CASTING SPECIFICATIONS:
1. Gray iron conforming to ASTM A48 Class 35B.
2. Ductile iron conforming to ASTM A536 grade 80-55-06.
3. Castings to be made of recycled materials, 75% consumer waste.
4. Castings shall come from a NCDOT approved foundry.
5. Castings shall be uniform quality, free from sand holes, gas holes, shrinkage, cracks, and other surface defects. Castings shall be reasonably smooth and well cleaned by shot blasting. Surfaces of the castings shall be free from burned on sand and shall be reasonably smooth. Runners, risers, fins and other cast-on pieces shall be removed from castings and such areas shall be ground smooth. Bearing surfaces between manhole rings and covers shall be cast or machined with such precision that uniform bearing shall be provided throughout the perimeter area of contact. Nominally, castings dimensional tolerances shall be +/- 1/16” per foot. All casting weights are average and approximate values may vary +/- 5%.
6. Traffic service castings shall meet or exceed the latest standards of AASHTO M306. The casting shall be tested on a suitable and calibrated load testing machine and the casting shall hold a 40,000 pound proof load for one minute without experiencing any cracks or detrimental permanent deformation. Ductile iron conforming to ASTM A536 grade 80-55-06.
7. Each casting shall be identifiable and show, at a minimum, the following: name of the producing foundry, country of manufacture, ASTM material designation, recycle symbol, individual part number and cast or heat date. Castings shall include all lettering as shown on the specification drawings.