Modification of a Previously Approved Plan Checklist

- Edwards Aquifer Application Cover Page (TCEQ-20705)
- General Information Form (TCEQ-0587)

Attachment A - Road Map

Attachment B - USGS / Edwards Recharge Zone Map

Attachment C - Project Description

Geologic Assessment Form (TCEQ-0585)

Attachment A - Geologic Assessment Table (TCEQ-0585-Table)

Attachment B - Stratigraphic Column

Attachment C - Site Geology

Attachment D - Site Geologic Map(s)

Modification of a Previously Approved Plan (TCEQ-0590)

Attachment A - Original Approval Letter and Approved Modification Letters

Attachment B - Narrative of Proposed Modification

Attachment C - Current Site Plan of the Approved Project

Application Form (include any applicable to the proposed modification):

Aboveground Storage Tank Facility Plan (TCEQ-0575)

Organized Sewage Collection System Application (TCEQ-0582)

Underground Storage Tank Facility Plan (TCEQ-0583)

Water Pollution Abatement Plan Application (TCEQ-0584)

Lift Station / Force Main System Application (TCEQ-0624)

Temporary Stormwater Section (TCEQ-0602)

Attachment A - Spill Response Actions

Attachment B - Potential Sources of Contamination

Attachment C - Sequence of Major Activities

Attachment D - Temporary Best Management Practices and Measures

Attachment E - Request to Temporarily Seal a Feature (if requested)

Attachment F - Structural Practices

Attachment G - Drainage Area Map

Attachment H - Temporary Sediment Pond(s) Plans and Calculations

Attachment I - Inspection and Maintenance for BMPs

Attachment J - Schedule of Interim and Permanent Soil Stabilization Practices

Permanent Stormwater Section (TCEQ-0600), if necessary

Attachment A - 20% or Less Impervious Cover Declaration (if requested for multi-family, school, or small business site)

Attachment B - BMPs for Upgradient Stormwater

Attachment C - BMPs for On-site Stormwater

Attachment D - BMPs for Surface Streams

Attachment E - Request to Seal Features, if sealing a feature

Attachment F - Construction Plans

Attachment G - Inspection, Maintenance, Repair and Retrofit Plan

Attachment H - Pilot-Scale Field Testing Plan (if requested)

Attachment I - Measures for Minimizing Surface Stream Contamination

- Agent Authorization Form (TCEQ-0599), if application submitted by agent
- Application Fee Form (TCEQ-0574)
- Check Payable to the "Texas Commission on Environmental Quality"
- Core Data Form (TCEQ-10400)

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

- 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 will be denied. Please note that because the technical review is underway, whether the application is withdrawn or denied **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:

- If the technical review has begun your application can be denied/withdrawn, your fees will be forfeited, and the plan will have to be resubmitted.
- 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 denied/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 affected 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 N Warehouse | ame: A | ppleg | gate Of | fice | | 2. Re | egulat | ed Entity No.: | RN108605452 |
|---|---------|-------|---------|---------|--------|--------|--------|----------------------------|-------------------------------|
| 3. Customer Name: A | pplega | te Pa | rk 1 LI | LC | | 4. Cu | istom | er No.: | |
| 5. Project Type: (Please circle/check one) | New | | Modif | icatior | D | Exter | nsion | Exception | |
| 6. Plan Type: (Please circle/check one) | WPAP | CZP | SCS | UST | AST | EXP | EXT | Technical Clarification | Optional Enhanced Measures |
| 7. Land Use: (Please circle/check one) | Residen | ıtial | Non-r | esiden | tial | | 8. Sit | e (acres): | 2.98 |
| 9. Application Fee: | \$4,000 | | 10. Po | ermai | nent I | BMP(s | s): | Batch Extended | d Detention Pond |
| 11. SCS (Linear Ft.): | None | | 12. AS | ST/US | ST (No | o. Tar | ıks): | None | |
| 13. County: | William | ison | 14. W | aters | hed: | | | Brushy 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 1 | Region | |
|---|--|---|--|
| County: | Hays | Travis | Williamson |
| Original (1 req.) | _ | _ | _X_ |
| Region (1 req.) | _ | _ | _X_ |
| County(ies) | _ | _ | _X_ |
| Groundwater Conservation District(s) | Edwards Aquifer AuthorityBarton Springs/ Edwards AquiferHays TrinityPlum Creek | Barton Springs/ Edwards Aquifer | NA |
| City(ies) Jurisdiction | AustinBudaDripping SpringsKyleMountain CitySan MarcosWimberleyWoodcreek | AustinBee CavePflugervilleRollingwoodRound RockSunset ValleyWest Lake Hills | AustinCedar ParkFlorenceGeorgetownJerrellLeanderLiberty HillPflugervilleRound Rock |

| | Sa | an 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 HillsFair Oaks RanchHelotesHill Country VillageHollywood ParkSan Antonio (SAWS)Shavano Park | Bulverde Fair Oaks Ranch Garden Ridge New Braunfels Schertz | NA | San Antonio ETJ (SAWS) | NA |

| I certify that to the best of my knowledge, that the application is hereby submitted to TCEQ for address. | |
|---|------------|
| | |
| Brian Roby, P.E. | |
| Print Name of Customer/Authorized Agent | |
| | 04/17/2025 |
| Signature of Customer/Authorized Agent | Date |
| | |

| **FOR TCEQ INTERNAL USE ONL | Y** | |
|--|-------|------------------------------|
| Date(s)Reviewed: | Date | e Administratively Complete: |
| Received From: | Corr | rect Number of Copies: |
| Received By: | Distr | ribution Date: |
| EAPP File Number: | Com | pplex: |
| Admin. Review(s) (No.): | No. A | AR Rounds: |
| Delinquent Fees (Y/N): | Revi | ew Time Spent: |
| Lat./Long. Verified: | SOS | Customer Verification: |
| Agent Authorization Complete/Notarized (Y/N): | Fee | Payable to TCEQ (Y/N): |
| Core Data Form Complete (Y/N): | Chec | ck: Signed (Y/N): |
| Core Data Form Incomplete Nos.: | | Less than 90 days old (Y/N): |

General Information Form

Texas Commission on Environmental Quality

For Regulated Activities on the Edwards Aquifer Recharge and Transition Zones and Relating to 30 TAC §213.4(b) & §213.5(b)(2)(A), (B) 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 **General Information Form** is hereby submitted for TCEQ review. The application was prepared by:

Print Name of Customer/Agent: Brian Roby Date: <u>04/17/2025</u> Signature of Customer/Agent: **Project Information** 1. Regulated Entity Name: Applegate Office Warehouse 2. County: Williamson 3. Stream Basin: Brushy Creek 4. Groundwater Conservation District (If applicable): ______ 5. Edwards Aquifer Zone: Recharge Zone Transition Zone 6. Plan Type: \times WPAP **AST** SCS **UST** Modification **Exception Request**

| 7. | Customer (Applicant): | |
|-----|---|--|
| | Contact Person: Anthony Bahr Entity: Applegate Park 1 LLC Mailing Address: 15720 Stone Oak Estates Ct City, State: Cypress, TX Telephone: 281-685-5751 Email Address: anthony@oakfieldmgmt.com | Zip: <u>77429</u> FAX: |
| 8. | Agent/Representative (If any): | |
| | Contact Person: <u>Brian Roby</u> Entity: <u>Septic Systems of Texas</u> Mailing Address: <u>5900 Balcones Dr., Suite 4000</u> City, State: <u>Austin, TX</u> Telephone: <u>737 710-4312</u> Email Address: <u>brian@septicsystemsoftexas.com</u> | Zip: <u>78737</u> FAX: |
| 9. | Project Location: | |
| | ☐ The project site is located inside the city limits ☐ The project site is located outside the city limit jurisdiction) of Round Rock. ☐ The project site is not located within any city's | s but inside the ETJ (extra-territorial |
| 10. | The location of the project site is described bel detail and clarity so that the TCEQ's Regional s boundaries for a field investigation. | · |
| | 7 Applegate Circle, Round Rock, TX 78665 | |
| 11. | Attachment A – Road Map. A road map show project site is attached. The project location are the map. | _ |
| 12. | Attachment B - USGS / Edwards Recharge Zon USGS Quadrangle Map (Scale: 1" = 2000') of th The map(s) clearly show: | |
| | ☑ Project site boundaries. ☑ USGS Quadrangle Name(s). ☑ Boundaries of the Recharge Zone (and Trange) ☑ Drainage path from the project site to the Boundaries | |
| 13. | The TCEQ must be able to inspect the project Sufficient survey staking is provided on the pro the boundaries and alignment of the regulated features noted in the Geologic Assessment. | eject to allow TCEQ regional staff to locate |
| | \boxtimes Survey staking will be completed by this date: | <u>03/26/2025</u> |

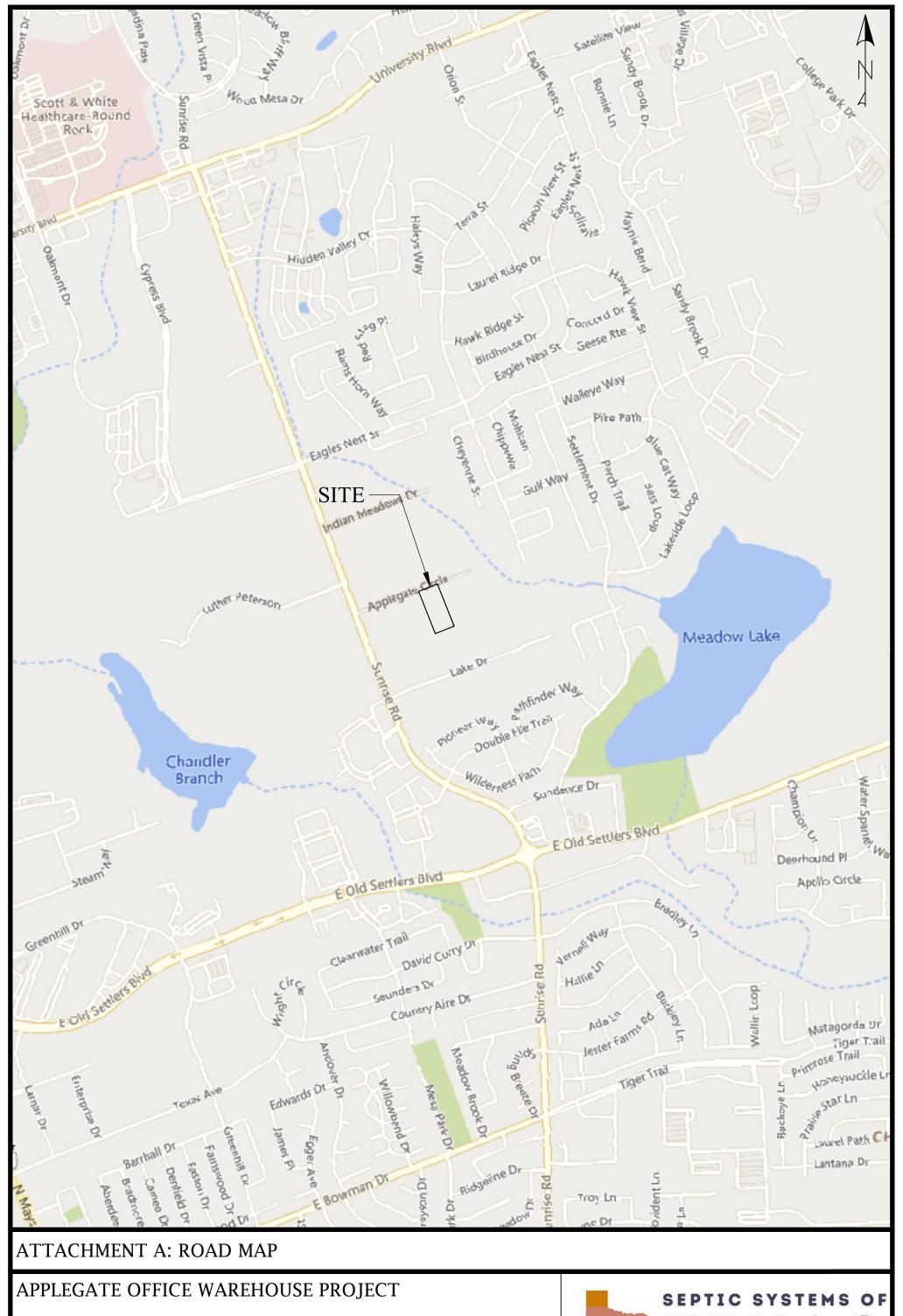
| 14. Attachment C – Project Description. Attached at the end of this form is a detailed | |
|---|----|
| narrative description of the proposed project. The project description is consistent | |
| throughout the application and contains, at a minimum, the following details: | |
| Area of the site ○ Offsite areas ○ Impervious cover ○ Permanent BMP(s) ○ Proposed site use ○ Site history ○ Previous development | |
| igthered Area(s) to be demolished | |
| 15. 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/Uncleared) Other: | |
| | |
| Prohibited Activities | |
| | |
| 16. I am aware that the following activities are prohibited on the Recharge Zone and are no proposed for this project: | t |
| | t |
| proposed for this project: (1) Waste disposal wells regulated under 30 TAC Chapter 331 of this title (relating to | t |
| proposed for this project: (1) Waste disposal wells regulated under 30 TAC Chapter 331 of this title (relating to Underground Injection Control); | t |
| proposed for this project:(1) Waste disposal wells regulated under 30 TAC Chapter 331 of this title (relating to Underground Injection Control);(2) New feedlot/concentrated animal feeding operations, as defined in 30 TAC §213.3; | ot |
| proposed for this project: (1) Waste disposal wells regulated under 30 TAC Chapter 331 of this title (relating to Underground Injection Control); (2) New feedlot/concentrated animal feeding operations, as defined in 30 TAC §213.3; (3) Land disposal of Class I wastes, as defined in 30 TAC §335.1; | ı |
| proposed for this project: (1) Waste disposal wells regulated under 30 TAC Chapter 331 of this title (relating to Underground Injection Control); (2) New feedlot/concentrated animal feeding operations, as defined in 30 TAC §213.3; (3) Land disposal of Class I wastes, as defined in 30 TAC §335.1; (4) The use of sewage holding tanks as parts of organized collection systems; and (5) New municipal solid waste landfill facilities required to meet and comply with Type standards which are defined in §330.41(b), (c), and (d) of this title (relating to Types) | 1 |
| (1) Waste disposal wells regulated under 30 TAC Chapter 331 of this title (relating to Underground Injection Control); (2) New feedlot/concentrated animal feeding operations, as defined in 30 TAC §213.3; (3) Land disposal of Class I wastes, as defined in 30 TAC §335.1; (4) The use of sewage holding tanks as parts of organized collection systems; and (5) New municipal solid waste landfill facilities required to meet and comply with Type standards which are defined in §330.41(b), (c), and (d) of this title (relating to Types of Municipal Solid Waste Facilities). (6) New municipal and industrial wastewater discharges into or adjacent to water in the | ı |

(2) Land disposal of Class I wastes, as defined in 30 TAC $\S 335.1$; and

(3) New municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41 (b), (c), and (d) of this title.

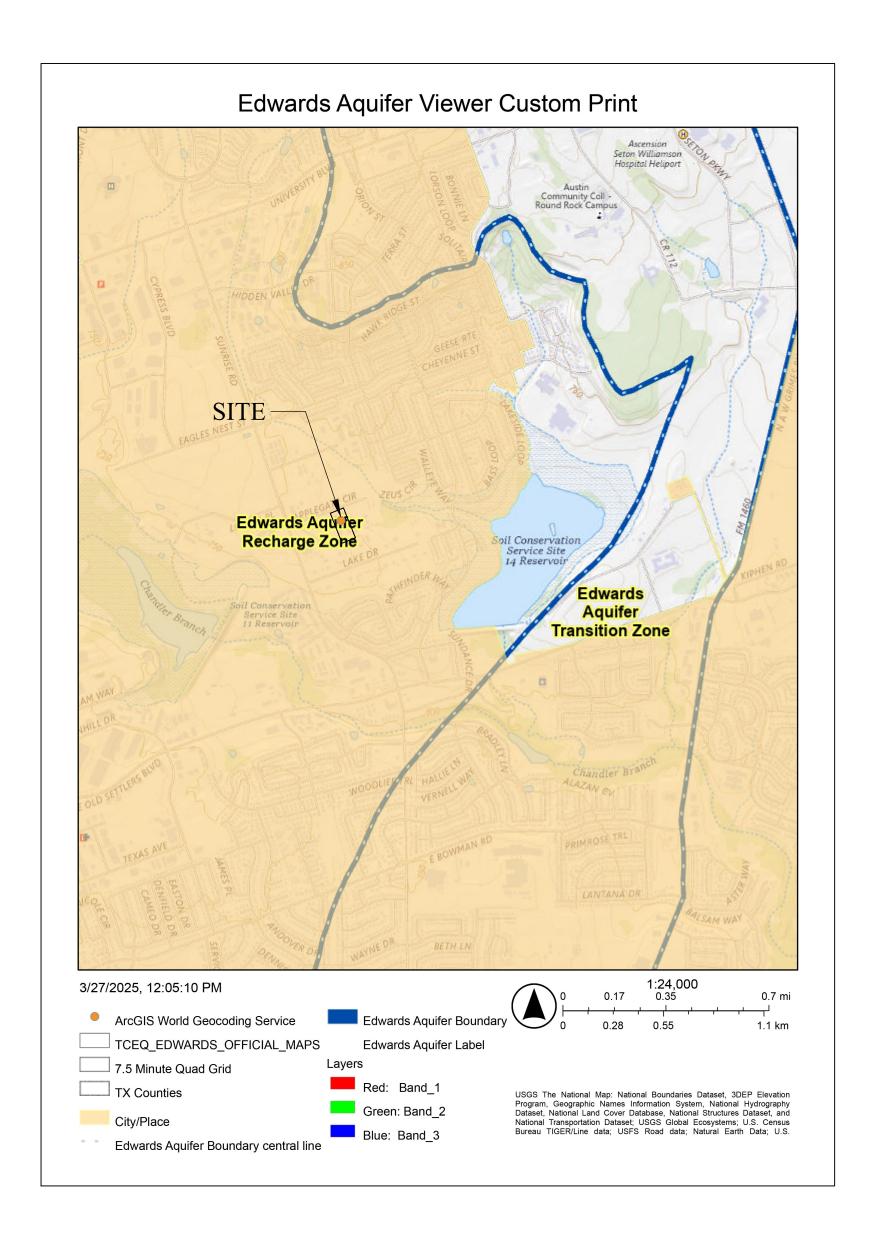
Administrative Information

| 18. | The | e fee for the plan(s) is based on: |
|-----|-------------|--|
| | | For a Water Pollution Abatement Plan or Modification, the total acreage of the site where regulated activities will occur. For an Organized Sewage Collection System Plan or Modification, the total linear footage of all collection system lines. For a UST Facility Plan or Modification or an AST Facility Plan or Modification, the total number of tanks or piping systems. A request for an exception to any substantive portion of the regulations related to the protection of water quality. A request for an extension to a previously approved plan. |
| 19. | | Application fees are due and payable at the time the application is filed. If the correct fee is not submitted, the TCEQ is not required to consider the application until the correct fee is submitted. Both the fee and the Edwards Aquifer Fee Form have been sent to the Commission's: |
| | | ☐ TCEQ cashier ☐ Austin Regional Office (for projects in Hays, Travis, and Williamson Counties) ☐ San Antonio Regional Office (for projects in Bexar, Comal, Kinney, Medina, and Uvalde Counties) |
| 20. | | 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. |
| 21. | \boxtimes | No person shall commence any regulated activity until the Edwards Aquifer Protection Plan(s) for the activity has been filed with and approved by the Executive Director. |



7 APPLEGATE CIRCLE ROUND ROCK, TX 78665





USGS QUAD NUM: 30097E6 USGS QUAD NAME: ROUND ROCK

ATTACHMENT B: EDWARDS AQUIFER MAP

APPLEGATE OFFICE WAREHOUSE PROJECT

7 APPLEGATE CIRCLE ROUND ROCK, TX 78665





FROM TCEQ-0587 ATTACHMENT C - PROJECT DESCRIPTION

To whom it may concern,

I am pleased to present this Water Pollution Abatement Plan (WPAP) modification application for your review regarding the development located at 7 Applegate Circle, Round Rock, TX 78665. The development was constructed in 2015. A WPAP was approved by the Texas Commission on Environmental Quality (TCEQ) in September of 2015 under the Edwards Aquifer Protection Program ID No. 11-15070702. The originally approved WPAP required removal of 1,566 pounds of total suspended solids (TSS) generated from an assumed 1.87-acres of impervious cover for the 2.988-acre site with no off-site drainage entering the subject BMP. The total site area listed in the original application mistakenly listed the site as a 2.89-acre parcel when in fact the tract is 2.988-acres.

A previous WPAP Modification application was submitted in 2021, under EAPP ID No. 11002434. That application was denied due to failure to clear all comments with the second Notice of Deficiency (NOD).

This modification finds a total of 2.04-acres of impervious cover requiring water quality treatment, with a required TSS removal of 1,675 pounds. The proposed BMP will capture 2.24-acres of site area, with 1.95-acres of that being impervious cover. This modification proposes changing the sand filter BMP to a batch extended detention system. This allows the existing pond footprint to be utilized to the best extent practical, while providing the necessary volumes for adequate water quality treatment and stormwater detention. The proposed BMP will remove the required 1,675 pounds of TSS.

The water quality and detention pond systems were found to be out of compliance with the approved WPAP. The pond is currently unable to discharge the water quality volume or the detention volume appropriately, resulting in ponded stormwater and algal growth within the bottom of pond. The pond remediation involves the following operations:

- Reconstruction of the southern pond wall
- Elimination of the interior separating wall
- Removal of the accumulated silt and growth from the bottom of pond
- Removal of the existing sand filter media and underdrain piping
- Excavation to a minimum depth to allow liner preparation and soil amendment
- Restoring the pond liner utilizing an appropriate geomembrane product
- Addition of batch detention valve and pressure switch system
- Repairing storm line connections
- Replacing the pond lower volume pump discharge system

- Reconstructing the outflow structure
- Constructing a mortared rock rip rap outflow channel to transport discharged stormwater
- Adding curb along the northern edge of the driveway to convey stormwater to the existing drainage flume

The site has been in operation as a light industrial warehouse business park since it's construction in 2015. This use will be continued with this modified WPAP. No additional buildings are proposed with this modification.

Other site work to be performed during this modification will be done to complete the on-site sewage facility (OSSF) license to operate permit approval. The OSSF failed its License to Operate inspection due to inability to confirm whether the effluent distribution line crossing under the driveway is or is not sleeved. The existing drive will be sawcut to allow proper encasement of the effluent discharge lines that cross under the drive to reach the drip field area south of the drive aisle. Two-way cleanouts will also be added to the existing wastewater collection lines within 5' of each building.

The OSSF has been in operation without this license since October of 2015 without any observed negative impacts upon the site or surrounding environment.

Thank you for your review of this WPAP modification request. It is our hope that the proposed construction elements will provide improved treatment performance with added protection for both public health and the environment. Please reach out via phone or email with any questions you may have.

Sincerely,

Brian Roby, PE

737-710-4312

brian@septicsystemsoftexas.com



Geologic Assessment

Texas Commission on Environmental Quality

For Regulated Activities on The Edwards Aquifer Recharge/transition Zones and Relating to 30 TAC §213.5(b)(3), 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. My signature certifies that I am qualified as a geologist as defined by 30 TAC Chapter 213.

| Pri | nt Name of Geologist: Russell C Ford | Telephone: <u>512 442-1122</u> |
|-----|---|--|
| Da | te: <u>6/1/15</u> | Fax: |
| | presenting: <u>Terracon Consultants, Inc.</u> (Name of mber) | Company and TBPG or TBPE registration |
| Sig | nature of Geologist: | |
| | | |
| Re | gulated Entity Name: Applegate Office Warehor | use, 7 Applegate Circle, Round Rock, Texas |
| PI | roject Information | |
| 1. | Date(s) Geologic Assessment was performed: 1 | /5/15 and 6/1/15 |
| 2. | Type of Project: | |
| 3. | WPAP SCS Location of Project: | ☐ AST ☐ UST |
| | Recharge Zone Transition Zone Contributing Zone within the Transition Zor | ne |

4. Attachment A - Geologic Assessment Table. Completed Geologic Assessment Table (Form TCEQ-0585-Table) is attached. Soil cover on the project site is summarized in the table below and uses the SCS Hydrologic Soil Groups* (Urban Hydrology for Small Watersheds, Technical Release No. 55, Appendix A, Soil Conservation Service, 1986). If there is more than one soil type on the project site, show each soil type on the site Geologic Map or a separate soils map. Table 1 - Soil Units, Infiltration * Soil Group Definitions (Abbreviated) Characteristics and Thickness A. Soils having a high infiltration rate when thoroughly wetted. Soil Name Group* Thickness(feet) B. Soils having a moderate 3.5 Houston D infiltration rate when thoroughly wetted. C. Soils having a slow infiltration rate when thoroughly wetted. D. Soils having a very slow infiltration rate when thoroughly wetted. 6. Attachment B - Stratigraphic Column. A stratigraphic column showing formations, members, and thicknesses is attached. The outcropping unit, if present, should be at the top of the stratigraphic column. Otherwise, the uppermost unit should be at the top of the stratigraphic column. 7. Attachment C - Site Geology. A narrative description of the site specific geology including any features identified in the Geologic Assessment Table, a discussion of the potential for fluid movement to the Edwards Aquifer, stratigraphy, structure(s), and karst characteristics is attached. 8. Attachment D - Site Geologic Map(s). The Site Geologic Map must be the same scale as the applicant's Site Plan. The minimum scale is 1": 400' Applicant's Site Plan Scale: 1" = ______ Site Geologic Map Scale: 1" = 100' Site Soils Map Scale (if more than 1 soil type): 1" = _' 9. Method of collecting positional data: Global Positioning System (GPS) technology. Other method(s). Please describe method of data collection: 10. The project site and boundaries are clearly shown and labeled on the Site Geologic Map. 11. X Surface geologic units are shown and labeled on the Site Geologic Map.

| 12. | investigat | r manmade features were discovered on the project site during the field on. They are shown and labeled on the Site Geologic Map and are described Geologic Assessment Table. | bed |
|-----|------------------------|---|-----|
| | Geologic investigat | r manmade features were not discovered on the project site during the fi on. | eld |
| 13. | 3. The Rech | rge Zone boundary is shown and labeled, if appropriate. | |
| 14. | | ls (test holes, water, oil, unplugged, capped and/or abandoned, etc.): If a information must agree with Item No. 20 of the WPAP Application Section | on. |
| | labeled. The w The w | (#) wells present on the project site and the locations are shown and Check all of the following that apply.) ells are not in use and have been properly abandoned. ells are not in use and will be properly abandoned. ells are in use and comply with 16 TAC Chapter 76. no wells or test holes of any kind known to exist on the project site. | |
| | inere are | to wells of test holes of any killa known to exist on the project site. | |

Administrative Information

15. 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.

| GEOL | OGIC AS | OGIC ASSESSME | ENT | NT TABLE | | а. | ROJEC | T NAME | : App | legate | Office V | Vareho | PROJECT NAME: Applegate Office Warehouse, Round Rock, Texas | d Roci | t, Tex | 35 | | , | |
|------------|---------|---------------|---------|----------|------------------------|--------|-------------------|---------------------|-------|-------------------|-----------------------------|--------|---|------------|-------------------|-----|----------------------------------|-------|---|
| LOCATION | NOI | | FEATU | RE CH | EATURE CHARACTERISTICS | RISTI | SS | | | | | | | EVALUATION | UAT | - | PHYSICAL SET | SP | SETTING |
| ¥ | 18. | ភ្ | 2A | 238 | 3 | | , | 2 | á | 9 | 7 | æ | 88 | a | 2 | | = | П | 17 |
| FEATURE (D | LATTUDE | LONGTUDE | FEATURE | POINTS | FORMATION | DIMENS | DMEDISIONS (FEET) | TREAD (DEGREESA) | | DENSITY (NOFT) | DOM DENSITY APERTURE (REET) | THEAT | RELATINE ANTLINATION RATE | ¥rōt | TOTAL SENSITIMITY | | CATCHM ENT AVEA (ACRES) | | тогодамент |
| | | | | | | × | YZ | | 10 | | | | | | 9 | 240 | 4.5 | \$1.6 | |
| WW-1 | 30.5465 | -97.6716 | MB | 30 | 30 Kdr | | - | | L | | | | 0 | 30 X | × | Г | × | Г | Hilltop |
| | | | | | | | | | | | | | | | | Γ | - | Г | |
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|---------|------------------------------------|---------------------------------------|----|--|
| 2A TYPE | TYPE | 2B POINTS | 8 | 8A INFILLING |
| U | Cave | 8 | z | None, expos |
| သွ | Solution cavity | 20 | O | Coarse - co |
| SF | Solution-enlarged fracture(s) | 20 | 0 | Loose or so |
| ıL | Fault | 8 | ᄔ | Fines, comp |
| 0 | Other natural bedrock features | ιo. | > | Vegetation. |
| MB | Manmade feature in bedrock | 8 | FS | Flowstane, |
| SW | Swallow hole | 30 | × | Other mater |
| R | Sinkhole | 20 | | |
| g | Non-karst closed depression | ιń | 12 | 12 TOPOGRAPHI |
| _ | Zone clustered or allohed features | 33 | S | Cirl Hilloo Hills |

Fines, compacted clay-rich sediment, soll profile, gray or red colors

Vegetation. Give details in narrative description

Flowstone, cements, cave deposits

Other materials

Loose or soft mud or soil, organics, leaves, sticks, dark colors

Coarse - cobbles, breakdown, sand, gravel

None, exposed bedrock

Cirif, Hilltop, Hillside, Drainage, Floodplain, Streambed TOPOGRAPHY

information presented here complies with that document and is a true representation of the conditions observed in the field. My signature certifies that I am qualified as a geologist as defined by 30 TAC 213

I have read, I understood, and I have followed the Texas Natural Resource Conservation Commission's Instructions to Geologists. The

Sheet

Date

TNRCC-0585-Table (Rev. 5-1-02)



TABLE 1
Stratigraphic Column
Applegate Office Warehouse
7 Applegate Circle
Round Rock, Texas

| HYDROGEOLOGIC SUBDIVISION | FORMATION | MEMBER | THICKNESS (feet) | LITHOLOGY |
|------------------------------|------------|--------|---------------------|--|
| Confining Unit | Del Rio | 1 | 70 | greenish gray, laminated mudstone |
| Edwards Aquifer | Georgetown | В | 20 | light gray, hard, crystalline, thin bedded limestone |



Source: Housh, 2007



SITE-SPECIFIC GEOLOGY

The Geologic Assessment (GA) of the Applegate Office Warehouse site was conducted by Mr. Russell C. Ford, P.G., of Terracon Consultants, Inc. on January 5 and June 1, 2015. The site consists of an approximate 2.9-acre tract of partially developed land located at 7 Applegate Circle in Round Rock, Texas.

Exhibit 1 (attached) is a site location map depicting the site in relation to the surrounding area. The site is vegetated with mostly grasses and a few scattered hardwoods. The areas immediately surrounding the site are a mix of residential and commercial properties.

