Office of the Superintending Engineer

Design's Circle, PWD 4th floor, Konkan Bhavan, New Bombay Dated 6-8-91

To The Chief Engineer Public Works Region

Sub:- Development of New Disciplines in Design's Circle

It is submitted that following obscislised discipline have been developed in this office.

- 1. Design of High embankment.
- 2. Rehabilitations of Buildings and Bridges.

It is therefore requested that problems pertaining to above mentioned subjects in your region could now also be referred to the Design Circle.

Basic data required for disposal of these subjects will have to be given by the field officers as per Annextures I-A,I-B & II.

It is also submitted that type plan for the design of "Flexible and rigid pavements" and "traffic junctions" have been prepared. These will soon be ready for circulation after obtaining approval from competent authorities.

Encl: Annexture I-A, I-B & II

Superintending Engineer Design's Circle New Bombay

ANNEXTURE I-A

High Embankment Design on Non Marine soil

Data required from the field for the

- 1. Name of work.
- 2. Category of road.
- 3. Height of embankment.
- 4. Formation width of road.
- 5. Carriage way width of road.
- 6. Ground water table level.
- 7. Surface water level if existing, and relevant flood levels
- 8. Subsurface Parameters.
 - (a) Subsurface profile upto hard strata.
 - (b) Type of soil for each layer.
 - (c) Depths of various types of soil layers.
 - (d) Density of soil for each layer.
 - (e) Cohesion of soil for each layer.
 - (f) Angle of internal friction for each layer.
- 9. Parameters of borrow materials to be used for embankment.
 - (a) Type of soil.
 - (b) Density of soil.
 - (c) Cohesion of soil.
 - (d) Angle of internal friction.
- 10. Any other information.
- 11. Desired time for getting design.

ANNEXURE I-B

High Embankment Design of Marine soil.

Data required from field for the.

- 1. Name of work
- 2. Category of road.
- 3. Height of embankment.
- 4. Formation width of road.
- 5. Carriage way width of road.
- 6. Ground water table level.
- 7. Surface water level if existing
- 8. Subsurface Parameters.
 - (a) Subsurface profile upto hard strata.
 - (b)Type of soil for each layer.
 - (c)Depth of marine clay and other soil layers upto hard strata
 - (d)Density of marine clay and each soil layer.
 - (e) Cohesion of marine clay in gm/cm2 at an interval od 10cm. Depth
 - (f) Cohesion of other soil layers.
 - (g) Angle of internal friction of each layer.
- 9. Parameters of borrow materials to be used for embankment.
 - (a) Type of soil
 - (b) Density of soil.
 - (c) Cohesion of soil.
 - (d) Angle of internal friction.
- 10 Any other information.
- 11 Desired time limit for getting design.