Bryan W. Shaw, Ph.D., P.E., Chairman Toby Baker, Commissioner Jon Niermann, Commissioner Richard A. Hyde, P.E., Executive Director



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

May 4, 2017

RECEIVED

MAY 1 6 2017

COUNTY ENGINEER

Mr. Richard Mott Lennar Homes of Texas Land and Construction, Ltd. 1922 Dry Creek Way, Suite 101 San Antonio, Texas 78259

Re: Edwards Aquifer, Comal County

Name of Project: 4S Ranch Amenity Center; Located approximately 2,000 feet east of Mustang Vista and Stahl Lane intersection; Bulverde, Texas

Plan Type: Request for Modification of an Approved of a Contributing Zone Plan (CZP); 30 Texas Administrative Code (TAC) Chapter 213 Subchapter B; Edwards Aquifer

Edwards Aquifer Protection Program ID No.: 13000321; Regulated Entity No.: RN105628622

Dear Mr. Mott:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the CZP application for the above-referenced project submitted to the San Antonio Regional Office by Pape-Dawson Engineers, Inc. on behalf of Lennar Homes of Texas Land and Construction, Ltd. on January 4, 2017. Final review of the CZP was completed after additional material was received on February 14, 2017 and April 6, 2017. As presented to the TCEQ, the Temporary Best Management Practices (BMPs) were selected and construction plans were prepared by a Texas Licensed Professional Engineer to be in general compliance with the requirements of 30 TAC Chapter 213. These planning materials were sealed, signed and dated by a Texas Licensed Professional Engineer. Therefore, based on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and the conditions in this letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aquifer Protection Plan. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.

BACKGROUND

4S Ranch Phase I CZP (EAPP 13-15082002) was approved October 30, 2015 for 753.6 acres. The proposed residential development was located within 87.75 acres with 34.41 acres (39.22 percent) of impervious cover. The construction included clearing, grading, excavation, installation of utilities and drainage improvement, streets, sidewalks and single family residential units. Permanent treatment included two single chamber sedimentation filtration basins and six vegetative filter strips.

PROJECT DESCRIPTION

The proposed project will have an area of approximately 22.47 acres located within the previously approved 753.6 acre tract. The 22.47 acre project area is individually platted separately within the Master Development Plan for 4S Ranch. It will include clearing, grading, excavation, installation of utilities and drainage improvements, parking, sidewalks, walking trails, an amenity center building, outdoor pool, and park with recreational pond. The impervious cover will be 3.61 acres (16.1 percent) within the 22.47 acre site. The remaining areas within this site will be maintained as greenspace. Wastewater will be disposed of by conveyance to a proposed 4S Ranch Wastewater Treatment Facility (WQ0015095001) owned by Stahl Lane, Ltd.

PERMANENT POLLUTION ABATEMENT MEASURES

To prevent the pollution of stormwater runoff originating on-site or upgradient of the site and potentially flowing across and off the site after construction, one (1) batch detention, one (1) fifteen-foot engineered vegetative filter strip (VFS), and two (2) fifty-foot natural VFS, designed using the TCEQ technical guidance document, Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices (2005), will be constructed to treat stormwater runoff. The required total suspended solids (TSS) treatment for this project is 3,240 pounds of TSS generated from the 3.61 acres of impervious cover. The approved measures meet the required 80 percent removal of the increased load in TSS caused by the project.

DRAINAGE AREA	ВМР	WATERSHED AREA	IMPERVIOUS COVER AREA	REQUIRED TSS REMOVAL	ACTUAL TSS REMOVAL
A1	50' VFS	5.37	0.62	556	556
A2	50' VFS	14.15	0.60	539	539
A3	15' VFS	6.51	0.33	296	296
J1 J2		14.82	0.00		
J3	Batch	3.04	0.811		
J4 J5	Detention Basin	4.82	1.101	2513	2729
<u>Ј7</u> Ј8		1.74	0.89		
J6	Overtreatment	6.48	0.243	_215	0
TOTAL		56.93	4.59	4119	4120

1. Providing treatment for existing 0.98 acres of impervious cover

2. Watershed includes offsite drainage area

3. Batch Detention Basin provides overtreatment for uncaptured impervious cover

The basin is designed with a water quality volume plus 20% additional volume for a total capacity of 19,368 cubic feet (18,459 cubic feet required); the depth for water quality volume is approximately 2.75 feet. The batch detention basin will implement a Flowmatic valve with an electric actuator in order to detain the captured runoff for the required amount of time before opening and releasing the treated stormwater. The system will be equipped with a 120V DDC logic controller and solar power battery backup that will be housed within a lockable enclosure with audio/visual alarm system.

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Mr. Richard Mott May 4, 2017 Page 3

COUNTY ENGINEER

The 15-foot wide VFS will treat portions of the proposed trail system and shall have a uniform slope of less than 20-percent and vegetated cover of at least 80-percent which will extend along the entire length of the contributing area and will be free of gullies or rills that can concentrate overland flow. The contributing area shall be relatively flat to evenly distribute runoff, and the impervious cover in the direction of flow shall not exceed 72-feet.

The two natural VFS(s) will treat the TSS generated from the park/playground area and proposed trail system. The natural VFS(s) will be undisturbed natural vegetative areas with slopes that shall not exceed 10 percent and shall have no flow concentrating areas on the strip. The contributing area shall be relatively flat to evenly distribute runoff.

SPECIAL CONDITION

Within 60 days of receiving written approval of an Edwards Aquifer Protection Plan, the applicant must submit to the San Antonio Regional Office, proof of recordation of notice in the county deed records, with the volume and page number(s) of the county deed records of the county in which the property is located. A description of the property boundaries shall be included in the deed recordation in the county deed records. A suggested format (Deed Recordation Affidavit, TCEQ-0625A) that you may use to deed record the approved CZP is enclosed.

STANDARD CONDITIONS

- 1. Pursuant to Chapter 7 Subchapter C of the Texas Water Code, any violations of the requirements in 30 TAC Chapter 213 may result in administrative penalties.
- 2. The holder of the approved Edwards Aquifer protection plan must comply with all provisions of 30 TAC Chapter 213 and all best management practices and measures contained in the approved plan. Additional and separate approvals, permits, registrations and/or authorizations from other TCEQ Programs (i.e., Stormwater, Water Rights, and UIC) can be required depending on the specifics of the plan.
- 3. In addition to the rules of the Commission, the applicant may also be required to comply with state and local ordinances and regulations providing for the protection of water quality.

Prior to Commencement of Construction:

- 4. All contractors conducting regulated activities at the referenced project location shall be provided a copy of this notice of approval. At least one complete copy of the approved Contributing Zone Plan and this notice of approval shall be maintained at the project location until all regulated activities are completed.
- 5. Any modification to the activities described in the referenced CZP application following the date of approval may require the submittal of a plan to modify this approval, including the payment of appropriate fees and all information necessary for its review and approval prior to initiating construction of the modifications.
- 6. The applicant must provide written notification of intent to commence construction, replacement, or rehabilitation of the referenced project. Notification must be submitted to the San Antonio Regional Office no later than 48 hours prior to commencement of the regulated activity. Written notification must include the name of the approved plan and file number for the regulated activity, the date on which the regulated activity will commence, and the name of the prime contractor with the name and telephone number of the contact person.
- 7. Temporary erosion and sedimentation (E&S) controls, i.e., silt fences, rock berms, stabilized construction entrances, or other controls described in the approved Storm Water Pollution Prevention Plan (SWPPP) must be installed prior to construction and maintained during construction. Temporary E&S controls may be removed when vegetation is established and the construction area is stabilized. If a water quality

pond is proposed, it shall be used as a sedimentation basin during construction. The TCEQ may monitor stormwater discharges from the site to evaluate the adequacy of temporary E&S control measures. Additional controls may be necessary if excessive solids are being discharged from the site.

During Construction:

- 8. During the course of regulated activities related to this project, the applicant or his agent shall comply with all applicable provisions of 30 TAC Chapter 213, Edwards Aquifer. The applicant shall remain responsible for the provisions and conditions of this approval until such responsibility is legally transferred to another person or entity.
- 9. If sediment escapes the construction site, the sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain). Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been significantly reduced. Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls, picked up daily).
- 10. Intentional discharges of sediment laden water are not allowed. If dewatering becomes necessary, the discharge will be filtered through appropriately selected best management practices. These may include vegetated filter strips, sediment traps, rock berms, silt fence rings, etc.
- 11. The following records shall be maintained and made available to the executive director upon request: the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.
- 12. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and construction activities will not resume within 21 days. When the initiation of stabilization measures by the 14th day is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable.
- 13. This approval does not authorize the installation of temporary aboveground storage tanks on this project. If the contractor desires to install a temporary aboveground storage tank for use during construction, an application to modify this approval must be submitted and approved prior to installation. The application must include information related to tank location and spill containment. Refer to Standard Condition No. 5, above.

After Completion of Construction:

- 14. Owners of permanent BMPs and measures must insure that the BMPs and measures are constructed and function as designed. A Texas Licensed Professional Engineer must certify in writing that the permanent BMPs or measures were constructed as designed. The certification letter must be submitted to the San Antonio Regional Office within 30 days of site completion.
- 15. The applicant shall be responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. Such entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred. A copy of the transfer of responsibility must be filed with the executive director through the San Antonio Regional Office within 30 days of the transfer. A copy of the transfer form (TCEQ-10263) is enclosed.
- 16. Upon legal transfer of this property, the new owner(s) is required to comply with all terms of the approved Contributing Zone Plan. If the new owner intends to commence any new regulated activity on the site, a new Contributing Zone Plan that specifically addresses the new activity must be submitted to the executive director. Approval of the plan for the new regulated activity by the executive director is required prior to commencement of the new regulated activity.

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MAY 1 6 2017

Mr. Richard Mott May 4, 2017 Page 5

- 17. A Contributing Zone Plan approval or extension will expire and no extension will be granted if more than 50 percent of the total construction has not been completed within ten years from the initial approval of a plan. A new Contributing Zone Plan must be submitted to the San Antonio Regional Office with the appropriate fees for review and approval by the executive director prior to commencing any additional regulated activities.
- 18. At project locations where construction is initiated and abandoned, or not completed, the site shall be returned to a condition such that the aquifer is protected from potential contamination.

This action is taken under authority delegated by the Executive Director of the Texas Commission on Environmental Quality. If you have any questions or require additional information, please contact Ms. Lillian Butler of the Edwards Aquifer Protection Program of the San Antonio Regional Office at (210) 403-4026.

Sincerely,

Lynn Bumguardner, Water Section Manager

San Antonio Region

Texas Commission on Environmental Quality

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MAY 1 6 2017

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COUNTY ENGINEER

Enclosures: Deed Recordation Affidavit, Form TCEQ-0625

Change in Responsibility for Maintenance of Permanent BMPs, Form TCEQ-10263

cc: Ms. Cara C. Tackett, P.E., Pape-Dawson Engineers, Inc.

The Honorable Bill Krawietz, City of Bulverde Mr. Roland Ruiz, Edwards Aquifer Authority Mr. Thomas H. Hornseth, P.E., Comal County

Mr. H. L. Saur, Trinity Groundwater Conservation District



February 13, 2017

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FEB 2 3 2017

COUNTY ENGINEER

Ms. Lillian Butler TCEQ – Region 13 14250 Judson Road San Antonio, Texas 78233

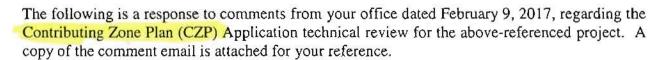
Re:

4S Ranch Amenity Center CZP

Edwards Aguifer Protection Program ID No.: 13000321;

Regulated Entity No.: RN105628622
Response to Notice of Deficiency (NOD1)

Dear Ms. Butler:



Contributing Zone Plan Application (TCEQ-10257):

1. Item No. 24, Attachment E - Volume and Character of Stormwater. Please demonstrate how the runoff coefficient value of 0.58 for post development was calculated. The Bulverde Drainage Manual was referenced during technical review.

Response: The total area of the site is 21.82 acres.

The amenity center area has an approximate area of 2.89 acres and a land use of high density development (greater than 60% impervious, average 3% to 5% slope) and therefore runoff coefficient is 0.91.

The entry park has an approximate area of 3.45 acres and a land use of high density development (greater than 60% impervious, average 3% to 5% slope) and therefore runoff coefficient is 0.91.

The open space area has an approximate area of 15.48 acres and a land use of undeveloped area (average slope over 5%) and therefore runoff coefficient is 0.52.

A weighted average runoff coefficient for the site is 0.63. Please refer to corrected Attachment E - Volume and Character of Stormwater.

 Item's No. 27-33 for the installation of AST(s). An outdoor pool is proposed (two separate pools adjacent to each other) for this project.

What treatment method(s) are proposed for the outdoor pool(s)?

Please review and revise the AST(s) section of the application if the site will hold chlorine (or other) in a total volume greater than or equal to 500 gallons.

Response: The outdoor pools will be treated with chlorinated water. The total volume of chlorine stored on-site will be less than 500 gallons.

 Attachment C2.00 Permanent Pollution Abatement Plan. Please provide a breakdown of impervious cover within the attachment. Preferably what impervious area makes-up the park-pond area, amenity center area, and walking trails between the two sections.

Response: The total 3.02 acres of proposed impervious cover is delineated as follows:

IMPERVIOUS COVER OF PROPOSED PROJECT	AMENITY CENTER (sf)	ENTRY PARK (sf)	TRAIL SYSTEM (sf)
STRUCTURES/ROOFTOPS	11,694	1,000	12
PARKING	39,775	12,049	
OTHER PAVED SURFACES	27,178	11,830	27,866
TOTAL IMPERVIOUS COVER BY AREA	78,647	24,879	27,866
TOTAL IMPERVIOUS COVER	51	131,392	
	311-		3.02 acre

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Temporary Stormwater (TCEQ-0602)

Item No. 2, Attachment A - Spill Response Actions. Please review and revise GHEER
attachment to correspond with 1.4.16 Spill Prevention and Control of RG 348 Technical
Guidance on BMP, specifically to note the following:

For significant or hazardous spills that are in reportable quantities:

Notify the TCEQ by telephone as soon as possible and within 24 hours at 512-339-2929 (Austin) or 210-490-3096 (San Antonio) between 8 AM and 5 PM. After hours, contact



Ms. Lillian Butler
4S Ranch Amenity Center CZP (RN105628622)
Response to NOD1
February 13, 2017
Page 3 of 3

the Environmental Release Hotline at 1-800-832-8224. It is the contractor's responsibility to have all emergency phone numbers at the construction site.

Response: Please find attached revised Attachment A – Spill Response Actions, to include the requested update.

Your prompt attention to this submittal is greatly appreciated. Please do not hesitate to contact our office if you have further questions or require additional information.

Sincerely,

Pape-Dawson Engineers, Inc.

Cara C. Tackett, P.E. Sr. Vice President

Attachments

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Cover Sheet

Number of Pages: 2 (including this sheet)

Date: February 9, 2017

To: Mr. Richard Mott

Organization: Hidden Trails Community Association, Inc.

Fax: NA/ Richard.mott@lennar.com

To: Ms. Cara C. Tackett, P.E.

Organization: Pape-Dawson Engineers, Inc.

Fax: 210-375-9010

From: Ms. Lillian Butler

Division: Edwards Aquifer Protection Program

Agency: Texas Commission on Environmental Quality

Phone: 210-403-4026

Fax: 210-545-4329

Re: Edwards Aquifer, Comal County

Name of Project: 4S Ranch Amenity Center; Located approximately 2,000 feet east of Mustang Vista and Stahl Lane intersection; Bulverde, Texas

Plan Type: Request for Approval of a Contributing Zone Plan (CZP); 30 Texas Administrative Code (TAC) Chapter 213 Subchapter B; Edwards Aquifer

Edwards Aquifer Protection Program ID No.: 13000321; Regulated PRINED RN105628622

FEB 2 3 2017

Dear Mr. Mott and Ms. Tackett,

COUNTY ENGINEER
We are in the process of technically reviewing the request for the approval of the
CZP application you submitted on the above-referenced project. Before we can
proceed with our review, the following comments relating to the application must
be addressed.

Contributing Zone Plan Application (TCEQ-10257)

 Item No. 24, Attachment E – Volume and Character of Stormwater. Please demonstrate how the runoff coefficient value of 0.58 for post development was calculated. The Bulverde Drainage Manual was referenced during technical review. Items No. 27-33 for the installation of AST(s). An outdoor pool is proposed (two separate pools adjacent to each other) for this project.

What treatment method(s) are proposed for the outdoor pool(s)?

Please review and revise the AST(s) section of the application if the site will hold chlorine (or other) in a total volume greater than or equal to 500 gallons.

 Attachment C2.00 Permanent Pollution Abatement Plan. Please provide a breakdown of impervious cover within the attachment. Preferably what impervious area makes-up the park-pond area, amenity center area, and walking trails between the two sections.

Temporary Stormwater (TCEQ-0602)

4. Item No. 2, Attachment A – Spill Response Actions. Please review and revise the attachment to correspond with 1.4.16 Spill Prevention and Control of RG 348 Technical Guidance on BMP, specifically to note the following:

For significant or hazardous spills that are in reportable quantities:

Notify the TCEQ by telephone as soon as possible and **within 24 hours** at 512- 339-2929 (Austin) or 210-490-3096 (San Antonio) between 8 AM and 5 PM. After hours, contact the Environmental Release Hotline at 1-800-832-8224. It is the contractor's responsibility to have all emergency phone numbers at the construction site.

We ask that you submit one original and 6 copies of the amended materials to supplement the application to this office by no later than 14 days from the date of this notice of deficiency (NOD) to avoid denial of the plan. If you have any questions or require additional information, please contact Ms. Lillian Butler of the Edwards Aquifer Protection Program of the San Antonio Regional Office at (210) 403-4026.

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4S RANCH AMENITY CENTER Contributing Zone Plan Application (TCEQ-10257)

Attachment E- Volume and Character of Stormwater

Stormwater runoff will increase as a result of this development. For a 25-year storm event, the overall project will generate approximately 91 cfs. The runoff coefficient for the site changes from approximately 0.53 before development to 0.63 after development. Values are based on the Rational Method using runoff coefficients per the City of Bulverde building Code.

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COUNTY ENGINEER



4S RANCH AMENITY CENTER Temporary Stormwater Section (TCEQ-0602)

Attachment A - Spill Response Actions

In the event of an accidental leak or spill:

- Spill must be contained and cleaned up immediately.
- Spills will not be merely buried or washed with water.
- Contractor shall take action to contain spill. Contractor may use sand or other absorbent
 material stockpiled on site to absorb spill. Absorbent material should be spread over the spill
 area to absorb the spilled product.
- In the event of an uncontained discharge the contractor shall utilize onsite equipment to construct berms downgradient of the spill with sand or other absorbent material to contain and absorb the spilled product.
- Spill containment/absorbent materials along with impacted media must be collected and stored in such a way so as not to continue to affect additional media (soil/water). Once the spill has been contained, collected material should be placed on poly or plastic sheeting until removed from the site. The impacted media and cleanup materials should be covered with plastic sheeting and the edges weighed down with paving bricks or other similarly dense objects as the material is being accumulated. This will prevent the impacted media and cleanup materials from becoming airborne in windy conditions or impacting runoff during a rain event. The stockpiled materials should not be located within an area of concentrated runoff such as along a curb line or within a swale.
- Contaminated soils and cleanup materials will be sampled for waste characterization. When
 the analysis results are known the contaminated soils and cleanup materials will be removed
 from the site and disposed in a permitted landfill in accordance with applicable regulations.
- The contractor will be required to notify the owner, who will in turn contact TCEQ to notify
 them in the event of a significant hazardous/reportable quantity spill. Additional notifications
 as required by the type and amount of spill will be conducted by owner or owner's
 representative.
- Contaminated soils will be sampled for waste characterization. When the analysis results are known the contaminated soils will be removed from the site and disposed in a permitted landfill in accordance with applicable regulations.

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FEB 2 3 2017



4S RANCH AMENITY CENTER Temporary Stormwater Section (TCEQ-0602)

In the event of an accidental significant or hazardous spill:

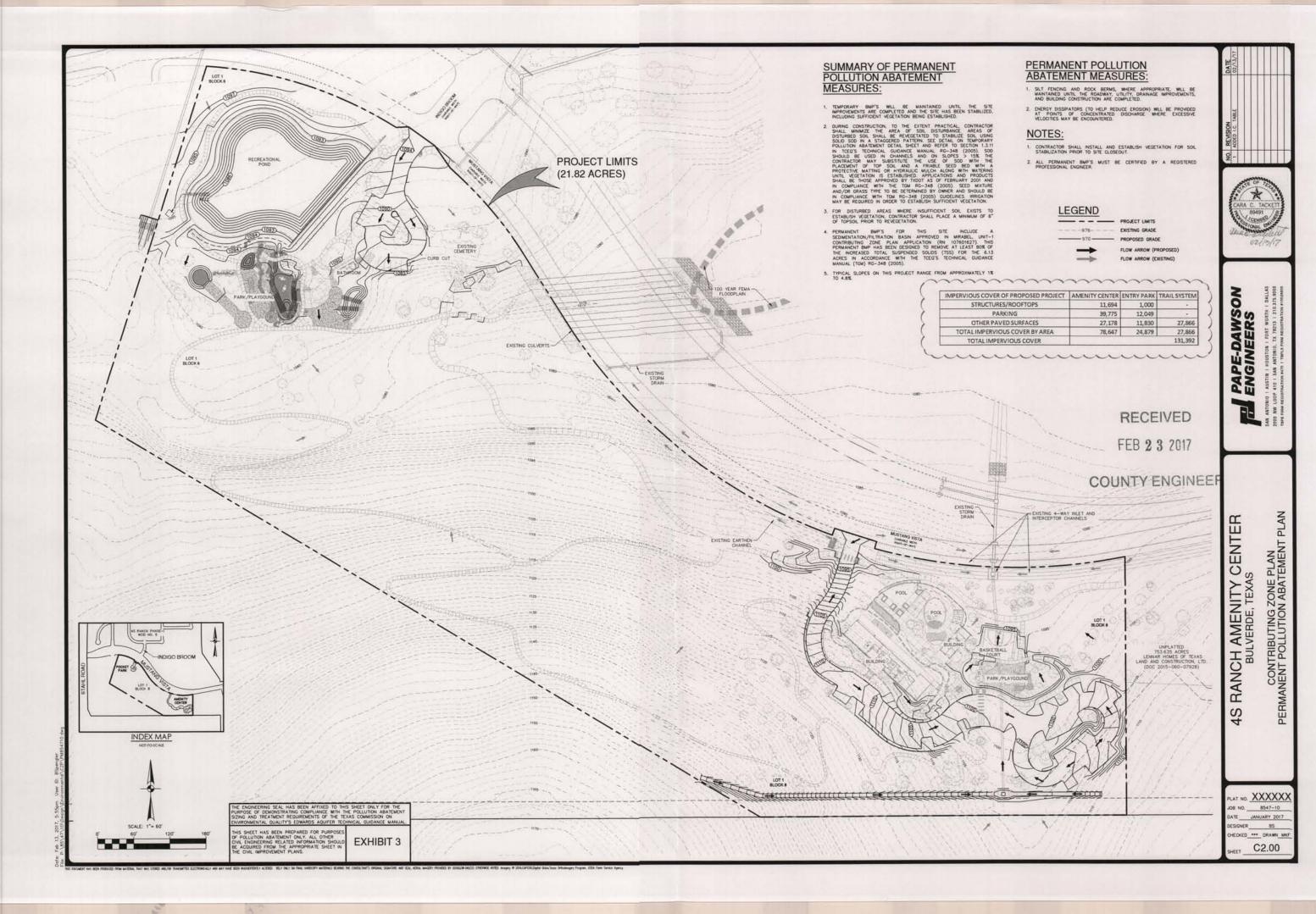
- The contractor will be required to report significant or hazardous spills that are in reportable quantities:
 - O Notify the TCEQ by telephone as soon as possible and within 24 hours at 512-339-2929 (Austin) or 210-490-3096 (San Antonio) between 8 AM and 5 PM. After hours, contact the Environmental Release Hotline at 1-800-832-8224. It is the contractor's responsibility to have all emergency phone numbers at the construction site
- the National Response Center at (800) 424-8802
- the Edwards Aquifer Authority at (210) 222-2204
- the TCEQ Regional Office (210) 490-3096 (if during business hours: 8 AM to 5 PM) or
- the State Emergency Response Center (800) 832-8224 (if after hours)

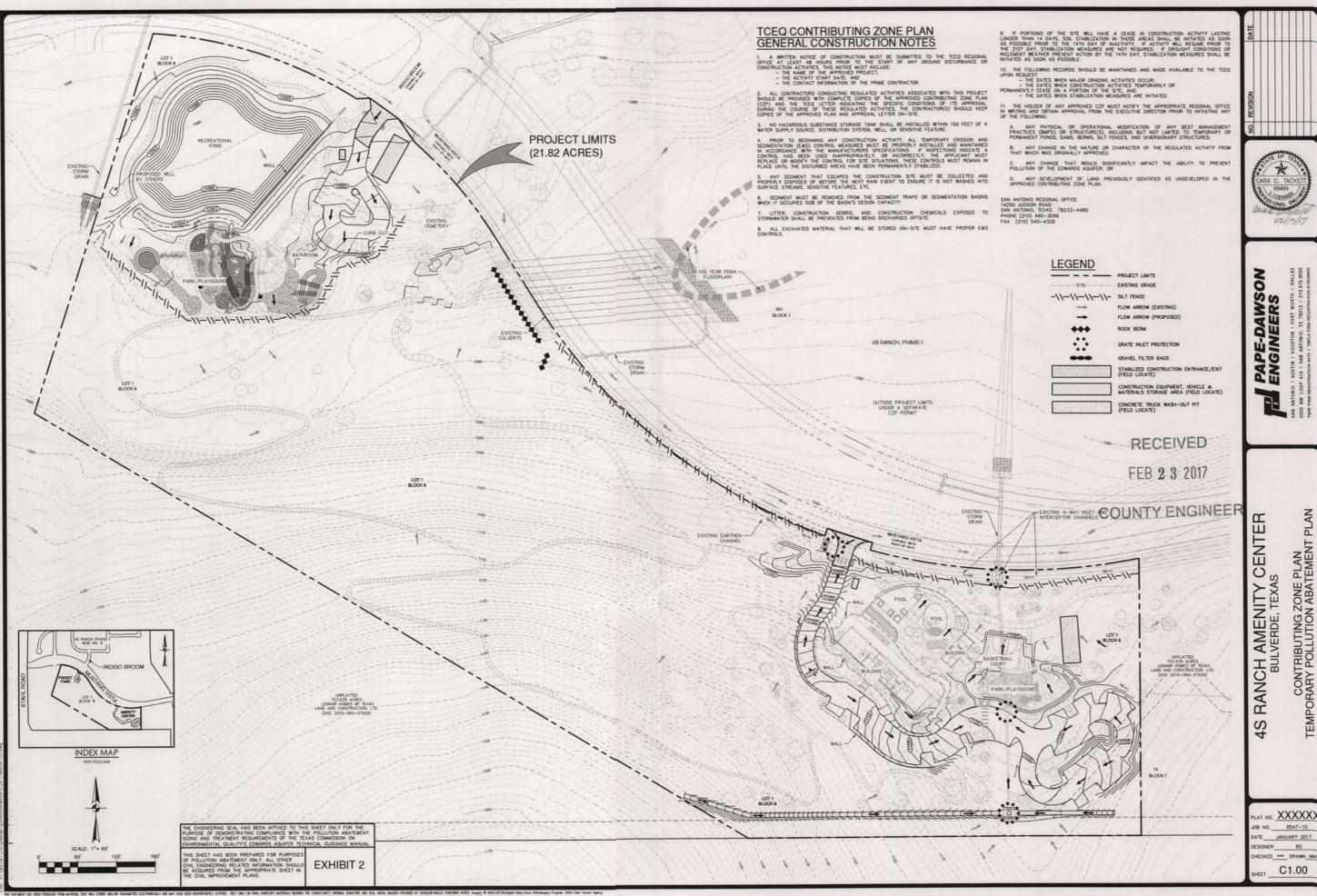
Additional guidance can be obtained from TCEQ's Technical Guidance Manual (TGM) RG-348 (2005) Section 1.4.16. Contractor shall review this section.