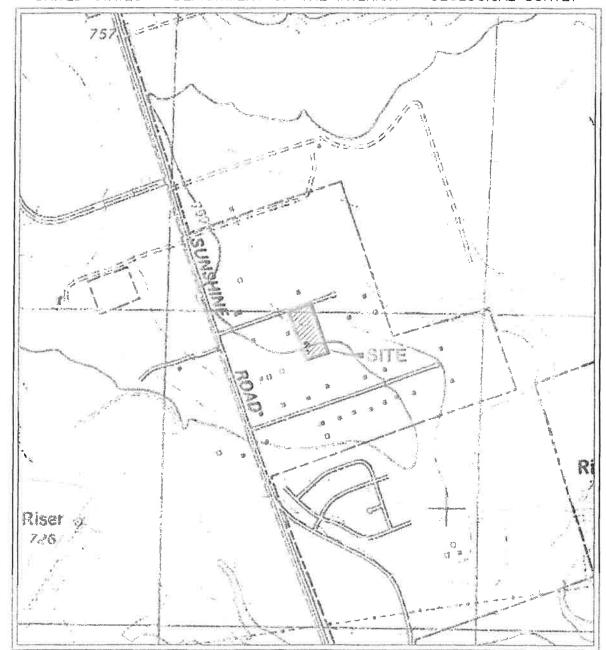
The surficial geologic units present at the site have been identified as the Georgetown Formation and the Del Rio Formation. Exhibit 2 (attached) is a geologic map of the site. The Georgetown Formation consists of an inter-bedded, calcareous, fossiliferous, marly limestone and forms the upper unit for the Edwards Aquifer. The formation has been subdivided into five members on the basis of lithology and fossil assemblages. The member mapped onsite is member E. Member E consists of approximately 20 feet of light gray, hard to very hard, crystalline, thinly bedded limestone. The Del Rio Formation overlies the Georgetown Formation and forms the confining unit for the Edwards Aquifer. The formation is approximately 70 feet thick in the area and consists of a greenish gray, soft, plastic, laminated mudstone.

The site is located entirely within the recharge zone of the Edwards Aquifer. The recharge zone boundary is located about 4,000 feet southeast of the site as shown on Exhibit 1. Table 1 (attached) is a stratigraphic column prepared for the site. Exposure of these units onsite is generally obscured by the relatively thick soil cover present and grass vegetation. The completed Geologic Assessment form is attached.

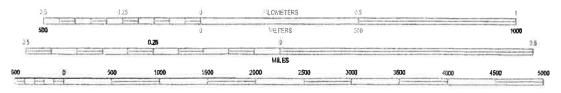
Based on a review of site topography, aerial photographs, and published geologic maps, there are no mapped faults located on the site. The nearest mapped fault is located about 4,000 feet southeast of the site and also forms the recharge zone boundary in the area. The fault, locally referred to as the Chandler Fault, trends to the northeast and is associated with the Balcones fault zone, which is comprised of en echelon, normal, high-angle faults, that are generally down thrown to the southeast and represents the dominant structural trend of the area.

No geologic features were observed on the site. An existing water well was observed in a small shed located behind an existing onsite residence. The well was equipped with a sanitary well seal and downhole piping which did not allow for access to the well. The wellhead appeared to be in good condition and is planned to be used as part of the proposed site development. Due to the lack of any significant sensitive recharge features observed on the site and the presence of a relatively impermeable soil cover present, the potential for fluid movement to the Edwards aguifer beneath the site is considered low.

UNITED STATES - DEPARTMENT OF THE INTERIOR - GEOLOGICAL SURVEY



SCALE 1:12,000



CONTOUR INTERVAL 10 FEET NATIONAL GEODETIC VERTICAL DATUM OF 1829 Round Rock, Texas 30097-C6-TF-024

1987 7.5 MINUTE SERIES (TOPOGRAPHIC)

| Project Mingr: RF | Project No. 96147739 |
|--------------------------|------------------------|
| Drawn By: Austlin CAD | Scale: AS SHOWN |
| Checked By: RF | File No. 96147739 |
| Арргоный Вус RF | Date: June 01, 2015 |



| TOPOGRAPHIC MAP |
|--------------------------------------|
| Applegate Office Warehouse |
| 7 Applegate Circle |
| Round Rock, Williamson County, Texas |

EXHIBIT

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

Print Name of Customer/Agent: Brian Roby

Date: <u>04/17/2025</u>

Signature of Customer/Agent:

Project Information

| 1. | Current Regulated Entity Name: Applegate Office Warehouse |
|----|--|
| | Original Regulated Entity Name: Applegate Office Warehouse |
| | Regulated Entity Number(s) (RN): 108605452 |
| | Edwards Aquifer Protection Program ID Number(s): 11-15070702, 11002434 |
| | The applicant has not changed and the Customer Number (CN) is: |
| | 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.

| Physical or operational including but not limited diversionary structures. Change in the nature of originally approved or plan to prevent pollution. Development of land proposed modification of Physical modified | or character of the regulated activity a change which would significantly on of the Edwards Aquifer; areviously identified as undevelope | on abatement structure(s) treatment plants, and by from that which was impact the ability of the d in the original water collection system; ge tank system; ge tank system. If the approved the table below, as |
|---|---|---|
| WPAP Modification | Approved Project | Proposed Modification |
| Summary | | |
| Acres | 2.89 | <u>2.988</u> |
| Type of Development | Commercial | Commercial |
| Number of Residential | <u>0</u> | <u>0</u> |
| Lots | | |
| Impervious Cover (acres) | <u>1.87</u> | 2.04 |
| Impervious Cover (% | <u>64.7</u> | <u>68.3</u> |
| Permanent BMPs | <u>1</u> | <u>1</u> |
| Other | Sand Filter | Batch Extended Detention |
| SCS Modification | Approved Project | Proposed Modification |
| Summary | | |
| Linear Feet | | |
| Pipe Diameter | | |

Other

| AST Modification | Approved Project | Proposed Modification |
|--|---|---|
| Summary | | |
| Number of ASTs | | |
| Volume of ASTs | | |
| Other | | |
| | | |
| UST Modification | Approved Project | Proposed Modification |
| Summary | | |
| Number of USTs | | |
| Volume of USTs | | |
| Other | | |
| the nature of the propos | sed modification is attached. | A detailed narrative description of It discusses what was approved, proposed modification will change |
| the existing site develop modification is attached modification is required The approved construction any subsequent mode document that the aliquid The approved construction illustrates that the sillustrates that the si | oment (i.e., current site layouth. A site plan detailing the charters are elsewhere. Truction has not commenced. dification approval letters are approval has not expired. Truction has commenced and ite was constructed as approvation has commenced and ite was not constructed as approvation has commenced and ates that, thus far, the site was ruction has commenced and are that, thus far, the site was ruction has commenced and | has been completed. Attachment C pproved. has not been completed. vas constructed as approved. |
| provided for the new ac | - | Geologic Assessment has been e approved plan. |
| needed for each affecte county in which the proj | d incorporated city, groundw ject will be located. The TCE | cation, plus additional copies as water conservation district, and Q will distribute the additional bmitted to the appropriate regional |

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





Texas Commission on Environmental Quality

Protecting Texas by Reducing and Preventing Pollution

September 11, 2015

Ruben Cortez Sprovy 7 Applegate Tx1 LLC 3720 Gattis School Rd. #800-278 Round Rock, Texas 78664

Re: Edwards Aquifer, Williamson County

NAME OF PROJECT: Applegate Office Warehouse; Located Off of Sunrise Road and North of Old Setters Road, Round Rock, Texas 78681

TYPE OF PLAN: Request for Approval of a Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer

Edwards Aquifer Protection Program ID No. 11-15070702; Investigation No. 1265480; Regulated Entity No. RN 108605452

Dear Mr. Cortez:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the WPAP Application for the above-referenced project submitted to the Austin Regional Office by Capital Engineering, Inc on behalf of Sprovy 7 Applegate Tx1, LLC on July 7, 2015. As presented to the TCEQ, the Temporary and Permanent Best Management Practices (BMP's) 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 site is currently a 2.89 acre commercial lot located in Round Rock Texas in the Edwards Aquifer Recharge Zone. A single family house and two sheds are currently located on the site. One of the sheds serves as a pump house for an active well.

Mr. Ruben Cortez Page 2 September 11, 2015

PROJECT DESCRIPTION

The proposed project will consist of the construction of 5 warehouse buildings that will cover 43,840 square feet of building space. A concrete paved parking lot will cover 37,897 acres. The one well that exists on the site will remain active.

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, a sand filtration pond designed using the TCEQ technical guidance document, <u>Complying with the Edwards Aquifer Rules:</u>

<u>Technical Guidance on Best Management Practices (2005)</u>, will be utilized to treat stormwater runoff. The required total suspended solids (TSS) treatment for this project is **1,566** pounds of TSS generated from the 1.87 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 a partial sedimentation and filtration pond system that will treat polluted surfaces.

GEOLOGY

According to the geologic assessment conducted by Terracon on January 5, 2015 and June 1, 2015 and included with the application, the subject area is located in the Georgetown and the Del Rio Formation in Williamson County. The area is located in the recharge zone of the northern segment of the Edwards Aquifer. No geologic features were observed on the site. One manmade feature was observed on the site. An existing well was observed in a small shed.

The Austin Regional Office site assessment conducted on September 9, 2015 revealed the site to be under construction. Two of the five proposed buildings and the driveway and parking lot were completed covering approximately half of the lot. The second half the lot was cleared and disturbed. Earthwork equipment were actively prepping and grading the second half of the site at the time of the site assessment.

SPECIAL CONDITIONS

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

Mr. Ruben Cortez Page 3 September 11, 2015

- 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. Within 60 days of receiving written approval of an Edwards Aquifer Protection Plan, the applicant must submit to the Austin 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 form (Deed Recordation Affidavit, TCEQ-0625) that you may use to deed record the approved WPAP is enclosed.
- 5. 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 WPAP and this notice of approval shall be maintained at the project location until all regulated activities are completed.
- 6. Modification to the activities described in the referenced WPAP 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.
- 7. The applicant must provide written notification of intent to commence construction, replacement, or rehabilitation of the referenced project. Notification must be submitted to the Austin Regional Office no later than 48 hours prior to commencement of the regulated activity. Written notification must include the date on which the regulated activity will commence, the name of the approved plan and program ID number for the regulated activity, and the name of the prime contractor with the name and telephone number of the contact person. The executive director will use the notification to determine if the approved plan is eligible for an extension.
- 8. Temporary erosion and sedimentation (E&S) controls, i.e., silt fences, rock berms, stabilized construction entrances, or other controls described in the approved WPAP, 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.
- 9. All borings with depths greater than or equal to 20 feet must be plugged with non-shrink grout from the bottom of the hole to within three (3) feet of the surface. The remainder of the hole must be backfilled with cuttings from the boring. All borings less than 20 feet must be backfilled with cuttings from the boring. All borings must be backfilled or plugged within four (4) days of completion of the drilling operation. Voids may be filled with gravel.

Mr. Ruben Cortez Page 4 September 11, 2015

During Construction:

- 10. During the course of regulated activities related to this project, the applicant or 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.
- 11. 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. 6, above.
- 12. If any sensitive feature (caves, solution cavities, sink holes, etc.) is discovered during construction, all regulated activities near the feature must be suspended immediately. The applicant or his agent must immediately notify the Austin Regional Office of the discovery of the feature. Regulated activities near the feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the feature and the aquifer from potentially adverse impacts to water quality. The plan must be sealed, signed, and dated by a Texas Licensed Professional Engineer.
- 13. One well exist(s) on site. All water wells, including injection, dewatering, and monitoring wells must be in compliance with the requirements of the Texas Department of Licensing and Regulation under Title 16 TAC Chapter 76 (relating to Water Well Drillers and Pump Installers) and all other locally applicable rules, as appropriate.
- 14. 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 reduced by 50 percent. Litter, construction debris, and construction chemicals shall be prevented from becoming stormwater discharge pollutants.
- 15. 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.
- 16. 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.
- 17. 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.

After Completion of Construction:

18. 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 Austin Regional Office within 30 days of site completion.

Mr. Ruben Cortez
 Page 5
 September 11, 2015

- 19. 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. The regulated 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 Austin Regional Office within 30 days of the transfer. A copy of the transfer form (TCEQ-10263) is enclosed.
- 20. Upon legal transfer of this property, the new owner(s) is required to comply with all terms of the approved Edwards Aquifer protection plan. If the new owner intends to commence any new regulated activity on the site, a new Edwards Aquifer protection 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.
- 21. An Edwards Aquifer protection 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 Edwards Aquifer protection plan must be submitted to the Austin Regional Office with the appropriate fees for review and approval by the executive director prior to commencing any additional regulated activities.
- 22. 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 Ab Maamar-Tayeb, P.E. of the Edwards Aquifer Protection Program of the Austin Regional Office at 512-339-2929.

Sincerely

Carolyn D. Runyon, Water Section Manager

Austin Region Office

Texas Commission on Environmental Quality

CDR/abm

Enclosure: Change in Responsibility, Form 10263, Deed Recordation Affidavit, Form 0625

cc: Mr. Sid Bassari, P.E., Capital Engineering, 2501 South Bagdad Road, Leander Texas 78641

Mrs. Alysha Girard, P.E., Storm Water Manger, City of Round Rock

Mr. Joe England, P.E., Williamson County Engineer, Williamson County

TCEQ Central Records, Building F, MC 212



FROM TCEQ-0590 ATTACHMENT B - NARRATIVE OF PROPOSED MODIFICATION

To whom it may concern,

I am pleased to present this Water Pollution Abatement Plan (WPAP) modification application for your review regarding the development located at 7 Applegate Circle, Round Rock, TX 78665. The development was constructed in 2015. A WPAP was approved by the Texas Commission on Environmental Quality (TCEQ) in September of 2015 under the Edwards Aquifer Protection Program ID No. 11-15070702.

The originally approved WPAP was submitted with plans and application documents showing the site area to be 1.89-acres. This looks to have been an error. The outer boundary of the property was utilized in the original drawings. No site area has been added to the property in the time since the original application, yet the latest title survey shows the property to be 1.988-acres. The approved WPAP required removal of 1,566 pounds of total suspended solids (TSS) generated from an assumed 1.87-acres of impervious cover for the 2.988-acre site with no off-site drainage entering the subject BMP. A permanent sand-filter system with no infiltration was the BMP chosen for the original approval.

Errors in construction of the site have resulted in failure of the BMP, construction of impervious cover in excess of the approved amount, and stormwater not entering the BMP through proper mechanism.

This modification finds a total of 2.04-acres of impervious cover requiring water quality treatment, with a required TSS removal of 1,675 pounds. The proposed BMP will capture 2.24-acres of site area, with 1.95-acres of that being impervious cover. This modification proposes changing the sand filter BMP to a batch extended detention system. This allows the existing pond footprint to be utilized to the best extent practical, while providing the necessary volumes for adequate water quality treatment and stormwater detention. To remove the required 1,675 pounds of TSS, the BMP needs a minimum water quality volume of 9,161 cf. The proposed BMP's water quality elevation is 736.00 msl, which provides a water quality volume of 9,582 cf. This will remove the required 1,675 pounds of TSS.

The water quality and detention pond systems were found to be out of compliance with the approved WPAP. The pond is currently unable to discharge the water quality volume or the detention volume appropriately, resulting in ponded stormwater and algal growth within the bottom of pond. The pond remediation involves the following operations:

- Reconstruction of the southern pond wall
- Elimination of the interior separating wall
- Removal of the accumulated silt and growth from the bottom of pond

- Removal of the existing sand filter media and underdrain piping
- Excavation to a minimum depth to allow liner preparation and soil amendment
- Restoring the pond liner utilizing an appropriate geomembrane product
- Addition of batch detention valve and pressure switch system
- Repairing storm line connections
- Replacing the pond lower volume pump discharge system
- Reconstructing the outflow structure
- Constructing a mortared rock rip rap outflow channel to transport discharged stormwater
- Adding curb along the northern edge of the driveway to convey stormwater to the existing drainage flume

The site has been in operation as a light industrial warehouse business park since it's construction in 2015. This use will be continued with this modified WPAP. No additional buildings are proposed with this modification.

Other site work to be performed during this modification will be done to complete the on-site sewage facility (OSSF) license to operate permit approval. The OSSF failed its License to Operate inspection due to inability to confirm whether the effluent distribution line crossing under the driveway is or is not sleeved. The existing drive will be sawcut to allow proper encasement of the effluent discharge lines that cross under the drive to reach the drip field area south of the drive aisle. Two-way cleanouts will also be added to the existing wastewater collection lines within 5' of each building.

The OSSF has been in operation without this license since October of 2015 without any observed negative impacts upon the site or surrounding environment.

Thank you for your review of this WPAP modification request. It is our hope that the proposed construction elements will provide improved treatment performance with added protection for both public health and the environment. Please reach out via phone or email with any questions you may have.

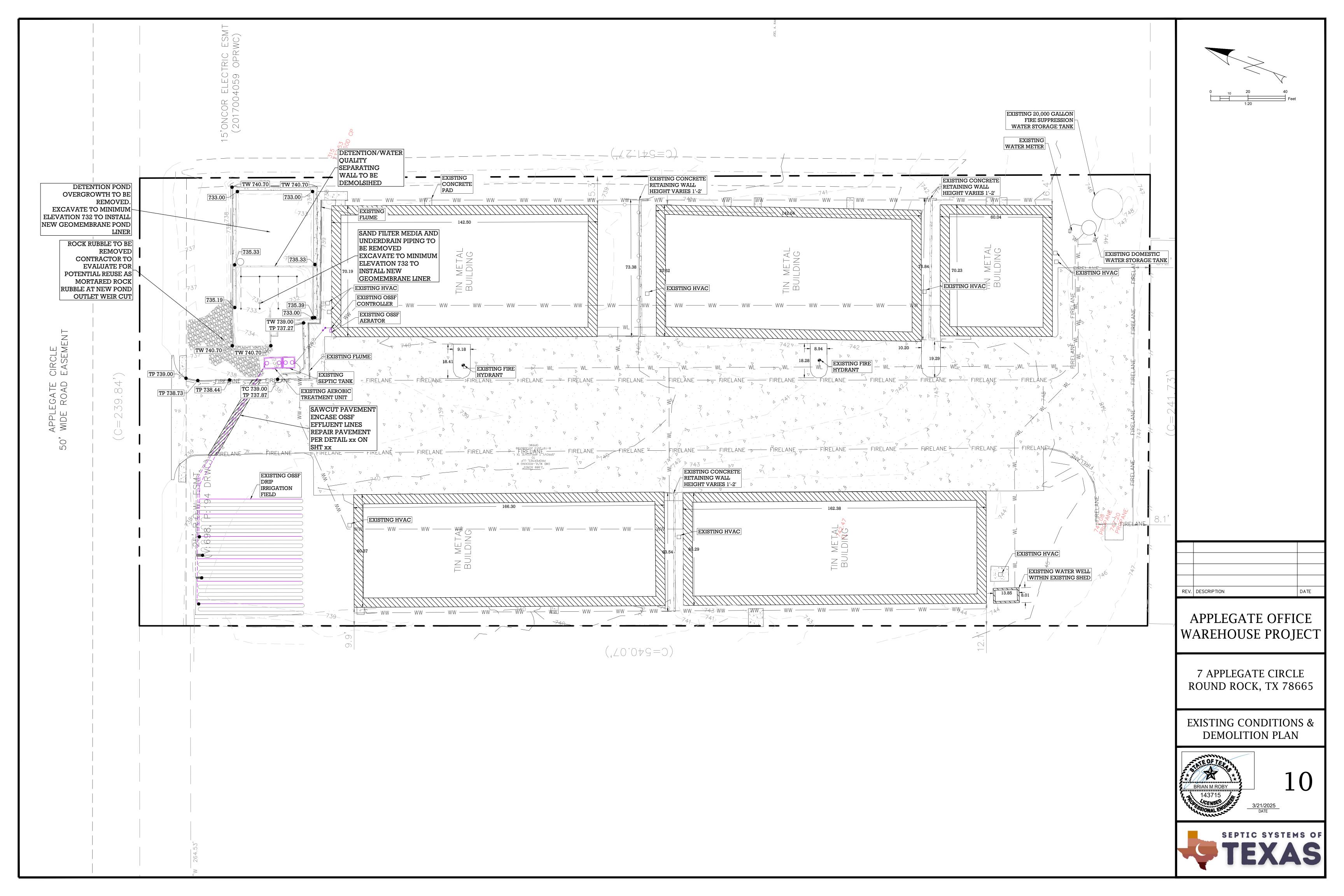
Sincerely,

Brian Roby, PE

737-710-4312

brian@septicsystemsoftexas.com





Water Pollution Abatement Plan Application

Texas Commission on Environmental Quality

for Regulated Activities on the Edwards Aquifer Recharge Zone and Relating to 30 TAC §213.5(b), 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 **Water Pollution Abatement Plan Application Form** is hereby submitted for TCEQ review and Executive Director approval. The form was prepared by:

Print Name of Customer/Agent: Brian Roby

Date: 03/26/2025

Signature of Customer/Agent:

Regulated Entity Name: Applegate Office Warehouse

Regulated Entity Information

| 1. | The type of project is: |
|----|--|
| | Residential: Number of Lots: Residential: Number of Living Unit Equivalents: |
| | Commercial |
| | Industrial |
| | Other: |
| 2 | Tatal site assessed /size of managements \2.2000 |

- 2. Total site acreage (size of property): 2.988
- 3. Estimated projected population:22
- 4. The amount and type of impervious cover expected after construction are shown below:

Table 1 - Impervious Cover Table

| Impervious Cover of Proposed Project | Sq. Ft. | Sq. Ft./Acre | Acres |
|--------------------------------------|---------|--------------|-------|
| Structures/Rooftops | 44,212 | ÷ 43,560 = | 1.015 |
| Parking | 43,932 | ÷ 43,560 = | 1.008 |
| Other paved surfaces | 764 | ÷ 43,560 = | 0.017 |
| Total Impervious Cover | 88908 | ÷ 43,560 = | 2.04 |

Total Impervious Cover $\underline{2.04}$ ÷ Total Acreage $\underline{2.98}$ X 100 = $\underline{68.4}$ % Impervious Cover

- 5. Attachment A Factors Affecting Surface Water Quality. A detailed description of all factors that could affect surface water and groundwater quality that addresses ultimate land use is attached.
- 6. Only inert materials as defined by 30 TAC §330.2 will be used as fill material.

For Road Projects Only

Complete questions 7 - 12 if this application is exclusively for a road project.

| 7. | 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. |
| 8. | Type of pavement or road surface to be used: |
| | Concrete Asphaltic concrete pavement Other: |
| 9. | Length of Right of Way (R.O.W.): feet. |
| | Width of R.O.W.: feet. $L \times W = Ft^2 \div 43,560 Ft^2/Acre = acres.$ |
| 10. | Length of pavement area: feet. |
| | Width of pavement area: feet. L x W = $Ft^2 \div 43,560 Ft^2/Acre = acres.$ Pavement area acres \div R.O.W. area acres x $100 = \%$ impervious cover. |
| 11. | A rest stop will be included in this project. |
| | A rest stop will not be included in this project. |

| TCEQ Executive Director. Modi | ting roadways that do not require approval from the fications to existing roadways such as widening g more than one-half (1/2) the width of one (1) existing m the TCEQ. |
|---|---|
| Stormwater to be gener | rated by the Proposed Project |
| volume (quantity) and characte occur from the proposed proje quality and quantity are based | naracter of Stormwater. A detailed description of the er (quality) of the stormwater runoff which is expected to ct is attached. The estimates of stormwater runoff on the area and type of impervious cover. Include the r both pre-construction and post-construction conditions |
| Wastewater to be gener | rated by the Proposed Project |
| 14. The character and volume of waste | ewater is shown below: |
| 100% Domestic% Industrial% Commingled TOTAL gallons/day 360 | 360Gallons/dayGallons/dayGallons/day |
| 15. Wastewater will be disposed of by | : |
| On-Site Sewage Facility (OSSF/S | Septic Tank): |
| will be used to treat and dis licensing authority's (authority the land is suitable for the the requirements for on-sit relating to On-site Sewage Each lot in this project/devesize. The system will be de | Letter from Authorized Agent. An on-site sewage facility spose of the wastewater from this site. The appropriate rized agent) written approval is attached. It states that use of private sewage facilities and will meet or exceed the sewage facilities as specified under 30 TAC Chapter 285 Facilities. Elopment is at least one (1) acre (43,560 square feet) in signed by a licensed professional engineer or registered as licensed installer in compliance with 30 TAC Chapter |
| Sewage Collection System (Sew | ver Lines): |
| to an existing SCS. | n the wastewater generating facilities will be connected in the wastewater generating facilities will be connected |
| The SCS was previously subThe SCS was submitted withThe SCS will be submitted a be installed prior to Execut | n this application. It a later date. The owner is aware that the SCS may not |

| | The sewage collection system will convey the wastewater to the (name) Treatment Plant. The treatment facility is: |
|------|--|
| | Existing. Proposed. |
| 16. | All private service laterals will be inspected as required in 30 TAC §213.5. |
| Si | te Plan Requirements |
| Iter | ms 17 – 28 must be included on the Site Plan. |
| 17. | \square The Site Plan must have a minimum scale of 1" = 400'. |
| | Site Plan Scale: 1" = <u>30</u> '. |
| 18. | 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 Map 48491CO495E Dated Sep. 26, 2008 |
| 19. | 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, open space, etc. are shown on the plan. |
| | The layout of the development is shown with existing contours at appropriate, but not greater than ten-foot intervals. Finished topographic contours will not differ from the existing topographic configuration and are not shown. Lots, recreation centers, buildings, roads, open space, etc. are shown on the site plan. |
| 20. | All known wells (oil, water, unplugged, capped and/or abandoned, test holes, etc.): |
| | \square There are $\underline{1}$ (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply) |
| | ☐ The wells are not in use and have been properly abandoned. ☐ The wells are not in use and will be properly abandoned. ☐ The wells are in use and comply with 16 TAC §76. |
| | ☐ There are no wells or test holes of any kind known to exist on the project site. |
| 21. | Geologic or manmade features which are on the site: |
| | All sensitive geologic or manmade features identified in the Geologic Assessment are shown and labeled. No sensitive geologic or manmade features were identified in the Geologic Assessment. |
| | Attachment D - Exception to the Required Geologic Assessment. A request and justification for an exception to a portion of the Geologic Assessment is attached. |

| 22. 🔀 | $\cInt The drainage patterns and approximate slopes anticipated after major grading activities$ |
|-------|--|
| 23. 🗵 | Areas of soil disturbance and areas which will not be disturbed. |
| 24. 🔀 | Locations of major structural and nonstructural controls. These are the temporary and permanent best management practices. |
| 25. 🗵 | Locations where soil stabilization practices are expected to occur. |
| 26. 🗵 | Surface waters (including wetlands). |
| | N/A |
| 27. 🔀 | Locations where stormwater discharges to surface water or sensitive features are to occur. |
| | There will be no discharges to surface water or sensitive features. |
| 28. 🗵 | Legal boundaries of the site are shown. |
| Adn | ministrative Information |
| 29. 🔀 | 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. |
| 30. 🔀 | Any modification of this WPAP will require Executive Director approval, prior to construction, and may require submission of a revised application, with appropriate fees. |



FROM TCEQ-0584 ATTACHMENT A

FACTORS AFFECTING SURFACE WATER QUALITY

The following construction activities may affect surface and ground water quality:

| POLLUTANT-GENERATING ACTIVITY | POLLUTANTS OR POLLUTANT CONSTITUENTS | LOCATION ON SITE |
|-------------------------------------|--|--------------------------|
| Grading, Excavation | Oil, Gasoline, Grease, Hydraulic Fluid | Pond, Frontage, Sideyard |
| Demolition | Sediment, Debris, Cement | Pond, Driveway |
| Pavement | Cement | Driveway |
| Wall | Concrete, Cement | Pond |
| *Landscaping (if any) | Fertilizer, Pesticide | N/A |
| *Note: There will be no landscaping | | |
| for this project | | |



FROM TCEQ-0584 ATTACHMENT B

VOLUME AND CHARACTER OF STORMWATER

The drainage analysis was conducted in conformance with the latest City of Austin Drainage Criteria Manual requirements and methods. HEC-HMS was utilized to build the drainage model, using the Frequency Storm Event meteorological model with ATLAS 14 precipitation rates. The 2-, 10-, 25-, and 100-year storm events were modeled. A base curve number was utilized for each drainage area as HEC-HMS accepts the impervious cover percentage of each drainage area and considers this percentage of the area completely impervious, thus the curve number only applies the pervious portions of the drainage area. A "C" value of 82 was utilized for this model, in accordance with the predeveloped character of the site and the character of the remaining pervious areas.

The proposed pond system will be capable of capturing and detaining the on-site stormwater, releasing at equal to or less than the pre-developed rates for the studied storm events.

Stormwater flowing over the site will collect oil and gas from vehicular exhaust, sediment, and construction debris. The use of proper silt fence during demolition and reconstruction can prevent the transport of this pollution. Once reconstruction is complete, the batch extended detention pond will remove the required pollutant load, preventing excess pollution from reaching off site water ways. All stormwater eventually leaves the site via the northeast corner, continuing along the roadway channel until collecting into a larger drainage ditch within 11 Applegate Circle. This then connects to Soil Conservation Site #14, Meadow Lake Park.

