

WIND-TUNNEL STUDY OF TRIAD PLAZA HOTEL  
AND OFFICE TOWER, HOUSTON

by

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## LIST OF SYMBOLS

| <u>Symbol</u>    | <u>Definition</u>   |
|------------------|---|
| U                | Local mean velocity   |
| D                | Characteristic dimension (building height, width, etc.)   |
| $\nu, \rho$      | Kinematic viscosity and density of approach flow  |
| $\frac{UD}{\nu}$ | Reynolds number   |
| E                | Mean voltage  |
| A, B, n          | Constants   |
| $U_{rms}$        | Root-mean-square of fluctuating velocity  |
| $E_{rms}$        | Root-mean-square of fluctuating voltage   |
| $U_{\infty}$     | Reference mean velocity outside the boundary layer  |
| X, Y             | Horizontal coordinates  |
| Z                | Height above surface  |
| $\delta$         | Height of boundary layer  |
| $T_u$            | Turbulence intensity $\frac{U_{rms}}{U_{\infty}}$ or $\frac{U_{rms}}{U}$  |
| $C_{p_{mean}}$   | Mean pressure coefficient, $\frac{(p-p_{\infty})_{mean}}{0.5 \rho U_{\infty}^2}$                                    |
| $C_{p_{rms}}$    | Root-mean-square pressure coefficient, $\frac{((p-p_{\infty})-(p-p_{\infty})_{mean})_{rms}}{0.5 \rho U_{\infty}^2}$ |
| $C_{p_{max}}$    | Peak maximum pressure coefficient, $\frac{(p-p_{\infty})_{max}}{0.5 \rho U_{\infty}^2}$                             |
| $C_{p_{min}}$    | Peak minimum pressure coefficient, $\frac{(p-p_{\infty})_{min}}{0.5 \rho U_{\infty}^2}$                             |
| $( )_{min}$      | Minimum value during data record  |
| $( )_{max}$      | Maximum value during data record  |
| p                | Fluctuating pressure at a pressure tap on the structure   |
| $p_{\infty}$     | Static pressure in the wind tunnel above the model  |

| <u>Symbol</u>   | <u>Definition</u>               |  |
|-----------------|---------------------------------|--|
| $F_x, F_y$      | Forces in X, Y direction        |  |
| $M_x, M_y, M_z$ | Moments about X, Y, Z axes      |  |
| $A_R$           | Reference Area                  |  |
| $L_R$           | Reference Length                |  |
| $CF_X$          | Force coefficient, X direction, | $\frac{F_x}{A_R 0.5\rho U_\infty^2}$     |
| $CF_Y$          | Force coefficient, Y direction, | $\frac{F_y}{A_R 0.5\rho U_\infty^2}$     |
| $CM_X$          | Moment coefficient, X axis,     | $\frac{M_x}{A_R H_R 0.5\rho U_\infty^2}$ |
| $CM_Y$          | Moment coefficient, Y axis,     | $\frac{M_y}{A_R H_R 0.5\rho U_\infty^2}$ |
| $CM_Z$          | Moment coefficient, Z axis,     | $\frac{M_z}{A_R H_R 0.5\rho U_\infty^2}$ |

## 1. INTRODUCTION

### 1.1 General

A significant characteristic of modern building design is lighter cladding and more flexible frames. These features produce an increased vulnerability of glass and cladding to wind damage and result in larger deflections of the building frame. In addition, increased use of pedestrian plazas at the base of the buildings has brought about a need to consider the effects of wind and gustiness in the design of these areas.

The building geometry itself may increase or decrease wind loading on the structure. Wind forces may be modified by nearby structures which can produce beneficial shielding or adverse increases in loading. Overestimating loads results in uneconomical design; underestimating may result in cladding or window failures. Tall structures have historically produced unpleasant wind and turbulence conditions at their bases. The intensity and frequency of objectionable winds in pedestrian areas is influenced both by the structure shape and by the shape and position of adjacent structures.

Techniques have been developed during the past decade for wind tunnel modeling of proposed structures which allow the prediction of wind pressures on cladding and windows, overall structural loading, and also wind velocities and gusts in pedestrian areas adjacent to the building. Information on sidewalk-level gustiness allows plaza areas to be protected by design changes before the structure is constructed. Accurate knowledge of the intensity and distribution of the pressures on the structure permits adequate but economical selection of window strength to meet selected maximum design winds and overall wind loads for the design of the frame for flexural control.

Modeling of the aerodynamic loading on a structure requires special consideration of flow conditions in order to guarantee similitude between model and prototype. A detailed discussion of the similarity requirements and their wind tunnel implementation can be found in References (1), (2), and (3). In general, the requirements are that the model and prototype be geometrically similar, that the approach mean velocity at the building site have a vertical profile shape similar to the full-scale flow, that the turbulence characteristics of the flows be similar, and that the Reynolds number for the model and prototype be equal.

These criteria are satisfied by constructing a scale model of the structure and its surroundings and performing the wind tests in a wind tunnel specifically designed to model atmospheric boundary-layer flows. Reynolds number similarity requires that the quantity  $UD/\nu$  be similar for model and prototype. Since  $\nu$ , the kinematic viscosity of air, is identical for both, Reynolds numbers cannot be made precisely equal with reasonable wind velocities. To accomplish this the air velocity in the wind tunnel would have to be as large as the model scale factor times the prototype wind velocity, a velocity which would introduce unacceptable compressibility effects. However, for sufficiently high Reynolds numbers ( $>2 \times 10^4$ ) the pressure coefficient at any location on the structure will be essentially constant for a large range of Reynolds numbers. Typical values encountered are  $10^7$ - $10^8$  for the full-scale and  $10^5$ - $10^6$  for the wind-tunnel model. In this range acceptable flow similarity is achieved without precise Reynolds number equality.

## 1.2 The Wind Tunnel Test

The wind-engineering study is performed on a building or building group modeled at scales ranging from 1:150 to 1:400. The building model

is constructed of clear plastic fastened together with screws. The structure is modeled in detail to provide accurate flow patterns in the wind passing over the building surfaces. The building under test is often located in a surrounding where nearby buildings or terrain may provide beneficial shielding or adverse wind loading. To achieve similarity in wind effects the area surrounding the test building is also modeled. A flow visualization study is first made (smoke is used to make the air currents visible) to define overall flow patterns and identify regions where local flow features might cause difficulties in building curtain-wall design or produce pedestrian discomfort.

The test model, equipped with pressure taps (200 to 600 or more), is exposed to an appropriately modeled atmospheric wind in the wind tunnel and the fluctuating pressure at each tap measured electronically. The model, and the modeled area, are rotated 15 degrees and another set of data recorded for each pressure tap. Normally, 24 sets of data (360 degrees of turning) are taken; however, when flow visualization or recorded data indicate high pressure regions of small azimuthal extent, data is obtained in smaller azimuthal steps.

Data are recorded, analyzed and processed by an on-line computerized data-acquisition system. Pressure coefficients of several types are calculated by the computer for each reading on each piezometer tap and are printed in tabular form as computer readout. Using wind data applicable to the building site, representative wind velocities are selected for combination with measured pressures on the building model. Integration of test data with wind data results in prediction of peak local wind pressures for design of glass or cladding and may include overall forces and moments on the structure (by floor if desired) for design of

the structural frame. Pressure contours are drawn on the developed building surfaces showing the intensity and distribution of peak wind loads on the building. These results may be used to divide the building into zones where lighter or heavier cladding or glass may be desirable.

Based on the visualization (smoke) tests and on a knowledge of heavy pedestrian use areas, a dozen or more locations may be chosen at the base of the building where wind velocities can be measured to determine the relative comfort or discomfort of pedestrians in plaza areas, near building entrances, near building corners, or on sidewalks. Usually a reference pedestrian position is also tested to determine whether the wind environment in the building area is better or worse than the environment a block or so away in an undisturbed area.

The following pages discuss in greater detail the procedures followed and the equipment and data collecting and processing methods used. In addition, the data presentation format is explained and the implications of the data are discussed.

## 2. EXPERIMENTAL CONFIGURATION

### 2.1 Wind Tunnel

Wind-engineering studies are performed in the Fluid Dynamics and Diffusion Laboratory at Colorado State University (Figure 1). Three large wind tunnels are available for wind loading studies depending on the detailed requirements of the study. The wind tunnel used for this investigation is shown in Figure 2. All tunnels have a flexible roof adjustable in height to maintain a zero pressure gradient along the test section. The mean velocity can be adjusted continuously in each tunnel to the maximum velocity available.

### 2.2 Model

In order to obtain an accurate assessment of local pressures using piezometer taps, models are constructed to the largest scale that does not produce significant blockage in the wind-tunnel test section. The models are constructed of 1/2 in. thick Lucite plastic and fastened together with metal screws. Significant variations in the building surface, such as mullions, are machined into the plastic surface. Piezometer taps (1/16 in. dia) are drilled normal to the exterior vertical surfaces in rows at several or more elevations between the bottom and top of the building. Similarly, taps are placed in the roof and on any sloping, protruding, or otherwise distinctive features of the building that might need investigation.

Pressure tap locations are chosen so that the entire surface of the building can be investigated for pressure loading and at the same time permit critical examination of areas where experience has shown that maximum wind effects may be expected to occur. Locations of the pressure taps for this study are shown in Figure 3. Dimensions are given both for

full-scale building (in ft) and for model (in in.). The pressure tap numbers are shown adjacent to the taps.

The pressure tests are sometimes made in two stages. In the first stage measurements are made on the initial distribution of pressure taps. If it becomes apparent from the data that the loading on the building is being influenced by some unsuspected geometry of the building or adjacent structures, additional pressure taps are installed in the critical areas. The locations of the taps are selected so that the maximum loading can be detected and the area over which this loading is acting can be defined. Any added taps are also shown in Figure 3.

A circular area 750 to 2000 ft in radius depending on model scale and characteristics of the surrounding buildings and terrain is modeled in detail. Structures within the modeled region are made from styrofoam and cut to the individual building geometries. They are mounted on the turntable in their proper locations. Significant terrain features are included as needed. The model is mounted on a turntable (Figure 2) near the downwind end of the test section. Any buildings or terrain features which do not fit on the turntable are placed on removable pieces which are placed upwind of the turntable for appropriate wind directions. A plan view of the building and its surroundings is shown in Figure 4. The turntable is calibrated to indicate azimuthal orientation to 0.1 degree.

The region upstream from the modeled area is covered with a randomized roughness constructed using various sized cubes placed on the floor of the wind tunnel. Different roughness sizes may be used for different wind directions. Spires are installed at the test-section entrance to provide a thicker boundary-layer than would otherwise be available. The



thicker boundary-layer permits a somewhat larger scale model than would otherwise be possible. The spires are approximately triangularly shaped pieces of 1/2 in. thick plywood 6 in. wide at the base and 1 in. wide at the top, extending from the floor to the top of the test section. They are placed so that the broad side intercepts the flow. A barrier approximately 8 in. high is placed on the test-section floor downstream of the spires to aid in development of the boundary-layer flow.

The distribution of the roughness cubes and the spires in the roughened area was designed to provide a boundary-layer thickness of approximately 4 ft, a velocity profile power-law exponent similar to that expected to occur in the region approaching the modeled area for each wind direction (a number of wind directions may have the same approach roughness). A photograph of the completed model in the wind tunnel is shown in Figure 5. The wind-tunnel ceiling is adjusted after placement of the model to obtain a zero pressure gradient along the test section.

### 3. INSTRUMENTATION AND DATA ACQUISITION

#### 3.1 Flow Visualization

Making the air flow visible in the vicinity of the model is helpful (a) in understanding and interpreting mean and fluctuating pressures, (b) in defining zones of separated flow and reattachment and zones of vortex formation where pressure coefficients may be expected to be high and (c) in indicating areas where pedestrian discomfort may be a problem. Titanium tetrachloride smoke is released from sources on and near the model to make the flow lines visible to the eye and to make it possible to obtain motion picture records of the tests. Conclusions obtained from these smoke studies are discussed in Sections 4.1 and 5.1.

#### 3.2 Pressures

Mean and fluctuating pressures are measured at each of the pressure taps on the model structure. Data are obtained for 24 wind directions, rotating the entire model assembly in a complete circle. Seventy-six pieces of 1/16 in. I.D. plastic tubing each 18 in. long are used to connect 76 pressure ports at a time to an 80 tap pressure switch mounted inside the model. The switch was designed and fabricated in the Fluid Dynamics and Diffusion Laboratory to minimize the attenuation of pressure fluctuations across the switch. Each of the 76 measurement ports is directed in turn by the switch to one of four pressure transducers mounted close to the switch. The four pressure input taps not used for transmitting building surface pressures are connected to a common tube leading outside the wind tunnel. This arrangement provides both a means of performing in-place calibration of the transducers and, by connecting this tube to a pitot tube mounted inside the wind tunnel, a means of automatically monitoring the tunnel speed. The switch is operated by

means of a shaft projecting through the floor of the wind tunnel. A computer-controlled stopping motor steps the switch into each of the 20 required positions. The computer keeps track of switch position but a digital readout of position is provided at the wind tunnel.

The pressure transducers used are Statham differential strain gage transducers (Model PM 283TC) with a 0.15 psid range. They were selected because of their stability and linearity in the required working range. The resonant frequency of the transducers is approximately 2,000 Hz. This is sufficiently high that transducer resonance effects on the measured pressures can be ignored. Reference pressures are obtained by connecting the reference sides of the four transducers, using plastic tubing, to the static side of a pitot tube mounted in the wind tunnel free stream above the model building. In this way the transducer measures the instantaneous difference between the local pressures on the surface of the building and the static pressure in the free stream above the model.

Each pressure transducer contains a built-in bridge similar to a Wheatstone Bridge. The bridge is monitored by a Honeywell Accudata 118 Gage Control/Amplifier unit which provides excitation to the transducer bridge and amplifies the bridge output. These instruments are characterized by a very stable excitation voltage and amplifier gain. Output from the Honeywell signal conditioners is fed to an on-line data acquisition system consisting of a Hewlett-Packard 21 MX computer, disk unit, card reader, printer, Digi-Data digital tape drive and a Preston Scientific analog-to-digital convertor. The data are processed immediately into pressure coefficient form as described in Section 4.3 and stored for printout or further analysis.

All four transducers are recorded simultaneously for 16 seconds at a 250 sample per second rate. The results of an experiment to determine the length of record required to obtain stable mean and rms (root-mean-square) pressures and to determine the overall accuracy of the pressure data acquisition system is shown in Figure 6. A typical pressure port record was integrated for a number of different time periods to obtain the data shown. Examination of a large number of pressure taps showed that the overall accuracy for a 16 second period is, in pressure coefficient form, 0.03 for mean pressures, 0.1 for peak pressures, and 0.01 for rms pressures. Pressure coefficients are defined in Section 4.3.

### 3.3 Velocity

Mean velocity and turbulence intensity profiles are measured upstream of the model to determine that an approach boundary-layer flow appropriate to the site has been established. Tests are made at one wind velocity in the tunnel. This velocity is well above that required to produce Reynolds number similarity between the model and the prototype as discussed in Section 1.1.

In addition, mean velocity and turbulence intensity measurements are made 5 to 7 feet (prototype) above the surface at a dozen or more locations on and near the building for 16 wind directions. The measurement locations are shown on Figure 4. The surface measurements are indicative of the wind environment to which a pedestrian at the measurement location would be subjected. The locations are chosen to determine the degree of pedestrian comfort or discomfort at the building corners where relatively severe conditions frequently are found, near building entrances and on adjacent sidewalks where pedestrian traffic is heavy, and in open plaza areas. In most studies a reference pedestrian position,

located about a block away, is also tested. These data are helpful in evaluating the degree of pedestrian comfort or discomfort in the proposed plaza area in terms of the undisturbed environment in the immediate vicinity.

Measurements are made with a single hot-wire anemometer mounted with its axis vertical. The instrumentation used is a Thermo Systems constant temperature anemometer (Model 1050) with a 0.001 in. dia platinum film sensing element 0.020 in. long. Output is read from a digital voltmeter with a time-constant circuit for mean voltage and a DISA RMS meter (Model 55035) for rms voltage.

Calibration of the hot-wire anemometer is performed using a Thermo Systems calibrator (Model 1125). The calibration data are fit to a variable exponent King's Law relationship of the form

$$E^2 = A + BU^n$$

where  $E$  is the hot-wire output voltage,  $U$  the velocity and  $A$ ,  $B$ , and  $n$  are coefficients selected to fit the data. The above relationship was used to determine the mean velocity at measurement points using the measured mean voltage. The fluctuating velocity in the form  $U_{\text{rms}}$  (root-mean-square velocity) was obtained from

$$U_{\text{rms}} = \frac{2 E E_{\text{rms}}}{B n U^{n-1}}$$

where  $E_{\text{rms}}$  is the root-mean-square voltage output from the anemometer. For interpretation all turbulence measurements were divided by the mean velocity outside the boundary-layer  $U_{\infty}$ .

## 4. RESULTS

### 4.1 Flow Visualization

A film is included as part of this report showing the characteristics of flow about the structure using smoke to make the flow visible. A listing of the contents of the film is shown in Table 1. Several features can be noted from the visualization. As with all large structures, wind approaching the building is deflected down to the plaza level, up over the structure and around the sides. A description of the smoke test results emphasizing flow patterns of concern relative to possible high-wind load areas and pedestrian comfort is given in Section 5.1.

### 4.2 Velocity

Velocity and turbulence profiles are shown in Figures 7a and 7b. These profiles were taken upstream from the model and are characteristic of the boundary-layer approaching the model. As shown in Figure 7a, the boundary-layer thickness,  $\delta$ , was 50 in. The corresponding prototype value of  $\delta$  for this study is shown in Figure 7a. This value was established as a reasonable height for this study. The mean velocity profile has the form

$$\frac{U}{U_{\infty}} = \left(\frac{z}{\delta}\right)^n .$$

The exponent  $n$  for the approach flow established for this study is shown in Figure 7a.

The profile of longitudinal turbulence intensity is shown in Figure 7b. The turbulence intensities are appropriate for the approach mean velocity profile selected. For the purpose of this report, turbulence intensity is defined as the root-mean-square about the mean of the longitudinal velocity fluctuations divided by the reference mean velocity

$U_{\infty}$  at the outer edge of the boundary layer,

$$Tu = \frac{U_{rms}}{U_{\infty}} .$$

A 'peak' velocity representing roughly the largest effective gust velocity was calculated,

$$U_{pk} = \frac{U + 3U_{rms}}{U_{\infty}} .$$

Mean velocity  $U/U_{\infty}$ , turbulence intensity  $U_{rms}/U_{\infty}$ , and largest effective gust at the pedestrian measuring positions shown in Figure 4 are listed in Table 2 for 16 wind directions and are plotted in polar form in Figures 8a, 8b, etc. Measurements were taken 5 to 7 ft above the ground surface. A site map is superimposed on the polar plots to aid in visualization of the effects of the nearby structures on the velocity and turbulence magnitudes. An analysis of these wind data is given in Section 5.2.

To enable a quantitative assessment of the wind environment, the wind-tunnel data were combined with wind frequency and direction information obtained at the local airport. Table 3 shows wind frequency by direction and magnitude obtained from summaries published by the National Weather Service. These data, usually obtained at an elevation of about 30 to 40 ft, were converted to velocities at the reference velocity height for the wind tunnel measurements and combined with the wind tunnel data to obtain cumulative probability distributions (percent time a given velocity is exceeded) for wind velocity at each measuring location. The percentage times were summed by wind direction to obtain a percent time exceeded at each measuring position independent of wind direction (but accounting for the fact that the wind blows from different directions with varying frequency). These results are plotted in Figure 9a, 9b, etc.

Interpretation of Figure 9 is aided by a description of the effects of wind of various magnitudes on people. The earliest quantitative description of wind effects was established by Sir Francis Beaufort in 1806 for use at sea and is still in use today. Several recent investigators have added to the knowledge of wind effects on pedestrians. These investigations along with suggested criteria for acceptance have been summarized by Penwarden and Wise (4). The Beaufort scale, based on mean velocity only, is reproduced as Table 4 including qualitative descriptions of wind effects. Table 4 suggests that mean wind speeds below 12 mph are of minor concern and that mean speeds above 24 mph are definitely inconvenient. Included in Section 5.2 is an analysis of the percent of time that the 12 and 24 mph magnitude are exceeded by mean winds and implications for pedestrian comfort.

The peak gust values require a somewhat different interpretation. The peak gust curves shown in Figure 9 are the percent of time during which a short gust of the stated magnitude could occur (say less than one of these gusts per hour). Evidence suggests that gusts greater than about 35 mph in magnitude can be a major impediment to pedestrians, particularly the elderly. Most measuring locations experience winds in which gusts of 35 mph or higher occur much less frequently than the 24 mph mean winds. Implications of these data are presented in Section 5.2.

Because some pedestrian wind measuring positions are purposely chosen at sites where the smoke tests showed large velocities of small spacial extent, the general wind environment about the structure may be less severe than one might infer from a strict analysis of Table 2 and Figure 9.



### 4.3 Pressures

For each of the pressure taps examined at each wind direction, the data record is analyzed to obtain four separate pressure coefficients.

The first is the mean pressure coefficient

$$C_{p_{\text{mean}}} = \frac{(p-p_{\infty})_{\text{mean}}}{0.5 \rho U_{\infty}^2}$$

where the symbols are as defined in the List of Symbols. It represents the mean of the instantaneous pressure difference between the building pressure tap and the static pressure in the wind tunnel above the building model, nondimensionalized by the dynamic pressure

$$0.5 \rho U_{\infty}^2$$

at the reference velocity position. This relationship produces a dimensionless coefficient which indicates that the mean pressure difference between building and ambient wind at a given point on the structure is some fraction less or some fraction greater than the undisturbed wind dynamic pressure near the upper edge of the boundary layer. Using the measured coefficient, prototype mean pressure values for any wind velocity may then be calculated.

The magnitude of the fluctuating pressure is obtained by the rms pressure coefficient

$$C_{p_{\text{rms}}} = \frac{\left( (p-p_{\infty}) - (p-p_{\infty})_{\text{mean}} \right)_{\text{rms}}}{0.5 \rho U_{\infty}^2}$$

in which the numerator is the root-mean-square of the instantaneous pressure difference about the mean.

If the pressure fluctuations followed a Gaussian probability distribution, no additional data would be required to predict the

frequency with which any given pressure level would be observed. However, the pressure fluctuations do not follow a Gaussian probability distribution so that additional information is required to show the extreme values of pressure expected. The peak maximum and peak minimum pressure coefficients are used to determine these values:

$$C_{p_{\max}} = \frac{(p-p_{\infty})_{\max}}{0.5 \rho U_{\infty}^2}$$

$$C_{p_{\min}} = \frac{(p-p_{\infty})_{\min}}{0.5 \rho U_{\infty}^2}$$

The values of  $p-p_{\infty}$  which were digitized at 250 samples per second for 16 seconds, representing about one hour of time in the full scale, are examined individually by the computer to obtain the most positive and most negative values during the 16 second period. These are converted to  $C_{p_{\max}}$  and  $C_{p_{\min}}$  by nondimensionalizing with the free stream dynamic pressure.

The four pressure coefficients are calculated by the on-line data acquisition system computer and tabulated along with the approach wind azimuth in degrees from true north. The list of coefficients is included as Appendix A. The pressure tap code numbers used in the appendix are explained in Figure 3.

To determine the largest peak loads acting at any point on the structure for cladding design purposes, the pressure coefficients for all wind directions were searched to obtain, at each pressure tap, the largest absolute value of peak pressure coefficient. Table 6 provides these pressure coefficients and associated wind directions. Included in

Section 5.3 is an analysis of the coefficients of Table 6 including the maximum values obtained and where they occurred on the building.

The pressure coefficients of Table 6 can be converted to full-scale loads by multiplication by a suitable reference pressure selected for the field site. This reference pressure is represented in the equations for pressure coefficients by the  $0.5 \rho U_{\infty}^2$  denominator. This value is the dynamic pressure associated with an hourly mean wind at the reference velocity measurement position at the edge of the boundary layer. In general, the method of arriving at a design reference pressure for a particular site involves selection of a design wind velocity, translation of the velocity to an hourly mean wind at the reference velocity location and conversion to a reference pressure. Selection of the design velocity can be made from statistical analysis of extreme wind data or selected from wind maps contained in the proposed wind loading code ANSI A58.1 of the American National Standards Institute (5). The calculation of reference pressure for this study is shown in Table 5. The factor used in Table 5 to reduce gust winds to hourly mean winds is given in reference (6).

The reference pressure associated with the design hourly mean velocity at the reference velocity location can be used directly with the peak-pressure coefficients to obtain peak local design wind loads for cladding design. For glass design pressures, a glass load factor is used to account for the different duration of measured peak pressures and the one minute loading used in glass design charts. Recent research (6) indicates that the period of application of the peak pressures reported herein is about 5-10 seconds or less. If a glass design is based on these peak values, then a glass strength associated with this

duration load is indicated. If the glass design is based on some alternate load duration--say one minute--then some reduction in peak loads should be made. An estimate of a load reduction factor can be obtained from an empirical relation of glass strength as a function of load duration (8). A glass load factor of 0.73 on the reference pressure was used to convert the short 5-10 second pressure peaks to one minute loads typically cited in glass selection charts.

Local, instantaneous peak loads on the full-scale building suitable for cladding design were computed by multiplying the reference pressure of Table 5 by the peak coefficients of Table 6. Loadings appropriate for glass design were computed by multiplying the reference pressure by the peak coefficients of Table 6 with application of the 0.73 load factor. Table 6 shows both of these results. The maximum psf load given at each tap location is the absolute value of the maximum value found in the tests, irrespective of its algebraic sign. For ease in visualizing the loads on the structure, contours of equal peak pressures for cladding and glass design shown in Table 6 have been plotted on developed elevation views of the structure, Figure 10.

#### 4.4 Forces and Moments

Force coefficients in the horizontal X and Y directions and moment coefficients about the X, Y and Z axes with the origin at ground level at the base of the building with Z axis vertical may be computed for the 24 wind directions tested by integration of mean pressures on the building. Overall forces and moments acting on the full-scale building due to wind loading may be obtained from use of these coefficients which is useful in designing the structural framing of the proposed building.

Force and moment coefficients were computed using the equations shown below.

$$CF_X = \frac{F_X}{A_R 0.5\rho U_\infty^2}$$

$$CF_Y = \frac{F_Y}{A_R 0.5\rho U_\infty^2}$$

$$CM_X = \frac{M_X}{A_R H_R 0.5\rho U_\infty^2}$$

$$CM_Y = \frac{M_Y}{A_R H_R 0.5\rho U_\infty^2}$$

$$CM_Z = \frac{M_Z}{A_R H_R 0.5\rho U_\infty^2}$$

Terms and symbols used in the equations are defined in the List of Symbols and the axes are defined for the building in Figure 3. Force coefficients  $CF_X$  and  $CF_Y$  were computed for the horizontal forces acting along the X and Y axes, and moment coefficients  $CM_X$ ,  $CM_Y$  and  $CM_Z$  were computed for moments  $M_X$ ,  $M_Y$  and  $M_Z$  acting about the X, Y and Z axes.  $A_R$  and  $H_R$  represent a constant reference area and reference length for nondimensionalization of the forces and moments. Values of  $A_R$  and  $H_R$  are given in Table 7. The signs on the moments are determined by application of the right-hand rule. The force and

moment coefficients were computed using the mean pressure coefficient at each pressure tap. The resulting force and moment coefficients are shown in Table 7 for the 24 wind directions tested in the wind tunnel. Data are presented for the building as a whole and by floor if requested.

The total forces and moments acting on the building for each wind direction may be computed by multiplying the above coefficients by the reference pressure of Table 5 and a gust load factor selected for an appropriate wind gust duration. The gust load factor, shown in Table 5, was selected to increase the loads from an hourly mean load to that of a gust whose duration would be sufficient for its effect to be fully felt by the structure. Forces and moments calculated by application of the reference pressure and load factor are shown in Table 7. A table of gust load factors for various gust durations is incorporated in Table 5 so that the data of Table 7 may be adjusted to a different load duration if desired.

## 5. DISCUSSION

### 5.1 Flow Visualization

Flow patterns about the Triad Plaza complex did not show any areas on the Hotel where exceptionally high pressures might be expected. Flow about the setbacks on the Office Tower indicated a possibility of local vortex formation which could lead to higher local pressures than might otherwise be expected. Pressure taps were concentrated in these regions to detect possible high pressures. Wind velocities at pedestrian level appeared to be moderate except for limited areas. Velocities in the region of points 5 and 6 on Figure 4 showed somewhat higher than average winds for north to northeasterly winds. Pedestrian winds on the south side of the Office Tower were strong for east to southeast and for westerly winds. Winds were channeled through this area by the shape and orientation of the Office Tower, by the 300 ft rectangular building to the east, and by the proposed 400 ft tower in the Triad complex to the south. Wind speeds on the setback balconies of the Office Tower did not appear large except for isolated wind directions.

### 5.2 Pedestrian Winds

Figure 4 shows the 32 pedestrian locations selected for study. Locations 4, 19, 24 and 25 were located at ground level under overhangs; locations 29 through 32 were located on balconies of the Office Tower. Locations 7 through 10 were located within small fenced patios. Table 2 and Figure 8 show that the largest values of mean velocity,  $U_{\text{mean}}$ , were measured at locations 25 and 22, having four and two wind directions respectively, with mean velocities between 60 and 66 percent of the reference wind  $U_{\infty}$  at 1460 ft. For comparison, an open-country

environment would expect a mean velocity of 40 to 45 percent of  $U_{\infty}$ . Locations 25 and 22 also had six and nine wind directions respectively with values of  $U_{\text{mean}}$  above 50 percent of  $U_{\infty}$ .

The largest values of fluctuating velocity,  $U_{\text{rms}}$ , were measured at location 6 with values of 21 percent of  $U_{\infty}$  at two wind directions. All other locations showed values of 17 percent or less. A value of about 10 to 12 percent might be expected in an open-country environment. The largest values of peak gust, represented by the mean plus three rms as discussed in Section 4.2, were obtained at locations 6 and 25 with values of 100 to 109 percent of  $U_{\infty}$ . Peak values of 75 to 85 percent of  $U_{\infty}$  would be typical of an open-country environment.

Velocity data of Table 2 integrated with local wind data is shown in Figure 9. Based on the data of this figure, mean winds will be above 12 mph, the level where winds become significant, for a maximum of about 20 percent at locations 22 and 25 and 8 percent or less at other locations. A frequency as high as 20 percent is indicative of a possible problem area. The largest percentage of time when mean winds will be above 24 mph, the limit of agreeable winds on land (see Table 4), is about 1 percent at locations 22 and 25 and less than 0.2 percent at other locations. The largest percentages of time when peak gusts could exceed 35 mph were about 2 percent at location 25, 1 percent at locations 22 and 5 and less than 0.6 percent for other locations.

The results of the pedestrian velocity analysis showed that the pedestrian environment about the Triad Plaza complex was relatively mild except at locations 22 and 25. Because smoke flow showed that the velocities on both sidewalks and in the street between the Office Tower and the 400 ft adjacent tower from Sage Street to South Rice Street were



similar to those at locations 22 and 25, the marginal pedestrian environment at those two locations was typical of that along the entire block. The wind environment in this area will, at times, be at the unpleasant level. Plantings or other flow obstructions at pedestrian level would improve local comfort. Winds at possible areas of concern such as the pool (locations 14, 15), tennis courts (locations 12, 13), entrances (locations 4, 19, 24), and balconies (locations 29, 30, 31, 32) all showed acceptable pedestrian wind levels.

### 5.3 Pressures

Table 6 shows the largest pressure coefficients and loads measured on the building for each pressure tap location. The largest peak pressure coefficients measured on the Hotel and Office Tower were -1.9 on the Hotel (tap 315 for wind azimuth 120) and -3.1 on the Office Tower (tap 1522 for wind azimuth 0). These coefficients correspond, using the 50-year-recurrence reference pressure of Table 5, to peak cladding loads of 65 and 105 psf respectively and to one-minute-equivalent glass loads of 47 and 77 psf respectively. The largest pressure on the Office Tower was associated with a vortex formation at a corner setback.

Figure 10 shows contours of equal pressures for both buildings for instantaneous cladding loads and one-minute-equivalent glass loads. Most areas of the Hotel have cladding loads below 40 psf and many areas below 32 psf. Pressures tended to be somewhat higher on the Office Tower with most areas having peak cladding loads below 50 psf.

## REFERENCES

1. Cermak, J. E., "Laboratory Simulation of the Atmospheric Boundary Layer," AIAA Jl., Vol. 9, September 1971.
2. Cermak, J. E., "Applications of Fluid Mechanics to Wind Engineering," A Freeman Scholar Lecture, ASME Jl. of Fluids Engineering, Vol. 97, No. 1, March 1975.
3. Cermak, J. E., "Aerodynamics of Buildings," Annual Review of Fluid Mechanics, Vol. 8, 1976, pp. 75-106.
4. Penwarden, A. D., and Wise, A. F. E., "Wind Environment Around Buildings," Building Research Establishment Report, HMSO, 1975.
5. American National Standards Institute, "American National Standard Building Code Requirements for Minimum Design Loads in Buildings and Other Structures," ANSI Standard A58.1, 1972.
6. Vellozzi, J., and Cohen, C., "Gust Response Factors," Jl. Structural Div., ASCE, Proc. Paper No. 5980, Vol. 94, No. ST6, 1968.
7. Peterka, J. A., and Cermak, J. E., "Peak-Pressure Duration in Separated Regions on a Structure," U.S.-Japan Research Seminar on Wind Effects on Structures, Kyoto, Japan, 9-13 September 1974; Report CEP74-75JAP-JEC8, Fluid Mechanics Program, Colorado State University, September 1974.
8. Architectural Glass Products, Pittsburgh Plate Glass Industries, January 1975.

**FIGURES**

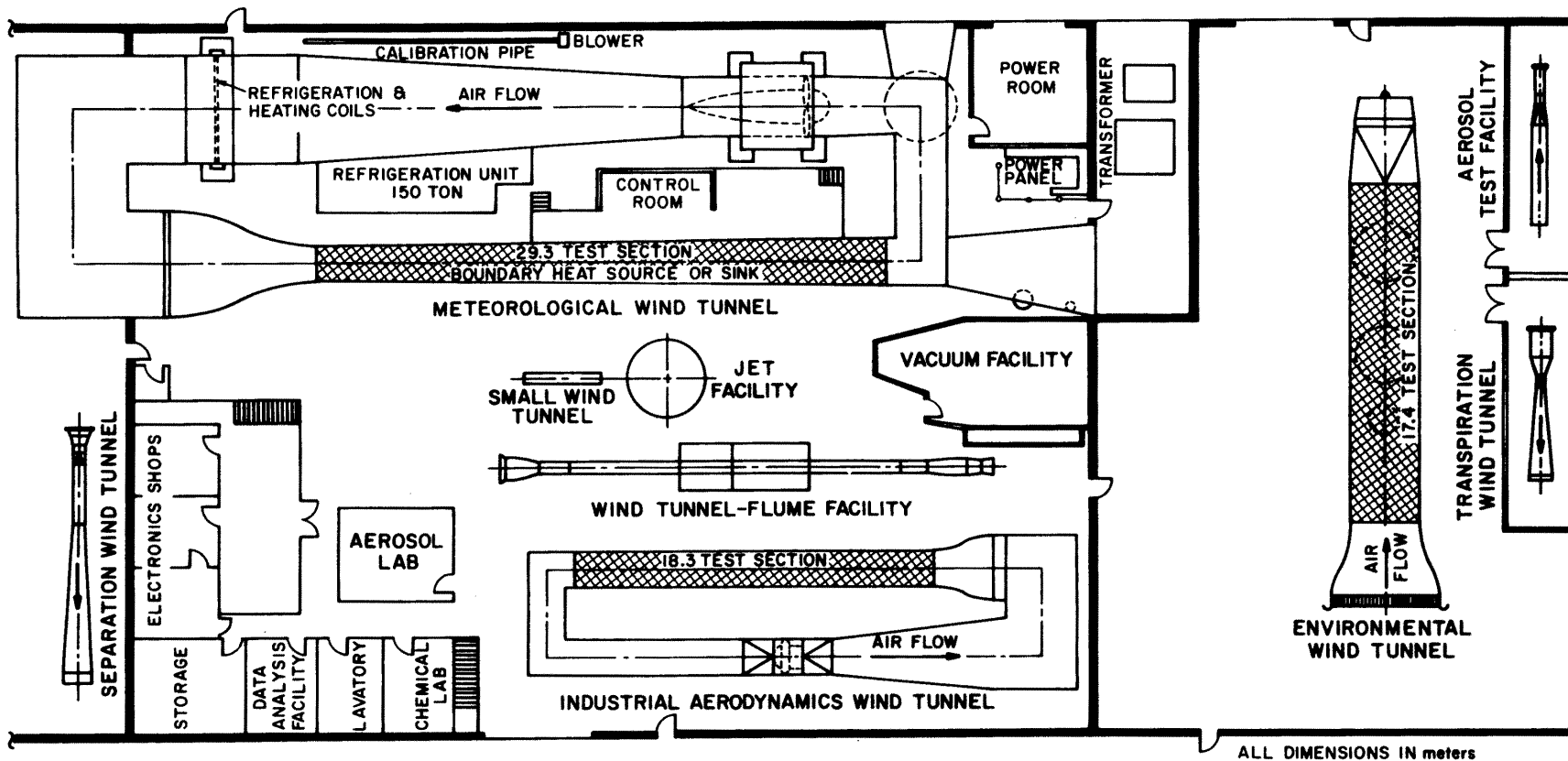
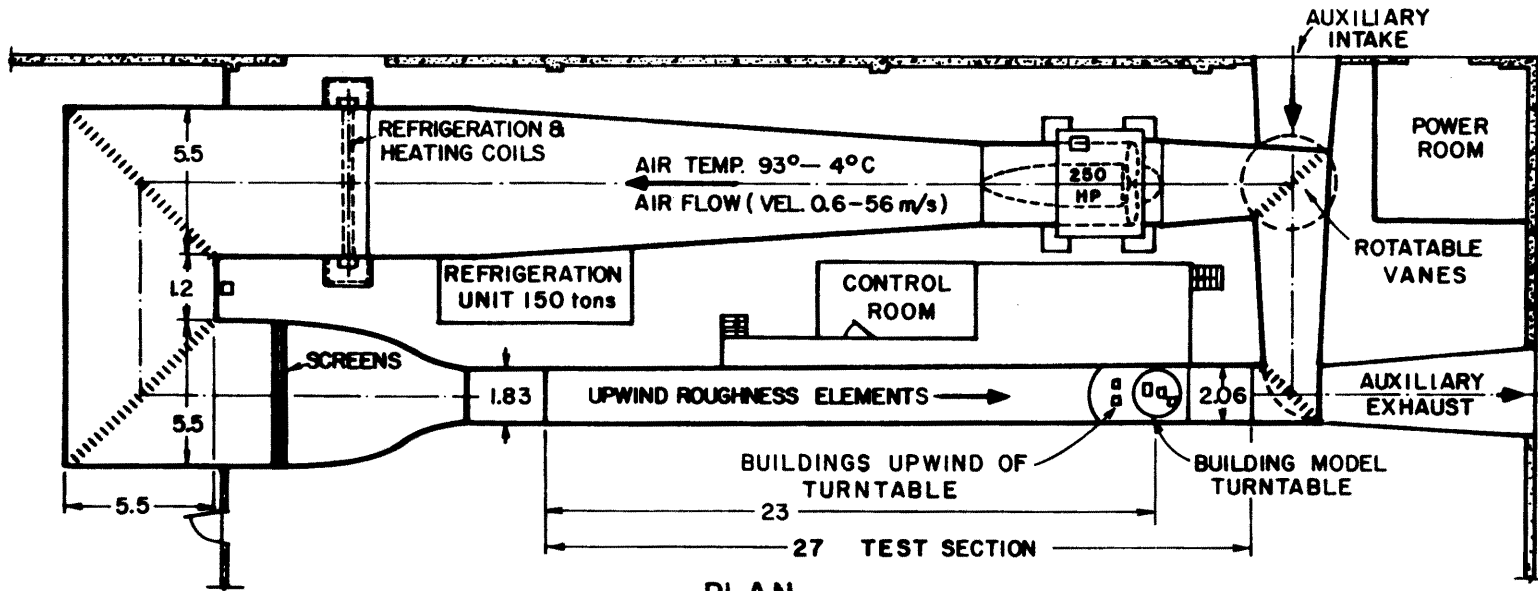
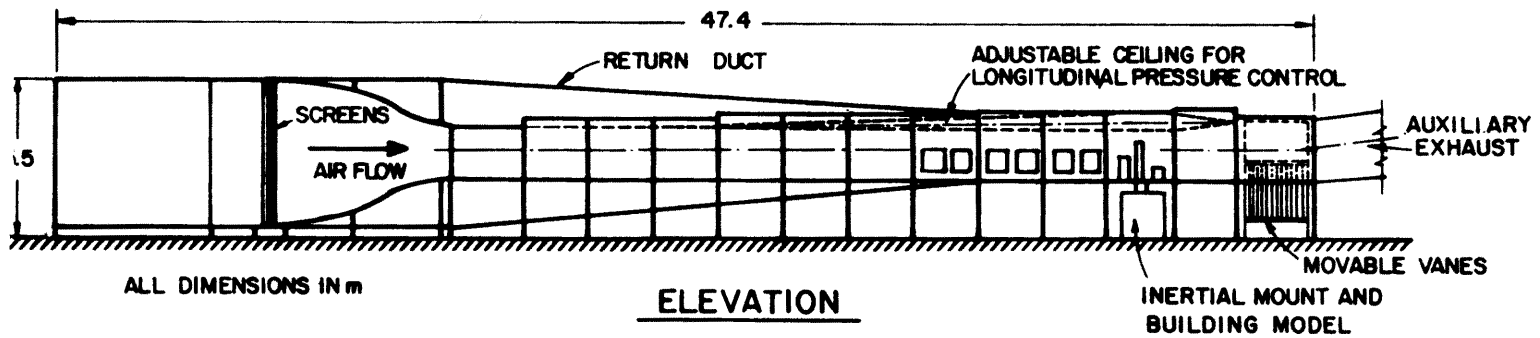


FIGURE 1 - FLUID DYNAMICS AND DIFFUSION LABORATORY  
 COLORADO STATE UNIVERSITY



PLAN



ELEVATION

METEOROLOGICAL WIND TUNNEL

Figure 2 - Wind Tunnel Configuration

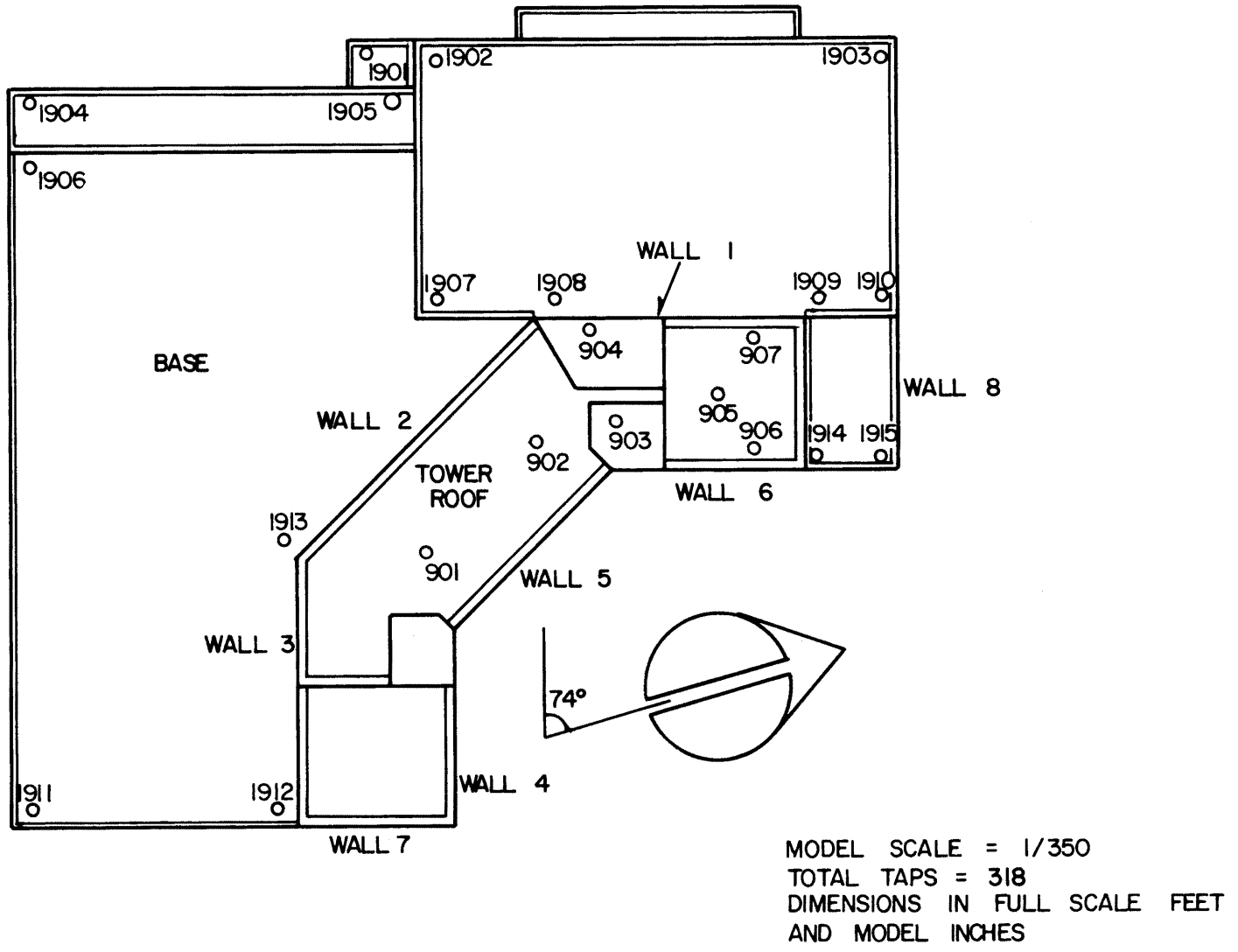


FIGURE 3a PRESSURE TAP LOCATIONS.

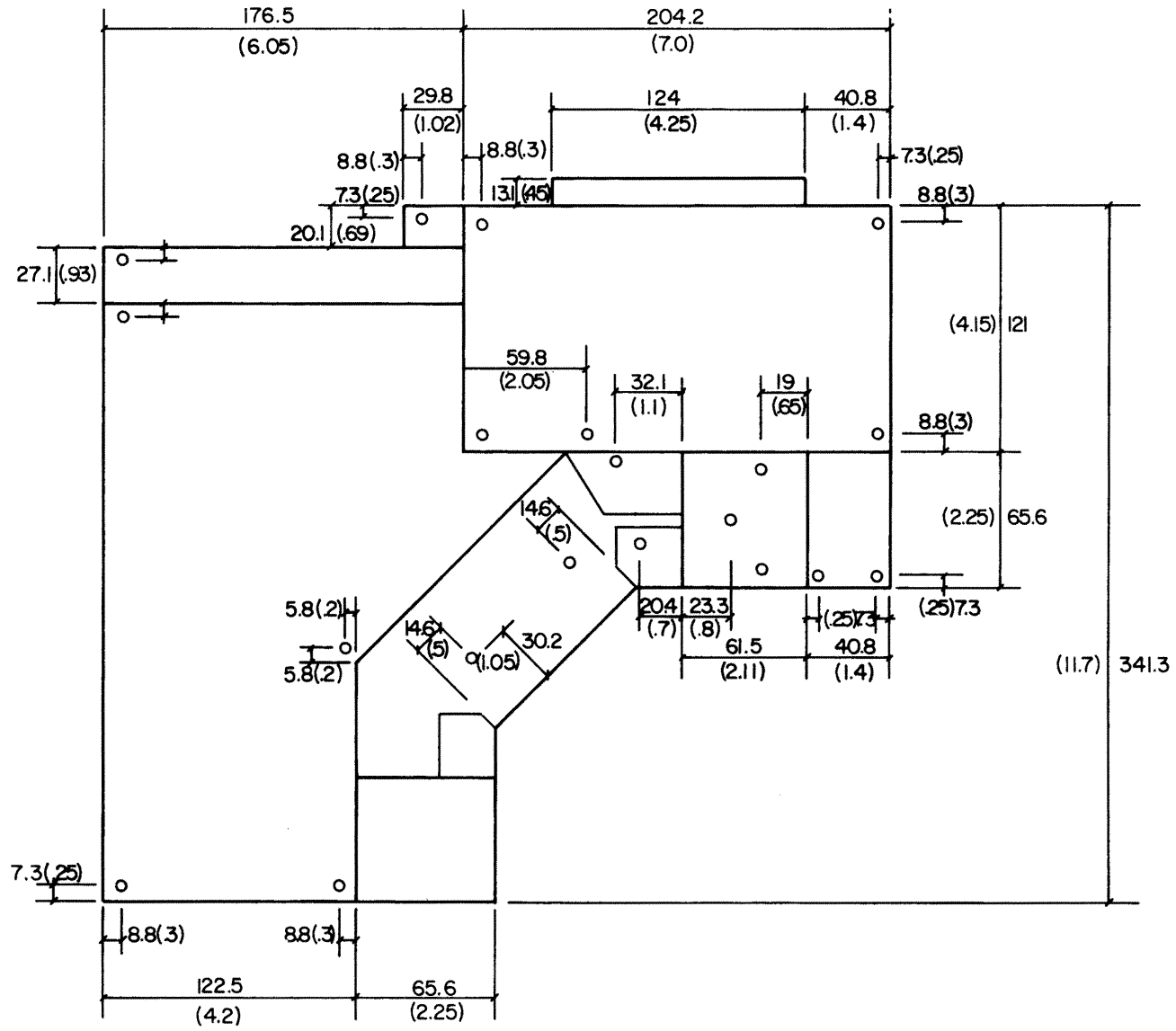


FIGURE 3b. PRESSURE TAP LOCATIONS.

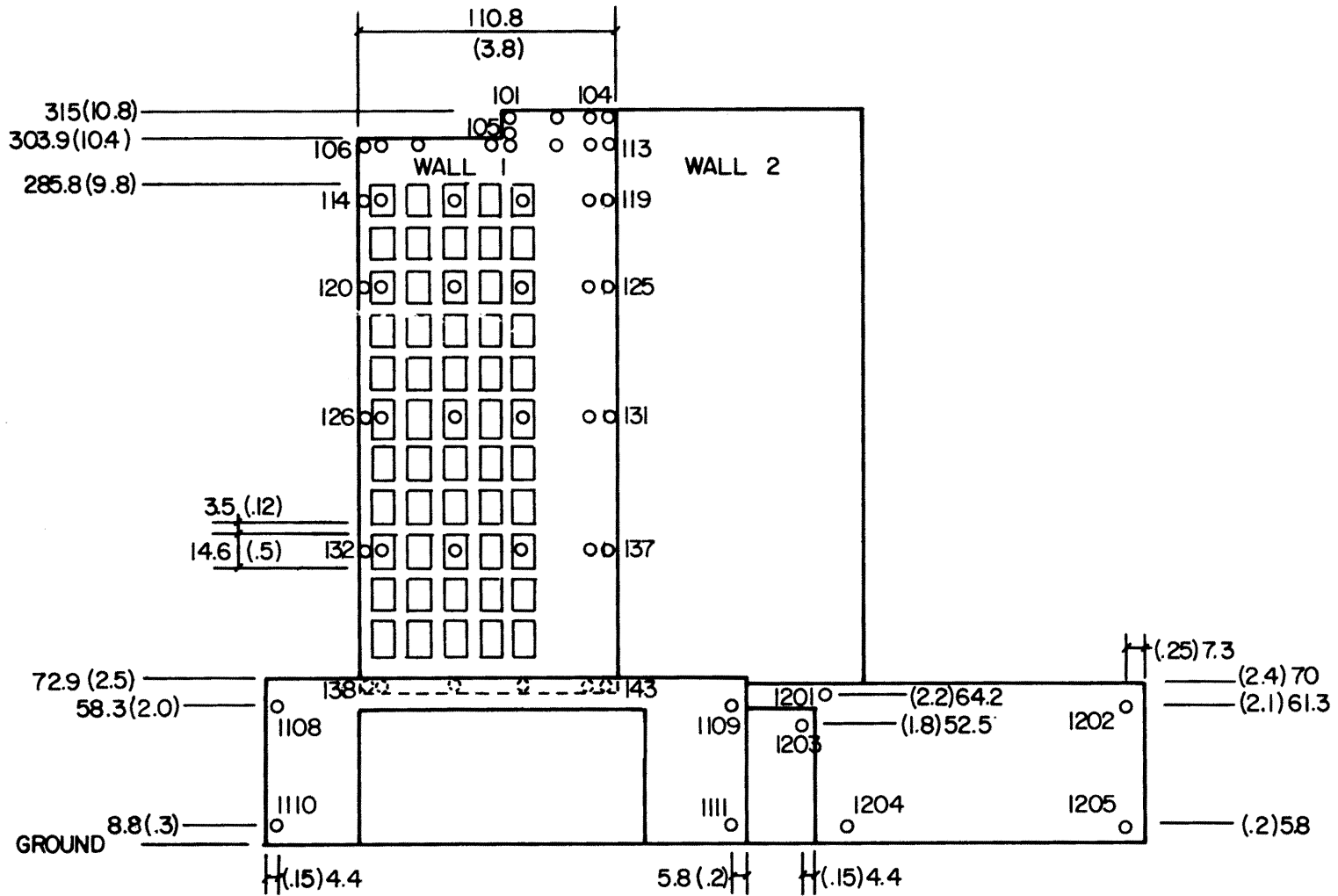


FIGURE 3c PRESSURE TAP LOCATIONS



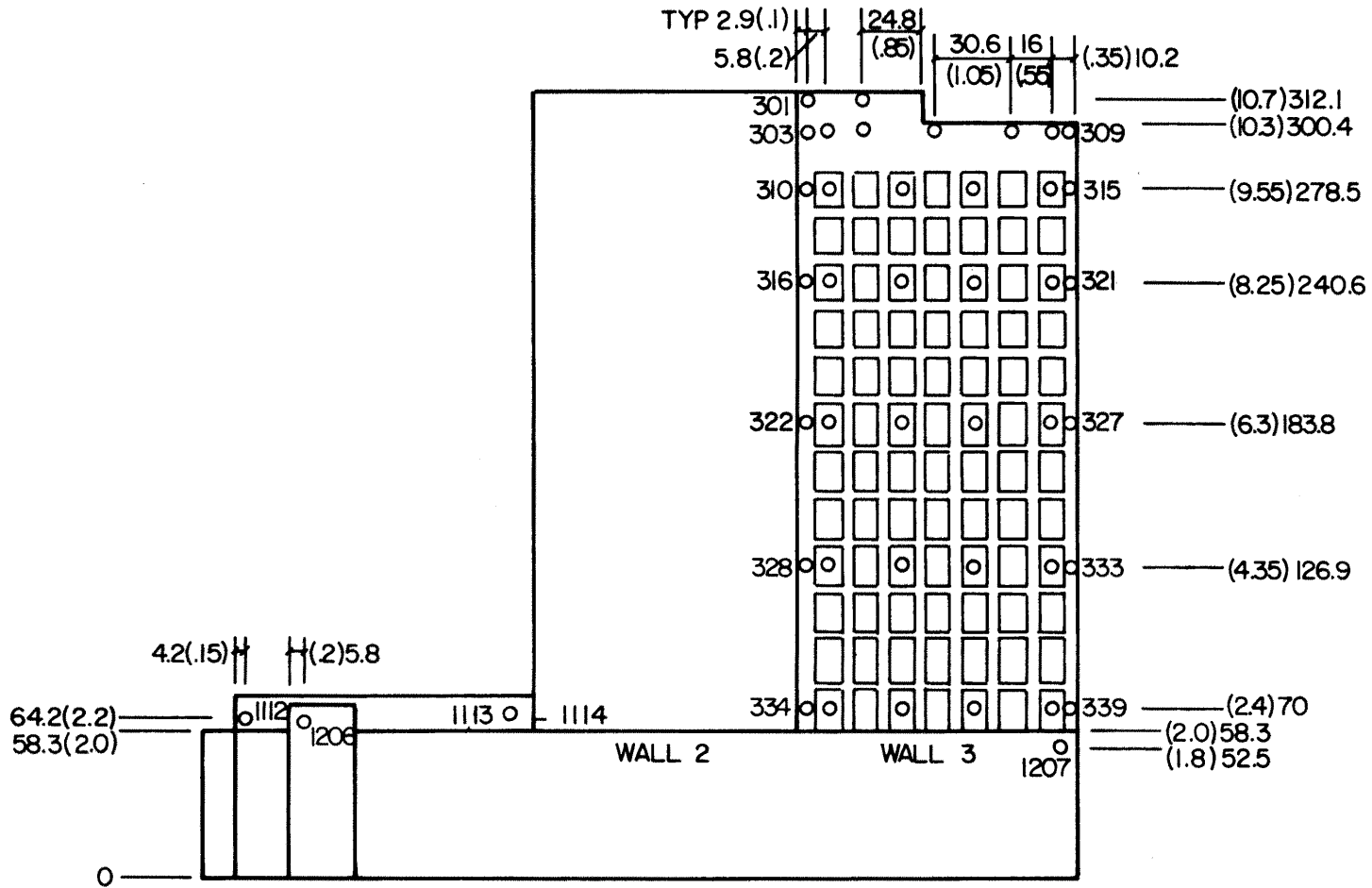
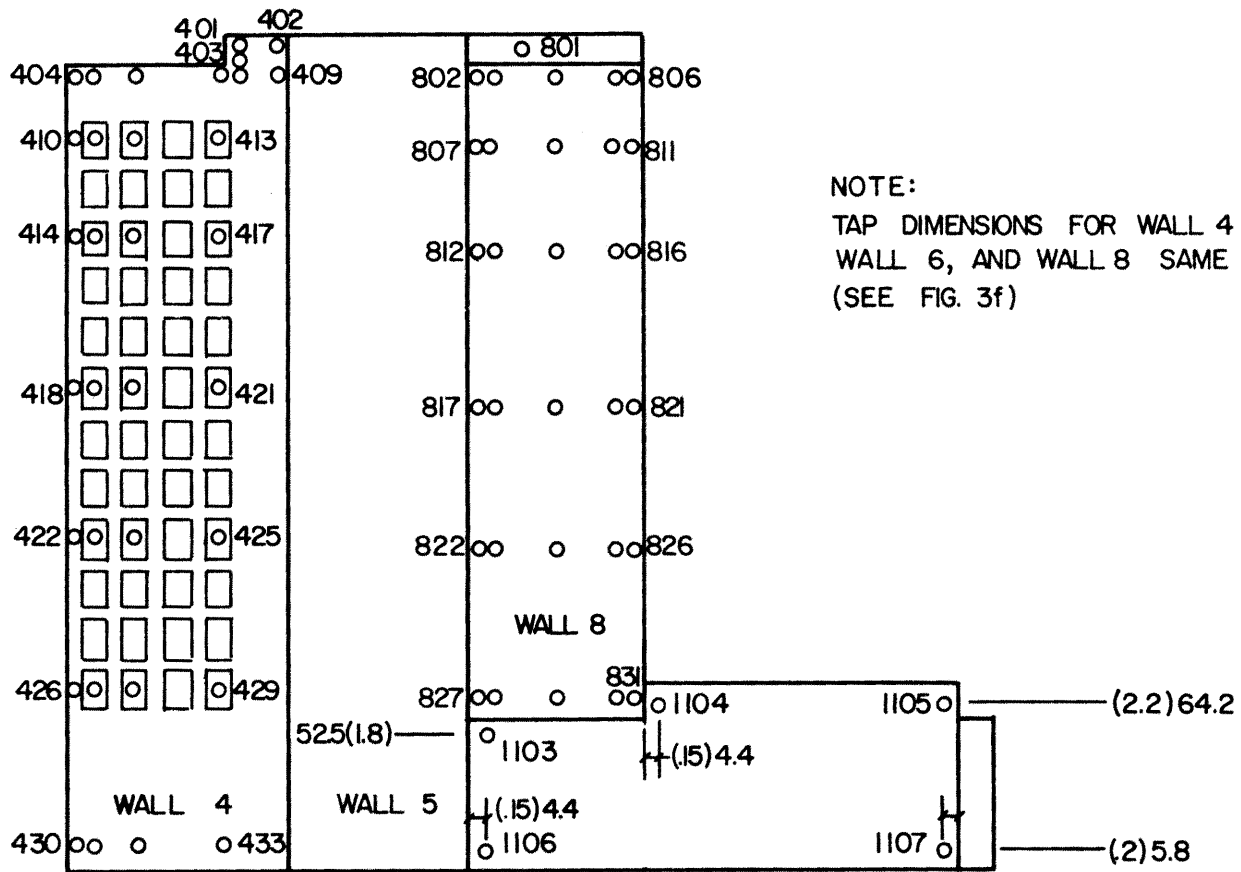


FIGURE 3d. PRESSURE TAP LOCATIONS.



NOTE:  
 TAP DIMENSIONS FOR WALL 4 SAME AS  
 WALL 6, AND WALL 8 SAME AS WALL 7.  
 (SEE FIG. 3f)

FIGURE 3e. PRESSURE TAP LOCATIONS.

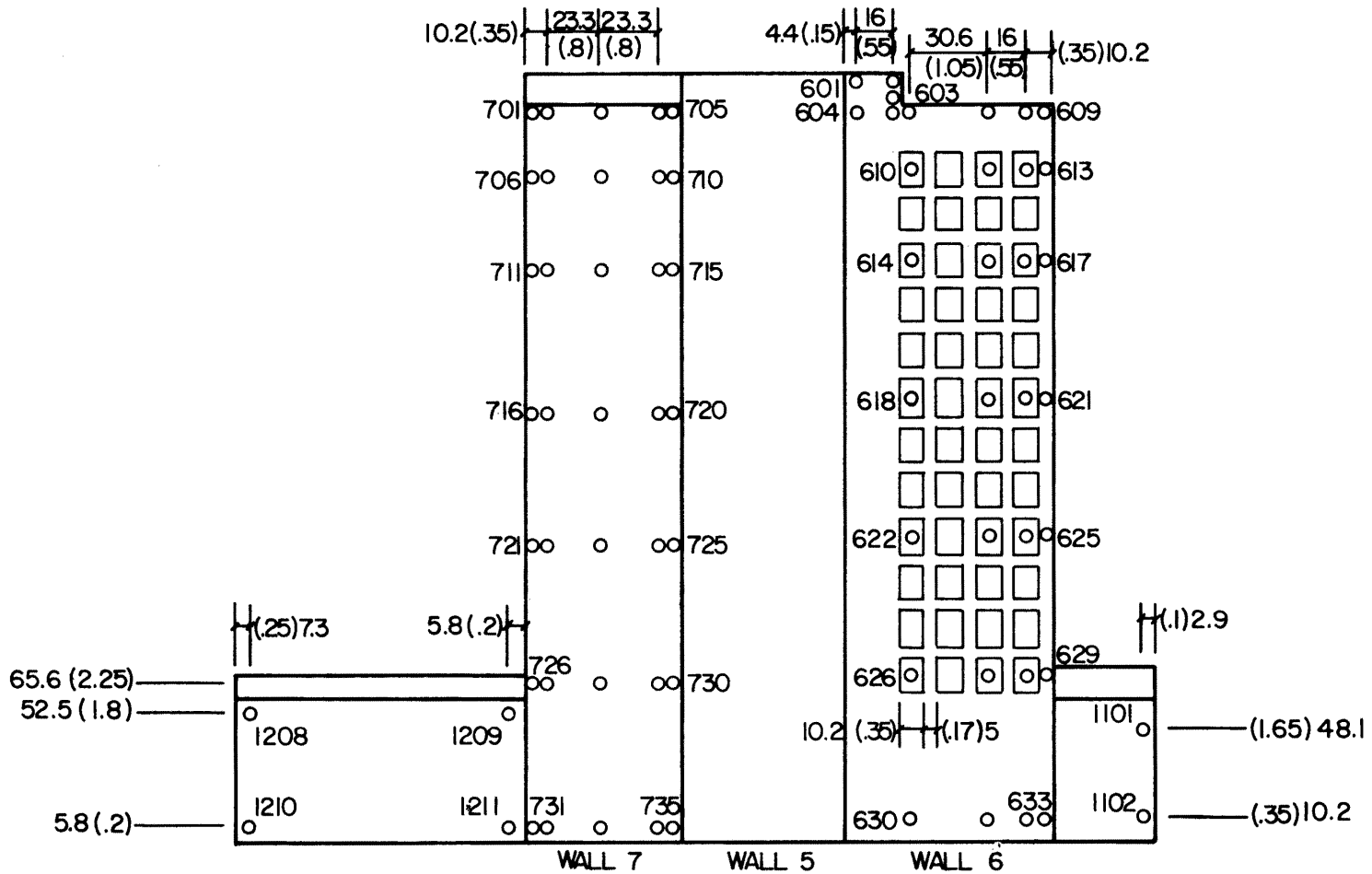


FIGURE 3f. PRESSURE TAP LOCATIONS.

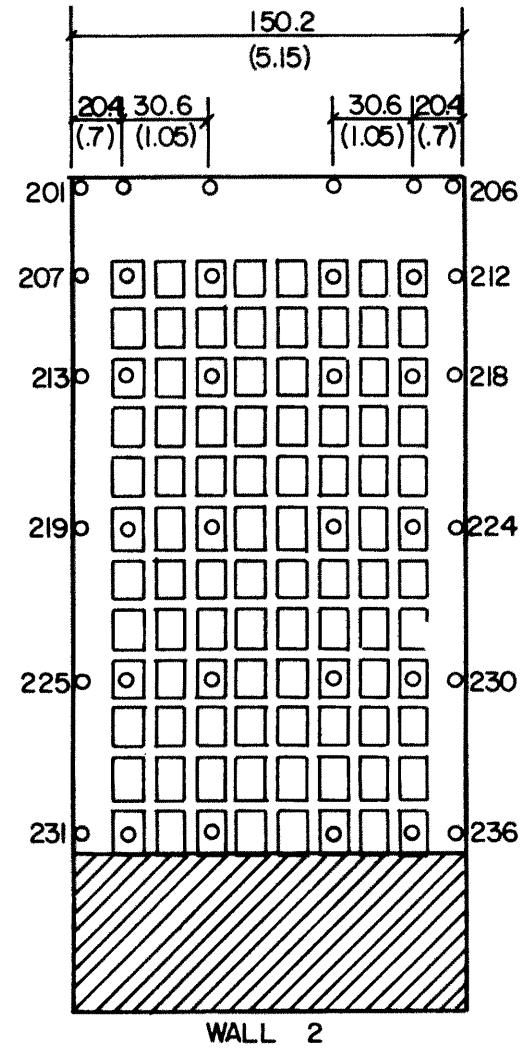
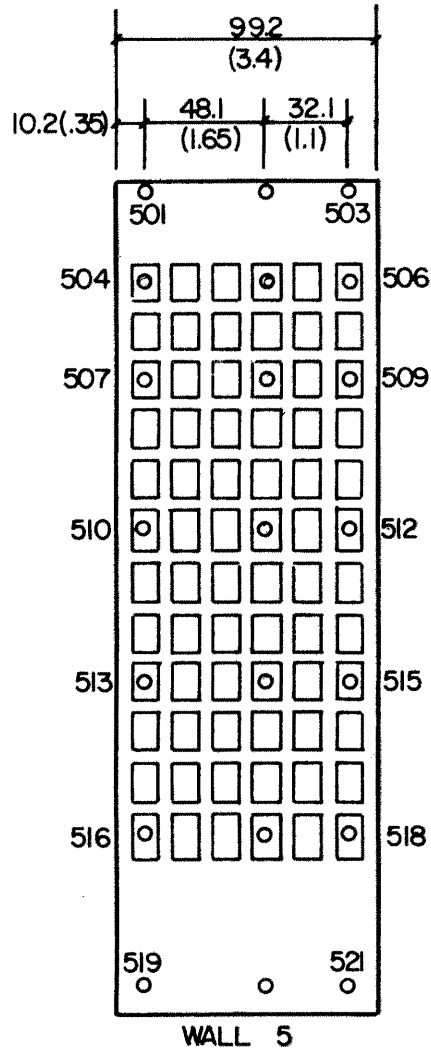


FIGURE 3g. PRESSURE TAP LOCATIONS.

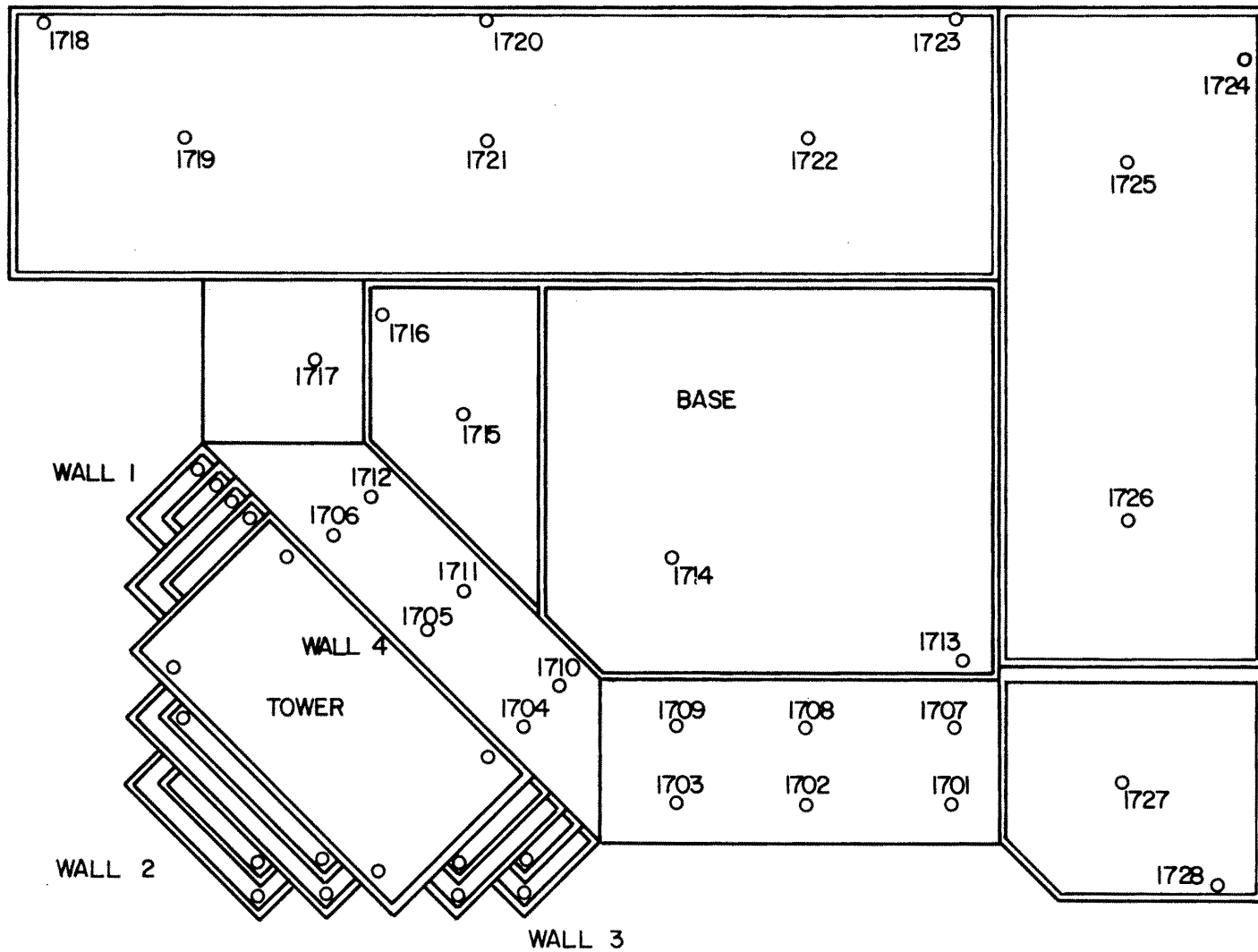


FIGURE 3h PRESSURE TAP LOCATIONS

MODEL SCALE = 1/350  
 TOTAL TAPS = 316

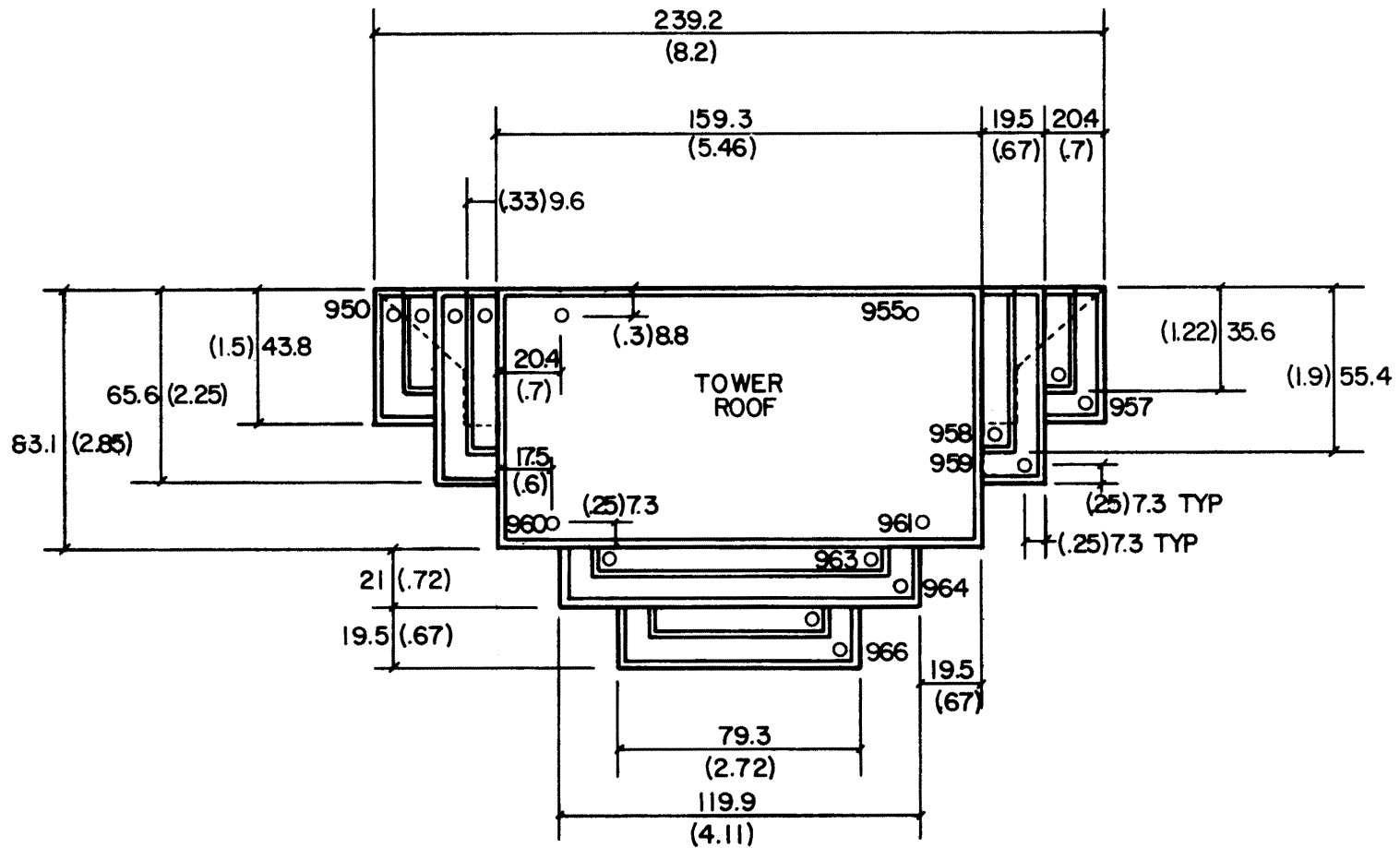


FIGURE 3i PRESSURE TAP LOCATIONS

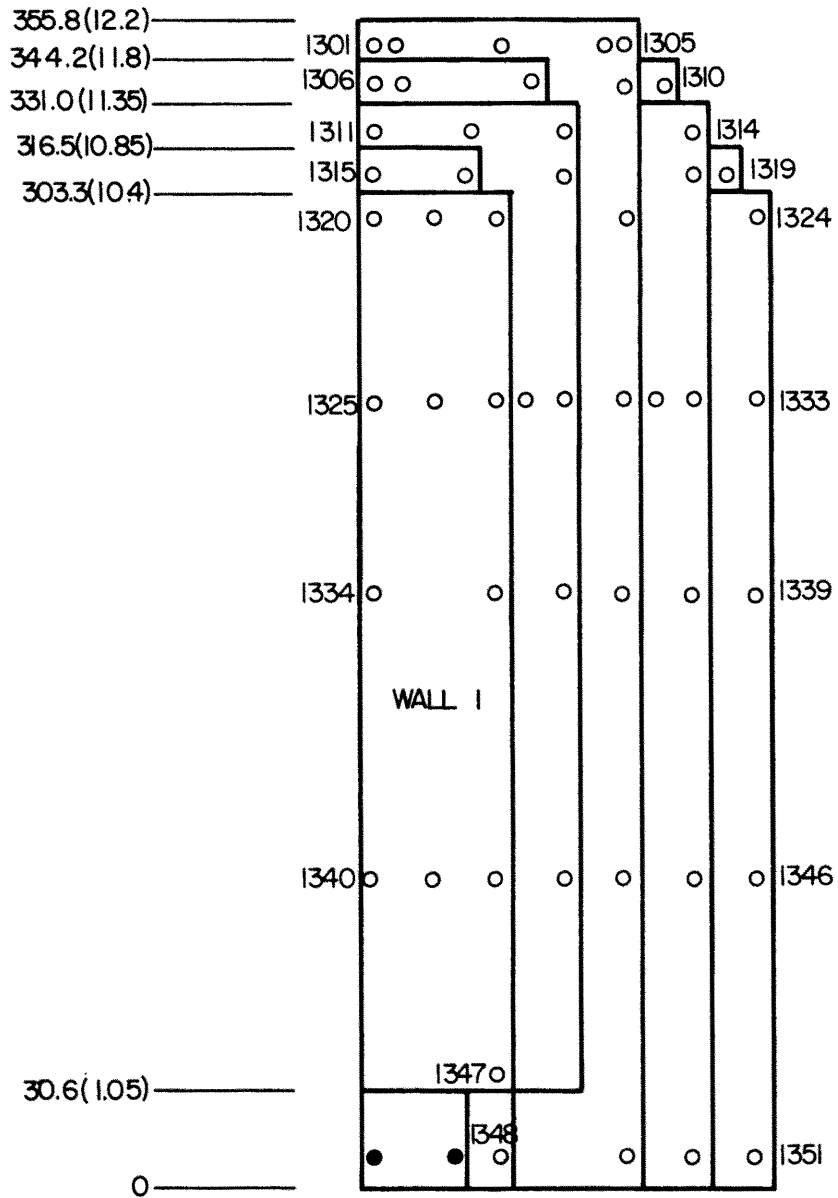


FIGURE 3j. PRESSURE TAP LOCATIONS

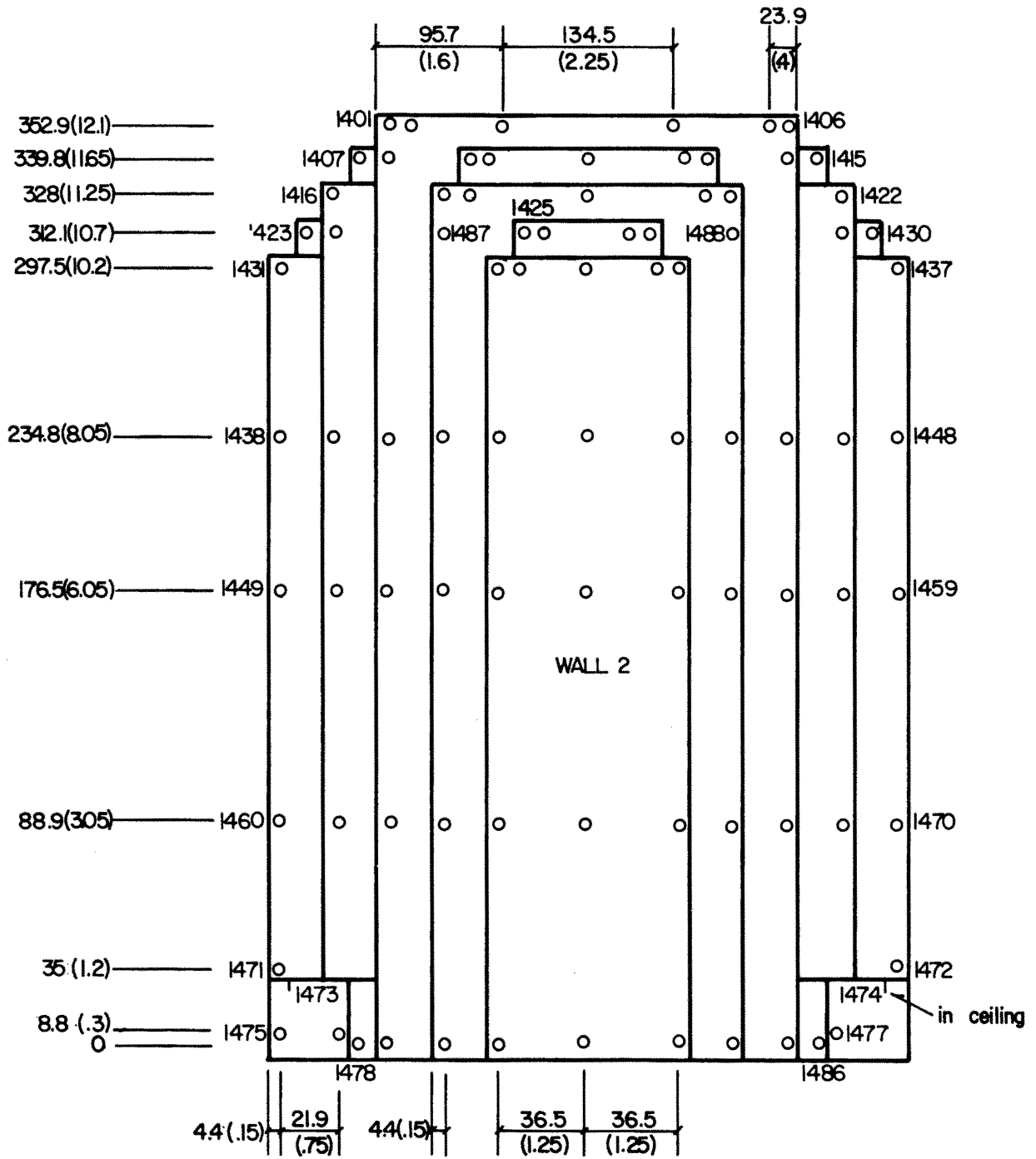


FIGURE 3k. PRESSURE TAP LOCATIONS.



