

<Annexure>

Annex 1 Minutes of Discussions
of May 6 and June 5, 2006.

MINUTES OF DISCUSSIONS
BETWEEN
EARTHQUAKE RECONSTRUCTION AND REHABILITATION AUTHORITY (ERRA)
OF THE GOVERNMENT OF PAKISTAN
AND
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
ON
TECHNICAL COOPERATION PROJECT
FOR
DESIGNING PROTOTYPE SEISMIC RESISTANT AND BARRIER-FREE
BASIC HEALTH UNITS (BHUs) IN NWFP AND AJK

Based on the request from the Government of Pakistan, JICA dispatched a Project Team in March, 2006 to agree upon the Work Plans on the technical cooperation project for Designing Prototype Seismic Resistant and Barrier-free BHUs in Azad Government of the State of Jammu and Kashmir (AJK) and North West Frontier Province (NWFP). The Work Plans were signed between Japan International Cooperation Agency (JICA) and AJK Government on March 14, 2006, as well as the Government of NWFP on March 16, 2006 (Work Plans are attached as Annex-3).

JICA exchanged views with the related authorities of Pakistan, including Earthquake Rehabilitation and Reconstruction Authority (ERRA), NESPAK, Pakistan Engineering Council (PEC), University of Engineering and Technology (UET) Peshawar, Provincial Earthquake Rehabilitation and Reconstruction Agency (PERA), Chief Secretary AJK and Health Departments of AJK and NWFP, etc.

Through a series of meetings and field visits, JICA prepared the design of the prototype seismic resistant and barrier-free BHUs with several options attached as Annex-2.

A meeting was held on May 6, 2006 under the chairmanship of the Deputy Chairman of ERRA, at ERRA, Islamabad (Participants List is attached as Annex-1) to discuss and approve;

- 1) the design for the prototype standard design of the BHUs, and
- 2) the sites for the model construction of BHUs in AJK and NWFP respectively.

As the result of the discussions, both JICA and ERRA reached common understanding which is as follows:

1. Design of the prototype standard BHUs

JICA explained the design, including importance of the seismic resistant and barrier-free concept, merit of the grid system, and requirement from the Health

Department from each Government. JICA proposed a total Seven(7) options for the standard design of BHUs, three(3) of 9feet grid plan and four(4) of 12feet grid plan, in order to facilitate each Government to choose the most suitable option depending upon the local requirement for the health service delivery, availability of medical staff, and availability of the land etc. Health Departments of AJK and NWFP have basically accepted the designs by JICA.

ERRA requested the standard model with 14feet grid, but JICA explained it could be difficult to make it as standard model due to the technical reasons of seismic resistant structure design, expensive construction cost, and land availability etc.

2. Sites for the model construction

AJK Government nominated BHU Langarpura as the candidate site for the model construction. JICA visited the site and confirmed the site as a suitable place for the construction of the model BHU because;

- 1) It was completely damaged by the earthquake,
- 2) It has large encatchment population,
- 3) It has big demand for the first level care facility locally, and
- 4) It has a good accessibility from the Muzaffarabad City.

JICA found that the site has a quite large space as a total area, but it is in 3 steps. Each step is about 6 feet lower than the other and each step has about 28-30 feet width only. JICA recommended the "12feet Grid split-type (12G 5-2)" to fit into the 2 steps, since any other type with 12 feet grid could not fit into one step.

NWFP Government nominated BHU Shoal Najaf Khan as the candidate site. JICA visited the site and confirmed the site is a suitable place for the construction of model BHU.

However, ERRA pointed out that other NGO has been already given the BHU Shoal Najaf Khan for reconstruction, and JICA has to go for another site.

JICA expressed their concern about model construction of larger facilities to compare with previous BHUs, such as;

- 1) the lack of number of the medical staff in each facility, and
- 2) the higher maintenance cost.

Pakistan side assured to assign necessary staff and to keep good maintenance as well as the full utilization of each facility, not only at the model construction sites, but also at any future construction site of BHUs.

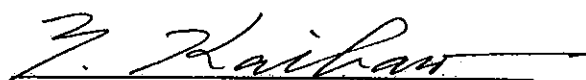
3. Conclusion

ERRA approved the designs of 12 feet Grid for model construction under JICA's technical cooperation project in AJK and NWFP on an experimental basis. ERRA will then inspect the BHUs to see if they meet the space requirements or not. ERRA also decided that, subject to successful experiment, the same designs could be adopted where there is lack of space.

ERRA confirmed there is no duplication with other donors nor NGOs on the site nominated by Government of AJK (BHU Langarpura), and approved the model construction by JICA.

The candidate sites for NFWP will be given to JICA by ERRA on May 08, 2006. JICA will visit the new candidate sites in NWFP and final decision will be taken after mutual consultation between ERRA and JICA.

Islamabad, May 06, 2006



Mr. Takao Kaibara
Resident Representative
JICA Pakistan Office



Lt. Gen. Nadeem Ahmed
Deputy Chairman
ERRA
Government of Pakistan

List of Annexes

Annex 1: List of Participants

Annex 2: Designs of prototype standard BHU

Annex 3: Work Plans (AJK and NWFP)

Participants List

No	Name	Organization	Designation	Sign
1	H Gen Nadeem	ERRA	Dy Chairman	
2	Jamshed ul Hasan	PERRA	DG	
3	Humaira Ahmed	ERRA	Director	
4	TAHIR SHAMSHAD	NESPAN	GM	
5	Brig Sher Afgan Niazi	ERRA	DG (IT&E)	
6	Muhammad Yousaf	P&D Dept ACS (Dev) ANK	ACS (Dev)	
7	Shakeel Habib	WBS Dept: NWFP	D-D (HQ)	
8	Seerat Asghar	ERRA	DG (P)	
9	DR SHABANA	ERRA	Prof: Coord: (Health)	
10	DR. MAFIEN	ERRA	Consultant (Health)	
11	Takao KAIBARA	JICA	Resident Representative	
12	Mitsumobu Inaba	"	Dy RR	
13	Hitoshi Imai	"	Architect	
14	Toshikazu HANAZATO	Mie University	Professor	T. Hanazato
15	Sachiko Misumi	JICA	Sr. Dy R.R.	
16	SOHAIL AHMAD	JICA	Sr. Prog Officer	Sohail
17				
18				
19				
20				

DESIGNING PROTOTYPE
SEISMIC RESISTANT and BARRIER-FREE
BASIC HEALTH UNITS
in
North West Frontier Province (NWFP)
and
Azad Jammu and Kashmir (AJK)

CONCEPT of Prototype designing of BHU

[Seismic Design]

Dual mode design (Two-phase design) : Primary design and Secondary design

*See *Structural design report*.

[Concept]

1. Refer and respect structural drawings of NWFP University of Engineering & Technology, Peshawar
2. Take advantage of grids in the design concept which characterizes regularities of structure
(Minimize eccentricity to avoid torsional response)
3. Use plinth bands and lintel bands to confine masonry wall. Plinth bands are designed as structural members to enhance the ultimate lateral strength.
4. Assume masonry walls to be non-structural members in structural calculations. Rigid frame of reinforced concrete only acts against horizontal force.
5. Consider regional conditions of available construction materials of masonry walls. Use bricks for BHU in NWFP, and concrete blocks for BHU in AJK.

[Barrier-free Design]

All public and institutional buildings should be accessible by wheelchair users.

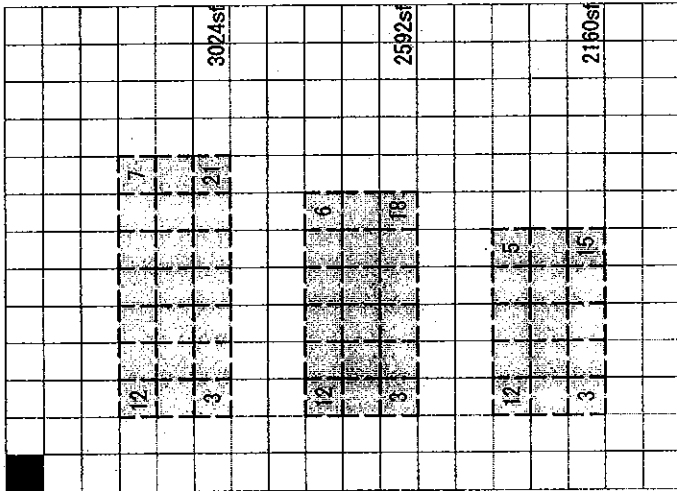
*See *Another detail drawings*.

[Grids Plan]

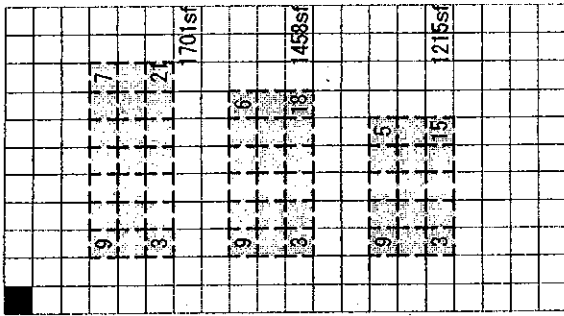
Characteristic of Grids Plan

1. Flexibility: Grids plan as module to provide exceptional flexibility in meeting both present and future needs.
2. Adaptability: Grids plan as module to provide adaptability. The standard design should be adapt to locaton.
3. Uniformity: Grids plan as module to provide uniformity. All column and beam size should be standardize.
4. simplify: About human resource freindly, The construction should be think about work simplification.

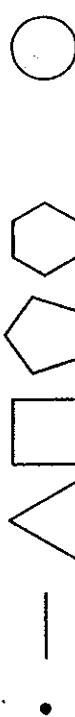
12feet grids



9feet grids




1 2 3 4 5 6 infinity



directional movement

"I always start with a square, no matter what the problem is." by Louis I. Kahn

REV	DESCRIPTION	DATE	APPROVED

 Japan International Cooperation Agency	PROJECT: Designing Prototype Basic Health Unit	DRAWING NO.:
	DRAWING TITLE: Concept	DATE: 27 Apr, 2006
SCALE:	DRAWN BY:	SIGNATURE:
PROJECT:	APPROVED BY:	DRAWING NO.:

12G7S

12G7S

APPROVED

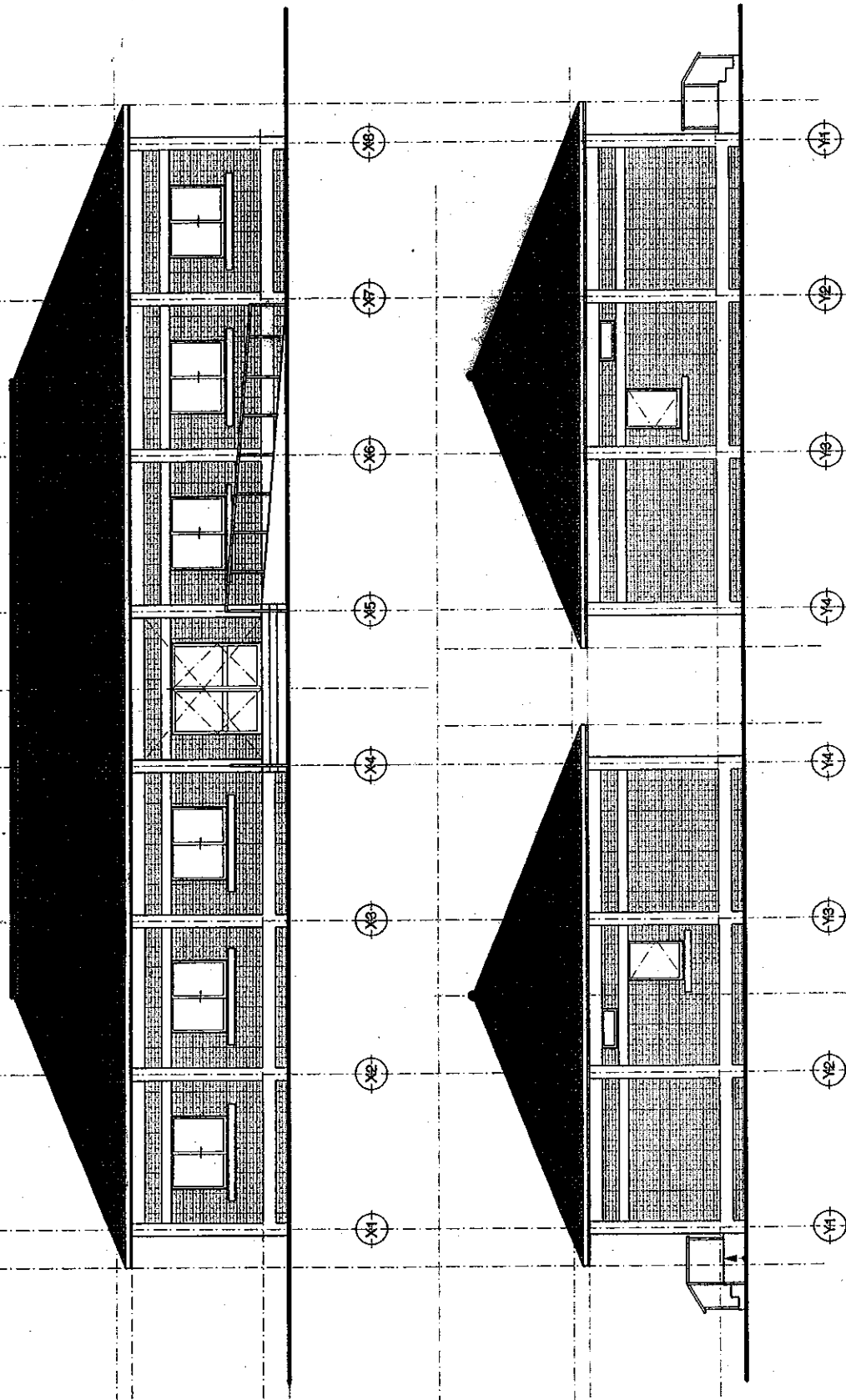
DATE

REVISION HISTORY

DESCRIPTION

REV

12		7
	3024sf	2
	3	



DRAWING No. 05

DATE 24 Apr. 2006

DESIGNED BY

DRAWN BY

APPROVED BY

PROJECT:

Designing Prototype Basic Health Unit



JICA

DRAWING TITLE ELEVATION(12G7S)

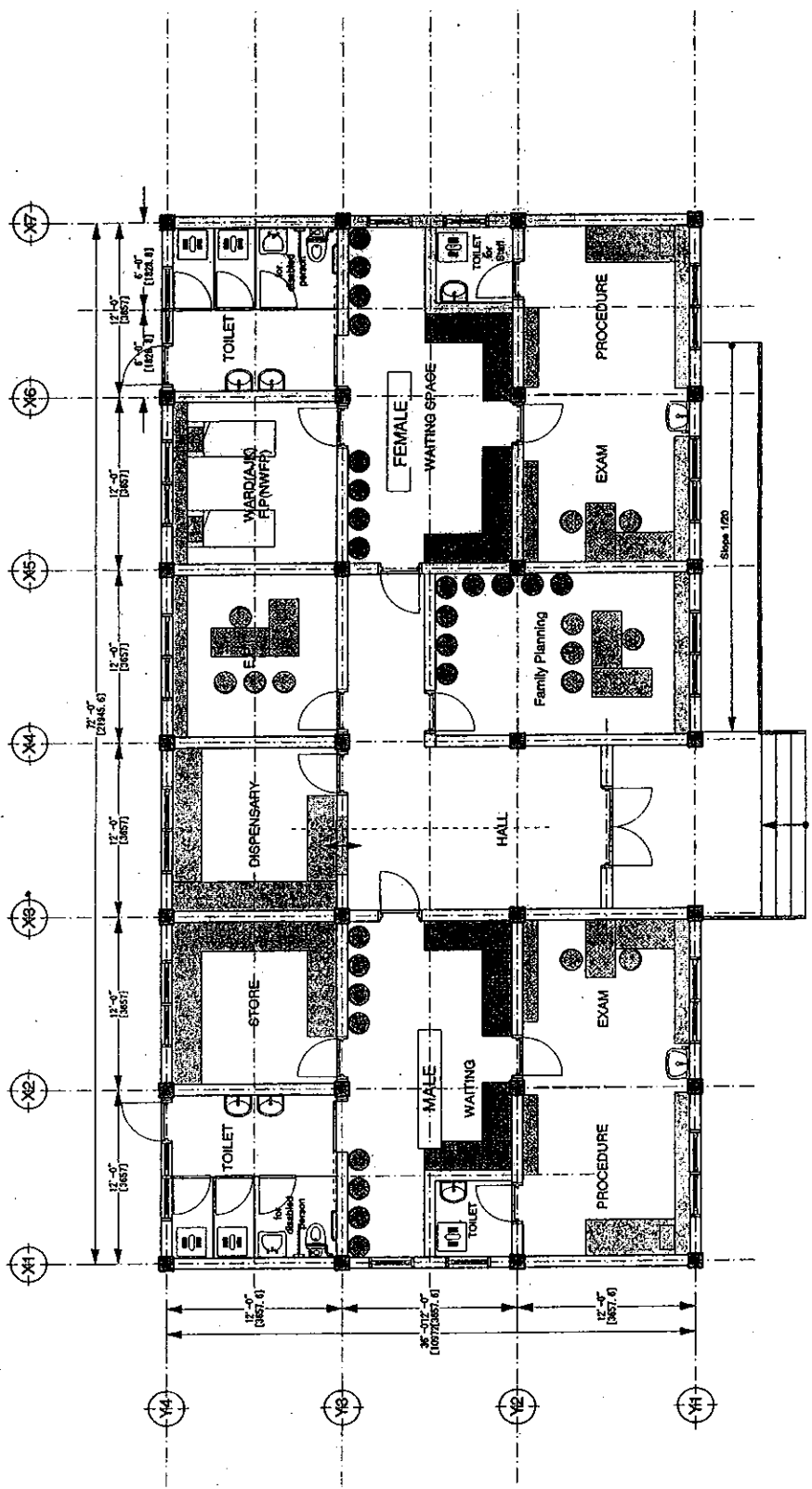
SCALE 1/100

12G6S

12G6S

12		6
3	2592sf	B

REV	DESCRIPTION	DATE	APPROVED



JICA Japan International Cooperation Agency

PROJECT: Designing Prototype Basic Health Unit
DRAWING TITLE: PLAN(12G6S)

DESIGNED BY: [Signature]
DRAWN BY: [Signature]
APPROVED BY: [Signature]

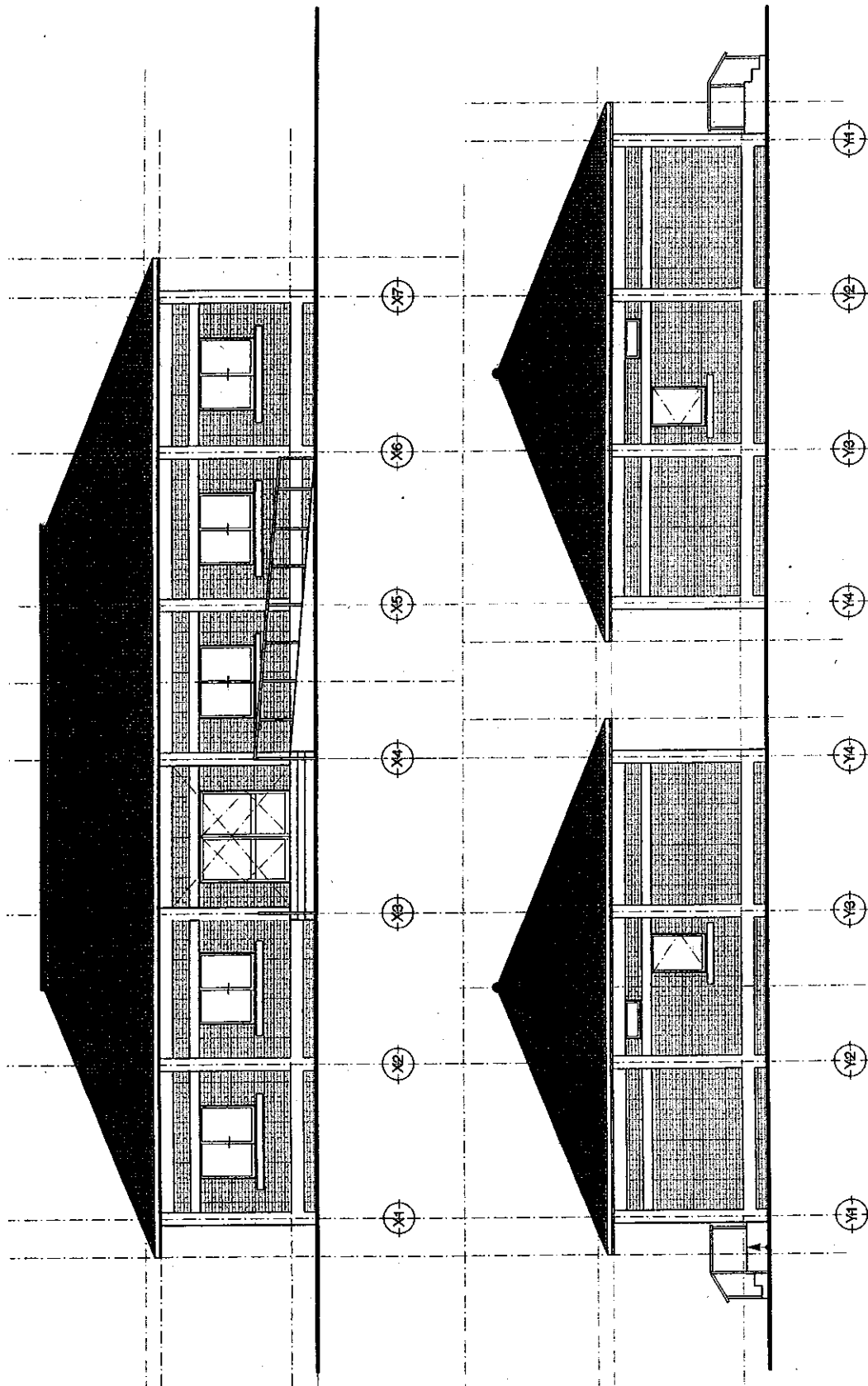
DATE: 24 Apr. 2006
DRAWING No.: 06

SCALE: 1/100

12G6S

39.101

REV	DESCRIPTION	DATE	APPROVED



Japan International Cooperation Agency

PROJECT: Designing Prototype Basic Health Unit
 DRAWING TITLE: ELEVATION(12G6S)

