Response to Comments of 10-10-08 Draft Ordinance Revision: Listed by Section of the Ordinance

Comment No. 1 (Michael Zeller)
Why has the word "Regional" been deleted from the ordinance and the name of the District now been reverted back to the ole name of the Pima County Flood Control District?

RFCD response: The word Regional is part of the operating name of the District but is not part of the legal name. No change to Ordinance.

Comment No. 2 (Michael Zeller)
(16.08.040) Under Section 16.08.040, it seems that the last sentence should read: "Unless demonstrated otherwise by an analysis prepared by Professional Civil Engineer registered in the state of Arizona all drainage basins shall be considered to be balanced basins unless a basin has been designated as a critical drainage basin (Ord. 2008 FC-1; Ord. 1999 FC-1 § 1 (part), 1999; Ord. 1988 FC-2 Art. 4 (part), 1988). This allows the opportunity to waive detention/retention if it can be shown, through scientific and technical analysis, that a watershed should not be classified as either Balanced or Critical.

RFCD Response: The ability to waive detention/retention based on technical justification is already addressed in 16.48.040. No change to ordinance.

Comment No. 3 (Michael Zeller)
(16.08.140) Why were Item A and Item B deleted from Section 16.08.140? They have been in all previous versions of the ordinance, and seem to serve a valid purpose remaining here and providing "exception cases" to substantial improvement criteria, even though they may also be repeated at another location in the Ordinance.

RFCD Response: Items A and B would apply to Cumulative Substantial Damage, Cumulative Substantial Improvement, Substantial Damage, and Substantial Improvement. Rather than include this language in all the definitions, it was decided to locate it in Substantial Improvement, and refer each other definition to the substantial improvement. Cumulative Substantial Improvement was modified to directly refer to Substantial Improvement.

Comment No. 4 (American Institute of Architects)
(16.08.150) Does the cumulative substantial improvements provision apply to tenant improvements for commercial structures?

RFCD response: Although the District has not encountered situations where non-conforming commercial structures have had numerous tenant improvements, it is not intended to apply. The provision has been modified to indicate that tenant improvements are not included in the cumulative substantial improvement calculation

Comment No. 5 (Tucson Association of Realtors)
(16.08.150) "Cumulative Substantial Improvement"- There is well established appraisal application of the term "Functional Obsolescence" which anticipates that aspects of an existing "residence" will become "worth-less"(either because they no longer work, or because the tastes of the buying public have so changed that the "aspects" have little or no value; and in some cases, a negative value). Bathrooms and kitchens are the foci of this concept in residential real estate. The change that you have proposed will, over time, cause every property which is now grandfathered (pre-FIRM) to lose its "grandfathered rights". We strongly oppose this provision and believe this has the effect of codifying an illegal taking of property rights.

Response: The District has not encountered the situation where a residence has multiple permits for kitchen and/or bathroom remodels, likely because these improvements seldom obtain permits prior to their construction. This provision is not intended to apply to that scenario, and it has been modified to exempt multiple remodels of the same facility.

Comment No. 6 (Michael Zeller)
(16.08.220) Why are Item C and Item D removed from Section 16.08.220? It seems to me that they serve a purpose here, even though they may also be repeated at another location in the Ordinance.

RFCD Response: Since there are different encroachment standards for floodway and flood way fringe, it is more appropriate to locate the floodway fringe standard in the floodway fringe chapter, and has been moved to that location in 16.26.020. No change to Ordinance

Comment No. 7 (Michael Zeller)
(16.08.260) Why delete Section 16.08.260. Is it not a useful definition to the lay person?

RFCD Response: This is an incorrect reference; the correct reference is the National Flood Insurance Program.

Comment No. 8 (Michael Zeller)
(16.08.290) Under new Section 16.08.290, it is my opinion that, for historic consistency and clarification, you should put the term "100-year" in parentheses after the word "base" if you are now going to call the 100-year flood a "base flood." That is, use the terminology "base (100-year) flood." I believe that this should also be done everywhere in the Ordinance where base flood is now being used instead of 100-year flood because, after all these years referring to the 100-year flood, there should be an equivalency used throughout the document so as to not confuse the lay reader who does not use the technical jargon.

RFCD response: Although used historically, the term "100-year flood" increases the confusion potential for and frequency of flood occurrence. Acknowledging that this is a misleading term, FEMA is moving to modify the term to the "1% annual chance of flooding"; for consistency, the District is retaining the term base flood. The District will modify the definition of "base flood" to refer to the 100-year flood.

