



Republic of the Philippines
Province of Cavite
City of Bacoor



5th SANGGUNIANG PANLUNGSOD

COMMITTEE ON HOUSING, LAND UTILIZATION AND URBAN DEVELOPMENT

COMMITTEE REPORT

NO. HLUUD 004-S-2022

Subject: *FROM THE OFFICE OF THE MAYOR: ENDORSING THE APPLICATION FOR ALTERATION PLAN OF F & E DE CASTRO CORPORATION FOR ITS ELISA HOMES SUBDIVISION, PHASE 4 EXTENSIONS, MOLINO IV, BACOOOR CITY. PCR No. 251-2023 dated 27 March 2023.*

This report resolves the application of F & E De Castro Corporation in relation to the alteration plan for its Elisa Homes Subdivision, Phase 4 Extensions, dated 28 March 2023. The said application was referred to the Committee by the Sangguniang Panlungsod Presiding Officer, Hon. Rowena Bautista-Mendiola, during the 36th Regular Session.

Findings:

The foregoing discussion clearly showed that the F & E De Castro Corporation was inadequate in its application for a *DEVELOPMENT PERMIT* for its *ALTERATION PLAN*. However, because the company's previous Development Permit has an old plan for alteration, they must reapply for a new Development Permit for the Phase 4 Extensions and the area according to which they are planning to construct the *WATER RETARDING BASIN*, which is located on the lowest point of the entire area of the subdivision.

RECOMMENDATION:

After a thorough review, the Committee recommends that this subject matter be **ARCHIVED** pending the rectification of the said application for an alteration plan for its Elisa Homes Subdivision.

WE HEREBY CERTIFY that the contents of the foregoing report are true and correct.

Signed this 31st day of March 2023 at the City of Bacoor, Cavite.



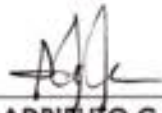
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Province of Cavite
City of Bacoor

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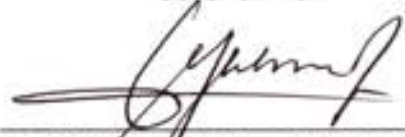
Committee on Housing, Land Utilization and Urban Development



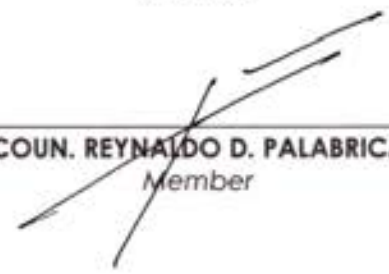
COUN. ALDE JOSELITO F. PAGULAYAN
Chairman



COUN. ADRIELITO G. GAWARAN
Vice Chairman



COUN. VICTORIO L. GUERRERO JR.
Member



COUN. REYNALDO D. PALABRICA
Member



Republic of the Philippines
Province of Cavite
City of Bacoor



5th SANGGUNIANG PANLUNGSOD

COMMITTEE ON HOUSING, LAND UTILIZATION AND URBAN DEVELOPMENT

COMMITTEE HEARING MINUTES NO. HLUUD 004-S-2023

Subject: *FROM THE OFFICE OF THE MAYOR: ENDORSING THE APPLICATION FOR ALTERATION PLAN OF F & E DE CASTRO CORPORATION FOR ITS ELISA HOMES SUBDIVISION, PHASE 4 EXTENSIONS, MOLINO IV, BACOR CITY. PCR No. 251-2023 dated 27 March 2023.*

The committee hearing was presided over by the Committee Chairman on Housing, Land Utilization and Urban Development, Hon. Councilor Alde Joselito F. Pagulayan. In attendance were City Councilors, F & E De Castro Corporation representatives, the Office of the City Assessor represented by Elmina C. Dela Cruz, the Office of the Building Official represented by Engr. Felicito R. Mejia, the Office of the City Legal Services representatives headed by Marius D. Sumira, the City Planning and Development Coordination Office represented by Rhowena D. Alcantara and the Office of the City Administrator represented by Atty. Jessie Salvador. Coun. Pagulayan called the roll and asked the representatives of F & E De Castro Corporation to clarify to the committee the plan of their company regarding the specific location of the alteration of the Elisa Homes Subdivision.

Mr. Renato T. Sayao Jr. of F & E De Castro Corporation explained that they had obtained the permit for alteration in Phase 4 of the said subdivision under the category of townhouses. It was seconded by Ms. Rosemarie Sotaridona, who is also a representative of F & E De Castro Corporation and she added that previously they obtained a Development Permit for the entire area of Elisa Homes Subdivision. The F & E De Castro Corporation requested assistance from the City Government of Bacoor with the sanction of its Alteration Plan application for **Phase 4 Extension**. According to F & E De Castro Corporation representatives, the Zoning and Land Development Department of the City Government of Bacoor mandated them to construct a **WATER RETARDING BASIN and SEWAGE TREATMENT PLANT**, and the company is willing to oblige. However, since the location of the said extension is on the highest point of the entire area of Elisa Homes Subdivision, they proposed to construct a water retarding basin at the lowest point of the development area.

Atty. Salvador clarified that relocating the water retarding basin to the lowest point of the area of the said subdivision, for a reason, will require another alteration plan and that the applicant needs to reapply for a new development permit. It was seconded by Coun. Pagulayan, Atty. Sumira and Ms. Alcantara.

Without any comments and suggestions, Hon. Councilor Adrielito G. Gawaran moved for the **ADJOURNMENT** of the committee hearing.