See the following time of concentration calculations and HEC-HMS Summary:

| | ID SHEET FI = t _{toverland}) | LOW | SHA | | CENTRATED | FLOW | (0 | CH OPEN CHANN | ANNELIZED NEL OR STOR $(t_t = t_{t_{chan}})$ | M SEWER FI | LOW) | тотл | AL TIME OF | CONCENT | RATION (1 | ·c) |
|---------------------------|---|-----------------|-------|------------------------------------|----------------------------|----------------|------|------------------|--|-------------------------------|----------------|---------------|-----------------------------|----------------|----------------|--------------|
| $t_{t_{overland}} = 0$ | $0.42 \frac{(nL)^{0.8}}{P_2^{0.5} S_{0.8}}$ | 4 | U | Paved: V | = 16.1345 (= 20.3282 (| | | V | $r = \frac{1.486 r^{2/3}}{n}$ | s ¹ / ₂ | | | $t_{overland} + t_{t_{sl}}$ | | | |
| | | | | $t_{t_{shallow}}$ | $_{conc} = \frac{L}{60V}$ | | | | $t_{t_{channel}} = \frac{L}{60}$ | V | | n = number of | segments co | omprising th | e total hydra | aulic length |
| MANNIN | IG' 'n' Valu | ies: | | | | | | | | | | | | | | |
| 0.015 | Con | icrete | | | | | | | | | | | | | | |
| 0.016 | Asp | ohalt | | | | | | | | | | | | | | |
| 0.15 | Short-gra | ass prarie | | | | | | | | | | | | | | |
| 0.24 | | grasses | | | | | | | | | | | | | | |
| 0.41 | | dagrass | | | | | | | | | | | | | | |
| 0.13 | Range (| (natural) | | | | | | | | | | | | | | |
| 2- Yr 24-Hour Rainfall | 3.97 | | | | | | | | | | | | | | | |
| DRAINAGE AREA ID | | AULIC / PATH | | OVERLANI (t _{toverla} | SHEET FLC |)W | | SHALLOW | CONCENTE (t _{t_shallow conc} | | <u> </u> | | NELIZED FL | .OW | T _c | |
| | FROM | то | n | L | s | t _t | L | s | Surface | ٧ | t _t | L | ٧ | t _t | ΔТс | ∑Tc |
| | | | | (FT) | (FT/FT) | (MIN) | (FT) | (FT/FT) | (P or U) | (FT/S) | (MIN) | (FT) | (FT/S) | (MIN) | (MIN) | (MIN) |
| | | | 0.13 | 100.00 | 0.03 | 6.7 | | | | | | | | | 6.7 | 6.7 |
| A1 | Existing C | Conditions | | | | | 473 | 0.02 | Unpaved: | 2 | 3.5 | | | | 3.5 | 3.5 |
| | | | | | | | | | | | | 0 | 4 | 0.0 | | 0.0 10.1 |
| | 1 | | 0.016 | 18 | 0.02 | 0.4 | | 1 | 1 | l | | | 1 | 1 | 0.4 | 0.4 |
| | | | 0.016 | 70 | 0.02 | 5.9 | 50 | 0.02 | Unpaved: | 2 | 0.4 | | | | 6.3 | 6.3 |
| A2 | Existing (| Conditions | 0.13 | 70 | 0.02 | 3.3 | 30 | 0.02 | Oripaveu. | | 0.4 | 0 | 5 | 0.0 | 0.3 | 0.0 |
| | | | | | | | | | | | | | | 0.0 | | 6.6 |
| | 1 | | l . | | | | | | 1 | | 1 | | 1 | | | 0.0 |
| | | | 0.015 | 100 | 0.04 | 1.2 | | | | | | | | | 1.2 | 1.2 |
| | | | | | | | 400 | 0.02 | Paved: | 3 | 2.3 | | | | 2.3 | 2.3 |
| A1 | Proposea | Conditions | | | | | | | | | | 0 | 5 | 0.0 | | 0.0 |
| | | | | | | | | | | | | | | | | 3.5 |
| | | | | | | | | _ | | | | | | | | |
| | | | 0.016 | 18 | 0.02 | 0.4 | | | | | | | 1 | | 0.4 | 0.4 |
| A2 | Proposed | Conditions | 0.13 | 70 | 0.02 | 5.9 | 50 | 0.02 | Unpaved: | 2 | 0.4 | | - | 0.0 | 6.3 | 6.3 |
| | | | | | | | | - | | | | 0 | 5 | 0.0 | | 0.0 |
| | | | | | | | | | | | | | 1 | | | 6.6 |
| | | | 0.24 | 100 | 0.02 | 12.8 | | | | | | | | | 12.8 | 12.8 |
| A3 | Proposed | Conditions | | | | | 179 | 0.02 | Unpaved: | 2 | 1.3 | | | | 1.3 | 1.3 |
| Α0 | 1.10hosen | Conditions | | | | | | | | | | 0 | 5 | 0.0 | | 0.0 |
| | | | | | | | | | | | | | 1 | | | 14.1 |
| | | | 0.24 | 100 | 0.03 | 10.9 | | 1 | 1 | | | 1 | | | 10.9 | 10.9 |
| | | | 0.24 | 100 | 0.00 | 10.5 | 0 | 0.02 | Unpaved: | | | | 1 | | 10.5 | 0.0 |
| A4 | Proposed | Conditions | | | | | | | | | | 424 | 5 | 1.4 | 1.4 | 1.4 |
| | 1 | | | | | | | | 1 | İ | | | | | | 12.3 |



| | | A | PPLEG | ATE 7 | | | | | | |
|------------------|--|----------|---------|----------|----------------|-----------|----------|-----------------|-----------------|------------------|
| | HEG | C-HMS H | YDROL | OGIC S | SUMMAF | RY | | | | |
| | | EXIS | TING CO | NDITION | S | | | | | |
| DRAINAGE AREA | Description | Ac. | CN | % I.C. | $T_{\rm C}$ | T_{LAG} | Q_2 | Q ₁₀ | Q ₂₅ | Q ₁₀₀ |
| A1 | Onsite Area - Existing Conditions | 2.85 Ac. | 82 | 1.5% | ####### | 6.1 min. | 8.7 cfs | 15.5 cfs | 20.0 cfs | 27.3 cfs |
| A2 | ROW Area - Existing Conditions | 0.14 Ac. | 82 | 55.0% | 6.6 min. | 4.0 min. | 0.6 cfs | 1.0 cfs | 1.2 cfs | 1.6 cfs |
| POA A | Total Area Released to Applegate Circle ROW | 2.99 Ac. | | | | | 9.2 cfs | 16.4 cfs | 21.1 cfs | 28.7 cfs |
| | | Д | PPLEG | ATE 7 | | | | | | |
| | HEG | C-HMS H | YDROI | LOGIC S | SUMMAF | RY | | | | |
| | | PROP | OSED C | ONDITIOI | NS | | | | | |
| DRAINAGE AREA | Description | Ac. | CN | % I.C. | T _C | T_{LAG} | Q_2 | Q ₁₀ | Q ₂₅ | Q ₁₀₀ |
| A1 | Onsite Area to Pond | 2.24 Ac. | 82 | 84.9% | 5.0 min. | 3.0 min. | 11.7 cfs | 17.5 cfs | 21.4 cfs | 27.6 cfs |
| | Total Through Detention | | | | | | 11.7 cfs | 17.5 cfs | 21.4 cfs | 27.6 cfs |
| DETENTION | Outfall from Detention | 2.24 Ac. | | | | | 6.0 cfs | 11.7 cfs | 15.8 cfs | 21.8 cfs |
| | Detention WSE | | | | | | 738.1' | 738.4' | 738.7' | 738.9' |
| A2 | ROW Area | 0.14 Ac. | 82 | 62.0% | 6.6 min. | 4.0 min. | 0.6 cfs | 1.0 cfs | 1.2 cfs | 1.6 cfs |
| A3 | Onsite Area Bypass - West | 0.25 Ac. | 82 | 0.4% | 5.0 min. | 8.5 min. | 0.7 cfs | 1.2 cfs | 1.6 cfs | 2.2 cfs |
| A4 | Onsite Area Bypass - East | 0.35 Ac. | 82 | 2.3% | 5.0 min. | 7.4 min. | 1.0 cfs | 1.8 cfs | 2.3 cfs | 3.2 cfs |
| POA A | Total Area Released to Existing Box Culverts | 2.98 Ac. | | | | | 8.1 cfs | 15.5 cfs | 20.7 cfs | 28.4 cfs |



TSS Removal Calculations 04-20-2009

Project Name: APPLEGATE OFFICE WAREHOUSE

Date Prepared: 3/21/2025

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 = Williamson
Total project area included in plan * = 2.99 acres
Predevelopment impervious area within the limits of the plan * = 0.12 acres
Total post-development impervious area within the limits of the plan* = 2.04 acres
Total post-development impervious cover fraction * = 0.68

P = 32 inches

L_{M TOTAL PROJECT} = 1675 lbs.

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

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



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

Drainage Basin/Outfall Area No. =

Total drainage basin/outfall area = 2.24 acres Predevelopment impervious area within drainage basin/outfall area = 0.04 acres Post-development impervious area within drainage basin/outfall area = 1.95 acres Post-development impervious fraction within drainage basin/outfall area = 0.87 $L_{M THIS BASIN} = 1663$ lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = Extended Detention
Removal efficiency = 91 percen

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: $L_R = (BMP \text{ efficiency}) \times P \times (A_1 \times 34.6 + A_2 \times 0.54)$

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

 $\mathsf{L}_\mathsf{R} = \mathsf{TSS}$ Load removed from this catchment area by the proposed BMP

 $\begin{array}{lll} A_C = & {\color{red} 2.24} & {\rm acres} \\ A_I = & {\color{red} 1.95} & {\rm acres} \\ A_P = & {\color{red} 0.29} & {\rm acres} \\ L_R = & {\color{red} 1970} & {\color{red} lbs} \end{array}$

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

Desired $L_{M THIS BASIN} = 1675$ lbs.

F = **0.85**

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

Pages 3-46 to 3-51

Rainfall Depth = 1.32 inches

Post Development Runoff Coefficient = 0.71

On-site Water Quality Volume = 7634 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 = **1527**

Total Capture Volume (required water quality volume(s) x 1.20) = 9161 cubic feet

8. Extended Detention Basin System

Designed as Required in RG-348

Required Water Quality Volume for extended detention basin =

9161 cubic feet

WCCHD Board of Health:

Wayne Cavalier, Chair, Williamson County Katherine M. Galloway, Cedar Park Rob Hardy, Georgetown Dr. Luis Egelsee, Leander Vacant, Liberty Hill/Hutto Selicia Sanchez-Adame, Round Rock Pamela Sanford, Taylor Larry Madsen, Williamson County



W. S. Riggins Jr., MD, MPH, WCCHD Executive Director/Health Authority

April 17, 2015

Sprovy 7 Applegate TX 1, LLC 17270 F.M. 112 Thrall, TX 76578

RE: 7 Applegate, Round Rock, TX, 78664

The above referenced property is located within the Edwards Aquifer Recharge Zone.

Based on the surrounding subdivisions and the soil survey for Williamson County and planning material received, this office is able to determine that the soil and site conditions of this lot is suitable to allow the use of on-site sewage facilities (OSSF). It should be noted that this office has not actually studied the physical properties of this site. Site specific conditions such as OSSF setbacks, recharge features, drainage, soil conditions, etc..., will need taken into account in planning any OSSF.

These OSSF's will have to be designed by a professional engineer or a registered sanitarian. An Edwards Aquifer protection plan shall be approved by the appropriate TCEQ regional office before an authorization to construct an OSSF may be issued. The owner will be required to inform each prospective buyer, lessee or renter of the following in writing:

- That an authorization to construct shall be required before an OSSF can be constructed in the subdivision;
- That a notice of approval shall be required for the operation of an OSSF;
- Whether an application for a water pollution abatement plan as defined in Chapter 213 has been made, whether it has been approved and if any restrictions or conditions have been placed on the approval.

If this office can be of further assistance, please do not hesitate to call.

Sincerely,

OS 8626

Doug McPeters, OS8626

WCCHD Environmental Health Services

Cc: Gapital Engineering 2501 S. Bagdad Road Leander, Texas 78641

Temporary Stormwater Section

Texas Commission on Environmental Quality

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

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

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

Signature

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

executive director approval. The application was prepared by:

Print Name of Customer/Agent: Brian Roby

Date: 03/29/2025

Regulated Entity Name: Applegate Office Warehouse

Project Information

Signature of Customer/Agent:

Potential Sources of Contamination

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

| 1. | Fuels for construction equipment and hazardous substances which will be used during construction: |
|----|--|
| | The following fuels and/or hazardous substances will be stored on the site: |
| | These fuels and/or hazardous substances will be stored in: |
| | Aboveground storage tanks with a cumulative storage capacity of less than 250 gallons will be stored on the site for less than one (1) year. |

| | Aboveground storage tanks with a cumulative storage capacity between 250 gallons and 499 gallons will be stored on the site for less than one (1) year. Aboveground storage tanks with a cumulative storage capacity of 500 gallons or more will be stored on the site. An Aboveground Storage Tank Facility Plan application must be submitted to the appropriate regional office of the TCEQ prior to moving the tanks onto the project. |
|----|---|
| | igstyle igstyle Fuels and hazardous substances will not be stored on the site. |
| 2. | Attachment A - Spill Response Actions. A site specific description of the measures to be taken to contain any spill of hydrocarbons or hazardous substances is attached. |
| 3. | Temporary aboveground storage tank systems of 250 gallons or more cumulative storage capacity must be located a minimum horizontal distance of 150 feet from any domestic, industrial, irrigation, or public water supply well, or other sensitive feature. |
| 4. | Attachment B - Potential Sources of Contamination. A description of any activities or processes which may be a potential source of contamination affecting surface water quality is attached. |
| S | equence of Construction |
| 5. | Attachment C - Sequence of Major Activities. A description of the sequence of major activities which will disturb soils for major portions of the site (grubbing, excavation, grading, utilities, and infrastructure installation) is attached. |
| | For each activity described, an estimate (in acres) of the total area of the site to be disturbed by each activity is given. For each activity described, include a description of appropriate temporary control measures and the general timing (or sequence) during the construction process that the measures will be implemented. |
| 6. | Name the receiving water(s) at or near the site which will be disturbed or which will |

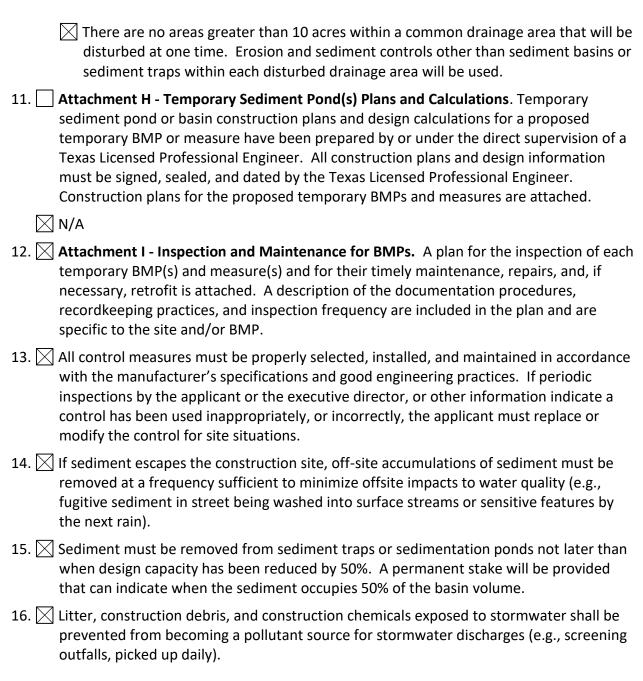
Temporary Best Management Practices (TBMPs)

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

receive discharges from disturbed areas of the project: Meadow Lake Park - SCS Site #14

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

| | | A description of how BMPs and measures will prevent pollution of surface water, groundwater or stormwater that originates upgradient from the site and flows across the site. |
|-----|-------------|---|
| | | A description of how BMPs and measures will prevent pollution of surface water or groundwater that originates on-site or flows off site, including pollution caused by contaminated stormwater runoff from the site. |
| | | A description of how BMPs and measures will prevent pollutants from entering surface streams, sensitive features, or the aquifer. |
| | | A description of how, to the maximum extent practicable, BMPs and measures will maintain flow to naturally-occurring sensitive features identified in either the geologic assessment, TCEQ inspections, or during excavation, blasting, or construction. |
| 8. | | The temporary sealing of a naturally-occurring sensitive feature which accepts recharge to the Edwards Aquifer as a temporary pollution abatement measure during active construction should be avoided. |
| | | Attachment E - Request to Temporarily Seal a Feature. A request to temporarily seal a feature is attached. The request includes justification as to why no reasonable and practicable alternative exists for each feature. |
| | | There will be no temporary sealing of naturally-occurring sensitive features on the site. |
| 9. | | Attachment F - Structural Practices . A description of the structural practices that will be used to divert flows away from exposed soils, to store flows, or to otherwise limit runoff discharge of pollutants from exposed areas of the site is attached. Placement of structural practices in floodplains has been avoided. |
| 10. | \boxtimes | Attachment G - Drainage Area Map . A drainage area map supporting the following requirements is attached: |
| | | For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin will be provided. |
| | | For areas that will have more than 10 acres within a common drainage area disturbed at one time, a smaller sediment basin and/or sediment trap(s) will be used. |
| | | For areas that will have more than 10 acres within a common drainage area |
| | | disturbed at one time, a sediment basin or other equivalent controls are not attainable, but other TBMPs and measures will be used in combination to protect down slope and side slope boundaries of the construction area. |
| | | There are no areas greater than 10 acres within a common drainage area that will be |
| | | disturbed at one time. A smaller sediment basin and/or sediment trap(s) will be used in combination with other erosion and sediment controls within each disturbed drainage area. |



Soil Stabilization Practices

Examples: establishment of temporary vegetation, establishment of permanent vegetation, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, or preservation of mature vegetation.

17. Attachment J - Schedule of Interim and Permanent Soil Stabilization Practices. A schedule of the interim and permanent soil stabilization practices for the site is attached.

- 18. Records must be kept at the site of the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.
- 19. Stabilization practices must be initiated as soon as practicable where construction activities have temporarily or permanently ceased.

Administrative Information

- 20. All structural controls will be inspected and maintained according to the submitted and approved operation and maintenance plan for the project.
- 21. If any geologic or manmade features, such as caves, faults, sinkholes, etc., are discovered, all regulated activities near the feature will be immediately suspended. The appropriate TCEQ Regional Office shall be immediately notified. Regulated activities must cease and not continue until the TCEQ has reviewed and approved the methods proposed to protect the aquifer from any adverse impacts.
- 22. Silt fences, diversion berms, and other temporary erosion and sediment controls will be constructed and maintained as appropriate to prevent pollutants from entering sensitive features discovered during construction.



FROM TCEQ-0602 ATTACHMENT A

SPILL RESPONSE ACTION

Major Spills:

Only trained personnel should ever approach a spill. Containment, clean up, or neutralization of the hazardous material be accomplished by individuals or organizations familiar with or trained in such activities. The following steps should be considered general guidelines and may not apply for all circumstances.

- 1. Notify responsible site contact for spill management and control.
- 2. Survey the scene and assess extent of spill, determine the existence or possibility of runoff, determine if any dead animals are near, evaluate the distressed nature of surrounding vegetation. Evaluate any markings on containers. Assess the physical characteristics of the material (color, solid, liquid, powder, or granules).
- 3. Restrict access to the spill site. Keep the public away from the hazard. Provide traffic control, as needed.
- 4. Notify supervisor by radio or telephone.
- 5. Supervisor should notify local fire department, Department of Public Safety, and district hazardous materials coordinator. Supervisor should ensure that field personnel only conduct traffic control from a safe distance from the spill.
- 6. Determine if a reportable discharge or spill has occurred and if so, the district hazardous materials coordinator should ensure TCEQ has been notified of the spill or release as soon as possible but not later than 24 hours after the discovery of the spill or discharge. Provide the following information, if possible:
 - a. the name, address, and phone number of the person making the report.
 - b. the date, time, and location of the spill or discharge.
 - c. a specific description of the hazardous substance discharged or spilled o an estimate of the quantity discharged or spilled.
 - d. the duration of the incident.
 - e. the name of the surface water affected or threatened by the discharge or spill.
 - f. the source of the discharge or spill.
 - g. a description of the extent of actual or potential harmful impact to the environment and an identification of any environmentally sensitive areas or natural resources at risk.
 - h. the names, addresses, and telephone numbers of the responsible person and the contact person at the location of the discharge or spill.
 - i. a description of any actions that have been taken, are being taken, and will be taken to contain and respond to the discharge or spill

- j. any known or anticipated health risks
- k. the identity of any governmental representatives, including local authorities or third parties, responding to the discharge or spill
- l. any other information that may be significant to the response action.

Minor Spills:

The responsible site contact person shall designate an area as spill storage location prepared with sand and containment device such as silt fence to store spilled material and removal to a facility for further handling. Minor spills are defined as minor equipment leakage of oil and gasoline.





FROM TCEQ-0602 ATTACHMENT B

POTENTIAL SOURCES OF CONTAMINATION

| POLLUTANT-GENERATING ACTIVITY | POLLUTANTS OR POLLUTANT CONSTITUENTS | LOCATION ON SITE |
|-------------------------------------|--|--------------------------|
| Grading, Excavation | Oil, Gasoline, Grease, Hydraulic Fluid | Pond, Frontage, Sideyard |
| Demolition | Sediment, Debris, Cement | Pond, Driveway |
| Pavement | Cement | Driveway |
| Wall | Concrete, Cement | Pond |
| *Landscaping (if any) | Fertilizer, Pesticide | N/A |
| *Note: There will be no landscaping | | |
| for this project | | |



FROM TCEQ-0602 ATTACHMENT C

SEQUENCE OF MAJOR ACTIVITIES

The proposed WPAP modification work shall follow the following sequence of activities:

*All activities excluding property line channel work and wastewater cleanout installation will take place in the northeast frontage, existing pond, and drive aisle. This area is roughly 0.27-acres.

- 1. Install silt fence, temporary construction entrance, and mulch sock at northeast channel.
- 2. Remove of sediment and algal growth within pond.
- 3. Demolish interior pond wall and sand filter underdrain.
- 4. Remove of demolition material and existing rock rubble.
- 5. Excavate of pond bottom.
- 6. Sawcut drive aisle.
- 7. Sleeve wastewater effluent lines.
- 8. Connect downspouts to storm sewer line.
- 9. Connect storm sewer to pond inflow locations.
- 10. Rough grade frontage area and pond outflow channel.
- 11. Rough grade north property line drainage channel. (0.08-acres)
- 12. Cut new detention outflow weir.
- 13. Patch existing outflow weir cuts.
- 14. Construct new curb, new south pond wall, and new concrete stub walls.
- 15. Patch drive aisle sawcut.
- 16. Install mortared rock rip rap outflow channel.
- 17. Install new geomembrane pond liner.
- 18. Fill over new pond liner with appropriate topsoil.
- 19. Install new pond pump system.
- 20. Install batch extended detention switch system.
- 21. Install new wastewater cleanouts.
- 22. Test pond pump system.
- 23. Revegetate rough graded areas and pond.
- 24. Remove temporary sedimentation and erosion control features.



FROM TCEQ-0602 ATTACHMENT D & I

TEMPORARY BEST MANAGEMENT PRACTICES AND MEASURES INSPECTION AND MAINTENANCE FOR TBMPs

These TBMP's shall be considered and followed:

Temporary silt fence, spoils area, construction entrance are installed and designated to protect natural streams, sensitive features, surface and ground water. These protection measures will be installed prior to start of any construction and shall be inspected after each rain and every week, any damaged areas shall be repaired or replaced if necessary. Remove siltation as required when siltation reaches half of its design depth or one foot. Inspect after each rain or every week.

When necessary, wheels must be cleaned to remove sediment prior to entrance onto public right of way. When washing is required, it shall be done on an area stabilized with crushed stone which drains into an approved sediment basin/trap. All sediment shall be prevented from entering any storm drain, ditch or watercourse using approved method.

The existing pond shall be utilized as a sediment trap. It shall be inspected after each rainfall or every six (6) months.

Designate a spoil area (shown on plan) for handling waste, inspect and secure the silt fence to prevent pollution spills. This area will be graded toward the sediment trap for maximum pollution and sedimentation prevention.

Contractor's staging area and construction material is designated on plans. This area is enclosed with silt fence and inspected regularly. This area will be graded toward the sediment trap for maximum pollution and sedimentation prevention.

Designated washout area will also be enclosed with silt fence. This area will be graded toward the sediment trap for maximum pollution and sedimentation prevention.

Important factor in this area is to transport contaminated soil due to fuel and oil to spoil area frequently and as required by the city/TCEQ. This area is designated on plan and enclosed with silt hence.

All equipment will be washed in the designated area as shown on plan. Silt fences will be inspected and properly maintained as required.

Gravel, stone, reinforcement bars for concrete foundation and retaining wall, sand, rock, construction equipment and/or any mechanical equipment will be stored on site.

A silt fence area adjacent to material storage area is set up for washout area where concrete mix trucks, will be washed and handled.

All equipment/vehicle fueling and discharge are handled within this area. In event of spills, contractor shall have sand and/or hay available on site to apply to the contaminated areas in order to contain and clean up possible spills. Contaminated sand shall be transported to the spoil area and disposed of off-site to a disposal site by the contractor.

<u>Measures taken to prevent pollution:</u> A construction exit/entrance will be installed to reduce tracking dirt on the pavement after exiting the construction area. Silt fences at critical locations are installed to reduce run-off velocity and retain sediments. All drainage inlets or culverts affected by this project's site activities shall be covered with silt fence, hay bale or rock berm.

Contaminated storm water will be collected in a temporary sediment trap. All pollutants enter the temporary sediment trap in the designated area shown on plan. Contractor shall clean and maintain sediment trap after each rain event. This measure will prevent pollution of downstream of this site.

There are no sensitive features nor naturally occurring sensitive features on this site per geologic assessment.





FROM TCEQ-0602 ATTACHMENT E

REQUEST TO SEAL TEMPORARILY SEAL A FEATURE

There will be no temporary sealing of naturally occurring sensitive features on the site.



FROM TCEQ-0602 ATTACHMENT F

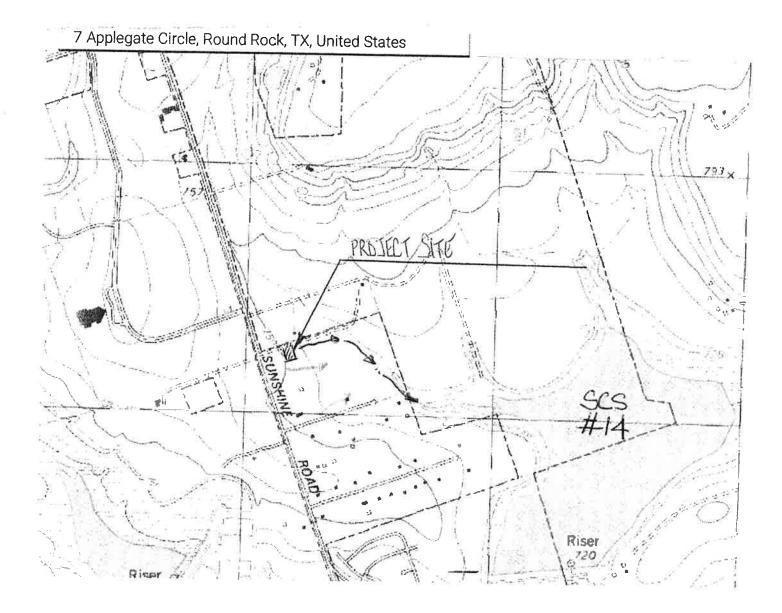
STRUCTURAL PRACTICES

The existing detention pond shall be utilized as the structural mechanism for limiting pollutant transport off site via storm water runoff. It shall be regularly checked and maintained per attachment D.



FROM TCEQ-0602 ATTACHMENT G

DRAINAGE AREA MAPS





FROM TCEQ-0602 ATTACHMENT J

SCHEDULE OF INTERIM AND PERMANENT SOIL STABILIZATION PRACTICES

The proposed project length is short enough that unless an unexpected delay in construction occurs, all revegetation shall be performed at the conclusion of the project.

Permanent Stormwater Section

Texas Commission on Environmental Quality

for Regulated Activities on the Edwards Aquifer Recharge Zone and Relating to 30 TAC §213.5(b)(4)(C), (D)(Ii), (E), and (5), 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 **Permanent Stormwater Section** is hereby submitted for TCEQ review and executive director approval. The application was prepared by:

Print Name of Customer/Agent: Brian Roby

Date: 03/26/2025

Signature of Customer/Agent

Regulated Entity Name Applegate Office Warehouse

Permanent Best Management Practices (BMPs)

Permanent best management practices and measures that will be used during and after construction is completed.

1. Permanent BMPs and measures must be implemented to control the discharge of pollution from regulated activities after the completion of construction.

N/A

2. 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 |
| 3. | 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 |
| 4. | 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. |
| 5. | The executive director may waive the requirement for other permanent BMPs for multifamily residential developments, schools, or small business sites where 20% or less impervious cover is used at the site. This exemption from permanent BMPs must be recorded in the county deed records, with a notice that if the percent impervious cover increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by 30 TAC §213.4(g) (relating to Application Processing and Approval), may no longer apply and the property owner must notify the appropriate regional office of these changes. |
| | Attachment A - 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. |
| 6. | ☐ The site will not be used for multi-family residential developments, schools, or small business sites. ☐ Attachment B - BMPs for Upgradient Stormwater. |
| | IALAGGUNGULD TOMES IVI QUEGUICIL SWIIIWALEI. |

| | | □ 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. |
|-----|-------------|---|
| 7. | \boxtimes | Attachment C - 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. |
| 8. | | Attachment D - BMPs for Surface Streams . A description of the BMPs and measures that prevent pollutants from entering surface streams, sensitive features, or the aquifer is attached. Each feature identified in the Geologic Assessment as sensitive has been addressed. |
| | | N/A |
| 9. | | The applicant understands that to the extent practicable, BMPs and measures must maintain flow to naturally occurring sensitive features identified in either the geologic assessment, executive director review, or during excavation, blasting, or construction. |
| | | The permanent sealing of or diversion of flow from a naturally-occurring sensitive feature that accepts recharge to the Edwards Aquifer as a permanent pollution abatement measure has not been proposed. Attachment E - Request to Seal Features. A request to seal a naturally-occurring sensitive feature, that includes, for each feature, a justification as to why no reasonable and practicable alternative exists, is attached. |
| 10. | | Attachment F - Construction Plans . All construction plans and design calculations for the proposed permanent BMP(s) and measures have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer, and are signed, sealed, and dated. The plans are attached and, if applicable include: |
| | | ✓ Design calculations (TSS removal calculations) ✓ TCEQ construction notes ✓ All geologic features ✓ All proposed structural BMP(s) plans and specifications |
| | | N/A |

| 11. Attachment G - Inspection, Maintenance, Repair and Retrofit Plan. A plan for the inspection, maintenance, repairs, and, if necessary, retrofit of the permanent BMPs and measures is attached. The plan includes all of the following: |
|--|
| Prepared and certified by the engineer designing the permanent BMPs and measuresSigned by the owner or responsible party |
| ✓ Procedures for documenting inspections, maintenance, repairs, and, if necessary retrofit ✓ A discussion of record keeping procedures |
| |
| 12. Attachment H - 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 |
| 13. Attachment I -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 results in water quality degradation. |
| □ N/A |
| Responsibility for Maintenance of Permanent BMP(s) |
| Responsibility for maintenance of best management practices and measures after construction is complete. |
| 14. 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. |
| □ N/A |
| 15. 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. |
| □ N/A |



FROM TCEQ-0600 ATTACHMENT A

20% or LESS IMPERVIOUS COVER WAIVER

The site is a small business development with more than 20% impervious cover.



FROM TCEQ-0600 ATTACHMENT B

PERMANENT BEST MANAGEMENT PRACTICES FOR OFF-SITE STORM WATER

There is no off-site storm water running through the project site.

See Drainage Area Maps.



FROM TCEQ-0600 ATTACHMENT C

PERMANENT BEST MANAGEMENT PRACTICES FOR ON-SITE STORM WATER

The existing partial sedimentation/filtration sand filter pond system shall be removed with this WPAP Modification. In its place, a batch extended detention system shall be installed utilizing the existing pond walls and storm water inflow mechanisms. A duplex sump pump is utilized to empty the lower elevations of the pond. The wet well for this pump system will have orifices at the water quality elevation, allowing stormwater to flow into the system only once the water quality volume storage is full. The pond will remove the required total suspended solids (TSS) for the development.

At the bottom of pond, a pipe shall be connected to the wet well with a solenoid valve that will only open via signal by a pressure transducer, signaling to open the valve after the water quality volume has been retained for a minimum of twelve hours.

The pond volume above the water quality elevation will detain stormwater to release stormwater at or below the existing pre-developed runoff rates for the 2-, 10-, 25-, and 100-year storm events. Water will exit the pond via the duplex sump pump system and the overflow weir cut into the northeast corner of the pond wall.

