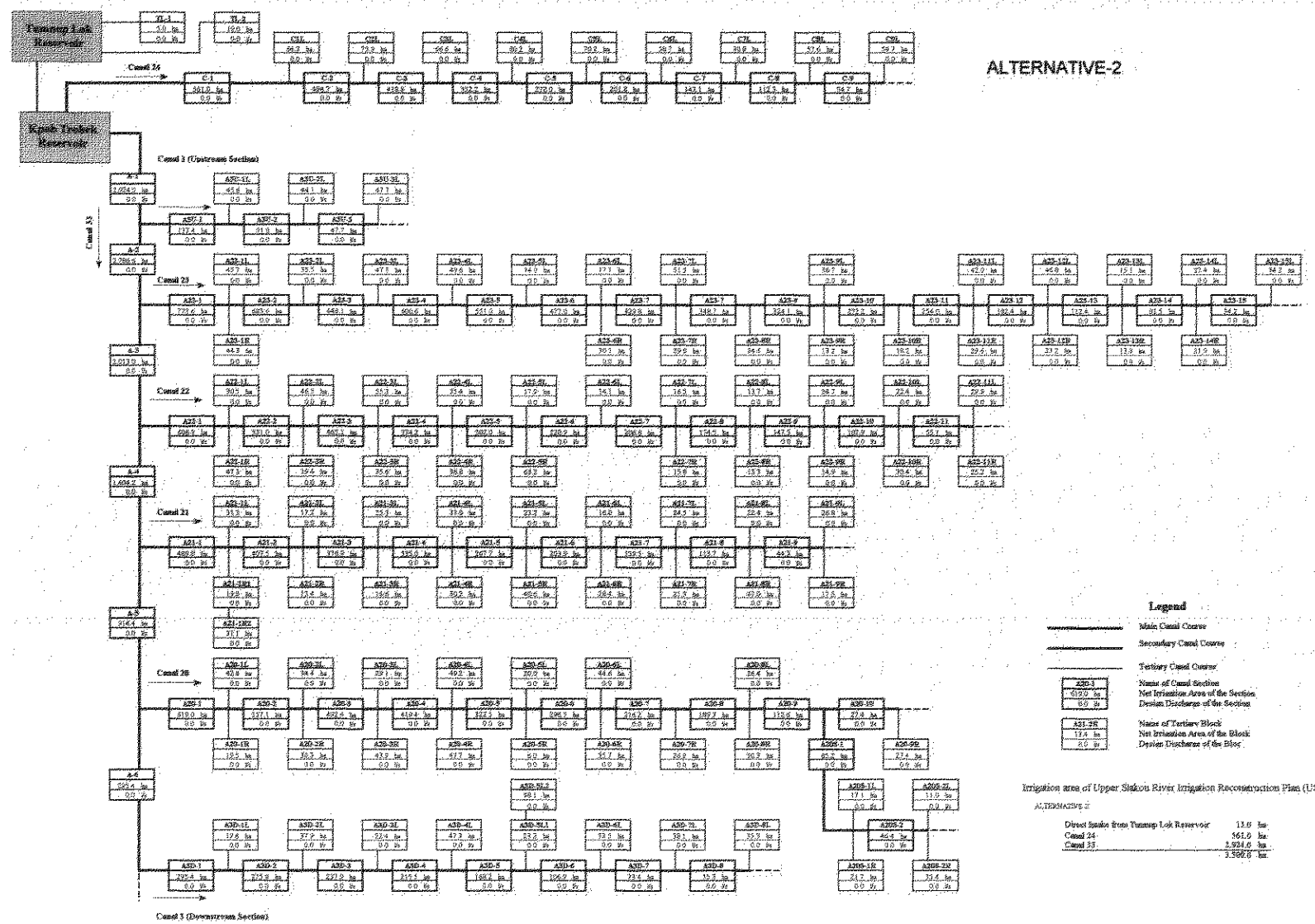


ALTERNATIVE-1

Direct intake from Tonle Sap Reservoir	15.0 ha
Canal 24	442.9 ha
Canal 23	1,443.9 ha
Kuk Kerk Canal	1,681.2 ha
<b>Total</b>	<b>3,500.0 ha</b>

