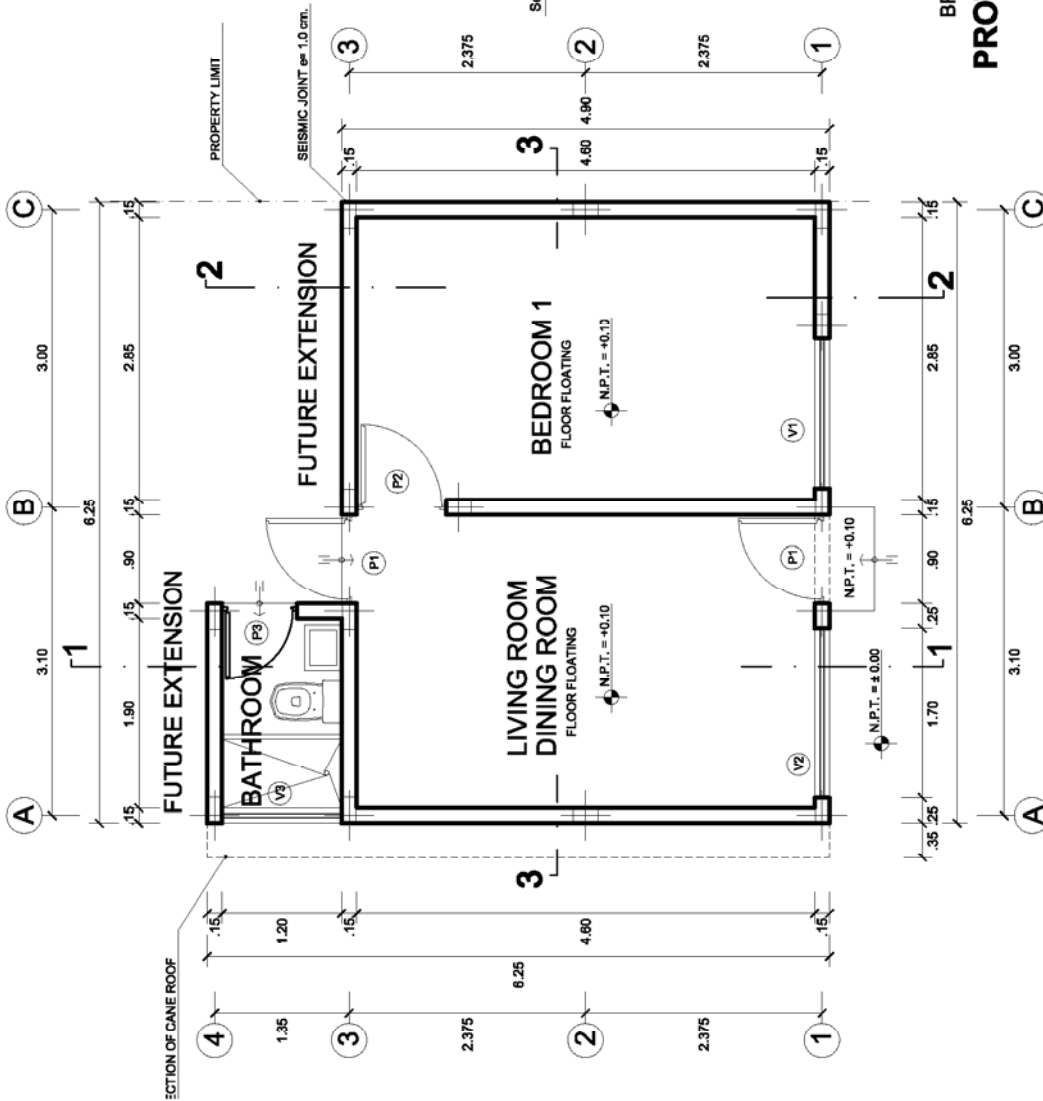


Prototype 2

Prototype 2 No. 5: Simple tie beam; roofing of cane; electrical installation available; with bathroom. The cost is S/. 14,133.47



NOTE 1: THE FRONTAL DISTANCE IS GIVEN BY THE PARAMETER OF THE DISTRICT.

LOCATION OF THE PROTOTYPE AT THE LAND

CONSTRUCTED AREA = 33.60 m²
ROOFING AREA = 35.78 m²

TABLE OF BAYS

CLASS	WIDE	HEIGHT	SPLAY	QUANTITY
DOOR				
P 1	0.90	2.30	-	2
P 2	0.90	2.30	-	1
P 3	0.75	2.30	-	1
WINDOW				
V 1	1.50	1.35	0.95	1
V 2	1.70	1.35	0.95	1
V 3	1.20	0.45	1.85	1

Manuel Málaga Lazo
Arquitecto
CAP 6425

PROJECT EXECUTOR
COMPANY :

MBI SAC
MASTERBUILDING INGENIEROS SAC

DATE:
SEPTEMBER 2008

APPROVED:

N° LAMINE:
A-01
PROTOTYPE 2
No 05

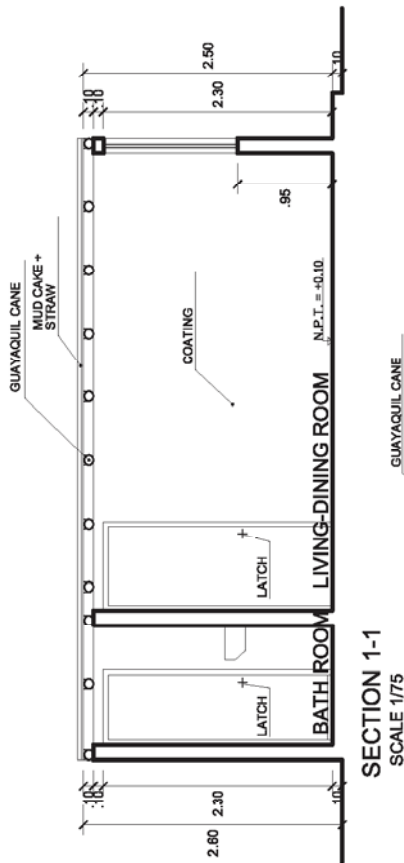
SPECIALITY:
ARCHITECTURE - PROTOTYPE 2
PLANT

PROJECT :
PROVISION OF THE RECONSTRUCTIONS OF SAFER
HOUSING
RECONSTRUCTIONS STUDY OF SEISMIC RESISTANT
HOUSING IN THE REPUBLIC OF PERU

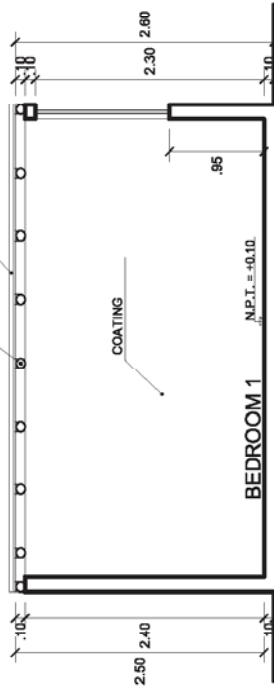
jica

BFH 13400
PROTOTYPE 2

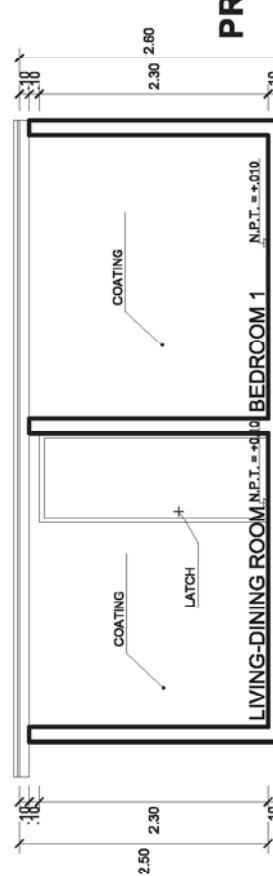
PLANT OF FIRST FLOOR
SCALE 1/75



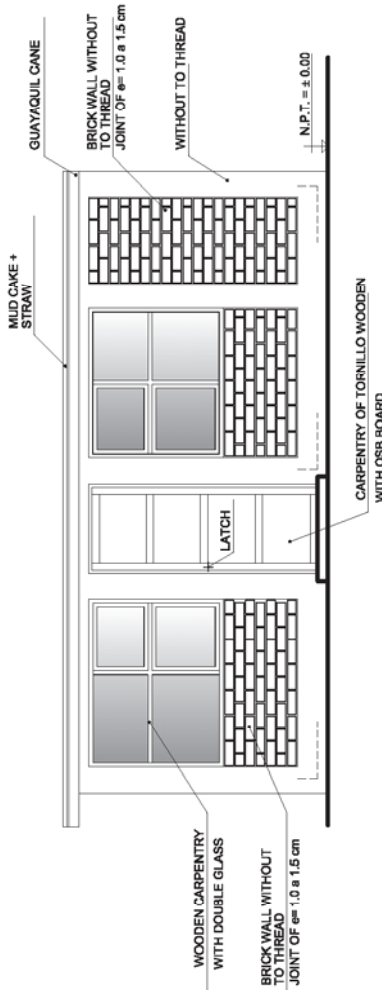
SECTION 1-1
SCALE 1/75



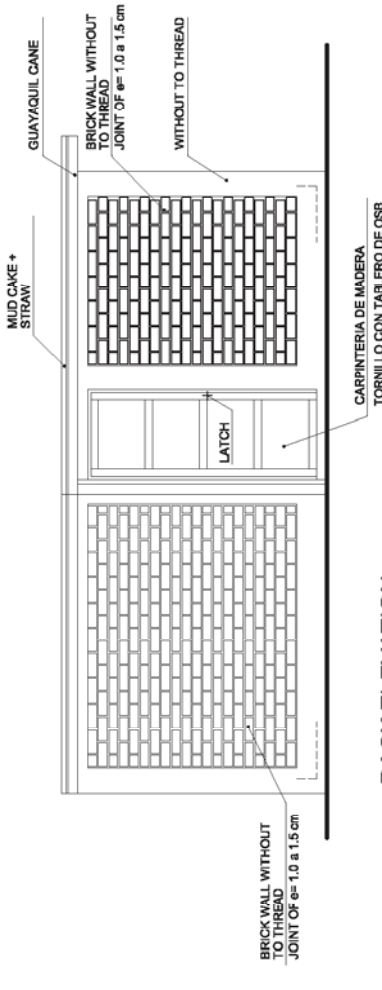
SECTION 2-2
SCALE 1/75



SECTION 3-3
SCALE 1/75

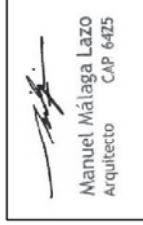


FRONT ELEVATION
SCALE 1/75



BACK ELEVATION
SCALE 1/75

BFH 13400
PROTOTIPO 2



PROJECT :
PROVISION OF THE RECONSTRUCTIONS OF SAFER HOUSING
RECONSTRUCTIONS STUDY OF SEISMIC RESISTANT HOUSING IN THE REPUBLIC OF PERU

