PROPOSAL

CONSTRUCTION OF:

CLEAN WATER FACILITY, PUBLIC LAVATORY,

AND BUSINESS DEVELOPMENT

(translated from Indonesian Language)

RUKUN WARGA 09 RANCA BAYAWAK

KELURAHAN CISARANTEN KIDUL

RANCA SARI SUB-DISTRICT

GEDE BAGE DISTRICT – BANDUNG CITY

Secretariat: Ranca Bayawak No. C14 RT 01/09 Bandung 40295

PROPOSAL

A. BACKGROUND

Development in Indonesia aims at improving the life of the people while also improving the quality and skill of the human resources for the sake of the development. This must be supported with construction of appropriate facilities according to the mandate of the people, to improve the standards and dignity of the people.

It is therefore considered necessary to solve and anticipate problems both existing and those that might occur in the future. One of these problems is the Annual Flood in RW 09 Ranca Bayawak in the Cisaranten Kidul Kelurahan of the Ranca Sari Sub-district, in the Gede Bage area of Bandung City.

As can be observed via the location map, RW 09 is situated between two rivers, namely the Cisaranten and Cinambo Rivers. Both these rivers end at the culvert of the toll road Padaleunyi Citarum. The rivers themselves are shallowing with plenty of mud accumulation along the rivers causing the river bodies to tighten. This leads to the rivers' inability to contain water during the wet season. The rivers have also become waste disposal area of industries that are located north of the Cisaranten Kidul Kelurahan. The pollution brings skin and digestion diseases to the people during flood occurrences.

In order to realize anticipation and mitigation efforts the people of the RW 09 Ranca Bayawak work collectively to construct clean water facility for basic needs and drinking, and a public lavatory. This program is expected as one of the programs that could minimize and reduce the problemsa and suffering of the people of RW 09 Ranca Bayawak.

The plans that we propose are:

1. Construction of clean water facility

2. Construction and rehabilitation of the public lavatory
3. Business development, namely:
    - Staple food store
    - Ducks breeding commerce

The reason we are proposing the above programs is the importance of physical and environmental health supported by adequate commerce advancement. During floods many people suffer from digestion (diarrhea, etc.) and skin (irritation, allergies, etc) diseases while clean water becomes difficult to obtain and unfortunately PDAM service is still unavailable and remains a dream for the people. The people rest plenty of hope on this proposal to fulfill the need for clean water.

It is expected that this program will gradually solve environmental and health problems that must not be neglected considering that most facilities owned by the people become useless in the time of flood. It should also be noted that there are people that do not have their own lavatory.

Concurrently, the proposal for duck breeding commerce derives from the fact that the major occupations are fishery and cultivation. These occupations are susceptible to flood, pests, and industrial pollution. Therefore the people have to find an alternative to their normal behavior in order to reduce losses. It is acknowledged that this alternative cannot provide income for everyone but is still worth the effort. The people already posses the foundation to start the commerce and they now need the development, guidance and support from every party in order for this innovation to succeed.

Thereby, we propose these plans a hope that it will end the suffering and problems little by little. We also hope that the realization of the solution for flood problems will be followed by realization of solution for other problems that still exist.

B. NAME OF ACTIVITY

"Flood Mitigation in RW 09 Ranca Bayawak, Kelurahan Cisaranten Kidul, Ranca Sari Sub-district, Bandung City, in the field of Health, Environment, and Welfare."

C. ACTIVITY EXECUTIVES

This activity will be managed and implemented by a self-management group established based by the community meeting, namely the Construction Committee for RW 09 Ranca Bayawak.

D. TIME, PLACE, AND STAGES OF THE ACTIVITY

This activity will be implemented between the months April and June 2001 with the following stages:

1. April: preparation/proposal of programs
2. May: availability of funding for the project
3. June: ralization of the project

The implementation of the project is managed and maintained by a team/unit consisting of different persons. The details are as follows:

a. Clean water facility construction

Project location	: RT 01/09 Ranca Bayawak
Implementation date	: May 27th – June 9th 2001
Number of days required	: 12 (calendar) days
Number of workers required	: 4 persons
Number of formans required	: 1 person

Number of beneficiaries : 134 families

Implementer : Clean Water Facility Team

b. Public lavatory construction and rehabilitation

Project location : RT 02, 01/09 Ranca Biuk/Ranca Bayawak

Implementation date : June 10th – June 23rd 2001

Number of days required : 8 (calendar) days

Number of workers required : 4 persons

Number of formans required : 1 person

Number of beneficiaries : 54 families

Implementer : Public Lavatory Team

c. Development of staple food store

Project location : RT 01/09 Ranca Bayawak

Implementation date : June 27th – …

Number of beneficiaries : 84 families

Managing team : 8 persons/Staple Food Store Team

d. Duck breeding commerce

Project location : RT 01/09 Ranca Bayawak

Implementation date : June 27th – …

Number of beneficiaries : 26 families

Managing team : 7 persons/Duck Breeding Commerce Team

E. ACTIVITY FORM

1. Clean water facility construction (illustration provided)
2. Construction and rehabilitation of public lavatory (illustration provided)

3. Business development: - the staple food store
   - Duck breeding commerce

F. ACTIVITY OBJECTIVES

1. To avoid pollution of the community's drinking water from pollution by industrial waste and to service basic needs.
2. To reduce and anticipate the spread of skin and digestion diseases during floods.
3. Promote healthy living and understanding of the importance of maintaining health and the environment.
4. Empower and develop the self-sustainability of the people of rw 09 Ranca Bayawak.

G. ACTIVITY TARGETS

1. Realization of this project
2. Establish brotherhood relations between the people with scientific and government organizations.
3. Establish better information network between the people with scientific and government organizations and vice versa.
4. Produce a new conclusion that will bring fresh wind to the community with direct advantages that can affect every component of the community.

H. ACTIVITY BENEFITS

Direct beneficiaries to this project consist of 115 families.

Indirect beneficiaries to this project consist of 19 families.

