

APPENDICES

APPENDIX 1. MEMBER LIST OF THE STUDY TEAM

1. Site survey

Mr. Eiichi KAWAHARA	Leader Assistant Director, Grant Aid Division, Economic Cooperation Bureau, Ministry of Foreign Affairs
Mr. Yoshiro KURASHINA	Project Coordinator First Project Management Division, Grant Aid Project Management Department, JICA
Mr. Minoru MIURA	Chief Consultant / Road Traffic Planner Katahira & Engineers International
Mr. Yoshitaka YANAGISAWA	Road Designer Katahira & Engineers International
Mr. Soemu OSHITA	Construction Planner /Cost Estimator Katahira & Engineers International

2. Explanation of the Draft Basic Design

Mr. Katsutosi ISHIDA	Leader Grant Aid Division, Economic Cooperation Bureau, Ministry of Foreign Affairs
Mr. Minoru MIURA	Chief Consultant / Road Traffic Planner Katahira & Engineers International

APPENDIX 2. SURVEY SCHEDULE

1. Site Survey (August 20 to September 18, 1996)

No.	Date	Activity
1	Aug. 20 (Tue)	• Mr. Miura, Mr. Yanagisawa, Mr. Oshita left Tokyo for Guam
2	Aug. 21 (Wed)	• Above 3 members arrived at Majuro
3	Aug. 22 (Thu)	• Courtesy call on Ministry of Foreign Affairs, Ministry of Resources & Development (MRD) and JOCV Majuro Office
4	Aug. 23 (Fri)	• Discussion with MRD and Office of Planning and Statistics
5	Aug. 24 (Sat)	• Site survey
6	Aug. 25 (Sun)	• Mr. Kawahara, Mr. Kurashina left Japan for Guam
7	Aug. 26 (Mon)	• Discussion with Environmental Protection Authority • Mr. Kawahara, Mr. Kurashina arrived at Majuro
8	Aug. 27 (Tue)	• Courtesy call on Ministry of Foreign Affairs • Discussion with MRD
9	Aug. 28 (Wed)	• Discussion with MRD • Site survey, Data correction
10	Aug. 29 (Thu)	• Discussion with MRD • Site survey, data correction
11	Aug. 30 (Fri)	• Signing on Minutes of Discussions • Mr. Kawahara, Mr. Kurashina left Majuro for Japan
12	Aug. 31 (Sat)	• Site survey
13	Sep. 1 (Sun)	• Site survey
14	Sep. 2 (Mon)	• Site survey
15	Sep. 3 (Tue)	• Site survey
16	Sep. 4 (Wed)	• Site survey
17	Sep. 5 (Thu)	• Site survey
18	Sep. 6 (Fri)	• Site survey
19	Sep. 7 (Sat)	• Site survey
20	Sep. 8 (Sun)	• Site survey
21	Sep. 9 (Mon)	• Site survey
22	Sep. 10 (Tue)	• Site survey
23	Sep. 11 (Wed)	• Site survey
24	Sep. 12 (Thu)	• Site survey
25	Sep. 13 (Fri)	• Discussion with MRD
26	Sep. 14 (Sat)	• Site survey
27	Sep. 15 (Sun)	• Site survey
28	Sep. 16 (Mon)	• Site survey
29	Sep. 17 (Tue)	• Mr. Miura left Majuro for Tokyo thru Nadi • Mr. Yanagisawa, Mr. Oshita left Majuro for Guam
30	Sep. 18 (Wed)	• Report to Agana Consulate General of Japan • Mr. Yanagisawa, Mr. Oshita arrived at Tokyo from Guam

2. Explanation of the Draft Basic Design (November 3 to 11, 1996)

No.	Date	Activity
1	Nov. 3 (Sun)	• Mr. Ishida, Mr. Miura left Tokyo for Guam
2	Nov. 4 (Mon)	• Above 2 members arrived at Majuro from Guam
3	Nov. 5 (Tue)	• Courtesy call on Ministry of Foreign Affairs, Ministry of Resources & Development (MRD)
4	Nov. 6 (Wed)	• Discussion with MRD
5	Nov. 7 (Thu)	• Discussion with MRD survey
6	Nov. 8 (Fri)	• Signing of Minutes of Discussions
7	Nov. 9 (Sat)	• Site survey
8	Nov. 10 (Sun)	• Mr. Ishida, Mr. Miura left Majuro for Guam
9	Nov. 11 (Mon)	• Mr. Ishida, Mr. Miura arrived at Tokyo from Guam

**APPENDIX 3. LIST OF PARTIES CONCERNED IN
THE REPUBLIC OF THE MARSHALL ISLANDS**

Ministry of Foreign Affairs

Mr. Jiba Kabua	Secretary
Mr. Damien Ishoda	Undersecretary for Asia & Pacific
Mr. Timius K. Anien	Undersecretary

Ministry of Resources & Development

Mr. Lomes McKay	Minister
Mr. Robert Muller	Secretary
Mr. Walter Myazoc	Assistant Secretary
Mr. Ken Cook	Manager, Facility Engineering Division
Mr. Takeshi Furakoshi	JOCV Engineer, Facility Engineering Division

Office of Planning & Statistics

Mr. Jefferson B. Butuna	Director
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Environmental Protection Authority

Mr. Jorelik Tibon	General Manager
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Weather Service Office

Mr. Paul S. Peter	Official in Charge
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Majuro Atoll Local Government

Ms. Amatlain E. Kabua	Mayor
Mr. Wilbur Allen	City Administrator

National Telecommunication Authority

Mr. Alane E. Fowler	President & General Manager
Mr. Thomas H. De Brum	Vice President & Deputy General Manager
Mr. Wooden M. Ishoda	Manager of Earth Stations/Plant Facilities

Marshall Islands Development Authority

Mr. David Kabua General Manager

Majuro Water & Sewer Company

Mr. Hackney Takuju Administrative Manager

Marshall Energy Company

Mr. William F. Roberts General Manager

JICA Expert

Mr. Hiroyuki Yoshida Marshall Islands Marine Resources Authority

JOCV Marshall Office

Ms. Masami Bolt Coordinator

APPENDIX 4. MINUTES OF DISCUSSIONS

The first meeting of the committee was held on 15th October 1991. The meeting was held in the presence of the following members: Mr. J. H. ...

The second meeting of the committee was held on 22nd October 1991. The meeting was held in the presence of the following members: Mr. J. H. ...

The third meeting of the committee was held on 29th October 1991. The meeting was held in the presence of the following members: Mr. J. H. ...

... ..

1. Site Survey

MINUTES OF DISCUSSIONS
ON
BASIC DESIGN STUDY
ON
THE PROJECT FOR THE IMPROVEMENT OF
THE ROAD IN MAJURO ATOLL
IN
THE REPUBLIC OF THE MARSHALL ISLANDS

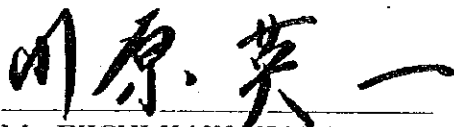
In response to the request from the Government of the Republic of the Marshall Islands, the Government of Japan decided to conduct the Basic Design Study on the Project for the Improvement of the Road in Majuro Atoll (hereinafter referred to as "the Project") and entrusted the study to the Japan International Cooperation Agency (hereinafter referred as "JICA").

JICA sent to the Republic of the Marshall Islands the Basic Design Study Team (hereinafter referred to as "the Study Team"), which is headed by Mr. Eiichi Kawahara, Assistant Director, Grant Aid Division, Economic Cooperation Bureau, Ministry of Foreign Affairs, and the Study Team is scheduled to stay in the country from August 21 to September 17, 1996.

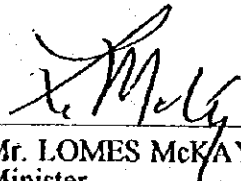
The Study Team held a series of discussions with the officials concerned of the Government of the Republic of the Marshall Islands and conducted field surveys at the study areas.

In the course of discussions and field surveys, both parties confirmed the main items described on the attached sheets. The Study Team will proceed to further works and prepare the Basic Design Study Report.

Majuro, August 30, 1996



Mr. EIICHI KAWAHARA
Leader,
Basic Design Study Team,
JICA



Mr. LOMES McKAY
Minister,
Ministry of Resources & Development

ATTACHMENT

1. Objectives

The objectives of the Project is to improve the main road between the Majuro Airport and Rita Area in Majuro Atoll in order to improve resident's living standard and traffic condition in the area.

2. Responsible Organization and Implementing Agency

Responsible Ministry : Ministry of Resources & Development

Implementing Agency : Ministry of Resources & Development

3. Project Site

The Project site is located in Majuro Atoll which is shown in ANNEX-1.

4. Major Items Requested by the Government of the Marshall Islands

After the series of discussions, the items listed in ANNEX-2 are finally requested by the Government of the Marshall islands.

5. Management and Maintenance

The facility constructed under the Japan's Grant Aid will be operated and maintained by the Government of the Republic of the Marshall Islands.

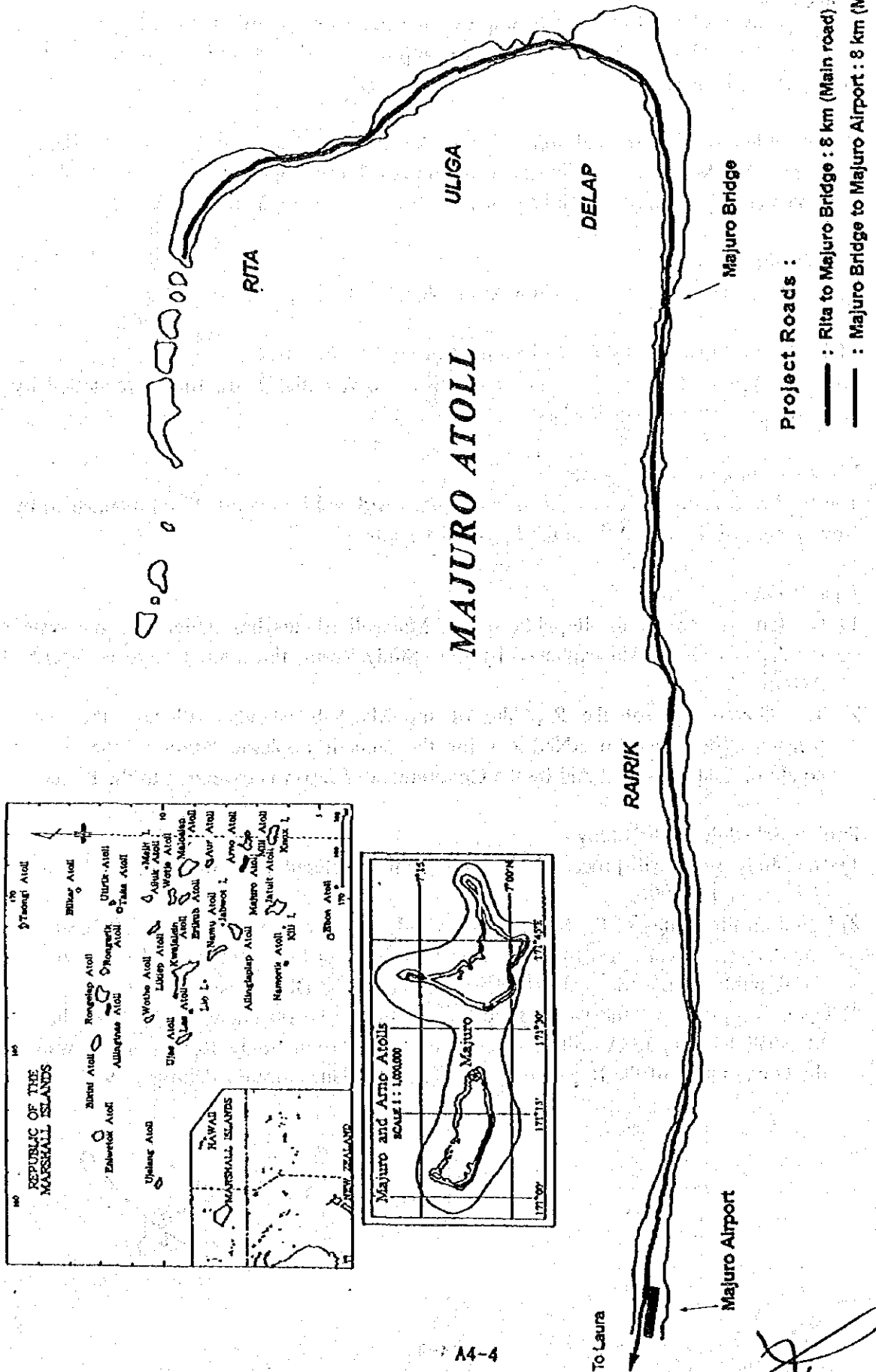
6. Japan's Grant Aid System

- 1) The Government of the Republic of the Marshall Islands has understood the system of the Japan's Grant Aid explained by the Study Team; the main feature is described in ANNEX-3.
- 2) The Government of the Republic of the Marshall Islands will take the necessary measures, described in ANNEX-4 for the smooth implementation of the Project on condition that the Grant Aid by the Government of Japan is extended to the Project.

7. Further Schedule of the Study

- 1) The Study Team will proceed further studies in the Republic of the Marshall Islands until September 17, 1996.
- 2) Based on the results of the Basic Design Study, JICA will prepare the Draft Basic Design and dispatch a team in early November 1996 in order to consult with the Government of the Republic of the Marshall Islands on outline of the Draft Basic Design.
- 3) Upon acceptance of the Draft Basic Design by the Government of the Republic of the Marshall Islands, JICA will complete the Basic Design Study Report and forward it to the Government of the Republic of the Marshall Islands around February 1997.

ANNEX-1 : SITE TO BE COVERED UNDER THE PROJECT



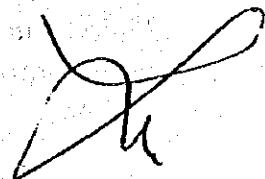
PROJECT SITE LOCATION MAP

**ANNEX-2 : ITEMS REQUESTED BY THE GOVERNMENT OF THE REPUBLIC OF
THE MARSHALL ISLANDS**

**To improve the main road between the Majuro Airport and Rita Area in Majuro Atoll,
prioritized items of the improvement works of the road are as follows:**

- 1) To construct drainage facilities along the road**
- 2) To repair asphalt pavement and to mark the road center line**
- 3) To design the structure of the road to accommodate future installation/rehabilitation of
water supply lines and related facilities**
- 4) To construct emergency drainage facilities, if necessary**
- 5) To construct sidewalks along the road, where necessary**
- 6) To construct school bus and taxi stops, where necessary**
- 7) To plant turf to prevent soil loss, where necessary**

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ANNEX-3 : JAPAN'S GRANT AID SCHEME

1. Grant Aid Procedures

1) Japan's Grant Aid Program is executed through the following procedures:

Application	(Request made by a recipient country)
Study	(Basic Design Study conducted by JICA)
Appraisal & Approval	(Appraisal by the Government of Japan and Approval by Cabinet)
Determination of Implementation	(The Notes exchanged between the Governments of Japan and the recipient country)

2) Firstly, the application or request for Grant Aid project submitted by a recipient country is examined by the Government of Japan (the Ministry of Foreign Affairs) to determine whether or not it is eligible for Grant Aid. If the request is deemed appropriate, the Government of Japan assign JICA to conduct a study on the request.

Secondly, JICA conducts the study (Basic Design Study), using Japanese consulting firms.

Thirdly, the Government of Japan appraises the project to see whether or not it is suitable for Japan's Grant Aid Program, based on the Basic Design Study report prepared by JICA, and the results are then submitted to the Cabinet for approval.

Fourthly, the project, once approved by the Cabinet, becomes official with the Exchange of Note signed by the Government of Japan and the recipient country.

Finally, for the implementation of the project, JICA assists the recipient country in such matters as preparing tenders, contracts and so on.

