PROGRESS REPORT
30 MAY 1996

SUMATRAN RHINO SANCTUARY (SRS)
WAY KAMBAS NATIONAL PARK, SUMATRA, INDONESIA

T.J. Foose
Program Officer
International Rhino Foundation

September 1995	•	Signature of a Memorandum of Understanding (M.O.U.) among PHPA, Taman Safari Indonesia (TSI) and the International Rhino Foundation (IRF). This MOU extended the previous Letter of Intent signed in December 1994 among PHPA, Yaysan Mitra Rhino (YMR) and IRF to initiate this Project in principle. The specific objective of the September 1995 M.O.U. is to provide interim permission to TSI and IRF to proceed with construction of enclosures for rhinos and support facilities for SRS management staff in Way Kambas National Park while the process of completing formation of the Management Company (described in Letter of Intent and M.O.U.) and obtaining the concession for the SRS is completed.
	•	Formal allocation by IRF of US $465,000 to cover budgeted expenses (stated as US $437,000 in M.O.U.) of the SRS through 31 December 1996.
	•	Site visit by TSI and IRF as well as IUCN Asian Rhino Specialist Group (AsRSG) staff to Way Kambas to finalize site selection for rhino enclosures and arrange for detailed mapping of this area as basis for construction.
November 1995	•	Detailed mapping of the site where rhino enclosures and support facilities are to be constructed was conducted by the Way Kambas Sumatran Tiger project team headed by Neil Franklin under contract from IRF.
December 1995	•	Transfer of this detailed map from Sumatran Tiger project to SRS development team.
	•	Finalization of detailed design of the rhino enclosures and support facilities were in meetings between TSI and IRF representatives. (Copies are attached).
	•	Selection of a construction project manager, Mr. Sumadi, who has previously worked for Taman Safari.
	•	Establishment of a separate bank account by TSI into which IRF will transfer funds for development expenses. Initial transfer of $ 10,000 to Indonesia by IRF.

January 1996	•	Finalization of detailed work plans and costs for the rhino enclosure and management staff facilities. (Copies are attached. Note there is one further adjustment on the fence designs: The depth of the footers will be 80 cm = 32 inches and the trapezoid will be inverted with larger base at bottom. Bruce Read of Disney Wild Animal Kingdom has provided very useful input on these designs.)
February 1996	•	Arrangements for procurement of the materials (e.g. shade net; solar panels, etc.) that must be imported.
	•	Intention to initiate construction after Ramadan as soon as rains cease in Way Kambas, Sumatra. However, rains are particularly heavy and long this year so start of construction is delayed.
March 1996	•	Arrival of Nico van Strien under full-time contract with IRF to assist TSI in activating construction project.
	•	Issuance of formal permit by PHPA to proceed with construction.
April 1996	•	IRF transfer of $ 100,000 to TSI account for material acquisition. (Another $ 100,000 will be transferred by mid-June; A further $ 150,000 will need to be transferred in July to keep construction on schedule).
	•	Arrangements for suppliers and subcontractors.
	•	Start of construction with objective of completing the enclosures and staff facilities by the end of November so that the first rhino can be moved.
May 1996	•	Official inauguration ceremony for SRS conducted by PHPA Director of Nature Conservation and attended by IRF President and Program Officer.
	•	Acquisition of vehicles. Construction continuing.

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FACSIMILE HEADER SHEET

TO: Tom Foose - International Rhino Foundation

FROM: Peter Litchfield

DATE: 31 - 5 - 96

NUMBER OF PAGES INCLUDING HEADER: 1

(PLEASE TELEPHONE (01303) 264647 IF ANY PAGES ARE UNCLEAR)

Dear Tom

I have now been able to discuss the Sumatran Rhino Breeding Project with Mr Aspinall and Mike Lockyer.

I am pleased to say that nothing has changed in that we still intend to send Torgamba to the Project as previously discussed.

Please give as much notice as possible of the completion date so that we can obtain the relevant documents and so that I can visit the Project before our final commitment.

