STEGER BIZZELL

ADDRESS
1978 S. AUSTIN AVENUE
GEORGETOWN, TX 78626

WEB
STEGERBIZZELL.COM

PHONE
512.930.9412

FAX
512.930.9416

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TEXAS REGISTERED ENGINEERING FIRM F-181

Contributing Zone Plan

For

Reagan 245 Gas Station

In the

City of Georgetown

Williamson County, Texas

Submitted: 05/07/2025

Job Number: 23028

Contributing Zone Plan

For

Reagan 245 Gas Station

In

City of Georgetown

Williamson County, Texas

Job Number: 23028

Prepared by:

STEGER BIZZELL

Texas Registered Engineering Firm-181
1978 S. Austin Ave
Georgetown, TX 78626

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Contributing Zone Plan Checklist

– Edwards Aquifer Application Cover Page (TCEQ-20705)

– Contributing Zone Plan Application (TCEQ-10257)

Attachment A - Road Map
Attachment B - USGS Quadrangle Map
Attachment C - Project Narrative
Attachment D - Factors Affecting Surface Water Quality
Attachment E - Volume and Character of Stormwater
Attachment F - Suitability Letter from Authorized Agent (if OSSF is proposed)
Attachment G - Alternative Secondary Containment Methods (if AST with an alternative method of secondary containment is proposed)
Attachment H - AST Containment Structure Drawings (if AST is proposed)
Attachment I - 20% or Less Impervious Cover Declaration (if project is multi-family residential, a school, or a small business and 20% or less impervious cover is proposed for the site)
Attachment J - BMPs for Upgradient Stormwater
Attachment K - BMPs for On-site Stormwater
Attachment L - BMPs for Surface Streams
Attachment M - Construction Plans
Attachment N - Inspection, Maintenance, Repair and Retrofit Plan
Attachment O - Pilot-Scale Field Testing Plan, if BMPs not based on Complying with the Edwards Aquifer Rules: Technical Guidance for BMPs
Attachment P - Measures for Minimizing Surface Stream Contamination

– Storm Water Pollution Prevention Plan (SWPPP)

-OR-

– 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 sealing a feature
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

– Copy of Notice of Intent (NOI)

– 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)

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Contributing Zone Plan Application

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of Customer/Agent: Reagan 245 Real Estate, LLC / Steger Bizzell, Chad Jones, P.E.

Date: 05/07/2025

Signature of Customer/Agent:

Regulated Entity Name: Reagan 245 Gas Station

Project Information

1. County: Williamson
2. Stream Basin: Berry Creek
3. Groundwater Conservation District (if applicable): N/A
4. Customer (Applicant):

   Contact Person: Sohil Maknojia
   Entity: Reagan 245 Real Estate, LLC
   Mailing Address: 1624 Sunset Vista Bend
   City, State: Leander, TX Zip: 78641
   Telephone: (512) 665-1815 Fax: N/A
   Email Address: sohilmak@gmail.com

5. Agent/Representative (If any):

Contact Person: Chad W. Jones, P.E.
Entity: Steger Bizzell
Mailing Address: 1978 S Austin Ave
City, State: Georgetown, TX Zip: 78626
Telephone: 512-930-9412 Fax: N/A
Email Address: chad.jones@stegerbizzell.com

6. Project Location:

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

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

From Austin: Traveling north on I-35, take Exit 266 toward TX-195 N. turn left onto TX-195 W, and continue for 5.5 miles. Turn left onto Rattlesnake Road, and then turn left onto Ronald Reagan Boulevard. Continue for 3.5 miles until you reach the intersection of Ronald Reagan Boulevard and CR 245. The site is at the northwest corner of the intersection.

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

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

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

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

☒ Area of the site
☒ Offsite areas
☒ Impervious cover
☒ Permanent BMP(s)
☒ Proposed site use
☒ Site history
☒ Previous development
☒ Area(s) to be demolished

11. Existing project site conditions are noted below:

- ☐ Existing commercial site
- ☐ Existing industrial site
- ☐ Existing residential site
- ☐ Existing paved and/or unpaved roads
- ☐ Undeveloped (Cleared)
- ☒ Undeveloped (Undisturbed/Not cleared)
- ☐ Other: _____

12. The type of project is:

- ☐ Residential: # of Lots: _____
- ☐ Residential: # of Living Unit Equivalents: _____
- ☒ Commercial
- ☐ Industrial
- ☐ Other: _____

13. Total project area (size of site): 4.42 Acres

    Total disturbed area: _____ Acres

14. Estimated projected population: _____

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

Table 1 - Impervious Cover

Impervious Cover of Proposed Project	***Sq. Ft.***	***Sq. Ft./Acre***	***Acres***
Structures/Rooftops	15493	÷ 43,560 =	0.356
Parking	87525	÷ 43,560 =	2.010
Other paved surfaces	13391	÷ 43,560 =	0.307
Total Impervious Cover	116409	÷ 43,560 =	2.672

Total Impervious Cover 2.672 **÷ Total Acreage** 4.42 **X 100 =** 60.4**% Impervious Cover**

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

17. ☒ Only inert materials as defined by 30 TAC 330.2 will be used as fill material.

For Road Projects Only

Complete questions 18 - 23 if this application is exclusively for a road project.

☒ N/A

18. Type of project:

☐ TXDOT road project.
☐ County road or roads built to county specifications.
☐ City thoroughfare or roads to be dedicated to a municipality.
☐ Street or road providing access to private driveways.

19. Type of pavement or road surface to be used:

☐ Concrete
☐ Asphaltic concrete pavement
☐ Other: _____

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

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

21. Pavement Area:

Length of pavement area: _____ feet.
Width of pavement area: _____ feet.
L x W = _____Ft^2 ÷ 43,560 Ft^2/Acre = _____ acres.
Pavement area _____ acres ÷ R.O.W. area _____ acres x 100 = _____% impervious cover.

22. ☐ A rest stop will be included in this project.

☐ A rest stop will not be included in this project.

23. ☐ Maintenance and repair of existing roadways that do not require approval from the TCEQ Executive Director. Modifications to existing roadways such as widening roads/adding shoulders totaling more than one-half (1/2) the width of one (1) existing lane require prior approval from the TCEQ.

Stormwater to be generated by the Proposed Project

24. ☒ **Attachment E - Volume and Character of Stormwater**. A detailed description of the volume (quantity) and character (quality) of the stormwater runoff which is expected to occur from the proposed project is attached. The estimates of stormwater runoff quality and quantity are based on area and type of impervious cover. Include the runoff coefficient of the site for both pre-construction and post-construction conditions.

Wastewater to be generated by the Proposed Project

25. ☐ Wastewater is to be discharged in the contributing zone. Requirements under 30 TAC §213.6(c) relating to Wastewater Treatment and Disposal Systems have been satisfied.

☒ N/A

26. Wastewater will be disposed of by:

☐ On-Site Sewage Facility (OSSF/Septic Tank):

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

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

☐ Sewage Collection System (Sewer Lines):

The sewage collection system will convey the wastewater to the _____ (name) Treatment Plant. The treatment facility is:

☐ Existing.
☐ Proposed.

☒ N/A

Permanent Aboveground Storage Tanks(ASTs) ≥ 500 Gallons

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

☒N/A

27. Tanks and substance stored:

Table 2 - Tanks and Substance Storage

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

AST Number	*Size (Gallons)*	*Substance to be Stored*	*Tank Material*
4			
5			

Total x 1.5 = _____ Gallons

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

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

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

Table 3 - Secondary Containment

Length (L)(Ft.)	*Width(W)(Ft.)*	*Height (H)(Ft.)*	*L x W x H = (Ft3)*	*Gallons*

Total: _____ Gallons

30. Piping:

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

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

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

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

☐ Dispenser clearly labeled

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

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

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

Site Plan Requirements

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

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

    Site Plan Scale: 1" = 40'.

35. 100-year floodplain boundaries:

    ☐ Some part(s) of the project site is located within the 100-year floodplain. The floodplain is shown and labeled.

    ☒ No part of the project site is located within the 100-year floodplain.

    The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s): FEMA National Flood Hazard Map, panel 48491C0275E, effective date 9/26/2008 .

36. ☒ The layout of the development is shown with existing and finished contours at appropriate, but not greater than ten-foot contour intervals. Lots, recreation centers, buildings, roads, etc. are shown on the site plan.

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

37. ☒ A drainage plan showing all paths of drainage from the site to surface streams.

38. ☒ The drainage patterns and approximate slopes anticipated after major grading activities.

39. ☒ Areas of soil disturbance and areas which will not be disturbed.

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

41. ☒ Locations where soil stabilization practices are expected to occur.

42. ☐ Surface waters (including wetlands).

☒ N/A

43. ☐ Locations where stormwater discharges to surface water.

    ☒ There will be no discharges to surface water.

44. ☐ Temporary aboveground storage tank facilities.

    ☒ Temporary aboveground storage tank facilities will not be located on this site.

45. ☐ Permanent aboveground storage tank facilities.

    ☒ Permanent aboveground storage tank facilities will not be located on this site.

46. ☒ Legal boundaries of the site are shown.

Permanent Best Management Practices (BMPs)

Practices and measures that will be used during and after construction is completed.

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

    ☐ N/A

48. ☒ These practices and measures have been designed, and will be constructed, operated, and maintained to insure that 80% of the incremental increase in the annual mass loading of total suspended solids (TSS) from the site caused by the regulated activity is removed. These quantities have been calculated in accordance with technical guidance prepared or accepted by the executive director.

    ☒ The TCEQ Technical Guidance Manual (TGM) was used to design permanent BMPs and measures for this site.

    ☐ A technical guidance other than the TCEQ TGM was used to design permanent BMPs and measures for this site. The complete citation for the technical guidance that was used is: _____.

    ☐ N/A

49. ☒ Owners must insure that permanent BMPs and measures are constructed and function as designed. A Texas Licensed Professional Engineer must certify in writing that the permanent BMPs or measures were constructed as designed. The certification letter must be submitted to the appropriate regional office within 30 days of site completion.

    ☐ N/A

50. Where a site is used for low density single-family residential development and has 20 % or less impervious cover, other permanent BMPs are not required. This exemption from permanent BMPs must be recorded in the county deed records, with a notice that if the percent impervious cover increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by 30 TAC §213.4(g) (relating to

Application Processing and Approval), may no longer apply and the property owner must notify the appropriate regional office of these changes.

- ☐ The site will be used for low density single-family residential development and has 20% or less impervious cover.
- ☐ The site will be used for low density single-family residential development but has more than 20% impervious cover.
- ☒ The site will not be used for low density single-family residential development.

51. The executive director may waive the requirement for other permanent BMPs for multi-family residential developments, schools, or small business sites where 20% or less impervious cover is used at the site. This exemption from permanent BMPs must be recorded in the county deed records, with a notice that if the percent impervious cover increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by 30 TAC §213.4(g) (relating to Application Processing and Approval), may no longer apply and the property owner must notify the appropriate regional office of these changes.

- ☐ **Attachment I - 20% or Less Impervious Cover Waiver**. The site will be used for multi-family residential developments, schools, or small business sites and has 20% or less impervious cover. A request to waive the requirements for other permanent BMPs and measures is attached.
- ☐ The site will be used for multi-family residential developments, schools, or small business sites but has more than 20% impervious cover.
- ☒ The site will not be used for multi-family residential developments, schools, or small business sites.

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

- ☒ A description of the BMPs and measures that will be used to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site is attached.
- ☐ No surface water, groundwater or stormwater originates upgradient from the site and flows across the site, and an explanation is attached.
- ☐ Permanent BMPs or measures are not required to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site, and an explanation is attached.

53. ☒ **Attachment K - BMPs for On-site Stormwater**.

- ☒ A description of the BMPs and measures that will be used to prevent pollution of surface water or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff from the site is attached.
- ☐ Permanent BMPs or measures are not required to prevent pollution of surface water or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff, and an explanation is attached.

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

☒ N/A

55. ☒ **Attachment M - Construction Plans**. Construction plans and design calculations for the proposed permanent BMPs and measures have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer, and are signed, sealed, and dated. Construction plans for the proposed permanent BMPs and measures are attached and include: Design calculations, TCEQ Construction Notes, all proposed structural plans and specifications, and appropriate details.

☐ N/A

56. ☒ **Attachment N - Inspection, Maintenance, Repair and Retrofit Plan**. A site and BMP specific plan for the inspection, maintenance, repair, and, if necessary, retrofit of the permanent BMPs and measures is attached. The plan fulfills all of the following:

☒ Prepared and certified by the engineer designing the permanent BMPs and measures
☒ Signed by the owner or responsible party
☒ Outlines specific procedures for documenting inspections, maintenance, repairs, and, if necessary, retrofit.
☒ Contains a discussion of record keeping procedures

☐ N/A

57. ☐ **Attachment O - Pilot-Scale Field Testing Plan**. Pilot studies for BMPs that are not recognized by the Executive Director require prior approval from the TCEQ. A plan for pilot-scale field testing is attached.

☒ N/A

58. ☐ **Attachment P - Measures for Minimizing Surface Stream Contamination**. A description of the measures that will be used to avoid or minimize surface stream contamination and changes in the way in which water enters a stream as a result of the construction and development is attached. The measures address increased stream flashing, the creation of stronger flows and in-stream velocities, and other in-stream effects caused by the regulated activity, which increase erosion that result in water quality degradation.

☒ N/A

Responsibility for Maintenance of Permanent BMPs and Measures after Construction is Complete.

59. ☒ The applicant is responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an

owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. Such entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred.

60. ☐ A copy of the transfer of responsibility must be filed with the executive director at the appropriate regional office within 30 days of the transfer if the site is for use as a multiple single-family residential development, a multi-family residential development, or a non-residential development such as commercial, industrial, institutional, schools, and other sites where regulated activities occur.

Administrative Information

61. ☒ Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions.

62. ☒ Any modification of this Contributing Zone Plan may require TCEQ review and Executive Director approval prior to construction, and may require submission of a revised application, with appropriate fees.

63. ☐ The site description, controls, maintenance, and inspection requirements for the storm water pollution prevention plan (SWPPP) developed under the EPA NPDES general permits for stormwater discharges have been submitted to fulfill paragraphs 30 TAC §213.24(1-5) of the technical report. All requirements of 30 TAC §213.24(1-5) have been met by the SWPPP document.

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

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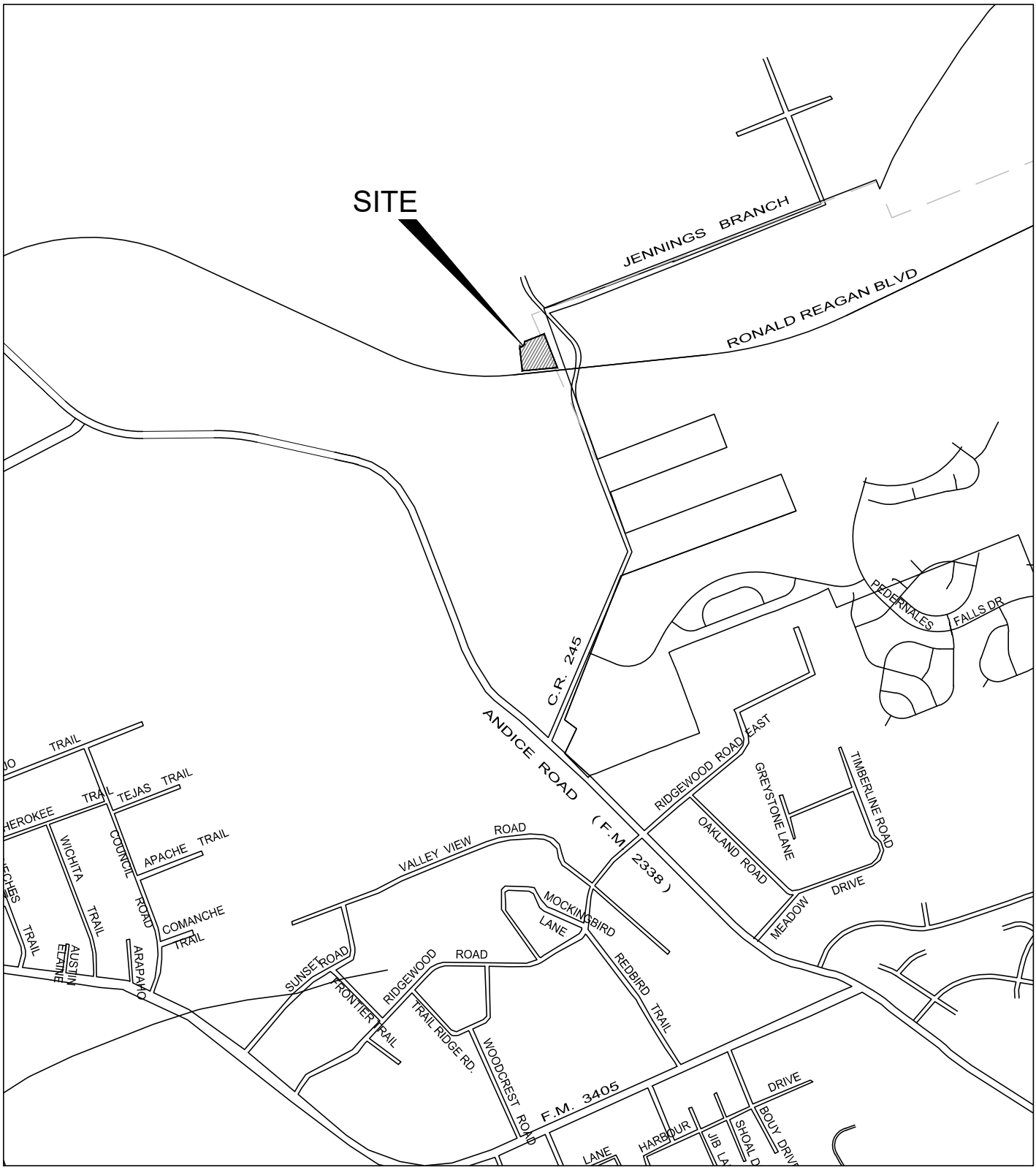


ROAD MAP
ATTACHMENT A

SCALE: 1" = 2000'

STEGER BIZZELL

ADDRESS 1978 S. AUSTIN AVENUE | GEORGETOWN, TX 78626
METRO 512.930.9412 | TEXAS REGISTERED ENGINEERING FIRM F-181 TBPLS FIRM No.10003700 | WEB STEGERBIZZELL.COM
SERVICES >>ENGINEERS >>PLANNERS >>SURVEYORS

JOB NO. 23028

4/25/2025

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

FLORENCE QUADRANGLE
TEXAS
7.5 MINUTE SERIES (TOPOGRAPHIC)

Recharge Zone

Recharge Zone

Contributing Zone

Recharge Zone

Mapped, edited, and published by the Geological Survey

Control by USGS and NOS/NOAA

Topography by photogrammetric methods from aerial photographs taken 1963. Field checked 1964

Polyconic projection. 1927 North American Datum
10,000-foot grid based on Texas coordinate system, central zone
1000-meter Universal Transverse Mercator grid ticks, zone 14, shown in blue. The difference between 1927 North American Datum and North American Datum of 1983 (NAD 83) for 7.5 minute intersections is given in USGS Bulletin 1875. The NAD 83 is shown by dashed corner ticks

Fine red dashed lines indicate selected fence lines

Map photoinspected 1976
No major culture or drainage changes observed

UTM GRID AND 1964 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SCALE 1:24000

CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

ROAD CLASSIFICATION
Heavy-duty
Medium-duty
Light-duty
Unimproved dirt
State Route

REAGAN GAS STATION
WILLIAMSON COUNTY, TEXAS

QUADRANGLE LOCATION

3097–331

FLORENCE, TEX.
30097-G7-TF-024

1964
PHOTOINSPECTED 1976
JOB No. 23028

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

STATE OF TEXAS
TEXAS WATER DEVELOPMENT BOARD

LEANDER NE QUADRANGLE
TEXAS-WILLIAMSON CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)

SITE

Contributing Zone

Recharge Zone

Recharge Zone

Mapped, edited, and published by the Geological Survey

Control by USGS and NOS/NOAA

Topography by photogrammetric methods from aerial photographs taken 1962. Field checked 1962

Polyconic projection. 1927 North American Datum
10,000-foot grid based on Texas coordinate system, central zone
1000-meter Universal Transverse Mercator grid ticks, zone 14, shown in blue
The difference between 1927 North American Datum and North American Datum of 1983 (NAD 83) for 7.5 minute intersections is given in USGS Bulletin 1875. The NAD 83 is shown by dashed corner ticks

Fine red dashed lines indicate selected fence lines

UTM GRID AND 1962 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

Map photoinspected 1976
No major culture or drainage changes observed

SCALE 1:24 000

CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

REAGAN GAS STATION
WILLIAMSON COUNTY, TEXAS

QUADRANGLE LOCATION

3097–324

ROAD CLASSIFICATION

Heavy-duty
Medium-duty
Light-duty
Unimproved dirt
U.S. Route
State Route

LEANDER NE, TEX.
30097-F7-TF-024

1962
PHOTOINSPECTED 1976
JOB No. 23028

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

GEORGETOWN QUADRANGLE
TEXAS–WILLIAMSON CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)

Recharge Zone

Contributing Zone

Recharge Zone

Recharge Zone

Transition Zone

REAGAN GAS STATION
WILLIAMSON COUNTY, TEXAS

Produced by the United States Geological Survey

Control by USGS and NOS/NOAA

Compiled from aerial photographs taken 1974. Field checked 1975
Map edited 1982

North American Datum of 1927 (NAD 27). Projection and 10 000-foot ticks: Texas Coordinate System, central zone (Lambert Conformal Conic)
Blue 1000-meter Universal Transverse Mercator ticks, zone 14

North American Datum of 1983 (NAD 83) is shown by dashed corner ticks. The values of the shift between NAD 27 and NAD 83 for 7.5-minute intersections are obtainable from National Geodetic Survey NADCON software

Red tint indicates areas in which only landmark buildings are shown

Fine red dashed lines indicate selected fence lines

Areas covered by dashed light-blue pattern are subject to controlled inundation

UTM GRID AND 1982 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SCALE 1:24 000

CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

QUADRANGLE LOCATION

3097-313

ROAD CLASSIFICATION

Primary highway, hard surface
Secondary highway, hard surface
Light-duty road, hard or improved surface
Unimproved road
Interstate Route
U. S. Route
State Route

GEORGETOWN, TX
30097-F6-TF-024

1982

JOB No. 23028

INTERIOR–GEOLOGICAL SURVEY, RESTON, VIRGINIA—1995

ISBN 0-607-51004-6

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

WEIR QUADRANGLE
TEXAS–WILLIAMSON CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)
NE/4 ROUND ROCK 15' QUADRANGLE

8445 I SW (COBBS CAVERN)
6445 I SE (JARRELL)
6445 IV SW (BARTLETT)
8445 II NW (GEORGETOWN)
6445 III NW (GRANGER)
(ROUND ROCK) 8445 I SW
(TAYLOR) 6445 II SW

SCHWERTNER 8 MI.
8 MI. TO TEX. 95
1.2 MI. TO INTERSTATE 35
3.1 MI. TO TEX. 418
GEORGETOWN 3.3 MI.
GRANGER 4.5 MI.
TAYLOR (VIA TEX. 95) 9 MI.
HUTTO 6 MI.

Recharge Zone
Transition Zone

Little Oppossum Creek
Oppossum Creek
Yankee Branch
East Fork Rowden Branch
Berry Creek
Pecan Branch
Weir
Queen Hill
Mileham Branch
Big House Branch
SAN GABRIEL RIVER

Walburg
Keelersville
Mozo
Weir (BM 685)
Jonah
Magee Cem
Mankins Crossing
Gravel Pit
Water Tank
Radio Tower 923
Zion Sch
Athletic Field
Zion Cem
St. Peter Ch
Queen Cem
Salyer Cem
Whitley Cem
Jonah Cem
Well
BM849
BM672
BM657
BM 634
BM 722
BM 595
PIPELINE
TEXAS
KANSAS
MISSOURI

97°37′30″ 30°45′ 32′30″ 97°30′
2 880 000 FEET
400 000 FEET
360 000 FEET
42′30″ 40′
30°37′30″ 97°37′30″
2 860 000 FEET
(HUTTO) 6445 II SE

Mapped, edited, and published by the Geological Survey

Control by USGS and NOS/NOAA

Topography by photogrammetric methods from aerial photographs taken 1974. Field checked 1975. Map edited 1982

Projection and 10,000-foot grid ticks: Texas coordinate system, central zone (Lambert conformal conic)
1000-meter Universal Transverse Mercator grid, zone 14
1927 North American datum
To place on the predicted North American Datum 1983 move the projection lines 17 meters south and 28 meters east as shown by dashed corner ticks

Fine red dashed lines indicate selected fence lines

MN GN
0°44′ 13 MILS
7½° 133 MILS
UTM GRID AND 1982 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SCALE 1:24 000
1 0 1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 .5 0 1 KILOMETER

CONTOUR INTERVAL 10 FEET
DOTTED LINES REPRESENT 5-FOOT CONTOURS
NATIONAL GEODETIC VERTICAL DATUM OF 1929

TEXAS
QUADRANGLE LOCATION

ROAD CLASSIFICATION
Primary highway, hard surface
Secondary highway, hard surface
Light-duty road, hard or improved surface
Unimproved road
Interstate Route U. S. Route State Route

INTERIOR—GEOLOGICAL SURVEY, RESTON, VIRGINIA—1982

REAGAN GAS STATION
WILLIAMSON COUNTY, TEXAS

WEIR, TEX.
NE/4 ROUND ROCK 15' QUADRANGLE
N3037.5–W9730/7.5
1982
JOB No. 23028

3097-314

Attachment C – Project Narrative

This project consists of the development of a local commercial site, known as the Reagan 245 Gas Station. The site is located within the Edwards Aquifer Contributing Zone, in the commercial tract known as Highland Village Phase I - Commercial. The site is in Georgetown, Texas and is bound by Ronald Reagan Boulevard to the south, County Road 245 to the east, and a developed residential neighborhood to the north and west. The site is previously undeveloped agricultural land, and no demolition activities will be required as a part of the project.

The project and CZP application will include grading, drainage, water, and paving improvements for the development. The Reagan Gas Station consists of 10 fuel pump stations, a single-story convenience store, a single-story retail store, and a surrounding parking and driving area. Temporary BMPs are shown in this application. The proposed site will be used for local commercial development and has 20-percent or more impervious cover, so permanent BMPs are required.

The site area is 4.42 acres. The total drainage area contributing to the on-site pond is 5.6 acres, which includes a small portion of the developed residential neighborhood surrounding the site from the west. A total of 2.47 acres of proposed impervious cover will be treated with a detention pond. The pond is designed to treat up to 3.09 acres of impervious cover on the gas station property.

Attachment D – Factors Affecting Surface Water Quality

The following factors are anticipated to adversely affect water and ground water quality:

- Disturbance of vegetated areas.
- Leaking oil from parked vehicles.
- Malfunctioning wastewater collection system and spill on site.
- Loss of vegetative ground cover due to inadequate watering or mismanagement.
- Over fertilizing vegetative areas.
- The use of roads by automotive traffic and subsequent oil/grease pollutants from normal use.
- The accidental or improper discharge of the following:
    - Concrete
    - Cleaning solvents
    - Detergents
    - Petroleum based products
    - Paints
    - Paint solvents
    - Acids
    - Concrete additives

Attachment E – Volume and Character of Storm Water

In the existing condition the site is underdeveloped and considered pasture in fair condition. There is no existing impervious cover on-site.