2. Basic Design Study

1) Contents of the Study

The aims of the Basic Design Study (hereinafter referred to as "the Study", conducted by JICA on a requested project (hereinafter referred to as "the Project") is to provide a basic document necessary for the appraisal of the Project by the Government of Japan. The contents of the Study are as follows:

- a) confirmation of the background, objectives, and benefits of the Project and also institutional capacity of agencies concerned of the recipient country necessary for the Project's implementation;
- b) evaluation of the appropriateness of the Project to be implemented under the Grant



- Aid Scheme from a technical, social and economic point of view;
- c) confirmation of items agreed on by both parties concerning the basic concept of the Project;
 - d) preparation of a basic design of the Project; and
 - e) estimation of costs of the Project.

The contents of the original request are not necessarily approved in their initial form as the contents of the Grant Aid project. The Basic Design of the Project is confirmed considering the guidelines of Japan's Grant Aid Scheme.

The Government of Japan requests the Government of the recipient country to take whatever measures are necessary to ensure its self-reliance in the implementation of the Project. Such measures must be guaranteed even though they may fall outside of the jurisdiction of the organization in the recipient country actually implementing the Project. Therefore, the implementation of the Project is confirmed by all relevant organization of the recipient country through the Minutes of Discussions.

2) Selection of Consultants

For smooth implementation of the Study, JICA uses a consultant firm selected through its own procedure (competitive proposal). The selected firm participates the Study and prepares a report based upon terms of reference set by JICA.

At the beginning of implementation after the Exchange of Notes, for the services of the Detailed Design and Construction Supervision of the Project, JICA recommends the same consulting firm which participated in the Study to the recipient country, in order to maintain the technical consistency between the Basic Design and Detailed Design as well as to avoid any undue delay caused by the selection of a new consulting firm.

3. Japan's Grant Aid Scheme

1) What is Grant Aid?

The Grant aid Program provides a recipient country with non-reimbursable fund to procure the facilities, equipment and services (engineering services and transportation of the products, etc.) for economic and social development of the country under principles in accordance with the relevant laws and regulations of Japan. Grant Aid is not supplied through the donation of materials as such.

2) Exchange of Notes (E/N)

Japan's Grant Aid is extended in accordance with the Notes exchanged by the two Governments concerned, in which the objectives of the Project, period of execution, conditions and amount of the Grant Aid, etc., are confirmed.

3) "The period of the Grant Aid" means the one fiscal year which the Cabinet approves the Project for. Within the fiscal year, all procedures such as exchange of the Notes,

concluding contracts with consulting firms and contractors and final payment to them must be completed. However, in case of delay in delivery, installation or construction due to unforeseen factors such as weather, the period of the Grant Aid can be further extended for a one fiscal year at most by mutual agreement between the two countries.

- 4) Under the Grant Aid, in principle, Japanese products and services including transport or those of the recipient country are to be purchased.

When the two Governments deem it necessary, the Grant Aid may be used for the purchase of the products or services of a third country.

However the prime contractors, namely, consulting, contracting and procurement firms, are limited to "Japanese nationals". (The term "Japanese nationals" means persons of Japanese nationality or Japanese corporations controlled by persons of Japanese nationality.)

5) Necessity of "Verification"

The Government of recipient country or its designated authority will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be verified by the Government of Japan. This "Verification" is deemed necessary to secure accountability to Japanese taxpayers.

6) Undertakings required to the Government of the Recipient Country

- a) to secure a lot of land necessary for the construction of the Project and to clear the site;
- b) to provide facilities for the distribution of electricity, water supply and drainage and other incidental facilities in and around the sites;
- c) to ensure prompt unloading, customs clearance at the port of disembarkation in the recipient country and internal transportation therein of the products purchased under the Grant Aid;
- d) to exempt Japanese nationals from customs duties, internal taxes and fiscal levies which may be imposed in the recipient country with respect to the supply of the products and services under the verified contracts;
- e) to accord Japanese nationals whose services may be required in connection with the supply of the products and services under the verified contracts, such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work;
- f) to ensure that the facilities constructed and products purchased under the Grant Aid be maintained and used properly and effectively for the Project; and
- g) to bear all the expenses, other than those covered by the Grant Aid, necessary for the Project.

7) "Proper Use"

The recipient country is required to maintain and use the facilities constructed and equipment purchased under the Grant Aid properly and effectively and to assign staff

necessary for operation and maintenance of them as well as to bear all the expenses other than those covered by the Grant Aid.

8) "Re-export"

The products purchased under the Grant Aid shall not be re-exported from the recipient country.

9) Banking Arrangement (B/A)

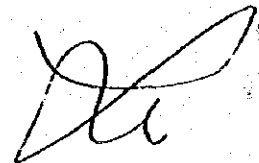
a) The Government of the recipient country or its designated authority should open an account in the name of the Government of the recipient country in an authorized foreign exchange bank in Japan (hereinafter referred to as "the Bank"). The Government of Japan will execute the Grant Aid by making payments in Japanese yen to cover the obligations incurred by the Government of the recipient country or its designated authority under the Verified Contracts.

b) The payments will be made when payment requests are presented by the Bank to the Government of Japan under an Authorization to Pay (A/P) issued by the Government of the recipient country or its designated authority.

**ANNEX-4 : NECESSARY MEASURES TO BE TAKEN BY THE GOVERNMENT OF
THE REPUBLIC OF THE MARSHALL ISLANDS**

The following necessary measures should be taken by the Government of the Republic of the Marshall Islands on condition that the Grant Aid by the Government of Japan is extended to the Project.

1. To provide data and information necessary for the Project.
2. To coordinate with other public works related to the Project.
3. To secure the land necessary for the execution of the Project, such as land for drainage facilities, sidewalks, bus/taxi stops, temporary construction works and others.
4. To undertake incidental works, such as fencing, lighting, and other incidental facilities in and around Project site, if necessary.
5. To bear commissions to the Japanese foreign exchange bank for its banking services based upon the Banking Arrangement, namely the advising commission of the "Authorization to Pay" and payment commissions.
6. To ensure prompt unloading and customs clearance at ports of disembarkation in the Republic of the Marshall Islands and internal transportation therein on the products purchased under the Grant.
7. To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which may be imposed in the Republic of the Marshall Islands with respect to the supply of the products and services under the Verified Contracts.
8. To accord Japanese nationals whose services may be required in connection with the supply of the products and services under the Verified Contract such as facilities as may be necessary for their entry into the Republic of the Marshall Islands and stay therein for the performance of their work.
9. To provide necessary permissions, licenses and other authorizations for implementing the Project, if necessary.
10. To assign appropriate budget and staff members for proper and effective operation and maintenance of the facilities constructed under the Project.
11. To maintain and use properly and effectively facilities constructed under the Project.
12. To bear all the expenses, other than those covered by the Japanese Grant Aid, necessary for the Project.



2. Explanation of the Draft Basic Design

MINUTES OF DISCUSSIONS
ON
BASIC DESIGN STUDY
ON
THE PROJECT FOR THE IMPROVEMENT OF
THE ROAD IN MAJURO ATOLL
IN
THE REPUBLIC OF THE MARSHALL ISLANDS

(Explanation of the Draft Basic Design)

In August 1996, the Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched the Basic Design Study Team on the Project for the Improvement of the Road in Majuro Atoll (hereinafter referred as "the Project") to the Republic of the Marshall Islands (hereinafter "RMI"). After the assessment of the data and information obtained through the study, JICA has prepared the Draft Basic Design of the Project.

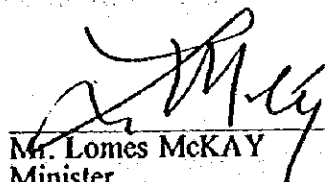
In order to explain and consult the Government of the RMI on the components of the Draft Basic Design, JICA sent to the RMI a Study Team headed by Mr. Katsutoshi ISHIDA, Grant Aid Division, Economic Cooperation Bureau, Ministry of Foreign Affairs, which is scheduled to stay in the country from November 4 to 9, 1996.

As a result of the discussions, both parties have confirmed the main items described on the attached sheets.

Majuro, November 8, 1996

石田勝利

Mr. Katsutoshi ISHIDA
Leader,
Basic Design Study Team,
JICA



Mr. Lomes McKAY
Minister,
Ministry of Resources & Development

ATTACHMENT

1. Objectives

The objective of the Project is to improve the road between the Majuro Airport and Rita Area in Majuro Atoll in order to improve residents' living standard and traffic conditions in the area.

2. Responsible Organization

The Ministry of Resources & Development of the RMI is responsible for the administration and execution of the Project.

3. Project Site

The location of the Project road is shown in ANNEX-1.

4. Draft Basic Design

The Government of the RMI has in principal agreed to the components of the Draft Basic Design proposed by the Team, with some minor changes agreed during the meetings. These amendments will be incorporated in the Basic Design. The major components of the Project are shown in ANNEX-2.

5. Coordination with Other Public Works

The Government of the RMI will coordinate with other public works related to the Project. Specially, to coordinate the ADB assisted water supply project which is to be implemented so as to preclude conflicts in the construction activities of the two projects.

6. Land Acquisition

The Government of the RMI will secure the lots for the widened road section and for drainage pipes and basins from the road to the sea before the construction.

7. Maintenance of the facilities

The facilities constructed under Japan's Grant Aid will be maintained by the Ministry of Resources & Development of the RMI. The maintenance items required for the facilities were discussed and preparation of a maintenance manual in the detailed design stage was proposed.

8. Japan's Grant Aid System

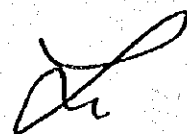
1) The Government of the RMI has understood the system of Japan's Grant Aid explained in ANNEX-3.

2) The Government of the RMI will take the necessary measures, described in ANNEX-4 for the smooth implementation of the Project in the event that Grant Aid by the Government of Japan is extended to the Project.

9. Further Schedule of the Study

JICA will complete the Basic Design Report and forward it to the RMI by February 1997.

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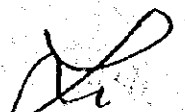


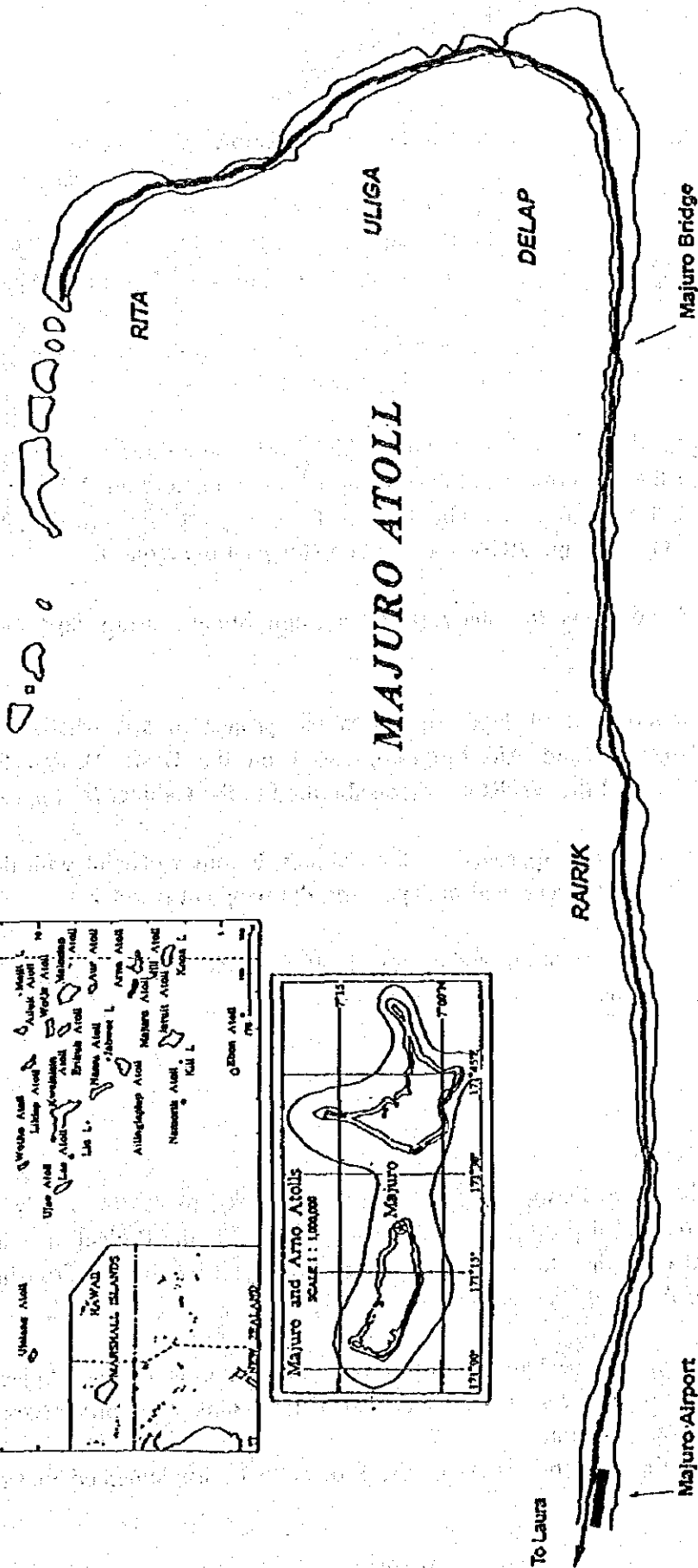
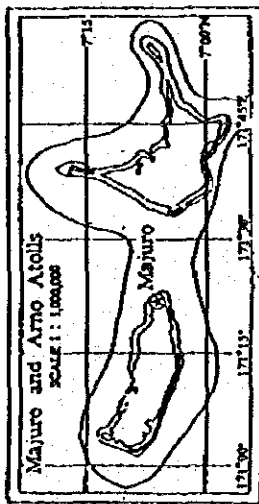
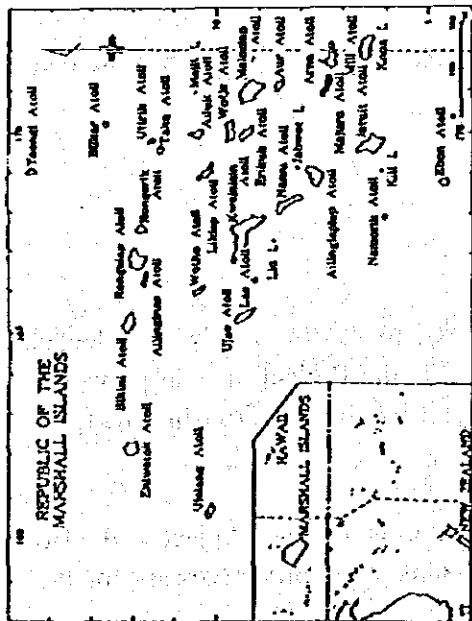
ANNEX-2 : MAJOR COMPONENTS OF THE PROJECT

The Project aims to improve the main road between Majuro Airport to Rita (16.7km) in Majuro Atoll. The major components of the Project are as follows:

- 1) To construct drainage facilities along the road.
- 2) To overlay asphalt concrete on the deteriorated pavement.
- 3) To mark centerline, sidelines and crosswalks on the pavement.
- 4) To install safety sign boards.
- 5) To construct about 1km long median with lighting in the vicinity of the Capitol Building.

(12/18)





Project Roads :

- : Rita to Majuro Bridge : 8 km (Main road)
- : Majuro Bridge to Majuro Airport : 8.7 km (Main road)

LOCATION OF THE PROJECT ROAD

ANNEX-3 : JAPAN'S GRANT AID SCHEME

1. Grant Aid Procedures

1) Japan's Grant Aid Program is executed through the following procedures:

Application	(Request made by a recipient country)
Study	(Basic Design Study conducted by JICA)
Appraisal & Approval	(Appraisal by the Government of Japan and Approval by Cabinet)
Determination of Implementation	(The Notes exchanged between the Governments of Japan and the recipient country)

2) Firstly, the application or request for Grant Aid project submitted by a recipient country is examined by the Government of Japan (the Ministry of Foreign Affairs) to determine whether or not it is eligible for Grant Aid. If the request is deemed appropriate, the Government of Japan assign JICA to conduct a study on the request.

