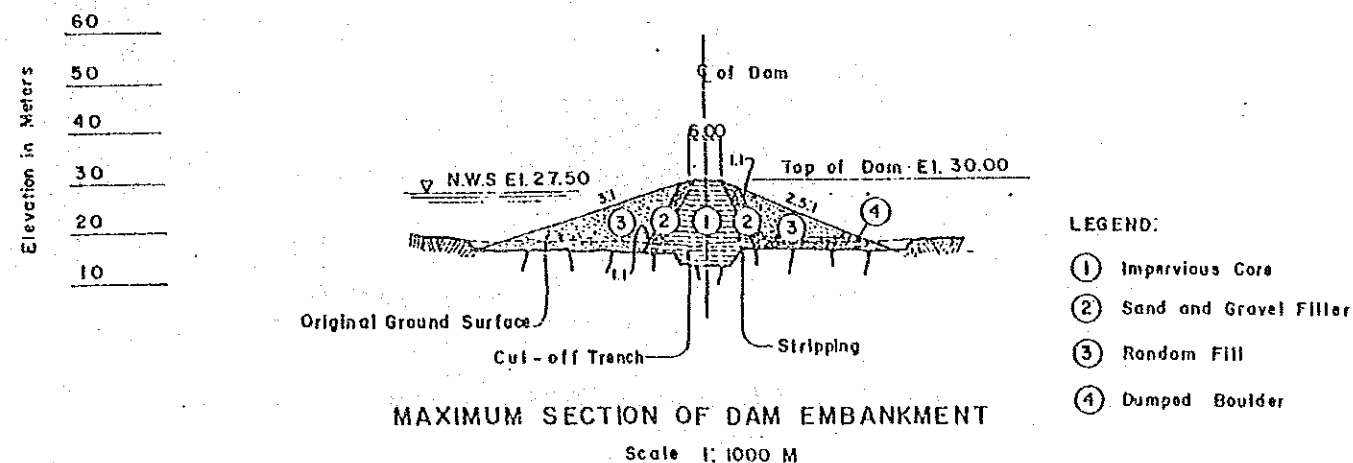


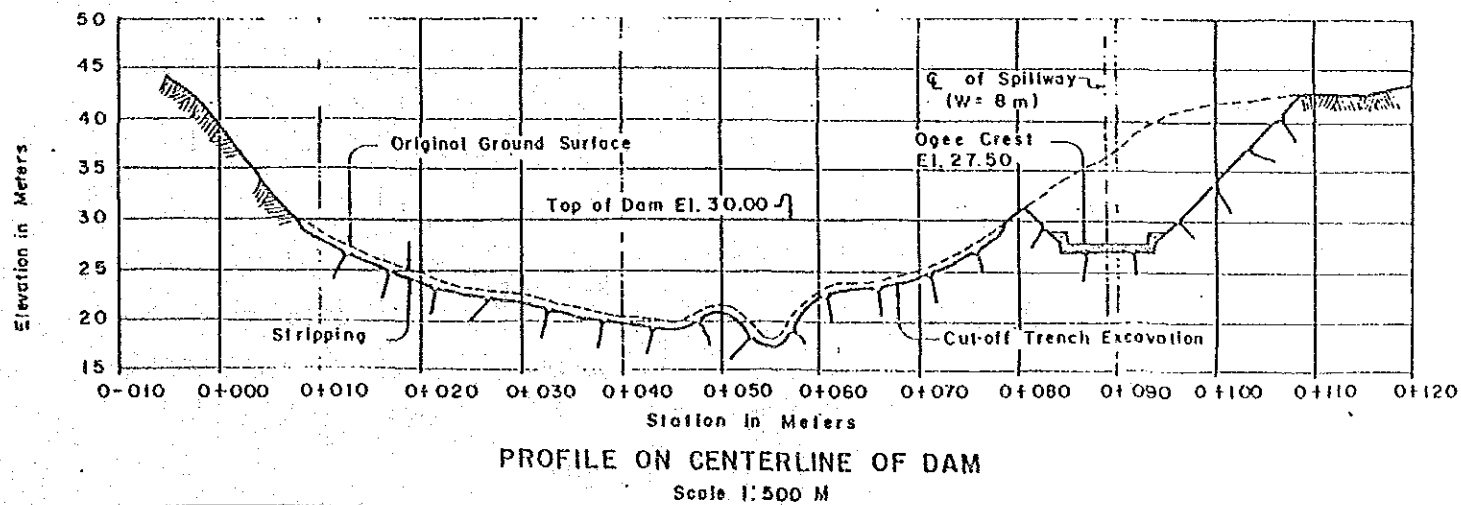
SWIM PROJECT PROFILE		File No. : 61
Regist. No. : Agency No. : NIA-107	Name: BORACAN SWIMP	
Region: 5	Province: MABATE	Municipality: USON
Present Status: ① Pre-F/S(1989) 2. F/S( ) 3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 12 m
	: Effective Storage Capacity	: 392,000 m <sup>3</sup>
	: Embankment Volume	: 28,000 m <sup>3</sup>
	: Design Flood Discharge	: 70 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 80 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 120 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 27 ton/year
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 19.8 %
2. Feasibility Study	: 197	Priority Rating:
3. Detailed Design	: 393	Group : B
4. Construction	:	Implementation Schedule:
Dam	: 5,766	Review : -
Irrigation	: 1,936	F/S : 1995
Mini-Hydropower	: 0	D/D : 1995
Water Supply	: 0	Construction: Jul. 1996; 9 months
Watershed Protection	: 3,220	
5. Grand Total	: 11,512	

Layout:

Typical Dam Section:



Profile of Dam Axis:



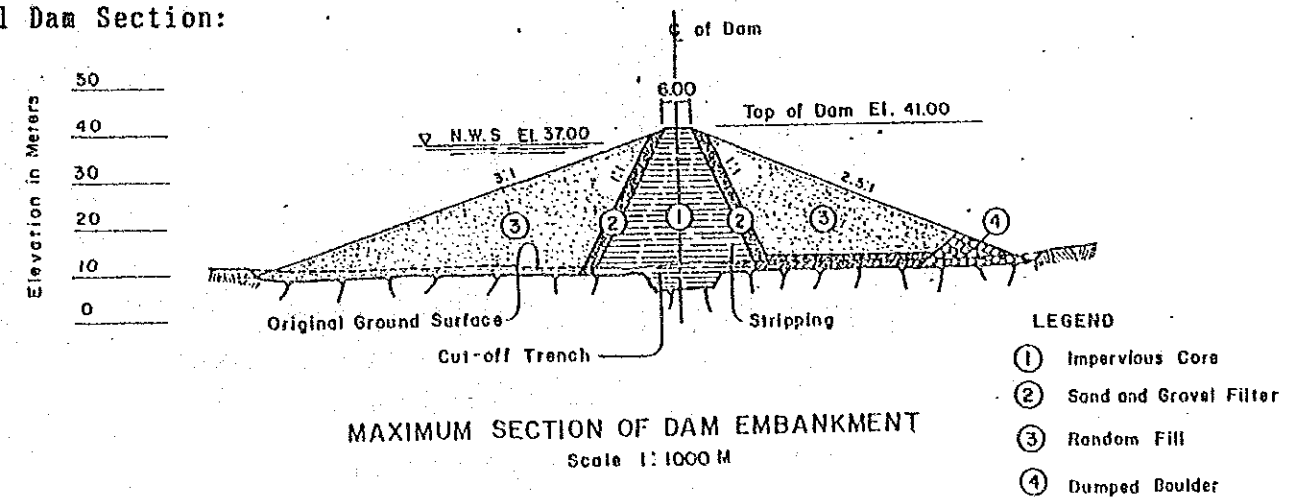
Note:

Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage.

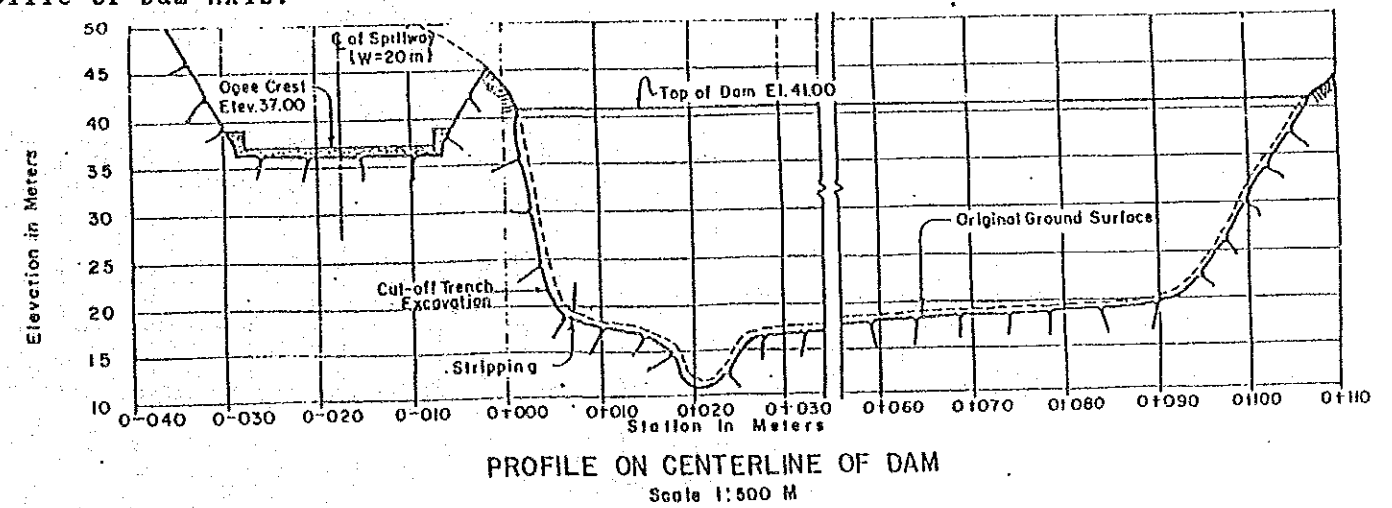
SWIM PROJECT PROFILE		File No. : 62
Regist. No. : Agency No. : NIA-108	Name : PINANGAKOGAN SWIMP	
Region : 5	Province : MASBATE	Municipality : USON
Present Status: ① Pre-F/S(1989)    2. F/S( )    3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC		
Project Feature:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 30 m
	: Effective Storage Capacity	: 14,066,000 m <sup>3</sup>
	: Embankment Volume	: 143,000 m <sup>3</sup>
	: Design Flood Discharge	: 185 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 250 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 0 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 317 ton/year
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 25.2 %
2. Feasibility Study	: 764	Priority Rating:
3. Detailed Design	: 1,520	Group : A
4. Construction	:	Implementation Schedule:
Dam	: 26,309	Review : -
Irrigation	: 6,051	F/S : 1993
Mini-Hydropower	: 0	D/D : 1993
Water Supply	: 0	Construction: Jul. 1994; 15 months
Watershed Protection	: 0	
5. Grand Total	: 34,653	

Layout:

Typical Dam Section:



Profile of Dam Axis:

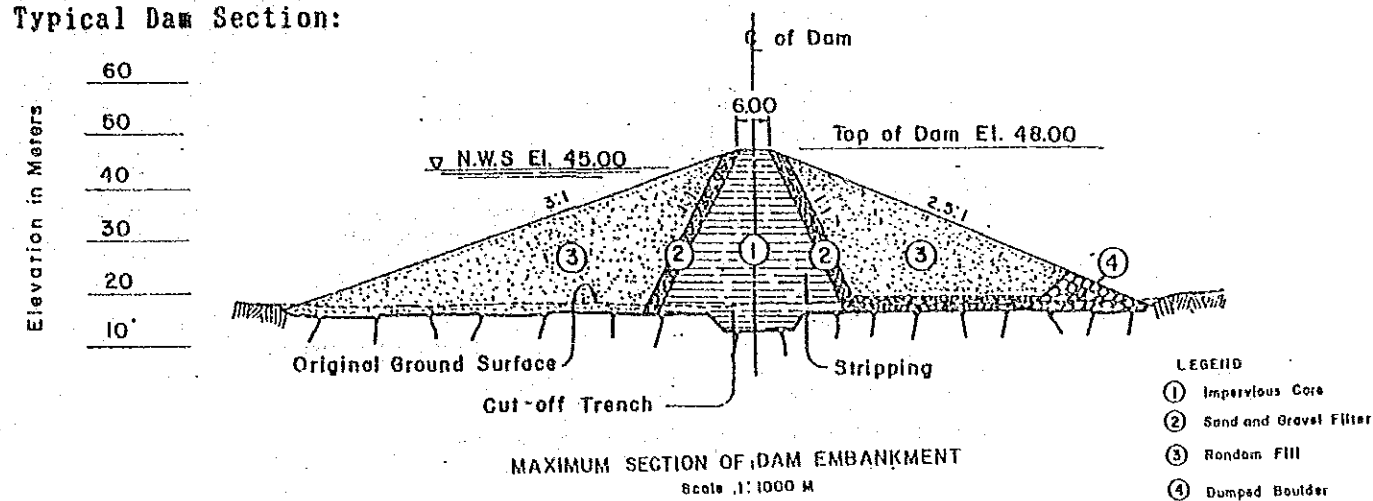


Note: Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage. Magnitude of design discharge should be at least more than 100 years.

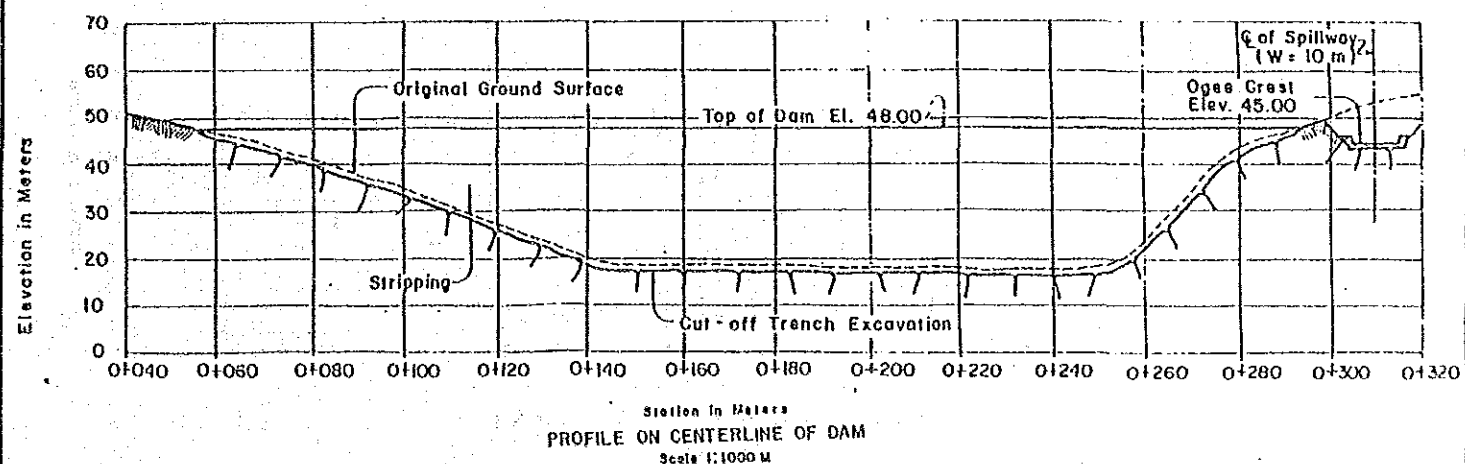
SWIM PROJECT PROFILE		File No. : 63
Regist. No. : Agency No. : NIA-111	Name : IBINGAN SWIP	
Region : 5	Province : SORSOGON	Municipality : PRIETO-DIAZ
Present Status : ① Pre-F/S(1988)    2. F/S( )    3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC		
Project Feature:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 30 m
	: Effective Storage Capacity	: 1,460,000 m <sup>3</sup>
	: Embankment Volume	: 172,000 m <sup>3</sup>
	: Design Flood Discharge	: 86 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 460 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 238 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 29 ton/year
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 17.1 %
2. Feasibility Study	: 911	Priority Rating:
3. Detailed Design	: 1,822	Group : A
4. Construction	:	Implementation Schedule:
Dam	: 23,518	Review : -
Irrigation	: 11,134	F/S : 1991
Mini-Hydropower	: 0	D/D : 1991
Water Supply	: 0	Construction: Jul. 1992; 21 months
Watershed Protection	: 6,379	
5. Grand Total	: 43,764	

Layout:

Typical Dam Section:



Profile of Dam Axis:



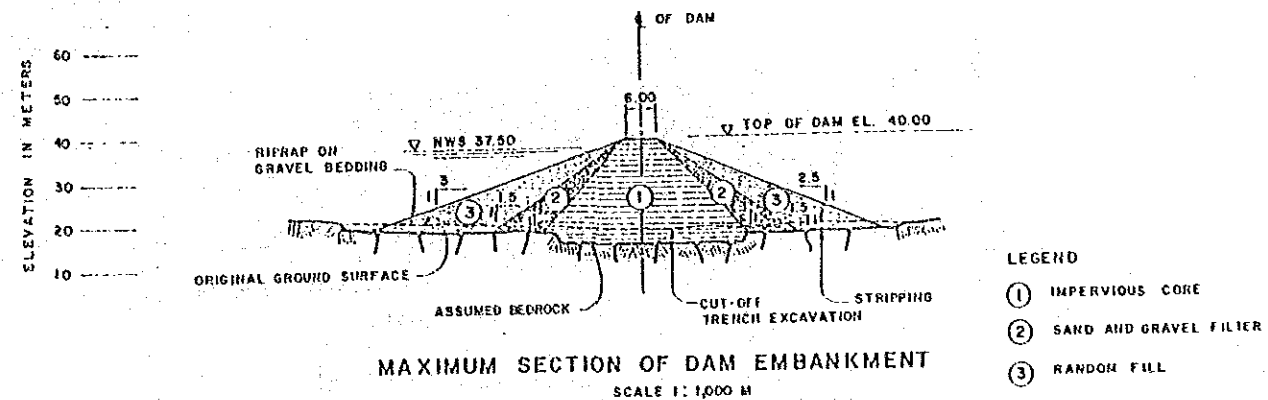
Note:

Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage. Magnitude of design discharge should be at least more than 100 years.

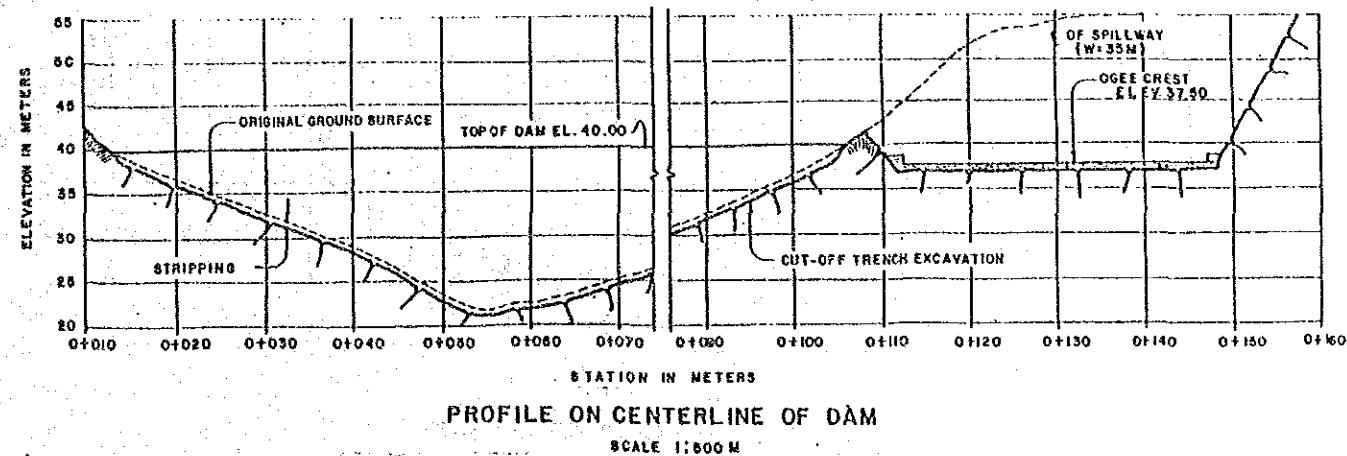
SWIM PROJECT PROFILE		File No. : 64
Regist. No. : Agency No. : NIA-112	Name: BAGASICO SWIP	
Region: 7	Province: BOHOL	Municipality: UNTAGA, ALICIA
Present Status: ① Pre-F/S(1989) 2. F/S( ) 3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC		
Project Feature:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 19 m
	: Effective Storage Capacity	: 2,364,000 m <sup>3</sup>
	: Embankment Volume	: 42,000 m <sup>3</sup>
	: Design Flood Discharge	: 280 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 400 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 0 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 83 ton/year
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 20.0 %
2. Feasibility Study	: 808	Priority Rating:
3. Detailed Design	: 1,616	Group : A
4. Construction	:	Implementation Schedule:
Dam	: 21,678	Review : -
Irrigation	: 9,682	F/S : 1992
Mini-Hydropower	: 0	D/D : 1992
Water Supply	: 0	Construction: Jul. 1993; 9 months
Watershed Protection	: 0	
5. Grand Total	: 33,784	

Layout:

Typical Dam Section:



Profile of Dam Axis:



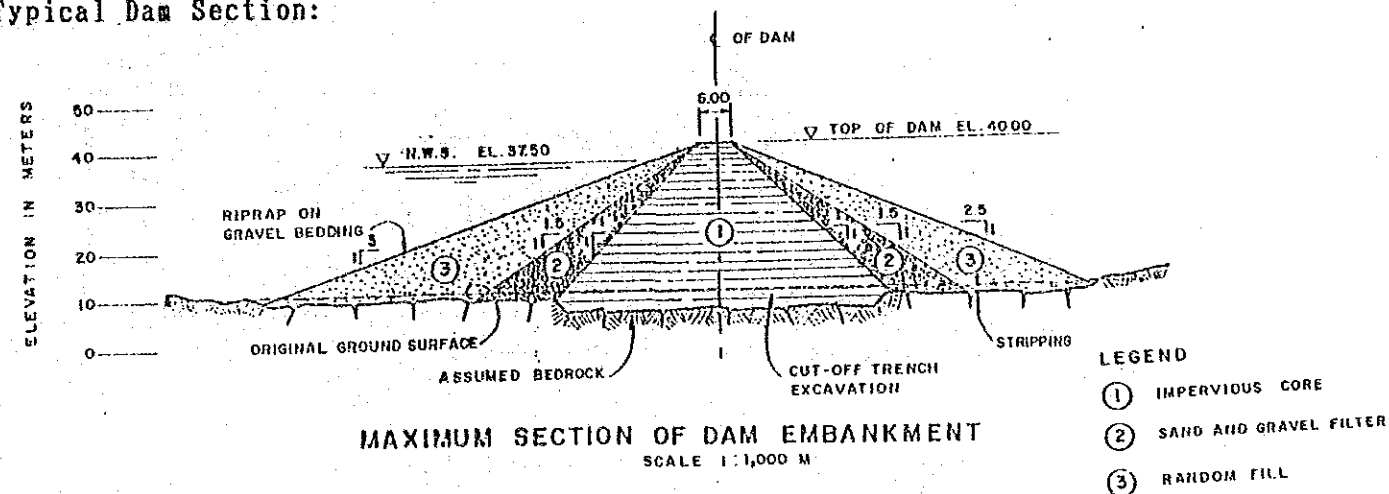
Note:

Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage.

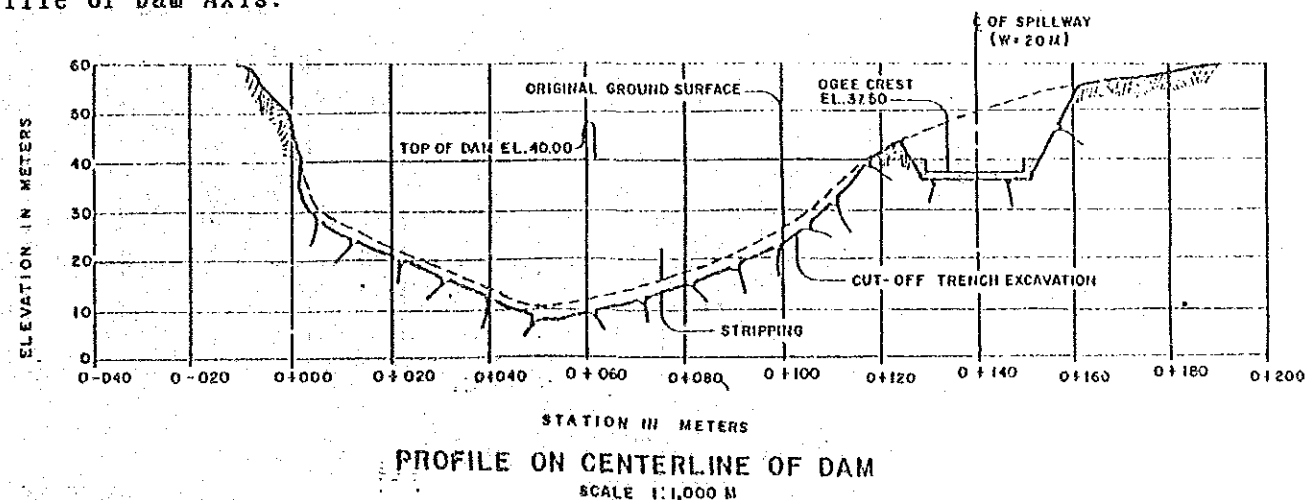
SWIM PROJECT PROFILE		File No. : 65
Regist. No. : Agency No. : NIA-119	Name: BONOT-BONOT SWIP	
Region: 7	Province: BOHOL	Municipality: BUENAVISTA
Present Status: ① Pre-F/S(1989)    2. F/S( )    3. D/D( )		
Purpose: Major : Irrigation Incidental : IP, FC, WM		
Project Feature:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 30 m
	: Effective Storage Capacity	: 11,693,000 m <sup>3</sup>
	: Embankment Volume	: 105,000 m <sup>3</sup>
	: Design Flood Discharge	: 170 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 300 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 680 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 277 ton/year
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 27.5
2. Feasibility Study	: 788	Priority Rating:
3. Detailed Design	: 1,576	Group : A
4. Construction	:	Implementation Schedule:
Dam	: 25,536	Review : -
Irrigation	: 7,261	F/S : 1991
Mini-Hydropower	: 0	D/D : 1991
Water Supply	: 0	Construction: Jul. 1992; 12 months
Watershed Protection	: 9,925	
5. Grand Total	: 45,086	

Layout:

Typical Dam Section:



Profile of Dam Axis:



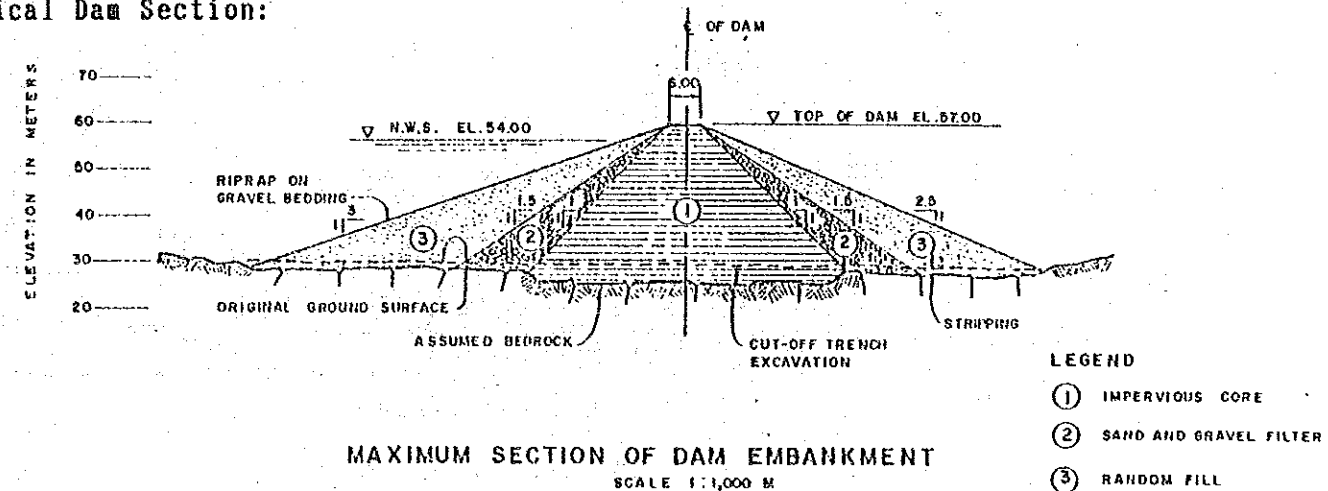
Note:

Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage. Magnitude of design discharge should be at least more than 100 years.

