TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

December 30, 2015

RECEIVED

JAN 06 2016

COUNTY ENGINEER

Mr. David Keith
SH-DJL Development, LLC
18615 Tuscany Stone, Suite 200
San Antonio, Texas 78258

Re: Edwards Aquifer, Comal County

NAME OF PROJECT: Singing Hills Development (Jiffy Lube); Located on the northwest corner of U.S. Highway 281 and State Highway 46; City of Bulverde, Texas

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

Investigation No. 1289574; Regulated Entity No. RN10609062; Additional ID No. 13000001

Dear Mr. Keith:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the CZP Modification for the above-referenced project submitted to the San Antonio Regional Office by CEI Engineering Associates, Inc. on behalf of SH-DJL Development, LLC on October 20, 2015. Final review of the CZP was completed after additional material was received on December 14, 2015, and December 22, 2015 As presented to the TCEQ, the Temporary and Permanent 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

The original CZP was approved by letter dated November 2, 2012 to construct a mixed use development on a 253.8 acre site. The development included the construction of approximately

90 acres of commercial development on the south and east portions of the site, a wastewater treatment plant, approximately 86 acres of mass grading activities, 4.4 acres of demolition, offsite pavement widening improvements along Highway 281 and State Highway 46, and approximately 78 acres of land was designated to remain undisturbed. Two sedimentation/filtration basins were constructed to provide permanent stormwater treatment. The total impervious cover for the project was 66.1 acres (26 percent).

The first modification, approved on January 13, 2015, proposed to construct a mixed use, phased development on a 253.80 acres site. The phase 1 impervious cover was slightly reduced from 66.1 acres to 65.68 acres. Approved Phase 2 activities included the construction of 5 acres of commercial development, 13 acres of multi-family structures, offsite road improvements, the construction of a lift station, two additional sedimentation/filtration basins, and 118 acres of single family residential development (352 lots). The total onsite impervious cover was approved to be 128.83 acres (50.76 percent). An additional 1.62 acres of offsite road improvements was also approved. Project wastewater will be disposed of by conveyance to the proposed Singing Hills Wastewater Treatment Plant.

PROJECT DESCRIPTION

The proposed commercial project will have an area of approximately 253.8 acres. It will include a Jiffy Lube retail store with nine proposed above ground storage tanks with a total volume of 3,900 gallons. The impervious cover will be 130.45 acres (51 percent). Project wastewater will be disposed of by conveyance to the existing Singing Hills Water Recycling Center owned by the SH-DJL Development, LLC (TCEQ ID No. WQ0015038001). The proposed aboveground storage tanks include the items listed in the table below.

AST Number	Gallons	Tank Material	Contents of Tank
1	280	Steel	Automotive Oil
2	280	Steel	Automotive Oil
3	280	Steel	Automotive Oil
4	280	Steel	Automotive Oil
5	280	Steel	Automotive Oil
6	500	Steel	Automotive Oil
7	500	Steel	Automotive Oil
8	500	Steel	Automotive Oil
9	1,000	Steel	Used Automotive Oil
Total	3,900		

Five UL 142 steel tanks, containing 280 gallons each, and three UL 142 steel tanks, containing 500 gallons each, and one UL 142 steel tank will be placed within the containment area with inside dimensions of 34 feet in length by 43 feet in width by 5 feet in depth. Total containment capacity of the proposed tanks will be greater than 150 percent of the total storage capacity of the tank system. Any spillage will be directed to a convenient point within the containment structure

for collection and recovery. A Floropoxy System 4700 Epoxy Primer will be used to seal the containment area.

All piping, hoses and dispensers will be located inside the containment structure. Piping will be aboveground. Spill and overfill control for each tank and piping structures will be provided by the secondary containment area.

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, four (4) existing sedimentation filtration basins, 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 112,857 pounds of TSS generated from the 130.45 acres of impervious cover. The approved measures meet the required 80 percent removal of the increased load in TSS caused by the project.

The individual treatment measures will consist of four existing partial sedimentation/filtration basins. All four basins will be concrete lined with a 4 inch perforated PVC underdrain system that will be covered with at least 6 inches of gravel. Geotextile fabric will be placed over the gravel layer and topped with at least 18 inches of sand (ASTM C-33 compliant).

Basin #1 will be designed with a water quality volume of 289,408 cubic feet (282,530 cubic feet required), and a sand filter area of 35,952 square feet (23,544 square feet required). This basin is designed to remove 50,890 pounds of TSS (50,212 pounds required).

Basin #2 will be designed with a water quality volume of 35,508 cubic feet (33,566 cubic feet required), and a sand filter area of 5,792 square feet (2,797 square feet required). This basin is designed to remove 5,115 pounds of TSS (4,983 pounds required).

Basin #3 will be designed with a water quality volume of 309,104 cubic feet (289,672 cubic feet required), and a sand filter area of 41,214 square feet (24,071 square feet required). This basin is designed to remove 33,525 pounds of TSS (29,083 pounds required).

Basin #4 will be designed with a water quality volume of 214,992 cubic feet (197,320 cubic feet required), and a sand filter area of 26,874 square feet (16,392 square feet required). This basin is designed to remove 24,200 pounds of TSS (21,749 pounds required).

*Basins 1 and 2 have been oversized to account for 2.410 acres of uncaptured impervious cover (2,163 pounds of TSS) within the phase 1 development.

*Basins 3 and 4 have been oversized to account for 5.199 acres of uncaptured impervious cover (4,667 pounds of TSS) within the phase 2 development

SPECIAL CONDITIONS

I. 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.

II. This modification is subject to all Special and Standard Conditions listed in the CZP approval letter dated November 2, 2012 and January 13, 2015.

III. All permanent pollution abatement measures shall be operational prior to occupancy of the facility.

IV. All sediment and/or media removed from the water quality basin during maintenance activities shall be properly disposed of according to 30 TAC 330 or 30 TAC 335, as applicable.

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, 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.

<u>After Completion of Construction:</u>

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.

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 Monica Reyes of the Edwards Aquifer Protection Program of the San Antonio Regional Office at (210) 403-4012.

Sincerely,

Lynn Bumguardner, Water Section Manager
San Antonio Region Office
Texas Commission on Environmental Quality

LB/MR/eg

Enclosure: Deed Recordation Affidavit, Form TCEQ-0625A
Change in Responsibility for Maintenance of Permanent BMPs, Form TCEQ-10263

cc: Mr. Andrew D. Slyter, P.E., CEI Engineering Associates, Inc.
Mr. Thomas Hornseth, P.E., Comal County
Mr. Roland Ruiz, Edwards Aquifer Authority
The Honorable Bill Kraweitz, City of Bulverde
TCEQ Central Records, Building F, MC212

TCEQ
Protecting Texas by Reducing and Preventing Pollution

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JAN 04 2016
COUNTY ENGINEER

F A X T R A N S M I T T A L

DATE: **December 18, 2015**

NUMBER OF PAGES *(including this cover sheet):* **2**

TO: Name **Mr. David Keith**
Organization **SH-DJL Development, LLC**
FAX Number **210-614-8276**

TO: Name **Mr. Andrew D. Slyter, P.E., CPESC**
Organization **CEI Engineering Associates, Inc.**
FAX Number **479-273-0844**

FROM: TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
Name **Monica Reyes**
Division/Region **EAPP/San Antonio**
Telephone Number **210-403-4012**
FAX Number **210-545-4329**

Re: Edwards Aquifer, Comal County

NAME OF PROJECT: Singing Hills Development (Jiffy Lube); Located on the northwest corner of US Highway 281 and State Highway 46; Bulverde, Texas

TYPE OF PLAN: Request for Approval of a Contributing Zone Plan (CZP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer

Request for a Modification of an Approved Contributing Zone Plan (CZP); 30 Texas Administration Code (TAC) Chapter 213 Edwards Aquifer

Investigation No.1289574; Regulated Entity No. RN10609062; Additional ID No. 13000001

Dear Mr. Keith:

We are in receipt of the additional information you have submitted on the above-referenced project for the CZP application and are in the process of technically reviewing the additional information. Before we can proceed with our review, the following comments relating to the application must be addressed.

1. Documentation provided indicates the Oil Base DRYLOK Masonry Waterproofer Paint proposed for this application is not resistant to oil. TCEQ Regulation 30 TAC 213.5(e) (1) requires that the controlled drainage area must be constructed of, and in a material impervious to, the substance(s) being stored. Please choose

a suitable coating that can withstand sustained immersion in oil, possesses long-term resistance to hydrocarbons, abrasions and impacts and which meets the design standards of 30 TAC 213.5(e)(1).

We ask that you submit **one original and four copies** of the amended materials to supplement the CZP application to this office by no later than **14 days from the date of this fax** to avoid denial of the plan. If the response to this notice is not received, is incomplete or inadequate, or provides new information that is incomplete or inadequate, a second notice will be sent to you requiring a response within 14 days from the notice date. If the response to the second is not received, is incomplete or inadequate, or provides new information that is incomplete or inadequate, the application will be denied unless you provide written notification that the application is being withdrawn. Please note that the application fee will be forfeited if the plan is not withdrawn. If you have any questions or require additional information, please contact Monica Reyes of the Edwards Aquifer Protection Program of the San Antonio Regional Office at the number listed above.

Floropoxy System 4700
Epoxy Primer

Product Description: Floropoxy System 4700 epoxy is 100% solids, fast curing and self-leveling. This coating is designed to penetrate and seal concrete floors. It cures to form a glossy, tough, smooth surface.

Typical Uses, Applications: Ideally suited for priming or midcoat use in commercial, industrial and institutional applications, such as:
- Hospitals
- Detention facilities
- Warehouses
- Manufacturing plants
- Washrooms

Product Advantages:
- Excellent durability and resilience
- Self Leveling Epoxy system restores worn, pitted or deteriorated concrete to a smooth, highly dense and lustrous surface
- A variety of colors can be achieved with the addition of Florock 100% Solids Colorants

Packaging:
4 Gal OverPack
20 Gal Pail Set
220 Gal Drum Set

Storage: All containers should be stored at 40° F to 95° F and be kept tightly sealed and out of direct sunlight.

Coverage:
Properly prepared floors will typically consume 10 to 16 mils of primer depending on the porosity of the surface. The spread ratio will be 100 SF/gal. for 16 mils. The spread ratio will be 160 SF/gal. for 10 mils..

Cured Physical Properties		
Property	**Test Method**	**Results**
Compressive Strength	ASTM D695	13,500 PSI
Tensile Strength	ASTM D2370	8,000 PSI
Hardness, Shore D	ASTM D2240	85 @ 0 sec. 80 @ 15 sec.
Fluxural Strength	ASTM D790	12,000 PSI
Tensile Elongation	ASTM 2370	5%
Abrasion Resistance, Taber Abrader CS 17 Wheel, 1000 gm load, 1000 cycles	ASTM D4060	88 mg loss
Water Absorption	ASTM C413	0.2%
Bond Strength	ASTM D454	>400 PSI
Impact Resistance	ASTM D2794	160 lbs.

Surface Preparation: New concrete must have a 28 day cure, and preferably a broom swept finish, prior to coating. In the case of older concrete flooring, remove all surface oils, paint, dust and debris. Prior to coating, make sure the surface is clean, passes the MVT test and the water drop test and that all surface defects have been repaired. Refer to the Florock "Preparation of Concrete" datasheet for more information on preparation and MVT before proceeding.

Note: Floropoxy should not be applied when floor temperature is above 90° F or below 55° F, or when within 5° F of the dew point.

Primer Application: In a clean, dry container, blend 3 parts by volume of Resin Part A with 1 part by volume of Activator Part B. Mix thoroughly for 3-5 minutes, using a low speed mechanical mixer. Transfer the mixture from the batch container to a transport container. Remix and pour entire mix from the transport container onto floor immediately. Retaining mixture in the bucket will shorten the pot life. Using a flat or 1/8" notched squeegee, apply at desired thickness. Backroll with a 3/8" nap roller.

Note: The cure time will vary with conditions. Allow a minimum of 4 hours and a maximum of 24 hours before next step.

Self Leveler Application:
When the surface is not as smooth as desired after priming and a high performance topcoat will be the final step, a second application of Floropoxy as a self-leveler shall be applied at a sufficient thickness to restore the profile. Mix the same as with primer step. For 16 mils, apply at 100 SF/gal.

Instructions for Use over Existing Coatings:
Examine the existing coating to ensure that it is well bonded to the concrete Any loose coating must be completely removed.

Edges should be sanded to a feathered edge. Clean the entire floor thoroughly with detergent cleaner. The surface must be free of all dirt, oils, or other contaminants.
After the floor has completely dried, sand the existing coating until a powdery residue is evident and all gloss is removed. Sweep or vacuum clean, and wipe with Florobase Thinner to ensure good adhesion of the new System.

Note: When coating over existing coatings, a test patch is recommended to evaluate compatibility.

Chemical Resistance	
Reagent	**Spot Test Results**
Water	1
Isopropyl Alcohol	4
Acetone	4
Sulfuric Acid 10%	1
Nitric Acid	1
Hydrochloric Acid 10%	2
Phosphoric Acid 50%	1
Citric Acid 10%	1
Brake Fluid	1
Salt 20%	1
Acetic Acid 10%	4
Sugar Solution 10%	1
MEK	4
JP 4 Jet Chloride	1
Methylene Chloride	D
Xylene	4
Toluene	4
Mineral Spirits	1
Skydrol	1
Tincture of Iodine	4,S
Lactic Acid 10%	4
Sulfuric Acid 25%	3

Rating Scale: Spot Test, ASTM D1308
Pencil Hardness Test, ASTM D3363
1 – No change in pencil hardness
2 – 1 Unit change in pencil hardness
3 – 2 Units change in pencil hardness
4 – 3 Units change in pencil hardness
D – Destroyed
S - Stains

Floropoxy System 4700
Epoxy Primer

Please read material safety data before using product.

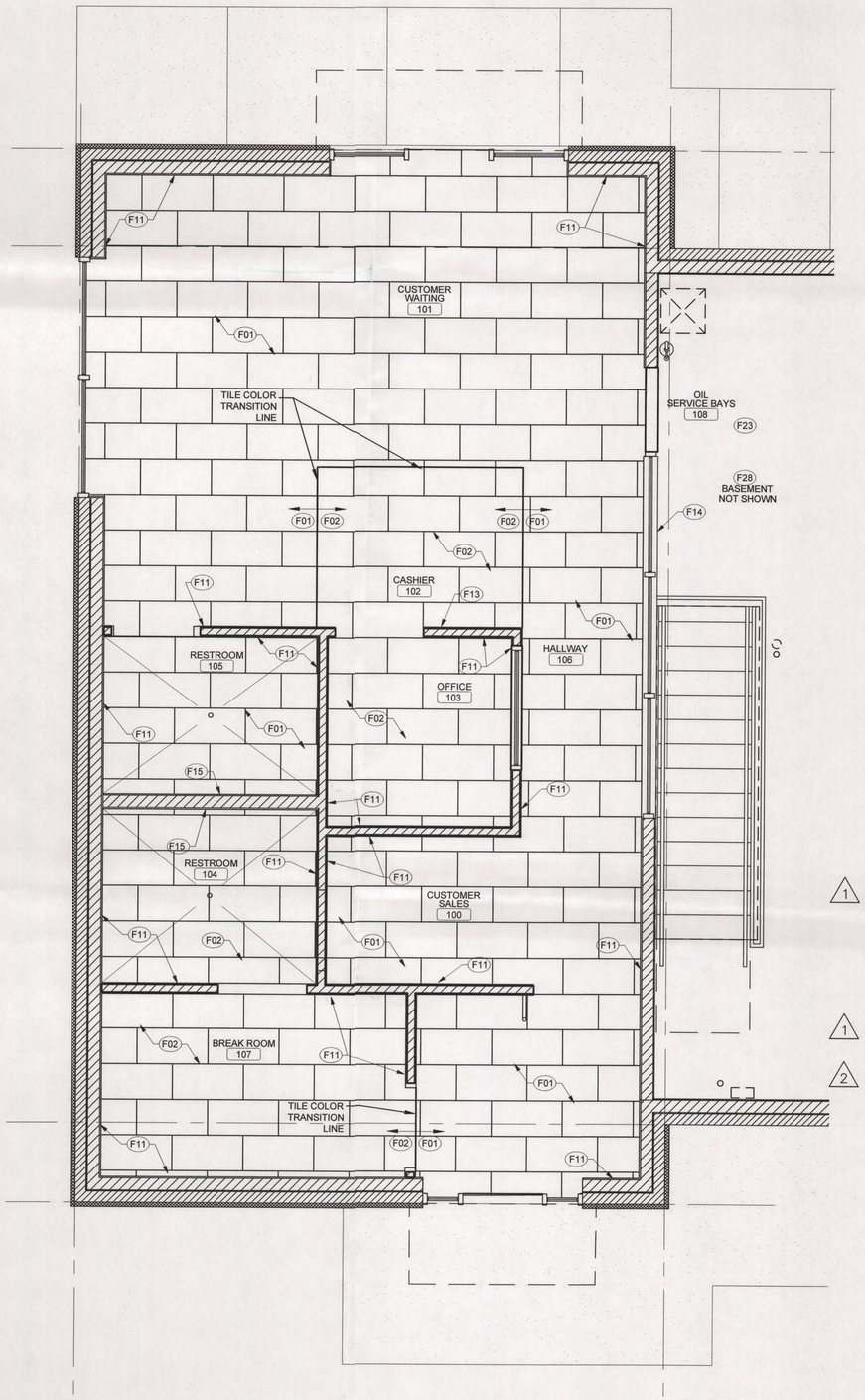
DISCLAIMER:
All statements and recommendations above are based on experience we believe to be reliable. The use or application of these products being beyond the control of the Seller or Manufacturer, neither Seller nor Manufacturer make any warranty, expressed of implied, as to results or hazard from its use. The suitability, risk and liability whatsoever of a product for an intended use shall be solely up to the User.

Liquid Physical Properties			
Property	**Test Method**	**M0-076 Component A**	**U0-144 Component B**
Viscosity	ASTM D2196	1000 cps	75 cps
Flash Point	ASTM D3278	>200 F	>200 F
Weight Per Gallon	ASTM D1475	9.13 lbs	8.10 lbs
N.V.W.	ASTM D2369	100%	100%
N.V.V.	ASTM D1259	100%	100%
VOC	ASTM D3960	0	0

Blended Components	
Blended Ratio	3:1 by volume
Curing Time, 70° F @ 50% RH	
Set to Touch	4 hours
Minimum Recoat (Foot Traffic)	6 hours
Maximum Recoat	24 hours
Pot Life (4 Gal. Volume)*	18 minutes @70° F
Minimum Recommended Spread Time	160 SF/gal.
Weight Per Gallon, ASTM D1475	8.62 lbs.
N.V.W., ASTM D2369	100%
N.V.V., ASTM D1259	100%
Blended Viscosity, ASTM D2196	500 – 800 cps
Recommended Clean Up Solvent	S 41Florobase Thinner
VOC, ASTM D3960	0

*Pot Life will be less with warmer slab and material temperatures.

4165 S. Emerald • Chicago, IL 60609 • (800) 356-7625 • www.florock.net



GENERAL NOTES

1) SERVICE PLATFORMS & RAILS TO BE PRE-FINISHED GALVANIZED BY DEVON
2) APPLY CLEAR COAT (F24) OVER CARMINE (F23) ON EXTERIOR APPLICATIONS.
4) FRP BY CRANE COMPOSITES "STONE", WWW.CRANECOMPOSITES.COM, PH-800.435.0080

INTERIOR FINISH SCHEDULE

LEGEND:

● MATERIAL AND FINISH APPLY TO ALL SURFACES

◒ MATERIAL FINISH APPLIED ON SURFACE BY QUADRANT SHADED. QUADRANT ORIENTATION SAME AS FLOOR PLAN

RM. NO.	ROOM NAME	FLOOR					BASE		WALL							CEILING		
		SMOOTH FINISHED CONC. W/ CLEAR SEALER	PORCELAIN TILE - F01	PORCELAIN TILE - F02	NOT USED	FIELD APPLIED SHAKE COLOR - F23	RUBBER - F03	NONE	PLYWOOD PAINTED (WAINSCOT) - F06	PLYWOOD PAINTED (ABOVE WAINSCOT) - F07	FRP (WAINSCOT) - F14	GYPSUM BOARD PAINTED (ABOVE WAINSCOT) - F07	GYPSUM BOARD PAINTED - F11	GYPSUM BOARD PAINTED - F12	GYPSUM BOARD PAINTED - F13	TILE - F15	NONE	GYP BOARD - F11	EXPOSED STRUCTURE PAINTED - F16	EXPOSED STRUCTURE NO PAINT	ACOUSTICAL LAY-IN TILE - F22
B01	LOWER BAY	●						●									●			●	
100	CUSTOMER SALES		●				●						●								●
101	CUSTOMER WAITING		●				●						◒								●
102	CASHIER			●			●								◒						●
103	OFFICE			●			●						●					●			
104	RESTROOM			●			●						◒			◒		●			
105	RESTROOM		●				●						◒			◒		●			
106	HALL		●				●						●								●
107	BREAK ROOM			●			●						●					●			
108	OIL SERVICE BAYS					●	●		◒	◒	◒	◒							●		
109	AUTO SERVICE BAYS					●	●		◒	◒	◒	◒							●		

FINISHES: INTERIOR/ EXTERIOR

MARK	TYPE	MATERIAL/ SIZE	MFR	MFR #	COLOR
F01	FLOORING	PORCELAIN (12" X 24") STYLE: DISTRICT	TIT CALLAHAN*	JLI-TDCTZO1224	OLIVE
F02	FLOORING	PORCELAIN (12" X 24") STYLE: DISTRICT	TIT CALLAHAN*	JLI-TDCTZC1224	CARBON
F03	BASE	RUBBERMYTE (4" COVED)	BURKE INDUSTRIES*	523	BLACK BROWN
F04	NOT USED				
F05	FLOORING	RUBBER TILE (36" X 36")	AUTOFLOORS*	--	BLACK SCULPTURE
F06	WAINSCOT SIGN POLES / FENCES / EXT. DOORS AND TRIM / OVERHEAD DOOR JAMB & HEAD	PAINT (SATIN / SEMI-GLOSS)	SHERWIN WILLIAMS	SW2827	COLONIAL REVIVAL STONE
F07	EIFS CORNICE/ GYP BOARD CEILINGS	PAINT (SEMI-GLOSS)	SHERWIN WILLIAMS	SW7005	PURE WHITE
F08	OPT. 1: PERSONNEL DOORS / FRAMES / TRIM (SHOP SIDE ONLY)	PAINT (SATIN / SEMI-GLOSS)	SHERWIN WILLIAMS	SW2841	WEATHERED SHINGLE
F09	OPT. 2: PERSONNEL DOORS / FRAMES / TRIM (SHOP SIDE ONLY)	PAINT (SATIN / SEMI-GLOSS)	SHERWIN WILLIAMS	SW6152	SUPERIOR BRONZE
F10	PIT GUARDS	PAINT (SEMI-GLOSS: INDUSTRIAL ENAMEL)	SHERWIN WILLIAMS	B54 SERIES	SAFETY YELLOW
F11	WALLS/ GYP BOARD CEILINGS	PAINT (SEMI-GLOSS)	SHERWIN WILLIAMS	SW7022	ALPACA
F12	WALLS	PAINT (SEMI-GLOSS)	SHERWIN WILLIAMS	SW7020	BLACK FOX
F13	WALLS	PAINT (SEMI-GLOSS)	SHERWIN WILLIAMS	SW6314	LUXURIOUS RED
F14	WAINSCOT (BELOW WINDOW - SERVICE BAY SIDE ONLY)	FRP PANELS	CRANE COMPOSITES	--	MATCH SW2827
F15	WALLS	LVT (12" X 18")	MANNINGTON COMMERCIAL*	AROALA21	LINEAR METALLIC STEEL
F16	CEILING	PAINT (MATTE)	SHERWIN WILLIAMS	SW6258	TRICORN BLACK
F17	CEILING	PAINT (SATIN / SEMI-GLOSS)	SHERWIN WILLIAMS	SW7005	PURE WHITE
F18	EXT. WALLS: REAR FASCIA / HANDRAILS / GUARD RAILS / TRAFFIC BOLLARDS	PAINT (SEMI-GLOSS)	SHERWIN WILLIAMS	SW2905	CARMINE
F19	EXT. WALLS: APPLY OVER CARMINE COLOR ABOVE	PAINT (SEMI-GLOSS)	SHERWIN WILLIAMS	CLEAR COAT	SHER-CLEAR
F20	EXT. WALLS: MAINFIELD VENEER	CONCRETE BLOCK - 4"H X 12"L X 4"D	ACME OR EQUIV.	--	RIVERSIDE MED. OR EQUIV.
F21	EXT. WALLS: ROWLOCK AND SOLDIER COURSE VENEER(S)	CONCRETE BLOCK - 4"H X 12"L X 4"D (SOLDIER COURSE) 4"H X 4"W X 4"D (ROWLOCK)	ACME OR EQUIV.	--	DOVE GRAY OR EQUIV.
F22	CEILING	ACOUSTIC CEILING TILE: ANGLED TEGULAR (2'X2')	ARMSTRONG	1774	DUNE
F23	FLOOR (STAIR PANS & BASEMENT NOT COLORED)	DRY SHAKE COLORED CONCRETE HARDENER W/ COLOR CURE SEALER CONCRETE (ROUGH TROWEL FINISH) ***PROVIDE MOCK-UP FOR OWNER APPROVAL***	SCOFIELD	A-21	DARK CHARCOAL
F24	LIMESTONE VENEER	SISTERDALE 8X RANDOM LENGTHS 12" THRU 24" - SAWN			BROWN
F25	CONC. BELT COURSE				
F26	EXT. WALLS: WAINSCOT VENEER	CONCRETE BLOCK - 4"H X 12"L X 4"D	ACME OR EQUIV.	--	DOVE GRAY OR EQUIV.
F27	DUMPSTER SCREEN WALL CMU	CONCRETE MASONRY UNIT- 8"H X 16"L X 8"D	TBD COLOR TO MATCH/COMPLIMENT F20		
F28	BASEMENT FLOOR & 36" UP EXTERIOR CONC. WALL	EPOXY PRIMER SYSTEM	FLOROCK	4700 EPOXY	GRAY

* SUPPLY THROUGH NATIONAL ACCOUNT VENDOR, AUTOFLOORS. PH: 281-354-1505, TOLL FREE: 866-365-7432, CONTACT: DAN O'MALLEY, EMAIL: dan@autofloors.com

VERIFY EXTERIOR COLORS PRIOR TO ORDERING COLORS TO MATCH HILL COUNTRY COLOR THEME-SPEC TO BE OWNER PROVIDED.

1

1

2

VERIFY EXTERIOR COLORS PRIOR TO ORDERING COLORS TO MATCH HILL COUNTRY COLOR THEME-SPEC TO BE OWNER PROVIDED.

FINISH SCHEDULE

design west | architects
255 SOUTH 300 WEST LOGAN UT 84321
795 NORTH 400 WEST SALT LAKE CITY UT 84103

jiffy lube®
1X5 STANDARD BRAKES AND SERVICES
PROTOTYPE V2014
TRACT 18 SINGING HILLS HWY 281
BULVERDE, TX

REVISIONS

REV 1 11/23/2015 EXTERIOR CHANGES
REV 2 12/21/2015 TCEQ REVISION

ISSUED DATES

PROGRESS SET:
PERMIT REVIEW:
BID:
CONSTRUCTION:

REGISTERED ARCHITECT SCOTT OLSON 25080 STATE OF TEXAS

PROFESSIONAL OF RECORD

DRAWN BY LASTNAME
CHECKED BY
STORE NUMBER XXXXXX
DESIGN WEST PROJECT NO. 415183
ISSUE DATE
SCALE
SHEET NUMBER A-12

12/21/15 S:\415183 - Jiffy Lube - Bulverde, TX_Working\Sheets\A-12 FINISH SCHEDULE.dwg

ENGINEERS ■ SURVEYORS ■ PLANNERS
LANDSCAPE ARCHITECTS ■ ENVIRONMENTAL SCIENTISTS

3108 SW Regency Parkway, Suite 2
Bentonville, AR 72712
(479) 273-9472 Fax (479) 273-0844

www.ceieng.com

December 9, 2015

Monica Reyes
TCEQ EAPP / San Antonio
14250 Judson Road
San Antonio, Texas 78233
(210) 403-4012

RE: Jiffy Lube Contributing Zone Plan Modification
Singing Hills Development - Bulverde, Texas
Investigation No. 1289574

Dear Ms. Reyes:

In response to your comments dated December 4, 2015 for the above referenced project and CZP Modification, we provide the following responses.

Edwards Aquifer Application Cover Page (TCEQ-20705) Comments:

1. Please provide form.
   Response: Completed form is included with this resubmittal.

Contributing Zone Plan Application (TCEQ-10257) Comments:

2. Attachment B: USGS map, please provide scale.
   Response: Scale has been added to the USGS map.

3. Provide coating material impervious to the oil that will cover the 1.5 times the volume of the storage tanks of the containment area.
   Response: Coating material has been added, please see revised Architecture documents.

4. Please discuss the piping material, and if piping is single or double walled.
   Response: Please see responses from Architect and revised documents.

5. Please provide the drainage area, impervious cover, required and designed TSS removal for the sand filter basin #1 including the proposed Jiffy Lube site.
   Response: Please see CZP Modification Attachment K. Drainage area including amount of impervious cover and TSS removal for sand filter basin #1 are provided for the overall entire Singing Hills Development, including the Jiffy Lube site. The original calculations for the Singing Hills Development are included as supporting documentation with this resubmittal.

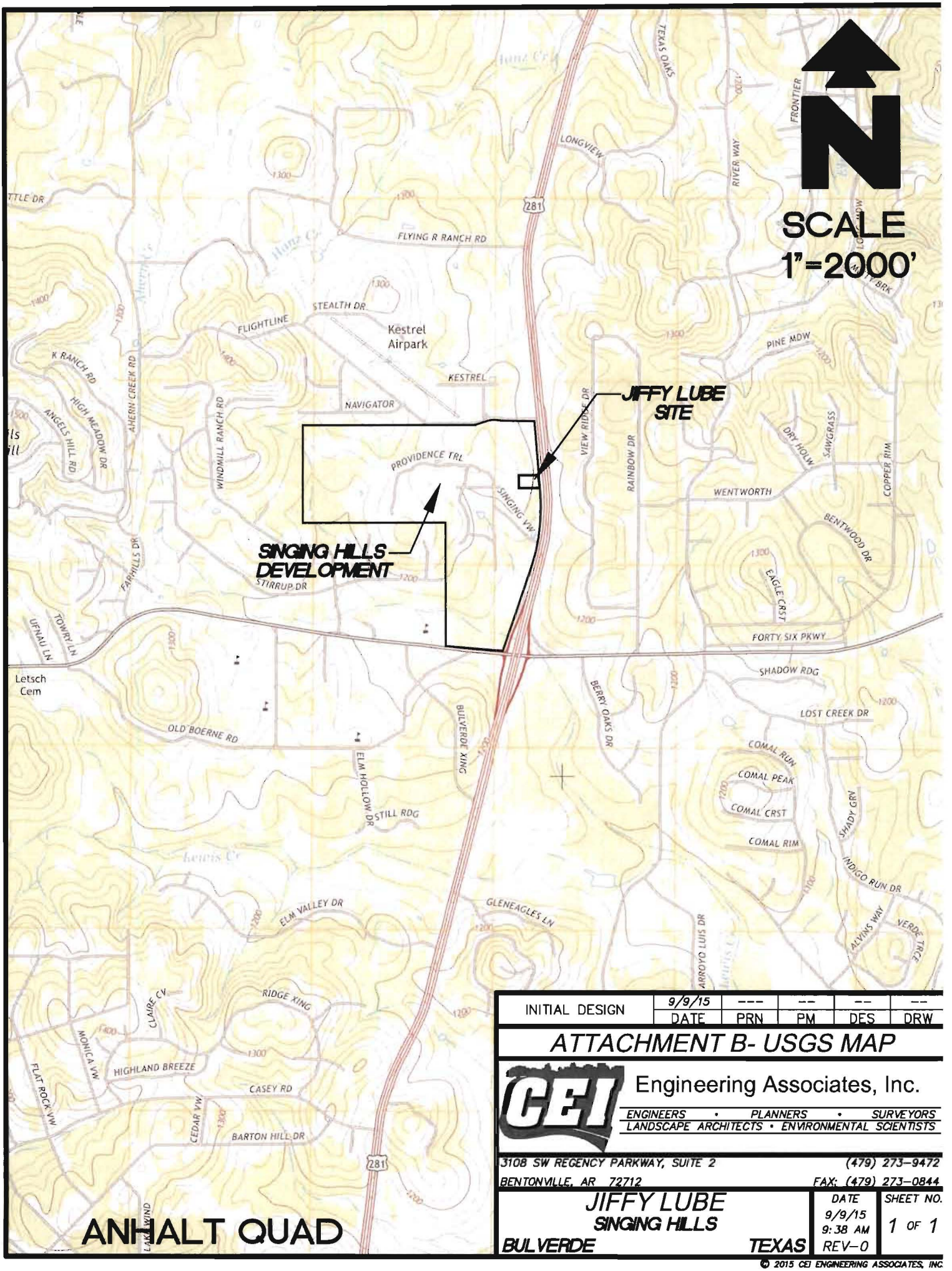
Sheets and Exhibits Comments:

6. Please outline location of Jiffy Lube site on sheet SP0.
   Response: The location of the Jiffy Lube site is now indicated on sheet SP0.

Please do not hesitate to contact us should you have any questions or need any additional information.

Sincerely,

Andrew D. Slyter, PE, CPESC
CEI Engineering Associates, Inc.



INITIAL DESIGN	9/9/15	---	--	--	--
	DATE	PRN	PM	DES	DRW

ATTACHMENT B- USGS MAP

Engineering Associates, Inc.
ENGINEERS • PLANNERS • SURVEYORS
LANDSCAPE ARCHITECTS • ENVIRONMENTAL SCIENTISTS
3108 SW REGENCY PARKWAY, SUITE 2
BENTONVILLE, AR 72712
(479) 273-9472
FAX: (479) 273-0844

JIFFY LUBE SINGING HILLS BULVERDE TEXAS	DATE 9/9/15 9:38 AM REV-0	SHEET NO. 1 OF 1

JOB # ####.DRAWING: USGS and Road Map.dwg LAST SAVED BY: ASLYTER

Texas Commission on Environmental Quality

Edwards Aquifer Application Cover Page

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

1. 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.

2. 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.

3. 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.

6. 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

1. 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.

1. Regulated Entity Name: Singing Hills					**2. Regulated Entity No.: 10609062**			
3. Customer Name: SH-DJL Development, LLC					**4. Customer No.: 604065060**			
5. Project Type: (Please circle/check one)	New	Modification			Extension		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. Site (acres):**			253.8
9. Application Fee:	$3,000	**10. Permanent BMP(s):**			4 Water Quality Basins			
11. SCS (Linear Ft.):	N/A	**12. AST/UST (No. Tanks):**			9 AST			
13. County:	Comal	**14. Watershed:**			Lewis 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%20GWCD%20map.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)	___	___	___
Groundwater Conservation District(s)	___ Edwards Aquifer Authority ___ Barton Springs/ Edwards Aquifer ___ Hays Trinity ___ Plum Creek	___ Barton Springs/ Edwards Aquifer	NA
City(ies) Jurisdiction	___ Austin ___ Buda ___ Dripping Springs ___ Kyle ___ Mountain City ___ San Marcos ___ Wimberley ___ Woodcreek	___ Austin ___ Bee Cave ___ Pflugerville ___ Rollingwood ___ Round Rock ___ Sunset Valley ___ West Lake Hills	___ Austin ___ Cedar Park ___ Florence ___ Georgetown ___ Jerrell ___ Leander ___ Liberty Hill ___ Pflugerville ___ Round Rock

San Antonio Region					
County:	**Bexar**	**Comal**	**Kinney**	**Medina**	**Uvalde**
Original (1 req.)	___	___	___	___	___
Region (1 req.)	___	___	___	___	___
County(ies)	___	___	___	___	___
Groundwater Conservation District(s)	___ Edwards Aquifer Authority ___ Trinity-Glen Rose	X Edwards Aquifer Authority	___ Kinney	___ EAA ___ Medina	___ EAA ___ Uvalde
City(ies) Jurisdiction	___ Castle Hills ___ Fair Oaks Ranch ___ Helotes ___ Hill Country Village ___ Hollywood Park ___ San Antonio (SAWS) ___ Shavano Park	X 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 complete and accurate. This application is hereby submitted to TCEQ for administrative review and technical review.

Andrew Slyter

Print Name of Customer/Authorized Agent

Signature of Customer/Authorized Agent — Date: 12/8/15

FOR TCEQ INTERNAL USE ONLY				
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):		Fee Check:	Payable to TCEQ (Y/N):	
Core Data Form Complete (Y/N):			Signed (Y/N):	
Core Data Form Incomplete Nos.:			Less than 90 days old (Y/N):	

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: Singing Hills - Pond #1 Revised
Date Prepared: 10/16/2014

Additional information is provided for cells with a red triangle in the upper right corner. Place the cursor over the cell.
Text shown in blue indicate location of instructions in the Technical Guidance Manual - RG-348.
Characters shown in red are data entry fields.
Characters shown in black (Bold) are calculated fields. Changes to these fields will remove the equations used in the spreadsheet.

1. The Required Load Reduction for the total project: Calculations from RG-348 Pages 3-27 to 3-30

Page 3-29 Equation 3.3: $L_M = 27.2(A_N \times P)$

where:

$L_{M\ TOTAL\ PROJECT}$ = Required TSS removal resulting from the proposed development = 80% of increased load
A_N = Net increase in impervious area for the project
P = Average annual precipitation, inches

Site Data: Determine Required Load Removal Based on the Entire Project

County =	Comal	
Total project area included in plan * =	253.80	acres
Predevelopment impervious area within the limits of the plan * =	4.72	acres
Total post-development impervious area within the limits of the plan* =	130.45	acres
Total post-development impervious cover fraction * =	0.51	
P =	33	inches
$L_{M\ TOTAL\ PROJECT}$ =	112855	lbs.

* The values entered in these fields should be for the total project area.

Number of drainage basins / outfalls areas leaving the plan area = 4

2. Drainage Basin Parameters (This information should be provided for each basin):

Drainage Basin/Outfall Area No. = 1

Total drainage basin/outfall area =	68.59	acres
Predevelopment impervious area within drainage basin/outfall area =	1.79	acres
Post-development impervious area within drainage basin/outfall area =	57.73	acres
Post-development impervious fraction within drainage basin/outfall area =	0.84	
$L_{M\ THIS\ BASIN}$ =	50212	lbs.

Duane A. Moy, PE
10/16/14

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = Sand Filter
Removal efficiency = 89 percent

Aqualogic Cartridge Filter
Bioretention
Contech StormFilter
Constructed Wetland
Extended Detention
Grassy Swale
Retention / Irrigation
Sand Filter
Stormceptor
Vegetated Filter Strips
Vortechs
Wet Basin
Wet Vault

4. Calculate Maximum TSS Load Removed (L_R) for this Drainage Basin by the selected BMP Type.

RG-348 Page 3-33 Equation 3.7: $L_R = (\text{BMP efficiency}) \times P \times (A_I \times 34.6 + A_P \times 0.54)$

where:

A_C = Total On-Site drainage area in the BMP catchment area
A_I = Impervious area proposed in the BMP catchment area
A_P = Pervious area remaining in the BMP catchment area
L_R = TSS Load removed from this catchment area by the proposed BMP

A_C = 68.59 acres
A_I = 57.73 acres
A_P = 10.86 acres
L_R = 58838 lbs

5. Calculate Fraction of Annual Runoff to Treat the drainage basin / outfall area

Desired $L_{M\ THIS\ BASIN}$ = 50890 lbs.

F = 0.86

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area. Calculations from RG-348 Pages 3-34 to 3-36

Rainfall Depth = 1.38 inches

Post Development Runoff Coefficient =	0.69	
On-site Water Quality Volume =	235441	cubic feet

Calculations from RG-348 Pages 3-36 to 3-37

Off-site area draining to BMP =	0.00	acres
Off-site Impervious cover draining to BMP =	0.00	acres
Impervious fraction of off-site area =	0	
Off-site Runoff Coefficient =	0.00	
Off-site Water Quality Volume =	0	cubic feet
Storage for Sediment =	47088	
Total Capture Volume (required water quality volume(s) x 1.20) =	282530	cubic feet

The following sections are used to calculate the required water quality volume(s) for the selected BMP.
The values for BMP Types not selected in cell C45 will show NA.

7. Retention/Irrigation System Designed as Required in RG-348 Pages 3-42 to 3-46

Required Water Quality Volume for retention basin =	NA	cubic feet	
Irrigation Area Calculations:			
Soil infiltration/permeability rate =	0.1	in/hr	Enter determined permeability rate or assumed value of 0.1
Irrigation area =	NA	square feet	
	NA	acres	

8. Extended Detention Basin System Designed as Required in RG-348 Pages 3-46 to 3-51

Required Water Quality Volume for extended detention basin =	NA	cubic feet

9. Filter area for Sand Filters Designed as Required in RG-348 Pages 3-58 to 3-63

9A. Full Sedimentation and Filtration System

Water Quality Volume for sedimentation basin =	282530	cubic feet	
Minimum filter basin area =	13080	square feet	
Maximum sedimentation basin area =	117721	square feet	For minimum water depth of 2 feet
Minimum sedimentation basin area =	29430	square feet	For maximum water depth of 8 feet

9B. Partial Sedimentation and Filtration System

Water Quality Volume for combined basins =	282530	cubic feet	
Minimum filter basin area =	23544	square feet	
Maximum sedimentation basin area =	94177	square feet	For minimum water depth of 2 feet
Minimum sedimentation basin area =	5886	square feet	For maximum water depth of 8 feet

10. Bioretention System — Designed as Required in RG-348 — Pages 3-63 to 3-65

Required Water Quality Volume for Bioretention Basin =	NA	cubic feet

11. Wet Basins — Designed as Required in RG-348 — Pages 3-66 to 3-71

Required capacity of Permanent Pool =	NA	cubic feet	Permanent Pool Capacity is 1.20 times the WQV
Required capacity at WQV Elevation =	NA	cubic feet	Total Capacity should be the Permanent Pool Capacity plus a second WQV.

12. Constructed Wetlands — Designed as Required in RG-348 — Pages 3-71 to 3-73

Required Water Quality Volume for Constructed Wetlands =	NA	cubic feet

13. AquaLogic™ Cartridge System — Designed as Required in RG-348 — Pages 3-74 to 3-78

** 2005 Technical Guidance Manual (RG-348) does not exempt the required 20% increase with maintenance contract with AquaLogic™.

Required Sedimentation chamber capacity =	NA	cubic feet
Filter canisters (FCs) to treat WQV =	NA	cartridges
Filter basin area (RIA_F) =	NA	square feet

14. Stormwater Management StormFilter® by CONTECH

Required Water Quality Volume for Contech StormFilter System =	NA	cubic feet

THE SIZING REQUIREMENTS FOR THE FOLLOWING BMPs / LOAD REMOVALS ARE BASED UPON FLOW RATES - NOT CALCULATED WATER QUALITY VOLUMES

15. Grassy Swales — Designed as Required in RG-348 — Pages 3-51 to 3-54

Design parameters for the swale:

Drainage Area to be Treated by the Swale = A =	8.00 acres

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: Singing Hills, Phase 2
Date Prepared: 10/8/2014

Additional information is provided for cells with a red triangle in the upper right corner. Place the cursor over the cell.
Text shown in blue indicate location of instructions in the Technical Guidance Manual - RG-348.
Characters shown in red are data entry fields.
Characters shown in black (Bold) are calculated fields. Changes to these fields will remove the equations used in the spreadsheet.

1. The Required Load Reduction for the total project: Calculations from RG-348 Pages 3-27 to 3-30

Page 3-29 Equation 3.3: $L_M = 27.2(A_N \times P)$

where:

$L_{M\ TOTAL\ PROJECT}$ = Required TSS removal resulting from the proposed development = 80% of increased load
A_N = Net increase in impervious area for the project
P = Average annual precipitation, inches

Site Data: Determine Required Load Removal Based on the Entire Project

County =	**Comal**	
Total project area included in plan * =	**253.80**	acres
Predevelopment impervious area within the limits of the plan * =	**4.72**	acres
Total post-development impervious area within the limits of the plan* =	**130.45**	acres
Total post-development impervious cover fraction * =	**0.51**	
P =	**33**	inches
$L_{M\ TOTAL\ PROJECT}$ =	**112855**	lbs.

* **The values entered in these fields should be for the total project area.**

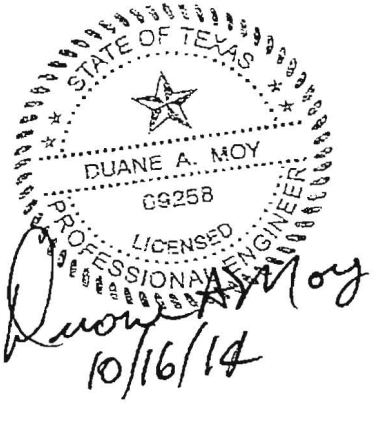
Number of drainage basins / outfalls areas leaving the plan area = **4**

2. Drainage Basin Parameters (This information should be provided for each basin):

Drainage Basin/Outfall Area No. = 3

Total drainage basin/outfall area =	**58.68**	acres
Predevelopment impervious area within drainage basin/outfall area =	**1.40**	acres
Post-development impervious area within drainage basin/outfall area =	**33.80**	acres
Post-development impervious fraction within drainage basin/outfall area =	**0.58**	
$L_{M\ THIS\ BASIN}$ =	**29083**	lbs.