Comment No. 9 (Michael Zeller)
Under new Section 16.08.365(350), Item D3, it is stated that: "The watercourse shall be considered confined through all reaches where this criteria is present both upstream and downstream of the subject area." In my opinion, this is too much overreach. If the ratio of the base flood to the 25-year flood remains greater than 1.25 either upstream or downstream of the subject area for a continuous distance of say something like 3 or 4 times the width of the flood plain, then the criteria should no longer apply beyond that point. There has to be reasonable boundary limits.

RFCD Response: This particular provision will be used to identify those portions of a watercourse that will be considered confined, and should not be considered a limitation by itself. Once considered a confined watercourse, the additional floodway criteria such as avoiding the 25-year floodplain will apply. Those portions of the watercourse which exceed the 1.25 ratio will likely have greater areas allowable for development due to the wider geologic floodplain. It remains important to maintain conveyance capacity through the wider portion through avoidance of the 25-year floodplain, by limited the extent of encroachment, and by avoiding areas with active fluvial processes. However, since the concern of the confined flow area is that progressively larger floods get deeper and faster; this provision has been amended to limit applicability to those areas that remains confined for flows greater than base flood.

Comment No. 10 (Tucson Association of Realtors)

(16.08.350) "Floodway Area" – Will there be a mechanism to allow for property owners who will be effected by the new restrictions to discuss "creative" solutions (e.g., the language is general enough to appear to allow a "conversation" between the District and property owners, but that is not explicit"?

RFCD Response: The existing language in the Ordinance allows for discussion of options. In addition, as with all other permitting decisions, the Floodplain Administrator's decision can be appealed to the Chief Engineer and the Chief Engineer's written finding can be appealed to the Floodplain Board. This provision is found in section 16.24.050 of the Ordinance. No change to the Ordinance.

Comment No. 11 (Michael Zeller)

(16.08.600) Under 16.08.600, the proposed wording is: "including all base floods where the base flood peak discharge is 100 cfs or greater, those areas that are subject to sheet flooding, those areas identified on subdivision plats or development plans, those areas designated by FEMA, including areas designated as Shaded Zone X as well as those areas that the Chief Engineer, using the best available data, has determined may be subject to a flood hazard during the base flood."

As I have commented repeatedly on this one. In my judgment, having been around since the first Ordinance was adopted in December of 1974, the proposed new Ordinance should be applicable only in areas where Q100 > 100 cfs. The way the current language reads, it leaves the impression to the reader that all sheet flood areas are subject to the ordinance, regardless of the Q100 peak. Accordingly, I recommended changing the preceding wording to read as follows (my suggested changes in red): "including all base floods where the base flood peak discharge is 100 cfs or greater, including those areas that are subject to sheet flooding, including those areas identified on subdivision plats or development plans, including those areas designated by FEMA, particularly ~~including~~ areas designated as Shaded Zone X, and including ~~as well as~~ those areas that the Chief Engineer, using the best available data, has determined may be subject to a flood hazard during ~~the~~ a base flood where Q100 > 100 cfs." Otherwise, without these suggested changes there is no apparent lower limit to regulation under the Ordinance---a regulatory level for which I believe neither the District nor the Pima County Attorney's Office should what to be responsible.

RFCD Response: The District has modified the definition of regulatory floodplain to exclude sheet flood areas that have the maximum potential contributing areas of less than 20 acres. It is important to note that the discharge will be calculated across the entire floodplain rather than only the portion of a floodplain impacting the subject property.

Comment No. 12 (Michael Zeller)

(16.16.030) Under Section 16.16.030, if the term "Chief Engineer" is capitalized, then the term "Arizona Registered Civil Engineer" should also be capitalized in order to maintain consistent syntax. In fact, this should apply throughout the Ordinance. Also, if the District will be preparing floodplain and erosion-hazard maps, it seems to me that it should be clearly stated in the Ordinance that all such District maps will be prepared by, or under the supervision of, an "Arizona Registered Civil Engineer" who is an employee of the District. It should work both ways for the public and private sector.

RFCD Response: Chief Engineer is a defined term and is capitalized for emphasis; Arizona registered civil engineer is not a defined term in the Ordinance. No change to Ordinance.

Comment No. 13 (SAHBA)

(16.16.070) Recommend inserting the word "final" in front of release of assurances in 16.16.070.B.2.d.

RFCD Response: RFCD understands the concerns regarding the timing of the release of assurances, however, the use of the terms "partial" and "final" occur informally, and not codified in the Pima County Code. As such, RFCD will continue to use "release of assurances", although the current process is not anticipated to change. No change to Ordinance.

Comment No. 14 (Michael Zeller)

(16.16.070) Under section 16.16.070, it is my professional opinion that the following sentence should be added to the end of this section of the Ordinance: "The requirement of new delineations of floodplain conditions within 120 calendar days after completion of construction shall also apply to the District and all other departments within Pima County."

