



BOARD OF SUPERVISORS AGENDA ITEM REPORT

Requested Board Meeting Date: 1/21/2025

**= Mandatory, information must be provided*

Click or tap the boxes to enter text. If not applicable, indicate "N/A".

***Title:**

Hearing – Rulemaking Enactment of Pima County Regional Flood Control Technical Procedure 111 and Amendments to the Design Standards for Stormwater Detention and Retention Manual.

***Introduction/Background:**

The District proposes the enactment of Technical Procedure 111 to establish the requirements and procedure for property owners to submit a rough grading statement to the District. The proposed changes to the Design Standards for Stormwater Detention and Retention Manual will conform to Technical Procedure 111 and Chapter 16.36.

***Discussion:**

Concurrent with this agenda item, the District is proposing a code text amendment to Chapter 16.36 of the Pima County Code to authorize the District to accept a rough grading certificate for incomplete drainage and grading improvements prior to the issuance of building permits. The enactment of Technical Procedure 111 will establish the requirements and procedure to implement the code text amendment. The changes to the Design Standards for Stormwater Detention and Retention Manual will conform to Technical Procedure 111 and Chapter 16.36.

***Conclusion:**

The enactment of Technical Procedure 111 and the amendments to the Design Standards for Stormwater Detention and Retention Manual will allow the District to consistently and fairly implement its authority to accept rough grading certificates.

***Recommendation:**

District staff and the Flood Control District Advisory Committee recommend enactment of Technical Procedure 111 and the amendments to the Design Standards for Stormwater Detention and Retention Manual.

***Fiscal Impact:**

None

***Board of Supervisor District:**

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☒ All

Department: Pima County Regional Flood Control District

Telephone: 520-724-4600

Contact: Eric Shepp, P.E. Director and Chief Engineer

Telephone: 520-724-4610

Department Director Signature: _____

Date: 1/6/2025

Deputy County Administrator Signature: _____

Date: 1/7/2025

County Administrator Signature: _____

Date: 1/8/2025

ORDINANCE 2025 – FC _____

AN ORDINANCE OF THE BOARD OF DIRECTORS OF THE PIMA COUNTY FLOOD CONTROL DISTRICT ADOPTING NEW TECHNICAL PROCEDURE 111 INTERIM USE OF ROUGH GRADING STATEMENT IN LIEU OF AS-BUILT CERTIFICATION AND AMENDING THE DESIGN STANDARDS FOR STORMWATER DETENTION AND RETENTION MANUAL TO CONFORM TO THE TECHNICAL PROCEDURE AND FLOODPLAIN MANAGEMENT ORDINANCE

THE BOARD OF DIRECTORS OF THE PIMA COUNTY FLOOD CONTROL DISTRICT, ARIZONA FINDS THAT:

1. Section 16.36.030(D) of the Floodplain Management Ordinance of the Pima County Code allows the issuance of building permits where property owners provide a rough grading statement sealed by an Arizona registered civil engineer verifying that the current state of infrastructure construction is adequate to mitigate flood and erosion hazards to adjacent and downstream properties resulting from that specific number of lots;
2. The adoption of Technical Procedure 111 is necessary to establish a consistent and efficient process for approving the rough grading statements authorized by Section 16.36.030(D).
3. The ordinance also amends the Design Standards for Stormwater Detention and Retention Manual to conform to Section 16.36.030(D) and Technical Procedure 111.

BE IT ORDAINED BY THE BOARD OF DIRECTORS OF THE PIMA COUNTY FLOOD CONTROL DISTRICT AS FOLLOWS:

SECTION 1. Technical Procedure 111 is enacted as provided in Exhibit A to this Ordinance.

SECTION 2. Chapter 11 of the Design Standards for Stormwater Detention and Retention Manual is amended to read as follows:

11. Requirements for Plats, Development Plans, and Construction Plans

11.1.2 General Notes and Permitting Notes

...

3. ~~When a project has drainage and grading improvements that are required to mitigate offsite adverse impacts to the proposed development, an As-Built Certification or plan shall be prepared and submitted to the Floodplain Administrator. The As-Built Certification or plan requires approval prior to the issuance of any building permits, except for model home permits and any permits necessary to build drainage infrastructure.~~

Prior to the final release of assurances for subdivisions, and prior to the issuance of the certificate of occupancy for development plans, as-built plans shall be submitted to and approved by the District demonstrating that drainage and grading improvements that are required to mitigate flood and erosion hazards that impact the development have been constructed. As-built plans may be submitted for portions of developments or separate phases of development but releases of assurance for portions of developments cannot rely on future improvements. For example, assurances cannot be released for a phase of development if flood hazard mitigation for that phase depends upon future upstream or downstream improvements to mitigate on-site or off-site flood hazards. If as-built certificates for portions of the development are submitted, the final release of assurances cannot be approved unless the sum of the partial as-built certifications covers the entire area for the release of assurances.