Republic of the Philippines
Province of Cavite
City of Bacoor

5th SANGGUNIANG PANLUNGSOD

Prepared By:


PETER ADRIAN F. BORJA
Local Legislative Staff I

Attested By:


COUN. ALDE JOSELITO F. PAGULAYAN
*Chairman
Committee on Housing, Land Utilization
And Urban Development*



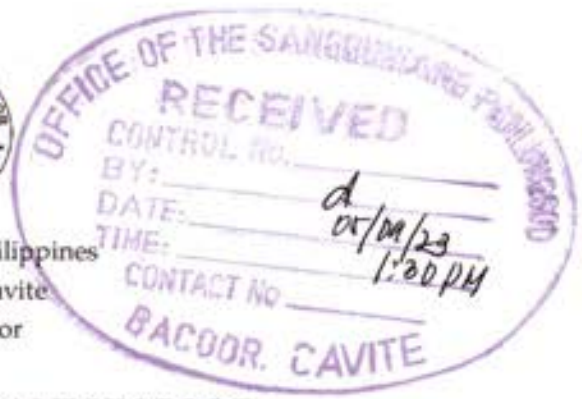
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5th SANGGUNIANG PANLUNGSOD

**COMMITTEE ON HOUSING, LAND UTILIZATION
AND URBAN DEVELOPMENT**

ATTENDANCE OF THE HEARING

28 March 2023 / 10:00 A.M.

Sangguniang Panlungsod Session Hall, 2nd Floor, Bacoor Government Center

Subject: *FROM THE OFFICE OF THE MAYOR: ENDORSING THE APPLICATION FOR ALTERATION PLAN OF F & E DE CASTRO CORPORATION FOR ITS ELISA HOMES SUBDIVISION, PHASE 4 EXTENSIONS, MOLINO IV, BACoor CITY. PCR No. 251-2023 dated 20 March 2023.*

SIGNATURE/ NAME	POSITION/AFFILIATION OFFICE/ADDRESS	CONTACT NUMBER/EMAIL
 HON. ALDE JOSELITO F. PAGULAYAN	CITY COUNCILOR SANGGUNIANG PANLUNGSOD	
 HON. ADRIELITO G. GAWARAN	CITY COUNCILOR SANGGUNIANG PANLUNGSOD	0919 0044502
 HON. VICTORIO L. GUERRERO, JR.	CITY COUNCILOR SANGGUNIANG PANLUNGSOD	
 HON. SIMPLICIO G. DOMINGUEZ	CITY COUNCILOR SANGGUNIANG PANLUNGSOD	
— Renato T. Jayago Jr.	F&E DECASTRO	09564194522
— Rosemarie Sotardona	F&E De Castro Corp	09328582953



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City of Bacoor

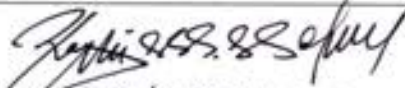


5th SANGGUNIANG PANLUNGSOD

SIGNATURE/ NAME	POSITION/AFFILIATION OFFICE/ADDRESS	CONTACT NUMBER/EMAIL
MYRA METROPIA RAMOS	FSE DE CASTRO	09232131445
GLENFORD S. DAYO	"	09988566568
EMIL Q. PUERTO	"	09189089710
FEUCTO P. MATA	BUDG. OFFICER / OBO	09285007853
ELMINE C. DELA CRUZ	LOCAL ASSESSMENT OPERATIONS OFFICER CITY ASSESSOR'S OFFICE	09606356587 elmine.dela.cruz@gmail.com
RHOWENA D. ALCANTARA	PLANNING OFFICER - CPOC	09391-9346410
R-MAN DE VERA	FSE DE CASTRO	09558030824
MARIUS D. SUMIRA	OCLS	09176385741
JESILY DARLA G. GUTIERREZ	OCLS	09504545857
JESSIE A. SALVADOR	City Admin's Office	09989890868
Jerome L. Velazquez	Zoning	0925-8899378



Republic of the Philippines
Province of Cavite
City of Bacoor

5th SANGGUNIANG PANLUNGSOD

SIGNATURE/ NAME	POSITION/AFFILIATION OFFICE/ADDRESS	CONTACT NUMBER/EMAIL
 HON. ROGELIO "BOY" M. NOLASCO	SP	
 HON. LEVY TELA	SP	
 PETER ADRIAN F. BORJA	Leg Staff SP	peteradrianborja@gmail.com



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Province of Cavite
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5th SANGGUNIANG PANLUNGSOD





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5th SANGGUNIANG PANLUNGSOD

**COMMITTEE ON HOUSING, LAND UTILIZATION
 AND URBAN DEVELOPMENT**

**NOTICE OF COMMITTEE HEARING
 (PROOF OF RECEIPT)**

28 March 2023 / 10:00 A.M.

Sangguniang Panlungsod Session Hall, 2nd Floor, Bacoor Government Center

Subject: *FROM THE OFFICE OF THE MAYOR: ENDORSING THE APPLICATION FOR ALTERATION PLAN OF F & E DE CASTRO CORPORATION FOR ITS ELISA HOMES SUBDIVISION, PHASE 4 EXTENSIONS, MOLINO IV, BACoor CITY. PCR No. 251-2023 dated 20 March 2023.*