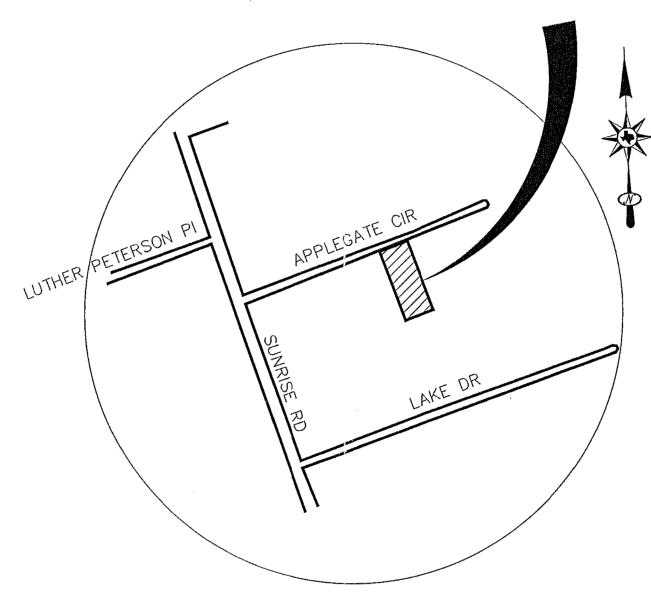
WILLIAMSON COUNTY, TEXAS SITE DEVELOPMENT PLAN APPLEGATE OFFICE WAREHOUSE PROJECT

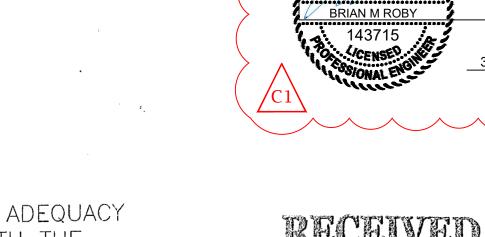
4 PRE DEVELOPMENT PLAN AND SLOPE MAP
5 POST DEVELOPMENT AND SLOPE MAP
6 WATER QUALITY AND DETENTION POND
7 WATER QUALITY AND DETENTION POND DETAILS

| | Sheet List Table |
|--------------|--|
| Sheet Number | Sheet Title |
| 01 | COVER |
| 02 | SITE DIMENSIONAL PLAN |
| 03 | EROSION CONTROL PLAN |
| 04 | PRE DEVELOPMENT PLAN & SLOPE MAP |
| 05 | POST DEVELOPMENT & SLOPE MAP |
| 06 | WATER QUALITY & DETENTION POND |
| 07 | WATER QUALITY & DETENTION POND DETAILS |
| 08 | AS-BUILT TOPOGRAPHIC SURVEY (1 OF 2) |
| 09 | AS-BUILT TOPOGRAPHIC SURVEY (2 OF 2) |
| 10 | EXISTING CONDITIONS & DEMOLITION PLAN |
| 11 | SITE DIMENSIONAL PLAN FINAL |
| 12 | EROSION & SEDIMENTATION CONTROL PLAN |
| 13 | PRE DEVELOPED DRAINAGE AREA MAP |
| 14 | DEVELOPED DRAINAGE AREA MAP |
| 15 | GRADING PLAN |
| 16 | POND PLAN - MODIFICATION |
| 17 | POND PROFILE - MODIFICATION |
| 18 | POND DETAILS (1 of 4) |
| 19 | POND DETAILS (2 of 4) |
| 20 | POND DETAILS (3 of 4) |
| ^ 21 ^ | POND DETAILS (4 of 4) |



PROPERTY OWNER NAME(S): RUBEN CORTEZ





VICINITY MAP

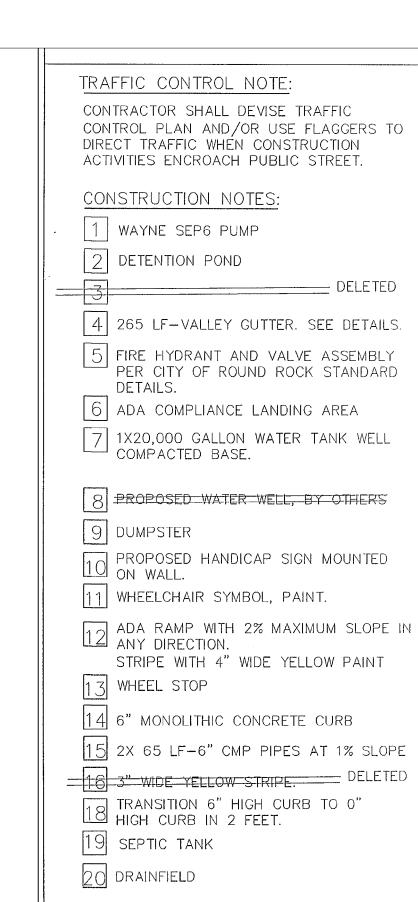
ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN REVIEWING THESE PLANS, THE WILLIAMSON COUNTY MUST RELY ON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER. ANY INADEQUACIES IN THESE PLANS IS THE SOLE RESPONSIBILITY OF THE DESIGN ENGINEER.

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| | TCEQ | | | | |
| | AUSTIN-REGION 17 | | | | |
| | | | | | |



BENCHMARK ELEVATION=100' (NORTHWESTERN CORNER OF PROPERTY)

| ROPERTY OWNER NAME(S): RUBEN CORTEZ WNER'S AGENT: BRAD LEEN DDRESS: 17270 FM 112 THRALL, TX 76578 CREAGE: 2.989 AC EGAL DESCRIPTION: 2.989 ac out N.B. Anderson Survey, A-29, also know as tract 2B, Round Rock Glen an unrecorded subdivision in | PHONE: 512-365-0096 (OWNER'S AGENT) CITY/STATE/ZIP: WILLIAMSON COUNTY TOTAL IMPERVIOUS COVER: 1.87 AC PROPERTY ADDRESS: 7 APPLEGATE CIR. ROUND ROCK, TX 787665 |
|---|--|
| Williamson County, Tx. Recorded in document no. 200609326 of the official public records of Williamson County Tx AND USE SUMMARY: Commercial Office & Warehouse ARKING SPACES REQUIRED: 54 parking spaces provided ATE: July 14, 2014 ERSON PREPARING PLAN: SAEID (SID) BASSARI, P.E. | PARKING SPACES REQUIRED: 54 Parking Spaces Provide COMPANY: CAPITAL ENGINEERING CITY/STATE/ZIP: LEANDER, TX 78641 FAX: |
| DDRESS: 2501 S. BAGDAD ROAD, LEANDER, TX 78641 HONE: 512-630-6184 NGINEER: SAEID BASSARI, P.E. DDRESS: 2501 S. BAGDAD ROAD, LEANDER, TX 78641 HONE: 512-630-6184 | COMPANY: |



PARKING SUMMARY:

PROVIDED: 54 PARKING SPACES (9' by 18.5') GENERAL NOTES:

1-ALL SITE UTILITY LINES ARE PROPOSED TO BE UNDERGROUND 2-EXTERIOR LIGHTING SHALL BE SHIELDED SUCH THAT THE LIGHT SOURCE IS NOT DIRECTLY VISIBLE FROM THE PUBLIC R.O.W. OR ADJACENT RESIDENTIAL DISTRICTS OR USES AT THE PROPERTY LINE. UNSHIELDED "WALL PACK" LIGHTING IS NOT PROPOSED. 3-"FIRE LANE TOW AWAY ZONE" SHALL BE PLACED AT 25' SPACING. FIRE LANE MARKING MUST BE ON VERTICAL FACE OF CURB. WHERE AVAILABLE AND EXTEND BEHIND PARKING SPACES THROUGHOUT PAVED AREAS. PAINT COLOR SHALL BE RED BACKGROUND (6" WIDE) WITH (4" WIDE) WHITE PAINT LETTERING.

CONCRETE PAVEMENT: -4.5" THICK CONCRETE (3000 PSI) WITH #3 REBARS @ 12" O.C.E.W.

-MINIMUM 6" CRUSHED LIMESTONE BASE COMPACTED TO 95% OF ASTM D1557, METHOD D @ ±2% OPTIMUM MOISTURE COMPACTED IN 6" LIFTS.

TCEQ-0592A (REV. 3/15/07) PAGE 1 OF 2 TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

CONTRIBUTING ZONE PLAN

GENERAL CONSTRUCTION NOTES

WRITTEN CONSTRUCTION NOTIFICATION SHOULD BE PROVIDED TO THE APPROPRIATE TCEQ REGIONAL OFFICE 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

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.

NO TEMPORARY ABOVEGROUND HYDROCARBON AND HAZARDOUS SUBSTANCE STORAGE TANK SYSTEM MAY 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 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 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

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. THE FOLLOWING RECORDS SHOULD BE MAINTAINED AND MADE AVAILABLE TO THE TCEQ UPON REQUEST:

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.

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

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 2800 S. IH 35, SUITE 100 AUSTIN, TEXAS 78704-5712 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.

ACCESSIBLE ROUTE NOTES

1. ACCESSIBLE ROUTE SIDEWALKS AND RAMPS SHALL HAVE A MINIMUM WIDTH OF 36 INCHES.

2. ACCESSIBLE ROUTE SIDEWALKS SHALL NOT HAVE A SLOPE IN THE DIRECTION OF TRAVEL OF GREATER THAN 1:20 EXCEPT AT RAMPS WHERE THE MAXIMUM SLOPE SHALL NOT EXCEED 1:12.

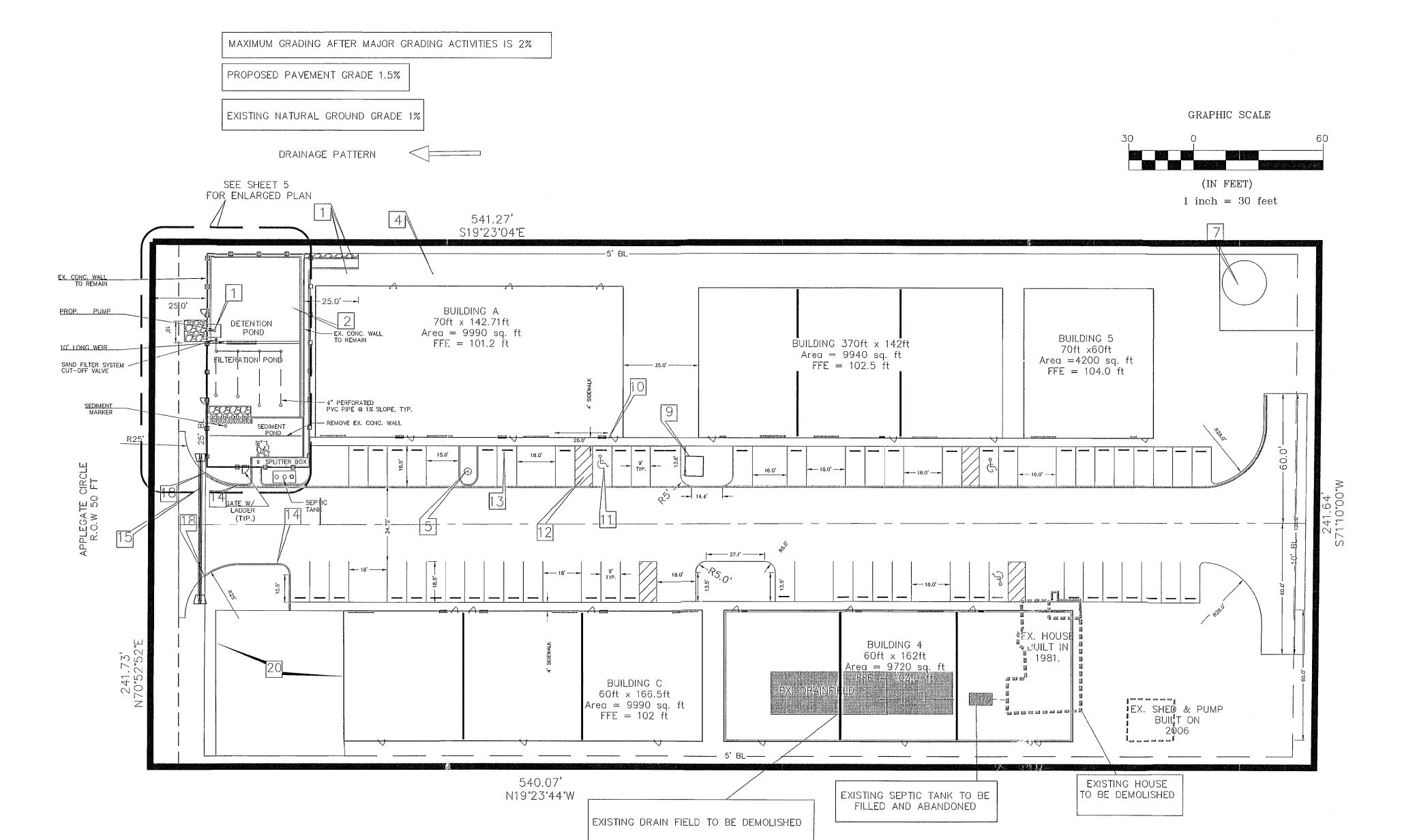
3. CROSS SLOPES ON ACCESSIBLE ROUTE WALKWAYS AND DRIVEWAY CROSSINGS SHALL BE AS CLOSE TO 0 SLOPE AS POSSIBLE AND SHALL NOT EXCEED 1:50.

4. EACH CURB RAMP SHALL HAVE A DETECTABLE WARNING THAT EXTENDS ACROSS THE 36 INCH WIDTH AND THE ENTIRE LENGTH OF THE RAMP AND ACROSS ANY VEHICULAR USE AREA. THE DETECTABLE WARNING SHALL CONSIST OF GROOVES WHICH CROSS THE DIRECTION OF TRAVEL OVER THE LENGTH AND WIDTH OF

RAMP. GROOVES SHALL BE AT A SPACING OF NO GREATER THAN ONE (1) INCH AND HAVE A DEPTH OF NOMINAL 0.2 INCH AND AND SHALL CONTRAST VISIBLY WITH ADJOINING SURFACES, EITHER LIGHT-ON-DARK OR DARK- ON-LIGHT. THE MATERIAL USED TO PROMDE CONTRAST SHALL BE AN INTEGRAL PART OF THE WALKING SURFACE.

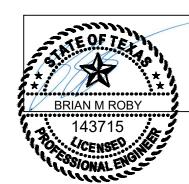
5. A LEVEL RUN (0:0 SLOPE) OF NOT LESS THAN 5 FEET WILL BE PROWDED AT THE TOP AND BOTTOM OF EACH RAMP EXCLUDING CURB RAMPS. (RAMP REFERS TO ANY SLOPED SURFACE ON THE ACCESSIBLE ROUTE WHICH IS GREATER THAN 1:20).

6. ACCESSIBLE ROUTE RAMPS AND LANDINGS WITH DROP OFFS SHALL HAVE CURBS, WALLS, RAILINGS, OR PROJECTING SURFACES THAT PREVENT PEOPLE FROM SLIPPING OFF THE RAMP. CURBS SHALL BE A MINIMUM OF TWO (2) INCHES HIGH.



ORIGINAL SITE PLAN ABOVE KEPT FOR REFERENCE.

AS-BUILT SURVEY AND SITE PLAN ADDED TO SHOW DEVIATIONS FROM ORIGINALLY APPROVED SITE PLAN ON SHEETS 08 AND 09, RESPECTIVELY.



2 OF 7

CAPITAL ENGINEERING F-7819

2501 S. BAGDAD ROAD LEANDER, TX 78641

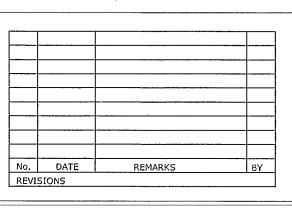
TEL. (512) 630-6184



SITE PLAN AND DIMENSION

APPLEGATE OFFICE WAREHOUSE ROUND ROCK, WILLIAMSON COUNTY, TEXAS

PROJECT SITE: 7 APPLEGATE CIRCLE ROUND ROCK **TEXAS** 78665

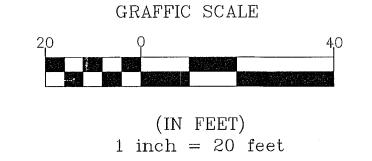


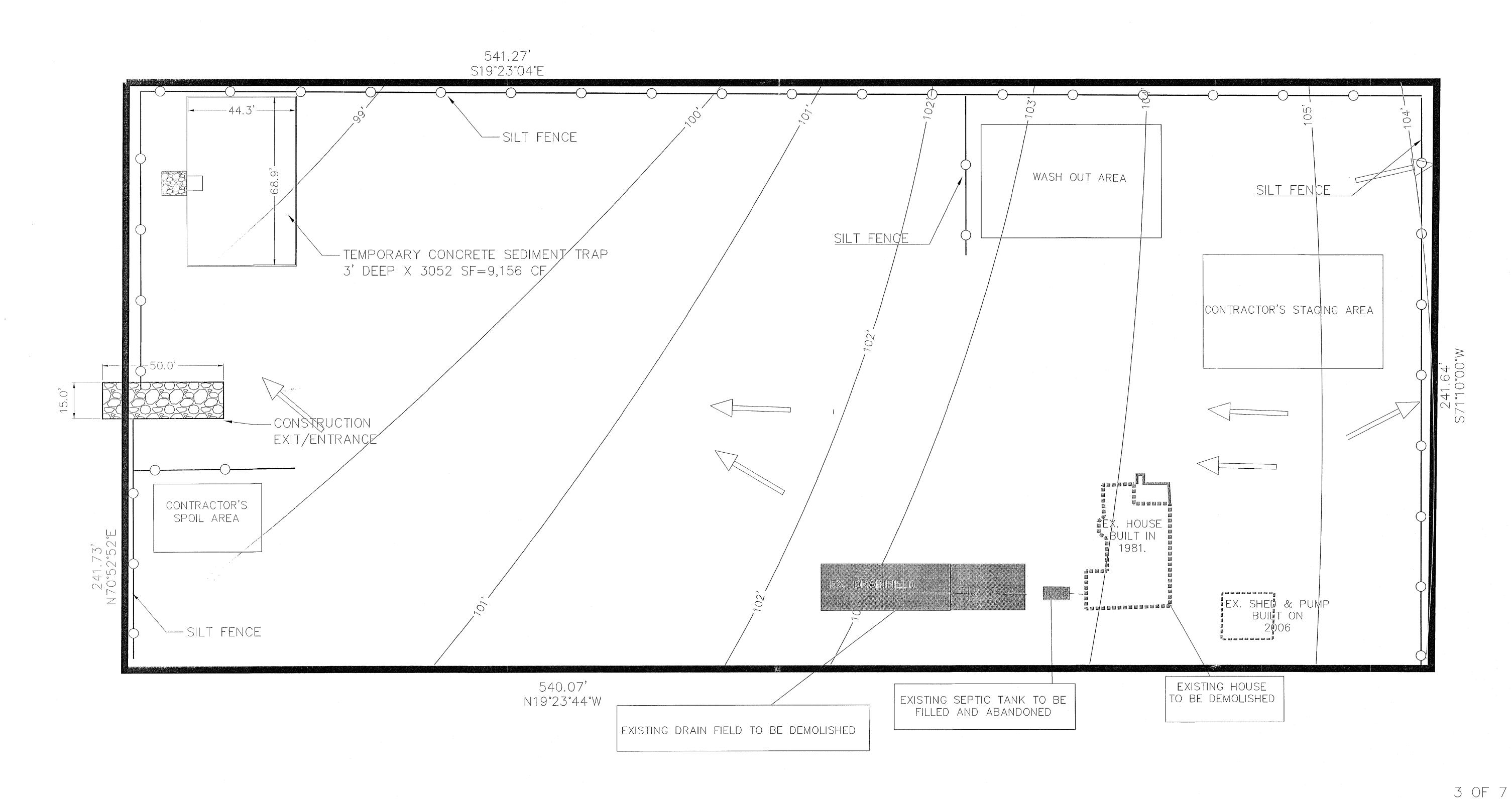
MAXIMUM GRADING AFTER MAJOR GRADING ACTIVITIES IS 2%

PROPOSED PAVEMENT GRADE 1.5%

EXISTING NATURAL GROUND GRADE 1%

DRAINAGE PATTERN





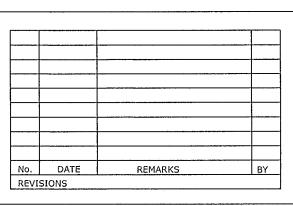
CAPITAL ENGINEERING F-7819

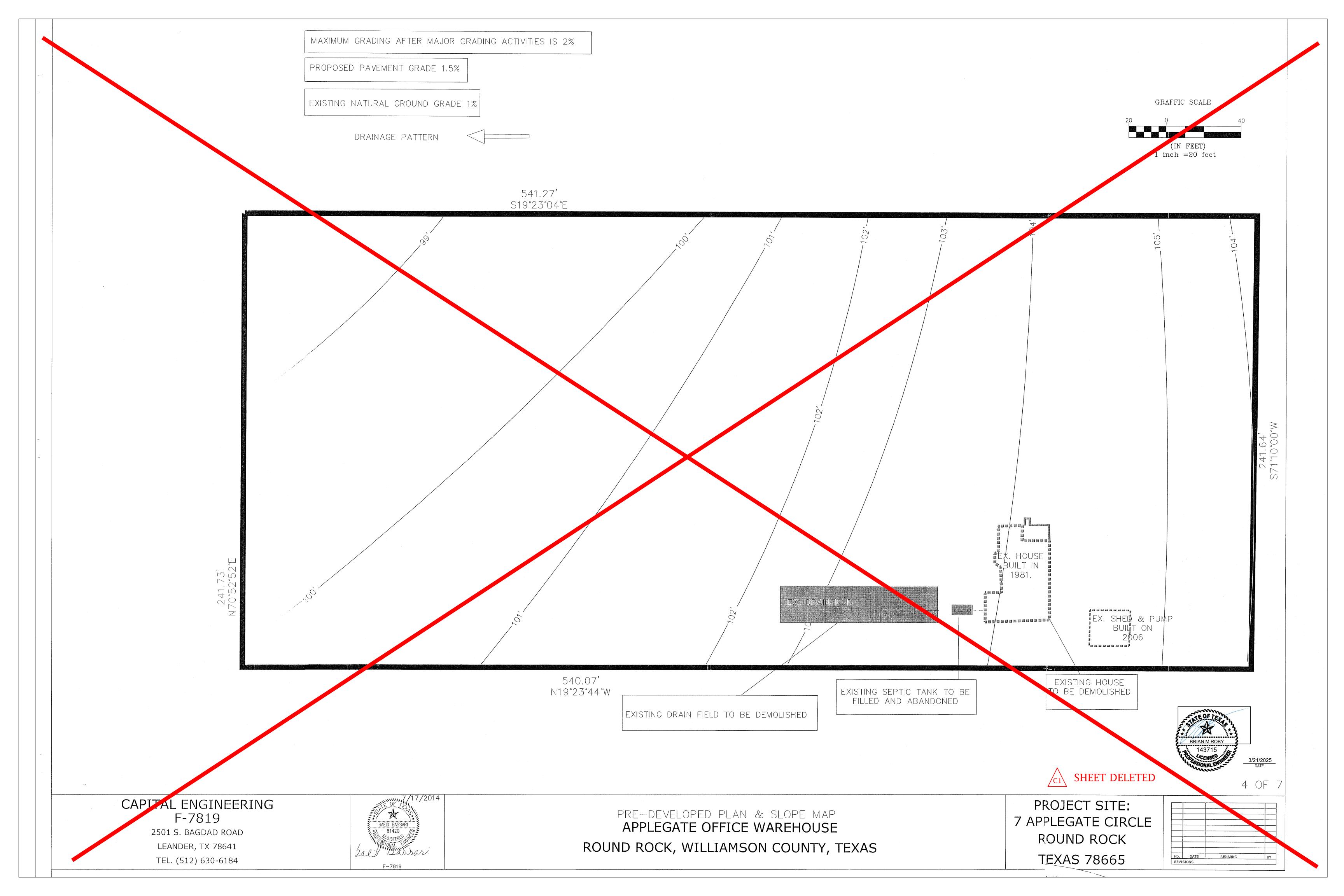
> 2501 S. BAGDAD ROAD LEANDER, TX 78641 TEL. (512) 630-6184

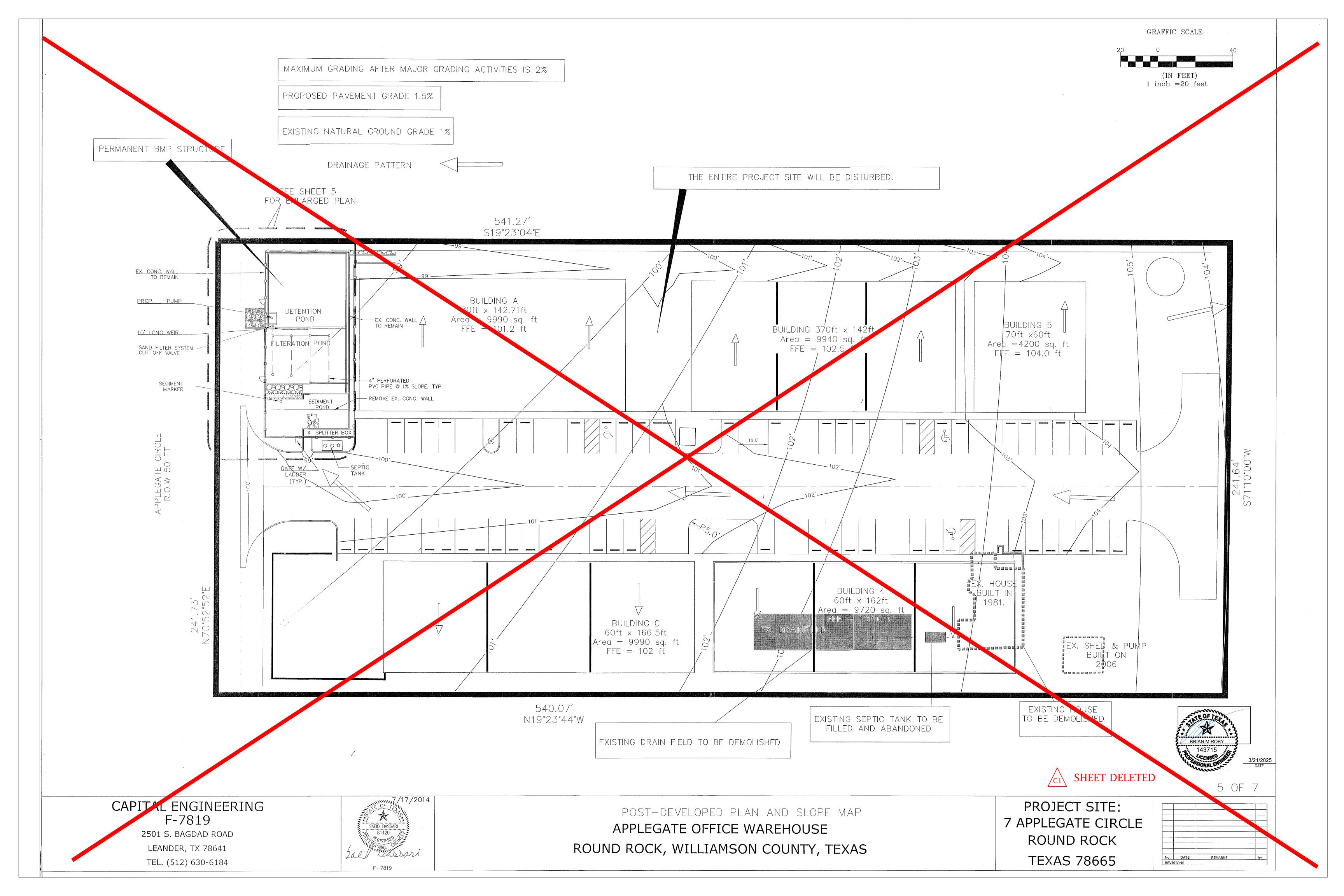


EROSION CONTROL

APPLEGATE OFFICE WAREHOUSE ROUND ROCK, WILLIAMSON COUNTY, TEXAS PROJECT SITE:
7 APPLEGATE CIRCLE
ROUND ROCK
TEXAS 78665







POND NOTES:

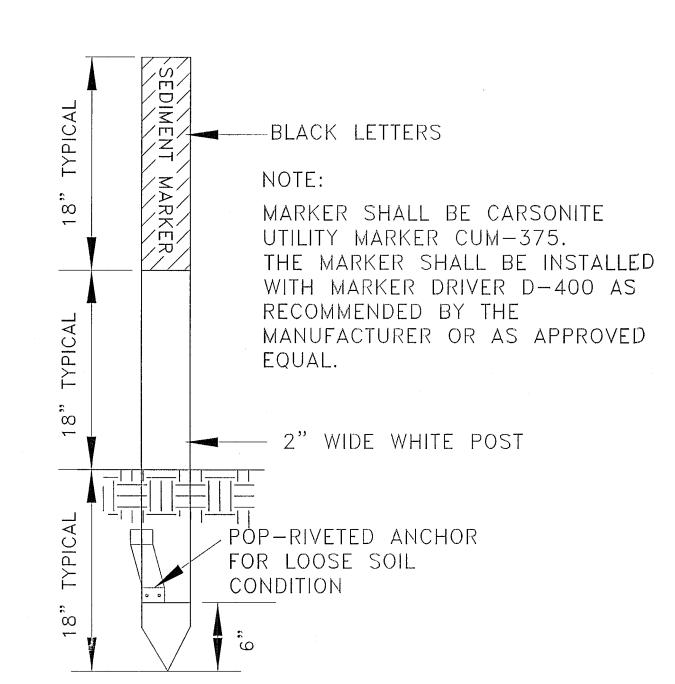
1— INSTALL COMMON BERMUDA SOD FOR THE ENTIRE DETENTION POND & DISTURBED AREA.

2- INSTALL TEMPORARY IRRIGATION SYSTEM FOR DISTURBED AREA TO ESTABLISH LAWN AND PLANTS.

3- DETENTION BASIN FLOOR AFTER EXCAVATION IS SCARIFIED TO A DEPTH OF 2 TO 3 INCHES TO IMPROVE INFILTRATION.

4- 6 TO 8 INCHES OF TOPSOIL MUST BE ADDED TO DETENTION BASIN FLOOR WITH A MIXTURE OF 30% TO 40% SAND 60% TO 70% TOPSOIL AND SUGGEST 5%-10% COMPOST OR PEAT SOIL BLEND MUST HAVE CLAY CONTENT OF LESS THAN 20% AND BE FREE OF STONES, STUMPS, ROOTS OR OTHER SIMILAR OBJECTS LARGER THAN 1 INCH. SANDY LOAM OR CALICHE IS NOT AN ACCEPTABLE SOIL.

5— THE RISER (STANDARD DRAWDOWN) SHOULD BE DOUBLE—WRAPPED WITH FILTER FABRIC UNTIL THE CONTRIBUTING DRAINAGE AREA IS VEGETATED AND STABILIZED.



SEDIMENT DEPTH MARKER

PARTIAL SEDIMENTATION/FILTRATION POND

TOTAL SITE AREA=2.99 AC

DRAINAGE AREA 12 CONTROL=2.89 AC

NEW IMPERVIOUS COVER=1.07 AC

% Unitervious COVER=1.87/2.89=64.7%

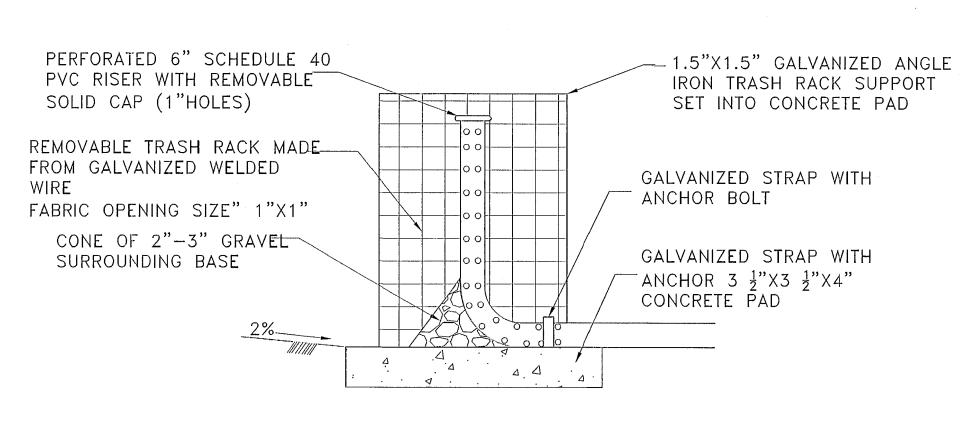
WATER QUALITY CONTROL CALCULATIONS

| TOTAL AREA DRAINING TO THE POND=2.89 AC | |
|---|-------|
| DESIGN PEAR FLOW RATE=18.72 CFS(25 YRS | LOW) |
| DESIGN PEAK FLOW RATE=25.81 CFS(100 YRS | FLOW) |

| | REQUIRED | PROVIDED |
|---------------------------------------|-----------|----------|
| WATER QUALITY VOLUME | 12033 CF | 12033 CF |
| SEDIMENT POND AREA | 838 SF | 838 SF |
| SEDIMENTATION POND VOLUME (>20 %WQV) | 2426 CF | 2604 CF |
| FILTRATION POND ADLA | 1002.73SF | 1690 SF |
| FILTRATION DOND VOLUME | 9627 CF | 10140 CF |
| WATER QUALITY ELEVATION= 98.25 FEET | | |

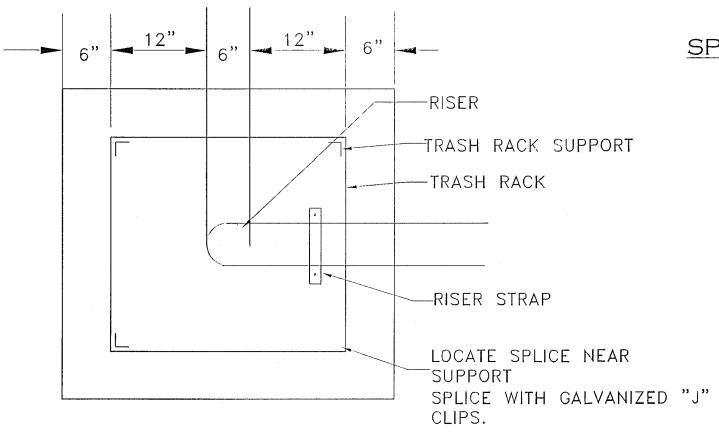
The production to build also Mp FLOW O WELD OA FEE

HEAD REQUIRED TO PUSH 100 YR FLOW @ WEIR= 0.4 FEET



SIDE VIEW OF RISER

N.T.S.