Secondly, JICA conducts the study (Basic Design Study), using Japanese consulting firms.

Thirdly, the Government of Japan appraises the project to see whether or not it is suitable for Japan's Grant Aid Program, based on the Basic Design Study report prepared by JICA, and the results are then submitted to the Cabinet for approval.

Fourthly, the project, once approved by the Cabinet, becomes official with the Exchange of Note signed by the Government of Japan and the recipient country.

Finally, for the implementation of the project, JICA assists the recipient country in such matters as preparing tenders, contracts and so on.

2. Basic Design Study

1) Contents of the Study

The aims of the Basic Design Study (hereinafter referred to as "the Study", conducted by JICA on a requested project (hereinafter referred to as "the Project") is to provide a basic document necessary for the appraisal of the Project by the Government of Japan. The contents of the Study are as follows:

- a) confirmation of the background, objectives, and benefits of the Project and also institutional capacity of agencies concerned of the recipient country necessary for the Project's implementation;
- b) evaluation of the appropriateness of the Project to be implemented under the Grant

- Aid Scheme from a technical, social and economic point of view;
- c) confirmation of items agreed on by both parties concerning the basic concept of the Project;
 - d) preparation of a basic design of the Project; and
 - e) estimation of costs of the Project.

The contents of the original request are not necessarily approved in their initial form as the contents of the Grant Aid project. The Basic Design of the Project is confirmed considering the guidelines of Japan's Grant Aid Scheme.

The Government of Japan requests the Government of the recipient country to take whatever measures are necessary to ensure its self-reliance in the implementation of the Project. Such measures must be guaranteed even though they may fall outside of the jurisdiction of the organization in the recipient country actually implementing the Project. Therefore, the implementation of the Project is confirmed by all relevant organization of the recipient country through the Minutes of Discussions.

2) Selection of Consultants

For smooth implementation of the Study, JICA uses a consultant firm selected through its own procedure (competitive proposal). The selected firm participates the Study and prepares a report based upon terms of reference set by JICA.

At the beginning of implementation after the Exchange of Notes, for the services of the Detailed Design and Construction Supervision of the Project, JICA recommends the same consulting firm which participated in the Study to the recipient country, in order to maintain the technical consistency between the Basic Design and Detailed Design as well as to avoid any undue delay caused by the selection of a new consulting firm.

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2) Exchange of Notes (E/N)

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3) "The period of the Grant Aid" means the one fiscal year which the Cabinet approves the Project for. Within the fiscal year, all procedures such as exchange of the Notes,

concluding contracts with consulting firms and contractors and final payment to them must be completed. However, in case of delay in delivery, installation or construction due to unforeseen factors such as weather, the period of the Grant Aid can be further extended for a one-fiscal year at most by mutual agreement between the two countries.

- 4) Under the Grant Aid, in principle, Japanese products and services including transport or those of the recipient country are to be purchased.

When the two Governments deem it necessary, the Grant Aid may be used for the purchase of the products or services of a third country.

However the prime contractors, namely, consulting, contracting and procurement firms, are limited to "Japanese nationals". (The term "Japanese nationals" means persons of Japanese nationality or Japanese corporations controlled by persons of Japanese nationality.)

- 5) Necessity of "Verification"

The Government of recipient country or its designated authority will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be verified by the Government of Japan. This "Verification" is deemed necessary to secure accountability to Japanese taxpayers.

- 6) Undertakings required to the Government of the Recipient Country

- a) to secure a lot of land necessary for the construction of the Project and to clear the site;
- b) to provide facilities for the distribution of electricity, water supply and drainage and other incidental facilities in and around the sites;
- c) to ensure prompt unloading, customs clearance at the port of disembarkation in the recipient country and internal transportation therein of the products purchased under the Grant Aid;
- d) to exempt Japanese nationals from customs duties, internal taxes and fiscal levies which may be imposed in the recipient country with respect to the supply of the products and services under the verified contracts;
- e) to accord Japanese nationals whose services may be required in connection with the supply of the products and services under the verified contracts, such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work;
- f) to ensure that the facilities constructed and products purchased under the Grant Aid be maintained and used properly and effectively for the Project; and
- g) to bear all the expenses, other than those covered by the Grant Aid, necessary for the Project.

- 7) "Proper Use"

The recipient country is required to maintain and use the facilities constructed and equipment purchased under the Grant Aid properly and effectively and to assign staff

necessary for operation and maintenance of them as well as to bear all the expenses other than those covered by the Grant Aid.

8) "Re-export

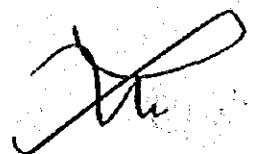
The products purchased under the Grant Aid shall not be re-exported from the recipient country.

9) Banking Arrangement (B/A)

a) The Government of the recipient country or its designated authority should open an account in the name of the Government of the recipient country in an authorized foreign exchange bank in Japan (hereinafter referred to as "the Bank"). The Government of Japan will execute the Grant Aid by making payments in Japanese yen to cover the obligations incurred by the Government of the recipient country or its designated authority under the Verified Contracts.

b) The payments will be made when payment requests are presented by the Bank to the Government of Japan under an Authorization to Pay (A/P) issued by the Government of the recipient country or its designated authority.

(A/P)



**ANNE X-4 : NECESSARY MEASURES TO BE TAKEN BY THE GOVERNMENT OF
THE REPUBLIC OF THE MARSHALL ISLANDS**

The following necessary measures should be taken by the Government of the Republic of the Marshall Islands on condition that Grant Aid by the Government of Japan is extended to the Project.

1. To provide data and information necessary for the Project.
2. To secure the lots necessary for the execution of the Project, such as lots for drainage facilities and widened road, and temporary yards for the construction.
3. To remove encroachments in the Project area, such as hedges, fences, power posts, telephone switchboards, etc.
4. To take necessary preparatory measures to satisfy the internal criteria concerning the earthmoving and the land modification permit as required by the Environmental Protection Authority and the Historic Preservation Office.
5. To bear commissions to the Japanese foreign exchange bank for its banking services based upon the Banking Arrangement, namely the advising commission of the "Authorization to Pay" and payment commissions.
6. To ensure prompt unloading and customs clearance at ports of disembarkation in the Republic of the Marshall Islands and internal transportation therein on the products purchased under the Grant.
7. To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which may be imposed in the Republic of the Marshall Islands with respect to the supply of the products and services under the Verified Contracts.
8. To accord Japanese nationals whose services may be required in connection with the supply of the products and services under the Verified Contract such as facilities as may be necessary for their entry into the Republic of the Marshall Islands and stay therein for the performance of their work.
9. To provide necessary permissions, licenses and other authorizations for implementing the Project, if necessary.
10. To assign appropriate budget and staff members for proper and effective maintenance of the facilities constructed under the Project.
11. To maintain and use properly and effectively facilities constructed under the Project.
12. To bear all the expenses, other than those covered by the Japanese Grant Aid, necessary for the Project.

APPENDIX 5. RESULT OF TRAFFIC SURVEY

TRAFFIC COUNT RECORD

STATION NO. 1 : AT MARSHALL ISLANDS HIGH SCHOOL, RITA DATE : SEP 5, 1996 (THURSDAY)

Vehicle Type	Direction/Side	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	TOTAL (7-19)	TOTAL (0-24)
Heavy Truck	To Laula	7	3	5	4	5	5	6	6	5	5	0	0	51	
	To Rita	2	1	5	7	3	3	7	4	0	2	0	0	36	
	Total	9	4	10	11	10	8	13	10	5	7	0	0	87	1.00
Light Truck	To Laula	90	146	81	78	78	76	109	79	95	83	104	105	1124	
	To Rita	73	94	77	57	71	50	72	75	111	90	111	111	992	
	Total	163	240	158	135	149	126	181	154	206	173	215	216	2116	1.11
Heavy Bus	To Laula	1	0	0	0	0	0	0	0	1	1	0	0	3	
	To Rita	2	3	0	0	0	2	0	0	1	0	0	0	8	
	Total	3	3	0	0	0	2	0	0	2	1	0	0	11	1.00
Light Bus	To Laula	13	24	13	8	14	17	15	24	25	19	21	14	207	
	To Rita	11	24	16	8	16	13	24	19	15	15	13	9	183	
	Total	24	48	29	16	30	30	39	43	40	34	34	23	390	1.04
Car & Taxi	To Laula	30	189	156	145	123	106	156	128	150	145	137	174	1639	
	To Rita	83	154	118	120	106	92	123	131	142	129	132	147	1477	
	Total	113	343	274	265	229	198	279	259	292	274	269	321	3116	1.11
Vehicle Total	To Laula	141	362	255	235	220	204	286	237	276	253	262	293	3024	
	To Rita	171	276	216	192	198	160	226	229	269	238	256	267	2696	
	Total	312	638	471	427	418	364	512	466	545	489	518	560	5720	6322
Motor Cycle	To Laula	1	1	1	2	0	2	0	1	0	1	1	4	14	
	To Rita	1	1	0	1	2	2	0	2	0	0	2	3	14	
	Total	2	2	1	3	2	4	0	3	0	1	3	7	28	1.00
Pedestrian	To Laula	55	49	33	35	27	22	9	17	72	11	14	12	357	
	To Rita	19	16	11	11	9	7	3	6	24	4	5	4	119	
	Total	75	65	44	46	36	29	12	23	96	15	19	16	476	1.14

Heavy Vehicle Total : 98
 Light Vehicle Total : 6224
 Total : 6322

TRAFFIC COUNT RECORD
 STATION NO. 2 AT THE MUSEUM, ULIGA
 DATE: SEP. 9, 1966 (MONDAY)

Vehicle Type	0-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	TOTAL (9-24)	TOTAL (6-24)	TOTAL (7-19)		
Heavy Truck	To Levia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	To Bija	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Light Truck	To Levia	2	9	67	220	138	113	158	148	175	152	186	180	127	96	45	33	13	4	1811	2015	1811	2015	
	To Bija	2	11	80	210	142	137	161	160	170	155	203	156	175	163	43	36	11	5	1942	2142	1942	2142	
	Total	4	20	147	430	280	250	319	308	345	307	389	336	354	259	88	69	24	9	3753	4157	3753	4157	
Heavy Bus	To Levia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	To Bija	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Light Bus	To Levia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	To Bija	0	3	23	34	31	28	30	11	19	32	33	19	29	25	5	3	0	0	0	0	0	0	0
	Total	0	3	23	34	31	28	30	11	19	32	33	19	29	25	5	3	0	0	0	0	0	0	0
Car & Taxi	To Levia	7	25	110	287	214	200	192	201	235	198	241	180	238	211	155	49	27	15	9	2902	2886	2902	
	To Bija	9	28	120	265	232	182	230	265	248	210	227	213	265	284	170	51	28	9	8	2721	3023	2721	
	Total	16	53	230	549	446	382	422	466	483	408	468	393	453	495	325	99	65	24	17	5323	5922	5323	
Vehicle Total	To Levia	9	36	189	538	355	347	377	399	468	383	468	365	446	358	260	98	70	28	13	4743	5656	4743	
	To Bija	11	52	223	511	456	352	423	458	440	404	469	399	470	452	291	97	63	20	13	4999	5526	4999	
	Total	20	88	412	1049	811	699	800	857	908	787	937	764	916	810	541	195	133	48	26	9742	10181	9742	
Motor Cycle	To Levia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	To Bija	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian	To Levia	7	11	40	52	28	20	25	28	30	62	24	22	34	17	11	8	2	0	0	407	484	407	
	To Bija	3	5	17	22	16	12	9	11	12	13	10	10	10	15	7	5	4	1	0	178	201	178	
	Total	10	16	57	74	44	32	34	39	40	43	34	32	44	32	18	13	6	0	0	585	685	585	

Heavy Vehicle Total : 80
 Light Vehicle Total : 10601
 Total : 10781

TRAFFIC COUNT RECORD

STATION NO. 3 AT OUTRIGGER HOTEL, DELAP

DATE: SEP 10, 1996 (TUESDAY)

Vehicle Type	Direction/Side	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	TOTAL (7-19)	(0-24)/(7-19)	TOTAL (0-24)
Heavy Truck	To Laula	1	5	10	9	12	5	7	7	8	6	7	0	77		
	To Rita	0	8	7	5	6	1	5	4	4	3	1	1	45		
	Total	1	13	17	14	18	6	12	11	12	9	8	1	122	1.00	122
Light Truck	To Laula	52	151	118	104	122	120	142	125	144	120	141	86	1425		
	To Rita	100	179	120	119	112	100	175	162	140	126	137	1100	2570		
	Total	152	330	238	223	234	220	317	287	284	246	278	1186	3995	1.11	4437
Heavy Bus	To Laula	0	0	0	0	0	1	0	0	0	1	0	0	2		
	To Rita	0	1	0	0	1	0	1	1	0	0	0	0	4		
	Total	0	1	0	0	1	1	1	1	0	1	0	0	6	1.00	6
Light Bus	To Laula	8	22	13	17	19	12	22	14	16	18	18	14	193		
	To Rita	30	15	15	22	30	19	38	33	36	21	25	20	304		
	Total	38	37	28	39	49	31	60	47	52	39	43	34	497	1.04	519
Car & Taxi	To Laula	103	197	151	152	196	159	155	177	154	147	203	165	1959		
	To Rita	216	253	175	160	158	188	220	229	180	192	227	161	2329		
	Total	319	450	326	312	354	347	375	406	334	309	430	326	4288	1.11	4771
Vehicle Total	To Laula	164	375	292	282	349	297	326	323	322	292	369	265	3656		
	To Rita	346	456	317	306	307	308	439	429	360	312	390	1292	5252		
	Total	510	831	609	588	656	605	765	752	682	604	759	1547	8908		9854
Motor Cycle	To Laula	0	2	1	0	0	2	3	3	3	6	3	6	29		
	To Rita	3	3	0	0	1	0	1	1	1	3	7	2	22		
	Total	3	5	1	0	1	2	4	4	4	9	10	8	51	1.00	51
Pedestrian	To Laula	38	4	4	5	65	42	17	90	35	13	43	38	402		
	To Rita	12	1	4	2	21	14	6	30	11	4	14	12	131		
	Total	50	5	16	7	86	56	23	120	46	17	57	50	533	1.14	608

Heavy Vehicle Total :

Light Vehicle Total :

Total :

128

9726

9854

TRAFFIC COUNT RECORD

STATION NO. 4 : AT MAJURO BRIDGE, DELAP/RA/ROK

DATE : SEP 11, 1996 (WEDNESDAY)