3. Indicate the proposed BMP Code for this basin.



Proposed BMP = **Sand Filter**
Removal efficiency = **89** percent

Aqualogic Cartridge Filter
Bioretention
Contech StormFilter
Constructed Wetland
Extended Detention
Grassy Swale
Retention / Irrigation
Sand Filter
Stormceptor
Vegetated Filter Strips
Vortechs
Wet Basin
Wet Vault

4. Calculate Maximum TSS Load Removed (L_R) for this Drainage Basin by the selected BMP Type.

RG-348 Page 3-33 Equation 3.7: L_R = (BMP efficiency) x P x (A_I x 34.6 + A_P x 0.54)

where:

A_C = Total On-Site drainage area in the BMP catchment area
A_I = Impervious area proposed in the BMP catchment area
A_P = Pervious area remaining in the BMP catchment area
L_R = TSS Load removed from this catchment area by the proposed BMP

A_C = **58.68** acres
A_I = **33.80** acres
A_P = **24.88** acres
L_R = **34743** lbs

5. Calculate Fraction of Annual Runoff to Treat the drainage basin / outfall area

Desired $L_{M\ THIS\ BASIN}$ = **33525** lbs.

F = **0.96**

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area. Calculations from RG-348 Pages 3-34 to 3-36

Rainfall Depth = **2.80** inches
Post Development Runoff Coefficient = **0.40**
On-site Water Quality Volume = **240713** cubic feet

Calculations from RG-348 Pages 3-36 to 3-37

Off-site area draining to BMP =	1.79	acres	
Off-site Impervious cover draining to BMP =	0.03	acres	
Impervious fraction of off-site area =	0.01		
Off-site Runoff Coefficient =	0.04		
Off-site Water Quality Volume =	680	cubic feet	
Storage for Sediment =	48279		
Total Capture Volume (required water quality volume(s) x 1.20) =	289672	cubic feet	

The following sections are used to calculate the required water quality volume(s) for the selected BMP.
The values for BMP Types not selected in cell C45 will show NA.

7. Retention/Irrigation System Designed as Required in RG-348 Pages 3-42 to 3-46

Required Water Quality Volume for retention basin =	NA	cubic feet	

Irrigation Area Calculations:

Soil infiltration/permeability rate =	0.1	in/hr	**Enter determined permeability rate or assumed value of 0.1**
Irrigation area =	NA	square feet	
	NA	acres	

8. Extended Detention Basin System Designed as Required in RG-348 Pages 3-46 to 3-51

Required Water Quality Volume for extended detention basin =	NA	cubic feet

9. Filter area for Sand Filters Designed as Required in RG-348 Pages 3-58 to 3-63

9A. Full Sedimentation and Filtration System

Water Quality Volume for sedimentation basin =	289672	cubic feet	
Minimum filter basin area =	13373	square feet	
Maximum sedimentation basin area =	120356	square feet	**For minimum water depth of 2 feet**
Minimum sedimentation basin area =	30089	square feet	**For maximum water depth of 8 feet**

9B. Partial Sedimentation and Filtration System

Water Quality Volume for combined basins =	289672	cubic feet	
Minimum filter basin area =	24071	square feet	
Maximum sedimentation basin area =	96285	square feet	**For minimum water depth of 2 feet**
Minimum sedimentation basin area =	6018	square feet	**For maximum water depth of 8 feet**

10. Bioretention System — Designed as Required in RG-348 — Pages 3-63 to 3-65

Required Water Quality Volume for Bioretention Basin = **NA** cubic feet

11. Wet Basins — Designed as Required in RG-348 — Pages 3-66 to 3-71

Required capacity of Permanent Pool = **NA** cubic feet **Permanent Pool Capacity is 1.20 times the WQV**
Required capacity at WQV Elevation = **NA** cubic feet **Total Capacity should be the Permanent Pool Capacity plus a second WQV.**

12. Constructed Wetlands — Designed as Required in RG-348 — Pages 3-71 to 3-73

Required Water Quality Volume for Constructed Wetlands = **NA** cubic feet

13. AquaLogic™ Cartridge System — Designed as Required in RG-348 — Pages 3-74 to 3-78

**** 2005 Technical Guidance Manual (RG-348) does not exempt the required 20% increase with maintenance contract with AquaLogic™.**

Required Sedimentation chamber capacity = **NA** cubic feet
Filter canisters (FCs) to treat WQV = **NA** cartridges
Filter basin area (RIA_F) = **NA** square feet

14. Stormwater Management StormFilter® by CONTECH

Required Water Quality Volume for Contech StormFilter System = **NA** cubic feet

THE SIZING REQUIREMENTS FOR THE FOLLOWING BMPs / LOAD REMOVALS ARE BASED UPON FLOW RATES - NOT CALCULATED WATER QUALITY VOLUMES

15. Grassy Swales — Designed as Required in RG-348 — Pages 3-51 to 3-54

Design parameters for the swale:

Drainage Area to be Treated by the Swale = A = 8.00 acres
Impervious Cover in Drainage Area = 4.00 acres
Rainfall intensity = i = 1.1 in/hr
Swale Slope = 0.01 ft/ft
Side Slope (z) = 3
Design Water Depth = y = 0.33 ft
Weighted Runoff Coefficient = C = 0.54

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: Singing Hills, Phase 2
Date Prepared: 10/8/2014

Additional information is provided for cells with a red triangle in the upper right corner. Place the cursor over the cell.
Text shown in blue indicate location of instructions in the Technical Guidance Manual - RG-348.
Characters shown in red are data entry fields.
Characters shown in black (Bold) are calculated fields. Changes to these fields will remove the equations used in the spreadsheet.

1. The Required Load Reduction for the total project: Calculations from RG-348 Pages 3-27 to 3-30

Page 3-29 Equation 3.3: $L_M = 27.2(A_N \times P)$

where:

$L_{M\ TOTAL\ PROJECT}$ = Required TSS removal resulting from the proposed development = 80% of increased load
A_N = Net increase in impervious area for the project
P = Average annual precipitation, inches

Site Data: Determine Required Load Removal Based on the Entire Project

County =	Comal	
Total project area included in plan * =	253.80	acres
Predevelopment impervious area within the limits of the plan * =	4.72	acres
Total post-development impervious area within the limits of the plan* =	130.45	acres
Total post-development impervious cover fraction * =	0.51	
P =	33	inches
$L_{M\ TOTAL\ PROJECT}$ =	112855	lbs.

*** The values entered in these fields should be for the total project area.**

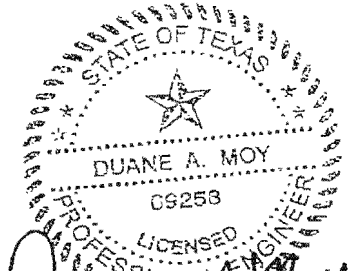
Number of drainage basins / outfalls areas leaving the plan area = 4

2. Drainage Basin Parameters (This information should be provided for each basin):

Drainage Basin/Outfall Area No. = 4

Total drainage basin/outfall area =	45.78	acres
Predevelopment impervious area within drainage basin/outfall area =	0.40	acres
Post-development impervious area within drainage basin/outfall area =	24.63	acres
Post-development impervious fraction within drainage basin/outfall area =	0.54	
$L_{M\ THIS\ BASIN}$ =	21749	lbs.

3. Indicate the proposed BMP Code for this basin.



Duane A. Moy, P.E.
10/16/14

Proposed BMP = Sand Filter
Removal efficiency = 89 percent

Aqualogic Cartridge Filter
Bioretention
Contech StormFilter
Constructed Wetland
Extended Detention
Grassy Swale
Retention / Irrigation
Sand Filter
Stormceptor
Vegetated Filter Strips
Vortechs
Wet Basin
Wet Vault

4. Calculate Maximum TSS Load Removed (L_R) for this Drainage Basin by the selected BMP Type.

RG-348 Page 3-33 Equation 3.7: L_R = (BMP efficiency) x P x (A_I x 34.6 + A_P x 0.54)

where:

A_C = Total On-Site drainage area in the BMP catchment area
A_I = Impervious area proposed in the BMP catchment area
A_P = Pervious area remaining in the BMP catchment area
L_R = TSS Load removed from this catchment area by the proposed BMP

A_C = 45.78 acres
A_I = 24.63 acres
A_P = 21.15 acres
L_R = 25364 lbs

5. Calculate Fraction of Annual Runoff to Treat the drainage basin / outfall area

Desired $L_{M\ THIS\ BASIN}$ = 24200 lbs.

F = 0.95

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area. Calculations from RG-348 Pages 3-34 to 3-36

Rainfall Depth = 2.60 inches
Post Development Runoff Coefficient = 0.38
On-site Water Quality Volume = 163918 cubic feet

Calculations from RG-348 Pages 3-36 to 3-37

Off-site area draining to BMP =	**0.67**	acres	
Off-site Impervious cover draining to BMP =	**0.04**	acres	
Impervious fraction of off-site area =	**0.05**		
Off-site Runoff Coefficient =	**0.08**		
Off-site Water Quality Volume =	**515**	cubic feet	
Storage for Sediment =	**32887**		
Total Capture Volume (required water quality volume(s) x 1.20) =	**197320**	cubic feet	

The following sections are used to calculate the required water quality volume(s) for the selected BMP.
The values for BMP Types not selected in cell C45 will show NA.

7. Retention/Irrigation System — Designed as Required in RG-348 — Pages 3-42 to 3-46

Required Water Quality Volume for retention basin =	**NA**	cubic feet	

Irrigation Area Calculations:

Soil infiltration/permeability rate =	0.1	*in/hr*	**Enter determined permeability rate or assumed value of 0.1**
Irrigation area =	**NA**	square feet	
	NA	acres	

8. Extended Detention Basin System — Designed as Required in RG-348 — Pages 3-46 to 3-51

Required Water Quality Volume for extended detention basin =	**NA**	cubic feet

9. Filter area for Sand Filters — Designed as Required in RG-348 — Pages 3-58 to 3-63

9A. Full Sedimentation and Filtration System

Water Quality Volume for sedimentation basin =	**197320**	cubic feet	
Minimum filter basin area =	**9107**	square feet	
Maximum sedimentation basin area =	**81959**	square feet	**For minimum water depth of 2 feet**
Minimum sedimentation basin area =	**20490**	square feet	**For maximum water depth of 8 feet**

9B. Partial Sedimentation and Filtration System

Water Quality Volume for combined basins =	**197320**	cubic feet	
Minimum filter basin area =	**16392**	square feet	
Maximum sedimentation basin area =	**65567**	square feet	**For minimum water depth of 2 feet**
Minimum sedimentation basin area =	**4098**	square feet	**For maximum water depth of 8 feet**

10. Bioretention System — Designed as Required in RG-348 — Pages 3-63 to 3-65

Required Water Quality Volume for Bioretention Basin = **NA** cubic feet

11. Wet Basins — Designed as Required in RG-348 — Pages 3-66 to 3-71

Required capacity of Permanent Pool = **NA** cubic feet **Permanent Pool Capacity is 1.20 times the WQV**
Required capacity at WQV Elevation = **NA** cubic feet **Total Capacity should be the Permanent Pool Capacity plus a second WQV.**

12. Constructed Wetlands — Designed as Required in RG-348 — Pages 3-71 to 3-73

Required Water Quality Volume for Constructed Wetlands = **NA** cubic feet

13. AquaLogic™ Cartridge System — Designed as Required in RG-348 — Pages 3-74 to 3-78

**** 2005 Technical Guidance Manual (RG-348) does not exempt the required 20% increase with maintenance contract with AquaLogic™.**

Required Sedimentation chamber capacity = **NA** cubic feet
Filter canisters (FCs) to treat WQV = **NA** cartridges
Filter basin area (RIA_F) = **NA** square feet

14. Stormwater Management StormFilter® by CONTECH

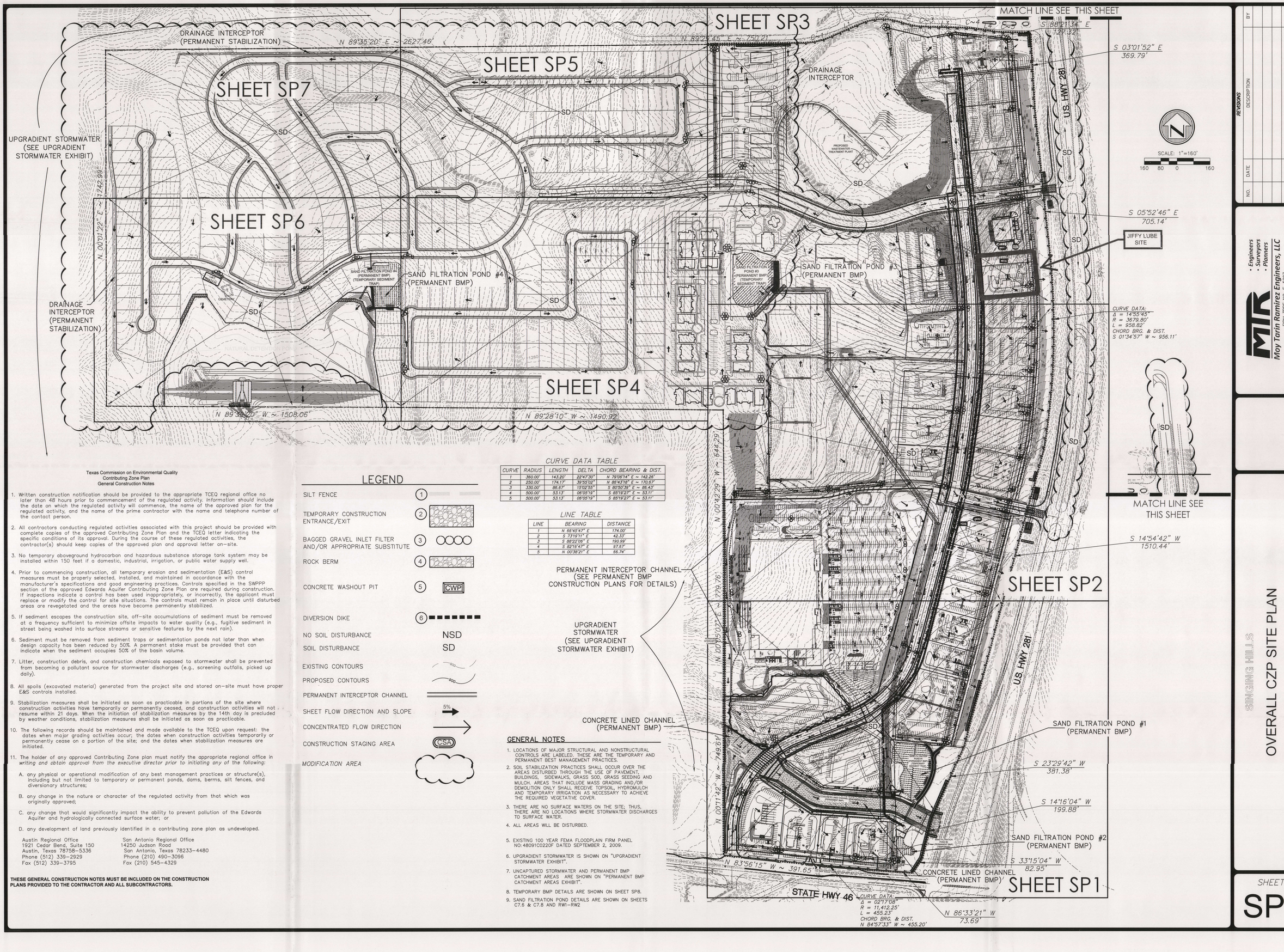
Required Water Quality Volume for Contech StormFilter System = **NA** cubic feet

THE SIZING REQUIREMENTS FOR THE FOLLOWING BMPs / LOAD REMOVALS ARE BASED UPON FLOW RATES - NOT CALCULATED WATER QUALITY VOLUMES

15. Grassy Swales — Designed as Required in RG-348 — Pages 3-51 to 3-54

Design parameters for the swale:

Drainage Area to be Treated by the Swale = A = 8.00 acres
Impervious Cover in Drainage Area = 4.00 acres
Rainfall intensity = i = 1.1 in/hr
Swale Slope = 0.01 ft/ft
Side Slope (z) = 3
Design Water Depth = y = 0.33 ft
Weighted Runoff Coefficient = C = 0.54



CURVE DATA TABLE

CURVE	RADIUS	LENGTH	DELTA	CHORD BEARING & DIST.
1	350.00'	143.20'	22°47'30"	N 79°06'14" E ~ 142.26'
2	250.00'	174.17'	39°55'02"	N 86°43'18" E ~ 170.67'
3	330.00'	86.67'	15°02'55"	S 80°50'39" E ~ 86.43'
4	500.00'	53.13'	06°05'16"	S 85°19'27" E ~ 53.11'
5	500.00'	53.13'	06°05'19"	S 85°19'27" E ~ 53.11'

LINE TABLE

LINE	BEARING	DISTANCE
1	N 56°45'47" E	174.00'
2	S 73°19'11" E	42.33'
3	S 88°22'08" E	190.99'
4	S 82°16'47" E	97.87'
5	N 00°38'21" E	66.74'

LEGEND

- SILT FILTER (1)
- TEMPORARY CONSTRUCTION ENTRANCE/EXIT (2)
- BAGGED GRAVEL INLET FILTER AND/OR APPROPRIATE SUBSTITUTE (3)
- ROCK BERM (4)
- CONCRETE WASHOUT PIT (5) CWP
- DIVERSION DIKE (6)
- NO SOIL DISTURBANCE — NSD
- SOIL DISTURBANCE — SD
- EXISTING CONTOURS
- PROPOSED CONTOURS
- PERMANENT INTERCEPTOR CHANNEL
- SHEET FLOW DIRECTION AND SLOPE — 5%
- CONCENTRATED FLOW DIRECTION
- CONSTRUCTION STAGING AREA — CSA
- MODIFICATION AREA

GENERAL NOTES

1. LOCATIONS OF MAJOR STRUCTURAL AND NONSTRUCTURAL CONTROLS ARE LABELED. THESE ARE THE TEMPORARY AND PERMANENT BEST MANAGEMENT PRACTICES.
2. SOIL STABILIZATION PRACTICES SHALL OCCUR OVER THE AREAS DISTURBED THROUGH THE USE OF PAVEMENT, BUILDINGS, SIDEWALKS, GRASS SOD, GRASS SEEDING AND MULCH. AREAS THAT INCLUDE MASS GRADING AND/OR DEMOLITION ONLY SHALL RECEIVE TOPSOIL, HYDROMULCH AND TEMPORARY IRRIGATION AS NECESSARY TO ACHIEVE THE REQUIRED VEGETATIVE COVER.
3. THERE ARE NO SURFACE WATERS ON THE SITE; THUS, THERE ARE NO LOCATIONS WHERE STORMWATER DISCHARGES TO SURFACE WATER.
4. ALL AREAS WILL BE DISTURBED.
5. EXISTING 100 YEAR FEMA FLOODPLAIN FIRM PANEL NO: 48091C0220F DATED SEPTEMBER 2, 2009.
6. UPGRADIENT STORMWATER IS SHOWN ON "UPGRADIENT STORMWATER EXHIBIT".
7. UNCAPTURED STORMWATER AND PERMANENT BMP CATCHMENT AREAS ARE SHOWN ON "PERMANENT BMP CATCHMENT AREAS EXHIBIT".
8. TEMPORARY BMP DETAILS ARE SHOWN ON SHEET SP8.
9. SAND FILTRATION POND DETAILS ARE SHOWN ON SHEETS C7.6 & C7.8 AND RW1–RW2

Texas Commission on Environmental Quality
Contributing Zone Plan
General Construction Notes

1. Written construction notification should be provided to the appropriate TCEQ regional office no later than 48 hours prior to commencement of the regulated activity. Information should include the date on which the regulated activity will commence, the name of the approved plan for the regulated activity, and the name of the prime contractor with the name and telephone number of the contact person.
2. All contractors conducting regulated activities associated with this project should be provided with complete copies of the approved Contributing Zone Plan and the TCEQ letter indicating the specific conditions of its approval. During the course of these regulated activities, the contractor(s) should keep copies of the approved plan and approval letter on–site.
3. No temporary aboveground hydrocarbon and hazardous substance storage tank system may be installed within 150 feet if a domestic, industrial, irrigation, or public water supply well.
4. Prior to commencing construction, all temporary erosion and sedimentation (E&S) control measures must be properly selected, installed, and maintained in accordance with the manufacturer's specifications and good engineering practices. Controls specified in the SWPPP section of the approved Edwards Aquifer Contributing Zone Plan are required during construction. If inspections indicate a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations. The controls must remain in place until disturbed areas are revegetated and the areas have become permanently stabilized.
5. If sediment escapes the construction site, off–site accumulations of 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).
6. Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50%. A permanent stake must be provided that can indicate when the sediment occupies 50% of the basin volume.
7. 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).
8. All spoils (excavated material) generated from the project site and stored on–site must have proper E&S controls installed.
9. 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.
10. The following records should be maintained and made available to the TCEQ 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.
11. The holder of any approved Contributing Zone plan must notify the appropriate regional office in writing and obtain approval from the executive director prior to initiating any of the following:
    A. any physical or operational modification of any best management practices or structure(s), including but not limited to temporary or permanent ponds, dams, berms, silt fences, and diversionary structures;
    B. any change in the nature or character of the regulated activity from that which was originally approved;
    C. any change that would significantly impact the ability to prevent pollution of the Edwards Aquifer and hydrologically connected surface water; or
    D. any development of land previously identified in a contributing zone plan as undeveloped.

Austin Regional Office
1921 Cedar Bend, Suite 150
Austin, Texas 78758–5336
Phone (512) 339–2929
Fax (512) 339–3795

San Antonio Regional Office
14250 Judson Road
San Antonio, Texas 78233–4480
Phone (210) 490–3096
Fax (210) 545–4329

THESE GENERAL CONSTRUCTION NOTES MUST BE INCLUDED ON THE CONSTRUCTION PLANS PROVIDED TO THE CONTRACTOR AND ALL SUBCONTRACTORS.

NO.	DATE	REVISIONS DESCRIPTION	BY

PROJ. #	DGN. BY:	DWN. BY:	CHKD. BY:	DATE:
12001	D.A.M.	J.U.	D.A.M.	8/21/12

MTR
Moy Tarin Ramirez Engineers, LLC
• Engineers
• Surveyors
• Planners
FIRM 18FE NO. F-5297
12770 CIMARRON PATH, SUITE 100
SAN ANTONIO, TEXAS 78249
TEL: (210) 908–5061
FAX: (210) 998–3085

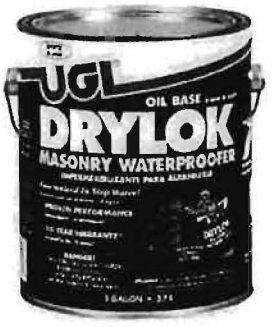
SINGING HILLS

OVERALL CZP SITE PLAN

SHEET
SP0

Oil Base DRYLOK® Masonry Waterproofer

MANUFACTURER
UNITED GILSONITE LABORATORIES
MAILING: P.O. Box 70, Scranton, Pennsylvania, 18501
SHIPPING: 1396 Jefferson Avenue, Dunmore, Pennsylvania, 18509
TOLL FREE: 1-800-UGL-LABS (845-5227)
PHONE: 1-570-344-1202 • **FAX:** 1-570-969-7634
www.ugl.com



PRODUCT DESCRIPTION

Oil Base DRYLOK Masonry Waterproofer is the manageable way to solve water seepage problems. Reduces radon gas penetration by reducing vapor transfer.

- Guaranteed to stop water
- No pre-mixing or pre-wetting
- Resists 10 psi, equivalent to a wall of water 22 ft. high
- Fully transferable 10 year warranty
- White is tintable

BASIC USES

Formulated for waterproofing all interior, exterior, above or below grade masonry walls, cinder and concrete blocks, stucco and brick, retaining walls, fish ponds, birdbaths, basement walls and foundations.

TECHNICAL DATA

COMPOSITION:
Oil base

SHEEN:
Flat

% WEIGHT SOLIDS:
75-77%

% VOLUME SOLIDS:
48-50%

DENSITY (LBS./US GAL.):
13 ± 0.25

VISCOSITY:
100-104 KU @77°F

COLORS:
- White – ready mixed formula
- 2 ready mixed colors

DRY TIME:
- 12-24 hours
- To recoat: 12 hours

Note: Maximum cure and dry time will be prolonged when slightly humid and/or damp, cool conditions prevail.

CLEAN UP:
Paint thinner

Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations.

COVERAGE (SQ. FT./US GAL.):
- Smooth surfaces: 100 sq. ft./gal. for first coat and 100-125 sq. ft./gal. for succeeding coats
- Rough surfaces: 75 sq. ft./gal. for first coat and 125 sq. ft./gal. for succeeding coats

Note: Actual coverage will vary depending upon application method, surface texture and porosity.

RECOMMENDED FILM THICKNESS/COAT:
13-21 Wet mils/coat

FLASH POINT:
104°F

SHELF LIFE:
N/A

FREEZE/THAW:
Stable, store indoors

CONTAINER SIZES:
One gallon (US) and five gallon (US) containers

VOC

Does not exceed 400 g/L

TINTING

Tint to light shades with alkali-proof universal tinting colors. Do not use more than 2 fl. oz. of colorant per gallon.

SURFACE PREPARATION

Masonry surfaces must be clean and free from dirt, dust, grease, oil, form release compound, frost and paint. Patch all holes or cracks with DRYLOK FAST PLUG®, a fast setting hydraulic cement, and smooth the patch evenly with the surface around it. Check the joint where the floor and wall meet and fill any breaks with DRYLOK FAST PLUG®.

EFFLORESCENCE, a white, powdery, crystal-like deposit visible on the masonry surface must be removed.

DRYLOK ETCH or muriatic acid, used according to manufacturer's directions, are effective efflorescence removal agents. All masonry surfaces are subject to occurrences of efflorescence.

DRYLOK may be applied on slightly damp surfaces but best results are obtained when applied on dry surfaces. Not warranted when used over previously painted or horizontal surfaces.

WARNING

If you scrape, sand, or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH-approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead.

APPLICATION

STIR THOROUGHLY BEFORE AND DURING APPLICATION. DO NOT THIN.

DRY TIME:
12-24 hours
Recoat 12 Hours

CLEAN-UP:
Paint Thinner

COVERAGE:
2 Coats Minimum

SPREAD RATE:
100 Sq. Ft./Gallon

OVER

Paint only when air and surface temperatures are 50°F or higher. For best waterproofing results, wait for a dry (rain-free) period before application. Apply DRYLOK Masonry Waterproofer directly on bare masonry. Apply first coat with a DRYLOK BRUSH or good quality nylon bristle or fiber brush, working the Waterproofer into the pores of the masonry (see COVERAGE). APPLY TWO COATS. Allow 12 hours drying time between coats. The second coat may be applied by brush, roller or spray. For information on spray application, write UGL and ask for Spray Specification Sheet D-30 or visit www.ugl.com.

IMPORTANT

If leaking is still present after two coats, it indicates that pores or pin holes are still open. Paint these areas again. When painting the inside of concrete fish ponds and non-potable water tanks, allow Oil Base DRYLOK Masonry Waterproofer to dry at least one week, fill with water, then drain and refill to control alkalinity content before putting into service.

VENTILATION

Use an exhaust fan with an explosion-proof motor and non-sparking tips to provide adequate air flow and ventilation.

Keep flow of fresh air until all vapors (odors) are gone. Ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH approved) during and after application. Follow respirator manufacturer's direction for respirator use. If cross ventilation is not possible, use Latex Base DRYLOK Masonry Waterproofer, DRYLOK Extreme Waterproofer or DRYLOK Powdered Masonry Waterproofer.

CAUTION

CONTAINS: PORTLAND CEMENT, CRYSTALLINE SILICA AND PETROLEUM DISTILLATES.

Vapor harmful. Close container after each use. May affect the brain or nervous system causing dizziness, headache or nausea. Causes eye, skin and throat irritation. Overexposure may cause lung and kidney damage. NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Keep away from heat and flame. Prevent build-up of vapors by opening all windows and doors to achieve cross-ventilation. Contains Crystalline Silica which can cause cancer. (Risk of cancer depends on duration and level of exposure.)

This product contains a chemical(s) known to the State of California to cause cancer and birth defects or other reproductive harm.

Use only with adequate ventilation. Do not breathe dust, vapors or spray mist. Ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH approved) during and after application. Follow respirator manufacturer's directions for respirator use. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

KEEP OUT OF REACH OF CHILDREN. DO NOT TAKE INTERNALLY.

FIRST AID

EYES: Flush immediately with large amounts of water for at least 15 minutes. Consult a physician.
SKIN: Wash affected areas with soap and water. Remove contaminated clothing. Consult a physician if irritation persists.
INGESTION: Drink 1 or 2 glasses of water to dilute. Do not induce vomiting. Consult a physician or poison control center immediately. Treat symptomatically.
INHALATION: Remove to fresh air, restore breathing. Treat symptomatically. Consult a physician.

For additional health and safety information please refer to the "Materials Safety Data Sheet".

WARRANTY

Oil Base DRYLOK Masonry Waterproofer, when applied according to directions on a properly prepared bare masonry surface, is warranted to provide a waterproof coating for ten (10) years from date of sale, warranty includes subsequent owners. Excludes leaks due to cracking of the surface, recurring efflorescence and application over surfaces previously coated with a paint other than DRYLOK Masonry Waterproofer.

LIMITED WARRANTY

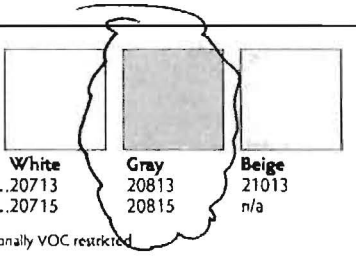
United Gilsonite Laboratories ("UGL") warrants, subject to the limitations set forth herein, that this product, under normal use and proper storage, will be free from defects in material or workmanship and merchantable for a period of ten (10) years from the original date of purchase. This limited warranty extends to the original consumer purchaser of the product only and is non-transferable. If this product is found to be defective by UGL within the warranty period, you will receive a replacement of the product or, at UGL's option, a full refund of the purchase price upon presentation of proof of purchase (original sales receipt). This limited warranty excludes failure to apply the product to a properly prepared bare surface in accordance with UGL's instructions provided with this product. UGL MAKES NO FURTHER EXPRESS WARRANTIES. THIS LIMITED WARRANTY EXCLUDES (1) LABOR AND ALL OTHER COSTS ASSOCIATED WITH THE APPLICATION OR REMOVAL OF THE PRODUCT OR ANY REPLACEMENT PRODUCT, AND (2) ANY INDIRECT, SPECIAL, EXEMPLARY, INCIDENTAL OR CONSEQUENTIAL DAMAGES. Some states do not allow the limitation or exclusion of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This limited warranty gives you specific legal rights and you may also have other legal rights which vary from state to state. To make a warranty claim please contact (with proof of purchase) the store where you purchased the product or contact UGL directly at 1-800-848-7253 (Consumer Hotline) or by mail at UGL Consumer Inquiry Department, P.O. Box 70, Scranton PA 18501-0070.

SPECIFICATION

TT-C-555B Meets New York Local Law 49; Phila. and PA. Reg. V.

Meets performance of Federal Specification TT-P-1411A, Paint, Copolymer Resin, Cementitious (for waterproofing concrete and masonry walls). Section 4.4.7, Resistance to wind-driven rain of Federal Specification

Oil Base DRYLOK has been tested to ASTM D-7088 Resistance to Hydrostatic Pressure and ASTM D-6904 Resistance to Wind Driven Rain.

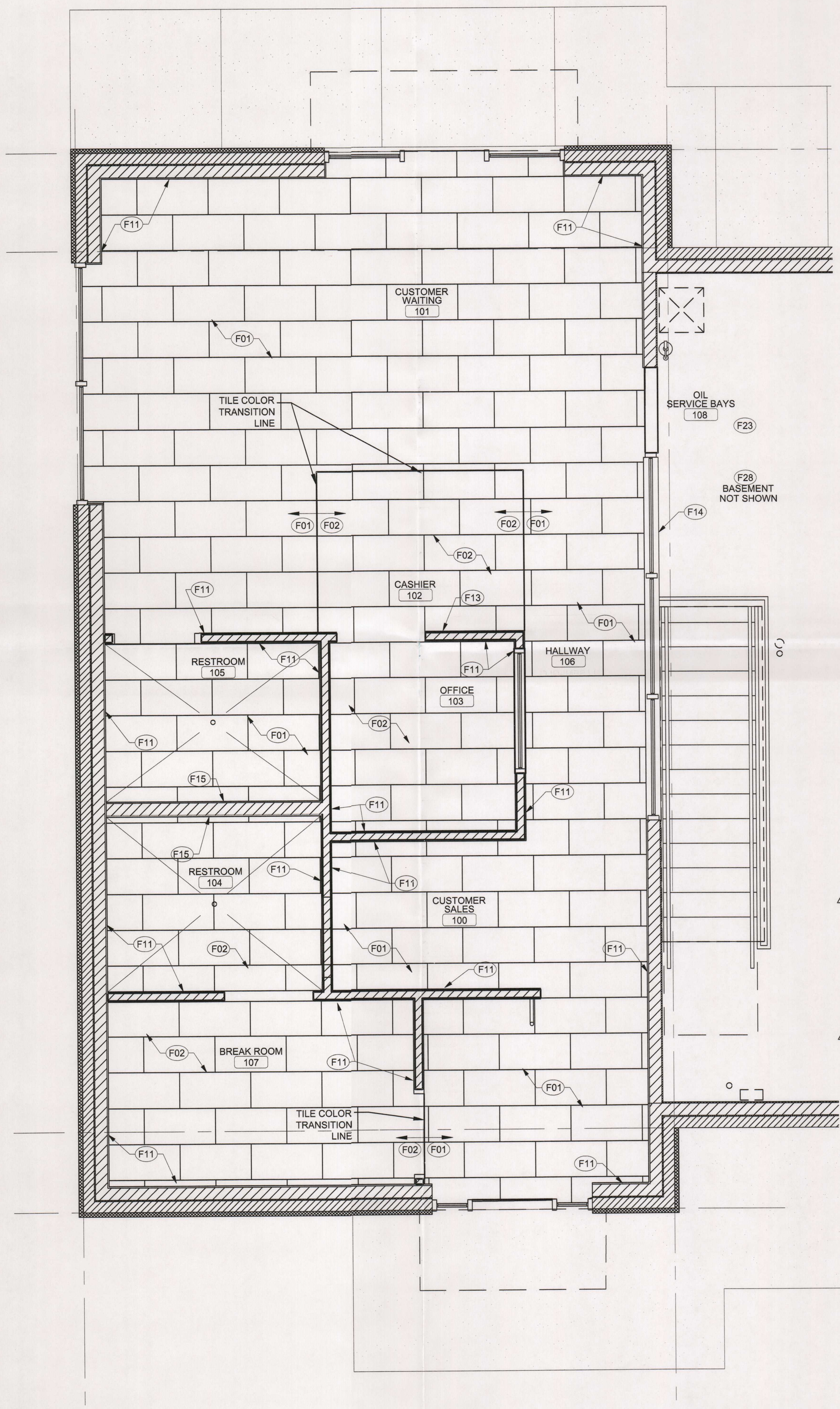


Oil Base Waterproofer Ready Mixed Colors*	White	Gray	Beige
1 GAL.+ 2/Case	20713	20813	21013
5 GAL.+ 1/Case	20715	20815	n/a

* Not available in California + Regionally VOC restricted

DISCLAIMER: This information is furnished without warranty, representation, inducement or license of any kind, except that it is accurate to the best of UGL's knowledge, or obtained from sources believed by UGL to be accurate, and UGL does not assume any legal responsibility for use or reliance upon same. Before using any product, read the label.

NOTE: COLOR SWATCHES ARE REPRESENTATIONAL ONLY. LR413



GENERAL NOTES

1) SERVICE PLATFORMS & RAILS TO BE PRE-FINISHED GALVANIZED BY DEVON

2) APPLY CLEAR COAT (F24) OVER CARMINE (F23) ON EXTERIOR APPLICATIONS.

4) FRP BY CRANE COMPOSITES "STONE", WWW.CRANECOMPOSITES.COM, PH-800.435.0080

INTERIOR FINISH SCHEDULE

LEGEND:

● MATERIAL AND FINISH APPLY TO ALL SURFACES

⊗ MATERIAL FINISH APPLIED ON SURFACE BY QUADRANT SHADED. QUADRANT ORIENTATION SAME AS FLOOR PLAN

RM. NO.	ROOM NAME	FLOOR					BASE		WALL										CEILING			
		SMOOTH FINISHED CONC. W/ CLEAR SEALER	PORCELAIN TILE - F01	PORCELAIN TILE - F02	NOT USED	FIELD APPLIED SHAKE COLOR - F23	RUBBER - F03	NONE	PLYWOOD PAINTED (WAINSCOT) - F06	PLYWOOD PAINTED (ABOVE WAINSCOT) - F07	FRP (WAINSCOT) - F14	GYPSUM BOARD PAINTED (ABOVE WAINSCOT) - F07	GYPSUM BOARD PAINTED - F11	GYPSUM BOARD PAINTED - F12	GYPSUM BOARD PAINTED - F13	TILE - F15	NONE	GYP BOARD - F11	EXPOSED STRUCTURE PAINTED - F16	EXPOSED STRUCTURE NO PAINT	ACOUSTICAL LAY-IN TILE - F22
B01	LOWER BAY	●						●									●			●	
100	CUSTOMER SALES		●				●						●								●
101	CUSTOMER WAITING		●				●						⊗								●
102	CASHIER			●			●								⊗						●
103	OFFICE			●			●						●					●			
104	RESTROOM			●			●						⊗			⊗		●			
105	RESTROOM		●				●						⊗			⊗		●			
106	HALL		●				●						●								●
107	BREAK ROOM			●			●						●					●			
108	OIL SERVICE BAYS					●	●		⊗	⊗	⊗	⊗							●		
109	AUTO SERVICE BAYS					●	●		⊗	⊗	⊗	⊗							●		

FINISHES: INTERIOR/ EXTERIOR

MARK	TYPE	MATERIAL/ SIZE	MFR	MFR #	COLOR
F01	FLOORING	PORCELAIN (12" X 24") STYLE: DISTRICT	TIT CALLAHAN*	JLI-TDCTZO1224	OLIVE
F02	FLOORING	PORCELAIN (12" X 24") STYLE: DISTRICT	TIT CALLAHAN*	JLI-TDCTZC1224	CARBON
F03	BASE	RUBBERMYTE (4" COVED)	BURKE INDUSTRIES*	523	BLACK BROWN
F04	NOT USED				
F05	FLOORING	RUBBER TILE (36" X 36")	AUTOFLOORS*	--	BLACK SCULPTURE
F06	WAINSCOT SIGN POLES / FENCES / EXT. DOORS AND TRIM / OVERHEAD DOOR JAMB & HEAD	PAINT (SATIN / SEMI-GLOSS)	SHERWIN WILLIAMS	SW2827	COLONIAL REVIVAL STONE
F07	EIFS CORNICE/ GYP BOARD CEILINGS	PAINT (SEMI-GLOSS)	SHERWIN WILLIAMS	SW7005	PURE WHITE
F08	OPT. 1: PERSONNEL DOORS / FRAMES / TRIM (SHOP SIDE ONLY)	PAINT (SATIN / SEMI-GLOSS)	SHERWIN WILLIAMS	SW2841	WEATHERED SHINGLE
F09	OPT. 2: PERSONNEL DOORS / FRAMES / TRIM (SHOP SIDE ONLY)	PAINT (SATIN / SEMI-GLOSS)	SHERWIN WILLIAMS	SW6152	SUPERIOR BRONZE
F10	PIT GUARDS	PAINT (SEMI-GLOSS: INDUSTRIAL ENAMEL)	SHERWIN WILLIAMS	B54 SERIES	SAFETY YELLOW
F11	WALLS/ GYP BOARD CEILINGS	PAINT (SEMI-GLOSS)	SHERWIN WILLIAMS	SW7022	ALPACA
F12	WALLS	PAINT (SEMI-GLOSS)	SHERWIN WILLIAMS	SW7020	BLACK FOX
F13	WALLS	PAINT (SEMI-GLOSS)	SHERWIN WILLIAMS	SW6314	LUXURIOUS RED
F14	WAINSCOT (BELOW WINDOW - SERVICE BAY SIDE ONLY)	FRP PANELS	CRANE COMPOSITES	--	MATCH SW2827
F15	WALLS	LVT (12" X 18")	MANNINGTON COMMERCIAL*	AROALA21	LINEAR METALLIC STEEL
F16	CEILING	PAINT (MATTE)	SHERWIN WILLIAMS	SW6258	TRICORN BLACK
F17	CEILING	PAINT (SATIN / SEMI-GLOSS)	SHERWIN WILLIAMS	SW7005	PURE WHITE
F18	EXT. WALLS: REAR FASCIA / HANDRAILS / GUARD RAILS / TRAFFIC BOLLARDS	PAINT (SEMI-GLOSS)	SHERWIN WILLIAMS	SW2905	CARMINE
F19	EXT. WALLS: APPLY OVER CARMINE COLOR ABOVE	PAINT (SEMI-GLOSS)	SHERWIN WILLIAMS	CLEAR COAT	SHER-CLEAR
F20	EXT. WALLS: MAINFIELD VENEER	CONCRETE BLOCK - 4"H X 12"L X 4"D	ACME OR EQUIV.	--	RIVERSIDE MED. OR EQUIV.
F21	EXT. WALLS: ROWLOCK AND SOLDIER COURSE VENEER(S)	CONCRETE BLOCK - 4"H X 12"L X 4"D (SOLDIER COURSE) 4"H X 4"W X 4"D (ROWLOCK)	ACME OR EQUIV.	--	DOVE GRAY OR EQUIV.
F22	CEILING	ACOUSTIC CEILING TILE: ANGLED TEGULAR (2'X2')	ARMSTRONG	1774	DUNE
F23	FLOOR (STAIR PANS & BASEMENT NOT COLORED)	DRY SHAKE COLORED CONCRETE HARDENER W/ COLOR CURE SEALER CONCRETE (ROUGH TROWEL FINISH) ***PROVIDE MOCK-UP FOR OWNER APPROVAL***	SCOFIELD	A-21	DARK CHARCOAL
F24	LIMESTONE VENEER	SISTERDALE 8X RANDOM LENGTHS 12" THRU 24" - SAWN			BROWN
F25	CONC. BELT COURSE				
F26	EXT. WALLS: WAINSCOT VENEER	CONCRETE BLOCK - 4"H X 12"L X 4"D	ACME OR EQUIV.	--	DOVE GRAY OR EQUIV.
F27	DUMPSTER SCREEN WALL CMU	CONCRETE MASONRY UNIT- 8"H X 16"L X 8"D	~~TBD COLOR TO~~ MATCH/COMPLIMENT F20		
F28	BASEMENT FLOOR & 36" UP EXTERIOR CONC. WALL	MASONRY WATERPROOFING, OIL BASE PAINT	UGL	DRYLOK	GRAY

Revision marks: 1 (at F20–F21), 1 (at F26)

* SUPPLY THROUGH NATIONAL ACCOUNT VENDOR, AUTOFLOORS. PH: 281-354-1505, TOLL FREE: 866-365-7432, CONTACT: DAN O'MALLEY, EMAIL: dan@autofloors.com

VERIFY EXTERIOR COLORS PRIOR TO ORDERING COLORS TO MATCH HILL COUNTRY COLOR THEME-SPEC TO BE OWNER PROVIDED.

VERIFY EXTERIOR COLORS PRIOR TO ORDERING COLORS TO MATCH HILL COUNTRY COLOR THEME-SPEC TO BE OWNER PROVIDED.

