











FINAL BOREHOLE LOG AND SUMMARY OF TEST RESULTS **MRW - 16b**PROJECT: **Pasig-Marikina River Channel Imp. Proj.**GROUND ELEV.
(MLLW = Zero Datum) **+ 11.531**DEPTH OF WATER: **1.55** m.LOCATION: **Right Side Offshore, Libis, Quezon City**STATION NO.: **9 + 000**DATE MEASURED: **23 Jan. 2001**NO: **BMRW-16** DATE DRILLED: **22 - 23 January 2001**WEATHER: **FAIR**TIME MEASURED: **4:00 PM**COORDINATES: **1616623.500** N, **508305.100** E

| SAMPLE NO. | RECOVERY (%) SAMPLE | LOG SYMBOL | CLASSIFICATION | RQD | DESCRIPTION | BLOWS (SPT) | | | STANDARD PENETRATION TEST (SPT) (N-VALUE) 10 20 30 40 50 | NATURAL MOIST. CONTENT, % | TOTAL UNIT WEIGHT, g/cc | ATTERBERG LIMITS | | SPECIFIC GRAVITY | UNCONFINED COMP. TEST | | SIEVE ANALYSIS % PASSING SIEVE | | | |
|------------|------------------------|---|----------------|-----|--|----------------|----------|----------|--|------------------------------|----------------------------|---------------------|------------------------|---------------------|--------------------------------|----------------|-----------------------------------|-----|----|-----|
| | | | | | | 15 cm | 15 cm | 15 cm | | | | LIQUID LIMIT, % | PLASTICITY INDEX, % | | STRENGTH kg/cm ² | STRAIN %, % | 4 | 10 | 40 | 200 |
| | | | | | | | | | | | | | | | | | | | | |
| SS-21 | 89 |  | CH | | Silty CLAY; brown; 98-99% high plasticity clay; VERY STIFF. | 7 | 10 | 11 | | 39 | | 71 | 42 | 2.60 | | | | 100 | 99 | 98 |
| SS-22 | 89 |  | | | | 8 | 10 | 12 | | | | | | | | | | | | |
| SS-23 | 89 |  | | | | 6 | 6 | 9 | | | | | | | | | | | | |
| SS-24 | 89 |  | | | | 7 | 12 | 12 | | 35 | | 73 | 51 | 2.60 | | | | 100 | 99 | |
| SS-25 | 89 |  | | | | 9 | 11 | 14 | | | | | | | | | | | | |
| SS-26 | 89 |  | SM | | Sandy CLAY; gray; 18% fine sand; 81% high plasticity clay; HARD To VERY STIFF. | 11 | 13 | 17 | | | | | | | | | | | | |
| SS-27 | 89 |  | | | 10 | 10 | 18 | | 31 | | 51 | 29 | 2.61 | | | | 100 | 99 | 81 | |
| SS-28 | 78 |  | | | 13 | 17 | 19 | | | | | | | | | | | | | |
| SS-29 | 78 |  | | | 15 | 19 | 21 | | | | | | | | | | | | | |
| SS-30 | 56 |  | | | 8 | 28 | 22/5 | | 26 | | | | 2.63 | | | | 100 | 77 | 42 | |
| | | | | | End of Borehole (29.90 m) | | | | | | | | | | | | | | | |
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**BASIC TECHNOLOGY AND
MANAGEMENT CORPORATION**
2nd Floor Prudential Bank Building,
1377 A. Mabini St., Ermita, Manila

MACHINE: **ACKER ACE**
J. MADERA
DRILLER: **I. LUENGAS**
M. ESTAURA
SUPERVISOR: **M. VILLAFUERTE**

LEGEND:



SS - SPLIT SPOON SAMPLE
WS - WASH SAMPLE
UDS - UNDISTURBED SAMPLE
CR - CORE SAMPLE
* W/ HYDROMETER ANALYSIS

Figure 5-3-3 (181/221) BORING LOGS (PHASE I)

FINAL BOREHOLE LOG AND SUMMARY OF TEST RESULTS **MRW-16b**PROJECT: **Pasig-Marikina River Channel Imp. Proj.**GROUND ELEV.
(MLLW = Zero Datum) **+ 11.531**DEPTH OF WATER: **1.55** m.LOCATION: **Right Side Offshore, Libis, Quezon City**STATION NO.: **9 + 000**DATE MEASURED: **23 Jan. 2001**NO: **BMRW-16** DATE DRILLED: **22 - 23 January 2001**WEATHER: **FAIR**TIME MEASURED: **4:00 PM**COORDINATES: **1616623.500** N, **508305.100** E

| SAMPLE NO. | RECOVERY (%) | LOG SYMBOL | CLASSIFICATION | RQD | DESCRIPTION | BLOWS (SPT) | | | STANDARD PENETRATION TEST (SPT) (N-VALUE) | NATURAL MOIST. CONTENT, % | TOTAL UNIT WEIGHT, g/cc | ATTERBERG LIMITS | | SPECIFIC GRAVITY | UNCONFINED COMP. TEST | | SIEVE ANALYSIS % PASSING SIEVE | | | |
|------------|--------------|------------|----------------|-----|--|-------------|-------|-------|--|---------------------------|-------------------------|------------------|---------------------|------------------|-----------------------------|----------|--------------------------------|-----|----|-----|
| | | | | | | 15 cm | 15 cm | 15 cm | | | | LIQUID LIMIT, % | PLASTICITY INDEX, % | | STRENGTH kg/cm ² | STRAIN % | 4 | 10 | 40 | 200 |
| 1 | SS-21 | 89 | | | Silty CLAY; brown; 98-99% high plasticity clay; VERY STIFF. | 7 | 10 | 11 | | 39 | | 71 | 42 | 2.60 | | | | 100 | 99 | 98 |
| 2 | SS-22 | 89 | | | | 8 | 10 | 12 | | | | | | | | | | | | |
| 3 | SS-23 | 89 | | | | 6 | 6 | 9 | | | | | | | | | | | | |
| 4 | SS-24 | 89 | | | | 7 | 12 | 12 | | 35 | | 73 | 51 | 2.60 | | | | 100 | 99 | |
| 5 | SS-25 | 89 | | | Sandy CLAY; gray; 18% fine sand; 81% high plasticity clay; HARD To VERY STIFF. | 9 | 11 | 14 | | | | | | | | | | | | |
| 16 | SS-26 | 89 | | | | 11 | 13 | 17 | | | | | | | | | | | | |
| 27 | SS-27 | 89 | | | Sandy CLAY; gray; contains some fine sand; high plasticity clay; HARD. | 10 | 10 | 18 | | 31 | | 51 | 29 | 2.61 | | | | 100 | 99 | 81 |
| 28 | SS-28 | 78 | | | | 13 | 17 | 19 | | | | | | | | | | | | |
| 29 | SS-29 | 78 | | | Silty SAND; gray; 23% medium sand and 35% fine sand; 42% non-plastic silt; VERY DENSE. | 15 | 19 | 21 | | | | | | | | | | | | |
| 30 | SS-30 | 56 | | SM | | 8 | 28 | 5 | | 26 | | | | 2.63 | | | | 100 | 77 | 4 |
| | | | | | End of Borehole (29.90 m) | | | | | | | | | | | | | | | |
| 31 | | | | | | | | | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | | | | | | | | | |
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BASIC TECHNOLOGY AND MANAGEMENT CORPORATION
2nd Floor Prudential Bank Building,
1377 A. Mabini St., Ermita, Manila

MACHINE: **ACKER ACE**
J. MADERA
DRILLER: **I. LUENGAS**
M. ESTAURA
SUPERVISOR: **M. VILLAFUERTE**

LEGEND:



SS - SPLIT SPOON SAMPLE
WS - WASH SAMPLE
UDS - UNDISTURBED SAMPLE
CR - CORE SAMPLE
W/ HYDROMETER ANALYSIS

Figure 5-3-3 (182/221) BORING LOGS (PHASE I)