Provide the following Permitting Note for development plans and General Note for tentative plats to disclose this requirement:

~~“Prior to issuance of any building permits [Certificate of Occupancy/final Release of Assurances] an certified As-Built Certification(Plan) plans of the drainage and grading improvements that are required to mitigate off-site adverse impacts flood and erosion hazards to the project shall be prepared and submitted to the Floodplain Administrator and approved by the District. Upon approval of the as-built plan by the Floodplain Administrator, the hold to issuance of building permits can be removed.”~~

4. ~~When a project has drainage and grading improvements that are required to mitigate off-site adverse impacts to adjacent properties, an As-Built Certification or plan shall be prepared and submitted to the Floodplain Administrator. The As-Built Certification requires approval prior to the Certificate of Occupancy for development plans and prior to the final Release of Assurances for plats.~~

Prior to the issuance of any building permits, except for model home permits and any permits necessary to build the drainage infrastructure, as-built plans shall be submitted to and approved by the District demonstrating that drainage and grading improvements that are required to mitigate adverse impacts to adjacent and downstream property due to the proposed development have been constructed. Prior to the completion of all of the drainage and grading improvements, the District may allow, at its discretion, the issuance of building permits for a specific number of lots when provided with a rough grading statement, sealed by an Arizona registered civil engineer, verifying that the current state of infrastructure construction is adequate to mitigate flood and erosion hazards to adjacent and downstream properties resulting from that specific number of lots. Provide the following Permitting Note for development plans and General Note for tentative plats to disclose this requirement:

~~“Prior to issuance of the [Certificate of Occupancy/final Release of Assurances] building permits for any lot not already allowed based on the District's approval of a Rough Grading Statement, the an certified As-Built Certification(Plan) plans of the drainage and grading improvements that are required to mitigate off-site adverse impacts flood and erosion hazards to adjacent properties shall be prepared and submitted to and approved by the Floodplain AdministratorDistrict. Upon approval of the asbuilt plan by the Floodplain Administrator, the hold to issuance of [Certificate of Occupancy/final Release of Assurances] can be removed.”~~

...


SECTION 3. This Ordinance is effective 30 days from the date of adoption of this Ordinance.

PASSED AND ADOPTED by the Board of Directors, Pima County, Arizona, on January 21, 2025.

ATTEST:

Chair
Pima County Board of Directors

Melissa Manriquez, Clerk of the Board



Eric Shepp, Director and Chief Engineer
Pima County Flood Control District

APPROVED AS TO FORM:



Bobby Yu, Deputy County Attorney

ORDINANCE 2025 – FC _____

AN ORDINANCE OF THE BOARD OF DIRECTORS OF THE PIMA COUNTY FLOOD CONTROL DISTRICT ADOPTING NEW TECHNICAL PROCEDURE 111 INTERIM USE OF ROUGH GRADING STATEMENT IN LIEU OF AS-BUILT CERTIFICATION AND AMENDING THE DESIGN STANDARDS FOR STORMWATER DETENTION AND RETENTION MANUAL TO CONFORM TO THE TECHNICAL PROCEDURE AND FLOODPLAIN MANAGEMENT ORDINANCE

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2. The adoption of Technical Procedure 111 is necessary to establish a consistent and efficient process for approving the rough grading statements authorized by Section 16.36.030(D).
3. The ordinance also amends the Design Standards for Stormwater Detention and Retention Manual to conform to Section 16.36.030(D) and Technical Procedure 111.

BE IT ORDAINED BY THE BOARD OF DIRECTORS OF THE PIMA COUNTY FLOOD CONTROL DISTRICT AS FOLLOWS:

SECTION 1. Technical Procedure 111 is enacted as provided in Exhibit A to this Ordinance.

SECTION 2. Chapter 11 of the Design Standards for Stormwater Detention and Retention Manual is amended to read as follows:

11. Requirements for Plats, Development Plans, and Construction Plans

11.1.2 General Notes and Permitting Notes

...

3. Prior to the final release of assurances for subdivisions, and prior to the issuance of the certificate of occupancy for development plans, as-built plans shall be submitted to and approved by the District demonstrating that drainage and grading improvements that are required to mitigate flood and erosion hazards that impact the development have been constructed. As-built plans may be submitted for portions of developments or separate phases of development but releases of assurance for portions of developments cannot rely on future improvements. For example, assurances cannot be released for a

phase of development if flood hazard mitigation for that phase depends upon future upstream or downstream improvements to mitigate on-site or off-site flood hazards. If as-built certificates for portions of the development are submitted, the final release of assurances cannot be approved unless the sum of the partial as-built certifications covers the entire area for the release of assurances.

