

Engineering Department – Utilities Division

Issue Date: **May 14, 2013**

Reference No. **5250-20 (Bulletin)**

AUTHORITY: GENERAL MANAGER, ENGINEERING

ATTENTION: LAND DEVELOPMENT CONSULTANTS

SUBJECT: VELOCITIES WITHIN PROPOSED SANITARY SEWERS

EFFECTIVE: IMMEDIATELY

Please be informed that Section 4.2 B(f) and 4.3 B(e) of the May 2004 Design Criteria Manual providing the minimum design criteria for velocities within sanitary sewers has been amended to provide clarification of the existing wording and to reflect current engineering practices.

1. The first paragraph of Section 4.2 B(f): Velocities Within Sanitary Sewers, has been deleted,

Existing Wording:

"All sanitary sewers shall be designed at grades which will ensure sewage flow at a self-cleansing velocity of 0.6m/s at least once every twenty-four hours, based on flow from the full development upstream, except where the maximum grade possible is limited. In such cases, upon approval by the Engineer, the required flow velocity may be reduced to a minimum of 0.45m/s provided the depth of flow at the peak wet weather flow condition exceeds 25% of the diameter of the pipe."

and replaced with the following:

"Pipe grades less than 0.5% may only be used with the approval of the Engineer when the flow, equal to 0.70 x Peak Drey Weather Flow, from the full development upstream attains a minimum velocity of 0.6m/s once every twenty four hours based on partial (not full) pipe flow hydraulics.

2. The last bullet of the final paragraph of Section 4.3 B(e): Pipe Slopes, has been deleted so that the criterion provided above is stated only once in the Manual.



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