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FEB 2 3 2017







08 NO. 8547-10

CHECKED *** DRAWN MKF

Bryan W. Shaw, Ph.D., Chairman Toby Baker, Commissioner Jon Niermann, Commissioner Richard A. Hyde, P.E., Executive Director



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

January 4, 2017

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JAN 1 3 2017

Mr. Thomas H. Hornseth, P.E. Comal County Engineer 195 David Jonas Drive New Braunfels TX 78132-3710

COUNTY ENGINEER

Re: Edwards Aquifer, Comal County

PROJECT NAME: 4 S Ranch Amenity Center, located approximately 2000 feet east of the Mustang Vista and Stahl Lane intersection, Bulverde, Texas

PLAN TYPE: Application for Contributing Zone Water Pollution Abatement Plan (CZP) 30 Texas Administration Code (TAC) Chapter 213; Edwards Aquifer Protection Program

Dear Mr. Hornseth:

The referenced application is being forwarded to you pursuant to the Edwards Aquifer Rules. The Texas Commission on Environmental Quality (TCEQ) is required by 30 TAC Chapter 213 to provide copies of all applications to affected incorporated cities and underground water conservation districts for their comments prior to TCEQ approval. More information regarding this project may be obtained from the TCEQ Central Registry website at http://www.tceq.state.tx.us/permitting/central_registry/.

Please forward your comments to this office by February 4, 2017.

The Texas Commission on Environmental Quality appreciates your assistance in this matter and your compliance efforts to ensure protection of the State's environment. If you or members of your staff have any questions regarding these matters, please feel free to contact the San Antonio Region Office at (210) 490-3096.

Sincerely

Todd Jones, Water Section Work Leader

San Antonio Regional Office

TJ/eg



San Antonio I Austin I Houston I Fort Worth I Dallas

4S RANCH AMENITY CENTER

Contributing Zone Plan Application

RECEIVED TCEQ-R13 (EAPP)

JAN 04 2017

SAN ANTONIO

RECEIVED

JAN 1 3 2017

COUNTY ENGINEER

January 2017

4S RANCH AMENITY CENTER

Contributing Zone Plan Application

JAN 1 3 2017 COUNTY ENGINEER

January 2017

Texas Board of Professional Engineers, Firm Registration # 470





January 3, 2017

Mr. Joel Anderson Texas Commission on Environmental Quality (TCEQ) Region 13 14250 Judson Road San Antonio, Texas 78233-4480

Re: 4S Ranch Amenity Center

Contributing Zone Plan Application

Dear Mr. Anderson:

Please find attached one (1) original and five (5) copies of the 4S Ranch Amenity Center Contributing Zone Plan Application. This Contributing Zone Plan Application has been prepared in accordance with the Texas Administrative Code (30 TAC 213) and current policies for development over the Edwards Aquifer Contributing Zone.

This Contributing Zone Application applies to an approximately 21.82-acre site as identified by the project limits. Please review the plan information for the items it is intended to address. If acceptable, please provide a written approval of the plan in order that construction may begin at the earliest opportunity.

Appropriate review fees (\$6,500) and fee application form are included. If you have questions or require additional information, please call our office.

Sincerely,

Pape-Dawson Engineers, Inc.

Chally Toulett

Cara C. Tackett, P.E.

Sr. Vice President

Attachments

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COUNTY ENGINEER

EDWARDS AQUIFER APPLICATION COVER PAGE (TCEQ-20705)

Texas Commission on Environmental Quality

Edwards Aquifer Application Cover Page UNTY ENGINEER

Our Review of Your Application

The Edwards Aquifer Program staff conducts an administrative and technical review of all applications. The turnaround time for administrative review can be up to 30 days as outlined in 30 TAC 213.4(e). Generally administrative completeness is determined during the intake meeting or within a few days of receipt. The turnaround time for technical review of an administratively complete Edwards Aquifer application is 90 days as outlined in 30 TAC 213.4(e). Please know that the review and approval time is directly impacted by the quality and completeness of the initial application that is received. In order to conduct a timely review, it is imperative that the information provided in an Edwards Aquifer application include final plans, be accurate, complete, and in compliance with 30 TAC 213.

Administrative Review

- Edwards Aquifer applications must be deemed administratively complete before a technical review can begin. To be considered administratively complete, the application must contain completed forms and attachments, provide the requested information, and meet all the site plan requirements. The submitted application and plan sheets should be final plans. Please submit one full-size set of plan sheets with the original application, and half-size sets with the additional copies.
 - To ensure that all applicable documents are included in the application, the program has developed tools to guide you and web pages to provide all forms, checklists, and guidance. Please visit the below website for assistance: http://www.tceq.texas.gov/field/eapp.
- This Edwards Aquifer Application Cover Page form (certified by the applicant or agent) must be included in the application and brought to the administrative review meeting.
- Administrative reviews are scheduled with program staff who will conduct the review. Applicants or their
 authorized agent should call the appropriate regional office, according to the county in which the project is
 located, to schedule a review. The average meeting time is one hour.
- 4. In the meeting, the application is examined for administrative completeness. Deficiencies will be noted by staff and emailed or faxed to the applicant and authorized agent at the end of the meeting, or shortly after. Administrative deficiencies will cause the application to be deemed incomplete and returned.
 - An appointment should be made to resubmit the application. The application is re-examined to ensure all deficiencies are resolved. The application will only be deemed administratively complete when all administrative deficiencies are addressed.
- 5. If an application is received by mail, courier service, or otherwise submitted without a review meeting, the administrative review will be conducted within 30 days. The applicant and agent will be contacted with the results of the administrative review. If the application is found to be administratively incomplete, it can be retrieved from the regional office or returned by regular mail. If returned by mail, the regional office may require arrangements for return shipping.
- If the geologic assessment was completed before October 1, 2004 and the site contains "possibly sensitive" features, the assessment must be updated in accordance with the *Instructions to Geologists* (TCEQ-0585 Instructions).

Technical Review

When an application is deemed administratively complete, the technical review period begins. The regional
office will distribute copies of the application to the identified affected city, county, and groundwater
conservation district whose jurisdiction includes the subject site. These entities and the public have 30 days
to provide comments on the application to the regional office. All comments received are reviewed by TCEQ.

- 2. A site assessment is usually conducted as part of the technical review, to evaluate the geologic assessment and observe existing site conditions. The site must be accessible to our staff. The site boundaries should be clearly marked, features identified in the geologic assessment should be flagged, roadways marked and the alignment of the Sewage Collection System and manholes should be staked at the time the application is submitted. If the site is not marked the application may be returned.
- 3. We evaluate the application for technical completeness and contact the applicant and agent via Notice of Deficiency (NOD) to request additional information and identify technical deficiencies. There are two deficiency response periods available to the applicant. There are 14 days to resolve deficiencies noted in the first NOD. If a second NOD is issued, there is an additional 14 days to resolve deficiencies. If the response to the second notice is not received, is incomplete or inadequate, or provides new information that is incomplete or inadequate, the application must be withdrawn or if not withdrawn the application will be denied and the application fee will be forfeited.
- 4. The program has 90 calendar days to complete the technical review of the application. If the application is technically adequate, such that it complies with the Edwards Aquifer rules, and is protective of the Edwards Aquifer during and after construction, an approval letter will be issued. Construction or other regulated activity may not begin until an approval is issued.

Mid-Review Modifications

It is important to have final site plans prior to beginning the permitting process with TCEQ to avoid delays.

Occasionally, circumstances arise where you may have significant design and/or site plan changes after your Edwards Aquifer application has been deemed administratively complete by TCEQ. This is considered a "Mid-Review Modification". Mid-Review Modifications may require redistribution of an application that includes the proposed modifications for public comment.

If you are proposing a Mid-Review Modification, two options are available to you:

- You can withdraw your application, and your fees will be refunded or credited for a resubmittal.
- TCEQ can continue the technical review of the application as it was submitted, and a modification
 application can be submitted at a later time.

If the application is withdrawn, the resubmitted application will be subject to the administrative and technical review processes and will be treated as a new application. The application will be redistributed to the effected jurisdictions.

Please contact the regional office if you have questions. If your project is located in Williamson, Travis, or Hays County, contact TCEQ's Austin Regional Office at 512-339-2929. If your project is in Comal, Bexar, Medina, Uvalde, or Kinney County, contact TCEQ's San Antonio Regional Office at 210-490-3096

Please fill out all required fields below and submit with your application.

JAN 1 3 2017

1. Regulated Entity Name: 4S Ranch Amenity Center				2. Re	egulat	ed Entity No.	: 105628622 COUNTY EN	
3. Customer Name: Hidden Trails Community Association, Inc.				4. Cı	4. Customer No.: Not yet assigned			
5. Project Type: (Please circle/check one)	New	Modi	fication	ı	Exte	nsion	Exception	
6. Plan Type: (Please circle/check one)	WPAP CZP	scs	UST	AST	EXP	EXT	Technical Clarification	Optional Enhanced Measures
7. Land Use: (Please circle/check one)	Residential	Non-residential)	8. Si	te (acres):	21.82	
9. Application Fee:	\$6,500	10. Permanent I		вмр(s):			
11. SCS (Linear Ft.): 12. AST/UST (No		o. Tar	nks):					
13. County: Comal 14. Watershed:				Cibolo Creek				

Application Distribution

Instructions: Use the table below to determine the number of applications required. One original and one copy of the application, plus additional copies (as needed) for each affected incorporated city, county, and groundwater conservation district are required. Linear projects or large projects, which cross into multiple jurisdictions, can require additional copies. Refer to the "Texas Groundwater Conservation Districts within the EAPP Boundaries" map found at:

http://www.tceq.texas.gov/assets/public/compliance/field_ops/eapp/EAPP%2oGWCD%2omap.pdf For more detailed boundaries, please contact the conservation district directly.

Austin Region						
County: Hays		Travis	Williamson			
Original (1 req.)		_	-			
Region (1 req.)		_				
County(ies)	<u></u> :	<u></u>	_			
Groundwater Conservation	Edwards Aquifer Authority					
District(s)	Barton Springs/Barton Springs/ Edwards Aquifer Edwards Aquifer		NA			
	Hays Trinity Plum Creek					
City(ies) Jurisdiction	Austin Buda Dripping Springs Kyle	Austin Bee Cave Pflugerville	AustinCedar ParkFlorenceGeorgetown REC	EIVED		
ong (rec) o unidatensi.	Mountain CitySan MarcosWimberleyWoodcreek	Rollingwood Round Rock Sunset Valley West Lake Hills	Jerrell	3 2017		

	S	San Antonio Region			
County:	Bexar	Comal	Kinney	Medina	Uvalde
Original (1 req.)	=	*	(+		_
Region (1 req.)	<u></u> ;	✓	7=	2.22	
County(ies)	-	₹	1-2007/20 - 1000 - 1 1 		_
Groundwater Conservation District(s)	Edwards Aquifer AuthorityTrinity-Glen Rose	✓ Edwards Aquifer Authority ✓ Comal Trinity	Kinney	EAA Medina	EAA Uvalde
City(ies) Jurisdiction	Castle HillsFair Oaks RanchHelotesHill Country VillageHollywood ParkSan Antonio (SAWS)Shavano Park	✓ Bulverde Fair Oaks Ranch Garden Ridge New Braunfels Schertz	NA	San Antonio ETJ (SAWS)	NA

I certify that to the best of my knowledge, that the application is hereby submitted to TCEQ for admir	
Cara C. Tackett, P.E.	
Print Name of Customer/Authorized Agent	
Yera Ch Strell Est	01/03/17
Signature of Customer/Authorized Agent	Date
Signature of Customer/Authorized Agent	Date

Date(s)Reviewed:	Date Administratively Complete:		
Received From:	Correct Number of Copies:		
Received By:	Distribution Date:		
EAPP File Number:	Complex:	***************************************	
Admin. Review(s) (No.):	No. AR Rounds:		
Delinquent Fees (Y/N):	Review Time Spent:		
Lat./Long. Verified:	SOS Customer Verification:	***************************************	
Agent Authorization Complete/Notarized (Y/N):	Payable to TCEQ (Y/N):		
Core Data Form Complete (Y/N):	Check: Signed (Y/N):	1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	
Core Data Form Incomplete Nos.:	Less than 90 days old (Y/N):		

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COUNTY ENGINEER

CONTRIBUTING ZONE PLAN APPLICATION (TCEQ-10257)

Contributing Zone Plan Application

Texas Commission on Environmental Quality

for Regulated Activities on the Contributing Zone to the Edwards Aquifer and Relating to 30 TAC §213.24(1), Effective June 1, 1999

To ensure that the application is administratively complete, confirm that all fields in the form are complete, verify that all requested information is provided, consistently reference the same site and contact person in all forms in the application, and ensure forms are signed by the appropriate party.

Note: Including all the information requested in the form and attachments contributes to more streamlined technical reviews.

Signature

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. This Contributing Zone Plan Application is hereby submitted for TCEQ review and Executive Director approval. The application was prepared by:

Print Name of Customer/Agent: Cara C. Tackett, P.E.

Date: <u>01/03/17</u>

Signature of Customer/Agent:

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JAN 1 3 2017

COUNTY ENGINEER

Regulated Entity Name: 45 Ranch Amenity Center

Project Information

Caro O, Darliel

1. County: Comal

2. Stream Basin: Cibolo Creek

3. Groundwater Conservation District (if applicable): Comal Trinity

4. Customer (Applicant):

Contact Person: Richard Mott

Entity: <u>Hidden Trails Community Association Inc.</u>
Mailing Address: <u>401 Congress Avenue, Suite 2100</u>

Email Address: Richard.Mott@lennar.com

5.	Agent/Representative (If any):	
	Contact Person: Cara C. Tackett, P.E. Entity: Pape-Dawson Engineers, Inc. Mailing Address: 2000 NW Loop 410 City, State: San Antonio, Texas Telephone: (210) 375-9000 Email Address: ctackett@pape-dawson.com	Zip: <u>78213</u> Fax: <u>(210) 375-9010</u>
6.	Project Location:	
	 ☐ The project site is located inside the city ☐ The project site is located outside the city ☐ jurisdiction) of <u>Bulverde</u>. ☐ The project site is not located within any 	ty limits but inside the ETJ (extra-territorial
7.	The location of the project site is described provided so that the TCEQ's Regional stable boundaries for a field investigation.	ped below. Sufficient detail and clarity has been aff can easily locate the project and site
	Loop 1604. Turn left onto Loop 1604 281. Exit toward onto U.S. 281N and FM 1863/Bulverde. Turn right on FN turn left on Stahl Lane. Travel 1.9 mi	oximately 2.5 miles north on Judson Road to and travel approximately 5 miles to U.S. Hwy travel north approximately 9.3 miles to exit for 1863 E and travel approximately 1.5 miles, then les north on Stahl Lane to 4S Ranch subdivision.
8.		showing directions to and the location of the shows the boundary of the project site.
9.	Attachment B - USGS Quadrangle Map. Quadrangle Map (Scale: 1" = 2000') is at Project site boundaries.	
10	USGS Quadrangle Name(s). Attachment C - Project Narrative. A defended project is attached. The project description contains, at a minimum, the following description.	tion is consistent throughout the application and
	Area of the site	RECEIVED
	Offsite areas	JAN 1 3 2017
	 ✓ Impervious cover ✓ Permanent BMP(s) ✓ Proposed site use ✓ Site history 	COUNTY ENGINEER
	Previous development	

Area(s) to be demolished	
11. Existing project site conditions are noted below:	
Existing commercial site Existing industrial site Existing residential site Existing paved and/or unpaved roads Undeveloped (Cleared) Undeveloped (Undisturbed/Not cleared) Other:	
12. The type of project is:	
Residential: # of Lots: Residential: # of Living Unit Equivalents:	RECEIVED
Commercial Industrial	JAN 1 3 2017
Other: Amenity Center	COUNTY ENGINEER
13. Total project area (size of site): 21.82 Acres	
Total disturbed area: 21.82 Acres	
14. Estimated projected population: <u>0</u>	
15. The amount and type of impervious cover expected after co	onstruction is complete is shown

Table 1 - Impervious Cover

below:

Impervious Cover of Proposed Project	Sq. Ft.	Sq. Ft./Acre	Acres
Structures/Rooftops	12,694	÷ 43,560 =	0.29
Parking	51,824	÷ 43,560 =	1.19
Other paved surfaces	66,874	÷ 43,560 =	1.54
Total Impervious Cover	131,392	÷ 43,560 =	3.02

Total Impervious Cover $3.02 \div$ Total Acreage $21.82 \times 100 = 13.8\%$ Impervious Cover

16. Attachment D - Factors Affecting Surface Water Quality. A detailed description of all factors that could affect surface water quality is attached. If applicable, this includes the location and description of any discharge associated with industrial activity other than construction.

17. Only inert materials as defined by 30 TAC 330.2 will be used as fill material. For Road Projects Only Complete questions 18 - 23 if this application is exclusively for a road project. N/A 18. Type of project: TXDOT road project. County road or roads built to county specifications. City thoroughfare or roads to be dedicated to a municipality. Street or road providing access to private driveways. 19. Type of pavement or road surface to be used: Concrete Asphaltic concrete pavement 20. Right of Way (R.O.W.): Length of R.O.W.: _____ feet. Width of R.O.W.: _____ feet. RECEIVED JAN 1 3 2017 21. Pavement Area: COUNTY ENGINEER Length of pavement area: _____ feet. Width of pavement area: _____ feet. Pavement area _____ acres ÷ R.O.W. area _____ acres x 100 = _____% impervious cover. 22. A rest stop will be included in this project. A rest stop will not be included in this project. 23. Maintenance and repair of existing roadways that do not require approval from the TCEQ Executive Director. Modifications to existing roadways such as widening roads/adding shoulders totaling more than one-half (1/2) the width of one (1) existing lane require prior approval from the TCEQ. Stormwater to be generated by the Proposed Project 24. Attachment E - Volume and Character of Stormwater. A detailed description of the volume (quantity) and character (quality) of the stormwater runoff which is expected to occur from the proposed project is attached. The estimates of stormwater runoff quality and quantity are based on area and type of impervious cover. Include the runoff coefficient of the site for both pre-construction and post-construction conditions.

Wastewater to be generated by the Proposed Project

25. Wastewater is to be discharged in the contributing zone. Requirements under 30 §213.6(c) relating to Wastewater Treatment and Disposal Systems have been sa	
26. Wastewater will be disposed of by:	
On-Site Sewage Facility (OSSF/Septic Tank):	
 Attachment F - Suitability Letter from Authorized Agent. An on-site sewage will be used to treat and dispose of the wastewater from this site. The approlicensing authority's (authorized agent) written approval is attached. It state the land is suitable for the use of private sewage facilities and will meet or eithe requirements for on-site sewage facilities as specified under 30 TAC Charelating to On-site Sewage Facilities. Each lot in this project/development is at least one (1) acre (43,560 square finites. The system will be designed by a licensed professional engineer or regions anitarian and installed by a licensed installer in compliance with 30 TAC Characteristics. 	opriate es that xceed pter 285 eet) in istered
 Sewage Collection System (Sewer Lines): The sewage collection system will convey the wastewater to the <u>4S Ranch</u> (name) Treatment Plant. The treatment facility is: ☐ Existing. ☑ Proposed. 	RECEIVED JAN 1 \$ 2017
□ N/A	OUNTY ENGINEER
Permanent Aboveground Storage Tanks(ASTs) ≥ 500 Gallons	

Complete questions 27 - 33 if this project includes the installation of AST(s) with volume(s) greater than or equal to 500 gallons.

⊠N/A

27. Tanks and substance stored:

Table 2 - Tanks and Substance Storage

AST Number	Size (Gallons)	Substance to be Stored	Tank Material
1			
2		••••	
3			

			Subst	ance to be			
AST Number	Size (Ga	Size (Gallons)		Stored		Tank Material	
4							
5		E		2000			
1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	i i	·		Tot	al x 1.5 =	Gallons	
one-half (1 one tank sy times the c	l be placed within a 1/2) times the storastem, the contains umulative storage	rage capaci nent struct capacity of	ty of the s ure is size all systen	system. For fac d to capture o ns.	cilities wit ne and or	th more than ne-half (1 1/2)	
for providir	t G - Alternative Se ng secondary conta for the Edwards Ac	inment are	propose		ns showir		
29. Inside dimensio	ons and capacity of	containme	ent structi	ure(s):	J	JAN 1 3 2017	
Table 3 - Second	dary Containmen	ıt					
Length (L)(Ft.)	Width(W)(Ft.)		(H)(Ft.)	LxWxH=(COUI Ft3)	NTY ENGINEE Gallons	
			-				
				2			
	•						
			-				
w-					Total	: Gallons	
30. Piping:							
All piping, h Some of the structure. The piping	noses, and dispense e piping to dispens will be abovegroun will be undergroun	ers or equi nd					
	nment area must b s) being stored. Th						
(To 1)	it H - AST Containn nt structure is attac				drawing	of the	
☐ Interna ☐ Tanks cl	dimensions (lengt I drainage to a poir early labeled clearly labeled						
						6 of 11	

Dispenser clearly labeled		
33. Any spills must be directed to a point convenient for collection and reconstorage tank facilities must be removed from the controlled drainage a within 24 hours of the spill.		
 In the event of a spill, any spillage will be removed from the contain within 24 hours of the spill and disposed of properly. In the event of a spill, any spillage will be drained from the contain through a drain and valve within 24 hours of the spill and disposed drain and valve system are shown in detail on the scaled drawing. 	ment structure	
Site Plan Requirements		
Items 34 - 46 must be included on the Site Plan.	RECEIVED	
34. The Site Plan must have a minimum scale of 1" = 400'. Site Plan Scale: $1" = \underline{60}$ '.	JAN 1 3 2017	
35. 100-year floodplain boundaries:	COUNTY ENGINEER	
 Some part(s) of the project site is located within the 100-year floodplain. The floodplain is shown and labeled. No part of the project site is located within the 100-year floodplain. The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s): FEMA [Flood Insurance Rate Map for Comal County, Texas, and Incorporated areas] Panel Number 48091C0220F, dated September 2, 2009. The layout of the development is shown with existing and finished contours at appropriate, but not greater than ten-foot contour intervals. Lots, recreation centers, buildings, roads, etc. are shown on the site plan. 		
The layout of the development is shown with existing contours at appendict of the development is shown with existing contours at appendict of the properties of the propert	s will not differ	
37. 🖂 A drainage plan showing all paths of drainage from the site to surface	streams.	
38. The drainage patterns and approximate slopes anticipated after major	grading activities.	
39. 🔀 Areas of soil disturbance and areas which will not be disturbed.		
40. \(\simega\) Locations of major structural and nonstructural controls. These are the permanent best management practices.	e temporary and	
41. 🔀 Locations where soil stabilization practices are expected to occur.		
42. Surface waters (including wetlands).		