RECEIVED BY: NAME/SIGNATURE	POSITION/AFFILIATION OFFICE/ADDRESS	DATE/TIME CONTACT NUMBER
TRIXIE DOMINQUEZ		3-24-23
 JENIFER N. LEGASPI	SANGGUNIANG PANLUNGSOD OFFICE OF GEN. TORO GUERRERO	3-24-2023
J. Francisco	CPDC	3/24/2023 11:50AM
Librada ^{Equipeado} Equipeado	OCLS	3/24/23
 IVY MARIE A. AQUILON	Zoning	03/24/23
 LANNY NOLASCO	CITY ASSESSORS OFFICE	3/24/2023



Republic of the Philippines
Province of Cavite
City of Bacoor

5th SANGGUNIANG PANLUNGSOD

RECEIVED BY: NAME/SIGNATURE	POSITION/AFFILIATION OFFICE/ADDRESS	DATE/TIME CONTACT NUMBER
<i>MHA</i> PASCUAL	SP	<i>pas</i> 3-24-23
<i>vatalon</i> ALVIN A. TORTONA	OBO	3/24/23 4:45 PM
<i>fyb de castro corporation</i>		<i>thru email &</i> <i>phone calls</i>



Republic of the Philippines
Province of Cavite

CITY OF BACOR

Office of the Mayor

March 13, 2023

HON. CATHERINE S. EVARISTO

Acting City Vice Mayor of Bacoor
Bacoor Government Center
Bacoor, Cavite



Thru: Atty. Khalid A. Atega, Jr.
Sangguniang Panlungsod Secretary

Subject: Endorsement of Application for Alteration Plan from
F&E De Castro Corporation

Dear Hon. Evaristo:

The Office of the City Mayor received a letter, dated March 8, 2023, from F&E De Castro Corporation requesting for assistance in the approval of its Alteration Plan application on Elisa Homes Subdivision, Phase 4 Extension. In the said letter, the said alteration would entail the said company to comply with the construction of the water retarding basin as part of its commitment to the Local Government of Bacoor and also establish a water sewage facility to treat water wastes from each household. In this regard, I respectfully request the esteemed members of the Sangguniang Panlungsod to perform the necessary actions relative to this matter.

Attached herewith is the aforementioned letter, including its attachments, from Frederic A. de Castro, for your immediate reference.

Sincerely yours,

HON. ROWENA BAUTISTA MENDIOLA
Acting City Mayor

Office of the Mayor **Strike**
Strike B. Revilla




SBR20231183

STRIKE
AS

Address: Bacoor Government Center, Bacoor Blvd., Brgy. Baysan, City of Bacoor, Cavite
Telephone: 434-1111 Website: www.bacoor.gov.ph



SCAN ME



F&E De Castro Corporation

314 REAL ST., TALON DOS, LAS PIÑAS CITY, METRO MANILA
Tel No (02) 8874-8193 Email feccdecastro@yahoo.com.ph

08 March 2023

Hon. Strike B. Revilla
Mayor
City of Bacoor, Cavite

RE: Elisa Homes Subdivision, Phase 4 Extension- Alteration Plan

Dear Mayor Revilla,

Good day! We are writing to your good office to request assistance in the approval of our application for our Alteration Plan in the referred subdivision.

We understand that this would entail us to comply with the construction of the water retarding basin as part of our commitment to the LGU. With this, we also plan to establish a water sewage facility to treat the water wastes from each household so we may recycle and reuse these water. This treated water may be then used as water supply for Fire Hydrants, landscaping requirements and other establishments such as fountains in parks for beautification projects. Establishing such a facility is one of our family's endeavor to give back to the community and help uplift the environmental cause.

However, we would request to undertake the construction of the water treatment project given the approval of the Alteration of Plan. If granted the development of our remaining lots and also to develop the project for mixed use, we foresee that sufficient funds would cover the costly construction of the water treatment facility. Attached herewith is our proposal for the construction of the water retarding basin and water treatment facility as for your perusal.

With this important project for our community, we respectfully request your assistance in the approval of our Alteration Plan application. As a beacon in our town of Bacoor, we hope you see the importance of this project and how it may greatly benefit the residents of our town.

We thank you for your kind consideration and should there be a need to discuss further, please let us know at your most convenient schedule.

Respectfully yours,



FREDERIC A. DE CASTRO
President
F & E De Castro Corporation

TABLE
OF
CONTENTS

COMPANY PROFILE

OBJECTIVES

DENR STANDARDS

DATA INFO

POPULATION/WASTE WATER EAT

GENERAL FLOW DIAGRAM

ITERATION 1

ITERATION 2

GANTT CHART

TO : F & E DE CASTRO CORPORATION
MOLINO IV BACCOOR, CAVITE 4102

FROM : GSD SYSTEMS WATER-HEALTH ENTERPRISES
BLOCK 16, LOT 16, JOSHUA ST., BAY GARDEN HOMES
STO. DOMINGO, BAY, LAGUNA 4033

**DESIGN, *BUILD-OPERATE/ SUPPLY
MATERIALS FOR THE WASTE WATER
TREATMENT FACILITY**



GSD Systems

Global Sanitation Design

*Your Environmental Sanitation
Specialists...*



GSD Systems Water-Health Enterprises

COMPANY PROFILE

GSD Systems Water-Health Enterprises is a distributor and service-provider of various high-quality products and services for water resources, Sanitation Services, pest control, animal health and related fields. We bring to the market numerous commodities and services that provide human needs for safe food and drinking water as well as pest-free environment conducive for business operations.

The products/merchandise that we offer improve performances, may it be in the field of **Water Resources**; water production, disinfection, distribution, waste water treatment and management, in the field of **Sanitation, Pest Control and Animal Health**.

