1. HARCO plastic drainage structures, including drain basins and inline drains, are fabricated from PVC pipe stock. HARCO employs a thermo-molding process to ensure a consistent watertight seal throughout the drainage structure and its outlet stubs. The PVC resin utilized to make this PVC stock conforms to ASTM D1784 cell class 12454.

2. The outlet stubs for HARCO plastic drainage structures are also manufactured from PVC pipe stock utilizing thermo-molding process to ensure a tight pipe-to-structure fit, so that when utilizing the appropriate pipe gaskets, the pipe-to-structure connection meets or exceeds the pressure requirements of the ASTM D3212 standard for pipe connections of plastic drainage pipe and sewer pipe using flexible elastomeric seals. These pipe gaskets must meet ASTM F477 requirements.

3. HARCO grates, covers, and frames shall be constructed of ductile iron meeting ASTM A536 Grade 80-55-06. 12” through 36” round and square hinged standard grades and solid covers meet H25 load rating. 12” through 24” round and square hinged pedestrian grades meet H10 load rating. Traffic family and curb inlet 2’X2’ and 2’X3’ grates meet H25 load rating. 8” and 10” grates and solid covers are one-piece drop-in castings designed for light duty load applications. All domed grates are not load rated.

A CONCRETE COLLAR IS REQUIRED TO BE POURED AROUND AND UNDER DUCTILE IRON FRAME AND GRATE FOR ALL TRAFFIC LOAD APPLICATIONS. THIS DRAWING REFLECTS MINIMUM CONCRETE COLLAR DIMENSIONS RECOMMENDED. LOCAL PROJECT CONDITIONS AND REQUIREMENTS SHOULD ALWAYS BE CONSIDERED IN THE CONCRETE COLLAR DESIGN.