FINISH SCHEDULE

design west | architects
255 SOUTH 300 WEST LOGAN UT 84321
795 NORTH 400 WEST SALT LAKE CITY UT 84103

jiffy lube®
1X5 STANDARD BRAKES AND SERVICES
PROTOTYPE V2014
TRACT 18 SINGING HILLS HWY 281
BULVERDE, TX

REVISIONS
REV 1 11/23/2015 EXTERIOR CHANGES

ISSUED DATES
PROGRESS SET:
PERMIT REVIEW:
BID:
CONSTRUCTION:

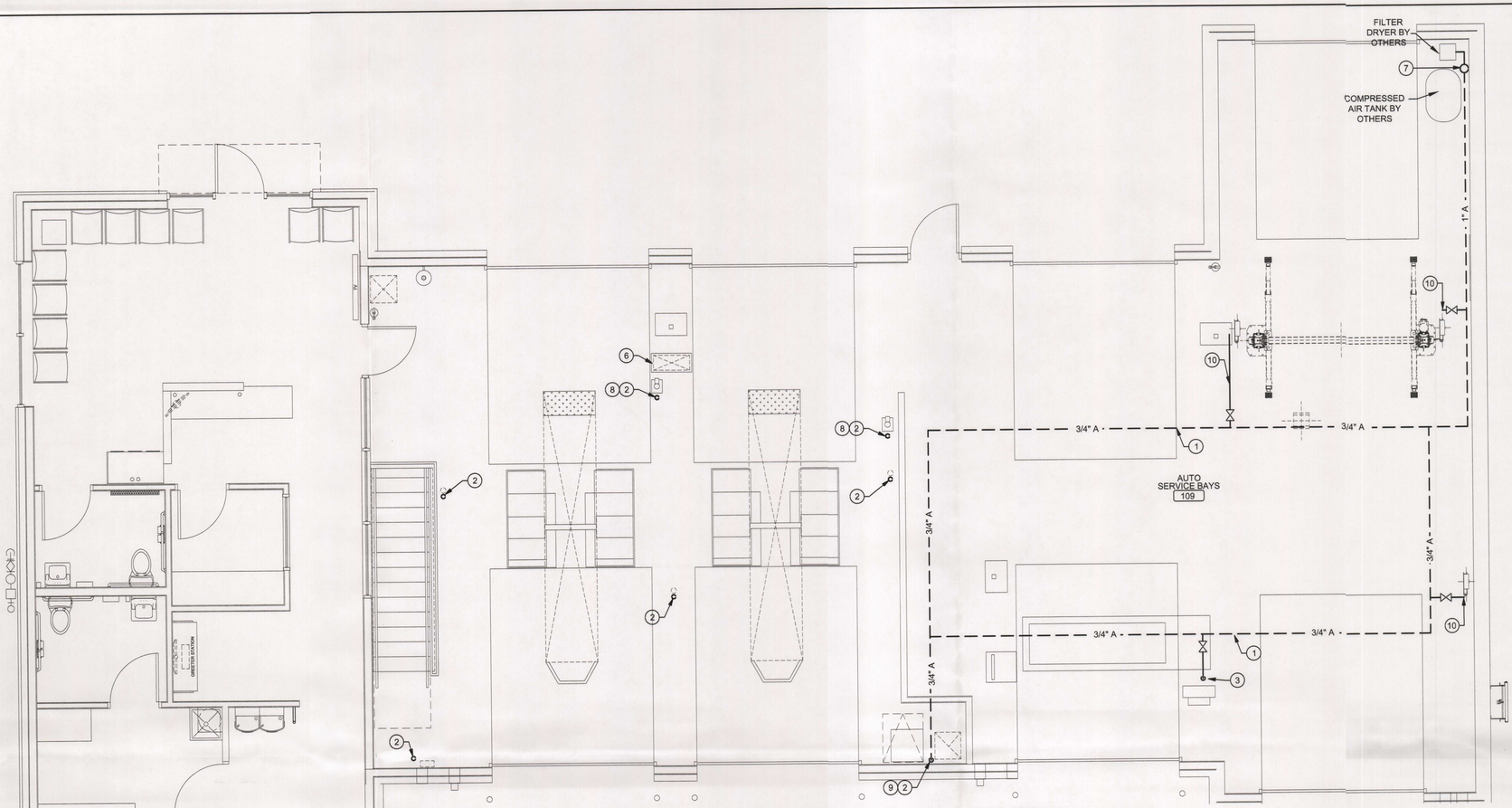
REGISTERED ARCHITECT SCOTT OLCOTT 25087 STATE OF TEXAS

PROFESSIONAL OF RECORD

DRAWN BY
LASTNAME
CHECKED BY

STORE NUMBER
XXXXXX
DESIGN WEST PROJECT NO.
415183
ISSUE DATE
SCALE
SHEET NUMBER
A-12

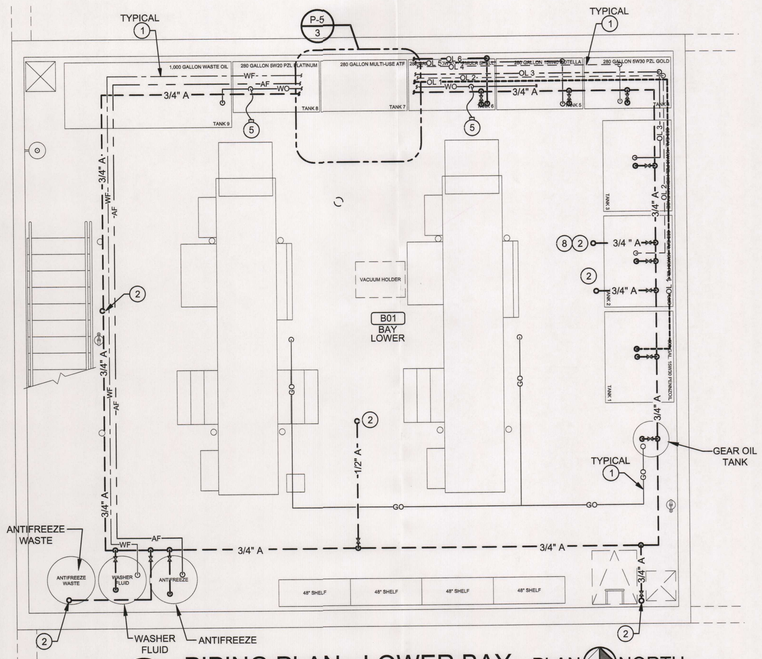
12/10/15 S:\415183 - Jiffy Lube - Bulverde, TX_Working\Sheets\A-12 FINISH SCHEDULE.dwg



1 P-5 PIPING PLAN - UPPER BAY

SCALE: 1/4" = 1'-0"

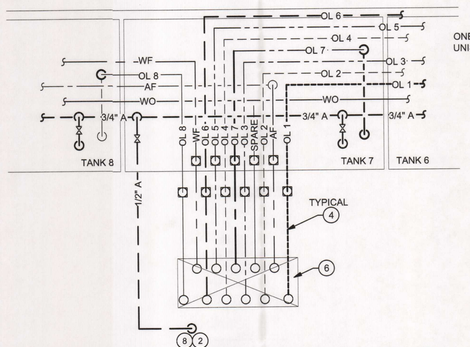
PLAN NORTH



2 P-5 PIPING PLAN - LOWER BAY PLAN NORTH

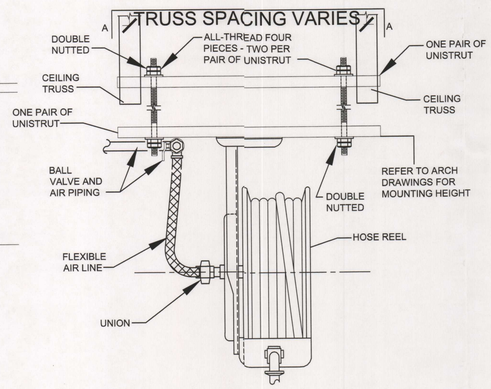
SCALE: 1/4" = 1'-0"

NOTE:
1. ALL PIPING SHOWN ON THIS PLAN SHALL BE PRESSURE TESTED.
2. CONTRACTOR SHALL CONFIRM WITH ALL LOCAL CODES TO VERIFY PIPING REQUIREMENTS PRIOR TO INSTALLATION.
3. ALL FLOOR PENETRATIONS FOR AIR AND OIL PIPING AND ROUTING OF AIR AND OIL PIPING TO BE COORDINATED AND VERIFIED WITH THE EQUIPMENT SUPPLIER.
4. ALL AIR, OIL, WASTE OIL, ANTI-FREEZE, AND WASHER FLUID PIPING INSTALLED BY OWNER'S EQUIPMENT PROVIDER.



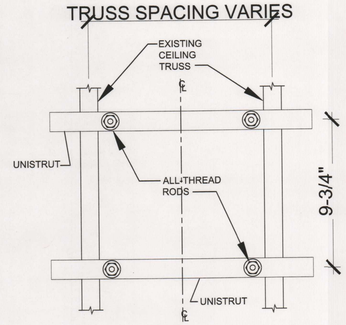
3 P5.0 ENLARGED PIPING LAYOUT

SCALE: 3/4" = 1'-0"



4 P-5 AIR HOSE REEL DETAIL

SCALE: 1/8" = 1'-0"



SECTION A-A

PLUMBING KEYED NOTES

1. CONTRACTOR SHALL ROUTE ALL PIPING TIGHT TO STRUCTURE AS POSSIBLE. FIELD COORDINATE ROUTING OF ALL PIPING WITH ALL OTHER DISCIPLINES PRIOR TO FABRICATION AND INSTALLATION.
2. CONTRACTOR SHALL COORDINATE ALL PIPE PENETRATIONS THRU STRUCTURAL SLAB WITH STRUCTURAL DRAWING.
3. DROP 1/2" AIR PIPING DOWN TO 6'-0" AFF FOR DYNAMOMETER CONTROL PANEL BELOW. COORDINATE ROUTE OF AIR LINE WITH PANEL LOCATION AND PROVIDE PROPER CONNECTION PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
4. PROVIDE FLEXIBLE OIL PIPING WHIP FROM VALVE TO FLOOR PENETRATIONS BELOW PIPING CONSOLE ABOVE. FIELD VERIFY PROVIDED LENGTH.
5. WASTE OIL DRAIN HOSE WITH CAMLOCK FITTINGS. COORDINATE LOCATION AND CONNECTION REQUIREMENTS WITH MANUFACTURER.
6. STRUCTURAL SLAB OPENING FOR PIPE ROUTING TO PIPING CONSOLE ABOVE. FIELD COORDINATE PIPE PLACEMENT WITH CONSOLE REQUIREMENTS PRIOR TO INSTALLATION.
7. AIR PIPING IN-LINE AIR FILTER. COORDINATE LOCATION OF FILTERS WITH MANUFACTURER REQUIREMENTS PRIOR TO INSTALLATION.
8. AIR PIPING UP THRU STRUCTURAL SLAB TO LIFT CONTROL PEDESTAL ABOVE.
9. AIR PIPING UP THRU STRUCTURAL SLAB FROM BASEMENT. ROUTE AIR LINES UP TIGHT TO STRUCTURE ABOVE AND ROUTE AS REQUIRED EQUIPMENT AS SHOWN.
10. 1/2" PIPE TO OVERHEAD AIR HOSE REEL. SEE DETAIL ON THIS SHEET FOR MOUNTING. COORDINATE EXACT LOCATION WITH FIXTURE PLAN.

PIPING MATERIAL LIST

AIR PIPING: (SEE PLAN FOR SIZES)
SCHEDULE 40 - 3/4" OD GALVANIZED
TYPE "L" OR "M" COPPER PIPE
STAINLESS STEEL - 0.35 WALL THICKNESS

NEW OIL PRODUCT:
STAINLESS STEEL - 5/8" OD, 0.035 WALL THICKNESS

USED OIL PRODUCT:
STAINLESS STEEL - 1", 0.035 WALL THICKNESS
GALVANIZED - 1"

GEAR OIL:
BLACK IRON - 5/8"
STAINLESS STEEL - 5/8" OD, 0.035 WALL THICKNESS

CHASSIS GREASE:
BLACK IRON - 5/8"
STAINLESS STEEL - 5/8" OD, 0.065 WALL THICKNESS

ANTI-FREEZE:
TYPE "L" COPPER PIPE - 5/8"
GALVANIZED - 5/8"

WASHER FLUID:
TYPE "L" COPPER PIPE - 5/8"
STAINLESS STEEL - 5/8" OD, 0.035 WALL THICKNESS

PIPING LEGEND

A	COMPRESSED AIR PIPING
AF	ANTI-FREEZE PIPING
GO	GEAR OIL PIPING
GR	CHASSIS GREASE PIPING
OL 1	OIL PIPING TANK 1
OL 2	OIL PIPING TANK 2
OL 3	OIL PIPING TANK 3
OL 4	OIL PIPING TANK 4
OL 5	OIL PIPING TANK 5
OL 6	OIL PIPING TANK 6
OL 7	OIL PIPING TANK 7
OL 8	OIL PIPING TANK 8
WF	WASHER FLUID PIPING
WO	WASTE OIL PIPING

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TRACT 18 SINGING HILLS HWY 281
BULVERDE, TX

REVISIONS

ISSUED DATES
PROGRESS SET:
PERMIT REVIEW:
BID:
CONSTRUCTION:

11/09/2015
STATE OF TEXAS
Michael E. Dallon
112109
LICENSED
PROFESSIONAL ENGINEER
BRUNNER & DALLON ENGINEERING
F-15889
PROFESSIONAL OF RECORD
PHONE: 801-685-8081

DRAWN BY	MED
CHECKED BY	ECD
STORE NUMBER	XXXXXX
DESIGN WEST PROJECT NO.	415183
ISSUE DATE	
SCALE	1/4" = 1'-0"
SHEET NUMBER	P-5

AIR & OIL PIPING PLAN

12/9/15 C:\Users\Mike Dallon\appdata\local\temp\AcPublish_10352\JL Bulverde--P5.dwg

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

October 20, 2015

RECEIVED

OCT 23 2015

COUNTY ENGINEER

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

Re: Edwards Aquifer, Comal County
PROJECT NAME: Singing Hills Development (Jiffy Lube), located on the northwest corner of US Highway 281 and State Highway 46, 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 November 20, 2015.

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

Todd Jones
Water Section Work Leader
San Antonio Regional Office

TJ/eg

CONTRIBUTING ZONE PLAN MODIFICATION

FOR THE PROPOSED JIFFY LUBE
at
Lot 18 SINGING HILLS

Singing Oaks Road
Bulverde, Comal County, Texas 78163

Prepared for:
SH-DJL Development, LLC
18615 Tuscany Stone, Suite 200
San Antonio, TX 78258

Rev-0
October 15, 2015

Presented By:

CEI Engineering Associates, Inc.

CEI Engineering Associates, Inc.
3108 S.W. Regency Parkway, Suite 2
Bentonville, AR 72712
Ph: (479) 273 - 9472 / Fax: (479) 273 – 0844

CEI Project No. 28913.0

Distribution
TCEQ / Client
CAA/File

CONTRIBUTING ZONE PLAN MODIFICATION

FOR THE PROPOSED JIFFY LUBE
at
Lot 18 SINGING HILLS

Singing Oaks Road
Bulverde, Comal County, Texas 78163

Prepared for:
SH-DJL Development, LLC
18615 Tuscany Stone, Suite 200
San Antonio, TX 78258

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Bentonville, AR 72712
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Distribution
TCEQ / Client
CAA/File

TABLE OF CONTENTS

CONTRIBUTING ZONE PLAN MODIFICATION
FOR THE PROPOSED JIFFY LUBE, LOT 18 SINGING HILLS

Singing Oaks Road
Bulverde, Comal County, Texas 78163

I. MODIFICATION OF A PREVIOUSLY APPROVED CONTRIBUTING ZONE PLAN

Modification of a Previously Approved Contributing Zone Plan

Texas Commission on Environmental Quality

for Regulated Activities on the Edwards Aquifer Recharge Zone and Transition Zone and Relating to 30 TAC 213.4(j), 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.

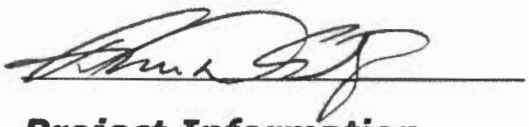
Signature

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 **Modification of a Previously Approved Contributing Zone Plan** is hereby submitted for TCEQ review and executive director approval. The request was prepared by:

Print Name of Customer/Agent: CEI Engineering Associates, Inc.

Date: 10/15/15

Signature of Customer/Agent:



Project Information

1. Current Regulated Entity Name: Singing Hills
   Original Regulated Entity Name: Singing Hills
   Assigned Regulated Entity Number(s) (RN): RN106090962
   Edwards Aquifer Protection Program ID Number(s): 2969.01
   ☒ The applicant has not changed and the Customer Number (CN) is: CN604065060
   ☐ The applicant or Regulated Entity has changed. A new Core Data Form has been provided.

2. ☒ **Attachment A: Original Approval Letter and Approved Modification Letters**. A copy of the original approval letter and copies of any modification approval letters are attached.

3. A modification of a previously approved plan is requested for (check all that apply):

☐ Any physical or operational modification of any best management practices or structure(s), including but not limited to temporary or permanent ponds, dams, berms, silt fences, and diversionary structures;

☒ Any change in the nature or character of the regulated activity from that which was originally approved;

☐ A change that would significantly impact the ability to prevent pollution of the Edwards Aquifer and hydrologically connected surface water; or

☐ Any development of land previously identified in a contributing zone plan as undeveloped.

4. ☒ Summary of Proposed Modifications (select plan type being modified). If the approved plan has been modified more than once, copy the appropriate table below, as necessary, and complete the information for each additional modification.

CZP Modification Summary	***Approved Project***	***Proposed Modification***
Acres	253.8	253.8
Type of Development	Mixed Use	Mixed Use
Number of Residential Lots	352	352
Impervious Cover (acres)	130.45	130.45
Impervious Cover (%)	51%	51%
Permanent BMPs	4 Water Quality Basins	4 Water Quality Basins
Other	____	____
AST Modification Summary	***Approved Project***	***Proposed Modification***
Number of ASTs	0	9
Other	____	____
UST Modification Summary	***Approved Project***	***Proposed Modification***
Number of USTs	____	____
Other	____	____

5. ☒ **Attachment B: Narrative of Proposed Modification**. A detailed narrative description of the nature of the proposed modification is attached. It discusses what was approved,

including previous modifications, and how this proposed modification will change the approved plan.

6. ☒ **Attachment C: Current Site Plan of the Approved Project**. A current site plan showing the existing site development (i.e., current site layout) at the time this application for modification is attached. A site plan detailing the changes proposed in the submitted modification is required elsewhere.
   - ☐ The approved construction has not commenced. The original approval letter and any subsequent modification approval letters are included as Attachment A to document that the approval has not expired.
   - ☐ The approved construction has commenced and has been completed. Attachment C illustrates that the site was constructed as approved.
   - ☐ The approved construction has commenced and has been completed. Attachment C illustrates that the site was **not** constructed as approved.
   - ☒ The approved construction has commenced and has **not** been completed. Attachment C illustrates that, thus far, the site was constructed as approved.
   - ☐ The approved construction has commenced and has **not** been completed. Attachment C illustrates that, thus far, the site was **not** constructed as approved.

7. ☒ Acreage has not been added to or removed from the approved plan.
   ☐ Acreage has been added to or removed from the approved plan and is discussed in *Attachment B: Narrative of Proposed Modification*.

8. ☒ 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. The copies must be submitted to the appropriate regional office.

ATTACHMENT A
ORIGINAL CZP APPROVAL LETTER

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

January 13, 2015

Mr. David Keith
SH-DJL Development, LLC
18615 Tuscany Stone, Suite 200
San Antonio, Texas 78258

Re: Edwards Aquifer, Comal County

NAME OF PROJECT: Singing Hills; Located on the northwest corner of U.S. Highway 281 and SH 46; Bulverde, Texas

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

Regulated Entity No.: RN106090962; Investigation No.: 1203582; Additional ID No.: 13-14101601

Dear Mr. Keith:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the CZP Modification for the above-referenced project submitted to the San Antonio Regional Office by Moy Tarin Ramirez Engineers, LLC on behalf of SH-DJL Development, LLC on October 16, 2014. Final review of the CZP was completed after additional material was received on December 12, 2014 and December 22, 2014, and January 12, 2015. As presented to the TCEQ, the Temporary and Permanent 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

The original CZP was approved by letter dated November 2, 2012 to construct a mixed use development on a 253.8 acre site. The development included the construction of approximately 90 acres of commercial development on the south and east portions of the site, a wastewater treatment plant, approximately 86 acres of mass grading activities, 4.4 acres of demolition, offsite pavement widening improvements along Highway 281 and State Highway 46, and approximately 78 acres of land was designated to remain

undisturbed. Two sedimentation/filtration basins were constructed to provide permanent stormwater treatment. The total impervious cover for the project was 66.1 acres (26 percent).

PROJECT DESCRIPTION

The proposed mixed use, phased development will have an area of approximately 253.8 acres. The phase 1 impervious cover will be slightly reduced from 66.1 acres to 65.68 acres. Phase 2 activities will include 5 acres of commercial development, 13 acres of multi-family structures, offsite road improvements, construction of a lift station, two additional sedimentation/filtration basins, and 118 acres of single family residential development (352 lots). The total onsite impervious cover will be 128.83 acres (50.76 percent). An additional 1.62 acres of offsite road improvements will also occur. Project wastewater will be disposed of by conveyance to the proposed Singing Hills Wastewater Treatment Plant.

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, two sedimentation/sand filtration basins, 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. Two existing sedimentation/sand filtration basins will continue to provide treatment for the phase 1 development. The required total suspended solids (TSS) treatment for this project is 112,857 pounds of TSS generated from the 130.45 acres of impervious cover. The approved measures meet the required 80 percent removal of the increased load in TSS caused by the project.

The individual treatment measures will consist of two new partial sedimentation/filtration basins and two existing partial sedimentation/filtration basins. All four basins will be concrete lined with a 4 inch perforated PVC underdrain system that will be covered with at least 6 inches of gravel. Geotextile fabric will be placed over the gravel layer and topped with at least 18 inches of sand (ASTM C-33 compliant).

Basin #1 will be designed with a water quality volume of 289,408 cubic feet (282,530 cubic feet required), and a sand filter area of 35,952 square feet (23,544 square feet required). This basin is designed to remove 50,890 pounds of TSS (50,212 pounds required).

Basin #2 will be designed with a water quality volume of 35,508 cubic feet (33,566 cubic feet required), and a sand filter area of 5,792 square feet (2,797 square feet required). This basin is designed to remove 5,115 pounds of TSS (4,983 pounds required).

Basin #3 will be designed with a water quality volume of 309,104 cubic feet (289,672 cubic feet required), and a sand filter area of 41,214 square feet (24,071 square feet required). This basin is designed to remove 33,525 pounds of TSS (29,083 pounds required).

Basin #4 will be designed with a water quality volume of 214,992 cubic feet (197,320 cubic feet required), and a sand filter area of 26,874 square feet (16,392 square feet required). This basin is designed to remove 24,200 pounds of TSS (21,749 pounds required).

*Basins 1 and 2 have been oversized to account for 2.410 acres of uncaptured impervious cover (2,163 pounds of TSS) within the phase 1 development.

*Basins 3 and 4 have been oversized to account for 5.199 acres of uncaptured impervious cover (4,667 pounds of TSS) within the phase 2 development

SPECIAL CONDITIONS

I. 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.

II. This modification is subject to all Special and Standard Conditions listed in the CZP approval letter dated November 2, 2012.

III. All permanent pollution abatement measures shall be operational prior to first occupancy of any structure within each drainage area.

IV. All sediment and/or media removed from the water quality basin during maintenance activities shall be properly disposed of according to 30 TAC 330 or 30 TAC 335, as applicable.

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, 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.

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 Mr. Alex Grant of the Edwards Aquifer Protection Program of the San Antonio Regional Office at 210-403-4035.

Sincerely,

Lynn Bumguardner, Water Section Manager
San Antonio Region Office
Texas Commission on Environmental Quality

LB/AG/eg

Enclosure: Deed Recordation Affidavit, Form TCEQ-0625A
Change in Responsibility for Maintenance of Permanent BMPs, Form TCEQ-10263

cc: Mr. Duane Moy, P.E., Moy Tarin Ramirez Engineers, LLC
Mr. Thomas Hornseth, P.E., Comal County
Mr. Roland Ruiz, Edwards Aquifer Authority
The Honorable Bill Kraweitz, City of Bulverde
TCEQ Central Records, Building F, MC212

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

November 2, 2012

Mr. David Keith
SH-DJL Development, LLC
18615 Tuscany Stone, Suite 200
San Antonio, Texas 78258-3502

Re: Edwards Aquifer, Comal County

Name of Plan: Singing Hills; Located at northwest corner of the intersection of Highway 281 and State Highway 46; Bulverde, Texas

Type of Plan: 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. 2969.01; Investigation No. 1030114; Regulated Entity No. RN106090962

Dear Mr. Keith:

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 Moy Tarin Ramirez Engineers, LLC on behalf of DJL Ventures, Inc. and SH-DJL Development, LLC on August 27, 2012. Final review the CZP was completed after additional material was received on October 18, 2012. As presented to the TCEQ, the Temporary and Permanent Best Management Practices (BMPs) 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.*

Project Description

The legal boundary of the site where proposed regulated activities will occur is 253.8 acres. The site is located over the Edwards Aquifer Contributing Zone. The proposed mixed use development project will include:

- approximately 90 acres of commercial development and related infrastructure at the south and east portions of the site
- a wastewater treatment plant will be constructed on the northeast portion of the site
- approximately 86 acres of mass grading activities following with the permanent stabilization measures
- 4.4 acres of demolition activities
- approximately 78 acres will remain uncleared and undisturbed
- offsite improvements consisting of pavement widening along Highway 281 and State Highway 46.

The impervious cover will be 64.2 acres of on-site impervious cover and 1.9 acres offsite impervious cover. The total impervious cover for the project is 66.1 acres (26 percent). Project wastewater will be disposed of by conveyance to the proposed Singing Hills Water Recycling Center owned by SH-DJL Development, LLC (TCEQ ID No. WQ0015038001).

Upgradient stormwater entering the site along the north and west boundaries will flow onto the site and into a proposed detention pond. Upon discharging from the pond, this water will flow off the site in a southeasterly direction and eventually reenter the site along the southern west boundary. This runoff will be intercepted by a permanent vegetative swale into a concrete lined channel and conveyed across the site.

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, two (2) sedimentation filtration basins, 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 55,379 pounds of TSS generated from the 61.7 acres of impervious cover (66.1 acres proposed minus 4.4 acres of preexisting impervious cover). The approved measures meet the required 80 percent removal of the increased load in TSS caused by the project.

The individual treatment measures are described below:

BMP Summary

Watershed Area	Total Area (ac)	Impervious Cover I/C (ac)	Existing I/C (ac)	Req. WQV (ft3)	Design WQV (ft3)	Req. sand filter area (ft2)	Design sand filter area (ft2)	Req. TSS removal (lb/yr)	Design TSS removal (lb/yr)
Sedimentation/Filtration Basin 1									
Pond 1	68.59	56.49	1.79	282,956	289,408	23,580	35,952	49,097	50,395
Sedimentation/Filtration Basin 2									
Pond 2	6.31	5.55	0	33,566	35,508	2,797	5,792	4,983	5,115

Uncaptured Areas*						
Onsite**	177	2.2	2.4		-230	—
Offsite	1:9	1.9	0.2		1,530	—
Total project	253.8	66.1	4.4		55,379	55,510

*The basin is oversized to account for the uncaptured area.
**Includes 86 acres of mass grading area, 78 acres of undisturbed/uncleared area and 13 acres within the 90 acre commercial development area. Those 13 acres will be intercepted by an underground storm drain system and discharged into the permanent concrete lined channel.

Water quality ponds 1 and 2 will utilize a concrete liner and sand filtration system consisting of 18 inch thick, ASTM C-33 sand beds and underdrain piping system covered with a minimum two inch gravel layer.

The mass grading is for future development. At this time, plans for this development have not been developed. Once those plans are finalized a modification to this CZP will be required. The mass grading will have no impervious cover and generate no wastewater. Temporary erosion and sedimentation controls will remain in place until completion of the mass grading. If the mass grading is completed before the future commercial development is presented and approved, the following permanent stabilization measures will be provided:

- The topsoil will be placed over the disturbed areas which have not already exhibited sufficient re-establishment of vegetation.
- The topsoil areas will be hydraulically mulched with grass seed to establish vegetation.
- Irrigation will be provided until sufficient vegetation has been established.

Special Conditions

I. 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.

II. All permanent pollution abatement measures shall be operational prior to occupancy of the facility.

III. All sediment and/or media removed from the water quality basin during maintenance activities shall be properly disposed of according to 30 TAC 330 or 30 TAC 335, as applicable.

IV. For any future modifications to this CZP, the summary tables in this letter must be updated and included in the application. It is the responsibility of the applicant to maintain this information and keep it current.

V. This CZP approval letter does not include the installation of the above ground storage tank facility at any commercial developments within the site. Prior to construction of the AST

Facility, a modification to this CZP must be submitted and received approval from the executive director.

VI. The proposed project will include a construction of a no-discharge wastewater treatment facility. This approval letter is being issued for regulated activities (as defined in Chapter 213) and for best management practices presented in the application. This approval does not constitute a wastewater permit or authorization from the TCEQ Wastewater Program. If wastewater is to be discharges in the contributing zone, requirements under 30 TAC 213. 6(c) (relating to Wastewater Treatment and Disposal Systems) must be satisfied.

VII. Since the project proposes mass grading activities, the applicant shall assure that any permanent soil stabilization performed is in accordance with the Technical Guidance Manual (RG-348, 2005) and shall be implemented in accordance with 30 TAC 213.24(5).

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, 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.
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 Yuliya Dunaway of the Edwards Aquifer Protection Program of the San Antonio Regional Office at 210-490-3096.

Sincerely,

for Lynn Bumguardner, Water Section Manager
San Antonio Region Office
Texas Commission on Environmental Quality

LB/YD/eg

Enclosures: Deed Recordation Affidavit, Form TCEQ-0625A
Change in Responsibility for Maintenance of Permanent BMPs, Form TCEQ-10263

cc: Mr. Duane Moy, P.E., Moy Tarin Ramirez Engineers, LLC
Mr. Tom Hornseth, P.E., Comal County
Mr. Roland Ruiz, Edwards Aquifer Authority
The Honorable Bill Kraweitz, City of Bulverde
TCEQ Central Records, Building F, MC212

ATTACHMENT B
NARRATIVE OF PROPOSED MODIFICATION

ATTACHMENT B
NARRATIVE OF PROPOSED MODIFICATON

BACKGROUND

The Singing Hills Development is an approximately 254 acre mixed use development located on the northwest corner of the intersection of U.S. Highway 281 and State Highway 46.

Original Contributing Zone Plan (CZP)

The original CZP for Singing Hills was completed in August 2012 by Moy Tarin Ramirez Engineers, LLC and approved by TCEQ on November 2, 2012. The CZP was approved for the construction of approximately 90 acres of commercial development and related infrastructure on the south and east portions of the site. In addition, the CZP was approved for construction of a wastewater treatment plant on the northeast side of the site, storm water detention pond to the west of the site, and approximately 86 acres of mass grading. In addition, approximately 4.4 acres of demolition and improvements to U.S. Highway 281 and State Highway 46 was also included. The original CZP application included approximately 64.2 acres of onsite impervious cover and approximately 1.89 acres of offsite impervious cover. In addition, the application included approximately 4.2 acres of existing onsite impervious cover to be removed, as well as approximately 0.2 acres of existing offsite impervious cover to be removed. This resulted in a net increase in impervious cover of approximately 61.7 acres or 24.3%. Construction has commenced for the first phase of the project and consists of clearing, mass grading, drainage channels, streets and utilities. Current construction activity associated with the first phase appears to be consistent with the approved CZP.

Contributing Zone Plan (CZP) Modification #1

A modification to the original CZP for Singing Hills was completed in October 2014 by Moy Tarin Ramirez Engineers, LLC and approved by TCEQ on January 13, 2015. The modification was submitted for development of areas that were previously indicated as undisturbed and an additional area added to a lot which increased the impervious cover for that lot. The new areas of development included two (2) street U-turns with deceleration lanes on U.S. Highway 281 and added the second phase of the development to be located north and west of the site. The second phase of development proposed 352 single family residential lots, a multi-family development and commercial / office development. The second phase proposed to add two (2) additional water quality basins to mitigate the increase of impervious cover. According to the modification, with completion of the first and second phase improvements; including additional offsite impervious cover for the street U-turns and deceleration lanes, removal of originally proposed driveways and deceleration lanes along U.S. Highway 281, the removal of additional existing impervious cover along US Highway 281 and State Highway 46, and the addition of impervious cover proposed for a lot size increase, the net overall impervious cover for the entire site is approximately 130.45 acres or 51% of the overall area.

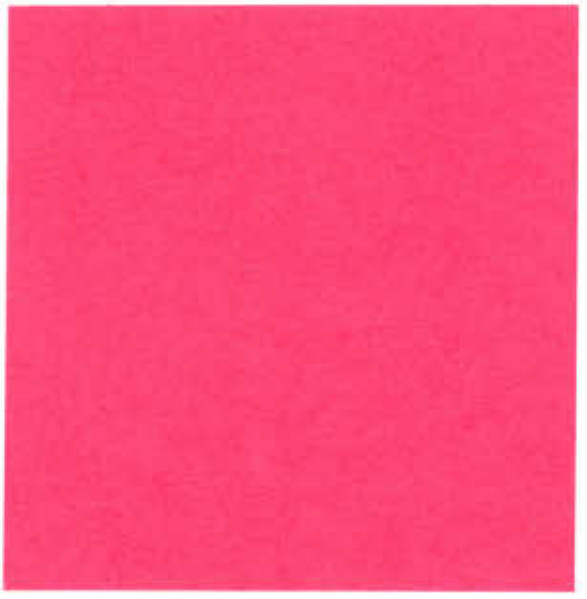
MODIFICATION

This modification is being submitted for a change in nature or character of the regulated activity from that which was originally approved. Specifically, for development of a Jiffy Lube auto care facility proposed to be located on Lot 18 of Singing Hills and to include nine (9) Storage Tanks with a total volume of 3,900 gallons.

Lot 18 is south of the Harmony Hills drive access to the site from U.S. Highway 281 and was included in the previously approved CZP, and specifically is allowed 90% impervious cover for the specific lot as defined by the original CZP. The Jiffy Lube development proposes an impervious cover of approximately 60%.

Storm water runoff from the Jiffy Lube site (Lot 18) drains to the storm drainage system along the east side of the site, travels south and enters the storm water management and sand filtration pond located at the south end of the Singing Hills near the intersection of U.S. Highway 281 and State Highway 46. The pond is referred to as "Sand Filtration Pond No. 1" per the construction plans for Singing Hills. According to documents for the Singing Hills, the pond has sufficient capture volume and sand area to treat the impervious cover from Lot 18.

ATTACHMENT C
LATEST APPROVED SITE PLAN OF SIGNING HILLS DEVELOPMENT



II. CONTRIBUTING ZONE PLAN APPLICATION

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.

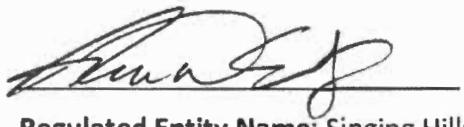
Signature

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: CEI Engineering Associates, Inc.

Date: 10/15/15

Signature of Customer/Agent:



Regulated Entity Name: Singing Hills

Project Information

1. County: Comal
2. Stream Basin: Lewis Creek
3. Groundwater Conservation District (if applicable): _____
4. Customer (Applicant):

   Contact Person: David Keith
   Entity: SH-DJL Development, LLC
   Mailing Address: 18615 Tuscany Stone, Suite 200
   City, State: San Antonio, Texas Zip: 78258
   Telephone: (210) 614-7051 Fax: (210) 614-8276
   Email Address: _____

5. Agent/Representative (If any):

Contact Person: Andrew D. Slyter, PE, CPESC
Entity: CEI Engineering Associates, Inc.
Mailing Address: 3108 SW Regency Parkway, Suite 2
City, State: Bentonville, Arkansas Zip: 72712
Telephone: (479) 273-9472 Fax: (479) 273-0844
Email Address: aslyter@ceieng.com

6. Project Location:

☒ The project site is located inside the city limits of Bulverde.
☒ The project site is located outside the city limits but inside the ETJ (extra-territorial jurisdiction) of The City of Bulverde.
☐ The project site is not located within any city's limits or ETJ.

7. ☒ The location of the project site is described below. Sufficient detail and clarity has been provided so that the TCEQ's Regional staff can easily locate the project and site boundaries for a field investigation.

Northwest Corner of U.S. Highway 281 and State Highway 46

8. ☒ **Attachment A - Road Map**. A road map showing directions to and the location of the project site is attached. The map clearly shows the boundary of the project site.

9. ☒ **Attachment B - USGS Quadrangle Map**. A copy of the official 7 ½ minute USGS Quadrangle Map (Scale: 1" = 2000') is attached. The map(s) clearly show:

☒ Project site boundaries.
☒ USGS Quadrangle Name(s).

10. ☐ **Attachment C - Project Narrative**. A detailed narrative description of the proposed project is attached. The project description is consistent throughout the application and contains, at a minimum, the following details:

☒ Area of the site
☒ Offsite areas
☒ Impervious cover
☒ Permanent BMP(s)
☒ Proposed site use
☒ Site history
☒ 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: _____
☒ Commercial
☐ Industrial
☐ Other: _____

13. Total project area (size of site): 0.93 Acres

Total disturbed area: 0.93 Acres

14. Estimated projected population: Non-residential

15. The amount and type of impervious cover expected after construction is complete is shown below:

Table 1 - Impervious Cover

Impervious Cover of Proposed Project	*Sq. Ft.*	*Sq. Ft./Acre*	*Acres*
Structures/Rooftops	3280	÷ 43,560 =	0.08
Parking	20680	÷ 43,560 =	0.47
Other paved surfaces		÷ 43,560 =	
Total Impervious Cover	23960	÷ 43,560 =	0.55

Total Impervious Cover 0.55 **÷ Total Acreage** 0.93 **X 100 =** 59**% 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
- ☐ Other: _____

20. Right of Way (R.O.W.):

Length of R.O.W.: _____ feet.
Width of R.O.W.: _____ feet.
L x W = _____Ft^2 ÷ 43,560 Ft^2/Acre = _____ acres.

21. Pavement Area:

Length of pavement area: _____ feet.
Width of pavement area: _____ feet.
L x W = _____Ft^2 ÷ 43,560 Ft^2/Acre = _____ acres.
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 TAC §213.6(c) relating to Wastewater Treatment and Disposal Systems have been satisfied.

☐ N/A

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 facility will be used to treat and dispose of the wastewater from this site. The appropriate licensing authority's (authorized agent) written approval is attached. It states that the land is suitable for the use of private sewage facilities and will meet or exceed the requirements for on-site sewage facilities as specified under 30 TAC Chapter 285 relating to On-site Sewage Facilities.

☐ Each lot in this project/development is at least one (1) acre (43,560 square feet) in size. The system will be designed by a licensed professional engineer or registered sanitarian and installed by a licensed installer in compliance with 30 TAC Chapter 285.

☒ Sewage Collection System (Sewer Lines):
The sewage collection system will convey the wastewater to the Singing Hills Wastewater (name) Treatment Plant. The treatment facility is:

☒ Existing.
☐ Proposed.

☐ N/A

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	5 x 280	Automotive Oil	Steel
2	3 x 500	Automotive Oil	Steel
3	1000	Used Automotive Oil	Steel
4			
5			

Total x 1.5 = 3900 Gallons

28. ☒ The AST will be placed within a containment structure that is sized to capture one and one-half (1 1/2) times the storage capacity of the system. For facilities with more than

one tank system, the containment structure is sized to capture one and one-half (1 1/2) times the cumulative storage capacity of all systems.

☒ **Attachment G - Alternative Secondary Containment Methods**. Alternative methods for providing secondary containment are proposed. Specifications showing equivalent protection for the Edwards Aquifer are attached.

29. Inside dimensions and capacity of containment structure(s):

Table 3 - Secondary Containment

Length (L)(Ft.)	*Width(W)(Ft.)*	*Height (H)(Ft.)*	*L x W x H = (Ft3)*	*Gallons*
35	43	5	7525	56,000

Total: 56,000 **Gallons**

30. Piping:

☒ All piping, hoses, and dispensers will be located inside the containment structure.
☐ Some of the piping to dispensers or equipment will extend outside the containment structure.
☐ The piping will be aboveground
☐ The piping will be underground

31. ☒ The containment area must be constructed of and in a material impervious to the substance(s) being stored. The proposed containment structure will be constructed of: Reinforced concrete.

32. ☒ **Attachment H - AST Containment Structure Drawings**. A scaled drawing of the containment structure is attached that shows the following:

☒ Interior dimensions (length, width, depth and wall and floor thickness).
☐ Internal drainage to a point convenient for the collection of any spillage.
☒ Tanks clearly labeled
☐ Piping clearly labeled
☐ Dispenser clearly labeled

33. ☒ Any spills must be directed to a point convenient for collection and recovery. Spills from storage tank facilities must be removed from the controlled drainage area for disposal within 24 hours of the spill.

☒ In the event of a spill, any spillage will be removed from the containment structure within 24 hours of the spill and disposed of properly.

☐ In the event of a spill, any spillage will be drained from the containment structure through a drain and valve within 24 hours of the spill and disposed of properly. The drain and valve system are shown in detail on the scaled drawing.

Site Plan Requirements

Items 34 - 46 must be included on the Site Plan.

34. ☒ The Site Plan must have a minimum scale of 1" = 400'.

    Site Plan Scale: 1" = 20'.

35. 100-year floodplain boundaries:

    ☐ 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 (FIRM), Community Panel Number 480910220F, Dated September 2, 2009.

36. ☒ 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 appropriate, but not greater than ten-foot contour intervals. Finished topographic contours will not differ from the existing topographic configuration and are not shown. Lots, recreation centers, buildings, roads, etc. are shown on the site plan.

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. ☒ Locations of major structural and nonstructural controls. These are the temporary and permanent best management practices.

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.

46. ☒ Legal boundaries of the site are shown.

Permanent Best Management Practices (BMPs)

Practices 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 less 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 §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.

☐ 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 multi-family 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.

☐ **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 permanent 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.

52. ☒ **Attachment J - BMPs for Upgradient Stormwater**.

☒ A description of the BMPs and measures that will be used to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site 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 water or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff, and an explanation is attached.

54. ☒ **Attachment L - BMPs for Surface Streams**. A description of the BMPs and measures that prevent pollutants from entering surface streams is attached.

☐ 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

attached and include: Design calculations, TCEQ Construction Notes, all proposed structural plans and specifications, and appropriate details.

☐ N/A

56. ☐ **Attachment N - Inspection, Maintenance, Repair and Retrofit Plan**. A site and BMP 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:

    ☐ 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 **No Permanent BMPs revised or added with this Modification**

57. ☐ **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.

    ☒ 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

Responsibility for Maintenance of Permanent BMPs and Measures 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 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.

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, schools, and other sites where regulated activities occur.

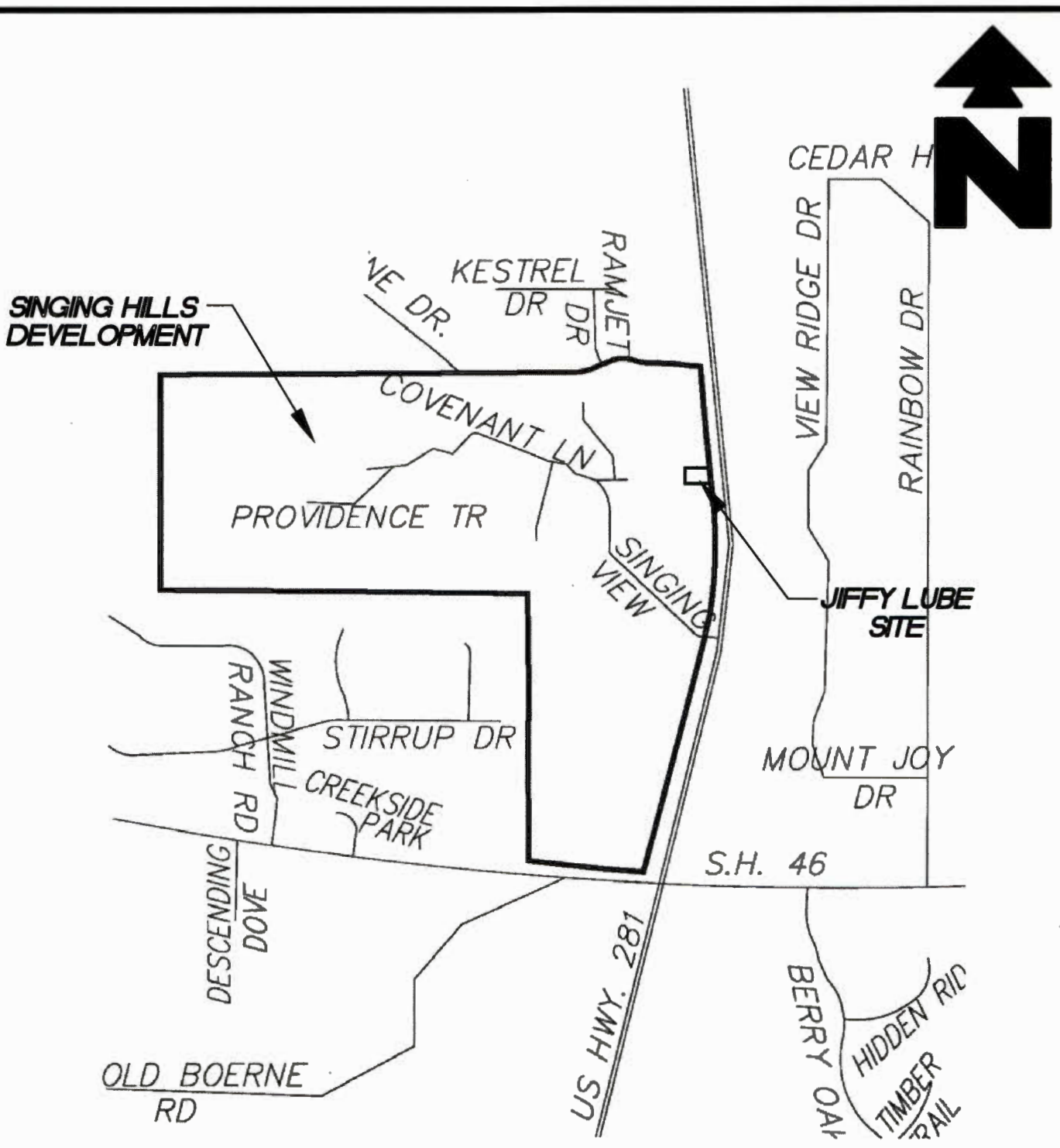
Administrative Information

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.

