

APPENDIX 7.2.2

BORING LOG

BORING LOG (Soil exploration)

MULTIPURPOS CYLONE SHELTER (PHASE-2)
PROJECT LOCATION

GROUND ELEVATION 4.190 m DATE OF INVESTIGATION 11 FEB '94

Jakli, Banskhal, Chittagong

DEPTH TO GROUND WATER
LEVEL IN HOLE -3.04 m

BORING HOLE No. 11-3 (2)

INVESTIGATED BY

| STAFF | ELEVATION m | DEPTH m | THICKNESS m | FIELD OBSERVATIONAL DESCRIPTION | | | STANDARD PENETRATION TEST | | | | | | | | | | | SAMPLING | | | | | |
|-------|----------------|------------|----------------|----------------------------------|---|---------------|---|------------|---------------------------|----------------------------|----|----|-------------------|----|----|----|----|----------|---------------|------------|--------|--|--|
| | | | | COLUMN SECTION (Graphic mark) | Soil or Rock NAME OF CLASSIFICATION | COLOR TONE | DESCRIPTION | Depth m | N INTER- PENE cm | Num of blows Every 15cm | | | NUMBER OF BLOWS N | | | | | | Sample No. | Depth m | Method | | |
| | | | | | | | | | | 15 | 30 | 45 | 0 | 10 | 20 | 30 | 40 | 50 | 60 | | | | |
| 1 | | | | | | | stiff to soft clayey SILT | 1.00 | | | | | | | | | | | | | | | |
| 2 | | 1.65 | 2.55 | 2.55 | silt | Grey | | 2.00 | 5/30 | 1 | 2 | 3 | | | | | | | | | | | |
| 3 | | | | | | | stiff clayey SILT | 3.00 | | | | | | | | | | | | | | | |
| 4 | | 0.40 | 4.65 | 2.10 | silt | Grey | | 4.00 | 3/30 | 1 | 1 | 2 | | | | | | | | | | | |
| 5 | | | | | | | stiff SILT with clay trace fine sand | 5.00 | 5/30 | 2 | 2 | 3 | | | | | | | | | | | |
| 6 | | 2.61 | 6.80 | 2.15 | silt | Grey | | 6.00 | 4/30 | 2 | 2 | 2 | | | | | | | | | | | |
| 7 | | | | | | | stiff to stiff & very stiff clayey silt | 7.00 | 5/30 | 2 | 2 | 3 | | | | | | | | | | | |
| 8 | | | | | | | | 8.00 | 6/30 | 2 | 3 | 3 | | | | | | | | | | | |
| 9 | | | | | | | | 9.00 | 7/30 | 3 | 3 | 4 | | | | | | | | | | | |
| 10 | | | | | | | | 10.00 | 13/30 | 5 | 6 | 7 | | | | | | | | | | | |
| 11 | | 7.46 | 11.65 | 4.85 | clayey silt | Grey | | 11.00 | 24/30 | 10 | 12 | 12 | | | | | | | | | | | |
| 12 | | | | | | | | 12.00 | 29/30 | 10 | 13 | 16 | | | | | | | | | | | |
| 13 | | | | | | | SAND with silt | 13.00 | 46/30 | 20 | 22 | 24 | | | | | | | | | | | |
| 14 | | | | | | | | 14.00 | 40/30 | 15 | 20 | 20 | | | | | | | | | | | |
| 15 | | 11.41 | 15.60 | 4.85 | sand | Grey | | 15.00 | 35/30 | 10 | 17 | 18 | | | | | | | | | | | |
| 16 | | | | | | | soft clayey SILT | 16.00 | 55/30 | 20 | 25 | 30 | | | | | | | | | | | |
| 17 | | | | | | | | 17.00 | 30/30 | 12 | 14 | 16 | | | | | | | | | | | |
| 18 | | 14.41 | 18.60 | 2.90 | silt | Grey | | 18.00 | 2/30 | 1 | 1 | 1 | | | | | | | | | | | |
| 19 | | | | | | | soft to very stiff & hard SILT with clay trace fine sand | 19.00 | | | | | | | | | | | | | | | |
| 20 | | | | | | | | 20.00 | 2/30 | 1 | 1 | 1 | | | | | | | | | | | |
| 21 | | | | | | | | 21.00 | 20/30 | 8 | 9 | 11 | | | | | | | | | | | |
| 22 | | 18.26 | 22.45 | 6.85 | silt | Grey | | 22.00 | 42/30 | 16 | 20 | 22 | | | | | | | | | | | |
| 23 | | | | | | | | 23.00 | 62/30 | 30 | 30 | 32 | | | | | | | | | | | |
| 24 | | | | | | | | 24.00 | | | | | | | | | | | | | | | |
| 25 | | | | | | | | 25.00 | | | | | | | | | | | | | | | |
| 26 | | | | | | | | 26.00 | | | | | | | | | | | | | | | |
| 27 | | | | | | | | 27.00 | | | | | | | | | | | | | | | |
| 28 | | | | | | | | 28.00 | | | | | | | | | | | | | | | |
| 29 | | | | | | | | 29.00 | | | | | | | | | | | | | | | |
| 30 | | | | | | | | 30.00 | | | | | | | | | | | | | | | |

BORING LOG (Soil exploration)

MULTIPURPOS CYLONE SHELTER (PHASE-2)
PROJECT LOCATION

GROUND ELEVATION 4,609 m

DATE OF INVESTIGATION 07 FEB '94

Jalalabad, Sadar, Cox & Bazar

DEPTH TO GROUND WATER
LEVEL IN HOLE -0.63 m

INVESTIGATED BY

BORING HOLE No.

11-4 (1)

| STAFF No. | ELEVATION m | DEPTH m | THICKNESS m | FIELD OBSERVATIONAL DESCRIPTION | | | STANDARD PENETRATION TEST | | | | | | | | | | | SAMPLING | | | | | | | | | | |
|-----------|-------------|---------|-------------|---------------------------------|-------------------------------------|------------|-------------------------------------|---------|-----------------|-------------------------|-------|---------------|-------------------|----|----|----|----|----------|------------|---------|--------|--|--|--|--|------|------|------|
| | | | | COLUMN SECTION (Graphic mark) | Soil or Rock NAME OF CLASSIFICATION | COLOR TONE | DESCRIPTION | Depth m | N INTER-PENE cm | Num of Blows Every 15cm | | | NUMBER OF BLOWS N | | | | | | Sample No. | Depth m | Method | | | | | | | |
| | | | | | | | | | | 15 cm | 30 cm | 45 cm | 0 | 10 | 20 | 30 | 40 | 50 | 60 | | | | | | | | | |
| 1 | 3.21 | 1.40 | 1.40 | [Hatched pattern] | sandy silt | Grey Brown | soft silt with fine sand | 1.00 | 4/30 | 2 | 2 | 2 | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | 2.00 | 2/30 | 1 | 1 | 1 | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | 3.00 | 3/30 | 0 | 1 | 2 | | | | | | | | | | | | | | 3.00 | | |
| 4 | | | | | | | | 4.00 | 0/30 | 0 | 0 | 0 | | | | | | | | | | | | | | U-1 | 3.50 | |
| 5 | | | | | | | | 5.00 | 1/30 | 0 | 0 | 1 | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | 6.00 | 1/30 | 0 | 0 | 1 | | | | | | | | | | | | | | | 6.00 | |
| 7 | | | | | | | | 7.00 | 1/30 | 0 | 0 | 1 | | | | | | | | | | | | | | | U-2 | 6.50 |
| 8 | | | | | | | | 8.00 | 1/30 | 0 | 0 | 1 | | | | | | | | | | | | | | | | |
| 9 | 4.99 | 9.60 | 8.20 | | | | | | silt with clay | Grey Brown | | 9.00 | 2/30 | 0 | 0 | 1 | | | | | | | | | | | | |
| 10 | | | | [Hatched pattern] | sand with silt | Grey | loose fine to medium SAND with silt | 10.00 | 4/30 | 2 | 2 | 4 | | | | | | | | | | | | | | | | |
| 11 | 6.49 | 11.10 | 1.50 | | | | | 11.00 | 0/30 | 0 | 0 | 0 | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | 12.00 | 0/30 | 0 | 0 | 0 | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | 13.00 | 1/30 | 0 | 0 | 1 | | | | | | | | | | | | | | | | |
| 14 | 9.59 | 14.20 | 3.10 | | | | | | silt with clay | Grey | | 14.00 | 1/30 | 0 | 0 | 1 | | | | | | | | | | | | |
| 15 | | | | | | | | 15.00 | 14/30 | 5 | 6 | 8 | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | 16.00 | 15/30 | 6 | 7 | 8 | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | 17.00 | 16/30 | 5 | 7 | 9 | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | 18.00 | 26/30 | 10 | 12 | 14 | | | | | | | | | | | | | | | | |
| 19 | 14.24 | 18.85 | 4.65 | | silt with clay | Grey | | 19.00 | | 10 | 50 | Blow for 15cm | | | | | | | | | | | | | | | | |
| 20 | 14.79 | 19.40 | 0.55 | | fine sand | Grey | very dense med to fine SAND & SILT | 20.00 | 60/30 | 8 | 20 | 32 | | | | | | | | | | | | | | | | |
| 21 | | | | 21.00 | 60/30 | 10 | 30 | 30 | | | | | | | | | | | | | | | | | | | | |
| 22 | 16.59 | 21.20 | 1.80 | | silt with clay | Grey | hard SILT with clay & fine sand | 22.00 | 53/30 | 8 | 26 | 27 | | | | | | | | | | | | | | | | |
| 23 | 17.79 | 22.40 | 1.20 | | sandy silt | Grey | hard fine sandy SILT trace gravel | 23.00 | 30/30 | 11 | 14 | 16 | | | | | | | | | | | | | | | | |
| 24 | | | | 24.00 | 79/30 | 16 | 34 | 54 | | | | | | | | | | | | | | | | | | | | |
| 25 | | | | 25.00 | 95/30 | 16 | 45 | 50 | | | | | | | | | | | | | | | | | | | | |
| 26 | | | | 26.00 | 90/30 | 16 | 40 | 50 | | | | | | | | | | | | | | | | | | | | |
| 27 | 22.39 | 27.00 | 4.60 | | clayey silt | Grey | | 27.00 | | 18 | 50 | Blow for 10cm | | | | | | | | | | | | | | | | |
| 28 | | | | 28.00 | | | | | | | | | | | | | | | | | | | | | | | | |
| 29 | | | | 29.00 | | | | | | | | | | | | | | | | | | | | | | | | |
| 30 | | | | 30.00 | | | | | | | | | | | | | | | | | | | | | | | | |

BORING LOG (Soil exploration)

MULTIPURPOS CYLONE SHELTER (PHASE-2)

GROUND ELEVATION 7.469 m

DATE OF INVESTIGATION 11 FEB '94

PROJECT LOCATION

Khovskul, Sadar, Cox's Bazar

DEPTH TO GROUND WATER

BOLING HOLE No.

11-6 (1)

LEVEL IN HOLE -3.60 m

INVESTIGATED BY

| STAFF No. | ELEVATION m | DEPTH m | THICKNESS m | FIELD OBSERVATIONAL DESCRIPTION | | | | STANDARD PENETRATION TEST | | | | | | | | | | SAMPLING | | | | | | | | | |
|-----------|-------------|---------|-------------|---------------------------------|-------------------------------------|------------|--|---------------------------|-----------------|-------------------------|-------|-------|-------------------|-----|------|----|----|----------|------------|---------|--------|----|-----|------|--|------|--|
| | | | | COLUMN SECTION (Graphic mark) | Soil or Rock NAME OF CLASSIFICATION | COLOR TONE | DESCRIPTION | Depth m | N INTER-PENE cm | Num of blows Every 15cm | | | NUMBER OF BLOWS N | | | | | | Sample No. | Depth m | Method | | | | | | |
| | | | | | | | | | | 15 cm | 30 cm | 45 cm | 0 | 10 | 20 | 30 | 40 | 50 | | | | 60 | | | | | |
| 1 | | | | [Dotted pattern] | sand with silt | Brown Grey | dense fine to med. SAND with silt | 1.00 | 9/30 | 4 | 4 | 5 | | | | | | | | | | | | | | | |
| 2 | | | 2.00 | | | | | 14/30 | 4 | 7 | 7 | | | | | | | | | | | | | | | | |
| 3 | 4.10 | 3.40 | 3.40 | | | | | | | | 3.00 | 7/30 | 2 | 3 | 4 | | | | | | | | | | | 3.10 | |
| | | | | | | | | | | | | | | | | | | | | | | | U-1 | | | | |
| 4 | | | | [Diagonal hatching] | Sand | Grey | very dense silty fine to med. SAND with silt | 4.00 | 75/30 | 12 | 25 | 50 | | | | | | | | | | | | 3.65 | | | |
| 5 | | | | | | | | 5.00 | 70/30 | 10 | 20 | 50 | | | | | | | | | | | | | | | |
| 6 | | | | | | | | 6.00 | | | 21 | 50 | Blows | for | 11cm | | | | | | | | | | | | |
| 7 | | | | | | | | 7.00 | | | 25 | 50 | Blows | for | 12cm | | | | | | | | | | | | |
| 8 | | | | | | | | 8.00 | 63/30 | 18 | 28 | 35 | | | | | | | | | | | | | | | |
| 9 | 1.93 | 9.40 | 6.00 | | | | | | | | 9.00 | 60/30 | 20 | 30 | 30 | | | | | | | | | | | | |
| 10 | | | | | | | | 10.00 | 91/30 | 25 | 41 | 50 | | | | | | | | | | | | | | | |
| 11 | | | | | | | | 11.00 | 95/30 | 23 | 45 | 50 | | | | | | | | | | | | | | | |
| 12 | | | | | | | | 12.00 | | | 31 | 50 | Blows | for | 5cm | | | | | | | | | | | | |
| 13 | | | | 13.00 | | | 35 | 50 | Blows | for | 1cm | | | | | | | | | | | | | | | | |
| 14 | | | | 14.00 | | | 36 | 50 | Blows | for | 2cm | | | | | | | | | | | | | | | | |
| 15 | | | | 15.00 | | | 30 | 50 | Blows | for | 14cm | | | | | | | | | | | | | | | | |
| 16 | | | | 16.00 | | | 32 | 50 | Blows | for | 13cm | | | | | | | | | | | | | | | | |
| 17 | | | | 17.00 | | | 35 | 50 | Blows | for | 2cm | | | | | | | | | | | | | | | | |
| 18 | | | | 18.00 | | | 50 | | Blows | for | 0cm | | | | | | | | | | | | | | | | |
| 19 | | | | 19.00 | | | 50 | | Blows | for | 8cm | | | | | | | | | | | | | | | | |
| 20 | | | | 20.00 | | | 50 | | Blows | for | 7cm | | | | | | | | | | | | | | | | |
| 21 | 13.53 | 21.00 | 11.60 | | Sand with silt | Grey Brown | 21.00 | 50 | Blows | for | 0cm | | | | | | | | | | | | | | | | |
| 22 | | | | 22.00 | | | | | | | | | | | | | | | | | | | | | | | |
| 23 | | | | 23.00 | | | | | | | | | | | | | | | | | | | | | | | |
| 24 | | | | 24.00 | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | | | | 25.00 | | | | | | | | | | | | | | | | | | | | | | | |
| 26 | | | | 26.00 | | | | | | | | | | | | | | | | | | | | | | | |
| 27 | | | | 27.00 | | | | | | | | | | | | | | | | | | | | | | | |
| 28 | | | | 28.00 | | | | | | | | | | | | | | | | | | | | | | | |
| 29 | | | | 29.00 | | | | | | | | | | | | | | | | | | | | | | | |
| 30 | | | | 30.00 | | | | | | | | | | | | | | | | | | | | | | | |

BORING LOG (Soil exploration)

