



## Travis County Commissioners Court Agenda Request

**Meeting Date:** July 31, 2012

**Prepared By:** Thomas Weber **Phone #:** 854-4629

**Division Director/Manager:** Jon A. White, Director, Natural Resources & Environmental Quality Division

**Department Head:** Steven M. Manilla, P.E., County Executive-TNR

**Sponsoring Court Member:** County Judge Samuel T. Biscoe

**AGENDA LANGUAGE:** Consider and take appropriate action on a presentation regarding proposed revisions to the Travis County Code relating to water quality protection (Chapters 64, 82, 104, and 108).

### **BACKGROUND/SUMMARY OF REQUEST:**

In the recent past, the Travis County Commissioners Court adopted rules and policies for the protection of the county's significant and unique water resources. These include requirements for the management of floodplains, the siting of solid waste facilities, the set-aside of lands for natural resource protection, the adoption of a joint development code with the City of Austin, and the setting of "interim" water quality requirements for areas outside of municipal Extra Territorial Jurisdictions (ETJs). Although this is substantial progress, gaps remain in county requirements, both geographically and in terms of comprehensiveness. These regulatory gaps should be filled. Furthermore, federal and state requirements mandate that the county update its water quality protection requirements so that they are consistent with recent changes.

Elimination and abatement of polluted storm water runoff from private and public development construction sites has emerged as a regulatory priority across the country and Texas. The U.S. Environmental Protection Agency (EPA) adopted new construction site rules effective February 1, 2010 and current proposals by the TCEQ set new standards and expectations on an operator of a municipal separate storm sewer system (MS4). Travis County is a designated small MS4 due to its extensive urbanization and is completing the fifth and final year of implementing a required Storm Water Management Plan (SWMP). Travis County's MS4 permit and its SWMP establish August 12, 2012 as the latest date on which to adopt final rules to set the minimum standards and practices acceptable under the federal/state framework.

The county's MS4 permit sets out a broad mandate requiring the county to implement rules that:

- cover our entire jurisdiction;
  - control construction sites disturbing more than one acre of land;
  - ensure developments adequately manage runoff after being built;
  - eliminate pollutant discharges into our storm sewers from industrial and commercial enterprises;
  - reduce pollutants in runoff from road construction; and
  - set out enforcement policies that will deter and correct violations.
- For all these reasons, the proposed rules are comprehensive and time sensitive.

The components of the proposed rules include:

A. The addition of new Subchapters H – L into existing Chapter 82: Subchapters H and I specify the requirements under which a plat application, a Basic Development Permit application, or a BMP Maintenance Permit application would be considered, to ensure an approval meets the water quality protection standards. Subchapter J would apply to permitted construction site owners and operators, to ensure Storm Water Pollution Prevention Plans (SWP3s) are carried out as designed. Subchapter K would apply water quality protection standards to County or private roadway and right of way construction projects. Subchapter L would specify the storm water management and reclamation requirements under which a mine or quarry application would be considered. Exhibit 1 includes the text of the proposed new Subchapters H - L.

B. The addition of new Chapter 104 into the Travis County Code: This chapter would specify requirements and prohibitions applicable to any person who discharges pollutants into the County MS4. The chapter describes allowable de minimus pollutant discharges. It also codifies and clarifies the existing enforcement policy TNR utilizes to address violation of water quality protection requirements. Exhibit 2 includes the text of the proposed new Chapter 104.

C. The repeal of Chapter 108 and the repeal of various provisions of Chapter 82: Under the proposed rules, all of Chapter 108 (Tree Preservation Rules) would be repealed. The essential provisions are incorporated into the new Subchapter K. In Chapter 82, the following would be repealed: Sections 82.204(c)(25)(B), 82.209, 82.211, and 82.302(g). Each of these repealed provisions would be re-numbered as a new section that is either kept substantially the same or modified and updated. Exhibit 3 is a table that lists and describes each provision proposed for repeal and the new section that will replace it, including information on whether the existing provision is being modified.

D. The amendment of various provisions of Chapter 82 and Chapter 64:

1. Eight definitions that pertain to water quality protection requirements would be modified and 61 new definitions are added,

2. Cross references would be added to pertinent environmental standards in Subchapters H – L that apply to development proposals,
3. Development standards pertaining to water quality protection would be added,
4. Various provisions would be "cleaned up" for greater clarity,
5. A new Section 82.302(g) would update the County design standards for driveway approaches to R.O.W., and
6. Amendments to 82.401 would revise and expand construction fiscal security requirements to ensure construction site stabilization.

Exhibit 4 is a "legislative" version showing all proposed insertions and deletions comprising these amendments. Exhibit 5 shows four new construction drawing details proposed for driveway approaches.

### **STAFF RECOMMENDATIONS:**

TNR recommends repeal of sections in Chapter 82 as proposed and the entire Chapter 108. TNR recommends adoption of new Subchapters H - L to Chapter 82 and adoption of new Chapter 104. TNR recommends adoption of amendments to the existing sections of Chapter 82 as proposed. TNR received no comments on the Takings Impact Analysis, notice of which was published on Feb. 11, 2012. Since the Commissioners Court convened the public hearing on the rule proposal on Feb. 7, 2012, TNR took several steps to review and consider written and oral comments on the rule making. Several meetings were held with the home developers, construction site operators, municipalities with shared jurisdiction (ETJs), and mining interests. Substantial changes to the rule were made as a result of these comments. Exhibit 6 is a written response to all comments submitted in writing to TNR. Today's proposal for adoption was delayed to accommodate the interactions we had with stakeholders. For example, a revised draft of Subchapters H - L was released on May 8<sup>th</sup>, 2012, to the rule commenters to obtain additional feedback.

Exhibit 6 details all of the comments and responses. Some of the more significant changes to the rule that resulted from public participation include:

1. Re-developed the SWP3 requirements to closely match the City of Austin process whereby the engineering information is submitted with a construction plan and non-engineering information is submitted at the time a construction site project starts.
2. For single lot construction, reduced the scope of permitting requirements for permanent water quality controls and further what SWP3 are to be submitted.
3. Flexibility is provided to allow cut/fill on steep slopes and near headwater streams along with appropriate controls; additional exceptions to the waterway setbacks are provided for wastewater lines and projects approved by the TCEQ Edwards Aquifer program.

4. Mining requirements have been established in its own subchapter. Some requirements (such as groundwater assessment & monitoring) have been eliminated.
5. Rainfall monitoring is required at construction sites >10 acres

### **ISSUES AND OPPORTUNITIES:**

Collectively, the proposed rules would result in greater protection and maintenance of water quality in Travis County rivers, streams, and lakes. These proposals would also expand consistency between jurisdictions in a manner that should make development design and approval processes more efficient and cost-effective.

The proposed rules would apply to all of Travis County, including all municipal ETJs, except for subdivision development proposals in the City of Austin ETJ, since water quality requirements are already in effect there under Title 30 of the Joint City/County Code. This represents an expansion of the scope of County environmental quality requirements, since the 2005 "interim" rule does not apply in any ETJ, and the 2010 Lake Travis water quality rules only apply within that lake's watershed.

In developing the proposed rules, TNR has reviewed rules of other jurisdictions, particularly the City of Austin (COA) and LCRA, and we have sought to harmonize requirements so that consistency is expanded to greater areas of Travis County. Significant examples include the proposed adoption of the following:

- Adopting the use of technical guidance manuals already prepared by LCRA for western watersheds and COA for eastern watersheds.
- Establishing the same water quality volume requirements as LCRA for western watersheds and the same as COA for eastern watersheds and a western watershed in the COA ETJ.
- Implementing requirements for storm water personnel qualifications SWP3 submittal procedures that are derived from COA (with an 18 mo. phase-in period).
- In the western watersheds, critical environmental feature and waterway setbacks that are equivalent to existing LCRA requirements.
- Adopting requirements for submittal of an environmental assessment that were derived from COA requirements.
- Adopting fiscal security requirements for construction site stabilization that were derived from the LCRA Highland Lakes Watershed Ordinance (HLWO) requirements.
- Patterning mine/quarry requirements based on LCRA, COA, and TCEQ standards.
- Adopting a list of 23 "allowable non-storm water" discharges that are consistent with the TCEQ Storm Water General Permit and that take into consideration COA allowable discharges.

The proposed rules include requirements for water quality protection that are more protective than what the County currently has in place. We believe these more protective requirements are justified based on TNR staff regulatory experience and professional judgment, local topographic challenges, the sensitivity of local aquatic ecosystems, the TCEQ's construction general permit, TCEQ's proposed MS4 general permit, new EPA requirements set forth in Title 40, Part 450 of the Code of Federal Regulations, and the EPA-approved Total Maximum Daily Load applicable to the Gilleland Creek watershed. These more rigorous requirements include:

- Additional environmental requirements that must be included when fair notice of a master development plan is provided.
- A system for TNR issuance of Best Management Practice (BMP) Maintenance Permits that must be regularly renewed with an application fee, and an alternative method for a permittee to educate workers and residents on pollution prevention in lieu of paying an annual fee.
- Technical standards for control of storm water from construction activities based upon existing technical guidelines developed in Central Texas (LCRA, COA, Edwards Aquifer rules); standards are more rigorous and provide greater environmental protection for more difficult site conditions and larger areas of land disturbance.
- New requirements for the control of mining and quarrying, with an emphasis on site stabilization, post-mining reclamation, and fiscal security.
- Cut and fill requirements that include additional engineering design safeguards and standards relating to fill disposal and the quality of fill material.
- Setbacks from waterways in eastern watersheds that would provide greater protection of headwater streams draining 64 acres or more (existing rules are for 320 acres or greater).
- Subdivision plat notes that prohibit certain activities in setback areas near waterways and critical environmental features.
- Storm water construction site inspection requirements derived from TCEQ general permit requirements and a requirement that certain inspection reports be submitted to TNR program staff.
- Submittal format and construction plan sheet requirements for storm water management details that are on par with existing Chapter 82 standards for roads and drainage ways.
- Requirements for erosion and sediment control and post-construction water quality ponds that would apply to County roadway projects, private roadway and drainage easement projects, and construction of utilities.
- A requirement that as-built drawings be submitted at final inspection of a subdivision or site to facilitate County geo-referencing of structures for our MS4 map.
- A clear standard for unaccepted roadway responsibility.

- A requirement that requires notice of any spill of hazardous materials if the spill could affect a water supply or a county road.

**FISCAL IMPACT AND SOURCE OF FUNDING:**

Processes and enforcement of the proposed rules will likely challenge existing staff resources in the long-term. The current downturn in development activity greatly reduces short-term impacts on staff resources. Simultaneous with this rule making, TNR is increasing its efficiency by establishing data systems to manage processing of development requests. The proposed new Section 82.918 would authorize fees payable annually and when re-inspection of a water quality control structure is necessary. A fee schedule will be proposed for Court consideration shortly after the time this rule is adopted. Depending upon the schedule approved, the fees may cover additional staffing necessary to administer and enforce the new BMP Maintenance Permit program.

**ATTACHMENTS/EXHIBITS:**

- Exhibit 1 - Proposed new Subchapters H - L, Chapter 82
- Exhibit 2 - Proposed new Chapter 104
- Exhibit 3 - Table showing disposition of repealed Code provisions
- Exhibit 4 - "Legislative" version with proposed insertions and deletions to pre-existing subchapters Chapter 82 and Chapter 64
- Exhibit 5 - Construction drawing details proposed for driveway approaches
- Exhibit 6 - A written Response to Comments provided on the proposed rule

**REQUIRED AUTHORIZATIONS:**

Cynthia McDonald	Financial Manager	TNR	854-4239
Steve Manilla	County Executive	TNR	854-9429
Jon White	Division Director, NREQ	TNR	854-7212

**CC:**

Thomas Weber	Dave Fowler	Anna Bowlin	Stacey Scheffel
Teresa Calkins	Julie Joe		

# **EXHIBIT 1**

## **Chapter 82 Subchapters H - L**

## **Title VII. Improvements -- Subtitle A. Roads**

### **Chapter 82. Standards for Construction of Streets and Drainage in Subdivision:**

#### ***Subchapter H. Water Quality Protection – General.***

- 82.910. Purpose.
- 82.911. Authority
- 82.912. Geographic Scope.
- 82.913. Applicability.
- 82.914. Environmental Review.
- 82.915. Pre-development Planning.
- 82.916. Other Environmental Authorizations Required.
- 82.917. Permanent Water Quality Control Maintenance Requirements.
- 82.918. Fees.
- 82.919. Outreach in Lieu of Fees.
- 82.920. Fiscal Security.
- 82.921. Variances.

#### ***Subchapter I. Submittal Requirements and Water Quality Protection Standards.***

- 82.931. Minimum Requirements for Environmental Review.
- 82.932. Standards and Requirements for Technical Adequacy.
- 82.933. Technical Criteria.
- 82.934. General Storm Water Management Requirements for Construction Activities.
- 82.935. Storm Water Pollution Prevention Plan.
- 82.936. ESC Plan Best Management Practices.
- 82.937. Other Controls and Pollution Prevention Measures for Construction Activities.
- 82.938. Erosion and Sediment Control Maintenance Requirements for Construction Activities.
- 82.939. Preliminary Construction Storm Water Plan.
- 82.940. Effluent Quality. [Reserved]
- 82.941. Setbacks from Critical Environmental Features and Waterways.
- 82.942. Environmental Assessment.
- 82.943. Cut and Fill.
- 82.944. Permanent Water Quality Control.
- 82.945. Subdivision Plat Notes.

#### ***Subchapter J. Storm Water Pollution Prevention Plan Inspections.***

- 82.950. SWP3 Pre-Construction Conference Required.
- 82.951. Owner and Primary Operator SWP3 Inspections.
- 82.952. Submittal of SWP3 Operator Inspection Reports.
- 82.953. Submittal of Engineer's Concurrence Letter.

#### ***Subchapter K. Roadways and Rights of Way.***

- 82.970. ESC Plan Standards for Roadways and Drainage Easements.
- 82.971. Low Impact Development Design.
- 82.972. Native Vegetation.
- 82.973. Tree Preservation.

82.974. Responsibility for Unaccepted Roadways.

***Subchapter L. Mine and Quarry Water Quality Protection.***

82.980. Applicability and Scope.

82.981. Exempt Activities.

82.982. Pre-Proposal Requirements.

82.983. Submittal Requirements for Environmental Review.

82.984. Other Local, State, and Federal Regulations.

82.985. Resource Extraction Plan.

82.986. Monitoring of Storm Water Discharges.

82.987. General Water Quality Protection Standards.

82.988. Setbacks from Critical Environmental Features and Waterways.

82.989. Permanent Water Quality Control.

82.990. Stabilization Plan.

82.991. Fiscal Security.

## ***Subchapter H. Water Quality Protection – General***

**82.910. Purpose.** The purpose of subchapters H - L is to set forth a consolidated set of water quality requirements that will control, reduce, and eliminate the discharge of pollutants into the Travis County storm sewer system and water in the State through the proper management of storm water and drainage while achieving optimal management of floodplains to prevent loss of property and human life. Proper storm water management requires three primary types of erosion and sediment controls (ESC): erosion source controls, sediment controls, and permanent erosion/soil stabilization controls, as well as applicable other controls, pollution prevention measures, and permanent water quality control design measures. Storm water management designs must include a combination of these types of ESC in order to control storm water volume and velocity within a construction site, minimize the discharge of sediment and other pollutants, and effectively minimize or eliminate pollutant discharges.

**82.911. Authority.** In addition to other authority and the authority granted to it in Chapter 232 of the Texas Local Government Code to adopt rules governing plats and subdivisions of land within the unincorporated area of the county to promote the health, safety, morals, or general welfare of the county and the safe, orderly, and healthful development of the unincorporated area of the County, the Commissioners Court of Travis County adopts Subchapters H - K pursuant to its authority under:

(a) Texas Local Government Code Chapter 573 to take any necessary or proper action to comply with the requirements of the storm water permitting program under the national pollutant discharge elimination system (Section 402, Federal Water Pollution Control Act (33 U.S.C. Section 1342)), including:

- (1) developing and implementing controls to reduce the discharge of pollutants from any conveyance or system of conveyance owned or operated by the County that is designed for collecting or conveying storm water; and
- (2) developing, implementing, and enforcing storm water management guidelines, design criteria, or rules to reduce the discharge of pollutants into any conveyance or system of conveyance owned or operated by the County that is designed for collecting or conveying storm water; and

(b) Texas Water Code, Chapter 16, to take all necessary and reasonable actions to comply with the requirements and criteria of the National Flood Insurance Program, to promote public health, safety, and general welfare.

**82.912. Geographic Scope.** Subchapters H – L apply to all unincorporated areas within Travis County, including areas within the ETJ of any municipality, except subdivision development within the ETJ of a municipality that has executed an agreement with Travis County that provides for a single office review and where a joint city/county code of subdivision regulations exists pursuant to Section 242.001(d)(4) of the Texas Local Government Code.

### **82.913. Applicability.**

- (a) Subchapters H, I, K, and L apply to the review of the completeness of each new application for a preliminary plan, final plat, subdivision construction plan, residential development, single lot development, commercial development, or any development that requires a basic development permit.
- (b) Subchapters H, I, K, and L apply to the review of the completeness of each application to amend or propose revisions of an approved preliminary plan, final plat, subdivision construction plan, residential development, single lot development, commercial development, or any development that requires a basic development permit. Non-substantive revisions or minor corrections are not subject to re-submittal and re-approval of an application. A substantive revision requiring re-submittal includes those that revise the limits of construction, increases the area of land disturbance, adds a new development activity, structures, or impervious cover to the project, requires re-calculation or re-design of sediment controls, a sediment basin, permanent water quality control measures, the drainage plan, or a revision that would change a substantive term, condition, provision, or limiting parameter in an existing authorization. Revisions that are defined as redevelopment are not subject to re-submittal and re-approval of an application.
- (c) Subchapters H, I, and K apply to the construction, operation, and maintenance of private and public roadways, including rights-of-ways.
- (d) Subchapter J applies to any owner or operator of an approved development for which the County Executive has required implementation of specific water quality management practices at sites under construction.
- (e) This subchapter applies to any owner of permanent water quality controls including any owner who is required to obtain and comply with a BMP Maintenance Permit upon completion of each structural permanent water quality control required for an authorized development.
- (f) Subchapter L applies to new applications for the commercial development for a quarry or a mine and to applications to amend or propose revisions to an approved commercial development for a quarry or a mine.
- (g) Except as otherwise noted, Subchapters H, I, and K apply to the following applications:
  - (1) An application for a development permit or subdivision development that proposes 10,000 square feet or greater of impervious cover or where one acre or more of land would be disturbed;

(2) An application for development that would disturb less than one acre of land but is a part of a common plan of development where the overall development would disturb one acre or more of land; and

(3) Other development applications, including applications for utility placement, right of way construction, single lot or parcel construction, a driveway, or an on-site sewerage facility, that propose less than 10,000 square feet of impervious cover or where less than one acre of land would be disturbed which are subject to Section 82.934(a) and (b)(3) – (4), as a minimum, including following technical guidelines for erosion and sedimentation control provided by the County Executive and as described in Section 82.933.

**82.914. Environmental Review.**

(a) In addition to any number of copies required by Chapter 64 of the Travis County Code for a basic development permit application, and in addition to any number of copies required by Section 82.201(b) of this chapter, an applicant for a project for which Subchapters H – L applies must submit a copy of the application for environmental review.

(b) Development within the Lake Travis watershed is subject to the provisions of the Highland Lakes Watershed Ordinance and the Travis County Code. A person who seeks to engage in development in the Lake Travis watershed must:

(1) Submit any development application, including revisions to an application and required supporting information, to the Lower Colorado River Authority at the same time as it is provided to the County Executive; and

(2) If additional information is required to be provided to the County Executive as a part of the review process for a development application, submit the same additional information at the same time to the Lower Colorado River Authority.

**82.915. Pre-development Planning.** Before submitting an application for a development permit for a subdivision development greater than 20 acres in area or a commercial development greater than three acres in area, an applicant shall arrange a pre-development/concept plan meeting with the County staff. The meeting will focus on the proposed land plan, slopes, buffers, critical environmental features, and water quality management practices for construction activities and permanent water quality control, and may include a site investigation.

**82.916. Other Environmental Authorizations Required.** It is the responsibility of each applicant to comply with all applicable federal, state, and local statutes, rules, and regulations.

(a) Each applicant seeking a development permit shall submit documentation that demonstrates that the proposed development complies with the following statutes, rules, and regulations:

(1) the LCRA Highland Lakes Watershed Ordinance, if the application includes development in the Lake Travis watershed;

- (2) the TCEQ Edwards Aquifer requirements at 30 Texas Administrative Code Chapter 213, if the application includes development that overlies the Edwards Aquifer Recharge Zone or Edwards Aquifer Contributing Zone;
  - (3) Section 10 of the federal Endangered Species Act;
  - (4) Section 10 of the federal Rivers and Harbors Act or Section 404 of the federal Clean Water Act;
  - (5) Any applicable municipal requirements if the proposed development is located partially or wholly within an extra-territorial jurisdiction of a municipality;
  - (6) The TCEQ industrial or municipal solid waste management requirements under Chapter 361, Texas Health and Safety Code;
  - (7) Texas Pollutant Discharge Elimination System requirements under Section 402 of the federal Clean Water Act, Section 26.027 of the Texas Water Code, or Section 26.040 of the Texas Water Code, including a TCEQ permit for waste discharge into or adjacent to water in the state, a Notice of Intent along with a Storm Water Pollution Prevention Plan for the discharge of storm water associated with an industrial activity; and
  - (8) If the application includes a proposal to construct a dam to impound water, the TCEQ Dam Safety requirements set forth in 30 Texas Administrative Code Chapter 299, and City of Austin Drainage Criteria Manual Dam Safety requirements, if the proposed development is within the City of Austin ETJ.
- (b) Except as specified in subsection (c), if any of the statutes, rules, or regulations listed in Subsection (a) do not apply to the proposed development, an applicant must submit:
- (1) documentation of that fact from the respective entity with enforcement authority over the statute, rule, or regulation, or,
  - (2) if documentation of that fact from the respective entity with enforcement authority over the statute, rule, or regulation is unavailable, *bona fide* documentation of that fact from a qualified professional along with supporting information.
- (c) In an instance where a development proposal is clearly not subject to one or more of the statutes, rules, or regulations listed in subsection (a), the County Executive may accept a statement from the applicant indicating documentation from a qualified professional is not necessary.

#### **82.917. Permanent Water Quality Control Maintenance Requirements.**

- (a) Except as provided in Subsection (j), the owner of a permanent water quality control must apply for and comply with the requirements of a BMP Maintenance Permit. An owner or the owner's legally-authorized assignee must, upon completion of the infrastructure for each structural, permanent water quality control required for the authorized development, obtain a BMP Maintenance Permit from the County Executive.
- (b) If a subsequent owner, maintenance association, or property owner's association does not accept the assignment of ownership of the permanent water quality control, the owner who developed the site shall remain subject to the terms of the BMP Maintenance Permit until an assignment occurs or until the subsequent owner, maintenance association, or property owner's association accepts responsibility for compliance with a BMP Maintenance Permit.
- (c) Along with the engineer's concurrence letter required by Section 82.953, the owner or the owner's legally-authorized assignee, shall submit a BMP Maintenance Permit application that includes the maintenance plan submitted with the permit application, revised if necessary, and the information necessary to verify that each permanent water quality control is in proper operating condition. An applicant for a BMP Maintenance Permit must remit the required, nonrefundable fee established by the Travis County Commissioners Court.
- (d) A person who has obtained a BMP Maintenance Permit must maintain the permanent water quality control in proper operating condition in accordance with the approved maintenance plan, the applicable technical criteria cited in Section 82.933, and any provisions established in the BMP Maintenance Permit.
- (e) Upon written notice from the Inspector that corrective action is needed, the owner must perform the necessary maintenance actions enumerated by the Inspector to bring the permanent water quality control into proper operating condition.
- (f) Not later than 30 days after a change in ownership or operation of a permanent water quality control, the new owner or operator must submit an application for a new BMP Maintenance Permit. When issued, the responsibility for the permanent water quality control transfers from the previous permit holder to the new permit holder.
- (g) Except for a BMP Maintenance Permit issued to a utility district, subdivision of the state, or municipality, a BMP Maintenance Permit will be issued for a term not to exceed one year. The term of a BMP Maintenance Permit issued to a utility district, subdivision of the state, or municipality is a term not to exceed three years. The owner or operator of record has the continuing obligation to apply for renewal of the BMP Maintenance Permit at least 30 days prior to the permit term's expiration. It is the obligation of the owner or operator to specify in the renewal application any necessary changes in maintenance or operation of the permanent water quality control that occurred since previous permit issuance.

- (h) Each application for renewal or change in ownership or operation of a permanent water quality control must include a report from a Texas-licensed professional engineer certifying that all maintenance activities identified in the BMP Maintenance Permit have been completed and that the water quality control remains in proper operating condition.
- (i) Effective Date. The owner or operator of a permanent water quality control authorized or completed on or after [insert effective date of this rule] shall submit an application and be approved for a BMP Maintenance Permit prior to the issuance of the final Certificate of Compliance and release of the ESC Fiscal for the project by the County.
- (j) The County Executive will not require a BMP Maintenance Permit if the permanent water quality control is:
  - (1) located in a jurisdiction with territory that overlaps with the jurisdiction of Travis County and the jurisdiction requires a similar permit or authorization from the owner or operator, including an authorization under 30 Texas Administrative Code Chapter 213 (Edwards Aquifer) or the HLWO;
  - (2) located within the City of Austin ETJ;
  - (3) a non-structural permanent water quality control, such as a plan for pesticide management, fertilizer use, or a personnel training plan, and the owner complies with Subsection (k);
  - (4) a permanent water quality control required for residential construction on one lot or parcel, and the owner complies with Subsection (k);
- (k) The owner of the permanent water quality control identified in Subsection (j)(3) or (j)(4) must:
  - (1) submit, along with the application for a Travis County development permit, a maintenance plan, procedures, and information necessary to verify how any proposed permanent water quality control will be maintained in proper operating condition;
  - (2) maintain the permanent water quality control in proper operating condition;
  - (3) comply with the requirements of Subsection (e); and
  - (4) within 30 days after a change in ownership, submit a notification to the County Executive specifying the new owner's name, mailing address, legal lot description where the permanent water quality control is located, and an acknowledgement agreeing to maintain the permanent water quality control.

**82.918. Fees.**

(a) Except as provided by subsection (c), a person who seeks to obtain or renew a BMP Maintenance Permit must include with the application the nonrefundable fee established by the Commissioners Court for the specific application. For any renewal application received by the County more than 30 days later than the expiration date of the permit, a late fee will be assessed.

(b) Within 30 days after the County notifies a permit holder of the inspection results of the County's on-site inspection of the permanent water quality control that has been determined to be either inoperable or out of substantial compliance with the maintenance plan provided by the permit holder pursuant to 82.917(c), the permit holder must pay the County the re-inspection fee established by the Travis County Commissioners Court. Failure to pay a re-inspection fee within the required timeframe or to complete the corrective actions specified by the County may result in enforcement as set forth in Section 104.010.

(c) A BMP Maintenance Permit renewal fee will be waived if a complete renewal application includes documentation of sufficient employee and public outreach efforts as described in Section 82.919.

**82.919. Outreach in Lieu of Fee.**

(a) A person who has been issued a BMP Maintenance Permit pursuant to Section 82.917 of this chapter is encouraged to publish and disseminate information to inform and educate the general public on day-to-day practices that will prevent the deterioration of water quality from sources that drain, or have the potential to drain, to the Travis County storm sewer system.

(b) The format of the outreach may be a brochure, newsletter, attachment or hyperlink in an e-mail, or similar method, so long as it is received by each residential owner within a subdivision and, in the case of a commercial development, by all owners, tenants, and employees of the establishments therein.

(c) In a residential subdivision, the information provided should focus on activities and practices of residential households that may cause water pollution if done improperly, such as motor vehicle maintenance, use of lawn and garden chemicals, trash and waste management, painting, and home repair. The information should give advice on proper methods that will prevent runoff of pollutants and the proper disposal methods that prevent pollution.

(d) In a commercial development, the information should focus on activities specific to the establishments that are being operated in the development.

(e) In both residential subdivisions and commercial developments, the outreach materials should describe the maintenance and operation responsibilities of the permit holder, the drainage relationship of individual households or establishments to the permanent water quality control structure, and the responsibility of all to minimize adverse impacts on storm water that is discharged from the control structure.

(f) Documentation must include:

(1) A copy of the outreach material disseminated, consistent with the guidelines of this section;

(2) A signed statement from the permit holder certifying the date(s) within the prior permit term when the materials were disseminated;

(3) A description of the geographic scope of the effort or the individuals, households, or business owners, as applicable, who were provided the information and the method by which the information was disseminated;

(4) For a commercial development, documentation of materials being provided to each business owner or business manager will be adequate, so long as multiple copies of any written materials provided, so that the business owner can provide one copy to each employee.

(g) If the County Executive determines that the applicant's outreach efforts were not adequate, the permit applicant shall either provide the required fee within 14 days to complete the renewal application, or will be provided 30 days to remedy the deficiency through additional outreach and provide documentation of the additional outreach efforts to the County Executive. If the County Executive finds that the additional outreach efforts are sufficient, the County will waive the renewal fee. However, if the County Executive finds that the outreach efforts are still not adequate, the applicant must submit the renewal fee within 14 days after the date the County Executive sends notification of the finding to the applicant.

**82.920. Fiscal Security.** Approval of a permit application for a commercial site development and for a subdivision development is contingent upon the execution of fiscal security in accordance with the requirements of Section 82.401 of the Code.

**82.921. Variance.**

(a) An applicant for a permit or plat may apply for a variance from the requirements of Subchapter H, I, K, or L. A variance may be sought only on the basis that the imposition of the requirements of Subchapter H, I, K, or L for the issuance of a permit to the applicant constitutes an exceptional hardship.

(b) An applicant may file a request for variance at any time before the applicant has complied with the provisions of this chapter. A request for a variance must be in writing, must be accompanied by a completed application, must include all information necessary to allow the Commissioners Court to make the findings specified in subsection (c) of this section, and must also specify:

- (1) The particular requirement from which a variance is sought;
- (2) The nature of the hardship presented by the imposition of the requirement;
- (3) The proposed alternative method or procedure to be utilized in lieu of the required method, practice or procedure that is proposed;
- (4) How the alternative method or procedure will provide at least an equivalent level of environmental protection;
- (5) The estimated cost in dollars of complying with the requirement;
- (6) The estimated cost in dollars of construction by the proposed alternative method or procedure;
- (7) The size, in acres, of the land area or the number of lots affected by the proposed alternative method or procedure;

(c) The Commissioners Court may grant a variance from a requirement of Subchapters H, I, K, and L if it determines that:

- (1) the requirement will deprive the applicant of a privilege or the safety of property given to owners of other similarly situated property with approximately contemporaneous development;
- (2) the variance:
  - (A) is not based on a condition caused by the method chosen by the applicant to develop the property, unless the development method provides greater overall environmental protection than is achievable without the variance;
  - (B) is the minimum change necessary to avoid the deprivation of a privilege given to other property owners, to allow a reasonable, economic use of the entire property, and to allow a reasonable use of the entire property; and
  - (C) does not create a significant probability of harmful environmental consequences; and
  - (D) development with the variance will result in environmental protection that is at least equal to the environmental protection achievable without the variance.

(d) Mere economic or financial hardship alone does not constitute an exceptional hardship that justifies the granting of a variance.



**Subchapter I. Submittal Requirements and Water Quality Protection Standards.**

**82.931. Submittal Requirements for Environmental Review.** In addition to any other requirement of the Code, an application must include the information specified in this section.

(a) For a preliminary plan or a commercial site development plan, the application must include:

- (1) Except for small construction projects, an environmental assessment as specified in Section 82.942 including a survey of critical environmental features, waterways, and proposed setbacks that comply with applicable standards;
- (2) For a preliminary subdivision plan of ten acres or greater, a plan consisting of:
  - i. Permanent water quality controls and a summary that describes how the proposed permanent water quality controls comply with applicable water quality standards and are compatible with drainage plan standards; and
  - ii. A preliminary construction storm water plan, in accordance with Section 82.939, that includes a summary describing how the storm water controls will comply with applicable SWP3 standards for the proposed construction;
- (3) For a preliminary plan, standard subdivision plat notes for a long form final plat that conform to Section 82.945; and
- (4) The submittal requirements of this section do not apply to a commercial site development plan proposing a mine or quarry. An applicant proposing a mine or quarry must submit an application and include the information specified in Subchapter L).

(b) For a short form final plat, an application must include the information specified in subsection (a), except that the plan set forth in Subsection (a)(2) need only be a general description of the future improvements planned for the site, if no construction improvements are included in the proposal.

(c) For a long form final plat, the plat must show:

- (1) Subdivision boundaries, configuration, and extent and lot and easement locations and sizes, all of which must comply with all applicable standards, including all applicable setbacks regarding critical environmental features;
- (2) The location of all critical environmental features and waterways with required setbacks and easements in accordance with Section 82.941;
- (3) The location and dimensions of each easement to be used for placement of required permanent water quality controls, consistency with the drainage plan, and compatibility of the plat with proposed SWP3 controls for construction; and

- (4) Standard plat notes required for the applicable site features and design as required by Section 82.945.
- (d) For a subdivision construction plan or commercial site development construction plan:
  - (1) The application must include general construction notes that reference the SWP3, ESC Plan, and storm water management controls for the project in accordance with Section 82.935(g)(1) and (2) and Section 82.945;
  - (2) Except for small construction projects, the application must include:
    - (A) ESC Plan description information in standard format plan sheets or pages in accordance with Section 82.935(a), 82.935(c) - (f), and Section 82.945, except for projects disturbing less than one acre, in which case the applicant must prepare and submit an ESC Plan as set forth in Section 82.935(g);
    - (B) Site plan and detail sheets for the ESC Plan, in accordance with Section 82.935(g)(3), including other BMPs as appropriate, and Section 82.945;
    - (C) permanent BMP plan sheet(s) showing the design and details of permanent water quality controls compatible with drainage plan standards, in accordance with Section 82.935(g)(4) and Section 82.945;
    - (D) fiscal surety documentation for erosion and sediment controls in accordance with Section 82.401; and
    - (E) a maintenance plan, if a BMP Maintenance Permit will be required prior to issuance of a Certificate of Compliance, as set forth in Section 82.917.
  - (3) For a commercial site development that will use an OSSF, the application must include documentation that the OSSF construction area will be included in the erosion and sediment controls and SWP3 coverage for the site development project.
- (e) Residential construction submittal.
  - (1) For residential construction on one lot or land parcel with one or more acres of land disturbance:
    - (A) An applicant must submit a SWP3 Summary prepared in a format approved by the County Executive that includes:

- i. The name, signature, and contact information of the primary operator, the owner, and their authorized representatives;
- ii. the location, address, and legal description of each parcel or lot where construction disturbance will occur;
- iii. the location where the SWP3 will be kept for inspection;
- iv. contact information and qualifications of the person(s) who prepared the SWP3 and who will perform the SWP3 inspections;
- v. the estimated start and end dates of the construction activities; and
- vi. if the applicant is proposing to share coverage using an existing SWP3, the SWP3 Summary must include a statement of eligibility for such coverage from the primary operator and documentation that the authorized representative of the existing SWP3 accepts this arrangement.

(B) A copy of the SWP3, or an approval of the SWP3, is not required to be submitted if the SWP3 Summary is provided in accordance with Subparagraph (A), except that for proposals with the following project attributes, the SWP3, or at a minimum, the ESC and BMP plan of the SWP3 proposed to address the attribute(s) must be submitted for approval:

- i. a project that proposes one or more of the following critical site improvements:
  - a. cut or fill that changes existing grade more than four vertical feet;
  - b. a slope of greater than ten percent;
  - c. land disturbance closer than 50 feet from the centerline of a waterway without any type of platted waterway setback, or closer than 100 feet from a critical environmental feature without any type of platted setback; or
  - d. land disturbance closer than 25 feet from the edge of any type of platted setback for a waterway or a critical environmental feature;
- ii. a project proposing a yard, hiking trail, or a recharge basin in a critical environmental feature setback listed in Section 82.941(e);

- iii. a project along Lake Travis or the Colorado River downstream from Lady Bird Lake to provide necessary access and appurtenances to a boat dock, pier, wharf, or marina, if the project complies with Section 82.941(j)(3) and is approved by the County Executive; and
      - iv. a low impact park development if it complies with Section 82.941(j)(4) and is approved by the County Executive.
  - (2) For residential construction on one lot or land parcel with less than one acre of land disturbance, an applicant must submit:
    - (A) a County form on which the applicant acknowledges that the applicant will implement the proper use of ESC and BMPs to minimize water quality impacts associated with the land disturbance; and
    - (B) a SWP3 Summary and appropriate erosion and sediment measures if the development proposal will include more than 10,000 square feet of impervious cover and the area of land disturbance includes any of the project attributes identified in Section 82.931(e)(1)(B).
  - (3) For residential construction on one or multiple lots located in a common plan of development, an applicant must submit the information specified in Section 82.931(e)(1)(A) – (B), except that if less than one acre of land will be disturbed and there is a single owner or operator, the applicant may submit a written request for an exemption from the requirements of Section 82.931(e)(1)(A). The County Executive may grant the exemption if the applicant provides adequate documentation of exemption status and the information specified in Section 82.931(e)(2)(A).
  - (4) For single lot residential construction proposing to add 10,000 square feet or greater of impervious cover in an area outside of the City of Austin ETJ, an applicant must also submit a proposal for permanent water quality controls to meet the requirements of Sections 82.944 and 82.917(k).
- (f) Utility or Construction in Right-of-Way Permit:
- (1) For a project with less than one acre of land disturbance, including a project that constitutes a small construction project, the applicant shall use ESC BMPs in the construction process, in conformance with Section 82.934(a) and (b)(3) – (4) and Sections 82.970 – 82.974. An applicant for a project with less than one acre of land disturbance but that does not constitute a small construction project, must prepare and submit an ESC Plan in conformance with Section 82.935(g).
  - (2) For a project with one or more acres of land disturbance, the applicant shall submit information equivalent to that provided with a site development

construction plan (as set forth in Subsection (d)), along with a tree assessment, in compliance with Section 82.973.

(g) Submittal of Notices. In addition to the submittal requirements of subsections (a) – (f), each applicant must provide the County Executive the following notices when applicable to the project:

- (1) An applicant must submit a Construction Site Notice (CSN) with the application, if construction is to commence within 30 days of permit approval, but in no case shall the CSN be submitted later than two days prior to the start of construction activity; and
- (2) An applicant must provide, with the application, a copy of the Notice of Intent (NOI) submitted to the Texas Commission on Environmental Quality if the land disturbance will be five acres or greater and if construction is to commence within 30 days of permit approval, but in no case shall the NOI be submitted later than seven days prior to the start of construction activity.

**82.932. Standards and Requirements for Technical Adequacy.** Sections 82.933 – 82.945 and Sections 82.970 – 82.974 describe the standards and requirements that apply to applications under environmental review.

**82.933. Technical Criteria.**

(a) In addition to the other requirements of this chapter, the following technical criteria manuals apply, except that any changes to the manuals subsequent to the effective date of this subsection shall not take effect until approved by the Commissioners Court:

- (1) Technical criteria for best management practices and permanent water quality controls in eastern watersheds and in the ETJ of the City of Austin are those set forth in the City of Austin Environmental Criteria Manual (effective [insert date of rule adoption]).
- (2) Technical criteria for best management practices and permanent water quality controls in a Western Watershed, except within the ETJ of the City of Austin, are those set forth in the LCRA HLWO Water Quality Management Technical Manual (effective July 1, 2007), provided that to the extent of any conflict, in watersheds contributing to the Edwards Aquifer the owner may use any equivalent or more stringent technical criteria in TCEQ's Complying with the Edwards Aquifer Rules: Technical Guidance and Best Management Practices (RG-348).

(b) The County may require or allow alternate technical criteria and standard details, on a case-by-case basis, in consideration of site-specific conditions.

(c) The County may approve alternate technical criteria proposed by an applicant if it finds that the applicant has presented data that demonstrates that the alternative technical criteria are

justified by the site constraints and other similar factors and provide equivalent water quality protection to the criteria described in Subsections (a) and (b).

**82.934. General Storm Water Management Requirements for Construction Activities.**

(a) Temporary and permanent best management practices shall be employed to prevent polluted storm water runoff from all construction and development activities from entering water in the State during the construction process until final site stabilization is complete. Proper storm water management requires three primary types of ESC: erosion source controls, sediment controls, and permanent erosion/soil stabilization controls, as well as applicable other controls, pollution prevention measures, and permanent water quality control design measures. ESC shall be designed to include a combination of these types of ESC in order to control storm water volume and velocity within a construction site, minimize the discharge of sediment and other pollutants, and effectively minimize or eliminate pollutant discharges.

(b) Responsibilities of an Owner and Operator.

(1) The owner and the primary operator of a property where construction activity occurs are each responsible for implementing approved site plans, construction plans, and specifications, maintaining day-to-day operational control of construction activities, developing and implementing SWP3s, if required, and implementing BMPs in accordance with this section.

(2) A SWP3 must be developed and implemented in accordance with this section for:

(A) Any construction activity or common plan of development for which a Travis County development permit is required and that disturbs one or more acres of land; and

(B) An individual lot in a common plan of development that disturbs less than one acre of land but is within a common plan of development that is one acre or greater in size.

(3) Where there is less than one acre of land disturbance and neither the owner nor primary operator is required to develop and implement an SWP3, the owner and the primary operator must still implement BMPs appropriate to the scope of the construction activities in compliance with this section.

(4) If sediment originates from construction activities on the project site and discharges off-site, the owner or operator must remove any accumulations that adversely affect off-site property and water in the State.

(A) Accumulations must be removed at a frequency that eliminates or minimizes to the maximum extent practicable any adverse impacts, and the removal must be accomplished prior to the next rain event whenever feasible.

- (B) If the owner or operator does not own or operate the off-site conveyance, the work must be accomplished by working with the owner or operator of the property to remove the sediment.
- (C) The removal and remediation work for any off-site sediment impacts proposed by the owner or operator of the construction site must be approved by the off-site property owner and the County Executive, prior to such work being done.
- (D) The proposal must demonstrate that no further adverse environmental impacts will result from the remediation work.
- (E) If there is an accidental or intentional discharge of any pollutant that poses a significant threat or an actual impact to human health, safety, or environmental quality, the provisions and time lines specified in this paragraph do not apply and the person responsible must comply with Section 104.008 and immediately take all necessary steps to ensure containment of a discharge source and cleanup of the released pollutants.
- (5) The primary operator and secondary operator of a property where construction activity occurs are responsible for complying with the conditions outlined in Part III, Section B of TPDES General Permit TXR150000 issued by the TCEQ on February 15, 2008, and these conditions as described in a subsequent renewal or amended permit. In addition to the foregoing, a secondary operator must comply with the permit requirements for primary operators if there are no other operators at the construction site.
- (6) Project Completion. The owner and primary operator are responsible for completing project construction, final grading, and final site stabilization as specified in the SWP3 and within the duration of the development permit before the project can be used or occupied. This includes following the sequence of construction, complying with the permanent erosion and soil stabilization control requirements in Section 82.936(d)(3), and the final inspection requirements in Section 82.951(b)(10), in order to complete the project in a manner that limits the exposure time of disturbed soils to the maximum extent practicable.
- (c) Qualifications for SWP3 Design and Inspection. For any project being constructed after [18 months from effective date] that requires a Travis County development permit and a SWP3, the SWP3 must be designed, certified, inspected, and approved only by individuals with the proper qualifications and certifications, as described below:
- (1) Only a Texas-licensed professional engineer or a Certified Professional in Erosion and Sediment Control ("CPESC") may design and develop the ESC Plan and Engineer's Report components of the SWP3.
- (2) For projects required by this chapter to have an engineer certification of the construction plans, only a Texas-licensed professional engineer may seal any engineering calculations that may be required for the SWP3.

(3) Only a CPESC, a Certified Erosion, Sediment, and Storm Water Inspector ("CESSWI"), and a Certified Inspector of Erosion and Sediment Control ("CIESC") may perform SWP3 inspections and sign SWP3 Inspection Reports required by Section 82.951.

(d) Each owner and primary operator must comply with all applicable requirements for Storm Water Pollution Prevention Plans and Best Management Practices for construction activities, as described in Sections 82.935 – 82.940 and Sections 82.970 – 82.974.

(e) Documentation of Rainfall Events. This subsection is applicable during any construction activity that disturbs ten or more acres of land at one time, including non-contiguous land disturbances that take place at the same time and are part of a larger common plan of development.

(1) The owner or operator shall place and maintain a rainfall gage at a location on site, subject to review by the Inspector, that will collect an accurate, representative rainfall sample. The gage shall be graduated at least in one-tenth inch increments with a capacity of at least five inches.