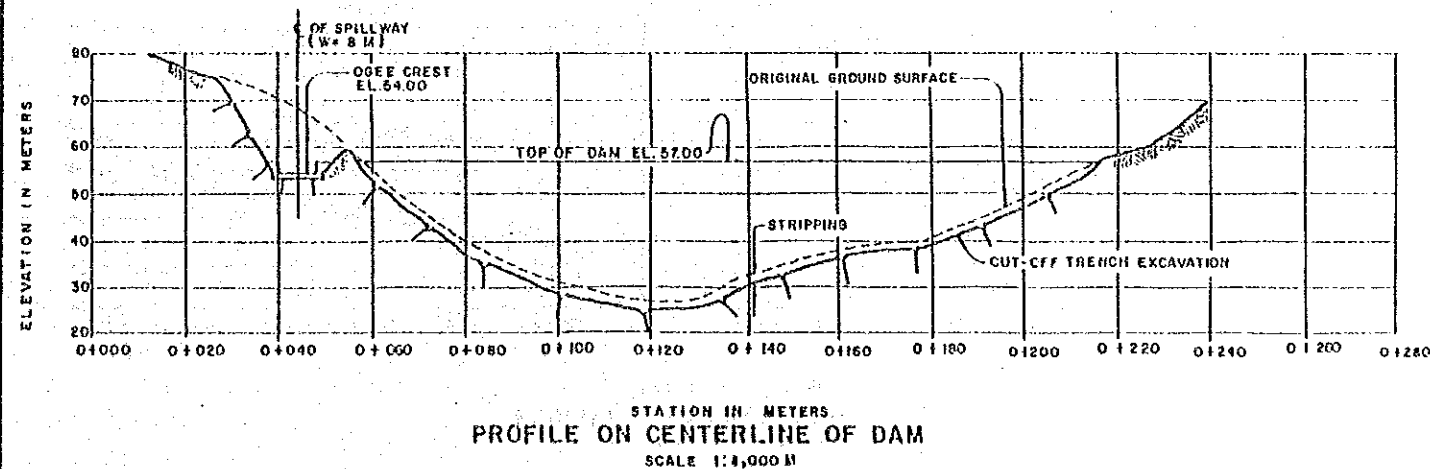
SWIM PROJECT PROFILE		File No. : 66
Regist. No. : Agency No. : NIA-120	Name : CALUNASAN SWIP	
Region : 7	Province : BOHOL	Municipality : CALAPE
Present Status : (1) Pre-F/S(1989)    2. F/S( )    3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	Dam Type : ZONED EARTHFILL	
	Dam Height : 30 m	
	Effective Storage Capacity : 833,700 m <sup>3</sup>	
	Embankment Volume : 78,000 m <sup>3</sup>	
	Design Flood Discharge : 61 m <sup>3</sup> /sec.	
2. Irrigation	Irrigation Area : 100 ha	
3. Mini-hydropower	Installed Capacity : - kW	
4. Watershed Man.	Watershed Protection Area : 120 ha	
5. Water Supply	Design Supply Capacity : - m <sup>3</sup> /day	
6. Inland Fishery	Annual Production : 21 ton/year	
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review :	0	EIRR : 14.2 %
2. Feasibility Study :	322	Priority Rating:
3. Detailed Design :	645	Group : A
4. Construction :		Implementation Schedule:
Dam :	9,947	Review : -
Irrigation :	2,420	F/S : 1993
Mini-Hydropower :	0	D/D : 1993
Water Supply :	0	Construction: Jul. 1994; 12 months
Watershed Protection :	3,220	
5. Grand Total :	16,555	

Layout:

Typical Dam Section:



Profile of Dam Axis:



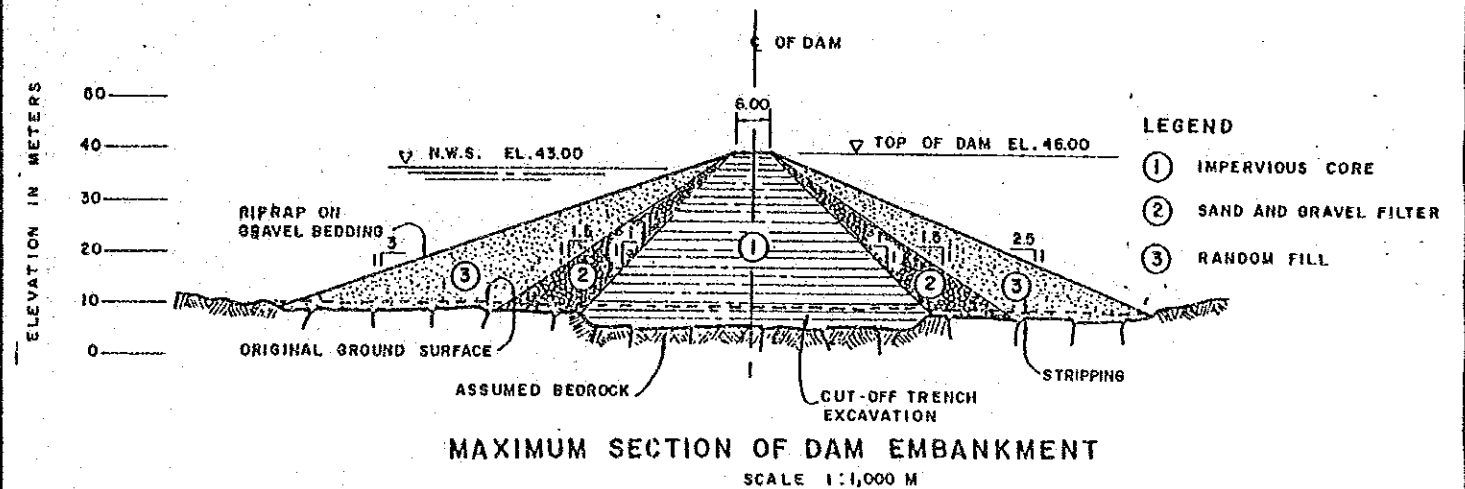
Note:

Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage. Magnitude of design discharge should be at least more than 100 years.

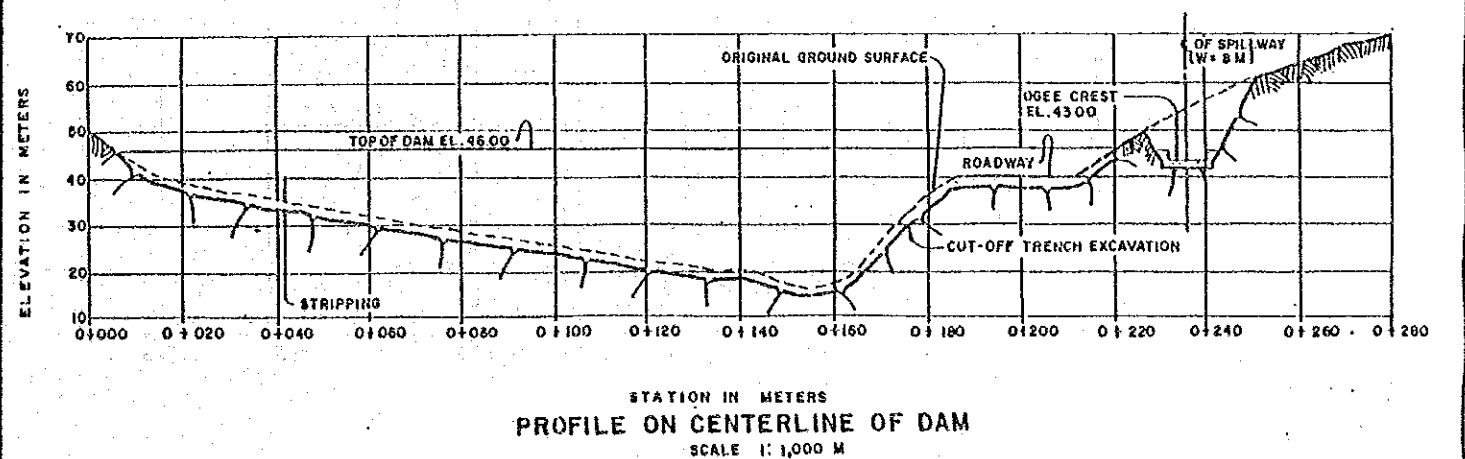
SWIM PROJECT PROFILE		File No. : 67
Regist. No. : Agency No. : NIA-121	Name : MANDAUG SWIP	
Region : 7	Province : BOHOL	Municipality : CALAPE
Present Status : ① Pro-F/S(1989)    2. F/S( )    3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 30 m
	: Effective Storage Capacity	: 1,122,000 m <sup>3</sup>
	: Embankment Volume	: 104,000 m <sup>3</sup>
	: Design Flood Discharge	: 650 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 140 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 157 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 21 ton/year
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 13.0 %
2. Feasibility Study	: 455	Priority Rating:
3. Detailed Design	: 911	Group : B
4. Construction	:	Implementation Schedule:
Dam	: 14,021	Review : -
Irrigation	: 3,389	F/S : 1995
Mini-Hydropower	: 0	D/D : 1995
Water Supply	: 0	Construction: Jul. 1996; 12 months
Watershed Protection	: 4,206	
5. Grand Total	: 22,982	

Layout:

Typical Dam Section:



Profile of Dam Axis:

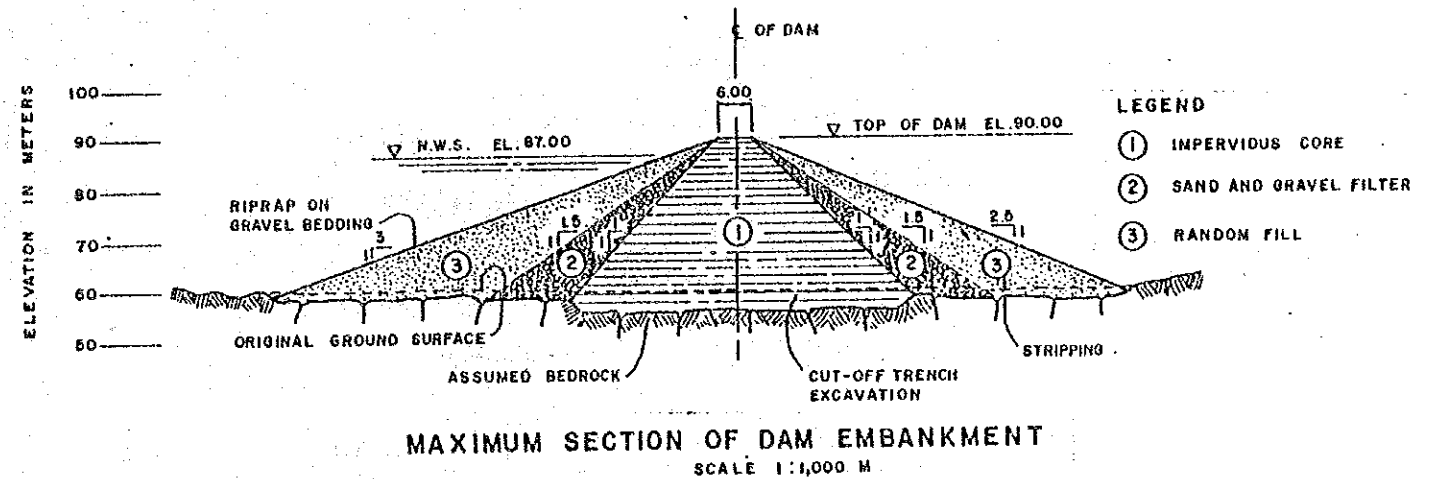


Note: Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage. Magnitude of design discharge should be at least more than 100 years.

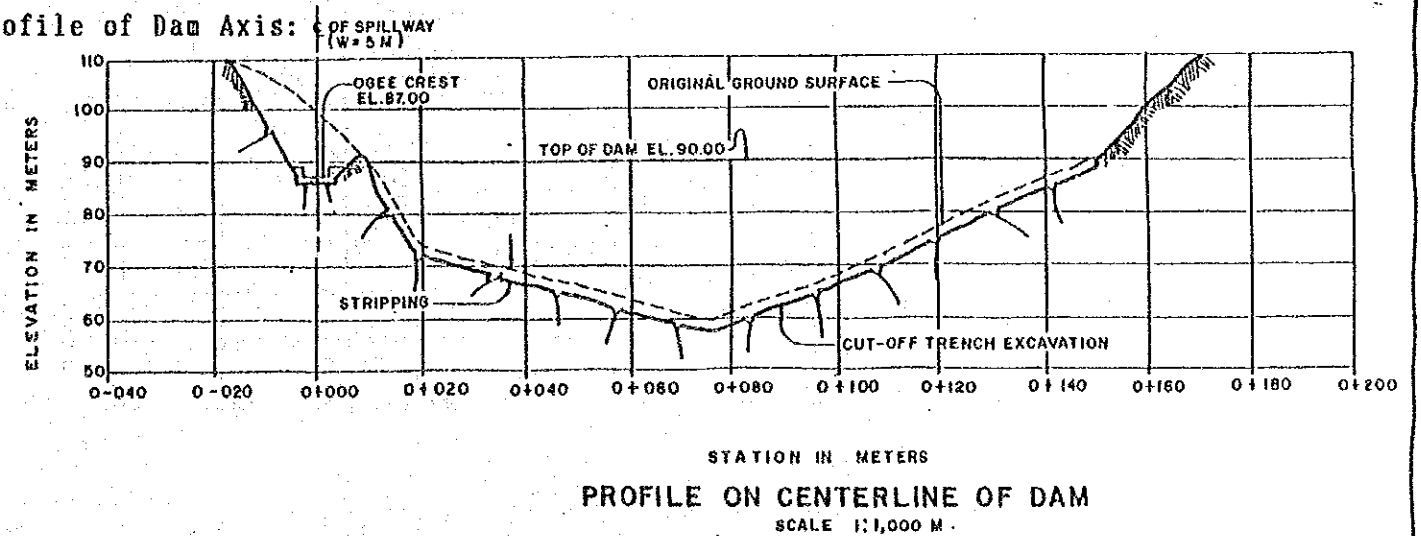
SWIM PROJECT PROFILE		File No. : 68
Regist. No. : Agency No. : NIA-122	Name: ABEJILAN SWIP	
Region: 7	Province: BOHOL	Municipality: CANDIJAY
Present Status: ① Pre-F/S(1989) 2. F/S( ) 3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 30 m
	: Effective Storage Capacity	: 202,000 m <sup>3</sup>
	: Embankment Volume	: 102,000 m <sup>3</sup>
	: Design Flood Discharge	: 34 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 30 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 55 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 5 ton/year
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning EIRR is less than 10 %. Project planning shall be re-formulated.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 57	EIRR : -0.8 %
2. Feasibility Study	: 413	Priority Rating:
3. Detailed Design	: 825	Group : B
4. Construction	:	Implementation Schedule:
Dam	: 14,865	Review : 1993
Irrigation	: 726	F/S : 1998
Mini-Hydropower	: 0	D/D : 1998
Water Supply	: 0	Construction: Jul. 1999; 12 months
Watershed Protection	: 1,475	
5. Grand Total	: 18,362	

Layout:

Typical Dam Section:



Profile of Dam Axis:



Note:

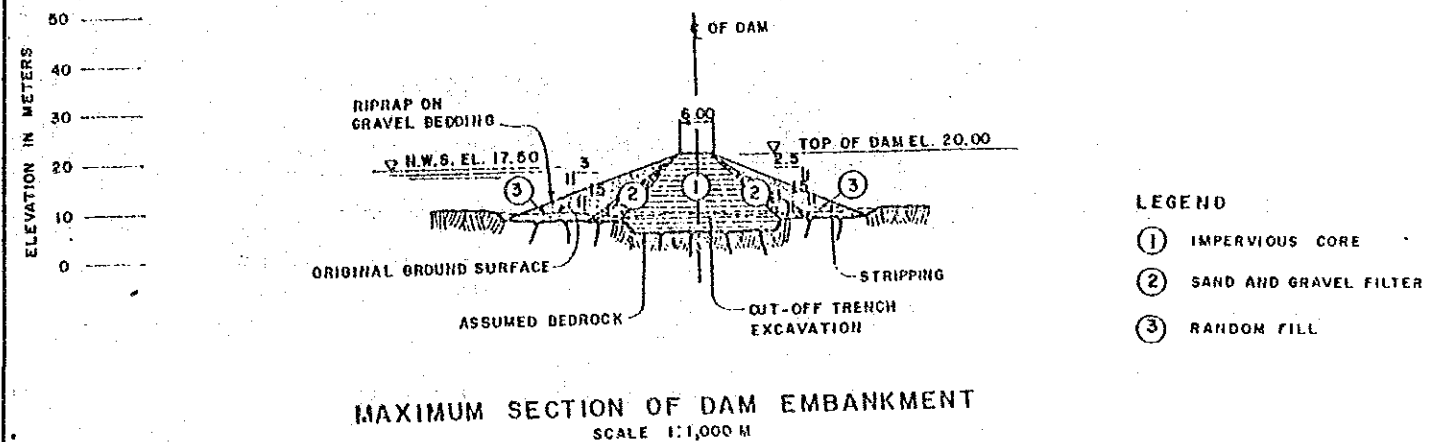
Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage. Magnitude of design discharge should be at least more than 100 years.



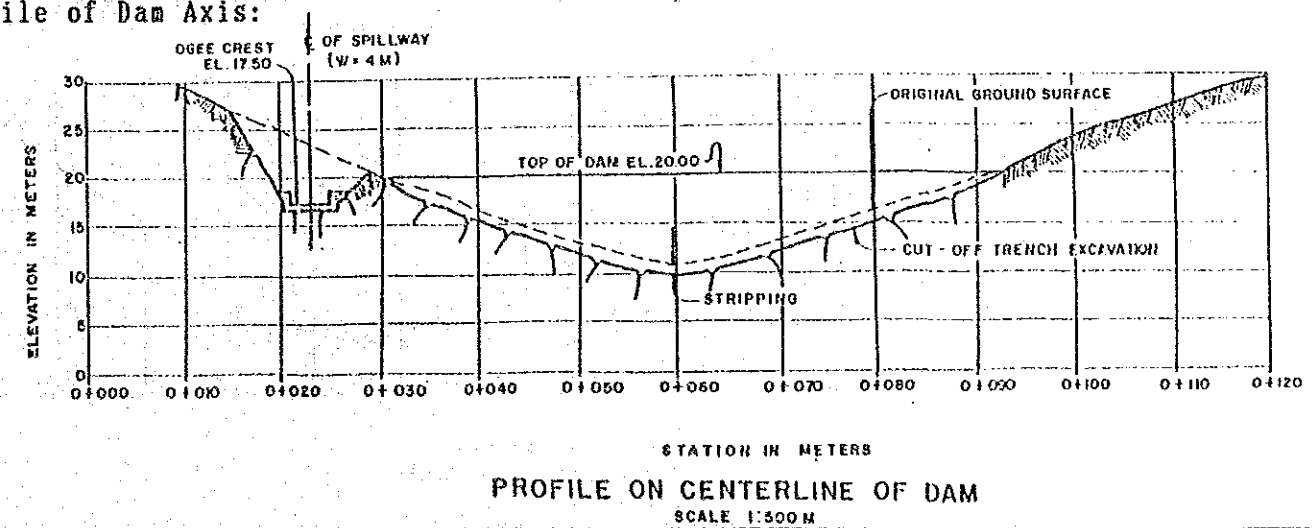
SWIM PROJECT PROFILE		File No. : 69
Regist. No. : Agency No. : NIA-128	Name : LUNGSODA-AN SWIP	
Region : 7	Province : BOHOL	Municipality : CANDIJAY
Present Status : (1) Pre-F/S(1989)    2. F/S( )    3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 9 m
	: Effective Storage Capacity	: 277,000 m <sup>3</sup>
	: Embankment Volume	: 8,100 m <sup>3</sup>
	: Design Flood Discharge	: 23 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 30 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 32 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 24 ton/year
Technical Assessment:		
i. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 29.1 %
2. Feasibility Study	: 62	Priority Rating:
3. Detailed Design	: 124	Group : A
4. Construction	:	Implementation Schedule:
Dam	: 1,892	Review : -
Irrigation	: 726	F/S : 1994
Mini-Hydropower	: 0	D/D : 1994
Water Supply	: 0	Construction: Jul. 1995; 6 months
Watershed Protection	: 860	
5. Grand Total	: 3,664	

Layout:

Typical Dam Section:



Profile of Dam Axis:

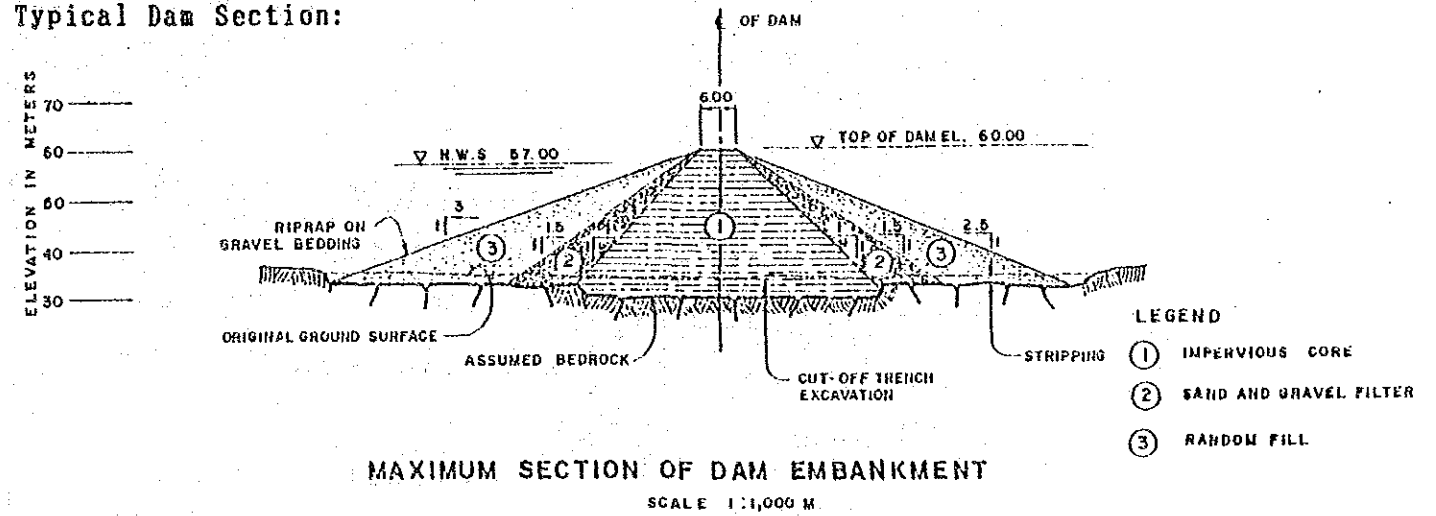


Note: Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage.

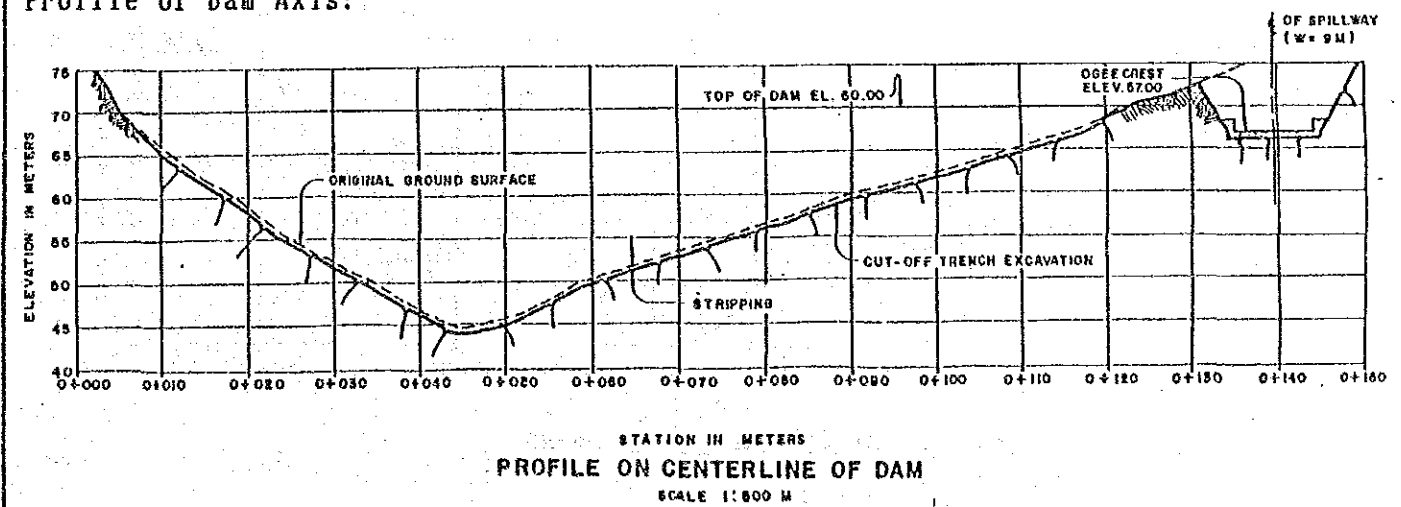
SWIM PROJECT PROFILE		File No. : 70
Regist. No. : Agency No. : NIA-130	Name: CATUNGAWAN SWIM	
Region: 7	Province: BOHOL	Municipality: GUINDULMAN
Present Status: ① Pre-F/S(1989)    2. F/S( )    3. D/D( )		
Purposo: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 25 m
	: Effective Storage Capacity	: 774,000 m <sup>3</sup>
	: Embankment Volume	: 77,000 m <sup>3</sup>
	: Design Flood Discharge	: 750 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 130 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 560 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 21 ton/year
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement:(1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 15.6 %
2. Feasibility Study	: 391	Priority Rating:
3. Detailed Design	: 782	Group : A
4. Construction	:	Implementation Schedule:
Dam	: 11,814	Review : -
Irrigation	: 3,147	F/S : 1993
Mini-Hydropower	: 0	D/D : 1994
Water Supply	: 0	Construction: Jan.1995;9 months
Watershed Protection	: 8,175	
5. Grand Total	: 24,308	

Layout:

Typical Dam Section:



Profile of Dam Axis:

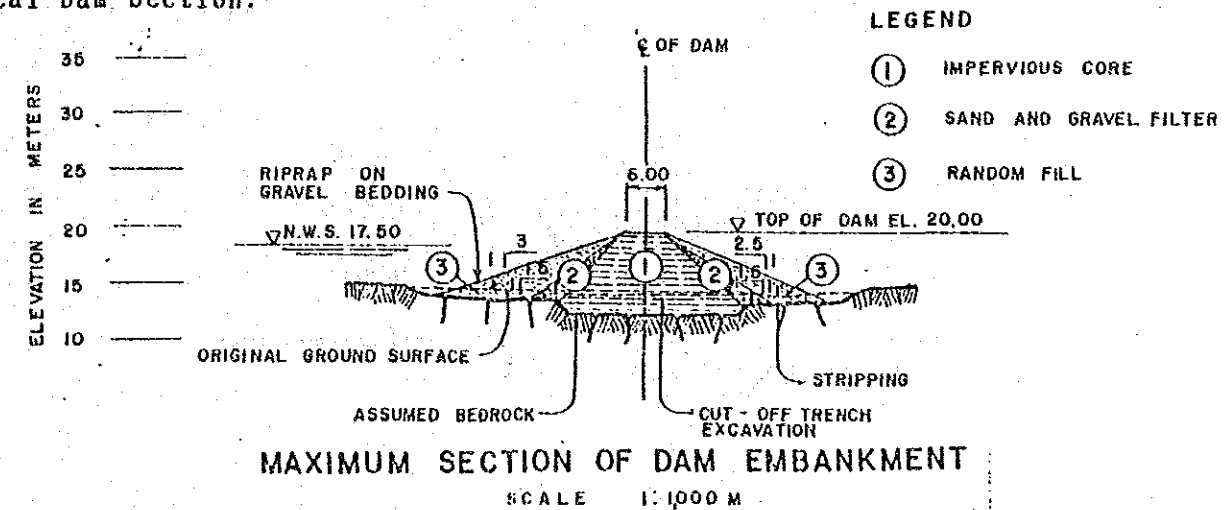


Note: Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage. Magnitude of design discharge should be at least more than 100 years.