MULTIPURPOS CYLONE SHEELER (PHASE-2)
PROJECT LOCATION

GROUND ELEVATION 2.969 m

DATE OF INVESTIGATION 09 FEB '94

East Boro Bheola, Chokoria, Cox's Bazar

DEPTH TO GROUND WATER

LEVEL IN HOLE -1.75 m

INVESTIGATED BY

BORING HOLE No. 11-7 (2)

| STAFF | ELEVATION m | DEPTH m | THICKNESS m | FIELD OBSERVATIONAL DESCRIPTION | | | | STANDARD PENETRATION TEST | | | | | | | | | | SAMPLING | | | | | | | | | | |
|-------|----------------|------------|----------------|----------------------------------|-------------------------------------|--------------------|---|---------------------------|--------------------|----------------------------|----|----|----|-------------------|----|----|----|----------|----|------------|------------|--------|----|--|--|--|--|--|
| | | | | COLUMN SECTION (Graphic mark) | Soil or Rock NAME OF CLASSIFICATION | COLOR TONE | DESCRIPTION | Depth m | N-INTER-PENE cm | Num of Blows Every 15cm | | | | NUMBER OF BLOWS N | | | | | | Sample No. | Depth m | Method | | | | | | |
| | | | | | | | | | | 15 | 30 | 45 | cm | 0 | 10 | 20 | 30 | 40 | 50 | | | | 60 | | | | | |
| 1 | 1.72 | 1.25 | 1.25 | | silt | high blown & grey | medium compressible SILT | 1.00 | 2/30 | 0 | 1 | 1 | | | | | | | | | | | | | | | | |
| 2 | 0.67 | 2.30 | 1.05 | | clay | Grey | medium plastic CLAY (med.stiff) | 2.00 | 4/30 | 0 | 2 | 2 | | | | | | | | | | | | | | | | |
| 3 | 0.53 | 3.50 | 1.20 | | clay | Grey | soft CLAY with decomposed wood | 3.00 | 1/30 | 0 | 0 | 1 | | | | | | | | | | | | | | | | |
| 4 | | | | | | | high plastic CLAY (very soft) | 4.00 | 1/30 | 0 | 0 | 1 | | | | | | | | | | | | | | | | |
| 5 | 2.43 | 5.40 | 1.90 | | clay | Grey | | 5.00 | 2/30 | 0 | 1 | 1 | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | 6.00 | 4/30 | 1 | 2 | 2 | | | | | | | | | | | | | | | | |
| 7 | | | | | | | sandy CLAY (medium stiff) | 7.00 | 5/30 | 2 | 2 | 3 | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | 8.00 | 3/30 | 1 | 1 | 2 | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | 9.00 | 5/30 | 2 | 2 | 3 | | | | | | | | | | | | | | | | |
| 10 | 7.53 | 10.50 | 5.10 | | clay | Grey | | 10.00 | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | fine SAND, some silt (medium dense) | 11.00 | 15/30 | 3 | 7 | 8 | | | | | | | | | | | | | | | | |
| 12 | 9.20 | 12.25 | 1.75 | | sand some silt | Grey | | 12.00 | 25/30 | 6 | 12 | 13 | | | | | | | | | | | | | | | | |
| 13 | | | | | | | sandy CLAY (medium stiff to stiff) | 13.00 | 10/30 | 3 | 4 | 6 | | | | | | | | | | | | | | | | |
| 14 | 11.13 | 14.10 | 1.05 | | sandy clay | Grey | | 14.00 | 7/30 | 3 | 3 | 4 | | | | | | | | | | | | | | | | |
| 15 | | | | | | | medium plastic CLAY, trace organic matter (stiff) | 15.00 | 10/30 | 3 | 4 | 6 | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | 16.00 | 8/30 | 2 | 3 | 5 | | | | | | | | | | | | | | | | |
| 17 | 14.33 | 17.30 | 3.20 | | clay | Grey | | 17.00 | 11/30 | 4 | 5 | 6 | | | | | | | | | | | | | | | | |
| 18 | | | | | | | high plastic CLAY, trace organic matter (stiff) | 18.00 | 10/30 | 3 | 5 | 5 | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | 19.00 | 6/30 | 2 | 3 | 3 | | | | | | | | | | | | | | | | |
| 20 | 17.03 | 20.00 | 2.70 | | clay | Grey | | 20.00 | | | | | | | | | | | | | | | | | | | | |
| 21 | | | | | | | high plastic CLAY (medium stiff to stiff) | 21.00 | 5/30 | 2 | 2 | 3 | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | 22.00 | 7/30 | 2 | 3 | 4 | | | | | | | | | | | | | | | | |
| 23 | 20.53 | 23.50 | 3.50 | | clay | Brownish grey | | 23.00 | 10/30 | 3 | 5 | 5 | | | | | | | | | | | | | | | | |
| 24 | | | | | | | high plastic CLAY (stiff) | 24.00 | 11/30 | 2 | 5 | 6 | | | | | | | | | | | | | | | | |
| 25 | | | | | | | | 25.00 | 13/30 | 3 | 6 | 7 | | | | | | | | | | | | | | | | |
| 26 | 23.53 | 26.50 | 3.00 | | clay | light brown & grey | | 26.00 | 16/30 | 4 | 6 | 10 | | | | | | | | | | | | | | | | |
| 27 | | | | | | | | 27.00 | 14/30 | 3 | 5 | 9 | | | | | | | | | | | | | | | | |
| 28 | | | | | | | medium plastic CLAY (very stiff) | 28.00 | 15/30 | 4 | 7 | 8 | | | | | | | | | | | | | | | | |
| 29 | | | | | | | | 29.00 | 18/30 | 5 | 7 | 11 | | | | | | | | | | | | | | | | |
| 30 | 27.03 | 30.00 | 3.50 | | clay | Light grey | | 30.00 | 18/30 | 4 | 7 | 10 | | | | | | | | | | | | | | | | |

BORING LOG (Soil exploration)

MULTIPURPOS CYLONE SHELTER (PHASE-2)
PROJECT LOCATION

GROUND ELEVATION 3.353 m

DATE OF INVESTIGATION 07 FEB '94

Chiringa, Chokoria, Cox's Bazar

DEPTH TO GROUND WATER

INVESTIGATED BY

BORING HOLE No. 11-9 (2)

LEVEL IN HOLE -1.70 m

| STAFF | ELEVATION m | DEPTH m | THICKNESS m | FIELD OBSERVATIONAL DESCRIPTION | | | STANDARD PENETRATION TEST | | | | | | | | | | SAMPLING | | | | | | | | | | |
|-------|----------------|------------|----------------|---------------------------------|-------------------------------------|------------|--|-----------------|------------------|-------------------------|----|----|-------------------|--|--|--|----------|--|------------|---------|--------|--|--|--|--|--|--|
| | | | | COLUMN SECTION (Graphic mark) | Soil or Rock NAME OF CLASSIFICATION | COLOR TONE | DESCRIPTION | Depth m | N INTER-PENE c/m | Num of blows Every 15cm | | | NUMBER OF BLOWS N | | | | | | Sample No. | Depth m | Method | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | | | | | | | medium plastic CLAY (medium stiff) | 1.00 | 4/30 | 2 | 2 | 2 | | | | | | | | | | | | | | | |
| 2 | | | | | | | Light blown & grey clay | 2.00 | 8/30 | 3 | 4 | 4 | | | | | | | | | | | | | | | |
| 3 | 0.053 | 3.40 | 3.40 | | | | | 3.00 | 4/30 | 2 | 2 | 2 | | | | | | | | | | | | | | | |
| 4 | | | | | | | | 4.00 | 3/30 | 1 | 1 | 2 | | | | | | | | | | | | | | | |
| 5 | 1.655 | 5.00 | 1.60 | | | | clay | 5.00 | 2/30 | 1 | 1 | 1 | | | | | | | | | | | | | | | |
| 6 | 2.856 | 6.20 | 1.20 | | | | clay with sand | 6.00 | 5/30 | 2 | 2 | 3 | | | | | | | | | | | | | | | |
| 7 | | | | | | | sand & silt | 7.00 | 7/30 | 2 | 3 | 4 | | | | | | | | | | | | | | | |
| 8 | 4.753 | 1.01 | 1.90 | | | | | 8.00 | 7/30 | 2 | 3 | 4 | | | | | | | | | | | | | | | |
| 9 | | | | | | | fine SAND, some silt (medium dense to dense) | 9.00 | 18/30 | 6 | 8 | 10 | | | | | | | | | | | | | | | |
| 10 | | | | | | | | 10.00 | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | 11.00 | 36/3 | 12 | 16 | 20 | | | | | | | | | | | | | | | |
| 12 | | | | | | | | 12.00 | 24/30 | 8 | 11 | 13 | | | | | | | | | | | | | | | |
| 13 | | | | | | | | 13.00 | 29/30 | 12 | 14 | 15 | | | | | | | | | | | | | | | |
| 14 | | | | | | | | 14.00 | 21/30 | 10 | 10 | 11 | | | | | | | | | | | | | | | |
| 15 | 11.75 | 15.10 | 7.00 | | | | | 15.00 | 19/30 | 7 | 9 | 10 | | | | | | | | | | | | | | | |
| 16 | | | | | | | | sand, some silt | 16.00 | 33/30 | 14 | 16 | 17 | | | | | | | | | | | | | | |
| 17 | 13.65 | 17.00 | 1.90 | | | | | | 17.00 | 6/30 | 2 | 3 | 3 | | | | | | | | | | | | | | |
| 18 | 15.15 | 18.50 | 1.50 | | | | | clay | 18.00 | 12/30 | 3 | 5 | 7 | | | | | | | | | | | | | | |
| 19 | 16.15 | 19.50 | 1.00 | | | | sand, little silt | 19.00 | 48/30 | 16 | 20 | 28 | | | | | | | | | | | | | | | |
| 20 | | | | | | | sand & silt | 20.00 | 15/30 | 4 | 6 | 9 | | | | | | | | | | | | | | | |
| 21 | | | | | | | | 21.00 | | | | | | | | | | | | | | | | | | | |
| 22 | 19.45 | 22.80 | 3.30 | | | | fine sand, some silt (medium dense to dense) | 22.00 | 17/30 | 18 | 22 | 25 | | | | | | | | | | | | | | | |
| 23 | | | | | | | sand, some silt | 23.00 | 30/30 | 14 | 18 | 20 | | | | | | | | | | | | | | | |
| 24 | | | | | | | | 24.00 | 35/30 | 12 | 16 | 19 | | | | | | | | | | | | | | | |
| 25 | 22.15 | 25.50 | 2.70 | | | | high plastic CLAY (stiff) | 25.00 | 14/30 | 4 | 5 | 9 | | | | | | | | | | | | | | | |
| 26 | | | | | | | clay | 26.00 | 11/30 | 5 | 5 | 6 | | | | | | | | | | | | | | | |
| 27 | | | | | | | | 27.00 | 13/30 | 3 | 6 | 7 | | | | | | | | | | | | | | | |
| 28 | | | | | | | medium plastic CLAY (stiff) | 28.00 | 11/30 | 3 | 5 | 6 | | | | | | | | | | | | | | | |
| 29 | | | | | | | | 29.00 | | | | | | | | | | | | | | | | | | | |
| 30 | 26.65 | 30.00 | 4.50 | | | | clay | 30.00 | 12/30 | 4 | 6 | 6 | | | | | | | | | | | | | | | |
| | | | | | | | | | 14/30 | 3 | 6 | 8 | | | | | | | | | | | | | | | |

BORING LOG (Soil exploration)

MULTIPURPOS CYLONE SHELTER (PHASE-2)
PROJECT LOCATION

GROUND ELEVATION 7.177 m

DATE OF INVESTIGATION 11 FEB '94

Jalgaon, Ukhin, Cox's Bazar

DEPTH TO GROUND WATER
LEVEL IN HOLE -2.10 m

INVESTIGATED BY

BORING HOLE No.

11-11 (1)

| STAFF | FIELD OBSERVATIONAL DESCRIPTION | | | STANDARD PENETRATION TEST | | | | | | | | | | | SAMPLING | | | | | | | |
|-------|---------------------------------|------------|----------------|--|--|---------------|--|------------|----------------------------|----------------------------|----------|----------|-------------------|----|----------|----|----|----|---------------|------------|--------|----|
| | ELE- VATION | DE- PTH | THICK- NESS | COLUM- N SECTION (Graphic mark) | Soil or Rock NAME OF CLASSIFICATION | COLOR TONE | DESCRIPTION | Depth m | N INTER- PENE- cm | Num of Blows Every 15cm | | | NUMBER OF BLOWS N | | | | | | Sample No. | Depth m | Method | |
| | m | m | m | | | | | | | 15 cm | 30 cm | 45 cm | 0 | 10 | 20 | 30 | 40 | 50 | | | | 60 |
| 1 | 5.78 | 1.40 | 1.40 | | fine sand with silt | Grey | loose fine SAND with silt | 1.00 | 9/30 | 4 | 4 | 5 | | | | | | | | | | |
| 2 | | | | | | | very stiff SILT with clay trace fine sand | 2.00 | 15/30 | 5 | 7 | 8 | | | | | | | | | 2.10 | |
| 3 | 4.10 | 3.00 | 1.60 | | silt clay sand | Grey | | 3.00 | 17/30 | 5 | 8 | 9 | | | | | | | | U-1 | 2.65 | |
| 4 | | | | | | | | 4.00 | 7/30 | 3 | 3 | 4 | | | | | | | | | 4.10 | |
| 5 | | | | | | | | 5.00 | 9/30 | 3 | 4 | 5 | | | | | | | | U-2 | 4.65 | |
| 6 | | | | | | | stiff to very stiff & hard SILT with clay & fine sand | 6.00 | 10/30 | 4 | 4 | 6 | | | | | | | | | | |
| 7 | | | | | | | | 7.00 | 6/30 | 3 | 3 | 3 | | | | | | | | | | |
| 8 | | | | | | | | 8.00 | 6/30 | 2 | 3 | 3 | | | | | | | | | | |
| 9 | | | | | | | | 9.00 | 7/30 | 2 | 3 | 4 | | | | | | | | | | |
| 10 | | | | | | | | 10.00 | 33/30 | 12 | 13 | 20 | | | | | | | | | | |
| 11 | 4.32 | 11.50 | 8.50 | | silt with clay & fine sand | Grey | | 11.00 | 25/30 | 11 | 12 | 13 | | | | | | | | | | |
| 12 | | | | | | | very stiff fine sandy SILT trace clay | 12.00 | 27/30 | 13 | 13 | 14 | | | | | | | | | | |
| 13 | 5.22 | 15.30 | 1.90 | | sandy silt | Grey | | 13.00 | 29/30 | 10 | 14 | 15 | | | | | | | | | | |
| 14 | | | | | | | hard sandy SILT trace gravel | 14.00 | 32/30 | 11 | 16 | 16 | | | | | | | | | | |
| 15 | 0.12 | 15.30 | 1.90 | | sandy silt | Grey | | 15.00 | 37/30 | 10 | 17 | 20 | | | | | | | | | | |
| 16 | | | | | | | dense very fine SAND with silt | 16.00 | 39/30 | 12 | 18 | 21 | | | | | | | | | | |
| 17 | 10.32 | 17.50 | 2.20 | | sand with silt | Grey | | 17.00 | 43/30 | 11 | 19 | 24 | | | | | | | | | | |
| 18 | | | | | | | | 18.00 | | 25 | 50 | - | Blows for 9cm | | | | | | | | | |
| 19 | | | | | | | hard fine sandy SILT trace gravel | 19.00 | | 27 | 50 | - | Blows for 7cm | | | | | | | | | |
| 20 | | | | | | | | 20.00 | | 25 | 50 | - | Blows for 5cm | | | | | | | | | |
| 21 | | | | | | | | 21.00 | | | 50 | - | Blows for 15cm | | | | | | | | | |
| 22 | 14.82 | 22.00 | 4.50 | | sandy silt & gravel | Grey | | 22.00 | | | 56 | - | Blows for 15cm | | | | | | | | | |
| 23 | | | | | | | | 23.00 | | | | | | | | | | | | | | |
| 24 | | | | | | | | 24.00 | | | | | | | | | | | | | | |
| 25 | | | | | | | | 25.00 | | | | | | | | | | | | | | |
| 26 | | | | | | | | 26.00 | | | | | | | | | | | | | | |
| 27 | | | | | | | | 27.00 | | | | | | | | | | | | | | |
| 28 | | | | | | | | 28.00 | | | | | | | | | | | | | | |
| 29 | | | | | | | | 29.00 | | | | | | | | | | | | | | |
| 30 | | | | | | | | 30.00 | | | | | | | | | | | | | | |

BORING LOG (Soil exploration)