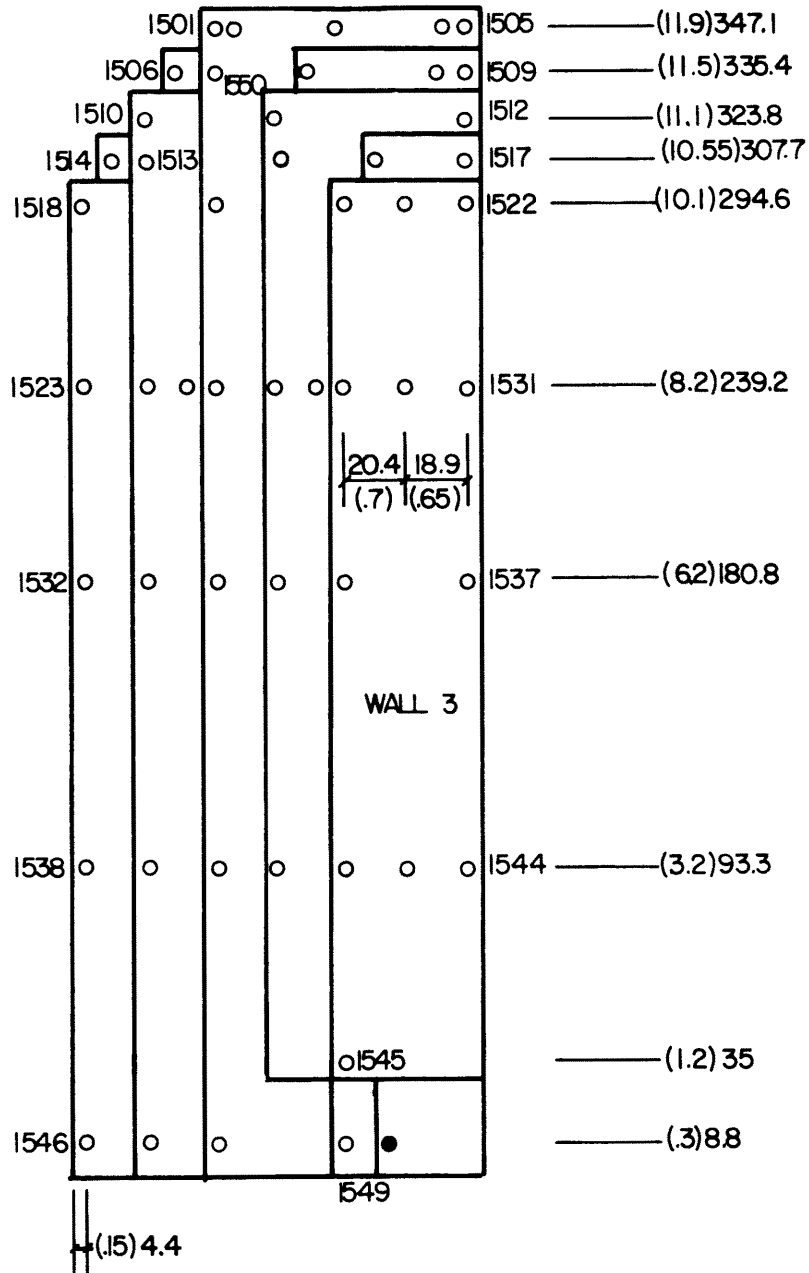


FIGURE 3I. PRESSURE TAP LOCATIONS

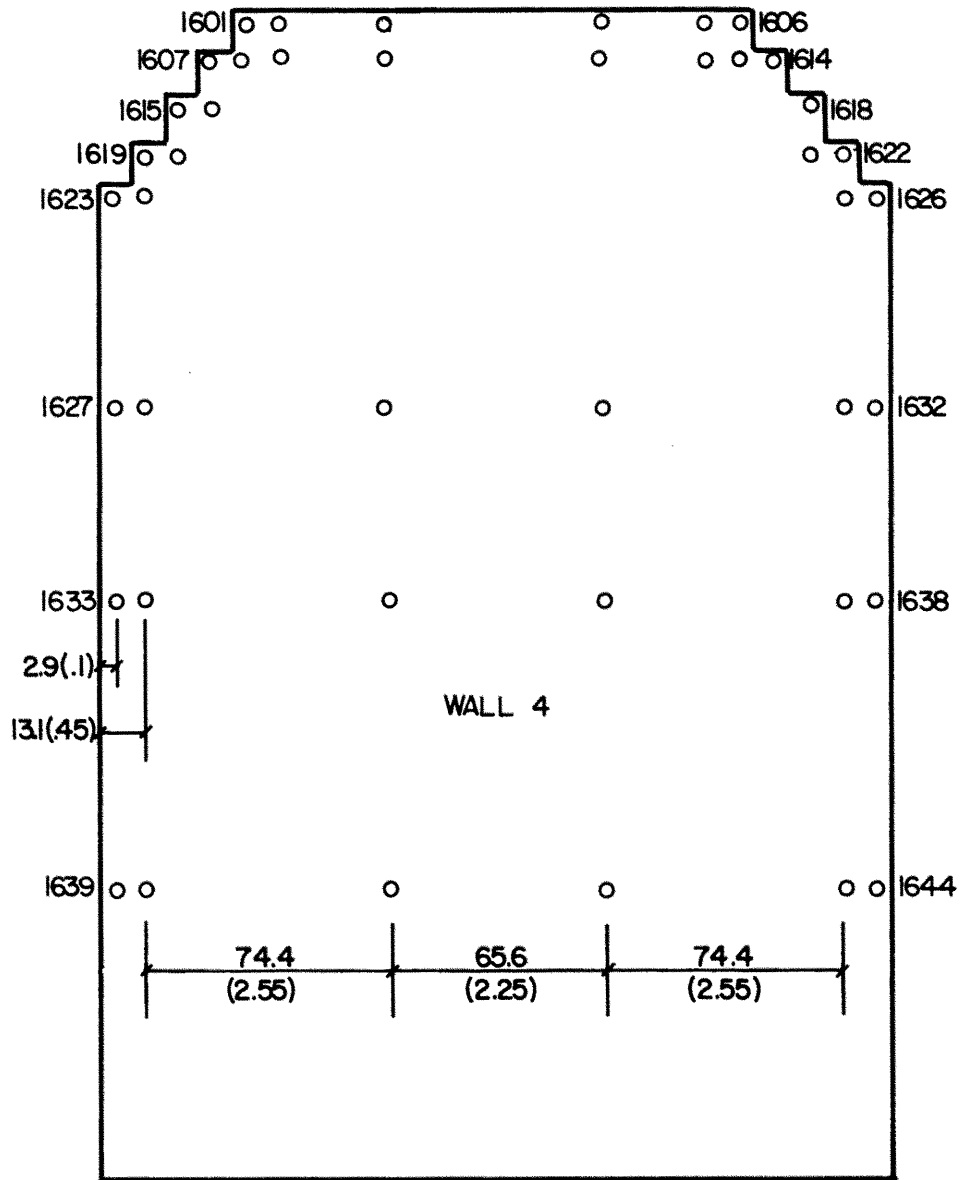


FIGURE 3m. PRESSURE TAP LOCATIONS

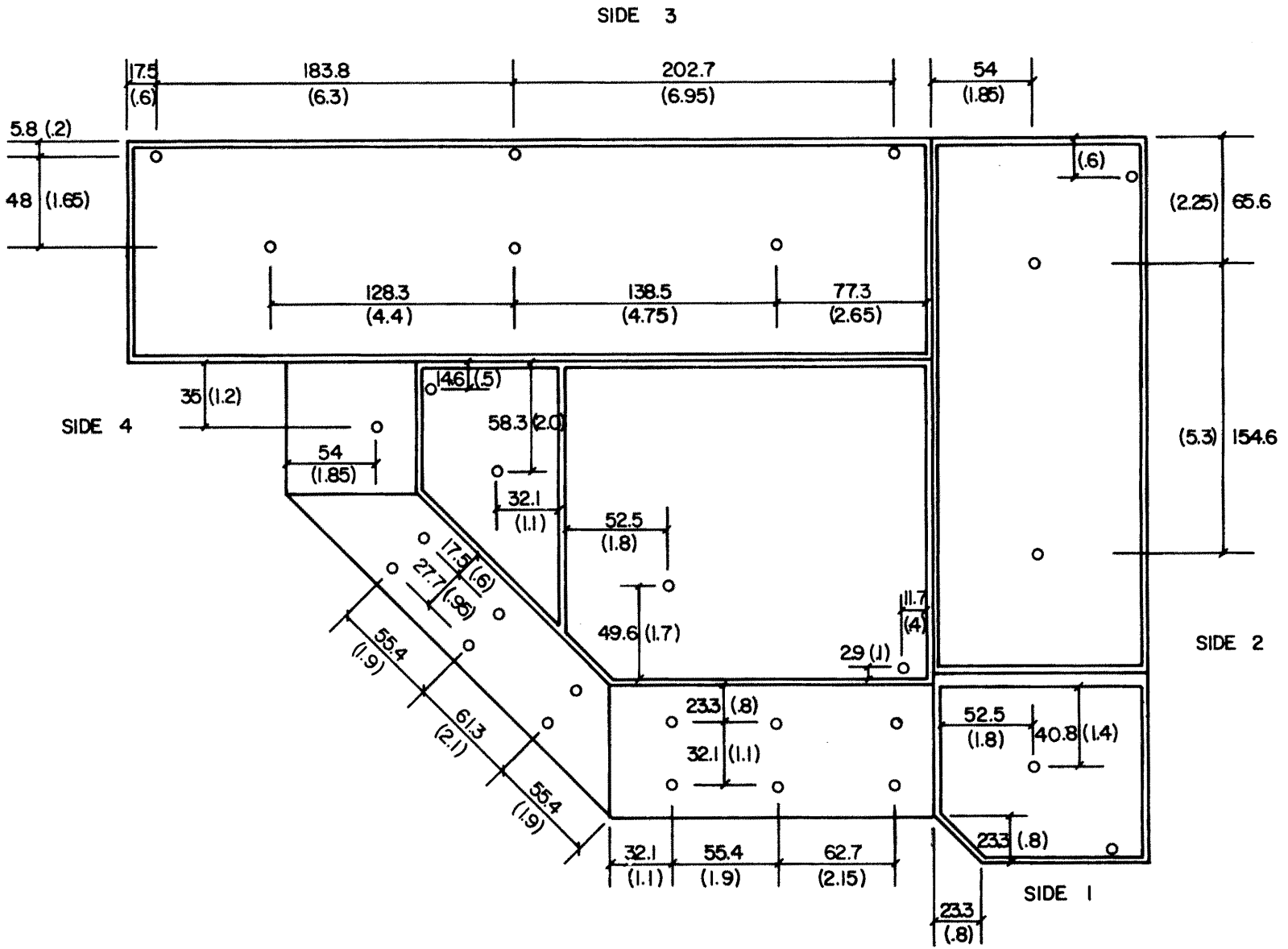
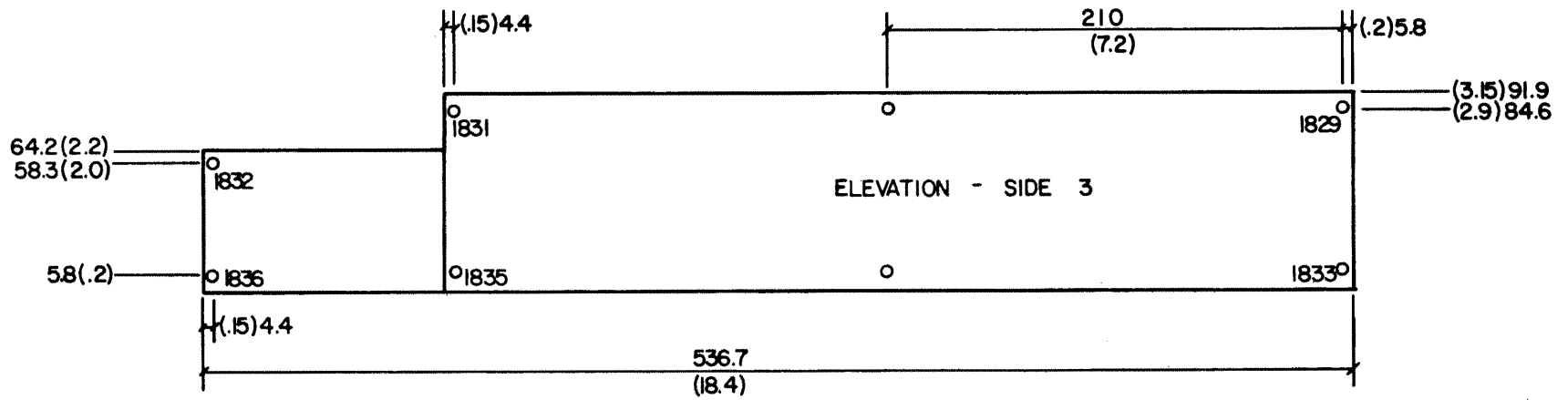


FIGURE 3n. PRESSURE TAP LOCATIONS.



**BASE ELEVATIONS**

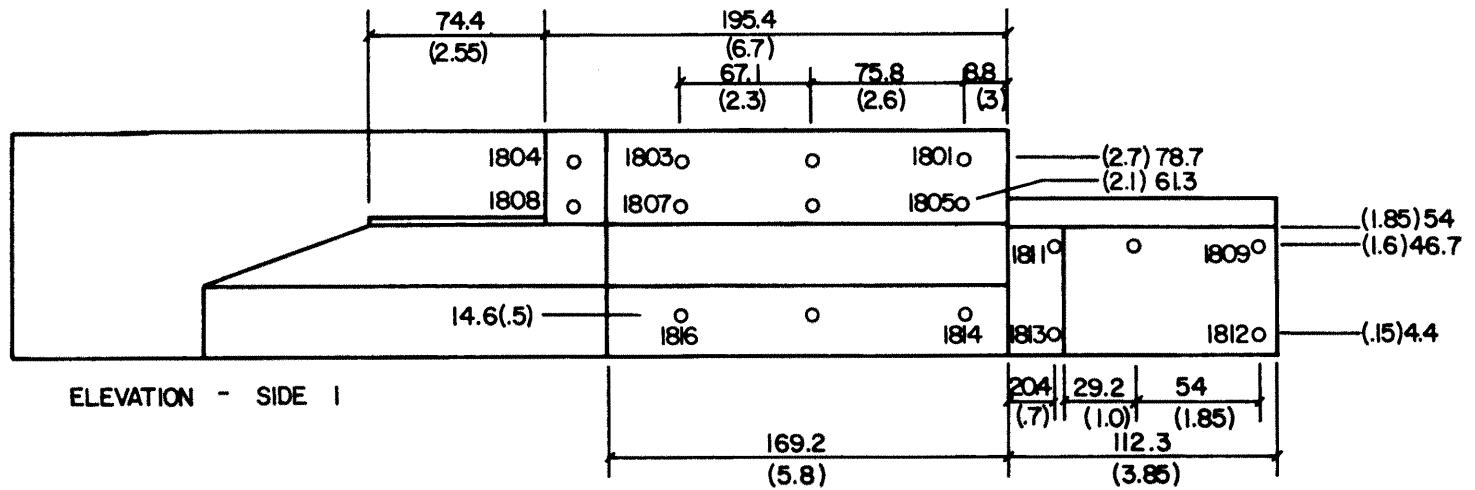
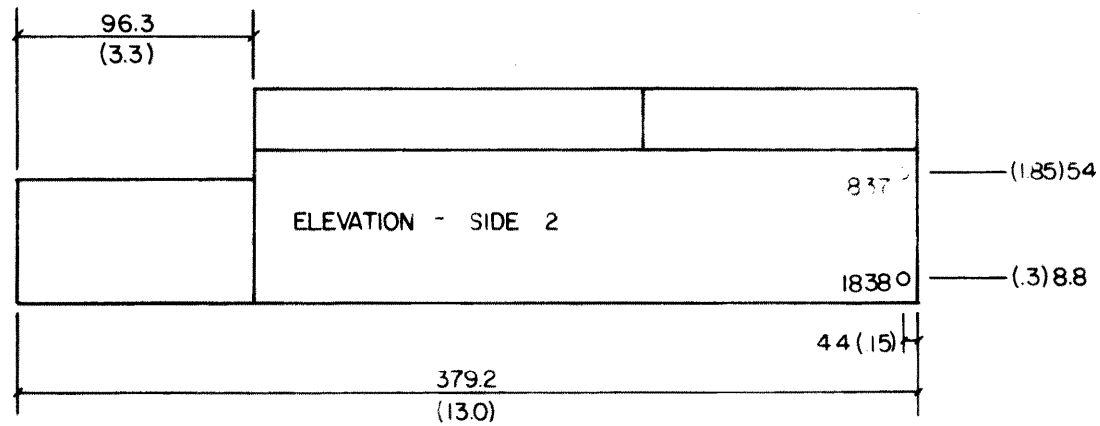


FIGURE 30. PRESSURE TAP LOCATIONS.



BASE ELEVATIONS

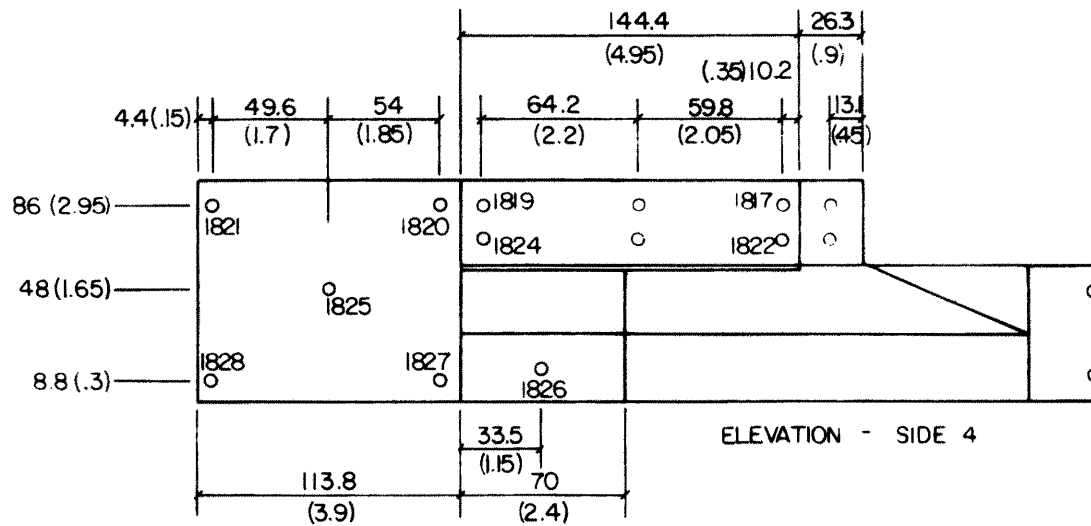


FIGURE 3p. PRESSURE TAP LOCATIONS.

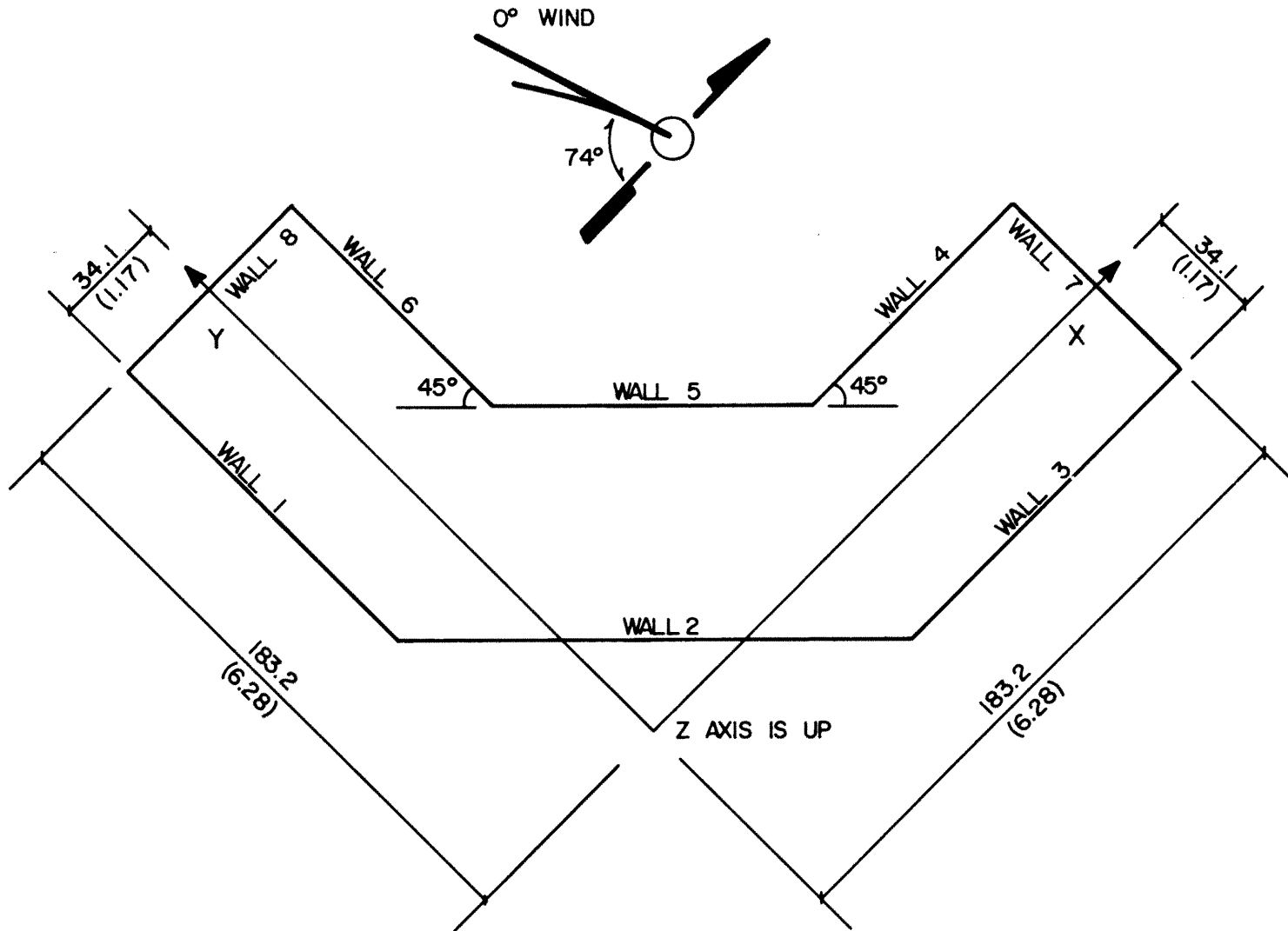


FIGURE 3q FORCE AND MOMENT COORDINATE SYSTEM

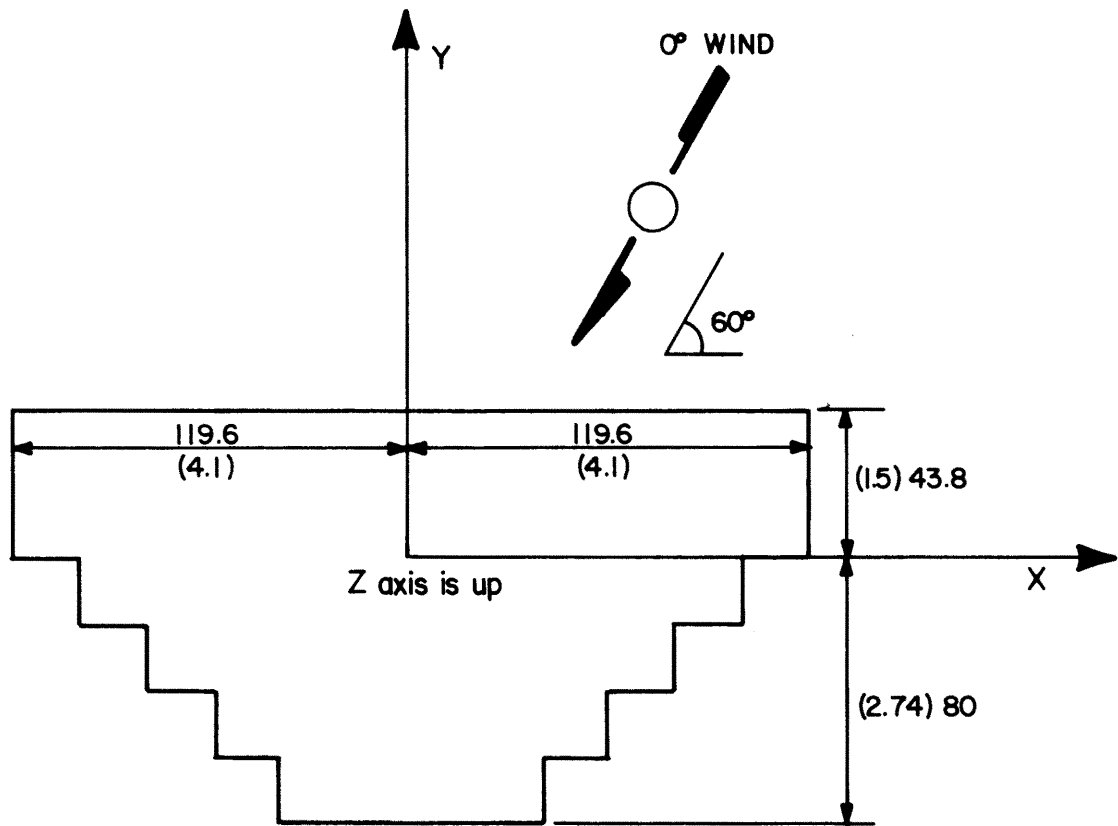


FIGURE 3r. FORCE AND MOMENT COORDINATE SYSTEM

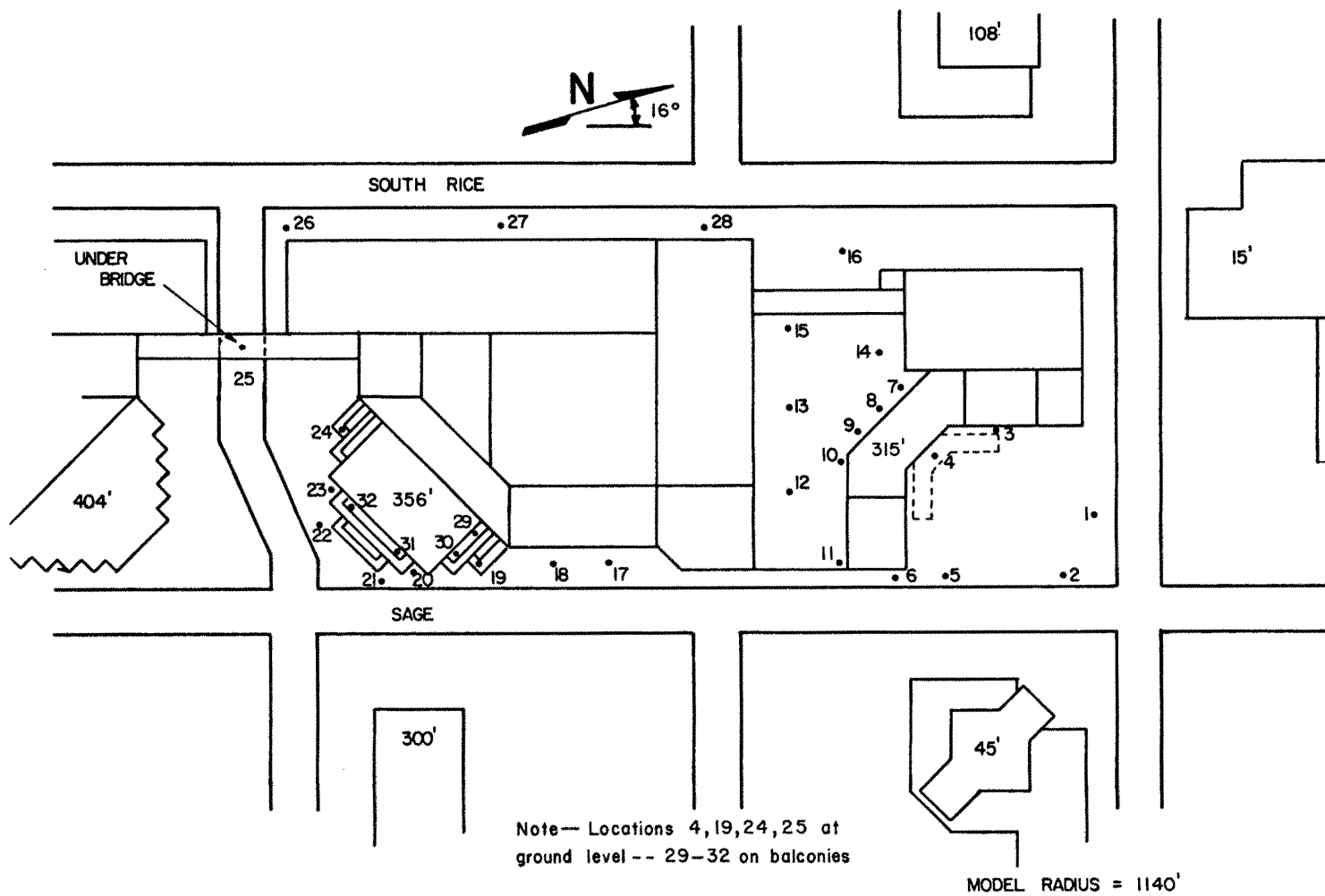


Figure 4. Building Location and Pedestrian Wind Velocity Measuring Positions



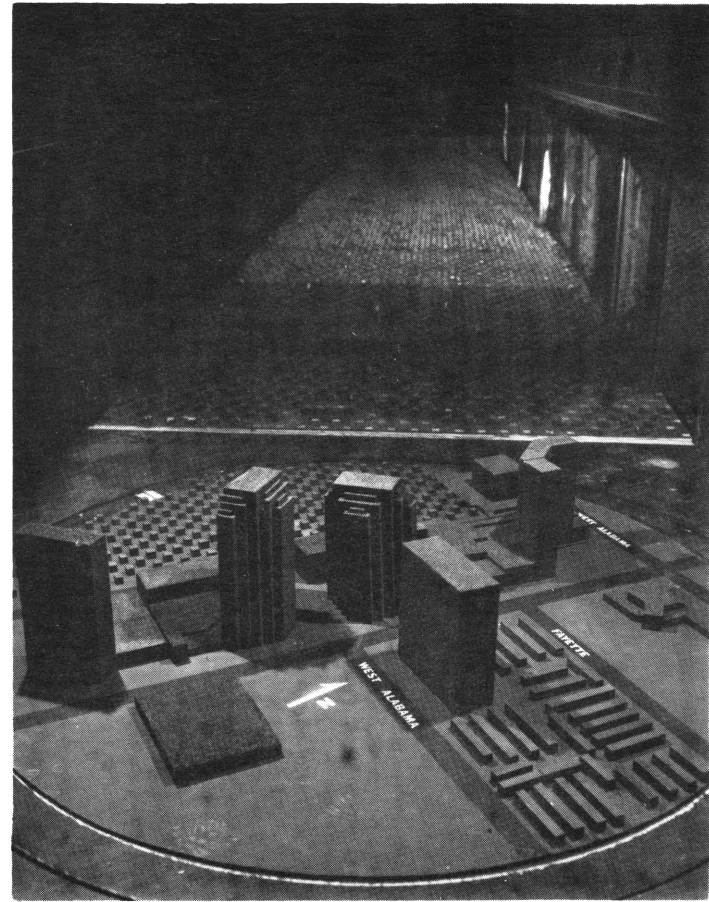
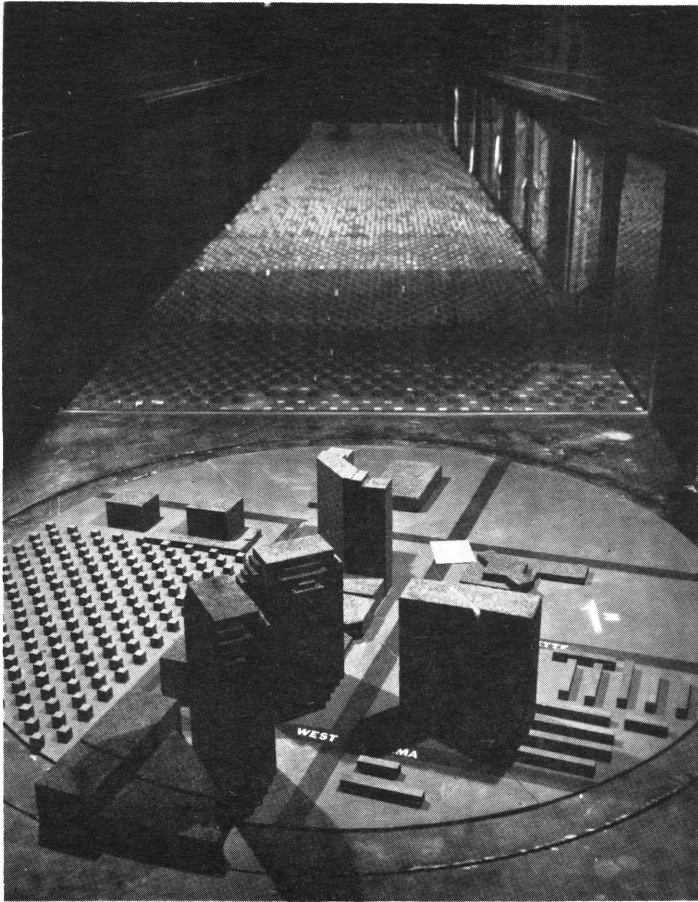


Figure 5. Completed Model in Wind Tunnel

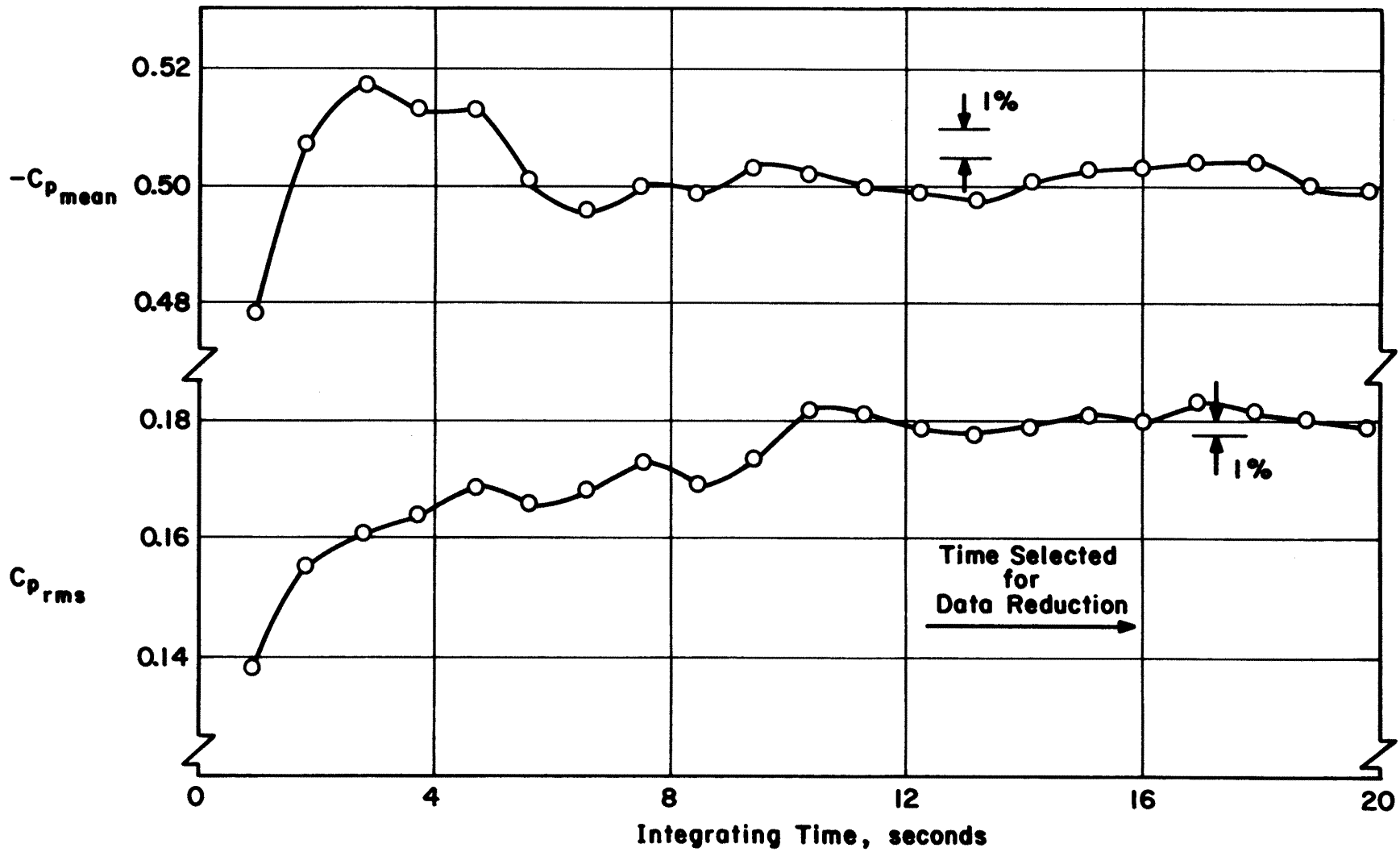


Figure 6 - Data Sampling Time Verification

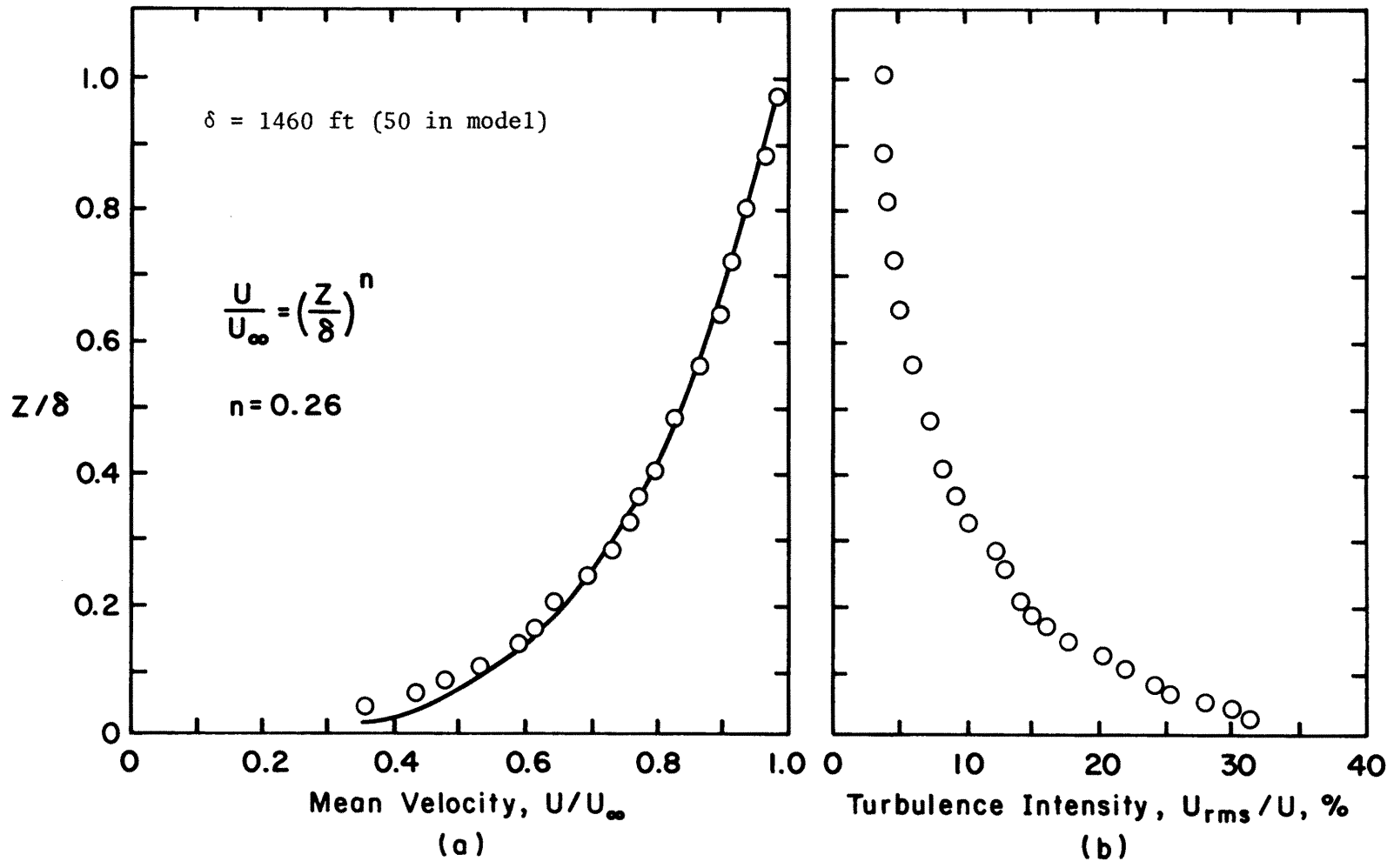
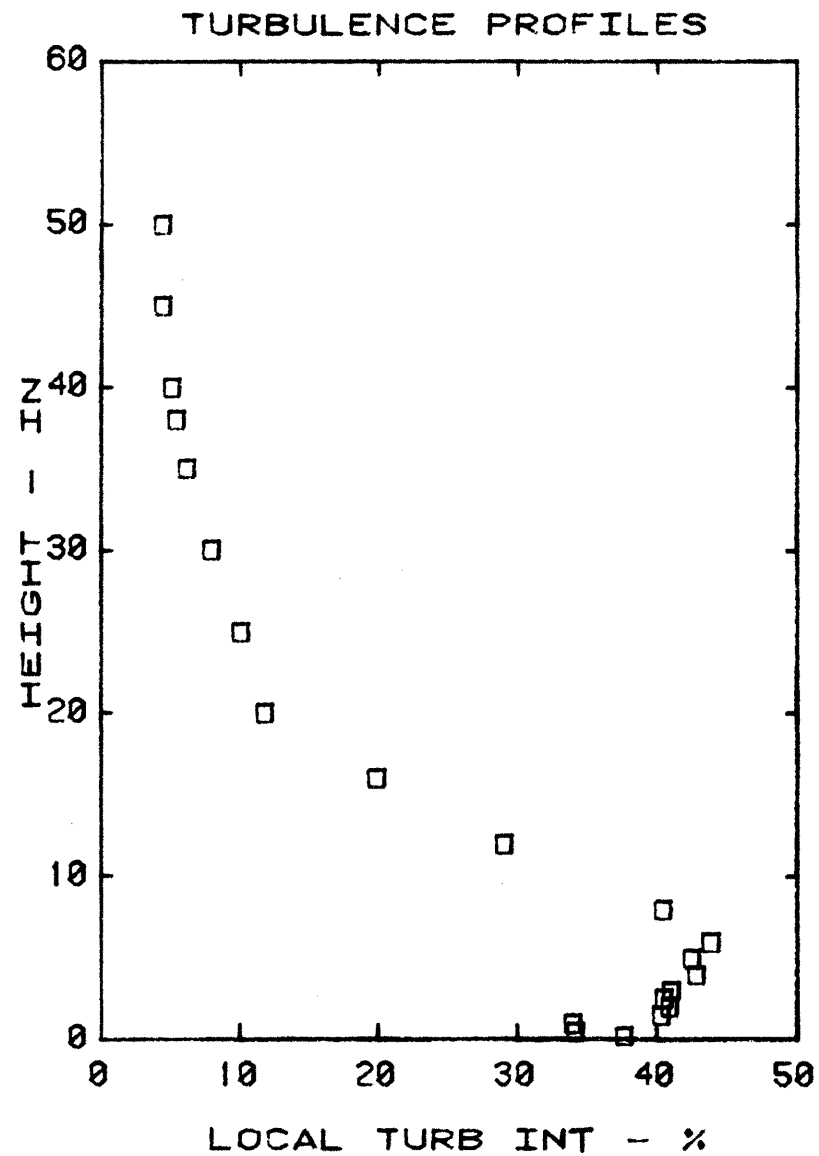
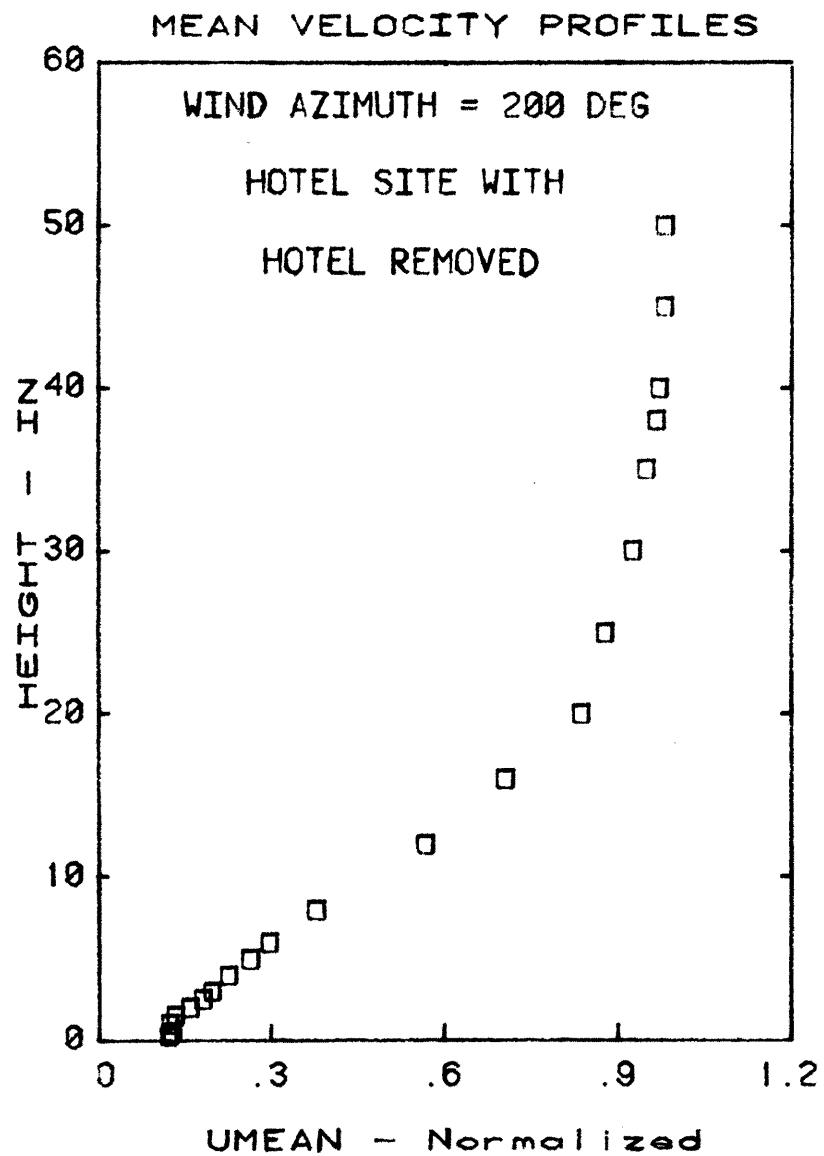
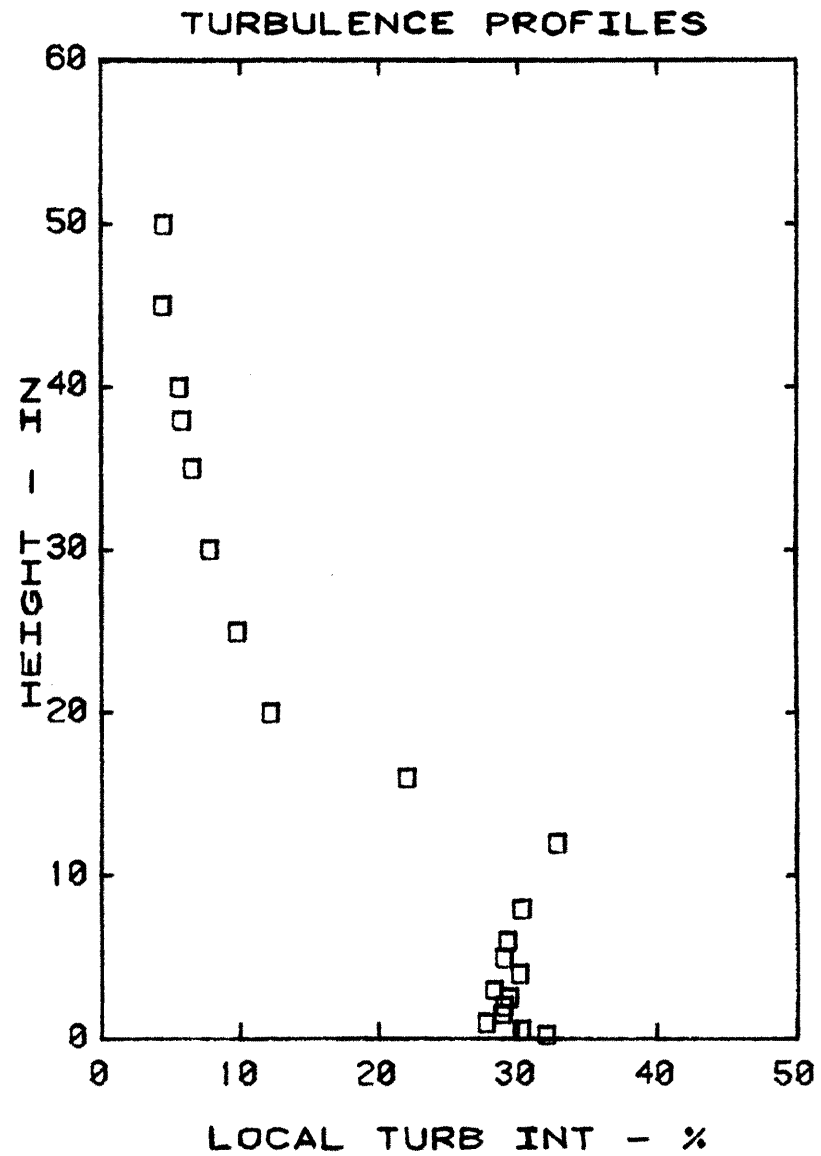
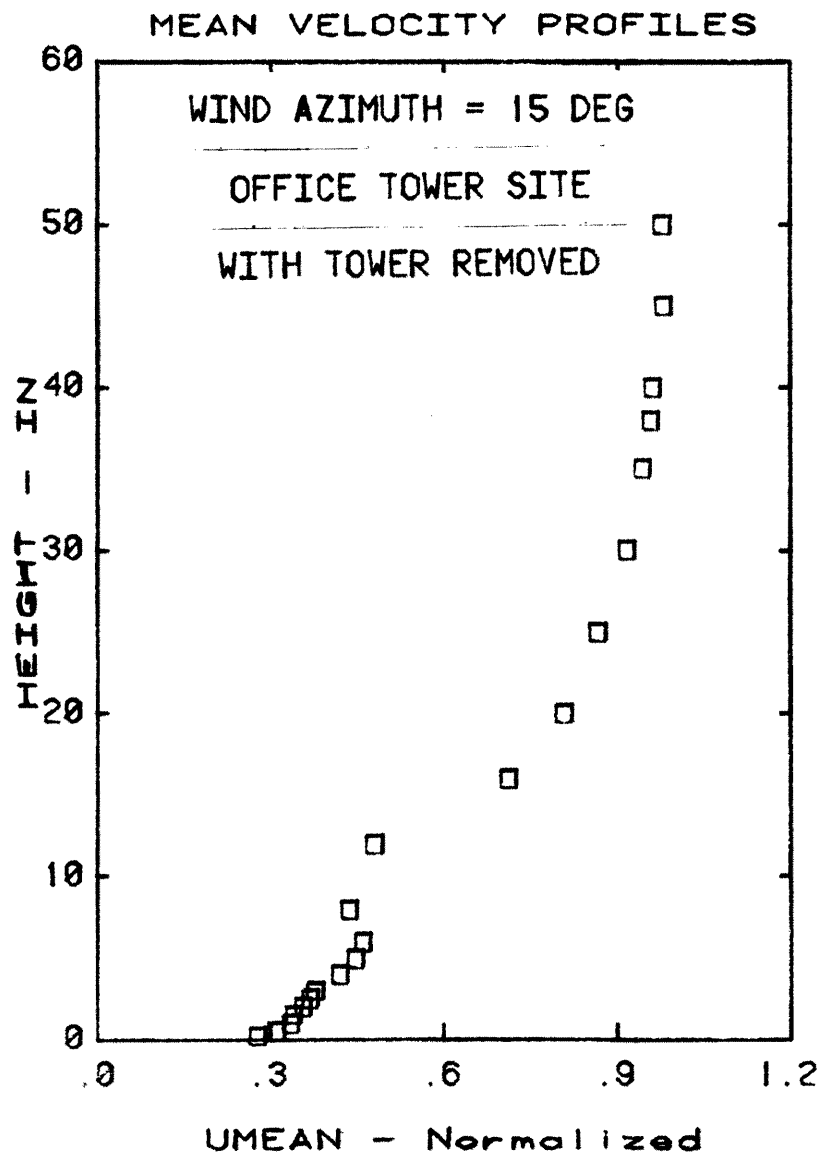


Figure 7 - Velocity and Turbulence Profiles Approaching the Model



(c)

Figure 7. Mean Velocity and Turbulence Profiles Approaching the Model



(d)

Figure 7. Mean Velocity and Turbulence Profiles Approaching the Model

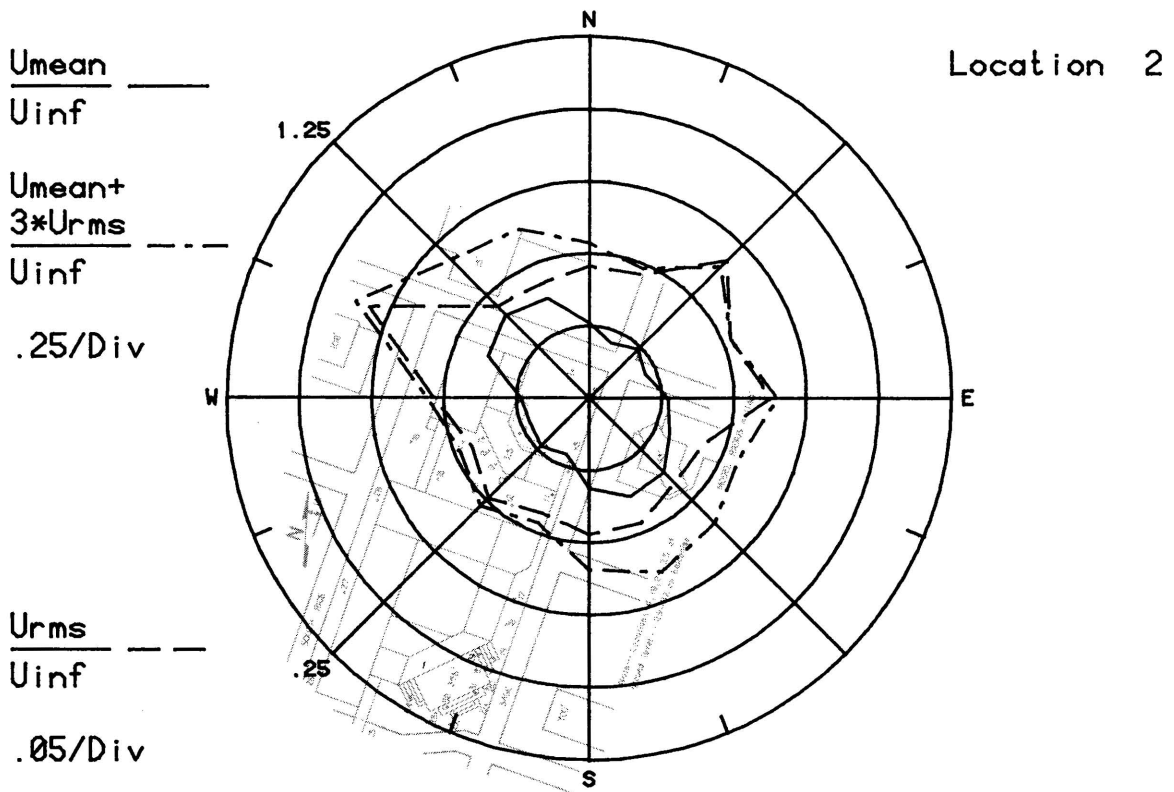
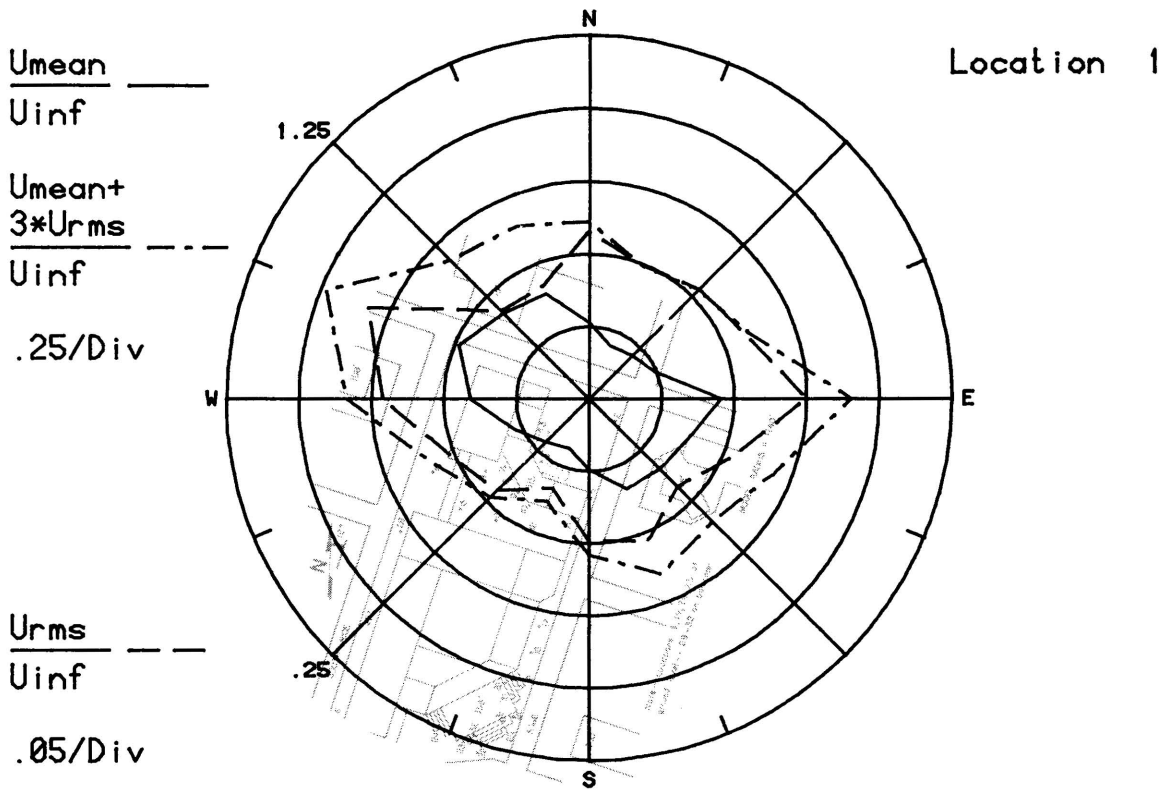


Figure 8a. Mean Velocities and Turbulence Intensities at Pedestrian Locations 1 and 2

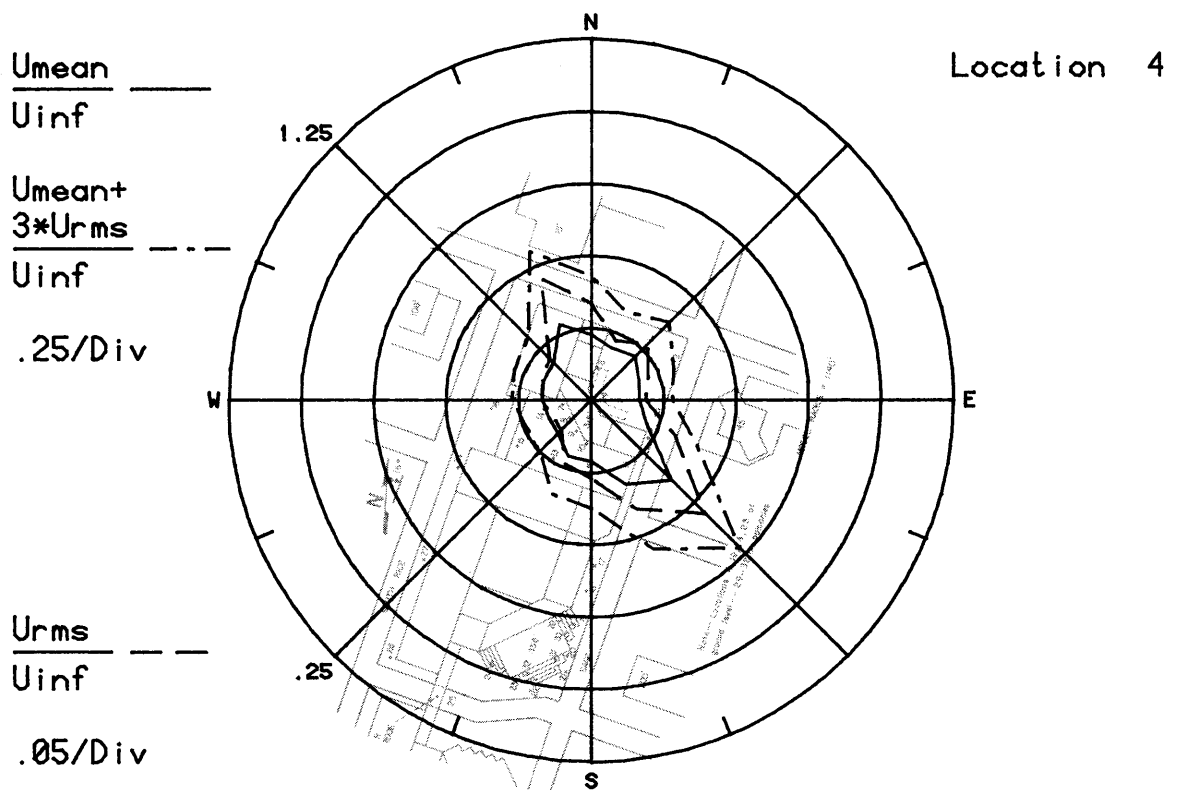
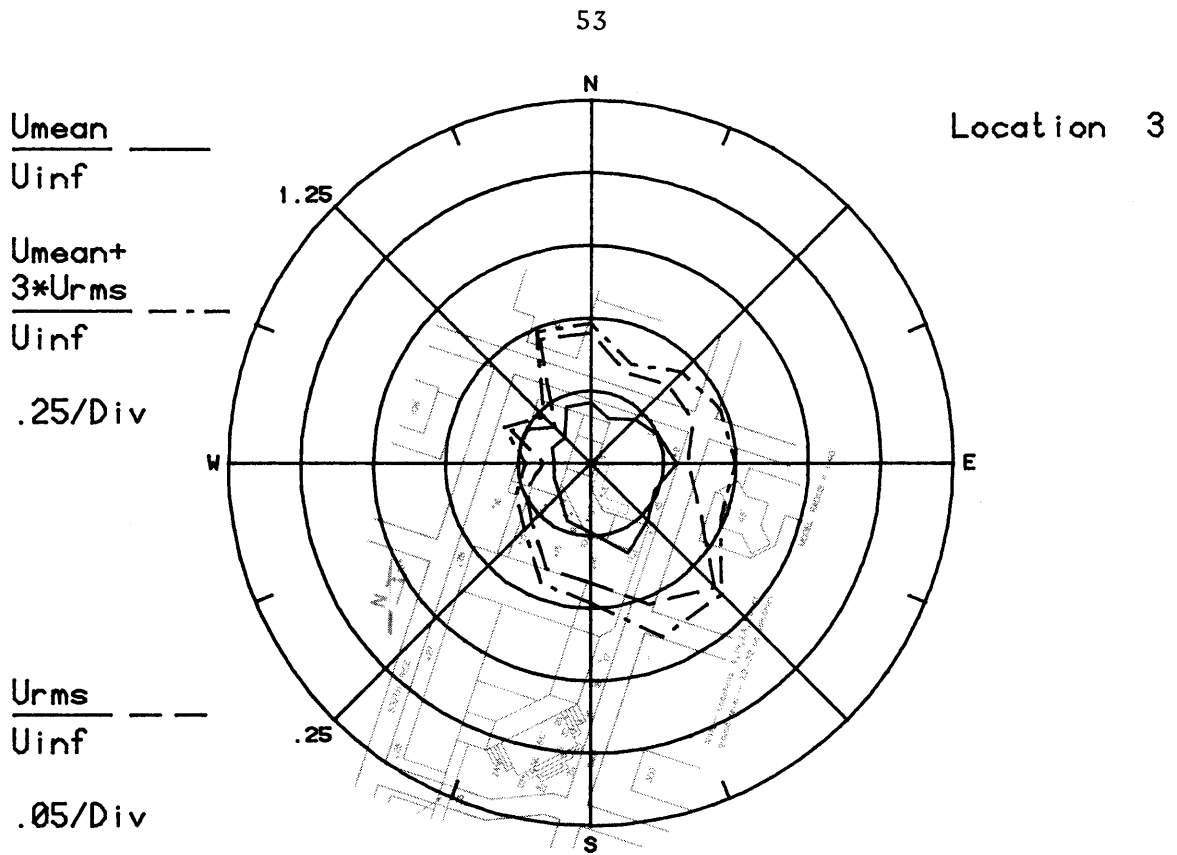


Figure 8b. Mean Velocities and Turbulence Intensities at Pedestrian Locations 3 and 4

$$\frac{U_{mean}}{U_{inf}} \text{ ———}$$

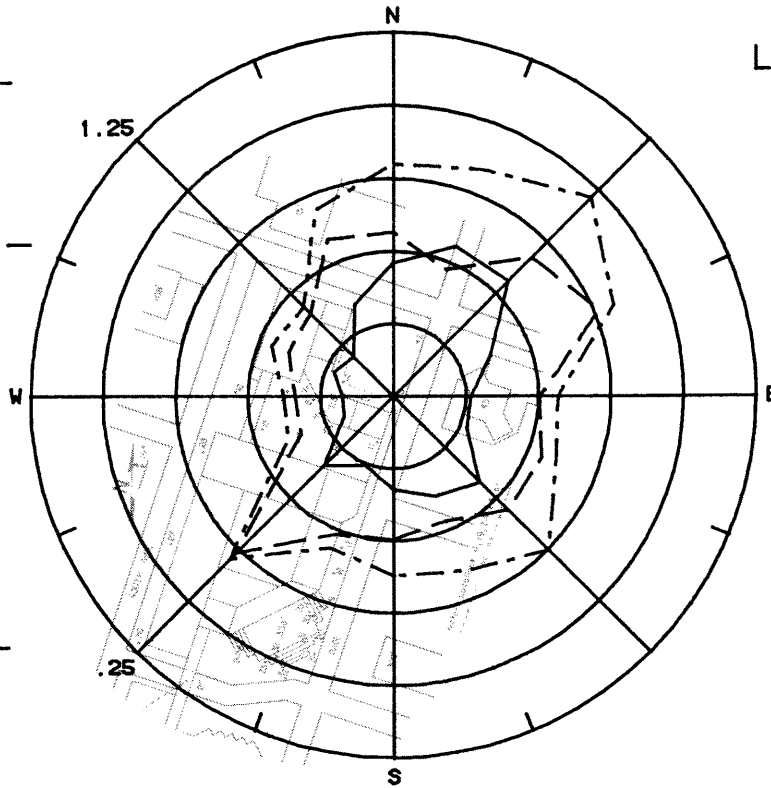
Location 5

$$\frac{U_{mean} + 3 \cdot U_{rms}}{U_{inf}} \text{ - - - -}$$

.25/Div

$$\frac{U_{rms}}{U_{inf}} \text{ - - - -}$$

.05/Div



$$\frac{U_{mean}}{U_{inf}} \text{ ———}$$

Location 6

$$\frac{U_{mean} + 3 \cdot U_{rms}}{U_{inf}} \text{ - - - -}$$

.25/Div

$$\frac{U_{rms}}{U_{inf}} \text{ - - - -}$$

.05/Div

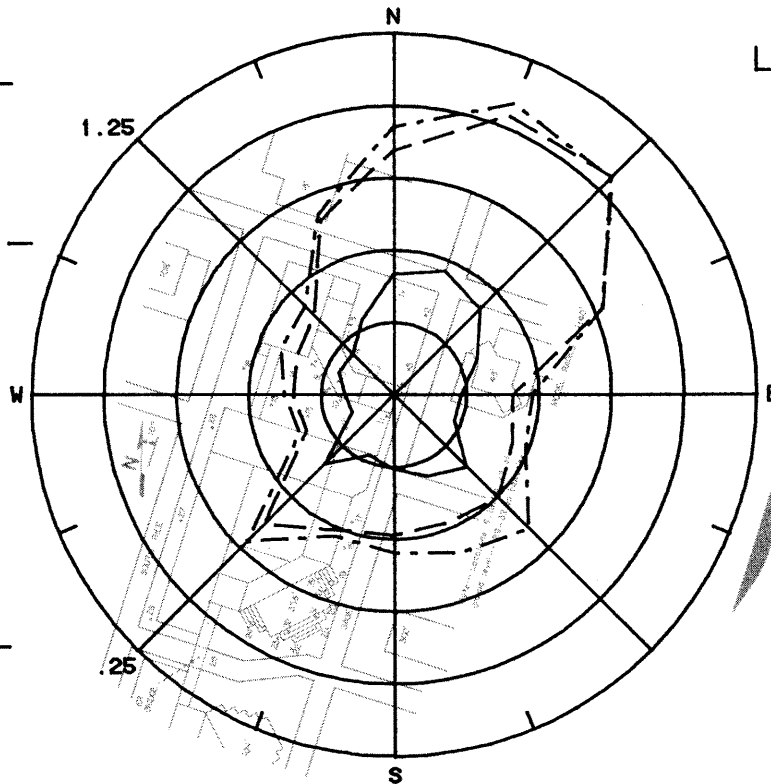


Figure 8c. Mean Velocities and Turbulence Intensities at Pedestrian Locations 5 and 6