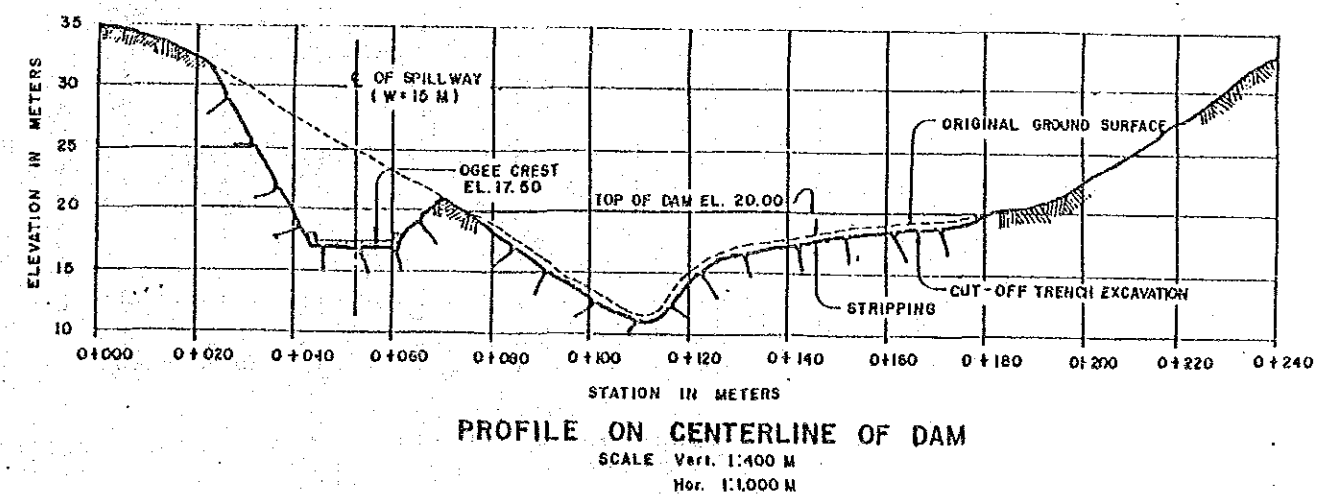
SWIM PROJECT PROFILE		File No. : 71
Regist. No. : Agency No. : NIA-131	Name : LAPACAN SWIP	
Region : 7	Province : BOHOL	Municipality : INABANGA
Present Status : ① Pre-F/S(1989)    2. F/S( )    3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	Dam Type : ZONED EARTHFILL Dam Height : 9 m Effective Storage Capacity : 591,000 m <sup>3</sup> Embankment Volume : 41,500 m <sup>3</sup> Design Flood Discharge : 132 m <sup>3</sup> /sec.	
2. Irrigation	Irrigation Area : 150 ha	
3. Mini-hydropower	Installed Capacity : - kW	
4. Watershed Man.	Watershed Protection Area : 770 ha	
5. Water Supply	Design Supply Capacity : - m <sup>3</sup> /day	
6. Inland Fishery	Annual Production : 59 ton/year	
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review : 0		EIRR : 25.5 %
2. Feasibility Study : 307		Priority Rating:
3. Detailed Design : 613		Group : A
4. Construction :		Implementation Schedule:
Dam : 8,592		Review : -
Irrigation : 3,631		F/S : 1992
Mini-Hydropower : 0		D/D : 1992
Water Supply : 0		Construction: Jul. 1993; 6 months
Watershed Protection : 11,235		
5. Grand Total : 24,377		

Layout:

Typical Dam Section:



Profile of Dam Axis:



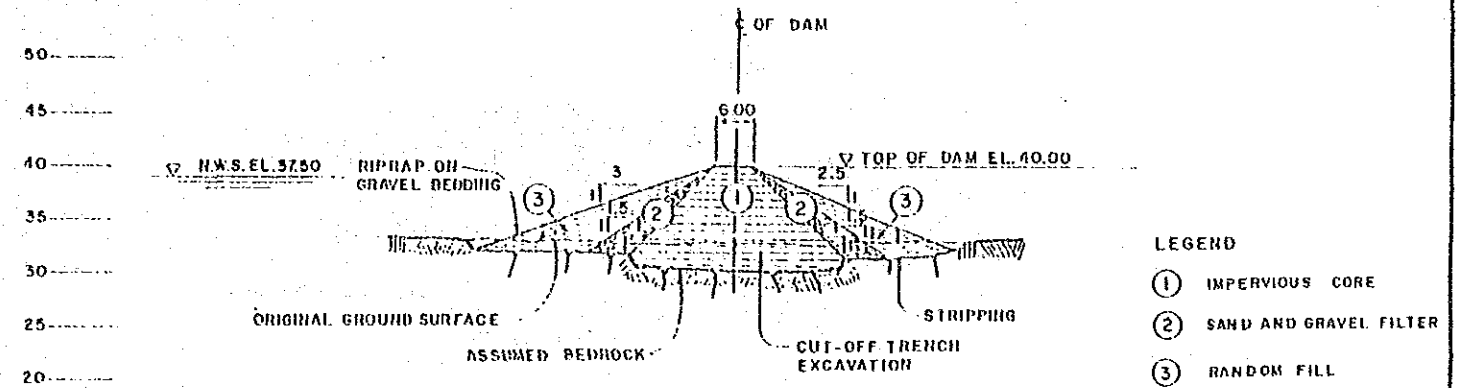
Note:

Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage.

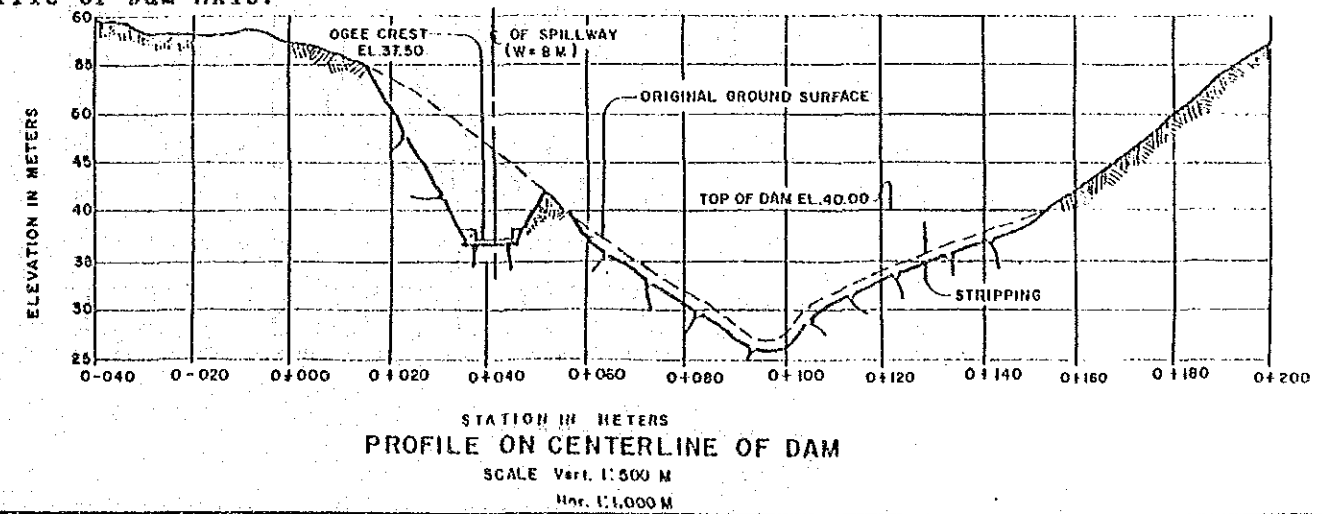
SWIM PROJECT PROFILE		File No. : 72
Regist. No. : Agency No. : NIA-132	Name : TAYTAY SWIP	
Region : 7	Province : BOHOL	Municipality : JETAPE
Present Status: ① Pre-F/S(1989)    2. F/S( )    3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 13 m
	: Effective Storage Capacity	: 822,000 m3
	: Embankment Volume	: 22,000 m3
	: Design Flood Discharge	: 65 m3/sec.
2. Irrigation	: Irrigation Area	: 110 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 136 ha
5. Water Supply	: Design Supply Capacity	: - m3/day
6. Inland Fishery	: Annual Production	: 48 ton/year
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 32.5 %
2. Feasibility Study	: 177	Priority Rating:
3. Detailed Design	: 353	Group : A
4. Construction	:	Implementation Schedule:
Dam	: 4,523	Review : -
Irrigation	: 2,663	F/S : 1991
Mini-Hydropower	: 0	D/D : 1991
Water Supply	: 0	Construction: Jul. 1992; 6 months
Watershed Protection	: 3,650	
5. Grand Total	: 11,365	

Layout:

Typical Dam Section:



Profile of Dam Axis:



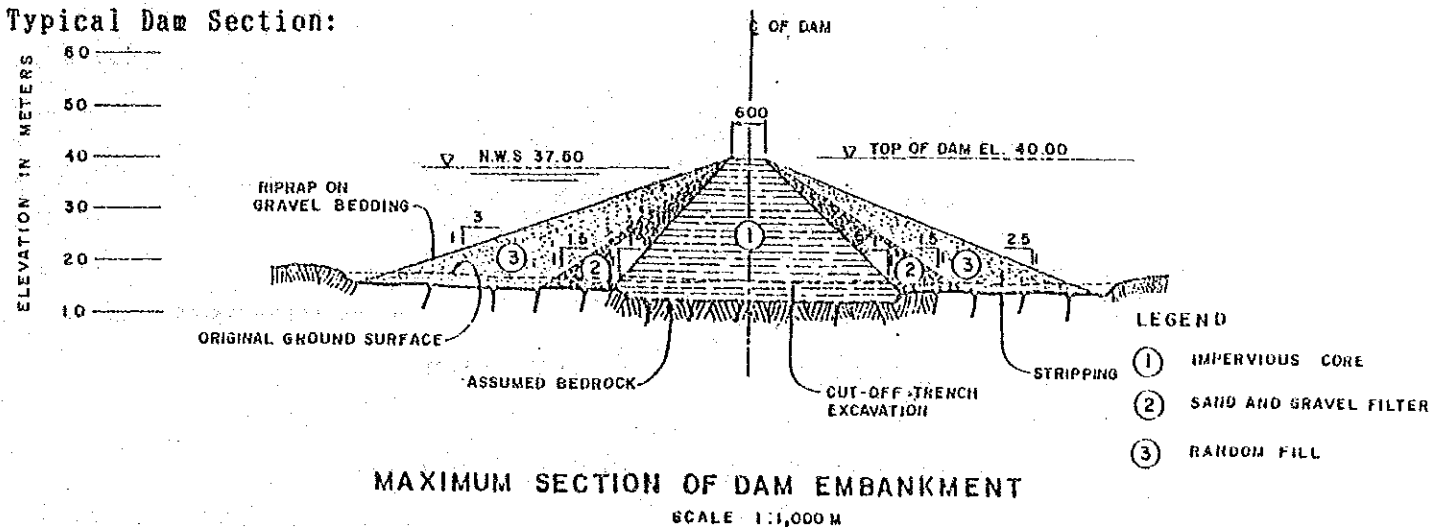
Note:

Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage.

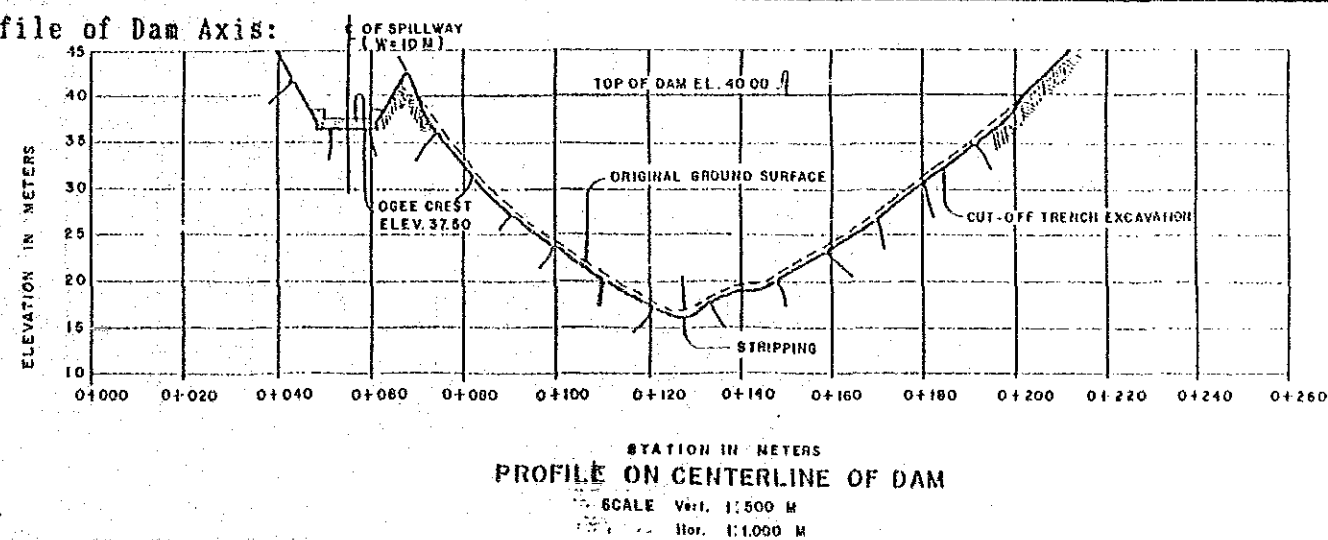
SWIM PROJECT PROFILE		File No. : 73
Regist. No. : Agency No. : NIA-133	Name : ABACA SWIP	
Region : 7	Province : BOHOL	Municipality : MABINI
Present Status : ① Pre-F/S(1989)    2. F/S( )    3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 23 m
	: Effective Storage Capacity	: 1,749,000 m <sup>3</sup>
	: Embankment Volume	: 70,000 m <sup>3</sup>
	: Design Flood Discharge	: 89 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 200 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 180 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 43 ton/year
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 20.2 %
2. Feasibility Study	: 513	Priority Rating:
3. Detailed Design	: 1,028	Group : A
4. Construction	:	Implementation Schedule:
Dam	: 14,961	Review : -
Irrigation	: 4,841	F/S : 1992
Mini-Hydropower	: 0	D/D : 1993
Water Supply	: 0	Construction: Jan. 1994; 9 months
Watershed Protection	: 4,830	
5. Grand Total	: 26,171	

Layout:

Typical Dam Section:



Profile of Dam Axis:



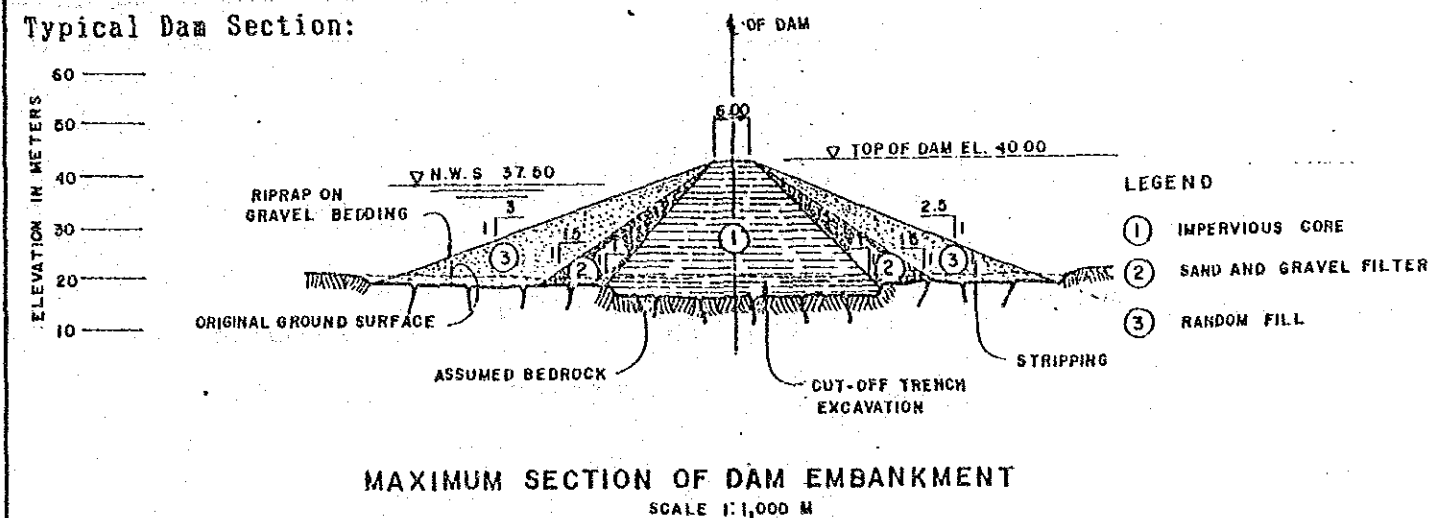
Note:

Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage. Magnitude of design discharge should be at least more than 100 years.

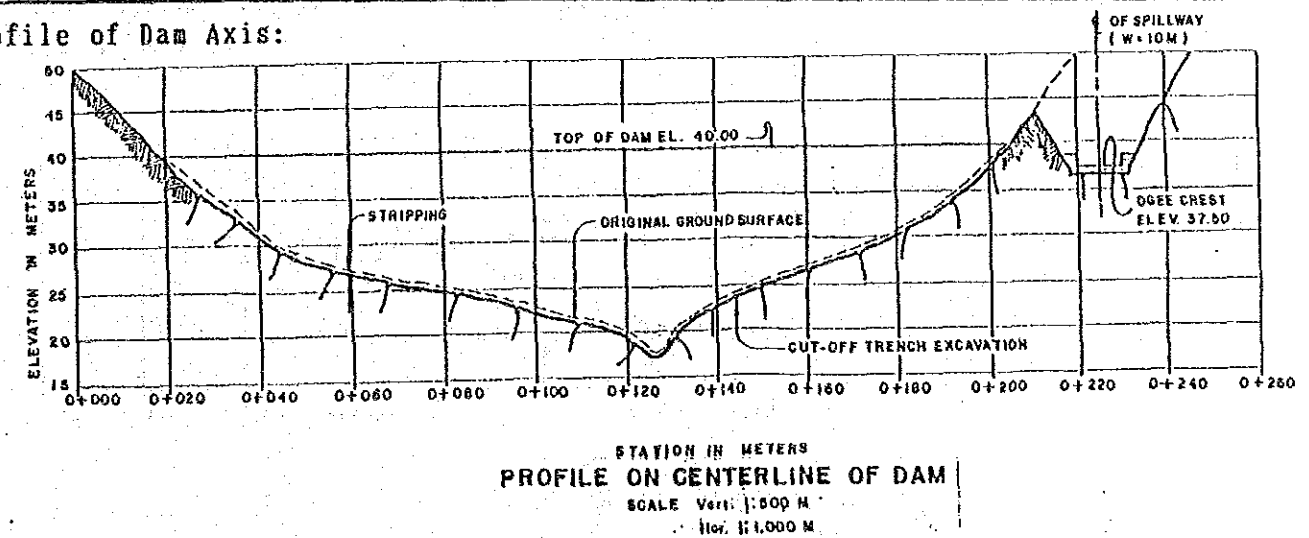
SWIM PROJECT PROFILE		File No. : 74
Regist. No. : Agency No. : NIA-136	Name : ONDOL SWIP	
Region : 7	Province : BOHOL	Municipality : MABINI
Present Status : (1) Pro-F/S(1989)    2. F/S( )    3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 22 m
	: Effective Storage Capacity	: 3,692,000 m <sup>3</sup>
	: Embankment Volume	: 83,000 m <sup>3</sup>
	: Design Flood Discharge	: 83 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 200 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 225 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 109 ton/year
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 24.4 %
2. Feasibility Study	: 504	Priority Rating:
3. Detailed Design	: 1,008	Group : A
4. Construction	: -	Implementation Schedule:
Dam	: 15,382	Review : -
Irrigation	: 4,841	F/S : 1991
Mini-Hydropower	: 0	D/D : 1991
Water Supply	: 0	Construction: Jul. 1992; 9 months
Watershed Protection	: 6,030	
5. Grand Total	: 27,766	

Layout:

Typical Dam Section:



Profile of Dam Axis:

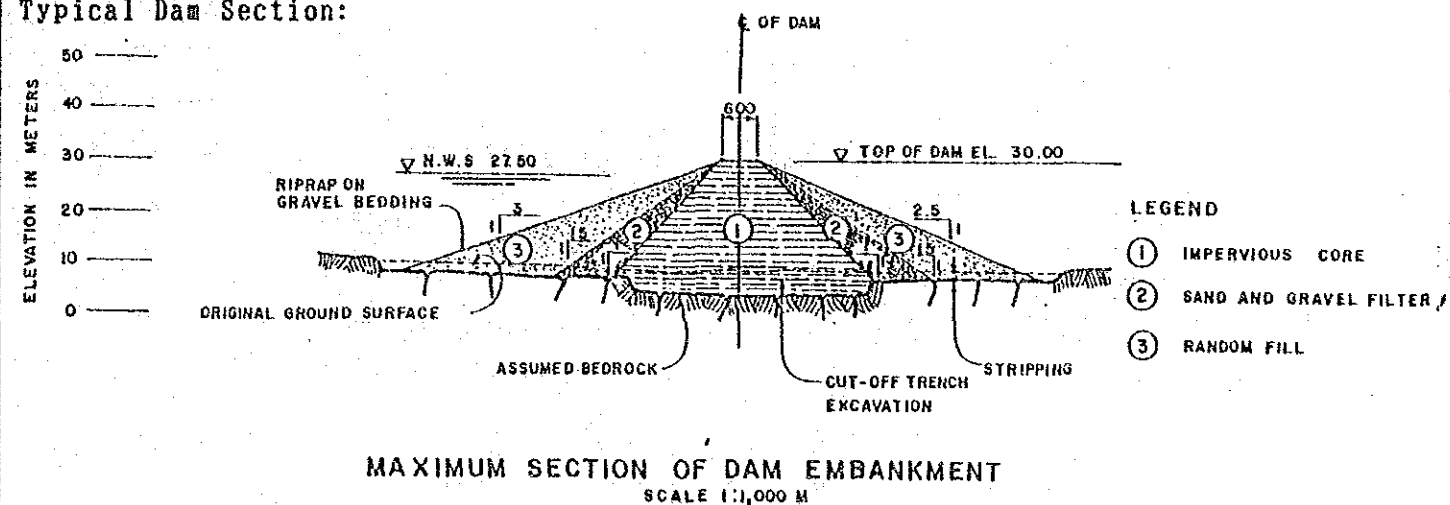


Note: Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage. Magnitude of design discharge should be at least more than 100 years.

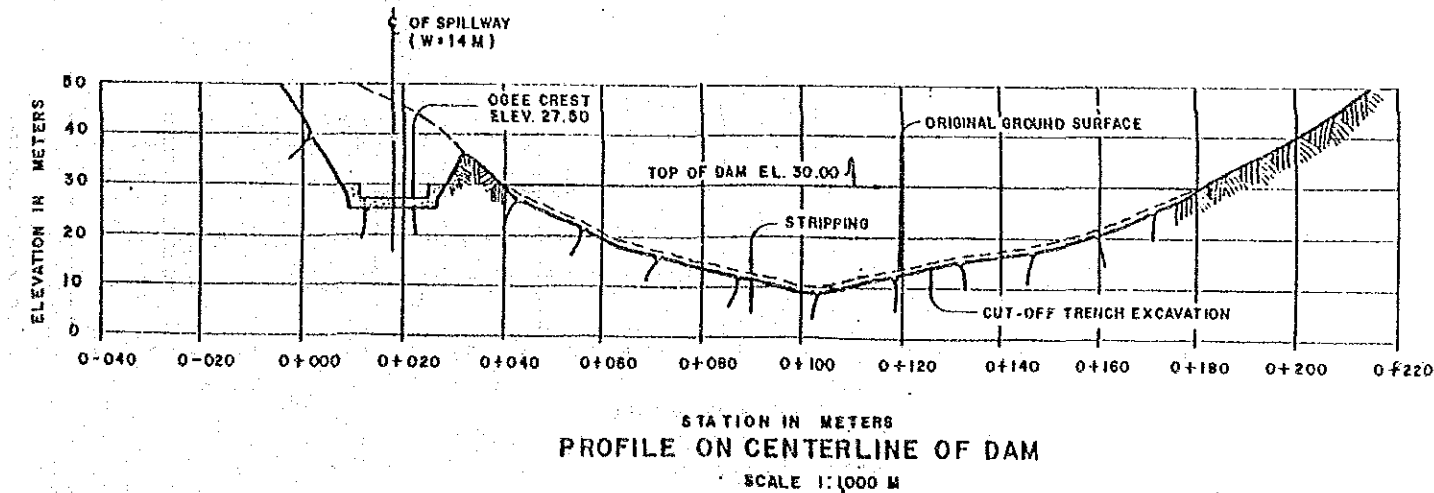
SWIM PROJECT PROFILE		File No. : 75
Regist. No. : Agency No. : NIA-138	Name : SAN ISIDRO BANLASAN SWIP	
Region : 7	Province : BOHOL	Municipality : TRINIDAD
Present Status : ① Pre-F/S(1989)    2. F/S( )    3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 20 m
	: Effective Storage Capacity	: 2,786,000 m <sup>3</sup>
	: Embankment Volume	: 61,000 m <sup>3</sup>
	: Design Flood Discharge	: 112 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 300 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 159 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 152 ton/year
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 32.2 %
2. Feasibility Study	: 534	Priority Rating:
3. Detailed Design	: 1,069	Group : A
4. Construction	:	Implementation Schedule:
Dam	: 13,228	Review : -
Irrigation	: 7,261	F/S : 1992
Mini-Hydropower	: 0	D/D : 1992
Water Supply	: 0	Construction: Jul. 1993; 9 months
Watershed Protection	: 3,900	
5. Grand Total	: 25,993	

Layout:

Typical Dam Section:



Profile of Dam Axis:



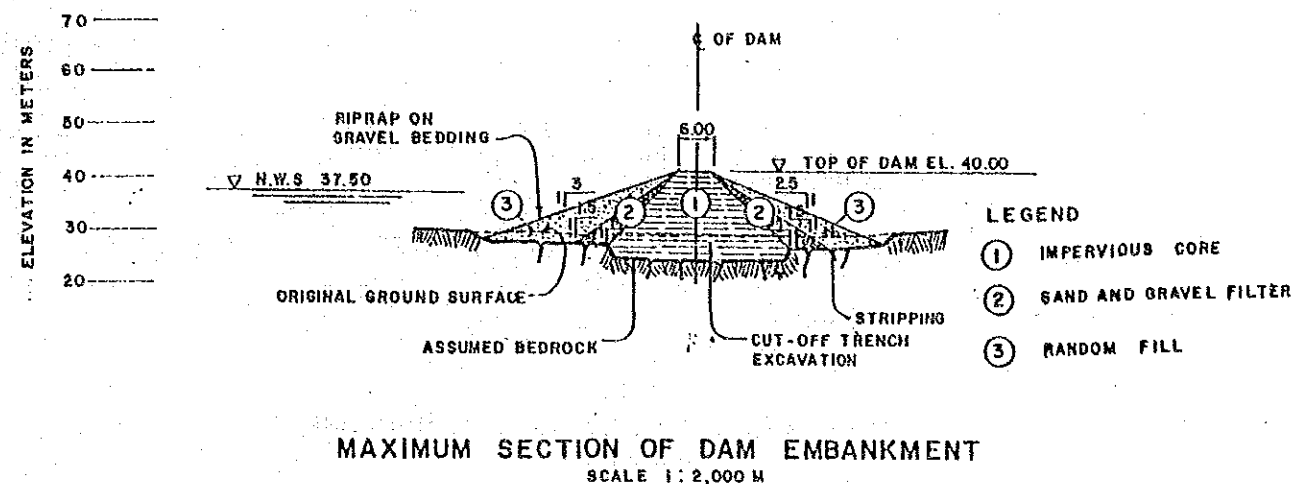
Note:

Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage. Magnitude of design discharge should be at least more than 100 years.