The proposed storm water capture will be typical of what is normally observed for a local commercial development. Runoff from the development will flow directly into a proposed batch development pond and may be routed to pond inlets from storm drains on site. Pervious cover in the development state will be a combination of mowed pastureland and irrigated lawns in good condition. Impervious cover will consist of buildings, roadway, parking areas, and pavement. The existing and proposed drainage plans, contained within the construction plans for the project, contain detailed data regarding storm water runoff expected in the existing and proposed conditions.

The developed peak flows leaving Reagan Gas Station for the 2, 10, 25, and 100-year storms will be less than or equal to those of the pre-developed existing conditions as shown in the attached Existing and Proposed Drainage Plans within the construction plans for the project.

Attachment F – Suitability Letter from Authorized Agent (if OSSF is proposed)

No OSSF are proposed for the site.

Attachment G - Alternative Secondary Containment Methods (if AST with an alternative method of secondary containment is proposed)

There are no ASTs proposed for the site.

Attachment H - AST Containment Structure Drawings (if AST is proposed)

There are no ASTs proposed for the site.

Attachment I - 20% or Less Impervious Cover Declaration (if project is multi-family residential, a school, or a small business and 20% or less impervious cover is proposed for the site)

Not applicable.

Attachment J - BMPs for Upgradient Stormwater

Not applicable.

Attachment K - BMPs for On-site Stormwater

Batch detention, as described in the Addendum to TCEQ's "Complying with the Edwards Rules: Technical Guidance Manual on Best Management Practices" Section 3.2.17 (RG-348), was used to design the BMP for this development.

A batch detention pond will be used to remove the Total Suspended Solids (TSS) load. Batch detention ponds have a TSS removal efficiency of 91%, according to the above referenced manual.

The pond is sized for the total buildout of the Reagan Gas Station. There are approximately 5.6 acres draining to the pond, of which, 3.8 may be impervious cover.

Calculations to determine the pollutant load and sizing for each BMP are attached directly behind this sheet.

`

TSS Removal Calculations 04-20-2009

Project Name: Reagan 245 Gas Station
Date Prepared: 4/23/2025

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 = 85% 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 * =	4.42	acres
Predevelopment impervious area within the limits of the plan * =	0.00	acres
Total post-development impervious area within the limits of the plan* =	3.09	acres
Total post-development impervious cover fraction * =	0.70	
P =	32	inches
$L_{M\ TOTAL\ PROJECT}$ =	2693	lbs.

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

Number of drainage basins / outfalls areas leaving the plan area = 3

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

Drainage Basin/Outfall Area No. = Pond

Total drainage basin/outfall area =	4.75	acres
Predevelopment impervious area within drainage basin/outfall area =	0.00	acres
Post-development impervious area within drainage basin/outfall area =	3.16	acres
Post-development impervious fraction within drainage basin/outfall area =	0.67	
$L_{M\ THIS\ BASIN}$ =	2750	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = Batch Detention Basin
Removal efficiency = 91 percent

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

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

where:

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

A_C =	4.75	acres
A_I =	3.16	acres
A_P =	1.59	acres
L_R =	3209	lbs

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

Desired $L_{M\ THIS\ BASIN}$ = 2750 lbs.

F = 0.86

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

Rainfall Depth =	1.38	inches
Post Development Runoff Coefficient =	0.47	
On-site Water Quality Volume =	11253	cubic feet

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

Off-site area draining to BMP =	1.25	acres
Off-site Impervious cover draining to BMP =	0.00	acres
Impervious fraction of off-site area =	0.00	
Off-site Runoff Coefficient =	0.02	
Off-site Water Quality Volume =	125	cubic feet
Storage for Sediment =	2276	
Total Capture Volume (required water quality volume(s) x 1.20) =	13654	cubic feet

`

ATTACHMENT E

BATCH DETENTION POND STAGE-STORAGE DATA

PROPOSED BATCH DETENTION LOT 1-A VOLUME SUMMARY						
ELEVATION (Ft.)	AREA (Sq. Ft.)	AVERAGE AREA (Sq. Ft.)	INC. ELEV. (Ft.)	INC. VOLUME (Cu.-Ft.)	TOTAL VOL. (Cu. Ft.)	TOTAL VOL. (Ac.- Ft.)
924	25				0	0.000000
		4010.5	1	4010.5		
925	7996				4011	0.092068
		9512.5	1	9512.5		
926	11029				13523	0.310445
		11271	1	11271		
927	11513				24794	0.569192
		11580.5	1	11580.5		
928	11648				36375	0.835044
		11708	1	11708		
929	11768				48083	1.103822
		11821	1	11821		
930	11874				59904	1.375195
		11900.5	0.5	5950.25		
930.5	11927				65854	1.511794

Attachment L - BMPs for Surface Streams

Not applicable.

Attachment M – Construction Plans

Please refer to the Reagan 245 Gas Station construction plans included with this CZP submittal.

SITE DEVELOPMENT PLANS
FOR
REAGAN 245 GAS STATION
CITY OF GEORGETOWN
WILLIAMSON COUNTY, TEXAS

PROJECT NAME:	HIGHLAND VILLAGE PHASE I COMMERCIAL - LOT 1-A
SITE ADDRESS:	29901 RONALD REAGAN BLVD, GEORGETOWN, TX 78633
SUBDIVISION NAME:	HIGHLAND VILLAGE COMMERCIAL
LEGAL DESCRIPTION:	S12921 - HIGHLAND VILLAGE COMMERCIAL, BLOCK B, LOT 1-A, 4.421 ACRES
ZONING DISTRICT:	C-1 LOCAL COMMERCIAL
FINAL PLAT DOCUMENT NUMBER:	2022045281, RECORDED 4/11/2022
OWNER:	REAGAN 245 REAL ESTATE, LLC 1624 SUNSET VISTA BEND LEANDER, TX 78641
APPLICANT/AGENT:	CHAD W. JONES, P.E. STEGER & BIZZELL ENGINEERING, INC. TEXAS REGISTERED ENGINEERING FIRM F-181 1978 SOUTH AUSTIN AVE. GEORGETOWN, TX 78626 (512) 930-9412 chad.jones@stegerbizzell.com https://stegerbizzell.com
ENGINEER/SURVEYOR:	STEGER & BIZZELL ENGINEERING, INC. TBPELS FIRM NO. 10003700 1978 S. AUSTIN AVE. GEORGETOWN, TX 78626 (512) 930-9412 https://stegerbizzell.com
ORIGINAL DATE:	MARCH 31, 2025
LATEST REVISION DATE:	APRIL 18, 2025
LEGAL DESCRIPTION:	S12921 - HIGHLAND VILLAGE COMMERCIAL, BLOCK B, LOT 1-A
ACREAGE OF LOT:	4.42 ACRES
LIMITS OF CONSTRUCTION:	6.52 ACRES
DRAINAGE FACILITY:	STORM WATER WILL BE DIRECTED TO AND THROUGH AN ON-SITE WATER QUALITY FACILITY
UTILITIES:	WATER - CITY OF GEORGETOWN, 512-930-3555, https://gus.georgetown.org 300-1 INDUSTRIAL AVE., GEORGETOWN, TEXAS 78626 WASTEWATER - CITY OF GEORGETOWN, 512-930-3555, https://gus.georgetown.org 300-1 INDUSTRIAL AVE., GEORGETOWN, TEXAS 78626 ELECTRIC - PEDERNALES ELECTRIC COOPERATIVE, 877-372-0391, https://www.pec.coop P.O. BOX 1, JOHNSON CITY, TEXAS 78636
ASSUMED TOTAL FUTURE IMPERVIOUS COVER:	3.09 ACRES (BASED ON 70% MAXIMUM ALLOWABLE IMPERVIOUS COVER)
PROPOSED USE:	FUEL SALES AND GENERAL RETAIL

General Notes:

1. It is the responsibility of the property owner, and successors to the current property owner, to ensure the subject property and any improvements are maintained in conformance with this Site Development Plan.
2. This development shall comply with all standards of the Unified Development Code (UDC), the City of Georgetown Construction Standards and Specifications Manual, the Development Manual and all other applicable City standards.
3. This Site Development Plan shall meet the UDC Stormwater requirements.
4. All signage requires a separate application and approval from the Inspection Services Department. No signage is approved with the Site Development Plan.
5. Sidewalks shall be provided in accordance with the UDC.
6. Driveways will require approval by the Development Engineer of the City of Georgetown.
7. Outdoor lighting shall comply with Section 7.04 of the UDC.
8. Screening of mechanical equipment, dumpsters and parking shall comply with Chapter 8 of the UDC. The screening is shown on the Landscape and Architectural Plans, as applicable.
9. The companion Landscape Plan has been designed and plant materials shall be installed to meet all requirements of the UDC.
10. All maintenance of required landscape shall comply with the maintenance standards of Chapter 8 of the UDC.
11. Any Heritage Tree noted on this Site Development Plan is subject, in perpetuity, to the maintenance, care, pruning and removal requirements of the Unified Development Code.
12. The construction portion of these plans was prepared, sealed, signed and dated by a Texas Licensed Professional Engineer. Therefore, based on the engineer's concurrence of compliance, the construction plans for construction of the proposed project are hereby approved subject to the Standard Construction Specifications and Details Manual and all other applicable City, State and Federal Requirements and Codes.
13. This project is subject to all City Standard Construction Specifications and Details in effect at the time of submittal of the project to the City.
14. Where no existing overhead infrastructure exists, underground electric utility lines shall be located along the street and within the site. Where existing overhead infrastructure is to be relocated, it shall be re-installed underground and the existing facilities shall be removed at the discretion of the Development Engineer.
15. All electric and communication infrastructure shall comply with UDC Section 13.06.
16. Screening and location of outdoor storage shall comply with Section 5.09 of the UDC.
17. The property subject to this application is subject to the Water Quality regulations of the City of Georgetown.

Location Map
1" = 1000'

NOTE:

1. These construction plans were prepared, sealed, signed, and dated by a Texas Licensed Professional Engineer. Therefore based on the engineer's concurrence of compliance, the construction plans for construction of the proposed project are hereby approved subject to the Standard Construction Specifications and Details Manual and all other applicable City, State and Federal Requirements and Codes.
2. This project is subject to all City Standard Specifications and Details in effect at the time of submittal of the project to the City.
3. All bearings and coordinates are referenced to the Texas Coordinate System, Central Zone. NAD 83 horizontal control datum and NAVD 88 vertical control datum. Coordinates are based on a temporary benchmark by others NAD 83 N=10242277.078, E=3101105.07, NAVD 88 Elevation = 927.44.
4. Distances shown hereon are grid values represented in U.S. survey feet.
5. Drawing is in Grid. Grid to Surface Scale Factor is 1.00015.

Submitted By:

STATE OF TEXAS · CHAD WILLIAM JONES · 144785 · LICENSED PROFESSIONAL ENGINEER · 5/7/25

CHAD W. JONES, P.E. DATE

Tree Tag #	Size-as Surveyed	Size in Whole Inches	Remove	Key	Half Critical Root Zone, Radius (in Feet)	Common Name	Latin Name
1201	25	25		P	12.5000	Ash, Texas	Fraxinus texensis
1202	25	25		P	12.5000	Elm, Cedar	Ulmus crassifolia
1581	30	30		HT	15.0000	Ash, Texas	Fraxinus texensis

NOTE: LOCATIONS OF EXISTING TREES SHOWN ON SHEETS 15.

Sheet List Table	
Sheet Number	Sheet Title
01	COVER SHEET
02	GENERAL NOTES (1 OF 2)
03	GENERAL NOTES (2 OF 2)
04	FINAL PLAT (1 OF 2)
05	FINAL PLAT (2 OF 2)
06	DIMENSIONAL SITE PLAN
07	EROSION & SEDIMENTATION CONTROL PLAN
08	EROSION & SEDIMENTATION CONTROL DETAILS
09	EXISTING DRAINAGE
10	PROPOSED DRAINAGE
11	TCEQ WATER QUALITY CALCULATIONS
12	WATER QUALITY POND PLAN
13	OVERALL STORM SEWER PLAN
14	SW PROFILES
15	TREE PRESERVATION PLAN
16	WATER & FIRE PLAN
17	WATER & FIRE DETAILS
18	WW PLAN AND PROFILE
19	WW DETAILS
20	GRADING AND PAVING PLAN
21	GRADING AND PAVING DETAILS (1 of 2)
22	GRADING AND PAVING DETAILS (2 of 2)
23	RONALD REAGAN DECEL LANE AND CULVERT PLAN
24	TRAFFIC CONTROL PLAN
25	STRIPING SIGNAGE & ADA DETAILS
L1.0	LANDSCAPE NOTES AND DETAILS
L2.0	LANDSCAPE PLAN
L3.0	IRRIGATION NOTES AND DETAILS
L4.0	IRRIGATION PLAN
L5.0	TREE BUBBLER PLAN
A2.0	FRONT & REAR ELEVATIONS - C-STORE
A2.1	LEFT & RIGHT ELEVATIONS - C-STORE
A2.2	ELEVATIONS - RETAIL
S1.0	GENERAL NOTES
S1.1	GENERAL ISOMETRIC PLAN
S2.0	FOUNDATION PLAN
S2.1	STRUCTURAL ELEVATIONS
	PHOTOMETRIC PLAN

BEFORE YOU DIG Texas811.com

NOTE:
CONTRACTOR IS TO FURNISH A SET OF CONSTRUCTION PLANS BACK TO THE ENGINEER AT THE END OF THE PROJECT WITH ALL DEVIATIONS NOTED IN RED INK ON THE PLAN SHEETS. CONTRACTOR SHALL NOT RECEIVE FINAL PAYMENT UNTIL COMPLETE "AS-BUILT" SET IS RETURNED TO ENGINEER.

WARNING!
There are existing water pipelines, underground telephone cables and other above and below ground utilities in the vicinity of this project. The Contractor shall contact all appropriate companies prior to any construction in the area and determine if any conflicts exist. If so, the Contractor shall immediately contact the Engineer who shall revise the design as necessary.

NO.	REVISION	BY	DATE

CWJ	2/1/2025
DESIGNED BY:	DATE
CWJ, NIE	2/15/2025
DRAWN BY:	DATE
CWJ	2/28/2025
CHECKED BY:	DATE
CWJ	2/28/2025
APPROVED BY:	DATE

STATE OF TEXAS · CHAD WILLIAM JONES · 144785 · LICENSED PROFESSIONAL ENGINEER · 5/7/25

STEGER BIZZELL
ADDRESS 1978 S. AUSTIN AVENUE GEORGETOWN, TX 78626
METRO 512.930.9412 TEXAS REGISTERED ENGINEERING FIRM F-181 TBPELS FIRM No.10003700 WEB STEGERBIZZELL.COM
SERVICES >>ENGINEERS >>PLANNERS >>SURVEYORS

COVER SHEET
for
REAGAN 245 GAS STATION
City of Georgetown
Williamson County, Texas

Project No: 23028

SHEET 01 of 25

SEQUENCE OF CONSTRUCTION

1. Temporary erosion and sedimentation controls are to be installed as indicated on the approved construction plan and in accordance with the Stormwater Pollution Prevention Plan (SWPPP) that is required to be posted on the site. Install tree protection and initiate tree mitigation measures.

2. Prior to beginning construction, the Owner or his authorized representative, shall convene a Pre-Construction Conference between the City of Georgetown, Engineer, Contractor, County Engineer (if applicable), Texas Commission on Environmental Quality Field Office, and any other affected parties. Notify all such parties at least 48 hours prior to the time of the conference and 48 hours prior to beginning construction.

3. The Environmental Project Manager, and/or Site Supervisor, and/or Designated Responsible Party, and the General Contractor will follow the Storm Water Pollution Prevention Plan (SWPPP) posted on the site. Temporary erosion and sedimentation controls will be revised, if needed, to comply with City Inspectors' directives, and revised construction schedule relative to the water quality plan requirements and the erosion plan.

4. Rough grade the pond(s) at 100% proposed capacity. Either the permanent outlet structure or a temporary outlet must be constructed prior to development of embankment or excavation that leads to ponding conditions. The outlet system shall be protected from erosion and shall be maintained throughout the course of construction until installation of the permanent water quality pond(s).

5. Temporary erosion and sedimentation controls will be inspected and maintained in accordance with the Storm Water Pollution Prevention Plan (SWPPP) posted on the site.

6. Begin site clearing/construction activities.

7. Permanent water quality ponds or controls will be cleaned out and filter media will be installed prior to/concurrently with revegetation of site.

8. Complete construction and start revegetation of the site and installation of landscaping.

9. Upon completion of the site construction and revegetation of a project site, a final inspection will be scheduled by the appropriate City Inspector.

10. After a final inspection has been conducted by the City Inspector and with approval from the City Inspector, remove the temporary erosion and sedimentation controls and complete any necessary final revegetation resulting from removal of the controls. Conduct any maintenance and rehabilitation of the water quality ponds or controls.

ACCESSIBILITY NOTES

1. Project shall be constructed in full compliance with the Texas Accessibility Standards (TAS) 2012.

2. Slopes in the direction of pedestrian travel shall not exceed 5% (1:20) or have a cross slope greater than 2% (1:48). This shall include routes that cross-vehicular ways including but not limited pedestrian/ vehicular ways such as street intersections.

   A. Exception: Per TAS 405.8 and 68.102 (1) grades at the new sidewalks parallel to the streets shall be equal to, or less than, the street grade. Should the new sidewalks exceed the street grade, and the new sidewalk grades exceed 5% in the direction of travel, ramps complying with TAS 405 are required at these conditions.

3. Curb Ramps:
   A. Curb ramps shall not exceed 8.3% (1:12) in the direction of pedestrian travel.
   B. Curb ramps flares (wings) shall not exceed 1:10.
   C. Minimum width of a curb ramp is 36".
   D. Top of the curb ramp must be 2% in all directions for an area 36" wide and 48"deep.
   E. When truncated domes are used, the truncated dome system shall extend the full width of the curb ramp and for a minimum depth of 24" at the bottom of the curb ramp.
   F. Returned curb ramps shall only be used where the adjacent surface on one or both sides of the curb ramp do not allow pedestrian travel such as but not limited to stop lights, stop signs and permanently mounted waste receptacles.

4. There shall be no changes in level greater than ¼" on any accessible route or ½" with a 1:2 bevel.

5. Decomposed granite surfaces, or similar Engineer-approved surfaces shall be compacted tight and maintained by the Owner at all times.

6. Provide directional signage using the international symbol of accessibility when not all routes are accessible. Signage shall be placed at the beginning of the route to avoid a patron from proceeding on a non-accessible route.

7. Verify that no plantings or other site elements on circulation paths would be protruding objects based on TAS 307 (protrudes more 4" and is higher than 27" from the surface and less than 80" from the surface).

Contractor shall notify the Engineer before proceeding with any Work, which is in conflict with the Texas Accessibility Standards. Contractor is financially responsible for proceeding with any Work without written direction on any clarification from the Engineer.

TCEQ WATER DISTRIBUTION SYSTEM GENERAL CONSTRUCTION NOTES

1. This water distribution system must be constructed in accordance with the current Texas Commission on Environmental Quality (TCEQ) Rules and Regulations for Public Water Systems 30 Texas Administrative Code (TAC) Chapter 290 Subchapter D. When conflicts are noted with local standards, the more stringent requirement shall be applied. Construction for public water systems must always, at a minimum, meet TCEQ's "Rules and Regulations for Public Water Systems.
2. An appointed engineer shall notify in writing the local TCEQ's Regional Office when construction will start. Please keep in mind that upon completion of the water works project, the engineer or owner shall notify the commission's Water Supply Division, in writing, as to its completion and attest to the fact that the work has been completed essentially according to the plans and change orders on file with the commission as required in 30 TAC §290.39(h)(3).
3. All newly installed pipes and related products must conform to American National Standards Institute (ANSI)/NSF International Standard 61 and must be certified by an organization accredited by ANSI, as required by 30 TAC §290.44(a)(1).
4. Plastic pipe for use in public water systems must bear the NSF International Seal of Approval (NSF-pw) and have an ASTM design pressure rating of at least 150 psi or a standard dimension ratio of 26 or less, as required by 30 TAC §290.44(a)(2).
5. No pipe which has been used for any purpose other than the conveyance of drinking water shall be accepted or relocated for use in any public drinking water supply, as required by 30 TAC §290.44(a)(3).
6. Water transmission and distribution lines shall be installed in accordance with the manufacturer's instructions. However, the top of the water line must be located below the frost line and in no case shall the top of the water line be less than 24 inches below ground surface, as required by 30 TAC §290.44(a)(4).
7. Pursuant to 30 TAC §290.44(a)(5), the hydrostatic leakage rate shall not exceed the amount allowed or recommended by the most current AWWA formulas for PVC pipe, cast iron and ductile iron pipe. Include the formulas in the notes on the plans.
   - The hydrostatic leakage rate for polyvinyl chloride (PVC) pipe and appurtenances shall not exceed the amount allowed or recommended by formulas in America Water Works Association (AWWA) C-605 as required in 30 TAC §290.44(a)(5). Please ensure that the formula for this calculation is correct and most current formula is in use;

     $$Q = \frac{L \times D \times P^{1/2}}{148{,}000}$$

     Q = the quantity of makeup water in gallons per hour,
     L = the length of the pipe section being tested, in feet,
     D = the nominal diameter of the pipe in inches, and
     P = the average test pressure during the hydrostatic test in pounds per square inch (psi).

   - The hydrostatic leakage rate for ductile iron (DI) pipe and appurtenances shall not exceed the amount allowed or recommended by formulas in America Water Works Association (AWWA) C-600 as required in 30 TAC §290.44(a)(5). Please ensure that the formula for this calculation is correct and most current formula is in use;

     $$L = \frac{S \times D \times P^{1/2}}{148{,}000}$$

     L = the quantity of makeup water in gallons per hour,
     S = the length of the pipe section being tested, in feet,
     D = the nominal diameter of the pipe in inches, and
     P = the average test pressure during the hydrostatic test in pounds per square inch (psi).

8. The maximum allowable lead content of pipes, pipe fittings, plumbing fittings, and fixtures to 0.25 percent.
9. The system must be designed to maintain a minimum pressure of 35 psi at all points within the distribution network at flow rates of at least 1.5 gallons per minute per connection. When the system is intended to provide firefighting capability, it must also be designed to maintain a minimum pressure of 20 psi under combined fire and drinking water flow conditions as required by 30 TAC §290.44(d).
10. The contractor shall install appropriate air release devices in the distribution system at all points where topography or other factors may create air locks in the lines. All vent openings to the atmosphere shall be covered with 16-mesh or finer, corrosion resistant screening material or an acceptable equivalent as required by 30 TAC §290.44(d)(1).
11. Pursuant to 30 TAC §290.44(d)(4), accurate water meters shall be provided. Service connections and meter locations should be shown on the plans.
12. Pursuant to 30 TAC §290.44(d)(5), sufficient valves and blowoffs to make repairs. The engineering report shall establish criteria for this design.
13. Pursuant to 30 TAC §290.44(d)(6), the system shall be designed to afford effective circulation of water with a minimum of dead ends. All dead-end mains shall be provided with acceptable flush valves and discharge piping. All dead-end lines less than two inches in diameter will not require flush valves if they end at a customer service. Where dead ends are necessary as a stage in the growth of the system, they shall be located and arranged to ultimately connect the ends to provide circulation.
14. The contractor shall maintain a minimum separation distance in all directions of nine feet between the proposed waterline and wastewater collection facilities including manholes and septic tank drainfields. If this distance cannot be maintained, the contractor must immediately notify the project engineer for further direction. Separation distances, installation methods, and materials utilized must meet 30 TAC §290.44(e)(1- 4) of the current rules.
15. Pursuant to 30 TAC §290.44(e)(5), the separation distance from a potable waterline to a wastewater main or lateral manhole or cleanout shall be a minimum of nine feet. Where the nine-foot separation distance cannot be achieved, the potable waterline shall be encased in a joint of at least 150 psi pressure class pipe at least 18 feet long and two nominal sizes larger than the new conveyance. The space around the carrier pipe shall be supported at five-foot intervals with spacers or be filled to the springline with washed sand. The encasement pipe shall be centered on the crossing and both ends sealed with cement grout or manufactured sealant.
16. Pursuant to 30 TAC §290.44(e)(6), fire hydrants shall not be installed within nine feet vertically or horizontally of any wastewater line, wastewater lateral, or wastewater service line regardless of construction.
17. Pursuant to 30 TAC §290.44(e)(7), suction mains to pumping equipment shall not cross wastewater mains, wastewater laterals, or wastewater service lines. Raw water supply lines shall not be installed within five feet of any tile or concrete wastewater main, wastewater lateral, or wastewater service line.
18. Pursuant to 30 TAC §290.44(e)(8), waterlines shall not be installed closer than ten feet to septic tank drainfields.
19. Pursuant to 30 TAC §290.44(f)(1), the contractor shall not place the pipe in water or where it can be flooded with water or sewage during its storage or installation.
20. Pursuant to 30 TAC §290.44(f)(2), when waterlines are laid under any flowing or intermittent stream or semi-permanent body of water the water main shall be installed in a separate watertight pipe encasement. Valves must be provided on each side of the crossing with facilities to allow the underwater portion of the system to be isolated and tested.
21. The contractor shall disinfect the new water mains in accordance with AWWA Standard C-651 and then flush and sample the lines before being placed into service. Samples shall be collected for microbiological analysis to check the effectiveness of the disinfection procedure which shall be repeated if contamination persists. A minimum of one sample for each 1,000 feet of completed water line will be required or at the next available sampling point beyond 1,000 feet as designated by the design engineer, in accordance with 30 TAC §290.44(f)(3).

CITY OF GEORGETOWN GENERAL NOTES

1. These construction plans were prepared, sealed, signed and dated by a Texas Licensed Professional Engineer. Therefore, based on the engineer's concurrence of compliance, the construction plans for construction of the proposed project are hereby approved subject to the standard Construction Specifications and Details Manual and all other applicable City, State and Federal Requirements and Codes.
2. This project is subject to all City Standard Specifications and Details in effect at the time of submittal of the project to the City.
3. The site construction plans shall meet all requirements of the approved site plan.
4. Wastewater mains and service lines shall be SDR 26 PVC.
5. Wastewater mains shall be installed without horizontal or vertical bends.
6. Maximum distance between wastewater manholes is 500 feet.
7. Wastewater mains shall be low pressure air tested and mandrel tested by the contractor according to the City of Georgetown and TCEQ requirements.
8. Wastewater manholes shall be vacuum tested and coated by the contractor according to City of Georgetown and TCEQ requirements.
9. Wastewater mains shall be camera tested by the contractor and submitted to the City on DVD format prior to paving the streets.
10. Private water system fire lines shall be tested by the contractor to 200 psi for 2 hours.
11. Private water system fire lines shall be ductile iron piping from the water main to the building sprinkler system, and 200 psi C900 PVC for all others.
12. Public water system mains shall be 150 psi C900 PVC and tested by the contractor at 200 psi for 15 minutes and 150 psi for 2 hours.
13. All bends and changes in direction on water mains shall be restrained and thrust blocked.
14. Long fire hydrant leads shall be restrained.
15. All water lines are to be bacteria tested by the contractor according to the City standards and specifications.
16. Water and Sewer main crossings shall meet all requirements of the TCEQ and the City.
17. Flexible base material for public streets shall be TXDOT Type A Grade 1.
18. Hot mix asphaltic concrete pavement shall be Type D unless otherwise specified and shall be a minimum of 2 inches thick on public streets and roadways.
19. All sidewalk ramps are to be installed with the public infrastructure.
20. A maintenance bond is required to be submitted to the City prior to acceptance of the public improvements. This bond shall be established for 2 years in the amount of 10% of the cost of the public improvements and shall follow the City format.
21. Record drawings of public improvements shall be submitted to the City by the design engineer prior to acceptance of the project. These drawings shall be a pdf emailed to the City Development engineer.