Figure G-4  
Irrigation Diagram of Alternative-2



ALTERNATIVE-2

**Legend**

- Main Canal Course
- Secondary Canal Course
- Tertiary Canal Course

A20-1	114 ha	0.0 m³/s
A20-2	114 ha	0.0 m³/s

Irrigation area of Upper Stakou River Irrigation Reconstruction Plan (USP)

Direct intake from Thmeung Lok Reservoir	11.6 ha
Canal 24	161.0 ha
Canal 23	2,224.0 ha
Canal 20	3,508.0 ha



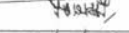

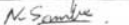
ALTERNATIVE 2

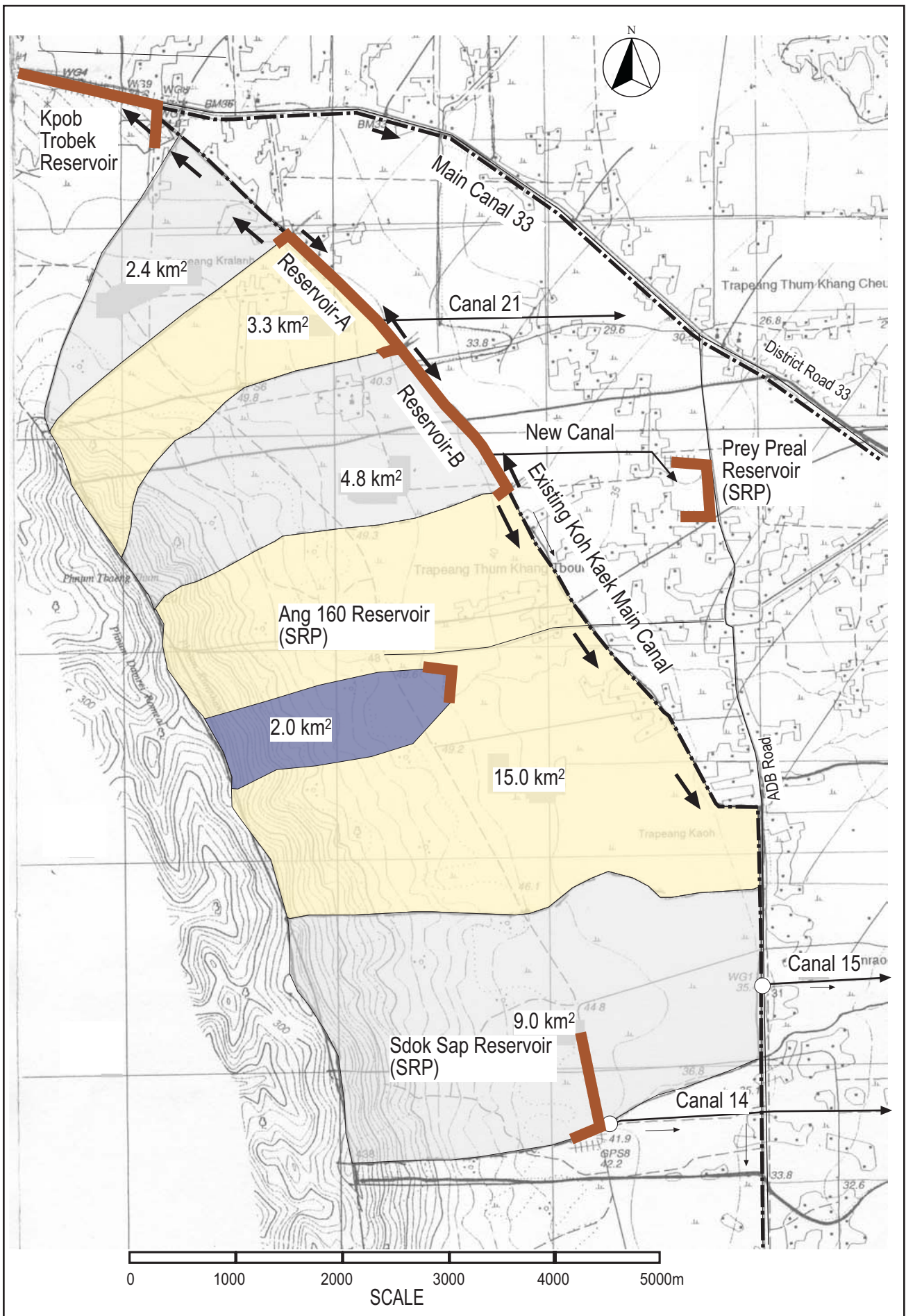
Unit Irrigation Requirement = 1.1 l/s/ha