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.

63. ☒ The site description, controls, maintenance, and inspection requirements for the storm water 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.

☐ The Temporary Stormwater Section (TCEQ-0602) is included with the application.



INITIAL DESIGN	9/9/15 DATE	--- PRN	-- PM	-- DES	-- DRW

ATTACHMENT A - ROAD MAP

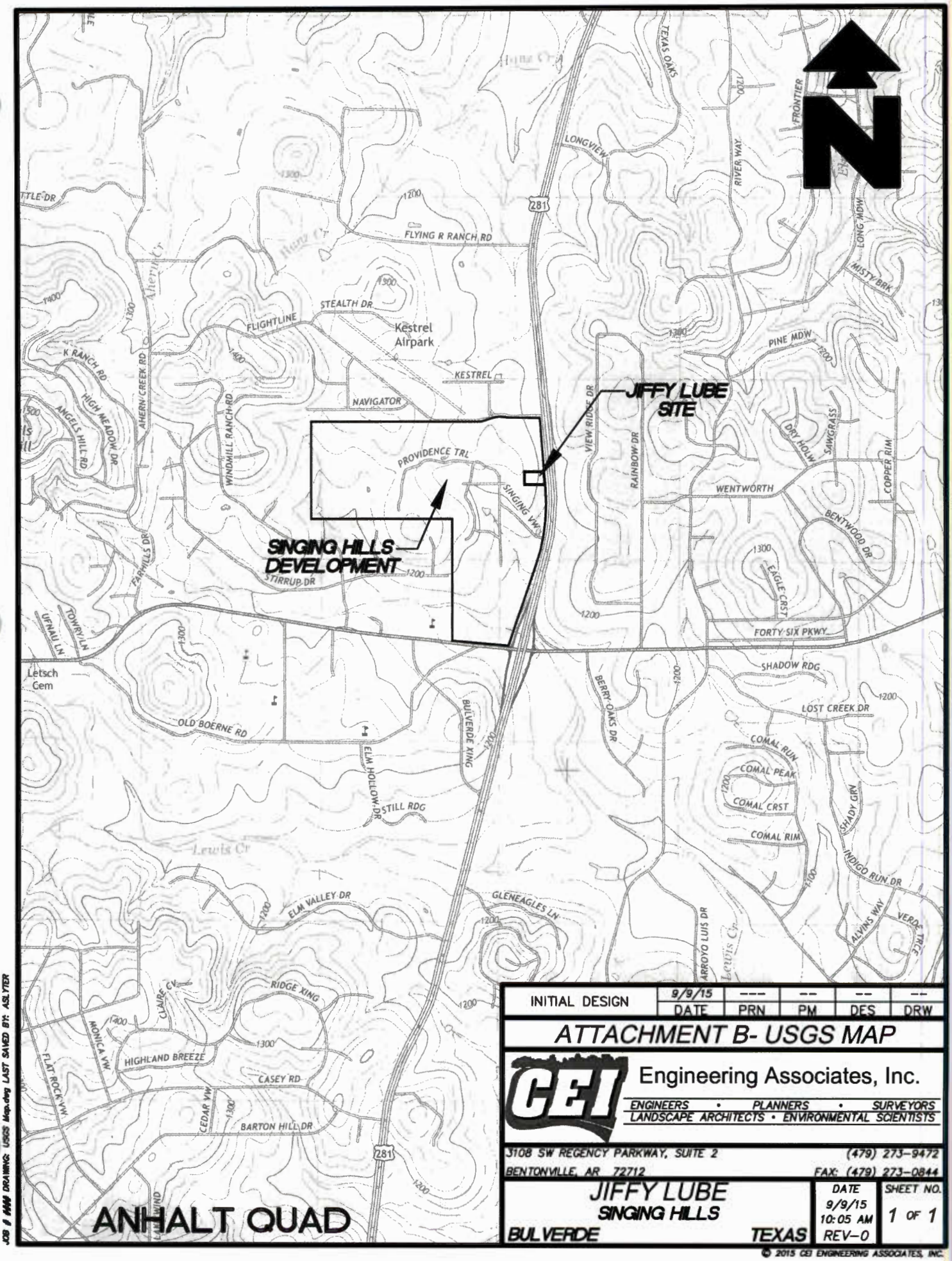
Engineering Associates, Inc.
ENGINEERS • PLANNERS • SURVEYORS
LANDSCAPE ARCHITECTS • ENVIRONMENTAL SCIENTISTS
3108 SW REGENCY PARKWAY, SUITE 2
BENTONVILLE, AR 72712
(479) 273-9472
FAX: (479) 273-0844

JIFFY LUBE
SINGING HILLS
BULVERDE TEXAS

DATE 9/9/15 10:12 AM REV-0

SHEET NO. 1 OF 1

JOB # ### DRAWING: USGS Map.dwg LAST SAVED BY: ASLYTER



INITIAL DESIGN	9/9/15	---	--	--	--
	DATE	PRN	PM	DES	DRW

ATTACHMENT B- USGS MAP

Engineering Associates, Inc.
ENGINEERS • PLANNERS • SURVEYORS
LANDSCAPE ARCHITECTS • ENVIRONMENTAL SCIENTISTS
3108 SW REGENCY PARKWAY, SUITE 2
BENTONVILLE, AR 72712
(479) 273-9472
FAX: (479) 273-0844

JIFFY LUBE
SINGING HILLS
BULVERDE TEXAS

DATE 9/9/15 10:05 AM REV-0

SHEET NO. 1 OF 1

JOB # ### DRAWING: USGS Map.dwg LAST SAVED BY: ASLYTER

ATTACHMENT C
PROJECT NARRATIVE

The Singing Hills Development is an approximately 254 acre mixed use development located on the northwest corner of the intersection of U.S. Highway 281 and State Highway 46.

The original CZP for Singing Hills was completed in August 2012 by Moy Tarin Ramirez Engineers, LLC and approved by TCEQ on November 2, 2012. The CZP was approved for the construction of approximately 90 acres of commercial development and related infrastructure on the south and east portions of the site. In addition, the CZP was approved for construction of a wastewater treatment plant on the northeast side of the site, storm water detention pond to the west of the site, and approximately 86 acres of mass grading. In addition, approximately 4.4 acres of demolition and improvements to U.S. Highway 281 and State Highway 46 was also included. The original CZP application included approximately 64.2 acres of onsite impervious cover and approximately 1.89 acres of offsite impervious cover. In addition, the application included approximately 4.2 acres of existing onsite impervious cover to be removed, as well as approximately 0.2 acres of existing offsite impervious cover to be removed. This resulted in a net increase in impervious cover of approximately 61.7 acres or 24.3%. Construction has commenced for the first phase of the project and consists of clearing, mass grading, drainage channels, streets and utilities.

A modification to the original CZP for Singing Hills was completed in October 2014 by Moy Tarin Ramirez Engineers, LLC and approved by TCEQ on January 13, 2015. The modification was submitted for development of areas that were previously indicated as undisturbed and an additional area added to a lot which increased the impervious cover for that lot. The new areas of development included two (2) street U-turns with deceleration lanes on U.S. Highway 281 and added the second phase of the development to be located north and west of the site. The second phase of development proposed 352 single family residential lots, a multi-family development and commercial / office development. The second phase proposed to add two (2) additional water quality basins to mitigate the increase of impervious cover. According to the modification, with completion of the first and second phase improvements; including additional offsite impervious cover for the street U-turns and deceleration lanes, removal of originally proposed driveways and deceleration lanes along U.S. Highway 281, the removal of additional existing impervious cover along US Highway 281 and State Highway 46, and the addition of impervious cover proposed for a lot size increase, the net overall impervious cover for the entire site is approximately 130.45 acres or 51% of the overall area.

This CZP application is being submitted specifically for development of a Jiffy Lube auto care facility proposed to be located on Lot 18 of Singing Hills of approximately 0.93 acres. The Jiffy Lube proposes nine (9) storage tanks with a total volume of 3,900 gallons. The nine (9) tanks are steel construction and consist of; three (3) 500 gallon fresh oil storage tanks, five (5) 280 gallon fresh oil storage tanks, and one (1) 1,000 gallon used oil storage tank. The storage tanks will be located underneath the building in a concrete basement. The concrete basement will operate as a secondary containment system for the storage tanks as it does not contain drains or any other wall or floor

penetration openings. The concrete basement is approximately 35 feet wide by 43 feet long and approximately 5 feet deep, providing a secondary containment volume of approximately 60,000 gallons.

Lot 18 is south of the Harmony Hills drive access to the site from U.S. Highway 281 and was included in the previously approved CZP, and specifically is allowed 90% impervious cover for the specific lot as defined by the original CZP. Impervious cover for the Jiffy Lube project will be from the building structure, sidewalks, driveways and the parking lot and is proposed to be approximately 60%. Permanent water quality treatment for the Jiffy Lube is provided by the existing storm water management and sand filtration pond located at the south end of the Singing Hills development near the intersection of U.S. Highway 281 and State Highway 46. Storm water runoff from the Jiffy Lube site (Lot 18) drains to the storm drainage system along the east side of the site, travels south and enters the storm water management pond. The pond is referred to as "Sand Filtration Pond No. 1" per the construction plans for Singing Hills. According to documents for the Singing Hills, the pond has sufficient capture volume and sand area to treat the impervious cover from Lot 18 and was designed in accordance with the TCEQ Technical Guidance Manual to remove at least 80% of the total suspended solids generated by the impervious cover.

During construction, temporary construction Best Management Practices (BMPs) will be employed to control sediment runoff and minimize erosion. Temporary BMPs will consist of a stabilized construction exit, silt / sediment fence, silt / sediment dikes and media tubes, inlet filters, concrete wash out pit and stabilized construction staging and laydown area.

ATTACHMENT D
FACTORS AFFECTING SURFACE WATER QUALITY

The Singing Hills Development Phase 1 consists of construction of asphalt and concrete pavement, concrete sidewalks, buildings, a wastewater treatment plant, a detention pond, two (2) sand filtration ponds and landscaped areas.

The Singing Hills Development Phase 2 consists of construction of approximately 352 single family residential lots, apartments and office space and includes construction of asphalt and concrete pavement for driveways and streets, concrete sidewalks, parking lots, residential homes and apartment buildings, office buildings, a sanitary sewer lift station, two (2) sand filtration ponds and landscape areas.

The Jiffy Lube auto car facility proposed to be located on Lot 18 of approximately 0.93 acres, consists of construction of asphalt and concrete pavement for driveways, concrete sidewalks, the Jiffy Lube building, underground utilities and landscaped areas.

Factors affecting surface water quality include; fertilizers, pesticides from landscape, sediment from soil disturbance, leaf litter from trees, small amounts of oil and grease from vehicular traffic and suspended solids from impervious cover areas. These factors may cause suspended solids to enter the storm water runoff and subsequently impact surface water. Temporary construction Best Management Practices (BMPs) will be utilized during construction to control sediment runoff from soil disturbance and minimize soil erosion. Temporary BMPs will consists of silt / sediment fences, rock berms, inlet filters, stabilized construction exits, diversion dikes, silt dikes and media tubes and stabilized construction staging and laydown areas. Permanent water quality and storm water management ponds are also proposed as part of the Singing Hills Development and consist of numerous sand filtration ponds designed on the Technical Guidance Manual to treat the storm water runoff and minimize the effect of the development on surface water.

ATTACHMENT E
VOLUME AND CHARACTER OF STORM WATER

VOLUME OF STORM WATER

According to construction documents associated with the Singing Hills development, the proposed detention pond located at the west end of the site is designed to decrease the post development peak runoff rate from the Singing Hills development to a rate that is less than the existing peak runoff rate from the development area, according to Comal County requirements. The detention pond is designed to over detain the runoff from the area entering the pond to mitigate the increase in runoff from the area located in the southeast corner of the Singing Hills development, which discharges storm water runoff into the U.S. Highway 281 right of way.

Existing Conditions (Singing Hills)
Area: 253.51
Runoff Coefficient: 0.50
Tc = 40 min
I = 4.44 in/hr
Q25 = 563 cfs

Proposed Conditions (Singing Hills)
Area: 253.51
Runoff Coefficient: 0.70
Tc = 25 min
I = 5.89 in/hr
Q25 = 1,045 cfs

Existing Conditions (Jiffy Lube)
Area: 0.93
Runoff Coefficient: 0.50
Tc = 10 min
I25 = 9.3 in/hr, I100 = 11.5 in/hr
Q25 = 4.3 cfs, Q100 = 5.3 cfs

Proposed Conditions (Jiffy Lube)
Area: 0.93
Runoff Coefficient: 0.77
Tc = 10 min
I25 = 9.3 in/hr, I100 = 11.5 in/hr
Q25 = 6.7 cfs, Q100 = 8.2 cfs

CHARACTER OF STORM WATER

According to the original CZP and CZP modification, storm water runoff generated from the Singing Hills development during construction will be typical of a large scale residential, multi-family and commercial construction project. The runoff may contain small amounts of suspended solids created by construction activities which may include sediments from disturbed soils and hydrocarbons from construction equipment. Permanent stabilization of areas where soil is disturbed by construction activities will be accomplished by installing new vegetation, mulch and impervious cover.

According to the original CZP and CZP modification, storm water runoff generated after construction of the Singing Hills development will be typical of small and large commercial and single and multi-family developments. The runoff will contain sediments from building roofs, driveways, parking lots, sidewalks, landscape areas and other miscellaneous impervious areas from the site. The runoff may contain small amounts of oil, grease, suspended solids, fertilizers and pesticides. The post construction runoff will be treated through four (4) sand filtration ponds designed in accordance with the Technical Guidance Manual to remove 80% of the total increase in TSS caused by the impervious cover.

Storm water runoff generated from the Jiffy Lube development during construction will be typical of a small scale commercial development construction project. Runoff may contain small amounts of suspended solids created by construction activities, which may include sediments from disturbed soils. Permanent stabilization of areas where soil is disturbed by construction activities will be accomplished by installing new vegetation, mulch and impervious cover as described in the Storm Water Pollution Prevention Plan (SWPPP).

Storm water runoff generated from the Jiffy Lube, after construction, will be typical of a small scale development. Runoff generated may contain sediments and small amounts of oil, grease, fertilizers and pesticides from building roofs, driveways, parking lots, sidewalks, landscape areas and other miscellaneous impervious areas. Post construction runoff from the Jiffy Lube will be treated in the existing storm water management and sand filtration pond located at the south end of the Singing Hills development near the intersection of U.S. Highway 281 and State Highway 46. According to documents for the Singing Hills, the pond has sufficient capture volume and sand area to treat the impervious cover from Lot 18 and was designed in accordance with the TCEQ Technical Guidance Manual to remove at least 80% of the total suspended solids generated by the impervious cover.

ATTACHMENT G
ALTERNATIVE SECONDARY CONTAINMENT METHODS

This CZP application is being submitted specifically for development of a Jiffy Lube auto care facility proposed to be located on Lot 18 of Singing Hills of approximately 0.93 acres. The Jiffy Lube proposes nine (9) storage tanks with a total volume of 3,900 gallons. The nine (9) tanks are steel construction and consist of; three (3) 500 gallon fresh oil storage tanks, five (5) 280 gallon fresh oil storage tanks, and one (1) 1,000 gallon used oil storage tank. The tanks are proposed to be single wall steel. As an alternative to double walled tanks, an alternate secondary containment system is proposed. Specifically, the storage tanks will be located underneath the building in a concrete basement. The concrete basement will operate as a secondary containment system for the storage tanks as it does not contain drains or any other wall or floor penetration openings. The concrete basement is approximately 35 feet wide by 43 feet long and approximately 5 feet deep, providing a secondary containment volume of approximately 60,000 gallons. As required, secondary containment system must have 1.5 times the volume of the storage tanks. The Jiffy Lube tanks have a total of 3,900 gallons, therefore the secondary containment system shall provide at least 5,850 gallons. The secondary system proposed provides more volume than required.

ATTACHMENT H

AST CONTAINMENT STRUCTURE DRAWINGS

Stanwade Metal Products

RECTANGULAR
U/L-142 SPECIFICATIONS
SINGLEWALL & DOUBLE WALL
ABOVEGROUND TANKS FOR FLAMMABLE AND COMBUSTIBLE LIQUIDS

1.0 Tank Description:

1.1 Stawade Tanks are designed, constructed, and tested in accordance with Underwriters Laboratories, Inc. Standard 142. " **UL 142** " pertains to Steel Aboveground Tanks for Flammable and Combustible Liquids. Stanwade Tanks shall, with this listing, meet the requirements for atmospheric tanks of The National Fire Protection Association (NFPA) Sections 30, 30A, and 31 as well as The Uniform Fire Code (UFC) Article 79.

1.2 Stanwade Tanks are designed and listed as atmospheric tanks with a **maximum** working pressure of 1 Pound Per Square Inch (PSI).

1.3 Stanwade Tanks shall have passed a proof of design hydrostatic pressure test of 25 PSI for the primary and secondary containment tanks.

1.4 Each primary tank shall have one emergency vent fitting as required by UL and four additional fittings for the mounting and installation of equipment.

1.5 Each secondary tank (double wall design) shall have one emergency vent fitting as required by UL and one additional fitting for interstitial monitoring and venting.

1.6 Each tank shall be equipped with lifting lugs.

1.7 Stanwade Tanks include a Twelve Month Warranty from date of purchase.

2.0 Single Wall Tanks (Primary Storage Tank)

2.1 Each primary tank will be of rectangular design.

2.2 Each Single Wall tank shall be constructed of ASTM A-569 or A-36 Carbon steel, ASTM A-240 type 304 or 316 stainless steel as required regarding product compatibility.

2.3 Each Single Wall tank shall be factory pressure tested per UL 142 specification at 3 to 5 PSI.

2.4 Each Single Wall tank exterior shall have one coat of red oxide primer.

3.0 Double Wall Tanks (Secondary Containment Tanks)

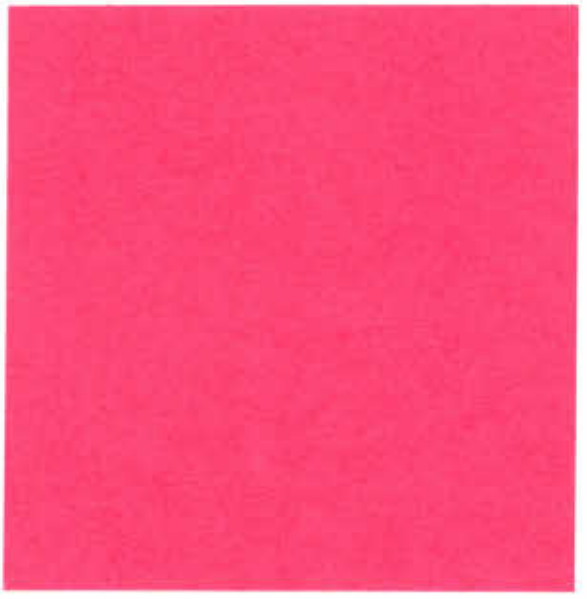
3.1 Each secondary containment tank will be of rectangular design.

3.2 Each secondary containment tank shall be listed by Underwriters Laboratories as a secondary containment tank.

3.3 Each secondary containment tank shall be constructed of ASTM A-569 or ASTM A-240 type steel.

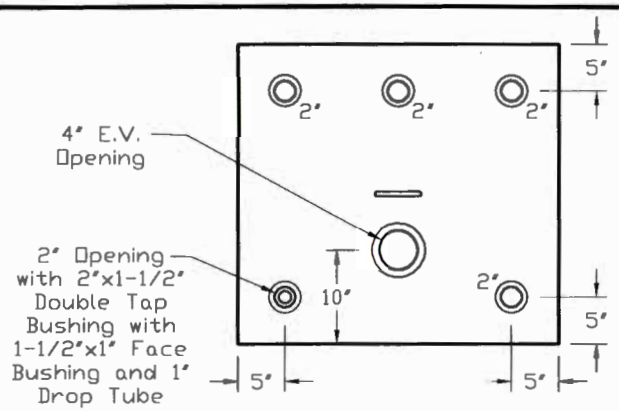
3.4 Each secondary containment tank shall be factory pressure tested per UL 142 specification at 3 PSI.

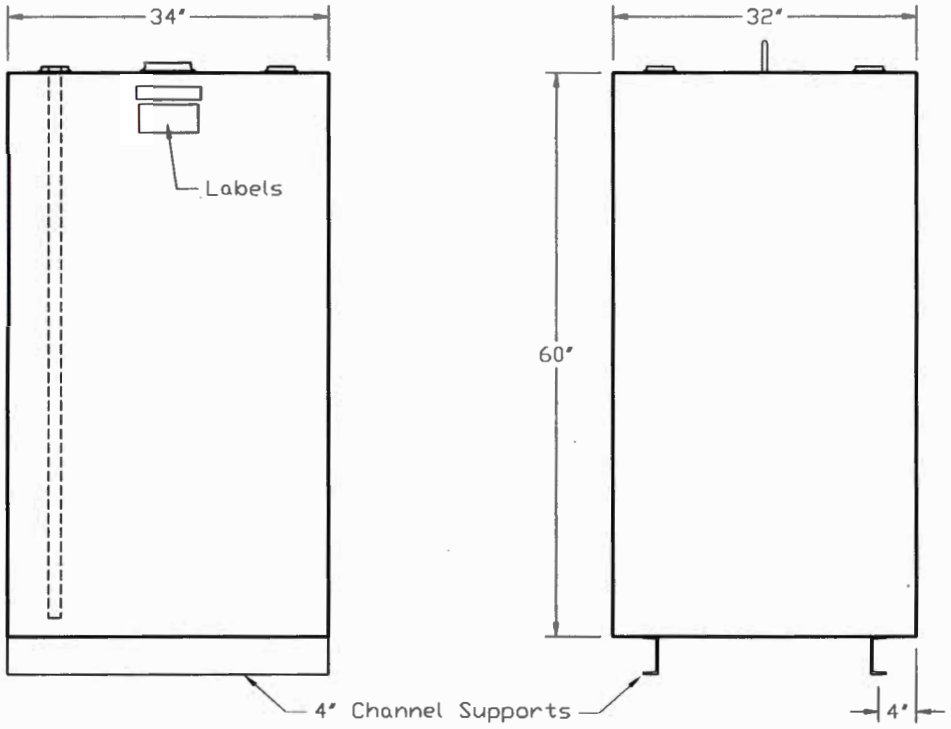
3.5 Each secondary containment tank exterior shall have one coat of red oxide primer.



STANWADE METAL PRODUCTS, INC.
6868 State Route 305, P.O. Box 10
Hartford, Ohio 44424
Phone: 800-826-5243 Fax. 1-330-772-3307
www.tankstore.com

STANWADE
METAL PRODUCTS INC





Capacity:	280 Gallons
Design:	Single Wall Rect.
Code:	UL 142
Test Pressure:	3 P.S.I. Max.
Primary Heads:	10 Ga. - 7 Ga. Top
Primary Shell:	10 Ga.
Paint Exterior:	Red Enamel over Primer
Paint Interior:	
Weight Empty:	500 Lbs.

Notes:

1. Tank For Stationary Use Only.
2. Dimensions Shown Are Interior.
3. All Openings Are Female Threaded Unless Noted Otherwise.
4. Dope and Plug All Openings.

Customer: Devon / Jiffy Lube

Drawing Date: 7-24-15

Drawing #: DEV001.7-24-15.2

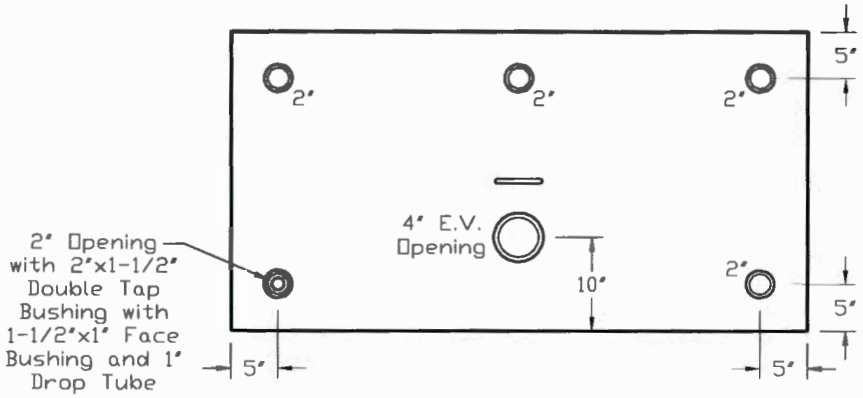
Quote #: _____

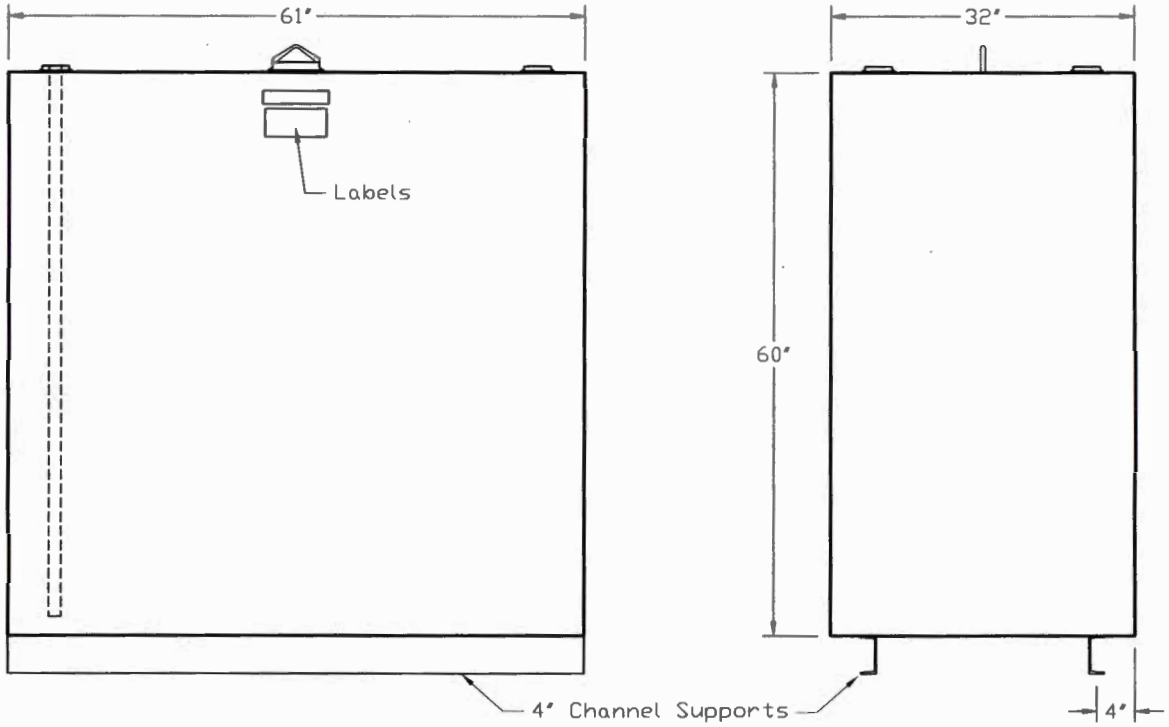
Quoted Lead Times Begin Upon Receipt of Signed Approved Drawing, Which Must be Returned Before Production Can Begin.

Drawing Approved By: _____

STANWADE METAL PRODUCTS, INC.
6868 State Route 305, P.O. Box 10
Hartford, Ohio 44424
Phone: 800-826-5243 Fax. 1-330-772-3307
www.tankstore.com

STANWADE
METAL PRODUCTS INC





Capacity:	500 Gallons
Design:	Single Wall Rect.
Code:	UL 142
Test Pressure:	3 P.S.I. Max.
Primary Heads:	10 Ga. - 7 Ga. Top
Primary Shell:	10 Ga.
Paint Exterior:	Red Enamel over Primer
Paint Interior:	
Weight Empty:	700 Lbs.

Notes:

1. Tank For Stationary Use Only.
2. Dimensions Shown Are Interior.
3. All Openings Are Female Threaded Unless Noted Otherwise.
4. Dope and Plug All Openings.

Customer: Devon / Jiffy Lube

Drawing Date: 7-24-15

Drawing #: DEV001.7-24-15.3

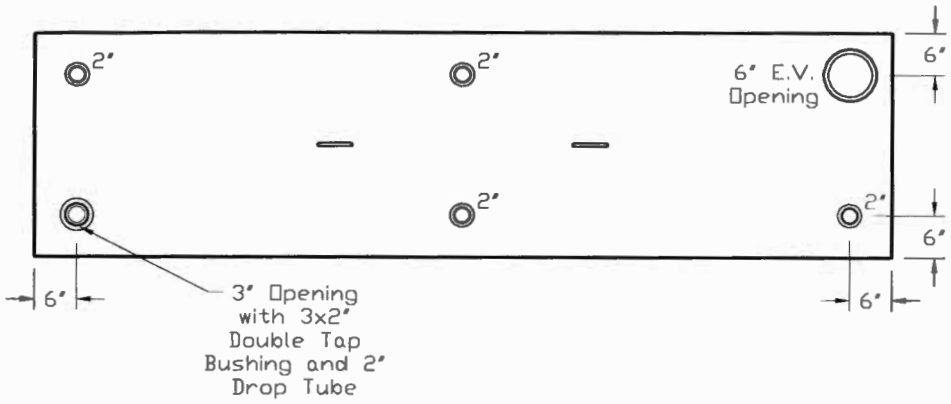
Quote #: _____

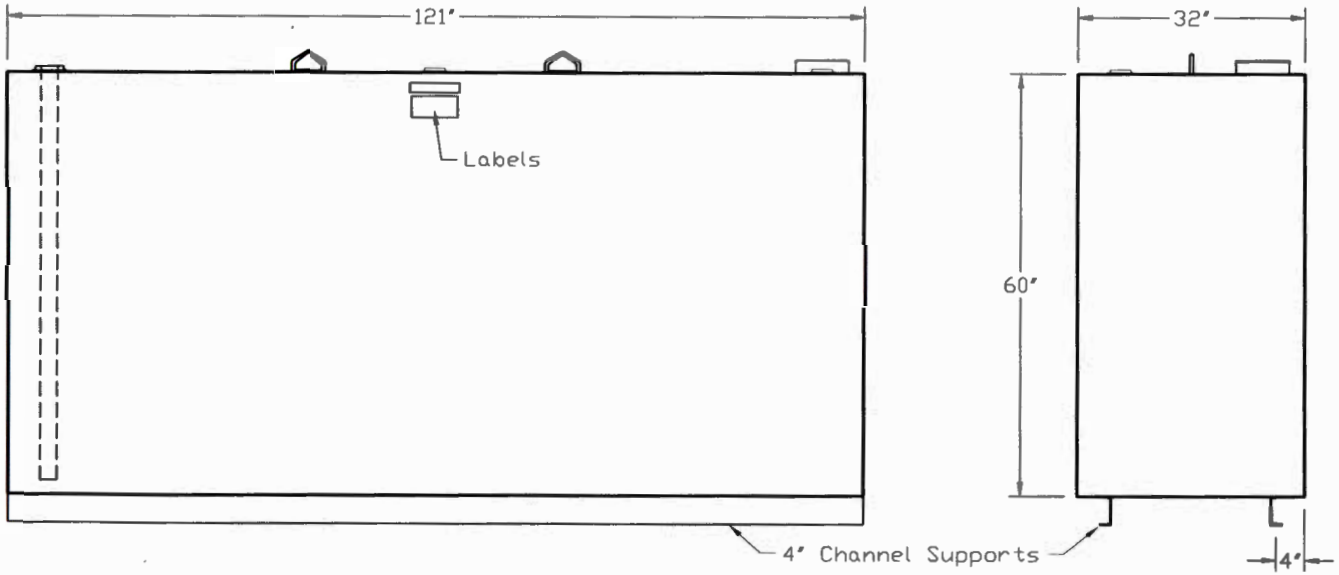
Quoted Lead Times Begin Upon Receipt of Signed Approved Drawing, Which Must be Returned Before Production Can Begin.

Drawing Approved By: _____

STANWADE METAL PRODUCTS, INC.
6868 State Route 305, P.O. Box 10
Hartford, Ohio 44424
Phone: 800-826-5243 Fax. 1-330-772-3307
www.tankstore.com

STANWADE
METAL PRODUCTS INC





Capacity:	1,000 Gallons
Design:	Single Wall Rect.
Code:	UL 142
Test Pressure:	3 P.S.I. Max.
Primary Heads:	10 Ga. - 7 Ga. Top
Primary Shell:	10 Ga.
Paint Exterior:	Red Enamel over Primer
Paint Interior:	
Weight Empty:	1,550 Lbs.

Notes:

1. Tank For Stationary Use Only.
2. Dimensions Shown Are Interior.
3. All Openings Are Female Threaded Unless Noted Otherwise.
4. Dope and Plug All Openings.

Customer: Devon / Jiffy Lube

Drawing Date: 7-24-15

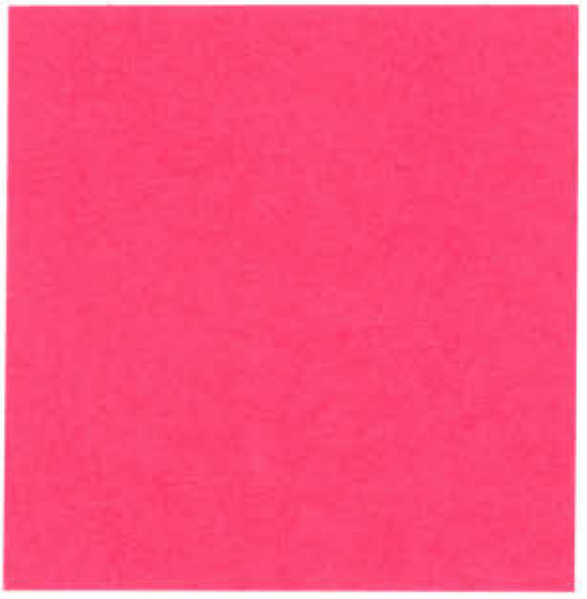
Drawirg #: DEV001.7-24-15.1

Quote #: _____

Quoted Lead Times Begin Upon Receipt of signed Approved Drawing, Which Must be Returned Before Production Can Begin.

Drawing Approved By: _____

JIFFY LUBE SITE PLAN



ATTACHMENT J

BMPs FOR UPGRADIENT STORM WATER

According to the original CZP and CZP modification, for the overall Singing Hills development, upgradient storm water enters the project site along the north, west and south boundaries of the overall development. A proposed interceptor channel will collect the upgradient flow on the northern boundary and convey it downstream to a proposed earthen channel. The storm water runoff entering the site along the western portion of the north boundary and the northern portion of the west boundary, in addition to the aforementioned proposed interceptor channel, will continue to flow onto the site and into the proposed earthen channel that will ultimately discharge into an existing detention pond. Upon discharging from the pond, this water will flow off the site in a southeasterly direction across Windmill Ranch Subdivision and eventually converge with an adjacent watershed flowing in the natural low that enters the site along the southwest boundary. Along this south west boundary, the runoff is intercepted and conveyed across the site in a concrete lined channel.

The upgradient flow entering the site near the far west boundary will be intercepted by a permanent interceptor channel and flow into the existing detention pond. The upgradient flow entering the site from the south and a small portion on the north will flow onto the property and will eventually enter water quality ponds #3 and #4.

The upgradient flow entering the site near the middle of the southwestern boundary will be intercepted by a permanent interceptor channel and routed south to the concrete lined channel that conveys water across the southern portion of the site. During construction, this runoff will be temporarily diverted with a diversion dike to the natural low that crosses the southern portion of the Singing Hills project site.

During the overall Singing Hills project construction, temporary BMPs consisting of silt fences, rock berms, inlet filters, diversion dikes, and stabilized construction exits will be utilized to alleviate sediment from leaving the site. During construction, the upgradient water will not flow into the sand filtration pond catchment areas. After construction, only some of the upgradient flow will enter the sand filtration pond.

In regard to the specific Jiffy Lube project site, there are no upgradient areas that contribute storm water runoff onto the Jiffy Lube site. Therefore, no additional BMPs are proposed for upgradient storm water runoff as it relates to the specific Jiffy Lube project.

ATTACHMENT K

BMPS FOR ONSITE STORM WATER

According to the original CZP and CZP modification, for the overall Singing Hills Development Phases 1 and 2, during construction temporary BMPs consisting of silt fences, rock berms, bagged gravel inlet filters, diversion dikes and stabilized construction entrance/exit will be utilized to alleviate sediment from leaving the overall Singing Hills development site.

After construction of Phase 1, storm water runoff will flow into two (2) sand filtration ponds provided for permanent storm water quality treatment. According to the original and modified CZP, the ponds have been designed to treat the total impervious cover for the entire Phase 1 development and out of approximately 66.1 acres of impervious cover, approximately 62 acres will drain into the sand filtration ponds.

According to the original and modified CZP, the impervious cover required to be treated is 61.697 acres which calculates to a required removal of 55,379 pounds of total suspended solids (TSS). The amount of impervious cover draining to Pond #1 is 56.492 acres and to Pond #2 is 5.551 acres.

Pond #1 (per original and modified CZP): Total required storage volume to remove 50,212 pounds of TSS is 282,530 cubic feet. The actual storage volume being provided is 289,408 cubic feet. The required sand filter area is 23,544 square feet and the actual area being provided is 35,952 square feet.

Pond #2 (per original and modified CZP): Total required storage volume to remove 5,115 pounds of TSS is 33,566 cubic feet. The actual storage volume being provided is 35,508 cubic feet. The required sand filter area is 2,797 square feet and the actual area being provided is 5,792 square feet.

The majority of the impervious cover area in the Phase 2 will flow into two (2) sand filtration ponds for permanent water quality treatment. The total impervious cover for Phase 2 is approximately 63.6 acres, of which approximately 58.4 acres of impervious cover will drain into the sand filtration ponds. The amount of impervious cover draining to Pond #3 is 33.8 acres and to Pond #4 is 24.6 acres.

Pond #3 (per original and modified CZP): Total required storage volume to remove 33,525 pounds of TSS is 289,672 cubic feet. The actual storage volume being provided is 309,104 cubic feet. The required sand filter area is 24,071 square feet and the actual area being provided is 41,214 square feet.

Pond #4 (per original and modified CZP): Total required storage volume to remove 24,200 pounds of TSS is 197,320 cubic feet. The actual storage volume being provided is 214,992 cubic feet. The required sand filter area is 16,392 square feet and the actual area being provided is 26,874 square feet.

In regard to the specific proposed Jiffy Lube project site or approximately 0.93 acres, approximately 60% is proposed to be impervious cover, or approximately 0.56 acres.

Permanent water quality treatment for the Jiffy Lube is provided by the existing storm water management and sand filtration pond located at the south end of the Singing Hills development near the intersection of U.S. Highway 281 and State Highway 46. Storm water runoff from the Jiffy Lube site (Lot 18) drains to the storm drainage system along the east side of the site, travels south and enters the storm water management pond. The pond is referred to as "Sand Filtration Pond No. 1" per the construction plans for Singing Hills. According to documents for the Singing Hills, the pond has sufficient capture volume and sand area to treat the impervious cover from Lot 18 and was designed in accordance with the TCEQ Technical Guidance Manual to remove at least 80% of the total suspended solids generated by the impervious cover.

Per TCEQ TSS Removal Caculations Spreadsheet, the impervious area for the Jiffy Lube generates 521 pounds of TSS and requires a volume of 7,099 cubic feet and a sand filter area of 329 square feet.

As stated, the Jiffy Lube site is included in the volume and filter area of the Sand Filtration Pond No. 1, which provides 289,408 cubic feet of volume and 35,952 square feet of filter area.

ATTACHMENT L

BMPS FOR SURFACE STREAMS

According to the original and modified CZP, surface streams do not exist on the Singing Hills development project site that would require protective measures. Permanent and temporary BMPs, shall be used to minimize pollutants draining to offsite surface streams, both during and after construction.

In regard to the specific Jiffy Lube project site, Lot 18 of the Singing Hills, there are no surface streams that would require protective measures.

ATTACHMENT M

POND CALCULATIONS AND CONSTRUCTION PLANS

There are no proposed revisions to the pond calculations and construction plans that were previously approved by TCEQ for the Signing Hills project.

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: Jiffy Lube - Singing Hills Lot 18
Date Prepared: 9/9/2015

Additional information is provided for cells with a red triangle in the upper right corner. Place the cursor over the cell.
Text shown in blue indicate location of instructions in the Technical Guidance Manual - RG-348.
Characters shown in red are data entry fields.
Characters shown in black (Bold) are calculated fields. Changes to these fields will remove the equations used in the spreadsheet.

1. The Required Load Reduction for the total project: Calculations from RG-348 Pages 3-27 to 3-30

Page 3-29 Equation 3.3: $L_M = 27.2(A_N \times P)$

where:

$L_{M\ TOTAL\ PROJECT}$ = Required TSS removal resulting from the proposed development = 80% of increased load
A_N = Net increase in impervious area for the project
P = Average annual precipitation, inches

Site Data: Determine Required Loed Removal Based on the Entire Project

County =	Comal	
Total project area included in plan * =	0.93	acres
Predevelopment impervious area within the limits of the plan * =	0.00	acres
Total post-development impervious area within the limits of the plan * =	0.58	acres
Total post-development impervious cover fraction * =	0.62	
P =	33	inches
$L_{M\ TOTAL\ PROJECT}$ =	521	lbs.

* The values entered in these fields should be for the total project area.

Number of drainage basins / outfalls areas leaving the plan area = 1

2. Drainage Basin Parameters (This information should be provided for each basin):

Drainage Basin/Outfall Area No. = 1

Total drainage basin/outfall area =	0.93	acres
Predevelopment impervious area within drainage basin/outfall area =	0.00	acres
Post-development impervious area within drainage basin/outfall area =	0.58	acres
Post-development impervious fraction within drainage basin/outfall area =	0.62	
$L_{M\ THIS\ BASIN}$ =	521	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = Sand Filter
Removal efficiency = 89 percent

Aqualogic Cartridge Filter
Bioretention
Contech StormFilter
Constructed Wetland
Extended Detention
Grassy Swale
Retention / Irrigation
Sand Filter
Stormceptor
Vegetated Filter Strips
Vortechs
Wet Basin
Wet Vault

4. Calculate Maximum TSS Load Removed (L_R) for this Drainage Basin by the selected BMP Type.

RG-348 Page 3-33 Equation 3.7: $L_R = (\text{BMP efficiency}) \times P \times (A_I \times 34.6 + A_P \times 0.54)$

where:

A_C = Total On-Site drainage area in the BMP catchment area
A_I = Impervious area proposed in the BMP catchment area
A_P = Pervious area remaining in the BMP catchment area
L_R = TSS Load removed from this catchment area by the proposed BMP

A_C = 0.93 acres
A_I = 0.58 acres
A_P = 0.35 acres
L_R = 595 lbs

5. Calculate Fraction of Annual Runoff to Treat the drainage basin / outfall area

Desired $L_{M\ THIS\ BASIN}$ = 595 lbs.

F = 1.00

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area. Calculations from RG-348 Pages 3-34 to 3-36

Rainfall Depth =	**4.00**	inches
Post Development Runoff Coefficient =	**0.44**	
On-site Water Quality Volume =	**5916**	cubic feet

Calculations from RG-348 Pages 3-36 to 3-37

Off-site area draining to BMP =	**0.00**	acres
Off-site Impervious cover draining to BMP =	**0.00**	acres
Impervious fraction of off-site area =	**0**	
Off-site Runoff Coefficient =	**0.00**	
Off-site Water Quality Volume =	**0**	cubic feet
Storage for Sediment =	**1183**	
Total Capture Volume (required water quality volume(s) x 1.20) =	**7099**	cubic feet

The following sections are used to calculate the required water quality volume(s) for the selected BMP.
The values for BMP Types not selected in cell C45 will show NA.

7. Retention/Irrigation System Designed as Required in RG-348 Pages 3-42 to 3-46

Required Water Quality Volume for retention basin =	**NA**	cubic feet	
Irrigation Area Calculations:			
Soil infiltration/permeability rate =	**0.1**	in/hr	**Enter determined permeability rate or assumed value of 0.1**
Irrigation area =	**NA**	square feet	
	NA	acres	

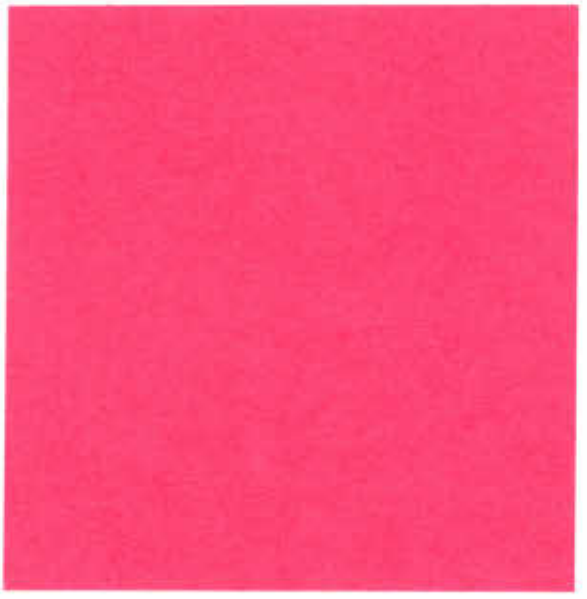
8. Extended Detention Basin System Designed as Required in RG-348 Pages 3-46 to 3-51

Required Water Quality Volume for extended detention basin =	**NA**	cubic feet

9. Filter area for Sand Filters Designed as Required in RG-348 Pages 3-58 to 3-63

9A. Full Sedimentation and Filtration System

Water Quality Volume for sedimentation basin =	**7099**	cubic feet	
Minimum filter basin area =	**329**	square feet	
Maximum sedimentation basin area =	**2958**	square feet	**For minimum water depth of 2 feet**
Minimum sedimentation basin area =	**739**	square feet	**For maximum water depth of 8 feet**



ATTACHMENT N

INSPECTION AND MAINTENANCE FOR BMPS

The original Inspection, Maintenance, Repair and Retrofit Plan that was previously submitted and approved is not being revised with this modification.