	N/A	
43.	Locations where stormwater discharges to surface water.	
	There will be no discharges to surface water.	
44.	▼ Temporary aboveground storage tank facilities.	
	Temporary aboveground storage tank facilities will not be located on this site.	
45.	Permanent aboveground storage tank facilities.	
	Permanent aboveground storage tank facilities will not be located on this site. RECEIVED	
46.	\boxtimes Legal boundaries of the site are shown. JAN $1~3~2017$	
	rmanent Best Management Practices (BMPs) COUNTY ENGINEER tices and measures that will be used during and after construction is completed.	
47.	Permanent BMPs and measures must be implemented to control the discharge of pollution from regulated activities after the completion of construction.	
	⊠ N/A	
48. These practices and measures have been designed, and will be constructed, operated, and maintained to insure that 80% of the incremental increase in the annual mass loading of total suspended solids (TSS) from the site caused by the regulated activity is removed. These quantities have been calculated in accordance with technical guidance prepared or accepted by the executive director.		
	 The TCEQ Technical Guidance Manual (TGM) was used to design permanent BMPs and measures for this site. A technical guidance other than the TCEQ TGM was used to design permanent BMPs and measures for this site. The complete citation for the technical guidance that was used is: 	
	⊠ N/A	
49.	Owners must insure that permanent BMPs and measures are constructed and function as designed. A Texas Licensed Professional Engineer must certify in writing that the permanent BMPs or measures were constructed as designed. The certification letter must be submitted to the appropriate regional office within 30 days of site completion.	
	⊠ N/A	
50.	Where a site is used for low density single-family residential development and has 20 % or ess impervious cover, other permanent BMPs are not required. This exemption from permanent BMPs must be recorded in the county deed records, with a notice that if the percent impervious cover increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by 30 TAC 6213 4/g) (relating to	

	Application Processing and Approval), may no longer apply and the property owner must notify the appropriate regional office of these changes.	
	 ☐ The site will be used for low density single-family residential development and has 20% or less impervious cover. ☐ The site will be used for low density single-family residential development but has more than 20% impervious cover. ☑ The site will not be used for low density single-family residential development. 	
51.	The executive director may waive the requirement for other permanent BMPs for multifamily residential developments, schools, or small business sites where 20% or less impervious cover is used at the site. This exemption from permanent BMPs must be recorded in the county deed records, with a notice that if the percent impervious cover increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by 30 TAC §213.4(g) (relating to Application Processing and Approval), may no longer apply and the property owner must notify the appropriate regional office of these changes.	1
	Attachment I - 20% or Less Impervious Cover Waiver. The site will be used for multi-family residential developments, schools, or small business sites and has 20% or less impervious cover. A request to waive the requirements for other permaner BMPs and measures is attached. The site will be used for multi-family residential developments, schools, or small business sites but has more than 20% impervious cover. The site will not be used for multi-family residential developments, schools, or small business sites.	©EIVED
52.	- T T W AT ATAMERICA STREET ST	1 3 2017
	 □ A description of the BMPs and measures that will be used to prevent poll a bit surface water, groundwater, or stormwater that originates upgradient from the sit and flows across the site is attached. □ No surface water, groundwater or stormwater originates upgradient from the site and flows across the site, and an explanation is attached. ☑ Permanent BMPs or measures are not required to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site, and an explanation is attached. 	
53.	Attachment K - BMPs for On-site Stormwater.	
	 □ A description of the BMPs and measures that will be used to prevent pollution of surface water or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff from the site is attached. ☑ Permanent BMPs or measures are not required to prevent pollution of surface wat or groundwater that originates on-site or flows off the site, including pollution 	7.5

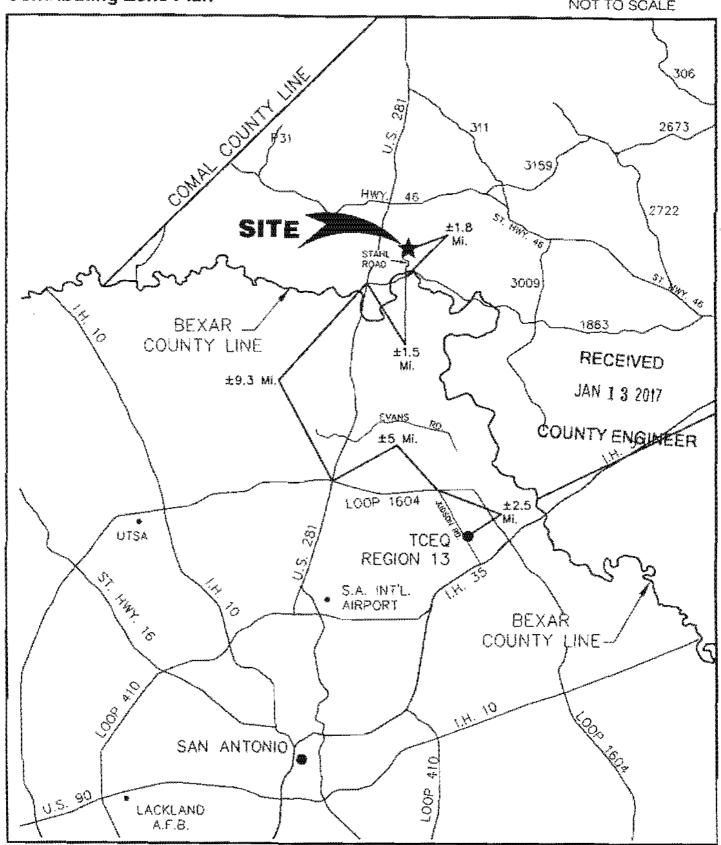
54.		Attachment L - BMPs for Surface Streams. A description of the BMPs and measures that prevent pollutants from entering surface streams is attached.
	\boxtimes	N/A
55.		Attachment M - Construction Plans. Construction plans and design calculations for the proposed permanent BMPs and measures have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer, and are signed, sealed, and dated. Construction plans for the proposed permanent BMPs and measures are RECEIVED attached and include: Design calculations, TCEQ Construction Notes, all proposed JAN 1 3 2017 structural plans and specifications, and appropriate details.
	\boxtimes	N/A COUNTY ENGINEER
56		specific plan for the inspection, maintenance, repair, and, if necessary, retrofit of the permanent BMPs and measures is attached. The plan fulfills all of the following:
ta.		 □ Prepared and certified by the engineer designing the permanent BMPs and measures □ Signed by the owner or responsible party □ Outlines specific procedures for documenting inspections, maintenance, repairs, and, if necessary, retrofit. □ Contains a discussion of record keeping procedures
		N/A
57	L	Attachment O - Pilot-Scale Field Testing Plan. Pilot studies for BMPs that are not recognized by the Executive Director require prior approval from the TCEQ. A plan for pilot-scale field testing is attached.
	\boxtimes	N/A
58		Attachment P - Measures for Minimizing Surface Stream Contamination. A description of the measures that will be used to avoid or minimize surface stream contamination and changes in the way in which water enters a stream as a result of the construction and development is attached. The measures address increased stream flashing, the creation of stronger flows and in-stream velocities, and other in-stream effects caused by the regulated activity, which increase erosion that result in water quality degradation.
		N/A
	-	ponsibility for Maintenance of Permanent BMPs and sures after Construction is Complete.
59	. [The applicant is responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an 10 of 11

	owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. Such entity shall then be responsible for maintenance until another entity assumes such obligations in writing ownership is transferred.		
60.	A copy of the transfer of responsibility must be filed with the executive director at the appropriate regional office within 30 days of the transfer if the site is for use as a multiple single-family residential development, a multi-family residential development or a non-residential development such as commercial, industrial, institutional, school and other sites where regulated activities occur.	ent, ols,	CEIVED
Adm	ninistrative Information	JAN	1 3 2017
61.	Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions.	JNTY	'ENGINEER
62. 🛚	Any modification of this Contributing Zone Plan may require TCEQ review and Executive Director approval prior to construction, and may require submission of a revised application, with appropriate fees.	tive	
63. 🔀	The site description, controls, maintenance, and inspection requirements for the stowater pollution prevention plan (SWPPP) developed under the EPA NPDES general permits for stormwater discharges have been submitted to fulfill paragraphs 30 TAC §213.24(1-5) of the technical report. All requirements of 30 TAC §213.24(1-5) have been met by the SWPPP document.		
\boxtimes	The Temporary Stormwater Section (TCEQ-0602) is included with the application.		

JAN 1 3 2017
COUNTY ENGINEER

ATTACHMENT A





Pape-Dawson Engineers, Inc.
Date: Von 02, 2017, 8 Diero, User 10: ADMINISTRA
PRINT PL (\$55,471,10), Bright Conformation (\$227), Conform

ATTACHMENT A
Road Map

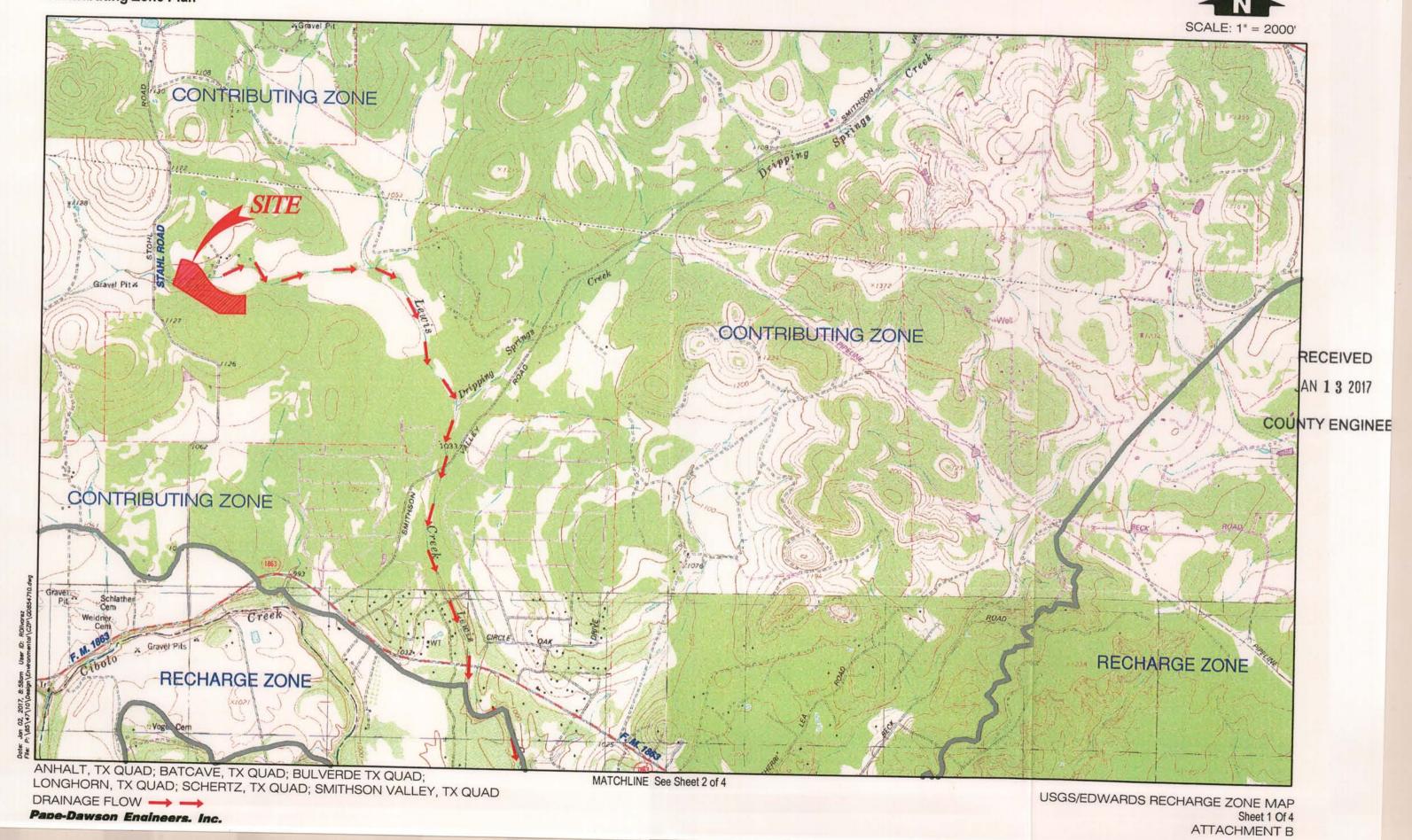
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JAN 1 3 2017

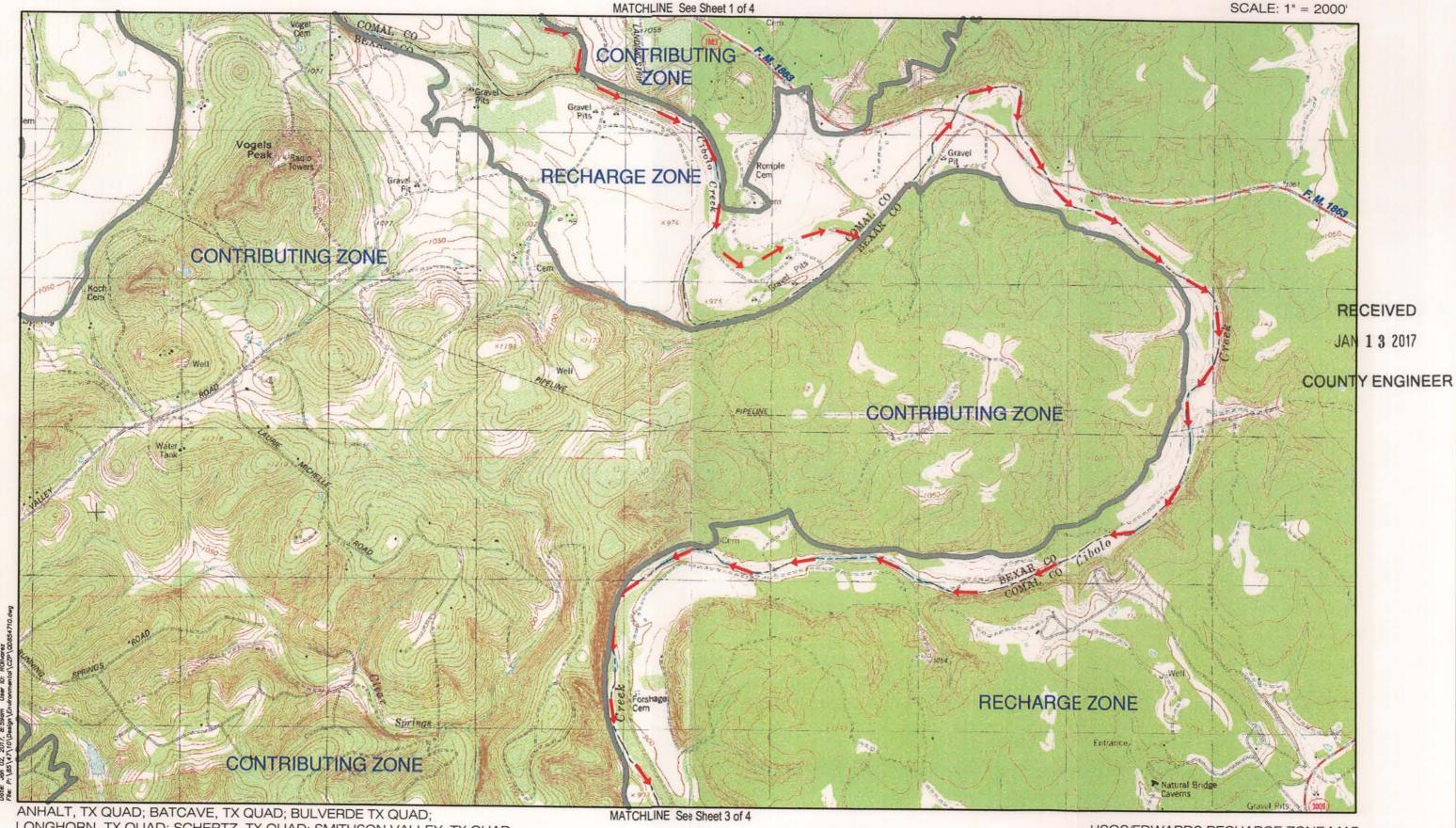
COUNTY ENGINEER

ATTACHMENT B









LONGHORN, TX QUAD; SCHERTZ, TX QUAD; SMITHSON VALLEY, TX QUAD DRAINAGE FLOW -> ->

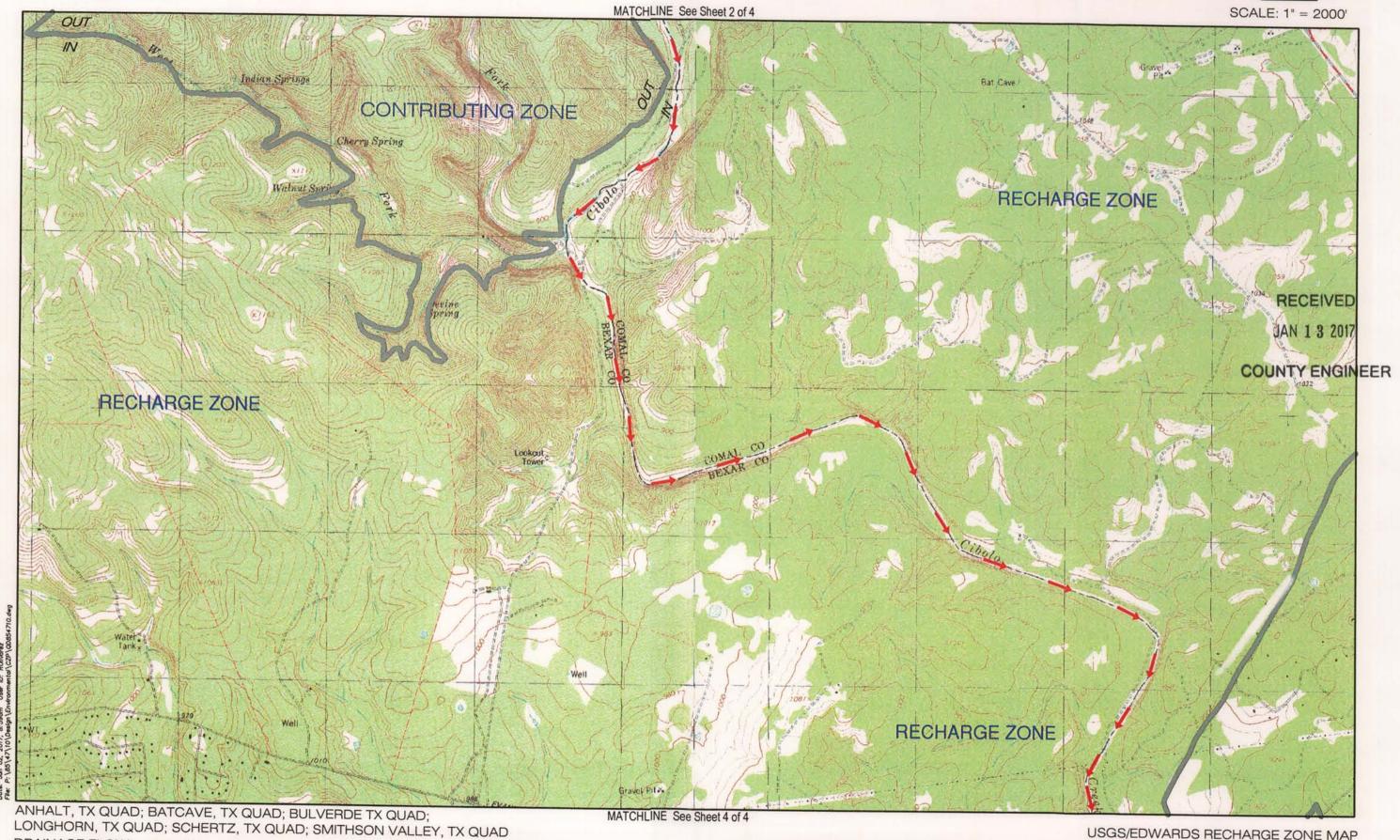
Pane-Dawson Engineers. Inc.

USGS/EDWARDS RECHARGE ZONE MAP Sheet 2 Of 4 ATTACHMENT B

DRAINAGE FLOW -> ->

Pape-Dawson Engineers. Inc.

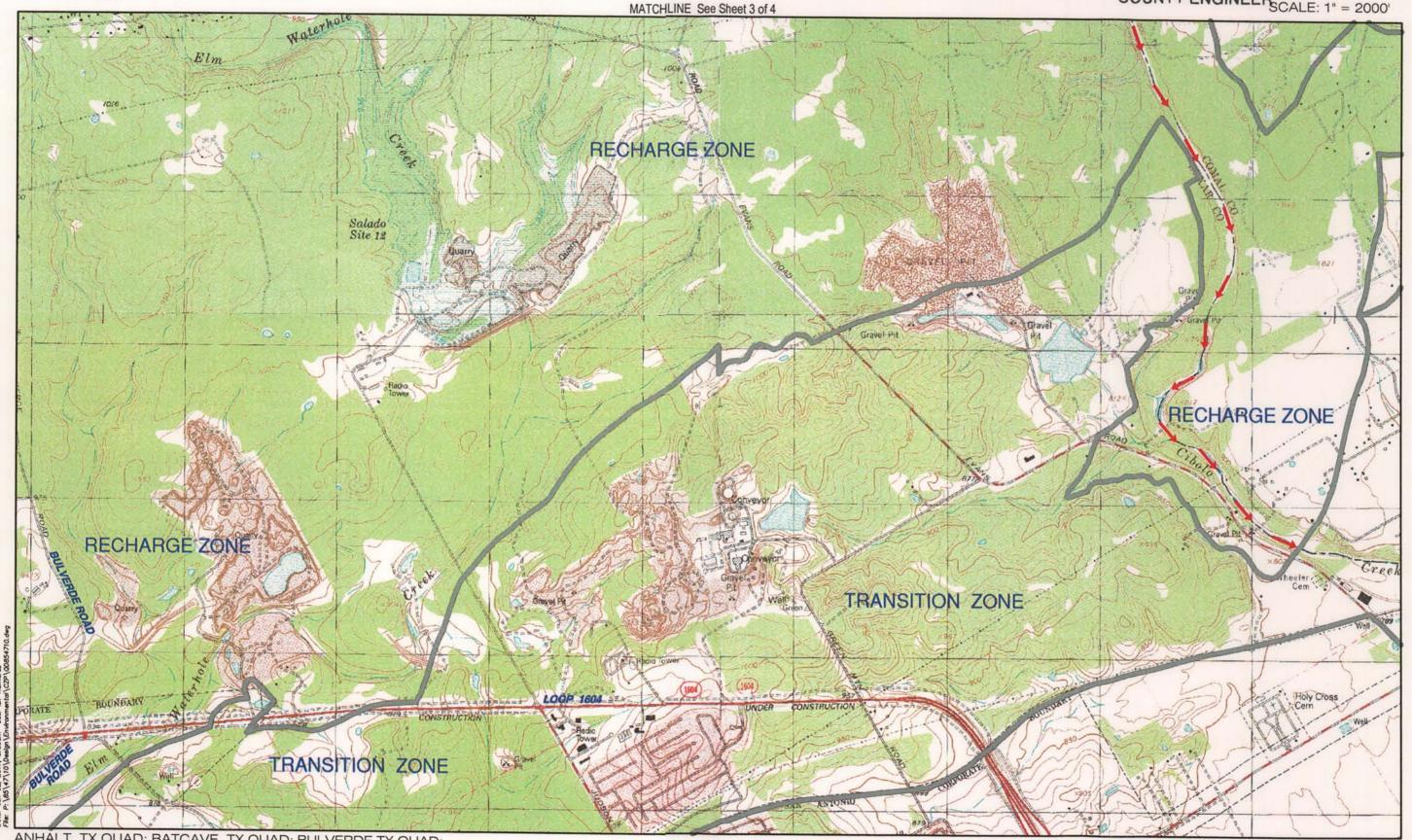




USGS/EDWARDS RECHARGE ZONE MAP Sheet 3 Of 4 ATTACHMENT B

JAN 1 3 2017

COUNTY ENGINEER SCALE: 1" = 2000"



ANHALT, TX QUAD; BATCAVE, TX QUAD; BULVERDE TX QUAD; LONGHORN, TX QUAD; SCHERTZ, TX QUAD; SMITHSON VALLEY, TX QUAD DRAINAGE FLOW

Pape-Dawson Engineers. Inc.

USGS/EDWARDS RECHARGE ZONE MAP Sheet 4 Of 4 ATTACHMENT B

4S RANCH AMENITY CENTER Contributing Zone Plan Application (TCEQ-10257)

Attachment C - Project Narrative

This Contributing Zone Plan (CZP) for 4S Ranch Amenity Center is an individually platted area within the Master Development Plan (MDP) for 4S Ranch. The project site is located within the extraterritorial jurisdiction of Bulverde in Comal County, Texas. The site was previously used as a ranch and there are existing structures that have been in place some as early as 1995. The project site is currently undeveloped though portions were previously cleared for agricultural uses. The site is located entirely over the Edwards Aquifer Contributing Zone. The proposed 21.82-acre project area is part of a larger planned development on a 753.6-acre tract but is platted separately for commercial use.

This CZP proposes clearing, grading, excavation, installation of utilities and drainage improvements, parking, sidewalks, walking trails, an Amenity Center building, outdoor pool, and park. Approximately 3.02 acres of impervious cover are proposed for this project or 13.8% of the 21.82-acre project limits is the total impervious cover proposed for construction. The remaining areas within this site will be maintained as greenspace. Due to the limited amount of impervious cover and minimal disturbance associated with the construction of this project, we hereby request a waiver from the requirements for permanent BMPs and treatment measures.

Since this project is located entirely over the Edwards Aquifer Contributing Zone, a Geological Assessment was not conducted and is not required by 30 TAC 213 regulations. Therefore, no naturally-occurring sensitive features are known to exist on the site.

Potable water will be supplied by the Canyon Lake Water Supply Company (CLWSC). The proposed development will generate approximately 2,400 gallons per day (average flow) of domestic wastewater (10 edu*240gpd = 2,400 gpd). Wastewater will be disposed of by conveyance to a proposed 45 Ranch Wastewater Treatment facility.

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JAN 13 2017



ATTACHMENT D

4S RANCH AMENITY CENTER Contributing Zone Plan Application (TCEQ-10257)

Attachment D- Factors Affecting Surface Water Quality

Potential sources of pollution that may reasonably be expected to affect the quality of storm water discharges from the site during construction include:

- Soil erosion due to the clearing of the site;
- Oil, grease, fuel and hydraulic fluid contamination from construction equipment and vehicle drippings;
- Hydrocarbons from asphalt paving operations;
- Miscellaneous trash and litter from construction workers and material wrappings;
- Concrete truck washout.
- Potential overflow/spills from portable toilets

Potential sources of pollution that may reasonably be expected to affect the quality of storm water discharges from the site after development include:

- Oil, grease, fuel and hydraulic fluid contamination from vehicle drippings;
- · Dirt and dust which may fall off vehicles; and
- Miscellaneous trash and litter.

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ATTACHMENT E

4S RANCH AMENITY CENTER Contributing Zone Plan Application (TCEQ-10257)

Attachment E- Volume and Character of Stormwater

Stormwater runoff will increase as a result of this development. For a 25-year storm event, the overall project will generate approximately 91 cfs. The runoff coefficient for the site changes from approximately 0.53 before development to 0.58 after development. Values are based on the Rational Method using runoff coefficients per the City of Bulverde building Code.

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ATTACHMENT I

4S RANCH AMENITY CENTER Contributing Zone Plan Application (TCEQ-10257)

Attachment I - 20% or Less Impervious Cover Waiver

The 4S Ranch Amenity Center is a proposed amenity center with an outdoor pool and park area with walking trails in the Extra-Territorial Jurisdiction (ETJ) of The City of Bulverde in Comal County, Texas. Approximately 3.02 acres (or 13.8% of the 21.82-acre site) is the proposed impervious cover for buildings, sidewalk, parking and walking trails. Per 30 TAC 213B.26 (a) an exception from permanent best management practice PBMPs is requested. Granting of exceptions to any substantive provision of this subchapter related to the protection of water quality may be granted by the executive director if the requestor can demonstrate equivalent water quality protection for surface streams which enter the recharge zone of the Edwards Aquifer. Prior approval under this section must be obtained from the executive director for the exception to be authorized.

Proposed regulated activities include clearing, grading, excavation, installation of utilities and drainage improvements, construction of one Amenity Center building, outdoor pool area with associated parking, and a park area. Approximately 3.02 acres, or 13.8 % of the 21.82-acre project limits is the total impervious cover proposed for construction. The remaining areas within this site will be maintained as greenspace. Due to the limited amount of impervious cover and minimal disturbance associated with the construction of this project, we hereby request a waiver from the requirements for permanent BMPs and treatment measures.

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4S RANCH AMENITY CENTER Contributing Zone Plan Application (TCEQ-10257)

Attachment P - Measures for Minimizing Surface Stream Contamination

Any points where discharge from the site is concentrated and erosive velocities exist will include appropriately sized energy dissipators to reduce velocities to non-erosive levels.

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TEMPORARY STORMWATER SECTION (TCEQ-0602)

Temporary Stormwater Section

Texas Commission on Environmental Quality

for Regulated Activities on the Edwards Aquifer Recharge Zone and Relating to 30 TAC §213.5(b)(4)(A), (B), (D)(I) and (G); Effective June 1, 1999

To ensure that the application is administratively complete, confirm that all fields in the form are complete, verify that all requested information is provided, consistently reference the same site and contact person in all forms in the application, and ensure forms are signed by the appropriate party.

Note: Including all the information requested in the form and attachments contributes to more streamlined technical reviews.

Signature

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. This Temporary Stormwater Section is hereby submitted for TCEQ review and executive director approval. The application was prepared by:

Print Name of Customer/Agent: Cara C. Tackett, P.E.

Date: 01/03/17

Signature of Customer/Agent:

Regulated Entity Name: 45 Ranch Amenity Center

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Project Information

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Potential Sources of Contamination

Examples: Fuel storage and use, chemical storage and use, use of asphaltic products, construction vehicles tracking onto public roads, and existing solid waste.