SCALE: 1/100

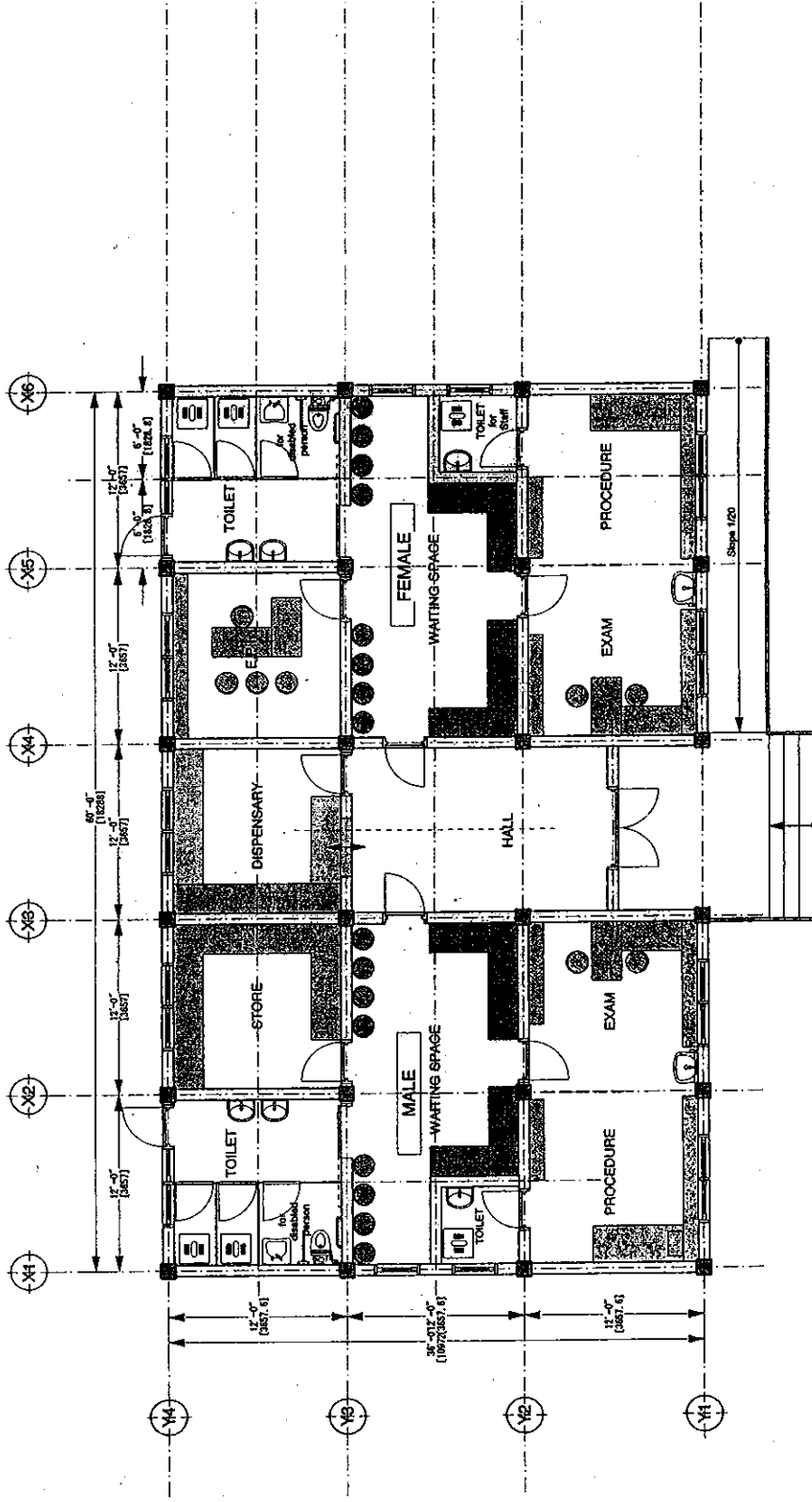
DESIGNED BY: [Signature]
 DRAWN BY: [Signature]
 APPROVED BY: [Signature]
 DATE: 24 Apr. 2006
 DRAWING NO.: 07


12G5S

12G5S

12		5
3	2160sf	5

REV	DESCRIPTION	DATE	APPROVED





JICA
Japan International Cooperation Agency

PROJECT: Designing Prototype Basic Health Unit

DRAWING TITLE: PLAN(12G5S)

SCALE: 1/100

DESIGNED BY: DRAWN BY: APPROVED BY:

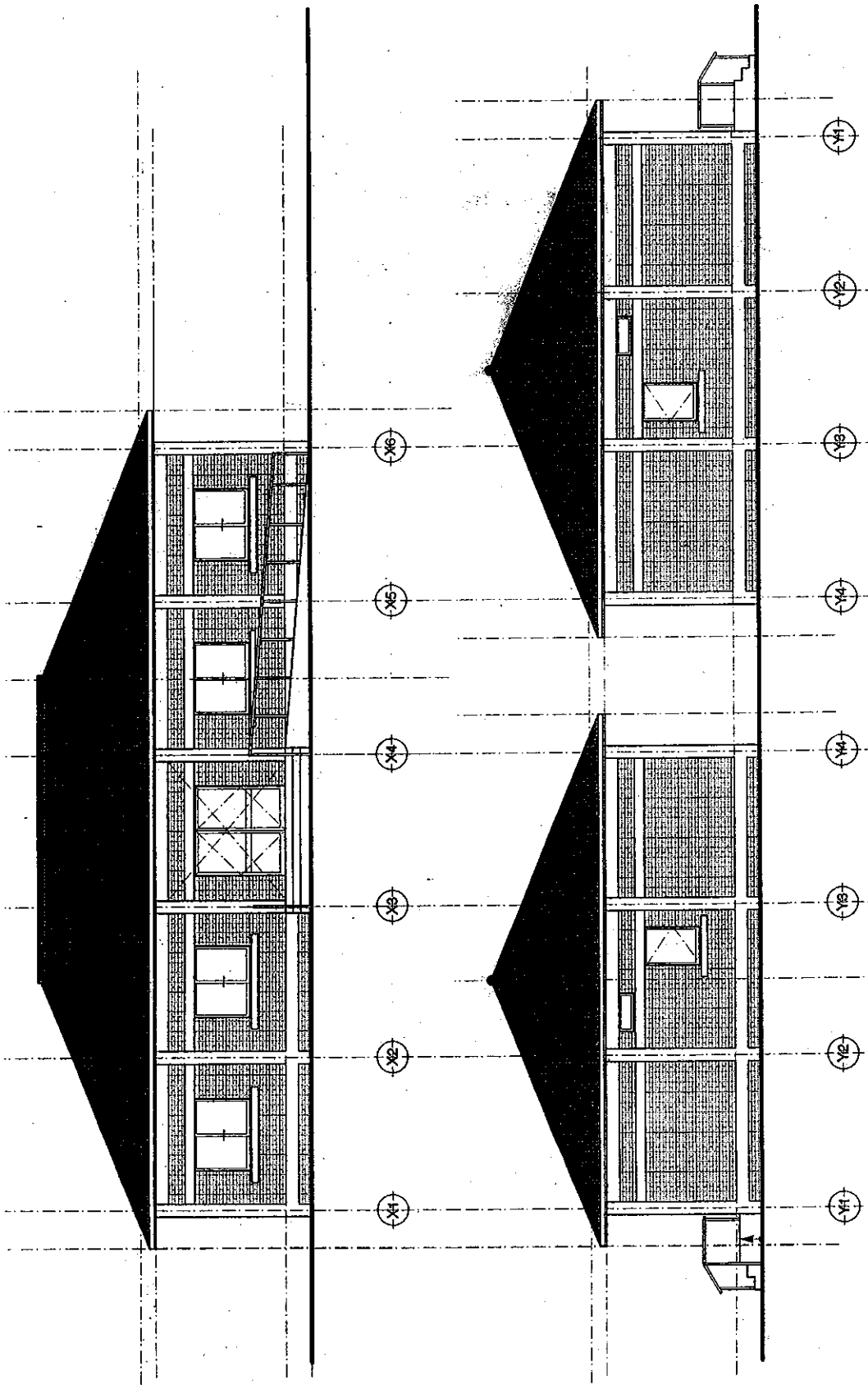
DATE: 25 Apr. 2006


DRAWING NO.: 08

12G5S

12G5S

REV	DESCRIPTION	DATE	APPROVED

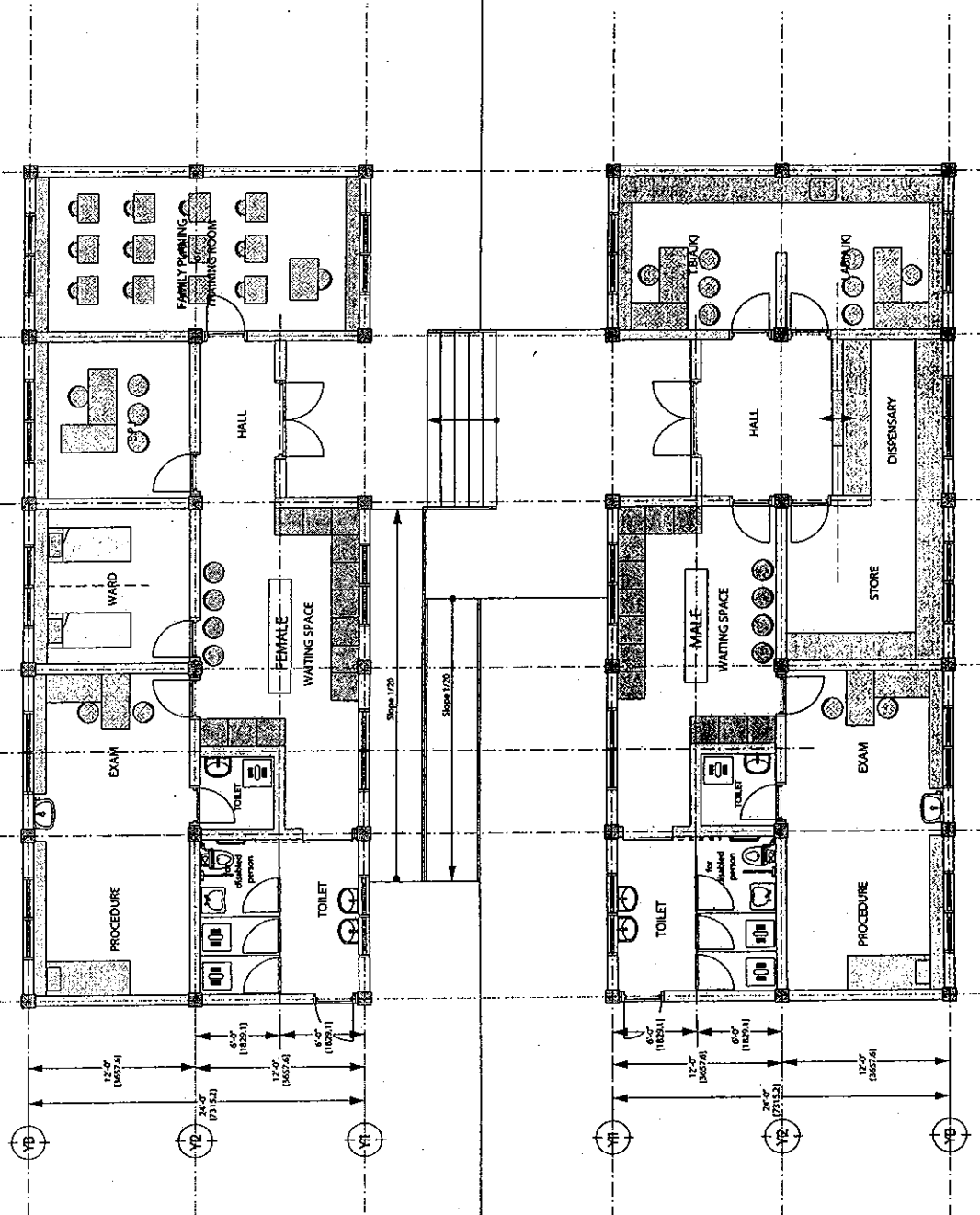


 Japan International Cooperation Agency	PROJECT: Designing Prototype Basic Health Unit DRAWING TITLE: ELEVATION(12G5S)	SCALE: 1/100	DRAWING NO.: 09
	DESIGNED BY: [Signature] CHECKED BY: [Signature] APPROVED BY: [Signature]	DATE: 25 Apr. 2006	DRAWING NO.: 09