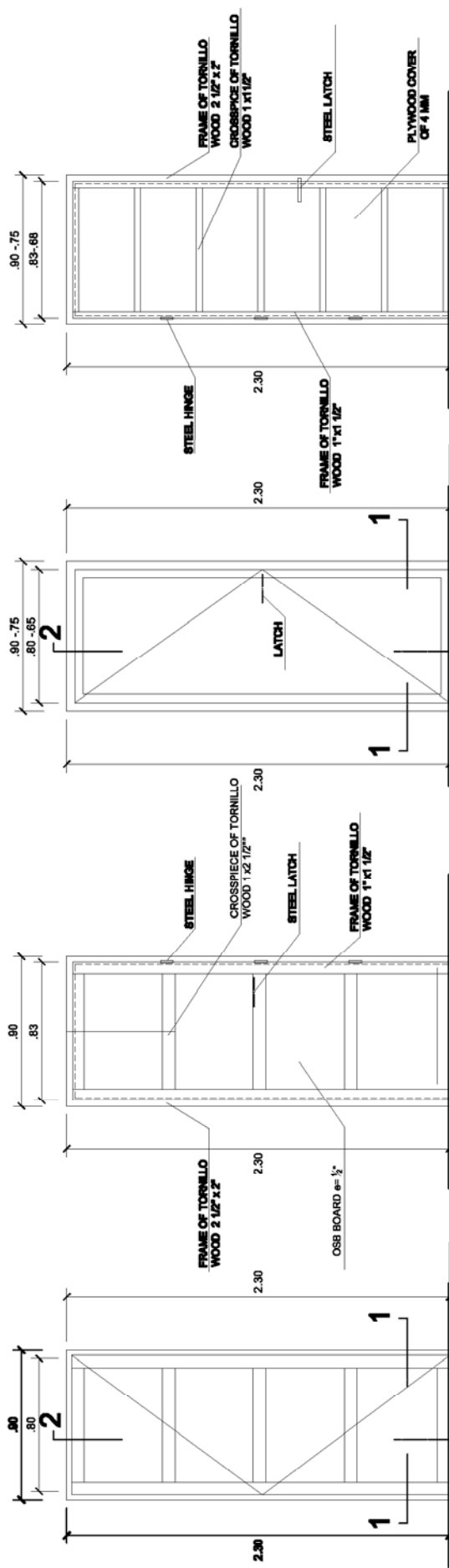
SPECIALITY:
ARCHITECTURE - PROTOTYPE 2
CUTS AND ELEVATIONS

Nº LAMINE:
A-02
PROTOTYPE 2
No 05

APPROVED:

DATE:
SEPTEMBER 2008

PROJECT EXECUTOR
COMPANY :
MBI SAC
MASTERBUILDING INGENIEROS SAC



DOOR P1
PLYWOOD
WITHOUT SCALE

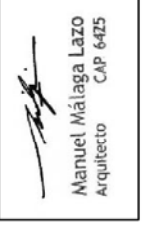
DETAILS OF DOOR P1
WITHOUT SCALE

DOOR P2
PLYWOOD
WITHOUT SCALE

DETAILS OF DOOR P2 - P3
WITHOUT SCALE

DETAILS OF DOOR P2
WITHOUT SCALE

DETAILS OF DOOR P1-P3



PROJECT:
PROVISION OF THE RECONSTRUCTIONS OF SAFER HOUSING
RECONSTRUCTIONS STUDY OF SEISMIC RESISTANT HOUSING IN THE REPUBLIC OF PERÚ

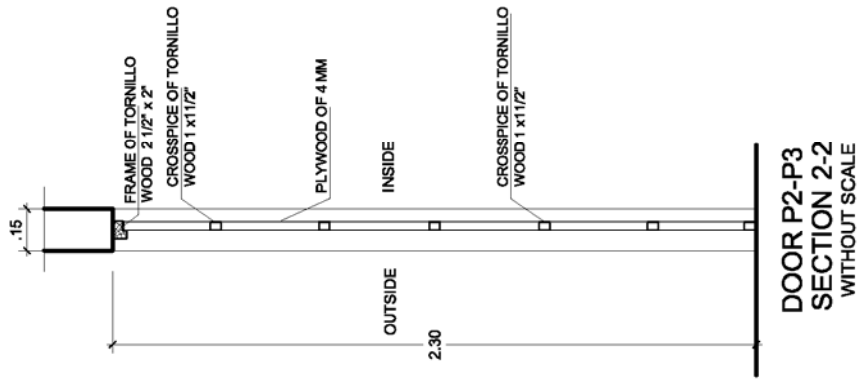
SPECIALITY:
ARCHITECTURE -
PROTOTYPE 2
CARPENTRY DETAILS

N° LAMINE:
D-01
PROTOTYPE 2
No 05

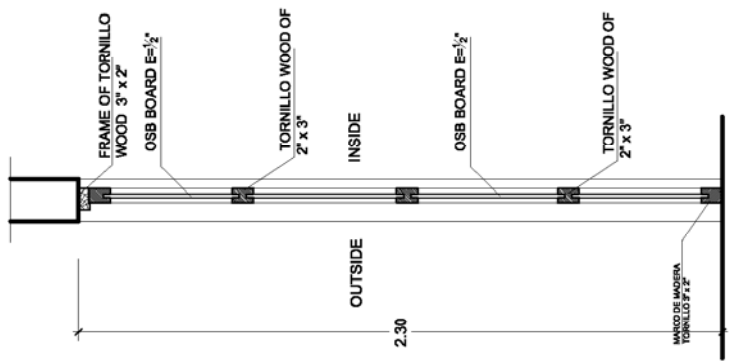
APPROVED:

DATE:
SEPTEMBER 2008

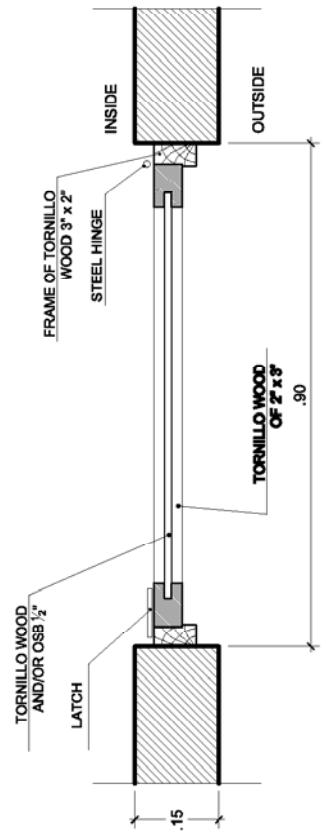
PROJECT EXECUTOR COMPANY:
MBI SAC
MASTERBUILDING INGENIEROS SAC



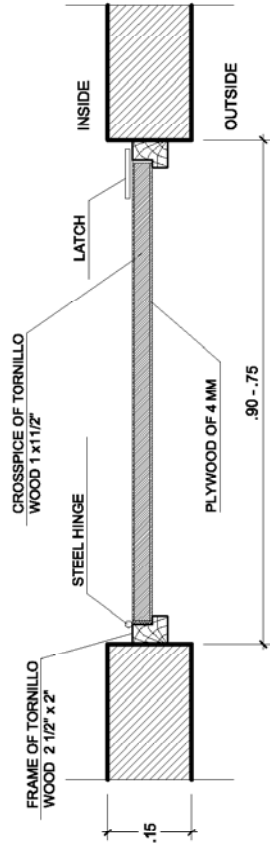
**DOOR P2-P3
SECTION 2-2
WITHOUT SCALE**




**DOOR P1
SECTION 2-2
WITHOUT SCALE**



**SECTION 1-1 (P1)
WITHOUT SCALE**



**SECTION 1-1 (P2 P3)
WITHOUT SCALE**


 Manuel Málaga Lazo
 Arquitecto
 CAP 6425

PROJECT EXECUTOR
 COMPANY :
MBI SAC
 MASTERBUILDING INGENIEROS SAC

DATE:
SEPTEMBER 2008

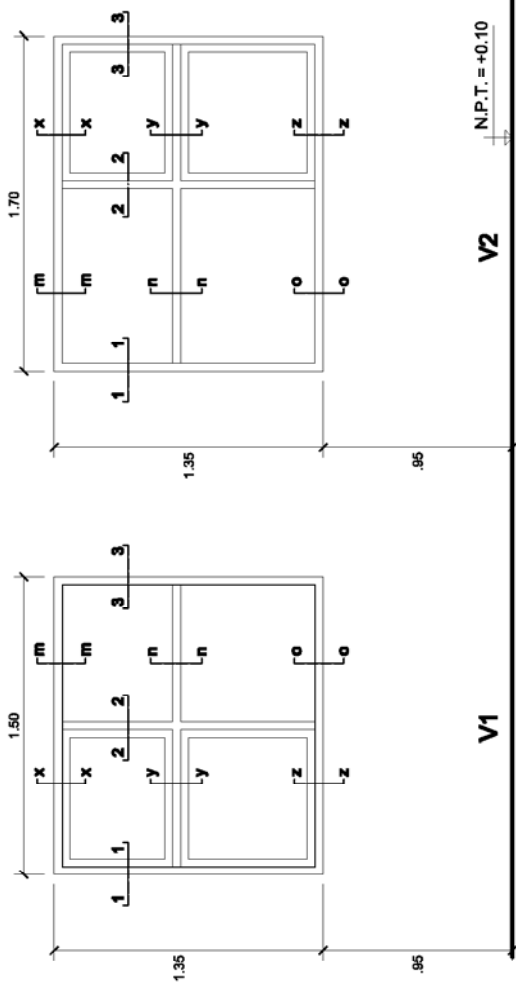
APPROVED:

Nº LAMINE:
D-02
 PROTOTYPE 2
 No 05

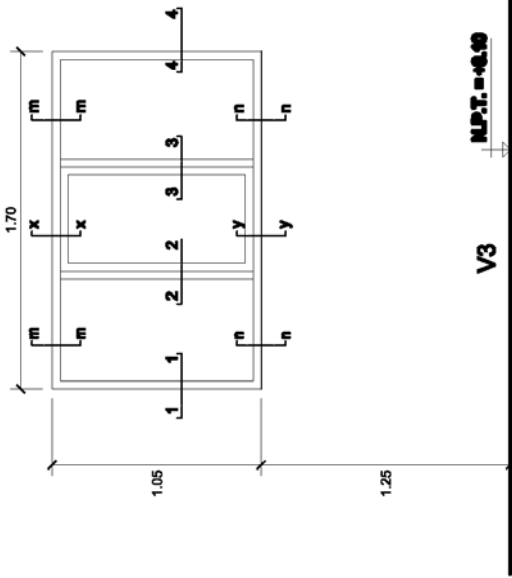
SPECIALITY:
**ARCHITECTURE -
 PROTOTYPE 2
 CARPENTRY DETAILS**

PROJECT :
**PROVISION OF THE RECONSTRUCTIONS OF SAFER
 HOUSING
 RECONSTRUCTIONS STUDY OF SEISMIC RESISTANT
 HOUSING IN THE REPUBLIC OF PERÚ**

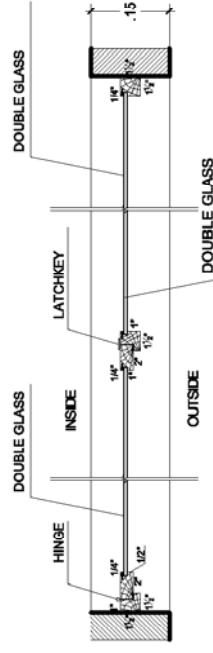
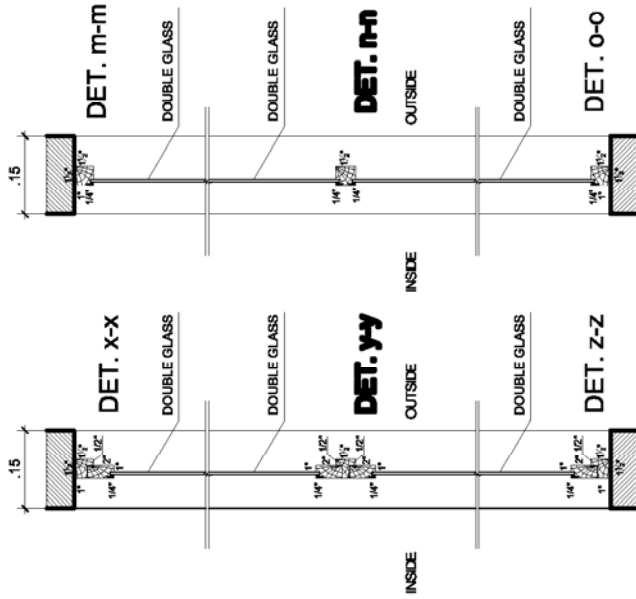