N.T.S.

SPLITTER BOX WEIR CALCULATION

Q= $C*L*(H)^{3/2}$ $Q_{100} = 25.81$ C= 3.31 L= 33' L= $Q_{100}/C*(H)^{3/2}$ $H^{3/2} = L/Q_{100} \times C$ =33'/25.8×3.31 H=0.4'

SPLITTER BOX ORIFICE CALCULATION

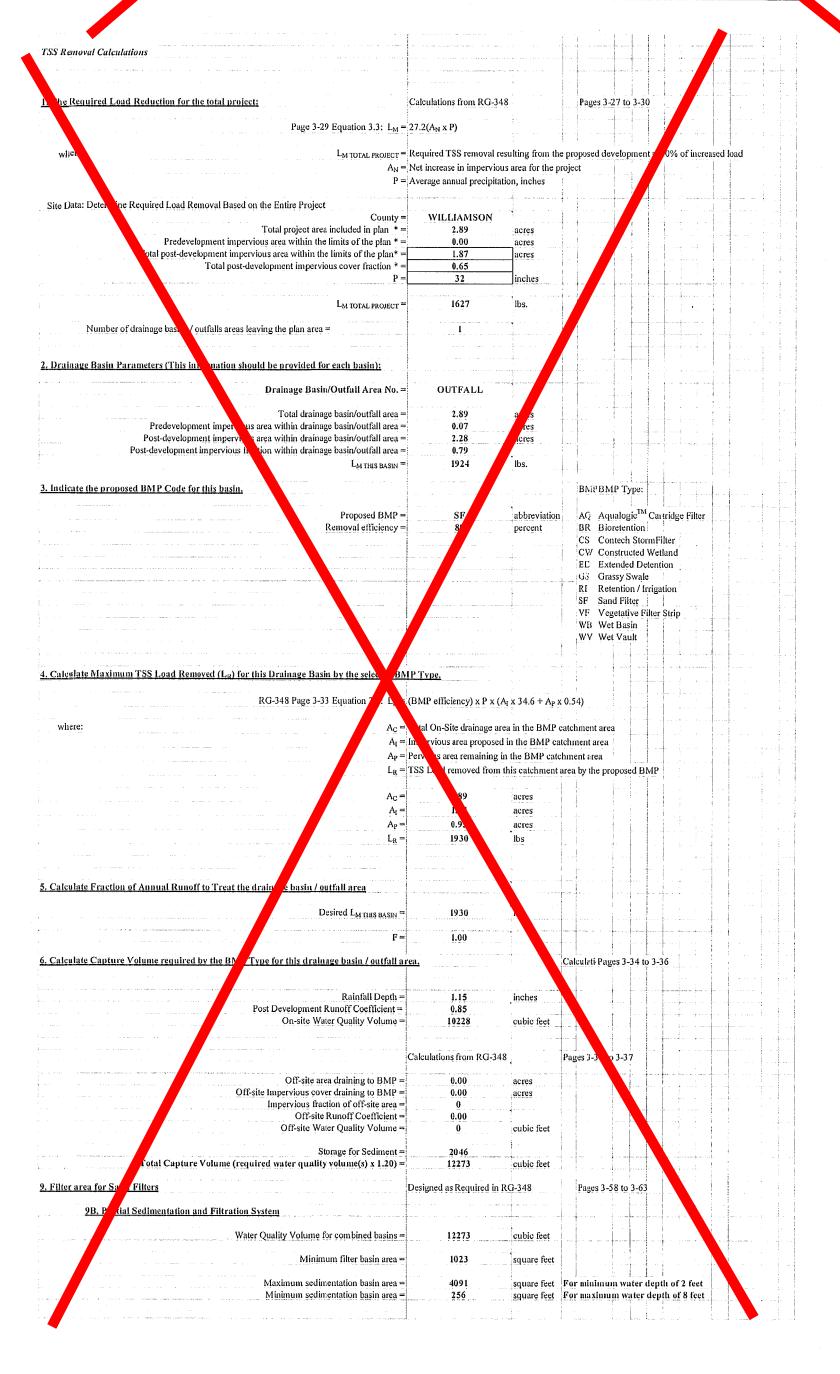
Q= Cd*A*(2gh) Q_{25} = 18.72 CFS K= 0.62 A= Q_{25} /Cd*(2gh) A= 18.72/0.62*(2*32.2*3) =2.17 SF USE 2- 16" X 9" RECTANGULAR ORIFICES

WATER QUALITY SEDIMENTATION POND

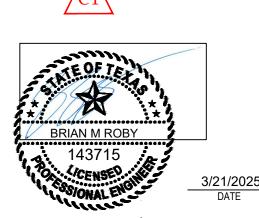
| T EVATION | STAGE (FT.) | AREA (SF) | △STORAGE (CU. FT.) | ∑ STORAGE (CU. FT.) | Σ STORAGE (C. FT.) |
|-----------|-------------|-----------|--------------------|---------------------|--------------------|
| 94.75 | 0 | 838 | 0 | 0 | 0 |
| 95.75 | 1 | 838 | 838 | 838 | 0.019 |
| 96.75 | 2 | 838 | 838 | 1676 | 0.038 |
| 97.75 | 3 | 838 | 838 | 2514 | 0.058 |
| 98.25 | 3.5 | 8. | 419 | 2 33 | 0.067 |

WATER QUALITY TRATION POND

| ELEVATION | STAGE (FT.) | AREA (SF) | ∕ STORAGE (CU. FT.) | STORAGE (CU. FT.) | ∑ STORAGE (AC. FT.) |
|-----------|-------------|-----------|---------------------|-------------------|---------------------|
| 92.25 | 0 | 1690 | 0 | 2 | 0 |
| 93.25 | 1 | 30 | 1690 | 1690 | 0.038 |
| 94.25 | 2 | 1690 | 1690 | 3380 | .077 |
| 95.25 | 7 | 1690 | 1690 | 5070 | 0.116 |
| 96.25 | 4 | 1690 | 1690 | 6760 | 155 |
| 96.5 | 5 | 1690 | 1690 | 8450 | 0.195 |
| ა.25 | 6 | 1690 | 1690 | 10140 | 0.232 |





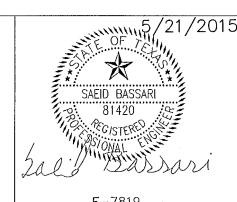


6 OF 7

CAPITAL ENGINEERING F-7819

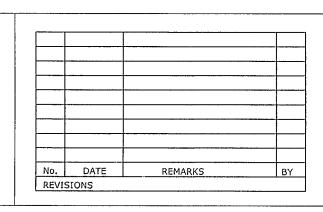
TOP VIEW OF RISER

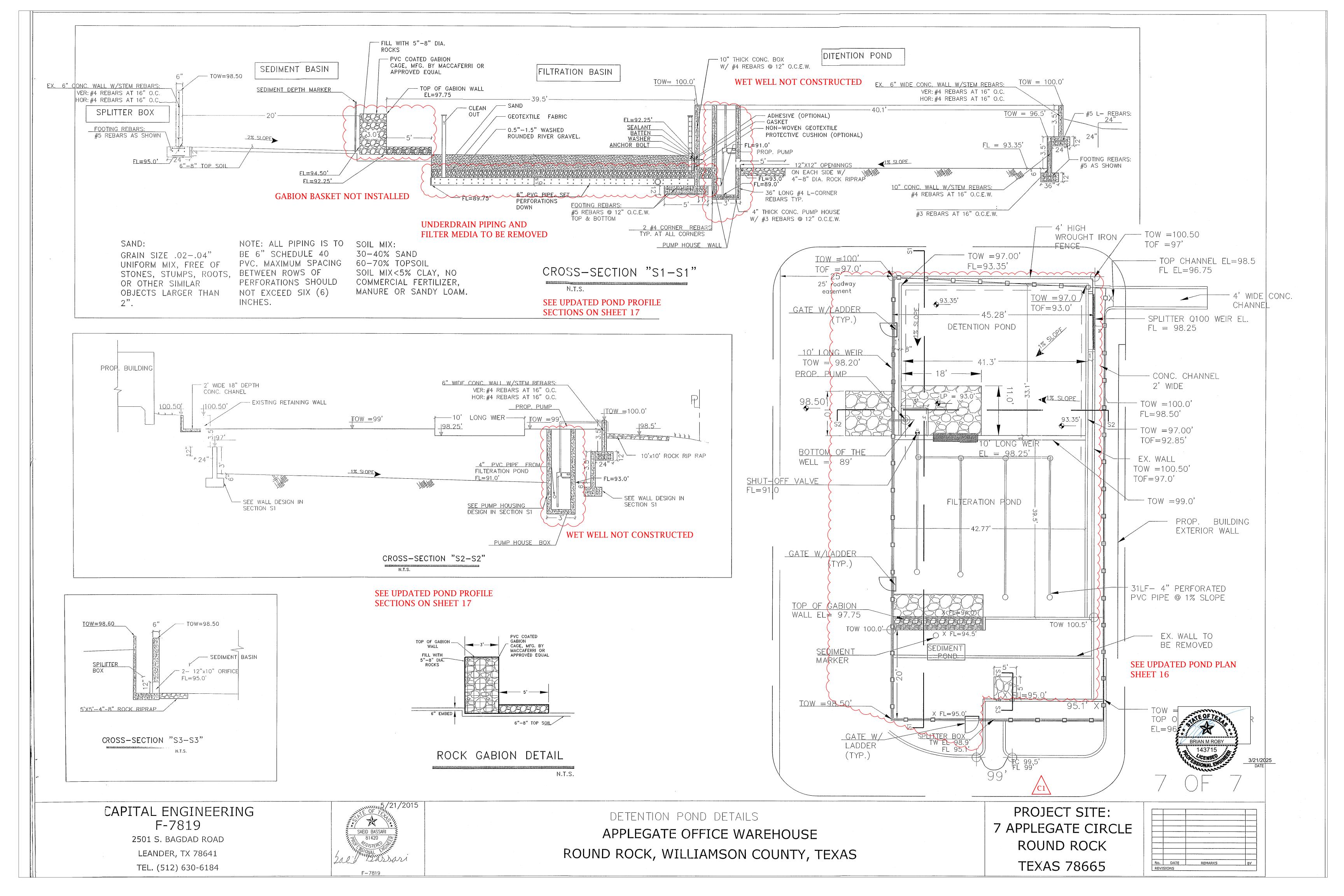
2501 S. BAGDAD ROAD LEANDER, TX 78641 TEL. (512) 630-6184

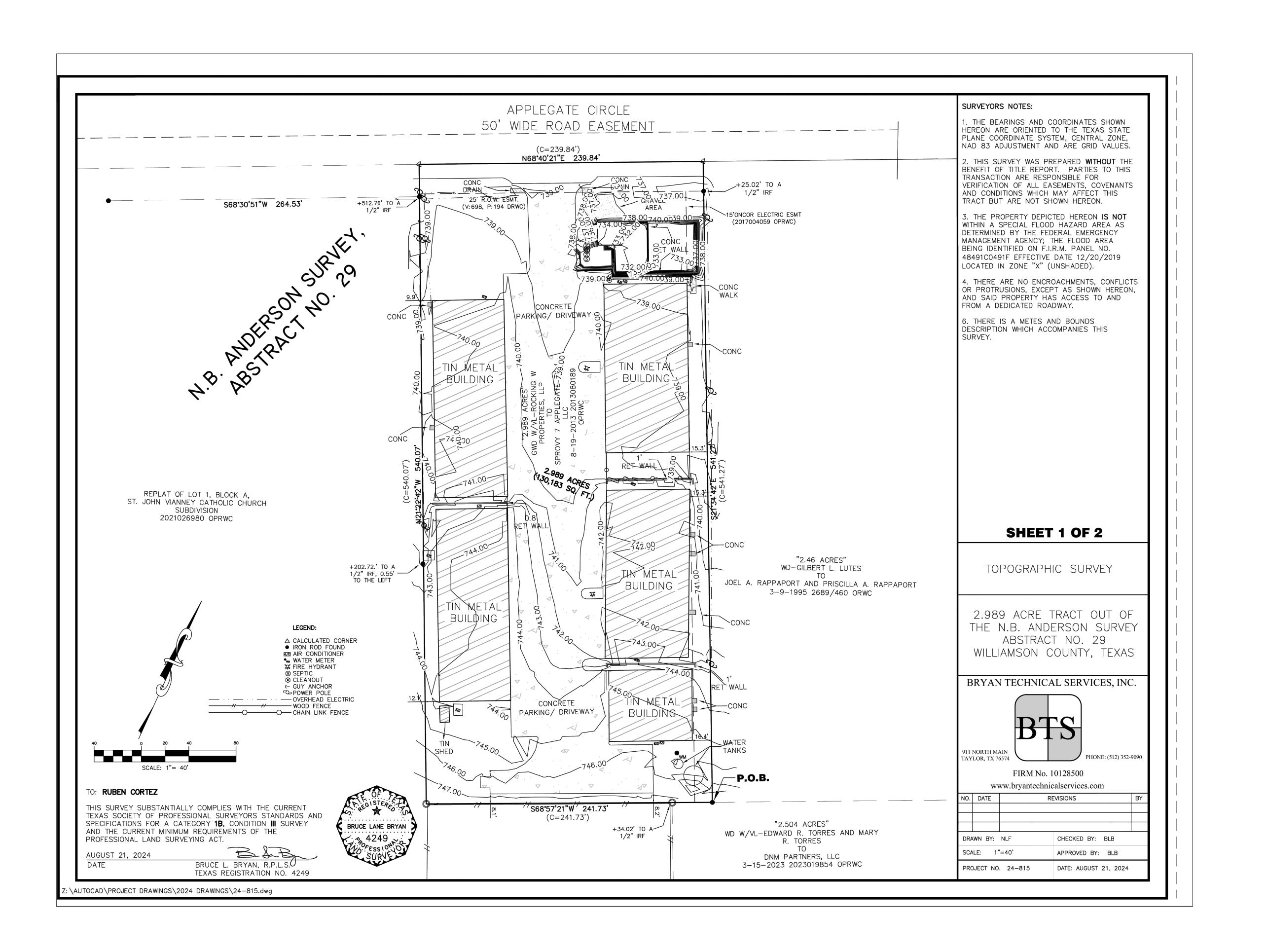


WATER QUALITY POND DETAILS

APPLEGATE OFFICE WAREHOUSE ROUND ROCK, WILLIAMSON COUNTY, TEXAS PROJECT SITE:
7 APPLEGATE CIRCLE
ROUND ROCK
TEXAS 78665







REV. DESCRIPTION DATE

APPLEGATE OFFICE WAREHOUSE PROJECT

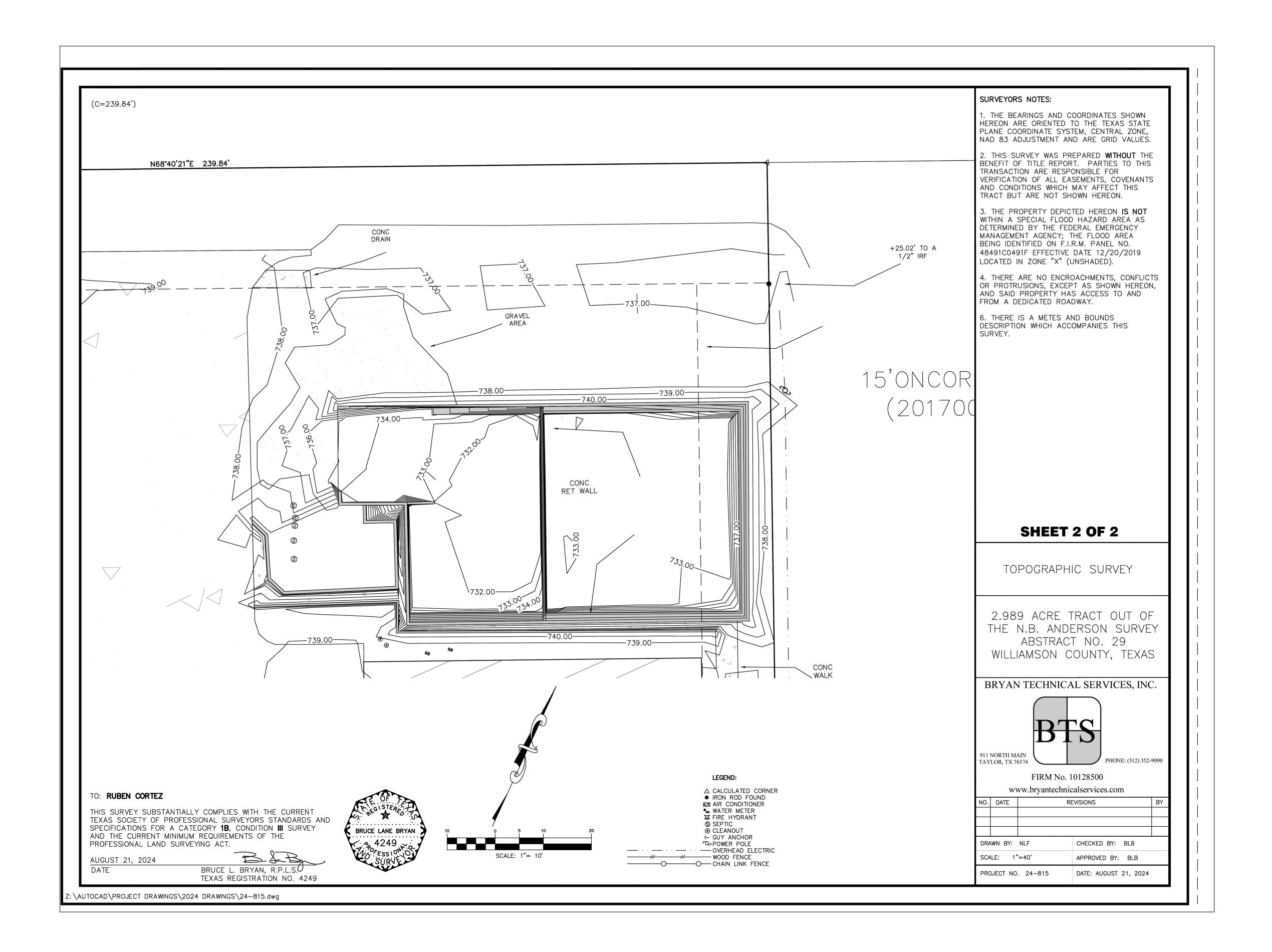
7 APPLEGATE CIRCLE ROUND ROCK, TX 78665

AS-BUILT TOPOGRAPHIC SURVEY (1 OF 2)

08

DATE:3/21/25





REV. DESCRIPTION DATE

APPLEGATE OFFICE WAREHOUSE PROJECT

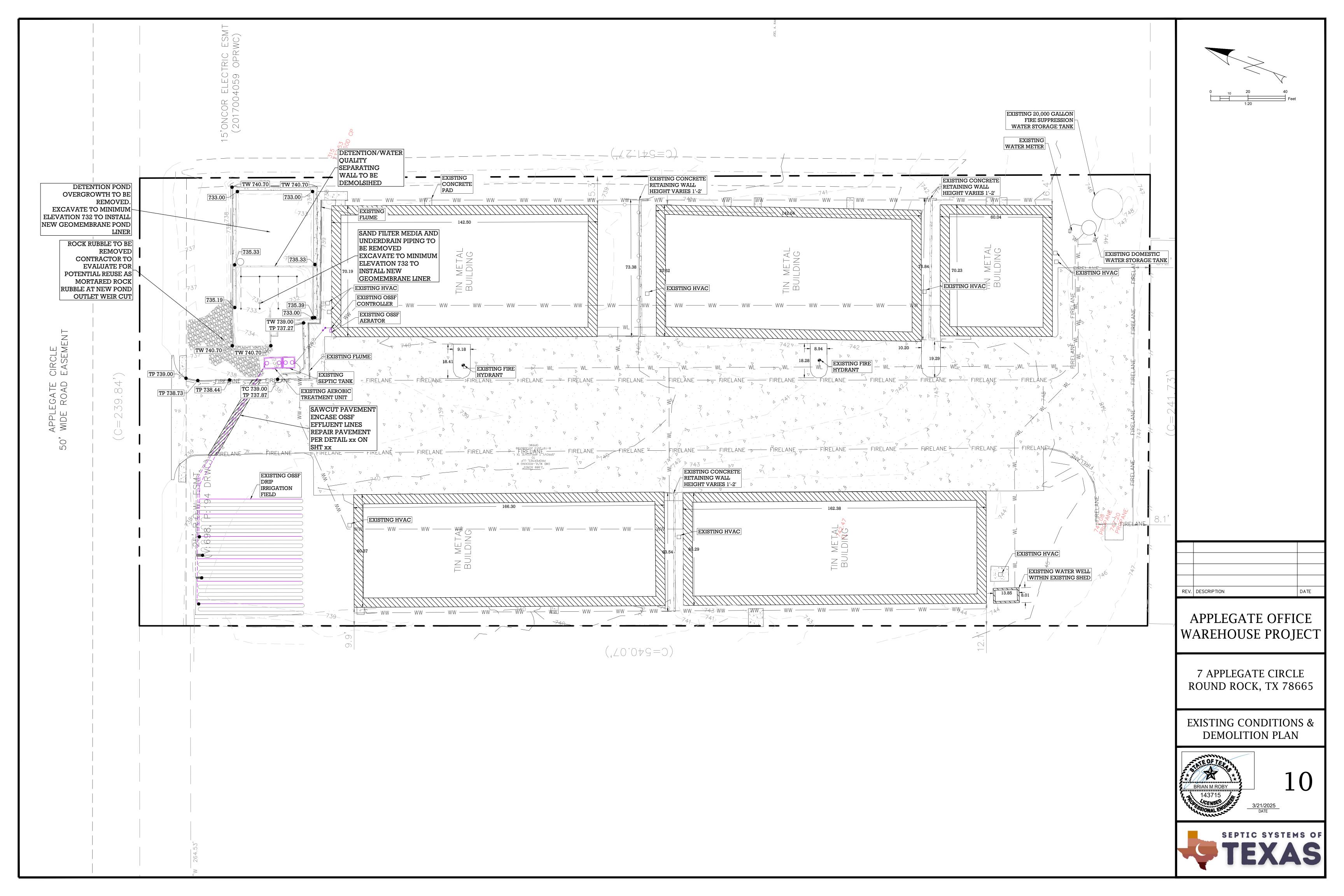
7 APPLEGATE CIRCLE ROUND ROCK, TX 78665

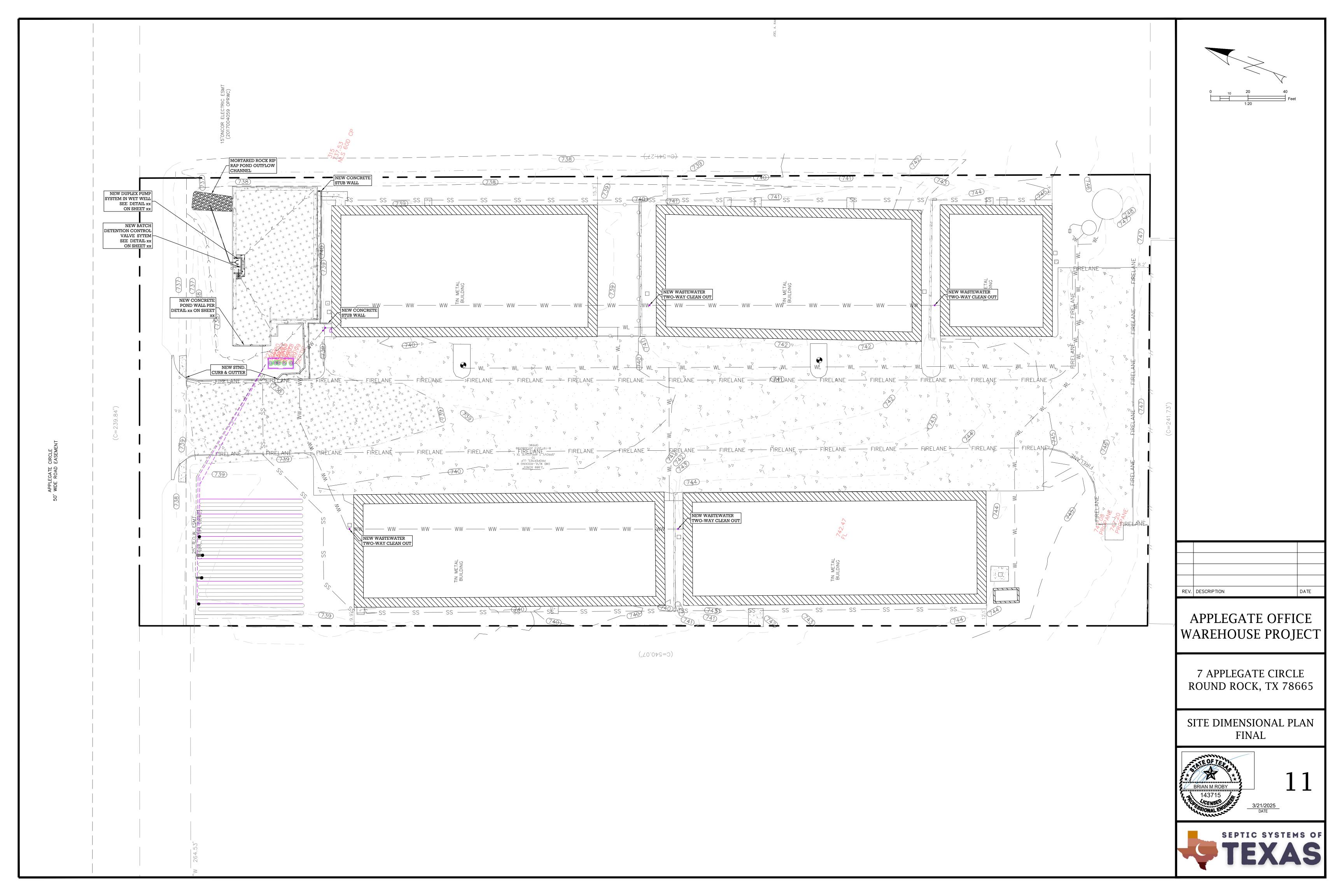
AS-BUILT TOPOGRAPHIC SURVEY (2 OF 2)

