

## City of Valdosta - Stormwater Committee

Meeting No. 6 – Regulations and Existing Program

April 20, 2010 5:30 PM

City Hall Annex – Multi-Purpose Room

### List of Attendees

- Can Denizman – VSU
- Angela Wall – Southern Georgia Regional Commission (SGRC)
- Henry Calhoun – Community
- Dan Deaver – Engineer
- Elton Cowart – District 6
- Ginny Holton - Community
- Elliot Norwood – District 1
- Danny Parkinson – District 4
- Von Shipman – City of Valdosta – City Engineer
- Emily Davenport – City of Valdosta – Stormwater Superintendent
- Jason Scarpate – City of Valdosta – Assistant Director of Utilities
- Kelly Bell – City of Valdosta – Environmental Technician
- Kevin Tolliver – Assistant City Engineer
- Steve Sedgwick – CDM
- Patrick Victor – CDM
- José Maria Guzman – CDM

### Absent

- Danny Sermons - Community
- Alan Sanderson – District 5
- Danny Rountree – Contractor
- Connie Ledbetter – Community
- Jeff Lovell – At Large/Engineer
- Rodney Flucas – District 2
- Sonny Vickers – District 3 Councilman
- Henry Hicks – Utilities Director

### Summary

This was an additional meeting to discuss the final committee recommendation to City Council. CDM prepared two examples that show in practice the benefits of implementing a citywide level of service (LOS).

- The first example outlined the process to evaluate the culvert expansion for the existing Ashley Street culvert. The engineering analysis determined the benefits of the project and ensures that no location throughout the system will be impacted by the project. The benefits are measured in a scale of points that determine how beneficial the implementation of the project would be to the City. Finally, the cost estimate of the project is divided by the benefit points to determine the cost/benefit ratio to rank the project against all the other projects within the City limits. The final result will be a table that summarizes the list of all the projects with their cost and cost/benefit, ranked from the ones with the highest benefit to the ones with the lowest benefit.
- The second example consisted of a 3.0 acre parcel developed for commercial purposes with 1.9 acres of impervious area. CDM summarized the different levels of on-site storage according to

the current Georgia Stormwater Management Manual and the current City regulations. The City currently uses the 25 year/24 hour storm as the basis to verify the peak flow rate. CDM suggested for the City to consider the volumetric control, as it had been done in other communities across the US, because it is the most effective method to reduce future impacts from urban development. CDM also acknowledged that it is up to the community to adopt such measure, since it does have a cost associated with the amount of land that will be dedicated to on-site stormwater control.

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### **COMMITTEE RECOMMENDATION**

The Committee reached an agreement and proposes the following for consideration of the City Council:

#### Level of Service (LOS)

- Arterial and Collector Roads shall have less than 0.5 ft of street flooding for the 50 year storm (8.4 inches)
- Local Roads shall have less than 0.5 ft of street flooding for the 5 year storm (5.5 inches)
- New structures shall be built at least 2 feet above the 100 year flood elevation.

#### Onsite Storage/Treatment

- Urban development shall retain on-site the 25 year/24 hour pre-condition volume. One exception to this rule is Cherry Creek, since most of its upstream tributary area is outside of City limits.

The potential presentation to Mayor and City Council is scheduled for either May 4<sup>th</sup> or June 8<sup>th</sup> at 5:30 PM in the City Hall chambers. Ms. Davenport will provide an update to the group, as the date becomes certain. All the committee members are welcome to attend and the following members volunteered to assist CDM in the presentation: Ms. Ginny Holton, Ms. Angela Wall, and Mr. Dan Deaver.

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#### Other Major Topics of Discussion

- (1) Regional stormwater facilities: Ms. Davenport and Mr. Deaver asked CDM if the treatment available at regional facilities could be allocated to future development. Mr. Victor explained that if the regional facility is built to retrofit existing development it is not possible to use its storage to alleviate future urban development. Conversely it is possible to create regional facilities with the only purpose of accommodating future development. This is common practice in many areas, particularly when the community wants to facilitate the development of specific areas.
- (2) Collector and arterial roads: Ms. Holton reminded the group that in the past meetings it was discussed that the implication of using the same criteria for both arterial and collector roads were not significant. The benefit of having the same recurrence interval (50 year) is that for a limited marginal cost, the City could be prepared for future expansion of collector roads to arterial roads.
- (3) Balance between regulation and economic prosperity: Mr. Shipman reminded the group that the City of Valdosta is in close competition with nearby communities to attract businesses and investments. It is therefore important to avoid becoming a City that is known for having regulations that go further beyond the requirements of nearby communities, otherwise potential businesses and investors might decide to work with other communities. The committee mentioned the fact that it is important to find a balance between the pressure to be business

oriented, and the protection of the City's resources and its own citizens. Mr. Parkinson asked the group how important would it be on the eyes of the people in regards to the stormwater impact that we are discussing? Mr. Sedgwick replied that in national surveys, stormwater does not fall in the top ten categories, well below others such as education and crime.

- (4) Land dedicated to stormwater: Since the committee discussed extensively the implications of dedicating a significant portion of a parcel for on-site stormwater management, Mr. Scarpace pointed out that there are alternatives to conventional stormwater ponds such as underground storage facilities and baffle boxes that might complement and reduce the work. He also mentioned that in recent years the construction costs of these alternative facilities has come down significantly.
- (5) Waterfront property valuation: Ms. Holton exposed to the committee that in recent visits to Florida she has noticed that waterfront properties are more expensive than other properties. Mr. Sedgwick mentioned a nationwide study of the US. Chamber of Commerce issued before 2008, showing that stormwater waterfront properties had up to a 20% price increase, with a benefit extending up to one block from the stormwater facility. This is a mechanism that can compensate the potential loss that land developers will have when dedicating a portion of their land to stormwater.
- (6) Benefits of volumetric control: The group discussed extensively the benefits of implementing a volumetric control. Mr. Tolliver mentioned that in reality this is the only method that really prevents negative impacts on the floodplain by urban development, because the common peak flow rate control still has the potential of flooding downstream properties. Mr. Sedgwick added that this was the most valuable argument that convinced the City of Jacksonville, FL in 1994 to adopt the volumetric control for selected watersheds.
- (7) Little effect on Withlacoochee River flooding: Mr. Scarpace mentioned the importance of keeping the community expectations clear when it comes to floods from the Withlacoochee River. Indeed all the work that the City is currently doing will not have a significant reduction in the threat from this river, given that Valdosta constitutes only 1% of the entire Withlacoochee Watershed.
- (8) Infrastructure age: Mr. Parkinson asked if the age of the infrastructure could be a factor in the ranking of projects. In the case of Ashley Street, Mr. Shipman pointed out that the existing culvert was old, and had an age of 50+ years. The group screened some of the other roadways that currently do not meet the LOS, and most of them have the same age. For this reason, this criteria might not change the screening significantly.
- (9) Redevelopment: Mr. Deaver asked what the City could do to control redevelopment. Particularly, the concern was directed towards the case where a major hurricane could destroy a portion of the City, and its reconstruction would increase runoff to the City watersheds. CDM explained that by adopting the LOS, and the on-site storage recommendations, the redevelopment will be required to provide on-site storage which will prevent negative impacts.

If you have any questions please contact Emily Davenport at 229-259-3592.