Minutes of Meeting with Tram Kak District, Samraong Commune and  
Trapeang Thum Khang Tboung Commune

Meeting No.:	Date:	Place:
	23 Nov. 2001	Tram Kak District Office

Participants	
District: Mr. Oum Hann (Chief of Tram Kak District)	
Commune: Mr. Som Mun (Chief of Samraong Commune, Tram Kak District) Mr. Touch Khy (3 rd Chief of Samraong Commune, Tram Kak District) Mr. Val Hann (3 rd Chief of Trapeang Thum Khang Tboung, Tram Kak District)	
MOWRAM: Mr. Chhuy Hy Karona (Engineering Department, MOWRAM)	
Study Team: Mr. Sambe Nobuo (Agricultural Production Infrastructure)	
Main object	Results
<ul style="list-style-type: none"> <li>To explain results of the feasibility study to two communes that were excluded from the irrigation area.</li> <li>To make hearing of request from the two communes for future development.</li> </ul>	<p>District office and the two communes accepted the study results and explanation by the study team. The communes requested rehabilitation of small reservoirs and canals for irrigation. District office also requested the development of the study area on the downstream.</p>
Details of Discussions (1/2)	
<p>1. First of all, the Study Team explained the results of the Study as follows:</p> <ul style="list-style-type: none"> <li>Water resource potential of the Slakou River was found that it can irrigate 3,500 ha of paddy rice even in the rainy season, that is less than 10 % of the Study Area.</li> <li>The Study Team firstly tried to select the irrigation area proportionally to the existing command area, from the upstream of Canal 24, Main Canal 33 and Koh Kaek Main Canal.</li> <li>However, after carrying out detailed survey works, it was found that the existing Koh Kaek Canal have not functioned as a canal. In order to reconstruct Koh Kaek Canal, the cut depth would be 7 m or more at the maximum, and both the construction cost and maintenance cost were estimated to be extraordinary high. Moreover, the maintenance should be done by beneficiaries themselves, which was considered impossible.</li> <li>Then the Study Team examined another alternative to shift the center line of Koh Kaek Canal to the lower part to reduce the excavation volume. However, it requires land acquisition of nearly 20 ha of existing paddy field.</li> <li>Consequently, the Study Team determined to abandon reconstruction of Koh Kaek Canal taking economic viability, technical soundness and negative impact into consideration.</li> <li>The Study Team would like to recommend development of the two communes by SRP and PDP including utilization of Koh Kaek Main Canal as a pond or a reservoir.</li> </ul>	

Details of Discussions (2/2)		
<p>2. Chief of Samraong Commune accepted the Team's explanation and requested the following things:</p> <ul style="list-style-type: none"> <li>Rehabilitation of Sdok Sap Reservoir which is included in the 15 small reservoirs proposed in the Master Plan.</li> <li>Rehabilitation of Canal 14 and Canal 15 that could be connected to Sdok Sap Reservoir.</li> <li>Installation of off-take gates on Canal 14 and Canal 15.</li> <li>Development of ponds proposed by PDP.</li> </ul> <p>3. Chief of Trapeang Thum Khang Tboung Commune accepted the Team's explanation and requested the following things:</p> <ul style="list-style-type: none"> <li>Rehabilitation of Prey Preal Reservoir along the ADB Road.</li> <li>Rehabilitation of Koh Kaek Canal as pond or reservoir (repair of embankment, installation of intake gates to the existing canals originating from Koh Kaek Canal.</li> <li>Development of ponds proposed by PDP.</li> <li>Rehabilitation of off-take gate of "Pagoda Pond" at the center of commune.</li> </ul> <p>4. Vice chief of Tram Kak District accepted the explanation of the Study Team and requested the following things:</p> <ul style="list-style-type: none"> <li>Development of area on the downstream, which can not covered by USP.</li> <li>Pond development for preparation of nursery for the paddy rice at the beginning of the rainy season</li> <li>Early implementation of the project</li> </ul> <p>5. The Study Team replied on the request from the communes and district as follows and concluded the discussion.</p> <ul style="list-style-type: none"> <li>The Study Area would be covered either by USP or SRP or PDP.</li> <li>Unfortunately the two communes were finally excluded from USP Area, but some small reservoirs proposed in SRP are located in the two communes. The Study Team would recommend the development of the two communes by SRP and PDP. It will be necessary for the communes to request to either Tram Kak District or DWRAM for promoting of SRP or PDP.</li> </ul>		
Name	Designation	Signature
Oum Hann	Chief, Tram Kak District	
Som Mun	Chief, Samraong Commune	
Horn Heun	Chief, Trapeang Thum Khang Tboung Commune	
Chhuy Hy Karona	Engineering Dept., MOWRAM	
Sambe Nobuo	JICA Study Team	