MULTIPURPOS CYLONE SHELTER (PHASE-2)
PROJECT LOCATION

GROUND ELEVATION 7.115 m

DATE OF INVESTIGATION 11 FEB '94

Jalapaero, Ukhta, Cox's Bazar

DEPTH TO GROUND WATER
LEVEL IN HOLE -2.30 m

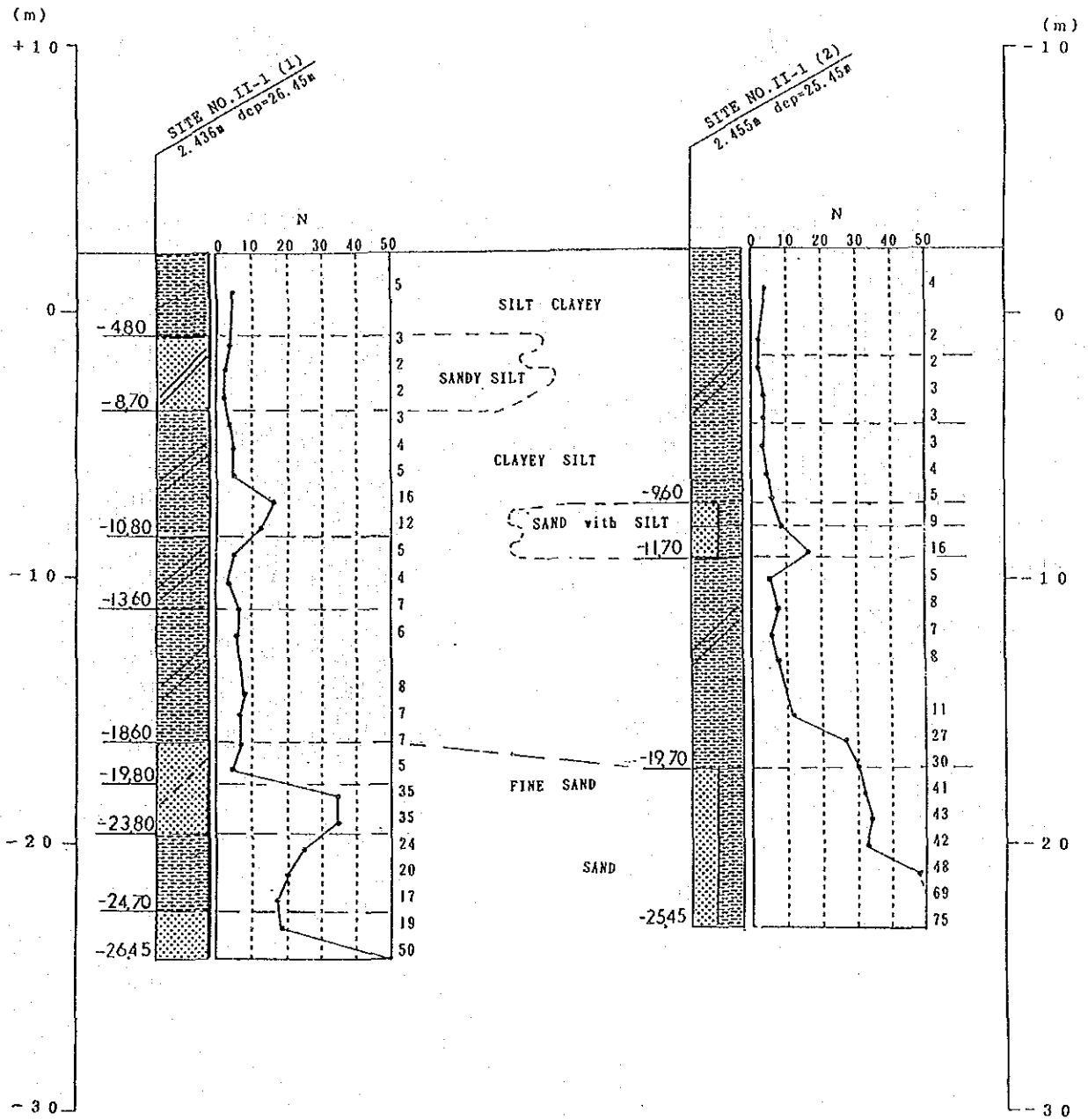
INVESTIGATED BY

BORING HOLE No. 11-11 (2)

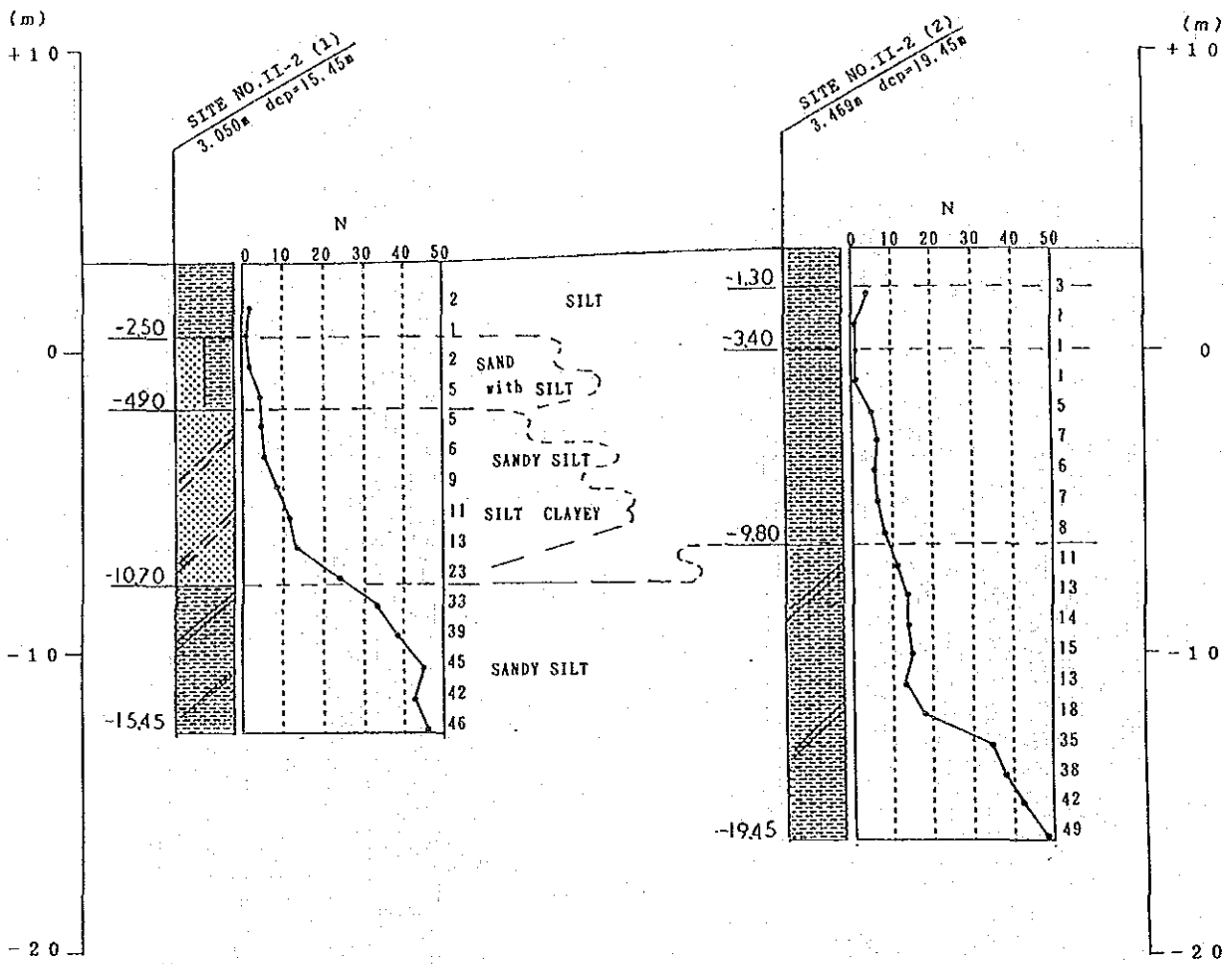
| STAFF | ELEVATION m | DEPTH m | THICKNESS m | FIELD OBSERVATIONAL DESCRIPTION | | | STANDARD PENETRATION TEST | | | | | | | | | | SAMPLING | | | | | | |
|-------|----------------|------------|----------------|----------------------------------|---|---------------|---|------------|--------------------------|----------------------------|----------|----------|-------------------|----|----|----|----------|----|---------------|------------|--------|--|------|
| | | | | COLUMN SECTION (Graphic work) | Soil or Rock NAME OF CLASSIFICATION | COLOR TONE | DESCRIPTION | Depth m | N INTER PENE cm | Num of blows Every 15cm | | | NUMBER OF BLOWS N | | | | | | Sample No. | Depth m | Method | | |
| | | | | | | | | | | 15 cm | 30 cm | 45 cm | 0 | 10 | 20 | 30 | 40 | 50 | 60 | | | | |
| 1 | 5.72 | 1.40 | 1.40 | | silt sand | Grey | stiff fine sandy SILT | 1.00 | 9/30 | 3 | 4 | 5 | | | | | | | | | | | |
| 2 | | | | | | | very stiff to stiff SILT with fine to med. surl & clay | 2.00 | 16/30 | 5 | 7 | 9 | | | | | | | | | | | 2.10 |
| 3 | 4.12 | 3.00 | 1.60 | | clay sand | Grey | | 3.00 | 10/30 | 3 | 4 | 6 | | | | | | | | | | | 2.65 |
| 4 | | | | | | | stiff SILT with clay & fine surl | 4.00 | 8/30 | 3 | 4 | 4 | | | | | | | | | | | |
| 5 | | | | | | | | 5.00 | 9/30 | 4 | 4 | 5 | | | | | | | | | | | |
| 6 | 0.82 | 6.30 | 3.30 | | silt clay sand | Grey | | 6.00 | 5/30 | 2 | 2 | 3 | | | | | | | | | | | |
| 7 | | | | | | | | 7.00 | 6/30 | 2 | 3 | 3 | | | | | | | | | | | |
| 8 | | | | | | | stiff to very stiff SILT with clay trace fine surl & organic matter | 8.00 | 5/30 | 2 | 3 | 3 | | | | | | | | | | | |
| 9 | | | | | | | | 9.00 | 5/30 | 3 | 2 | 3 | | | | | | | | | | | |
| 10 | | | | | | | | 10.00 | 16/30 | 5 | 6 | 10 | | | | | | | | | | | |
| 11 | 4.22 | 11.30 | 5.00 | | stiff silt clay fine surl | Grey | | 11.00 | 19/30 | 6 | 7 | 12 | | | | | | | | | | | |
| 12 | | | | | | | stiff SILT trace clay | 12.00 | 9/30 | 3 | 4 | 5 | | | | | | | | | | | |
| 13 | 6.12 | 13.30 | 2.00 | | stiff silt trace clay | Grey | | 13.00 | 7/30 | 3 | 3 | 4 | | | | | | | | | | | |
| 14 | | | | | | | | 14.00 | 30/30 | 8 | 12 | 18 | | | | | | | | | | | |
| 15 | | | | | | | | 15.00 | 44/30 | 10 | 14 | 30 | | | | | | | | | | | |
| 16 | | | | | | | very dense fine SAND & SILT trace gravel | 16.00 | 49/30 | 11 | 14 | 35 | | | | | | | | | | | |
| 17 | | | | | | | | 17.00 | 51/30 | 10 | 18 | 38 | | | | | | | | | | | |
| 18 | | | | | | | | 18.00 | | 23 | 50 | | | | | | | | | | | | |
| 19 | | | | | | | | 19.00 | | 36 | 51 | | | | | | | | | | | | |
| 20 | | | | | | | | 20.00 | | 54 | | | | | | | | | | | | | |
| 21 | 13.69 | 21.00 | 7.70 | | silt gravel | Grey | | 21.00 | | 60 | | | | | | | | | | | | | |
| 22 | | | | | | | | 22.00 | | | | | | | | | | | | | | | |
| 23 | | | | | | | | 23.00 | | | | | | | | | | | | | | | |
| 24 | | | | | | | | 24.00 | | | | | | | | | | | | | | | |
| 25 | | | | | | | | 25.00 | | | | | | | | | | | | | | | |
| 26 | | | | | | | | 26.00 | | | | | | | | | | | | | | | |
| 27 | | | | | | | | 27.00 | | | | | | | | | | | | | | | |
| 28 | | | | | | | | 28.00 | | | | | | | | | | | | | | | |
| 29 | | | | | | | | 29.00 | | | | | | | | | | | | | | | |
| 30 | | | | | | | | 30.00 | | | | | | | | | | | | | | | |

APPENDIX 7.2.3

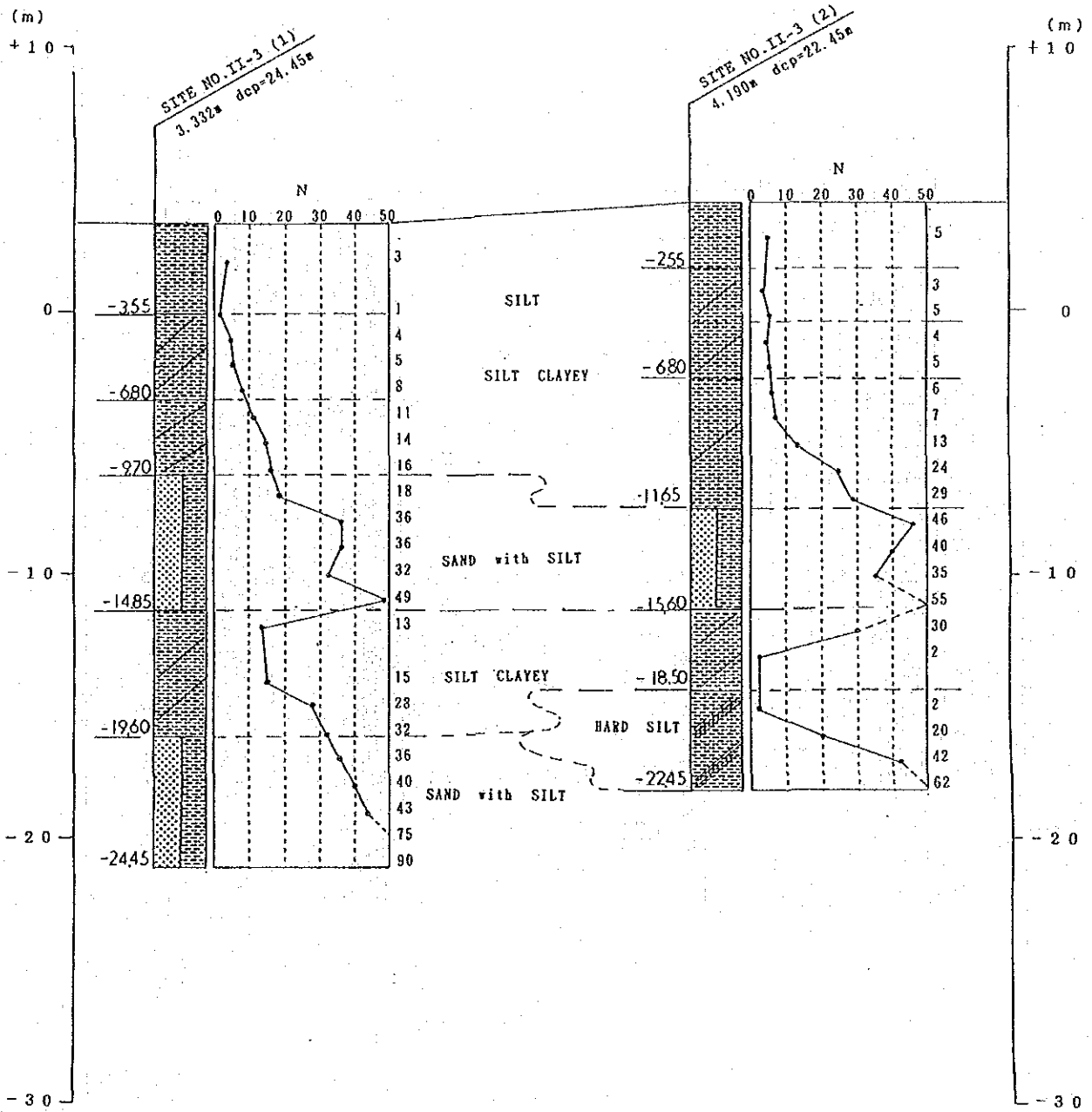
ASSUMED GEOLOGICAL SECTIONS



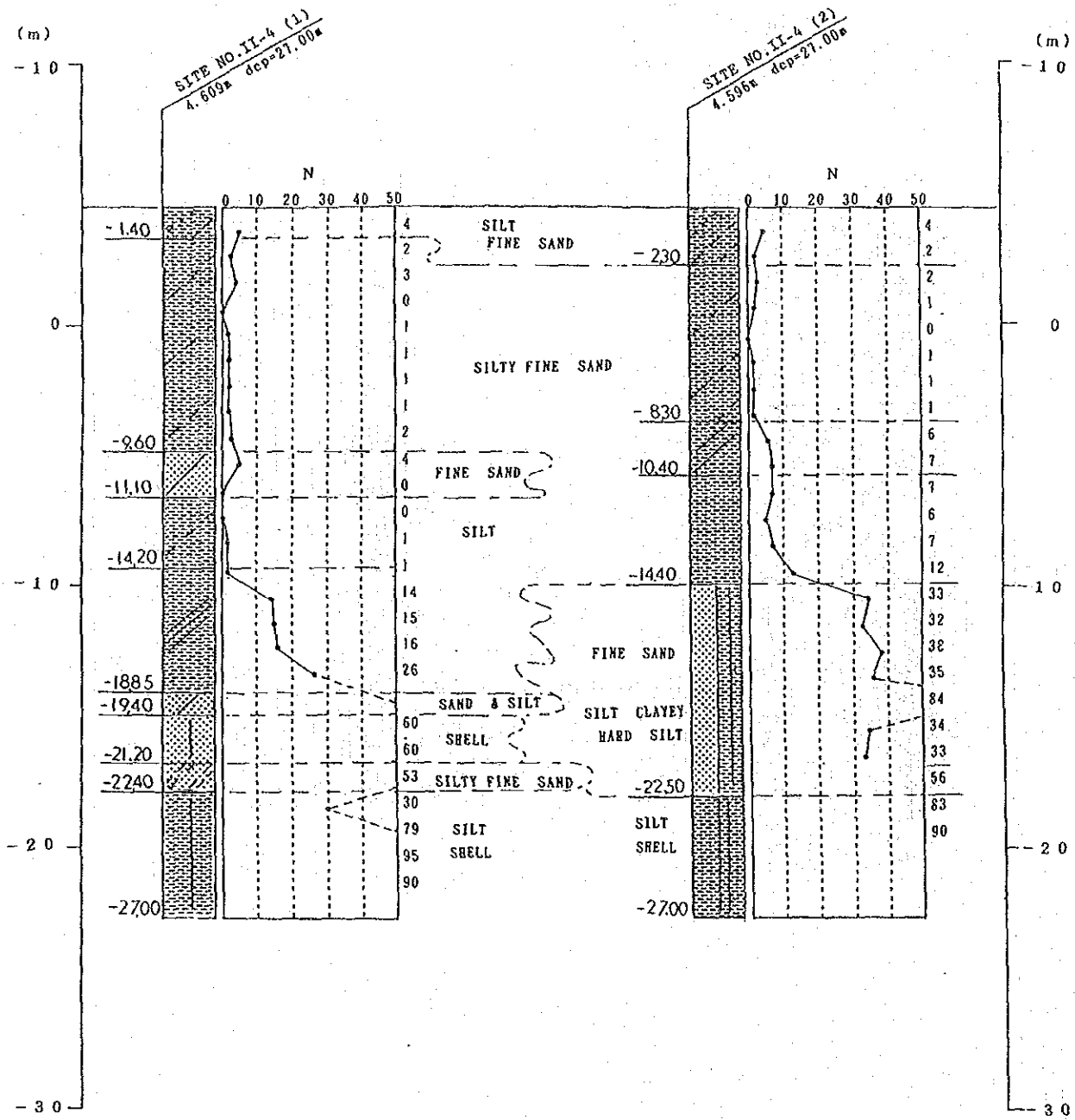
ASSUMED GEOLOGICAL SECTION (SITE NO. II-1)