Having a capable and experienced engineering and technical staff, our company can precisely and correctly determine and then provide the clients "true" needs, which shall make their businesses achieve and sustain success.

Reliability, Customer Focus, Passion and Sincere Service, highlight the principles that guide our company.

VISION

GSD Systems Water-Health Enterprises envisions itself to be the preferred product/service provider in the fields of Water Resources, Sanitation, Pest Control, Animal Health and related fields, thru our continuous offering of high quality products and excellent services in a global perspective.

MISSION

Our primary purpose is to provide science-based and cost-effective solutions responsive to our customer's "true" needs through ethical systems that will help ensure sustainable success of businesses, keeping in heart and mind the safety of all people and its environment.



MAJOR SERVICES

DRINKING WATER DISINFECTION SYSTEM (DEEP WELL)



WASTE WATER TREATMENT (DESIGN, BUILD, MANAGEMENT SYSTEM

DISINFECTION & SANITATION SERVICES



CLEANING SERVICE



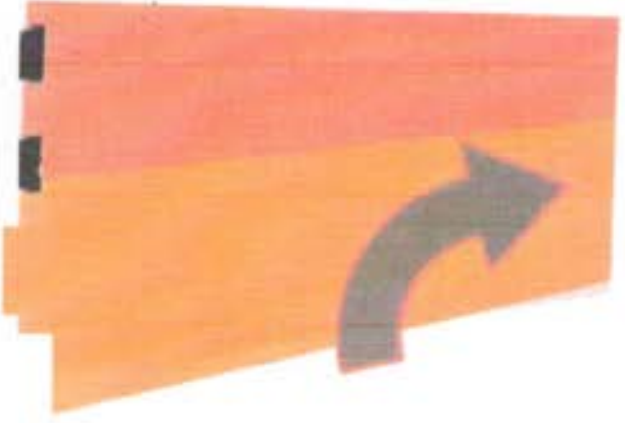
WASTE WATER TREATMENT AND RECYCLING DESIGNS



PEST CONTROL SERVICES



Banana Waste Water Treatment System FLOW





GSD Systems

WASTE WATER TREATMENT AND RECYCLING DESIGNS

STP PROPOSAL



PROCESS

1. COLLECTION
2. GROSS SCREENING
3. FINE SCREENING
4. AERATION
5. SECONDARY CLARIFICATION
6. SLUDGE THICKENING
7. SLUDGE DEWATERING
8. RECYCLED WATER STORAGE
9. EFFLUENT DISCHARGE



