



## Legislation Details (With Text)

**File #:** 17-120      **Version:** 1      **Name:**  
**Type:** Study Session Item      **Status:** Agenda Ready  
**File created:** 4/5/2017      **In control:** Town Council  
**On agenda:** 4/13/2017      **Final action:** 4/13/2017  
**Title:** Storm Drainage Design Manual Revisions Summary and Update  
15 Minutes

**Sponsors:**

**Indexes:**

**Code sections:** 15-2 - Sanitary Sewers, Design, Construction, Inspection and Usage, 5-10 - Development

**Attachments:** 1. Storm Drainage Design Manual 4/5/2017, 2. Storm Drainage Design Manual Comment Resolution Final 4.7.17, 3. Presentation - Storm Drainage Design Manual

Date	Ver.	Action By	Action	Result
4/13/2017	1	Town Council	Received and Filed	

**TO:** Mayor Collins and Town Council Members

**FROM:** Kevin Burke, Town Manager  
Brent Skoglund, Public Works Director  
Jeremy Knapp, Engineering Services Analyst

**DATE:** April 13<sup>th</sup>, 2017

**DEPARTMENT:** Public Works and Engineering Department

480-348-3622

**AGENDA TITLE:**

Storm Drainage Design Manual Revisions Summary and Update

**Council Goals**

**Storm Water** - Identify the scope, scale and possible solution to recurring storm water management issues.

**SUMMARY STATEMENT:**

At the February 9<sup>th</sup> Town Council Meeting staff presented the proposed Storm Drainage Design Manual, highlighting some of the updates and changes. The discussion led to several Town Council questions which needed further input as well as Council request for public comment.

After the February 9<sup>th</sup> meeting, the Engineering Department began publicizing the draft document, advertising a public meeting, and soliciting public comment the week of February 20<sup>th</sup>. Staff utilized the town's website, e-mailed the notify me builders list, placed flyers at the Building and Engineering Departments counters, published a noticed in the March 8<sup>th</sup> Paradise Valley Independent, and placed ads on the TV screens at Town Hall. On March 21<sup>st</sup>, staff held a public meeting in the Community

Room to present the draft and receive public input. A summary of the input was presented at the March 23<sup>rd</sup> Council Meeting.

At the March 23<sup>rd</sup> meeting staff addressed Council's questions regarding what new regulations were included in the document and the cost implications associated with complying. A recommended option was to adopt the manual as written which included four policy decisions they are:

1. Calculation for flatland retention for disturbed area
2. Hillside retention requirements on a tiered scale
3. First flush requirement for the first ½" of rainfall
4. Retention basin easement requirement

There are two policy decisions that required clarification, they include first flush retention requirements and retention basin easements.

#### First Flush:

The EPA delegates stormwater enforcement to the individual states. The Arizona Department of Environmental Quality is the state department that oversees municipal compliance with state regulations for stormwater quality. This is accomplished through permitting municipalities through the Municipal Separate Storm Sewer System or MS4. The basins for first flush are not a requirement of the MS4 permit, but are practice to be chosen by each municipality. As such, the town is not bound by the EPA's definition of first flush. The town's calculation for first flush requirement is based off the disturbed area of the proposed development and not the entire site.

While not bound by the state to include first flush requirements in the town's Storm Drainage Design Manual, staff believes that the practical implementation of first flush retention/detention will ultimately help the town accomplish other requirements of the MS4, such as illicit discharge detection and elimination.

After the discussion at the March 23<sup>rd</sup> meeting, staff has reviewed the first flush requirement as written in the draft and is recommending some changes be incorporated to further clarify the intent of the requirement and provide some flexibility due to the practical challenges of retaining the first flush on lots with topography or where driveways meet the town's roadways.

The previous text stated, in Section 3-2 B.2.a:

*First flush volume shall be retained on all lots*

The revised text states, in Section 3-2 B.2.a:

*Where detention is allowed, first flush volume shall be retained on all lots or within common retention areas, and a reasonable attempt shall be made to route all runoff from disturbed areas to first flush basin(s) subject to grading plan approval.*

Additionally, Section 3-4 B does allow for smaller basins and/or alternative stormwater controls, if they meet the approval of the Town Engineer, to retain/detain the first flush requirement.

#### Retention Basin Easements:

The proposed Storm Drainage Design Manual introduces a new requirement for an easement over

retention basins to ensure that as property changes hands, new property owners are aware of the requirement to keep and maintain the basins on their property. The manual as written require an easement over the basin.

This study session item was intended to provide a 15 minute update on these issue prior to public input and consideration of adoption during the regular business meeting.

**ATTACHMENT(S):**

Storm Drainage Design Manual 4/5/2017

Comment Tracking and Resolution

PowerPoint Presentation