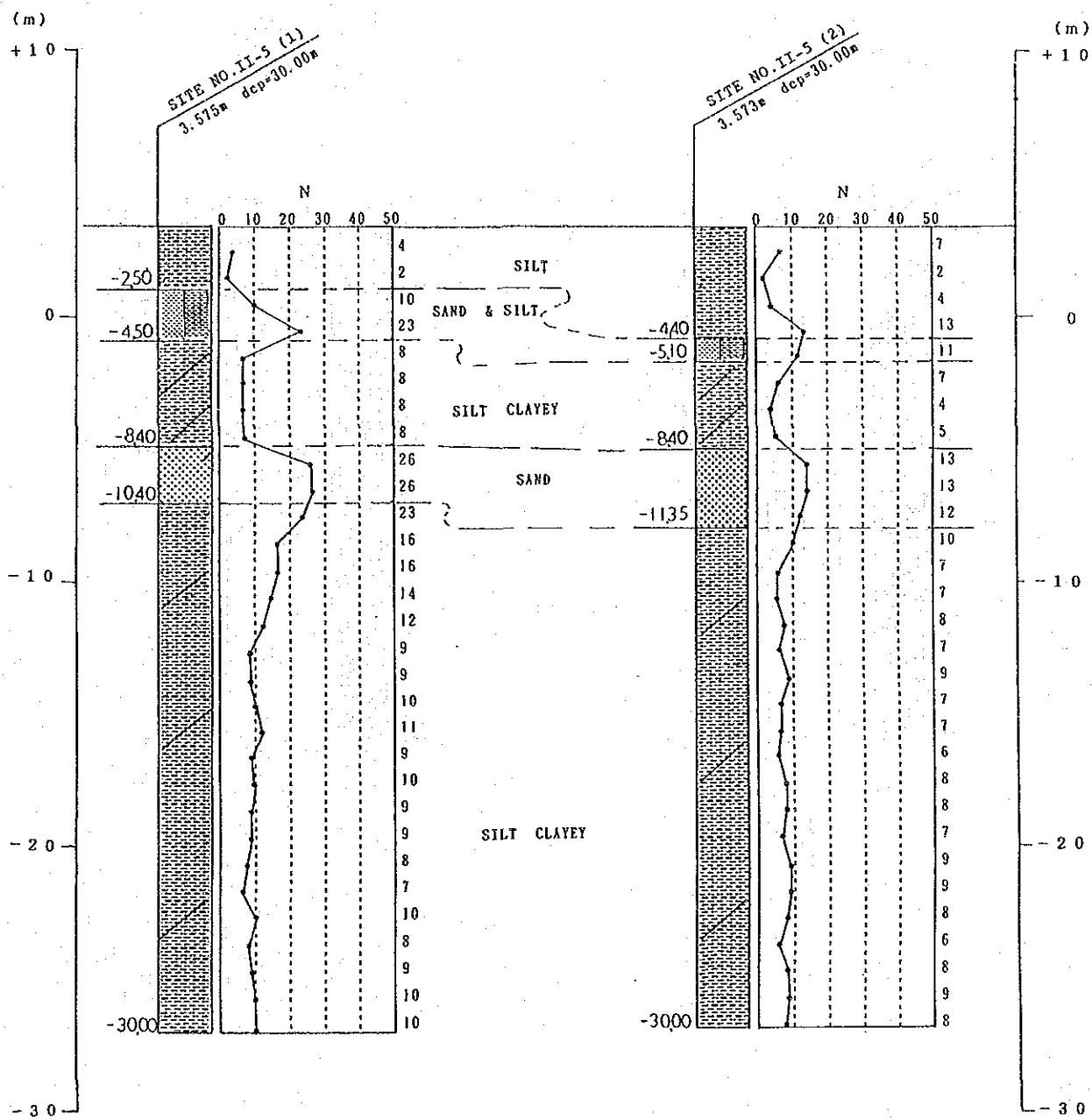
ASSUMED GEOLOGICAL SECTION (SITE NO. II-2)



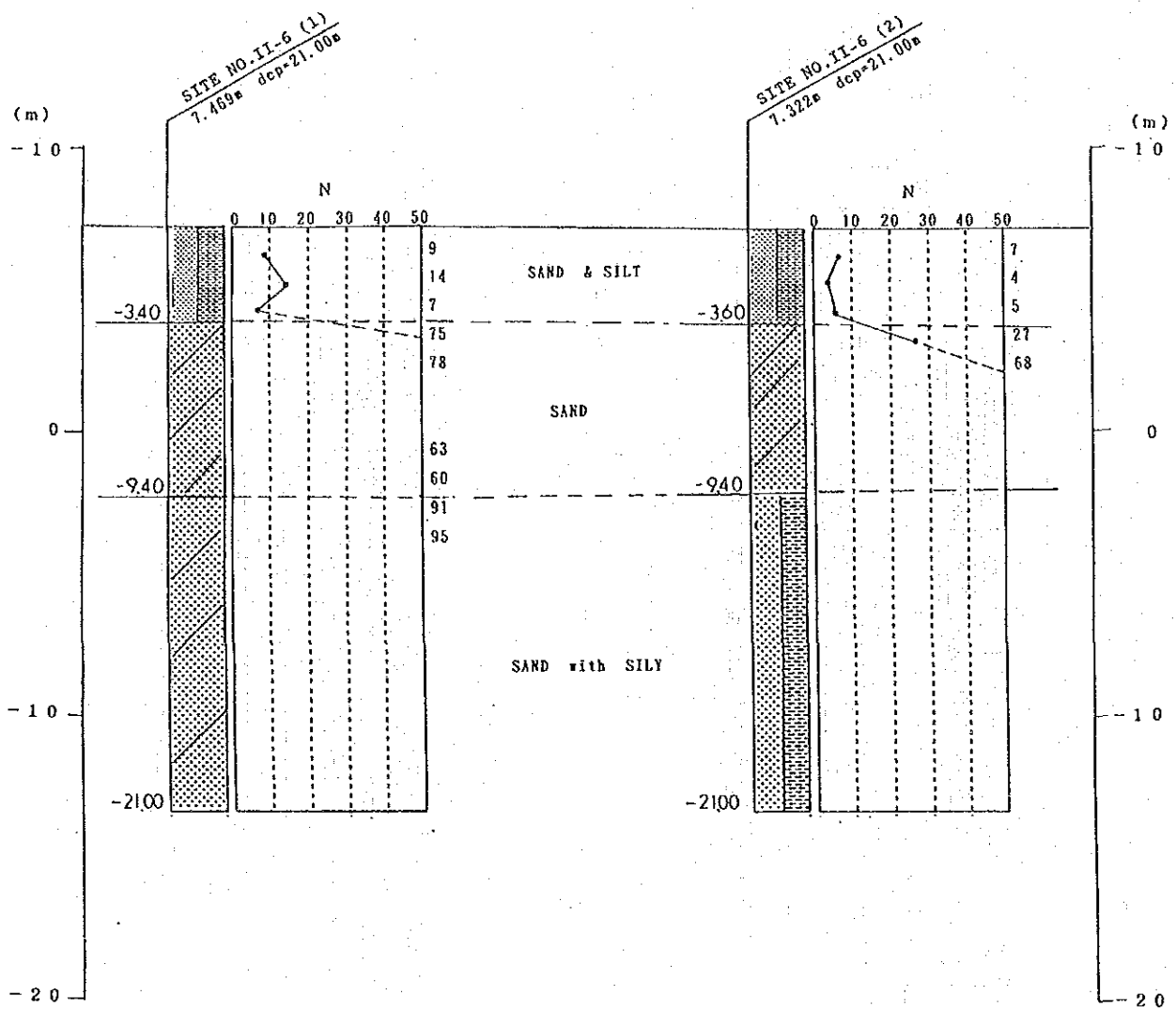
ASSUMED GEOLOGICAL SECTION (SITE NO. II-3)



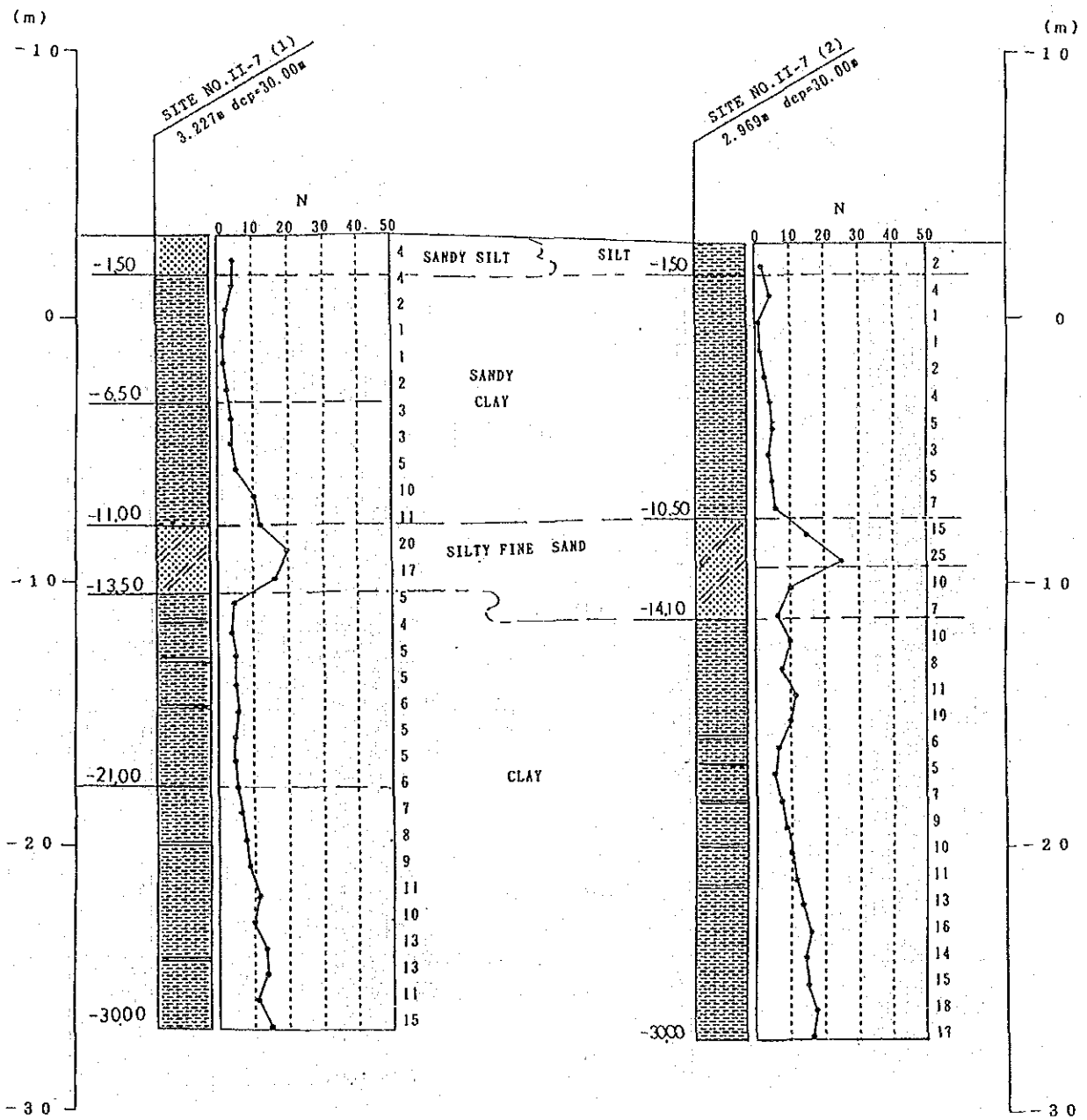
ASSUMED GEOLOGICAL SECTION (SITE NO. II-4)



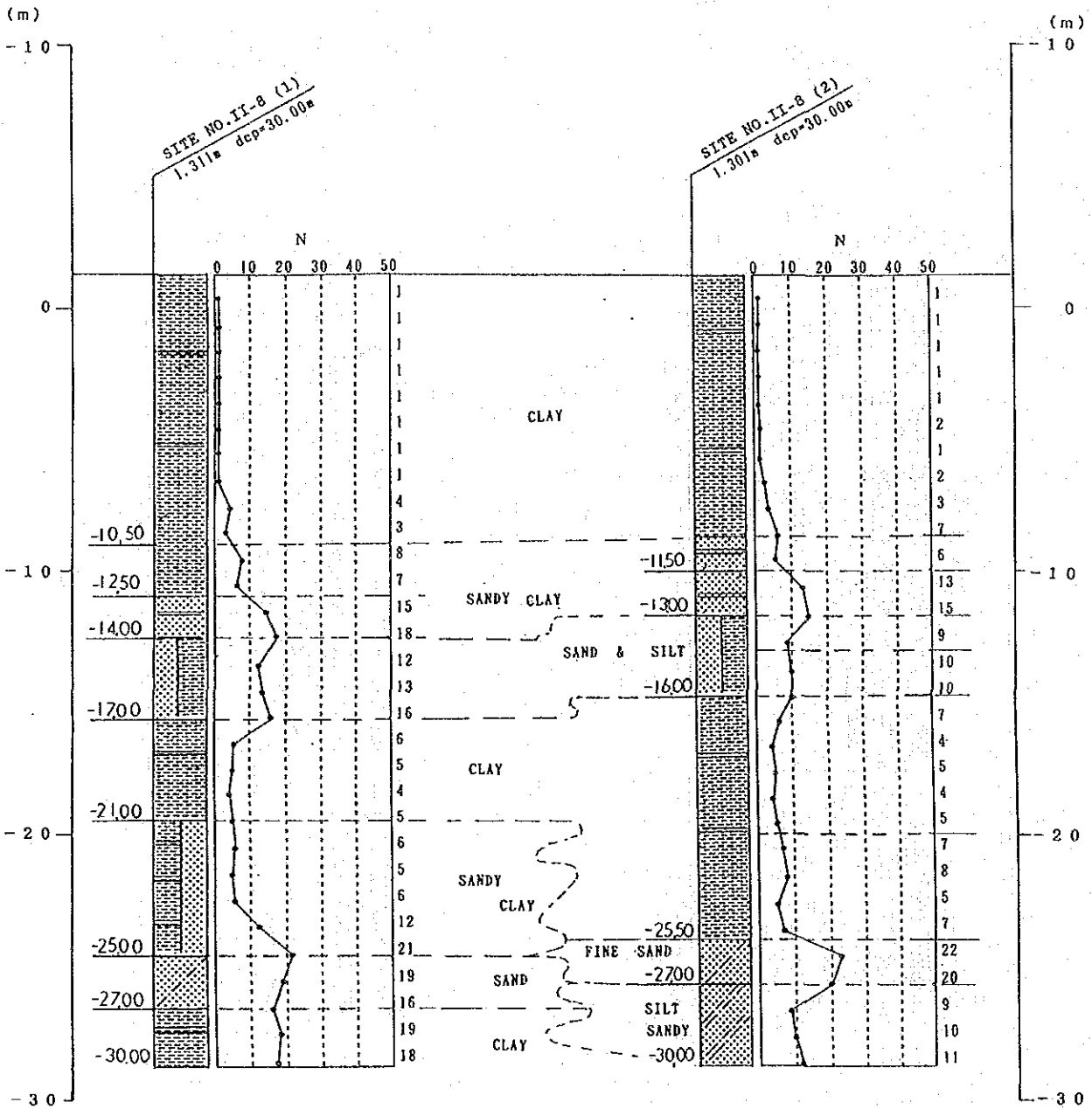
ASSUMED GEOLOGICAL SECTION (SITE NO. II-5)