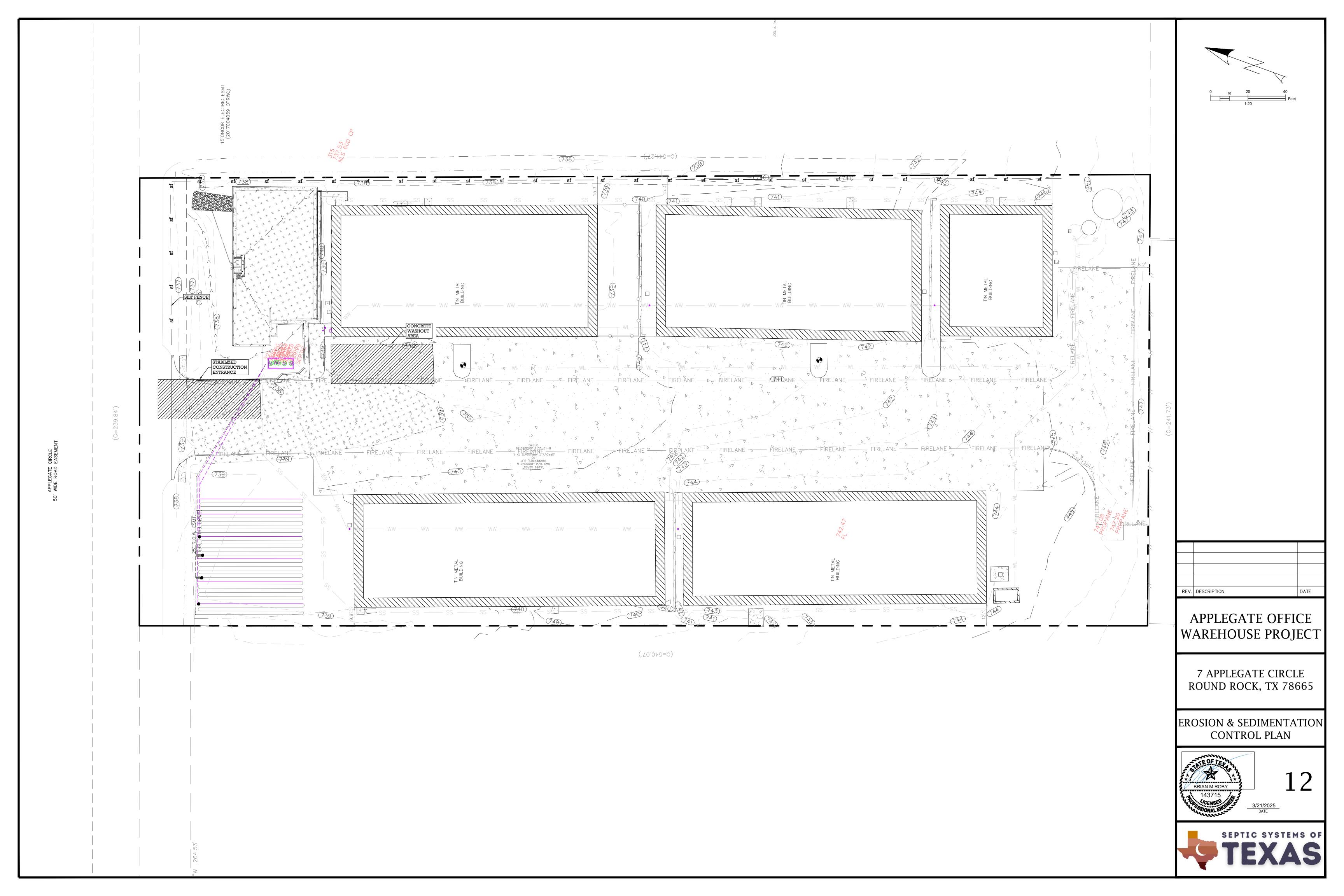
09

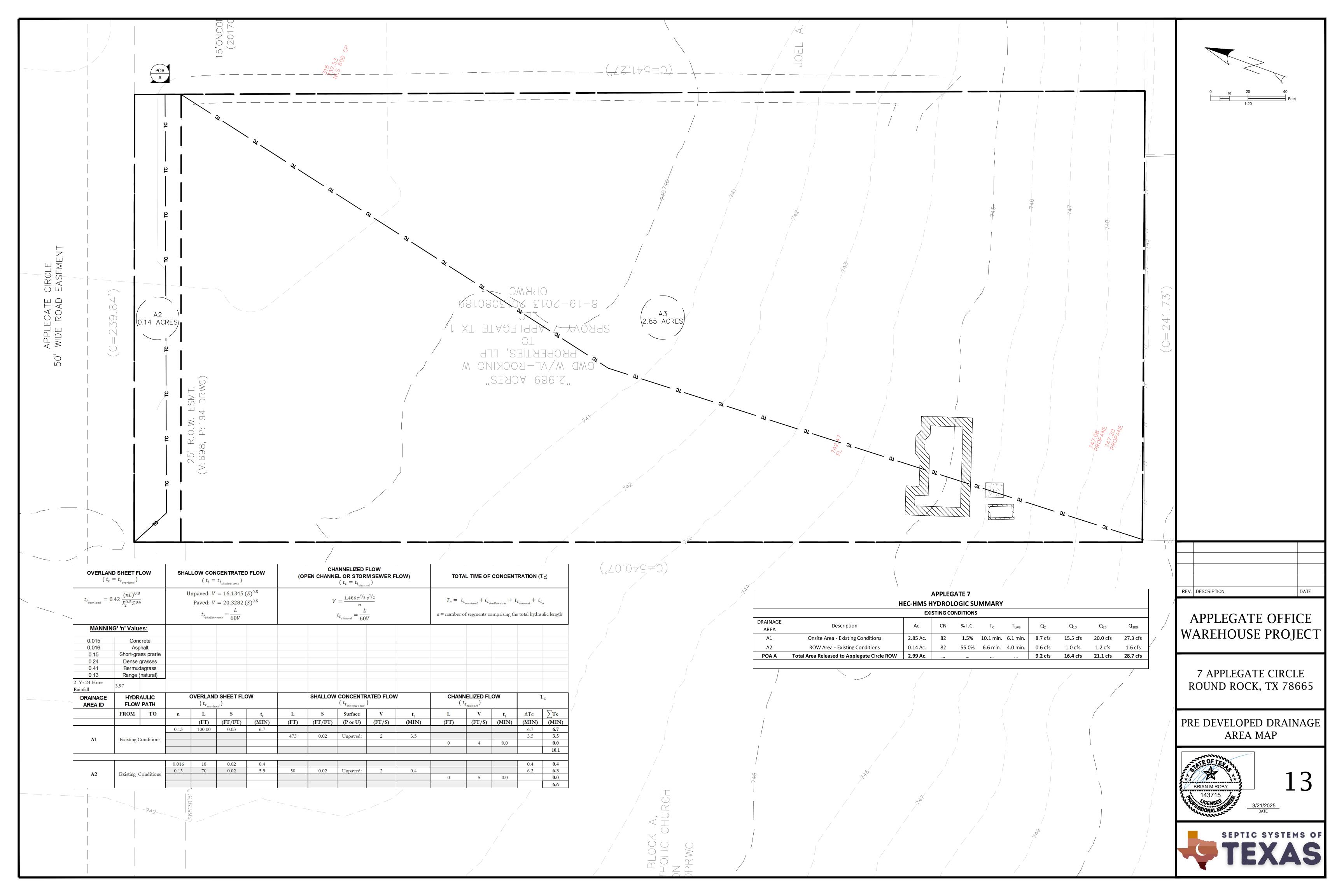
DATE:3/21/25

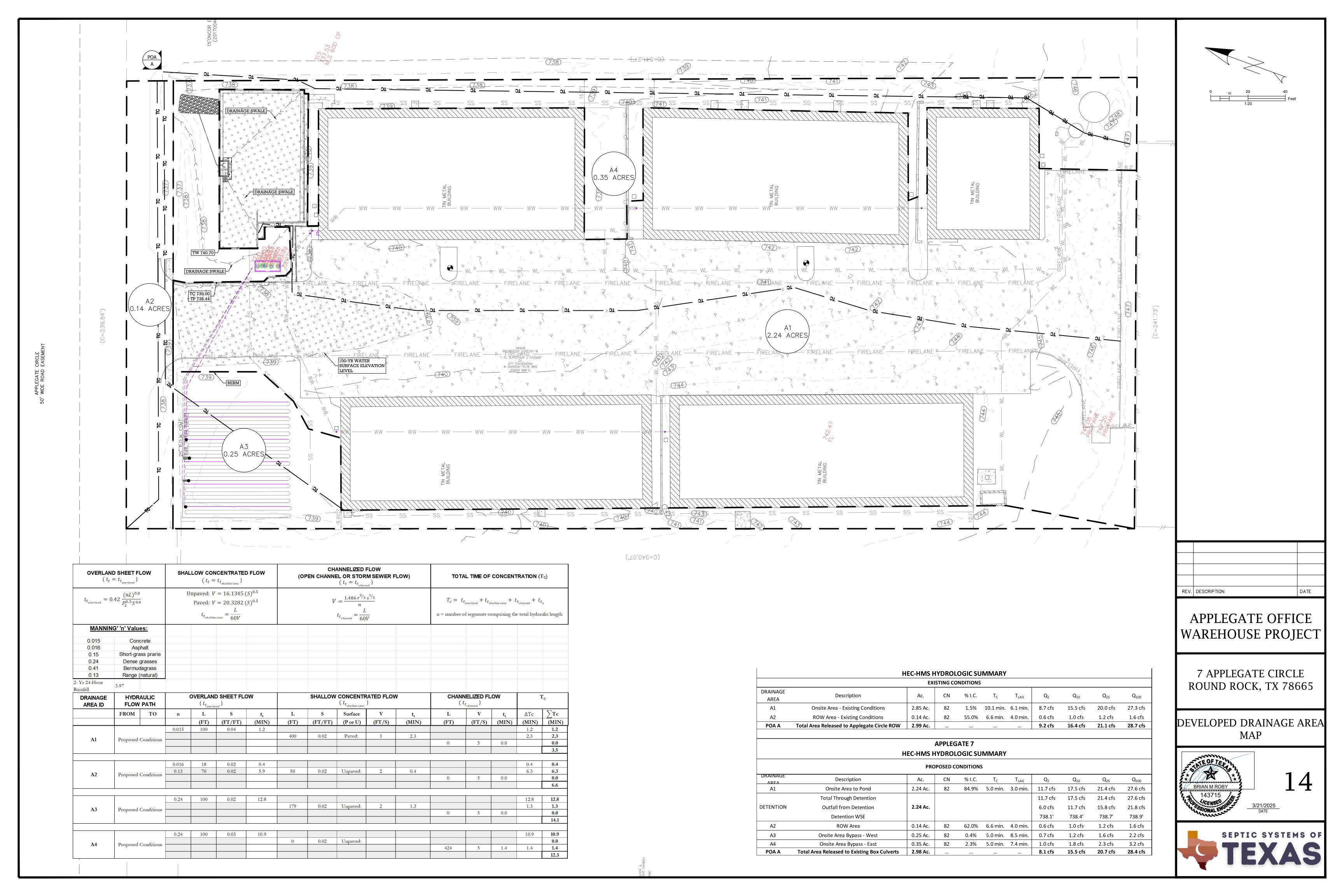


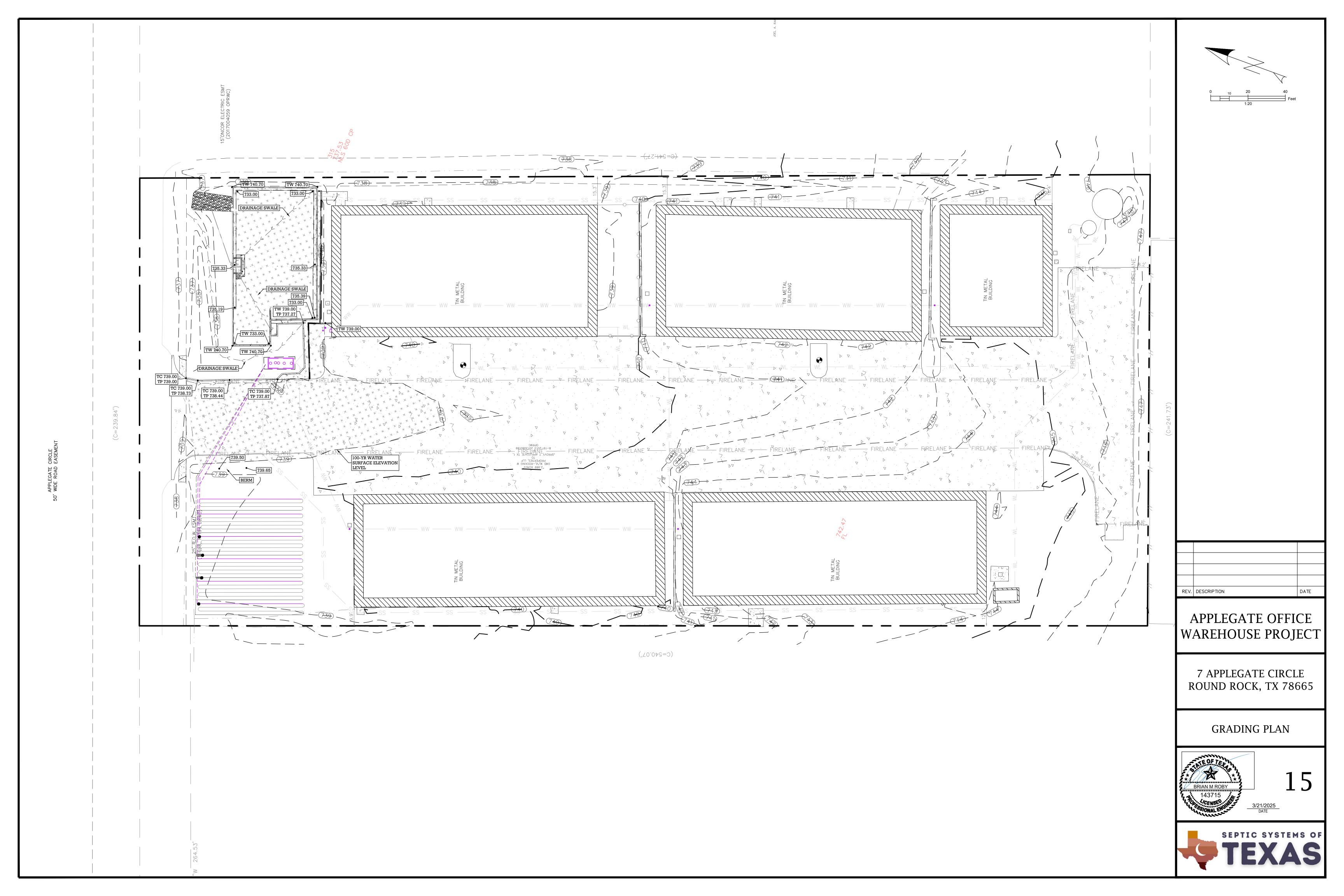


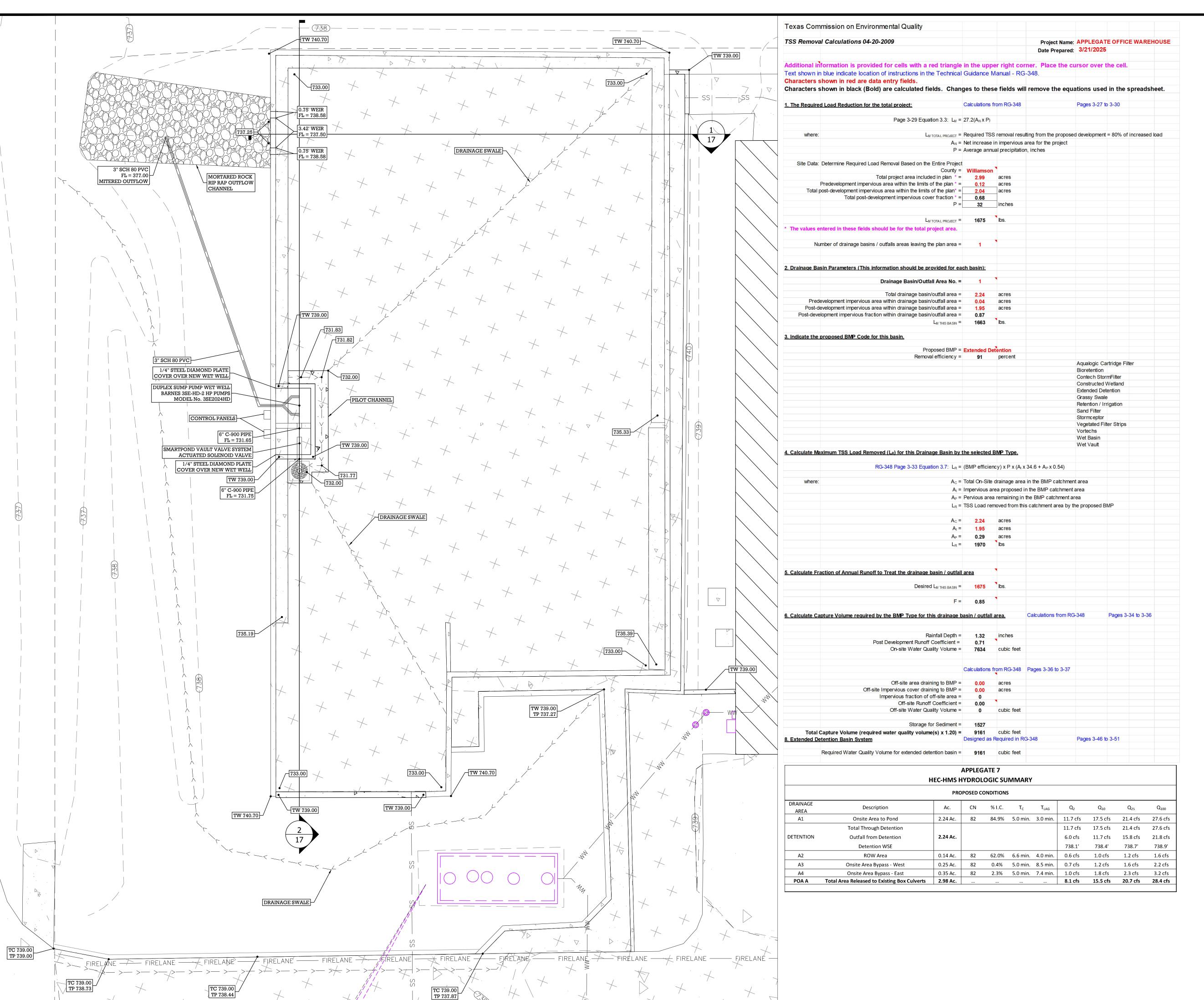






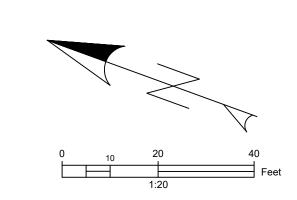






| Elev. (ft msl) | Area (sf) | Inc. Vol. (cf) | Cum. Vol. (cf) |
|----------------|-----------|----------------|----------------|
| | | | |
| 730.00 | 10 | 0 | 0 |
| 732.90 | 10 | 29 | 29 |
| 733.00 | 3132 | 157 | 186 |
| 734.00 | 3132 | 3,132 | 3,318 |
| 735.00 | 3132 | 3,132 | 6,450 |
| 736.00 | 3132 | 3,132 | 9,582 |
| 736.78 | 3132 | 2,443 | 12,025 |
| 736.85 | 3391 | 228 | 12,253 |
| 737.00 | 3391 | 509 | 12,762 |
| 738.00 | 3664 | 3,528 | 16,290 |
| 739.00 | 8977 | 6,321 | 22,610 |

BATCH EXTENDED DETENTION POND VOLUME

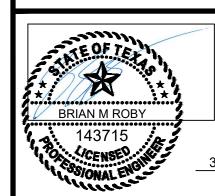


REV. DESCRIPTION DATE

APPLEGATE OFFICE WAREHOUSE PROJECT

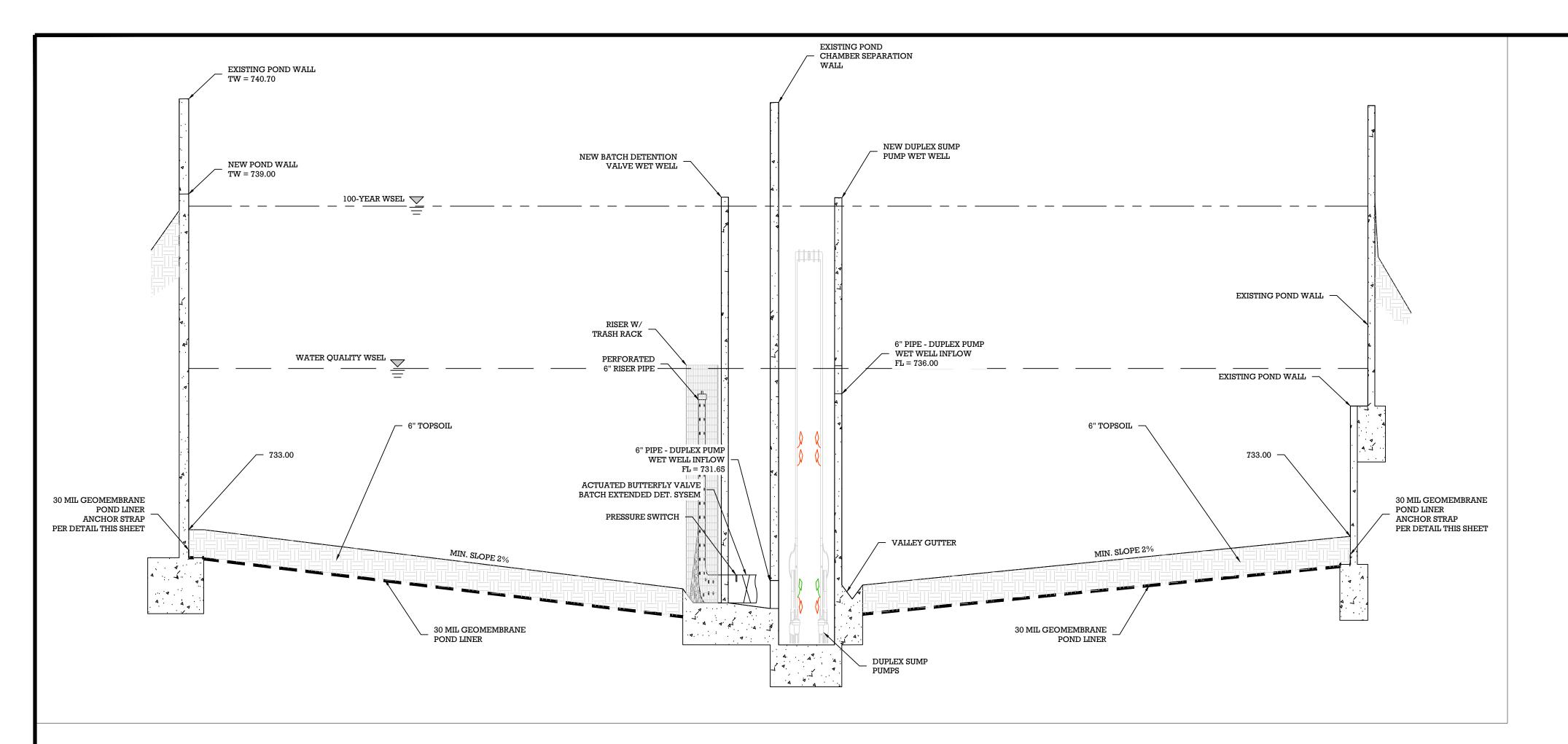
7 APPLEGATE CIRCLE ROUND ROCK, TX 78665

POND PLAN - MODIFICATION

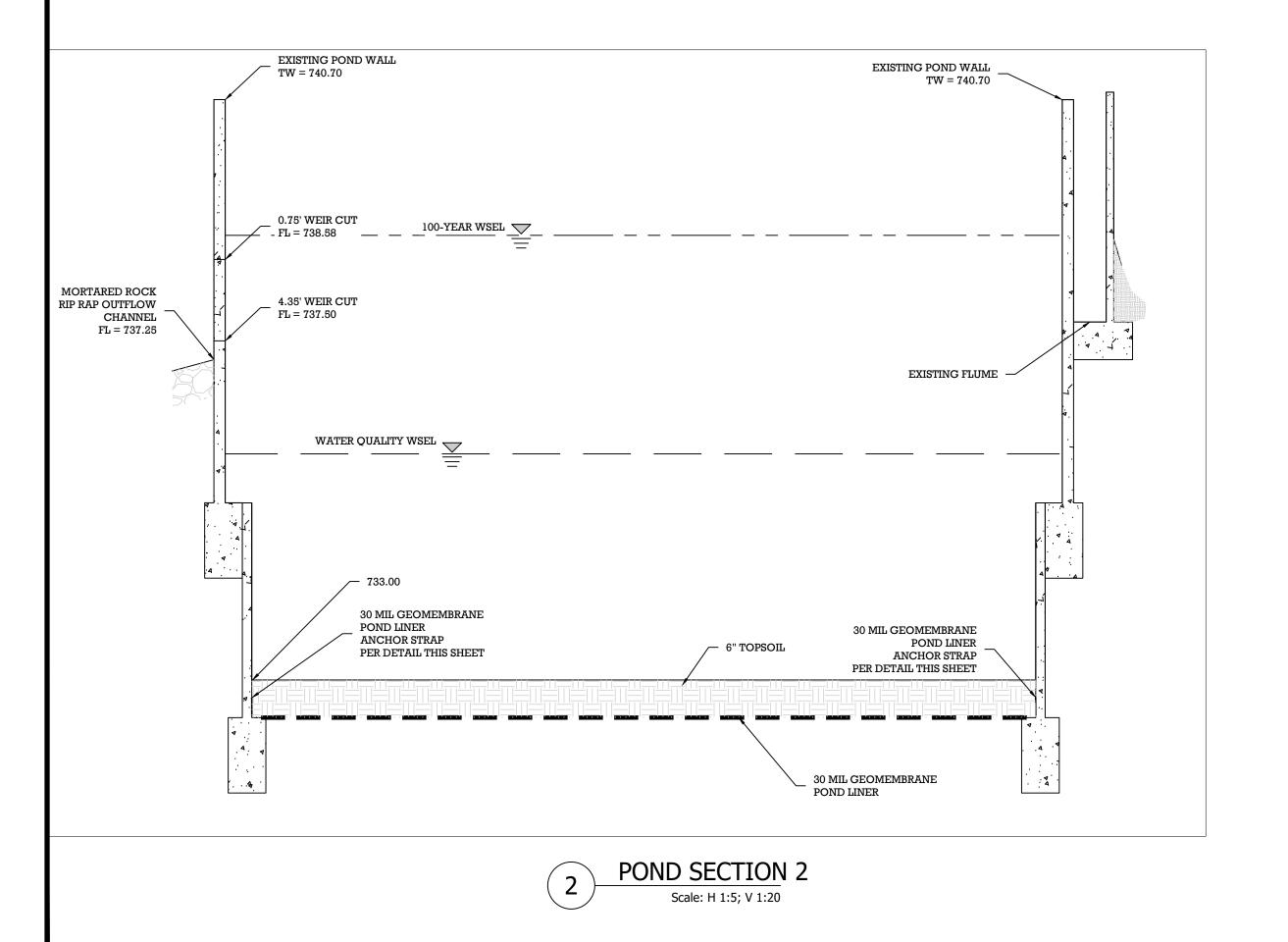


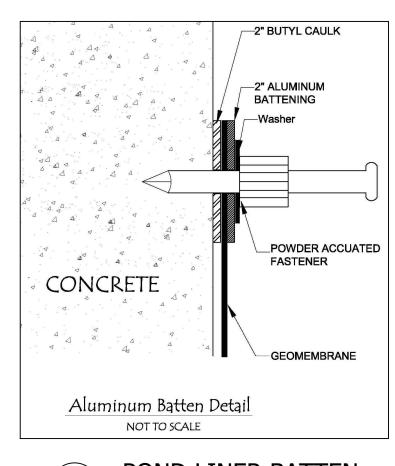
16



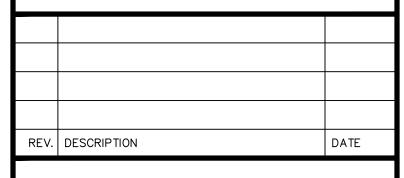








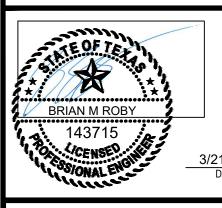
POND LINER BATTEN



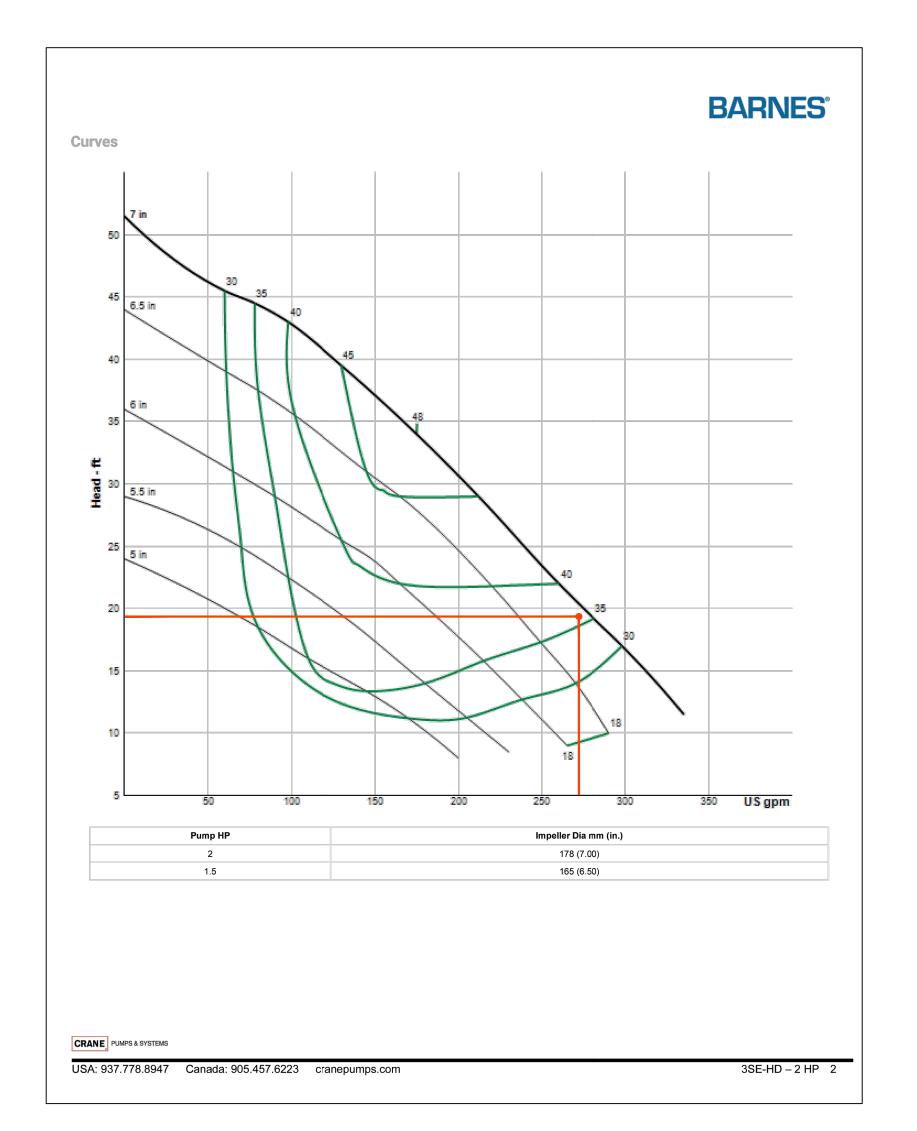
APPLEGATE OFFICE
WAREHOUSE PROJECT

7 APPLEGATE CIRCLE ROUND ROCK, TX 78665

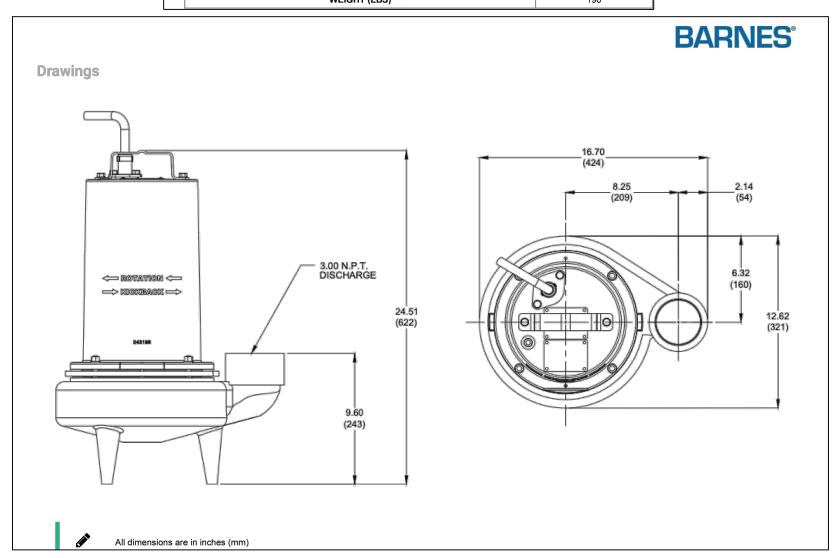
POND PROFILE - MODIFICATION



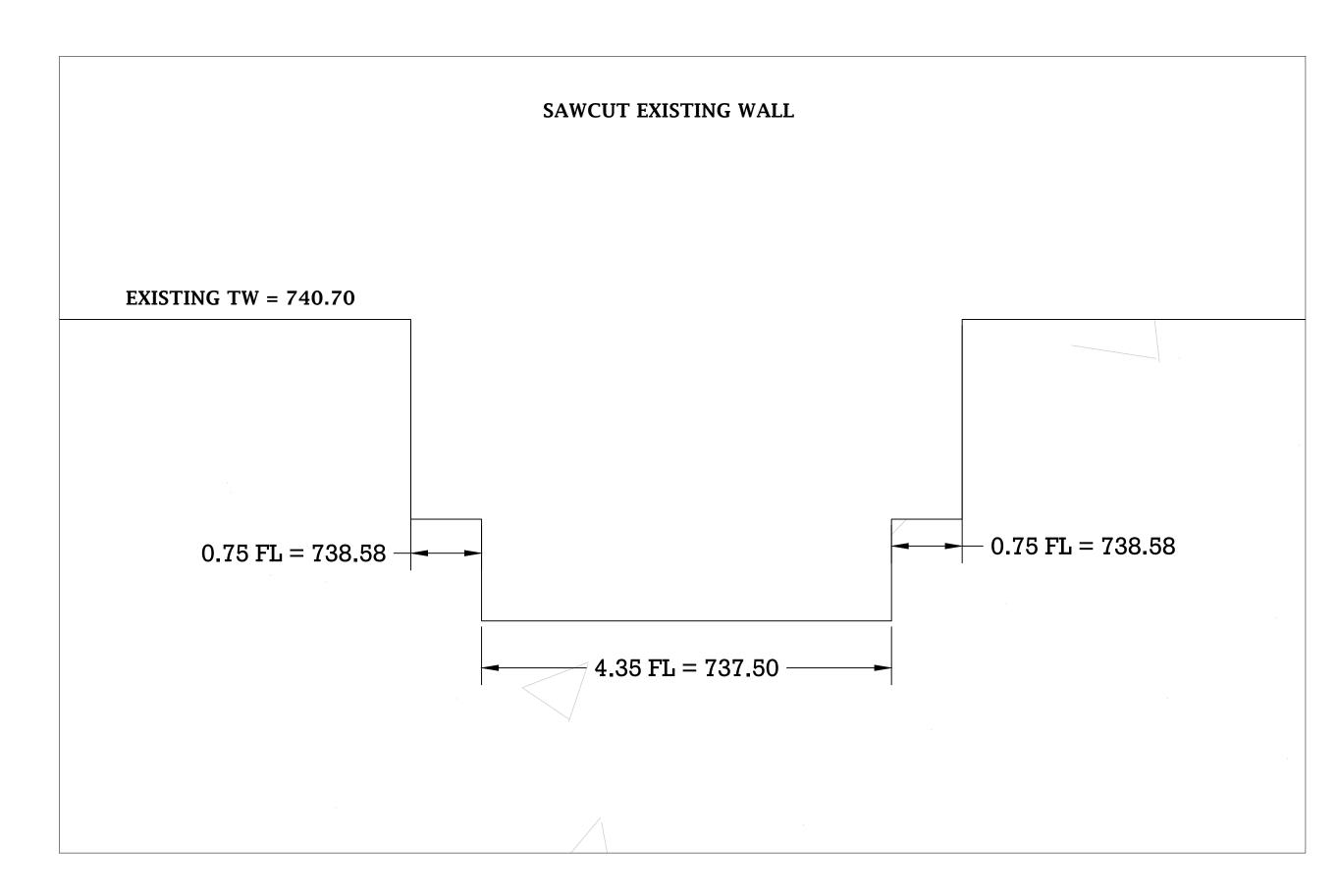




| PUMP MODEL NUMBER | 3SE2024HD |
|--------------------|------------|
| PART NUMBER | 133466 |
| НР | 2 |
| VOLTAGE/PHASE | 230/1 |
| HZ | 60 |
| RPM (NOMINAL) | 1750 |
| NEMA START CODE | В |
| FULL LOAD AMPS | 14.5 |
| LOCKED ROTOR AMPS | 29.0 |
| CORD SIZE | 12/3 |
| CORD TYPE | SOOW/SOW |
| CORD O.D INCH (MM) | .61 (15.5) |
| WEIGHT (LBS) | 190 |