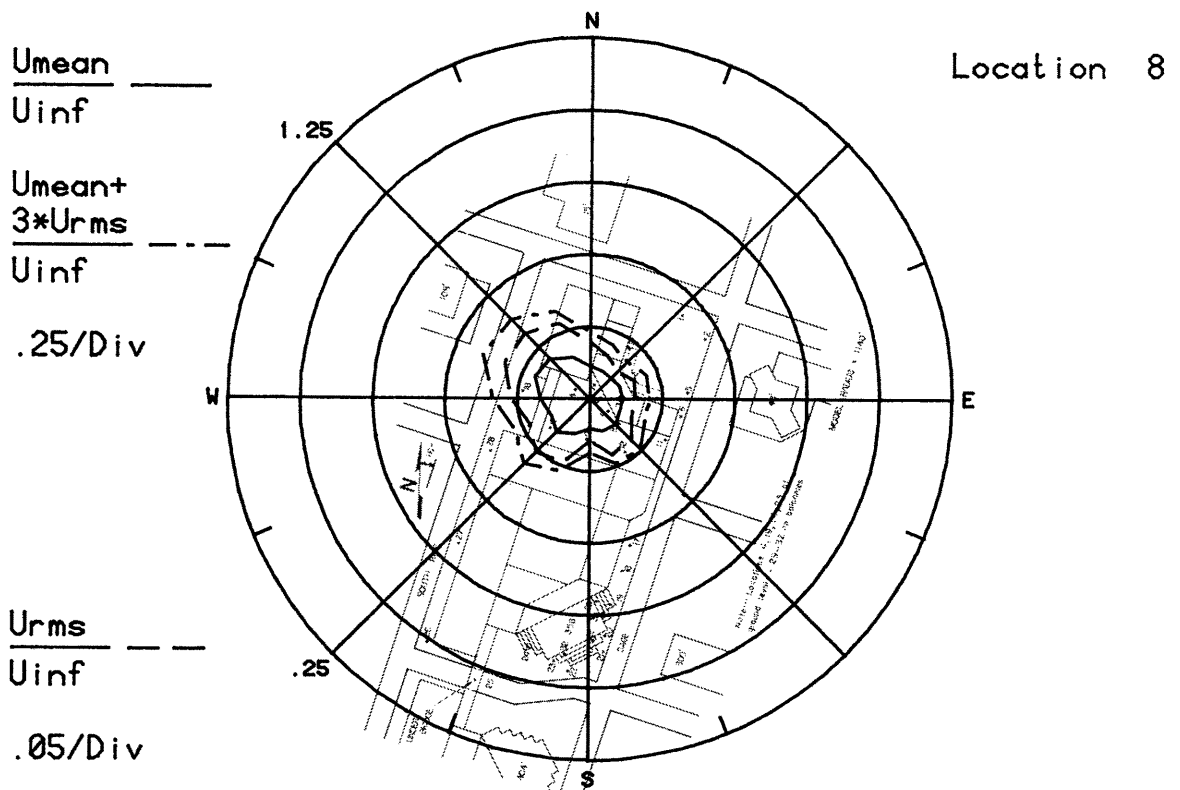
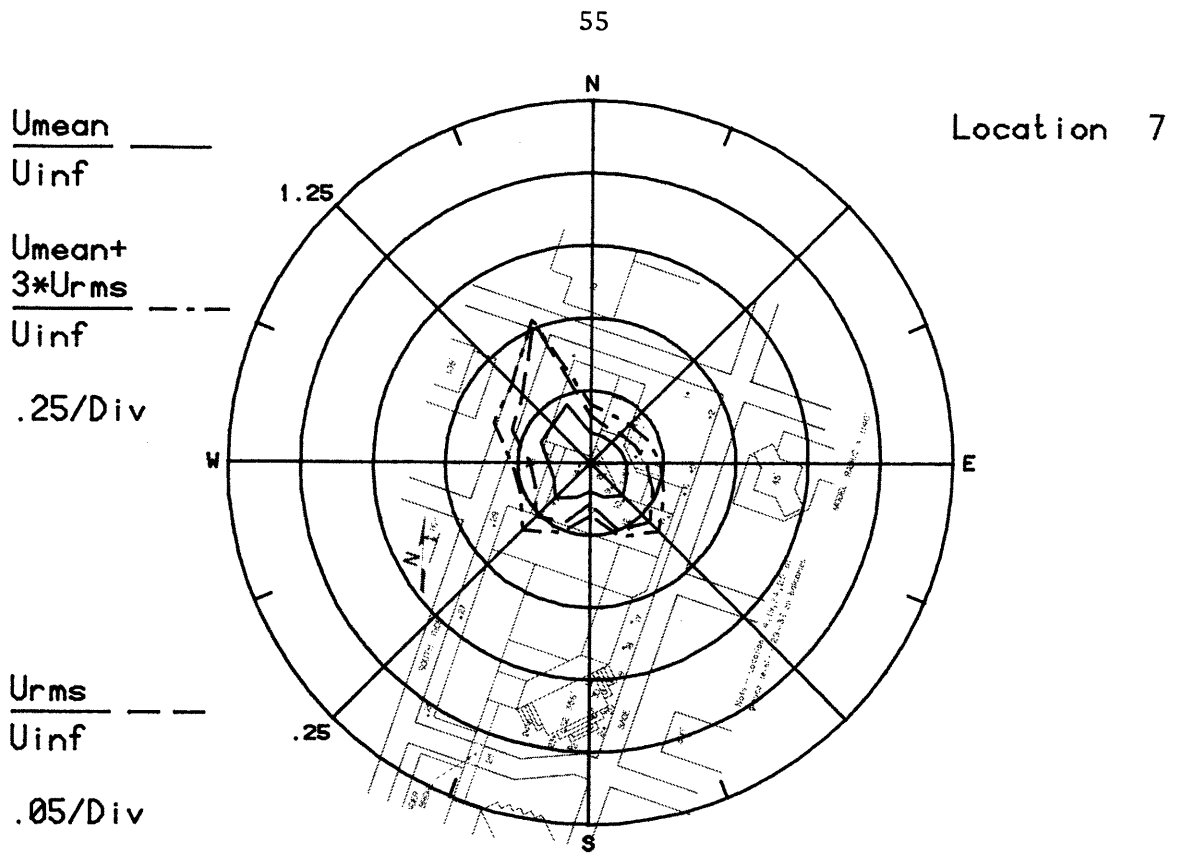


Figure 8d. Mean Velocities and Turbulence Intensities at Pedestrian Locations 7 and 8

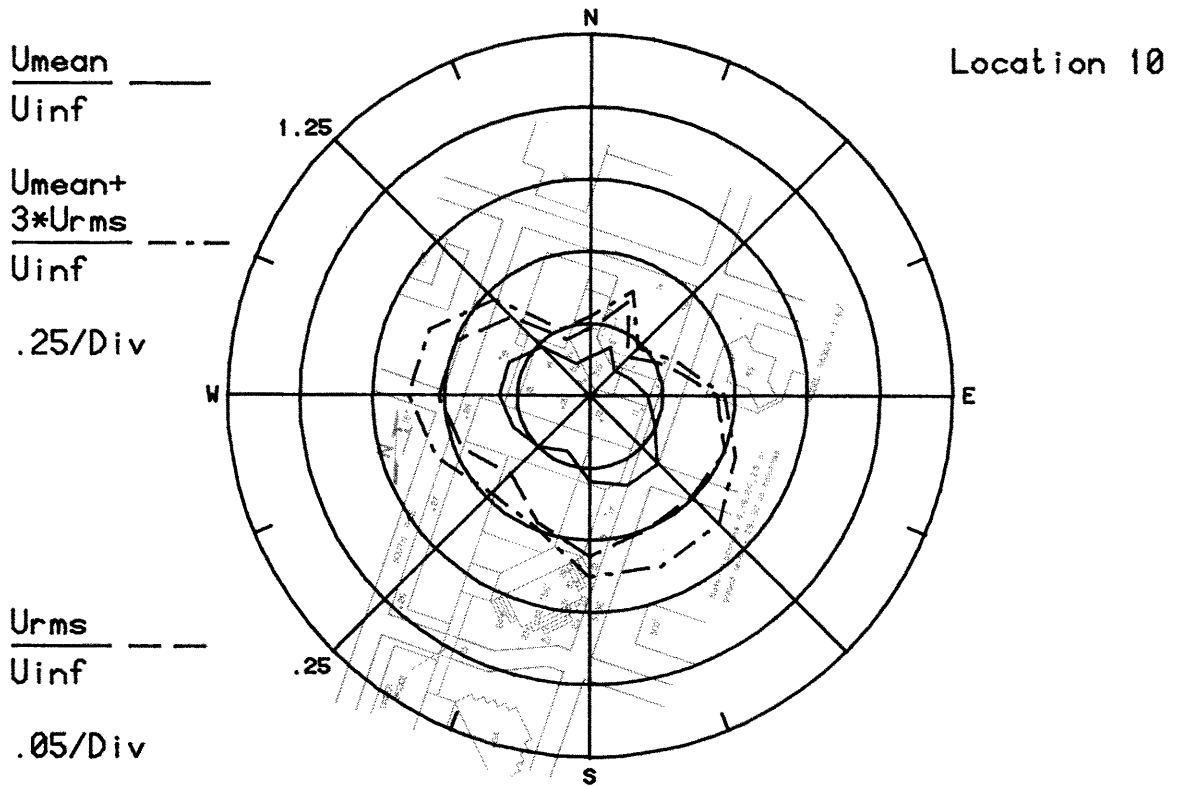
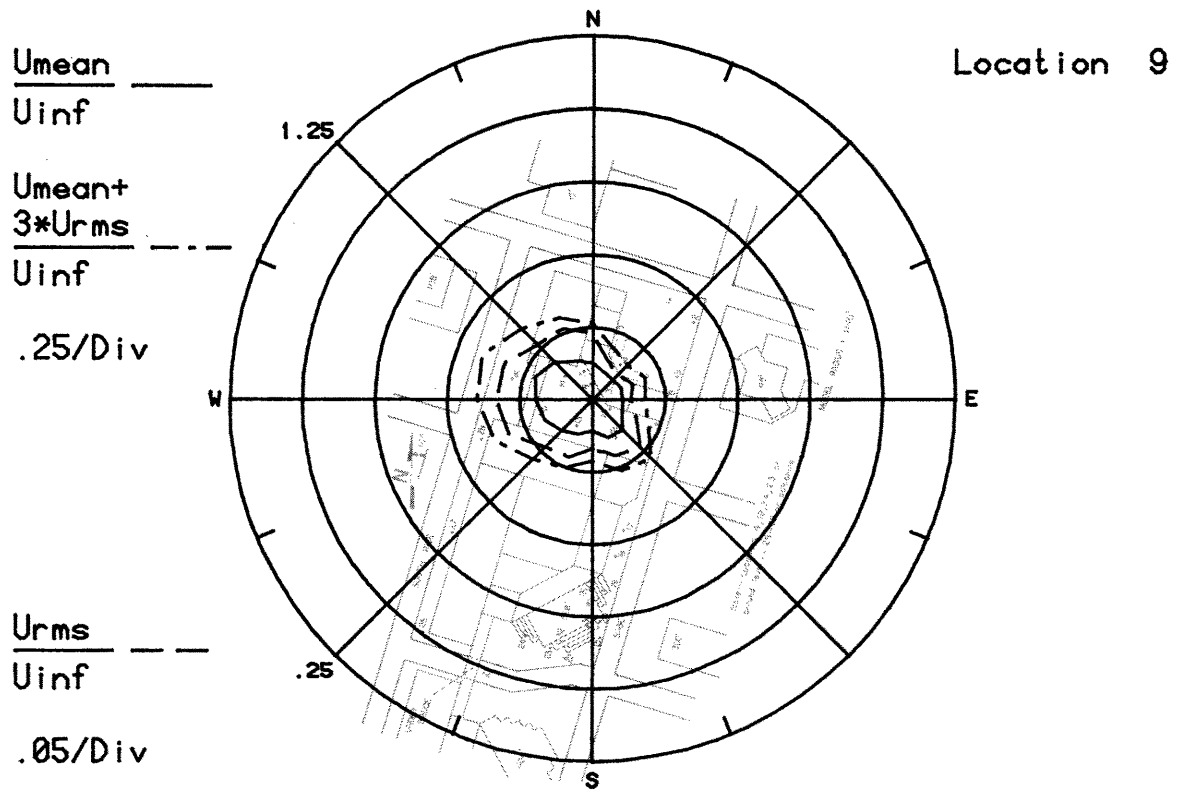


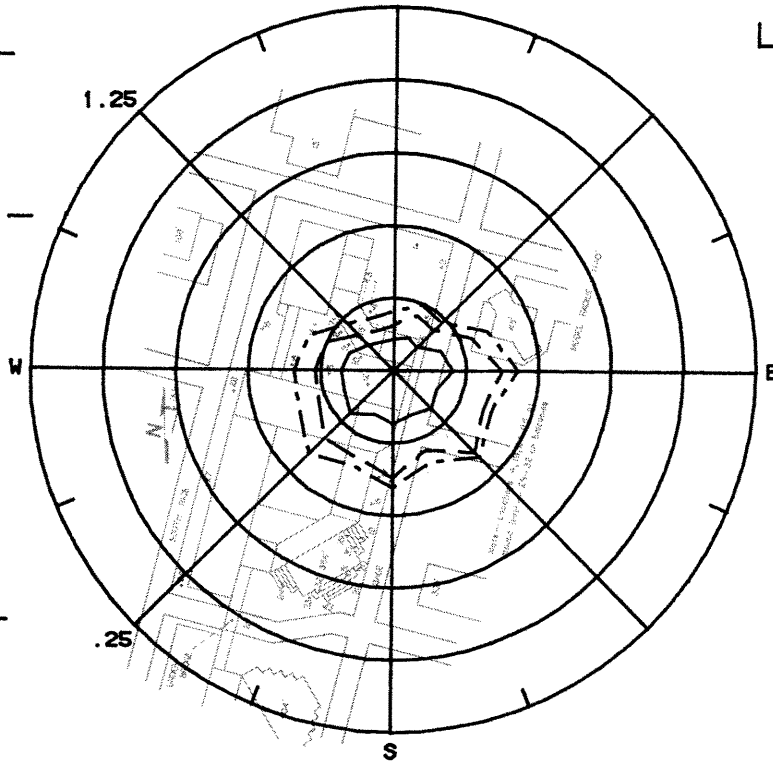
Figure 8e. Mean Velocities and Turbulence Intensities at Pedestrian Locations 9 and 10

$\frac{U_{mean}}{U_{inf}}$  ———  
 $U_{inf}$

Location 11

$\frac{U_{mean} + 3 \cdot U_{rms}}{U_{inf}}$  - - - -  
.25/Div

$\frac{U_{rms}}{U_{inf}}$  - - - -  
.05/Div



$\frac{U_{mean}}{U_{inf}}$  ———  
 $U_{inf}$

Location 12

$\frac{U_{mean} + 3 \cdot U_{rms}}{U_{inf}}$  - - - -  
.25/Div

$\frac{U_{rms}}{U_{inf}}$  - - - -  
.05/Div

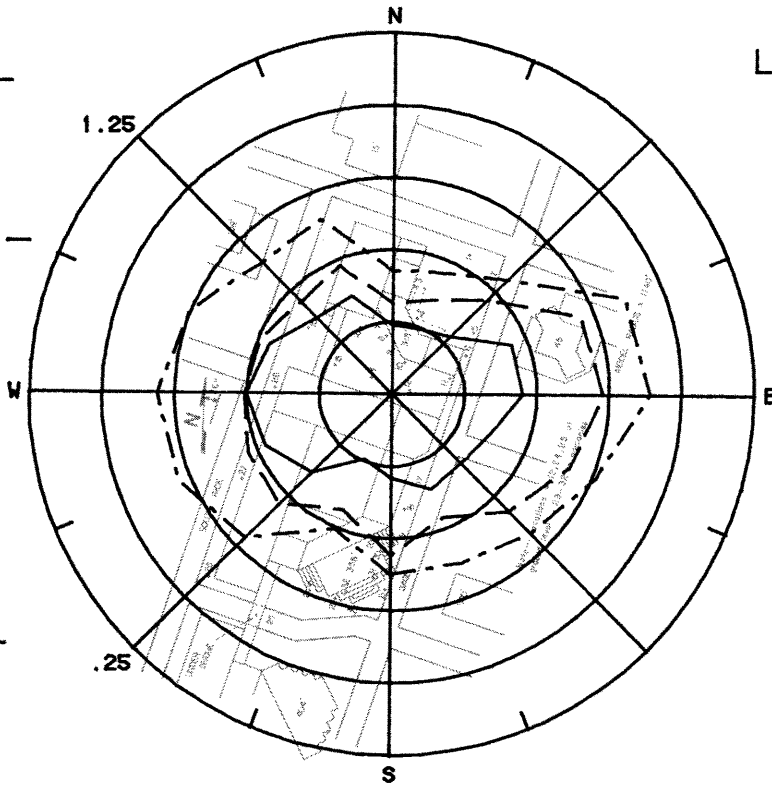


Figure 8f. Mean Velocities and Turbulence Intensities at Pedestrian Locations 11 and 12

$\frac{U_{mean}}{U_{inf}}$  ———

$U_{inf}$

$\frac{U_{mean} + 3 \cdot U_{rms}}{U_{inf}}$  - - - -

$U_{inf}$

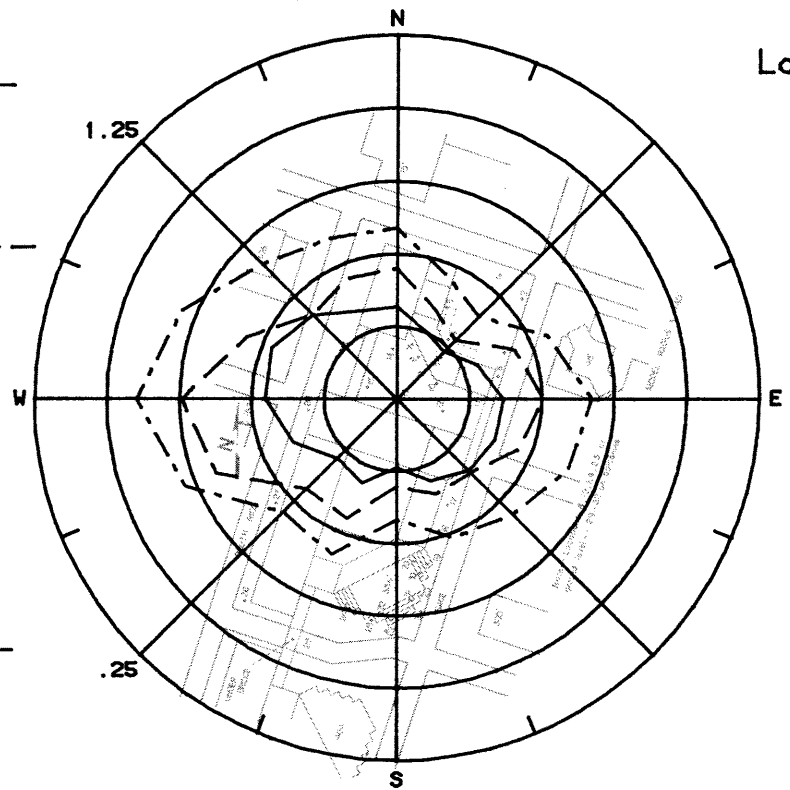
.25/Div

$\frac{U_{rms}}{U_{inf}}$  - - - -

$U_{inf}$

.05/Div

Location 13



$\frac{U_{mean}}{U_{inf}}$  ———

$U_{inf}$

$\frac{U_{mean} + 3 \cdot U_{rms}}{U_{inf}}$  - - - -

$U_{inf}$

.25/Div

$\frac{U_{rms}}{U_{inf}}$  - - - -

$U_{inf}$

.05/Div

Location 14

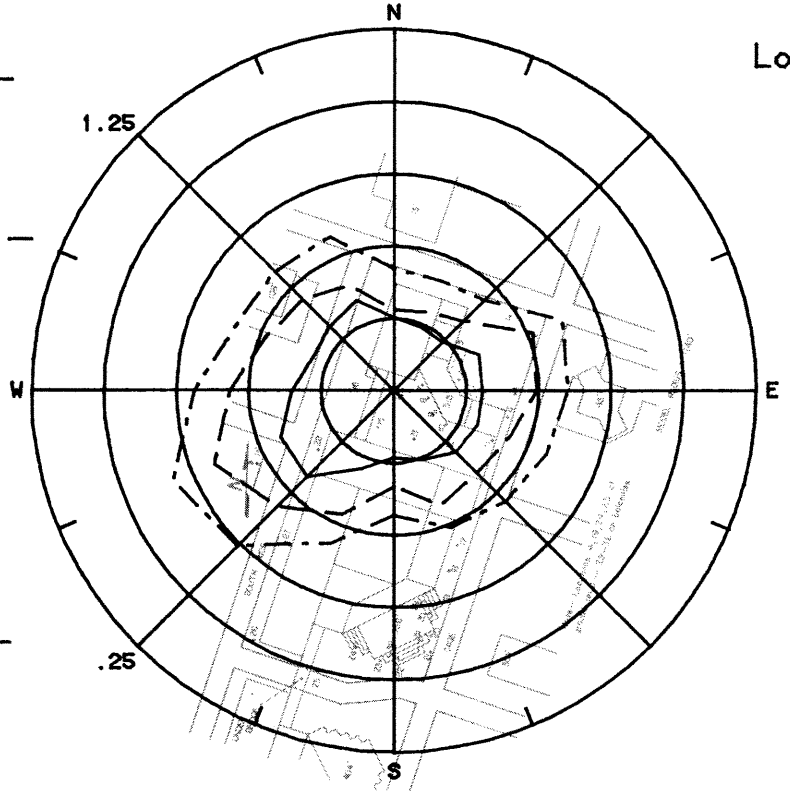
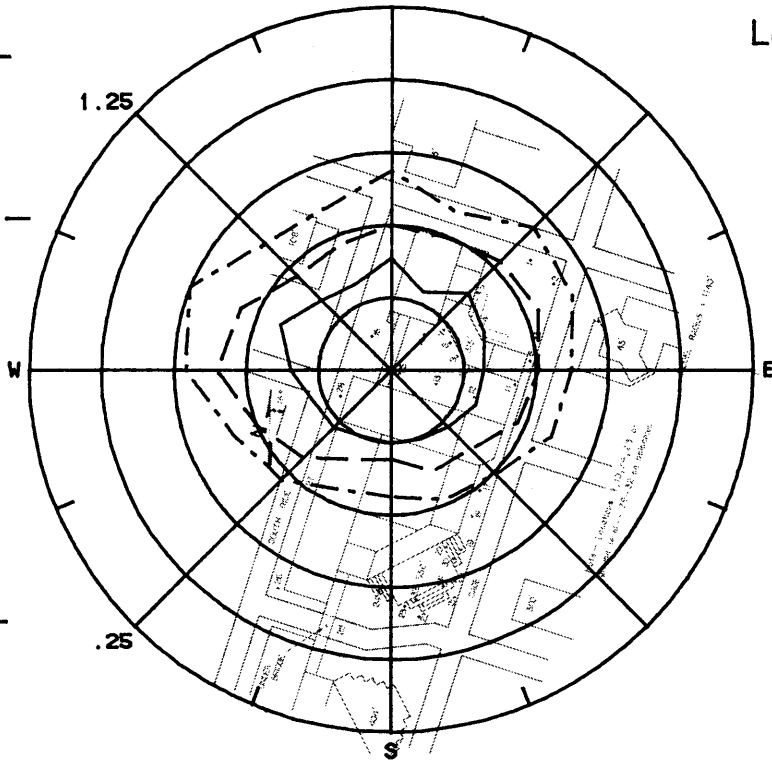


Figure 8g. Mean Velocities and Turbulence Intensities at Pedestrian Locations 13 and 14

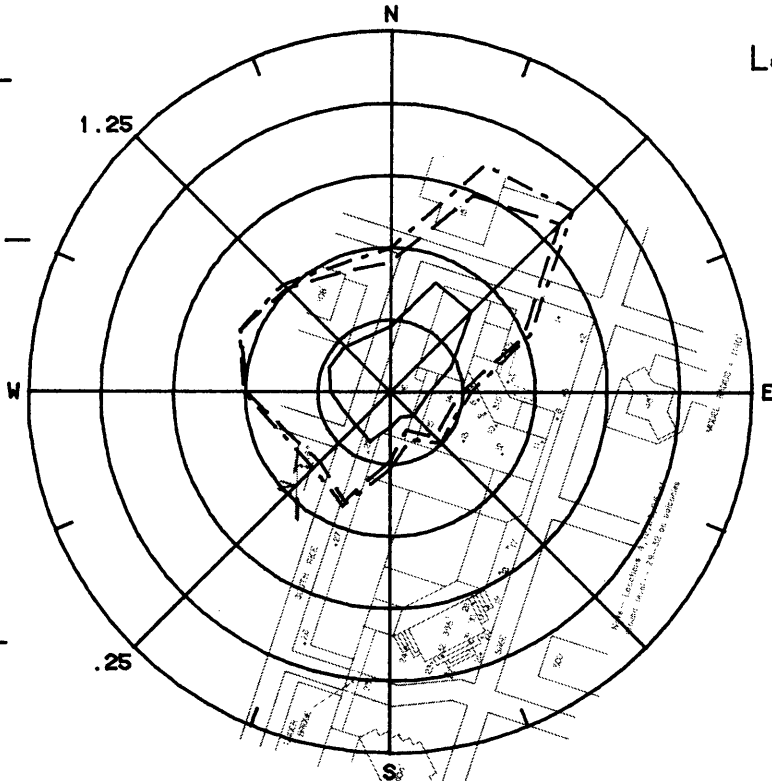
$\frac{U_{mean}}{U_{inf}}$  ———  
 $\frac{U_{mean} + 3*U_{rms}}{U_{inf}}$  - - -

Location 15



$\frac{U_{mean}}{U_{inf}}$  ———  
 $\frac{U_{mean} + 3*U_{rms}}{U_{inf}}$  - - -

Location 16



$\frac{U_{rms}}{U_{inf}}$  - - -  
 $\frac{U_{rms}}{U_{inf}}$  - - -

.25/Div  
 .05/Div

Figure 8h. Mean Velocities and Turbulence Intensities at Pedestrian Locations 15 and 16

$$\frac{U_{mean}}{U_{inf}} \text{ ———}$$

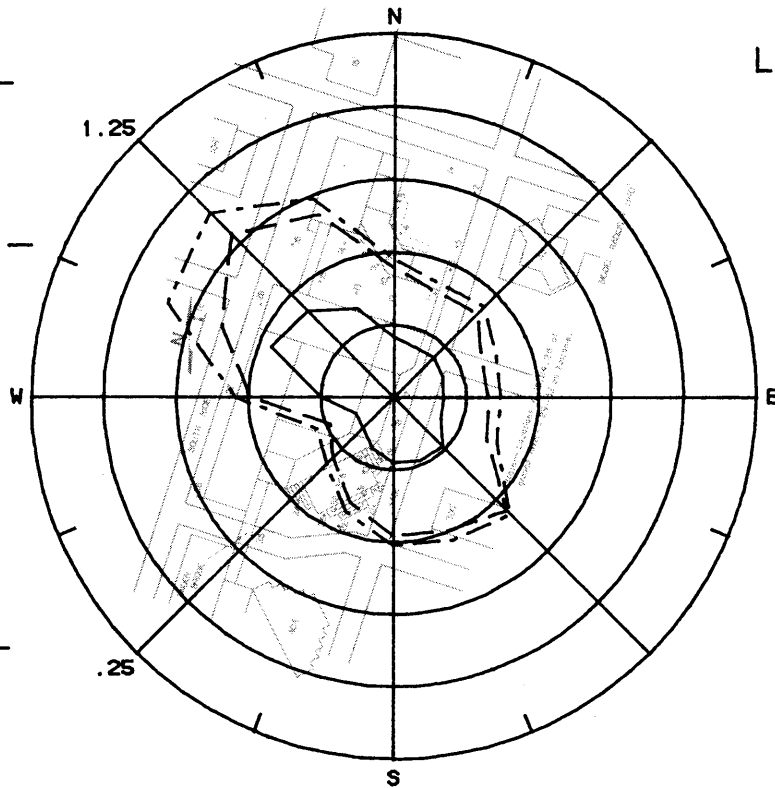
Location 17

$$\frac{U_{mean} + 3 \cdot U_{rms}}{U_{inf}} \text{ - - - -}$$

.25/Div

$$\frac{U_{rms}}{U_{inf}} \text{ - - - -}$$

.05/Div



$$\frac{U_{mean}}{U_{inf}} \text{ ———}$$

Location 18

$$\frac{U_{mean} + 3 \cdot U_{rms}}{U_{inf}} \text{ - - - -}$$

.25/Div

$$\frac{U_{rms}}{U_{inf}} \text{ - - - -}$$

.05/Div

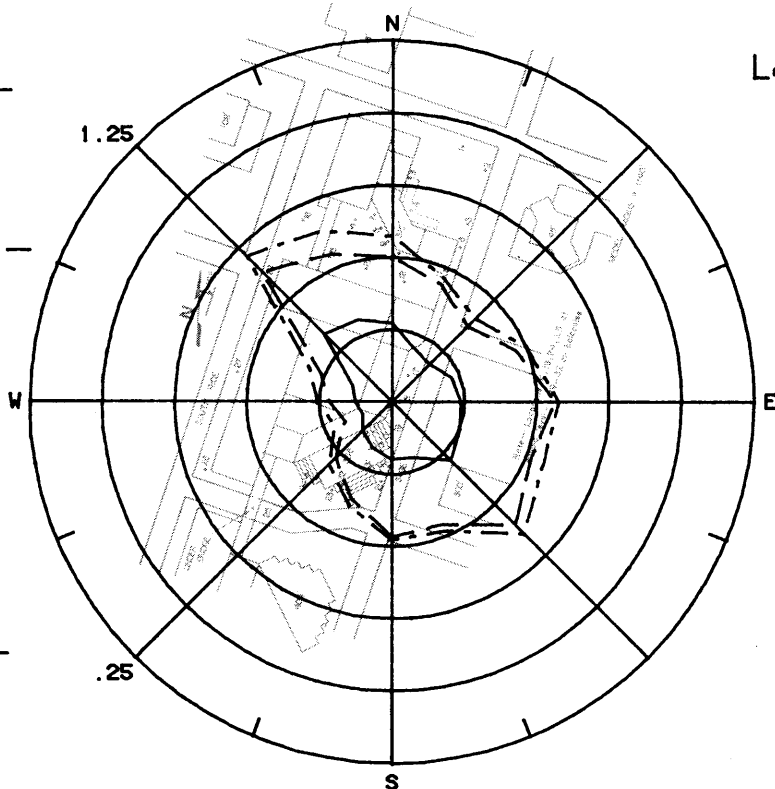


Figure 8i. Mean Velocities and Turbulence Intensities at Pedestrian Locations 17 and 18

$\frac{U_{mean}}{U_{inf}}$  ———

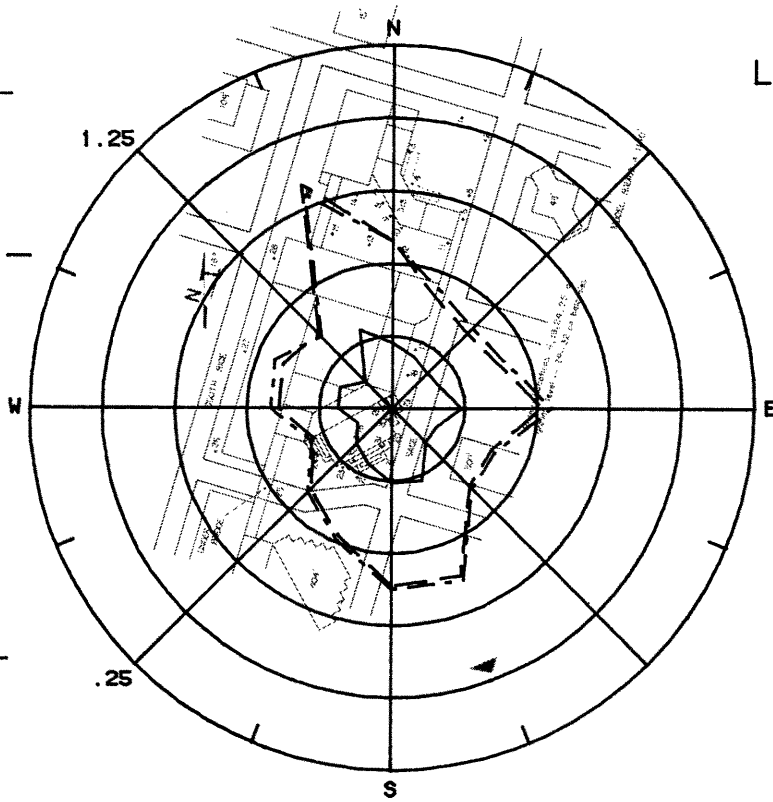
$U_{inf}$

Location 19

$\frac{U_{mean} + 3 \cdot U_{rms}}{U_{inf}}$  - - -

$U_{inf}$

.25/Div



$\frac{U_{rms}}{U_{inf}}$  - - -

$U_{inf}$

.05/Div

$\frac{U_{mean}}{U_{inf}}$  ———

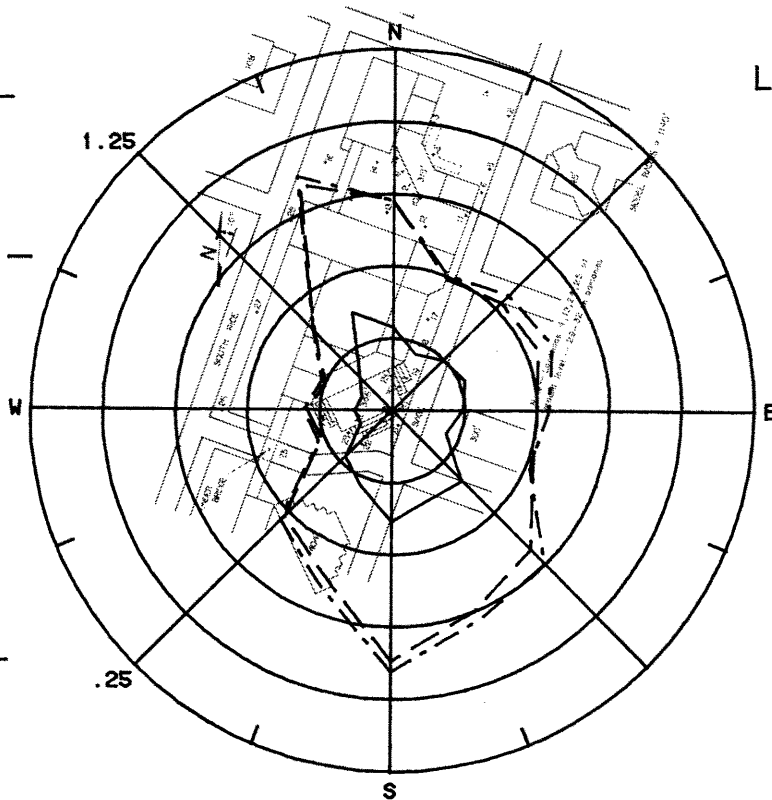
$U_{inf}$

Location 20

$\frac{U_{mean} + 3 \cdot U_{rms}}{U_{inf}}$  - - -

$U_{inf}$

.25/Div



$\frac{U_{rms}}{U_{inf}}$  - - -

$U_{inf}$

.05/Div

Figure 8j. Mean Velocities and Turbulence Intensities at Pedestrian Locations 19 and 20

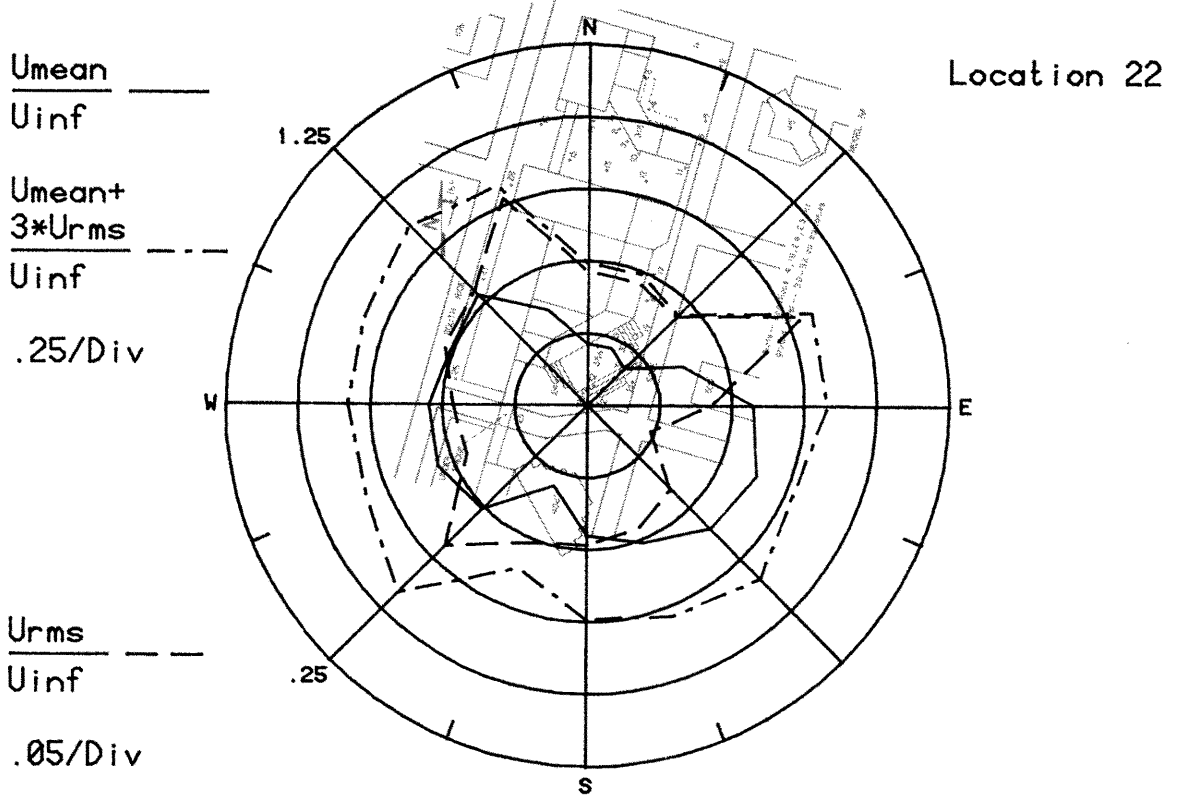
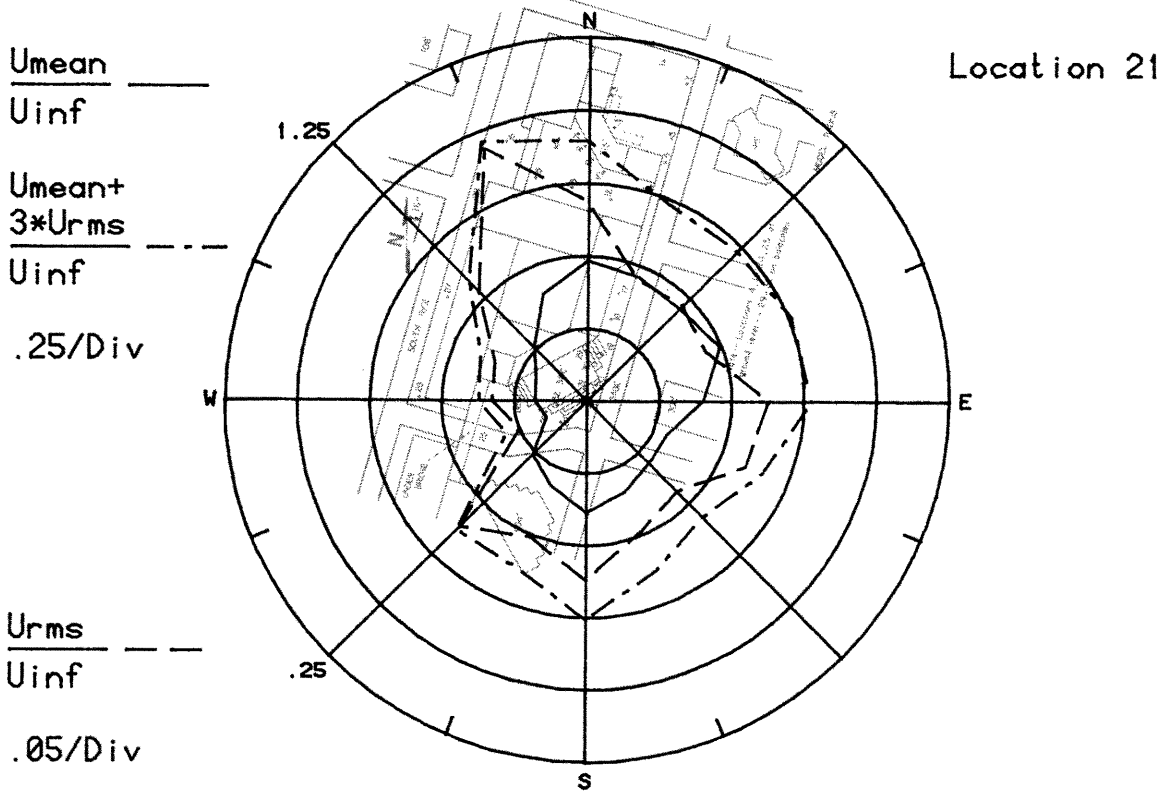


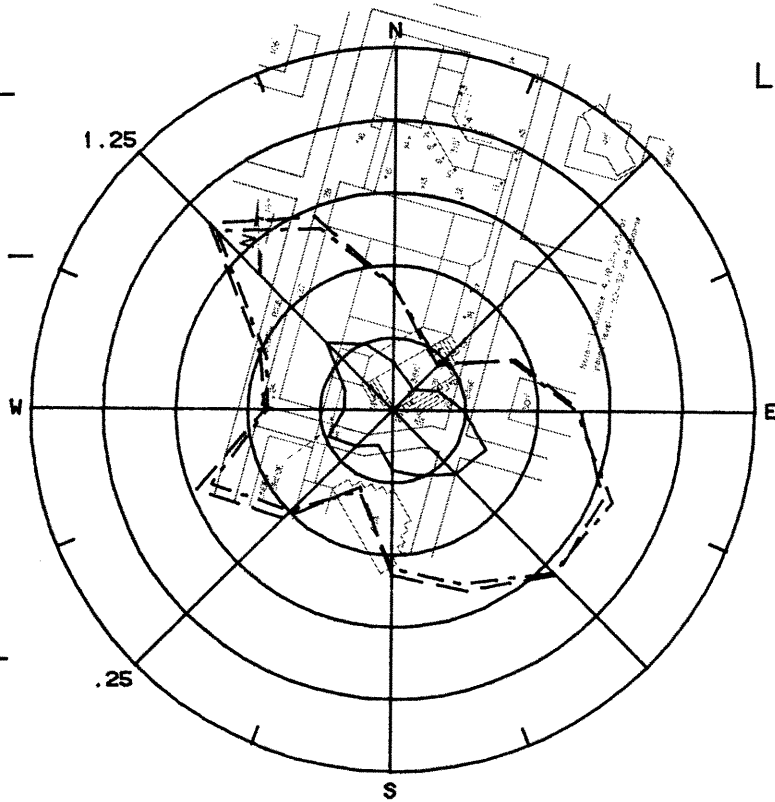
Figure 8i. Mean Velocities and Turbulence Intensities at Pedestrian Locations 21 and 22



$\frac{U_{mean}}{U_{inf}}$  ———  
 $U_{inf}$

Location 23

$\frac{U_{mean} + 3 \times U_{rms}}{U_{inf}}$  - - - -  
 $U_{inf}$   
 .25/Div

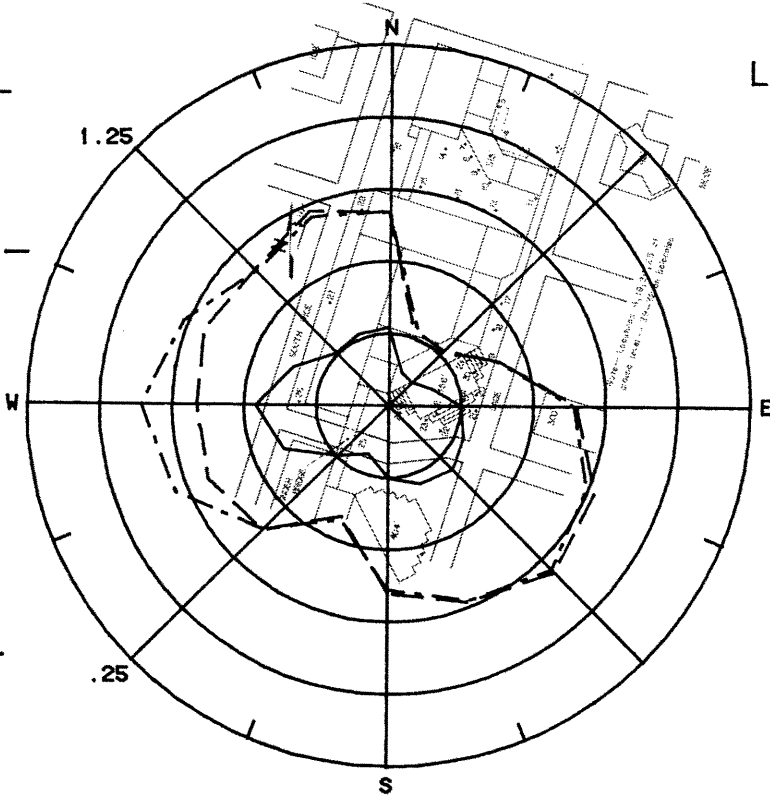


$\frac{U_{rms}}{U_{inf}}$  - - - -  
 $U_{inf}$   
 .05/Div

$\frac{U_{mean}}{U_{inf}}$  ———  
 $U_{inf}$

Location 24

$\frac{U_{mean} + 3 \times U_{rms}}{U_{inf}}$  - - - -  
 $U_{inf}$   
 .25/Div



$\frac{U_{rms}}{U_{inf}}$  - - - -  
 $U_{inf}$   
 .05/Div

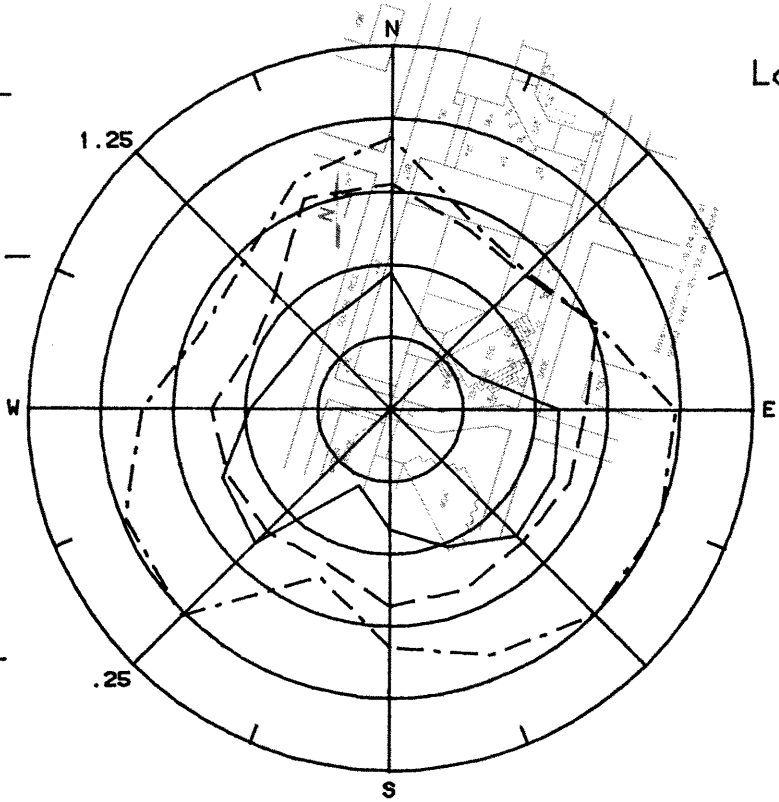
Figure 8j. Mean Velocities and Turbulence Intensities at Pedestrian Locations 23 and 24

Location 25

$\frac{U_{mean}}{U_{inf}}$  ———

$\frac{U_{mean} + 3 * U_{rms}}{U_{inf}}$  - - - -  
.25/Div

$\frac{U_{rms}}{U_{inf}}$  - - - -  
.05/Div



Location 26

$\frac{U_{mean}}{U_{inf}}$  ———

$\frac{U_{mean} + 3 * U_{rms}}{U_{inf}}$  - - - -  
.25/Div

$\frac{U_{rms}}{U_{inf}}$  - - - -  
.05/Div

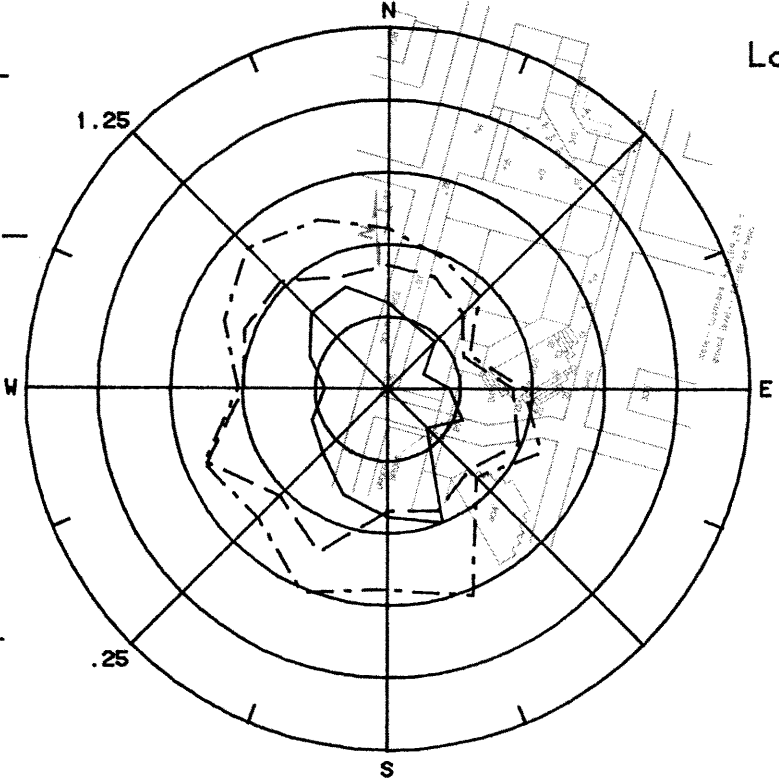


Figure 8k. Mean Velocities and Turbulence Intensities at Pedestrian Locations 25 and 26

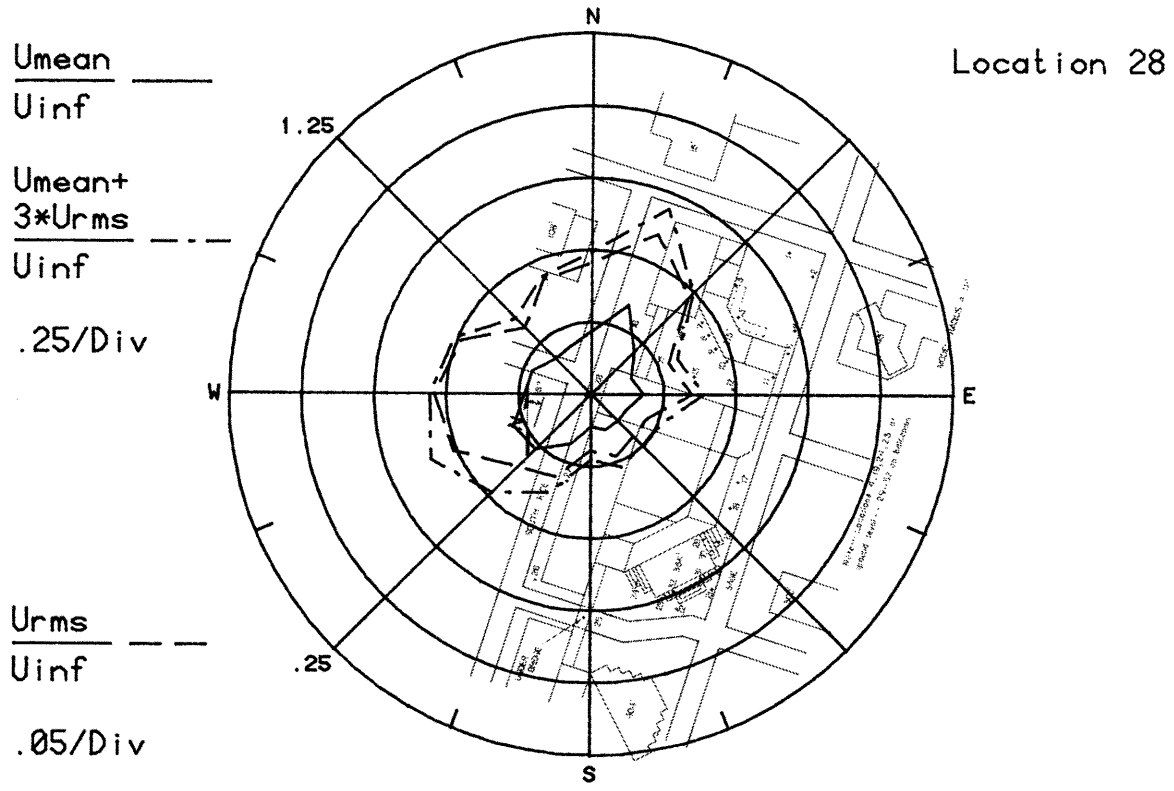
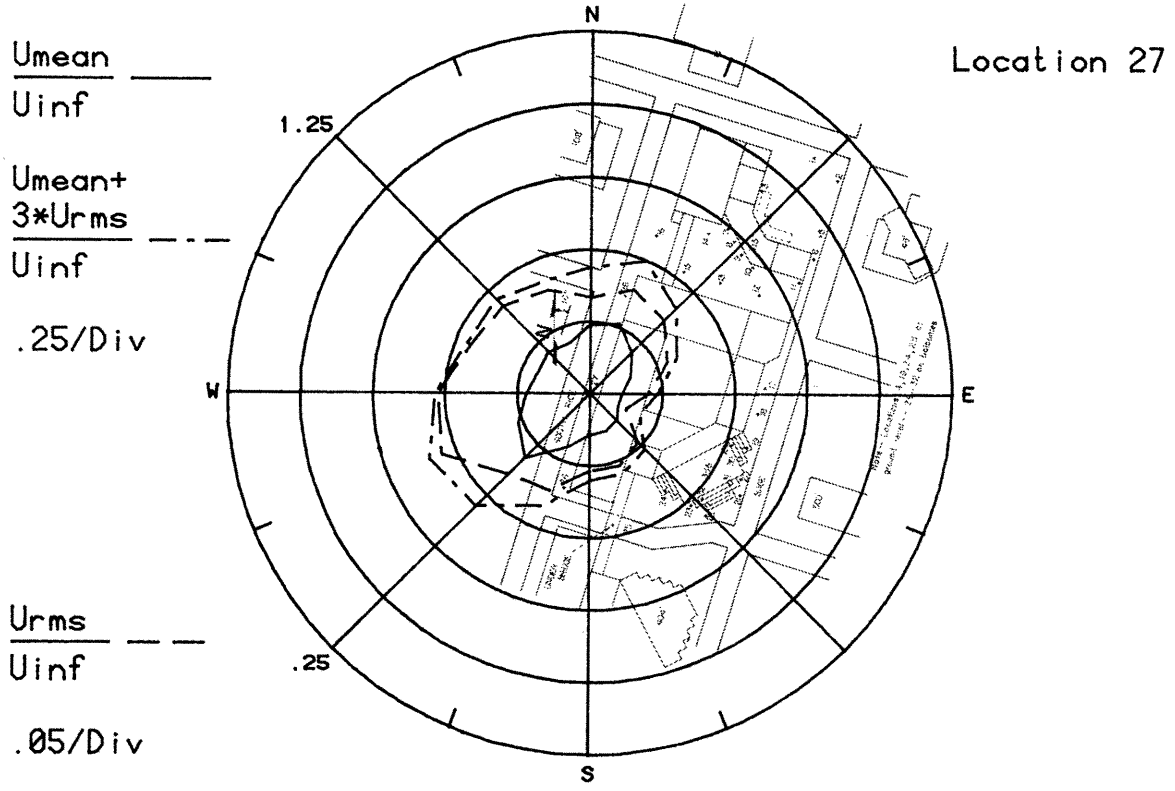


Figure 81. Mean Velocities and Turbulence Intensities at Pedestrian Locations 27 and 28

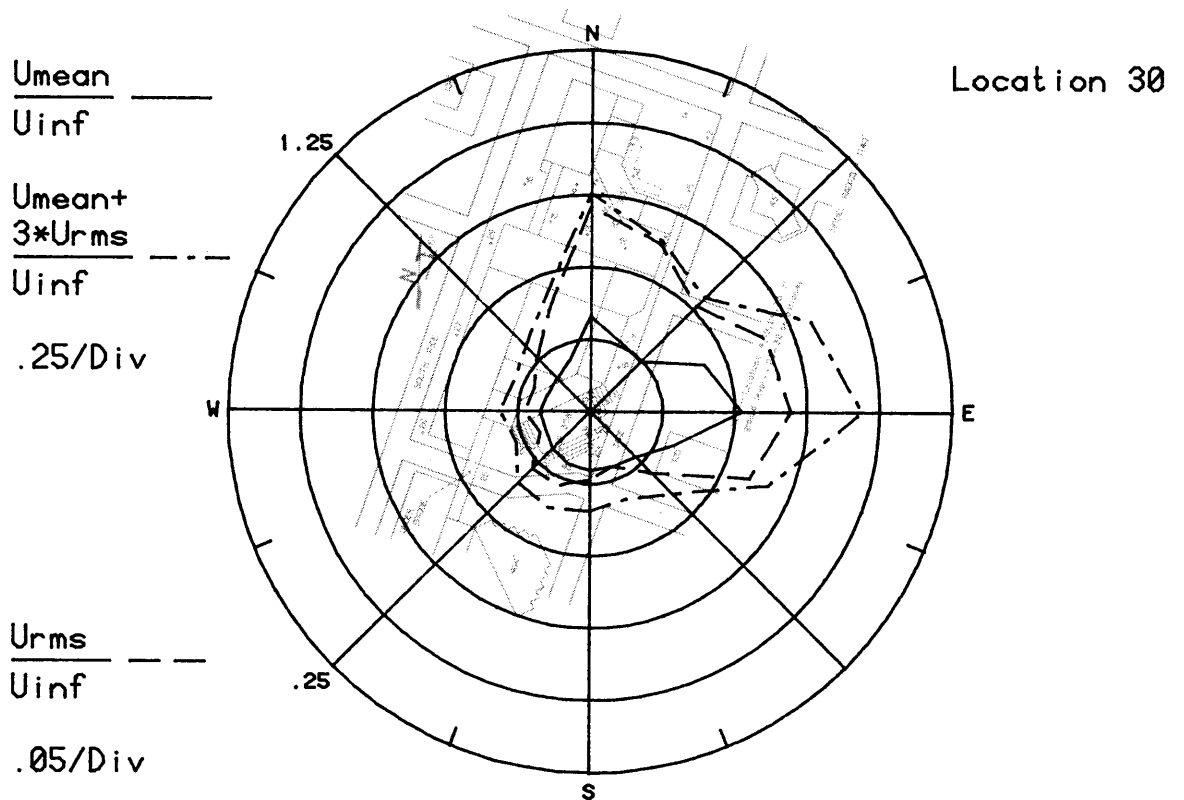
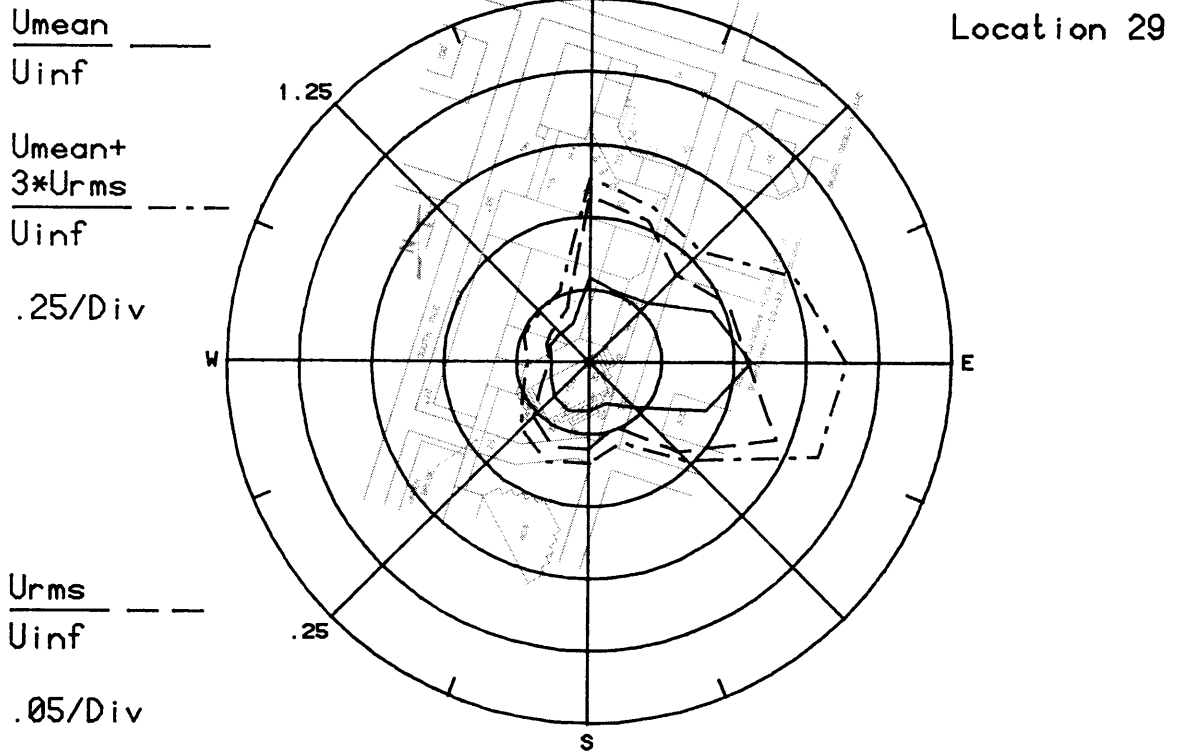
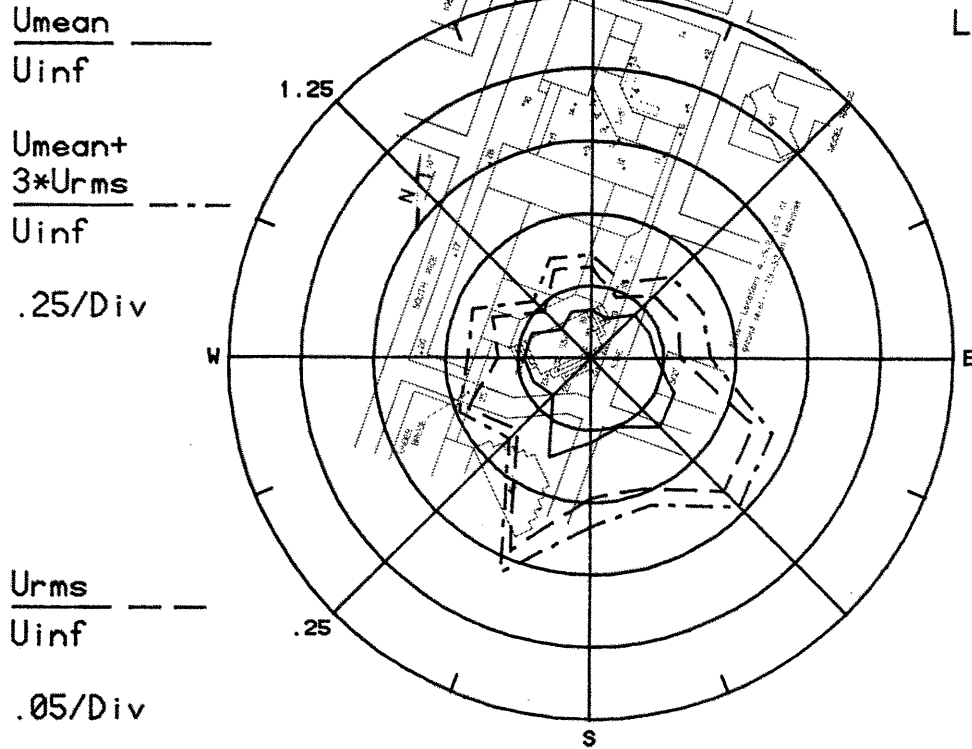


Figure 8m. Mean Velocities and Turbulence Intensities at Pedestrian Locations 29 and 30

Location 31



Location 32

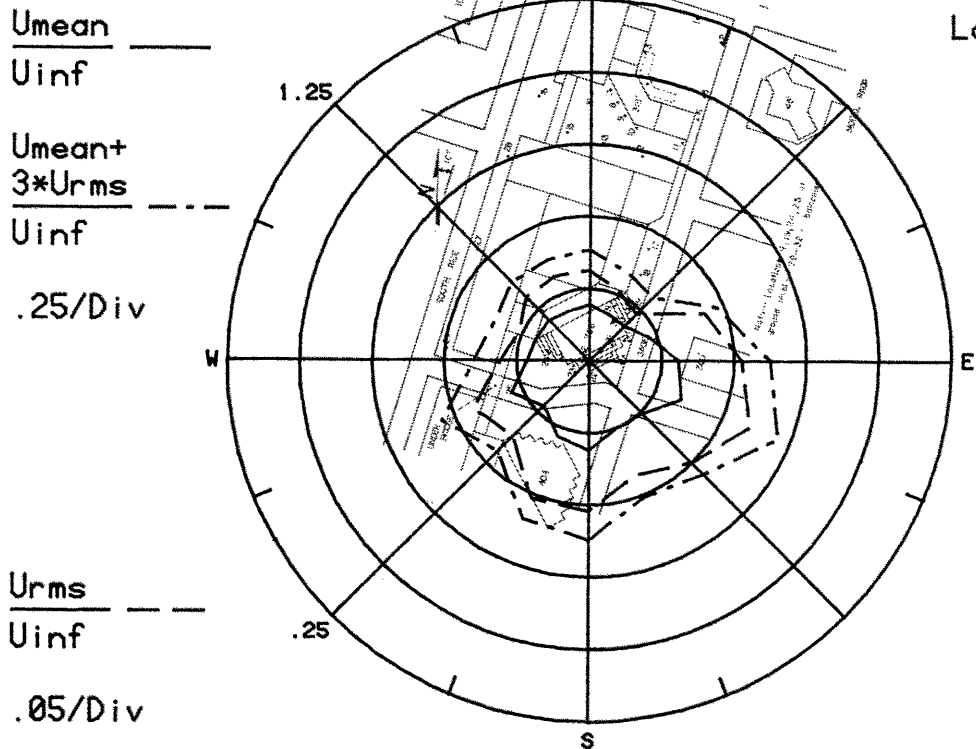


Figure 8n. Mean Velocities and Turbulence Intensities at Pedestrian Locations 31 and 32

