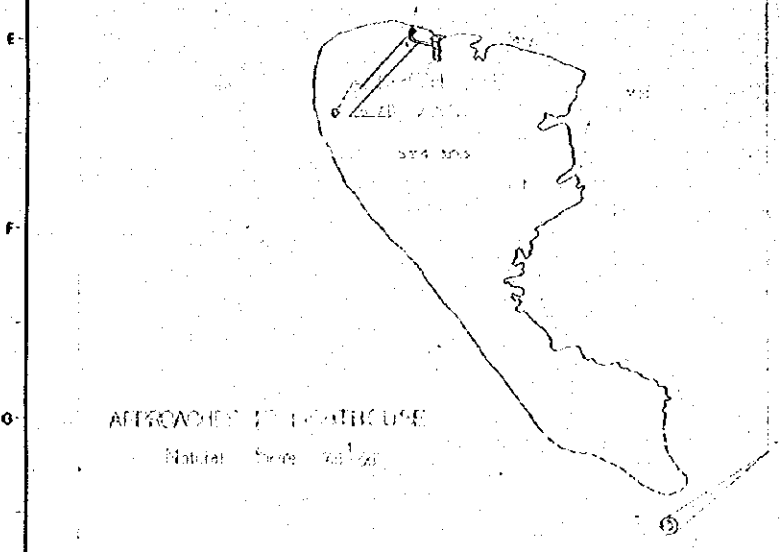
R.M. NO.	ROOM-NAME	FLOOR			BASE			WAINSCOT			WALL			CEILING			REMARKS
		MAT.	FIN.	HT.	MAT.	FIN.	HT.	MAT.	FIN.	HT.	MAT.	FIN.	HT.	MAT.	FIN.	HT.	

GENERAL NOTES
ROOF-HATCH: WATER-PROOFED
STAINLESS

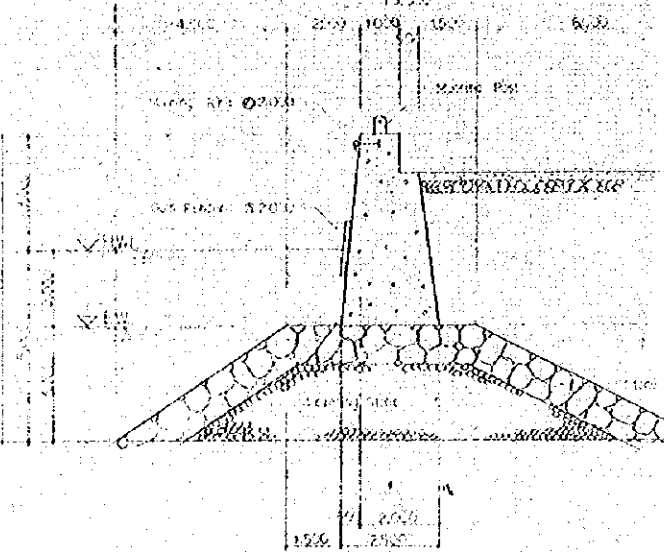
NO.	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT PAKISTAN			
NAVIGATION-AIDS ARRANGEMENT LIGHT-HOUSE FINISHED-SCHEDULE			
JAPAN INTERNATIONAL COOPERATION AGENCY CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
SCALE			REV. NO.
DATE: C 13 1975		DWG. NO: 116	



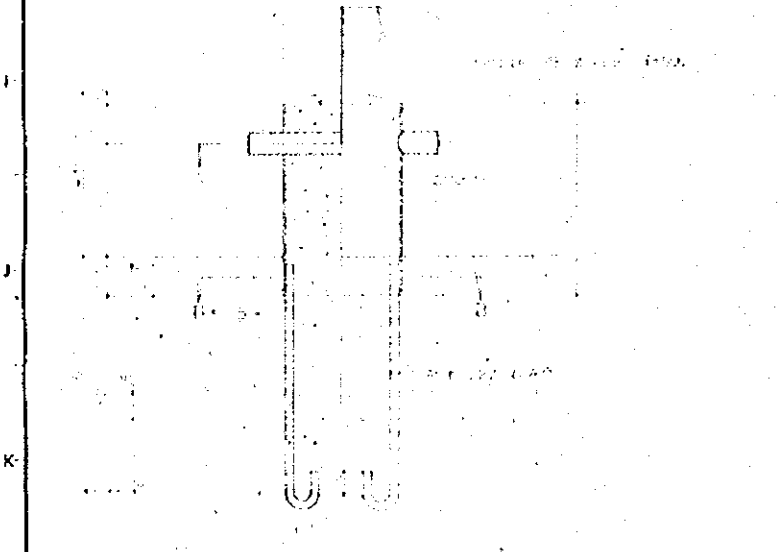
LANDING PLACE PLAN 1:100



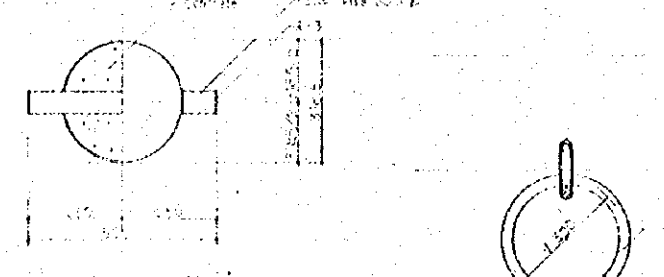
APPROACH TO LANDING PLACE



ELEVATION & MOORING SECTION 1:100



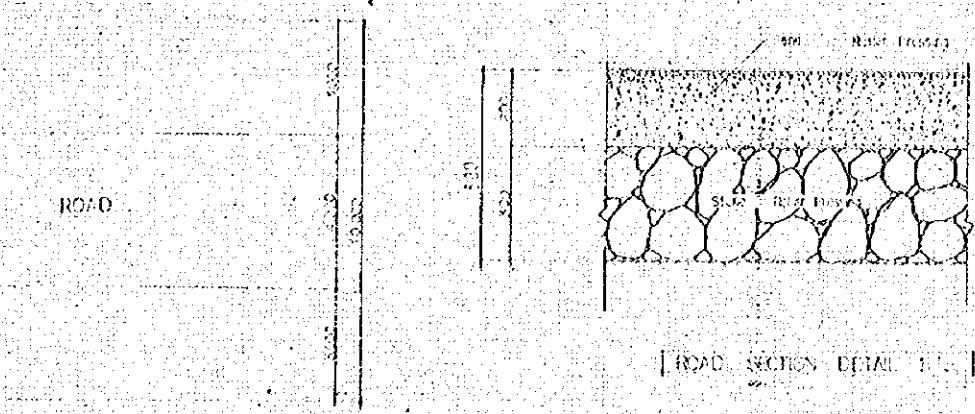
MOORING PLAN 1:100



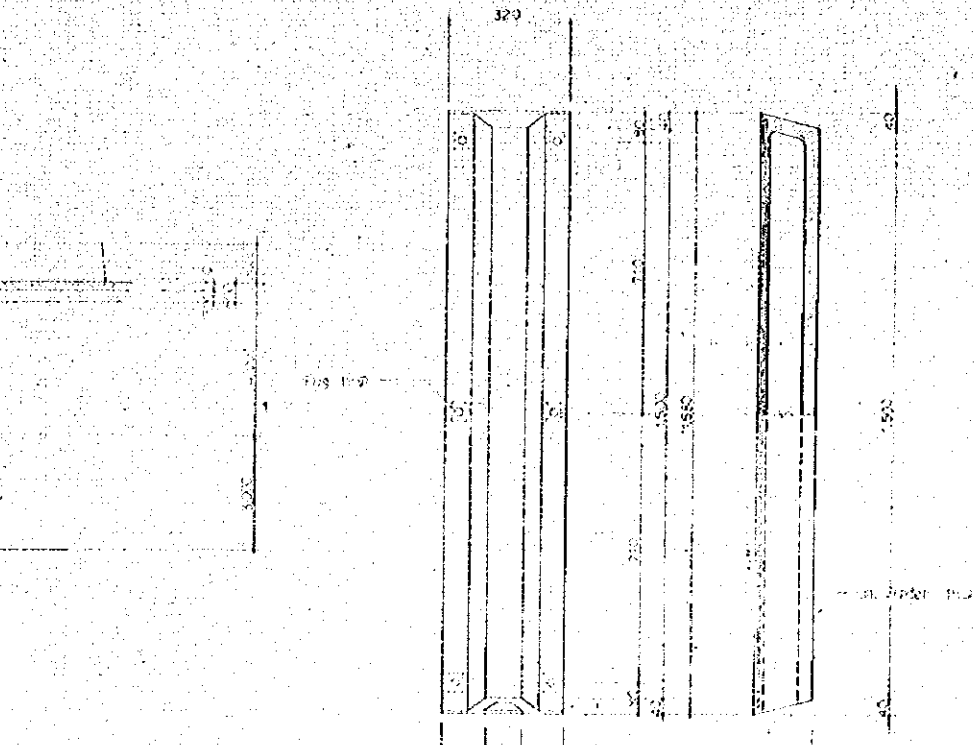
MOORING POST DETAIL 1:100



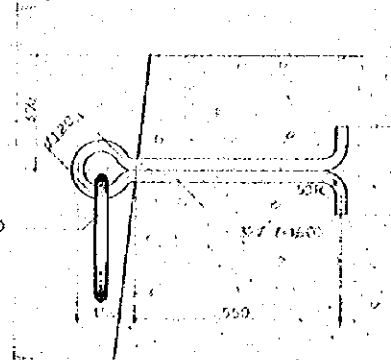
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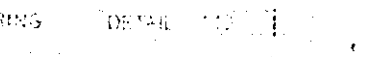
ROAD SECTION DETAIL 1:100



MOORING POST DETAIL 1:100



MOORING POST SECTION DETAIL 1:100



MOORING POST SECTION DETAIL 1:100

GENERAL NOTES

NO.	DATE	DESCRIPTION	APPROVED
REVISION			

PORT MUHAMMAD-BIN-QASIM PROJECT
PAKISTAN

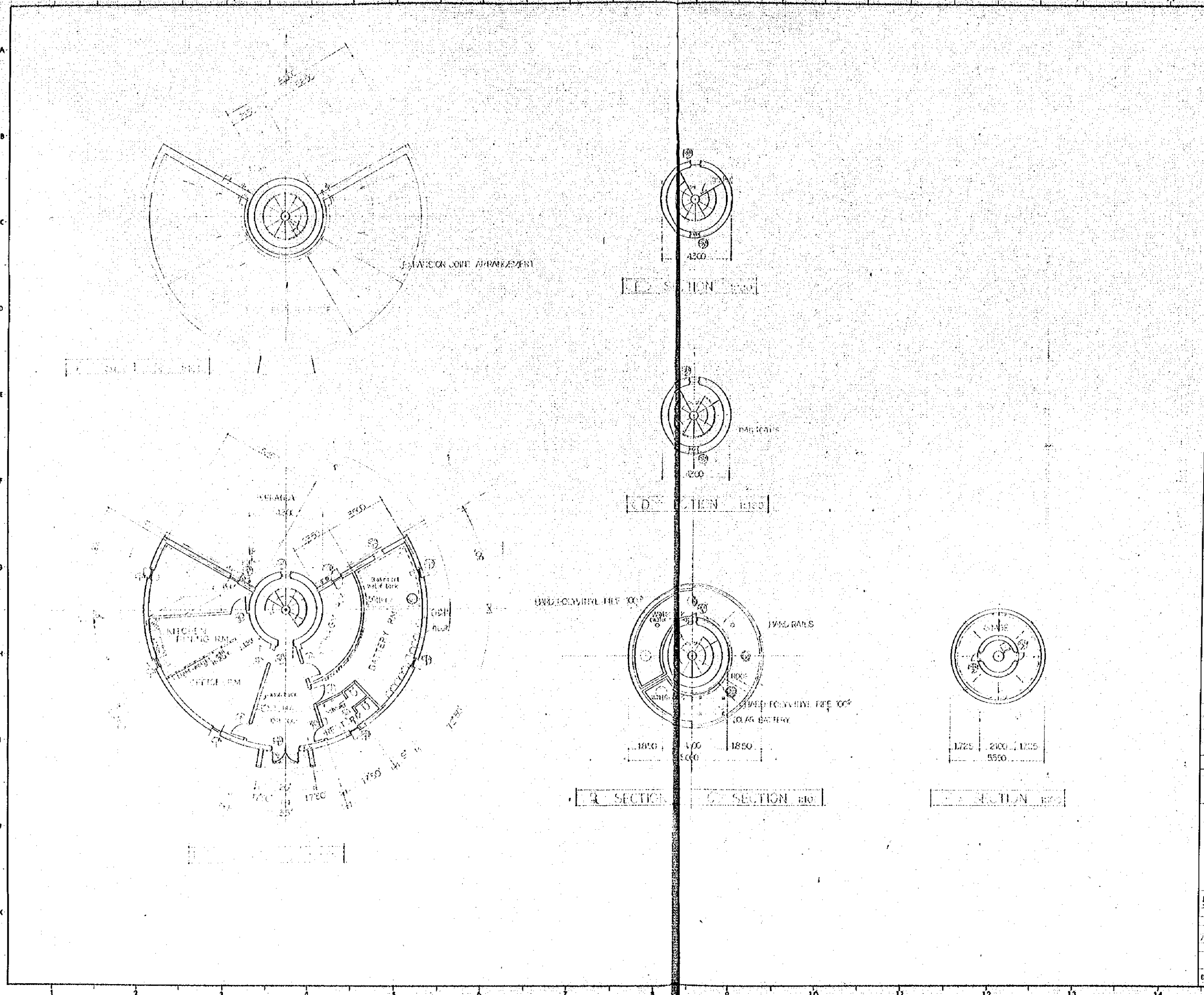
NAVIGATION AIDS
ARRANGEMENT

APPROVED
PLANS, SECTION & DETAILS

JAPAN INTERNATIONAL COOPERATION AGENCY

CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
SCALE		REV. NO.	

DATE: 13/10/71 DWG. NO: 11/1



GENERAL NOTES

NO.	DATE	DESCRIPTION	APPROVED
REVISION			

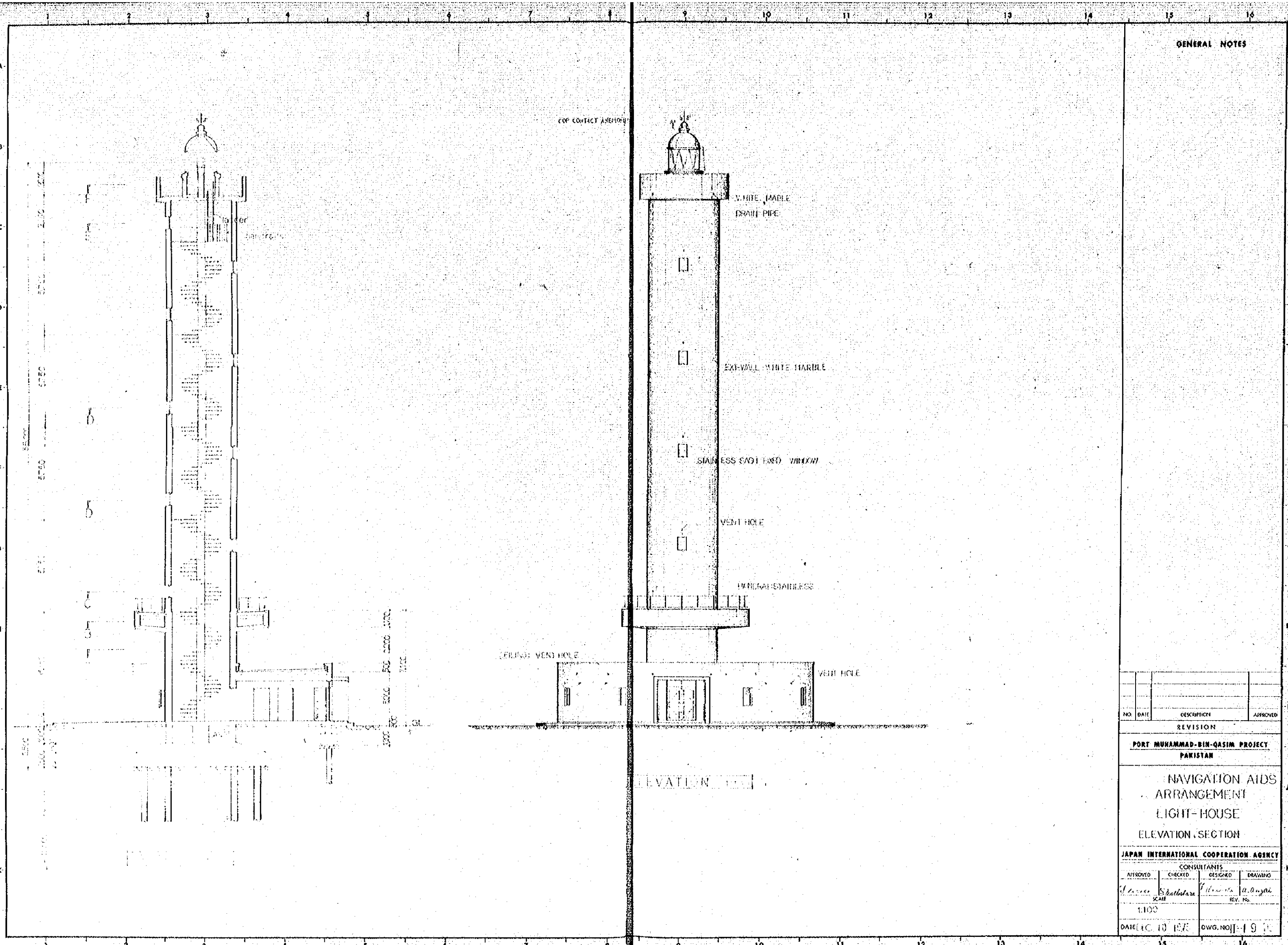
PORT MUHAMMAD-BIN-QASIM PROJECT
PAKISTAN

NAVIGATION AIDS
ARRANGEMENT
LIGHTHOUSE
PLAN & SECTIONS

JAPAN INTERNATIONAL COOPERATION AGENCY

CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
<i>M. Hasebe</i>	<i>S. Yamaguchi</i>	<i>T. Yamamoto</i>	<i>A. Angeli</i>
SCALE		REV. No.	