Yours sincerely

Peter Litchfield

WORKPLAN
SUMATRAN RHINO SANCTUARY (SRS)
WAY KAMBAS NATIONAL PARK
May 1996 - October 1996

Refering to:

a. The Indonesian Rhino Conservation Strategy, 1991;
b. Sumatran Rhino Population and Habitat Viability Analysis (PHVA). Report on a workshop, Bandar Lampung, November 1993.
c. Report of Workshop on Establishment of Sumatran Rhinoceros Sanctuary, 15-16 August 1994 - PHPA, TSI, YMR, IRF;
d. Letter of Intent among PHPA, YMR, and IRF to develop SRS through a joint venture company which would receive concession from Ministry of Forestry, December 1994;
e. Draft Proposal for Establishment of Sumatran Rhinoceros Sanctuary. International Rhino Foundation, 15 January 1995;
f. Sumatran Rhino Sanctuary, Site Evaluation and Work Plan. Nico J. van Strien (IRF), Haerudin R. Sadjudin (YMR), Pudji S. Pratjiuno (PHPA), February 1995;
g. YMR forms PT Lestari Badak Perkasa and IRF forms Rhino Conservation Investment Corporation as first step in establishing joint venture company to manage SRS, May 1995;
h. IRF prepares Progress Report on SRS and provides first formal detailed plans of enclosure and fence designs, August 1995;
i. A Memorandum of Understanding (MOU) among The Directorate General of Forest Protection and Nature Conservation (PHPA), Ministry of Forestry, The Republic of Indonesia, and Taman Safari Indonesia (TSI) as Indonesian Center for Reproduction of Endangered Wildlife (ICREW) and the International Rhino Foundation (IRF), concerning a Collaborative Program of Sumatran Rhino Conservation, 7 September 1995;
j. Keputusan Direktur Jenderal Perlindungan Hutan dan Pelestarian Alam, Nomer 37/Kpts/DJ-VI/1996, Tentang Pelaksanaan Kegiatan Konservasi in Situ Badak Sumatera di Taman Nasional Way Kambas Propinsi Lampung, 15 April 1996.

Taman Safari Indonsia (TSI), appointed by the Directorate General of Forest Protection and Nature Conservation (PHPA) as implementing agency of the Sumatran Rhino Sanctuary (SRS) project, assisted with funds provided by the International Rhino Foundation (IRF), will conduct the following activities to establish the proposed facilities in Way Kambas National Park (TNWK).

DESIGN and DEMARCATION

1. A preliminary desgin of the SRS was developed at the PHVA Workshop. This design was extensively revised at the August 1994 Workshop on Establishment of the SRS. Further refinements occurred as part of the January 1995 Site Evaluation and Workplan. Final designs of the enclosures and fences were formulated September through December 1995. In part these were based on a reconnaissance by representatives of TSI and IRF in April 1995 of rhino and elephant fence and enclosures being used in Africa. The design of the SRS is based on the ecological requirements of the species and on consideration of cost-effectiveness. The SRS aims at breeding Sumatran Rhinos uder near-natural condition by:
   a. Providing each individual rhino as large an area as feasible of native habitat with natural foodplants, and
   b. Keeping sexes separate with controlled interactions only at female estrus periods.

   The aggreed design includes 10 enclosures of ca 10 Ha each, arranged around a central

area for interactions between animals. The approximately circular design ensures most economic fence construction. Initially each rhino will have 2 enclosures to:

a. Allowing for rotation of animals for habitat recovery, and
b. Creating effective visual and olfactory barriers between the animals.

After the area was mapped in November 1995 the design was modified to fit in with the topographic features of the area, to minimize construction costs and constraints.

The final design of the SRS is shown on the map attached.

In April 1996 the lines for the entrance and internal roads, and for the perimeter road and fence where surveyed and marked in the field, by clearing a 5 metre wide strip of undergrowth.

LAND CLEARING

2. To allow construction of the roads and fences a strip of forest will be cleared of all vegetation and topsoil, by bulldozer, with minimizing disturbance as much as possible. Whenever possible trees with diameter of 30 cm and up, in particular the protected species, should be left.

For the entrance road and for the internal road a strip of maximally 7 metres wide, and ca 700 metres long, will be cleared of vegetation and topsoil. The vegetation and topsoil will be deposited along the side of the cleared strip. See the profile attached.

For the perimeter road and fence a strip of maximally 9 metres wide, and ca 3700 metres long, will be cleared. The vegetation and topsoil will be deposited on the outer side of the circular strip, in order to keep the inner side clean for fence construction. See the profile attached.

Where the road allignment crosses a swamp a dam will be made, ca 7 metres wide at the top and between 2 and 3 metres high, depending on the topography. Soil for the dams will be borrowed from designated areas within the SRS enclosure.

For the construction of housing and support facilities an area of ca 6000 square metres will be cleared between the entrance road and the perimeter road. Mature trees that do not form a safety hazzard will be retained as much as possible.

Cutting of big trees for the land clearing will be minimised by re-alligning the strips wherever possible. Felled trees will be left in the forest, preferably on the outside of the allignment of the perimeter road, but when needed may be used for construction work for the project.

No timber will be removed from the area.

ROAD CONSTRUCTION

3. For access and security, roads will be constructed, as shown on the map and in the profiles attached. The road surface will be appropriately hardened with gravel to allow all-weather, low-volume traffic.

For the construction of the roadbed, the ditches and the fenceline, appropriate heavy-equipment (compacter, grader, excavator, etc.) will be used, considering that small parts of the loation will be inundated during the rain season.

In the dams across the swamps adequate drainage structures will be constructed, so that ca 1 - 1.5 metres depth of water is retained as a dry season water reserve. Excess water will be drained through culverts or will be allowed to overflow.

PERIMETER FENCING

4. The perimeter fence functions to prevent the rhinos from escaping from the SRS and prevents elephants from entering. The perimeter road provides rapid access to all parts of the fence for security, damage prevention, and repairs.

For the perimeter fence concrete poles (ca 15 cm diameter, 80 cm in the ground, 170 cm above ground) will be used, anchered in concrete blocks. Poles will be 3 metres apart, with larger tensioning poles at the corners and at other strategic places. Side braces will be constructed where required.

The fence will consist of 3 strands of 10 mm steel cable at 40, 80 and 160 cm above the groundlevel, and a 5 mm wire at 120 cm above the groundlevel. Shade cloth will be fastened between the 40 cm cable and the 120 cm wire.

To prevent the animals from touching the cables high-voltage electric wires will be placed ca 15 cm in front of the cables and wires, and above the top wire.

Five feeding and observation paddocks, each serving two enclosures, with gates to the outside and to the enclosures, will be constructed in the perimeter fence.

Adequate hazzard signs will be installed to warn people about the electric fence.

FACILITIES

5. On the facility area the project will construct:
   a. Staff housing, maximally 200 sqm;
   b. Permanent and temporary storage facilities for materials and equipment;
   c. Adequate water supply (borehole or well) and storage facilities for the facilities and for maintaining sufficient water in the wallows in the rhino enclosures at all times;
   d. Adequate electricity supply for the facilities and for powering the electric fences;
   e. Facilities and personnel to enable 24-hours controle of the compound.

INTERNAL FENCING

6. The internal fences will be constructed after the perimeter fence has become operational and elephants have no longer access to the area.

The internal fences will be placed in the forest and only a 2-3 metre wide strip of undergrowth will be cleared for the fences and inspection trails.

The internal fences will be constructed from the same materials as the perimeter fence, but with 10 mm cables at 40, 80, and 120 cm above the groundlevel. Alternatively a new netting material, currently being tested for Sumatran Rhino by the Malaysian Wildlife Department may be used.

Gates will be constructed linking all the enclosures with the central area.

In the central area a circular dry-season road will be constructed to allow transportation of the materials needed, and for emergency access to the enclosures.

In the central area an observation post will be constructed and an artificial saltlick will be created. The undergrowth will be partly removed to improve visibility for the monitoring of rhino behaviour.

PROVISIONS

7. All materials, services and labour needed for the realisation of the activities specified above will be purchased or contracted by TSI, using the funds provided by IRF in accordance with an agreed budget.