Vehicle Type	Direction/Side	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	TOTAL (7-19)	(0-24)/(7-19)	TOTAL (0-24)
Heavy Truck	To Laula	3	3	1	4	1	1	4	1	5	4	1	1	29		
	To Rita	2	3	1	1	2	0	1	2	6	2	3	1	24		
	Total	5	6	2	5	3	1	5	3	11	6	4	2	53	1.00	53
Light Truck	To Laula	52	56	55	60	64	54	48	61	80	84	107	75	796		
	To Rita	128	90	48	60	50	67	85	62	60	76	56	65	847		
	Total	180	146	103	120	114	121	133	123	140	160	163	140	1643	1.11	1825
Heavy Bus	To Laula	0	0	0	1	0	0	0	0	0	0	0	0	2		
	To Rita	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Total	0	0	0	1	0	0	0	0	0	0	0	0	2	1.00	2
Light Bus	To Laula	8	8	2	7	8	11	10	11	11	18	14	18	126		
	To Rita	23	8	5	11	10	12	13	15	12	10	10	16	145		
	Total	31	16	7	18	18	23	23	26	23	28	24	34	271	1.04	283
Car & Taxi	To Laula	58	56	49	57	83	94	66	81	91	92	168	104	999		
	To Rita	142	91	55	60	75	87	118	80	83	92	102	116	1101		
	Total	200	147	104	117	158	181	184	161	174	184	270	220	2100	1.11	2336
Vehicle Total	To Laula	121	123	107	129	156	160	128	154	187	198	291	198	1952		
	To Rita	295	192	109	132	137	166	217	159	161	180	171	198	2117		
	Total	416	315	216	261	293	326	345	313	348	378	462	396	4069		
Motor Cycle	To Laula	0	0	0	0	0	1	0	0	0	1	3	3	8		
	To Rita	2	1	0	0	0	0	0	0	0	1	2	0	6		
	Total	2	1	0	0	0	1	0	0	0	2	5	3	14	1.00	14
Pedestrian	To Laula	0	3	0	0	0	10	3	3	2	0	1	1	23		
	To Rita	0	1	0	0	0	3	1	1	1	0	0	0	7		
	Total	0	4	0	0	0	13	4	4	3	0	1	1	30	1.14	34

Heavy Vehicle Total :

55

Light Vehicle Total :

4444

Total :

4499

TRAFFIC COUNT RECORD

STATION NO. 5, AT RAIROK SHOPPING CENTER, RAIROK DATE: SEP 12, 1996 (THURSDAY)

Vehicle Type	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	TOTAL(7-19)	(0-24)/(7-19)	TOTAL(0-24)
Direction/Side															
To Laila	0	2	9	1	1	2	2	2	3	0	1	0	0	23	
To Rita	0	2	0	1	2	0	2	2	3	1	2	1	16		
Total	0	4	9	2	3	2	4	4	6	1	3	1	39	1.00	39
Light Truck															
To Laila	13	33	28	36	52	50	39	33	46	35	51	39	455		
To Rita	87	27	40	42	49	59	59	35	39	40	96	38	551		
Total	100	60	68	78	101	109	98	68	85	75	87	77	1006	1.11	1117
Heavy Bus															
To Laila	0	0	1	0	0	0	1	0	1	0	0	0	3		
To Rita	1	0	0	0	1	0	0	1	0	0	0	0	3		
Total	1	0	1	0	1	0	1	1	1	0	0	0	6	1.00	6
Light Bus															
To Laila	5	5	5	97	14	5	3	6	7	14	10	14	185		
To Rita	6	8	1	14	13	9	6	5	7	5	12	20	106		
Total	11	13	6	111	27	14	9	11	14	19	22	34	291	1.04	304
Car & Taxi															
To Laila	23	40	33	40	53	57	33	46	52	42	86	63	568		
To Rita	89	45	53	56	31	88	75	50	58	60	48	65	718		
Total	112	85	86	96	84	145	108	96	110	102	134	128	1286	1.11	1431
Vehicle Total															
To Laila	41	80	76	174	120	114	78	87	109	91	148	116	1234		
To Rita	183	82	94	113	96	156	142	93	107	106	98	124	1394		
Total	224	162	170	287	216	270	220	180	216	197	246	240	2628		
Motor Cycle															
To Laila	0	0	6	0	0	1	1	0	0	1	2	0	11		
To Rita	1	1	1	0	0	0	3	0	0	1	2	0	9		
Total	1	1	7	0	0	1	4	0	0	2	4	0	20	1.00	20
Pedestrian															
To Laila	11	12	22	20	5	11	11	13	17	6	17	11	156		
To Rita	3	4	7	6	1	3	3	4	6	2	5	4	48		
Total	14	16	29	26	6	14	14	17	23	8	22	15	204	1.14	233

Heavy Vehicle Total : 45
 Light Vehicle Total : 2852
 Total : 2897

APPENDIX 6. RESULT OF GEOTECHNICAL SURVEY

CBR TEST RESULTS:

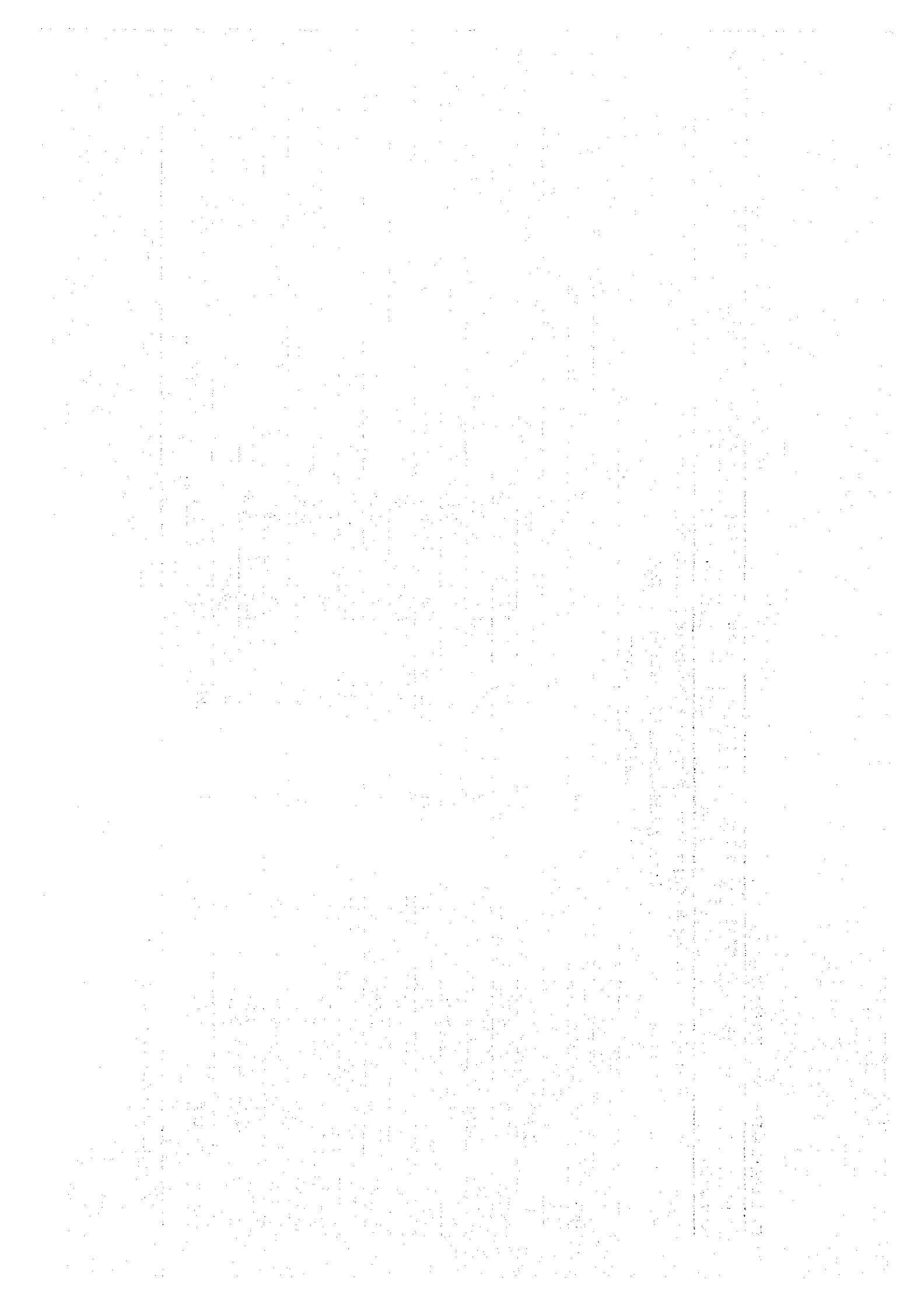
CBR TEST#:	CHAINAGE: (m)	CBR: (%)	MOISTURE CONT (%):	DESCRIPTION:	
				COLOUR:	GRADING:
1	2400	10	12.6	LIGHT	POORLY GRADED
2	2635	17	10.6	DARK	POORLY GRADED
3	2870	20	9.9	DARK	WELL GRADED
4	3080	15	9.9	GREY	POORLY GRADED
5	3280	35	9.3	LIGHT	WELL GRADED
6	10850	45	12.0	GREY	WELL GRADED
7	11335	30	17.5	DARK	WELL GRADED
8	16010	8	34.3	GREY	POORLY GRADED.
9	16080	5	19.0	LIGHT	POORLY GRADED
10	16150	8	17.5	DARK	POORLY GRADED

September 14, 1996

SEA & GROUND WATER LEVEL TEST RESULT

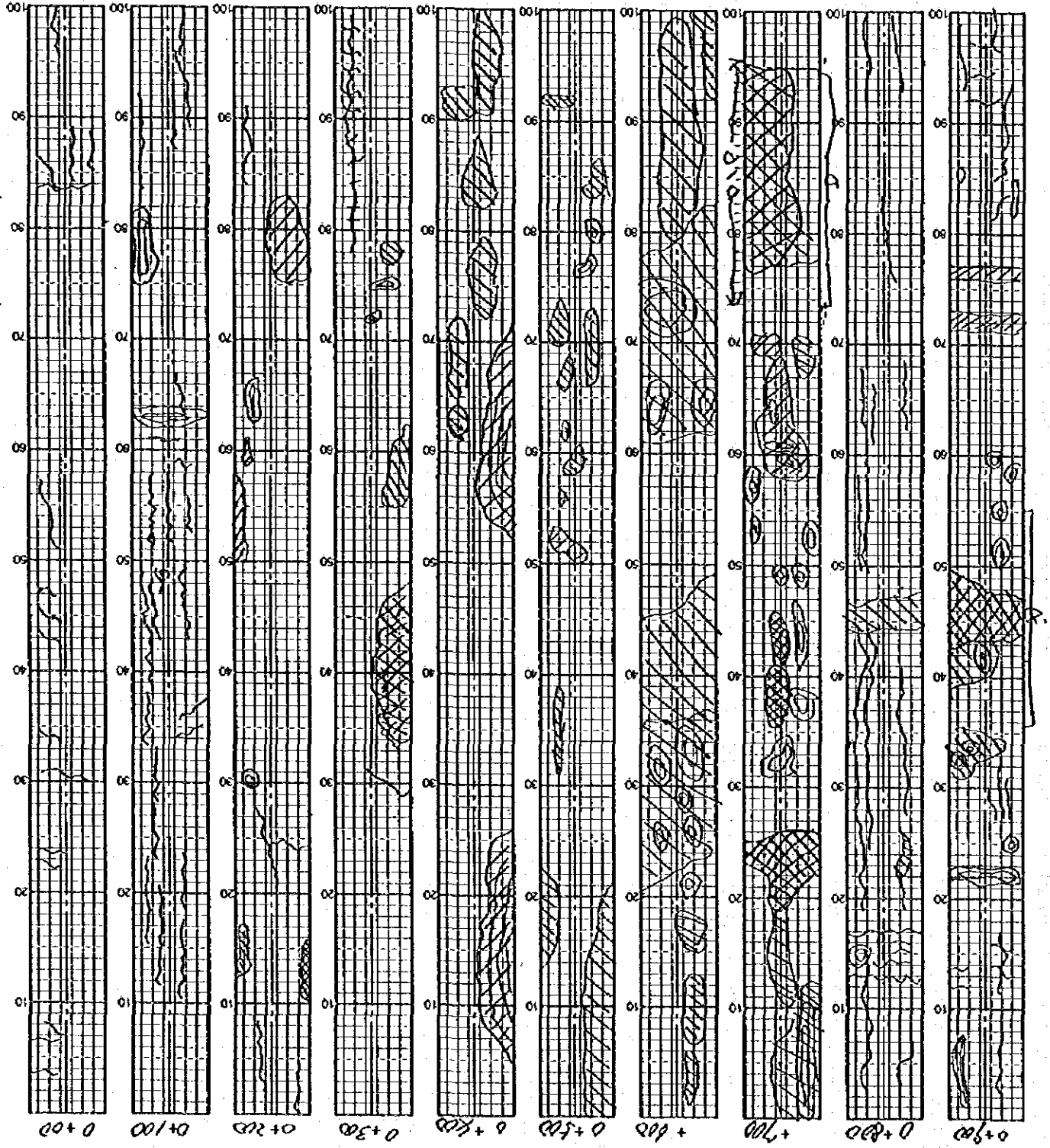
	PIT #1	PIT #2	PIT #3	PIT #4	PIT #5	PIT #6	PIT #7	PIT #8	PIT #9	PIT #10
Change(m)	3.130	5.240	6.360	7.300	9.990	10.500	12.540	14.020	15.310	16.180
Soil Description	Light-Greyish Brown Sand	Dark Grey Sand	Light-Grey Gravelly Sand	Compacted Fill Material w/ Sand & Gravel	Compacted Fill Material - Layered	Soily Sand w/ Cobble	Dark Soily Sand w/ Pebbles	Dark Soily Sand w/ Cobble	White Coral Material	Coarse Coral Beach Sand
Depth of Pit(m)	1.7	1.6	2.0	1.5	1.7	1.0	1.5	1.8	1.5	0.8
TIME	TIDE DATUM									
0600hrs	0.71	0.58	0.52	0.71	0.58	0.69	0.62	0.68	0.65	0.55
0700hrs	0.66	0.57	0.53	0.66	0.61	0.63	0.39	0.65	0.68	0.53
0800hrs	0.53	0.44	0.49	0.62	0.56	0.51	0.22	0.57	0.39	0.42
0900hrs	-0.29	0.30	0.44	0.45	0.49	0.15	-0.05	0.42	0.24	0.24
1000hrs	-0.70	0.17	0.42	0.30	0.48	0.09	-0.30	0.32	-0.03	0.15
1100hrs	-0.67	0.04	0.38	0.16	0.44	-0.08	-0.25	-0.06	-0.17	-0.02
1200hrs	-0.63	-0.06	0.37	-0.21	0.43	-0.26	-0.12	-0.11	-0.23	-0.12
1300hrs	-0.30	-0.09	0.35	-0.32	0.41	-0.11	-0.03	-0.23	-0.10	-0.18
1400hrs	-0.05	-0.09	0.34	-0.18	0.39	-0.08	0.07	-0.12	-0.06	-0.07
1500hrs	0.45	0.04	0.33	0.22	0.40	0.07	0.48	0.18	0.35	0.08
1600hrs	0.82	0.39	0.38	0.46	0.44	0.44	0.69	0.35	0.41	0.27
1700hrs	0.85	0.60	0.46	0.59	0.52	0.63	0.70	0.56	0.48	0.46
1800hrs	0.70	0.68	0.68	0.69	0.75	0.66	0.54	0.70	0.63	0.59