RFCD Response: This requirement exists in 16.16.070.A. No change to Ordinance

Comment No. 15 (Michael Zeller)

(16.24.020) Under Section 16.24.020, why has the phrase "require a certification, sealed by an Arizona registered professional civil engineer that the proposed use will not result in any increase in the floodway elevations during the occurrence of the base flood, nor will the proposed use . . . " been deleted? There should always be an opportunity provided, through technical documentation, for the property owner to demonstrate that a use in the floodway would not affect adjacent properties.

RFCD Response: This provision has been moved 16.24.020.C. The use of an engineer to demonstrate that proposed improvements will not cause any rise in base flood elevations, is not only allowed, it is required. No change to Ordinance.

Comment No. 16 (Michael Zeller)

(16.24.050) I notice that under Section 16.24.050, for example, that the term "property owner" has been deleted and replaced with the term "applicant." However, there is no definition in the Ordinance for what constitutes an "applicant." Yet, it seems to me that an applicant must be a property owner or an authorized agent of a property owner in order to even legally file an application with the District. Accordingly, I recommend that the Definitions Section of the Ordinance include "Applicant" and defines exactly what constitutes an applicant.

RFCD Response: You are correct that applicant means the owner of a property for which a Floodplain Use Permit application has been submitted, or that owner's authorized agent. When a term is not defined, the common practice is to refer to the dictionary definition, which would indicate that it is the person who applies for the permit. This is generally the owner or their authorized agent. No change to Ordinance.

Comment No. 17 (Michael Zeller)

(16.26.040) Under Section 16.26.040, I believe Item B should read as follows (my suggested changes in red): "Such fill or other materials shall be protected against erosion by a method approved by the District including riprap, vegetative cover, bulk-heading, or other approved methods, unless a study prepared by an Arizona Registered Civil Engineer demonstrates that erosion protection is not required." Otherwise, there is no provision in the current language to waive erosion protection for fill or other materials in circumstances where protection is not needed.

RFCD Response: This change has been made. In addition, while reviewing the Ordinance, the District observe that 16.36.070.C contains similar language, which has now bee revised.

Comment No. 18 (Arizona Manufactured Housing Association)

(16.26.050) Since the District and the Office of Manufactured Housing are prescribing erosion protection, is it possible that fill pad dimensions can be reduced?

RFCD Response:

The District understands that there are increased costs associated with the implementation of the construction standards that are in conformance with FEMA85. It is for that reason that the District has provided construction standards in order to reduce the cost associated with hiring an engineer for each installation. Once erosion protection is prescribed, the potential for scour and erosion from flood forces should be mitigated. As such, the requirement to maintain a 25 foot fill pad buffer

around the structure is not necessary. The District has revised the Ordinance to allow a 10 foot fill pad around the structure.

Comment No. 19 (Michael Zeller)

(16.26.055) Under Section 16.26.055, why mandate that the FFE be one foot above the 0.2% flood elevation? Recall that the "one-foot-above" requirement is in the state law only for the regulatory (i.e., 100-year) flood. Requiring the same for a 500-year flood seems like overkill (and there is no legal basis for requiring it).

RFCD Response: The District has amended the rule to require that the FFE be either base flood elevation plus one foot, or the 0.2% annual chance flood elevation, whichever is greater. Other flood protection measures, such as scour protection will still use the 0.2% annual chance flood as the design flood.

Comment No. 20 (SAHBA)

(16.26.055)Do the new critical facilities requirements apply to all utilities, even linear features like power lines? Will this apply in every regulatory floodplain?

RFCD Response: The District has proposed using FEMA's definition of critical facilities, which includes linear features. However, it is important to note that the only real concern with linear features such as power poles is the determination of scour depth and structural stability should that scour occur. The District has amended the Ordinance to reduce the applicability of the critical facility requirements to only those floodplains designated by FEMA. In some cases, the applicant may be required to determine the flow characteristics of the 0.2% annual chance flood in order to design flood mitigation elements.

Comment No. 21 (Michael Zeller)

(16.28.030) Section 16.28.030, Item C, should be modified to read (my suggested changes in red): "In order to provide for reasonable access and stability of foundations and structures, at no time shall a setback of less than 25 feet from the top of channel bank be permitted, unless a study prepared by an Arizona Registered Civil Engineer demonstrates that an alternate setback is acceptable." Again, without this last phrase added there is no provision in the current language to reduce the setback in circumstances where 25 feet is not needed (and they do exist).