I. PROPOSED BUDGET

(Attached)

J. OFFICIAL REPORT OF COMMITTEE ESTABLISHMENT

(Attached)

K. VALIDATION PAGE

(Attached)

L. RESPONSIBLE PARTIES FOR MAINENANCE AND MANAGEMENT

1. Clean water facility

The maintenance, management and operational responsible party for this unit is the Clean Water Facility Team. The team consists of the people nearest to the location. Funding for the electricity of this facility is provided from the profit of the Staple Food Store.

2. Public Lavatory

The Public Lavatory is managed and maintained by the Public Lavatory team. Much like the Clean water facility, the electricity bills will derive from the profit of the Staple Food Store.

3. Staple Food Store Unit

The management and responsible party for this unit is the Staple Food Store Team consisting of a chairman, a secretary, and a treasurer. The profit from this business is classified into:

10 % for the electricity bill of both the Clean Water Facility and Public Lavatory

30 % for developing other businesses

60 % for the management team by using proportional system of distribution

The objective of sepparating a small amount of profit is to develop other businesses aiming to expand the reach of the market and multiply the membership. In the future, should this commerce advance the people wishes to establish a cooperative or distribution agency.

4. Duck Breeding Commerce

The activity will be managed by the Duck Breeding Commerce team/unit by using caged/domesticated ducks instead of wild ducks.

M. ORGANIZATION STRUCTURE OF ACTIVITY MANAGEMENT AND EXECUTIVE

Chairman : Agus Budiman

Secretary : Ujang Safa'at

Treasurer : Ujang Kusnadi

Managing Divisions:

1. Development of Community Self-sustainability
   a. Clean Water Facility Unit

      Unit Chairman : Dadang S

      Members : 1. Sapta

      2. Dadin

      3. Ujang Rohman

      4. Imas Suryati

   b. Public Lavatory Facility Unit

Unit Chairman : Asep Sukmara

Members : 1. Engkus

2. Agus Gumilar

3. Ocen

4. Ade Rohani

2. Development of Staple Food Store

a. Staple Food Store Unit

Unit Chairman : Omon

Members : 1. Oon Hidayat

2. Anwar

3. Jeni

4. Asep Ruhiyat

b. Duck Breeding Commerce Unit

Unit Chairman : Yayat

Members : 1. Endut M

2. Atang

3. Deni S

Note:

Every unit act as executives for the construction of the project and management of the result after realization.

EXPLANATION OF POINT (M)

The task and functions of the management team are as follows:

1. Chairman

- Run the organization in a planned manner according to its objectives and functions.
- Authorize financially related important documents.
- Guide and control the organization, and make collective decisions wisely to achieve agreement.
- Cooperate with every party that can support the success of current and future program

2. Secretary
   - Record the program and work plan established according to the project proposal.
   - List items owned by the organization.
   - Record activity results.
   - Run the administration of the organization.
3. Treasurer
   - Document financial reports, development of funding and business activities, and account development.
   - Manage finance according to the needs that were agreed upon.
   - Authorize various transactions.
4. Community Self-sustainability Development Division
   - The unit chairman acts as foreman.
   - Assist and prepare the maintenance of the basic facilities and infrastructures, environment and hygiene utilizing resources from the people nearest to the location.
   - Prepare a work plan.
   - The members are the workers during construction.

5. Business Development Division
    - The unit chairman acts as foreman.
    - Develop the potential and solve problems that exist in the community
    - Develop businesses into a cooperative that will benefit the people
    - The members are the workers during construction.

N. RULES

1. The people of RW 09 is obliged to maintain their environment
2. The people of RW 09 has the right to receive clean water as the result of the clean water facility construction.

O. CLOSING REMARKS

This proposal has been formulated truthfully. We pray for the divine guidance from Allaw SWT and hope for support and guidance from everyone in the realization of these activities. We hope that this will yield benefit for the people that must annually cope with flood and that the people will understand the importance of their physical and environmental health.

Note:

Issues that have not been addressed in the above proposal will be resolved in the future by holding an assembly.

(Bagian Gambar-gambar)

(Gambar 1)

(Judul) : Location map of the clean water facility, public lavatory, staple food store, and duck breeding commerce in RW 09 Ranca Bayawak

KETERANGAN = LEGEND

MCK = PUBLIC LAVATORY

AIR BERSIH = CLEAN WATER FACILITY

WARUNG SEMBAKO = STAPLE FOOD STORE

TERNAK BEBEK = DUCK BREEDING COMMERCE

JEMBATAN = BRIDGE

SUNGAI = RIVER

JALAN GANG = GANGWAY

(Ket. Gambar yg lain)

Sawah = rice field

(Gambar 2)

(Judul) : LOCATION MAP OF RW 09 RANCA BAYAWAK

KELURAHAN CISARANTEN KIDUL, RANCA SARI SUB-DISTRICT

GEDE BAGE AREA, BANDUNG CITY

LEGEND:

WATER INUNDATION AREA

KELURAHAN STREET

PRIMARY ROAD

RAILROAD

AGRICULTURE FIELD

RIVER

(Ket. Gambar yg lain)

PETIKEMAS = Container Terminal

POLDA JABAR = District Police For West Java Province

PERUMAHAN CIPADUNG INDAH = Cipadung Indah Residential Complex

KANTOR KELURAHAN C. KIDUL = Kelurahan Office For Cisaranten Kidul

(Gambar 3)

(Judul) : ILLUSTRATION OF THE CLEAN WATER FACILITY PROJECT

1. Ground floor and Tower plan (vertical view)
2. Ground floor and tower plan (external view)

Illustration Information:

A. Illustration no. 1: Ground floor and Tower plan (vertical view)
    - A = ground floor water container, dimensions: 2 m x 2 m x 0.60 m (length x width x height)
    - B = public lavatory, dimensions: 1 m x 0.80 m x 1.60 m
    - C = bathroom, dimensions: 2.80 m x 1.50 m x 1.60 m
    - D = tower to store water tanks, dimensions: 2 m x 0.80 m x 0.50 m

B. Illustration no. 2: Ground floor and Tower plan (external view)
    - A = water tanks

- B = support column
- C = terrace/ground floor
- D = disposal pipe from the lavatory and bathroom
- E = ground water/treatment pipe
- F = water taps
- G = water pipe from the pump to the water tanks
- H = water pipes from the tanks to the ground floor water container