FINAL BOREHOLE LOG AND SUMMARY OF TEST RESULTS **MRW-17**PROJECT: **Pasig-Marikina River Channel Imp. Proj.**GROUND ELEV.
(MLLW = Zero Datum) **+ 10.075**DEPTH OF WATER: **1.40** m.LOCATION: **Right Side Offshore, Santolan, Pasig**STATION NO.: **9 + 500**DATE MEASURED: **20 Jan. 2001**WEATHER: **FAIR**TIME MEASURED: **8:30 AM**H NO: **BMRW-17** DATE DRILLED: **20 - 21 January 2001**COORDINATES: **1617023.500** N, **508620.500** E

| NO. DIM. | | SAMPLE NO. | RECOVERY (%) SAMPLE | LOG SYMBOL | CLASSIFICATION | RQD | DESCRIPTION | BLOWS (SPT) | | | STANDARD PENETRATION TEST (SPT) (N-VALUE) 10 20 30 40 50 | NATURAL MOIST. CONTENT, % | TOTAL UNIT WEIGHT, g/cc | ATTERBERG LIMITS | | SPECIFIC GRAVITY | UNCONFINED COMP. TEST | | SIEVE ANALYSIS % PASSING SIEVE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------|----------|------------|------------------------|------------|----------------|-----|---|-------------|--------------------|------------------------|--|------------------------------|----------------------------|--------------------------------|-------------------|---------------------|--------------------------|----|-----------------------------------|-----|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 15 cm | 15 cm | | | | | | | 15 cm | LIQUID LIMIT, % | PLASTICITY INDEX, % | | | | STRENGTH kg/cm ² | STRAIN %, N | | 4 | 10 | 40 | 200 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 1 | SS-1 | 89 | | SM SW | | | Gravelly SAND; brownish gray to gray; 12-19% sub-angular to angular gravel; 19-20% coarse sand; 45-52% medium sand, 7-9% non-plastic silty fines; MEDIUM DENSE. | 2 | 5 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



BASIC TECHNOLOGY AND MANAGEMENT CORPORATION
2nd Floor Prudential Bank Building,
1377 A. Mabini St., Ermita, Manila

MACHINE: **ACKER ACE**
DRILLER: **J. MADERA**
I. LUENGAS
SUPERVISOR: **M. ESTAURA**
M. VILLAFUERTE

LEGEND:



SS - SPLIT SPOON SAMPLE
WS - WASH SAMPLE
UDS - UNDISTURBED SAMPLE
CR - CORE SAMPLE
W/ HYDROMETER ANALYSIS

Figure 5-3-3 (183/221) BORING LOGS (PHASE I)

FINAL BOREHOLE LOG AND SUMMARY OF TEST RESULTS **MRW-18**PROJECT: **Pasig-Marikina River Channel Imp. Proj.**GROUND ELEV.
(MLLW = Zero Datum) **+ 11.565**DEPTH OF WATER: **1.30** m.LOCATION: **R. Side Offshore, Marikina River, Santolan**STATION NO.: **10 + 000**DATE MEASURED: **12 Dec. 2000**WEATHER: **FAIR**TIME MEASURED: **10:00 AM**NO: **BMRW-18** DATE DRILLED: **10 - 12 December 2000**COORDINATES: **1617499.750** N, **508681.100** E

| SAMPLE NO. | RECOVERY (%) SAMPLE | LOG SYMBOL | CLASSIFICATION | RQD | DESCRIPTION | BLOWS (SPT) | | | STANDARD PENETRATION TEST (SPT) | (N-VALUE) | NATURAL MOIST. CONTENT, % | TOTAL UNIT WEIGHT, g/cc | ATTERBERG LIMITS | | SPECIFIC GRAVITY | UNCONFINED COMP. TEST | | SIEVE ANALYSIS % PASSING SIEVE | | | |
|------------|------------------------|------------|----------------|-----|--|----------------|----------|----------|---------------------------------------|-----------|------------------------------|----------------------------|---------------------|------------------------|---------------------|--------------------------------|--------------|-----------------------------------|----|-----|-----|
| | | | | | | 15 cm | 15 cm | 15 cm | | | | | LIQUID LIMIT, % | PLASTICITY INDEX, % | | STRENGTH kg/cm ² | STRAIN %, | 4 | 10 | 40 | 200 |
| SS-1 | 67 | | GM | | Silty Sandy GRAVEL ; brown; 17% coarse sand; 15% medium sand w/ traces of fine sand and non-plastic silt; 52% sub-rounded gravel; MEDIUM DENSE. | 5 | 9 | 13 | | | 11 | | | | 2.64 | | | 48 | 31 | 16 | 8 |
| SS-2 | 44 | | | | Gravelly CLAY ; brown; 42% sub-rounded gravel with little amount of fine sand; 53% high plasticity clay; VERY STIFF. | 10 | 9 | 18 | | | | | | | | | | | | | |
| SS-3 | 89 | | | | | 5 | 7 | 9 | | | 35 | 65 | 34 | 2.64 | | | | 58 | 57 | 56 | 53 |
| SS-4 | 9 | | | | Sandy CLAY ; brown; high plasticity silty clay with considerable amount of sand; STIFF. | 4 | 5 | 7 | | | | | | | | | | | | | |
| SS-5 | 89 | | | | | 3 | 5 | 8 | | | | | | | | | | | | | |
| SS-6 | 89 | | CH | | Sandy CLAY ; grayish brown; 86% high plasticity silty clay with 13% coarse to fine sand; STIFF to VERY STIFF. | 5 | 8 | 10 | | | 29 | 66 | 37 | 2.61 | | | | 99 | 90 | 87 | 86 |
| SS-7 | 89 | | | | | 7 | 9 | 13 | | | | | | | | | | | | | |
| SS-8 | 89 | | | | | 9 | 12 | 18 | | | | | | | | | | | | | |
| SS-9 | 100 | | | | Sandy CLAY ; brown; 11% sub-angular gravel; 14% fine sand with appreciable amount of coarse to medium sand; 64% high plasticity clay; HARD. | 22 | 30 | 10 | | | 24 | 51 | 30 | 2.63 | | | | 89 | 84 | 78 | 64 |
| SS-10 | 78 | | | | | 11 | 12 | 13 | | | | | | | | | | | | | |
| SS-11 | 89 | | | | | 9 | 14 | 18 | | | | | | | | | | | | | |
| SS-12 | 67 | | SM | | Silty SAND ; dark brown; 23% non-plastic silt; 18% medium sand; 58% fine sand; MEDIUM DENSE. | 9 | 10 | 14 | | | 30 | | | | 2.63 | | | 99 | 99 | 81 | 23 |
| SS-13 | 78 | | | | | 11 | 9 | 9 | | | | | | | | | | | | | |
| SS-14 | 78 | | | | | 8 | 6 | 9 | | | | | | | | | | | | | |
| SS-15 | 89 | | | | | 3 | 7 | 9 | | | 30 | 54 | 32 | 2.62 | | | | 100 | 98 | 73 | |
| SS-16 | 90 | | | | | 13 | 30 | 9 | | | | | | | | | | | | | |
| SS-17 | 93 | | CH | | Sandy CLAY ; brown to grayish brown; 25-26% fine sand; 73% high plasticity clay; VERY STIFF to HARD. | 19 | 23 | 13 | | | 28 | 54 | 31 | 2.61 | | | | 100 | 99 | 73* | |
| SS-18 | 71 | | | | | 20 | 24 | 12 | | | | | | | | | | | | | |
| SS-19 | 85 | | | | | 20 | 24 | 11 | | | | | | | | | | | | | |
| SS-20 | 54 | | | | End of Borehole (19.92 m) | 21 | 32 | 7 | | | | | | | | | | | | | |



**BASIC TECHNOLOGY AND
MANAGEMENT CORPORATION**
2nd Floor Prudential Bank Building,
1377 A. Mabini St., Ermita, Manila

MACHINE: **ACKER ACE**
DRILLER: **E. RIEZA**
SUPERVISOR: **M. ESTAURA**

LEGEND:



SS - SPLIT SPOON SAMPLE
WS - WASH SAMPLE
UDS - UNDISTURBED SAMPLE
CR - CORE SAMPLE
* - HYDROMETER ANALYSIS

Figure 5-3-3 (184/221) BORING LOGS (PHASE I)

FINAL BOREHOLE LOG AND SUMMARY OF TEST RESULTS **MRW-19a**

PROJECT: Pasig-Marikina River Channel Imp. Proj.
LOCATION: R. Side Offshore, Pasig-Marikina River
DATE DRILLED: 12 - 13 December 2000

GROUND ELEV.
 (MLLW = Zero Datum) + 9.545
STATION NO.: 10 + 500
WEATHER: FAIR

DEPTH OF WATER: 2.20 m.
DATE MEASURED: 13 Dec. 2000
TIME MEASURED: 5:00 PM

COORDINATES: 1617992.750 N, 508820.100 E

| SAMPLE NO. | RECOVERY (%) | LOG SYMBOL | CLASSIFICATION | RQD | DESCRIPTION | BLOWS (SPT) | | | STANDARD PENETRATION TEST (SPT) (N-VALUE) | NATURAL MOIST. CONTENT, % | TOTAL UNIT WEIGHT, g/cc | ATTERBERG LIMITS | | SPECIFIC GRAVITY | UNCONFINED COMP. TEST | | SIEVE ANALYSIS % PASSING SIEVE | | | |
|------------|--------------|------------|----------------|-----|--|-------------|-------|-------|--|---------------------------|-------------------------|------------------|---------------------|------------------|-----------------------------|-------------|--------------------------------|----|----|-----|
| | | | | | | 15 cm | 15 cm | 15 cm | | | | LIQUID LIMIT, % | PLASTICITY INDEX, % | | STRENGTH kg/cm ² | STRAIN %, % | 4 | 10 | 40 | 200 |
| S-1 | 44 | | ML | | Gravelly Sandy SILT; light gray; 13% sub-angular gravel; 15% coarse sand; 14% medium sand with traces of fine sand; VERY SOFT. | 1 | 0 | 1 | | 43 | | | | 2.63 | | | 87 | 72 | 58 | 50 |
| S-2 | 67 | | | | | 5 | 6 | 10 | | | | | | | | | | | | |
| S-3 | 100 | | CH | | Silty CLAY; brown to brown gray; 97% high plasticity silty clay with little amount of sand; STIFF to VERY STIFF. | 6 | 36 | 14/5 | | 91 | 76 | 48 | 2.60 | | | | 100 | 99 | 97 | |
| S-4 | 78 | | | | | 13 | 11 | 14 | | | | | | | | | | | | |
| S-5 | 100 | | | | | 11 | 30 | 20/7 | | | | | | | | | | | | |
| S-6 | 100 | | | | | 50/14 | | | | 31 | | | | 2.63 | | | 100 | 97 | 82 | 39 |
| S-7 | 96 | | SM | | Silty SAND; brown; 39% non-plastic silt; 58% fine to medium sand; contains little amount of coarse sand; VERY DENSE. | 31 | 11 | | | | | | | | | | | | | |
| S-8 | 71 | | | | | 50/14 | | | | | | | | | | | | | | |
| CR-1 | 48 | | ST | | Tuffaceous SANDSTONE; light brown; contains pumiceous materials; moderately weathered; broken; Moderately SOFT. | CORING | | | | | | | | | | | | | | |
| SS-9 | 73 | | | | | 18 | 28 | 18/5 | | 36 | | | | 2.64 | | | 97 | 91 | 49 | 19 |
| SS-10 | 69 | | SM | | Silty SAND; dark brown; 19% non-plastic silt; 42% medium sand; 30% fine sand w/ traces of coarse sand; contains little amount of gravel; HARD. (11.34m) | 22 | 14 | | | | | | | | | | | | | |
| SS-11 | 67 | | | | | 24 | 15 | | | | | | | | | | | | | |
| SS-12 | 100 | | ML | | Sandy SILT; yellowish brown; 19% coarse to medium sand; 27% fine sand; 54% non-plastic silt; HARD. | 50/8 | | | | 47 | | | | 2.62 | | | 100 | 96 | 81 | 54 |
| | | | ST | | Tuffaceous SANDSTONE; grayish brown; coarse-grained; moderately weathered; slightly broken; Moderately HARD. | | | | | | | | | | | | | | | |
| CR-2 | 86 | | Tf | 70 | Fine TUFF; brown; moderately weathered; slightly broken; Moderately SOFT. | CORING | | | | 34 | 1.67 | | | 46.366 | 1.610 | | | | | |
| CR-3 | 87 | | | 73 | | CORING | | | | 45 | 1.44 | | | 37.892 | 1.770 | | | | | |
| CR-4 | 57 | | ST | 13 | Tuffaceous SANDSTONE; brown; contains pumice clasts and other volcanic lithics; moderately weathered; slightly broken; SOFT. | CORING | | | | 33 | 1.49 | | | 22.956 | 1.379 | | | | | |
| CR-5 | 20 | | | 0 | | CORING | | | | | | | | | | | | | | |

BASIC TECHNOLOGY AND MANAGEMENT CORPORATION
 2nd Floor Prudential Bank Building,
 1377 A. Mabini St., Ermita, Manila

MACHINE: ACKER ACE
DRILLER: E. RIEZA
SUPERVISOR: M. ESTAURA


LEGEND:



SS - SPLIT SPOON SAMPLE
 WS - WASH SAMPLE
 UDS - UNDISTURBED SAMPLE
 CR - CORE SAMPLE
 * W/ HYDROMETER ANALYSIS

Figure 5-3-3 (185/221) BORING LOGS (PHASE I)

FINAL BOREHOLE LOG AND SUMMARY OF TEST RESULTS **MRW-19b**PROJECT: **Pasig-Marikina River Channel Imp. Proj.**GROUND ELEV.
(MLLW = Zero Datum) **+ 9.545**DEPTH OF WATER: **2.20** m.LOCATION: **R. Side Offshore, Pasig-Marikina River**STATION NO.: **10 + 500**DATE MEASURED: **13 Feb. 2001**WEATHER: **FAIR**TIME MEASURED: **5:00 PM**NO: **BMRW-19** DATE DRILLED: **12 - 13 December 2000**COORDINATES: **1617992.750** N, **508820.100** E

| NO: BMKW 1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------|------------------------|---|----------------|-----|------------------------------|----------------|----------|----------|---------------------------------------|----|----|----|----|--|------------------------------|----------------------------|---------------------|------------------------|--------------------------------|---------------------|--------------------------|---|-----------------------------------|----|-----|--|
| SAMPLE NO. | RECOVERY (%) SAMPLE | LOG SYMBOL | CLASSIFICATION | RQD | DESCRIPTION | BLOWS (SPT) | | | STANDARD PENETRATION TEST (SPT) | | | | | | NATURAL MOIST. CONTENT, % | TOTAL UNIT WEIGHT, g/cc | ATTERBERG LIMITS | | | SPECIFIC GRAVITY | UNCONFINED COMP. TEST | | SIEVE ANALYSIS % PASSING SIEVE | | | |
| | | | | | | 15 cm | 15 cm | 15 cm | (N-VALUE) | | | | | | | | LIQUID LIMIT, % | PLASTICITY INDEX, % | STRENGTH kg/cm ² | | STRAIN %, % | 4 | 10 | 40 | 200 | |
| | | | | | | | | | 10 | 20 | 30 | 40 | 50 | | | | | | | | | | | | | |
| CR-6 | 23 |  | ST | 0 | Tuffaceous SANDSTONE; brown. | CORING | | | | | | | | | | | | | | | | | | | | |
| | | | | | End of Borehole (20.50 m) | | | | | | | | | | | | | | | | | | | | | |



**BASIC TECHNOLOGY AND
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MACHINE: **ACKER ACE**
DRILLER: **E. RIEZA**
SUPERVISOR: **M. ESTAURA**

LEGEND:



SS - SPLIT SPOON SAMPLE
WS - WASH SAMPLE
UDS - UNDISTURBED SAMPLE
CR - CORE SAMPLE
* W/ HYDROMETER ANALYSIS

Figure 5-3-3 (186/221) BORING LOGS (PHASE I)