1:100
DATE DEC. 10 1975 DWG. NO. 18



GENERAL NOTES

NO.	DATE	DESCRIPTION	APPROVED
REVISION			

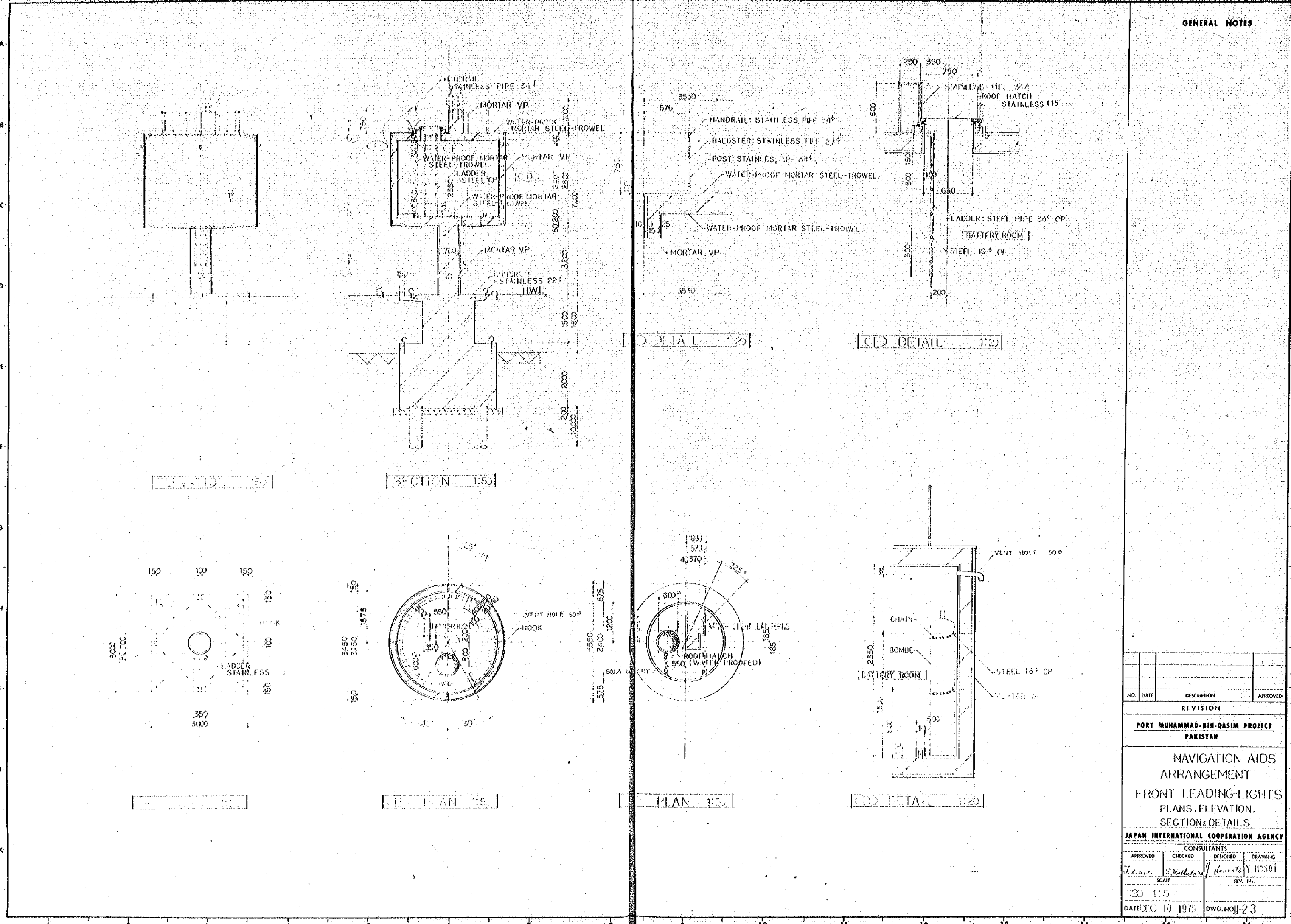
PORT MUHAMMAD-BIN-QASIM PROJECT
PAKISTAN

NAVIGATION AIDS
ARRANGEMENT
LIGHT-HOUSE
ELEVATION SECTION

JAPAN INTERNATIONAL COOPERATION AGENCY

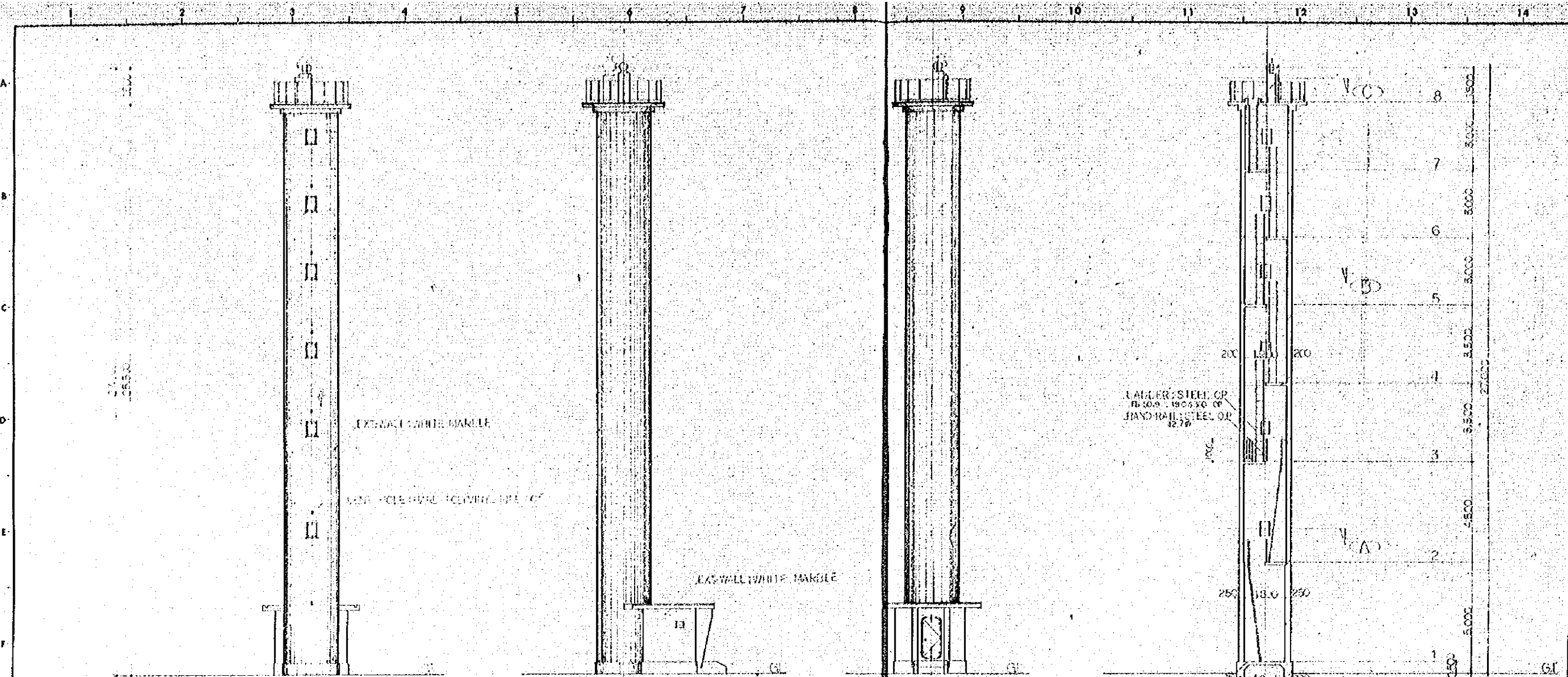
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APPROVED	CHECKED	DESIGNED	DRAWING
<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
SCALE		REV. NO.	
1:100			

DATE: 10/19/77 DWG. NO.: 19/1



GENERAL NOTES:

NO.	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT PAKISTAN			
NAVIGATION AIDS ARRANGEMENT FRONT LEADING LIGHTS PLANS, ELEVATION, SECTION & DETAILS			
JAPAN INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS			
APPROVED <i>J. Kawai</i>	CHECKED <i>S. Nakamura</i>	DESIGNED <i>H. Kawai</i>	DRAWING 117501
SCALE 1:20		REV. NO. REV. 15	
DATE: 13 1975		DWG. NO.: 23	

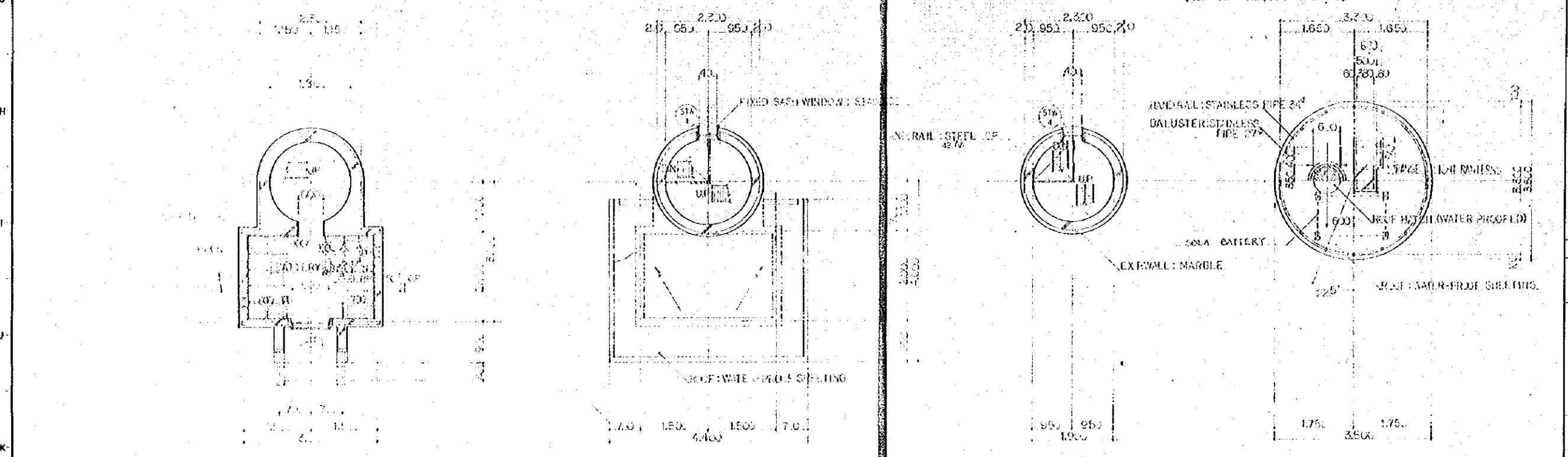


[ELEVATION 1:100]

[ELEVATION 1:100]

[ELEVATION 1:100]

[SECTION 1:100]



[SITE PLAN 1:50]

[SECTION 1:50]

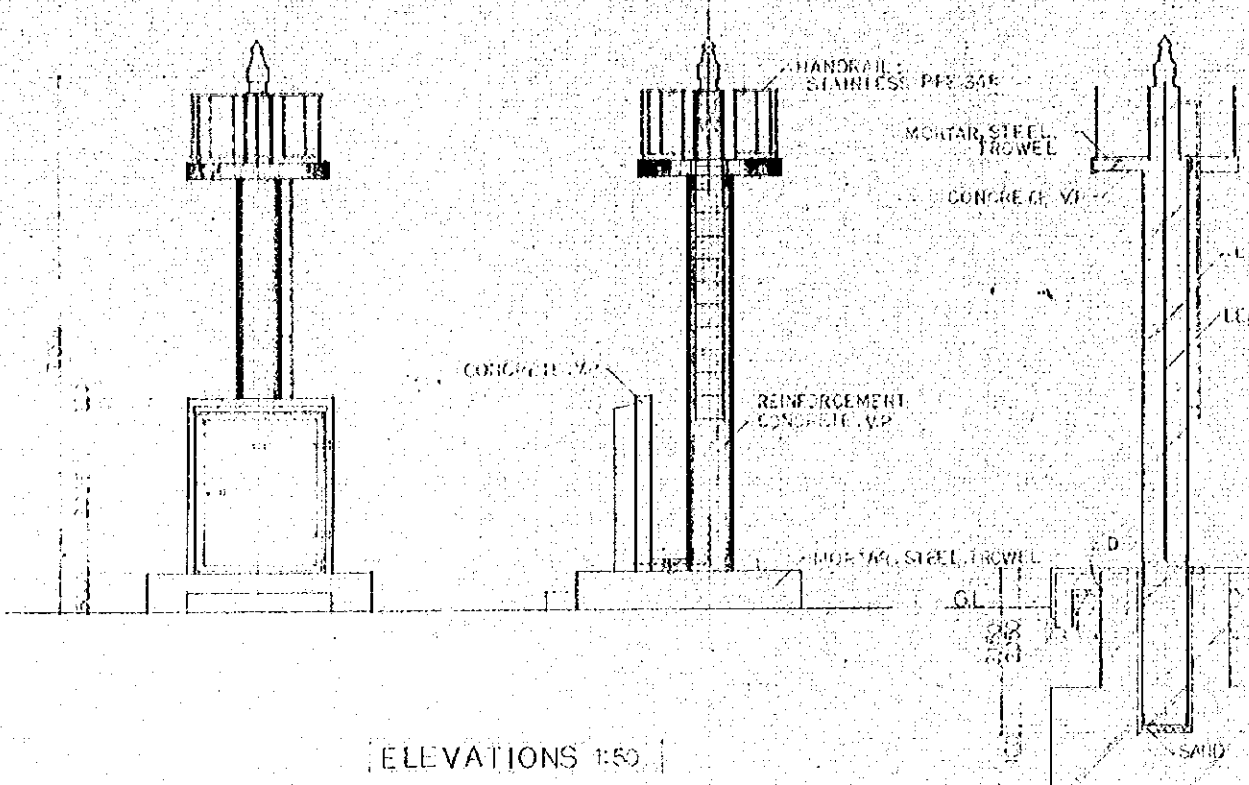
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[PLAN 1:50]

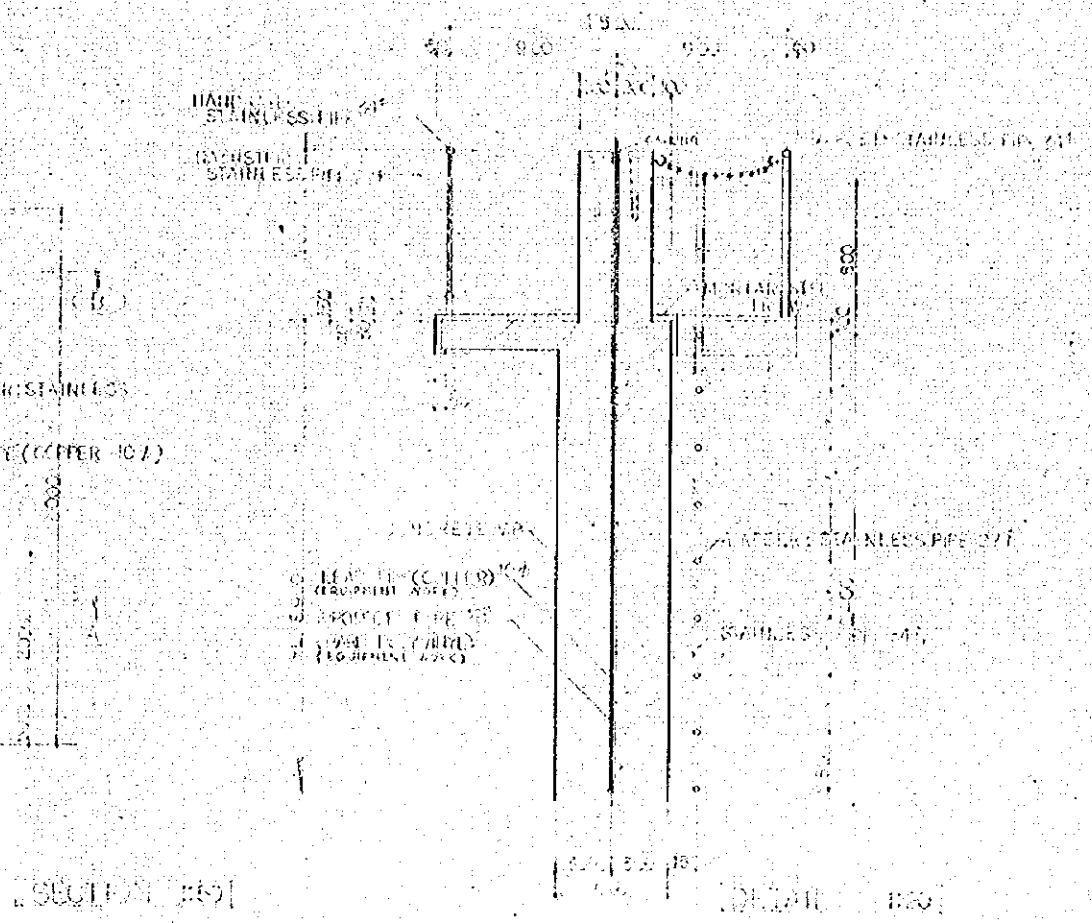
GENERAL NOTES

NO.	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT PAKISTAN			
NAVIGATION AIDS ARRANGEMENT REAR LANDING LIGHTS PLANS, SECTIONS & ELEVATIONS			
JAPAN INTERNATIONAL COOPERATION AGENCY CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
<i>U. S. Khan</i>	<i>S. Shukla</i>	<i>V. S. S. S.</i>	<i>V. S. S. S.</i>
SCALE		REV. NO.	
1:50 (1:10)			
DATED: 10/1975		DWG. NO. -24	