(Gambar 3)

(Judul) : PUBLIC LAVATORY PROJECT ILLUSTRATION

Figure A = base plan for the lavatory

Figure B = the septic tank

Figure C = front view of the lavatory

Figure D = side view of the lavatory

Figure E = three dimensional (external) view

Illustration Information:

1. Figure A = base plane of the lavatory
    - Dimensions: 2 m x 1 m (l x w)
2. Figure B = the septic tank
    - Dimensions: 2 m x 1 m x 1.50 m (l x w x depth)
3. Figure C = front view of the lavatory
    - Dimensions: 2 m x 1 m x 1.50 m (l x w x h)

- Dimension of doors: 1.70 m x 0.60 m (h x w)

4. Figure D = side view of the lavatory
    - Dimensions: 1 m x 2.50 m x 2 m (w x front height x rear height)
5. Figure E = three dimensional (external) view
    - The lavatory and septic tank combined in one structure
    - The lavatory without the septic tank disposes waste straight into the river via a disposal pipe, as shown in Figure D

Attachment: 1

PROPOSED BUDGET

1. Construction Of Clean Water Facility
    a. Provision of material

Sand	3 truck loads	@ Rp. 40.000,-	=	Rp. 120.000,-
Cement	20 sacks (@50 kg)	@ Rp. 24.000,-	=	Rp. 480.000,-
Bricks	2000 pieces	@ Rp. 200,-	=	Rp. 400.000,-
Steel bars (10”)	4 Lt	@ Rp. 16.000,-	=	Rp. 64.000,-
Steel bars (6”)	2 Lt	@ Rp. 10.000,-	=	Rp. 20.000,-
Alba plate	20 sheets	@ Rp. 20.000,-	=	Rp. 100.000,-
Ceramics	21 packs	@ Rp. 26.000,-	=	Rp. 546.000,-
Water taps	6 pieces	@ Rp. 25.000,-	=	Rp. 150.000,-
Pipes (4”)	20 pieces	@ Rp. 95.000,-	=	Rp. 1.900.000,-
Pipes (1”)	10 pieces	@ Rp. 15.000,-	=	Rp. 150.000,-

Ground water drilling		100 m deep	=	Rp. 2.500.000,-
Water pumps			=	Rp. 1.000.000,-
Water tanks	2 tanks	@ Rp. 750.000,-	=	Rp. 1.500.000,-
PVC glue	2 containers	@ Rp. 15.000,-	=	Rp. 30.000,-
Kni (1")	5 pieces	@ Rp. 5.000,-	=	Rp. 25.000,-
Kni (3/4")	3 pieces	@ Rp. 15.000,-	=	Rp. 45.000,-
Letter L	4 pieces	@ Rp. 2.500,-	=	Rp. 10.000,-
Letter T	2 pieces	@ Rp. 2.500,-	=	Rp. 5.000,-
Sopdrat L5	5 pieces	@ Rp. 4.000,-	=	Rp. 20.000,-
Sopdrat D5	5 pieces	@ Rp. 4.000,-	=	Rp. 20.000,-
Paint	10 kg	@ Rp. 24.000,-	=	Rp. 240.000,-
Curing buckets	5 pieces	@ Rp. 15.000,-	=	Rp. 75.000,-
Drilling experts	4 persons x 4 days	@ Rp. 50.000,-	=	Rp. 800.000,-
Consumption	4 persons x 4 days	@ Rp. 4.000,-	=	Rp. 64.000,-
Unexpected reserve			=	Rp. 50.000,-
		TOTAL	=	Rp. 10.314.000,-

(Ten million, three hundred and fourteen thousand Rupiahs)

b. Self-sustained budget from the community

Worker fee	4 persons x 8 days	@ Rp. 30.000,-	=	Rp. 960.000,-
Laden fee	4 persons x 8 days	@ Rp. 20.000,-	=	Rp. 640.000,-
Consumption	8 persons x 8 days	@ Rp. 4.000,-	=	Rp. 256.000,-
Security	2 persons x 8 days	@ Rp. 5.000,-	=	Rp. 80.000,-

		TOTAL	=	Rp.1.936.000,-

(One million, nine hundred and thirty six thousand Rupiahs)

The total sum of (a) and (b) is: = Rp. 12.250.000,-

(Twelve million, two hundred and fifty thousand Rupiahs)

2. Construction and Rehabilitation of the Public Lavatory

This project is distributed in 5 different places in RW 09.

a. Provision of material

Sand	1 truck load	@ Rp. 40.000,-	=	Rp. 230.000,-
Cement	30 sacks (@50 kg)	@ Rp. 24.000,-	=	Rp. 720.000,-
Bricks	5000 pieces	@ Rp. 200,-	=	Rp. 1.000.000,-
Asbestos plates	15 sheets	@ Rp. 30.000,-	=	Rp. 450.000,-
Steel nails (10 cm)	10 kg	@ Rp. 5.000,-	=	Rp. 25.000,-
Steel nails (2 cm)	1 kg	@ Rp. 5.000,-	=	Rp. 7.000,-
Thumb tacks	5 kg	@ Rp. 12.000,-	=	Rp. 60.000,-
Wood for door	10 sheets	@ Rp. 28.000,-	=	Rp. 280.000,-
Plywood	10 sheets	@ Rp. 32.000,-	=	Rp. 320.000,-
Wooden block	25 blocks	@ Rp. 37.000,-	=	Rp. 925.000,-
Toilet	10 pieces	@ Rp. 45.000,-	=	Rp. 450.000,-
Pipes (4”)	5 pieces	@ Rp. 95.000,-	=	Rp. 475.000,-
Letter L	10 pieces	@ Rp. 2.500,-	=	Rp. 25.000,-
Pipes (1”)	2 pieces	@ Rp. 15.000,-	=	Rp. 30.000,-
Large bucket	5 pieces	@ Rp. 20.000,-	=	Rp. 100.000,-

Paint	25 kg	@ Rp. 4.800,-	=	Rp. 125.000,-
Unexpected reserve			=	Rp. 50.000,-
		TOTAL	=	Rp. 5.292.000,-