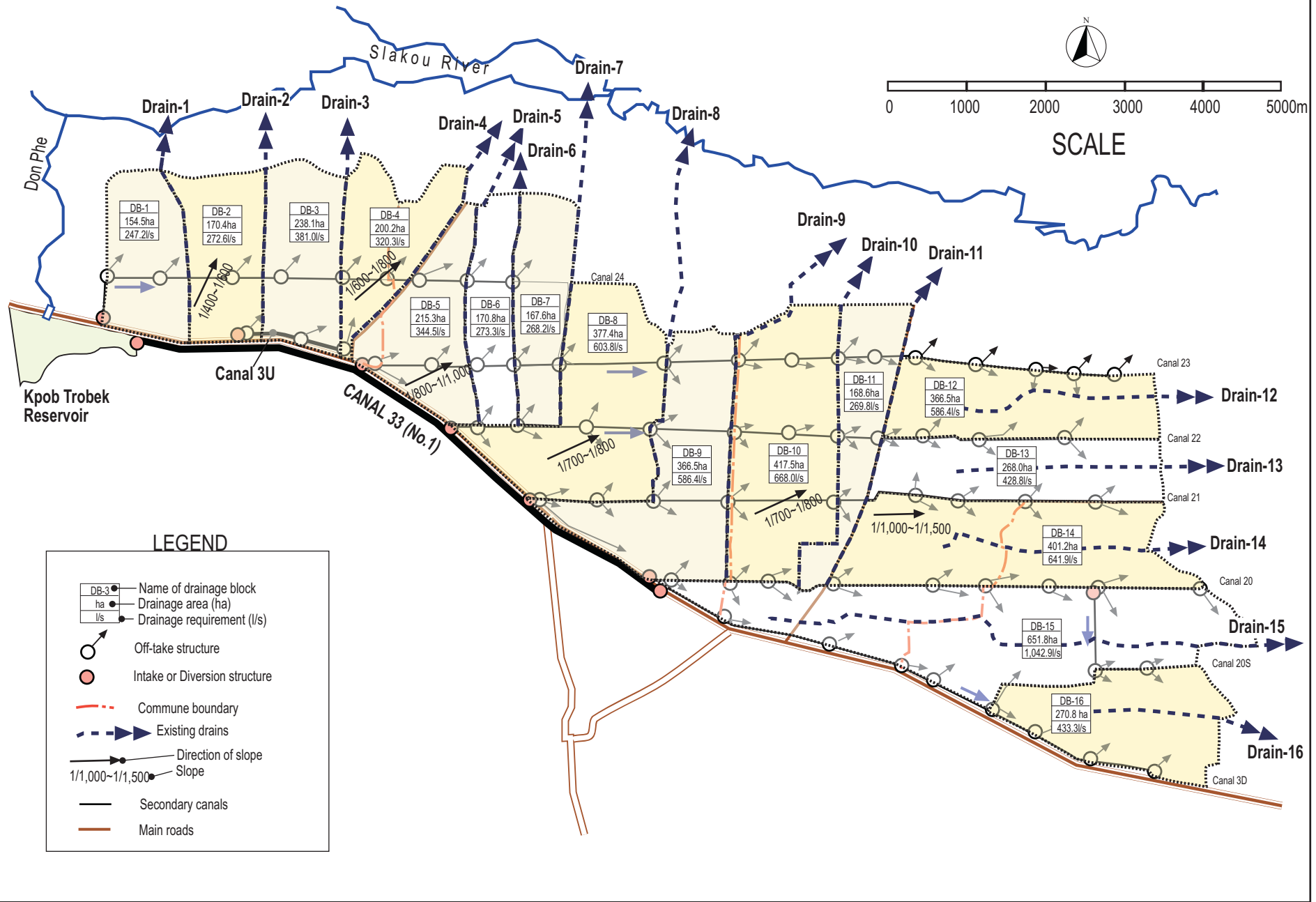


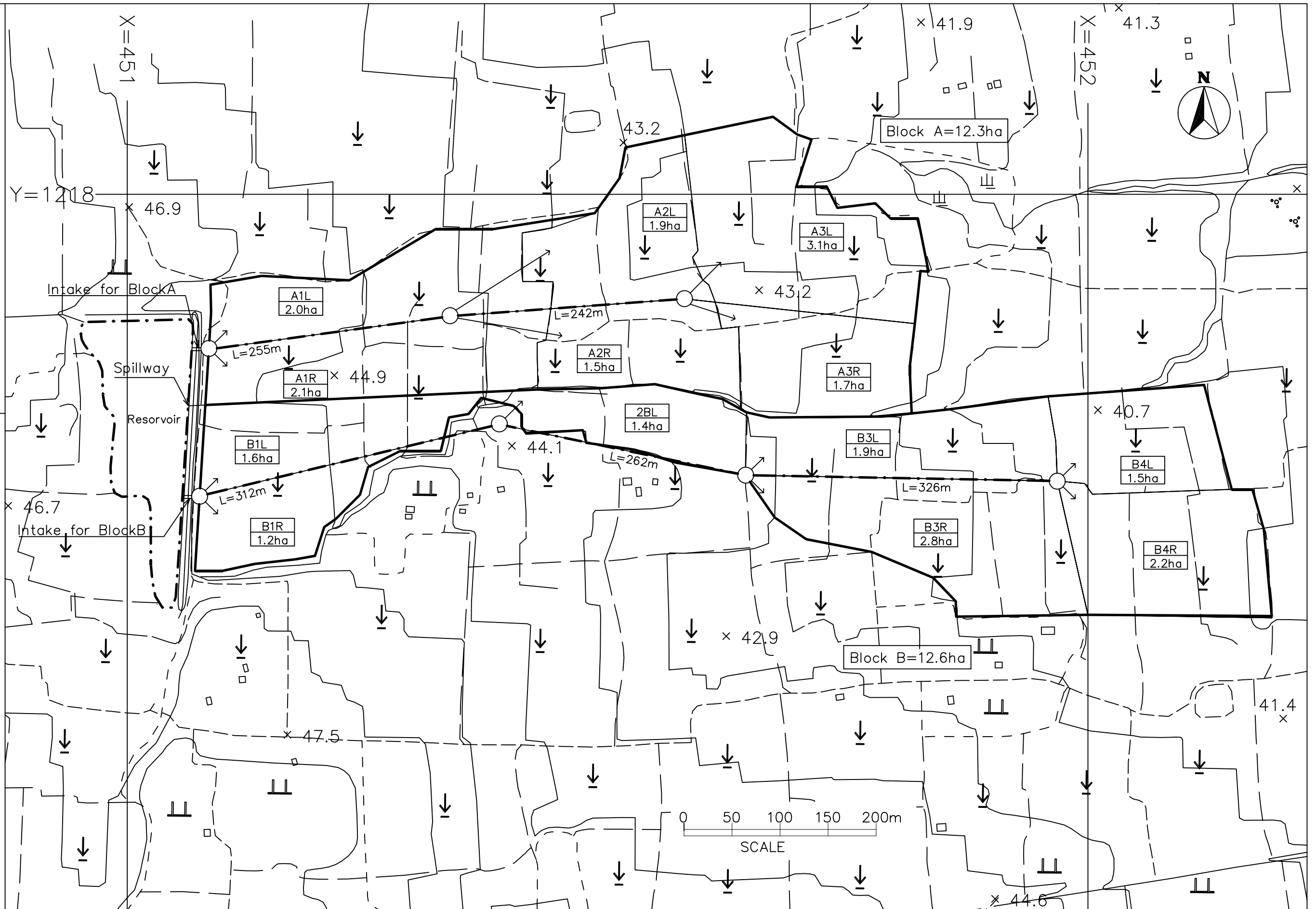
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of Agricultural Production System  
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Japan International Cooperation Agency