TSI will:
a. Use the best and most appropriate materials available;
b. Employ labour from local communities whenever possible;
c. Purchase materials locally whenever quality and quantity standards can be met;
d Report regularly to the Head of the TNWK about progress made and liaise closely with Park Staff on technical matters and management issues during construction.

PHPA Way Kambas will:
a. Provide qualified rangers for surveys and protection when required and requested by TSI;
b. Provide accomodation for project staff and personnel in exiting facilities when needed and available, free of charge;
c. Will provide unrestricted access to the project area for project staff, labourers and equipment;
d. Will assist with the contracting of local labour and services and with liaison with other government agencies.

IRF will:
a. Provide funds for the construction of the SRS facilities as specified above, in accordance with the budget approved in the MOU of 7 September 1995 (i.e. to a maximum of US$ 350,000).
b. Provide funds for the operation of the SRS during the first three years of operation, to a

maximum of $ 150,000.

c Provide technical assistance to the project.

The DG PHPA will:

a. Facilitate the granting of the rhino conservation/ecotourism development concession by the Minister of Forestry to TSI, and ultimately to the IRF/TSI/YMR joint venture company.

b. Facilitate the importation of goods needed for construction and operation.

c. Provide overall supervision and coordination of the project.

For the services specified above the project will pay the National Park a lumpsum of RP 1,000,000 for the period of this workplan (6 months). Additionally the project will pay Park Rangers Rp 15,000 + 2,000 for food, per full day worked for the project.

SUPERVISION

8. Ultimate oversight of construction and operation will be provided by TSI [Currently Mr. Jansen Manansang and Mr. Tony Sumampau, Directors] in consultation with IRF [Currently Dr. Thomas J. Foose Program Director].
The constructions and other activities specified in this workplan will be supervised by a Project Superviser appointed by TSI [Currently Mr. Sumadi]
Technical assistance will be provided by a senior Technical Advisor provided by IRF[Currently Dr. Nico van Strien]

Overall supervision will be provided by the DG PHPA.

APPROVAL

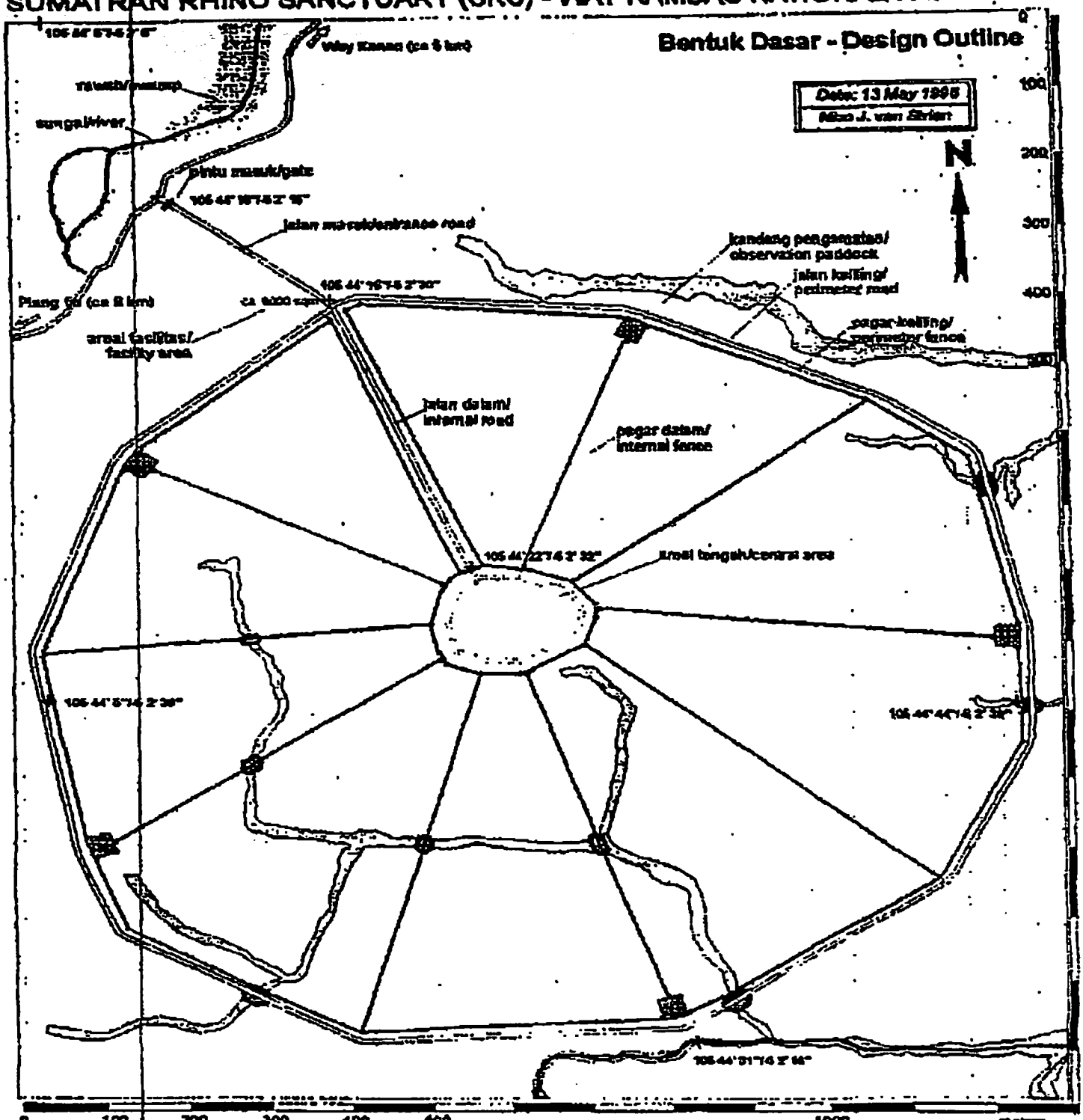
9. This workplan has been reviewed by PHPA Staff and has been approved.