- Fuels for construction equipment and hazardous substances which will be used during construction:
 - The following fuels and/or hazardous substances will be stored on the site: <u>located</u> within the construction staging area in compliance with 30TAC§213.

These fuels and/or hazardous substances will be stored in:

Aboveground storage tanks with a cumulative storage capacity of less than 250 gallons will be stored on the site for less than one (1) year.

	 Aboveground storage tanks with a cumulative storage capacity between 250 gallons and 499 gallons will be stored on the site for less than one (1) year. Aboveground storage tanks with a cumulative storage capacity of 500 gallons or more will be stored on the site. An Aboveground Storage Tank Facility Plan application must be submitted to the appropriate regional office of the TCEQ prior to moving the tanks onto the project.
	Fuels and hazardous substances will not be stored on the site.
2.	Attachment A - Spill Response Actions. A site specific description of the measures to b taken to contain any spill of hydrocarbons or hazardous substances is attached.
3.	Temporary aboveground storage tank systems of 250 gallons or more cumulative storage capacity must be located a minimum horizontal distance of 150 feet from any domestic, industrial, irrigation, or public water supply well, or other sensitive feature.
4.	Attachment B - Potential Sources of Contamination. A description of any activities or processes which may be a potential source of contamination affecting surface water quality is attached.
S	equence of Construction
5.	Attachment C - Sequence of Major Activities. A description of the sequence of major activities which will disturb soils for major portions of the site (grubbing, excavation, grading, utilities, and infrastructure installation) is attached.
	For each activity described, an estimate (in acres) of the total area of the site to be disturbed by each activity is given.
	For each activity described, include a description of appropriate temporary control

6. Name the receiving water(s) at or near the site which will be disturbed or which will receive discharges from disturbed areas of the project: Cibolo Creek

measures and the general timing (or sequence) during the construction process that

Temporary Best Management Practices (TBMPs)

the measures will be implemented.

Erosion control examples: tree protection, interceptor swales, level spreaders, outlet stabilization, blankets or matting, mulch, and sod. Sediment control examples: stabilized construction exit, silt fence, filter dikes, rock berms, buffer strips, sediment traps, and sediment basins. Please refer to the Technical Guidance Manual for guidelines and specifications. All structural BMPs must be shown on the site plan.

7. Attachment D – Temporary Best Management Practices and Measures. TBMPs and measures will prevent pollution of surface water, groundwater, and stormwater. The construction-phase BMPs for erosion and sediment controls have been designed to retain sediment on site to the extent practicable. The following information is attached:

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to the Edwards Aquifer as a temporary pollution abatement measure during active construction should be avoided. Attachment E - Request to Temporarily Seal a Feature. A request to temporarily Seal a feature is attached. The request includes justification as to why no reason and practicable alternative exists for each feature. There will be no temporary sealing of naturally-occurring sensitive features on site. Attachment F - Structural Practices. A description of the structural practices that used to divert flows away from exposed soils, to store flows, or to otherwise limit discharge of pollutants from exposed areas of the site is attached. Placement of structural practices in floodplains has been avoided. Attachment G - Drainage Area Map. A drainage area map supporting the following requirements is attached: For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin will be provided. For areas that will have more than 10 acres within a common drainage area disturbed at one time, a smaller sediment basin and/or sediment trap(s) will be used. For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin or other equivalent controls are not attainable, but other TBMPs and measures will be used in combination to prot down slope and side slope boundaries of the construction area. There are no areas greater than 10 acres within a common drainage area that disturbed at one time. A smaller sediment basin and/or sediment trap(s) will less than a disturbed at one time.			 A description of how BMPs and measures will prevent pollution of surface water, groundwater or stormwater that originates upgradient from the site and flows across the site. A description of how BMPs and measures will prevent pollution of surface water or groundwater that originates on-site or flows off site, including pollution caused by contaminated stormwater runoff from the site. A description of how BMPs and measures will prevent pollutants from entering surface streams, sensitive features, or the aquifer. A description of how, to the maximum extent practicable, BMPs and measures will maintain flow to naturally-occurring sensitive features identified in either the geologic assessment, TCEQ inspections, or during excavation, blasting, or construction.
seal a feature is attached. The request includes justification as to why no reast and practicable alternative exists for each feature. There will be no temporary sealing of naturally-occurring sensitive features on site. Mattachment F - Structural Practices. A description of the structural practices that used to divert flows away from exposed soils, to store flows, or to otherwise limit discharge of pollutants from exposed areas of the site is attached. Placement of structural practices in floodplains has been avoided. Attachment G - Drainage Area Map. A drainage area map supporting the followin requirements is attached: For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin will be provided. For areas that will have more than 10 acres within a common drainage area disturbed at one time, a smaller sediment basin and/or sediment trap(s) will be used. For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin or other equivalent controls are not attainable, but other TBMPs and measures will be used in combination to prot down slope and side slope boundaries of the construction area. There are no areas greater than 10 acres within a common drainage area that disturbed at one time. A smaller sediment basin and/or sediment trap(s) will lead to combination with other erosion and sediment controls within each disturbed in combination with other erosion and sediment controls within each disturbed in combination with other erosion and sediment controls within each disturbed at one time.	€.	\boxtimes	The temporary sealing of a naturally-occurring sensitive feature which accepts recharge to the Edwards Aquifer as a temporary pollution abatement measure during active construction should be avoided.
used to divert flows away from exposed soils, to store flows, or to otherwise limit discharge of pollutants from exposed areas of the site is attached. Placement of structural practices in floodplains has been avoided. 10. Attachment G - Drainage Area Map. A drainage area map supporting the followin requirements is attached: For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin will be provided. For areas that will have more than 10 acres within a common drainage area disturbed at one time, a smaller sediment basin and/or sediment trap(s) will b used. For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin or other equivalent controls are not attainable, but other TBMPs and measures will be used in combination to prot down slope and side slope boundaries of the construction area. There are no areas greater than 10 acres within a common drainage area that disturbed at one time. A smaller sediment basin and/or sediment trap(s) will be used in combination with other erosion and sediment controls within each disturbed in combination with other erosion and sediment controls within each disturbed in combination with other erosion and sediment controls within each disturbed in combination with other erosion and sediment controls within each disturbed in combination with other erosion and sediment controls within each disturbed in combination with other erosion and sediment controls within each disturbed in combination with other erosion and sediment controls within each disturbed in combination with other erosion and sediment controls within each disturbed in combination with other erosion and sediment controls within each disturbed in combination with other erosion and sediment controls within each disturbed in combination with other erosion and sediment controls within each disturbed in combination with other erosion and sediment controls within each disturbed in combination within each disturbe			There will be no temporary sealing of naturally-occurring sensitive features on the
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disturbed at one time, a sediment basin will be provided. For areas that will have more than 10 acres within a common drainage area disturbed at one time, a smaller sediment basin and/or sediment trap(s) will b used. For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin or other equivalent controls are not attainable, but other T8MPs and measures will be used in combination to prot down slope and side slope boundaries of the construction area. There are no areas greater than 10 acres within a common drainage area that disturbed at one time. A smaller sediment basin and/or sediment trap(s) will I used in combination with other erosion and sediment controls within each dis	10	· 🗵	
			disturbed at one time, a sediment basin will be provided. For areas that will have more than 10 acres within a common drainage area disturbed at one time, a smaller sediment basin and/or sediment trap(s) will be used. For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin or other equivalent controls are not attainable, but other TBMPs and measures will be used in combination to protect down slope and side slope boundaries of the construction area. There are no areas greater than 10 acres within a common drainage area that will be disturbed at one time. A smaller sediment basin and/or sediment trap(s) will be used in combination with other erosion and sediment controls within each disturbed

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	There are no areas greater than 10 acres within a comdisturbed at one time. Erosion and sediment controls sediment traps within each disturbed drainage area within each disturbed drainage.	s other than sediment b	will be asins or
11. 🗌	Attachment H - Temporary Sediment Pond(s) Plans and sediment pond or basin construction plans and design ca temporary BMP or measure have been prepared by or un Texas Licensed Professional Engineer. All construction plans be signed, sealed, and dated by the Texas Licensed Construction plans for the proposed temporary BMPs and	Iculations for a propose der the direct supervisi ans and design informat Professional Engineer.	d on of a tion
\boxtimes	N/A		
12.	Attachment I - Inspection and Maintenance for BMPs. A temporary BMP(s) and measure(s) and for their timely m necessary, retrofit is attached. A description of the docu recordkeeping practices, and inspection frequency are in specific to the site and/or BMP.	aintenance, repairs, and mentation procedures,	d, if
13.	All control measures must be properly selected, installed with the manufacturer's specifications and good enginee inspections by the applicant or the executive director, or control has been used inappropriately, or incorrectly, the modify the control for site situations.	ring practices. If period other information indic	ic ate a
14. 🔀	If sediment escapes the construction site, off-site accumulation removed at a frequency sufficient to minimize offsite implicative sediment in street being washed into surface street he next rain).	pacts to water quality (e	.g.,
15.	Sediment must be removed from sediment traps or seding when design capacity has been reduced by 50%. A permethat can indicate when the sediment occupies 50% of the	anent stake will be prov	
16. 🛚	Litter, construction debris, and construction chemicals exprevented from becoming a pollutant source for stormw outfalls, picked up daily).		
Soil	Stabilization Practices		
mulch	oles: establishment of temporary vegetation, establishmen ing, geotextiles, sod stabilization, vegetative buffer strips, vation of mature vegetation.		tion,
17.	Attachment J - Schedule of Interim and Permanent Soil schedule of the interim and permanent soil stabilization attached.		Α
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18. 🛚	Records must be kept at the site of the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.
19. 🛚	Stabilization practices must be initiated as soon as practicable where construction activities have temporarily or permanently ceased.
Adm	ninistrative Information
20. 🛚	All structural controls will be inspected and maintained according to the submitted and approved operation and maintenance plan for the project.
21.	If any geologic or manmade features, such as caves, faults, sinkholes, etc., are discovered, all regulated activities near the feature will be immediately suspended. The appropriate TCEQ Regional Office shall be immediately notified. Regulated activities must cease and not continue until the TCEQ has reviewed and approved the methods proposed to protect the aquifer from any adverse impacts.
22. 🔀	Silt fences, diversion berms, and other temporary erosion and sediment controls will be constructed and maintained as appropriate to prevent pollutants from entering

sensitive features discovered during construction.

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ATTACHMENT A

Attachment A - Spill Response Actions

In the event of an accidental leak or spill:

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· Spill must be contained and cleaned up immediately.

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Spills will not be merely buried or washed with water.

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- Contractor shall take action to contain spill. Contractor may use sand or other absorbent material stockpiled on site to absorb spill. Absorbent material should be spread over the spill area to absorb the spilled product.
- In the event of an uncontained discharge the contractor shall utilize onsite equipment to construct berms downgradient of the spill with sand or other absorbent material to contain and absorb the spilled product.
- Spill containment/absorbent materials along with impacted media must be collected and stored in such a way so as not to continue to affect additional media (soil/water). Once the spill has been contained, collected material should be placed on poly or plastic sheeting until removed from the site. The impacted media and cleanup materials should be covered with plastic sheeting and the edges weighed down with paving bricks or other similarly dense objects as the material is being accumulated. This will prevent the impacted media and cleanup materials from becoming airborne in windy conditions or impacting runoff during a rain event. The stockpiled materials should not be located within an area of concentrated runoff such as along a curb line or within a swale.
- Contaminated soils and cleanup materials will be sampled for waste characterization. When
 the analysis results are known the contaminated soils and cleanup materials will be removed
 from the site and disposed in a permitted landfill in accordance with applicable regulations.
- The contractor will be required to notify the owner, who will in turn contact TCEQ to notify
 them in the event of a significant hazardous/reportable quantity spill. Additional notifications
 as required by the type and amount of spill will be conducted by owner or owner's
 representative.

In the event of an accidental significant or hazardous spill:

- The contractor will be required to report significant or hazardous spills in reportable quantities to:
 - the National Response Center at (800) 424-8802
 - the Edwards Aquifer Authority at (210) 222-2204
 - the TCEQ Regional Office (210) 490-3096 (if during business hours: 8 AM to 5 PM) or
 - the State Emergency Response Center (800) 832-8224 (if after hours)



 Contaminated soils will be sampled for waste characterization. When the analysis results are known the contaminated soils will be removed from the site and disposed in a permitted landfill in accordance with applicable regulations.

Additional guidance can be obtained from TCEQ's Technical Guidance Manual (TGM) RG-348 (2005) Section 1.4.16. Contractor shall review this section.

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Attachment B - Potential Sources of Contamination COUNTY ENGINEER

Other potential sources of contamination during construction include:

Potential Source

- Asphalt products used on this project.
- Preventative Measure
- After placement of asphalt, emulsion or coatings, the contractor will be responsible for immediate cleanup should an unexpected rain occur. For the duration of the asphalt product curing time, the contractor will maintain standby personnel and equipment to contain any asphalt wash-off should an unexpected rain occur. The contractor will be instructed not to place asphalt products on the ground within 48 hours of a forecasted rain.

Potential Source

 Oil, grease, fuel and hydraulic fluid contamination from construction equipment and vehicle dripping.

Preventative Measure

- Vehicle maintenance when possible will be performed within the construction staging area.
- Construction vehicles and equipment shall be checked regularly for leaks and repaired immediately.

Potential Source

 Accidental leaks or spills of oil, petroleum products and substances listed under 40 CFR parts 110, 117, and 302 used or stored temporarily on site.

Preventative Measure

- Contractor to incorporate into regular safety meetings, a discussion of spill prevention and appropriate disposal procedures.
- Contractor's superintendent or representative overseer shall enforce proper spill prevention and control measures.
- Hazardous materials and wastes shall be stored in covered containers and protected from vandalism.
- A stockpile of spill cleanup materials shall be stored on site where it will be readily accessible.



Potential Source	#	Miscellaneous trash and litter from construction workers and material wrappings.
Preventive Measure	**	Trash containers will be placed throughout the site to encourage proper trash disposal.
Potential Source	*	Construction debris.
Preventive Measure	**	Construction debris will be monitored daily by contractor. Debris will be collected weekly and placed in disposal bins. Situations requiring immediate attention will be addressed on a case by case basis.
Potential Source	*	Spills/Overflow of waste from portable toilets
Preventative Measure	鰄	Portable toilets will be placed away from high traffic vehicular areas and storm drain inlets.
	***	Portable toilets will be placed on a level ground surface.
	2	Portable toilets will be inspected regularly for leaks and will be serviced and sanitized at time intervals that will maintain sanitary conditions.

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ATTACHMENT C

Attachment C - Sequence of Major Activities

The sequence of major activities which disturb soil during construction on this site will be divided into two stages. The first is site preparation that will include clearing and grubbing of vegetation where applicable. This will disturb approximately 5.39 acres for the Amenity Center area and approximately 4.27 acres for the pocket park and recreational area for a total of 9.66 acres. The second is construction that will include construction of new pavement areas for the parks and Amenity center, a pool, recreational pond, walking trails, landscaping, and site cleanup. This will disturb approximately 9.66 total acres.

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ATTACHMENT D

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Attachment D - Temporary Best Management Practices and Measures

a. A description of how BMPs and measures will prevent pollution of surface water, groundwater or stormwater that originates upgradient from the site and flows across the site.

Upgradient stormwater from the undeveloped areas will be intercepted by a concrete interceptor channel and walls and conveyed through underground storm drains to be discharged into the existing floodplain in the center of the site. All TBMPs are adequate for the drainage areas served.

b. A description of how BMPs and measures will prevent pollution of surface water or groundwater that originates on-site or flows off site, including pollution caused by contaminated stormwater runoff from the site.

Site preparation, which is the initiation of all activity on the project, will disturb the largest amount of soil. Therefore, before any of this work can begin, the clearing and grading contractor will be responsible for the installation of all on-site control measures. The methodology for pollution prevention of on-site stormwater includes: (1) erection of silt fences along the downgradient boundary of construction activities for temporary erosion and sedimentation controls, (2) installation of rock berms with silt fencing downgradient from areas of concentrated stormwater flow for temporary erosion control, (3) placement of gravel filter bags along the downgradient boundary of construction activities for temporary erosion and sedimentation controls, (4) installation of stabilized construction entrance/exit(s) to reduce the dispersion of sediment from the site, and (5) installation of construction staging area(s).

Prior to the initiation of construction, all previously installed control measures will be repaired or reestablished for their designed or intended purpose. This work, which is the remainder of all activity on the project, may also disturb additional soil. The construction contractor will be responsible for the installation of all remaining on-site control measures as construction phasing warrants that include installation of the concrete truck washout pit(s) and placement of gravel filter bags for use in inlet protection and to prevent sediment migration off-site.

Temporary measures are intended to provide a method of slowing the flow of runoff from the construction site in order to allow sediment and suspended solids to settle out of the runoff. By containing the sediment and solids within the site, they will not enter the aquifer, surface streams and/or sensitive features that may exist downstream of the site.

c. A description of how BMPs and measures will prevent pollutants from entering surface streams, sensitive features, or the aquifer.

As this site is entirely over the Edwards Aquifer Contributing Zone, a Geologic Assessment was not conducted and is not required; therefore, no sensitive features were identified. There are no surface streams on or immediately adjacent to the site.



Temporary measures are intended to provide a method of slowing the flow of runoff from the construction site in order to allow sediment and suspended solids to settle out of the runoff. By containing the sediment and solids within the site, they will not enter surface streams and/or sensitive features.

d. A description of how, to the maximum extent practicable, BMPs and measures will maintain flow to naturally-occurring sensitive features identified in either the geologic assessment, TCEQ inspections, or during excavation, blasting, or construction.

Since the project is located entirely over the Edwards Contributing Zone, a Geologic Assessment was not conducted and is not required by 30 TAC 213 regulations. Therefore, no naturally-occurring sensitive features are known to exist on the site. 30 TAC 213(f)(2) only applies to projects over the Edwards Recharge Zone.

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ATTACHMENT F

Attachment F - Structural Practices

The following structural measures will be installed prior to the initiation of site preparation activities:

- Erection of silt fences along the downgradient boundary of construction activities and rock berms with silt fence for secondary protection, as located on Exhibit 1 and illustrated in Exhibit 2.
- Placement of gravel filter bags along the downgradient boundary of construction activities and rock berms with silt fence for secondary protection, as located on Exhibit 1 and illustrated in Exhibit 2.
- Installation of stabilized construction entrance/exit(s) and construction staging area(s), as located on Exhibit), and illustrated on Exhibit 2.

The following structural measures will be installed at the initiation of construction activities or as appropriate based on the construction sequencing:

 Installation of gravel filter bags, concrete truck washout pit(s), as required and located on Exhibit 1 and illustrated on Exhibit 2.

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ATTACHMENT G

Attachment G - Drainage Area Map

TBMPs and interim on-site stabilization measures will be used in combination to protect down stope and side slope boundaries of the construction. Construction of civil infrastructure (utilities, roads, drainage, etc.) add grading and will precede building construction. All TBMPs utilized are adequate for the drainage areas served.

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ATTACHMENT I

Attachment I - Inspection and Maintenance for BMPs

Designated and qualified person(s) shall inspect Pollution Control Measures weekly and within

24 hours after a storm event. An inspection report that summarizes the scope of the inspection,

names and qualifications of personnel conducting the inspection, date of the inspection, major

observations, and actions taken as a result of the inspection shall be recorded and maintained as

part of Storm Water TPDES data for a period of three years after the date of the inspection. A

copy of the Inspection Report Form is provided in this Storm Water Pollution Prevention Plan.

As a minimum, the inspector shall observe: (1) significant disturbed areas for evidence of

erosion, (2) storage areas for evidence of leakage from the exposed stored materials, (3)

structural controls (rock berm outlets, silt fences, drainage swales, etc.) for evidence of failure or

excess siltation (over 6 inches deep), (4) vehicle exit point for evidence of off-site sediment

tracking, (5) vehicle storage areas for signs of leaking equipment or spills, (6) concrete truck

rinse-out pit for signs of potential failure, (7) embankment, spillways, and outlet of sediment

basin (where applicable) for erosion damage, and (8) sediment basins (where applicable) for

evidence that basin has accumulated 50% of its volume in silt. Deficiencies noted during the

inspection will be corrected and documented within seven calendar days following the inspection

or before the next anticipated storm event if practicable.

Contractor shall review Sections 1.3 and 1.4 of TCEQ's Technical Guidance Manual for

additional BMP inspection and maintenance requirements.

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Prevention	S	Correctiv	ve Action
rrevention	Inspected	CONC. 14/1 MAD	Date
Measure	L L	Description	Completed
General			
Revegetation			
Erosion/sediment controls			
Vehicle exits			
Material areas			
Equipment areas			
Concrete rinse			
Construction debris			
Trash receptacles		.	
Infrastructure			
Roadway clearing			
Utility clearing			
Roadway grading			
Utility construction			
Drainage construction			
Roadway base			
Roadway surfaces			
Site cleanups			
Building	-?·	,	1949
Clearing for building			
Foundation grading			
Utility construction			
Foundation construction			
Building construction			
Site grading			
Site cleanup			RECE

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PROJECT MILESTONE DATES

Date when major site grading activities begin:

Construction Activity	<u>Date</u>
Dates when construction activities temporarily or perm project:	namentry cease on all or a portion of the
Construction Activity	Date
Dates when stabilization measures are initiated:	JAN 1 3 2017
Stabilization Activity	Date COUNTY ENGINEER
	

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ATTACHMENT J

Attachment J - Schedule of Interim and Permanent Soil Stabilization Practices

Interim on-site stabilization measures, which are continuous, will include minimizing soil disturbances by exposing the smallest practical area of land required for the shortest period of time and maximizing use of natural vegetation. As soon as practical, all disturbed soil will be stabilized as per project specifications in accordance with pages 1-35 to 1-60 of TCEQ's Technical Guidance Manual (TGM) RG-348 (2005). Mulching, netting, erosion blankets and seeding are acceptable.

Stabilization measures will be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and except as provided below, will be initiated no more than fourteen (14) days after the construction activity in that portion of the site has temporarily or permanently ceased. Where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within twenty-one (21) days, temporary stabilization measures do not have to be initiated on that portion of site. In areas experiencing droughts where the initiation of stabilization measures by the 14th day after construction activity has temporarily or permanently ceased is precluded by seasonably arid conditions, stabilization measures must be initiated as soon as practicable.

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CN:	
Region:	

TCEQ Notice of Intent (NOI) for Stormwater Discharges Associated with Construction Activity under TPDES General Permit (TXR150000)

IMPORTANT:

- Use the <u>INSTRUCTIONS</u> to fill out each question in this form.
- Use the <u>CHECKLIST</u> to make certain you filled out all required information.
 Incomplete applications **WILL** delay approval or result in denial.
- Once processed your permit can be viewed at: http://www.tceq.texas.gov/goto/wq-dpa

ePERMITS: Sign up now for online NOI: https://www3.tceq.texas.gov/steers/ Pay a \$225 reduced application fee by using ePermits.

Pay a \$	225 reduced application fee by using ePermits.	
complete. Payment and N Did you know y Go to http: Select Fee T DISCHARC Provide your Mailed	he \$325 Application Fee to TCEQ for the paper application to be WOI must be mailed to separate addresses. You can pay on line?	JAN 1 3 2017 PUNTY ENGINEER t:
☐ EPAY	Voucher Number:	
	NOI a Renewal of an existing General Permit Authorizat nnot be renewed after June 3, 2013.)	tion?
Yes The Permit (If a perm	number is: TXR15 nit number is not provided, a new number will be assigne	ed.)