Note: Tidegauge Reading were Converted to Mean Sea Level

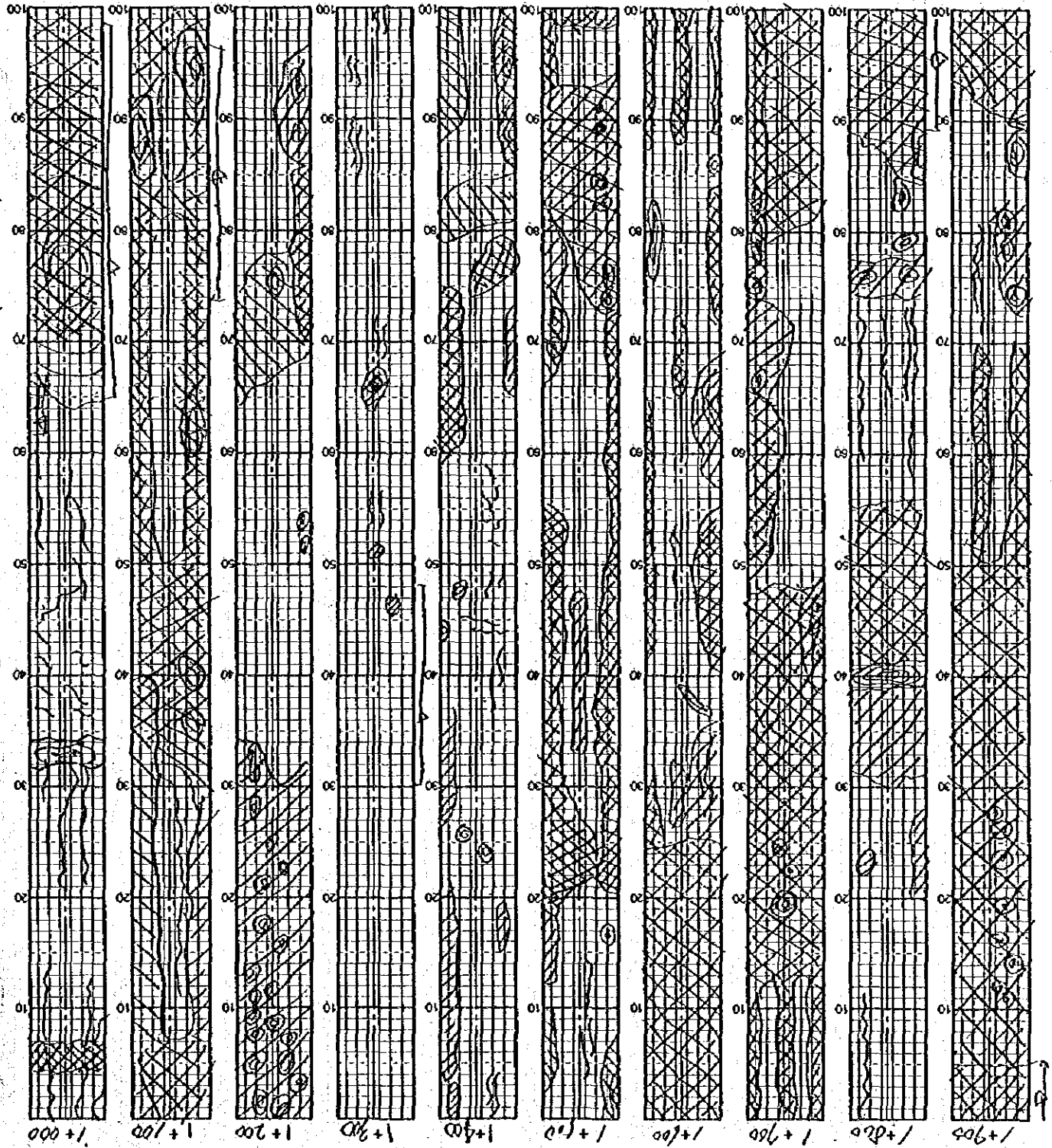


APPENDIX 7. SKETCH OF PAVEMENT DETERIORATION

PAVEMENT DETERIORATION SURVEY DATA (Scale 1:500)



PAVEMENT DETERIORATION SURVEY DATA (Scale 1:500)



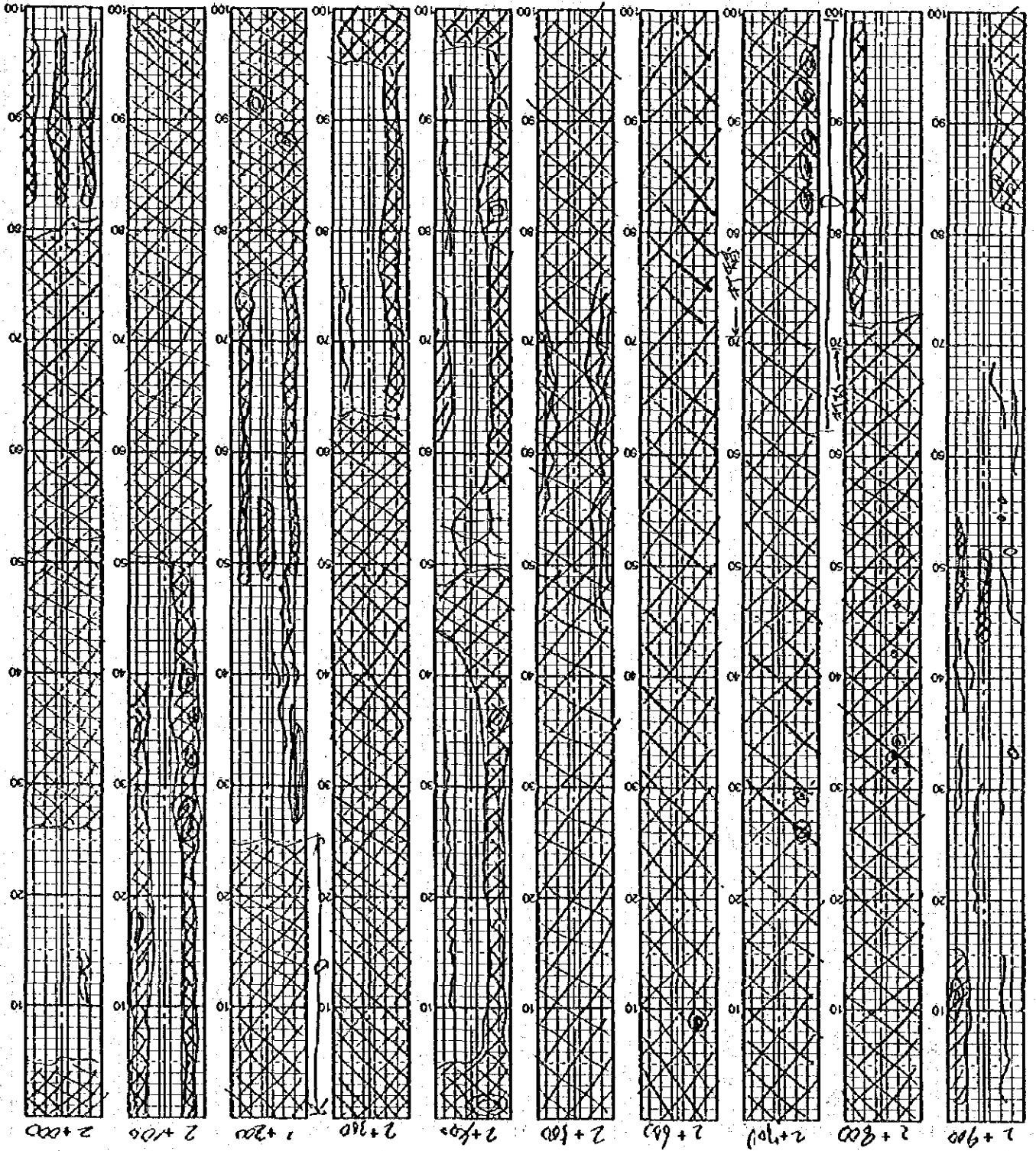
: CRACK

: DEPRESS

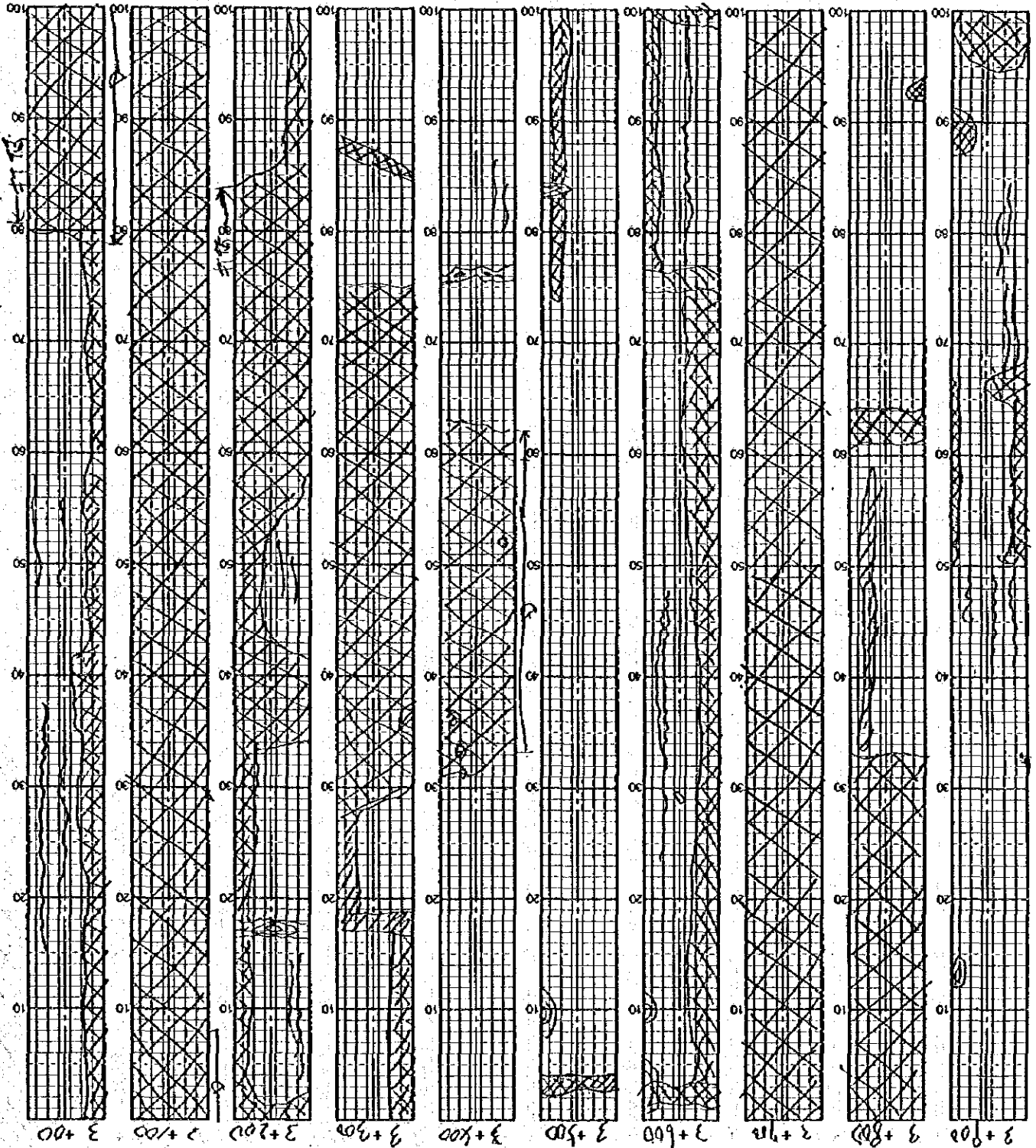
: SCALE

: FRACTURE

PAVEMENT DETERIORATION SURVEY DATA (Scale 1:500)



PAVEMENT DETERIORATION SURVEY DATA (Scale 1:500)



LEGEND:

D : Depressed Section

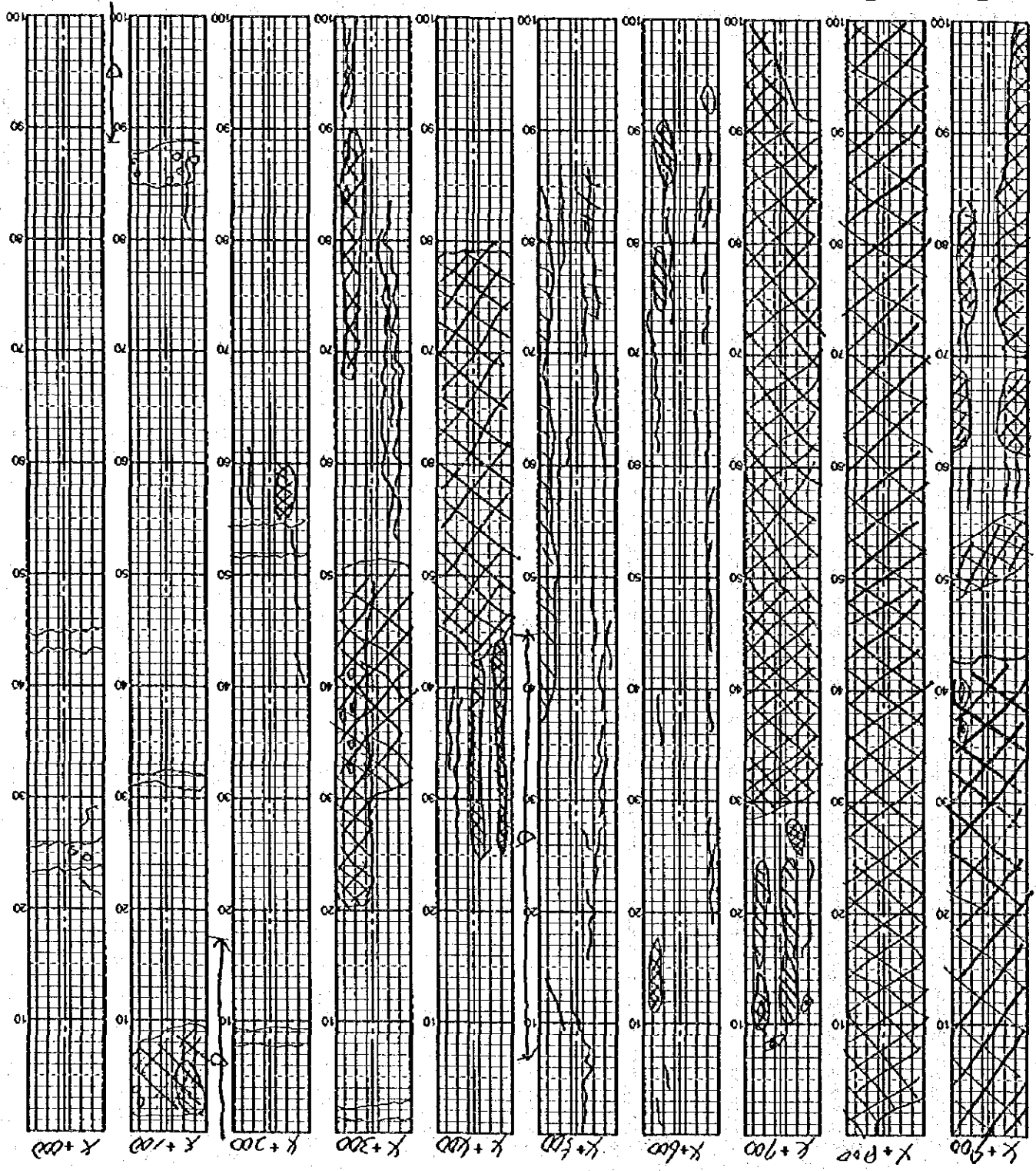
~ : CRACK
(ひび割れ)

○ : DEPRESS
(くぼみ)

◐ : SCALE
(表層剥がれ)