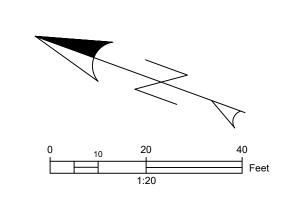


| Friction Head | | | | | |
|---------------|-------------|------------------|-----------|------------------------|-------|
| Pipe Section | Pipe Length | Size | Flow Rate | Loss | Loss |
| | [ft] | [in] | [gpm] | [ft] | [psi] |
| 1 | 15 | 3 | 274 | 2.03 | 0.88 |
| Static Head | | | | | |
| | Pump Inlet | Max Elevatioin | | | |
| | 729.25 | 740 | | 10.75 | |
| | Pipe | Friction Loss = | | 2.03 | 0.88 |
| | 20 | % For Fittings = | | 0.41 | 0.18 |
| | Sta | atic Head Loss = | | 10.75 | 4.65 |
| | Total [| Dynamic Head = | | 13.19 | 5.71 |
| | lotai L | • | | 13.19 : IN PUMP DIS | |



OUTFLOW STRUCTURE DETAIL

Scale: 1":1'

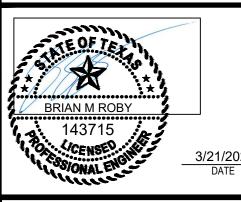


REV. DESCRIPTION DATE

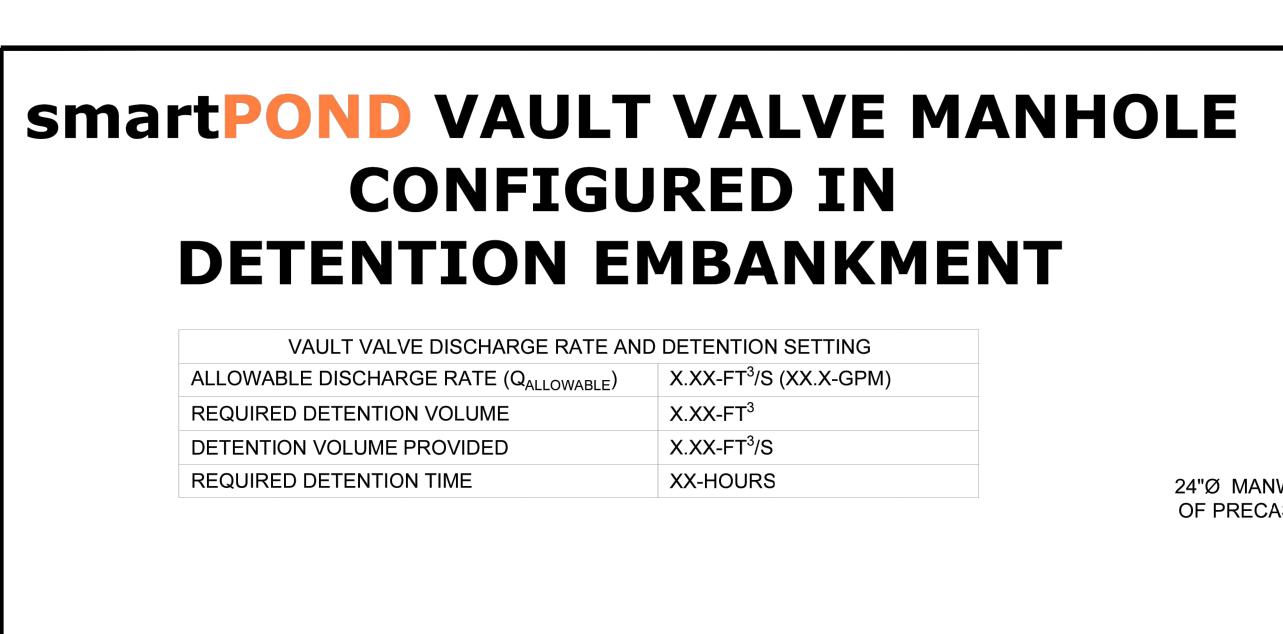
APPLEGATE OFFICE WAREHOUSE PROJECT

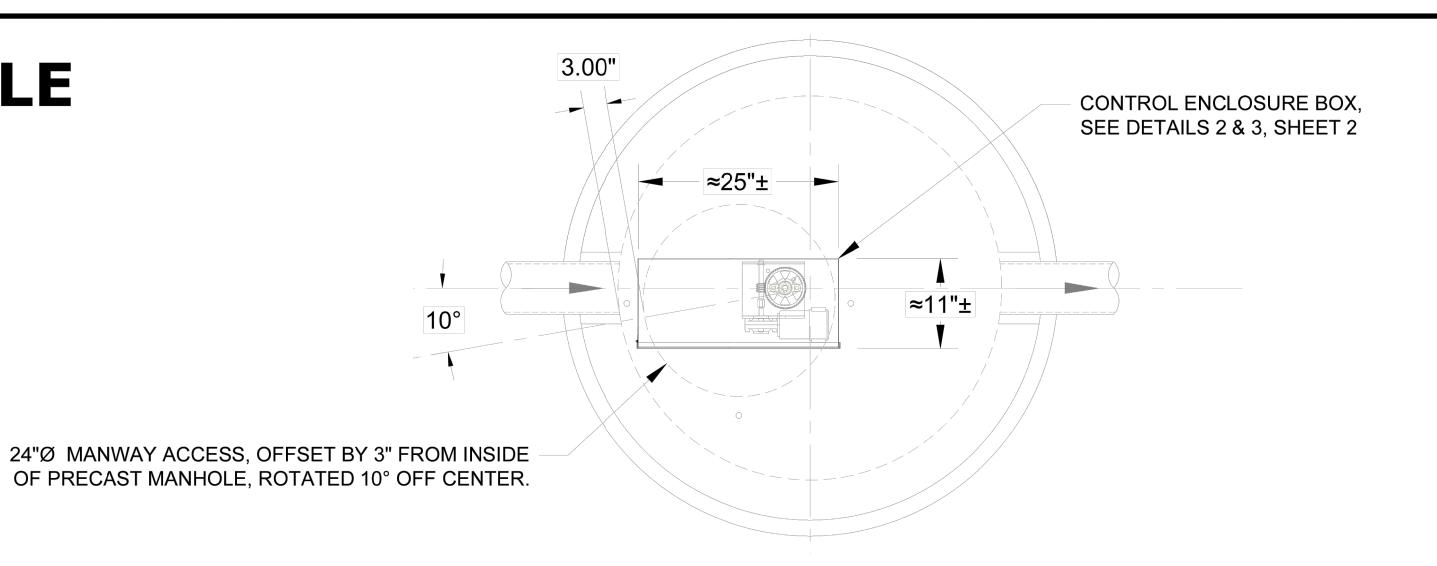
7 APPLEGATE CIRCLE ROUND ROCK, TX 78665

POND DETAILS (1 OF 4)



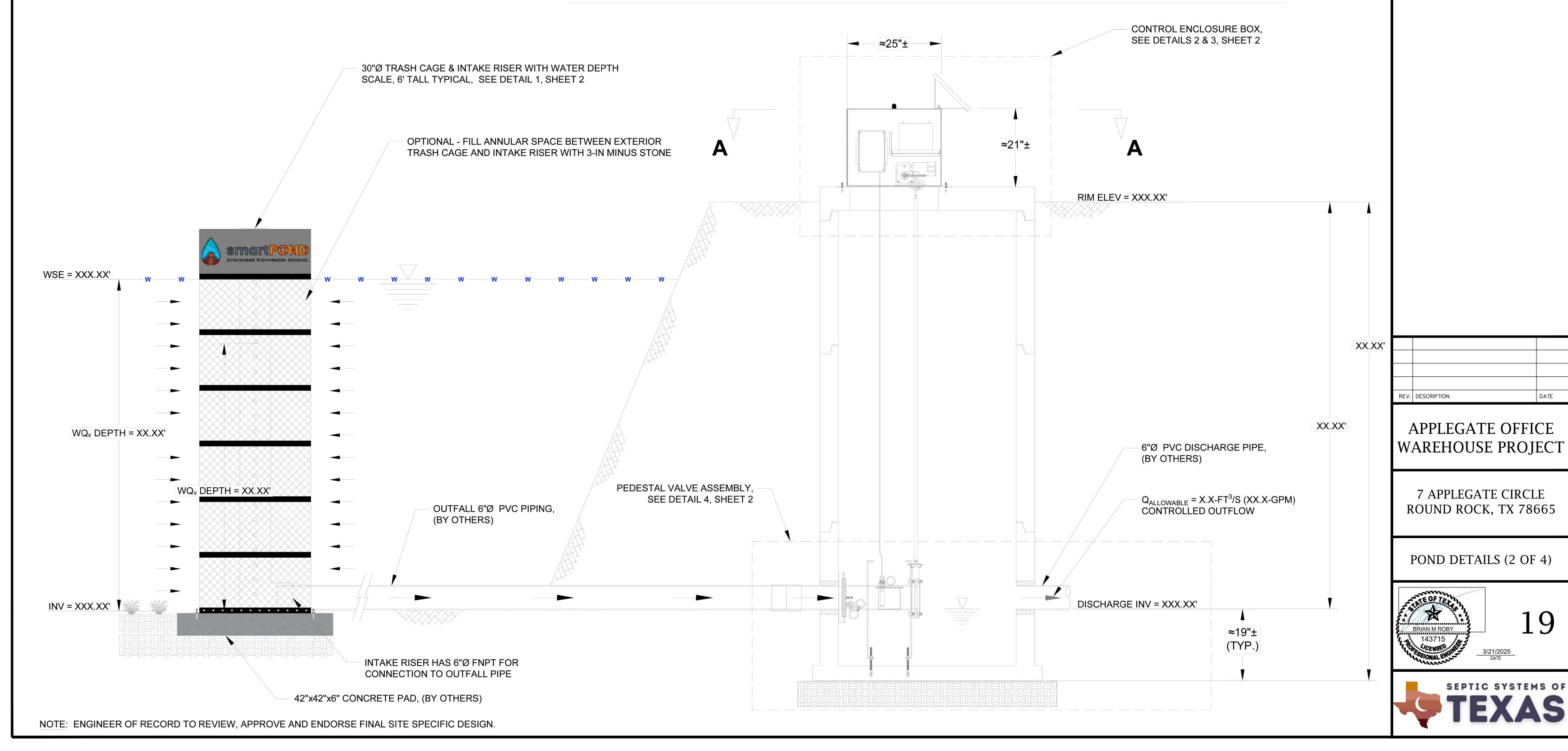




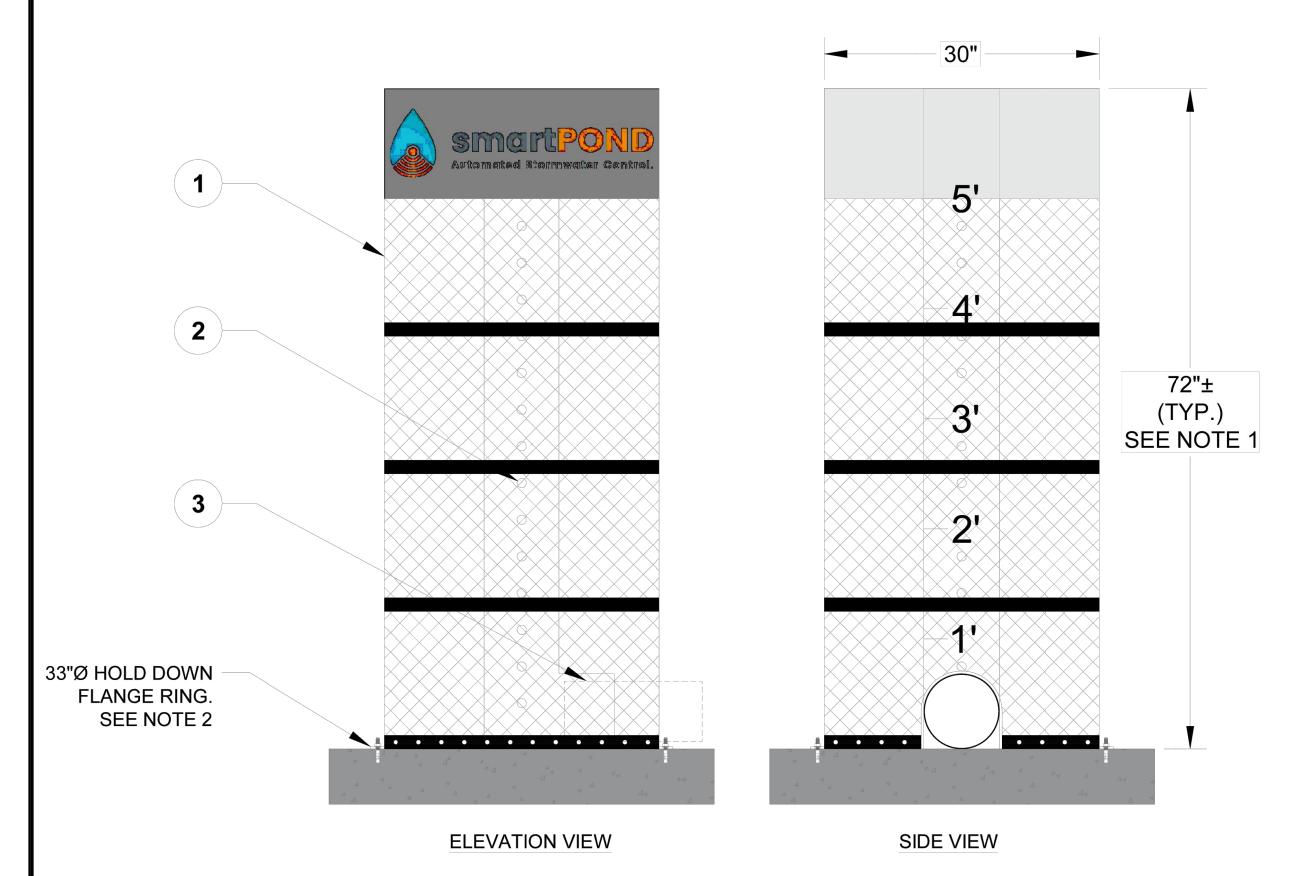


19

PLANVIEW AA - 4'Ø MANHOLE WITH ACTUATED VALVE AND CONTROL PANEL



DETAIL 1 - TRASH CAGE & INTAKE RISER

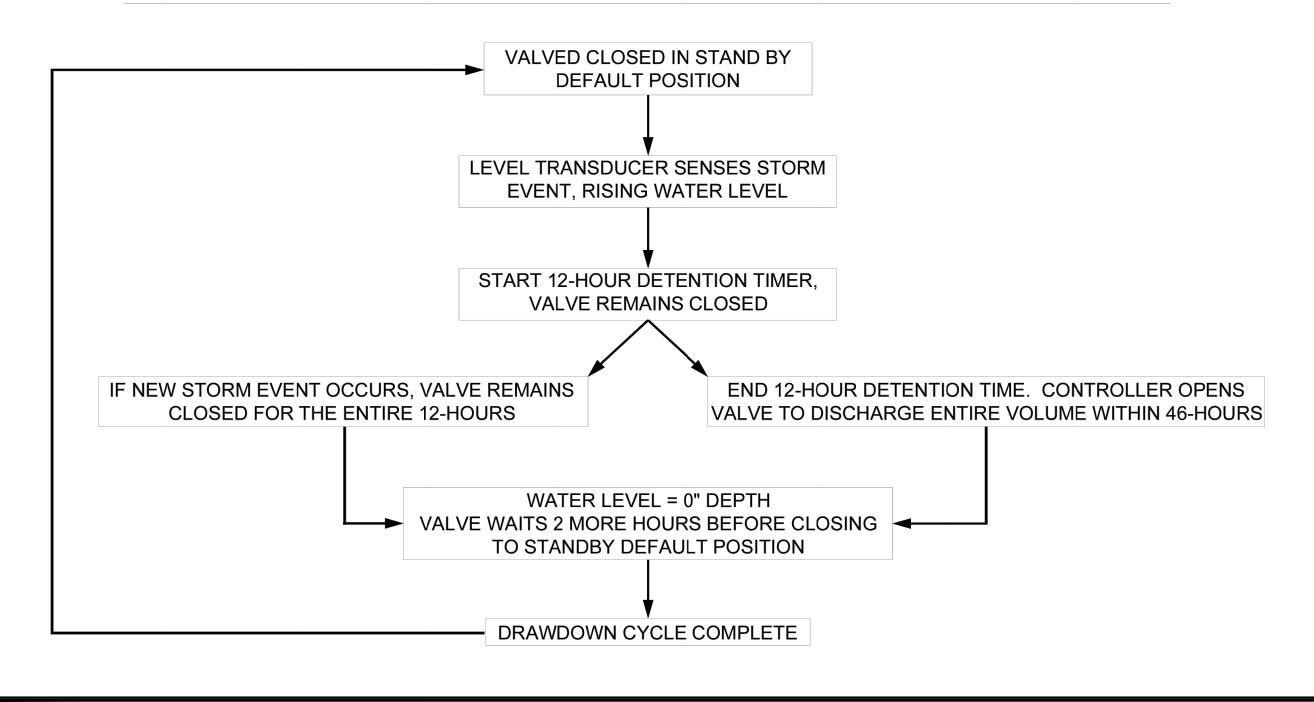


TRASH CAGE & INTAKE RISER NOTES:

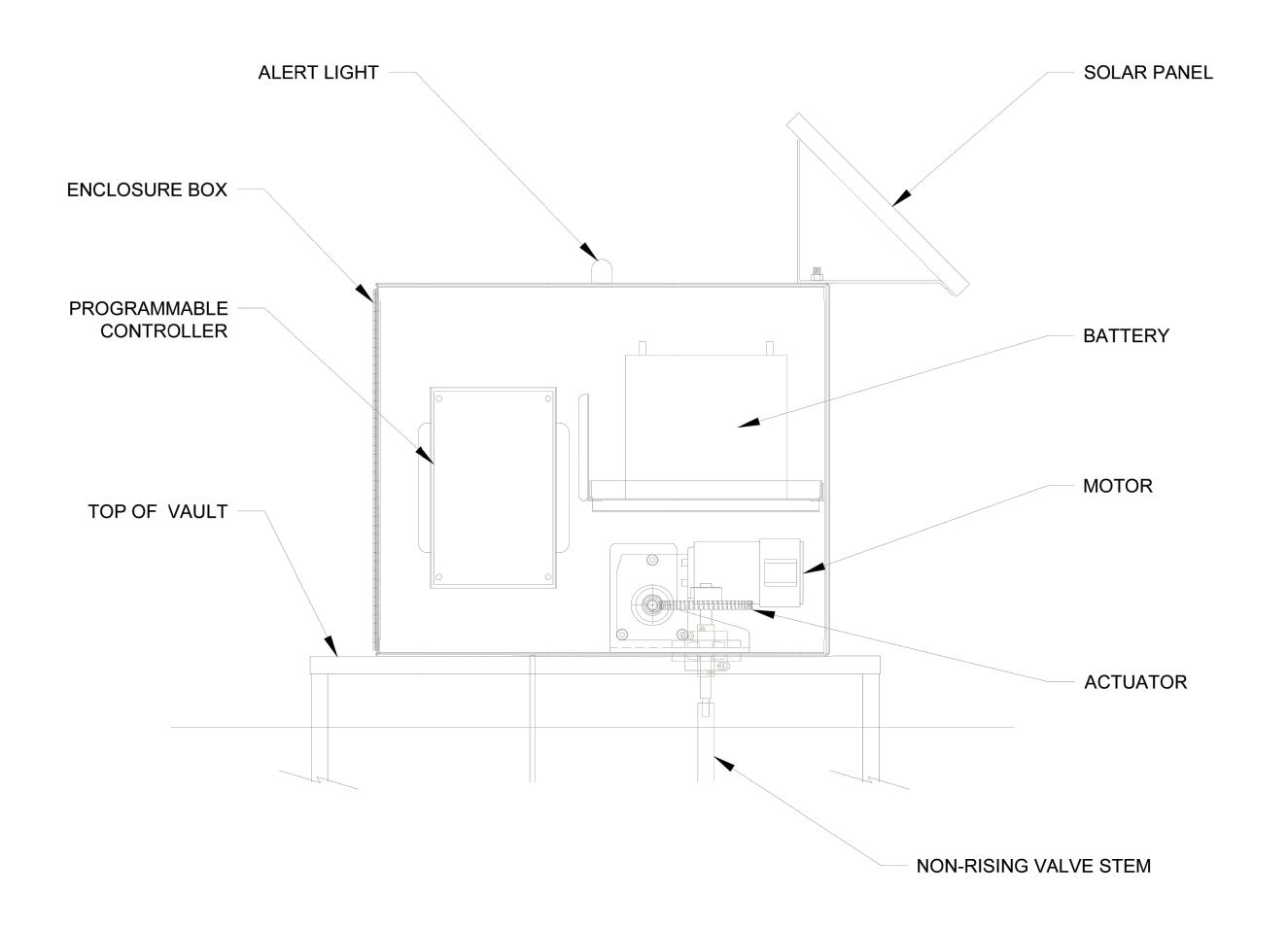
- 1. DESIGN HEIGHT OF INTAKE TRASH CAGE AND INTAKE RISER TO MATCH REQUIRED DETENTION DEPTHS.
- 2. USE 4X, $\frac{1}{2}$ "Ø X 3.5" SS WEDGE ANCHOR BOLTS TO CONNECT OUTFALL ASSEMBLY TO CONCRETE PAD, 2.5" MINIMUM EMBEDMENT

| TRASH CAGE WITH INTAKE RISER - PARTS LIST | | |
|---|--|--|
| ITEM | COMPONENT DESCRIPTION | |
| 1 | 30"Ø CAGE WITH 1.5" GALVANIZED MESH SCREEN | |
| 2 | 8" SQUARE PERFORATED TUBING WITH 1"Ø PERFORATIONS, SPACED 4" ON CENTERS WITH WATER DEPTH SCALE | |
| 3 | 6"Ø FNPTS PROVIDED AT BOTTOM DISCHARGE OF INTAKE RISER | |

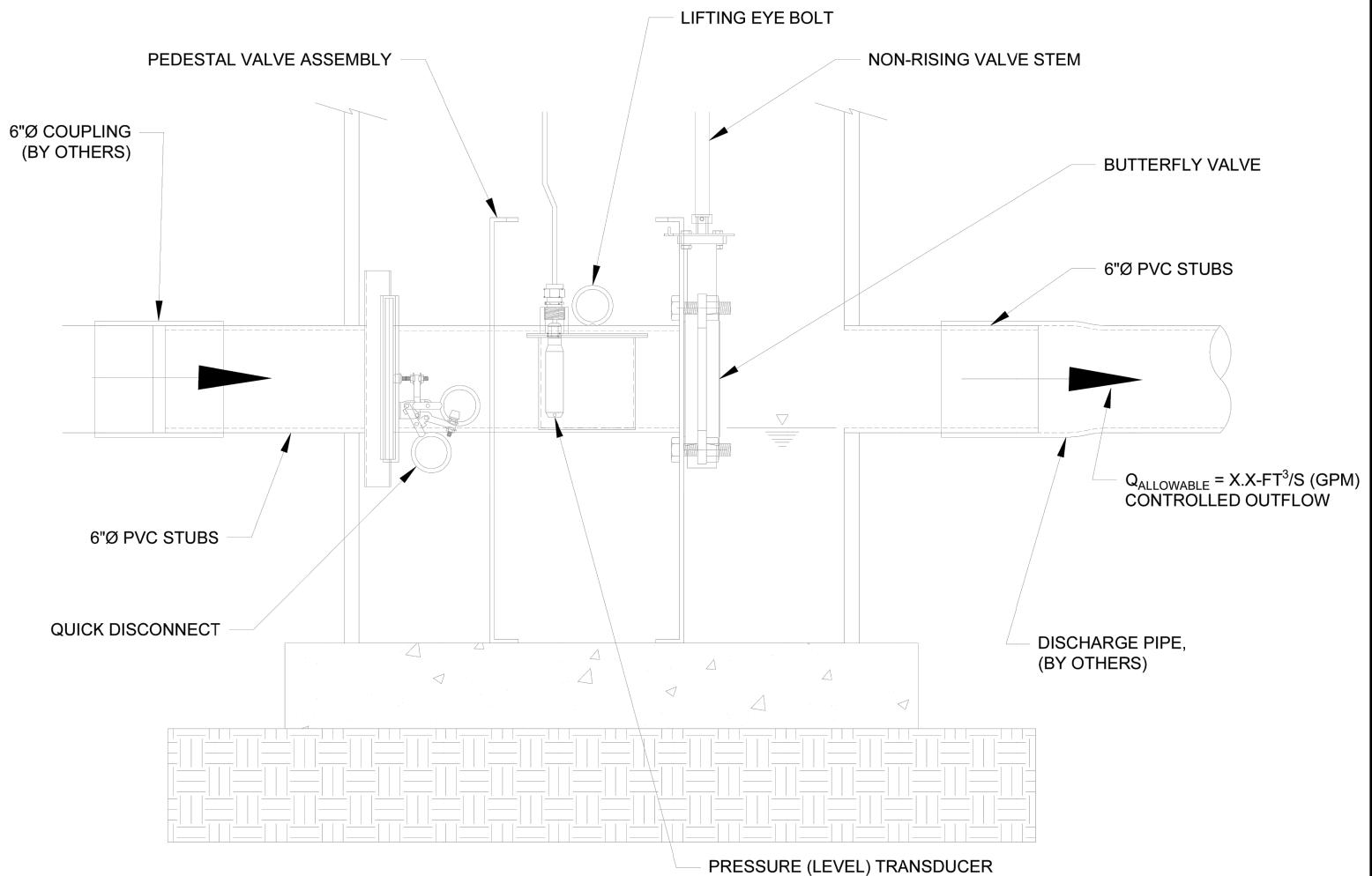
DETAIL 2 - PROGRAMMABLE LOGIC FLOW CHART, VAULT VALVE OPERATION FOR DETENTION AND/OR WATER QUALITY



DETAIL 3 - CONTROL ENCLOSURE BOX



DETAIL 4 - PEDESTAL VALVE ASSEMBLY

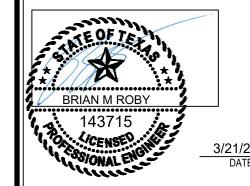


REV. DESCRIPTION DATE

APPLEGATE OFFICE WAREHOUSE PROJECT

7 APPLEGATE CIRCLE ROUND ROCK, TX 78665

POND DETAILS (3 OF 4)





smartPOND VAULT VALVE, MH SPECIFICATIONS

CONTINUOUSLY MONITORED AUTOMATED STORMWATER SYSTEM (C-MASS), WITH PROGRAM CONTROLLED VAULT VALVE

1. CONTINUOUSLY MONITORED AUTOMATED STORMWATER SYSTEM (C-MASS) DEVICE: THE CONTINUOUSLY MONITORED AUTOMATED STORMWATER SYSTEM (C-MASS), SHOWN ON THE PLANS AS THE VAULT ASSEMBLY SHALL BE A smartPONDTM VAULT VALVE PROVIDED BY:

CONVERGENT WATER TECHNOLOGIES 800.711.5428 WWW.CONVERGENTWATER.COM

THE smartPONDTM VAULT VALVE SHALL PROVIDE FOR ACTIVE MANAGEMENT OF DETAINED STORMWATER VOLUME AND / OR ITS ALLOWABLE DISCHARGE RATE. THE smartPONDTM VAULT VALVE SHALL BE PROGRAMMABLE TO DETAIN A SPECIFIED VOLUME OF STORMWATER FOR A SPECIFIED REQUIRED PERIOD OF TIME AND / OR PROGRAMMED TO CONTROL THE OUTFLOW RATE TO MATCH THE MAXIMUM ALLOWABLE DISCHARGE RATE OR BOTH OF THIS OPERATIONS SIMULTANEOUSLY. THE smartPONDTM VAULT VALVE MAXIMIZES THE DETENTION TO PROMOTE THE SETTLEMENT OF SOLIDS BEFORE AUTOMATICALLY DEWATERING THE DETENTION POND COMPLETELY. FOR STORMWATER RETENTION SYSTEMS, THE SYSTEM SHALL BE PROGRAMMED TO MANAGE THE REQUIRED RETENTION VOLUME WHILE MAINTAINING A SPECIFIED AMOUNT OF CAPACITY FOR FLOOD STORAGE OR OTHER USE.

THE FOLLOWING SPECIFICATIONS DESCRIBE THE COMPONENTS, GENERAL FUNCTIONS, AND APPLICATIONS OF A CONTINUOUSLY MONITORED AUTOMATED STORMWATER SYSTEM (C-MASS), USING THE PROGRAMMED smartPONDTM VAULT VALVE.

THIS smartPONDTM VAULT VALVE SHALL FUNCTION AS AN ELECTRONICALLY CONTROLLED, SOLAR POWERED STORMWATER MANAGEMENT DEVICE, PROVIDING PRECISION STORMWATER VOLUME MANAGEMENT CAPABILITIES AND REAL-TIME DATA. USING SENSORS, SOLAR POWER, AN ELECTRONIC ACTUATOR, AND AN INTERNET-BASED CONTROL INTERFACE. THE smartPONDTM VAULT VALVE CONNECTS TO A SPECIALIZED PERFORATED INTAKE RISER INSIDE THE STORMWATER IMPOUNDMENT AREA TO ENABLE PRECISE CONTROL OF REQUIRED DETAINED OR RETAINED STORMWATER CONTROL VOLUMES AND ALLOWABLE DISCHARGE RATES AUTOMATICALLY OR IN REAL TIME. THE smartPONDTM ASSEMBLY CAN BE CONFIGURED ABOVE GROUND OR BELOW IN SMALL MANHOLE OR VAULT STRUCTURE.

