The boundary conditions used to determine the two displacement coefficients a_5 and a_6, the constraint pressure P_1, and the wafer centerline deflection are the same as those invoked previously. Once these factors are known, the displacements, strains, stresses, and applied force can all be found by utilizing the appropriate equations.

A complete description of the one-dimensional analysis, together with the computer programs used in computing the coefficients, stresses, and applied force, is presented in Reference (1), and will not be repeated here.

3. Rigid Anvils - Zero Shear. If only the last term appearing in the previous two displacement functions is retained, a new function

$$\psi_2 = a_7 r^2 z \qquad (68)$$

is thus defined. It will be shown that this function leads to the results obtained from the analysis of rigid, perfectly lubricated anvils.

Taking the appropriate derivatives of (68), the displacements become

$$u = a_7 r \qquad w = -2a_7 z \qquad (69)$$