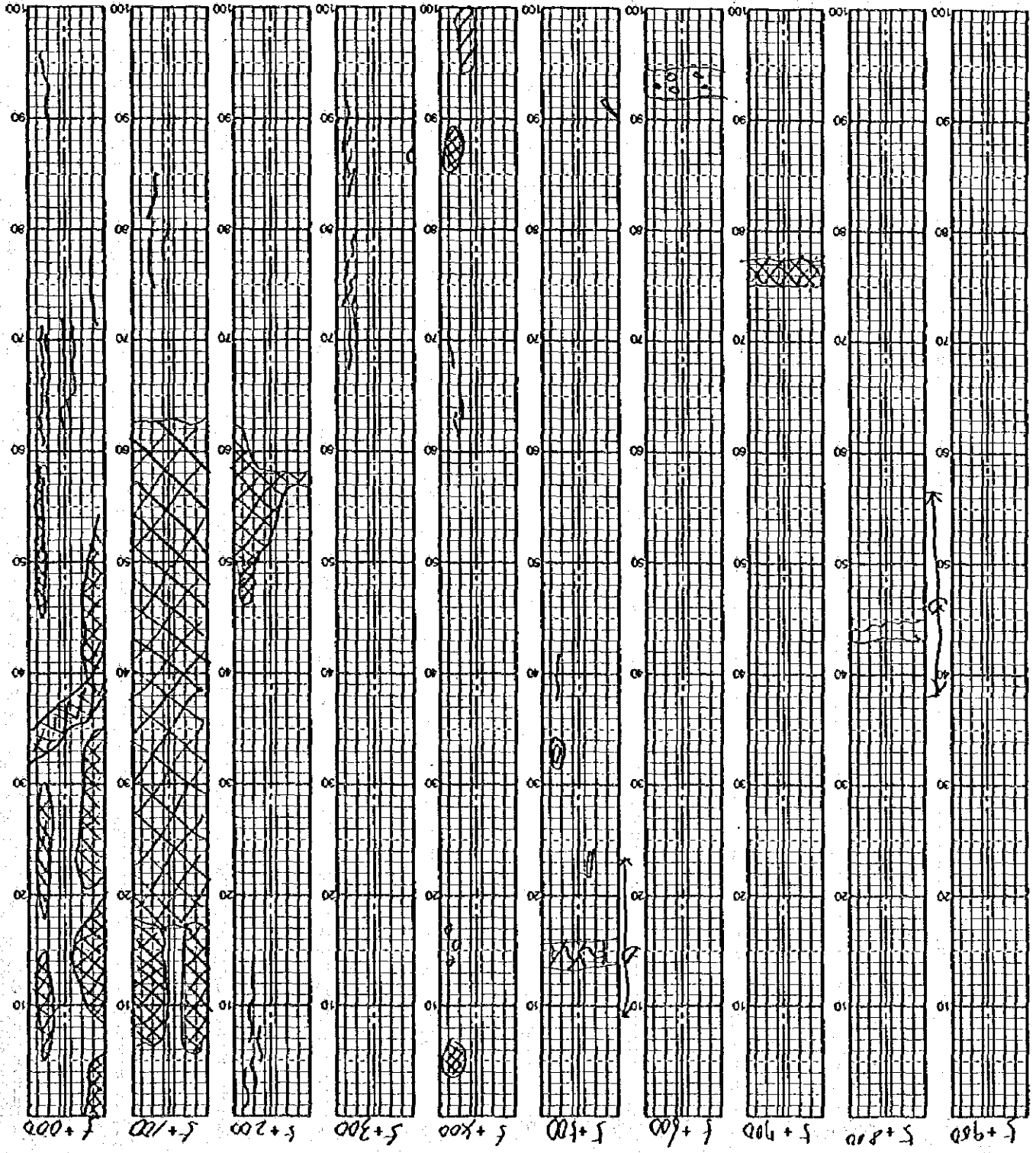
◑ : FRACTURE
(地甲ひび割れ)

PAVEMENT DETERIORATION SURVEY DATA (Scale 1:500)

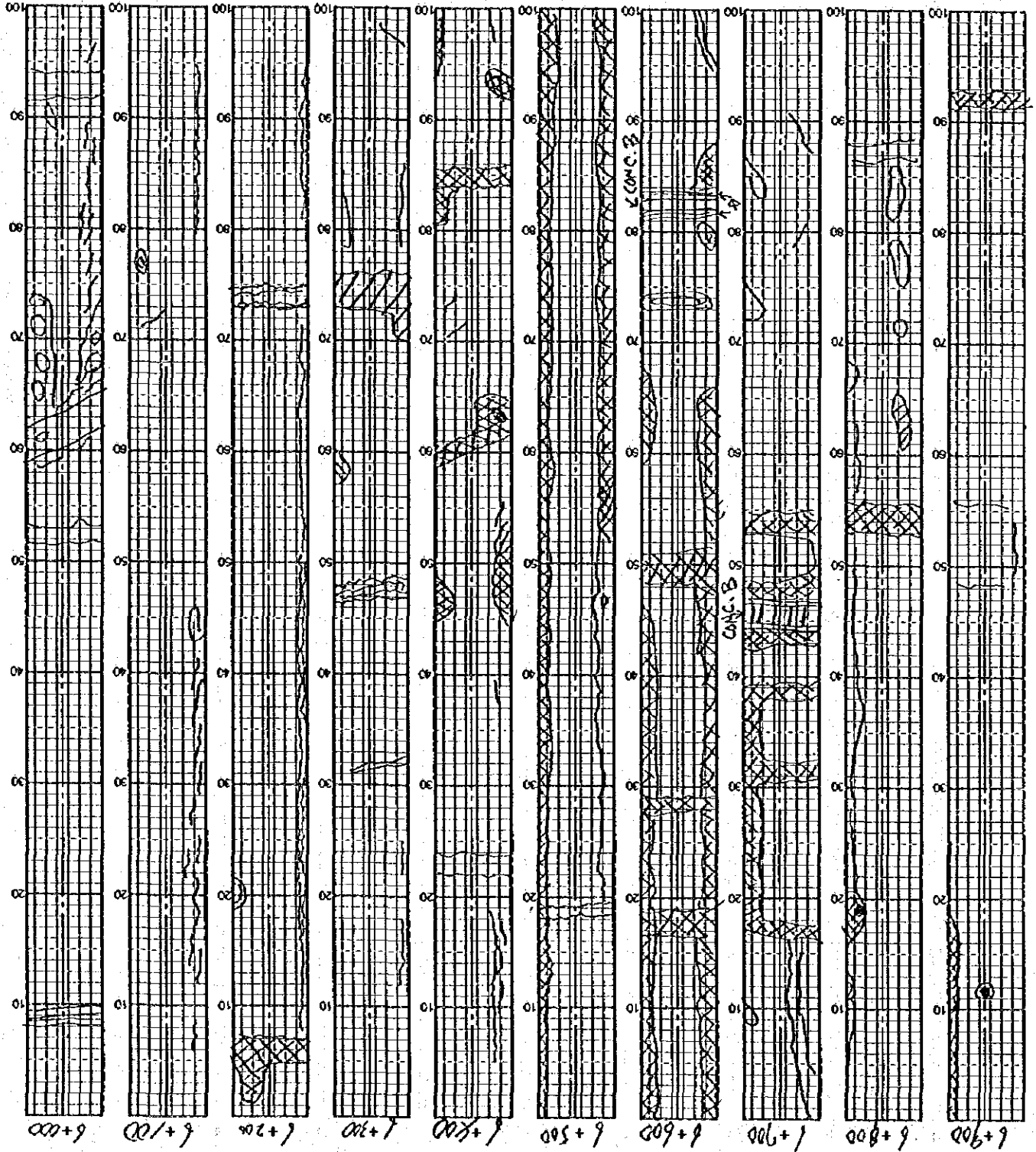


- LEGEND:
- D : Depressed Section
 - : CRACK (ひび割れ)
 - : DEPRESS (くぼみ)
 - : SCALE (表層剥がれ)
 - : FRACTURE (亀甲ひび割れ)

PAVEMENT DETERIORATION SURVEY DATA (Scale 1:500)



PAVEMENT DETERIORATION SURVEY DATA (Scale 1:500)



LEGEND:

D : Depressed Section

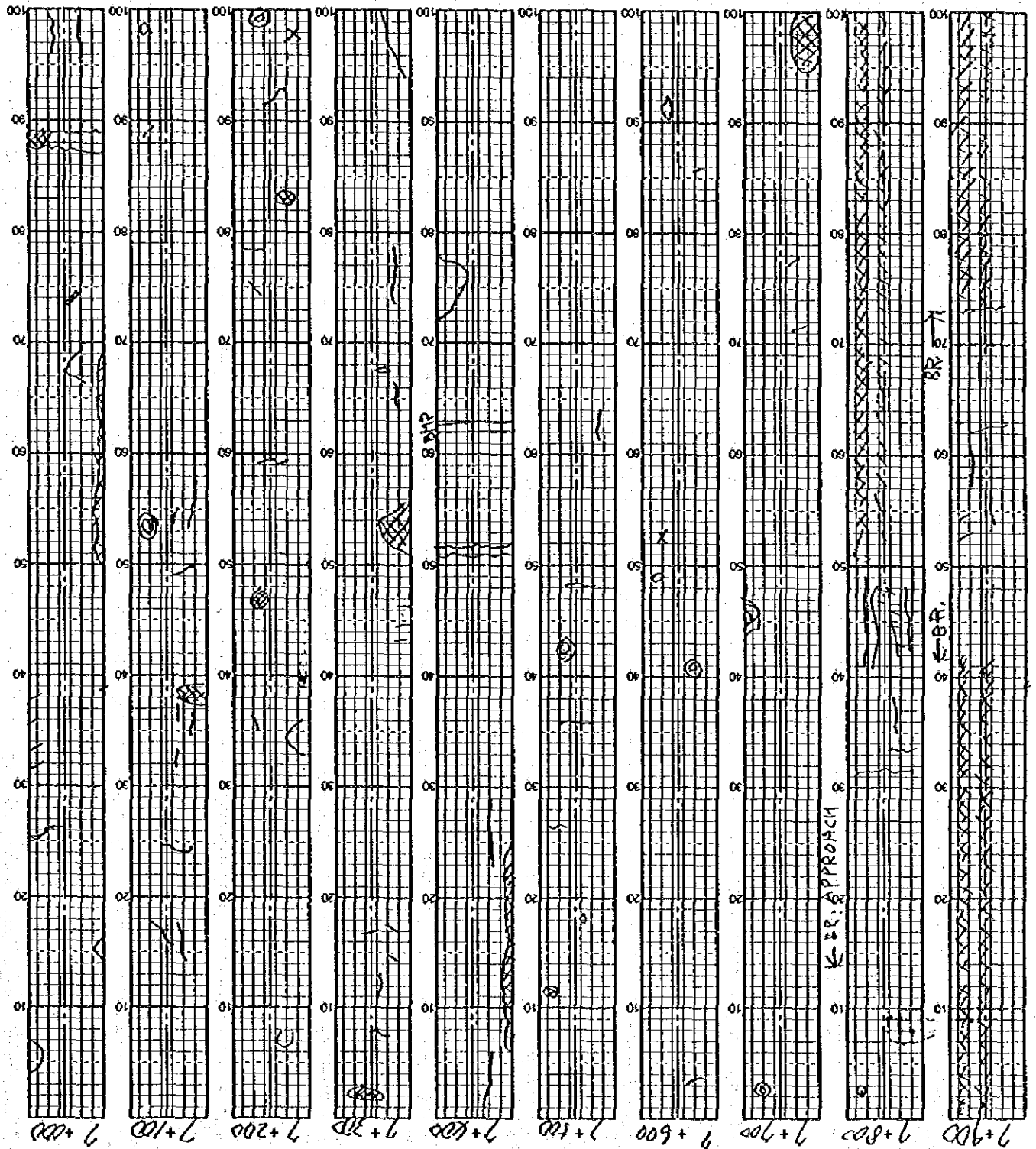
~ : CRACK
(ひび割れ)

◎ : DEPRESS
(くぼみ)

▨ : SCALE
(表層剥がれ)

▩ : FRACTURE
(亀甲ひび割れ)