**WINDOW V2
OF TORNILLO WOOD
WITHOUT SCALE**



WINDOW V3

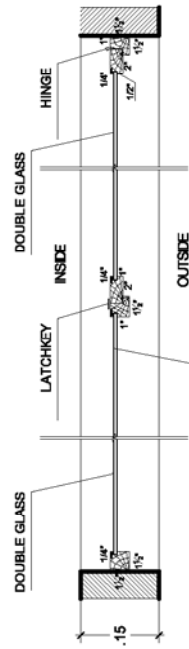
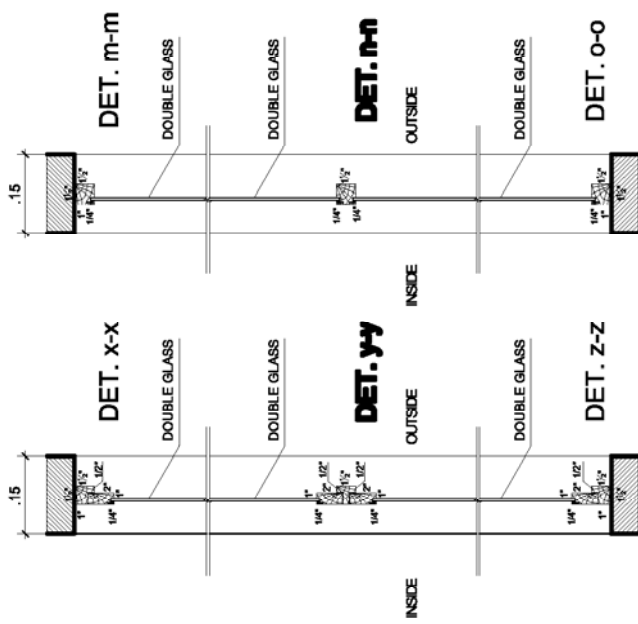


**DETAILS OF WINDOW V1
WITHOUT SCALE**

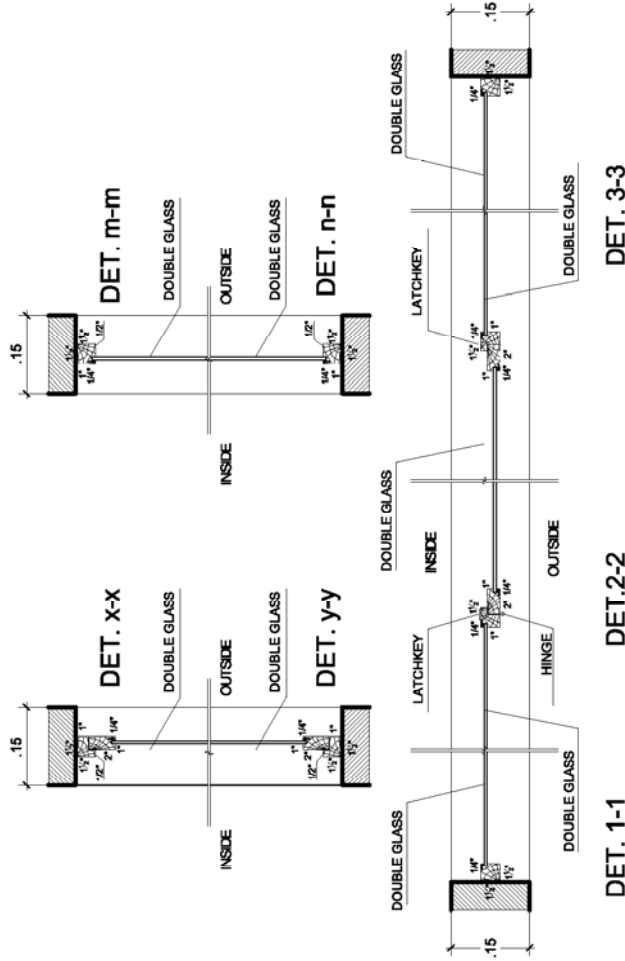
Manuel Málaga Lazo
Arquitecto
CAP 6425

PROJECT: PROVISION OF THE RECONSTRUCTIONS OF SAFER HOUSING RECONSTRUCTIONS STUDY OF SEISMIC RESISTANT HOUSING IN THE REPUBLIC OF PERÚ	SPECIALITY: ARCHITECTURE - PROTOTYPE 2 CARPENTRY DETAILS		APPROVED: D-03	DATE: SEPTEMBER 2008	PROJECT EXECUTOR COMPANY: MBI SAC MASTERBUILDING INGENIEROS SAC
	Nº LAMINE: D-03	PROTOTYPE 2 No 05	DET. 1-1 DET. 2-2 DET. 3-3		






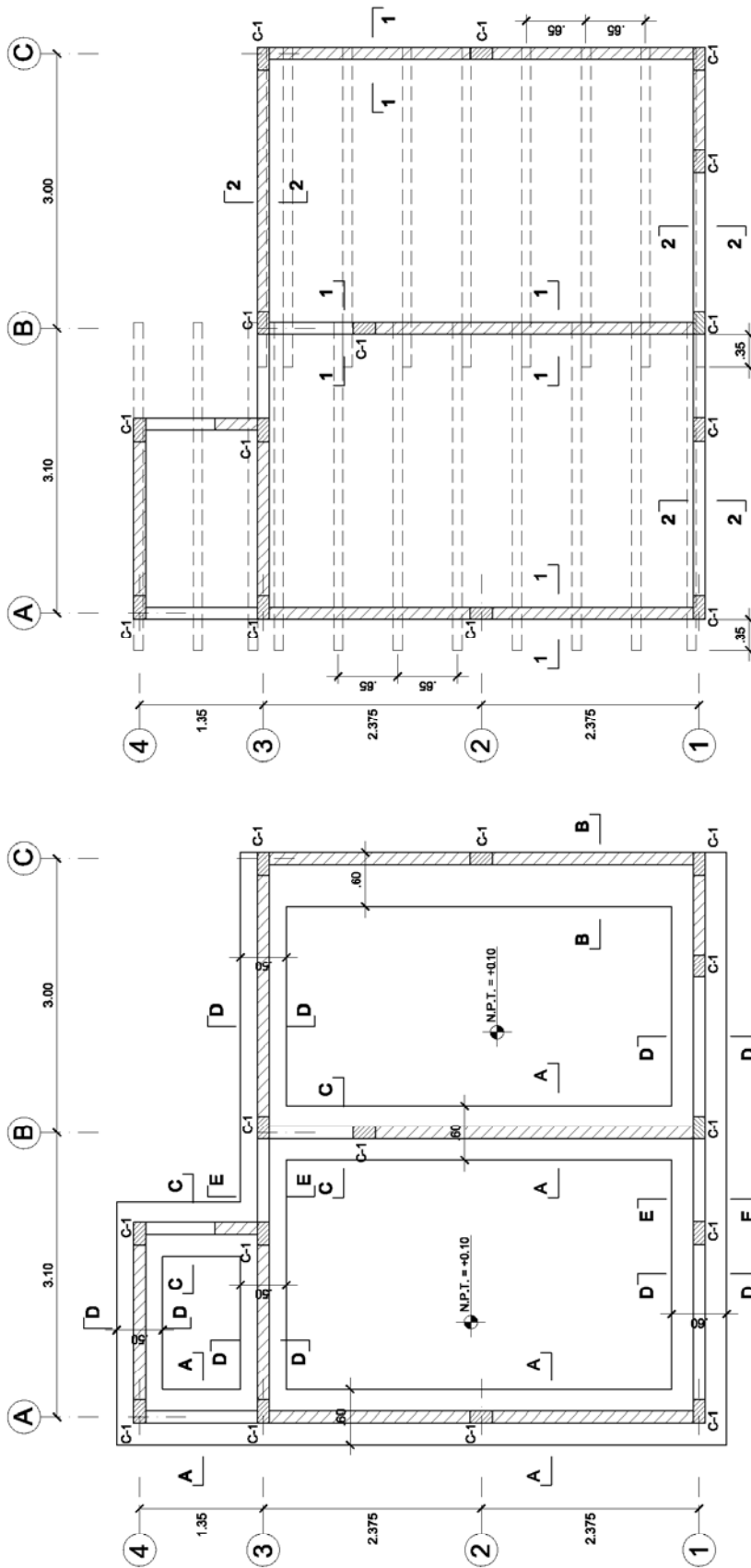
DET. 1-1
DET.22 DET. 3-3
DETAILS OF WINDOW V2
 WITHOUT SCALE



DET. 1-1
 DET.2-2
 DET. 3-3
DETAILS OF WINDOW V3
 WITHOUT SCALE


 Manuel Málaga Lazo
 Arquitecto
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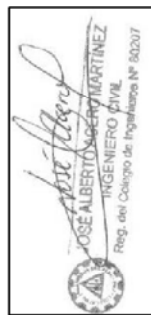
	PROJECT: PROVISION OF THE RECONSTRUCTIONS OF SAFER HOUSING RECONSTRUCTIONS STUDY OF SEISMIC RESISTANT HOUSING IN THE REPUBLIC OF PERU	SPECIALITY: ARCHITECTURE - PROTOTYPE 2 CARPENTRY DETAILS	APPROVED: D-04 No 05	DATE: SEPTEMBER 2008	PROJECT EXECUTOR COMPANY: MBI SAC MASTERBUILDING INGENIEROS SAC
			Nº LAMINE: D-04 PROTOTYPE 2 No 05		



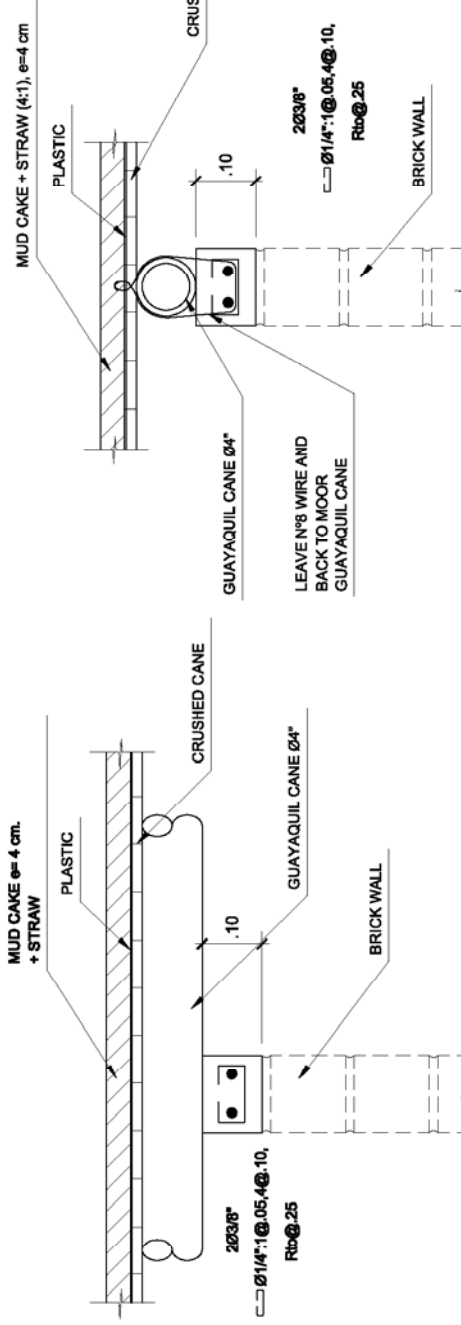
FOUNDATION
SCALE 1/75

BFH 13400
PROTOTYPE 2

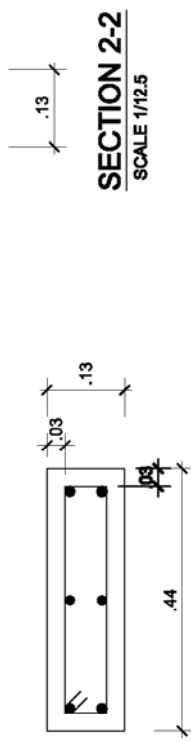
**CANE COVERING ROOF +
CRUSHED CANE + MUD CAKE**
SCALE 1/75



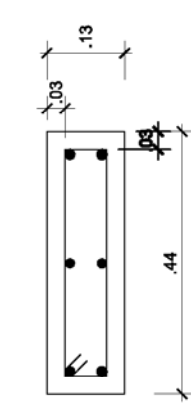
	PROJECT : PROVISION OF THE RECONSTRUCTIONS OF SAFER HOUSING RECONSTRUCTIONS STUDY OF SEISMIC RESISTANT HOUSING IN THE REPUBLIC OF PERU		SPECIALITY : FOUNDATION AND SLAB ESTRUCTURE - PROTOTYPE 2		N° LAMINE: E-01 PROTOTYPE 2 No 05		APPROVED:		DATE: SEPTEMBER 2008		PROJECT EXECUTOR COMPANY : MBI SAC MASTERBUILDING INGENIEROS SAC	