ATTACHMENT P

MEASURES FOR MINIMIZING SURFACE STREAM CONTAMINATION

According to the original and modified CZP, surface streams do not exist on the Singing Hills development project site that would require protective measures. Permanent and temporary BMPs, shall be used to minimize pollutants draining to offsite surface streams, both during and after construction.

In regard to the specific Jiffy Lube project site, Lot 18 of the Singing Hills, there are no surface streams that would require protective measures.

According to the original and modified CZP, for the overall Singing Hills development, during construction temporary BMPs will consist of silt fences, rock berms, bagged gravel inlet filters, diversion dikes, and stabilized construction entrance / exit. After construction, the permanent BMPs will consist of four (4) sand filtration ponds.

During construction of the Jiffy Lube project site, temporary construction Best Management Practices (BMPs) will be employed to control sediment runoff and minimize erosion. Temporary BMPs will consist of a stabilized construction exit, silt / sediment fence, silt / sediment dikes and media tubes, inlet filters, concrete wash out pit and stabilized construction staging and laydown area.

III. STORM WATER POLLUTION PREVENTION PLAN

STORM WATER POLLUTION PREVENTION PLAN

FOR THE PROPOSED JIFFY LUBE
at
LOT 18 SINGING HILLS

Singing Oaks Road
Bulverde, Comal County, Texas 78163

CEI Engineering Associates, Inc.

CEI Project No. 28913.0

Rev-0
September 9, 2015

Distribution
Client
CAA/File

Presented By
CEI Engineering Associates, Inc.
3108 S.W. Regency Parkway, Suite 2
Bentonville, AR 72712
Ph: (479) 273 - 9472 / Fax: (479) 273 – 0844

STORM WATER POLLUTION PREVENTION PLAN

FOR

CONSTRUCTION ACTIVITIES

AT

JIFFY LUBE
Singing Oaks Road
Bulverde, Texas

Prepared by:

CEI Engineering Associates Inc.
3108 SW Regency Parkway, Suite 2
Bentonville, AR 72712
Phone: (479) 273-9472
Fax: (479) 273-0844

CEI Project # 28913.0

EROSION AND SEDIMENTATION CONTROL (INCLUDING SWPPP)
TABLE OF CONTENTS

Section **Page**

I. SUMMARY OF PERMIT AND PROGRAM REQUIREMENTS

The Storm Water Pollution Prevention Plan (SWPPP) includes, but is not limited to, Erosion Control Specification, the Erosion and Sedimentation Control Plan included in the Construction Drawings with the Detail Sheet, Permit Authorization, General Permit, Project Completion Report, all records of inspections and activities which are created during the course of the project, and other documents as may be included by reference to this SWPPP. Changes, modifications, revisions, additions, or deletions shall become part of this SWPPP as they occur.

Note: The General Contractor must complete the Contact List included in Appendix A and maintain the list in the SWPPP Binder until the storm water permit is terminated.

The General Contractor and all subcontractors involved with a construction activity that disturbs site soil or who implement a pollutant control measure identified in the SWPPP must comply with the following requirements of the National Pollutant Discharge Elimination System (NPDES) General Permit ("General Permit") and any local governing agency having jurisdiction concerning NPDES, storm water, erosion and sedimentation control:

A. General Permit Information

- Texas Commission on Environmental Quality (TCEQ) and The City of Bulverde Texas are the governing agencies for the storm water discharges from construction activities.
- Coverage will be obtained under TPDES General Permit TXR150000.
- A Notice of Intent (NOI) is not required for this project (total area of disturbance under 5 acre) and coverage under this general permit is automatic. A "Small Construction Site Notice" in Appendix C is requited to be posted at the construction site in a location where it is safely and readily available for viewing by the general public, local, state, and federal authorities, prior to commencing construction, and maintain the notice in that location until completion of the construction activity.
- There is no Notice of Termination (NOT). The contractor is responsible to complete the applicable portion of the site notice (date notice removed) and submit it to local authority within 30 days after final stabilization.
- Provide a copy of the signed and certified construction site notice to the City of Bulverde.
- No permit fee is required.
- A copy of the General Permit is located in Appendix H.

1. Permit Information:

   The General Contractor is not required to obtain <u>separate</u> storm water permit coverage.

   A local storm water or E&S control permit is not required for this project. However, a copy of the "Small Construction Site Notice" must be kept on site at all times

   A project location/vicinity map is located in Appendix B.

2. Co-permittee information:

   Not applicable – The state of Texas does not require a co-permit for a small construction project of this size.

3. Permit transfer information:

   Operators of regulated construction activities who are not required to submit an NOI must remove the original site notice, and the new operator must post the required site notice and submit a copy of new site notice to local authority prior to the transfer of operational control.

4. Waiting Period:

   Ground-disturbing activities can not begin until Pre-Construction meeting has taken place and BMP's have been implemented.

5. Permit Expiration:

The applicable General Permit expires: 5 years from the effective date of the permit. A copy of the General Permit is located in Appendix H.

There are no local level storm water permits required for the project. A copy of the site notice must be submitted to local authority.

6. Off-Site Permits:

Note: For purposes of this SWPPP and associated storm water permit, 'off-site' is defined as any and all areas beyond the project permitted limits of disturbance.

Any areas outside the limits of disturbance acquired for use by the General Contractor or a subcontractor of the General Contractor must be managed in accordance with Section V. D. of this specification.

Off-Site storm water permits are not part of this project.

7. Governing Agency:

The following agency or agencies have governing authority for storm water-related regulations and permits.

Texas Commission on Environmental Quality (TCEQ)
Water Quality Division MC-148
P.O. Box 13087
Austin, TX 78711-3087
512-239-4671

City of Bulverde, TX
Public Works Department
30360 Cougar Bend
Bulverde, TX 78163
(830) 438-3612

B. Agency Information for Storm Water Pre-Construction Meeting

City of Bulverde, TX
Public Works Department
30360 Cougar Bend
Bulverde, TX 78163
(830) 438-3612

C. Public Posting

Post "Small Construction Site Notice" on the jobsite before beginning BMP installation. The following information must be posted near the construction exit in a prominent place for public viewing until the completion of construction and termination of permit coverage: 1) Construction Site Notice (found in Appendix C); and 2) The location of the SWPPP on site.

D. Retention of Records

A complete copy of the SWPPP, including copies of all inspection reports, plan revisions, etc., must be retained at the project site at all times during the duration of the project and kept in the permanent project records of the General Contractor for at least THREE years after project completion.

E. Contractor/Sub-Contractor List

The General Contractor must provide names and addresses of all subcontractors working on this project who will be involved with the major construction activities that disturb site soil or otherwise affect BMP implementation. This information must be kept in the SWPPP Binder.

F. Inspections

Weekly inspections by the General Contractor Superintendent must be made to determine the effectiveness of the SWPPP. An inspection is required within 24 hours of the end of a storm event of 0.5 inches or greater. The required forms are included in Appendix D.

There are no state or local storm water inspection forms for this project.

The SWPPP, including the best management practices implemented on the jobsite, shall be modified as needed to reduce or prevent pollutants from discharging from the site. Modifications to BMPs that change a hydrologic design component (diversions, basins, etc.) must first be approved by the Owner and Engineer.

The inspector must be a person familiar with the site, the nature of the major construction activities, and qualified to evaluate both overall system performance and individual component performance. The inspector must either be someone empowered to implement BMPs in order to increase effectiveness to an acceptable level or someone with the authority to cause such things to happen.

There are no state or local storm water site inspector certification requirements for this project.

Inspection Frequency Reduction

Inspection frequency may be reduced under the following conditions:

1) No active on-site construction activities and site is adequately temporarily stabilized.
2) Temporary cover has been provided across the entire site and no BMPs remain. Situation: waiting for grass to grow, but grass is dormant.

G. Weekly Storm Water Meeting

A weekly storm water meeting will be held by the General Contractor with all contractors and subcontractors involved in ground-disturbing activities to review the requirements of the Permits, the SWPPP, and address any problems that have arisen in implementing the SWPPP or maintaining the BMPs. Contractor shall maintain a log of all weekly meetings and document the issues addressed in the meetings. The weekly meeting form is found in Appendix D and must be completely filled out each week.

H. SWPPP Updates and Amendments

The General Contractor must update the SWPPP and Site Maps daily to reflect the progress of construction activities and general changes to the project site. SWPPP contact and contractor information and the record of site stabilization activities log must be maintained by the General Contractor throughout the project.

BMPs that do not impact the hydraulic design of the site may be modified or added by the General Contractor, and site maps updated accordingly, as needs arise. Examples of BMPs that do not typically impact the hydraulic design of the site include silt fence, silt dike, wattles, construction exit and various forms of temporary and permanent erosion controls (blankets, nets, seed, sod, etc.). Examples of BMPs that commonly impact hydraulic design include storm water basins, diversions, check dams, inlet protection or any product, process or system that changes the storm water flow path or storm water storage capacity of the site or is located in an area of concentrated flow.

The General Contractor must submit a request for information (RFI) to the Engineer and obtain written approval from the Engineer before modifying or adding sediment controls that may impact the hydraulic design of the site.

Substitution of any erosion or sediment control BMPs beyond those specified in the SWPPP must first be approved in writing by the Engineer. Substitutions are typically only approved if specified materials are not available or there is a valid reason the specified BMP will not work.

Amending the SWPPP does not mean that it has to be reprinted. It is acceptable to add addenda, sketches, new sections, details, and/or revised drawings that are initialed and dated.

I. Discharge of Petroleum Products or Hazardous Substances

Discharge of petroleum products or other hazardous substances into storm water or the storm water (storm sewer) system is subject to reporting and clean up requirements. See Section V.B.9. of this SWPPP for state and local information on reporting spills. Refer to the General Permit for additional information. A copy of the spill form is located in Appendix E and the General Permit is located in Appendix H.

J. Project Completion

Once the site reaches final stabilization with all permanent erosion and sedimentation controls installed, all temporary erosion and sedimentation controls removed, the contractor is responsible to complete the applicable portion of the site notice (date notice removed) and submit it to **TCEQ** and The City of Bulverde, Texas within 30 days after final stabilization.

NOTE: Stabilization requirements include all areas covered by applicable permits, including out lots and utility easements. Authorization to discharge under this general permit terminates immediately upon removal of the applicable site notice. Compliance with the conditions and requirements of this permit is required until the site notice is removed.

K. General Contractors Responsibility

This SWPPP intends to control water-borne, air-borne and liquid pollutant discharges by some combination of interception, sedimentation, filtration, and containment. The General Contractor and subcontractors implementing this SWPPP must remain alert to the need to periodically refine the update the SWPPP in order to accomplish the intended goals. The General Contractor is ultimately responsible for all site conditions and permit compliance.

L. Log of Construction Activity

A record of dates must be maintained when:

- major ground-disturbing activities including earthwork or grubbing occur;
- construction activities temporarily or permanently cease on a portion of the site;
- stabilization measures are initiated or completed; and
- BMPs are installed or permanently removed.

This log must be maintained until the project completion.

A Record of Stabilization and Construction Activity Dates (Stabilization) log for documenting such activities is included in Appendix F. The General Contractor shall complete, at a minimum, 1-page of Stabilization log entries for each month of active construction.

Controls must be in place down gradient of any ground-disturbing activities prior to the commencement of up gradient construction activities and noted on the Site Maps and the Stabilization log. Site Map and Stabilization log comments and entries must complement one another with greater detail provided in the Stabilization log as needed.

M. Agency Storm Water Inspections

A project Superintendent must walk the site with the regulatory inspector and document any deficiencies noted during the inspection. Deficiencies of any type, field or documentation-related, identified during the regulatory inspection must be noted on the inspection form as a deficiency and resolved within 24 or 48-hours as appropriate.

A log of all inspections by Federal, State, or local storm water or other environmental agencies shall be kept in the General Contractor SWPPP Binder. The log form can be found in Appendix G and must include the date and time of the visit and whether a report was issued or will be issued as a result of the inspection.

II. INTRODUCTION

This SWPPP has been prepared for major activities associated with the construction of:

JIFFY LUBE, SINGING OAKS ROAD, BULVERDE, COMAL COUNTY, TEXAS 78163

This SWPPP, including the applicable General Permit, includes the elements necessary to comply with the General Permit for construction activities administered by the TCEQ Texas Pollutant Discharge Elimination System and all local governing agency requirements. This SWPPP must be implemented at the start of construction.

Construction phase pollutant sources anticipated at the site are disturbed (bare) soil, vehicle fuels and lubricants, chemicals and coatings associated with site or building construction and pavement installation, construction-generated litter and debris, and building materials. Without adequate control there is a potential for each type of pollutant to be transported by storm water.

Project construction will consist primarily of site grading, paving, storm drainage, and site lighting to facilitate construction of an approximately 3,280 square foot building, parking, utilities and landscape. The total land disturbance for this project is approximately 0.70 acres.

A. Purpose

A major goal of pollution prevention efforts during project construction is to control soil and pollutants that originate on the site and prevent them from flowing to surface waters. The purpose of this SWPPP is to provide guidelines for achieving that goal. A successful pollution prevention program also relies upon careful inspection and adjustments during the construction process in order to enhance its effectiveness.

B. Scope

This SWPPP must be implemented before construction begins on the site. It primarily addresses the impact of storm rainfall and runoff on areas of the ground surface disturbed during the construction process. In addition, there are recommendations for controlling other sources of pollution that could accompany the major construction activities. Applicability of this SWPPP will terminate when disturbed areas are stabilized, permanent erosion and sedimentation controls are installed, temporary erosion and sedimentation controls are removed, construction activities covered herein have ceased, and a completed site notice is transmitted to the governing agency.

Forms which are necessary for implementing the SWPPP are included herein.

The General Permit for Storm Water Discharges Associated with Construction Activities prohibits most non-storm water discharges during the construction phase. Allowable non-storm water discharges that occur during construction on this project, which are covered by the General Permit, include:

(a) Discharges from fire fighting activities (fire fighting activities do not include washing of trucks, run-off water from training activities, test water from fire suppression systems, and similar activities);
(b) Uncontaminated fire hydrant flushings (excluding discharges of hyperchlorinated water, unless the water is first dechlorinated and discharges are not expected to adversely affect aquatic life), which include flushings from systems that utilize potable water, surface water, or groundwater that does not contain additional pollutants (uncontaminated fire hydrant flushings do not include systems utilizing reclaimed wastewater as a source water);
(c) water from the routine external washing of vehicles, the external portion of buildings or structures, and pavement, where detergents and soaps are not used and where spills or leaks of toxic or hazardous materials have not occurred (unless spilled materials have been removed; and if local state, or federal regulations are applicable, the materials are removed according to those regulations), and where the purpose is to remove mud, dirt, or dust;
(d) Uncontaminated water used to control dust;
(e) Potable water sources including waterline flushings (excluding discharges of hyperchlorinated water, unless the water is first dechlorinated and discharges are not expected to adversely affect aquatic life);
(f) Uncontaminated air conditioning condensate;
(g) Uncontaminated ground water or spring water, including foundation or footing drains where flows are not contaminated with industrial materials such as solvents; and

(h) Lawn watering and similar irrigation drainage.

Best Management Practices (BMPs) must be implemented for the above allowable foreseeable discharges for the duration of the permit. Each non-storm water discharge should be noted in the SWPPP and have proper erosion and sedimentation controls in place with the possible exception of discharges from fire fighting activities.

The techniques described in this SWPPP focus on providing control of pollutant discharges with practical approaches that utilize readily available expertise, material, and equipment.

The Owner referred to in this SWPPP is:

SH-DJL Development, LLC
18615 Tuscany Stone, Suite 200
San Antonio, Texas 78258
(210) 614-7051

The General Contractor shall construct the site development improvements while working under contract with the Owner.

III. PROJECT DESCRIPTION

Described below are the major construction activities that are the subject of this SWPPP. Also included in the sequence are BMP installation activities that must take place prior to construction activities. **NOTE: Down slope protective measures must always be in place before soil is disturbed.** Activities are presented in the order (sequence) they are expected to be completed.

All activities and timeframes (beginning and ending dates) shall be noted on the Site Map and the "Record of Stabilization and Construction Activity Dates" form found in Appendix F of this SWPPP. The sequence of construction is as follows:

Phase I: Install erosion controls:
- a. reinforced silt fences
- b. inlet protection
- c. stabilize construction entrance/exit

Phase II, III & IV: Maintain existing erosion controls:
- a. inlet protection
- b. add additional erosion control as needed
- c. construct rock check dams in ditches

Phase V: Maintain Exist. Erosion Controls:
- a. modify inlet protection to method compatible
- b. add additional controls as needed for construction activities

Phase VI: Revegetate all disturbed areas not covered in the landscape plan.
- a. establish minimum cover of 70% of the native background cover.
- b. remove erosion controls when 70% minimum cover is established

IV. SITE DESCRIPTION

Included as parts of this SWPPP are the project Construction Drawings for the project. Refer to the Construction Drawings for detailed site information.

A. Site Location

- Address: Singing Oaks Road, Bulverde, Comal County, Texas 78163
- Latitude: 29 degrees 48'22" N
- Longitude: -98 degrees 25'07" W
- A vicinity map is included in Appendix B.

B. Site Topography

- Percent slope variation: Site minimum slope = 1.00%, Site maximum slope = 6.0%
- Topography changes: The site is currently undeveloped consisting of grass field and generally slopes from northwest to southeast.

C. Site Soils

- Soil type and texture: The existing site is covered with grass. Per the USDA NRCS Soil Resource site soils consist of Krum Clay (KrB) and Real-Comfort-Doss Complex (RcD), with Hydrologic Soil Group Classification of "D".

D. Total Site Area, Area to be Disturbed, and Runoff Coefficient

- The entire site contains: 0.93 +/- Acres
- The area to be disturbed is: 0.70 +/- acres
- Off-site areas to be disturbed as part of this project: 0.00 acres
- Pre-Construction Runoff Coefficient [or SCS TR-55 Curve Number]: "C" = 0.50
- Post-Construction Runoff Coefficient [or SCS TR-55 Curve Number]: "C" = 0.77

E. Receiving Surface Waters

- Receiving waters: Lewis Creek
- Distance to named receiving waters: 1.5 miles south
- Floodplain: This property is located within zone X, areas determined to be outside the 0.2% annual chance floodplain – Community Panel No. 48091C0220F, Comal County, Texas, Revised September 2, 2009.

F. Environmental Permits – Other than NPDES, Storm Water and/or Erosion & Sediment Control

There are no additional environmental permits necessary for this project site.

G. Threatened and Endangered Species

The site is within an existing developed area, therefore there does not appear to be any known threatened and endangered species impacted by this project.

I. Historic Properties

The site is within an existing developed area, therefore there does not appear to be any known historic properties which will be impacted by this project.

V. STORM WATER POLLUTION PREVENTION MEASURES AND CONTROLS

A variety of storm water pollutant controls are recommended for this project. Some controls are intended to function temporarily and will be used as needed for pollutant control during the construction period. These include temporary sediment barriers and permanent storm retention ponds (which can also function as temporary sediment basins). Permanent stabilization will be accomplished in all disturbed areas by covering the soil with pavement, building foundation, vegetation, or other forms of soil stabilization.

A. Erosion and Sediment Controls

1. Minimization of Disturbed Areas

Note to General Contractor: Owner has authority to limit surface area of erodible earth material exposed by clearing and grubbing, excavation, borrow and embankment operations and to direct General Contractor to provide immediate permanent or temporary pollution control measures

2. Soil Stabilization

The purpose of soil stabilization is to prevent soil from eroding and leaving the site. In the natural condition, soil is stabilized by native vegetation. The primary technique to be used at this project for stabilizing site soils will be to provide a protective cover of grass, pavement, or building structure.

a.) **Temporary Seeding or Stabilization** – All denuded areas that will be inactive for 14 days or more, must be stabilized temporarily with the use Bermuda or buffalo grass between May 15 and September 15 and water and mow until established (20 plats per sq. ft.) During other months seed with Winter Rye and reseed with Bermuda or Buffalo grass between the next April 1 and May 15 and maintain until there is coverage. Stockpiles and diversion ditches/berms must be stabilized to prevent erosion and dust issues.

Note to General Contractor: Temporary stabilization is not achieved simply through seeding. In order for an area or stockpile to be sufficiently stabilized via temporary vegetation, seed must germinate, grow and provide adequate vegetative density.

Temporary stabilization requirements are referenced under General Permit TXR150000 Part III.Section F.b.

b.) **Permanent Seeding, Sodding or Mulching** – All areas at final grade must be seeded or sodded within 14 days after completion of work in that area. Seed immediately after final grade is achieved and soils are prepared to take advantage of soil moisture and seed germination. At the completion of ground-disturbing activities the entire site must have permanent vegetative cover, meeting vegetative density requirements, or mulch per landscape plan, in all areas not covered by hardscape (pavement, buildings, etc.).

Except for small (<100 sq.ft.) level spots, seeded areas should be protected with mulch, tackifier or a rolled erosion control product. Mulch must be crimped by disc or other machinery.

To minimize the potential for erosion and maximize seed germination & growth, the General Contractor must evaluate the short and long-term local forecast prior to applying permanent seed or sod.

Final site stabilization is achieved when perennial vegetative cover provides permanent stabilization with a density greater than **75 percent** over the entire area to be stabilized by vegetative cover. This area is exclusive of areas that are covered with rock (crushed granite, gravel, etc.) or landscape mulch, paved or have a building or other permanent structure on them.

Permanent stabilization requirements are referenced under General Permit TXR150000 Part I. Section B.

3. Structural Controls

A variety of storm water pollutant controls are recommended for this project. Some controls are intended to function temporarily and will be used as needed for pollutant control during the construction period. These include temporary sediment barriers and permanent storm retention ponds (which can also function as temporary sediment basins). Permanent stabilization will be accomplished in all disturbed areas by covering the soil with pavement, building foundation, vegetation, or other forms of soil stabilization.

a) **Silt Fence** – Silt fence is a synthetic permeable woven or non-woven geotextile fabric incorporating metal support stakes at intervals sufficient to support the fence (5-feet maximum distance between posts), water, and sediment retained by the fence. The fence is designed to retain sediment-laden storm water and allow settlement of suspended soils before the storm water flows through the fabric and discharges off-site. Silt fence shall be located on the contour to capture overland, low-velocity sheet flows and is typically installed with a wire fence backing for additional support. Wire fence backing is required unless the silt fence is installed using the slicing method as the slicing method ensures the silt fence fabric is anchored securely in the ground.
Install silt fence at a fairly level grade along the contour with the ends curved uphill to provide sufficient upstream storage volume for the anticipated runoff. Drainage areas shall not exceed ½ acre per 100 feet of wire-reinforced silt fence for slopes less than 2 percent.

b) **Construction Exit** – All access points from the public street into the construction site shall include a construction exit composed of course stone to the dimensions shown on the Construction Drawings detail sheet. The rough texture of the stone helps to remove clumps of soil adhering to the construction vehicle tires through the action of vibration and jarring over the rough surface and the friction of the stone matrix against soils attached to vehicle tires.

In addition to the stone at the construction exit, it may be necessary to install devices such as pipes (cattle guard) to increase the vibration and jarring. It may also be necessary to install a wheel wash system. If this is done, a sediment trap control must be installed to treat the wash water before it discharges from the site.

All site access must be confined to the construction exit(s). Barricade to prevent use, any locations other than the construction exit(s) where vehicles or equipment may access the site. Use jersey barriers, construction fencing/drums, etc. near construction exit(s) to prevent traffic by-pass or short circuiting.

c) **Storm Sewer Inlet Protection** – Curb and grated inlets are protected from the intrusion of sediment through a variety of measures as shown on the details included in the Construction drawings. The primary mechanism is to place controls in the path of flow sufficient to slow the sediment-laden water to allow settlement of suspended soils before discharging into the storm sewer. It is possible that as construction progresses from storm sewer installation through to paving that the inlet protection devices will change.

Note to General Contractor: All inlet protection devices create ponding of storm water that can result in flooding or by-pass conditions.

d) **Check Dams (This control is not specified at this time)** – Defined channels subject to concentrated flows in larger quantities and higher velocities may be protected with rock or other manufactured device (Geo-ridge for example) that can be used as a check dam. The dams impound sediment-laden water and allow for settlement of suspended soil before the storm water flows over and through the device. Dams shall be placed along the water course at linear intervals in which the elevation of the bottom of the upper most check dam is at the same elevation as the top of the check dam immediately below it.

This will allow the most ponding capacity and will not increase the velocity of the water flowing along the channel.

Location and spacing of check dams are shown on the Site Maps. Check dams are composed of crushed stone or rip rap or of other manufactured devices. See the detail sheet within the Construction Drawings for the types of dams to be used on this site.

e) **Diversion Ditch/Berm (This control is not specified at this time)** – Diversion ditches (swales) and berms (dikes) are constructed as shown on the Site Maps at locations within the construction site to intercept overland flow and direct or divert flow to a sediment basin or other point where discharge can be controlled. Ditches are excavated in the surface soils with the spoils from the excavation typically placed along the downstream edge of the ditch to provide additional capacity. Berms are built up on the surface soils and compacted to create a stable diversion.

f) **Silt Dike (This control is not specified at this time)** - Silt dikes are used to temporary detains and filters the sediment-laden water. It shall be placed as shown on the SWPPP and shall be triangular-shaped, having a height of at least eight to ten inches (8"-10") in the center with equal sides and a sixteen- to twenty-inch (16"-20") base. The triangular-shaped inner material shall be urethane foam. The outer cover shall be a woven geotextile fabric placed around the inner material and allowed to extend beyond both sides of the triangle two to three (2'-3') feet. Adhesive material shall be used to in-place the silt dike on pavement area.

B. Other Pollutant Controls

This section includes the controls of pollutants other than sediment and additional requirements of the General Permit.

1. Dust Control

Construction traffic must enter and exit the site at the stabilized construction exit. The purpose is to trap dust and mud that would otherwise be carried off-site by construction traffic. Large areas of soil that are denuded of vegetation and have no protection from particles being picked up and carried by wind should be protected with a temporary cover or kept under control with water or other soil adhering products to limit wind transported particles exiting the site perimeter.

Water trucks or other dust control agents will be used as needed during construction to minimize dust generated on the site. Tackifiers may be used to hold soil in place and prevent dust. Manufacturer recommendations for application locations and rates must be used for dust control applications. Dust control must be provided by the General Contractor to a degree that is in compliance with applicable local and state dust control regulations.

2. Dewatering

Verify discharges from dewatering activities are allowed non-storm water discharges under the General Permit. Obtain a dewatering permit according to state and local regulations, if discharges from dewatering activities are not allowed under the General Permit. Discharges from dewatering operations must be directed through an appropriate pollution prevention/treatment measure, such as a pump discharge filter bag, sediment trap or sediment basin prior to being discharged from the site or into a water body of the State. Under no circumstances are discharges from dewatering operations to be discharged directly into streams, rivers, lakes or other areas off-site. Likewise, discharges into storm sewer systems that do not drain to a suitable on-site treatment facility, such as a basin, are also prohibited. Discharges from dewatering operations must also be conducted in a manner sufficient to prevent erosion from the discharge runoff.

Use best management practices when dewatering. Place intake hose on a flotation or similar device and do not pump directly from the bottom of the basin, trench, etc. Always pump through a sediment control BMP and dewater within the permitted limits of disturbance to ensure discharge criteria are achieved. Do not discharge on a slope greater than three percent or within 20' of a surface water body. Dewatering should not occur during or immediately after precipitation events, but exceptions will be evaluated on case by case basis.

3. **Solid Waste Disposal**

No solid materials, including building materials, are allowed to be discharged from the site with storm water. All solid waste, including disposable materials incidental to the major construction activities, must be collected and placed in containers. The containers will be emptied as necessary by a contract trash disposal service and hauled away from the site. Covers for the containers will be provided as necessary to meet state and local requirements. Construct covers as practicable, or required, to prevent storm water contact and pollutant discharges from solid waste receptacles. The location of solid waste receptacles shall be shown on the Site Maps.

Substances that have the potential for polluting surface and/or groundwater must be controlled by whatever means necessary in order to ensure that they do not discharge from the site. As an example, special care must be exercised during equipment fueling and servicing operations. If a spill occurs, it must be contained and disposed of so that it will not flow from the site or enter groundwater, even if this requires removal, treatment, and disposal of soil. In this regard, potentially polluting substances should be handled in a manner consistent with the impact they represent.

4. **Sanitary Facilities**

All personnel involved with construction activities must comply with state and local sanitary or septic system regulations. Temporary sanitary facilities will be provided at the site throughout the construction phase. They must be utilized by all construction personnel and will be serviced by a commercial operator. The location of sanitary facilities shall be shown on the Site Maps. Portable toilets must be securely anchored and are not allowed within 30' of inlets or permitted limit of disturbance or within 50' of a water of the State.

5. **Non-Storm Water Discharges**

Non-storm water components of site discharges must be clean water. Water used for construction which discharges from the site must originate from a public water supply or private well approved by the State Health Department. Water used for construction that does not originate from an approved public supply must not discharge from the site. It can be retained in the ponds until it infiltrates and evaporates. Other non-storm water discharges would include ground water. Only uncontaminated ground water can be discharged from the site, as allowed by and in accordance with applicable local ground water dewatering permits/regulations. When non-storm water is discharged from the site, it must be done in a manner such that it does not cause erosion of the soil during discharge.

Process water such as power washing and concrete cutting must be collected for treatment and disposal. It is not to be flushed into the site storm drain system.

6. **Concrete Waste from Concrete Ready-Mix Trucks**

Discharge of excess or waste concrete and/or wash water from concrete trucks will be allowed on the construction site, but only in specifically designated lined and diked areas prepared to prevent contact between the concrete and/or wash water and storm water that will be discharged from the site. Alternatively, waste concrete can be placed into forms to make rip rap or other useful concrete products. The cured residue from the concrete washout diked areas shall be disposed in accordance with applicable state and federal regulations. This jobsite superintendent is responsible for assuring that these procedures are followed. The location of concrete washout areas shall be shown on the Site Maps. Follow all applicable environmental regulations for concrete wash out pits.

7. **Masonry Area**

Contractor shall identify masons' area on the site and indicate location on the Site Map. To the extent practical, all masonry tools, material, including sand and sacked cement or mortar materials, and equipment shall be located within the area identified. Runoff control, such as berms or diversion ditches, silt fence, straw wattles, or other means of containment shall be provided to prevent the migration of storm water pollutants in runoff from the masons' area. Receptacles for debris and trash disposal shall also be provided.

8. **Fuel Tanks**

Temporary on-site fuel tanks for construction vehicles shall meet all state and federal regulations. Tanks shall have approved spill containment with the capacity required by the applicable regulations. From NFPA 30: All tanks shall be provided with secondary containment (i.e. containment external to and separate from primary containment). Secondary containment shall be constructed of materials of sufficient thickness, density, and composition so as not to be structurally weakened as a result of contact with the fuel stored and capable of containing discharged fuel for a period of time equal to or longer than the maximum anticipated time sufficient to allow recovery of discharged fuel. It shall be capable of containing 110% of the volume of the primary tank if a single tank is used, or in the case of multiple tanks, 150% of the largest tank or 10% of the aggregate, whichever is larger.

The tanks shall be in sound condition free of rust or other damage which might compromise containment. Fuel storage areas will meet all TCEQ, EPA, OSHA and other regulatory requirements for signage, fire extinguisher, etc. Hoses, valves, fittings, caps, filler nozzles, and associated hardware shall be maintained in proper working condition at all times. The location of fuel tanks shall be shown on the Site Maps and shall be located to minimize exposure to weather and surface water drainage features.

A Spill Prevention, Control and Countermeasure (SPCC) Plan must be developed if aboveground oil storage *capacity* at the construction site exceeds 1,320-gallons. Containers with a storage capacity of 55-gallons or less are not included when calculating site storage capacity. The General Contractor shall work with the CEC to develop and implement a SPCC Plan in accordance with the Oil Pollution Prevention regulation at Title 40 of the Code of Federal Regulations, Part 112, (40 CFR 112).

9. **Hazardous Material Management and Spill Reporting Plan**

Any hazardous or potentially hazardous material that is brought onto the construction site will be handled properly in order to reduce the potential for storm water pollution. All materials used on this construction site will be properly stored, handled, dispensed and disposed of following all applicable label directions. Flammable and combustible liquids will be stored and handled according to 29 CFR 1926.152. Only approved containers and portable tanks shall be used for storage and handling of flammable and combustible liquids.

Material Safety Data Sheets (MSDS) information will be kept on site for any and all applicable materials.

In the event of an accidental spill, immediate action will be undertaken by the General Contractor to contain and remove the spilled material. All hazardous materials will be disposed of by the Contractor in the manner specified by federal, state and local regulations and by the manufacturer of such products. As soon as possible, the spill will be reported to the appropriate agencies. As required under the provisions of the Clean Water Act, any spill or discharge entering waters of the United States will be properly reported. The General Contractor will prepare a written record of any spill and associated clean-up activities of petroleum products or hazardous materials in excess of 1 gallon or reportable quantities, whichever is less. A spill report form is located in Appendix E.

Any spills of petroleum products or hazardous materials in excess of Reportable Quantities as defined by EPA or the state or local agency regulations, shall be immediately reported to the EPA National Response Center (1-800-424-8802) and TCEQ (1-800-832-8224).

The State reportable quantity for petroleum products is 210 gallons (five barrels) discharged onto land from an exempt PST facility, 25 gallons when discharged onto land from a non-exempt PST facility, or when directly spilled into water in which a sheen can be seen on the surface of the water.

The reportable quantity for hazardous materials can be found in 40 CFR 302.

In order to minimize the potential for a spill of petroleum product or hazardous materials to come in contact with storm water, the following steps will be implemented:

a) All materials with hazardous properties (such as pesticides, petroleum products, fertilizers, detergents, construction chemicals, acids, paints, paint solvents, additives for soil stabilization, concrete, curing compounds and additives, etc.) will be stored in a secure location, under cover, when not in use.

b) The minimum practical quantity of all such materials will be kept on the job site and scheduled for delivery as close to time of use as practical.

c) A spill control and containment kit (containing for example, absorbent material such as kitty litter or sawdust, acid neutralizing agent, brooms, dust pans, mops, rags, gloves, goggles, plastic and metal trash containers, etc.) will be provided on the construction site and location(s) shown on Site Maps.

d) All of the product in a container will be used before the container is disposed of. All such containers will be triple rinsed, with water prior to disposal. The rinse water used in these containers will be disposed of in a manner in compliance with state and federal regulations and will not be allowed to mix with storm water discharges.

e) All products will be stored in and used from the original container with the original product label.

f) All products will be used in strict compliance with instructions on the product label.

g) The disposal of excess or used products will be in strict compliance with instructions on the products label.

10. Long-Term Pollutant Controls

Storm water pollutant control measures installed during construction that will also provide storm water management benefits after construction, include landscape area and detention ponds surrounding the site.

C. "Best Management Practices" (BMPs)

Owner has authority to limit surface area of erodible earth material exposed by clearing and grubbing, excavation, borrow and embankment operations and to direct the General Contractor to provide immediate permanent or temporary pollution control measures.

During the construction phase, the General Contractor shall implement the following measures:

1) Materials resulting from the clearing and grubbing or excavation operations shall be stockpiled up slope from adequate sedimentation controls. Ensure that materials removed to an off-site location shall be protected with appropriate controls and properly permitted and otherwise comply with applicable laws, all in accordance with this SWPPP, including Section V.D. below.

2) The General Contractor shall designate areas on the Site Maps for equipment cleaning, maintenance, and repair. The General Contractor and subcontractors shall utilize such designated areas. Cleaning, maintenance, and repair areas shall be protected by a temporary perimeter berm, shall not occur within 150 feet of any waterway, water body or wetland, and in areas located as far as practical from storm sewer inlets.

3) Use of detergents for large scale washing is prohibited (i.e. vehicles, buildings, pavement surfaces, etc.).

4) Chemicals. Paints, solvents, fertilizers, and other toxic materials must be stored in waterproof containers. Except during application, the containers, the contents must be kept in trucks or within storage facilities. Runoff containing such material must be collected, removed from the site, treated, and disposed of at an approved solid waste and chemical disposal facility.

D. Material Storage, Borrow, or Disposal Areas Outside of Permitted Limits of Disturbance

This section describes roles and responsibilities of the General Contractors in verifying and documenting that activities associated with site construction at material storage, borrow, or disposal areas outside of the Permitted Limits of Disturbance have obtained proper coverage under the NPDES program.

Definitions Applicable to this Section

Site - The location(s) described in this SWPPP and on the associated Site Maps at which CST or a CST contractor has operational control. Schaffer Construction will be the company responsible for the implementing the erosion control measures and oversight and compliance with the SWP3.

Operational Control - Control over construction plans and specifications, including the ability to make modifications to those plans and specifications, or day-to-day operational control of those activities at the Site which are necessary to ensure compliance with the SWPPP.

Off-site – Any area outside the Limits of Disturbance as shown on the Site Maps in the SWPPP. This is not necessarily the same as the property ownership boundary.

Permitted Limits of Disturbance - Any area of the Site for which the operator(s) are authorized to disturb the ground surface or conduct construction-related activities (i.e. areas shown inside the Limits of Disturbance on the Site Maps in the SWPPP).

Material – Rock, soil, or other construction materials obtained as part of an earth disturbing activity.

VI. LOCAL PLANS

In addition to this SWPPP, construction activities associated with this project must comply with any guidelines set forth by local regulatory agencies. The General Contractor shall maintain documents evidencing such compliance in Appendix H of this SWPPP.

VII. INSPECTIONS AND SYSTEM MAINTENANCE

Between the time this SWPPP is implemented and final Project Completion Report has been submitted, all disturbed areas and pollutant controls must be inspected daily. The purpose of site inspections is to assess performance of pollutant controls. The inspections will be conducted by the General Contractor's Site Superintendent. Based on these inspections, the General Contractor will decide whether it is necessary to modify this SWPPP, add or relocate controls, or revise or implement additional Best management Practices in order to prevent pollutants from leaving the site via storm water runoff. The General Contractor has the duty to cause pollutant control measures to be repaired, modified, supplemented, or take additional steps as necessary in order to achieve effective pollutant control. Note: If a BMP is covered by snow, mark the BMP as not applicable and document the reason the BMP cannot be inspected on the daily report.

Inspections need to occur 24 hours after a 0.5 inch rain, and a rain gauge needs to be on the construction site.

Examples of specific items to evaluate during site inspections are listed below. This list is not intended to be comprehensive. During each inspection, the inspector must evaluate overall pollutant control system performance as well as particular details of individual system components. Additional factors should be considered as appropriate to the circumstances. Note: A grid system has been incorporated into Site Maps and shall be used as a location guide for daily reporting on structural controls and BMPs.

A. Construction Exit and Track Out

Locations where vehicles enter and exit the site must be inspected for evidence of off-site sediment tracking. A stabilized construction exit shall be constructed where vehicles enter and exit. Exits shall be maintained or supplemented with additional rock as necessary to prevent the release of sediment from vehicles leaving the site. Any sediment deposited on the roadway shall be swept as necessary throughout the day or at the end of every day and disposed of in an appropriate manner. Sediment shall **NOT** be washed into storm sewer systems.

B. Erosion Control Devices

Rolled erosion control products (nets, blankets, turf reinforcement mats) and marginally vegetated areas (areas not meeting required vegetative densities for final stabilization) must be inspected daily. Rilling, rutting and other signs of erosion indicate the erosion control device is not functioning properly and additional erosion control devices are warranted.

C. Sediment Control Devices

Sediment barriers, traps and basins must be inspected and they must be cleaned out at such time as their original capacity has been reduced by 50 percent. All material excavated from behind sediment barriers or in traps and basins shall be incorporated into on-site soils or spread out on an upland portion of the site and stabilized. To minimize the potential for sediment releases from the project site perimeter control devices shall be inspected with consideration given to changing up-gradient conditions.

D. Material Storage Areas

Material storage areas should be located to minimize exposure to weather. Inspections shall evaluate disturbed areas and areas used for storing materials that are exposed to rainfall for evidence of, or the potential for, pollutants entering the drainage system or discharging from the site. If necessary, the materials must be covered or original covers must be repaired or supplemented. Also, protective berms must be constructed, if needed, in order to contain runoff from material storage areas. All state and local regulations pertaining to material storage areas will be adhered to.

E. Vegetation

Consideration must be given to anticipated climate and seasonal conditions when specifying and planting seed. Seed shall be free of weedy species and appropriate for site soils and regional climate. Seed and mulch immediately after topsoil is applied and final grade is reached. Grassed areas shall be inspected to confirm that a healthy stand of grass is maintained. The site has achieved final stabilization once all areas are covered with building foundation or pavement, or have a stand of grass with a minimum of 70 percent density or greater of natural background cover over the entire vegetated area in accordance with the General Permit requirements. Vegetated areas must be watered, fertilized, and reseeded as needed to achieve this requirement. The vegetative density must be maintained through project completion to be considered stabilized. Areas protected by erosion control blankets are not permanently stabilized until the applicable General Permit requirement for final vegetative density is achieved.

Rip-rap, mulch, gravel, decomposed granite or other equivalent permanent stabilization measures may be employed in lieu of vegetation based on site-specific conditions and governing authority approval.

F. Discharge Points

All discharge points must be inspected to determine whether erosion and sediment control measures are effective in preventing discharge of sediment from the site or impacts to receiving waters.

G. Off-Site or Special Project Areas

There are no special projects, beyond the permitted limits of disturbance, requiring inspection and maintenance associated with this construction project.

The Weekly Inspection Checklist must identify all deficiencies, any corrections, whether they are identified during the current inspection or have occurred since the previous inspection, and any additional comments. Based on inspection results, any modification necessary to increase effectiveness of this SWPPP to an acceptable level must be made immediately but no longer than within 48 hours of the inspection. The inspection reports must be complete and additional information should be included if needed to fully describe a situation. An important aspect of the inspection report is the description of additional measures that need to be taken to enhance plan effectiveness. The inspection report must identify whether the site was in compliance with the SWPPP at the time of inspection and specifically identify all incidents of non-compliance.

Ultimately, it is the responsibility of the General Contractor to assure the adequacy of site pollutant discharge controls. Actual physical site conditions or contractor practices could make it necessary to install more structural controls than are shown on the plans. For example, localized concentrations of runoff could make it necessary to install additional sediment barriers. Assessing the need for additional controls and implementing them or adjusting existing controls will be a continuing aspect of this SWPPP until the site achieves final stabilization. Any modifications, additions or deletions of sediment control devices that may alter the hydraulic design of the site or are located in areas of potential high flow (basins, traps, check dams, diversions. etc.) must be approved by the Engineer through the request for information process (RFI).

LIST OF APPENDICES

APPENDIX "A" - CONTACT LIST

APPENDIX "B" - VICINITY MAP

APPENDIX "C" - CONTRUCTION SITE NOTICE

APPENDIX "D" - WEEKLY SITE INSPECTION CHECKLIST
- WEEKLY STORM WATER MEETING FORM

APPENDIX "E" - SPILL REPORT FORM

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APPENDIX - A

CONTACT LIST

CONTACT LIST

Contacts for: **Jiffy Lube, Singing Oaks Road, Bulverde , TX** Date: _____

Responsible for conducting monthly inspections, conducting the final site inspection after verifying final stabilization and overseeing compliance with all applicable permits, the Clean Water Act, and the site SWPPP.

Responsible Contractor's Compliance Officer: Name: _____

Company: _____

Phone: _____

Responsible for the supervision or completion of construction at a site and able to adequately identify and implement storm water sediment and erosion control practices and effectively instruct employees and contractors in the implementation of such practices.