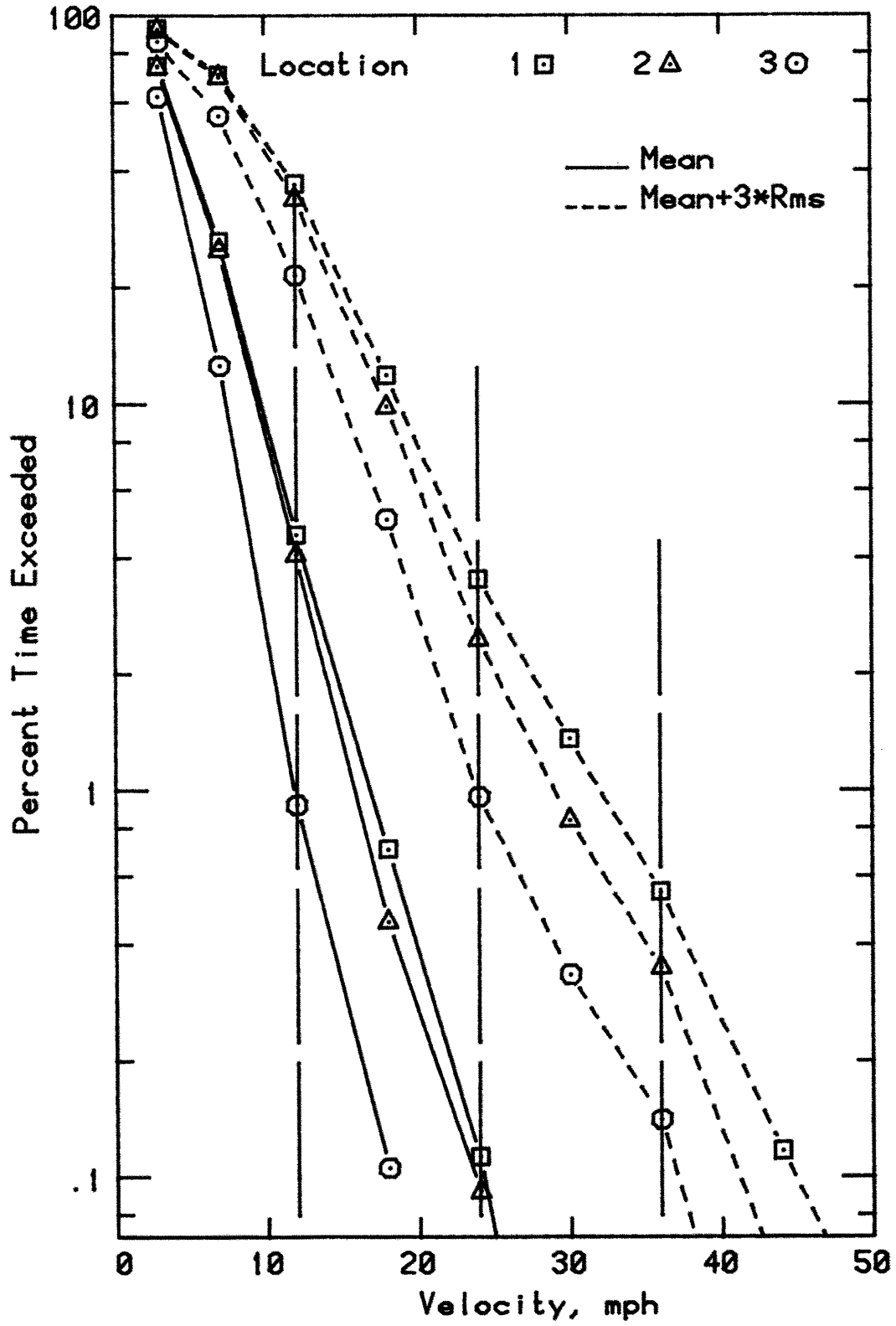


Figure 9a. Wind Velocity Probabilities  
for Pedestrian Locations

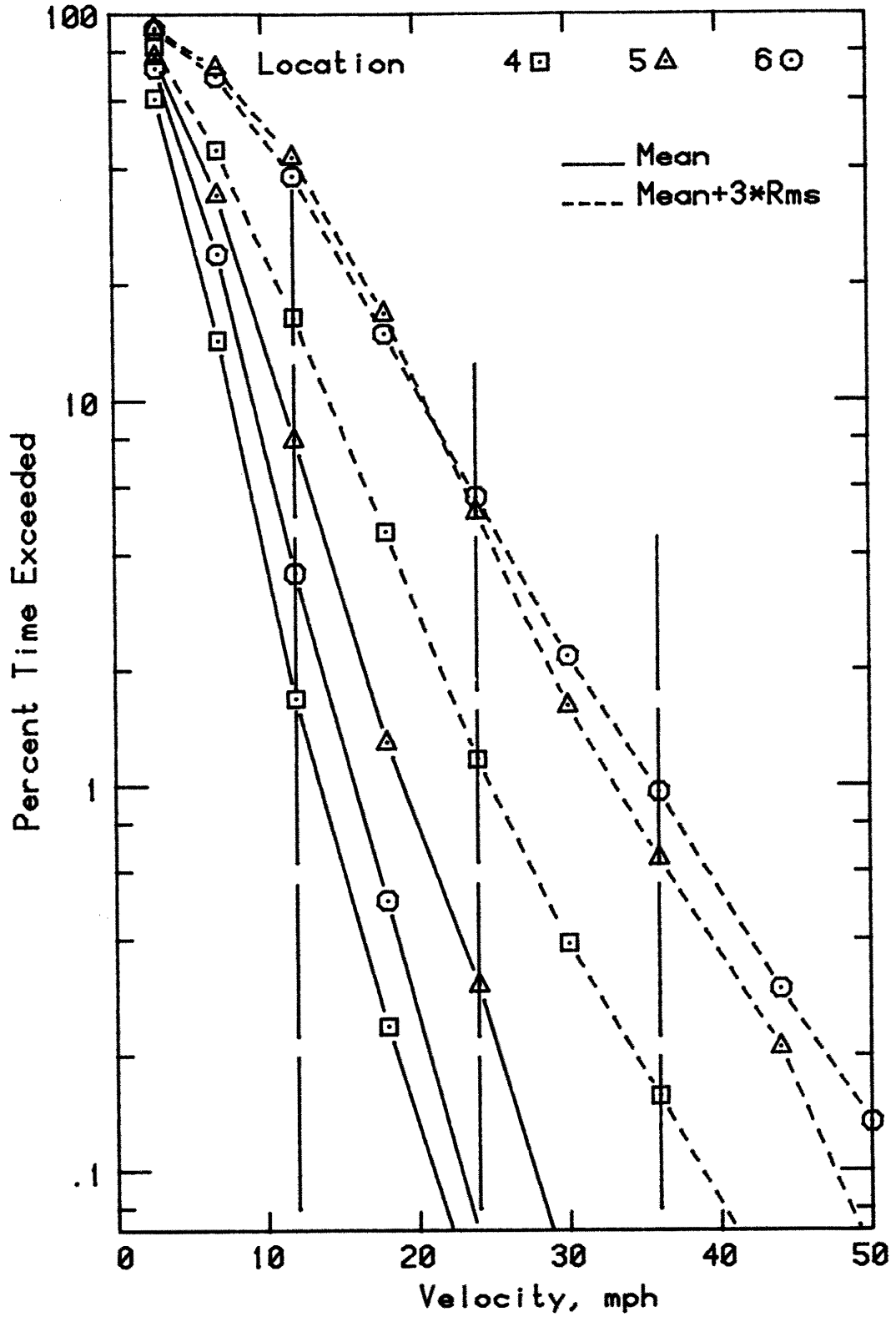


Figure 9b. Wind Velocity Probabilities for Pedestrian Locations

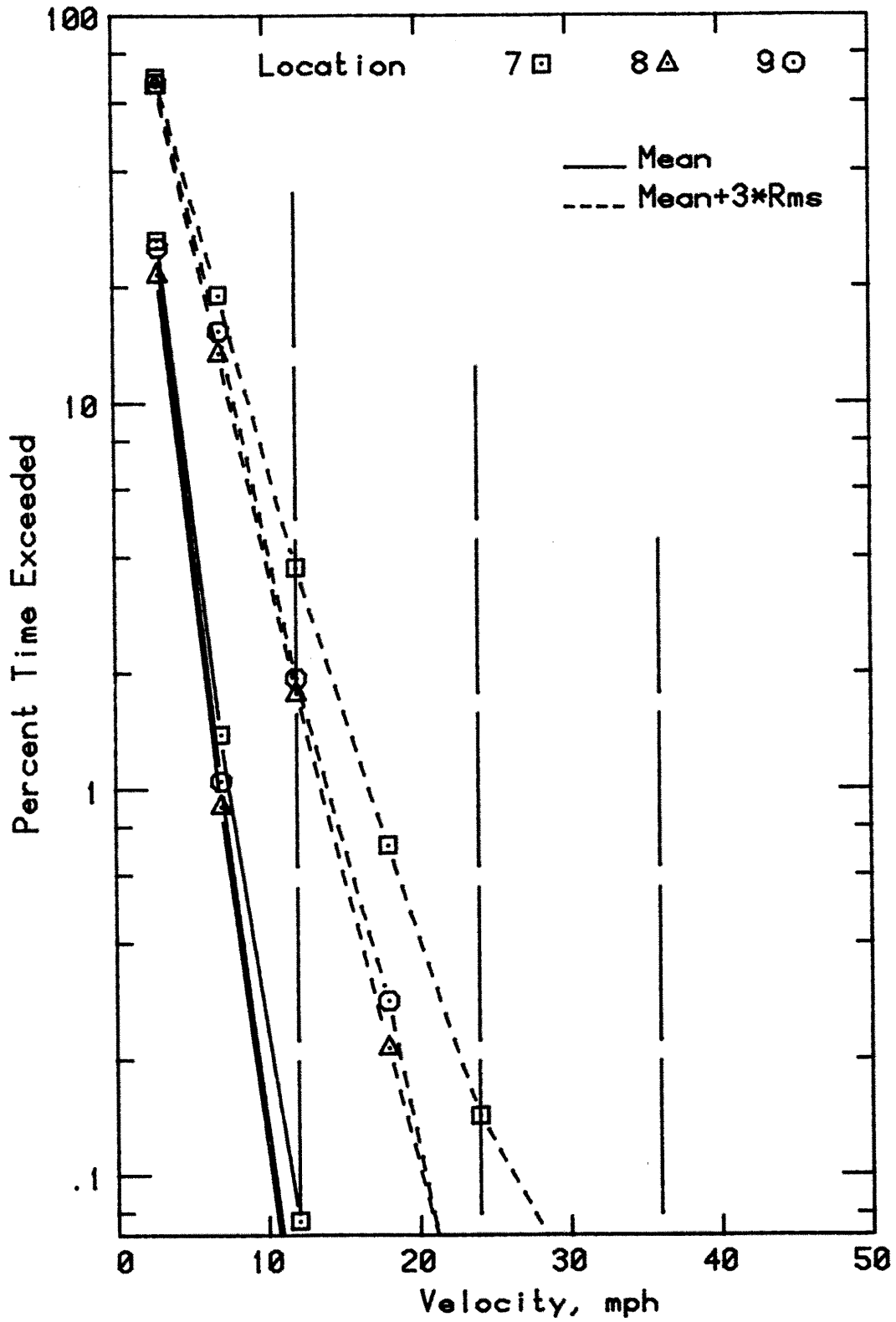


Figure 9c. Wind Velocity Probabilities for Pedestrian Locations



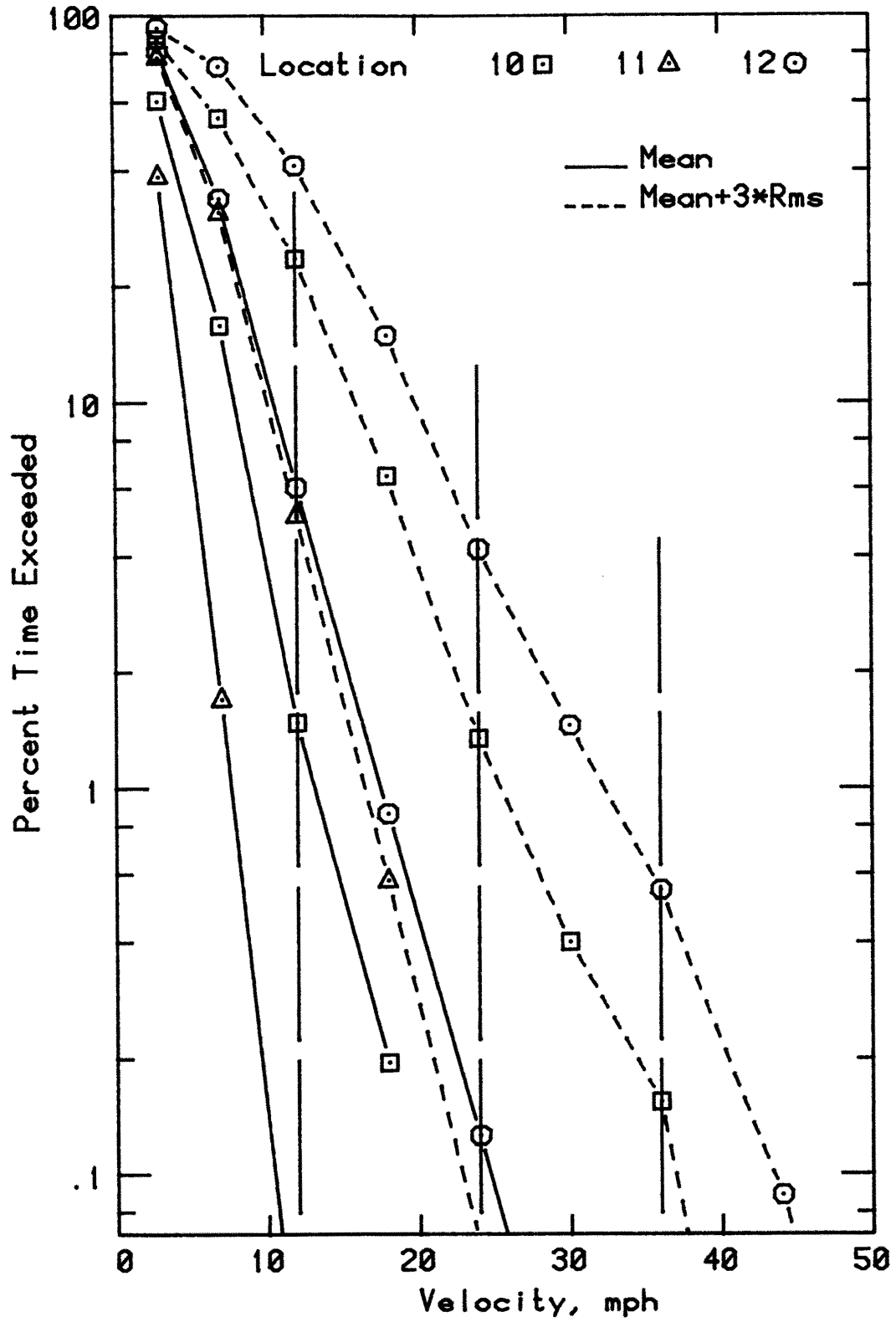


Figure 9d. Wind Velocity Probabilities for Pedestrian Locations

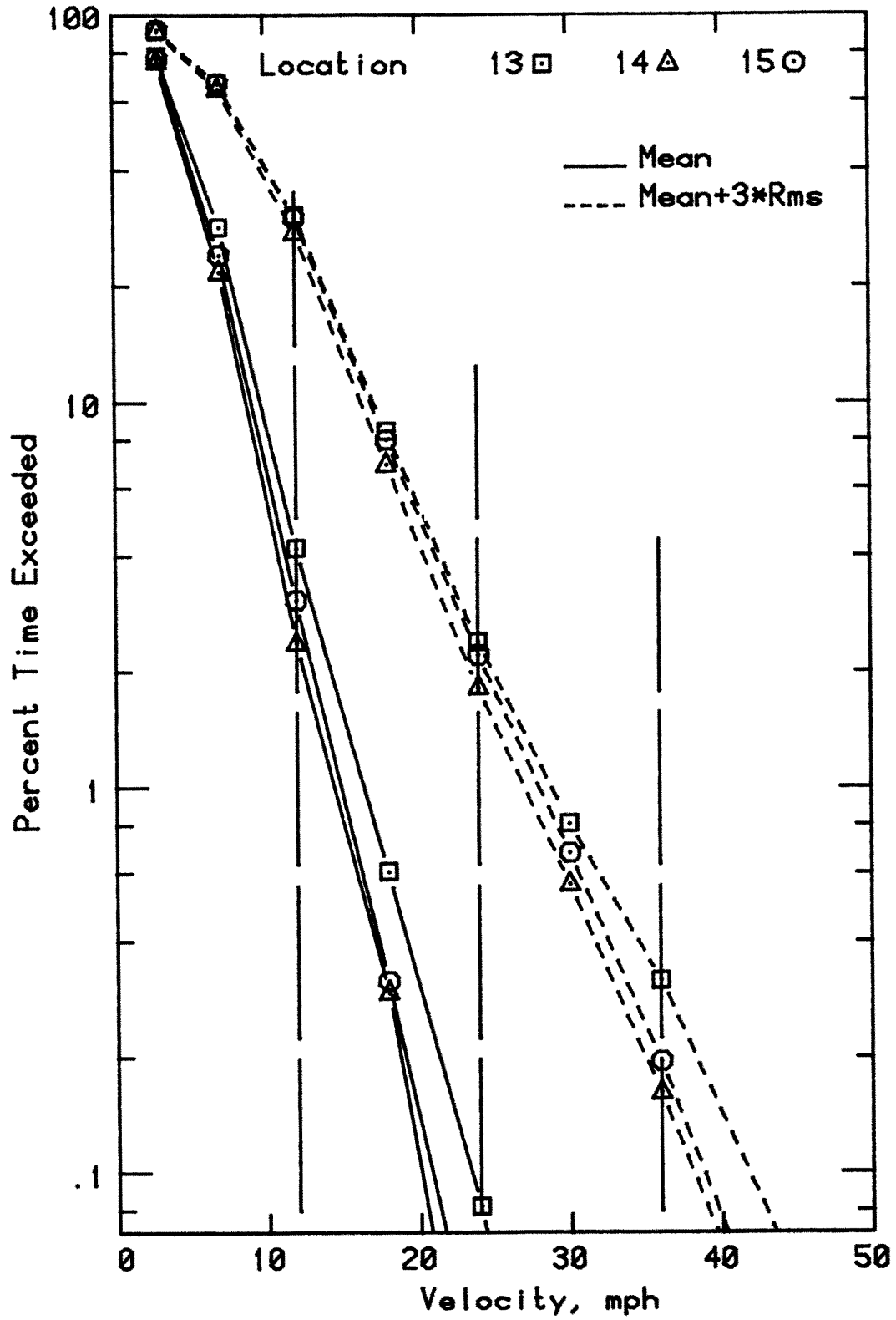


Figure 9e. Wind Velocity Probabilities for Pedestrian Locations

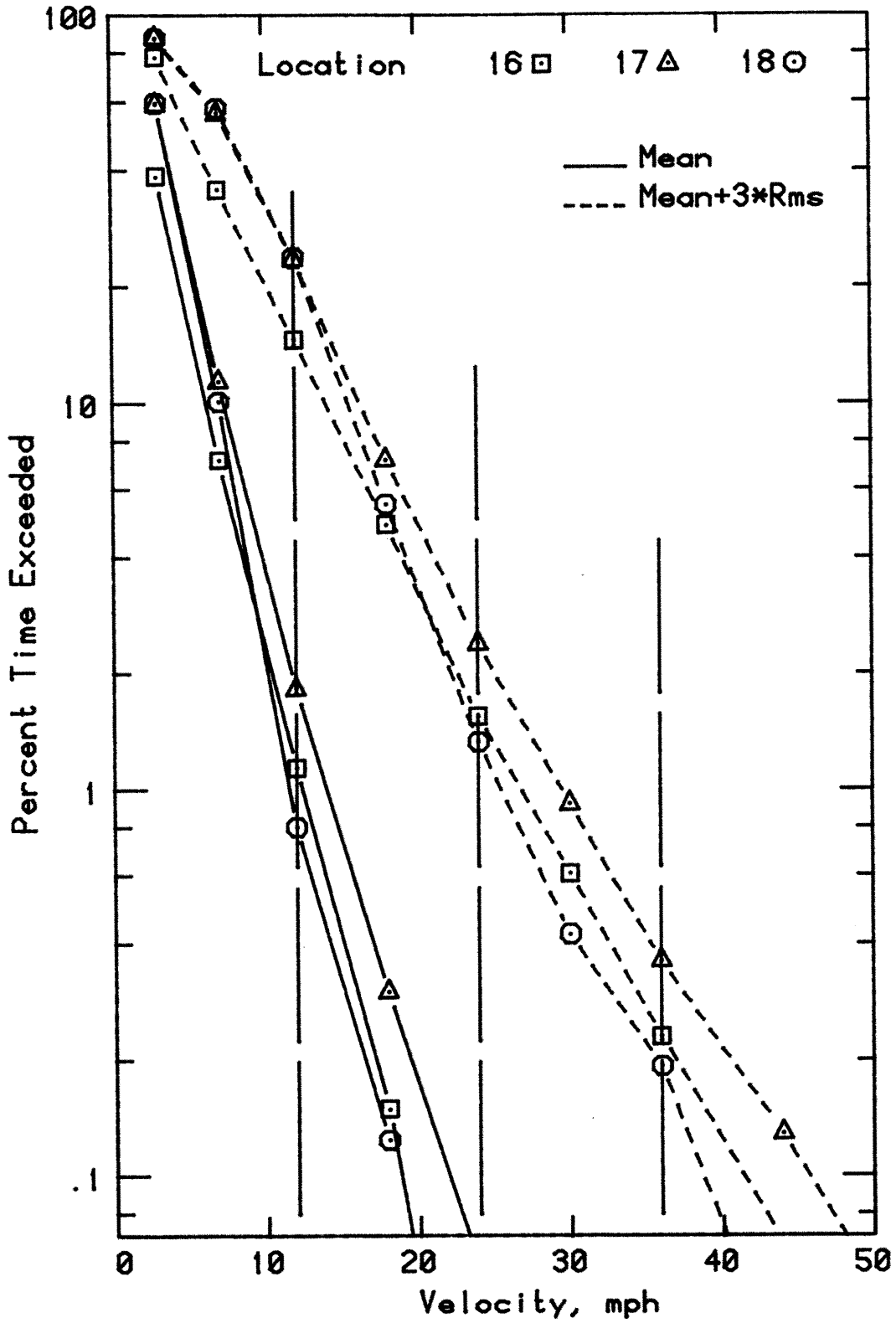


Figure 9f. Wind Velocity Probabilities for Pedestrian Locations

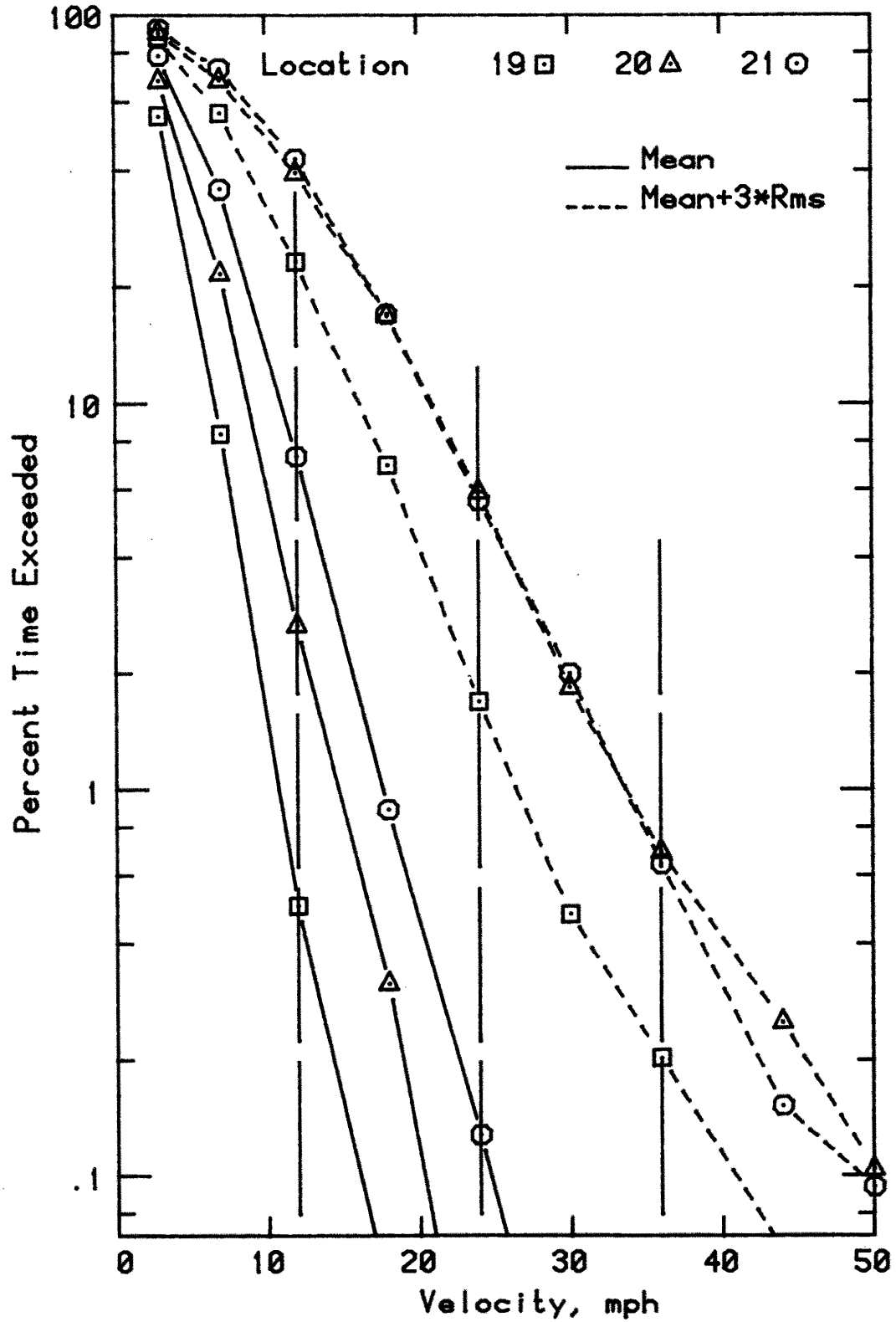


Figure 9g. Wind Velocity Probabilities for Pedestrian Locations

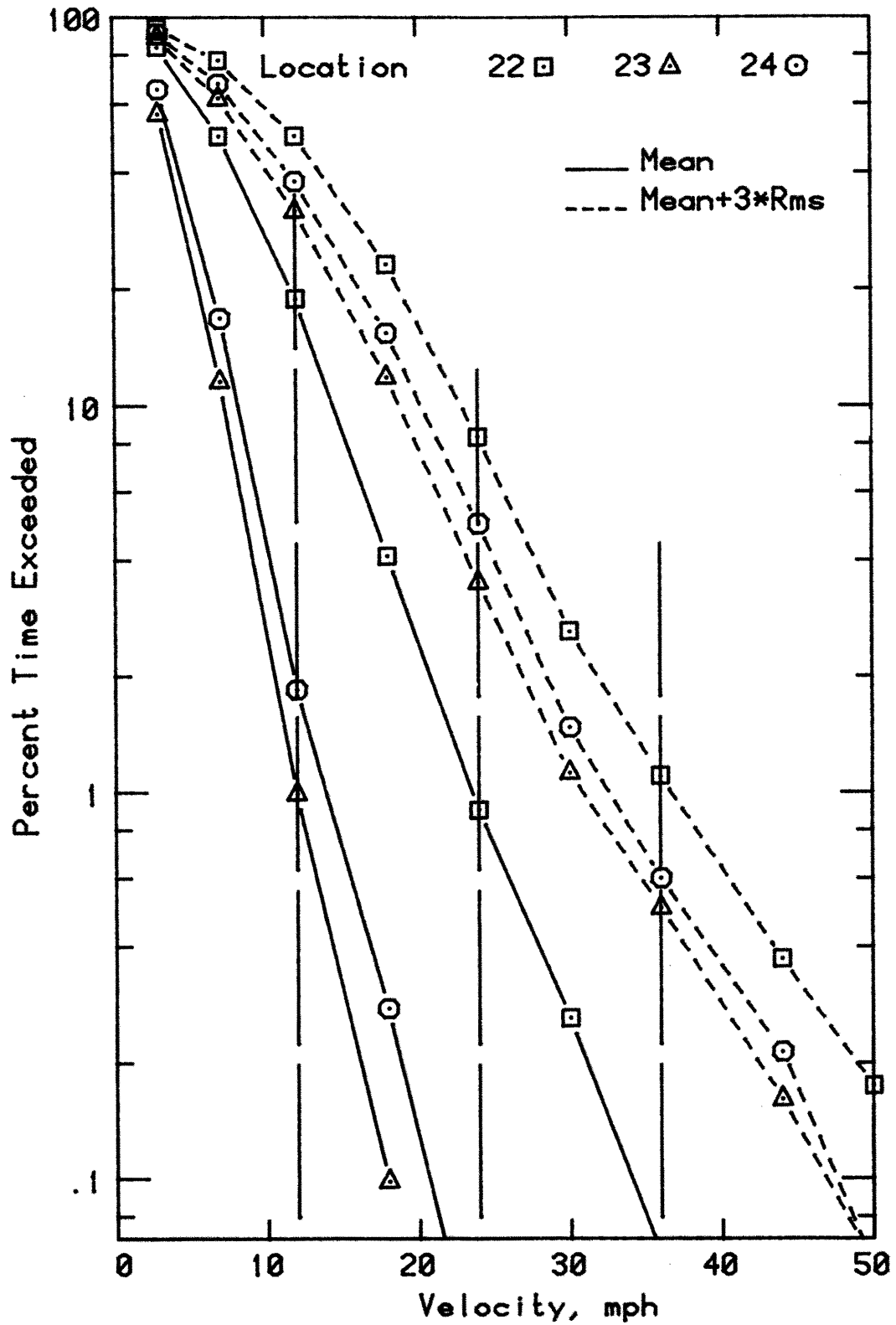


Figure 9h. Wind Velocity Probabilities for Pedestrian Locations

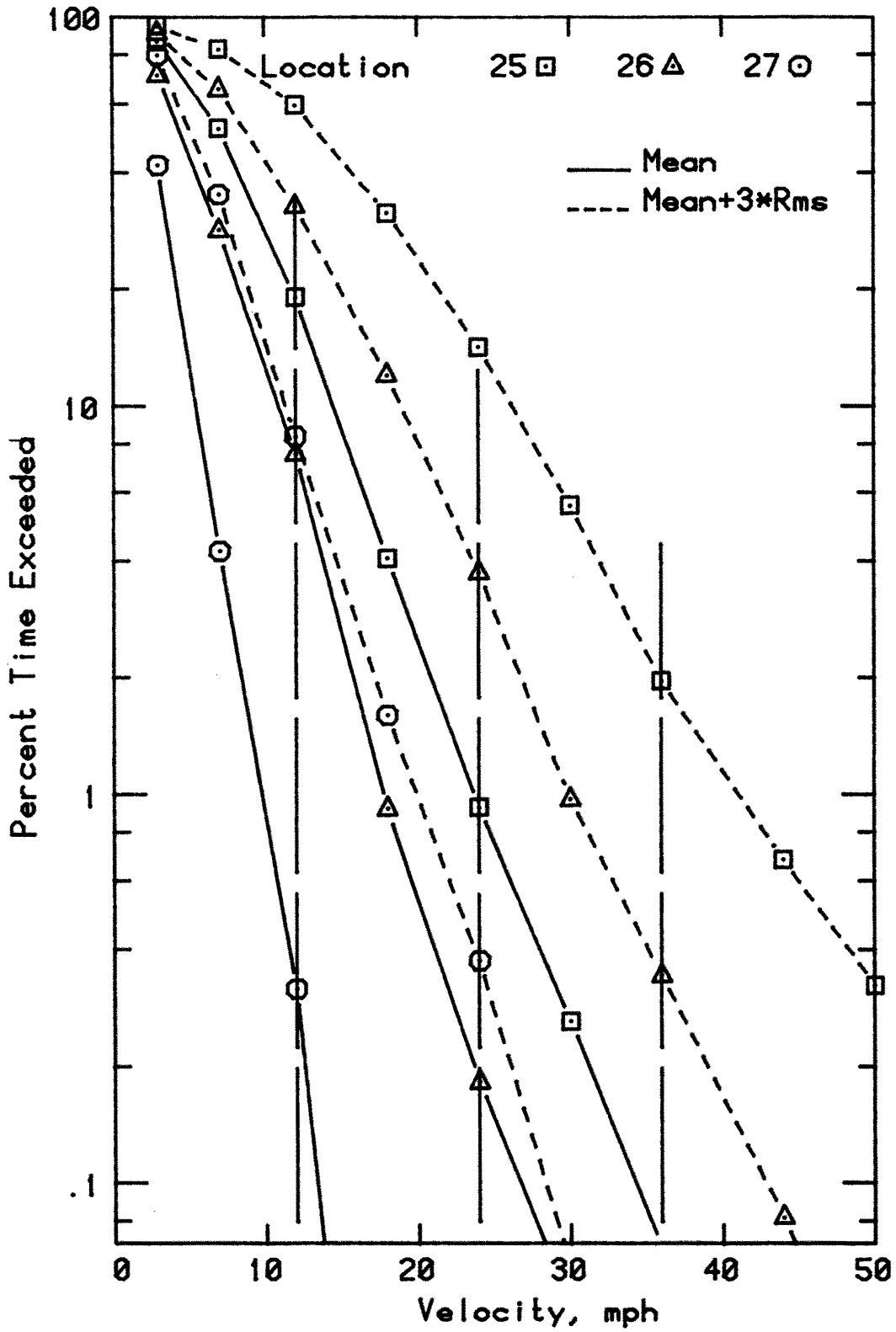


Figure 9i. Wind Velocity Probabilities for Pedestrian Locations

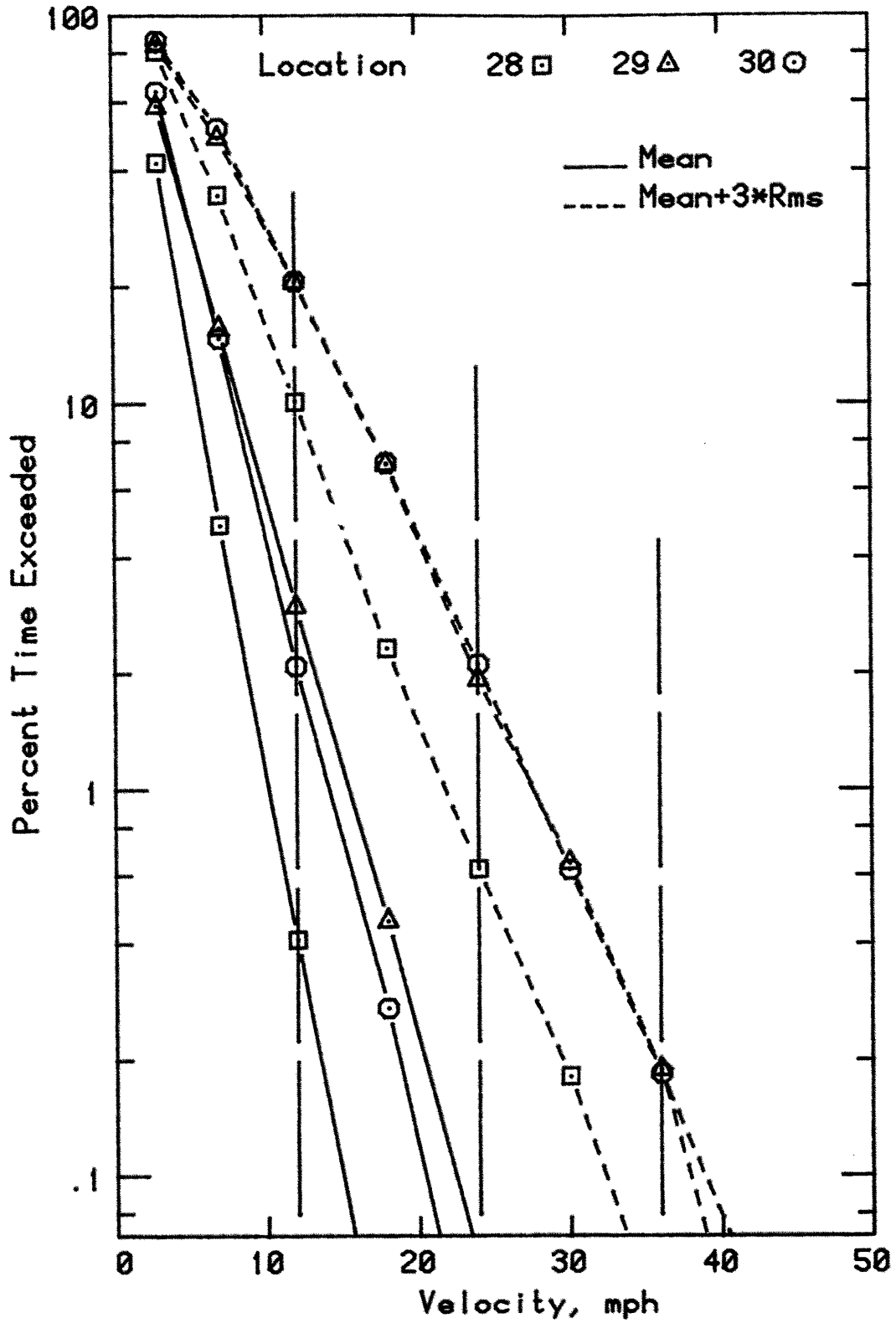


Figure 9j. Wind Velocity Probabilities for Pedestrian Locations

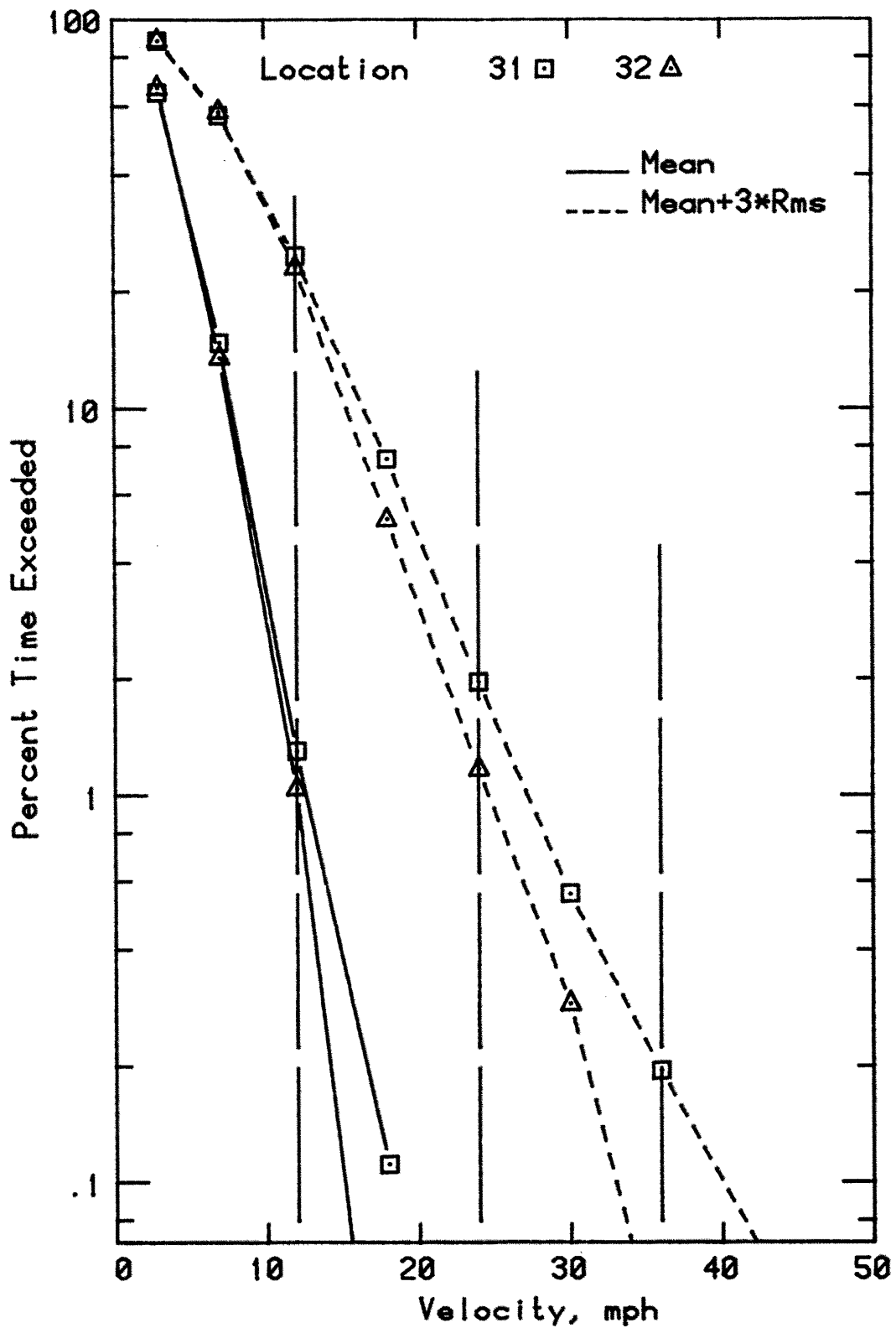
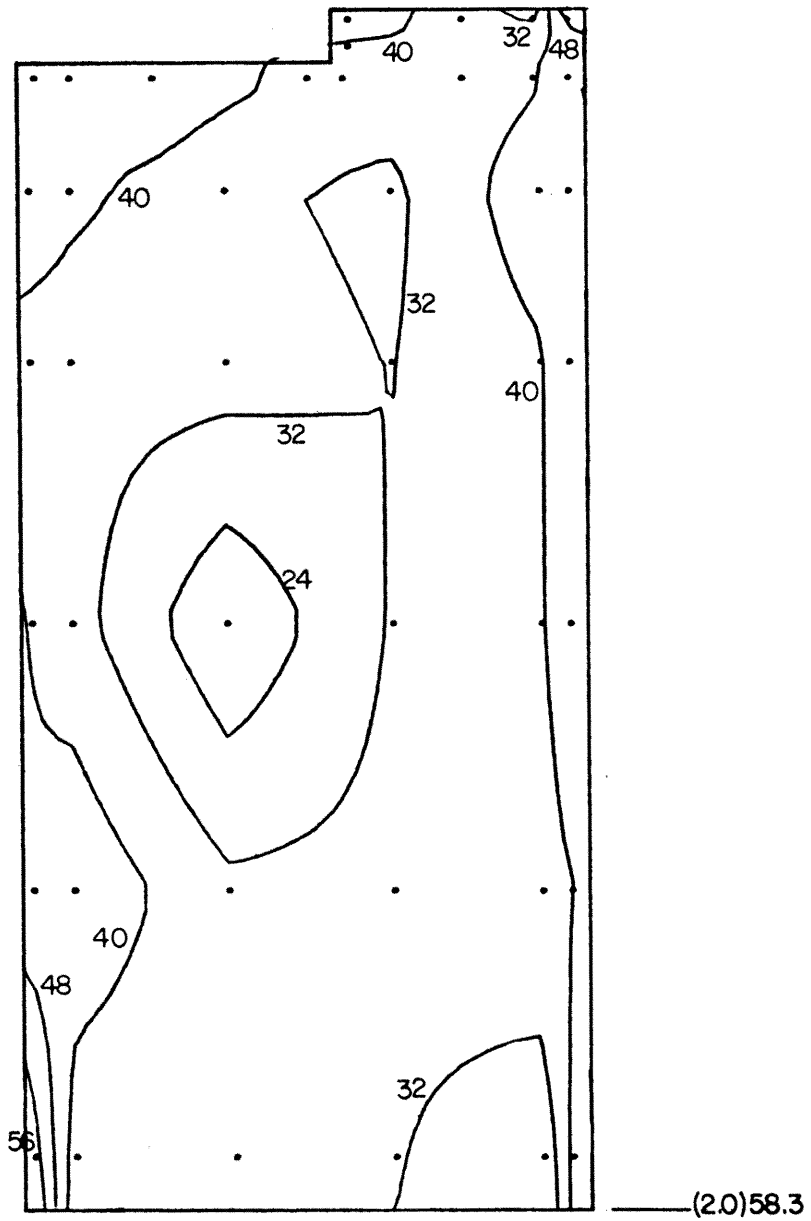


Figure 9k. Wind Velocity Probabilities for Pedestrian Locations



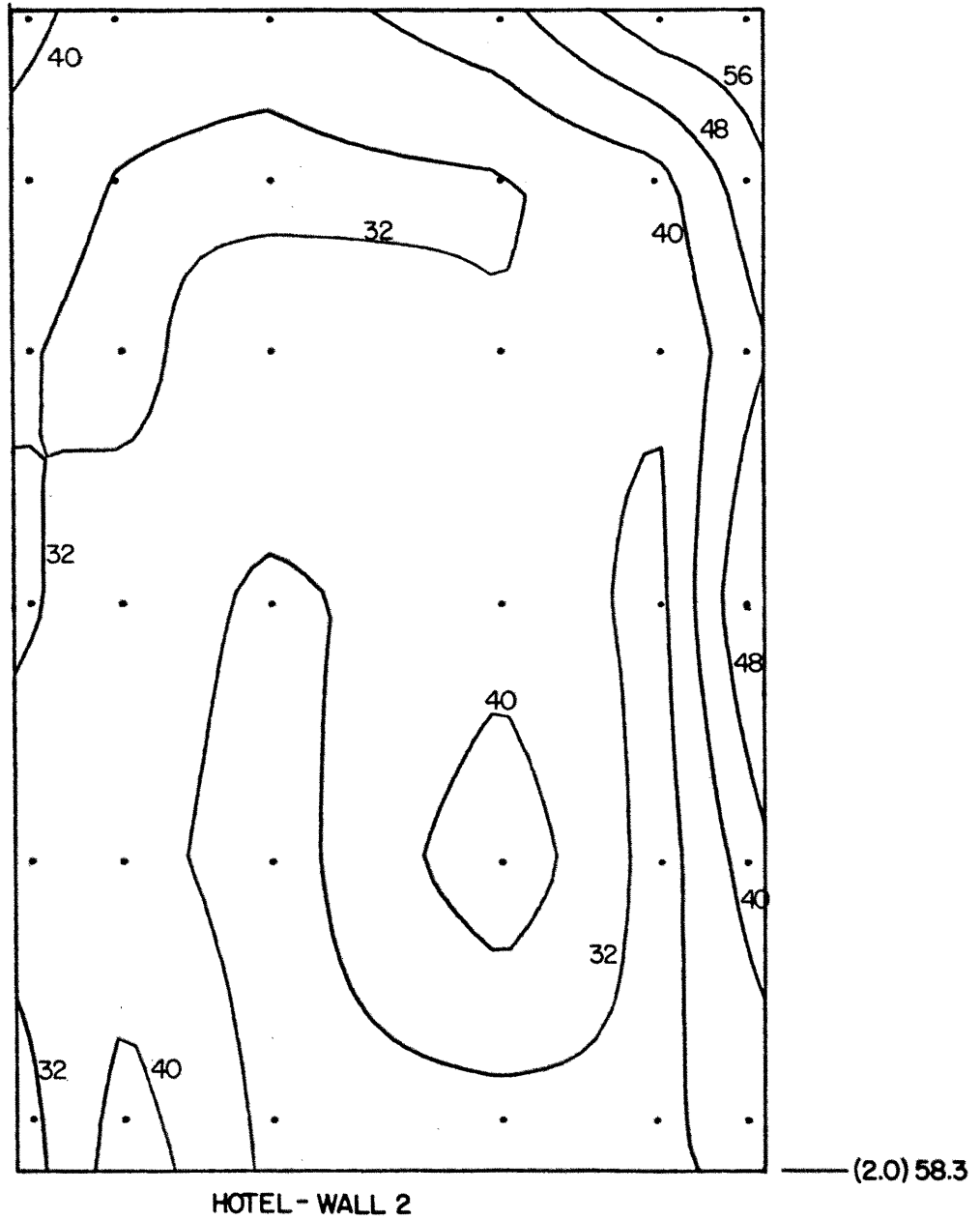


HOTEL - WALL 1

CLADDING LOADS  
REFERENCE PRESSURE = 34 PSF

—— (GROUND LEVEL)

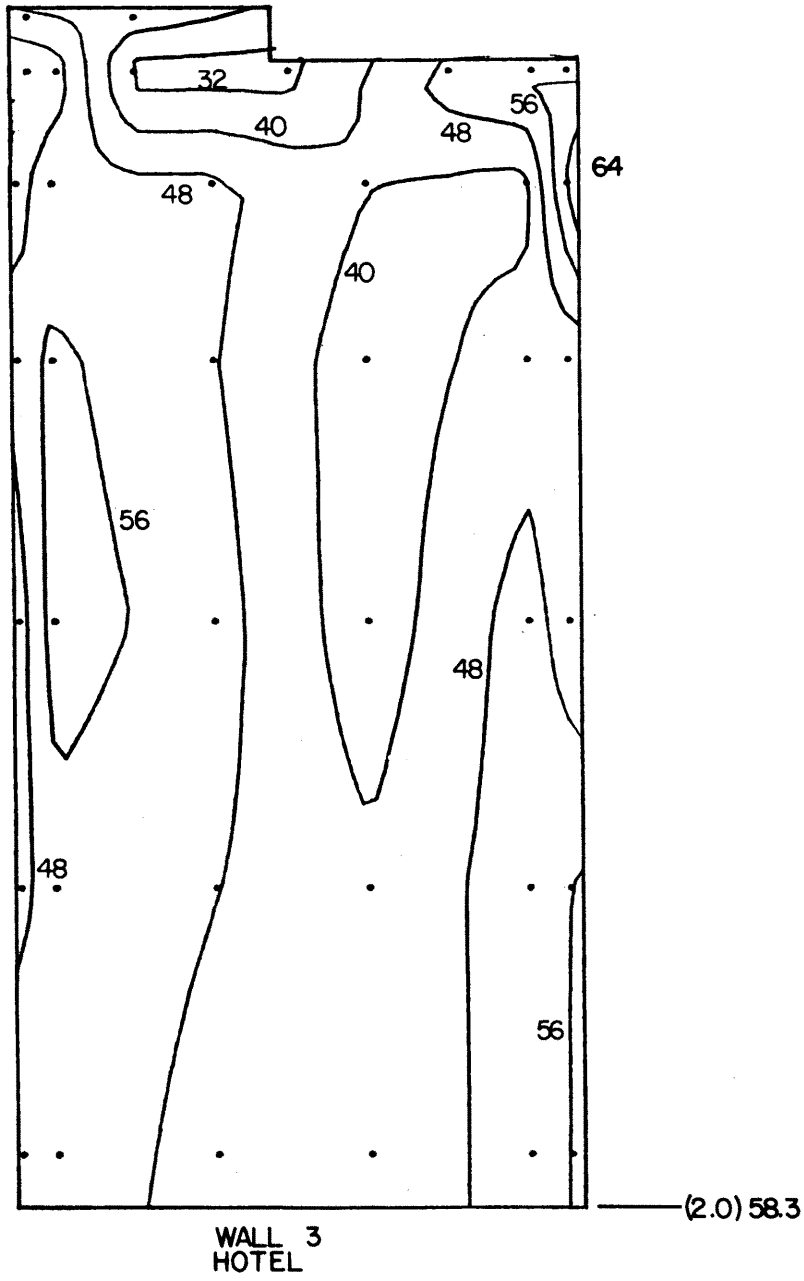
FIGURE 10a. PEAK PRESSURE LOADS ON BUILDING



CLADDING LOADS  
REFERENCE PRESSURE = 34 PSF

— GROUND LEVEL

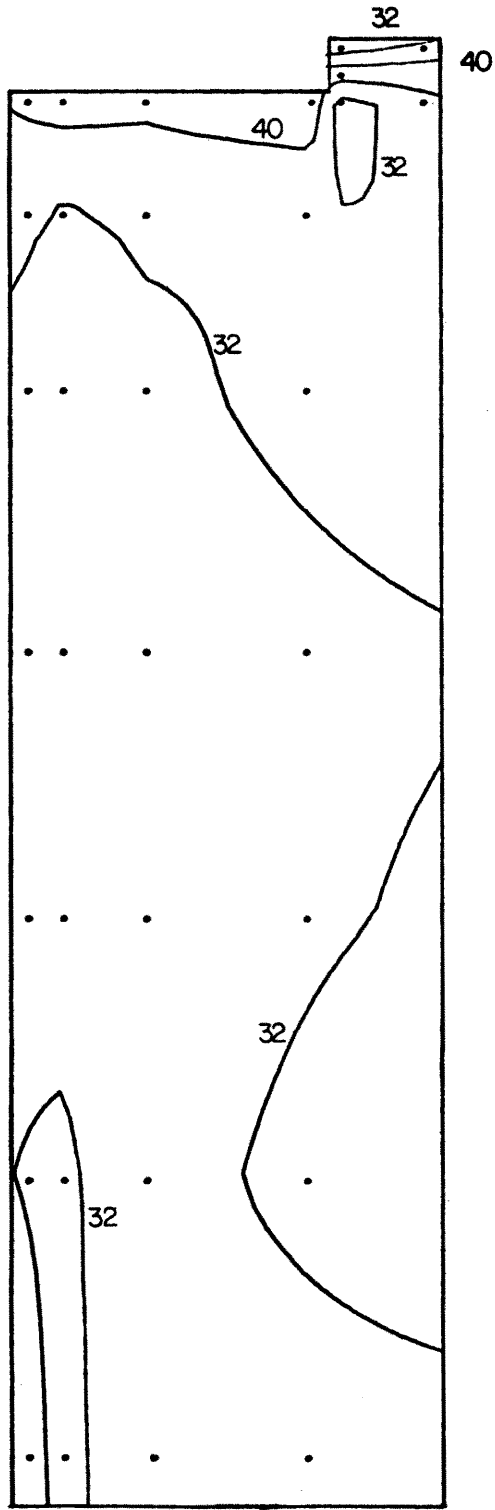
FIGURE 10b. PEAK PRESSURE LOADS ON BUILDING



CLADDING LOADS  
REFERENCE PRESSURE = 34 PSF

—— GROUND LEVEL

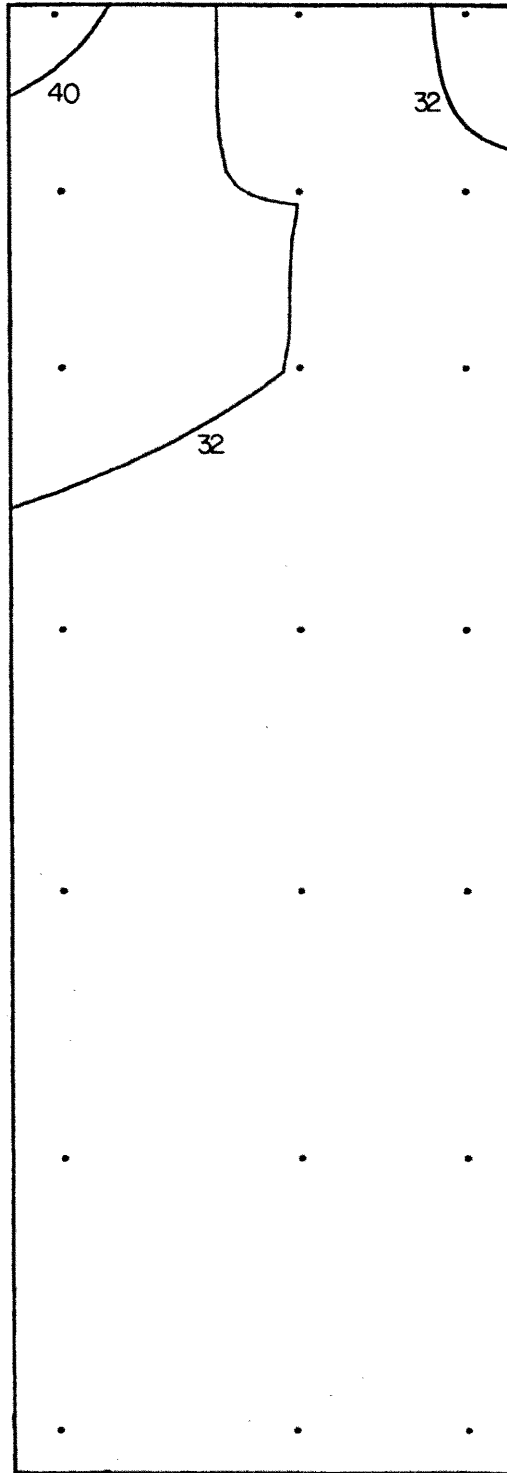
FIGURE 10c PEAK PRESSURE LOADS ON BUILDING



WALL 4  
HOTEL

CLADDING LOADS  
REFERENCE PRESSURE = 34 PSF

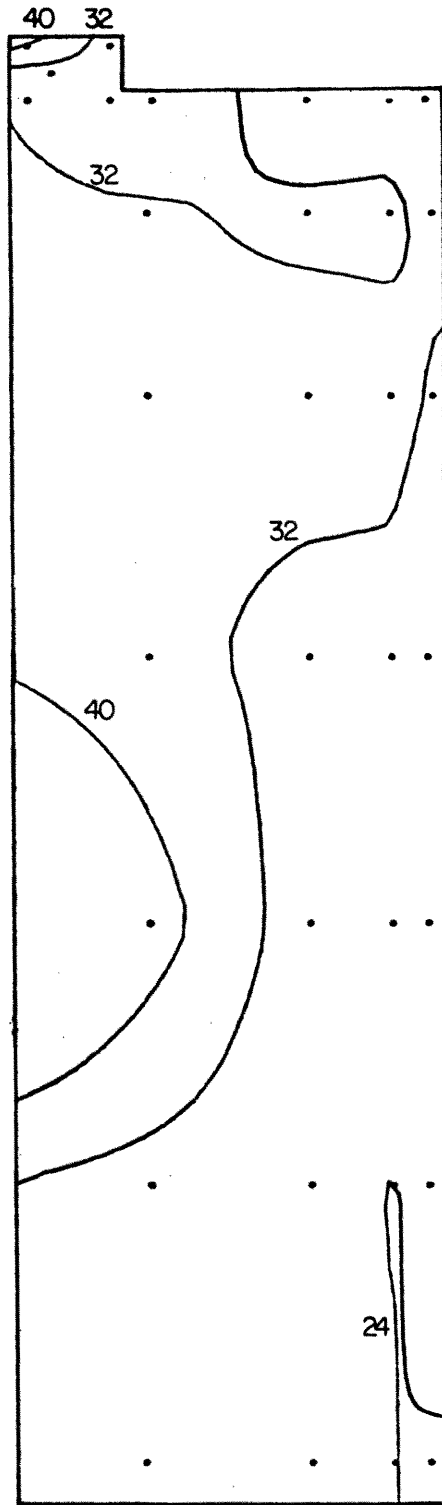
FIGURE 10d. PEAK PRESSURE LOADS ON BUILDING



WALL 5  
HOTEL

CLADDING LOADS  
REFERENCE PRESSURE = 34 PSF

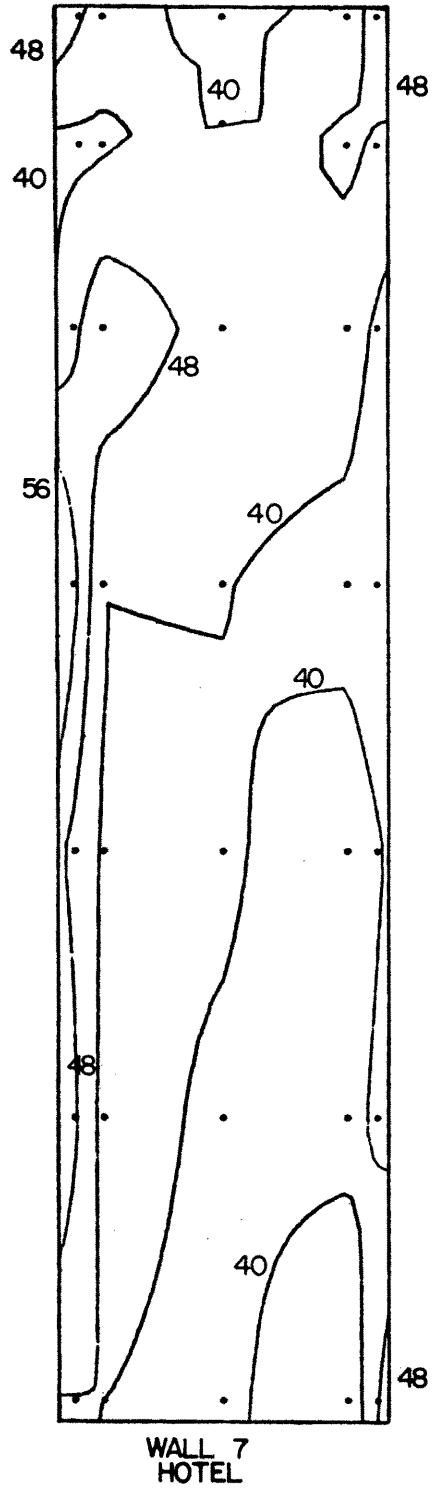
FIGURE 10e PEAK PRESSURE LOADS ON BUILDING



WALL 6  
HOTEL

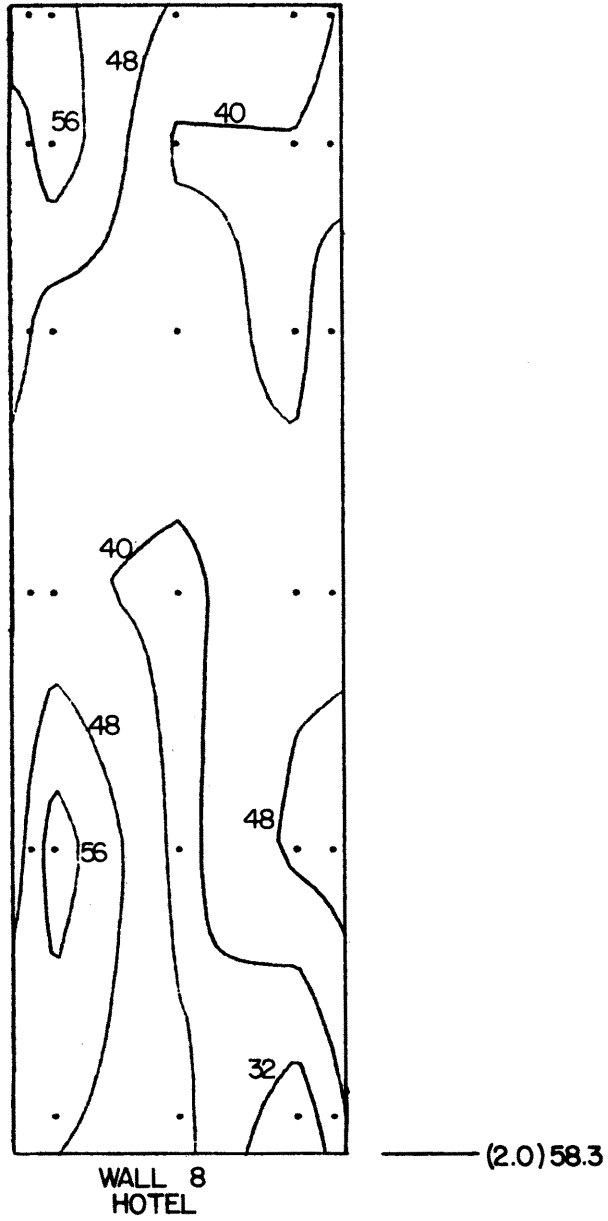
CLADDING LOADS  
REFERENCE PRESSURE = 34 PSF

FIGURE 10f. PEAK PRESSURE LOADS ON BUILDING



CLADDING LOADS  
REFERENCE PRESSURE = 34 PSF

FIGURE 10g. PEAK PRESSURE LOADS ON BUILDING



CLADDING LOADS  
REFERENCE PRESSURE = 34 PSF

— GROUND LEVEL

FIGURE 10h PEAK PRESSURE LOADS ON BUILDING.



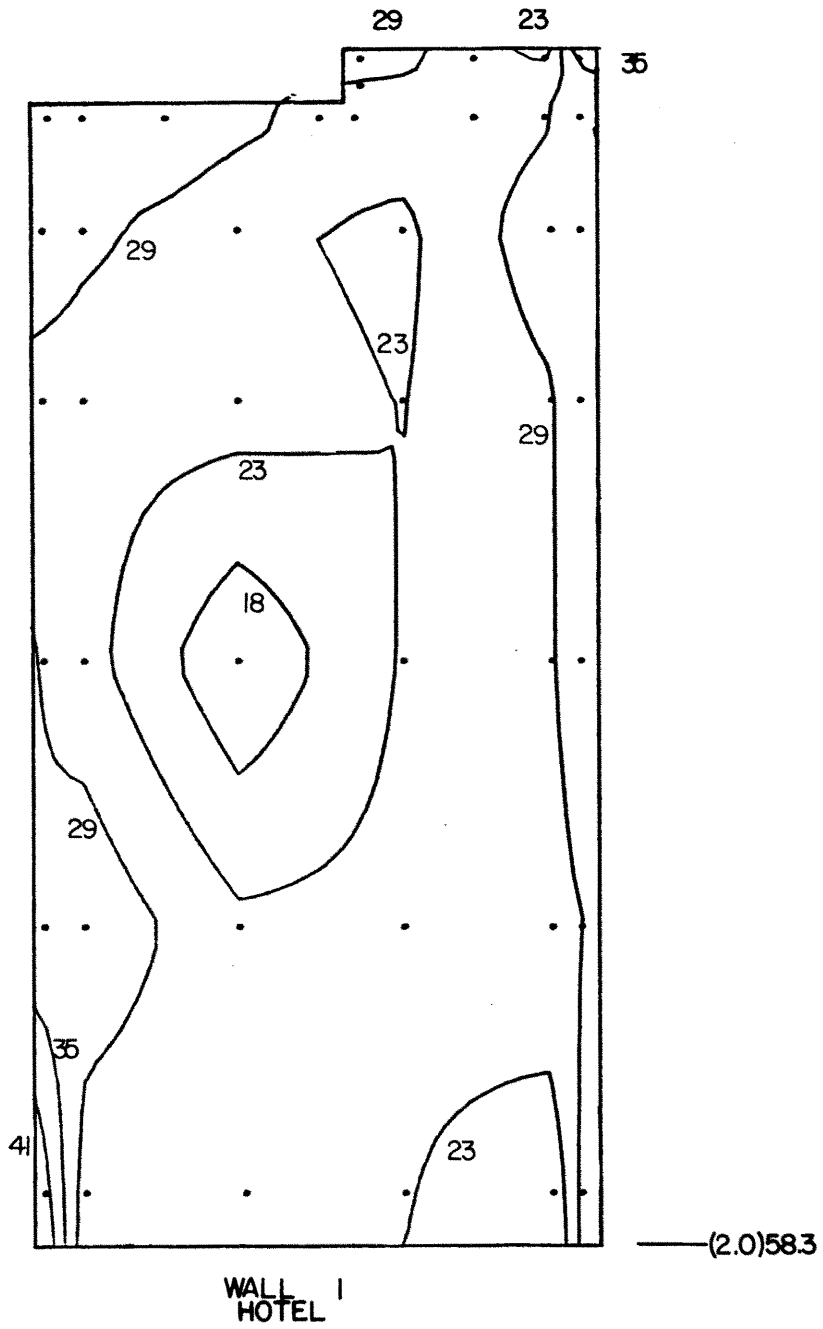
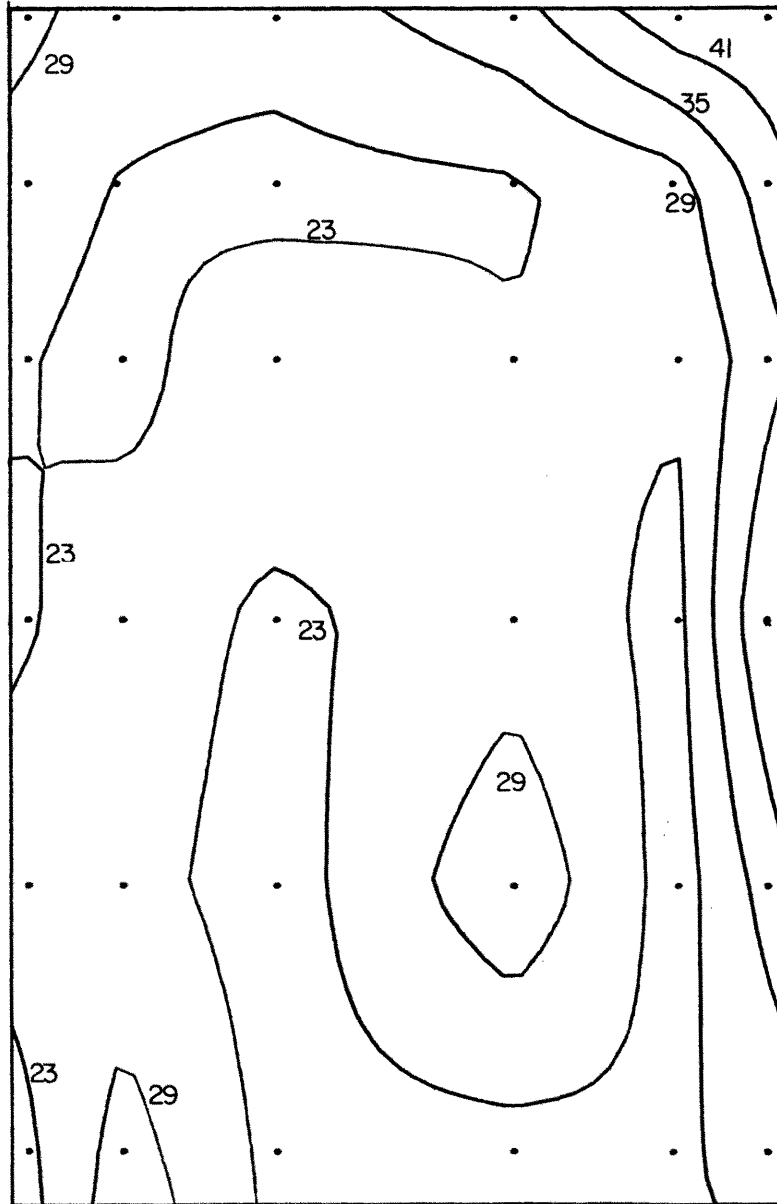


FIGURE 101 PEAK PRESSURE LOADS ON BUILDING



WALL 2  
HOTEL

GLASS LOADS  
REFERENCE PRESSURE = 34 PSF  
GLASS LOAD FACTOR = 0.73

— (2.0)58.3

— GROUND LEVEL

FIGURE 10j PEAK PRESSURE LOADS ON BUILDING

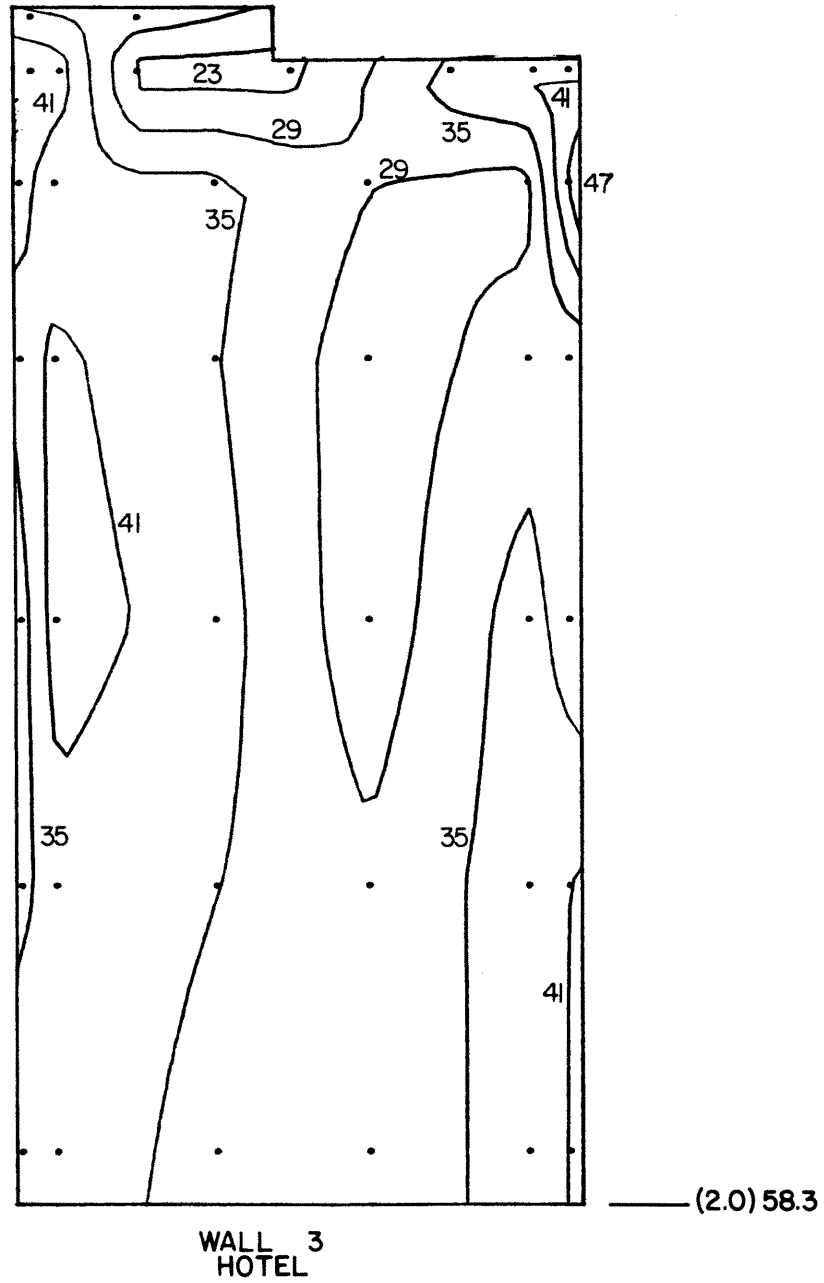
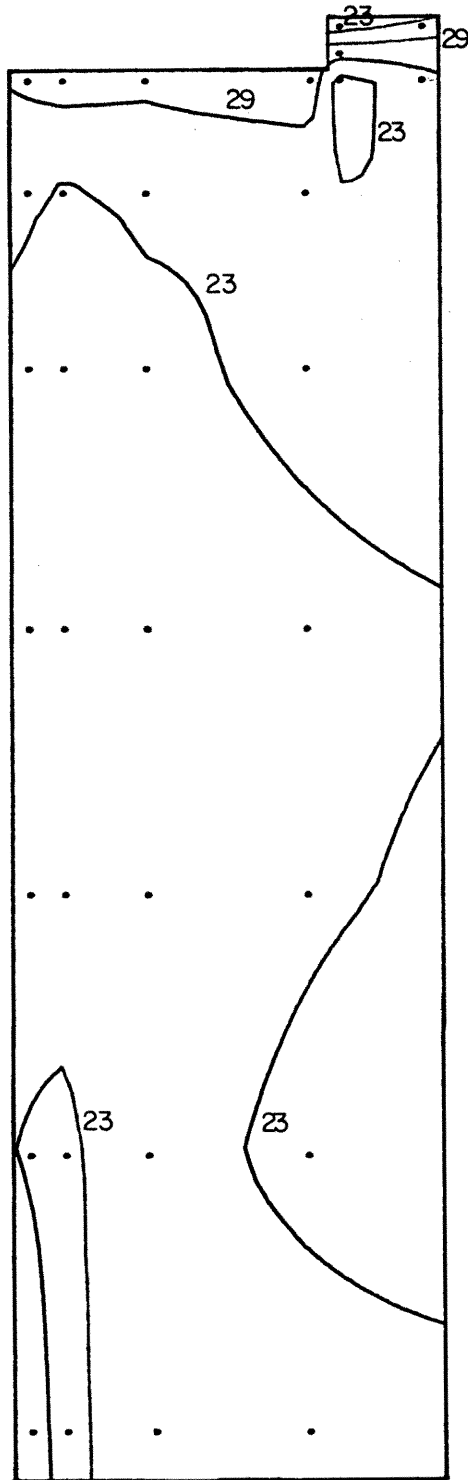


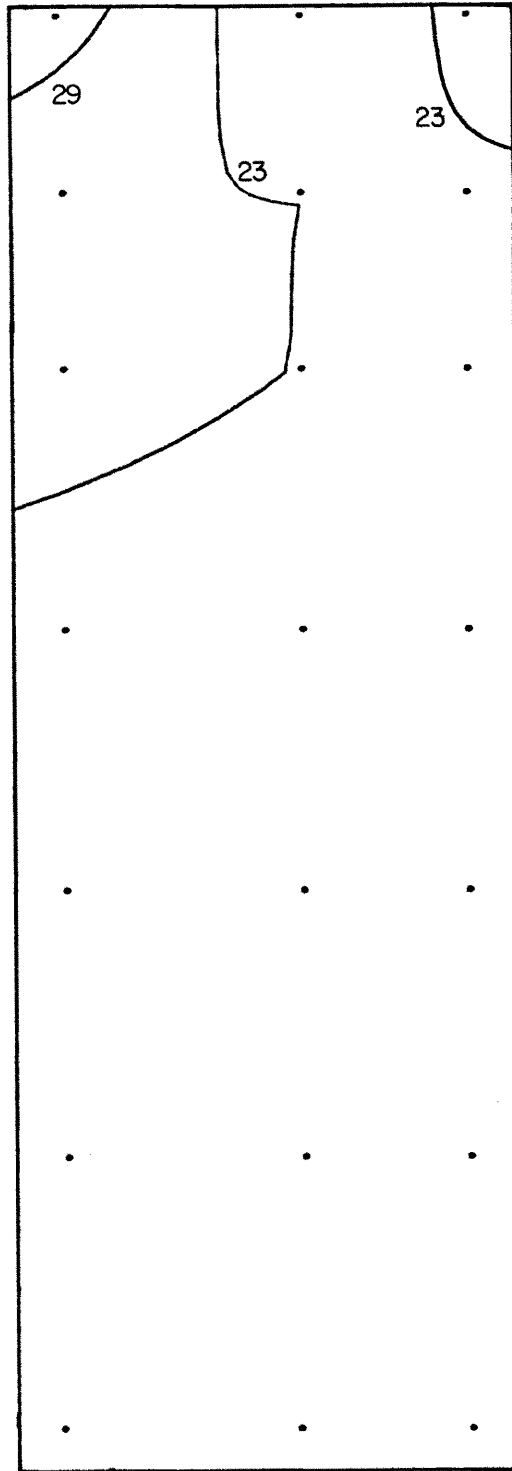
FIGURE 10k PEAK PRESSURE LOADS ON BUILDING.



WALL 4  
HOTEL

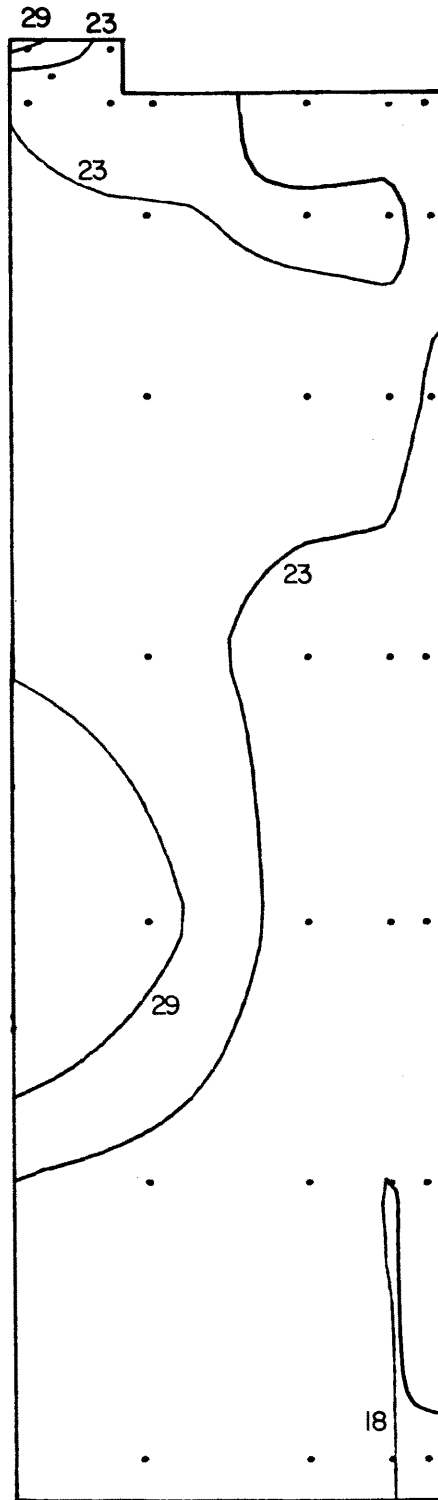
GLASS LOADS  
REFERENCE PRESSURE = 34 PSF  
GLASS LOAD FACTOR = 0.73

FIGURE 101 PEAK PRESSURE LOADS ON BUILDING



WALL 5  
HOTEL  
GLASS LOADS  
REFERENCE PRESSURE = 34 PSF  
GLASS LOAD FACTOR = 0.73

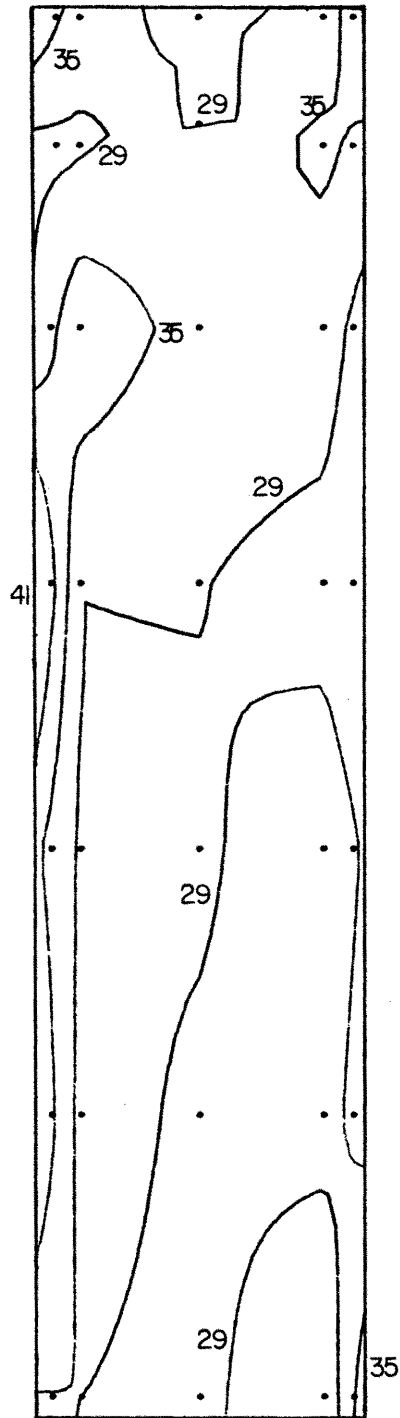
FIGURE 10m PEAK PRESSURE LOADS ON BUILDING



WALL 6  
HOTEL

GLASS LOADS  
REFERENCE PRESSURE = 34 PSF  
GLASS LOAD FACTOR = 0.73

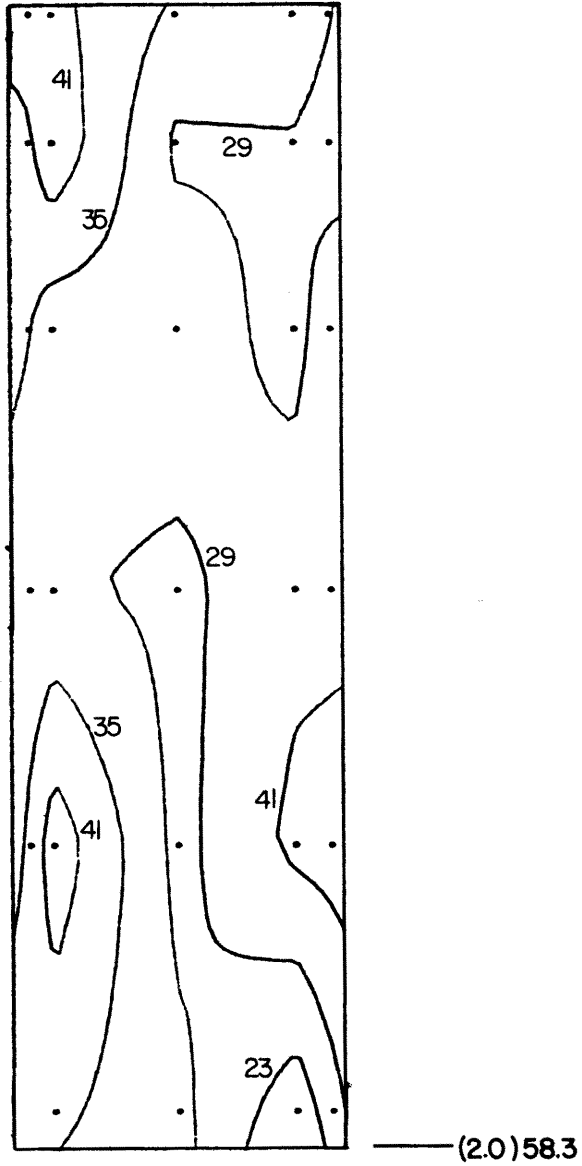
FIGURE 10n. PEAK PRESSURE LOADS ON BUILDING



WALL 7  
HOTEL

GLASS LOADS  
REFERENCE PRESSURE = 34 PSF  
GLASS LOAD FACTOR = 0.73

FIGURE 100. PEAK PRESSURE LOADS ON BUILDING.