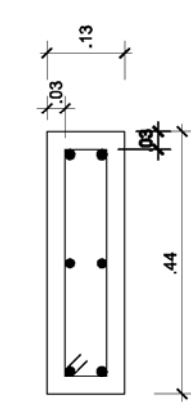
DETAIL OF RING BEAM
SCALE 1/12.5



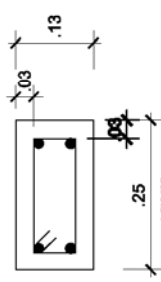
SECTION 1-1
SCALE 1/12.5



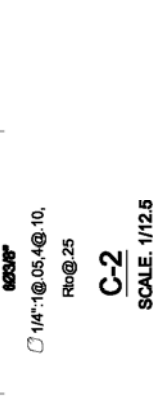
SECTION 2-2
SCALE 1/12.5



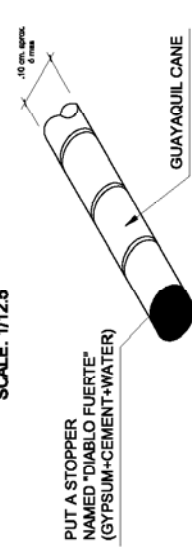
SECTION 2-2
SCALE 1/12.5



C-1
SCALE: 1/12.5

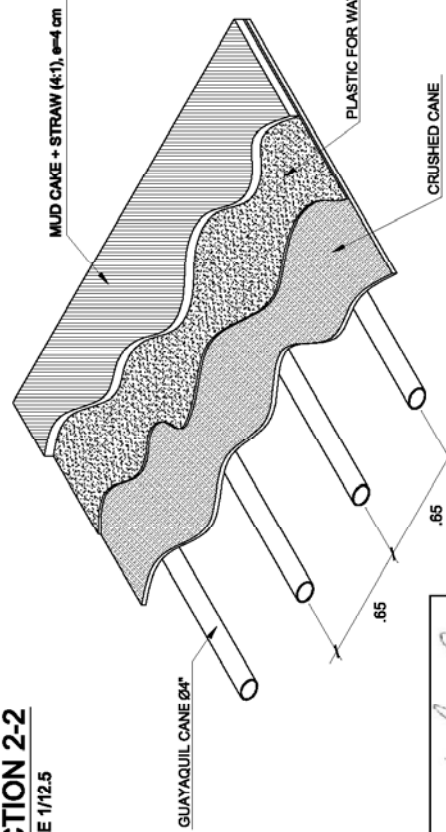


C-2
SCALE: 1/12.5

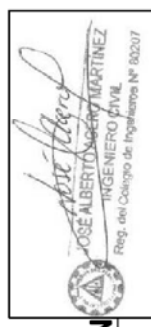


PUT A STOPPER NAMED "DIABLO FUERTE" (GYPSUM-CEMENT+WATER)

DETAIL OF THE CLOSING OF THE END CANE FOR PROTECTION
WITHOUT SCALE



DETAIL OF THE ROOF COVER



SPECIALITY:
TYPICAL DETAILS OF THE SLAB STRUCTURE - PROTOTYPE 2

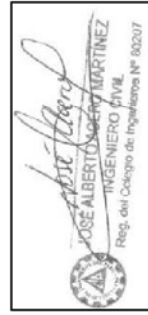
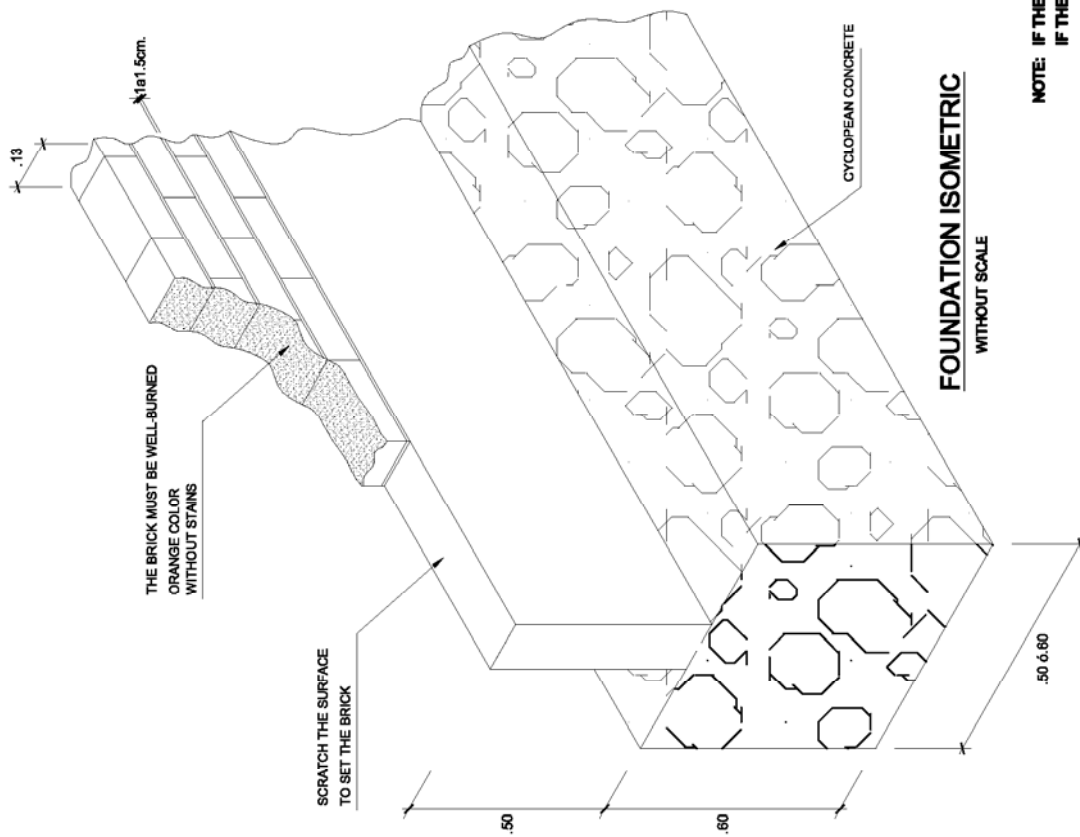
N° LAMINE:
E-02
PROTOTYPE 2
No 05

APPROVED:
DATE:
SEPTEMBER 2008

PROJECT EXECUTOR COMPANY:
MBI SAC
MASTERBUILDING INGENIEROS SAC

PROJECT:
PROVISION OF THE RECONSTRUCTIONS OF SAFER HOUSING
RECONSTRUCTIONS STUDY OF SEISMIC RESISTANT HOUSING IN THE REPUBLIC OF PERU



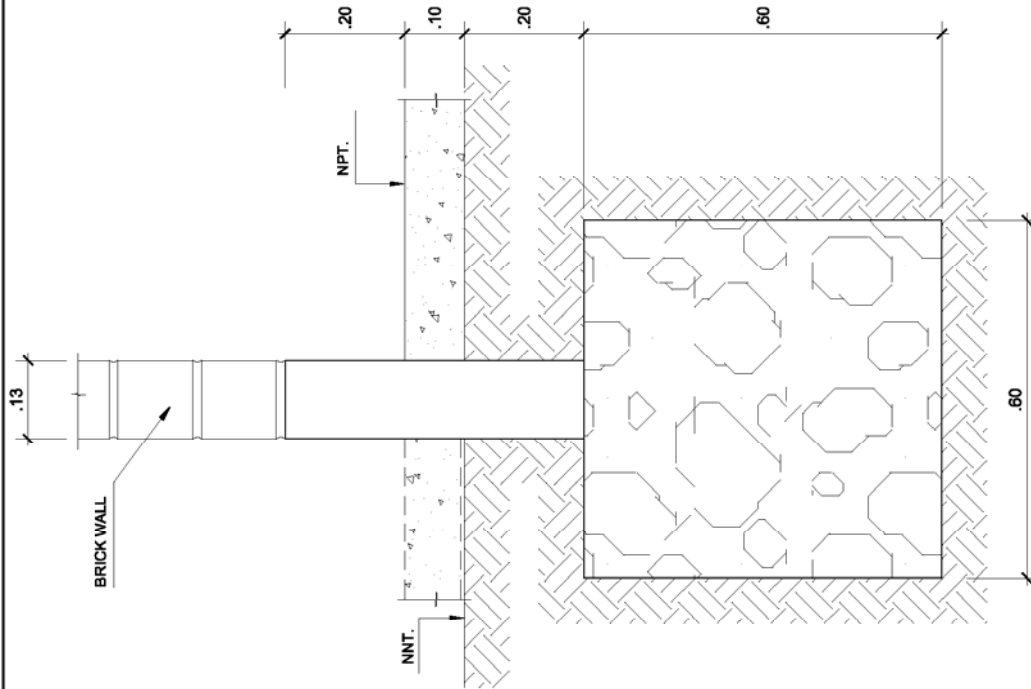


NOTE: IF THE SOIL HAS BAD RESISTANCE PUT REINFORCEMENT IN THE TIE BEAM
 IF THE SOIL HAS GOOD RESISTANCE NOT PUT REINFORCEMENT IN THE TIE BEAM

FOUNDATION ISOMETRIC
 WITHOUT SCALE

PROJECT : PROVISION OF THE RECONSTRUCTIONS OF SAFER HOUSING RECONSTRUCTIONS STUDY OF SEISMIC RESISTANT HOUSING IN THE REPUBLIC OF PERU	SPECIALITY: TYPICAL DETAILS OF FOUNDATIONS - PROTOTYPE 2		DATE: SEPTEMBER 2008	PROJECT EXECUTOR COMPANY : MBI SAC MASTERBUILDING INGENIEROS SAC
	N° LAMINE: E-03 PROTOTYPE 2 No 05	APPROVED:		