12G5-2

REVISION HISTORY

NO.	REV.	DESCRIPTION	DATE	APPROVED
	X5			
	X4			
	X3			
	X2			
	X1			



12	1440sf	5
2		10

12	1440sf	5
2		10

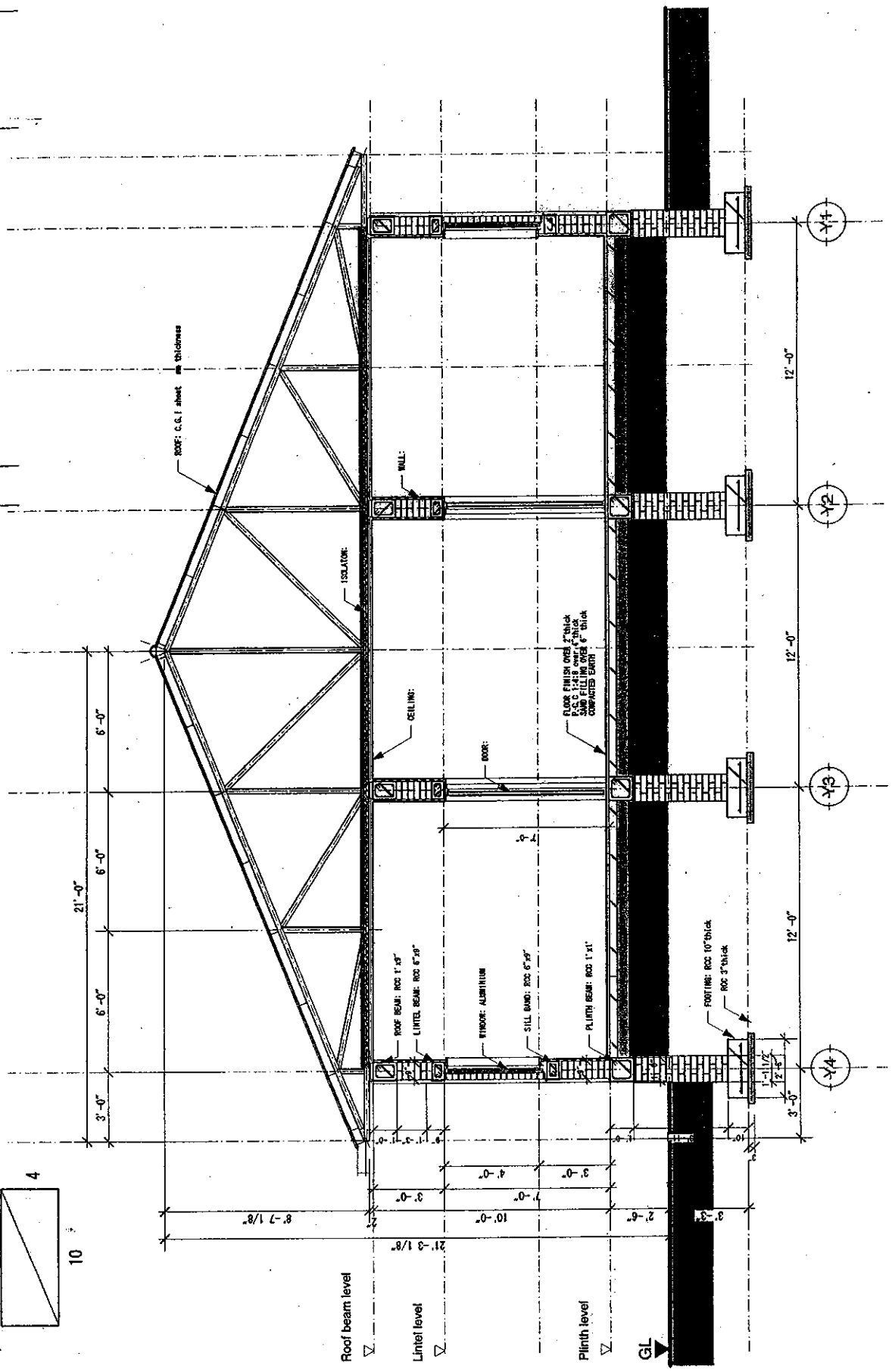
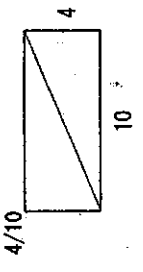
PROJECT: Designing Prototype Basic Health Unit
 DRAWING TITLE: PLAN(12G5)
 SCALE: 1/100


DATE: 5 May, 2006

DESIGNED BY: _____
 DRAWN BY: _____
 APPROVED BY: _____



REV	DESCRIPTION	DATE	APPROVED

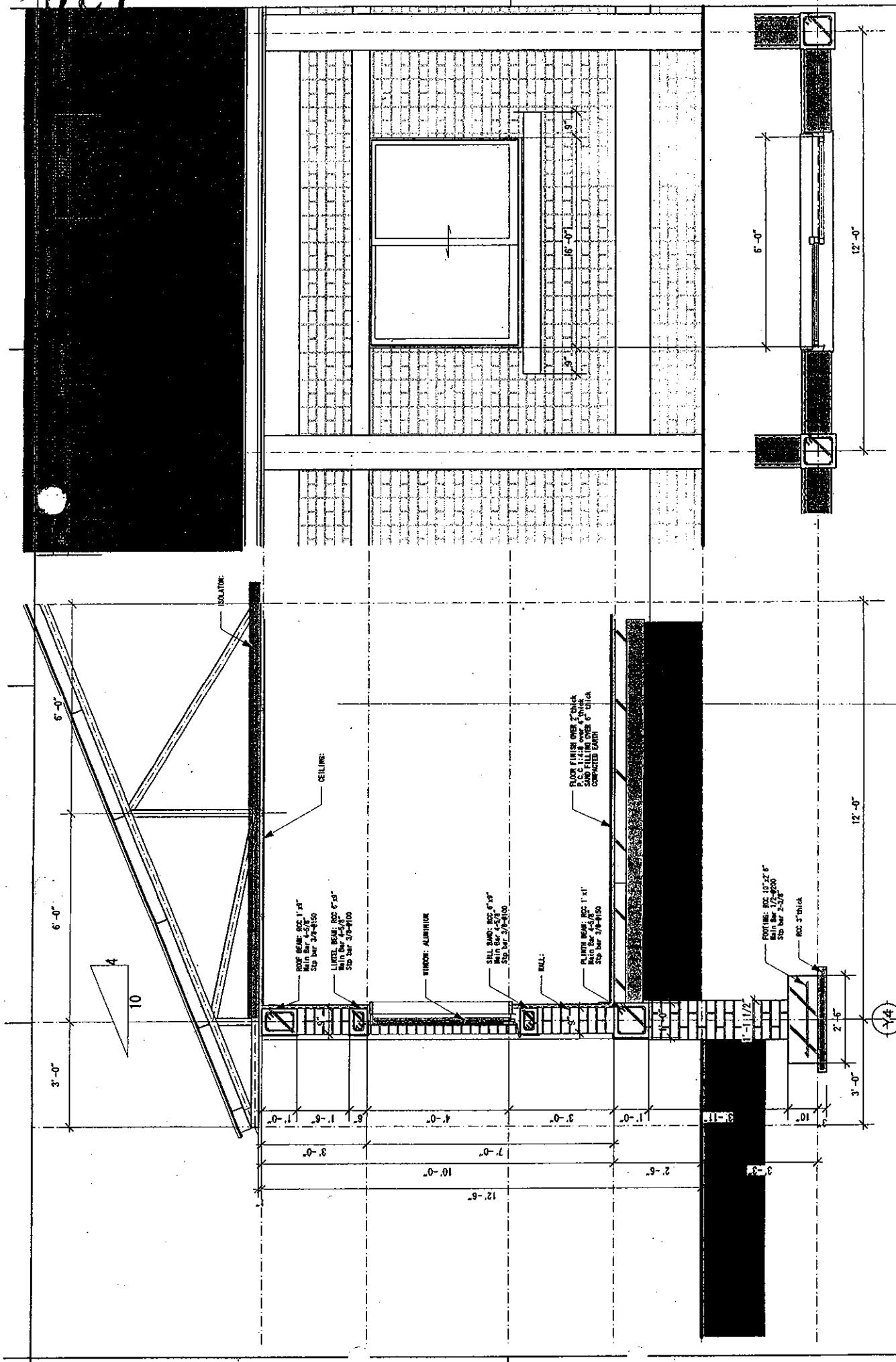



Japan International Cooperation Agency

PROJECT: Designing Prototype Basic Health Unit
 DRAWING TITLE: Section X2
 SCALE: 1/50

DESIGNED BY: [Signature]
 DRAWN BY: [Signature]
 APPROVED BY: [Signature]

DATE: 25 Apr. 2006
 DRAWING NO.: **A0**



PROJECT: Designing Prototype Basic Health Unit
 DRAWING TITLE: Detail Section X2
 ISSUE: 1/30
 DESIGNED BY: DRAWN BY: APPROVED BY:
 DATE: 25 Apr. 2006
 DRAWING NO. A1

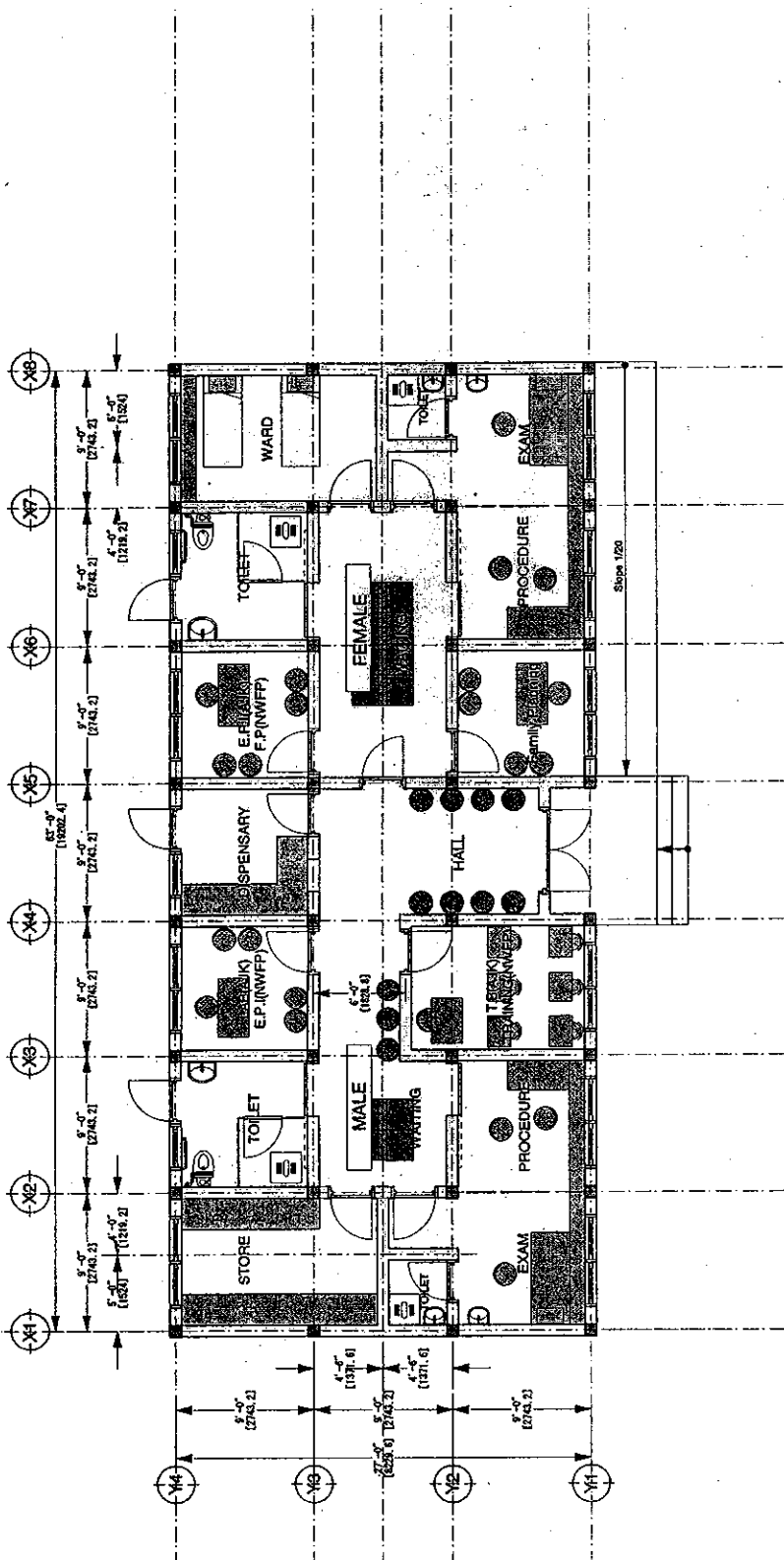



9G7S

9G7S

REV	DESCRIPTION	DATE	APPROVED

9	7
3	21
1701sf	




 Japan International Co-operation Agency

PROJECT: Designing Prototype Basic Health Unit
 DRAWING TITLE: PLAN(9G7S) SCALE: 1/100