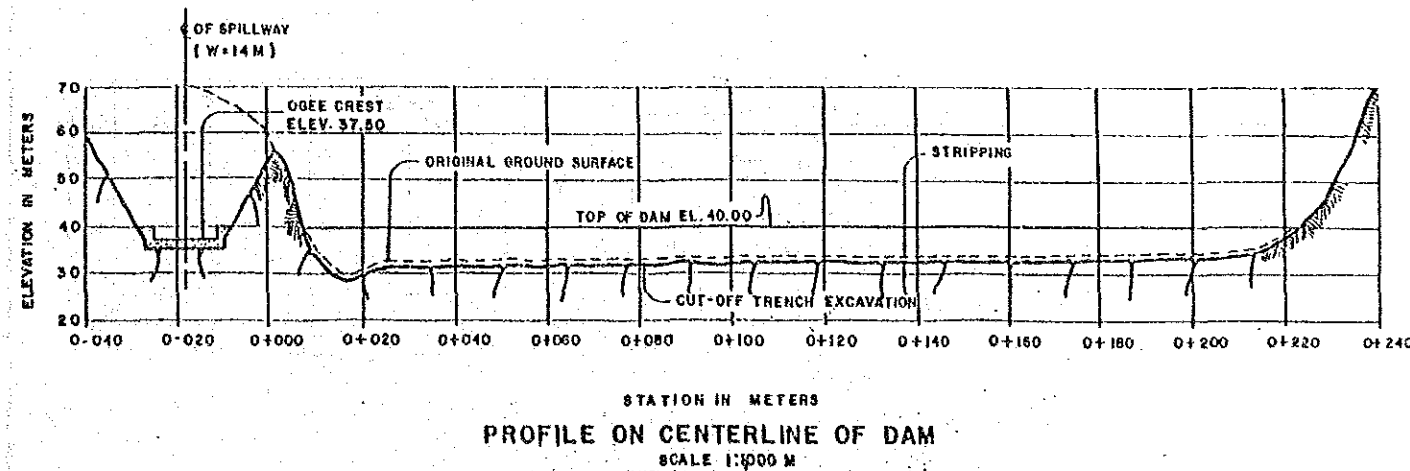
SWIM PROJECT PROFILE		File No. : 76
Regist. No. : Agency No. : NIA-139	Name: BANLASAN SWIP	
Region: 7	Province: BOHOL	Municipality: TUBIGON
Present Status: ① Pre-F/S(1989) 2. F/S( ) 3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 10 m
	: Effective Storage Capacity	: 465,000 m <sup>3</sup>
	: Embankment Volume	: 28,300 m <sup>3</sup>
	: Design Flood Discharge	: 116 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 130 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 320 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 38 ton/year
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 23.0 %
2. Feasibility Study	: 258	Priority Rating:
3. Detailed Design	: 516	Group : A
4. Construction	:	Implementation Schedule:
Dam	: 6,997	Review : -
Irrigation	: 3,147	F/S : 1994
Mini-Hydropower	: 0	D/D : 1994
Water Supply	: 0	Construction: Jul.1995;6 months
Watershed Protection	: 8,580	
5. Grand Total	: 19,497	

Layout:

Typical Dam Section:



Profile of Dam Axis:



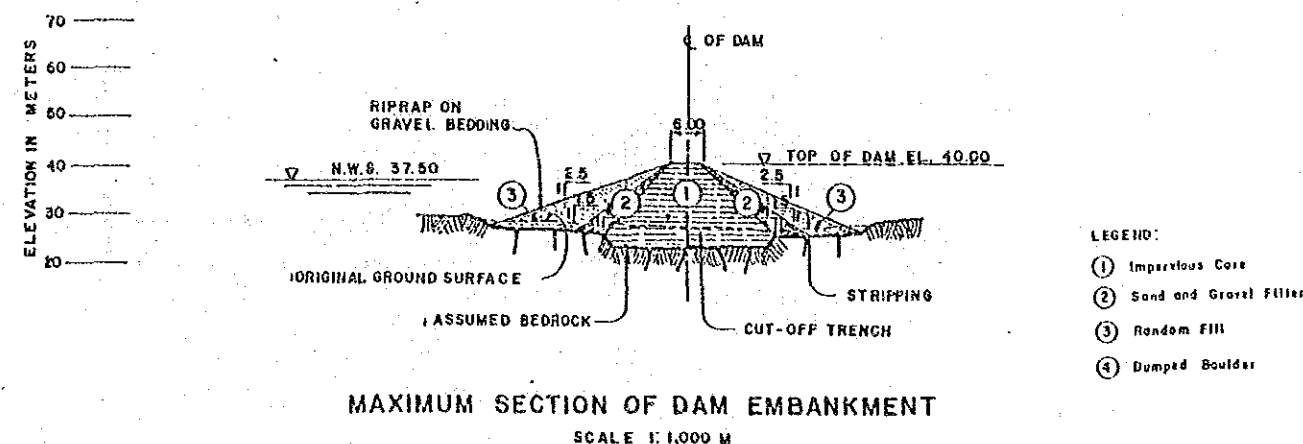
Note: Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage.



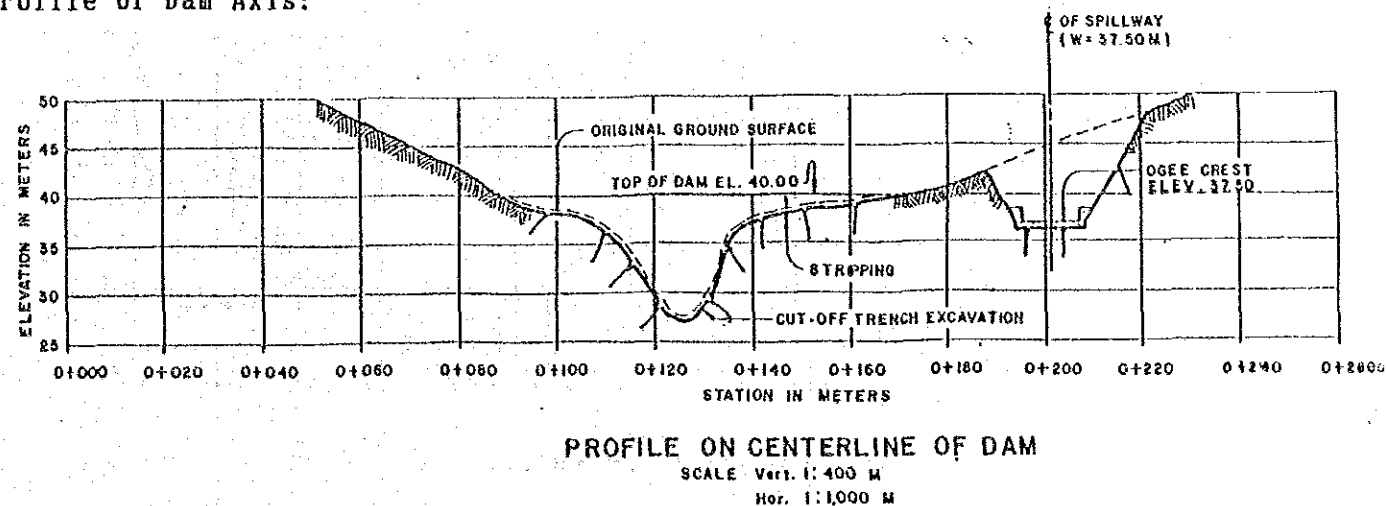
SWIM PROJECT PROFILE		File No. : 77
Regist. No. : Agency No. : NIA-141	Name : BIABAS SWIP	
Region : 7	Province : BOHOL	Municipality : UBAY
Present Status : ① Pre-F/S(1989) 2. F/S( ) 3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	Dam Type : ZONED EARTHFILL	
	Dam Height : 10 m	
	Effective Storage Capacity : 485,000 m <sup>3</sup>	
	Embankment Volume : 25,000 m <sup>3</sup>	
	Design Flood Discharge : 102 m <sup>3</sup> /sec.	
2. Irrigation	Irrigation Area : 110 ha	
3. Mini-hydropower	Installed Capacity : - kW	
4. Watershed Man.	Watershed Protection Area : 255 ha	
5. Water Supply	Design Supply Capacity : - m <sup>3</sup> /day	
6. Inland Fishery	Annual Production : 37 ton/year	
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 27.2 %
2. Feasibility Study	: 214	Priority Rating:
3. Detailed Design	: 428	Group : A
4. Construction	:	Implementation Schedule:
Dam	: 5,803	Review : -
Irrigation	: 2,663	F/S : 1994
Mini-Hydropower	: 0	D/D : 1994
Water Supply	: 0	Construction: Jul. 1995; 6 months
Watershed Protection	: 6,833	
5. Grand Total	: 15,940	

Layout:

Typical Dam Section:



Profile of Dam Axis:

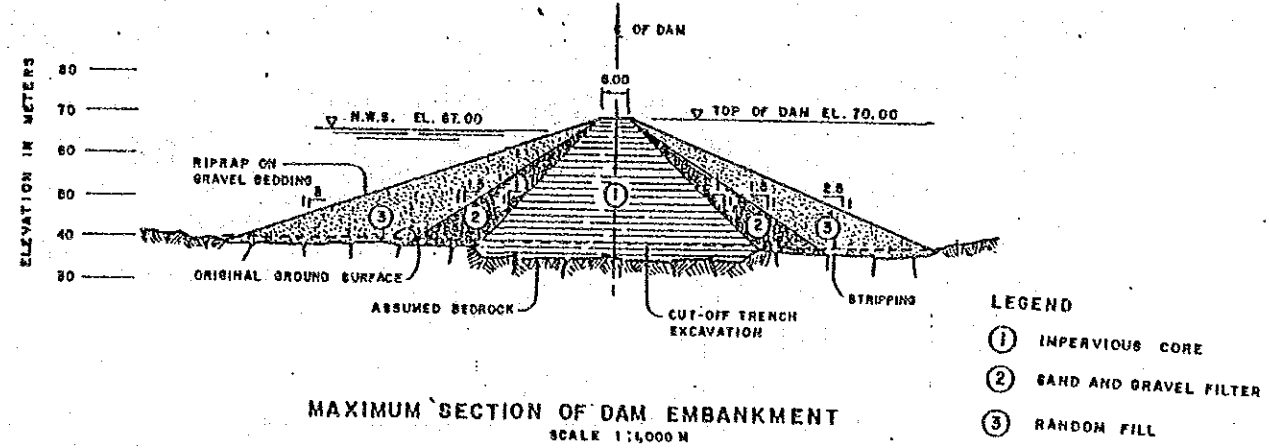


Note: Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage.

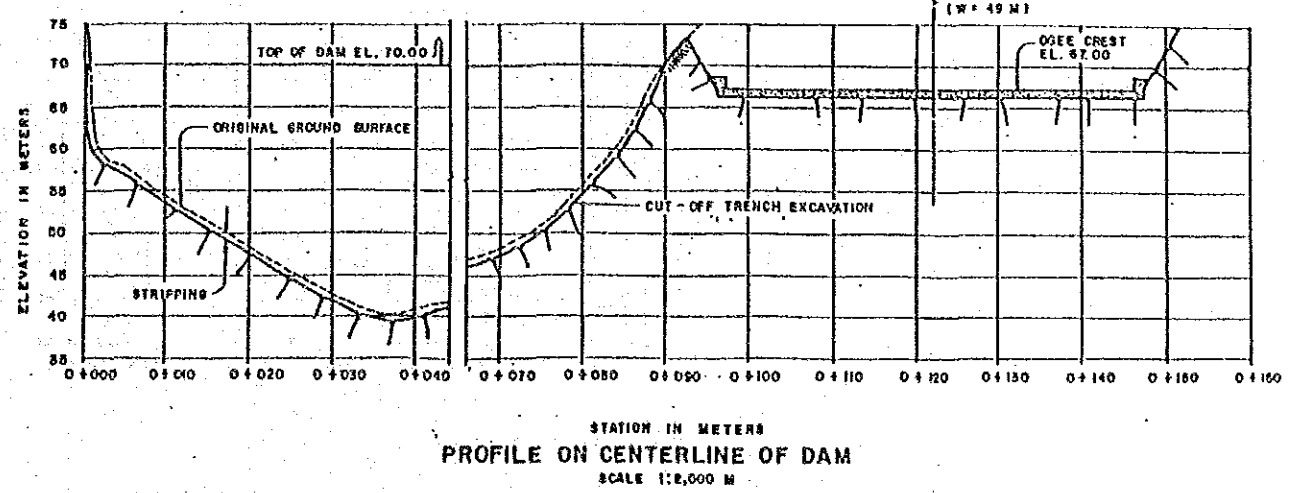
SWIM PROJECT PROFILE		File No. : 78
Regist. No. : Agency No. : NIA-147	Name: KANASUHAN CIP	
Region: 7	Province: CEBU	Municipality: CARGAR
Present Status: (1) Pre-F/S(1989)    2. F/S( )    3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	Dam Type : ZONED EARTHFILL	
	Dam Height : 30 m	
	Effective Storage Capacity : 5,992,000 m <sup>3</sup>	
	Embankment Volume : 164,000 m <sup>3</sup>	
	Design Flood Discharge : 410 m <sup>3</sup> /sec.	
2. Irrigation	Irrigation Area : 380 ha	
3. Mini-hydropower	Installed Capacity : - kW	
4. Watershed Man.	Watershed Protection Area : 1,560 ha	
5. Water Supply	Design Supply Capacity : - m <sup>3</sup> /day	
6. Inland Fishery	Annual Production : 152 ton/year	
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 13.7 %
2. Feasibility Study	: 1,505	Priority Rating:
3. Detailed Design	: 3,009	Group : B
4. Construction	:	Implementation Schedule:
Dam	: 49,185	Review : -
Irrigation	: 9,198	F/S : 1995
Mini-Hydropower	: 0	D/D : 1995
Water Supply	: 0	Construction: Jul. 1996; 18 months
Watershed Protection	: 22,749	
5. Grand Total	: 85,646	

Layout:

Typical Dam Section:



Profile of Dam Axis:

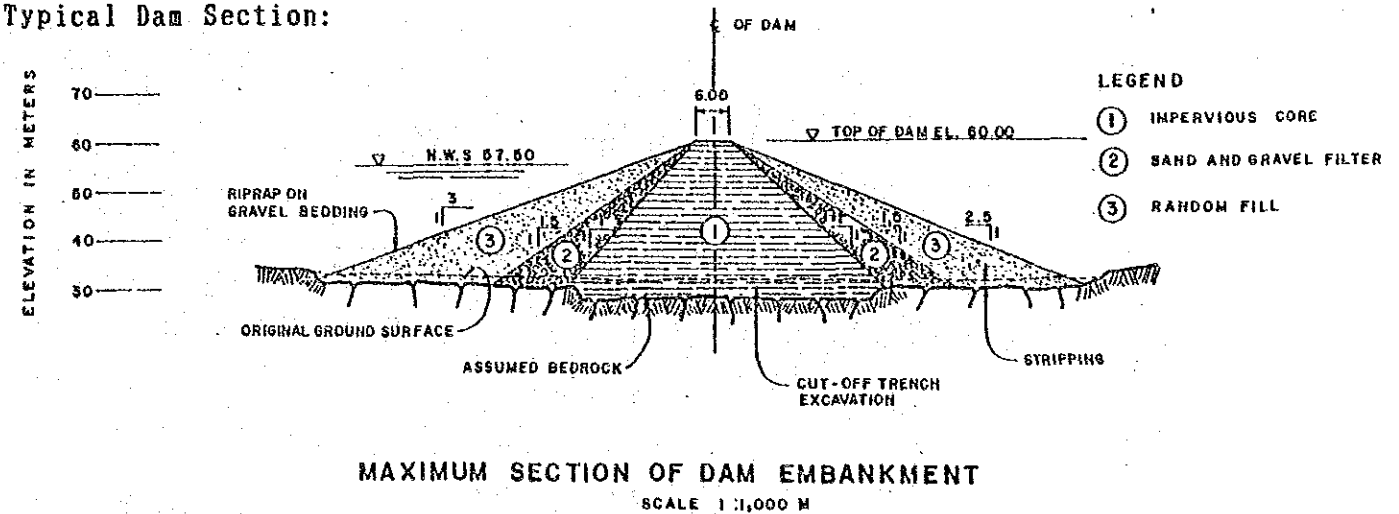


Note: Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage.

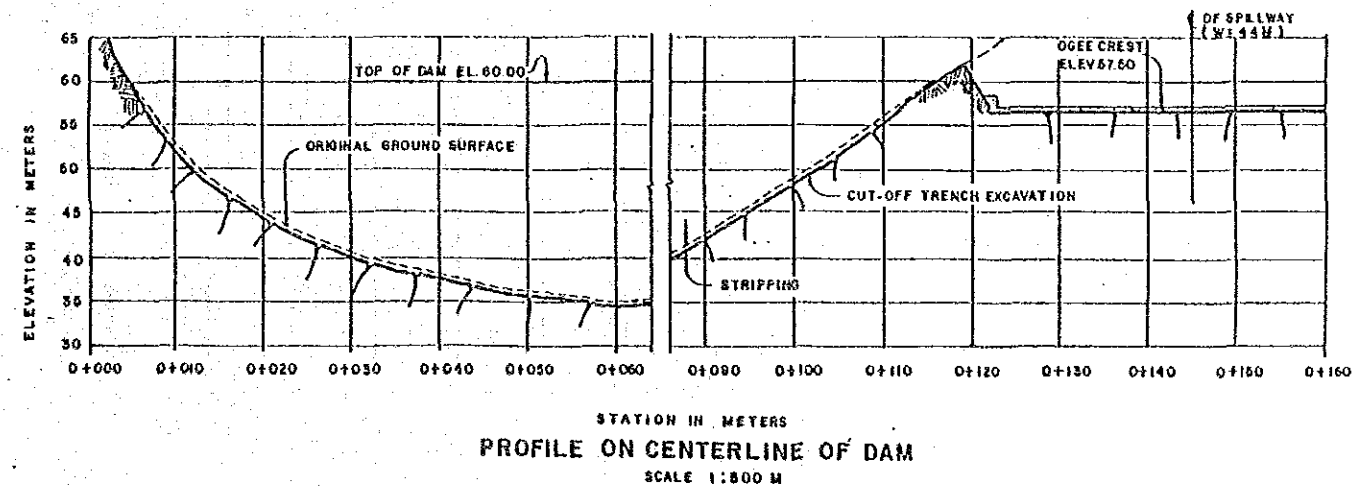
SWIM PROJECT PROFILE		File No. : 79
Regist. No. : Agency No. : NIA-148	Name: LUYANG CIP	
Region: 7	Province: CEBU	Municipality: CARMEN
Present Status: ① Pro-F/S(1989)    2. F/S( )    3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	Dam Type : ZONED EARTHFILL	
	Dam Height : 27 m	
	Effective Storage Capacity : 982,000 m <sup>3</sup>	
	Embankment Volume : 77,000 m <sup>3</sup>	
	Design Flood Discharge : 370 m <sup>3</sup> /sec.	
2. Irrigation	Irrigation Area : 230 ha	
3. Mini-hydropower	Installed Capacity : - kW	
4. Watershed Man.	Watershed Protection Area : 1,350 ha	
5. Water Supply	Design Supply Capacity : - m <sup>3</sup> /day	
6. Inland Fishery	Annual Production : 22 ton/year	
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 10.0 %
2. Feasibility Study	: 1,027	Priority Rating:
3. Detailed Design	: 2,055	Group : B
4. Construction	:	Implementation Schedule:
Dam	: 33,393	Review : -
Irrigation	: 5,567	F/S : 1998
Mini-Hydropower	: 0	D/D : 1999
Water Supply	: 0	Construction: Jan. 2000; 9 months
Watershed Protection	: 19,604	
5. Grand Total	: 61,736	

Layout:

Typical Dam Section:



Profile of Dam Axis:



Note:

Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage.

SWIM PROJECT PROFILE		File No. : 80
Regist. No. : Agency No. : NIA-149	Name : DANA O CIP	
Region : 7	Province : CEBU	Municipality : DANA O CITY
Present Status: ① Pre-F/S(1989)    2. F/S( )    3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 30 m
	: Effective Storage Capacity	: 2,623,000 m <sup>3</sup>
	: Embankment Volume	: 73,200 m <sup>3</sup>
	: Design Flood Discharge	: 500 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 430 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 2,160 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 62 ton/year
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 13.8 %
2. Feasibility Study	: 1,512	Priority Rating:
3. Detailed Design	: 3,024	Group : B
4. Construction	:	Implementation Schedule:
Dam	: 47,246	Review : -
Irrigation	: 10,408	F/S : 1987
Mini-Hydropower	: 0	D/D : 1998
Water Supply	: 0	Construction: Jan. 1999; 9 months
Watershed Protection	: 31,494	
5. Grand Total	: 93,685	

Layout:

Typical Dam Section:

MAXIMUM SECTION OF DAM EMBANKMENT  
SCALE 1:1,000 M

Profile of Dam Axis:

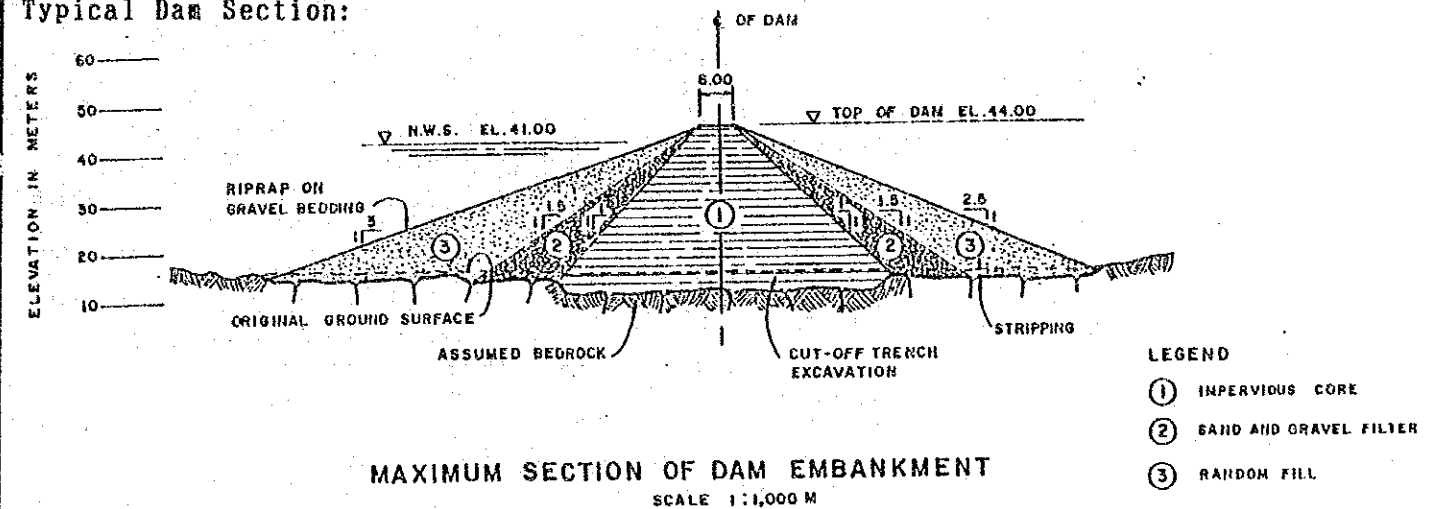
PROFILE ON CENTERLINE OF DAM  
SCALE 1:1,000 M

Note:  
Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage.