(2) The owner or operator shall inspect the gage within any 24-hour period during which any rainfall event has occurred at the site. The 24-hour rainfall quantity, date, time, and name of the person logging the result shall be recorded in a written log and the applicable SWP3 Inspection Report.

(3) The inspection of the gage must take place within one hour of the time the previous day's reading was logged, whenever there are successive rainfall events lasting more than 24 hours.

(4) The rainfall log shall be retained in the SWP3 Site Notebook and shall be readily available for review by the Inspector. At the request of the Inspector, a copy of the rainfall log shall be promptly provided.

### **82.935. Storm Water Pollution Prevention Plan.**

(a) This subsection describes the required components and content of SWP3s as they apply to each type of proposed development activity and describes the time at which each component of the SWP3 must be submitted to the County or made available during the development approval process.

(1) For a project that is not a small construction project, the SWP3 must include the contents specified in (c) – (h) of this section for submittals associated with a subdivision construction plan or a commercial site development construction plan. The contents of the SWP3 consists of specific items placed within:

(A) an ESC Plan with the construction plans;

(B) the Engineer's Report; and

(C) the SWP3 Site Notebook.

(2) For a project with one acre or more of land disturbance, the SWP3 must include the contents specified in (c) – (h) of this section for submittals associated with a utility or construction in right-of-way project. The contents of the SWP3 consists of specific items placed within an ESC Plan with the construction plans, placed within the Engineer's Report, and placed within the SWP3 Site Notebook.

(3) For a utility or construction in right-of-way project with less than one acre of land disturbance, the SWP3 content requirements are specified in section 82.931(f)(1).

(4) The contents of the SWP3 may be placed entirely within the SWP3 Site Notebook in accordance with Subsection (h) for residential and other permit applications where the submittal does not require sealed construction plans prepared by Texas-licensed professional engineer.

(5) When required, the ESC Plan and Engineer's Report must be submitted to the County Executive for approval with construction plans as part of an application for a development permit.

(6) The SWP3 Site Notebook must be prepared and completed no later than the time when the Construction Site Notice is required to be posted or Notice of Intent is required to be submitted to the TCEQ, and it must be available for review at the pre-construction conference.

(b) The contents of the SWP3 must provide equivalent or greater environmental protection than the contents required by TPDES General Permit TXR150000 issued by the TCEQ on February 15, 2008 (and any subsequent renewal or amended permit issued by TCEQ) . Each of the components of the SWP3 must meet all technical standards specified in this section, Sections 82.936 – 82.940, and Sections 82.970 – 82.974.

(c) Site and Project Description. The Engineer's Report component of the SWP3 must be consistent with the criteria specified in the City of Austin Environmental Criteria Manual Section on Water Quality Management, as well as any additional criteria required by the LCRA HLWO Technical Manual if a project is located outside of the City of Austin ETJ and within a Western Watershed. Every Engineer's Report, regardless of the location of the project, must include the following general site and project description information:

(1) A description of the nature of the construction activity and a summary of the primary and secondary construction project types and operations planned, including the major construction improvement site features planned;

(2) A summary list or table of potential pollutants, including sediment from runoff, sediment from non-storm water discharges, solid wastes from miscellaneous construction

activities, petroleum hydrocarbons from vehicle and equipment maintenance and asphalt operations, and pollutants from miscellaneous industrial and construction materials, their sources, and proposed controls,. For each pollutant and source, the summary or table must specify the section or location in the construction plans or SWP3 Site Notebook where the controls for the pollutant are listed and described.

(3) A description of the intended schedule or sequence of construction activities that will disturb soil for major portions of the site, including the construction sequencing information required in Section 82.301(c)(2)(C), the City of Austin Environmental Criteria Manual, and the following additional information:

(A) Each construction project and each discrete major phase of a multi-phase construction project or common plan of development shall have a detailed sequence of construction and BMP implementation listed in the construction plan sheets;

(B) The detailed sequence of construction and BMP implementation for each project or discrete major project phase shall list major construction operations and site improvements summarized in paragraph (1) of this subsection and the implementation, phasing, and scheduling of all the ESC Plan and other BMPs required for these operations and improvement features. These include all the erosion source controls, sediment controls, temporary and permanent stabilization controls, and other controls and pollution prevention measures in the approved plans; and

(C) A time line describing the total months estimated from the start of construction to the completion and final stabilization of the site shall be included for the project, including each discrete major phase, if applicable.

(4) The total number of acres of the entire property and the total number of acres within the entire property where construction activities will occur, including off-site material storage areas and stockpiles of fill, spoil, and borrow areas that are authorized under the same TCEQ Notice of Intent or Construction Site Notice and Travis County development permit;

(5) The approximate, estimated cubic yards of excess fill material (soil, subsoil, rock) that will be generated by the project cut and fill operations that will require permanent off-site disposal, if any.

(6) A description of existing and post-construction site conditions, including:

(A) The existing soil types at the site, including soil information describing the principal, most extensive soil types in the areas to be disturbed, using reference information from *The Soil Survey of Travis County, Texas*, by the U.S. Department of Agriculture;

(B) A summary description of existing site conditions, including any existing land development features and the approximate percentage of existing grass cover and tree canopy; and

(C) For a subdivision or commercial site development project required to provide a drainage plan, a summary of slope gradients present, including the approximate percentage of the total site acreage proposed to be disturbed from paragraph (4) that is a zero to ten percent grade, a ten to twenty percent grade, and a greater than twenty percent grade. As an alternative, composite slope gradients for the individual drainage areas in the site drainage plan may be added on the ESC Plan sheet drainage areas maps required by Subsection (g)(3)(G).

(7) A description of any existing critical environmental feature and water in the State to which runoff or a pollutant discharge would be conveyed, either on or adjacent to the construction site, and a description of the BMPs included in the construction plans to address these areas;

(8) The name, and segment number, if applicable, of receiving waters at or near the site that may receive discharges from disturbed areas of the project, including the USGS stream type: ephemeral, intermittent, or perennial. If any receiving water is on the TCEQ List of Impaired Waters (relating to the CWA section 303(d) or subject to a Total Maximum Daily Load ("TMDL"), the Engineer's Report must indicate this, the pollutant parameter(s) and designated or presumed use that does not meet the water quality standard, and any BMPs included in the construction plans to address these pollutants or TMDL requirements;

(9) The location, description, and authorization number or identifier of any support activity that are intended to be authorized under the owner or primary operator TCEQ Notice of Intent or Construction Site Notice for this project or Travis County development permit, including an asphalt or concrete batching operation, temporary or permanent fill or staging area, and other activities providing support to this construction site that is authorized under the TCEQ general permit; and

(10) Information on whether the SWP3 and construction plans are in compliance with other applicable state and local regulations and permitting requirements in addition to the requirements of the County Executive under the Travis County Code, including those authorizations identified in Section 82.916(a).

(d) Erosion and Sediment Control Plan and BMPs. The Engineer's Report component of the SWP3 must include a summary that:

(1) describes all of the ESCs and BMPs selected for the project that meet all applicable standards in Sections 82.933 and 82.936;

(2) includes each erosion source control, sediment control, and permanent erosion and soil stabilization control for the project;

- (3) lists the individual controls selected and specifies where in the construction plan sheet(s) the details, specifications, schedule of implementation, site plans, and other relevant information for the controls are located;
  - (4) includes calculations of the volume of sediment basins; and
  - (5) if requested by the County, calculations for sediment controls other than sediment basins must be submitted to verify sizing, sediment removal performance, or appropriateness of the chosen sediment control.
- (e) Permanent Storm Water Controls. The Engineer's Report component of the SWP3 must include a summary that describes any permanent storm water control or BMP required by this subchapter that will be installed to control pollutants in a storm water discharge that may occur after construction has terminated.

(f) Other Controls and Pollution Prevention Measures. The Engineer's Report component of the SWP3 must include a description of any other controls and pollution prevention measures selected for the project necessary to meet all applicable requirements in Section 82.937 and that will be included in the construction plans. The selected controls and measures must address each non-storm water discharge control, staging and stockpile area management, fill and spoils management and disposal and construction support activity control. If requested by the County Executive based on the significance or location of the controls, the Engineer's Report and construction plans must also describe specifications for hazardous substance management, materials inventory and management, and spill prevention and controls.

(g) ESC Plan. The ESC Plan component of the SWP3 must include construction plan sheets showing each site plan, specifications, plan details, and implementation requirements for the ESC and other BMPs selected for the project. The construction sheets shall be consistent with Section 82.301(c), relating to Engineer's Construction Plan Requirements, the City of Austin Environmental Criteria Manual Section on Water Quality Management, as well as any additional criteria required by the LCRA HLWO Technical Manual when a project is located outside of the City of Austin ETJ and within a Western Watershed. Regardless of the location of a project, the plan sheets shall also include the following:

- (1) Cover Sheet, including a site location map that meets the TCEQ General Permit requirements;
- (2) General Notes Sheet:
  - (A) Travis County General Construction Notes for subdivision and site development construction, and special notes pertinent to the project, shall be consistent with the SWP3 Site Notebook, other sheets of the construction plans, and the Engineer's Report.

(B) The County Executive has the discretion to require additional SWP3 and ESC Plan-related standard notes for the construction plan sheets. These standard notes will be prepared and made available to applicants, and may be updated from time to time. Generally, these notes will specify requirements of inspection and maintenance, supplement the requirements of paragraph (g)(3), and will address requirements pertaining to Other Controls and Pollution Prevention Measures. The County Executive has discretion to allow modification of standard notes for customization to specific projects.

(C) The sequence of construction and BMP implementation shall meet all the requirements listed in paragraph (c)(3) and must be identical to the SWP3 Site Notebook.

(3) ESC Plan Sheets. In addition to items listed in Section 82.301(c)(3), the following items shall be included in ESC Plan Sheets in order to meet all applicable requirements of Sections 82.933, 82.936 – 82.940, and Sections 82.970 – 82.974:

(A) A Limits of Construction (LOC) line, clearly showing the areas where soil disturbance will occur;

(B) Existing and proposed slope contours before and after major grading and permanent site construction improvements;

(C) The name and location of each surface water either on, or adjacent to the site that receives storm water discharges from the disturbed areas of the site;

(D) Each structural erosion source control proposed and its location, a description of the site phasing and implementation schedule, and relevant plan notes and plan details, including drainage diversion and dissipation details. Non-structural erosion source controls applicable to the ESC and BMP sheets shall be included in plan notes, descriptions, and details.

(E) Each sediment control proposed and its location, a description of the site phasing and implementation schedule, and relevant plan notes and plan details, including each sediment pond with design information, sediment trap, perimeter controls, and interior control;

(F) Each permanent erosion and soil stabilization control proposed and its location, a description of the site phasing and implementation schedule, and relevant plan notes and plan details, including: temporary stabilization measures, permanent vegetative stabilization measures, and permanent structural erosion control measures;

(G) Drainage area boundaries, the acreage of each drainage area, and flow arrows from the project's proposed drainage plan must be included on the site plan

maps for structural erosion source controls, temporary sediment controls, and permanent erosion and soil stabilization controls;

(H) Each permanent water quality control, other permanent BMPs, areas of waterway or critical environmental feature setbacks, and permanent site improvement proposed for the project;

(I) Other controls and pollution prevention measures proposed for which a location on the site plan is necessary and a description of the implementation schedule, plan notes, and plan details as applicable, including each stabilized construction entrance, concrete wash out area, vehicle maintenance and washing area, fuel tankage; dewatering controls for any pond, stream crossings, excavations, and other non-storm water controls.

(J) Depiction of each construction support activity and associated controls on-site or directly adjacent to the site, including each staging and stockpile area, haul road, temporary storage and permanent disposal area for fill and spoil, and asphalt or concrete batching.

(K) Each storm water outfall (existing and planned) and other points, where discharges associated with the construction activities site will occur; and

(L) A complete legend for each symbol used on the plan sheet for the various controls and BMPs, and standard and special specification details and plan notes.

(4) Drainage Layout, Plan and Profile, Detention Water Quality Control Structure, and Construction Detail Sheets. Plan sheets showing drainage layout, plan and profile, detention and water quality pond, and construction detail shall include additional technical standards, setback boundaries, notes, and details necessary for constructing all applicable permanent erosion controls, permanent storm water management and water quality BMPs required by this subchapter. Design details must incorporate all applicable technical criteria requirements set forth in Section 82.933.

(h) SWP3 Site Notebook.

(1) The SWP3 Site Notebook shall be maintained on-site and updated by the owner or operator during the construction of a development project, along with a copy of the approved construction plans and County development permit.

(2) SWP3 contents required by this section which are not provided within the construction plan sheets or Engineer's Report approved with the development permit shall be provided by the owner or operator before the start of construction in the SWP3 Site Notebook.

(3) A master checklist shall be included in the SWP3 Site Notebook that cross references the location of all required contents of the SWP3. A cross reference must be

included of where the details, specifications, schedule of implementation, drainage plans, and site plans for individual controls are located in the construction plan sheet(s).

(4) The SWP3 Site Notebook must include a description of all Other Controls and Pollution Prevention Measures selected to meet the requirements of Section 82.937. This includes specified controls listed in subsection (f) and described in the Engineer's Report, or included in the construction plans, as well as controls and measures for solid waste and hazardous substance management, materials inventory and management, and spill prevention and control.

(5) The SWP3 Site Notebook must include either an original or a copy of the following:

(A) the TCEQ General Permit, each TCEQ notice, signed SWP3 inspection reports, inspection and revision logs, and all adjustments, modifications, and official plan revisions to the approved SWP3 and ESC construction plan sheets and BMPs that occur after the start of construction.

(B) Day-to-day operator and secondary operator information; qualified inspector information; owner and operator SWP3 certifications or delegation letters, if executed; operator site personnel qualifications and training records, if required.

(C) Any additions or modifications to the SWP3's Other Controls and Pollution Prevention Measures, including: non-storm water discharge controls, site materials inventories and records, spill prevention and control procedures, and related records.

(6) In the event of any conflicts between the content in the SWP3 Site Notebook and the content in construction plans approved by Travis County with the development permit, the content of the construction plans shall take precedence.

(7) Maintenance and Inspection Description. The SWP3 Site Notebook must include a summary that describes how the maintenance, training, and inspection requirements for the SWP3 meets the applicable requirements of this chapter. The summary shall include:

(A) The general SWP3 implementation and maintenance responsibilities of each responsible primary and secondary operator, including the name and contact information of the responsible part(ies) for the primary operator(s);

(B) The name, qualifications, and contact information of each qualified individual who has been designated by the owner to conduct SWP3 inspections;

(C) The schedule for SWP3 monitoring inspections and reports;

(D) The maintenance and inspection procedures for SWP3 inspection milestones, including: pre-construction, site monitoring, post-rainfall, SWP3

revisions, permanent drainage and water quality system inspections, complaint response, non-compliance, final inspection and final stabilization; and

(E) The SWP3 Site Notebook must include the name and contact information for the primary operator with day-to-day operational control of the construction site and the qualified SWP3 inspector and, if the name and contact information are not available at the time of permit application review, it shall be provided at or before the pre-construction conference required under Section 82.950.

(F) The applicable training requirements for the site personnel who are responsible for implementing the various requirements of the SWP3 during construction, including each person to be trained on their roles and responsibilities, the type and content of the training to be received by each person, and the training schedule and records for each person.

(i) Revision of the SWP3.

(1) The SWP3 must include an implementation schedule for revisions that complies with this section and all revisions and adjustments must be documented by the operator's qualified SWP3 inspector in the SWP3 Site Notebook.

(2) The owner or operator must revise or update the SWP3 whenever any of the following circumstances occur:

(A) A change in design, construction, operation, or maintenance that has a significant effect on the discharge of pollutants and that has not been previously addressed in the SWP3;

(B) A change in site conditions based on updated plans and specifications, amendment of an approved development permit, a new operator, a new area of responsibility for an operator, or a change in a BMP;

(C) An investigation or inspection conducted by the operator, as required by Section 82.951 indicates that the SWP3 is ineffective in eliminating or significantly minimizing pollutants in discharges; or

(D) A result from an investigation or inspection by an Inspector that indicates the SWP3 is proving ineffective in eliminating or significantly minimizing pollutants in discharges.

(3) Revisions to the SWP3 must be completed within seven calendar days following an inspection or within a shorter timeframe as specified by the Inspector.

(4) Minor revisions and adjustments to the SWP3 may be approved in the field by the Inspector during construction.

(5) SWP3 revisions which require formal County plan review and approval including those which require additional engineering calculations or engineered design changes, although the County Executive reserves the right to require formal plan revisions on construction plan changes or SWP3 changes, based upon site-specific characteristics, ESC and BMP performance issues, and similar factors.

**82.936. ESC Plan Best Management Practices.**

(a) General. Temporary and permanent ESC and BMPs implemented in an ESC Plan must include both structural runoff controls and non-structural management practices, and must comply with the design standards described in this section. All control measures must be properly selected, installed, and maintained according to the manufacturer or designer specifications and the approved Travis County development permit, and plans. The construction plans must identify the locations, specifications, and timing or sequence for BMP implementation within the schedule of the construction activities.

(b) Design Storm Standards. ESC Plan BMPs must be developed and implemented in the SWP3 to prevent and minimize off-site discharge of sediment and other pollutants. The design must ensure retention of sediment and other potential pollutants associated with the construction activity on-site, in accordance with the required design storm standard, to the maximum extent practicable.

(1) A sediment basin must provide sufficient storage to contain a calculated volume of runoff from a 2-year, 24-hour storm until final stabilization of the site.

(2) Flows from stabilized areas and on-site or off-site undisturbed areas are not required to be included in the basin calculations if the flows are diverted around the disturbed areas of the site and the sediment basin.

(3) Design of the ESC Plan BMPs must be consistent with the approved technical criteria established for the site location as set forth in Section 82.933.

(c) Site Specific Criteria for ESC Plan Design. For each construction site, the site specific factors identified in paragraphs (1) – (5), where applicable, must be given primary consideration and priority in selecting the:

(i) Erosion and sediment controls set forth in subsection (d);

(ii) Applicable BMPs set forth in Section 82.937 ; and

(iii) ESC Plan standards for roadways and drainage easements set forth in Section 82.970 :

(1) Special Definitions. In this Chapter:

(A) "Critical Site Characteristics" means the primary site-specific topographic factors that must be evaluated and considered in the design of an ESC Plan and must be addressed with suitable measures and BMPs; these factors include the total area disturbed in combination with the slope steepness, the slope lengths, the soil erosiveness, the run-on drainage, the total drainage area size, and the proximity to water in the State.

(B) "Critical Site Improvements" means specific construction features that are prone to greater erosion and sediment discharge and therefore require greater amounts and types of ESC for sediment control and final stabilization in the ESC Plan design; these include:

- (i) construction features in areas with priority critical site characteristics as described in paragraph (2);
- (ii) cut slopes and fill embankment slopes exceeding ten percent grade, including side slopes of permanent storm water ponds;
- (iii) designed drainage channels, swales and concentrated flows;
- (iv) stream crossings, bridges, culverts, and the runoff discharge from the approaches on each side; and
- (v) storm water outfalls and any features contributing excessive sediment load or pollutants to the outfall discharge.

(2) Priority Critical Site Characteristics. ESC Plan design measures must address and correspond to the critical site characteristics of a disturbed soil area and minimize the potential adverse off-site discharge impacts to the maximum extent practicable. In particular, increased levels of ESC measures will be required to address disturbed soil areas with any of the following priority critical site characteristics:

- (A) Slopes greater than ten percent, slopes between five and ten percent with slope lengths greater than 50 feet, and slope lengths greater than 100 feet;
- (B) Areas and outfalls located within a distance of 150 feet from the centerline of a waterway (including ephemeral, intermittent, or perennial surface waters) or a critical environmental feature; and
- (C) For all disturbed soil areas, as the level and combination of the critical site characteristic factors increase, erosion and off-site sediment discharge potential also increases, requiring increased amounts and types of ESC in the ESC Plan design.

(3) Construction Project Type. The type of project being constructed must guide the applicant in the selection of the ESC Plan BMP controls that are the most effective for the

characteristics of the site and typical industry practices common to each primary type of construction project. Primary construction project types include: site construction including buildings and parking areas; residential homes; construction support areas; construction maintenance activities; and linear construction, including streets, drainage, and underground utilities.

(4) Construction Features and Critical Site Improvements. Construction features that must be considered in the ESC Plan design include: all disturbed areas, fill embankments, cut slopes, temporary and permanent stream crossings, roadways, underground utilities, residential lots, bridges, culverts, storm sewer systems, channels, inlets, basins, outfalls; temporary entrances, roads, and stockpiles. All critical site improvements must be addressed as required in the ESC Plan design.

(5) Construction Duration, Phasing, and Sequence. The length of time from start of construction to final stabilization, the construction site phasing, and the construction sequence for each phase must be considered for each construction project. Projects extending over longer periods of time will typically require increased site phasing and construction sequence considerations in the ESC Plan design, especially larger and more complex construction projects, and projects with increased levels of critical site characteristics and critical site improvements.

(d) Primary ESC Categories and Functions. Each ESC Plan must include the three primary types of ESC: erosion source controls, sediment controls, and permanent erosion/soil stabilization controls. All ESC Plans shall be designed to include a combination of all three primary types of ESC in order to control storm water volume and velocity within the construction site, minimize the discharge of sediment and other pollutants, and effectively perform the following functions.

(1) Erosion Source Controls. Each ESC Plan must include structural and non-structural erosion source controls in order to minimize the amount of soil particles that can potentially become mobilized by erosion during construction activities. The erosion source controls listed in (A)-(E) must be included in the ESC Plan, where feasible, and implemented to the maximum extent practicable to reduce erosion and increase the effectiveness of the sediment controls and permanent erosion/soil stabilization controls in the ESC Plan:

(A) Minimize Soil Disturbance and Compaction. Soil disturbance shall be minimized in areas with critical site characteristics. Required setbacks for protection of all streams, floodplains, and critical environmental features shall remain undisturbed. Within a developed or disturbed area of the site, existing vegetation and desirable environmental features must be preserved where feasible. Disturbance of steeper and longer slopes should be minimized. Soil compaction must be minimized and surface roughening or texturing must be undertaken in disturbed soil areas where appropriate.

(B) Phase Soil Disturbance and Stabilization. The total amount of disturbed soil exposed at one time shall be limited through phasing of major portions of the construction project, to the maximum extent practicable. Temporary protection or permanent stabilization of disturbed soil areas must be accomplished as required by paragraph (3), and as specified in the detailed construction sequence for each project or project phase.

(C) Managing Staging Areas, Site Grading, and Fill Material. The staging and stockpile area management requirements set forth in Section 82.937(b)(3) must be used to minimize discharges from staging and stockpiling areas during the construction process. The fill and spoils management and disposal requirements set forth in Section 82.937(b)(4) must be used to effectively manage the soil material excavated, transported, and placed on or off the construction site to minimize it as a source of sedimentation. During the site grading process, the operator shall implement placement of temporary soil grades, sumps, and berms that will act to inhibit runoff and promote infiltration on site to the maximum extent practicable, in addition to required structural controls.

(D) Drainage Diversion. Run-on drainage to disturbed soil areas shall be diverted around disturbed areas, whenever feasible through temporary or permanent structural diversions, or through the use of other BMPs, including construction of all or parts of the permanent drainage conveyance systems and structures designed for the site as early as possible in the sequence of construction.

(E) Drainage Dissipation. Storm water discharges, including both peak flow rates and total storm water volume, shall be controlled to dissipate drainage flow, minimize erosion within the site and at drainage outlets, and to minimize downstream channel and stream bank erosion. Velocity dissipation devices are to be used as site interior controls and must slow velocities, spread out flows, and promote sedimentation. Velocity dissipation devices at drainage discharge locations and along the length of any outfall channel must provide a non-erosive flow velocity from the structure to a water course. Velocity dissipation devices must prevent degradation of natural physical and biological characteristics and functions.

(2) Sediment Controls. Structural sediment controls must be designed to protect all disturbed soil areas from discharging sediment off of the construction site. Sediment control structures must capture and temporarily detain the required storm water runoff volume and must effectively retain sediment from the range of soil particle sizes expected to be present at the construction site, to the maximum extent practicable. In addition, sediment controls must meet the following standards:

(A) Drainage volume calculations for sediment controls shall be prepared in accordance with the guidelines in the Austin Drainage Criteria Manual.

(B) Sediment control structures are to be redundant and placed at perimeter and interior locations within the construction site to maximize sediment trapping areas and temporary runoff capture volume to maximize sedimentation and address all applicable site factors and priorities described in subsection (c) of this section.

(C) Each structural sediment control shall be designed and placed so that runoff flows, including flows exceeding the design storm, will discharge or overtop the structure in a controlled manner at planned outlet points, without breaching of the sediment control structure, without causing uncontrolled discharge, and without causing flooding of adjacent property. Longer lengths of structural sediment controls will typically require perpendicular dissipation structures, especially when such controls cannot be placed along the contour. Low points in the sediment control structure which develop into runoff outlet points must be further redesigned or reinforced as necessary before the next runoff event to prevent breaching and uncontrolled discharges. Where feasible within the limits of construction, storm water should be directed to vegetated areas to increase sediment removal and maximize infiltration.

(D) Primary Types of Structural Sediment Controls. The primary types of Structural Sediment Controls include:

(i) Sediment basin. Unless a sediment basin is not feasible due to the factors listed in a., a sediment basin is required for disturbed drainage areas of five or more acres in order to minimize sediment discharges. If a site design includes a permanent water quality control pond, the pond must be used as a temporary sediment basin during construction, unless it is not feasible due to the factors listed in a.

a. Feasibility. Factors in determining whether a sediment basin is necessary or appropriate include critical site characteristics, as well as the available area, public safety, precipitation patterns, site geometry, site location, site vegetation, infiltration capacity, geotechnical factors, depth to groundwater, and other similar considerations. If a sediment basin is not feasible, the applicant shall document the reason and utilize equivalent control measures, which may include a series of smaller sediment basins or traps, increased perimeter and interior sediment controls, and other ESC BMPs.

b. A sediment basin and outlet shall be designed to maximize sedimentation, including sedimentation of the finest sediment particles to the maximum extent practicable and shall have a reinforced spillway for overflow discharges. Sediment must be removed from the sediment basin no later than the time that design volume has been reduced by greater than ten percent. Basin de-watering must comply with Section 82.937(b)(1)(C).

c. Disposal of sediment removed from a basin may require special handling, in accordance with TCEQ requirements, if coagulants, flocculants, or other treatment chemicals are used.

d. Sequence. A temporary sediment basin or permanent water quality control pond serving initially as a construction sediment basin, must be installed first during the sequence of construction.

(ii) Sediment traps. A sediment trap is a small sediment basin or impoundment area located at strategic areas on the construction site where the runoff volume can safely be temporarily detained to increase capture volume, to maximize sedimentation effects, and to retard runoff velocity.

(iii) Perimeter Sediment Controls. Silt fencing or equivalent sediment controls are required for all down slope boundaries of the disturbed construction site area where runoff can discharge off-site.

(iv) Interior Sediment Controls. Structural sediment controls of various types shall be placed at locations within the construction site interior to address critical site characteristics, construction project type, construction site features and critical site improvements, and construction length, phasing, and sequence.

(v) Temporary sediment control structures must be maintained in accordance with the plans and specifications throughout the construction process and removed along with accumulated sediment when final site stabilization is completed for the entire site or the site phase.

(3) Permanent Erosion and Soil Stabilization Controls. Each permanent structural and vegetative erosion control design specified in the ESC Plan must prevent long term erosion of site improvements, reduce runoff velocities, and achieve full, permanent vegetation coverage and final site stabilization, including prioritizing the stabilization of critical site improvements. When phasing and implementing site stabilization in the SWP3, the operator must adopt the following priorities and meet the following standards and minimum schedule of initiation and completion:

(A) The operator must give first priority for stabilization to portions of the construction site that have critical site improvements. These critical site improvements will typically require greater amounts of permanent erosion control measures to achieve effective final stabilization, such as mulch, soil retention blankets, or riprap, as appropriate. If feasible, the operator must also implement stabilization of other portions of the construction site early in the sequence of construction. Re-vegetation must be initiated and completed for all of the remainder of the construction site as soon as practicable before submittal of the engineer's concurrence letter.

(B) Topsoil meeting the applicable technical criteria in Section 82.933 and the approved plans shall be placed as required prior to permanent seeding and mulching activities for re-vegetation. Existing native site topsoil shall be stockpiled and reused for this purpose whenever it is feasible. The County can consider approval of minimizing topsoil placement or other alternate final stabilization measures for selected areas with very high levels of critical site characteristics and high erosion potential, on a case-by-case basis.

(C) Seed, mulch, soil retention blankets, fertilizer, irrigation for vegetation establishment, and other measures used for re-vegetation of disturbed areas shall meet the applicable technical criteria in Section 82.933 and shall be specified in the approved plans. The primary operator must follow irrigation schedules and methods that will result in successful and rapid germination and growth of the seeded or planted vegetation.

(D) Stabilization of disturbed areas must be initiated by the primary operator immediately whenever an applicable milestone in the approved sequence of construction has been reached, or whenever any clearing, grading, excavating, or other earth disturbing activities have permanently ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days. The primary operator may not delay final stabilization of completed site sections or critical site improvements solely for the purpose of mobilizing re-vegetation operations for the entire site at a later date.

(E) The primary operator must take advantage of optimum seasonal planting dates, times-of-day, and temperatures to the maximum extent practicable in accordance with the applicable technical guidance to complete permanent re-vegetation of required site areas in a timely manner. The primary operator shall plan for early spring as the first priority planting date for required permanent vegetation, to the maximum extent practicable, unless otherwise specified in the approved plans. The primary operator may be required to cut back the height of temporary annual vegetation if it is necessary to allow the specified permanent, perennial vegetation to successfully establish.

(F) If the irrigation water supply and irrigation schedule are restricted as a result of drought conditions, vegetative stabilization measures must be initiated by the primary operator as soon as practicable but no later than the 14<sup>th</sup> day after construction activity has temporarily or permanently ceased in portions of the site.

(G) Successful stabilization initiated for a portion of the site identified in either the approved sequence of construction or by the actual cessation of earth disturbing activities described in subparagraph (D) of this paragraph must be completed by the primary operator within the following time periods from the required date of initiation, as identified during construction by the Inspector or the qualified SWP3 inspector and documented in the SWP3 Inspection Report:

(i) Initial Stabilization Activities. Non-vegetative stabilization controls and initial vegetative seeding activities in the identified portion of the site must be substantially completed within seven days of the required date of initiation.

(ii) Temporary stabilization must be substantially completed either in accordance with the approved sequence of construction, if applicable; within seven days after the date of initiation for non-vegetative controls, such as mulch, or within 60 days after the date of initiation for temporary vegetation growth from seeding.

(iii) Permanent final stabilization must be substantially completed either in accordance with the approved sequence of construction, if applicable, within ten days after the date of initiation for sodding, or within 120 days after the date of initiation for permanent seeding.

(iv) The County Executive will consider requests for extensions to the completion time periods listed in clauses (i) – (iii) only if the operator can demonstrate that they are justified by the applicable technical criteria of Section 82.933 or by truly exceptional circumstances, including: time delays to reach optimal warm or cool season planting dates, exceptional characteristics of an individual site, extended periods of exceptionally severe heat or cold, official declaration of a water restriction of the primary irrigation water supply, or use of approved alternative vegetation or seed mixes. A request for a time extension must include interim stabilization or protection measures that will adequately prevent discharges during the extension period, including additional measures necessary for critical site improvements.

(H) The operator must achieve final stabilization of the entire site in accordance with the approved plans, specifications, and applicable technical criteria, including the required vegetation cover percentage, prior to submittal of the engineer's concurrence letter required by Section 82.953 and termination of the SWP3 permit coverage, unless the project meets the criteria described in paragraph (4) of this subsection for a developer's contract. Temporary stabilization measures may not be substituted for required final stabilization measures. The County may consider alternate final stabilization measures for future building pad areas of two percent grade or less if equivalent stabilization is achieved. Fiscal security for erosion control shall be refunded only upon completion of final stabilization, including removal of all temporary sediment controls and accumulated sediments.

(4) Developer's Contract.

(A) A separate, written agreement to ensure final stabilization, known as a developer's contract, may be executed between the County Executive and an

owner if maintenance responsibility for constructed facilities is accepted for County maintenance, or if the County Executive approves an owner's request for temporary use or occupancy of a project, facility, or building before the required re-vegetation coverage is complete.

(B) A developer's contract, unless extended in writing by the County Executive, is effective for up to 120 days after the date it is executed by the County Executive and the owner, and must be secured by fiscal surety that the County will use for final site stabilization if the owner fails to achieve final stabilization within the contract period. After performance of final stabilization at the site in accordance with the contract, the fiscal surety is then refunded by the County Executive to the owner.

(C) To be considered for a developer's contract, an owner must have:

(i) followed the approved plan for phasing and sequence of construction;

(ii) followed the approved plan for temporary and permanent stabilization;

(iii) substantially completed all permanent water quality controls and other inspection punch list items;

(iv) initiated permanent re-vegetation in all required areas; and

(v) submitted the engineer's concurrence letter required by Section 82.953.

#### **82.937. Other Controls and Pollution Prevention Measures for Construction Activities.**

(a) In addition to ESC Plan BMPs for construction activities, an owner must design, install, implement, and maintain other controls and pollution prevention measures in accordance with this section. These controls and measures must eliminate and effectively minimize the off-site transport of pollutants from the construction site by means other than direct storm water runoff. An owner must address activities that can cause contamination on-site and increase the potential for subsequent pollutant discharge from runoff with other controls and pollution prevention measures.

(b) Other controls and pollution prevention measures include:

(1) Non-Storm Water Discharge Controls. Non-storm water discharge controls must be described in the SWP3 and be consistent with the following standards:

(A) Vehicle Tracking. Controls and measures must minimize the off-site vehicle tracking of sediments and the clean up of any public roads or off-site areas adversely affected.

(B) Dust Control. Controls and measures must minimize the generation and migration of dust.

(C) De-Watering. Controls and measures for de-watering must minimize the offsite transport of suspended sediments and other pollutants if it is necessary to pump or channel standing water from the site, including from sediment ponds. When discharging from a basin or impoundment, an outlet structure that withdraws water from the surface must be used whenever possible. A discharge from dewatering activities, including a discharge from dewatering of a trench or excavation, is prohibited unless effective sedimentation, collection and disposal, or a similarly effective treatment occurs prior to discharge.

(D) Work in Surface Waters. Controls and measures for working in or directly adjacent to a waterway must prevent and minimize discharges into such water, including the location of a temporary or permanent stream crossing.

(E) Concrete Wash-out. Controls for wastewater discharges from concrete washout and water well drilling operations must contain wash outs on land surfaces without discharge to water in the State. Concrete wash out without appropriate pollution prevention measures is prohibited.

(F) Wash Water. Controls must completely prevent the discharge of wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds, and other construction materials. Pollution prevention measures must include collection, storage, and off-site disposal of these wastes in accordance with all TCEQ requirements.

(G) Vehicle Washing. Controls for vehicle washing must minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge; discharges of soaps or solvents used in vehicle and equipment washing are prohibited.

(H) Any additional, anticipated non-storm water discharges must be listed in the SWP3 and the ESC Plan must specify the BMP measures selected. All non-storm water discharges are subject to the requirements of Chapter 104 of the Code and TCEQ discharge requirements.

(2) Solid Waste and Hazardous Substance Management. A description must be provided in the SWP3 of construction solid waste and hazardous substances expected to be generated or stored on-site. Controls and measures must be implemented to eliminate and prevent pollutant discharges from solid waste and hazardous substance handling, including recycling and disposal as appropriate. In preparing the SWP3, an applicant shall consider how to eliminate and prevent pollutant discharges from materials such as the following: trash, litter, construction or demolition debris, residual or surplus construction materials of all types, surplus containers of chemical or hazardous substances, soil

contaminated from an oil or hazardous substance spill, cut or uprooted vegetation such as trees and brush, and waste from sanitary facilities provided for personnel.

(3) **Staging and Stockpile Area Management.** Staging areas include all areas necessary for equipment, materials, fill storage and stockpiles, temporary offices, vehicle parking, vehicle maintenance, and the associated haul roads for these areas and the construction site. Controls and measures for these areas shall include:

- (A) Restricting the size of these areas to the minimum necessary for the operator to perform the typical industry practices necessary and appropriate to the primary construction project type, in accordance with approved construction plans and as revised and approved during construction by the Inspector;
- (B) Locating the area(s) within the approved limits of construction and not within setback areas for waterways and critical environmental features, floodplains, tree drip lines, areas with pass-through drainage, or steep slopes; and
- (C) Using structural controls such as run-on drainage diversion and sediment controls and appropriate non-structural BMPs.

(4) **Fill Management and Disposal.** In addition to the cut and fill requirements of Section 82.943, designated areas for excavated soil fill and spoils material from the construction site (topsoil, subsoil, rock) shall be planned, designed, and described in the SWP3. The owner must use a reasoned estimate of the quantity of net cut and fill balance to determine how much and how many areas to reserve on site for temporary storage and permanent disposal and to plan for any necessary off-site fill disposal or the importing of any necessary fill material required for the site. Excavated fill material must be handled using the following minimum controls and practices:

- (A) **Temporary Stockpiling.** Fill material temporarily stockpiled in place as excavation occurs shall be located in areas protected by sediment controls and shall use erosion source controls whenever feasible, such as fill placement using existing topography and excavated features to minimize erosion and runoff potential. Stockpiling within the FEMA-designated 100-year flood plain is prohibited; however, temporary fill placement is allowable in situations where the fill quantity is less than the increase in floodplain capacity caused by a mining project. Applicable temporary stabilization requirements described in Section 82.936(d)(3) must be implemented for temporary stockpiles.
- (B) **Removal and Disposal.** Fill material must be removed from the point of excavation to the designated temporary storage or permanent disposal area described in the approved plans and SWP3 as soon as feasible after excavation occurs.
- (C) **Permanent Fill Disposal.** Fill material shall be permanently disposed of as described in the approved plans and SWP3 and must comply with Section

82.943(d), which, among other things, prohibits solid waste from being mixed or buried with fill material. No person may engage in off-site disposal of fill material in Travis County unless the person has received a Travis County development permit that specifically authorizes the off-site disposal. Before engaging in off-site disposal of fill material, a person may have to obtain other applicable development or regulatory permits, an additional SWP3 or, revisions to an existing SWP3.

(5) **Materials Inventory and Management.** Measures are required to be developed and implemented to minimize the exposure of the following materials to precipitation and storm water runoff: building materials, building products, construction waste, landscape materials, fertilizers, pesticides, herbicides, detergents, petroleum products, automotive fluids, sanitary waste, and other construction and industrial materials present on the site.

(A) Each material and hazardous substance that will be on the site during the construction activities, from the start of construction to the final stabilization and final inspection release, must be listed and described along with the management practices to be followed for each. These material management practices shall include: limiting inventory to the minimum necessary, storage in a secure site location with compatible materials, storage in original containers, proper disposal of surplus materials and containers, inspection monitoring, and training of personnel handling the materials

(B) A description of storage, management, and maintenance practices is required for each petroleum product at a construction site, including: on-site fuel, oil, other motor vehicle fluids, and asphalt. Discharges of fuels, oils, and other pollutants used in vehicle and equipment operation and maintenance are prohibited

(6) **Spill Prevention and Control.** The SWP3 shall include a description of spill prevention measures, and spill response, clean-up, and reporting procedures to prevent and minimize the discharge of pollutants, to the maximum extent practicable, from spills and leaks of oil and hazardous substances on the site. The plan must follow all TCEQ and local regulations. Spill response procedures must include personnel training on product and safety information, and procedures must be adjusted as necessary for improvement and to prevent particular types of spills from reoccurring. Spill clean-up materials must be used, spills must be cleaned up, and waste residue must be properly disposed of. Reporting must occur whenever a spill threshold quantity is exceeded.

(7) A description of potential pollutant sources from areas on the project site, other than construction areas, is required in the SWP3. These other sources include construction support and maintenance areas and activities dedicated to construction site operations, including dedicated asphalt and concrete batch operations. A description of controls and measures that will be implemented for these activities shall detail how pollutant discharges will be prevented and eliminated.

**82.938. Erosion and Sediment Control Maintenance Requirements for Construction Activities.**

- (a) All ESC, BMP, and protective measures identified in the approved plans, the ESC Plan, and SWP3 must be maintained by the primary operator in effective operating condition. If, through inspections or other means, the owner, primary operator, or Inspector determines that a BMP is not operating effectively, then the owner or primary operator shall perform maintenance as necessary to make the storm water controls effective.
- (b) The owner or primary operator shall carry out the inspection requirements of Section 82.951 to ensure the ESC Plan BMPs are implemented and maintained in compliance with the approved plans and SWP3 throughout construction.
- (c) The owner or operator must promptly take any corrective action specified in the Inspector's findings to ensure proper maintenance of ESC Plan BMPs. Items requiring corrective action must be corrected by the owner and operator within timeframes specified by the Inspector. If corrective actions are not performed as required, the County Executive will consider use of further measures, including a stop work order and progressive enforcement.
- (d) Necessary corrective actions must be accomplished within seven days or as specified in the inspection report prepared by the Inspector. When consecutive runoff events occur within 24 to 48 hours, corrective actions must be accomplished prior to the next rain event, to the maximum extent practicable. If maintenance prior to the next anticipated storm event is impracticable, the reason shall be documented in the Operator SWP3 inspection report and maintenance must be scheduled and accomplished as soon as practicable. ESCs that have been intentionally disabled, run-over, removed, or otherwise rendered ineffective must be replaced or corrected immediately upon discovery.
- (e) Whenever it is discovered that a control or BMP has been used incorrectly, is performing inadequately, or is damaged, then the owner or primary operator must immediately replace or modify the control or BMP. Revisions to ESC Plan BMPs must be coordinated with the Inspector and performed in accordance with Section 82.935(i).

**82.939. Preliminary Construction Storm Water Plan.** The preliminary construction storm water plan required pursuant to Section 82.931(a)(2)(ii) for a preliminary plan shall include a SWP3 summary describing the proposed construction phase of the project. The summary must be consistent with the ESC and BMP technical standards described in Sections 82.936 – 82.938, 82.940, and 82.970. The SWP3 summary shall describe the following items, with a plan view map where applicable:

- (1) The ESC and BMPs to be used to address site specific considerations including critical site characteristics; construction project type; the construction site features and critical site improvements; and the construction length, phasing, and sequence.

(2) The ESC measures and BMPs to be used in the ESC Plan to meet the requirements for erosion source control, sediment control, and permanent erosion and soil stabilization control for the construction activities.

(3) The other controls and pollution prevention measures to be used to limit the off-site transport of pollutants that have the potential to discharge by means other than direct storm water runoff, and activities that can cause on-site contamination and increase the potential for pollutant discharge from runoff.

(4) A plan view map of the proposed site improvements with the location and description of applicable proposed measures, including drainage area boundaries, acreage, flow paths, and outfalls.

**82.940. Effluent Quality. [Reserved]**

**82.941. Setbacks from Critical Environmental Features and Waterways.**

(a) Drainage patterns for a development must be designed to protect all critical environmental features and waterways from the effects of runoff from developed areas, and to maintain the catchment areas of recharge features in a natural state. Controls shall be sufficient to avoid the effects of erosion, sedimentation, and high rate of flow.

(b) Setbacks for critical environmental features and waterways shall be included within protective, platted easements and shall not be within areas disturbed by construction activities.

(c) The following minimum setbacks are established around each critical environmental feature, except as provided by paragraph (4):

- (1) For a cave, sinkhole, spring, and wetland, the minimum width of the setback is 150 feet from the edge of the critical environmental feature.
- (2) For a point recharge feature, the required setback coincides with the topographically defined contributing surface drainage area to the feature, except that the width of the setback from the edge of the critical environmental feature must not be less than 150 feet and the setback need not extend greater than 300 feet, depending on the boundaries of the surface drainage area.
- (3) For a bluff or canyon rimrock feature, the minimum setback must be 50 feet.
- (4) The width of a critical environmental feature setback for an Edwards Aquifer karst or recharge feature may be reduced if evidence is provided by the applicant that the TCEQ has approved of the lesser width in accordance with the requirements or guidance specified for the Edwards Aquifer Protection Program.

(d) Except as provided in subsection (e) below, within a critical environmental feature setback:

- (1) the natural vegetation cover must be retained to the maximum extent practicable;
- (2) construction and related activities are prohibited; and
- (3) wastewater disposal and irrigation are prohibited.

(e) Subsection (d) does not apply to a yard, hiking trail, or a recharge basin designed to discharge to a point recharge feature without polluting ground water if the yard, hiking trail, or recharge basin is located at least 50 feet from the edge of the critical environmental feature.