GENERAL CONSTRUCTION NOTES

1. Prior to beginning construction, the Owner or his authorized representative, shall convene a Pre-Construction Conference between the City of Georgetown, Engineer, Contractor, County Engineer (if applicable), Texas Commission on Environmental Quality Field Office, and any other affected parties. Notify all such parties at least 48 hours prior to the time of the conference and 48 hours prior to beginning construction.
2. Any existing utilities, pavement, curbs, and/or sidewalks damaged or removed shall be repaired by the Contractor at his expense before acceptance of the project.
3. The location of any existing water, wastewater lines or other utilities shall be verified by the City of Georgetown & other utility providers prior to construction.
4. Manhole frames, covers, water valve covers, etc., shall be raised to finished pavement grade at the Contractor's expense by a qualified contractor with City inspection. All utility adjustments shall be completed prior to final paving construction.
5. Steger Bizzell has endeavored to design these plans compliant with ADA/TDLR and other accessibility requirements. However, the contractor shall not be relieved of any responsibility for constructing these improvements compliant with all applicable accessibility standards. If the contractor notices any discrepancies between these plans and accessibility laws/rules, he is to stop work in the area of conflict and notify Steger Bizzell immediately for a resolution and/or revision to these plans. Steger Bizzell shall not be held responsible for constructing this site compliant with accessibility laws/rules regardless of what is shown in these plans.
6. Topography based upon LiDAR survey dated August 20, 2014 and supplemental field topo survey dated July 17-18, 2017 by McKim and Creed. The contractor shall notify the design engineer in writing of any discrepancies discovered during construction prior to proceeding.

TEMPORARY EROSION CONTROL NOTES

1. The Contractor shall install erosion/sedimentation controls and tree protective fencing prior to any site preparation work (clearing grubbing or excavation).
2. The placement of erosion/sedimentation controls shall be in accordance with the EROSION & SEDIMENTATION CONTROL PLAN
3. Any significant variation in materials or locations of controls or fences from those shown on the approved plans must be approved by the City Engineer.
4. The Contractor is required to inspect all controls and fences at weekly intervals and after significant rainfall events to insure that they are functioning properly. The person(s) responsible for maintenance of controls and fences shall immediately make any necessary repairs to damaged areas. Silt accumulation at controls must be removed when the depth reaches six (6) inches.
5. Prior to final acceptance, haul roads and waterway crossings constructed for temporary Contractor access must be removed, accumulated sediment removed from the waterway and the area restored to the original grade and revegetated. All land clearing debris shall be disposed of in approved spoil disposal sites.
6. Field revisions to the EROSION & SEDIMENTATION CONTROL PLAN required by the Engineer or field inspector with the Texas Commission may be on Environmental Quality (TCEQ) during the course of construction to correct control inadequacies. Major revisions must be approved by the (TCEQ).

PERMANENT EROSION CONTROL NOTES

1. All disturbed areas shall be restored as noted below:
   a. A minimum of four inches of imported sandy loam topsoil or approved equal shall be placed in all drainage channels (except rock) and on all cleared areas.
   b. Grass areas may be sodded, plugged, sprigged or seeded except that solid sod shall be used in swales or other areas subject to erosion.

   The seeding for permanent erosion control shall be applied over areas disturbed by construction as follows, unless specified elsewhere:
   i. From September 15 to March 1, seeding shall be with a combination of 1 pound per 1,000 square feet of unhulled Bermuda and 7 pounds per 1,000 square feet of Winter Rye with a purity of 95% with 90% germination.
   ii. From March 2 to September 14, seeding shall be with hulled Bermuda at a rate of 3 pounds per 1,000 square feet with a purity of 95% with 85% germination.
   c. Fertilizer shall be slow release granular or pelleted type and shall have an analysis of 15-15-15 and shall be applied at the rate of 23 pounds per acre once at the time of planting and again once during the time of establishment.
   d. All planted areas shall be provided with a readily available water supply and watered as necessary to ensure continuous healthy growth and development. The planted area shall be irrigated or sprinkled in a manner that will not erode the top soil, but will sufficiently soak the soil to a depth of six inches. The irrigation shall occur at ten-day intervals during the first two months. Rainfall occurrences of 1/2 inch or more shall postpone the watering schedule for one week.
   e. Mulch type used shall be Mulch, applied at a rate of 1,500 pounds per acre.
2. Disturbed areas within areas to become public shall be re-vegetated to the City of Georgetown requirements. See section G7 of the City of Georgetown Specifications.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY WATER POLLUTION ABATEMENT PLAN GENERAL CONSTRUCTION NOTES

1. Written construction notification must be given to the appropriate TCEQ regional office no later than 48 hours prior to commencement of the regulated activity. Information must 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 and the name and telephone number of the contact person.
2. All contractors conducting regulated activities associated with this project must be provided with complete copies of the approved Water Pollution Abatement Plan and the TCEQ letter indicating the specific conditions of its approval. During the course of these regulated activities, the contractors are required to keep on-site copies of the approved plan and approval letter.
3. If any sensitive feature is discovered during construction, all regulated activities near the sensitive feature must be suspended immediately. The appropriate TCEQ regional office must be immediately notified of any sensitive features encountered during construction. The regulated activities near the sensitive feature may not proceed until the TCEQ has reviewed and approved the methods proposed to protect the sensitive feature and the Edwards Aquifer from any potentially adverse impacts to water quality.
4. No temporary aboveground hydrocarbon and hazardous substance storage tank system is installed within 150 feet of a domestic, industrial, irrigation, or public water supply well, or other sensitive feature.
5. Prior to commencement of construction, all temporary erosion and sedimentation (E&S) control measures must be properly selected, installed, and maintained in accordance with the manufacturers specifications and good engineering practices. Controls specified in the temporary storm water section of the approved Edwards Aquifer Protection 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.
6. If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain).
7. 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.
8. Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls, picked up daily).
9. All spoils (excavated material) generated from the project site must be stored on-site with proper E&S controls. For storage or disposal of spoils at another site on the Edwards Aquifer Recharge Zone, the owner of the site must receive approval of a water pollution abatement plan for the placement of fill material or mass grading prior to the placement of spoils at the other site.
10. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. Where the initiation of stabilization measures by the 14th day after construction activity temporary or permanently cease is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable. Where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within 21 days, temporary stabilization measures do not have to be initiated on that portion of site. In areas experiencing droughts where the initiation of stabilization measures by the 14th day after construction activity has temporarily or permanently ceased is precluded by seasonal arid conditions, stabilization measures shall be initiated as soon as practicable.
11. The following records shall be maintained and made available to the TCEQ upon request: the dates when major grading activities occur; the dates when construction activities temporarily or permanently cease on a portion of the site; and the dates when stabilization measures are initiated.
12. The holder of any approved Edward Aquifer protection 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 water pollution abatement structure(s), including but not limited to ponds, dams, berms, sewage treatment plants, and diversionary structures;
    B. any change in the nature or character of the regulated activity from that which was originally approved or a change which would significantly impact the ability of the plan to prevent pollution of the Edwards Aquifer;
    C. any development of land previously identified as undeveloped in the original water pollution abatement plan.

Austin Regional Office
12100 Park 35 Circle
Building A, 1st Floor
Austin, Texas 78753
Phone (512) 339-2929
Fax (512) 339-3795

WARNING!
There are existing water pipelines, underground telephone cables and other above and below ground utilities in the vicinity of this project. The Contractor shall contact all appropriate companies prior to any construction in the area and determine if any conflicts exist. If so, the Contractor shall immediately contact the Engineer who shall revise the design as necessary.

NO.	REVISION	BY	DATE

CWJ — DESIGNED BY: — 2/1/2025 DATE
CWJ, NIE — DRAWN BY: — 2/15/2025 DATE
CWJ — CHECKED BY: — 2/28/2025 DATE
CWJ — APPROVED BY: — 2/28/2025 DATE

STATE OF TEXAS — CHAD WILLIAM JONES — 144788 — LICENSED PROFESSIONAL ENGINEER — 5/7/25

STEGER BIZZELL
ADDRESS 1978 S. AUSTIN AVENUE GEORGETOWN, TX 78626
METRO 512.930.9412 TEXAS REGISTERED ENGINEERING FIRM F-181 TBPELS FIRM No.10003700 WEB STEGERBIZZELL.COM
SERVICES >>ENGINEERS >>PLANNERS >>SURVEYORS

GENERAL NOTES (1 OF 2)
for
REAGAN 245 GAS STATION
City of Georgetown
Williamson County, Texas

Project No: 23028

SHEET 02 of 25

Texas Commission on Environmental Quality
Organized Sewage Collection System
General Construction Notes

1. This Organized Sewage Collection System (SCS) must be constructed in accordance with 30 Texas Administrative Code (TAC) §213.5(c), the Texas Commission on Environmental Quality's (TCEQ) Edwards Aquifer Rules and any local government standard specifications.

2. All contractors conducting regulated activities associated with this proposed regulated project must be provided with copies of the SCS plan and the TCEQ letter indicating the specific conditions of its approval. During the course of these regulated activities, the contractors must be required to keep on-site copies of the plan and the approval letter.

3. A written notice of construction must be submitted to the presiding TCEQ regional office at least 48 hours prior to the start of any regulated activities. This notice must include:
- the name of the approved project;
- the activity start date; and
- the contact information of the prime contractor.

4. Any modification to the activities described in the referenced SCS application following the date of approval may require the submittal of an SCS application to modify this approval, including the payment of appropriate fees and all information necessary for its review and approval.

5. Prior to beginning any construction activity, all temporary erosion and sedimentation (E&S) control measures must be properly installed and maintained in accordance with the manufacturers specifications. These controls must remain in place until the disturbed areas have been permanently stabilized.

6. If any sensitive features are discovered during the wastewater line trenching activities, all regulated activities near the sensitive feature must be suspended immediately. The applicant must immediately notify the appropriate regional office of the TCEQ of the feature discovered. A geologist's assessment of the location and extent of the feature discovered must be reported to that regional office in writing and the applicant must submit a plan for ensuring the structural integrity of the sewer line or for modifying the proposed collection system alignment around the feature. The regulated activities near the sensitive feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the sensitive feature and the Edwards Aquifer from any potentially adverse impacts to water quality while maintaining the structural integrity of the line.

7. Sewer lines located within or crossing the 5-year floodplain of a drainage way will be protected from inundation and stream velocities which could cause erosion and scouring of backfill. The trench must be capped with concrete to prevent scouring of backfill, or the sewer lines must be encased in concrete. All concrete shall have a minimum thickness of 6 inches.

8. Blasting procedures for protection of existing sewer lines and other utilities will be in accordance with the National Fire Protection Association criteria. Sand is not allowed as bedding or backfill in trenches that have been blasted. If any existing sewer lines are damaged, the lines must be repaired and retested.

9. All manholes constructed or rehabilitated on this project must have watertight size on size resilient connectors allowing for differential settlement. If manholes are constructed within the 100-year floodplain, the cover must have a gasket and be bolted to the ring. Where gasketed manhole covers are required for more than three manholes in sequence or for more than 1500 feet, alternate means of venting will be provided. Bricks are not an acceptable construction material for any portion of the manhole.

   The diameter of the manholes must be a minimum of four feet and the manhole for entry must have a minimum clear opening diameter of 30 inches. These dimensions and other details showing compliance with the commission's rules concerning manholes and sewer line/manhole inverts described in 30 TAC §217.55 are included on Plan Sheet 19.

   It is suggested that entrance into manholes in excess of four feet deep be accomplished by means of a portable ladder. The inclusion of steps in a manhole is prohibited.

10. Where water lines and new sewer line are installed with a separation distance closer than nine feet (i.e., water lines crossing wastewater lines, water lines paralleling wastewater lines, or water lines next to manholes) the installation must meet the requirements of 30 TAC §217.53(d) (Pipe Design) and 30 TAC §290.44(e) (Water Distribution).

11. Where sewers lines deviate from straight alignment and uniform grade all curvature of sewer pipe must be achieved by the following procedure which is recommended by the pipe manufacturer: NOT APPLICABLE.

    If pipe flexure is proposed, the following method of preventing deflection of the joint must be used: NOT APPLICABLE.

    Specific care must be taken to ensure that the joint is placed in the center of the trench and properly bedded in accordance with 30 TAC §217.54.

12. New sewage collection system lines must be constructed with stub outs for the connection of anticipated extensions. The location of such stub outs must be marked on the ground such that their location can be easily determined at the time of connection of the extensions. Such stub outs must be manufactured wyes or tees that are compatible in size and material with both the sewer line and the extension. At the time of original construction, new stub-outs must be constructed sufficiently to extend beyond the end of the street pavement. All stub-outs must be sealed with a manufactured cap to prevent leakage. Extensions that were not anticipated at the time of original construction or that are to be connected to an existing sewer line not furnished with stub outs must be connected using a manufactured saddle and in accordance with accepted plumbing techniques.

    If no stub-out is present an alternate method of joining laterals is shown in the detail on Plan Sheet _of _. (For potential future laterals). NOT APPLICABLE.

    The private service lateral stub-outs must be installed as shown on the Overall Wastewater Plan on Plan Sheet _of _and marked after backfilling as shown in the detail on Plan Sheet _of _. NOT APPLICABLE.

13. Trenching, bedding and backfill must conform with 30 TAC §217.54. The bedding and backfill for flexible pipe must comply with the standards of ASTM D-2321, Classes IA, IB, II or III. Rigid pipe bedding must comply with the requirements of ASTM C 12 (ANSI A 106.2) classes A, B or C.

14. Sewer lines must be tested from manhole to manhole. When a new sewer line is connected to an existing stub or clean-out, it must be tested from existing manhole to new manhole. If a stub or clean-out is used at the end of the proposed sewer line, no private service attachments may be connected between the last manhole and the cleanout unless it can be certified as conforming with the provisions of 30 TAC §213.5(c)(3)(E).

15. All sewer lines must be tested in accordance with 30 TAC §217.57. The engineer must retain copies of all test results which must be made available to the executive director upon request. The engineer must certify in writing that all wastewater lines have passed all required testing to the appropriate regional office within 30 days of test completion and prior to use of the new collection system. Testing method will be:

15.a. For a collection system pipe that will transport wastewater by gravity flow, the design must specify an infiltration and exfiltration test or a low-pressure air test. A test must conform to the following requirements:

15.a.1. Low Pressure Air Test.

15.a.1.A. A low pressure air test must follow the procedures described in American Society For Testing And Materials (ASTM) C-828, ASTM C-924, or ASTM F-1417 or other procedure approved by the executive director, except as to testing times as required in Table C.3 in subparagraph (C) of this paragraph or Equation C.3 in subparagraph (B)(ii) of this paragraph.

15.a.1.B. For sections of collection system pipe less than 36 inch average inside diameter, the following procedure must apply, unless a pipe is to be tested as required by paragraph (2) of this subsection.

15.a.1.B.1. A pipe must be pressurized to 3.5 pounds per square inch (psi) greater than the pressure exerted by groundwater above the pipe.

15.a.1.B.2. Once the pressure is stabilized, the minimum time allowable for the pressure to drop from 3.5 psi gauge to 2.5 psi gauge is computed from the following equation:

Equation C.3 $$T = \frac{0.085 \times D \times K}{Q}$$

Where:

T = time for pressure to drop 1.0 pound per square inch gauge in seconds
K = 0.000419 X D X L, but not less than 1.0
D = average inside pipe diameter in inches
L = length of line of same size being tested, in feet
Q = rate of loss, 0.0015 cubic feet per minute per square foot internal surface

15.a.1.C. Since a K value of less than 1.0 may not be used, the minimum testing time for each pipe diameter is shown in the following Table C.3:

Pipe Diameter *(inches)*	**Minimum Time** *(seconds)*	**Maximum Length for Minimum Time** *(feet)*	**Time for Longer Length** *(seconds/foot)*
6	340	398	0.855
8	454	298	1.520
10	567	239	2.374
12	680	199	3.419
15	850	159	5.342
18	1020	133	7.693
21	1190	114	10.471
24	1360	100	13.676
27	1530	88	17.309
30	1700	80	21.369
33	1870	72	25.856

15.a.1.D. An owner may stop a test if no pressure loss has occurred during the first 25% of the calculated testing time.

15.a.1.E. If any pressure loss or leakage has occurred during the first 25% of a testing period, then the test must continue for the entire test duration as outlined above or until failure.

15.a.1.F. Wastewater collection system pipes with a 27 inch or larger average inside diameter may be air tested at each joint instead of following the procedure outlined in this section.

15.a.1.G. A testing procedure for pipe with an inside diameter greater than 33 inches must be approved by the executive director.

15.a.2. Infiltration/Exfiltration Test.

15.a.2.A. The total exfiltration, as determined by a hydrostatic head test, must not exceed 50 gallons per inch of diameter per mile of pipe per 24 hours at a minimum test head of 2.0 feet above the crown of a pipe at an upstream manhole.

15.a.2.B. An owner shall use an infiltration test in lieu of an exfiltration test when pipes are installed below the groundwater level.

15.a.2.C. The total exfiltration, as determined by a hydrostatic head test, must not exceed 50 gallons per inch diameter per mile of pipe per 24 hours at a minimum test head of two feet above the crown of a pipe at an upstream manhole, or at least two feet above existing groundwater level, whichever is greater.

15.a.2.D. For construction within a 25-year flood plain, the infiltration or exfiltration must not exceed 10 gallons per inch diameter per mile of pipe per 24 hours at the same minimum test head as in subparagraph (C) of this paragraph.

15.a.2.E. If the quantity of infiltration or exfiltration exceeds the maximum quantity specified, an owner shall undertake remedial action in order to reduce the infiltration or exfiltration to an amount within the limits specified. An owner shall retest a pipe following a remediation action.

15.b. If a gravity collection pipe is composed of flexible pipe, deflection testing is also required. The following procedures must be followed:

15.b.1. For a collection pipe with inside diameter less than 27 inches, deflection measurement requires a rigid mandrel.

15.b.1.A. Mandrel Sizing.

15.b.1.A.1. A rigid mandrel must have an outside diameter (OD) not less than 95% of the base inside diameter (ID) or average ID of a pipe, as specified in the appropriate standard by the ASTMs, American Water Works Association, UNI-BELL, or American National Standards Institute, or any related appendix.

15.b.1.A.2. If a mandrel sizing diameter is not specified in the appropriate standard, the mandrel must have an OD equal to 95% of the ID of a pipe. In this case, the ID of the pipe, for the purpose of determining the OD of the mandrel, must equal be the average outside diameter minus two minimum wall thicknesses for OD controlled pipe and the average inside diameter for ID controlled pipe.

15.b.1.A.3. All dimensions must meet the appropriate standard.

15.b.1.B. Mandrel Design.

15.b.1.B.1. A rigid mandrel must be constructed of a metal or a rigid plastic material that can withstand 200 psi without being deformed.

15.b.1.B.2. A mandrel must have nine or more odd number of runners or legs.

15.b.1.B.3. A barrel section length must equal at least 75% of the inside diameter of a pipe.

15.b.1.B.4. Each size mandrel must use a separate proving ring.

15.b.1.C. Method Options.

15.b.1.C.1. An adjustable or flexible mandrel is prohibited.

15.b.1.C.2. A test may not use television inspection as a substitute for a deflection test.

15.b.1.C.3. If requested, the executive director may approve the use of a deflectometer or a mandrel with removable legs or runners on a case-by-case basis.

15.b.2. For a gravity collection system pipe with an inside diameter 27 inches and greater, other test methods may be used to determine vertical deflection.

15.b.3. A deflection test method must be accurate to within plus or minus 0.2% deflection.

15.b.4. An owner shall not conduct a deflection test until at least 30 days after the final backfill.

15.b.5. Gravity collection system pipe deflection must not exceed five percent (5%).

15.b.6. If a pipe section fails a deflection test, an owner shall correct the problem and conduct a second test after the final backfill has been in place at least 30 days.

16. All manholes must be tested to meet or exceed the requirements of 30 TAC §217.58.

16.a. All manholes must pass a leakage test.

16.b. An owner shall test each manhole (after assembly and backfilling) for leakage, separate and independent of the collection system pipes, by hydrostatic exfiltration testing, vacuum testing, or other method approved by the executive director.

16.b.1. Hydrostatic Testing.

16.b.1.A. The maximum leakage for hydrostatic testing or any alternative test methods is 0.025 gallons per foot diameter per foot of manhole depth per hour.

16.b.1.B. To perform a hydrostatic exfiltration test, an owner shall seal all wastewater pipes coming into a manhole with an internal pipe plug, fill the manhole with water, and maintain the test for at least one hour.

16.b.1.C. A test for concrete manholes may use a 24-hour wetting period before testing to allow saturation of the concrete.

16.b.2. Vacuum Testing.

16.b.2.A. To perform a vacuum test, an owner shall plug all lift holes and exterior joints with a non-shrink grout and plug all pipes entering a manhole.

16.b.2.B. No grout must be placed in horizontal joints before testing.

16.b.2.C. Stub-outs, manhole boots, and pipe plugs must be secured to prevent movement while a vacuum is drawn.

16.b.2.D. An owner shall use a minimum 60 inch/lb torque wrench to tighten the external clamps that secure a test cover to the top of a manhole.

16.b.2.E. A test head must be placed at the inside of the top of a cone section, and the seal inflated in accordance with the manufacturer's recommendations.

16.b.2.F. There must be a vacuum of 10 inches of mercury inside a manhole to perform a valid test.

16.b.2.G. A test does not begin until after the vacuum pump is off.

16.b.2.H. A manhole passes the test if after 2.0 minutes and with all valves closed, the vacuum is at least 9.0 inches of mercury.

17. All private service laterals must be inspected and certified in accordance with 30 TAC §213.5(c)(3)(I). After installation of and, prior to covering and connecting a private service lateral to an existing organized sewage collection system, a Texas Licensed Professional Engineer, Texas Registered Sanitarian, or appropriate city inspector must visually inspect the private service lateral and the connection to the sewage collection system, and certify that it is constructed in conformity with the applicable provisions of this section. The owner of the collection system must maintain such certifications for five years and forward copies to the appropriate regional office upon request. Connections may only be made to an approved sewage collection system.

Austin Regional Office
12100 Park 35 Circle, Building A
Austin, Texas 78753-1808
Phone (512) 339-2929
Fax (512) 339-3795

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

MANHOLE TESTING

All manholes must pass a leakage test. An owner shall test each manhole (after assembly and backfilling) for leakage, separate and independent of the collection system pipes, by hydrostatic exfiltration testing, vacuum testing, or other method approved by the executive director.

HYDROSTATIC TESTING

The maximum leakage for hydrostatic testing or any alternative test methods is 0.025 gallons per foot diameter per foot of manhole depth per hour. To perform a hydrostatic exfiltration test, an owner shall seal all wastewater pipes coming into a manhole with an internal pipe plug, fill the manhole with water and maintain the test for at least one hour. A test for concrete manholes may use a 24 hour wetting period before testing to allow saturation of the concrete.

VACUUM TESTING

To perform a vacuum test, an owner shall plug all lift holes and exterior joints with a non-shrink grout and plug all pipes entering a manhole. No grout must be placed in horizontal joints before testing. Stub outs, manhole boots and pipe plugs must be secured to prevent movement while a vacuum is drawn. An owner shall use a minimum 60 inch/lb torque wrench to tighten the external clamps that secure a test cover to the top of a manhole. A test head must be placed at the inside of the top of a cone section and the seal inflated in accordance with the manufacturer's recommendations. There must be a vacuum of 10 inches of mercury inside a manhole to perform a valid test. A test does not begin until after the vacuum pump is off. A manhole passes the test if after 2.0 minutes and with all valves closed, the vacuum is a least 9.0 inches of mercury.

ADDITIONAL WASTEWATER NOTES

1. If a conflict exists between the various documents, the documents will take precedence in the following order:
   a. Municipal Utility Specifications
   b. Change Orders
   c. Addenda Issue During Bidding
   d. Construction Plans
   e. Project Specifications

2. The following pipe diameters, pipe material and national standard specifications are proposed for this project:

PIPE DIAMETER (IN)	LINEAR FEET (FT)	PIPE MATERIAL	NATIONAL STANDARD FOR PIPE MATERIAL	NATIONAL STANDARD FOR PIPE JOINTS
6	501	PVC SDR-26	ASTM D 3034	ASTM D 3212

3. Watertight, size on size resilient connectors conforming to ASTM C 923 must be used for connecting pipe to manholes.

4. The bedding class for each diameter of flexible pipe and each flexible pipe material is as follows:

PIPE DIAMETER (IN)	PIPE MATERIAL	BEDDING CLASS
8	PVC SDR-26/DR-18	1B
12	PVC SDR-26	1B

5. Brick manhole construction is not allowed. Use of brick for adjusting manhole covers to grade is also prohibited.

6. All manholes shall be of precast concrete construction.

7. The structural integrity of the collection line due to high soil P.I.'s will require the bedding around the pipe to be 6" minimum below the pipe, 6" minimum on each side of the pipe, and 12" minimum above the pipe.

8. If faults, caverns, or subsidence are discovered during construction, construction shall be halted to allow the features to be inspected by the design engineer or a geological or geotechnical engineer. Based on this inspection, revisions approval to the design may be required.

9. The trench walls shall be vertical to at least one foot above the pipe.

10. The trench backfill shall be free of stones greater than 6 inches in diameter and free of organic or any other unstable material.

11. Manholes shown on the plans with sealed and gasketed covers are provided as protection against inflow for those manholes which lie 1) within a 100 year flood plain, 2) lie with a drainageway, 3) lie within a street subject to carrying drainage flows, and 4) additional locations as determined necessary by the Engineer.

12. No drop connections are proposed in these plans.

13. The minimum allowable tensile strength and cell class for each flexible pipe shall be as follows:

PIPE MATERIAL	TENSILE STRENGTH	CELL CLASS (PVC ONLY)
SDR-26	7,000	12454-B
PS-115	7,000	12454-B

14. All gravity lines utilizing flexible pipe must be tested for deflection by pulling a rigid mandrel through the installed pipe. The test must be conducted at least 30 days after placement and compaction of final backfill. No pipe shall exceed a deflection of 5 rigid mandrel shall be used to measure deflection. The test must be performed without mechanical pulling devices. The mandrel's minimum outside diameter is 95 inside diameter. The mandrel must have an odd number of runners, totaling nine or more. The barrel section of the mandrel must have a length at least 75 inside diameter. A TV test cannot substitute for the deflection test.

15. A leakage test is required for all gravity lines. For line that is not horizontally curved, a hydrostatic test and/or a low pressure air test must be performed on all proposed gravity sanitary sewer collection piping. These tests must comply with Section 217.57(a) of the TCEQ's rules. The contractor shall have the option of utilizing either a hydrostatic test or a low pressure air test.