Project Superintendent: Name: _____

Company: _____

Phone (office): _____

Phone (mobile): _____

Project Superintendent: Name: _____

Company: _____

Phone (office): _____

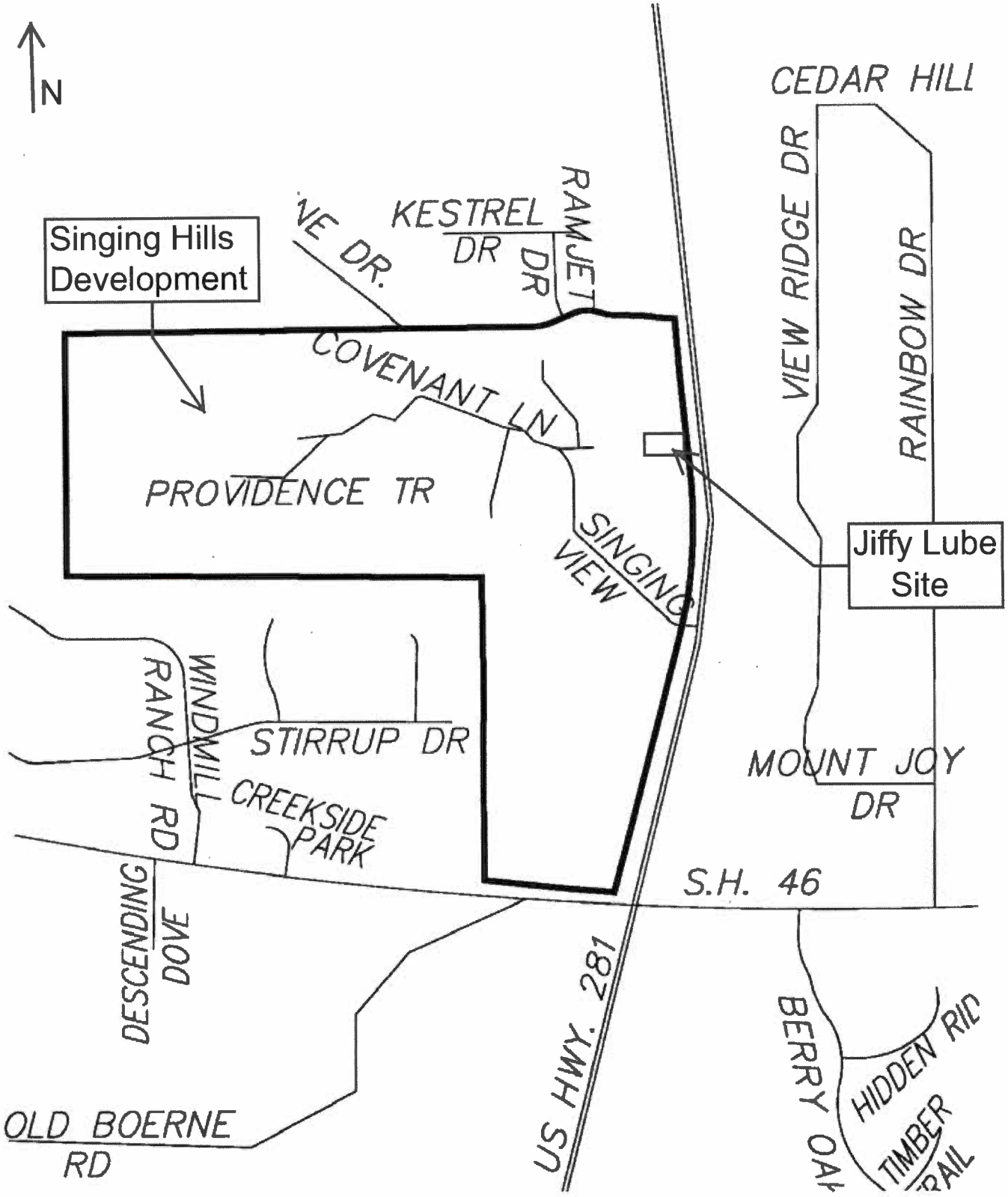
Phone (mobile): _____

Responsible for overseeing activities and work at a site; has the authority to direct employees and contractors to undertake actions to comply with all applicable permits, the Clean Water Act, and the site's SWPPP.

Note to General Contractors: Date this form each time contact information is added or updated. Do not erase information from this form. If information is incorrect or outdated, line through incorrect / outdated information and write in correct / new information. If contact information changes more than once create a new updated Contact List, date, and place on top of old Contact List in the SWPPP Binder.

APPENDIX - B

VICINITY MAP



VICINITY MAP

APPENDIX - C

CONSTRUCTION SITE NOTICE

NOTES to General Contractor:

The Construction Site Notice must be posted on the SWPPP Information Sign located near the construction exit along with a reference to where the SWPPP is located on the jobsite.

SMALL CONSTRUCTION SITE NOTICE

FOR THE Texas Commission on Environmental Quality (TCEQ)Storm Water Program

TPDES GENERAL PERMIT TXR150000

The following information is posted in compliance with **Part II.E.2.** of the TCEQ General Permit Number TXR150000 for discharges of storm water runoff from small construction sites. Additional information regarding the TCEQ storm water permit program may be found on the internet at: http://www.tceq.state.tx.us/nav/permits/wq_construction.html

Operator Name:	
Contact Name and Phone Number:	
Project Description: *Physical address or description of the site=s location, estimated start date and projected end date, or date that disturbed soils will be stabilized*	
Location of Storm Water Pollution Prevention Plan:	

For Small Construction Activities Authorized Under Part II.E.2. (Obtaining Authorization to Discharge) the following certification must be completed:

I _____ (Typed or Printed Name Person Completing This Certification) certify under penalty of law that I have read and understand the eligibility requirements for claiming an authorization under Part II.E.2. of TPDES General Permit TXR150000 and agree to comply with the terms of this permit. A storm water pollution prevention plan has been developed and will be implemented prior to construction, according to permit requirements. A copy of this signed notice is supplied to the operator of the MS4 if discharges enter an MS4. I am aware there are significant penalties for providing false information or for conducting unauthorized discharges, including the possibility of fine and imprisonment for knowing violations.

Signature and Title

Date _____

_____ *Date Notice Removed MS4 operator notified per Part II.F.3.*

APPENDIX - D

WEEKLY SITE INSPECTION CHECKLIST
AND
WEEKLY STORM WATER MEETING FORM

Weekly Site Inspection Checklist

Jiffy Lube, Singing Oaks Road, Bulverde, Texas

Date: _____ Location: _____

Inspector(s):

_____ _____
Name Title

_____ _____
Name Title

_____ _____
Name Title

Weather Conditions: _____Rain since last inspection:_____ (inches) Phase of Construction: _____ (Clearing, Rough Grading, Building Const, Paving, Etc.)

*** This checklist must be conducted weekly (with-in every 7 days) and within 24 hours of a 0.5 inches or greater rainfall. The site must be equipped with an accurate rain gauge to complete this form. The onsite SWPPP must be referenced and updated with the performance of this checklist.

Temporary stabilization **Y/N or NA**

1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days? ____
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties? ____
3. Have disturbed areas outside the silt fence been seeded or mulched? ____
4. Have soil stockpiles that will sit for over 21 days been stabilized? ____
5. Has seed and mulch been applied at the proper rate? (In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.) ____
6. Has seed or mulch blown away? If so, repair. ____

Note areas where repairs or maintenance is needed:

_____

_____

Construction Entrances **Y/N or NA**

1. Are all entrances constructed per the SWPPP design? (geotextile fabric, correct stone 2 inches diameter and 6 inches in depth) ____
2. Are the drives useable width and length a minimum of 10 feet and 50 feet, respectively? ____
3. If the entrance is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource? ____
4. If the entrance is placed across a ditch, is the culvert pipe allowing proper flow and in good condition? ____
5. If a truck wash is required to prevent track out, is it operating correctly? ____

Note areas where repairs or maintenance is needed:

_____

_____

Sediment Ponds **Y/N or NA**

1. Is the sediment pond installed and appropriately sized per the SWPPP (67 cubic yards per acre of total drainage area)? ____
2. Are concentrated flows of runoff directed to a sediment pond? ____
3. Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acres or larger) directed to a sediment pond? ____
4. Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels? ____
5. Are the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized? ____
6. For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric? ____
   Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically? ____
   For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per the SWPPP? ____
7. For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped? ____
   For sediment traps, which dewater 100% between storms, is the dewatering pipe end capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile? ____
8. Is the length-to-width ratio between inlet(s) and outlet at least 2:1? NOTE: If not, a baffle should be added to lengthen the distance. ____
9. Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet? ____
10. For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet watertight? ____
11. Is it time to clean out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch. ____

Note areas where repairs or maintenance is needed:

_____

_____

Silt Fence **Y/N or NA**

1. Is all silt fences labeled with station markings both in the field and on the SWPPP? ____
2. Is the fence at least 4" to 6" into the ground? ____
3. Is the install trench backfilled to prevent runoff from cutting underneath the fence? ____
4. Is the fence pulled tight so it won't sag when water builds up behind it? ____
5. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends? ____
6. Is the fence placed on a level contour? If not, the fence will only act as a diversion. ____
7. Have all the gaps and tears in the fence been eliminated? ____
8. Is the fence controlling an appropriate drainage area? ____

RULE OF THUMB: Design capacity for 100 linear feet of silt fence is 0.5 acres for slopes <2%, 0.25 acres for slopes 2% to 20%, & 0.125 acres for slopes 20% or more. Generally, no more than 0.25 acres should lie behind 100 feet of fence at 2% to 10% slope, i.e., the distance between the fence and the top of the slope behind it should be not more than 125 feet. The allowable distance increases on flatter slopes and decreases for steeper slopes.

Note areas where repairs or maintenance is needed: (Reference locations by station markings)

_____

_____

Inlet protection **Y/N or NA**

1. Does water pond around the inlet when it rains? ____
2. Is there fabric that has developed tears or sags? (Replace) ____
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window? ____
4. For yard inlet protections, does the structure encircle the entire grate per the SWPPP? ____
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it? ____
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported, per the SWPPP, typically by a wood frame with cross braces. ____
7. Is there accumulated sediment at the inlet that requires removal? ____

Note areas where repairs or maintenance is needed:

_____

_____

Permanent Stabilization **Y/N or NA**

1. Are any areas at final grade? ____
2. Has the soil been properly prepared to accept permanent seeding? ____
3. Has seed and mulch been applied at the appropriate rate? ____
4. If rainfall has been inadequate, are seeded areas being watered? ____
5. For drainage ditches requiring matting per the SWPPP, have the correct products been installed? ____
6. Has rock riprap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel? ____
7. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion? ____

Note areas where repairs or maintenance is needed:

_____

_____

Non-Sediment Pollution Control **Y/N or NA**

1. Has the designated area for washing out concrete trucks been noted on the SWPPP and identified on site? (Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch, or storm drain.) ____
2. Is waste and packaging disposed of in a dumpster? (No on site burning is allowed.) ____
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer? ____
4. Are streets swept as often as necessary to keep them clean and free from sediment and track out debris? ____

NOTE: Sediment should be swept back onto the lot, not down the storm sewers or off the development.

5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain? ____
6. Have stream crossings been constructed entirely of non-erodible material? ____
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? ____

NOTE: If you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground.

Note areas where repairs or maintenance is needed:

_____

_____

Outflow or Discharge Point(s) **Y/N or NA**

1. Does the appearance of run-off or storm water flow indicate the current BMPs are effective? ____

Note areas where repairs or maintenance is needed:

_____

_____

Record Keeping **Y/N or NA**

2. Are the NOI and SWPPP on site? ____
3. Is the proper sign posted at the site entrance per the SWPPP? ____
4. Is the SWPPP, posted on site, up to date with all applicable changes? ____
5. Are copies of the weekly inspection reports kept in the site office? ____

Note areas where repairs or maintenance is needed:

_____

_____

I certify that the information in this inspection checklist is true, accurate, and complete. I am aware that there are significant penalties for falsifying any information in this inspection checklist.

_____	_____	_____
Inspector's Signature	Date	Inspector's Name (Printed)

The owner's representative is required to participate in one inspection per Month.

_____	_____	_____
Owner's Signature	Date	Owner's Name (Printed)

Signed copies of executed checklists (preferably emailed pdf files) must be provided to both local and corporate owner's representatives on a weekly/ongoing basis.

Weekly Storm Water Meeting Review and Comment Form

Jiffy Lube, Singing Oaks Road, Bulverde, Texas

Project Site Superintendent: _____ Date and Time: _____

Others Present: NAME	TITLE	COMPANY

Installation/Removal of BMPs (include subcontractors performing the activities): _____

_____

BMP Maintenance and Repair (include subcontractors performing the activities): _____

_____

Non-effective BMPs: _____

_____

Efforts to mitigate or correct non-effective BMPs: _____

_____

Status of staging areas, storage, borrow, fill, concrete wash-out, and exits: _____

_____

Upcoming activities: _____

_____

Modifications or additions to SWPPP or project phasing: _____

_____

Findings, Conclusions & Additional Information: _____

APPENDIX - E

SPILL REPORT FORM

NOTES to General Contractor:

1) Contact the appropriate regulatory agency if the spill exceeds the applicable reportable quantity.
2) Complete this form in full for each spill that exceeds 1-gallon or exceeds the reportable quantity for the Governing Agency.
3) Transfer spill information to the weekly report and resolve as appropriate.

It is recommended taking photos to document spill clean-up measures and saving the photos on-site.

Spill Report Form

Jiffy Lube, Singing Oaks Road, Bulverde, Texas

Spill Reported by: _____

Date/Time Spill: _____

Describe spill location and events leading to spill: _____

_____

Material spilled: _____

Source of spill: _____

Amount spilled: _____ Amount spilled to waterway: _____

Containment or clean up action: _____

_____

_____

Approximate depth of soil excavation: _____

List Injuries or Personal Contamination: _____

Action to be taken to prevent future spills: _____

_____

Modifications to the SWPPP, including required sampling, necessary due to this spill: _____

_____

Agencies notified of the spill: _____

_____

_____

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

_____ _____

Contractor Superintendent Date

APPENDIX - F

RECORD OF STABILIZATION
AND
CONSTRUCTION ACTIVITY DATES

SITE STABILIZATION and CONSTRUCTION ACTIVITY DATES

A record of dates when BMPs are installed or removed, stabilization measures are initiated, major grading activities occur, and construction activities temporarily or permanently cease on a portion of the site shall be maintained until final site stabilization is achieved and the Project Completion Report (PCR) is filed. This form must be updated continuously throughout the project until the PCR is filed. **NOTE:** The General Contractor shall complete at least 1-pg of stabilization and grading activities for each month of active construction. Activities noted in this log must reflect information provided on Site Maps.

MAJOR STABILIZATION AND GRADING ACTIVITIES

Description of Activity:____
Contractor performing Activity: ________________ Begin (date): __________ End(date):__________
Location:____

Description of Activity:____
Contractor performing Activity: ________________ Begin (date): __________ End(date):__________
Location:____

Description of Activity:____
Contractor performing Activity: ________________ Begin (date): __________ End(date):__________
Location:____

Description of Activity:____
Contractor performing Activity: ________________ Begin (date): __________ End(date):__________
Location:____

Description of Activity:____
Contractor performing Activity: ________________ Begin (date): __________ End(date):__________
Location:____

Description of Activity:____
Contractor performing Activity: ________________ Begin (date): __________ End(date):__________
Location:____

Description of Activity:____
Contractor performing Activity: ________________ Begin (date): __________ End(date):__________
Location:____

Description of Activity:____
Contractor performing Activity: ________________ Begin (date): __________ End(date):__________
Location:____

Description of Activity:____
Contractor performing Activity: ________________ Begin (date): __________ End(date):__________
Location:____

Description of Activity:____
Contractor performing Activity: ________________ Begin (date): __________ End(date):__________
Location:____

Description of Activity:____
Contractor performing Activity: ________________ Begin (date): __________ End(date):__________
Location:____

Description of Activity:____
Contractor performing Activity: ________________ Begin (date): __________ End(date):__________
Location:____

APPENDIX - G

FEDERAL, STATE, OR LOCAL STORM WATER OR OTHER ENVIRONMENTAL INSPECTOR SITE VISIT LOG

Federal, State, or Local Storm Water or other Environmental Inspector Site Visit Log

Inspectors Name: _____ Agency: _____

Contractors Representative Present: _____

Others Present:_____

Comments: _____

Time and Date: _____ Report Prepared: Yes No

Inspectors Name: _____ Agency: _____

Contractors Representative Present: _____

Others Present:_____

Comments: _____

Time and Date: _____ Report Prepared: Yes No

Inspectors Name: _____ Agency: _____

Contractors Representative Present: _____

Others Present:_____

Comments: _____

Time and Date: _____ Report Prepared: Yes No

APPENDIX - H

GENERAL PERMIT

Texas Commission on Environmental Quality

P.O. Box 13087, Austin, Texas 78711-3087

GENERAL PERMIT TO DISCHARGE UNDER THE

TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM

under provisions of
Section 402 of the Clean Water Act
and Chapter 26 of the Texas Water Code

This permit supersedes and replaces
TPDES General Permit No. TXR150000, issued March 5, 2008

Construction sites that discharge stormwater associated with construction activity

located in the state of Texas

may discharge to surface water in the state

only according to monitoring requirements and other conditions set forth in this general permit, as well as the rules of the Texas Commission on Environmental Quality (TCEQ or Commission), the laws of the State of Texas, and other orders of the Commission of the TCEQ. The issuance of this general permit does not grant to the permittee the right to use private or public property for conveyance of stormwater and certain non-stormwater discharges along the discharge route. This includes property belonging to but not limited to any individual, partnership, corporation or other entity. Neither does this general permit authorize any invasion of personal rights nor any violation of federal, state, or local laws or regulations. It is the responsibility of the permittee to acquire property rights as may be necessary to use the discharge route.

This general permit and the authorization contained herein shall expire at midnight, five years from the permit effective date.

EFFECTIVE DATE: March 5, 2013

ISSUED DATE: FEB 19 2013

Bryan W. Shaw

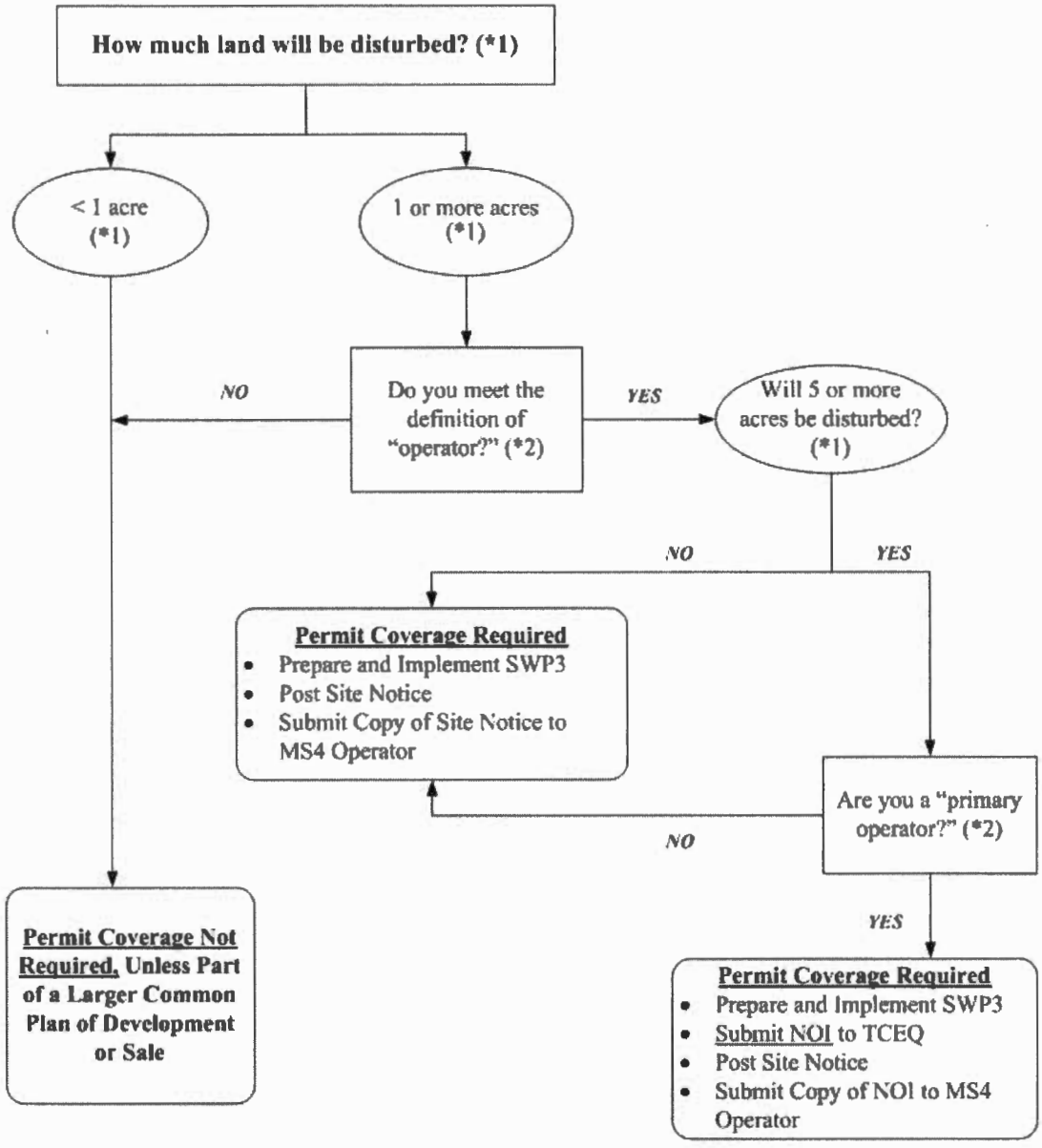
For the Commission

TPDES GENERAL PERMIT NUMBER TXR150000 RELATING TO STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES

Table of Contents

Part I. Flow Chart and Definitions

Section A. Flow Chart to Determine Whether Coverage is Required



*(*1) To determine the size of the construction project, use the size of the entire area to be disturbed, and include the size of the larger common plan of development or sale, if the project is part of a larger project (refer to Part I.B., "Definitions," for an explanation of "common plan of development or sale").*

*(*2) Refer to the definitions for "operator," "primary operator," and "secondary operator" in Part I., Section B. of this permit.*

Section B. Definitions

Arid Areas - Areas with an average annual rainfall of 0 to 10 inches.

Best Management Practices (BMPs) - Schedules of activities, prohibitions of practices, maintenance procedures, structural controls, local ordinances, and other management practices to prevent or reduce the discharge of pollutants. BMPs also include treatment requirements, operating procedures, and practices to control construction site runoff, spills or leaks, waste disposal, or drainage from raw material storage areas.

Commencement of Construction - The initial disturbance of soils associated with clearing, grading, or excavation activities, as well as other construction-related activities (e.g., stockpiling of fill material, demolition).

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

Construction Activity - Includes soil disturbance activities, including clearing, grading, and excavating; and does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the site (e.g., the routine grading of existing dirt roads, asphalt overlays of existing roads, the routine clearing of existing right-of-ways, and similar maintenance activities). Regulated construction activity is defined in terms of small and large construction activity.

Dewatering – The act of draining rainwater or groundwater from building foundations, vaults, and trenches.

Discharge – For the purposes of this permit, the drainage, release, or disposal of pollutants in stormwater and certain non-stormwater from areas where soil disturbing activities (e.g., clearing, grading, excavation, stockpiling of fill material, and demolition), construction materials or equipment storage or maintenance (e.g., fill piles, borrow area, concrete truck wash out, fueling), or other industrial stormwater directly related to the construction process (e.g., concrete or asphalt batch plants) are located.

Drought-Stricken Area – For the purposes of this permit, an area in which the National Oceanic and Atmospheric Administration's U.S. Seasonal Drought Outlook indicates for the period during which the construction will occur that any of the following conditions are likely: (1) "Drought to persist or intensify", (2) "Drought ongoing, some improvement", (3) "Drought likely to improve, impacts ease", or (4) "Drought development likely". See http://www.cpc.ncep.noaa.gov/products/expert_assessment/seasonal_drought.html.

Edwards Aquifer - As defined under Texas Administrative Code (TAC) § 213.3 of this title (relating to the Edwards Aquifer), that portion of an arcuate belt of porous, water-bearing, predominantly carbonate rocks known as the Edwards and Associated Limestones in the Balcones Fault Zone trending from west to east to northeast in Kinney, Uvalde, Medina, Bexar, Comal, Hays, Travis, and Williamson Counties; and composed of the Salmon Peak

Limestone, McKnight Formation, West Nueces Formation, Devil's River Limestone, Person Formation, Kainer Formation, Edwards Formation, and Georgetown Formation. The permeable aquifer units generally overlie the less-permeable Glen Rose Formation to the south, overlie the less-permeable Comanche Peak and Walnut Formations north of the Colorado River, and underlie the less-permeable Del Rio Clay regionally.

Edwards Aquifer Recharge Zone - Generally, that area where the stratigraphic units constituting the Edwards Aquifer crop out, including the outcrops of other geologic formations in proximity to the Edwards Aquifer, where caves, sinkholes, faults, fractures, or other permeable features would create a potential for recharge of surface waters into the Edwards Aquifer. The recharge zone is identified as that area designated as such on official maps located in the offices of the Texas Commission on Environmental Quality (TCEQ) and the appropriate regional office. The Edwards Aquifer Map Viewer, located at http://www.tceq.texas.gov/compliance/field_ops/eapp/mapdisclaimer.html, can be used to determine where the recharge zone is located.

Edwards Aquifer Contributing Zone - The area or watershed where runoff from precipitation flows downgradient to the recharge zone of the Edwards Aquifer. The contributing zone is located upstream (upgradient) and generally north and northwest of the recharge zone for the following counties: all areas within Kinney County, except the area within the watershed draining to Segment No. 2304 of the Rio Grande Basin; all areas within Uvalde, Medina, Bexar, and Comal Counties; all areas within Hays and Travis Counties, except the area within the watersheds draining to the Colorado River above a point 1.3 miles upstream from Tom Miller Dam, Lake Austin at the confluence of Barrow Brook Cove, Segment No. 1403 of the Colorado River Basin; and all areas within Williamson County, except the area within the watersheds draining to the Lampasas River above the dam at Stillhouse Hollow reservoir, Segment No. 1216 of the Brazos River Basin. The contributing zone is illustrated on the Edwards Aquifer map viewer at http://www.tceq.texas.gov/compliance/field_ops/eapp/mapdisclaimer.html.

Effluent Limitations Guideline (ELG) – Defined in 40 Code of Federal Regulations (CFR) § 122.2 as a regulation published by the Administrator under § 304(b) of the Clean Water Act (CWA) to adopt or revise effluent limitations.

Facility or Activity – For the purpose of this permit, a construction site or construction support activity that is regulated under this general permit, including all contiguous land and fixtures (for example, ponds and materials stockpiles), structures, or appurtances used at a construction site or industrial site described by this general permit.

Final Stabilization - A construction site status where any of the following conditions are met:

A. All soil disturbing activities at the site have been completed and a uniform (that is, evenly distributed, without large bare areas) perennial vegetative cover with a density of at least 70% of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.

B. For individual lots in a residential construction site by either:

(1) the homebuilder completing final stabilization as specified in condition (a) above; or

(2) the homebuilder establishing temporary stabilization for an individual lot prior to the time of transfer of the ownership of the home to the buyer and after informing the homeowner of the need for, and benefits of, final stabilization. If temporary stabilization is not feasible, then the homebuilder may fulfill this requirement by retaining perimeter controls or BMPs, and informing the homeowner of the need for removal of temporary controls and the establishment of final stabilization.

Fullfillment of this requirement must be documented in the homebuilder's stormwater pollution prevention plan (SWP3).

C. For construction activities on land used for agricultural purposes (such as pipelines across crop or range land), final stabilization may be accomplished by returning the disturbed land to its preconstruction agricultural use. Areas disturbed that were not previously used for agricultural activities, such as buffer strips immediately adjacent to surface water and areas that are not being returned to their preconstruction agricultural use must meet the final stabilization conditions of condition (a) above.

D. In arid, semi-arid, and drought-stricken areas only, all soil disturbing activities at the site have been completed and both of the following criteria have been met:

(1) Temporary erosion control measures (for example, degradable rolled erosion control product) are selected, designed, and installed along with an appropriate seed base to provide erosion control for at least three years without active maintenance by the operator, and

(2) The temporary erosion control measures are selected, designed, and installed to achieve 70% of the native background vegetative coverage within three years.

Hyperchlorination of Waterlines – Treatment of potable water lines or tanks with chlorine for disinfection purposes, typically following repair or partial replacement of the waterline or tank, and subsequently flushing the contents.

Impaired Water - A surface water body that is identified on the latest approved CWA §303(d) List as not meeting applicable state water quality standards. Impaired waters include waters with approved or established total maximum daily loads (TMDLs), and those where a TMDL has been proposed by TCEQ but has not yet been approved or established.

Indian Country Land – (from 40 CFR §122.2) (1) all land within the limits of any Indian reservation under the jurisdiction of the United States government, notwithstanding the issuance of any patent, and, including rights-of-way running through the reservation; (2) all dependent Indian communities with the borders of the United States whether within the originally or subsequently acquired territory thereof, and whether within or without the limits of a state; and (3) all Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same.

Indian Tribe - (from 40 CFR §122.2) any Indian Tribe, band, group, or community recognized by the Secretary of the Interior and exercising governmental authority over a Federal Indian Reservation.

Large Construction Activity - Construction activities including clearing, grading, and excavating that result in land disturbance of equal to or greater than five (5) acres of land. Large construction activity also includes the disturbance of less than five (5) acres of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than five (5) acres of land. Large construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the site (for example, the routine grading of existing dirt roads, asphalt overlays of existing roads, the routine clearing of existing right-of-ways, and similar maintenance activities.)

Linear Project – Includes the construction of roads, bridges, conduits, substructures, pipelines, sewer lines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment and associated ancillary facilities in a long, narrow area.

Minimize - To reduce or eliminate to the extent achievable using stormwater controls that are technologically available and economically practicable and achievable in light of best industry practices.

Municipal Separate Storm Sewer System (MS4) - A separate storm sewer system owned or operated by the United States, a state, city, town, county, district, association, or other public body (created by or pursuant to state law) having jurisdiction over the disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under state law such as a sewer district, flood control or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, that discharges to surface water in the state.

Notice of Change (NOC) – Written notification to the executive director from a discharger authorized under this permit, providing changes to information that was previously provided to the agency in a notice of intent form.

Notice of Intent (NOI) - A written submission to the executive director from an applicant requesting coverage under this general permit.

Notice of Termination (NOT) - A written submission to the executive director from a discharger authorized under a general permit requesting termination of coverage.

Operator - The person or persons associated with a large or small construction activity that is either a primary or secondary operator as defined below:

Primary Operator – the person or persons associated with a large or small construction activity that meets either of the following two criteria:

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

(b) the person or persons have day-to-day operational control of those activities at a construction site that are necessary to ensure compliance with a Storm Water Pollution Prevention Plan (SWP3) for the site or other permit conditions (for example, they are authorized to direct workers at a site to carry out activities required by the SWP3 or comply with other permit conditions).

Secondary Operator – The person or entity, often the property owner, whose operational control is limited to:

(a) the employment of other operators, such as a general contractor, to perform or supervise construction activities; or

(b) the ability to approve or disapprove changes to construction plans and specifications, but who does not have day-to-day on-site operational control over construction activities at the site.

Secondary operators must either prepare their own SWP3 or participate in a shared SWP3 that covers the areas of the construction site where they have control over the plans and specifications.

If there is not a primary operator at the construction site, then the secondary operator is defined as the primary operator and must comply with the requirements for primary operators.

Outfall - For the purpose of this permit, a point source at the point where stormwater runoff associated with construction activity discharges to surface water in the state and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels, or other conveyances that connect segments of the same stream or other water of the U.S. and are used to convey waters of the U.S.

Permittee - An operator authorized under this general permit. The authorization may be gained through submission of a notice of intent, by waiver, or by meeting the requirements for automatic coverage to discharge stormwater runoff and certain non-stormwater discharges.

Point Source – (from 40 CFR §122.2) Any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are, or may be, discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff.

Pollutant - Dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, filter backwash, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into any surface water in the state. The term "pollutant" does not include tail water or runoff water from irrigation or rainwater runoff from cultivated or uncultivated rangeland, pastureland, and farmland. For the purpose of this permit, the term "pollutant" includes sediment.

Pollution - (from Texas Water Code (TWC) §26.001(14)) The alteration of the physical, thermal, chemical, or biological quality of, or the contamination of, any surface water in the state that renders the water harmful, detrimental, or injurious to humans, animal life, vegetation, or property or to public health, safety, or welfare, or impairs the usefulness or the public enjoyment of the water for any lawful or reasonable purpose.

Rainfall Erosivity Factor (R factor) - the total annual erosive potential that is due to climatic effects, and is part of the Revised Universal Soil Loss Equation (RUSLE).

Receiving Water - A "Water of the United States" as defined in 40 CFR §122.2 into which the regulated stormwater discharges.

Semiarid Areas - areas with an average annual rainfall of 10 to 20 inches

Separate Storm Sewer System - A conveyance or system of conveyances (including roads with drainage systems, streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains), designed or used for collecting or conveying stormwater; that is not a combined sewer, and that is not part of a publicly owned treatment works (POTW).

Small Construction Activity - Construction activities including clearing, grading, and excavating that result in land disturbance of equal to or greater than one (1) acre and less than five (5) acres of land. Small construction activity also includes the disturbance of less than one (1) acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one (1) and less than five (5) acres of land. Small construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the site (for example, the routine grading of existing dirt roads, asphalt overlays of existing roads, the routine clearing of existing right-of-ways, and similar maintenance activities.)

Steep Slopes – Where a state, Tribe, local government, or industry technical manual (e.g. stormwater BMP manual) has defined what is to be considered a "steep slope", this permit's definition automatically adopts that definition. Where no such definition exists, steep slopes are automatically defined as those that are 15 percent or greater in grade.

Stormwater (or Stormwater Runoff) - Rainfall runoff, snow melt runoff, and surface runoff and drainage.

Stormwater Associated with Construction Activity - Stormwater runoff from a construction activity where soil disturbing activities (including clearing, grading, excavating) result in the disturbance of one (1) or more acres of total land area, or are part of a larger common plan of development or sale that will result in disturbance of one (1) or more acres of total land area.

Structural Control (or Practice) - A pollution prevention practice that requires the construction of a device, or the use of a device, to reduce or prevent pollution in stormwater

runoff. Structural controls and practices may include but are not limited to: silt fences, earthen dikes, drainage swales, sediment traps, check dams, subsurface drains, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins.

Surface Water in the State - Lakes, bays, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, wetlands, marshes, inlets, canals, the Gulf of Mexico inside the territorial limits of the state (from the mean high water mark (MHWM) out 10.36 miles into the Gulf), and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, navigable or nonnavigable, and including the beds and banks of all water-courses and bodies of surface water, that are wholly or partially inside or bordering the state or subject to the jurisdiction of the state; except that waters in treatment systems which are authorized by state or federal law, regulation, or permit, and which are created for the purpose of waste treatment are not considered to be water in the state.

Temporary Stabilization - A condition where exposed soils or disturbed areas are provided a protective cover or other structural control to prevent the migration of pollutants. Temporary stabilization may include temporary seeding, geotextiles, mulches, and other techniques to reduce or eliminate erosion until either permanent stabilization can be achieved or until further construction activities take place.

Total Maximum Daily Load (TMDL) - The total amount of a pollutant that a water body can assimilate and still meet the Texas Surface Water Quality Standards.

Turbidity – A condition of water quality characterized by the presence of suspended solids and/or organic material.

Waters of the United States - (from 40 CFR §122.2) Waters of the United States or waters of the U.S. means:

(a) all waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

(b) all interstate waters, including interstate wetlands;

(c) all other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds that the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:

(1) which are or could be used by interstate or foreign travelers for recreational or other purposes;

(2) from which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

(3) which are used or could be used for industrial purposes by industries in interstate commerce;

(d) all impoundments of waters otherwise defined as waters of the United States under this definition;

(e) tributaries of waters identified in paragraphs (a) through (d) of this definition;

(f) the territorial sea; and

(g) wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR §423.11(m) which also meet the criteria of this definition) are not waters of the U.S. This exclusion applies only to manmade bodies of water which neither were originally created in waters of the U.S. (such as

disposal area in wetlands) nor resulted from the impoundment of waters of the U.S. Waters of the U.S. do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with EPA.

Part II. Permit Applicability and Coverage

Section A. Discharges Eligible for Authorization

1. Stormwater Associated with Construction Activity

Discharges of stormwater runoff from small and large construction activities may be authorized under this general permit.

2. Discharges of Stormwater Associated with Construction Support Activities

Examples of construction support activities include, but are not limited to, concrete batch plants, rock crushers, asphalt batch plants, equipment staging areas, material storage yards, material borrow areas, and excavated material disposal areas. Construction support activities authorized under this general permit are not commercial operations, and do not serve multiple unrelated construction projects. Discharges of stormwater runoff from construction support activities may be authorized under this general permit, provided that the following conditions are met:

(a) the activities are located within one (1) mile from the boundary of the permitted construction site and directly support the construction activity;

(b) an SWP3 is developed for the permitted construction site according to the provisions of this general permit, and includes appropriate controls and measures to reduce erosion and discharge of pollutants in stormwater runoff from the construction support activities; and

(c) the construction support activities either do not operate beyond the completion date of the construction activity or, at the time that they do, are authorized under separate Texas Pollutant Discharge Elimination System (TPDES) authorization. Separate TPDES authorization may include the TPDES Multi Sector General Permit (MSGP), TXR050000 (related to stormwater discharges associated with industrial activity), separate authorization under this general permit if applicable, coverage under an alternative general permit if available, or authorization under an individual water quality permit.

3. Non-Stormwater Discharges

The following non-stormwater discharges from sites authorized under this general permit are also eligible for authorization under this general permit:

(a) discharges from fire fighting activities (fire fighting activities do not include washing of trucks, run-off water from training activities, test water from fire suppression systems, or similar activities);

(b) uncontaminated fire hydrant flushings (excluding discharges of hyperchlorinated water, unless the water is first dechlorinated and discharges are not expected to adversely affect aquatic life), which include flushings from systems that utilize potable water, surface water, or groundwater that does not contain additional pollutants (uncontaminated fire hydrant flushings do not include systems utilizing reclaimed wastewater as a source water);

(c) water from the routine external washing of vehicles, the external portion of buildings or structures, and pavement, where detergents and soaps are not used, where spills or leaks of toxic or hazardous materials have not occurred (unless spilled materials

have been removed; and if local state, or federal regulations are applicable, the materials are removed according to those regulations), and where the purpose is to remove mud, dirt, or dust;

(d) uncontaminated water used to control dust;

(e) potable water sources, including waterline flushings, but excluding discharges of hyperchlorinated water, unless the water is first dechlorinated and discharges are not expected to adversely affect aquatic life;

(f) uncontaminated air conditioning condensate;

(g) uncontaminated ground water or spring water, including foundation or footing drains where flows are not contaminated with industrial materials such as solvents; and

(h) lawn watering and similar irrigation drainage.

4. Other Permitted Discharges

Any discharge authorized under a separate National Pollutant Discharge Elimination System (NPDES), TPDES, or TCEQ permit may be combined with discharges authorized by this general permit, provided those discharges comply with the associated permit.

Section B. Concrete Truck Wash Out

The wash out of concrete trucks at regulated construction sites must be performed in accordance with the requirements of Part V of this general permit.

Section C. Limitations on Permit Coverage

1. Post Construction Discharges

Discharges that occur after construction activities have been completed, and after the construction site and any supporting activity site have undergone final stabilization, are not eligible for coverage under this general permit. Discharges originating from the sites are not authorized under this general permit following the submission of the notice of termination (NOT) or removal of the appropriate site notice, as applicable, for the regulated construction activity.

2. Prohibition of Non-Stormwater Discharges

Except as otherwise provided in Part II.A. of this general permit, only discharges that are composed entirely of stormwater associated with construction activity may be authorized under this general permit.

3. Compliance With Water Quality Standards

Discharges to surface water in the state that would cause, have the reasonable potential to cause, or contribute to a violation of water quality standards or that would fail to protect and maintain existing designated uses are not eligible for coverage under this general permit. The executive director may require an application for an individual permit or alternative general permit (see Parts II.H.2. and 3.) to authorize discharges to surface water in the state if the executive director determines that any activity will cause, has the reasonable potential to cause, or contribute to a violation of water quality standards or is found to cause, has the reasonable potential to cause, or contribute to, the impairment of a designated use. The executive director may also require an application for an individual permit considering factors described in Part II.H.2. of this general permit.

4. Impaired Receiving Waters and Total Maximum Daily Load (TMDL) Requirements

New sources or new discharges of the pollutants of concern to impaired waters are not authorized by this permit unless otherwise allowable under 30 TAC Chapter 305 and applicable state law. Impaired waters are those that do not meet applicable water quality standards and are listed on the EPA approved CWA §303(d) List. Pollutants of concern are those for which the water body is listed as impaired.

Discharges of the pollutants of concern to impaired water bodies for which there is a TMDL are not eligible for this general permit unless they are consistent with the approved TMDL. Permittees must incorporate the conditions and requirements applicable to their discharges into their SWP3, in order to be eligible for coverage under this general permit. For consistency with the construction stormwater-related items in an approved TMDL, the SWP3 must be consistent with any applicable condition, goal, or requirement in the TMDL, TMDL Implementation Plan (I-Plan), or as otherwise directed by the executive director.

5. Discharges to the Edwards Aquifer Recharge or Contributing Zone

Discharges cannot be authorized by this general permit where prohibited by 30 TAC Chapter 213 (relating to Edwards Aquifer). In addition, commencement of construction (i.e., the initial disturbance of soils associated with clearing, grading, or excavating activities, as well as other construction-related activities such as stockpiling of fill material and demolition) at a site regulated under 30 TAC Chapter 213, may not begin until the appropriate Edwards Aquifer Protection Plan (EAPP) has been approved by the TCEQ's Edwards Aquifer Protection Program.

(a) For new discharges located within the Edwards Aquifer Recharge Zone, or within that area upstream from the recharge zone and defined as the Contributing Zone (CZ), operators must meet all applicable requirements of, and operate according to, 30 TAC Chapter 213 (Edwards Aquifer Rule) in addition to the provisions and requirements of this general permit.

(b) For existing discharges located within the Edwards Aquifer Recharge Zone, the requirements of the agency-approved Water Pollution Abatement Plan (WPAP) under the Edwards Aquifer Rule is in addition to the requirements of this general permit. BMPs and maintenance schedules for structural stormwater controls, for example, may be required as a provision of the rule. All applicable requirements of the Edwards Aquifer Rule for reductions of suspended solids in stormwater runoff are in addition to the requirements in this general permit for this pollutant.

6. Discharges to Specific Watersheds and Water Quality Areas

Discharges otherwise eligible for coverage cannot be authorized by this general permit where prohibited by 30 TAC Chapter 311 (relating to Watershed Protection) for water quality areas and watersheds.

7. Protection of Streams and Watersheds by Other Governmental Entities

This general permit does not limit the authority or ability of federal, other state, or local governmental entities from placing additional or more stringent requirements on construction activities or discharges from construction activities. For example, this permit does not limit the authority of a home-rule municipality provided by Texas Local Government Code §401.002.

8. Indian Country Lands

Stormwater runoff from construction activities occurring on Indian Country lands are not under the authority of the TCEQ and are not eligible for coverage under this general permit. If discharges of stormwater require authorization under federal NPDES

regulations, authority for these discharges must be obtained from the U.S. Environmental Protection Agency (EPA).

9. Oil and Gas Production

Stormwater runoff from construction activities associated with the exploration, development, or production of oil or gas or geothermal resources, including transportation of crude oil or natural gas by pipeline, are not under the authority of the TCEQ and are not eligible for coverage under this general permit. If discharges of stormwater require authorization under federal NPDES regulations, authority for these discharges must be obtained from the EPA.

10. Stormwater Discharges from Agricultural Activities

Stormwater discharges from agricultural activities that are not point source discharges of stormwater are not subject to TPDES permit requirements. These activities may include clearing and cultivating ground for crops, construction of fences to contain livestock, construction of stock ponds, and other similar agricultural activities. Discharges of stormwater runoff associated with the construction of facilities that are subject to TPDES regulations, such as the construction of concentrated animal feeding operations, would be point sources regulated under this general permit.

11. Endangered Species Act

Discharges that would adversely affect a listed endangered or threatened aquatic or aquatic-dependent species or its critical habitat are not authorized by this permit, unless the requirements of the Endangered Species Act are satisfied. Federal requirements related to endangered species apply to all TPDES permitted discharges and site-specific controls may be required to ensure that protection of endangered or threatened species is achieved. If a permittee has concerns over potential impacts to listed species, the permittee may contact TCEQ for additional information.

12. Other

Nothing in Part II of the general permit is intended to negate any person's ability to assert the force majeure (act of God, war, strike, riot, or other catastrophe) defenses found in 30 TAC §70.7.

Section D. Deadlines for Obtaining Authorization to Discharge

1. Large Construction Activities

(a) New Construction - Discharges from sites where the commencement of construction occurs on or after the effective date of this general permit must be authorized, either under this general permit or a separate TPDES permit, prior to the commencement of those construction activities.

(b) Ongoing Construction - Operators of large construction activities continuing to operate after the effective date of this permit, and authorized under TPDES general permit TXR150000 (effective on March 5, 2008), must submit an NOI to renew authorization or a NOT to terminate coverage under this general permit within 90 days of the effective date of this general permit. During this interim period, as a requirement of this TPDES permit, the operator must continue to meet the conditions and requirements of the previous TPDES permit.

2. Small Construction Activities

(a) New Construction - Discharges from sites where the commencement of construction occurs on or after the effective date of this general permit must be authorized, either

under this general permit or a separate TPDES permit, prior to the commencement of those construction activities.

(b) Ongoing Construction - Discharges from ongoing small construction activities that commenced prior to the effective date of this general permit, and that would not meet the conditions to qualify for termination of this permit as described in Part II.E. of this general permit, must meet the requirements to be authorized, either under this general permit or a separate TPDES permit, within 90 days of the effective date of this general permit. During this interim period, as a requirement of this TPDES permit, the operator must continue to meet the conditions and requirements of the previous TPDES permit.