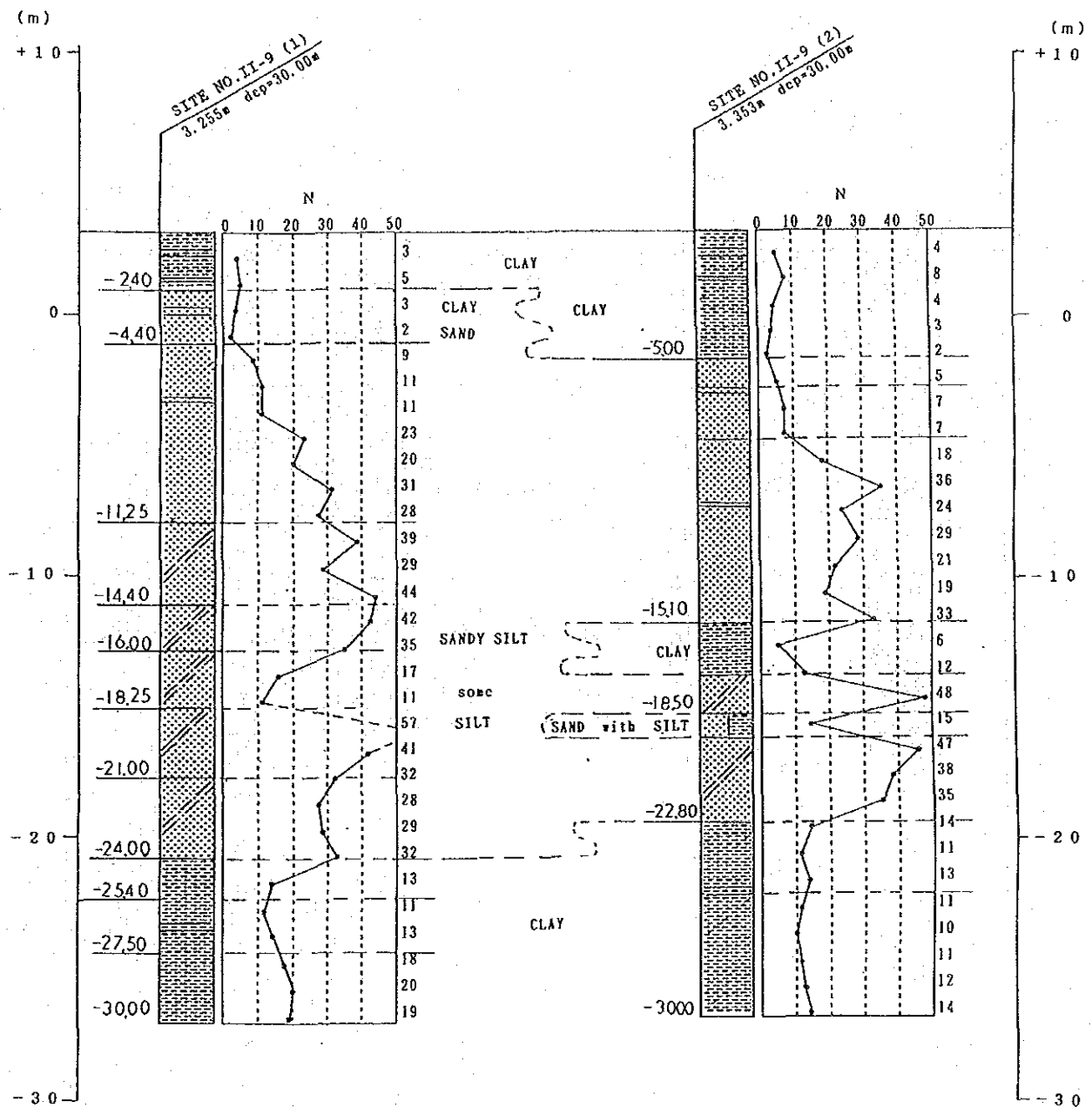
ASSUMED GEOLOGICAL SECTION (SITE NO. II-6)



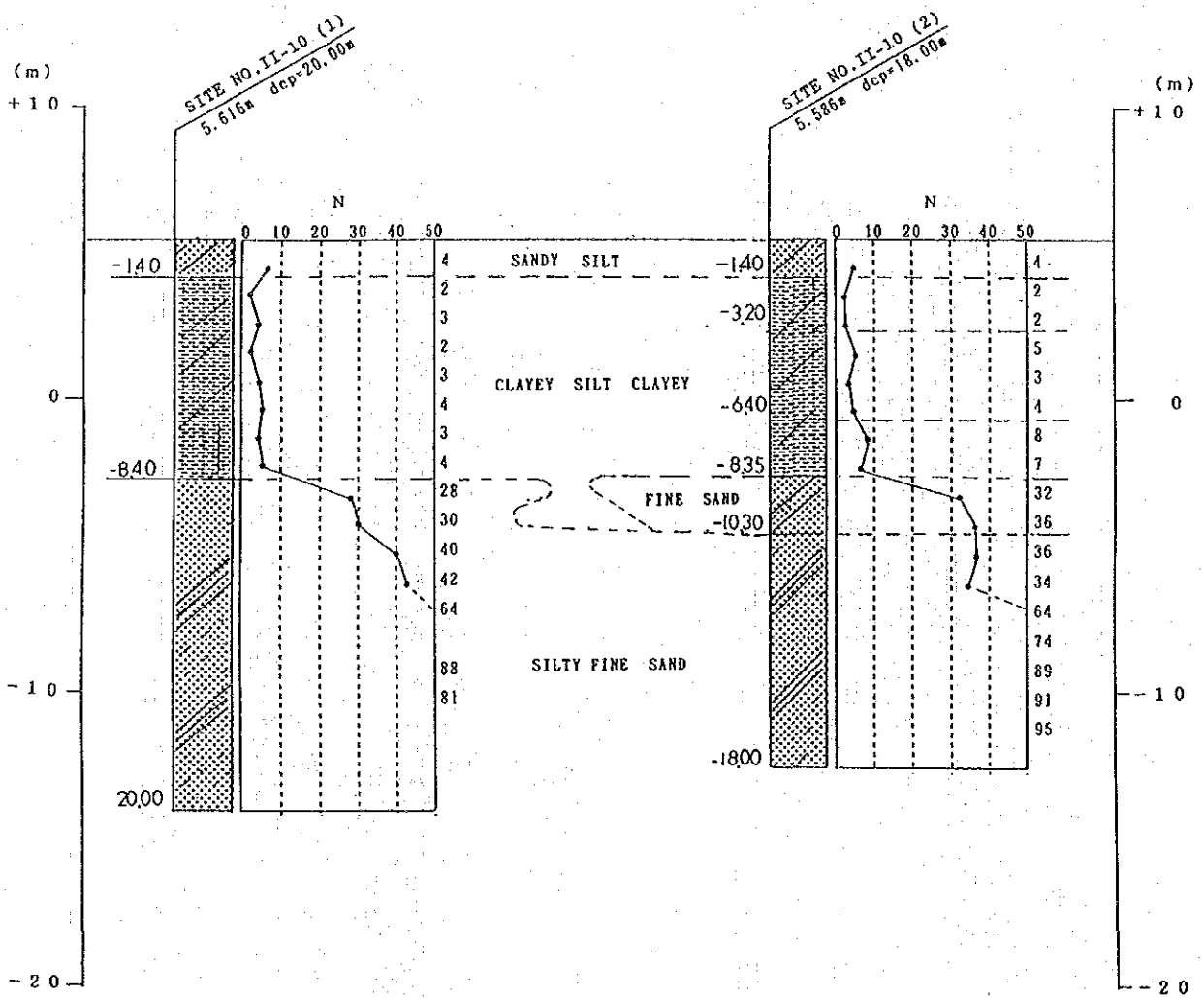
ASSUMED GEOLOGICAL SECTION (SITE NO. II-7)



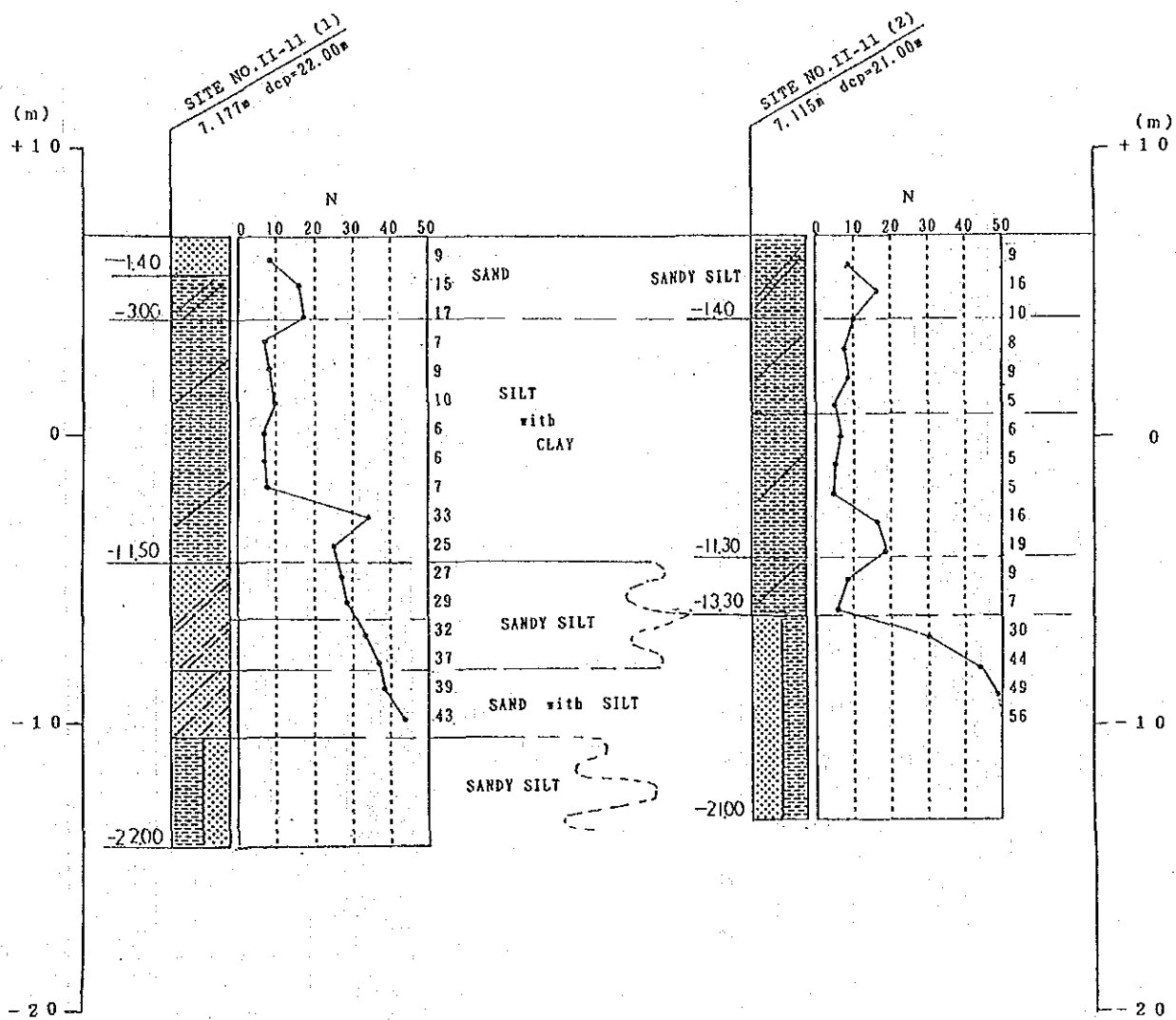
ASSUMED GEOLOGICAL SECTION (SITE NO. II-8)



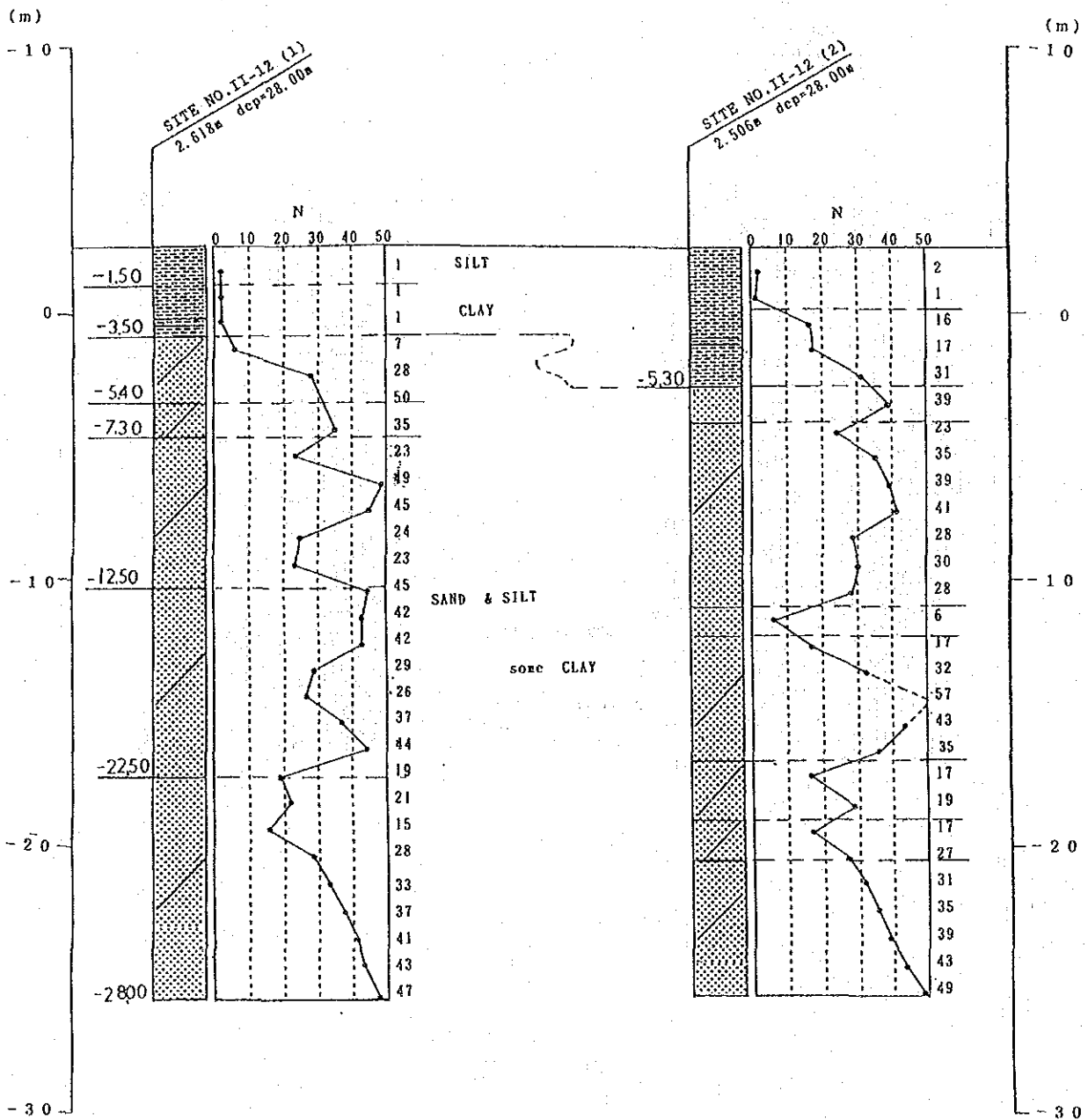
ASSUMED GEOLOGICAL SECTION (SITE NO. II-9)