16. Manholes must be tested for leakage. Manholes will be tested with a hydrostatic test, or with a vacuum test, Contractor's Option.

17. The hydrostatic manhole test shall comply with the test requirements detailed in Section 217.58(b)(1) of the TCEQ's rules.

18. Each manhole shall be tested immediately after assembly and prior to backfilling. Manholes which have been backfilled shall either be excavated to expose the entire exterior prior to vacuum testing or the manhole shall be tested for leakage by means of a hydrostatic test.

19. All lift holes and exterior joints shall be plugged with an approved non-shrink grout.

20. No grout shall be placed in horizontal joints before testing.

21. All pipes entering the manhole shall be plugged, taking care to securely brace the plugs from being drawn into the manhole.

22. Stubouts, manhole boots and pipe plugs shall be secured to prevent movement while the vacuum is drawn.

23. A minimum 60-inch/lb torque wrench shall be used to tighten the external clamps that secure the test cover to the top of the manhole.

24. The test head shall be placed at the inside of the top of the cone section and the seal inflated in accordance with the manufacturer's recommendation.

25. A vacuum of 10 inches of mercury shall be drawn and the vacuum pump shut off. With the valves closed, the time shall be measured for the vacuum to drop to 9 inches of mercury. The manhole shall pass if the time is greater than 2 minutes. If the manhole fails the initial test, necessary repairs shall be made with a non-shrink grout while the vacuum is still being drawn. If the manhole fails a second time, repairs should again be made and the manhole shall be tested by means of a hydrostatic test which complies with Section 217.58(b)(1) of the TCEQ's rules. If any manhole fails the hydrostatic test, after failing the vacuum test twice, the contractor should consider replacing that manhole. If the contractor chooses to attempt to repair that manhole, the manhole must be retested by means of the hydrostatic test outlined in Section 217.58(b)(1) of the TCEQ's rules, until it passes.

26. Inspection must be provided during critical phases of construction by a qualified inspector under the direction of a P.E. Critical phases of construction are deemed at a minimum to include testing of pipe and manholes for leakage, testing of flexible pipe for installed deflection, and any other as directed by the City. The City and design engineer shall provide inspection as appropriate.

27. TCEQ approval letters for plans and specifications review contain the requirement that once the project is completed, a P.E. registered in the state of Texas must certify that the construction was performed substantially in accordance with the approved plans and specifications. If flexible pipe was installed, a P.E. must also certify that all pipe was subjected to and passed the required deflection test. The design engineer, with concurrence of the City, will certify the installation.

28. The project plans and specifications must ensure that the pipe installation will adhere to the minimum separation distances allowed by 217.53 (d), TCEQ's rules.

    Separation Distances.
    The following rules apply to separation distances between potable water and wastewater treatment plants, and waterlines and sanitary sewers.

    (a) Water line/new sewer line separation. When new sanitary sewers are installed, they shall be installed no closer to waterlines than nine feet in all directions. Sewers that parallel waterlines must be installed in separate trenches. Where the nine foot separation distance cannot be achieved, the following guidelines will apply:
    (b) SDF

    (1) Where a sanitary sewer parallels a waterline, the sewer shall be constructed of cast iron, ductile iron or PVC meeting ASTM specifications with a pressure rating for both the pipe and joints of 150 psi. The vertical separation shall be a minimum of two feet between outside diameters and the horizontal separation shall be a minimum of four feet between outside diameters. The sewer shall be located below the waterline.
    (2) Where a sanitary sewer crosses a waterline and the sewer is constructed of cast iron, ductile iron or PVC with a minimum pressure rating of 150 psi, an absolute minimum distance of 6 inches between outside diameters shall be maintained. In addition the sewer shall be located below the waterline where possible and one length of the sewer pipe must be centered on the waterline.
    (3) Where a sewer crosses under a waterline and the sewer is con- structed of ABS truss pipe, similar semi-rigid plastic composite pipe, clay pipe or concrete pipe with gasketed joints, a minimum two foot separation distance shall be maintained. The initial backfill shall be cement stabilized sand (two or more bags of cement per cubic yard of sand) for all sections of sewer within nine feet of the waterline. This initial backfill shall be from one quarter diameter below the centerline of the pipe to one pipe diameter (but not less than 12 inches) above the top of the pipe.
    (4) Where a sewer crosses over a waterline all portions of the sewer within nine feet of the waterline shall be constructed of cast iron, ductile iron, or PVC pipe with a pressure rating of at least 150 psi using appropriate adapters. In lieu of this procedure the new conveyance may be encased in a joint of 150 psi pressure class pipe at least 18 feet long and two nominal sizes larger than the new conveyance. The space around the carrier pipe shall be supported at 5 feet intervals with spacers or be filled to the springline with washed sand. The encasement pipe should be centered on the crossing and both ends sealed with cement grout or manufactured seal.

    b) Water line/manhole separation. Unless sanitary sewer manholes and the connecting sewer can be made watertight and tested for no leakage, they must be installed so as to provide a minimum of nine feet of horizontal clearance from an existing or proposed waterline. Where the nine foot separation distance cannot be achieved, a carrier pipe as des- cribed in subsection (a)(4) of this section may be used where appropriate.

The separation distance between any unknown water lines which are discovered during the installation phase of the project, and, the gravity sanitary sewer pipe which will be installed, shall be sufficient to comply with the minimum separation distances allowed by 217.53(d) of the TCEQ's rules as stated above.

29. AN EROSION AND SEDIMENTATION CONTROL PLAN is included with these plans. These provisions are intended to control erosion and sedimentation due to runoff during construction. These provisions must be installed prior to any other construction activities.

30. It is the intent of this project that portable ladders be used to access manholes during construction by the Contractor as well as for maintenance purposes after construction is complete by the City.

31. It is the intent of this project that personal gas detectors are required for wear by all personnel whose jobs require entering enclosed spaces (such as manholes and lift stations) capable of accumulations of hydrogen sulfide or other harmful gases. It shall be the responsibility of the Contractor to ensure these detectors are provided to the appropriate personnel during the construction of this project. It shall be the responsibility of the City to ensure these detectors are provided to the appropriate personnel during the maintenance of this project after construction.

WARNING!
There are existing water pipelines, underground telephone cables and other above and below ground utilities in the vicinity of this project. The Contractor shall contact all appropriate companies prior to any construction in the area and determine if any conflicts exist. If so, the Contractor shall immediately contact the Engineer who shall revise the design as necessary.

NO.	REVISION	BY	DATE

CWJ — DESIGNED BY: — 2/1/2025 DATE
CWJ, NIE — DRAWN BY: — 2/15/2025 DATE
CWJ — CHECKED BY: — 2/28/2025 DATE
CWJ — APPROVED BY: — 2/28/2025 DATE

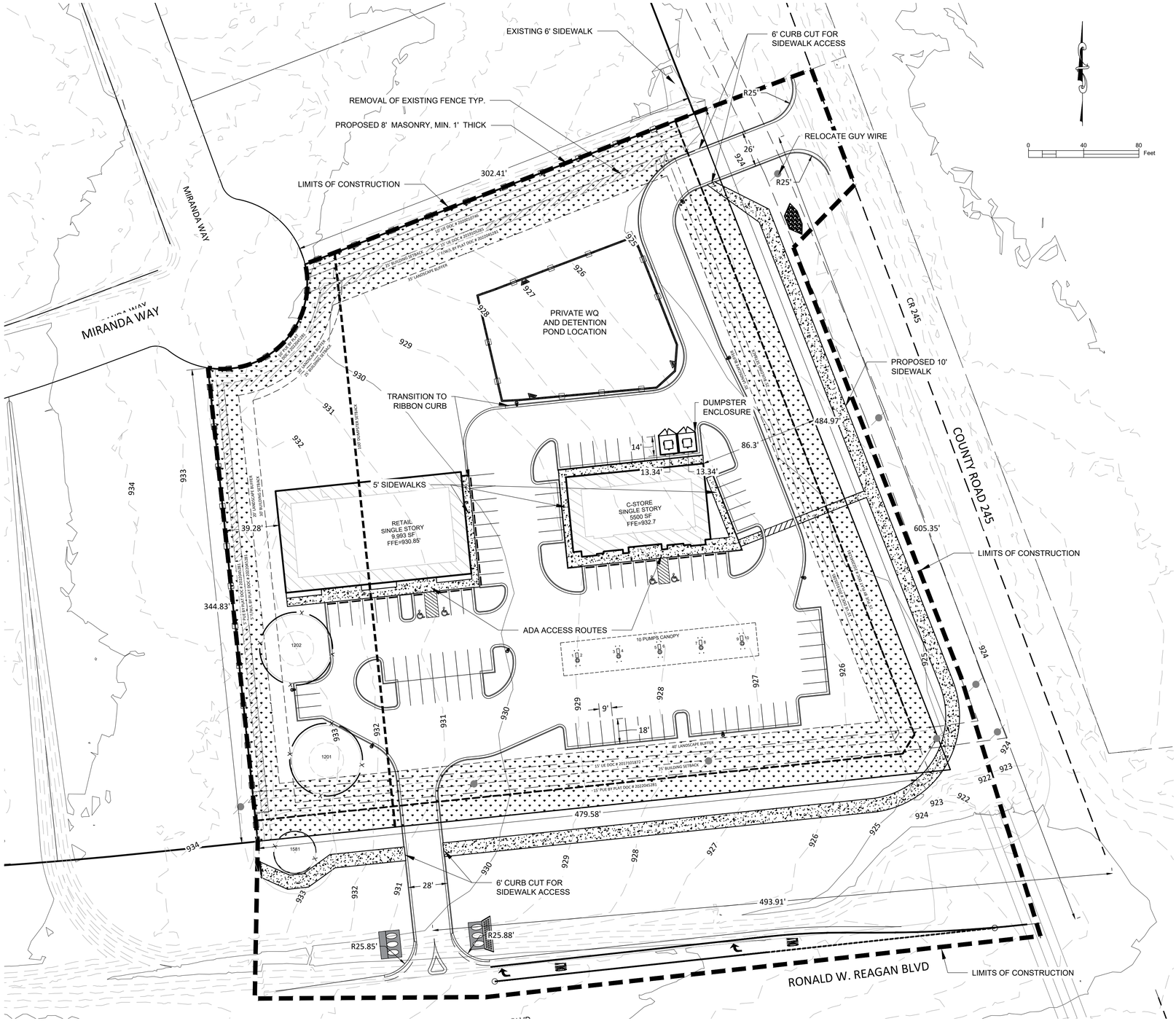
STATE OF TEXAS — CHAD WILLIAM JONES — 144785 — LICENSED PROFESSIONAL ENGINEER — 5/7/25

STEGER BIZZELL
ADDRESS 1978 S. AUSTIN AVENUE GEORGETOWN, TX 78626
METRO 512.930.9412 TEXAS REGISTERED ENGINEERING FIRM F-181 TBPELS FIRM No.10003700 WEB STEGERBIZZELL.COM
SERVICES >>ENGINEERS >>PLANNERS >>SURVEYORS

GENERAL NOTES (2 OF 2)
for
REAGAN 245 GAS STATION
City of Georgetown
Williamson County, Texas

Project No: 23028

SHEET 03 of 25



LEGEND

- PROPERTY BOUNDARY
- EASEMENT BOUNDARY
- 750 EXISTING CONTOURS (MAJOR)
- EXISTING CONTOURS (MINOR)
- 750 PROPOSED CONTOURS (MAJOR)
- PROPOSED CONTOURS (MINOR)

SITE DATA	
SITE AREA (FT^2):	192,565
SITE AREA (ACRES):	4.421
IMPERVIOUS COVERAGE AREA (ACRES):	2.47
MAXIMUM ALLOWABLE IMPERVIOUS COVERAGE (%):	70%
MAXIMUM ALLOWABLE IMPERVIOUS COVERAGE (AC):	3.095
IMPERVIOUS COVERAGE (%):	56%

PARKING DATA

FLOOR AREAS
- C-STORE SINGLE STORY: 5500 FT^2
- RETAIL SINGLE STORY: 9993 FT^2
- SITE GFA: 15,493 FT^2

COG CONSUMER RETAIL REQUIREMENTS
- 1 SPOT / 250 FT^2 GFA FOR FIRST 20,000 FT^2 GFA

REQUIRED PARKING
- (15,493 FT^2) / (250 FT^2) = 62 SPACES
- **PARKING SPACES REQUIRED:** 62 SPACES
- **PARKING SPACES PROPOSED:** 91 SPACES

PARKING RATIO
- 91 SPACES PROPOSED)/(62 SPACES REQUIRED)
- PARKING RATIO = 1.47

NOTES:
1. All lighting fixtures shall be designed to completely conceal and fully shield, within an opaque housing, the light source from visibility from any street right-of-way. The cone of light shall not cross any adjacent property line. The illumination shall not exceed 2 foot candles at a height of three feet at the property line. Only incandescent, fluorescent, color-corrected high-pressure sodium or metal halide may be used. All vehicle or pedestrian access shall be sufficiently lighted to ensure security of property and persons.
2. All roof, wall and ground mounted mechanical equipment must be screened in accordance with Chapter 8 of the UDC. If roof and wall mounted equipment of any type including duct work and large vents is proposed it shall be shown on the Site Plan and screening identified. Screening of mechanical equipment shall result in the mechanical equipment blending in with the primary building and not appearing separate from the building and shall be screened from view of any rights-of-way or adjoining properties.
3. Per Chapter 8, the dumpster enclosures must be one (1) foot above the height of the waste container. Use protective poles in corners and at impact areas. fence posts shall be of rust protected metal or concrete. A minimum 6" slab is required and must be sloped to drain: the enclosure must have steel framed gates with spring loaded hinges and fasteners to keep closed. Screening must be on all four sides by masonry wall or approved fence or screening with opaque gates.

WARNING!
There are existing water pipelines, underground telephone cables and other above and below ground utilities in the vicinity of this project. The Contractor shall contact all appropriate companies prior to any construction in the area and determine if any conflicts exist. If so, the Contractor shall immediately contact the Engineer who shall revise the design as necessary.

NO.	REVISION	BY	DATE

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CWJ, NIE DRAWN BY:	2/15/2025 DATE
CWJ CHECKED BY:	2/28/2025 DATE
CWJ APPROVED BY:	2/28/2025 DATE

STATE OF TEXAS — CHAD WILLIAM JONES — 144785 — LICENSED PROFESSIONAL ENGINEER — 5/7/25

STEGER BIZZELL
ADDRESS 1978 S. AUSTIN AVENUE GEORGETOWN, TX 78626
METRO 512.930.9412 TEXAS REGISTERED ENGINEERING FIRM F-181 TBPELS FIRM No. 10003700 WEB STEGERBIZZELL.COM
SERVICES >>ENGINEERS >>PLANNERS >>SURVEYORS

DIMENSIONAL SITE PLAN
for
REAGAN 245 GAS STATION
City of Georgetown
Williamson County, Texas

Project No: 23028

SHEET 06 *of 25*

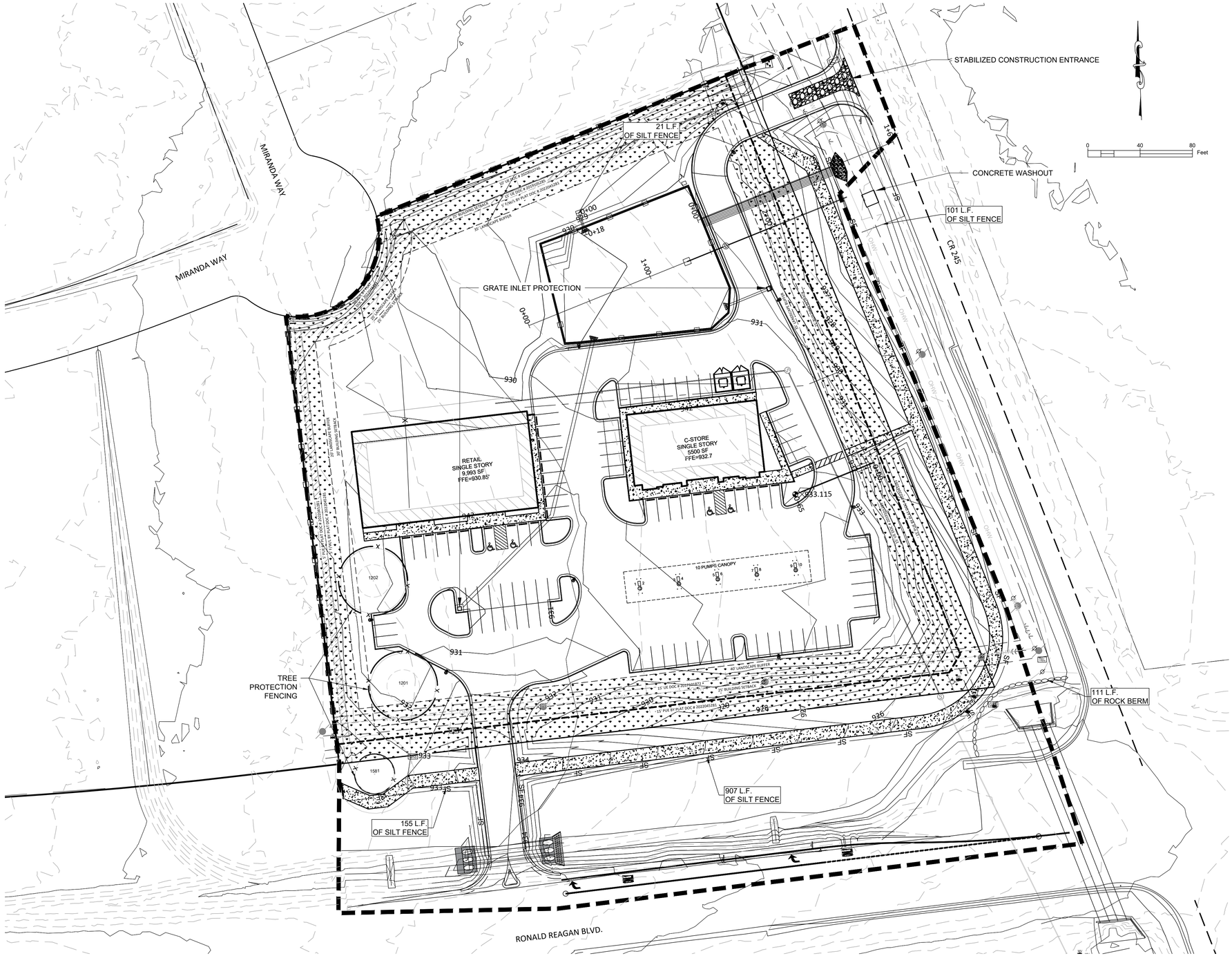
LEGEND

SF — SILT FENCE

ROCK BERM

NOTES:

1. Topography based upon ground-run survey performed June 2023 by Steger & Bizzell Engineering, Inc.
2. All proposed development of this site conforms to the City of Georgetown's subdivision regulations and/or the development agreement.
3. Limits of construction line has been offset for clarity.
4. All temporary erosion and sedimentation controls shall be inspected every 7 days and following every rainfall event.
5. Contractor shall maintain all temporary erosion and sediment controls in accordance with local, state and federal regulations.
6. Contractor shall place rock filter dams at the locations where concentrated flow enters and exits the limits of construction.
7. Contractor shall place construction entrance at the location determined by the owner in the field.
8. Curb inlet protection is required at inlets installed with this project. Protection to remain in place until the project is accepted.
9. Rock berm and temporary pond shall be used during initial grading activities. Straw erosion control logs shall be installed once the site has been brought to grade.



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CWJ — CHECKED BY — 2/28/2025 DATE
CWJ — APPROVED BY: — 2/28/2025 DATE

STATE OF TEXAS — CHAD WILDAW JONES — 144785 — LICENSED PROFESSIONAL ENGINEER — 5/7/25

STEGER BIZZELL
ADDRESS: 1978 S. AUSTIN AVENUE, GEORGETOWN, TX 78626
METRO: 512.930.9412
TEXAS REGISTERED ENGINEERING FIRM F-181
TBPELS FIRM No.10003700
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SERVICES: >>ENGINEERS >>PLANNERS >>SURVEYORS

EROSION & SEDIMENTATION CONTROL PLAN
for
REAGAN 245 GAS STATION
City of Georgetown
Williamson County, Texas

Project No: 23028

SHEET 07 *of 25*

GUIDELINES FOR DESIGN AND INSTALLATION OF TEMPORARY EROSION AND SEDIMENTATION CONTROLS

TYPE OF STRUCTURE	REACH LENGTH	MAXIMUM DRAINAGE AREA	SLOPE
SILT FENCE	N/A	2 ACRES	0 – 10%
	200 FEET	2 ACRES	10 – 20%
	100 FEET	1 ACRE	20 – 30%
	50 FEET	1/2 ACRE	> 30%
TRIANGLE FILTER DIKE	100 FEET	1/2 ACRE	< 30% SLOPE
	50 FEET	1/4 ACRE	> 30% SLOPE
ROCK BERM *, **	500 FEET	< 5 ACRES	0 – 10%

* FOR ROCK BERM DESIGN WHERE PARAMETERS ARE OTHER THAN STATED, DRAINAGE AREA CALCULATIONS AND ROCK BERM DESIGN MUST BE SUBMITTED FOR REVIEW.

** HIGH SERVICE ROCK BERMS MAY BE REQUIRED IN AREAS OF ENVIRONMENTAL SIGNIFICANCE AS DETERMINED BY THE CITY OF GEORGETOWN.

The Architect/Engineer assumes responsibility for appropriate use of this standard.

REVISION NOTE: ADOPTED 6/21/2006

CITY OF GEORGETOWN
CONSTRUCTION STANDARDS AND DETAILS
TEMPORARY EROSION AND SEDIMENTATION CONTROL GUIDELINES

DRAWING NAME: ECO1

SCALE: NTS | DATE: 1/2003
DRAWN BY: MPS | APPROVED BY: TRB

NOTE: THIS SECTION IS INTENDED TO ASSIST THOSE PERSONS PREPARING WATER POLLUTION ABATEMENT PLANS (WPAP) OR STORM WATER POLLUTION PREVENTION PLANS (SW3P) THAT COMPLY WITH FEDERAL, STATE AND/OR LOCAL STORM WATER REGULATIONS.

1. THE CONTRACTOR TO INSTALL AND MAINTAIN EROSION/SEDIMENTATION CONTROLS AND TREE/NATURAL AREA PROTECTIVE FENCING PRIOR TO ANY SITE PREPARATION WORK (CLEARING, GRUBBING, GRADING, OR EXCAVATION). CONTRACTOR TO REMOVE EROSION/SEDIMENTATION CONTROLS AT THE COMPLETION OF PROJECT AND GRASS RESTORATION.
2. ALL PROJECTS WITHIN THE RECHARGE ZONE OF THE EDWARD'S AQUIFER SHALL SUBMIT A BEST MANAGEMENT PRACTICES AND WATER POLLUTION AND ABATEMENT PLAN TO THE TNRCC FOR APPROVAL PRIOR TO ANY CONSTRUCTION.
3. THE PLACEMENT OF EROSION/SEDIMENTATION CONTROLS TO BE IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN AND WATER POLLUTION ABATEMENT PLAN. DEVIATIONS FROM THE APPROVED PLAN MUST BE SUBMITTED TO AND APPROVED BY THE OWNER'S REPRESENTATIVE.
4. ALL PLANTING SHALL BE DONE BETWEEN MAY 1 AND SEPTEMBER 15 EXCEPT AS SPECIFICALLY AUTHORIZED IN WRITING. IF PLANTING IS AUTHORIZED TO BE DONE OUTSIDE THE DATES SPECIFIED, THE SEED SHALL BE PLANTED WITH THE ADDITION OF WINTER FESCUE (KENTUCKY 31) AT A RATE OF 100lb/ACRE. GRASS SHALL BE COMMON BERMUDA GRASS, HULLED, MINIMUM 80% PURE LIVE SEED. ALL GRASS SEED SHALL BE FREE FROM NOXIOUS WEED, GRADE "A" RECENT CROP, RECLEANED AND TREATED WITH APPROPRIATE FUNGICIDE AT TIME OF MIXING. SEED SHALL BE FURNISHED IN SEALED, STANDARD CONTAINERS WITH DEALER'S GUARANTEED ANALYSIS.
5. ALL DISTURBED AREAS TO BE RESTORED AS NOTED IN THE WATER POLLUTION ABATEMENT PLAN.
6. THE PLANTED AREA TO BE IRRIGATED OR SPRINKLED IN A MANNER THAT WILL NOT ERODE THE TOPSOIL, BUT WILL SUFFICIENTLY SOAK THE SOIL TO A DEPTH OF FOUR (4) INCHES. THE IRRIGATION TO OCCUR AT 10-DAY INTERVALS DURING THE FIRST TWO MONTHS TO INSURE GERMINATION AND ESTABLISHMENT OF THE GRASS . RAINFALL OCCURRENCES OF 1/2 INCH OR GREATER TO POSTPONE THE WATERING SCHEDULE ONE WEEK.
7. RESTORATION TO BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST 1-1/2 INCHES HIGH WITH 95% COVERAGE, PROVIDED NO BARE SPOTS LARGER THAN 25 SQUARE FEET EXIST.
8. A MINIMUM OF FOUR (4) INCHES OF TOPSOIL TO BE PLACED IN ALL AREAS DISTURBED BY CONSTRUCTION.
9. THE CONTRACTOR TO HYDROMULCH OR SOD (AS SHOWN ON PLANS) ALL DISTURBED CUTS AND FILLS UPON COMPLETION OF CONSTRUCTION.
10. EROSION AND SEDIMENTATION CONTROLS TO BE INSTALLED OR MAINTAINED IN A MANNER WHICH DOES NOT RESULT IN SOIL BUILDUP WITHIN TREE DRIPLINE.
11. TO AVOID SOIL COMPACTION, CONTRACTOR SHALL NOT ALLOW VEHICULAR TRAFFIC, PARKING, OR STORAGE OF EQUIPMENT OR MATERIALS IN THE TREE DRIPLINE AREAS.
12. WHERE A FENCE IS CLOSER THAN FOUR (4) FEET TO A TREE TRUNK, PROTECT THE TRUNK WITH STRAPPED-ON PLANKING TO A HEIGHT OF EIGHT (8) FEET (OR TO THE LIMITS OF LOWER BRANCHING) IN ADDITION TO THE FENCING.
13. TREES TO BE REMOVED IN A MANNER WHICH DOES NOT IMPACT TREES TO BE PRESERVED.
14. ANY ROOT EXPOSED BY CONSTRUCTION ACTIVITY TO BE PRUNED FLUSH WITH THE SOIL. BACKFILL ROOT AREAS WITH GOOD QUALITY TOPSOIL AS SOON AS POSSIBLE. IF EXPOSED ROOT AREAS ARE NOT BACKFILLED WITHIN TWO DAYS, COVER THEM WITH ORGANIC MATERIAL IN A MANNER WHICH REDUCES SOIL TEMPERATURE AND MINIMIZES WATER LOSS DUE TO EVAPORATION.
15. CONTRACTOR TO PRUNE VEGETATION TO PROVIDE CLEARANCE FOR STRUCTURES, VEHICULAR TRAFFIC, AND EQUIPMENT BEFORE DAMAGE OCCURS (RIPPING OF BRANCHES, ETC.). ALL FINISHED PRUNING TO BE DONE ACCORDING TO RECOGNIZED, APPROVED STANDARDS OF THE INDUSTRY (REFERENCE THE "NATIONAL ARBORIST ASSOCIATION PRUNING STANDARDS FOR SHADE TREES").
16. THE CONTRACTOR IS TO INSPECT THE CONTROLS AT WEEKLY INTERVALS AND AFTER EVERY RAINFALL EXCEEDING 1/4 INCH TO VERIFY THAT THEY HAVE NOT BEEN SIGNIFICANTLY DISTURBED. ANY ACCUMULATED SEDIMENT AFTER A SIGNIFICANT RAINFALL TO BE REMOVED AND PLACED IN THE OWNER DESIGNATED SPOIL DISPOSAL SITE. THE CONTRACTOR TO CONDUCT PERIODIC INSPECTIONS OF ALL EROSION/SEDIMENTATION CONTROLS AND TO MAKE ANY REPAIRS OR MODIFICATIONS NECESSARY TO ASSURE CONTINUED EFFECTIVE OPERATION OF EACH DEVICE.
17. WHERE THERE IS TO BE AN APPROVED GRADE CHANGE, IMPERMEABLE PAVING SURFACE, TREE WELL, OR OTHER SUCH SITE DEVELOPMENT IMMEDIATELY ADJACENT TO A PROTECTED TREE, ERECT THE FENCE APPROXIMATELY TWO TO FOUR FEET (2'-4') BEHIND THE AREA IN QUESTION.
18. NO ABOVE AND/OR BELOW GROUND TEMPORARY FUEL STORAGE FACILITIES TO BE STORED ON THE PROJECT SITE.
19. IF EROSION AND SEDIMENTATION CONTROL SYSTEMS ARE EXISTING FROM PRIOR CONTRACTS, OWNER'S REPRESENTATIVE AND THE CONTRACTOR TO EXAMINE THE EXISTING EROSION AND SEDIMENTATION CONTROL SYSTEMS FOR DAMAGE PRIOR TO CONSTRUCTION. ANY DAMAGE TO PREEXISTING EROSION AND SEDIMENTATION CONTROLS NOTED TO BE REPAIRED AT OWNERS EXPENSE.
20. INTENTIONAL RELEASE OF VEHICLE OR EQUIPMENT FLUIDS ONTO THE GROUND IS NOT ALLOWED. CONTAMINATED SOIL RESULTING FROM ACCIDENTAL SPILL TO BE REMOVED AND DISPOSED OF PROPERLY.