1) OPERATOR (Applicant)

a) If the applicant is currently a customer with TCEQ, what is the Customer Number (CN) issued to this entity? You may search for your CN at: http://www.tceq.texas.gov/goto/cr-customer

CN____

b)	What is the Legal Name of the	e entity (applicant) applying fo	or this permit?
	(The legal name must be spell in the legal document forming	ed exactly as filed with the Te g the entity.)	xas Secretary of State, County, or
c)	What is the contact informatic address must be recognized b https://tools.usps.com/go/Zi Prefix (Mr. Ms. Miss):	y the US Postal Service (USPS pLookupAction!input.action	ble Authority)? The mailing). You may verify the address at:
	Firet/Last Name:		Suffix:
	Title:	Est. Fax	Credential: Number:
	Phone Number:	EXt:Fax	number:
	Mailing Addroge:		
	Internal Routing (Mail Code,	Etc.):	ZIP Code:
	City:	State:	ZIP Code:
	If outside USA:	G G. 3.	D1-10-1-
	Territory:	Country Code:	Postal Code:
d)	Indicate the type of Customer	r (The instructions will help de	etermine your customer type):
	☐ Individual	Limited Partnership	☐Sole Proprietorship-DBA
	☐ Joint Venture	General Partnership	Corporation
	☐ Trust	Estate	Federal Government
	State Government	County Government	City Government
	Other Government		
~)	The state of the s	warnmantal antity subsidian	or part of a larger comperation
ej	check "No".) Yes No	overnmental entry, subsidiary	, or part of a larger corporation,
f)	Number of Employees:	☐ 101-250; ☐ 251-50	o; or 501 or higher
g)	Government, or Sole Proprie State Franchise Tax ID Numb Federal Tax ID: Texas Secretary of State Char	s and Limited Partnerships. 1	*
2)	APPLICATION CONTACT		
	rceQ needs additional inform		on, who should be contacted?
	the application contact the sar	1177 (1271) TURN	
	Yes, go to Section 3).	200 0克	
-	15		RECEIVED
	No, complete section below		JAN 1 3 2017
			Orient I & Lon

Pre	fix (Mr. Ms. Miss):	_		0.00	
Firs	st/Last Name:		Cradar	Suffix:	
Ora	e: ganization Name: one Number:		Creder	itiai:	
Pho	one Number:	Ext:	Fax Number:		
E-n	nail:				
Mai	iling Address:ernal Routing (Mail Code, Etc.): /: iling Information if outside USA				
Inte	ernal Routing (Mail Code, Etc.):			_	
City	/:	State:	ZIP Co	ode:	
Ma	iling Information if outside USA ritory:	A: Country Codes	Dootal	Codo	
rer	mory:	country code	rostai	Code,	
3)	REGULATED ENTITY (RE)	INFORMATION ON	PROJECT OR	SITE	
If this site site	he site of your business is part of s site before yours, a Regulated be. Use the RN assigned for the later may already be registered as a p://www.tceq.texas.gov/goto/c	of a larger business site Entity Number (RN) m arger site. Search TCE regulated site at:	or if other busing already be as	esses were locat signed for the la	rger
info	he site is found, provide the ass ormation for the site to be authorization may vary fro	orized through this app	lication below. '		
a)	TCEQ issued RE Reference Nu	mber (RN): RN_			
b)	Name of project or site (the nat 4S Ranch Amenity Center	me known by the com		ated):	27
c)	In your own words, briefly descrepeat the SIC and NAICS code		ess of the Regul	ated Entity: (Do	not
	Amenity Center and park ar	ea			
d)	County (or counties if > 1)				
	Comal				
e)	Latitude: 29.768783 N	Long	itude: <u>-98.4083</u>	42 W	
f)	Does the site have a physical ac	ddress?			
	Yes, complete Section A for	r a physical address			
	☑ No, complete section B for		on.		
	Section A: Enter the physic. Verify the address with USPS. the address as identified for ovtools to confirm an address.	al address for the site. If the address is not re ernight mail delivery,	cognized as a del		
	Physical Address of Project or Street Number: City:	Street Name:	e· Texas	_ZIP Code:	
		Stat	<u> </u>		
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	If no physical address (Street Number & Street Name), provide a written location access
	description to the site. (Example: located 2 miles west from intersection of Hwy 290 &
	IH35 accessible on Hwy 290 South)
	Approximately 2,000 ft. East of the intersection of Stahl Lane and Mustang Vista
	City where the site is located or, if not in a city, what is the nearest city: Bulverde
	State: Texas ZIP Code where the site is located: 78163
71)	GENERAL CHARACTERISTICS
	Is the project/site located on Indian Country Lands?
	Yes - If the answer is Yes, you must obtain authorization through EPA, Region 6.
	☑ No
bì	Is your construction activity associated with a facility that, when completed, would be
	associated with the exploration, development, or production of oil or gas or geothermal
	resources? Yes - If the answer is Yes, you may be under jurisdiction of the Railroad Commission of
	Texas and may need to obtain authorization through EPA, Region 6.
	☑ No
c)	What is the Primary Standard Industrial Classification (SIC) Code that best describes the
	construction activity being conducted at the site?
	Primary SIC Code: 1542
d)	If applicable, what is the Secondary SIC Code(s): 1623
e)	What is the total number of acres disturbed? 21.82
f)	Is the project site part of a larger common plan of development or sale?
ĺ	Yes - If the answer is Yes, the total number of acres disturbed can be less than 5 acres.
	☐ No - If the answer is No, the total number of acres disturbed must be 5 or more. If the
	total number of acres disturbed is less than 5 then the project site does not qualify for coverage through this Notice of Intent. Coverage will be denied. See the
	requirements in the general permit for small construction sites.
**	
8)	What is the name of the first water body(s) to receive the stormwater runoff or potential runoff from the site?
	Cibolo Creek
	CIDOIO CICCK
h)	What is the segment number(s) of the classified water body(s) that the discharge will
	eventually reach?
	1908

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i)	Is the discharge into an MS4?
	Yes - If the answer is Yes, provide the name of the MS4 operator below. Bexar
	Note: The general permit requires you to send a copy of the NOI to the MS4 operator.
	□ No
j)	Are any of the surface water bodies receiving discharges from the construction site on the latest EPA-approved CWA 303(d) List of impaired waters?
	Yes - If the answer is Yes, provide the name(s) of the impaired water body(s) below. Cibolo Creek
	□ No
k)	Is the discharge or potential discharge within the Recharge Zone, Contributing Zone, or Contributing Zone within the Transition Zone of the Edwards Aquifer as defined in 30 TAC Chapter 213? Yes - If the answer is Yes, complete certification below by checking "Yes."
	□ No
	I certify that a copy of the TCEQ approved Plan required by the Edwards Aquifer Rule (30 TAC Chapter 213) is either included or referenced in the Stormwater Pollution Prevention Plan. Yes

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Ch	CERTIFICATION eck Yes to the certifications below. Failure to indicate Yes to ALL items may res coverage under the general permit.	oult in denial
a)	I certify that I have obtained a copy and understand the terms and conditions of the Construction General Permit (TXR150000).	f Yes
b)	I certify that the full legal name of the entity applying for this permit has been provided and is legally authorized to do business in Texas.	Yes
c)	I understand that a Notice of Termination (NOT) must be submitted when this authorization is no longer needed.	Yes
d)	I certify that a Stormwater Pollution Prevention Plan has been developed, will be implemented prior to construction and to the best of my knowledge and belief is compliant with any applicable local sediment and erosion control plans, as required the general permit TXR150000. Note: For multiple operators who operate us shared SWP3, the confirmation of an operator may be limited to its obligations under the SWP3 provided all obligations are confirmed by at least one operator.	s nired nder a
Οį	perator Certification:	
I,		
	Typed or printed name Title	
dia prope indiaco	rtify under penalty of law that this document and all attachments were prepared rection or supervision in accordance with a system designed to assure that qualifulation operly gather and evaluate the information submitted. Based on my inquiry of the system, or those persons directly responsible for gathering formation, the information submitted is, to the best of my knowledge and belief, curate, and complete. I am aware there are significant penalties for submitting formation, including the possibility of fine and imprisonment for knowing violation.	ied personnel ne person or g the true, alse
an	urther certify that I am authorized under 30 Texas Administrative Code §30 id submit this document, and can provide documentation in proof of such authorquest.)5.44 to sign ization upon
Siį	gnature: Date:	**************************************
	(Use blue ink)	
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NOTICE OF INTENT CHECKLIST (TXR150000)

- Did you complete everything? Use this checklist to be sure!
- Are you ready to mail your form to TCEQ? Go to the General Information Section of the Instructions for mailing addresses.

This checklist is for use by the operator to ensure a complete application. Missing information may result in denial of coverage under the general permit. (See NOI process description in the Instructions)

Instructions)	10 TO
Application Fee:	10 10 10 10 10 10 10 10 10 10 10 10 10 1
If paying by Check:	
Check was mailed separately to the TCE	Qs Cashier's Office. (See Instructions for
Cashier's address and Application address	.)
Check number and name on check is prov	ded in this application.
If using ePay:	
The voucher number is provided in this ap	plication or a copy of the voucher is attached.
PERMIT NUMBER:	
Permit number provided – if this application	on is for renewal of an existing authorization.
OPERATOR INFORMATION - Confirm each item	is complete:
Customer Number (CN) issued by TCEQ (Central Registry
Legal name as filed to do business in Texa	
Name and title of responsible authority sign	
Mailing address is complete & verifiable w	
Phone numbers/e-mail address	
Type of operator (entity type)	
☐ Independent operator	
Number of employees	
For corporations or limited partnerships -	- Tax ID and SOS filing numbers
Application contact and address is comple	te & verifiable with USPS. http://www.usps.com
REGULATED ENTITY (RE) INFORMATION ON	PROJECT OR SITE - Confirm each item is
complete:	the standard and the st
Regulated Entity Reference Number (RN)	(if site is already regulated by TCEQ)
Site/project name/regulated entity	
✓ Latitude and longitude http://www.tceq.t	exas.gov/gis/sqmaview.html
Site/project physical address. Do not use	a rural route or post office box.
✓ Business description	
GENERAL CHARACTERISTICS - Confirm each i	
✓ Construction activity related to facility ass	
✓ Standard Industrial Classification (SIC) C	
Acres disturbed is provided and qualifies:	for coverage through a NOI
Common plan of development or sale	RECEIVED
Receiving water body(s)	JAN 1 3 2017
Segment number(s)	ANI TO SON
Impaired water body(s)	
MS4 operator	COUNTY ENGINEER
✓ Edwards Aquifer rule	CHECK THOSE (AND ADDRESS CARPING AND THE PROGRAMMES IN THE PERSON OF THE
CERTIFICATION	
Certification statements have been checked	
Signature meets 30 Texas Administrative	Code (TAC) 305.44 and is original.

Notice of Intent (NOI) for Stormwater Discharges Associated with EIVED Construction Activity under TPDES General Permit (TXR150000)

General Information and Instructions

COUNTY ENGINEER

GENERAL INFORMATION

Where to Send the Notice of Intent (NOI):

BY REGULAR U.S. MAIL

Texas Commission on Environmental Quality Stormwater Processing Center (MC-228)

P.O. Box 13087

Austin, Texas 78711-3087

BY OVERNIGHT/EXPRESS MAIL

Texas Commission on Environmental Quality Stormwater Processing Center (MC-228)

12100 Park 35 Circle

Austin, TX 78753

TCEQ Contact List:

Application – status and form questions:

Technical questions:

Environmental Law Division:

Records Management - obtain copies of forms:

Reports from databases (as available):

Cashier's office:

512/239-3700, swpermit@tceq.texas.gov

512/239-4671, swgp@tceq.texas.gov

512/239-0600

512/239-0900

512/239-DATA (3282)

512/239-0357 or 512/239-0187

Notice of Intent Process:

When your NOI is received by the program, the form will be processed as follows:

- 1) Administrative Review: Each item on the form will be reviewed for a complete response. In addition, the operator's legal name must be verified with Texas Secretary of State as valid and active (if applicable). The address(s) on the form must be verified with the US Postal service as receiving regular mail delivery. Never give an overnight/express mailing address.
- 2) **Notice of Deficiency:** If an item is incomplete or not verifiable as indicated above, a notice of deficiency (NOD) will be mailed to the operator. The operator will have 30 days to respond to the NOD. The response will be reviewed for completeness.
- 3) Acknowledgment of Coverage: An Acknowledgment Certificate will be mailed to the operator. This certificate acknowledges coverage under the general permit.
 -or-

Denial of Coverage: If the operator fails to respond to the NOD or the response is inadequate, coverage under the general permit may be denied. If coverage is denied, the operator will be notified.

General Permit (Your Permit)

For NOIs submitted **electronically** through ePermits, provisional coverage under the general permit begins immediately following confirmation of receipt of the NOI form by the TCEQ.

For paper NOIs, provisional coverage under the general permit begins 7 days after a completed NOI is postmarked for delivery to the TCEQ.

You should have a copy of your general permit when submitting your application. You may view and print your permit for which you are seeking coverage, on the TCEQ web site http://www.tceq.texas.gov. Search using key word TXR150000.

General Permit Forms

The Notice of Intent (NOI), Notice of Termination (NOT), and Notice of Change (NOC) (including instructions) are available in Adobe Acrobat PDF format on the TCEQ web site http://www.tceq.texas.gov.

Change in Operator

An authorization under the general permit is not transferable. If the operator of the regulated entity changes, the present permittee must submit a Notice of Termination and the new operator must submit a Notice of Intent. The NOT and NOI must be submitted no later than 10 days prior to the change in Operator status.

TCEQ Central Registry Core Data Form

The Core Data Form has been incorporated into this form. Do not send a Core Data Form to TCEQ. After final acknowledgment of coverage under the general permit, the program will assign a Customer Number and Regulated Entity Number.

You can find the information on the Central Registry web site at http://www15.tceq.texas.gov/crpub/. You can search by the Regulated Entity (RN), Customer Number (CN) or Name (Permittee), or by your permit number under the search field labeled "Program ID". Capitalize all letters in the permit number.

The Customer (Permittee) is responsible for providing consistent information to the TCEQ, and for updating all CN and RN data for all authorizations as changes occur. For General Permits, a Notice of Change form must be submitted to the program area.

Fees associated with a General Permit

Payment of the fee may be made by check or money order, payable to TCEQ, or through EPAY (electronic payment through the web).

Application Fee: This fee is required to be paid at the time the NOI is submitted. Failure to submit payment at the time the application is filed will cause delays in acknowledgment or denial of coverage under the general permit.

Mailed Payments:

Payment must be mailed under separate cover at one of the addresses below using the attached Application Fee submittal form. (DO NOT SEND A COPY OF THE NOI WITH THE APPLICATION FEE SUBMITTAL FORM)

BY REGULAR U.S. MAIL

Texas Commission on Environmental Quality Financial Administration Division Cashier's Office, MC-214 P.O. Box 13088 Austin, Texas 78711-3088

BY OVERNIGHT/EXPRESS MAIL

Texas Commission on Environmental Quality Financial Administration Division Cashier's Office, MC-214 12100 Park 35 Circle Austin, TX 78753

ePAY Electronic Payment: http://www.tceq.texas.gov/epay

When making the payment you must select Water Quality, and then select the fee category "General Permit Construction Storm Water Discharge NOI Application". You must include a copy of the payment voucher with your NOI. Your NOI will not be considered complete without the payment voucher.

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INSTRUCTIONS FOR FILLING OUT THE NOTFORM

Renewal of General Permit. Dischargers holding active authorizations under the expired General Permit are required to submit a NOI to continue coverage. The existing permit number is required. If the permit number is not provided or has been terminated, expired, or denied a new permit number will be issued.

1. Operator (Applicant)

a) Enter assigned Customer Number (CN)

TCEQ's Central Registry will assign each customer a number that begins with CN, followed by nine digits. This is not a permit number, registration number, or license number. If this customer has not been assigned a CN, leave the space for the CN blank. If this customer has already been assigned this number, enter the permittee's CN.

b) Legal Name

Provide the current legal name of the permittee, as authorized to do business in Texas. The name must be provided exactly as filed with the Texas Secretary of State (SOS), or on other legal documents forming the entity, that is filed in the county where doing business. You may contact the SOS at 512/463-5555, for more information related to filing in Texas. If filed in the county where doing business, provide a copy of the legal documents showing the legal name.

c) Operator Contact's (Responsible Authority) Contact Information and Mailing Address

Provide the first and last name, and the title of the person signing the Certification section of the application. This person must be an individual having signatory authority in accordance with 30 TAC Chapter §305.44. This person is also referred to as the Responsible Authority.

Provide a complete mailing address for receiving mail from the TCEQ. The address must be verifiable with the US Postal Service at

https://tools.usps.com/go/ZipLookupAction!input.action for regular mail delivery (not overnight express mail). If you find that the address is not verifiable using the USPS web search, please indicate the address is used by the USPS for regular mail delivery.

The area code and phone number should provide contact to the operator. Leave Extension blank if not applicable.

The fax number and e-mail address are optional and should correspond to the operator.

d) Type of Customer (Entity Type)

Check only one box that identifies the type of entity. Use the descriptions below to identify the appropriate entity type. Note that the selected entity type also indicates the name that must be provided as an applicant for a permit, registration or authorization.

Sole Proprietorship - DBA

A sole proprietorship is a customer that is owned by only one person and has not be RECEIVED incorporated. This business may:

• be under the person's name

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- have its own name (doing business as or d.b.a.)
- have any number of employees

If the customer is a Sole Proprietorship or DBA, the 'legal name' of the individua UNTY ENGINEER business 'owner' must be provided. The DBA name is not recognized as the 'legal name' of the entity. The DBA name may be used for the site name (regulated entity).

Individual

An individual is a customer who has not established a business, but conducts an activity that needs to be regulated by the TCEQ.

Partnership

- A customer that is established as a partnership as defined by the Texas Secretary of State Office (TX SOS). A Limited Partnership or Limited Liability Partnership (Partnership) is required to file with the Texas Secretary of State. A General Partnership or Joint Venture is not required to register with the state.
- Partnership (Limited Partnership or Limited Liability Partnership): A limited partnership is defined in the Act as a partnership formed by two or more persons under the provisions of Section 3 of the Uniform Limited Partnership Act (Art. 6132a, Revised Civil Statutes of Texas) and having as members one or more general partners and one or more limited partners. The limited partners as such are not bound by the obligations of the partnership. Limited partners may not take part in the day-to-day operations of the business. A Limited Partnership must file with the Texas Secretary of State. A registered limited liability partnership is a general or limited partnership that is registered with the Texas Secretary of State. The partnership's name must contain the words "Registered Limited Liability Partnership" or the abbreviation "L.L.P." as the last words or letters of its name.
- General Partnership: A general partner may or may not invest, participates in running the partnership and is liable for all acts and debts of the partnership and any member of it. A General Partnership does not have limited partners. For a General Partnership, there is no registration with the state or even written agreement necessary for a general partnership to be formed. The legal definition of a partnership is generally stated as "an association of two or more persons to carry on as co-owners a business for profit" (Revised Uniform Partnership Act § 101 [1994]).
- Joint Venture: A joint venture is but another name for a special partnership. It might be distinguished from a general partnership in that the latter is formed for the transaction of a general business, while a joint venture is usually limited to a single transaction. That is, a joint venture is a special combination of persons in the nature of a partnership engaged in the joint prosecution of a particular transaction for mutual benefit or profit.

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Corporation

A customer meets all of these conditions:

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- is a legally incorporated entity under the laws of any state or country
- is recognized as a corporation by the Texas Secretary of State
- has proper operating authority to operate in Texas.

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- The corporation's 'legal name' as filed with the Texas Secretary of State must be
- provided as applicant. An 'assumed' name of a corporation is not recognized as the 'legal name' of the entity.

Government

Federal, state, county, or city government (as appropriate) The customer is either an agency of one of these levels of government or the governmental body itself. The government agency's 'legal name' must be provided as the applicant. A department name or other description of the organization should not be included as a part of the 'legal name' as applicant.

Trust or Estate

A trust and an estate are fiduciary relationships governing the trustee/executor with respect to the trust/estate property.

Other Government

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A utility district, water district, tribal government, college district, council of JAN 1 3 2017 governments, or river authority. Write in the specific type of government.

e) Independent Entity

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Check No if this customer is a subsidiary, part of a larger company, or is a governmental entity. Otherwise, check Yes.

f) Number of Employees

Check one box to show the number of employees for this customer's entire company, at all locations. This is not necessarily the number of employees at the site named in the application.

g) Customer Business Tax and Filing Numbers

These are required for Corporations and Limited Partnerships. These are not required for Individuals, Government, and Sole Proprietors.

State Franchise Tax ID Number

Corporations and limited liability companies that operate in Texas are issued a franchise tax identification number. If this customer is a corporation or limited liability company, enter this number here.

Federal Tax ID

All businesses, except for some small sole proprietors, individuals, or general partnerships should have a federal taxpayer identification number (TIN). Enter this number here. Use no prefixes, dashes, or hyphens. Sole proprietors, individuals, or general partnerships do not need to provide a federal tax ID.

TX SOS Charter (filing) Number

Corporations and Limited Partnerships required to register with the Texas Secretary of State are issued a charter or filing number. You may obtain further information by calling SOS at 512/463-5555.

DUNS Number

Most businesses have a DUNS (Data Universal Numbering System) number issued by Dun and Bradstreet Corp. If this customer has one, enter it here.

2. APPLICATION CONTACT

Provide the name, title and communication information of the person that TCEQ can contact for additional information regarding this application.

3. REGULATED ENTITY (RE) INFORMATION ON PROJECT OR SITE

a) Regulated Entity Reference Number (RN)

A number issued by TCEQ's Central Registry to sites (a location where a regulated activity occurs) regulated by TCEQ. This is not a permit number, registration number, or license number. If this regulated entity has not been assigned an RN, leave this space blank.

If the site of your business is part of a larger business site, a Regulated Entity Number (RN) may already be assigned for the larger site. Use the RN assigned for the larger site. Search TCEQ's Central Registry to see if the larger site may already be registered as a regulated site at: http://www.tceq.texas.gov/goto/cr-searchrn

If the site is found, provide the assigned Regulated Entity Reference Number (RN) and provide the information for the site to be authorized through this application. The site information for this authorization may vary from the larger site information.

An example is a chemical plant where a unit is owned or operated by a separate corporation that is accessible by the same physical address of your unit or facility. Other examples include industrial parks identified by one common address but different corporations have control of defined areas within the site. In both cases, an RN would be assigned for the physical address location and the permitted sites would be identified separately under the same RN.

b) Site/Project Name/Regulated Entity

Provide the name of the site as known by the public in the area where the site is located. The name you provide on this application will be used in the TCEQ Central Registry as the Regulated Entity name.

c) Description of Activity Regulated

In your own words, briefly describe the primary business that you are doing that requires this authorization. Do not repeat the SIC Code description.

d) County

Identify the county or counties in which the regulated entity is located.

e) Latitude and Longitude

Enter the latitude and longitude of the site in degrees, minutes, and seconds or decimal form. For help obtaining the latitude and longitude, go to: http://www.tceq.texas.gov/gis/sqmaview.html or http://nationalmap.gov/ustopo

f) Site/Project (RE) Physical Address/Location Information

Enter the complete address for the site in Section A if the address can be validated through the US Postal Service. If the physical address is not recognized as a USPS delivery address, you may need to validate the address with your local police (911 service) or through an online map site used to locate a site. Please confirm this to be a complete and valid address. Do not use a rural route or post office box for a site location.

If a site does not have an address that includes a street (or house) number and street name, enter NO ADDRESS for the street name in Section A. In Section B provide a complete written location description. For example: "The site is located 2 miles west from intersection of Hwy 290 & IH35, located on the southwest corner of the Hwy 290 South bound lane." Provide the city (or nearest city) and zip code of the facility location.

4. GENERAL CHARACTERISTICS

a) Indian Country Lands

If your site is located on Indian Country Lands, the TCEQ does not have authority to process your application. You must obtain authorization through EPA, Region 6, Dallas. Do not submit this form to TCEQ.

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TCEQ-20022 Instructions (Effective 03/05/2013, Form rev. 06/13/2016)

b) Construction activity associated with facility associated with exploration, development, or production of oil, gas, or geothermal resources

If your activity is associated with oil and gas exploration, development, or production, you may be under jurisdiction of the Railroad Commission of Texas and may need to obtain authorization from EPA Region 6. For more information, see:

http://texreg.sos.state.tx.us/public/readtac\$ext.TacPage?sl=R&app=q&p_dir=&p_rloc=&p_tlo c=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&cli=3&cl=30

Construction activities associated with a facility related to oil, gas or geothermal resources may include the construction of a well site; treatment or storage facility; underground hydrocarbon or natural gas storage facility; reclamation plant; gas processing facility; compressor station; terminal facility where crude oil is stored prior to refining and at which refined products are stored solely for use at the facility; a carbon dioxide geologic storage facility; and a gathering. transmission, or distribution pipeline that will transport crude oil or natural gas, including natural gas liquids, prior to refining of such oil or the use of the natural gas in any manufacturing process or as a residential or industrial fuel.

Where required by federal law, discharges of stormwater associated with construction activities under the Railroad Commission's jurisdiction must be authorized by the EPA and the Railroad Commission of Texas, as applicable. Activities under Railroad Commission of Texas jurisdiction include construction of a facility that, when completed, would be associated with the exploration, development, or production of oil or gas or geothermal resources, such as a well site; treatment or storage facility; underground hydrocarbon or natural gas storage facility; reclamation plant; gas processing facility; compressor station; terminal facility where crude oil is stored prior to refining and at which refined products are stored solely for use at the facility; a carbon dioxide geologic storage facility under the jurisdiction of the Railroad Commission of Texas; and a gathering, transmission, or distribution pipeline that will transport crude oil or natural gas, including natural gas liquids, prior to refining of such oil or the use of the natural gas in any manufacturing process or as a residential or industrial fuel. The Railroad Commission of Texas also has jurisdiction over stormwater from land disturbance associated with a site survey that is conducted prior to construction of a facility that would be regulated by the Railroad Commission of Texas. Under 33 U.S.C. §1342(1)(2) and §1362(24), EPA cannot require a permit for discharges of stormwater from "field activities or operations associated with {oil and gas} exploration, production, processing, or treatment operations, or transmission facilities, including activities necessary to prepare a site for drilling and for the movement and placement of drilling equipment, whether or not such field activities or operations may be considered to be construction activities" unless the discharge is contaminated by contact with any overburden, raw material, intermediate product, finished product, byproduct, or waste product located on the site of the facility. Under §3.8 of this title (relating to Water Protection), the Railroad Commission of Texas prohibits operators from causing or allowing pollution of surface or subsurface water. Operators are encouraged to implement and maintain best management practices (BMPs) to minimize discharges of pollutants, including sediment, in stormwater during construction activities to help ensure protection of surface water quality during storm events.

c) Primary Standard Industrial Classification (SIC) Code

Provide the SIC Code that best describes the construction activity being conducted at this site.

Common SIC Codes related to construction activities include:

- 1521 Construction of Single Family Homes
- 1522 Construction of Residential Bldgs. Other than Single Family Homes
- 1541 Construction of Industrial Bldgs. and Warehouses

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- 1542 Construction of Non-residential Bldgs, other than Industrial Bldgs. and Warehouses
- 1611 Highway and Street Construction, except Highway Construction
- 1622 Bridge, Tunnel, and Elevated Highway Construction
- 1623 Water, Sewer, Pipeline and Communications, and Power Line Construction

For help with SIC Codes, go to: http://www.osha.gov/pls/imis/sicsearch.html

d) Secondary SIC Code

Secondary SIC Code(s) may be provided. Leave blank if not applicable. For help with SIC Codes, go to: http://www.osha.gov/pls/imis/sicsearch.html

e) Total Number of Acres Disturbed

Provide the approximate number of acres that the construction site will disturb. Construction activities that disturb less than one acre, unless they are part of a larger common plan that disturbs more than one acre, do not require permit coverage. Construction activities that disturb between one and five acres, unless they are part of a common plan that disturbs more than five acres, do not require submission of an NOI. Therefore, the estimated area of land disturbed should not be less than five, unless the project is part of a larger common plan that disturbs five or more acres. Disturbed means any clearing, grading, excavating, or other similar activities.

If you have any questions about this item, please contact the stormwater technical staff by phone at (512)239-4671 or by email at swgp@tceq.texas.gov.

f) Common Plan of Development

Construction activities that disturb less than five acres do not require submission of an NOI unless they are part of a common plan of development or for sale where the area disturbed is five or more acres. Therefore, the estimated area of land disturbed should not be less than five, unless the project is part of a larger common plan that disturbs five or more acres. Disturbed means any clearing, grading, excavating, or other similar activities.

For more information on "What is a common plan of development?" go to: www.tceq.texas.gov/permitting/stormwater/common_plan_of_development_steps.html

For further information, go to the TCEQ stormwater construction webpage at: www.tceq.texas.gov/goto/construction and search for "Additional Guidance and Quick Links". If you have any further questions about this item, please call the stormwater technical staff at (512)239-4671.

g) Identify the water body(s) receiving stormwater runoff

The stormwater may be discharged directly to a receiving stream or through a MS4 from your site. It eventually reaches a receiving water body such as a local stream or lake, possibly via a drainage ditch. You must provide the name of the water body that receives the discharge from the site (a local stream or lake).

If your site has more than one outfall you need to include the name of the first water body for each outfall, if they are different.

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h) Identify the segment number(s) of the classified water body(s)

Identify the classified segment number(s) receiving a discharge directly or indirectly. Go to the following link to find the segment number of the classified water body where stormwater will flow from the site: www.tceq.texas.gov/waterquality/monitoring/viewer.html

You may also find the segment number in TCEQ publication GI-316: www.tceq.texas.gov/publications/gi/gi-316

If the discharge is into an unclassified receiving water and then crosses state lines prior to entering a classified segment, select the appropriate watershed:

- 0100 (Canadian River Basin)
- o2oo (Red River Basin)
- 0300 (Sulfur River Basin)
- 0400 (Cypress Creek Basin)
- 0500 (Sabine River Basin)

Call the Water Quality Assessments section at (512)239-4671 for further assistance.

i) Discharge into MS4 - Identify the MS4 Operator

The discharge may initially be into a municipal separate storm sewer system (MS4). If the stormwater discharge is into an MS4, provide the name of the entity that operates the MS4 where the stormwater discharges. An MS4 operator is often a city, town, county, or utility district, but possibly can be another form of government. Please note that the Construction General Permit requires the Operator to supply the MS4 with a copy of the NOI submitted to TCEQ. For assistance, you may call the technical staff at (512)239-4671.

j) Surface Water bodies on list of impaired waters – Identify the impaired water body(s)

Indicate Yes or No if any surface water bodies receiving discharges from the construction site are on the latest EPA-approved CWA 303(d) List of impaired waters. Provide the name(s) of surface water bodies receiving discharges or potential discharges from the construction site that are on the latest EPA-approved CWA 303(d) List of impaired waters. The EPA-approved CWA 303(d) List of impaired waters in Texas can be found at:

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www.tceq.texas.gov/waterquality/assessment/305_303.html

NOTE: Do not use any "draft" documents.