Provide the following Permitting Note for development plans and General Note for tentative plats to disclose this requirement:

“Prior to [Certificate of Occupancy/final Release of Assurances] certified As-Built plans of the drainage and grading improvements that are required to mitigate on-site flood and erosion hazards to the project shall be submitted to and approved by the District.”

4. Prior to the issuance of any building permits, except for model home permits and any permits necessary to build the drainage infrastructure, as-built plans shall be submitted to and approved by the District demonstrating that drainage and grading improvements that are required to mitigate adverse impacts to adjacent and downstream property due to the proposed development have been constructed. Prior to the completion of all of the drainage and grading improvements, the District may allow, at its discretion, the issuance of building permits for a specific number of lots when provided with a rough grading statement, sealed by an Arizona registered civil engineer, verifying that the current state of infrastructure construction is adequate to mitigate flood and erosion hazards to adjacent and downstream properties resulting from that specific number of lots. Provide the following Permitting Note for development plans and General Note for tentative plats to disclose this requirement:

“Prior to issuance of building permits for any lot not already allowed based on the District’s approval of a Rough Grading Statement, the certified As-Built plans of the drainage and grading improvements that are required to mitigate off-site flood and erosion hazards shall be submitted to and approved by the District.”

...

SECTION 3. This Ordinance is effective 30 days from the date of adoption of this Ordinance.

PASSED AND ADOPTED by the Board of Directors, Pima County, Arizona, on January 21, 2025.

ATTEST:

Chair
Pima County Board of Directors

Melissa Manriquez, Clerk of the Board



Eric Shepp, Director and Chief Engineer
Pima County Flood Control District

APPROVED AS TO FORM:



Bobby Yu, Deputy County Attorney

EXHIBIT A

PIMA COUNTY REGIONAL FLOOD CONTROL DISTRICT TECHNICAL PROCEDURE

PROCEDURE NO.: Technical Procedure, TECH-111 **EFFECTIVE DATE:**
REVISED:

PROCEDURE TITLE: Interim Use of Rough Grading Statement in Lieu of As-Built Certification

PURPOSE:

The purpose of this procedure is to provide guidance related to Rough Grading Statements as allowed per Section 16.36.030(D) of the Floodplain Management Ordinance.

BACKGROUND:

Section 16.36.030(D) of the Floodplain Management Ordinance prohibits the issuance of building permits in subdivisions and commercial development until the District approves the as-built certifications for all “drainage and grading improvements that are required to mitigate adverse impacts to adjacent and downstream property due to the proposed development have been constructed.” This requires said improvements to be fully constructed. The intent of this provision of the Ordinance is to ensure that development causes no adverse impact to adjacent and downstream properties. The District understands that infrastructure that is partially complete (roughed-in) may serve the purpose of mitigating off-site impacts in the short term during the construction phase of a development. Acceptance of this roughed-in infrastructure to allow for building permit issuance has been informally accepted at times in the past which has led to inconsistent application and lack of awareness by all parties involved. In 2025, the District amended Section 16.36.030(D) to allow the issuance of building permits when the District is “provided with a rough grading statement, sealed by an Arizona registered civil engineer, verifying that the current state of infrastructure construction is adequate to mitigate off-site flood and erosion hazards to adjacent and downstream properties...”

PROCEDURE:

This procedure allows for the issuance of building permits prior to the approval of as-built certificates for drainage infrastructure. It does not remove the requirement for District approval of as-built certificates prior to release of assurances or building occupancy (final inspection).

I. Definitions

A. Roughed in

Grading or infrastructure that is at or close to final grade or configuration but which may not be finished with erosion protection, slope protection, protective barriers, inlet or outlet structures, etc. This includes, but is not limited to: fill slopes; channels, swales, low impact development features, terraces, berms, all drainage facilities as indicated on the plan(s), detention basins including the completed associated outlet structure(s).

B. Rough Grading Concept Plan

Plans and documents created prior to construction that establishes the necessary drainage infrastructure and level of completion required prior to the issuance of building permits for specific lots.

C. Rough Grading Statement

A statement sealed by an Arizona registered civil engineer verifying that the current state of infrastructure construction is adequate to mitigate adverse impacts to adjacent property owners for a specific set of lots identified in the Rough Grading Statement. Any deviations from the approved Rough Grading Concept Plan must be noted on the Rough Grading Statement.

II. Applicability

This procedure is intended to be widely used but its use is at the discretion of the District and may not be allowed when the District determines that the completion of all drainage infrastructure prior to building permit issuance is necessary to protect public safety.