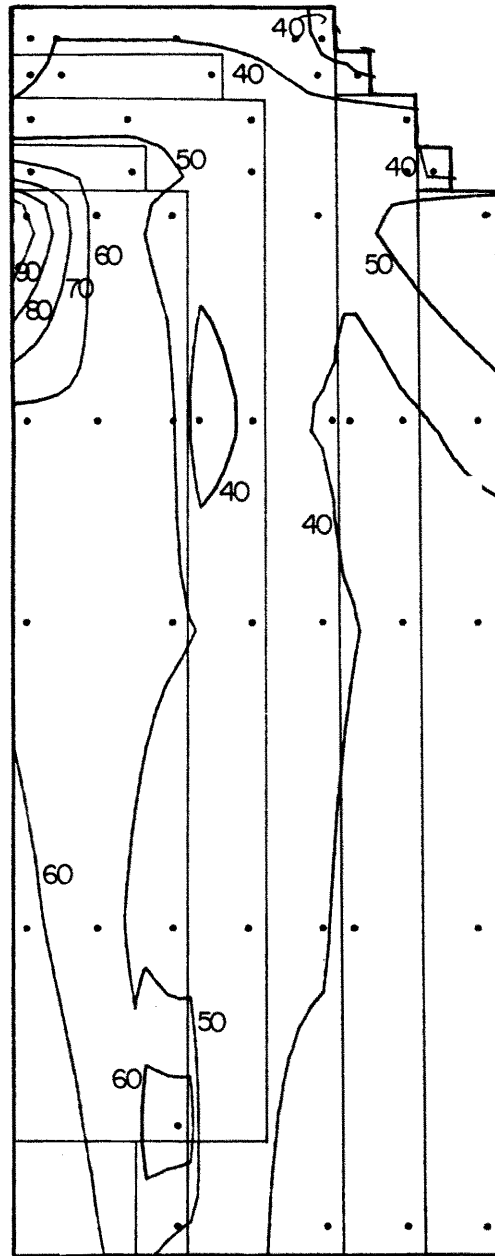
WALL 8  
HOTEL

GLASS LOADS  
REFERENCE PRESSURE = 34 PSF  
GLASS LOAD FACTOR = 0.73

—— GROUND LEVEL

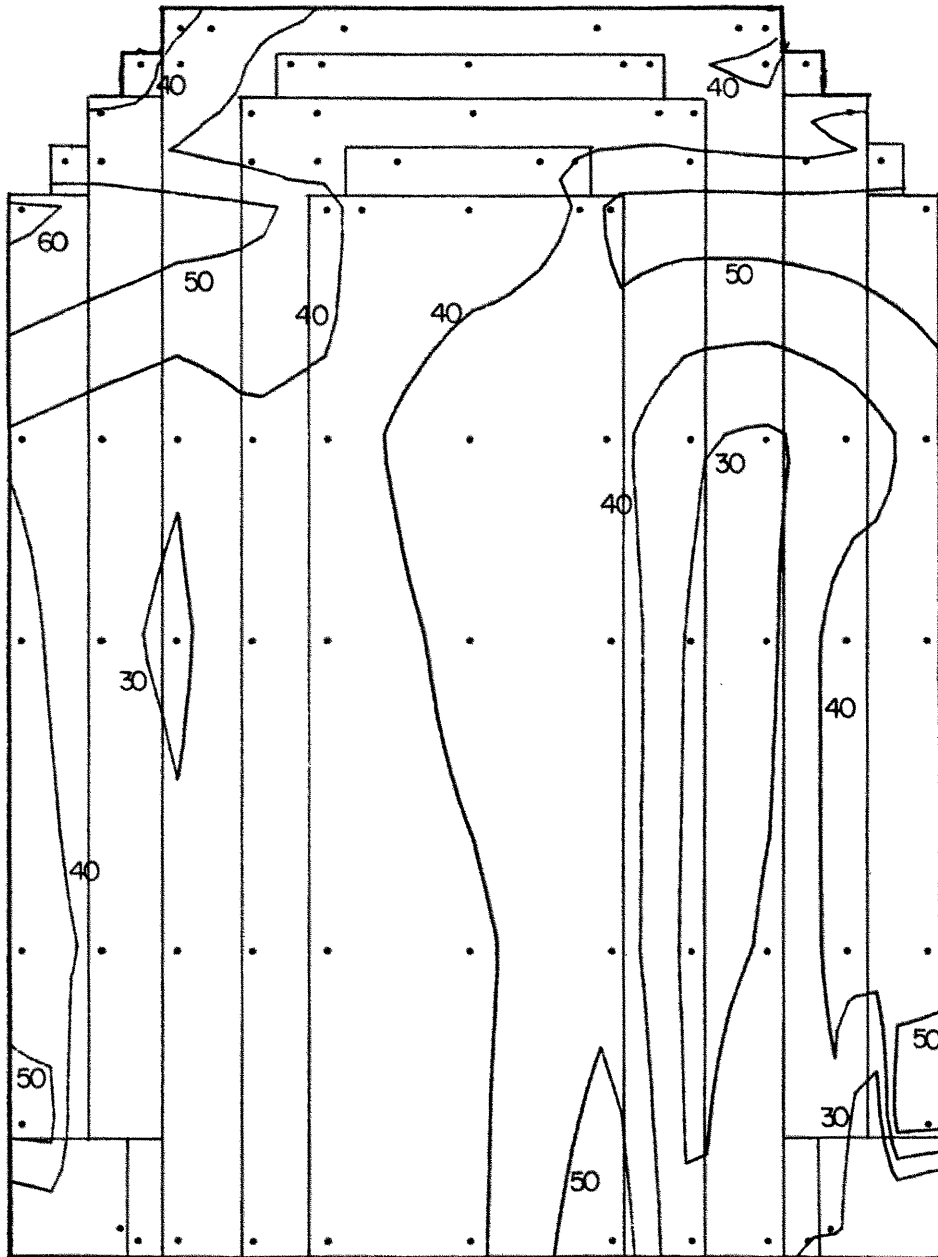
FIGURE 10p. PEAK PRESSURE LOADS ON BUILDING





WALL 1  
OFFICE BUILDING  
CLADDING LOADS  
REFERENCE PRESSURE = 34 PSF

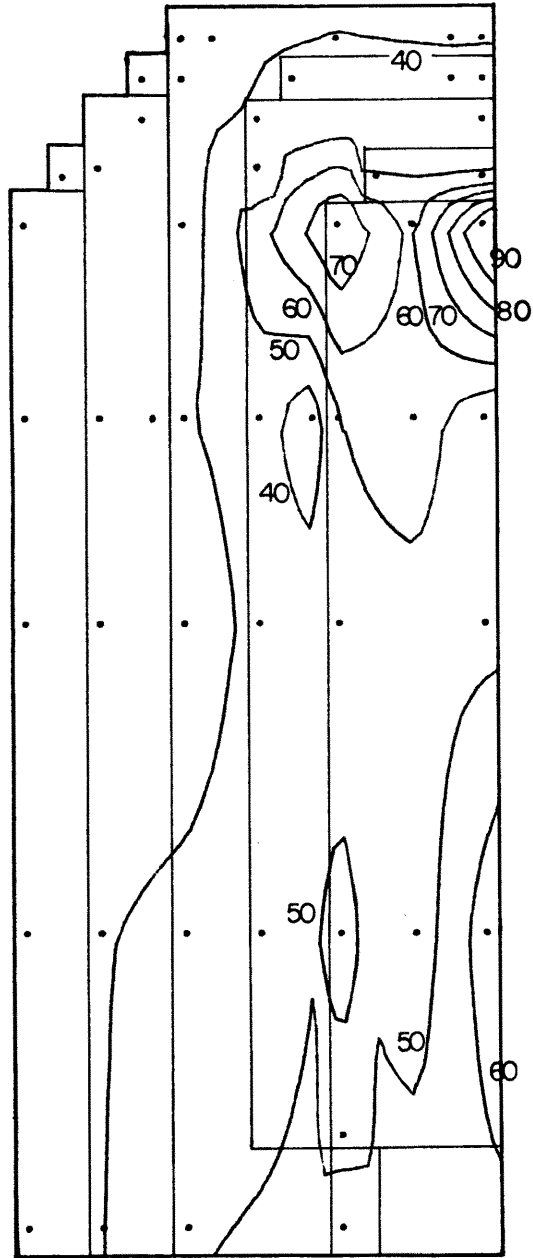
FIGURE 10q PEAK PRESSURE LOADS ON BUILDING



WALL 2  
OFFICE BUILDING

CLADDING LOADS  
REFERENCE PRESSURE = 34 PSF

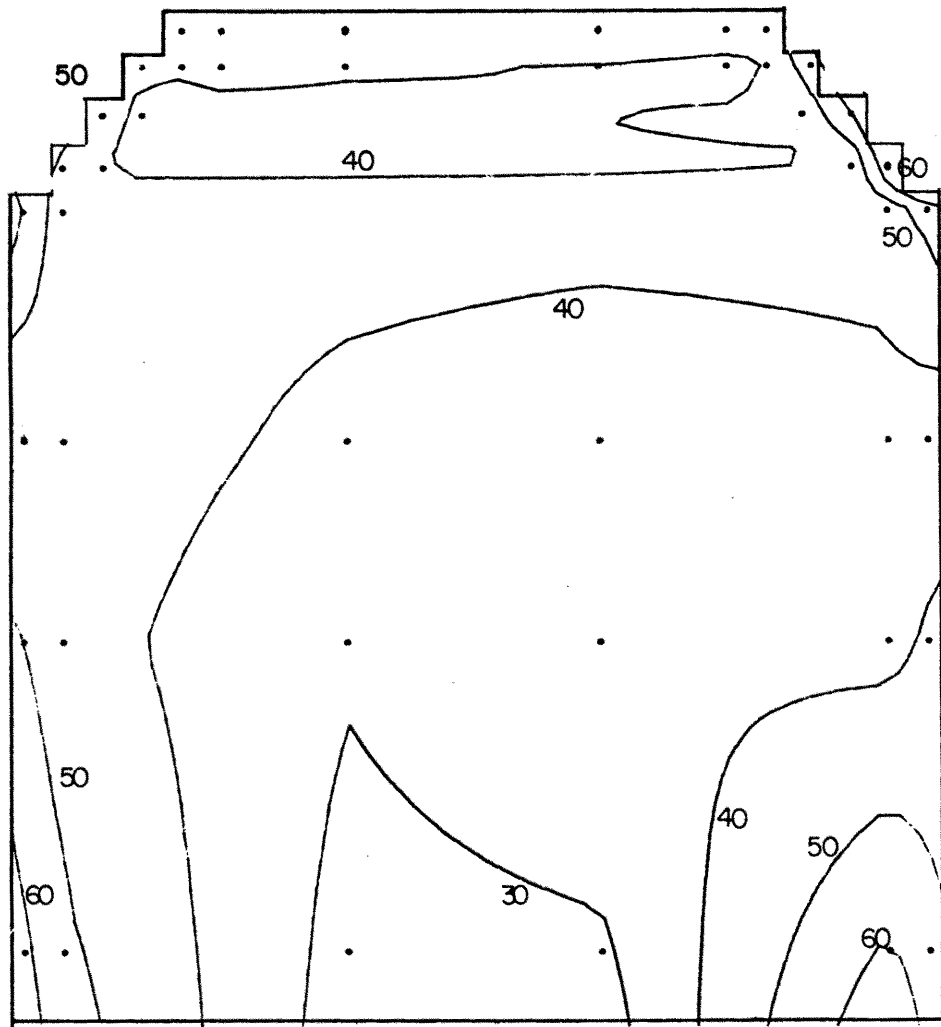
FIGURE 10r. PEAK PRESSURE LOADS ON BUILDING



WALL 3  
OFFICE BUILDING

CLADDING LOADS  
REFERENCE PRESSURE = 34 PSF

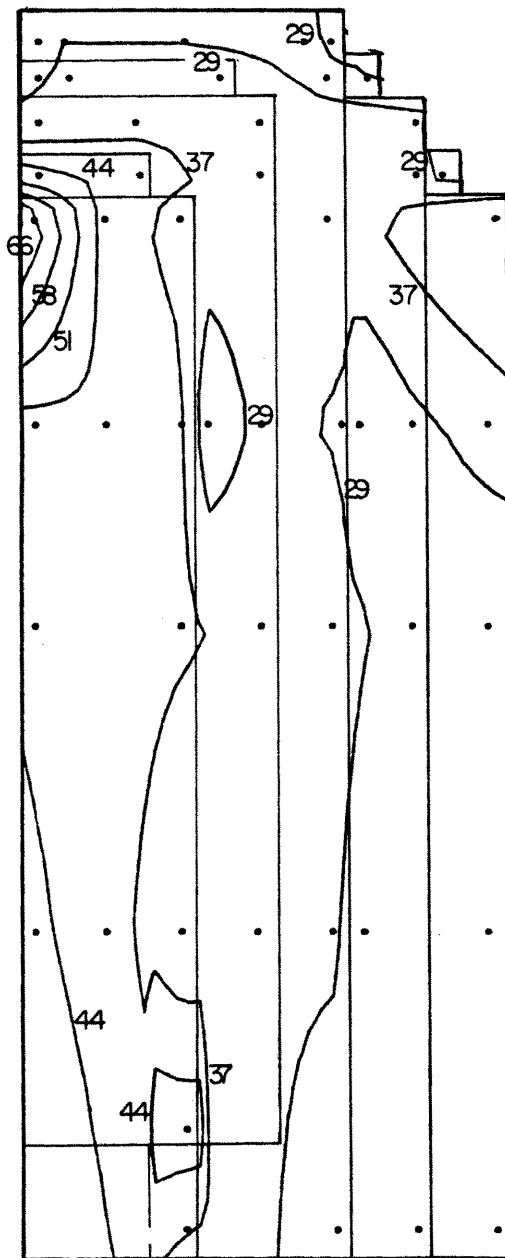
FIGURE 10s. PEAK PRESSURE LOADS ON BUILDING



WALL 4  
OFFICE BUILDING

CLADDING LOADS  
REFERENCE PRESSURE = 34 PSF

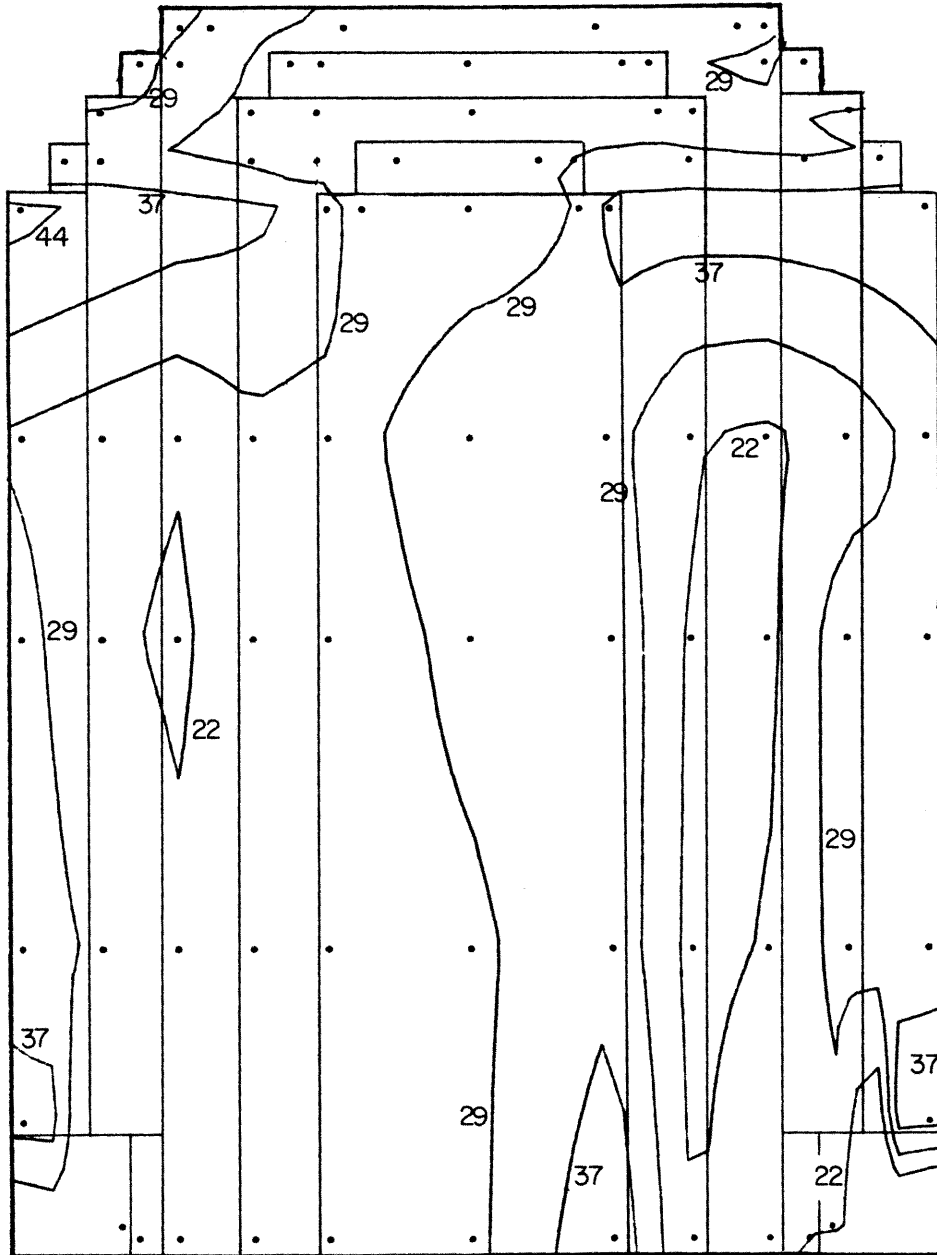
FIGURE 10: PEAK PRESSURE LOADS ON BUILDING



WALL 1  
OFFICE BUILDING

GLASS LOADS  
REFERENCE PRESSURE = 34 PSF  
GLASS LOAD FACTOR = 0.73

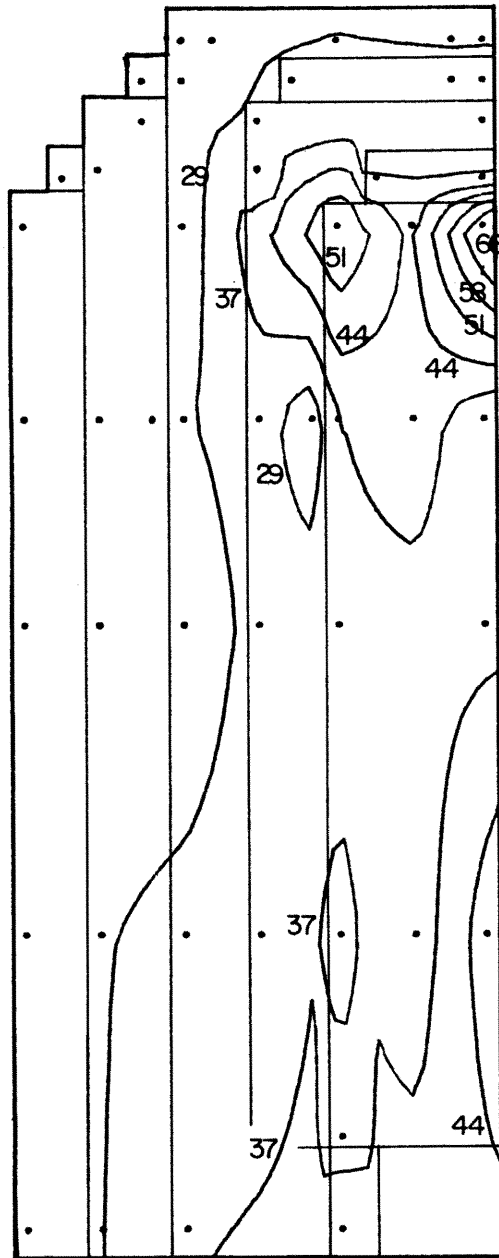
FIGURE 10u. PEAK PRESSURE LOADS ON BUILDING



WALL 2  
OFFICE BUILDING

GLASS LOADS  
REFERENCE PRESSURE = 34 PSF  
GLASS LOAD FACTOR = 0.73

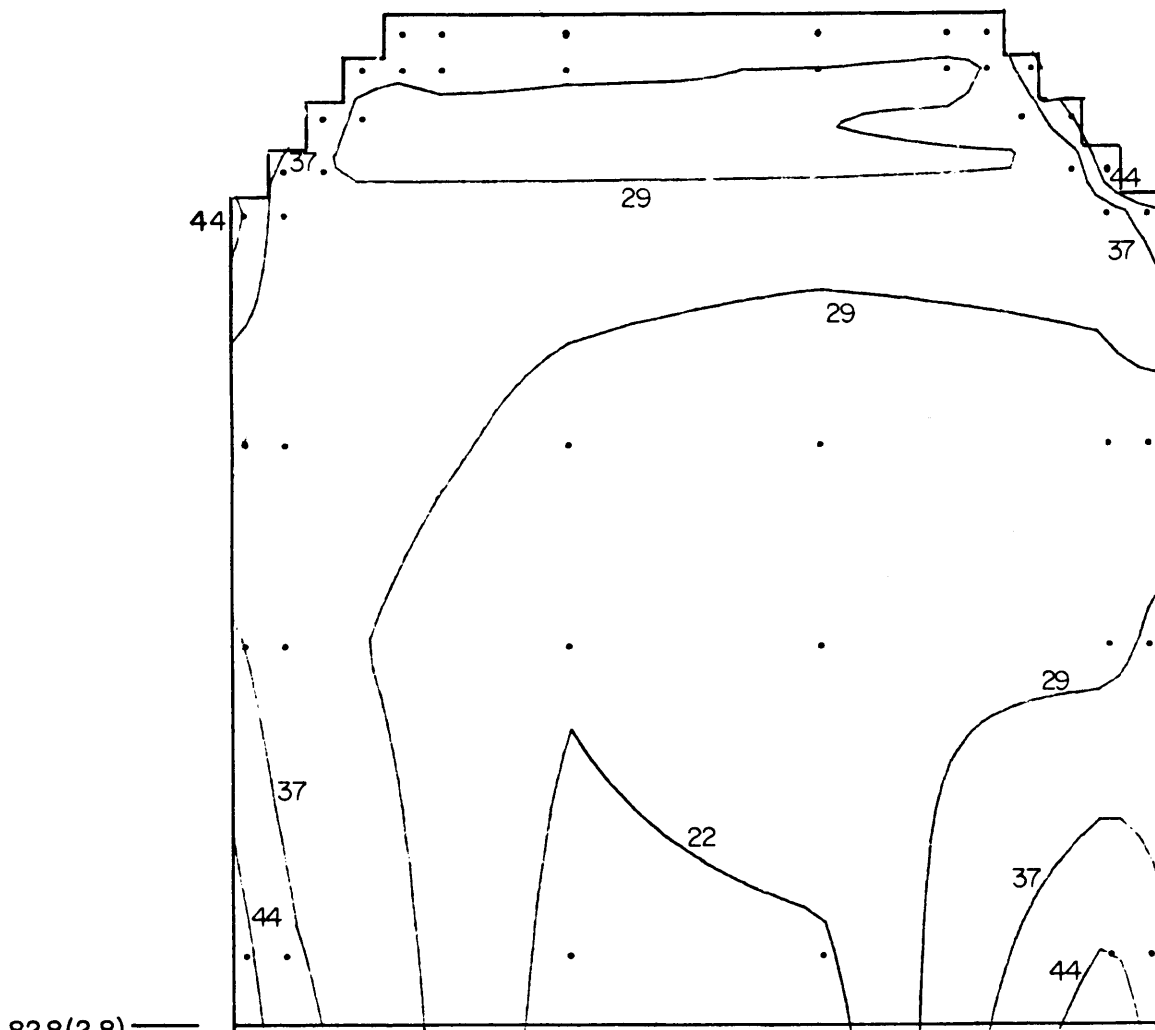
FIGURE 10v. PEAK PRESSURE LOADS ON BUILDING



WALL 3  
OFFICE BUILDING

GLASS LOADS  
REFERENCE PRESSURE = 34 PSF  
GLASS LOAD FACTOR = 0.73

FIGURE 10w. PEAK PRESSURE LOADS ON BUILDING



WALL 4  
OFFICE BUILDING

GLASS LOADS  
REFERENCE PRESSURE = 34 PSF  
GLASS LOAD FACTOR = 0.73

GROUND LEVEL ———

FIGURE 10x. PEAK PRESSURE LOADS ON BUILDING



**TABLES**

TABLE 1

## MOTION PICTURE SCENE GUIDE

| Run No. | Wind Azimuth (Degrees) | Building Under Study |
|---------|------------------------|----------------------|
| 1       | 0                      | Hotel                |
| 2       | 45                     | "                    |
| 3       | 90                     | "                    |
| 4       | 135                    | "                    |
| 5       | 180                    | "                    |
| 6       | 225                    | "                    |
| 7       | 270                    | "                    |
| 8       | 315                    | "                    |
| 9       | 0                      | Office Tower         |
| 10      | 45                     | "                    |
| 11      | 90                     | "                    |
| 12      | 135                    | "                    |
| 13      | 180                    | "                    |
| 14      | 225                    | "                    |
| 15      | 270                    | "                    |
| 17      | 315                    | "                    |

TABLE 2--PEDESTRIAN WIND VELOCITIES AND TURBULENCE INTENSITIES

| LOCATION 1   |                      |                     |                             | LOCATION 2   |                      |                     |                             | LOCATION 3   |                      |                     |                             | LOCATION 4   |                      |                     |                             |
|--------------|----------------------|---------------------|-----------------------------|--------------|----------------------|---------------------|-----------------------------|--------------|----------------------|---------------------|-----------------------------|--------------|----------------------|---------------------|-----------------------------|
| WIND AZIMUTH | UMEAN/UINF (PERCENT) | URMS/UINF (PERCENT) | UMEAN+3*URMS/UINF (PERCENT) | WIND AZIMUTH | UMEAN/UINF (PERCENT) | URMS/UINF (PERCENT) | UMEAN+3*URMS/UINF (PERCENT) | WIND AZIMUTH | UMEAN/UINF (PERCENT) | URMS/UINF (PERCENT) | UMEAN+3*URMS/UINF (PERCENT) | WIND AZIMUTH | UMEAN/UINF (PERCENT) | URMS/UINF (PERCENT) | UMEAN+3*URMS/UINF (PERCENT) |
| 0.00         | 3.60                 | 1.99                | 61.00                       | 0.00         | 26.16                | 9.12                | 53.40                       | 0.00         | 21.60                | 6.75                | 42.90                       | 0.00         | 21.60                | 6.75                | 42.90                       |
| 22.50        | 2.21                 | 1.07                | 49.20                       | 245.00       | 22.40                | 12.46               | 44.30                       | 22.50        | 22.40                | 10.25               | 33.00                       | 22.50        | 22.40                | 10.25               | 33.00                       |
| 45.00        | 2.45                 | 1.11                | 53.00                       | 47.50        | 22.70                | 10.66               | 45.00                       | 47.50        | 22.70                | 11.28               | 33.00                       | 47.50        | 22.70                | 11.28               | 33.00                       |
| 67.50        | 2.57                 | 1.15                | 55.00                       | 90.50        | 22.70                | 10.66               | 45.00                       | 90.50        | 22.70                | 11.28               | 33.00                       | 90.50        | 22.70                | 11.28               | 33.00                       |
| 90.00        | 2.59                 | 1.15                | 55.00                       | 132.50       | 22.70                | 10.66               | 45.00                       | 132.50       | 22.70                | 11.28               | 33.00                       | 132.50       | 22.70                | 11.28               | 33.00                       |
| 112.50       | 2.33                 | 1.08                | 50.20                       | 157.50       | 22.90                | 10.99               | 47.00                       | 157.50       | 22.90                | 11.68               | 33.00                       | 157.50       | 22.90                | 11.68               | 33.00                       |
| 135.00       | 2.24                 | 1.06                | 48.20                       | 180.50       | 22.20                | 10.32               | 45.00                       | 180.50       | 22.20                | 10.68               | 33.00                       | 180.50       | 22.20                | 10.68               | 33.00                       |
| 157.50       | 2.27                 | 1.07                | 48.20                       | 202.50       | 22.40                | 10.99               | 47.00                       | 202.50       | 22.40                | 11.68               | 33.00                       | 202.50       | 22.40                | 11.68               | 33.00                       |
| 180.00       | 2.27                 | 1.07                | 48.20                       | 227.50       | 22.40                | 10.99               | 47.00                       | 227.50       | 22.40                | 11.68               | 33.00                       | 227.50       | 22.40                | 11.68               | 33.00                       |
| 202.50       | 2.27                 | 1.07                | 48.20                       | 250.00       | 22.40                | 10.99               | 47.00                       | 250.00       | 22.40                | 11.68               | 33.00                       | 250.00       | 22.40                | 11.68               | 33.00                       |
| 225.00       | 2.27                 | 1.07                | 48.20                       | 272.50       | 22.40                | 10.99               | 47.00                       | 272.50       | 22.40                | 11.68               | 33.00                       | 272.50       | 22.40                | 11.68               | 33.00                       |
| 247.50       | 2.27                 | 1.07                | 48.20                       | 300.00       | 22.40                | 10.99               | 47.00                       | 300.00       | 22.40                | 11.68               | 33.00                       | 300.00       | 22.40                | 11.68               | 33.00                       |
| 270.00       | 2.27                 | 1.07                | 48.20                       | 327.50       | 22.40                | 10.99               | 47.00                       | 327.50       | 22.40                | 11.68               | 33.00                       | 327.50       | 22.40                | 11.68               | 33.00                       |
| 300.00       | 2.27                 | 1.07                | 48.20                       | 350.00       | 22.40                | 10.99               | 47.00                       | 350.00       | 22.40                | 11.68               | 33.00                       | 350.00       | 22.40                | 11.68               | 33.00                       |

TABLE 2--PEDESTRIAN WIND VELOCITIES AND TURBULENCE INTENSITIES

| LOCATION 5   |                        |                       |                                | LOCATION 6   |                        |                       |                                |
|--------------|------------------------|-----------------------|--------------------------------|--------------|------------------------|-----------------------|--------------------------------|
| WIND AZIMUTH | U MEAN/U INF (PERCENT) | U RMS/U INF (PERCENT) | U MEAN+3*U RMS/U INF (PERCENT) | WIND AZIMUTH | U MEAN/U INF (PERCENT) | U RMS/U INF (PERCENT) | U MEAN+3*U RMS/U INF (PERCENT) |
| 00           | 4.2                    | 1.3                   | 7.9                            | 00           | 4.1                    | 1.6                   | 9.2                            |
| 25           | 5.5                    | 1.5                   | 8.5                            | 25           | 4.6                    | 2.1                   | 10.8                           |
| 50           | 5.5                    | 1.5                   | 8.5                            | 45           | 4.1                    | 1.5                   | 10.5                           |
| 75           | 5.4                    | 1.4                   | 8.2                            | 70           | 4.1                    | 1.8                   | 10.7                           |
| 100          | 5.7                    | 1.4                   | 8.5                            | 90           | 3.5                    | 1.8                   | 9.5                            |
| 125          | 5.7                    | 1.4                   | 8.5                            | 115          | 3.5                    | 1.9                   | 9.6                            |
| 150          | 5.7                    | 1.5                   | 8.5                            | 135          | 3.5                    | 1.7                   | 9.5                            |
| 175          | 5.7                    | 1.5                   | 8.5                            | 160          | 3.5                    | 1.5                   | 9.5                            |
| 200          | 5.7                    | 1.5                   | 8.5                            | 180          | 3.5                    | 1.5                   | 9.5                            |
| 225          | 5.7                    | 1.5                   | 8.5                            | 205          | 3.5                    | 1.5                   | 9.5                            |
| 250          | 5.7                    | 1.5                   | 8.5                            | 225          | 3.5                    | 1.5                   | 9.5                            |
| 275          | 5.7                    | 1.5                   | 8.5                            | 250          | 3.5                    | 1.5                   | 9.5                            |
| 300          | 5.7                    | 1.5                   | 8.5                            | 275          | 3.5                    | 1.5                   | 9.5                            |
| 325          | 5.7                    | 1.5                   | 8.5                            | 300          | 3.5                    | 1.5                   | 9.5                            |
| 350          | 5.7                    | 1.5                   | 8.5                            | 325          | 3.5                    | 1.5                   | 9.5                            |
| 375          | 5.7                    | 1.5                   | 8.5                            | 350          | 3.5                    | 1.5                   | 9.5                            |
| 400          | 5.7                    | 1.5                   | 8.5                            | 375          | 3.5                    | 1.5                   | 9.5                            |
| 425          | 5.7                    | 1.5                   | 8.5                            | 400          | 3.5                    | 1.5                   | 9.5                            |
| 450          | 5.7                    | 1.5                   | 8.5                            | 425          | 3.5                    | 1.5                   | 9.5                            |
| 475          | 5.7                    | 1.5                   | 8.5                            | 450          | 3.5                    | 1.5                   | 9.5                            |
| 500          | 5.7                    | 1.5                   | 8.5                            | 475          | 3.5                    | 1.5                   | 9.5                            |
| 525          | 5.7                    | 1.5                   | 8.5                            | 500          | 3.5                    | 1.5                   | 9.5                            |
| 550          | 5.7                    | 1.5                   | 8.5                            | 525          | 3.5                    | 1.5                   | 9.5                            |
| 575          | 5.7                    | 1.5                   | 8.5                            | 550          | 3.5                    | 1.5                   | 9.5                            |
| 600          | 5.7                    | 1.5                   | 8.5                            | 575          | 3.5                    | 1.5                   | 9.5                            |
| 625          | 5.7                    | 1.5                   | 8.5                            | 600          | 3.5                    | 1.5                   | 9.5                            |
| 650          | 5.7                    | 1.5                   | 8.5                            | 625          | 3.5                    | 1.5                   | 9.5                            |
| 675          | 5.7                    | 1.5                   | 8.5                            | 650          | 3.5                    | 1.5                   | 9.5                            |
| 700          | 5.7                    | 1.5                   | 8.5                            | 675          | 3.5                    | 1.5                   | 9.5                            |
| 725          | 5.7                    | 1.5                   | 8.5                            | 700          | 3.5                    | 1.5                   | 9.5                            |
| 750          | 5.7                    | 1.5                   | 8.5                            | 725          | 3.5                    | 1.5                   | 9.5                            |
| 775          | 5.7                    | 1.5                   | 8.5                            | 750          | 3.5                    | 1.5                   | 9.5                            |
| 800          | 5.7                    | 1.5                   | 8.5                            | 775          | 3.5                    | 1.5                   | 9.5                            |
| 825          | 5.7                    | 1.5                   | 8.5                            | 800          | 3.5                    | 1.5                   | 9.5                            |
| 850          | 5.7                    | 1.5                   | 8.5                            | 825          | 3.5                    | 1.5                   | 9.5                            |
| 875          | 5.7                    | 1.5                   | 8.5                            | 850          | 3.5                    | 1.5                   | 9.5                            |
| 900          | 5.7                    | 1.5                   | 8.5                            | 875          | 3.5                    | 1.5                   | 9.5                            |
| 925          | 5.7                    | 1.5                   | 8.5                            | 900          | 3.5                    | 1.5                   | 9.5                            |
| 950          | 5.7                    | 1.5                   | 8.5                            | 925          | 3.5                    | 1.5                   | 9.5                            |
| 975          | 5.7                    | 1.5                   | 8.5                            | 950          | 3.5                    | 1.5                   | 9.5                            |
| 1000         | 5.7                    | 1.5                   | 8.5                            | 975          | 3.5                    | 1.5                   | 9.5                            |

| LOCATION 7   |                        |                       |                                | LOCATION 8   |                        |                       |                                |
|--------------|------------------------|-----------------------|--------------------------------|--------------|------------------------|-----------------------|--------------------------------|
| WIND AZIMUTH | U MEAN/U INF (PERCENT) | U RMS/U INF (PERCENT) | U MEAN+3*U RMS/U INF (PERCENT) | WIND AZIMUTH | U MEAN/U INF (PERCENT) | U RMS/U INF (PERCENT) | U MEAN+3*U RMS/U INF (PERCENT) |
| 00           | 10.4                   | 3.7                   | 20.4                           | 00           | 11.4                   | 3.5                   | 23.3                           |
| 25           | 10.5                   | 3.7                   | 20.5                           | 25           | 10.3                   | 3.3                   | 22.9                           |
| 50           | 11.0                   | 3.7                   | 21.0                           | 45           | 11.3                   | 3.3                   | 23.0                           |
| 75           | 11.2                   | 3.7                   | 21.2                           | 70           | 11.3                   | 3.3                   | 23.0                           |
| 100          | 11.3                   | 3.7                   | 21.3                           | 90           | 11.2                   | 3.4                   | 22.9                           |
| 125          | 11.3                   | 3.7                   | 21.3                           | 115          | 11.2                   | 3.4                   | 22.9                           |
| 150          | 11.3                   | 3.7                   | 21.3                           | 135          | 11.0                   | 3.5                   | 22.8                           |
| 175          | 11.3                   | 3.7                   | 21.3                           | 160          | 11.0                   | 3.5                   | 22.8                           |
| 200          | 11.3                   | 3.7                   | 21.3                           | 180          | 11.0                   | 3.5                   | 22.8                           |
| 225          | 11.3                   | 3.7                   | 21.3                           | 205          | 11.0                   | 3.5                   | 22.8                           |
| 250          | 11.3                   | 3.7                   | 21.3                           | 225          | 11.0                   | 3.5                   | 22.8                           |
| 275          | 11.3                   | 3.7                   | 21.3                           | 250          | 11.0                   | 3.5                   | 22.8                           |
| 300          | 11.3                   | 3.7                   | 21.3                           | 275          | 11.0                   | 3.5                   | 22.8                           |
| 325          | 11.3                   | 3.7                   | 21.3                           | 300          | 11.0                   | 3.5                   | 22.8                           |
| 350          | 11.3                   | 3.7                   | 21.3                           | 325          | 11.0                   | 3.5                   | 22.8                           |
| 375          | 11.3                   | 3.7                   | 21.3                           | 350          | 11.0                   | 3.5                   | 22.8                           |
| 400          | 11.3                   | 3.7                   | 21.3                           | 375          | 11.0                   | 3.5                   | 22.8                           |
| 425          | 11.3                   | 3.7                   | 21.3                           | 400          | 11.0                   | 3.5                   | 22.8                           |
| 450          | 11.3                   | 3.7                   | 21.3                           | 425          | 11.0                   | 3.5                   | 22.8                           |
| 475          | 11.3                   | 3.7                   | 21.3                           | 450          | 11.0                   | 3.5                   | 22.8                           |
| 500          | 11.3                   | 3.7                   | 21.3                           | 475          | 11.0                   | 3.5                   | 22.8                           |
| 525          | 11.3                   | 3.7                   | 21.3                           | 500          | 11.0                   | 3.5                   | 22.8                           |
| 550          | 11.3                   | 3.7                   | 21.3                           | 525          | 11.0                   | 3.5                   | 22.8                           |
| 575          | 11.3                   | 3.7                   | 21.3                           | 550          | 11.0                   | 3.5                   | 22.8                           |
| 600          | 11.3                   | 3.7                   | 21.3                           | 575          | 11.0                   | 3.5                   | 22.8                           |
| 625          | 11.3                   | 3.7                   | 21.3                           | 600          | 11.0                   | 3.5                   | 22.8                           |
| 650          | 11.3                   | 3.7                   | 21.3                           | 625          | 11.0                   | 3.5                   | 22.8                           |
| 675          | 11.3                   | 3.7                   | 21.3                           | 650          | 11.0                   | 3.5                   | 22.8                           |
| 700          | 11.3                   | 3.7                   | 21.3                           | 675          | 11.0                   | 3.5                   | 22.8                           |
| 725          | 11.3                   | 3.7                   | 21.3                           | 700          | 11.0                   | 3.5                   | 22.8                           |
| 750          | 11.3                   | 3.7                   | 21.3                           | 725          | 11.0                   | 3.5                   | 22.8                           |
| 775          | 11.3                   | 3.7                   | 21.3                           | 750          | 11.0                   | 3.5                   | 22.8                           |
| 800          | 11.3                   | 3.7                   | 21.3                           | 775          | 11.0                   | 3.5                   | 22.8                           |
| 825          | 11.3                   | 3.7                   | 21.3                           | 800          | 11.0                   | 3.5                   | 22.8                           |
| 850          | 11.3                   | 3.7                   | 21.3                           | 825          | 11.0                   | 3.5                   | 22.8                           |
| 875          | 11.3                   | 3.7                   | 21.3                           | 850          | 11.0                   | 3.5                   | 22.8                           |
| 900          | 11.3                   | 3.7                   | 21.3                           | 875          | 11.0                   | 3.5                   | 22.8                           |
| 925          | 11.3                   | 3.7                   | 21.3                           | 900          | 11.0                   | 3.5                   | 22.8                           |
| 950          | 11.3                   | 3.7                   | 21.3                           | 925          | 11.0                   | 3.5                   | 22.8                           |
| 975          | 11.3                   | 3.7                   | 21.3                           | 950          | 11.0                   | 3.5                   | 22.8                           |
| 1000         | 11.3                   | 3.7                   | 21.3                           | 975          | 11.0                   | 3.5                   | 22.8                           |

TABLE 2--PEDESTRIAN WIND VELOCITIES AND TURBULENCE INTENSITIES

| LOCATION 9   |   |   |  | LOCATION 10  |   |   |  | LOCATION 11  |   |   |  | LOCATION 12  |   |   |  |
|--------------|---|---|--|--------------|---|---|--|--------------|---|---|--|--------------|---|---|--|
| WIND AZIMUTH | U <sub>MEAN</sub> /U <sub>INF</sub> (PERCENT) | U <sub>MS</sub> /U <sub>INF</sub> (PERCENT) | U <sub>MEAN</sub> +3*U <sub>MS</sub> /U <sub>INF</sub> (PERCENT) | WIND AZIMUTH | U <sub>MEAN</sub> /U <sub>INF</sub> (PERCENT) | U <sub>MS</sub> /U <sub>INF</sub> (PERCENT) | U <sub>MEAN</sub> +3*U <sub>MS</sub> /U <sub>INF</sub> (PERCENT) | WIND AZIMUTH | U <sub>MEAN</sub> /U <sub>INF</sub> (PERCENT) | U <sub>MS</sub> /U <sub>INF</sub> (PERCENT) | U <sub>MEAN</sub> +3*U <sub>MS</sub> /U <sub>INF</sub> (PERCENT) | WIND AZIMUTH | U <sub>MEAN</sub> /U <sub>INF</sub> (PERCENT) | U <sub>MS</sub> /U <sub>INF</sub> (PERCENT) | U <sub>MEAN</sub> +3*U <sub>MS</sub> /U <sub>INF</sub> (PERCENT) |
| 0 00         | 12 00   | 4 6   | 26 9   | 0 00         | 13 3  | 4 7   | 29 5   | 0 00         | 24 9  | 3 1   | 42 6   | 0 00         | 10 9  | 2 1   | 42 6   |
| 22 50        | 11 9  | 2 2   | 17 1   | 22 50        | 18 2  | 2 2   | 17 1   | 22 50        | 22 8  | 5 9   | 42 6   | 22 50        | 11 7  | 5 1   | 42 6   |
| 45 00        | 10 8  | 2 2   | 19 6   | 45 00        | 15 0  | 5 8   | 23 1   | 45 00        | 22 8  | 14 3  | 42 6   | 45 00        | 11 7  | 14 3  | 42 6   |
| 67 50        | 10 0  | 2 2   | 18 0   | 67 50        | 20 4  | 1 0   | 22 4   | 67 50        | 22 8  | 11 3  | 42 6   | 67 50        | 11 7  | 11 3  | 42 6   |
| 90 00        | 11 0  | 2 3   | 20 5   | 90 00        | 22 3  | 1 0   | 22 3   | 90 00        | 22 8  | 11 3  | 42 6   | 90 00        | 11 7  | 11 3  | 42 6   |
| 112 50       | 14 0  | 4 2   | 22 9   | 112 50       | 22 3  | 1 0   | 22 3   | 112 50       | 22 8  | 11 3  | 42 6   | 112 50       | 11 7  | 11 3  | 42 6   |
| 135 00       | 13 9  | 4 2   | 22 9   | 135 00       | 22 3  | 1 0   | 22 3   | 135 00       | 22 8  | 11 3  | 42 6   | 135 00       | 11 7  | 11 3  | 42 6   |
| 157 50       | 10 6  | 4 4   | 21 0   | 157 50       | 20 5  | 4 2   | 22 8   | 157 50       | 22 8  | 11 3  | 42 6   | 157 50       | 11 7  | 11 3  | 42 6   |
| 180 00       | 13 9  | 4 4   | 22 8   | 180 00       | 22 3  | 1 0   | 22 3   | 180 00       | 22 8  | 11 3  | 42 6   | 180 00       | 11 7  | 11 3  | 42 6   |
| 202 50       | 11 8  | 6 6   | 23 6   | 202 50       | 22 3  | 1 0   | 22 3   | 202 50       | 22 8  | 11 3  | 42 6   | 202 50       | 11 7  | 11 3  | 42 6   |
| 225 00       | 11 9  | 6 6   | 23 6   | 225 00       | 22 3  | 1 0   | 22 3   | 225 00       | 22 8  | 11 3  | 42 6   | 225 00       | 11 7  | 11 3  | 42 6   |
| 247 50       | 12 1  | 6 5   | 23 4   | 247 50       | 22 3  | 1 0   | 22 3   | 247 50       | 22 8  | 11 3  | 42 6   | 247 50       | 11 7  | 11 3  | 42 6   |
| 270 00       | 11 9  | 6 5   | 23 4   | 270 00       | 22 3  | 1 0   | 22 3   | 270 00       | 22 8  | 11 3  | 42 6   | 270 00       | 11 7  | 11 3  | 42 6   |
| 292 50       | 11 9  | 6 5   | 23 4   | 292 50       | 22 3  | 1 0   | 22 3   | 292 50       | 22 8  | 11 3  | 42 6   | 292 50       | 11 7  | 11 3  | 42 6   |
| 315 00       | 11 9  | 6 5   | 23 4   | 315 00       | 22 3  | 1 0   | 22 3   | 315 00       | 22 8  | 11 3  | 42 6   | 315 00       | 11 7  | 11 3  | 42 6   |
| 337 50       | 11 4  | 6 3   | 23 0   | 337 50       | 22 3  | 1 0   | 22 3   | 337 50       | 22 8  | 11 3  | 42 6   | 337 50       | 11 7  | 11 3  | 42 6   |

TABLE 2--PEDESTRIAN WIND VELOCITIES AND TURBULENCE INTENSITIES

| LOCATION 13  |                      |                     |                             | LOCATION 14  |                      |                     |                             |
|--------------|----------------------|---------------------|-----------------------------|--------------|----------------------|---------------------|-----------------------------|
| WIND AZIMUTH | UMEAN/UINF (PERCENT) | URMS/UINF (PERCENT) | UMEAN+3*URMS/UINF (PERCENT) | WIND AZIMUTH | UMEAN/UINF (PERCENT) | URMS/UINF (PERCENT) | UMEAN+3*URMS/UINF (PERCENT) |
| 00           | 1.8                  | 9.0                 | 58.8                        | 00           | 25.7                 | 5.5                 | 42.1                        |
| 05           | 2.2                  | 8.7                 | 45.7                        | 22           | 23.7                 | 6.8                 | 41.3                        |
| 10           | 2.2                  | 8.9                 | 40.0                        | 31           | 23.1                 | 10.9                | 44.1                        |
| 15           | 3.6                  | 10.1                | 56.2                        | 40           | 23.0                 | 8.9                 | 60.2                        |
| 20           | 3.4                  | 9.2                 | 57.8                        | 50           | 23.1                 | 8.8                 | 56.9                        |
| 25           | 3.0                  | 7.7                 | 51.8                        | 60           | 23.0                 | 8.5                 | 47.5                        |
| 30           | 3.2                  | 7.7                 | 41.7                        | 70           | 23.3                 | 6.2                 | 45.0                        |
| 35           | 3.2                  | 8.8                 | 57.9                        | 80           | 22.9                 | 11.2                | 57.0                        |
| 40           | 3.5                  | 11.4                | 78.9                        | 90           | 22.2                 | 11.2                | 42.3                        |
| 45           | 4.6                  | 11.8                | 87.9                        | 100          | 23.0                 | 11.2                | 68.8                        |
| 50           | 4.1                  | 9.9                 | 79.6                        | 110          | 23.1                 | 9.9                 | 68.8                        |
| 55           | 4.3                  | 9.9                 | 59.9                        | 120          | 23.3                 | 7.7                 | 57.5                        |

| LOCATION 15  |                      |                     |                             | LOCATION 16  |                      |                     |                             |
|--------------|----------------------|---------------------|-----------------------------|--------------|----------------------|---------------------|-----------------------------|
| WIND AZIMUTH | UMEAN/UINF (PERCENT) | URMS/UINF (PERCENT) | UMEAN+3*URMS/UINF (PERCENT) | WIND AZIMUTH | UMEAN/UINF (PERCENT) | URMS/UINF (PERCENT) | UMEAN+3*URMS/UINF (PERCENT) |
| 00           | 3.9                  | 10.0                | 68.7                        | 00           | 22.7                 | 9.0                 | 49.6                        |
| 05           | 3.7                  | 9.6                 | 58.9                        | 22           | 21.9                 | 16.5                | 45.8                        |
| 10           | 3.4                  | 11.0                | 67.7                        | 31           | 22.3                 | 19.9                | 48.1                        |
| 15           | 3.1                  | 10.2                | 62.9                        | 40           | 21.7                 | 4.4                 | 22.8                        |
| 20           | 3.1                  | 9.4                 | 59.6                        | 50           | 21.5                 | 4.2                 | 27.9                        |
| 25           | 3.7                  | 7.8                 | 50.8                        | 60           | 22.6                 | 4.8                 | 26.7                        |
| 30           | 3.2                  | 6.6                 | 43.6                        | 70           | 22.6                 | 6.7                 | 27.2                        |
| 35           | 3.2                  | 6.8                 | 47.8                        | 80           | 21.7                 | 6.9                 | 29.7                        |
| 40           | 3.3                  | 10.0                | 57.0                        | 90           | 22.0                 | 11.2                | 40.4                        |
| 45           | 4.1                  | 11.9                | 70.6                        | 100          | 22.2                 | 10.9                | 44.4                        |
| 50           | 4.3                  | 9.3                 | 61.0                        | 110          | 22.0                 | 7.7                 | 37.6                        |
| 55           | 4.4                  | 9.3                 | 59.9                        | 120          | 22.7                 | 9.9                 | 47.6                        |

TABLE 2--PEDESTRIAN WIND VELOCITIES AND TURBULENCE INTENSITIES

| LOCATION 17     |                         |                        |                                | LOCATION 18     |                         |                        |                                | LOCATION 19     |                         |                        |                                | LOCATION 20     |                         |                        |                                |
|-----------------|-------------------------|------------------------|--------------------------------|-----------------|-------------------------|------------------------|--------------------------------|-----------------|-------------------------|------------------------|--------------------------------|-----------------|-------------------------|------------------------|--------------------------------|
| WIND<br>AZIMUTH | UMEAN/UINF<br>(PERCENT) | URMS/UINF<br>(PERCENT) | UMEAN+3*URMS/UINF<br>(PERCENT) | WIND<br>AZIMUTH | UMEAN/UINF<br>(PERCENT) | URMS/UINF<br>(PERCENT) | UMEAN+3*URMS/UINF<br>(PERCENT) | WIND<br>AZIMUTH | UMEAN/UINF<br>(PERCENT) | URMS/UINF<br>(PERCENT) | UMEAN+3*URMS/UINF<br>(PERCENT) | WIND<br>AZIMUTH | UMEAN/UINF<br>(PERCENT) | URMS/UINF<br>(PERCENT) | UMEAN+3*URMS/UINF<br>(PERCENT) |
| 0.00            | 0.00                    | 0.00                   | 0.00                           | 0.00            | 0.00                    | 0.00                   | 0.00                           | 0.00            | 0.00                    | 0.00                   | 0.00                           | 0.00            | 0.00                    | 0.00                   | 0.00                           |
| 22.50           | 1.66                    | 8.78                   | 42.10                          | 22.50           | 2.01                    | 4.21                   | 42.10                          | 22.50           | 2.14                    | 4.55                   | 42.10                          | 22.50           | 2.14                    | 4.55                   | 42.10                          |
| 45.00           | 1.19                    | 6.26                   | 44.13                          | 45.00           | 1.84                    | 4.41                   | 44.13                          | 45.00           | 1.84                    | 4.41                   | 44.13                          | 45.00           | 1.84                    | 4.41                   | 44.13                          |
| 67.50           | 1.19                    | 6.26                   | 43.69                          | 67.50           | 1.84                    | 4.41                   | 43.69                          | 67.50           | 1.84                    | 4.41                   | 43.69                          | 67.50           | 1.84                    | 4.41                   | 43.69                          |
| 90.00           | 1.17                    | 6.09                   | 43.50                          | 90.00           | 1.82                    | 4.38                   | 43.50                          | 90.00           | 1.82                    | 4.38                   | 43.50                          | 90.00           | 1.82                    | 4.38                   | 43.50                          |
| 112.50          | 1.23                    | 6.51                   | 43.71                          | 112.50          | 1.88                    | 4.53                   | 43.71                          | 112.50          | 1.88                    | 4.53                   | 43.71                          | 112.50          | 1.88                    | 4.53                   | 43.71                          |
| 135.00          | 1.22                    | 6.48                   | 43.66                          | 135.00          | 1.87                    | 4.52                   | 43.66                          | 135.00          | 1.87                    | 4.52                   | 43.66                          | 135.00          | 1.87                    | 4.52                   | 43.66                          |
| 157.50          | 1.14                    | 5.99                   | 42.50                          | 157.50          | 1.77                    | 4.35                   | 42.50                          | 157.50          | 1.77                    | 4.35                   | 42.50                          | 157.50          | 1.77                    | 4.35                   | 42.50                          |
| 180.00          | 1.14                    | 5.99                   | 42.50                          | 180.00          | 1.77                    | 4.35                   | 42.50                          | 180.00          | 1.77                    | 4.35                   | 42.50                          | 180.00          | 1.77                    | 4.35                   | 42.50                          |
| 202.50          | 1.14                    | 5.99                   | 42.50                          | 202.50          | 1.77                    | 4.35                   | 42.50                          | 202.50          | 1.77                    | 4.35                   | 42.50                          | 202.50          | 1.77                    | 4.35                   | 42.50                          |
| 225.00          | 1.24                    | 6.60                   | 44.44                          | 225.00          | 1.91                    | 4.66                   | 44.44                          | 225.00          | 1.91                    | 4.66                   | 44.44                          | 225.00          | 1.91                    | 4.66                   | 44.44                          |
| 247.50          | 1.24                    | 6.60                   | 44.44                          | 247.50          | 1.91                    | 4.66                   | 44.44                          | 247.50          | 1.91                    | 4.66                   | 44.44                          | 247.50          | 1.91                    | 4.66                   | 44.44                          |
| 270.00          | 1.24                    | 6.60                   | 44.44                          | 270.00          | 1.91                    | 4.66                   | 44.44                          | 270.00          | 1.91                    | 4.66                   | 44.44                          | 270.00          | 1.91                    | 4.66                   | 44.44                          |
| 292.50          | 1.23                    | 6.51                   | 43.71                          | 292.50          | 1.88                    | 4.53                   | 43.71                          | 292.50          | 1.88                    | 4.53                   | 43.71                          | 292.50          | 1.88                    | 4.53                   | 43.71                          |
| 315.00          | 1.23                    | 6.51                   | 43.71                          | 315.00          | 1.88                    | 4.53                   | 43.71                          | 315.00          | 1.88                    | 4.53                   | 43.71                          | 315.00          | 1.88                    | 4.53                   | 43.71                          |
| 337.50          | 1.23                    | 6.51                   | 43.71                          | 337.50          | 1.88                    | 4.53                   | 43.71                          | 337.50          | 1.88                    | 4.53                   | 43.71                          | 337.50          | 1.88                    | 4.53                   | 43.71                          |

TABLE 2--PEDESTRIAN WIND VELOCITIES AND TURBULENCE INTENSITIES

| LOCATION 21  |                      |                     |                             | LOCATION 22  |                      |                     |                             | LOCATION 23  |                      |                     |                             | LOCATION 24  |                      |                     |                             |
|--------------|----------------------|---------------------|-----------------------------|--------------|----------------------|---------------------|-----------------------------|--------------|----------------------|---------------------|-----------------------------|--------------|----------------------|---------------------|-----------------------------|
| WIND AZIMUTH | UMEAN/UINF (PERCENT) | URMS/UINF (PERCENT) | UMEAN+3*URMS/UINF (PERCENT) | WIND AZIMUTH | UMEAN/UINF (PERCENT) | URMS/UINF (PERCENT) | UMEAN+3*URMS/UINF (PERCENT) | WIND AZIMUTH | UMEAN/UINF (PERCENT) | URMS/UINF (PERCENT) | UMEAN+3*URMS/UINF (PERCENT) | WIND AZIMUTH | UMEAN/UINF (PERCENT) | URMS/UINF (PERCENT) | UMEAN+3*URMS/UINF (PERCENT) |
| 0.00         | 48.71                | 13.71               | 87.52                       | 0.00         | 21.75                | 9.15                | 49.19                       | 0.00         | 27.14                | 13.45               | 57.55                       | 0.00         | 31.79                | 13.45               | 67.69                       |
| 22.50        | 45.00                | 13.35               | 82.26                       | 22.50        | 18.22                | 7.22                | 44.19                       | 22.50        | 12.79                | 15.00               | 26.53                       | 22.50        | 11.88                | 15.00               | 22.88                       |
| 45.00        | 45.44                | 13.35               | 82.97                       | 45.00        | 15.24                | 7.22                | 44.19                       | 45.00        | 15.89                | 17.50               | 32.54                       | 45.00        | 12.48                | 17.50               | 29.98                       |
| 67.50        | 40.16                | 11.88               | 75.46                       | 67.50        | 12.50                | 6.56                | 39.47                       | 67.50        | 10.00                | 12.50               | 22.22                       | 67.50        | 10.00                | 12.50               | 22.22                       |
| 90.00        | 42.30                | 11.88               | 79.47                       | 90.00        | 13.57                | 6.56                | 40.50                       | 90.00        | 18.00                | 13.57               | 30.86                       | 90.00        | 13.57                | 13.57               | 24.44                       |
| 112.50       | 32.44                | 12.44               | 67.52                       | 112.50       | 10.50                | 6.22                | 37.52                       | 112.50       | 12.27                | 10.50               | 29.77                       | 112.50       | 10.50                | 10.50               | 22.22                       |
| 135.00       | 25.59                | 12.23               | 59.23                       | 135.00       | 9.50                 | 5.92                | 33.79                       | 135.00       | 12.27                | 9.50                | 27.99                       | 135.00       | 12.27                | 9.50                | 22.22                       |
| 157.50       | 26.49                | 12.30               | 60.23                       | 157.50       | 10.50                | 6.22                | 37.52                       | 157.50       | 12.27                | 10.50               | 29.77                       | 157.50       | 12.27                | 10.50               | 22.22                       |
| 180.00       | 17.88                | 11.23               | 49.88                       | 180.00       | 8.50                 | 5.68                | 31.68                       | 180.00       | 11.14                | 8.50                | 27.88                       | 180.00       | 11.14                | 8.50                | 22.22                       |
| 202.50       | 17.88                | 11.23               | 49.88                       | 202.50       | 10.50                | 6.22                | 37.52                       | 202.50       | 12.27                | 10.50               | 29.77                       | 202.50       | 12.27                | 10.50               | 22.22                       |
| 225.00       | 17.88                | 11.23               | 49.88                       | 225.00       | 10.50                | 6.22                | 37.52                       | 225.00       | 12.27                | 10.50               | 29.77                       | 225.00       | 12.27                | 10.50               | 22.22                       |
| 247.50       | 17.88                | 11.23               | 49.88                       | 247.50       | 10.50                | 6.22                | 37.52                       | 247.50       | 12.27                | 10.50               | 29.77                       | 247.50       | 12.27                | 10.50               | 22.22                       |
| 270.00       | 17.88                | 11.23               | 49.88                       | 270.00       | 10.50                | 6.22                | 37.52                       | 270.00       | 12.27                | 10.50               | 29.77                       | 270.00       | 12.27                | 10.50               | 22.22                       |
| 292.50       | 17.88                | 11.23               | 49.88                       | 292.50       | 10.50                | 6.22                | 37.52                       | 292.50       | 12.27                | 10.50               | 29.77                       | 292.50       | 12.27                | 10.50               | 22.22                       |
| 315.00       | 17.88                | 11.23               | 49.88                       | 315.00       | 10.50                | 6.22                | 37.52                       | 315.00       | 12.27                | 10.50               | 29.77                       | 315.00       | 12.27                | 10.50               | 22.22                       |
| 337.50       | 17.88                | 11.23               | 49.88                       | 337.50       | 10.50                | 6.22                | 37.52                       | 337.50       | 12.27                | 10.50               | 29.77                       | 337.50       | 12.27                | 10.50               | 22.22                       |
| 0.00         | 16.77                | 11.00               | 42.74                       | 0.00         | 27.14                | 13.45               | 57.55                       | 0.00         | 31.79                | 13.45               | 67.69                       | 0.00         | 31.79                | 13.45               | 67.69                       |
| 22.50        | 11.00                | 11.00               | 22.00                       | 22.50        | 15.89                | 15.00               | 31.79                       | 22.50        | 12.79                | 15.00               | 26.53                       | 22.50        | 11.88                | 15.00               | 22.88                       |
| 45.00        | 11.74                | 11.00               | 23.74                       | 45.00        | 12.48                | 17.50               | 32.54                       | 45.00        | 10.00                | 17.50               | 29.98                       | 45.00        | 10.00                | 17.50               | 29.98                       |
| 67.50        | 12.34                | 12.00               | 26.34                       | 67.50        | 10.00                | 12.50               | 22.22                       | 67.50        | 18.00                | 12.50               | 30.86                       | 67.50        | 18.00                | 12.50               | 30.86                       |
| 90.00        | 12.34                | 12.00               | 26.34                       | 90.00        | 12.27                | 10.50               | 29.77                       | 90.00        | 12.27                | 10.50               | 29.77                       | 90.00        | 12.27                | 10.50               | 29.77                       |
| 112.50       | 12.34                | 12.00               | 26.34                       | 112.50       | 12.27                | 10.50               | 29.77                       | 112.50       | 12.27                | 10.50               | 29.77                       | 112.50       | 12.27                | 10.50               | 29.77                       |
| 135.00       | 12.34                | 12.00               | 26.34                       | 135.00       | 12.27                | 10.50               | 29.77                       | 135.00       | 12.27                | 10.50               | 29.77                       | 135.00       | 12.27                | 10.50               | 29.77                       |
| 157.50       | 12.34                | 12.00               | 26.34                       | 157.50       | 12.27                | 10.50               | 29.77                       | 157.50       | 12.27                | 10.50               | 29.77                       | 157.50       | 12.27                | 10.50               | 29.77                       |
| 180.00       | 12.34                | 12.00               | 26.34                       | 180.00       | 12.27                | 10.50               | 29.77                       | 180.00       | 12.27                | 10.50               | 29.77                       | 180.00       | 12.27                | 10.50               | 29.77                       |
| 202.50       | 12.34                | 12.00               | 26.34                       | 202.50       | 12.27                | 10.50               | 29.77                       | 202.50       | 12.27                | 10.50               | 29.77                       | 202.50       | 12.27                | 10.50               | 29.77                       |
| 225.00       | 12.34                | 12.00               | 26.34                       | 225.00       | 12.27                | 10.50               | 29.77                       | 225.00       | 12.27                | 10.50               | 29.77                       | 225.00       | 12.27                | 10.50               | 29.77                       |
| 247.50       | 12.34                | 12.00               | 26.34                       | 247.50       | 12.27                | 10.50               | 29.77                       | 247.50       | 12.27                | 10.50               | 29.77                       | 247.50       | 12.27                | 10.50               | 29.77                       |
| 270.00       | 12.34                | 12.00               | 26.34                       | 270.00       | 12.27                | 10.50               | 29.77                       | 270.00       | 12.27                | 10.50               | 29.77                       | 270.00       | 12.27                | 10.50               | 29.77                       |
| 292.50       | 12.34                | 12.00               | 26.34                       | 292.50       | 12.27                | 10.50               | 29.77                       | 292.50       | 12.27                | 10.50               | 29.77                       | 292.50       | 12.27                | 10.50               | 29.77                       |
| 315.00       | 12.34                | 12.00               | 26.34                       | 315.00       | 12.27                | 10.50               | 29.77                       | 315.00       | 12.27                | 10.50               | 29.77                       | 315.00       | 12.27                | 10.50               | 29.77                       |
| 337.50       | 12.34                | 12.00               | 26.34                       | 337.50       | 12.27                | 10.50               | 29.77                       | 337.50       | 12.27                | 10.50               | 29.77                       | 337.50       | 12.27                | 10.50               | 29.77                       |



TABLE 2--PEDESTRIAN WIND VELOCITIES AND TURBULENCE INTENSITIES

| LOCATION 25     |                         |                        |                                | LOCATION 26     |                         |                        |                                |
|-----------------|-------------------------|------------------------|--------------------------------|-----------------|-------------------------|------------------------|--------------------------------|
| WIND<br>AZIMUTH | UMEAN/UINF<br>(PERCENT) | URMS/UINF<br>(PERCENT) | UMEAN+3*URMS/UINF<br>(PERCENT) | WIND<br>AZIMUTH | UMEAN/UINF<br>(PERCENT) | URMS/UINF<br>(PERCENT) | UMEAN+3*URMS/UINF<br>(PERCENT) |
| 0.00            | 47.1                    | 15.50                  | 93.6                           | 0.00            | 23.8                    | 8.6                    | 55.4                           |
| 22.50           | 50.1                    | 15.50                  | 70.7                           | 22.50           | 23.1                    | 8.4                    | 49.0                           |
| 45.00           | 57.6                    | 15.50                  | 66.5                           | 45.00           | 23.2                    | 8.7                    | 45.1                           |
| 67.50           | 60.0                    | 15.45                  | 76.4                           | 67.50           | 21.4                    | 7.7                    | 37.5                           |
| 90.00           | 65.0                    | 15.00                  | 100.9                          | 90.00           | 28.0                    | 8.8                    | 51.4                           |
| 112.50          | 65.0                    | 15.00                  | 100.4                          | 112.50          | 19.3                    | 9.1                    | 43.3                           |
| 135.00          | 65.4                    | 15.00                  | 82.0                           | 135.00          | 44.2                    | 9.8                    | 72.6                           |
| 157.50          | 64.4                    | 15.00                  | 82.3                           | 157.50          | 39.6                    | 10.5                   | 69.4                           |
| 180.00          | 63.5                    | 15.00                  | 62.4                           | 180.00          | 31.1                    | 11.0                   | 63.0                           |
| 202.50          | 62.4                    | 15.00                  | 108.5                          | 202.50          | 28.1                    | 11.5                   | 68.0                           |
| 225.00          | 62.4                    | 15.00                  | 85.5                           | 225.00          | 21.8                    | 10.5                   | 51.6                           |
| 247.50          | 64.4                    | 15.15                  | 77.0                           | 247.50          | 37.1                    | 10.4                   | 61.4                           |
| 270.00          | 63.5                    | 15.15                  | 85.4                           | 270.00          | 38.1                    | 10.8                   | 68.0                           |
| 292.50          | 62.4                    | 15.15                  | 77.1                           | 292.50          | 37.1                    | 10.4                   | 61.4                           |
| 315.00          | 62.4                    | 15.15                  | 85.4                           | 315.00          | 38.1                    | 10.8                   | 68.0                           |
| 337.50          | 62.4                    | 15.15                  | 77.1                           | 337.50          | 38.1                    | 10.8                   | 68.0                           |

| LOCATION 27     |                         |                        |                                | LOCATION 28     |                         |                        |                                |
|-----------------|-------------------------|------------------------|--------------------------------|-----------------|-------------------------|------------------------|--------------------------------|
| WIND<br>AZIMUTH | UMEAN/UINF<br>(PERCENT) | URMS/UINF<br>(PERCENT) | UMEAN+3*URMS/UINF<br>(PERCENT) | WIND<br>AZIMUTH | UMEAN/UINF<br>(PERCENT) | URMS/UINF<br>(PERCENT) | UMEAN+3*URMS/UINF<br>(PERCENT) |
| 0.00            | 3.8                     | 6.70                   | 43.7                           | 0.00            | 8.6                     | 9.1                    | 49.1                           |
| 22.50           | 3.3                     | 7.00                   | 43.0                           | 22.50           | 21.6                    | 10.5                   | 49.5                           |
| 45.00           | 3.1                     | 7.50                   | 42.2                           | 45.00           | 14.8                    | 9.5                    | 43.1                           |
| 67.50           | 3.0                     | 7.50                   | 42.2                           | 67.50           | 18.3                    | 9.4                    | 43.2                           |
| 90.00           | 3.0                     | 7.50                   | 42.2                           | 90.00           | 13.5                    | 9.4                    | 43.2                           |
| 112.50          | 3.0                     | 7.50                   | 42.2                           | 112.50          | 12.9                    | 9.4                    | 43.2                           |
| 135.00          | 3.0                     | 7.50                   | 42.2                           | 135.00          | 11.1                    | 9.4                    | 43.2                           |
| 157.50          | 3.0                     | 7.50                   | 42.2                           | 157.50          | 11.1                    | 9.4                    | 43.2                           |
| 180.00          | 3.0                     | 7.50                   | 42.2                           | 180.00          | 18.4                    | 9.2                    | 43.0                           |
| 202.50          | 3.0                     | 7.50                   | 42.2                           | 202.50          | 18.8                    | 9.2                    | 43.0                           |
| 225.00          | 3.0                     | 7.50                   | 42.2                           | 225.00          | 22.5                    | 9.2                    | 43.0                           |
| 247.50          | 3.0                     | 7.50                   | 42.2                           | 247.50          | 22.5                    | 9.2                    | 43.0                           |
| 270.00          | 3.0                     | 7.50                   | 42.2                           | 270.00          | 22.5                    | 9.2                    | 43.0                           |
| 292.50          | 3.0                     | 7.50                   | 42.2                           | 292.50          | 22.5                    | 9.2                    | 43.0                           |
| 315.00          | 3.0                     | 7.50                   | 42.2                           | 315.00          | 22.5                    | 9.2                    | 43.0                           |
| 337.50          | 3.0                     | 7.50                   | 42.2                           | 337.50          | 22.5                    | 9.2                    | 43.0                           |

TABLE 2--PEDESTRIAN WIND VELOCITIES AND TURBULENCE INTENSITIES

| LOCATION 29  |                      |                     |                             | LOCATION 30  |                      |                     |                             | LOCATION 31  |                      |                     |                             | LOCATION 32  |                      |                     |                             |
|--------------|----------------------|---------------------|-----------------------------|--------------|----------------------|---------------------|-----------------------------|--------------|----------------------|---------------------|-----------------------------|--------------|----------------------|---------------------|-----------------------------|
| WIND AZIMUTH | UMEAN/UINF (PERCENT) | URMS/UINF (PERCENT) | UMEAN+3*URMS/UINF (PERCENT) | WIND AZIMUTH | UMEAN/UINF (PERCENT) | URMS/UINF (PERCENT) | UMEAN+3*URMS/UINF (PERCENT) | WIND AZIMUTH | UMEAN/UINF (PERCENT) | URMS/UINF (PERCENT) | UMEAN+3*URMS/UINF (PERCENT) | WIND AZIMUTH | UMEAN/UINF (PERCENT) | URMS/UINF (PERCENT) | UMEAN+3*URMS/UINF (PERCENT) |
| 0.00         | 9.0                  | 11.4                | 67.4                        | 0.00         | 9.0                  | 11.4                | 67.4                        | 0.00         | 16.8                 | 6.3                 | 32.8                        | 0.00         | 16.8                 | 6.3                 | 32.8                        |
| 22.50        | 22.0                 | 10.5                | 57.4                        | 22.50        | 22.0                 | 10.5                | 57.4                        | 22.50        | 14.7                 | 6.6                 | 33.9                        | 22.50        | 14.7                 | 6.6                 | 33.9                        |
| 45.00        | 29.0                 | 10.4                | 54.6                        | 45.00        | 29.0                 | 10.4                | 54.6                        | 45.00        | 22.0                 | 6.5                 | 39.5                        | 45.00        | 22.0                 | 6.5                 | 39.5                        |
| 67.50        | 45.0                 | 11.0                | 82.0                        | 67.50        | 45.0                 | 11.0                | 82.0                        | 67.50        | 22.0                 | 6.5                 | 39.5                        | 67.50        | 22.0                 | 6.5                 | 39.5                        |
| 90.00        | 55.0                 | 1.0                 | 85.0                        | 90.00        | 55.0                 | 1.0                 | 85.0                        | 90.00        | 11.2                 | 6.0                 | 41.4                        | 90.00        | 11.2                 | 6.0                 | 41.4                        |
| 112.50       | 42.0                 | 8.8                 | 48.3                        | 112.50       | 42.0                 | 8.8                 | 48.3                        | 112.50       | 15.7                 | 6.0                 | 47.6                        | 112.50       | 15.7                 | 6.0                 | 47.6                        |
| 135.00       | 35.0                 | 6.0                 | 30.1                        | 135.00       | 35.0                 | 6.0                 | 30.1                        | 135.00       | 22.5                 | 5.0                 | 58.0                        | 135.00       | 22.5                 | 5.0                 | 58.0                        |
| 157.50       | 16.0                 | 4.0                 | 32.2                        | 157.50       | 16.0                 | 4.0                 | 32.2                        | 157.50       | 18.0                 | 5.0                 | 48.2                        | 157.50       | 18.0                 | 5.0                 | 48.2                        |
| 180.00       | 18.0                 | 6.4                 | 32.2                        | 180.00       | 18.0                 | 6.4                 | 32.2                        | 180.00       | 17.0                 | 5.2                 | 48.2                        | 180.00       | 17.0                 | 5.2                 | 48.2                        |
| 202.50       | 11.0                 | 5.5                 | 22.4                        | 202.50       | 11.0                 | 5.5                 | 22.4                        | 202.50       | 14.0                 | 5.2                 | 44.2                        | 202.50       | 14.0                 | 5.2                 | 44.2                        |
| 225.00       | 17.0                 | 2.2                 | 24.4                        | 225.00       | 17.0                 | 2.2                 | 24.4                        | 225.00       | 13.0                 | 4.4                 | 37.7                        | 225.00       | 13.0                 | 4.4                 | 37.7                        |
| 247.50       | 14.0                 | 3.4                 | 24.6                        | 247.50       | 14.0                 | 3.4                 | 24.6                        | 247.50       | 11.4                 | 4.0                 | 37.7                        | 247.50       | 11.4                 | 4.0                 | 37.7                        |
| 270.00       | 14.0                 | 3.4                 | 24.6                        | 270.00       | 14.0                 | 3.4                 | 24.6                        | 270.00       | 11.4                 | 4.0                 | 37.7                        | 270.00       | 11.4                 | 4.0                 | 37.7                        |
| 292.50       | 14.0                 | 3.4                 | 24.6                        | 292.50       | 14.0                 | 3.4                 | 24.6                        | 292.50       | 11.4                 | 4.0                 | 37.7                        | 292.50       | 11.4                 | 4.0                 | 37.7                        |
| 315.00       | 14.0                 | 3.4                 | 24.6                        | 315.00       | 14.0                 | 3.4                 | 24.6                        | 315.00       | 11.4                 | 4.0                 | 37.7                        | 315.00       | 11.4                 | 4.0                 | 37.7                        |
| 337.50       | 14.0                 | 3.4                 | 24.6                        | 337.50       | 14.0                 | 3.4                 | 24.6                        | 337.50       | 11.4                 | 4.0                 | 37.7                        | 337.50       | 11.4                 | 4.0                 | 37.7                        |

TABLE 3

## ANNUAL PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED

Based on Summary of Hourly Observations

Houston International Airport

1951-1960

Anemometer Elevation = 40 ft above ground

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Annual Hourly Observations of Wind Speed - Miles Per Hour

| <u>Direction</u> | <u>0-3</u> | <u>4-7</u> | <u>8-12</u> | <u>13-18</u> | <u>19-24</u> | <u>25-31</u> | <u>32-38</u> | <u>39-46</u> | <u>&gt;47</u> | <u>Total</u> |
|------------------|------------|------------|-------------|--------------|--------------|--------------|--------------|--------------|---------------|--------------|
| N                | 0.27       | 0.84       | 1.87        | 1.72         | 0.65         | 0.10         | 0.01         | 0.02         |               | 5.46         |
| NNE              | 0.20       | 0.95       | 1.51        | 1.44         | 0.54         | 0.10         | 0.05         |              |               | 4.80         |
| NE               | 0.26       | 1.08       | 2.11        | 1.46         | 0.33         | 0.08         | 0.04         | 0.01         | 0.01          | 5.38         |
| ENE              | 0.37       | 1.25       | 2.81        | 2.19         | 0.40         | 0.09         | 0.01         |              |               | 7.12         |
| E                | 0.32       | 1.19       | 2.33        | 1.28         | 0.25         | 0.08         | 0.01         |              |               | 5.47         |
| ESE              | 0.46       | 1.83       | 3.05        | 2.34         | 0.55         | 0.12         | 0.01         |              |               | 8.36         |
| SE               | 0.38       | 1.33       | 3.81        | 3.23         | 1.22         | 0.27         | 0.06         | 0.06         |               | 10.36        |
| SSE              | 0.39       | 1.64       | 4.37        | 4.66         | 2.23         | 0.49         | 0.07         | 0.06         |               | 13.92        |
| S                | 0.32       | 1.47       | 3.21        | 2.99         | 0.99         | 0.19         | 0.04         |              |               | 9.21         |
| SSW              | 0.32       | 1.10       | 2.20        | 1.73         | 0.51         | 0.11         | 0.03         |              |               | 5.99         |
| SW               | 0.25       | 0.94       | 1.38        | 0.79         | 0.18         | 0.08         | 0.01         |              |               | 3.66         |
| WSW              | 0.29       | 0.93       | 1.26        | 0.67         | 0.17         | 0.06         | 0.03         | 0.01         |               | 3.41         |
| W                | 0.17       | 0.73       | 0.87        | 0.41         | 0.13         | 0.06         | 0.02         | 0.01         |               | 2.40         |
| WNW              | 0.22       | 0.82       | 1.22        | 0.80         | 0.37         | 0.09         | 0.03         | 0.01         | 0.01          | 3.56         |
| NW               | 0.18       | 0.79       | 1.36        | 0.93         | 0.47         | 0.09         | 0.04         | 0.03         | 0.01          | 3.89         |
| NNW              | 0.19       | 0.82       | 1.68        | 1.85         | 0.74         | 0.30         | 0.30         | 0.05         | 0.04          | 5.70         |
| CALM             | 1.30       |            |             |              |              |              |              |              |               | 1.33         |
| TOTAL            | 5.97       | 17.73      | 35.25       | 28.26        | 9.67         | 2.29         | 0.50         | 0.26         | 0.07          | 100.00       |

TABLE 4  
SUMMARY OF WIND EFFECTS ON PEOPLE

|                 | <u>Beaufort<br/>number</u> | <u>Speed<br/>(mph)</u> | <u>Effects</u>   |
|-----------------|----------------------------|------------------------|--|
| Calm, light air | 0,1                        | 0- 3                   | Calm, no noticeable wind   |
| Light breeze    | 2                          | 4- 7                   | Wind felt on face  |
| Gentle breeze   | 3                          | 8-12                   | Wind extends light flag<br>Hair is disturbed<br>Clothing flaps   |
| Moderate breeze | 4                          | 13-18                  | Raises dust, dry soil and<br>loose paper<br>Hair disarranged   |
| Fresh breeze    | 5                          | 19-24                  | Force of wind felt on body<br>Drifting snow becomes airborne<br>Limit of agreeable wind on<br>land   |
| Strong breeze   | 6                          | 25-31                  | Umbrellas used with difficulty<br>Hair blown straight<br>Difficult to walk steadily<br>Wind noise on ears unpleasant<br>Windborne snow above head<br>height (blizzard) |
| Near gale       | 7                          | 32-38                  | Inconvenience felt when<br>walking   |
| Gale            | 8                          | 39-46                  | Generally impedes progress<br>Great difficulty with balance<br>in gusts  |
| Strong gale     | 9                          | 47-54                  | People blown over by gusts   |

Note: Table from Reference 4, p. 40

TABLE 5

## CALCULATION OF REFERENCE PRESSURE

1. Basic wind speed from ANSI A58.1 (ref. 5):

50-yr fastest mile at 30 ft = 77 mph

Mean hourly wind speed, 30 ft =  $\frac{77}{1.27} = 60.6$  mph

Mean hourly wind speed, gradient level =  $U_{\infty} =$

$60.6 \left(\frac{1000}{30}\right)^{.17} = 110$  mph.