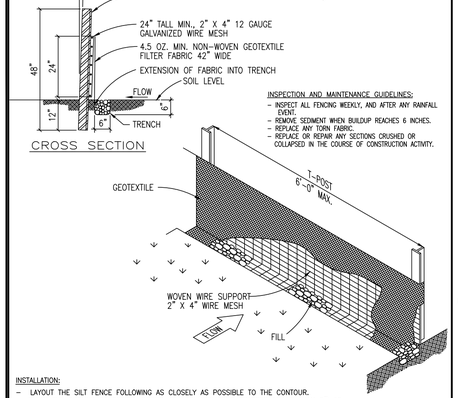
The Architect/Engineer assumes responsibility for appropriate use of this standard.

REVISION NOTE: ADOPTED 6/21/2006

CITY OF GEORGETOWN
CONSTRUCTION STANDARDS AND DETAILS
EROSION AND SEDIMENTATION AND TREE PROTECTION NOTES

DRAWING NAME: ECO1A

SCALE: NTS | DATE: 1/2003
DRAWN BY: MPS | APPROVED BY: TRB



The Architect/Engineer assumes responsibility for appropriate use of this standard.

INSPECTION AND MAINTENANCE GUIDELINES:
- INSPECT ALL FENCING WEEKLY, AND AFTER ANY RAINFALL EVENT.
- REMOVE SEDIMENT WHEN BUILDUP REACHES 6 INCHES.
- REPLACE ANY TORN FABRIC.
- REPLACE OR REPAIR ANY SECTIONS CRUSHED OR COLLAPSED IN THE COURSE OF CONSTRUCTION ACTIVITY.

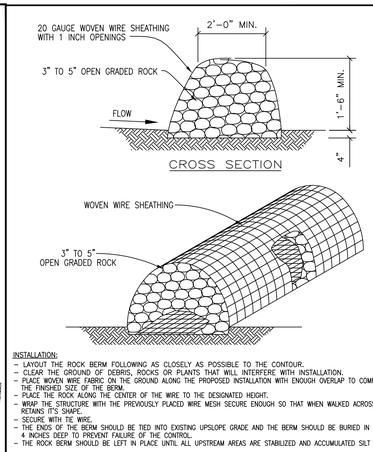
INSTALLATION:
- LAYOUT THE SILT FENCE FOLLOWING AS CLOSELY AS POSSIBLE TO THE CONTOUR.
- CLEAR THE GROUND OF DEBRIS, ROCKS, PLANTS (INCLUDING GRASSES TALLER THAN 2") TO PROVIDE A SMOOTH FLOW APPROACH SURFACE. EXCAVATE 6" DEEP X 6" WIDE TRENCH ON UPSTREAM SIDE OF FACE PER PLANS.
- DRIVE THE HEAVY DUTY T-POST AT LEAST 12 INCHES INTO THE GROUND AND AT A SLIGHT ANGLE TOWARDS THE FLOW.
- ATTACH THE 2" X 4" 12 GAUGE WELDED WIRE MESH TO THE T-POST WITH 11 1/2 GAUGE GALVANIZED T-POST CLIPS. THE TOP OF THE WIRE TO BE 24" ABOVE GROUND LEVEL. THE WELDED WIRE MESH TO BE OVERLAPPED 6" AND TIED AT LEAST 6 TIMES WITH HOG RINGS.
- THE SILT FENCE TO BE INSTALLED WITH A SKIRT A MINIMUM OF 6" WIDE PLACED ON THE UPHILL SIDE OF THE FENCE INSIDE EXCAVATED TRENCH. THE FABRIC TO OVERLAP THE TOP OF THE WIRE BY 1".
- ANCHOR THE SILT FENCE BY BACKFILLING WITH EXCAVATED DIRT AND ROCKS (NOT LARGER THAN 2").
- GEOTEXTILE SPLICES SHOULD BE A MINIMUM OF 18" WIDE ATTACHED IN AT LEAST 6 PLACES. SPLICES IN CONCENTRATED FLOW AREAS WILL NOT BE ACCEPTED.
- SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

REVISION NOTE: ADOPTED 6/21/2006

CITY OF GEORGETOWN
CONSTRUCTION STANDARDS AND DETAILS
SILT FENCE DETAIL

DRAWING NAME: ECO2

SCALE: NTS | DATE: 1/2003
DRAWN BY: MPS | APPROVED BY: TRB



The Architect/Engineer assumes responsibility for appropriate use of this standard.

INSTALLATION:
- LAYOUT THE ROCK BERM FOLLOWING AS CLOSELY AS POSSIBLE TO THE CONTOUR.
- CLEAR THE GROUND OF DEBRIS, ROCKS OR PLANTS THAT WILL INTERFERE WITH INSTALLATION.
- PLACE WOVEN WIRE FABRIC ON THE GROUND ALONG THE PROPOSED INSTALLATION WITH ENOUGH OVERLAP TO COMPLETELY ENCIRCLE THE FINISHED SIZE OF THE BERM.
- PLACE THE ROCK ALONG THE CENTER OF THE WIRE TO THE DESIGNATED HEIGHT.
- WRAP THE STRUCTURE WITH THE PREVIOUSLY PLACED WIRE MESH SECURE ENOUGH SO THAT WHEN WALKED ACROSS THE STRUCTURE RETAINS IT'S SHAPE.
- SECURE WITH TIE WIRE.
- THE ENDS OF THE BERM SHOULD BE TIED INTO EXISTING UPSLOPE GRADE AND THE BERM SHOULD BE BURIED IN A TRENCH APPROX. 4 INCHES DEEP TO PREVENT FAILURE OF THE CONTROL.
- THE ROCK BERM SHOULD BE LEFT IN PLACE UNTIL ALL UPSTREAM AREAS ARE STABILIZED AND ACCUMULATED SILT REMOVED.

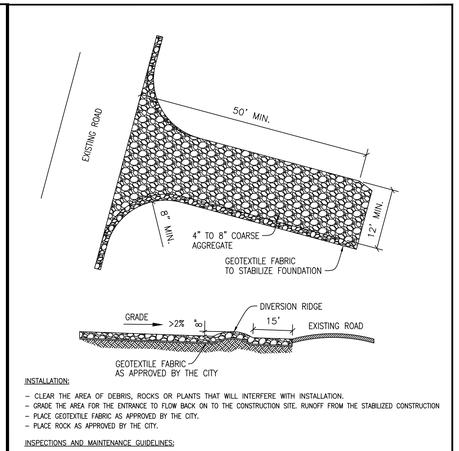
INSPECTION AND MAINTENANCE GUIDELINES:
- INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL EVENT BY THE RESPONSIBLE PARTY. FOR INSTALLATIONS IN STREAMBEDS, ADDITIONAL DAILY INSPECTIONS SHOULD BE MADE.
- REMOVE SEDIMENT AND OTHER DEBRIS WHEN BUILDUP REACHES 6 INCHES AND DISPOSE OF THE ACCUMULATED SILT IN AN APPROVED MANNER.
- REPAIR ANY LOOSE WIRE SHEATHING.
- THE BERM SHOULD BE RESHAPED AS NEEDED DURING INSPECTION.
- THE BERM SHOULD BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.

REVISION NOTE: ADOPTED 6/21/2006

CITY OF GEORGETOWN
CONSTRUCTION STANDARDS AND DETAILS
ROCK BERM DETAIL

DRAWING NAME: ECO3

SCALE: NTS | DATE: 1/2003
DRAWN BY: MPS | APPROVED BY: TRB



The Architect/Engineer assumes responsibility for appropriate use of this standard.

INSTALLATION:
- CLEAR THE AREA OF DEBRIS, ROCKS OR PLANTS THAT WILL INTERFERE WITH INSTALLATION.
- GRADE THE AREA FOR THE ENTRANCE TO FLOW BACK ON TO THE CONSTRUCTION SITE. RUNOFF FROM THE STABILIZED CONSTRUCTION SITE SHALL NOT FLOW ONTO PUBLIC RIGHTS-OF-WAY.
- PLACE GEOTEXTILE FABRIC AS APPROVED BY THE CITY.
- PLACE ROCK AS APPROVED BY THE CITY.

INSPECTIONS AND MAINTENANCE GUIDELINES:
- THE ENTRANCE SHOULD BE MAINTAINED IN A CONDITION, WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
- ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ON TO PUBLIC RIGHTS-OF-WAY SHOULD BE REMOVED IMMEDIATELY BY CONTRACTOR.
- WHEN NECESSARY, WHEELS SHOULD BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY.
- WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
- ALL SEDIMENT SHOULD BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATER COURSE BY USING APPROVED METHODS.

REVISION NOTE: ADOPTED 6/21/2006

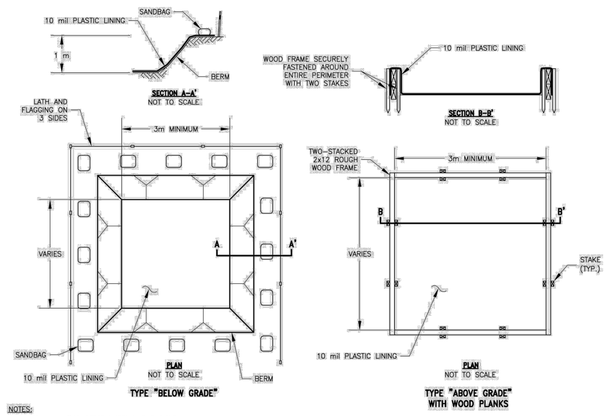
CITY OF GEORGETOWN
CONSTRUCTION STANDARDS AND DETAILS
STABILIZED CONSTRUCTION ENTRANCE

DRAWING NAME: ECO6

SCALE: NTS | DATE: 1/2003
DRAWN BY: MPS | APPROVED BY: TRB

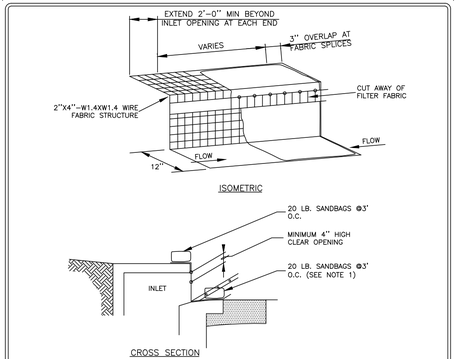
Concrete Waste Management

WM-8



NOTES:
1. ACTUAL LAYOUT DETERMINED IN THE FIELD.
2. THE CONCRETE WASHOUT SIGN (SEE PAGE 6) SHALL BE INSTALLED WITHIN 10 m OF THE TEMPORARY CONCRETE WASHOUT FACILITY.

CONCRETE WASHOUT AREA DETAIL



NOTES:
1. WHERE MINIMUM CLEARANCES CAUSE TRAFFIC TO DRIVE IN THE GUTTER, THE CONTRACTOR MAY SUBSTITUTE A 1" X 4" BOARD SECURED WITH CONCRETE NAILS 3' O.C. NAILED INTO THE GUTTER IN LIEU OF SANDBAGS TO HOLD THE FILTER DIKE IN PLACE. UPON REMOVAL, CLEAN ANY DIRT/DEBRIS FROM NAILING LOCATIONS, APPLY CHEMICAL SANDING AGENT AND APPLY NON–SHRINK GROUT FLUSH WITH SURFACE OF GUTTER.
2. A SECTION OF FILTER FABRIC SHALL BE REMOVED AS SHOWN ON THIS DETAIL OR AS DIRECTED BY THE ENGINEER OR DESIGNATED REPRESENTATIVE. FABRIC MUST BE SECURED TO WIRE BACKING WITH CLIPS OR HOG RINGS AT THIS LOCATION.
3. DAILY INSPECTION SHALL BE MADE BY THE CONTRACTOR AND SILT ACCUMULATION MUST BE REMOVED WHEN DEPTH REACHES 2".
4. CONTRACTOR SHALL MONITOR THE PERFORMANCE OF INLET PROTECTION DURING EACH RAINFALL EVENT AND IMMEDIATELY REMOVE THE INLET PROTECTIONS IF THE STORM–WATER BEGINS TO OVERTOP THE CURB.
5. INLET PROTECTIONS SHALL BE REMOVED AS SOON AS THE SOURCE OF SEDIMENT IS STABILIZED.

THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)

CURB INLET PROTECTION DETAIL

WARNING!
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NO.	REVISION	BY	DATE

CWJ — DESIGNED BY: 2/1/2025 DATE
CWJ, NIE — DRAWN BY: 2/15/2025 DATE
CWJ — CHECKED BY: 2/28/2025 DATE
CWJ — APPROVED BY: 2/28/2025 DATE

STATE OF TEXAS — CHAD WILLIAM JONES — 144785 — LICENSED PROFESSIONAL ENGINEER — 5/7/25

STEGER BIZZELL
ADDRESS: 1978 S. AUSTIN AVENUE, GEORGETOWN, TX 78626
METRO: 512.930.9412 | TEXAS REGISTERED ENGINEERING FIRM F-181, TBPELS FIRM No.10003700 | WEB: STEGERBIZZELL.COM
SERVICES: >>ENGINEERS >>PLANNERS >>SURVEYORS

EROSION & SEDIMENTATION CONTROL DETAILS
for
REAGAN 245 GAS STATION
City of Georgetown
Williamson County, Texas

Project No: 23028

SHEET 08 *of 25*

TIME OF CONCENTRATION CALCULATIONS

	Sheet Flow							*Shallow Concentrated 1*						*Total*	
Drainage Area	Length (ft)	Surface Condition	"n"	U/S Elev	D/S Elev	Slope (%)	T_t	Length (ft)	Surface Condition	U/S Elev	D/S Elev	Slope (%)	T_t	T_c Total (min)	Tlag
EX-1	200	RANGE	0.13	935.56	931.74	1.91%	13.53	370	UNPAVED	931.74	923.67	2.18%	2.59	16.1	9.7
EX-2	200	RANGE	0.13	935.10	932.50	1.30%	15.78	410	UNPAVED	932.50	925.00	1.83%	3.13	18.9	11.3

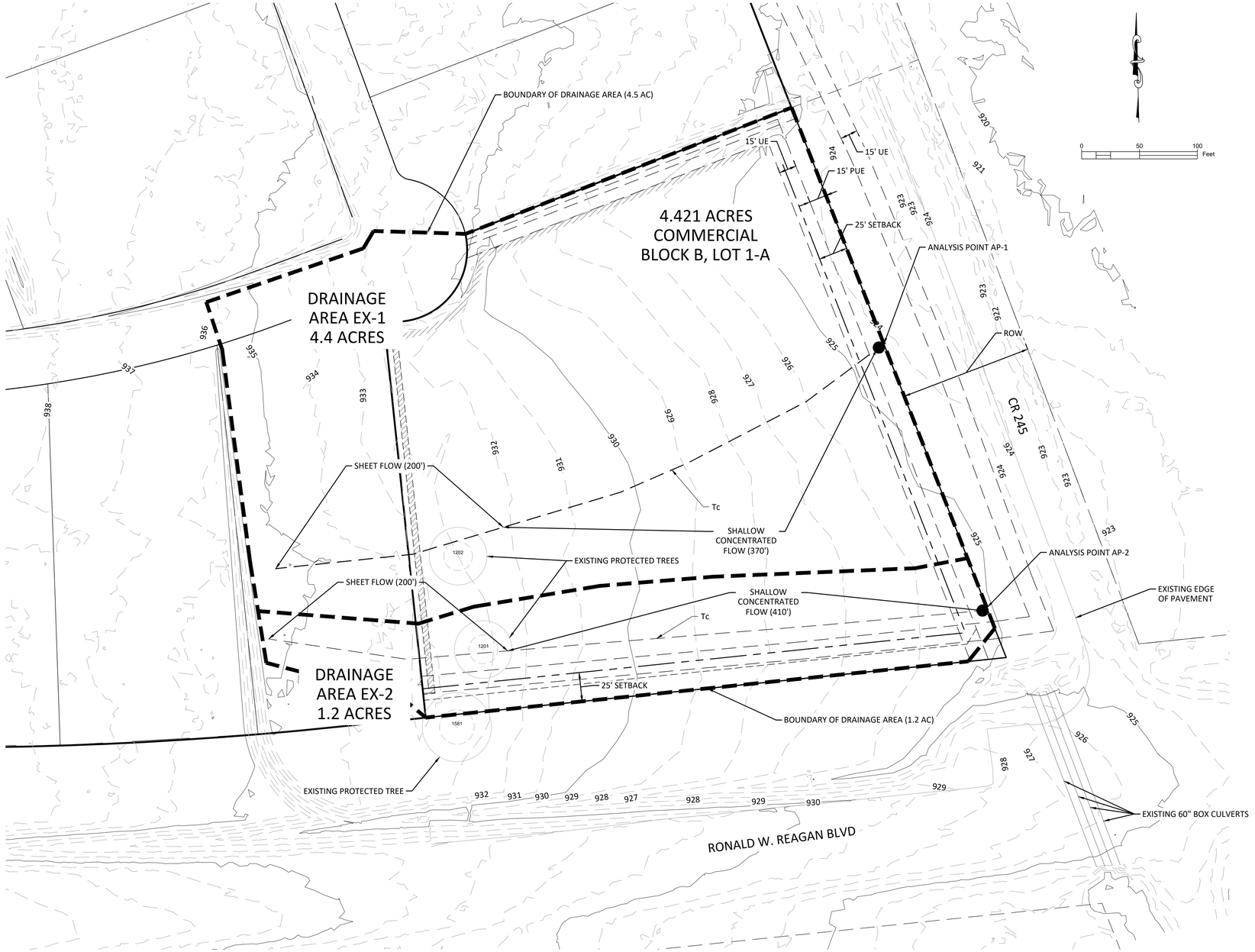
SCS CURVE NUMBER

BASIN	TOTAL AREA			PASTURE & RANGE	ROW PAVEMENT	1-ACRE RESIDENTIAL	COMPOSITE
No.	S.F.	ACRES	SQ. MI.	CN 84 (HSG D)	CN 98 (HSG D)	CN 84 (HSG D)	CN (HSG D)
EX-B1	194,628	4.468	0.0069813	3.346	0.30	0.82	85
EX-B2	52,444	1.204	0.0018812	1.026	0.00	0.18	84

FLOW DATA (CFS)

EXISTING CONDITIONS

BASIN	Q2	Q10	Q25	Q100
EX-1	10.9	19.8	24.7	32.5
EX-2	2.6	4.9	6.2	8.2
Analysis Point	**Q2**	**Q10**	**Q25**	**Q100**
AP-1	10.9	19.8	24.7	32.5
AP-2	2.6	4.9	6.2	8.2



SURVEY NOTE: TOPOGRAPHIC DATA WITHIN THE LOT 1-A PROPERTY WAS OBTAINED BY STEGER BIZZELL ON BETWEEN JUNE 9- JULY 6,2023. TOPOGRAPHIC DATA FOR AREAS OUTSIDE OF LOT 1-A PROPERTY OBTAINED FROM PUBLICLY-AVAILABLE LIDAR DATA.

NO SPRINGS OR STREAM BUFFERS EXIST ON THE SITE.

WARNING!
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SERVICES >>ENGINEERS >>PLANNERS >>SURVEYORS

EXISTING DRAINAGE
for
REAGAN 245 GAS STATION
City of Georgetown
Williamson County, Texas

Project No: 23028

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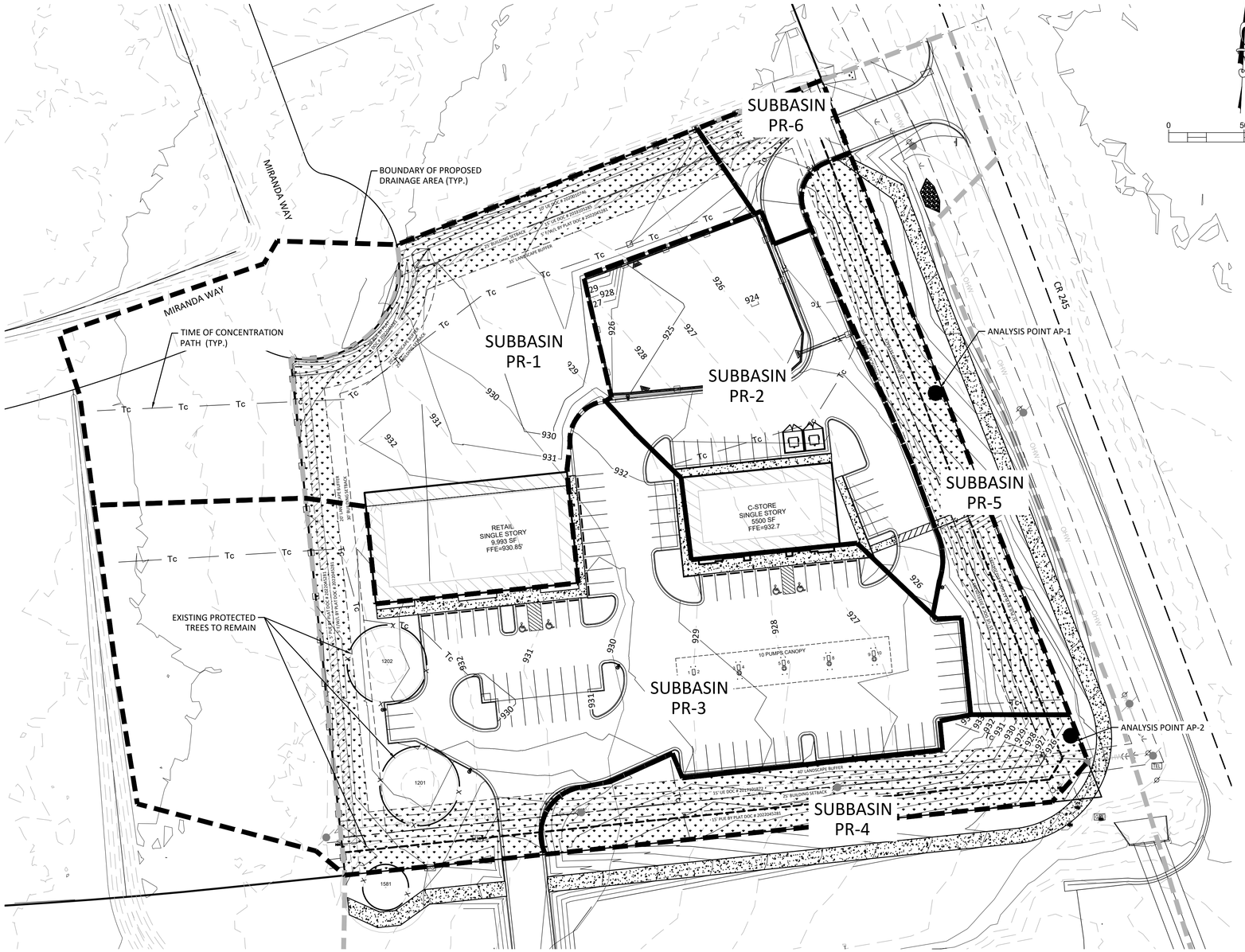
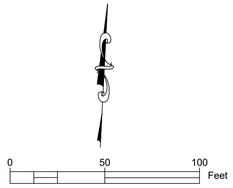
of 25





LEGEND

- PROPERTY BOUNDARY
- EASEMENT BOUNDARY
- 750 EXISTING CONTOURS (MAJOR)
- EXISTING CONTOURS (MINOR)
- 750 PROPOSED CONTOURS (MAJOR)
- PROPOSED CONTOURS (MINOR)
- DRAINAGE BOUNDARY

FLOW DATA (CFS)				
PROPOSED CONDITIONS - WITH DETENTION				
BASIN	Q2	Q10	Q25	Q100
PR-1	5.4	8.9	10.8	13.7
PR-2	3.4	5.2	6.2	7.6
PR-3	8.2	13.0	15.7	19.7
PR-4	1.0	1.9	2.4	3.1
PR-5	1.0	1.9	2.4	3.1
PR-6	0.5	0.8	0.9	1.2
POND	4.6	14.0	17.5	22.0
Analysis Point	Q2	Q10	Q25	Q100
AP-1	6.1	16.7	20.8	26.3
AP-2	1.0	1.9	2.4	3.1

FLOW DATA (CFS)				
CHANGE IN FLOW FROM EXISTING CONDITIONS				
Analysis Point	Q2	Q10	Q25	Q100
AP-1	-4.8	-3.1	-3.9	-6.2
AP-2	-1.6	-3.0	-3.8	-5.1

SCS CURVE NUMBER							
BASIN	TOTAL AREA			OPEN SPACE	IMPERVIOUS COVER	1-ACRE RESIDENTIAL	ROW PAVEMENT	COMPOSITE
No.	S.F.	ACRES	SQ. MI.	CN 84 (HSG D)	CN 98	CN 84 (HSG D)	CN 98 (HSG D)	CN (HSG D)
PR-1	71,009	1.630	0.0025471	0.80	0.23	0.30	0.30	89
PR-2	35,747	0.821	0.0012822	0.30	0.52	0.00	0.00	93
PR-3	101,332	2.326	0.0036348	0.45	1.14	0.74	0.00	91
PR-4	16,727	0.386	0.0006025	0.39	0.00	0.00	0.00	84
PR-5	16,764	0.387	0.0006039	0.39	0.00	0.00	0.00	84
PR-6	5,528	0.127	0.0001983	0.07	0.06	0.00	0.00	91

	Sheet Flow							*Shallow Concentrated 1*						*Shallow Concentrated 1*						*Channel*										*Channel*						*Total*	
Drainage Area	Length (ft)	Surface Condition	"n"	U/S Elev	D/S Elev	Slope (%)	T_t	Length (ft)	Surface Condition	U/S Elev	D/S Elev	Slope (%)	T_t	Length (ft)	Surface Condition	U/S Elev	D/S Elev	Slope (%)	T_t	Length (ft)	A (ft2)	P (ft)	R (ft)	U/S Elev	D/S Elev	S (ft/ft)	n	Velocity (fps)	T_t	Length (ft)	A (ft2)	P (ft)	R (ft)	U/S Elev	D/S Elev	S (ft/ft)	n	Velocity (fps)	T_t	T_c Total (min)	Tlag
PR-1	150	RANGE	0.13	935.20	932.22	1.99%	10.58	391	PAVED	932.22	924.98	1.85%	2.36								2.25	12.30	0.18	932.40	931.00	#DIV/0!	0.013	#DIV/0!			1.77	4.71	0.38	926.00	925.00	#DIV/0!	0.013	#DIV/0!		12.9	7.8
PR-2	100	RANGE	0.13	933.00	931.79	1.21%	9.33	54	PAVED	931.79	929.24	4.72%	0.20							9	1.49	12.30	0.12	929.24	929.08	1.78%	0.013	3.74	0.04	29	1.77	4.71	0.38	925.14	925.00	0.48%	0.013	4.15	0.12	9.7	5.8
PR-3	150	RANGE	0.13	935.26	932.95	1.54%	11.71	88	UNPAVED	932.95	930.93	2.30%	0.60	44	PAVED	931.79	929.24	5.80%	0.15	21	2.25	12.30	0.18	930.02	929.83	0.90%	0.013	3.51	0.10	240	4.91	7.85	0.63	926.22	925.00	0.51%	0.013	5.98	0.67	13.2	7.9
PR-4	54	RANGE	0.13	932.54	929.13	6.31%	2.94	0	PAVED																															6.0	5.9
PR-5	58	RANGE	0.13	933.50	925.36	14.03%	2.26	0	PAVED																															6.0	5.9
PR-6	80	RANGE	0.13	927.17	925.86	1.64%	6.91	0	PAVED																															6.9	5.9

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STATE OF TEXAS — CHAD WILLIAM JONES — 144785 — LICENSED PROFESSIONAL ENGINEER — 5/7/25

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SERVICES >>ENGINEERS >>PLANNERS >>SURVEYORS

PROPOSED DRAINAGE
for
REAGAN 245 GAS STATION
City of Georgetown
Williamson County, Texas

Project No: 23028

SHEET 10 of 25

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: Reagan 245 Gas Station
Date Prepared: 2/5/2025

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 = 85% 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 * =	**4.42**	acres
Predevelopment impervious area within the limits of the plan * =	**0.00**	acres
Total post-development impervious area within the limits of the plan* =	**3.09**	acres
Total post-development impervious cover fraction * =	**0.70**	
P =	**32**	inches
$L_{M\ TOTAL\ PROJECT}$ =	**2693**	lbs.