FINAL BOREHOLE LOG AND SUMMARY OF TEST RESULTS **MRW-20**PROJECT: **Pasig-Marikina River Channel Imp. Proj.**LOCATION: **R. Side Offshore, Marikina River, Santolan**BO: **BMRW-20** DATE DRILLED: **18 - 20 December 2000**GROUND ELEV.
(MLLW = Zero Datum) **+ 11.825**STATION NO.: **11 + 000**WEATHER: **FAIR**DEPTH OF WATER: **2.50** m.DATE MEASURED: **20 Dec. 2001**TIME MEASURED: **10:30 AM**COORDINATES: **1617849.850** N, **509219.750** E

| O: BMRW-20 DATE | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|--------------|--------|------------|----------------|-----|--|-------------|-------|-------|---------------------------------|---------------------------|-------------------------|------------------|---------------------|------------------|-----------------------------|-------------|--------------------------------|------|------|-----|-----------|-----|----|-----|-----|-----|
| SAMPLE NO. | RECOVERY (%) | SAMPLE | LOG SYMBOL | CLASSIFICATION | RQD | DESCRIPTION | BLOWS (SPT) | | | STANDARD PENETRATION TEST (SPT) | NATURAL MOIST. CONTENT, % | TOTAL UNIT WEIGHT, g/cc | ATTERBERG LIMITS | | SPECIFIC GRAVITY | UNCONFINED COMP. TEST | | SIEVE ANALYSIS % PASSING SIEVE | | | | | | | | | |
| | | | | | | | 15 cm | 15 cm | 15 cm | | | | LIQUID LIMIT, % | PLASTICITY INDEX, % | | STRENGTH kg/cm ² | STRAIN %, N | 4 | 10 | 40 | 200 | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | (N-VALUE) | | | | | |
| | | | | | | | | | | 10 | 20 | 30 | 40 | 50 | | | | | | | | | | | | | |
| SS-1 | 89 | | | CH | | Silty CLAY; dark gray to light brown; 93-97% high plasticity silty clay with little amount of fine sand; FIRM to VERY STIFF. | 2 | 3 | 5 | | | | | | 36 | | 70 | 49 | 2.60 | | | | 99 | 99 | 97 | 93* | |
| SS-2 | 89 | | | | 3 | | 3 | 4 | | | | | | | | | | | | | | | | | | | |
| SS-3 | 89 | | | | 33 | | 11 | 11 | | | | | | | | 46 | | 71 | 43 | 2.60 | | | | 99 | 99 | 98 | 93* |
| SS-4 | 89 | | | | 5 | | 5 | 7 | | | | | | | | | | | | | | | | | | | |
| SS-5 | 89 | | | | 7 | | 11 | 13 | | | | | | | | | | | | | | | | | | | |
| SS-6 | 89 | | | | 9 | | 8 | 9 | | | | | | | | 27 | | 72 | 48 | 2.60 | | | | | 100 | 99 | 97* |
| SS-7 | 89 | | | | 6 | | 10 | 14 | | | | | | | | | | | | | | | | | | | |
| SS-8 | 89 | | | | 8 | | 13 | 15 | | | | | | | | | | | | | | | | | | | |
| SS-9 | 89 | | | CL | | Sandy Gravelly CLAY; light brown; 10% sub-angular gravel; 83% high plasticity clay with little amount of coarse to finesand; VERY STIFF to HARD. | 8 | 14 | 15 | | | | | | 32 | | 67 | 46 | 2.61 | | | | 90 | 88 | 86 | 83* | |
| SS-10 | 89 | | | | 11 | | 18 | 21 | | | | | | | | | | | | | | | | | | | |
| SS-11 | 89 | | | | 8 | | 13 | 17 | | | | | | | | | | | | | | | | | | | |
| SS-12 | 89 | | | CL | | Sandy CLAY; brown to dark gray; 22-37% fine sand; 57-73% medium plasticity clay with little coarse to medium sand; HARD. | 9 | 13 | 21 | | | | | | 32 | | 49 | 29 | 2.61 | | | | 100 | 96 | 94 | 57* | |
| SS-13 | 89 | | | | 9 | | 14 | 18 | | | | | | | | | | | | | | | | | | | |
| SS-14 | 89 | | | | 12 | | 17 | 19 | | | | | | | | | | | | | | | | | | | |
| SS-15 | 100 | | | | 16 | | 18 | 10 | | | | | | | | 28 | | 51 | 23 | 2.61 | | | | | 100 | 95 | 73* |
| SS-16 | 89 | | | | 11 | | 24 | 32 | | | | | | | | | | | | | | | | | | | |
| SS-17 | 100 | | | ML | | Sandy SILT; brown to dark gray; 37% fine sand; 62% non-plastic silt. HARD. | | 18 | 26/5 | | | | | | | | | | | | | | | | | | |
| SS-18 | 98 | | | | | | 12 | 24 | | 26/11 | | | | | | 27 | | | | 2.61 | | | | | 100 | 99 | 62 |
| SS-19 | 95 | | | | | | | 26/12 | | | | | | | | | | | | | | | | | | | |
| SS-20 | 49 | | | | | | | 20/11 | | | | | | | | | | | | | | | | | | | |
| End of Borehole (19.96 m) | | | | | | | 21 | 30 | 11 | | | | | | | | | | | | | | | | | | |

**BASIC TECHNOLOGY AND
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DRILLER: **E. RIEZA**
SUPERVISOR: **M. ESTAURA**

LEGEND:



SS - SPLIT SPOON SAMPLE
WS - WASH SAMPLE
UDS - UNDISTURBED SAMPLE
CR - CORE SAMPLE
* W/ HYDROMETER ANALYSIS

Figure 5-3-3 (187/221) BORING LOGS (PHASE I)

FINAL BOREHOLE LOG AND SUMMARY OF TEST RESULTS **MRW-21a**PROJECT: **Pasig-Marikina River Channel Imp. Proj.**LOCATION: **R. Side Offshore, Calumpang, Marikina**BOREHOLE NO.: **BMRW-21** DATE DRILLED: **22 - 26 December 2000**GROUND ELEV.
(MLLW = Zero Datum) **+ 11.055**STATION NO.: **11 + 500**WEATHER: **FAIR**COORDINATES: **1617471.500 N, 509542.400 E**DEPTH OF WATER: **1.50** m.DATE MEASURED: **25 Dec. 2000**TIME MEASURED: **12:00 NN**