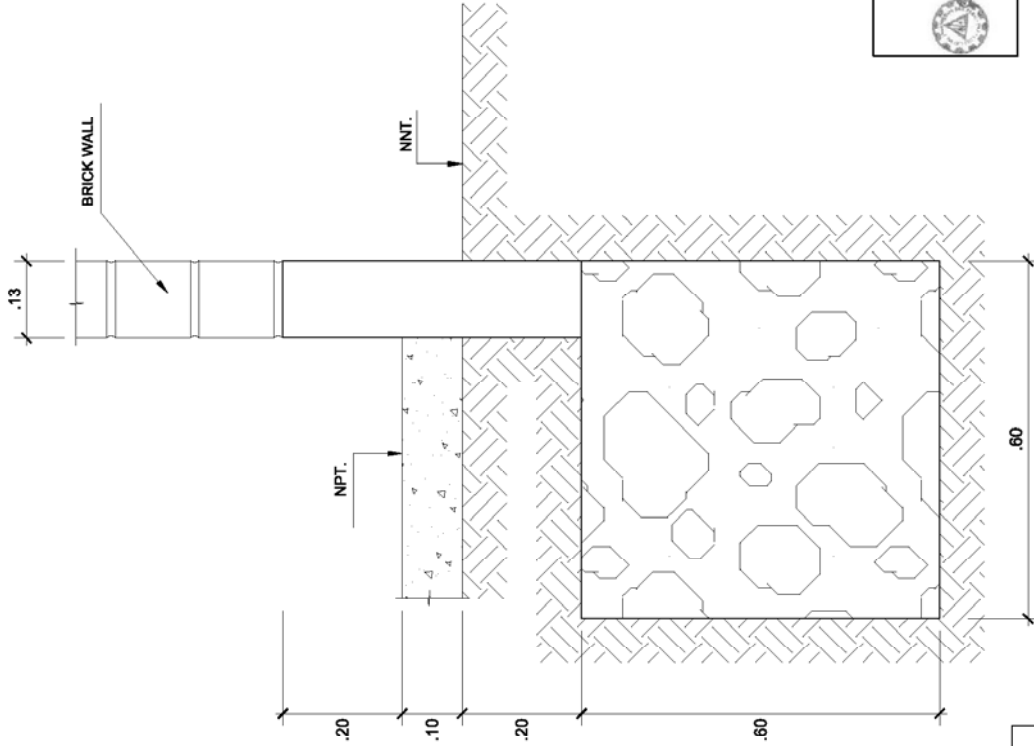


SECTION A-A

SCALE 1/12.5

LEGEND

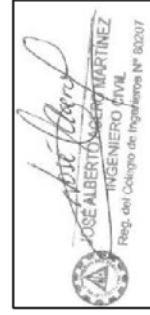
NNT	Natural level of land
NPT	Level of finished floor



SECTION B-B

SCALE 1/12.5

**NOTE: IF THE SOIL HAS BAD RESISTANCE PUT REINFORCEMENT IN THE TIE BEAM
IF THE SOIL HAS GOOD RESISTANCE NOT PUT REINFORCEMENT IN THE TIE BEAM**



PROJECT:
PROVISION OF THE RECONSTRUCTIONS OF SAFER HOUSING
RECONSTRUCTIONS STUDY OF SEISMIC RESISTANT HOUSING IN THE REPUBLIC OF PERU

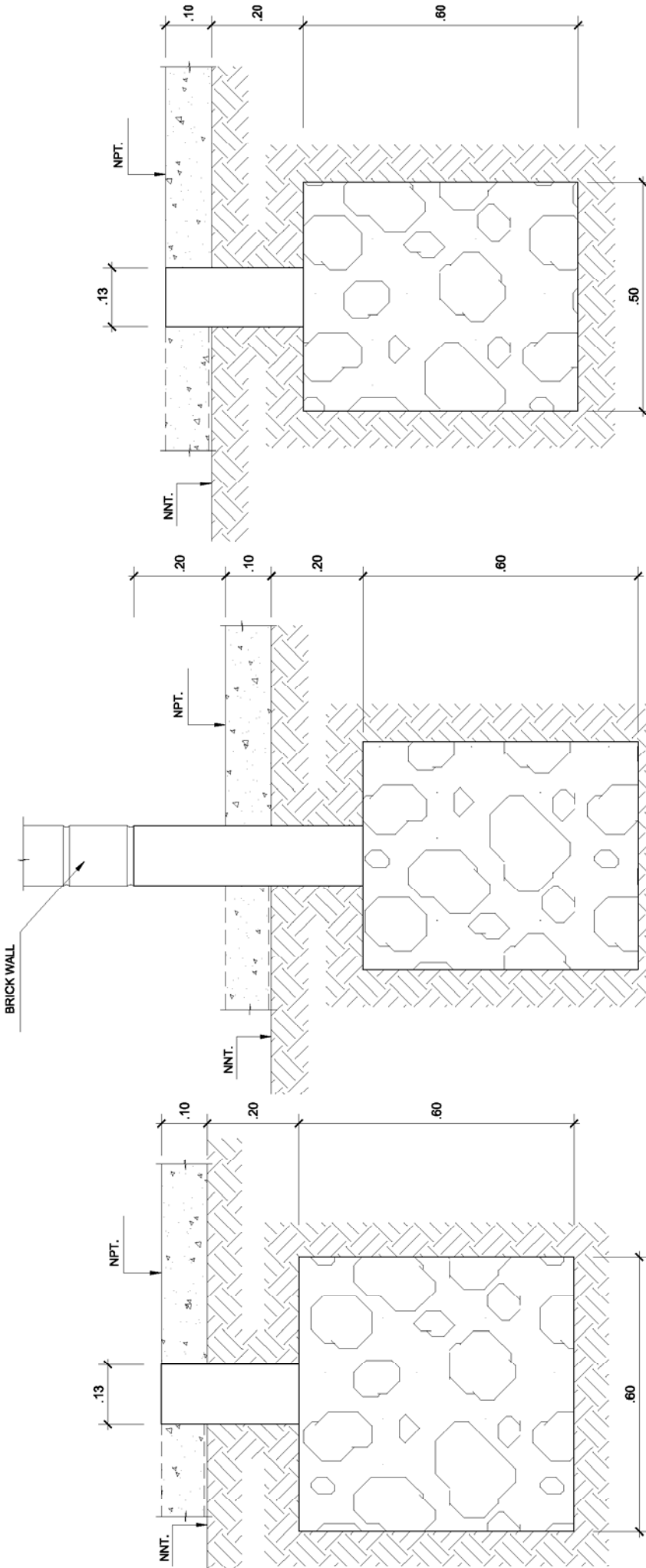
SPECIALITY:
TYPICAL DETAILS OF FOUNDATION - PROTOTYPE 2

N° LAMINE:
E-04
PROTOTYPE 2
No 05

APPROVED:

DATE:
SEPTEMBER 2008

PROJECT EXECUTOR COMPANY:
MBI SAC
MASTERBUILDING INGENIEROS SAC



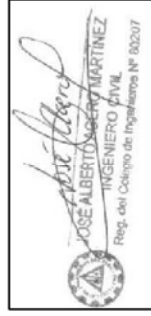
SECTION C-C
SCALE 1/12.5

SECTION D-D
SCALE 1/12.5

SECTION E-E
SCALE 1/12.5

LEGEND	
NNT	Natural level of land
NPT	Level of finished floor

NOTE: IF THE SOIL HAS BAD RESISTANCE PUT REINFORCEMENT IN THE TIE BEAM
IF THE SOIL HAS GOOD RESISTANCE NOT PUT REINFORCEMENT IN THE TIE BEAM



PROJECT: PROVISION OF THE RECONSTRUCTIONS OF SAFER HOUSING
RECONSTRUCTIONS STUDY OF SEISMIC RESISTANT HOUSING IN THE REPUBLIC OF PERU

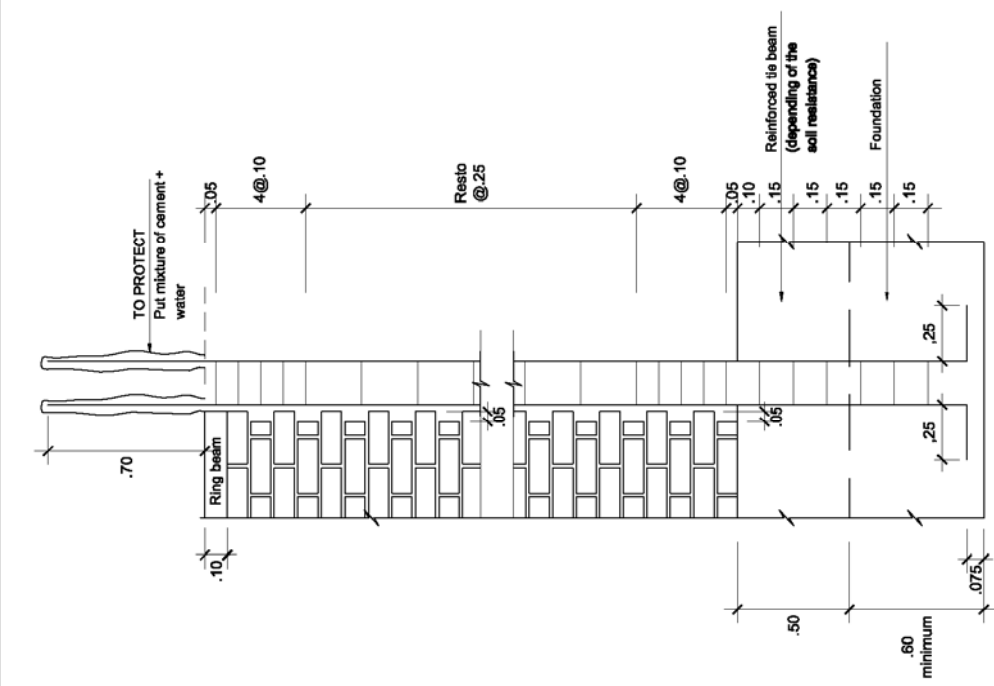
SPECIALITY: TYPICAL DETAILS OF FOUNDATION - PROTOTYPE 2

N° LAMINE: **E-05**
PROTOTYPE 2
No 05

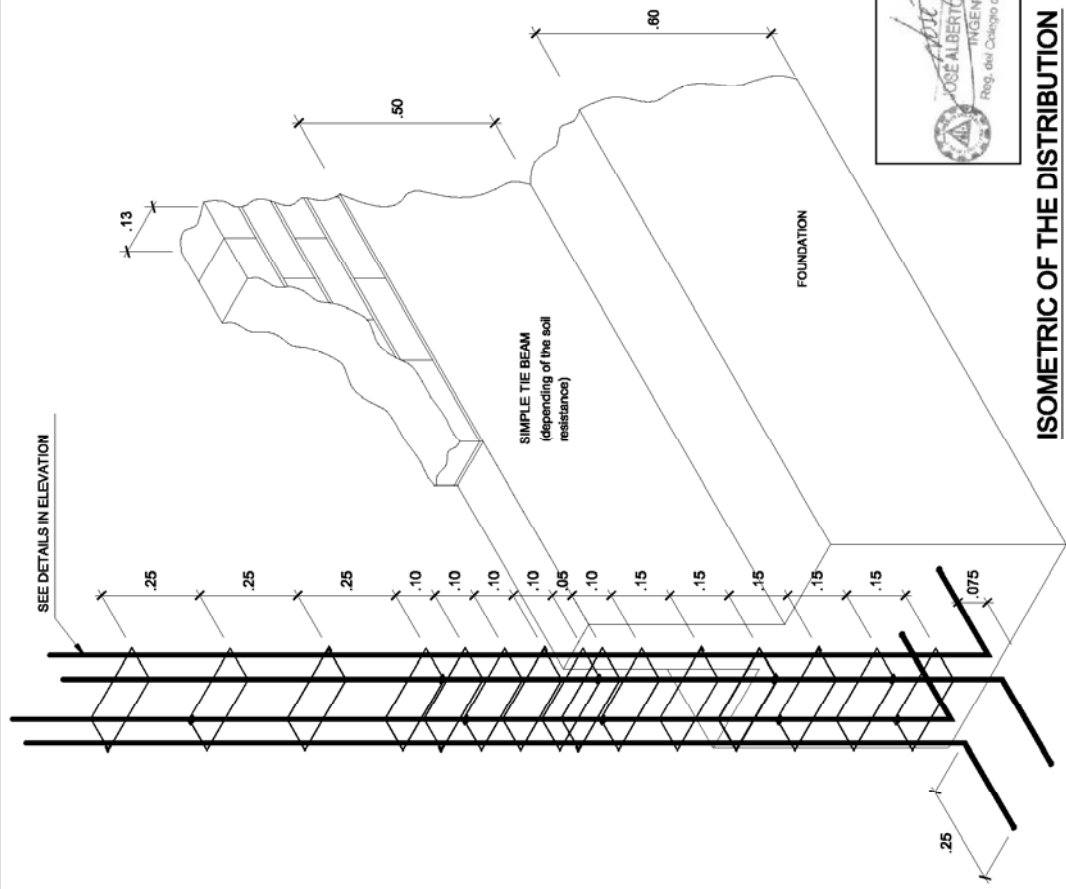
APPROVED:

DATE: SEPTEMBER 2008

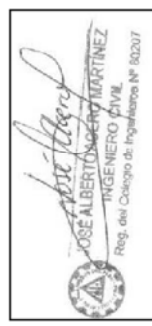
PROJECT EXECUTOR COMPANY: **MBI SAC**
MASTERBUILDING INGENIEROS SAC



**ELEVATION OF THE CONFINEMENT WALL
(GEARED ALTERNATIVE)**
WITHOUT SCALE



**ISOMETRIC OF THE DISTRIBUTION
OF STEEL IN THE WALL CONFINEMENT
COLUMN (GEARED ALTERNATIVE)**
WITHOUT SCALE



PROJECT :
PROVISION OF THE RECONSTRUCTIONS OF SAFER
HOUSING
RECONSTRUCTIONS STUDY OF SEISMIC RESISTANT
HOUSING IN THE REPUBLIC OF PERÚ

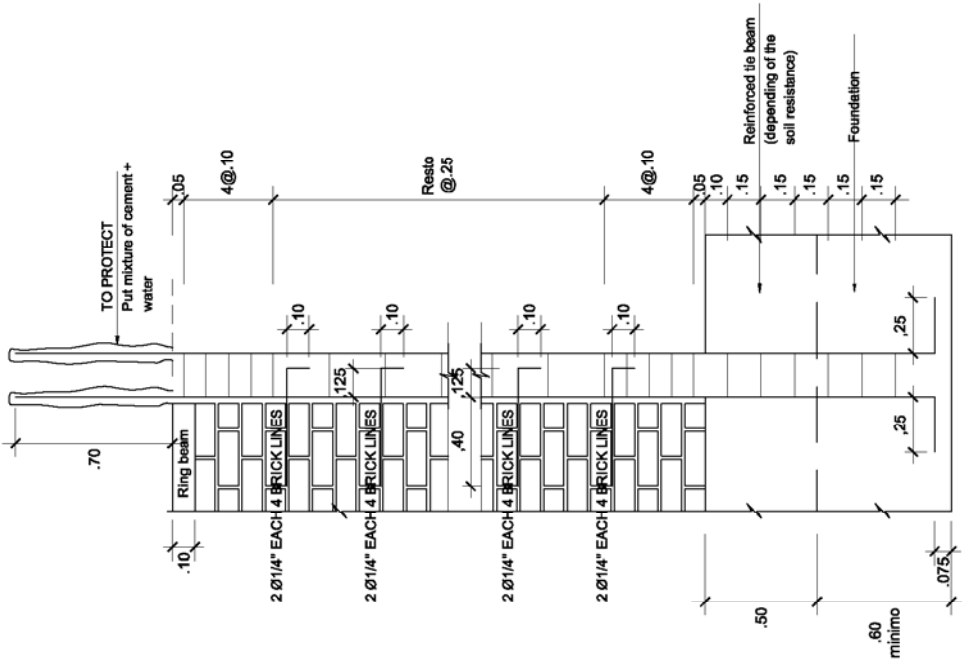
SPECIALITY:
TYPICAL DETAILS OF
FOUNDATION -
PROTOTYPE 2

N° LAMINE:
E-06
PROTOTYPE 2
No 05

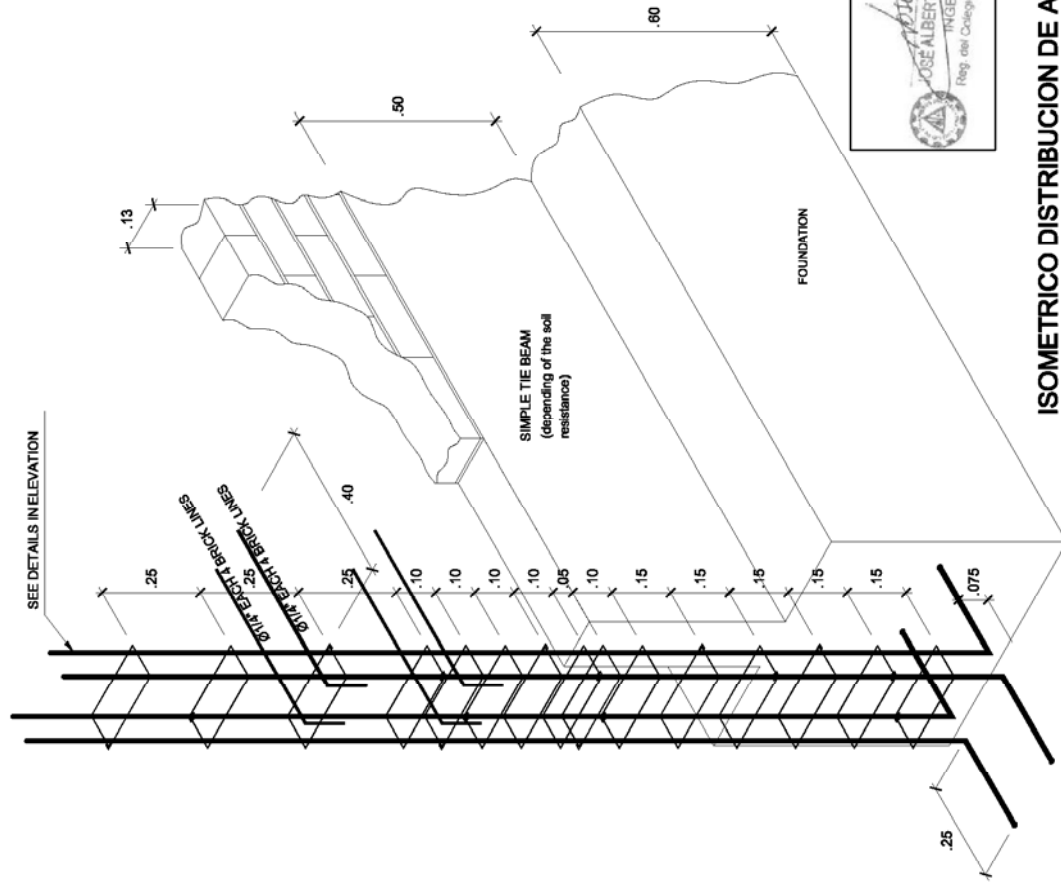
APPROVED:

DATE:
SEPTEMBER 2008

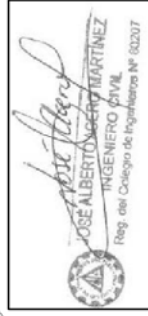
**PROJECT EXECUTOR
COMPANY :**
MBI SAC
MASTERBUILDING INGENIEROS SAC



**ELEVATION OF WALL CONFINEMENT
WITH JUNKS**
WITHOUT SCALE



**ISOMETRICO DISTRIBUCION DE ACERO
EN COLUMNA CON CHICOTES**
SIN ESCALA



PROJECT: PROVISION OF THE RECONSTRUCTIONS OF SAFER HOUSING RECONSTRUCTIONS STUDY OF SEISMIC RESISTANT HOUSING IN THE REPUBLIC OF PERU

SPECIALITY: TYPICAL DETAILS OF FOUNDATION - PROTOTYPE 2

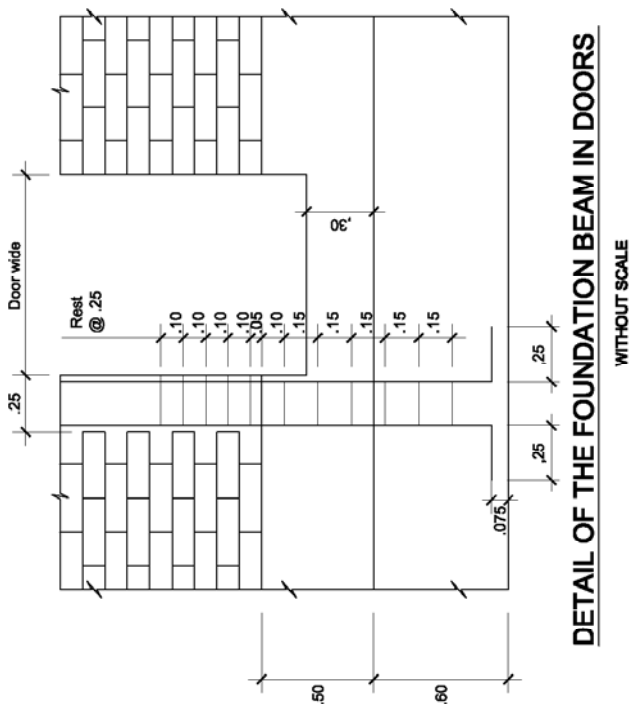
N° LAMINE: **E-07**
PROTOTYPE 2
No 05

APPROVED:

DATE: SEPTEMBER 2008

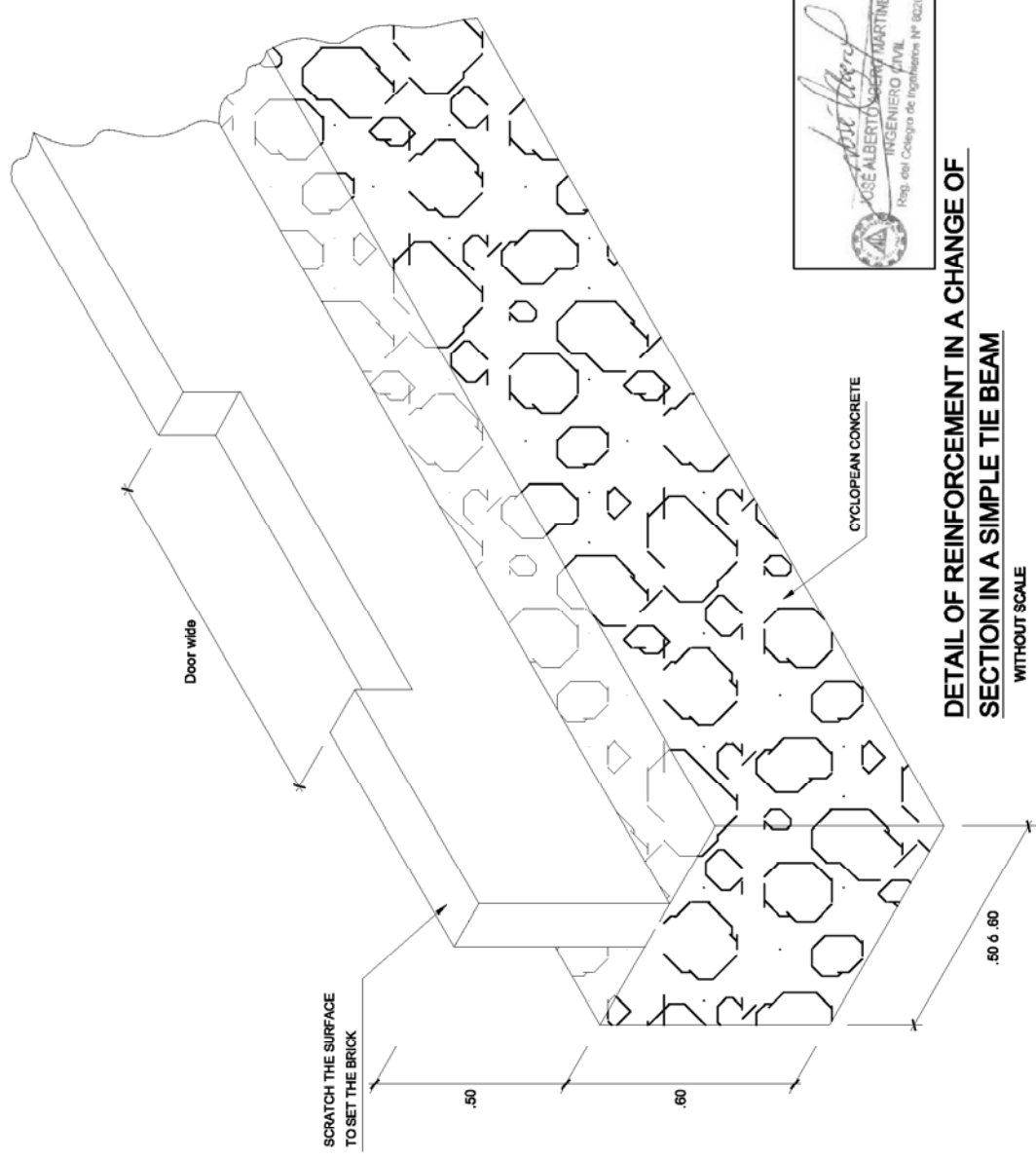
PROJECT EXECUTOR COMPANY: **MBI SAC**
MASTERBUILDING INGENIEROS SAC



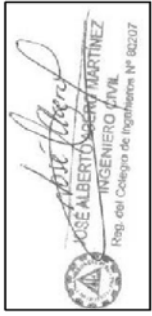


DETAIL OF THE FOUNDATION BEAM IN DOORS
WITHOUT SCALE

NOTE: IF THE SOL HAS BAD RESISTANCE PUT REINFORCEMENT IN THE TIE BEAM
IF THE SOL HAS GOOD RESISTANCE NOT PUT REINFORCEMENT IN THE TIE BEAM



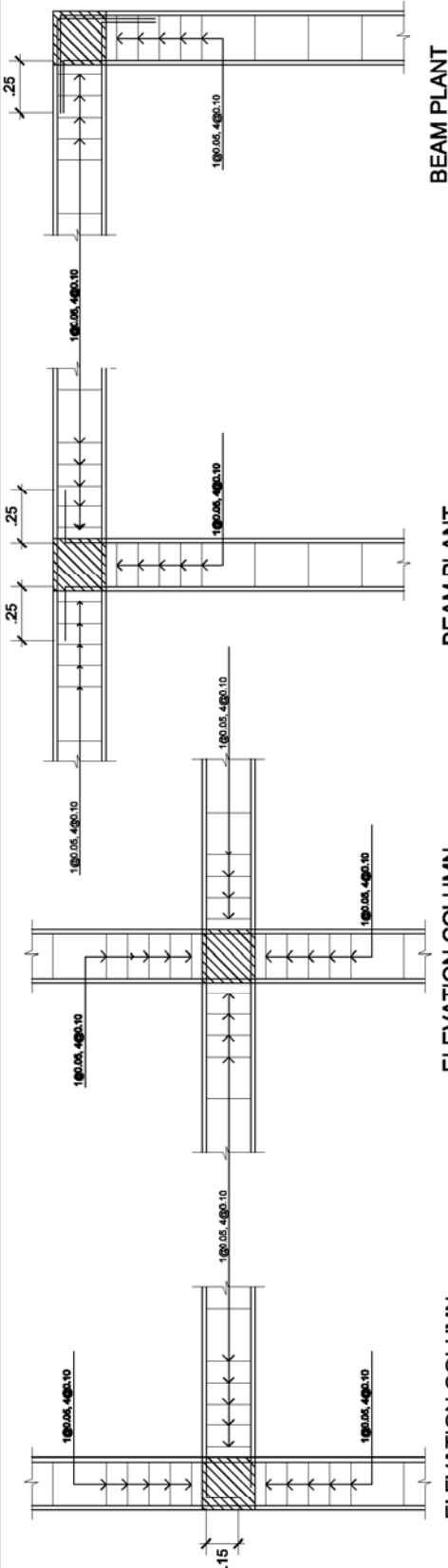
DETAIL OF REINFORCEMENT IN A CHANGE OF SECTION IN A SIMPLE TIE BEAM
WITHOUT SCALE



PROJECT : PROVISION OF THE RECONSTRUCTIONS OF SAFER HOUSING RECONSTRUCTIONS STUDY OF SEISMIC RESISTANT HOUSING IN THE REPUBLIC OF PERU	SPECIALITY: TYPICAL DETAILS OF FOUNDATION - PROTOTYPE 2	N° LAMINE: E-08 PROTOTYPE 2 No 05	APPROVED:	DATE: SEPTEMBER 2008	PROJECT EXECUTOR COMPANY : MBI SAC MASTERBUILDING INGENIEROS SAC

FACTORS USED TO DESIGN ANALYSIS	
SEISMIC FACTOR	Zone 3
SOIL PARAMETER	Soil Type III Type III Type III Type III Type III
BUILDING CATEGORIES	Category C (Housing)
COMPONENT OF STRUCTURE	Walls of non-ventilated masonry
FACTORS OF SEISMIC AMPLIFICATION	C=2.0 (Type C)
Other	Other

NOTE
 1.- For seismic use the drawing of masonry is to be used in the order of the drawing in the foundation depth it is not found a reduced level, down with a slope base to reach the reduced soil.
 3.- The structural design corresponds to a building with two levels.



BEAM PLANT

BEAM PLANT

ELEVATION COLUMN

ELEVATION COLUMN

DETAILS OF KNOTS OF COLUMNS AND BEAMS

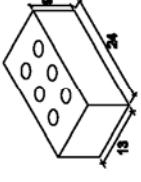
SUMMARY OF FOUNDATION CONDITIONS

KIND OF FOUNDATION	RUNNING FOUNDATIONS
STATUS OF SUPPORT OF FOUNDATION	SAND FAIRLY DENSE TO DENSE
DESIGN PARAMETER OF FOUNDATION	FOUNDATION DEPTH : 0.80 m
ACCEPTABLE PRESSURE	0.8 kg/cm ² (SUD SOIL)
SECURITY FACTOR BY OUT	1.2 kg/cm ² (REGULAR SOIL)
TOTAL SETTLEMENT	MAJOR TO 3
ADHESION OF SOIL TO FOUNDATION	2.50 cm.
FREATIC LEVEL	NOT PRESENT
	NOT DETECTED

Jose Alberto Garcia Martinez
 INGENIERO CIVIL
 Reg. del Colegio de Ingenieros N° 80207

GENERAL SPECIFICATIONS

REINFORCED CONCRETE : f_c = 210 kg/cm²
 THE BEAM : f_c = 100 kg/cm² (1:10 + 25% T4)
 SIMPLE CONCRETE : CALENTOS : f_c = 100 kg/cm² (1:10 + 20% P2)
 STEEL BAR : f_y = 4200 kg/cm²
 BRICK MASONRY : f_m = 45 kg/cm²
 f_m = 120 kg/cm²
 All the masonry units with the indicated dimensions allowed in the drawing. They must be of clay or long-burn type or similar. If they have asbestos they have not to exceed the 25% of the volume.
 It will be verified with mortar 1:4 cement - sand

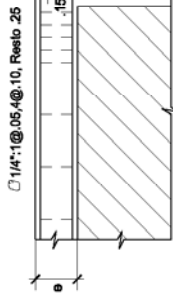


LAND : See summary of foundation conditions
 DESIGN CODES : R.N.C. - N.T.E.-400 - N.T.E. 0.70 - N.T.E. 0.30
 COVERINGS :
 COLUMNS : 3.0 cm.
 BEAMS AND SLABS : 3.0 cm.
 REBES SLABS : 2.8 cm.
 FOUNDATIONS : 7.8 cm.
 COATING: Surface of masonry, cement : sand (1:6)

CONNECTIONS		STIRRUPS
Slabs and beams L (cm)	Columns L (cm)	IN COLUMNS, BEAMS AND PLATES
1/4	30	 The L connections : They will be located in the central third part. It is not recommended to connect more of the 50 % of the framework in a same direction.
3/8	40	
1/2	40	
5/8	50	
5/8	50	

e	d
.20	.15

REMATE DE COLUMNAS



ANCLAJE DE VIGAS SOLERAS

PROJECT : PROVISION OF THE RECONSTRUCTIONS OF SAFER HOUSING RECONSTRUCTIONS STUDY OF SEISMIC RESISTANT HOUSING IN THE REPUBLIC OF PERU

SPECIALITY : TYPICAL DETAILS PROTOTYPE 2

N° LAMINE : **E-09** PROTOTYPE 2 No 05

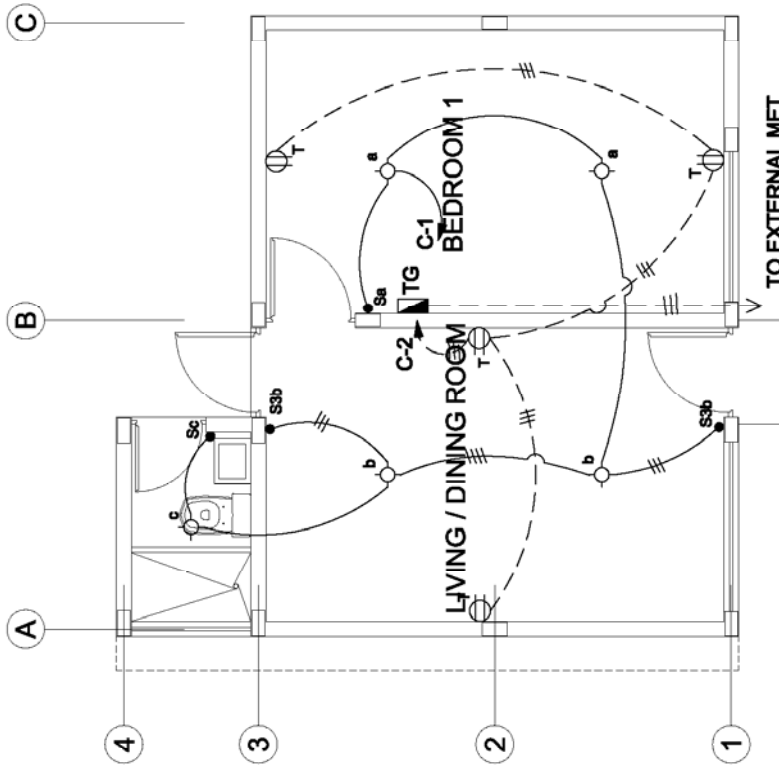
APPROVED :

DATE : SEPTEMBER 2008

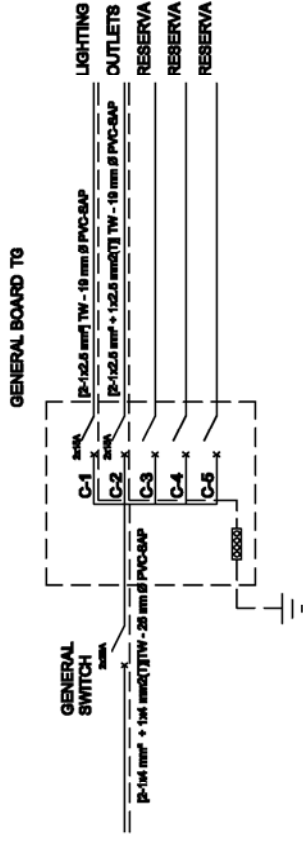
PROJECT EXECUTOR COMPANY :