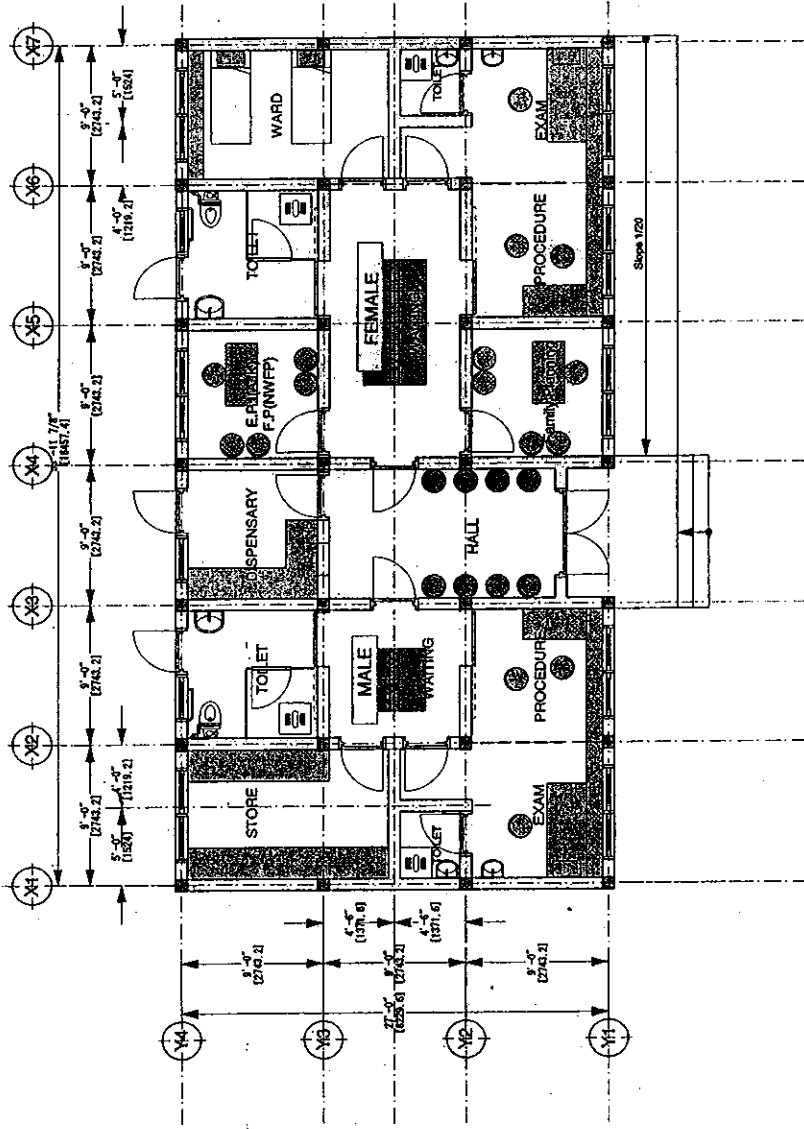
DESIGNED BY: [Signature]
 CHECKED BY: [Signature]
 DATE: 17 Apr, 2006
 DRAWING NO: A12

9G6S

REV	DESCRIPTION	DATE	APPROVED

9996

9	6
3	B
1458sf	



jica Japan International Cooperation Agency

PROJECT: Designing Prototype Basic Health Unit
 DRAWING TITLE: PLAN(9G6S)
 SCALE: 1/100

DESIGNED BY: DRAWN BY: APPROVED BY: [Signature]

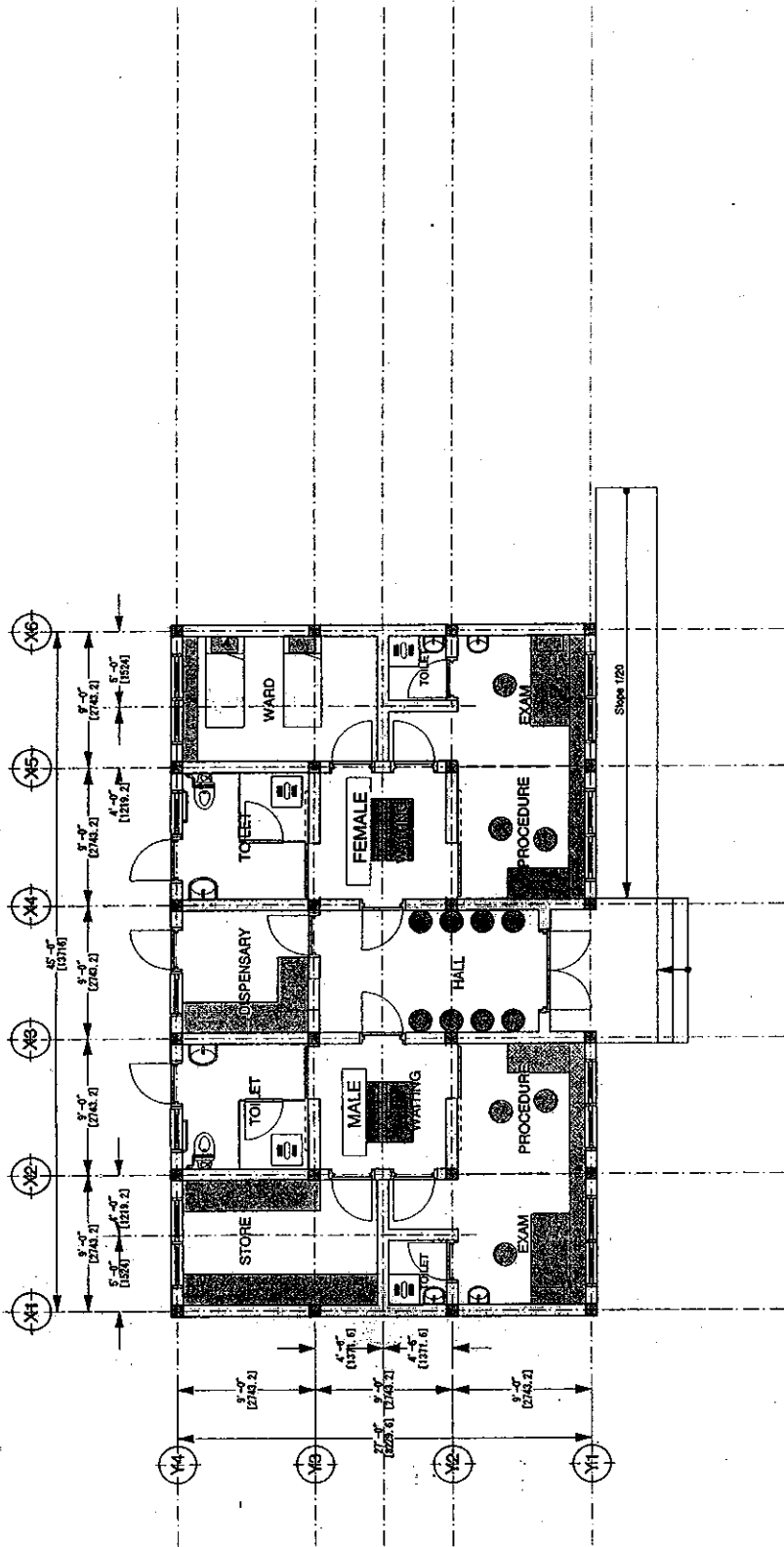
DATE: 27 Apr. 2006
 DRAWING NO.: A13


9G5S

9G5S

9	5
3	6
1215sf	

REV	DESCRIPTION	DATE	APPROVED




 Japan International Cooperation Agency	PROJECT: Designing Prototype Basic Health Unit DRAWING TITLE: PLAN(9G5S)	REVISIONS BY: <i>SPAWN EX</i> APPROVED BY: <i>SPAWN EX</i>	DATE: 27 Apr. 2006 SERVICE: <i>SPAWN EX</i>	DRAWING NO.: A4
	SCALE: 1/100	APPROVED: <i>[Signature]</i>		

Work Plan
on
Japanese Technical Cooperation Project
for
Designing Prototype Seismic Resistant and Barrier-free
Basic Health Units
in
Azad Jammu and Kashmir
agreed upon between
Azad Government of the State of Jammu and Kashmir
and
Japan International Cooperation Agency

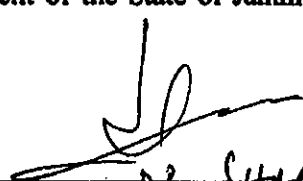
Date: 14 March 2006


14/03/2006

Mr. Hiroshi Imai
Team Leader of the Project
Japan International Cooperation Agency

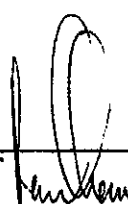
 14/3/06

f. Dr. Raja Muhammad Arif Khan. Add. Sec of W
Secretary Works and Communication
Azad Government of the State of Jammu and
Kashmir
Muhammad ALYAS
ABBASI


Maj. Gen. Abdul Malik
Secretary Health Services
Azad Government of the State of Jammu and
Kashmir
DC Health
AHT76



Ms. Najma Siddiqui
Joint Secretary
Economic Affairs Division
The Government of Islamic Republic of
Pakistan


Mr. Muhammad Yousaf
Additional Chief Secretary (Development)
Azad Government of the State of Jammu and
Kashmir
14/3/06

1. Background of the project

An earthquake measuring 7.6 on the Richter scale struck the northern areas of Pakistan and India on October 8, 2005. Its epicentre was 19 km northeast of Muzaffarabad. As a result of that Azad Jammu Kashmir (hereinafter referred to as "AJK") and North West Frontier Province (hereinafter referred to as "NWFP") were severely affected. The estimated overall death toll is 73,000, whereas housing infrastructure also received heavy damages, i.e., 84% houses in AJK and 36% in NWFP were also reported to have collapsed primarily due to the poor earthquake resilience. Similarly the infrastructure of primary health care facilities including Basic Health Unit (hereinafter referred to as "BHU") and Rural Health Center (hereinafter referred to as "RHC") were also affected adversely as; a) the facilities were constructed following the standards and designs that were developed by respective governments as early as 20 years ago; 2) and the infrastructure design and standards were not prepared keeping in view the impact of high intensity seismic motion on the facilities.

The need for safeguarding primary health care facilities, from earthquake devastation and ensuring that they remain safe and functioning should there be another earthquake of the similar and/or higher intensity, becomes more evident and pertinent after the October, earthquake. Apart from damage to infrastructure the unprecedented October earthquake also left a large number of people with physical disabilities, therefore, it is equally important to ensure that the new health facility designs are not only earthquake resistant but are also barrier-free so that the people with disabilities could easily access the health facilities. In order to make a prototype BHU design with seismic resistant and barrier-free idea, Government of Islamic Republic of Pakistan requested to Government of Japan to conduct the technical cooperation project "Designing Prototype Seismic Resistant and Barrier-free Basic Health Units and Rural Health Centers in North West Frontier Province and Azad Jammu Kashmir". Government of Japan decided to conduct the project and Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched the mission to make an agreement on contents of the project described in this Work Plan.

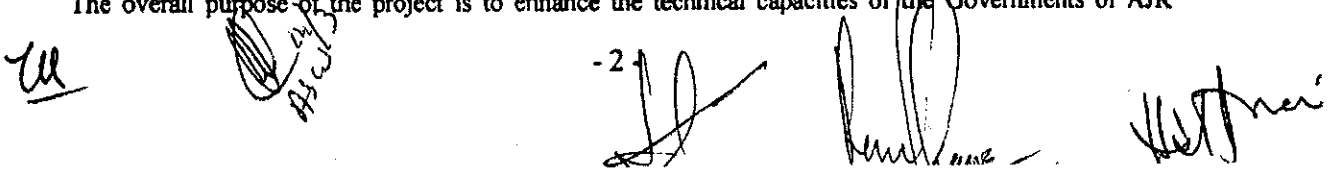
2. Project Summary

2.1 Overall Goal

The design created in this project will be endorsed by Pakistani Authorities as a standard in and AJK, and when BHUs are reconstructed or newly constructed, the concept of seismic resistance and barrier-free would be secured.

2.2 Project Purpose

The overall purpose of the project is to enhance the technical capacities of the Governments of AJK

The bottom of the page contains several handwritten signatures and initials. From left to right: a signature that appears to be 'Ull', a signature with 'AJK' written below it, a signature with '-2' written above it, a signature with 'JICA' written below it, and a signature that appears to be 'H. H. H.'.

needed for the designing of prototype seismic resistant and barrier-free design and construction of primary health care facilities.