Reference height for measurement in wind tunnel = 1460 ft

Reference velocity at 1460 ft =  $(110) \left(\frac{1460}{1250}\right)^{.26} = 114$  mph

Reference pressure for cladding loads =  $0.5\rho U_{\infty}^2$

$$= 0.00256(114)^2 = \underline{33.6 \text{ psf}}$$

Use 34 psf

2. Reduction of cladding peak pressures to 1 minute equivalent load for glass: multiply by glass load factor = 0.73 (Ref. 8)
3. Loads for 100-yr recurrence wind:  
100-yr fastest mile at 30 ft = 90 mph (Ref. 5)  
Multiply 50-yr recurrence wind by  $\left(\frac{90}{77}\right)^2 = 1.37$
4. Gust load factors to convert hourly mean integrated loads to various gust durations (see Section 4.4):

| <u>Gust Duration, sec</u> | <u>Gust Load Factor</u> |
|---------------------------|-------------------------|
| 10-15                     | $(1.4)^2 = 1.96$        |
| 30                        | $(1.32)^2 = 1.74$       |
| 45                        | $(1.26)^2 = 1.59$       |

30 sec duration load factor was used in Table 7 resulting in equivalent reference pressure of  $(1.74) (33.6) = 58$  psf

TABLE 6 -- CLADDING AND GLASS LOADS-- CONFIGURATION, PEAK LOAD AND GLASS LOAD (1 MINUTE EQUIVALENT) LARGEST VALUE OF ABS(CPMAX) OR ABS(CPMIN), FACTOR= 730 REFERENCE PRESSURE = 34 PSF

Table with columns: TAP, AZTH, PREFF, PEAK LOAD (PSF), GLASS LOAD (PSF), TAP, AZTH, PREFF, PEAK LOAD (PSF), GLASS LOAD (PSF), TAP, AZTH, PREFF, PEAK LOAD (PSF), GLASS LOAD (PSF), TAP, AZTH, PREFF, PEAK LOAD (PSF), GLASS LOAD (PSF). The table contains multiple rows of numerical data representing load values for different configurations.

TABLE 6 -- CLADDING AND GLASS LOADS -- CONFIGURATION A -- PEAK LOAD AND GLASS LOAD (1 MINUTE EQUIVALENT)  
LARGEST VALUE OF ABS(CPMAX) OR ABS(CPMIN), PEAK LOAD FACTOR = .73

| TAP | AZIMUTH | PRESF COEFF | PEAK LOAD (PSF) | GLASS LOAD (PSF) | TAP | AZIMUTH | PRESF COEFF | PEAK LOAD (PSF) | GLASS LOAD (PSF) |
|-----|---------|-------------|-----------------|------------------|-----|---------|-------------|-----------------|------------------|
| 1   | 0       | 1           | 25              | 12               | 1   | 0       | 1           | 25              | 12               |
| 2   | 30      | 1           | 30              | 15               | 2   | 30      | 1           | 30              | 15               |
| 3   | 60      | 1           | 35              | 18               | 3   | 60      | 1           | 35              | 18               |
| 4   | 90      | 1           | 40              | 20               | 4   | 90      | 1           | 40              | 20               |
| 5   | 120     | 1           | 45              | 22               | 5   | 120     | 1           | 45              | 22               |
| 6   | 150     | 1           | 50              | 24               | 6   | 150     | 1           | 50              | 24               |
| 7   | 180     | 1           | 55              | 25               | 7   | 180     | 1           | 55              | 25               |
| 8   | 210     | 1           | 60              | 26               | 8   | 210     | 1           | 60              | 26               |
| 9   | 240     | 1           | 65              | 27               | 9   | 240     | 1           | 65              | 27               |
| 10  | 270     | 1           | 70              | 28               | 10  | 270     | 1           | 70              | 28               |
| 11  | 300     | 1           | 75              | 29               | 11  | 300     | 1           | 75              | 29               |
| 12  | 330     | 1           | 80              | 30               | 12  | 330     | 1           | 80              | 30               |
| 13  | 360     | 1           | 85              | 31               | 13  | 360     | 1           | 85              | 31               |
| 14  | 0       | 1           | 90              | 32               | 14  | 0       | 1           | 90              | 32               |
| 15  | 30      | 1           | 95              | 33               | 15  | 30      | 1           | 95              | 33               |
| 16  | 60      | 1           | 100             | 34               | 16  | 60      | 1           | 100             | 34               |
| 17  | 90      | 1           | 105             | 35               | 17  | 90      | 1           | 105             | 35               |
| 18  | 120     | 1           | 110             | 36               | 18  | 120     | 1           | 110             | 36               |
| 19  | 150     | 1           | 115             | 37               | 19  | 150     | 1           | 115             | 37               |
| 20  | 180     | 1           | 120             | 38               | 20  | 180     | 1           | 120             | 38               |
| 21  | 210     | 1           | 125             | 39               | 21  | 210     | 1           | 125             | 39               |
| 22  | 240     | 1           | 130             | 40               | 22  | 240     | 1           | 130             | 40               |
| 23  | 270     | 1           | 135             | 41               | 23  | 270     | 1           | 135             | 41               |
| 24  | 300     | 1           | 140             | 42               | 24  | 300     | 1           | 140             | 42               |
| 25  | 330     | 1           | 145             | 43               | 25  | 330     | 1           | 145             | 43               |
| 26  | 360     | 1           | 150             | 44               | 26  | 360     | 1           | 150             | 44               |
| 27  | 0       | 1           | 155             | 45               | 27  | 0       | 1           | 155             | 45               |
| 28  | 30      | 1           | 160             | 46               | 28  | 30      | 1           | 160             | 46               |
| 29  | 60      | 1           | 165             | 47               | 29  | 60      | 1           | 165             | 47               |
| 30  | 90      | 1           | 170             | 48               | 30  | 90      | 1           | 170             | 48               |
| 31  | 120     | 1           | 175             | 49               | 31  | 120     | 1           | 175             | 49               |
| 32  | 150     | 1           | 180             | 50               | 32  | 150     | 1           | 180             | 50               |
| 33  | 180     | 1           | 185             | 51               | 33  | 180     | 1           | 185             | 51               |
| 34  | 210     | 1           | 190             | 52               | 34  | 210     | 1           | 190             | 52               |
| 35  | 240     | 1           | 195             | 53               | 35  | 240     | 1           | 195             | 53               |
| 36  | 270     | 1           | 200             | 54               | 36  | 270     | 1           | 200             | 54               |
| 37  | 300     | 1           | 205             | 55               | 37  | 300     | 1           | 205             | 55               |
| 38  | 330     | 1           | 210             | 56               | 38  | 330     | 1           | 210             | 56               |
| 39  | 360     | 1           | 215             | 57               | 39  | 360     | 1           | 215             | 57               |
| 40  | 0       | 1           | 220             | 58               | 40  | 0       | 1           | 220             | 58               |
| 41  | 30      | 1           | 225             | 59               | 41  | 30      | 1           | 225             | 59               |
| 42  | 60      | 1           | 230             | 60               | 42  | 60      | 1           | 230             | 60               |
| 43  | 90      | 1           | 235             | 61               | 43  | 90      | 1           | 235             | 61               |
| 44  | 120     | 1           | 240             | 62               | 44  | 120     | 1           | 240             | 62               |
| 45  | 150     | 1           | 245             | 63               | 45  | 150     | 1           | 245             | 63               |
| 46  | 180     | 1           | 250             | 64               | 46  | 180     | 1           | 250             | 64               |
| 47  | 210     | 1           | 255             | 65               | 47  | 210     | 1           | 255             | 65               |
| 48  | 240     | 1           | 260             | 66               | 48  | 240     | 1           | 260             | 66               |
| 49  | 270     | 1           | 265             | 67               | 49  | 270     | 1           | 265             | 67               |
| 50  | 300     | 1           | 270             | 68               | 50  | 300     | 1           | 270             | 68               |
| 51  | 330     | 1           | 275             | 69               | 51  | 330     | 1           | 275             | 69               |
| 52  | 360     | 1           | 280             | 70               | 52  | 360     | 1           | 280             | 70               |
| 53  | 0       | 1           | 285             | 71               | 53  | 0       | 1           | 285             | 71               |
| 54  | 30      | 1           | 290             | 72               | 54  | 30      | 1           | 290             | 72               |
| 55  | 60      | 1           | 295             | 73               | 55  | 60      | 1           | 295             | 73               |
| 56  | 90      | 1           | 300             | 74               | 56  | 90      | 1           | 300             | 74               |
| 57  | 120     | 1           | 305             | 75               | 57  | 120     | 1           | 305             | 75               |
| 58  | 150     | 1           | 310             | 76               | 58  | 150     | 1           | 310             | 76               |
| 59  | 180     | 1           | 315             | 77               | 59  | 180     | 1           | 315             | 77               |
| 60  | 210     | 1           | 320             | 78               | 60  | 210     | 1           | 320             | 78               |
| 61  | 240     | 1           | 325             | 79               | 61  | 240     | 1           | 325             | 79               |
| 62  | 270     | 1           | 330             | 80               | 62  | 270     | 1           | 330             | 80               |
| 63  | 300     | 1           | 335             | 81               | 63  | 300     | 1           | 335             | 81               |
| 64  | 330     | 1           | 340             | 82               | 64  | 330     | 1           | 340             | 82               |
| 65  | 360     | 1           | 345             | 83               | 65  | 360     | 1           | 345             | 83               |
| 66  | 0       | 1           | 350             | 84               | 66  | 0       | 1           | 350             | 84               |
| 67  | 30      | 1           | 355             | 85               | 67  | 30      | 1           | 355             | 85               |
| 68  | 60      | 1           | 360             | 86               | 68  | 60      | 1           | 360             | 86               |
| 69  | 90      | 1           | 365             | 87               | 69  | 90      | 1           | 365             | 87               |
| 70  | 120     | 1           | 370             | 88               | 70  | 120     | 1           | 370             | 88               |
| 71  | 150     | 1           | 375             | 89               | 71  | 150     | 1           | 375             | 89               |
| 72  | 180     | 1           | 380             | 90               | 72  | 180     | 1           | 380             | 90               |
| 73  | 210     | 1           | 385             | 91               | 73  | 210     | 1           | 385             | 91               |
| 74  | 240     | 1           | 390             | 92               | 74  | 240     | 1           | 390             | 92               |
| 75  | 270     | 1           | 395             | 93               | 75  | 270     | 1           | 395             | 93               |
| 76  | 300     | 1           | 400             | 94               | 76  | 300     | 1           | 400             | 94               |
| 77  | 330     | 1           | 405             | 95               | 77  | 330     | 1           | 405             | 95               |
| 78  | 360     | 1           | 410             | 96               | 78  | 360     | 1           | 410             | 96               |
| 79  | 0       | 1           | 415             | 97               | 79  | 0       | 1           | 415             | 97               |
| 80  | 30      | 1           | 420             | 98               | 80  | 30      | 1           | 420             | 98               |
| 81  | 60      | 1           | 425             | 99               | 81  | 60      | 1           | 425             | 99               |
| 82  | 90      | 1           | 430             | 100              | 82  | 90      | 1           | 430             | 100              |
| 83  | 120     | 1           | 435             | 101              | 83  | 120     | 1           | 435             | 101              |
| 84  | 150     | 1           | 440             | 102              | 84  | 150     | 1           | 440             | 102              |
| 85  | 180     | 1           | 445             | 103              | 85  | 180     | 1           | 445             | 103              |
| 86  | 210     | 1           | 450             | 104              | 86  | 210     | 1           | 450             | 104              |
| 87  | 240     | 1           | 455             | 105              | 87  | 240     | 1           | 455             | 105              |
| 88  | 270     | 1           | 460             | 106              | 88  | 270     | 1           | 460             | 106              |
| 89  | 300     | 1           | 465             | 107              | 89  | 300     | 1           | 465             | 107              |
| 90  | 330     | 1           | 470             | 108              | 90  | 330     | 1           | 470             | 108              |
| 91  | 360     | 1           | 475             | 109              | 91  | 360     | 1           | 475             | 109              |
| 92  | 0       | 1           | 480             | 110              | 92  | 0       | 1           | 480             | 110              |
| 93  | 30      | 1           | 485             | 111              | 93  | 30      | 1           | 485             | 111              |
| 94  | 60      | 1           | 490             | 112              | 94  | 60      | 1           | 490             | 112              |
| 95  | 90      | 1           | 495             | 113              | 95  | 90      | 1           | 495             | 113              |
| 96  | 120     | 1           | 500             | 114              | 96  | 120     | 1           | 500             | 114              |
| 97  | 150     | 1           | 505             | 115              | 97  | 150     | 1           | 505             | 115              |
| 98  | 180     | 1           | 510             | 116              | 98  | 180     | 1           | 510             | 116              |
| 99  | 210     | 1           | 515             | 117              | 99  | 210     | 1           | 515             | 117              |
| 100 | 240     | 1           | 520             | 118              | 100 | 240     | 1           | 520             | 118              |

TABLE 6 -- CLADDING AND GLASS LOADS -- CONFIGURATION A -- TRIAD PLAZA HOTEL  
 LOWEST VALUE OF ABS(CPMAX) OR ABS(CPMIN), PEAK LOAD AND GLASS LOAD (1 MINUTE EQUIVALENT)  
 REFERENCE PRESSURE = 34 PSF GLASS LOAD FACTOR = 730

| TAP  | AZI -<br>MUTH | PRESS<br>COEFF | PEAK<br>LOAD<br>(<br>PSF) | GLASS<br>LOAD<br>(<br>PSF) | TAP  | AZI -<br>MUTH | PRESS<br>COEFF | PEAK<br>LOAD<br>(<br>PSF) | GLASS<br>LOAD<br>(<br>PSF) | TAP  | AZI -<br>MUTH | PRESS<br>COEFF | PEAK<br>LOAD<br>(<br>PSF) | GLASS<br>LOAD<br>(<br>PSF) |
|------|---------------|----------------|---------------------------|----------------------------|------|---------------|----------------|---------------------------|----------------------------|------|---------------|----------------|---------------------------|----------------------------|
| 1209 | 1805          | 028            | 313                       | 22.9                       | 1910 | 45            | 135            | 45.4                      | 33.5                       | 1910 | 45            | 135            | 45.8                      | 33.5                       |
| 1210 | 1805          | 028            | 313                       | 22.4                       | 1911 | 45            | 135            | 45.4                      | 33.5                       | 1911 | 45            | 135            | 48.1                      | 33.5                       |
| 1211 | 150           | 090            | 305                       | 22.4                       | 1912 | 105           | 155            | 43.5                      | 31.4                       | 1912 | 105           | 155            | 48.1                      | 31.4                       |
| 1901 | 60            | 077            | 245                       | 17.9                       | 1913 | 225           | 195            | 43.8                      | 31.4                       | 1913 | 225           | 195            | 55.5                      | 31.4                       |
| 1902 | 90            | 076            | 245                       | 17.8                       | 1914 | 15            | 15             | 43.8                      | 31.4                       | 1914 | 15            | 15             | 55.5                      | 31.4                       |
| 1903 | 90            | 076            | 245                       | 23.8                       | 1915 | 15            | 15             | 43.8                      | 31.4                       | 1915 | 15            | 15             | 55.5                      | 31.4                       |







TABLE 6 -- CLADDING AND GLASS LOADS -- CONFIGURATION B -- TRIAD PLAZA OFFICE BUILDING  
 LARGEST VALUE OF ABS(CP MAX) OR ABS(CP MIN), PEAK LOAD AND GLASS LOAD (1 MINUTE EQUIVALENT)  
 REFERENCE PRESSURE = 34 PSF GLASS LOAD FACTOR = 1.730

| TAP  | AZIMUTH | PRESS COEFF | PEAK LOAD ( ) | GLASS LOAD ( ) | TAP  | AZIMUTH | PRESS COEFF | PEAK LOAD ( ) | GLASS LOAD ( ) | TAP  | AZIMUTH | PRESS COEFF | PEAK LOAD ( ) | GLASS LOAD ( ) |
|------|---------|-------------|---------------|----------------|------|---------|-------------|---------------|----------------|------|---------|-------------|---------------|----------------|
| 1824 | 345     | .61         | 20.7          | 15.1           | 1829 | 195     | .92         | 31.9          | 22.8           | 1834 | 285     | .65         | 21.6          | 15.9           |
| 1825 | 135     | .69         | 26.9          | 19.6           | 1830 | 125     | .68         | 23.4          | 16.9           | 1835 | 15      | .48         | 16.3          | 11.9           |
| 1826 | 135     | .69         | 23.4          | 17.1           | 1831 | 30      | .63         | 21.4          | 15.6           | 1836 | 90      | .62         | 23.5          | 15.7           |
| 1827 | 370     | .82         | 41.5          | 30.3           | 1832 | 165     | .85         | 34.4          | 25.1           | 1837 | 275     | .64         | 22.8          | 17.9           |
| 1828 |         |             | 27.8          | 20.3           | 1833 |         |             | 29.0          | 21.2           | 1838 |         |             | 28.5          | 20.9           |

TABLE 7.

TOTAL FORCE AND MOMENT LOADS : TRIAD PLAZA HOTEL BUILDING e

| REF. PRESS = 34.0 PSF | GUST FACTOR = 1.32 | REF. AREA = 1800 SQ. FT. | REF. LENGTH = 200 FT. |                    |     |     |     |                          |        |        |
|-----------------------|--------------------|--------------------------|-----------------------|--------------------|-----|-----|-----|--------------------------|--------|--------|
| AZIMUTH               | CFX                | CFY                      | FORCE(X)<br>(KIPS)    | FORCE(Y)<br>(KIPS) | CMX | CMY | CMZ | MOM(X)<br>(1000-FT-KIPS) | MOM(Y) | MOM(Z) |
| 0                     | 94                 | 1                        | 57                    | 92                 | 89  | 4   | 68  | 78                       | 88     | 73     |
| 15                    | 56                 | 2                        | 89                    | 45                 | 32  | 6   | 50  | 64                       | 33     | 32     |
| 30                    | 62                 | 1                        | 24                    | 22                 | 44  | 9   | 10  | 88                       | 27     | 27     |
| 45                    | 25                 | 1                        | 38                    | 35                 | 70  | 2   | 25  | 88                       | 56     | 45     |
| 60                    | 78                 | 1                        | 29                    | 70                 | 29  | 6   | 65  | 88                       | 69     | 53     |
| 75                    | 11                 | 1                        | 10                    | 10                 | 22  | 7   | 89  | 88                       | 57     | 59     |
| 90                    | 15                 | 1                        | 22                    | 37                 | 82  | 5   | 7   | 88                       | 23     | 26     |
| 105                   | 1                  | 1                        | 16                    | 9                  | 7   | 2   | 4   | 88                       | 51     | 16     |
| 120                   | 1                  | 1                        | 22                    | 1                  | 1   | 3   | 1   | 88                       | 10     | 4      |
| 135                   | 1                  | 1                        | 16                    | 7                  | 1   | 5   | 1   | 88                       | 2      | 4      |
| 150                   | 1                  | 1                        | 8                     | 3                  | 1   | 8   | 1   | 88                       | 1      | 4      |
| 165                   | 1                  | 1                        | 16                    | 7                  | 1   | 5   | 1   | 88                       | 1      | 4      |
| 180                   | 1                  | 1                        | 22                    | 1                  | 1   | 3   | 1   | 88                       | 1      | 4      |
| 195                   | 1                  | 1                        | 16                    | 7                  | 1   | 5   | 1   | 88                       | 1      | 4      |
| 210                   | 1                  | 1                        | 8                     | 3                  | 1   | 8   | 1   | 88                       | 1      | 4      |
| 225                   | 1                  | 1                        | 16                    | 7                  | 1   | 5   | 1   | 88                       | 1      | 4      |
| 240                   | 1                  | 1                        | 22                    | 1                  | 1   | 3   | 1   | 88                       | 1      | 4      |
| 255                   | 1                  | 1                        | 16                    | 7                  | 1   | 5   | 1   | 88                       | 1      | 4      |
| 270                   | 1                  | 1                        | 8                     | 3                  | 1   | 8   | 1   | 88                       | 1      | 4      |
| 285                   | 1                  | 1                        | 16                    | 7                  | 1   | 5   | 1   | 88                       | 1      | 4      |
| 300                   | 1                  | 1                        | 22                    | 1                  | 1   | 3   | 1   | 88                       | 1      | 4      |
| 315                   | 1                  | 1                        | 16                    | 7                  | 1   | 5   | 1   | 88                       | 1      | 4      |
| 330                   | 1                  | 1                        | 8                     | 3                  | 1   | 8   | 1   | 88                       | 1      | 4      |
| 345                   | 1                  | 1                        | 16                    | 7                  | 1   | 5   | 1   | 88                       | 1      | 4      |
| 360                   | 1                  | 1                        | 22                    | 1                  | 1   | 3   | 1   | 88                       | 1      | 4      |

TABLE 7.  
FLOOR FORCE AND MOMENT LOADS : TRIAD PLAZA HOTEL BUILDING @

| FLOOR | CFX  | CFY  | GUST FACTOR = 1.32 | REF. AREA = 1800 SQ. FT. | REF. LENGTH = 200 FT. | MOM(X) | MOM(Y)         | MOM(Z) |
|-------|------|------|--------------------|--------------------------|-----------------------|--------|----------------|--------|
|       |      |      | FORCE(X)<br>(KIPS) | CMX                      | CMY                   | CMZ    | (1000-FT-KIPS) |        |
| 1     | 0.00 | 0.00 | 0.00               | 0.00                     | 0.00                  | 0.00   | 0.00           | 0.00   |
| 2     | 0.00 | 0.00 | 0.00               | 0.00                     | 0.00                  | 0.00   | 0.00           | 0.00   |
| 3     | 0.00 | 0.00 | 0.00               | 0.00                     | 0.00                  | 0.00   | 0.00           | 0.00   |
| 4     | 0.09 | 0.00 | 9.33               | 0.08                     | 0.23                  | 0.07   | 0.50           | 0.43   |
| 5     | 0.09 | 0.00 | 9.33               | 1.13                     | 0.33                  | 0.17   | 6.99           | 3.90   |
| 6     | 0.09 | 0.00 | 9.33               | 1.46                     | 0.44                  | 0.06   | 8.01           | 3.48   |
| 7     | 0.09 | 0.00 | 9.33               | 1.67                     | 0.55                  | 0.06   | 9.07           | 2.65   |
| 8     | 0.10 | 0.00 | 10.24              | 1.79                     | 0.66                  | 0.06   | 0.16           | 1.84   |
| 9     | 0.10 | 0.00 | 10.24              | 2.22                     | 0.66                  | 0.05   | 1.24           | 1.43   |
| 10    | 0.09 | 0.00 | 9.33               | 2.45                     | 0.66                  | 0.05   | 2.45           | 1.32   |
| 11    | 0.08 | 0.00 | 8.27               | 2.57                     | 0.66                  | 0.06   | 3.71           | 1.08   |
| 12    | 0.07 | 0.00 | 7.20               | 2.57                     | 0.66                  | 0.06   | 5.02           | 0.83   |
| 13    | 0.07 | 0.00 | 7.20               | 2.57                     | 0.66                  | 0.06   | 6.27           | 0.59   |
| 14    | 0.07 | 0.00 | 7.20               | 2.57                     | 0.66                  | 0.06   | 7.51           | 0.34   |
| 15    | 0.07 | 0.00 | 7.20               | 2.57                     | 0.66                  | 0.06   | 8.76           | 0.10   |
| 16    | 0.07 | 0.00 | 7.20               | 2.57                     | 0.66                  | 0.06   | 10.00          | 0.00   |
| 17    | 0.07 | 0.00 | 7.20               | 2.57                     | 0.66                  | 0.06   | 11.25          | 0.00   |
| 18    | 0.07 | 0.00 | 7.20               | 2.57                     | 0.66                  | 0.06   | 12.50          | 0.00   |
| 19    | 0.07 | 0.00 | 7.20               | 2.57                     | 0.66                  | 0.06   | 13.75          | 0.00   |
| 20    | 0.07 | 0.00 | 7.20               | 2.57                     | 0.66                  | 0.06   | 15.00          | 0.00   |
| 21    | 0.07 | 0.00 | 7.20               | 2.57                     | 0.66                  | 0.06   | 16.25          | 0.00   |
| 22    | 0.07 | 0.00 | 7.20               | 2.57                     | 0.66                  | 0.06   | 17.50          | 0.00   |
| 23    | 0.07 | 0.00 | 7.20               | 2.57                     | 0.66                  | 0.06   | 18.75          | 0.00   |
| 24    | 0.07 | 0.00 | 7.20               | 2.57                     | 0.66                  | 0.06   | 20.00          | 0.00   |
| 25    | 0.07 | 0.00 | 7.20               | 2.57                     | 0.66                  | 0.06   | 21.25          | 0.00   |
| 26    | 0.07 | 0.00 | 7.20               | 2.57                     | 0.66                  | 0.06   | 22.50          | 0.00   |
| 27    | 0.07 | 0.00 | 7.20               | 2.57                     | 0.66                  | 0.06   | 23.75          | 0.00   |
| 28    | 0.07 | 0.00 | 7.20               | 2.57                     | 0.66                  | 0.06   | 25.00          | 0.00   |
| 29    | 0.07 | 0.00 | 7.20               | 2.57                     | 0.66                  | 0.06   | 26.25          | 0.00   |
| 30    | 0.07 | 0.00 | 7.20               | 2.57                     | 0.66                  | 0.06   | 27.50          | 0.00   |

TABLE 7.  
FLOOR FORCE AND MOMENT LOADS : TRIAD PLAZA HOTEL BUILDING 8

| FLOOR | CFX  | CFY  | FORCE(X)<br>(KIPS) | FORCE(Y)<br>(KIPS) | CMX  | CMY  | CMZ  | REF. AREA = 1800 SQ. FT. | MOM(X)<br>(1000-FI-KIPS) | MOM(Y)<br>(1000-FI-KIPS) | MOM(Z) |
|-------|------|------|--------------------|--------------------|------|------|------|--------------------------|--------------------------|--------------------------|--------|
| 1     | 0.00 | 0.00 | 0.00               | 0.00               | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00                     | 0.00   |
| 2     | 0.00 | 0.00 | 0.00               | 0.00               | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00                     | 0.00   |
| 3     | 0.36 | 0.44 | 4.67               | 4.67               | 1.24 | 1.40 | 0.05 | 0.00                     | 0.00                     | 0.00                     | 0.00   |
| 4     | 0.33 | 0.44 | 4.47               | 4.47               | 1.17 | 1.23 | 0.03 | 0.00                     | 0.00                     | 0.00                     | 0.00   |
| 5     | 0.32 | 0.45 | 4.33               | 4.48               | 1.15 | 1.24 | 0.02 | 0.00                     | 0.00                     | 0.00                     | 0.00   |
| 6     | 0.30 | 0.46 | 4.19               | 4.59               | 1.14 | 1.25 | 0.01 | 0.00                     | 0.00                     | 0.00                     | 0.00   |
| 7     | 0.28 | 0.47 | 4.05               | 4.69               | 1.13 | 1.26 | 0.00 | 0.00                     | 0.00                     | 0.00                     | 0.00   |
| 8     | 0.26 | 0.47 | 3.91               | 4.79               | 1.12 | 1.27 | 0.00 | 0.00                     | 0.00                     | 0.00                     | 0.00   |
| 9     | 0.24 | 0.48 | 3.77               | 4.89               | 1.11 | 1.28 | 0.00 | 0.00                     | 0.00                     | 0.00                     | 0.00   |
| 10    | 0.22 | 0.48 | 3.63               | 4.99               | 1.10 | 1.29 | 0.00 | 0.00                     | 0.00                     | 0.00                     | 0.00   |
| 11    | 0.20 | 0.49 | 3.49               | 5.09               | 1.09 | 1.30 | 0.00 | 0.00                     | 0.00                     | 0.00                     | 0.00   |
| 12    | 0.18 | 0.49 | 3.35               | 5.19               | 1.08 | 1.31 | 0.00 | 0.00                     | 0.00                     | 0.00                     | 0.00   |
| 13    | 0.16 | 0.50 | 3.21               | 5.29               | 1.07 | 1.32 | 0.00 | 0.00                     | 0.00                     | 0.00                     | 0.00   |
| 14    | 0.14 | 0.50 | 3.07               | 5.39               | 1.06 | 1.33 | 0.00 | 0.00                     | 0.00                     | 0.00                     | 0.00   |
| 15    | 0.12 | 0.50 | 2.93               | 5.49               | 1.05 | 1.34 | 0.00 | 0.00                     | 0.00                     | 0.00                     | 0.00   |
| 16    | 0.10 | 0.50 | 2.79               | 5.59               | 1.04 | 1.35 | 0.00 | 0.00                     | 0.00                     | 0.00                     | 0.00   |
| 17    | 0.08 | 0.50 | 2.65               | 5.69               | 1.03 | 1.36 | 0.00 | 0.00                     | 0.00                     | 0.00                     | 0.00   |
| 18    | 0.06 | 0.50 | 2.51               | 5.79               | 1.02 | 1.37 | 0.00 | 0.00                     | 0.00                     | 0.00                     | 0.00   |
| 19    | 0.04 | 0.50 | 2.37               | 5.89               | 1.01 | 1.38 | 0.00 | 0.00                     | 0.00                     | 0.00                     | 0.00   |
| 20    | 0.02 | 0.50 | 2.23               | 5.99               | 1.00 | 1.39 | 0.00 | 0.00                     | 0.00                     | 0.00                     | 0.00   |
| 21    | 0.00 | 0.50 | 2.09               | 6.09               | 0.99 | 1.40 | 0.00 | 0.00                     | 0.00                     | 0.00                     | 0.00   |
| 22    | 0.00 | 0.50 | 1.95               | 6.19               | 0.98 | 1.41 | 0.00 | 0.00                     | 0.00                     | 0.00                     | 0.00   |
| 23    | 0.00 | 0.50 | 1.81               | 6.29               | 0.97 | 1.42 | 0.00 | 0.00                     | 0.00                     | 0.00                     | 0.00   |
| 24    | 0.00 | 0.50 | 1.67               | 6.39               | 0.96 | 1.43 | 0.00 | 0.00                     | 0.00                     | 0.00                     | 0.00   |
| 25    | 0.00 | 0.50 | 1.53               | 6.49               | 0.95 | 1.44 | 0.00 | 0.00                     | 0.00                     | 0.00                     | 0.00   |
| 26    | 0.00 | 0.50 | 1.39               | 6.59               | 0.94 | 1.45 | 0.00 | 0.00                     | 0.00                     | 0.00                     | 0.00   |
| 27    | 0.00 | 0.50 | 1.25               | 6.69               | 0.93 | 1.46 | 0.00 | 0.00                     | 0.00                     | 0.00                     | 0.00   |
| 28    | 0.00 | 0.50 | 1.11               | 6.79               | 0.92 | 1.47 | 0.00 | 0.00                     | 0.00                     | 0.00                     | 0.00   |
| 29    | 0.00 | 0.50 | 0.97               | 6.89               | 0.91 | 1.48 | 0.00 | 0.00                     | 0.00                     | 0.00                     | 0.00   |
| 30    | 0.00 | 0.50 | 0.83               | 6.99               | 0.90 | 1.49 | 0.00 | 0.00                     | 0.00                     | 0.00                     | 0.00   |



TABLE 7.  
 FLOOR FORCE AND MOMENT LOADS : TRIAD PLAZA HOTEL BUILDING e

WIND DIRECTION 45  
 REF. PRESS = 34.0 PSF

GUST FACTOR = 1.32

REF. AREA = 1800 SQ. FT.

LENGTH = 200 FT.

| FLOOR | CFX  | CFY  | FORCE(X)<br>(KIPS) | FORCE(Y)<br>(KIPS) | CMX   | CMY  | CHZ  | MOM(X)<br>(1000-FT-KIPS) | MOM(Y)<br>(1000-FT-KIPS) | MOM(Z) |
|-------|------|------|--------------------|--------------------|-------|------|------|--------------------------|--------------------------|--------|
| 1     | 0.00 | 0.00 | 0.00               | 0.00               | 0.00  | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 2     | 0.00 | 0.00 | 0.00               | 0.00               | 0.00  | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 3     | 0.49 | 0.58 | 51.66              | 61.12              | 1.19  | 1.35 | 0.05 | 41.80                    | 86.90                    | 1.106  |
| 4     | 0.43 | 0.57 | 43.25              | 51.20              | 2.24  | 1.15 | 0.02 | 35.69                    | 168.80                   | 3.442  |
| 5     | 0.39 | 0.57 | 38.25              | 46.00              | 2.91  | 1.18 | 0.02 | 30.93                    | 169.11                   | 4.225  |
| 6     | 0.35 | 0.56 | 33.25              | 40.80              | 3.44  | 1.18 | 0.02 | 25.83                    | 171.44                   | 5.008  |
| 7     | 0.31 | 0.56 | 28.25              | 35.60              | 3.91  | 1.19 | 0.02 | 20.64                    | 173.94                   | 5.791  |
| 8     | 0.27 | 0.55 | 23.25              | 30.40              | 4.39  | 1.19 | 0.02 | 15.44                    | 176.50                   | 6.574  |
| 9     | 0.22 | 0.55 | 18.25              | 25.20              | 4.82  | 1.19 | 0.02 | 10.24                    | 179.11                   | 7.357  |
| 10    | 0.17 | 0.55 | 13.25              | 20.00              | 5.25  | 1.19 | 0.02 | 5.04                     | 181.78                   | 8.140  |
| 11    | 0.12 | 0.55 | 8.25               | 14.80              | 5.68  | 1.20 | 0.02 | 0.84                     | 184.44                   | 8.923  |
| 12    | 0.07 | 0.55 | 3.25               | 9.60               | 6.11  | 1.20 | 0.02 | 0.64                     | 187.11                   | 9.706  |
| 13    | 0.02 | 0.55 | 0.25               | 4.40               | 6.54  | 1.20 | 0.02 | 0.44                     | 189.78                   | 10.489 |
| 14    | 0.00 | 0.55 | 0.00               | 0.00               | 6.97  | 1.20 | 0.02 | 0.24                     | 192.44                   | 11.272 |
| 15    | 0.00 | 0.55 | 0.00               | 0.00               | 7.40  | 1.20 | 0.02 | 0.04                     | 195.11                   | 12.055 |
| 16    | 0.00 | 0.55 | 0.00               | 0.00               | 7.83  | 1.20 | 0.02 | 0.00                     | 197.78                   | 12.838 |
| 17    | 0.00 | 0.55 | 0.00               | 0.00               | 8.26  | 1.20 | 0.02 | 0.00                     | 200.44                   | 13.621 |
| 18    | 0.00 | 0.55 | 0.00               | 0.00               | 8.69  | 1.20 | 0.02 | 0.00                     | 203.11                   | 14.404 |
| 19    | 0.00 | 0.55 | 0.00               | 0.00               | 9.12  | 1.20 | 0.02 | 0.00                     | 205.78                   | 15.187 |
| 20    | 0.00 | 0.55 | 0.00               | 0.00               | 9.55  | 1.20 | 0.02 | 0.00                     | 208.44                   | 15.970 |
| 21    | 0.00 | 0.55 | 0.00               | 0.00               | 9.98  | 1.20 | 0.02 | 0.00                     | 211.11                   | 16.753 |
| 22    | 0.00 | 0.55 | 0.00               | 0.00               | 10.41 | 1.20 | 0.02 | 0.00                     | 213.78                   | 17.536 |
| 23    | 0.00 | 0.55 | 0.00               | 0.00               | 10.84 | 1.20 | 0.02 | 0.00                     | 216.44                   | 18.319 |
| 24    | 0.00 | 0.55 | 0.00               | 0.00               | 11.27 | 1.20 | 0.02 | 0.00                     | 219.11                   | 19.102 |
| 25    | 0.00 | 0.55 | 0.00               | 0.00               | 11.70 | 1.20 | 0.02 | 0.00                     | 221.78                   | 19.885 |
| 26    | 0.00 | 0.55 | 0.00               | 0.00               | 12.13 | 1.20 | 0.02 | 0.00                     | 224.44                   | 20.668 |
| 27    | 0.00 | 0.55 | 0.00               | 0.00               | 12.56 | 1.20 | 0.02 | 0.00                     | 227.11                   | 21.451 |
| 28    | 0.00 | 0.55 | 0.00               | 0.00               | 12.99 | 1.20 | 0.02 | 0.00                     | 229.78                   | 22.234 |
| 29    | 0.00 | 0.55 | 0.00               | 0.00               | 13.42 | 1.20 | 0.02 | 0.00                     | 232.44                   | 23.017 |
| 30    | 0.00 | 0.55 | 0.00               | 0.00               | 13.85 | 1.20 | 0.02 | 0.00                     | 235.11                   | 23.800 |







TABLE 7.  
FLOOR FORCE AND MOMENT LOADS : TRIAD PLAZA HOTEL BUILDING 8

| FLOOR | CFX  | CFY  | FORCE(X)<br>(KIPS) | FORCE(Y)<br>(KIPS) | CMX  | CMY  | CHZ  | MOM(X)<br>(1000-FT-KIPS) | MOM(Y)<br>(1000-FT-KIPS) | MOM(Z) |
|-------|------|------|--------------------|--------------------|------|------|------|--------------------------|--------------------------|--------|
| 1     | 0.00 | 0.00 | 0.00               | 0.00               | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 2     | 0.00 | 0.00 | 0.00               | 0.00               | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 3     | 0.58 | 0.51 | 61.44              | 53.90              | 1.16 | 1.60 | 0.05 | 0.00                     | 0.00                     | 1.42   |
| 4     | 0.54 | 0.51 | 57.22              | 54.41              | 1.09 | 1.50 | 0.08 | 0.00                     | 0.00                     | 1.25   |
| 5     | 0.52 | 0.51 | 53.10              | 54.44              | 1.06 | 1.42 | 0.10 | 0.00                     | 0.00                     | 1.08   |
| 6     | 0.49 | 0.51 | 48.99              | 54.47              | 1.02 | 1.35 | 0.12 | 0.00                     | 0.00                     | 0.92   |
| 7     | 0.46 | 0.51 | 46.99              | 54.50              | 0.98 | 1.28 | 0.14 | 0.00                     | 0.00                     | 0.76   |
| 8     | 0.43 | 0.52 | 46.13              | 54.52              | 0.94 | 1.22 | 0.16 | 0.00                     | 0.00                     | 0.61   |
| 9     | 0.43 | 0.52 | 46.68              | 54.55              | 0.94 | 1.16 | 0.17 | 0.00                     | 0.00                     | 0.46   |
| 10    | 0.44 | 0.52 | 47.05              | 54.57              | 0.94 | 1.10 | 0.17 | 0.00                     | 0.00                     | 0.31   |
| 11    | 0.45 | 0.52 | 47.56              | 54.59              | 0.93 | 1.04 | 0.17 | 0.00                     | 0.00                     | 0.16   |
| 12    | 0.50 | 0.51 | 50.67              | 54.60              | 0.90 | 0.98 | 0.15 | 0.00                     | 0.00                     | 0.00   |
| 13    | 0.59 | 0.50 | 59.71              | 54.59              | 0.85 | 0.92 | 0.10 | 0.00                     | 0.00                     | 0.00   |
| 14    | 0.67 | 0.48 | 71.63              | 54.56              | 0.79 | 0.86 | 0.05 | 0.00                     | 0.00                     | 0.00   |
| 15    | 0.62 | 0.47 | 67.11              | 54.52              | 0.76 | 0.80 | 0.02 | 0.00                     | 0.00                     | 0.00   |
| 16    | 0.67 | 0.46 | 71.63              | 54.47              | 0.74 | 0.74 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 17    | 0.66 | 0.45 | 70.87              | 54.41              | 0.73 | 0.68 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 18    | 0.62 | 0.44 | 66.35              | 54.34              | 0.71 | 0.62 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 19    | 0.62 | 0.44 | 66.35              | 54.28              | 0.71 | 0.56 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 20    | 0.62 | 0.44 | 66.35              | 54.22              | 0.71 | 0.50 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 21    | 0.62 | 0.44 | 66.35              | 54.16              | 0.71 | 0.44 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 22    | 0.62 | 0.44 | 66.35              | 54.10              | 0.71 | 0.38 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 23    | 0.62 | 0.44 | 66.35              | 54.04              | 0.71 | 0.32 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 24    | 0.62 | 0.44 | 66.35              | 53.98              | 0.71 | 0.26 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 25    | 0.62 | 0.44 | 66.35              | 53.92              | 0.71 | 0.20 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 26    | 0.62 | 0.44 | 66.35              | 53.86              | 0.71 | 0.14 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 27    | 0.62 | 0.44 | 66.35              | 53.80              | 0.71 | 0.08 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 28    | 0.62 | 0.44 | 66.35              | 53.74              | 0.71 | 0.02 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 29    | 0.62 | 0.44 | 66.35              | 53.68              | 0.71 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 30    | 0.62 | 0.44 | 66.35              | 53.62              | 0.71 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |







TABLE 7. FLOOR FORCE AND MOMENT LOADS : TRIAD PLAZA HOTEL BUILDING #

| FLOOR | WIND DIRECTION 150 |      | GUST FACTOR = 1.32 | REF. AREA = 1800 SQ.FT. |        | REF. LENGTH = 200 FT. | REF. MOMENT    |                | REF. MOMENT    |                |
|-------|--------------------|------|--------------------|-------------------------|--------|-----------------------|----------------|----------------|----------------|----------------|
|       | CFX                | CFY  |                    | CMX                     | CMY    |                       | MOM(X)         | MOM(Y)         | MOM(X)         | MOM(Y)         |
|       | PSF                | PSF  | (KIPS)             | (KIPS)                  | (KIPS) | (1000-FT-KIPS)        | (1000-FT-KIPS) | (1000-FT-KIPS) | (1000-FT-KIPS) | (1000-FT-KIPS) |
| 1     | 0.00               | 0.00 | 0.00               | 0.00                    | 0.00   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 2     | 0.00               | 0.00 | 0.00               | 0.00                    | 0.00   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 3     | 0.09               | 0.00 | 0.14               | 0.02                    | 0.00   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 4     | 0.09               | 0.01 | 0.19               | 0.03                    | 0.04   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 5     | 0.09               | 0.02 | 0.24               | 0.04                    | 0.05   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 6     | 0.09               | 0.03 | 0.29               | 0.05                    | 0.07   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 7     | 0.09               | 0.04 | 0.34               | 0.06                    | 0.09   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 8     | 0.09               | 0.05 | 0.39               | 0.07                    | 0.11   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 9     | 0.09               | 0.06 | 0.44               | 0.08                    | 0.13   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 10    | 0.09               | 0.07 | 0.49               | 0.09                    | 0.15   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 11    | 0.09               | 0.08 | 0.54               | 0.10                    | 0.17   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 12    | 0.09               | 0.09 | 0.59               | 0.11                    | 0.19   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 13    | 0.09               | 0.10 | 0.64               | 0.12                    | 0.21   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 14    | 0.09               | 0.11 | 0.69               | 0.13                    | 0.23   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 15    | 0.09               | 0.12 | 0.74               | 0.14                    | 0.25   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 16    | 0.09               | 0.13 | 0.79               | 0.15                    | 0.27   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 17    | 0.09               | 0.14 | 0.84               | 0.16                    | 0.29   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 18    | 0.09               | 0.15 | 0.89               | 0.17                    | 0.31   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 19    | 0.09               | 0.16 | 0.94               | 0.18                    | 0.33   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 20    | 0.09               | 0.17 | 0.99               | 0.19                    | 0.35   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 21    | 0.09               | 0.18 | 1.04               | 0.20                    | 0.37   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 22    | 0.09               | 0.19 | 1.09               | 0.21                    | 0.39   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 23    | 0.09               | 0.20 | 1.14               | 0.22                    | 0.41   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 24    | 0.09               | 0.21 | 1.19               | 0.23                    | 0.43   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 25    | 0.09               | 0.22 | 1.24               | 0.24                    | 0.45   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 26    | 0.09               | 0.23 | 1.29               | 0.25                    | 0.47   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 27    | 0.09               | 0.24 | 1.34               | 0.26                    | 0.49   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 28    | 0.09               | 0.25 | 1.39               | 0.27                    | 0.51   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 29    | 0.09               | 0.26 | 1.44               | 0.28                    | 0.53   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 30    | 0.09               | 0.27 | 1.49               | 0.29                    | 0.55   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 31    | 0.09               | 0.28 | 1.54               | 0.30                    | 0.57   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 32    | 0.09               | 0.29 | 1.59               | 0.31                    | 0.59   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 33    | 0.09               | 0.30 | 1.64               | 0.32                    | 0.61   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 34    | 0.09               | 0.31 | 1.69               | 0.33                    | 0.63   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 35    | 0.09               | 0.32 | 1.74               | 0.34                    | 0.65   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 36    | 0.09               | 0.33 | 1.79               | 0.35                    | 0.67   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 37    | 0.09               | 0.34 | 1.84               | 0.36                    | 0.69   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 38    | 0.09               | 0.35 | 1.89               | 0.37                    | 0.71   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 39    | 0.09               | 0.36 | 1.94               | 0.38                    | 0.73   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 40    | 0.09               | 0.37 | 1.99               | 0.39                    | 0.75   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 41    | 0.09               | 0.38 | 2.04               | 0.40                    | 0.77   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 42    | 0.09               | 0.39 | 2.09               | 0.41                    | 0.79   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 43    | 0.09               | 0.40 | 2.14               | 0.42                    | 0.81   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 44    | 0.09               | 0.41 | 2.19               | 0.43                    | 0.83   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 45    | 0.09               | 0.42 | 2.24               | 0.44                    | 0.85   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 46    | 0.09               | 0.43 | 2.29               | 0.45                    | 0.87   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 47    | 0.09               | 0.44 | 2.34               | 0.46                    | 0.89   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 48    | 0.09               | 0.45 | 2.39               | 0.47                    | 0.91   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 49    | 0.09               | 0.46 | 2.44               | 0.48                    | 0.93   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 50    | 0.09               | 0.47 | 2.49               | 0.49                    | 0.95   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 51    | 0.09               | 0.48 | 2.54               | 0.50                    | 0.97   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 52    | 0.09               | 0.49 | 2.59               | 0.51                    | 0.99   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 53    | 0.09               | 0.50 | 2.64               | 0.52                    | 1.01   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 54    | 0.09               | 0.51 | 2.69               | 0.53                    | 1.03   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 55    | 0.09               | 0.52 | 2.74               | 0.54                    | 1.05   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 56    | 0.09               | 0.53 | 2.79               | 0.55                    | 1.07   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 57    | 0.09               | 0.54 | 2.84               | 0.56                    | 1.09   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 58    | 0.09               | 0.55 | 2.89               | 0.57                    | 1.11   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 59    | 0.09               | 0.56 | 2.94               | 0.58                    | 1.13   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 60    | 0.09               | 0.57 | 2.99               | 0.59                    | 1.15   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 61    | 0.09               | 0.58 | 3.04               | 0.60                    | 1.17   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 62    | 0.09               | 0.59 | 3.09               | 0.61                    | 1.19   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 63    | 0.09               | 0.60 | 3.14               | 0.62                    | 1.21   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 64    | 0.09               | 0.61 | 3.19               | 0.63                    | 1.23   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 65    | 0.09               | 0.62 | 3.24               | 0.64                    | 1.25   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 66    | 0.09               | 0.63 | 3.29               | 0.65                    | 1.27   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 67    | 0.09               | 0.64 | 3.34               | 0.66                    | 1.29   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 68    | 0.09               | 0.65 | 3.39               | 0.67                    | 1.31   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 69    | 0.09               | 0.66 | 3.44               | 0.68                    | 1.33   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 70    | 0.09               | 0.67 | 3.49               | 0.69                    | 1.35   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 71    | 0.09               | 0.68 | 3.54               | 0.70                    | 1.37   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 72    | 0.09               | 0.69 | 3.59               | 0.71                    | 1.39   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 73    | 0.09               | 0.70 | 3.64               | 0.72                    | 1.41   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 74    | 0.09               | 0.71 | 3.69               | 0.73                    | 1.43   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 75    | 0.09               | 0.72 | 3.74               | 0.74                    | 1.45   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 76    | 0.09               | 0.73 | 3.79               | 0.75                    | 1.47   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 77    | 0.09               | 0.74 | 3.84               | 0.76                    | 1.49   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 78    | 0.09               | 0.75 | 3.89               | 0.77                    | 1.51   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 79    | 0.09               | 0.76 | 3.94               | 0.78                    | 1.53   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 80    | 0.09               | 0.77 | 3.99               | 0.79                    | 1.55   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 81    | 0.09               | 0.78 | 4.04               | 0.80                    | 1.57   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 82    | 0.09               | 0.79 | 4.09               | 0.81                    | 1.59   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 83    | 0.09               | 0.80 | 4.14               | 0.82                    | 1.61   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 84    | 0.09               | 0.81 | 4.19               | 0.83                    | 1.63   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 85    | 0.09               | 0.82 | 4.24               | 0.84                    | 1.65   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 86    | 0.09               | 0.83 | 4.29               | 0.85                    | 1.67   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 87    | 0.09               | 0.84 | 4.34               | 0.86                    | 1.69   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 88    | 0.09               | 0.85 | 4.39               | 0.87                    | 1.71   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 89    | 0.09               | 0.86 | 4.44               | 0.88                    | 1.73   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 90    | 0.09               | 0.87 | 4.49               | 0.89                    | 1.75   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 91    | 0.09               | 0.88 | 4.54               | 0.90                    | 1.77   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 92    | 0.09               | 0.89 | 4.59               | 0.91                    | 1.79   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 93    | 0.09               | 0.90 | 4.64               | 0.92                    | 1.81   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 94    | 0.09               | 0.91 | 4.69               | 0.93                    | 1.83   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 95    | 0.09               | 0.92 | 4.74               | 0.94                    | 1.85   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 96    | 0.09               | 0.93 | 4.79               | 0.95                    | 1.87   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 97    | 0.09               | 0.94 | 4.84               | 0.96                    | 1.89   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 98    | 0.09               | 0.95 | 4.89               | 0.97                    | 1.91   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 99    | 0.09               | 0.96 | 4.94               | 0.98                    | 1.93   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |
| 100   | 0.09               | 0.97 | 4.99               | 0.99                    | 1.95   | 0.00                  | 0.00           | 0.00           | 0.00           | 0.00           |

TABLE 7.

FLOOR FORCE AND MOMENT LOADS : TRIAD PLAZA HOTEL BUILDING 8

WIND DIRECTION 165  
 REF. PRESS = 34.0 PSF  
 GUST FACTOR = 1.32  
 REF. AREA = 1800 SQ. FT.  
 REF. LENGTH = 200 FT.

| FLOOR | CFX  | CFY  | FORCE(X)<br>(KIPS) | FORCE(Y)<br>(KIPS) | CMX  | CMY  | CMZ  | MOM(X)<br>(1000-FT-KIPS) | MOM(Y)<br>(1000-FT-KIPS) | MOM(Z) |
|-------|------|------|--------------------|--------------------|------|------|------|--------------------------|--------------------------|--------|
| 00    | 0.00 | 0.00 | 0.00               | 0.00               | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 01    | 0.00 | 0.00 | 0.00               | 0.00               | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 02    | 0.02 | 0.05 | 2.07               | 5.28               | 0.01 | 0.01 | 0.00 | 0.288                    | 1.12                     | 0.80   |
| 03    | 0.01 | 0.04 | 1.41               | 4.33               | 0.02 | 0.00 | 0.00 | 3.221                    | 1.02                     | 0.74   |
| 04    | 0.01 | 0.04 | 1.41               | 4.33               | 0.02 | 0.00 | 0.00 | 3.221                    | 1.02                     | 0.74   |
| 05    | 0.01 | 0.03 | 1.41               | 3.55               | 0.01 | 0.00 | 0.00 | 3.221                    | 0.88                     | 0.67   |
| 06    | 0.00 | 0.02 | 1.27               | 2.82               | 0.01 | 0.00 | 0.00 | 2.561                    | 0.42                     | 0.45   |
| 07    | 0.00 | 0.02 | 1.27               | 2.82               | 0.01 | 0.00 | 0.00 | 2.561                    | 0.42                     | 0.45   |
| 08    | 0.01 | 0.01 | 1.27               | 2.05               | 0.01 | 0.00 | 0.00 | 2.561                    | 0.28                     | 0.34   |
| 09    | 0.01 | 0.01 | 1.27               | 2.05               | 0.01 | 0.00 | 0.00 | 2.561                    | 0.28                     | 0.34   |
| 10    | 0.02 | 0.01 | 2.55               | 1.85               | 0.01 | 0.01 | 0.00 | 1.653                    | 1.87                     | 0.39   |
| 11    | 0.02 | 0.01 | 2.55               | 1.85               | 0.01 | 0.01 | 0.00 | 1.653                    | 1.87                     | 0.39   |
| 12    | 0.03 | 0.01 | 3.59               | 1.85               | 0.00 | 0.02 | 0.00 | 1.034                    | 2.55                     | 0.33   |
| 13    | 0.04 | 0.00 | 3.59               | 1.85               | 0.00 | 0.03 | 0.00 | 1.034                    | 2.55                     | 0.33   |
| 14    | 0.04 | 0.00 | 3.59               | 1.85               | 0.00 | 0.04 | 0.00 | 1.034                    | 2.55                     | 0.33   |
| 15    | 0.04 | 0.00 | 3.59               | 1.85               | 0.00 | 0.04 | 0.00 | 1.034                    | 2.55                     | 0.33   |
| 16    | 0.04 | 0.01 | 4.32               | 1.68               | 0.01 | 0.04 | 0.00 | 0.66                     | 3.59                     | 0.27   |
| 17    | 0.04 | 0.01 | 4.32               | 1.68               | 0.01 | 0.04 | 0.00 | 0.66                     | 3.59                     | 0.27   |
| 18    | 0.04 | 0.01 | 4.32               | 1.68               | 0.01 | 0.04 | 0.00 | 0.66                     | 3.59                     | 0.27   |
| 19    | 0.04 | 0.01 | 4.32               | 1.68               | 0.01 | 0.04 | 0.00 | 0.66                     | 3.59                     | 0.27   |
| 20    | 0.03 | 0.01 | 3.55               | 1.55               | 0.02 | 0.04 | 0.00 | 2.72                     | 3.40                     | 0.14   |
| 21    | 0.03 | 0.01 | 3.55               | 1.55               | 0.02 | 0.04 | 0.00 | 2.72                     | 3.40                     | 0.14   |
| 22    | 0.03 | 0.01 | 3.55               | 1.55               | 0.02 | 0.04 | 0.00 | 2.72                     | 3.40                     | 0.14   |
| 23    | 0.03 | 0.01 | 3.55               | 1.55               | 0.02 | 0.04 | 0.00 | 2.72                     | 3.40                     | 0.14   |
| 24    | 0.03 | 0.02 | 3.55               | 1.55               | 0.01 | 0.04 | 0.01 | 2.55                     | 3.40                     | 0.05   |
| 25    | 0.03 | 0.02 | 3.55               | 1.55               | 0.01 | 0.04 | 0.01 | 2.55                     | 3.40                     | 0.05   |
| 26    | 0.03 | 0.02 | 3.55               | 1.55               | 0.01 | 0.04 | 0.01 | 2.55                     | 3.40                     | 0.05   |
| 27    | 0.03 | 0.02 | 3.55               | 1.55               | 0.01 | 0.04 | 0.01 | 2.55                     | 3.40                     | 0.05   |
| 28    | 0.03 | 0.02 | 3.55               | 1.55               | 0.01 | 0.04 | 0.01 | 2.55                     | 3.40                     | 0.05   |
| 29    | 0.03 | 0.02 | 3.55               | 1.55               | 0.01 | 0.04 | 0.01 | 2.55                     | 3.40                     | 0.05   |
| 30    | 0.03 | 0.02 | 3.55               | 1.55               | 0.01 | 0.04 | 0.01 | 2.55                     | 3.40                     | 0.05   |
| 31    | 0.03 | 0.02 | 3.55               | 1.55               | 0.01 | 0.04 | 0.01 | 2.55                     | 3.40                     | 0.05   |
| 32    | 0.03 | 0.02 | 3.55               | 1.55               | 0.01 | 0.04 | 0.01 | 2.55                     | 3.40                     | 0.05   |
| 33    | 0.03 | 0.02 | 3.55               | 1.55               | 0.01 | 0.04 | 0.01 | 2.55                     | 3.40                     | 0.05   |
| 34    | 0.03 | 0.02 | 3.55               | 1.55               | 0.01 | 0.04 | 0.01 | 2.55                     | 3.40                     | 0.05   |
| 35    | 0.03 | 0.02 | 3.55               | 1.55               | 0.01 | 0.04 | 0.01 | 2.55                     | 3.40                     | 0.05   |
| 36    | 0.03 | 0.02 | 3.55               | 1.55               | 0.01 | 0.04 | 0.01 | 2.55                     | 3.40                     | 0.05   |
| 37    | 0.03 | 0.02 | 3.55               | 1.55               | 0.01 | 0.04 | 0.01 | 2.55                     | 3.40                     | 0.05   |
| 38    | 0.03 | 0.02 | 3.55               | 1.55               | 0.01 | 0.04 | 0.01 | 2.55                     | 3.40                     | 0.05   |
| 39    | 0.03 | 0.02 | 3.55               | 1.55               | 0.01 | 0.04 | 0.01 | 2.55                     | 3.40                     | 0.05   |
| 40    | 0.03 | 0.02 | 3.55               | 1.55               | 0.01 | 0.04 | 0.01 | 2.55                     | 3.40                     | 0.05   |
| 41    | 0.03 | 0.02 | 3.55               | 1.55               | 0.01 | 0.04 | 0.01 | 2.55                     | 3.40                     | 0.05   |
| 42    | 0.03 | 0.02 | 3.55               | 1.55               | 0.01 | 0.04 | 0.01 | 2.55                     | 3.40                     | 0.05   |
| 43    | 0.03 | 0.02 | 3.55               | 1.55               | 0.01 | 0.04 | 0.01 | 2.55                     | 3.40                     | 0.05   |
| 44    | 0.03 | 0.02 | 3.55               | 1.55               | 0.01 | 0.04 | 0.01 | 2.55                     | 3.40                     | 0.05   |
| 45    | 0.03 | 0.02 | 3.55               | 1.55               | 0.01 | 0.04 | 0.01 | 2.55                     | 3.40                     | 0.05   |
| 46    | 0.03 | 0.02 | 3.55               | 1.55               | 0.01 | 0.04 | 0.01 | 2.55                     | 3.40                     | 0.05   |
| 47    | 0.03 | 0.02 | 3.55               | 1.55               | 0.01 | 0.04 | 0.01 | 2.55                     | 3.40                     | 0.05   |
| 48    | 0.03 | 0.02 | 3.55               | 1.55               | 0.01 | 0.04 | 0.01 | 2.55                     | 3.40                     | 0.05   |
| 49    | 0.03 | 0.02 | 3.55               | 1.55               | 0.01 | 0.04 | 0.01 | 2.55                     | 3.40                     | 0.05   |
| 50    | 0.03 | 0.02 | 3.55               | 1.55               | 0.01 | 0.04 | 0.01 | 2.55                     | 3.40                     | 0.05   |
| 51    | 0.03 | 0.02 | 3.55               | 1.55               | 0.01 | 0.04 | 0.01 | 2.55                     | 3.40                     | 0.05   |
| 52    | 0.03 | 0.02 | 3.55               | 1.55               | 0.01 | 0.04 | 0.01 | 2.55                     | 3.40                     | 0.05   |
| 53    | 0.03 | 0.02 | 3.55               | 1.55               | 0.01 | 0.04 | 0.01 | 2.55                     | 3.40                     | 0.05   |
| 54    | 0.03 | 0.02 | 3.55               | 1.55               | 0.01 | 0.04 | 0.01 | 2.55                     | 3.40                     | 0.05   |
| 55    | 0.03 | 0.02 | 3.55               | 1.55               | 0.01 | 0.04 | 0.01 | 2.55                     | 3.40                     | 0.05   |
| 56    | 0.03 | 0.02 | 3.55               | 1.55               | 0.01 | 0.04 | 0.01 | 2.55                     | 3.40                     | 0.05   |
| 57    | 0.03 | 0.02 | 3.55               | 1.55               | 0.01 | 0.04 | 0.01 | 2.55                     | 3.40                     | 0.05   |
| 58    | 0.03 | 0.02 | 3.55               | 1.55               | 0.01 | 0.04 | 0.01 | 2.55                     | 3.40                     | 0.05   |
| 59    | 0.03 | 0.02 | 3.55               | 1.55               | 0.01 | 0.04 | 0.01 | 2.55                     | 3.40                     | 0.05   |
| 60    | 0.03 | 0.02 | 3.55               | 1.55               | 0.01 | 0.04 | 0.01 | 2.55                     | 3.40                     | 0.05   |



TABLE 7.  
FLOOR FORCE AND MOMENT LOADS : TRIAD PLAZA HOTEL BUILDING @

WIND DIRECTION 180°  
REF. PRESS = 34.0 PSF

GUST FACTOR = 1.32

REF. AREA = 1800 SQ. FT.

LENGTH = 200 FT.

| FLOOR | CFX  | CFY  | FORCE(X)<br>(KIPS) | FORCE(Y)<br>(KIPS) | CMX  | CMY  | CMZ  | MOM(X)<br>(1000-FT-KIPS) | MOM(Y)<br>(1000-FT-KIPS) | MOM(Z) |
|-------|------|------|--------------------|--------------------|------|------|------|--------------------------|--------------------------|--------|
| 1     | 0.00 | 0.00 | 0.00               | 0.00               | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 2     | 0.00 | 0.00 | 0.00               | 0.00               | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 3     | 0.05 | 0.05 | 0.50               | 0.50               | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 4     | 0.05 | 0.05 | 0.50               | 0.50               | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 5     | 0.05 | 0.04 | 0.50               | 0.40               | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 6     | 0.05 | 0.04 | 0.50               | 0.40               | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 7     | 0.05 | 0.04 | 0.50               | 0.40               | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 8     | 0.05 | 0.03 | 0.50               | 0.30               | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 9     | 0.04 | 0.02 | 0.40               | 0.20               | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 10    | 0.04 | 0.02 | 0.40               | 0.20               | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 11    | 0.02 | 0.01 | 0.20               | 0.10               | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 12    | 0.01 | 0.01 | 0.10               | 0.10               | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 13    | 0.01 | 0.01 | 0.10               | 0.10               | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 14    | 0.01 | 0.01 | 0.10               | 0.10               | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 15    | 0.01 | 0.01 | 0.10               | 0.10               | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 16    | 0.01 | 0.01 | 0.10               | 0.10               | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 17    | 0.01 | 0.01 | 0.10               | 0.10               | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 18    | 0.01 | 0.01 | 0.10               | 0.10               | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 19    | 0.01 | 0.01 | 0.10               | 0.10               | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 20    | 0.02 | 0.03 | 0.20               | 0.30               | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 21    | 0.03 | 0.04 | 0.30               | 0.40               | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 22    | 0.04 | 0.04 | 0.40               | 0.50               | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 23    | 0.04 | 0.04 | 0.40               | 0.50               | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 24    | 0.03 | 0.03 | 0.30               | 0.40               | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 25    | 0.03 | 0.03 | 0.30               | 0.40               | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 26    | 0.03 | 0.03 | 0.30               | 0.40               | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 27    | 0.03 | 0.03 | 0.30               | 0.40               | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 28    | 0.03 | 0.03 | 0.30               | 0.40               | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 29    | 0.03 | 0.03 | 0.30               | 0.40               | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 30    | 0.03 | 0.03 | 0.30               | 0.40               | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |





TABLE 7.  
FLOOR FORCE AND MOMENT LOADS ; TRIAD PLAZA HOTEL BUILDING @

WIND DIRECTION 225  
REF. PRESS = 34.0 PSF

GUST FACTOR = 1.32

REF. AREA = 1800 SQ. FT.