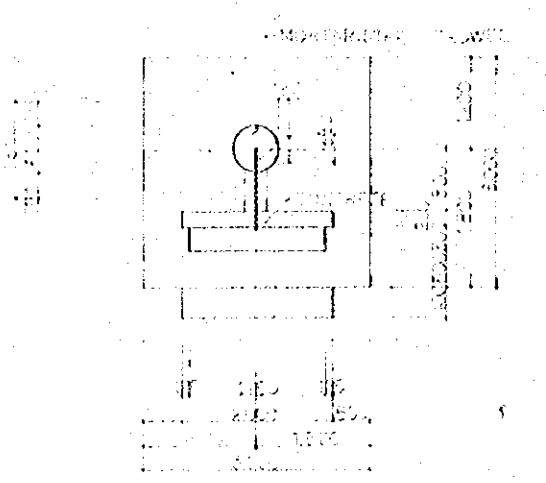
GENERAL NOTES



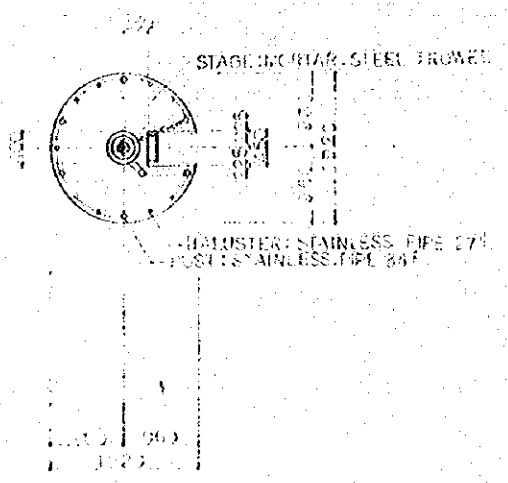
ELEVATIONS 1:50



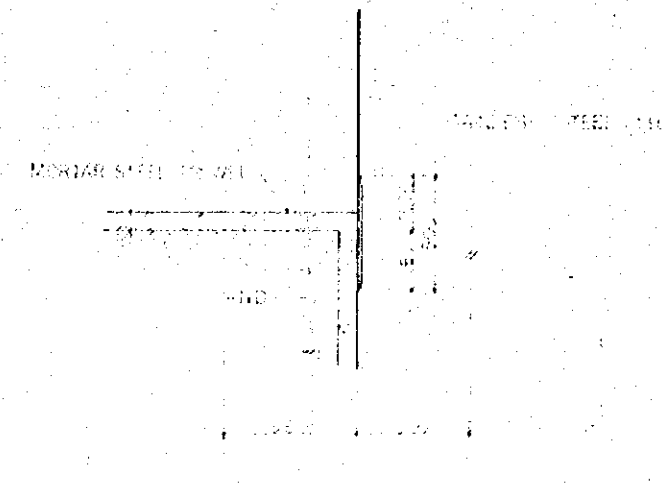
SECTION 1:50



PLAN 1:50



PLAN 1:50



DETAIL 1:10

NO.	DATE	DESCRIPTION	APPROVED
REVISION			

PORT MUHAMMAD-BIN-QASIM PROJECT
PAKISTAN

NAVIGATION AIDS
ARRANGEMENT
LIGHT-BEACON
PLANS, ELEVATIONS,
SECTION & DETAILS

JAPAN INTERNATIONAL COOPERATION AGENCY

APPROVED	CHECKED	DESIGNED	DRAWING
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SCALE		REV. No.	

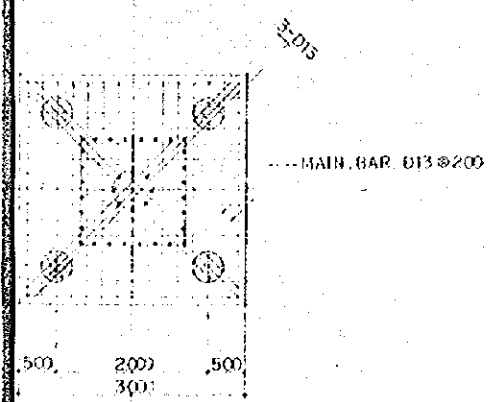
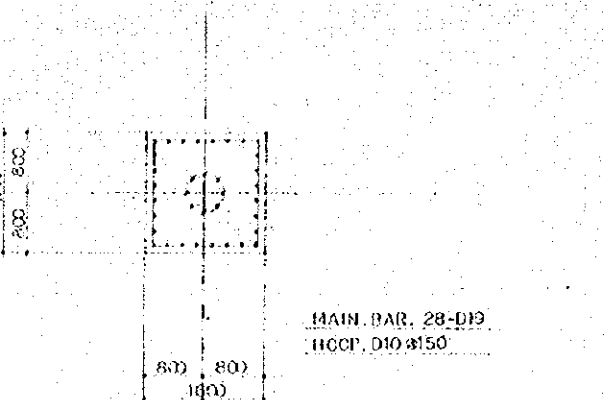
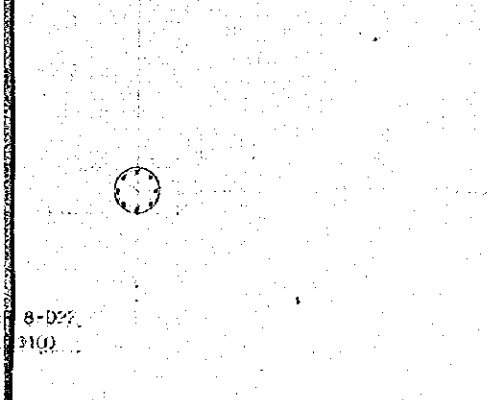
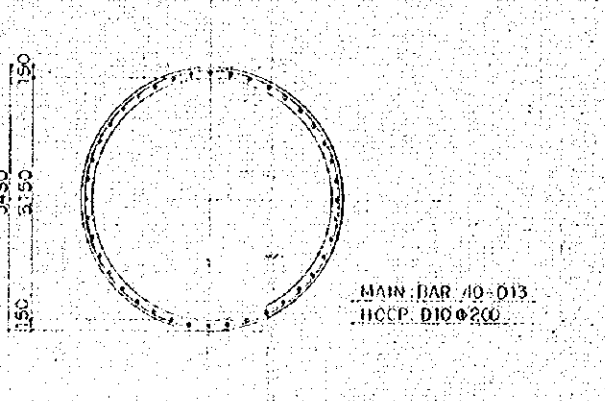
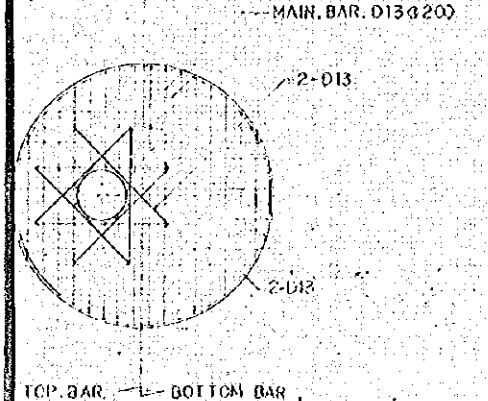
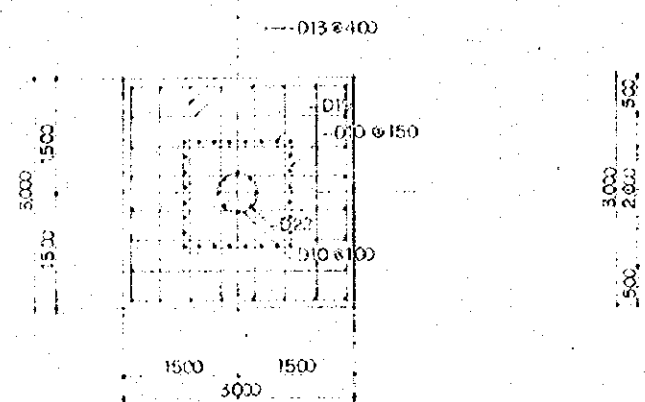
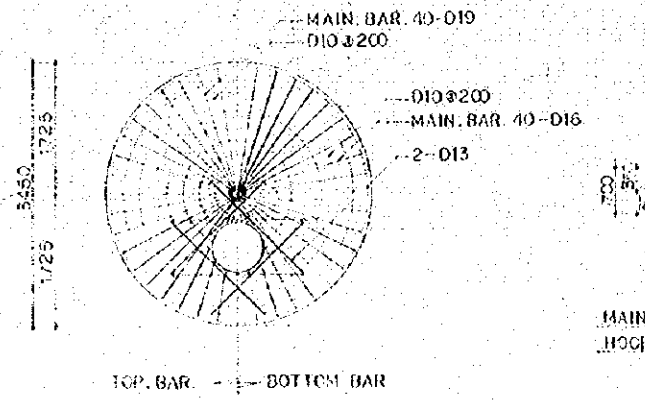
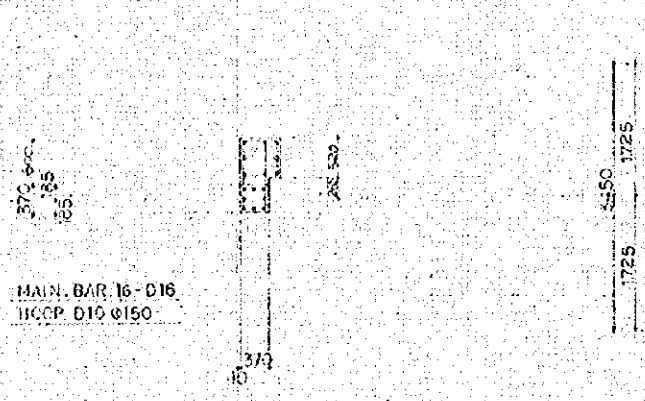
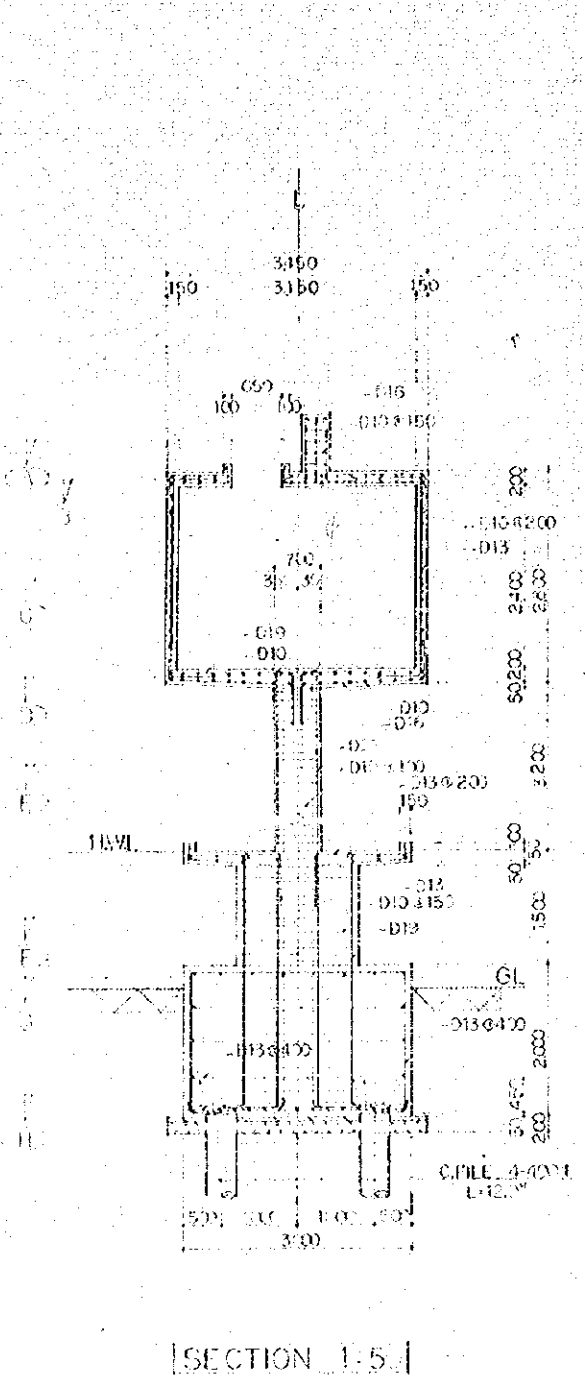
1:10 1:20 1:50
DATE: 10/1/75

DWG. NO: J-26

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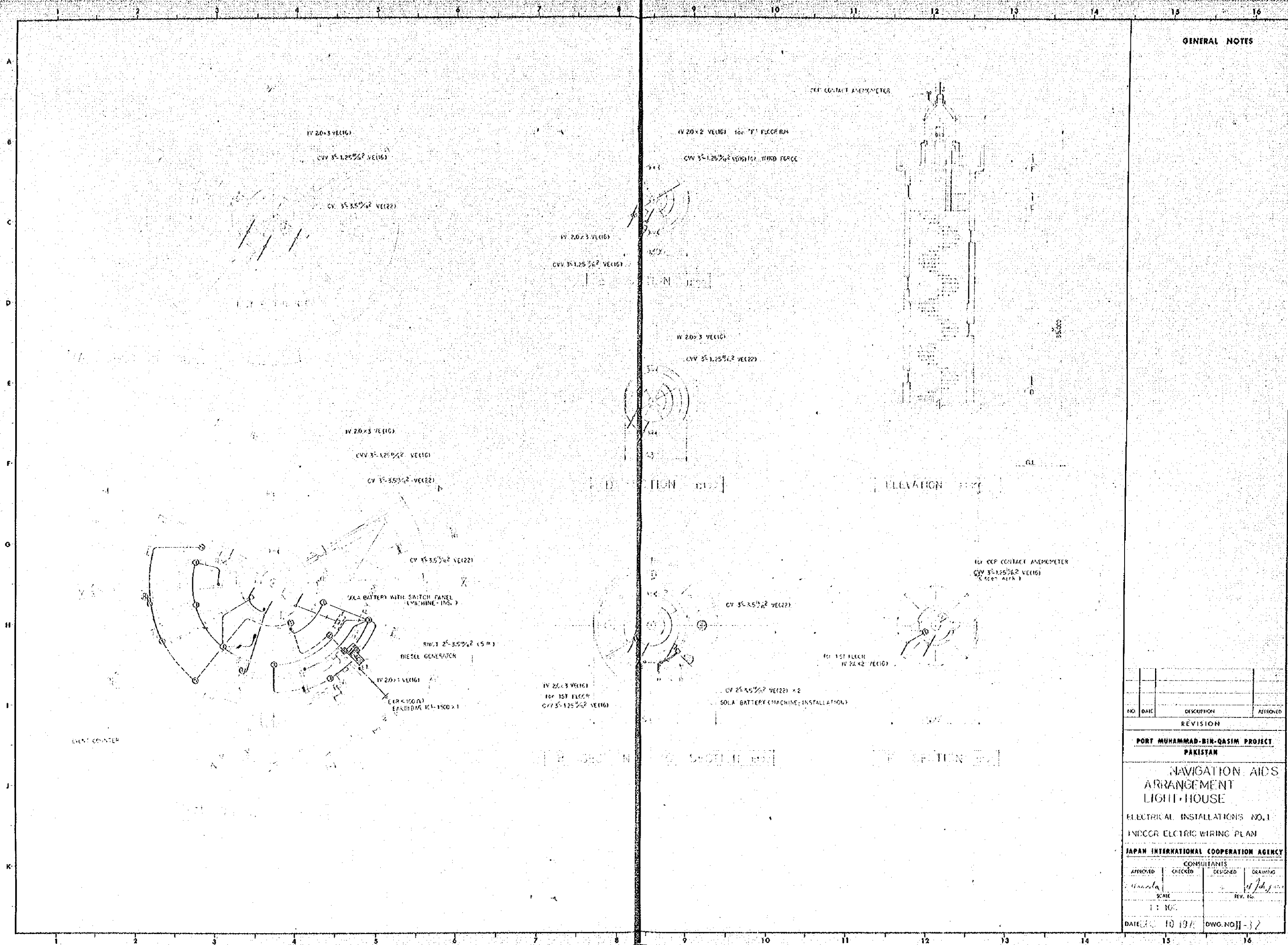
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GENERAL NOTES



NO.	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT PAKISTAN			
NAVIGATION AIDS ARRANGEMENT FRONT LEADING-LIGHT STRUCTURAL DRAWINGS			
JAPAN INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
<i>S. Khan</i>	<i>S. Khattak</i>	<i>S. Khan</i>	<i>M. Bhatti</i>
SCALE			REV. NO.
1:50			
DATE	10/19/71	DWG. NO.	1-73

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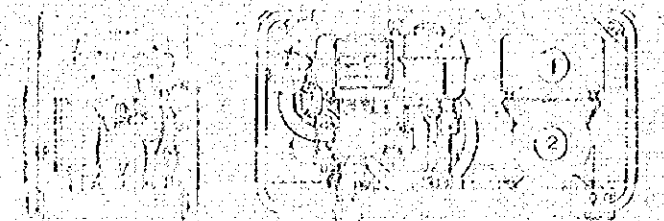


GENERAL NOTES

NO.	DATE	DESCRIPTION	ASSIGNED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT PAKISTAN			
NAVIGATION AID ARRANGEMENT LIGHT HOUSE			
ELECTRICAL INSTALLATIONS NO. 1 INDOCR ELECTRIC WIRING PLAN			
JAPAN INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
<i>[Signature]</i>			<i>[Signature]</i>
SCALE		REV. NO.	
1 : 100			
DATE: 10/10/77		DWG. NO: 1-17	

DIESEL GENERATOR

DIMENSIONS (mm)



UNIT	W	H
Dimensions	1.2	1.2
Weight	1.2	1.2

SPECIFICATIONS

CAPACITY	22 KVA	22KW
VOLTAGE	230V	V
AMPLERE	10	A
FREQUENCY	50	Hz
PHASE	SINGLE PHASE	
POWER FACTOR	1.0	
EXCITING SYSTEM	STATIC EXCITING SYSTEM	
DRIVING SYSTEM	V-BELT DRIVE	
FUEL	4-CYCLE HORIZONTAL DIESEL ENGINE	
EXHAUST	TO EXTERIOR	
STARTING SYSTEM	MANUAL	
COOLING SYSTEM	WATER COOLING	
LUBRICATION SYSTEM	PERIODIC LUBRICATION WITH OIL	
FUEL OIL	1.24	L/HOUR
CONSUMPTION	0.27	KWH/KWH
EFF. EFF.	0.85	
EFFICIENCY	0.85	
FUEL TANK	1.4	LTR
CAPACITY	1.7	LTR

NAME OF PARTS

1	SWITCH BOARD
2	A.C. GENERATOR
3	FUEL OIL TANK
4	CONDENSER
5	AIR CLEANER
6	SILENCER
7	OIL SUPPLY
8	REGULATOR HANDLE
9	LUB. OIL SAFETY VALVE
10	OLE INDICATOR
11	FUEL OIL FILTER
12	STARTING HANDLE

STANDARD ACCESSORIES

TOOLS FOR MAINTENANCE AND INSPECTION	1 SET
WIRE	1 SET

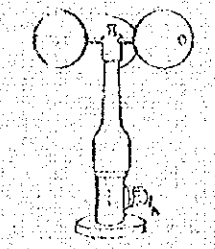
STANDARD SPARE PARTS

PILOT LAMP	1
CARBON BRUSH	1 SET

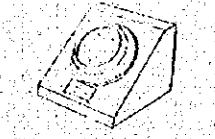
NOTES

1. All parts of the generator shall be made with special steel.
2. The generator shall be capable of operating at 230V/50Hz.
3. The generator shall be capable of operating at 230V/50Hz.
4. The generator shall be capable of operating at 230V/50Hz.