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

Number of drainage basins / outfalls areas leaving the plan area = **3**

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

Drainage Basin/Outfall Area No. = **Pond**

Total drainage basin/outfall area =	**4.75**	acres
Predevelopment impervious area within drainage basin/outfall area =	**0.00**	acres
Post-development impervious area within drainage basin/outfall area =	**3.16**	acres
Post-development impervious fraction within drainage basin/outfall area =	**0.67**	
$L_{M\ THIS\ BASIN}$ =	**2750**	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = **Batch Detention Basin**
Removal efficiency = **91** percent

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

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

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

A_C =	**4.75**	acres
A_I =	**3.16**	acres
A_P =	**1.59**	acres
L_R =	**3209**	lbs

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

Desired $L_{M\ THIS\ BASIN}$ =	**2750**	lbs.
F =	**0.86**	

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

Rainfall Depth =	**1.38**	inches
Post Development Runoff Coefficient =	**0.47**	
On-site Water Quality Volume =	**11253**	cubic feet

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

Off-site area draining to BMP =	**1.25**	acres
Off-site Impervious cover draining to BMP =	**0.00**	acres
Impervious fraction of off-site area =	**0.00**	
Off-site Runoff Coefficient =	**0.02**	
Off-site Water Quality Volume =	**125**	cubic feet
Storage for Sediment =	**2276**	
Total Capture Volume (required water quality volume(s) x 1.20) =	**13654**	cubic feet

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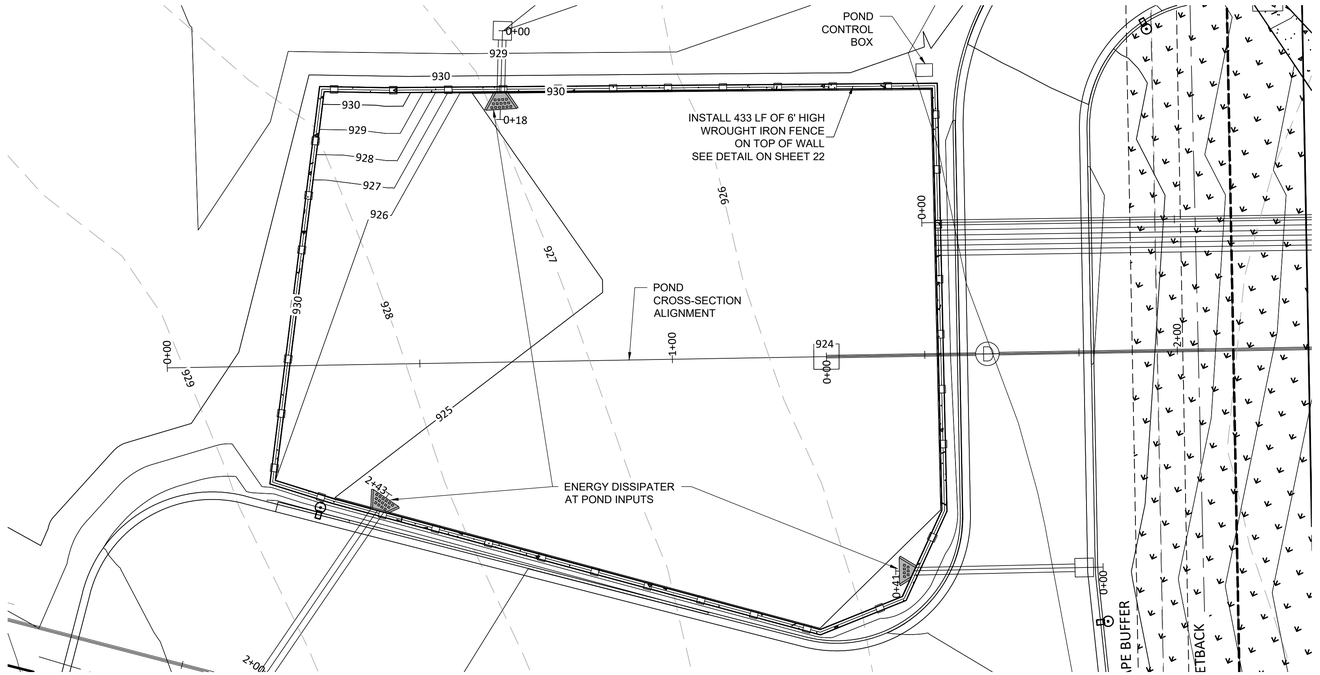
TCEQ WATER QUALITY CALCULATIONS
for
REAGAN 245 GAS STATION
City of Georgetown
Williamson County, Texas

Project No: 23028

SHEET
11
of 25



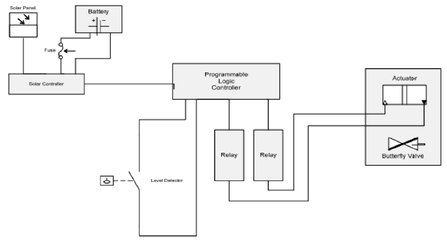
LEGEND

- PROPERTY BOUNDARY
- EASEMENT BOUNDARY
- 750 EXISTING CONTOURS (MAJOR)
- EXISTING CONTOURS (MINOR)
- 750 PROPOSED CONTOURS (MAJOR)
- PROPOSED CONTOURS (MINOR)

BATCH POND CONTROLLER NOTES:

1. SUBMITTALS - THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH BATCH POND CONTROLLER SUBMITTALS FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. SUBMITTALS SHALL INCLUDE: POWER SOURCE, BATTERY BACKUP, LOGIC CONTROLLER, LOCKABLE PARTS ENCLOSURE, FLOAT, VALVE, ACTUATOR, RELAY, ALARM SYSTEM, SIGNAGE, ETC. TOTAL WATTAGE OF POWER CONSUMPTION AND W-HOURS OF ACTUATOR, CONTROLLER AND RELAY SHALL BE PROVIDED. A COPY OF THE APPROVED SUBMITTALS SHALL BE PROVIDED TO TCEQ WITH THE ENGINEERS CERTIFICATION OF PROJECT COMPLETION FOR INCLUSION IN THE TCEQ PROJECT FILE .
2. CONTROLLER - THE CONTROLLER CONSISTS OF A LEVEL SENSOR IN THE DETENTION BASIN, A VALVE (WITH A DEFAULT CLOSED POSITION), AN ACTUATOR, AND THE ASSOCIATED CONTROL. THE CONTROLLER DETECTS WATER FILLING THE BASIN FROM THE LEVEL SENSOR AND INITIATES A 12-HOUR DETENTION TIME. AT THE END OF THE REQUIRED DETENTION TIME, THE CONTROLLER OPENS THE VALVE AND DRAINS INTO THE SECOND BASIN. SUBSEQUENT RAINFALL EVENTS THAT OCCUR PRIOR TO THE BASIN DRAINING SHOULD CAUSE THE VALVE TO REMAIN OPEN AND ALLOW THE ADDITIONAL STORMWATER RUNOFF TO PASS THROUGH THE BASIN. ONCE THE BASIN IS DRAINED THE CONTROLLER CLOSES THE VALVE. THE DRAWDOWN TIME OF THE BASIN SHOULD NOT EXCEED 48 HOURS FOR A SINGLE STORM EVENT AFTER THE 12 HOUR REQUIRED DETENTION TIME. ALL CABLES SHOULD BE PROTECTED BY CONDUIT AND BURIED TO PREVENT DAMAGE DURING MAINTENANCE ACTIVITIES. INFORMATION ON THE DESIGN AND CONFIGURATION OF AN EXISTING SYSTEM, INCLUDING THE SYSTEM SCHEMATIC, CAN BE VIEWED AT THE AUSTIN OR SAN ANTONIO REGIONAL OFFICES.
3. LOGIC CONTROLLER – THE CONTROLLER SHOULD BE PROGRAMMED TO BEGIN DRAINING STORMWATER RUNOFF FROM THE BASIN 12 HOURS AFTER THE FIRST STORMWATER RUNOFF IS SENSED. THE SYSTEM SHOULD BE PROGRAMMED TO HAVE THE VALVE REMAIN OPEN FOR TWO HOURS AFTER THE LEVEL SENSOR INDICATES THE BASIN IS EMPTY TO ALLOW ANY REMAINING SHALLOW WATER TO BE DISCHARGED. THE SYSTEM SHOULD PROVIDE THE FOLLOWING: A TEST SEQUENCE, BE ABLE TO DEAL WITH LOW BATTERY/POWER OUTAGES, AN ON/OFF/RESET SWITCH, MANUAL OPEN/CLOSE SWITCHES (MAINTENANCE/SPILL), CLEARLY VISIBLE EXTERNAL INDICATOR TO INDICATE A CYCLE IS IN PROGRESS WITHOUT OPENING THE BOX, AND ABILITY TO EXERCISE THE VALVE TO PREVENT SEIZING.
4. POWER – THE POND CONTROL SYSTEM CONTROLLER AND ACTUATOR SHALL BE 120 VOLT POWDERED OR 120 VOLT SOLAR POWERED WITH BACKUP BATTERY POWER TO RESPOND TO A LOSS OF POWER IN THE MIDDLE OF A CYCLE.
5. PARTS ENCLOSURE & ALARM SYSTEM - THE PARTS ENCLOSURE SHALL BE LOCKABLE. AN ALARM SYSTEM CLEARLY VISIBLE TO INDICATE SYSTEM MALFUNCTION, WITH PHONE NUMBERS OF THE OWNER AND TCEQ REGION 11 OFFICE SHALL BE PROVIDED.
6. TEMPERATURE/WEATHER - THE SYSTEM SHALL BE BE CAPABLE OF OPERATION FROM 0 TO 130 DEGREES FAHRENHEIT AND FROM 10 TO 90% HUMIDITY.
7. RELIABILITY - THE SYSTEM SHALL HAVE A MINIMUM RELIABILITY OF 40,000 HOURS (4.6 YEARS).

CONTROLLER CIRCUIT BOX DIAGRAM



ATTACHMENT E

BATCH DETENTION POND STAGE-STORAGE DATA

PROPOSED BATCH DETENTION LOT 1-A VOLUME SUMMARY

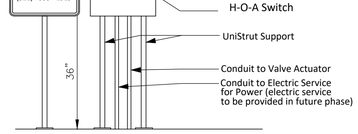
ELEVATION (Ft.)	AREA (Sq. Ft.)	AVERAGE AREA (Sq. Ft.)	INC. ELEV. (Ft.)	INC. VOLUME (Cu.-Ft.)	TOTAL VOL. (Cu. Ft.)	TOTAL VOL. (Ac.- Ft.)
924	25				0	0.000000
		5432.5	1	5432.5		
925	10840				5433	0.124713
		11360	1	11360		
926	11880				16793	0.385503
		11881.5	4	47526		
930	11883				64319	1.476550

STORM	POND OUTFLOW	POND OUTFLOW VELOCITY (FT/S)
2-YEAR	4.6	1.5
10-YEAR	14.0	4.5
25-YEAR	17.5	5.6
100-YEAR	22.0	7.0

Perforated Riser Pipes			
Riser Pipe Ø	Vert. Spacing Between Rows O.C.	No. Perforations Per Row	Diameter of Perforations
6"	4"	4	1"

SEDIMENTATION RISER PIPE

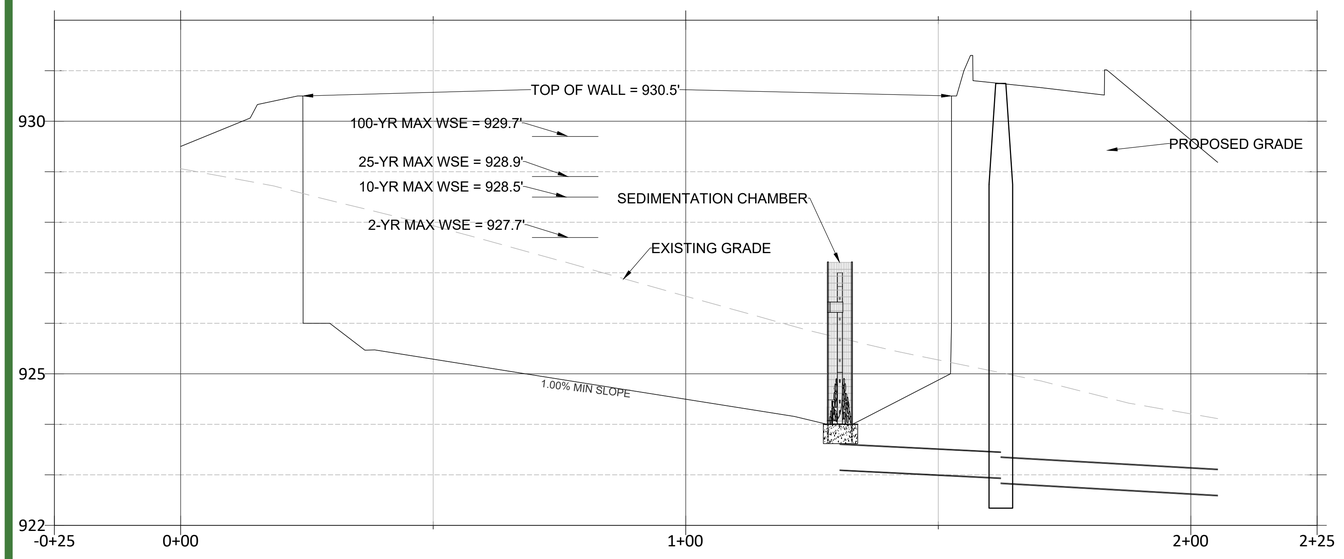
NTS

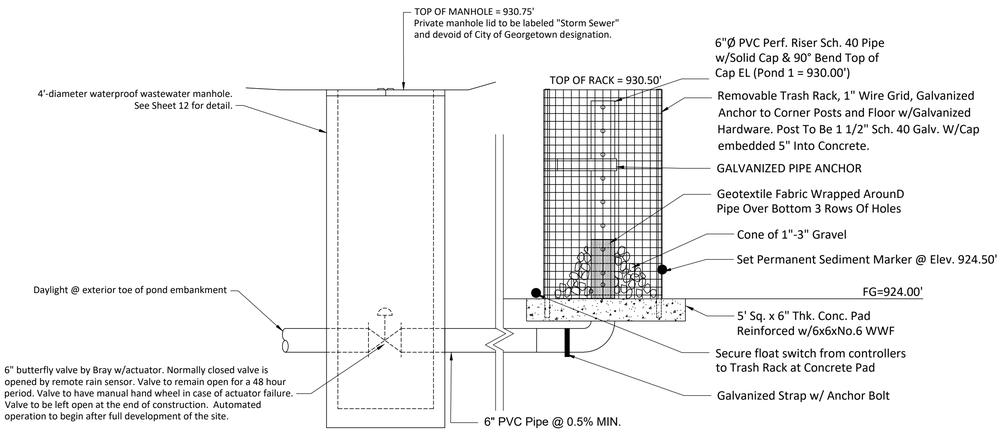


CONTROL / ALARM

NTS

POND X-SECT





WARNING!
There are existing water pipelines, underground telephone cables and other above and below ground utilities in the vicinity of this project. The Contractor shall contact all appropriate companies prior to any construction in the area and determine if any conflicts exist. If so, the Contractor shall immediately contact the Engineer who shall revise the design as necessary.

NO.	REVISION	BY	DATE

CWJ — DESIGNED BY: — 2/1/2025 DATE
CWJ, NIE — DRAWN BY: — 2/15/2025 DATE
CWJ — CHECKED BY: — 2/28/2025 DATE
CWJ — APPROVED BY: — 2/28/2025 DATE

STATE OF TEXAS — CHAD WILLIAM JONES — 144785 — LICENSED PROFESSIONAL ENGINEER — 5/7/25

STEGER BIZZELL

ADDRESS: 1978 S. AUSTIN AVENUE, GEORGETOWN, TX 78626
METRO: 512.930.9412 | TEXAS REGISTERED ENGINEERING FIRM F-181 TBPELS FIRM No.10003700 | WEB: STEGERBIZZELL.COM
SERVICES: >>ENGINEERS >>PLANNERS >>SURVEYORS

WATER QUALITY POND PLAN
for
REAGAN 245 GAS STATION
City of Georgetown
Williamson County, Texas

Project No: 23028

SHEET 12 of 25

LEGEND

- PROPERTY BOUNDARY
- EASEMENT BOUNDARY
- 750 EXISTING CONTOURS (MAJOR)
- EXISTING CONTOURS (MINOR)
- 750 PROPOSED CONTOURS (MAJOR)
- PROPOSED CONTOURS (MINOR)

WARNING!
There are existing water pipelines, underground telephone cables and other above and below ground utilities in the vicinity of this project. The Contractor shall contact all appropriate companies prior to any construction in the area and determine if any conflicts exist. If so, the Contractor shall immediately contact the Engineer who shall revise the design as necessary.

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STATE OF TEXAS
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144785
LICENSED PROFESSIONAL ENGINEER
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GRADING AND PAVING PLAN
for
REAGAN 245 GAS STATION
City of Georgetown
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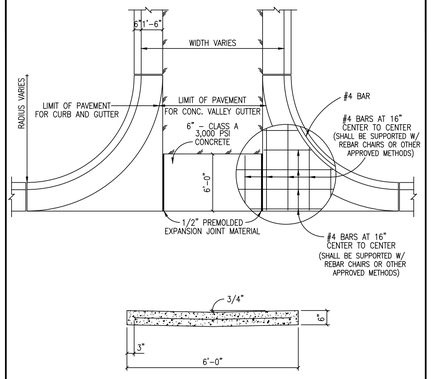
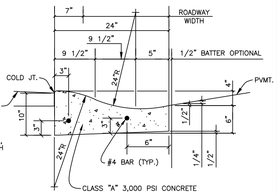
SHEET 20 *of 25*

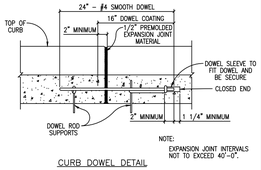




MOUNTABLE CURB

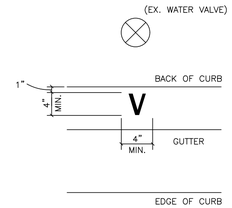
NOTES:

1. ALL WORK AND MATERIAL SHALL CONFORM TO ASTM A615, A615M, C309, AND D1752. BROOM FINISH EXPOSED SURFACE.
2. CONTRACTION JOINT SPACING 10' MAX.
3. EXPANSION JOINTS AS PER STD. ASTM D-1752.
4. 1/2" EXPANSION JOINT MATERIAL SHALL BE PROVIDED WHERE CURB IS ADJACENT TO SIDEWALK OR RIP-RAP.
5. TRANSITIONS BETWEEN CURBS OR DIFFERING CROSS SECTIONS SHALL OCCUR OVER A 20 FOOT LENGTH AS APPROVED BY THE ENGINEER OR TH CITY OF GEORGETOWN.
6. ALL CONCRETE SHALL BE CLASS A, 3000 PSI.
7. ALL SURFACES THAT ARE CHIPPED OR OTHERWISE DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED.
8. ONE OF THE FOLLOWING SCHEMES OF REINFORCEMENT SHALL BE REQUIRED. THE MANNER OF PLACEMENT AND LOCATION SHALL BE TO THE SATISFACTION OF THE ENGINEER OR THE CITY OF GEORGETOWN.
   A. CURB AND GUTTER (REINFORCED) SHALL HAVE LONGITUDINAL REINFORCING BARS AS FOLLOWS: THREE #4.
   B. ALL TYPES OF CURB (REINFORCED) SHALL HAVE #4 BAR FOR LONGITUDINAL REINFORCEMENT.
9. REINFORCING BARS SHALL BE LAPPED A MINIMUM OF 15 INCH.
10. REINFORCING BARS SHALL BE SUPPORTED WITH REBAR CHAIRS OR OTHER APPROVED METHODS.
11. REBAR SUPPORTS ARE NOT REQUIRED ON MACHINE PLACED CURB PROVIDED THAT REBAR IS PROPERLY GUIDED INTO THE CURB SECTION.



CURB DOWEL DETAIL

The Architect/Engineer assumes responsibility for appropriate use of this standard.



PLAN VIEW
(TYPICAL)

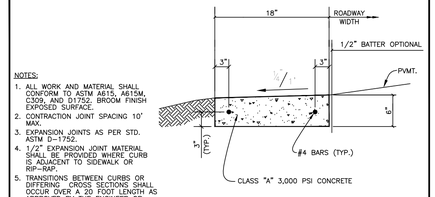
NOTES:

1. ALL WATER SERVICE, WASTE WATER SERVICE AND VALVE LOCATIONS SHALL BE APPROXIMATLEY MARKED AS FOLLOWS:

WATER SERVICE	"W"	TOP OF CURB
WASTE WATER SERVICE	"S"	TOP OF CURB
VALVE	"V"	TOP OF CURB

2. LETTERS SHALL HAVE A 1/2" MAX. WIDTH.

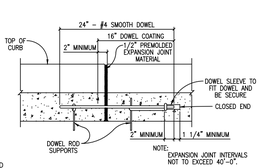
The Architect/Engineer assumes responsibility for appropriate use of this standard.



RIBBON CURB

NOTES:

1. ALL WORK AND MATERIAL SHALL CONFORM TO ASTM A615, A615M, C309, AND D1752. BROOM FINISH EXPOSED SURFACE.
2. CONTRACTION JOINT SPACING 10' MAX.
3. EXPANSION JOINTS AS PER STD. ASTM D-1752.
4. 1/2" EXPANSION JOINT MATERIAL SHALL BE PROVIDED WHERE CURB IS ADJACENT TO SIDEWALK OR RIP-RAP.
5. TRANSITIONS BETWEEN CURBS OR DIFFERING CROSS SECTIONS SHALL OCCUR OVER A 20 FOOT LENGTH AS APPROVED BY THE ENGINEER OR TH CITY OF GEORGETOWN.
6. ALL CONCRETE SHALL BE CLASS A, 3000 PSI.
7. ALL SURFACES THAT ARE CHIPPED OR OTHERWISE DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED.
8. ONE OF THE FOLLOWING SCHEMES OF REINFORCEMENT SHALL BE REQUIRED. THE MANNER OF PLACEMENT AND LOCATION SHALL BE TO THE SATISFACTION OF THE ENGINEER OR THE CITY OF GEORGETOWN.
   A. CURB AND GUTTER (REINFORCED) SHALL HAVE LONGITUDINAL REINFORCING BARS AS FOLLOWS: THREE #4.
   B. ALL TYPES OF CURB (REINFORCED) SHALL HAVE #4 BAR FOR LONGITUDINAL REINFORCEMENT.
9. REINFORCING BARS SHALL BE LAPPED A MINIMUM OF 15 INCH.
10. REINFORCING BARS SHALL BE SUPPORTED WITH REBAR CHAIRS OR OTHER APPROVED METHODS.
11. REBAR SUPPORTS ARE NOT REQUIRED ON MACHINE PLACED CURB PROVIDED THAT REBAR IS PROPERLY GUIDED INTO THE CURB SECTION.



CURB DOWEL DETAIL

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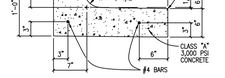
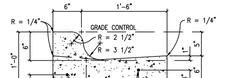
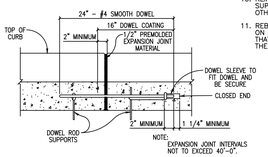


SPILL CURB



CATCH AND LAYDOWN CURB



CURB DOWEL DETAIL

NOTES:

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2. CONTRACTION JOINT SPACING 10' MAX.
3. EXPANSION JOINTS AS PER STD. ASTM D-1752.
4. 1/2" EXPANSION JOINT MATERIAL SHALL BE PROVIDED WHERE CURB IS ADJACENT TO SIDEWALK OR RIP-RAP.
5. TRANSITIONS BETWEEN CURBS OR DIFFERING CROSS SECTIONS SHALL OCCUR OVER A 20 FOOT LENGTH AS APPROVED BY THE ENGINEER OR THE CITY OF GEORGETOWN.
6. ALL CONCRETE SHALL BE CLASS A, 3000 PSI.
7. ALL SURFACES THAT ARE CHIPPED OR OTHERWISE DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED.
8. THE FOLLOWING SCHEME OF REINFORCEMENT SHALL BE REQUIRED. THE MANNER OF PLACEMENT AND LOCATION SHALL BE TO THE SATISFACTION OF THE ENGINEER OR THE CITY OF GEORGETOWN.
   A. ALL CURB AND CURB AND GUTTER (REINFORCED) SHALL HAVE TWO #4 LONGITUDINAL REINFORCING BARS.
9. REINFORCING BARS SHALL BE LAPPED A MINIMUM OF 15 INCH.
10. REINFORCING BARS SHALL BE SUPPORTED WITH REBAR CHAIRS OR OTHER APPROVED METHODS.
11. REBAR SUPPORTS ARE NOT REQUIRED ON MACHINE PLACED CURB PROVIDED THAT REBAR IS PROPERLY GUIDED INTO THE CURB SECTION.