REF. LENGTH = 200 FT.

| FLOOR | CFX  | CFY  | FORCE(X)<br>(KIPS) | FORCE(Y)<br>(KIPS) | CMX  | CMY  | CMZ  | MOM(X)<br>(1000-FT-KIPS) | MOM(Y)<br>(1000-FT-KIPS) | MOM(Z) |
|-------|------|------|--------------------|--------------------|------|------|------|--------------------------|--------------------------|--------|
| 1     | 0.00 | 0.00 | 0.00               | 0.00               | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 2     | 0.00 | 0.00 | 0.00               | 0.00               | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 3     | 0.35 | 0.48 | 37.4               | 52.2               | 1.4  | 1.0  | 0.0  | 2.3                      | 0.0                      | 2.2    |
| 4     | 3.37 | 4.77 | 337.1              | 480.0              | 16.9 | 12.3 | 1.1  | 32.4                     | 0.0                      | 30.9   |
| 5     | 3.37 | 4.77 | 337.1              | 480.0              | 16.9 | 12.3 | 1.1  | 32.4                     | 0.0                      | 30.9   |
| 6     | 3.37 | 4.77 | 337.1              | 480.0              | 16.9 | 12.3 | 1.1  | 32.4                     | 0.0                      | 30.9   |
| 7     | 3.37 | 4.77 | 337.1              | 480.0              | 16.9 | 12.3 | 1.1  | 32.4                     | 0.0                      | 30.9   |
| 8     | 3.37 | 4.77 | 337.1              | 480.0              | 16.9 | 12.3 | 1.1  | 32.4                     | 0.0                      | 30.9   |
| 9     | 3.37 | 4.77 | 337.1              | 480.0              | 16.9 | 12.3 | 1.1  | 32.4                     | 0.0                      | 30.9   |
| 10    | 3.37 | 4.77 | 337.1              | 480.0              | 16.9 | 12.3 | 1.1  | 32.4                     | 0.0                      | 30.9   |
| 11    | 3.37 | 4.77 | 337.1              | 480.0              | 16.9 | 12.3 | 1.1  | 32.4                     | 0.0                      | 30.9   |
| 12    | 3.37 | 4.77 | 337.1              | 480.0              | 16.9 | 12.3 | 1.1  | 32.4                     | 0.0                      | 30.9   |
| 13    | 3.37 | 4.77 | 337.1              | 480.0              | 16.9 | 12.3 | 1.1  | 32.4                     | 0.0                      | 30.9   |
| 14    | 3.37 | 4.77 | 337.1              | 480.0              | 16.9 | 12.3 | 1.1  | 32.4                     | 0.0                      | 30.9   |
| 15    | 3.37 | 4.77 | 337.1              | 480.0              | 16.9 | 12.3 | 1.1  | 32.4                     | 0.0                      | 30.9   |
| 16    | 3.37 | 4.77 | 337.1              | 480.0              | 16.9 | 12.3 | 1.1  | 32.4                     | 0.0                      | 30.9   |
| 17    | 3.37 | 4.77 | 337.1              | 480.0              | 16.9 | 12.3 | 1.1  | 32.4                     | 0.0                      | 30.9   |
| 18    | 3.37 | 4.77 | 337.1              | 480.0              | 16.9 | 12.3 | 1.1  | 32.4                     | 0.0                      | 30.9   |
| 19    | 3.37 | 4.77 | 337.1              | 480.0              | 16.9 | 12.3 | 1.1  | 32.4                     | 0.0                      | 30.9   |
| 20    | 3.37 | 4.77 | 337.1              | 480.0              | 16.9 | 12.3 | 1.1  | 32.4                     | 0.0                      | 30.9   |
| 21    | 3.37 | 4.77 | 337.1              | 480.0              | 16.9 | 12.3 | 1.1  | 32.4                     | 0.0                      | 30.9   |
| 22    | 3.37 | 4.77 | 337.1              | 480.0              | 16.9 | 12.3 | 1.1  | 32.4                     | 0.0                      | 30.9   |
| 23    | 3.37 | 4.77 | 337.1              | 480.0              | 16.9 | 12.3 | 1.1  | 32.4                     | 0.0                      | 30.9   |
| 24    | 3.37 | 4.77 | 337.1              | 480.0              | 16.9 | 12.3 | 1.1  | 32.4                     | 0.0                      | 30.9   |
| 25    | 3.37 | 4.77 | 337.1              | 480.0              | 16.9 | 12.3 | 1.1  | 32.4                     | 0.0                      | 30.9   |
| 26    | 3.37 | 4.77 | 337.1              | 480.0              | 16.9 | 12.3 | 1.1  | 32.4                     | 0.0                      | 30.9   |
| 27    | 3.37 | 4.77 | 337.1              | 480.0              | 16.9 | 12.3 | 1.1  | 32.4                     | 0.0                      | 30.9   |
| 28    | 3.37 | 4.77 | 337.1              | 480.0              | 16.9 | 12.3 | 1.1  | 32.4                     | 0.0                      | 30.9   |
| 29    | 3.37 | 4.77 | 337.1              | 480.0              | 16.9 | 12.3 | 1.1  | 32.4                     | 0.0                      | 30.9   |
| 30    | 3.37 | 4.77 | 337.1              | 480.0              | 16.9 | 12.3 | 1.1  | 32.4                     | 0.0                      | 30.9   |

TABLE 7.  
FLOOR FORCE AND MOMENT LOADS : TRIAD PLAZA HOTEL BUILDING @

| FLOOR | CFX  | CFY  | FORCE(X)<br>(KIPS) | FORCE(Y)<br>(KIPS) | CMX  | CMY  | CMZ  | MOM(X)<br>(1000-FT-KIPS) | MOM(Y)<br>(1000-FT-KIPS) | MOM(Z) |
|-------|------|------|--------------------|--------------------|------|------|------|--------------------------|--------------------------|--------|
| 1     | 0.00 | 0.00 | 0.00               | 0.00               | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 2     | 0.00 | 0.00 | 0.00               | 0.00               | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 3     | 0.42 | 4.22 | 4.42               | 4.42               | 0.00 | 0.00 | 0.00 | 0.52                     | 4.68                     | 0.00   |
| 4     | 4.38 | 4.22 | 4.38               | 4.38               | 1.13 | 1.13 | 0.02 | 2.86                     | 4.73                     | 0.00   |
| 5     | 3.36 | 3.36 | 3.36               | 3.36               | 1.16 | 1.16 | 0.02 | 3.18                     | 3.67                     | 0.00   |
| 6     | 3.42 | 3.36 | 3.42               | 3.42               | 1.15 | 1.15 | 0.03 | 3.48                     | 3.58                     | 0.00   |
| 7     | 3.20 | 3.20 | 3.20               | 3.20               | 1.16 | 1.16 | 0.04 | 4.02                     | 3.23                     | 0.00   |
| 8     | 2.86 | 2.86 | 2.86               | 2.86               | 1.17 | 1.17 | 0.05 | 4.71                     | 2.56                     | 0.00   |
| 9     | 2.66 | 2.66 | 2.66               | 2.66               | 1.18 | 1.18 | 0.05 | 5.06                     | 1.88                     | 0.00   |
| 10    | 2.66 | 2.66 | 2.66               | 2.66               | 1.22 | 1.22 | 0.05 | 5.41                     | 1.23                     | 0.00   |
| 11    | 2.66 | 2.66 | 2.66               | 2.66               | 1.22 | 1.22 | 0.05 | 5.76                     | 0.55                     | 0.00   |
| 12    | 2.66 | 2.66 | 2.66               | 2.66               | 1.22 | 1.22 | 0.05 | 6.11                     | -0.13                    | 0.00   |
| 13    | 2.66 | 2.66 | 2.66               | 2.66               | 1.22 | 1.22 | 0.05 | 6.46                     | -0.81                    | 0.00   |
| 14    | 2.66 | 2.66 | 2.66               | 2.66               | 1.22 | 1.22 | 0.05 | 6.81                     | -1.49                    | 0.00   |
| 15    | 2.66 | 2.66 | 2.66               | 2.66               | 1.22 | 1.22 | 0.05 | 7.16                     | -2.17                    | 0.00   |
| 16    | 2.66 | 2.66 | 2.66               | 2.66               | 1.22 | 1.22 | 0.05 | 7.51                     | -2.85                    | 0.00   |
| 17    | 2.66 | 2.66 | 2.66               | 2.66               | 1.22 | 1.22 | 0.05 | 7.86                     | -3.53                    | 0.00   |
| 18    | 2.66 | 2.66 | 2.66               | 2.66               | 1.22 | 1.22 | 0.05 | 8.21                     | -4.21                    | 0.00   |
| 19    | 2.66 | 2.66 | 2.66               | 2.66               | 1.22 | 1.22 | 0.05 | 8.56                     | -4.89                    | 0.00   |
| 20    | 2.66 | 2.66 | 2.66               | 2.66               | 1.22 | 1.22 | 0.05 | 8.91                     | -5.57                    | 0.00   |
| 21    | 2.66 | 2.66 | 2.66               | 2.66               | 1.22 | 1.22 | 0.05 | 9.26                     | -6.25                    | 0.00   |
| 22    | 2.66 | 2.66 | 2.66               | 2.66               | 1.22 | 1.22 | 0.05 | 9.61                     | -6.93                    | 0.00   |
| 23    | 2.66 | 2.66 | 2.66               | 2.66               | 1.22 | 1.22 | 0.05 | 9.96                     | -7.61                    | 0.00   |
| 24    | 2.66 | 2.66 | 2.66               | 2.66               | 1.22 | 1.22 | 0.05 | 10.31                    | -8.29                    | 0.00   |
| 25    | 2.66 | 2.66 | 2.66               | 2.66               | 1.22 | 1.22 | 0.05 | 10.66                    | -8.97                    | 0.00   |
| 26    | 2.66 | 2.66 | 2.66               | 2.66               | 1.22 | 1.22 | 0.05 | 11.01                    | -9.65                    | 0.00   |
| 27    | 2.66 | 2.66 | 2.66               | 2.66               | 1.22 | 1.22 | 0.05 | 11.36                    | -10.33                   | 0.00   |
| 28    | 2.66 | 2.66 | 2.66               | 2.66               | 1.22 | 1.22 | 0.05 | 11.71                    | -11.01                   | 0.00   |
| 29    | 2.66 | 2.66 | 2.66               | 2.66               | 1.22 | 1.22 | 0.05 | 12.06                    | -11.69                   | 0.00   |
| 30    | 2.66 | 2.66 | 2.66               | 2.66               | 1.22 | 1.22 | 0.05 | 12.41                    | -12.37                   | 0.00   |



TABLE 7.  
FLOOR FORCE AND MOMENT LOADS : TRIAD PLAZA HOTEL BUILDING @

WIND DIRECTION 270  
REF. PRESS = 34.0 PSF

GUST FACTOR = 1.32

REF. AREA = 1800 SQ. FT.

REF. LENGTH = 200 FT.

| FLOOR | CFX  | CFY  | FORCECX<br>(KIPS) | FORCECY<br>(KIPS) | CMX  | CMY  | CMZ  | MOM(X)<br>(1000-FT-KIPS) | MOM(Y)<br>(1000-FT-KIPS) | MOM(Z) |
|-------|------|------|-------------------|-------------------|------|------|------|--------------------------|--------------------------|--------|
| 1     | 0.00 | 0.00 | 0.00              | 0.00              | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 2     | 0.00 | 0.00 | 0.00              | 0.00              | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 3     | 0.00 | 0.00 | 0.00              | 0.00              | 0.00 | 0.00 | 0.00 | 0.00                     | 0.00                     | 0.00   |
| 4     | 0.44 | 0.21 | 507               | 220               | 0.06 | 0.14 | 0.00 | 0.25                     | 0.09                     | 0.35   |
| 5     | 0.42 | 0.18 | 443               | 192               | 0.07 | 0.15 | 0.00 | 0.45                     | 0.69                     | 0.27   |
| 6     | 0.35 | 0.15 | 334               | 152               | 0.07 | 0.16 | 0.00 | 0.45                     | 0.73                     | 0.10   |
| 7     | 0.30 | 0.13 | 269               | 122               | 0.07 | 0.16 | 0.00 | 0.38                     | 0.59                     | 0.03   |
| 8     | 0.25 | 0.10 | 209               | 93                | 0.06 | 0.16 | 0.00 | 0.30                     | 0.43                     | 0.02   |
| 9     | 0.20 | 0.09 | 157               | 70                | 0.07 | 0.16 | 0.00 | 0.22                     | 0.37                     | 0.02   |
| 10    | 0.15 | 0.07 | 109               | 53                | 0.06 | 0.16 | 0.00 | 0.15                     | 0.25                     | 0.02   |
| 11    | 0.11 | 0.05 | 77                | 38                | 0.07 | 0.17 | 0.00 | 0.09                     | 0.17                     | 0.01   |
| 12    | 0.08 | 0.04 | 55                | 28                | 0.09 | 0.18 | 0.00 | 0.05                     | 0.09                     | 0.01   |
| 13    | 0.06 | 0.03 | 39                | 20                | 0.11 | 0.19 | 0.00 | 0.03                     | 0.05                     | 0.01   |
| 14    | 0.04 | 0.02 | 27                | 14                | 0.13 | 0.20 | 0.00 | 0.02                     | 0.03                     | 0.01   |
| 15    | 0.03 | 0.01 | 19                | 10                | 0.15 | 0.21 | 0.00 | 0.01                     | 0.02                     | 0.01   |
| 16    | 0.02 | 0.01 | 14                | 7                 | 0.16 | 0.21 | 0.00 | 0.01                     | 0.01                     | 0.01   |
| 17    | 0.01 | 0.00 | 10                | 5                 | 0.19 | 0.22 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 18    | 0.01 | 0.00 | 7                 | 4                 | 0.22 | 0.23 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 19    | 0.00 | 0.00 | 5                 | 3                 | 0.25 | 0.24 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 20    | 0.00 | 0.00 | 3                 | 2                 | 0.29 | 0.25 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 21    | 0.00 | 0.00 | 2                 | 1                 | 0.33 | 0.26 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 22    | 0.00 | 0.00 | 1                 | 1                 | 0.38 | 0.27 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 23    | 0.00 | 0.00 | 1                 | 1                 | 0.44 | 0.28 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 24    | 0.00 | 0.00 | 1                 | 1                 | 0.50 | 0.29 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 25    | 0.00 | 0.00 | 1                 | 1                 | 0.57 | 0.30 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 26    | 0.00 | 0.00 | 1                 | 1                 | 0.65 | 0.31 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 27    | 0.00 | 0.00 | 1                 | 1                 | 0.73 | 0.32 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 28    | 0.00 | 0.00 | 1                 | 1                 | 0.82 | 0.33 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 29    | 0.00 | 0.00 | 1                 | 1                 | 0.91 | 0.34 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 30    | 0.00 | 0.00 | 1                 | 1                 | 1.00 | 0.35 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 31    | 0.00 | 0.00 | 1                 | 1                 | 1.09 | 0.36 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 32    | 0.00 | 0.00 | 1                 | 1                 | 1.18 | 0.37 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 33    | 0.00 | 0.00 | 1                 | 1                 | 1.27 | 0.38 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 34    | 0.00 | 0.00 | 1                 | 1                 | 1.36 | 0.39 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 35    | 0.00 | 0.00 | 1                 | 1                 | 1.45 | 0.40 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 36    | 0.00 | 0.00 | 1                 | 1                 | 1.54 | 0.41 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 37    | 0.00 | 0.00 | 1                 | 1                 | 1.63 | 0.42 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 38    | 0.00 | 0.00 | 1                 | 1                 | 1.72 | 0.43 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 39    | 0.00 | 0.00 | 1                 | 1                 | 1.81 | 0.44 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 40    | 0.00 | 0.00 | 1                 | 1                 | 1.90 | 0.45 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 41    | 0.00 | 0.00 | 1                 | 1                 | 1.99 | 0.46 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 42    | 0.00 | 0.00 | 1                 | 1                 | 2.08 | 0.47 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 43    | 0.00 | 0.00 | 1                 | 1                 | 2.17 | 0.48 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 44    | 0.00 | 0.00 | 1                 | 1                 | 2.26 | 0.49 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 45    | 0.00 | 0.00 | 1                 | 1                 | 2.35 | 0.50 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 46    | 0.00 | 0.00 | 1                 | 1                 | 2.44 | 0.51 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 47    | 0.00 | 0.00 | 1                 | 1                 | 2.53 | 0.52 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 48    | 0.00 | 0.00 | 1                 | 1                 | 2.62 | 0.53 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 49    | 0.00 | 0.00 | 1                 | 1                 | 2.71 | 0.54 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 50    | 0.00 | 0.00 | 1                 | 1                 | 2.80 | 0.55 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 51    | 0.00 | 0.00 | 1                 | 1                 | 2.89 | 0.56 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 52    | 0.00 | 0.00 | 1                 | 1                 | 2.98 | 0.57 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 53    | 0.00 | 0.00 | 1                 | 1                 | 3.07 | 0.58 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 54    | 0.00 | 0.00 | 1                 | 1                 | 3.16 | 0.59 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 55    | 0.00 | 0.00 | 1                 | 1                 | 3.25 | 0.60 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 56    | 0.00 | 0.00 | 1                 | 1                 | 3.34 | 0.61 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 57    | 0.00 | 0.00 | 1                 | 1                 | 3.43 | 0.62 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 58    | 0.00 | 0.00 | 1                 | 1                 | 3.52 | 0.63 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 59    | 0.00 | 0.00 | 1                 | 1                 | 3.61 | 0.64 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 60    | 0.00 | 0.00 | 1                 | 1                 | 3.70 | 0.65 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 61    | 0.00 | 0.00 | 1                 | 1                 | 3.79 | 0.66 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 62    | 0.00 | 0.00 | 1                 | 1                 | 3.88 | 0.67 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 63    | 0.00 | 0.00 | 1                 | 1                 | 3.97 | 0.68 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 64    | 0.00 | 0.00 | 1                 | 1                 | 4.06 | 0.69 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 65    | 0.00 | 0.00 | 1                 | 1                 | 4.15 | 0.70 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 66    | 0.00 | 0.00 | 1                 | 1                 | 4.24 | 0.71 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 67    | 0.00 | 0.00 | 1                 | 1                 | 4.33 | 0.72 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 68    | 0.00 | 0.00 | 1                 | 1                 | 4.42 | 0.73 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 69    | 0.00 | 0.00 | 1                 | 1                 | 4.51 | 0.74 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 70    | 0.00 | 0.00 | 1                 | 1                 | 4.60 | 0.75 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 71    | 0.00 | 0.00 | 1                 | 1                 | 4.69 | 0.76 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 72    | 0.00 | 0.00 | 1                 | 1                 | 4.78 | 0.77 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 73    | 0.00 | 0.00 | 1                 | 1                 | 4.87 | 0.78 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 74    | 0.00 | 0.00 | 1                 | 1                 | 4.96 | 0.79 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 75    | 0.00 | 0.00 | 1                 | 1                 | 5.05 | 0.80 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 76    | 0.00 | 0.00 | 1                 | 1                 | 5.14 | 0.81 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 77    | 0.00 | 0.00 | 1                 | 1                 | 5.23 | 0.82 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 78    | 0.00 | 0.00 | 1                 | 1                 | 5.32 | 0.83 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 79    | 0.00 | 0.00 | 1                 | 1                 | 5.41 | 0.84 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 80    | 0.00 | 0.00 | 1                 | 1                 | 5.50 | 0.85 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 81    | 0.00 | 0.00 | 1                 | 1                 | 5.59 | 0.86 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 82    | 0.00 | 0.00 | 1                 | 1                 | 5.68 | 0.87 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 83    | 0.00 | 0.00 | 1                 | 1                 | 5.77 | 0.88 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 84    | 0.00 | 0.00 | 1                 | 1                 | 5.86 | 0.89 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 85    | 0.00 | 0.00 | 1                 | 1                 | 5.95 | 0.90 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 86    | 0.00 | 0.00 | 1                 | 1                 | 6.04 | 0.91 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 87    | 0.00 | 0.00 | 1                 | 1                 | 6.13 | 0.92 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 88    | 0.00 | 0.00 | 1                 | 1                 | 6.22 | 0.93 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 89    | 0.00 | 0.00 | 1                 | 1                 | 6.31 | 0.94 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 90    | 0.00 | 0.00 | 1                 | 1                 | 6.40 | 0.95 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 91    | 0.00 | 0.00 | 1                 | 1                 | 6.49 | 0.96 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 92    | 0.00 | 0.00 | 1                 | 1                 | 6.58 | 0.97 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 93    | 0.00 | 0.00 | 1                 | 1                 | 6.67 | 0.98 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 94    | 0.00 | 0.00 | 1                 | 1                 | 6.76 | 0.99 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 95    | 0.00 | 0.00 | 1                 | 1                 | 6.85 | 1.00 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 96    | 0.00 | 0.00 | 1                 | 1                 | 6.94 | 1.01 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 97    | 0.00 | 0.00 | 1                 | 1                 | 7.03 | 1.02 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 98    | 0.00 | 0.00 | 1                 | 1                 | 7.12 | 1.03 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 99    | 0.00 | 0.00 | 1                 | 1                 | 7.21 | 1.04 | 0.00 | 0.00                     | 0.00                     | 0.01   |
| 100   | 0.00 | 0.00 | 1                 | 1                 | 7.30 | 1.05 | 0.00 | 0.00                     | 0.00                     | 0.01   |













TABLE 7.

TOTAL FORCE AND MOMENT LOADS : TRIAD PLAZA OFFICE TOWER

| REF. PRESS = 34.0 PSF | GUST FACTOR = 1.32 | REF. AREA = 1800 SQ.FT. | REF. LENGTH = 200 FT. |                    |     |     |     |                          |                          |        |
|-----------------------|--------------------|-------------------------|-----------------------|--------------------|-----|-----|-----|--------------------------|--------------------------|--------|
| AZIMUTH               | CFX                | CFY                     | FORCE(X)<br>(KIPS)    | FORCE(Y)<br>(KIPS) | CMX | CMY | CMZ | MOM(X)<br>(1000-FT-KIPS) | MOM(Y)<br>(1000-FT-KIPS) | MOM(Z) |
| 05                    | 167                | 304                     | 377                   | 2165               | 197 | 233 | 5   | 410                      | 708                      | -28    |
| 13                    | 127                | 89                      | 550                   | 225                | 125 | 59  | 14  | 27                       | 121                      | 18     |
| 45                    | 20                 | 176                     | 766                   | 320                | 25  | 93  | 22  | 61                       | 165                      | 58     |
| 75                    | 19                 | 52                      | 117                   | 387                | 6   | 52  | 1   | 19                       | 204                      | 43     |
| 105                   | 13                 | 58                      | 116                   | 387                | 1   | 42  | 1   | 15                       | 244                      | 22     |
| 135                   | 11                 | 28                      | 163                   | 257                | 1   | 23  | 1   | 20                       | 155                      | 33     |
| 165                   | 1                  | 43                      | 120                   | 157                | 1   | 80  | 1   | 27                       | 155                      | 33     |
| 195                   | 1                  | 11                      | 137                   | 121                | 1   | 23  | 1   | 22                       | 155                      | 33     |
| 225                   | 1                  | 14                      | 137                   | 121                | 1   | 23  | 1   | 22                       | 155                      | 33     |
| 255                   | 1                  | 14                      | 137                   | 121                | 1   | 23  | 1   | 22                       | 155                      | 33     |
| 285                   | 1                  | 14                      | 137                   | 121                | 1   | 23  | 1   | 22                       | 155                      | 33     |
| 315                   | 1                  | 14                      | 137                   | 121                | 1   | 23  | 1   | 22                       | 155                      | 33     |
| 345                   | 1                  | 14                      | 137                   | 121                | 1   | 23  | 1   | 22                       | 155                      | 33     |
| 375                   | 1                  | 14                      | 137                   | 121                | 1   | 23  | 1   | 22                       | 155                      | 33     |
| 405                   | 1                  | 14                      | 137                   | 121                | 1   | 23  | 1   | 22                       | 155                      | 33     |
| 435                   | 1                  | 14                      | 137                   | 121                | 1   | 23  | 1   | 22                       | 155                      | 33     |
| 465                   | 1                  | 14                      | 137                   | 121                | 1   | 23  | 1   | 22                       | 155                      | 33     |
| 495                   | 1                  | 14                      | 137                   | 121                | 1   | 23  | 1   | 22                       | 155                      | 33     |
| 525                   | 1                  | 14                      | 137                   | 121                | 1   | 23  | 1   | 22                       | 155                      | 33     |
| 555                   | 1                  | 14                      | 137                   | 121                | 1   | 23  | 1   | 22                       | 155                      | 33     |
| 585                   | 1                  | 14                      | 137                   | 121                | 1   | 23  | 1   | 22                       | 155                      | 33     |
| 615                   | 1                  | 14                      | 137                   | 121                | 1   | 23  | 1   | 22                       | 155                      | 33     |
| 645                   | 1                  | 14                      | 137                   | 121                | 1   | 23  | 1   | 22                       | 155                      | 33     |
| 675                   | 1                  | 14                      | 137                   | 121                | 1   | 23  | 1   | 22                       | 155                      | 33     |
| 705                   | 1                  | 14                      | 137                   | 121                | 1   | 23  | 1   | 22                       | 155                      | 33     |
| 735                   | 1                  | 14                      | 137                   | 121                | 1   | 23  | 1   | 22                       | 155                      | 33     |
| 765                   | 1                  | 14                      | 137                   | 121                | 1   | 23  | 1   | 22                       | 155                      | 33     |
| 795                   | 1                  | 14                      | 137                   | 121                | 1   | 23  | 1   | 22                       | 155                      | 33     |
| 825                   | 1                  | 14                      | 137                   | 121                | 1   | 23  | 1   | 22                       | 155                      | 33     |
| 855                   | 1                  | 14                      | 137                   | 121                | 1   | 23  | 1   | 22                       | 155                      | 33     |
| 885                   | 1                  | 14                      | 137                   | 121                | 1   | 23  | 1   | 22                       | 155                      | 33     |
| 915                   | 1                  | 14                      | 137                   | 121                | 1   | 23  | 1   | 22                       | 155                      | 33     |
| 945                   | 1                  | 14                      | 137                   | 121                | 1   | 23  | 1   | 22                       | 155                      | 33     |
| 975                   | 1                  | 14                      | 137                   | 121                | 1   | 23  | 1   | 22                       | 155                      | 33     |
| 1005                  | 1                  | 14                      | 137                   | 121                | 1   | 23  | 1   | 22                       | 155                      | 33     |

TABLE 7.  
FLOOR FORCE AND MOMENT LOADS : TRIAD PLAZA OFFICE TOWER

| FLOOR | CFX | CFY  | FORCE(X)<br>(KIPS) | FORCE(Y)<br>(KIPS) | CMX   | CMY | CMZ | MOM(X)<br>(1000-FT-KIPS) | MOM(Y)<br>(1000-FT-KIPS) | MOM(Z) |
|-------|-----|------|--------------------|--------------------|-------|-----|-----|--------------------------|--------------------------|--------|
| 1     | 0.0 | 48.7 | -4.8               | 8.9                | 25.5  | 0.0 | 0.0 | 39.7                     | 0.28                     | 11.2   |
| 2     | 0.0 | 45.2 | -1.6               | 9.4                | 0.9   | 0.0 | 0.1 | 10.3                     | 0.27                     | 4.2    |
| 3     | 0.0 | 52.1 | 1.4                | 9.0                | 1.4   | 0.0 | 0.2 | 9.9                      | 0.28                     | 5.5    |
| 4     | 0.0 | 64.4 | 6.9                | 8.7                | 2.4   | 0.0 | 0.3 | 13.4                     | 0.28                     | 8.8    |
| 5     | 0.0 | 68.1 | 12.3               | 6.4                | 3.6   | 0.0 | 0.4 | 17.8                     | 0.29                     | 15.1   |
| 6     | 0.0 | 67.7 | 11.4               | 7.6                | 4.2   | 0.0 | 0.4 | 19.3                     | 0.29                     | 15.8   |
| 7     | 0.0 | 73.6 | 14.4               | 1.9                | 5.6   | 0.0 | 0.4 | 22.9                     | 0.29                     | 18.9   |
| 8     | 0.0 | 77.8 | 15.5               | 1.9                | 6.7   | 0.0 | 0.5 | 26.0                     | 0.29                     | 22.9   |
| 9     | 0.0 | 84.6 | 16.7               | 2.6                | 7.7   | 0.0 | 0.5 | 29.4                     | 0.29                     | 27.9   |
| 10    | 0.0 | 88.9 | 17.3               | 3.5                | 8.4   | 0.0 | 0.5 | 32.7                     | 0.29                     | 32.1   |
| 11    | 0.0 | 88.9 | 17.7               | 3.5                | 9.4   | 0.0 | 0.5 | 35.9                     | 0.29                     | 37.1   |
| 12    | 0.0 | 93.6 | 17.7               | 3.7                | 10.2  | 0.0 | 0.6 | 39.1                     | 0.29                     | 42.1   |
| 13    | 0.0 | 93.6 | 17.7               | 3.7                | 11.7  | 0.0 | 0.6 | 42.4                     | 0.29                     | 47.1   |
| 14    | 0.0 | 93.6 | 17.7               | 3.7                | 13.2  | 0.0 | 0.6 | 45.7                     | 0.29                     | 52.1   |
| 15    | 0.0 | 93.6 | 17.7               | 3.7                | 14.7  | 0.0 | 0.6 | 49.0                     | 0.29                     | 57.1   |
| 16    | 0.0 | 93.6 | 17.7               | 3.7                | 16.2  | 0.0 | 0.6 | 52.3                     | 0.29                     | 62.1   |
| 17    | 0.0 | 93.6 | 17.7               | 3.7                | 17.7  | 0.0 | 0.6 | 55.6                     | 0.29                     | 67.1   |
| 18    | 0.0 | 93.6 | 17.7               | 3.7                | 19.2  | 0.0 | 0.6 | 58.9                     | 0.29                     | 72.1   |
| 19    | 0.0 | 93.6 | 17.7               | 3.7                | 20.7  | 0.0 | 0.6 | 62.2                     | 0.29                     | 77.1   |
| 20    | 0.0 | 93.6 | 17.7               | 3.7                | 22.2  | 0.0 | 0.6 | 65.5                     | 0.29                     | 82.1   |
| 21    | 0.0 | 93.6 | 17.7               | 3.7                | 23.7  | 0.0 | 0.6 | 68.8                     | 0.29                     | 87.1   |
| 22    | 0.0 | 93.6 | 17.7               | 3.7                | 25.2  | 0.0 | 0.6 | 72.1                     | 0.29                     | 92.1   |
| 23    | 0.0 | 93.6 | 17.7               | 3.7                | 26.7  | 0.0 | 0.6 | 75.4                     | 0.29                     | 97.1   |
| 24    | 0.0 | 93.6 | 17.7               | 3.7                | 28.2  | 0.0 | 0.6 | 78.7                     | 0.29                     | 102.1  |
| 25    | 0.0 | 93.6 | 17.7               | 3.7                | 29.7  | 0.0 | 0.6 | 82.0                     | 0.29                     | 107.1  |
| 26    | 0.0 | 93.6 | 17.7               | 3.7                | 31.2  | 0.0 | 0.6 | 85.3                     | 0.29                     | 112.1  |
| 27    | 0.0 | 93.6 | 17.7               | 3.7                | 32.7  | 0.0 | 0.6 | 88.6                     | 0.29                     | 117.1  |
| 28    | 0.0 | 93.6 | 17.7               | 3.7                | 34.2  | 0.0 | 0.6 | 91.9                     | 0.29                     | 122.1  |
| 29    | 0.0 | 93.6 | 17.7               | 3.7                | 35.7  | 0.0 | 0.6 | 95.2                     | 0.29                     | 127.1  |
| 30    | 0.0 | 93.6 | 17.7               | 3.7                | 37.2  | 0.0 | 0.6 | 98.5                     | 0.29                     | 132.1  |
| 31    | 0.0 | 93.6 | 17.7               | 3.7                | 38.7  | 0.0 | 0.6 | 101.8                    | 0.29                     | 137.1  |
| 32    | 0.0 | 93.6 | 17.7               | 3.7                | 40.2  | 0.0 | 0.6 | 105.1                    | 0.29                     | 142.1  |
| 33    | 0.0 | 93.6 | 17.7               | 3.7                | 41.7  | 0.0 | 0.6 | 108.4                    | 0.29                     | 147.1  |
| 34    | 0.0 | 93.6 | 17.7               | 3.7                | 43.2  | 0.0 | 0.6 | 111.7                    | 0.29                     | 152.1  |
| 35    | 0.0 | 93.6 | 17.7               | 3.7                | 44.7  | 0.0 | 0.6 | 115.0                    | 0.29                     | 157.1  |
| 36    | 0.0 | 93.6 | 17.7               | 3.7                | 46.2  | 0.0 | 0.6 | 118.3                    | 0.29                     | 162.1  |
| 37    | 0.0 | 93.6 | 17.7               | 3.7                | 47.7  | 0.0 | 0.6 | 121.6                    | 0.29                     | 167.1  |
| 38    | 0.0 | 93.6 | 17.7               | 3.7                | 49.2  | 0.0 | 0.6 | 124.9                    | 0.29                     | 172.1  |
| 39    | 0.0 | 93.6 | 17.7               | 3.7                | 50.7  | 0.0 | 0.6 | 128.2                    | 0.29                     | 177.1  |
| 40    | 0.0 | 93.6 | 17.7               | 3.7                | 52.2  | 0.0 | 0.6 | 131.5                    | 0.29                     | 182.1  |
| 41    | 0.0 | 93.6 | 17.7               | 3.7                | 53.7  | 0.0 | 0.6 | 134.8                    | 0.29                     | 187.1  |
| 42    | 0.0 | 93.6 | 17.7               | 3.7                | 55.2  | 0.0 | 0.6 | 138.1                    | 0.29                     | 192.1  |
| 43    | 0.0 | 93.6 | 17.7               | 3.7                | 56.7  | 0.0 | 0.6 | 141.4                    | 0.29                     | 197.1  |
| 44    | 0.0 | 93.6 | 17.7               | 3.7                | 58.2  | 0.0 | 0.6 | 144.7                    | 0.29                     | 202.1  |
| 45    | 0.0 | 93.6 | 17.7               | 3.7                | 59.7  | 0.0 | 0.6 | 148.0                    | 0.29                     | 207.1  |
| 46    | 0.0 | 93.6 | 17.7               | 3.7                | 61.2  | 0.0 | 0.6 | 151.3                    | 0.29                     | 212.1  |
| 47    | 0.0 | 93.6 | 17.7               | 3.7                | 62.7  | 0.0 | 0.6 | 154.6                    | 0.29                     | 217.1  |
| 48    | 0.0 | 93.6 | 17.7               | 3.7                | 64.2  | 0.0 | 0.6 | 157.9                    | 0.29                     | 222.1  |
| 49    | 0.0 | 93.6 | 17.7               | 3.7                | 65.7  | 0.0 | 0.6 | 161.2                    | 0.29                     | 227.1  |
| 50    | 0.0 | 93.6 | 17.7               | 3.7                | 67.2  | 0.0 | 0.6 | 164.5                    | 0.29                     | 232.1  |
| 51    | 0.0 | 93.6 | 17.7               | 3.7                | 68.7  | 0.0 | 0.6 | 167.8                    | 0.29                     | 237.1  |
| 52    | 0.0 | 93.6 | 17.7               | 3.7                | 70.2  | 0.0 | 0.6 | 171.1                    | 0.29                     | 242.1  |
| 53    | 0.0 | 93.6 | 17.7               | 3.7                | 71.7  | 0.0 | 0.6 | 174.4                    | 0.29                     | 247.1  |
| 54    | 0.0 | 93.6 | 17.7               | 3.7                | 73.2  | 0.0 | 0.6 | 177.7                    | 0.29                     | 252.1  |
| 55    | 0.0 | 93.6 | 17.7               | 3.7                | 74.7  | 0.0 | 0.6 | 181.0                    | 0.29                     | 257.1  |
| 56    | 0.0 | 93.6 | 17.7               | 3.7                | 76.2  | 0.0 | 0.6 | 184.3                    | 0.29                     | 262.1  |
| 57    | 0.0 | 93.6 | 17.7               | 3.7                | 77.7  | 0.0 | 0.6 | 187.6                    | 0.29                     | 267.1  |
| 58    | 0.0 | 93.6 | 17.7               | 3.7                | 79.2  | 0.0 | 0.6 | 190.9                    | 0.29                     | 272.1  |
| 59    | 0.0 | 93.6 | 17.7               | 3.7                | 80.7  | 0.0 | 0.6 | 194.2                    | 0.29                     | 277.1  |
| 60    | 0.0 | 93.6 | 17.7               | 3.7                | 82.2  | 0.0 | 0.6 | 197.5                    | 0.29                     | 282.1  |
| 61    | 0.0 | 93.6 | 17.7               | 3.7                | 83.7  | 0.0 | 0.6 | 200.8                    | 0.29                     | 287.1  |
| 62    | 0.0 | 93.6 | 17.7               | 3.7                | 85.2  | 0.0 | 0.6 | 204.1                    | 0.29                     | 292.1  |
| 63    | 0.0 | 93.6 | 17.7               | 3.7                | 86.7  | 0.0 | 0.6 | 207.4                    | 0.29                     | 297.1  |
| 64    | 0.0 | 93.6 | 17.7               | 3.7                | 88.2  | 0.0 | 0.6 | 210.7                    | 0.29                     | 302.1  |
| 65    | 0.0 | 93.6 | 17.7               | 3.7                | 89.7  | 0.0 | 0.6 | 214.0                    | 0.29                     | 307.1  |
| 66    | 0.0 | 93.6 | 17.7               | 3.7                | 91.2  | 0.0 | 0.6 | 217.3                    | 0.29                     | 312.1  |
| 67    | 0.0 | 93.6 | 17.7               | 3.7                | 92.7  | 0.0 | 0.6 | 220.6                    | 0.29                     | 317.1  |
| 68    | 0.0 | 93.6 | 17.7               | 3.7                | 94.2  | 0.0 | 0.6 | 223.9                    | 0.29                     | 322.1  |
| 69    | 0.0 | 93.6 | 17.7               | 3.7                | 95.7  | 0.0 | 0.6 | 227.2                    | 0.29                     | 327.1  |
| 70    | 0.0 | 93.6 | 17.7               | 3.7                | 97.2  | 0.0 | 0.6 | 230.5                    | 0.29                     | 332.1  |
| 71    | 0.0 | 93.6 | 17.7               | 3.7                | 98.7  | 0.0 | 0.6 | 233.8                    | 0.29                     | 337.1  |
| 72    | 0.0 | 93.6 | 17.7               | 3.7                | 100.2 | 0.0 | 0.6 | 237.1                    | 0.29                     | 342.1  |
| 73    | 0.0 | 93.6 | 17.7               | 3.7                | 101.7 | 0.0 | 0.6 | 240.4                    | 0.29                     | 347.1  |
| 74    | 0.0 | 93.6 | 17.7               | 3.7                | 103.2 | 0.0 | 0.6 | 243.7                    | 0.29                     | 352.1  |
| 75    | 0.0 | 93.6 | 17.7               | 3.7                | 104.7 | 0.0 | 0.6 | 247.0                    | 0.29                     | 357.1  |
| 76    | 0.0 | 93.6 | 17.7               | 3.7                | 106.2 | 0.0 | 0.6 | 250.3                    | 0.29                     | 362.1  |
| 77    | 0.0 | 93.6 | 17.7               | 3.7                | 107.7 | 0.0 | 0.6 | 253.6                    | 0.29                     | 367.1  |
| 78    | 0.0 | 93.6 | 17.7               | 3.7                | 109.2 | 0.0 | 0.6 | 256.9                    | 0.29                     | 372.1  |
| 79    | 0.0 | 93.6 | 17.7               | 3.7                | 110.7 | 0.0 | 0.6 | 260.2                    | 0.29                     | 377.1  |
| 80    | 0.0 | 93.6 | 17.7               | 3.7                | 112.2 | 0.0 | 0.6 | 263.5                    | 0.29                     | 382.1  |
| 81    | 0.0 | 93.6 | 17.7               | 3.7                | 113.7 | 0.0 | 0.6 | 266.8                    | 0.29                     | 387.1  |
| 82    | 0.0 | 93.6 | 17.7               | 3.7                | 115.2 | 0.0 | 0.6 | 270.1                    | 0.29                     | 392.1  |
| 83    | 0.0 | 93.6 | 17.7               | 3.7                | 116.7 | 0.0 | 0.6 | 273.4                    | 0.29                     | 397.1  |
| 84    | 0.0 | 93.6 | 17.7               | 3.7                | 118.2 | 0.0 | 0.6 | 276.7                    | 0.29                     | 402.1  |
| 85    | 0.0 | 93.6 | 17.7               | 3.7                | 119.7 | 0.0 | 0.6 | 280.0                    | 0.29                     | 407.1  |
| 86    | 0.0 | 93.6 | 17.7               | 3.7                | 121.2 | 0.0 | 0.6 | 283.3                    | 0.29                     | 412.1  |
| 87    | 0.0 | 93.6 | 17.7               | 3.7                | 122.7 | 0.0 | 0.6 | 286.6                    | 0.29                     | 417.1  |
| 88    | 0.0 | 93.6 | 17.7               | 3.7                | 124.2 | 0.0 | 0.6 | 289.9                    | 0.29                     | 422.1  |
| 89    | 0.0 | 93.6 | 17.7               | 3.7                | 125.7 | 0.0 | 0.6 | 293.2                    | 0.29                     | 427.1  |
| 90    | 0.0 | 93.6 | 17.7               | 3.7                | 127.2 | 0.0 | 0.6 | 296.5                    | 0.29                     | 432.1  |
| 91    | 0.0 | 93.6 | 17.7               | 3.7                | 128.7 | 0.0 | 0.6 | 299.8                    | 0.29                     | 437.1  |
| 92    | 0.0 | 93.6 | 17.7               | 3.7                | 130.2 | 0.0 | 0.6 | 303.1                    | 0.29                     | 442.1  |
| 93    | 0.0 | 93.6 | 17.7               | 3.7                | 131.7 | 0.0 | 0.6 | 306.4                    | 0.29                     | 447.1  |
| 94    | 0.0 | 93.6 | 17.7               | 3.7                | 133.2 | 0.0 | 0.6 | 309.7                    | 0.29                     | 452.1  |
| 95    | 0.0 | 93.6 | 17.7               | 3.7                | 134.7 | 0.0 | 0.6 | 313.0                    | 0.29                     | 457.1  |
| 96    | 0.0 | 93.6 | 17.7               | 3.7                | 136.2 | 0.0 | 0.6 | 316.3                    | 0.29                     | 462.1  |
| 97    | 0.0 | 93.6 | 17.7               | 3.7                | 137.7 | 0.0 | 0.6 | 319.6                    | 0.29                     | 467.1  |
| 98    | 0.0 | 93.6 | 17.7               | 3.7                | 139.2 | 0.0 | 0.6 | 322.9                    | 0.29                     | 472.1  |
| 99    | 0.0 | 93.6 | 17.7               | 3.7                | 140.7 | 0.0 | 0.6 | 326.2                    | 0.29                     | 477.1  |
| 100   | 0.0 | 93.6 | 17.7               | 3.7                | 142.2 | 0.0 | 0.6 | 329.5                    | 0.29                     | 482.1  |

TABLE 7.  
FLOOR FORCE AND MOMENT LOADS : TRIAD PLAZA OFFICE TOWER

| FLOOR | CFX | CFY | FORCE(X)<br>(KIPS) | FORCE(Y)<br>(KIPS) | CMX | CMY | CHZ | MOM(X) | MOM(Y) | MOM(Z) |
|-------|-----|-----|--------------------|--------------------|-----|-----|-----|--------|--------|--------|
| 1     | 10  | 21  | 0                  | 22                 | 02  | 00  | 02  | 173    | 086    | 49     |
| 2     | 08  | 22  | 8                  | 26                 | 04  | 00  | 01  | 509    | 198    | 272    |
| 3     | 08  | 22  | 8                  | 26                 | 04  | 00  | 00  | 599    | 239    | 020    |
| 4     | 07  | 23  | 8                  | 32                 | 09  | 00  | 00  | 844    | 394    | 010    |
| 5     | 07  | 24  | 7                  | 35                 | 14  | 00  | 00  | 988    | 587    | 067    |
| 6     | 07  | 25  | 7                  | 37                 | 20  | 00  | 00  | 272    | 856    | 045    |
| 7     | 07  | 25  | 7                  | 39                 | 27  | 00  | 00  | 280    | 946    | 086    |
| 8     | 07  | 27  | 7                  | 42                 | 37  | 00  | 00  | 324    | 129    | 127    |
| 9     | 07  | 28  | 7                  | 45                 | 50  | 00  | 01  | 325    | 199    | 197    |
| 10    | 07  | 30  | 7                  | 45                 | 58  | 00  | 01  | 359    | 209    | 201    |
| 11    | 06  | 32  | 6                  | 45                 | 64  | 00  | 01  | 326    | 192    | 220    |
| 12    | 05  | 33  | 5                  | 45                 | 71  | 00  | 01  | 307    | 177    | 220    |
| 13    | 04  | 33  | 4                  | 45                 | 79  | 00  | 01  | 267    | 155    | 215    |
| 14    | 03  | 34  | 3                  | 45                 | 86  | 00  | 00  | 247    | 142    | 215    |
| 15    | 03  | 35  | 3                  | 45                 | 94  | 00  | 00  | 235    | 134    | 206    |
| 16    | 02  | 36  | 2                  | 45                 | 101 | 00  | 00  | 227    | 129    | 206    |
| 17    | 02  | 37  | 2                  | 45                 | 107 | 00  | 00  | 225    | 127    | 205    |
| 18    | 02  | 38  | 2                  | 45                 | 110 | 00  | 00  | 225    | 125    | 205    |
| 19    | 02  | 39  | 2                  | 45                 | 111 | 00  | 00  | 225    | 125    | 205    |
| 20    | 02  | 40  | 2                  | 45                 | 111 | 00  | 00  | 225    | 125    | 205    |
| 21    | 02  | 41  | 2                  | 45                 | 111 | 00  | 00  | 225    | 125    | 205    |
| 22    | 02  | 42  | 2                  | 45                 | 111 | 00  | 00  | 225    | 125    | 205    |
| 23    | 02  | 43  | 2                  | 45                 | 111 | 00  | 00  | 225    | 125    | 205    |
| 24    | 02  | 43  | 2                  | 45                 | 111 | 00  | 00  | 225    | 125    | 205    |
| 25    | 02  | 43  | 2                  | 45                 | 111 | 00  | 00  | 225    | 125    | 205    |
| 26    | 02  | 43  | 2                  | 45                 | 111 | 00  | 00  | 225    | 125    | 205    |
| 27    | 02  | 43  | 2                  | 45                 | 111 | 00  | 00  | 225    | 125    | 205    |
| 28    | 02  | 43  | 2                  | 45                 | 111 | 00  | 00  | 225    | 125    | 205    |
| 29    | 02  | 43  | 2                  | 45                 | 111 | 00  | 00  | 225    | 125    | 205    |
| 30    | 02  | 43  | 2                  | 45                 | 111 | 00  | 00  | 225    | 125    | 205    |

TABLE 7.  
FLOOR FORCE AND MOMENT LOADS : TRIAD PLAZA OFFICE TOWER

| FLOOR | CFX | CFY | FORCE(X)<br>(KIPS) | FORCE(Y)<br>(KIPS) | CMX | CMY  | CMZ  | MOM(X)<br>(1000-FT-KIPS) | MOM(Y)<br>(1000-FT-KIPS) | MOM(Z) |
|-------|-----|-----|--------------------|--------------------|-----|------|------|--------------------------|--------------------------|--------|
| 1     | 221 | 125 | 7.45               | 12.45              | 0.0 | 0.1  | 1.98 | 0.97                     | 2.14                     | 2.47   |
| 2     | 220 | 101 | 2.22               | 11.1               | 0.0 | 0.2  | 0.87 | 1.22                     | 4.77                     | 1.68   |
| 3     | 220 | 00  | 2.21               | 11.3               | 0.0 | 0.5  | 0.67 | 0.65                     | 1.04                     | 1.52   |
| 4     | 220 | 02  | 2.20               | 11.0               | 0.0 | 0.8  | 0.65 | 1.35                     | 1.55                     | 2.25   |
| 5     | 199 | 02  | 2.20               | 11.4               | 0.0 | 0.8  | 0.55 | 2.24                     | 1.82                     | 1.11   |
| 6     | 120 | 03  | 2.21               | 11.6               | 0.0 | 1.1  | 0.55 | 3.02                     | 1.48                     | 1.11   |
| 7     | 120 | 03  | 2.22               | 11.6               | 0.0 | 1.5  | 0.55 | 4.77                     | 1.66                     | 1.11   |
| 8     | 122 | 03  | 2.23               | 11.6               | 0.0 | 1.6  | 0.55 | 5.65                     | 1.44                     | 1.11   |
| 9     | 122 | 04  | 2.23               | 11.6               | 0.0 | 2.0  | 0.55 | 7.55                     | 1.33                     | 1.11   |
| 10    | 122 | 04  | 2.23               | 11.6               | 0.0 | 2.5  | 0.55 | 9.22                     | 1.27                     | 1.11   |
| 11    | 122 | 05  | 2.24               | 11.6               | 0.0 | 3.0  | 0.55 | 11.07                    | 1.19                     | 1.11   |
| 12    | 122 | 05  | 2.24               | 11.6               | 0.0 | 3.5  | 0.55 | 13.07                    | 1.25                     | 1.11   |
| 13    | 122 | 06  | 2.24               | 11.6               | 0.0 | 4.0  | 0.55 | 15.22                    | 1.19                     | 1.11   |
| 14    | 122 | 06  | 2.24               | 11.6               | 0.0 | 4.5  | 0.55 | 17.55                    | 1.16                     | 1.11   |
| 15    | 122 | 06  | 2.24               | 11.6               | 0.0 | 5.0  | 0.55 | 20.07                    | 1.16                     | 1.11   |
| 16    | 122 | 06  | 2.24               | 11.6               | 0.0 | 5.5  | 0.55 | 22.77                    | 1.16                     | 1.11   |
| 17    | 122 | 06  | 2.24               | 11.6               | 0.0 | 6.0  | 0.55 | 25.65                    | 1.16                     | 1.11   |
| 18    | 122 | 06  | 2.24               | 11.6               | 0.0 | 6.5  | 0.55 | 28.77                    | 1.16                     | 1.11   |
| 19    | 122 | 06  | 2.24               | 11.6               | 0.0 | 7.0  | 0.55 | 32.11                    | 1.16                     | 1.11   |
| 20    | 122 | 06  | 2.24               | 11.6               | 0.0 | 7.5  | 0.55 | 35.65                    | 1.16                     | 1.11   |
| 21    | 122 | 06  | 2.24               | 11.6               | 0.0 | 8.0  | 0.55 | 39.41                    | 1.16                     | 1.11   |
| 22    | 122 | 06  | 2.24               | 11.6               | 0.0 | 8.5  | 0.55 | 43.39                    | 1.16                     | 1.11   |
| 23    | 122 | 06  | 2.24               | 11.6               | 0.0 | 9.0  | 0.55 | 47.59                    | 1.16                     | 1.11   |
| 24    | 122 | 06  | 2.24               | 11.6               | 0.0 | 9.5  | 0.55 | 52.01                    | 1.16                     | 1.11   |
| 25    | 122 | 06  | 2.24               | 11.6               | 0.0 | 10.0 | 0.55 | 56.65                    | 1.16                     | 1.11   |
| 26    | 122 | 06  | 2.24               | 11.6               | 0.0 | 10.5 | 0.55 | 61.51                    | 1.16                     | 1.11   |
| 27    | 122 | 06  | 2.24               | 11.6               | 0.0 | 11.0 | 0.55 | 66.59                    | 1.16                     | 1.11   |
| 28    | 122 | 06  | 2.24               | 11.6               | 0.0 | 11.5 | 0.55 | 71.97                    | 1.16                     | 1.11   |
| 29    | 122 | 06  | 2.24               | 11.6               | 0.0 | 12.0 | 0.55 | 77.65                    | 1.16                     | 1.11   |
| 30    | 122 | 06  | 2.24               | 11.6               | 0.0 | 12.5 | 0.55 | 83.61                    | 1.16                     | 1.11   |
| 31    | 122 | 06  | 2.24               | 11.6               | 0.0 | 13.0 | 0.55 | 89.81                    | 1.16                     | 1.11   |
| 32    | 122 | 06  | 2.24               | 11.6               | 0.0 | 13.5 | 0.55 | 96.21                    | 1.16                     | 1.11   |
| 33    | 122 | 06  | 2.24               | 11.6               | 0.0 | 14.0 | 0.55 | 102.81                   | 1.16                     | 1.11   |
| 34    | 122 | 06  | 2.24               | 11.6               | 0.0 | 14.5 | 0.55 | 109.61                   | 1.16                     | 1.11   |
| 35    | 122 | 06  | 2.24               | 11.6               | 0.0 | 15.0 | 0.55 | 116.61                   | 1.16                     | 1.11   |
| 36    | 122 | 06  | 2.24               | 11.6               | 0.0 | 15.5 | 0.55 | 123.81                   | 1.16                     | 1.11   |
| 37    | 122 | 06  | 2.24               | 11.6               | 0.0 | 16.0 | 0.55 | 131.21                   | 1.16                     | 1.11   |
| 38    | 122 | 06  | 2.24               | 11.6               | 0.0 | 16.5 | 0.55 | 138.81                   | 1.16                     | 1.11   |
| 39    | 122 | 06  | 2.24               | 11.6               | 0.0 | 17.0 | 0.55 | 146.61                   | 1.16                     | 1.11   |
| 40    | 122 | 06  | 2.24               | 11.6               | 0.0 | 17.5 | 0.55 | 154.61                   | 1.16                     | 1.11   |
| 41    | 122 | 06  | 2.24               | 11.6               | 0.0 | 18.0 | 0.55 | 162.81                   | 1.16                     | 1.11   |
| 42    | 122 | 06  | 2.24               | 11.6               | 0.0 | 18.5 | 0.55 | 171.21                   | 1.16                     | 1.11   |
| 43    | 122 | 06  | 2.24               | 11.6               | 0.0 | 19.0 | 0.55 | 179.81                   | 1.16                     | 1.11   |
| 44    | 122 | 06  | 2.24               | 11.6               | 0.0 | 19.5 | 0.55 | 188.61                   | 1.16                     | 1.11   |
| 45    | 122 | 06  | 2.24               | 11.6               | 0.0 | 20.0 | 0.55 | 197.61                   | 1.16                     | 1.11   |
| 46    | 122 | 06  | 2.24               | 11.6               | 0.0 | 20.5 | 0.55 | 206.81                   | 1.16                     | 1.11   |
| 47    | 122 | 06  | 2.24               | 11.6               | 0.0 | 21.0 | 0.55 | 216.21                   | 1.16                     | 1.11   |
| 48    | 122 | 06  | 2.24               | 11.6               | 0.0 | 21.5 | 0.55 | 225.81                   | 1.16                     | 1.11   |
| 49    | 122 | 06  | 2.24               | 11.6               | 0.0 | 22.0 | 0.55 | 235.61                   | 1.16                     | 1.11   |
| 50    | 122 | 06  | 2.24               | 11.6               | 0.0 | 22.5 | 0.55 | 245.61                   | 1.16                     | 1.11   |
| 51    | 122 | 06  | 2.24               | 11.6               | 0.0 | 23.0 | 0.55 | 255.81                   | 1.16                     | 1.11   |
| 52    | 122 | 06  | 2.24               | 11.6               | 0.0 | 23.5 | 0.55 | 266.21                   | 1.16                     | 1.11   |
| 53    | 122 | 06  | 2.24               | 11.6               | 0.0 | 24.0 | 0.55 | 276.81                   | 1.16                     | 1.11   |
| 54    | 122 | 06  | 2.24               | 11.6               | 0.0 | 24.5 | 0.55 | 287.61                   | 1.16                     | 1.11   |
| 55    | 122 | 06  | 2.24               | 11.6               | 0.0 | 25.0 | 0.55 | 298.61                   | 1.16                     | 1.11   |
| 56    | 122 | 06  | 2.24               | 11.6               | 0.0 | 25.5 | 0.55 | 309.81                   | 1.16                     | 1.11   |
| 57    | 122 | 06  | 2.24               | 11.6               | 0.0 | 26.0 | 0.55 | 321.21                   | 1.16                     | 1.11   |
| 58    | 122 | 06  | 2.24               | 11.6               | 0.0 | 26.5 | 0.55 | 332.81                   | 1.16                     | 1.11   |
| 59    | 122 | 06  | 2.24               | 11.6               | 0.0 | 27.0 | 0.55 | 344.61                   | 1.16                     | 1.11   |
| 60    | 122 | 06  | 2.24               | 11.6               | 0.0 | 27.5 | 0.55 | 356.61                   | 1.16                     | 1.11   |
| 61    | 122 | 06  | 2.24               | 11.6               | 0.0 | 28.0 | 0.55 | 368.81                   | 1.16                     | 1.11   |
| 62    | 122 | 06  | 2.24               | 11.6               | 0.0 | 28.5 | 0.55 | 381.21                   | 1.16                     | 1.11   |
| 63    | 122 | 06  | 2.24               | 11.6               | 0.0 | 29.0 | 0.55 | 393.81                   | 1.16                     | 1.11   |
| 64    | 122 | 06  | 2.24               | 11.6               | 0.0 | 29.5 | 0.55 | 406.61                   | 1.16                     | 1.11   |
| 65    | 122 | 06  | 2.24               | 11.6               | 0.0 | 30.0 | 0.55 | 419.61                   | 1.16                     | 1.11   |
| 66    | 122 | 06  | 2.24               | 11.6               | 0.0 | 30.5 | 0.55 | 432.81                   | 1.16                     | 1.11   |
| 67    | 122 | 06  | 2.24               | 11.6               | 0.0 | 31.0 | 0.55 | 446.21                   | 1.16                     | 1.11   |
| 68    | 122 | 06  | 2.24               | 11.6               | 0.0 | 31.5 | 0.55 | 459.81                   | 1.16                     | 1.11   |
| 69    | 122 | 06  | 2.24               | 11.6               | 0.0 | 32.0 | 0.55 | 473.61                   | 1.16                     | 1.11   |
| 70    | 122 | 06  | 2.24               | 11.6               | 0.0 | 32.5 | 0.55 | 487.61                   | 1.16                     | 1.11   |
| 71    | 122 | 06  | 2.24               | 11.6               | 0.0 | 33.0 | 0.55 | 501.81                   | 1.16                     | 1.11   |
| 72    | 122 | 06  | 2.24               | 11.6               | 0.0 | 33.5 | 0.55 | 516.21                   | 1.16                     | 1.11   |
| 73    | 122 | 06  | 2.24               | 11.6               | 0.0 | 34.0 | 0.55 | 530.81                   | 1.16                     | 1.11   |
| 74    | 122 | 06  | 2.24               | 11.6               | 0.0 | 34.5 | 0.55 | 545.61                   | 1.16                     | 1.11   |
| 75    | 122 | 06  | 2.24               | 11.6               | 0.0 | 35.0 | 0.55 | 560.61                   | 1.16                     | 1.11   |
| 76    | 122 | 06  | 2.24               | 11.6               | 0.0 | 35.5 | 0.55 | 575.81                   | 1.16                     | 1.11   |
| 77    | 122 | 06  | 2.24               | 11.6               | 0.0 | 36.0 | 0.55 | 591.21                   | 1.16                     | 1.11   |
| 78    | 122 | 06  | 2.24               | 11.6               | 0.0 | 36.5 | 0.55 | 606.81                   | 1.16                     | 1.11   |
| 79    | 122 | 06  | 2.24               | 11.6               | 0.0 | 37.0 | 0.55 | 622.61                   | 1.16                     | 1.11   |
| 80    | 122 | 06  | 2.24               | 11.6               | 0.0 | 37.5 | 0.55 | 638.61                   | 1.16                     | 1.11   |
| 81    | 122 | 06  | 2.24               | 11.6               | 0.0 | 38.0 | 0.55 | 654.81                   | 1.16                     | 1.11   |
| 82    | 122 | 06  | 2.24               | 11.6               | 0.0 | 38.5 | 0.55 | 671.21                   | 1.16                     | 1.11   |
| 83    | 122 | 06  | 2.24               | 11.6               | 0.0 | 39.0 | 0.55 | 687.81                   | 1.16                     | 1.11   |
| 84    | 122 | 06  | 2.24               | 11.6               | 0.0 | 39.5 | 0.55 | 704.61                   | 1.16                     | 1.11   |
| 85    | 122 | 06  | 2.24               | 11.6               | 0.0 | 40.0 | 0.55 | 721.61                   | 1.16                     | 1.11   |
| 86    | 122 | 06  | 2.24               | 11.6               | 0.0 | 40.5 | 0.55 | 738.81                   | 1.16                     | 1.11   |
| 87    | 122 | 06  | 2.24               | 11.6               | 0.0 | 41.0 | 0.55 | 756.21                   | 1.16                     | 1.11   |
| 88    | 122 | 06  | 2.24               | 11.6               | 0.0 | 41.5 | 0.55 | 773.81                   | 1.16                     | 1.11   |
| 89    | 122 | 06  | 2.24               | 11.6               | 0.0 | 42.0 | 0.55 | 791.61                   | 1.16                     | 1.11   |
| 90    | 122 | 06  | 2.24               | 11.6               | 0.0 | 42.5 | 0.55 | 809.61                   | 1.16                     | 1.11   |
| 91    | 122 | 06  | 2.24               | 11.6               | 0.0 | 43.0 | 0.55 | 827.81                   | 1.16                     | 1.11   |
| 92    | 122 | 06  | 2.24               | 11.6               | 0.0 | 43.5 | 0.55 | 846.21                   | 1.16                     | 1.11   |
| 93    | 122 | 06  | 2.24               | 11.6               | 0.0 | 44.0 | 0.55 | 864.81                   | 1.16                     | 1.11   |
| 94    | 122 | 06  | 2.24               | 11.6               | 0.0 | 44.5 | 0.55 | 883.61                   | 1.16                     | 1.11   |
| 95    | 122 | 06  | 2.24               | 11.6               | 0.0 | 45.0 | 0.55 | 902.61                   | 1.16                     | 1.11   |
| 96    | 122 | 06  | 2.24               | 11.6               | 0.0 | 45.5 | 0.55 | 921.81                   | 1.16                     | 1.11   |
| 97    | 122 | 06  | 2.24               | 11.6               | 0.0 | 46.0 | 0.55 | 941.21                   | 1.16                     | 1.11   |
| 98    | 122 | 06  | 2.24               | 11.6               | 0.0 | 46.5 | 0.55 | 960.81                   | 1.16                     | 1.11   |
| 99    | 122 | 06  | 2.24               | 11.6               | 0.0 | 47.0 | 0.55 | 980.61                   | 1.16                     | 1.11   |
| 100   | 122 | 06  | 2.24               | 11.6               | 0.0 | 47.5 | 0.55 | 1000.61                  | 1.16                     | 1.11   |



TABLE 7.  
FLOOR FORCE AND MOMENT LOADS : TRIAD PLAZA OFFICE TOWER

WIND DIRECTION 45  
REF. PRESS = 34.0 PSF

GUST FACTOR = 1.32      REF. AREA = 1800 SQ. FT.      REF. LENGTH = 200 FT.

| FLOOR | CFX  | CFY  | FORCE(X)<br>(KIPS) | FORCE(Y)<br>(KIPS) | CMX | CMY  | CMZ | MOM(X)<br>(1000-FT-KIPS) | MOM(Y)<br>(1000-FT-KIPS) | MOM(Z) |
|-------|------|------|--------------------|--------------------|-----|------|-----|--------------------------|--------------------------|--------|
| 1     | 1.05 | 2.14 | 32.6               | 22.1               | 0.2 | 0.3  | 1.2 | 1.2                      | 6.6                      | 3.2    |
| 2     | 2.24 | 1.09 | 22.5               | 11.1               | 0.2 | 0.4  | 1.1 | 1.3                      | 9.2                      | 3.5    |
| 3     | 2.24 | 0.99 | 22.5               | 10.5               | 0.3 | 0.6  | 1.0 | 1.4                      | 8.6                      | 3.5    |
| 4     | 2.23 | 0.88 | 22.4               | 9.9                | 0.4 | 0.9  | 0.8 | 1.7                      | 6.7                      | 3.2    |
| 5     | 2.23 | 0.99 | 22.4               | 10.5               | 0.5 | 1.2  | 0.8 | 1.9                      | 6.9                      | 3.2    |
| 6     | 2.25 | 1.01 | 22.6               | 11.0               | 0.7 | 1.6  | 0.8 | 2.0                      | 7.0                      | 3.2    |
| 7     | 2.25 | 1.11 | 22.6               | 11.3               | 0.9 | 2.0  | 0.8 | 2.3                      | 7.8                      | 3.2    |
| 8     | 2.25 | 1.11 | 22.6               | 11.3               | 1.0 | 2.3  | 0.8 | 2.5                      | 8.0                      | 3.2    |
| 9     | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 2.6  | 0.8 | 2.7                      | 8.2                      | 3.2    |
| 10    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 2.9  | 0.8 | 2.9                      | 8.4                      | 3.2    |
| 11    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 3.2  | 0.8 | 3.0                      | 8.5                      | 3.2    |
| 12    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 3.5  | 0.8 | 3.1                      | 8.6                      | 3.2    |
| 13    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 3.8  | 0.8 | 3.2                      | 8.7                      | 3.2    |
| 14    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 4.1  | 0.8 | 3.3                      | 8.8                      | 3.2    |
| 15    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 4.4  | 0.8 | 3.4                      | 8.9                      | 3.2    |
| 16    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 4.7  | 0.8 | 3.5                      | 9.0                      | 3.2    |
| 17    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 5.0  | 0.8 | 3.6                      | 9.1                      | 3.2    |
| 18    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 5.3  | 0.8 | 3.7                      | 9.2                      | 3.2    |
| 19    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 5.6  | 0.8 | 3.8                      | 9.3                      | 3.2    |
| 20    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 5.9  | 0.8 | 3.9                      | 9.4                      | 3.2    |
| 21    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 6.2  | 0.8 | 4.0                      | 9.5                      | 3.2    |
| 22    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 6.5  | 0.8 | 4.1                      | 9.6                      | 3.2    |
| 23    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 6.8  | 0.8 | 4.2                      | 9.7                      | 3.2    |
| 24    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 7.1  | 0.8 | 4.3                      | 9.8                      | 3.2    |
| 25    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 7.4  | 0.8 | 4.4                      | 9.9                      | 3.2    |
| 26    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 7.7  | 0.8 | 4.5                      | 10.0                     | 3.2    |
| 27    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 8.0  | 0.8 | 4.6                      | 10.1                     | 3.2    |
| 28    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 8.3  | 0.8 | 4.7                      | 10.2                     | 3.2    |
| 29    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 8.6  | 0.8 | 4.8                      | 10.3                     | 3.2    |
| 30    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 8.9  | 0.8 | 4.9                      | 10.4                     | 3.2    |
| 31    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 9.2  | 0.8 | 5.0                      | 10.5                     | 3.2    |
| 32    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 9.5  | 0.8 | 5.1                      | 10.6                     | 3.2    |
| 33    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 9.8  | 0.8 | 5.2                      | 10.7                     | 3.2    |
| 34    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 10.1 | 0.8 | 5.3                      | 10.8                     | 3.2    |
| 35    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 10.4 | 0.8 | 5.4                      | 10.9                     | 3.2    |
| 36    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 10.7 | 0.8 | 5.5                      | 11.0                     | 3.2    |
| 37    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 11.0 | 0.8 | 5.6                      | 11.1                     | 3.2    |
| 38    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 11.3 | 0.8 | 5.7                      | 11.2                     | 3.2    |
| 39    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 11.6 | 0.8 | 5.8                      | 11.3                     | 3.2    |
| 40    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 11.9 | 0.8 | 5.9                      | 11.4                     | 3.2    |
| 41    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 12.2 | 0.8 | 6.0                      | 11.5                     | 3.2    |
| 42    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 12.5 | 0.8 | 6.1                      | 11.6                     | 3.2    |
| 43    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 12.8 | 0.8 | 6.2                      | 11.7                     | 3.2    |
| 44    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 13.1 | 0.8 | 6.3                      | 11.8                     | 3.2    |
| 45    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 13.4 | 0.8 | 6.4                      | 11.9                     | 3.2    |
| 46    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 13.7 | 0.8 | 6.5                      | 12.0                     | 3.2    |
| 47    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 14.0 | 0.8 | 6.6                      | 12.1                     | 3.2    |
| 48    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 14.3 | 0.8 | 6.7                      | 12.2                     | 3.2    |
| 49    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 14.6 | 0.8 | 6.8                      | 12.3                     | 3.2    |
| 50    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 14.9 | 0.8 | 6.9                      | 12.4                     | 3.2    |
| 51    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 15.2 | 0.8 | 7.0                      | 12.5                     | 3.2    |
| 52    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 15.5 | 0.8 | 7.1                      | 12.6                     | 3.2    |
| 53    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 15.8 | 0.8 | 7.2                      | 12.7                     | 3.2    |
| 54    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 16.1 | 0.8 | 7.3                      | 12.8                     | 3.2    |
| 55    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 16.4 | 0.8 | 7.4                      | 12.9                     | 3.2    |
| 56    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 16.7 | 0.8 | 7.5                      | 13.0                     | 3.2    |
| 57    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 17.0 | 0.8 | 7.6                      | 13.1                     | 3.2    |
| 58    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 17.3 | 0.8 | 7.7                      | 13.2                     | 3.2    |
| 59    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 17.6 | 0.8 | 7.8                      | 13.3                     | 3.2    |
| 60    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 17.9 | 0.8 | 7.9                      | 13.4                     | 3.2    |
| 61    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 18.2 | 0.8 | 8.0                      | 13.5                     | 3.2    |
| 62    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 18.5 | 0.8 | 8.1                      | 13.6                     | 3.2    |
| 63    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 18.8 | 0.8 | 8.2                      | 13.7                     | 3.2    |
| 64    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 19.1 | 0.8 | 8.3                      | 13.8                     | 3.2    |
| 65    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 19.4 | 0.8 | 8.4                      | 13.9                     | 3.2    |
| 66    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 19.7 | 0.8 | 8.5                      | 14.0                     | 3.2    |
| 67    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 20.0 | 0.8 | 8.6                      | 14.1                     | 3.2    |
| 68    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 20.3 | 0.8 | 8.7                      | 14.2                     | 3.2    |
| 69    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 20.6 | 0.8 | 8.8                      | 14.3                     | 3.2    |
| 70    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 20.9 | 0.8 | 8.9                      | 14.4                     | 3.2    |
| 71    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 21.2 | 0.8 | 9.0                      | 14.5                     | 3.2    |
| 72    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 21.5 | 0.8 | 9.1                      | 14.6                     | 3.2    |
| 73    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 21.8 | 0.8 | 9.2                      | 14.7                     | 3.2    |
| 74    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 22.1 | 0.8 | 9.3                      | 14.8                     | 3.2    |
| 75    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 22.4 | 0.8 | 9.4                      | 14.9                     | 3.2    |
| 76    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 22.7 | 0.8 | 9.5                      | 15.0                     | 3.2    |
| 77    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 23.0 | 0.8 | 9.6                      | 15.1                     | 3.2    |
| 78    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 23.3 | 0.8 | 9.7                      | 15.2                     | 3.2    |
| 79    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 23.6 | 0.8 | 9.8                      | 15.3                     | 3.2    |
| 80    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 23.9 | 0.8 | 9.9                      | 15.4                     | 3.2    |
| 81    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 24.2 | 0.8 | 10.0                     | 15.5                     | 3.2    |
| 82    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 24.5 | 0.8 | 10.1                     | 15.6                     | 3.2    |
| 83    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 24.8 | 0.8 | 10.2                     | 15.7                     | 3.2    |
| 84    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 25.1 | 0.8 | 10.3                     | 15.8                     | 3.2    |
| 85    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 25.4 | 0.8 | 10.4                     | 15.9                     | 3.2    |
| 86    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 25.7 | 0.8 | 10.5                     | 16.0                     | 3.2    |
| 87    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 26.0 | 0.8 | 10.6                     | 16.1                     | 3.2    |
| 88    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 26.3 | 0.8 | 10.7                     | 16.2                     | 3.2    |
| 89    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 26.6 | 0.8 | 10.8                     | 16.3                     | 3.2    |
| 90    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 26.9 | 0.8 | 10.9                     | 16.4                     | 3.2    |
| 91    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 27.2 | 0.8 | 11.0                     | 16.5                     | 3.2    |
| 92    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 27.5 | 0.8 | 11.1                     | 16.6                     | 3.2    |
| 93    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 27.8 | 0.8 | 11.2                     | 16.7                     | 3.2    |
| 94    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 28.1 | 0.8 | 11.3                     | 16.8                     | 3.2    |
| 95    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 28.4 | 0.8 | 11.4                     | 16.9                     | 3.2    |
| 96    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 28.7 | 0.8 | 11.5                     | 17.0                     | 3.2    |
| 97    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 29.0 | 0.8 | 11.6                     | 17.1                     | 3.2    |
| 98    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 29.3 | 0.8 | 11.7                     | 17.2                     | 3.2    |
| 99    | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 29.6 | 0.8 | 11.8                     | 17.3                     | 3.2    |
| 100   | 2.25 | 1.11 | 22.6               | 11.3               | 1.1 | 29.9 | 0.8 | 11.9                     | 17.4                     | 3.2    |

TABLE 7.  
FLOOR FORCE AND MOMENT LOADS : TRIAD PLAZA OFFICE TOWER

| FLOOR | CFX | CFY | FORCE(X)<br>(KIPS) | FORCE(Y)<br>(KIPS) | CMX | CMY | CMZ | REF. AREA = 1800 SQ.FT. | MOM(K) | MOM(Y)<br>(1000-FT-KIPS) | MOM(Z) |
|-------|-----|-----|--------------------|--------------------|-----|-----|-----|-------------------------|--------|--------------------------|--------|
| 1     | 44  | 38  | 32                 | 32                 | 00  | 04  | 18  | 303                     | 341    | 33                       | 82     |
| 2     | 33  | 25  | 22                 | 22                 | 00  | 06  | 13  | 654                     | 241    | 1                        | 04     |
| 3     | 32  | 22  | 22                 | 22                 | 00  | 08  | 12  | 287                     | 16     | 1                        | 87     |
| 4     | 32  | 22  | 22                 | 22                 | 00  | 12  | 12  | 989                     | 2      | 2                        | 75     |
| 5     | 32  | 22  | 22                 | 22                 | 00  | 15  | 12  | 346                     | 4      | 2                        | 90     |
| 6     | 32  | 22  | 22                 | 22                 | 00  | 16  | 12  | 265                     | 3      | 2                        | 75     |
| 7     | 32  | 22  | 22                 | 22                 | 00  | 13  | 12  | 289                     | 4      | 2                        | 90     |
| 8     | 32  | 22  | 22                 | 22                 | 00  | 13  | 11  | 238                     | 4      | 2                        | 90     |
| 9     | 32  | 22  | 22                 | 22                 | 00  | 12  | 11  | 318                     | 5      | 2                        | 90     |
| 10    | 32  | 22  | 22                 | 22                 | 00  | 12  | 11  | 448                     | 5      | 2                        | 90     |
| 11    | 32  | 22  | 22                 | 22                 | 00  | 12  | 11  | 894                     | 7      | 2                        | 90     |
| 12    | 32  | 22  | 22                 | 22                 | 00  | 12  | 10  | 827                     | 8      | 2                        | 90     |
| 13    | 32  | 22  | 22                 | 22                 | 00  | 12  | 09  | 717                     | 8      | 2                        | 90     |
| 14    | 32  | 22  | 22                 | 22                 | 00  | 12  | 08  | 981                     | 9      | 2                        | 90     |
| 15    | 32  | 22  | 22                 | 22                 | 00  | 12  | 08  | 256                     | 10     | 2                        | 90     |
| 16    | 32  | 22  | 22                 | 22                 | 00  | 12  | 08  | 558                     | 11     | 2                        | 90     |
| 17    | 32  | 22  | 22                 | 22                 | 00  | 12  | 07  | 837                     | 12     | 2                        | 90     |
| 18    | 32  | 22  | 22                 | 22                 | 00  | 12  | 07  | 116                     | 13     | 2                        | 90     |
| 19    | 32  | 22  | 22                 | 22                 | 00  | 12  | 06  | 255                     | 13     | 2                        | 90     |
| 20    | 32  | 22  | 22                 | 22                 | 00  | 12  | 05  | 442                     | 13     | 2                        | 90     |
| 21    | 32  | 22  | 22                 | 22                 | 00  | 12  | 04  | 655                     | 14     | 2                        | 90     |
| 22    | 32  | 22  | 22                 | 22                 | 00  | 12  | 03  | 951                     | 14     | 2                        | 90     |
| 23    | 32  | 22  | 22                 | 22                 | 00  | 12  | 02  | 126                     | 15     | 2                        | 90     |
| 24    | 32  | 22  | 22                 | 22                 | 00  | 12  | 01  | 255                     | 15     | 2                        | 90     |
| 25    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 442                     | 15     | 2                        | 90     |
| 26    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 655                     | 15     | 2                        | 90     |
| 27    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 951                     | 15     | 2                        | 90     |
| 28    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 126                     | 15     | 2                        | 90     |
| 29    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 255                     | 15     | 2                        | 90     |
| 30    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 442                     | 15     | 2                        | 90     |
| 31    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 655                     | 15     | 2                        | 90     |
| 32    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 951                     | 15     | 2                        | 90     |
| 33    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 126                     | 15     | 2                        | 90     |
| 34    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 255                     | 15     | 2                        | 90     |
| 35    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 442                     | 15     | 2                        | 90     |
| 36    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 655                     | 15     | 2                        | 90     |
| 37    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 951                     | 15     | 2                        | 90     |
| 38    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 126                     | 15     | 2                        | 90     |
| 39    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 255                     | 15     | 2                        | 90     |
| 40    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 442                     | 15     | 2                        | 90     |
| 41    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 655                     | 15     | 2                        | 90     |
| 42    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 951                     | 15     | 2                        | 90     |
| 43    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 126                     | 15     | 2                        | 90     |
| 44    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 255                     | 15     | 2                        | 90     |
| 45    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 442                     | 15     | 2                        | 90     |
| 46    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 655                     | 15     | 2                        | 90     |
| 47    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 951                     | 15     | 2                        | 90     |
| 48    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 126                     | 15     | 2                        | 90     |
| 49    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 255                     | 15     | 2                        | 90     |
| 50    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 442                     | 15     | 2                        | 90     |
| 51    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 655                     | 15     | 2                        | 90     |
| 52    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 951                     | 15     | 2                        | 90     |
| 53    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 126                     | 15     | 2                        | 90     |
| 54    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 255                     | 15     | 2                        | 90     |
| 55    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 442                     | 15     | 2                        | 90     |
| 56    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 655                     | 15     | 2                        | 90     |
| 57    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 951                     | 15     | 2                        | 90     |
| 58    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 126                     | 15     | 2                        | 90     |
| 59    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 255                     | 15     | 2                        | 90     |
| 60    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 442                     | 15     | 2                        | 90     |
| 61    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 655                     | 15     | 2                        | 90     |
| 62    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 951                     | 15     | 2                        | 90     |
| 63    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 126                     | 15     | 2                        | 90     |
| 64    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 255                     | 15     | 2                        | 90     |
| 65    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 442                     | 15     | 2                        | 90     |
| 66    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 655                     | 15     | 2                        | 90     |
| 67    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 951                     | 15     | 2                        | 90     |
| 68    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 126                     | 15     | 2                        | 90     |
| 69    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 255                     | 15     | 2                        | 90     |
| 70    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 442                     | 15     | 2                        | 90     |
| 71    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 655                     | 15     | 2                        | 90     |
| 72    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 951                     | 15     | 2                        | 90     |
| 73    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 126                     | 15     | 2                        | 90     |
| 74    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 255                     | 15     | 2                        | 90     |
| 75    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 442                     | 15     | 2                        | 90     |
| 76    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 655                     | 15     | 2                        | 90     |
| 77    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 951                     | 15     | 2                        | 90     |
| 78    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 126                     | 15     | 2                        | 90     |
| 79    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 255                     | 15     | 2                        | 90     |
| 80    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 442                     | 15     | 2                        | 90     |
| 81    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 655                     | 15     | 2                        | 90     |
| 82    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 951                     | 15     | 2                        | 90     |
| 83    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 126                     | 15     | 2                        | 90     |
| 84    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 255                     | 15     | 2                        | 90     |
| 85    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 442                     | 15     | 2                        | 90     |
| 86    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 655                     | 15     | 2                        | 90     |
| 87    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 951                     | 15     | 2                        | 90     |
| 88    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 126                     | 15     | 2                        | 90     |
| 89    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 255                     | 15     | 2                        | 90     |
| 90    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 442                     | 15     | 2                        | 90     |
| 91    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 655                     | 15     | 2                        | 90     |
| 92    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 951                     | 15     | 2                        | 90     |
| 93    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 126                     | 15     | 2                        | 90     |
| 94    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 255                     | 15     | 2                        | 90     |
| 95    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 442                     | 15     | 2                        | 90     |
| 96    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 655                     | 15     | 2                        | 90     |
| 97    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 951                     | 15     | 2                        | 90     |
| 98    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 126                     | 15     | 2                        | 90     |
| 99    | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 255                     | 15     | 2                        | 90     |
| 100   | 32  | 22  | 22                 | 22                 | 00  | 12  | 00  | 442                     | 15     | 2                        | 90     |

TABLE 7.