RFCD Response: The Ordinance has been revised to allow the erosion hazard setback to be reduced below 25 feet when unusual conditions exist.

Comment No. 22 (Arizona Manufactured Housing Association and Office of Manufactured Housing)

(16.34.020)Now that the Office of Manufactured Housing requires installation of manufactured homes to the FEMA85 standard, what is the Districts role regarding the anchoring requirements?

RFCD Response: The District has met numerous times with the Office of Manufactured Housing to discuss the role of the District with respect to their new requirements. It was agreed that the District would review applications for manufactured housing proposed in floodplains in order to make sure that they were designed to overcome the forces associated with flooding (e.g. flotation, collapse, and lateral movement). The remaining forces on the manufactured home (e.g wind, dead loads, etc) would be subject to the regulations of the Office of Manufactured Housing. As such, 16.34.020 has been substantively rewritten to reflect the Districts obligations.

Comment No. 23 (Michael Zeller)

(16.34.040) Under Section 16.34.040, scour around piers and pilings is a complex process ordinarily not understood by the lay person. Accordingly, it seems to me that if piers or pilings are to be used, then before construction occurs in such a manner a study should be prepared by an Arizona Registered Civil Engineer defining the amount of scour and the extent of piers or pilings required. I recommend that language to this effect be added to the Ordinance.

RFCD Response: Section 16.20.020.C of the Ordinance already provides the authority to require an engineering study, prepared by an Arizona registered civil engineer when concerns regarding the development of a property, including scour potential exist. No change to Ordinance.

Comment No. 24 (SAHBA)

(16.36.030) Regarding 16.36.030.D, how is this intending to address phased developments? Are we required to provide all of the "as-builts" for the whole development? How does this impact model home permits?

RFCD Response: This provision is only intended to address drainage infrastructure necessary to mitigate the proposed development and the language has been amended to reflect that. In addition, the District will continue to allow the construction of a few model homes prior to the submittal of the "as-built" plans although it is anticipated that much of the infrastructure would be in place.

Comment No. 25 (Tucson Association of Realtors)

(16.36.030) "Grading, Storm Water and Drainage Improvement" – The "as-built plans" requirement adds considerable costs to an individual property owner building a home. Is there a mechanism for this requirement to be waived in these cases?

RFCD Response: This chapter applies only to subdivision and development plan permitting, and the "as-built" requirement would only apply to infrastructure authorized pursuant to these actions. The District may require "as-built" plans for individual residences in cases where engineered structures (e.g. erosion protection, or channel stabilization) were required prior to issuance of the floodplain use permit. In these cases, it is important to ensure that the infrastructure was built as designed and approved. This is typically accomplished through the "as-built" inspection process. No change to Ordinance

Comment No. 26 (Michael Zeller)

(16.36.120) Under Section 16.36.120, for purposes of clarification I recommend adding the word "levee' between the word "the" and the word "construction" on the next to last line of Item C.

RFCD Response: Ordinance revised as requested

Comment No. 27 (Tucson Association of Realtors)

(16.38) "Maintenance of Private Drainage Improvements" - Is it the intent of the District to impose these restrictions "off-site (e.g. improvements that may be made to private easements which lead to the property on which a structure is being built)?

RFCD Response: The intent of this language is to ensure that there is adequate enforcement authority to compel a Homeowners Association (HOA) responsible for drainage maintenance to perform maintenance if needed. The construction of detention basins and constructed channels occur in order create subdivision parcels that are free from flood hazards. Once constructed, these improvements often become the responsibility of an HOA. It is important to make sure that these basins and channels are maintained so that they continue to function as intended so that adjacent property remains free from flood risk. No change to Ordinance

Comment No. 28 (Michael Zeller)

(16.48.040) Under Section 16.48.040, a sentence has been added which reads: "As appropriate, alternate post-construction best management practices for storm water quality will be required." This kind of regulation should be the purview of PDEQ, et al., not the District. We are dealing with a Floodplain Management Ordinance, not a Stormwater Quality Ordinance. There are other ordinances and regulations (local, state, and federal) which regulate stormwater quality. In addition, to my knowledge there is no state enabling legislation which allows

counties to include stormwater quality regulations in their floodplain management ordinances. Finally, stormwater quality issues deal with very small amounts of runoff, not with floodwaters. Why complicate the Ordinance, even more than it already has been complicated, by adding more regulations for which "others" are supposed to be responsible?

RFCD Response: In addition to addressing water quantity issues, the use of detention/retention is known to have a water quality benefit, and implementation of the District's detention/retention requirements is an element in the County's Municipal Separate Storm Sewer permit issued by the EPA. Recent audits of this permit by EPA identified that this Ordinance among other, did not emphasize the water quality sufficiently. The purpose for the revision is to address this concern. No change to Ordinance.

