NOTES:

1. When manholes are installed in unimproved areas, the top of the cover shall be a min. of 1 foot above grade.

2. Min. of one 3" grade adjustment ring. Max. height of grade adjustment rings = 20". Alternately, contractor may cast grade adjustment rings in place.

3. Set all barrel sections & taper sections in plastic gasket, Ram–nek or approved alternate. Typical joint use (1) 3/4" x 2-1/2" Ram–nek seal, (2) seals in high water table areas.

4. Cover section (taper) must be eccentric.

5. After lower ring section is set, break out top half of pipe flush with inside face of M.H. wall and construct shelf and u-shaped channel. Make elevation changes gradually and directional changes with smooth curves. Slope and size of channels shall match upstream and downstream pipes. Manhole channels with a horizontal change in direction of 30° or more shall have a minimum drop of 0.1" across the manhole or shall match the slope of the pipe, whichever is greater.

6. Poured–in–place base shall be poured full thickness on undisturbed soil. Precast base to be from Utilities Director approved list and placed on 6" minimum of 3/4" drain rock installed against undisturbed earth.

7. Class "A" conc. collar shall be 2" below finished grade.

8. Install waterstop for poured in place bases, in accordance with manufacturer's instructions as shown. (typical)

9. ECCENTRIC MANHOLE COVER & grade rings to be located over downstream pipe.

10. Flexible pipe coupling is required on all pipe other than SDR 35 PVC pipe. Flex coupling to be installed in mainline trench and out of manhole excavation.