PAVEMENT DETERIORATION SURVEY DATA



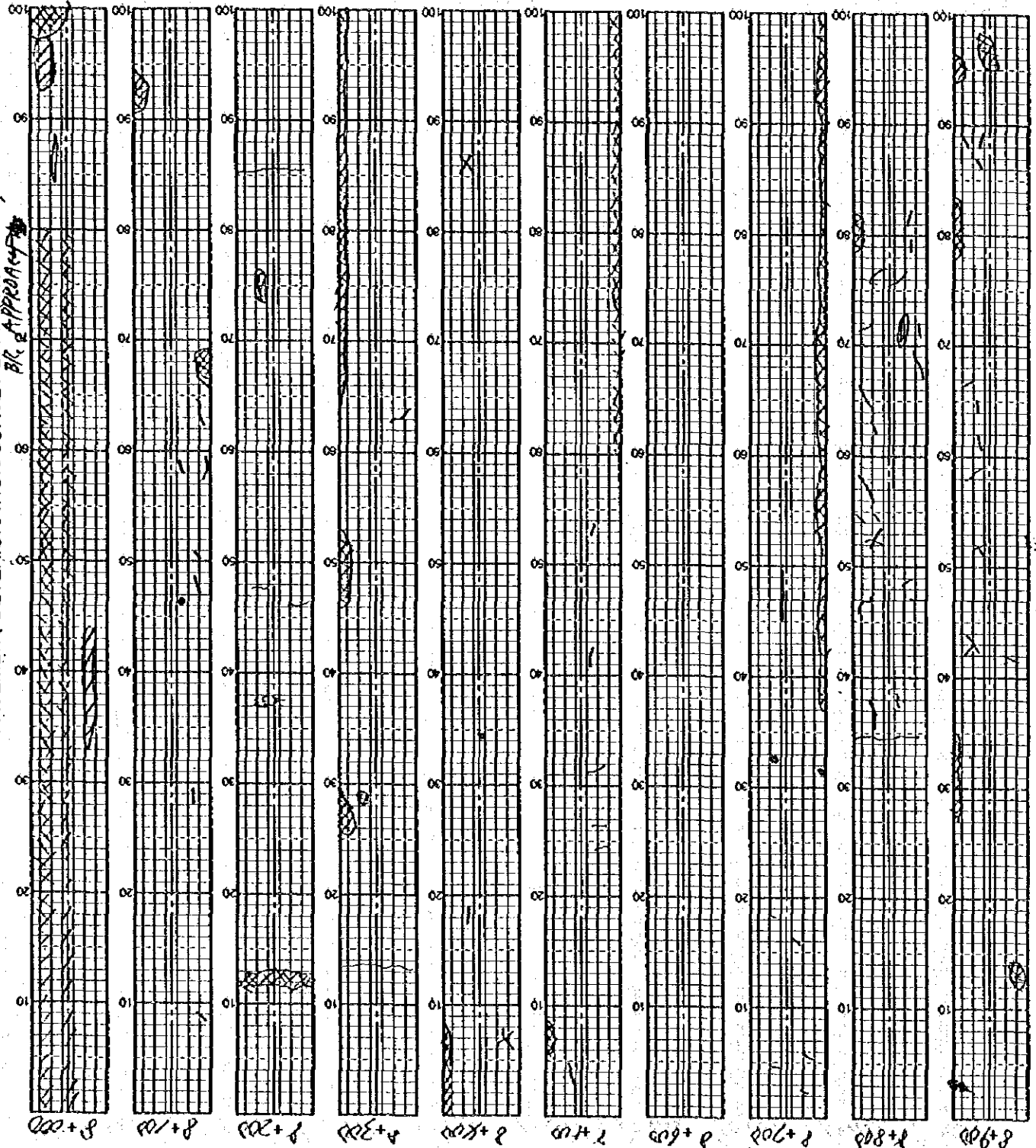
: CRACK

: DEPRESS

: SCALE

: FRACTURE

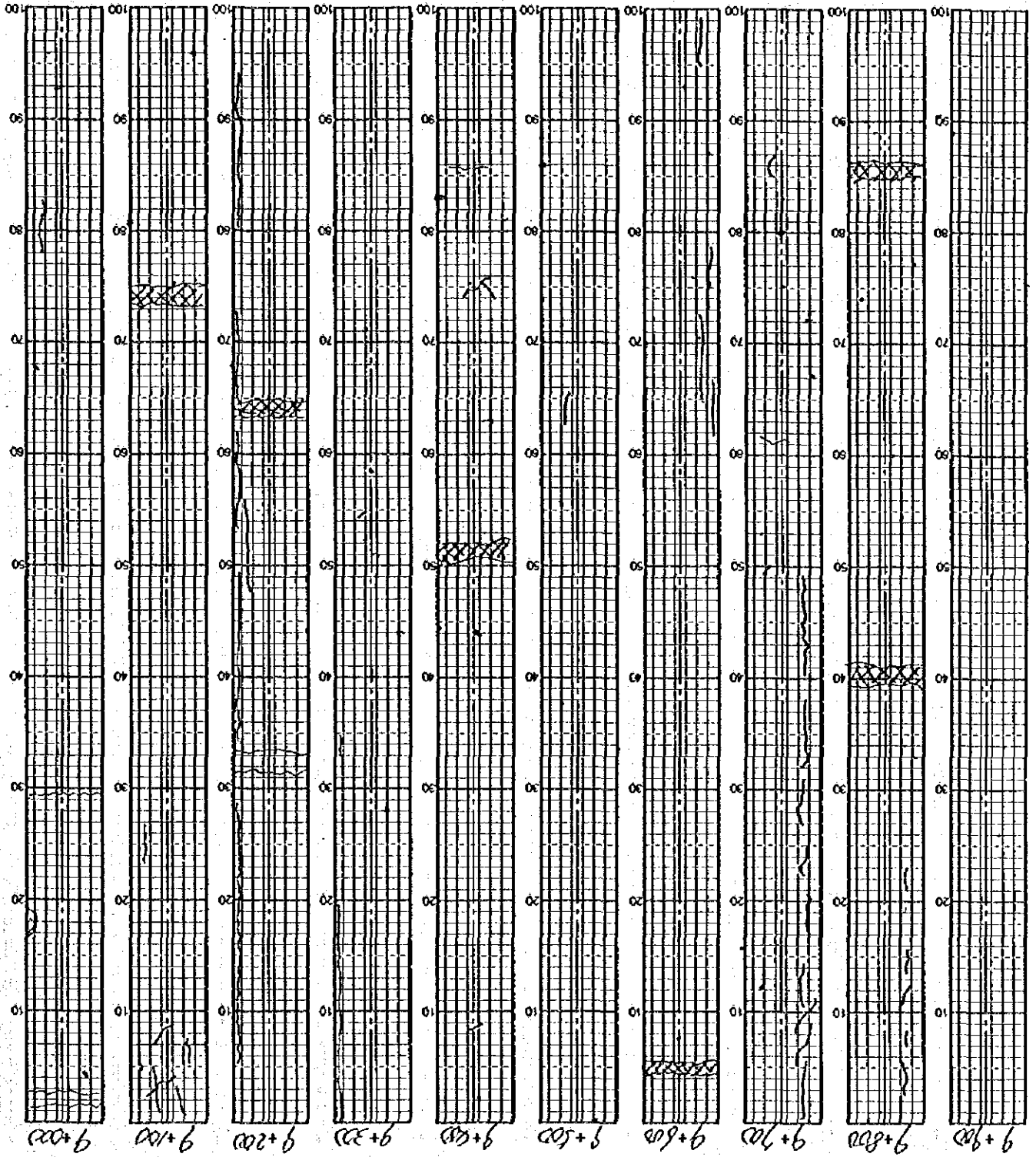
PAVEMENT DETERIORATION SURVEY DATA (Scale 1:500)



- LEGEND:
- D : Depressed Section
 - : CRACK (ひび割れ)
 - : DEPRESS (くぼみ)
 - : SCALE (表層剥がれ)
 - : FRACTURE (亀甲ひび割れ)

BREAK
8+700 = 8+600

PAVEMENT DETERIORATION SURVEY DATA (Scale 1:500)



LEGEND:

D : Depressed Section

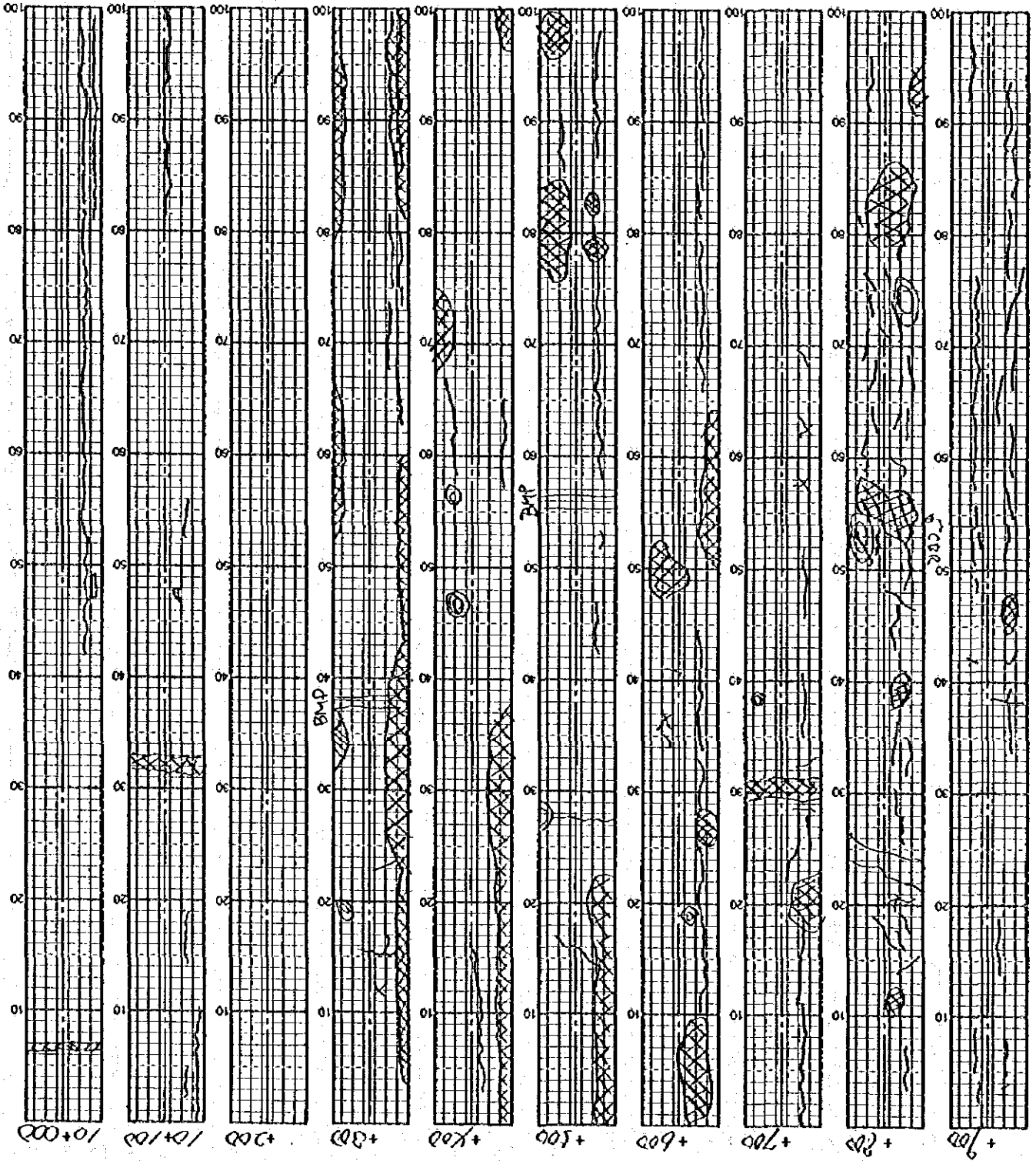
: CRACK (ひび割れ)

: DEPRESS (くぼみ)

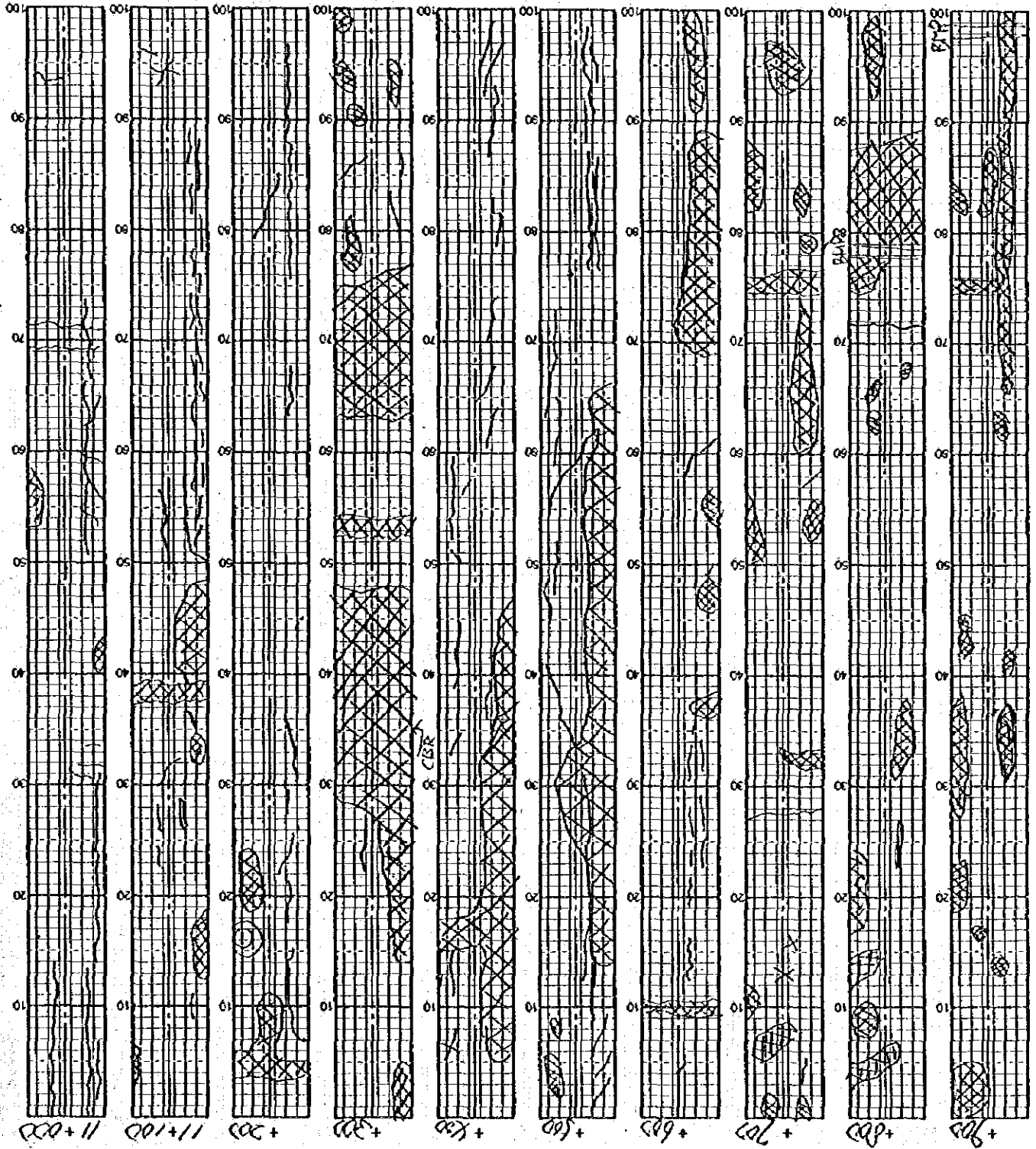
: SCALE (表層剥がれ)

: FRACTURE (亀甲ひび割れ)

PAVEMENT DETERIORATION SURVEY DATA (Scale 1:500)



PAVEMENT DETERIORATION SURVEY DATA (Scale 1:500)



LEGEND:

D : Depressed Section

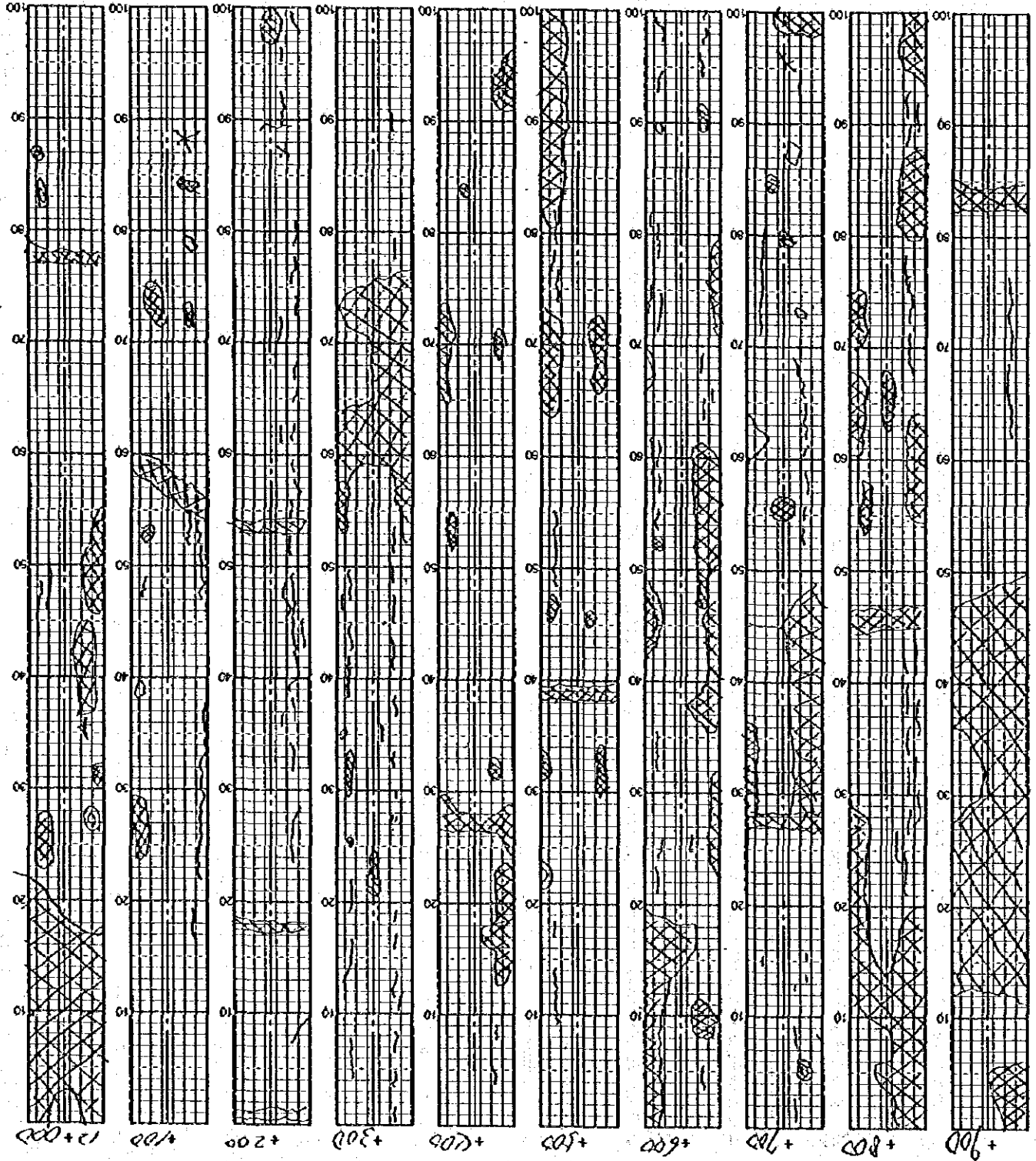
: CRACK
(ひび割れ)

: DEPRESS
(くぼみ)