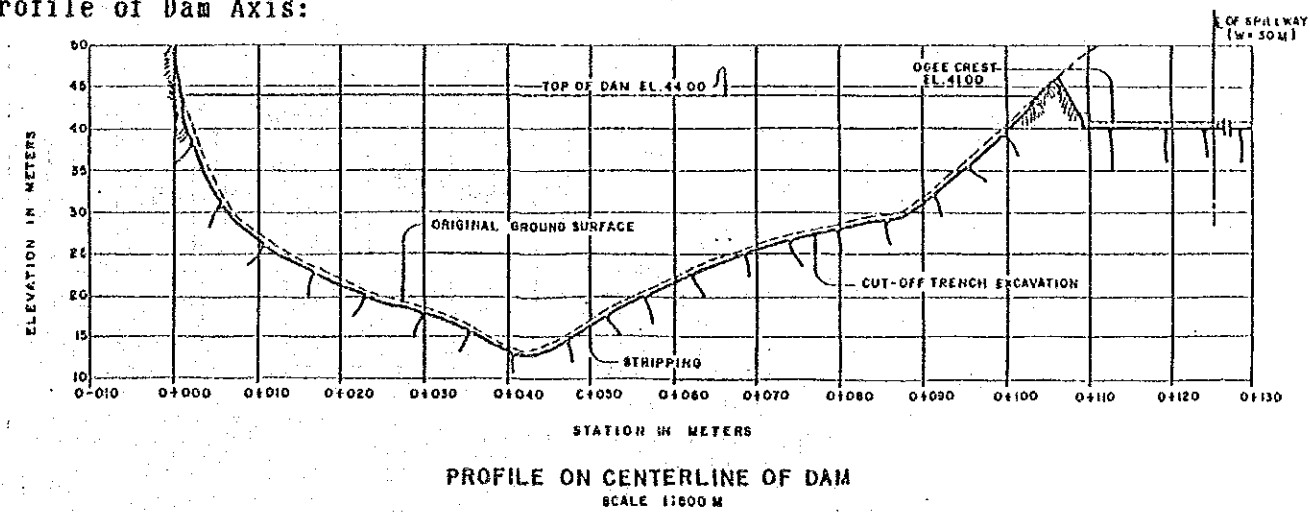
SWIM PROJECT PROFILE		File No. : 81
Regist. No. : Agency No. : NIA-150	Name: TUNGKOD CIP	
Region: 7	Province: CEBU	Municipality: MINGLANILLA
Present Status: ① Pre-F/S(1989)    2. F/S( )    3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	Dam Type : ZONED EARTHFILL	
	Dam Height : 30 m	
	Effective Storage Capacity : 9,648,000 m <sup>3</sup>	
	Embankment Volume : 88,900 m <sup>3</sup>	
	Design Flood Discharge : 260 m <sup>3</sup> /sec.	
2. Irrigation	Irrigation Area : 240 ha	
3. Mini-hydropower	Installed Capacity : - kW	
4. Watershed Man.	Watershed Protection Area : 1,033 ha	
5. Water Supply	Design Supply Capacity : - m <sup>3</sup> /day	
6. Inland Fishery	Annual Production : 216 ton/year	
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	BIRR : 20.0 %
2. Feasibility Study	: 872	Priority Rating:
3. Detailed Design	: 1,743	Group : B
4. Construction	:	Implementation Schedule:
Dam	: 29,454	Review : -
Irrigation	: 5,809	F/S : 1995
Mini-Hydropower	: 0	D/D : 1995
Water Supply	: 0	Construction: Jul. 1996; 12 months
Watershed Protection	: 15,060	
5. Grand Total	: 52,938	

Layout:

Typical Dam Section:



Profile of Dam Axis:



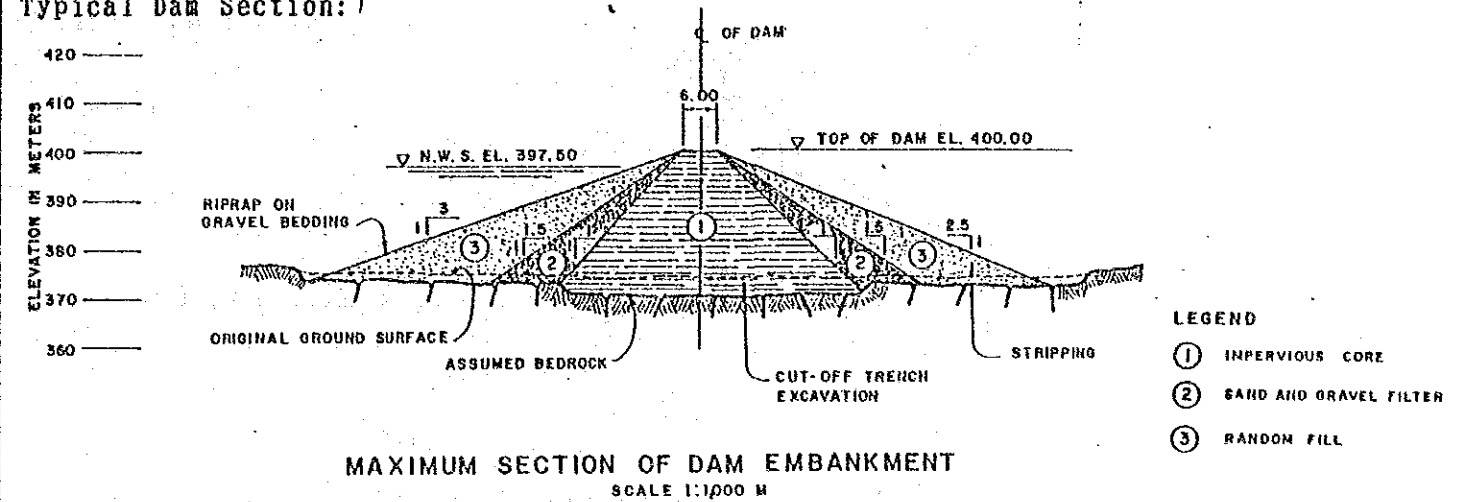
Note:

Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage.

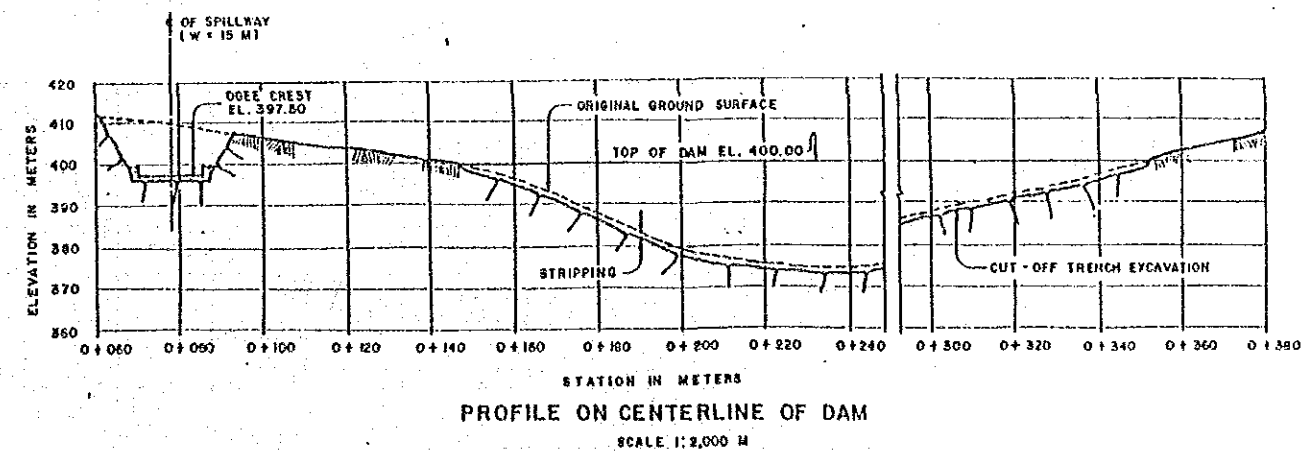
SWIM PROJECT PROFILE		File No. : 82
Regist. No. : Agency No. : NIA-152	Name : MAAYOG-TUBIG CIP	
Region : 7	Province : NEGROS ORIENTAL	Municipality : DAUIN
Present Status : ① Pre-F/S(1989) 2. F/S( ) 3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC		
Project Feature:		
1. Dam	Dam Type : ZONED EARTHFILL	
	Dam Height : 25 m	
	Effective Storage Capacity : 1,455,000 m <sup>3</sup>	
	Embankment Volume : 78,600 m <sup>3</sup>	
	Design Flood Discharge : 123 m <sup>3</sup> /sec.	
2. Irrigation	Irrigation Area : 180 ha	
3. Mini-hydropower	Installed Capacity : - kW	
4. Watershed Man.	Watershed Protection Area : 0 ha	
5. Water Supply	Design Supply Capacity : - m <sup>3</sup> /day	
6. Inland Fishery	Annual Production : 59 ton/year	
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review :	0	EIRR : 23.2 %
2. Feasibility Study :	420	Priority Rating:
3. Detailed Design :	841	Group : A
4. Construction :		Implementation Schedule:
Dam :	12,146	Review : -
Irrigation :	4,357	F/S : 1993
Mini-Hydropower :	0	D/D : 1993
Water Supply :	0	Construction: Jul. 1994; 12 months
Watershed Protection :	0	
5. Grand Total :	17,764	

Layout:

Typical Dam Section:



Profile of Dam Axis:



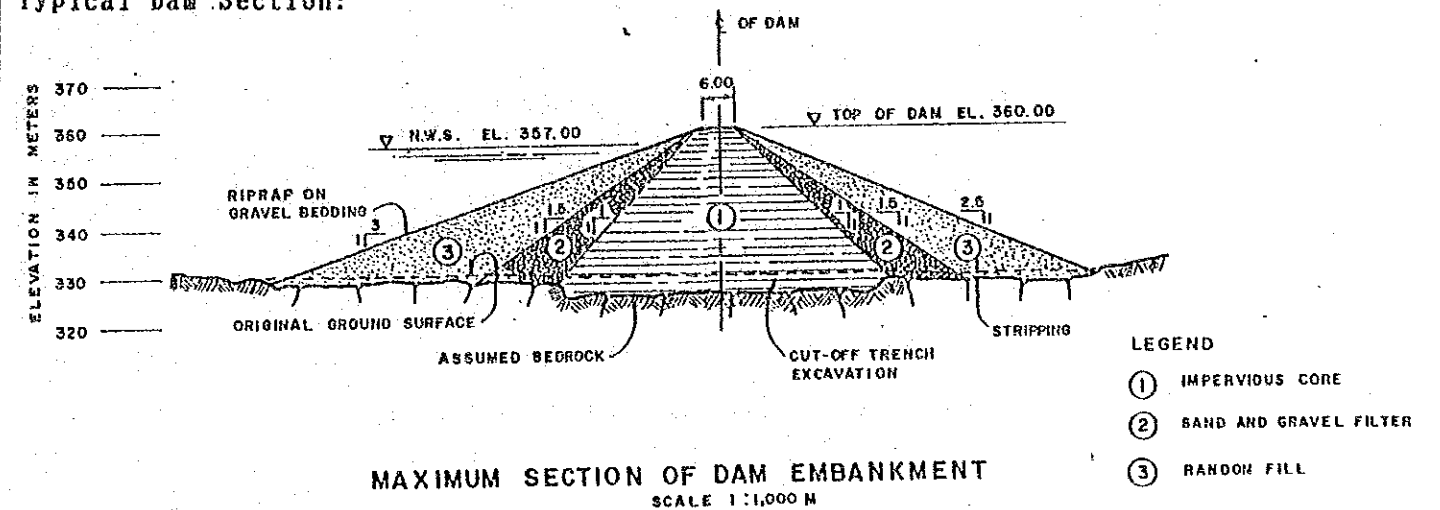
Note:

Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage.

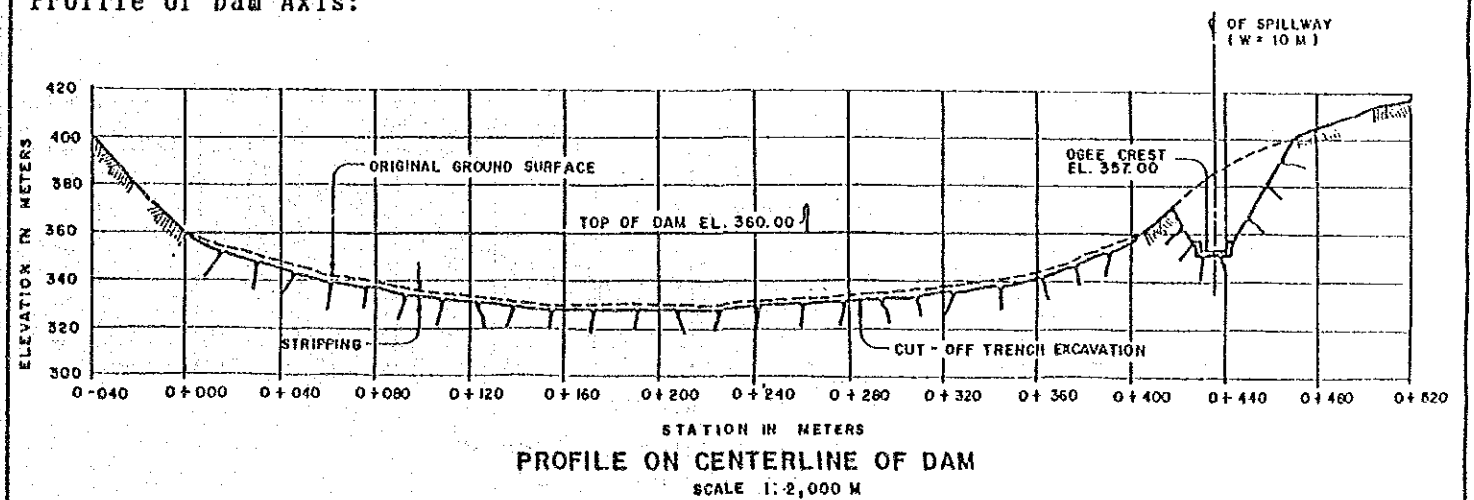
SWIM PROJECT PROFILE		File No. : 83
Regist. No. : Agency No. : NIA-154	Name : MASAPLOD CIP	
Region : 7	Province : NEGROS ORIENTAL	Municipality : DAUIN
Present Status : ① Pre-F/S(1989)    2. F/S( )    3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 30 m
	: Effective Storage Capacity	: 2,273,000 m <sup>3</sup>
	: Embankment Volume	: 78,000 m <sup>3</sup>
	: Design Flood Discharge	: 83 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 130 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 240 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 43 ton/year
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 19.4 %
2. Feasibility Study	: 375	Priority Rating:
3. Detailed Design	: 751	Group : B
4. Construction	:	Implementation Schedule:
Dam	: 11,470	Review : -
Irrigation	: 3,147	F/S : 1995
Mini-Hydropower	: 0	D/D : 1995
Water Supply	: 0	Construction: Jul. 1996; 9 months
Watershed Protection	: 6,023	
5. Grand Total	: 21,766	

Layout:

Typical Dam Section:



Profile of Dam Axis:



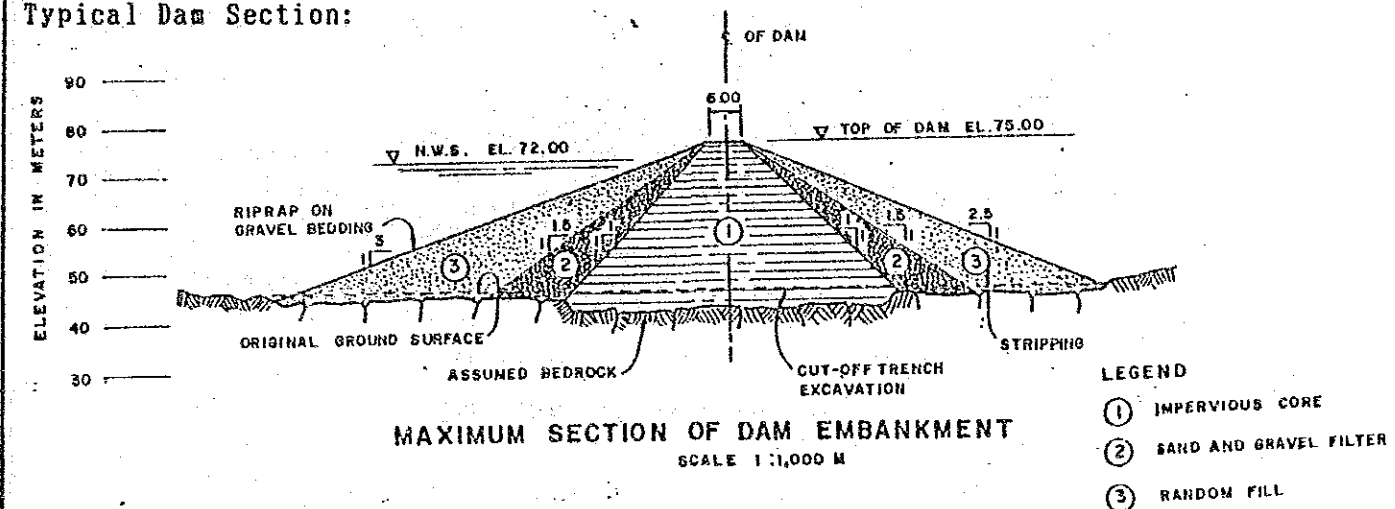
Note:

Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone; shape of core trench; necessity of impervious blanket, would be decided through F/S, D/D stage. Magnitude of design discharge should be at least more than 100 years.

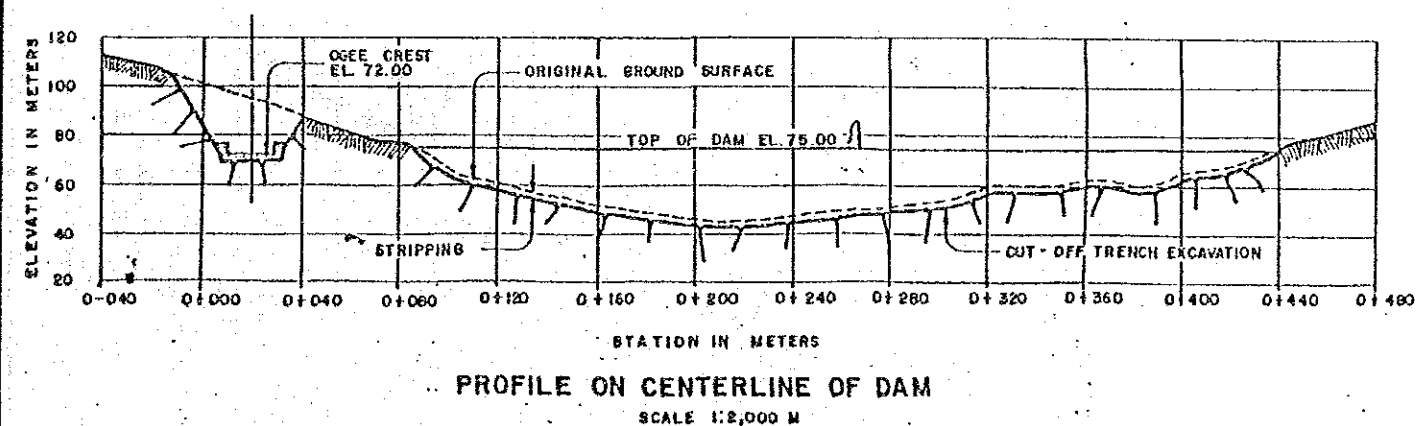
SWIM PROJECT PROFILE		File No. : 84
Regist. No. : Agency No. : NIA-157	Name : NAGA-MANTUYOP CIP	
Region : 7	Province : NEGROS ORIENTAL	Municipality : SIATON
Present Status : (1) Pre-F/S(1989) 2. F/S( ) 3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 30 m
	: Effective Storage Capacity	: 2,481,000 m <sup>3</sup>
	: Embankment Volume	: 219,000 m <sup>3</sup>
	: Design Flood Discharge	: 152 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 250 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 465 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 54 ton/year
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement:(1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 11.4 %
2. Feasibility Study	: 1,101	Priority Rating:
3. Detailed Design	: 2,202	Group : B
4. Construction	:	Implementation Schedule:
Dam	: 36,030	Review : -
Irrigation	: 6,051	F/S : 1996
Mini-Hydropower	: 0	D/D : 1996
Water Supply	: 0	Construction: Jul.1997;21 months
Watershed Protection	: 12,452	
5. Grand Total	: 57,836	

Layout:

Typical Dam Section:



Profile of Dam Axis:



Note:

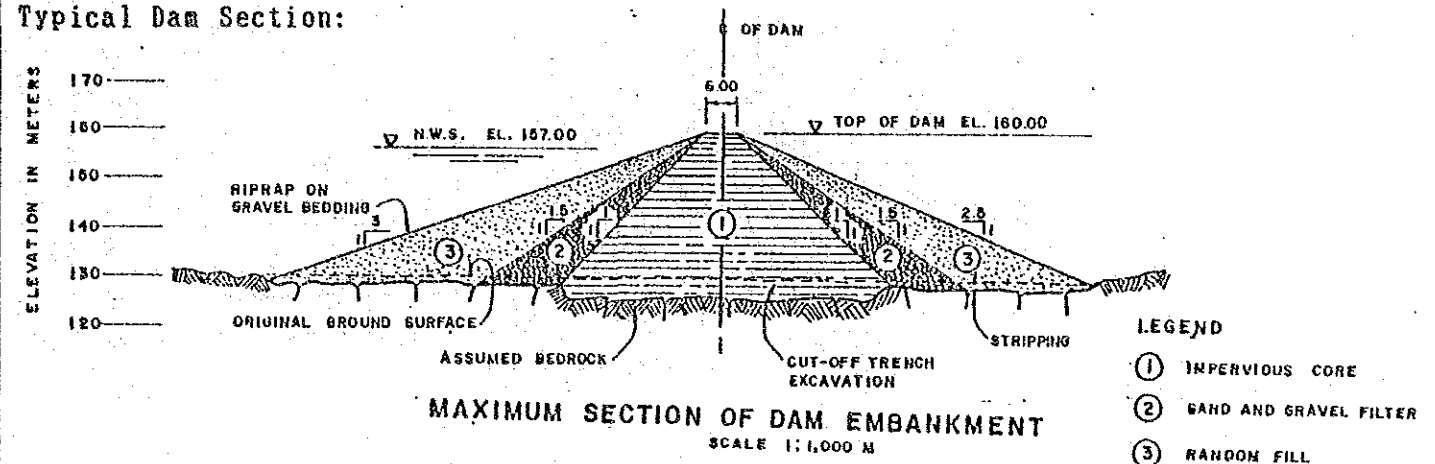
Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage. Magnitude of design discharge should be at least more than 100 years.



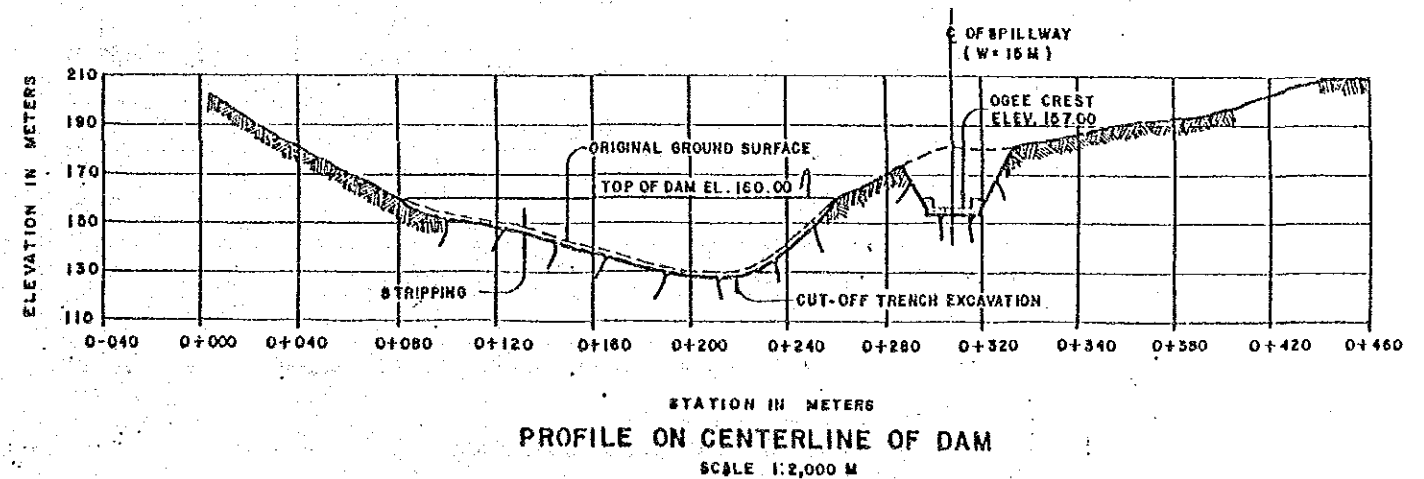
SWIM PROJECT PROFILE		File No. : 85
Regist. No. : Agency No. : NIA-158	Name : SAN ANTONIO CIP	
Region : 7	Province : NEGROS ORIENTAL	Municipality : SIBULAN
Present Status : ① Pre-F/S(1989)    2. F/S( )    3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 30 m
	: Effective Storage Capacity	: 351,000 m <sup>3</sup>
	: Embankment Volume	: 118,300 m <sup>3</sup>
	: Design Flood Discharge	: 133 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 120 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 365 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 11 ton/year
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning EIRR is less than 10 %. Project planning shall be re-formulated.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 90	EIRR : 6.4 %
2. Feasibility Study	: 647	Priority Rating:
3. Detailed Design	: 1,293	Group : B
4. Construction	:	Implementation Schedule:
Dam	: 21,578	Review : 1991
Irrigation	: 2,905	F/S : 1998
Mini-Hydropower	: 0	D/D : 1998
Water Supply	: 0	Construction: Jul. 1999; 12 months
Watershed Protection	: 9,787	
5. Grand Total	: 36,300	

Layout:

Typical Dam Section:



Profile of Dam Axis:

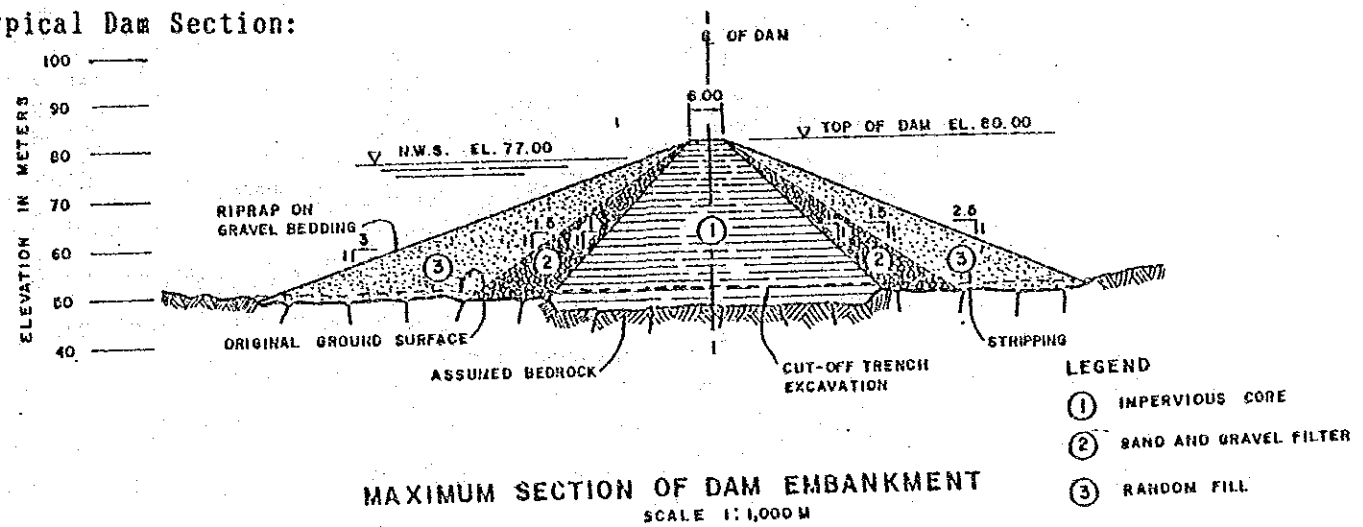


Note: Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage. Magnitude of design discharge should be at least more than 100 years.