Figure G-6

Utilization of the Existing Koh Kaek Main Canal



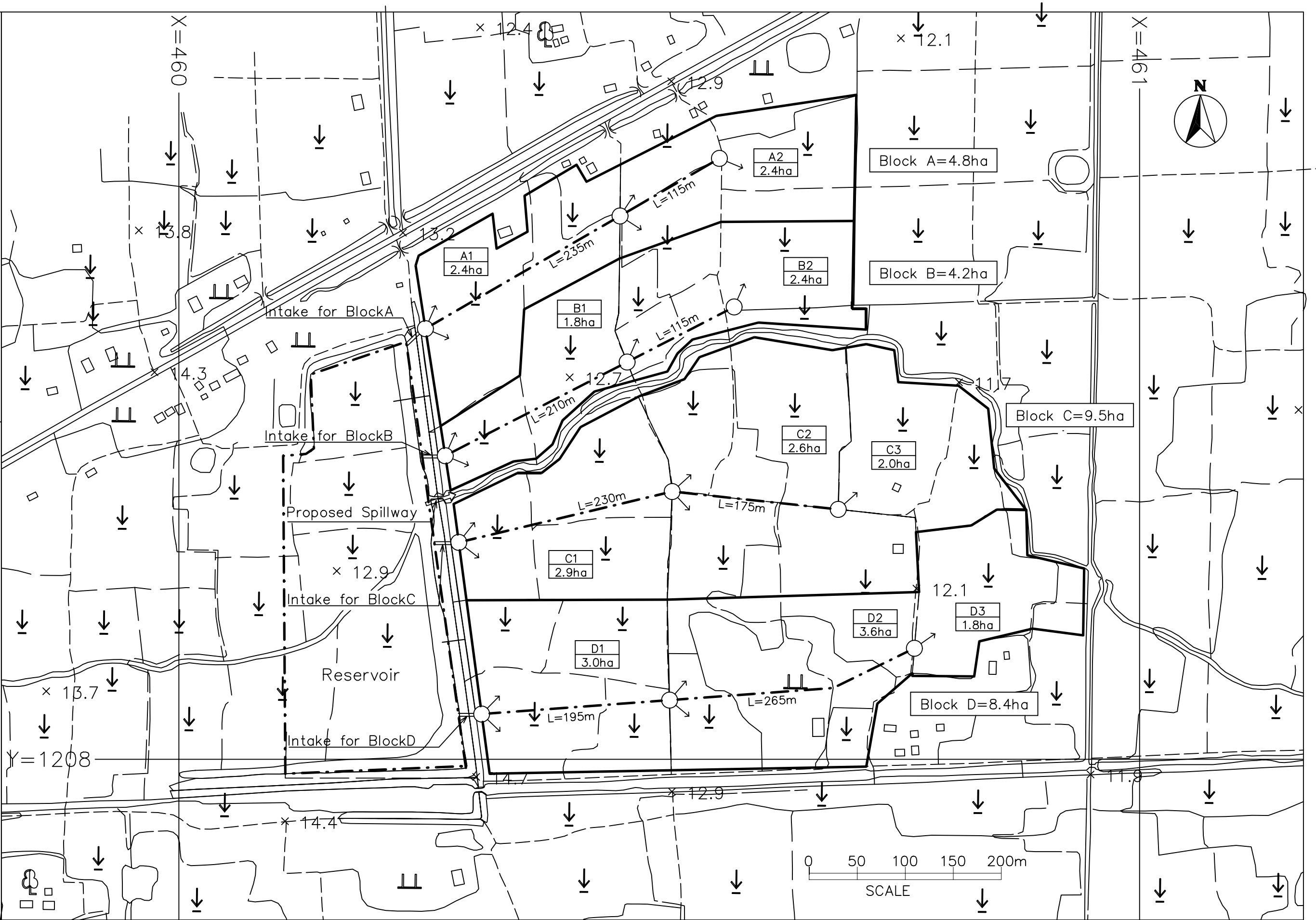


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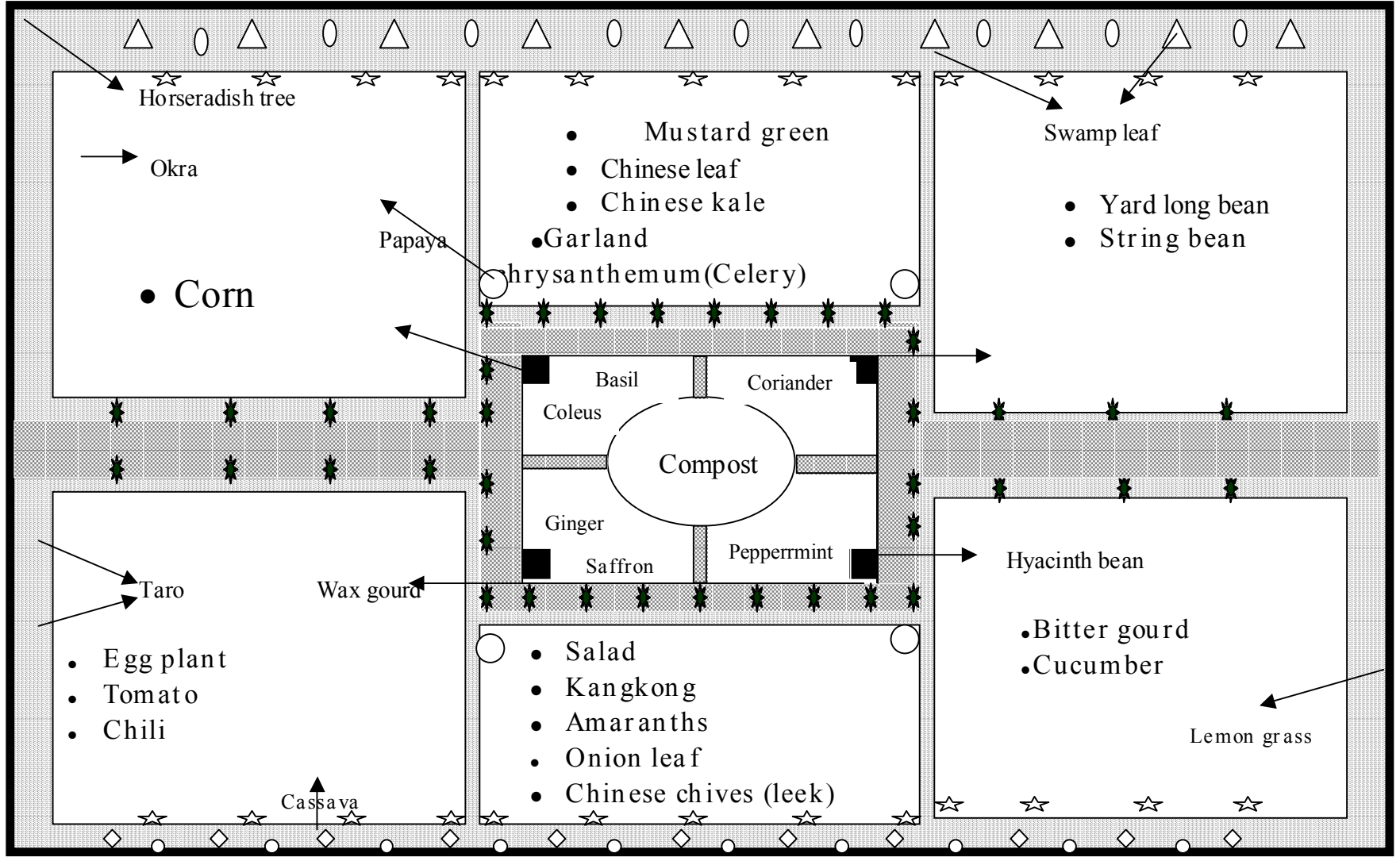
Figure G-8

A Prototype Irrigation Layout Plan of Ang 160  
SRP



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Japan International Cooperation Agency

Figure G-9  
A Prototype Irrigation Layout Plan of Kim Sei SRP



Note: Designed by Ms.Lyleng Sovannary, DAFF Takeo (counterpart for the agriculture expert)