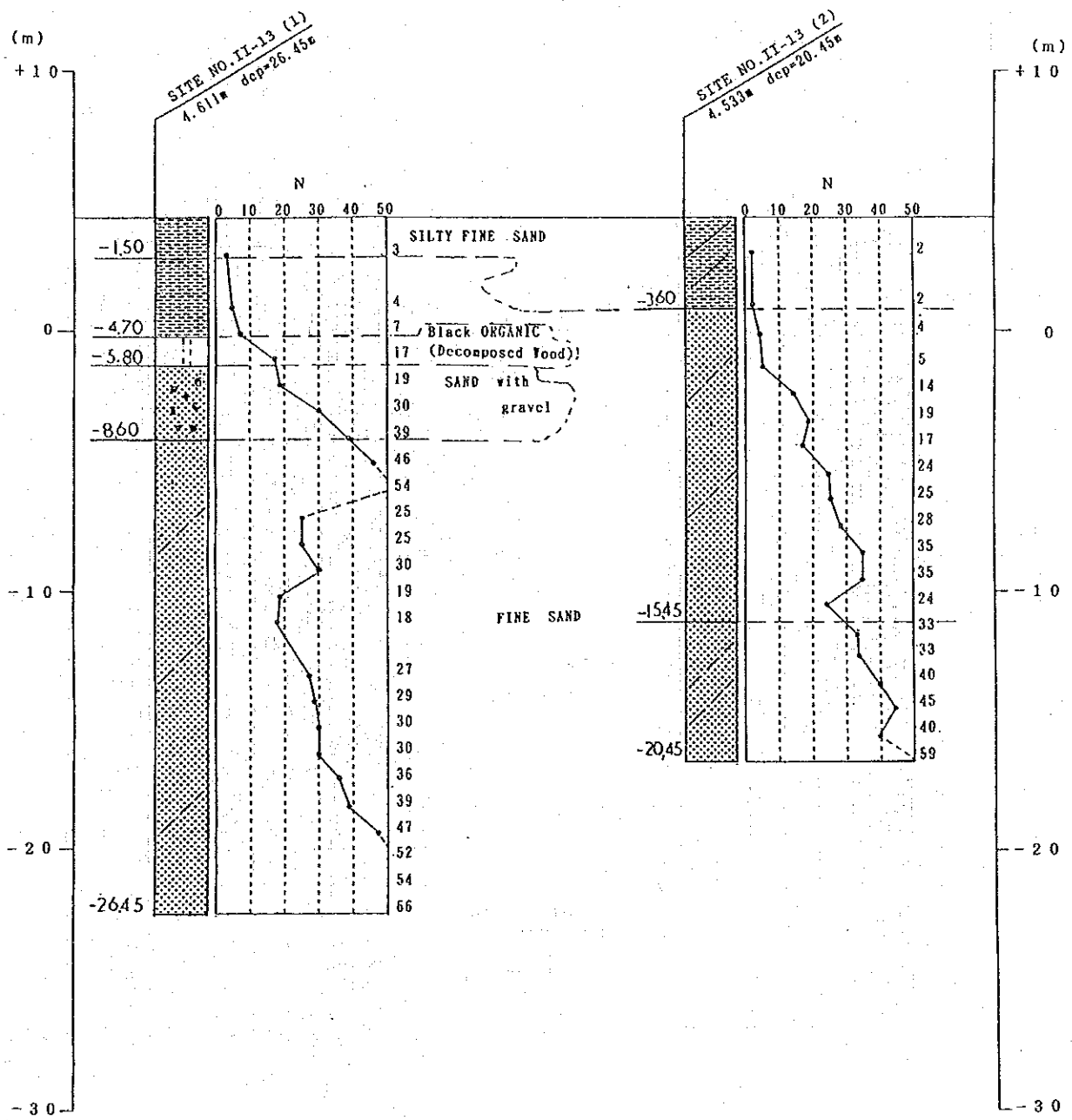
ASSUMED GEOLOGICAL SECTION (SITE NO. II-10)



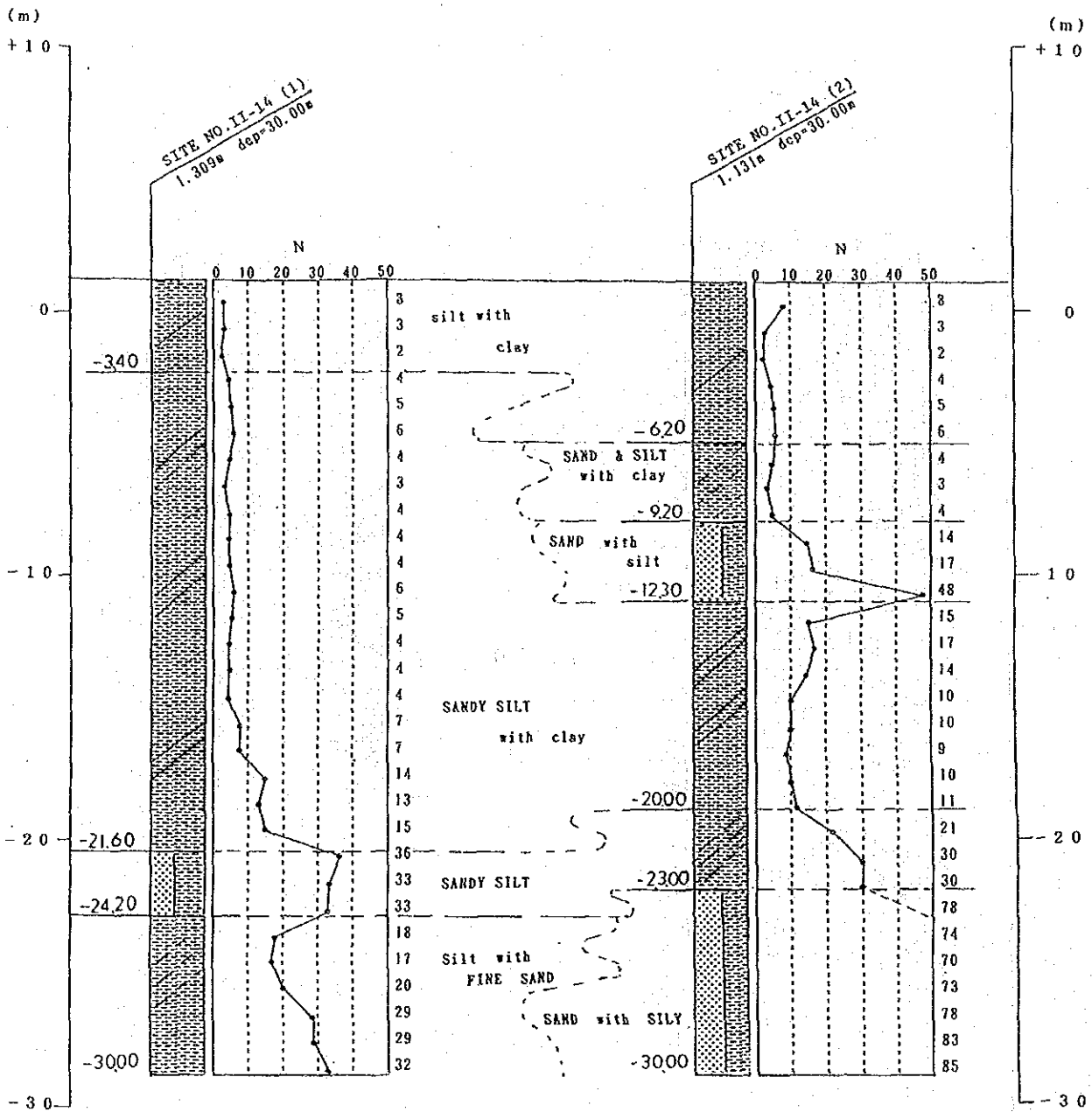
ASSUMED GEOLOGICAL SECTION (SITE NO. II-11)



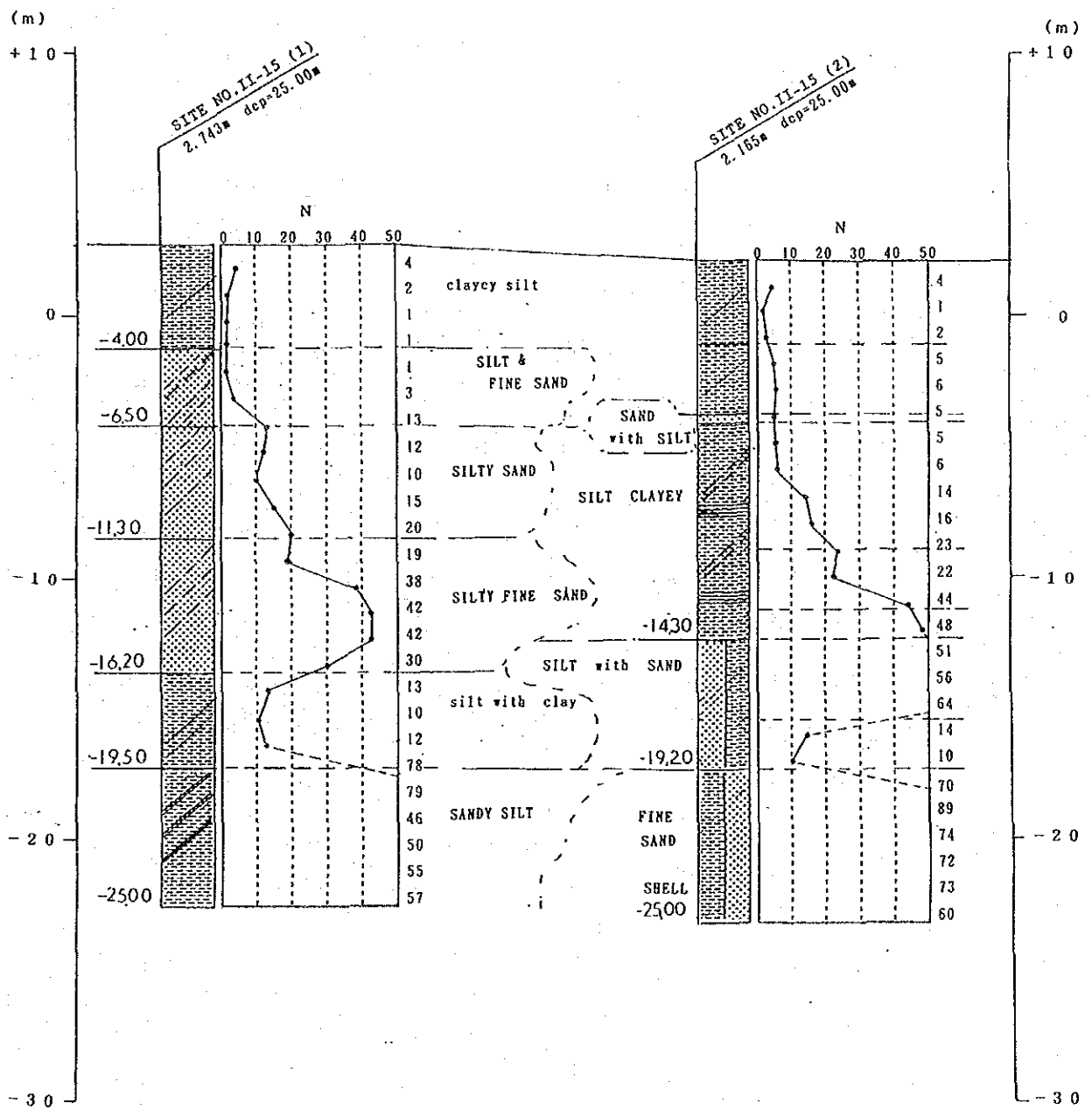
ASSUMED GEOLOGICAL SECTION (SITE NO. II-12)



ASSUMED GEOLOGICAL SECTION (SITE NO. II-13)



ASSUMED GEOLOGICAL SECTION (SITE NO. II-14)



ASSUMED GEOLOGICAL SECTION (SITE NO. II-15)

APPENDIX 7.2.4

SUMMARY OF LABORATORY TESTS

SUMMARY OF LABORATORY TEST (1)

| SITE LOCATION (Site No.) | | Banskhali, Saral (II-1) | | | | | | | | | | | | | |
|---------------------------------|---|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|--|--|
| BORING HOLE No. | | I - 1 | | | | | | | I - 2 | | | | | | |
| SAMPLE No. | | U-1 | U-2 | U-5 | D-11 | D-13 | D-18 | U-1 | U-2 | D-4 | D-5 | D-9 | D-14 | | |
| DEPTH (m) | | 1.50 | 14.50 | 5.00 | 11.00 | 13.00 | 17.00 | 2.00 | 16.00 | 4.00 | 5.00 | 9.00 | 14.00 | | |
| | | 1.95 | 14.95 | 5.45 | 11.45 | 13.45 | 17.45 | 2.45 | 16.45 | 4.45 | 5.45 | 9.45 | 14.45 | | |
| GENERAL | DRY DENSITY ρ_d g/cm ³ | 1.125 | 1.20 | | | | | 1.30 | 1.343 | | | | | | |
| | WET DENSITY ρ g/cm ³ | 1.60 | 1.749 | | | | | 1.78 | 1.81 | | | | | | |
| GRAIN SIZE | SPECIFIC GRAVITY ρ_s g/cm ³ | | | 2.655 | | 2.65 | 2.651 | | | | | 2.645 | 2.622 | | |
| | NATU. MOIST. CONT. w_n % | 42.13 | 45.29 | | | | | 36.63 | 34.73 | | | | | | |
| ATTERBERG LIMITS | VOID RATIO e | | | | | | | | | | | | | | |
| | SATURATION S_r % | | | | | | | | | | | | | | |
| UNCONFINED COMPRESSIVE STRENGTH | GRAVEL (2~75mm) % | | | | | | | | | | | | | | |
| | SAND (75 μ m ~2mm) % | | | | 1.6 | 1.5 | 2.8 | | | | 1.0 | 6.8 | 30.2 | | |
| | SILT (5 ~75 μ m) % | | | | 84.4 | 82.5 | 81.2 | | | | 80.0 | 82.2 | 69.8 | | |
| | CLAY (Under 5 μ m) % | | | | 14.0 | 16.0 | 16.0 | | | | 19.0 | 11.0 | | | |
| SOIL CLASSIFICATION | UNIFORMITY U_c | | | | | | | | | | | | | | |
| | CURVATURE U_c' | | | | | | | | | | | | | | |
| UNCONFINED COMPRESSIVE STRENGTH | MAX. GRAIN SIZE mm | | | | | | | | | | | | | | |
| | LIQUID LIMIT w_L % | | | 41.00 | 40.00 | 43.00 | | 39.00 | | 42.00 | | 38.00 | | | |
| | PLASTIC LIMIT w_P % | | | 23.20 | 22.43 | 23.59 | | 21.92 | | 22.79 | | 21.66 | | | |
| | PLASTICITY INDEX I_P | | | 17.80 | 17.57 | 19.41 | | 17.08 | | 19.21 | | 16.34 | | | |
| UNIFIED SOIL CLASS. | CONSISTENCY INDEX | | | | | | | | | | | | | | |
| | CLASSIFICATION | | | | CL | CL | | | | | | CL | | | |
| UNCONFINED COMPRESSIVE STRENGTH | UNIFIED SOIL CLASS. | | | | CL | CL | | | | | | CL | | | |
| | UNCONFINED COMPRESSIVE STRENGTH q_u kgf/cm ² | 0.284 | 0.128 | | | | | 0.668 | 0.503 | | | | | | |
| FAILURE STRAIN % | | 6 | 7 | | | | 7 | 6 | | | | | | | |

SUMMARY OF LABORATORY TEST (2)

| SITE LOCATION (Site No.) | | Banskhalii, Sadhonpur (II-2) | | | | | | | | | |
|---|--------------|------------------------------|--------------|--------------|--------------|----------------|--------------|--------------|--------------|--------------|----------------|
| BORING HOLE No. | | 2 - 1 | | | | | 2 - 2 | | | | |
| SAMPLE No. | U-1 | D-1 | D-2 | D-4 | D-5 | D-10 | U-1 | D-2 | D-3 | D-4 | D-10 |
| DEPTH (m) | 1.50 1.95 | 1.00 1.45 | 2.00 2.45 | 4.00 4.45 | 5.00 5.45 | 10.00 10.45 | 1.50 1.95 | 2.00 2.45 | 3.00 3.45 | 4.00 4.45 | 10.00 10.45 |
| DRY DENSITY ρ_d g/cm ³ | 1.357 | | | | | | 1.414 | | | | |
| WET DENSITY ρ g/cm ³ | 1.88 | | | | | | 1.91 | | | | |
| SPECIFIC GRAVITY ρ_s g/cm ³ | | | 2.653 | | 2.632 | 2.634 | | 2.614 | | 2.634 | 2.622 |
| NATU. MOIST. CONT. w_n % | 38.54 | | | | | | 35.00 | | | | |
| VOID RATIO e | | | | | | | | | | | |
| SATURATION S_r % | | | | | | | | | | | |
| GRAVEL (2~75mm) % | | | | | | | | | | | |
| SAND (75 μ m ~2mm) % | | | 1.2 | | 41.6 | 39.0 | | 1.4 | | 13.6 | 31.4 |
| SILT (5 ~75 μ m) % | | | 81.8 | | 57.4 | 61.0 | | 82.2 | | 79.4 | 66.6 |
| CLAY (Under 5 μ m) % | | | 17.0 | | 1.0 | | | 16.4 | | 7.0 | 2.0 |
| UNIFORMITY U_c | | | | | | | | | | | |
| CURVATURE U_c' | | | | | | | | | | | |
| MAX. GRAIN SIZE mm | | | | | | | | | | | |
| LIQUID LIMIT w_L % | | 42.00 | 40.00 | 38.00 | | | | 40.00 | 39.00 | 38.00 | |
| PLASTIC LIMIT w_p % | | 22.79 | 21.20 | 22.79 | | | | 22.20 | 21.80 | 22.40 | |
| PLASTICITY INDEX I_p | | 19.21 | 18.80 | 15.30 | | | | 17.80 | 17.20 | 15.60 | |
| CONSISTENCY INDEX | | | | | | | | | | | |
| CLASSIFICATION | | | | | | | | | | | |
| UNIFIED SOIL CLASS. | | | ML | | | | | ML | | CL | |
| UNCONFINED COMPRESSION STRENGTH q_u kgf/cm ² | | | | | | | 0.394 | | | | |
| FAILURE STRAIN % | | | | | | | 8 | | | | |