Jakarta, 13 May 1996

DIREKTUR JENDERAL PERLINDUNGAN HUTAN
DAN PELESTARIAN ALAM

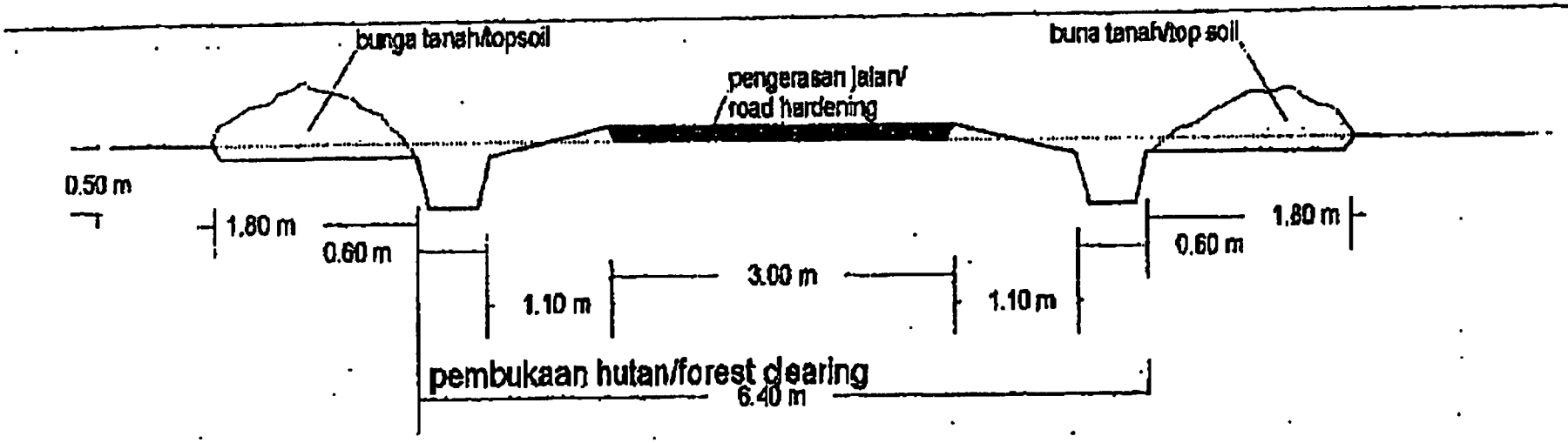
Ir. R. Soemarsono
NIP 090019732

SUAKA RHINO SUMATERA (SRS) - TAMAN NASIONAL WAY KAMBAS
SUMATRAN RHINO SANCTUARY (SRS) - WAY KAMBAS NATIONAL PARK

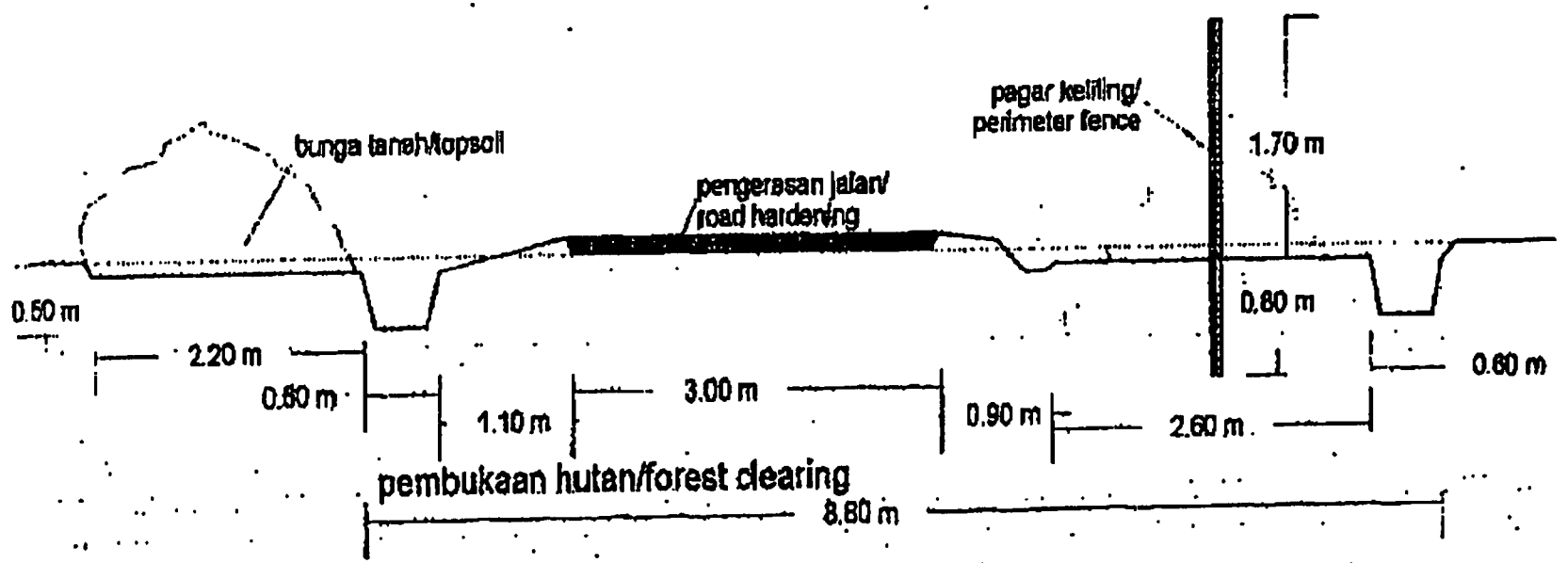


SUAKA RHINO SUMATERA (SRS) - TAMAN NASIONAL WAY KAMBAS
SUMATRAN RHINO SANCTUARY (SRS) - WAY KAMBAS NATIONAL PARK

Date: 13 May 1996
Moo J. van Strien



PENAMPANG JALAN MASUK DAN JALAN DALAM/PROFILE OF ENTRANCE ROAD AND INTERNAL ROAD



PENAMPANG JALAN KELILING/PROFILE OF PERIMETER ROAD