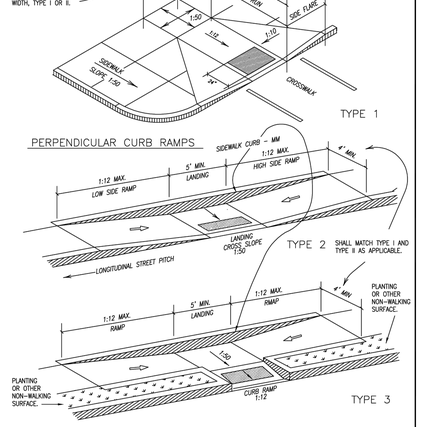
The Architect/Engineer assumes responsibility for appropriate use of this standard.

The Architect/Engineer assumes responsibility for appropriate use of this standard.

NOTES:

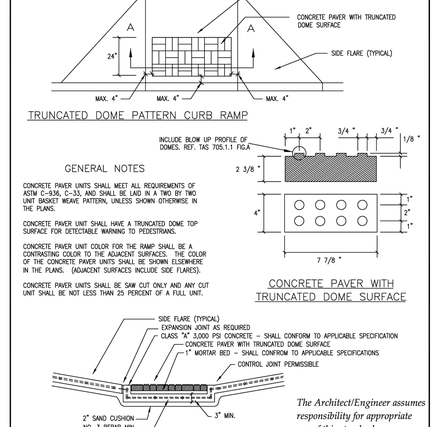
1. COMMERCIAL SIDEWALKS WIDTHS = 6'
   RESIDENTIAL SIDEWALKS WIDTHS = 5'
2. ALL SLOPES ARE MAXIMUM ALLOWABLE. FLATTER SLOPES THAT WILL STILL DRAIN PROPERLY ARE ENCOURAGED.
3. ALL CONCRETE SURFACES SHALL RECEIVE A LIGHT BROOM FINISH UNLESS NOTED OTHERWISE IN THE PLANS.
4. FOR PURPOSES OF WARNING, THE CURB RAMPS SHALL HAVE A LIGHT REFLECTIVE VALUE AND TEXTURE THAT SIGNIFICANTLY CONTRASTS WITH THAT OF ADJOINING PEDESTRIAN ROUTES.
5. TEXTURES MAY CONSIST OF PAVERS WITH TRUNCATED DOMED SURFACES. TEXTURES ARE REQUIRED TO BE DETECTABLE UNDERFOOT. SURFACES THAT WOULD ALLOW WATER TO ACCUMULATE ARE PROHIBITED.
6. COLOR CONTRAST, FOR EXAMPLE, MAY BE ACCOMPLISHED WITH COLORED CONCRETE PAVERS THAT HAVE TRUNCATED DOMES WHICH WOULD PROVIDE A CONTRAST WITH TYPICALLY LIGHT COLORED CONCRETE.
7. ADDITIONAL INFORMATION ON CURB RAMP LOCATION, DESIGN, VISIBILITY AND TEXTURE MAY BE FOUND IN THE CURRENT EDITION OF THE TEXAS ACCESSIBILITY STANDARDS (TAS) PREPARED AND ADMINISTERED BY THE TEXAS DEPARTMENT OF LICENSING AND REGULATION (TDLR).
8. RAISED MEDIANS SEPARATE OPPOSING DIRECTIONS OF TRAFFIC AND PROVIDE A REFUGE AREA FOR PEDESTRIANS IF THEY ARE UNABLE TO CROSS THE ENTIRE ROADWAY IN THE ALLOTTED SIGNAL PHASE. MEDIAN CROSSING SHALL BE A MINIMUM OF 5' WIDE. MEDIANS SHOULD BE DESIGNED TO PROVIDE ACCESSIBLE PASSAGE OVER OR TROUGH THEM.
9. ALL SIDEWALK PLANS AND DETAILS SHALL BE SUBMITTED AND APPROVED BY "REGISTERED ACCESSIBILITY SPECIALIST" (RAS).
10. ANY PART OF THE ACCESSIBLE ROUTE WITH A SLOPE GRATER THAN 1:20 (5%) SHALL BE CONSIDERED A RAMP. IF A RAMP HAS A RISE GREATER THAN 6 INCHES OR A HORIZONTAL PROJECTION GREATER THAN 72 INCHES, THEN IT SHALL MEET THE REQUIREMENTS OF A RAMP PER TAS 405.THE ONLY EXCEPTION IS AT CURB RAMPS. HANDRAILS ARE NOT REQUIRED ON CURB RAMPS. CURB RAMPS SHALL BE PROVIDED WHERE EVER AN ACCESSIBLE ROUTE CROSSES (PENETRATES) A CURB.
11. TRAFFIC SIGNAL OR ILLUMINATION POLES, GROUND BOXES, CONTROLLER BOXES, SIGNS, DRAINAGE FACILITIES AND OTHER ITEMS SHALL BE PLACED SO NOT TO OBSTRUCT THE ACCESSIBLE ROUTE OR ACT PROTRUDING OBJECTS.
12. ALL SIDEWALKS SHALL BE DOWELED INTO EXISTING SIDEWALKS, DRIVEWALKS, DRIVEWAYS, INLET BOXES, RETAINING WALLS, ETC.
13. ALL SIDEWALK CROSS-SLOPES SHALL NOT EXCEED 1:50, UNLESS A VARIANCE IS PROVIDED BY TDLR.

(PENETRATES) A CURB.



The Architect/Engineer assumes responsibility for appropriate use of this standard.

PARALLEL CURB RAMPS



TRUNCATED DOME PATTERN CURB RAMP

GENERAL NOTES

CONCRETE PAVER UNITS SHALL MEET ALL REQUIREMENTS OF ASTM C-936, C-33, AND SHALL BE LAID IN A TWO BY TWO UNIT BASKET WEAVE PATTERN, UNLESS SHOWN OTHERWISE IN THE PLANS.

CONCRETE PAVER UNIT SHALL HAVE A TRUNCATED DOME TOP SURFACE FOR DETECTABLE WARNING TO PEDESTRIANS.

CONCRETE PAVER UNIT COLOR FOR THE RAMP SHALL BE A CONTRASTING COLOR TO THE ADJACENT SURFACES. THE COLOR OF THE CONCRETE PAVER UNITS SHALL BE SHOWN ELSEWHERE IN THE PLANS. (ADJACENT SURFACES INCLUDE SIDE FLARES).

CONCRETE PAVER UNITS SHALL BE SAW CUT ONLY AND ANY CUT UNIT SHALL BE NOT LESS THAN 25 PERCENT OF A FULL UNIT.

CONCRETE PAVER WITH TRUNCATED DOME SURFACE

SECTION A-A

The Architect/Engineer assumes responsibility for appropriate use of this standard.

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	SD03
CONCRETE VALLEY GUTTER DETAIL	
ADOPTED 6/21/2006	
SCALE: NTS	DATE: 1/2003
DRAWN BY: MRS	CHKD BY: TRB

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	SD07
MOUNTABLE CURB AND GUTTER DETAILS	
ADOPTED 6/21/2006	
SCALE: NTS	DATE: 1/2003
DRAWN BY: MRS	CHKD BY: TRB

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	SD05
CURB STAMP DETAIL	
ADOPTED 6/21/2006	
SCALE: NTS	DATE: 1/2003
DRAWN BY: MRS	CHKD BY: TRB

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	SD08
RIBBON CURB DETAILS	
ADOPTED 6/21/2006	
SCALE: NTS	DATE: 1/2003
DRAWN BY: MRS	CHKD BY: TRB

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	SD06
CURB AND GUTTER DETAILS	
ADOPTED 6/21/2006	
SCALE: NTS	DATE: 1/2003
DRAWN BY: MRS	CHKD BY: TRB

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	SD28
PEDESTRIAN RAMPS GENERAL NOTES	
REVISED 6/25/2015 WBD ADOPTED 6/21/2006 TRB	
SCALE: NTS	DATE: 1/2003
DRAWN BY: MRS	CHKD BY: TRB

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	SD31
SIDEWALK RAMP DETAILS TYPE 1-3	
REVISED 6/30/2015 WBD ADOPTED 6/21/2006 TRB	
SCALE: NTS	DATE: 1/2003
DRAWN BY: MRS	CHKD BY: TRB

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS	SD37
CURB RAMP TEXTURES TYPE A	
REVISED 7/7/2015 WBD REVISED 3/14/2014 WBD ADOPTED 6/21/2006 TRB	
SCALE: NTS	DATE: 1/2003
DRAWN BY: MRS/AP	CHKD BY: TRB

WARNING!
There are existing water pipelines, underground telephone cables and other above and below ground utilities in the vicinity of this project. The Contractor shall contact all appropriate companies prior to any construction in the area and determine if any conflicts exist. If so, the Contractor shall immediately contact the Engineer who shall revise the design as necessary.

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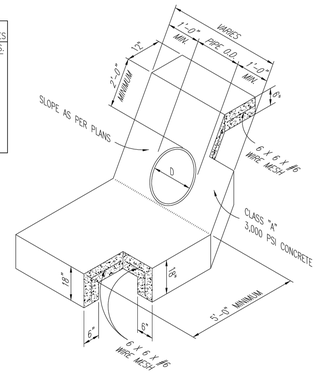
SERVICES: >>ENGINEERS >>PLANNERS >>SURVEYORS

GRADING AND PAVING DETAILS (1 OF 2)
for
REAGAN 245 GAS STATION
City of Georgetown
Williamson County, Texas

Project No: 23028

SHEET 21 of 25

MINIMUM RIP-RAP QUANTITIES	
PIPE	SQ. YDS.
18"	6.2
24"	6.9
27"	7.8
30"	9.5
36"	10.4
42"	12.0
48"	14.3
54"	16.4



NOTES:

1. WHEN HEADWALLS AND WINGWALLS ARE REQUIRED, THEY SHALL CONFORM TO THE TEXAS DEPARTMENT OF TRANSPORTATION STANDARDS, OR AS DIRECTED BY THE CITY.
2. ENERGY DISSIPATERS SHALL BE REQUIRED IF PIPE VELOCITY IS GREATER THAN 5.0 F.P.S. OR AS DIRECTED BY THE CITY OF GEORGETOWN.
3. SUPPORT REINFORCING WIRE MESH REQUIRED AS SUPPORT FOR APPROACH SLAB AND SHALL BE SUPPORTED BY REBAR CHAIRS OR OTHER APPROVED METHODS.

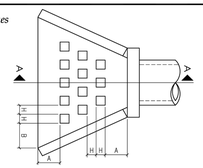
The Architect/Engineer assumes responsibility for appropriate use of this standard.

REVISION NOTE: ADOPTED 6/21/2006
DRAWING NAME: SD19

CITY OF GEORGETOWN
CONSTRUCTION STANDARDS AND DETAILS
TYPICAL CONCRETE RIP-RAP AT PIPE

SCALE: NTS | DATE: 1/2003 | DRAWN BY: MRS | APPROVED BY: TRB

The Architect/Engineer assumes responsibility for appropriate use of this standard.



NOTES:

1. USE CLASS "A" CONCRETE, 3,000 PSI AT 28 DAYS, UNLESS NOTED.
2. REINFORCING STEEL – ASTM A615, GRADE 40, UNLESS NOTED.
3. LAP REINFORCING 30 BAR DIAMETERS MIN. AT SPLICES, UNLESS NOTED.
4. CHAMFER EXPOSED EDGES OF CONCRETE 3/4", UNLESS NOTED.
5. PLACE REINFORCING WITH THE CENTER OF THE OUTSIDE BARS 2 INCHES FROM THE SURFACE OF THE CONCRETE.

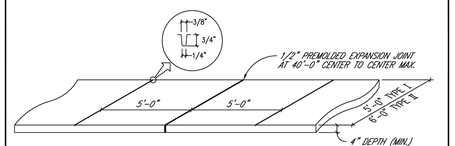
TABLE OF DIMENSIONS FOR ENERGY DISSIPATOR DETAIL

D PIPE DIAMETER (INCHES)	NUMBER OF ROWS OF DISSIPATORS	NUMBER OF DISSIPATORS IN FRONT ROW	H (INCHES)	A (INCHES)	B (INCHES)
12	1	3	4	4	9.1875
18	2	4	4 1/2	9 1/2	15.5625
24	2	5	6	14 3/4	16 1/2
30	3	6	7 1/2	12 1/2	14 3/8
36	3	6	9	16 1/4	18 5/16
42	3	6	10 1/2	20	22 1/4
48	3	6	12	23 3/4	26 1/4
54	3	6	13 1/2	27 1/2	27 3/4
60	3	6	15	31 1/4	31 5/8

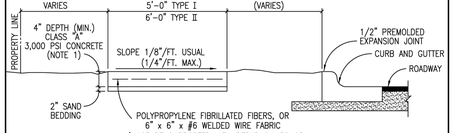
REVISION NOTE: ADOPTED 6/21/2006
DRAWING NAME: SD20

CITY OF GEORGETOWN
CONSTRUCTION STANDARDS AND DETAILS
ENERGY DISSIPATER DETAIL

SCALE: NTS | DATE: 1/2003 | DRAWN BY: MRS | APPROVED BY: TRB



TYPE I – AS REQUIRED FOR SINGLE FAMILY, DUPLEXES AND TOWNHOUSES.
TYPE II – AS REQUIRED FOR APARTMENTS, OFFICE AND PARKING LOTS, COMMERCIAL AND INDUSTRIAL.



NOTES:

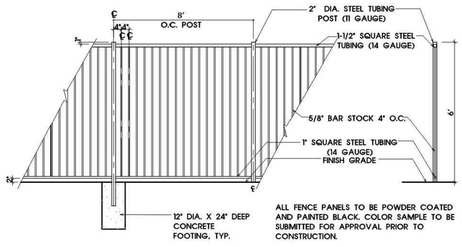
1. STANDARD LOCATION OF SIDEWALK IS OFF BACK OF CURB. SPECIAL DESIGNS MAY BE APPROVED BY THE CITY ENGINEER, PRIOR TO FINAL DESIGN AS APPROVED BY ENGINEER DURING PLAN REVIEW AN IN CONFORMANCE WITH CURRENT AASHTO STANDARDS.
2. SIDEWALK SHALL CONFORM TO CURRENT AMERICANS WITH DISABILITIES ACT STANDARDS.
3. ALL SIDEWALKS SHALL BE SUBMITTED AND APPROVED BY THE REGISTERED ACCESSIBILITY SPECIALIST (RAS) AND ENGINEER OF RECORD.
4. ANY VARIANCE IN TEXTURE, GRADE OR ALIGNMENT SHALL BE APPROVED BY THE REGISTERED ACCESSIBILITY SPECIALIST (RAS) AND ENGINEER OF RECORD.
5. SLIP DOWEL SHALL BE INSTALLED AT EVERY LONGITUDINAL EXPANSION JOINT (UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER DURING ENGINEERING PLAN REVIEW PRIOR TO FINAL DESIGN).

The Architect/Engineer assumes responsibility for appropriate use of this standard.

REVISION NOTE: REVISED 6/25/2015 WBD
REVISION NOTE: ADOPTED 6/21/2006 TRB
DRAWING NAME: SD14

CITY OF GEORGETOWN
CONSTRUCTION STANDARDS AND DETAILS
SIDEWALK SECTION AND JOINT DETAIL

SCALE: NTS | DATE: 1/2003 | DRAWN BY: MRS | APPROVED BY: TRB



FENCE DETAIL

Rigid Pavement

Based on assumed loading conditions, we have developed the following Portland Cement concrete pavement design sections for use at this site.

	Minimum Thickness (inches)
Parking Traffic	
Portland Cement Concrete	5
Minimum Lime Stabilized Subgrade	6
Compacted Subgrade Soils /Re-work of Fill*	6/24*
Driveway / Fire Lane**	
Portland Cement Concrete	6
Minimum Lime Stabilized Subgrade	6
Compacted Subgrade Soils /Re-work of Fill*	6/24*
Dumpster / Approach	
Portland Cement Concrete	7
Minimum Lime Stabilized Subgrade	6
Compacted Subgrade Soils /Re-work of Fill*	6/24*

*Where fill soils are encountered
**Capable of carrying 85000 lbs of fire apparatus load.

Prior to the placement of any fill in the pavement area, we recommend that all the existing vegetation, loose soils, trees and tree roots (if any) should be removed and disposed of off-site until hard stratum is encountered.
Due to the presence of the fill /possible fill soils at this site, long-term settlement can occur. In order to reduce the settlement of the fill soils, the entire fill soils should be reworked. In the event re-working of the entire fill soils are not economical then a minimum of 2 feet of the fill should be re-worked; however, long-term pavement maintenance plan should be implemented.
For re-work of the fill soils, where encountered, we recommend that fill soils should be excavated and stockpiled, the exposed surface should be proof rolled as per TxDOT item 216, then after passing the proof rolling scarified to a depth of 6 inches water as required and compacted between 95 and 100 percent of maximum dry density as per ASTM D 698 with the minimum moisture content between optimum and 4 points above optimum. The excavated fill soils can be placed back provided no objectionable material is present within the soils in 6 to 8 inches loose soils and compacted to the above specification.
In areas where fill soils are NOT present, after the removal of all the vegetation, the exposed surface should be proof rolled. The exposed subgrade should be scarified to a depth of 6 inches water as required and compacted to 95 and 100 percent of maximum dry density as defined by ASTM D 698 (Standard Proctor Test), at moisture content between optimum and 4 points above optimum.
The upper six inches of subgrade soils should then be stabilized with lime. We estimate approximately 6 to 8 percent of hydrated lime 28 to 36 lbs/yard for 6-inch-thick-soil will be required to stabilize the subgrade soils (to reduce the plasticity index to 15 or less). It should be noted that after the final grade is complete, the actual amount of lime required should be calculated by lime series test in the laboratory.
The lime stabilized soils should be compacted to a minimum of 95 percent of maximum dry density with the moisture content between optimum and 4 points above optimum. Field density tests should be taken at the rate of one test per every 2,500 square feet per lift.
After grading, if limestone is exposed, then lime stabilization for subgrade soils is not required however, the upper 6 inches of the disturbed areas of the utility trenches should be backfilled with flex base. The flex base should be placed and compacted as per the procedure outlined on page 8 of this report.
In the event that lime stabilization of the subgrade soils is not economically feasible then thickness of the concrete should be increased by an additional one inch or city standards as an alternative can then be used.
Some differential movement in the pavement is anticipated over time due to the swelling of the subgrade clays at this site. The design of the concrete pavement should specify a minimum 28-day concrete compressive strength of 3,600 psi for all the pavement and 4,000 psf for the city right of way with 4 percent to 6 percent entrained air. The concrete should be placed within one and one-half hours of batching. During hot weather, the concrete placement should follow ACI 311 Hot Weather concreting and in no case should the concrete temperature be allowed to exceed 95ºF. To avoid excessive heat periods, consideration should be given to limiting concrete placement to a time of day that will minimize large differences in the ambient and concrete temperature.
Past experience indicates that pavements with sealed joints on 15 to 20-foot spacings, cut to a depth of at least one-quarter of the pavement thickness, generally exhibit less uncontrolled post-construction cracking than pavements with wider spacings. As a minimum, expansion joints should be used wherever the pavement abut a structural element subject to a different magnitude of movement, e.g., light poles, retaining walls, existing pavement, building walls, or manholes. After construction, the construction and expansion joints should be inspected periodically and resealed, if necessary. The pavement should be reinforced using at least No. 3 bars, 18 inches on center should be used.

NOTE:

1. The pavement design and construction recommendations are summarized hereon to aid the contractor. Contractor shall obtain, read and comply with all geotechnical recommendations contained in the Geotechnical Investigation and Pavement Thickness Design Report prepared by GEOSCIENCE ENGINEERS, LLC prepared for RONALD REAGAN CR 245 REAL ESTATE, LLC.

WARNING!
There are existing water pipelines, underground telephone cables and other above and below ground utilities in the vicinity of this project. The Contractor shall contact all appropriate companies prior to any construction in the area and determine if any conflicts exist. If so, the Contractor shall immediately contact the Engineer who shall revise the design as necessary.

NO.	REVISION	BY	DATE

CWJ — DESIGNED BY: — 2/1/2025 DATE
CWJ, NIE — DRAWN BY: — 2/15/2025 DATE
CWJ — CHECKED BY: — 2/28/2025 DATE
CWJ — APPROVED BY: — 2/28/2025 DATE

STATE OF TEXAS — CHAD WILLIAM JONES — 144785 — LICENSED PROFESSIONAL ENGINEER — 5/7/25

STEGER BIZZELL

ADDRESS: 1978 S. AUSTIN AVENUE | GEORGETOWN, TX 78626
METRO: 512.930.9412 | TEXAS REGISTERED ENGINEERING FIRM F-181 TBPELS FIRM No.10003700 | WEB: STEGERBIZZELL.COM
SERVICES: >>ENGINEERS >>PLANNERS >>SURVEYORS

GRADING AND PAVING DETAILS (2 OF 2)
for
REAGAN 245 GAS STATION
City of Georgetown
Williamson County, Texas

Project No: 23028
SHEET 22 of 25

Attachment N – Inspection, Maintenance, Repair, and Retrofit Plan

The following can be found in the TCEQ's "Complying with the Edwards Rules: Technical Guidance Manual on Best Management Practices."

Maintenance Guidelines for Batch Detention Basins

Batch detention basins may have somewhat higher maintenance requirements than an extended detention basin since they are active stormwater controls. The maintenance activities are identical to those of extended detention basins with the addition of maintenance and inspections of the automatic controller and the valve at the outlet.

- *Inspections*. Inspections should take place a minimum of twice a year. One inspection should take place during wet weather to determine if the basin is meeting the target detention time of 12 hours and a drawdown time of no more than 48 hours. The remaining inspections should occur between storm events so that manual operation of the valve and controller can be verified. The level sensor in the basin should be inspected and any debris or sediment in the area should be removed. The outlet structure and the trash screen should be inspected for signs of clogging. Debris and sediment should be removed from the orifice and outlet(s) as described in previous sections. Debris obstructing the valve should be removed. During each inspection, erosion areas inside and downstream of this BMP should be identified and repaired/revegetated immediately.

- *Mowing*. The basin, basin side-slopes, and embankment of the basin must be mowed to prevent woody growth and control weeds. A mulching mower should be used, or the grass clippings should be caught and removed. Mowing should take place at least twice a year, or more frequently if vegetation exceeds 18 inches in height. More frequent mowing to maintain aesthetic appeal may be necessary in landscaped areas.

- *Litter and Debris Removal*. Litter and debris removal should take place at least twice a year, as part of the periodic mowing operations and inspections. Debris and litter should be removed from the surface of the basin. Particular attention should be paid to floatable debris around the outlet structure. The outlet should be checked for possible clogging or obstructions and any debris removed.

- *Erosion control*. The basin side slopes and embankment all may periodically suffer from slumping and erosion. To correct these problems, corrective action, such as regarding and revegetation, may be necessary. Correction of erosion control should take place whenever required based on the periodic inspections.

- *Nuisance Control*. Standing water or soggy conditions may occur in the basin. Some standing water may occur after a storm event since the valve may close with 2 to 3 inches of water in the basin. Some flow into the basin may also occur between storms due to spring flow and residential water use that enters the storm sewer system. Twice a year, the facility should be evaluated in terms of nuisance control (insects, weeds, odors, algae, etc.).

- *Structural Repairs and Replacement*. With each inspection, any damage to structural elements of the basin (pipes, concrete drainage structures, retaining walls, etc.) should be identified and repaired immediately. An example of this type of repair can include patching of cracked concrete, sealing of

voids, removal of vegetation from cracks and joints. The various inlet/outlet structures in a basin will eventually deteriorate and must be replaced.

- *Sediment Removal*. A properly designed batch detention basin will accumulate quantities of sediment over time. The accumulated sediment can detract from the appearance of the facility and reduce the pollutant removal performance of the facility. The sediment also tends to accumulate near the outlet structure and can interfere with the level sensor operation. Sediment shall be removed from the basin at least every 5 years, when sediment depth exceeds 6 inches, when the sediment interferes with the level sensor or when the basin does not drain within 48 hours. Care should be taken not to compromise the basin lining during maintenance.

- *Logic Controller*. The Logic Controller should be inspected as part of the twice yearly investigations. Verify that the external indicators (active, cycle in progress) are operating properly by turning the controller off and on, and by initiating a cycle by triggering the level sensor in the basin. The valve should be manually opened and closed using the open/close switch to verify valve operation and to assist in inspecting the valve for debris. The solar panel should be inspected and any dust or debris on the panel should be carefully removed. The controller and all other circuitry and wiring should be inspected for signs of corrosion, damage from insects, water leaks, or other damage. At the end of the inspection, the controller should be reset.

NOTE: This Inspection, Maintenance, Repair and Retrofit Plan for the **Highland Village Phase I – Commercial Batch Detention Pond** was created and designed by the engineer of this BMP. Maintenance is the responsibility of the Owner and should be followed in accordance with this plan in order to keep the BMPs operating correctly.

Saiyad Maknojia (Owner) 5/8/2025

Reagan 245 Real Estate LLC Date

5/8/2025

Chad W. Jones, P.E. Date
Steger Bizzell
F-181

(SAMPLE) PERMANENT BMP LOG **(SAMPLE)**

INSPECTOR: _____ DATE: _____

Inspectors Company: _____

Company Address: _____

_____

_____

Company Phone: _____ Fax: _____

Date of Last Inspection: _____ Recent Heavy Rainfall: YES NO
(CIRCLE ONE)

Status of BMP(s): _____

_____

_____

_____

_____

Corrective Action Required (if any): _____

_____

_____

_____

_____

Date Corrected (if applicable): _____

*If actions are required, they must be completed within 7 working days of this INSPECTION.

_____ _____

Inspectors Signature Date:

Attachment O – Pilot-Scale Field Testing Plan, if BMPs not based on Complying with the Edwards Aquifer Rules: Technical Guidance for BMPs

Not applicable.

Attachment P – Measures for Minimizing Surface Stream Contamination

The proposed site will be used for commercial development with a maximum 70-percent impervious cover and a permanent BMP is included. There are no surface streams located within the project limits or directly downstream.

Temporary Stormwater Section

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of Customer/Agent: Reagan 245 Real Estate LLC / Steger Bizzell, Chad Jones, P.E.

Date: 5/07/2025

Signature of Customer/Agent:

Regulated Entity Name: Reagan 245 Gas Station

Project Information

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.

☒ 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.