For development on lots that requires bank protection to prevent the lateral migration of watercourses, the District may not allow the use of this procedure when the Rough Grading Statement process would not sufficiently address the adverse impacts to specific lots that would be mitigated by bank protection. In other words, the District may require as-built certification for bank protection or portions of bank protection when it is deemed necessary to protect improvements.

This procedure does not allow for final inspection of buildings or releases of assurances prior to approval of as-built certificates by the District.

III. Procedure

The following tasks will create a framework for allowing the issuance of building permits prior to approval of as-built certificates, which requires all drainage infrastructure to be fully complete.

A. Pre-Development, Planning and Permitting Phase

When the developer/builder chooses to utilize this procedure, the developer/builder and the District will be expected to perform the following tasks.

1. At the time of application of the Site Construction permit, it is the responsibility of the developer/builder to provide the District with a Rough Grading Concept Plan that:
 - a. Associates specific lots or groups of lots with specific infrastructure that is necessary to mitigate off-site impacts due to construction on those lots; and
 - b. Shows any additional temporary mitigation measures that may be employed to mitigate off-site impacts in order to facilitate building permit issuance. Examples include temporary berms or drainage swales to direct flow to detention basins.
 - c. Identifies which lots require Floodplain Use Permits in the interim condition due to as yet unmitigated hazards or the need to regulate to existing FEMA floodplain mapping.
2. The District will review the site plan and engineer's statement and either:
 - a. work with the developer/builder to make any changes necessary for approval from the District
 - b. approve the Rough Grading Concept Plan
 - c. Inform the developer/builder that a Rough Grading Concept Plan will not be accepted whole or in part due to concern about adverse impacts to adjacent properties.
3. Once a Rough Grading Concept Plan is approved, the District will ensure that the concept plan is referenced in the permit conditions and plan documents, as appropriate.

B. Construction Phase

A Rough Grading Concept Plan is encouraged and preferable, but is not a prerequisite for the submittal of Rough Grading Statements. This allows projects started prior to the effective date of this policy to benefit from this process. The developer/builder and the District will be expected to perform the following tasks:

1. The developer/builder will provide a sealed Rough Grading Statement from a civil engineer that contains the following information for the requested lot(s):
 - a. A survey showing that the relevant drainage infrastructure is constructed to design grades.
 - b. As-built plans for any infrastructure identified in the Rough Grading Concept Plan as needing to be fully constructed at the time of the Rough Grading Statement for the lots included in the Rough Grading Statement.
 - c. The current construction status of all drainage infrastructure that is necessary to mitigate adverse impact to adjacent properties. For example, "The drainage channel is 100% complete, and the receiving detention basin is fully roughed in. The inlet structure has been constructed but the outlet structure has not been constructed."
 - d. Identifies and asserts as constructed any temporary measures necessary to protect adjacent properties from adverse impacts. Examples include berms or swales to direct flow as a temporary measure until final grading and construction is complete.
 - e. A statement that the current state of construction of drainage infrastructure is adequate to protect adjacent properties from adverse impacts due to development of the requested lots
 - f. An estimated date for the completion of drainage infrastructure and as-built certification submittal to the District.
2. Upon approval of the Rough Grading Statement by the District will:
 - a. Work with Development Services to issue of building permits for the subject lots,
 - b. Update applicable permit records in the County permitting software to document the approval of the Rough Grading Statement and indicate which lots the approval applies to,
 - c. inform Floodplain Management single-lot permitting staff of the approval to ensure that any building permits routed to the District are properly handled. This communication will also include whether a Floodplain Use Permit is necessary or not. The criteria for this determination are whether a structure is proposed within an existing regulatory floodplain or not.
 - d. Apply inspection holds as necessary to ensure that drainage infrastructure is fully constructed with approved as-built certificates prior to the release of final inspection of building permits within the area covered by a Rough Grading Statement.
3. The developer/builder is responsible for ensuring that the infrastructure remains in the condition noted by the engineer of record on the Rough Grading Statement. The developer/builder shall:
 - a. Inspect all roughed-in drainage infrastructure after every rain event at the site greater than or equal to 0.5".
 - b. Contact the District at (520) 724-4600 if any damage is found.
 - c. Contact the engineer of record on the Rough Grading Statement if any damage is found.
 - d. Repair any damage to the drainage infrastructure within 24 hours or as soon as site conditions allow.

- e. If damage is found that cannot be repaired within 24 hours, take any additional measures necessary to mitigate impacts to adjacent and downstream properties within 24 hours.

APPROVED BY:

Brian Jones, CFM
Deputy Director and
Floodplain Administrator

Date

Original Procedure Approved: _____
Date(s) Revised: _____