2.3 Outputs

- 2.3.1 Prototype of standard design of BHU
- 2.3.2 Manual on construction and maintenance of BHU
- 2.3.3 Transfer of technique on prototype standard design and manual to government counterparts
- 2.3.4 Disseminate information on earthquake resistant and barrier-free technology

2.4 Activities

2.4.1 Prototype of standard design of BHU

- 1) Review of standard designs, guidelines, and other information material developed by provincial and federal governments and other technical and coordination agencies (e.g. PEC, ERRA etc)
- 2) Study existing health facilities situation on ground as it stands after the earthquake
- 3) Identify the specific causes of damage to the health infrastructure/buildings
- 4) Develop standard design of prototype BHU ensuring that they have improved earthquake resistance and they are barrier-free

2.4.2 Manual on construction and maintenance of BHU

- 1) Engage services of experts having specialized expertise on developing manuals on prototype construction and maintenance of BHU
- 2) Develop manual on construction and maintenance of BHU

2.4.3 Transfer of technique on prototype standard design and manual to government counterparts

- 1) Discussion on the earthquake resistant and barrier-free technology
- 2) Transfer of construction and supervision technology through constructing model BHU

2.4.4 Disseminate information on earthquake resistant and barrier-free technology

- 1) Organize and hold a seminar on prototype earthquake resistant technology in consultation and support from respective government counterparts

2.5 Inputs

2.5.1 Implementing Organizations of Pakistani Side

- 1) Technical, coordination and administrative services of counterpart personnel and/or other key stakeholders
- 2) Provision of suitable office space with necessary facilities such as telephone and air conditioner, etc by counterpart.

2.5.2 Japanese Side

- 1) Provision of specialized technical advice and services through dispatch of JICA Experts
- 2) Construction of model BHU
- 3) Provision of necessary equipment for model BHU
- 4) Seminar on earthquake resistant and barrier-free technology

2.6 Project period

This project will start from middle of March and finish by the end of October, 2006.

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Review, Study and Designing of health facilities											
Model Construction											
Manual preparation, printing and distribution											
Seminar and Training											
Report										▲	

2.7 Project area

The project activities will be carried out primarily in AJK. The exact location of model BHU construction will be identified through discussion between Japanese and Pakistani sides.

2.8 Implementing Organizations of Pakistani Side

2.8.1 Counterpart

- 1) Health Department of Government of AJK
- 2) Public Works Department of Government of AJK

2.8.2 Other Key stakeholders

- 1) Pakistan Engineering Council (PEC)
- 2) Earthquake Rehabilitation and Reconstruction Authority (ERRA)
- 3) NESPAK
- 4) Ministry of Health
- 5) Government of NWFP

3. Undertakings of Pakistani Side

In addition to the duties described in "Agreement on Technical Cooperation between the Government of the Islamic Republic of Pakistan and the Government of Japan", the followings are responsibilities of Government of AJK

Handwritten signatures and initials are present at the bottom of the page, including a signature on the left, a signature in the center, and initials on the right.

- Land acquisition for model BHU construction
- Land clearance for the place of model BHU construction
- Any permission necessary for the activities of model BHU construction

4. Others

4.1 Report

JICA will submit the report as follows;

4.1.1 Main Report

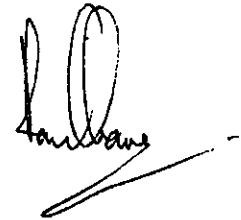
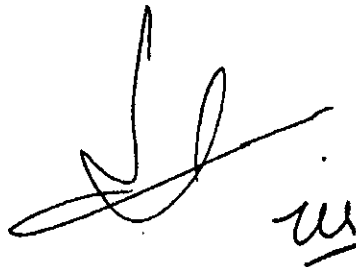
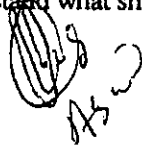
Main Report will be composed of specification of prototype design, architectural drawings, structural drawings include structural analysis, and manual of construction and maintenance

4.1.2 Text book

Text book will be created for the government staff or local people to understand the cause of damage, feature of prototype standard design, and items to be considered during the construction.

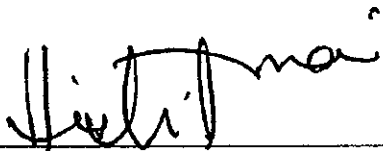
4.1.3 Manual of construction and maintenance

Manual of construction and maintenance will be created for government staff, local contractors, and workers to understand what should be considered and what is the crucial point during the construction.



Work Plan
on
Japanese Technical Cooperation Project
for
Designing Prototype Seismic Resistant and Barrier-free
Basic Health Units
in
North West Frontier Province
agreed upon between
Government of North West Frontier Province
and
Japan International Cooperation Agency

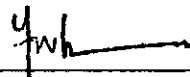
Date: 16 March 2006



Mr. Hiroshi Imai

Team Leader of the Project

Japan International Cooperation Agency




Mr. Jamshed ul Hasan

Director General

Provincial Earthquake Rehabilitation and

Reconstruction Agency

Government of North West Frontier Province



Ms. Najma Siddiqui

Joint Secretary

Economic Affairs Division

The Government of Islamic Republic of

Pakistan

1. Background of the project

An earthquake measuring 7.6 on the Richter scale struck the northern areas of Pakistan and India on October 8, 2005. Its epicentre was 19 km northeast of Muzaffarabad. As a result of that Azad Jammu Kashmir (hereinafter referred to as "AJK") and North West Frontier Province (hereinafter referred to as "NWFP") were severely affected. The estimated overall death toll is 73,000, whereas housing infrastructure also received heavy damages, i.e., 84% houses in AJK and 36% in NWFP were also reported to have collapsed primarily due to the poor earthquake resilience. Similarly the infrastructure of primary health care facilities including Basic Health Unit (hereinafter referred to as "BHU") and Rural Health Center (hereinafter referred to as "RHC") were also affected adversely as; a) the facilities were constructed following the standards and designs that were developed by respective governments as early as 20 years ago; 2) and the infrastructure design and standards were not prepared keeping in view the impact of high intensity seismic motion on the facilities.

The need for safeguarding primary health care facilities, from earthquake devastation and ensuring that they remain safe and functioning should there be another earthquake of the similar and/or higher intensity, becomes more evident and pertinent after the October earthquake. Apart from damage to infrastructure the unprecedented October earthquake also left a large number of people with physical disabilities, therefore, it is equally important to ensure that the new health facility designs are not only earthquake resistant but are also barrier-free so that the people with disabilities could easily access the health facilities. In order to make a prototype BHU design with seismic resistant and barrier-free idea, Government of Islamic Republic of Pakistan requested to Government of Japan to conduct the technical cooperation project "Designing Prototype Seismic Resistant and Barrier-free Basic Health Units and Rural Health Centers in North West Frontier Province and Azad Jammu Kashmir". Government of Japan decided to conduct the project and Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched the mission to make an agreement on contents of the project described in this Work Plan.

2. Project Summary

2.1 Overall Goal

The design created in this project will be endorsed by Pakistani Authorities as a standard in and NWFP, and when BHUs are reconstructed or newly constructed, the concept of seismic resistance and barrier-free would be secured.

2.2 Project Purpose

The overall purpose of the project is to enhance the technical capacities of the Governments of NWFP

needed for the designing of prototype seismic resistant and barrier-free design and construction of primary health care facilities.

2.3 Outputs

2.3.1 Prototype of standard design of BHU

2.3.2 Manual on construction and maintenance of BHU

2.3.3 Transfer of technique on prototype standard design and manual to government counterparts

2.3.4 Disseminate information on earthquake resistant and barrier-free technology

2.4 Activities

2.4.1 Prototype of standard design of BHU

- 1) Review of standard designs, guidelines, and other information material developed by provincial and federal governments and other technical and coordination agencies (e.g. PEC, ERRA etc)
- 2) Study existing health facilities situation on ground as it stands after the earthquake
- 3) Identify the specific causes of damage to the health infrastructure/buildings
- 4) Develop standard design of prototype BHU ensuring that they have improved earthquake resistance and they are barrier-free

2.4.2 Manual on construction and maintenance of BHU

- 1) Engage services of experts having specialized expertise on developing manuals on prototype construction and maintenance of BHU
- 2) Develop manual on construction and maintenance of BHU

2.4.3 Transfer of technique on prototype standard design and manual to government counterparts

- 1) Discussion on the earthquake resistant and barrier-free technology
- 2) Transfer of construction and supervision technology through constructing model BHU

2.4.4 Disseminate information on earthquake resistant and barrier-free technology

- 1) Organize and hold a seminar on prototype earthquake resistant technology in consultation and support from respective government counterparts

2.5 Inputs

2.5.1 Implementing Organizations of Pakistani Side

- 1) Technical, coordination and administrative services of counterpart personnel and/or other key stakeholders
- 2) Provision of suitable office space with necessary facilities such as telephone and air conditioner, etc by counterpart.

U

U
11/11/2011

2.5.2 Japanese Side

- 1) Provision of specialized technical advice and services through dispatch of JICA Experts
- 2) Construction of model BHU
- 3) Provision of necessary equipment for model BHU
- 4) Seminar on earthquake resistant and barrier-free technology

2.6 Project period

This project will start from middle of March and finish by the end of October, 2006.

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Review, Study and Designing of health facilities											
Model Construction											
Manual preparation, printing and distribution											
Seminar and Training											
Report										▲	

2.7 Project area

The project activities will be carried out primarily in NWFP. The exact location of model BHU construction will be identified through discussion between Japanese and Pakistani sides.

2.8 Implementing Organizations of Pakistani Side

2.8.1 Counterpart

- 1) Provincial Earthquake Rehabilitation and Reconstruction ~~Agency~~
- 2) Health Department of Government of NWFP
- 3) Works and Service Department of Government of NWFP
- 4) District Reconstruction Unit

2.8.2 Other Key stakeholders

- 1) Pakistan Engineering Council (PEC)
- 2) Earthquake Rehabilitation and Reconstruction Authority (ERRA)
- 3) University of Engineering and Technology, Peshawar
- 4) NESPAK
- 5) Ministry of Health
- 6) Government of AJK

U

*for
Mr. A. Anwar*

3. Undertakings of Pakistani Side

In addition to the duties described in "Agreement on Technical Cooperation between the Government of the Islamic Republic of Pakistan and the Government of Japan ", the followings are responsibilities of Government of NWFP

- Land acquisition for model BHU construction
- Land clearance for the place of model BHU construction
- Any permission necessary for the activities of model BHU construction

4. Others

4.1 Report

JICA will submit the report as follows;

4.1.1 Main Report

Main Report will be composed of specification of prototype design, architectural drawings, structural drawings include structural analysis, and manual of construction and maintenance

4.1.2 Text book

Text book will be created for the government staff or local people to understand the cause of damage, feature of prototype standard design, and items to be considered during the construction.

4.1.3 Manual of construction and maintenance

Manual of construction and maintenance will be created for government staff, local contractors, and workers to understand what should be considered and what is the crucial point during the construction.

W


for
H. T. Mas

Minutes of Discussions
on Inception Report for
JICA's Technical Cooperation Project for
Designing Prototype Seismic Resistant and Barrier-free BHUs
In Azad Government of the State of Jammu and Kashmir (AJK)
And North West Frontier Province (NWFP)

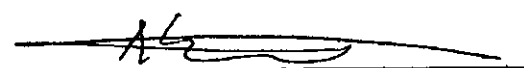
The details of inception report were explained by Mr. Nobuyoshi FURUICHI, Project Manager for the captioned project and Lt.General Nadeem Ahmed agreed and accepted its contents. The points discussed and agreed are as follows.

1. Pakistani and Japanese sides agreed to construct model BHUs on the following sites and sizes.
NWFP: Mansehra District, BHU Attarshisha 12G7S with 3,024sqf
AJK: Muzaffarabad District, BHU Langarpura 12G5-2 (split type) with 2,880sqf
2. Pakistani side asked Japanese side to complete construction as early as possible and Japanese side responded that it will try its best.
3. Pakistani side would build monitoring and evaluation system during construction work at each site and will dispatch station engineers for learning seismic resistant construction techniques from Japanese experts during the construction.
4. Pakistani side requested Japanese side to consider staff residences to be included in this project. Japanese side responded that they would convey the request to JICA Headquarters.