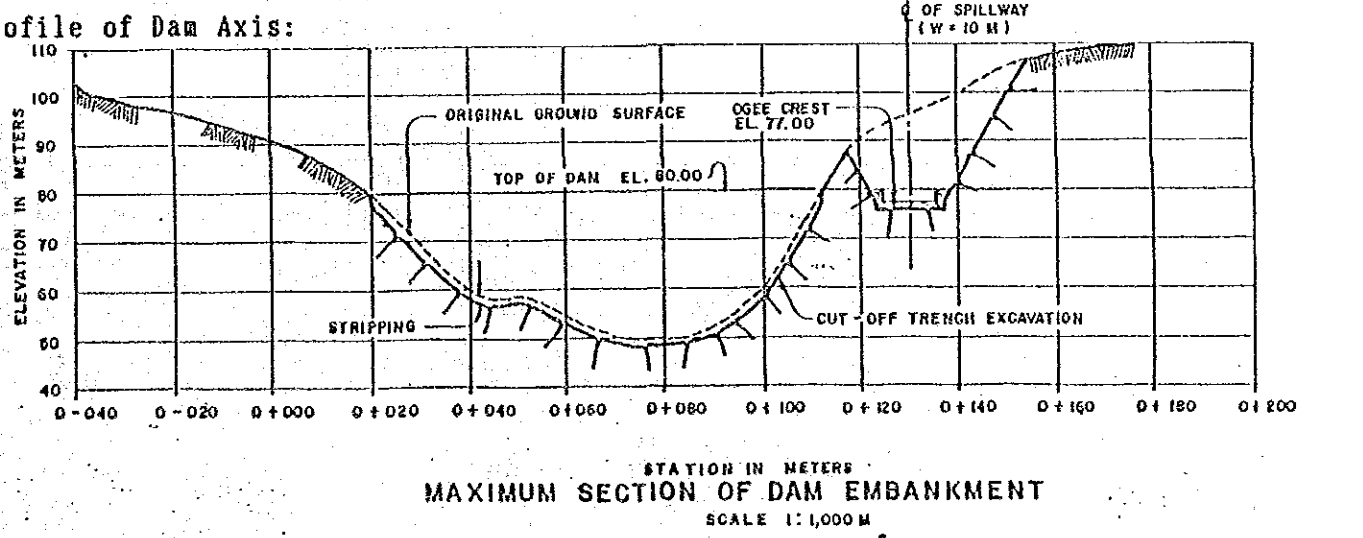
SWIM PROJECT PROFILE		File No. : 86
Regist. No. : Agency No. : NIA-163	Name: TIGBAO CIP	
Region: 7	Province: SIKUIJOR	Municipality: LAZI
Present Status: (1) Pre-F/S(1989) 2. F/S( ) 3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	Dam Type : ZONED EARTHFILL	
	Dam Height : 30 m	
	Effective Storage Capacity : 383,000 m <sup>3</sup>	
	Embankment Volume : 95,200 m <sup>3</sup>	
	Design Flood Discharge : 90 m <sup>3</sup> /sec.	
2. Irrigation	Irrigation Area : 80 ha	
3. Mini-hydropower	Installed Capacity : - kW	
4. Watershed Man.	Watershed Protection Area : 217 ha	
5. Water Supply	Design Supply Capacity : - m <sup>3</sup> /day	
6. Inland Fishery	Annual Production : 10 ton/year	
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning EIRR is less than 10 %. Project planning shall be re-formulated.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review :	65	EIRR : 7.4 %
2. Feasibility Study :	466	Priority Rating:
3. Detailed Design :	931	Group : B
4. Construction :		Implementation Schedule:
Dam :	15,707	Review : 1991
Irrigation :	1,936	F/S : 1998
Mini-Hydropower :	0	D/D : 1998
Water Supply :	0	Construction: Jul, 1999; 12 months
Watershed Protection :	6,175	
5. Grand Total :	25,280	

Layout:

Typical Dam Section:



Profile of Dam Axis:

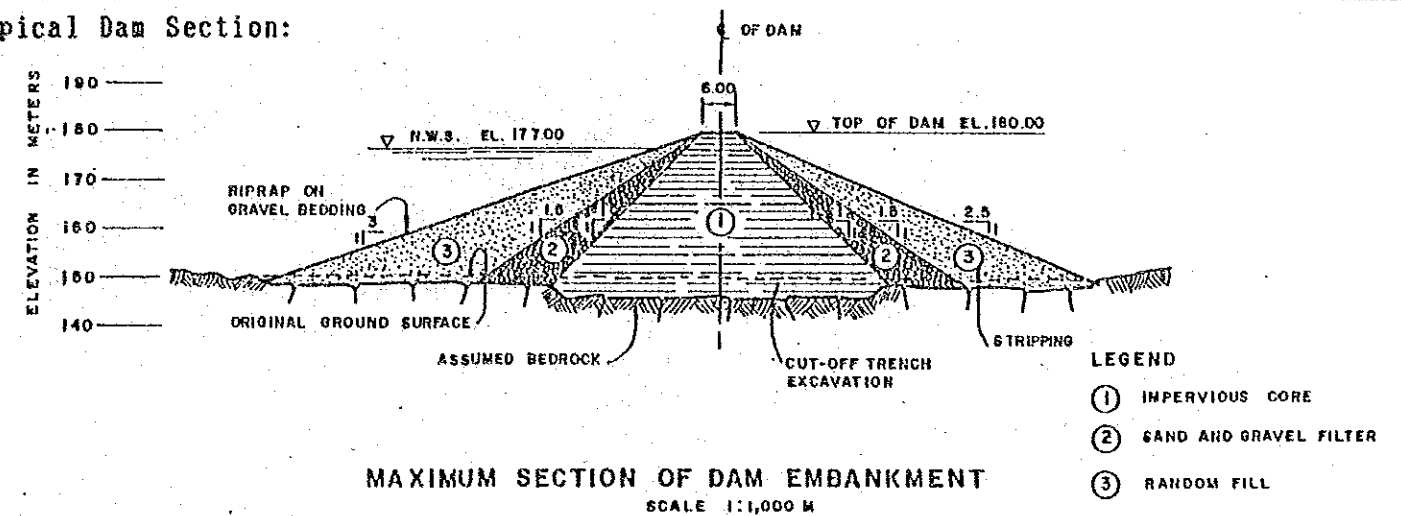


Note:  
Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage. Magnitude of design discharge should be at least more than 100 years.

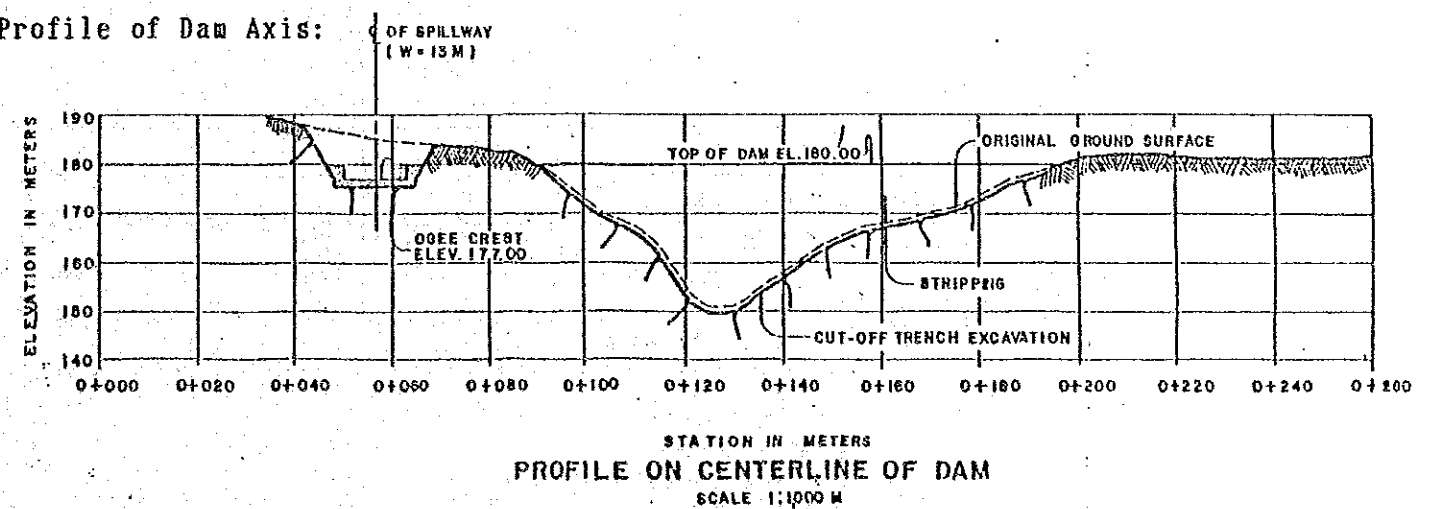
SWIM PROJECT PROFILE		File No. : 87
Regist. No. : Agency No. : NIA-186	Name: MAHAYAHAY SWIP	
Region: 8	Province: SOUTHERN LEYTE	Municipality: BONTOC
Present Status: (1) Pre-F/S(1989) 2. F/S( ) 3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Features:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 30 m
	: Effective Storage Capacity	: 221,000 m <sup>3</sup>
	: Embankment Volume	: 117,000 m <sup>3</sup>
	: Design Flood Discharge	: 112 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 335 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 204 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 6 ton/year
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 19.3 %
2. Feasibility Study	: 759	Priority Rating:
3. Detailed Design	: 1,519	Group : B
4. Construction	:	Implementation Schedule:
Dam	: 21,120	Review : -
Irrigation	: 8,109	F/S : 1995
Mini-Hydropower	: 0	D/D : 1995
Water Supply	: 0	Construction: Jul. 1996; 15 months
Watershed Protection	: 5,457	
5. Grand Total	: 36,963	

Layout:

Typical Dam Section:



Profile of Dam Axis:

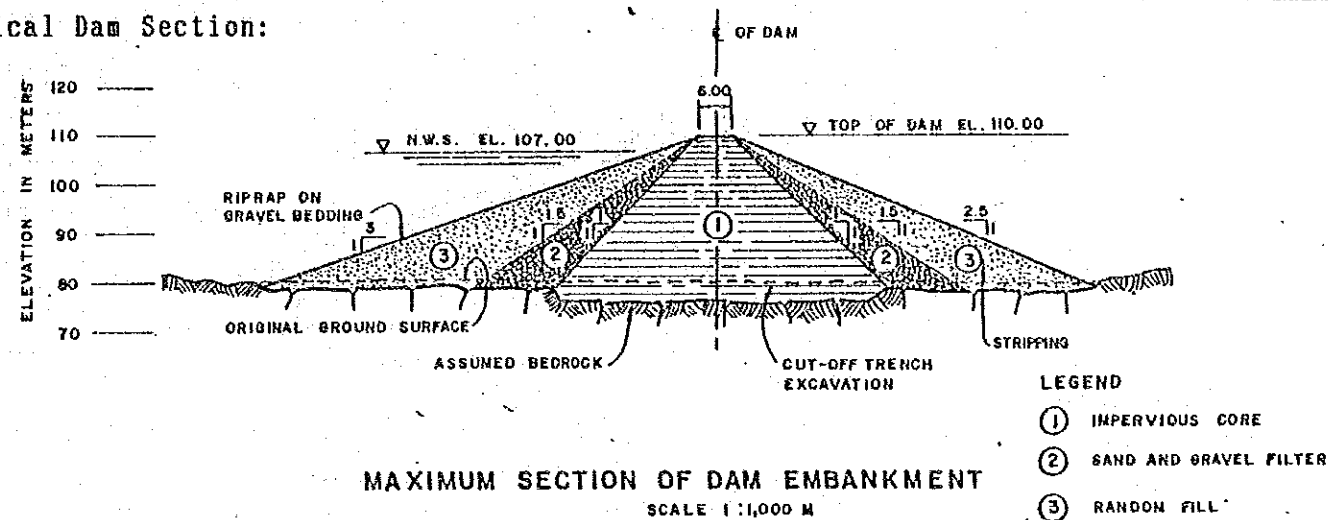


Note: Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage. Magnitude of design discharge should be at least more than 100 years.

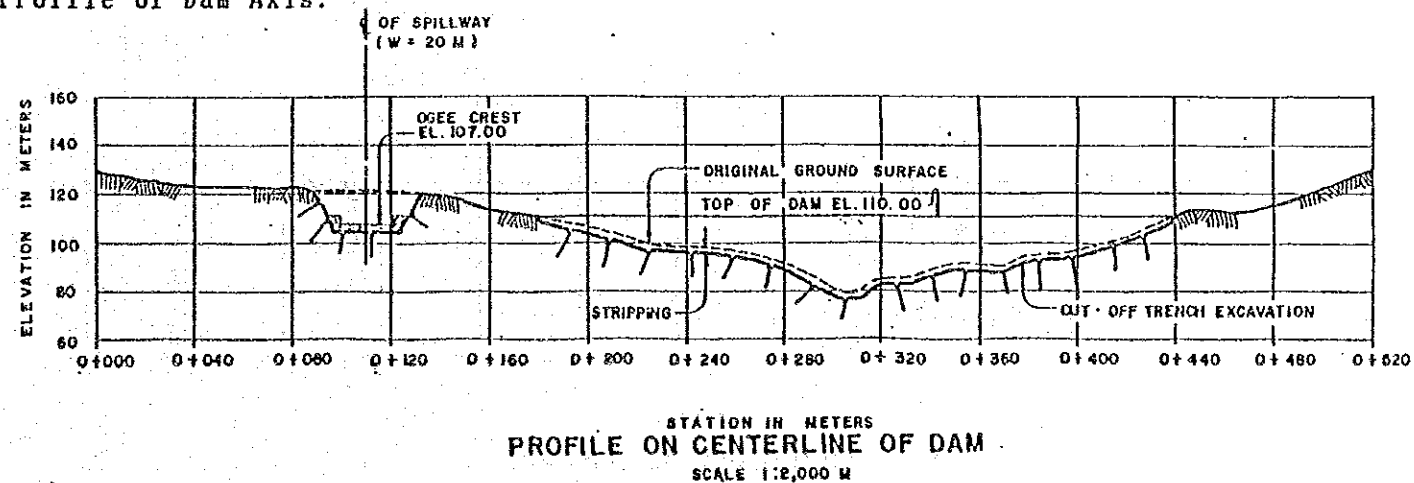
SWIM PROJECT PROFILE		File No. : 88
Regist. No. : Agency No. : NIA-187	Name: BOGO-DONGON SWIP	
Region: 8	Province: SOUTHERN LEYTE	Municipality: MAASIN
Present Status: ① Pre-F/S(1989) 2. F/S( ) 3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 30 m
	: Effective Storage Capacity	: 4,405,000 m <sup>3</sup>
	: Embankment Volume	: 150,000 m <sup>3</sup>
	: Design Flood Discharge	: 170 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 260 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 555 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 93 ton/year
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 14.6 %
2. Feasibility Study	: 909	Priority Rating:
3. Detailed Design	: 1,818	Group : B
4. Construction	:	Implementation Schedule:
Dam	: 28,986	Review : -
Irrigation	: 6,293	F/S : 1996
Mini-Hydropower	: 0	D/D : 1996
Water Supply	: 0	Construction: Jul. 1997; 15 months
Watershed Protection	: 9,518	
5. Grand Total	: 47,524	

Layout:

Typical Dam Section:



Profile of Dam Axis:



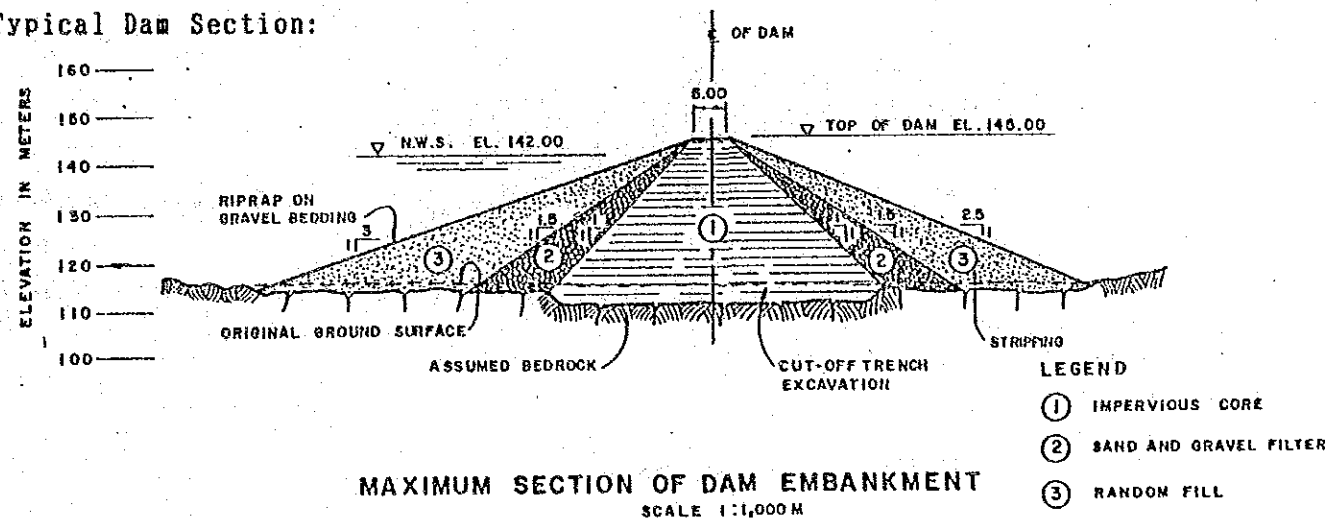
Note:

Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage. Magnitude of design discharge should be at least more than 100 years.

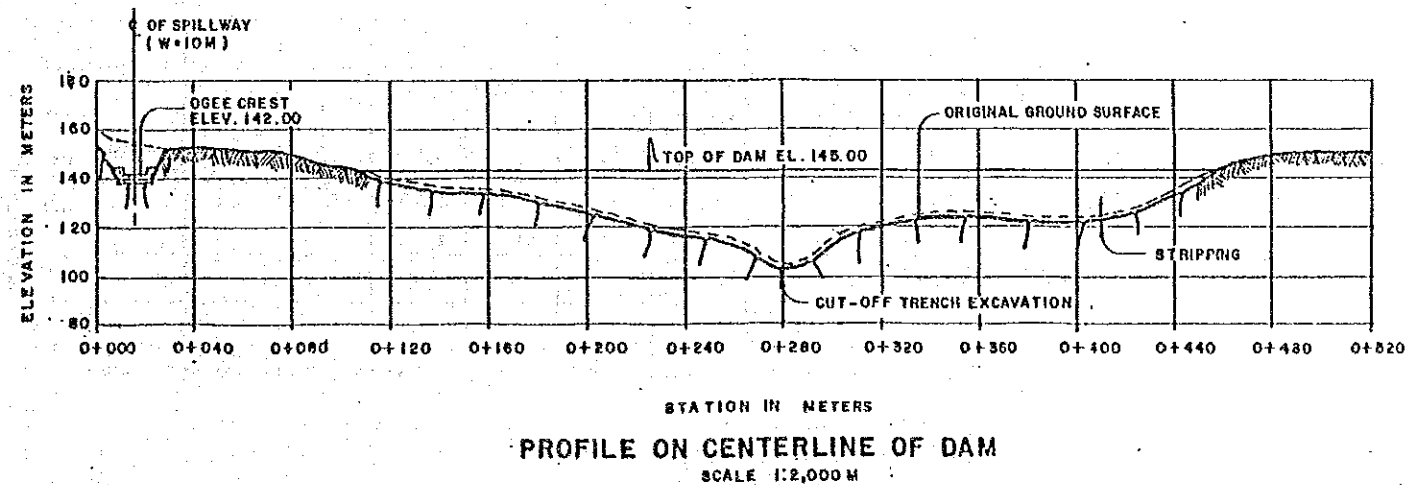
SWIM PROJECT PROFILE		File No. : 89
Regist. No. : Agency No. : NIA-188	Name: LAN-AGAN SWIM	
Region: 8	Province: SOUTHERN LEYTE	Municipality: MAASIN
Present Status: ① Pre-F/S(1989) 2. F/S( ) 3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC		
Project Feature:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 30 m
	: Effective Storage Capacity	: 3,003,000 m <sup>3</sup>
	: Embankment Volume	: 141,000 m <sup>3</sup>
	: Design Flood Discharge	: 59 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 110 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 0 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 72 ton/year
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 13.8 %
2. Feasibility Study	: 488	Priority Rating:
3. Detailed Design	: 976	Group : B
4. Construction	:	Implementation Schedule:
Dam	: 16,520	Review : -
Irrigation	: 2,663	F/S : 1996
Mini-Hydropower	: 0	D/D : 1997
Water Supply	: 0	Construction: Jan.1998;12 months
Watershed Protection	: 0	
5. Grand Total	: 20,646	

Layout:

Typical Dam Section:



Profile of Dam Axis:

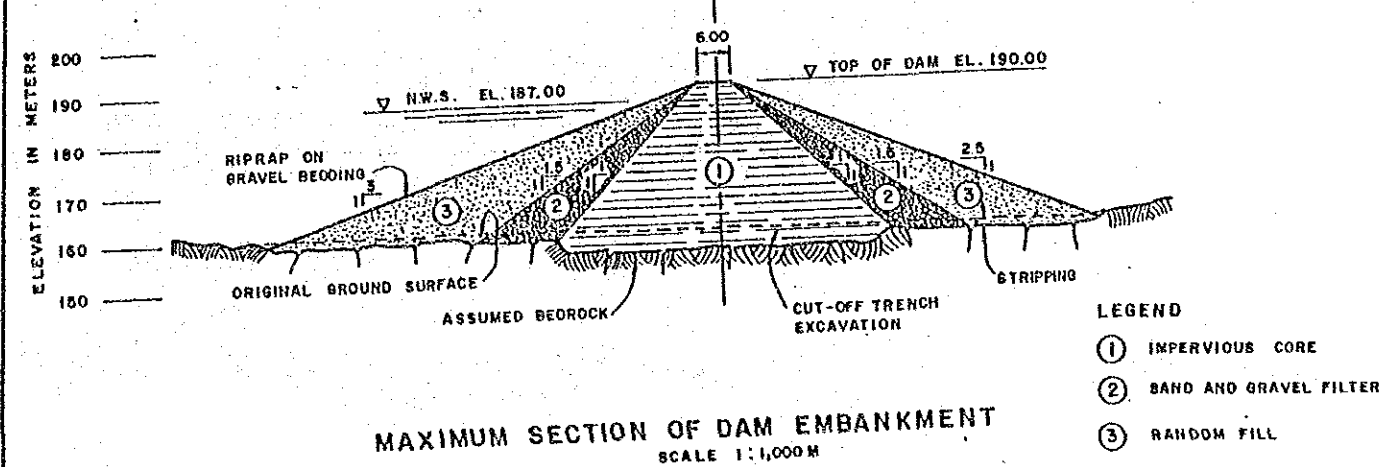


Note: Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage. Magnitude of design discharge should be at least more than 100 years.

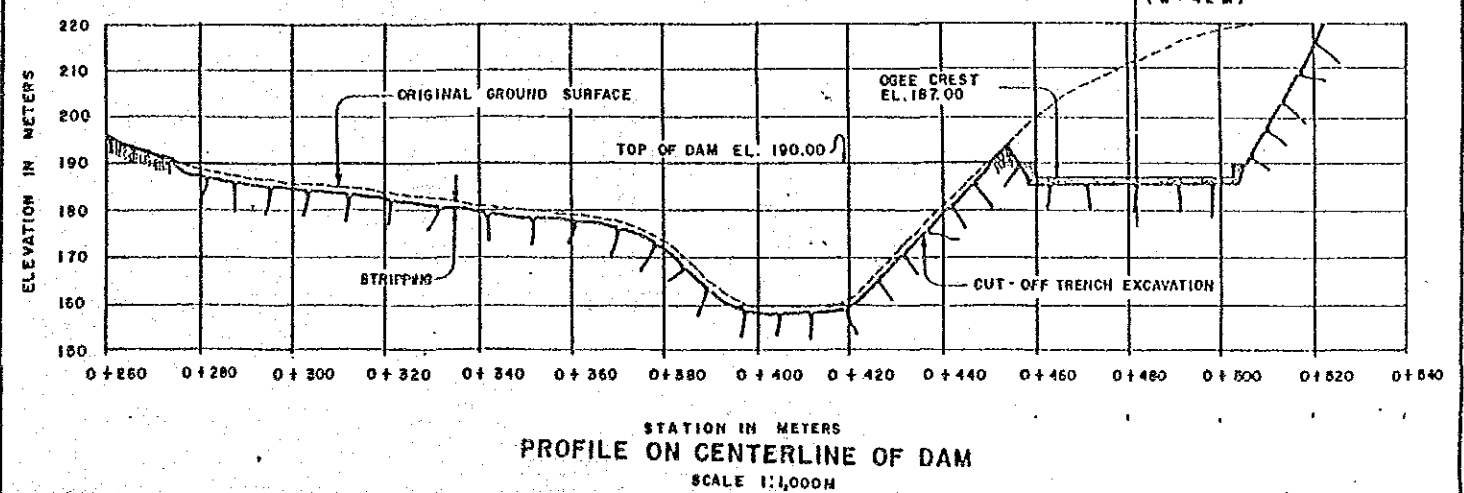
SWIM PROJECT PROFILE		File No. : 90
Regist. No. : Agency No. : NIA-190	Name : KAMANSI-RIZAL SWIP	
Region : 8	Province : SOUTHERN LEYTE	Municipality : TOMAS OPPUS
Present Status : (1) Pre-F/S(1989)    2. F/S( )    3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC		
Project Feature:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 30 m
	: Effective Storage Capacity	: 6,031,000 m <sup>3</sup>
	: Embankment Volume	: 160,000 m <sup>3</sup>
	: Design Flood Discharge	: 350 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 346 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 0 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 122 ton/year
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 14.0 %
2. Feasibility Study	: 1,297	Priority Rating:
3. Detailed Design	: 2,593	Group : B
4. Construction	:	Implementation Schedule:
Dam	: 41,856	Review : -
Irrigation	: 8,351	F/S : 1996
Mini-Hydropower	: 0	D/D : 1996
Water Supply	: 0	Construction: Jul. 1997; 18 months
Watershed Protection	: 0	
5. Grand Total	: 54,097	

Layout:

Typical Dam Section:

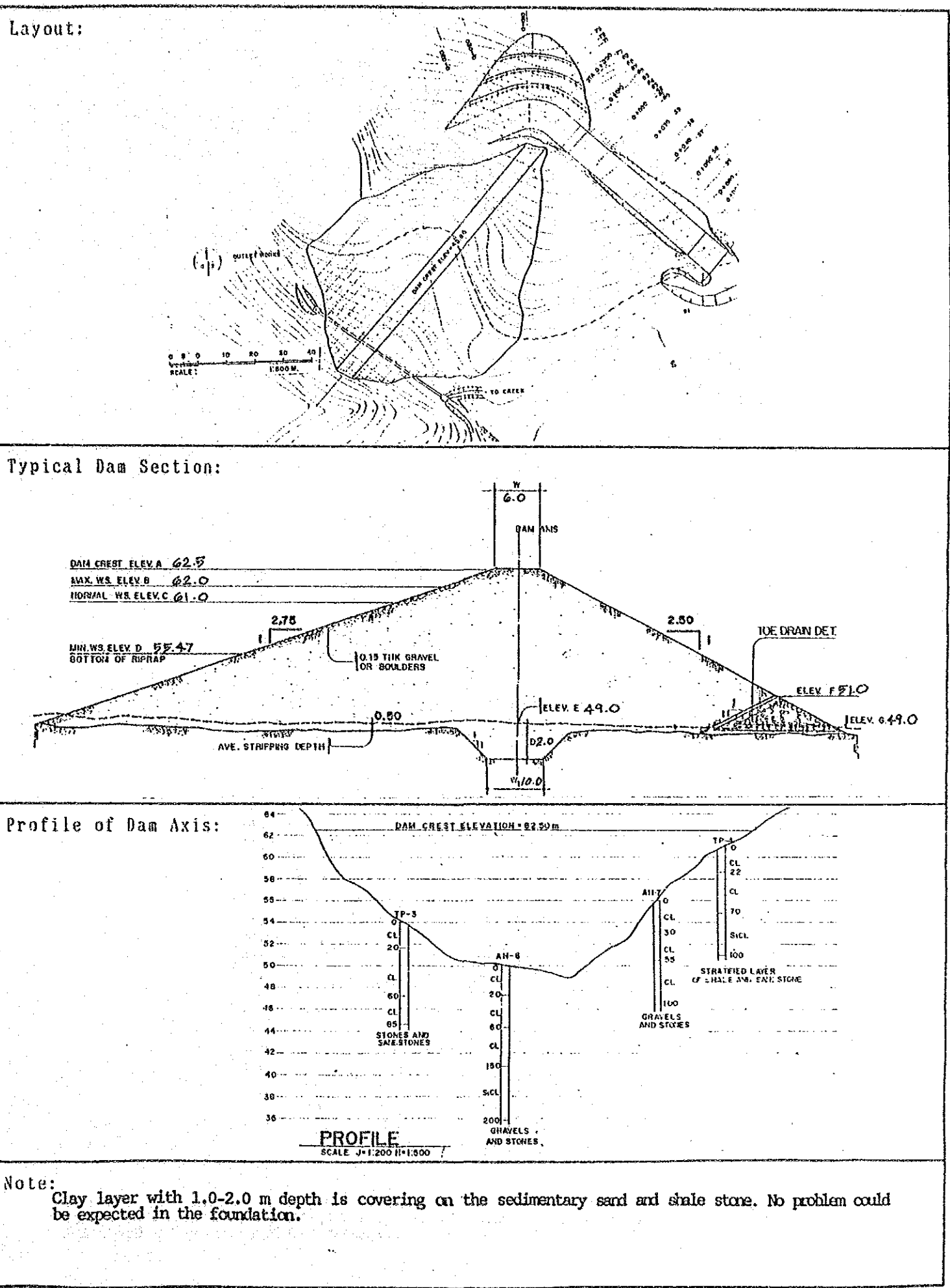


Profile of Dam Axis:



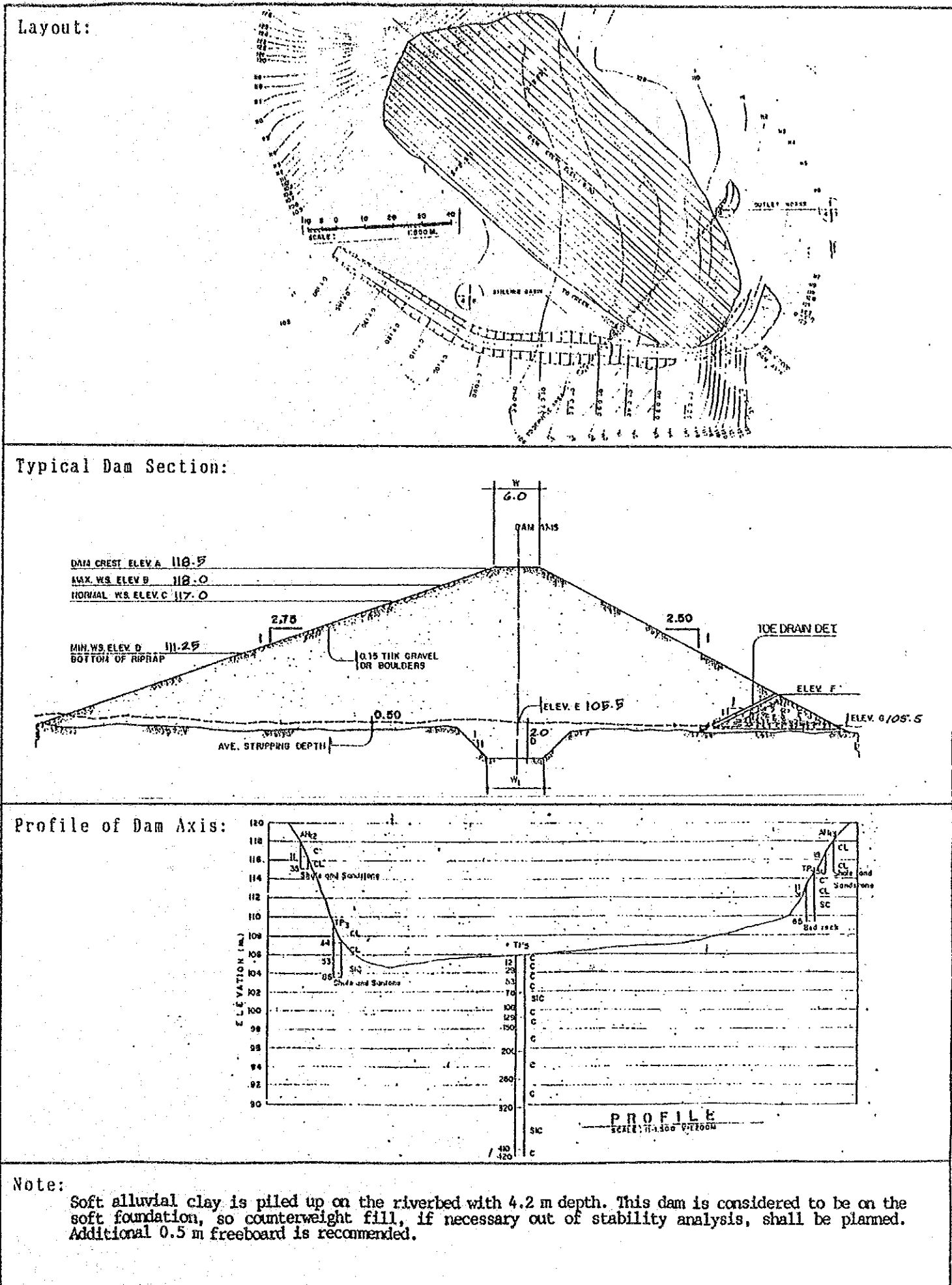
Note: Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage.

SWIM PROJECT PROFILE		File No. : 91
Regist. No. : Agency No. : BSWM-1	Name : SUCSUGUEN SWIP	
Region : 1	Province : ILOCOS NORTE	Municipality : PIDDIG
Present Status : 1. Pro-F/S( )    ② F/S(1983)    ③ D/D(1983)		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	: Dam Type	: HOMOGENEOUS EARTHFILL
	: Dam Height	: 14 m
	: Effective Storage Capacity	: 156,662 m <sup>3</sup>
	: Embankment Volume	: 28,000 m <sup>3</sup>
	: Design Flood Discharge	: 20 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 30 ha
3. Mini-hydropower	: Installed Capacity	: 0 kW
4. Watershed Man.	: Watershed Protection Area	: 110 ha
5. Water Supply	: Design Supply Capacity	: 0 m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 6 ton/year
Technical Assessment:		
1. Survey and Investigation:		
Depth of test pit or auger boring is not enough.		
Bearing capacity and permeability are not measured.		
Available volume for the dam embankment materials shall be studied before construction.		
2. Planning		
Environmental conservation plan is not formulated.		
Project planning shall be re-formulated.		
3. Design		
Depth of core trench shall be modified during construction.		
Stability of upstream slope of the dam shall be checked.		
Weir shall be provided in the spillway.		
4. Operation and Maintenance		
Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 35	EIRR : 8.0 %
2. Feasibility Study	: 0	Priority Rating:
3. Detailed Design	: 0	Group : B
4. Construction	:	Implementation Schedule:
Dam	: 3,738	Review : 1991
Irrigation	: 666	F/S : completed
Mini-Hydropower	: 0	D/D : completed
Water Supply	: 0	Construction: Jul.2000; 6 months
Watershed Protection	: 1,589	
5. Grand Total	: 6,028	



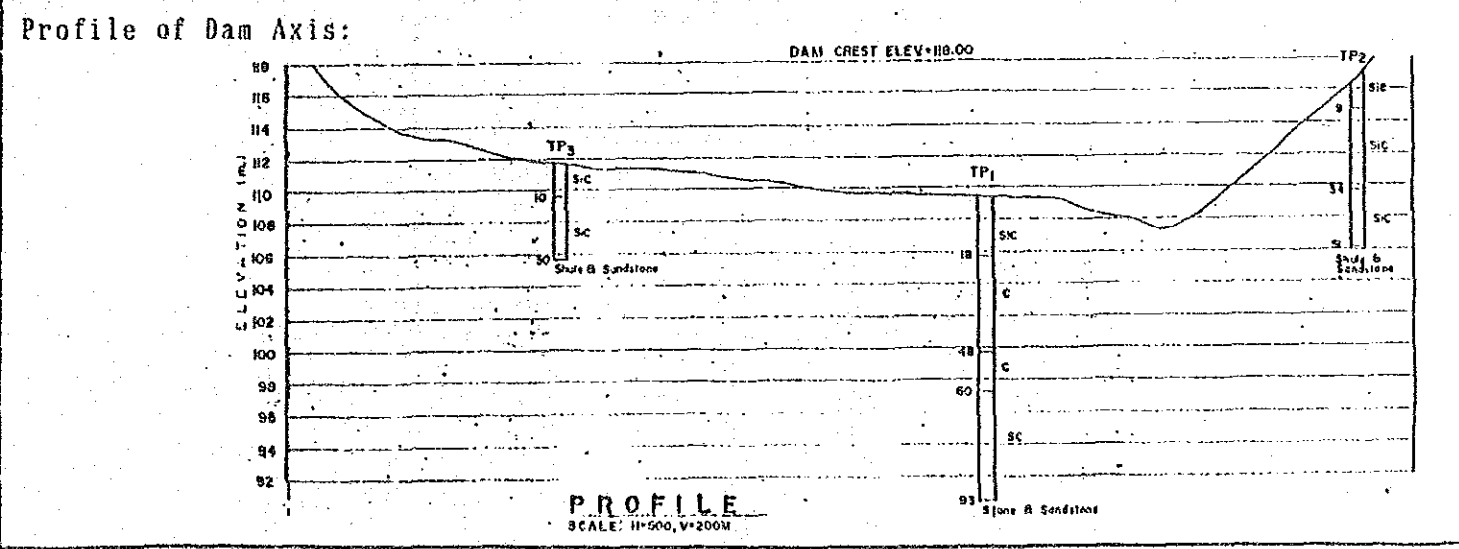
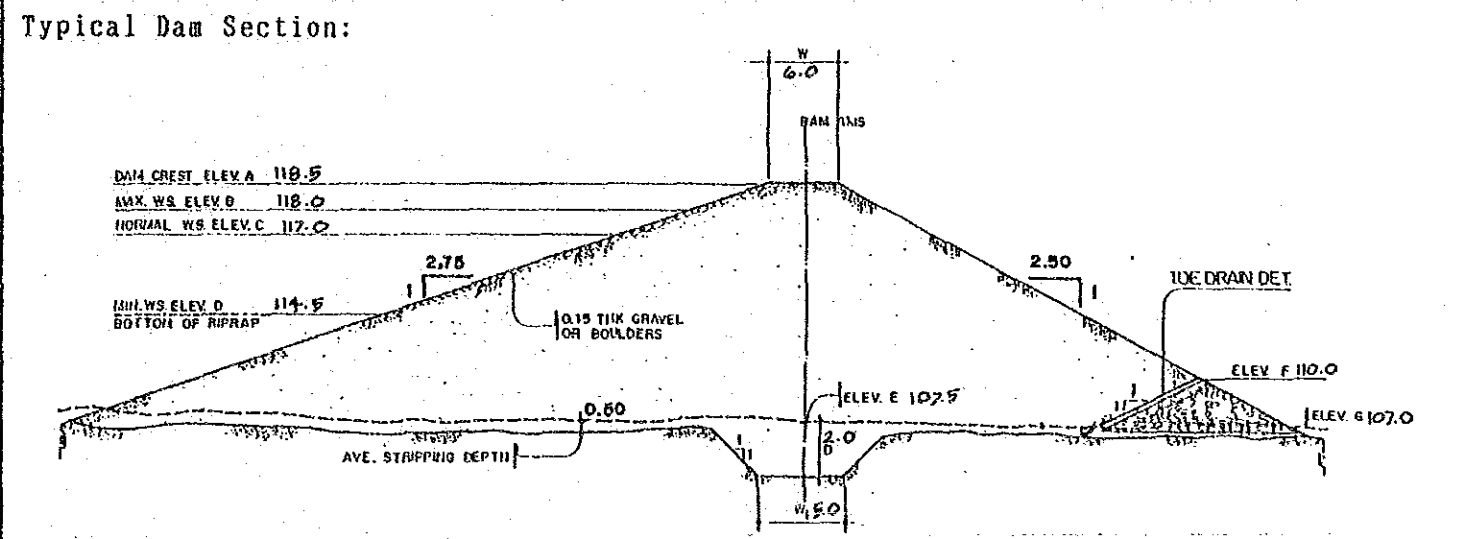
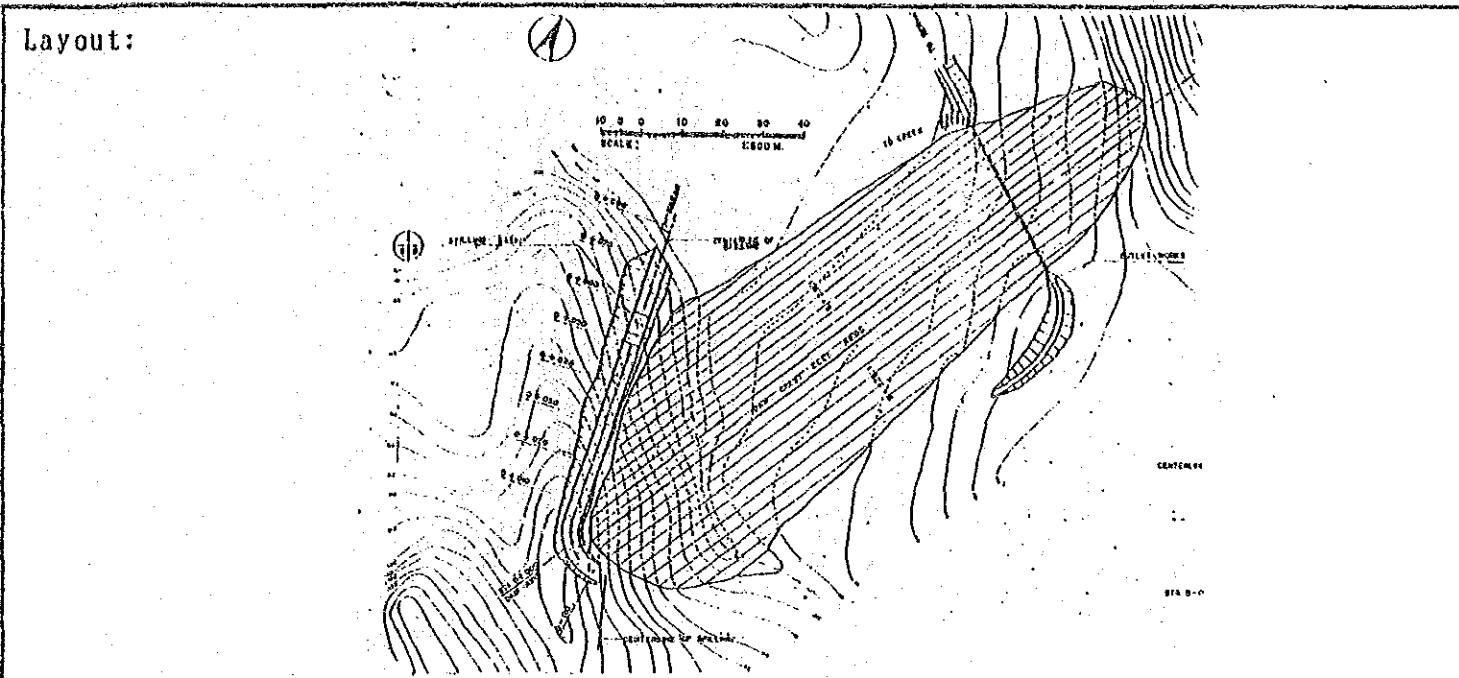


SWIM PROJECT PROFILE		File No. : 92
Regist. No. : Agency No. : BSWM-2	Name: OLO-OLO I SWIP	
Region: 1	Province: ILOCOS SUR	Municipality: SANTIAGO
Present Status: 1. Pre-F/S( )    ② F/S(1983)    ③ D/D(1983)		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	: Dam Type	: HOMOGENEOUS EARTHFILL
	: Dam Height	: 14 m
	: Effective Storage Capacity	: 168,048 m <sup>3</sup>
	: Embankment Volume	: 55,900 m <sup>3</sup>
	: Design Flood Discharge	: 11 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 35 ha
3. Mini-hydropower	: Installed Capacity	: 0 kW
4. Watershed Man.	: Watershed Protection Area	: 70 ha
5. Water Supply	: Design Supply Capacity	: 0 m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 6 ton/year
Technical Assessment:		
1. Survey and Investigation: Depth of test pit or auger boring is not enough. Bearing capacity and permeability are not measured. Available volume for the dam embankment shall be studied before construction.		
2. Planning Environmental conservation plan is not formulated. Project planning shall be re-formulated.		
3. Design Depth of core trench shall be modified during construction. Stability of upstream slope of the dam shall be checked. Freeboard is not enough for 50 year's flood. Center line of the spillway shall be shifted to left side. Weir shall be provided in the spillway.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 109	EIRR : 6.9 %
2. Feasibility Study	: 0	Priority Rating:
3. Detailed Design	: 0	Group : B
4. Construction	: 6,086	Implementation Schedule:
Dam	: 777	Review : 1992
Irrigation	: 0	F/S : Completed
Mini-Hydropower	: 0	D/D : Completed
Water Supply	: 1,017	Construction: Jan. 2000; 9 months
Watershed Protection	: 7,989	
5. Grand Total	: 7,989	





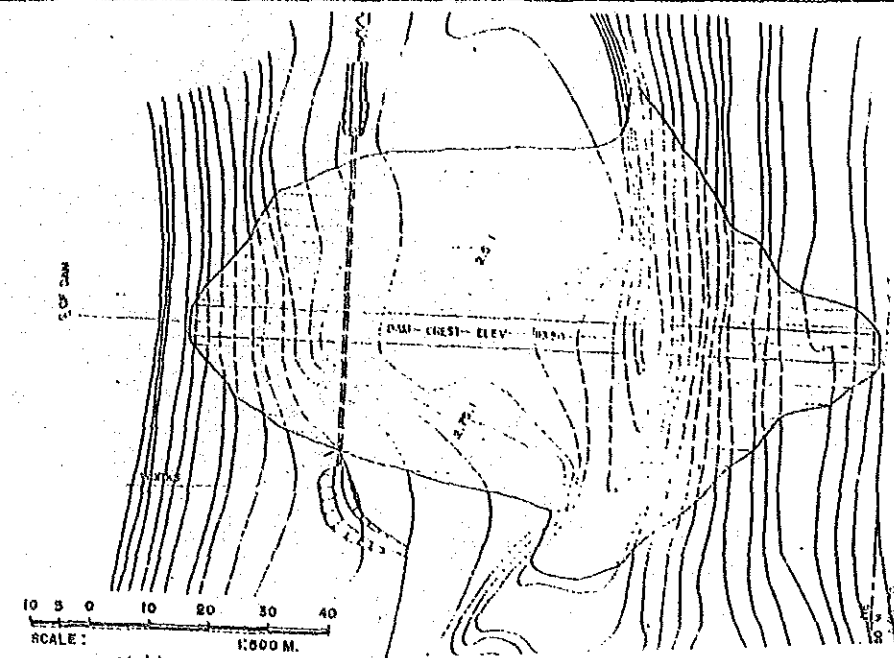
SWIM PROJECT PROFILE		File No. : 93
Regist. No. : Agency No. : BSWM-3	Name : OLO-OLO II SWIP	
Region : 1	Province : ILOCOS SUR	Municipality : SANTIAGO
Present Status : 1. Pre-F/S( )    ② F/S(1983)    ③ D/D(1983)		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	: Dam Type	: HOMOGENEOUS EARTHFILL
	: Dam Height	: 12 m
	: Effective Storage Capacity	: 68,549 m <sup>3</sup>
	: Embankment Volume	: 37,120 m <sup>3</sup>
	: Design Flood Discharge	: 14 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 30 ha
3. Mini-hydropower	: Installed Capacity	: 0 kW
4. Watershed Man.	: Watershed Protection Area	: 70 ha
5. Water Supply	: Design Supply Capacity	: 0 m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 2 ton/year
Technical Assessment:		
1. Survey and Investigation: Depth of test pit or auger boring is enough. Bearing capacity and permeability are not measured. Available volume for the dam embankment shall be studied before construction.		
2. Planning Annual production of inland fishery is over-estimated. Environmental conservation plan is not formulated. Project planning shall be re-formulated.		
3. Design Depth of core trench shall be modified during construction. Stability of upstream slope of the dam shall be checked. Freeboard is not enough for 50 year's flood. Weir shall be provided in the spillway.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 43	EIRR : 7.9 %
2. Feasibility Study	: 0	Priority Rating:
3. Detailed Design	: 0	Group : A
4. Construction	: 4,643	(OECF Candidate)
Dam	: 666	Implementation Schedule:
Irrigation	: 0	Review : within 1st 5 years
Mini-Hydropower	: 0	F/S : completed
Water Supply	: 1,017	D/D : completed
Watershed Protection	: 6,368	Construction: within 1st 5 years
5. Grand Total		



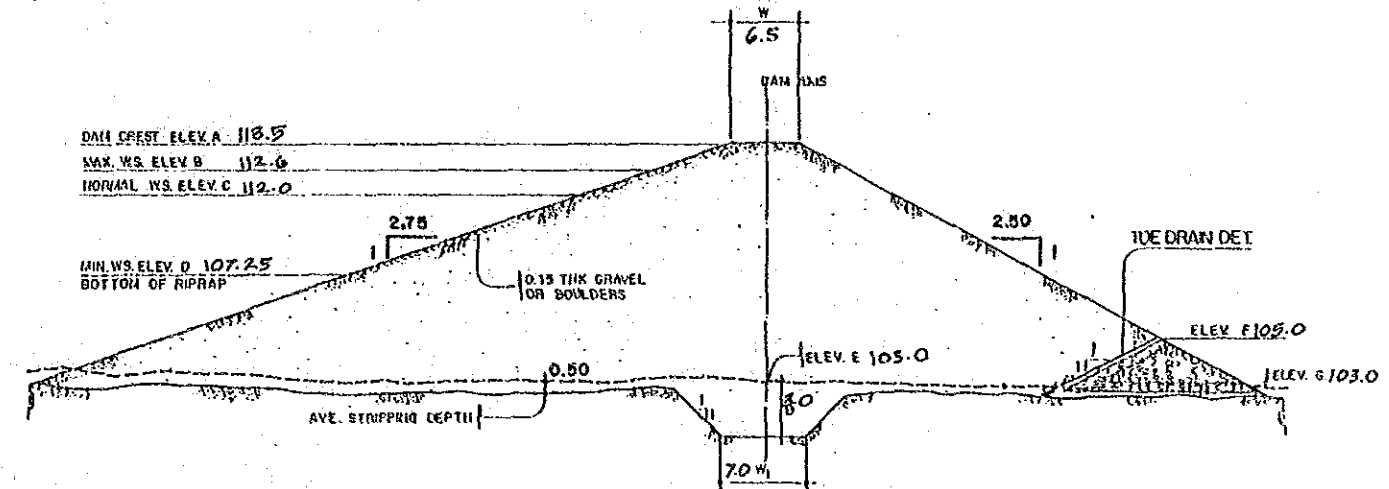
Note:  
Top soil of clay with 0.5-1.0 m depth covers dam site. Additional 1.0 m freeboard is required from NWS to dam crest.

SWIM PROJECT PROFILE		File No. : 94
Regist. No. : Agency No. : BSWM-4	Name: BALINGOAN SWIP	
Region: 1	Province: ILOCOS SUR	Municipality: CANDON
Present Status: 1. Pre-F/S( )    ② F/S(1983)    ③ D/D(1983)		
Purpose: Major : Irrigaion Incidental : IF, FC, WM		
Project Feature:		
1. Dam	: Dam Type	: HOMOGENEOUS EARTHFILL
	: Dam Height	: 16 m
	: Effective Storage Capacity	: 165,025 m <sup>3</sup>
	: Embankment Volume	: 46,000 m <sup>3</sup>
	: Design Flood Discharge	: 8 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 50 ha
3. Mini-hydropower	: Installed Capacity	: 0 kW
4. Watershed Man.	: Watershed Protection Area	: 40 ha
5. Water Supply	: Design Supply Capacity	: 0 m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 5 ton/year
Technical Assessment:		
1. Survey and Investigation: Depth of test pit or auger boring is not enough. Bearing capacity and permeability are not measured. Available volume for the dam embankment shall be studied before construction.		
2. Planning Environmental conservation plan is not formulated.		
3. Design Depth of core trench shall be modified during construction. Stability of upstream slope of the dam shall be checked. Weir shall be provided in the spillway.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 10.4 %
2. Feasibility Study	: 0	Priority Rating:
3. Detailed Design	: 0	Group : B
4. Construction	: 4,877	Implementation Schedule:
Dam	: 1,109	Review :
Irrigation	: 0	F/S : Completed
Mini-Hydropower	: 0	D/D : Completed
Water Supply	: 580	Construction: Jan. 1999; 6 months
Watershed Protection	: 6,566	
5. Grand Total		

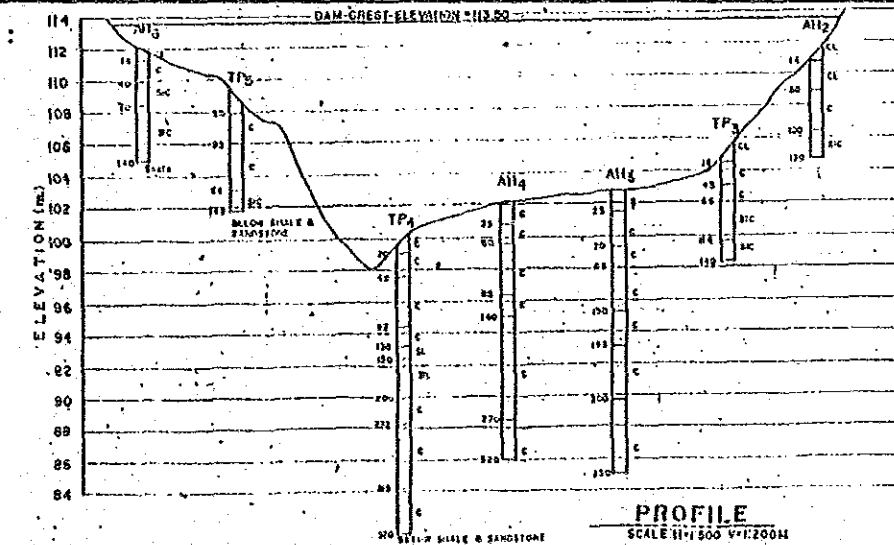
Layout:



Typical Dam Section:

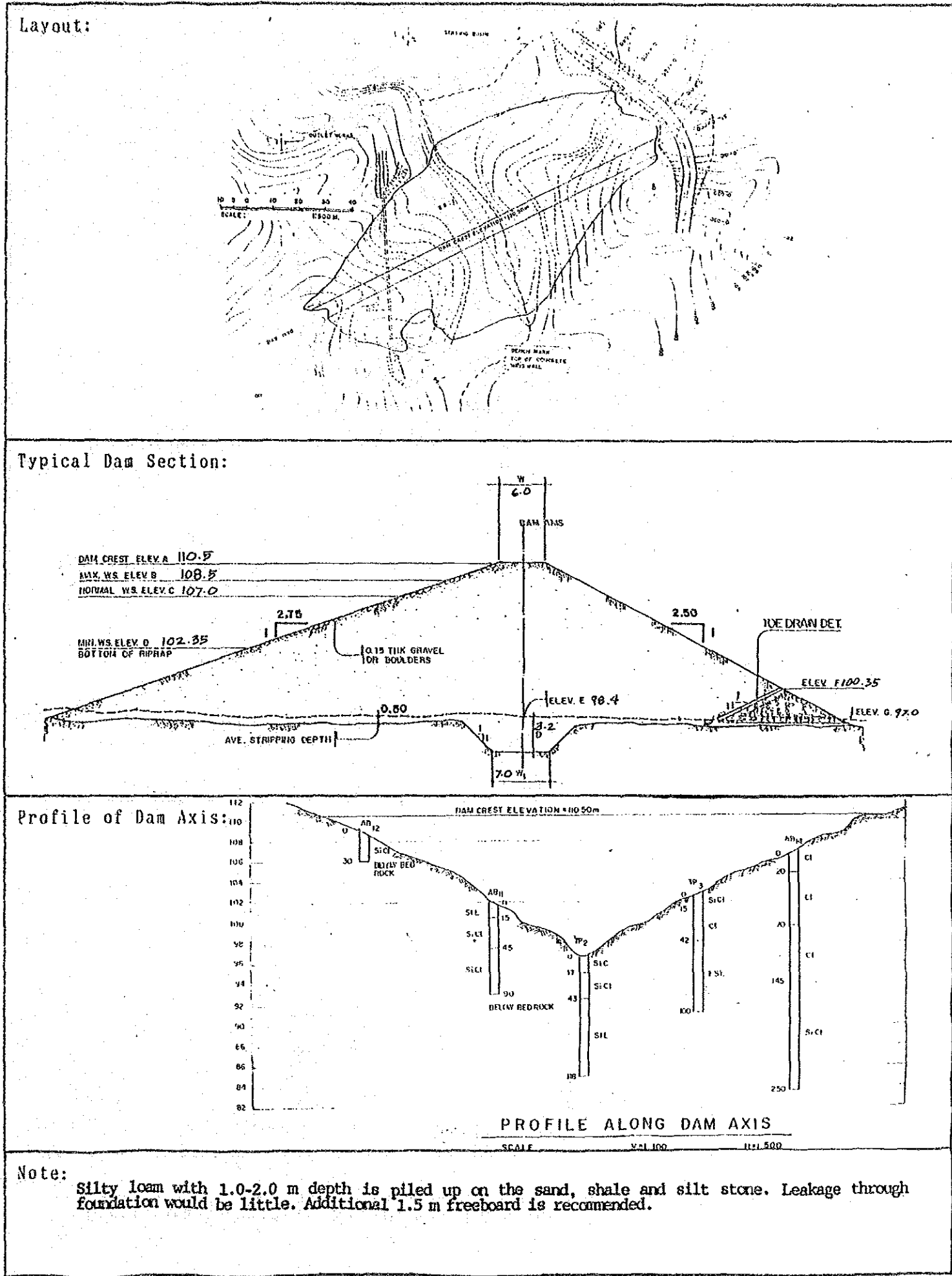


Profile of Dam Axis:

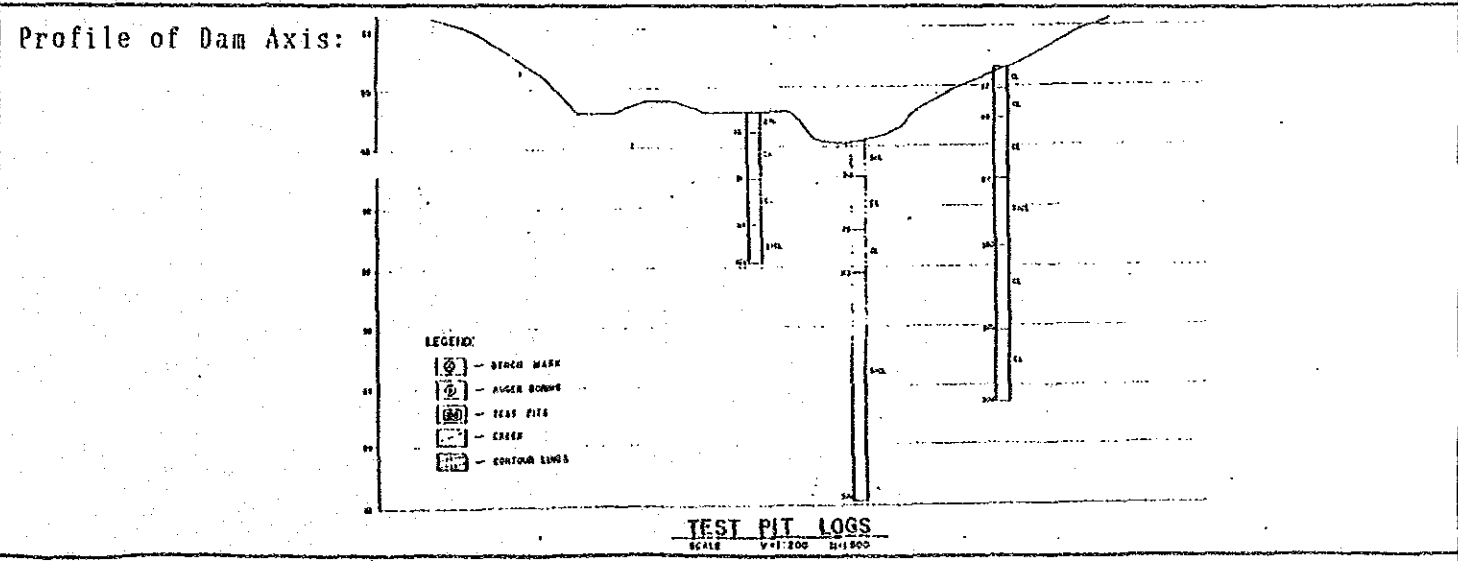
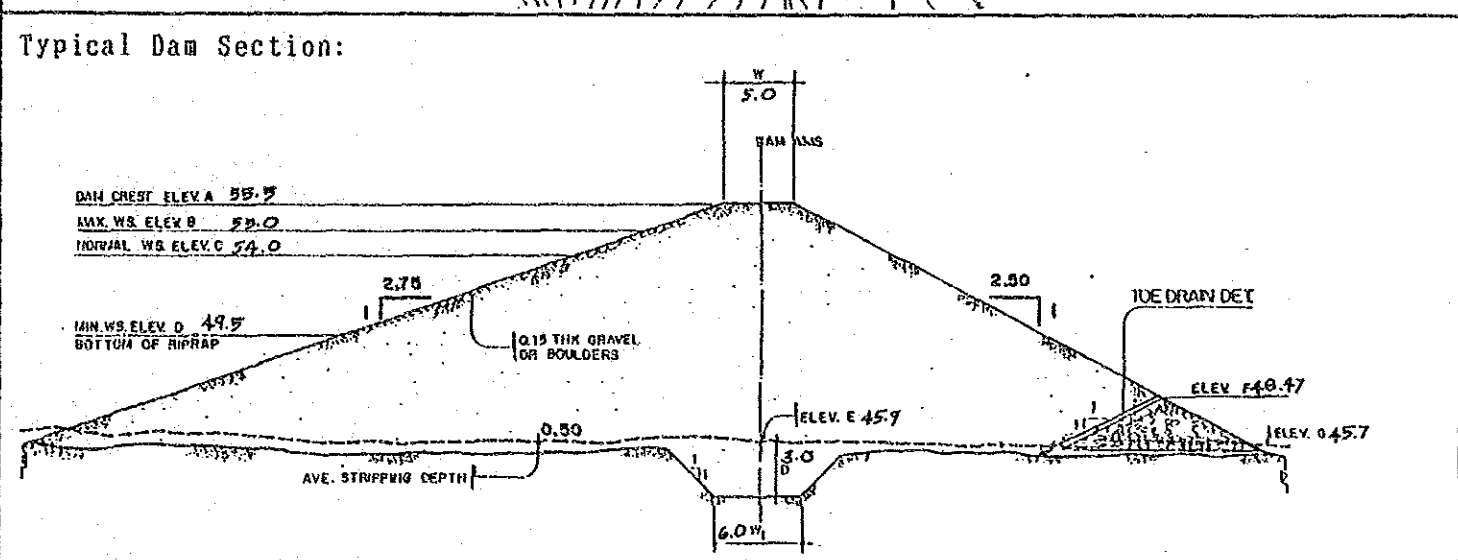
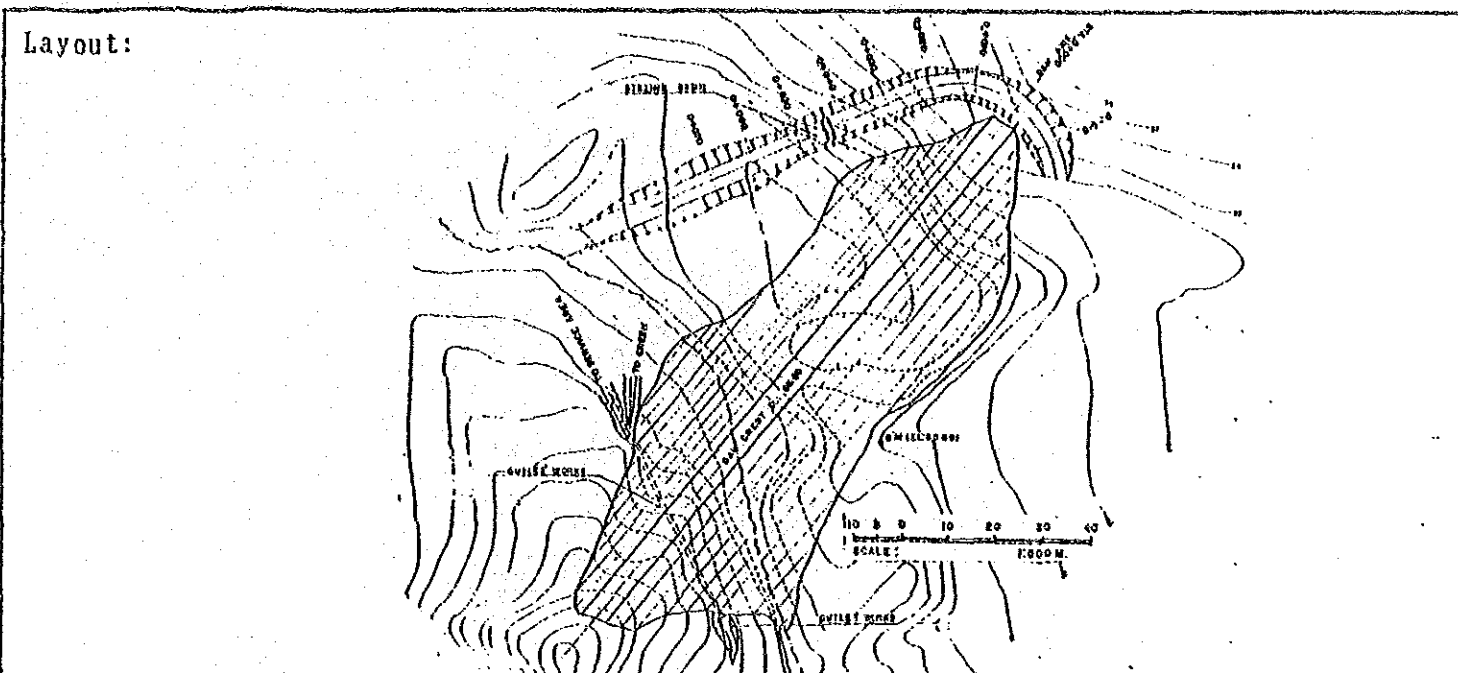


Note: Riverbed is piled up with soft clay of 4.0 m depth, of which strength should be noticed. Magnitude of design discharge is recommended to be adopted 100 years flood.

SWIM PROJECT PROFILE		File No. : 95
Regist. No. : Agency No. : BSWM-5	Name: SAN CRISTOBAL SWIP	
Region: 1	Province: ILOCOS NORTE	Municipality: SARRAT
Present Status: 1. Pre-F/S( )    ② F/S(1983)    ③ D/D(1983)		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	: Dam Type	: HOMOGENEOUS EARTHFILL
	: Dam Height	: 14 m
	: Effective Storage Capacity	: 281,432 m <sup>3</sup>
	: Embankment Volume	: 39,200 m <sup>3</sup>
	: Design Flood Discharge	: 57 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 100 ha
3. Mini-hydropower	: Installed Capacity	: 0 kW
4. Watershed Man.	: Watershed Protection Area	: 260 ha
5. Water Supply	: Design Supply Capacity	: 0 m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 16 ton/year
Technical Assessment:		
1. Survey and Investigation: Depth of test pit or auger boring is not enough. Bearing capacity and permeability are not measured. Available volume for dam embankment materials shall be studied before construction.		
2. Planning Annual production of inland fishery is over-estimated. Environmental conservation plan is not formulated.		
3. Design Depth of core trench shall be modified during construction. Stability of upstream slope of the dam shall be checked. Freeboard is not enough for 50 year's flood. Weir shall be provided in the spillway.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 57	EIRR : 21.0 %
2. Feasibility Study	: 0	Priority Rating:
3. Detailed Design	: 0	Group : B
4. Construction	: 5,006	Implementation Schedule:
Dam	: 2,219	Review : 1996
Irrigation	: 0	F/S : Completed
Mini-Hydropower	: 0	D/D : Completed
Water Supply	: 3,792	Construction: Jan. 1997; 6 months
Watershed Protection	: 11,074	
5. Grand Total		

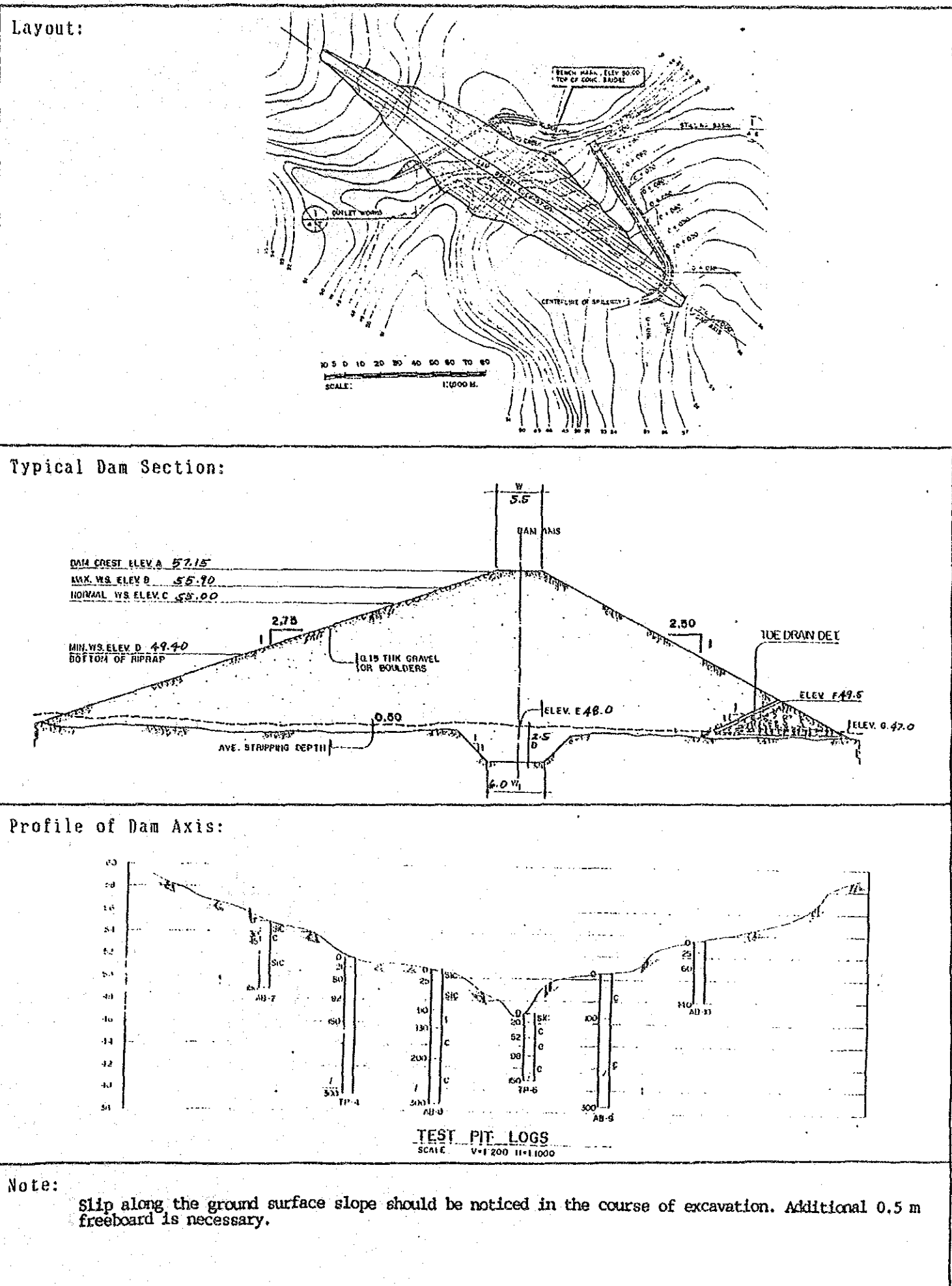


SWIM PROJECT PROFILE		File No. : 96
Regist. No. : Agency No. : BSWM-6	Name : SAN AGUSTIN SWIP	
Region : 1	Province : ILOCOS NORTE	Municipality : SAN NICOLAS
Present Status: 1. Pre-F/S( )    ② F/S(1983)    ③ D/D(1983)		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	: Dam Type	: HOMOGENEOUS EARTHFILL
	: Dam Height	: 10 m
	: Effective Storage Capacity	: 90,082 m <sup>3</sup>
	: Embankment Volume	: 24,750 m <sup>3</sup>
	: Design Flood Discharge	: 13 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 32 ha
3. Mini-hydropower	: Installed Capacity	: 0 kW
4. Watershed Man.	: Watershed Protection Area	: 70 ha
5. Water Supply	: Design Supply Capacity	: 0 m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 5 ton/year
Technical Assessment:		
1. Survey and Investigation: Depth of test pit or auger boring is not enough. Bearing capacity and permeability are not measured. Available volume for dam embankment materials shall be studied before construction.		
2. Planning Environmental conservation plan is not formulated. Project planning shall be re-formulated.		
3. Design Depth of core trench shall be modified during construction. Stability of upstream slope of the dam shall be checked. Freeboard is not enough. Supercritical flow portion shall be straight. Weir shall be provided in the spillway.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 66	EIRR : 9.8 %
2. Feasibility Study	: 0	Priority Rating:
3. Detailed Design	: 0	Group : B
4. Construction	: 3,429	Implementation Schedule:
Dam	: 710	Review : 1991
Irrigation	: 0	F/S : Completed
Mini-Hydropower	: 0	D/D : Completed
Water Supply	: 1,017	Construction: Jul. 1999; 6 months
Watershed Protection	: 5,222	
5. Grand Total		

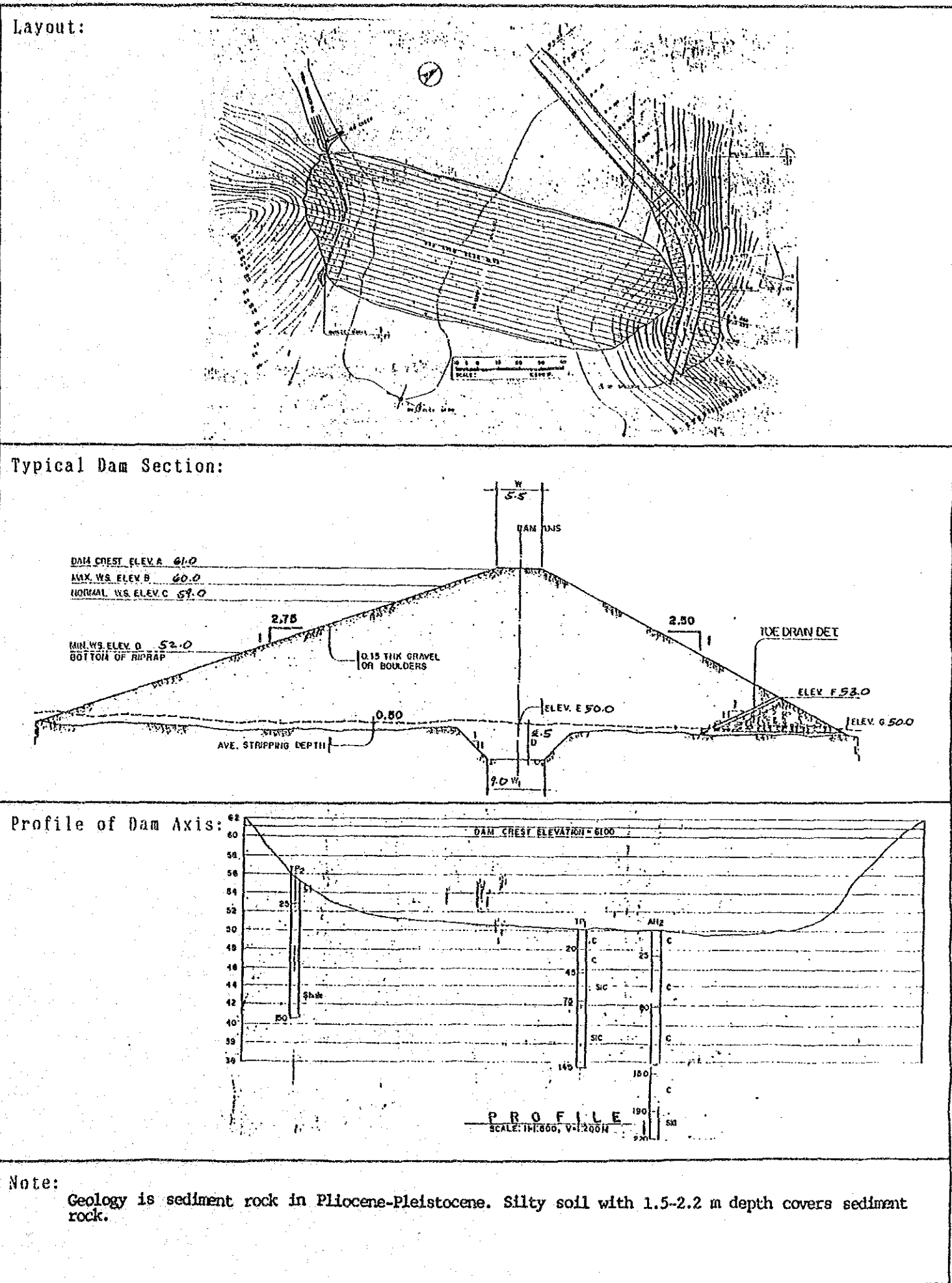


Note: Silty clay with 3.0 m depth is piled up on the shale foundation. Sliding in the silty clay layer have to be noticed. Additional 0.5 m freeboard is recommended.

SWIM PROJECT PROFILE		File No. : 97
Regist. No. : Agency No. : BSWM-7	Name : BINGAO II SWIP	
Region : 1	Province : ILOCOS NORTE	Municipality : SAN NICOLAS
Present Status : 1. Pre-F/S( )    ② F/S(1983)    ③ D/D(1983)		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	: Dam Type	: HOMOGENEOUS EARTHFILL
	: Dam Height	: 10 m
	: Effective Storage Capacity	: 528,958 m <sup>3</sup>
	: Embankment Volume	: 33,000 m <sup>3</sup>
	: Design Flood Discharge	: 35 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 40 ha
3. Mini-hydropower	: Installed Capacity	: 0 kW
4. Watershed Man.	: Watershed Protection Area	: 140 ha
5. Water Supply	: Design Supply Capacity	: 0 m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 30 ton/year
Technical Assessment:		
1. Survey and Investigation: Depth of test pit or auger boring is not enough. Bearing capacity and permeability are not measured. Available volume for dam embankment materials shall be studied before construction. Topographic maps for the dam site shall be prepared with 1 m contour at a scale of 1/500.		
2. Planning Environmental conservation plan is not formulated.		
3. Design Depth of core trench shall be modified during construction. Stability of upstream slope of the dam shall be checked. Freeboard is not enough. Compaction near the spillway shall be carefully carried out. Weir shall be provided in the spillway.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 42	EIRR : 19.2 %
2. Feasibility Study	: 0	Priority Rating:
3. Detailed Design	: 0	Group : B
4. Construction	: 4,415	Implementation Schedule:
Dam	: 888	Review : 1997
Irrigation	: 0	F/S : Completed
Mini-Hydropower	: 0	D/D : Completed
Water Supply	: 2,045	Construction: Jan. 1998; 6 months
Watershed Protection	: 7,390	
5. Grand Total		



SWIM PROJECT PROFILE		File No. : 98
Regist. No. : Agency No. : BSWM-8	Name : ODA SWIP	
Region : 1	Province : PANGASINAN	Municipality : AGNO
Present Status : 1. Pre-F/S( )    ② F/S(1983)    ③ D/D(1983)		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	: Dam Type	: HOMOGENEOUS EARTHFILL
	: Dam Height	: 11 m
	: Effective Storage Capacity	: 360,737 m <sup>3</sup>
	: Embankment Volume	: 53,000 m <sup>3</sup>
	: Design Flood Discharge	: 21 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 100 ha
3. Mini-hydropower	: Installed Capacity	: 0 kW
4. Watershed Man.	: Watershed Protection Area	: 120 ha
5. Water Supply	: Design Supply Capacity	: 0 m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 11 ton/year
Technical Assessment:		
1. Survey and Investigation: Depth of test pit or auger boring is not enough. Bearing capacity and permeability are not measured. Available volume for dam embankment materials shall be studied before construction.		
2. Planning Environmental conservation plan is not formulated.		
3. Design Depth of core trench shall be modified during construction. Stability of upstream slope of the dam shall be checked. Center line of spillway shall be shifted to right side. Weir shall be provided in the spillway. Center line of conduit is recommended to be straight.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 22.6 %
2. Feasibility Study	: 0	Priority Rating:
3. Detailed Design	: 0	Group : A
4. Construction	: 5,249	Implementation Schedule:
Dam	: 2,219	Review : -
Irrigation	: 0	F/S : Completed
Mini-Hydropower	: 0	D/D : Completed
Water Supply	: 1,740	Construction: Jul. 1991; 6 months
Watershed Protection	: 9,207	
5. Grand Total		





SWIM PROJECT PROFILE		File No. : 99
Regist. No. : Agency No. : BSWM-9	Name: PUGARO SWIP	
Region: 1	Province: PANGASINAN	Municipality: MANAOAG
Present Status: 1. Pre-F/S( )    ② F/S(1983)    ③ D/D(1983)		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	Dam Type : HOMOGENEOUS EARTHFILL	
	Dam Height : 7 m	
	Effective Storage Capacity : 193,995 m <sup>3</sup>	
	Embankment Volume : 10,000 m <sup>3</sup>	
	Design Flood Discharge : 16 m <sup>3</sup> /sec.	
2. Irrigation	Irrigation Area : 75 ha	
3. Mini-hydropower	Installed Capacity : 0 kW	
4. Watershed Man.	Watershed Protection Area : 90 ha	
5. Water Supply	Design Supply Capacity : 0 m <sup>3</sup> /day	
6. Inland Fishery	Annual Production : 19 ton/year	
Technical Assessment:		
1. Survey and Investigation:		
Depth of test pit or auger boring is not enough.		
Bearing capacity and permeability are not measured.		
Available volume for dam embankment shall be studied before construction.		
2. Planning		
Environmental conservation plan is not formulated.		
3. Design		
Depth of core trench shall be modified during construction.		
Stability of Up stream slope of dam shall be checked by stability		
Weir shall be provided in the spillway.		
4. Operation and Maintenance		
Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 25.5 %
2. Feasibility Study	: 0	
3. Detailed Design	: 0	Priority Rating:
4. Construction		Group : A
Dam	: 2,325	Implementation Schedule:
Irrigation	: 1,664	Review : -
Mini-Hydropower	: 0	F/S : Completed
Water Supply	: 0	D/D : Completed
Watershed Protection	: 1,320	Construction: Jul.1992; 6 months
5. Grand Total	: 5,309	