| RECOVERY (%) SAMPLE | LOG SYMBOL | CLASSIFICATION | RQD | DESCRIPTION | BLOWS (SPT) | | | STANDARD PENETRATION TEST (SPT) (N-VALUE) 10 20 30 40 50 | NATURAL MOIST. CONTENT, % | TOTAL UNIT WEIGHT, g/cc | ATTERBERG LIMITS | | SPECIFIC GRAVITY | UNCONFINED COMP. TEST | | SIEVE ANALYSIS % PASSING SIEVE | | | |
|------------------------|------------|----------------|-----|---|-------------|----------|----------|--|------------------------------|----------------------------|---------------------|------------------------|---------------------|--------------------------------|----------------|-----------------------------------|-----|----|-----|
| | | | | | 15 cm | 15 cm | 15 cm | | | | LIQUID LIMIT, % | PLASTICITY INDEX, % | | STRENGTH kg/cm ² | STRAIN W, % | 4 | 10 | 40 | 200 |
| 67 | | SM | | Silty SAND ; brownish gray; poorly graded with 67% fine sand; 32% non-plastic silt; VERY LOOSE . | 4 | 0 | 0 | | 38 | | | | 2.63 | | | | 100 | 99 | 32 |
| 67 | | SM | | Silty Gravelly SAND ; brownish gray; poorly graded sand; 28% angular gravel; 48% coarse to fine sand; and 24% non-plastic silt; LOOSE . | 1 | 0 | 0 | | | | | | | | | | | | |
| 67 | | SW | | | 3 | 3 | 3 | | 20 | | | | 2.64 | | | 72 | 64 | 34 | 24 |
| 78 | | | | Silty CLAY ; grayish brown to brown; contains little amount of sand and sub-angular to sub-rounded gravel; high plasticity clay; STIFF to VERY STIFF . | 6 | 5 | 5 | | | | | | | | | | | | |
| 89 | | | | | 7 | 7 | 12 | | | | | | | | | | | | |
| 89 | | GC | | Gravelly CLAY ; grayish brown to brown; with little amount of fine to coarse sand; 10% sub-rounded gravel; 84% high plasticity clay; VERY STIFF To HARD . | 8 | 10 | 17 | | 22 | 58 | 29 | 2.60 | | | | 90 | 88 | 86 | 84 |
| 89 | | | | | 10 | 15 | 22 | | | | | | | | | | | | |
| 89 | | | | | 15 | 16 | 22 | | | | | | | | | | | | |
| 89 | | | | | 9 | 13 | 16 | | 20 | 56 | 32 | 2.61 | | | | 93 | 92 | 91 | 81 |
| 89 | | | | Sandy CLAY ; brown; 12-26% fine to coarse sand; with traces of gravel; 72-81% high plasticity clay; VERY STIFF To HARD . | 6 | 12 | 12 | | | | | | | | | | | | |
| 89 | | | | | 8 | 12 | 13 | | | | | | | | | | | | |
| 89 | | | | | 7 | 11 | 19 | | 33 | 56 | 33 | 2.61 | | | | 98 | 96 | 95 | 72 |
| 93 | | | | | | 28 | | | | | | | | | | | | | |
| 93 | | | | | 14 | 22 | 13 | | | | | | | | | | | | |
| 68 | | CH | | | | 32 | | | | | | | | | | | | | |
| 68 | | | | | 10 | 18 | 14 | | | | | | | | | | | | |
| 100 | | | | Sandy CLAY ; gray; 14% fine sand; 85-86% high plasticity clay; VERY STIFF To HARD . | 10 | 14 | 24 | | 25 | 57 | 33 | 2.60 | | | | | 100 | 86 | |
| 89 | | | | | 14 | 20 | 22 | | | | | | | | | | | | |
| 78 | | | | | 9 | 17 | 27 | | | | | | | | | | | | |
| 89 | | | | | 6 | 10 | 17 | | 34 | 59 | 32 | 2.60 | | | | 100 | 99 | 99 | 85 |
| 89 | | | | | 7 | 11 | 15 | | | | | | | | | | | | |
| 89 | | | | | 8 | 12 | 14 | | | | | | | | | | | | |

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MACHINE: **ACKER ACE**DRILLER: **E. RIEZA**SUPERVISOR: **M. ESTAURA
M. VILLAFUERTE**

LEGEND:



SS - SPLIT SPOON SAMPLE
WS - WASH SAMPLE
UDS - UNDISTURBED SAMPLE
CR - CORE SAMPLE
W/ - HYDROMETER ANALYSIS


Figure 5-3-3 (188/221) BORING LOGS (PHASE I)

FINAL BOREHOLE LOG AND SUMMARY OF TEST RESULTS **MRW-21b**

PROJECT: **Pasig-Marikina River Channel Imp. Proj.**
 LOCATION: **R. Side Offshore, Calumpang, Marikina**
 DATE DRILLED: **22 - 26 December 2000**

GROUND ELEV.
 (MLW = Zero Datum) **+ 11.055**
 STATION NO.: **11 + 500**
 WEATHER: **FAIR**
 COORDINATES: **1617471.500 N, 509542.400 E**

DEPTH OF WATER: **1.50** m.
 DATE MEASURED: **25 Dec. 2000**
 TIME MEASURED: **12:00 NN**

| SAMPLE NO. | RECOVERY (%) SAMPLE | LOG SYMBOL | CLASSIFICATION | RQD | DESCRIPTION | BLOWS (SPT) | | | STANDARD PENETRATION TEST (SPT) | | | | | NATURAL MOIST. CONTENT, % | TOTAL UNIT WEIGHT, g/cc | ATTERBERG LIMITS | | SPECIFIC GRAVITY | UNCONFINED COMP. TEST | | SIEVE ANALYSIS % PASSING SIEVE | | | | | |
|------------|------------------------|---|----------------|-----|--|----------------|----------|----------|---------------------------------------|----|----|----|----|------------------------------|----------------------------|---------------------|------------------------|---------------------|--------------------------------|----------------|-----------------------------------|----|-----|-----|----|--|
| | | | | | | 15 cm | 15 cm | 15 cm | (N-VALUE) | | | | | | | LIQUID LIMIT, % | PLASTICITY INDEX, % | | STRENGTH kg/cm ² | STRAIN %, % | 4 | 10 | 40 | 200 | | |
| | | | | | | | | | 10 | 20 | 30 | 40 | 50 | | | | | | | | | | | | | |
| S-21 | 89 |  | CH | | Silty CLAY; gray; 98-99% high plasticity clay; VERY STIFF. | 4 | 7 | 10 | | | | | | 21 | | 73 | 52 | 2.60 | | | | | | 100 | 99 | |
| S-22 | 89 | | | 6 | | 8 | 10 | | | | | | | | | | | | | | | | | | | |
| S-23 | 89 | | | 5 | | 7 | 10 | | | | | | | | | | | | | | | | | | | |
| S-24 | 89 | | | 5 | | 8 | 10 | | | | | | | | 36 | | 72 | 42 | 2.60 | | | | 100 | 99 | 98 | |
| S-25 | 89 | | | 8 | | 9 | 11 | | | | | | | | | | | | | | | | | | | |
| | | | | | End of Borehole (25.00 m) | | | | | | | | | | | | | | | | | | | | | |

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 M. VILLAFUERTE**

LEGEND:



SS - SPLIT SPOON SAMPLE
 WS - WASH SAMPLE
 UDS - UNDISTURBED SAMPLE
 CR - CORE SAMPLE
 W/ HYDROMETER ANALYSIS

Figure 5-3-3 (189/221) BORING LOGS (PHASE I)

FINAL BOREHOLE LOG AND SUMMARY OF TEST RESULTS **MRW - 22a**PROJECT: **Pasig-Marikina River Channel Imp. Proj.**LOCATION: **R. Side Offshore, Calumpang, Marikina**BO: **BMRW-22** DATE DRILLED: **27 - 28 December 2000**GROUND ELEV.
(MLLW = Zero Datum) **+ 13.056**STATION NO.: **12 + 000**WEATHER: **FAIR**DEPTH OF WATER: **1.00** m.DATE MEASURED: **28 Dec. 2000**TIME MEASURED: **12:00 NN**COORDINATES: **1617551.500** N, **509911.100** E

| C: BMRV-22 | | | | RQD | DESCRIPTION | BLOWS (SPT) | | | STANDARD PENETRATION TEST (SPT) | | | | | NATURAL MOIST. CONTENT, % | TOTAL UNIT WEIGHT, g/cc | ATTERBERG LIMITS | | SPECIFIC GRAVITY | UNCONFINED COMP. TEST | | SIEVE ANALYSIS % PASSING SIEVE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| SAMPLE NO. | RECOVERY (%) | LOG SYMBOL | CLASSIFICATION | | | 15 | 15 | 15 | (N-VALUE) | | | | | | | LIQUID LIMIT, % | PLASTICITY INDEX, % | | STRENGTH kg/cm ² | STRAIN %, ϵ | 4 | 10 | 40 | 200 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| SS-1 | 78 | | ML | | 1 | 2 | 2 | | | | | | | 31 | | | 2.63 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

BASIC TECHNOLOGY AND MANAGEMENT CORPORATION
2nd Floor Prudential Bank Building,
1377 A. Mabini St., Ermita, Manila

MACHINE: **ACKER ACE**
DRILLER: **E. RIEZA**
SUPERVISOR: **M. ESTAURA**
M. VILLAFUERTE

LEGEND:



SS - SPLIT SPOON SAMPLE
WS - WASH SAMPLE
UDS - UNDISTURBED SAMPLE
CR - CORE SAMPLE
W/ HYDROMETER ANALYSIS

Figure 5-3-3 (190/221) BORING LOGS (PHASE I)

FINAL BOREHOLE LOG AND SUMMARY OF TEST RESULTS **MRW-22b**PROJECT: **Pasig-Marikina River Channel Imp. Proj.**LOCATION: **R. Side Offshore, Calumpang, Marikina**D: BMRW-22 DATE DRILLED: **27 - 28 December 2000**GROUND ELEV.
(MLLW = Zero Datum) **+ 13.056**STATION NO.: **12 + 000**WEATHER: **FAIR**DEPTH OF WATER: **1.00** m.DATE MEASURED: **28 Dec. 2000**TIME MEASURED: **12:00 NN**COORDINATES: **1617551.500** N, **509911.100** E

| SAMPLE NO. | | RECOVERY (%) SAMPLE | LOG SYMBOL | CLASSIFICATION | RQD | DESCRIPTION | BLOWS (SPT) | | | STANDARD PENETRATION TEST (SPT) | | | | | | NATURAL MOIST. CONTENT, % | TOTAL UNIT WEIGHT, g/cc | ATTERBERG LIMITS | | SPECIFIC GRAVITY | UNCONFINED COMP. TEST | | SIEVE ANALYSIS % PASSING SIEVE | | | | | |
|------------|----|------------------------|------------|----------------|-----|---|----------------|----------|----------|---------------------------------------|----|--|--|--|----|------------------------------|----------------------------|---------------------|------------------------|---------------------|--------------------------------|----------------|-----------------------------------|-----|----|-----|--|--|
| | | | | | | | 15 cm | 15 cm | 15 cm | (N-VALUE) | | | | | | | | LIQUID LIMIT, % | PLASTICITY INDEX, % | | STRENGTH kg/cm ² | STRAIN %, % | 4 | 10 | 40 | 200 | | |
| | | | | | | | 10 | 20 | 30 | 40 | 50 | | | | | | | | | | | | | | | | | |
| 21 | 91 | | | CH | | Silty CLAY; gray; 98% high plasticity clay; HARD. | 16 | 22 | 28 14 | | | | | | 27 | | 73 | 38 | 2.60 | | | | | 100 | 98 | | | |
| 22 | 89 | | | | | | 12 | 16 | 25 | | | | | | | | | | | | | | | | | | | |
| 23 | 44 | | | | | | 16 | 25 | 24 | | | | | | | | | | | | | | | | | | | |
| | | | | | | End of Borehole (23.00 m) | | | | | | | | | | | | | | | | | | | | | | |

BASIC TECHNOLOGY AND MANAGEMENT CORPORATION
2nd Floor Prudential Bank Building,
1377 A. Mabini St., Ermita, Manila

MACHINE: **ACKER ACE**DRILLER: **E. RIEZA**SUPERVISOR: **M. ESTAURA
M. VILLAFUERTE**

LEGEND:



SS - SPLIT SPOON SAMPLE
WS - WASH SAMPLE
UDS - UNDISTURBED SAMPLE
CR - CORE SAMPLE
W/ HYDROMETER ANALYSIS

Figure 5-3-3 (191/221) BORING LOGS (PHASE I)

FINAL BOREHOLE LOG AND SUMMARY OF TEST RESULTS **MRW-23**PROJECT: **Pasig-Marikina River Channel Imp. Proj.**LOCATION: **R. Side Offshore, Butiki Park, Marikina**NO: **BMRW-23** DATE DRILLED: **05 - 08 January 2001**GROUND ELEV.
(MLLW = Zero Datum) **+ 10.855**STATION NO.: **12 + 500**WEATHER: **FAIR**DEPTH OF WATER: **2.10**DATE MEASURED: **08 Jan. 2001**TIME MEASURED: **8:00 AM**COORDINATES: **1618034.250** N, **509961.750** E

| NO: BMRW-23 DATE: 11/11/2023 | | | | | | | | | | COORDINATES: 11 | | | | | | | | | |
|------------------------------|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|
|------------------------------|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|

End of Borehole (19.88 m)

BASIC TECHNOLOGY AND MANAGEMENT CORPORATION
2nd Floor Prudential Bank Building,
1377 A. Mabini St., Ermita, Manila

MACHINE: **ACKER ACE**
J. MADERA
DRILLER: **I. LUENGAS**
M. ESTAURA
SUPERVISOR: **M. VILLAFUERTE**

LEGEND:



SS - SPLIT SPOON SAMPLE
WS - WASH SAMPLE
UDS - UNDISTURBED SAMPLE
CR - CORE SAMPLE
W/ HYDROMETER ANALYSIS

Figure 5-3-3 (192/221) BORING LOGS (PHASE I)

FINAL BOREHOLE LOG AND SUMMARY OF TEST RESULTS **MRW - 24**

PROJECT: **Pasig-Marikina River Channel Imp. Proj.**
 LOCATION: **R. Side Offshore, Dela Peña, Marikina**
 ID: **BMRW-24** DATE DRILLED: **06 - 09 January 2001**
 GROUND ELEV. (MLLW = Zero Datum) **+ 11.485**
 STATION NO.: **13 + 000**
 WEATHER: **FAIR**
 COORDINATES: **1618520.750 N, 509891.100 E**
 DEPTH OF WATER: **1.50** m.
 DATE MEASURED: **09 Jan. 2001**
 TIME MEASURED: **1:00 PM**

| SAMPLE NO. | RECOVERY (%) | LOG SYMBOL | CLASSIFICATION | RQD | DESCRIPTION | BLOWS (SPT) | | | STANDARD PENETRATION TEST (SPT) (N-VALUE) | NATURAL MOIST. CONTENT, % | TOTAL UNIT WEIGHT, g/cc | ATTERBERG LIMITS | | SPECIFIC GRAVITY | UNCONFINED COMP. TEST | | SIEVE ANALYSIS % PASSING SIEVE | | | |
|---------------------------|--------------|------------|----------------|-----|---|-------------|-------|-------|--|---------------------------|-------------------------|------------------|---------------------|------------------|-----------------------------|----------|--------------------------------|----|----|-----|
| | | | | | | 15 cm | 15 cm | 15 cm | | | | LIQUID LIMIT, % | PLASTICITY INDEX, % | | STRENGTH kg/cm ² | STRAIN % | 4 | 10 | 40 | 200 |
| SS-1 | 44 | | CH | | Sandy Silty CLAY; gray; 36% fine to medium sand; 62% high plasticity clay; FIRM. | 6 | 3 | 2 | | 33 | | 54 | 31 | 2.61 | | | 99 | 98 | 83 | 62 |
| SS-2 | 89 | | CH | | Silty CLAY; gray; dominantly fine to very fine sand; 80% high plasticity; FIRM. | 3 | 2 | 3 | | | | | | | | | | | | |
| SS-3 | 89 | | SM | | Silty SAND; dark gray; fine-grained sand; non-plastic silty fines; MEDIUM DENSE. | 2 | 3 | 4 | | 38 | | 58 | 38 | 2.61 | | | 100 | 99 | 80 | |
| SS-4 | 89 | | CH | | Silty CLAY; gray; dominantly fine sand; high plasticity clay; SOFT. | 6 | 4 | 7 | | | | | | | | | | | | |
| SS-5 | 89 | | CH | | Silty CLAY; gray; dominantly fine sand; high plasticity clay; SOFT. | 2 | 1 | 1 | | | | | | | | | | | | |
| SS-6 | 89 | | CH | | Sandy Silty CLAY; dark gray; 31% fine sand with 6% medium to coarse sand; 61% high plasticity; FIRM. | 2 | 3 | 5 | | 33 | | 55 | 31 | 2.61 | | | 98 | 97 | 92 | 61 |
| SS-7 | 89 | | CH | | Silty CLAY; gray; dominantly fine sand; high plasticity clay; SOFT. | 3 | 3 | 5 | | | | | | | | | | | | |
| SS-8 | 67 | | SM | | Silty SAND; dark gray; 75% fine to coarse sand; 6% sub-angular gravel; 19% non-plastic silt; MEDIUM DENSE. | 3 | 7 | 6 | | | | | | | | | | | | |
| SS-9 | 67 | | SM | | Silty SAND; dark gray; 75% fine to coarse sand; 6% sub-angular gravel; 19% non-plastic silt; MEDIUM DENSE. | 9 | 11 | 9 | | 20 | | | | 2.63 | | | 94 | 83 | 50 | 19 |
| SS-10 | 44 | | ML | | Gravelly Sandy SILT; dark grayish brown; 35% fine to coarse sand; 7% sub-angular to sub-rounded gravel; 58% non-plastic silty fines; MEDIUM DENSE. | 6 | 10 | 14 | | | | | | | | | | | | |
| SS-11 | 67 | | ML | | Gravelly Sandy SILT; dark grayish brown; 35% fine to coarse sand; 7% sub-angular to sub-rounded gravel; 58% non-plastic silty fines; MEDIUM DENSE. | 8 | 16 | 11 | | | | | | | | | | | | |
| SS-12 | 44 | | ML | | Gravelly Sandy SILT; dark grayish brown; 35% fine to coarse sand; 7% sub-angular to sub-rounded gravel; 58% non-plastic silty fines; MEDIUM DENSE. | 11 | 8 | 11 | | 10 | | | | 2.62 | | | 93 | 85 | 70 | 58 |
| SS-13 | 56 | | ML | | Gravelly Sandy SILT; dark grayish brown; 35% fine to coarse sand; 7% sub-angular to sub-rounded gravel; 58% non-plastic silty fines; MEDIUM DENSE. | 13 | 8 | 8 | | | | | | | | | | | | |
| SS-14 | 71 | | GP | | Silty Sandy GRAVEL; dark gray to brown; 36-42% fine to coarse sand; 46-58% sub-angular to angular gravel; 6-12% non-plastic silty fines; VERY DENSE to DENSE. | 24 | 31 | 12 | | | | | | | | | | | | |
| SS-15 | 79 | | GP | | Silty Sandy GRAVEL; dark gray to brown; 36-42% fine to coarse sand; 46-58% sub-angular to angular gravel; 6-12% non-plastic silty fines; VERY DENSE to DENSE. | 28 | 35 | 8 | | 12 | | | | 2.66 | | | 54 | 42 | 24 | 12 |
| SS-16 | 78 | | GP | | Silty Sandy GRAVEL; dark gray to brown; 36-42% fine to coarse sand; 46-58% sub-angular to angular gravel; 6-12% non-plastic silty fines; VERY DENSE to DENSE. | 19 | 17 | 18 | | | | | | | | | | | | |
| SS-17 | 89 | | GP | | Silty Sandy GRAVEL; dark gray to brown; 36-42% fine to coarse sand; 46-58% sub-angular to angular gravel; 6-12% non-plastic silty fines; VERY DENSE to DENSE. | 10 | 24 | 27 | | | | | | | | | | | | |
| SS-18 | 56 | | GP | | Silty Sandy GRAVEL; dark gray to brown; 36-42% fine to coarse sand; 46-58% sub-angular to angular gravel; 6-12% non-plastic silty fines; VERY DENSE to DENSE. | 16 | 24 | 23 | | 10 | | | | 2.66 | | | 42 | 24 | 13 | 6 |
| SS-19 | 44 | | GP | | Silty Sandy GRAVEL; dark gray to brown; 36-42% fine to coarse sand; 46-58% sub-angular to angular gravel; 6-12% non-plastic silty fines; VERY DENSE to DENSE. | 25 | 28 | 22 | | | | | | | | | | | | |
| End of Borehole (19.00 m) | | | | | | | | | | | | | | | | | | | | |



BASIC TECHNOLOGY AND MANAGEMENT CORPORATION
 2nd Floor Prudential Bank Building,
 1377 A. Mabini St., Ermita, Manila

MACHINE: **ACKER ACE**
 DRILLER: **E. RIEZA**
 SUPERVISOR: **M. ESTAURA**
M. VILLAFUERTE

LEGEND:



SS - SPLIT SPOON SAMPLE
 WS - WASH SAMPLE
 UDS - UNDISTURBED SAMPLE
 CR - CORE SAMPLE
 * / W/ HYDROMETER ANALYSIS

Figure 5-3-3 (193/221) BORING LOGS (PHASE I)

FINAL BOREHOLE LOG AND SUMMARY OF TEST RESULTS **MRW-25**PROJECT: **Pasig-Marikina River Channel Imp. Proj.**LOCATION: **R. Side Offshore, Dela Peña, Marikina**DATE DRILLED: **09 - 11 January 2001**GROUND ELEV.
(MLLW = Zero Datum) **+ 10.811**STATION NO.: **13 + 525**WEATHER: **FAIR**DEPTH OF WATER: **2.50** m.DATE MEASURED: **09 Jan. 2001**TIME MEASURED: **3:00 PM**COORDINATES: **1619022.500** N, **509761.100** E

| RECOVERY (%) | | LOG SYMBOL | CLASSIFICATION | RQD | DESCRIPTION | BLOWS (SPT) | | | STANDARD PENETRATION TEST (SPT) | | | | | | NATURAL MOIST. CONTENT, % | TOTAL UNIT WEIGHT, g/cc | ATTERBERG LIMITS | | SPECIFIC GRAVITY | UNCONFINED COMP. TEST | | SIEVE ANALYSIS % PASSING SIEVE | | | | | |
|---------------------------|-------|------------|----------------|-----|--|-------------|-------|--|---------------------------------|----|----|----|--|-----------------|---------------------------|-------------------------|---------------------|-----------------------------|------------------|-----------------------|------|--------------------------------|-----|-----|----|----|-----|
| SAMPLE | 15 cm | | | | | 16 cm | 15 cm | (N-VALUE) | | | | | | LIQUID LIMIT, % | | | PLASTICITY INDEX, % | STRENGTH kg/cm ² | | STRAIN W, % | 4 | 10 | 40 | 200 | | | |
| | | | | | | | | 10 | 20 | 30 | 40 | 50 | | | | | | | | | | | | | | | |
| 1-1 | 56 | | SM SW | | Silty Gravelly SAND; brown; 41% sand; 40% sub-angular to sub-rounded gravel & 19% non plastic silty fines; VERY LOOSE. | 2 | 1 | 1 | | | | | | | 18 | | | 2.66 | | 60 | 49 | 29 | 19 | | | | |
| 1-2 | 22 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1-3 | 89 | | | | | | | Silty SAND; gray; 35% medium sand; 31% fine sand with 19% non-plastic silty fines; poorly graded; 7% gravel; MEDIUM DENSE. | 4 | 9 | 10 | | | | | | | | | | | | | | | | |
| 1-4 | 89 | | | | | | | | 4 | 6 | 3 | | | | | | | 18 | | | 2.63 | | 93 | 85 | 50 | 19 | |
| 1-5 | 89 | | | | | | | | 6 | 7 | 3 | | | | | | | | | | | | | | | | |
| 1-6 | 89 | | | | | | | | 5 | 8 | 9 | | | | | | | | | | | | | | | | |
| 1-7 | 89 | | | | | | | Silty Gravelly SAND; gray; 68% fine to coarse sand with 17% sub-rounded to sub-angular gravel; 15% non-plastic silt; MEDIUM DENSE. | 7 | 7 | 11 | | | | | | | 14 | | | 2.64 | | 83 | 67 | 38 | 15 | |
| 1-8 | 89 | | | | | | | | 8 | 8 | 11 | | | | | | | | | | | | | | | | |
| 1-9 | 89 | | | | | | | Sandy CLAY; gray; 72% highly plastic clayey fines with 17% fine sand; about 4% gravel; STIFF. | 5 | 5 | 6 | | | | | | | 31 | | 57 | 36 | 2.61 | | 96 | 92 | 89 | 72* |
| 1-10 | 89 | | | | | | | | 4 | 8 | 12 | | | | | | | 41 | | | 2.63 | | 100 | 99 | 96 | 22 | |
| 1-11 | 78 | | GP | | Silty SAND; gray; 74% fine sand with 22% non-plastic silt; MEDIUM DENSE. | 11 | 9 | 9 | | | | | | | | | | | | | | | | | | | |
| 1-12 | 78 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1-13 | 67 | | | | | | | | | 18 | 19 | 16 | | | | | | | | | | | | | | | |
| 1-14 | 67 | | | | | | | | | 18 | 26 | 20 | | | | | | | 5 | | | 2.65 | | 41 | 20 | 8 | 3 |
| 1-15 | 67 | | | | | | | | | 19 | 24 | 26 | | | | | | | | | | | | | | | |
| 1-16 | 67 | | | | | 18 | 23 | 27 | | | | | | | | | | | | | | | | | | | |
| 1-17 | 67 | | | | | 17 | 24 | 26 | | | | | | | 8 | | | 2.65 | | 45 | 23 | 9 | 4 | | | | |
| End of Borehole (15.00 m) | | | | | | | | | | | | | | | | | | | | | | | | | | | |



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M. VILLAFUERTE**

LEGEND:



SS - SPLIT SPOON SAMPLE
WS - WASH SAMPLE
UDS - UNDISTURBED SAMPLE
CR - CORE SAMPLE
W/ - HYDROMETER ANALYSIS

Figure 5-3-3 (194/221) BORING LOGS (PHASE I)

FINAL BOREHOLE LOG AND SUMMARY OF TEST RESULTS **MRW-26**PROJECT: **Pasig-Marikina River Channel Imp. Proj.**GROUND ELEV.
(MLW = Zero Datum) **+ 11.085**DEPTH OF WATER: **2.00** m.LOCATION: **R. Side Offshore, Sto. Niño, Marikina**STATION NO.: **13 + 975**DATE MEASURED: **12 Jan. 2001**WEATHER: **FAIR**TIME MEASURED: **9:00 AM**NO: **BMRW-26** DATE DRILLED: **12 - 15 January 2001**COORDINATES: **1619464.100** N, **509628.100** E

| NO: BMRW-26 | | | | | | | | | | COORDINATES: | | | | | | | | | | |
|-------------|------------------------|------------|----------------|-----|--|----------------|----------|----------|--|------------------------------|----------------------------|---------------------|------------------------|---------------------|--------------------------------|----------------|-----------------------------------|----|----|-----|
| SAMPLE NO. | RECOVERY (%) SAMPLE | LOG SYMBOL | CLASSIFICATION | RQD | DESCRIPTION | BLOWS (SPT) | | | STANDARD PENETRATION TEST (SPT) (N-VALUE) 10 20 30 40 50 | NATURAL MOIST. CONTENT, % | TOTAL UNIT WEIGHT, g/cc | ATTERBERG LIMITS | | SPECIFIC GRAVITY | UNCONFINED COMP. TEST | | SIEVE ANALYSIS % PASSING SIEVE | | | |
| | | | | | | 15 cm | 15 cm | 15 cm | | | | LIQUID LIMIT, % | PLASTICITY INDEX, % | | STRENGTH kg/cm ² | STRAIN Z, % | 4 | 10 | 40 | 200 |
| SS-1 | 67 | | ML | | Sandy SILT; grayish brown; 37% fine sand w/ garbage included; 57% non-plastic silt; VERY LOOSE. | 1 | 0 | 0 | | 92 | | | | 2.62 | | | 100 | 99 | 94 | 57 |
| SS-2 | 89 | | SW | | Gravelly Silty SAND; grayish brown; 22-24% medium sand; 16-26% fine sand; 10-11% coarse sand; 15-19% angular to sub-angular gravel; 23-34% non-plastic silty fines; VERY LOOSE to LOOSE. | 1 | 0 | 0 | | 29 | | | | 2.64 | | | 85 | 74 | 50 | 34 |
| SS-3 | 89 | | SM | | | 3 | 4 | 4 | | 25 | | | | 2.64 | | | 81 | 71 | 49 | 23 |
| SS-4 | 89 | | ML | | Gravelly Sandy SILT; grayish brown; 18% gravel; 40% fine to coarse sand; 42% non-plastic silt; STIFF. | 1 | 3 | 6 | | 26 | | | | 2.64 | | | 82 | 75 | 65 | 42 |
| SS-5 | 89 | | | | Silty SAND; gray; 58% fine sand; 15% medium sand; 27% non-plastic silty fines; MEDIUM DENSE. | 3 | 4 | 5 | | 36 | | | | 2.63 | | | 100 | 85 | 27 | |
| SS-6 | 89 | | | | | 8 | 7 | 5 | | 21 | | | | 2.63 | | | 96 | 88 | 54 | 14 |
| SS-7 | 89 | | SM | | Silty SAND; gray, 4% angular to sub-angular gravel; 40% fine sand; 34% medium sand with 8% coarse sand; 14% non-plastic silty fines; MEDIUM DENSE. | 8 | 10 | 9 | | | | | | | | | | | | |
| SS-8 | 89 | | SW | | | 8 | 9 | 9 | | | | | | | | | | | | |
| SS-9 | 89 | | | | | 14 | 25 | 14 | | 12 | | | | 2.65 | | | 64 | 44 | 24 | 12 |
| SS-10 | 44 | | | | Silty Gravelly SAND; brownish gray to gray; 36% sub-angular to sub-rounded gravel; 20% coarse sand; 20% medium sand; 12% fine sand; 12% non-plastic silt; DENSE. | 14 | 18 | 24 | | | | | | | | | | | | |
| SS-11 | 67 | | | | | 10 | 14 | 19 | | | | | | | | | | | | |
| SS-12 | 33 | | GW | | Sandy Gravel; gray; 82% sub-angular to sub-rounded gravel; 17% sand with very little amount of silt; VERY DENSE. | 13 | 17 | 33 | | 5 | | | | 2.65 | | | 18 | 10 | 4 | 1 |
| SS-13 | 89 | | SW | | Gravelly Clayey SAND; brownish gray; 50% coarse to fine sand; low to medium plasticity clay; LOOSE to MEDIUM DENSE. | 3 | 6 | 10 | | 64 | | 47 | 25 | 2.64 | | | 79 | 70 | 49 | 29 |
| SS-14 | 89 | | SC | | | 3 | 3 | 5 | | | | | | | | | | | | |
| SS-15 | 89 | | CH | | Sandy Silty CLAY; brownish gray; 12% fine to medium sand; high plasticity clay; STIFF. | 4 | 5 | 6 | | 51 | | 64 | 39 | 2.60 | | | 100 | 99 | 97 | 87* |
| SS-16 | 67 | | | | Sandy Gravelly CLAY; gray; 31% sub-angular to sub-rounded gravel; 27% fine to coarse sand; 42% medium plasticity clay; STIFF. | 6 | 7 | 8 | | 31 | | 45 | 25 | 2.64 | | | 69 | 60 | 57 | 42 |
| SS-17 | 89 | | CL | | Sandy Gravelly CLAY; grayish brown; 5% gravel; 46% fine to coarse sand; 49% medium plasticity clay; HARD. | 9 | 13 | 25 | | 24 | | 42 | 22 | 2.63 | | | 95 | 85 | 73 | 49 |
| SS-18 | 100 | | | | | 33 | 50 | 2 | | 16 | | | | 2.64 | | | 73 | 55 | 38 | 26 |
| SS-19 | 100 | | SW | | Silty Gravelly SAND; brownish gray; 27% sub-rounded to sub-angular gravel; 47% well-graded sand; 26% non plastic silt; VERY DENSE. | 16 | 21 | 13 | | | | | | | | | | | | |
| SS-20 | 100 | | SM | | Silty SAND; grayish brown; 40% fine sand with 12% medium sand; 47% medium plasticity silt; VERY DENSE. | 17 | 23 | 12 | | 47 | | 44 | 21 | 2.63 | | | 100 | 99 | 87 | 47 |
| | | | | | | | | | | End of Borehole (19.97 m) | | | | | | | | | | |

End of Borehole (19.97 m)


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Figure 5-3-3 (195/221) BORING LOGS (PHASE I)