Islamabad, June 5, 2006



Lt. Gen. Nadeem Ahmed
Deputy Chairman, ERRA



Mr. Nobuyoshi Furuichi
Project Manager, JICA Project Team

<Attachment>

Attendant List

Pakistani side

Name	Title	Name of Organization
Lt.General Nadeem Ahmed	Deputy Chairman	ERRA
Mrs. Humaira Ahmed	Director (D&S)	ERRA
Dr. Shabana Saleem	Coordinator (Health)	ERRA
Col. Abid Hasnain	Structural Engineer	ERRA

Japanese side

Name	Title	Name of Organization
Mr. Mitsunobu Inaba	Dy. Resident Representative	JICA Pakistan Office
Mr. Sohail Ahmad	Senior Program Officer	JICA Pakistan Office
Mr. Nobuyoshi Furuichi	Architect, Project Manager	JICA Project Team Binko International Ltd.
Ms. Yasuko Asanuma	Project Coordinator	JICA Project Team Binko International Ltd.



Annex 2 Technical Transfer Seminar Documents,
(Attendants List)

List of Attendants for Technical Transfer Seminar
at Muzaffarabad, October 31, 2006

Name	Title	Name of Organization
Mr. Raja Saeed	SDO(Sub divisional officer)building	Public Works Department, Gov. of AJK
Dr Syed Ghulam Haider Kazmi	Provincial Planning Expert	SERRA / Planning & Development Department
Roshan ud Din	Vaccinator	Health DHO NEELUM
Gavin MacMillan	Watltas programme coordinator	ICRC
Mushtaq A.Butt	Regional Health. Coordinator	ERRA
Mohammad Hayat	Program Engineer	SERRA(DRU) MZ
CH.Mansiir Akhtal	Contractor	CH.Shamas ud din & co.
Mahmaud Rathopiz	Assis. Engineer	Highway dept.
Abdul Busit	Executive engineer	AK DWD(Building dep)
Rashid Awan	Admin. Officer	UNFPA
Naveed Javed	Sub divisional officer	PWD(A.K)
Sohail Oayyum	Sub divisional officer	PWD(A.K)
Raja Parverz Khan	Sub divisional officer	PWD(A.K)
Usman Sarmar	Field Engineer	U IBC Turkey
Sharib Awan	Sub engineer (building M2D)	PWD(A.K)
Sbefeju sa	Dy-Director Architect	CDO
Majid IQBAL	SDO(Sub divisional officer)	PWD(A.K)Building
Saleem Kqazmi	Assistant chief planning	AJK Health Dept.
Dr. RM Hanig PTO	District drugs insoector	AJK Health Dept.
Mansool Qadir Dal	Director	SERRA
Shamuirru Hashmi	ME Director	SERRA
Syed Abran Haidr Gardezi	Assistant chief	PSIDD

List of Attendants for Technical Transfer Seminar
at Manshira, November 2, 2006

Name	Title	Name of Organization
Dr. Fazalur Rahman	Director(M&E)	PERRA
Akhtar Rehman	Director Technical	PERRA
Pierre Bonr	Reconstruction Manager	CARITAS PAKISTAN
Aqbal Khan	Civil engineer	CARITAS PAKISTAN
Sayaka Usui	Admin A KUK Paksitan	KNK
Javed Aqsal	Director	FNA
Thomor Fisler	Team Leader	SDC
Masood Akhtar	Technical Advisar	SDC
Gulfan Jahans		Dist Court
Zardkli Khattall		w&S dept.
Masood Suouq	SS	Dist.union & tournament
Mirafzal curlzal	SS	DO
Fida Muhammed	S .Engineer	Works & Services
Zahid Ali Auraiz	Jr. M&E officer	DRU Mansehira
Naveed Lakal	Jr. Engineer	DRU Mansehira
Younis Javed	Health Department NWFP	Add. Secretary Health
Dr.Siqqique	EDO	EDO Health
Raza Taroli		HRCP
Israr Ahnam		Works & Services
Sharkat Javed		Works & Services
Asif Khan		NESPAK
Peer Khan		EPI Technichian
Muhammad Asif	M&E officer	DRU Mansehira
Mr Pierre	Reconstruction Manager	CARITAS PAKISTAN
Rahim Zada	CPO Health	Gov. of NWFP, Health Dept.
Muhammad Yasil	Executive Engineer	Health Dept. Gov. of NWFP
Ashig Raza	Engineer	Kohistan contractor
Habibull AH Khan	Director General	PERRA
ZIAUDDIN	EDO W&S	Works&Service dept.Mansehra
Mr. Sardar Muhammad Yousaf,	District Nazim, Mansehira	Gov. of Mansehira District

List of Attendants for Technical Transfer Seminar
at Islamabad, November 4, 2006

Name	Title	Name of Organization
Zulfikar Ali	CEO	Parthenon
Shahid Mahmood	Site engineer	Parthenon
M.L.sarar	Site supervisor	Parthenon
Dr. Mateen	Health consultant	ERRA
Engg.Khebid	Consultant	UNICEF
Mr. Pervez Saeed Khan	Managing director	Norwest Group(Pvt)Ltd
Ziaullah	Engineer	Parthenon
E.J.Bhnhf	WFBGOO	ADB
Dr.Qaisar	Assistant professor	UET Peshawar
Milcaleem Ullah	STEP	Health Coordinator
Bagir Sajjad	Staff reporter	Awon
Ali Mustafa Rathere		Lawer
Amjad Gulzar	Emergency coordinator	CARITAS
G Erberzy		Tekilli Okazzu
Muhammad Bilal	Engineer	NESPAK
Suleman Tames	P.Coordinator	SICS
Syed Wajahat Aiq	STR.Engineer	NESPAK
Umair Abdullah	PM	RIF
Aijaz Hussain	AEE	Pak PWD Isb
Nazar Hssair	Vice president	STEP
Abdul Shakoor	Engineer	GIKI
M.Riaz	Resident Eigneer	Loyal associates
Martaza Maliu	Dy Diretor	CDA
Hawid Mahrđ	Site inspector	PAEC
Major Tariq	Dy Diretor	ERRA
Haris Khan	Consultant	ERRA
Khalid Anwar	Structural engineer	CDA
M.Ky zley		BR
Aha Oqrisam	programme manager	IBC Turkey
Col.Saleem	Health scientist	DDMS(AK)
Shahid Khan	Architect(Con)	ICON ARCHITECTUOR
Bnig Sker Afgan Nigi	DG M&E	ERRA
Zakaullah	EM	Parthenon
M.Jawad	Site engineer	Parthenon
Sherdil	Progm Manager	ERRA
Bajwa	Prog.Manager	ERRA
Mahmoob	Secretary PEC	
Mathias Errst	Architect	UNICEF
Tahir P.DUN	Deputy director ,IMUs	Planning & Communication
M.Atif	President	STEP
Shahjad Khan	O.OZAGA	DH Islamabad
Adil Farooq	Managing director	Shami Associates
M.Riaz	Prog.officer	Islamic relief
A-AZIZ	Site engineer	OODC
David Lees	Project consultant	ADB

Name	Title	Name of Organization
Najib Almhhd	Director	Designman
Tahir Banuri	Durector Archi	CDA
Imtiaz Ali	MD	Askisi Ltd.
Mohammad Rahid	Executive engineer	PAK , PWD
Shakir Hussain	Architect	ICON Arch.engineering
Fedoz Bangers	Architect	CDA
Kamran Qadir	Site enginere	Parthenon
Awais Manzur	Director	ERRA
Tariq Amir	Director	CEMCON
Naweed Saeed Khan	Director	Norwest Group(Pvt)Ltd
Dr. Arifa Afm	Program officer health	IR
Iwlan Hussain	Project Manager	IKAN ENG
Eksan Wallah	Construction management	TOBISHIMA
M.FAROOQ	Engineer	NESPAK
Adnan Tarezn	Asis(const)	ADB
M.Nagasaku	Program manager	JICS
Eng. Najio Ismail	Design engineer	NESPAK
Eng. GILL		Laeiya Asamend Swivey Eng,
Sh.Farrukh M.	CEO	RIF international
Farooq Ahmad	SE(STO)	Pak PWD
Rahim Khan	Architect	CDA Islama
Tahir Pervaiz Dar	Manager Techno-legal affairs	
Mr. David Lee		
Mr. John Blunt		
Dr. Shabana Saleem	Program Coordinator (Health)	ERRA

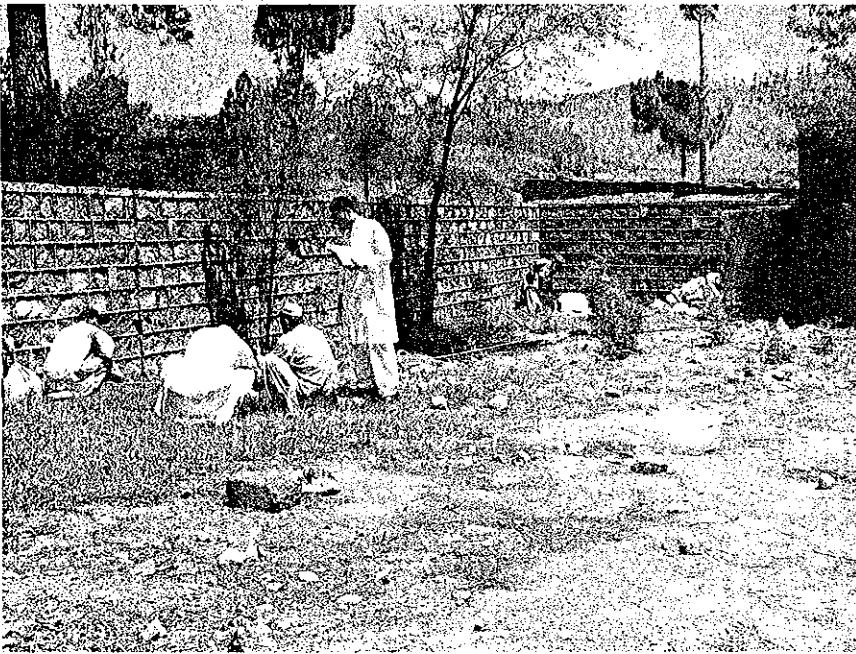
Annex 3 Weekly Report

3.1 Attarshisha BHU Construction

**The Project of Designing prototype
Seismic Resistant and Barrier-Free BHU at Attar Shisha**

Weekly Report	From: 15 July	To: 21 July	No. 1
SITUATION AT SITE: <ol style="list-style-type: none">1. CEMCON (PVT) Limited was selected on the tender which was held on 6th July.2. Construction Contract was concluded on 10th July.3. CEMCON started the site work from 15th July.4. Excavation work is being executed at the site.5. In mean time well digging work was started for getting water used for construction work.			
Pending matter: Non			
Event: Non			
Note: 1. Rain does not influence construction for the time being now.			

Attar Shisha Site Report



Explanation

Site work was started on 15th July from the setting-out work of the building.



Explanation

Well digging work was started from 16th July.