Sequence 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 receive discharges from disturbed areas of the project: Berry Creek

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.

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. ☒ **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.

☒ There are no areas greater than 10 acres within a common drainage area that will be disturbed at one time. Erosion and sediment controls other than sediment basins or sediment traps within each disturbed drainage area will be used.

11. ☐ **Attachment H - Temporary Sediment Pond(s) Plans and Calculations**. Temporary sediment pond or basin construction plans and design calculations for a proposed temporary BMP or measure have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer. All construction plans and design information must be signed, sealed, and dated by the Texas Licensed Professional Engineer. Construction plans for the proposed temporary BMPs and measures are attached.

☒ N/A

12. ☒ **Attachment I - Inspection and Maintenance for BMPs.** A plan for the inspection of each temporary BMP(s) and measure(s) and for their timely maintenance, repairs, and, if necessary, retrofit is attached. A description of the documentation procedures, recordkeeping practices, and inspection frequency are included in the plan and are specific to the site and/or BMP.

13. ☒ All control measures must be properly selected, installed, and maintained in accordance with the manufacturer's specifications and good engineering practices. If periodic inspections by the applicant or the executive director, or other information indicate a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations.

14. ☒ If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain).

15. ☒ Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50%. A permanent stake will be provided that can indicate when the sediment occupies 50% of the basin volume.

16. ☒ Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls, picked up daily).

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.

Attachment A – Spill Response Actions

Because fuels and hazardous substances will be provided by an off-site facility, no on-site containment procedures are provided for in this CZP.

The objective of this section is to describe measures to prevent or reduce the discharge of pollutants to drainage systems or watercourses from leaks and spills by reducing the chance for spills, stopping the source of spills, containing and cleaning up spills, properly disposing of spill materials, and training employees. The following steps will help reduce the stormwater impacts of leaks and spills:

Education

1. Be aware that different materials pollute in different amounts. Make sure that each employee knows what a "significant spill" is for each material they use, and what is the appropriate response for "significant" and "insignificant" spills. Employees should also be aware of when spill must be reported to the TCEQ. Information available in 30 TAC 327.4 and 40 CFR 302.4.
2. Educate employees and subcontractors on potential dangers to humans and the environment from spills and leaks.
3. Hold regular meetings to discuss and reinforce appropriate disposal procedures (incorporate into regular safety meetings).
4. Establish a continuing education program to indoctrinate new employees.
5. Have contractor's superintendent or representative oversee and enforce proper spill prevention and control measures.

General Measures

1. To the extent that the work can be accomplished safely, spills of oil, petroleum products, and substances listed under 40 CFR parts 110,117, and 302, and sanitary and septic wastes should be contained and cleaned up immediately.
2. Store hazardous materials and wastes in covered containers and protect from vandalism.
3. Place a stockpile of spill cleanup materials where it will be readily accessible.
4. Train employees in spill prevention and cleanup.
5. Designate responsible individuals to oversee and enforce control measures.
6. Spills should be covered and protected from stormwater run-on during rainfall to the extent that it doesn't compromise clean-up activities.
7. Do not bury or wash spills with water.
8. Store and dispose of used clean up materials, contaminated materials, and recovered spill material that is no longer suitable for the intended purpose in conformance with the provisions in applicable BMPs.
9. Do not allow water used for cleaning and decontamination to enter storm drains or watercourses. Collect and dispose of contaminated water in accordance with applicable regulations.
10. Contain water overflow or minor water spillage and do not allow it to discharge into drainage facilities or watercourses.
11. Place Material Safety Data Sheets (MSDS), as well as proper storage, cleanup, and spill reporting instructions for hazardous materials stored or used on the project site in an open, conspicuous, and accessible location.
12. Keep waste storage areas clean, well-organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Perimeter controls, containment structures, covers, and liners should be repaired or replaced as needed to maintain proper function.

Cleanup

1. Clean up leaks and spills immediately.
2. Use a rag for small spills on paved surfaces, a damp mop for general cleanup, and absorbent material for larger spills. If the spilled material is hazardous, then the used cleanup materials are also hazardous and must be disposed of as hazardous waste.
3. Never hose down or bury dry material spills. Clean up as much of the material as possible and dispose of properly. See the waste management BMPs in this section for specific information.

Minor Spills

1. Minor spills typically involve small quantities of oil, gasoline, paint, etc. which can be controlled by the first responder at the discovery of the spill.
2. Use absorbent materials on small spills rather than hosing down or burying the spill.
3. Absorbent materials should be promptly removed and disposed of properly.
4. Follow the practice below for a minor spill:
5. Contain the spread of the spill.
6. Recover spilled materials.
7. Clean the contaminated area and properly dispose of contaminated materials.

Semi-Significant Spills

Semi-significant spills still can be controlled by the first responder along with the aid of other personnel such as laborers and the foreman, etc. This response may require the cessation of all other activities.

Spills should be cleaned up immediately:

1. Contain spread of the spill.
2. Notify the project foreman immediately.
3. If the spill occurs on paved or impermeable surfaces, clean up using "dry" methods (absorbent materials, cat litter and/or rags). Contain the spill by encircling with absorbent materials and do not let the spill spread widely.
4. If the spill occurs in dirt areas, immediately contain the spill by constructing an earthen dike. Dig up and properly dispose of contaminated soil.
5. If the spill occurs during rain, cover spill with tarps or other material to prevent contaminating runoff.

Significant/Hazardous Spills

For significant or hazardous spills that are in reportable quantities:

1. Notify the TCEQ by telephone as soon as possible and within 24 hours at 512-339-2929 (Austin) or 210-490-3096 (San Antonio) between 8 AM and 5 PM. After hours, contact the Environmental Release Hotline at 1-800-832-8224. It is the contractor's responsibility to have all emergency phone numbers at the construction site.
2. For spills of federal reportable quantities, in conformance with the requirements in 40 CFR parts 110, 119, and 302, the contractor should notify the National Response Center at (800) 424-8802.
3. Notification should first be made by telephone and followed up with a written report.

4. The services of a spills contractor or a Haz-Mat team should be obtained immediately. Construction personnel should not attempt to clean up until the appropriate and qualified staff have arrived at the job site.
5. Other agencies which may need to be consulted include, but are not limited to, the City Police Department, County Sheriff Office, Fire Departments, etc.

More information on spill rules and appropriate responses is available on the TCEQ website at: http://www.tceq.texas.gov/response/

Vehicle and Equipment Maintenance

1. If maintenance must occur onsite, use a designated area and a secondary containment, located away from drainage courses, to prevent the run-on of stormwater and the runoff of spills.
2. Regularly inspect onsite vehicles and equipment for leaks and repair immediately.
3. Check incoming vehicles and equipment (including delivery trucks, and employee and subcontractor vehicles) for leaking oil and fluids. Do not allow leaking vehicles or equipment onsite.
4. Always use secondary containment, such as a drain pan or drop cloth, to catch spills or leaks when removing or changing fluids.
5. Place drip pans or absorbent materials under paving equipment when not in use.
6. Use absorbent materials on small spills rather than hosing down or burying the spill. Remove the absorbent materials promptly and dispose of properly.
7. Promptly transfer used fluids to the proper waste or recycling drums. Don't leave full drip pans or other open containers lying around.
8. Oil filters disposed of in trashcans or dumpsters can leak oil and pollute stormwater. Place the oil filter in a funnel over a waste oil-recycling drum to drain excess oil before disposal. Oil filters can also be recycled. Ask the oil supplier or recycler about recycling oil filters.
9. Store cracked batteries in a non-leaking secondary container. Do this with all cracked batteries even if you think all the acid has drained out. If you drop a battery, treat it as if it is cracked. Put it into the containment area until you are sure it is not leaking.

Vehicle and Equipment Fueling

1. If fueling must occur on site, use designated areas, located away from drainage courses, to prevent the run-on of stormwater and the runoff of spills.
2. Discourage "topping off" of fuel tanks.
3. Always use secondary containment, such as a drain pan, when fueling to catch spills/ leaks.

If a spill should occur, the person responsible for the spill should contact the TCEQ at (512) 339-2929 or call 911. Soil contaminated by spills that occur on-site will be removed and disposed at an approved disposal site.

Attachment B – Potential Sources of Contamination

- Hydraulic and diesel fuel
- Portable toilet systems (Sanitary Waste)
- Trash from construction workers
- Paints, Paint Solvents, glues, concrete and other building materials
- Plant fertilizers and Pesticides
- Inadequate maintenance of temporary water pollution abatement measures
- Stock piles or spoils of materials

Attachment C – Sequence of Major Activities

The following sequence of activities is suggested. The actual sequence may vary slightly depending on the contractor or weather conditions.

1. Construction activities will commence with the installation of a silt fence on the down-gradient side of both the proposed building and pavement of the site and the installation of the stabilized construction entrance to the site.
2. Construction of the new building and pavement will disturb approximately 2.34 acres. This construction will involve excavation for the foundation and parking areas, and trenching for water and wastewater connections.
3. Construction of the new batch detention pond will disturb approximately 0.28 acres. The construction will involve cut and fill excavation for the calculated grades of the proposed pond, and the addition of an impermeable liner to prevent groundwater contamination.
4. After completing construction of the new building, pavement, and utilities, disturbed areas will be hydro-mulched or seeded.
5. Once vegetation is established on the site, Temporary BMPs will be removed as allowed by the engineer.

Attachment D – Temporary Best Management Practices and Measures

The following sequence of activities is suggested. The sequence of construction will take place in one phase. The actual sequence may vary slightly depending on the contractor or weather conditions.

1. Construction activities will commence with the installation of the required silt fence and erosion and sedimentation control measures.
2. Excavation will take place where the new building, detention pond, and pavement will be situated. Spoils of this material may be placed at a location on the project site as directed by the contractor or hauled off-site. These spoils and any other loose granular material will be enclosed by a silt fence. **Silt fences and rock berm will be utilized as the control measures.** (Approximate total disturbed area = 6.52 acres)
3. Grading on the site will consist of the placement and compaction of base for the pavement, detention pond, and new building foundation, and fill for backfill of the water and wastewater line trenches. **Silt fences and rock berms will be utilized as the control measures.** (Approximate total disturbed area = 6.52 acres)
4. Subsequent to the construction of the new building, pavement, and utilities, disturbed areas will be hydro-mulched or seeded. **Silt fences and rock berm will be utilized as the control measures.** (Approximate total disturbed area = 4.0 acres)
5. Once vegetation is established on the site, Temporary BMPs will be removed as allowed by the engineer. (Approximate total disturbed area = 1.5 acres)

All surface runoff originating up-gradient or on site will be contained within the proposed silt fence and rock berms. The silt fence and rock berm will trap most pollutants and prevent them from leaving the site.

Attachment E – Request to Temporarily Seal a Feature

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

Attachment F – Structural Practices

Construction will be conducted in a manner which will minimize areas of unstabilized disturbance. Silt fences, concrete washouts, and construction entrances will be used to limit the runoff discharge of sediments from exposed areas on the site during construction. Drainage off the site is typically in a sheet flow or shallow concentrated flow condition due to the relatively flat topography found on the project site.

Attachment G – Drainage Area Map

See the attached Reagan 245 Gas Station construction plans for existing and proposed drainage area maps.

Attachment H – Temporary Sediment Pond Plans and Calculations

Not applicable.

Attachment I – Inspection and Maintenance for BMP's

Silt Fence

1. Inspect all fences weekly and after any rainfall
2. Remove sediment when buildup reaches 6 inches, or install a second line of fencing parallel to the old fence.
3. Replace any torn fabric or install a second line of fencing parallel to the torn section.
4. Replace or repair any sections crushed or collapsed in the course of construction activity. If a section of fence is obstructing vehicular access, consider relocating it to a spot where it will provide equal protection, but will not obstruct vehicles. A triangular filter dike may be preferable to a silt fence at common vehicle access points.
5. When construction is complete the sediment should be disposed of in a manner that will not cause additional siltation and the prior location of the silt fence should be revegetated. The fence itself should be disposed of in an approved landfill.

Rock Berm

1. Inspection should be made weekly and after each rainfall by the responsible party. For installations in streambeds, additional daily inspections should be made
2. Remove sediment and other debris when buildup reaches 6 inches and dispose of the accumulated silt in an approved manner that will not cause any additional siltation.
3. Repair any loose wire sheathing.
4. The berm should be reshaped as needed during inspection.
5. The berm should be replaced when the structure ceases to function as intended due to silt accumulation among the rocks, washout, construction traffic damage, etc.
6. The rock berm should be left in place until all upstream areas are stabilized and accumulated silt removed.

Temporary Construction Entrance/Exit

1. The entrance should be maintained in a condition, which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment.
2. All sediment spilled, dropped, washed, or tracked onto public rights-of-way should be removed immediately by contractor.
3. When necessary, wheels should be cleaned to remove sediment prior to entrance onto public right-of-way.
4. When washing is required, it should be done on an area stabilized with crushed stone that drains into an approved sediment trap or sediment basin.
5. All sediments should be prevented from entering any storm drain, ditch or water course by using approved methods.

The following sample forms should be utilized to document the inspection and maintenance of the proposed temporary BMPs as described above. This form shall be kept on site with the CZP until the project is completed.

Temporary BMP Logs – Silt Fence

Date	Date of Last Inspection	Inspection Performed By	Title	Company	Status of BMP(s)	Corrective Action Required (if any)	Date Corrective Action Completed

Temporary BMP Logs – Rock Berms

Date	Date of Last Inspection	Inspection Performed By	Title	Company	Status of BMP(s)	Corrective Action Required (if any)	Date Corrective Action Completed

Temporary BMP Logs – Temporary Construction Entrance

Date	Date of Last Inspection	Inspection Performed By	Title	Company	Status of BMP(s)	Corrective Action Required (if any)	Date Corrective Action Completed

Temporary BMP Logs – Inlet Protection

Date	Date of Last Inspection	Inspection Performed By	Title	Company	Status of BMP(s)	Corrective Action Required (if any)	Date Corrective Action Completed

Attachment J – Schedule of Interim and Permanent Soil Stabilization Practices

Vehicular traffic should be limited to areas of the project site where construction will take place. The contractor should endeavor to preserve existing vegetation as much as practicable to reduce erosion and lower the cost associated with stabilization. **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**.

All disturbed areas shall be stabilized as described below:

Expect as provided for below, stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased.

A. Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceases is precluded by snow cover or frozen ground conditions, stabilization measures shall be initiated as soon as practicable.
B. Where construction activity on a portion of the site has temporarily ceased, and earth disturbing activities will be resumed within 21 days, temporary stabilization measures do not have to be initiated on that portion of the site.
C. In areas experiencing drought, where the initiation of stabilization measures by the 14th day after construction activity has temporarily or permanently ceased is precluded by seasonal arid conditions, stabilization measures shall be initiated as soon as practicable.

Stabilization measures as described as follows:

All disturbed grass areas should be planted in drought resistant species normally grown as permanent lawns, such as Zoysia, Bermuda and Buffalo. Grass areas may be sodded, plugged, sprigged, or seeded except that solid sod shall be used in swales or other areas subject to erosion. All planted areas shall be provided with a readily available water supply and watered as necessary to ensure continuous healthy growth and development. Maintenance shall include the replacement of all dead plant material if that material was used to meet the requirements of this section.

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

I SAIYAD MAKNOJIA,
Print Name

OWNER,
Title - Owner/President/Other

of Reagan 245 Real Estate, LLC,
Corporation/Partnership/Entity Name

have authorized Mr. Chad W. Jones, P.E.
Print Name of Agent/Engineer

of Steger Bizzell
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

1/10/2025
Date

THE STATE OF TEXAS §

COUNTY OF BELL §

BEFORE ME, the undersigned authority, on this day personally appeared Sajyad Maknojia 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 10 day of January, 2025.

NOTARY PUBLIC

SAMINA ALI
Notary Public, State of Texas
Comm. Expires 03-06-2028
Notary ID 134796247

Samina Ali
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 03-06-2028

Owner Authorization Form

Edwards Aquifer Protection Program

Instructions

Complete the following form by adding the requested information in the fields below. The form must be notarized for it to be considered complete. Attach it to other programmatic submittals required by 30 Texas Administrative Code (30 TAC), Chapter 213, and provide it to TCEQ's Edwards Aquifer Protection Program (EAPP) as part of your application.

If you have questions on how to fill out this form or about EAPP, please contact us by phone at 512-339-2929 or by e-mail at eapp@tceq.texas.gov.

Landowner Authorization

I, _____ of City of Georgetown

am the owner of the property located at:

the public right-of-way of CR-245 between Ronald Reagan Blvd and Jennings Branch

and am duly authorized in accordance with 30 TAC 213.4(c)(2) and 213.4(d)(1), or 30 TAC 213.23(c)(2) and 213.23(d), relating to the right to submit an application, signatory authority, and proof of authorized signatory.

I do hereby authorize Reagan 245 Real Estate, LLC
To conduct construction of driveway entrance to a new commercial development
At the public right-of-way of CR-245 between Ronald Reagan Blvd and Jennings Branch

Landowner Acknowledgement

I understand that _____

Is ultimately responsible for the compliance with the approved or conditionally approved Edwards Aquifer protection plan and any special conditions of the approved plan through all phases of plan implementation even if the responsibility for compliance and the right to possess and control the property referenced in the application has been contractually assumed by another legal entity. I further understand that any failure to comply with any condition of the executive director's approval is a violation and subject to administrative rule or orders and penalties as provided under 30 TAC 213.10, relating to enforcement. Such violations may also be subject to civil penalties.

Landowner Signature

Landowner Signature

5/29/25

Date

THE STATE § OF Texas

County § of Williamson

BEFORE ME, the undersigned authority, on this day personally appeared

David Munk

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 29 day of May, 2025

Daniel Havins

NOTARY PUBLIC

DANIEL HAVINS
Notary Public, State of Texas
Comm. Expires 08-07-2028
Notary ID 135028707

MY COMMISSION EXPIRES: 8-7-2028

Optional Attachments

Select All that apply:

☐ Lease Agreement

☐ Signed Contract

☐ Deed Restricted Easement

☐ Other legally binding documents

Owner Authorization Form

Edwards Aquifer Protection Program

Instructions

Complete the following form by adding the requested information in the fields below. The form must be notarized for it to be considered complete. Attach it to other programmatic submittals required by 30 Texas Administrative Code (30 TAC), Chapter 213, and provide it to TCEQ's Edwards Aquifer Protection Program (EAPP) as part of your application.

If you have questions on how to fill out this form or about EAPP, please contact us by phone at 512-339-2929 or by e-mail at eapp@tceq.texas.gov.

Landowner Authorization

I, David Munk of City of Georgetown

am the owner of the property located at:

the public right-of-way of Ronald Reagan Blvd along the frontage of parcel R629345

and am duly authorized in accordance with 30 TAC 213.4(c)(2) and 213.4(d)(1), or 30 TAC 213.23(c)(2) and 213.23(d), relating to the right to submit an application, signatory authority, and proof of authorized signatory.

I do hereby authorize Reagan 245 Real Estate, LLC
To conduct construction of driveway entrance to a new commercial development
the public right-of-way of Ronald Reagan Blvd along the frontage of parcel R629345

Landowner Acknowledgement

I understand that David Munk Is ultimately responsible for the compliance with the approved or conditionally approved Edwards Aquifer protection plan and any special conditions of the approved plan through all phases of plan implementation even if the responsibility for compliance and the right to possess and control the property referenced in the application has been contractually assumed by another legal entity. I further understand that any failure to comply with any condition of the executive director's approval is a violation and subject to administrative rule or orders and penalties as provided under 30 TAC 213.10, relating to enforcement. Such violations may also be subject to civil penalties.

Landowner Signature

Landowner Signature

Date 5/29/25

THE STATE § OF Texas

County § of BEFORE ME, the undersigned authority, on this day personally appeared

Williamson David Munk

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 29 day of May, 2025

NOTARY PUBLIC Daniel Havins

DANIEL HAVINS
Notary Public, State of Texas
Comm. Expires 08-07-2028
Notary ID 135028707

MY COMMISSION EXPIRES: 8-7-2028

Optional Attachments

Select All that apply:

☐ Lease Agreement

☐ Signed Contract

☐ Deed Restricted Easement☐ Other legally binding documents

Application Fee Form

Texas Commission on Environmental Quality
Name of Proposed Regulated Entity: Reagan 245 Gas Station
Regulated Entity Location: Georgetown, TX
Name of Customer: Reagan 245 Real Estate, LLC
Contact Person: Chad W. Jones, P.E. Phone: 512-930-9412
Customer Reference Number (if issued):CN _____
Regulated Entity Reference Number (if issued):RN _____

Austin Regional Office (3373)

☐ Hays ☐ Travis ☒ Williamson

San Antonio Regional Office (3362)

☐ Bexar ☐ Medina ☐ Uvalde
☐ Comal ☐ Kinney

Application fees must be paid by check, certified check, or money order, payable to the **Texas Commission on Environmental Quality**. Your canceled check will serve as your receipt. **This form must be submitted with your fee payment**. This payment is being submitted to:

☒ Austin Regional Office
☐ Mailed to: TCEQ - Cashier
Revenues Section
Mail Code 214
P.O. Box 13088
Austin, TX 78711-3088

☐ San Antonio Regional Office
☐ Overnight Delivery to: TCEQ - Cashier
12100 Park 35 Circle
Building A, 3rd Floor
Austin, TX 78753
(512)239-0357

Site Location (Check All That Apply):

☐ Recharge Zone ☒ Contributing Zone ☐ Transition Zone

Type of Plan	***Size***	***Fee Due***
Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	4.42 Acres	$ 4000
Sewage Collection System	L.F.	$
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	Tanks	$
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	Each	$

Signature: _____

Date: 5/07/2025

Application Fee Schedule

Texas Commission on Environmental Quality
Edwards Aquifer Protection Program 30 TAC Chapter 213 (effective 05/01/2008)

Water Pollution Abatement Plans and Modifications

Contributing Zone Plans and Modifications

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

Organized Sewage Collection Systems and Modifications

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

Underground and Aboveground Storage Tank System Facility Plans and Modifications

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

Exception Requests

Project	*Fee*
Exception Request	$500

Extension of Time Requests

TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General Information

1. Reason for Submission *(If other is checked please describe in space provided)*

☒ New Permit, Registration or Authorization *(Core Data Form should be submitted with the program application)*

☐ Renewal *(Core Data Form should be submitted with the renewal form)* ☐ Other

2. Attachments **Describe Any Attachments:** *(ex. Title V Application, Waste Transporter Application, etc.)*

☐ Yes ☒ No

3. Customer Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	4. Regulated Entity Reference Number *(if issued)*
CN		RN

SECTION II: Customer Information

5. Effective Date for Customer Information Updates (mm/dd/yyyy) 5/07/2025

6. Customer Role (Proposed or Actual) – *as it relates to the Regulated Entity listed on this form. Please check only one of the following:*

☒ Owner ☐ Operator ☐ Owner & Operator
☐ Occupational Licensee ☐ Responsible Party ☐ Voluntary Cleanup Applicant ☐ Other: _____

7. General Customer Information

☒ New Customer ☐ Update to Customer Information ☐ Change in Regulated Entity Ownership
☐ Change in Legal Name (Verifiable with the Texas Secretary of State) ☐ No Change**

If "No Change" and Section I is complete, skip to Section III – Regulated Entity Information.

8. Type of Customer:	☒ Corporation	☐ Individual	☐ Sole Proprietorship- D.B.A
☐ City Government	☐ County Government	☐ Federal Government	☐ State Government
☐ Other Government	☐ General Partnership	☐ Limited Partnership	☐ Other:

9. Customer Legal Name *(If an individual, print last name first: ex: Doe, John)*	*If new Customer, enter previous Customer below*	*End Date:*
Reagan 245 Real Estate LLC		

10. Mailing Address:	1624 Sunset Vista Bend						
	City	Leander	State	TX	ZIP	78641	ZIP + 4	5255

11. Country Mailing Information *(if outside USA)*	12. E-Mail Address *(if applicable)*
n/a	n/a

13. Telephone Number	14. Extension or Code	15. Fax Number *(if applicable)*
(512) 665-1815		( ) -

16. Federal Tax ID *(9 digits)*	17. TX State Franchise Tax ID *(11 digits)*	18. DUNS Number *(if applicable)*	19. TX SOS Filing Number *(if applicable)*
	32096750305		

20. Number of Employees

☒ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher

21. Independently Owned and Operated?

☒ Yes ☐ No

SECTION III: Regulated Entity Information

22. General Regulated Entity Information *(If 'New Regulated Entity" is selected below this form should be accompanied by a permit application)*

☒ New Regulated Entity ☐ Update to Regulated Entity Name ☐ Update to Regulated Entity Information ☐ No Change** *(See below)*

If "NO CHANGE" is checked and Section I is complete, skip to Section IV, Preparer Information.

23. Regulated Entity Name *(name of the site where the regulated action is taking place)*

Reagan 245 Real Estate LLC

24. Street Address of the Regulated Entity: *(No P.O. Boxes)*	29901 Ronald Reagan Boulevard							
	City	Georgetown	**State**	TX	**ZIP**	78633	**ZIP + 4**	
25. Mailing Address:	1624 Sunset Vista Bend							
	City	Leander	**State**	TX	**ZIP**	78641	**ZIP + 4**	5255

26. E-Mail Address:		
27. Telephone Number	**28. Extension or Code**	**29. Fax Number** *(if applicable)*
( ) -		( ) -

30. Primary SIC Code (4 digits)	**31. Secondary SIC Code** (4 digits)	**32. Primary NAICS Code** (5 or 6 digits)	**33. Secondary NAICS Code** (5 or 6 digits)
		n/a	

34. What is the Primary Business of this entity? *(Please do not repeat the SIC or NAICS description.)*

Questions 34 – 37 address geographic location. Please refer to the instructions for applicability.

35. Description to Physical Location:	Head north on I-35 and take Exit 266. Turn left onto TX-195 W for 5.5 miles, then left onto Rattlesnake Road, and another left onto Ronald Reagan Boulevard. Drive 3.5 miles to the northwest corner of Ronald Reagan Boulevard and CR 245.

36. Nearest City	**County**	**State**	**Nearest ZIP Code**
Georgetown	Williamson	TX	78633

37. Latitude (N) In Decimal:	30.736948		**38. Longitude (W) In Decimal:**	-97.774676	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
30	44	13.0128	97	46	28.8336

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 or the updates may not be made. If your Program is not listed, check other and write it in. See the Core Data Form instructions for additional guidance.

☐ Dam Safety	☐ Districts	☒ Edwards Aquifer	☐ Industrial Hazardous Waste	☐ Municipal Solid Waste
		CZP		
☐ New Source Review – Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS	☐ Sludge
☐ Stormwater	☐ Title V – Air	☐ Tires	☐ Used Oil	☐ Utilities
☐ Voluntary Cleanup	☐ Waste Water	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:

SECTION IV: Preparer Information

40. Name:	Steger Bizzell - Chad W. Jones, P.E.	**41. Title:**	Project Engineer

42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(512) 930-9412	n/a	(n/a) -	chad.jones@stegerbizzell.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 9 and/or as required for the updates to the ID numbers identified in field 39.

(See the Core Data Form instructions for more information on who should sign this form.)

Company:	Steger Bizzell	**Job Title:**	Project Engineer		
Name *(In Print)* :	Mr. Chad W. Jones, P.E.			**Phone:**	(512) 930-9412
Signature:				**Date:**	5/07/2025