JAN 1 3 2017

k) Discharges to the Edwards Aquifer Recharge Zone and Certification COUNTY ENGINEER See maps on the TCEQ website to determine if the site is located within the Recharge Zone, Contributing Zone, or Contributing Zone within the Transition Zone of the Edwards Aquifer at: www.tceq.texas.gov/field/eapp/viewer.html

If the discharge or potential discharge is within the Recharge Zone, Contributing Zone, or Contributing Zone within the Transition Zone of the Edwards Aquifer, a site specific authorization approved by the Executive Director under the Edwards Aquifer Protection Program (30 TAC Chapter 213) is required before construction can begin. The certification must be answered "Yes" for coverage under the Construction General Permit. The TCEQ approved plan must be readily available for TCEQ staff to review at the time that the NOI is submitted.

The general permit requires the approved Contributing Zone Plan or Water Pollution Abatement Plan to be included or referenced as a part of the Stormwater Pollution Prevention Plan.

For questions regarding the Edwards Aquifer Protection Program, contact the appropriate TCEQ Regional Office. For projects in Hays, Travis and Williamson Counties: Austin Regional Office, 12100 Park 35 Circle, Austin, TX 78753, 512-339-2929. For Projects in Bexar, Comal, Kinney, Medina and Uvalde Counties: TCEQ San Antonio Regional Office, 14250 Judson Rd., San Antonio, TX 78233-4480, 210-490-3096.

5. CERTIFICATIONS

Failure to indicate **Yes** to ALL of the certification items may result in denial of coverage under the general permit.

a) Certification of Understanding the Terms and Conditions of Construction General Permit (TXR150000)

Provisional coverage under the Construction General Permit (TXR150000) begins 7 days after the completed paper NOI is postmarked for delivery to the TCEQ. (Electronic applications submitted through ePermits have immediate provisional coverage). You must obtain a copy and read the Construction General Permit before submitting your application. You may view and print the Construction General Permit for which you are seeking coverage at the TCEQ web site: www.tceq.texas.gov/goto/construction

b) Certification of Legal Name

The full legal name of the applicant as authorized to do business in Texas is required. The name must be provided exactly as filed with the Texas Secretary of State (SOS), or on other legal documents forming the entity, that is filed in the county where doing business. You may contact the SOS at (512)463 5555, for more information related to filing in Texas.

c) Understanding of Notice of Termination

A permittee shall terminate coverage under this Construction General Permit through the JAN 1 3 2017 submittal of a NOT when the operator of the facility changes, final stabilization has been reached, the discharge becomes authorized under an individual permit, or the construction UNTY ENGINEER activity never began at this site.

d) Certification of Stormwater Pollution Prevention Plan

The SWP3 identifies the areas and activities that could produce contaminated runoff at your site and then tells how you will ensure that this contamination is mitigated. For example, in describing your mitigation measures, your site's plan might identify the devices that collect and filter stormwater, tell how those devices are to be maintained, and tell how frequently that maintenance is to be carried out. You must develop this plan in accordance with the TCEQ general permit requirements. This plan must be developed and implemented before you complete this NOI. The SWP3 must be available for a TCEQ investigator to review on request.

Operator Certification:

The certification must bear an original signature of a person meeting the signatory requirements specified under 30 Texas Administrative Code (TAC) §305.44.

IF YOU ARE A CORPORATION:

The regulation that controls who may sign an NOI or similar form is 30 Texas Administrative Code §305.44(a)(1) (see below). According to this code provision, any corporate representative may sign an NOI or similar form so long as the authority to sign such a document has been delegated to that person in accordance with corporate procedures. By signing the NOI or similar form, you are certifying that such authority has been delegated to you. The TCEQ may request documentation evidencing such authority.

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IF YOU ARE A MUNICIPALITY OR OTHER GOVERNMENT ENTITY:

The regulation that controls who may sign an NOI or similar form is 30 Texas Administrative Code §305.44(a)(3) (see below). According to this code provision, only a ranking elected official or principal executive officer may sign an NOI or similar form. Persons such as the City Mayor or County Commissioner will be considered ranking elected officials. In order to identify the principal executive officer of your government entity, it may be beneficial to consult your city charter, county or city ordinances, or the Texas statute(s) under which your government entity was formed. An NOI or similar document that is signed by a government official who is not a ranking elected official or principal executive officer does not conform to §305.44(a)(3). The signatory requirement may not be delegated to a government representative other than those identified in the regulation. By signing the NOI or similar form, you are certifying that you are either a ranking elected official or principal executive officer as required by the administrative code. Documentation demonstrating your position as a ranking elected official or principal executive officer may be requested by the TCEQ.

If you have any questions or need additional information concerning the signatory requirements discussed above, please contact the Texas Commission on Environmental Quality's Environmental Law Division at (512)239-0600.

30 Texas Administrative Code §305.44. Signatories to Applications

- (a) All applications shall be signed as follows.
- (1) For a corporation, the application shall be signed by a responsible corporate officer. For purposes of this paragraph, a responsible corporate officer means a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. Corporate procedures governing authority to sign permit or post-closure order applications may provide for assignment or delegation to applicable corporate positions rather than to specific individuals.
- (2) For a partnership or sole proprietorship, the application shall be signed by a general partner or the proprietor, respectively.
- (3) For a municipality, state, federal, or other public agency, the application shall be signed by either a principal executive officer or a ranking elected official. For purposes of this paragraph, a principal executive officer of a federal agency includes the chief executive officer of the agency, or a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., regional administrator of the EPA).

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Texas Commission on Environmental Quality General Permit Payment Submittal Form

Use this form to submit your Application Fee only if you are mailing your payment.

· Complete items 1 through 5 below:

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- Staple your check in the space provided at the bottom of this document.
- · Do not mail this form with your NOI form.

JAN : 3 :: 17

· Do not mail this form to the same address as your NOI.

COUNTY ENGINEER

Mail this form and your check to:

BY REGULAR U.S. MAIL

Texas Commission on Environmental Quality Financial Administration Division Cashier's Office, MC-214 P.O. Box 13088 Austin, TX 78711-3088

BY OVERNIGHT/EXPRESS MAIL

Texas Commission on Environmental Quality Financial Administration Division Cashier's Office, MC-214 12100 Park 35 Circle Austin, TX 78753

	Fee Code: GPA	General Permit:	TXR150000
1.	Check / Money Order Number:		
2,	Amount of Check/Money Order:		
3.	Date of Check or Money Order:		
4.	Name on Check or Money Order:		
5.	NOI INFORMATION		
	If the check is for more than one NOI, list each Project Address exactly as provided on the NOI. DO NOT SUITHIS FORM AS IT COULD CAUSE DUPLICATE PER	BMIT A COPY OF TH	
	See Attached List of Sites (If more space is needed, yo	u may attach a list.)	
	Project/Site (RE) Name: 4S Ranch Amenity Center		
	Project/Site (RE) Physical Address:		
	Approximately 2,000 ft. East of the intersection of Sta TX 78163	ahl Lane and Mustang	g Vista, Bulverde,

Staple Check in This Space

	- 1
	- 1
1.0	
	100
	-

AGENT AUTHORIZATION FORM (TCEQ-0599)

Agent Authorization Form

For Required Signature
Edwards Aquifer Protection Program
Relating to 30 TAC Chapter 213
Effective June 1, 1999

	Richard Mott	
***************************************	Print Name	
	Director	
	Title - Owner/President/Other	
of	Hidden Trails Community Association, Inc.	
	Corporation/Partnership/Entity Name	
have authorized	Pape-Dawson Engineers, Inc.	
	Print Name of Agent/Engineer	
of	Pape-Dawson Engineers, Inc.	
	Print Name of Firm	

to represent and act on the behalf of the above named Corporation, Partnership, or Entity for the purpose of preparing and submitting this plan application to the Texas Commission on Environmental Quality (TCEQ) for the review and approval consideration of regulated activities.

I also understand that:

- 1. The applicant is responsible for compliance with 30 Texas Administrative Code Chapter 213 and any condition of the TCEQ's approval letter. The TCEQ is authorized to assess administrative penalties of up to \$10,000 per day per violation.
- For those submitting an application who are not the property owner, but who have the right to control and possess the property, additional authorization is required from the owner.
- 3. Application fees are due and payable at the time the application is submitted. The application fee must be sent to the TCEQ cashier or to the appropriate regional office. The application will not be considered until the correct fee is received by the commission.
- 4. A notarized copy of the Agent Authorization Form must be provided for the person preparing the application, and this form must accompany the completed application.
- No person shall commence any regulated activity on the Edwards Aquifer Recharge Zone, Contributing Zone or Transition Zone until the appropriate application for the activity has been filed with and approved by the Executive Director.

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SIGNATURE PAGE:

Applicant's Signature

11/22/16 Date

THE STATE OF Lexar &

BEFORE ME, the undersigned authority, on this day personally appeared Ruhur Mott known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that (s)he executed same for the purpose and consideration therein expressed.

GIVEN under my hand and seal of office on this 28th day of Mounte

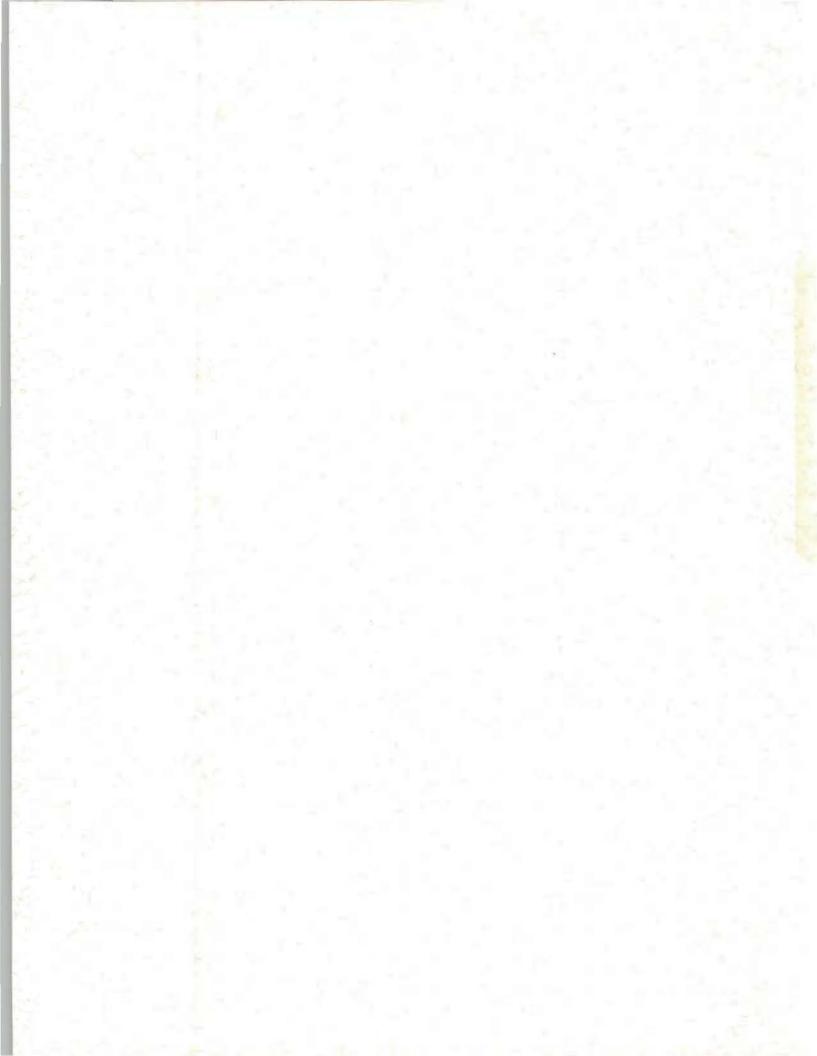
NOTARY PUBLIC

Typed or Printed Name of Notary

MY COMMISSION EXPIRES:

DOROTHY RENESE COLLIER Notary Public. State of Texas My Commission Expires May 13, 2017

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APPLICATION FEE FORM (TCEQ-0574)

Application Fee Form

Texas Commission on Environmental Quality Name of Proposed Regulated Entity: 4S Ranch Amenity Center Regulated Entity Location: Approximately 2,000 ft east of intersection of Mustang Vista and Stahl Lane, Bulverde, TX 78163 Name of Customer: Hidden Trails Community Association, Inc. Phone: (210) 403-6200 Contact Person: Richard Mott Customer Reference Number (if issued):CN Not yet assigned Regulated Entity Reference Number (if issued):RN 105628622 Austin Regional Office (3373) Travis Williamson Havs San Antonio Regional Office (3362) Uvalde Medina Bexar Comal Comal Application fees must be paid by check, certified check, or money order, payable to the Texas Commission on Environmental Quality. Your canceled check will serve as your receipt. This form must be submitted with your fee payment. This payment is being submitted to: San Antonio Regional Office Austin Regional Office Overnight Delivery to: TCEQ - Cashier Mailed to: TCEQ - Cashier Revenues Section 12100 Park 35 Circle Mail Code 214 Building A, 3rd Floor RECEIVED P.O. Box 13088 Austin, TX 78753 JAN 1 3 2017 Austin, TX 78711-3088 (512)239-0357 Site Location (Check All That Apply): **COUNTY ENGINEER** Contributing Zone Recharge Zone Transition Zone Type of Plan Size Fee Due Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling Acres Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks Acres Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential 21.82 Acres | \$ 6,500 Sewage Collection System L.F. Acres \$ Lift Stations without sewer lines Underground or Aboveground Storage Tank Facility Tanks \$ Piping System(s)(only) Each \$ Exception Each

Signature:

1 of 2

Each \$

Extension of Time

Date: <u>01/03/17</u>

Application Fee Schedule

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Texas Commission on Environmental Quality

Edwards Aquifer Protection Program 30 TAC Chapter 213 (effective 05/01/2008)

COUNTY ENGINEER

Water Pollution Abatement Plans and Modifications

Contributing Zone Plans and Modifications

Project	Project Area in Acres	Fee
One Single Family Residential Dwelling	< 5	\$650
Multiple Single Family Residential and Parks	< 5	\$1,500
Security (Constitution of the Constitution of	5 < 10	\$3,000
	10 < 40	\$4,000
	40 < 100	\$6,500
	100 < 500	\$8,000
	≥ 500	\$10,000
Non-residential (Commercial, industrial, institutional,	< 1	\$3,000
multi-family residential, schools, and other sites	1 < 5	\$4,000
where regulated activities will occur)	5 < 10	\$5,000
	10 < 40	\$6,500
	40 < 100	\$8,000
	≥ 100	\$10,000

Organized Sewage Collection Systems and Modifications

Project	Cost per Linear Foot	Minimum Fee- Maximum Fee		
Sewage Collection Systems	\$0.50	\$650 - \$6,500		

Underground and Aboveground Storage Tank System Facility Plans and **Modifications**

Project	Cost per Tank or Piping System	Minimum Fee- Maximum Fee
Underground and Aboveground Storage Tank Facility	\$650	\$650 - \$6,500

Exception Requests

Project	Fee				
Exception Request	\$500				

Extension of Time Requests

Duning	F
Project	ree

Project	Fee	
Extension of Time Request	\$150	

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COUNTY ENGINEER

CORE DATA FORM (TCEQ-10400)



TCEQ Core Data Form

TCI	EQ Use	Only	,	
	- 4 - 0 - 0		6	

For detailed instructions regarding completion of this form, please read the Core Data Form Instructions or call 512-239-5175.

SECTION I: General Infor	mation								JAN 1 3 2017
1. Reason for Submission (If other is					60				
New Permit, Registration or Author	ization (Core Data	a Form s	hould be	submitted	21 0.00	- 1943A	ogram application	··)_COL	INTY ENGINEER
Renewal (Core Data Form should		h the ren	ewal forn	n) [her	W2 0 2 2		
2. Customer Reference Number (if Iss	sued)		nis link to		3. Re	gulate	ed Entity Referen	ice Numbe	er (if issued)
CN			r RN num ral Regi <u>s</u> tr		RN	110	562862	2	
SECTION II: Customer In	<u>formation</u>								
4. General Customer Information	5. Effective Da	ate for C	ustomer	Informat	ion U	pdate	s (mm/dd/yyyy)	01/04/2	2017
New Customer				Information				Regulated I	Entity Ownership
Change in Legal Name (Verifiable w	AN THE WAR BURNEY	STORES ALC: 1	10,000,000,000				Del Shirles Aberto		active with the
The Customer Name submitted Texas Secretary of State (SOS)	77 9 -47 1 COMO 11 61 - 51 79 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	112-14-12-12-12-12-12-12-12-12-12-12-12-12-12-			•			rent and	active with the
				IDIIC AC	200			our Cualan	a shalawa
6. Customer Legal Name (If an individu	22	51 069 C			is ne	W Cus	tomer, enter previo	ous Custom	er below:
Hidden Trails Comn		*							
7. TX SOS/CPA Filing Number	8. TX State Ta	contract	igits)				Tax ID (9 digits)	10. DUN	S Number (if applicable)
802573970	3206195826	63		_	81-	4577 T	203		
11. Type of Customer: Corpora	tion	[Individ	ual		Part	nership: 🔲 Genera	al 🗌 Limited	
Government: City County Federal	State Other		Sole P	roprietors			Other:		
12. Number of Employees ■ 0-20	251-500	☐ 501	and high	ier		Indep Yes	endently Owned	and Opera	ated?
14. Customer Role (Proposed or Actual)	– as it relates to the	e Regulat	ed Entity l	isted on thi	s form	. Pleas	e check one of the	following:	
Owner Oper	ator		Owner 8	Operato	r				
Occupational Licensee Resp	onsible Party		Voluntar	y Cłeanuj	Appl	licant	☐Other:		
401 Congress Aver	nue, Suite 210	00							
15. Mailing Address:									
City Austin		State	TX	Z	P 7	7870	I	ZIP+4	3798
16. Country Mailing Information (# out	side USA)	-		17. E-M	ail Ad	Idress	(if applicable)	-	
						Ri	chard. Mott@	lennar.	com
18. Telephone Number	11	9. Exten	slon or (Code			20. Fax Numbe	r (if applica	ble)
(210)403 -6200	1						() .		
SECTION III: Regulated I	Entity Infor	matio	n						
21. General Regulated Entity Informa		_		elected be	low ti	his for	n should be acco	mpanied by	(a permit application)
	e to Regulated En						Entity Information		
The Regulated Entity Name sur of organizational endings such		200		order to	me	et TC	EQ Agency D	ata Stan	dards (removal
22. Regulated Entity Name (Enter name				is taking p	lace.)				
4S Ranch Amenity Center									

23. Street Address of	reet Address of Not yet assigned												
the Regulated Entity:													
(No PO Boxes)	City State			ZIP				ZIP+4					
24. County	Com	al				•						ı	
	J	Enter Physical L	ocatio	n Descriptio	n if no s	treet add	iress	is provid	ded.			***************************************	
25. Description to Physical Location:	App	roximately 2,00	00 ft 1	East of int	ersect	ion of I	Must	ang Vi	sta and	Stahl	Lane		
26. Nearest City	. l							State			Nea	rest ZIP Code	
Bulverde									Texas			78163	
27. Latitude (N) In Deci	mal:	29.768783	3			28. Long	itude (W) In	Decimal:	-98.	.40834	12	
Degrees	Minute	S	Secon	ids .		Degrees			Minutes			Seconds	
29		46		7.619			98			24		30.031	
29. Primary SIC Code (4 digits) 30. Secondary SI				e (4 digits)	31. Pr (5 or 6	rimary NA digits)	AICS (ode		Second 6 digits)	lary NA	ICS Code	
7999		79	991			713	3990				7132	40	
33. What is the Primary E	Busines	s of this entity?	(Do not r	epeal the SiC o	r NAICS d	escription.)					HE	UEIVEU	
Construction of an A	menit	y Center and P	ark								JAN	1 3 2017	
	401	Congress Ave	nue, S	Suite 2100)								
34. Mailing										CC	UNT	Y ENGINE	
Address:	C	City Austin State		State	TX		ZIP	7870)1		Z3P + 4	3798	
35. E-Mail Address:	i	Richard.Mott(@lenr							L <u>-</u>			
36. Telepho				37. Extensi	on or C	ode		38	3. Fax Nu	mber <i>(i</i>	f applic	able)	
.,	103- 62								·	j .			
39. TCEQ Programs and II orm. See the Core Data Form	D Numb	ers Check all Progra		write in the pe	rmits/regi	istration nu	ımbers	that will t	e affected	by the u	pdates s	ubmitted on this	
☐ Dam Safety	☐ Dis			Edwards Aquif	er	☐ En	nission	s Inventor	y Air	☐ Ind	ustrial Ha	azardous Wasle	
☐ Municipat Solid Waste	□Ne	w Source Review Air		DSSF		☐ Pe	troleun	n Storage	Tank	☐ PW	/S		
Sludge	Sto	orm Water		☐ Title V Air		☐ Tires				Used Oil			
☐ Voluntary Cleanup	☐ Wa	aste Water		Mastewater Ag	griculture	W	ater Ric	ghts		Other:			
	<u> </u>												
SECTION IV: Pro	epare	<u>r Informatio</u>	11										
40. Name: Jean Prit	chett,	EIT				41. Titl	e:	Envir	onment	al Spe	ecialis	t	
42. Telephone Number	4	3. Ext./Code	44. Fa	ax Number		45. E-	Mail A	ddress					
(21) 375 9000			(21)	375 90	10	jprite	hett(<i>@</i> раре	-dawso	n.com	3		
SECTION V: Au	thori	zed Sionatur	<u>, , , , , , , , , , , , , , , , , , , </u>			'							
46. By my signature below signature authority to submidentified in field 39	v, I certi	fy, to the best of my	- knowl										

Job Title:

Sr. Vice President

Phone:

Date:

(210)375-9000

01/03/17

Pape-Dawson Engineers, Inc.

Cara C. Tackett, P.E.

Company:

Signature:

Name(In Print):



TCEQ Core Data Form

TCEQ Use Only			

For detailed instructions regarding completion of this form, please read the Core Data Form Instructions or call 512-239-5175.

SECTION I: General Info	<u>rmation</u>						
1. Reason for Submission (If other							-
New Permit, Registration or Author	orization (Core Date	a Form sho	uld be submitt	ed with	the program applicati	on.)	
Renewal (Core Data Form shou		h the renew	val form)	Ot			
2. Customer Reference Number (if is	ssued)		link to search	3. Re	gulated Entity Refer	ence Numbe	r (if Issued)
CN 602412207			N numbers in Registry**	RN	10562862	22	
SECTION II: Customer I	<u>nformation</u>		_				
4. General Customer Information	5. Effective Da	ate for Cus	tomer Inform	ation U	pdates (mm/dd/yyyy)		
New Customer			tomer Informa		(8-16) S	5	Entity Ownership
Change in Legal Name (Verifiable		10002010					
The Customer Name submitte Texas Secretary of State (SOS		B				urrent and	active with the
6. Customer Legal Name (If an individ	50 5 (10) 10) 10) 10	- 147-0 		10,757	w Customer, enter pre	vious Custome	er below:
8	W	8				a 	
7. TX SOS/CPA Filing Number	8. TX State Ta	X ID (11 digit	s)	9. F	ederal Tax 1D (9 digits)	10. DUN	S Number (if applicable)
11. Type of Customer: Corpor	ation		Individua!		Partnership: Gen	eral 🗀 Limited	
Government: City County Federa	I State Other		Sole Proprieto	rship	Other:		
12. Number of Employees 0-20 21-100 101-250	251-500	☐ 501 ar	nd higher		Independently Owne Yes		ted?
14. Customer Role (Proposed or Actua	l) – as it relates to the	e Regulated	Entity listed on	this form	. Please check one of th	e following:	
Open Open			wner & Opera				
Occupational Licensee Res	ponsible Party		oluntary Clean	up Appi	licant Other:		
15. Mailing							
Address:							
City		State		ZIP		ZIP + 4	
16. Country Malling Information (if o	utside USA)		17. E-	Mail Ad	Idress (if applicable)		
18. Telephone Number	1	9. Extension	on or Code		20. Fax Numt	per (if applicat	ble)
() -				_	()	-	
SECTION III: Regulated	Entity Infor	mation					
21. General Regulated Entity Inform New Regulated Entity Upda					his form should be acculated Entity Informati		a permit application)
The Regulated Entity Name so	The state of the s	MA 101	20 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -		The state of the s		lards (removal
of organizational endings suc						RECE	VED
22. Regulated Entity Name (Enter nar	ne of the site where t	he regulated	l action is taking	place.)		JAN T3	7017
4S Ranch Amenity Center						1HIA T 9	LUIT

23. Street Address of	Not ye	et assigned								RECEIVED
the Regulated Entity: (No PO Boxes)	City		State	Г		ZIP	T		ZIP+4	JAN 1 3 201
24. County	Coma	1	-	-					1000000 100000	NITY ENOU
		Enter Physical Lo	cation Descriptio	n if no :	street a	ddress	is provi	ded.		INTY ENGI
25. Description to Physical Location:	larges.	oximately 2,00	ANYOLING HORE OF BRANCH		or s	D. C. (1975)		N DE AS	Stahl Lane	
26. Nearest City	140						State		Nea	arest ZIP Code
Bulverde								Texas		78163
27. Latitude (N) In Deci	mal:	29.768783			28. Lon	gitude	(W) Ir	Decimal:	-98.40834	42
Degrees	Minutes		Seconds		Degrees			Minutes		Seconds /
29		46	7.619			98		2	24	30.031
29. Primary SIC Code (4 c	ligits)	30. Secondary SIC	Code (4 digits)	31. P (5 or 6	rimary i digits)	VAICS	Code	32. Se (5 or 6 d	condary NA	ICS Code
7999		799	91			13990)		7139	40
33. What is the Primary E	Business	of this entity? (Do not repeat the SIC o	r NAICS o	description	1.)			_	
Construction of an A						7				
	401 (Congress Aven	ue, Suite 2100	0						
34. Mailing										
Address:	Cify	City Austin		TX		ZIP	787	01	ZIP + 4	3798
35. E-Mail Address		Richard.Mott@	State State				1,0,	<u> </u>	L.,	0170
36. Teleph			37. Extensi	ion or C	ode		3	8. Fax Num	ber (if applic	able)
	103- 6200				-			() -	
39, TCEQ Programs and I	D Numbe	rs Check all Program		ermits/reg	gistration	number	s that will	be affected by	y the updates s	submitted on this
☐ Dam Safety	☐ Distri	1000	Edwards Aquif	ier		Emission	ns Invento	ory Air [Industrial H	azardous Waste
	i,									
☐ Municipal Solid Waste	New	Source Review Air	OSSF		☐ Petroleum Storage Ta			e Tank [nk DPWS	
									_	
Sludge	Storr	n Water	☐ Title V Air		Tires		(☐ Used Oil		
☐ Voluntor: Class	☐ Mara	te Waler	□ Mastarretes 4	aria di		Main- C	ahte		700	
☐ Voluntary Cleanup	vvas	ie water	☐ Wastewater A	griculture		Water R	ignis	- 1	Other:	
SECTION IV: Pr	eparer	Information	<u> </u>							
40. Name: Jean Prit	chett, E	EIT	71		41. T	itle:	Envir	onmental	Specialis	t
42. Telephone Number	43.	. Ext./Code	44. Fax Number		45.	E-Mail .	Address		•	
(210)375-9000			(210)375-90	10	jpri	tchett	@рар	e-dawson	.com	
SECTION V: Au	thorize	ed Signature								
46. By my signature below signature authority to submited in Gold 20	v, I certify	, to the best of my !	knowledge, that th	e inform Section	nation pr II, Field	ovided 6 and/o	in this for as requ	orm is true ar uired for the	nd complete, updates to the	and that I have tD numbers

identified in field 39.