Section E. Obtaining Authorization to Discharge

1. Automatic Authorization for Small Construction Activities With Low Potential for Erosion:

If all of the following conditions are met, then a small construction activity is determined to occur during periods of low potential for erosion, and a site operator may be automatically authorized under this general permit without being required to develop an SWP3 or submit an NOI:

(a) the construction activity occurs in a county listed in Appendix A;

(b) the construction activity is initiated and completed, including either final or temporary stabilization of all disturbed areas, within the time frame identified in Appendix A for the location of the construction site;

(c) all temporary stabilization is adequately maintained to effectively reduce or prohibit erosion, permanent stabilization activities have been initiated, and a condition of final stabilization is completed no later than 30 days following the end date of the time frame identified in Appendix A for the location of the construction site;

(d) the permittee signs a completed TCEQ construction site notice, including the certification statement;

(e) a signed copy of the construction site notice is posted at the construction site in a location where it is readily available for viewing by the general public, local, state, and federal authorities prior to commencing construction activities, and maintained in that location until completion of the construction activity;

(f) a copy of the signed and certified construction site notice is provided to the operator of any MS4 receiving the discharge at least two days prior to commencement of construction activities;

(g) any supporting concrete batch plant or asphalt batch plant is separately authorized for discharges of stormwater runoff or other non-stormwater discharges under an individual TPDES permit, another TPDES general permit, or under an individual TCEQ permit where stormwater and non-stormwater is disposed of by evaporation or irrigation (discharges are adjacent to water in the state); and

(h) any non-stormwater discharges are either authorized under a separate permit or authorization, or are not considered to be a wastewater.

Part II.G. of this general permit describes how an operator may apply for and obtain a waiver from permitting, for certain small construction activities that occur during a period with a low potential for erosion, where automatic authorization under this section is not available.

2. Automatic Authorization For All Other Small Construction Activities:

Operators of small construction activities not described in Part II.E.1. above may be automatically authorized under this general permit, and operators of these sites shall not be required to submit an NOI, provided that they meet all of the following conditions:

(a) develop a SWP3 according to the provisions of this general permit, that covers either the entire site or all portions of the site for which the applicant is the operator, and implement that plan prior to commencing construction activities;

(b) sign and certify a completed TCEQ small construction site notice, post the notice at the construction site in a location where it is safely and readily available for viewing by the general public, local, state, and federal authorities, prior to commencing construction, and maintain the notice in that location until completion of the construction activity (for linear construction activities, e.g. pipeline or highway, the site notice must be placed in a publicly accessible location near where construction is actively underway; notice for these linear sites may be relocated, as necessary, along the length of the project, and the notice must be safely and readily available for viewing by the general public; local, state, and federal authorities); and

(c) provide a copy of the signed and certified construction site notice to the operator of any municipal separate storm sewer system receiving the discharge prior to commencement of construction activities.

Operators of small construction activities as defined in Part I.B of this general permit shall not submit an NOI for coverage unless otherwise required by the executive director.

As described in Part I (Definitions) of this general permit, large construction activities include those that will disturb less than five (5) acres of land, but that are part of a larger common plan of development or sale that will ultimately disturb five (5) or more acres of land, and must meet the requirements of Part II.E.3. below.

3. Authorization for Large Construction Activities:

Operators of large construction activities that qualify for coverage under this general permit must meet all of the following conditions:

(a) develop a SWP3 according to the provisions of this general permit that covers either the entire site or all portions of the site for which the applicant is the operator, and implement that plan prior to commencing construction activities;

(b) primary operators must submit an NOI, using a form provided by the executive director, at least seven (7) days prior to commencing construction activities, or if utilizing electronic submittal, prior to commencing construction activities. If an additional primary operator is added after the initial NOI is submitted, the new primary operator must submit an NOI at least seven (7) days before assuming operational control, or if utilizing electronic NOI submittal, prior to assuming operational control. If the primary operator changes after the initial NOI is submitted, the new primary operator must submit a paper NOI or an electronic NOI at least ten (10) days before assuming operational control;

(c) all operators of large construction activities must post a site notice in accordance with Part III.D.2. of this permit. The site notice must be located where it is safely and readily available for viewing by the general public, local, state, and federal authorities prior to commencing construction, and must be maintained in that location until completion of the construction activity (for linear construction activities, e.g. pipeline or highway, the site notice must be placed in a publicly accessible location near where construction is actively underway; notice for these linear sites may be relocated, as necessary, along the length of the project, and the notice must be safely and readily available for viewing by the general public; local, state, and federal authorities);

(d) prior to commencing construction activities, all primary operators must (1) provide a copy of the signed NOI to the operator of any MS4 receiving the discharge and to any secondary construction operator, and (2) list in the SWP3 the names and addresses of all MS4 operators receiving a copy;

(e) all persons meeting the definition of "secondary operator" in Part I of this permit are hereby notified that they are regulated under this general permit, but are not required to submit an NOI, provided that a primary operator at the site has submitted an NOI, or is required to submit an NOI, and the secondary operator has provided notification to the operator(s) of the need to obtain coverage (with records of notification available upon request). Any secondary operator notified under this provision may alternatively submit an NOI under this general permit, may seek coverage under an alternative TPDES individual permit, or may seek coverage under an alternative TPDES general permit if available; and

(f) all secondary operators must provide a copy of the signed and certified Secondary Operator construction site notice to the operator of any MS4 receiving the discharge prior to commencement of construction activities.

4. Waivers for Small Construction Activities:

Part II.G. describes how operators of certain small construction activities may obtain a waiver from coverage.

5. Effective Date of Coverage

(a) Operators of small construction activities as described in either Part II.E.1. or II.E.2. above are authorized immediately following compliance with the applicable conditions of Part II.E.1. or II.E.2. Secondary operators of large construction activities as described in Part II.E.3. above are authorized immediately following compliance with the applicable conditions in Part II.E.3. For activities located in areas regulated by 30 TAC Chapter 213, related to the Edwards Aquifer, this authorization to discharge is separate from the requirements of the operator's responsibilities under that rule. Construction may not commence for sites regulated under 30 TAC Chapter 213 until all applicable requirements of that rule are met.

(b) Primary operators of large construction activities as described in Part II.E.3. above are provisionally authorized seven (7) days from the date that a completed NOI is postmarked for delivery to the TCEQ, unless otherwise notified by the executive director. If electronic submission of the NOI is provided, and unless otherwise notified by the executive director, primary operators are authorized immediately following confirmation of receipt of the NOI by the TCEQ. Authorization is non-provisional when the executive director finds the NOI is administratively complete and an authorization number is issued for the activity. For activities located in areas regulated by 30 TAC Chapter 213, related to the Edwards Aquifer, this authorization to discharge is separate from the requirements of the operator's responsibilities under that rule. Construction may not commence for sites regulated under 30 TAC Chapter 213 until all applicable requirements of that rule are met.

(c) Operators are not prohibited from submitting late NOIs or posting late notices to obtain authorization under this general permit. The TCEQ reserves the right to take appropriate enforcement actions for any unpermitted activities that may have occurred between the time construction commenced and authorization was obtained.

6. Notice of Change (NOC)

If relevant information provided in the NOI changes, an NOC must be submitted at least 14 days before the change occurs, if possible. Where 14-day advance notice is not possible, the operator must submit an NOC within 14 days of discovery of the change. If

the operator becomes aware that it failed to submit any relevant facts or submitted incorrect information in an NOI, the correct information must be provided to the executive director in an NOC within 14 days after discovery. The NOC shall be submitted on a form provided by the executive director, or by letter if an NOC form is not available. A copy of the NOC must also be provided to the operator of any MS4 receiving the discharge, and a list must be included in the SWP3 that includes the names and addresses of all MS4 operators receiving a copy.

Information that may be included on an NOC includes, but is not limited to, the following: the description of the construction project, an increase in the number of acres disturbed (for increases of one or more acres), or the operator name. A transfer of operational control from one operator to another, including a transfer of the ownership of a company, may not be included in an NOC.

A transfer of ownership of a company includes changes to the structure of a company, such as changing from a partnership to a corporation or changing corporation types, so that the filing number (or charter number) that is on record with the Texas Secretary of State must be changed.

An NOC is not required for notifying TCEQ of a decrease in the number of acres disturbed. This information must be included in the SWP3 and retained on site.

7. Signatory Requirement for NOI Forms, Notice of Termination (NOT) Forms, NOC Letters, and Construction Site Notices

NOI forms, NOT forms, NOC letters, and Construction Site Notices that require a signature must be signed according to 30 TAC § 305.44 (relating to Signatories for Applications).

8. Contents of the NOI

The NOI form shall require, at a minimum, the following information:

(a) the TPDES CGP authorization number for existing authorizations under this general permit, where the operator submits an NOI to renew coverage within 90 days of the effective date of this general permit;

(b) the name, address, and telephone number of the operator filing the NOI for permit coverage;

(c) the name (or other identifier), address, county, and latitude/longitude of the construction project or site;

(d) the number of acres that will be disturbed by the applicant;

(e) confirmation that the project or site will not be located on Indian Country lands;

(f) confirmation that a SWP3 has been developed in accordance with this general permit, that it will be implemented prior to construction, and that it is compliant with any applicable local sediment and erosion control plans; for multiple operators who prepare a shared SWP3, the confirmation for an operator may be limited to its obligations under the SWP3 provided all obligations are confirmed by at least one operator;

(g) name of the receiving water(s);

(h) the classified segment number for each classified segment that receives discharges from the regulated construction activity (if the discharge is not directly to a classified segment, then the classified segment number of the first classified segment that those discharges reach); and

(i) the name of all surface waters receiving discharges from the regulated construction activity that are on the latest EPA-approved CWA § 303(d) List of impaired waters.

Section F. Terminating Coverage

1. Notice of Termination (NOT) Required

Each operator that has submitted an NOI for authorization under this general permit must apply to terminate that authorization following the conditions described in this section of the general permit. Authorization must be terminated by submitting an NOT on a form supplied by the executive director. Authorization to discharge under this general permit terminates at midnight on the day the NOT is postmarked for delivery to the TCEQ. If electronic submission of the NOT is provided, authorization to discharge under this permit terminates immediately following confirmation of receipt of the NOT by the TCEQ. Compliance with the conditions and requirements of this permit is required until an NOT is submitted.

The NOT must be submitted to TCEQ, and a copy of the NOT provided to the operator of any MS4 receiving the discharge (with a list in the SWP3 of the names and addresses of all MS4 operators receiving a copy), within 30 days after any of the following conditions are met:

(a) final stabilization has been achieved on all portions of the site that are the responsibility of the permittee;

(b) a transfer of operational control has occurred (See Section II.F.4. below); or

(c) the operator has obtained alternative authorization under an individual TPDES permit or alternative TPDES general permit.

2. Minimum Contents of the NOT

The NOT form shall require, at a minimum, the following information:

(a) if authorization was granted following submission of an NOI, the permittee's site-specific TPDES authorization number for the construction site;

(b) an indication of whether the construction activity is completed or if the permittee is simply no longer an operator at the site;

(c) the name, address, and telephone number of the permittee submitting the NOT;

(d) the name (or other identifier), address, county, and location (latitude/longitude) of the construction project or site; and

(e) a signed certification that either all stormwater discharges requiring authorization under this general permit will no longer occur, or that the applicant is no longer the operator of the facility or construction site, and that all temporary structural erosion controls have either been removed, will be removed on a schedule defined in the SWP3, or have been transferred to a new operator if the new operator has applied for permit coverage. Erosion controls that are designed to remain in place for an indefinite period, such as mulches and fiber mats, are not required to be removed or scheduled for removal.

3. Termination of Coverage for Small Construction Sites and for Secondary Operators at Large Construction Sites

Each operator that has obtained automatic authorization and has not been required to submit an NOI must remove the site notice upon meeting any of the conditions listed below, complete the applicable portion of the site notice related to removal of the site notice, and submit a copy of the completed site notice to the operator of any MS4 receiving the discharge (or provide alternative notification as allowed by the MS4 operator, with documentation of such notification included in the SWP3), within 30 days of meeting any of the following conditions:

(a) final stabilization has been achieved on all portions of the site that are the responsibility of the permittee;

(b) a transfer of operational control has occurred (See Section II.F.4. below); or

(c) the operator has obtained alternative authorization under an individual or general TPDES permit.

Authorization to discharge under this general permit terminates immediately upon removal of the applicable site notice. Compliance with the conditions and requirements of this permit is required until the site notice is removed.

4. Transfer of Operational Control

Coverage under this general permit is not transferable. A transfer of operational control includes changes to the structure of a company, such as changing from a partnership to a corporation, or changing to a different corporation type such that a different filing (or charter) number is established with the Texas Secretary of State.

When the primary operator of a large construction activity changes or operational control is transferred, the original operator must submit an NOT within ten (10) days prior to the date that responsibility for operations terminates, and the new operator must submit an NOI at least ten (10) days prior to the transfer of operational control, in accordance with condition (a) or (b) below. A copy of the NOT must be provided to the operator of any MS4 receiving the discharge in accordance with Section II.F.1. above.

Operators of regulated construction activities who are not required to submit an NOI must remove the original site notice, and the new operator must post the required site notice prior to the transfer of operational control, in accordance with condition (a) or (b) below. A copy of the completed site notice must be provided to the operator of any MS4 receiving the discharge, in accordance with Section II.F.3. above.

A transfer of operational control occurs when either of the following criteria is met:

(a) Another operator has assumed control over all areas of the site that have not been finally stabilized; and all silt fences and other temporary erosion controls have either been removed, scheduled for removal as defined in the SWP3, or transferred to a new operator, provided that the permitted operator has attempted to notify the new operator in writing of the requirement to obtain permit coverage. Record of this notification (or attempt at notification) shall be retained by the operator in accordance with Part VI of this permit. Erosion controls that are designed to remain in place for an indefinite period, such as mulches and fiber mats, are not required to be removed or scheduled for removal.

(b) A homebuilder has purchased one or more lots from an operator who obtained coverage under this general permit for a common plan of development or sale. The homebuilder is considered a new operator and shall comply with the requirements listed above, including the development of a SWP3 if necessary. Under these circumstances, the homebuilder is only responsible for compliance with the general permit requirements as they apply to lot(s) it has operational control over, and the original operator remains responsible for common controls or discharges, and must amend its SWP3 to remove the lot(s) transferred to the homebuilder.

Section G. Waivers from Coverage

The executive director may waive the otherwise applicable requirements of this general permit for stormwater discharges from small construction activities under the terms and conditions described in this section.

1. Waiver Applicability and Coverage

Operators of small construction activities may apply for and receive a waiver from the requirements to obtain authorization under this general permit, where all of the following conditions are met. This waiver from coverage does not apply to non-stormwater discharges. The operator must insure that any non-stormwater discharges are either authorized under a separate permit or authorization, or are not considered to be a wastewater.

(a) the calculated rainfall erosivity (R) factor for the entire period of the construction project is less than five (5);

(b) the operator submits to the TCEQ a signed waiver certification form, supplied by the executive director, certifying that the construction activity will commence and be completed within a period when the value of the calculated R factor is less than five (5); and

(c) the waiver certification form is postmarked for delivery to the TCEQ at least seven (7) days before construction activity begins or, if electronic filing is available, then any time following the receipt of written confirmation from TCEQ that a complete electronic application was submitted and acknowledged.

2. Steps to Obtaining a Waiver

The construction site operator may calculate the R factor to request a waiver using the following steps:

(a) Estimate the construction start date and the construction end date. The construction end date is the date that final stabilization will be achieved.

(b) Find the appropriate Erosivity Index (EI) zone in Appendix B of this permit.

(c) Find the EI percentage for the project period by adding the results for each period of the project using the table provided in Appendix D of this permit, in EPA Fact Sheet 2.1, or in USDA Handbook 703, by subtracting the start value from the end value to find the percent EI for the site.

(d) Refer to the Isoerodent Map (Appendix C of this permit) and interpolate the annual isoerodent value for the proposed construction location.

(e) Multiply the percent value obtained in Step (c) above by the annual isoerodent value obtained in Step (d). This is the R factor for the proposed project. If the value is less than 5, then a waiver may be obtained. If the value is five (5) or more, then a waiver may not be obtained, and the operator must obtain coverage under Part II.E.2. of this permit.

Alternatively, the operator may calculate a site-specific R factor utilizing the following online calculator: http://ei.tamu.edu/index.html, or using another available resource.

The waiver certification form is not required to be posted at the small construction site.

3. Effective Date of Waiver

Operators of small construction activities are provisionally waived from the otherwise applicable requirements of this general permit seven (7) days from the date that a completed waiver certification form is postmarked for delivery to TCEQ, or immediately upon receiving confirmation of approval of an electronic submittal, if electronic form submittals are available.

4. Activities Extending Beyond the Waiver Period

If a construction activity extends beyond the approved waiver period due to circumstances beyond the control of the operator, the operator must either:

(a) recalculate the R factor using the original start date and a new projected ending date, and if the R factor is still under five (5), submit a new waiver certification form at least two (2) days before the end of the original waiver period; or

(b) obtain authorization under this general permit according to the requirements delineated in either Part II.E.2. or Part II.E.3. before the end of the approved waiver period.

Section H. Alternative TPDES Permit Coverage

1. Individual Permit Alternative

Any discharge eligible for coverage under this general permit may alternatively be authorized under an individual TPDES permit according to 30 TAC §305 (relating to Consolidated Permits). Applications for individual permit coverage should be submitted at least three hundred and thirty (330) days prior to commencement of construction activities to ensure timely authorization.

2. Individual Permit Required

The executive director may suspend an authorization or deny an NOI in accordance with the procedures set forth in 30 TAC §205 (relating to General Permits for Waste Discharges), including the requirement that the executive director provide written notice to the permittee. The executive director may require an operator of a construction site, otherwise eligible for authorization under this general permit, to apply for an individual TPDES permit in the following circumstances:

(a) the conditions of an approved TMDL or TMDL I-Plan on the receiving water;

(b) the activity being determined to cause a violation of water quality standards or being found to cause, or contribute to, the loss of a designated use of surface water in the state: and

(c) any other consideration defined in 30 TAC Chapter 205 (relating to General Permits for Waste Discharges) including 30 TAC Chapter 205.4(c)(3)(D), which allows the commission to deny authorization under the general permit and require an individual permit if a discharger "has been determined by the executive director to have been out of compliance with any rule, order, or permit of the commission, including non-payment of fees assessed by the executive director."

Additionally, the executive director may cancel, revoke, or suspend authorization to discharge under this general permit based on a finding of historical and significant noncompliance with the provisions of this general permit, relating to 30 TAC §60.3 (Use of Compliance History). Denial of authorization to discharge under this general permit or suspension of a permittee's authorization under this general permit shall be done according to commission rules in 30 TAC Chapter 205 (relating to General Permits for Waste Discharges).

3. Alternative Discharge Authorization

Any discharge eligible for authorization under this general permit may alternatively be authorized under a separate general permit according to 30 TAC Chapter 205 (relating to General Permits for Waste Discharges), if applicable.

Section I. Permit Expiration

1. This general permit is effective for a term not to exceed five (5) years. All active discharge authorizations expire on the date provided on page one (1) of this permit. Following public notice and comment, as provided by 30 TAC §205.3 (relating to

Public Notice, Public Meetings, and Public Comment), the commission may amend, revoke, cancel, or renew this general permit.

2. If the executive director publishes a notice of the intent to renew or amend this general permit before the expiration date, the permit will remain in effect for existing, authorized discharges until the commission takes final action on the permit. Upon issuance of a renewed or amended permit, permittees may be required to submit an NOI within 90 days following the effective date of the renewed or amended permit, unless that permit provides for an alternative method for obtaining authorization.
3. If the commission does not propose to reissue this general permit within 90 days before the expiration date, permittees shall apply for authorization under an individual permit or an alternative general permit. If the application for an individual permit is submitted before the expiration date, authorization under this expiring general permit remains in effect until the issuance or denial of an individual permit. No new NOIs will be accepted nor new authorizations honored under the general permit after the expiration date.

Part III. Stormwater Pollution Prevention Plans (SWP3)

All regulated construction site operators shall prepare an SWP3, prior to submittal of an NOI, to address discharges authorized under Parts II.E.2. and II.E.3. of this general permit that will reach Waters of the U.S., including discharges to MS4s and privately owned separate storm sewer systems that drain to Waters of the U.S., to identify and address potential sources of pollution that are reasonably expected to affect the quality of discharges from the construction site, including off-site material storage areas, overburden and stockpiles of dirt, borrow areas, equipment staging areas, vehicle repair areas, fueling areas, etc., used solely by the permitted project. The SWP3 must describe the implementation of practices that will be used to minimize to the extent practicable the discharge of pollutants in stormwater associated with construction activity and non-stormwater discharges described in Part II.A.3., in compliance with the terms and conditions of this permit.

Individual operators at a site may develop separate SWP3s that cover only their portion of the project, provided reference is made to the other operators at the site. Where there is more than one SWP3 for a site, permittees must coordinate to ensure that BMPs and controls are consistent and do not negate or impair the effectiveness of each other. Regardless of whether a single comprehensive SWP3 is developed or separate SWP3s are developed for each operator, it is the responsibility of each operator to ensure compliance with the terms and conditions of this general permit in the areas of the construction site where that operator has control over construction plans and specifications or day-to-day operations.

Section A. Shared SWP3 Development

For more effective coordination of BMPs and opportunities for cost sharing, a cooperative effort by the different operators at a site is encouraged. Operators must independently obtain authorization, but may work together to prepare and implement a single, comprehensive SWP3 for the entire construction site.

1. The SWP3 must clearly list the name and, for large construction activities, the general permit authorization numbers, for each operator that participates in the shared SWP3. Until the TCEQ responds to receipt of the NOI with a general permit authorization number, the SWP3 must specify the date that the NOI was submitted to TCEQ by each operator. Each operator participating in the shared plan must also sign the SWP3.

2. The SWP3 must clearly indicate which operator is responsible for satisfying each shared requirement of the SWP3. If the responsibility for satisfying a requirement is not described in the plan, then each permittee is entirely responsible for meeting the requirement within the boundaries of the construction site where they perform construction activities. The SWP3 must clearly describe responsibilities for meeting each requirement in shared or common areas.
3. The SWP3 may provide that one operator is responsible for preparation of a SWP3 in compliance with the CGP, and another operator is responsible for implementation of the SWP3 at the project site.

Section B. Responsibilities of Operators

1. Secondary Operators and Primary Operators with Control Over Construction Plans and Specifications

All secondary operators and primary operators with control over construction plans and specifications shall:

(a) ensure the project specifications allow or provide that adequate BMPs are developed to meet the requirements of Part III of this general permit;

(b) ensure that the SWP3 indicates the areas of the project where they have control over project specifications, including the ability to make modifications in specifications;

(c) ensure that all other operators affected by modifications in project specifications are notified in a timely manner so that those operators may modify their BMP s as necessary to remain compliant with the conditions of this general permit; and

(d) ensure that the SWP3 for portions of the project where they are operators indicates the name and site-specific TPDES authorization number(s) for operators with the day-to-day operational control over those activities necessary to ensure compliance with the SWP3 and other permit conditions. If the party with day-to-day operational control has not been authorized or has abandoned the site, the person with control over project specifications is considered to be the responsible party until the authority is transferred to another party and the SWP3 is updated.

2. Primary Operators with Day-to-Day Operational Control

Primary operators with day-to-day operational control of those activities at a project that are necessary to ensure compliance with an SWP3 and other permit conditions must ensure that the SWP3 accomplishes the following requirements:

(a) meets the requirements of this general permit for those portions of the project where they are operators;

(b) identifies the parties responsible for implementation of BMPs described in the SWP3;

(c) indicates areas of the project where they have operational control over day-to-day activities; and

(d) includes, for areas where they have operational control over day-to-day activities, the name and site-specific TPDES authorization number of the parties with control over project specifications, including the ability to make modifications in specifications.

Section C. Deadlines for SWP3 Preparation, Implementation, and Compliance

The SWP3 must be prepared prior to obtaining authorization under this general permit, and implemented prior to commencing construction activities that result in soil

disturbance. The SWP3 must be prepared so that it provides for compliance with the terms and conditions of this general permit.

Section D. Plan Review and Making Plans Available

1. The SWP3 must be retained on-site at the construction site or, if the site is inactive or does not have an on-site location to store the plan, a notice must be posted describing the location of the SWP3. The SWP3 must be made readily available at the time of an on-site inspection to: the executive director; a federal, state, or local agency approving sediment and erosion plans, grading plans, or stormwater management plans; local government officials; and the operator of a municipal separate storm sewer receiving discharges from the site. If the SWP3 is retained off-site, then it shall be made available as soon as reasonably possible. In most instances, it is reasonable that the SWP3 shall be made available within 24 hours of the request.
2. A primary operator of a large construction activity must post the TCEQ site notice near the main entrance of the construction site. An operator of a small construction activity seeking authorization under this general permit and a secondary operator of a large construction activity must post the TCEQ site notice required in Part II.E.1., 2., or 3. of this general permit in order to obtain authorization. If the construction project is a linear construction project, such as a pipeline or highway, the notices must be placed in a publicly accessible location near where construction is actively underway. Notices for these linear sites may be relocated, as necessary, along the length of the project. The notices must be readily available for viewing by the general public; local, state, and federal authorities; and contain the following information:
   (a) the site-specific TPDES authorization number for the project if assigned;
   (b) the operator name, contact name, and contact phone number;
   (c) a brief description of the project; and
   (d) the location of the SWP3.
3. This permit does not provide the general public with any right to trespass on a construction site for any reason, including inspection of a site; nor does this permit require that permittees allow members of the general public access to a construction site.

Section E. Revisions and Updates to SWP3s

The permittee must revise or update the SWP3 whenever the following occurs:

1. a change in design, construction, operation, or maintenance that has a significant effect on the discharge of pollutants and that has not been previously addressed in the SWP3;
2. changing site conditions based on updated plans and specifications, new operators, new areas of responsibility, and changes in BMPs; or
3. results of inspections or investigations by site operators, operators of a municipal separate storm sewer system receiving the discharge, authorized TCEQ personnel, or a federal, state or local agency approving sediment and erosion plans indicate the SWP3 is proving ineffective in eliminating or significantly minimizing pollutants in discharges authorized under this general permit.

Section F. Contents of SWP3

The SWP3 must include, at a minimum, the information described in this section and must comply with the construction and development effluent guidelines in Part III, Section G of the general permit.

1. A site or project description, which includes the following information:
   (a) a description of the nature of the construction activity;
   (b) a list of potential pollutants and their sources;
   (c) a description of the intended schedule or sequence of activities that will disturb soils for major portions of the site, including estimated start dates and duration of activities;
   (d) the total number of acres of the entire property and the total number of acres where construction activities will occur, including off-site material storage areas, overburden and stockpiles of dirt, and borrow areas that are authorized under the permittee's NOI;
   (e) data describing the soil or the quality of any discharge from the site;
   (f) a map showing the general location of the site (e.g. a portion of a city or county map);
   (g) a detailed site map (or maps) indicating the following:
      (i) drainage patterns and approximate slopes anticipated after major grading activities;
      (ii) areas where soil disturbance will occur;
      (iii) locations of all controls and buffers, either planned or in place;
      (iv) locations where temporary or permanent stabilization practices are expected to be used;
      (v) locations of construction support activities, including off-site activities, that are authorized under the permittee's NOI, including material, waste, borrow, fill, or equipment or chemical storage areas;
      (vi) surface waters (including wetlands) either at, adjacent, or in close proximity to the site, and also indicating those that are impaired waters;
      (vii) locations where stormwater discharges from the site directly to a surface water body or a municipal separate storm sewer system;
      (viii) vehicle wash areas; and
      (ix) designated points on the site where vehicles will exit onto paved roads (for instance, this applies to construction transition from unstable dirt areas to exterior paved roads).

      Where the amount of information required to be included on the map would result in a single map being difficult to read and interpret, the operator shall develop a series of maps that collectively include the required information.
   (h) the location and description of support activities authorized under the permittee's NOI, including asphalt plants, concrete plants, and other activities providing support to the construction site that is authorized under this general permit;
   (i) the name of receiving waters at or near the site that may be disturbed or that may receive discharges from disturbed areas of the project;
   (j) a copy of this TPDES general permit;
   (k) the NOI and acknowledgement certificate for primary operators of large construction sites, and the site notice for small construction sites and for secondary operators of large construction sites;
   (l) stormwater and allowable non-stormwater discharge locations, including storm drain inlets on site and in the immediate vicinity of the construction site; and

(m) locations of all pollutant-generating activities, such as paving operations; concrete, paint and stucco washout and water disposal; solid waste storage and disposal; and dewatering operations.

2. A description of the BMPs that will be used to minimize pollution in runoff.

The description must identify the general timing or sequence for implementation. At a minimum, the description must include the following components:

(a) General Requirements

(i) Erosion and sediment controls must be designed to retain sediment on-site to the extent practicable with consideration for local topography, soil type, and rainfall.

(ii) Control measures must be properly selected, installed, and maintained according to the manufacturer's or designer's specifications.

(iii) Controls must be developed to minimize the offsite transport of litter, construction debris, and construction materials.

(b) Erosion Control and Stabilization Practices

The SWP3 must include a description of temporary and permanent erosion control and stabilization practices for the site, compliant with the requirements of Part III.G.1 and G.2 of this general permit, including a schedule of when the practices will be implemented. Site plans should ensure that existing vegetation is preserved where it is possible.

(i) Erosion control and stabilization practices may include but are not limited to: establishment of temporary or permanent vegetation, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of existing trees and vegetation, slope texturing, temporary velocity dissipation devices, flow diversion mechanisms, and other similar measures.

(ii) The following records must be maintained and either attached to or referenced in the SWP3, and made readily available upon request to the parties listed in Part III.D.1 of this general permit:

(A) the dates when major grading activities occur;

(B) the dates when construction activities temporarily or permanently cease on a portion of the site; and

(C) the dates when stabilization measures are initiated.

(iii) Erosion control and stabilization measures must be initiated immediately in portions of the site where construction activities have temporarily ceased and will not resume for a period exceeding 14 calendar days. Stabilization measures that provide a protective cover must be initiated immediately in portions of the site where construction activities have permanently ceased. The term "immediately" is used to define the deadline for initiating stabilization measures. In the context of this requirement, "immediately" means as soon as practicable, but no later than the end of the next work day, following the day when the earth-disturbing activities have temporarily or permanently ceased. Except as provided in (A) through (D) below, these measures must be completed as soon as practicable, but no more than 14 calendar days after the initiation of soil stabilization measures:

(A) Where the immediate initiation of stabilization measures after construction activity temporarily or permanently ceased is precluded

by snow cover or frozen ground conditions, stabilization measures must be initiated as soon as practicable.

(B) In arid areas, semi-arid areas, or drought-stricken areas where the immediate initiation of stabilization measures after construction activity has temporarily or permanently ceased or is precluded by arid conditions, erosion control and stabilization measures must be initiated as soon as practicable. Where vegetative controls are not feasible due to arid conditions, the operator shall immediately install, and within 14 calendar days of a temporary or permanent cessation of work in any portion of the site complete, non-vegetative erosion controls. If non-vegetative controls are not feasible, the operator shall install temporary sediment controls as required in Paragraph (C) below.

(C) In areas where temporary stabilization measures are infeasible, the operator may alternatively utilize temporary perimeter controls. The operator must document in the SWP3 the reason why stabilization measures are not feasible, and must demonstrate that the perimeter controls will retain sediment on site to the extent practicable. The operator must continue to inspect the BMPs at the frequency established in Section III.F.7.(a) for unstabilized sites.

(D) If the initiation or completion of vegetative stabilization is affected by circumstances beyond the control of the permittee, vegetative stabilization must be initiated or completed as soon as conditions or circumstances allow it on the site. The requirement to initiate stabilization is triggered as soon as it is known with reasonable certainty that work will be stopped for 14 or more additional calendar days.

(iv) Final stabilization must be achieved prior to termination of permit coverage.

(v) TCEQ does not expect that temporary or permanent stabilization measures to be applied to areas that are intended to be left un-vegetated or un-stabilized following construction (e.g., dirt access roads, utility pole pads, areas being used for storage of vehicles, equipment, or materials).

(c) Sediment Control Practices

The SWP3 must include a description of any sediment control practices used to remove eroded soils from stormwater runoff, including the general timing or sequence for implementation of controls.

(i) Sites With Drainage Areas of Ten or More Acres

(A) Sedimentation Basin(s)

(1) A sedimentation basin is required, where feasible, for a common drainage location that serves an area with ten (10) or more acres disturbed at one time. A sedimentation basin may be temporary or permanent, and must provide sufficient storage to contain a calculated volume of runoff from a 2-year, 24-hour storm from each disturbed acre drained. When calculating the volume of runoff from a 2-year, 24-hour storm event, it is not required to include the flows from offsite areas and flow from onsite areas that are either undisturbed or have already undergone permanent stabilization, if these flows are diverted around both the disturbed areas of the site and the sediment basin. Capacity calculations shall be included in the SWP3.

(2) Where rainfall data is not available or a calculation cannot be performed, the sedimentation basin must provide at least 3,600 cubic feet of storage per acre drained until final stabilization of the site.

(3) If a sedimentation basin is not feasible, then the permittee shall provide equivalent control measures until final stabilization of the site. In determining whether installing a sediment basin is feasible, the permittee may consider factors such as site soils, slope, available area, public safety, precipitation patterns, site geometry, site vegetation, infiltration capacity, geotechnical factors, depth to groundwater, and other similar considerations. The permittee shall document the reason that the sediment basins are not feasible, and shall utilize equivalent control measures, which may include a series of smaller sediment basins.

(4) Unless infeasible, when discharging from sedimentation basins and impoundments, the permittee shall utilize outlet structures that withdraw water from the surface.

(B) Perimeter Controls: At a minimum, silt fences, vegetative buffer strips, or equivalent sediment controls are required for all down slope boundaries of the construction area, and for those side slope boundaries deemed appropriate as dictated by individual site conditions.

(ii) Controls for Sites With Drainage Areas Less than Ten Acres:

(A) Sediment traps and sediment basins may be used to control solids in stormwater runoff for drainage locations serving less than ten (10) acres. At a minimum, silt fences, vegetative buffer strips, or equivalent sediment controls are required for all down slope boundaries of the construction area, and for those side slope boundaries deemed appropriate as dictated by individual site conditions.

(B) Alternatively, a sediment basin that provides storage for a calculated volume of runoff from a 2-year, 24-hour storm from each disturbed acre drained may be utilized. Where rainfall data is not available or a calculation cannot be performed, a temporary or permanent sediment basin providing 3,600 cubic feet of storage per acre drained may be provided. If a calculation is performed, then the calculation shall be included in the SWP3.

(C) If sedimentation basins or impoundments are used, the permittee shall comply with the requirements in Part III.G.6 of this general permit.

3. Description of Permanent Stormwater Controls

A description of any measures that will be installed during the construction process to control pollutants in stormwater discharges that may occur after construction operations have been completed must be included in the SWP3. Permittees are only responsible for the installation and maintenance of stormwater management measures prior to final stabilization of the site or prior to submission of an NOT.

4. Other Required Controls and BMPs

(a) Permittees shall minimize, to the extent practicable, the off-site vehicle tracking of sediments and the generation of dust. The SWP3 shall include a description of controls utilized to accomplish this requirement.

(b) The SWP3 must include a description of construction and waste materials expected to be stored on-site and a description of controls to minimize pollutants from these materials.

(c) The SWP3 must include a description of potential pollutant sources from areas other than construction (such as stormwater discharges from dedicated asphalt plants and dedicated concrete batch plants), and a description of controls and measures that will be implemented at those sites to minimize pollutant discharges.

(d) Permittees shall place velocity dissipation devices at discharge locations and along the length of any outfall channel (i.e., runoff conveyance) to provide a non-erosive flow velocity from the structure to a water course, so that the natural physical and biological characteristics and functions are maintained and protected.

(e) Permittees shall design and utilize appropriate controls to minimize the offsite transport of suspended sediments and other pollutants if it is necessary to pump or channel standing water from the site.

(f) Permittees shall ensure that all other required controls and BMPs comply with all of the requirements of Part III.G of this general permit.

5. Documentation of Compliance with Approved State and Local Plans

(a) Permittees must ensure that the SWP3 is consistent with requirements specified in applicable sediment and erosion site plans or site permits, or stormwater management site plans or site permits approved by federal, state, or local officials.

(b) SWP3s must be updated as necessary to remain consistent with any changes applicable to protecting surface water resources in sediment erosion site plans or site permits, or stormwater management site plans or site permits approved by state or local official for which the permittee receives written notice.

(c) If the permittee is required to prepare a separate management plan, including but not limited to a WPAP or Contributing Zone Plan in accordance with 30 TAC Chapter 213 (related to the Edwards Aquifer), then a copy of that plan must be either included in the SWP3 or made readily available upon request to authorized personnel of the TCEQ. The permittee shall maintain a copy of the approval letter for the plan in its SWP3.

6. Maintenance Requirements

(a) All protective measures identified in the SWP3 must be maintained in effective operating condition. If, through inspections or other means, the permittee determines that BMPs are not operating effectively, then the permittee shall perform maintenance as necessary to maintain the continued effectiveness of stormwater controls, and prior to the next rain event if feasible. If maintenance prior to the next anticipated storm event is impracticable, the reason shall be documented in the SWP3 and maintenance must be scheduled and accomplished as soon as practicable. Erosion and sediment controls that have been intentionally disabled, run-over, removed, or otherwise rendered ineffective must be replaced or corrected immediately upon discovery.

(b) If periodic inspections or other information indicates a control has been used incorrectly, is performing inadequately, or is damaged, then the operator shall replace or modify the control as soon as practicable after making the discovery.

(c) Sediment must be removed from sediment traps and sedimentation ponds no later than the time that design capacity has been reduced by 50%. For perimeter

controls such as silt fences, berms, etc., the trapped sediment must be removed before it reaches 50% of the above-ground height.

(d) If sediment escapes the site, accumulations must be removed at a frequency that minimizes off-site impacts, and prior to the next rain event, if feasible. If the permittee does not own or operate the off-site conveyance, then the permittee shall work with the owner or operator of the property to remove the sediment.

7. Inspections of Controls

(a) Personnel provided by the permittee must inspect disturbed areas of the construction site that have not been finally stabilized, areas used for storage of materials that are exposed to precipitation, discharge locations, and structural controls for evidence of, or the potential for, pollutants entering the drainage system. Personnel conducting these inspections must be knowledgeable of this general permit, familiar with the construction site, and knowledgeable of the SWP3 for the site. Sediment and erosion control measures identified in the SWP3 must be inspected to ensure that they are operating correctly. Locations where vehicles enter or exit the site must be inspected for evidence of off-site sediment tracking. Inspections must be conducted at least once every 14 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater.

Where sites have been finally or temporarily stabilized or where runoff is unlikely due to winter conditions (e.g. site is covered with snow, ice, or frozen ground exists), inspections must be conducted at least once every month. In arid, semi-arid, or drought-stricken areas, inspections must be conducted at least once every month and within 24 hours after the end of a storm event of 0.5 inches or greater. The SWP3 must also contain a record of the total rainfall measured, as well as the approximate beginning and ending dates of winter or drought conditions resulting in monthly frequency of inspections.

As an alternative to the above-described inspection schedule of once every 14 calendar days and within 24 hours of a storm event of 0.5 inches or greater, the SWP3 may be developed to require that these inspections will occur at least once every seven (7) calendar days. If this alternative schedule is developed, then the inspection must occur regardless of whether or not there has been a rainfall event since the previous inspection.

The inspections may occur on either schedule provided that the SWP3 reflects the current schedule and that any changes to the schedule are conducted in accordance with the following provisions: the schedule may be changed a maximum of one time each month, the schedule change must be implemented at the beginning of a calendar month, and the reason for the schedule change must be documented in the SWP3 (e.g., end of "dry" season and beginning of "wet" season).

(b) Utility line installation, pipeline construction, and other examples of long, narrow, linear construction activities may provide inspection personnel with limited access to the areas described in Part III.F.7.(a) above. Inspection of these areas could require that vehicles compromise temporarily or even permanently stabilized areas, cause additional disturbance of soils, and increase the potential for erosion. In these circumstances, controls must be inspected at least once every 14 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater, but representative inspections may be performed. For representative inspections, personnel must inspect controls along the construction site for 0.25 mile above and below each access point where a roadway, undisturbed right-of-way, or other similar feature intersects the construction site and allows access to the areas described in Part III.F.7.(a)

above. The conditions of the controls along each inspected 0.25 mile portion may be considered as representative of the condition of controls along that reach extending from the end of the 0.25 mile portion to either the end of the next 0.25 mile inspected portion, or to the end of the project, whichever occurs first.

As an alternative to the above-described inspection schedule of once every 14 calendar days and within 24 hours of a storm event of 0.5 inches or greater, the SWP3 may be developed to require that these inspections will occur at least once every seven (7) calendar days. If this alternative schedule is developed, the inspection must occur regardless of whether or not there has been a rainfall event since the previous inspection. The inspections may occur on either schedule provided that the SWP3 reflects the current schedule and that any changes to the schedule are conducted in accordance with the following provisions: the schedule may be changed a maximum of one time each month, the schedule change must be implemented at the beginning of a calendar month, and the reason for the schedule change must be documented in the SWP3 (e.g., end of "dry" season and beginning of "wet" season).

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

(d) The SWP3 must be modified based on the results of inspections, as necessary, to better control pollutants in runoff. Revisions to the SWP3 must be completed within seven (7) calendar days following the inspection. If existing BMPs are modified or if additional BMPs are necessary, an implementation schedule must be described in the SWP3 and wherever possible those changes implemented before the next storm event. If implementation before the next anticipated storm event is impracticable, these changes must be implemented as soon as practicable.

(e) A report summarizing the scope of the inspection, the date(s) of the inspection, and major observations relating to the implementation of the SWP3 must be made and retained as part of the SWP3. Major observations should include: The locations of discharges of sediment or other pollutants from the site; locations of BMPs that need to be maintained; locations of BMPs that failed to operate as designed or proved inadequate for a particular location; and locations where additional BMPs are needed.

Actions taken as a result of inspections must be described within, and retained as a part of, the SWP3. Reports must identify any incidents of non-compliance. Where a report does not identify any incidents of non-compliance, the report must contain a certification that the facility or site is in compliance with the SWP3 and this permit. The report must be signed by the person and in the manner required by 30 TAC §305.128 (relating to Signatories to Reports).

The names and qualifications of personnel making the inspections for the permittee may be documented once in the SWP3 rather than being included in each report.

8. The SWP3 must identify and ensure the implementation of appropriate pollution prevention measures for all eligible non-stormwater components of the discharge, as listed in Part II.A.3. of this permit.
9. The SWP3 must include the information required in Part III.B. of this general permit.
10. The SWP3 must include pollution prevention procedures that comply with Part III.G.4 of this general permit.

Section G. Erosion and Sediment Control Requirements Applicable to All Sites

Except as provided in 40 CFR §§125.30-125.32, any discharge regulated under this general permit, with the exception of sites that obtained waivers based on low rainfall erosivity, must achieve, at a minimum, the following effluent limitations representing the degree of effluent reduction attainable by application of the best practicable control technology currently available (BPT).

1. *Erosion and sediment controls.* Design, install, and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants. At a minimum, such controls must be designed, installed, and maintained to:

   (a) Control stormwater volume and velocity within the site to minimize soil erosion;

   (b) If any stormwater flow will be channelized at the site, stormwater controls must be designed to control both peak flowrates and total stormwater volume to minimize erosion at outlets and to minimize downstream channel and streambank erosion;

   (c) Minimize the amount of soil exposed during construction activity;

   (d) Minimize the disturbance of steep slopes;

   (e) Minimize sediment discharges from the site. The design, installation, and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting stormwater runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site;

   (f) If earth disturbance activities are located in close proximity to a surface water, provide and maintain appropriate natural buffers if feasible and as necessary, around surface waters, depending on site-specific topography, sensitivity, and proximity to water bodies. Direct stormwater to vegetated areas to increase sediment removal and maximize stormwater infiltration. If providing buffers is infeasible, the permittee shall document the reason that natural buffers are not feasible, and shall implement additional erosion and sediment controls to reduce sediment load;

   (g) Preserve native topsoil at the site, unless infeasible; and

   (h) Minimize soil compaction in post-construction pervious areas. In areas of the construction site where final vegetative stabilization will occur or where infiltration practices will be installed, either:

      (1) restrict vehicle and equipment use to avoid soil compaction; or

      (2) prior to seeding or planting areas of exposed soil that have been compacted, use techniques that condition the soils to support vegetative growth, if necessary and feasible;

   (i) TCEQ does not consider stormwater control features (e.g., stormwater conveyance channels, storm drain inlets, sediment basins) to constitute "surface waters" for the purposes of triggering the buffer requirement in Part III.G.(f) above.

2. *Soil stabilization.* Stabilization of disturbed areas must, at a minimum, be initiated immediately whenever any clearing, grading, excavating, or other earth disturbing activities have permanently ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days. In the context of this requirement, "immediately" means as soon as practicable, but no later than the end of the next work day, following the day when the earth-disturbing activities have temporarily or permanently ceased. Temporary

stabilization must be completed no more than 14 calendar days after initiation of soil stabilization measures, and final stabilization must be achieved prior to termination of permit coverage. In arid, semi-arid, and drought-stricken areas where initiating vegetative stabilization measures immediately is infeasible, alternative non-vegetative stabilization measures must be employed as soon as practicable. Refer to Part III.F.2.(b) for complete erosion control and stabilization practice requirements.