(Five million, two hundred and ninety-two thousand Rupiahs)

b. Self-sustained budget from the community

Worker fee	5 persons x 8 days	@ Rp. 30.000,-	=	Rp. 1.200.000,-
Laden fee	5 persons x 8 days	@ Rp. 20.000,-	=	Rp. 800.000,-
Consumption	10 persons x 8 days	@ Rp. 4.000,-	=	Rp. 160.000,-
Security	3 persons x 8 days	@ Rp. 5.000,-	=	Rp. 120.000,-
		TOTAL	=	Rp. 2.280.000,-

(Two million, two hundred and eighty thousand Rupiahs)

The total sum of (a) and (b) is: = Rp. 7.572.000,-

(Seven million, five hundred and seventy-two thousand Rupiahs)

3. Duck Breeding Commerce

Provision of ducks (Babaya, egg-layers)	=	Rp. 3.000.000,-
Construction of cages	=	Rp. 25.000,-
Duck food for 2 months	=	Rp. 225.000,-
TOTAL	=	Rp. 3.250.000,-

(Three million, two hundred and fifty thousand Rupiahs)

4. Staple Food Store (WABAKO) Group

Provision of rice	500 kg	@ Rp. 2.400,-	=	Rp. 1.200.000,-
Vegetable oil	20 kg	@ Rp. 4.000,-	=	Rp. 80.000,-
Sugar	10 kg	@ Rp. 3.500,-	=	Rp. 35.000,-
Brown sugar	10 kg	@ Rp. 3.400,-	=	Rp. 34.000,-
Wheat flour	10 kg	@ Rp. 2.800,-	=	Rp. 120.000,-
Instant noodles	200 lt	@ Rp. 600,-	=	Rp. 140.000,-
Washing soaps	5 packs	@ Rp. 28.000,-	=	Rp. 40.000,-
Bath soaps	20 pieces	@ Rp. 2.000,-	=	Rp. 20.000,-
Powder detergents	20 pieces	@ Rp. 1.000,-	=	Rp. 10.000,-
Anti mosquito	10 pieces	@ Rp. 500,-	=	Rp. 30.000,-
Plastic	10 pieces	@ Rp. 3.000,-	=	Rp. 15.000,-
Other items			=	Rp. 150.000,-
Transportation fee			=	Rp. 20.000,-
		TOTAL	=	Rp. 1.922.000,-

(One million, nine hundred and twenty thousand Rupiahs)

BUDGET RECAPITULATION

1.	Clean Water Facility	=	Rp. 10.314.000,-
2.	Public Lavatory	=	Rp. 3.292.000,-
3.	Duck Breeding Commerce (egg-layers)	=	Rp. 3.250.000,-
4.	Staple Food Store	=	Rp. 1.922.000,-
5.	Self-sustained budget	=	Rp. 4.216.000,-

Total = Rp. 24.994.000,-

(Twenty-four million, nine hundred and ninety-four thousand Rupiahs)

Attachment: 2.a

AGENDA REPORT OF THE COMMITTEE ESTABLISHMENT

FOR THE DEVELOPMENT IN RW 09 RANCA BAYAWAK

According to the agreement concluded in the community assembly held on Tuesday, March 27th 2001, at the house of the RT chief, Mr. U. Kusnadi, RW 09 Ranca Bayawak of the Kelurahan Cisaranten Kidul, Ranca Sari Sub-district, Gede Bage area, Bandung City, the following names (attached) are elected as chairman, secretary, treasurer, members and assistance in the RW 09 development program, to realize the flood disaster mitigation program.

The following projects were also agreed upon by the assembly that will be realized by the RW 09 Development Committee, namely:

1. Construction of clean water facility
2. Construction and rehabilitation of public lavatories
3. Business developments:
    - Staple food store (WABAKO)
    - Duck breeding commerce (egg-layers)

Bandung, March 27th 2001

Acknowledging,

ADE MA'MUR	H. A. SURYANA	OMON
Chief of RW 09	1. Community representative	2. Community repr.

AGUS BUDIMAN	U. KUSNADI
Repr. of Project Members	Repr. of Project Members

Attachment: 2.b

ORGANIZATION STRUCTURE FOR DEVELOPMENT PROJECT

OF RW 09 RANCA BAYAWAK, KELURAHAN CISARANTEN KIDUL

No.	Name	Sex	Position	Address	Signature
1.	Agus Budiman	M	Chairman	RT 01	
2.	Ujang Safaat	M	Secretary	RT 01	
3.	U. Kusnadi	M	Treasurer	RT 01	
4.	Asep Sukmara	M	Member	RT 01	

5.	Sapta	M	Member	RT 01	
6.	Yayat	M	Member	RT 01	
7.	Oon Hidayat	M	Member	RT 01	
8.	Asep Ruhiat	M	Member	RT 01	
9.	Anwar	M	Member	RT 01	
10.	Dadang S	M	Member	RT 01	
11.	Ocen	M	Member	RT 02	
12.	Dindin	M	Member	RT 01	
13.	Jeni	M	Member	RT 01	
14.	Endut Misa M	M	Member	RT 01	
15.	Atang	M	Member	RT 02	
16.	Engkus	M	Member	RT 02	
17.	Deni S	M	Member	RT 02	
18.	Omon	M	Member	RT 02	
19.	Agus G	M	Member	RT 02	
20.	Ujang Rohman	M	Member	RT 02	
21.	Imas Suryati	F	Member	RT 01	
22.	Ade Rohani	F	Member	RT 01	

Bandung, March 27th 2001

Acknowledging,

Ade Ma'mur	H. A. Suryana
Chief of RW 09	Community Representative

Attachment: 3

VALIDATION PAGE

Bandung, March 27th 2001

The Development Committee of RW 09 Ranca Bayawak

Kelurahan Cisaranten Kidul, Ranca Sari Sub-district

Gede bage area, Bandung City

Agus Budiman	U. Kusnadi
Executive Chairman	Treasurer

Acknowledging

Lurah Of Cisaranten Kidul	Chief Of RW 09
Drs. Suardi	Ade Ma'mur

NIP.