GENERAL NOTES

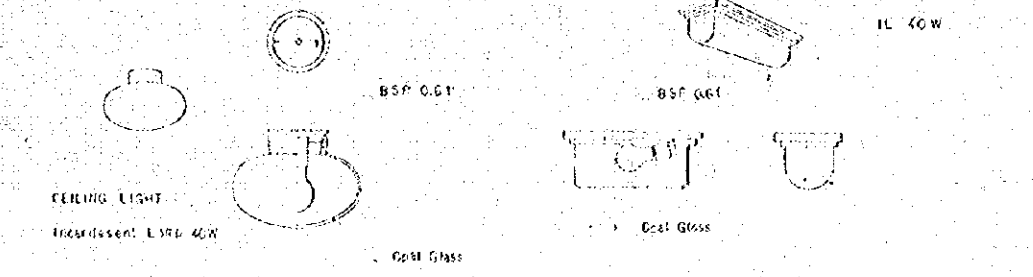


CUP CONTACT ANEMOMETER
 Wind velocity is measured by means of revolving three-cups, and provides switch closures for each 100m of revolution. Device of contact ensures constant time so that prevents the contact remaining in the 'ON' position. Anemometer rotor measuring 10cm in diameter consists of three-cups, each 10cm in diameter. Overall height of cups and housing 32cm. Corrosion free construction. Accuracy better than 1% between 2m/s. Starting wind speed: less than 2m/s. Wt. 3kg.



EVENT COUNTER (METALLIC CASE)
 Event counter operates continuously with 24V D.C. and is suitable for counting and recording a station in period time may be read off remotely at a remote location. Meters type indicator has five stabilizing value dial of from 1x10³ to 10⁷. Size 100x100x50mm. Wt. 0.5kg.

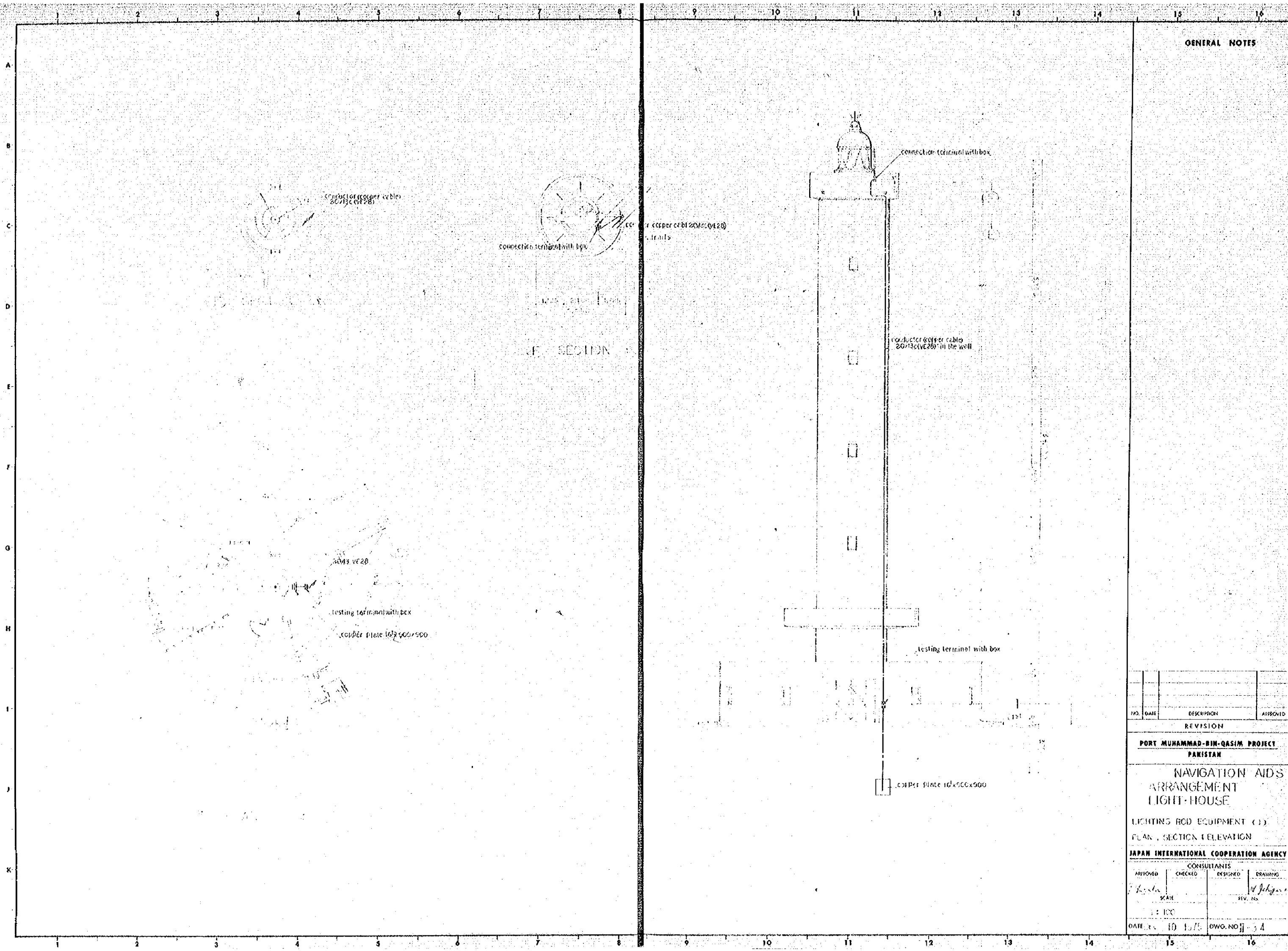
FIGURE PLAN OF LIGHTING FIXTURE



EXPLANATORY NOTES

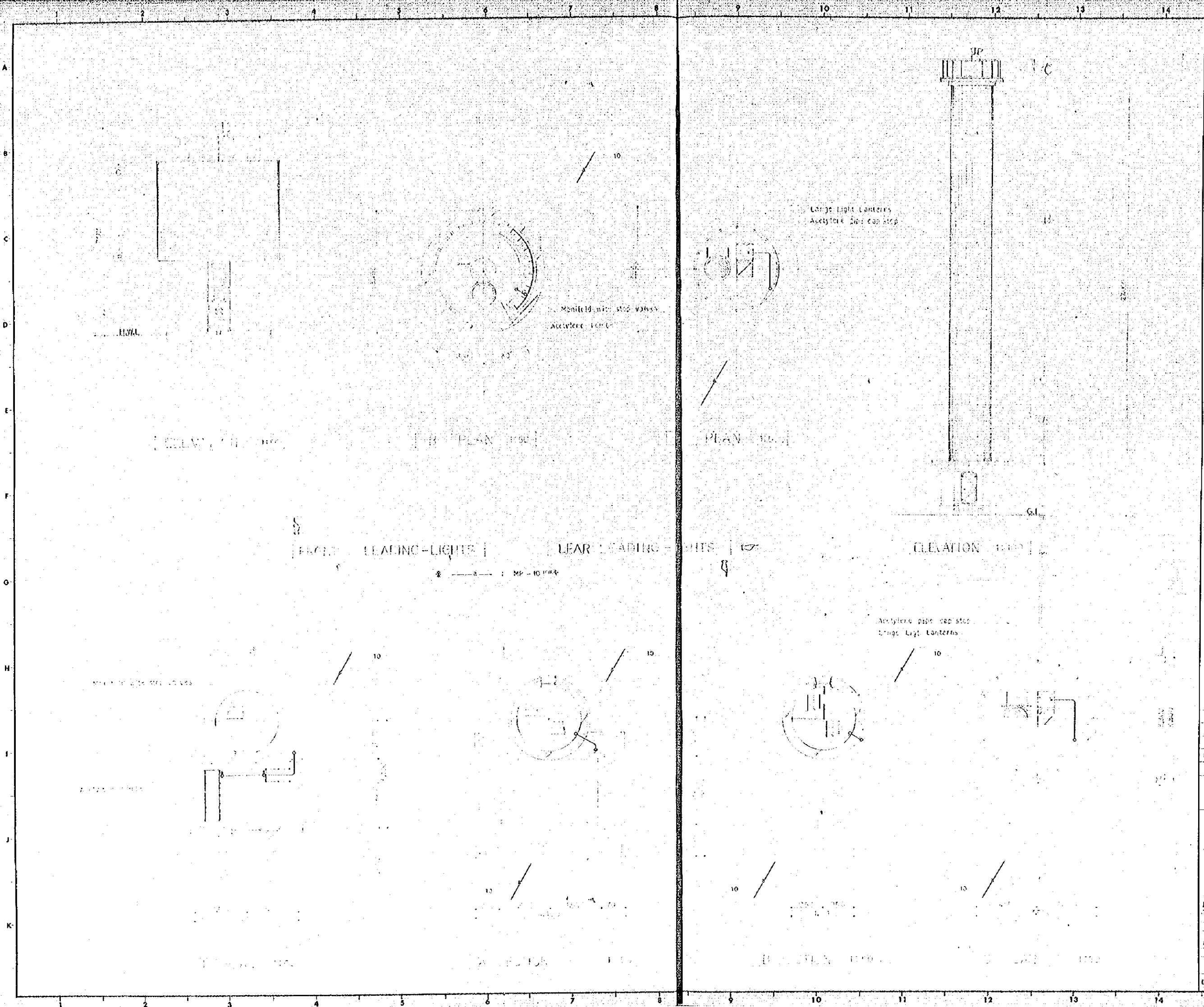
Symbol	Name and Rating etc.
(1)	Generator - Single-phase A.C. 220V/22KW
(2)	Control Switch - 10 Amp Breaker (2p 2w) 200x100x50mm
(3)	Ceiling Light - Lighter Fixture Fixture
(4)	Bracket Light - 200x100x50mm
(5)	Incandescent Lamp - 200x100x50mm
(6)	Incandescent Lamp - 200x100x50mm
(7)	Junction Box - Flush stainless plate
(8)	Oil Gauge - Oil Gauge
(9)	Filter - Filter
(10)	Cup Contact Anemometer
(11)	Event Counter (metallic case)
(12)	Switch Terminal
(13)	Endly Plate (metallic case)
(14)	Wt. 1.5kg

NO.	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT PAKISTAN			
NAVIGATION AIDS ARRANGEMENT LIGHT HOUSE			
ELECTRICAL INSTALLATIONS NO.2 MENTION SPECIFICATIONS			
JAPAN INTERNATIONAL COOPERATION AGENCY CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
<i>[Signature]</i>			<i>[Signature]</i>
SCALE	REV. NO.		
DATE: 10/1975	DWG. NO: [33]		



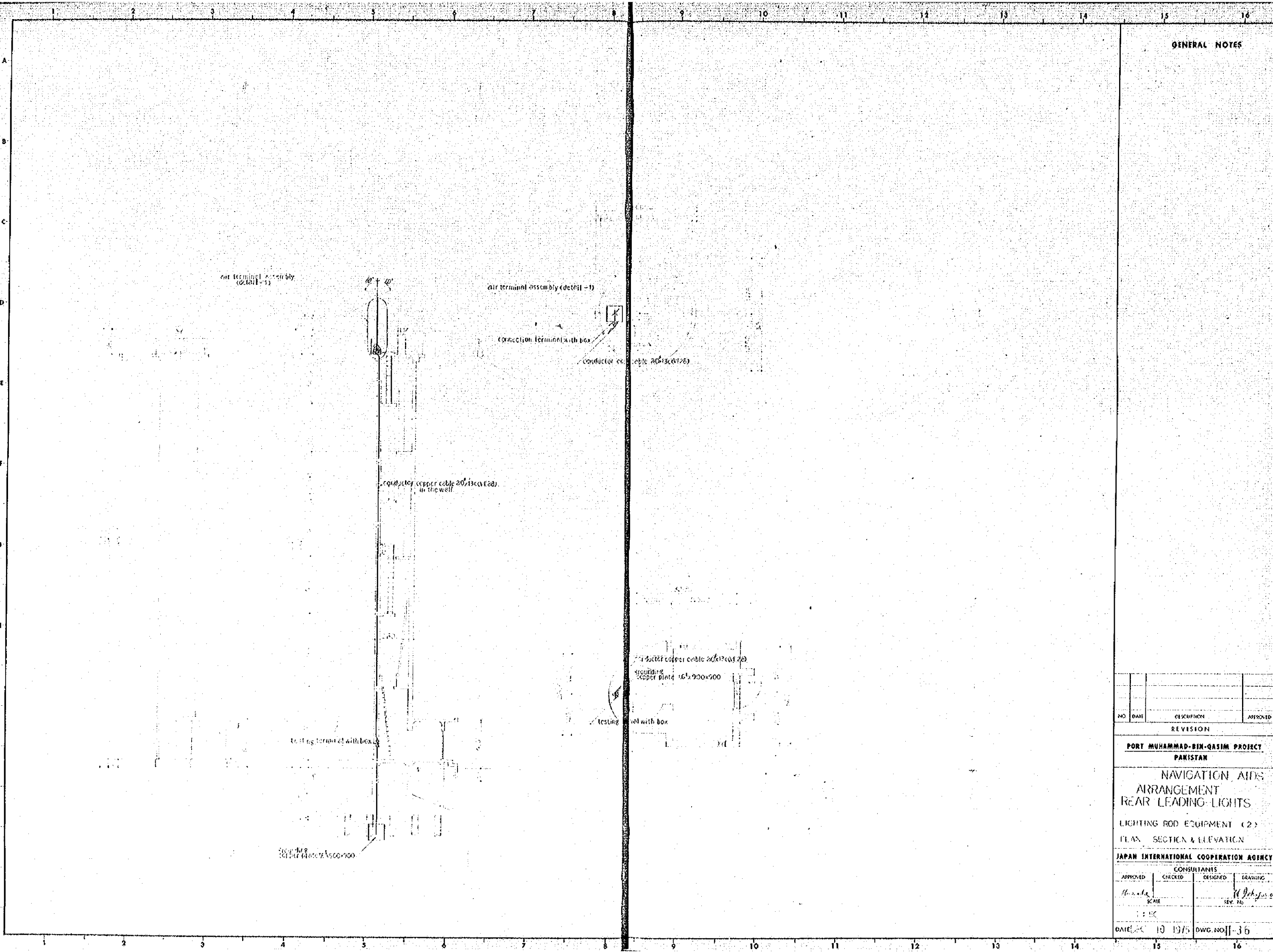
GENERAL NOTES

NO.	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT PAKISTAN			
NAVIGATION AIDS ARRANGEMENT LIGHT HOUSE			
LIGHTING RCD EQUIPMENT (1)			
PLAN, SECTION, ELEVATION			
JAPAN INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
<i>[Signature]</i>			<i>[Signature]</i>
SCALE		REV. NO.	
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DATE	10/10/75	DWG. NO.	54



GENERAL NOTES

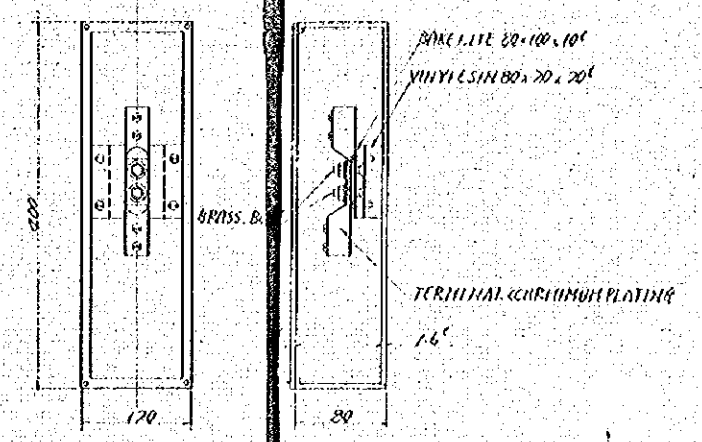
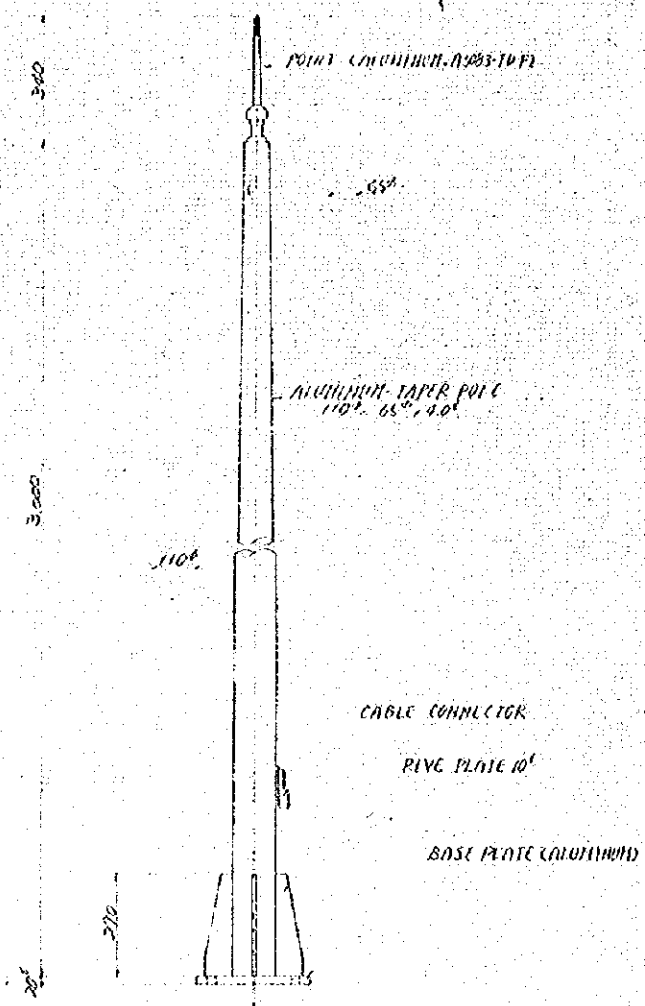
NO.	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT			
PAKISTAN			
NAVIGATION AID			
ARRANGEMENT			
LEARN-LEADING			
GAS PIPING			
JAPAN INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
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SCALE		REV. No.	
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DATE	10/1975	DWG. NO.	35