MBI SAC
 MASTERBUILDING INGENIEROS SAC





ELECTRICAL INSTALLATIONS
SCALE 1/75
BRH 13400
PROTOTYPE 2



VOLTAGE TABLE - GENERAL BOARD

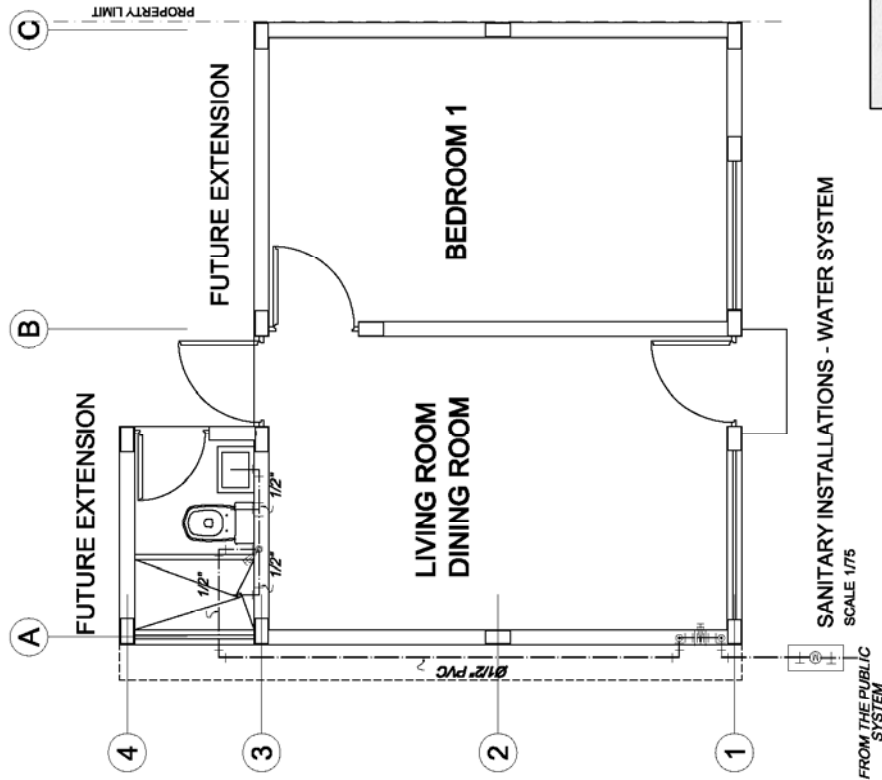
DESCRIPTION	P.L.(KW)	F.D.(%)	M.D.(KW)
LIGHTING AND OUTLETS AREA : 38.00m² x 20mm²	0.84	100	0.84
TOTAL (KW)	0.84		0.84

GENERAL LEGEND

SYMBOL	DESCRIPTION	BOXES (mm)	HEIGHT (mm)
⊙	EXIT FOR LIGHTING, ROOF (CENTER OF LIGHT)	OCT: 100x40	ROOF
#S	SIMPLE SINGLE-POLE SWITCH (10A, 220V) ROCKER TYPE	100x65x60	1.20
#S3	SIMPLE COMMUTATION SWITCH (10A, 220V) ROCKER TYPE	100x65x60	1.20
T	DOUBLE TWO-POLE OUTLET W/ LINE TO GROUND, 10A - 220V.	100x65x60	0.30
⊕	LIGHTING GENERAL BOARD, OUTLETS	SPECIAL	1.80 (B.S.)
⊕	AUTOMATIC SWITCH; NO FUSE TYPE, THERMOMAGNETIC 10 KA, 240V, 80 CCB.		
—	CIRCUIT FILLED IN THE ROOF OR WALL 3-1x2.5mm.2 TW-19 mm Ø PVC.		
—	CIRCUIT FILLED IN THE FLOOR 3-1x2.5 mm.2 TW-12.5 mm.2 (1) TW - 19 mm Ø PVC. FOR OUTLETS		
—	LINE WITH 3 - 1 x 2.5 mm.2 TW - 19 mm. Ø PVC.		
—	LINE WITH 4 - 1 x 2.5 mm.2 TW - 19 mm. Ø PVC.		

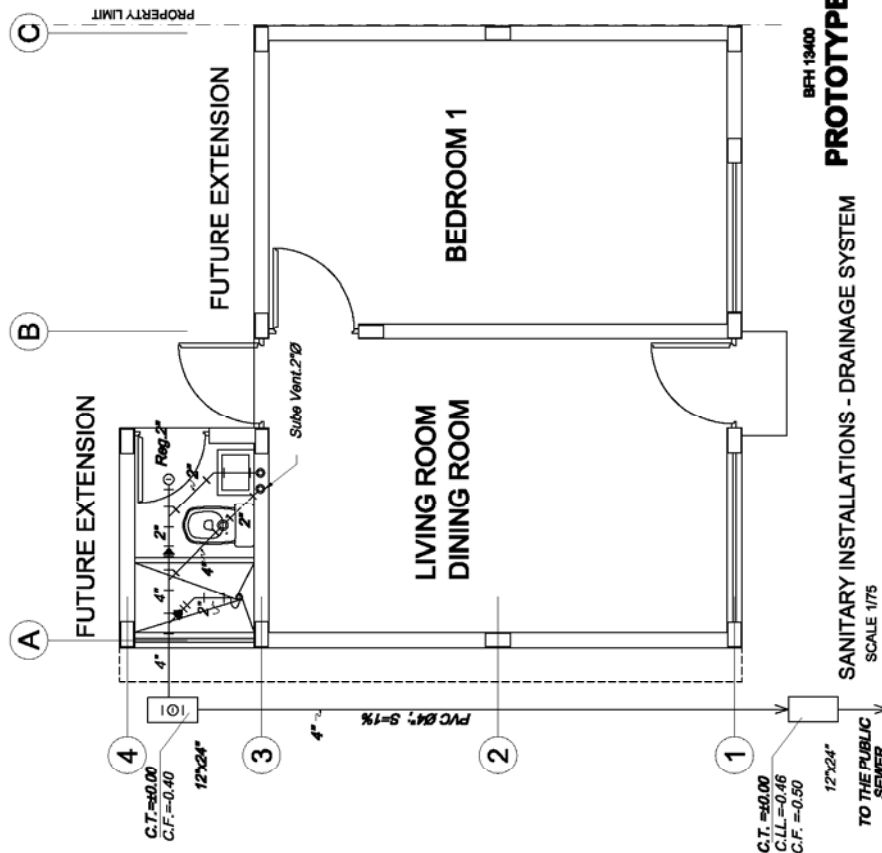
Carlos Armijo Cantu Pejuelo
Carlos Armijo Cantu Pejuelo
 INGENIERO ELECTRICISTA
 Reg. del Colegio de Ingenieros N° 55524

PROJECT : PROVISION OF THE RECONSTRUCTIONS OF SAFER HOUSING RECONSTRUCTIONS STUDY OF SEISMIC RESISTANT HOUSING IN THE REPUBLIC OF PERU	SPECIALITY : ELECTRICAL INSTALLATIONS - PROTOTYPE 2	N° LAMINE : IE-01 PROTOTYPE 2 No 05	APPROVED :	DATE : SEPTEMBER 2008	PROJECT EXECUTOR COMPANY : MBI SAC MASTERBUILDING INGENIEROS SAC
	jica				



SANITARY INSTALLATIONS - WATER SYSTEM
SCALE 1/75

FROM THE PUBLIC SYSTEM



SANITARY INSTALLATIONS - DRAINAGE SYSTEM
SCALE 1/75

TO THE PUBLIC SEWER

BFH 13400
PROTOTYPE 2



PROJECT EXECUTOR
COMPANY : **MBI SAC**
MASTERBUILDING INGENIEROS SAC

DATE: **SEPTEMBER 2008**

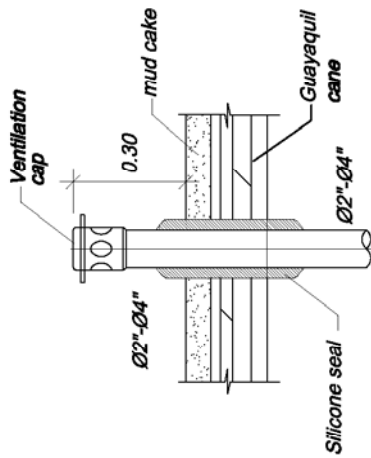
APPROVED:

N° LAMINE: **IS-01**
PROTOTYPE 2
No 05

SPECIALITY:
**SANITARY INSTALLATIONS -
PROTOTYPE 2**

PROJECT :
**PROVISION OF THE RECONSTRUCTIONS OF SAFER
HOUSING
RECONSTRUCTIONS STUDY OF SEISMIC RESISTANT
HOUSING IN THE REPUBLIC OF PERU**

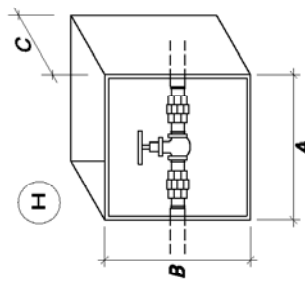




EXIT OF SANITARY VENTILATION

IN THE ROOF
WITHOUT SCALE

□	A	B	C
(H)	1/2"	20	15
(V)	1/2"	15	20
			7
			7

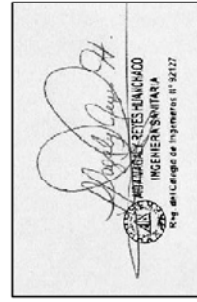
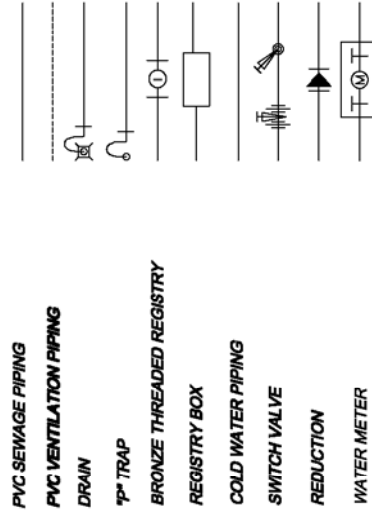


DETAIL : LOCK GATE VALVES
SIN ESCALA

TECHNICAL SPECIFICATIONS

- 1.-THE COLD WATER PIPING WILL BE OF PVC FOR PRESSURE FLUID OF TYPE 10 Kg/cm²
- 2.-THE DRAINAGE PIPING WILL BE OF PVC - AVERAGE PRESSURE
- 3.-THE EXITS FOR SANITARY FITTINGS WILL BE OF GALVANIZED STEEL OF Ø1/2"
- 4.-THE VENTILATION PIPING WILL BE OF PVC - AVERAGE PRESSURE
- 5.-THE LOCKGATE VALVES WILL HAVE TWO UNIVERSAL JOINTS AND WILL BE IN HOLES AT THE WALL WITH FRAME AND COVER MADE OF WOOD.
- 6.-THE VENTILATION WILL FINISH IN A VENTILATION CAP TO + .30 S.N.T.
- 7.-THE WATER PIPING SYSTEM WITHOUT INDICATION WILL BE OF Ø1/2", OF THE PERTINENT MATERIAL.
- 8.-THE DRAINAGE PIPING WITHOUT INDICATION WILL BE OF Ø 2", OF THE PERTINENT MATERIAL.

LEGEND



PROJECT EXECUTOR
COMPANY :

MBI SAC
MASTERBUILDING INGENIEROS SAC

DATE:

SEPTEMBER 2008

APPROVED:

Nº LAMINE:

IS-02

PROTOTYPE 2
No 05

SPECIALITY:

GENERAL DETAILS -
PROTOTYPE 2

PROJECT :

PROVISION OF THE RECONSTRUCTIONS OF SAFER HOUSING
RECONSTRUCTIONS STUDY OF SEISMIC RESISTANT HOUSING IN THE REPUBLIC OF PERU