Endorsing

PROPOSAL

CONSTRUCTION OF:

FLOOD DISASTER MITIGATION

RT 02, 03, 04, 05, AND 06 OF RW 14

KELURAHAN CISARANTEN KIDUL

RANCA SARI SUB-DISTRICT - BANDUNG CITY

BANDUNG, MARCH 2001

P. BACKGROUND

Bandung is the provincial capital of West Java. The population density of the city can be very high due to the city being a harbor of hope and occupation place of people from outside the city limits. This in turn will raise various problems, one of which is settlement problems.

The City and Municipality Government collectively anticipate the condition by building more residential areas, ranging from very simple houses (RSS = rumah sangat sederhana), simple houses (RS = rumah sederhana), to luxury houses. Through many developer parties, a number of settlement areas are constructed, one of which is the Riung Bandung Permai Residential Area.

The objective of developing new settlement area is to resolve the settlement problems gradually and expand the city, increasing the quality and standards of life, and distribute development equally especially to borderline areas of Bandung.

Unfortunately, in many cases of settlement area development, the one important thing that is often not much cared for is the design of drainage canals. Specifically speaking, the drainage canal of the Riung Bandung Permai area in RT 02, 03, 04, 05, and 06 of RW 14 often cause inundation of flood water in the area.

Roughly 40 % of the people living in RW 14 are retired. Flood in this area has become a routine/annual disaster caused not only directly by rain but also due to transferred flood from Ujung Berung area, the culverts having inadequate dimensions, water canals changing function, the water level of the river being higher than the ground level of the settlement area, and the narrowing and shallowing of the river.

The local people cooperating with the government, developer parties, and other related organizations, must intensively solve the problems. The first step would be identifying the characteristics of the flood and its causes.

Presently, flood mitigation is still limited to response actions during the occurences. Some of the material losses and health problems that occur are:

- Typhus and paratyphus
- Cholera, dengue fever
- Water poisoning
- Influenza, dysentery
- Loss of the opportunity to work or loss of occupation, during flood the men cannot leave for work and must stay home to clean the remnant of the flood and stay alert for upcoming floods
- The house and land value decrease, reducing interest to potential buyers
- Previous proposals made to the developer and government did not yield satisfactory results

There are two rivers/water canals in RT 05 and 06 of RW 14, the Cisaranten River and a small canal to irrigate rice crops located in kelurahan Cisaranten Kidul, Darwati and so on. There is also a vacant area for settlement building that was previously designated as a water pouch in time of flood. The small river cannot contain water during rain resulting in a ± 60 cm flood. The inundation itself can last for as long as 36 hours. The Riung Purna 7 river stream is unable to convey the water because its upstream area is lower than its downstream area. This is made worse by river narrowing construction of disorderly built houses along the riverbank.

Q. MITIGATION EFFORTS

There had been numerous and various efforts held by the people in accord with their capacity and financial ability. The recent assembly of the RW chief with the related RT chiefs, community personages and representatives had arrived at the proposal of the following minimum flood mitigation construction plans:

1. Construction of embankmet along the settlement area in RT 05 and 06, with an approximate length of 152 meters.
2. Construction of four new culverts in Riung Purna VII Street.
3. Scrape the river in Riung Purna VII Street, extending from RT 03 and 02 to the container terminal for as long as 147 meters.

R. CONSTRUCTION SPECIFICATIONS

This project will be realized simply by adjusting to the financial ability of the people in RT 02 – 06 of RW 14 with the following objectives:

1. Construction of embankment, approximately 152 m.
2. Construction of four new culverts and embankment, approximately 18 m.
3. Normalize the water canal approximately for as long as 147 meters.

S. CONSTRUCTION TARGET

In general, the causing factors of floods are high precipitation, inadequate drainage system construction, indisciplined garbage disposal, change of land function, river shallowing, and so on. Thus, it becomes necessary to construct a flood control canal that could reduce or even free inundated areas.

The construction of embankment is expected to contain and convey rainwater from the upstream and downstream locations. It is also expected to reduce water inundation in RT 02, 03, and 04 resulting from transferred flood from RW 03, 10 and 13 of Kelurahan Cisaranten Kidul. In the end, the embankement is expected to free areas of RT 03, 04, 05, and 06 from water inundation that normally occurs.

The construction of four new culverts in Riung Purna VII St. will help convey water from the settlement area. The existing culverts are no longer sufficient to fulfill the task. The culverts will convey water from the Riung Purna VII St. canal to the temporary disposal in two streams. The first stream will run through the container terminal while the second will run through the canals servicing the rice crops.

Through these efforts, the people hope that the suffering caused by water inundation can be resolved.

T. CONSTRUCTION REALIZATION

Based on the assembly on March 26th 2001, the implementation of the construction will be self-managed by establishing a construction committee for flood mitigation in RT 02, 03, 04, 05, and 06 of RW 14, Riung Bandung, Kelurahan Cisaranten Kidul. The attendance list is provided in the latter part of this document.

U. TIME AND PLACE OF THE CONSTRUCTION

The construction will take place on April 29th to May 17th 2001, at various locations in RT 02, 03, 04, 05, and 06 of RW 14 Riung Bandung, Kelurahan Cisaranten Kidul. The location map is attached in the latter part of this document.

V. PROPOSED BUDGET

(Attached)

W. AGENDA REPORT FOR CONSTRUCTION COMMITTEE ESTABLISHMENT

(Attached)

X. VALIDATION PAGE

(Attached)

Y. CLOSING REMARKS

This proposal has been formulated truthfully. We hope that the community involved in these construction activities can live better lives while promoting the spirit of Gotong Royong and togetherness through the implementation. We hope that what we aim for can be improved further in the future.

We pray that the construction will yield direct benefits and attract support from various parties, and that the implementation will be well and trouble-free.