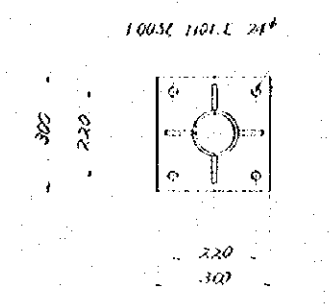
GENERAL NOTES

NO	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT PAKISTAN			
NAVIGATION AIDS ARRANGEMENT REAR LEADING LIGHTS			
LIGHTING ROD EQUIPMENT (2)			
PLAN SECTION & ELEVATION			
JAPAN INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
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DATE	10/19/75	DWG. NO. 36	

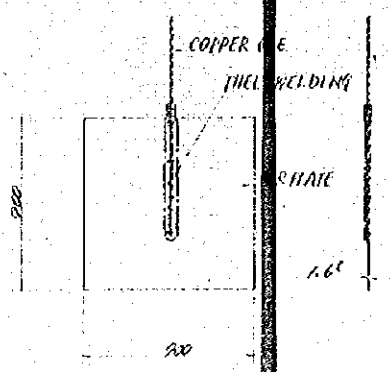
GENERAL NOTES



TESTING AND CONNECTION TERMINAL WITH BOX

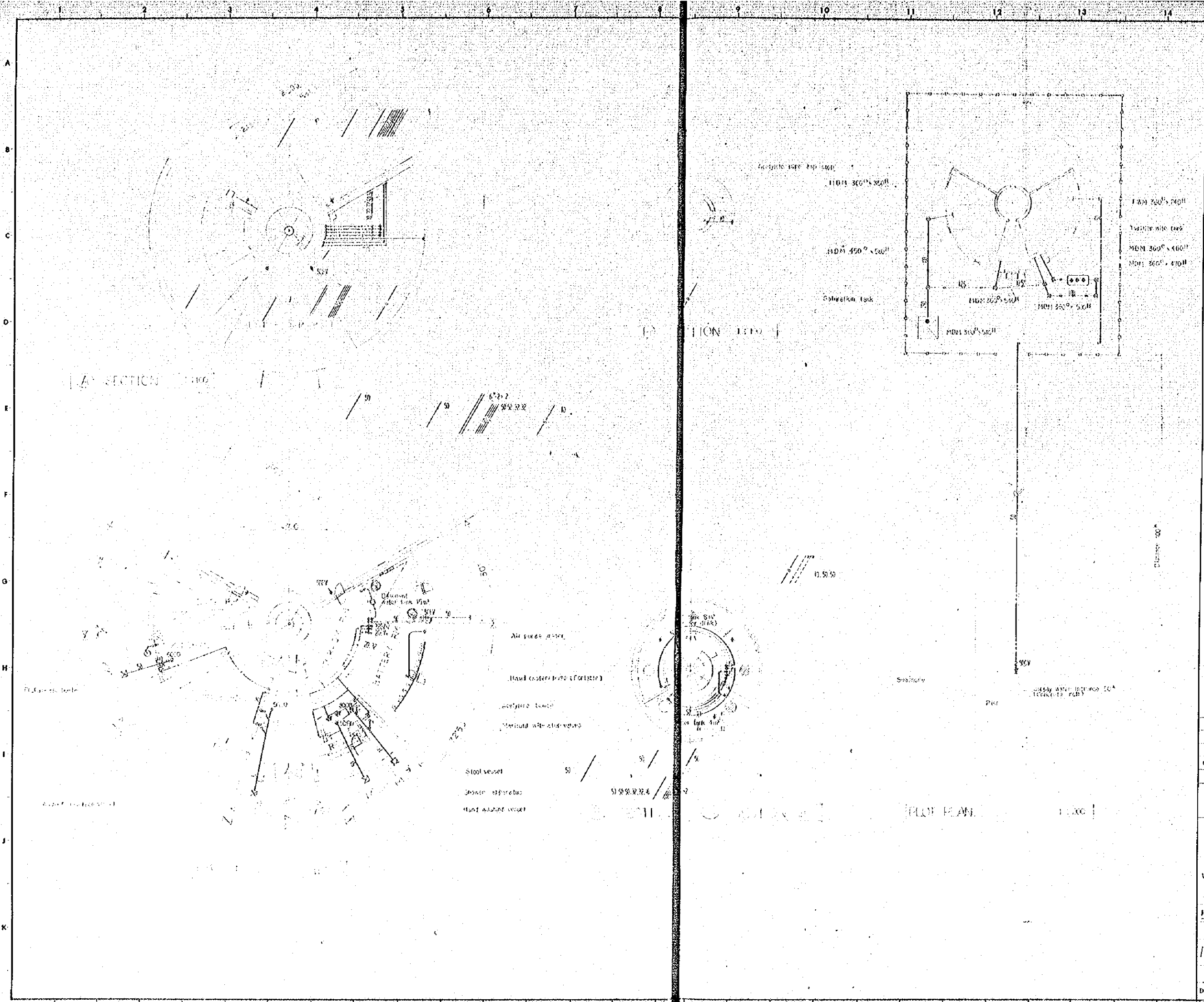


DETAIL - I
AIR TERMINAL ASSEMBLY



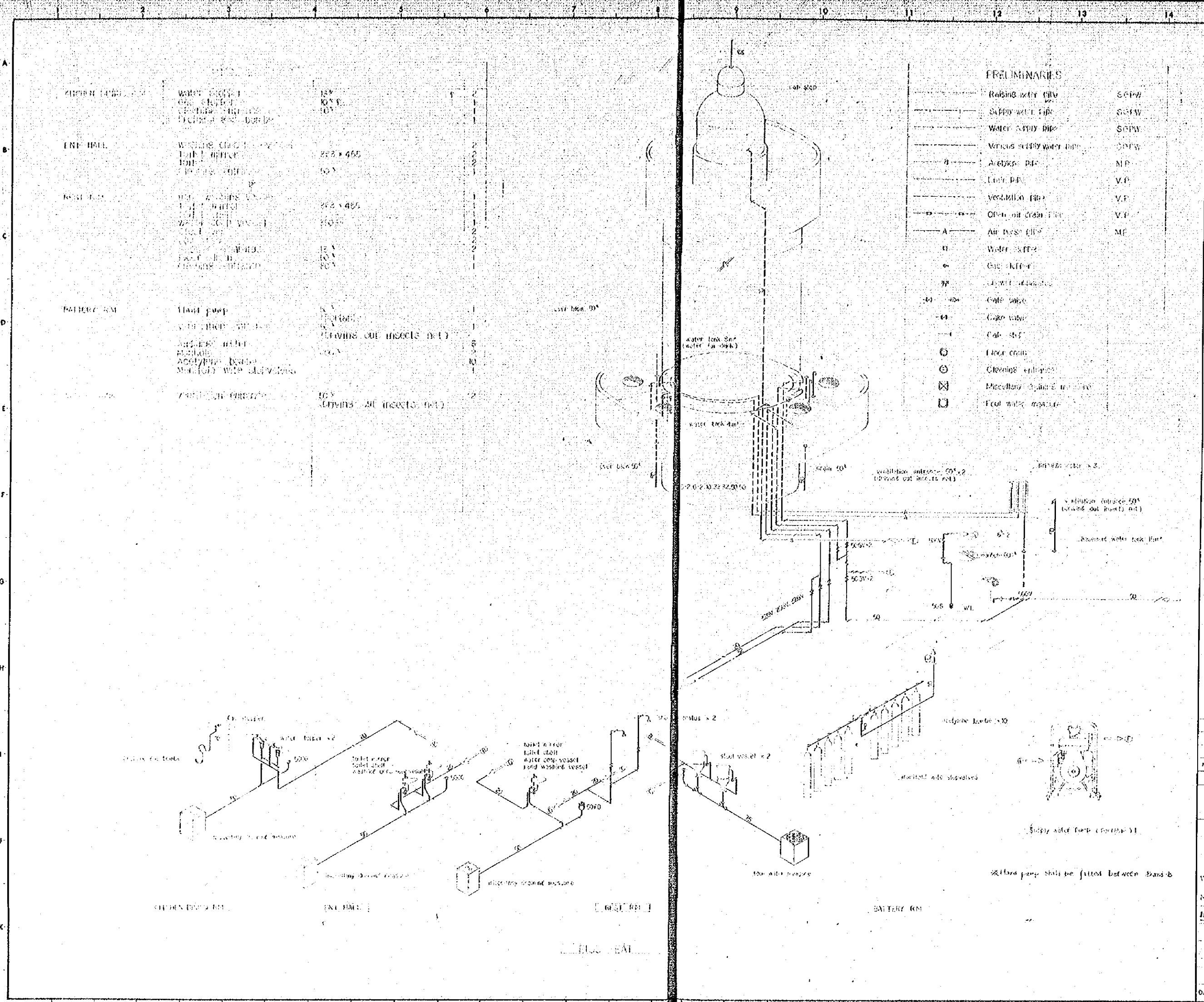
GROUNDING COPPER PLATE SCALE 1/20

NO.	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT PAKISTAN			
NAVIGATION AIDS LIGHT HOUSE AND REAR LEADING LIGHTS LIGHTING SOB EQUIPMENT (S) DETAIL PLAN			
JAPAN INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWN
<i>[Signature]</i>			<i>[Signature]</i>
SCALE	REV. NO.		
DATE: 10/19/77	DWG. NO.: 37		



GENERAL NOTES

NO.	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT PAKISTAN			
NAVIGATION AIDS ARRANGEMENT LIGHT-HOUSE			
WATER SUPPLY TO DRAINAGE AND PLUMBING EQUIPMENT PLAN FIGURES NO. 1			
JAPAN INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
<i>L. M. Khan</i>			<i>M. J. Khan</i>
SCALE		REV. No.	
DATE: 10/19/71		DWG. NO: 39	



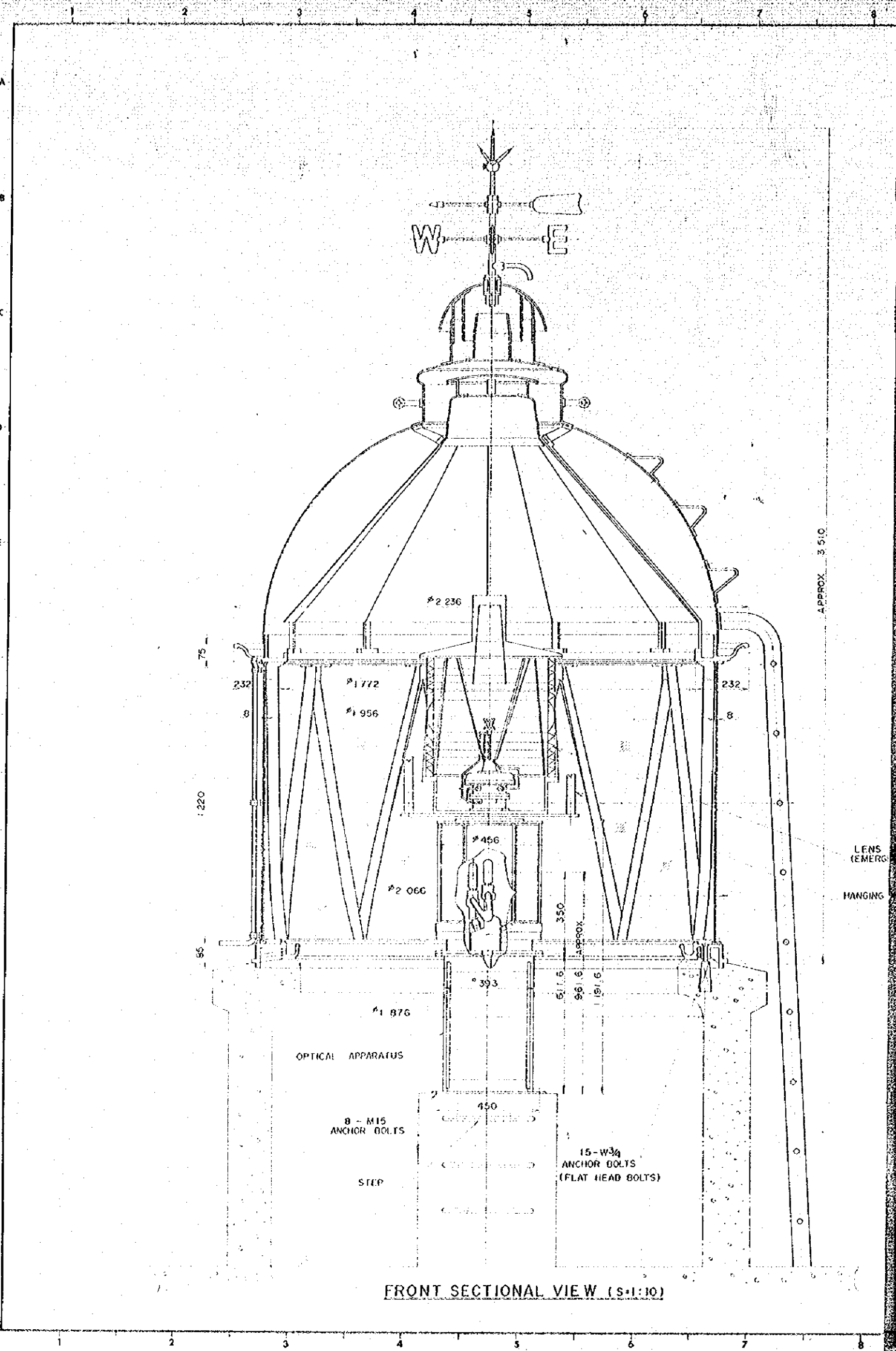
KITCHEN (18' x 10') WATER SUPPLY SINK SINK SINK	18' x 10' 10' x 10' 10' x 10'
ENGINE ROOM (25'3" x 46') WATER SUPPLY SINK SINK SINK	25'3" x 46' 10' x 10' 10' x 10' 10' x 10'
BATTERY ROOM (25'3" x 46') WATER SUPPLY SINK SINK SINK	25'3" x 46' 10' x 10' 10' x 10' 10' x 10'
BATTERY ROOM WATER SUPPLY SINK SINK SINK	25'3" x 46' 10' x 10' 10' x 10' 10' x 10'

FREELIMINARIES

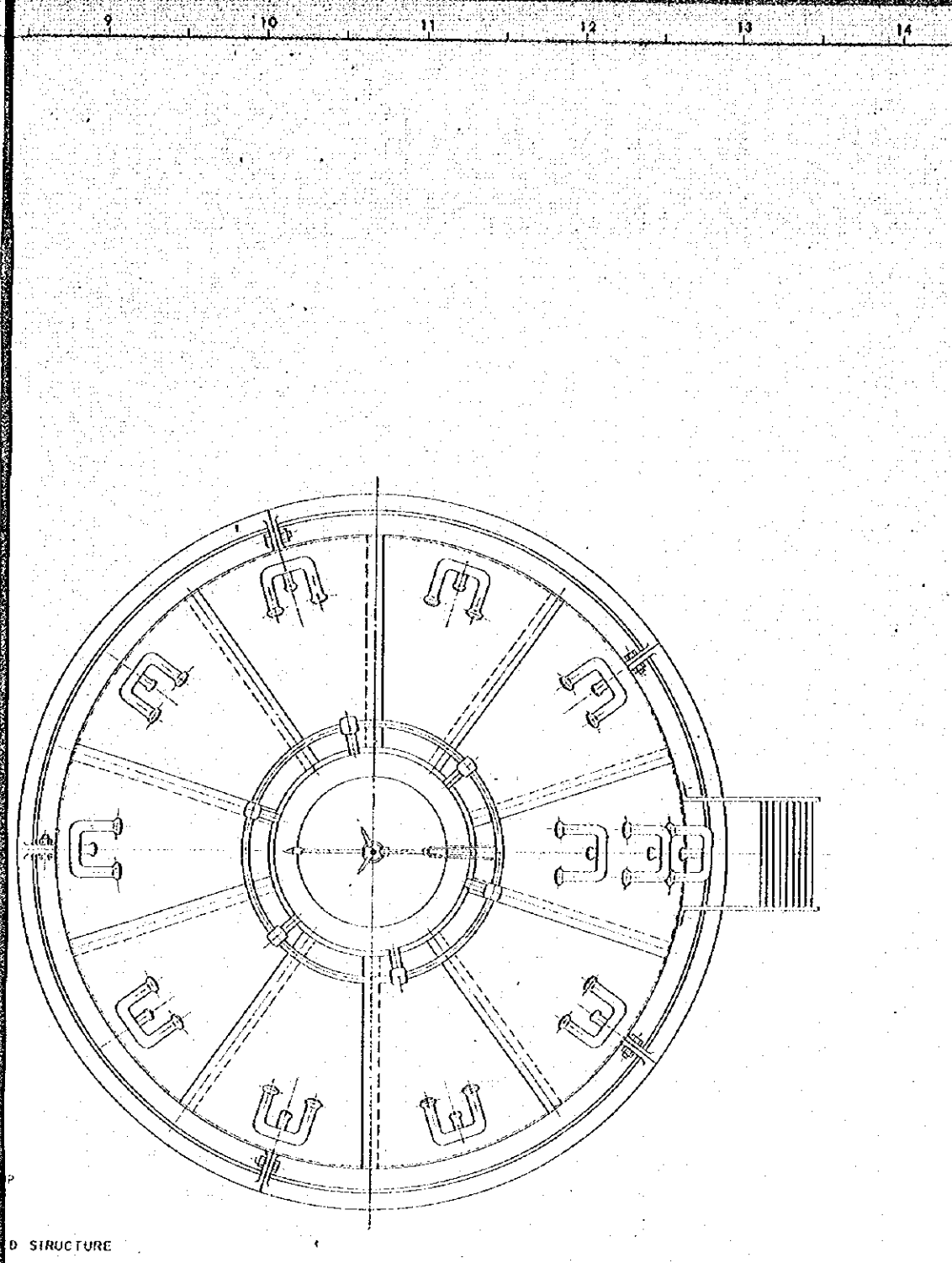
-----	Rising water pipe	S.P.W.
-----	Supply water pipe	S.P.W.
-----	Water supply pipe	S.P.W.
-----	Various supply water pipe	S.P.W.
-----	Artery pipe	M.P.
-----	Uter pipe	V.P.
-----	Ventilation pipe	V.P.
-----	Open air drain pipe	V.P.
-----	Air base pipe	M.P.
-----	Water supply	
-----	Gas supply	
-----	Light supply	
-----	Gas pipe	
-----	Gas pipe	
-----	Gas pipe	
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-----	Gas pipe	
-----	Gas pipe	