SUMMARY OF LABORATORY TEST (3)

| SITE LOCATION (Site No.) | | Banskhali, Jaldi (II-3) | | | | | | | | | | | |
|--------------------------|---|-------------------------|----------------|--------------|----------------|----------------|----------------|--------------|----------------|--------------|--------------|----------------|-------|
| BORING HOLE No. | | 3 - 1 | | | | | | 3 - 2 | | | | | |
| SAMPLE No. | | U-1 | U-2 | D-4 | D-15 | D-18 | D-19 | U-1 | U-2 | D-5 | D-6 | D-19 | |
| DEPTH (m) | | 1.50 1.95 | 16.00 16.45 | 4.00 4.45 | 15.00 15.45 | 18.00 18.45 | 19.00 19.45 | 1.60 2.05 | 18.50 18.95 | 5.00 5.45 | 6.00 6.45 | 19.00 19.45 | |
| GENERAL | DRY DENSITY ρ_s g/cm ³ | 1.139 | 1.20 | | | | | 1.27 | 1.26 | | | | |
| | WET DENSITY ρ g/cm ³ | 1.72 | 1.79 | | | | | 1.83 | 1.83 | | | | |
| | SPECIFIC GRAVITY ρ_s g/cm ³ | | | 2.655 | | 2.641 | 2.639 | | | 2.655 | 2.647 | 2.652 | |
| | NATU. MOIST. CONT. W_n % | 50.93 | 48.58 | | | | | 43.88 | 44.37 | | | | |
| GRAIN SIZE | VOID RATIO e | | | | | | | | | | | | |
| | SATURATION S_r % | | | | | | | | | | | | |
| | GRAVEL (2~75mm) % | | | | | | | | | | | | |
| | SAND (75 μ m ~2mm) % | | | 2.6 | | 22.0 | 21.0 | | | 4.0 | 7.8 | 1.6 | |
| | SILT (5 ~75 μ m) % | | | 83.4 | | 76.0 | 77.0 | | | 86.0 | 84.2 | 81.4 | |
| | CLAY (Under 5 μ m) % | | | 14.0 | | 2.0 | 1.0 | | | 10.0 | 8.0 | 17.0 | |
| | UNIFORMITY U_c | | | | | | | | | | | | |
| | CURVATURE U_c' | | | | | | | | | | | | |
| | MAX. GRAIN SIZE mm | | | | | | | | | | | | |
| | ATTEBERG LIMITS | LIQUID LIMIT W_L % | | 41.00 | 39.00 | | 36.00 | | | | 39.00 | 38.00 | 41.00 |
| PLASTIC LIMIT W_P % | | | 23.39 | 22.60 | | 22.70 | | | | 22.18 | 22.58 | 23.19 | |
| PLASTICITY INDEX I_P | | | 17.61 | 16.40 | | 13.30 | | | | 16.82 | 15.42 | 17.81 | |
| CONSISTENCY INDEX | | | | | | | | | | | | | |
| SOIL CLASS | CLASSIFICATION | | | | | | | | | | | | |
| | UNIFIED SOIL CLASS. | | CL | | | ML | | | | CL | CL | UL | |
| UNCONFINED COMPRESS | UNCONFINED COMPRESSION STRENGTH q_u kgf/cm ² | 0.247 | 0.425 | | | | | 0.323 | 0.704 | | | | |
| | FAILURE STRAIN % | 10 | 4 | | | | | 8 | 6 | | | | |

SUMMARY OF LABORATORY TEST (4)

| SITE LOCATION (Site No.) | Cox's Bazar, Sadar, Jalalabad (II-4) | | | | | | | | | | Cox's Bazar, Sadar, Jalalabad (II-5) | | | | | |
|-------------------------------------|--------------------------------------|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------------------------|-------|-------|-------|-------|--|
| | 4 - 1 | | | | | 4 - 2 | | | | | 5 - 1 | | | 5 - 2 | | |
| | U-1 | U-2 | D-11 | U-1 | U-2 | U-1 | U-2 | D-2 | U-12 | U-1 | D-7 | D-10 | U-1 | U-2 | D-6 | |
| GENERAL | BORING HOLE No. | | | | | | | | | | | | | | | |
| | SAMPLE No. | | | | | | | | | | | | | | | |
| | DEPTH (m) | | | | | | | | | | | | | | | |
| | DRY DENSITY | ρ_s g/cm ³ | 1.327 | 1.390 | 1.498 | 1.174 | 1.301 | 1.497 | | 1.256 | 1.475 | 1.575 | 1.390 | 1.747 | 1.476 | |
| | WET DENSITY | ρ_t g/cm ³ | 1.860 | 1.909 | 1.881 | 1.740 | 1.839 | 1.853 | | 1.782 | 1.916 | 1.916 | 1.867 | 2.136 | 1.888 | |
| | SPECIFIC GRAVITY | ρ_s g/cm ³ | 2.595 | 2.606 | 2.67 | 2.587 | 2.595 | 2.651 | 2.59 | 2.590 | 2.609 | 2.673 | 2.623 | 2.668 | 2.623 | |
| | NATU. MOIST. CONT. | W_n % | 40.19 | 37.33 | 25.60 | 48.19 | 41.30 | 23.74 | 42.16 | 41.89 | 29.94 | 21.69 | 34.28 | 22.26 | 27.90 | |
| | VOID RATIO | e | | | | | | | | | | | | | | |
| | SATURATION | S_r % | | | | | | | | | | | | | | |
| | GRAVEL (2~75mm) | % | | | | | | | | | | | | | | |
| | SAND (75 μ m ~2mm) | % | 8 | 8 | 76 | 7 | 24 | 32 | 3 | 27 | 37 | 93 | 30 | 85 | 28 | |
| | SILT (5 ~75 μ m) | % | 76 | 81 | 24 | 73 | 59 | 64 | 78 | 58 | 50 | 7 | 58 | 15 | 64 | |
| | CLAY (Under 5 μ m) | % | 16 | 11 | 0 | 20 | 17 | 4 | 19 | 15 | 13 | 0 | 12 | 0 | 8 | |
| | UNIFORMITY | U_c | | | | | | | | | | | | | | |
| | CURVATURE | U_c' | | | | | | | | | | | | | | |
| | MAX. GRAIN SIZE | mm | | | | | | | | | | | | | | |
| ATTERBERG LIMITS | LIQUID LIMIT | W_L % | 50.84 | 41.48 | N.P. | 51.85 | 45.33 | N.P. | | 48.99 | 41.41 | N.P. | 49.78 | N.P. | 34.06 | |
| | PLASTIC LIMIT | W_P % | 26.40 | 25.00 | | 28.00 | 26.40 | | | 25.00 | 25.00 | | 25.64 | | 19.23 | |
| | PLASTICITY INDEX | I_P | 24.44 | 16.48 | | 23.85 | 18.93 | | | 23.99 | 16.41 | | 24.14 | | 14.83 | |
| SOIL CLASSIFICATION | CLASSIFICATION | | | | | | | | | | | | | | | |
| UNCONSOLIDATED COMPRESSIVE STRENGTH | UNIFIED SOIL CLASS. | | MH | OL | SM | MH | CL | ML | | ML | CL | SM | ML | SM | CL | |
| | UNCONSOLIDATED COMPRESSIVE STRENGTH | q_u kgf/cm ² | 0.311 | 0.531 | | 0.414 | 0.376 | | | 0.371 | | | 0.350 | | | |
| | FAILURE STRAIN | % | 10.71 | 10.71 | | 10.71 | 10.71 | | | 8.92 | | | 10.71 | | | |

SUMMARY OF LABORATORY TEST (5)

| SITE LOCATION (Site No.) | | Cox's Bazar, Sadar, Jalalabad (II-6) | | | | | | Ramu, Patakarkul (II-10) | | | | | |
|-----------------------------------|---|--------------------------------------|-------|-------|-------|-------|-------|--------------------------|-------|-------|--------|-------|-------|
| BORING HOLE No. | | 6 - 1 | | | 6 - 2 | | | 10 - 1 | | | 10 - 2 | | |
| SAMPLE No. | | U-1 | D-8 | D-14 | U-1 | D-7 | D-11 | U-1 | U-2 | D-13 | U-1 | U-2 | D-2 |
| DEPTH (m) | | 3.10 | 7.55 | 13.55 | 3.10 | 6.55 | 10.55 | 4.10 | 6.10 | 12.55 | 4.10 | 7.10 | 1.55 |
| | | 3.55 | 8.00 | 14.00 | 3.55 | 7.00 | 11.00 | 4.55 | 6.55 | 13.00 | 4.55 | 7.55 | 2.00 |
| GENERAL | DRY DENSITY ρ_s g/cm ³ | 1.549 | 1.520 | 1.519 | 1.563 | 1.539 | 1.867 | 1.379 | 1.361 | 1.684 | 1.396 | 1.379 | 1.328 |
| | WET DENSITY ρ_w g/cm ³ | 1.909 | 1.836 | 1.888 | 1.909 | 1.881 | 1.570 | 1.867 | 1.895 | 2.037 | 1.902 | 1.895 | 1.864 |
| | SPECIFIC GRAVITY ρ_s g/cm ³ | 2.634 | 2.670 | 2.668 | 2.665 | 2.673 | 2.645 | 2.612 | 2.601 | 2.601 | 2.582 | 2.595 | 2.617 |
| | NATU. MOIST. CONT. W. % | 23.28 | 20.75 | 24.38 | 22.17 | 22.26 | 18.89 | 35.38 | 39.29 | 20.91 | 36.27 | 37.43 | 40.37 |
| | VOID RATIO e | | | | | | | | | | | | |
| | SATURATION S, % | | | | | | | | | | | | |
| GRAIN SIZE | GRAVEL (2~75mm) % | | | | | | | | | | | | |
| | SAND (75 μ m ~2mm) % | 76 | 71 | 82 | 77 | 80 | 60 | 2 | 9 | 97 | 4 | 9 | 12 |
| | SILT (5 ~75 μ m) % | 24 | 29 | 18 | 23 | 20 | 40 | 81 | 73 | 3 | 67 | 75 | 78 |
| | CLAY (Under 5 μ m) % | | | | | | | 17 | 18 | 0 | 29 | 16 | 10 |
| UNIFORMITY U _c | | | | | | | | | | | | | |
| CURVATURE U _{c'} | | | | | | | | | | | | | |
| MAX. GRAIN SIZE mm | | | | | | | | | | | | | |
| ATTENBERG LIMITS | LIQUID LIMIT WL % | N.P. | N.P. | N.P. | N.P. | N.P. | N.P. | 54.12 | 58.20 | N.P. | 57.95 | 47.20 | 36.30 |
| | PLASTIC LIMIT WP % | | | | | | | 26.92 | 29.16 | | 29.62 | 25.00 | 20.00 |
| | PLASTICITY INDEX I _p | | | | | | | 27.20 | 29.04 | | 28.33 | 22.20 | 16.30 |
| | CONSISTENCY INDEX | | | | | | | | | | | | |
| SOIL CLASSIFICATION | | | | | | | | | | | | | |
| UNCOMPRESSED COMPRESSIVE STRENGTH | UNIFIED SOIL CLASS. | SM | SM | SM | SM | SM | SM | MH | MH | SW | MH | ML | CL |
| | qu kgf/cm ² | 0.371 | | | 0.509 | | | 0.545 | 0.519 | | 0.637 | 0.752 | |
| | FAILURE STRAIN % | 5.35 | | | 5.35 | | | 8.92 | 10.71 | | 8.92 | 10.71 | |
| | | | | | | | | | | | | | |

SUMMARY OF LABORATORY TEST (6)

| SITE LOCATION (Site No.) | | Chokoria, East Boro Bheola (II-7) | | | | | | | | | | | | | |
|--------------------------|---|-----------------------------------|----------------|----------------|--------------|----------------|----------------|---------------|----------------|----------------|----------------|----------------|----------------|--|--|
| BORING HOLE No. | | 7 - 1 | | | | | | | 7 - 2 | | | | | | |
| SAMPLE No. | DEPTH (m) | U-1 | U-2 | U-3 | D-1 | D-12 | D-13 | U-1 | U-2 | U-3 | D-11 | D-12 | D-14 | | |
| GENERAL | DRY DENSITY ρ_s g/cm ³ | 9.50 10.00 | 19.50 20.00 | 29.00 29.50 | 0.50 1.00 | 11.50 12.00 | 12.50 13.00 | 9.50 10.00 | 19.50 20.00 | 29.00 29.50 | 10.50 11.00 | 11.50 12.00 | 13.50 14.00 | | |
| | WET DENSITY ρ g/cm ³ | 1.525 | 1.467 | 1.560 | | | | 1.499 | 1.394 | 1.635 | | | | | |
| | SPECIFIC GRAVITY ρ_s g/cm ³ | 1.961 | 1.905 | 1.920 | | | | 1.950 | 1.898 | 1.999 | | | | | |
| GRAIN SIZE | NATU. MOIST. CONT. w_n % | 28.6 | 29.9 | 23.1 | | | | 2.681 | 2.622 | | | 2.660 | | | |
| | VOID RATIO e | | | | | | | 30.1 | 36.2 | 22.3 | | | | | |
| | SATURATION S_r % | | | | | | | | | | | | | | |
| | GRAVEL (2~75mm) % | | | | | | | | | | | | | | |
| | SAND (75 μ m ~2mm) % | | | | 10 | 71 | 88 | | | | 56 | 74 | | | |
| | SILT (5 ~75 μ m) % | | | | 90 | 29 | 32 | | | | 34 | 26 | | | |
| | CLAY (Under 5 μ m) % | | | | | | | | | | | | | | |
| | UNIFORMITY U_c | | | | | | | | | | | | | | |
| | CURVATURE U_c' | | | | | | | | | | | | | | |
| | MAX. GRAIN SIZE mm | | | | | | | | | | | | | | |
| ATTEBERG LIMITS | LIQUID LIMIT w_L % | 42.0 | 44.0 | 59.0 | | | | 42.0 | 57.0 | 48.0 | | | 45.0 | | |
| | PLASTIC LIMIT w_p % | 19.0 | 21.0 | 33.0 | | | | 18.0 | 28.0 | 26.0 | | | 20.0 | | |
| | PLASTICITY INDEX I_p | 23.0 | 23.0 | 26.0 | | | | 24.0 | 29.0 | 22.0 | | | 25.0 | | |
| SOIL CLASS | CONSISTENCY INDEX | | | | | | | | | | | | | | |
| | CLASSIFICATION | | | | | | | | | | | | | | |
| | UNIFIED SOIL CLASS. | | | | | | | | | | | | | | |
| UNCONSOLIDATED COMPRESS | UNCONSOLIDATED COMPRESSION STRENGTH q_u kgf/cm ² | 1.068 | 0.608 | 1.442 | | | | 0.791 | 0.617 | 2.249 | | | | | |
| | FAILURE STRAIN % | 12 | 13 | 10 | | | | 13 | 10 | 9 | | | | | |

SUMMARY OF LABORATORY TEST (7)

| SITE LOCATION (Site No.) | | Chokoria, Badarkhali (II-8) | | | | | | | | | | | | | |
|--------------------------|---|-----------------------------|----------------|----------------|--------------|----------------|----------------|----------------|---------------|----------------|----------------|----------------|----------------|----------------|--|
| BORING HOLE No. | | 8 - 1 | | | | | | | 8 - 2 | | | | | | |
| SAMPLE No. | | U-1 | U-2 | U-3 | D-6 | D-13 | D-14 | D-26 | U-1 | U-2 | U-3 | D-12 | D-15 | D-27 | |
| DEPTH (m) | | 9.50 10.00 | 19.50 20.00 | 29.00 29.50 | 5.50 6.00 | 12.50 13.00 | 13.50 14.00 | 25.50 26.00 | 9.50 10.00 | 19.50 20.00 | 29.00 29.50 | 11.50 12.00 | 14.50 15.00 | 26.50 27.00 | |
| GENERAL | DRY DENSITY ρ_d g/cm ³ | 1.275 | 1.413 | 1.634 | | | | | 1.421 | 1.425 | 1.606 | | | | |
| | WET DENSITY ρ_w g/cm ³ | 1.735 | 1.869 | 2.029 | | | | | 1.843 | 1.855 | 1.994 | | | | |
| | SPECIFIC GRAVITY ρ_s g/cm ³ | 2.680 | | 2.684 | | 2.685 | | 2.657 | 2.601 | 2.682 | | | 2.660 | | |
| GRAIN SIZE | NATU. MOIST. CONT. W_n % | 36.1 | 32.3 | 24.2 | | | | | 29.7 | 30.2 | 24.2 | | | | |
| | VOID RATIO e | | | | | | | | | | | | | | |
| | SATURATION S_r % | | | | | | | | | | | | | | |
| | GRAVEL (2~75mm) % | | | | | | | | | | | | | | |
| | SAND (75 μ m ~2mm) % | | | | | 75 | 73 | 82 | | | | 69 | 57 | 81 | |
| | SILT (5 ~75 μ m) % | | | | | | | | | | | | | | |
| | CLAY (Under 5 μ m) % | | | | | 25 | 27 | 18 | | | | 31 | 43 | 19 | |
| | UNIFORMITY U_c | | | | | | | | | | | | | | |
| | CURVATURE $U_{c'}$ | | | | | | | | | | | | | | |
| | MAX. GRAIN SIZE mm | | | | | | | | | | | | | | |
| ATTERBERG LIMITS | LIQUID LIMIT W_L % | 45.0 | 44.0 | 52.0 | 41.0 | | | | 39.0 | 46.0 | 46.0 | | | | |
| | PLASTIC LIMIT W_p % | 22.0 | 20.0 | 24.0 | 17.0 | | | | 17.0 | 22.0 | 21.0 | | | | |
| | PLASTICITY INDEX I_p | 23.0 | 24.0 | 28.0 | 24.0 | | | | 22.0 | 24.0 | 25.0 | | | | |
| SOIL CLASSIFICATION | CONSISTENCY INDEX | | | | | | | | | | | | | | |
| | UNIFIED SOIL CLASS. | | | | | | | | | | | | | | |
| | UNCONFINED COMPRESSIVE STRENGTH q_u kgf/cm ² | 0.300 | 0.458 | 1.967 | | | | | 0.643 | 0.491 | 1.193 | | | | |
| | FAILURE STRAIN % | 16 | 14 | 10 | | | | | 14 | 15 | 12 | | | | |