Attachment 1a

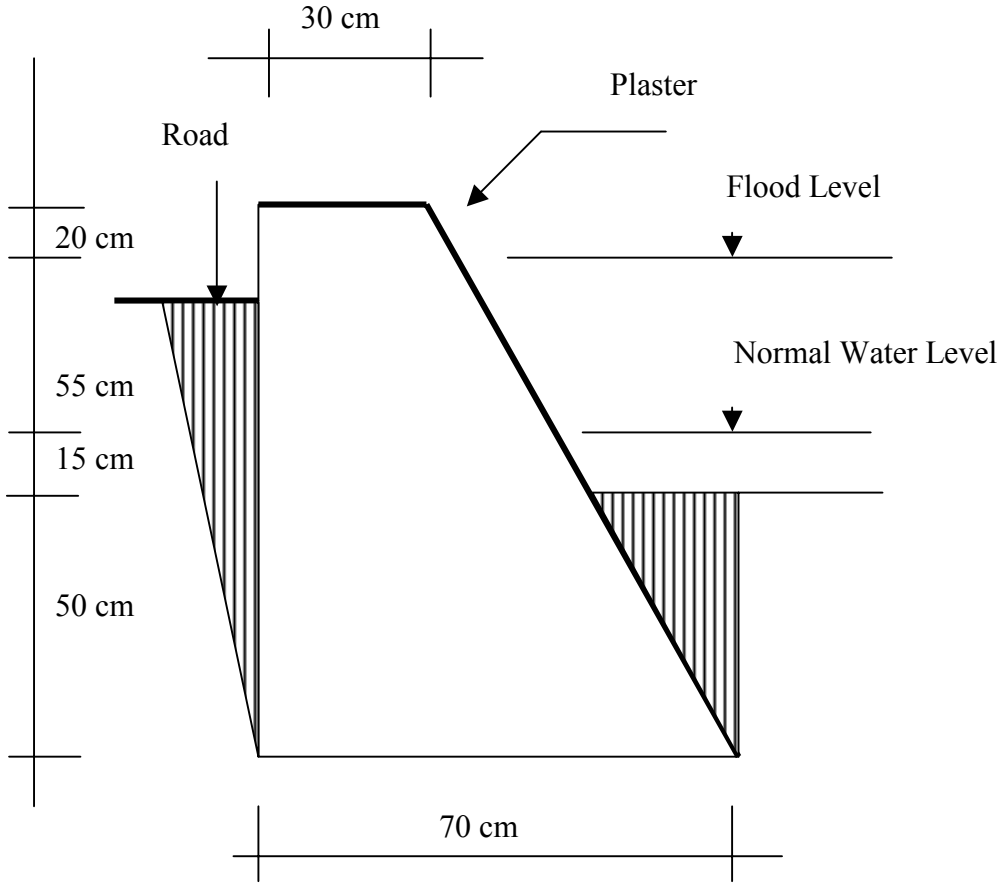
PROPOSED BUDGET FOR FLOOD MITIGATION IN RW 14

KELURAHAN CISARANTEN KIDUL – SUB-DISTRICT OF RANCA SARI

BANDUNG MUNICIPALITY – WEST JAVA

CONSTRUCTION OF EMBANKMENT FOR 152 M

MASONRY DESIGN DETAILS



Volume $= \frac{(0.3+0.7)}{2} \times 1.50 \times 152.0$

$= 114.0\ m^3$

Unit price analysis of masonry

1.	Rocks	= 1.20 x Rp. 34.000,- / m^3	= Rp. 40.800,-
2.	Sand	= 0.45 x Rp. 32.000,- /m^3	= Rp. 14.400,-
3.	Cement	= 2.70 x Rp. 24.000,- /m^3	= Rp. 64.800,-
4.	Labor fee	= Ls/m^3	= Rp. 32.000,-
	Total budget required		= Rp. 152.000,- /m^3

TABLE OF PROPOSED BUDGET FOR EMBANKMENT CONSTRUCTION

No.	Job Description	Unit	Volume	Unit price	Self supplied	Aid	Total
I	PLANNING						
1	Survey	Area	-	-	100.000		100.000
2	Measuring	Area	-	-	150.000		150.000
3	Sheets	Sheets	-	125.000	250.000		250.000
							500.000
II	IMPLEMENTATION						
1	Normalization	m^2	121.60	2.700	328.320		
2	Excavation	m^2	53.20	7.000	372.400		
3	Ground levelling	area	-	-	300.000		
4	Fitting masonry 1:5						
	- Masonry	m^3	136.80	34.000		4.651.200	
	- Sand	m^3	51.30	32.000		1.641.600	

	- Cement - Labor fee	Sacks Area	307.80 114.00	24.000 32.000	 1.459.2000 (40%)	2.387.200 2.188.800 (60%)	
				Total (in Rp.)	2.959.920	15.868.800	

Total cost of construction = Rp. 18.828.720,-

(Eighteen million, eight hundred twenty-eight thousand, seven hundred and twenty Rupiah)

Construction of embankment for culverts for 18 meters:

Volume $= \frac{(0.3+0.7)}{2} \times 1.50 = 13.5\ m^3$

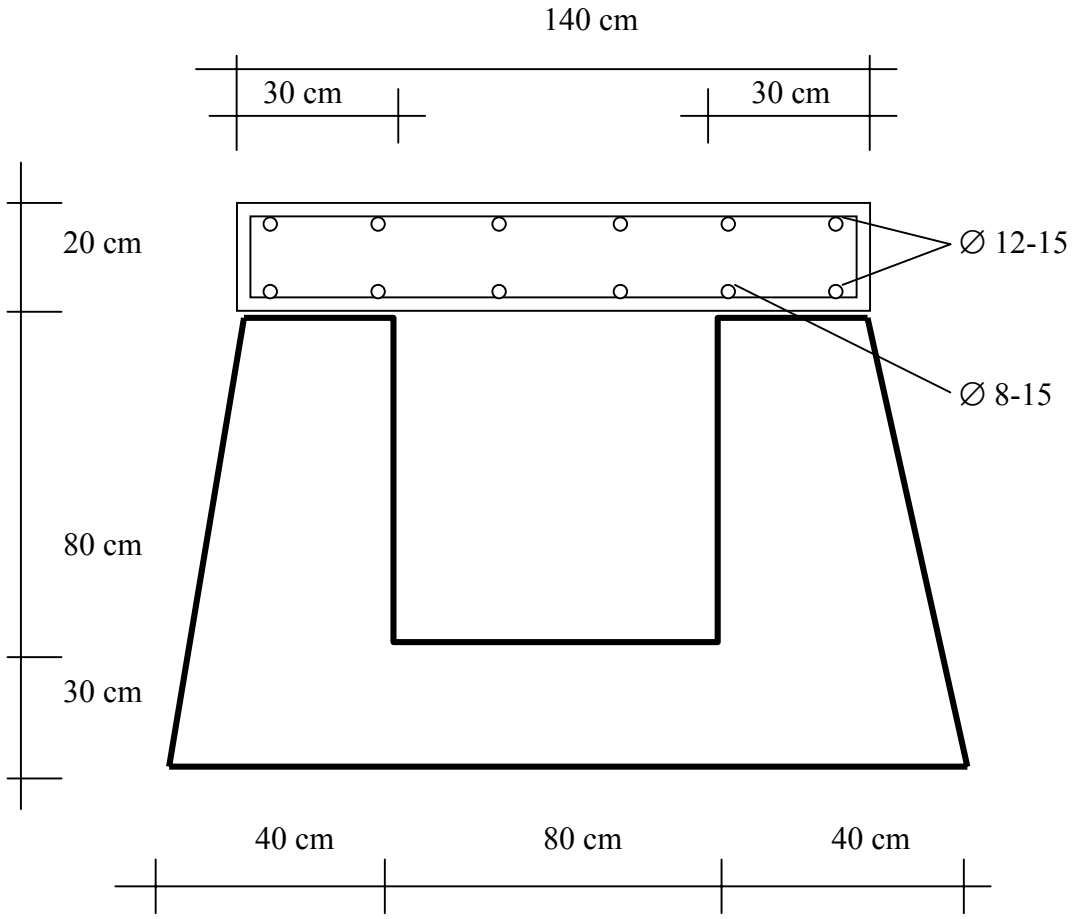
No.	Job Descriptions	Unit	Volume	Unit price	Self supplied	Aid
1	Masonry	m^3	16.20	34.000,-		550.800,-
2	Sand	m^3	6.075	32.000,-		194.400,-
3	Cement	Sacks	36.45	24.000,-		874.800,-
4	Labor fee	Area	13.50	32.000,-	432.000,-	
5	Excavation and landfill	Area	13.50	7.000,-	94.500,-	
				Total (in Rp.)	526.500,-	1.620.000,-

Total cost of construction = Rp. 2.146.500,-

(Two million, one hundred fourty-six thousand, and five hundred Rupiah)

Attachment 1b

CULVERTS



A. Excavation

1.6 x 1.3 x 4.5 = 9.36 m^3

9.36 m^3 x Rp. 8.000 = Rp. 74.880

B. Masonry

$$= \left(\frac{0{,}30 + 0{,}40}{2} \times 1{,}10 \times 4{,}50 \right) \times 2 + \left(0{,}80 \times 0{,}30 \times 4{,}50 \right)$$

= 3,465 + 1,080

= 4,545 m^3 x Rp. 152.000

= Rp. 690.844 x 4 units

= Rp. 2.763.360,-

C. Reinforced Concrete

V = (0,20 x 1,40 x 4,50) x 4 units

= 5,04 m^3 x Rp. 863,640/m^3

= Rp. 4.352.745,-

TABLE OF PROPOSED BUDGET FOR CONSTRUCTION OF CULVERTS

No.	Job Description	Unit	Volume	Unit price	Self supplied	Aid
A	Implementation					
1	Excavation	m^3	9,36	8.000	74,880	
2	Masonry					
	- Masonry	m^3	5,454	34.000		185.436
	- Sand	m^3	2,045	32.000		65.448
	- Cement	Sacks	12,270	24.000		294.516
	- Labor fee	Area		32.000	145.440	
Total cost per unit of culvert (in Rp.)					220.320	545.400
Total for 4 units of culvert (in Rp.)					881.280	2.181.600

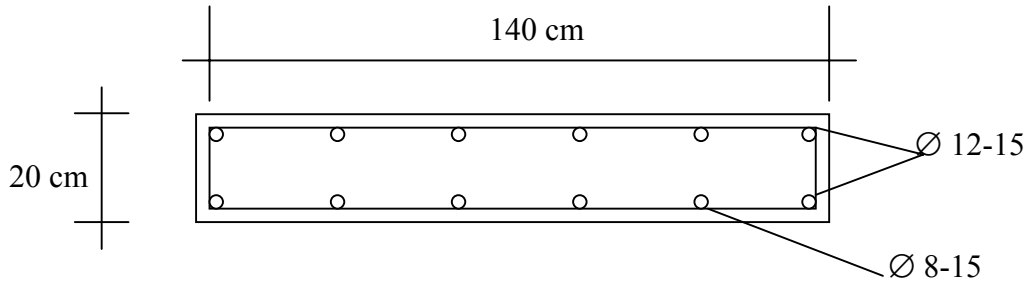
Total cost of construction for 4 units of culvert = Rp. 3.662.880,-

Three million, six hundred sixty-two thousand, and eight hundred and eighty Rupiah)

Attachment 1c

UNIT PRICE ANALYSIS

REINFORCED CONCRETE DEKKER PLATE



Volume = $\frac{1\,m^3}{0{,}2 \times 1{,}4} = 3{,}57\,m^3$

1. Steel (U-24)

∅ 12	= 6 bars x 12 m x 0,887	= 63,864 kg x Rp. 2.500	= Rp. 159.660
∅ 8	= 7,5 bars x 12 m x 0,393	= 35,37 kg x Rp. 2.500	= Rp. 88.425
Wires	= (63,894 + 35,37) kg x 0,01 x Rp. 6.500		= Rp. 6.450
		(Total)	= Rp. 254.535 (Aid)
Wages	= (63,894 + 35,37) kg x Rp. 1.250		= Rp. 124.040 (People)

