

Make the following Section a part of the Standard Specifications:

## **"SECTION 717 - CULLET AND CULLET-MADE MATERIALS**

### **717.01 Cullet and Cullet-Aggregate Mixtures as Construction Materials.**

When available, process recycled glass into construction-grade cullet (crushed glass) using methods accepted by the Engineer. Construction-Grade cullet shall have a uniform gradation from fine to coarse. 100% of the material shall pass the 0.375 inch sieve. Blend the processed cullet with the natural aggregates according to Subsections 717.02 - Cullet Materials for Roadway, 717.03 - Cullet Materials for Utility Structures, or 717.04 - Cullet Materials for Drainage Systems.

Cullet content is the percentage at which the Contractor uses the construction-grade cullet with or without the addition of natural aggregates depending on its application(s). The mixture of the materials produced shall be of acceptable gradation as specified for the finished product.

Debris include plastics, papers, and non-ceramic constituents of the cullet. The contract considers debris as deleterious material. Debris shall not exceed values specified for various applications of the processed cullet. Also, the Engineer will not allow hazardous material in the cullet.

Compaction shall comply with the minimum levels, as specified for each particular application, to attain the desired engineering properties in the field.

**717.02 Cullet Materials for Roadways.** Roadway applications include the use of cullet and cullet-aggregate mixtures in base course (untreated or glassphalt concrete base course mix), subbase, and embankments. Use of construction-grade cullet is appropriate depending on cullet percentage. Table 717-I lists the limits of cullet content and debris levels allowed for cullet use in roadway applications.

<b>TABLE 717-I - CULLET IN ROADWAY APPLICATIONS</b>		
<b>Roadway Applications</b>	<b>Cullet Content (% By Weight)</b>	<b>Maximum Debris Level (% By Weight Of Cullet)</b>
Base Course	10 to 15	0.2
Subbase	10 to 25	0.2
Embankments	10 to 25	0.3

**717.03 Cullet Material for Utility Structures.** Utility applications involve the use of cullet for trench bedding and backfill for utility structures. Process the cullet into construction grade according to Subsection 717.01 - Cullet and Cullet - Aggregate Mixtures as Construction Materials before use in these applications.

Table 717-II lists the limits of cullet content and debris level for utility fill applications. The cullet contents listed shall apply to backfill that is not subjected to surcharge loading such as from a roadway. If the trench backfill lies within five feet of a road surface, then use the values given in Table 717-I, as applicable.

<b>TABLE 717-II - CULLET IN UTILITY APPLICATIONS</b>		
<b>Utility Trench Bedding and Backfill Applications</b>	<b>Maximum Cullet Content (% By Weight)</b>	<b>Maximum Debris Level (% By Weight Of Cullet)</b>
Sewer Pipes	100	0.3
Electrical Conduits	100	0.3
Fiber Optic Lines	100	0.3

**717.04 Cullet Materials for Drainage Systems.** Drainage fill applications include retaining walls, foundation drains, drainage blankets, and french drains. For use in these applications, cullet shall be of construction grade according to Subsection 717.01 - Cullet and Cullet-Aggregate Mixtures as Construction Materials. Table 717-III lists the limits of cullet content and debris levels for drainage fill applications. These values assume that the cullet is not subjected to surcharge loading as from a roadway. If the fill is subject to surcharge loads, then use the values set forth in Table 717-I, as applicable.

<b>TABLE 717-III - CULLET IN DRAINAGE APPLICATIONS</b>		
<b>Drainage Fill Applications</b>	<b>Maximum Cullet Content (% By Weight)</b>	<b>Maximum Debris Level (% By Weight Of Cullet)</b>
Retaining Walls	100	0.2
Foundation Drainage	100	0.2
Drainage Blankets	100	0.2
French Drains	100	0.2"

**END OF SECTION**