GENERAL NOTES

NO.	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT PAKISTAN			
NAVIGATION AIDS ARRANGEMENT LIGHT-HOUSE			
WATER SUPPLY TO DRAINAGE AND PLUMBING EQUIPMENT MENTION SPECIFICATION 1/1/72			
JAPAN INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS			
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SCALE		REV. No.	
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DATE: 10/19/75	DWG. NO. 1-33		



FRONT SECTIONAL VIEW (S:1:10)



TOP VIEW (S:1:10)

GENERAL NOTES

NO.	DATE	DESCRIPTION	APPROVED
REVISION			

PORT MUHAMMAD-BIN-QASIM PROJECT
PAKISTAN

NAVIGATION AIDS
LIGHTHOUSE

Lantern & Optical
Apparatus

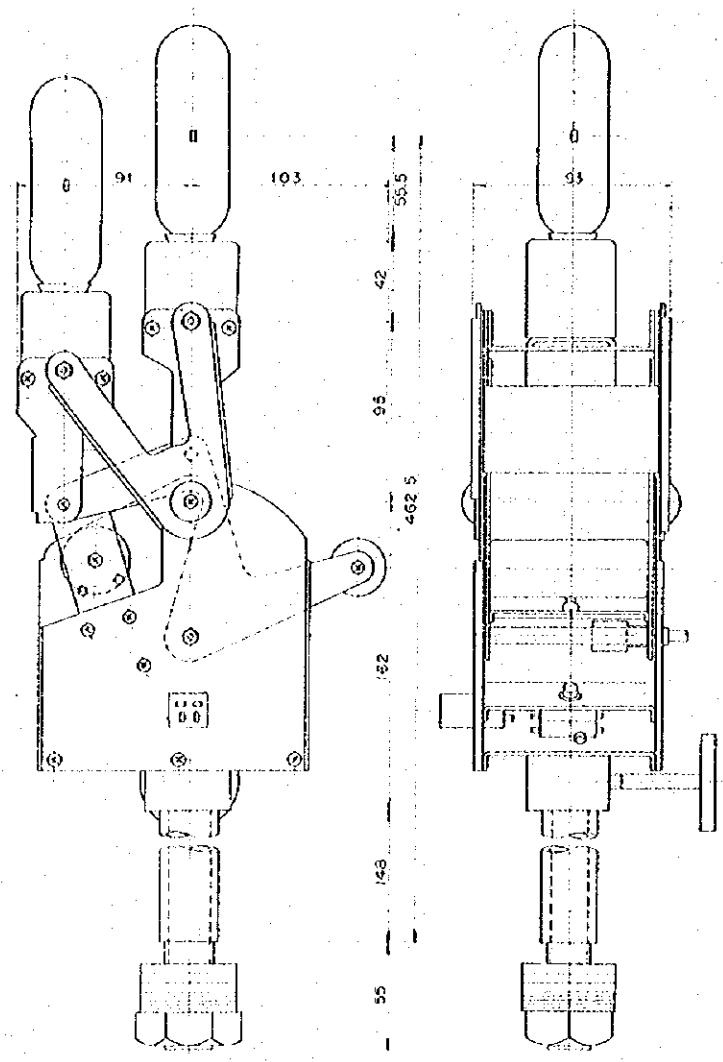
JAPAN INTERNATIONAL COOPERATION AGENCY

CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWN
SCALE		REV. NO.	

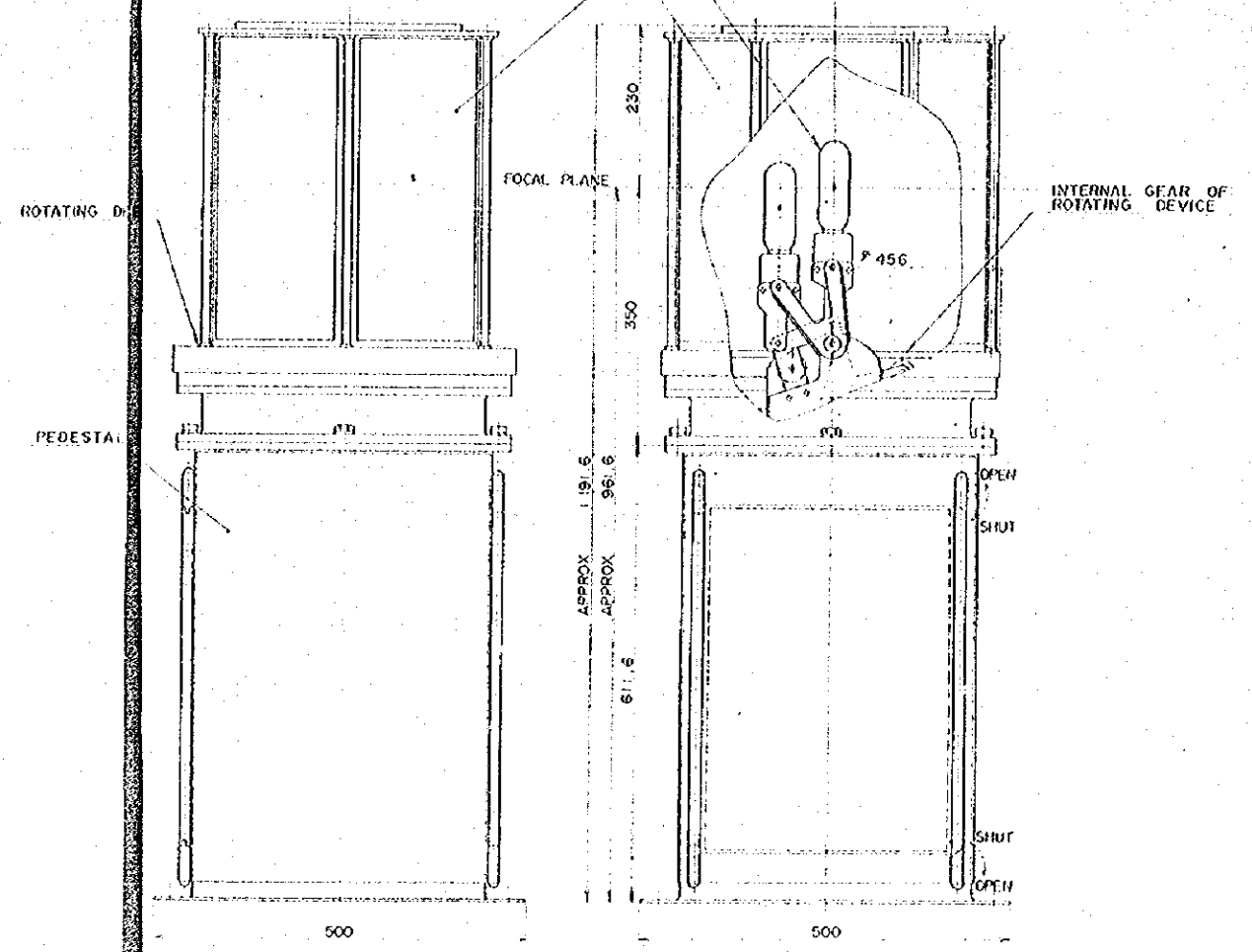
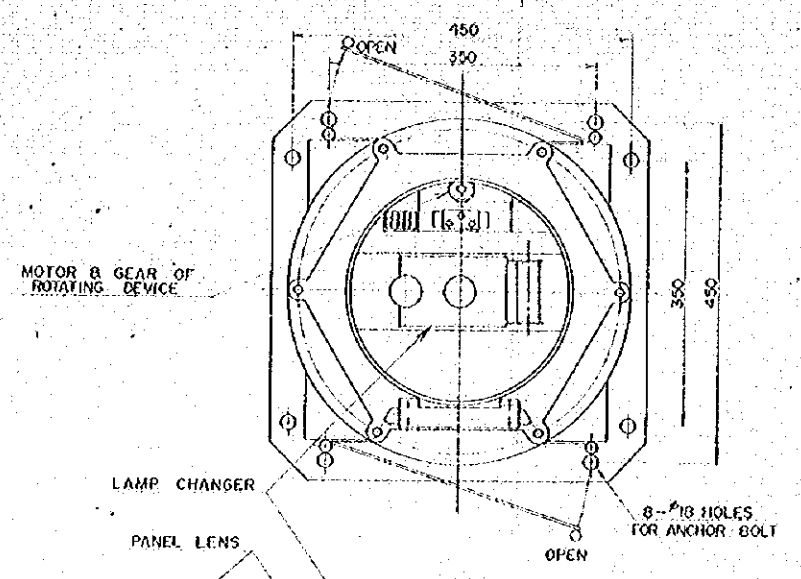
1:10 UNIT MM
DATE DEC-13-1975 DWG. NO. II-41

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LAMP CHANGER (S:1:2)



OPTICAL APPARATUS (S:1:5)

GENERAL NOTES

NO	DATE	DESCRIPTION	APPROVED
REVISION			

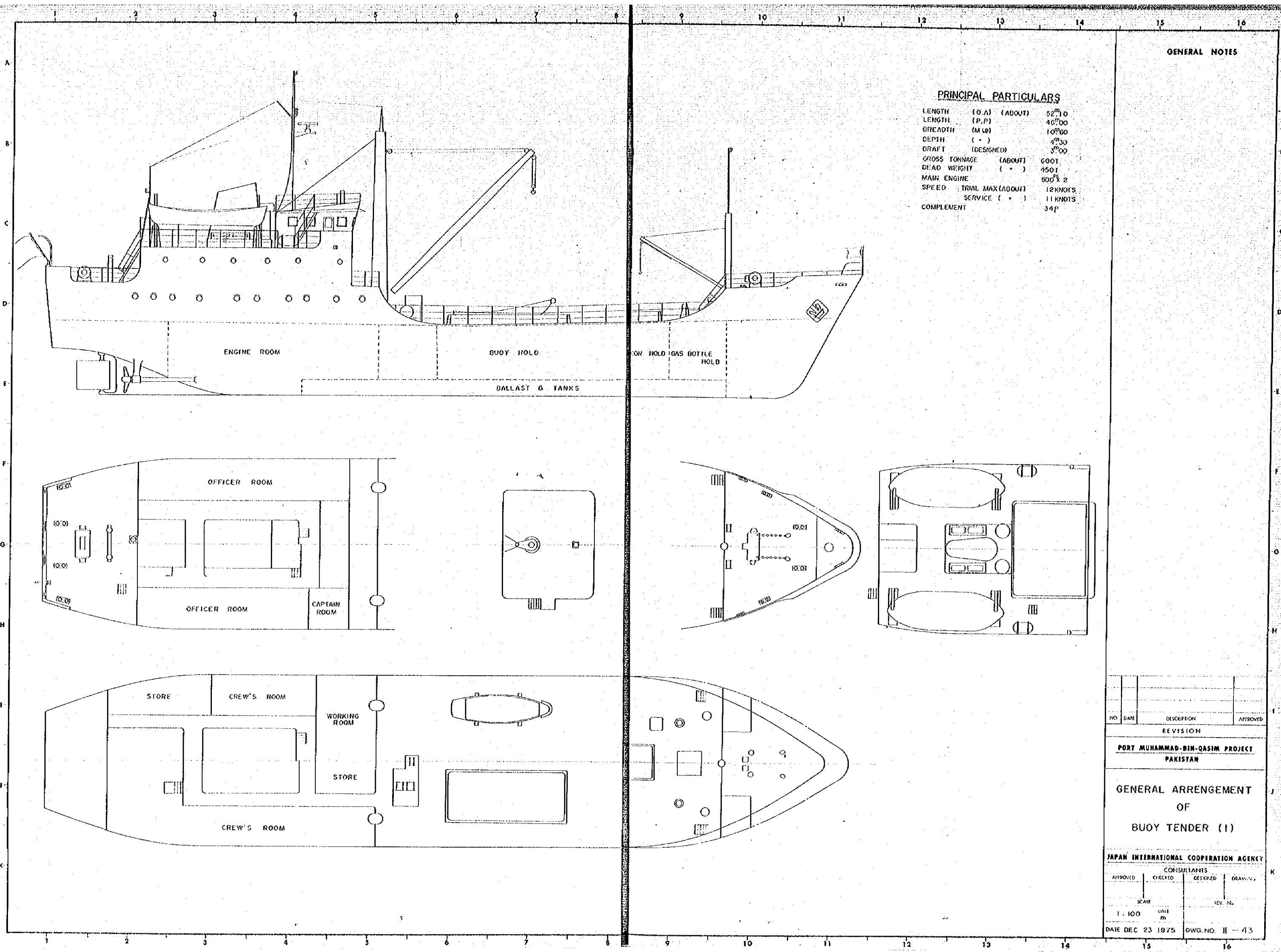
PORT MUHAMMAD-BIN-QASIM PROJECT
PAKISTAN

NAVIGATION AIDS
LIGHTHOUSE
OPTICAL APPARATUS

JAPAN INTERNATIONAL COOPERATION AGENCY

ASSIGNED		CONSULTANTS	
DESIGNED	CHECKED	DESIGNED	CHECKED
SCALE 1:5, 1:2		UNIT MM	
DATE DEC-13-1975		DWG. NO. II-42	

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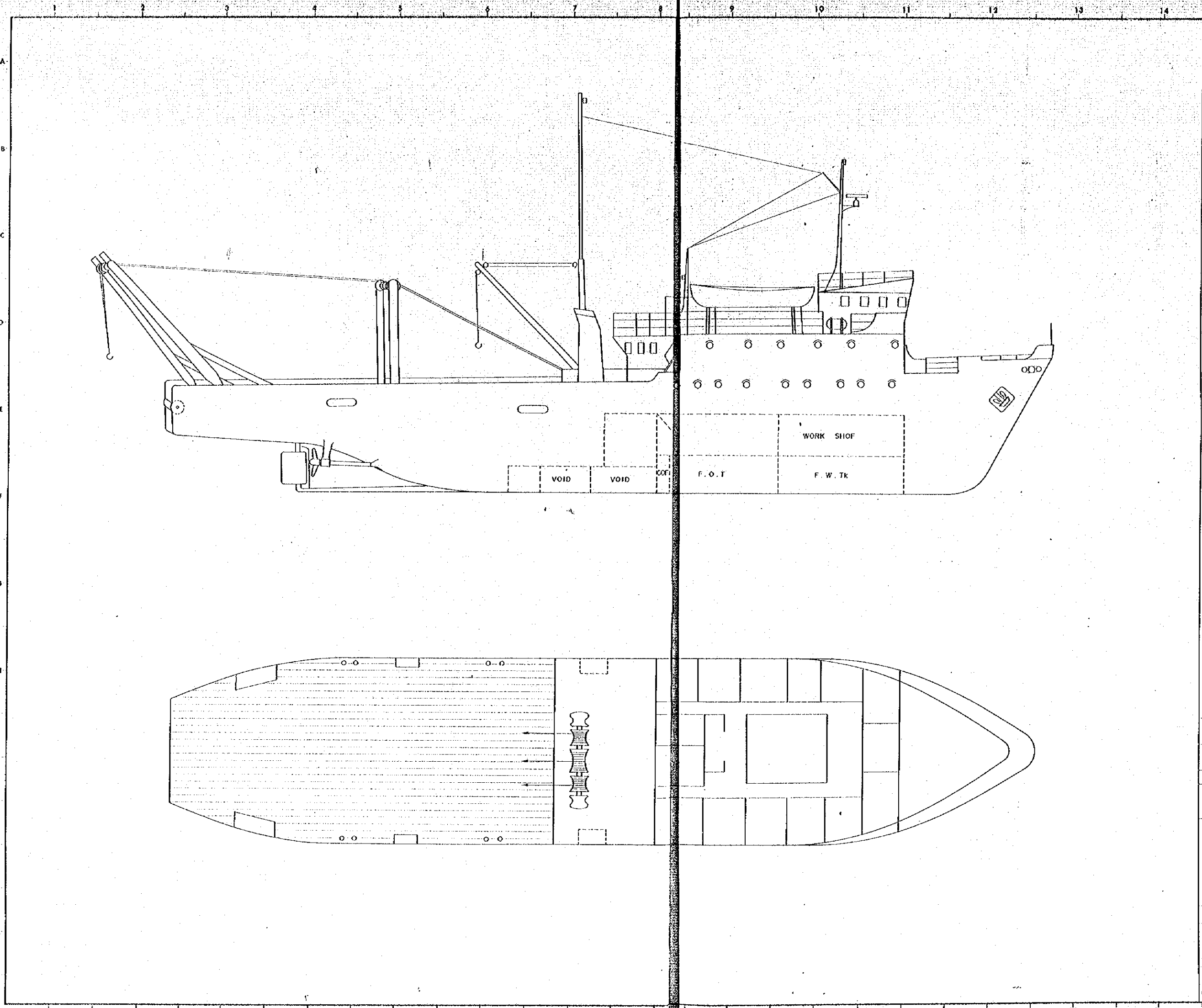