3. *Dewatering*. Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, are prohibited, unless managed by appropriate controls.
4. *Pollution prevention measures*. Design, install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants. At a minimum, such measures must be designed, installed, implemented, and maintained to:
   (a) Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;
   (b) Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, and other materials present on the site to precipitation and to stormwater; and
   (c) Minimize the discharge of pollutants from spills and leaks, and implement chemical spill and leak prevention and response procedures.
5. *Prohibited discharges*. The following discharges are prohibited:
   (a) Wastewater from wash out of concrete trucks, unless managed by an appropriate control (see Part V of the general permit);
   (b) Wastewater from wash out and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;
   (c) Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and
   (d) Soaps or solvents used in vehicle and equipment washing.
6. *Surface outlets*. When discharging from basins and impoundments, utilize outlet structures that withdraw water from the surface, unless infeasible.

Part IV. Stormwater Runoff from Concrete Batch Plants

Discharges of stormwater runoff from concrete batch plants at regulated construction sites may be authorized under the provisions of this general permit provided that the following requirements are met for concrete batch plant(s) authorized under this permit. If discharges of stormwater runoff from concrete batch plants are not covered under this general permit, then discharges must be authorized under an alternative general permit or individual permit. This permit does not authorize the discharge or land disposal of any wastewater from concrete batch plants at regulated construction sites. Authorization for these wastes must be obtained under an individual permit or an alternative general permit.

Section A. Benchmark Sampling Requirements

1. Operators of concrete batch plants authorized under this general permit shall sample the stormwater runoff from the concrete batch plants according to the requirements

of this section of this general permit, and must conduct evaluations on the effectiveness of the SWP3 based on the following benchmark monitoring values:

Table 1. Benchmark Parameters

Benchmark Parameter	Benchmark Value	Sampling Frequency	Sample Type
Oil and Grease	15 mg/L	1/quarter (*1) (*2)	Grab (*3)
Total Suspended Solids	100 mg/L	1/quarter (*1) (*2)	Grab (*3)
pH	6.0 – 9.0 Standard Units	1/quarter (*1) (*2)	Grab (*3)
Total Iron	1.3 mg/L	1/quarter (*1) (*2)	Grab (*3)

(*1) When discharge occurs. Sampling is required within the first 30 minutes of discharge. If it is not practicable to take the sample, or to complete the sampling, within the first 30 minutes, sampling must be completed within the first hour of discharge. If sampling is not completed within the first 30 minutes of discharge, the reason must be documented and attached to all required reports and records of the sampling activity.

(*2) Sampling must be conducted at least once during each of the following periods. The first sample must be collected during the first full quarter that a stormwater discharge occurs from a concrete batch plant authorized under this general permit.

January through March

April through June

July through September

October through December

For projects lasting less than one full quarter, a minimum of one sample shall be collected, provided that a stormwater discharge occurred at least once following submission of the NOI or following the date that automatic authorization was obtained under Section II.E.2., and prior to terminating coverage.

(*3) A grab sample shall be collected from the stormwater discharge resulting from a storm event that is at least 0.1 inches of measured precipitation that occurs at least 72 hours from the previously measurable storm event. The sample shall be collected downstream of the concrete batch plant, and where the discharge exits any BMPs utilized to handle the runoff from the batch plant, prior to commingling with any other water authorized under this general permit.

2. The permittee must compare the results of sample analyses to the benchmark values above, and must include this comparison in the overall assessment of the SWP3's effectiveness. Analytical results that exceed a benchmark value are not a violation of this permit, as these values are not numeric effluent limitations. Results of analyses are indicators that modifications of the SWP3 should be assessed and may be necessary to protect water quality. The operator must investigate the cause for each exceedance and must document the results of this investigation in the SWP3 by the end of the quarter following the sampling event.

The operator's investigation must identify the following:

(a) any additional potential sources of pollution, such as spills that might have occurred,

(b) necessary revisions to good housekeeping measures that are part of the SWP3,

(c) additional BMPs, including a schedule to install or implement the BMPs, and

(d) other parts of the SWP3 that may require revisions in order to meet the goal of the benchmark values.

Background concentrations of specific pollutants may also be considered during the investigation. If the operator is able to relate the cause of the exceedance to background concentrations, then subsequent exceedances of benchmark values for that pollutant may be resolved by referencing earlier findings in the SWP3. Background concentrations may be identified by laboratory analyses of samples of stormwater runon to the permitted facility, by laboratory analyses of samples of stormwater run-off from adjacent non-industrial areas, or by identifying the pollutant is a naturally occurring material in soils at the site.

Section B. Best Management Practices (BMPs) and SWP3 Requirements

Minimum SWP3 Requirements – The following are required in addition to other SWP3 requirements listed in this general permit (including, but not limited to Part III.F.7. of this permit):

1. Description of Potential Pollutant Sources - The SWP3 must provide a description of potential sources (activities and materials) that may reasonably be expected to affect the quality of stormwater discharges associated with concrete batch plants authorized under this permit. The SWP3 must describe practices that that will be used to reduce the pollutants in these discharges to assure compliance with this general permit, including the protection of water quality, and must ensure the implementation of these practices.

   The following must be developed, at a minimum, in support of developing this description:

   (a) Drainage – The site map must include the following information:

      (1) the location of all outfalls for stormwater discharges associated with concrete batch plants that are authorized under this permit;

      (2) a depiction of the drainage area and the direction of flow to the outfall(s);

      (3) structural controls used within the drainage area(s);

      (4) the locations of the following areas associated with concrete batch plants that are exposed to precipitation: vehicle and equipment maintenance activities (including fueling, repair, and storage areas for vehicles and equipment scheduled for maintenance); areas used for the treatment, storage, or disposal of wastes; liquid storage tanks; material processing and storage areas; and loading and unloading areas; and

      (5) the locations of the following: any bag house or other dust control device(s); recycle/sedimentation pond, clarifier or other device used for the treatment of facility wastewater (including the areas that drain to the treatment device); areas with significant materials; and areas where major spills or leaks have occurred.

   (b) Inventory of Exposed Materials – A list of materials handled at the concrete batch plant that may be exposed to stormwater and that have a potential to

affect the quality of stormwater discharges associated with concrete batch plants that are authorized under this general permit.

(c) Spills and Leaks - A list of significant spills and leaks of toxic or hazardous pollutants that occurred in areas exposed to stormwater and that drain to stormwater outfalls associated with concrete batch plants authorized under this general permit must be developed, maintained, and updated as needed.

(d) Sampling Data - A summary of existing stormwater discharge sampling data must be maintained, if available.

2. Measures and Controls - The SWP3 must include a description of management controls to regulate pollutants identified in the SWP3's "Description of Potential Pollutant Sources" from Part IV.B.1.(a) of this permit, and a schedule for implementation of the measures and controls. This must include, at a minimum:

(a) Good Housekeeping - Good housekeeping measures must be developed and implemented in the area(s) associated with concrete batch plants.

(1) Operators must prevent or minimize the discharge of spilled cement, aggregate (including sand or gravel), settled dust, or other significant materials from paved portions of the site that are exposed to stormwater. Measures used to minimize the presence of these materials may include regular sweeping or other equivalent practices. These practices must be conducted at a frequency that is determined based on consideration of the amount of industrial activity occurring in the area and frequency of precipitation, and shall occur at least once per week when cement or aggregate is being handled or otherwise processed in the area.

(2) Operators must prevent the exposure of fine granular solids, such as cement, to stormwater. Where practicable, these materials must be stored in enclosed silos, hoppers or buildings, in covered areas, or under covering.

(b) Spill Prevention and Response Procedures - Areas where potential spills that can contribute pollutants to stormwater runoff, and the drainage areas from these locations, must be identified in the SWP3. Where appropriate, the SWP3 must specify material handling procedures, storage requirements, and use of equipment. Procedures for cleaning up spills must be identified in the SWP3 and made available to the appropriate personnel.

(c) Inspections - Qualified facility personnel (i.e., a person or persons with knowledge of this general permit, the concrete batch plant, and the SWP3 related to the concrete batch plant(s) for the site) must be identified to inspect designated equipment and areas of the facility specified in the SWP3. The inspection frequency must be specified in the SWP3 based upon a consideration of the level of concrete production at the facility, but must be a minimum of once per month while the facility is in operation. The inspection must take place while the facility is in operation and must, at a minimum, include all areas that are exposed to stormwater at the site, including material handling areas, above ground storage tanks, hoppers or silos, dust collection/containment systems, truck wash down and equipment cleaning areas. Follow-up procedures must be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections must be maintained and be made readily available for inspection upon request.

(d) Employee Training - An employee training program must be developed to educate personnel responsible for implementing any component of the SWP3, or personnel otherwise responsible for stormwater pollution prevention, with the provisions of the SWP3. The frequency of training must be documented in

the SWP3, and at a minimum, must consist of one training prior to the initiation of operation of the concrete batch plant.

(e) Record Keeping and Internal Reporting Procedures - A description of spills and similar incidents, plus additional information that is obtained regarding the quality and quantity of stormwater discharges, must be included in the SWP3. Inspection and maintenance activities must be documented and records of those inspection and maintenance activities must be incorporated in the SWP3.

(f) Management of Runoff - The SWP3 shall contain a narrative consideration for reducing the volume of runoff from concrete batch plants by diverting runoff or otherwise managing runoff, including use of infiltration, detention ponds, retention ponds, or reusing of runoff.

3. Comprehensive Compliance Evaluation – At least once per year, one or more qualified personnel (i.e., a person or persons with knowledge of this general permit, the concrete batch plant, and the SWP3 related to the concrete batch plant(s) for the site) shall conduct a compliance evaluation of the plant. The evaluation must include the following.

(a) Visual examination of all areas draining stormwater associated with regulated concrete batch plants for evidence of, or the potential for, pollutants entering the drainage system. These include but are not limited to: cleaning areas, material handling areas, above ground storage tanks, hoppers or silos, dust collection/containment systems, and truck wash down and equipment cleaning areas. Measures implemented to reduce pollutants in runoff (including structural controls and implementation of management practices) must be evaluated to determine if they are effective and if they are implemented in accordance with the terms of this permit and with the permittee's SWP3. The operator shall conduct a visual inspection of equipment needed to implement the SWP3, such as spill response equipment.

(b) Based on the results of the evaluation, the following must be revised as appropriate within two weeks of the evaluation: the description of potential pollutant sources identified in the SWP3 (as required in Part IV.B.1., "Description of Potential Pollutant Sources"); and pollution prevention measures and controls identified in the SWP3 (as required in Part IV.B.2., "Measures and Controls"). The revisions may include a schedule for implementing the necessary changes.

(c) The permittee shall prepare and include in the SWP3 a report summarizing the scope of the evaluation, the personnel making the evaluation, the date(s) of the evaluation, major observations relating to the implementation of the SWP3, and actions taken in response to the findings of the evaluation. The report must identify any incidents of noncompliance. Where the report does not identify incidences of noncompliance, the report must contain a statement that the evaluation did not identify any incidence(s), and the report must be signed according to 30 TAC §305.128, relating to Signatories to Reports.

(d) The Comprehensive Compliance Evaluation may substitute for one of the required inspections delineated in Part IV.B.2.(c) of this general permit.

Section C. Prohibition of Wastewater Discharges

Wastewater discharges associated with concrete production including wastewater disposal by land application are not authorized under this general permit. These wastewater discharges must be authorized under an alternative TCEQ water quality permit or otherwise disposed of in an authorized manner. Discharges of concrete truck wash out at construction sites may be authorized if conducted in accordance with the requirements of Part V of this general permit.

Part V. Concrete Truck Wash Out Requirements

This general permit authorizes the wash out of concrete trucks at construction sites regulated under Sections II.E.1., 2., and 3. of this general permit, provided the following requirements are met. Authorization is limited to the land disposal of wash out water from concrete trucks. Any other direct discharge of concrete production waste water must be authorized under a separate TCEQ general permit or individual permit.

1. Direct discharge of concrete truck wash out water to surface water in the state, including discharge to storm sewers, is prohibited by this general permit.
2. Concrete truck wash out water shall be discharged to areas at the construction site where structural controls have been established to prevent direct discharge to surface waters, or to areas that have a minimal slope that allow infiltration and filtering of wash out water to prevent direct discharge to surface waters. Structural controls may consist of temporary berms, temporary shallow pits, temporary storage tanks with slow rate release, or other reasonable measures to prevent runoff from the construction site.
3. Wash out of concrete trucks during rainfall events shall be minimized. The direct discharge of concrete truck wash out water is prohibited at all times, and the operator shall insure that its BMPs are sufficient to prevent the discharge of concrete truck wash out as the result of rainfall or stormwater runoff.
4. The discharge of wash out water must not cause or contribute to groundwater contamination.
5. If a SWP3 is required to be implemented, the SWP3 shall include concrete wash out areas on the associated site map.

Part VI. Retention of Records

The permittee must retain the following records for a minimum period of three (3) years from the date that a NOT is submitted as required by Part II.E.3. For activities in which an NOT is not required, records shall be retained for a minimum period of three (3) years from the date that the operator terminates coverage under Section II.F.3. of this permit. Records include:

1. A copy of the SWP3;
2. All reports and actions required by this permit, including a copy of the construction site notice;
3. All data used to complete the NOI, if an NOI is required for coverage under this general permit; and
4. All records of submittal of forms submitted to the operator of any MS4 receiving the discharge and to the secondary operator of a large construction site, if applicable.

Part VII. Standard Permit Conditions

1. The permittee has a duty to comply with all permit conditions. Failure to comply with any permit condition is a violation of the permit and statutes under which it was issued, and is grounds for enforcement action, for terminating, revoking, or denying coverage under this general permit, or for requiring a discharger to apply for and obtain an individual TPDES permit.
2. Authorization under this general permit may be suspended or revoked for cause. Filing a notice of planned changes or anticipated non-compliance by the permittee does not stay any permit condition. The permittee must furnish to the executive director, upon request and within a reasonable time, any information necessary for the executive director to determine whether cause exists for revoking, suspending, or

terminating authorization under this permit. Additionally, the permittee must provide to the executive director, upon request, copies of all records that the permittee is required to maintain as a condition of this general permit.

3. It is not a defense for a discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the permit conditions.
4. Inspection and entry shall be allowed under TWC Chapters 26-28, Texas Health and Safety Code §§361.032-361.033 and 361.037, and 40 CFR §122.41(i). The statement in TWC §26.014 that commission entry of a facility shall occur according to an establishment's rules and regulations concerning safety, internal security, and fire protection is not grounds for denial or restriction of entry to any part of the facility or site, but merely describes the commission's duty to observe appropriate rules and regulations during an inspection.
5. The discharger is subject to administrative, civil, and criminal penalties, as applicable, under TWC Chapter 7 for violations including but not limited to the following:
   (a) negligently or knowingly violating the federal CWA §§301, 302, 306, 307, 308, 318, or 405, or any condition or limitation implementing any sections in a permit issued under CWA §402, or any requirement imposed in a pretreatment program approved under CWA §§402(a)(3) or 402(b)(8);
   (b) knowingly making any false statement, representation, or certification in any record or other document submitted or required to be maintained under a permit, including monitoring reports or reports of compliance or noncompliance; and
   (c) knowingly violating §303 of the federal CWA, and placing another person in imminent danger of death or serious bodily injury.
6. All reports and other information requested by the executive director must be signed by the person and in the manner required by 30 TAC §305.128 (relating to Signatories to Reports).
7. Authorization under this general permit does not convey property or water rights of any sort and does not grant any exclusive privilege.
8. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.
9. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.
10. The permittee shall comply with the reporting requirements in 40 CFR §122.41(l), as applicable.

Part VIII. Fees

1. A fee of must be submitted along with the NOI:
   (a) $325 if submitting a paper NOI, or
   (b) $225 if submitting an NOI electronically.

2. Fees are due upon submission of the NOI. An NOI will not be declared administratively complete unless the associated fee has been paid in full.
3. No separate annual fees will be assessed for this general permit. The Water Quality Annual Fee has been incorporated into the NOI fees as described above.

Appendix A: Automatic Authorization

Periods of Low Erosion Potential by County – Eligible Date Ranges

Andrews: Nov. 15 - Apr. 30

Archer: Dec. 15 - Feb. 14

Armstrong: Nov. 15 - Apr. 30

Bailey: Nov. 1 - Apr. 30, or Nov. 15 - May 14

Baylor: Dec. 15 - Feb. 14

Borden: Nov. 15 - Apr. 30

Brewster: Nov. 15 - Apr. 30

Briscoe: Nov. 15 - Apr. 30

Brown: Dec. 15 - Feb. 14

Callahan: Dec. 15 - Feb. 14

Carson: Nov. 15 - Apr. 30

Castro: Nov. 15 - Apr. 30

Childress: Dec. 15 - Feb. 14

Cochran: Nov. 1 - Apr. 30, or Nov. 15 - May 14

Coke: Dec. 15 - Feb. 14

Coleman: Dec. 15 - Feb. 14

Collingsworth: Jan. 1 - Mar. 30, or Dec. 1 - Feb. 28

Concho: Dec. 15 - Feb. 14

Cottle: Dec. 15 - Feb. 14

Crane: Nov. 15 - Apr. 30

Crockett: Nov. 15 - Jan. 14, or Feb. 1 - Mar. 30

Crosby: Nov. 15 - Apr. 30

Culberson: Nov. 1 - May 14

Dallam: Nov. 1 - Apr. 14, or Nov. 15 - Apr. 30

Dawson: Nov. 15 - Apr. 30

Deaf Smith: Nov. 15 - Apr. 30

Dickens: Nov. 15 - Jan. 14, or Feb. 1 - Mar. 30

Dimmit: Dec. 15 - Feb. 14

Donley: Jan. 1 - Mar. 30, or Dec. 1 - Feb. 28

Eastland: Dec. 15 - Feb. 14

Ector: Nov. 15 - Apr. 30

Edwards: Dec. 15 - Feb. 14

El Paso: Jan. 1 - Jul. 14, or May 15 - Jul. 31, or Jun. 1 - Aug. 14, or Jun. 15 - Sept. 14, or Jul. 1 - Oct. 14, or Jul. 15 - Oct. 31, or Aug. 1 - Apr. 30, or Aug. 15 - May 14, or Sept. 1 - May 30, or Oct. 1 - Jun. 14, or Nov. 1 - Jun. 30, or Nov. 15 - Jul. 14

Fisher: Dec. 15 - Feb. 14

Floyd: Nov. 15 - Apr. 30

Foard: Dec. 15 - Feb. 14

Gaines: Nov. 15 - Apr. 30

Garza: Nov. 15 - Apr. 30

Glasscock: Nov. 15 - Apr. 30

Hale: Nov. 15 - Apr. 30

Hall: Feb. 1 - Mar. 30

Hansford: Nov. 15 - Apr. 30

Hardeman: Dec. 15 - Feb. 14

Hartley: Nov. 15 - Apr. 30

Haskell: Dec. 15 - Feb. 14

Hockley: Nov. 1 - Apr. 14, or Nov. 15 - Apr. 30

Howard: Nov. 15 - Apr. 30

Hudspeth: Nov. 1 - May 14

Hutchinson: Nov. 15 - Apr. 30

Irion: Dec. 15 - Feb. 14

Jeff Davis: Nov. 1 - Apr. 30 or Nov. 15 - May 14

Jones: Dec. 15 - Feb. 14

Kent: Nov. 15 - Jan. 14 or Feb. 1 - Mar. 30

Kerr: Dec. 15 - Feb. 14

Kimble: Dec. 15 - Feb. 14

King: Dec. 15 - Feb. 14

Kinney: Dec. 15 - Feb. 14

Knox: Dec. 15 - Feb. 14

Lamb: Nov. 1 - Apr. 14, or Nov. 15 - Apr. 30

Loving: Nov. 1 - Apr. 30, or Nov. 15 - May 14

Lubbock: Nov. 15 - Apr. 30

Lynn: Nov. 15 - Apr. 30

Martin: Nov. 15 - Apr. 30

Mason: Dec. 15 - Feb. 14

Maverick: Dec. 15 - Feb. 14

McCulloch: Dec. 15 - Feb. 14

Menard: Dec. 15 - Feb. 14

Midland: Nov. 15 - Apr. 30

Mitchell: Nov. 15 - Apr. 30

Moore: Nov. 15 - Apr. 30

Motley: Nov. 15 - Jan. 14, or Feb. 1 - Mar. 30

Nolan: Dec. 15 - Feb. 14

Oldham: Nov. 15 - Apr. 30

Parmer: Nov. 1 - Apr. 14, or Nov. 15 - Apr. 30

Pecos: Nov. 15 - Apr. 30

Potter: Nov. 15 - Apr. 30

Presidio: Nov. 1 - Apr. 30, or Nov. 15 - May 14

Randall: Nov. 15 - Apr. 30

Reagan: Nov. 15 - Apr. 30

Real: Dec. 15 - Feb. 14

Reeves: Nov. 1 - Apr. 30, or Nov. 15 - May 14

Runnels: Dec. 15 - Feb. 14

Schleicher: Dec. 15 - Feb. 14

Scurry: Nov. 15 - Apr. 30

Shackelford: Dec. 15 - Feb. 14

Sherman: Nov. 15 - Apr. 30

Stephens: Dec. 15 - Feb. 14

Sterling: Nov. 15 - Apr. 30

Stonewall: Dec. 15 - Feb. 14

Sutton: Dec. 15 - Feb. 14

Swisher: Nov. 15 - Apr. 30

Taylor: Dec. 15 - Feb. 14

Terrell: Nov. 15 - Apr. 30

Terry: Nov. 15 - Apr. 30

Throckmorton: Dec. 15 - Feb. 14

Tom Green: Dec. 15 - Feb. 14

Upton: Nov. 15 - Apr. 30

Uvalde: Dec. 15 - Feb. 14

Val Verde: Nov. 15 - Jan. 14, or Feb. 1 - Mar. 30

Ward: Nov. 1 - Apr. 14, or Nov. 15 - Apr. 30

Wichita: Dec. 15 - Feb. 14

Wilbarger: Dec. 15 - Feb. 14

Winkler: Nov. 1 - Apr. 30, or Nov. 15 - May 14

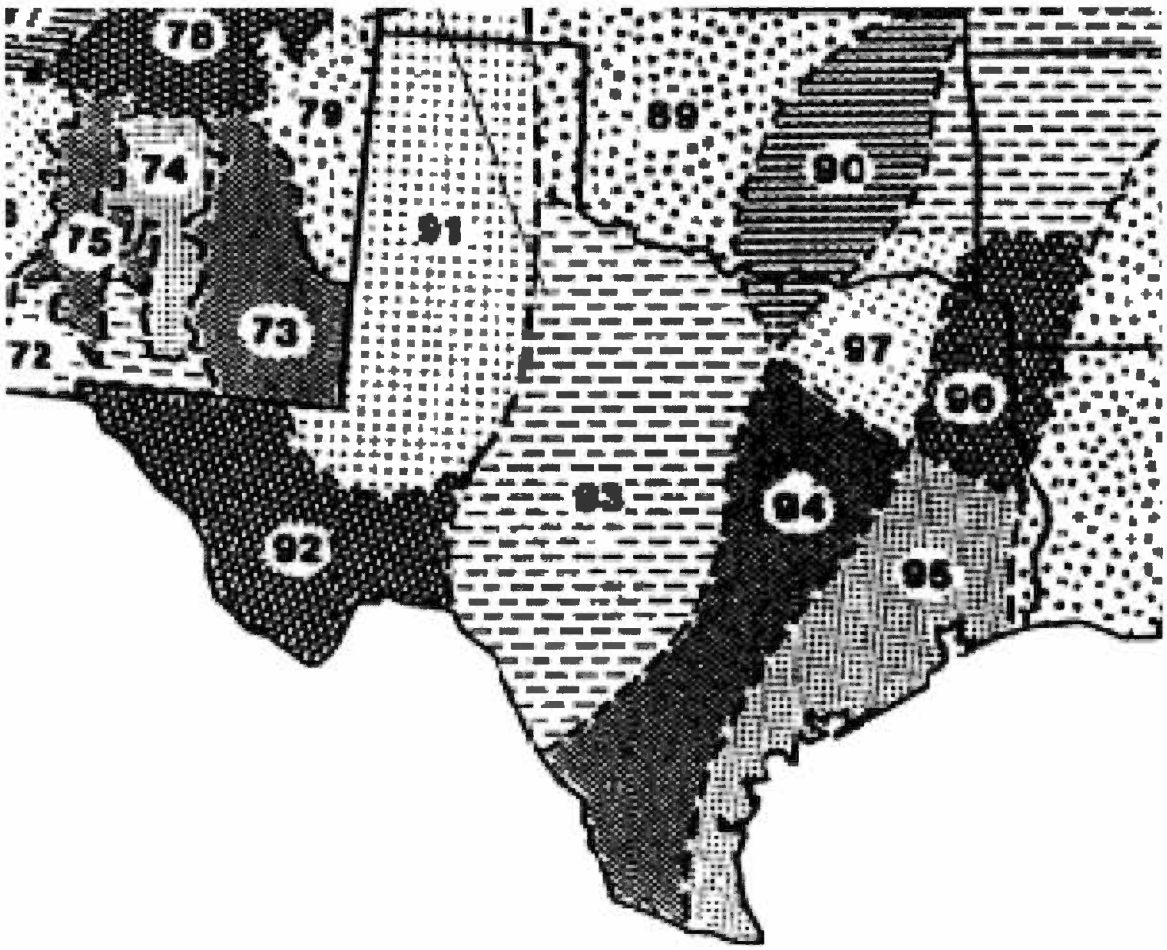
Yoakum: Nov. 1 - Apr. 30, or Nov. 15 - May 14

Young: Dec. 15 - Feb. 14

Wheeler: Jan. 1 - Mar. 30, or Dec. 1 - Feb. 28

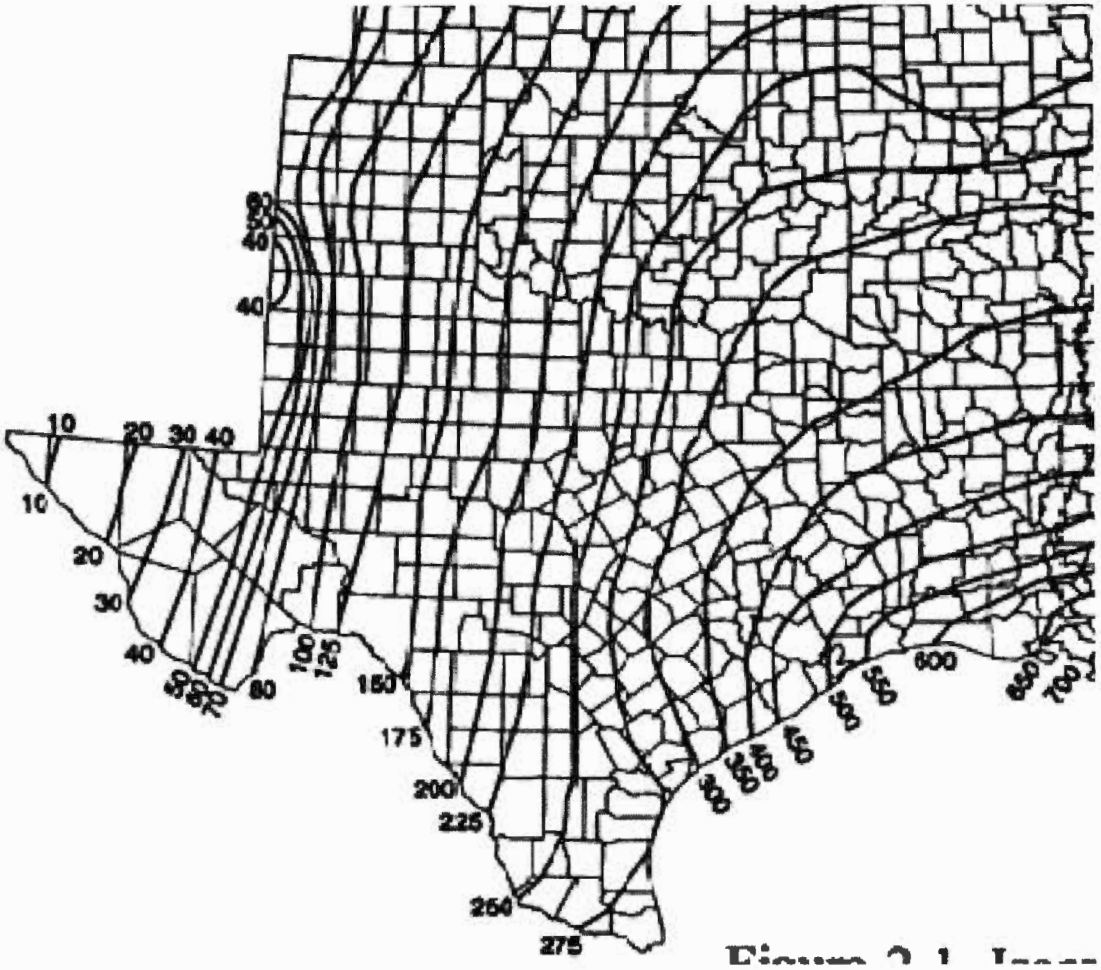
Zavala: Dec. 15 - Feb. 14

Appendix B: Erosivity Index (EI) Zones in Texas



Adapted from Chapter 2 of USDA Agriculture Handbook 703: "Predicting Soil Erosion by Water: A Guide to Conservation Planning With the Revised Universal Soil Loss Equation (RUSLE)," U.S. Department of Agriculture, Agricultural Research Service

Appendix C: Isoerodent Map



Adapted from Chapter 2 of USDA Agriculture Handbook 703: "Predicting Soil Erosion by Water: A Guide to Conservation Planning With the Revised Universal Soil Loss Equation (RUSLE)," U.S. Department of Agriculture, Agricultural Research Service

Attachment 1

SMALL CONSTRUCTION SITE NOTICE: LOW POTENTIAL FOR EROSION

FOR THE
Texas Commission on Environmental Quality (TCEQ)
Storm Water Program

TPDES GENERAL PERMIT TXR150000

The following information is posted in compliance with **Part II.E.1.** of the TCEQ General Permit Number TXR150000 for discharges of storm water runoff from small construction sites automatically authorized based on low rainfall erosivity. Additional information regarding the TCEQ storm water permit program may be found on the internet at:
http://www.tceq.state.tx.us/nav/permits/wq_construction.html

Operator Name:	
Contact Name and Phone Number:	
Project Description: (Physical address or description of the site's location, estimated start date and projected end date, or date that disturbed soils will be stabilized)	

For Small Construction Sites Authorized Under Part II.E.1., the following certification must be completed:

I _____ (Typed or Printed Name Person Completing This Certification) certify under penalty of law that I have read and understand the eligibility requirements for claiming an automatic authorization based on low rainfall erosivity under Part II.E.1. of TPDES General Permit TXR150000 and agree to comply with the terms of this permit. Construction activities at this site shall occur within a time period listed in Appendix A of the TPDES general permit for this county, that period beginning on _____ and ending on _____. I understand that if construction activities continue past this period, all storm water runoff must be authorized under a separate provision of the general permit. A copy of this signed notice is supplied to the operator of the MS4 if discharges enter an MS4. I am aware there are significant penalties for providing false information or for conducting unauthorized discharges, including the possibility of fine and imprisonment for knowing violations.

Signature and Title _____ Date_____

_____*Date Notice Removed*
____*MS4 operator notified per Part II.F.3.*

SMALL CONSTRUCTION SITE NOTICE

FOR THE
Texas Commission on Environmental Quality (TCEQ)
Storm Water Program
TPDES GENERAL PERMIT TXR150000

The following information is posted in compliance with **Part II.E.2.** of the TCEQ General Permit Number TXR150000 for discharges of storm water runoff from small construction sites. Additional information regarding the TCEQ storm water permit program may be found on the internet at:
http://www.tceq.state.tx.us/nav/permits/wq_construction.html

Operator Name:	
Contact Name and Phone Number:	
Project Description: *Physical address or description of the site's location, estimated start date and projected end date, or date that disturbed soils will be stabilized*	
Location of Storm Water Pollution Prevention Plan:	

For Small Construction Activities Authorized Under Part II.E.2. (Obtaining Authorization to Discharge) the following certification must be completed:

I _____ (Typed or Printed Name Person Completing This Certification) certify under penalty of law that I have read and understand the eligibility requirements for claiming an authorization under Part II.D.2. of TPDES General Permit TXR150000 and agree to comply with the terms of this permit. A storm water pollution prevention plan has been developed and will be implemented prior to construction, according to permit requirements. A copy of this signed notice is supplied to the operator of the MS4 if discharges enter an MS4. I am aware there are significant penalties for providing false information or for conducting unauthorized discharges, including the possibility of fine and imprisonment for knowing violations.

Signature and Title_____ Date _____

_____*Date Notice Removed*
____*MS4 operator notified per Part II.F.3.*

APPENDIX H

STATE AND LOCAL GOVERNMENT REQUIREMENTS

There are no local storm water regulatory requirements that exceed the state General Permit guidelines for the project.

Attachment 4

LARGE CONSTRUCTION SITE NOTICE

FOR THE
Texas Commission on Environmental Quality (TCEQ)
Storm Water Program

TPDES GENERAL PERMIT TXR150000

"PRIMARY OPERATOR" NOTICE

This notice applies to construction sites operating under Part II.E.3. of the TPDES General Permit Number TXR150000 for discharges of storm water runoff from construction sites equal to or greater than five acres, including the larger common plan of development. The information on this notice is required in Part III.E.2. of the general permit. This notice shall be posted along with a copy of the signed Notice of Intent (NOI), as applicable. Additional information regarding the TCEQ storm water permit program may be found on the internet at: http://www.tceq.state.tx.us/nav/permits/sw_permits.html

Site-Specific TPDES Authorization Number:	
Operator Name:	
Contact Name and Phone Number:	
Project Description: *Physical address or description of the site's location, and estimated start date and projected end date, or date that disturbed soils will be stabilized.*	
Location of Storm Water Pollution Prevention Plan:	

Attachment 3

LARGE CONSTRUCTION SITE NOTICE

FOR THE
Texas Commission on Environmental Quality (TCEQ)
Storm Water Program

TPDES GENERAL PERMIT TXR150000

"SECONDARY OPERATOR" NOTICE

This notice applies to secondary operators of construction sites operating under Part II.E.3. of the TPDES General Permit Number TXR150000 for discharges of storm water runoff from construction sites equal to or greater than five acres, including the larger common plan of development. The information on this notice is required in Part III.E.2. of the general permit. Additional information regarding the TCEQ storm water permit program may be found on the internet at: http://www.tceq.state.tx.us/nav/permits/sw_permits.html

Site-Specific TPDES Authorization Number:	
Operator Name:	
Contact Name and Phone Number:	
Project Description: *Physical address or description of the site's location, and estimated start date and projected end date, or date that disturbed soils will be stabilized.*	
Location of Storm Water Pollution Prevention Plan (SWP3):	

For Large Construction Activities Authorized Under Part II.E.3. (Obtaining Authorization to Discharge) the following certification must be completed:

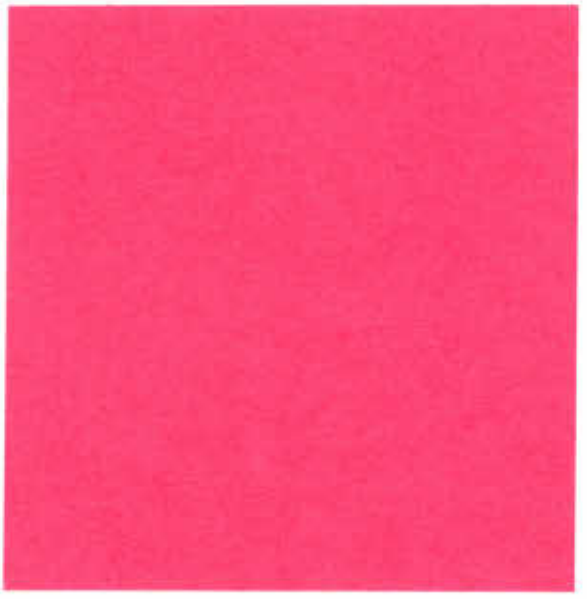
I _____ (Typed or Printed Name Person Completing This Certification) certify under penalty of law that I have read and understand the eligibility requirements for claiming an authorization under Part II.E.2. of TPDES General Permit TXR150000 and agree to comply with the terms of this permit. A storm water pollution prevention plan has been developed and will be implemented prior to construction, according to permit requirements. A copy of this signed notice is supplied to the operator of the MS4 if discharges enter an MS4. I am aware there are significant penalties for providing false information or for conducting unauthorized discharges, including the possibility of fine and imprisonment for knowing violations.

Signature and Title_____ Date _____

_____*Date Notice Removed*
____*MS4 operator notified per Part II.F.3.*

APPENDIX - I

EROSION CONTROL PLAN
&
DETAILS



IV. AGENT AUTHORIZATION FORM.

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

I David Keith,
Print Name

Vice President,
Title - Owner/President/Other

of SH-DJL Development, LLC,
Corporation/Partnership/Entity Name

have authorized CEI Engineering & Associates
Print Name of Agent/Engineer

of CEI Engineering & Associates
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.

2. 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.

5. 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.

SIGNATURE PAGE:

Applicant's Signature

9-28-2015
Date

THE STATE OF Texas §

County of Bexar §

BEFORE ME, the undersigned authority, on this day personally appeared _____ 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 September, 2015.

NOTARY PUBLIC

LISA R. CLIFTON
Notary Public
State of Texas
My Comm. Expires 03-19-2018

Lisa R. Clifton
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 3-19-2018

V. CONTRIBUTING ZONE APPLICATION FEE FORM

Application Fee Form

Texas Commission on Environmental Quality
Name of Proposed Regulated Entity: Jiffy Lube
Regulated Entity Location: Singing Oaks Rd. & Hwy. 281
Name of Customer: Guggenheim C/O CEI Engineering
Contact Person: Andrew Slyter Phone: (479) 273-9472
Customer Reference Number (if issued):CN _____
Regulated Entity Reference Number (if issued):RN _____

Austin Regional Office (3373)

☐ Hays ☐ Travis ☐ Williamson

San Antonio Regional Office (3362)

☐ Bexar ☐ Medina ☐ Uvalde
☒ Comal ☐ Kinney

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:

☐ Austin Regional Office
☐ Mailed to: TCEQ - Cashier
Revenues Section
Mail Code 214
P.O. Box 13088
Austin, TX 78711-3088

☒ San Antonio Regional Office
☐ Overnight Delivery to: TCEQ - Cashier
12100 Park 35 Circle
Building A, 3rd Floor
Austin, TX 78753
(512)239-0357

Site Location (Check All That Apply):

☐ Recharge Zone ☒ Contributing 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	0.93 Acres	$ 3000.00
Sewage Collection System	L.F.	$
Lift Stations without sewer lines	*Acres*	$
Underground or Aboveground Storage Tank Facility	9 Tanks	$ N/A
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	Each	$

Signature: _____ Date: 10/15/15

Application Fee Schedule

Texas Commission on Environmental Quality
Edwards Aquifer Protection Program 30 TAC Chapter 213 (effective 05/01/2008)

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 5 < 10 10 < 40 40 < 100 100 < 500 ≥ 500	$1,500 $3,000 $4,000 $6,500 $8,000 $10,000
Non-residential (Commercial, industrial, institutional, multi-family residential, schools, and other sites where regulated activities will occur)	< 1 1 < 5 5 < 10 10 < 40 40 < 100 ≥ 100	$3,000 $4,000 $5,000 $6,500 $8,000 $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

Project	*Fee*
Extension of Time Request	$150

VI. TCEQ CORE DATA FORM

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 Information

1. Reason for Submission (If other is checked please describe in space provided.)

☒ New Permit, Registration or Authorization (Core Data Form should be submitted with the program application.)

☐ Renewal (Core Data Form should be submitted with the renewal form) ☐ Other

2. Customer Reference Number (if issued)	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number (if issued)
CN 603438862		RN 10609062

SECTION II: Customer Information

4. General Customer Information	5. Effective Date for Customer Information Updates (mm/dd/yyyy)	10/9/2014

☐ New Customer ☐ Update to Customer Information ☐ Change in Regulated Entity Ownership

☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)

The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).

6. Customer Legal Name (If an individual, print last name first: e.g.: Doe, John)	If new Customer, enter previous Customer below:

7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number (if applicable)

11. Type of Customer:	☐ Corporation	☐ Individual	Partnership: ☐ General ☐ Limited
Government: ☐ City ☐ County ☐ Federal ☐ State ☐ Other		☐ Sole Proprietorship	☐ Other:

12. Number of Employees	13. Independently Owned and Operated?
☐ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher	☐ Yes ☐ No

14. Customer Role (Proposed or Actual) - as it relates to the Regulated Entity listed on this form. Please check one of the following:

☒ Owner ☐ Operator ☐ Owner & Operator

☐ Occupational Licensee ☐ Responsible Party ☐ Voluntary Cleanup Applicant ☐ Other:

15. Mailing Address:							
	City		State		ZIP		ZIP + 4

16. Country Mailing Information (if outside USA)	17. E-Mail Address (if applicable)

18. Telephone Number	19. Extension or Code	20. Fax Number (if applicable)
( ) -		( ) -

SECTION III: Regulated Entity Information

21. General Regulated Entity Information (If `New Regulated Entity" is selected below this form should be accompanied by a permit application)

☐ New Regulated Entity ☐ Update to Regulated Entity Name ☐ Update to Regulated Entity Information

The Regulated Entity Name submitted may be updated in order to meet TCEQ Agency Data Standards (removal of organizational endings such as Inc, LP, or LLC).

22. Regulated Entity Name (Enter name of the site where the regulated action is taking place.)

23. Street Address of the Regulated Entity: (No PO Boxes)								
	City		State		ZIP		ZIP + 4	
24. County								

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:					
26. Nearest City			State		Nearest ZIP Code
27. Latitude (N) In Decimal:			28. Longitude (W) In Decimal:		
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds

29. Primary SIC Code (4 digits)	30. Secondary SIC Code (4 digits)	31. Primary NAICS Code (5 or 6 digits)	32. Secondary NAICS Code (5 or 6 digits)

33. What is the Primary Business of this entity? (Do not repeat the SIC or NAICS description.)								
34. Mailing Address:								
	City		State		ZIP		ZIP + 4	
35. E-Mail Address:								

36. Telephone Number	37. Extension or Code	38. Fax Number (if applicable)
( ) -		( ) -

39. **TCEQ Programs and ID Numbers** Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form. See the Core Data Form instructions for additional guidance.

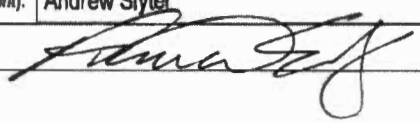
☐ Dam Safety	☐ Districts	☐ Edwards Aquifer	☐ Emissions Inventory Air	☐ Industrial Hazardous Waste
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
☐ Sludge	☐ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
☐ Voluntary Cleanup	☐ Waste Water	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:

SECTION IV: Preparer Information

40. Name: Andrew Slyter			41. Title: Project Engineer
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(479) 273 - 9472		(479) 273 - 0844	aslyter@ceieng.com

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified in field 39.

Company:	CEI Engineering Associates, Inc.		Job Title:	Project Engineer
Name(*In Print*):	Andrew Slyter		Phone:	(479) 273-9472
Signature:			Date:	10/15/15

Texas Commission on Environmental Quality

Edwards Aquifer Application Cover Page

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

1. 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.

2. 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.

3. 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.

6. 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

1. 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.

1. Regulated Entity Name: Singing Hills						**2. Regulated Entity No.: 10609062**			
3. Customer Name: SH-DJL Development, LLC						**4. Customer No.: 603438862**			
5. Project Type: (Please circle/check one)	New	Modification				Extension		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. Site (acres):**		253.8	
9. Application Fee:	$3,000	**10. Permanent BMP(s):**				4 Water Quality Basins			
11. SCS (Linear Ft.):	N/A	**12. AST/UST (No. Tanks):**				9 AST			
13. County:	Comal	**14. Watershed:**				Lewis 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%20GWCD%20map.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)	___	___	___
Groundwater Conservation District(s)	___Edwards Aquifer Authority ___Barton Springs/ Edwards Aquifer ___Hays Trinity ___Plum Creek	___Barton Springs/ Edwards Aquifer	NA
City(ies) Jurisdiction	___Austin ___Buda ___Dripping Springs ___Kyle ___Mountain City ___San Marcos ___Wimberley ___Woodcreek	___Austin ___Bee Cave ___Pflugerville ___Rollingwood ___Round Rock ___Sunset Valley ___West Lake Hills	___Austin ___Cedar Park ___Florence ___Georgetown ___Jerrell ___Leander ___Liberty Hill ___Pflugerville ___Round Rock

San Antonio Region					
County:	**Bexar**	**Comal**	**Kinney**	**Medina**	**Uvalde**
Original (1 req.)	___	___	___	___	___
Region (1 req.)	___	___	___	___	___
County(ies)	___	___	___	___	___
Groundwater Conservation District(s)	___ Edwards Aquifer Authority ___Trinity-Glen Rose	___Edwards Aquifer Authority	___Kinney	___EAA ___Medina	___EAA ___Uvalde
City(ies) Jurisdiction	___Castle Hills ___Fair Oaks Ranch ___Helotes ___Hill Country Village ___Hollywood Park ___San 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 complete and accurate. This application is hereby submitted to TCEQ for administrative review and technical review.

Andrew Slyter
Print Name of Customer/Authorized Agent

Signature of Customer/Authorized Agent — Date: 10/15/15

FOR TCEQ INTERNAL USE ONLY					
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):		Fee Check:	Payable to TCEQ (Y/N):		
Core Data Form Complete (Y/N):			Signed (Y/N):		
Core Data Form Incomplete Nos.:			Less than 90 days old (Y/N):