SUMMARY OF LABORATORY TEST (8)

| SITE LOCATION (Site No.) | | Chokoria, Chiringa (II-9) | | | | | | | | | | | | | | | |
|----------------------------|--|---------------------------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|--|--|
| BORING HOLE No. | | 9 - 1 | | | | | | | | 9 - 2 | | | | | | | |
| SAMPLE No. | | U-1 | U-2 | U-3 | D-3 | D-14 | D-17 | D-25 | D-27 | U-1 | U-2 | U-3 | D-6 | D-8 | D-16 | | |
| DEPTH (m) | | 9.50 | 19.50 | 28.50 | 2.50 | 13.50 | 16.50 | 24.50 | 26.50 | 9.50 | 18.50 | 28.50 | 5.50 | 7.50 | 15.50 | | |
| | | 10.00 | 20.00 | 29.00 | 3.00 | 14.00 | 17.00 | 25.00 | 27.00 | 10.00 | 19.00 | 29.00 | 6.00 | 8.00 | 16.00 | | |
| GENERAL | DRY DENSITY ρ_s g/cm ³ | 1.562 | 1.626 | 1.643 | | | 1.541 | | | 1.610 | | 1.585 | | | | | |
| | WET DENSITY ρ g/cm ³ | 1.938 | 1.985 | 2.015 | | | 1.929 | | | 1.944 | | 1.970 | | | | | |
| | SPECIFIC GRAVITY ρ_s g/cm ³ | 2.657 | 2.656 | 2.684 | | | | | | 2.659 | 2.657 | 2.685 | | | | | |
| GRAIN SIZE | NATU. MOIST. CONT. W_n % | 24.1 | 22.1 | 22.7 | | | 25.2 | | | 23.9 | 23.1 | 24.3 | | | | | |
| | VOID RATIO e | | | | | | | | | | | | | | | | |
| | SATURATION S_r % | | | | | | | | | | | | | | | | |
| ATTENERS | GRAVEL (2~75mm) % | | | | | | | | | | | | | | | | |
| | SAND (75 μ m ~2mm) % | 84 | 93 | | | 89 | 72 | | | 71 | 61 | | | 54 | | | |
| | SILT (5 ~75 μ m) % | 16 | 7 | | | 11 | 28 | | | 29 | 39 | | | 46 | | | |
| | CLAY (Under 5 μ m) % | | | | | | | | | | | | | | | | |
| | UNIFORMITY U_c | | | | | | | | | | | | | | | | |
| SOIL CLASS | CURVATURE U_c' | | | | | | | | | | | | | | | | |
| | MAX. GRAIN SIZE mm | | | | | | | | | | | | | | | | |
| | LIQUID LIMIT W_L % | | | 59.0 | 41.0 | | | 57.0 | 47.0 | | | 48.0 | 45.0 | | 47.0 | | |
| | PLASTIC LIMIT W_P % | | | 34.0 | 18.0 | | | 33.0 | 25.0 | | | 25.0 | 19.0 | | 22.0 | | |
| | PLASTICITY INDEX I_P | | | 25.0 | 23.0 | | | 24.0 | 22.0 | | | 23.0 | 26.0 | | 25.0 | | |
| UNCONSOLIDATED COMPRESSION | CONSISTENCY INDEX | | | | | | | | | | | | | | | | |
| | CLASSIFICATION | | | | | | | | | | | | | | | | |
| | UNIFIED SOIL CLASS. | | | | | | | | | | | | | | | | |
| FAILURE STRAIN | UNCONSOLIDATED COMPRESSION q_u kgf/cm ² | | | 2.222 | | | | | | | | 1.213 | | | | | |
| | FAILURE STRAIN % | | | 10 | | | | | | | | 13 | | | | | |

SUMMARY OF LABORATORY TEST (9)

| SITE LOCATION (Site No.) | Ukhia, Jaliapara (II-11) | | | | | | | Chokoria, Magnama (II-14) | | | | | | |
|-------------------------------------|---|-------|-------|--------|-------|-------|-------|---------------------------|-------|-------|--------|-------|-------|----|
| | 11 - 1 | | | 11 - 2 | | | | 14 - 1 | | | 14 - 2 | | | |
| BORING HOLE No. | U-1 | U-2 | D-8 | U-1 | D-7 | D-10 | U-1 | U-2 | D-5 | D-11 | U-1 | U-2 | D-8 | |
| SAMPLE No. | 2.10 | 4.10 | 7.55 | 2.10 | 6.55 | 9.55 | 1.10 | 2.10 | 4.55 | 10.55 | 1.10 | 2.10 | 7.55 | |
| DEPTH (m) | 2.55 | 4.55 | 8.00 | 2.55 | 7.00 | 10.00 | 1.55 | 2.55 | 5.00 | 11.00 | 1.55 | 2.55 | 8.00 | |
| GENERAL | DRY DENSITY ρ_s g/cm ³ | 1.604 | 1.648 | 1.414 | 1.334 | 1.563 | 1.351 | 1.375 | 1.469 | | 1.332 | 1.305 | 1.364 | |
| | WET DENSITY ρ_w g/cm ³ | 2.037 | 2.051 | 1.902 | 1.846 | 1.959 | 1.848 | 1.860 | 1.768 | | 1.839 | 1.860 | 1.768 | |
| | SPECIFIC GRAVITY ρ_s g/cm ³ | 2.569 | 2.609 | 2.617 | 2.623 | 2.609 | 2.579 | 2.585 | 2.614 | | 2.617 | 2.609 | 2.612 | |
| | NATU. MOIST. CONT. w_n % | 26.98 | 24.46 | 34.50 | 25.58 | 38.39 | 36.85 | 35.28 | 20.36 | 36.00 | 38.00 | 42.42 | 34.24 | |
| | VOID RATIO e | | | | | | | | | | | | | |
| | SATURATION S_r % | | | | | | | | | | | | | |
| | GRAVEL (2~75mm) % | | | | | | | | | | | | | |
| | SAND (75 μ m ~2mm) % | 3 | 4 | 4 | 25 | 3 | 10 | 2 | 4 | 26 | 30 | 2 | 4 | 44 |
| | SILT (5 ~75 μ m) % | 72 | 82 | 79 | 63 | 82 | 74 | 73 | 78 | 62 | 59 | 85 | 81 | 44 |
| | CLAY (Under 5 μ m) % | 25 | 14 | 17 | 12 | 15 | 16 | 25 | 18 | 12 | 11 | 13 | 15 | 12 |
| UNIFORMITY U_c | | | | | | | | | | | | | | |
| CURVATURE U_c' | | | | | | | | | | | | | | |
| MAX. GRAIN SIZE mm | | | | | | | | | | | | | | |
| ATTERBERG LIMITS | LIQUID LIMIT w_L % | 55.46 | 51.47 | 44.87 | 50.95 | 37.87 | 69.23 | 42.06 | 37.04 | | 51.02 | 44.08 | 34.40 | |
| | PLASTIC LIMIT w_p % | 28.46 | 26.92 | 24.00 | 28.40 | 21.42 | 30.76 | 25.38 | 20.62 | | 26.92 | 25.38 | 19.23 | |
| | PLASTICITY INDEX I_p | 27.00 | 24.55 | 20.87 | 22.55 | 29.77 | 38.47 | 16.68 | 16.42 | | 24.10 | 18.70 | 15.17 | |
| CONSISTENCY INDEX | | | | | | | | | | | | | | |
| SOIL CLASSIFICATION | | | | | | | | | | | | | | |
| UNIFIED SOIL CLASS. | MH | MH | ML | MH | MH | ML | MH | ML | ML | | MH | MH | ML | |
| UNCONSOLIDATED COMPRESSION STRENGTH | UNCONSOLIDATED COMPRESSION STRENGTH q_u kgf/cm ² | 2.365 | 2.410 | | 4.451 | | 1.222 | 0.597 | | | 0.687 | 0.234 | | |
| | FAILURE STRAIN % | 8.92 | 5.35 | | 8.92 | | 8.92 | 8.92 | | | 10.71 | 10.71 | | |

SUMMARY OF LABORATORY TEST (10)

| SITE LOCATION (Site No.) | | Chokoria, Khotakhari (II-12) | | | | | | | | | | | |
|-------------------------------|---|------------------------------|-------|-------|------|-------|-------|--------|-------|-------|-------|-------|--|
| BORING HOLE No. | | 12 - 1 | | | | | | 12 - 2 | | | | | |
| SAMPLE No. | | U-1 | U-2 | D-2 | D-6 | D-16 | D-27 | U-1 | U-2 | D-3 | D-14 | D-26 | |
| DEPTH (m) | | 9.50 | 19.50 | 1.50 | 5.50 | 15.50 | 26.50 | 9.50 | 19.50 | 1.50 | 13.50 | 25.50 | |
| | | 10.00 | 20.00 | 2.00 | 6.00 | 16.00 | 27.00 | 10.00 | 20.00 | 2.00 | 14.00 | 26.00 | |
| GENERAL | DRY DENSITY ρ_s g/cm ³ | 1.618 | 1.620 | | | 1.612 | | 1.611 | 1.632 | | | 1.620 | |
| | WET DENSITY ρ g/cm ³ | 1.962 | 1.982 | | | 1.971 | | 1.996 | 2.025 | | | 1.981 | |
| GRAIN SIZE | SPECIFIC GRAVITY ρ_s g/cm ³ | 2.658 | 2.660 | | | 2.659 | | 2.659 | 2.672 | | | 2.656 | |
| | NATU. MOIST. CONT. w_p % | 21.3 | 22.4 | | | 22.3 | | 23.9 | 24.1 | | | 22.3 | |
| ATTRIB. LIMITS | VOID RATIO e | | | | | | | | | | | | |
| | SATURATION S_r % | | | | | | | | | | | | |
| UNCONFINED COMPRESS. STRENGTH | GRAVEL (2~75mm) % | | | | | | | | | | | | |
| | SAND (75 μ m ~2mm) % | 87 | 76 | | 88 | | 88 | 78 | 8 | | | 78 | |
| SOIL CLASS. | SILT (5 ~75 μ m) % | 13 | 24 | | 12 | | 12 | 22 | 92 | | | 22 | |
| | CLAY (Under 5 μ m) % | | | | | | | | | | | | |
| UNCONFINED COMPRESS. STRENGTH | UNIFORMITY U_c | | | | | | | | | | | | |
| | CURVATURE U_c' | | | | | | | | | | | | |
| UNCONFINED COMPRESS. STRENGTH | MAX. GRAIN SIZE mm | | | | | | | | | | | | |
| | LIQUID LIMIT w_L % | | | 42.00 | | | | | | 44.00 | 46.00 | | |
| UNCONFINED COMPRESS. STRENGTH | PLASTIC LIMIT w_P % | | | 18.00 | | | | | | 19.00 | 21.00 | | |
| | PLASTICITY INDEX I_p | | | 24.00 | | | | | | 25.00 | 25.00 | | |
| UNCONFINED COMPRESS. STRENGTH | CONSISTENCY INDEX | | | | | | | | | | | | |
| | CLASSIFICATION | | | | | | | | | | | | |
| UNCONFINED COMPRESS. STRENGTH | UNIFIED SOIL CLASS. | | | | | | | | | | | | |
| | UNCONFINED COMPRESS. STRENGTH q_u kgf/cm ² | | | | | | | | | | | | |
| UNCONFINED COMPRESS. STRENGTH | FAILURE STRAIN % | | | | | | | | | | | | |

SUMMARY OF LABORATORY TEST (11)

| SITE LOCATION (Site No.) | | Chokoria, Chiringa (II-13) | | | | | | Chokoria, Magnama (II-15) | | | | | | | |
|---------------------------------|----------------------------|----------------------------|--------------|----------------|--------------|--------------|----------------|---------------------------|--------------|--------------|----------------|--------------|--------------|--------------|----------------|
| BORING HOLE No. | | 13 - 1 | | 13 - 2 | | 15 - 1 | | 15 - 2 | | 15 - 2 | | 15 - 2 | | | |
| SAMPLE No. | | U-1 | D-1 | D-21 | U-1 | D-1 | D-11 | U-1 | U-2 | D-3 | D-15 | U-1 | U-2 | D-7 | D-13 |
| DEPTH (m) | | 1.50 1.95 | 1.00 1.45 | 20.00 20.45 | 1.50 1.95 | 1.00 1.45 | 11.00 11.45 | 6.10 6.55 | 7.10 7.55 | 2.55 3.00 | 14.55 15.00 | 2.10 2.55 | 3.10 3.55 | 6.55 7.00 | 12.55 13.00 |
| DRY DENSITY | ρ_s g/cm ³ | 1.52 | | | 1.43 | | | 1.313 | 1.297 | 1.393 | | 1.216 | 1.304 | 1.377 | |
| WET DENSITY | ρ_w g/cm ³ | 1.87 | | | 1.86 | | | 1.895 | 1.786 | 1.846 | | 1.754 | 1.793 | 1.853 | |
| SPECIFIC GRAVITY | ρ_w g/cm ³ | 2.623 | 2.647 | 2.622 | 2.643 | 2.639 | 2.622 | 2.628 | 2.668 | 2.579 | | 2.595 | 2.617 | 2.623 | |
| NATU. MOIST. CONT. | W _n % | 22.36 | | | 30.09 | | | 37.73 | 32.48 | 44.32 | 26.52 | 44.18 | 37.52 | 34.50 | 28.25 |
| VOID RATIO | e | | | | | | | | | | | | | | |
| SATURATION | S _r % | | | | | | | | | | | | | | |
| GRAVEL (2~75mm) | % | | | | | | | | | | | | | | |
| SAND (75 μ m ~2mm) | % | 45.0 | 13.5 | 66.8 | 17.5 | 11.0 | 62.5 | 40 | 69 | 5 | 74 | 3 | 23 | 32 | 29 |
| SILT (5 ~75 μ m) | % | 55.0 | 83.5 | 33.2 | 81.5 | 84.0 | 37.5 | 52 | 31 | 67 | 26 | 78 | 67 | 56 | 65 |
| CLAY (Under 5 μ m) | % | 0 | 3.0 | 0 | 1.0 | 5.0 | 0 | 8 | 0 | 28 | 0 | 19 | 10 | 12 | 6 |
| UNIFORMITY | U _c | | | | | | | | | | | | | | |
| CURVATURE | U _{c'} | | | | | | | | | | | | | | |
| MAX. GRAIN SIZE | mm | | | | | | | | | | | | | | |
| LIQUID LIMIT W _L | % | | 36.50 | | 35.50 | 37.00 | | 36.72 | N.P. | 48.00 | | 46.80 | 35.95 | 35.85 | |
| PLASTIC LIMIT W _P | % | | 22.62 | | 21.11 | 22.93 | | 20.68 | | 25.92 | | 23.07 | 19.23 | 20.00 | |
| PLASTICITY INDEX I _p | | | 13.88 | | 13.39 | 14.07 | | 16.04 | | 22.08 | | 23.73 | 16.72 | 15.85 | |
| CONSISTENCY INDEX | | | | | | | | | | | | | | | |
| CLASSIFICATION | | | | | | | | | | | | | | | |
| UNIFIED SOIL CLASS. | | | ML | | ML | ML | | OL | SM | OL | | OL | ML | ML | |
| UNCONFINED COMPRESSIVE STRENGTH | qu kgf/cm ² | 0.132 | | | 0.316 | | | 0.292 | 0.440 | | | 0.212 | 0.391 | | |
| FAILURE STRAIN | % | 4 | | | 6 | | | 8.92 | 5.35 | | | 8.92 | 7.14 | | |