2. Albasiah wood (for temporary support

Board 2/30 x 3		= 9 sheets x Rp. 4.500	= Rp. 40.500
Block 5/7 x 3		= 24 units x Rp. 4.500	= Rp. 96.000
Nails 5-7 cm		= 2 kg x Rp. 4.000	= Rp. 8.000
		(Total)	= Rp. 144.500 (Aid)
Wages	= (1,4 x 3,57) m^2 x Rp. 7.500		= Rp. 37.485 (People)

3. Concrete (K175)

Split 0,83 x rp70.000 = Rp. 58.100

Sand 0,4 x Rp. 65.000 = Rp. 26.000

Cement 6,26 x Rp. 23.000 = Rp. 143.980

(Total) = Rp. 228.140 (Aid)

Wages = per unit area = Rp. 75.000 (Self-supplied by the people)

External Aid		Self-supplied	
Steel	= Rp. 254.535	Wages	= Rp. 124.040
Wood for support	= Rp. 144.500	Wages	= Rp. 37.485
Concrete	= Rp. 228.140	Wages	= Rp. 75.000
	= Rp. 627.175 /m^3		= Rp. 236.525 /m^3

External aid

V = 5,04 m^3 x Rp. 627.275 = Rp. 3.160.962

Self-supplied by the people

Wages = 5,04 m^3 x Rp. 236.525 = Rp. 1.192.086

Total cost = Rp. 4.353.048

Attachment 3a

CHANNEL NORMALIZATION

Vol. = 1,5 x 147 m = 220,5 m^2

Analysis

- Excavation 1 m^2 x Rp. 7.500 = Rp. 7.500
- Disposal 1 m^2 x Rp. 6.000 = Rp. 6.000
- Clean up 1 m^2 x Rp. 4.500 = Rp. 4.500

= Rp. 18.000 /m^2

Total cost = Rp. 18.000 x 202,5 = Rp. 3.969.000

External aid = 60% x Rp. 3.969.000 = Rp. 2.381.400

Self-supplied = 40 % x Rp. 3.969.000 = Rp. 1.587.600

Total Budget

	Self-supplied	External aid
Construction of embankment (152 m)	Rp. 2.959.920	Rp. 15.868.800
Construction of embankment (18 m) for culverts	Rp. 526.500	Rp. 1.620.000
Construction of culverts (4 units)		
- Masonry construction cost	Rp. 881.280	Rp. 2.181.600
- Reinforced concrete cost	Rp. 1.192.086	Rp. 3.160.962
Normalization of channels	Rp. 1.587.600	Rp. 2.381.400
TOTAL	Rp. 6.626.151	Rp. 25.212.762

The total cost for flood mitigation construction in RT 02, 03, 04, 05, and 06 of RW 14 Kelurahan Cisaranten Kidul, Ranca Sari Sub-district, Bandung is:

Rp. 31.838.913, rounded to Rp. 31.839.000 (Thirty-one million, eight hundred and thirty-nine thousand Rupiah)

Attachment 2b

ORGANIZATION STRUCTURE FOR FLOOD MITIGATION CONSTRUCTION

RT 02, 03, 04, 05, AND 06 OF RW 14 RIUNG BANDUNG

KELURAHAN CISARANTEN KIDUL, RANCA SARI SUB-DISTRICT

BANDUNG

No.	NAME	POSITION	ADDRESS	SIGNATURE
1.	Suryadi	Responsible person, RW 14 Chief	RT 02	
2.	Pauzi	Project executive, RT 02 chief	RT 02	
3.	Haris	Project executive, RT 03 chief	RT 03	
4.	Atang Gozali	Project executive, RT 04 chief	RT 04	
5.	Hariyanto	Project executive, RT 05 chief	RT 05	
6.	Asep Turniadi	Project executive, RT 06 chief	RT 06	
7.	A. Badru Hidayat	Head of Technical Operational	RT 06	
8.	Jeje S. Najib	Secretary of Technical Operational	RT 05	
9.	Yetie	Treasurer	RT 02	
10.	Enung	Member	RT 02	
11.	Dian	Member	RT 03	

12.	Yana	Member	RT 03	
13	Tintin	Member	RT 04	
14.	Siti Mariam	Member	RT 05	
15.	Haji Nandang S.	Member	RT 06	
16.	Ir. Achmad Hidayat	Construction designer	RT 06	
17.	Wisnu	Construction designer	RT 05	
18.	Dadang Chaerul, St	Construction designer	RT 06	
19.	Tatang	Construction designer	RT 03	
20.	Dudi Sudirman	Designer	RT 05	
21.	Prihadiat	Designer	RT 04	

Attachment 2a

AGENDA REPORT OF COMMITTEE ESTABLISHMENT

Flood Mitigation Construction Committee Of RT 02, 03, 04, 05, And 06 Of RW 14

Riung Bandung Kelurahan Cisaranten Kidul, Ranca Sari Sub-District

Bandung

Based on the agreement made in the community assembly on:

Day/date : Monday/March 26th 2001

Place : Multi-purpose Room RT 02, RW 14

Hereby declare the following names (attached) to be the responsible person, project executives, head of technical operational, secretary of technical operational, treasurer, members, construction designer, and designer of the Flood Mitigation Construction Committee.

The Flood Mitigation Construction that will be realized by the committee covers the following:

1. Construction of embankment for 152 meters.
2. Construction of 4 units of culverts with 18 meters of embankment.
3. Channel normalization for 147 meters.

Bandung, March 26th 2001

Acknowledging:

PAUZI	HARIS	ATANG GHOZALI
CHIEF OF RT 02	CHIEF OF RT 03	CHIEF OF RT 04
HARIYANTO	ASEP TURNIADI	SURYADI
CHIEF OF RT 05	CHIEF OF RT 06	CHIEF OF RW 14

Attachment 3

VALIDATION PAGE

Flood Mitigation Construction Committee Of RT 02, 03, 04, 05, And 06 Of RW 14

Riung Bandung Kelurahan Cisaranten Kidul, Ranca Sari Sub-District

Bandung

Bandung, March 26th 2001

A. BADRU HIDAYAT	YETIE
HEAD OF TECHNICAL OPERATIONAL	TREASURER

Acknowledging:

Lurah of Cisaranten Kidul	Chief of RW 14
AFFUDIN	SURYADI