PRINCIPAL PARTICULARS

LENGTH (O.A.) (ABOUT)	52'00
LENGTH (P.P.) (*)	46'00
BREADTH (M.L.)	10'00
DEPTH (*)	4'30
DRAFT (DESIGNED)	3'00
GROSS TONNAGE (ABOUT)	6001
DEAD WEIGHT (*)	7501
MAIN ENGINE	600 X 2
SPEED TRIAL MAX (ABOUT)	12 KNOTS
SERVICE (*)	11 KNOTS
COMPLEMENT	34 P

GENERAL NOTES

NO.	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT PAKISTAN			
GENERAL ARRANGEMENT OF BUOY TENDER (1)			
JAPAN INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWN
SCALE		REV. NO.	
1 : 100		m	
DATE DEC 23 1975		DWG. NO. II - 43	



GENERAL NOTES

NO.	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT PAKISTAN			
GENERAL ARRANGEMENT OF BUOY TENDER (2)			
JAPAN INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWN
SCALE		SHEET NO.	
1 : 100		m	
DATE DEC 23 1975		DWG. NO. II - 41	

GENERAL NOTES

POSITION OF STATION
 Casting (YRD) Northing (YRO)
 MASTER 2207850.98 881380.96
 SLAVE 1 2234380.65 860497.49
 SLAVE 2 2247815.10 847895.50

PATTERN 1
 PATTERN 2

See drawing No III-01
 SEA FIX PLOTTER CHART
 FOR CHANNEL NAVIGATION

NO	DATE	DESCRIPTION	APPROVED

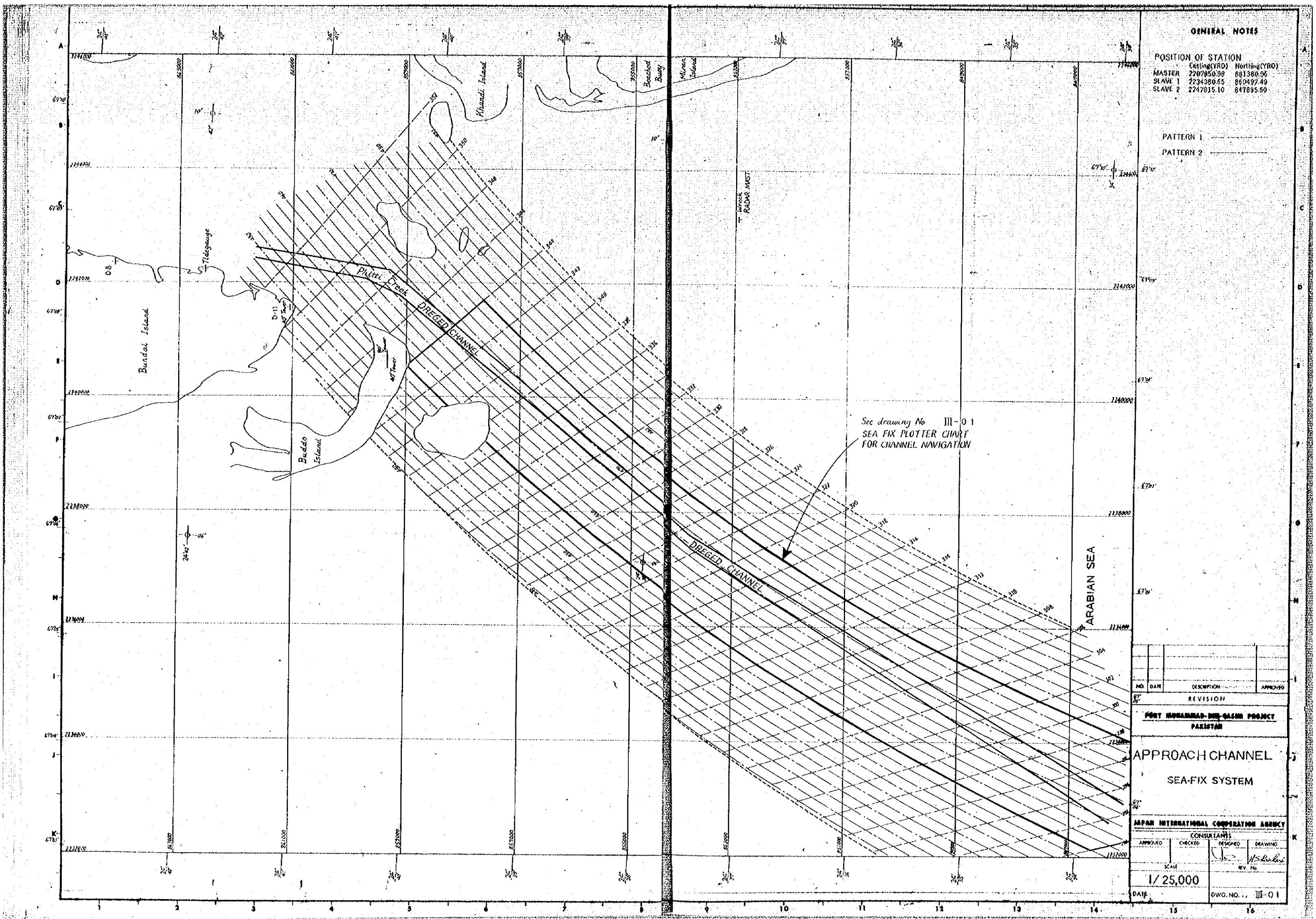
REVISION
 FORT MUHAMMAD-DUN-GASH PROJECT
 PAKISTAN

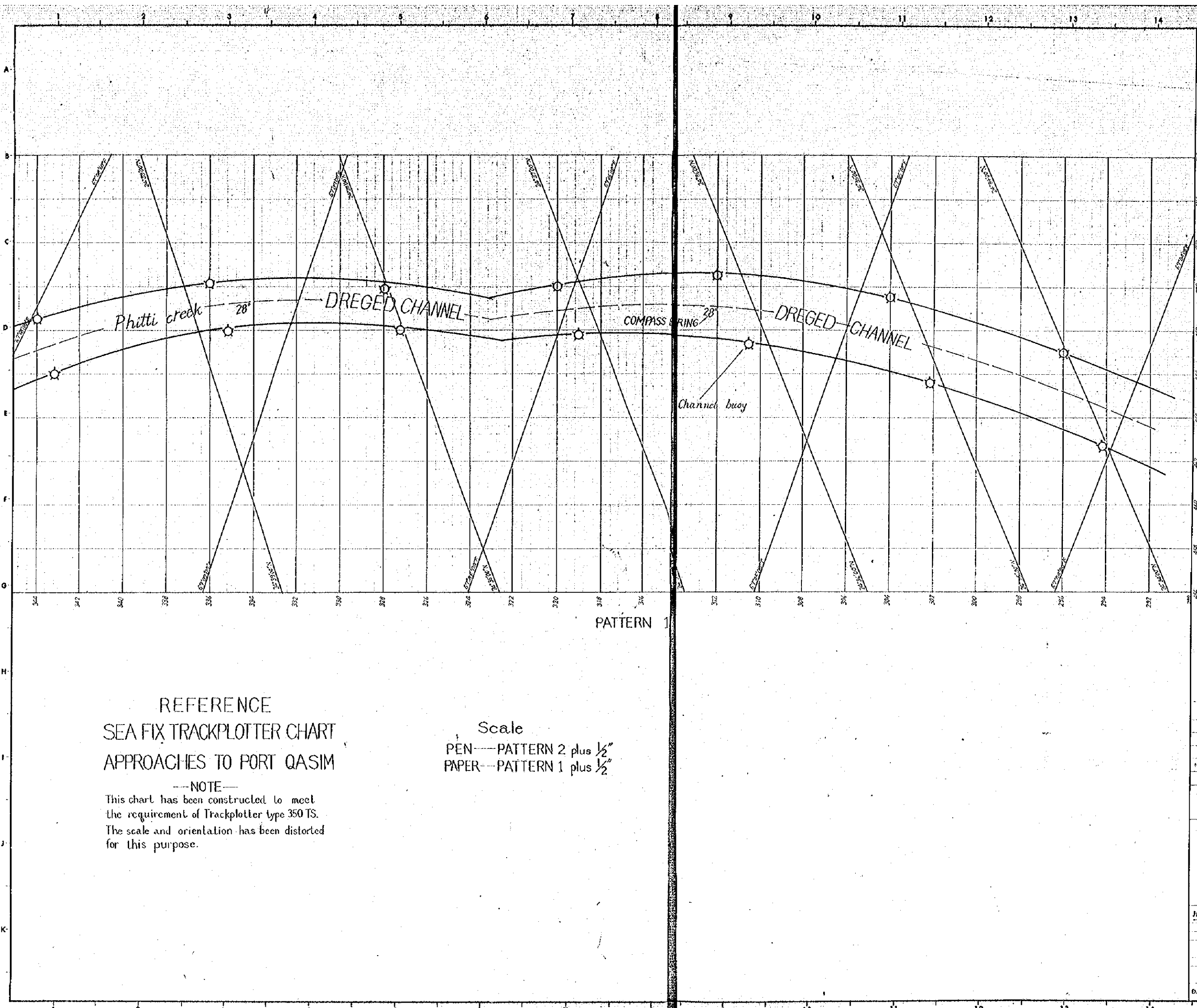
APPROACH CHANNEL
 SEA-FIX SYSTEM

JAPAN INTERNATIONAL COOPERATION AGENCY
 CONSULTANTS

APPROVED	CHECKED	DESIGNED	DRAWING

SCALE
 1/25,000
 DATE
 DWG. NO. III-01





GENERAL NOTES
 PATTERN 1 --- 290~344
 PATTERN 2 --- 456~476
 ☆ --- channel buoy

REFERENCE
 SEA FIX TRACKPLOTTER CHART
 APPROACHES TO PORT QASIM

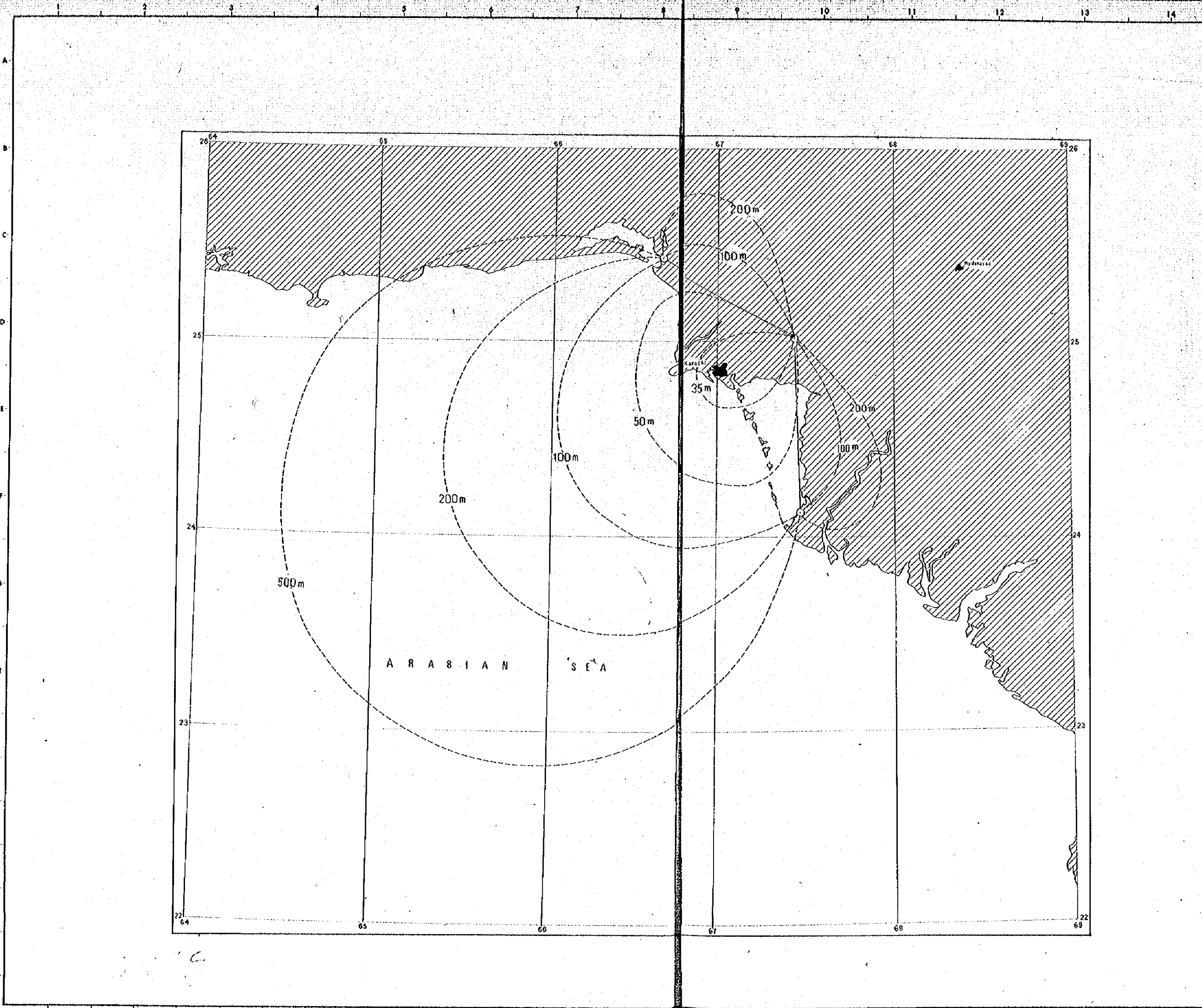
---NOTE---
 This chart has been constructed to meet
 the requirement of Trackplotter type 350 TS.
 The scale and orientation has been distorted
 for this purpose.

Scale
 PEN --- PATTERN 2 plus 1/2"
 PAPER --- PATTERN 1 plus 1/2"

PATTERN 2

PATTERN 1

NO.	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT PAKISTAN			
PLOTTER CHART FOR CHANNEL NAVIGATION			
JAPAN INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
		<i>H.S. Shalvi</i>	<i>H.S. Shalvi</i>
SCALE		REV. NO.	
DATE		DWG. NO. III-02	



GENERAL NOTES

The contours enclose areas in which the predicted position repeatability accuracy does not exceed the figures shown at the 95% probability level under FULL DAYLIGHT conditions.

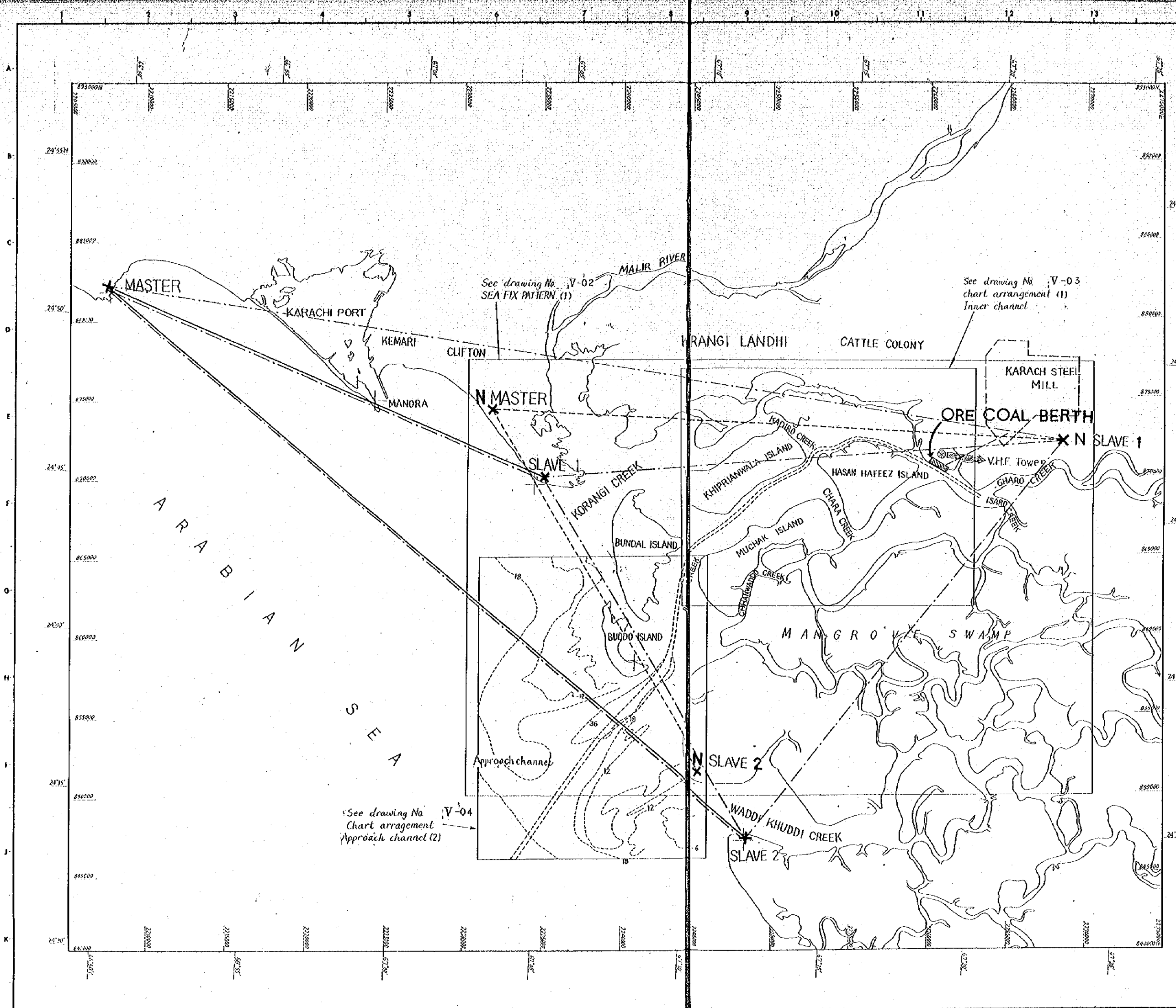
Assumed Standard Deviation = .02 Mean Lanes.