Company:	Pape-Dawson Engineers, Inc. Job Title: Sr. Vic		e President		
Name(In Print):	Cara C. Tackett, P.E.			Phone:	(210)375-9000
Signature:	ana or Stulees	-		Date:	01/03/17

LENNAR

November 30, 2016

Mr. Todd Jones TCEQ 14250 Judson Rd. San Antonio, TX 78233

Re:

4S Ranch Amenity Center Contributing Zone Plan

Dear Mr. Jones:

This letter is to inform you that I authorize Hidden Trails Community Association, Inc., to conduct regulated activity as it relates to the 4S Ranch Amenity Center Contributing Zone Plan (CZP) currently owned by Lennar Homes of Texas Land and Construction, Ltd., as indicated by Comal County Appraisal District. A preliminary plat of the 4S Ranch Amenity Center is included with this letter.

If you have any questions or require additional information, please do not hesitate to contact our office at your earliest convenience.

Sincerely,

David Grove

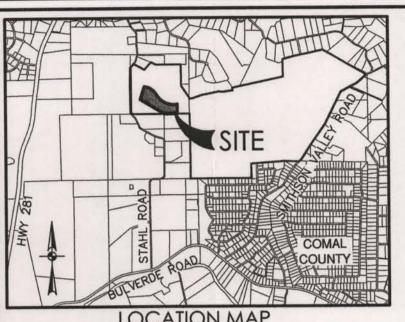
Lennar Homes of Texas Land and Construction, Ltd.

Vice President

JAN 1 3 2017

COUNTY ENGINEER





LOCATION MAP

LEGEND

DOC DOCUMENT NUMBER OPR OFFICIAL PUBLIC RECORDS (SURVEYOR) O SET 1/2" IRON ROD (PD) (OFFICIAL PUBLIC RECORDS

BEXAR COUNTY, TEXAS -1140 — EXISTING CONTOURS - - - ORIGINAL SURVEY/COUNTY LINE

20' WATER EASEMENT

CITY PUBLIC SERVICE EASEMENT PREPARED OCTOBER 1999 BY PAPE-DAWSON INO RECORDING INFORMATION

FOUND 1/2" IRON ROD

(UNLESS NOTED OTHERWISE)

VARIABLE WIDTH DRAINAGE EASEMENT TO EXPIRE UPON INCORPORATION INTO FUTURE PLAT (4S RANCH PHASE-I)

14' GAS, ELECTRIC, TELEPHONE AND CABLE TV EASEMENT (4S RANCH PHASE-I) VARIABLE WIDTH DRAINAGE

EASEMENT (4S RANCH PHASE-I) 12' SANITARY SEWER EASEMENT (4S RANCH PHASE-I)

VARIABLE WIDTH WATER **EASEMENT (4S RANCH PHASE-I)**

1. FUTURE DEVELOPMENT IS SUBJECT TO CHAPTER 114-STREETS, SIDEWALKS AND OTHER

2. CONTOURS SHOWN ARE BASED OFF OF AN ON THE GROUND SURVEY. THE DATUM USED TO GENERATE THE CONTOURS IS THE NORTH AMERICAN DATUM OF 1983 NAD83 (NA2011) EPOCH 2010.00, FROM THE TEXAS COORDINATE SYSTEM ESTABLISHED FOR THE SOUTH CENTRAL ZONE.

STATE OF TEXAS

I HEREBY CERTIFY THAT PROPER ENGINEERING CONSIDERATION HAS BEEN GIVEN THIS PLAT TO THE MATTERS OF STREETS, LOTS AND DRAINAGE LAYOUT. TO THE BEST OF MY KNOWLEDGE THIS PLAT CONFORMS TO ALL REQUIREMENTS OF THE UNIFIED DEVELOPMENT CODE, EXCEPT FOR THOSE VARIANCES GRANTED BY THE CITY OF BULVERDE PLANNING COMMISSION.

> CARA C. TACKETT, P.E. LICENSED PROFESSIONAL ENGINEER PAPE-DAWSON ENGINEERS, INC. 2000 NW LOOP 410 SAN ANTONIO, TEXAS 78213

STATE OF TEXAS COUNTY OF BEXAR

BEFORE ME, THE UNDERSIGNED AUTHORITY ON THIS DAY PERSONALLY APPEARED CARA C. TACKETT KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT, AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME FOR THE PURPOSES AND CONSIDERATIONS THEREIN EXPRESSED AND IN THE CAPACITY THEREIN STATED. GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS , A.D. 20

NOTARY PUBLIC, BEXAR COUNTY, TEXAS

STATE OF TEXAS COUNTY OF BEXAR

II, THE UNDERSIGNED JOHN NOEL NICHOLLS, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF TEXAS, HEREBY CERTIFY THAT THIS PLAT IS TRUE AND CORRECTLY MADE UNDER MY SUPERVISION AND IN COMPLIANCE WITH CITY AND STATE SURVEY REGULATIONS AND LAWS AND MADE ON THE GROUND AND THAT THE CORNER MONUMENTS WERE PROPERLY PLACED UNDER MY SUPERVISION.

PRELIMINARY, THIS DOCUMENT SHALL NOT BE RECORDED FOR ANY PURPOSE AND SHALL NOT BE USED OR VIEWED OR RELIED UPON AS A FINAL SURVEY DOCUMENT.

JOHN NOEL NICHOLLS REGISTERED PROFESSIONAL LAND SURVEYOR. PAPE-DAWSON ENGINEERS, INC. SAN ANTONIO, TEXAS 78213

STATE OF TEXAS

COUNTY OF BEXAR BEFORE ME, THE UNDERSIGNED AUTHORITY ON THIS DAY PERSONALLY APPEARED JOHN NOEL NICHOLLS. KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT, AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME FOR THE PURPOSES AND CONSIDERATIONS THEREIN EXPRESSED AND IN THE CAPACITY THEREIN STATED. GIVEN UNDER MY HAND AND SEAL OF OFFICE DAY OF_ , A.D. 20

SUBDIVISION PLAT OF **4S RANCH AMENITY CENTER**

BEING 21,739 ACRES OUT OF THAT 753.635 ACRES CONVEYED TO LENNAR HOMES OF TEXAS LAND AND CONSTRUCTION LTD IN DEED RECORDED IN DOCUMENT 201506007928, OUT OF THAT 7.600 ACRE REVERSION TRACT CONVEYED TO LENNAR HOMES OF TEXAS LAND AND CONSTRUCTION LTD IN DEED RECORDED IN DOCUMENT 201506007932, AND OUT OF THAT 9.530 ACRES CONVEYED TO LENNAR HOMES OF TEXAS LAND AND CONSTRUCTION LTD IN DEED RECORDED IN DOCUMENT 201506007932, OF THE OFFICIAL PUBLIC RECORDS OF COMAL COUNTY, TEXAS. SAID 21.739 ACRE TRACT OUT OF THE JOHN KADERLI SURVEY NUMBER 449, ABSTRACT

308, IN COMAL COUNTY, TEXAS.

C.P.S. NOTES:

1. THE CITY OF SAN ANTONIO AS PART OF ITS ELECTRIC AND GAS SYSTEM (CITY PUBLIC SERVICE ENERGY) IS HEREBY DEDICATED THE EASEMENTS AND RIGHTS-OF-WAY FOR ELECTRIC AND GAS DISTRIBUTION AND SERVICE FACILITIES IN THE AREAS DESIGNATED ON THIS PLAT AS "ELECTRIC EASEMENT," "GAS EASEMENT," "ANCHOR EASEMENT," "SERVICE EASEMENT," "OVERHANG EASEMENT," "UTILITY EASEMENT," AND "TRANSFORMER EASEMENT" FOR THE PURPOSE OF INSTALLING, CONSTRUCTING, RECONSTRUCTING, MAINTAINING, REMOVING, INSPECTING, PAIROLLING, AND ERECTING POLES, HANGING OR BURYING WIRES, CABLES, CONDUITS, PPELINES OR TRANSFORMERS, EACH WITH ITS NECESSARY APPURTENANCES; TOGETHER WITH THE RIGHT OF INGRESS AND EGRESS OVER GRANTOR'S ADJACENT LAND, THE RIGHT TO RELOCATE SAID FACILITIES WITHIN SAID EASEMENT AND RIGHT-OF-WAY AREAS, AND THE RIGHT TO REMOVE FROM SAID LANDS ALL TREES OF PARTS THEREBOF, OR OTHER OBSTRUCTIONS WHICH ENDANGER OR MAY INTERFERE WITH THE EFFICIENCY OF SAID LINES OR APPURTENANCES THERETO, IT IS AGREED AND UNDERSTOOD THAT NO BUILDINGS, CONCRETE SLABS, OR WALLS WILL BE PLACED WITHIN SAID EASEMENT AREA.

2. ANY CYS ENERGY MONETABY LOSS RESULTING FROM MODIFICATIONS REQUIRED OF CYS EQUIPMENT, LOCATED WITHIN SAID EASEMENT, DUE TO GRADE CHANGES OR GROUND ELEVATION ALTERATION.

3. THIS PLAT DOES NOT AMEND, ALTER, RELEASE OR OTHERWISE AFFECT ANY EXISTING ELECTRIC, CAS, WATER, SEWER, DRAINAGE, TELEPHONE, CABLE EASEMENTS OR ANY OTHER EASEMENTS FOR UTILITIES UNLESS THE CHANGES TO SUCH

NAD83 (NA2011) EPOCH 2010.00 FROM THE TEXAS COORDINATE SYSTEM 7.600 ACRE REVERSION TRACT ESTABLISHED FOR THE SOUTH CENTRAL ZONE DISPLAYED IN GRID VALUES DERIVED LENNAR HOMES OF TEXAS FROM THE NGS COOPERATIVE CORS NETWORK. 3. DIMENSIONS SHOWN ARE SURFACE. LAND AND CONSTRUCTION, LTD. 4. BEARINGS ARE BASED ON THE NORTH AMERICAN DATUM OF 1983 NAD83 (DOC 2015-060-07932 OPR) (NA2011) EPOCH 2010.00, FROM THE TEXAS COORDINATE SYSTEM ESTABLISHED 753.635 ACRES LENNAR HOMES OF TEXAS LOT 1 LAND AND CONSTRUCTION OTD (DOC 2015-060-07928 UPR) BLOCK 7 753.635 ACRES LENNAR HOMES OF TEXAS JOHN KADERLI LAND AND CONSTRUCTION, LTD. (DOC 2015-060-07928 OPR) SURVEY NUMBER 449 ABSTRACT - 308 JOHN KADERLI SURVEY NUMBER 449 LENNAR HOMES OF TEXAS LAND AND CONSTRUCTION, LTD. ABSTRACT - 308

> F.H. FAIGAUX SURVEY NUMBER 578/

(DOC 2015-060-07932 OPR)

107.112 ACRES HELENA KLECK VIVIAN (DOC 1998-060-28689 OPR)

S89°49'33"W N: 13827185.78 E: 2156053.10

J. RITTIMAN SURVEY NUMBER 579

BLOCK 7

(4S RANCH PHASE-I) (CONCURRENT PLATTING).

DRAINAGE, TELEPHONE, CABLE EASEMENTS OR ANY OTHER EASEMENTS FOR UTILITIES UNLESS THE CHANGES TO SUCH JESSEMENTS ARE DESCRIBED BELOW; NONE

PROPERTY CORNERS ARE MONUMENTED WITH CAP OR DISK MARKED

2. COORDINATES SHOWN ARE BASED ON THE NORTH AMERICAN DATUM OF 1983

"PAPE-DAWSON" UNLESS NOTED OTHERWISE.

RECEIVED JAN 1 3 2017

COUNTY ENGINEER

STATE OF TEXAS

BLOCK 7

(4S RANCH PHASE-I)

I (WE), THE UNDERSIGNED OWNER(S) OF THE LAND SHOWN ON THIS PLAT, AND DESIGNATED HEREIN AS THE 4S RANCH AMENITY CENTER SUBDIVISION TO THE CITY OF BULVERDE, COUNTY OF COMAL, TEXAS, AND WHOSE NAME IS SUBSCRIBED HERETO. DO HEREBY SUBDIVIDE SUCH PROPERTY AND DEDICATE TO THE USE OF THE PUBLIC ALL STREETS, ALLEYS, PARKS, DRAINS, EASEMENTS, AND PUBLIC PLACES THEREON SHOWN FOR THE PURPOSES AND CONSIDERATION THEREIN EXPRESSED.

OWNER/DEVELOPER: RICHARD MOTT HIDDEN TRAILS COMMUNITY ASSOCIATION, INC. 1922 DRY CREEK WAY, SUITE 101 SAN ANTONIO, TEXAS 78259

STATE OF TEXAS COUNTY OF BEXAR

BEFORE ME, THE UNDERSIGNED AUTHORITY ON THIS DAY PERSONALLY APPEARED DAVID GROVE KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT, AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME FOR THE PURPOSES AND CONSIDERATIONS THEREIN EXPRESSED AND IN THE CAPACITY THEREIN STATED. GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS , A.D. <u>20</u>

	NOTARY PUBLIC, BEXAR COUNTY, TEXAS					
ATE OF TEXAS						
OUNTY OF COMAL						
	, col	JNTY C	LERK OF CO	MAL COUN	TY, DO HEREBY	
ERTIFY THAT THIS PLAT	WAS FILED FOR RE	CORE	IN MY OFF	ICE, ON THE	DAY	
F	, A.D. <u>20</u>	_AT_	M.	AND DULY F	RECORDED THE	
DAY OF			, A.D. <u>20</u>	AT	M. IN THE	
ECORDS OF				_OF COM	AL COUNTY, IN	
OOK/DOC # ON PAGE			IN TESTIMONY WHEREOF, WITNESS			
Y HAND AND OFFICIA	L SEAL OF OFFICE	, THIS	DA	Y OF		
.D. 20						

COUNTY CLERK, COMAL COUNTY, TEXAS

SHEET 1 OF 1

LINE TABLE LINE # BEARING LENGTH S50'42'42"E 84.00" 4.71 N39"7"18"E L3 S32'05'52"E 119.49 L4 N79'46'21"E 22.82' L5 S15"10'03"W 42.00' L6 N74'49'57"W 20.00' L7 N15"10'03"E 42.06'

N: 13827844.37

E: 2154951.51

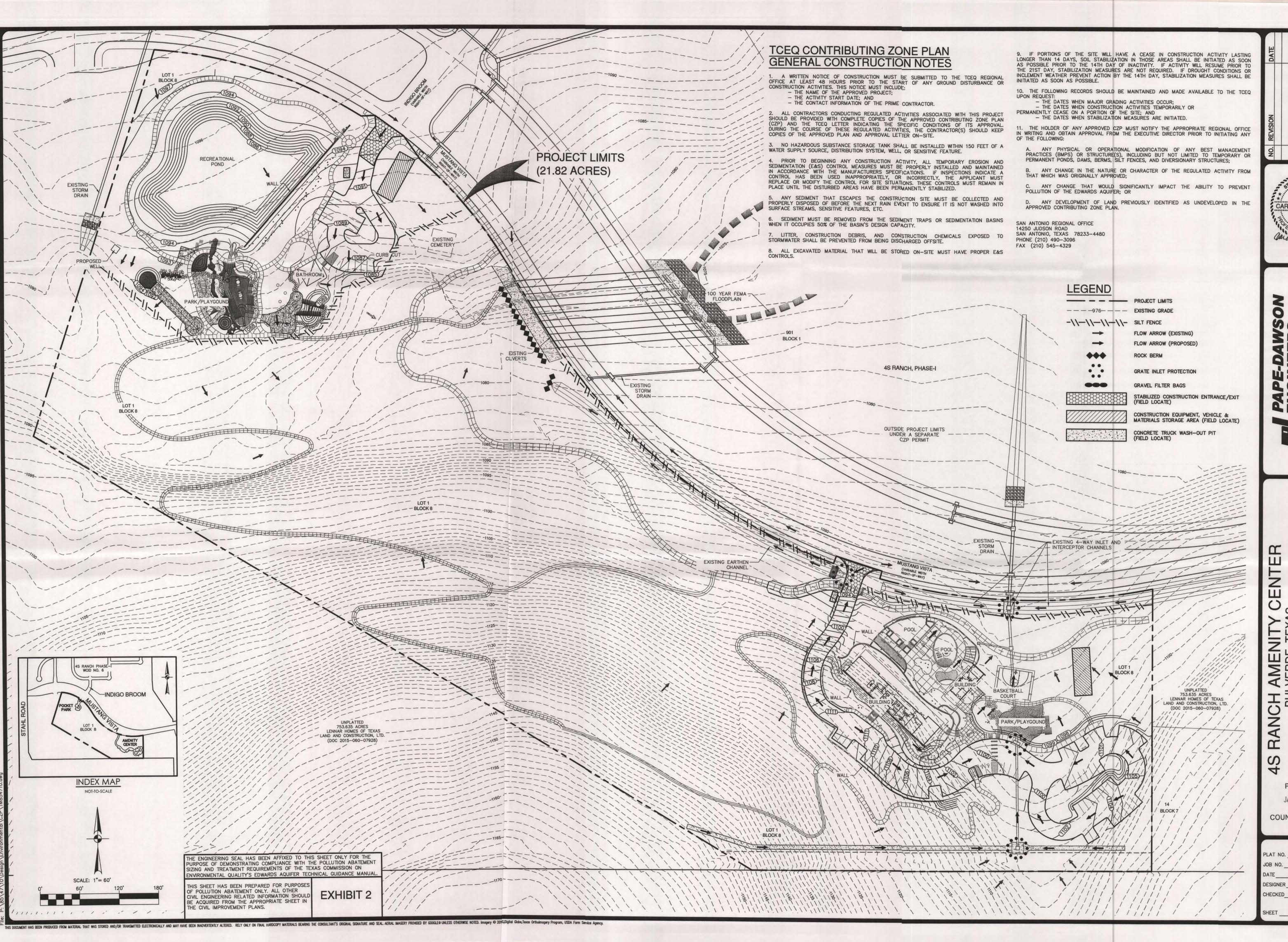
CURVE TABLE CURVE # RADIUS | DELTA | CHORD BEARING CHORD LENGTH 676.00' 02816'02" 330.14 333.51 19.51' S0919'08"E 22.06 13.00 09712'52" 18.75 20.94 C3 13.00' 092"18'40" N85*26'38"E 191.70' 192.35' 676.00' 016"8'10" S66'09'45"E 992.55' 1053.53' 886.00' 068'07'47" 20.00" 886.00' 001"17'36" S74'39'55"E

> THIS PLAT OF 4S RANCH AMENITY CENTER HAS BEEN SUBMITTED TO AND CONSIDERED BY THE CITY PLANNING AND ZONING COMMISSION OF THE CITY OF BULVERDE, TEXAS AND IS HEREBY APPROVED BY SUCH COMMISSION.

CHAIRPERSON

SECRETARY

NOTARY PUBLIC, BEXAR COUNTY, TEXAS





RECEIVED JAN 1 3 2017

COUNTY ENGINEE

CHECKED *** DRAWN MK

C1.00

CONSTRUCTION ENTRANCE/EXI

MATERIALS

1. THE AGGREGATE SHOULD CONSIST OF 4-INCH TO 8-INCH WASHED STONE OVER A STABLE FOUNDATION AS SPECIFIED IN THE PLAN. 2. THE AGGREGATE SHOULD BE PLACED WITH A MINIMUM THICKNESS OF

3. THE GEOTEXTILE FABRIC SHOULD BE DESIGNED SPECIFICALLY FOR USE AS A SOIL FILTRATION MEDIA WITH AN APPROXIMATE WEIGHT OF 6 OZ/YD2, A MULLEN BURST RATING OF 140 LB/IN2, AND AN EQUIVALENT OPENING SIZE GREATER THAN A NUMBER 50 SIEVE.

4. IF A WASHING FACILITY IS REQUIRED, A LEVEL AREA WITH A MINIMUM OF 4-INCH DIAMETER WASHED STONE OR COMMERCIAL ROCK SHOULD BE INCLUDED IN THE PLANS. DIVERT WASTEWATER TO A SEDIMENT TRAP OR

INSTALLATION

DRAINAGE

LAY SOD IN A STAGGERED PATTERN. BUTT

DO NOT LEAVE SPACES AND DO NOT

OVERLAP. A SHARPENED MASON'S TROWEL

IS A HANDY TOOL FOR TUCKING DOWN THE

AUTOMATIC SOD CUTTER MUST BE MATCHED

- ANGLED ENDS CAUSED BY THE

ENDS AND TRIMMING PIECES.

CORRECTLY.

MATERIALS

OF 36 HOURS.

SHOOT GROWTH AND THATCH.

SITE PREPARATION

TIGHTLY (SEE FIGURE ABOVE).

THE STRIPS TIGHTLY AGAINST EACH OTHER.

AVOID CURVES ON PUBLIC ROADS AND STEEP SLOPES. REMOVE VEGETATION AND OTHER OBJECTIONABLE MATERIAL FROM THE FOUNDATION AREA. GRADE CROWN FOUNDATION FOR POSITIVE DRAINAGE.

2. THE MINIMUM WIDTH OF THE ENTRANCE/EXIT SHOULD BE 12 FEET OR THE FULL WIDTH OF EXIT ROADWAY, WHICHEVER IS GREATER.

3. THE CONSTRUCTION ENTRANCE SHOULD BE AT LEAST 50 FEET LONG. 4. IF THE SLOPE TOWARD THE ROAD EXCEEDS 2%, CONSTRUCT A RIDGE, 6-INCHES TO 8-INCHES HIGH WITH 3:1 (H: V) SIDE SLOPES, ACROSS THE

RUNOFF AWAY FROM THE PUBLIC ROAD. 5. PLACE GEOTEXTILE FABRIC AND GRADE FOUNDATION TO IMPROVE STABILITY, ESPECIALLY WHERE WET CONDITIONS ARE ANTICIPATED.

FOUNDATION APPROXIMATELY 15 FEET FROM THE ENTRANCE TO DIVERT

6. PLACE STONE TO DIMENSIONS AND GRADE SHOWN ON PLANS. LEAVE SURFACE SMOOTH AND SLOPE FOR DRAINAGE.

7. DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE STONE PAD TO A SEDIMENT TRAP OR BASIN.

8. INSTALL PIPE UNDER PAD AS NEEDED TO MAINTAIN PROPER PUBLIC ROAD

TABILIZE FOUNDATION SECTION "A-A" OF A CONSTRUCTION ENTRANCE/EXIT

COMMON TROUBLE POINTS

1. INADEQUATE RUNOFF CONTROL-SEDIMENT WASHES ONTO PUBLIC ROAD. 2. STONE TOO SMALL OR GEOTEXTILE FABRIC ABSENT, RESULTS IN MUDDY CONDITION AS STONE IS PRESSED INTO SOIL.

S. PAD TOO SHORT FOR HEAVY CONSTRUCTION TRAFFIC-EXTEND PAD BEYOND THE MINIMUM 50-FOOT LENGTH AS NECESSARY

4. PAD NOT FLARED SUFFICIENTLY AT ROAD SURFACE, RESULTS IN MUD BEING TRACKED ON TO ROAD AND POSSIBLE DAMAGE TO ROAD.

5. UNSTABLE FOUNDATION - USE GEOTEXTILE FABRIC UNDER PAD AND/OR IMPROVE FOUNDATION DRAINAGE.

INSPECTION AND MAINTENANCE GUIDELINES THE ENTRANCE SHOULD BE MAINTAINED IN A CONDITION, WHICH WILL

PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.

2. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY SHOULD BE REMOVED IMMEDIATELY BY CONTRACTOR. 3. WHEN NECESSARY, WHEELS SHOULD BE CLEANED TO REMOVE SEDIMENT

PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. 4. WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR

SEDIMENT BASIN. 5. ALL SEDIMENT SHOULD BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATER COURSE BY USING APPROVED METHODS.

WOVEN WIRE SHEATHING

ISOMETRIC PLAN VIEW

ROCK BERMS

THE PURPOSE OF A ROCK BERM IS TO SERVE AS A CHECK DAM IN AREAS OF CONCENTRATED FLOW, TO INTERCEPT SEDIMENT-LADEN RUNOFF, DETAIN THE SEDIMENT AND RELEASE THE WATER IN SHEET FLOW. THE ROCK BERM SHOULD BE USED WHEN THE CONTRIBUTING DRAINAGE AREA IS LESS THAN 5 ACRES. ROCK BERMS ARE USED IN AREAS WHERE THE VOLUME OF RUNOFF IS TOO GREAT FOR A SILT FENCE TO CONTAIN. THEY ARE LESS EFFECTIVE FOR SEDIMENT REMOVAL THAN SILT FENCES, PARTICULARLY FOR FINE PARTICLES, BUT ARE ABLE TO WITHSTAND HIGHER FLOWS THAN A SILT FENCE. AS SUCH, ROCK BERMS ARE OFTEN USED IN AREAS OF CHANNEL FLOWS (DITCHES, GULLIES, ETC.). ROCK BERMS ARE MOST EFFECTIVE AT REDUCING BED LOAD IN CHANNELS AND SHOULD NOT BE SUBSTITUTED FOR OTHER EROSION AND SEDIMENT CONTROL MEASURES FARTHER UP THE WATERSHED.

INSPECTION AND MAINTENANCE GUIDELINES 1. INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL BY THE RESPONSIBLE PARTY. FOR INSTALLATIONS IN STREAMBEDS, ADDITIONAL DAILY

REMOVE SEDIMENT AND OTHER DEBRIS WHEN BUILDUP REACHES 6 INCHES AND DISPOSE OF THE ACCUMULATED SILT IN AN APPROVED MANNER THAT WILL NOT CAUSE ANY ADDITIONAL SILTATION.

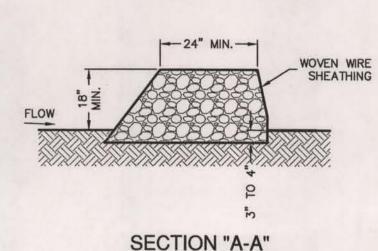
3. REPAIR ANY LOOSE WIRE SHEATHING.

INSPECTIONS SHOULD BE MADE.

