1. All construction shall conform to MAG Specifications and Details and City of Scottsdale Supplement to MAG Specifications and Details, unless modified on the plans.

2. All steel reinforcing shall be deformed bars, Grade 60, billet steel conforming to ASTM A615, latest edition.

3. All concrete for the grout fillet inside the structure shall conform to MAG Section 725, Class C, minimum compressive strength at 28 days = 2,000 psi. Block masonry may be used in lieu of concrete, along with a certification of meeting the requirements of MAG and City of Scottsdale Specifications and Details, unless modified on the plans.

4. All concrete floors, walls and top slab of the structure shall conform to MAG section 725, Class C, minimum compressive strength at 28 days = 3,000 psi.

5. The Monitoring/Sampling Vault shall be installed on the owner's property as close to the customer tap to the City sewer as feasible, and approved by the City of Scottsdale.

6. Flume size should be based upon the minimum and maximum flow rates and velocities to insure free-flow conditions.

7. Flume floor elevation should be high enough, relative to downstream conditions, to prevent submerged flow (50% submergence is acceptable at maximum flow), and free of obstacles that may cause turbulence, non-uniform flow, or other conditions that may affect accuracy of measurements.

8. Upstream flow should be wave free, non-turbulent, and symmetrical having a uniform velocity (1 fps minimum to 3 fps maximum) at least 10 times the diameter of the upstream sewer pipe in length in the approach channel. Bends upstream in the flume will NOT be allowed for a distance of 25 pipe diameters unless conditions in the approach section of the flume will not be adversely affected.

9. The flume shall be installed off-center and away from the ladder to allow the maximum working space for City personnel.

10. Flume shall be self-supporting, and require no external supporting structure. Interior dimensions shall conform to those in the latest revision of Water Measurement Manual published by the U.S. Department of the Interior, Water and Power Resources Services. The throat width and flume height (E dimension) shall be per plan.

11. It shall be the owner's responsibility to properly maintain the flume in accordance with the manufacturers recommendations to ensure the accuracy of the measurement.

12. The flow shall be measured by the City's approved primary measuring device, which shall be self-supporting and require no external supporting structure. Interior dimensions shall conform to those in the latest revision of Water Measurement Manual published by the U.S. Department of the Interior, Water and Power Resources Services. The throat width and flume height (E dimension) shall be per plan.