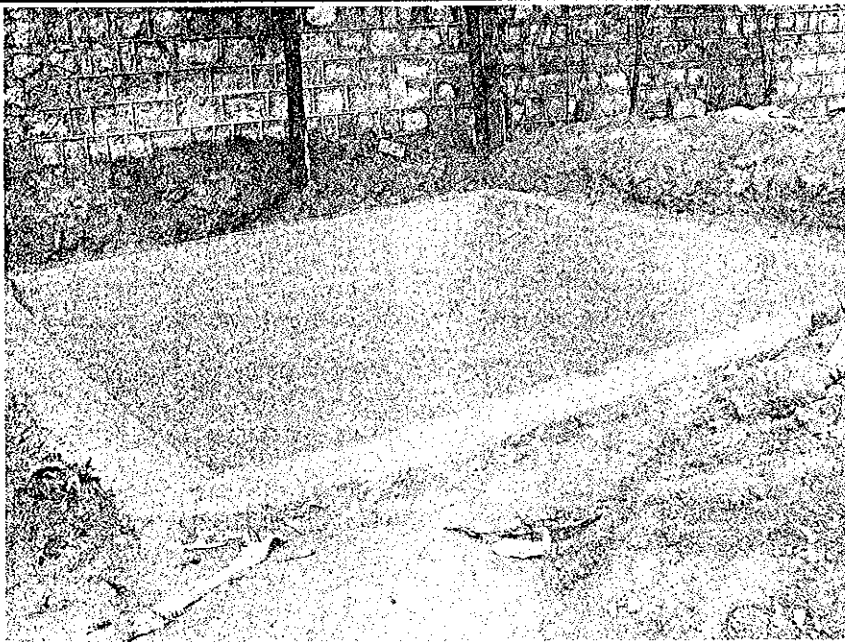
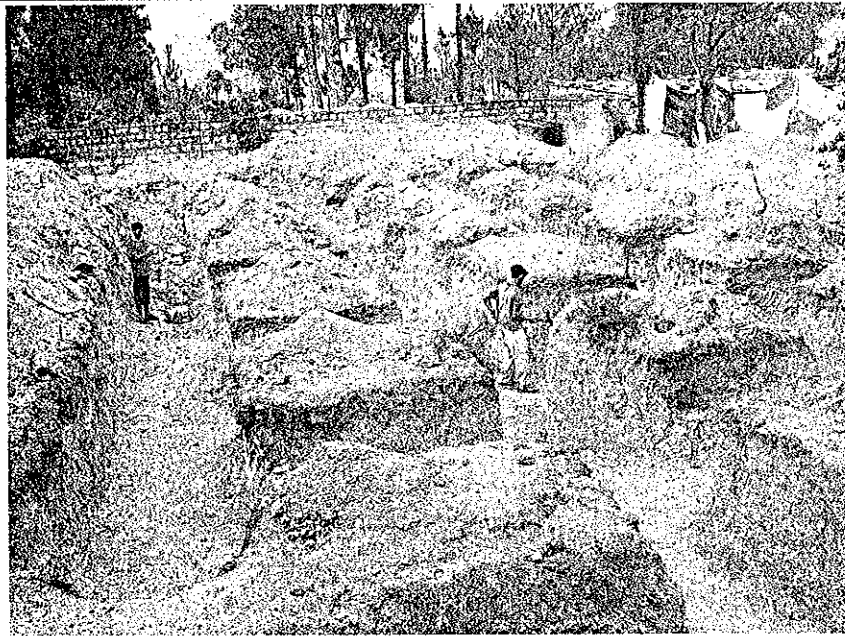

Explanation

The situation of Excavation work on 20th July.

**The Project of Designing prototype
Seismic Resistant and Barrier-Free BHU at Attar Shisha**

Weekly Report	No. 2	From: 22 July	To: 29 July
SITUATION AT SITE: <ol style="list-style-type: none">1. CEMCON (PVT) Limited continued the excavation work. It will be estimated to finish on 31st July.2. Well digging reach to the depth of 120feet on 29th July and it work is continued till the depth more than 150feet.3. Water is used for construction can not be gotten from the well, so it is supplied from the hennery in the vicinity.			
Pending matter: Non			
Event: Non			
Note: <ol style="list-style-type: none">1. Rain does not influence construction for the time being now.			

Attar Shisha Site Report

	<p>Explanation</p> <p>Pond to store water for concrete work is completed on 28th.</p>
	<p>Explanation</p> <p>The situation of Excavation work on 29th July.</p>
	<p>Explanation</p> <p>The botom layer of soil of foundation is very hard gravel bed.</p>

**The Project of Designing prototype
Seismic Resistant and Barrier-Free BHU at Attar Shisha**

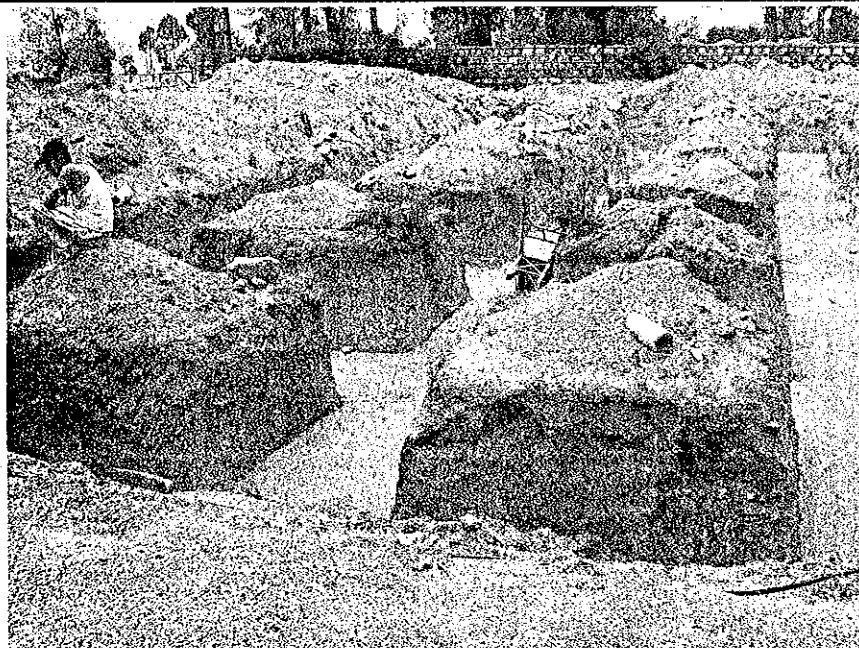
Weekly Report	No. 3	From: 30th July	To: 5th August
SITUATION AT SITE: <ol style="list-style-type: none">1. CEMCON (PVT) Limited completed the excavation work on 1st August.2. Levelling concrete was placed on 2nd August.3. Well digging reach to the depth of 135feet on 5th August and water has been gushed out. It's work is continued till the depth more than 150feet.4. Steel bar work was started from 3rd August.			
Pending matter: <p style="text-align: center;">Non</p>			
Event: <ol style="list-style-type: none">1. Workshop was held on 31st July at Mansehra office.			
Note: <ol style="list-style-type: none">1. Rain does not influence construction for the time being now.			

Attar Shisha Site Report



Explanation

Excavation work was completed on 1st August.



Explanation

Leveling concrete was placed on 2nd August.

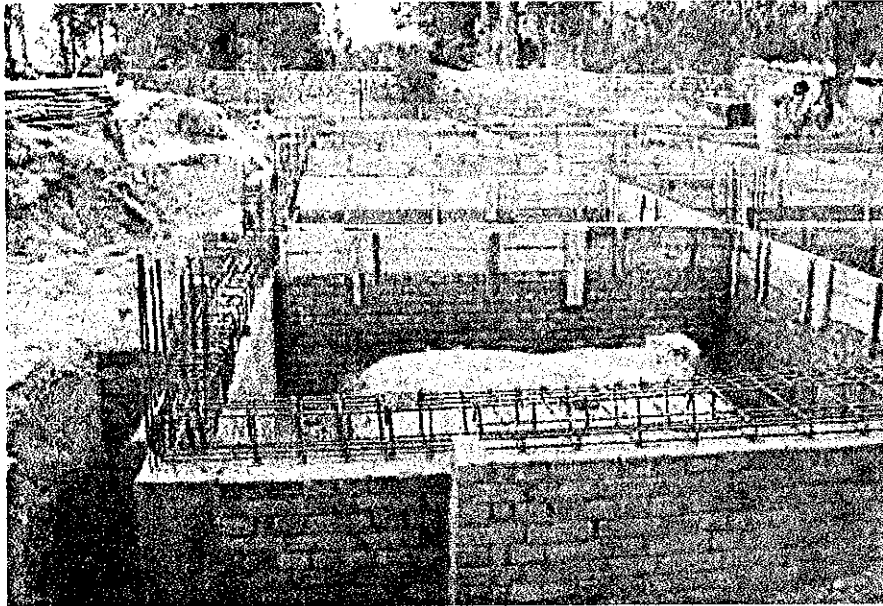


Explanation

Steel bar work was started on 3rd August. Photo shows the bending of steel bar.

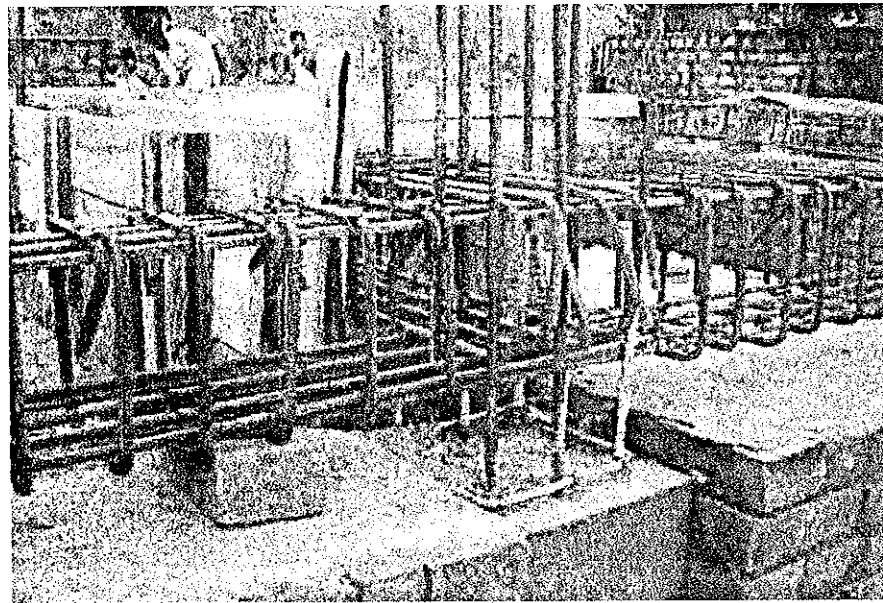
**The Project of Designing Prototype
Seismic Resistant and Barrier-Free BHU at
Attar Shisha**

Weekly Report	No. 4	From: 27th august	To: 2nd September
SITUATION AT SITE: <ol style="list-style-type: none">1. Contractor (SEMCON) completed brick work under plinth beam.2. Steel bar assembling of plinth beam is on going.3.4.			
Pending matter:			
Event: <ol style="list-style-type: none">1.			
Note: <ol style="list-style-type: none">1.			



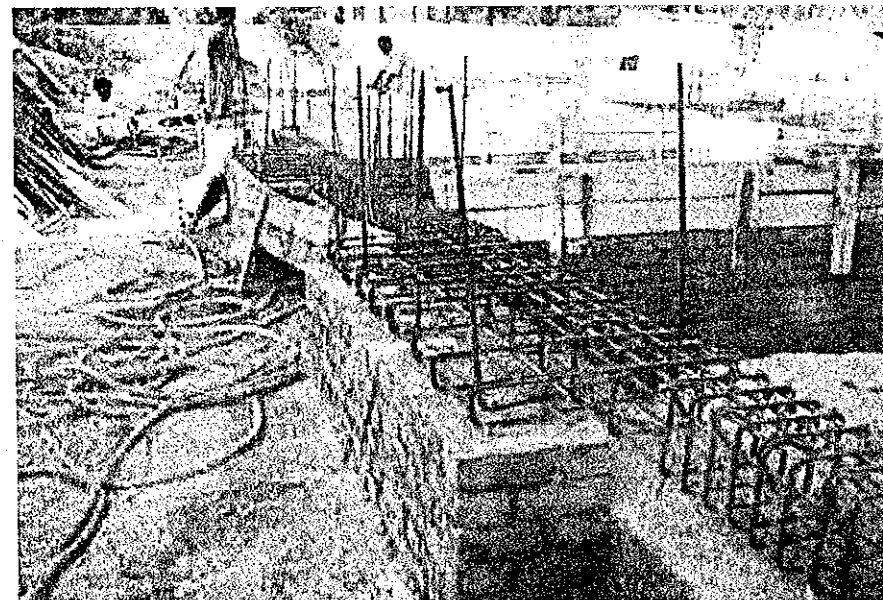
Plinth beam reinforcing

Contractor will change stirrups pitch near column.



Reinforcing Detail

Contractor will change the position of main bar of beam.



Plinth beam at projection wall

The position of steel bar at projection wall will be changed by Contractor.

Pitch of the stirrups of of this beam near column is 3".