NO.	DATE	DESCRIPTION	APPROVED
REVISION			

PORT MUHAMMAD-BIN-QASIM PROJECT
PAKISTAN

COVERAGE OF PORT QASIM AND KARACHI

JAPAN INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
		<i>[Signature]</i>	<i>[Signature]</i>
SCALE		REV. NO.	
DATE		DWG. NO. IV-001	



GENERAL NOTES

X --- Lat.
Y --- Long.

— EXISTING-CHAIN
- - - PROPOSAL 1
- - - PROPOSAL 2

See drawing No. V-02
SEA FIX PATERN (1)

See drawing No. V-03
chart arrangement (1)
Inner channel

See drawing No. V-04
Chart arrangement
Approach channel (2)

NO.	DATE	DESCRIPTION	APPROVED
REVISION			

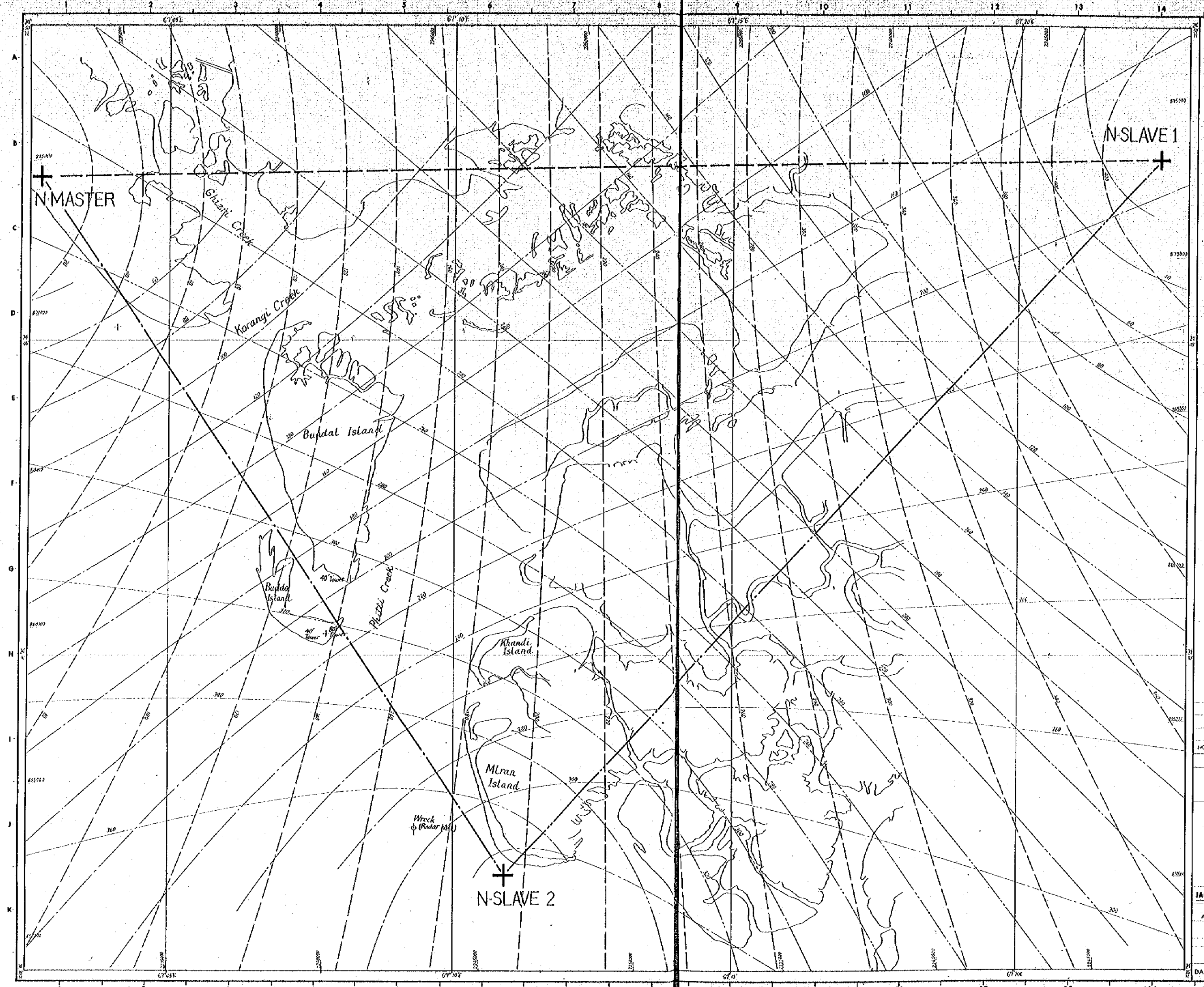
PORT MUHAMMAD-BIN-QASIM PROJECT
PAKISTAN

**SEA FIX CHAINS
(STATION ARRANGEMENT)**
V.H.F. TOWER

JAPAN INTERNATIONAL COOPERATION AGENCY
CONSULTANTS

APPROVED	CHECKED	DESIGNED	DRAWING
		H. Shukri	

SCALE 1/100,000
DATE _____ DWG. NO. V-01



GENERAL NOTES

- PATTERN 1
- PATTERN 2
- PATTERN 3 (S1-S2)

NO.	DATE	DESCRIPTION	APPROVED

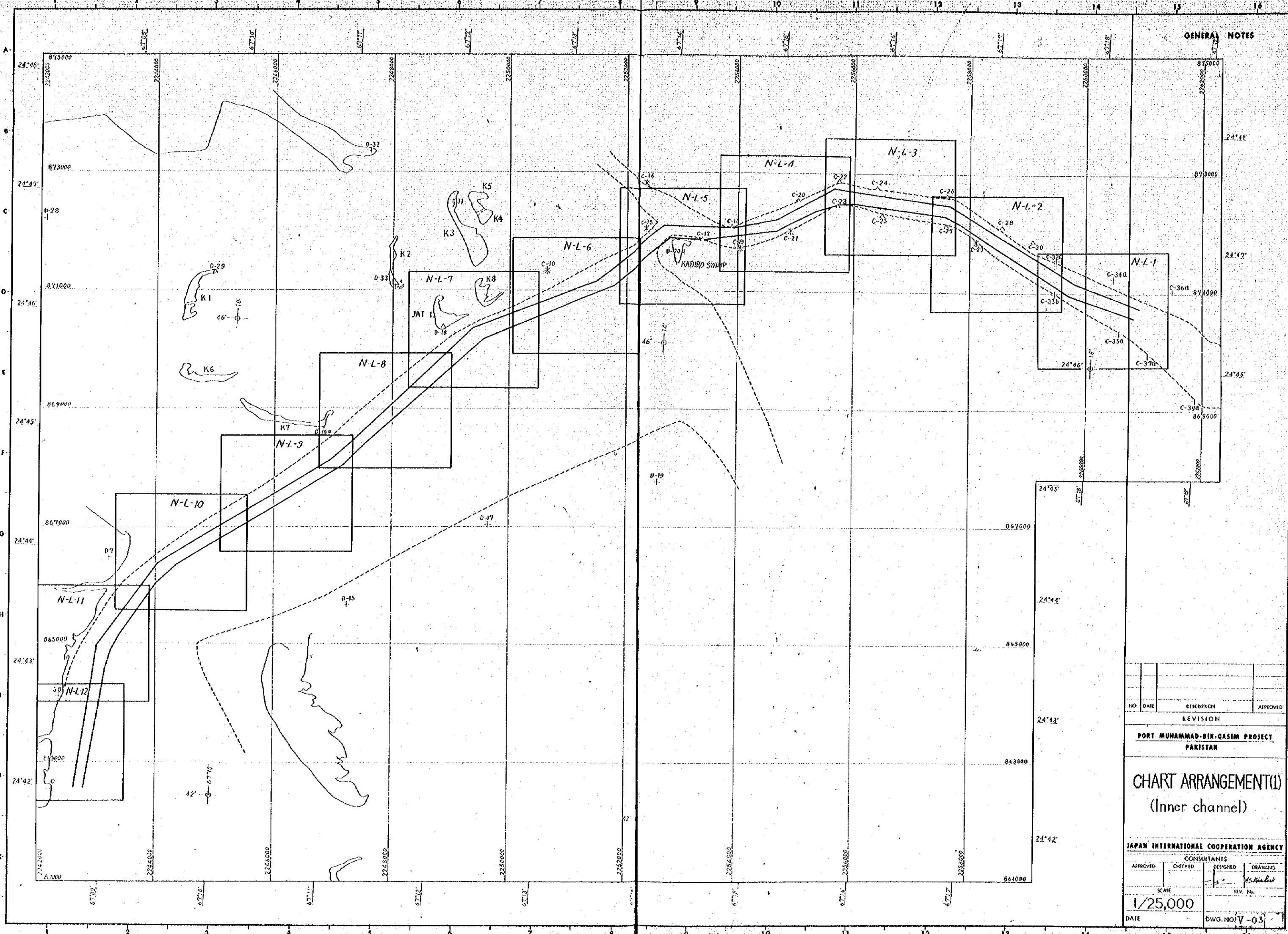
REVISION
PORT MUHAMMAD-BIN-QASIM PROJECT
 PAKISTAN

SEA FIX PATTERN (1)
 PROPOSAL 1
 LAT. 24°40'N

JAPAN INTERNATIONAL COOPERATION AGENCY

CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING

SCALE
1/50,000
 DATE _____ DWG. NO. **V-02**



GENERAL NOTES

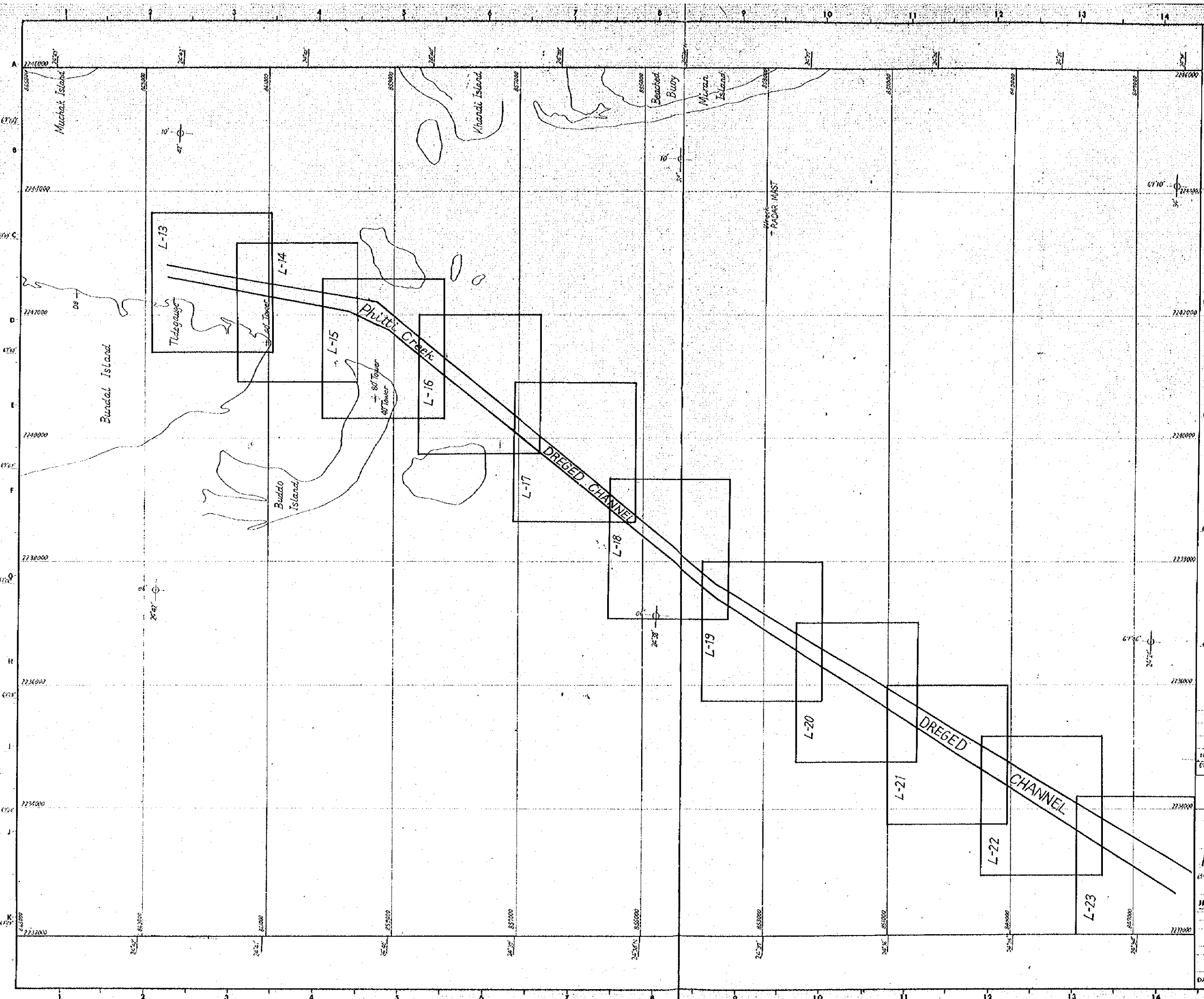
NO.	DATE	DESCRIPTION	APPROVED
REVISION			

PORT MUHAMMAD-BIN-QASIM PROJECT
PAKISTAN

CHART ARRANGEMENT(I)
(Inner channel)

JAPAN INTERNATIONAL COOPERATION AGENCY

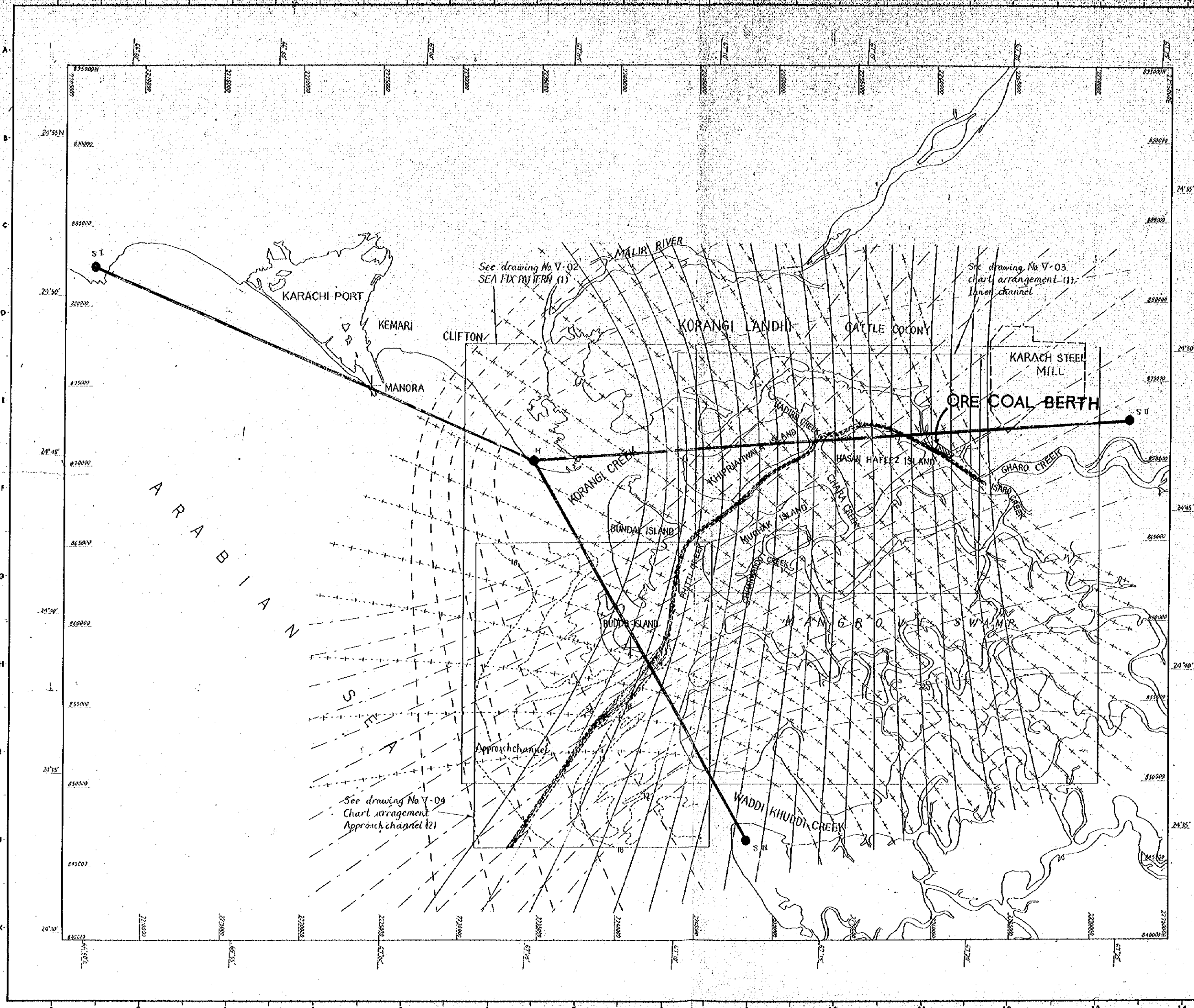
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWN
SCALE		REV. NO.	
1/25,000			
DATE		DWG. NO. IV-03	



GENERAL NOTES

X --- Long.
Y --- Lat.

NO	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT PAKISTAN			
CHART ARRANGEMENT APPROACH CHANNEL (2)			
JAPAN INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
			H. S. Shalabi
SCALE		REV. NO.	
1/25,000			
DATE		DWG. NO. V-04	



GENERAL NOTES

X --- Lat
Y --- Long

- M --- SI ---
- M --- S II ---
- M --- S B ---
- SI --- SU ---
- SI --- SB ---
- SE --- SB ---

NO.	DATE	DESCRIPTION	APPROVED
REVISION			
PORT MUHAMMAD-BIN-QASIM PROJECT			
PAKISTAN			
REFERENCE			
SEA-FIX PATTERN (2)			
PROPOSAL 2			
JAPAN INTERNATIONAL COOPERATION AGENCY			
CONSULTANTS			
APPROVED	CHECKED	DESIGNED	DRAWING
			<i>[Signature]</i>
SCALE			
1/100,000			
DATE	DWG. NO. V-05		