Comment No. 29 (Michael Zeller)

Under Section 16.56.010, Item D.1, reads: "The appeal petition shall be on a form approved by the District and shall contain a detailed explanation of all matters in dispute . . . ." Although elsewhere in the Ordinance, I recommend adding the following wording (in red) to this item as well: "When matters of a scientific or technical nature are in dispute, the Appellant must provide a report, prepared by an Arizona Registered Civil Engineer, which includes supporting calculations and documentation regarding the areas of scientific and technical disagreement with the District." In this way, it will be clear, "up-front," that the Appellant will have to provide credible evidence supporting the appeal, not just unsubstantiated opinion.

RFCD Response: The District agrees that this issue should be emphasized, and that this provision is likely the provision that an appellant will read. The Ordinance was changed to reflect this, although language that was already in the Ordinance was used for consistency purposes.

Comment No. 30 (Tucson Association of Realtors)

(16.56.050) "Technical Evidence – Requiring a "seal" adds considerable costs to an individual property owner building a home. Is there a mechanism for this requirement to be waived, or the standard(s) reduced in these cases? (applicable to 16.20.070 and 16.64.070(2) as well).

RFCD Response: There are ample opportunities for discussion during the permitting process which would avoid the need for Technical Evidence to come in under a seal (or for an appeal for that matter). The District prefers the use of thoughtful site planning, and consideration of floodplain and riparian functions during the design stage. However, in some cases, when flood hazards are severe or when compromise cannot occur, the remaining option is to appeal. In these cases, the Districts reasoning will be technical in nature, whether it's a flood hazard assessment or a biological assessment, and the appropriate response in these situations should be technical as well. We do realize that some appeals may be due to hardship or other factors. The proposed language will be modified to make to allow for appeals with out an engineering seal.

Comment No. 31 (Michael Zeller)

(16.64.010) Under Section 16.64.010, Item G, there seems to be too wide gap between a $750.00 fine for an individual and a $10,000.00 fine for an enterprise. Should not the amount of the fine be based upon the severity of the violation? I mean, an individual can commit just as sever a violation as can an enterprise. If fines cannot be imposed based upon their severity, then I recommend either increasing the amount of the fine to $2,500.00 for the individual (1/4 of $10,000.00) or decreasing the amount of the fine to $3,000.00 for the enterprise (4 times $750.00).

RFCD Response: These penalties are the penalties prescribed for Class 2 misdemeanors. No change to Ordinance.

Comment No. 32 (Tucson Association of Realtors)

(16.64.020) 16.64.020.B.1.a "Abatement of Violations" – While there may be functional merit in the District's desire to have "reasonable access" to a property in these regards, we do not believe that any such right, on the part of the District exists. ARS-48-3613 is very clear. (*Excerpt omitted])*If the District believes that they may be damaged

there is provision to bring an action to "enjoin, abate, or otherwise prevent" the "unauthorized diversion, retardation, or obstruction of a watercourse." Once an action is filed the courts will grant access to the property in question as a matter of discovery. To assert an "administrative" right of access onto private property is a violation of the rights contained in both the US and Arizona Constitutions. We also challenge the presumption, on the part of the District, that it has jurisdiction to pursue, or obtain, an "administrative search warrant" as provided for under 16.64.020.B.1.b.

RFCD Response: This section will be modified to clarify that administrative searches are inspections of businesses that need to be closely regulated such as sand and gravel operations. The District is allowed "reasonable access" to inspect pursuant to ARS §48-3609.K. Further, the chief engineer is authorized to apply for and obtain an administrative search warrant for entry and inspection pursuant to ARS §48-3603.C.25. Again, the administrative search warrant is for regulation of businesses where there is substantial government interest supported by the regulatory scheme. Such warrant would be obtained through the courts.

Comment No. 33 (Tucson Association of Realtors)

(16.64.030) – Structures deemed nuisances – remedies – As an industry we are supportive of "informed consent" and full disclosure of latent defects. As such, we are supportive of the provision allowing the District to record notifications of violations against offending properties. We are also supportive of the quick and efficient release of any such recordation. The Tucson Association of REALTORS asks that you include a reasonable time provision to accomplish the recordation of the release (e.g. "no more than 30 days says from compliance").

RFCD Response: The District appreciates the positive response to the violation recordation proposal and agrees that full disclosure of floodplain issues, including existing violations, is important to property transaction. The District also agrees that an expeditious resolution and closure of enforcement case, including release from recorded violation, is an important element of an effective compliance enforcement program. The Ordinance has been modified to address your request.