(f) The setback from a bluff or rimrock shall not apply adjacent to the Pedernales River if:

- (1) all lots fronting the Pedernales River have a minimum frontage of 200 feet and a minimum size of one acre and best management practices are employed to achieve a level of water quality and environmental protection equivalent to the 50 foot setback; or
- (2) the County Executive grants an exception allowing a setback of no less than 25 feet based on a demonstration that a level of water quality and environmental protection equivalent to the 50 foot setback will be achieved through enhancement of natural vegetative cover within the setback, low impact site design, or other best management practices.

(g) Waterway Setbacks in an Eastern Watershed. The following setbacks apply in an eastern watershed and within the City of Austin ETJ in a western watershed, except as specified in subsection (j):

- (1) Waterways are classified as follows:
  - (A) A minor waterway has a drainage area of at least 64 acres and not more than 320 acres;
  - (B) An intermediate waterway has a drainage area of more that 320 acres and not more than 640 acres;
  - (C) A major waterway has a drainage area of more than 640 acres
- (2) A protected zone is established along each classified waterway as a waterway setback. A setback for a waterway shall be included within protective, platted easements.
  - (A) For a minor waterway, the boundary of the setback is located 100 feet from the centerline of the waterway.

- (B) For an intermediate waterway, the boundary of the setback is located 200 feet from the centerline of the waterway.
- (C) For a major waterway except for the Colorado River downstream from Lady Bird Lake, the boundary of the setback is located 300 feet from the centerline of the waterway.
- (D) For the Colorado River downstream from Lady Bird Lake, setbacks of 300 feet are established along and parallel to the shorelines of each bank of the river, beginning at the ordinary high water mark, as defined by Title 33, Code of Federal Regulations, Section 328.3. The setbacks also include the inundated areas that constitute the Colorado River.

(h) Waterway Setbacks in a Western Watershed. The following setbacks apply in a western watershed that is outside the ETJ of the City of Austin, except as specified in subsection (j):

- (1) Except as described in paragraph (2), a waterway setback shall comply with either option 1 or option 2, as described in subparagraphs (A) and (B).
  - (A) Option 1: Distance-Based Setback.
    - (i) Creeks or swales draining 40 or fewer acres but more than five acres, excluding roadside swales, shall have a minimum setback width of 25 feet from the centerline of the creek or swale.
    - (ii) Creeks or swales draining 128 or fewer acres but more than 40 acres shall have a minimum setback width of 75 feet from the centerline of the creek or swale.
    - (iii) Creeks draining 320 acres or fewer acres but more than 128 acres shall have a minimum setback width of 100 feet from the centerline of the creek or swale.
    - (iv) Creeks draining 640 or fewer acres but more than 320 acres shall have a minimum setback width of 200 feet from the centerline of the creek or swale.
    - (v) Creeks draining more than 640 acres shall have a minimum setback width of 300 feet from the centerline of the creek or swale.
  - (B) Option 2: Floodplain-based Setback.
    - (i) For creeks or rivers draining 40 square miles or less but more than five acres, excluding roadside swales, the setback shall extend a minimum of 25 feet from the 100-year floodplain boundary paralleling

each side of the creek or swale. The 100-year floodplain shall be based on the fully developed conditions using the LCRA Technical Manual standards.

- (ii) For creeks or rivers draining more than 40 square miles, the setback shall be considered equal to the 100-year floodplain as designated by Federal Emergency Management Agency or by an engineered floodplain study approved by LCRA, using the LCRA Technical Manual standards.

- (2) The shoreline boundary of the waterway setback for Lake Travis coincides with the 681.0 foot mean sea level contour line. The width of the setback, measured horizontally inland, is 100 feet, or, for a detached single-family residential use, 75 feet.

(i) **Limitation of Activity in Waterway Setbacks.** The following requirements apply to waterway setbacks established in subsections (g) – (h) of this section:

- (1) Setbacks shall remain free of construction, development, and other alterations except for approved utility and roadway crossings.
- (2) Wastewater collection lines and lift stations are prohibited from running within the setback zone parallel or sub-parallel to the waterway.
- (3) No golf courses, on-site wastewater systems or wastewater irrigation shall be located in a waterway setback.
- (4) Before reaching a setback area, drainage patterns from a development shall be designed to prevent erosion, maintain infiltration and recharge of local seeps and springs, attenuate the harm of contaminants collected and transported by storm water, and dispersed into a sheet flow pattern. Whenever possible, the natural drainage features and patterns must be maintained.
- (5) No part of a residential lot with a lot size of 5,750 square feet or less may be located within a waterway setback.

(j) **Exceptions to the Waterway Setbacks.** All requests for exceptions to waterway setbacks must be included as a part of the application submittal required by Section 82.931. Exceptions that may be approved include:

- (1) The County Executive may approve limited utility and roadway crossings. However, the number of crossings through a setback zone shall be minimized according to the guidance located in the LCRA Technical Manual or City of Austin Environmental Criteria Manual, as applicable to the watershed.

- (2) The County Executive may approve a necessary waterway crossing of a wastewater line in a waterway setback in accordance with the following procedures and guidelines:
  - (A) An applicant must provide an environmental assessment that concludes the alignment is the most appropriate alternative, based on an evaluation of the effects of alternative wastewater line alignments.
  - (B) The depth of a wastewater line crossing and location of associated manholes shall not be constructed within a City of Austin Erosion Hazard Zone where erosion is predicted to affect the structure.
  - (C) Except for a necessary crossing, a wastewater line in a waterway setback must be located outside the two-year floodplain.
- (3) The County Executive may approve necessary access and appurtenances to a boat dock, pier, wharf, or marina, along the Colorado River downstream from Lady Bird Lake and along Lake Travis, except along the Lake Travis shoreline in the setback of a swale, creek, or river. The access and appurtenances must follow a route through the setback area and a design that minimizes short-term and long-term erosion and runoff impacts, minimizes the clearing of vegetation, and minimizes additional impervious cover.
- (4) The County Executive may approve a low impact park development that is limited to trails, picnic facilities, open space not used as a parking lot, and similar construction that does not significantly alter the existing vegetation and drainage patterns or increase erosion. A low impact park development cannot include a stable or corral for animals.
- (5) Drainage retention basins and floodplain alterations are permitted in a waterway setback if they comply with the requirements of Chapter 64 of the Code.
- (6) In an eastern watershed:
  - (A) A reduction of the setback width, up to a minimum of 50 feet from a minor waterway, may be permitted so long as the overall surface area of the setback is the same or greater than the surface area that would be provided without this exception.
  - (B) Innovative permanent water quality controls, as specified in Section 1.6.7 of the City of Austin Environmental Criteria Manual, may be placed within the outermost one-half of the setback of an eastern waterway.
- (k) An application for development is also subject to the requirements of Chapter 64 of the Code, relating to development restrictions in a floodplain.

**82.942. Environmental Assessment.**

(a) An applicant shall submit an environmental assessment for any proposed development that is:

- (1) a residential subdivision development of ten acres or greater and proposing ten or more lots or a non-residential subdivision development of ten acres or greater;
- (2) a commercial, utility, or right-of-way development of three acres or greater;
- (3) a commercial, utility, or right-of-way development of less than three acres and greater than 10,000 square feet impervious cover, in which case only (b)(1) of this section applies.
- (4) for a residential or non-residential subdivision development of less than ten acres and greater than 10,000 square feet impervious cover, in which case only (b)(1) of this section applies.

(b) Except as otherwise provided in Subsection (a), each environmental assessment provided by an applicant must:

- (1) identify critical environmental features and waterways, and propose protection measures for the features;
- (2) identify any habitat of a federally-listed endangered species or Texas-threatened species within the area to be developed as well as within 500 feet outside the property line;
- (3) provide an environmental justification for spoil disposal locations and roadway alignments;
- (4) propose methods to achieve overland flow and justify enclosed storm sewers;
- (5) include a hydrogeologic report that:
  - (A) describes the topography, soils, and geology of the site;
  - (B) identifies springs and significant point recharge features on the site;
  - (C) demonstrates that proposed drainage patterns will protect the quality and quantity of recharge at significant point recharge features; and
  - (D) includes a water well survey of the site and properties adjacent to the site for a radius of 150 feet, inclusive of recorded water wells and a field survey of the area.

- (6) include a vegetation report describing existing site vegetation, the site's dominant plant communities (such as grassland, riparian, woodland, palustrian, or savanna), a list of the scientific and common names of the dominant species of identified communities, demonstrating that the proposed development preserves to the maximum extent practicable the significant trees and vegetation on the site and provides maximum erosion control and overland flow benefits from the vegetation; and
- (7) include a wastewater report that provides an environmental justification for any sewer line proposed to be located in a waterway setback described in Section 82.941, and describes construction techniques and standards for wastewater lines.

(c) If an applicant is required to prepare a tree assessment pursuant to Section 82.973, the applicant shall submit it as a part of the environmental assessment required by this section.

#### **82.943. Cut and Fill.**

(a) Land Balancing. Except as provided by subsection (b) of this section, a proposal for cut and fill land balancing must comply with the following requirements:

- (1) All cut and fill land balancing is limited to a maximum of eight vertical feet. This includes eight vertical feet maximum of excavated cut, eight vertical feet maximum placement of fill, or an eight vertical feet maximum combination of cut and fill.
- (2) Applicable fill containment, temporary controls, and permanent stabilization standards specified in Sections 82.936, 82.937, and 82.970 must be followed.
- (3) A retaining wall over five feet in height shall be detailed in the construction plans sealed by a Texas licensed professional engineer and submitted with the development permit application for a commercial site development, multi-family dwelling, or subdivision.
- (4) Cut and fill located on a slope with a gradient of more than 15 percent must include appropriate BMPs to prevent erosion, including diversion of surface water runoff; use of terraces; soil retention blankets, mulch, riprap or structural containment; establishment of mixed vegetation (such as forbs, shrubs, trees); or similar controls.
- (5) Cut and fill may not be located within 100 feet of the centerline of a waterway with 64 or more acres of drainage.
- (6) Every cut and fill proposal must be designed so that it complies with the requirement in Chapter 64 of the Code that flood plain storage must not be reduced.

- (7) The design and structural integrity of fill areas associated with residential lot construction must be consistent with the U.S. Department of Housing and Urban Development guidelines established in Data Sheet 79g entitled "Land Development with Controlled Earthwork" (1973). The County Executive may require that a proposal for fill for a residential construction project that includes critical site improvements as defined in section 82.936(c)(1) include design plans and specifications prepared and sealed by a Texas-licensed professional engineer.

(b) There are no limitations to the maximum height of cut or fill for the construction of permanent water quality controls, storm water detention ponds, streets, a building or parking structure's footprint, or driveways, so long as the requirements of (a)(2), (a)(3), and (a)(4) are followed. Additional requirements for the construction of a dam may apply.

(c) Fill Disposal.

- (1) No fill or excess fill from a construction site may be placed on any lot or land parcel unless the placement of the fill is authorized in an approved subdivision construction plan or development permit. Development permit applications must provide accurate site plan information regarding the location, size, boundaries, depth, grading, and erosion control measures for proposed filling activities.
- (2) This subsection does not apply to the placement of fill or topsoil less than twelve inches deep as part of an existing residential home landscaping activity that does not:
  - (A) Alter existing on-site or off-site drainage or the FEMA 100-year floodplain; or
  - (B) Encroach upon or affect rights-of-way, easements, other platted setbacks, waterways, or adjoining properties.
- (3) All temporarily placed fill shall be removed prior to acceptance of streets and drainage in a subdivision and in accordance with the approved construction plan, SWP3, and development permit.
- (4) Before removing fill from a permitted construction site, the owner or operator shall notify the Inspector of the destination of the fill.
- (5) A development permit application that proposes permanent disposal or temporary storage of fill material covering one acre or more as the primary construction activity, and that is not associated with a separately permitted primary construction project underway with a coordinated projected completion date for both permitted activities, is subject to the following special requirements:
  - (A) The permittee shall submit annual reports no later than the date of each one-year anniversary of the permit's issuance documenting:

- (i) the dates of receipt of fill material, each source of the fill, and the estimated quantity of material received during the past one year period;
- (ii) the estimated quantity of material still required to complete the fill and the approximate date at which time the fill site will be completed; and
- (iii) ESC needs and BMPs appropriate to the size of area still un-stabilized; and
- (iv) for projects required to implement a SWP3, the SWP3 updated to reflect current site conditions, including current SWP3 inspection reports in accordance with Subchapter J.

(B) It is cause for revocation of the Basic Development Permit, in accordance with Section 64.071(c), if the County Executive finds that an annual report has not been provided, the annual report provides incomplete or inaccurate information, site management in accordance with the SWP3 is inadequate, or in consideration of the project's lack of compliance with the development permit and the requirements of this section.

(C) Upon written notice of revocation, the permittee must complete all final stabilization activities for all disturbed areas, in accordance with the requirements of Section 82.936(d)(3) and within the timeframe set forth in the notice of revocation.

(6) Applicable fill containment, temporary controls, and permanent stabilization standards specified in Sections 82.936, 82.937, 82.970, and the retaining wall requirements of (a)(4) and (a)(5) of this section must be followed for all fill disposal activities.

(d) Quality of Fill material. Only uncontaminated earthen material and inert construction rubble may be used as fill. Protruding metal must be removed from concrete and rubble. The use of garbage, new asphalt, non-weathered asphalt, or soils containing non-weathered asphalt residue, or any material other than industrial solid waste that is Class 3 waste is strictly prohibited. All fill material must be inert and essentially insoluble. The applicant may be required to submit chemical analyses from a NELAC-certified laboratory to verify the fill material is inert, if the fill material has an odor, texture or appearance indicating that it is not inert and essentially insoluble.

#### **82.944. Permanent Water Quality Control.**

(a) Every proposed development in an area outside the City of Austin ETJ that includes the addition of greater than 10,000 square feet of impervious cover, every proposed subdivision, and every proposed commercial site must include permanent water quality controls for storm water in accordance with the standards applicable to its watershed location. Each application for a preliminary plan must include a storm water management plan that demonstrates permanent water quality structural and non-structural BMPs which will comply with this section and shows

their locations and dimensions. The storm water management plan may be included as part of a drainage plan under Section 82.207.

(b) Western Watersheds. This subsection applies to development that is located in a western watershed and outside the ETJ of the City of Austin:

- (1) **Water Quality Volume.** Each development project shall provide water quality volume in accordance with the approved BMPs found in the LCRA Technical Manual. The minimum required water quality volume is based on the one-year, three-hour storm runoff volume as defined in the LCRA Technical Manual. In addition, development projects can use low impact development methodologies as identified in the LCRA Technical Manual to reduce or avoid storm water storage volume.
- (2) In the Lake Travis watershed, the owner of a project for which a Travis County development permit is required must also obtain a LCRA BMP Maintenance Permit in accordance with Section 4, Subchapter A, Paragraph (d) of the LCRA HLWO effective March 1, 2007.
- (3) **Alternate Standards.** A subdivision development project that meets the criteria in (A) and a commercial development project subject to this section that meets the criteria in (B) need not comply with paragraphs (1) – (2), except as specified in paragraph (4).
  - (A) **Subdivision Preliminary Plans, Subdivision Final Plats, and Subdivision Construction Plans.**
    - (i) The gross impervious cover is 15 percent or less and the cluster development sections have 20 percent or less gross impervious cover, as defined in the LCRA Technical Manual.
    - (ii) A street and drainage network is designed to include the use of open-roadway sections, ribbon curb, maintenance of sheet flow, and employs the applicable permanent erosion control and stabilization standards specified in Sections 82.936, 82.937, and 82.970.
    - (iii) Impervious cover credit by use of porous pavement, rainwater harvesting, native landscaping and other methods will be considered during the application review to gain compliance as defined in the LCRA Technical Manual.
  - (B) **Commercial Site Development.**

- (i) Projects less than three acres in area that use vegetated filter strips and flow spreading methodologies as identified in the LCRA Technical Manual.
- (ii) Impervious cover credit by use of porous pavement, rainwater harvesting, native landscaping and other methods will be considered during the application review to gain compliance as defined in the LCRA Technical Manual.

(4) The County Executive may require that the water quality volume specified in paragraph (1) of this subsection be provided for a portion or portions of a development utilizing the alternate standards of paragraph (3), if a proposed project would create localized points of erosion or pollutant discharges sources and if the County Executive determines there are factors that may affect water quality such as the added volume of runoff, lot sizes in the subdivision, the location and proximity of impervious cover sections of the development to the 691 foot mean sea level contour line, the extent to which the development site is able to preserve or achieve sheet flow and sustain effective permanent site stabilization and vegetative cover, and the intensity of slopes to be developed at a site.

(c) Eastern Watersheds. This subsection applies to development that is located in an eastern watershed or within the ETJ of the City of Austin:

- (1) Each permanent water quality control must be designed in accordance with the City of Austin Environmental Criteria Manual.
  - (A) The permanent water quality control must provide at least the treatment level of a sedimentation / filtration system described in the City of Austin Environmental Criteria Manual.
  - (B) An impervious liner is required if placement of the permanent water quality control is within the Edwards Aquifer Recharge Zone or in an area where there is substantial surface runoff to groundwater conductivity. If a liner is required and controls are located in series, liners are not required for the second or later in the series following sedimentation, extended detention, or sedimentation / filtration.
- (2) A permanent water quality control must capture, isolate, and treat the water draining to the control from the contributing area. A permanent water quality control must be constructed if 10,000 square feet or greater of impervious cover is proposed. The required capture volume is:
  - (A) the first one-half inch of runoff; and
  - (B) for each ten percent increase in impervious cover over 20 percent of gross site area, an additional 0.1 inch of runoff.

- (3) The location of a permanent water quality control:
  - (A) must avoid recharge features to the greatest extent possible; and
  - (B) must be shown on the slope map, preliminary plan, site plan, subdivision construction plan, or development permit application, as applicable.

(d) Operation and Maintenance. In both an eastern and a western watershed, the owner or operator shall maintain all permanent water quality controls in a proper manner that is consistent with County and other applicable standards, including the BMP Maintenance Permit requirements of Section 82.917.

**82.945. Subdivision Plat Notes.**

(a) The following plat notes related to requirements in this Subchapter shall be included on each final subdivision plat. Additional notes may be required to more accurately reflect individual subdivision plat conditions.

(1) No cut or fill on any lot may exceed eight feet, excluding driveways, a building structure's footprint, or a parking area footprint, in accordance with the Travis County Code.

(2) As depicted on the plat, each protective easement from a critical environmental feature, including a cave, sinkhole, point recharge feature, bluff, canyon rimrock feature, wetland, and spring must remain in its existing, undeveloped, natural state. Natural vegetative cover must be retained. Construction activities, wastewater disposal, and wastewater irrigation are prohibited within a protective easement. A residential lawn or hiking trail is allowed if it is located at least 50 feet from the edge of a critical environmental feature in accordance with the Travis County Code.

(3) As depicted on the plat, the setback area identified for each waterway is a protective easement that must remain undeveloped and activities must be limited within the easement. The protective easement must remain free of construction, development, and other alterations except when specifically approved in a Travis County development permit.

(4) Before beginning construction activities on a subdivision lot, the owner must obtain a Travis County development permit and, when applicable, implement a Storm Water Pollution Prevention Plan (SWP3). The SWP3 requires implementation of temporary and permanent Best Management Practices, including erosion and sediment controls, for protection of storm water runoff quality, in accordance with the Travis County Code.

- (5) The owner is responsible for maintaining and operating all permanent water quality controls in compliance with all applicable standards and requirements of the Travis County Code. See Document \_\_\_\_\_.
- (6) An activity that may adversely affect a tree of eight inches or more in trunk diameter (measured at four feet height above the ground) in a right-of-way accepted for maintenance by Travis County must comply with all standards and requirements in the Travis County Code.
- (b) The subdivision final plat must depict the following information related to the requirements of this chapter:
- (1) Clearly marked and labeled, the location and dimensions of each protective easement pertaining to a setback from any critical environmental feature;
  - (2) Clearly marked and labeled, the location and dimensions of each protective easement pertaining to a setback from any waterway;
  - (3) Clearly marked and labeled, the location and dimensions of any waterway or karst buffer zone easement required by the Texas Commission on Environmental Quality, Edwards Aquifer Protection Program, pursuant to 30 Texas Administrative Code, Chapter 213;
  - (4) Clearly marked and labeled, the location and dimensions of any easement for placement of a permanent water quality control required by the Travis County Code, or required by another jurisdiction;
  - (5) The locations listed in paragraphs (1) – (4) shall be integrated into the drainage, floodplain, and other easements.

***Subchapter J. Storm Water Pollution Prevention Plan Inspections.***

**82.950. SWP3 Pre-Construction Conference Required.**

- (a) Except as described in Subsection (g), the SWP3 pre-construction conference requirements of this section apply to every project for which a SWP3 must be submitted to the County for approval.
- (b) The requirements of this section are in addition to any applicable pre-construction conference requirements of Section 82.603(d).
- (c) The owner of a project, or owner representative, shall participate in a pre-construction conference with the designated Inspector before starting construction under an approved site plan or subdivision construction plan.
- (d) The owner or owner's designated representative shall provide notice of the SWP3 pre-construction conference and a copy of the approved plans for the development to the following persons or entities at least two business days before the conference:
- (1) primary operator with operational control of the plans and specifications;
  - (2) designated Inspector(s);
  - (3) design engineer or representative for the approved plans and SWP3;
  - (4) contractor(s) and primary operator(s) with day to day operational control of the construction site;
  - (5) designated qualified inspector for the operator responsible for preparing the SWP3 inspection reports
  - (6) municipal development review representatives, as appropriate; and
  - (7) affected utility representatives.
- (e) The SWP3 pre-construction conference may be a discrete meeting or a subset of a larger project pre-construction conference, but must include an on-site inspection and approval by the Inspector of the installation of the first phase of the project's erosion and sediment controls before the construction activities can commence. Participants must evaluate the adequacy of the SWP3 utilizing a SWP3 Operator Compliance Checklist available from Travis County summarizing the storm water management tasks which must be performed by the operator during construction. The Inspector shall briefly explain and discuss the SWP3 requirements with the participants. The conference shall include discussion of the following items in the approved permit, plans, and SWP3:

- (1) the approved phasing of the project, the non-structural erosion source controls, the detailed sequence of construction and BMP implementation, start dates, and schedule of events;
- (2) sediment control installation, phasing of the various perimeter and interior controls throughout construction, including structural erosion source controls such as diversion and dissipation, and maintenance requirements;
- (3) the adequacy of the initial installation and future control phases to address site conditions;
- (4) temporary and permanent stabilization and re-vegetation requirements and phasing schedule throughout construction, including critical site improvements and priority re-vegetation areas;
- (5) on or off-site temporary and permanent spoil and fill disposal areas, haul roads, and staging areas;
- (6) permanent water quality structural controls and related grading and drainage construction;
- (7) special conditions or provisions of plans or specifications, such as future homebuilding on lots, protection of waterways, critical environmental features, and trees to be saved;
- (8) observation and documentation of existing site conditions adjacent to and downstream from the limits of construction prior to soil disturbing activities, including waterways and potential outfall discharge routes, rights-of-way and easements, buffer zones, and critical environmental features;
- (9) site supervision of the SWP3 implementation by the Primary Operator's designated on-site project manager, including roles, responsibilities, and coordination when more than one operator is charged with tasks in implementing a shared SWP3;
- (10) monitoring inspections of the SWP3 by the operator's qualified inspector, and SWP3 inspections by the Inspector, and a schedule for submittal of the SWP3 Inspection Reports;
- (11) rain gage location or rainfall information source to be used during construction and reporting, when applicable;
- (12) the potential necessity for adjustment and revision of the ESC Plan and SWP3 controls;

- (13) exchange of telephone numbers and other contact information for the primary and secondary operators, designated qualified SWP3 inspector for the owner, and designated Inspector; and
  - (14) final inspection and acceptance requirements.
- (f) The owner's consulting engineer shall prepare and distribute notes, key decisions, and follow up from the preconstruction conference to all participants within three business days after completion of the conference.
- (g) The requirement for a pre-construction conference does not apply to construction on a single family residential lot, unless so specified in a Travis County development permit, based upon the potential impact on water quality of the activities approved for construction.

**82.951. Owner and Primary Operator SWP3 Inspections.**

- (a) General. The requirements of this section are in addition to the applicable technical criteria in Section 82.933 and the requirements in Section 82.601.
- (b) Owner and Operator SWP3 Inspection Responsibilities. An owner or operator shall comply with the following requirements in the implementation and inspection of construction projects and associated recordkeeping subject to a SWP3 and Travis County development permit:
- (1) The owner or operator shall post at the construction site a copy of the TCEQ Construction Site Notice ("CSN") and, if the project disturbs five or more acres a copy of the TCEQ Notice of Intent ("NOI"). No later than two days before the start of construction, the owner or operator must provide the County Executive a copy of the TCEQ CSN. No later than seven days before the start of construction, the owner or operator must provide to the County Executive a copy of the TCEQ NOI, if any.
  - (2) The owner or operator shall designate an on-site project manager and personnel with the necessary experience, qualifications, and training who will be responsible for performing and monitoring the SWP3, ESC Plan BMPs, and construction activities to ensure specified practices and structural controls are continuously implemented and maintained in effective operating condition throughout construction. The owner or operator must perform any ongoing inspections, monitoring, and actions necessary to maintain compliance, including preparing a signed SWP3 Inspection Report on the schedule described in paragraph (4) of this subsection. Any necessary corrective action identified shall be recorded on the SWP3 Inspection Report. The owner or operator shall ensure any corrective action is promptly performed in accordance with the SWP3 and requirements of this Chapter.
  - (3) The owner or operator shall designate a qualified inspector familiar with the SWP3 and possessing the required certification as specified in Section 82.934(c) to conduct an SWP3 inspection of the site and prepare the signed SWP3 Inspection Report. The

designated project manager and the qualified SWP3 inspector are to coordinate with the Inspector on a regular basis during construction to help ensure the SWP3 controls and measures are properly implemented.

(4) SWP3 Inspection and Report Schedule. From the start of construction site soil disturbing activity until the entire site is temporarily or finally stabilized, the SWP3 inspections shall be conducted at least once every seven calendar days on a specifically defined day. In addition, a SWP3 inspection shall be conducted within 48 hours of the end of a storm event of 0.5 inches or greater, unless the seven day inspection falls within the 48-hour period. Information from this post-storm event inspection shall be included in the signed SWP3 Inspection Report.

(5) When the entire site has been finally or temporarily stabilized, inspections must be conducted at least once every month until final inspection release. This also applies to discrete areas or phases of a larger active site which are finally or temporarily stabilized. Unfinished sites finally or temporarily stabilized but inactive for three months or longer must be inspected once every two months as a minimum.

(6) Long, narrow, linear construction activities where access is limited may be inspected on an alternative schedule, with representative inspections in accordance with the TCEQ General Permit, if the owner or operator submits supporting documentation to the County and the County approves the alternative schedule.

(7) In the event of flooding or other uncontrollable situations which prohibit access to the inspection sites, the inspection must be conducted as soon as access is practical.

(8) The SWP3 inspection must include inspection of the site for compliance with all applicable SWP3 requirements. Areas of the construction site that must be inspected and items to be included in the SWP3 Inspection Report are described in Subsection (c).

(9) The SWP3 must be revised as necessary based on any inspection result by the primary operator or Inspector for Travis County, in a manner that will eliminate or minimize, to the maximum extent practicable, the discharge or potential discharge of pollutants in runoff. The owner or operator must revise the SWP3 as necessary in accordance with Section 82.935(i).

(10) Final Inspection and Certificate of Compliance. The owner or operator shall schedule a final inspection with the Inspector when all SWP3 and related construction plan requirements are completed. Completion of the SWP3 includes final site stabilization, removal and proper disposal of all sediment controls and accumulated sediment, and proper construction of each permanent storm water management control and drainage system. When required for the project, the final inspection must be preceded by submittal of the design engineer's concurrence letter, as required by Section 82.953.

(A) If the findings of the inspection demonstrate to Travis County that the SWP3 and construction plan requirements have been fully completed, a Certificate of Compliance will be issued for the project and any fiscal security for erosion and sedimentation controls or permanent storm water management facilities shall be released. The primary operator must not submit a Notice of Termination until after the primary operator has obtained a Certificate of Compliance for the project from Travis County.

(B) If re-vegetation coverage is not fully completed, a Developers Contract as described in Section 82.936(d)(4) may be issued at the discretion of Travis County for eligible projects with fiscal security posted for erosion and sedimentation controls, as a conditional acceptance until the required vegetative coverage is attained.

(C) The requirement for a final inspection and certificate of compliance does not apply to construction on a single family residential lot, unless so specified in the Travis County development permit, based upon the potential impact on water quality of the activities approved for construction. Regardless, residential lot construction must comply with all applicable SWP3 and ESC Plan measures and requirements of this Chapter prior to submission of the Notice of Termination, including construction sequence, final completion schedule, and final site stabilization.

(c) SWP3 Inspection Areas and Report Contents.

(1) SWP3 inspections must cover all areas of the construction site to determine whether SWP3 and ESC Plan BMPs are fully implemented and operating as required, and to determine if there is evidence of, or the potential for, pollutants entering the drainage system and discharging off-site. Areas of the construction site that must be inspected include each:

(A) disturbed area and approved limits of construction, and evaluation of all disturbed areas and critical site improvements for compliance with requirements for initiation of temporary or permanent stabilization based on the approved sequence of construction or cessation of construction activities;

(B) area undergoing temporary stabilization measures or permanent vegetation establishment;

(C) area used for storage of materials and equipment that is exposed to precipitation;

(D) temporary or permanent fill and spoil storage or disposal area;

(E) outfall discharge location and the area immediately downstream of each outfall location;

- (F) structural control, including any sediment pond, sediment trap, and drainage diversion;
- (G) perimeter and interior sediment control measure;
- (H) haul road and location where vehicles enter or exit the site, and each adjacent roadway for evidence of off-site sediment tracking;
- (I) waterway crossing and each area adjacent to a surface water or critical environmental feature; and
- (J) concrete wash out area, non-storm water discharge control, and any other control or pollution prevention measure applicable, including control measures for dust, solid waste, de-watering, material spills, vehicle maintenance and washing, and wash water discharges.

(2) For each scheduled SWP3 inspection required by subsection (b), the designated, qualified inspector shall prepare and sign a SWP3 Inspection Report, certifying whether the site is in compliance with the SWP3, and describing any corrective actions necessary. The SWP3 Inspection Report shall contain notations on inspection findings, the site's compliance status with the BMPs in the SWP3, and the approved ESC plan for the areas listed in paragraph (1), including:

- (A) compliance with applicable erosion source controls, including site phasing, sequence of construction, drainage diversion, temporary and permanent fill disposal and stockpile management;
- (B) compliance with sediment controls, including perimeter and interior controls, sediment traps and basins;
- (C) compliance with permanent erosion and soil stabilization controls, including initiation of temporary or permanent stabilization based on the sequence of construction or cessation of construction activities, including stabilization of critical site improvements;
- (D) compliance with applicable other controls and pollution prevention measures;
- (E) all locations of discharge of sediment or other pollutants from the site and each disturbance beyond the approved limits of construction;
- (F) all locations of a BMP that requires maintenance, including any BMP location identified in the previous SWP3 Inspection Report needing maintenance or revision that was not accomplished;

- (G) all locations of a BMP that failed to operate as designed or proved inadequate for a particular location;
- (H) all locations where an additional ESC or BMP is needed;
- (I) rainfall dates and amounts, in accordance with Section 82.934(e) if required by that section, and if not required by Section 82.934(e), then based upon accurate rainfall data in close proximity to the site; and
- (J) all corrective actions required for any non-compliant items and the schedule of completion for these items.

(3) SWP3 Site Notebook and Records. The SWP3 Site Notebook and contents, as described in Section 82.935(h), shall be maintained by the primary operator or the qualified inspector at the construction site, and it shall be readily available upon request. All SWP3 records must be kept by the owner or primary operator for a minimum of three years after site completion.

**82.952. Submittal of SWP3 Operator Inspection Reports.** At the request of the Inspector, the owner or operator shall periodically submit each SWP3 Inspection Report that is required by this subchapter. Each submittal shall be in a format and at a frequency agreed upon by the owner or operator and Inspector.

**82.953. Submittal of Engineer's Concurrence Letter.** This section applies to a development proposal that requires sealed plans prepared by a Texas-licensed professional engineer. At the time of substantial completion of construction in accordance with the approved construction plan, SWP3, and Travis County development permit, a Texas-licensed professional engineer shall submit a concurrence letter to Travis County and the owner which states the project has been substantially completed in conformance with the approved plans and development permit. The concurrence letter shall request a final inspection and approval that the project is complete. The concurrence letter must address completion of final stabilization as required by Section 82.936(d)(3)(H). These requirements are in addition to any applicable requirements of Section 82.604.

***Subchapter K. Roadways and Rights of Way.***

**82.970 ESC Plan Standards for Roadways and Drainage Easements.**

(a) Temporary and permanent ESC Plan design for roadway right-of-way and drainage easement areas must comply with the technical criteria and standards in Sections 82.933, 82.936, 82.937, and 82.940, as well as the additional requirements outlined in this section. These standards apply to the construction of new roadways, improvements to existing roadways that require disturbance of land, and construction of utilities within existing roadway rights-of-way.

(b) The temporary ESC plan during construction must minimize the discharge of sediment and pollutants to prevent sedimentation of drainage structures, off-site areas, surface waters, adverse impacts to aquatic life, reduced flow capacity, excessive stream bank erosion, erosion around structures, or damage of adjoining property.

(c) The permanent erosion control and stabilization plan design shall be in conformance with the Austin Drainage Criteria Manual and Environmental Criteria Manual requirements for velocities to be below erosive values for the particular soil conditions. All structures must be designed and constructed to withstand the forces of the 25-year, 24-hour storm event.

(1) The plan provisions must ensure permanent stabilization of all disturbed soil areas with permanent vegetation, including the following special considerations for slopes and embankments:

(A) Disturbed roadside slopes in excess of ten percent grade must be covered with temporary mulch or soil retention blankets or equivalent methods in addition to seeding to achieve permanent vegetative stabilization, if the slope's length and runoff volume have the potential to result in substantial erosion of the slope during or after the vegetation establishment period.

(B) The methods specified in (A) shall also be used on disturbed slopes associated with culvert and bridge crossings.

(2) The plan provisions must prevent erosion from runoff velocity exiting at an outlet of a culvert, bridge, storm sewer, and channel through use of a dissipater, rip-rap, level spreader, lining, gabion, or similar BMP, and include erosion control protection of the inlets to such structures where necessary;

(3) The plan provisions must prevent gulying and scouring of a roadside or outfall open channel from high shear stress, through vegetation, lining, soil retention blankets, a permanent berm structure, a drop structure, or similar BMP, both during and after the vegetation re-establishment period;

(4) The plan must include provisions that address impacts from the slope of an open channel, as follows:

(A) An open channel with a flow line grade of two percent or greater must be protected from erosion using temporary or permanent soil cover measures in addition to seeding to achieve permanent soil stabilization.

(B) Adequate soil cover measures in addition to seeding must be used to achieve permanent soil stabilization in an open channel less than two percent grade where the channel geometry, volume, velocity, or shear stress will result in erosion during or after the vegetation establishment period.

(C) Structural hardening for flow line protection in addition to the measures described in subparagraph (A) must be considered for open channels with flow line grades between two to five percent if flow volume, velocity, and shear stress will result in channel erosion both during and after the vegetation establishment period.

(D) The considerations of subparagraph (C) are mandatory if the open channel grade exceeds five percent.

(E) If heterogeneous soil conditions or stratigraphy are present in the open channel, such as exposed bedrock or subsoil layers of varying hardness, the additional measures or alternatives specified in (A) – (C) must be used to achieve effective final stabilization.

(F) Channel volume, velocity, and shear stress calculations may be performed by the engineer to propose alternate channel stabilization measures, and these calculations are mandatory for channels required to be designed using the Austin Drainage Criteria Manual.

(5) The plan provisions must protect the integrity of any structural improvement and prevent excessive continuing sedimentation from an unstable right-of-way area into any drainage structure and roadside channel; and

(6) The plan provisions must stabilize a driveway approach to prevent erosion and achieve proper drainage conveyance on a rural design roadside, using a standard driveway approach detail in accordance with Section 82.302(g) and the corresponding exhibits or using an alternative driveway approach that is approved by the County Executive.

(c) A stream crossing design for a roadway shall employ spanning, bridging, structural containment, or similar design methods to the maximum extent practicable to minimize the amount and the proximity of erodible fill soil for roadside embankments, approaches, and slopes adjacent to the stream crossings. Design and alignment for a proposed crossing of a waterway through a waterway setback may require approval of an exception in accordance with Section 82.941. Sediment controls and permanent erosion control design considerations for all stream crossing construction shall follow the applicable standards of this section and Sections 82.936 and 82.937.

**82.971. Low Impact Development Design.**

(a) The County Executive may approve the use of alternative design criteria for selected roadside areas and local roadways to support the use of low impact development (“LID”) techniques for enhanced water quality and runoff mitigation if the design can substantially meet the traffic safety and drainage conveyance design standards in Section 82.302 and can be maintained on a long-term basis. Design criteria and LID techniques must comply with the applicable technical standards in section 82.933. Alternate design criteria that may be approved include: ribbon curb without roadside drainage swales; grassed roadside drainage swale systems instead of curb and gutter; vegetative filter strips; storm water infiltration techniques; storm water wetlands; natural area preservation; reuse of native topsoil; native grasses and vegetation; and soil amendment and conservation landscaping. Alternative and LID designs must also demonstrate long-term maintenance feasibility.

(b) Applicability of Standards. The use of the alternative design criteria set forth in Subsection (a) may be applied to Travis County improvements and maintenance to County-owned or leased land, easements, and rights-of-way, including County road, park, or facilities operation and maintenance activities. Additionally, the criteria may be applied to development permit and plat applications of any type.

**82.972. Native Vegetation.** The applicant should consider the use of native plants and grass cover for the re-vegetation of construction areas wherever it is feasible

(a) In determining whether to use native vegetation for re-vegetation and landscaping, an applicant shall consider the existing site conditions and planned uses of the area; the degree of urbanization versus the undeveloped, natural character of the area; the limitations of the available water supply for irrigation, and the owners and parties responsible for ongoing maintenance of the area

(b) An applicant should consider selected native vegetation and grass cover for areas that are more rural and natural in character, less urbanized and developed, and areas where regular landscape maintenance is less practicable and more suited to native vegetation, as well as any areas where it is desired to achieve a more natural, low-maintenance landscape condition.

(c) Seasonal native wildflowers should be considered for the roadsides and open spaces of Travis County, if it is feasible.

(d) An applicant should consider the use of sustainable designs with native plants to maintain or reduce long-term maintenance costs.

(e) County right-of-way areas being regularly maintained by the property owners directly adjacent to such areas shall implement the native vegetation standards specified in this section whenever feasible, but may generally follow the landscape character and maintenance standards of the adjacent developed areas, or as agreed upon by local residents or neighborhood associations, or in accordance with any maintenance or license agreements entered into with Travis County.

### **82.973. Tree Preservation.**

- (a) **Applicability.** This section applies to Travis County improvements and maintenance to County-owned or leased land, easements, and rights-of-way. This includes capital improvement projects or any construction improvements to County roads, bridges, parks, drainage, utilities, buildings, and parking facilities. This also includes County road, park, and facility operation and maintenance activities, including maintenance construction. This section also applies to applications for development permits and plats as described in subsection (c) below.
- (b) **County Project Implementation.** The County is responsible for ensuring the design and implementation of an applicable project is completed in conformance with the requirements of this section. The person responsible for the County project must prepare and submit a tree assessment to the County Executive for review.
- (c) **Development Application Requirements.** Development permit and plat applications of any type that include proposed development activities affecting trees in an existing or proposed County right-of-way shall follow the standards in this section. The applicant must prepare and submit a tree assessment in accordance with subsection (d), when applicable, as part of the development permit review process.
- (d) **Tree Assessment.**
- (1) The applicant or the applicable Travis County department proposing a development must submit a tree survey and tree assessment that evaluates areas proposed for development on County-owned land, County-leased land, and County road right-of-way. The detailed tree survey area extent in the tree assessment must include the proposed right-of-way and easement areas on the site as a minimum. The assessment must include explanations of any alternate right-of-way corridor options considered to save any particularly valuable trees, and the rationale and feasibility of the corridor selected.
  - (2) The tree assessment must be consistent with the guidelines of the City of Austin *Environmental Criteria Manual, Section 3 – Tree and Natural Area Preservation* (effective [Insert effective date of rule]). The assessment must include a tree survey, identification of significant trees, proposed measures to preserve significant trees, and mitigation measures for significant trees that would not be preserved.
  - (3) A tree survey must be certified by a Texas-registered professional land surveyor and conducted in accordance with the most current land surveying practice pertaining to topographic, easement and boundary surveys. The tree assessment must be prepared by a person qualified in the identification of trees present in Travis County and tree condition.
  - (4) When a tree assessment is required, a development permit applicant proposing activities affecting trees in a right-of-way or right-of-way easement shall submit tree assessment information that includes: trunk location and diameter, tree species,

proximity of the proposed construction activities to a tree(s), proposed pruning or removal activities, and proposed protection measures. Subdivision and commercial site development construction shall include tree assessment information as part of the engineered, surveyed construction plan submittal.

(e) The tree assessment will be reviewed as a part of the application review process, or in response to a County departmental request. A determination will be made as to whether the tree assessment:

(1) is sufficiently complete and prepared consistent with the City of Austin Environmental Criteria Manual guidelines;

(2) identifies significant trees and sufficiently avoided them in the development design;

(3) includes an analysis of design constraints, clear zones associated with roadway design, and alternatives; and

(4) proposes sufficient mitigation measures when necessary.

(f) The approved tree assessment, the design constraints, tree protection measures, and mitigation become a part of the approved development plan, and shall be implemented in accordance with the approved permit and construction plans.

**82.974. Responsibility for Unaccepted Roadways.**

(a) An owner of an unaccepted roadway is the person responsible for any pollution, discharge of pollutants, and excessive storm water drainage impacts that may be caused by the operation of the roadway.

(b) The owner of a roadway whose operation is observed to be causing pollution, the discharge of pollutants, or excessive storm water drainage discharge impacts must mitigate such effects. Erosion mitigation measures, if required, shall follow sediment control and permanent erosion control and stabilization standards set forth in Section 82.970 and Sections 82.933 - 82.940.

***Subchapter L. Mine and Quarry Water Quality Protection.***

**82.980. Applicability and Scope.** This subchapter applies to proposals to develop land for the purpose of mining or quarrying. This subchapter addresses application submittal requirements, best management practices for the control of pollutants discharged in storm water as a result of mining or quarrying activities, and site stabilization following completion of mining or quarrying.

**82.981. Exempt Activities.** The following activities are exempt from the requirements of this subchapter, but such activities must comply with all other applicable requirements of this Chapter and Chapter 64 of the Code:

- (a) Excavations or grading solely for domestic or farm use when carried out at a residence or farm;
- (b) Excavations or grading conducted for the construction, re-construction, maintenance, or repair of a roadway, railroad, airport facility, or other transportation facility where the excavation or grading is entirely within the property boundaries or easement of the facility;
- (c) Excavations for building construction purposes conducted on a building site; and
- (d) Quarry or mine sites where less than one acre of total affected acreage occurs over the life of the quarry or mine.

**82.982. Pre-Proposal Requirements.** An applicant must schedule a pre-proposal concept plan meeting with the County regarding any quarry or mine proposal that will disturb five or more acres of land surface. The meeting purpose is to discuss potential disturbed areas, slopes, setbacks, water diversions, and water quality management practices. The meeting may include a site investigation. The applicant may be requested to modify the proposal before it is submitted as an application, in order to reduce pollutant discharges to the maximum extent practicable. If the proposal is within the geographic boundary of a groundwater conservation district, the applicant must notify the district of the plan prior to initiating a quarry or mining facility.

**82.983. Submittal Requirements for Environmental Review.**

- (a) In addition to any other requirement of the Travis County Code, an application for a quarry or mine must include the information specified in this section.
- (b) Unless waived as specified in paragraph (9), the proposed commercial site development plan and construction plan application for a quarry or mine must include:
  - (1) Except for small construction projects, an environmental assessment as specified in Section 82.942 including a survey of critical environmental features, waterways, and proposed setbacks that comply with applicable standards;
  - (2) Permanent water quality controls for areas of the site specified in Section 82.989 and a summary that describes how the proposed permanent water

quality controls comply with applicable water quality standards and are compatible with drainage plan standards;

- (3) A hydrologic report certified by a Texas-licensed professional engineer defining impoundments, streams, floodplains, and proposed drainage diversions including water quality BMPs within the proposed mine or quarry property boundaries;
- (4) A Resource Extraction Plan, in accordance with Section 82.985;
- (5) General construction notes that reference the SWP3 and storm water management controls for any portion of the site that does not drain to a resource extraction area, in accordance with Section 82.935(g)(1) and (2);
- (6) Except for small construction projects, the application must include for any portion of the site that does not drain to a resource extraction area:
  - (A) SWP3 description information in standard format plan sheets or pages in accordance with Section 82.935(c) - (f) and (h);
  - (B) SWP3 ESC site plan and detail sheets, in accordance with Section 82.935(g)(3), including other BMPs as appropriate; and
  - (C) Permanent BMP Plan Sheet(s) showing the design and details of permanent water quality controls compatible with drainage plan standards, in accordance with Section 82.935(g)(4);
- (7) A stabilization plan and cost estimate to implement the plan in accordance with Section 82.990 and that describes the fiscal security that will be posted to ensure final stabilization of the site, in accordance with applicable provisions of Section 82.991;
- (8) For a quarry or mine site development that will use an OSSF, the application must include documentation by the applicant that the OSSF construction area will be included in the erosion and sediment controls and SWP3 coverage for the site development project; and
- (9) On a case-by-case and limited basis, the County Executive may waive the requirement for an applicant to submit an environmental assessment, hydrologic report, or resource extraction plan. The determination will be based upon the significance of the site conditions, planned quarry or mine activities, size of the quarry or mine, and depth of excavation, professional standards for the appropriate submittals, and the project's proximity or potential impacts on surface water quality. Submittals that are waived will be communicated in writing after review of the applicant's written justification for waiver and after the pre-proposal concept plan meeting specified in Section 82.982.

**82.984. Other Local, State, and Federal Regulations.** An applicant must comply with Section 82.916 relating to other environmental authorizations required for the quarry or mine. In addition, the applicant must provide copies of, or access to all applicable plans, reports, and approvals from other regulatory agencies, for the following:

- (a) A Spill Prevention Control, Containment, and Countermeasures Plan required by the U.S. Environmental Protection Agency;
- (b) A Hazard Communications Plan as required by the Mine Safety and Health Administration;
- (c) A Marl, Sand, and Gravel Mining Permit required by the Texas Parks and Wildlife Department for mining in public water of the State, if applicable; and
- (d) Documentation of compliance with groundwater conservation district requirements, if applicable.

**82.985. Resource Extraction Plan.** A resource extraction plan shall be certified by a Texas-licensed professional engineer, or other qualified professional (i.e. a registered landscape architect or a licensed professional geoscientist), and submitted with the permit application. Each resource extraction plan must:

- (a) Show the anticipated location and approximate depth of the proposed resource extraction in plan and profile view. Plan view must include two foot contour (or less) interval topography. Paper construction sheet submittals must be at a scale no greater than one inch equals 400 feet on 24-inch by 36-inch document sheets. As an alternative, digital construction plan sheets will be accepted when prepared in a commonly available format.
- (b) Include a general description of material to be extracted on a cross-section profile.
- (c) Show the planned initial location of all haul roads, equipment, office and facilities, and materials handling areas.
- (d) Describe all initial necessary measures and installations for diversion and drainage of runoff from the site to prevent pollutant discharges to a waterway or wetland and describe all runoff diversions that may drain to a neighboring property.
- (e) Provide notes on operational storm water controls for all areas of initial land disturbance.
- (f) Show proposed mine or quarry boundaries, property limits, mining limits, approximate mining depths, drainage plan, creek crossings, and diversions.
- (g) Describe general planned practices for material management, including planned extraction and replacement practices, overburden storage practices, procedures for accepting potential fill material in accordance with Section 82.990(b)(6), and general planned restoration practices.

**82.986. Monitoring of Storm Water Discharges.**

- (a) If a discharge to a waterway or wetland of storm water associated with quarrying or mining will occur from the proposed site, then the facility must comply with all applicable federal, state, and local regulations.
- (b) If a discharge is to be covered under the TCEQ Industrial Multi-Sector General Storm Water Permit, then the owner or operator can use applicable portions of the required SWP3 as the basis for a surface water monitoring plan, but shall monitor at least once per quarter when a representative discharge occurs, for total suspended solids.
- (c) Monitoring data shall be readily available for Inspector review. At the request of the Inspector, documentation of the monitoring and results shall be submitted to the County within five business days of the request.

**82.987. General Water Quality Protection Standards.**

- (a) ESC Control. Erosion and sedimentation shall be controlled by the owner and operator throughout the quarry and mine process and during the stabilization and reclamation phases, in order to ensure that any discharge to a waterway complies with all applicable effluent limitations and requirements of a U.S. Environmental Protection Agency, TCEQ, or other discharge permit.
- (b) Temporary Stabilization Requirements. Any disturbed area, including an overburden stockpile that is observed to be the source of excessive sediment in runoff, shall require improved BMP's, such as re-vegetation, sediment capture, or other suitable methods, to minimize erosion or runoff of sediment-laden storm water to a waterway.
- (c) The owner and operator have the continuing obligation to operate and maintain a mine or quarry in accordance with all approved plans, specifications, and permit conditions, until all portions of the site have been stabilized as necessary to protect surface water quality, or the property has been returned to an alternative post-mining use. The alternative post-mining use will be subject to all applicable federal, state, and local rules, including requirements in the Travis County Code.
- (d) For a project area discharging to a resource extraction area, an applicant shall use drainage diversions or other BMPs as necessary to prevent sediment from discharging into karst features. Recharge features with a surface opening greater than 0.25 square feet in area that are located on the floor of a quarry or mine must be sealed or protected in order to prevent sediment from infiltrating with storm water runoff.
- (e) Excavation limits. All excavations may operate at a vertical slope but it is recommended that during excavation activities, side slopes not exceed a 2-horizontal to

1-vertical unit ratio on the portion of the site adjacent to or within a waterway setback in order to prevent a breach of a natural water body.

**82.988. Setbacks from Critical Environmental Features and Waterways.**

(a) The requirements for setbacks from critical environmental features and waterways specified in Section 82.941 apply to a mine or quarry proposal.

(b) In addition to the requirements of Section 82.921, a variance from a minor waterway setback may be approved by the Commissioners' Court based on an environmental assessment by the applicant that a minor waterway does not exhibit significant aquatic and riparian resource value, defined bed and banks, and a change in hydrologic functions detrimental to the waterway downstream.

**82.989. Permanent Water Quality Control.** Permanent water quality controls must be provided for areas of the site that are to be developed and that do not drain into a resource extraction area. The applicability of permanent water quality control standards is based upon watershed location in accordance with Section 82.944. For a site in an eastern watershed, the requirements of Section 82.944 apply along with any additional criteria specified in section 1.3.4 of the City of Austin Environmental Criteria Manual, relating to Pollutant Attenuation Plan.

**82.990. Stabilization Plan.**

(a) Each application for a Travis County development permit must include a stabilization plan. The stabilization plan must describe how the site will be stabilized using final measures to protect water quality once the mining or quarrying activities are complete. The plan must address all areas affected by mining or quarrying, and show the steps that the applicant will take to ensure the site is left in a condition that has stabilized land surfaces, provides for human safety, and is suitable for the applicant's proposed post-mining land use. Concurrent stabilization shall be conducted, whenever feasible, to minimize the land area disturbed by mining or quarrying at any given time. The plan must provide for complete stabilization of each area of the site following completion of mining or quarrying while mining or quarrying continues on other portions of the site.

(b) Each stabilization plan shall describe:

(1) the overall plan for the mine or quarry stabilization activities including methods (such as concurrent stabilization), proposed phases of stabilization for each particular area of the site, and a time schedule, including interim milestones and final completion;

(2) proposed stabilization for each area of the site such as protected riparian corridor areas, restoration of disturbed areas, areas of re-vegetation, and areas where future development is planned;

- (3) specific methods to establish vegetative cover within two-years of completion of each phase of excavation, except as required by paragraph (8), to restore areas to conditions compatible with what existed prior to the excavation, except on quarry walls, flooded areas, and areas that are designed to be flooded over time, including within two-years of final completion of all resource extraction at the permitted site, unless the site has been entered into an alternative post-mining use;
  - (4) those structures, temporary haul roads, and storage areas that will be removed within one-year of completion of each phase of excavation and within one-year of final completion of all resource extraction at the permitted site;
  - (5) the stabilization measures that will be used, such as re-seeding or placement of erosion blankets, temporary irrigation, and other soil stabilization practices;
  - (6) if applicable, the procedures to be used in accepting off-site material for backfill, in accordance with TCEQ guidance from TCEQ's Rule Interpretation Summary Form 330-4.001 and as described in Section 82.943(d);
  - (7) a detailed cost estimate for the construction that is necessary to completely implement the mine or quarry stabilization plan and that is consistent with the requirements of Section 82.991; and
  - (8) for each area of the site with disturbed land cover that drains to a waterway, the schedule and requirements for final stabilization must comply with Section 82.936(d)(3).
- (c) The stabilization plan must be approved by Travis County and fiscal security shall be posted in accordance with Section 82.991 prior to issuance of the Travis County development permit for the site.

**82.991. Fiscal Security.**

- (a) Within the City of Austin ETJ, fiscal security pertaining to site stabilization of the quarry or mine shall be posted with the City of Austin and evidence of the fiscal security shall be provided to Travis County.
- (b) In areas outside the City of Austin ETJ, fiscal security shall be posted with Travis County unless there is a legal agreement between Travis County and another jurisdiction that assigns fiscal security to another entity. The following requirements and procedures shall apply:
  - (1) Filing. Following approval of the mine or quarry stabilization plan, and as a condition of approval of the Travis County development permit, the applicant shall file fiscal security payable to Travis County. The fiscal security shall provide that the owner or operator shall faithfully perform all requirements for site stabilization necessary to adequately protect surface water quality.

(2) Amount and Duration. The amount of fiscal security shall equal as closely as possible the cost to the County Executive of hiring a contractor to complete either final stabilization initiatives or concurrent stabilization, according to the approved stabilization plan. The amount of the fiscal security may be reviewed once every five years by the County Executive to assure it equals outstanding stabilization costs. The County Executive may accept a lesser amount if a permittee initiates a process to continuously increase the amount of fiscal security until it is adequate to complete stabilization. The period of fiscal security is dictated by the period of time approved in the stabilization plan to establish the post-mining land use. The Travis County development permit will remain active while at least a portion of the fiscal security is still in place, and until the operator requests, in writing, for the permit to be closed. The fiscal security will remain in place, for the portions of the site not already released, until the site stabilization is successful and complete implementation of the stabilization plan has been achieved.

(3) Form of Security. Travis County will accept the fiscal security instruments described in Section 82.401(a)(5) – (6).

(4) Certification of Completion and Release. The owner or operator shall file a notice of completion with the County at the time the operator determines that stabilization of any portion of the mining or quarry site or the entire site is complete. The site, or portion thereof that was the subject of the notice of completion, shall be inspected by the County to determine if stabilization has been carried out in accordance with the stabilization plan.

(5) Reduction of Security. A partial release of the fiscal security can occur if the County determines that compliance with a portion of the stabilization plan has been achieved and requires no waiting period. After the County determines that stabilization is complete, or that the site has been entered into an alternative post-mining use, a certificate of completion will be issued to allow release of the fiscal security.

(6) Collection on Security. In the event any or all of the stabilization fails to meet the requirements specified in the approved stabilization plan, and the owner or operator fails or refuses to correct deficiencies of implementation specified in writing by the County Executive, the County may collect the security to complete the stabilization plan. Additionally, the County may draw upon any security that is posted, for reasons specified in Section 82.401(b)(3).

(c) Assessment of Stabilization Success. A quarry or mine site, or portion of a site, is considered to have achieved final stabilization, or to be returned to an alternative post mining use if the owner or operator can demonstrate that it has accomplished either the conditions specified in (1) or (2):

(1) Final Stabilization. To achieve final stabilization, the operator shall ensure that all of the following requirements have been met:

(A) Storm water runoff that comes into contact with raw materials, intermediate byproducts, finished products, and waste products does not have the potential to cause or contribute pollutants to the runoff.

(B) Soil disturbing activities related to mining at the site or portion of the site have been completed.

(C) The site or portion of the site as identified in the stabilization plan has been stabilized in accordance with the approved plan to minimize soil erosion.

(D) If appropriate depending on the type, location, or size of the site and its the potential to contribute pollutants to storm water discharges, the site or portion of the site has been re-graded and re-vegetated, will be amenable to natural re-vegetation, or will be left in a condition consistent with the alternative post-mining land use described in paragraph (2).

- (2) Alternative Post Mining Use. For the purposes of this section, an owner or operator will be issued a certificate of completion to allow release of the fiscal security required by this section if the land has been returned to an alternative post-mining land use and the evaluation described in paragraph (3) determines that the conditions of the site do not have the potential to cause or contribute to significant pollutant discharges. Similarly, the owner or operator will be issued a certificate of completion to allow release of the fiscal security if the land has been returned to an alternative post-mining land use, and proof is provided to the County that a new owner or operator has assumed liability for the completion of final stabilization.
- (3) Evaluation of completion of paragraph (1) or (2) shall be determined by on-site inspection, or other evidence provided by the owner or operator, possibly including data, reports, or photos, indicating that all requirements have been met.

## EXHIBIT 2

## **Title VIII. Environmental**

### **Chapter 104. Prohibited Discharges; Enforcement.**

- 104.001. Authority, Application, Purpose, and Construction.
- 104.002. Definitions.
- 104.003. Prohibited Discharges.
- 104.004. Suspension of MS4 Access.
- 104.005. Industrial or Construction Activities Discharges
- 104.006. Requirement to Prevent, Control, and Reduce Storm Water Pollutants  
by the Use of Best Management Practices.
- 104.007. Watercourse Protection.
- 104.008. Accidental Discharge or Spill of a Pollutant, Including a Hazardous  
Substance.
- 104.009. Right of Entry.
- 104.010. Enforcement.

## **Chapter 104. Discharge Prohibitions; Enforcement.**

### **104.001. Authority, Application, Purpose, and Construction.**

(a) Authority. The Commissioners Court of Travis County adopts this chapter pursuant to authority granted to it in Chapter 573 of the Local Government Code Section 573.002 to take any necessary or proper action to comply with the requirements of the storm water permitting program under the national pollutant discharge elimination system (Section 402, Federal Water Pollution Control Act (33 U.S.C. Section 1342)), including:

(1) developing and implementing controls to reduce the discharge of pollutants from any conveyance or system of conveyance owned or operated by the County that is designed for collecting or conveying storm water; and

(2) developing, implementing, and enforcing storm water management guidelines, design criteria, or rules to reduce the discharge of pollutants into any conveyance or system of conveyance owned or operated by the County that is designed for collecting or conveying storm water.

(b) Application. This chapter applies to all unincorporated areas of Travis County, Texas.

(c) Purpose. The purpose of this chapter is to:

(1) take necessary and proper action to comply with the requirements of the storm water permitting program established under Section 402, Federal Water Pollution Control Act (33 U.S.C. Section 1342) and to protect the health, safety, and general welfare of the public;

(2) set forth regulations necessary to comply with Travis County's TPDES storm water discharge permit, to protect human life and health, and to eliminate or reduce pollutant levels associated with storm water;

(3) eliminate the illicit discharge of a pollutant into a conveyance, water in the state, or into the Travis County Municipal Separate Storm Sewer.

(d) Construction. The provisions of this chapter are to be liberally construed to give effect to its purpose and intent.

(e) Abrogation and Greater Restrictions. This chapter is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, the provisions of this chapter shall take precedence over any less restrictive conflicting law, order, ordinance, code, or official determination. All other regulations inconsistent with this ordinance are hereby repealed to the extent of the inconsistency only. For purposes of this chapter, the County Executive shall determine which of these

conflicting laws, orders, ordinances, codes, or official determinations are most restrictive, and his decision in this regard shall be final.

(f) Severability. If any provision of this chapter, or the application thereof, to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications of this chapter which can be given effect without the invalid portion, and to this end the provisions of this chapter are declared to be severable.

(g) Remedies Not Exclusive. The remedies listed in this chapter are not exclusive of any other remedies available under any applicable federal, state, or local law, and it is within the discretion of Travis County to seek cumulative remedies. A person who violates this chapter is subject to any applicable administrative, civil, or criminal penalties.

**104.002. Definitions.** In this chapter:

"Accidental discharge" means an act or omission through which waste or other substances are inadvertently discharged into water in the State or a MS4.

"Best management practices" or "BMPs" means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of water in the State or the Travis County MS4. BMPs include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. In the Lake Travis watershed, BMPs include those practices described in LCRA's Technical Manual that effectively manage storm water runoff quality and volume.

"Conveyance" means curbs, gutters, man-made or natural channels and ditches, drains, pipes, and other features designed or used for flood control or to otherwise transport storm water runoff.

"County Executive" means the county executive of the Travis County Transportation and Natural Resources Department or a successor department, or a person designated by the County Executive.

"Discharge" or "To discharge" means to either deposit, conduct, drain, emit, throw, run, allow to seep, or otherwise release or dispose of, or to allow, permit, or suffer any of these acts or omissions.

"Discharger" means a person that causes or threatens to cause a discharge.

"Facility" means any structure or building, including contiguous land, or equipment, pipe or pipeline, well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, aircraft, or any site or area.

"Hazardous substance" means any substance that is designated as such by the administrator of the Environmental Protection Agency pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. Sec. 9601 et seq.), is regulated pursuant to Section 311 of the federal Clean Water Act (33 U.S.C. Sec. 1321 et seq.), or designated as such by the Texas Commission on Environmental Quality.

"Illicit connection" means a man-made conveyance regardless of whether it is on the surface or subsurface, that allows any illicit discharge to enter a municipal separate storm sewer or, any conveyance connected from a commercial or industrial site to a municipal separate storm sewer which has not been documented in plans, maps, or equivalent records and approved by an authorized enforcement agency.

"Illicit discharge" means any discharge to a conveyance or a municipal separate storm sewer that is not composed entirely of storm water except discharges that are allowed under Section 104.003, authorized pursuant to a TPDES permit (other than the TPDES permit for discharges from the municipal separate storm sewer), and discharges resulting from fire-fighting activities.

"Industrial activity" means manufacturing, processing, material storage, and waste material disposal areas (and similar areas where storm water can contact industrial pollutants related to the industrial activity) at an industrial facility described by the TPDES Multi Sector General Permit, TXR050000, or by another TCEQ or TPDES permit.

"Maximum Extent Practicable" means the technology-based discharge standard for municipal separate storm sewer systems to reduce pollutants in storm water discharges that was established by CWA sec. 402(p).

"Municipal Separate Storm Sewer System" or "MS4" means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) that:

- (A) Is owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to water of the United States;
- (B) Is designed or used for collecting or conveying storm water; and
- (C) Is not part of a Publicly Owned Treatment Works as defined at 40 CFR 122.2.

"Non-storm water discharge" means any discharge to a municipal separate storm sewer that is not composed entirely of storm water.

"Operator" means the person responsible for the overall operation of a site or facility.

"Other substances" means substances that may be useful or valuable and therefore are not ordinarily considered to be waste, but that will cause pollution if discharged into water in the state.

"Owner" means the owner of real property subject to a proposed or existing subdivision, site, parcel of land, or development.

"Person" means an individual, association, partnership, corporation, organization, business trust, political subdivision, state or federal agency, or an agent or employee thereof.

"Person responsible" or "responsible person" means:

- (A) the owner, operator, or demise charterer of a vessel from which a spill emanates;
- (B) the owner or operator of a facility from which a spill emanates; or
- (C) any other person who causes, suffers, allows, or permits a spill or discharge.

"Pollutant" means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, filter backwash, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into any water in the State. The term:

- (A) includes tail water or runoff water from irrigation associated with an animal feeding operation or concentrated animal feeding operation that is located in a major sole source impairment zone as defined by Texas Water Code Section 26.502; and
- (B) includes rainwater runoff from the confinement area of an animal feeding operation or concentrated animal feeding operation that is located in a major sole source impairment zone, as defined by Texas Water Code Section 26.502; but
- (C) does not include tail water or runoff water from irrigation or rainwater runoff from other cultivated or uncultivated rangeland, pastureland, and farmland that is not owned or controlled by an operator of an animal feeding operation or concentrated animal feeding operation on which agricultural waste is applied.

"Pollution" means the alteration of the physical, thermal, chemical, or biological quality of, or the contamination of, any water in the state that renders the water harmful,

detrimental, or injurious to humans, animal life, vegetation, or property or to public health, safety, or welfare, or impairs the usefulness or the public enjoyment of the water for any lawful or reasonable purpose.

"Premises" means any building, lot, parcel of land, or portion of land, regardless of whether it is improved or unimproved, including adjacent sidewalks and parking strips.

"Site" means the land or water area where any facility or activity is physically located or conducted, including adjacent land used in connection with the facility or activity.

"Storm water" and "storm water runoff" means rainfall runoff, snow melt runoff, and surface runoff and drainage.

"Storm Water Pollution Prevention Plan" or "SWPPP" or "SWP3" means a document which describes the best management practices and activities to be implemented by a person to identify sources of pollution or contamination at a site and the actions to eliminate or reduce pollutant discharges to water in the State, a conveyance or a municipal separate storm sewer to the maximum extent practicable. The SWP3 must include all practices and activities required by any applicable TCEQ permit as well as any applicable requirements of the Travis County Code.

"TCEQ" means Texas Commission on Environmental Quality or any successor agency.

"Texas Pollutant Discharge Elimination System" or "TPDES" means the state program for issuing, amending, terminating, monitoring, and enforcing permits authorizing the discharge of pollutants to water in the State of Texas, and imposing and enforcing pretreatment requirements, under Clean Water Act §§ 307, 402, 318 and 405, the Texas Water Code and Texas Administrative Code regulations.

"Travis County Municipal Separate Storm Sewer System" or "Travis County MS4" means the Small MS4 owned or operated by Travis County.

"Waste" means sewage, industrial waste, municipal waste, recreational waste, agricultural waste, or other waste, as the terms are defined in Texas Water Code, Section 26.001.

"Water in the State" means groundwater, percolating or otherwise, lakes, bays, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, wetlands, marshes, inlets, canals, the Gulf of Mexico, inside the territorial limits of the state, and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, navigable or non-navigable, and including the beds and banks of all watercourses and bodies of surface water, that are wholly or partially inside or bordering the State or inside the jurisdiction of the State.

### **104.003. Prohibited Discharges.**

(a) No person may cause, suffer, allow, or permit the discharge of any waste or of any pollutant, or the performance or failure of any activity other than a discharge, in violation of this chapter.

(b) No person may discharge or cause to be discharged into a municipal separate storm sewer or into a water in the State any pollutant that causes or contributes to a violation of applicable water quality standards, other than storm water authorized by permit or similar authorization issued by the TCEQ. The commencement, conduct or continuance of any illicit discharge is prohibited except as described in subsections (c) and (d).

(c) The following discharges are allowed only if they do not substantially contribute pollutants in storm water runoff:

(1) water line flushing, only if:

(A) Any hyper-chlorinated water is de-chlorinated before it is discharged; and

(B) The discharge is not reasonably expected to adversely affect aquatic life;

(2) water line breaks, only if sediment and chlorine in the discharge is controlled so that there is no impact to aquatic life;

(3) water line hydrant testing, only if: rust deposits and chlorine levels do not result in an impact to aquatic life;

(4) runoff or return flow from landscape irrigation, lawn irrigation, and other irrigation utilizing potable water, groundwater, or surface water sources;

(5) discharges from a potable water source;

(6) diverted stream flows;

(7) rising groundwater or springs;

(8) discharges from uncontaminated groundwater infiltration;

(9) discharges from uncontaminated, pumped groundwater;

(10) discharges from uncontaminated foundation and footing drains;

(11) discharges from air conditioning condensation;

(12) discharges from water pumped from an elevator sump or utility vault, only if it is free of oil and visible sheen;

(13) discharges from individual residential exterior car washing only if mild detergents are used and the discharges contain no degreasers or other chemicals;

(14) flows from a wetland or riparian habitat;

(15) uncontaminated discharges associated with a de-chlorinated, residential swimming pool, spa, or ornamental fountain, excluding filter backwash wastewater and excluding saline water;

(16) discharges from the routine washing of pavement only if:

(A) the washing is done without the use of detergents or other chemicals;

(B) spills or leaks of oil, toxins, or other hazardous materials have not occurred (unless all spilled material has been removed); and

(C) the discharge does not include street sweeper wash water;

(17) discharges from fire-fighting activities where foam or chemical agents are not used (and not including washing of trucks, runoff from training activities, and similar activities);

(18) discharges of uncontaminated fire test maintenance and fire sprinkler/suppression system water;

(19) discharges specified in writing by the County Executive as being necessary to protect public health and safety;

(20) discharges of uncontaminated water used for dust suppression;

(21) dye testing, if written notification is made to the County Executive prior to the time of the test;

(22) discharges associated with dewatering of collected storm water in an above-ground storage tank secondary containment area if the water is free of, oil, visible sheen, and other contaminants;

(23) discharges from dewatering of collected storm water in a construction pit, only if the discharge is free of silt, oil, and visible sheen;

(24) discharges of storm water from an authorized permanent water quality control;

(25) discharges of ballast water from a petroleum storage tank pit during installation; and

(26) discharges of water from a dumpster or similar receptacle if the water is free of oil, visible sheen, and other contaminants.

(d) The prohibitions set forth in this section do not apply to any non-storm water discharge authorized by a TPDES permit, waiver, or waste discharge order issued to the discharger and administered under the authority of the United States Environmental Protection Agency and TCEQ if:

- (1) the authorized person is in full compliance with all requirements of the permit, waiver, or order and other applicable laws and regulations,
  - (2) written approval has been granted by the County Executive for any discharge to the Travis County Municipal Separate Storm Sewer; and
  - (3) The discharge does not contain a pollutant or any substance which causes, continues to cause, or will cause pollution.
- (e) A person violates this chapter if the person discharges any storm water that contains a pollutant or any substance which causes, continues to cause, or will cause pollution.
- (f) The construction, use, maintenance, or continued existence of an illicit connection to the Travis County Municipal Separate Storm Sewer is prohibited. This prohibition expressly includes, without limitation, an illicit connection made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.

**104.004. Suspension of MS4 Access.**

- (a) Travis County may, without prior notice, require a person to immediately stop an illicit discharge into either a municipal separate storm sewer or water in the State.
- (b) The County may, without prior notice, issue a suspension order to suspend a person's access to discharge into a municipal separate storm sewer or water in the State if the suspension would abate or reduce pollution caused by an illicit discharge.
- (c) The County will not reinstate a person's access to a municipal separate storm sewer or water in the State until:
  - (1) the person presents proof, satisfactory to the County Executive, that the illegal discharge has been eliminated and its cause determined and corrected;
  - (2) the person pays the County for all costs the County incurred in responding to abating and remediating the illegal discharge; and
  - (3) the person pays the County for all costs the County will incur in reinstating access.
- (d) A person whose access to a municipal separate storm sewer has been suspended may petition the Travis County Commissioners Court for reconsideration and a hearing.
- (e) A person whose access to a municipal separate storm sewer has been suspended violates this Chapter if the person accesses the municipal separate storm sewer without the prior approval of the Travis County Commissioners Court.

**104.005. Industrial or Construction Activities Discharges.**

(a) Any person authorized to discharge pollutants generated from an industrial or construction activity that is subject to a TPDES storm water discharge permit or similar authorization shall comply with all provisions of such permit and any additional requirements of a Travis County development permit. Proof of compliance may be required in a form acceptable to Travis County prior to allowing discharge into a Municipal Separate Storm Sewer.

(b) It is a violation of this chapter to engage in activities requiring a TPDES storm water permit without authorization under a TPDES permit for storm water discharges or any applicable permit required by the Travis County Code.

(c) Any violation of any general or individual TPDES permit is a violation of this chapter.

(d) A person violates this chapter if the person causes, suffers, allows, or permits a discharge into a MS4 without having first obtained authorization under a TPDES permit, or any other required authorization from TCEQ.

**104.006. Requirement to Prevent, Control, and Reduce Storm Water Pollutants by the Use of Best Management Practices.**

(a) Travis County requires that best management practices be identified and incorporated into any activity, operation, or facility that may cause or contribute to pollution or contamination of storm water, a municipal separate storm sewer, or water in the State. These BMPs shall be part of a storm water pollution prevention plan if required for compliance with the TPDES permit and any applicable Travis County development permit.

(b) The owner or operator of a commercial or industrial establishment shall provide, at its own expense, protection from accidental discharge of prohibited materials into a municipal separate storm sewer or water in the State through the use of structural and non-structural BMPs.

(c) The County Executive may require any person responsible for a property or premises, that is, or may be, the source of an illicit discharge, to implement, at the person's expense, additional structural and non-structural BMPs to prevent the further discharge of pollutants to a municipal separate storm sewer or water in the State.

(d) Compliance with all terms and conditions of a valid TPDES permit authorizing the discharge of storm water associated with industrial activity, along with any additional, more stringent requirements required by a Travis County development permit, shall be deemed to be compliance with the provisions of this section.

**104.007. Watercourse Protection.** Any responsible person who owns or leases property through which water in the State passes shall keep and maintain that part of the watercourse

within the property free of any waste that could cause a condition of pollution to exist. In addition, a responsible person shall maintain any privately owned structures within or adjacent to a watercourse (including a dam or weir), so that the structures will not become a hazard to the use, function, or physical integrity of the watercourse and will not cause pollution.

**104.008. Accidental Discharge or Spill of a Pollutant, Including a Hazardous Substance.** As soon as any person responsible for a facility or activity or any person who is responsible for emergency response for a facility or activity has any information of a known or suspected accidental discharge or spill that causes or may cause a pollutant to enter into storm water, a MS4, or water in the State, that person must:

- (1) take all necessary steps to ensure the discovery, containment, and cleanup of the discharge;
- (2) as soon as possible and no later than 24 hours after the discharge, notify the Texas Commission on Environmental Quality and any other state or federal agency that it is required by law to be notified; and
- (3) immediately notify Travis County if the discharge may adversely affect a public or private source of drinking water or a Travis County road, including a right-of-way, and provide information as to the location, identification, concentration, and volume of the discharge as well as the measures the responsible person is taking to contain and clean up the discharge.

**104.009. Right of Entry.**

(a) Pursuant to Texas Water Code Section 26.171, Travis County officials, employees, agents, and representatives are entitled to enter and inspect the premises of any person to determine whether or not:

- (1) the quality of the water meets the state water quality standards adopted by the TCEQ;
- (2) persons discharging effluent into the public water located in the areas in which Travis County has jurisdiction have obtained permits for discharge of the effluent; and
- (3) persons who have permits are making discharges in compliance with the requirements of the permits.

(b) Pursuant to Texas Water Code Section 26.173, Travis County officials, employees, agents, and representatives are entitled to enter any public or private property within the County's territorial jurisdiction to make inspections and investigations of conditions relating to water quality. In exercising this power, Travis County officials, employees, agents, and representatives are subject to the same provisions and restrictions set forth in Texas Water Code Section 26.014 with respect to the TCEQ.

(c) Travis County officials, employees, agents, representatives and contractors are entitled to enter public or private property at any reasonable time to investigate or monitor, or if the person responsible is not responsive or there is an immediate danger to public health or the environment, to remove or remediate a condition related to the quality of water in the state.

(d) Travis County officials, employees, agents, representatives and contractors who enter private property must:

(1) observe the property's rules and regulations concerning safety, internal security, and fire protection; and

(2) if the property has management in residence, notify management in person or the person then in charge in that person's presence and exhibit proper credentials.

(e) Travis County officials, employees, agents, representatives, and contractors are entitled to enter and inspect premises as often as may be necessary to determine compliance with this chapter. If a responsible person has security measures in force which require proper identification and clearance before entry into its premises, the responsible person shall make the necessary arrangements to allow access to Travis County officials, employees, agents, representatives, and contractors.

(f) Responsible persons must allow Travis County officials, employees, agents, representatives, and contractors ready access to all parts of the premises for the purposes of inspection, sampling, examination and copying of records that must be kept under the conditions of a TPDES permit to discharge storm water, and the performance of any additional duties as defined by state and federal law.

(g) If the premises are occupied, the Travis County representative shall present credentials and request entry. If the premises are unoccupied, the Inspector shall attempt to contact a responsible person and request entry before entering.

(h) At the written or oral request of the responsible person of a facility or vessel to be inspected or sampled, any temporary or permanent obstruction to safe and easy access to the facility or vessel to be inspected or sampled must be promptly removed by the responsible person at the written or oral request of a Travis County official, employee, agent, representative, or contractor and must not be replaced.

(i) A delay of 30 minutes or more in allowing a Travis County official, employee, agent, representative, or contractor access to a permitted facility is a violation of a storm water discharge permit and of this chapter. A person who is the owner or operator of a facility with a TPDES permit to discharge storm water associated with industrial activity violates this chapter if the person denies Travis County officials, employees, agents, representatives and contractors reasonable access to the permitted facility for the purpose of conducting any activity authorized or required by this chapter.

(j) If a Travis County official, employee, agent, representative, or contractor has been refused access to any part of the premises from which storm water is discharged, and is able to demonstrate probable cause to believe that there may be a violation of this chapter, or that there is a need to inspect or sample as part of a routine inspection and sampling program designed to verify compliance with this chapter or any order issued hereunder, or to protect the overall public health, safety, and welfare of the community, then the Travis County official, employee, agent, representative, or contractor may seek issuance of a search warrant from any court of competent jurisdiction, in accordance with the enforcement policy adopted by the Commissioners Court on June 26, 2001.

#### **104.010. Enforcement.**

##### **(a) Civil Remedies.**

(1) In accordance with Texas Local Government Code, Sec. 573.003, whenever Travis County finds that a person has violated a prohibition or failed to meet a requirement of this chapter, that person is liable to the county for a civil penalty of not more than \$1,000 for each violation. Each day a violation continues is considered a separate violation for purposes of assessing the civil penalty.

(2) Travis County may bring suit in a district court to:

(A) enjoin a violation or threatened violation of a rule or requirement adopted by the county in this Code; or

(B) recover a civil penalty authorized by Texas Local Government Code, section 573.003(a).

(b) Nuisances. An actual or threatened discharge to a Municipal Separate Storm Sewer that violates or would violate this chapter is hereby declared to be a nuisance.

(c) Abatement of Violation and Remediation. Any person violating any of the provisions of this chapter is liable for any costs of violation abatement or remediation of any property, land, water, or wildlife habitat negatively affected, damaged, or threatened as a result of any such violation. The cost of abatement or remediation is the responsibility of that person and not a cost borne by Travis County and any other affected entities.

(d) Injunctive Relief. It is unlawful for any person to violate any provision or fail to comply with any of the requirements of this chapter. If a person has violated or continues to violate this chapter, Travis County may petition for a preliminary or permanent injunction restraining the person from activities which would create further violations or compelling the person to perform abatement or remediation of the violation. Travis County may recover all attorney fees, court costs, and other expenses associated with enforcement of the Code, including sampling and monitoring expenses.

**EXHIBIT 3**

## Crosswalk for Proposed Repeals to Chapter 82 and Chapter 108

Affected Rule	Existing Requirement	Disposition of the Requirement
82.204(c)(25)(B)	Under this requirement, final plats can be approved only when the applicant submits information on environmental permits required by other jurisdictions.	These requirements have been supplemented with other environmental authorizations for which an applicant must show evidence of compliance. Together, these requirements are proposed in Section 82.916.
82.209(a)	This subsection specifies that the scope of the 2005-adopted water quality protection requirements is outside of all municipal ETJs.	Proposed Section 82.912 describes the scope of water quality protection requirements as being all unincorporated areas of Travis County, including all ETJs, except that the water quality requirements do not apply to subdivision proposals in the City of Austin ETJ processed through the Single Office of Review.
82.209(b)	This subsection identifies basic requirements to control pollutant discharges of construction site runoff and requirements for a pre-construction conference.	Proposed Sections 82.934 – 82.940 detail storm water quality measures for construction activities. Section 82.950 details requirements for a pre-construction conference.
82.209(c)	This subsection defines certain environmental features and establishes distance buffers between development and either an environmentally valuable feature or waterway.	The definitions are modified and proposed for addition to Section 82.002. The definition of bluff has been changed to characterize more formations as bluffs. The requirements for setbacks have been strengthened for eastern watersheds and waterways with adjacent bluffs, for rim rock, and these changes are proposed in Section 82.941.
82.209(d)	This subsection identifies restrictions on the use of cut and fill of land under development.	The requirements have been modified, clarified, and new requirements are proposed relating to the quality of fill material. These requirements are proposed for Section 82.943.
82.209(e) – (g)	These subsections describe the requirements for permanent, structural water quality controls.	The engineering standards for these controls are not proposed for change and are specified in Section 82.944.

Affected Rule	Existing Requirement	Disposition of the Requirement
82.209(h)	This subsection requires that permanent, structural water quality controls be maintained by the property owner.	The proposed requirements for maintenance and operation of a permanent water quality control (and a BMP Maintenance Permit for a subset of the structures and annual fees) are proposed in 82.917 through 82.919.
82.209(i)	This subsection requires that a person submitting a preliminary plan shall provide information on how storm water will be managed to protect water quality once the construction phase commences.	These requirements are proposed for Section 82.939 and have been expanded with some additional detail.
82.209(j) and 82.211(j)	These subsections adopted 2009 City of Austin and 2007 LCRA technical criteria manuals as standards for review of development proposals to Travis County.	Use of the same criteria manuals are proposed in Section 82.933. The proposed rule references the latest City of Austin manual approved on the date the Commissioners' Court adopts 82.933.
82.209(k) and 82.211(k)	These subsections identify that water quality controls are subject to the same requirements as drainage structures and specify fiscal security requirements in the HLWO area.	These general statements are proposed to be replaced with more specific standards for storm water, including fiscal security (new 82.920 and amended 82.401), construction plans (82.935), and required inspections (82.951 – 82.952).
82.211(a)	This subsection identifies the purpose of rule amendments in 2010, which set out requirements for water quality protection in the HLWO area.	This specific purpose is no longer needed. The more broad purpose of proposed water quality requirements is found in 82.910.
82.211(b)	This subsection defines best management practices (BMPs), commercial development, master plan, single family subdivision development, and single family residence.	In proposed amendments to 82.002, the definition of BMP has been modified to be consistent with the TCEQ and the LCRA definitions. The definitions of commercial development and master plan are also proposed for amendment in 82.002. The definitions of single family subdivision development and single family residence are replaced with applicable Travis County terminology in 82.002.

Affected Rule	Existing Requirement	Disposition of the Requirement
82.211(d)	This subsection describes submittal requirements to Travis County and LCRA for applications subject to review by both entities.	The submittal requirements for applicants for environmental review are proposed in 82.914 and the environmental requirements for each application type are proposed in 82.931.
82.211(e)	This subsection adopted a standard for the LCRA HWLO area for pre-application meeting for certain large developments.	This requirement is proposed for the same class of large applicants, and has been expanded to apply to all parts of Travis County jurisdiction in proposed 82.915.
82.211(f)	This subsection establishes distance buffers between development and a waterway in the HLWO area.	In proposed 82.941, setbacks established for the HLWO area are proposed to be the same and to apply to all western watersheds of Travis County. Some changes to the exceptions to setback requirements are proposed.
82.211(g) - (h)	These subsections principally cross-reference other sections in Chapter 82.	Proposed 82.934 – 82.940 and 82.943 detail the requirements for storm water quality at construction sites and cut and fill, respectively
82.211(i)	This subsection describes the requirements for permanent, structural water quality controls in the HLWO area.	The engineering standards for these controls are not proposed for change and are specified in Section 82.944.
82.302(f)	This subsection identifies general standards to control construction-related impacts on water quality in the HLWO area.	Proposed 82.934 – 82.940 detail storm water quality measures for construction activities in all parts of Travis County jurisdiction.
82.302(g)	This subsection requires that development comply with USEPA general permits relating to construction and industrial activity.	The existing section is out-of-date and references a time before TCEQ assumed the NPDES program from USEPA in Texas. Proposed 82.934 – 82.940 detail storm water quality measures for construction activities. This section includes the specific requirements from the TCEQ-issued construction general permit. Proposed 82.916, Subchapter L, and new proposed Chapter 104 address discharges associated with industrial activity.

<b>Affected Rule</b>	<b>Existing Requirement</b>	<b>Disposition of the Requirement</b>
108.001 – 108.018	In 1995, this Chapter was adopted as the tree preservation policy that applies on County property and rights of way.	Proposed 82.973 would adopt very similar procedures and standards and would reference the use of the COA tree preservation guidelines adopted in the city's Environmental Criteria Manual. The requirements for tree preservation are proposed to include a future R.O.W. proposed for a subdivision.

## **EXHIBIT 4**

**Legislative Version of Rule Amendment Proposal  
Chapters 82 and 64, Travis County Code**

**Reader's Guide**

**Text that is proposed for addition is shown in underline format, for example:**

Underline format is proposed new text

**Text shown in strike-through is proposed for deletion, for example:**

~~Strike-through format is text proposed for deletion~~

**Sections, subsections, paragraphs, etc. of the existing Code skipped or not shown in this document is not proposed for revision**

**Section 82.002. Definitions.** For the purposes of ~~this chapter~~the Manual, the definition of various terms, phrases, words, and their derivations will have the meaning ascribed to them herein and in Section 64.031 of the Travis County Code. When not consistent with the context, words used in the present tense include the future; words used in the singular number include the plural number; and words used in the plural number include the singular number. Any office referred to herein by title will mean the person employed or appointed for that position of his/her duly authorized deputy or representative. Definitions not expressly authorized herein are to be considered in accordance with customary usage. The definition of specific terms, phrases, ~~word~~words, and their derivations applicable to matter contained in ~~this chapter~~the Manual are as follows:

**The following definitions are proposed to be amended in this section, as follows:**

"Best Management Practices" or "(BMPs)" mean schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of water in the State or the Travis County MS4. BMPs also include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. In the Lake Travis watershed, BMP means those practices, including those described in LCRA's Technical Manual, that effectively manage storm water runoff quality and volume. Practices specified to prevent and abate nonpoint source pollution resulting from stormwater runoff. These can include, but are not limited to, site design guidelines, temporary and permanent erosion controls, stormwater treatment ponds, and land management practices.

"Commercial Development" means all development other than open space, a single-family residence, or a residential single-family subdivision development.

"County Executive" or "Executive Manager" means the county executive manager of the Transportation and Natural Resources Department of Travis County, a successor department, or a person designated by the county executive manager.

~~"Erosion and Sediment~~**Sedimentation Controls**" mean temporary—Temporary and permanent Best Management Practices (BMPs) specified for preventing and abating accelerated soil erosion and sedimentation ~~control~~to the maximum extent practicable during construction and are removed after completion of re-vegetationrevegetation. Permanent practices remain permanently in place to prevent soil erosion.

"Master Development Plan" or "Master Plan" means a conceptual plan of a multi-phased development showing the order of phased development, boundaries, adjacent property, environmental features (such as creeks, tributaries, slopes, recharge features, etc.), roads, designated land uses, sites for special use, and proposed location of water quality protection measures for the development. The plan includes aA-reasonably detailed map or schematic drawing containing the following:

- (A) The boundaries of the entire development;
- (B) The names of adjacent platted subdivisions or the names of the record owners of adjoining unplatted property;
- (C) The location, width, and names of all existing or platted streets or public rights-of-way and all existing easements within and adjacent to the development;
- (D) The layout and width of proposed arterials, thoroughfares and collector streets and the general configuration of proposed streets and alleys;
- (E) The general arrangement and designations of land uses, and any sites for special use (that is, for parks, open space, detention, or public facilities);
- (F) The approximate location of the 25-year flood plain and the 100-year flood plain, the location and width of existing drainage channels, creeks and water courses within the development;
- (G) The location of proposed drainage courses and any necessary off-site extensions.

"Owner" means the ~~The owner of real property subject to a proposed or existing subdivision, site, parcel of land, or development.~~ Also: Subdivider, Applicant, Developer.

~~Stormwater-~~ "Storm Water Pollution Prevention Plan" or "SWPPP" or "SWP3" means a document the plan required by the construction general permit issued by the Texas Commission on Environmental Quality (TCEQ) that describes the best management practices and activities to be implemented by a person to identify and address potential sources of pollutants or contamination at a site and the actions to eliminate or reduce pollutant discharges to water in the state, a conveyance, or a Municipal Separate Storm Sewer to the maximum that are reasonably expected to affect the quality of discharges from a construction activity, and that describes the implementation of practices that will be used to minimize to the extent practicable. The contents of the SWP3 shall include all practices and activities required by the relevant TCEQ permit as well as any additional requirements specified in the Travis County Code ~~the discharge of pollutants in storm water during the construction activities required during land development.~~

"Western Watershed" means the ~~The Lake Travis, Lake Austin or Town Lady Bird Lake watersheds.~~

**The following definitions are proposed additions to this section:**

"Active Resource Extraction Area" means the area of a mine or quarry from which mineral resources are currently being extracted for sale at a particular time.

"Agricultural Development" means activities associated with the production of livestock or use of the land for planting, growing, cultivating, and harvesting crops, or participating in a wildlife management plan. Agricultural development does not include the processing of plant or animal products after harvesting or the production of timber and forest products.

"Alternative Post-Mining Use" means a use of land, other than for mining or quarrying, that occurs after mining or quarrying has ceased. To qualify as an alternative post-mining use, the land must actually be utilized for another purpose, such as for residential or commercial development, agriculture, or some other use. Abandonment in place, or use strictly as open space does not qualify as an Alternative Post-Mining Use.

"Applicant" means a person who submits an application to Travis County.

"Bluff" means a feature that is adjacent to a waterway that has a vertical change in elevation of more than 40 feet and an average gradient measured from the base of the bluff to its crest greater than a 1 : 1 slope (greater than one foot vertical for each one foot horizontal).

"BMP Maintenance Permit" means an operating permit issued by the County Executive to maintain the permanent water quality controls associated with a completed development.

"Canyon Rimrock" means a rimrock that is adjacent to a waterway that has a rock substrate with a gradient that exceeds 60 percent for a vertical distance of at least four feet, and that is exposed for at least 50 feet horizontally along the rim of the canyon.

"Certified Erosion, Sediment, and Storm Water Inspector" or "CESSWI" means a person who holds a valid certification issued by EnviroCert International, Inc., and has the qualifications and experience necessary for the inspection of ESC and SWP3s.

"Certified Inspector of Erosion and Sediment Control" or "CIESC" means a person who holds a valid certification issued by CIESC, Inc., and has the qualifications and experience necessary for the inspection of ESC and SWP3s.

"Certified Professional in Erosion and Sediment Control" or "CPESC" means a person who holds a valid certificate issued by EnviroCert International, Inc, and has the qualifications and experience necessary for SWP3 and ESC plan development, approval, evaluation, and inspection.

"Clean Water Act" or "CWA" means the federal Water Pollution Control Act (33 U.S.C. §§1251 - 1387 (1977, as amended)).

"Common Plan of Development" means a construction activity that is completed in separate stages, separate phases, or in combination with other construction activities. A common plan of development (also known as a "common plan of development or sale") is identified by the documentation for the construction project that identifies the scope of the project, and may include plats, blueprints, marketing plans, contracts, building permits, a public notice or hearing, zoning requests, or other similar documentation and activities. A common plan of development does not necessarily include all construction projects within the jurisdiction of a public entity (e.g., a city or university). Construction of roads or buildings in different parts of the jurisdiction would be considered separate "common plans," with only the interconnected parts of a project being considered part of a "common plan" (e.g., a building and its associated parking lot and driveways, airport runway and associated taxiways, a building complex, etc.). Where discrete construction projects occur within a larger common plan of development or sale but are located ¼ mile or more apart, and the area between the projects is not being disturbed, each individual project can be treated as a separate plan of development or sale, if any interconnecting road, pipeline or utility project that is part of the same "common plan" is not included in the area to be disturbed.

"Concurrent Stabilization" for mines and quarries means a procedure by which resource extraction areas that will no longer be mined are being stabilized while mineral resources are still being extracted from other areas within the same facility. Stabilization activities may include backfilling, sloping, grading, re-vegetation, or the installation of temporary or permanent erosion control features.

"Construction Activity" means clearing, grading, and excavating that results in land disturbance of equal to or greater than one acre. Construction activity also includes the disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal or greater than one acre. Construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility.

"Construction Site Notice" or "CSN" means a document signed and certified by the operator of a construction activity that results in land disturbance of equal to or greater than one acre and less than five acres of land indicating the operator's name, contact information, project description, and the physical location of the SWP3, and must be posted at the construction site prior to commencement of construction and maintained until completion in accordance with the requirements of TCEQ General Permit TXR150000.

"Construction Support or Maintenance Area" means an area placed either on or in the proximity of a construction site or activity, used by the owner or operator of the construction site, for support activities associated with the development or construction, including areas for concrete or asphalt batch operations, material formulation or fabrication, construction or sales office, material storage, vehicle storage or maintenance, and similar activities.

"Conveyance" means curbs, gutters, man-made or natural channels and ditches, drains, pipes, and other features designed or used for flood control or to otherwise transport storm water runoff.

"Critical Environmental Feature" means a feature that is of critical importance to the protection of environmental resources, and includes a bluff, canyon rimrock, cave, point recharge feature, sinkhole, spring, and wetland.

"Discharge" or "To Discharge" means to either deposit, conduct, drain, emit, throw, run, allow to seep, or otherwise release or dispose of, or to allow, permit, or suffer any of these acts or omissions.

"Erosion and Sediment Control Plan or "ESC Plan" means the component of the SWP3 required under Section 82.935(g) that contains the construction plans approved by the County with the Basic Development Permit, including the ESC and BMPs necessary to address all items and site features identified in the Engineer's Report.

"Facility" means any structure or building, including contiguous land, or equipment, pipe or pipeline, well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, aircraft, or any site or area.

"Fill" or "Fill Material" means material including, but not limited to rock, sand, soil, clay, concrete rubble with no exposed metal, and overburden or spoils from mining or other excavation activities. The term fill material does not include any material classified as a solid waste or any contaminated materials.

"Hazardous substance" means any substance that is designated as such by the administrator of the Environmental Protection Agency pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. Sec. 9601 et seq.), is regulated pursuant to Section 311 of the federal Clean Water Act (33 U.S.C. Sec. 1321 et seq.), or is designated as such by the Texas Commission on Environmental Quality.

"Inspector" means a representative of the County Executive who is responsible for making investigations, responding to citizen complaints or concerns, and conducting inspections of development projects, property, and facilities, to determine the compliance status of an activity with this chapter, other requirements of the Travis County Code, and state statutes and regulations.

"Industrial Activity" means any of ten categories of industrial activities included in the definition of "storm water discharges associated with industrial activity" as defined in 40 CFR Section 122.26(b)(14)(i) – (ix) and (xi).

"Linear Construction" means a construction activity with longitudinally oriented land disturbance, that is typical of infrastructure projects and that may include an excavation for burial of conduit, such as the placement of a drinking water, storm sewer, sanitary sewer, electrical, or telecommunication utility line, construction of or improvements to a drainage ditch or roadway, and similar activities.

"Mine" means an excavation in the earth from which ores, coal, limestone, or other mineral substances are being or have been removed by excavation or other mining methods. A mine includes an area of land actively or previously mined for the production of dimension stone, crushed or broken stone, construction sand and gravel, clay, or industrial sand.

"Municipal Separate Storm Sewer" means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) that:

(A) Is owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to water of the United States;

(B) Is designed or used for collecting or conveying storm water;

(C) which is not a combined sewer; and

(D) Is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

"Non-Storm Water Discharge" means any discharge to the municipal separate storm sewer that is not composed entirely of storm water.

"Notice of Change" or "NOC" means a written notification to the TCEQ from a discharger authorized under a general permit, providing changes to information that was previously provided to the agency in a notice of intent form.

"Notice of Termination" or "NOT" means a written submission to the executive director of the Texas Commission on Environmental Quality from a discharger authorized under a general permit requesting termination of coverage.

"Operator" means the person responsible for the overall operation of a site or facility.

"Outfall" means a point source at the point where pollutants discharge to surface water and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels, or other conveyances that connect segments of the same stream. Outfall does not include sheet flow leaving a linear transportation system without channelization or a point source such as a curb cut or concrete traffic barrier with drains into an open culvert or roadside.

"Permanent Water Quality Control" means a permanent structure, system, or feature that provides water quality benefits by treating storm water runoff or preventing the discharge of pollutants. A permanent water quality control may be structural, such as a water quality pond, water quality detention pond, commercial pond, residential pond, or vegetative filter strip or it may be non-structural, such as a system or implemented plan for pesticide management. Permanent water quality controls include impoundments or impoundment systems designed to meet both water quality and flood detention requirements of this chapter.

"Person" means an individual, association, partnership, corporation, organization, business trust, political subdivision, state or federal agency, or an agent or employee thereof.

"Point Recharge Feature" means a cave, sinkhole, fault, joint, or other natural feature that lies over an aquifer recharge zone and that may transmit a significant amount of surface water into the subsurface strata.

"Pollutant" means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, filter backwash, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into any water in the State. The term:

- (A) Includes tail water or runoff water from irrigation associated with an animal feeding operation or concentrated animal feeding operation that is located in a major sole source impairment zone as defined by Texas Water Code, Section 26.502; and
- (B) Includes rainwater runoff from the confinement area of an animal feeding operation or concentrated animal feeding operation that is located in a major sole source impairment zone, as defined by Texas Water Code, Section 26.502; but
- (C) does not include tail water or runoff water from irrigation or rainwater runoff from other cultivated or uncultivated rangeland, pastureland, and farmland that is not owned or controlled by an operator of an animal feeding operation or concentrated animal feeding operation on which agricultural waste is applied.

"Pollution" means the alteration of the physical, thermal, chemical, or biological quality of, or the contamination of, any water in the state that renders the water harmful, detrimental, or injurious to humans, animal life, vegetation, or property or to public health, safety, or welfare, or impairs the usefulness or the public enjoyment of the water for any lawful or reasonable purpose.

"Primary Operator" means the person or persons associated with a construction activity that meets either of the following two criteria:

(A) The person or persons have operational control over a site plan, construction plan, and specifications, including the ability to make modifications to those plans and specifications; or

(B) The person or persons have day-to-day operational control of those activities at a construction site that are necessary to ensure compliance with a storm water pollution prevention plan (SWP3) for the site or other permit conditions (e.g., they are authorized to direct workers at a site to carry out activities required by the SWP3 or comply with other permit conditions).

"Quarry" means a site where aggregates are being or have been removed or extracted from the earth to form the pit or mine, including the entire excavation, stripped areas, haulage ramps, and the land under ownership, lease, or mineral rights immediately adjacent thereto upon which the plant processing the raw materials is located.

"Residential" means of or relating to structures and accessory uses of a single family, manufactured home, or duplex dwelling.

"Resource Extraction Area" means the area of a mine or quarry from which mineral resources have been, or will be, extracted for sale.

"Secondary Operator" means a person whose operational control is limited to the employment of other operators or to the ability to approve or disapprove changes to plans and specifications.

"Sediment Basin" means a temporary pond where sedimentation of pollutants occurs which is used during site construction and then removed, or a permanent basin designed to be a permanent site structure but used for sedimentation during the construction phase of a site.

"Site" means the land or water area where any facility or activity is physically located or conducted, including adjacent land used in connection with the facility or activity.

"Site Construction" means a construction activity and land disturbance at a site, as distinguished from linear construction.

"Small Construction Project" means any proposed construction activity that is not a part of a common plan of development and does not:

(A) exceed 10,000 square feet of land disturbance;

(B) result in depositing more than two feet of earth fill;

(C) include a significant alteration of existing drainage;

(D) include construction within:

- (i) 150 feet of a critical environmental feature;
- (ii) a platted waterway setback; or
- (iii) an area near a waterway that requires a setback; and

(E) exceed 3,000 square feet, if the construction is linear construction for utility placement.

"Solid waste" means any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant or air pollution control facility, and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, municipal, commercial, mining, and agricultural operations, and from community and institutional activities. The term:

(A) does not include:

- (i) solid or dissolved material in domestic sewage, or solid or dissolved material in irrigation return flows, or industrial discharges subject to regulation by permit issued in accordance with Texas Water Code, Chapter 26 (an exclusion applicable only to the actual point source discharge that does not exclude industrial wastewater while it is being collected, stored, or processed before discharge, nor does it exclude sludge that is generated by industrial wastewater treatment);
- (ii) uncontaminated soil, dirt, rock, sand, and other natural or man-made inert solid materials used to fill land if the object of the fill is to make the land suitable for the construction of surface improvements. The material serving as fill may also serve as a surface improvement such as a structure foundation, a road, soil erosion control, and flood protection.

(B) does include man-made materials exempted under (A)(ii) but where the land is sold, leased, or otherwise conveyed prior to the completion of construction of the surface improvements at a site where the man-made material is deposited.

"Storm Water" and "Storm Water Runoff" means rainfall runoff, snow melt runoff, and surface runoff and drainage.

"SWP3 Inspection Report" or "Storm Water Pollution Prevention Plan (SWP3) Inspection Report" means a report required under the terms of the TCEQ Construction General Permit and by this chapter as a part of a SWP3, that is prepared by a qualified individual for the owner or operator of a construction site after routine and periodic inspection of disturbed

areas of land that have not been finally stabilized, to determine whether all sediment and erosion control measures are operating correctly.

"SWP3 Site Notebook" or "Storm Water Pollution Prevention Plan (SWP3) Site Notebook" means the notebook containing the approved SWP3 that is maintained up-to-date at the construction site by the owner or construction site operator.

"TCEQ" means Texas Commission on Environmental Quality or any successor agency.

"Texas Pollutant Discharge Elimination System" or "TPDES" means the state program for issuing, amending, terminating, monitoring, and enforcing permits authorizing the discharge of pollutants to water in the State and imposing and enforcing pretreatment requirements under Clean Water Act §§ 307, 402, 318 and 405, the Texas Water Code and the Texas Administrative Code.

"Topsoil" means the surface layer of soil which is generally more fertile than the underlying soil layers, which is the natural medium for plant growth and which can provide the plant growth, soil stability, and other attributes necessary to meet the success standards approved in the reclamation plan.

"Topsoil Substitute Material" means soil or other unconsolidated material either used alone or mixed with other beneficial materials and which can provide the plant growth, soil stability, and other attributes necessary to meet the success standards approved in the reclamation plan.

"Waste" means sewage, industrial waste, municipal waste, recreational waste, agricultural waste, or other waste, as the terms are defined in Texas Water Code, Section 26.001.

"Water" or "Water in the State" means groundwater, percolating or otherwise, lakes, bays, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, wetlands, marshes, inlets, canals, the Gulf of Mexico, inside the territorial limits of the state, and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, navigable or non-navigable, and including the beds and banks of all watercourses and bodies of surface water, that are wholly or partially inside or bordering the state or inside the jurisdiction of the state.

"Waterway" means water in the state other than groundwater, percolating or otherwise, springs, or wetlands.

"Waterway Setback" means the surface area of a setback or buffer area parallel to both sides of a waterway established as a protective easement permanently managed for the purpose of surface water quality protection in which development is prohibited or limited.

"Wetland" means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

Wetlands generally include swamps, marshes, bogs, and similar areas. Wetland boundaries are defined using the U.S. Army Corps of Engineer's protocol described in the 1987 Corps of Engineers Wetlands Delineation Manual.

**82.101. Authority, Purpose, and Objective.**

(a) No change.

(b)(1) – (2) No change.

(3) The County has authority under Texas Local Government Code Chapter 573 to take any necessary or proper action to comply with the requirements of the storm water permitting program under the national pollutant discharge elimination system (Section 402, Federal Water Pollution Control Act (33 U.S.C. Section 1342)), including:

(A) developing and implementing controls to reduce the discharge of pollutants from any conveyance or system of conveyance owned or operated by the County that is designed for collecting or conveying storm water;

(B) developing, implementing, and enforcing storm water management guidelines, design criteria, or rules to reduce the discharge of pollutants into any conveyance or system of conveyance owned or operated by the County that is designed for collecting or conveying storm water; and

(C) assessing reasonable charges to fund the implementation, administration, and operation of the stormwater permitting program as necessary to comply with federal or state program requirements.

(4) The County has authority under Texas Water Code Chapter 16 to take all necessary and reasonable actions to comply with the requirements and criteria of the National Flood Insurance Program, to promote public health, safety, and general welfare.

**82.103. Coordination with Other Jurisdictions.**

(a) through (b) No change.

(c) Other Development.

In additions-addition to compliance with the subdivision regulations of the County, a municipality, and/or any other legislative created entities with subdivision authority, the development and use of real property in the County may be subject to regulation by

other jurisdictions, such as the Lower Colorado River Authority, the Texas Natural Resources Conservation Commission on Environmental Quality, and the Barton Springs Edwards Aquifer Conservation District, as well as other County regulations, as provided in Section 82.101(c).

#### **82.104. Enforcement.**

(a) Enforcement Relating to Subdivision Platting Requirements. Violations of these Standards may be enjoined or damages may be recovered in an amount adequate for the County to undertake any necessary construction activity to bring about compliance with the Standards under Section 232.005, of the Texas Local Government Code. In addition, a knowing or intentional ~~violations~~ violation of the Standards is a Class B misdemeanor.

(b) Enforcement relating to Storm Water Management. A person who violates a requirement of this chapter relating to storm water management may be subject to the following remedies:

(1) Civil Remedies.

(A) A person who violates a rule or order adopted by the County pursuant to Chapter 573 of the Texas Local Government Code is liable to the County for a civil penalty of not more than \$1,000 for each violation. Each day a violation continues is considered a separate violation for purposes of assessing the civil penalty.

(B) Travis County may bring suit in a district court to:

(i) enjoin a violation or threatened violation of a rule or requirement adopted by the County under Chapter 573 of the Texas Local Government Code; or

(ii) recover a civil penalty authorized by Section 573.003(a), Texas Local Government Code.

(2) Nuisances. An actual or threatened discharge to a Municipal Separate Storm Sewer that violates or would violate this chapter is hereby declared to be a nuisance.

(3) Abatement of Violation and Remediation. Any person violating any of the provisions of this chapter is liable for any costs of violation abatement or remediation of any property, land, water, or wildlife habitat negatively affected, damaged, or threatened as a result of any such violation. The cost of abatement or remediation is the responsibility of that person and not a cost borne by Travis County and any other affected entities.

(4) Injunctive Relief. It is unlawful for any person to violate any provision or fail to comply with any of the requirements of this chapter. If a person has violated or continues to violate the provisions, Travis County may petition for a preliminary or permanent

injunction restraining the person from activities which would create further violations or compelling the person to perform abatement or remediation of the violation. Travis County may recover all attorney fees, court costs, and other expenses associated with enforcement of the Code, including sampling and monitoring expenses.

(5) Remedies Not Exclusive. The remedies listed in this chapter are not exclusive of any other remedies available under any applicable federal, state or local law and it is within the discretion of Travis County to seek cumulative remedies. The discharger is subject to any administrative, civil, or criminal penalties, as applicable under the Texas Water Code.

#### **82.106. Regulation of Land Excepted from the Platting Requirements.**

(a) No change.

(b) The applicable portions of the County's current Rules and Private Sewage Facilities and Regulations for Flood Plain Management and Guidelines and Procedures for Development Permits; and

(c) To the extent that engineering and traffic safety concerns are raised, the Travis County Driveway Permit Process; and

(d) The requirements of this chapter for permanent management of storm water, construction management of storm water, and setbacks for development from waterways and critical environmental features.

#### **82.201 General Subdivision Procedures.**

(a) General.

(1) The Commissioners Court will not approve a Final Plat for subdivision of land unless it complies with all applicable requirements ~~of these~~ and standards of this chapter.

(2) For subdivisions ~~with~~ within the ETJ of a municipality with which the County has entered into an agreement under 242.001(c) and (d), Local Government Code, County review, if any, shall be as provided in the agreement. If any provision of the chapter cannot be reconciled with such an agreement in a manner consistent with Chapter 245, Local Government Code, the agreement shall control.

(a)(3) through (a)(4) No Changes.

(b) Applications.

(1) No Changes.

(2) The application for approval of a preliminary plan or Final Plat will be reviewed by TNR for completeness under the applicable requirements and procedures of ~~these Standards~~ this chapter.

(A) through (C) No Change.

(3) through (8) No Change.

(9) A Master Development Plan must be submitted for an applicant to meet "fair notice" requirements under Section 82.102(a). Otherwise, an applicant may voluntarily submit a master development plan as a non-binding planning tool, but it is not required and will not be approved by the County Executive Manager or the Commissioners Court. If submitted either voluntarily or to meet "fair notice" requirements, it shall consist of a written plan, supporting documentation, and a reasonably detailed map or schematic drawing, drawn to scale. The submittal must contain ~~containing~~ the following:

(A) No Change.

(B) The ~~name~~ names of each adjacent platted subdivisions ~~subdivisions~~ ~~or~~ and the ~~name~~ names of each the record owner ~~owners~~ of adjoining unplatted property;

(C) through (D) No Change.

(E) The location, dimensions, general arrangement and designations of land uses, including all waterways, a preliminary identification of critical environmental features, and other land protected from development and proposed setbacks from waterways and critical environmental features;

(F) Any any sites proposed for special use, including (e.g., parks, open space, flood detention, permanent water quality controls, and or other public facilities);

(~~G~~F) The approximate location of the 25-year flood plain and the 100-year flood ~~plan~~ plain, the location and width of existing drainage channels, creeks, and water courses within the development;

(H) Estimates of the amount of water to be used and wastewater to be generated in all phases of development, identification of the source(s) of the water, a description of the new or existing water and wastewater facilities that will serve the development, a statement by a qualified engineer or geoscientist that the water source and the water and wastewater facilities will be of adequate capacity to serve the development, the owner and operator of the water and wastewater

facilities and the location of the development with respect to any applicable certificates of convenience and necessity, and the schedule for creating any entity that will own or operate the facilities; and-

(IG) The proposed location of ~~proposed~~ drainage courses and any necessary off-site extensions.

(c) Expiration and Extension.

(1) Preliminary Plan.

(A) No Change.

(B)

(i) No Change.

(ii) The expiration date of a preliminary plan may be extended administratively for a period of two years if neither the preliminary plan nor the regulations, including requirements of this chapter and Chapter 64, governing the original approval of the preliminary plan have significantly changed. No more than two such extensions shall be granted.

(iii) No Change.

**82.204. Final Plat.**

(a) Final Plat Approval. If the property proposed for a Final Plat is within the jurisdiction of any other governmental entity with platting authority, the Final Plat must be submitted concurrently to both jurisdictions. If the Final Plat application contains property currently within an existing recorded subdivision, see Section 82.201(d) for plat cancellation and revision procedures. A Final Plat must incorporate all the provisions of any Preliminary Plan for the property that has previously received approval from the Commissioners Court. A final plat proposal must comply with all applicable requirements of this chapter, including the water quality protection requirements. If changes are necessary, the approved Preliminary Plan must be revised, unless the entire tract is being final platted.

(b) No Change.

(c) Final Plat Requirements Outside a Municipality's ETJ.

(1) through (24) No Change.

(25) Other Approvals.

(A) When a revision to a flood plain insurance rate map is initiated under Section 82.207, evidence required by that section must be submitted demonstrating of the Federal Emergency Management Agency's receipt of the applicant's request for revision before approval of the final plat that request.

(B) Outside the ETJ, or for any single-family residential subdivision of a tract exceeding 20 acres and for all commercial subdivisions, the owner must provide evidence of compliance with the environmental requirements of other jurisdictions, in accordance with Section 82.916. ~~submit copies of any of the following permits that are required for the development of the tract, or if a permit is not required, documentation of that fact from the appropriate agency or, if documentation from the agency is unavailable, bona fide documentation of that fact from a qualified professional. In this subsection, areas in which Travis County has been granted exclusive jurisdiction pursuant to Chapter 242 of the Texas Local Government Code are considered outside the ETJ.~~

~~(i) — If the development is subject to the LCRA Highland Lakes Watershed Ordinance or the TCEQ Edwards Aquifer rules at 30 Texas Administrative Code Chapter 213, or if the owner applies for an individual TPDES permit, any additional material that the owner submits to LCRA or TCEQ to obtain the permit, as well as the permit once it is issued.~~

~~(ii) — Permits under Section 10 of the federal Rivers and Harbors Act and/or Section 404 of the federal Clean Water Act.~~

~~(iii) — Permits under Section 10 of the federal Endangered Species Act.~~

~~(iv) — The owner's proposed Stormwater Pollution Prevention Plan and Notice of Intent required to comply with Texas Pollutant Discharge Elimination System (TPDES) requirements under Section 26.040, Water Code, and Section 402 of the Clean Water Act. The final Plan and Notice must be submitted before approval of subdivision construction plans.~~

(C) through (E) No Change.

(d) Certifications and Acknowledgments.

(1) through (5) No Change.

(6) Plat Notes.

(A) through (D) No Change.

(E) The plat notes relating to water quality protection requirements, in accordance with Section 82.945 of this chapter.

(e) No Change.

**82.206. Private Street Subdivision.**

(a) General. A private street is privately owned and maintained, is not intended for use by the general public, and may have controlled or restricted access. Private streets normally serve residential properties on individual lots.

(1) through (2) No Change.

(3) Outside the ETJ of any municipality, private streets are subject to county regulations in order to ensure:

(A) through (D) No Change.

(E) Construction and post-construction operation of the private street does not cause or allow adverse impacts on water quality as a result of storm water runoff or other pollutant discharges.

(4) through (6) No Change.

(b) Creation of Private Streets in New Subdivisions.

(1) No Change.

(A) No Change.

(B) Association bylaws which outline membership, voting rights, and other items similar in nature; and

(C) Establishment of a contact person and mailing address for the association; and

(C)(D) Whenever there is a change in the information of Paragraphs (A) – (C), the association must promptly forward the revised information to the County Executive.

(2) Prior to the issuance of a Basic Development Permit for the construction of the private street subdivision improvements, the developer must submit a copy of the association's Homeowners' Association's Certificate of Incorporation to the County Executive TNR.

(3) The following final plat notes are required:

(A) No Change.

(B) The undersigned owner does hereby subdivide \_\_\_\_ acres of land out of said \_\_\_\_\_ acres tract in accordance with this plat, to be known as "[subdivision's title]" subdivision, subject to the covenants and restrictions shown hereon, and hereby dedicates to the owners of the lots in the subdivision, public utilities serving the subdivision, emergency services providers with jurisdiction, and public service agencies, the use of all the private street and other easements shown hereon, subject to any easements and/or restrictions heretofore granted and not released. The maintenance and payment of real property taxes on such private streets are the responsibility of the owner(s) of the subdivision or any duly constituted homeowners association under that certain instrument of record at [Volume \_\_\_\_\_, Page \_\_\_\_\_, of the ~~Travis County~~ Deed of Records of Travis County, Texas, or Document Number \_\_\_\_\_ in the Official Public Records of Travis County, Texas]. An express easement is hereby granted across said private streets and any common areas for the use of the surface for all governmental functions, vehicular and non-vehicular, including fire and police protection, solid and other waste material pickup, inspection or investigation of storm water management, and any other purpose any governmental authority deems necessary; and owner further agrees that all governmental entities, their agents or employees, shall not be responsible or liable for any damage occurring to the surface of the said private street and any common area as a result of any such use by governmental vehicles

(C) The private street shall be operated and maintained to prevent adverse impacts on water quality as a result of storm water runoff or other pollutant discharges. The entity identified in Doc. Number \_\_\_\_\_ of the Official Public Records of Travis County, Texas must manage the private street using appropriate structural and non-structural best management practices at all times to sufficiently prevent and address erosion and sedimentation. The entity has a continuing duty to operate and maintain any permanent water quality control and other best management practices associated with the private street, to reduce or eliminate the discharge of pollutants to the maximum extent practicable.

(4) through (9) No Changes.

(c) Conversion of Existing Public Streets to Private Streets.

(1) A homeowners or property owner's association must be in existence or created and must have the power to assess fees in order to own, pay applicable taxes, operate and maintain a permanent water quality control structure, and maintain the proposed private streets. Draft copies of the documents referenced

at Section 82.206(b)(1)(A) and (B) are required to be submitted for review and approval during the review process. ~~Approved copies of the documents shall be recorded by the county at the time of abandonment and discontinuance.~~ In addition, a copy of the homeowners or property owner's association's Certificate of Incorporation must be provided to TNR prior to the time of abandonment and discontinuance. Approved copies of the Order of the Commissioners Court shall be recorded by the County at the time of abandonment and continuance.

(2) through (4) No Change.

(5) If ~~security gates~~ are proposed, a Basic Development Permit application must be submitted that includes plans ~~must be prepared~~ showing the location of the gates. A minimum storage space of 40 feet must be provided between the gates and the nearest intersecting street right-of-way. A development permit will not be granted until the ~~The~~ design of the gates ~~is~~ must be approved by the County ~~county~~, the emergency service ~~service~~ provider, and, where applicable, any other governmental entity with jurisdiction.

(d) through (e) No Change.

**82.207 Water Quality Protection ~~Stormwater, Drainage, and Floodplains.~~**

(a) A preliminary plan, final plat, or development permit may not be approved unless it includes storm water drainage facilities, permanent water quality controls, and measures that:

(1) through (3) No Change.

(4) ensure surface grades will ~~not~~ permit water to gather in a pool that may become stagnant;

(5) control, both temporarily during construction and permanently thereafter, erosion and sedimentation so as to reduce to the maximum extent practicable or eliminate the discharge of pollutants into ~~minimize siltation of water courses, in~~ accordance with the requirements of Subchapters I and K;

(6) through (8) No Change.

(b) through (o) No Change.

**82.209 ~~Storm Water Quality, Riparian Corridors, and Environment.~~**

(a) ~~Geographic Scope~~

~~In addition to the other requirements of this chapter, this section applies outside the ETJ of any municipality to any single-family residential development of a tract exceeding 20 acres on the date of the order adopting this section and all Commercial Developments;~~

~~except any development in the unincorporated areas of Travis County in the HLWO area, as governed by Section 82-211. . In this Section, areas in which Travis County has been granted exclusive jurisdiction pursuant to Chapter 242 of the Texas Local Government Code are considered outside the ETJ.~~

~~(b) Water Quality Measures for Construction Activities:~~

~~(1) Temporary and permanent best management practices shall be employed to prevent polluted stormwater runoff from all construction and development activities from entering surface waterways or groundwater during the construction process until final site stabilization is complete.~~

~~(2) If the owner or Construction Site Operator is issued a TCEQ Edwards Aquifer permit, or individual TPDES stormwater permit, and if the owner's or Construction Site Operator's SWP3 and Notice of Intent comply with the applicable TCEQ general permit requirements, no additional best management practices shall be required to comply with Paragraph (1), except as provided in Paragraph (3).~~

~~(3) Construction best management practices may be required in addition to those in the owner's or Construction Site Operator's SWP3 or TCEQ permit if: more than five acres will be disturbed at any one time;~~

~~the development will take place on any slope greater than ten percent;~~

~~(C) the development includes a road crossing of a waterway, including an intermittent or perennial stream; or~~

~~(D) after construction or development activities commence, the measures in the SWP3 or TCEQ permit are determined by the Executive Manager to be inadequate to ensure that pollution of surface and ground water is prevented to Maximum Extent Practicable.~~

~~4. Additional best management practices under Paragraph (3) include:~~

~~(A) a pre-construction site meeting;~~

~~(B) construction disturbance phasing or sequencing to limit soil erosion, including final stabilization accomplished with each phase;~~

~~(C) stabilization measures including re-vegetation, mulching, soil retention blanket, or similar best management practices;~~

~~(D) temporary structural or non-structural best management practices at additional locations or in additional quantities;~~

~~(E) accelerated maintenance; and~~

(F) ~~other best management practices, if appropriate, specified in the LCRA Technical Manual.~~

(c) ~~Buffer Zones~~

~~(1) Buffer Zones for Environmentally Valuable Features.~~

(A) ~~In this subsection, the following terms have the following meanings:~~

(i) ~~“Bluff” means a bluff that is adjacent to a waterway that has a vertical change in elevation of more than 40 feet and an average gradient greater than 400 percent (greater than four (4) feet vertical for each one (1) foot horizontal).~~

(ii) ~~“Canyon Rimrock” means a rimrock that is adjacent to a waterway that has a rock substrate with a gradient that exceeds 60 percent for a vertical distance of at least four feet, and that is exposed for at least 50 feet horizontally along the rim of the canyon.~~

(iii) ~~“Point Recharge Feature” means a cave, sinkhole, fault, joint, or other natural feature that lies over an aquifer recharge zone and that may transmit a significant amount of surface water into the subsurface strata.~~

(iv) ~~“Environmentally Valuable Features” means features that are of critical importance to the protection of environmental resources, and include bluffs, canyon rimrocks, cave, point recharge features, sinkholes, springs, and wetlands.~~

(v) ~~“Wetland” means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.~~

(B) ~~Drainage patterns for development must be designed to protect environmentally valuable features from the effects of runoff from developed areas, and to maintain the catchment areas of recharge features in a natural state. Special controls must be used where necessary to avoid the effects of erosion, or sedimentation, or high rate of flow.~~

(C) ~~Buffer zones for environmentally valuable features shall be included within protective easements.~~

(D) ~~A buffer zone is established around each environmentally valuable feature.~~

(i) ~~For a cave, sinkhole, spring, and wetland, the width of the buffer zone is 150 feet from the edge of the environmentally valuable features.~~

~~(ii) For a point recharge feature, the buffer zone coincides with the topographically defined catchment basin, except that the width of the buffer zone from the edge of the environmentally valuable feature is not less than 150 feet and not more than 300 feet.~~

~~For a bluff or canyon rimrock feature, the buffer zone is 50 feet.~~

~~(E) Except as provided in Subparagraph (F) below, within an environmentally valuable feature buffer zone:~~

~~(i) the natural vegetation cover must be retained to the maximum extent practicable;~~

~~(ii) construction is prohibited; and~~

~~(iii) wastewater disposal or irrigation is prohibited.~~

~~(F) If located at least 50 feet from the edge of the environmentally valuable feature, the prohibition of Subparagraph (E) does not apply to a yard, hiking trail, or a recharge basin designed to discharge to a point recharge feature without polluting ground water.~~

~~(3) Buffer Zones for Waterways.~~

~~(A) Waterways are classified as follows:~~

~~(i) Within a western watershed;~~

~~(1) a minor waterway has a drainage area of at least 64 acres and not more than 320 acres;~~

~~(2) an intermediate waterway has a drainage area of more than 320 acres and not more than 640 acres;~~

~~(3) a major waterway has a drainage area of more than 640 acres.~~

~~(ii) Within an eastern watershed:~~

~~(1) a minor waterway has a drainage area of at least 320 acres and not more than 640 acres;~~

~~(2) an intermediate waterway has a drainage area of more than 640 acres and not more than 1290 acres;~~

~~(3) a major waterway has a drainage area of more than 1280 acres.~~

~~(B) A buffer zone is established along each classified waterway. The boundaries of the buffer coincide with the boundaries of the fully developed 100-year~~

~~flood plain for the waterway, except as follows. Buffer zones for waterways shall be included within protective easements.~~

~~\_\_\_\_\_ (ii) For a minor waterway, the boundaries of the buffer zone are located not less than 50 feet and not more than 100 feet from the centerline of the waterway.~~

~~\_\_\_\_\_ (iii) For an intermediate waterway, the boundaries of the buffer zone are located not less than 100 feet and not more than 200 feet from the centerline of the waterway.~~

~~\_\_\_\_\_ (iv) For a major waterway, the boundaries of the buffer are located not less than 200 feet and not more than 400 feet from the centerline of the waterway.~~

~~\_\_\_\_\_ (C) Notwithstanding Subparagraph (B), a waterway buffer zone does not extend beyond a rimrock or the crest of a bluff. A crest is a line along the top of a bluff beyond which the average slope has a gradient of not more than 50 percent for a distance of at least 40 feet.~~

~~\_\_\_\_\_ (D) The shoreline boundary of the waterway buffer for Lake Travis coincides with the 681-foot mean sea level contour line. The width of the buffer, measured horizontally inland, is 100 feet, or, for a detached single-family residential use, 75 feet.~~

~~(E) Development within a waterway zone buffer is prohibited except as follows:~~

~~\_\_\_\_\_ (i) A fence is permitted only if it does not obstruct flood flows,~~

~~\_\_\_\_\_ (ii) A golf course or part of a golf course is permitted only if no fertilizers, pesticides, or herbicides are used within the buffer zone.~~

~~\_\_\_\_\_ (iii) a park or similar open space use, other than a parking lot, is permitted only if a program of fertilizer, pesticide, and herbicide use is approved. Park development is limited to hiking, jogging, or walking trails and outdoor facilities, and excludes stable and corrals for animals.~~

~~\_\_\_\_\_ (iv) Along Lake Travis, a boat dock, pier, wharf, or marina and necessary access and appurtenances, is permitted.~~

~~\_\_\_\_\_ (v) A utility line may cross a waterway buffer zone.~~

~~\_\_\_\_\_ (vi) Detention basins and floodplain alterations are permitted if the requirements of Section 82.207 and the other provisions of this chapter are met.~~

~~\_\_\_\_\_ (vii) A minor waterway buffer zone may be crossed by a residential or commercial street or driveway if necessary to provide access to property that cannot otherwise be safely accessed.~~

~~—— (viii) An arterial street identified in the metropolitan transportation plan may cross a major waterway buffer zone.~~

~~—— (ix) An arterial or collector street may cross an intermediate waterway buffer zone only if it is at least one mile from any other collector or arterial street crossing on the same waterway.~~

~~—— (x) An arterial or collector street may cross a minor waterway buffer zone, provided that a collector street crossing must be at least 2,000 feet from a collector or arterial street crossing on same waterway.~~

~~—— (xi) Street and utility crossings shall be aligned to be perpendicular to the waterway buffer zone.~~

~~—— (xii) The Executive Manager may grant exceptions to the requirements of clauses (ix) through (xi) where strict compliance is impracticable.~~

~~—— (xiii) All street and utility crossings shall be designed and constructed to minimize pollution of the waterway to the greatest extent practicable.~~

~~(d) — Cut and Fill.~~

~~—— (1) Land Balancing.~~

~~—— (A) All cut and fill land balancing shall be limited to a maximum of 8 feet.~~

~~—— (B) Retaining walls shall not exceed one foot above the material being retained.~~

~~—— (C) Retaining wall over 5 feet in height shall be detailed in construction plans or plans submitted with the application for the site development permit.~~

~~—— (2) Detention and Water Quality Ponds.~~

~~There are no cut or fill limitations for the construction of water quality basins, stormwater detention ponds, streets, or driveways.~~

~~(3) Spoils Disposal.~~

~~(A) No fill shall be placed on any lot unless authorized in approved subdivision construction plans or a site development permit.~~

~~(B) Temporary spoils shall be removed prior to acceptance of streets and drainage in a subdivision.~~

~~(C) Prior to removal of spoils from a site, the owner shall notify the Executive Manager of the destination of the spoils.~~

~~(e) — Post-Construction Water Quality Controls~~

~~Permanent water quality controls meeting the requirements of Subsection (f) for western watersheds and Subsection (g) for eastern watersheds shall be employed to prevent polluted stormwater runoff from developed sites from entering surface waterways or ground water after construction is complete.~~

~~(f) — Post-Construction Water Quality Controls for Western Watersheds~~

~~(1) — For development in areas with slopes up to 10 percent, 70 percent of the additional pollutant load in the stormwater runoff for total suspended solids, total phosphorus, and oil and grease shall be removed. For such development with 500 feet of the 691-foot mean sea level contour line, 75 percent of the additional pollutant load in the stormwater runoff for total suspended solids, total phosphorus, and oil and grease shall be removed.~~

~~(2) — For development on slopes greater than 10 percent but less than 20 percent, 80 percent of the additional pollutant load in the stormwater runoff for total suspended solids and 75 percent of the additional pollutant load in the stormwater runoff for total phosphorus and oil and grease shall be removed. For such development within 500 feet of the 691-foot mean sea level contour line, 90 percent of the additional pollutant load in the stormwater runoff for total suspended solids and 85 percent of the additional pollutant load in the stormwater runoff for total phosphorus and oil and grease shall be removed.~~

~~(3) — For development on slopes greater than 20 percent, 90 percent of the additional pollutant load in the stormwater runoff for total suspended solids and 85 percent of the additional pollutant load in the stormwater runoff for total phosphorus and oil and grease shall be removed.~~

~~(4) — Streambank erosion shall be controlled by designing the drainage system so that the amount of erosion and siltation occurring in the receiving streams is not increased. The magnitude and frequency of the pre-development one-year design storm shall remain the same.~~

~~(5) — The requirements for Paragraph (1) through (4) may be satisfied for a single-family residential subdivision if the subdivision has:~~

~~————— (A) a minimum lot size of one acre; and~~

~~————— (B) a street and drainage network designed without curbs or gutters, or otherwise adequately designed, so that runoff is treated using overland flow methods to a vegetated buffer meeting slope and vegetative area cover requirements.~~

~~(g) — Post-Construction Water Quality Controls for Eastern Watersheds~~

~~—— (1) Water quality controls are required for development with impervious cover exceeding 20% of net site area.~~

~~(2) The controls must provide at least the treatment level of a sedimentation/filtration system and must capture, isolate, and treat the water draining to the control from the contributing area.~~

~~(3) The required capture volume is the first one-half inch of runoff and an additional one-tenth on an inch of runoff for each 10% increase in impervious cover over 20% of gross site area.~~

~~(h) — Maintenance~~

~~The owner or construction site operator shall be responsible for maintaining and shall maintain all permanent water quality controls in a proper manner and consistent with county and other applicable standards, including BMP maintenance permits or agreements required by LCRA or previously approved by LCRA. The owner or construction site operator shall remain responsible for maintenance until either the maintenance obligation is either assumed in writing by another entity having ownership or control of the property, including an owners' association, a district, or a municipality, or ownership of the property is transferred to another entity. A copy of the assumption or transfer of responsibility shall be filed with the Executive Manager within 30 days of the transfer.~~

~~(i) — Site Assessment and Stormwater Management Plan~~

~~—— (1) An owner subject to the requirements of this section shall submit with an application for a preliminary plan a site assessment that identifies all environmentally valuable features, waterways and their classifications, buffer zones, contours, and all other information necessary to determine compliance with this section.~~

~~—— (2) An owner subject to the requirements of this section must submit with an application for a preliminary plan a stormwater management plan that demonstrates permanent water quality structural and non-structural BMPs will comply with this section and shows their locations. The stormwater management plan may be included as part of a drainage plan under 82.207 or as a part of the material submitted under Subsection (b). The stormwater management plan must summarize the SWP3 and temporary structural and non-structural BMPs to be used.~~

~~(j) — Technical Criteria~~

~~—— For purposes of complying with this section, the following technical criteria manual shall apply, provided that any changes to the manuals subsequent to the effective date of this subsection shall not take effect until approved by the Commissioners Court.~~

~~Technical criteria for best management practices and water quality controls in eastern watersheds, environmentally valuable features, waterways, and buffer zones are those contained in the City of Austin Environmental Criteria Manual (effective December 15, 2009). The Executive Manager reserves the right to require alternate technical criteria, on a case-by-case basis, in consideration of site-specific conditions. Impervious cover for purposes of Section 82.209(g) shall be calculated as it is calculated in the City of Austin's ETJ under Chapter 30, the Joint City of Austin-Travis County Code.~~

~~Technical criteria for best management practices and water quality controls in western watersheds are those in the LCRA HLWO Water Quality Management Technical Manual (effective July 1, 2007), provided that to the extent of any conflict, in watersheds contributing to the Edwards Aquifer the owner may use any equivalent or more stringent technical criteria in TCEQ's Complying with the Edwards Aquifer Rules: Technical Guidance and Best Management Practices (RG-348).~~

~~(k) Construction Plan, Engineering, Fiscal Security, and Inspections~~

~~Water quality controls are subject to same requirements as drainage structures under this chapter regarding construction plans, engineering standards, fiscal security, and inspections.~~

#### **SECTION 82.211. Lake Travis Watershed Water Quality Protection.**

~~(a) Purpose. The Commissioners Court adopts these requirements in recognition of the adoption by the LCRA of the HLWO (effective February 1, 2006). Adoption of these requirements provides an applicant for a development permit with a consistent set of development standards. To improve consistency and provide for coordination of the processes used by Travis County and the LCRA in the area covered by the HLWO, Travis County and the LCRA will enter into an Interlocal Cooperation Agreements that included these requirements. Travis County and the LCRA will facilitate adoption of an Interlocal Cooperation Agreement including these requirements, that will improve the consistency and coordination of the processes used by Travis County and the LCRA in the area now within LCRA jurisdiction under the HLWO.~~

~~(b) Definitions. In this section, the following terms have the following meanings.~~

~~———— **Best Management Practice or BMP** means those practices, including but not limited to those described in LCRA's Technical Manual that effectively manage stormwater runoff quality and volume.~~

~~———— **Commercial Development** means all development other than open space, a single-family residence, or a single-family subdivision development.~~

~~—— **Master Plan** means a conceptual plan of a multi-phased development showing the order of phased development, environmental features (such as creeks, tributaries, slopes, etc.), roads, and proposed location of water quality protection measures for the development.~~

~~—— **Single Family Subdivision Development** means a development subdivision consisting of two or more Single Family Residences.~~

~~—— **Single Family Residence** means one and two family dwelling units designated for occupancy by one or more families as a residence.~~

~~(c) Geographic Scope and Applicability:~~

~~(1) In addition to other requirements of this chapter, this section applies within unincorporated areas of Travis County within the HLWO area, except as specified in paragraph (2).~~

~~(2) The requirements of this section are not applicable to a Single Family Subdivision Development within the extraterritorial jurisdiction of any municipality that has an executed agreement with Travis County that provides for a single office review and where a joint city/county code of subdivision regulations exists pursuant to Section 242.001(d)(4) of the Texas Local Government Code.~~

~~(3) In addition to the other requirements of this chapter, this section applies to the following proposals:~~

~~(A) A development application for a Single Family Residence that proposes 10,000 square feet or greater of impervious cover or where one (1) acre or more of land would be disturbed;~~

~~(B) A Single Family Subdivision Development or Commercial Development that proposes 10,000 square feet or greater of impervious cover or where one (1) acre or more of land would be disturbed; and~~

~~(C) A Re-development application that proposes a cumulative increase of impervious cover of 10,000 square feet or greater or where one (1) acre or more of land will be disturbed.~~

~~(4) A Travis County development permit issued pursuant to Chapter 64 of the Travis County Code is required for a Commercial Development or Single Family Residence that will disturb less than one (1) acre of land. In addition to other requirements of this chapter, the application must describe how erosion and sedimentation will be controlled throughout the development process and how the site complies with the downstream buffer guidelines, in accordance with the LCRA Technical Manual.~~

~~(d) — Development Application Procedures.~~

- ~~(1) In addition to other requirements of this chapter, an applicant for a development permit subject to this section is also subject to the requirements of paragraphs (2) — (4) of this subsection.~~
- ~~(2) Any development application, amendment application, and required supporting information shall be submitted to the Lower Colorado River Authority at the same time as it is provided to the Executive Manager.~~
- ~~(3) Whenever additional information is provided to the Executive Manager as a part of the administrative or technical review process for a development application, it also shall also be submitted at the same time to the Lower Colorado River Authority at the same time.~~
- ~~(4) Before making any changes to an approved master plan, an applicant must apply for an amendment to the development permit issued pursuant to Chapter 64 of the Travis County Code with respect to the approved master plan. An application for amendment shall be made and will be processed in accordance with the procedures of this subsection and any additional requirements of this chapter and Chapter 64. The application for amendment shall clearly identify the items being sought to be amended and the reasons therefore. No permit amendment is required for minor field adjustments of temporary erosion and sedimentation controls. A modification to an approved master plan shall be required if there is a material change in land use or an increase in density or impervious cover. Modifications to an approved master plan shall be processed in accordance with the performance standards in effect on the date of the application for the area or phase covered by such modification.~~

~~(e) — Pre-Development Planning.~~

~~Before submitting an application for a development permit for a Single Family Subdivision Development greater than 20 acres in area or a Commercial Development greater than three acres in area, an applicant shall contact the Executive Manager to arrange a pre-development/concept plan meeting with the Executive Manager or his designee. The meeting will focus on the proposed land plan, slopes, buffers, environmentally valuable features, and water quality management practices for construction activities and post-construction storm water management, and may include a site investigation. The objective of the meeting is to assess the desired development configuration and to offer constructive guidance regarding appropriate water quality management strategies for the site. Additional guidance on the meeting and procedures are found in the LCRA Technical Manual. After the meeting, the County will provide a letter to the applicant confirming that the meeting has been held.~~

~~(f) Buffer Zones:~~

~~(1) Buffer Zones for Environmentally Valuable Features. A development project subject to this section must comply with Section 82.209(c)(1).~~

~~(2) The buffer zones for bluffs and rimrocks shall not apply adjacent to the Pedernales River if:~~

~~(A) all lots fronting the Pedernales River have a minimum frontage of 200 feet and a minimum size of 1 acre and best management practices are employed to achieve a level of water quality and environmental protection equivalent to the 50 foot buffer zone; or~~

~~(B) the Executive Manager grants an exception allowing a buffer zone of no less than 25 feet based on a demonstration that a level of water quality and environmental protection equivalent to the 50 foot buffer zone will be achieved through enhancement of natural vegetative cover within the buffer, low impact site design, or other measures.~~

~~(3) Buffer Zones for Waterways. Buffer zones for waterways protect aquatic resources from the short and long term impacts of development activities. Buffer zones shall remain free of construction, development, or other alterations except for utility and roadway crossings. No stormwater treatment facilities, golf courses, on-site wastewater systems or wastewater irrigation shall be located in the buffer zone. Stormwater discharge from the development shall be dispersed into a sheet flow pattern before reaching the buffer zone. Except as described in subparagraph (C), a development application shall comply with either option 1 or option 2, as described in subparagraphs (A) and (B).~~

~~(A) Option 1: Buffer Zones:~~

~~(i) Creeks or swales draining less than 40 acres but more than five acres, excluding roadside swales, shall have a minimum buffer width of 25 feet from the centerline of the creek or swale.~~

~~(ii) Creeks or swales draining less than 128 acres but more than 40 acres shall have a minimum buffer width of 75 feet from the centerline of the creek or swale.~~

~~(iii) Creeks draining less than 320 acres but more than 128 acres shall have a minimum buffer width of 100 feet from the centerline of the creek or swale.~~

~~(iv) Creeks draining less than 640 acres but more than 320 acres shall have a minimum buffer width of 200 feet from the centerline of the creek or swale.~~

~~(v) — Creeks draining 640 acres or greater shall have a minimum buffer width of 300 feet from the centerline of the creek or swale.~~

~~(B) — Option 2: Floodplain Buffer Zone:~~

~~(i) — For creeks or rivers draining less than 40 square miles but more than five acres, excluding roadside swales, the buffer zone shall extend a minimum of 25 feet from the 100-year floodplain boundary paralleling each side of the creek or swale. The 100-year floodplain shall be based on the fully developed conditions as approved by LCRA.~~

~~(ii) — For creeks or rivers draining more than 40 square miles, the buffer zone shall be considered equal to the 100-year floodplain as designated by Federal Emergency Management Agency or by an engineered floodplain study approved by LCRA.~~

~~(C) — Exceptions to the Buffer Zone to Waterways:~~

~~(i) — Limited utility and roadway crossing may be approved by the Executive Manager. The number of crossings through buffer zones shall be minimized according to the guidance located in the LCRA Technical Manual.~~

~~(ii) — Along Lake Travis, necessary access and appurtenances to a boat dock, pier, wharf, or marina, may be approved by the Executive Manager. However, this exception is not allowable along the Lake Travis shoreline in the buffer zone of a swale, creek, or river.~~

~~(iii) — A low impact park development may be approved by the Executive Manager. A low impact park should be limited to trails, picnic facilities, and similar construction that does not significantly alter the existing vegetation or drainage patterns.~~

~~(g) Cut and Fill. A development project subject to this section must comply with Section 82.209(d).~~

~~(h) Water Quality Measures for Construction Activities:~~

~~(1) A development project subject to this section must comply with Section 82.209(b)(1). If the owner's or Construction Site Operator's SWP3 and Notice of~~

~~Intent comply with the applicable TCEQ general permit requirements and the SWP3 is prepared in accordance with the LCRA Technical Manual, no additional best management practices shall be required, except as provided in Paragraph (2).~~

~~(2) A development project subject to this section must also comply with Section 82.209(b)(3) and (4), when applicable due to the site conditions at the location of the proposed project.~~

~~(3) For each SWP3 and Notice of Intent prepared by the owner or Construction Site Operator, a copy shall be provided to the Executive Manager in either paper or portable document format (pdf). These shall be provided in draft form no later than two (2) business days prior to the pre-development/concept plan meeting identified in subsection (e) and provided in final form prior to final approval of the permit. The owner and Construction Site Operator shall be under the continuing obligation to promptly provide a copy of any Notice of Intent, Construction Site Notice, SWP3 revisions, or SWP3 construction inspection reports upon the request of Travis County.~~

~~(i) Post-Construction Water Quality Controls:~~

~~(1) Water Quality Volume. For the protection of water quality and drainage ways from channel erosion and stormwater runoff pollution, each development project subject to these performance standards shall provide water quality volume in approved BMPs found in the LCRA Technical Manual. The minimum required water quality volume is based on the one-year, three-hour storm runoff volume as defined in the LCRA Technical Manual. In addition, development projects can use Low Impact Development methodologies as identified in the LCRA Technical Manual to reduce or avoid stormwater storage volume.~~

~~(2) Coverage of a development project or site under a Travis County development permit does not exempt the owner from the requirement to obtain a LCRA BMP Maintenance Permit, in accordance with Section 4, Subchapter A, Paragraph (d) of the LCRA-HLWO effective March 1, 2007.~~

~~(3) Maintenance. A development project subject to this section must comply with Section 82.209(h).~~

~~(4) Alternate Standards. A Single-Family Subdivision Development project subject to this section that meets the criteria in (A) or a Commercial Development project subject to this section that meets~~

~~the criteria in (B) need not comply with paragraphs (1) — (2), except as specified in paragraph (5).~~

~~(A) — Single-Family Subdivision Development.~~

- ~~(i) — The gross impervious cover is 15 percent or less and the Cluster Development sections have 20 percent or less gross impervious cover.~~
- ~~(ii) — A street and drainage network is designed to include the use of open roadway sections, ribbon curb and maintenance of sheet flow.~~
- ~~(iii) — Impervious cover credit by use of porous pavement, rainwater harvesting, native landscaping and other methods is used to gain compliance as defined in the LCRA Technical Manual.~~

~~(B) — Commercial Development.~~

- ~~(i) — Projects less than three acres in area can achieve compliance with this section through the use of vegetated filter strips and flow-spreading methodologies as identified in the LCRA Technical Manual.~~
- ~~(ii) — Impervious cover credit by use of porous pavement, rainwater harvesting, native landscaping and other methods can be used to gain compliance as defined in the LCRA Technical Manual. For a Single-Family Subdivision Development, the alternate standards of Section 5, Subchapter A, Paragraph (b)(2)(i) of the LCRA HLWQ effective March 1, 2007, are adopted by reference.~~

~~(2) The Executive Manager may require that the water quality volume specified in paragraph (1) of this subsection be provided for a portion or portions of a development utilizing the alternate standards of paragraph (4), in consideration of factors including, but not limited to, minimum lot size of the subdivision, location and proximity of impervious cover sections of the development to the 691 foot mean sea level contour line, extent to which the development site is able to preserve or achieve sheet flow, and the intensity of slopes to be developed at a site.~~

~~(j) Technical Criteria.—Technical criteria for best management practices and water quality controls are those in the LGRA HLWO Water Quality Management Technical Manual, effective July 1, 2007, and subsequent amendments.~~

~~(k) Construction Plan, Engineering, Fiscal Security, and Inspections.~~

~~(1) —Water quality controls are subject to the same requirements as drainage structures under this chapter regarding construction plans, engineering standards, and inspections.~~

~~(2) —Approval of a permit application for commercial and single-family subdivision development is contingent upon the execution of an irrevocable letter of credit acceptable to Travis County in the amount specified in the permit which provides for the construction of temporary erosion and sedimentation controls and site stabilization, in accordance with the permit and any other provision of this chapter. The amount of the irrevocable letter of credit shall not be less than 100 percent of the cost as estimated by the Texas-registered professional engineer who seals the permit application. The irrevocable letter of credit shall be released after the final inspection/concurrence letter from the engineer has been received and after approval of a BMP Maintenance Permit by LGRA.~~

**82.216. Water Availability-Protection of Surface and Ground Water Quantity and Quality.**

(a) through (b) No Change.

(c) Impervious cover under this section shall be calculated in accordance with the requirements and guidance set up manner it is calculated under Section 82.944(b)(3) 82.211, Permanent Lake Travis Watershed Water Quality ControlProtection.

(d) No Change.

**82.301. General.**

(a) No Change.

(b) General Engineering Design Process. A final Development Permit application may be submitted to TNR during normal office hours. The application must be accompanied by: (1) one set two sets of the consulting engineer's construction drawings for streets, site development, drainage, storm water pollution prevention, permanent water quality control, water supply, wastewater, and roadway signing and striping plan;

(2) one copy of the geotechnical report establishing pavement design standards based on City of Austin or AASHTO pavement thickness design for a full 20-year life; (3) temporary and permanent erosion and sedimentation control methods for all areas disturbed by the construction; and (4) an engineer's construction cost estimate signed and sealed by the same engineer who prepared the plans. In addition, an engineer's summary letter shall be submitted outlining the nature of the project and any requests for the use of Other Standards from the design standards with justification for such applications. A traffic impact analysis will be required for developments that generate traffic volumes in excess of 1,000 vehicles per day. A traffic impact analysis may be required for developments which generate less than 1,000 vpd depending on the type of access proposed, single versus multiple, or if the County believes that existing boundary streets which are affected by the subdivision access will require improvements to maintain an acceptable level of service at the intersections of the subdivision access roads.

(c) Engineer's Construction Plan Requirements. In addition to the construction plan requirements specified in this subsection, each application must include plan sheets prepared by a Texas-licensed professional engineer that comply with the requirements of Section 82.935.

(1) through (13) No Change.

(d) No Change.

**82.302. Street and Drainage Design.**

(a) through (c) No Change.

(d) **Exceptions or Additions to Design Guidelines. Exceptions or Additions to Approved Roadway Design Guidelines for inside and outside of the City of Austin ETJ.**

(1) Street Grades. Shoulder section roadways may have minimum centerline centerline profile grades of 0.0%, if the bar ditches are provided with minimum flow\_line profile grades of 0.5% and the roadway has adequate cross-slope to drain storm\_water away from the pavement. Vertical curves less than one hundred feet long should be avoided. The County Executive may, in accordance with section 82.971, approve alternative street grades using low hydrologic impact techniques in roadway projects.

(2) through (10) No Change.

(e) No Change.

(f) Design for Erosion Control. Designs for erosion and sediment control, sustainable roadways, native vegetation, and tree preservation for roadways and Rights-of-Way shall conform to Subchapter K of this chapter.

~~(1) — Inside the ETJ of incorporated municipalities and within districts with special stormwater quality control requirements, development shall conform to the applicable standards of such municipalities or districts or the County's Standards, whichever are more stringent.~~

~~(2) — In any case, minimum requirements for temporary and permanent erosion control design for right-of-way and drainage easement areas are as follows:~~

~~(A) — The temporary control plan during construction shall be sufficient to prevent sedimentation of drainageways, drainage structures, and flood plain areas that could result in reduced flow capacity, excessive streambank erosion, erosion around structures, or damage of adjoining property.~~

~~(B) — The permanent erosion control plan design shall be sufficient to:~~

~~(i) — Permanently stabilize all disturbed areas with permanent vegetation, including slopes and embankments.~~

~~(ii) — Prevent erosion from exit velocities at outlets of culverts, bridges, storm sewers, and channels through dissipaters, rip rap, level spreaders, linings, gabions, etc.~~

~~(iii) — Prevent gullying and scouring of roadside ditches and open channels from excessive tractive force (shear stress), through vegetation, linings, retention blankets, retards, drop structures, etc., both during and after the vegetation re-establishment period.~~

~~(iv) — Protect the integrity of all structural improvements and prevent excessive continuing sedimentation from unstable right-of-way areas into drainage structures, channels, and bar ditches.~~

~~(g) — National Pollutant Discharge Elimination System (NPDES) Compliance:~~

~~Stormwater discharges from all development projects must conform to the NPDES requirement of the Clean Water Act, which is administered through the U.S. Environmental Protection Agency (EPA). Based on construction scope and total acreage of disturbed soil area, requirements can include: compliance with NPDES General Permits for Industrial Activity, preparation and execution of a Storm Water Pollution Prevention Plan, construction and completion notifications, etc.~~

(g) Driveways.

(1) through (4) No Change.

(5) ~~Driveways may be constructed with portland~~ Portland cement concrete or hot mix asphalt concrete and they should be constructed for their full length and width between the edge of roadway and the right-of-way line. Dip-style driveways, as shown in Exhibits 82.302 B and C, as revised on [Insert effective date of rule], should be used when roadway bar ditches are 18" or less deep measured vertically from the edge of roadway to the invert of the bar ditch. Driveway culverts should be used when bar ditches are greater than 18" deep.

(6) Pipe culverts must be constructed according to details shown in Exhibits 82.302 (D) and (E), as revised on [Insert effective date of rule]. Driveway pipe culverts should be sized to convey the storm event which the roadway bar ditch conveys.

(7) A proposal for a driveway shall provide appropriate construction controls that will reduce or eliminate erosion and sedimentation impacts of the project.

#### **82.401 Construction Fiscal Security**

##### **(a) Requirement of Security**

(1) ~~The County will not approve a construction plan for a commercial development or development of a subdivision is contingent upon~~ the filing of Requirement of Security. In order to assure that a Subdivision's streets and drainage structures are constructed in a timely manner and in accordance with the County's Standards, the Owner of the Subdivision shall file construction security (the "Security"), payable to the County Judge, in the amount equal to, but not exceeding 100% of the cost of such construction, as approved by the County.

(A) Outside the City of Austin ETJ, this section applies unless there is a legal agreement between Travis County and another jurisdiction that assigns fiscal security to another entity.

(B) Within the ETJ of the City of Austin, fiscal security as required by Travis County and the City of Austin by the Single Office of Review, in aggregate, shall be posted with the City of Austin.

(2) The requirement of security is necessary to ensure that:

(A) Streets and drainage structures for the development are constructed in a timely manner and in accordance with the County's Standards; and

(B) Temporary erosion and sediment controls and permanent site stabilization for a commercial development or the development of a

subdivision are constructed and maintained in accordance with the approved plan, permit, and standards required by Subchapters I and K.

(3) Construction Secured. The following plat note will be inserted on all plats to be approved by the County:

The Owner(s) of the Subdivision shall construct the Subdivision's street and drainage improvements (the "Improvements") to County Standards in order for the County to accept the public Improvements for maintenance or to release fiscal security posted to secure private Improvements. To secure this obligation, the Owner(s) must post fiscal security with the County in the amount of the estimated cost of the Improvements. The Owner(s)' obligation to construct the Improvements to County Standards and to post the fiscal security to secure such construction is a continuing obligation binding on the Owner(s) and their successors and assigns until the public Improvements have been accepted for maintenance by the County or the private Improvements have been constructed and are performing to County Standards.

(43) Computing Security Amount.

(A) An estimate of the costs of the road, drainage, and sidewalk construction shall be signed and sealed by a Texas Registered Professional Engineer and delivered to TNR for its approval. The estimate will be based on construction plans, which are acceptable to TNR, and current costs for such work, which have been developed by the County from City, County, and State bid results and from information provided by local suppliers. Preliminary construction plans may be submitted to TNR, if they are sufficiently detailed to establish a reliable basis for the preparation of the construction cost estimate. Quantities will be as shown on the Subdivision's construction plans or developed from the plans, if required. Estimates will be on forms developed by the County. Costs of large or unusual structures, such as bridges, will be based on current costs for similar structures in the area. However, in no case shall the amount of Security be less than the amount it would cost the County to complete the work if it becomes necessary.

(B) The amount of the security shall not be less than 100 percent of the cost estimated by the Texas-licensed professional engineer who seals the plan, as approved by Travis County. The estimate must include the cost for Travis County to complete all temporary erosion and sediment controls, and permanent stabilization work at the site.

(54) Form of Security. The forms of acceptable Security, including a Bond, Letter of Credit, and Cash Security Agreement are included in the Appendix. The Commissioners Court must approve substantive modifications to the form of security. Any form of Security selected will include an escalation clause that may

require an increase in the amount of Security over time. Fiscal security for the construction of sidewalks shall be posted as provided in Section 82.202(g)(3). If ~~posed~~ posted separately from fiscal security ~~for~~ other subdivision infrastructure, sidewalk fiscal security shall be in a form ~~which~~ that tracks the forms of security set forth in the Appendix ~~with the exception~~ except that the ~~term~~ term "Sidewalks" will be substituted for the term "Improvements" in the forms and, for sidewalks for which the homebuilder or other person undertaking site development is responsible, the reference to acceptance by the Commissioners Court at the end of the one-year construction performance period ~~is~~ will be deleted from the forms.

(65) Substitution of Security. In the case of an impending call down of the Security, the The County Judge may accept an offer of substitute security in the then current amount of Security under an approved form without the necessity of Commissioners Court action. In a case where the Security is not about to expire, the County Executive may accept an offer of substitute security. The amount of Security shall be increased to account for any estimated increase in cost due to a change in the construction cost index for the items considered in the original computation of Security.

(67) When Security Required. ~~Security must be filed with the County prior to~~

(A) Security must be filed with the County prior to

(i) approval of a subdivision plat for recording; or

(ii) the commencement of the construction and site disturbance of any kind if no Security is in place at that time.

(B) For a construction project for which fiscal security for erosion and sediment controls is required under this chapter, the fiscal security shall be provided prior to the final approval of the development permit.

(C) If the Security for a recorded Subdivision expires before construction of the Improvements has been completed, it shall be reposted by the party responsible for the construction of such Improvements before construction begins or continues.

(87) Period of Security. The Security instruments shall have a principal period of three years or more. Bonds with no expiration date are acceptable. Letters of Credit must include the following statement:

It is a condition of this letter of credit that it shall be automatically extended without amendment, for additional one-year periods from the present or any future expiration date, unless the bank notifies Travis County in writing by registered mail or overnight courier, at least 60 days prior to the then

current expiration date, that the bank elects not to extend this letter of credit for an additional one-year period.

(98) Construction Performance Period for Public Improvements. The Owner is responsible for the construction of the public Improvements during the Construction Performance Period, which begins upon the acceptance of the construction of the public Improvements by the County and ends a minimum of one year later, when, if the Improvements are performing to County Standards, the County releases the Construction Performance Period Security construction performance period security. If the public Improvements are not then performing to County Standards, the County will notify the owner in writing of the repairs which must be performed in order to bring the Improvements back to acceptable County Standards.

(10) Construction Performance Period for Temporary Erosion and Sediment Controls and Permanent Stabilization.

(A) The security for temporary erosion and sediment controls and permanent stabilization will be released after the final inspection letter from the applicant's engineer has been received, as specified in Section 82.951(b)(10), after acceptance of the certificate of compliance, and after approval of a BMP Maintenance Permit in accordance with Section 82.917, unless the County Executive has waived the requirement for the BMP Maintenance Permit.

(B) The security for temporary erosion and sediment controls and permanent stabilization for a commercial development or residential subdivision development in the Highland Lakes Watershed Ordinance area will, be released after the final inspection/concurrence letter from the engineer has been received by the County Executive and after approval of a BMP Maintenance Permit by Travis County or LCRA.

(b) Collection of Security.

(1) Condition and Period of Construction Security. The Construction Security will be conditioned that the Owner of the ~~Subdivision~~ shall promptly begin construction of the Improvements, including construction of temporary erosion and sediment controls, after approval of the plat and shall diligently prosecute and complete such construction in accordance with the County Standards and specifications. The Construction Security will remain in full force and in effect until all of the ~~Subdivision~~ Improvements have been completed to the satisfaction of the County and public Improvements have been accepted and are performing to County Standards at the end of the Construction Performance Period. In addition, the Construction Security collected for permanent site stabilization will remain in full force and in effect until stabilization has been completed to the satisfaction of the County and is performing to County Standards.

(2) Collection on Security. In the event any or all of the Improvements, including temporary erosion and sediment controls and permanent site stabilization fail to meet the County Standards and the Owner fails or refuses to correct the defects or damage called to his attention in writing by the County, the County may collect the Security to complete the Improvements. The County Judge is authorized to execute notices of intent to collect on posted Security without the necessity of Commissioners Court action, but the Court must authorize the collection of the Security.

(3) Conditions to Draw on Security. The County may draw upon any Security posted under in accordance with this AgreementChapter upon the occurrence of one or more of the following events:

(A) The failure of the Owner or Operator or Subdivider to construct or complete the Improvements to the applicable County Standards;

(B) The Owner, Operator, or Subdivider's failure to renew or replace the Security at least forty-five (45) days prior to its expiration;

(C) The acquisition of the Property or a portion of the Property by the issuer of the Security or other creditor through foreclosure or an assignment or conveyance in lieu of foreclosure;

(D) The arrangement by the Commissioners Court for the completion of one or more of the Improvements, including completion of temporary erosion and sediment controls, or permanent site stabilization; or

(E) The determination by the Commissioners Court that the completion of one or more of the public Improvements, including completion of temporary erosion and sediment controls, and permanent site stabilization is in the public interest.

(4) Collection Is Not Acceptance. The collection on Security and the prosecution of construction to complete the Improvements, including temporary erosion and sediment controls, or permanent site stabilization, to the extent possible with the resulting funds is not acceptance of the Improvements for maintenance. The County is not a Subdivision developer and, if it undertakes the performance of such construction through a third party contractor, the County is acting as a third party trustee on behalf of the public.

(5) No Change.

(c) Reductions of Security

(1) Partial Reduction of Construction Security for Public Improvements, not including Security for temporary erosion and sediment control and permanent site stabilization. Where estimated costs for construction exceed \$50,000, partial reductions of construction Security may be allowed, but cannot exceed ninety percent (90%) of the Security posted for public Improvements or 100% of the Security posted for private Improvements. Partial reductions will be signed by the County Executive-Manager, when provided with:

(A) through (C) No Change.

(2) A partial reduction of construction security for temporary erosion and sediment controls or permanent site stabilization will not be allowed until after satisfactory completion of a pre-defined section or phase of a subdivision or site plan has occurred in its entirety, as specified in paragraph (4) of this subsection.

(3) Full Release. The County Executive-Manager will notify the Commissioners Court of the satisfactory construction of the public and private Improvements. The Commissioners Court may then authorize accepting public Improvements for maintenance. Upon acceptance of the public Improvements and the satisfactory completion of the Construction Performance Period, the County Executive-Manager will fully release the Security for public Improvements, except for sidewalks not yet constructed. Upon approval of the private Improvements, the County Executive Manager will fully release the Security for the private Improvements.

(4) Partial Acceptance. Sections or Phases of subdivisions must be completed in their entirety, excluding sidewalks. No allowances will be made for accepting partially completed sections or phases without the approval of a variance from the Commissioners' Court.

(5) Sidewalk Fiscal. Fiscal for sidewalks shall be released as the sidewalks are constructed and a favorable inspection by a registered accessibility specialist is provided to TNR or substitute fiscal is provided on one or more lots by the then owner of the lot.

(6) Sidewalk Fiscal. Fiscal for sidewalks for which the homebuilder or other person undertaking site development is responsible shall be released as the sidewalks are determined to be constructed in compliance with all requirements of this chapter.

(d) In order to obtain approval and filing of a plat, the Owner must post Security in the amount of ten percent of the cost of the completed Improvements and 100% of the cost of the incomplete Improvements to secure the performance of the construction of the Improvements for a minimum of one year from the date of the approval of the plat and acceptance of the dedication by the County.

(e) Alternative Fiscal. Notwithstanding Sections (a)-(ed) above, the Owner of the land to be subdivided may request the Commissioners Court in writing in the form included in the Appendix for its approval to have the County hold a plat in abeyance until all of the Improvements have been completed to the satisfaction of the County. The Owner shall file Security with the submitted Final Plat to secure restoration of disturbed areas should construction not be completed. The amount of Security to be posted for restoration for developments located within a municipality's ETJ shall be based upon the requirements of the applicable municipality or the County's Standards, whichever are more stringent. However, in no case shall the amount posted be less than the amount required for the County to perform or to contract for the performance of the work, if necessary. The Owner may also be required to post Security for boundary street Improvements, if the Improvements are not to be completed during the construction of the subdivision streets and drainage system. Upon satisfactory completion of the Improvements, the submitted plat shall be forwarded to the Commissioners Court for approval.

(f) If an owner, operator, or subdivider succeeds another owner, operator, or subdivider at a site, the County Executive may release the first owner, operator, or subdivider after the successor owner, operator, or subdivider files an application for the change, obtains a permit, posts the required security, and assumes, in writing, all outstanding stabilization or reclamation liability and requirements at the site transferred to the successor operator. All areas disturbed by the first owner, operator, or subdivider that have not been transferred to the successor operator shall remain the liability of the first operator.

**82.601. Inspection: General Obligations and Responsibilities.**

(a) through (b) No Change.

(c) Performance Period. If during the one-year Performance Period, beginning on the date the public Improvements are accepted by the County and ending one (1) year thereafter, the public Improvements are damaged, exhibit failures, permanent stabilization is not complete, or have required excessive maintenance due to damage or defects in materials or workmanship, including utility backfills or design inadequacies or, if, with respect to permanent site stabilization, specified vegetation is not fully established, the Owner shall take corrective actions, which are acceptable to the County. Prior to release of the Performance Bond, the public Improvements and site stabilization shall be in a condition substantially equal to that at the beginning of the Performance Period.

(d) through (h) No Change.

(i) General Environmental Protection Water Quality Pollution Prevention.

(1) Temporary erosion and sediment control control shall be constructed and maintained and permanent site stabilization shall be completed in an acceptable

manner in accordance with the approved construction plan and SWP3, as required by Sections 82.933 – 82.940 of this chapter as outlined in the City of Austin's Environmental Criteria Manual.

(2) If the erosion and sediment controls or permanent site stabilization is are found to be inadequate, the owner or authorized representative of the owner contractor shall be notified to take corrective measures. If the contractor or primary operator fails to correct the deficiencies, the County may require the contractor to stop construction until the deficiencies are corrected in accordance with the approved plans.

**82.602. Inspection: Protection of Persons and Property.**

(a) and (b) No Change.

(c) Protection of Adjoining Property. The Owner shall be responsible for and shall require his/her contractors each contractor or primary operator to take proper means to protect the adjacent or adjoining property, or any private properties, and residents on those properties from any. The scope of this requirement includes the prevention of in any way encountered, which might be injured injury, damage, or serious effects related in any reasonable way to seriously affected by any process of construction to be undertaken by the owner or authorized representative of the owner. in the work from any damage or injury by reason of said process of construction and the The Owner shall be liable for any and all claims for such damage on account of the failure to fully protect all adjoining, adjacent, and private property or all residents on those properties.

(d) No Change.

(e) Location and Protection of Utilities.

(1) The Owner and his/her contractors are solely responsible for the location and protection of any and all public utility lines and utility customer service lines in the work area. The contractor shall exercise due care to locate and to mark, uncover, or otherwise protect all utility lines in the work area. Upon request, the utility owners will provide such information they have as to the location and grade of water, wastewater, gas, storm sewer, and telephone and electric lines and other utilities in the work area; but such information shall not relieve the Owner or his/her contractor's obligation thereunder, which shall be primary and nondelegatable. Any utility lines damaged by the contractor's operations shall be immediately repaired by the contractor on approval of the utility or the Owner shall cause such damage to be repaired at his/her expense.

(2) Prior to the release of construction fiscal security as described in Section 82.401, the owner shall provide the County Executive with accurate record drawings, in accordance with the standards described in Section 82.604(h).

(f) No Change.

**82.603. Inspection (Responsibility of Owner and County).**

(a) through (c) No Change.

(d) No Change.

(1) through (5) No Change.

(6) County Inspectors (TNR);

(e) Inspector Notifications. It is anticipated that through the Preconstruction Conference and the cooperation of the Owner, Contractor, Superintendent, Primary Operator, and Inspector, only a forty-eight (48) hour advance notice of intent to begin the work will be required. However, other circumstances may require additional advance notification. The Inspector shall be given the opportunity to ~~choice of inspecting and testing~~ inspect and test before, during, and after the operation of various stages of construction.

(1) When a major item, such as excavating, placing of storm sewer pipe, processing of base, placing of curb and gutter, placing structures, laying asphaltic concrete, placing bedding material over storm water underdrains in a permanent water quality control structure, or constructing drains, is under way, the Inspector will follow up at intervals. If the work is stopped for any reason (e.g., rain, strike, lack of materials, equipment breakdown, etc.) for seven (7) calendar days or more, the Inspector shall be notified twenty-four (24) hours in advance of work startup. Usual construction sequence is shown in Exhibit 82.301 E in the Appendix and is generally as follows:

- (A) Placement of storm water erosion and sediment controls.
- (B) Excavation.
- (CB) Subgrade preparation.
- (DC) Installation of underground pipe, conduit, and structures.
- (ED) Processing first left of base.
- (FE) Placing curb and gutter.
- (GF) Processing final left of base.
- (HG) Laying asphaltic concrete.

(2) through (6) No Change.

(f) through (m) No Change.

**82.604 Inspection: Approval of Construction: and Performance Period Guarantee.**

(a) No Change.

(b) Within four (4) working days after the Owner or the Owner's consulting engineer or contractor has given the Inspector written notice that the work has been substantially completed, the Inspector will review the work and a report will be prepared for the Owner with copies for the Owner's consulting engineer and the contractor. This report will include: (1) any remaining items discovered which do not comply with the Construction Documents; (2) requirements of the County previously required and not completed; and (3) any other items required for the issuance of the Approval of Construction Letter. The Inspector's report shall not excuse the Owner from requiring his/her contractors to perform all the work required by the Construction Documents regardless of the time of discovery.

(c) A construction approval meeting will be convened on the site of the work and at a time agreed to by the Inspectors TNR and the Owner. The Owner will also invite contractors as appropriate and the Owner's consulting engineer. An Approval of Construction Letter will be issued by the County. ~~The Letter will be issued at the onsite meeting if all items listed below in this section are in order. If there are exceptions, an approval letter will not be issued and a letter of exception will be issued for the with reasons of exceptions. An Approval Letter will then be issued when the exceptions are cleared. The Approval of Construction Letter will not be issued until contingent upon the following documents being supplied~~ are submitted to the County:

(1) through (2) No Change.

(3) Reproducible Plans, certified as "Record drawings", by the Owner's Consulting Engineer, including any documentation on the drawings to meet any applicable requirements of subsection (h).

(4) No Change.

(5) If applicable, a copy of the Conditional Letter of Map Amendment or Revision from FEMA and the completed application for a Letter of Map Amendment or Revision.

After the Approval of Construction Letter has been issued, the public streets and drainage will be accepted by the Commissioners Court and the construction will be monitored by the County for the one year maintenance period. If damages, failures, or defects appear, or if unsatisfactory stabilization or unsatisfactory re-vegetation occurs, the Owner will be notified to make corrections.

(d) through (f) No Changes.

(g) In addition to the requirements of this section, at the time of substantial completion, the owner or the owner's consulting engineer must also comply with the

requirements of Section 82.951(b)(10) relating to final inspection of the site stabilization in accordance with the SWP3.

(h) Standards for Geo-Referencing of Structures. This subsection applies to a subdivision construction plan, a commercial site construction plan, and a utility or right-of-way project that is not a small construction project if a permanent storm water drainage structure has been constructed or if a setback from a waterway or critical environmental feature exists. This subsection applies in addition to the requirements of subsection (c).

(1) As part of the final inspection and completion approval process, the owner shall require its consulting engineer to provide the County Executive with record drawings of the permanent drainage system constructed for a project in a reproducible form. These record drawings shall comply with paragraph (c)(3) of this section and the requirements of paragraphs (2) – (5).

(2) The record drawings shall be of the “as-built” condition observed at the final inspection of the project.

(3) The record drawing sheets shall include the plan cover sheet, the site plan sheet, the drainage layout sheet, the drainage plan and profile sheets, and the detention and permanent water quality control plans and detail sheets, as applicable to the individual project.

(4) The record drawing sheets shall include the location of at least the following:

(A) each drainage structure and permanent water quality control structure, including: culverts, bridges, inlets, manholes, open channels, outfalls, storm sewer pipe outlets, headwalls, ponds, filter strips, and any permanent water quality control structure;

(B) the storm sewer piping extending underground between the inlet, outlet, and manhole structures; and

(C) setbacks for waterways, critical environmental features, and drainage easements.

(5) The record drawings shall include one printed copy and one digitally reproducible copy, with digital data in a format approved by the County Executive, for ease of incorporation or conversion into a Geographic Information Systems format that is used by the County for maintaining the County's MS4 map.

## **82.901. Permits.**

(a) The County requires permits for the construction of all driveways accessing public roads, utility installation and servicing within public rights-of-way, and Basic

Development Permit for all construction outside incorporated areas for residential and commercial development and soils disposal sites. The Basic Development Permit shall incorporate the construction and water quality protection Standards outlined in required by this chapter document as well as the requirements of Travis County Regulations for Flood Plain Management Chapter 64 of the Travis County Code (Regulations for Floodplain Management and Guidelines and Procedures for Development Permits). All incomplete permit applications will expire one year after the submittal date. A 180-day extension may be granted by the Executive Manager upon request before the one-year time limit has passed. Applicants attempting to complete an expired permit application must apply for a new permit. A renewal of a permit may be allowed by the County Executive Manager, if it is determined that no significant changes have been made to the construction plans and specifications.

(1) Driveway Permit Submittal Requirements.

(A) No Change.

(B) To scale drawing Drawing describing the type, layout, and location of driveway, including documentation either acknowledging use of approved standard details and in accordance with the requirements of 82.931(g) of this chapter for driveways, or alternative details reviewed during the permitting process.

(C) No Change.

(2) Utility Installation Permit.

(A) through (B) No Change.

(C) All work shall be in compliance with the construction and water quality protection Standards outlined in set forth in this chapter document as well as the requirements of Chapter 64 of the Travis County Code (Regulations for Floodplain Management and Guidelines and Procedures for Development Permits), as applicable to the project Travis County Regulations for Flood-Plain Management.

(D) through (I) No Change.

**Chapter 64. Regulations for Floodplain Management  
and Guidelines and Procedures for Development Permits**

**SUBCHAPTER A.**

**64.001. Findings and General Authority.**

(a) **No Change.**

(b)

(1) through (2)      No Change.

(3) Pursuant to the authority granted to it by the Texas Legislature in Texas Local Government Code, Chapter 573, the Travis County Commissioners Court is authorized to take any necessary or proper action to comply with the requirements of the storm water permitting program under the national pollutant discharge elimination system (Section 402, Federal Water Pollution Control Act (33 U.S.C. Section 1342)).

**64.045. Dedication of Easements and Rights-of-Way.**

(a) through (d)      No Change.

(e) Upon completion of construction of the development in accordance with the permit, the owner shall provide reproducible plans and record drawings to the County Executive that meet the requirements of Section 82.604(h) of the Code, relating to geo-referencing of structures completed.

**64.062 Development Permit Application.**

(a)

(1) through (20)      No Change.

(21) The information required by Section 82.931 of the Code for environmental review, as specified for the permit application type.

(b) through (g)      No Change.

**64.066. Approval or Denial of Development Permit.**

(a) through (j)      No Change.

(k) The failure of the applicant to include all of the applicable information required by Section 82.931 of the Code.

#### **64.071. Revocation of Permits.**

(a) and (b) No Change.

(c) Grounds for suspension or revocation of a permit include, but are not limited to:

(1) ~~Refusal~~ refusal to make corrections as may be required by the Floodplain Administrator;

(2) Refusal to make corrections as may be required for compliance with the requirements of Chapter 82, Subchapters H - L of the Code (relating to Water Quality Protection Standards);

(3) ~~Allowing~~ allowing work to be covered so an inspection cannot be made; or

(4) ~~Denial~~ denial of access for inspections to the Floodplain Administrator or other agents of the County Executivehis agent.

#### **64.183. Utilities and Individual Septic Tank Systems.**

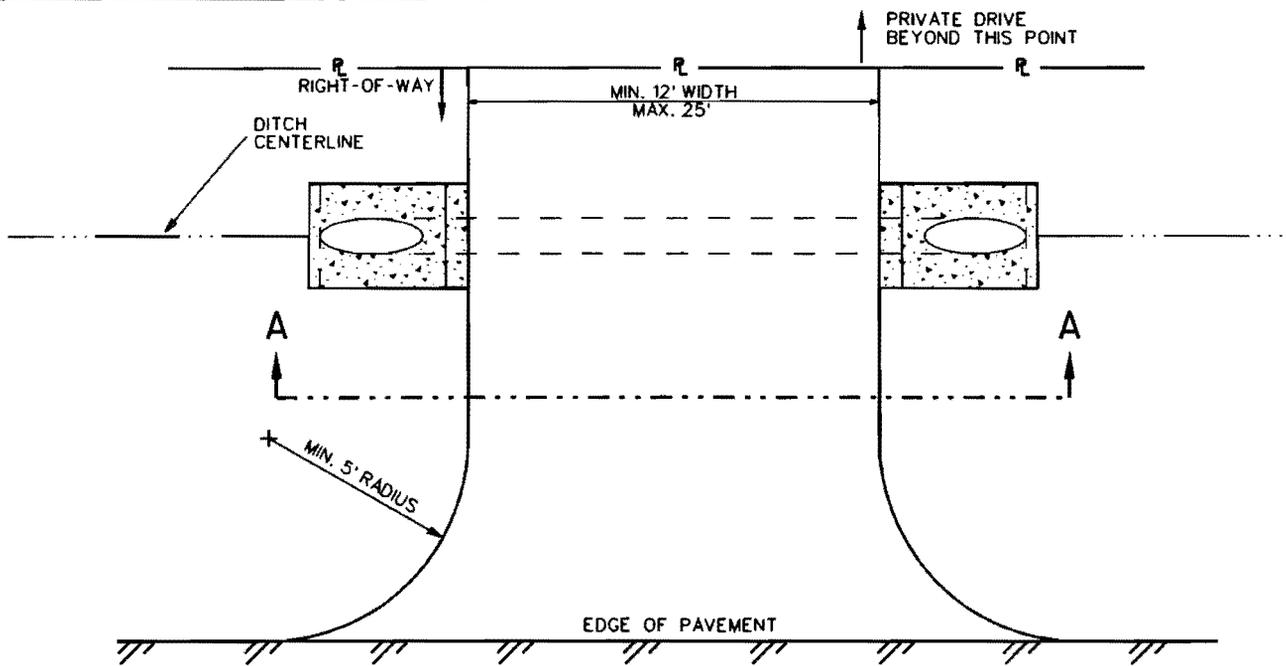
(a) Except as provided in Subsection ~~(b)~~(c), a basic development permit or special flood hazard area development permit must be obtained prior to the installation, repair, or removal of all utilities, including as water and wastewater lines, on-site waste disposal systems, gas lines, telephone and electric lines and related facilities.

(b) In addition to the requirements of this Chapter, an application submitted for the basic development permit shall include all of the applicable information required by Section 82.931 of the Code.

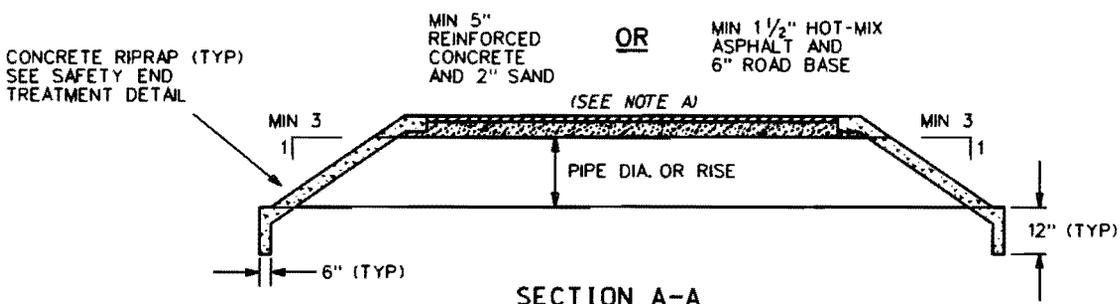
(c) A permit does not have to be obtained prior to performing emergency repairs to a utility, but written notice must be provided to the Floodplain Administrator on the next County business day as to the location of the repair, the nature of the repair, the name of the person conducting the repairs, the name and address of the property owner, and the name and address of the person who requested the repairs. For the purpose of this subsection, an emergency repair is a repair that is necessary to mitigate or prevent an immediate threat to the health and safety of the public.

~~(d)~~ No sewage treatment plant, septic tank system, or other on-site sewage disposal system shall be operated when there are floodwaters over any portion of the on-site sewage disposal system.

## EXHIBIT 5

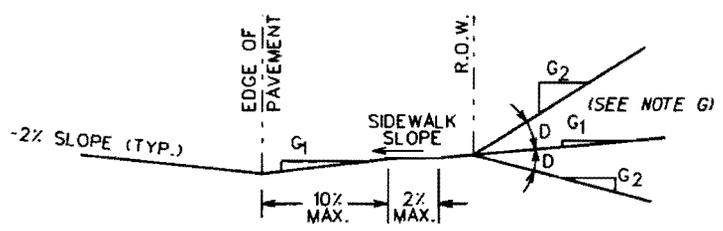


**PLAN VIEW**



**SECTION A-A**

DRAWINGS  
NOT TO SCALE



**ALLOWABLE GRADES**

**NOTES:**

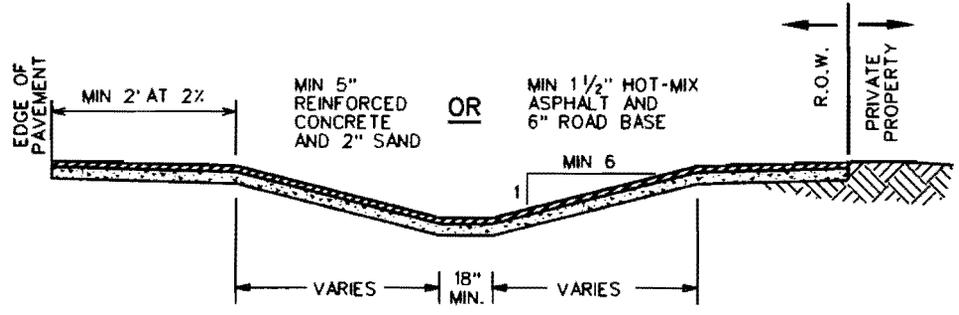
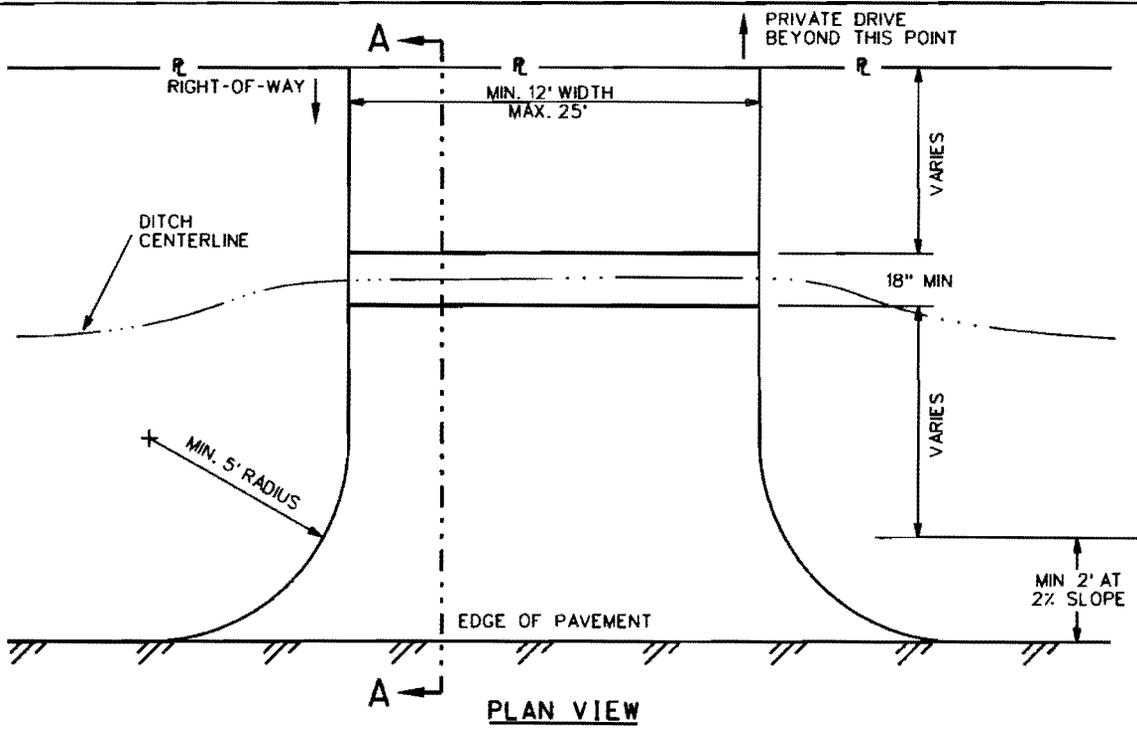
- A) MATERIAL DEPTHS SHOWN ABOVE ARE MINIMUMS. TOTAL COVER OVER PIPE IS RECOMMENDED TO BE 12" OR MORE.
- B) PIPE MAY BE CORRUGATED METAL OR CONCRETE ONLY. PIPE MAY BE ROUND OR ARCH SHAPE.
- C) MINIMUM REINFORCEMENT IN CONCRETE DRIVE SHALL BE #3 @ 18" O.C.E.W. OR 6X6XW1.5XW1.5 WELDED WIRE MESH
- D) INSTALL CULVERT PIPE TO MATCH FLOWLINE OF DITCH.
- E) ENGINEERED DRAWINGS MUST BE SUBMITTED FOR COMMERCIAL DRIVEWAYS.
- F) SPECIAL CONDITIONS MAY APPLY TO ARCH PIPES LARGER THAN DES 3 AND ROUND PIPES LARGER THAN 30".
- G) WHILE THE PROPERTY OWNER REMAINS RESPONSIBLE FOR GRADE BREAKS WITHIN PRIVATE PROPERTY, THE FIRE DEPARTMENT SHOULD BE CONSULTED WHERE THE DRIVEWAY IS ESSENTIAL TO EMERGENCY VEHICLE ACCESS AND "G2" IS GREATER THAN 15%. "G1" PLUS "D" SHOULD NOT EXCEED 15%.

FILE: Q:\Project\Environmental\Driveway\_Stds\culvert\_style\_2011.dgn  
DATE: 09-Mar-11

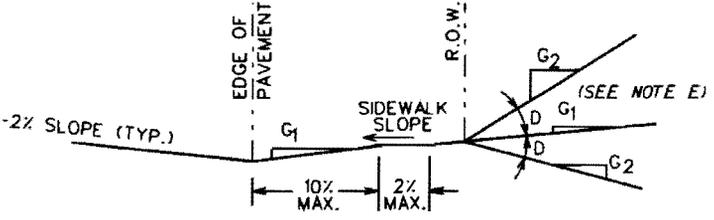


**TRAVIS COUNTY, TEXAS**  
**TRANSPORTATION and NATURAL**  
**RESOURCES DEPARTMENT**

**RESIDENTIAL DRIVEWAY**  
**WITH CULVERT PIPE**



SECTION A-A



ALLOWABLE GRADES

DRAWINGS NOT TO SCALE

NOTES:

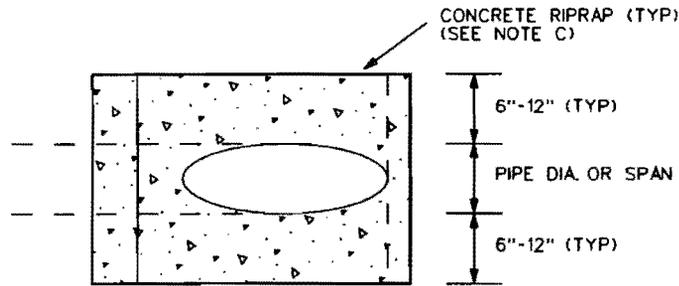
- A) DIP CENTERLINE TO BE ALIGNED WITH DITCH CENTERLINE.
- B) TOP OF DIP SECTION TO MATCH DITCH FLOWLINE ELEVATION.
- C) MINIMUM REINFORCEMENT IN CONCRETE DRIVE SHALL BE 3 @ 18" O.C.E.W. OR 6X6XW1.5XW1.5 WELDED WIRE MESH
- D) ENGINEERED DRAWINGS MUST BE SUBMITTED FOR COMMERCIAL DRIVEWAYS.
- E) WHILE THE PROPERTY OWNER REMAINS RESPONSIBLE FOR GRADE BREAKS WITHIN PRIVATE PROPERTY, THE FIRE DEPARTMENT SHOULD BE CONSULTED WHERE THE DRIVEWAY IS ESSENTIAL TO EMERGENCY VEHICLE ACCESS AND "G2" IS GREATER THAN 15%. "G1" PLUS "D" SHOULD NOT EXCEED 15%.

FILE: Q:\Project\Environmental\Driveway\_Stds\dip\_style\_2011.dgn  
DATE: 09-Mar-11

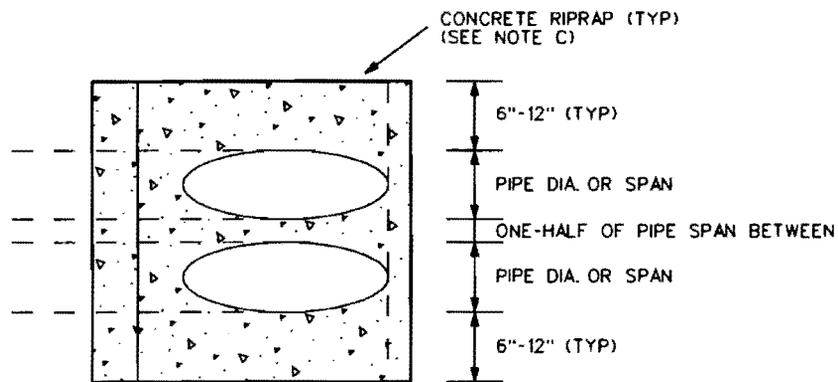


**TRAVIS COUNTY, TEXAS**  
**TRANSPORTATION and NATURAL RESOURCES DEPARTMENT**

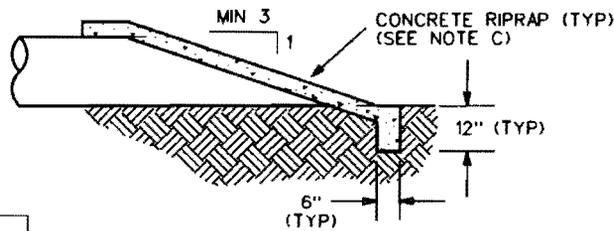
**RESIDENTIAL DRIVEWAY DIP-STYLE**



**PLAN VIEW -- SINGLE PIPE**



**PLAN VIEW -- MULTIPLE PIPES**



**SECTION**

DRAWINGS  
NOT TO SCALE

**NOTES:**

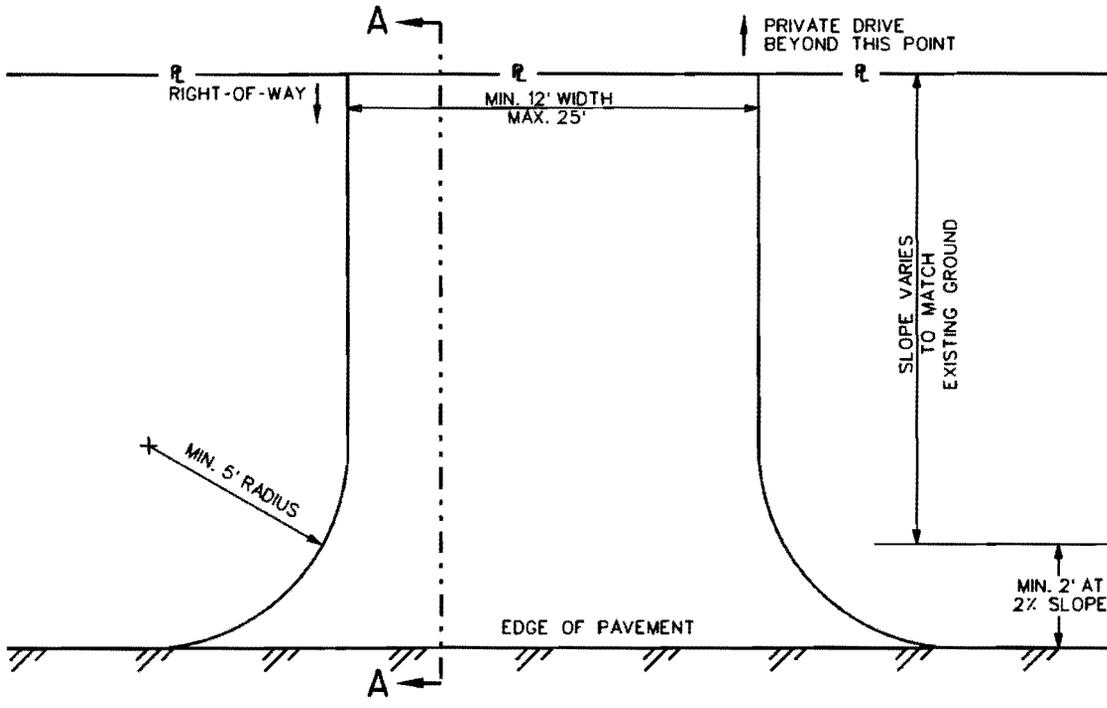
- A) PIPE SIZE AND NUMBER TO BE DESIGNATED BY PERMITTING DEPARTMENT.
- B) PIPE MAY BE CORRUGATED METAL OR CONCRETE ONLY. PIPE MAY BE ROUND OR ARCH SHAPE.
- C) CONCRETE RIPRAP SHALL BE A NOMINAL 4" THICK REINFORCED WITH MIN 6X6XW1.5XW1.5 WELDED WIRE MESH
- D) SPECIAL CONDITIONS MAY APPLY TO ARCH PIPES LARGER THAN DES 3 AND ROUND PIPES LARGER THAN 30".
- E) ENGINEERED DRAWINGS MUST BE SUBMITTED FOR COMMERCIAL DRIVEWAYS

FILE: O:\Project\Environmental\Driveway\_Stds\safety\_end\_2011.dgn  
DATE: 09-Mar-11

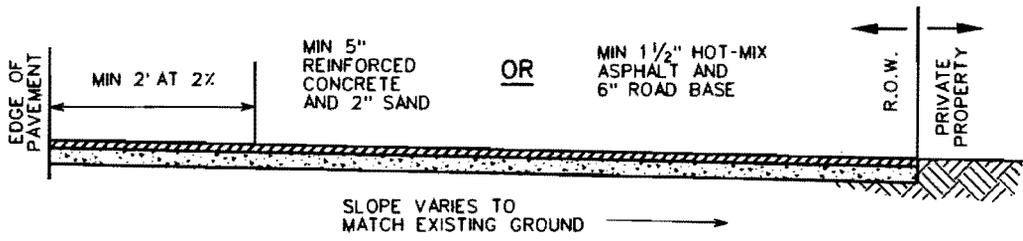


**TRAVIS COUNTY, TEXAS**  
**TRANSPORTATION and NATURAL**  
**RESOURCES DEPARTMENT**

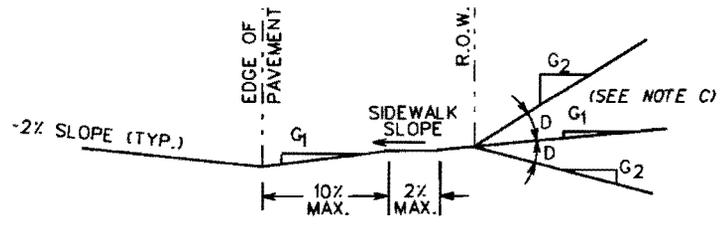
**SAFETY END TREATMENT**  
**FOR RESIDENTIAL**  
**DRIVEWAY CULVERT**



PLAN VIEW



SECTION A-A



ALLOWABLE GRADES

DRAWINGS NOT TO SCALE

FILE: Q:\Project\Environmental\Driveway\_Stds\straight\_tie\_in\_2011.dgn  
DATE: 09-Mar-11

NOTES:

- A) MINIMUM REINFORCEMENT IN CONCRETE DRIVE SHALL BE •3 @ 18" O.C.E.W. OR 6X6XW1.5XW1.5 WELDED WIRE MESH
- B) ENGINEERED DRAWINGS MUST BE SUBMITTED FOR COMMERCIAL DRIVEWAYS.
- C) WHILE THE PROPERTY OWNER REMAINS RESPONSIBLE FOR GRADE BREAKS WITHIN PRIVATE PROPERTY, THE FIRE DEPARTMENT SHOULD BE CONSULTED WHERE THE DRIVEWAY IS ESSENTIAL TO EMERGENCY VEHICLE ACCESS AND "G2" IS GREATER THAN 15%. "G1" PLUS "D" SHOULD NOT EXCEED 15%.



**TRAVIS COUNTY, TEXAS**  
**TRANSPORTATION and NATURAL RESOURCES DEPARTMENT**

**RESIDENTIAL DRIVEWAY STRAIGHT TIE-IN**

## **EXHIBIT 6**

### **Response to Comments on Proposed Water Quality Protection Rules**

In this exhibit, the comment is either restated or paraphrased. The Travis County TNR response is in *italics* following each comment

**Comments from Michael E. Barrett, for Save Barton Creek Association (SBCA), received 2/4/12. Travis County responses in italics.**

Discharge Standards

Most of the elements of the construction sections reiterate requirements of other guidance such as the Texas Construction General Permit, with some improvements, such as a review of the Storm Water Pollution Prevention Plan (SWP3) by County staff. The main modification that would improve these requirements is to have a numeric standard for discharge quality to determine whether a site is in compliance with their permit (Section 82.940: reserved). As written, the proposed standard is to "minimize off-site discharge of sediment and other pollutants". This is a very difficult standard to enforce and has historically resulted in erosion and sediment control measures that lag far behind those implemented in other areas of the US. A numerical standard also provides the opportunity for stakeholders, such as SBCA to conduct their own monitoring and develop evidence that can be presented in administrative and legal proceedings.

The US EPA has been working for the last two years to develop a nationwide numeric standard for construction site runoff without success. Much of this difficulty is associated with trying to adopt a standard appropriate for the wide range of climatic, topographic, and soil conditions present across the country. In contrast, EPA in many documents continues to promote a watershed based approach and that is what I recommend the County consider in this case. There is abundant local data collected between 1978 and 2008 by the US Geological Survey that provides the data necessary to develop a scientifically based discharge standard.

Figure 1 presents historical turbidity data for Barton Creek during wet weather flows. The turbidity is measured in nephelometric turbidity units (NTU), a measure of light scattering. This figure presents the cumulative probability that an observed turbidity will not be exceeded. It indicates half of the analyzed storms had a turbidity of less than 130 NTU, while 90% of all wet weather events in Barton Creek had turbidities less than about 725 NTU. The observed range during this monitoring period is 3.6 to 2,200 NTU. Construction site runoff, on the other hand, frequently has turbidities exceeding 4000 NTU, which is the upper range of readily available monitoring equipment. Based on these data, I recommend that the County adopt a numeric turbidity discharge limit of not greater than 130 NTU.

The questions that immediately arise include whether there is precedent for establishing a turbidity standard and whether the 130 NTU is reasonably achievable. In fact, a number of states and other jurisdictions have established turbidity standards despite the inaction at the federal level. These include Alabama, California, Georgia, Oregon, Vermont, Washington, and Wyoming, not all of which are considered among the nation's most progressive states. The standards developed include absolute values as well as allowable increase over background, determined by measuring turbidity upstream and downstream of a discharge. The latter standard is more difficult to document, especially for projects that do not discharge directly to surface water, but are comingled with runoff from offsite prior to discharge. Jurisdictions that have standards more stringent than 130 NTU include, Alabama (50 NTU), Georgia (25 NTU),

Vermont (25 NTU), Washington (5 – 10 NTU increase over background), and Wyoming (10 -15 NTU increase over background). The widespread adoption of these low turbidity standards indicate that a 130 NTU standard should be achievable with current technology if the erosion and sediment control measures are properly designed, implemented, and maintained.

Achieving this turbidity limit will require some changes to current erosion and sediment control practices on construction sites. At too many sites, these controls seem limited to perimeter silt fencing and inlet protect. These practices alone will not be adequate to achieve the proposed turbidity limit. Other erosion and sediment control measures implemented during construction can substantially reduced sediment discharge. These measures include the widespread use of mulch from the trees removed at a site to cover disturbed areas. This groundcover substantially reduces the mobilization and transport of sediment. In addition, construction of permanent stormwater BMPs (e.g., sand filtration systems), prior to site clearing and other construction activities, results in high quality treatment of construction runoff prior to discharge. It is not really feasible to design erosion and sediment controls to address the largest storm events that might occur. Consequently, it may be necessary to exempt storms larger than the 2- year, 24-hour event, from the turbidity standard as EPA has proposed. *The County agrees that effluent limitations are necessary and appropriate. We agree that your analysis demonstrates the feasibility of providing this additional safeguard. Earlier drafts of this rule circulated to stakeholders had included a “placeholder section” for the turbidity limitation that the USEPA was expected to promulgate by now. In spite of the reasonable approach presented in this comment, the County is hesitant to take this significant step at this time. First, we expect the USEPA to set the appropriate standard for implementation nationwide. Secondly, if the USEPA does not act, it will be prudent of the County to develop an inclusive stakeholder process to obtain advice and to consider an appropriate standard for our community, given the local data on receiving water impacts and treatability of sediment typically resulting from soils of this area. The County may consider identifying a stakeholder-based process for developing such standards, for the Round 2 SWMP it must develop and begin implementing after renewal of the Small MS4 permit later this year.*

#### Sampling Requirements

In order to determine whether the numeric discharge standard has been achieved, I recommend that the operator of a construction site subject to that standard be required to implement a sampling program. Requirements adopted by the County should include direction on when to sample (whenever there is a discharge from the site), but perhaps only during normal working hours to avoid safety concerns associated with nighttime access or when conditions would cause a reasonable person to believe that the safety of the sampling team was imperiled.

Requirements for sampling typically include direction on sampling frequency. Draft EPA guidance would required that the first sample be collected within the first hour of discharge and that a minimum of 3 samples be collected in total over the course of the day, distributed in such a way as to be representative.

Requirements also generally include guidance on location and protocols of sample collection to ensure that the data are representative. I recommend that the County adopt guidance included in the EPA Draft Construction General Permit (2011) regarding these elements.

The County should require that the operator submit a report of sampling results once per month to demonstrate compliance with the standard. A standard format should be developed that includes the identification of the discharge points, dates, observed values, and actions undertaken when the average discharge turbidity exceeds the standard.

Monitoring requirements can present a special burden for very small projects; consequently, I recommend that the phased approach contained in the EPA Draft Construction General Permit from last April be adopted. This requires that sites disturbing more than 20 acres (or part of a larger common plan of development) be subject to this requirement immediately and that commencing in 2014 this be extended to sites with disturbed areas as small as 10 acres. See previous response.

#### Post Construction

The County is proposing enhanced protection of water quality in the western watersheds by adopting the use of the technical guidance manual prepared by the LCRA. Although it is not explicit in the LCRA guidance the required BMP configurations were developed based on numerical criteria for sediment and phosphorus reduction. There is no question that a higher level of pollutant removal could be required by, for example, adopting the terms of the SOS Ordinance, which requires that new development result in no net increase of the pollutant load. Although required discharge concentrations under the LCRA guidance would not exceed predevelopment concentrations, the load (concentration x volume) would increase because of the substantial increase in runoff volume. It may or may not be politically feasible for the County to adopt the more stringent SOS criteria. *Instead of LCRA HLWO requirements, the SOS Ordinance applies in this rule in certain Austin ETJ areas that are western watersheds. These would be western watersheds also identified in Austin's Code as subject to the SOS Ordinance standards. The County believes it would need to have a more thorough stakeholder process to consider extending the SOS criteria to additional western watersheds beyond the Austin ETJ.*

One major event in stormwater regulation is that EPA is scheduled to publish a draft nationwide stormwater rule in the near future. At this time it does not appear that EPA will act fast enough for us to know the content prior to finalizing the County code. Discussions with the EPA indicate a much greater focus on the preservation of predevelopment hydrological conditions and an emphasis on the use of Low Impact Development measures (rain gardens/bioretenion, vegetated filter strips, reduced/disconnected impervious cover, and many more). *Once USEPA acts, Travis County and neighboring jurisdictions should review our existing BMPs for consistency with the direction USEPA takes. A review in this manner would be an appropriate addition to the Round 2 SWMP that the County will be required to develop and implement when the Small MS4 permit is renewed.*

One BMP that is not included in either the City of Austin or LCRA guidance is the Permeable Friction Course (PFC), which is a thin, permeable pavement overlay. PFC is an alternative to traditional hot mix asphalt and is produced by eliminating the fine aggregate from the asphalt mix. Rain that falls on the friction course drains through the porous layer to the original impervious road surface at which point the water drains along the boundary between the pavement types until the runoff emerges at the edge of the pavement. Porous asphalt overlays are used increasingly by state transportation agencies, including those in Arizona, Georgia, Texas, California, and Utah, to improve drivability in wet weather conditions and to reduce noise from highway traffic.

In terms of water quality, research in Europe and across the US indicates that the pollutant reduction associated with this type of pavement is roughly equivalent to that achieved by Austin sand filters (Eck et al., 2011). PFC is recognized as a permanent BMP for highways over the Edwards Aquifer by the TCEQ. The advantage of PFC is that it can be overlain on existing roadways to improve water quality without the need for purchasing additional right-of-way or the construction of stormwater treatment facilities. I recommend that PFC be adopted by the County as the standard paving material for all county roads. *The County is not proposing a technical guidance document of its own. We participate in processes that result in the adoption of revised criteria by other jurisdictions and will be receptive to designs that have advantages. We do agree that PFC offers superior safety benefits due to water drainage and traction. The County has considered PFC in the design of a roadway in the recent past but PFC was not chosen. At the time, PFC costs were higher than hot mix treatments and not cost effective for the County (\$55/T vs. \$100/T). Other disadvantages include higher maintenance costs to repair the road, costlier designs if roads have curbs/gutters, and the potential to lose the water quality function over time due to clogging. At this time, the County believes the conventional hot mix asphalt and use of storm water treatment facilities would be less expensive.*

Although stormwater treatment may be required at a site, its performance can only be ensured with a thorough inspection and maintenance program. One component of the post construction requirements is that the operators of all facilities constructed after August 12, 2007 must obtain a BMP Maintenance Permit that is renewed annually. One shortcoming is that it only appears that the facility owner must provide information (through a concurrence letter from a licensed engineer) to indicate that the facility was constructed as designed and is in proper working order. This is a good first step, but additional measures could provide more assurance that the controls are functional and transfer much of the burden to the facility owner.

I recommend that the holder of a BMP Maintenance Permit in areas other than the City of Austin ETJ be required to submit with their application for annual renewal a document from a licensed engineer indicating that all maintenance activities identified in the permit have been completed and that the facility remains in proper operating condition. *The rule has been revised to incorporate the proposal into the rule. It is agreed that the requirement will help keep the owners of these structures more focused on this long-term infrastructure management necessity.*

In addition, the County should adopt civil penalties of at least \$100/day for each day that the document is late. Incorporating this change in the code would transfer most of the inspection burden to the facility owner and reduce the demand on County resources. *It is our department policy to not stipulate fees within the County Code. Fees are adopted by the Commissioners' Court as separate items. However, having a negative consequence for a late submittal may encourage renewals on time. Therefore, Section 82.918 has been revised to establish that a renewal application more than 30 days late will be subject to a late fee.*

I strongly oppose granting an exemption to “districts” from the requirement to hold a BMP Maintenance Permit. Many of the BMPs in the Hill Country are operated by Municipal Utility Districts and exempting them from this requirement substantially weakens the potential of the permit system for ensuring the proper operation of stormwater BMPs and the protection of the precious water resources of this area. *The County agrees with this comment and utility districts will be required to obtain the BMP Maintenance Permit with a three year term.*

**Comments from TX Aggregate & Concrete Assn. (TACA), February 7, 2012. In letter of 2/7/12, TXI, Inc. also indicated it supported of TACA comments. Travis Co. responses in italics.**

*As a general response to the comments, the County has deleted proposed section 82.945 and replaced it with a new proposed subchapter L (Sections 82.980 – 82.991).*

Section 82.002 Definitions It is important to first note that the proposed and amended definitions overlap state and federal definitions in many cases. Potential conflicts may make it difficult for entities to comply with all county, city, state, and federal regulations which rely on these various definitions. *In response to this comment and further discussion, the following definitions were deleted: “aggregate”, “contemporaneous reclamation”, and “reclamation”. The following new definitions were added: “active resource extraction area”, “alternative post-mining use”, “concurrent reclamation”, and “resource extraction area”.*

#### Section 82.945 Requirements for Quarries and Mines

The language in 82.945(a) states that the section “addresses best management practices for the control of pollutants discharged in storm water as a result of mining or quarrying activities,”. More specifically, the authority granted to the County under Local Government Code Title 13, Subtitle C, Chapter 573, section 573.002, stipulates that a “county...may take any necessary or proper action to comply with the requirements of the stormwater permitting program under the national pollutant discharge elimination system” including Section 573.002, (2): “developing, implementing and enforcing stormwater management guidelines design criteria, or rules to reduce discharge of pollutants into any conveyance or system of conveyance owned or operated by the county, district or authority that is designed for collecting stormwater”.

This authority is limited. It limits County authority to taking actions to comply with its obligations under the national pollutant discharge elimination system (NPDES), and specifically references stormwater discharging only into county-owned or operated stormwater conveyances. However, several of the requirements laid out in this section appear to greatly exceed this authority. *The TCEQ requires a small MS4 to comply with a general permit that requires a SWMP to address discharges that will reach waters of the US including those from a public and a private storm sewer system.*

Reviewing the requirements in proposed section 82.945 reveals that a large majority has been drawn directly from those established for quarrying and mining under Highland Lakes Watershed Ordinance by Lower Colorado River Authority (LCRA). This raises a number of questions. The authority for this ordinance was granted specifically through the LCRA Enabling Act, in Texas Water Code Section 222.004(a), (d), (e), (q). The listed sections relate specifically to authority for protection of the Colorado River and its tributaries. While TACA agrees that it is critical to protect this resource, this was a legislative action granting specific authority to enable

LCRA to manage the Colorado River watershed. The County does not have the same explicit legislative authority to regulate activities in the manner as LCRA does, even though some of the territory in which LCRA has authority overlaps into the County. The County is called to comply with the requirements of the stormwater permitting program under NPDES.

The authority of each entity, while overlapping, is separate and distinct. Furthermore, reading of section 220.004(q) further clarifies this limitation on authority as it states: "An ordinance adopted under this section may not be adopted in any county or counties outside the existing boundaries of the authority." While the County is not directly adopting the ordinance, a review of the language indicates that both the LCRA Ordinance for quarrying and mining activity and proposed 82.945 are substantially similar as to be the same. The application of these standards in proposed section 82.945 goes beyond the authority of the County. *It is true that the County reviewed the HLWO mining/quarrying requirements, but we do not assert the County's authority as being the same as that of LCRA. The authority for these rules is specified in Section 82.911.*

In the context of this primary question of the correct application of the County's authority, the following comments focus on specific sections of 82.945. It should be noted that many of the proposed sections refer to other specific sections earlier in the rules which are not currently being proposed for changes. These add significant requirements for mines and quarries and cause a substantial increase in complexity to understanding the requirements for compliance with the rules.

#### 82.945(c) Water Quality Management

##### 82.945(c)(1) Project areas not discharging into a pit

These regulations make reference that stormwater runoff not discharging into the pit must meet the requirements of section 82.944, permanent water quality controls. The definition of what constitutes a pit is unclear in the context of this section. *This has been addressed with the new definition of "active resource extraction area".*

In addition, and more importantly, operations do not discharge any stormwater off of the property without obtaining the required permit from the Texas Commission on Environmental Quality. This permit, typically referred to as the MSGP TXR05, already stipulates many requirements to protect water quality, including BMP's, sampling and inspection requirements along with reporting obligations. These requirements already allow the County to meet its obligation under the stormwater permitting requirements of the NPDES. In addition, to require mines or quarries to meet the requirements outlined in 82.944 would be impractical and likely to provide little benefit to water quality. *Provisions for monitoring of storm water discharges have been revised as described in 82.986, are consistent with the parameters required for*

*analysis under the TCEQ's MSGP. However, the County will require a more frequent sampling frequency of quarterly.*

In particular, the requirement for an impervious liner where there is surface runoff to groundwater conductivity for a mine has no real justification. Unlike a residential development or other commercial operation, any constituents of discharge from a mining operation are typically native to the site and chemically identical to the substrata that they will be infiltrating. Additionally, the most common issue with ground water quality in Travis County is related to nutrients associated with past farming practices. Converting land from an agricultural use to a mining use actually reduces or eliminates the addition of nutrients to the surface, which might positively impact discharges during rain events *The permanent water quality controls are necessary for areas developed and that drain outside of an active resource management area as specified in 82.989. These include buildings, parking lots, or other features. The requirement cites the applicability of pollutant attenuation plan requirements already required by the City of Austin in the ETJ. The requirement for a lined water quality control structure is intended for preventing direct recharge to an aquifer. Section 82.944 has been revised to clarify this intent.*

Finally, in reviewing the authority granted to Travis County, it does not appear that the County has any authority to develop additional rules or requirements on any water that does not leave the property as a surface flow, including water collected in pits and settling basins, because such water will have no impact on surface water quality in the County.

Furthermore, these requirements are excessive and do not lend to improved water quality in sand and gravel operations. Lining an area that is part of an ongoing excavation is not practical, and this requirement directly conflicts with 82.945(c)(2), which does not require a liner for storm water discharging to the pit. It is also unclear how the County wishes to define a "pit". It is common for sand and gravel plants to utilize portions of past pits as effective storm water BMP's, to allow for either retention or detention of storm water discharges. However, as the life of a mine or quarry may be several years, it is possible that a "pit" that is being used as a BMP is no longer an "active" pit. In fact, some old pits may be used as water sources for agricultural use even during the life of the mine. Because these requirements are unclear, and because it doesn't appear that the County has authority for groundwater, or any water that is retained on site, these requirements should be removed. *The proposal did not require lining of mine pits that receive storm water runoff.*

#### 82.945(c)(2) Project area discharging into a pit

Any stormwater that remains on the site of a mine does not fall within the jurisdiction of County regulation. Also, the requirements of this section directly conflict with BMP's and water quality protection strategies utilized toward compliance with TCEQ and EPA water quality

requirements by responsible mine and quarry operators in the State. 82.945(c)(2)(A) requires that each pit intended to be used as a permanent BMP must contain the runoff volume of a 10 year, 24 hour storm event without a discharge. This requirement is unnecessary and is more in line with a wastewater impoundment rather than a stormwater detention basin. Mines and quarries are already subject to TCEQ and EPA requirements, which govern the quality of storm water discharges. There is no requirement for lining of storm water ponds, or for maintaining a particular capacity, because that gives the operations the flexibility to develop BMP's that work best for their particular site characteristics. There is absolutely no justification for a capacity requirement, if the water that discharges the pit is sufficiently clean when it leaves the property, and the outfall is appropriately permitted with the TCEQ. Again, it must be stated that the County has not defined a "pit", and does not appear to have the authority to create rules for water that does not leave the property.

Furthermore, site conditions and market cycles have significant effects on the phasing and size of excavations. These overly-restrictive requirements either reduce the flexibility of operators to respond to their markets, or cause the expenditure of significant resources to prepare plans and designs that offer no value to the County, the Public, or the Environment. The County does not appear to have justified any of these new requirements with scientific data, or considered the significant financial impact on the regulated community with respect to what benefits might be realized. *The requirement that a mine pit's capacity be identified as satisfactory has been deleted. If a mine pit discharges, it is subject to monitoring per 82.986. Section 82.989 includes requirements for ensuring adequate water quality volume, for storm water discharges that are not routed to an active resource extraction area.*

82.945(c)(4) Additional Report Submittals, (A) through (D):

As referenced above, requirements of this proposed regulation are taken directly from the LCRA's Highland Lakes Watershed Protection Ordinance, which TACA has previously commented as outside the scope of authority for the County. Even despite the contention that the County does not have authority to adapt the LCRA ordinance for quarrying and mining, it is interesting to note that even in the LCRA ordinance, the report submittals are referred to in section 2.3.4 of the Technical Manual as "Potential Submittals to LCRA" (emphasis added). This section goes on to say that the "LCRA may require an applicant to submit certain information dependent upon site conditions, planned quarry or mine activities, size of quarry or mine and depth of excavation." It does not state "LCRA shall require..." While the County retains the ability to waive these requirements in section (E), it does so in an obtuse manner. The wording of 82.945(c)(4) is more restrictive than that of the LCRA Technical Manual in that it specifies "Unless waived by the County Executive as specified in subparagraph (E), an applicant must submit the following:" Given this unnecessary strengthening of authority, TACA offers the

following comments on each of the required reports. *Section 82.945(c)(4) has been replaced with 82.983 and the requirements for a hydrogeologic report, a groundwater monitoring plan, and a surface water monitoring plan have been deleted. The County Executive may waive at least three of the submittals outlined in 82.983, including the environmental assessment, the hydrologic report, or the resource extraction plan. We disagree with the comment of being obtuse. A pre-proposal concept plan meeting will allow for a thoughtful determination of the need for the submittals, inasmuch as the County understands that each particular proposal may not be as significant as others.*

(A) Hydrologic report prepared by a Texas licensed P.E.

It is unclear what the County is requiring here. A hydrologic report implies that an exhaustive (and expensive) report should be prepared that identifies these features and documents a variety of intricate detail for each feature. Furthermore, the requirement that the report be prepared by a P.E. is unjustified and unnecessary, and doesn't consider that other qualified persons could prepare such a report, such as a Landscape Architect. All the information that would be useful to the County would already be contained in the various maps or plans that are required by existing programs such as storm water permitting, existing requirements for site development permit applications (Class B Travis County Flood Hazard Development Permit), SPCC plans, etc. Again, the County has failed to show any cause as to why these additional requirements are justified, or how the significant financial and resource investments by the applicant would in any way benefit the public, or the environment, with respect to the County's storm water management obligations. *The hydrologic report is a required submittal justified by the need to have a SWP3. Some mining operations are of very large acreage and a full understanding of how storm water flows is justified. There are no existing development permit requirements for this report.*

(B) Hydrogeologic report prepared by Texas-licensed Professional Geoscientist

The County has no authority to regulate ground water quality management, and, therefore no authority to require such a report. In addition, the County has not shown any cause for such a requirement, or provided any analysis as to the cost/benefit comparison of such a requirement.

(C) Surface Water Monitoring Plan

The County has not demonstrated that the additional requirements beyond current governing regulations in this section are necessary for the management of surface water quality. The County has not provided any data to suggest that mines or quarries are, or would be expected to be, a source of Total Organic Carbon. The County has not provided a justification that the TCEQ MSGP is inadequate for Travis County, or that mines or quarries have contributed to the impairment of any streams in the County. The County has not described what type of annual

report is required. The MSGP TXR05 requires that metals be sampled once per year, and Benchmarks be sampled twice per year. It appears to be the County's intent that only the listed parameters be sampled four times per year, yet the wording of this section does not differentiate between the Benchmarks (which do require an annual report be submitted to the TCEQ) and Annual Hazardous Metals sampling (which does not require an annual report). Additionally, the County does not describe requirements for sampling required by the MSGP, but not listed in this section. Finally, any requirements in this Chapter that conflict with TCEQ's applicable requirements, also conflict with Chapter 104, because Chapter 104 basically requires that applicants comply with any required TCEQ permit for surface water discharges. In conclusion, this requirement should be removed because it is unclear, and because the County has offered no justification for increasing the regulatory burden on mines and quarries.

#### (D) Groundwater Monitoring Plan

As previously discussed, the County does not have authority to regulate groundwater quality management, or to require any kind of groundwater monitoring plan. *The requirements for a hydrogeologic report, a groundwater monitoring plan, and a surface water monitoring plan have been deleted from the rule proposal. The County's regulatory program will focus on storm water impacts from discharges to surface water. Section 82.986 replaces the requirements for a surface water monitoring plan and is largely consistent with the TCEQ permit requirements.*

#### 82.945(c)(5) Erosion and Sedimentation Control

This section requires that quarries and mines meet sections 82.934-82.940, and 82.970-82.974.

Regarding 82.934, it is important to note that this section is written in a manner that the requirements apply until "final site stabilization is complete." However, the section needs to provide for other potential cases in which a site may transition to other permit coverage, such as a MSGP TXR05, as commonly occurs with mines and quarries. When a facility transfers to different permit coverage, then the construction rules no longer apply, and the County needs to be consistent here with EPA and TCEQ. Additionally, a facility may terminate storm water construction coverage if the site transitions to a zero-discharge condition, when all areas that contribute to storm water flows off the property have been adequately stabilized, or when the facility transfers to an alternative post-mining use. The County should revise the rules to account for these conditions. *The County understands the concerns with regard to trying to place these activities under the stabilization requirements associated with subdivisions or other structural-oriented development. Therefore, more customized ESC and stabilization requirements have been specified in Sections 82.983(b)(6) - (7), and 82.990, relating to a stabilization plan.*

Neither the EPA, nor the TCEQ require that SWP3's be certified by a P.E., or a CPESC, and the County's decision to require such imparts a significant burden upon those developers within Travis County. The County has offered no justification for this requirement, and should remove the requirement from the proposed amendments. It is very troubling that the County has also opted to include requirements that storm water inspections may only be conducted by a person who is CPESC, CESSWI, or CIESC certified. Neither the EPA, nor the TCEQ have determined that such a requirement is warranted, and have always accepted many types of training, so long as the training is adequately comprehensive so that the inspector can be considered a "qualified personnel". At mines and quarries, especially at smaller facilities, there are no resources to provide for plant personnel to get such certifications. Furthermore, the County has offered no explanation to why such a certification would be required in order to be able to evaluate whether BMP's are effective and well-maintained. For the very simple types of BMP's common at mines and quarries, such as silt fence, berms, swales, rock filters, and vegetative buffers, internal training is more than adequate to evaluate these features and identify needed repairs. This requirement is overly-restrictive, burdensome, unjustified, and should be removed in this section and any other section in the County Code. *The County's requirements are in line with requirements of other local jurisdictions, such as the City of Austin. Additionally, the upcoming small MS4 permit is expected to require all MS4s to ensure those who design and inspect for proper implementation of SWP3s are adequately trained. The third party companies in this community who provide SWP3 services to developers are typically certified. The County has identified an 18-month grace period to allow for transition to this new standard. If the site is small and not subject to SWP3 permitting thresholds (generally one acre or a common plan of development), the certification requirements are not applicable. We believe it is appropriate for any person or operator who plans significant disturbance of land, with its potential for water pollution, to be more formally trained and qualified to carry out the sometimes complex requirements of storm water management on a site.*

Section 82.937(b)(4)(A) stipulates that no temporary stockpiling of fill material is allowed to occur in the FEMA 100-year floodplain. However, complying with this proposed limitation is simply unfeasible in that many sand and gravel mining operations are conducted in alluvial terraces within the 100-year floodplain, along the river corridor where the deposits are located. Also, overburden and/or fill material consists typically of the naturally occurring material on the site, and when stockpiled in line with the direction of flow does not obstruct drainage ways. The materials temporarily stockpiled in the floodplain have been excavated from the floodplain, and the volume of the stockpile is offset by the excavation. It is critical that this limitation be removed from the proposed rule amendments, as it is overly-restrictive and does not consider the best management practices at mines and quarries that are alternative, but equally-protective means of managing activities within the FEMA 100-year floodplain. *Temporary storage of fill in the floodplain is allowable in a mining situation, when the net result of*

*excavations and fill stockpiling results in a net increase in the capacity of the floodplain to convey storm flows. The prohibition has been modified to reflect this allowance.*

#### 82.945(c)(7) Groundwater Conservation District Requirements.

The County does not have authority for groundwater management or quality, and therefore does not have authority to require groundwater monitoring. As such, this section should be removed because operations subject to the jurisdiction of a groundwater conservation district will be required to comply with those applicable rules. *As discussed above, the groundwater monitoring requirements have been deleted from this rule proposal.*

#### 82.945(C)(8)(B) Drainage from Haul Roads

Subject to TCEQ rules, stormwater that does not leave the property has no restrictions or requirements. Regardless of whether the drainage from haul roads flows into a resource extraction excavation or not, such a requirement is unnecessary, and the County has no authority to require water quality controls for haul road drainages (or any drainages) that are contained within the subject property. *The County disagrees with this comment. The fundamental issue is whether storm water from a mining site flows into a surface water either on-site or off-site, or into the County MS4. As an example, there are several circumstances in this County where haul roads cross surface waters in the State within a mine site.*

#### 82.945(c)(9) Pit Backfill Requirements (also 82.943(d))

The County does not have authority to require compaction of backfill material, as compacting backfill has no relation to stormwater quality or management. Further, depending on the intended after-mine use of the property (which is subject to change over time), compaction of backfill may be inconsistent with future plans, and imposes unnecessary and unjustified costs upon the operator. In fact, requiring compaction of backfill, in some cases, could actually increase the potential for erosion problems and flooding, as the infiltration ability of retained water could be negatively impacted. The County has provided no scientific demonstration that this requirement is beneficial to the management of storm water, or that it will provide improved protections to the public or the environment. The County also does not have authority to regulate the final grade of backfilled areas, except for those areas within a floodway (floodplain). In certain specific cases, this requirement would directly conflict with other mine regulations, such as the placement of safety berms along public roadways. Furthermore, such a requirement removes the flexibility of the operator to leave the site in a manner most suitable for the planned after-mine use of the property. Also, it is important to note that the final grade of the property is not directly related to the quality of any water that leaves the property, as you cannot single-out the final grade, but also must consider other BMP's. Finally, this requirement is overly-restrictive because it does not consider that one part

of the property may be above the original grade, while other portions of the property may be below original grade. . *The standards at issue were derived from existing requirements of the City of Austin, applicable in their ETJ where significant mining occurs or is planned to occur. There is a relationship between backfill, backfill compaction, grading, and storm water quality, particularly when backfilled material is subject to runoff, is not re-vegetated or stabilized, and when backfilled material is adjacent or in close proximity to a waterway. Nonetheless, the County has chosen to delete the specific backfill standards first proposed in lieu of a requirement for the stabilization plan (82.990) that will address the compaction, re-grading, and re-vegetation of the site after mining. In this manner, the County is not establishing specific design standards but the applicant must propose a design and post-mining use of the land that provides for adequate water quality protection.*

#### 82.945(c)(10) Resource Extraction Plan

The County has no authority to regulate methods of extraction, or to require a Resource Extraction Plan. The County's authority only extends to those activities that obstruct flows, or reduce capacity in a Floodway (Floodplain), or as relates to stormwater management. Resource extraction activities are variable and must be flexible enough to respond to the site conditions and market demands on a continuous basis. Modifying resource extraction plans and continuously resubmitting modifications to the County to keep up with the daily site challenges is not appropriate or meaningful to improving storm water discharge quality, and places unwarranted burden on mine operators. *The County did not propose criteria or requirements for how extraction must occur. It proposes submittal of a plan (see 82.985) in which an applicant describes the extraction methods it would use. Review of the plan will help ensure the County can approve of a mining proposal that lays out the areas of mining, haul roads, and associated facilities, along with a plan that shows overall storm water management on the site*

#### 82.945(c)(11) Reclamation Plan

The County has no authority to require Reclamation Plans, but only to require that discharges at closed mines do not adversely impact water quality. None of the required submittals in this section would be meaningful because they require looking years into the future, without considering that the conditions of the resource, extraction methods, and expected after-mine use are highly variable. The MSGP TXR05 already contains language to ensure that surface water quality is not adversely impacted by discharges from inactive mines, and the rules being developed in HB 571 will require that the TCEQ continue to inspect these properties at least once every three years, until they have been returned to a suitable post-mining use. Existing federal, state, and county rules already adequately protect surface water without the requirement for a reclamation plan. *The County is required by the MS4 permit to ensure that construction sites, including the disturbed areas caused by mining, are re-vegetated and achieve*

*final stabilization. The reclamation plan requirements have been modified into a requirement for a stabilization plan (82.990). The County encourages concurrent stabilization as the mining progresses across a site. Therefore, the need to prepare and plan for stabilization of previously mined areas is not necessarily years into the future or unknown.*

#### 82.945(d) Fiscal Security

This requirement could result in excessive financial assurance for areas beyond the scope of storm water protection, and often result in a requirement to post multiple bonds for the same activity. While County authority is for storm water protection, other entities, such as the City of Austin already have fiscal security requirements in place for activities related to protecting storm water. In these cases, it is clearly not appropriate to require redundant coverage. There should only be one financial assurance procedure and one release for these activities. *The requirements have been modified in Section 82.991 to take into account when another jurisdiction requires security for site stabilization and a legal agreement on the handling of the security funds is in place. In such instances, fiscal security will not also be required by Travis County.*

#### 82.945(e) Assessment of Reclamation Success

Assessment of general site reclamation is excessive and is beyond erosion control and lateral support, and therefore should not be conducted by the County. The County is not the appropriate authority to assess or judge land use choices for private land management decisions, and there is no consideration to evaluating these requirements with respect to the anticipated post-mining use of the property. Adequate rules are already in place by the EPA, TCEQ, City of Austin, Travis County, and other agencies, to address any health and safety impacts of surface water noncompliance. *It is the County's responsibility to ensure a land use choice and methods/procedures to accomplish them will not result in discharges of pollutants. The mine can choose a land use so long as the plan is fully carried out in a manner that achieves final stabilization. Section 82.991(c) describes the stabilization success criteria.*

#### Conclusion

As a long-standing member of the community and an organization that will be a part of the region for many years to come, TACA recognizes the importance of participating through the comment phase of the proposed storm water regulations. Several of the proposed regulations, or aspects thereof, extend beyond the authority of the County in that many are not directly related to stormwater management, overlap already existing requirements that are currently being met, and draw from references that have separately established legislative authority. TACA recognizes the importance of managing water quality, and, more specifically, impacts on storm water, and appreciates the opportunity to provide our comments to the County. TACA

looks forward to working with the County to develop reasonable and protective requirements that fulfill its legislative obligation in a mutually beneficial manner. Thank you for your consideration.

We appreciate your assistance in this matter. Please let me know if you have any questions regarding our position.

Best Regards,

Richard S. Szecsy, Ph.D, PE

President

**Comments from TXI, received on 5/25/12, with responses from Travis County in italics.**

82.987

(b) Temporary Stabilization Requirements. Any disturbed area, including an overburden stockpile that is observed to be the source of significant sediment in runoff ~~which exceeds the facility's effluent limitations~~, shall require improved BMP's, such as re-vegetation, sediment capture, or other suitable methods, to minimize erosion or runoff of sediment-laden storm water to a waterway.

*Travis Co. agrees with the proposed change since the facility effluent quality identified by the TCEQ under the industrial storm water permit are "benchmark" effluent concentrations rather than "limitations".*

82.991

(c)(2) Alternative Post Mining Use. For the purposes of this section, an owner or operator will be issued a certificate of completion to allow release of the fiscal security required by this section if the land has been returned to an alternative post-mining land use and the evaluation described in paragraph (3) determines that the conditions of the site do not have the potential to cause or contribute to significant pollutant discharges ~~of storm water~~. Similarly, the owner or operator will be issued a certificate of completion to allow release of the fiscal security if the land has been returned to an alternative post-mining land use, and proof is provided to the County that a new owner or operator has assumed liability for the completion of final stabilization.

*Travis Co. agrees with the proposed change since the water quality protection goals of the rule are not to completely eliminate pollutants in storm water discharges; rather the goal is to eliminate or reduce pollutants in storm water discharges to the maximum extent practicable.*

82.988

It is our understanding that the proposed language in 82.988 will be changed to remove (b), which removed setback requirements from a minor waterway for mining operations in the alluvial terraces along the Colorado River in cases where it was identified that the minor waterway did not exhibit significant aquatic resources. TXI agrees that this case may best be addressed in 82.941, and applied to any development applications in the County.

As such, we recommend that the following language be added as a general exception to 82.941:

82.941(j)(7)

The requirement for a setback from a minor waterway, or from a portion of a minor waterway, may be excepted if the applicant demonstrates that the minor waterway, or a portion of the minor waterway, lacks a defined bed and banks, does not contain significant aquatic resources, and does not comprise significant riparian habitat.”

Many minor waterways may be valuable to preserve, and, thus, in most cases a setback requirement is a sound and responsible inclusion into the County’s development rules. However, a minor waterway is not always a defined stream, and in some cases would not currently contain aquatic resources or riparian habitat. For example, in the case of an agricultural field that has been in use for many years, the “minor waterway” may simply be the lowest part of the field through which accumulated rainwater would flow during large storm events. In this case, the “minor waterway” is not a defined stream, does not have a bed and banks, and offers no aquatic resources or riparian habitat. An exception in this case is reasonable and justified, because the setback from this minor waterway would adversely bisect the property, reducing the accessibility and useful value of the land, while gaining or preserving no benefit to the environment, or to water quality.

*It is true that the County had considered changing the language first circulated on May 8<sup>th</sup> to provide an exception under 82.941, the section that sets standards for waterway setbacks. Nonetheless, we determined that a variance process would be more appropriate, considering the case-specific nature of each proposal. Additionally, the County believes a variance process provides for more significant public involvement and opportunity for comment on variances associated with mining proposals. See also the comments provided by the City of Austin on this matter.*

**Comments from City of Austin, received 5/31/12, with Travis Co. responses in italics**

1. 82.913 Applicability: (G)(3) I think we are changing our standards to look at our review applying to 5k of new impervious cover and I think if they stay less than 10k the county would not do a review on small subdivision. If the single office is supposed to handle the reviews in the ETJ and they are not doing one would we just handle it? *Commenter appears to be referring to paragraph (G)(1) not (G)(3). Travis County chose 10,000 SF as a trigger for applying the water quality protection standards based on the same threshold existing under the LCRA HLWO. In terms of which jurisdiction reviews subdivisions in the COA ETJ or do both review, be mindful that all subdivision applications in the COA ETJ are governed by Title 30 rules and the single office, not under these proposed rules.*
2. 82.931 and sections thereafter Submittal Requirements for Environmental Review. In this section it appears that the County is also going to be doing E&S control review. Potential conflict if we are also reviewing the same site plan? Two different reviewers two different opinions? *For non-subdivision matters in the COA ETJ like a commercial site plan, there is not a single office of review. In this instance, the County and COA executed an inter-local agreement on July 12, 2011 that describes roles in the ETJ for site plan review. We have agreed to coordinate reviews and approvals. The County has agreed not to issue a development permit until a city approval is obtained or an approval being effective contingent on City approval. In practice, the County generally will defer to City environmental review on these matters, considering County staff resources and a higher priority to review non-subdivision matters outside of the Austin ETJ or within other municipal ETJs where site plans may not be subject to municipal environmental review.*
3. 82.941 Setbacks for waterways (G)(2)(D) Have we changed our setback from the Colorado river downstream of Ladybird lake to be consistent with their proposed 300'? *This appears to be an internal question to the COA. In the County's proposal, the critical water quality zone will be 300 feet wide, from the OHWM on each bank. It is our judgment that the combination of a critical water quality zone and any additional restrictions due to floodplain will adequately buffer the Colorado River from impacts of storm water runoff.*
4. 82.941 Setbacks for waterways (G)(2)(h)(B) Option 2 floodplain based setback. Again another potential conflict with two entities review same site plan? Our floodplain based parameters for reviewing Western waterways and their setbacks. *Based on comments in 2011 from COA, Travis Co. revised an earlier draft of the rule to exclude the COA ETJ from the western watershed setbacks. 82.941(h) makes that clear. Section 82.941(g) has been revised to make it clear that the county's eastern watershed setbacks will apply there. If (for a non-subdivision matter) there is a difference between the COA and County setbacks there, the more stringent would apply to an applicant.*

5. 82.941 Setbacks for waterways (G)(2)(j) I know we are working on matching their new rules for marinas and low impact park development along the Colorado river but we are not there yet. *Once the COA completes its ordinance making, the County will be requested to adopt them under Title 30. At that same time, it is envisioned that discrepancies in this rule can be proposed to be revised as part of a Chapter 82 rule making package.*

6. 82.943 Cut/fill They did not distinguish between eastern and western watersheds with their blanket 8' maximum. If we are reviewing same plans in WS or BSZ watersheds then they would need a variance from us for anything greater than 4' in upland. *It is our understanding that cut and fill requirements of COA do not differentiate between east and west watersheds either. It is acknowledged that an applicant will need to choose between keeping cut/fill to four feet with no variance or propose a project with up to eight feet cut/fill and need a variance from COA only. Given the topographic constraints in outlying areas of the County (steep slopes west and large floodplains on the east), we are comfortable with the eight foot standard along with the associated environmental protection requirements for such a proposal under 82.943 and 82.941.*

7. 82.945 Subdivision plat notes. I think our legal group might have a problem with them putting a plat note on a plat excluding cut or fill on a lot exceeding 8'. Since it does not say unless variance is approved. We do not put notes like this on plats anymore. *All subdivision applications in the COA ETJ are governed by Title 30 rules and the single office, not under these Chapter 82 proposed rules.*

8. Subchapter K Roadways and ROW's 82.970 and 972. Again potential review conflicts on E&S plan reviews. 972 we do not have a native vegetation section in our code. *All subdivision applications in the COA ETJ are governed by Title 30 rules and the single office, not under these Chapter 82 proposed rules at all. That said, for non-subdivision matters, 82.970 will apply to proposals for construction of a County R.O.W. This section has been revised to explicitly identify applicability to County roadways. Regarding 82.972, the section provides guidance and preferences and designs we ask applicants to carefully consider, not outright mandates. Therefore, we do not foresee review conflicts.*

9. Subchapter L Mine and Quarry 82.988 I do not feel any exemption should be allowed. I believe the setback should be based on the hydrology for that minor tributary and it be set at a studied distance to avoid any dewatering of that tributary. I also do not believe any specific business should have a specific code exemption. *It is agreed there is a potential equity issue to provide an exception to one line of business. It was initially considered given the special nature of mining. Regardless, this exception has been removed and a variance process is identified that would require an applicant demonstration and findings by our Commissioners' Court, along with*

*environmental assessment information regarding the quality of the aquatic and riparian resources and hydrologic regime.*

**Comments from Casey Giles, National Trench Safety Corp., received May 25, 2012, with Travis County responses in italics**

- The “master checklist” (item 3, page 28) in the swppp seems like it could be just a detailed Table of Contents?

*Yes, similar to that. The County plans to come up with a standard checklist based on the items in Section 82.935. We would like to work with stakeholders to finalize it. The checklist would be filled out and put in the SWP3 Site Notebook.*

- Item 6 on page 28 worries me.....the swppp is supposed to be a living breathing document. If something in the field, or something discovered after plan permitting but before construction dictates specific action to be written into the swppp, it seems like that should govern? If nothing else, the inspector and/or contractor and/or engineer and/or CPESC should be able to decide what course of action is best for the water quality protection?

*This is really not an issue. Nothing limits the ability to revise the SWP3 or the construction plans after construction starts, if necessary and if the proper steps are followed, as outlined in Section 82.935(i). This is the existing process today. To emphasize, the County as the permit authority cannot review and issue a County development permit based on construction plans, and then allow another document to be issued governing the construction project that could potentially conflict without our review and approval. The document reviewed and permitted by the County must take precedence over the one not reviewed to have a clear line of authority for the project. Then, just as we do now, if there are minor revisions to SWP3 items in the field, those are done with the inspector and contractor. If there are major revisions, the applicant must come back for plan revisions. This provision protects the County if something significant in the SWP3 is changed without going through the proper process, because we can direct the operator to follow the original plans.*

- For item F on page 29, are you asking that the SWPPP list what training/certification is required for the contractors? If the Engineer or CPESC is the person responsible for implementation, is further training required? Or is this referring only to the contractor representative who will be onsite almost every day and what he has to know?

*This provision was included primarily because we believe the USEPA and TCEQ will have something similar in their upcoming SWP3 requirements. We were not planning to emphasize this section in enforcement; we included it as a provision so the operator will be more aware of training documentation required to be put in the SWP3 in the future. We can consider revising, if necessary to clarify.*

- Overall, the revisions are definitely an improvement. I still feel like we are solving a problem that we haven't defined. I don't know how this will make water quality better. A lot of it just seems to put the same information in multiple places, and/or put

references to the same information in multiple places.....making it easier for ya'll, but harder on everyone else? Beefing up requirements on the ESC sheets in the construction plans seems more simple/effective?

*This Code change solves a huge problem that will definitely improve water quality. It gives Travis County greater ability to enforce water quality requirements, since pre-existing requirements are too non-specific. The SWP3 format advocated by the stakeholders is the one we are proceeding to establish. Therefore, the burden on SWP3 consultants should not be too different.*

**Letter of June 11, 2012 – from HBA of Greater Austin; responses by Travis Co. in italics.**

**1**– HBA suggests the recent AG opinion on County platting rules does not provide authority to regulate water availability. *These rules are not based on any of the statutes addressed in the recent AG opinion.*

**2** – Chapter 242 of the LGC prohibits Travis County from acting unilaterally in the Extraterritorial Jurisdiction (ETJ) of the municipalities to regulate subdivisions. *First, Chapter 242 prevents a county from unilaterally adopting subdivision regulations applicable in the ETJ of a city with which the county operates a single office and has a joint code governing subdivisions in the ETJ. These rules apply only to subdivisions outside those areas. Second, Chapter 242 applies only to subdivisions and related permits. These rules apply to development permits to which Chapter 242 does not apply because they are authorized by other statutes not related to Chapter 242.*

*TNR agrees with the HBA that we should work to optimize the implementation of 242 agreements with every willing jurisdiction. Travis County would like to work with the HBA to identify the highest priorities where new or improved 242 agreements should be established for efficiency and to ensure full protection from subdivision development water quality impacts. The County takes very seriously its duty to comply with both the mandates of the TCEQ and the Small MS4 permit and at the same time the mandate to streamline subdivision approvals in ETJs. No changes were made in response to this comment.*

**3** - HBA also questions the authority of Travis County to regulate impervious cover stating that an attempt to regulate impervious cover violates the intent of LGC 232.101(b). *The proposed rules do not conflict with the statute. The rules do not set impervious cover (IC) limitations. The proposal does not restrict the use of buildings, the bulk or height of buildings, nor the ratio of building space to lot size. The proposal does require that, when certain intensity of IC is proposed, the proposal must include post-construction water quality treatment. The proposal is consistent with the Small MS4 permit that requires the County to implement strategies for structural BMPs and to use an ordinance to address post-construction runoff.*

**4** – The statutory basis for tree preservation and mitigation requirements is questioned. One of the most puzzling requirements is that dealing with tree preservation. No statutory authority for tree preservation/protection by counties exists. *The County proposal is a re-codification of existing County policy adopted as Chapter 108 on March 28, 1995, pertaining to County roads, R.O.W., and County-owned property. Also, existing 82.203(b)(10) requires information on trees in a proposed R.O.W. The proposal today is to repeal Chapter 108 and to simplify the old policy, makes reference to an existing guidance document of the City of Austin for area-wide consistency. The City's guidance is strikingly similar to the old Chapter 108 requirements for tree assessment methods. The County has adequate authority to control the design of a County*

*roadway and R.O.W. Also, the preservation of significant-sized trees and the associated root structure is an important way to maintain soil stability and prevent storm water pollution. The most significant difference between the existing policy and the one proposed is that when a development is to result in construction of a roadway that will be accepted by the County in the future, the roadway corridor must include the preservation of significant trees or mitigation for the loss. This proposal does not apply to land that will remain in private ownership, the chief difference between City of Austin requirements and this proposal.*

**5 -** *The setbacks from streams are excessive. HBA requests the scientific information with calculations for the setback requirements from streams. The HBA would suggest that a more appropriate setback and one that is unassailable is a setback based on the 100 year flood plain. We also suggest that the setbacks be used as a portion of the takings analysis required under the Texas Property Rights Statute. A takings impact analysis was prepared and notice of its availability and opportunity to comment on it was completed earlier in 2012. The County is under no obligation to develop a scientifically based project in order to establish setbacks from waterways. Members of the HBA have actively participated in the City of Austin's 2011 – 2012 ordinance development process which resulted in a high level of support for establishing setbacks in the eastern watersheds consistent with the County's proposal. The existing County Code has already established setbacks for the western watersheds that are substantially the same as proposed today. In the case of major waterways in an eastern watershed, the proposal of the County is to reduce the required setback from 400 to 300 feet.*

*The proposal does require greater protection than exists in the County Code, for eastern watersheds, identifying stream catchments in the range of 64 to 320 acres as minor waterways with a 100 foot setback. One basis for the requirement includes the TCEQ-approved Gilleland Creek TMDL Implementation Plan, to allow attenuation of anthropogenic bacteria sources through the natural areas that border waterways in the Gilleland watershed. Also, soils in the eastern watersheds are highly erodible and the proposed setbacks in headwater areas will limit or prevent erosion and will help prevent long-range infrastructure costs that occur when stream channels shift and damage structures and improvements built too close to the waterway. Finally, the promulgated standards of the USEPA (40 CFR Part 450) and the draft Small MS4 permit proposed by TCEQ require natural buffers around surface waters as a control measure.*

*The County does not consider the buffers excessive. In many instances, the floodplain boundary already restricts development in these areas. Several exceptions to the setback requirements are allowed to accommodate development, including setback width averaging, allowances for water/sewer and road installations, and use of setbacks for passive recreational opportunities.*

**6 -** *The minimum lot widths do not seem to be authorized under statutes. The County did not propose minimum lot widths in this rule making.*

**7** - “Optimal season for planting” is not set and potentially a source of arbitrary acts by staff. *The rule has been revised to link the re-vegetation requirement to appropriate guidance documents that specify timing of planting.*

**8** - Cave setbacks of 150 feet is a requirement for which we would like to see the scientific justification relative to water quality. Recharge 150 to 300 feet, is not defined as to who determines the recharge feature setback. We would also suggest that the setbacks be limited to upstream only. *These requirements are proposed to be carried forward from the existing requirements first set in 2005 in County Code (see existing 82.209(c)(1)(D)). No re-evaluation of these requirements was made. Noteworthy in our consideration is that these requirements are consistent with City of Austin requirements that apply in County jurisdiction (Austin ETJ) already.*

**9** - The HBA objects to the prohibition of utility lines, golf course installation within setbacks. Often such locations are the optimal location and to claim that they are an undue hazard is not justified. *The proposal seeks to keep setback areas free from construction, development, and other alterations. However, exceptions for utility placement are allowed under the proposal, when justified in accordance with applicable technical guidelines. The County makes no claim that a utility or golf course is an undue hazard. The County views non-critical use of the setback areas as eliminating an opportunity to protect the water quality of the subject waterway.*

**10** - The requirement that the County may require alternate technical criteria and standard details, on a case-by-case basis, in consideration of site-specific conditions is open to arbitrary or capricious application. *Eliminating the provision could also result in lessened flexibility during the environmental review process. This is intended to allow the County to develop special specifications more applicable to the County areas rather than the more urban emphasis of the Austin ECM, for instance.*

**11** – Concerns are raised over a requirement that a SWP3 Summary must be submitted when a residential lot development projects will disturb more than 1 acre (82.931(e)(1)). *The Small MS4 permit states that the County must develop, implement, and enforce a program to reduce pollutants in any storm water runoff from an activity that disturbs greater than 1 acre. The County believes a SWP3 Summary is simple to complete and submit, relieves the owner of submittal of an entire SWP3, and provides the County a basic notification that the owner is complying with storm water management requirements of TCEQ.*

**12** – Concerns are mentioned regarding the stringency of what must be in an Engineer’s Report component of a SWP3 (82.935(c)(3) – (10), relating to the site and project description. *These requirements substantially track what is required by neighboring jurisdictions such as City of Austin and have their basis in TCEQ’s SWP3 requirements, as specified in the Construction General Permit. When County officials met with HBA to hear concerns on the Feb. 7<sup>th</sup> draft of*

*the rule, we were encouraged by HBA to revise our requirements to match up with City of Austin requirements (which was done). This level of detail is typically provided in projects under consideration presently. These details are necessary for the environmental review of development proposals subject to County permitting. These requirements are only for engineered projects, not for every project (see 82.935(a)).*

**13** - As referenced in Section 82.943, an 8 feet maximum cut and fill combined effect (leveling) is inadequate; particularly in a region with extreme topographical changes and such averaging may limit the actual cut to 4'. Lots with slope are the ones most likely to need cut and fill. *Section 82.943(a) replaces existing 82.209(d) adopted previously and now in force. The standard of eight feet maximum is the same standard as exists today. The requirement is written in a clearer manner so it might appear more restrictive than presently. But, it is the same standard. The eight feet maximum is not as stringent as the City of Austin maximum of four feet. That difference better accommodates the terrain in outlying areas of Travis County. The restriction of cut-and-fill within a waterway setback is equivalent to the City of Austin's provision to prohibit cut-and-fill within the critical water quality zone.*

*In response to the concerns, the County has adjusted the restrictions to waterway setbacks of 64 acres and greater; we agree that the restriction for setback areas from 5 to 64 acres catchment areas may greatly limit otherwise developable sites. The County has also revised the restriction on 15% or greater slopes, to provide for cut-and-fill as long as certain BMPs are applied.*

**14** – Regarding Section 82.943(c)(5), HBA commented that so long as the construction permit is active, this is unjustified paperwork and the HBA objects to the requirement. The HBA objects to the requirement for an annual report. It is particularly onerous that failure to timely file be cause for revocation of the permit. *As written, the annual report applies only to fill disposal sites not connected with a permitted, primary construction site such as a subdivision development. In these limited situations, it has been the County's experience that inadequate planning and control of the sites occur, fill piles are un-stabilized, and there is often a lack of finality to the construction activity. Therefore, the County proposal is intended to increase planning and compliance and to discourage property owners from getting fill authorizations without a greater degree of foresight to consequences. When it is unsatisfactory, authorization to receive further fill will be revoked and the fill site must be stabilized and closed.*

**15** – Regarding Section 82.944, the county authority, such that it exists is through TCEQ that does not regulate impervious cover except with respect to the Barton Springs recharge zone. This section should be deleted. *The commenter is correct that the TCEQ did provide the directive to permit holders like Travis County. The proposal is consistent with the Small MS4 permit that requires the County to implement strategies for structural BMPs and to use an ordinance to address post-construction runoff; therefore, it has not been deleted. The 10,000 SF*

*threshold is derived from the LCRA HLWO threshold. The City of Austin also discussed this issue with stakeholders and is considering a square footage threshold for requiring a permanent water quality control through its current ordinance development process, instead of only relying on a percentage of IC formula.*

**16** – Regarding Eastern Watershed permanent water quality control (82.944(c)), the HBA commented that Travis County should track TCEQ requirements or those of the respective ETJ; e.g. Pflugerville or Manor. *The City of Pflugerville does not have standards for permanent water quality control in its ETJ. Pflugerville and the County are engaged in coordination to streamline ETJ matters at this time. For matters subject to this requirement, the County believes it is appropriate to track the water quality volume requirements of the City of Austin for greater consistency in our community. TCEQ only has specific technical criteria governing application over the Edwards Aquifer recharge and contributing zone.*

**17** - The HBA objects to standards or requirements that exceed those set by TCEQ and EPA. SWP3 weekly reports do not require submission to the State as proposed by the County (in Section 82.952); but rather to be maintained. *In addition to the statewide minimum requirements, the County must consider effective and efficient methods to comply with the Small MS4 permit. This proposed submittal would be used on a case-by-case basis and serves as an alternative to travel to a site for a records review. In regard to the general objection over exceeding State requirements, the TCEQ permit encourages consideration of local conditions and the County strives to consider local community standards of Austin and LCRA as well as TCEQ in formulating our local regulations.*

**E-mail from Hank Smith, June 11, 2012 with Travis County responses in italics.**

Tom here are my comments, sorry for the informality of the format

**General Comments**

This appears to be a conglomeration of several different documents and it is very difficult to try and follow what the County wants – I would challenge the County staff to flow chart these rules in regards to what is required - When and where different criteria applies, etc...

*We believe any new regulations are going to seem more confusing at first to those reviewing them for the first time. We also realize it is our responsibility to have ongoing dialogue and efforts to orient the regulated community on the rules and our objectives. It may be recalled that the County distributed charts showing when various requirements apply or do not apply. The County intends to make an effort to put together guidance for applicants- charts, checklists, etc. This will be done after the rules are adopted. This effort will link up with the new permit software project being implemented by TNR.*

I am concerned that these rules take a huge step backwards in regards to water quality simply from the difficulty in interpreting what is required and the County could make a huge step forward by simply saying comply with TCEQ or LCRA criteria and be done with it but I have read these several times and have struggled just make reasonable comments.

*We disagree with this comment. The technical criteria of LCRA and the COA are adopted for the western and eastern watersheds, respectively. This improves water quality because it allows the County to enforce rules it hasn't had in the past. Further, the TCEQ sets minimum statewide standards and non-specific requirements that are intended to be more specific and emphasize local conditions and local community preferences. These regulations are based on existing state and local requirements with some items added in which are applicable and necessary to the County organization and MS4 characteristics. Finally, LCRA and TCEQ could make future changes to their criteria in ways the County does not agree. If County rules simply cross-reference LCRA and TCEQ criteria, the County automatically accepts the new criteria even though we disagree with it.*

**Subchapter "H"**

- 82 912 "Geographic Scope" - I continue to have a concern regarding applying the regulations within the ETJ of municipalities where there is no 245 agreement. I believe the proper mechanism for this effort would be to include these recommendations into a 245 agreement otherwise we risk defeating the purpose of the original 245 legislation which was to avoid conflicts in rules but this approach actually creates conflicts since it overlaps with city authority and in certain cases may conflict with city requirements.

*See response to HBA letter. The County shares this goal with HBA. To accomplish it, the County must work with many different cities. First, time and staff resources are required to develop HB 1445 agreements and the necessary code amendments. Both the County and the cities have limited staff whose first priority is review and processing of permits so as not to delay construction of projects. Second, these County rules address both subdivision plats and development permits. Some cities take the position that HB 1445 agreements can cover only subdivision plats and there is no legal authority for a city and county to address development permits and site plans in a HB 1445 agreement. Because of these two factors, including these rules in HB 1445 agreements will take a long time. That cannot be accomplished by the deadline that TCEQ has set for the County to adopt these rules, so HB 1445 agreements must be a longer term goal.*

- 82.913 what is the definition of a non-substantive revisions or minor corrections  
*The County agrees with this need and has clarified what is “substantive” more precisely.*
- 92.914 why cant the LCRA and County agree on a single review process instead of a dual review that simply adds time and money to enforce the same regulations. *This issue has been discussed and budget requests to fund the necessary County position to accomplish this have been attempted in the past. TNR is still interested in a single review process for the HLWO area. Again, this is a shared goal, but time and staff resources are required to develop such agreements and the related code amendments. Like a HB 1445 agreement, an agreement with LCRA cannot be immediately accomplished by the TCEQ deadline.*
- 82.916 what is the form of this documentation, why are we burdening other agencies with providing documentation that their rules do not apply to our development and what if we cannot get such verification? IF a rule is “Clearly not applicable” why does an applicant have to pay a professional to assert that fact? *As stated in the rule, checklists are available to assist applicants. Proposed subsection (c) outlines the documentation could be as simple a written statement from an applicant to show compliance.*
- 82.917 we discussed at length our concerns with obtaining a permit. The County verified that no other successful permit program was in place except Houston who was used as the basis for this requirement but only a couple of permits had been issued in Houston so why is this process still in the rules? If the County is going to require these controls they need to assume responsibility for maintaining the controls! Relying on HOA to maintain these controls is a proven failure yet the County is proceeding down that path which makes no sense.

*Section 82.917(j) lists many exceptions to the requirement for the permit. For instance, the BMP Maintenance Permit is not required in the Lake Travis watershed and within the City of Austin ETJ where the HLWO and city requirements, respectively, apply. Since proposal, the County also modified the rule to exclude the requirement for a BMP Maintenance Permit for water quality controls required on residential lots and clarified the permit does not apply to a non-structural control. The request in this comment raise policy and County resource questions. TNR is not prepared to recommend a new County program to operate and maintain privately built structures. TNR intends to focus on succeeding with implementation through the owner of record, even if it is an HOA. The effect of the proposed requirements is that it only applies prospectively and only for*

*certain development activities in approximately 25% of the County's jurisdiction.*

*Therefore, the initiative will not be overwhelming and can be appropriately managed.*

- 82.917 (i) How can you retroactively require a permit back to 2007 – where is this specific authority? *.The initial rule proposal sought to target BMP Maintenance Permits with the date of the 2007 MS4 General Permit of TCEQ, after which date the County was expected to implement a SWMP and control post-construction runoff from new and re-development. A SWMP must be fully implemented by Aug. 12, 2012, including adoption of appropriate rules. Given the difficulties of implementing this retrospectively, the rule has been revised to make this provision for projects completed after the effective date of the rule. The rule will govern only prospective actions and is not being applied retroactively. The BMP Maintenance Permit is required for the future act of operating a water quality control after the effective date of these rules. Applying it to the future operation of all pre-existing water quality controls may be beyond the capacity of County staff resources.*
- 82.918 Does Travis County have authority to require a fee for a BMP maintenance permit?  
*Yes, the authority for a storm water management related fee is derived from Chapter 573, LGC.*
- 82.921 where does the concept of “Exceptional Hardship” come from, how is this defined and where else has it been used, and under what authority does the County have to require only under the terms of “Exceptional Hardship”. How does the cost of compliance and the cost of an alternative compliance relate to a variance? *Exceptional hardship is one of four demonstrations the Commissioners' Court must consider in order to make a finding that a variance is acceptable under Chapter 62 of the Travis County Code, relating to siting of a solid waste management facility. Also, exceptional hardship is one of three demonstrations the County's floodplain administrator must consider in order to make a finding that a floodplain variance is acceptable under Chapter 64 of the Travis County Code. Proposed 82.921(b) requires the applicant to indicate the nature of the hardship presented by the imposition of the County requirement. No further definition of this term is proposed because it is our belief that each hardship could be unique or site-specific. Proposed 82.921(b) describes the information from a variance applicant necessary in order to process a variance and these factors include cost considerations.*

#### **Subchapter “I”**

- 82.931 – providing a preliminary SWPPP at the preliminary plan phase is not practical since at this phase the project is a concept plan and these criteria are very specific to the actual construction phase. I suggest eliminating most of these requirements and calling it something other than a “Preliminary” SWPPP since a SWPPP is a very specific term. *The County agrees that a name change could reduce confusion and has re-named the plan as a “preliminary construction storm water plan”. The preliminary construction storm water plan is an entirely different document from a SWP3 and requires only summary level information. This requirement is derived from a requirement first*

*established in the County Code in 2005 (see existing 82.209(i)(2)). The preliminary information provided is intended to ensure applicants have taken a serious look at the overall needs of storm water management at the conceptual phase of the development. Based on preliminary plan subdivision rules of the County, the developer must lay out the number of lots, footage of streets, drainage easements, a drainage plan, potential flood plain revisions, and water supply needs certified by a professional. The County believes it is both appropriate and feasible to summarize how storm water will be managed once the construction phase is reached. Additionally, the rule at 82.939 has been revised in response to this comment to reduce some of the information needed at the preliminary plan phase.*

- Showing specific easements and location of water quality controls on a final plat is not appropriate since these will likely change during the design process. A final plat is intended for property conveyance and nothing more. This information belongs on the preliminary plan and construction plans but not on a final plat. *The intention here is to show all the general platted easement areas required for all water quality related items, not specific locations of specific controls. To clarify this intent, 82.931(c)(3) has been revised to state "the location and dimensions of each easement for placement of required permanent water quality controls, compatible with the drainage plan".*
- 82.931(e) (1) (B) virtually every site will meet the definition of including "critical site improvements" so this exception to not require a SWPPP does not really mean anything and we are back to requiring approval of a SWPPP. Does the County have the authority to approve or deny an SWPPP? *A SWP3 being required is not dependent on whether there are critical site improvements or not. Critical site improvements that exist on a lot only raise the priority for the County to review and approve the SWP3 (rather than only requiring submittal of a SWP3 Summary). In consideration of this comment and County resources available for review, 82.931(e)(1)(B)(i) has been revised to indicate the SWP3s for these lot proposals would be submitted based on cut and fill of four feet or greater, slope of 10% or greater, or construction activity proposed within 150 feet of a waterway or CEF. The majority of residential lot sites subject to needing a SWP3 will not meet the definition of having critical site improvements.*
- TO build any single family home in the county a builder must now hire an engineer or erosion control expert to design a ESC plan for review and approval by the County which far exceeds any other requirement for single family development in the State that I am aware of.  
*This is an untrue statement. Proposed 82.935 specifies that the ESC Plan is not required for small construction projects and the ESC Plan is only necessary for a subdivision construction plan, not the construction occurring on individual lots at a later phase. The ESC Plan is a set of engineered construction plan sheets which must be prepared by a P.E. in accordance with State law. The construction plan sheet requirements (see 82.935(g)) are based upon existing practices within the local development industry and include information necessary in order for the County to be assured the proposed construction will adequately reduce pollutants in storm water runoff.*
- 82.931 is very difficult to understand since it references many sections - what is it you are trying to accomplish here ? *It is agreed that the regulatory framework is complex.*

*The section provides the framework of what needs to be submitted in a development proposal. To a great extent, this section tracks existing County subdivision and permitting processes, which have been dictated by the State to counties. The USEPA and TCEQ have set construction activity thresholds that are repeated in this section.*

- 82.931 (g) why all these different notification dates and criteria – can't you provide one summary of the notice requirements? *This subsection identifies the notices the TCEQ requires construction site owners/operators must provide to the MS4 Operator. The subsection includes only two items (NOIs and CSNs).*
- 82.933 what is the purpose for not recognizing updates to the technical criteria manuals – this will lead to massive confusion and multiple sets of criteria manuals. Does the County plan to keep a log of what revisions have been approved and which ones have not been approved? What type of alternate criteria and standards may be required – this leads to a complete lack of prediction in development standards and is not in place anywhere that I am aware of. You cannot simply change the rules on a whim but this exception seems to allow that! *HB 1445 requires cities and counties that elect to have a single office to also have a single set of regulations governing plats in the ETJ. If a city that operates under a single office agreement with a county changes any part of its platting regulations without county concurrence, the city and the county are then applying different standards to plats in the ETJ. This is contrary to the letter and spirit of HB 1445. This section keeps the criteria uniform, which prevents permit applicants from being ping-ponged between different rules.*

*Eliminating the provision for alternate criteria could also result in lessened flexibility during the environmental review process. This is intended to allow the County to develop special specifications more applicable to the County areas rather than the more urban emphasis of the Austin ECM, for instance.*

- 82.934 Erosion is a natural process and sediment is moved off a property under natural conditions without construction activities or any level of disturbance so to put a requirement that "If sediment escapes a project site, the owner or operator must remove any accumulations that adversely affect off-site property and water is in the state" is very difficult to define – how does the county plan to define "adversely affect". *In response to this concern, the rule has been revised to state the sediment originates from construction activities at the construction project site. If sediment begins to accumulate downstream from a site, this would be an adverse impact.*
- Is the County now going to enforce construction schedules? Many project are delayed for a variety of conditions including weather, labor issues, etc... that are beyond the control of the owner. *Delays due to those common issues are beyond the intent of this provision. Revisions to 82.934(b)(6) have been made to delete reference to a time schedule. This provision is included to make clear to owners that when the construction project is completed and use of the facilities is desired, the owner is obligated to complete the requirements and stabilization process outlined in the Code prior to use and acceptance of the property. We are trying to encourage a permit and inspection process by which the owner understands they have an obligation to complete the project, get the concurrence letter, do site stabilization including signing a developer's*

*contract for unfinished re-vegetation, prior to using the property and submitting an NOT, and not let these issues go unresolved indefinitely.*

- 82.935 (b) - we need predictability and this seems to give the County the authority to change the criteria at any time for any reason. *This proposal was not to authorize changes in criteria or standards. It was to change the format of submittals. This would occur administratively after input from stakeholders. On further study, we believe a rule change would be preferable and have deleted this proposal.*
- Why can't the county coordinate with the other cities regarding slope categories on a slope map – Travis County would be the only entity requiring a slope map to show 0%-5% and 5% - 10% and greater than 10%. Most cities that have this criteria us 0% - 15%, 15%-25%, 25%-35% and greater than 35%. *We agree with this comment and have revised 82.935(c)(6)(C) to reflect consistency with LCRA slope intervals of 0 to 10%, 10% to 20%, and >20% slope.*
- Section (9) there is no way to know who the contractor is or which concrete plant or quarry they will use til they actually get the material this is highly dependent on availability on a day to day basis. *One intention of this requirement is to have assurance before the project is approved by the County that this type of associated activity has been carefully thought out. We agree with the concern on changing circumstances and it is the reason why the requirement states the applicant will indicate what they intend to do. Updates and changes will be accepted through changes to the SWP3 if events change.*
- 82.935(i) – A SWPPP is supposed to be a living document that gets modified and adjusted frequently but the County process described herein is very burdensome and likely result in a less flexible working document that does not get appropriately modified as necessary. How do you define minor revisions to a SWPPP? *The SWP3 revision process is not going to be different than what it is now. If additional engineering calculations are required, that is typically when a formal plan revision will be required. Minor revisions to the SWP3 can be approved by the County inspector in the field.*
- 82.936(d) this belongs in the very front of the document not buried in the back somewhere. *The details of 82.936(d) need to remain in that location. However, we have described the basic categories of ESC with additions to the purpose section (82.910) and to 82.934(a).*
- 82.936(d) (3) (F) is not practical since requiring seeding 14 days after ceasing activity but not allowing watering is a waste of resources. *This section only identifies the initiation schedule required for stabilization rather than the completion schedule- the operator has an additional 14 days to initiate stabilization measures when there is restriction of the irrigation supply. Under (G)(iv), it identifies irrigation supply restrictions as a legitimate exception to the 120 day permanent re-vegetation completion schedule. Alternate measures can be accepted by the County on account of irrigation water supply restriction.*
- (d)(4) what is the purpose of a Developers Contract and how does this fiscal relate to the standard subdivision fiscal for erosion controls. *The developer's contract process is based upon the City of Austin Code. It would be used if occupancy is requested prior to*

*full completion of re-vegetation. The return of fiscal surety funds for ESC would occur after re-vegetation eventually occurs.*

- 82.941 (g) how do these compare to the City of Austin and LCRA? Lets not introduce a different set of setback criteria! The setback in (h) are very restrictive – 5 acre minimum????? Where does this specific authority come from. No one else in this area has setbacks anywhere near this stringent! *The western watershed criteria, including the five acre threshold are derived from equivalent standards set out in the LCRA's HLWO. Notably, an option 2 is allowable as an alternative, based on floodplain boundaries. The eastern watershed criteria are based on the consensus achieved during the City of Austin stakeholder process. The County cannot reliably predict when and what the Austin City Council will adopt; however, the County will be requested to adopt revisions to Title 30 after the city does complete its process. Therefore, any adjustment to the setbacks in this rule can be addressed in Chapter 82 when the Title 30 revisions are proposed to Court. In terms of authority, the commenter is referred to the regulations in 40 CFR Part 450, adopted by USEPA and referenced in TCEQ regulations.*
- Section (i)(2) what is sub-parallel. *It means not quite parallel or less than parallel. The County will allow perpendicular or near to perpendicular crossings of wastewater lines through a setback. The County does not intend to allow crossings that roughly parallel or are nearly parallel the stream channels.*
- 82.942 if I am dividing a 24 acre tract into 3 acre lots what is the purpose of an environmental assessment? This is a significant cost for a very low impact type development! *Based on this comment, the proposal has been adjusted so that the EA is only required when the residential development is 10 acres in size or greater and will include 10 or more lots.*
- 82.943 If no cut fill is allowed within 100' of a setback for a channel with a drainage area of 5 acres there is virtually no development opportunities left. *The County agrees this prohibition should not be applied in all circumstances and based on this comment, the rule has been revised to apply to areas where 64 acres of drainage exist.*
- Section (4) prohibiting cut fill on a slope >15% restricts most development in western Travis county and is more restrictive than any other regulation currently in the County. *The County has modified this proposal to emphasize the use of appropriate BMPs to prevent erosion when slopes greater than 15% are to be filled. BMPs include diversion of surface runoff, use of terraces, and establishment of mixed vegetation (forbs, shrubs, trees).*
- 82.944 the impervious cover limits in (3)(A) (i) are too low to be any incentive suggest raising to 20% to match TCEQ and 40% in a cluster area. *These are existing County standards and are based upon the LCRA HLWO and the County believes consideration of revisions should involve stakeholders and LCRA and the County.*
- Section (c) (1) (A) liners have a severe restriction on trees and this should be carefully considered since virtually all surface runoff has groundwater conductivity. *The County criteria for water quality controls in eastern watersheds is based upon the City of Austin existing requirements. Particularly, the statement of concern is based on COA ECM 1.6.2.C. Based on the statement, the County has revised the passage to refer to ponds*

over the Edwards Aquifer Recharge Zone and to indicate situations of “high” groundwater connectivity. Trees should be restricted from being planted above a lined pond.

- 82.945 (a)(6) what does this mean? (b)(4) should be removed *The wording of (a)(6) has been clarified. The wording of (b)(4) has been revised to identify the note pertaining to the easement area of a water quality control rather than its specific design.*

#### **Subchapter “J”**

- 82.950 why cant this pre development conference requirements simply be rolled into the other predevelopment conference requirements. *It is intended to be administered that way.*
- I will defer these comments to the SWPPP consultants –

#### **Subchapter “K”**

- 82.970 (b)(4)(A) – should this reference velocity instead of slope since that is the controlling factor for erosion  
*Velocity is one major factor but channel erosion potential has been measured using the shear stress calculation by erosion control specialists and engineers who specialize in storm water and erosion control plans. This has become more typical of an engineering practice in the last 15 years (lbs/sf of shear on the channel bottom based on channel slope, weight of water, and the depth of water in the channel). A prime example of this is the 2004 TXDOT standard specifications (Item 169) for soil retention blankets for channels – channel blanket designs are based on the channel shear stress calculation, not velocity. Notably, the County’s proposal of 82.970 (b)(4)(F) does give the engineer the ability to use volume, velocity, or shear calculations to propose alternate channel stabilization design if desired.*
- 82.973 (c) this is new previously this only applied to county projects now you want a tree survey for all trees in proposed ROW. Under what authority is the county now applying a tree survey and tree protection // mitigation. IS the County going to hire an arborist to review these plans? *See response to HBA.*