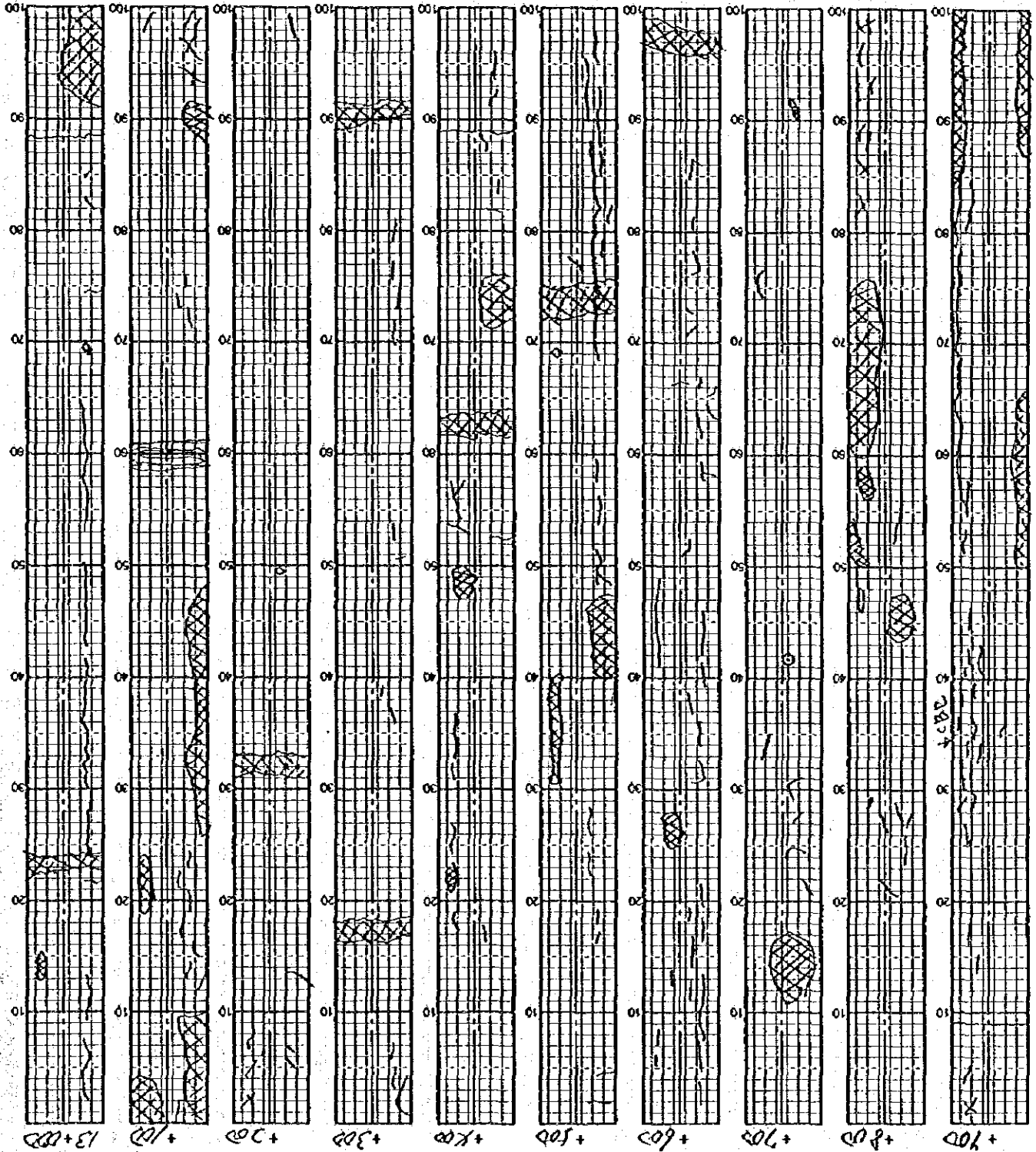
: SCALE
(表層剥がれ)

: FRACTURE
(亀甲ひび割れ)

PAVEMENT DETERIORATION SURVEY DATA (Scale 1:500)



PAVEMENT DETERIORATION SURVEY DATA (Scale 1:500)



LEGEND:

D : Depressed Section

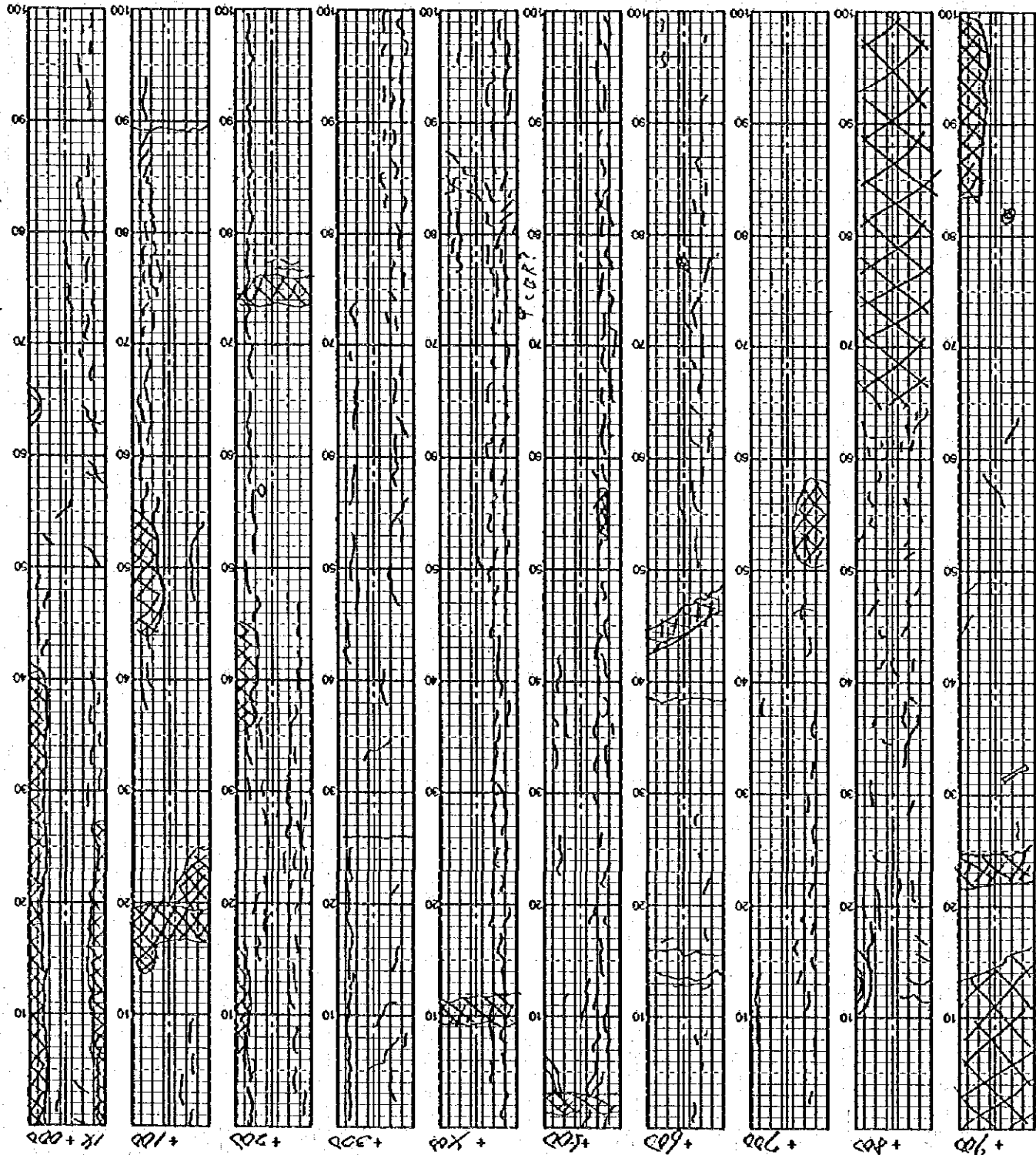
: CRACK
(ひび割れ)

: DEPRESS
(くぼみ)

: SCALE
(縦割れがれ)

: FRACTURE
(亀甲ひび割れ)

PAVEMENT DETERIORATION SURVEY DATA (Scale 1:500)



LEGEND:

D : Depressed Section

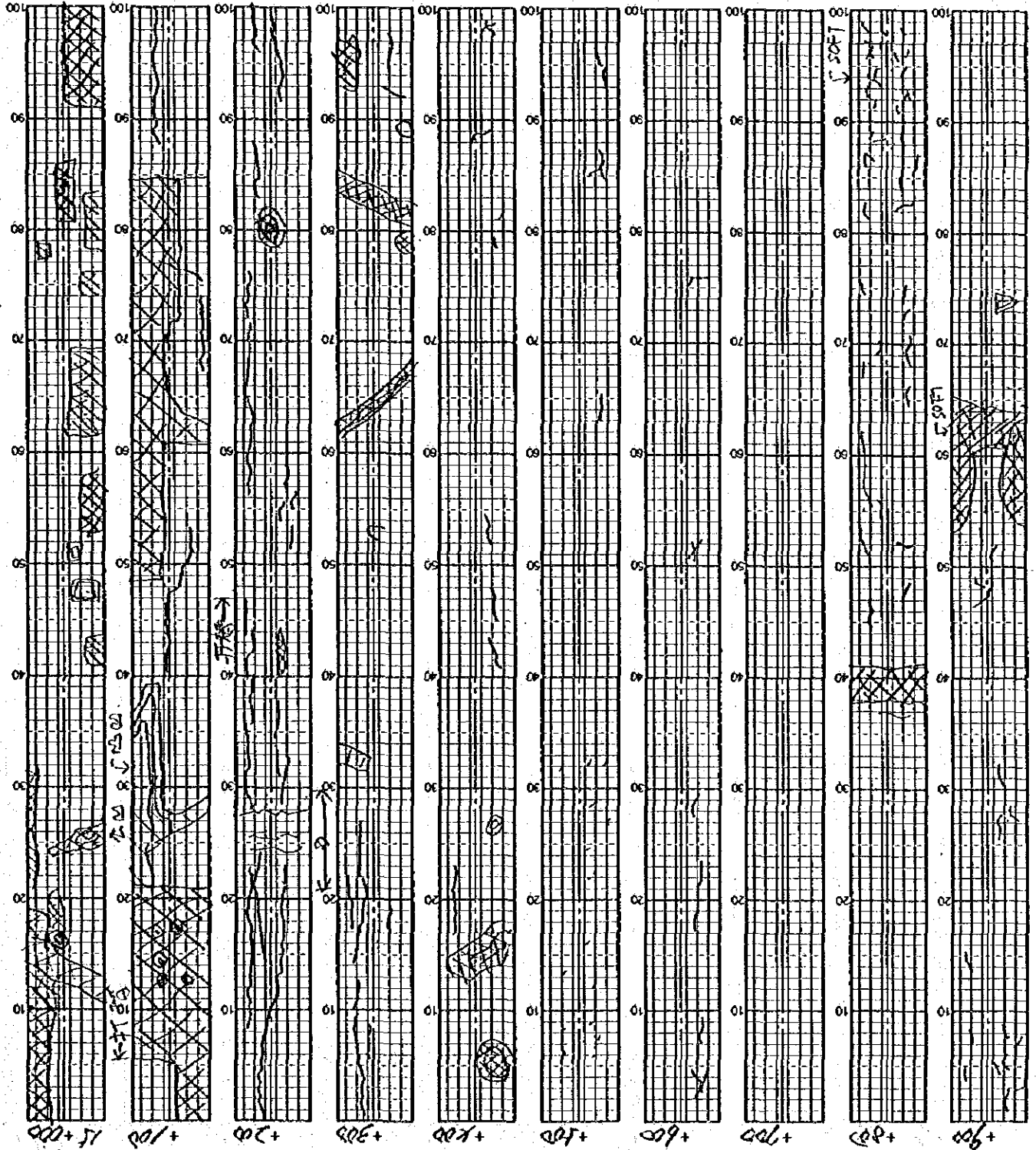
CRACK
(ひび割れ)

DEPRESS
(くぼみ)

SCALE
(表層剥がれ)

FRACTURE
(亀甲ひび割れ)

PAVEMENT DETERIORATION SURVEY DATA (Scale 1:500)



LEGEND:

D : Depressed Section

: CRACK (ひび割れ)

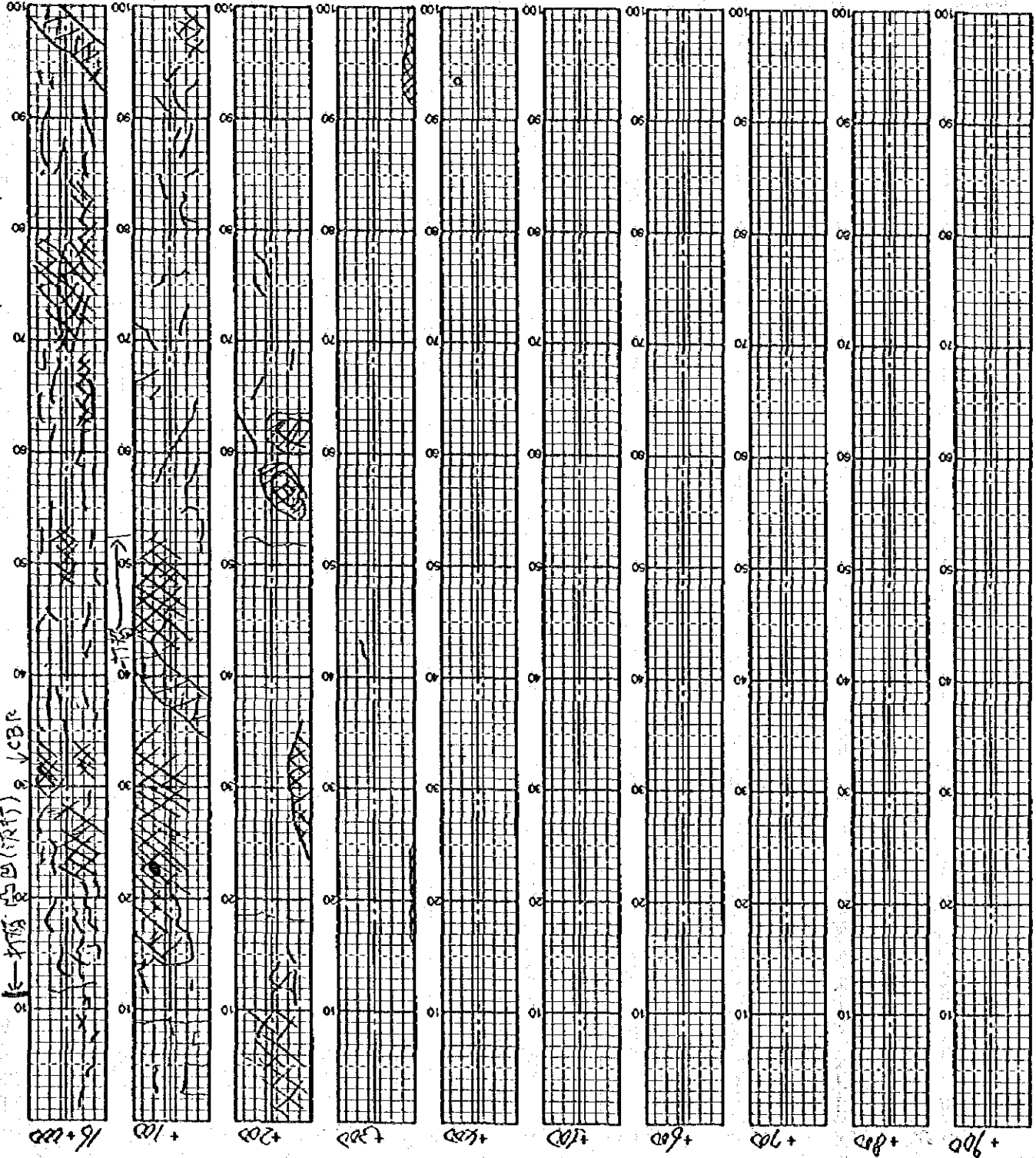
: DEPRESS (くぼみ)

: SCALE (表層剥がれ)

: FRACTURE (亀甲ひび割れ)

PAVEMENT DETERIORATION SURVEY DATA (Scale 1:500)

2 (K-1) 打掃 空凹 (17打) 9 ↓ CBR



LEGEND:

- D : Depressed Section
- : CRACK (ひび割れ)
- : DEPRESS (くぼみ)
- : SCALE (表層剥がれ)
- : FRACTURE (亀甲ひび割れ)