MAJOR PRODUCTS



G-Oxide Sanitizing
Tablets



G-Oxide Sanitizing Gel



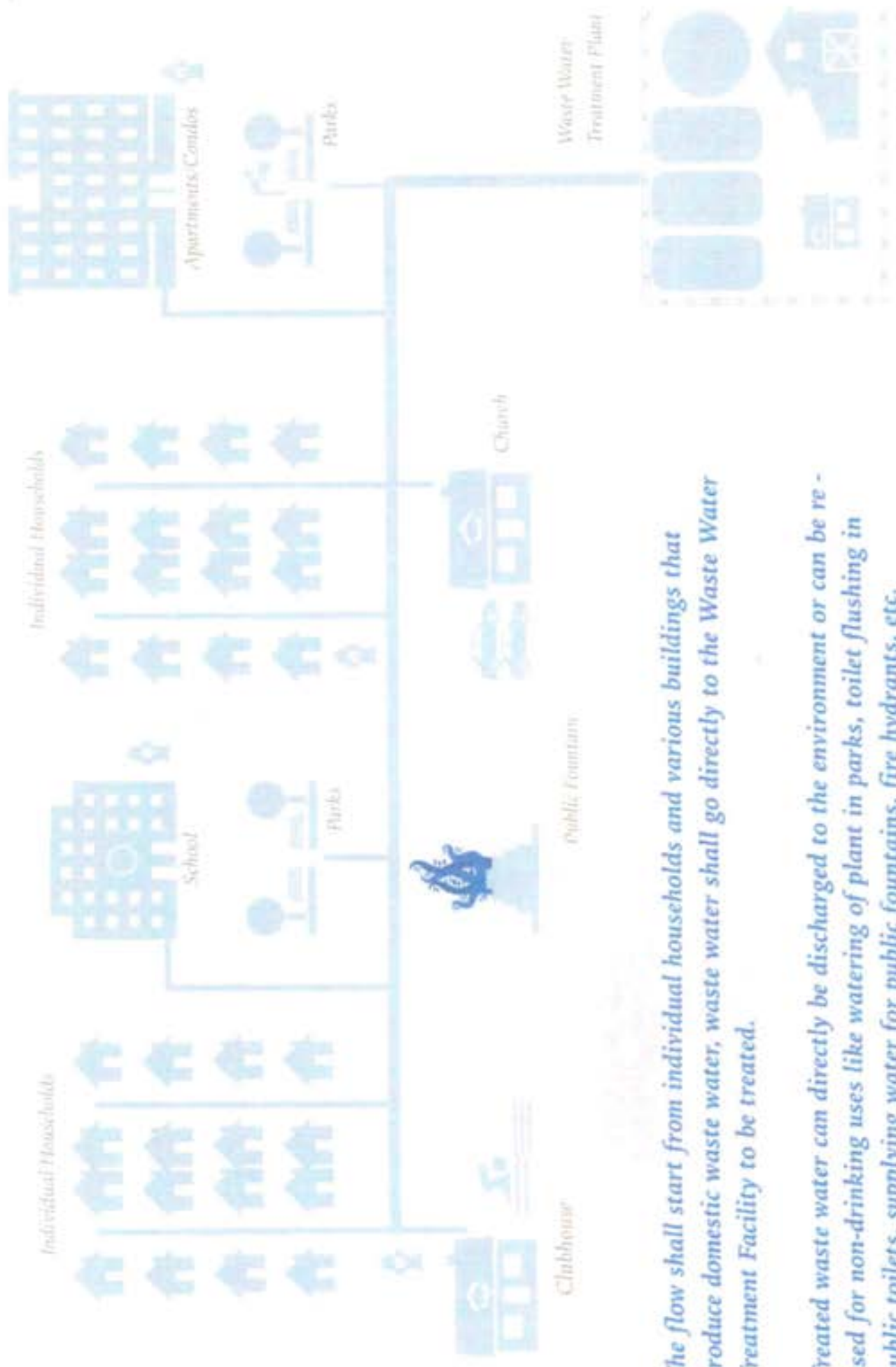
G-Oxide Liquid

Other Products:

Chemicals: Coagulants, Flocculants, pH Adjusters, Etc.

Equipment: Pumps, Test Kits, Pipes & Appurtenances, Etc.

DOMESTIC WASTE WATER TREATMENT FLOW



The flow shall start from individual households and various buildings that produce domestic waste water, waste water shall go directly to the Waste Water Treatment Facility to be treated.

Treated waste water can directly be discharged to the environment or can be re-used for non-drinking uses like watering of plant in parks, toilet flushing in public toilets, supplying water for public fountains, fire hydrants, etc.

F & E De Castro Waste Water Treatment Facility Design & Build

Objective: To design and install a Waste Water Facility for the client to complying to the parameters set in the Effluent Standards in Administrative Order 2016 (DAO 2016)

- RE-USE the treated waste water for toilet flushing, watering plants
- Create savings thru lesser water purchase from water providers

Proposal:

- Provide Design, supply various equipment for WWTP stages;
- Grit/Bar Screen, FOG Chamber,
- Clarifying Chamber;
- Equalization Chamber (Diffusers/Blowers, Pumps);
- Aeration Chamber (Diffusers/Blowers, Pumps);
- a chemical treatment chamber/tank,
- 2nd Clarifying Chamber,
- additional G-Oxide Chlorine Dioxide Disinfection System,
- Lagoon: Water Retarding Basin



Republic of the Philippines
Department of Environment and Natural Resources
Visayas Avenue, Diliman, Quezon City
Tel Nos. 929-6626 to 29, 929-6633 to 35
928-7041 to 43; 929-6252; 929-1689
Website: <http://www.denr.gov.ph> / E-mail: web@denrgov.ph

DENR Administrative Order
No. 2016 - 08

MAY 24 2016

SUBJECT: Water Quality Guidelines and General Effluent Standards of 2016

Table 8 Significant Effluent Quality Parameters Per Sector

PSIC Code	Industry Category	Significant Parameters
I. Accommodation and Food Services		
55	Hotels, motels, resorts, dormitories and other accommodation services	BOD, Fecal Coliform, Ammonia, Nitrate, Phosphate, Oil and Grease, Surfactants
56	Restaurants, food chains, bars and other food/beverage services	BOD, Total Suspended Solids, Oil and Grease, Surfactants
L. Real Estate Activities		
681	Real estate activities with own or leased property	BOD, Fecal Coliform, Ammonia, Nitrate, Phosphate, Oil and Grease, Surfactants

Table 9. Effluent Standards⁶⁰

Parameter	Unit	Water Body Classification									
		AA	A	B	C	D	SA	SB	SC	SD	
Ammonia as NH ₃ -N	mg/L	NDA	0.5	0.5	0.5	7.5	NDA	0.5	0.5	7.5	
BOD	mg/L	NDA	20	30	50	120	NDA	30	100	150	
Boron	mg/L	NDA	2	2	3	12	NDA	2	20	80	
Chloride	mg/L	NDA	350	350	450	500	NDA	n/a	n/a	n/a	
COD	mg/L	NDA	60	60	100	200	NDA	60	200	300	
Color	TCU	NDA	100	100	150	300	NDA	100	150	300	
Cyanide as Free Cyanide	mg/L	NDA	0.14	0.14	0.2	0.4	NDA	0.04	0.2	0.4	
Fluoride	mg/L	NDA	2	2	2	4	NDA	3	3	6	
Nitrate as NO ₃ -N	mg/L	NDA	14	14	14	30	NDA	20	20	30	
pH (Range)		NDA	6.0-9.0	6.0-9.0	6.0-9.5	5.5-9.5	NDA	6.5-9.0	6.0-9.0	5.5-9.5	
Phosphate	mg/L	NDA	1	1	1	10	NDA	1	1	10	
Selenium	mg/L	NDA	0.02	0.02	0.04	0.08	NDA	0.02	0.2	0.4	
Sulfate	mg/L	NDA	500	500	550	1,000	NDA	500	550	1,000	
Surfactants (MBAS)	mg/L	NDA	2	3	15	30	NDA	1	15	30	
Temperature ⁶¹	°C change	NDA	3	3	3	3	NDA	3	3	3	
Total Suspended Solids	mg/L	NDA	70	85	100	150	NDA	70	100	150	

★ ★ ★ ★ ★ ★ ★ ★

Fecal Coliform	MPN/100mL	NDA	4	200	400	800	NDA	200	400	800
Total Coliform	MPN/100mL	NDA	3,000	3,000	10,000	15,000	NDA	3,000	10,000	15,000

★

DATA / INFORMATION - LOCATION



► Bacoor, Cavite

Stay Sanitized, Stay Safe!

ESTIMATING DESIGN FLOW AND ORGANIC LOADING

EXISTING HOUSEHOLD	600	5	3,000
FOR DEV'T (206,000/100)	2,060	5	10,300
EST POPULATION			13,300

WORKERS			0
RESTAURANTS			0
TOTAL DAILY ORGANIC LOADING			0

Table 2.4 Wastewater generation by activity (adapted from Crites & Tchobanoglous, 1998)

Activity	User	Hours (users/peak)	Typical (liters/day)
Airport	Passenger	8-15	11
Apartment houses	Persons	150-300	100
Auto service center	Vehicle washed	30-57	45
Bar	Customer	4-18	11
Boarding house	Persons	95-230	160
Department store	Totals	1500-2300	1900
Hospital/medical	Bed	470-810	630
Hospital/medical	Employee	19-57	38
Hotel	Guest	150-230	160
Industrial building (sanitary waste only)	Employee	26-61	49
Laboratory	Personnel	1000-2000	3100
Office	Employee	20-61	49
Public works	Used	11-23	10
Restaurant (per seat)	Multi server	8-13	11
School	Student	28-76	57

Source: Crites and Tchobanoglous, 1998

TANK DIMENSION ESTIMATES

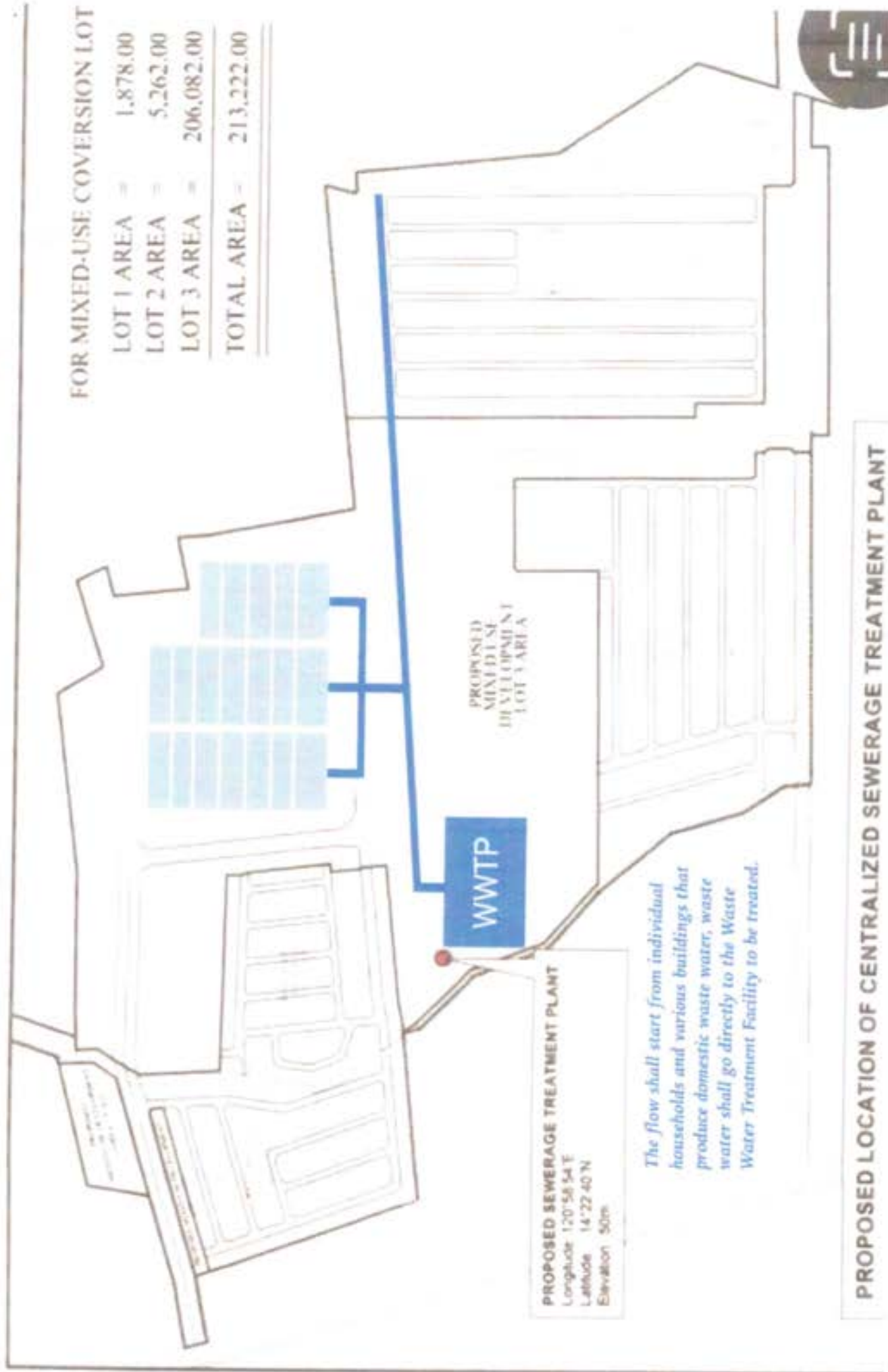
SEWAGE ESTIMATION	ESTIMATED POPULATION X LPCD X 75-80% x PF	EST POPN 10,000.00	LPCD 150.00	LCPD % 0.85	Liters
LITER PER CAPITA DEMAND (LPCD)	WATER CONSUMPTION OF A PERSON PER DAY	PF 3.00			
PEAK ACTOR (PF)	RATIO OF MAXIMUM TO AVERAGE FLOWS DEPENDENT ON CONTRIBUTORY POPULATION	SEWAGE ESTIMATE			
	40 lit 20,000 x 3.0	3,442,500.00	3,442.50	3.44	L/Day
	26,000 50,000 x 2.5	143,437.50	MLD	L/hour	m ³ /day
	70,000 750,000 x 2.25	143.44	m ³ /hour		
	750,000 LPF x 2.0				

TANK DIMENSION ESTIMATES

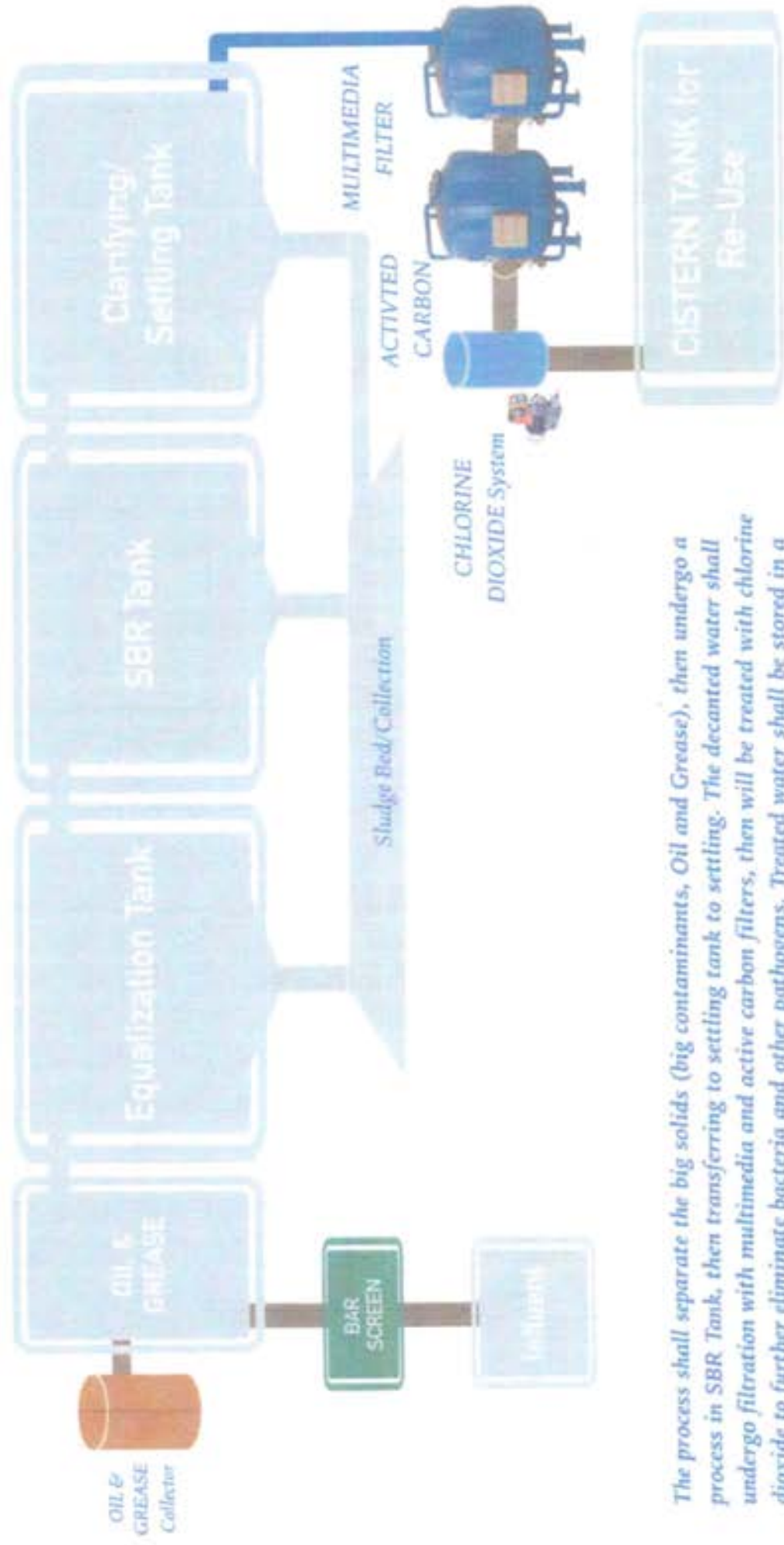
RECTANGULAR LIFT TANK		Q	3,442.50	m ³
VOLUME OF TANK = FLOW x Detention Period/24		t	1.00	hours
Total Flow = Q		Volume of Tank	143.44	m ³
Det'n Time = t divided by 24 for days	Assumption: L to W Ratio 1:3 : L=3W Area = LxW =3W x W W=sqrt(SAT/3)	Depth Assumption	2.50	meters
Surface Area of Tank = Volume / Depth		Surface Area of Tank	57.38	m ²
Area = L x W L to W Ratio is 1:3 L=3W		Area (L xW) or (3W xW)	57.38	m ²
Width = sqrt of (Surface Area of Tank/3)		Width (W)	4.37	meters
MLD to m ³ multiply by 1,000		Length (L or 3W)	13.12	meters

RECTANGULAR SEDIMENTATION / AERATION TANK		Q	3,442.50	m ³
VOLUME OF TANK = FLOW x Detention Period/24		t	2.50	hours
Total Flow = Q		Volume of Tank	558.59	m ³
Det'n Time = t divided by 24 for days	Assumption: L to W Ratio 1:3 L=3W Area = LxW =3W x W W=sqrt(SAT/3)	Depth Assumption	2.50	meters
Surface Area of Tank = Volume / Depth		Surface Area of Tank	143.44	m ²
Area = L x W L to W Ratio is 1:3 L=3W		Area (L xW) or (3W xW)	143.44	m ²
Width = sqrt of (Surface Area of Tank/3)		Width (W)	6.91	meters

CENTRALIZED WASTE WATER COLLECTION AND TREATMENT

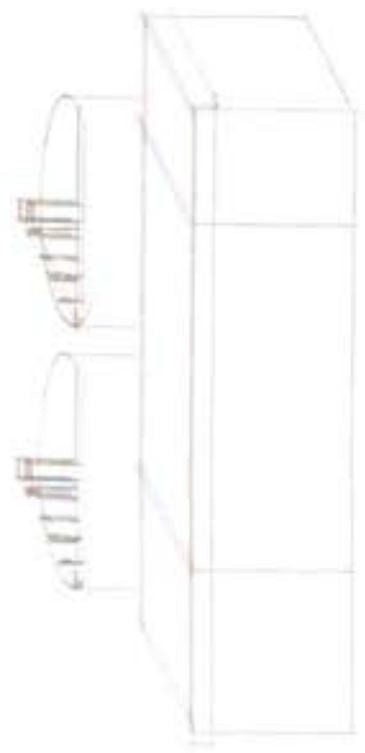


CONVENTIONAL WASTE WATER TREATMENT



The process shall separate the big solids (big contaminants, Oil and Grease), then undergo a process in SBR Tank, then transferring to settling tank to settling. The decanted water shall undergo filtration with multimedia and active carbon filters, then will be treated with chlorine dioxide to further eliminate bacteria and other pathogens. Treated water shall be stored in a tank, ready to be RE-USED.

DESIGN PROPOSAL ITERATION 1



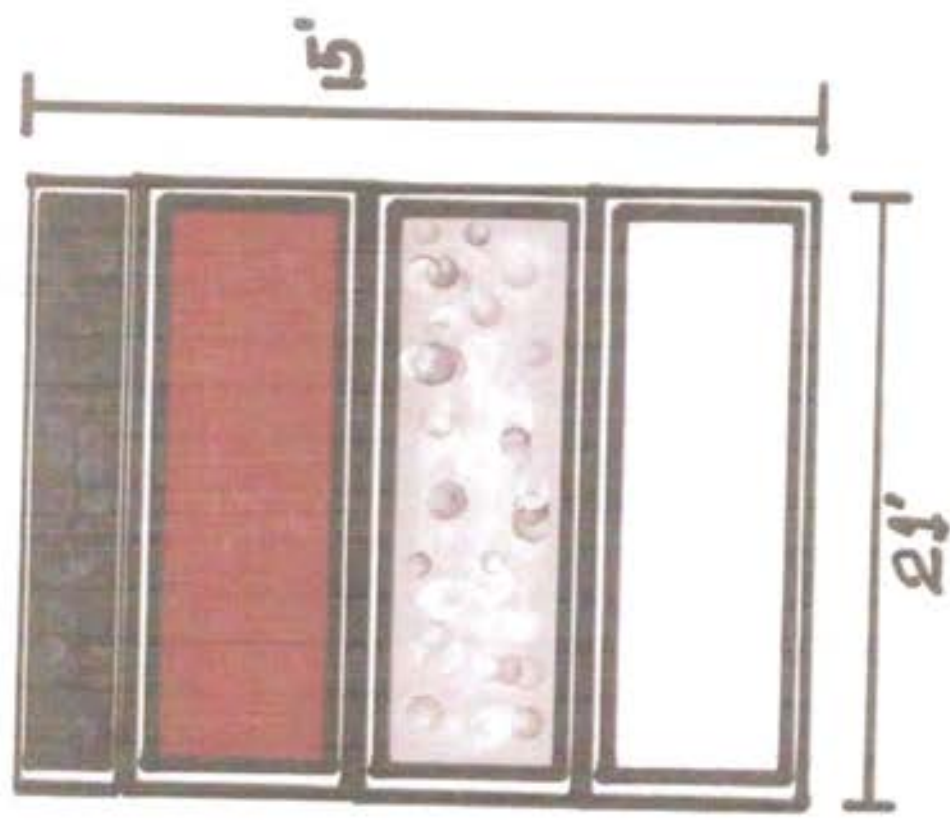
DESIGN PROPOSAL ITERATION 2

COLLECTION/LIFT CHAMBER

CLARIFYING CHAMBER

AERATION CHAMBER

2ND CLARIFYING CHAMBER



DESIGN PROPOSAL ITERATION 2

COLLECTION/LIFT CHAMBER

CLARIFYING CHAMBER

AERATION CHAMBER

2ND CLARIFYING CHAMBER

LAGOON/ WATER
RETARDING BASIN

PUTTING AREA