4. THE BERM SHOULD BE RESHIPED AS NEEDED DURING INSPECTION.

THE BERM SHOULD BE REPLICED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFC DAMAGE, ETC.

6. THE ROCK BERM SHOULD BELEFT IN PLACE UNTIL ALL UPSTREAM AREAS ARE STABILIZED AND ACCUMULATED SILT REMOVED.



MATERIALS THE BERM STRUCTURE SHOULD BE SECURED WITH A WOVEN WIRE SHEATHING HAVING MAXIMUM OPENING OF 1 INCH AND A MINIMUM WIRE DIAMETER OF 20 GAUGE GALVANIZED AND SHOULD BE SECURED WITH SHOAT

2. CLEAN, OPEN GRADED 3-INCH TO 5-INCH DIAMETER ROCK SHOULD BE USED, EXCEPT IN AREAS WHERE HIGH VELOCITIES OR LARGE VOLUMES OF FLOW ARE EXPECTED, WHERE 5-INCH TO 8-INCH DIAMETER ROCKS MAY BE

. LAY OUT THE WOVEN WIRE SHEATHING PERPENDICULAR TO THE FLOW LINE. THE SHEATHING SHOULD BE 20 GAUGE WOVEN WIRE MESH WITH 1 INCH OPENINGS. 2. BERM SHOULD HAVE A TOP WIDTH OF 2 FEET MINIMUM WITH SIDE SLOPES

BEING 2:1 (H: V) OR FLATTER. 3. PLACE THE ROCK ALONG THE SHEATHING AS SHOWN IN THE DIAGRAM TO

A HEIGHT NOT LESS THAN 18". 4. WRAP THE WIRE SHEATHING AROUND THE ROCK AND SECURE WITH TIE WIRE SO THAT THE ENDS OF THE SHEATHING OVERLAP AT LEAST 2 INCHES,

AND THE BERM RETAINS ITS SHAPE WHEN WALKED UPON. 5. BERM SHOULD BE BUILT ALONG THE CONTOUR AT ZERO PERCENT GRADE OR AS NEAR AS POSSIBLE.

6. THE ENDS OF THE BERM SHOULD BE TIED INTO EXISTING UPSLOPE GRADE AND THE BERM SHOULD BE BURIED IN A TRENCH APPROXIMATELY 3 TO 4 INCHES DEEP TO PREVENT FAILURE OF THE CONTROL.

COMMON TROUBLE POINTS INSUFFICIENT BERM HEIGHT OR LENGTH (RUNOFF QUICKLY ESCAPES OVER

THE TOP OR AROUND THE SIDES OF BERM). 2. BERM NOT INSTALLED PERPENDICULAR TO FLOW LINE (RUNOFF ESCAPING

AROUND ONE SIDE).

ROCK BERM DETAIL

NOT-TO-SCALE

HOOTS OR GRASS BLADES. GRASS SHOULD BE GREEN AND HEALTHY; MOWED AT A 2"-3" CUTTING HEIGHT -THATCH- GRASS CLIPPINGS AND CORRECT DEAD LEAVES, UP TO 1/2" THICK. ROOT ZONE - SOIL AND ROOTS. SHOULD BE 1/2"-3/4" THICK, WITH DENSE ROOT MAT FOR STRENGTH.

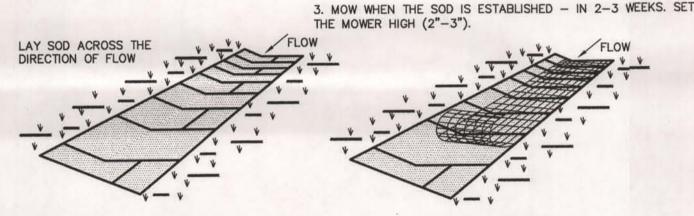
APPEARANCE OF GOOD SOD

1. ROLL SOD IMMEDIATELY TO ACHIEVE FIRM CONTACT WITH THE

STABILIZED CONSTRUCTION ENTRANCE/EXIT DETAIL

NOT-TO-SCALE

2. WATER TO A DEPTH OF 4" AS NEEDED. WATER WELL AS SOON AS THE SOD IS LAID.



1. SOD SHOULD BE MACHINE CUT AT A UNIFORM SOIL THICKNESS OF 3/4" INCH

(± 1/4" INCH) AT THE TIME OF CUTTING. THIS THICKNESS SHOULD EXCLUDE

2. PIECES OF SOD SHOULD BE CUT TO THE SUPPLIER'S STANDARD WIDTH AND

3. STANDARD SIZE SECTIONS OF SOD SHOULD BE STRONG ENOUGH TO

SUPPORT THEIR OWN WEIGHT AND RETAIN THEIR SIZE AND SHAPE WHEN

4. SOD SHOULD BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD

1. PRIOR TO SOIL PREPARATION, AREAS TO BE SODDED SHOULD BE BROUGHT

. THE SURFACE SHOULD BE CLEARED OF ALL TRASH, DEBRIS AND OF ALL

ROOTS, BRUSH, WIRE, GRADE STAKES AND OTHER OBJECTS THAT WOULD

3. FERTILIZE ACCORDING TO SOIL TESTS. FERTILIZER NEEDS CAN BE

DETERMINED BY A SOIL TESTING LABORATORY OR REGIONAL RECOMMENDATIONS

CAN BE MADE BY COUNTY AGRICULTURAL EXTENSION AGENTS. FERTILIZER

SHOULD BE WORKED INTO THE SOIL TO A DEPTH OF 3 INCHES WITH A DISC.

FINAL HARROWING OR DISCING OPERATION SHOULD BE ON THE CONTOUR.

SPRINGTOOTH HARROW OR OTHER SUITABLE EQUIPMENT. ON SLOPING LAND, THE

SOD STRIPS IN WATERWAYS SHOULD BE LAID PERPENDICULAR TO THE

DIRECTION OF FLOW. CARE SHOULD BE TAKEN TO BUTT ENDS OF STRIPS

2. AFTER ROLLING OR TAMPING, SOD SHOULD BE PEGGED OR STAPLED TO

RESIST WASHOUT DURING THE ESTABLISHMENT PERIOD. MESH OR OTHER

LENGTH, WITH A MAXIMUM ALLOWABLE DEVIATION IN ANY DIMENSION OF 5%.

TORN OR UNEVEN PADS SHOULD NOT BE ACCEPTABLE.

SUSPENDED FROM A FIRM GRASP ON ONE END OF THE SECTION.

TO FINAL GRADE IN ACCORDANCE WITH THE APPROVED PLAN.

INSTALLATION IN CHANNELS

INTERFERE WITH PLANTING, FERTILIZING OR MAINTENANCE OPERATIONS.

IN CRITICAL AREAS, SECURE SOD WITH NETTING. USE STAPLES.

SOD INSTALLATION STAPLE USE PEGS OR STAPLES TO FASTEN SOD

FIRMLY - AT THE ENDS OF STRIPS AND

IN THE CENTER, OR EVERY 3-4 FEET IF THE STRIPS ARE LONG. WHEN READY TO MOW, DRIVE PEGS OR STAPLES FLUSH WITH THE GROUND.

GENERAL INSTALLATION (VA. DEPT. OF

CONSERVATION, 1992) SOD SHOULD NOT BE CUT OR LAID IN EXCESSIVELY WET OR DRY WEATHER. SOD ALSO SHOULD NOT BE LAID ON SOIL SURFACES THAT ARE FROZEN.

2. DURING PERIODS OF HIGH TEMPERATURE, THE SOIL SHOULD BE LIGHTLY IRRIGATED IMMEDIATELY PRIOR TO LAYING THE SOD, TO COOL THE SOIL AND REDUCE ROOT BURNING AND DIEBACK.

THE FIRST ROW OF SOD SHOULD BE LAID IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PLACED PARALLEL TO AND BUTTING TIGHTLY AGAINST EACH OTHER. LATERAL JOINTS SHOULD BE STAGGERED TO PROMOTE MORE UNIFORM GROWTH AND STRENGTH. CARE SHOULD BE EXERCISED TO ENSURE THAT SOD IS NOT STRETCHED OR OVERLAPPED AND THAT ALL JOINTS ARE BUTTED TIGHT IN ORDER TO PREVENT VOIDS WHICH WOULD CAUSE DRYING OF THE ROOTS (SEE FIGURE ABOVE).

4. ON SLOPES 3:1 OR GREATER, OR WHEREVER EROSION MAY BE A PROBLEM, SOD SHOULD BE LAID WITH STAGGERED JOINTS AND SECURED BY STAPLING OR OTHER APPROVED METHODS. SOD SHOULD BE INSTALLED WITH THE LENGTH PERPENDICULAR TO THE SLOPE (ON CONTOUR).

5. AS SODDING OF CLEARLY DEFINED AREAS IS COMPLETED, SOD SHOULD BE ROLLED OR TAMPED TO PROVIDE FIRM CONTACT BETWEEN ROOTS AND SOIL.

AFTER ROLLING, SOD SHOULD BE IRRIGATED TO A DEPTH SUFFICIENT THAT THE UNDERSIDE OF THE SOD PAD AND THE SOIL 4 INCHES BELOW THE SOD IS THOROUGHLY WET.

UNTIL SUCH TIME A GOOD ROOT SYSTEM BECOMES DEVELOPED, IN THE ABSENCE OF ADEQUATE RAINFALL, WATERING SHOULD BE PERFORMED AS OFTEN AS NECESSARY TO MAINTAIN MOIST SOIL TO A DEPTH OF AT LEAST 4

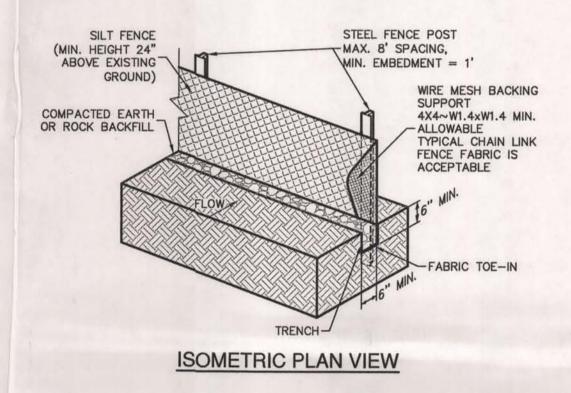
8. THE FIRST MOWING SHOULD NOT BE ATTEMPTED UNTIL THE SOD IS FIRMLY ROOTED, USUALLY 2-3 WEEKS. NOT MORE THAN ONE THIRD OF THE GRASS LEAF SHOULD BE REMOVED AT ANY ONE CUTTING.

INSPECTION AND MAINTENANCE GUIDELINES SOD SHOULD BE INSPECTED WEEKLY AND AFTER EACH RAIN EVENT

LOCATE AND REPAIR ANY DAMAGE. 2. DAMAGE FROM STORMS OR NORMAL CONSTRUCTION ACTIVITIES SUCH AS TIRE RUTS OR DISTURBANCE OF SWALE STABILIZATION SHOULD BE REPAIRED AS SOON AS PRACTICAL.

SOD INSTALLATION DETAIL

NOT-TO-SCALE



SILT FENCE

A SILT FENCE IS A BARRIEICONSISTING OF GEOTEXTILE FABRIC SUPPORTED BY METAL POSTS TO PRENT SOIL AND SEDIMENT LOSS FROM A SITE. WHEN PROPERLY USED, IT FENCES CAN BE HIGHLY EFFECTIVE AT CONTROLLING SEDIMENT FRC DISTURBED AREAS. THEY CAUSE RUNOFF TO POND, ALLOWING HEAVIERSOLIDS TO SETTLE OUT. IF NOT PROPERLY INSTALLED, SILT FENCES ARNOT LIKELY TO BE EFFECTIVE.

THE PURPOSE OF A SILT FICE IS TO INTERCEPT AND DETAIN WATER-BORN SEDIMENT FROM UNPROTEC') AREAS OF A LIMITED EXTENT. SILT FENCE IS USED DURING THE PERIODIF CONSTRUCTION NEAR THE PERIMETER OF DISTURBED AREA TO INTCEPT SEDIMENT WHILE ALLOWING WATER TO PERCOLATE THROUGH. TH FENCE SHOULD REMAIN IN PLACE UNTIL THE DISTURBED AREA IS PERMANTLY STABILIZED. SILT FENCE SHOULD NOT BE USED WHERE THERE IS A ONCENTRATION OF WATER IN A CHANNEL OR DRAINAGE WAY. IF CONNTRATED FLOW OCCURS AFTER INSTALLATION, CORRECTIVE ACTION MUST ETAKEN SUCH AS PLACING A ROCK BERM IN THE AREAS OF CONCENTRATED DW.

SILT FENCING WITHIN THE S MAY BE TEMPORARILY MOVED DURING THE DAY TO ALLOW CONSTRUCTION JIVITY PROVIDED IT IS REPLACED AND PROPERLY ANCHORED TO THE GROUNCT THE END OF THE DAY. SILT FENCES ON THE PERIMETER OF THE SITE ORROUND DRAINAGE WAYS SHOULD NOT BE MOVED AT ANY TIME.

MATERIALS

1. SILT FENCE MATERIAL OULD BE POLYPROPYLENE, POLYETHYLENE, OR POLYAMIDE WOVEN OR NOOVEN FABRIC. THE FABRIC SHOULD BE 36 INCHES, WITH A MINIMUMNIT WEIGHT OF 4.5 OZ/YD, MULLEN BURST STRENGTH EXCEEDING 1903/IN2, ULTRAVIOLET STABILITY EXCEEDING 70%, AND MINIMUM APPARENT OIING SIZE OF U.S. SIEVE NUMBER 30.

FENCE POSTS SHOULD EMADE OF HOT ROLLED STEEL, AT LEAST 4 FEET LONG WITH TEE OR YAR CROSS SECTION, SURFACE PAINTED OR GALVANIZED, MINIMUM WHT 1.25 LB/FT, AND BRINDELL HARDNESS

3. WOVEN WIRE BACKING SUPPORT THE FABRIC SHOULD BE GALVANIZED 2" X 4" WELDED WIRE, 12 GE MINIMUM.

INSTALLATION 1. STEEL POSTS, WHICH SURT THE SILT FENCE, SHOULD BE INSTALLED ON A SLIGHT ANGLE TOWARD : ANTICIPATED RUNOFF SOURCE. POSTS MUST BE EMBEDDED A MINIMUM 1-FOOT DEEP AND SPACED NOT MORE THAN 8 FEET ON CENTER. WHEREATER CONCENTRATES, THE MAXIMUM SPACING

LAY OUT FENCING DC-SLOPE OF DISTURBED AREA, FOLLOWING THE CONTOUR AS CLOSELY ASSSIBLE. THE FENCE SHOULD BE SITED SO THAT THE MAXIMUM DRAINAGE A IS 1/4 ACRE/100 FEET OF FENCE.

3. THE TOE OF THE SILT FENCE SHOULD BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWN-SLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CANNOT BE TRENCHED IN (E.G., PAVEMENT OR ROCK OUTCROP), WEIGHT FABRIC FLAP WITH 3 INCHES OF PEA GRAVEL ON UPHILL SIDE TO PREVENT FLOW FROM SEEPING UNDER FENCE.

THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT

POST. THERE SHOULD BE A 3-FOOT OVERLAP, SECURELY FASTENED WHERE ENDS OF FABRIC MEET. 6. SILT FENCE SHOULD BE REMOVED WHEN THE SITE IS COMPLETELY

POST OR TO WOVEN WIRE, WHICH IS IN TURN ATTACHED TO THE STEEL FENCE

STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

COMMON TROUBLE POINTS FENCE NOT INSTALLED ALONG THE CONTOUR CAUSING WATER TO CONCENTRATE AND FLOW OVER THE FENCE.

2. FABRIC NOT SEATED SECURELY TO GROUND (RUNOFF PASSING UNDER

3. FENCE NOT INSTALLED PERPENDICULAR TO FLOW LINE (RUNOFF ESCAPING 4. FENCE TREATING TOO LARGE AN AREA, OR EXCESSIVE CHANNEL FLOW (RUNOFF OVERTOPS OR COLLAPSES FENCE).

INSPECTION AND MAINTENANCE GUIDELINES 1. INSPECT ALL FENCING WEEKLY, AND AFTER RAINFALL.

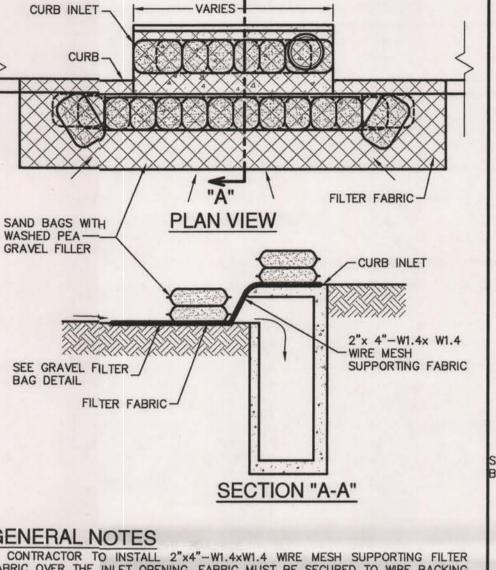
2. REMOVE SEDIMENT WHEN BUILDUP REACHES 6 INCHES. . REPLACE TORN FABRIC OR INSTALL A SECOND LINE OF FENCING PARALLEL

TO THE TORN SECTION. 4. REPLACE OR REPAIR SECTIONS CRUSHED OR COLLAPSED IN THE COURSE OF CONSTRUCTION ACTIVITY. IF A SECTION OF FENCE IS OBSTRUCTING

VEHICULAR ACCESS, CONSIDER RELOCATING IT TO A SPOT WHERE IT WILL PROVIDE EQUAL PROTECTION, BUT WILL NOT OBSTRUCT VEHICLES. A TRIANGULAR FILTER DIKE MAY BE PREFERABLE TO A SILT FENCE AT COMMON VEHICLE ACCESS POINTS. WHEN CONSTRUCTION IS COMPLETE, THE SEDIMENT SHOULD BE DISPOSED

OF IN A MANNER THAT WILL NOT CAUSE ADDITIONAL SILTATION AND THE PRIOR LOCATION OF THE SILT FENCE SHOULD BE REVEGETATED. THE FENCE ITSELF SHOULD BE DISPOSED OF IN AN APPROVED LANDFILL.

SILT FENCE DETAIL NOT-TO-SCALE



GENERAL NOTES

CONTRACTOR TO INSTALL 2"x4"-W1.4xW1.4 WIRE MESH SUPPORTING FILTER FABRIC OVER THE INLET OPENING. FABRIC MUST BE SECURED TO WIRE BACKING WITH CLIPS OR WIRE TIES AT THIS LOCATION. SAND BAGS FILLED WITH WASHED PEA GRAVEL SHOULD BE PLACED ON TOP OF WIRE MESH ON TOP OF THE INLET AS SHOWN ON THIS DETAIL TO HOLD WIRE MESH IN PLACE, SANDBAGS FILLED WITH WASHED PEA GRAVEL SHOULD ALSO BE PLACED ALONG THE GUTTER AS SHOWN ON THIS DETAIL TO HOLD WIRE MESH IN PLACE. SAND BAGS TO BE STACKED TO FORM A CONTINUOUS BARRIER AROUND INLETS.

2. THE BAGS SHOULD BE TIGHTLY ABUTTED AGAINST EACH OTHER TO PREVENT RUNOFF FROM FLOWING BETWEEN THE BAGS.

INSPECTION AND MAINTENANCE GUIDELINES . INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL. REPAIR OR REPLACEMENT SHOULD BE MADE PROMPTLY AS NEEDED BY THE

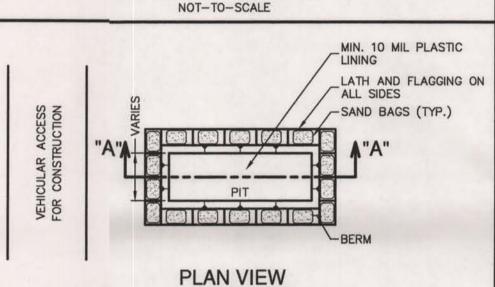
REMOVE SEDIMENT WHEN BUILDUP REACHES A DEPTH OF 3 INCHES. REMOVED SEDIMEN'T SHOULD BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE. 3. CHECK PLACEMENT OF DEVICE TO PREVENT GAPS BETWEEN DEVICE AND

4. INSPECT FILTER FABRIC AND PATCH OR REPLACE IF TORN OR MISSING. STRUCTURES SHOULD BE REMOVED AND THE AREA STABILIZED ONLY AFTER

BAGGED GRAVEL CURB INLET

THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

PROTECTION DETAIL



MIN. 10 MIL PLASTIC LINING SAND BAGS (TYP.) -SAND BAGS (TYP.)

SECTION "A-A"

GENERAL NOTES

1. DETAIL ABOVE ILLUSTRATES MINIMUM DIMENSIONS. PIT CAN BE INCREASED IN SIZE DEPENDING ON EXPECTED FREQUENCY OF USE. 2. WASHOUT PIT SHALL BE LOCATED IN AN AREA EASILY ACCESSIBLE TO CONSTRUCTION TRAFFIC.

3. WASHOUT PIT SHALL NOT BE LOCATED IN AREAS SUBJECT TO INUNDATION FROM STORM WATER RUNOFF. 4. LOCATE WASHOUT AREA AT LEAST 50 FEET FROM SENSITIVE FEATURES,

STORM DRAINS, OPEN DITCHES OR WATER BODIES. TEMPORARY CONCRETE WASHOUT FACILITY SHOULD BE CONSTRUCTED WITH SUFFICIENT QUANTITY AND VOLUME TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.

PLASTIC LINING MATERIAL SHOULD BE A MINIMUM OF 10 MIL IN POLYETHYLENE SHEETING AND SHOULD BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.

MAINTENANCE

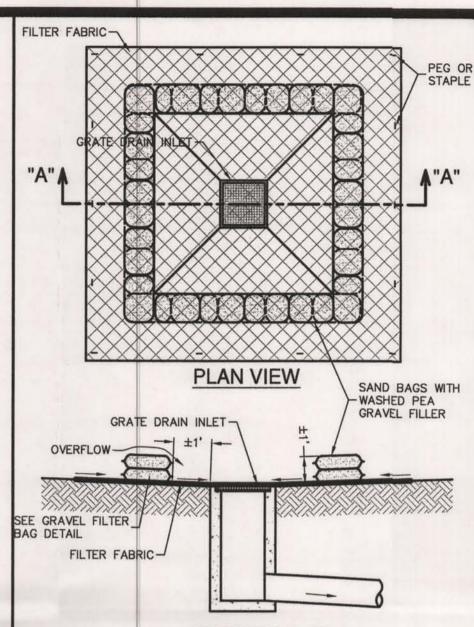
. WHEN TEMPORARY CONCRETE WASHOUT FACILITIES ARE NO LONGER REQUIRED FOR THE WORK, THE HARDENED CONCRETE SHOULD BE REMOVED MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT

FACILITIES SHOULD BE REMOVED FROM THE SITE OF THE WORK AND DISPOSED

HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCES CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE BACKFILLED AND REPAIRED.

CONCRETE TRUCK WASHOUT PIT DETAIL

NOT-TO-SCALE



SECTION "A-A"

GENERAL NOTES THE SANDBAGS SHOULD BE FILLED WITH WASHED PEA GRAVEL AND STACKED TO FORM A CONTINUOUS BARRIER ABOUT 1 FOOT HIGH AROUND

THE BAGS SHOULD BE TIGHTLY ABUTTED AGAINST EACH OTHER TO PREVENT RUNOFF FROM FLOWING BETWEEN THE BAGS.

INSPECTION AND MAINTENANCE GUIDELINES . INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFAL REPAIR OR REPLACEMENT SHOULD BE MADE PROMPTLY AS NEEDED BY THE CONTRACTOR. REMOVE SEDIMENT WHEN BUILDUP REACHES A DEPTH OF 3 INCHES.

SUCH A MATTER THAT IT WILL NOT ERODE. 3. CHECK PLACEMENT OF DEVICE TO PREVENT GAPS BETWEEN DEVICE

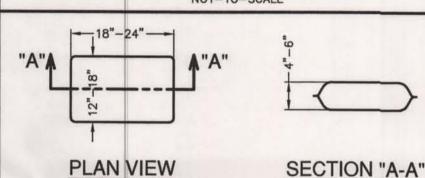
REMOVED SEDIMENT SHOULD BE DEPOSITED IN A SUITABLE AREA AND IN

4. INSPECT FILTER FABRIC AND PATCH OR REPLACE IF TORN . STRUCTURES SHOULD BE REMOVED AND THE AREA STABILIZED ONLY

AFTER THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED

BAGGED GRAVEL GRATE INLET PROTECTION DETAIL

NOT-TO-SCALE

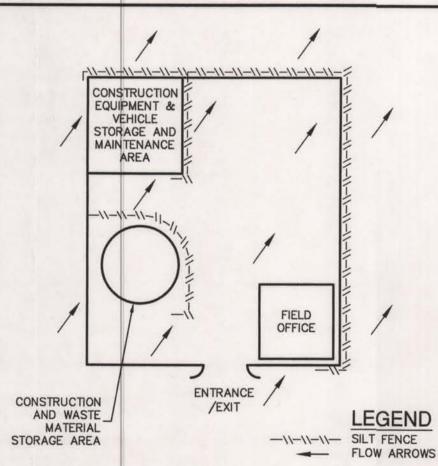


1. THE FILTER BAG MATERIAL SHALL BE MADE OF POLYPROPYLENE POLYETHYLENE OR POLYAMIDE WOVEN FABRIC, MIN. UNIT WEIGHT OF 4 OUNCES/SY, HAVE A MULLEN BURST STRENGTH EXCEEDING 300 PSI AND ULTRAVIOLET STABILITY EXCEEDING 70%.

2. THE FILTER BAG SHALL BE FILLED WITH CLEAN, MEDIUM WASHED PEA GRAVEL TO COARSE GRAVEL (0.31 TO 0.75 INCH DIAMETER). 3. SAND SHALL NOT BE USED TO FILL THE FILTER BAGS.

GRAVEL FILTER BAG DETAIL

NOT-TO-SCALE



CONSTRUCTION STAGING AREA

NOT-TO-SCALE

THE ENGINEERING SEAL HAS BEEN AFFIXED TO THIS SHEET ONLY FOR THE PURPOSE OF DEMONSTRATING COMPLIANCE WITH THE TPDES-STORM WATER POLLUTION PREVENTION PLAN (SWP3) REGULATIONS.

THIS SHEET HAS BEEN PREPARED FOR PURPOSES OF THE SWP3 ONLY. ALL OTHER CIVIL ENGINEERING RELATED INFORMATION SHOULD BE ACQUIRED FROM THE APPROPRIATE SHEET IN THE CIVIL IMPROVEMENT PLANS.



DET

RECEIVED JAN 1 3 2017

COUNTY ENGINEER

LAT NO. XXXXXX 8547-10

JANUARY 2017 ESIGNER CHECKED *** DRAWN MKF

C1.01

NETTING MAY BE PEGGED OVER THE SOD FOR EXTRA PROTECTION IN CRITICAL AREAS.

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