FLOOR FORCE AND MOMENT LOADS : TRIAD PLAZA OFFICE TOWER

| FLOOR | CFX | CFY | FORCE(X)<br>(KIPS) | FORCE(Y)<br>(KIPS) | CMX | CMY | CMZ | REF. AREA = 1800 SQ. FT. | REF. LENGTH = 200 FT. | MOM(X)<br>(1000-FT-KIPS) | MOM(Y)<br>(1000-FT-KIPS) | MOM(Z) |
|-------|-----|-----|--------------------|--------------------|-----|-----|-----|--------------------------|-----------------------|--------------------------|--------------------------|--------|
| 12    | 47  | 29  | 49.8               | 32.9               | 1.0 | 0.2 | 16  | 241                      | 392                   | 21                       | 9                        | 10     |
| 3     | 49  | 31  | 42.2               | 28.7               | 0.2 | 0.7 | 12  | 468                      | 352                   | 1                        | 3                        | 16     |
| 5     | 49  | 31  | 42.1               | 28.7               | 0.4 | 1.0 | 11  | 853                      | 403                   | 1                        | 4                        | 32     |
| 7     | 49  | 31  | 41.8               | 28.5               | 0.6 | 1.2 | 10  | 1294                     | 458                   | 1                        | 3                        | 28     |
| 9     | 40  | 16  | 42.2               | 28.9               | 0.8 | 1.7 | 10  | 1978                     | 526                   | 1                        | 4                        | 12     |
| 10    | 41  | 17  | 43.4               | 31.8               | 0.9 | 2.0 | 10  | 2997                     | 687                   | 1                        | 4                        | 68     |
| 11    | 41  | 18  | 44.6               | 33.5               | 1.2 | 2.6 | 10  | 4387                     | 949                   | 1                        | 5                        | 25     |
| 12    | 44  | 19  | 45.2               | 35.6               | 1.4 | 3.2 | 10  | 6377                     | 1351                  | 1                        | 6                        | 05     |
| 13    | 44  | 19  | 45.8               | 37.7               | 1.6 | 3.9 | 10  | 9174                     | 1949                  | 1                        | 7                        | 69     |
| 14    | 44  | 18  | 45.2               | 36.7               | 1.7 | 4.0 | 10  | 1280                     | 2304                  | 1                        | 8                        | 99     |
| 15    | 44  | 16  | 47.7               | 41.8               | 1.8 | 4.6 | 10  | 1807                     | 2949                  | 1                        | 9                        | 99     |
| 16    | 44  | 15  | 48.6               | 45.5               | 1.8 | 5.3 | 10  | 2529                     | 3980                  | 1                        | 10                       | 47     |
| 17    | 44  | 13  | 48.5               | 45.5               | 1.8 | 5.3 | 10  | 3529                     | 5399                  | 1                        | 11                       | 87     |
| 18    | 44  | 11  | 48.5               | 45.5               | 1.8 | 5.3 | 10  | 4929                     | 7418                  | 1                        | 12                       | 27     |
| 19    | 44  | 9   | 48.5               | 45.5               | 1.8 | 5.3 | 10  | 6717                     | 10047                 | 1                        | 13                       | 74     |
| 20    | 44  | 7   | 48.5               | 45.5               | 1.8 | 5.3 | 10  | 8927                     | 14137                 | 1                        | 14                       | 13     |
| 21    | 44  | 5   | 48.5               | 45.5               | 1.8 | 5.3 | 10  | 11660                    | 19184                 | 1                        | 15                       | 35     |
| 22    | 44  | 3   | 48.5               | 45.5               | 1.8 | 5.3 | 10  | 15960                    | 26814                 | 1                        | 16                       | 81     |
| 23    | 44  | 1   | 48.5               | 45.5               | 1.8 | 5.3 | 10  | 21946                    | 37254                 | 1                        | 17                       | 25     |
| 24    | 44  | 0   | 48.5               | 45.5               | 1.8 | 5.3 | 10  | 29741                    | 51632                 | 1                        | 18                       | 59     |
| 25    | 44  | 0   | 48.5               | 45.5               | 1.8 | 5.3 | 10  | 40111                    | 70754                 | 1                        | 19                       | 14     |

TABLE 7.

FLOOR FORCE AND MOMENT LOADS : TRIAD PLAZA OFFICE TOWER

| FLOOR | CFX | CFY | FORCE(X)<br>(KIPS) | FORCE(Y)<br>(KIPS) | CMX  | CMY  | CMZ | MOM(X)<br>(1000-FT-KIPS) | MOM(Y)<br>(1000-FT-KIPS) | MOM(Z) |
|-------|-----|-----|--------------------|--------------------|------|------|-----|--------------------------|--------------------------|--------|
| 1     | 58  | 54  | 22                 | 59                 | 0257 | 0255 | 13  | 1                        | 4                        | 22     |
| 2     | 49  | 44  | 52                 | 47                 | 007  | 009  | 10  | 1                        | 1                        | 1      |
| 3     | 49  | 42  | 51                 | 45                 | 103  | 125  | 08  | 1                        | 2                        | 1      |
| 4     | 48  | 43  | 51                 | 45                 | 116  | 118  | 08  | 2                        | 3                        | 1      |
| 5     | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 6     | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 7     | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 8     | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 9     | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 10    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 11    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 12    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 13    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 14    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 15    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 16    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 17    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 18    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 19    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 20    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 21    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 22    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 23    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 24    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 25    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 26    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 27    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 28    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 29    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 30    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 31    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 32    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 33    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 34    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 35    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 36    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 37    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 38    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 39    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 40    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 41    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 42    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 43    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 44    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 45    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 46    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 47    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 48    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 49    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 50    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 51    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 52    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 53    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 54    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 55    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 56    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 57    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 58    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 59    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 60    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 61    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 62    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 63    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 64    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 65    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 66    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 67    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 68    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 69    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 70    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 71    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 72    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 73    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 74    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 75    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 76    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 77    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 78    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 79    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 80    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 81    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 82    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 83    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 84    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 85    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 86    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 87    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 88    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 89    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 90    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 91    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 92    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 93    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 94    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 95    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 96    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 97    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 98    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 99    | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |
| 100   | 48  | 43  | 50                 | 45                 | 122  | 124  | 07  | 4                        | 4                        | 1      |

TABLE 7.  
FLOOR FORCE AND MOMENT LOADS : TRIAD PLAZA OFFICE TOWER

| FLOOR | CFX | CFY | FORCE(X)<br>(KIPS) | FORCE(Y)<br>(KIPS) | CMX   | CMY  | CMZ  | MOM(X)<br>(1000-FT-KIPS) | REF. LENGTH = 200 FT. | MOM(Y)<br>(1000-FT-KIPS) | MOM(Z) |
|-------|-----|-----|--------------------|--------------------|-------|------|------|--------------------------|-----------------------|--------------------------|--------|
| 1     | 59  | 58  | 62.8               | 61.7               | 0.00  | 0.00 | 1.08 | -1.487                   |                       | 9.0                      | 3.55   |
| 2     | 48  | 48  | 51.0               | 51.1               | 0.00  | 0.00 | 0.77 | -1.179                   |                       | 14.6                     | 2.89   |
| 3     | 46  | 49  | 48.9               | 52.2               | 1.25  | 1.14 | 0.77 | -1.225                   |                       | 11.0                     | 2.59   |
| 4     | 44  | 50  | 47.0               | 55.0               | 2.25  | 1.92 | 0.77 | -1.453                   |                       | 11.5                     | 2.59   |
| 5     | 44  | 50  | 46.9               | 56.9               | 3.25  | 2.88 | 0.77 | -1.561                   |                       | 11.5                     | 2.59   |
| 6     | 44  | 50  | 47.2               | 56.5               | 4.25  | 3.81 | 0.77 | -1.674                   |                       | 11.5                     | 2.59   |
| 7     | 44  | 50  | 47.6               | 56.3               | 5.25  | 4.70 | 0.77 | -1.737                   |                       | 11.5                     | 2.59   |
| 8     | 44  | 50  | 47.7               | 56.4               | 6.25  | 5.57 | 0.77 | -1.740                   |                       | 11.5                     | 2.59   |
| 9     | 44  | 50  | 47.6               | 56.2               | 7.25  | 6.40 | 0.77 | -1.697                   |                       | 11.5                     | 2.59   |
| 10    | 44  | 50  | 47.0               | 54.4               | 8.25  | 7.17 | 0.77 | -1.595                   |                       | 11.5                     | 2.59   |
| 11    | 44  | 50  | 46.0               | 52.3               | 9.25  | 7.87 | 0.77 | -1.459                   |                       | 11.5                     | 2.59   |
| 12    | 44  | 50  | 44.5               | 49.4               | 10.25 | 8.50 | 0.65 | -1.297                   |                       | 11.5                     | 2.59   |
| 13    | 44  | 50  | 43.7               | 46.2               | 11.25 | 8.97 | 0.54 | -1.145                   |                       | 11.5                     | 2.59   |
| 14    | 44  | 50  | 43.5               | 42.8               | 12.25 | 9.29 | 0.42 | -1.008                   |                       | 11.5                     | 2.59   |
| 15    | 44  | 50  | 43.3               | 39.2               | 13.25 | 9.46 | 0.32 | -0.887                   |                       | 11.5                     | 2.59   |
| 16    | 44  | 50  | 43.3               | 35.4               | 14.25 | 9.50 | 0.25 | -0.782                   |                       | 11.5                     | 2.59   |
| 17    | 44  | 50  | 43.3               | 31.4               | 15.25 | 9.42 | 0.16 | -0.691                   |                       | 11.5                     | 2.59   |
| 18    | 44  | 50  | 43.3               | 27.2               | 16.25 | 9.23 | 0.09 | -0.613                   |                       | 11.5                     | 2.59   |
| 19    | 44  | 50  | 43.3               | 22.8               | 17.25 | 8.94 | 0.04 | -0.547                   |                       | 11.5                     | 2.59   |
| 20    | 44  | 50  | 43.3               | 18.2               | 18.25 | 8.56 | 0.01 | -0.492                   |                       | 11.5                     | 2.59   |
| 21    | 44  | 50  | 43.3               | 13.4               | 19.25 | 8.09 | 0.00 | -0.447                   |                       | 11.5                     | 2.59   |
| 22    | 44  | 50  | 43.3               | 8.4                | 20.25 | 7.64 | 0.00 | -0.411                   |                       | 11.5                     | 2.59   |
| 23    | 44  | 50  | 43.3               | 3.2                | 21.25 | 7.21 | 0.00 | -0.382                   |                       | 11.5                     | 2.59   |
| 24    | 44  | 50  | 43.3               | 0.0                | 22.25 | 6.80 | 0.00 | -0.359                   |                       | 11.5                     | 2.59   |

TABLE 7.  
FLOOR FORCE AND MOMENT LOADS : TRIAD PLAZA OFFICE TOWER

WIND DIRECTION 120  
REF. PRESS = 34.0 PSF

GUST FACTOR = 1.32

REF. AREA = 1800 SQ. FT.

REF. LENGTH = 200 FT.

| FLOOR | CFX | CFY | FORCE(X)<br>(KIPS) | FORCE(Y)<br>(KIPS) | CMX | CMY | CMZ | MOM(X)<br>(1000-FT-KIPS) | MOM(Y)<br>(1000-FT-KIPS) | MOM(Z) |
|-------|-----|-----|--------------------|--------------------|-----|-----|-----|--------------------------|--------------------------|--------|
| 1     | 39  | 51  | 40                 | 54                 | 02  | 03  | 03  | 42                       | 31                       | 52     |
| 2     | 39  | 51  | 30                 | 54                 | 09  | 04  | 04  | 12                       | 17                       | 23     |
| 3     | 27  | 33  | 29                 | 57                 | 13  | 05  | 05  | 17                       | 07                       | 05     |
| 4     | 26  | 33  | 27                 | 58                 | 17  | 06  | 06  | 23                       | 00                       | 05     |
| 5     | 44  | 55  | 26                 | 58                 | 09  | 07  | 07  | 45                       | 16                       | 09     |
| 6     | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 7     | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 8     | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 9     | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 10    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 11    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 12    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 13    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 14    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 15    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 16    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 17    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 18    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 19    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 20    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 21    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 22    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 23    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 24    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 25    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 26    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 27    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 28    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 29    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 30    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 31    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 32    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 33    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 34    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 35    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 36    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 37    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 38    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 39    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 40    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 41    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 42    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 43    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 44    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 45    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 46    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 47    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 48    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 49    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 50    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 51    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 52    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 53    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 54    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 55    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 56    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 57    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 58    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 59    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 60    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 61    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 62    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 63    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 64    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 65    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 66    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 67    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 68    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 69    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 70    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 71    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 72    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 73    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 74    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 75    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 76    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 77    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 78    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 79    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 80    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 81    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 82    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 83    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 84    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 85    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 86    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 87    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 88    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 89    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 90    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 91    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 92    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 93    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 94    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 95    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 96    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 97    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 98    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 99    | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |
| 100   | 22  | 32  | 24                 | 58                 | 25  | 08  | 08  | 21                       | 13                       | 11     |

TABLE 7.

FLOOR FORCE AND MOMENT LOADS : TRIAD PLAZA OFFICE TOWER

WIND DIRECTION 135  
 REF. PRESS = 34.0 PSF

| FLOOR | CFX | CFY | FORCE(X)<br>(KIPS) | FORCE(Y)<br>(KIPS) | GUST FACTOR = 1.32 | CMX | CMY | CMZ | REF. AREA = 1800 SQ.FT. | MOM(X)<br>(1000-FT-KIPS) | MOM(Y)<br>(1000-FT-KIPS) | MOM(Z) |
|-------|-----|-----|--------------------|--------------------|--------------------|-----|-----|-----|-------------------------|--------------------------|--------------------------|--------|
| 12    | 7   | 47  | 18.4               | 50.7               |                    | 25  | 0   | 02  |                         | 1                        | 13                       | 27     |
| 3     | 13  | 46  | 13.5               | 49.8               |                    | 9   | 0   | 2   |                         | 1                        | 7                        | 18     |
| 4     | 22  | 55  | 16.2               | 55.5               |                    | 16  | 0   | 3   |                         | 1                        | 7                        | 18     |
| 5     | 22  | 55  | 16.2               | 55.5               |                    | 16  | 0   | 4   |                         | 1                        | 7                        | 18     |
| 6     | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 7     | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 8     | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 9     | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 10    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 11    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 12    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 13    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 14    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 15    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 16    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 17    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 18    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 19    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 20    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 21    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 22    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 23    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 24    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 25    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 26    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 27    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 28    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 29    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 30    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 31    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 32    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 33    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 34    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 35    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 36    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 37    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 38    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 39    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 40    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 41    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 42    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 43    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 44    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 45    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 46    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 47    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 48    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 49    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 50    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 51    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 52    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 53    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 54    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 55    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 56    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 57    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 58    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 59    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 60    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 61    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 62    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 63    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 64    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 65    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 66    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 67    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 68    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 69    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 70    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 71    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 72    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 73    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 74    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 75    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 76    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 77    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 78    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 79    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 80    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 81    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 82    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 83    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 84    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 85    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 86    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 87    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 88    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 89    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 90    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 91    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 92    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 93    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 94    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 95    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 96    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 97    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 98    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 99    | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |
| 100   | 11  | 55  | 11.2               | 55.7               |                    | 27  | 0   | 5   |                         | 1                        | 7                        | 18     |

TABLE 7.  
FLOOR FORCE AND MOMENT LOADS : TRIAD PLAZA OFFICE TOWER

| FLOOR | CFX | CFY | FORCE(X)<br>(KIPS) | FORCE(Y)<br>(KIPS) | CMX  | CMY | CMZ | MOM(X)<br>(1000-FT-KIPS) | MOM(Y)<br>(1000-FT-KIPS) | MOM(Z) |
|-------|-----|-----|--------------------|--------------------|------|-----|-----|--------------------------|--------------------------|--------|
| 1     | 10  | 42  | -10.6              | 47.2               | 025  | 001 | 03  | 349                      | 083                      | 6112   |
| 2     | 08  | 41  | -8.4               | 49.6               | 008  | 001 | 01  | 382                      | 196                      | 1241   |
| 3     | 07  | 48  | -7.5               | 51.8               | 125  | 002 | 02  | 525                      | 285                      | 3364   |
| 4     | 07  | 51  | -7.5               | 52.4               | 139  | 002 | 02  | 525                      | 459                      | 4571   |
| 5     | 06  | 53  | -6.7               | 55.2               | 237  | 003 | 03  | 736                      | 569                      | 5536   |
| 6     | 07  | 54  | -7.3               | 57.3               | 371  | 004 | 02  | 997                      | 829                      | 7188   |
| 7     | 07  | 55  | -7.8               | 59.4               | 523  | 006 | 02  | 132                      | 118                      | 9402   |
| 8     | 08  | 57  | -9.4               | 62.0               | 735  | 009 | 02  | 224                      | 222                      | 1204   |
| 9     | 09  | 58  | -10.2              | 66.1               | 993  | 009 | 02  | 347                      | 389                      | 1566   |
| 10    | 10  | 58  | -10.1              | 69.4               | 1256 | 010 | 02  | 473                      | 554                      | 1957   |
| 11    | 09  | 57  | -10.5              | 69.0               | 1525 | 011 | 03  | 627                      | 800                      | 2529   |
| 12    | 08  | 56  | -10.7              | 65.0               | 1750 | 010 | 03  | 805                      | 1073                     | 3299   |
| 13    | 08  | 57  | -9.5               | 61.2               | 1980 | 009 | 03  | 975                      | 1452                     | 4164   |
| 14    | 03  | 56  | -2.1               | 62.5               | 2259 | 000 | 03  | 118                      | 179                      | 5290   |
| 15    | 01  | 54  | -1.6               | 64.5               | 2529 | 001 | 02  | 139                      | 233                      | 6940   |
| 16    | 01  | 53  | -1.2               | 67.4               | 2828 | 002 | 01  | 159                      | 299                      | 8940   |
| 17    | 05  | 54  | -5.3               | 71.1               | 3115 | 008 | 00  | 173                      | 410                      | 11228  |
| 18    | 02  | 53  | -1.2               | 74.1               | 3428 | 002 | 00  | 183                      | 518                      | 15228  |



TABLE 7.

FLOOR FORCE AND MOMENT LOADS : TRIAD PLAZA OFFICE TOWER

WIND DIRECTION 165  
 REF. PRESS = 34.0 PSF

GUST FACTOR = 1.32      REF. AREA = 1800 SQ. FT.      REF. LENGTH = 200 FT.

| FLOOR | CFX | CFY | FORCE(X)<br>(KIPS) | FORCE(Y)<br>(KIPS) | CMX     | CMY | CMZ | MOM(X)<br>(1000-FT-KIPS) | MOM(Y)<br>(1000-FT-KIPS) | MOM(Z) |
|-------|-----|-----|--------------------|--------------------|---------|-----|-----|--------------------------|--------------------------|--------|
| 1     | 07  | 41  | -7.7               | 43.2               | 04      | 01  | 08  | 336                      | 061                      | 683    |
| 2     | 07  | 44  | -7.4               | 42.7               | 09      | 01  | 05  | 360                      | 157                      | 1014   |
| 3     | 07  | 46  | -7.2               | 42.1               | 11      | 02  | 03  | 390                      | 151                      | 929    |
| 4     | 06  | 48  | -6.6               | 41.5               | 15      | 02  | 02  | 442                      | 142                      | 823    |
| 5     | 06  | 49  | -6.6               | 41.8               | 18      | 03  | 01  | 475                      | 130                      | 751    |
| 6     | 06  | 51  | -6.6               | 42.4               | 22      | 03  | 00  | 521                      | 123                      | 675    |
| 7     | 06  | 52  | -6.6               | 43.2               | 26      | 04  | 01  | 577                      | 116                      | 597    |
| 8     | 06  | 53  | -6.7               | 44.2               | 31      | 05  | 01  | 644                      | 109                      | 518    |
| 9     | 07  | 54  | -7.0               | 45.5               | 37      | 06  | 01  | 725                      | 102                      | 438    |
| 10    | 07  | 55  | -7.7               | 48.9               | 44      | 07  | 01  | 830                      | 95                       | 358    |
| 11    | 08  | 56  | -8.0               | 53.2               | 52      | 08  | 01  | 957                      | 89                       | 278    |
| 12    | 08  | 57  | -8.0               | 58.7               | 61      | 09  | 01  | 1107                     | 84                       | 198    |
| 13    | 07  | 58  | -8.0               | 65.2               | 71      | 11  | 00  | 1257                     | 80                       | 118    |
| 14    | 07  | 58  | -8.0               | 72.7               | 82      | 13  | 00  | 1430                     | 77                       | 38     |
| 15    | 07  | 58  | -7.9               | 81.9               | 94      | 15  | 00  | 1628                     | 75                       | 1016   |
| 16    | 06  | 58  | -7.6               | 92.7               | 107     | 17  | 00  | 1851                     | 74                       | 99     |
| 17    | 05  | 58  | -7.4               | 105.0              | 122     | 19  | 00  | 2100                     | 73                       | 92     |
| 18    | 02  | 58  | 3.4                | 118.6              | 138     | 21  | 01  | 2385                     | 72                       | 85     |
| 19    | 01  | 58  | 3.4                | 134.0              | 156     | 23  | 01  | 2707                     | 71                       | 78     |
| 20    | 00  | 58  | -1.2               | 152.6              | 175     | 25  | 01  | 3067                     | 70                       | 70     |
| 21    | 00  | 58  | -1.2               | 174.4              | 196     | 27  | 01  | 3465                     | 69                       | 62     |
| 22    | 00  | 58  | -1.2               | 200.0              | 219     | 29  | 01  | 3903                     | 68                       | 54     |
| 23    | 00  | 58  | -1.2               | 229.2              | 244     | 31  | 01  | 4383                     | 67                       | 46     |
| 24    | 00  | 58  | -1.2               | 261.4              | 270     | 33  | 01  | 4907                     | 66                       | 38     |
| 25    | 00  | 58  | -1.2               | 297.2              | 298     | 35  | 01  | 5477                     | 65                       | 30     |
| 26    | 00  | 58  | -1.2               | 346.4              | 328     | 37  | 01  | 6095                     | 64                       | 22     |
| 27    | 00  | 58  | -1.2               | 409.2              | 360     | 39  | 01  | 6863                     | 63                       | 14     |
| 28    | 00  | 58  | -1.2               | 487.2              | 394     | 41  | 01  | 7783                     | 62                       | 6      |
| 29    | 00  | 58  | -1.2               | 581.2              | 440     | 43  | 01  | 8857                     | 61                       | 0      |
| 30    | 00  | 58  | -1.2               | 693.2              | 498     | 45  | 01  | 10087                    | 60                       | 0      |
| 31    | 00  | 58  | -1.2               | 825.2              | 568     | 47  | 01  | 11307                    | 59                       | 0      |
| 32    | 00  | 58  | -1.2               | 988.2              | 650     | 49  | 01  | 12627                    | 58                       | 0      |
| 33    | 00  | 58  | -1.2               | 1183.2             | 744     | 51  | 01  | 14047                    | 57                       | 0      |
| 34    | 00  | 58  | -1.2               | 1412.2             | 852     | 53  | 01  | 15567                    | 56                       | 0      |
| 35    | 00  | 58  | -1.2               | 1687.2             | 974     | 55  | 01  | 17187                    | 55                       | 0      |
| 36    | 00  | 58  | -1.2               | 2012.2             | 1112    | 57  | 01  | 18907                    | 54                       | 0      |
| 37    | 00  | 58  | -1.2               | 2392.2             | 1266    | 59  | 01  | 20727                    | 53                       | 0      |
| 38    | 00  | 58  | -1.2               | 2932.2             | 1438    | 61  | 01  | 22647                    | 52                       | 0      |
| 39    | 00  | 58  | -1.2               | 3642.2             | 1628    | 63  | 01  | 24667                    | 51                       | 0      |
| 40    | 00  | 58  | -1.2               | 4532.2             | 1836    | 65  | 01  | 26887                    | 50                       | 0      |
| 41    | 00  | 58  | -1.2               | 5612.2             | 2062    | 67  | 01  | 29307                    | 49                       | 0      |
| 42    | 00  | 58  | -1.2               | 6892.2             | 2406    | 69  | 01  | 31927                    | 48                       | 0      |
| 43    | 00  | 58  | -1.2               | 8472.2             | 2868    | 71  | 01  | 34747                    | 47                       | 0      |
| 44    | 00  | 58  | -1.2               | 10362.2            | 3448    | 73  | 01  | 37767                    | 46                       | 0      |
| 45    | 00  | 58  | -1.2               | 12572.2            | 4146    | 75  | 01  | 40987                    | 45                       | 0      |
| 46    | 00  | 58  | -1.2               | 15112.2            | 4972    | 77  | 01  | 44407                    | 44                       | 0      |
| 47    | 00  | 58  | -1.2               | 17992.2            | 5936    | 79  | 01  | 48027                    | 43                       | 0      |
| 48    | 00  | 58  | -1.2               | 21222.2            | 7048    | 81  | 01  | 51847                    | 42                       | 0      |
| 49    | 00  | 58  | -1.2               | 24812.2            | 8308    | 83  | 01  | 55867                    | 41                       | 0      |
| 50    | 00  | 58  | -1.2               | 29762.2            | 9726    | 85  | 01  | 60087                    | 40                       | 0      |
| 51    | 00  | 58  | -1.2               | 36082.2            | 11302   | 87  | 01  | 64507                    | 39                       | 0      |
| 52    | 00  | 58  | -1.2               | 43882.2            | 13046   | 89  | 01  | 69127                    | 38                       | 0      |
| 53    | 00  | 58  | -1.2               | 53262.2            | 15068   | 91  | 01  | 73947                    | 37                       | 0      |
| 54    | 00  | 58  | -1.2               | 64322.2            | 17378   | 93  | 01  | 78967                    | 36                       | 0      |
| 55    | 00  | 58  | -1.2               | 77162.2            | 20086   | 95  | 01  | 84187                    | 35                       | 0      |
| 56    | 00  | 58  | -1.2               | 91882.2            | 23202   | 97  | 01  | 89607                    | 34                       | 0      |
| 57    | 00  | 58  | -1.2               | 108582.2           | 26736   | 99  | 01  | 95227                    | 33                       | 0      |
| 58    | 00  | 58  | -1.2               | 127362.2           | 31698   | 101 | 01  | 101047                   | 32                       | 0      |
| 59    | 00  | 58  | -1.2               | 148322.2           | 38098   | 103 | 01  | 107067                   | 31                       | 0      |
| 60    | 00  | 58  | -1.2               | 171562.2           | 45946   | 105 | 01  | 113287                   | 30                       | 0      |
| 61    | 00  | 58  | -1.2               | 207162.2           | 55362   | 107 | 01  | 119707                   | 29                       | 0      |
| 62    | 00  | 58  | -1.2               | 255322.2           | 66466   | 109 | 01  | 126327                   | 28                       | 0      |
| 63    | 00  | 58  | -1.2               | 316162.2           | 79366   | 111 | 01  | 133147                   | 27                       | 0      |
| 64    | 00  | 58  | -1.2               | 390762.2           | 94072   | 113 | 01  | 140167                   | 26                       | 0      |
| 65    | 00  | 58  | -1.2               | 479362.2           | 111696  | 115 | 01  | 147387                   | 25                       | 0      |
| 66    | 00  | 58  | -1.2               | 582162.2           | 132238  | 117 | 01  | 154807                   | 24                       | 0      |
| 67    | 00  | 58  | -1.2               | 699362.2           | 155898  | 119 | 01  | 162427                   | 23                       | 0      |
| 68    | 00  | 58  | -1.2               | 832162.2           | 182676  | 121 | 01  | 170247                   | 22                       | 0      |
| 69    | 00  | 58  | -1.2               | 980762.2           | 212682  | 123 | 01  | 178267                   | 21                       | 0      |
| 70    | 00  | 58  | -1.2               | 1145362.2          | 246026  | 125 | 01  | 186487                   | 20                       | 0      |
| 71    | 00  | 58  | -1.2               | 1325962.2          | 292706  | 127 | 01  | 194907                   | 19                       | 0      |
| 72    | 00  | 58  | -1.2               | 1523762.2          | 352832  | 129 | 01  | 203527                   | 18                       | 0      |
| 73    | 00  | 58  | -1.2               | 1739962.2          | 426512  | 131 | 01  | 212347                   | 17                       | 0      |
| 74    | 00  | 58  | -1.2               | 1975762.2          | 513852  | 133 | 01  | 221367                   | 16                       | 0      |
| 75    | 00  | 58  | -1.2               | 2232362.2          | 615966  | 135 | 01  | 230587                   | 15                       | 0      |
| 76    | 00  | 58  | -1.2               | 2510962.2          | 732862  | 137 | 01  | 239907                   | 14                       | 0      |
| 77    | 00  | 58  | -1.2               | 2812762.2          | 865662  | 139 | 01  | 249327                   | 13                       | 0      |
| 78    | 00  | 58  | -1.2               | 3137962.2          | 1014502 | 141 | 01  | 258847                   | 12                       | 0      |
| 79    | 00  | 58  | -1.2               | 3487762.2          | 1180526 | 143 | 01  | 268467                   | 11                       | 0      |
| 80    | 00  | 58  | -1.2               | 3862362.2          | 1364882 | 145 | 01  | 278187                   | 10                       | 0      |
| 81    | 00  | 58  | -1.2               | 4262962.2          | 1567702 | 147 | 01  | 288007                   | 9                        | 0      |
| 82    | 00  | 58  | -1.2               | 4689762.2          | 1789126 | 149 | 01  | 297927                   | 8                        | 0      |
| 83    | 00  | 58  | -1.2               | 5142962.2          | 2029302 | 151 | 01  | 307947                   | 7                        | 0      |
| 84    | 00  | 58  | -1.2               | 5622762.2          | 2288482 | 153 | 01  | 318067                   | 6                        | 0      |
| 85    | 00  | 58  | -1.2               | 6129362.2          | 2566802 | 155 | 01  | 328287                   | 5                        | 0      |
| 86    | 00  | 58  | -1.2               | 6662962.2          | 2864402 | 157 | 01  | 338607                   | 4                        | 0      |
| 87    | 00  | 58  | -1.2               | 7223762.2          | 3181426 | 159 | 01  | 349027                   | 3                        | 0      |
| 88    | 00  | 58  | -1.2               | 7811962.2          | 3518026 | 161 | 01  | 359547                   | 2                        | 0      |
| 89    | 00  | 58  | -1.2               | 8427762.2          | 3884402 | 163 | 01  | 370167                   | 1                        | 0      |
| 90    | 00  | 58  | -1.2               | 9071362.2          | 4280802 | 165 | 01  | 380887                   | 0                        | 0      |
| 91    | 00  | 58  | -1.2               | 9742962.2          | 4707402 | 167 | 01  | 391707                   | 0                        | 0      |
| 92    | 00  | 58  | -1.2               | 10442762.2         | 5164402 | 169 | 01  | 402627                   | 0                        | 0      |
| 93    | 00  | 58  | -1.2               | 11169362.2         | 5651802 | 171 | 01  | 413647                   | 0                        | 0      |
| 94    | 00  | 58  | -1.2               | 11922562.2         | 6169802 | 173 | 01  | 424767                   | 0                        | 0      |
| 95    | 00  | 58  | -1.2               | 12702362.2         | 6718602 | 175 | 01  | 435987                   | 0                        | 0      |
| 96    | 00  | 58  | -1.2               | 13508762.2         | 7298402 | 177 | 01  | 447307                   | 0                        | 0      |
| 97    | 00  | 58  | -1.2               | 14341762.2         | 7909602 | 179 | 01  | 458727                   | 0                        | 0      |
| 98    | 00  | 58  | -1.2               | 15191362.2         | 8552602 | 181 | 01  | 470247                   | 0                        | 0      |
| 99    | 00  | 58  | -1.2               | 16057562.2         | 9227802 | 183 | 01  | 481867                   | 0                        | 0      |
| 100   | 00  | 58  | -1.2               | 16940362.2         | 9935602 | 185 | 01  | 493587                   | 0                        | 0      |

TABLE 7.  
FLOOR FORCE AND MOMENT LOADS : TRIAD PLAZA OFFICE TOWER

WIND DIRECTION 180  
REF. PRESS = 34.0 PSF

GUST FACTOR = 1.32      REF. AREA = 1800 SQ.FT.      REF. LENGTH = 200 FT.

| FLOOR | CFX | CFY | FORCE(X)<br>(KIPS) | FORCE(Y)<br>(KIPS) | CMX | CMY | CMZ | MOM(X)<br>(1000-FT-KIPS) | MOM(Y)<br>(1000-FT-KIPS) | MOM(Z) |
|-------|-----|-----|--------------------|--------------------|-----|-----|-----|--------------------------|--------------------------|--------|
| 1     | .03 | .37 | 3.7                | 39.4               | .04 | .00 | .06 | 3.9                      | .024                     | -1.341 |
| 2     | .03 | .36 | -2.2               | 38.0               | .07 | .00 | .04 | 3.5                      | .059                     | -1.853 |
| 3     | .02 | .40 | -2.2               | 45.0               | .10 | .01 | .02 | 3.1                      | .100                     | -2.579 |
| 4     | .02 | .44 | -2.2               | 46.0               | .17 | .01 | .02 | 2.5                      | .126                     | -4.493 |
| 5     | .02 | .45 | -1.1               | 48.0               | .20 | .01 | .02 | 2.3                      | .149                     | -4.722 |
| 6     | .02 | .46 | -1.1               | 49.4               | .24 | .01 | .02 | 2.4                      | .182                     | -5.367 |
| 7     | .02 | .47 | -2.2               | 50.4               | .27 | .01 | .02 | 2.3                      | .239                     | -5.358 |
| 8     | .02 | .47 | -2.2               | 50.7               | .33 | .02 | .02 | 2.1                      | .304                     | -5.354 |
| 9     | .03 | .48 | -2.2               | 55.1               | .37 | .02 | .02 | 1.7                      | .377                     | -4.226 |
| 10    | .03 | .48 | -3.3               | 55.1               | .43 | .03 | .02 | 1.3                      | .455                     | -4.226 |
| 11    | .03 | .48 | -3.3               | 51.2               | .47 | .03 | .02 | 1.0                      | .540                     | -3.217 |
| 12    | .04 | .46 | -4.5               | 48.0               | .49 | .05 | .01 | 1.0                      | .625                     | -1.046 |
| 13    | .05 | .45 | -4.5               | 48.9               | .51 | .08 | .00 | 1.0                      | .722                     | -1.184 |
| 14    | .05 | .45 | -5.2               | 48.9               | .59 | .07 | .01 | 1.2                      | .821                     | -2.266 |
| 15    | .05 | .45 | 3.5                | 52.3               | .72 | .08 | .01 | 1.5                      | 1.022                    | -2.266 |
| 16    | .05 | .45 | 5.8                | 53.3               | .70 | .09 | .01 | 1.5                      | 1.184                    | -1.744 |
| 17    | .05 | .44 | 5.8                | 44.3               | .71 | .12 | .02 | 1.5                      | 1.269                    | -1.103 |

TABLE 7.  
FLOOR FORCE AND MOMENT LOADS : TRIAD PLAZA OFFICE TOWER

WIND DIRECTION 195  
REF. PRESS = 34.0 PSF

GUST FACTOR = 1.32

REF. AREA = 1800 SQ. FT.

REF. LENGTH = 200 FT.

| FLOOR | CFX | CFY | FORCE(X)<br>(KIPS) | FORCE(Y)<br>(KIPS) | CMX | CMY | CMZ | MOM(X)<br>(1000-FT-KIPS) | MOM(Y)<br>(1000-FT-KIPS) | MOM(Z) |
|-------|-----|-----|--------------------|--------------------|-----|-----|-----|--------------------------|--------------------------|--------|
| 1     | 05  | 08  | 53                 | 33                 | 03  | 00  | 06  | 11                       | 49                       | 261    |
| 2     | 04  | 23  | 32                 | 32                 | 00  | 00  | 03  | 26                       | 12                       | 270    |
| 3     | 03  | 22  | 32                 | 32                 | 00  | 00  | 03  | 16                       | 12                       | 682    |
| 4     | 03  | 22  | 32                 | 32                 | 00  | 00  | 03  | 12                       | 18                       | 590    |
| 5     | 02  | 23  | 32                 | 32                 | 00  | 00  | 02  | 16                       | 22                       | 527    |
| 6     | 02  | 23  | 32                 | 32                 | 00  | 00  | 02  | 16                       | 22                       | 486    |
| 7     | 02  | 23  | 32                 | 32                 | 00  | 00  | 02  | 16                       | 22                       | 452    |
| 8     | 02  | 23  | 32                 | 32                 | 00  | 00  | 02  | 16                       | 22                       | 432    |
| 9     | 01  | 25  | 32                 | 32                 | 00  | 00  | 02  | 13                       | 21                       | 405    |
| 10    | 01  | 25  | 32                 | 32                 | 00  | 00  | 02  | 13                       | 21                       | 378    |
| 11    | 01  | 25  | 32                 | 32                 | 00  | 00  | 02  | 13                       | 21                       | 352    |
| 12    | 01  | 25  | 32                 | 32                 | 00  | 00  | 02  | 13                       | 21                       | 334    |
| 13    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 14    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 15    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 16    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 17    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 18    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 19    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 20    | 01  | 25  | 32                 | 32                 | 00  | 00  | 02  | 13                       | 21                       | 338    |
| 21    | 01  | 25  | 32                 | 32                 | 00  | 00  | 02  | 13                       | 21                       | 338    |
| 22    | 01  | 25  | 32                 | 32                 | 00  | 00  | 02  | 13                       | 21                       | 338    |
| 23    | 01  | 25  | 32                 | 32                 | 00  | 00  | 02  | 13                       | 21                       | 338    |
| 24    | 01  | 25  | 32                 | 32                 | 00  | 00  | 02  | 13                       | 21                       | 338    |
| 25    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 26    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 27    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 28    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 29    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 30    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 31    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 32    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 33    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 34    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 35    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 36    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 37    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 38    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 39    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 40    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 41    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 42    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 43    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 44    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 45    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 46    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 47    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 48    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 49    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 50    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 51    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 52    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 53    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 54    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 55    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 56    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 57    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 58    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 59    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 60    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 61    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 62    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 63    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 64    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 65    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 66    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 67    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 68    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 69    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 70    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 71    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 72    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 73    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 74    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 75    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 76    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 77    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 78    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 79    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 80    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 81    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 82    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 83    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 84    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 85    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 86    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 87    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 88    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 89    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 90    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 91    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 92    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 93    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 94    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 95    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 96    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 97    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 98    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 99    | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |
| 100   | 00  | 27  | 32                 | 32                 | 00  | 00  | 01  | 10                       | 18                       | 338    |

TABLE 7.  
FLOOR FORCE AND MOMENT LOADS : TRIAD PLAZA OFFICE TOWER

WIND DIRECTION 210  
REF. PRESS = 34.0 PSF

| FLOOR | CFX  | CFY | FORCE(X)<br>(KIPS) | FORCE(Y)<br>(KIPS) | CMX | CMY | CMZ | MOM(X)<br>(1000-FT-KIPS) | MOM(Y)<br>(1000-FT-KIPS) | MOM(Z) |
|-------|------|-----|--------------------|--------------------|-----|-----|-----|--------------------------|--------------------------|--------|
| 1     | 1143 | 326 | 18.7               | 38.2               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 2     | 1132 | 227 | 14.4               | 28.9               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 3     | 1122 | 226 | 11.3               | 28.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 4     | 1122 | 226 | 11.2               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 5     | 1109 | 225 | 11.0               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 6     | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 7     | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 8     | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 9     | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 10    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 11    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 12    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 13    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 14    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 15    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 16    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 17    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 18    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 19    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 20    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 21    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 22    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 23    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 24    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 25    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 26    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 27    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 28    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 29    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 30    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 31    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 32    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 33    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 34    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 35    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 36    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 37    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 38    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 39    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 40    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 41    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 42    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 43    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 44    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 45    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 46    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 47    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 48    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 49    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 50    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 51    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 52    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 53    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 54    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 55    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 56    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 57    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 58    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 59    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 60    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 61    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 62    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 63    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 64    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 65    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 66    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 67    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 68    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 69    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |
| 70    | 1097 | 225 | 10.9               | 27.7               | 0.0 | 0.0 | 0.0 | 1.1                      | 1.2                      | 1.1    |



TABLE 7.  
FLOOR FORCE AND MOMENT LOADS : TRIAD PLAZA OFFICE TOWER

WIND DIRECTION 240  
REF. PRESS = 34.0 PSF

GUST FACTOR = 1.32      REF. AREA = 1800 SQ. FT.      REF. LENGTH = 200 FT.

| FLOOR | CFX | CFY | FORCE(X)<br>(KIPS) | FORCE(Y)<br>(KIPS) | CMX | CMY | CMZ | MOM(X)<br>(1000-FT-KIPS) | MOM(Y)<br>(1000-FT-KIPS) | MOM(Z) |
|-------|-----|-----|--------------------|--------------------|-----|-----|-----|--------------------------|--------------------------|--------|
| 1     | 4   | 28  | 23                 | 9                  | 01  | 02  | 16  | 187                      | 199                      | 32     |
| 2     | 2   | 17  | 18                 | 4                  | 03  | 05  | 13  | 45                       | 81                       | 22     |
| 3     | 2   | 17  | 18                 | 4                  | 04  | 05  | 12  | 50                       | 81                       | 22     |
| 4     | 2   | 18  | 19                 | 5                  | 07  | 08  | 10  | 15                       | 22                       | 22     |
| 5     | 2   | 19  | 19                 | 5                  | 08  | 11  | 10  | 15                       | 22                       | 22     |
| 6     | 2   | 22  | 22                 | 2                  | 12  | 11  | 10  | 20                       | 27                       | 22     |
| 7     | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 8     | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 9     | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 10    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 11    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 12    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 13    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 14    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 15    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 16    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 17    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 18    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 19    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 20    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 21    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 22    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 23    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 24    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 25    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 26    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 27    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 28    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 29    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 30    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 31    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 32    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 33    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 34    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 35    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 36    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 37    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 38    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 39    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 40    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 41    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 42    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 43    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 44    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 45    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 46    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 47    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 48    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 49    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 50    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 51    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 52    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 53    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 54    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 55    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 56    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 57    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 58    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 59    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 60    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 61    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 62    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 63    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 64    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 65    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 66    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 67    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 68    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 69    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 70    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 71    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 72    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 73    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 74    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 75    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 76    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 77    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 78    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 79    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 80    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 81    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 82    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 83    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 84    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 85    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 86    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 87    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 88    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 89    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 90    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 91    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 92    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 93    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 94    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 95    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 96    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 97    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 98    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 99    | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |
| 100   | 2   | 22  | 22                 | 2                  | 17  | 12  | 10  | 23                       | 27                       | 22     |

TABLE 7.  
FLOOR FORCE AND MOMENT LOADS : TRIAD PLAZA OFFICE TOWER

| FLOOR | CFX | CFY | FORCE(X)<br>(KIPS) | FORCE(Y)<br>(KIPS) | CMX | CMY | CMZ | MOM(X)<br>(1000-FT-KIPS) | MOM(Y)<br>(1000-FT-KIPS) | MOM(Z) |
|-------|-----|-----|--------------------|--------------------|-----|-----|-----|--------------------------|--------------------------|--------|
| 1     | 22  | 0   | 22                 | 0                  | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 2     | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 3     | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 4     | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 5     | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 6     | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 7     | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 8     | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 9     | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 10    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 11    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 12    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 13    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 14    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 15    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 16    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 17    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 18    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 19    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 20    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 21    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 22    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 23    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 24    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 25    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 26    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 27    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 28    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 29    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 30    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 31    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 32    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 33    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 34    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 35    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 36    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 37    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 38    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 39    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 40    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 41    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 42    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 43    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 44    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 45    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 46    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 47    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 48    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 49    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 50    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 51    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 52    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 53    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 54    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 55    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 56    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 57    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 58    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 59    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 60    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 61    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 62    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 63    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 64    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 65    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 66    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 67    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 68    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 69    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 70    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 71    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 72    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 73    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 74    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 75    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 76    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 77    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 78    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 79    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 80    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 81    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 82    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 83    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 84    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 85    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 86    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 87    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 88    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 89    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 90    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 91    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 92    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 93    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 94    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 95    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 96    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 97    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 98    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 99    | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |
| 100   | 22  | 11  | 22                 | 11                 | 0   | 0   | 0   | 0                        | 0                        | 0      |

TABLE 7.

FLOOR FORCE AND MOMENT LOADS : TRIAD PLAZA OFFICE TOWER

| FLOOR | CFX | CFY | FORCE(X)<br>(KIPS) | FORCE(Y)<br>(KIPS) | CMX | CMY | CMZ | REF. AREA = 1800 SQ.FT. | MOM(X)<br>(1000-FT-KIPS) | MOM(Y)<br>(1000-FT-KIPS) | MOM(Z) |
|-------|-----|-----|--------------------|--------------------|-----|-----|-----|-------------------------|--------------------------|--------------------------|--------|
| 1     | 18  | 34  | 18.0               | 36.0               | 01  | 02  | 01  | 285                     | 1                        | 147                      | 573    |
| 2     | 15  | 32  | 16.3               | 32.7               | 06  | 03  | 01  | 305                     | 1                        | 355                      | 176    |
| 3     | 15  | 32  | 16.3               | 32.8               | 09  | 04  | 01  | 306                     | 1                        | 379                      | 176    |
| 4     | 15  | 38  | 16.6               | 40.2               | 12  | 05  | 01  | 304                     | 1                        | 412                      | 176    |
| 5     | 16  | 41  | 17.4               | 44.5               | 18  | 07  | 02  | 272                     | 1                        | 471                      | 176    |
| 6     | 17  | 42  | 18.1               | 45.9               | 25  | 08  | 02  | 253                     | 1                        | 520                      | 176    |
| 7     | 18  | 44  | 19.0               | 47.6               | 33  | 11  | 01  | 235                     | 1                        | 570                      | 176    |
| 8     | 19  | 45  | 20.0               | 48.5               | 42  | 13  | 01  | 218                     | 1                        | 620                      | 176    |
| 9     | 20  | 46  | 21.2               | 50.2               | 52  | 15  | 01  | 202                     | 1                        | 671                      | 176    |
| 10    | 22  | 47  | 22.7               | 52.5               | 64  | 17  | 01  | 187                     | 1                        | 723                      | 176    |
| 11    | 23  | 48  | 23.4               | 54.8               | 77  | 19  | 01  | 172                     | 1                        | 776                      | 176    |
| 12    | 23  | 49  | 23.4               | 56.6               | 92  | 22  | 01  | 158                     | 1                        | 830                      | 176    |
| 13    | 23  | 49  | 23.4               | 58.0               | 108 | 25  | 01  | 145                     | 1                        | 885                      | 176    |
| 14    | 23  | 49  | 23.4               | 59.5               | 126 | 29  | 01  | 132                     | 1                        | 941                      | 176    |
| 15    | 23  | 49  | 23.4               | 61.0               | 147 | 32  | 01  | 120                     | 1                        | 998                      | 176    |
| 16    | 23  | 49  | 23.4               | 62.7               | 172 | 37  | 02  | 109                     | 1                        | 1056                     | 176    |
| 17    | 23  | 49  | 23.4               | 64.5               | 200 | 42  | 04  | 99                      | 1                        | 1115                     | 176    |
| 18    | 23  | 49  | 23.4               | 66.4               | 230 | 47  | 06  | 90                      | 1                        | 1175                     | 176    |
| 19    | 23  | 49  | 23.4               | 68.4               | 262 | 53  | 09  | 81                      | 1                        | 1236                     | 176    |
| 20    | 23  | 49  | 23.4               | 70.5               | 297 | 59  | 11  | 73                      | 1                        | 1298                     | 176    |
| 21    | 23  | 49  | 23.4               | 72.7               | 334 | 67  | 14  | 64                      | 1                        | 1361                     | 176    |
| 22    | 23  | 49  | 23.4               | 75.0               | 374 | 75  | 17  | 55                      | 1                        | 1425                     | 176    |
| 23    | 23  | 49  | 23.4               | 77.4               | 417 | 85  | 20  | 47                      | 1                        | 1490                     | 176    |
| 24    | 23  | 49  | 23.4               | 80.0               | 463 | 97  | 24  | 39                      | 1                        | 1556                     | 176    |
| 25    | 23  | 49  | 23.4               | 82.7               | 512 | 110 | 29  | 31                      | 1                        | 1623                     | 176    |
| 26    | 23  | 49  | 23.4               | 85.6               | 564 | 126 | 34  | 24                      | 1                        | 1691                     | 176    |
| 27    | 23  | 49  | 23.4               | 88.6               | 620 | 144 | 40  | 17                      | 1                        | 1760                     | 176    |



TABLE 7.

FLOOR FORCE AND MOMENT LOADS : TRIAD PLAZA OFFICE TOWER

| FLOOR | CFX | CFY | FORCE(X)<br>(KIPS) | FORCE(Y)<br>(KIPS) | CMX | CMY | CHZ  | MOM(CX)<br>(1000-FT-KIPS) | MOM(Y)<br>(1000-FT-KIPS) | MOM(Z) |
|-------|-----|-----|--------------------|--------------------|-----|-----|------|---------------------------|--------------------------|--------|
| 1     | 173 | 51  | 19.65              | 4.18               | 25  | 0.1 | 0.23 | 423                       | 143                      | 432    |
| 2     | 132 | 45  | 14.12              | 5.55               | 9   | 0.2 | 0.34 | 155                       | 136                      | 594    |
| 3     | 111 | 55  | 11.24              | 5.58               | 13  | 0.3 | 0.4  | 814                       | 599                      | 722    |
| 4     | 109 | 61  | 11.57              | 6.51               | 23  | 0.4 | 0.5  | 868                       | 785                      | 922    |
| 5     | 109 | 66  | 9.20               | 6.87               | 33  | 0.4 | 0.6  | 004                       | 930                      | 998    |
| 6     | 088 | 68  | 9.20               | 7.03               | 35  | 0.5 | 0.6  | 137                       | 924                      | 1238   |
| 7     | 088 | 71  | 9.20               | 7.35               | 45  | 0.5 | 0.6  | 385                       | 924                      | 1599   |
| 8     | 088 | 72  | 8.88               | 7.70               | 54  | 0.6 | 0.6  | 507                       | 1194                     | 1799   |
| 9     | 088 | 75  | 8.88               | 8.24               | 61  | 0.6 | 0.7  | 715                       | 1270                     | 1959   |
| 10    | 088 | 79  | 8.88               | 8.69               | 71  | 0.6 | 0.7  | 959                       | 1402                     | 2000   |
| 11    | 088 | 84  | 8.88               | 8.89               | 84  | 0.6 | 0.7  | 1109                      | 1559                     | 2095   |
| 12    | 090 | 88  | 9.20               | 9.13               | 94  | 0.6 | 0.6  | 1323                      | 1623                     | 2368   |
| 13    | 115 | 93  | 10.14              | 9.68               | 102 | 1.0 | 0.8  | 1627                      | 1899                     | 2520   |
| 14    | 115 | 95  | 11.14              | 10.14              | 109 | 1.1 | 1.0  | 2023                      | 2253                     | 2688   |
| 15    | 115 | 99  | 11.14              | 10.68              | 110 | 1.1 | 1.0  | 2327                      | 2538                     | 2908   |
| 16    | 115 | 102 | 11.14              | 11.14              | 117 | 1.1 | 1.0  | 2627                      | 2849                     | 3088   |
| 17    | 115 | 105 | 11.14              | 11.60              | 123 | 1.2 | 1.1  | 2929                      | 3184                     | 3222   |
| 18    | 115 | 108 | 11.14              | 12.09              | 129 | 1.2 | 1.1  | 3224                      | 3547                     | 3222   |
| 19    | 115 | 109 | 11.14              | 12.51              | 136 | 1.2 | 1.0  | 3524                      | 3947                     | 3222   |
| 20    | 115 | 111 | 11.14              | 12.91              | 142 | 1.2 | 1.0  | 3824                      | 4387                     | 3222   |

TABLE 7.

FLOOR FORCE AND MOMENT LOADS : TRIAD PLAZA OFFICE TOWER

WIND DIRECTION 300  
 REF. PRESS = 34.0 PSF  
 GUST FACTOR = 1.32  
 REF. AREA = 1800 SQ.FT.  
 REF. LENGTH = 200 FT.

| FLOOR | CFX | CFY | FORCE(X)<br>(KIPS) | FORCE(Y)<br>(KIPS) | CMX | CMY | CMZ | MOM(X)<br>(1000-FT-KIPS) | MOM(Y)<br>(1000-FT-KIPS) | MOM(Z) |
|-------|-----|-----|--------------------|--------------------|-----|-----|-----|--------------------------|--------------------------|--------|
| 1     | 16  | 64  | 17.3               | 0                  | 07  | 01  | 07  | 531                      | 1355                     | 499    |
| 2     | 109 | 55  | 11.5               | 68                 | 11  | 02  | 06  | 406                      | 232                      | 273    |
| 3     | 007 | 66  | 7.5                | 72                 | 02  | 02  | 07  | 271                      | 335                      | 424    |
| 4     | 003 | 77  | 5.5                | 84                 | 01  | 01  | 08  | 123                      | 469                      | 520    |
| 5     | 010 | 79  | 3.2                | 92                 | 00  | 00  | 08  | 454                      | 102                      | 667    |
| 6     | 010 | 84  | 3.3                | 97                 | 00  | 01  | 08  | 838                      | 124                      | 667    |
| 7     | 023 | 87  | 4.5                | 99                 | 02  | 01  | 08  | 239                      | 130                      | 678    |
| 8     | 047 | 89  | 6.7                | 99                 | 03  | 01  | 08  | 540                      | 139                      | 684    |
| 9     | 055 | 91  | 7.8                | 99                 | 04  | 01  | 08  | 941                      | 144                      | 690    |
| 10    | 056 | 92  | 7.8                | 102                | 05  | 01  | 08  | 274                      | 149                      | 697    |
| 11    | 066 | 92  | 6.6                | 103                | 06  | 01  | 07  | 687                      | 152                      | 711    |
| 12    | 066 | 92  | 6.5                | 103                | 07  | 01  | 07  | 207                      | 152                      | 711    |
| 13    | 067 | 92  | 6.5                | 104                | 07  | 01  | 08  | 880                      | 154                      | 734    |
| 14    | 067 | 92  | 6.5                | 106                | 07  | 01  | 08  | 178                      | 155                      | 744    |
| 15    | 067 | 92  | 6.5                | 106                | 07  | 01  | 08  | 703                      | 155                      | 744    |
| 16    | 067 | 92  | 6.5                | 108                | 07  | 01  | 08  | 335                      | 155                      | 744    |
| 17    | 067 | 92  | 6.5                | 108                | 07  | 01  | 08  | 482                      | 155                      | 744    |
| 18    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 19    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 20    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 21    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 22    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 23    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 24    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 25    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 26    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 27    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 28    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 29    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 30    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 31    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 32    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 33    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 34    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 35    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 36    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 37    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 38    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 39    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 40    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 41    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 42    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 43    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 44    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 45    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 46    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 47    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 48    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 49    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 50    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 51    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 52    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 53    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 54    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 55    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 56    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 57    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 58    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 59    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 60    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 61    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 62    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 63    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 64    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 65    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 66    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 67    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 68    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 69    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 70    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 71    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 72    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 73    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 74    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 75    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 76    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 77    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 78    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 79    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 80    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 81    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 82    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 83    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 84    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 85    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 86    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 87    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 88    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 89    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 90    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 91    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 92    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 93    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 94    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 95    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 96    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 97    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 98    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 99    | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |
| 100   | 067 | 92  | 6.5                | 109                | 07  | 01  | 08  | 508                      | 155                      | 744    |



TABLE 7.  
FLOOR FORCE AND MOMENT LOADS : TRIAD PLAZA OFFICE TOWER

| FLOOR | CFX | CFY | FORCE(X)<br>(KIPS) | FORCE(Y)<br>(KIPS) | CMX | CMY | CMZ | MOM(X)<br>(1000-FT-KIPS) | MOM(Y)<br>(1000-FT-KIPS) | MOM(Z) |
|-------|-----|-----|--------------------|--------------------|-----|-----|-----|--------------------------|--------------------------|--------|
| 12    | 19  | 50  | 11                 | 55                 | 06  | 01  | 02  | 43                       | 07                       | 40     |
| 11    | 19  | 50  | 11                 | 55                 | 06  | 01  | 02  | 43                       | 07                       | 40     |
| 10    | 19  | 50  | 11                 | 55                 | 06  | 01  | 02  | 43                       | 07                       | 40     |
| 9     | 19  | 50  | 11                 | 55                 | 06  | 01  | 02  | 43                       | 07                       | 40     |
| 8     | 19  | 50  | 11                 | 55                 | 06  | 01  | 02  | 43                       | 07                       | 40     |
| 7     | 19  | 50  | 11                 | 55                 | 06  | 01  | 02  | 43                       | 07                       | 40     |
| 6     | 19  | 50  | 11                 | 55                 | 06  | 01  | 02  | 43                       | 07                       | 40     |
| 5     | 19  | 50  | 11                 | 55                 | 06  | 01  | 02  | 43                       | 07                       | 40     |
| 4     | 19  | 50  | 11                 | 55                 | 06  | 01  | 02  | 43                       | 07                       | 40     |
| 3     | 19  | 50  | 11                 | 55                 | 06  | 01  | 02  | 43                       | 07                       | 40     |
| 2     | 19  | 50  | 11                 | 55                 | 06  | 01  | 02  | 43                       | 07                       | 40     |
| 1     | 19  | 50  | 11                 | 55                 | 06  | 01  | 02  | 43                       | 07                       | 40     |

TABLE 7.  
FLOOR FORCE AND MOMENT LOADS : TRIAD PLAZA OFFICE TOWER

WIND DIRECTION 345  
REF. PRESS = 34.0 PSF

GUST FACTOR = 1.32      REF. AREA = 1800 SQ. FT.      REF. LENGTH = 200 FT.

| FLOOR | CFX | CFY | FORCE(X)<br>(KIPS) | FORCE(Y)<br>(KIPS) | CMX | CMY | CMZ | MOM(X)<br>(1000-FT-KIPS) | MOM(Y)<br>(1000-FT-KIPS) | MOM(Z) |
|-------|-----|-----|--------------------|--------------------|-----|-----|-----|--------------------------|--------------------------|--------|
| 1     | .03 | .54 | 9.78               | -57.6              | .06 | .01 | .01 | 480                      | .71                      | 2181   |
| 2     | .04 | .59 | 10.2               | -62.6              | .10 | .01 | .02 | 2216                     | 1.25                     | 2251   |
| 3     | .02 | .62 | 2.8                | -66.7              | .15 | .00 | .02 | 2334                     | 1.96                     | 2381   |
| 4     | .02 | .66 | 1.7                | -70.1              | .20 | .00 | .02 | 2524                     | 2.08                     | 4200   |
| 5     | .03 | .73 | 1.5                | -77.8              | .28 | .01 | .02 | 2286                     | 1.27                     | 4259   |
| 6     | .04 | .78 | 4.4                | -85.2              | .37 | .02 | .02 | 1267                     | 3.16                     | 4472   |
| 7     | .04 | .81 | 4.4                | -85.2              | .37 | .02 | .02 | 554                      | 5.94                     | 4525   |
| 8     | .05 | .83 | 4.4                | -88.1              | .56 | .03 | .02 | 557                      | 6.84                     | 4528   |
| 9     | .05 | .86 | 5.2                | -94.1              | .74 | .04 | .03 | 606                      | 7.88                     | 5241   |
| 10    | .05 | .88 | 5.2                | -94.1              | .74 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 11    | .05 | .91 | 5.2                | -96.9              | .92 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 12    | .05 | .93 | 5.2                | -96.9              | .92 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 13    | .05 | .95 | 5.2                | -102.7             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 14    | .05 | .96 | 5.2                | -102.7             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 15    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 16    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 17    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 18    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 19    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 20    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 21    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 22    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 23    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 24    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 25    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 26    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 27    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 28    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 29    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 30    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 31    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 32    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 33    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 34    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 35    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 36    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 37    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 38    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 39    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 40    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 41    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 42    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 43    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 44    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 45    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 46    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 47    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 48    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 49    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 50    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 51    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 52    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 53    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 54    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 55    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 56    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 57    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 58    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 59    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 60    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 61    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 62    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 63    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 64    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 65    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 66    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 67    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 68    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 69    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 70    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 71    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 72    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 73    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 74    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 75    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 76    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 77    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 78    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 79    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 80    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 81    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 82    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 83    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 84    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 85    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 86    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 87    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 88    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 89    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 90    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 91    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 92    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 93    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 94    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 95    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 96    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 97    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 98    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 99    | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |
| 100   | .05 | .99 | 5.2                | -105.2             | .99 | .04 | .03 | 606                      | 8.88                     | 5256   |

APPENDIX A  
PRESSURE DATA

Note: Pressure coefficients are defined in Section 4.3.  
Pressure tap designation is explained in Figure 3.

TRIAD PLAZA HOTEL - HOUSTON, TEXAS

APPENDIX A -- PRESSURE DATA:

Z  
E  
K  
C

X  
E  
K  
C

S  
E  
K  
C

A  
E  
K  
C

R  
E  
K  
C

U  
D

H  
E  
K  
C

M  
E  
K  
C

S  
E  
K  
C

A  
E  
K  
C

R  
E  
K  
C

U  
D

N  
E  
K  
C

X  
E  
K  
C

S  
E  
K  
C

A  
E  
K  
C

R  
E  
K  
C

U  
D





TRIAD PLAZA HOTEL - HOUSTON, TEXAS

```

IN
CPM 449 621 1022 268 679 188 973 600 782 748 25 650 100 36 62 176
      452 172 252 429 114 473 602 502 467 437 456 471 42 102 42
      .....

```

```

X
CPMX 011 014 015 019 024 027 031 034 038 042 046 050 054 058 062 066 070
      001 004 005 009 011 015 019 023 027 031 035 039 043 047 051 055 059
      .....

```

```

MS
CPMS 067 071 074 077 080 083 086 089 092 095 098 101 104 107 110 113 116
      002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017 018
      .....

```

```

AN
CPEN 001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017
      001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017
      .....

```

```

R
CPRO 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000
      000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000
      .....

```

```

D
      .....

```

```

W
CPW 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000
      000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000
      .....

```

```

X
CPX 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000
      000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000
      .....

```

```

S
CPSS 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000
      000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000
      .....

```

```

AN
CPAN 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000
      000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000
      .....

```

```

R
CPRR 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000
      000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000
      .....

```

```

D
      .....

```

```

W
CPW 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000
      000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000
      .....

```

```

X
CPX 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000
      000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000
      .....

```

```

S
CPSS 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000
      000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000
      .....

```

```

AN
CPAN 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000
      000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000
      .....

```

```

R
CPRR 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000
      000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000 000
      .....

```

```

D
      .....

```

APPENDIX A -- PRESSURE DATA:



TRIAD PLAZA HOTEL - HOUSTON, TEXAS

X  
C

X  
C

X  
C

X  
C

X  
C

X  
C

X  
C

X  
C

X  
C

X  
C

X  
C

X  
C

X  
C

X  
C

X  
C

X  
C

X  
C

X  
C

APPENDIX A - - PRESSURE DATA:













TRIAD PLAZA HOTEL - HOUSTON, TEXAS

HEB...  
HEB...  
HEB...  
C...

X...  
X...  
X...  
C...

SD...  
SD...  
SD...  
C...

M...  
M...  
M...  
C...

A...  
A...  
A...  
C...

D...  
D...  
D...  
C...

W...  
W...  
W...  
C...

X...  
X...  
X...  
C...

S...  
S...  
S...  
C...

M...  
M...  
M...  
C...

A...  
A...  
A...  
C...

D...  
D...  
D...  
C...

M...  
M...  
M...  
C...

X...  
X...  
X...  
C...

S...  
S...  
S...  
C...

M...  
M...  
M...  
C...

A...  
A...  
A...  
C...

D...  
D...  
D...  
C...

APPENDIX A -- PRESSURE DATA:



































M 1132517770411250028060001627110044248101549571808991188899  
 R 1242814770301250028060001627110044248101549571808991188899  
 C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

X 6421454502560214042014471502760297674652121151460309801114  
 R 1021454502560214042014471502760297674652121151460309801114  
 C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

M 52250159002038794444197109491950422110225400110211085151804  
 R 05250159002038794444197109491950422110225400110211085151804  
 C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

M 1134976290173902289412939309000197109491950422110225400110211085151804  
 R 1134976290173902289412939309000197109491950422110225400110211085151804  
 C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

A 3456789901123456789011234567890112345678901123456789011234567890  
 R 3456789901123456789011234567890112345678901123456789011234567890  
 C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

D 00  
 R 00  
 C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

M 12345678901123456789011234567890112345678901123456789011234567890  
 R 12345678901123456789011234567890112345678901123456789011234567890  
 C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

X 00  
 R 00  
 C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

M 004404000400040004000400040004000400040004000400040004000400040004000400040004000  
 R 004404000400040004000400040004000400040004000400040004000400040004000400040004000  
 C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

M 110150110350110550110950110550110550110550110550110550110550110550110550110550110550110550  
 R 110150110350110550110950110550110550110550110550110550110550110550110550110550110550110550110550  
 C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

A 115011234567890112345678901123456789011234567890112345678901123456789011234567890  
 R 11501123456789011234567890112345678901123456789011234567890112345678901123456789011234567890  
 C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

D 00  
 R 00  
 C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

X 6217017500000015429112345678901123456789011234567890112345678901123456789011234567890  
 R 6217017500000015429112345678901123456789011234567890112345678901123456789011234567890  
 C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

M 24715000000040  
 R 24715000000040  
 C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

M 0011010000100  
 R 0011010000100  
 C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

M 0011010000100  
 R 0011010000100  
 C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

A 6789011234567890112345678901123456789011234567890112345678901123456789011234567890  
 R 678901123456789011234567890112345678901123456789011234567890112345678901123456789011234567890  
 C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

D 00  
 R 00  
 C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

TRIAD PLAZA HOTEL - HOUSTON, TEXAS

APPENDIX A -- PRESSURE DATA:





















TRIAD PLAZA HOTEL - HOUSTON, TEXAS

APPENDIX A -- PRESSURE DATA:

| Time  | P1 | P2 | P3 | P4 | P5 | P6 | P7 | P8 | P9 | P10 | P11 | P12 | P13 | P14 | P15 | P16 | P17 | P18 | P19 | P20 | P21 | P22 | P23 | P24 | P25 | P26 | P27 | P28 | P29 | P30 |
|-------|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 00:00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00  | 00  | 00  | 00  | 00  | 00  | 00  | 00  | 00  | 00  | 00  | 00  | 00  | 00  | 00  | 00  | 00  | 00  | 00  | 00  |     |
| 01:00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00  | 00  | 00  | 00  | 00  | 00  | 00  | 00  | 00  | 00  | 00  | 00  | 00  | 00  | 00  | 00  | 00  | 00  | 00  | 00  |     |















TRIAD PLAZA HOTEL - HOUSTON, TEXAS

ZIN...  
E...  
P...  
C...

X...  
E...  
P...  
C...

S...  
R...  
P...  
C...

H...  
E...  
P...  
C...

L...  
E...  
P...  
C...

D...  
E...  
P...  
C...

Z...  
E...  
P...  
C...

X...  
E...  
P...  
C...

S...  
R...  
P...  
C...

H...  
E...  
P...  
C...

L...  
E...  
P...  
C...

D...  
E...  
P...  
C...

Z...  
E...  
P...  
C...

X...  
E...  
P...  
C...

S...  
R...  
P...  
C...

H...  
E...  
P...  
C...

L...  
E...  
P...  
C...

D...  
E...  
P...  
C...

APPENDIX A -- PRESSURE DATA:



TRIAD PLAZA HOTEL - HOUSTON, TEXAS

APPENDIX A -- PRESSURE DATA:

X.....  
R.....  
C.....

X.....  
R.....  
C.....

X.....  
R.....  
C.....

X.....  
R.....  
C.....

X.....  
R.....  
C.....

X.....  
R.....  
C.....

X.....  
R.....  
C.....

X.....  
R.....  
C.....

X.....  
R.....  
C.....

X.....  
R.....  
C.....

X.....  
R.....  
C.....

X.....  
R.....  
C.....

X.....  
R.....  
C.....

X.....  
R.....  
C.....

X.....  
R.....  
C.....

X.....  
R.....  
C.....

X.....  
R.....  
C.....

X.....  
R.....  
C.....







TRIAD PLAZA HOTEL - HOUSTON, TEXAS

XZLN...  
C

XZLN...  
C

XZLN...  
C

XZLN...  
C

XZLN...  
C

XZLN...  
C

XZLN...  
C

XZLN...  
C

XZLN...  
C

XZLN...  
C

XZLN...  
C

XZLN...  
C

XZLN...  
C

XZLN...  
C

XZLN...  
C

XZLN...  
C

XZLN...  
C

XZLN...  
C

APPENDIX A - - PRESSURE DATA:





TRIAD PLAZA OFFICE TOWER - HOUSTON, TEXAS

APPENDIX A -- PRESSURE DATA:

Z  
 H  
 P  
 C

X  
 M  
 P  
 C

R  
 P  
 C

H  
 E  
 I  
 P  
 C

A  
 I  
 T  
 H

D  
 U

Z  
 H  
 P  
 C

X  
 M  
 P  
 C

R  
 P  
 C

H  
 E  
 I  
 P  
 C

A  
 I  
 T  
 H

D  
 U

Z  
 H  
 P  
 C

X  
 M  
 P  
 C

R  
 P  
 C

H  
 E  
 I  
 P  
 C

A  
 I  
 T  
 H

D  
 U















TRIAD PLAZA OFFICE TOWER - HOUSTON, TEXAS

APPENDIX A - PRESSURE DATA:

MEASUREMENTS FROM 01/17/85 TO 01/18/85  
C

MEASUREMENTS FROM 01/19/85 TO 01/20/85  
C

MEASUREMENTS FROM 01/21/85 TO 01/22/85  
C

MEASUREMENTS FROM 01/23/85 TO 01/24/85  
C

MEASUREMENTS FROM 01/25/85 TO 01/26/85  
C

MEASUREMENTS FROM 01/27/85 TO 01/28/85  
C

MEASUREMENTS FROM 01/29/85 TO 01/30/85  
C

MEASUREMENTS FROM 01/31/85 TO 02/01/85  
C

MEASUREMENTS FROM 02/02/85 TO 02/03/85  
C

MEASUREMENTS FROM 02/04/85 TO 02/05/85  
C

MEASUREMENTS FROM 02/06/85 TO 02/07/85  
C

MEASUREMENTS FROM 02/08/85 TO 02/09/85  
C

MEASUREMENTS FROM 02/10/85 TO 02/11/85  
C

MEASUREMENTS FROM 02/12/85 TO 02/13/85  
C

MEASUREMENTS FROM 02/14/85 TO 02/15/85  
C

MEASUREMENTS FROM 02/16/85 TO 02/17/85  
C

MEASUREMENTS FROM 02/18/85 TO 02/19/85  
C

MEASUREMENTS FROM 02/20/85 TO 02/21/85  
C









TRIAD PLAZA OFFICE TOWER - HOUSTON, TEXAS

APPENDIX A - PRESSURE DATA:

XBBSOON...  
P...  
C...

XGOM...  
P...  
C...

ESB...  
P...  
C...

EM...  
P...  
C...

LO...  
P...  
C...

DS...  
P...  
C...

EX...  
P...  
C...

XGN...  
P...  
C...

SN...  
P...  
C...

EN...  
P...  
C...

EN...  
P...  
C...

EN...  
P...  
C...

EX...  
P...  
C...

XEN...  
P...  
C...

SN...  
P...  
C...

EN...  
P...  
C...

LO...  
P...  
C...

EN...  
P...  
C...







TRIAD PLAZA OFFICE TOWER - HOUSTON, TEXAS

APPENDIX A -- PRESSURE DATA:

Z  
E  
X  
R  
C  
M  
E  
R  
E  
C  
N  
A  
B  
P  
C

X  
R  
C  
M  
E  
R  
E  
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N  
A  
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P  
C

E  
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M  
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A  
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C

Z  
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A  
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N  
A  
B  
P  
C

A  
B  
P  
C

D  
B  
P  
C

Z  
E  
X  
R  
C  
M  
E  
R  
E  
C  
N  
A  
B  
P  
C







TRIAD PLAZA OFFICE TOWER - HOUSTON, TEXAS

APPENDIX A -- PRESSURE DATA:

H  
I  
E  
P  
C

X  
E  
P  
C

S  
R  
C

H  
E  
P  
C

A  
T  
P  
C

D  
M  
P  
C

H  
I  
E  
P  
C

X  
E  
P  
C

S  
R  
C

H  
E  
P  
C

A  
T  
P  
C

D  
M  
P  
C

H  
I  
E  
P  
C

X  
E  
P  
C

S  
R  
C

H  
E  
P  
C

A  
T  
P  
C

D  
M  
P  
C





TRIAD PLAZA OFFICE TOWER - HOUSTON, TEXAS

APPENDIX A - - PRESSURE DATA:

Z  
H  
E  
P  
C

X  
H  
E  
P  
C

G  
R  
P  
C

M  
E  
P  
C

L  
T  
H  
I

D  
B  
I

M  
H  
E  
P  
C

X  
H  
E  
P  
C

S  
R  
P  
C

M  
E  
P  
C

L  
T  
H  
I

D  
B  
I

Z  
H  
E  
P  
C

X  
H  
E  
P  
C

G  
R  
P  
C

M  
E  
P  
C

L  
T  
H  
I

D  
B  
I



TRIAD PLAZA OFFICE TOWER - HOUSTON, TEXAS

APPENDIX A -- PRESSURE DATA:

N  
 H  
 R  
 C

X  
 H  
 R  
 C

S  
 R  
 C

N  
 H  
 R  
 C

R  
 H  
 R  
 C

O  
 H  
 R  
 C

X  
 H  
 R  
 C

X  
 H  
 R  
 C

S  
 R  
 C

N  
 H  
 R  
 C

R  
 H  
 R  
 C

O  
 H  
 R  
 C

X  
 H  
 R  
 C

X  
 H  
 R  
 C

S  
 R  
 C

N  
 H  
 R  
 C

R  
 H  
 R  
 C

O  
 H  
 R  
 C





















































TRIAD PLAZA OFFICE TOWER - HOUSTON, TEXAS

HN  
H  
P  
C

X  
X  
P  
C

S  
S  
P  
C

N  
N  
P  
C

B  
B  
P  
C

D  
D  
P  
C

N  
N  
P  
C

X  
X  
P  
C

S  
S  
P  
C

N  
N  
P  
C

B  
B  
P  
C

D  
D  
P  
C

N  
N  
P  
C

X  
X  
P  
C

S  
S  
P  
C

N  
N  
P  
C

B  
B  
P  
C

D  
D  
P  
C

APPENDIX A -- PRESSURE DATA:





