Concrete Mobile CALIBRATION WORK SHEET
(Obtain from the Concrete Engineering Unit)

Low SP _____

Concrete Mobile Serial Number:_____ Owned By:

Calibrated By:_____ Date Calibrated:

Concrete Mobile Constants: 45 kg (100 lb.) cement per_____ revolutions at_____ seconds.

Aggregate Sources: _____Fine Aggregate and_____ Coarse Aggregate.

Step 1 - Cement Check (Pre-load the Belt, etc. for the first run)
Number of revolutions required_____ Run
Quantity of Cement and Weight of Container.....
Weight of Container.....
Quantity of Cement....._____6 (A)

A. If quantity of cement is between 45 and 46 kg (100 - 102 lb.), proceed to Step 2.
If not make two more runs. Run_____ Run_____

Quantity of Cement and Weight of Container…..

Weight of Container.....

Quantity of Cement.....

Add cement quantities for the three runs and divide by 3 = _____ 6 (B)

B. If average quantity of cement is between 45 and 46 kg (100 - 102 lb.), proceed to Step 2.
If not, correct as follows:

New Meter Count = $\frac{\text{Previous meter Count x 46 kg (102 lb.)}}{\text{Average Cement Weight (B)}}$

$\frac{\text{New Meter Count}}{\text{45 kg (100 lb.) Cement}}$ = _____ =

New Time Constant = $\frac{\text{New Meter Count x Previous Time Constant}}{\text{Previous Meter Count}}$

= _____ =

Empty Cement Bin.

Step 2 - Sand and Stone Dial Checks

A. Standard Concrete Mobile - use 76.2 mm x 76.2 mm x 203.2 mm (3” x 3” x 8”) hard wood block (provided by Contractor).
Sand and Stone Dial Pointers should read between 6.2 and 6.6.

B. Magnum Concrete Mobile - use 42.86 mm (1-11/16”) hard wood block (provided by Contractor).
Sand Dial Pointer should read between 7.8 and 8.0.
Stone Dial Pointer should read between 7.4 and 7.6.

Step 3 - Aggregate Calibration
Number of revolutions required _____ (Meter Count per 45 kg (100 lb.) Cement)

A. Fill Sand Bin (Cement Bin and Stone Bin must be empty)

Sand Dial Pointer set at 2.0 (6.0 Magnum) (Pre-load the Belt).

Run 1

Quantity of Sand and Weight of Container.....

Weight of Container.....

Quantity of Sand.....

Sand Dial Pointer set at 3.0 (7.5 Magnum) (Pre-load the Belt).

Run 1

Quantity of Sand and Weight of Container.....

Weight of Container.....

Quantity of Sand.....

Sand Dial Pointer set at 4.0 (9.0 Magnum) (Pre-load the Belt).

Run 1

Quantity of Sand and Weight of Container.....

Weight of Container.....

Quantity of Sand.....

Plot Sand Dial Settings vs. Quantity of Sand. (See Fig. B 5-694.455, Concrete Manual.)

B. Fill Stone Bin (Cement Bin and Sand Bin Empty)

Stone Dial Pointer set at 3.0 (7.0 Magnum) (Pre-load the Belt).

Run 1

Quantity of Stone and Weight of Container.....

Weight of Container.....

Quantity of Sand.....

Stone Dial Pointer set at 4.0 (9.0 Magnum) (Pre-load the Belt).

Run 1

Quantity of Stone and Weight of Container.....

Weight of Container.....

Quantity of Sand.....

Stone Dial Pointer set at 5.0 (11.0 Magnum) (Pre-load the Belt).

Run 1

Quantity of Stone and Weight of Container.....

Weight of Container.....

Quantity of Sand.....

Plot Stone Dial Setting vs. Quantity of Stone. (See Fig. B 5-694.455, Concrete Manual.)

Step 4 - Admixture Calculations

HiFlo System - Water Reducer (8 parts solution).

A. Time Constant (Seconds/45 kg (100 lb.) Cement)

B. Milliliters (Ounces) of Water Reducer/45 kg (100 lb.) Cement
(See Concrete Manual for Dosage)

C. Determine Cement Discharged/Minute (45 kg units (100 lb.))
60 / A =

D. Milliliters (Ounces) of Water Reducer Required/Minute
B x C =

E. Milliliter (Ounces) of Solution Required/Minute
D x 8 =

F. Number of Liters (Quarts) of Solution Required/Minute
E / $\frac{1000\ ml}{Liter}$ or E / $\frac{(32\ oz)}{(Quart)}$ =

HiFlo Setting (from HiFlo Chart)

NOTE: The HiFlo setting will remain constant as long as the Time Constant remains and the Water Reducer Dose is not changed.

Form 2448, Weekly Concrete Report, requires the amount of Air Entraining agent per m^3 (yd^3). This is obtained as follows:

B x $\frac{496\ kg\ (836\ lb.)\ Cement}{45\ kg\ (100\ lb.)}$ = _____ Water Reducer/m^3 (yd^3).

LoFlo System - Air Entraining Agent (11 parts solution)

The LoFlo setting is obtained by trial and error based on air content of the mix as determined by the air meter. Use a setting of 0.8 and adjust to obtain 6.5% air (3U17A Concrete Mix).

Form 2448 requires the amount of Air Entraining agent per m^3 (yd^3). This is obtained as follows:

G. Milliliters (Ounces) of Solution/Minute (from LoFlo Chart)

H. Milliliters (Ounces) of Air Entraining Agent/Minute
G / 11 =

I. Milliliters (Ounces) of Air Entraining Agent/45 kg (100 lb.) Cement
H / C =

Air Entraining Agent m^3 (yd^3) = I x $\frac{496\ kg\ (836\ lb.)\ Cement}{45\ kg(100\ lb.)}$ =