- 1.1 PRE-PROGRAMMED VAULT VALVE CONTROL: THE VAULT VALVE SHALL BE PRE-PROGRAMMED TO EXECUTE COMMANDS BASED ON STORM EVENTS, REQUIRED CONTROL VOLUMES AND ALLOWABLE DISCHARGE RATES.
- 1.1.1 DETENTION POND OPTIMIZATION: THE smartPONDTM VAULT VALVE SHALL BE PROGRAMMED TO DISCHARGE FLOWS FROM THE DETENTION SYSTEM AT THE MAXIMUM ALLOWABLE RELEASE, WHICH IS TYPICALLY A PREDEVELOPMENT VALUE. OTHER PROGRAM CONSIDERATIONS MAY INCLUDE INCLUDE PREVENTION OF OVERTOPPING OR BYPASS.
- 1.1.2 BATCH DETENTION FUNCTION FOR STORMWATER QUALITY: THE smartPONDTM VAULT VALVE MAY BE PROGRAMMED TO PROVIDE BATCH DETENTION TO ACHIEVE STORMWATER QUALITY EFFLUENT GOAL OF 80% OR MORE REMOVAL OF TOTAL SUSPENDED SOLID (TSS) REMOVAL BY HOLDING THE WATER QUALITY VOLUME (WQ_V) FOR SETTLEMENT TREATMENT, FOR A REQUIRED PERIOD OF TIME. HOLDING TIMES ARE TYPICALLY SET FORTH IN STORMWATER MANAGEMENT REGULATIONS AS 2, 24 OR 48-HOURS.
- 1.1.3 SPILL CONTROL OF HAZARDOUS MATERIAL (HAZMAT): smartPONDTM WHEN SPECIFIED FOR HAZMAT SPILL CONTROL SHALL BE EQUIPPED WITH POLLUTANT SPECIFIC SENSORS THAT WHEN TRIGGERED AUTOMATICALLY CLOSE THE VAULT VALVE UNTIL THE COMMAND IS OVERRIDDEN.
- 1.2 REAL TIME MONITORING: smartPONDTM SHALL COME WITH TELEMETRY AND THE "AUTOFLOW APP" USER APPLICATION SOFTWARE AT NO ADDITIONAL COST FOR 1-YEAR. THIS AUTOFLOW APP ENABLES REAL TIME MONITORING OF THE DETENTION POND'S STORAGE-STAGE AND DISCHARGE RATE. THE AUTOFLOW APP SHALL ENABLE A USER TO:
 - CONTROL THE VAULT VALVE, EITHER OPEN OR CLOSE.
 - DETERMINE THE WATER SURFACE ELEVATION (WSE) OR POND DEPTH.
- DETERMINE IF TRASH OR DEBRIS IS SURROUNDING THE TRASH CAGE AND INTAKE RISER.
- RECEIVE MAINTENANCE ALERTS SUCH AS: LOW BATTERY, VAULT VALVE FAILURE, ETC.
- MAINTAIN SPECIFIED WATER SURFACE LEVEL.
- 2. **COMPONENTS**: THE smartPONDTM VAULT VALVE MAY BE IMPLEMENTED EITHER ABOVE OR BELOW GROUND, AND IS COMPRISED OF THE FOLLOWING COMPONENTS:
- 2.1 HARDWARE AND CONFIGURATION:

THE STANDARD smartPONDTM VAULT VALVE SYSTEM CONSISTS OF A LOWER AND UPPER COMPONENT: THE LOWER COMPONENT IS THE PEDESTAL VALVE ASSEMBLY WITH 6"Ø PIPE SPOOL AND 6"Ø ACTUATED VAULT VALVE AND PRESSURE TRANSDUCER HOUSING. THIS LOWER PEDESTAL SHALL HAVE A QUICK DISCONNECT SYSTEM ENABLING THE PEDESTAL VALVE ASSEMBLY TO BE DISCONNECTED FROM THE SURFACE AND HOISTED UP USING THE LIFTING EYE-BOLT ON TOP OF THE PEDESTAL VALVE ASSEMBLY.

THE SECOND, UPPER COMPONENT IS THE LOCKABLE STEEL WEATHERPROOF ENCLOSURE BOX WITH A SOLAR PANEL AND ALERT LIGHT MOUNTED ON ITS TOP. THIS ENCLOSURE BOX HOUSES THE PROGRAMMABLE CONTROLLER INSIDE A NEMA-3R BOX, BATTERY, ELECTRIC MOTOR, ACTUATOR GEARING AND AN EXTENDABLE NON-RISING VALVE STEM BETWEEN THE ACTUATOR AND THE 6"Ø VAULT VALVE.

THE ENCLOSURE BOX SHALL BE BOLTED TO THE TOP OF THE VAULT WITH $\frac{1}{2}$ "Ø" STAINLESS STEEL (SS) BOLT, NUTS AND WASHERS. USE $\frac{1}{2}$ "Ø, 3.5" LONG STAINLESS STEEL (SS) WEDGE ANCHORS IF VAULT'S TOP SLAB IS CONCRETE.

THIS ENCLOSURE BOX MAY BE INSTALLED WITHIN THE UNDERGROUND STRUCTURE AS LONG AS ACCESS TO THE ENTIRE VAULT ASSEMBLY IS ENSURED WITH A PROPERLY SIZED STRUCTURE. IN SUCH AN UNDERGROUND DEPLOYMENT CONFIGURATION, THE ENCLOSURE BOX SHOULD BE MOUNTED ABOVE THE MAXIMUM WATER SURFACE ELEVATION (WSE), OF THE DETENTION/DRAINAGE SYSTEM ION. THIS DEPLOYMENT CONFIGURATION STILL REQUIRES THE SOLAR PANEL TO BE LOCATED ABOVE GROUND.

THE LOWER PEDESTAL VALVE ASSEMBLY IS INSTALLED IN A MANHOLE OR VAULT AS NEEDED. AN EXTENDED NON-RISING VALVE STEM, AKA: "DRIVE SHAFT" CONNECTS THE UNDERGROUND VAULT VALVE TO THE ACTUATOR IN THE ABOVE GROUND ENCLOSURE BOX.

THE OUTFALL PIPE FROM THE DETENTION SYSTEM CONNECTS TO THE 6"Ø PVC INLET STUB PVC VAULT.

- 2.2 OTHER ELECTRONICS SPECIFICATIONS:
- MOTOR OPERATES ON 12-VOLTS AND HAS TWO WIRES CONNECTING TO THE MOTOR CONTROLLER BOARD.
- BATTERY THIS IS A GEL BATTERY THAT PROVIDES 12-VOLTS, 30 AMP/HOUR OF POWER TO THE VAULT VALVE ASSEMBLY.

- SOLAR PANEL PROVIDES 15-WATT CHARGING TO THE 12-VOLT GEL BATTERY.
- SOLAR CHARGE CONTROLLER REGULATES THE VOLTAGE AND CURRENT DELIVERED TO THE GEL BATTERY.

SENSORS:

- PRESSURE TRANSDUCER A SENSOR CAPABLE OF STAYING SUBMERSED IN WATER INDEFINITELY AND IS MOUNTED IN CENTER PIPE SPOOL OF THE LOWER PEDESTAL COMPONENT.
- VAULT VALVE POSITION SENSOR DETERMINES THE POSITION OF THE OUTFALL VALVE.

OPTIONAL SENSORS & HARDWARE:

- HYDROCARBON SENSOR THIS OPTIONAL SENSOR MAY BE FITTED TO THE smartPONDTM VAULT VALVE TO PERFORM SPECIFIC FUNCTIONS BASED ON THE PRESENCE OF HYDROCARBON CONTAMINATION.
- CELL DATA MODEM REQUIRED FOR REAL TIME CONTROL AND ALERTS.

3. ADDITIONAL COMPONENTS LIST:

- 3.1 INTAKE RISER: THIS SHALL BE A PERFORATED STEEL RISER CONNECTED TO THE 6"Ø VAULT PIPE WITHIN THE POND AREA. THIS INTAKE RISER SHALL BE AN 8" SQUARE STEEL WITH FOUR (4X) 1"Ø HOLES AT 90-DEGREES EACH, EVERY 4 VERTICAL INCHES. THE DISCHARGE OF THIS INTAKE TUBING SHALL HAVE FEMALE NATIONAL PIPE THREADS (FNPT) TO MATCH THE 6"Ø SCHEDULE 40 PVC VAULT PIPE.
- 3.2 TRASH CAGE: THE TRASH CAGE ATTACHES TO THE PERFORATED RISER WITH A COUPLING AND CALDER PIN PROVIDED WITH THE THE SYSTEM. THE TRASH CAGE SHALL BE COMPRISED OF STEEL BANDING AND A 1.5" X 1.5" MESH TO PREVENT FLOATABLE'S AND OTHER CONTAMINANTS FROM ENTERING AND CLOGGING THE PERFORATED RISER. THE TRASH CAGE WILL SIT 0.5" ABOVE THE BOTTOM OF THE IMPOUNDMENT TO ALLOW THE LAST 0.5" OUT OF THE IMPOUNDMENT.
- 3.3 VAULT VALVE STEM EXTENSION: THE NON-RISING STEM, AKA: "DRIVE SHAFT" OF THE smartPONDTM SYSTEM MAY BE EXTENDED TO ANY LENGTH NECESSARY FOR DEPLOYMENT CONFIGURATIONS INSTANCES WHERE THE VAULT VALVE WILL BE IN AN UNDERGROUND VAULT OR MANHOLE. THE VAULT VALVE STEM WILL CONNECT THE VAULT VALVE TO THE ABOVE GROUND CONTROLS.
- 4. REAL TIME MONITORING INTERFACE (OPTIONAL): THE AUTOFLOW APP SHALL BE THE SOFTWARE USED IF THE REAL TIME MONITORING OPTION IS SPECIFIED FOR LONG-TERM POND OPERATIONS. A COMPLETE SET OF USER INSTRUCTIONS SHALL BE PROVIDED IN THE CONSTRUCTION SUBMITTALS AND COPY OF THESE INSTRUCTIONS SHALL BE PLACED IN THE ENCLOSURE BOX.

THIS AUTOFLOW APP SHALL PROVIDE LIVE AND HISTORICAL DATA AND PROVIDE THE ALERTS LISTED IN SECTION 6. IT WILL ALSO ENABLE COMMANDS TO BE SENT TO THE VAULT VALVE TO CHANGE THE VALVES POSITION TO CONTROL DISCHARGE RATE AND POND DEPTH.

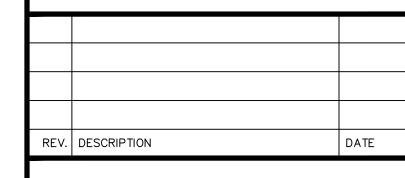
- 5. ALERTS: THE smartPONDTM VAULT VALVE WILL INDICATE THE FOLLOWING ALERTS BY ILLUMINATING AN EXTERIORLY VISIBLE RED LED LIGHT ON TOP OF THE ENCLOSURE BOX:
 - LOW BATTERY
 - LOSS OF FUNCTION
 - VAULT VALVE MALFUNCTION
 - HYDROCARBON CONTAMINATION (OPTIONAL)

IF THE TELEMETRY OPTION IS SELECTED, THE UNIT WILL UPLOAD THE ABOVE ALERTS TO THE AUTOFLOW APP AND NOTIFY THE OPERATOR VIA TEXT OR EMAIL.

- 6. MAINTENANCE & OPERATION SUBMITTAL: AN OPERATION AND MAINTENANCE MANUAL SHALL BE PROVIDED, REVIEWED AND APPROVED DURING THE CONSTRUCTION SUBMITTAL PROCESS AND SHALL INCLUDE AT A MINIMUM: GREASING AND LUBRICATION ITEMS AND CYCLE FOR THE ACTUATOR, MOTOR AND VALVE; INSPECTION AND MAINTENANCE OF THE SOLAR PANEL, GEL BATTERY TRASH CAGE AND INTAKE RISER; AND PROCEDURES FOR VALVE OPERATION IN CASE OF TOTAL ELECTRONIC OR MOTOR FAILURE.
- 7. SHIPPING AND HANDLING STORAGE: THE smartPONDTM VAULT VALVE IS SHIPPED IN A NEAR-FULLY ASSEMBLED CONFIGURATION AND SHOULD BE STORED LIKEWISE. THE SYSTEMS ARE TRANSPORTED AND STORED ON PALLETS AND MUST REMAIN SECURED VIA STRAPS OR STEEL BANDS TO SAID PALLET AT ALL TIMES. THE SOLAR PANEL IS NOT INSTALLED AT TIMES OF TRANSPORT OR STORAGE AND SHOULD NOT BE INSTALLED UNTIL THE UNIT IS READY TO BEGIN OPERATION. THE BATTERY MAY BE STORED INSIDE THE ELECTRONICS BOX AND IF REMOVED, SHOULD NEVER BE STORED ON A CONCRETE SURFACE.
- 8. INSTALLATION: INSTALL THE smartPONDTM VAULT ASSEMBLY FIRST WITHOUT THE SOLAR PANEL. MOUNT SOLAR PANEL WITH THE CONNECTION BOLTS PROVIDED AFTER THE ASSEMBLY IS ANCHORED TO THE CONCRETE PAD USING THE ANCHOR BOLTS CALLED OUT ON THE PLANS. AS . BOLTS SHOULD BE REMOVED DURING THE INSTALLATION PROCESS. THERE ARE SEVERAL WAYS TO INSTALL THE SMARTPONDTM VAULT VALVE WITH THE KEY BEING STRUCTURED SUPPORT.
 - 8.1 <u>BELOW GROUND INSTALLATIONS</u>: THE UPPER COMPONENT CONSISTING OF THE ENCLOSURE BOX AND ALL ITS INTERNALS SHOULD BE FASTENED TO THE SURFACE OF THE CONCRETE VAULT. FOR VAULT INSTALLATIONS, SEE DESIGN DETAILS FOR STANDARD VAULT DESIGN.

9. SAFETY INFORMATION AND WARNINGS:

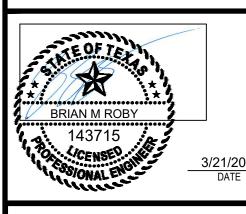
- ALWAYS KEEP HANDS CLEAR OF THE VAULT VALVE AND MOTOR WHEN UNIT IS IN OPERATION.
- TURN THE POWER SWITCH OFF WHEN DOING ANY ELECTRICAL WORK.
- DO NOT ENTER THE WATER WHEN THE DEVICE IS ACTIVELY DRAINING WATER.
- ALWAYS USE PROPER PERSONAL PROTECTION EQUIPMENT (PPE), AND CONFINED SPACE PROTOCOL WHEN SERVICING A VAULT VALVE BENEATH GROUND.
- 10. PRODUCTS: THE MANUFACTURER SHALL BE AN ESTABLISHED STORMWATER COMPANY THAT HAS AT LEAST FIVE (5X) INSTALLATIONS OF C-MASS DEVICES THAT HAVE BEEN IN USE AND FUNCTIONAL FOR FIVE (5X) OR MORE YEARS.
- 11. QUALITY ASSURANCE AND PERFORMANCE SPECIFICATIONS: THE QUALITY OF ALL SYSTEM COMPONENTS AND ALL OTHER APPURTENANCES AND THEIR ASSEMBLY PROCESS SHALL BE SUBJECT TO INSPECTION UPON DELIVERY OF THE SYSTEM TO THE WORK SITE. INSTALLATION IS TO BE PERFORMED ONLY BY SKILLED WORK PEOPLE WITH SATISFACTORY RECORD OF PERFORMANCE ON EARTHWORKS, PIPE, WELDING, CHAMBER, OR POND/LANDFILL CONSTRUCTION PROJECTS OF COMPARABLE SIZE AND QUALITY.



APPLEGATE OFFICE WAREHOUSE PROJECT

7 APPLEGATE CIRCLE ROUND ROCK, TX 78665

POND DETAILS (4 OF 4)







FROM TCEQ-0600 ATTACHMENT G

Inspection, Maintenance, Repair, and Retrofit Plan for Batch Extended Detention Pond System

1. Introduction

This plan outlines the inspection, maintenance, repair, and retrofit procedures for the batch extended detention pond system located at [SITE NAME]. The plan adheres to the Texas Commission on Environmental Quality (TCEQ) guidelines, specifically RG-348, and is intended to ensure the system's functionality, regulatory compliance, and long-term performance.

2. System Overview

- Location: [Insert GPS coordinates or address]
- Total Drainage Area: [Insert area in acres]
- Pond Storage Volume: [Insert volume in acre-feet]
- Primary Outlet Structure: [Describe, e.g., orifice, weir, riser]
- **Batch Release System:** Pressure switch transducer signals a solenoid valve and actuator to open the discharge valve, discharging into a duplex sump pump wet well
- Emergency Overflow: [Describe, e.g., spillway, secondary outlet]
- Pond Configuration: Vertical concrete wall pond with a geomembrane liner and appropriate topsoil and vegetation along the bottom of the pond

3. Inspection Plan

3.1 Frequency

- Routine Inspections: Semi-annually (spring and fall)
- Post-Storm Inspections: After rainfall events exceeding 1 inch
- Annual Comprehensive Inspection: Conducted by a licensed professional engineer or qualified inspector

3.2 Inspection Checklist

- Structural Components:
 - o Inspect concrete walls for cracking, spalling, or signs of seepage

- o Check inlet and outlet structures for clogging or damage
- o Verify proper functioning of trash racks and debris screens

Hydraulic Function:

- Verify proper water levels and batch release timing
- Inspect the duplex sump pump wet well for proper operation
- Check for signs of prolonged standing water or insufficient drawdown

Batch Release Mechanism:

- Inspect the pressure switch transducer, solenoid valve, and actuator for proper functionality
- Check for corrosion, leaks, or electrical issues
- Verify proper calibration of the transducer

Vegetation:

- o Inspect vegetation along the bottom of the pond for health and coverage
- Remove any invasive species

Sediment Accumulation:

- Measure sediment depth in the basin
- o Remove sediment when it reaches 6 inches in depth

4. Maintenance Plan

4.1 Routine Maintenance

Vegetation Management:

- Maintain vegetation along the bottom of the pond
- Remove invasive species as needed

. Debris and Litter Removal:

Remove trash and floating debris from inlet, outlet, and pond surface

Erosion Control:

Repair any signs of erosion or scouring at the bottom of the pond



• Duplex Sump Pump Wet Well:

- o Inspect and clean pump intakes
- Verify pump activation and proper discharge
- Test backup pump functionality

• Batch Release Mechanism:

- Clean and test the solenoid valve and actuator
- Verify transducer accuracy and recalibrate if necessary
- Inspect and replace wiring or connectors showing wear

4.2 Sediment Removal

- Frequency: When sediment accumulation reaches 6 inches in depth
- Procedure:
 - Dewater the pond as necessary
 - Use appropriate excavation equipment
 - o Dispose of sediment in accordance with local and state regulations

5. Repair Plan

Outlet and Inlet Structures:

- Repair or replace damaged trash racks, orifices, or valves
- Clear clogged pipes and restore flow capacity

Concrete Walls:

- Patch or seal cracks in concrete walls
- Apply protective coatings if necessary

Emergency Overflow:

 Clear obstructions and reinforce spillway with riprap or other stabilization measures

Duplex Sump Pump Wet Well:

Repair or replace malfunctioning pumps



- Clean or replace damaged electrical connections
- Inspect and repair control panel issues

Batch Release Mechanism:

- o Repair or replace faulty transducers, solenoids, or actuators
- o Ensure wiring and connectors are secure and corrosion-free

6. Retrofit Plan

6.1 Assessment Criteria

- Hydraulic Capacity: Ensure the pond meets original or updated design capacity
- Water Quality Performance: Evaluate pollutant removal effectiveness
- Structural Integrity: Assess concrete wall stability and outlet structure condition
- Pump System Reliability: Confirm proper wet well operation and pump efficiency
- Batch Release Reliability: Ensure transducer, solenoid valve, and actuator function properly

6.2 Retrofit Options

- Outlet Modification: Install flow control devices to optimize detention times
- Vegetation Enhancement: Improve vegetation coverage along the pond bottom
- Low-Impact Development (LID) Features: Consider bioretention cells or filter strips for enhanced treatment
- Pump System Upgrades: Improve pump efficiency or add remote monitoring capabilities
- Batch Release Upgrades: Add redundant transducer or valve for reliability

7. Recordkeeping and Reporting

- Inspection Logs: Maintain detailed logs of all inspections and findings
- Maintenance Records: Document all maintenance activities with dates and descriptions
- Repair Records: Include details of repairs performed with photos and supporting documentation
- Annual Reports: Submit annual maintenance and inspection reports to TCEQ if required



8. Conclusion

This plan provides a comprehensive framework for the inspection, maintenance, repair, and retrofit of the batch extended detention pond system. Adhering to this plan will help ensure compliance with TCEQ RG-348 requirements and maintain the system's effectiveness in stormwater management and water quality protection.

Owner/Responsible Party Signature

Date

4/17/25



RECORD KEEPING:

Records will be retained for a minimum period of at least 3 years after the permit is terminated.

The following is a list of records which will be kept at project site available for inspectors to review:

- Dates of grading, construction activity, and stabilization
- A copy of the construction general permit.
- The signed and certified NOI form or permit application form.
- A copy of the letter from EPA or/the state notifying their receipt of complete NOI/application.
- Inspection reports (attach)
- Records relating to endangered species and historic preservation, if required.

Date(s) when major grading activities occur:

Date(s) when construction activities temporarily or permanently cease on a portion of the site:

Date(s) when an area is either temporarily or permanently stabilized:





FROM TCEQ-0600 ATTACHMENT I

MEASURES FOR MINIMIZING SURFACE STREAM CONTAMINATION

The detention pond system will lower stormwater runoff to less than pre-developed rates for the 2-year storm event, minimizing surface stream erosion.

Agent Authorization Form

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

| 1A | othery BAHR | |
|-----------------|-------------------------------------|---|
| | Print Name | |
| 4 | FRESIDENT | |
| 1 | Title - Owner/President/Other | 0 |
| of Apple | Corporation/Partnership/Entity Name | |
| 1.11 | Corporation/Partnership/Entity Name | |
| have authorized | Brian Roby, P.E. | |
| | Print Name of Agent/Engineer | |
| of | Septic Systems of Texas | |
| | 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

4/17/25 Date

THE STATE OF TEXAS §
County of Hams §

BEFORE ME, the undersigned authority, on this day personally appeared Anthony Bake 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 1 day of April ,205

ANNA FEATHERSTON
Notary Public, State of Texas
Comm. Expires 04-17-2027
Notary ID 134309032

NOTARY PUBLIC

Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 04-17-2027

Application Fee Form

Texas Commission on Environmental Quality

| Name of Proposed Regulated Entit | y: Applegate Offi | ce Warehouse | |
|--|-----------------------------|--------------------|-----------------------------------|
| Regulated Entity Location: 7 Apple | gate Circle, Roun | d Rock, TX | |
| Name of Customer: <u>Applegate par</u> | k 1 LLC | | |
| Contact Person: <u>Anthony Bahr</u> | | Phone: 281-685 | <u>-5751</u> |
| Customer Reference Number (if is: | sued):CN | | |
| Regulated Entity Reference Numbe | er (if issued):RN <u>1</u> | <u>08605452</u> | |
| Austin Regional Office (3373) | | | |
| Hays | Travis | | |
| San Antonio Regional Office (3362 | 2) | | |
| Bexar | Medina | | Uvalde |
| Comal | ☐ Kinney | | |
| Application fees must be paid by c | heck, certified che | eck, or money or | der, payable to the Texas |
| Commission on Environmental Qu | ı ality . Your cance | eled check will se | erve as your receipt. This |
| form must be submitted with you | r fee payment. $	op$ | his payment is b | eing submitted to: |
| Austin Regional Office | | San Antonio | Regional Office |
| Mailed to: TCEQ - Cashier | | Overnight De | elivery to: TCEQ - Cashier |
| Revenues Section | | 12100 Park 3 | 35 Circle |
| Mail Code 214 | | Building A, 3 | rd Floor |
| P.O. Box 13088 | | Austin, TX 78 | 3753 |
| Austin, TX 78711-3088 | | (512)239-03 | 57 |

Site Location (Check All That Apply):

Recharge Zone

Piping System(s)(only)

Extension of Time

Exception

| 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 | 2.98 Acres | \$ 4,000 |
| Sewage Collection System | L.F. | \$ |
| Lift Stations without sewer lines | Acres | \$ |
| Underground or Aboveground Storage Tank Facility | Tanks | \$ |

Contributing Zone

Signature: ______ Date: <u>03/26/2025</u>

TCEQ-0574 (Rev. 02-24-15)

Transition Zone

Each \$

Each \$

Each \$

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 | \$1,500 |
| | 5 < 10 | \$3,000 |
| | 10 < 40 | \$4,000 |
| | 40 < 100 | \$6,500 |
| | 100 < 500 | \$8,000 |
| | ≥ 500 | \$10,000 |
| Non-residential (Commercial, industrial, institutional, | < 1 | \$3,000 |
| multi-family residential, schools, and other sites | 1 < 5 | \$4,000 |
| where regulated activities will occur) | 5 < 10 | \$5,000 |
| | 10 < 40 | \$6,500 |
| | 40 < 100 | \$8,000 |
| | ≥ 100 | \$10,000 |

Organized Sewage Collection Systems and Modifications

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

Underground and Aboveground Storage Tank System Facility Plans and Modifications

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

Exception Requests

| Project | Fee |
|-------------------|-------|
| Exception Request | \$500 |

Extension of Time Requests

| Project | Fee |
|---------------------------|-------|
| Extension of Time Request | \$150 |



TCEQ Core Data Form

For detailed instructions on completing 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 Pern | nit, Registra | ation or Authorization | (Core Data Form | should be s | submitte | ed wit | h the prog | ram application.) | | | | | |
|--|--|--------------------------|--|--|-------------|--------|--|------------------------------|------------------------------|---------------------------------|----------------|--|--|
| Renewal | Renewal (Core Data Form should be submitted with the renewal form) | | | | | | Other | | | | | | |
| 2. Customer Reference Number (if issued) CN | | | | Follow this link to searc for CN or RN numbers in Central Registry** | | | 3. Regulated Entity Reference Number (if issued) RN 108605452 | | | | | | |
| SECTIO | N II: | Customer | Inform | <u>ation</u> | <u>l</u> | | | | | | | | |
| 4. General Cu | ıstomer In | 5. Effective D | 5. Effective Date for Customer Information | | | | Updates (mm/dd | 11/15/2024 | | | | | |
| | egal Name (| (Verifiable with the To | | State or Tex | as Comp | | er of Public | - | · | | etary of State | | |
| | | oller of Public Acco | - | tomatican | y busc | u on | Wildt 13 C | arrem and activ | e with th | ie rexus seer | ctury of State | | |
| 6. Customer | Legal Nam | ne (If an individual, pr | int last name first | t: eg: Doe, J | lohn) | | | <u>If new Customer</u> | , enter pre | evious Custom | er below: | | |
| Applegate Park 1 LLC | | | | | | | Sprovy 7 Applegate TX1 LLC | | | | | | |
| 7. TX SOS/CPA Filing Number 805722525 | | | 8. TX State Tax ID (11 digits) | | | | | 9. Federal Tax ID (9 digits) | | 10. DUNS Number (if applicable) | | | |
| 11. Type of Customer: Corporation | | | | | | | | | Partnership: General Limited | | eral 🗌 Limited | | |
| Government: City County Federal Local State | | | | ate Other Sole I | | | roprietorship | | | | | | |
| 12. Number | of Employ | ees | | | | | | 13. Independe | ntly Ow | ned and Ope | erated? | | |
| □ 0-20 □ 21-100 □ 101-250 □ 251-500 □ 501 and higher | | | | | | | | ⊠ Yes □ No | | | | | |
| 14. Customer | r Role (Pro | posed or Actual) – as | it relates to the R | egulated Er | ntity liste | ed on | this form. | Please check one c | f the follo | owing | | | |
| ⊠Owner ☐Occupation | | | _ | ier & Opera CP/BSA App | | | | ☐ Other | : | | | | |
| 15. Mailing | 15720 Sto | one Oak Estates Ct | | | | | | | | | | | |
| Address: | City | Cypress | | State | TX | | ZIP | 77429 | | ZIP + 4 | | | |
| 16 Country | | formation (if outside | LICA) | | | 17 | E Mail A | ddross (if annlicat | n/a) | | | | |
| 16. Country Mailing Information (if outside USA) | | | | | | | 17. E-Mail Address (if applicable) | | | | | | |
| | | | | | | | anthony@oakfieldmgmt.com | | | | | | |

TCEQ-10400 (11/22) Page 1 of 3

| (281) 685-5751 | | | | | | () - | | | | | | |
|--|--------------------|--------------------|--------------------------|---------------|---------------|-------------------------|-----------------|------------------|--|--|--|--|
| (201) 003 3731 | | | | | | · / | | | | | | |
| ECTION III: | Regula | ited Ent | ity Inform | <u>nation</u> | ı | | | | | | | |
| 21. General Regulated En | tity Informa | tion (If 'New Reg | gulated Entity" is selec | ted, a new p | ermit applica | tion is also required.) | | | | | | |
| ☐ New Regulated Entity | Update to | Regulated Entity | Name 🔀 Update t | o Regulated | Entity Inform | ation | | | | | | |
| The Regulated Entity Namas Inc, LP, or LLC). | ne submitted | d may be upda | ted, in order to mee | et TCEQ Cor | e Data Star | ndards (removal of c | organizatior | nal endings such | | | | |
| 22. Regulated Entity Nam | ne (Enter name | e of the site wher | e the regulated action | is taking pla | ce.) | | | | | | | |
| Applegate Office Warehouse | | | | | | | | | | | | |
| 23. Street Address of the Regulated Entity: | 7 Applegate Circle | | | | | | | | | | | |
| (No PO Boxes) | City Round Rock | | State | TX | ZIP | 78665 | ZIP + 4 | | | | | |
| 24. County | Williamson | 1 | I | 1 | 1 | 1 | 1 | 1 | | | | |
| | | If no Stree | et Address is provid | ed, fields 2 | 5-28 are re | quired. | | | | | | |
| 25. Description to | | | | | | | | | | | | |
| Physical Location: | | | | | | | | | | | | |
| 26. Nearest City | | | | | | State | Nea | rest ZIP Code | | | | |
| | | | | | | | | | | | | |
| Latitude/Longitude are re used to supply coordinate | • | | • | | ata Standa | ırds. (Geocoding of t | he Physical | Address may be | | | | |
| 27. Latitude (N) In Decimal: | | | 28. Longitud | | | V) In Decimal: | | | | | | |
| Degrees | Minutes | | Seconds | Degre | es | Minutes | | Seconds | | | | |
| | | | | | | | | | | | | |
| 29. Primary SIC Code | 30. | Secondary SIC | Code | | y NAICS Co | de 32. Sec | ondary NAI | CS Code | | | | |
| (4 digits) | (4 di | gits) | | (5 or 6 digi | cs) | (5 or 6 d | (5 or 6 digits) | | | | | |
| | | | | | | | | | | | | |
| 33. What is the Primary B | Business of t | his entity? (Do | o not repeat the SIC or | NAICS descr | iption.) | | | | | | | |
| Light Industrial / Warehouse | Business | | | | | | | | | | | |
| 34. Mailing | 7 Applegat | e Circle | | | | | | _ | | | | |
| Address: | | 1 | | 1 | | | T | | | | | |
| | City | Round Rock | State | тх | ZIP | 78665 | ZIP + 4 | | | | | |
| 35. E-Mail Address: | anth | nony@oakfieldm | gmt.com | • | | • | | • | | | | |
| 36. Telephone Number | | | 37. Extension or 0 | Code | 38. F | ax Number (if applica | ıble) | | | | | |
| (281) 685-5751 | | | | | 1 | 1 | | | | | | |

19. Extension or Code 20. Fax Number (if applicable)

18. Telephone Number

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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 11-15070702 ☐ New Source OSSF ☐ Petroleum Storage Tank ☐ PWS Review Air Sludge Storm Water ☐ Title V Air ☐ Tires Used Oil ☐ Voluntary Cleanup ■ Wastewater ■ Wastewater Agriculture ■ Water Rights Other: SECTION IV: Preparer Information 40. Name: **Brian Roby** 41. Title: Engineer/Authorized Agent 42. Telephone Number 43. Ext./Code 44. Fax Number 45. E-Mail Address (737)710-4312 brian@septicsystemsoftexas.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: Job Title: Septic Systems of Texas Principal Name (In Print): **Brian Roby** Phone: (737)710-4312 Signature: Date: 4/17/2025

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